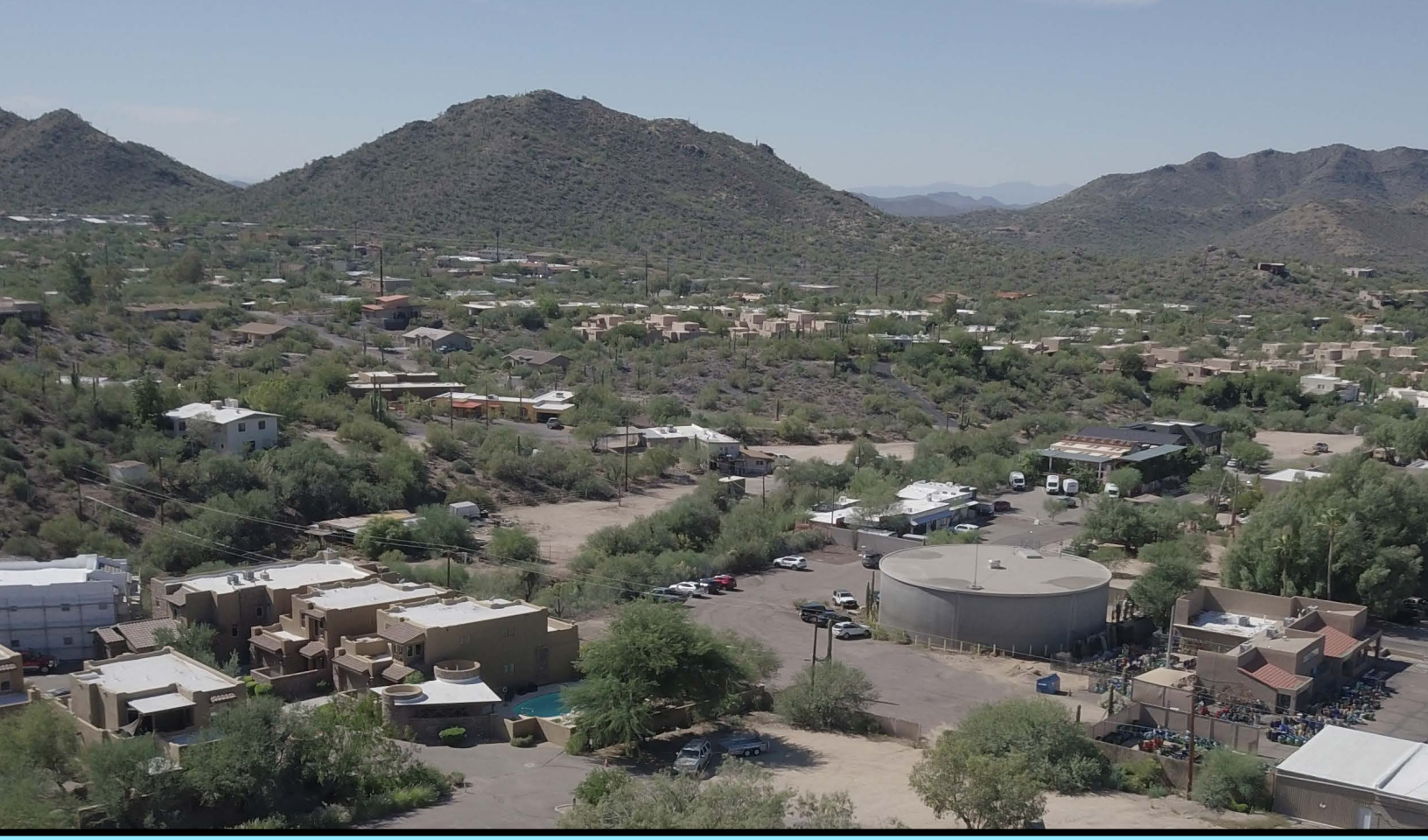


2023 ANNUAL WATER QUALITY REPORT
CAVE CREEK WATER SYSTEM

PWS ID: 04-07-016

SETTLED IN 1870 • INCORPORATED IN 1986
CAVE CREEK
ARIZONA

37622 N Cave Creek Rd
Cave Creek, AZ 85331

CaveCreekAZ.gov

What is a Water Quality Report?

A Water Quality Report, also known as Consumer Confidence Report (CCR) or Drinking Water Quality Report, provides you with important information about the quality of your drinking water. The United States Environmental Protection Agency (U.S. EPA) requires every community water supplier to provide a CCR to its customers. All community water systems must prepare and distribute a brief annual water quality report summarizing information regarding source water, detected contaminants, compliance, and educational information. Not all water quality reports look alike, they are often tailored to each unique community's water system.

Some of the water quality information included in this report can help you better understand how your drinking water can affect your health. For example, your water source may contain contaminants. Some contaminants, such as arsenic, occur naturally. It's important to note that not all contaminants are bad. Some things listed as "contaminants" can actually improve water quality, such as the appropriate amount of disinfectant. Disinfectants, such as chlorine, will be listed as a contaminant even though they protect your health and kill harmful waterborne germs.

Share This Report

Landlords, businesses, schools, hospitals, and other groups are encouraged to share this important water quality information with water users at their location who are not billed customers of the Town of Cave Creek and therefore do not receive this report directly.

To access this report digitally, please visit this web page: **CaveCreekAZ.gov/cc/ccr2023**

Our Mark of Excellence To Serve Your Water Needs

Water is a precious natural resource, vital to our desert community and essential for everyday life. We will continue to innovate, to ensure a safe and sustainable drinking water supply now and into the future at a fair price.

It begins with our Town staff, who work hard to bring you safe and reliable drinking water every time you pour a glass. Our stewardship begins with a focus on water quality and customer satisfaction. We continually strive to improve our services by fostering new ideas in sustainable technologies and practices to make our operations more efficient.

We dedicate ourselves to producing drinking water that meets or exceeds state and federal drinking water standards. We continually strive to adopt new and better methods of delivering the best quality drinking water to you. As regulations and drinking water standards change, we are committed to incorporate these changes in an expeditious and cost-effective manner.

"The Town of Cave Creek is dedicated to conserving, protecting, and enhancing water resources to ensure a safe and reliable drinking water supply."

- Bob Morris, Town of Cave Creek Mayor

There Were No Violations of Water Quality Standards for the Cave Creek Water System in Calendar Year 2023

Sources of Drinking Water

The sources of drinking water (both tap 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, and can pick up substances resulting from the presence of animals or from human activity. 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 **EPAs Safe Drinking Water Hotline at (800) 426-4791**.

Contaminants that may be present in source water include:

Microbial Contaminants: Such as viruses and bacteria, which may come from septic systems, sewage treatment plants, agricultural live- stock operations, or wildlife.
Inorganic Contaminants: Such as salts and metals, which can be naturally occurring or may result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
Pesticides and Herbicides: Such as agriculture, urban storm water runoff, and residential uses that may come from a variety of sources.
Organic Chemical Contaminants: Such as synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.
Radioactive Contaminants: That can be naturally occurring or be the result of oil and gas production and mining activities.

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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water that the general population. Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. 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/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

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. We 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 Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Where Does My Water Come From?

Central Arizona Project

Photo: CAP Canal

Today, 100 percent of Cave Creek's total water supply comes from renewable Colorado River surface water. Raw water is transported through the Central Arizona Project (CAP) Canal which is Arizona's single largest resource for renewable water supplies.

The Town has a 16-inch raw water pipeline that extends over 12 miles from the CAP canal North to the Town's water treatment plant through a series of four in-line booster stations.

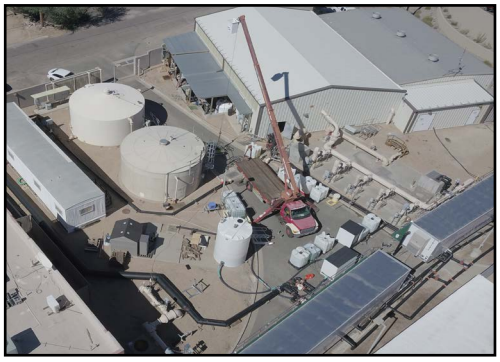


Photo: Water Treatment Plant

Source Water Assessment Program

In 2000, the Town of Cave Creek worked with the Arizona Department of Environmental Quality (ADEQ) to complete a source water assessment report. The assessment looked at potential risks to our water sources.

The assessment concluded that based on the information available on the settings and the adjacent land uses that are in the specified proximity of the drinking water source(s) to the system ADEQ has given a high-risk designation regarding the degree to which these public water systems drinking water source(s) are protected. A designation of high risk indicates there may be additional source water protection measures which can be implemented on the local level. This designation does not imply that the source water is contaminated, nor does it mean that contamination is imminent. Rather, it simply states that land use activities or hydrogeological conditions exist that make the source water susceptible to possible future contamination. At the time of this report, the Town's water system was partially utilizing groundwater wells that had high arsenic levels. Since purchasing the water system in 2007, the Town has relied solely on surface water supplies from the CAP canal.

In 2004, ADEQ completed a source water assessment of the groundwater wells and renewable surface water used by the Town of Cave Creek. The assessment concluded that the groundwater wells could not be relied upon to provide a reliable long-term water source. Currently no wells are being used as part of the Town's drinking water supply. While the Town is currently not using groundwater wells, several residents do operate private wells. Residents can help protect the groundwater supplies by properly recycling household and automotive chemicals and limiting pesticide and fertilizer use.

For more information, please call our Customer Service Center at (480) 488-6620 or visit the Source Water Assessment and Protection Unit website at www.azdeq.gov/source-water-protection.

Whom Do I Contact with Questions About Cave Creek Water?

We want our valued customers to be informed about their water quality. For more information about this report, or for any questions relating to your drinking water, please call Customer Service at (480) 488-6620. You can also visit our website at CaveCreekAZ.gov for more information.

Queremos que nuestros valiosos clientes estén informados sobre la calidad de su agua. Para obtener más información sobre este informe, o para cualquier pregunta relacionada con su agua potable, llame al Servicio al Cliente al (480) 488-6620. También puede visitar nuestro sitio web en CaveCreekAZ.gov para obtener más información.

How is Your Water Treated?

The Cave Creek Water Treatment Plant utilizes conventional water treatment processes, which include: coagulation, sedimentation, filtration, and disinfection process to produce potable water. The raw water is treated to remove turbidity for water clarity, chemistry is adjusted so that it does not damage pipelines, and disinfection occurs to protect the public health. The treated water is distributed to our customers through miles of water main ranging in size from 2 to 16-inches in diameter. These mains are buried underground and are supplied by a system of booster pumps, water storage tanks, and control valves.

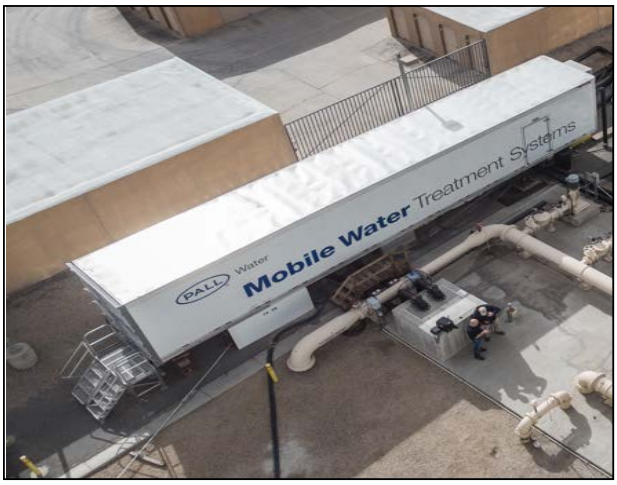


Photo: Pall Membrane Trailer Unit

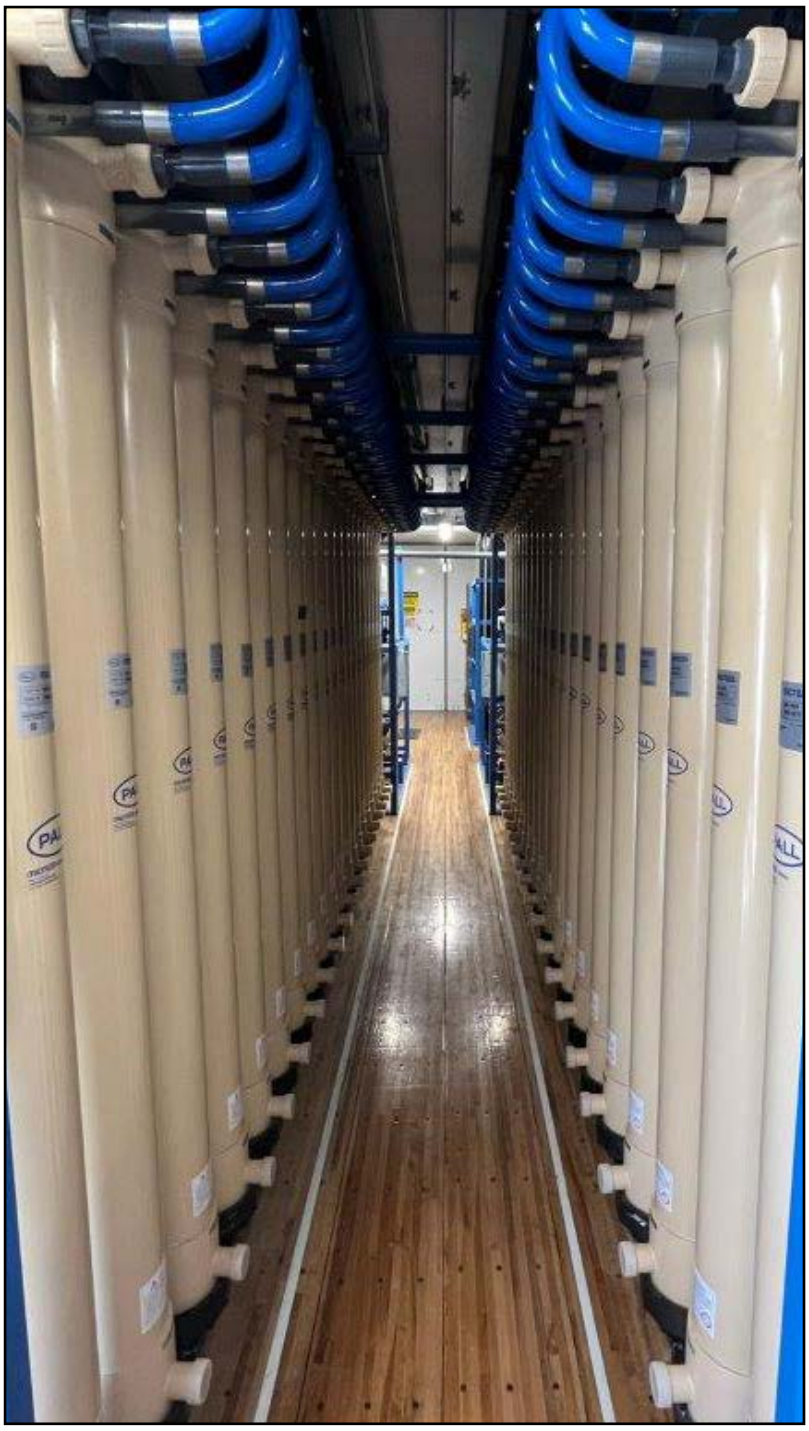


Photo: Pall Membrane Filters

In November of 2019, two new state of the art membrane treatment units were added to the plant to enhance overall water quality. In the fall of 2020, the Town purchased the membrane units to make them a permanent part of the water treatment system.

Definitions of Terms Used in this Report

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

gr/g: Grain per gallon

Likely Source of Contamination: Notes where the substance usually originates

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health

Maximum Residual Disinfectant Level (MRDL): The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap

Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant added for treatment at which no known or anticipated adverse effect on health of persons would occur

Million Fibers per Liter (MFL): Measure of the presence of asbestos fibers that are longer than 10 micrometers

Minimum Reporting Limit (MRL): The smallest measured concentration of a substance that can be reliably measured by a given analytical method

Not Applicable (N/A): Sampling was not completed by regulation or was not required

Not Detected (ND or <): Not detectable at reporting limit

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

ppm: Parts per million or Milligrams per liter (mg/L) ppm x 1000 = ppb

ppb: Parts per billion or Micrograms per liter (ug/L) ppb x 1000 = ppt

ppt: Parts per trillion or Nanograms per liter (ng/L) ppt x 1000 = ppq

ppq: Parts per quadrillion or Picograms per liter (pg/L)

Picocuries per Liter (pCi/L): Measure of the radioactivity in water

Running Annual Average (RAA): The average of sample analytical results for samples taken at a particular monitoring location during the previous 4 calendar quarters

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

Test Results

We follow state and federal guidelines for water sampling schedules. Here, we show only those substances that were detected in our water (if a substance was not detected, it was omitted from the list). Full analytical results are available upon request. Please note that detecting a substance does not mean the water is unsafe to drink. The data presented in this report are from the most recent testing conducted in accordance with regulations.

Microbiological (RTCR)	Violation (Y or N)	Number of Positive Samples	MCL	MCLG	Sample Year	Likely Source of Contamination
Total Coliform [1] (Present/Absent)	N	0	Greater than 1 (Monthly)	0	2023	Naturally present in the environment
E. Coli [2] (Present/Absent)	N	0	0	0	2023	Human and animal fecal waste

Total Coliform detected in greater than five percent of the samples collected each month requires an assessment to investigate its source. During the past year, the Town was not required to conduct any assessments on our water systems because all sampling criteria were met, and no Total Coliform or E. Coli was found to be present in the distribution system.

[1] **Total Coliform** are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. If coliform is found, then the system is responsible to look for potential problems in water treatment or distribution. When this occurs, the water system is required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

[2] **E. Coli** are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. If E.Coli bacteria is found, the water system is required to look for potential problems in water treatment or distribution. When this occurs, the system is required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

Surface Water Treatment Rule	Violation (Y or N)	Highest Level Detected	% Range (Low - High)	TT	Sample Year	Likely Source of Contamination
Total Organic Carbon[3] (mg/L)	N	3.38	2.23 - 3.38	1.0 or greater RAA (Compliance Factor)	2023	Naturally present in the environment
Turbidity [4] (NTU)	N	0.300	0.106 - 0.300	TT = 1; and 95% less than 0.3 NTU	2023	Solid runoff

[3] **Total organic carbon (TOC)** has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THM) and haloacetic acids (HAA). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver, or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

[4] **Turbidity** is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. We monitor it because it is a good indicator of the quality of water. High turbidity can hinder the effectiveness of disinfectants. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Disinfectants	Violation (Y or N)	RAA	Range of All Samples (Low - High)	MRDL	MRDLG	Sample Year	Likely Source of Contamination
Chlorine (ppm)	N	1.19	0.22 - 1.97	4	4	2023	Water additive used to control microbes
Disinfection By-Products	**Violation (Y or N)**	**RAA Or Highest Level Detected**	**Range of All Samples (Low - High)**	**MCL**	**MRDLG**	**Sample Year**	**Likely Source of Contamination**
Haloacetic Acids [HAA5] (ppb)	N	17	9.1 - 24	60	N/A	2023	Byproduct of drinking water disinfection
Total Trihalomethanes [TTHM] (ppb)	N	64	41.2 - 95.1	80	N/A	2023	Byproduct of drinking water disinfection
Lead & Copper	**Violation (Y or N)**	**90th Percentile**	**Number of Sites Above AL**	**AL**	**MCLG**	**Sample Year**	**Likely Source of Contamination**
Copper (ppm)	N	0.49	0 of 22	90% of taps must not exceed 1.3	1.3	2021	Corrosion of household plumbing systems; erosion of natural deposits
Lead [5] (ppb)	N	5	2 of 22	90% of taps must not exceed 15	0	2021	Corrosion of household plumbing systems; erosion of natural deposits

[5] **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. Cave Creek Water 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 Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Inorganic Chemicals (IOC)	Violation (Y or N)	RAA Or Highest Level Detected	Range of All Samples (Low - High)	MCL	MRDLG	Sample Year	Likely Source of Contamination
Barium (ppb)	N	0.12	0.12 - 0.12	2	2	2018	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Fluoride (ppb)	N	0.34	0.34 - 0.34	4	4	2018	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate [6] (ppm) [Measured as Nitrogen]	N	0.22	0.22 - 0.22	10	10	2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	N	95	95 - 95	N/A	N/A	2022	Erosion of natural deposits

[6] **Nitrate** in drinking water at levels above 10 ppm is a health risk for infants of 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.

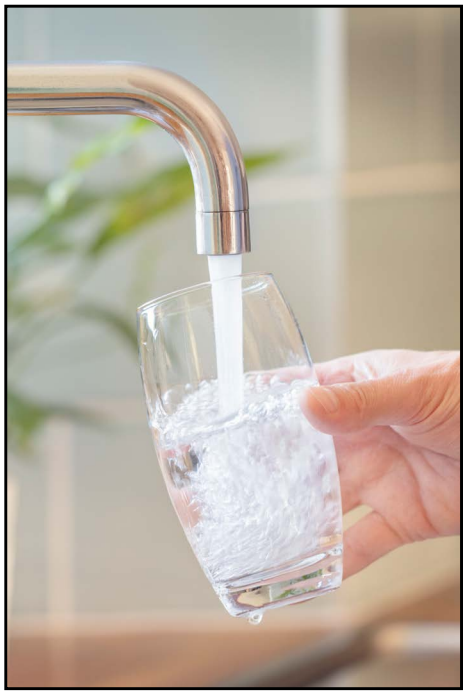
Radionuclides	Violation (Y or N)	RAA Or Highest Level Detected	Range of All Samples (Low - High)	MCL	MCLG	Sample Year	Likely Source of Contamination
Alpha Emitters (pCi/L)	N	3.2 (+/- 0.35)	3.2 - 3.2	15	0	2021	Erosion of natural deposits

Secondary Contaminants	Violation (Y or N)	Highest Level Detected	% Range (Low - High)	Secondary Standard	Sample Year	Likely Source of Contamination
pH (ppm)	N/A	7.5	7.4 - 7.5	6.5 - 8.5	2019	Measure of the acid/base properties
Hardness (gr/g)	N/A	15.0	12.0 - 15.0	N/A	2018	Natural content

Unregulated Contaminants Monitoring Rule UCMR 5

Unregulated contaminants are constituents for which the EPA has not established drinking water standards. The EPA issues a new list of up to 30 unregulated substances for monitoring every five years. Currently, the EPA has identified 29 polyfluoroalkyl substances (PFAS) and 1 metal (lithium) for monitoring during this five-year Unregulated Contaminants Monitoring Rule, also known as UCMR 5.

From January 2025 to October 2025 the Town will be monitoring for unregulated substances PFAS and lithium. Any PFAS and lithium detected during this monitoring period will be reported in the 2025 CCR. Results for unregulated contaminants do not indicate current compliance or noncompliance. The monitoring data will help the EPA make determinations about future regulations and other actions to protect public health.



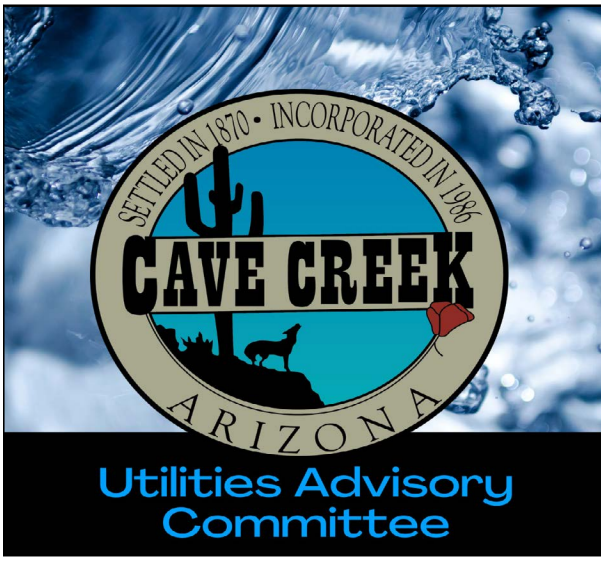
Extensive monitoring is conducted to ensure that your water meets water quality standards. We routinely monitor for contaminants in your drinking water according to Federal and State laws.

The State of Arizona requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. This explains why some of our data, though representative, may be more than one year old.

The Town of Cave Creek has a Utilities Advisory Committee made up of water utility customers that act as an advisory body to the Town Council. In consultation with town staff, the advisory committee provides recommendations to the Town Council on utility issues as outlined in Ordinance No O2023-07.

Currently there are five positions with terms ending December 31, 2026.

Please email townclerk@cavecreekaz.gov if you are interested in joining the committee.

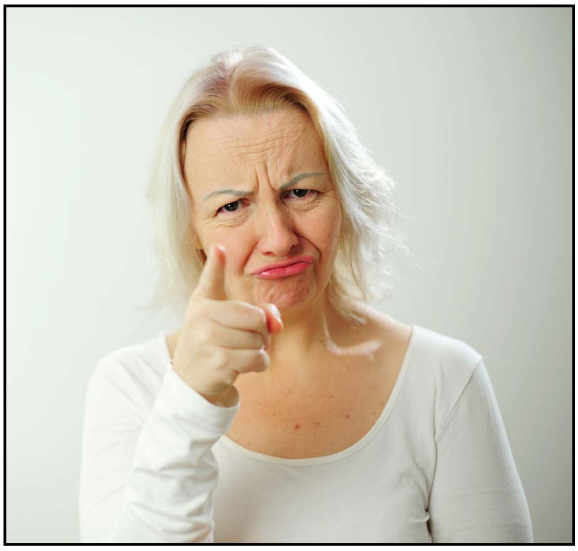


Conservation Measures

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water but can also save you money by reducing your water bill.

Conservation measures you can use inside your home include:

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures
- Install water-saving devices on faucets, toilets, and appliances
- Wash only full loads of laundry
- Do not use the toilet for trash or wipe disposal
- Take shorter showers
- Do not let the water run while shaving or brushing
- Soak dishes before washing
- Run the dishwasher only when it's full



You can conserve outdoors as well:

- Water the lawn and garden in the early morning or evening
- Use mulch around plants and shrubs
- Repair leaks in faucets, hoses and irrigation systems
- Use water-saving nozzles
- Use water from a bucket to wash your car and save the hose for rinsing

Backflow Prevention Program:

- Test backflow prevention assemblies at least annually!
- Repair or replace leaking and failed backflow preventors
- Eliminate unnecessary cross-connections (e.g. abandoned wells, etc.) to the public water system
- Please visit our Backflow Program web page to learn more: CaveCreekAZ.gov/366/Backflow-Program

Water Conservation

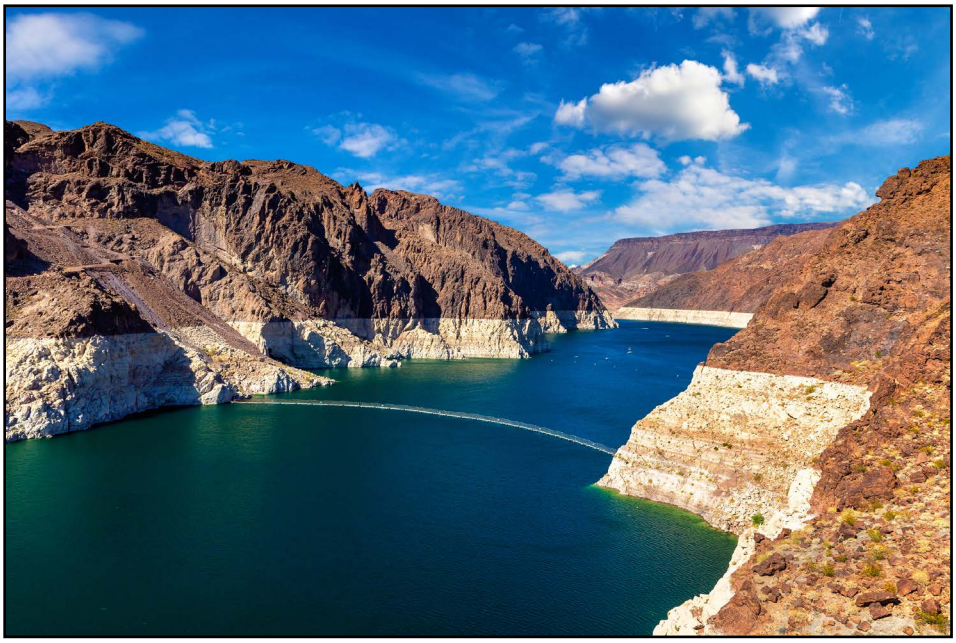


Photo: Drought Conditions at Lake Mead

Water Resource Policy

As of December 20, 2021 the Cave Creek Town Council approved a revised Water Resource Policy in order to ensure a safe and reliable water supply for new and existing customers.

You can review a copy of the policy visit:
CaveCreekAZ.gov/368/Utilities-Links-and-Forms

Photo: Drying Lake Mead

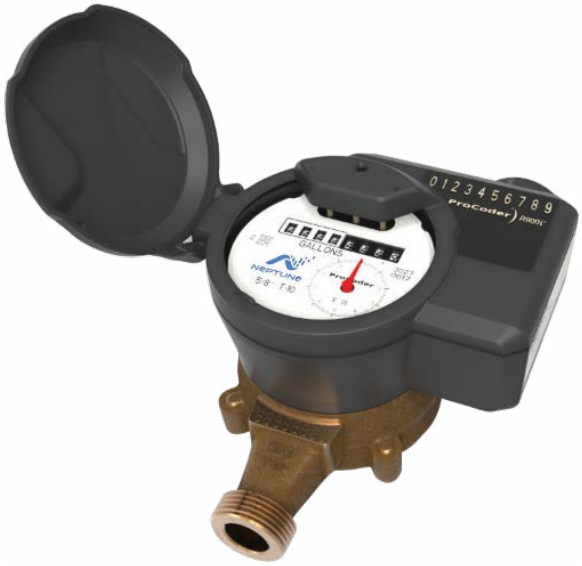
Water Shortage & Drought Management Plan

The Town is dedicated to conserving, protecting, and enhancing water resources to ensure safe and reliable water supplies. We have a Water Shortage and Drought Management Plan to ensure that we take specific actions during Town water supply shortages or drought.

The Town prefers to reduce water use during a shortage through education and voluntary measures that allow you, the customer choices in how you conserve. However, the Town must also establish mandatory compliance measures for those painful choices that will need to be made during a significant shortage. To avoid the need for drastic action (such as price increases, water shortage surcharges, tiered water rates for higher water quantity users, or drastic prohibitions on water uses), it is important to learn how to better manage our water so we develop habits to conserve and protect our water supply. Water is a precious natural resource, vital to our desert community and essential for everyday life.

To view the Drought Management Plan visit:
CaveCreekAZ.gov/DroughtManagement

Water Partnerships



Neptune Technology Group

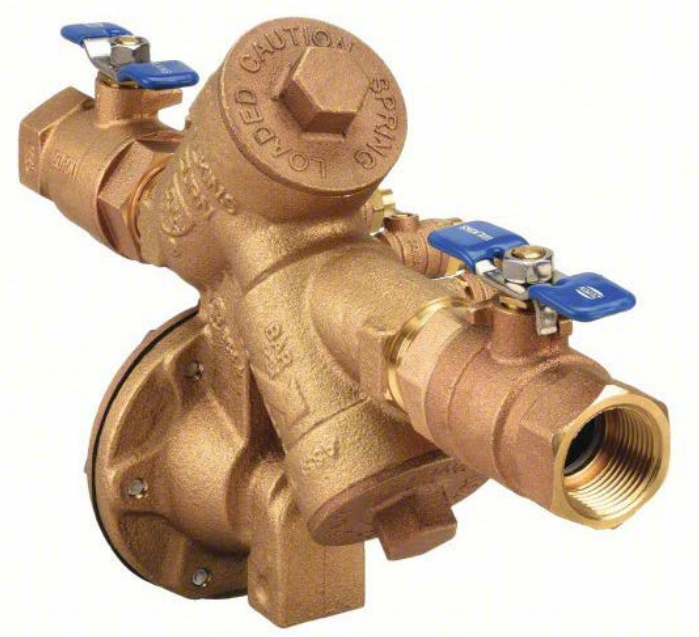
The Town has partnered with Neptune to upgrade its aging metering infrastructure to advance metering technology (AMI). This innovative technology will allow the Town to collect more accurate water metering data faster than ever before. With Neptune My 360 meter data management platform, the Town can integrate data seamlessly, respond to water customers faster, and proactively identify and resolve potential leaks, excessive consumption events, and reverse flow issues throughout the system.

Following the AMI transition, the Town will introduce the Neptune My360 consumer portal. The Neptune My360 portal will allow the Town to enhance utility customer service and conservation efforts by providing consumers with a convenient, proactive way to monitor their own water consumption. Neptune My360 will give water customers the ability to create usage alerts, set a water budget, and view their own water usage online 24/7.

Backflow Solutions, Inc. (BSI)

The Town has partnered with BSI to maintain its comprehensive backflow prevention program to protect the public drinking water supply from pollutants and contaminants that could infiltrate the water system from private properties through backflow. BSI is the nation's most recognized backflow data management firm, developing the only US patented online backflow tracking system, BSI Online.

The Town is committed to protecting its water consumers from the dangers of backflow contamination. Water customers who are required to install a backflow prevention device, must have them tested annually. All certified backflow testers need to register with BSI and have a business license to be recognized by the Town of Cave Creek. All registration and test result uploading can be done at bsionline.com.



Frequently Asked Water Questions

Why does my water appear milky or cloudy?
The most common reason why your tap water is cloudy is due to tiny air bubbles being present in the water. They are harmless and not a health concern, and they will not damage your plumbing or appliances. Fill a clean, clear glass with water and let it stand for a few minutes. As air escapes, the water will clear from the bottom of the glass up to the top.

Why does my water pressure seem high (or low)?
Water pressures will vary greatly from one area of the system to another. Here are some factors that may affect your home's water pressure:

- Elevation of your home or business to the water meter
- Water outages or leaks
- A home water treatment system that needs maintenance
- A malfunctioning shut-off valve
- A pressure regulating valve (PRV) that needs adjustment or replacement

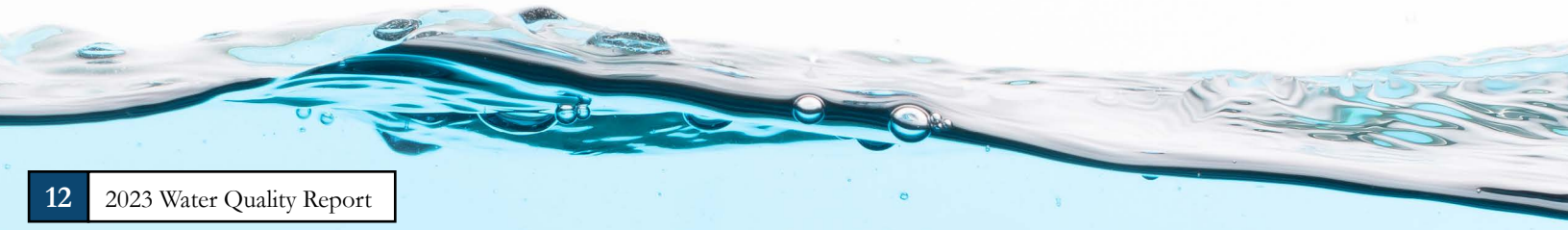
Why does my water smell like rotten eggs?
Rotten egg, musty, or sulfur smell is most commonly caused by bacteria growing in a sink drain, floor drain, garbage disposal, or water heater. Bacteria flourish because water faucets haven't been turned on, hot water hasn't been used for a while, or the water heater thermostat is set too low. Go to the sink where you believe the odor originates. Check cold water versus hot water. Fill a clean glass with cold water, step away from the sink, and smell the water. If there is no odor, the origin may be the drain and not the water.

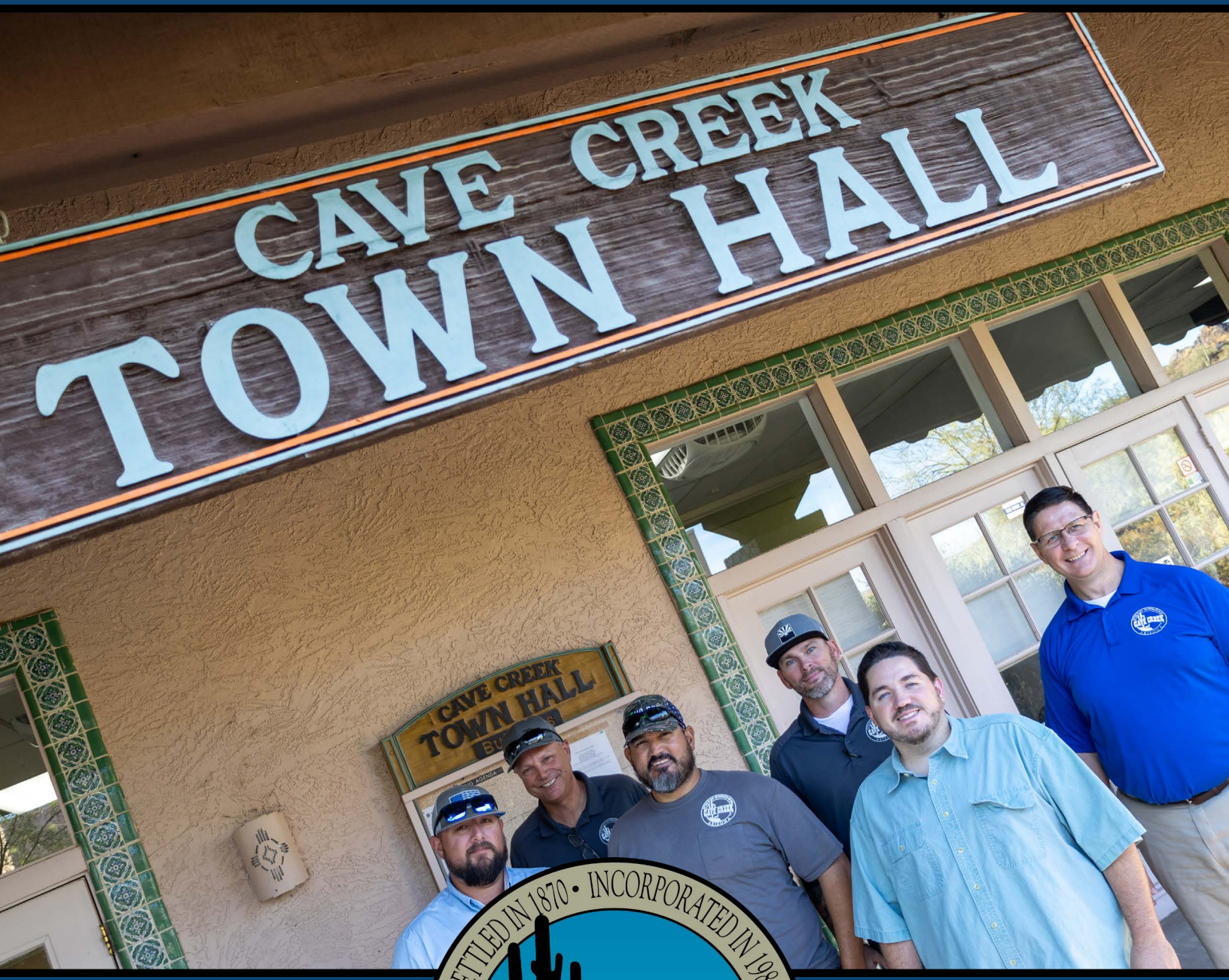
Why is my water discolored?
Discolored or dirty water can be related to older, galvanized pipes, plumbing or a water softener, or to recent activity in your neighborhood, such as construction, break repairs, or flushing fire hydrants. Fill a clean bucket from an outside faucet closest to your water meter or to a main faucet where water enters. Run the water from the spigot into the bucket until the bucket is full and repeat 2 or 3 times. If bucket water is clear, the issue is most likely localized to the home or business. Contact a plumber to inspect plumbing and pipes.

Why don't I receive water outage notices or utility alerts?
Visit CaveCreekAZ.gov/ for any posted utility notices about your location. They will be in the News & Announcements section and/or a Utility Alert across the top of the page. You may also follow us on social media (Facebook, Twitter, YouTube, and LinkedIn) for notifications.

You can sign up and manage your E-Notify utility alerts at CaveCreekAZ.gov/list.aspx. This will ensure that you get an email if something is happening in your area.

CodeRed is an emergency telephone notification service that, when activated, will dial subscribers with a recorded message describing the nature of the emergency or utility outage, actions the Town is taking to alleviate the emergency and recommendations for measures citizens can take to ensure their safety during an emergency. For more information and to sign up visit - CaveCreekAZ.gov/230/CodeRed





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