

TO: Bonita Creek water customers

Date: July 2019

From: Jack Helzer Bonita Creek Land and HOA - Water Director

Subject: Water System communications

SUMMARY:

- **Water storage is limited, please voluntarily conserve water.**
- **Check the water level stage upon entry into Bonita Creek.**
- **Contact the water operator when your use is expected to be high over 24 hours.**
- **If irrigating, consider drip system.**
- **Have you checked your pressure and need a pressure reducer?**
- **Consider a carbon water filter to minimize any taste from water treatment.**
- **A homeowner shut off valve and anti siphon devices are required by code.**

I am writing to you to communicate the status of the water system along with some requests to help the water company continue to provide a high quality and consistent water supply to meet the needs of the community. Please visit the Bonita Creek Land and Homeowners Association web site bonitacreekhoa.org under the Bonita Water Company tab for additional information.

We have grown and are up to over 50 customers and as many of you have seen, Bonita Creek has experienced new building, which means added customers. For the new customers as well as a reminder for the long term customers, I wish to bring your attention to some of the advances as well as the struggles the water company has in providing water service to the community.

The water company operations are regulated by the Arizona Corporation Commission (ACC). The ACC issues the Arizona Administrative Code (AAC) which spells out how water public water companies operate. Title 14, Chapter 2 Article 4 of the AAC for the ACC's codes governing water utilities in Arizona. The water company generates an annual report to the ACC. These reports are public record and can be seen on the ACC website under Utilities at azcc.gov.

The water quality is governed by the Arizona Department of Environmental Quality (ADEQ). The ADEQ oversees the testing the water company performs on water quality as well as performs annual audits of our system. Title 18 Chapter 4 of the AAC provides the rules that ADEQ sets for safe drinking water. Many of the policies that come out of ADEQ are tied to the US Environmental Protection Agency and the Clean Water Act. Information on ADEQ can be found at azdeq.gov.

Water Conservation:

The water supply is surface water from Bonita Creek. Water is pumped, treated, filtered and chlorinated prior to being sent to one of two 10,000 gallon storage tanks. There have been times when the creek is dirty, or turbid, and we are unable to pump and meet the water standards set by ADEQ. In the past couple of years, flooding has also damaged the water intake inhibiting the ability to pump water for sometimes days prior to repairs or turbidity being low enough to pump, so water usage needs to be restricted. The water system is not like a major city municipal water system that has hundreds of thousands gallons of water storage. Check the Water Level board by the mail boxes as you enter Bonita Creek. Level 1 is a normal status. Level II is water supply is compromised and there is a need to conserve water.

ADEQ requires that all of the water treated meet safe drinking water despite typically less than 10% of the water delivered being used for human consumption. We are spending more money now to meet ADEQ's requirements for drinking water, so if irrigating rather than drinking, it adds to the cost to provide water. The water company recommends that all customers practice water conservation practices so that adequate supply is available. Please communicate water conservation practices to your guests as well.

Three areas of water usage are of major concern for the water company.

Those being leaks, construction use and irrigation. When larger quantities of water is used beyond normal household usage, it strains the water operations in two ways. If water storage levels drop significantly in a 24 hr period, the water operator makes the assumption that there could be a water line break or major leak that needs to be detected and repaired. Time and effort are spent troubleshooting shooting the distribution system. Often it is determined that no leaks are present and some customers have had unusually high water usage. When tank levels are low, replenishing the supply can take some time, which will impact the supply to all customers on our relatively small water system.

The water company respectfully requests that if you know that your water usage will be greater than 300 gallons of water over your normal household usage in a 24hr period of time that you contact our onsite contracted water operator, Ken Nagy, by calling, texting or emailing him so that he is aware and can plan for it. Ken's cell phone is 928 9787633 and email is knagy1955@gmail.com

If you are performing construction and need larger amounts of water, please have your contractor be aware of water usage and contact Ken. If irrigating, please attempt to minimize water usage so water is not wasted. Please consider drip systems and drought resistant plants. Leaving a hose open can drain one of the tanks in less than 24 hrs. If filling a spa, or your own water storage tank, letting Ken know will help to insure an adequate supply of water is available for the community.

Water Quality:

The water treatment of surface water possess some challenges. The first step involves adding aluminum sulfate (alum) to the water to help fine silt particles in

the water coagulate so that they are easier to filter out. Alum is recommended by ADEQ to serve this purpose for drinking water. One disadvantage of alum is that it will slightly lower the pH of the water and add a bit of taste that can be noticed by some people. Since using surface water, ADEQ requires disinfecting the water. The most traditional way to do this is to add chlorine, which is what we do. Of course, this will also add some taste that may not be desirable. Based on the amount of alum and chlorine used to treat the water, the taste will vary and some people are more sensitive to the variation. **If water tastes are a concern, it is recommended customers install, at minimum, a carbon filter on drinking water or a house filter to help remove any taste issues, as many customers around the state do.**

This past year ADEQ required that we monitor for cryptosporidium, which is a microscopic parasite that is not effectively removed by current disinfection techniques of chlorinating and UV light exposure which is used for other parasites like e coli. This testing is very expensive, so rather than test the water, special filters certified to filter out crypto were approved by ADEQ and inserted into our process. **These filters are expensive and are in place just for drinking water purposes. This is another reason to avoid using larger quantities of water for non-household use as the more water processed, the more often we need to replace these filters.**

Water Operations:

The water distribution system is gravity fed from the storage tanks. For those customers that are down the hill a bit from the tanks, water pressure can get up to 100 psi. For those of you doing new building, it is recommended that you check the water pressure at you location. Recommend pressures for homes is less than 50 psi. **It is recommended that a pressure reducer be installed where water pressures are greater than 50 psi.**

The code requires that each customer have their own supply shut off valve on your side of the water meter. Sometimes this will be right by the meter and other times it will be located at the home. **The shut off valve on the water company side of the meter is NOT to be used to shut off water to the home.** With the number of transient home owners (part time use), many will shut off the water to the house while not present. If you do not have a shut off valve, get one installed so that you meet code and again, the water company service disconnect valve is not to be used for this purpose.

Backflow prevention is another area the code requires certain responsibilities for the homeowner. Hose bib vacuum break and backflow prevention is needed to prevent contaminated water from getting into your home as well as back into the water distribution system. If you need devices installed, consult a licensed plumber.

If you have any comments, questions or want to know more about our system, please contact myself or one of the board members. Contact information is on the website. You can also contact Ken Nagy as well for operation questions.