Talk of the Town: Water quality in the Prescott area

GREG STEIN, Special to the Courier

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We can assume that water quality is important to everyone in this area, state and literally, any area in the world. There are short- and long-term health-related issues if the wrong substances are ingested. While this column will primarily focus on water supplied by the city of Prescott, well owners should periodically have their well water checked for the most harmful substances, including lead, PFAs (polyfluoroalkyl, the scariest of all the forever-chemical carcinogenic compounds) and arsenic.

As for Prescott-supplied water, it meets all federal water quality standards. It is "legal," which is not the same as safe. Prescott, as well as Prescott Valley, Chino Valley and most water systems, tests for close to 100 potentially harmful substances. Unfortunately, there are over 1,000 potentially harmful substances that can be in water. Some are more toxic than others.

Concerning examples:

- Reputable organizations like the Environmental Working Group (EWG) say we have a nitrate problem but the Environmental Protection Agency (EPA) says no.
- Many communities (2,337 in 49 states) have concerning PFA levels in their water. Arizona says we are fine.

I will focus on one local, fixable concern: arsenic, which according to the EPA, is not a problem for residents getting their water from the city and not a well. Not surprisingly, there were national politics involved in setting EPA "safe" levels. Before 2000, 50 ppb (parts per billion) was allowable, though very far from safe. Most scientists, municipalities, and even the EPA, wanted the allowable level to be 5 ppb or less. Many states and municipalities felt that that was an unreachable level (not true) so Congress got involved and 10 ppb was the compromise number enacted in 2006, which still stands today.

Arsenic is a toxic heavy metal used in mining, agriculture, pressure-treated lumber, coal burning and factory wastes, and it can be naturally occurring in soil, water, rocks, plants, and even air. It is directly linked to several different cancers as well as lowered IQs in children. Most home water-filtration systems do not remove arsenic; most reverse-osmosis systems do. That different levels of long-term arsenic ingestion can yield different levels of cancer risk is irrefutable, according to studies

by the National Academy of Sciences and many others. For more information on arsenic, see cwagaz.org — "Current Issues" on the home page.

The municipal water coming out of Prescott taps is barely under the EPA-allowable 10 ppb maximum. By blending from several wells (we can utilize up to seven in Chino Valley) and often not using some of them, our arsenic levels tend to vary between 8.8 and 9.8 ppb. One Chino Valley well was, and still is, far above 10 ppb, so an arsenic-removal system was purchased several years ago to allow Prescott to utilize water from that well. Money was allocated to purchase multiple arsenic-removal systems, however, that budget got trimmed to finance only one. Importantly, these machines are customized, and can be designed to remove other harmful substances.

There is still an unfiltered well significantly over the 10 ppb level and two around 7 to 8 ppb. Water from these is blended with water from wells with arsenic levels around 2 or 3 ppb. The May 2021 issue of Consumer Reports dealt with the subject, and they and others believe that 3 ppb is a safe, reachable level. Three more removal systems would get us there.

This is a fixable problem at no cost to the city, county or state because the EPA has billions of dollars allocated to clean- safe-water projects. Prescott should immediately apply for the needed funds to fix/improve this issue. Ongoing expense for filters and maintenance are worth the cost to have healthier water.

City of Prescott Environmental Coordinator Matt Killeen will provide an update on the health and future of Prescott's lakes and creeks on Feb. 12. Details at cwagaz.org.

Greg Stein is a 13-year resident of Prescott and an active member of the Citizens Water Advocacy Group, serving on the strategy committee, policy committee and the board.