

Municipalities ignore water issues

By JOHN ZAMBRANO
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Prescott and Prescott Valley are proceeding with a project to import about 8,000 to 11,300 acre-feet per year of water from the Big Chino Valley for use within the Prescott region.

Private and government environmental organizations, officials of municipalities along the Verde and many citizens have concluded that withdrawal of groundwater from the Big Chino will reduce flow in the Upper Verde River and have called for a scientifically prepared mitigation plan that would prevent that from happening.

The two municipalities have not put forth a mitigation plan, but have undertaken an expensive public-relations campaign with a web site to convince residents that their Big Chino Water Ranch project will not reduce flow in the Verde River.

The basis for their conclusion rests on two conditions: they will be pumping 20 miles from the headwaters, and a "playa intrusion" or fine-grained deposit exists between their location and the headwaters.

In their PR campaign, they refer to the 20 miles as "...sufficiently distant to avoid impacts." and to the fine grained deposit

by the erroneous and discredited term "clay plug." To them, the "clay plug" is a "natural barrier" that "divides" and "largely disconnects" their location from the headwaters, similar to "kinking a hose."

These explanations of distance and barriers as a basis for avoiding flow reduction are simply false.

All of the prominent independent and government scientists and even scientists hired by the municipalities who have studied the aquifer have concluded that the factors of distance and soil composition will affect the time for significant flow reductions to occur, but not the fact of the reduction.

The PR campaign states there is no conclusive evidence that pumping from their location will reduce flow in the Verde River. While government reports to date have not been asked or written to directly address that question, the information from those reports provides the answer.

The well-respected U.S. Geological Survey (USGS) report "Hydrogeology of the Upper and Middle Verde River Watersheds, Central Arizona," 2006, states "Ground-water outflow from the Big Chino Valley occurs only as base flow in the Verde River."

This statement is a clear refutation of the concept that there exists a "barrier" or "divide" and that the pumping location is "largely disconnected" from the Verde.

Groundwater flows slowly through the fine-grained deposit and more rapidly around the deposit, but it goes to the Verde. To my knowledge, the municipalities have not provided any evidence to refute the USGS conclusion nor have they explained to what alternative location the groundwater flows if not to the Verde.

At a presentation to the Verde Watershed Association on June 21, 2007, John Hoffman, Director of the USGS Arizona Water Science Center and an author of the above report, asked and answered the following question: "Will ground-water pumpage from the Big Chino sub-basin reduce ground-water outflow from the Big Chino sub-basin to the Verde River? And the answer of course is 'Yes.' It is not a matter of if. It is just a matter of when."

It should be clear to all that the independent USGS, the agency the Mayor of Prescott refers to as the "gold standard," concludes that removal of groundwater from the Big Chino captures water that would otherwise flow to the Verde

and over time will reduce flow in the Verde.

So, why do the municipalities ignore this information? Clearly they want the Big Chino water for growth, and mitigation could be difficult and expensive.

It is hard not to conclude that for them protecting the Verde is a secondary consideration at best and possibly no consideration at all.

The municipalities say that they will monitor, and if actual demonstrable impacts occur, they are committed to remedy such impacts. But they would find it much more difficult to mitigate after impacts demonstrate themselves, and they have described no plan for remedial actions.

The Salt River Project and the Center for Biological Diversity have threatened lawsuits concerning reduction of flow in the Verde. Consequently, the two municipalities' position that their pumping will not affect the River may be more a legal stance than a scientific opinion.

Taxpayers can watch as this expensive drama plays out, most likely in the courts.

(John Zambrano is a retired environmental engineer and vice-president of the Citizens Water Advocacy Group.)