

CWAG Bulletin #5



The Importance of Conservation *A Vital Step Towards Safe Yield*

The water supply for residents of the Prescott area is the Prescott Active Management Area aquifer system (PAMA). In January of 1999, the Department of Water Resources officially determined the PAMA was “out-of-safe yield.” That means the water level in the aquifer is declining because more water is being pumped out and discharging naturally than is being recharged naturally and artificially. Simply put, we are “mining” the aquifer.

State law has set a goal for the PAMA to achieve safe yield by 2025. Aside from this regulatory goal, it should be obvious that mining cannot continue indefinitely; at some point water will not be economically or physically available.

We can eliminate the mining of groundwater by a combination of methods:

- We can conserve water to reduce demand,
- We can collect and treat wastewater and recharge it to the aquifer
- We can enhance the recharge of precipitation,
- We can import water from sources outside the aquifer, and
- We can reduce additional demand for water by establishing policies that limit the growth in population.

Of the methods described above, establishing policies that limit the growth in population has met with great resistance from many public officials throughout the region. One can recall the great rush to approve 32,000 plats in 1998 after the “mining” determination was made, but before its restrictions took effect in January of 1999. This view that the current rapid growth is essential to the region’s economic health is shortsighted. Such growth cannot be sustained. Moreover, limiting population growth does not mean that you cannot grow the economy. However, as long as our public officials view rapid population growth as essential, the remaining methods must play a greater role in achieving safe yield.

The amount of effluent that can be recharged is limited and enhancing the recharge of precipitation may be difficult and costly. Importing water has legal, financial, environmental and political implications. Most notably, importation from the Big Chino aquifer will take water from the Verde River. Our communities have pledged to avoid this effect, but they have not put forth a plan to prevent it. Thus conservation must play a significant role in achieving safe yield.

Where we use water is a key to conservation. Water used outside the home, most typically for watering vegetation, is lost to the atmosphere. Water used in the home can be returned to the aquifer. This is performed efficiently in municipalities that have central collection, treatment and recharge facilities. It is done less efficiently in communities that use septic tanks with leach fields. While conservation of all uses is valuable, the greatest benefits will come from outdoor uses.

We have all been admonished to conserve water, but our ability or will to do so varies. If we are to conserve significantly and fairly, we need proper incentives. The incentives can include the price of water and ordinances for allowable plants and watering.

We can use less water outdoors if we minimize landscape vegetation, if we use only native plants and if we clear the excessive trees and shrubs that grow on our properties. We can establish codes for new construction that limit the amount and type of vegetation. This idea already is meeting resistance from developers and landscapers. Furthermore, by not including existing users, it is limited in its applicability and fairness. It will be a challenge to establish a vegetation ordinance.

The way and the amount we charge for water can spur conservation. The price can be inexpensive for the quantity that a typical family uses inside the home for essential health and sanitation. However, the price beyond that essential quantity would have to increase dramatically if we are to reduce demand. Some communities have such tiered price structures for water, but the prices at the high levels are still modest and insufficient to obtain the kind of water use reductions we need.

Stringent water conservation measures may be unpleasant and unacceptable for some of our residents. However, achieving safe yield is essential. All communities throughout the PAMA need to design a conservation plan that will meet specific and substantial reductions to counter the expected growth in demand that they are encouraging.

~ Those interested in learning more about local water issues and how our citizen-based group is working with area officials are encouraged to visit our website at www.cwagAZ.org. Please join with us by attending our meetings held on the second Saturday of each month, 10am-Noon at the Granite Peak Unitarian Universalist Congregation, 882 Sunset Ave in Prescott.

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