

Arizona Water Law Fails to Protect Rivers and Springs

By Gary Beverly

“Water is life” said the Apache elders.

Our modern water-life is controlled by the 1980 Arizona Groundwater Management Act (AGMA). Originally heralded as progressive and comprehensive, 33 years later the AGMA is due for an update, especially with respect to environmental water – our rivers and springs.

Agriculture, mines, and cities negotiated the AGMA in response to declining water levels and land surface in central and southern Arizona, and out of fear that California might claim Arizona’s share of the Colorado River. Environmental interests were not at the table, despite the fact that the Colorado, Gila, Santa Cruz, and Salt Rivers were drained. Now, seven more rivers may disappear unless we act to protect surface water flows from groundwater mining.

Part of the problem is that groundwater and surface water are managed by separate legal doctrines solely due to historical precedent. Surface water is subject to “Prior Appropriation”, or “First in use, first in right”. Groundwater is subject to “Beneficial Use” which allows unlimited water pumping on that property; different rules apply in the Active Management Areas (AMAs) that cover only 13% of the state.

In reality, groundwater and surface water are physically connected, and this is especially crucial to two of Arizona’s most threatened rivers: the San Pedro and the Verde. Both are perennial desert rivers dependent on groundwater. AZ water law does not protect surface water flows from groundwater pumping that captures water destined for the river.

Consider these examples:

In AMAs, achieving safe yield by 2025 is not a requirement – only a goal without penalty for failure. None of Arizona’s AMAs are expected to meet the safe yield goal. In the Prescott AMA, even if we miraculously achieved safe yield today, Del Rio Springs would still go dry and the groundwater flow to the Verde River would diminish. Safe yield does nothing to protect our rivers.

Water law is riddled by exceptions and options that weaken its effectiveness. For example, the 1993 Groundwater Transportation Act prohibited water transfers between groundwater basins, except Prescott was granted an exception to mine groundwater in the Big Chino Valley, a direct and serious threat to the Verde.

Outside of AMAs, a county can activate the Adequate Water Supply (AWS) rule by unanimous vote of the Board of Supervisors. To establish a new subdivision, the rule requires a developer to obtain a certificate of AWS certifying that a 100-year water supply exists. Outside of an AMA, the developer must show that after 100 years of use the water table will not decline below 1200 feet (!) below ground surface.

Cochise County has adopted the AWS rule, but the weak criteria do nothing to protect the San Pedro River. The Department of Water Resources was required by law to certify the massive 7000-lot Tribute subdivision near Sierra Vista despite the certain destruction of both the San Pedro River and the federal San Pedro River National Riparian Conservation Area. Now, litigation is exploding into the courts.

Yavapai County has not adopted the AWS rule. If adopted, would it protect the Verde River? In the Big Chino Valley, groundwater is both shallow and plentiful. Any development would easily qualify. Any additional unmitigated groundwater pumping will further diminish the river. No help here.

Clearly, the AWS rule does not protect our rivers.

Arizona water law has ratified a death sentence for our two remaining perennial rivers. Tribute will dry up the San Pedro. In the Big Chino Valley, groundwater pumping by the Big Chino Water Ranch plus population growth could exceed the current upper Verde base flow three times over, eventually changing the first 25 miles into a dry wash and destroying some of the finest surviving riparian habitat in the southwest.

Fundamentally, these examples demonstrate the fallacy of separate management for ground and surface water and reveal a root cause of environmental destruction. There is no reasonable possibility of now changing to unified groundwater and surface water management statewide without tearing the state apart. However, new legislation could unify management and control groundwater use in a few limited areas of critical environmental concern. We could begin with the Big Chino and San Pedro Valleys, where the essential water management goal should be to preserve the rivers.

Our legislature needs to correct this problem. It is possible to ensure adequate water supplies for our economy, our quality of life, and our few remaining rivers and springs.