

Protect Ecological Water

Keep Arizona's Rivers and Streams Flowing

Support SB1370!

Water is life. In Arizona's arid environment, rivers and streams are vital arteries that sustain our diverse flora and fauna. The health of these fragile waterways is also intimately tied to the well-being of human communities and local economies. Sadly, the vast majority of Arizona rivers have already been dried up over the past century, and our remaining flowing rivers are at significant risk, especially in places like the Upper Verde and the San Pedro, which are threatened more than ever by surface water diversions, groundwater pumping, drought, and climate change. This is happening despite the fact that Arizona's \$20 billion-dollar tourist economy relies on healthy rivers and riparian habitat for boating, fishing, hunting, hiking, birding and sightseeing, all of which will be negatively affected by continued diminishing flows.



Studies by federal¹ and state agencies² report numerous challenges to our water supply that threaten our future economy, our lifestyle, and our environment and wildlife. The time to address these challenges is now, and it is way past time for an honest assessment of whether we can continue to base our state's economy on continuous growth and on water-intensive uses without significant reform. Unfortunately, none of this has been considered in discussions of the Drought Contingency Plan.

Growing numbers of countries embrace a holistic water management paradigm that places conservation of environmental/ecological flows (water left in rivers and aquifers to maintain ecosystem health) at the center of management practices. This is not the case in Arizona, but should be. Increasingly, countries and states that turn first to expensive high-tech water solutions without protecting rivers and aquifers, or investing intensively in conservation measures that spark new industries, are seen as penny wise and dollar foolish.³ Maintaining Arizona's rivers and streams is something that is fundamental to the future of our state, its economy, and its citizens. **The truth is that environmental/ecological flows are not distinct from or in competition with human uses, but rather, human uses count on healthy flows in rivers and streams.**

¹ US Bureau of Reclamation "Colorado River Basin Water Supply and Demand Study", <http://www.usbr.gov/lc/region/programs/crbstudy.html>; see also USGS, Human Effects on the Hydrologic System of the Verde Valley, Central Arizona, 1910-2005 and 2005-2110, Using a Regional Groundwater Flow Model, Scientific Investigation Report 2013-5029 (2013), available at <https://pubs.usgs.gov/sir/2013/5029/sir2013-5029.pdf>

² Arizona Department of Water Resources, *Arizona's Next Century: A Strategic Vision for Water Supply Sustainability*, http://www.azwater.gov/AzDWR/Arizonas_Strategic_Vision/

³ <http://www.circleofblue.org/tag/stranded-assets/>



Ecological flows are defined as “**water sufficient to sustain freshwater ecosystems and the wildlife habitat and human livelihoods and well-being that depend on these ecosystems.**” This definition is consistent with the United States Geological Survey (USGS) definition and other best practices that recognize the important role our rivers and streams play in sustaining wildlife, our economy, and our children’s well-being.

SB1370 freshwater ecosystems; ecological water; survey (Dalessandro: Alston, Bowie, et al.) does the following:

- Defines ecological water as water sufficient to sustain freshwater ecosystems and the wildlife habitat and human livelihoods and well-being that depend on these ecosystems
- Recognizes ecological water as a beneficial use and allows any person, the state, or the state’s political subdivisions to appropriate unappropriated water as ecological water and allows water rights to be severed and transferred for ecological water.
- Directs the Arizona Department of Water Resources (ADWR) director to use the best available science to develop a set of standards to define the ecological water needs of Arizona and to conduct an assessment of Arizona surface waters to be made available to the public.

The window of opportunity to better manage our water resources and protect these ecological flows is closing quickly – once a perennial stream or river dries up for part of the year or for certain stretches, species disappear and the ecological integrity of the system is degraded. We must act now to reduce additional permanent damage from unsustainable water use and to protect our economies and tourist industry that rely on these systems.

We ask that the state legislature recognize its public trust responsibility to the people of Arizona by passing an ecological water bill to recognize and provide a mechanism for protecting and restoring ecological flows as the cornerstone to a sound 21st century economy. It is imperative to ensure that our waters are sustained for all of us and for future generations. **Please support SB1370!**

Thank you for your consideration.

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