

# A Conservation Vision of Arizona's Water Future

## **A Vision for Water Sustainability:**

We envision a future where all citizens can live comfortable, economically secure lives with good jobs, and enjoy healthy natural areas with flowing rivers and springs, healthy riparian habitats, vigorous wildlife, and recreational opportunities. Water is life. To sustain our lives and environment for the future, we need sustainable water policies.

Arizona needs to achieve a sustainable water future through effective management that controls surface water and groundwater usage in a manner that can be maintained for an indefinite time, without causing unacceptable environmental, economic, or social consequences. To achieve that future, all water users – agricultural, municipal, industrial, *and environmental* – must work together to better manage our water resources.

## **The Challenges:**

Studies by federal<sup>1</sup> and state agencies<sup>2</sup> report numerous challenges to our water supply that threaten our future economy, our lifestyle, and our environment and wildlife. Since Arizona's statehood, pumpage and diversions have severely impacted major groundwater basins and seriously degraded five of Arizona's major perennial rivers: the Colorado, Gila, Salt, Santa Cruz, and much of the San Pedro. Additionally, future perennial flow in the upper Verde River is deeply threatened. Researchers<sup>3</sup> predict that in 2050 groundwater demand in seven river basins will exceed base flow, thus endangering the Agua Fria, Babocomari, San Pedro, upper Verde, and Little Colorado Rivers. One indicator of the

declining health of Arizona's rivers and streams is the status of native fish populations. Twenty-one of Arizona's original thirty-three native fish species now have status under the Endangered Species Act, and three are extinct. Reduced river flows and deterioration of riparian habitats have detrimental effects on hunting, fishing, boating, birding, and other water-based recreational activities that significantly contribute to Arizona tourism – a growing \$20.9 billion industry bringing revenue from outside Arizona.

To date, Arizona water resource management has failed to bring either surface or ground water to a sustainable condition. The "General Adjudication of All Rights to Use Water in the Gila River System and Source" has spanned four decades with costs exceeding one hundred million dollars, yet it has failed to adjudicate a single basin. The 1980 Arizona Groundwater Management Act (AGMA) is inadequate, failing to achieve key goals in the Active Management Areas covering only 13 percent of the state. The AGMA does not recognize environmental water rights, has weak regulatory authorities, and is administratively underfunded. The remainder of the state not covered by the AGMA now confronts significant threats, especially for environmental water resources. Environmental water has no legal rights statewide, and nowhere in the AGMA is environmental protection a goal.

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<sup>1</sup> US Bureau of Reclamation "Colorado River Basin Water Supply and Demand Study", <http://www.usbr.gov/lc/region/programs/crbstudy.html>

<sup>2</sup> Arizona Department of Water Resources, *Arizona's Next Century: A Strategic Vision for Water Supply Sustainability*,

[http://www.azwater.gov/AzDWR/Arizonas\\_Strategic\\_Vision/](http://www.azwater.gov/AzDWR/Arizonas_Strategic_Vision/)

<sup>3</sup> Marshall RM, Robles MD, Majka DR, Haney JA (2010) Sustainable Water Management in the Southwestern United States: Reality or Rhetoric? PLoS ONE 5(7): e11687. doi:10.1371/journal.pone.0011687

### **Clearer Vision Needed:**

The Arizona Department of Water Resources (ADWR) report *Arizona's Next Century: A Strategic Vision for Water Supply Sustainability* proposes to increase water supply by desalinization or other expensive infrastructure to import water. A clearer vision would:

- Consider environmental water needs and propose policies to keep rivers, streams, and springs flowing;
- Incorporate the high probability that climate change will afflict Arizona with multi-decadal droughts, increased temperatures, and diminished water supplies;
- Include new possibilities for controlling demand, especially aggressive water conservation;
- Consider the water needs of rural Arizona; and
- Include a comprehensive economic evaluation of alternative augmentation techniques and advanced water reuse technology.

### **Modernize Arizona Water Law**

The window of opportunity to better manage our water resources is closing quickly – groundwater responds slowly both to stresses and improved management. 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.

Arizona's water laws need to be modernized, in consultation with a broad selection of stakeholders including the environmental community. In general, we should strive to simplify water law, address rural Arizona's water issues, integrate the best available science, include environmental water rights, and refocus on sustainability with a strong emphasis on

conservation, reuse, and the environment. Water law reform is notoriously difficult; five previous state study commissions<sup>4</sup> have produced some valuable perspectives but no improvements to state water law. Our leadership must rise to the challenge. We call on Governor Ducey to exert leadership to ensure effective changes in Arizona water policy.

### **Arizona Sustainable Water Workgroup**

We urge Governor Ducey and ADWR to immediately convene a Sustainable Water Workgroup charged to propose policies that will prevent further degradation of Arizona's rivers, lakes and springs. At a minimum, in critical environmental sub-basins, new policies should integrate the management of groundwater and surface water and ensure restoration to acceptable environmental flows, or non-degradation of current environmental flows. The Workgroup must include a broad range of stakeholders, including the environmental community.

### **Signers:**

Center for Biological Diversity  
Citizens' Water Advocacy Group  
Coalition for Sonoran Desert Protection  
Community Water Coalition  
Desert Rivers Audubon  
Friends of Ironwood Forest  
Friends of Madera Canyon  
Great Old Broads for Wilderness  
Save the Scenic Santa Ritas Association  
Sierra Club – Grand Canyon (Arizona) Chapter  
Southern Arizona Green For All Coalition  
Tucson Audubon Society  
Unitarian Universalist Justice Arizona Network  
Watershed Management Group  
Western Watershed Project  
Yuma Audubon Society

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<sup>4</sup> Arizona Department of Water Resources, *Arizona's Next Century: A Strategic Vision for Water Supply Sustainability*,