Shallow Groundwater Restoration

Community Water Coalition policy statement

Adopted August 11, 2015

Revitalizing Tucson's Living Waters

Water is a precious and finite resource in Southern Arizona. It is the basis for healthy human communities and the watersheds they depend on, as well as thriving riparian ecosystems that support the vast majority of plants and wildlife in the region. Healthy watersheds and the ecosystem services they provide are fundamentally important to the region's economic health.

In the Lower Santa Cruz Watershed, there are special areas near mountain fronts and along streambeds where geology and natural recharge maintain groundwater levels within 50 feet of the land surface. These shallow groundwater areas support private household and commercial water use as well as springs, cienegas, and lush riparian corridors such as Sabino Creek and Cienega Creek.

In our increasingly arid climate, and in the context of long-term drought and climate change, the supply of water for human and natural systems is declining and becoming more uncertain. Changes in the timing and amount of precipitation combine with increases in human demand to put tremendous pressure on the region's water resources. Shallow groundwater areas are particularly susceptible to these threats and have already suffered significant damage, but they also can recover quickly if properly stewarded.

To preserve our quality of life and the natural systems that enhance it, we must change the way that water is valued, used, and managed in shallow groundwater areas. Sound stewardship of these areas requires community engagement to understand the amount of water being withdrawn for human uses as well as the value and needs of riparian systems, habitat, and wildlife supported by shallow groundwater.

To ensure use of shallow groundwater resources that is sustainable and supports both human and natural communities, we propose the following actions and policies:

- Develop data and information to quantify water withdrawn; natural and potential supply in shallow groundwater areas; and the effect shallow groundwater has on natural systems and long-term water security.
- Collaborate with well owners in shallow groundwater areas to reduce the amount of water being withdrawn and implement water-saving strategies.
- Promote dramatic reductions in the amount of potable groundwater used for outdoor landscaping through rainwater-harvesting and greywater systems and native landscaping.
- Work with agencies and governments to improve policy and infrastructure in shallow groundwater areas to reduce the amount of water being withdrawn.
- Establish priority areas and encourage restoration in shallow groundwater areas that will enhance the capacity of natural systems to retain water and support biodiversity.