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**PLANNING FOR FUTURE WATER NEEDS IN ARIZONA –  
WILL THE ENVIRONMENT ENTER INTO THE WATER SUPPLY-DEMAND EQUATION?**

Rob Marshall\*, Jeanmarie Haney

**ABSTRACT:** Although the concept of sustainability is widely touted as an ideal for urban growth policies, achieving sustainability can be difficult. Nowhere is this more evident than with our use of water. Sustainability in the realm of freshwater is defined as the provisioning of water for both people and the environment for generations to come. Plans for urban growth in the western U.S. rarely embrace this goal, focusing instead on the pursuit of new supplies to accommodate future growth. Conflict over water has become a hallmark of the western United States, where large-scale water infrastructure projects in the 20th Century facilitated rapid urban and economic expansion at the expense of the environment and, frequently, rural communities. In a proactive move, the Arizona Legislature created the Water Resources Development Commission (WRDC) in 2010 to assess current and projected water needs, available supplies and new sources, and funding mechanisms. The intent was to reduce conflict between urban and rural interests and between water development and the environment. Working committees were formed, including an environment committee tasked with identifying natural resource values and quantifying environmental water needs. The environment committee produced a comprehensive compendium of tables, maps and narrative across Arizona's 51 ground water basins characterizing riverine, riparian, and aquatic resources as well as attributes such as wild and scenic designations, critical habitat for threatened and endangered species, unique waters, and effluent-dependent reaches. Environmental water needs were quantified using two different approaches, which yielded a surprising level of correspondence. The environment committee's work represents a first for Arizona and, generally, has been well received, which has given river and riparian resources a higher profile in discussions about our water future. Still, considerable challenges remain in integrating environmental water needs with traditional municipal, industrial, and agricultural water demands. The WRDC has been actively deliberating this and other issues as they prepare to release a final report to the Legislature in September 2011. We will report on methods for identifying and characterizing natural resource values and quantifying environmental water needs and how this information has been utilized.

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\* Director Center for Science and Public Policy, The Nature Conservancy, 1510 E. Fort Lowell Road, Tucson, AZ 85719 USA, Phone: 520-622-3861, Fax: 520-620-1799, Email: rmarshall@tnc.org