

Summary of the Status of Transboundary Aquifer Assessment efforts for GNEB Workgroup 4, River Basins:

The Transboundary Aquifer Assessment Act (U.S. Public Law 109-448) was signed by the President of the United States on December 22, 2006. A total of four priority aquifers were initially identified in the federal legislation. Two are located in the Arizona-Sonora region, the Santa Cruz River Valley aquifer and San Pedro aquifers underlying Arizona and Sonora. The two other aquifers that are specified by the program are the Hueco Bolson Aquifer near El Paso/Ciudad Juarez and the Mesilla/Conejos-Médanos Aquifer at the New Mexico-Chihuahua border. Mexico's collaboration in the program was formalized through a Joint Report signed by the Principal Engineers of the International Boundary and Water Commission (IBWC) on August 19, 2009. The Joint Report established the Cooperative Framework for U.S.-Mexico coordination and dialogue that has been essential to binational study of these aquifers.

Working through the IBWC Cooperative Framework, the U.S. Geological Survey, the University of Arizona, CONAGUA, and the University of Sonora are nearing completion of the *Santa Cruz River Aquifer Binational Report* and the *San Pedro River Aquifer Binational Report*. These reports reflect an unprecedented effort to align the earth science data (hydrology, geology, precipitation, etc.) and collaboratively map these. The nine-chapter reports, which will be issued by IBWC later in 2014 in Spanish and English, are the culmination of binational field visits, workshops, identification and analysis of available data and needs, and cooperative task assignments to fill gaps. The reports lay the foundation for future efforts, which are discussed in the final chapters.

The U.S. Congress has appropriated only \$2 million to date of the \$50 million authorized for the entire transboundary program. Despite this funding challenge, there has been significant progress on studies related to the aquifers in the Arizona-Sonora region. In this region, the University of Arizona's Water Resources Research Center (UA WRRC) serves as the lead partner for the U.S. Geological Survey (USGS), while the University of Sonora's (UNISON) Department of Geology is the lead partner for Mexico's National Water Commission (CONAGUA). Funding from Mexico for work within Sonora and limited additional U.S. resources, bolstered by the strong collaborative spirit, have resulted in these scientific studies of shared resources. Awaiting final review, the studies provide foundational information on current aquifer characteristics that are important for policy makers, land managers, and stakeholders involved in water management, including efforts to restore or prevent degradation to ecological systems. The Arizona-Sonora transboundary collaboration and the IBWC Cooperative Framework can serve as a model for meeting similar informational and analytical needs along the U.S.-Mexico border region.

Information on the Santa Cruz Valley and San Pedro aquifer assessment efforts can be found at wrrc.arizona.edu/TAAP.

