

The Arizona Water Banking Authority

A Nonprofit Water Storage Facilitator

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The Arizona Water Banking Authority (AWBA) is an institution created by the Arizona Legislature in 1996 with two primary functions: increasing utilization of the unused portion of Arizona's allocation of Colorado River water through recharge; and ensuring a secure water supply for the future. The AWBA is directed by a board comprised of individuals that represent Arizona's water users. It purchases water from the Central Arizona Project (CAP) for storage at both underground storage facilities (USFs), where CAP water is recharged into the subsurface, and groundwater savings facilities (GSFs), where CAP water is used in lieu of pumping groundwater. By acting as an intermediary between entities with access to excess water and entities with storage facility capacity, the AWBA can also facilitate other water banking activities.

To facilitate water storage, the AWBA has:

- funds available for purchasing and storing water;
- a contract for excess water from the CAP. The CAP has the lowest priority for Arizona's allocation of Colorado River water (after on-river users) and the AWBA contract is the lowest priority for CAP water use;
- agreements for storing CAP water with both USFs and GSFs;
- water storage permits, obtained from the Arizona Department of Water Resources (ADWR) for storage at USFs and GSFs. The authority is charged the same fees for permits as all other entities;
- authority to hold long-term water storage credits and to transfer these credits to others. Credits are held by the AWBA on behalf of water users of the state and must be used pursuant to state law. The credits are calculated and issued by ADWR in accordance with current recharge statutes.

Representation of the AWBA

The five board members of the AWBA include the director of the ADWR, who chairs the AWBA board; the president of the board of the CAP; a representative of CAP municipal and industrial (M&I) users; a representative of Colorado River water users along the Colorado River; and someone knowledgeable in water resources management issues. The latter three members are appointed by the governor and approved by the legislature; they serve six-year terms. In addition, the president of the Arizona Senate and the speaker of the Arizona House of Representatives each serve or appoint one nonvoting member to the AWBA.

Functions of the AWBA

The objectives of the AWBA, as defined by law when the authority was created, include:

- **Secure Water Supply:** The AWBA purchases water from CAP and stores it in USFs and GSFs, developing a stored reserve of water that can be provided to CAP M&I users or to on-river users in times of drought on the Colorado River, or to M&I users in times of disruption of the CAP distribution system.
- **Assistance in Meeting Groundwater Management Objectives:** The AWBA can help the state comply with the provisions of the 1980 Groundwater Management Code through both storage and recovery. Although 95 percent of stored water can be recovered, a five percent "cut to the aquifer" may not be recovered. Additionally, the AWBA can extinguish credits to benefit the aquifer if requested by the ADWR.
- **Assistance in Settling Indian Water Rights Claims:** Indian tribes in Arizona have significant claims to water rights and the affected parties often negotiate settlements to resolve claims. The AWBA provides another source of water



RIGHT AND ABOVE: CAP canals and reservoirs in Arizona. Photos courtesy of Central Arizona Project (©2004)

that can be used as part of Indian water rights settlements. For example, long-term storage credits held by the AWBA could be transferred to a tribe as a component of a settlement.

- **Interstate Water Storage:** The AWBA may contract with authorized entities in California and Nevada to store Colorado River water in Arizona. The contracting state pays the AWBA the full cost for water delivery, storage, and recovery.

Subsequent statutory amendments to the AWBA include provisions for additional services:

- **Water Banking Storage Agreements:** Arizona entities may store water through agreements with the AWBA. The excess water contract, water storage permits, and storage facility agreements that the authority already possesses may make entering into water banking agreements with the AWBA more efficient than entities making similar arrangements

for themselves. The AWBA is permitted to facilitate only those activities that entities could undertake themselves pursuant to state law.

- **Long-Term Storage Credit Lending:** The AWBA may lend long-term storage credits to any Arizona entity. For example, a municipality faced with a shortage of its 100-year assured water supply could receive a loan of storage credits from the AWBA, with

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the requirement that those credits be replaced later. Thus, through storage credits the AWBA would supply the balance of water needed for the assured water supply.

- **Effluent Recharge:** The AWBA may store effluent, but only when all available excess CAP water has been stored or when excess CAP water is not available to the AWBA.
- **Firming Non-CAP Supplies:** The AWBA determines the amount of storage credits needed to secure or firm water supplies for CAP M&I subcontractors and on-river users, should a shortage of Colorado River water be declared. Storage credits in excess of that amount may be used to firm other non-CAP surface water supplies, such as water from the Salt-Verde river system.

Funding

The AWBA has three primary sources of funding:

- Fees for groundwater pumping within the Phoenix, Pinal, and Tucson Active Management Areas (AMAs). A groundwater withdrawal fee is charged for each acre-foot of groundwater pumped in an AMA. The AWBA portion of that fee is set by statute at \$2.50.
- A four-cent ad valorem property tax in the three-county CAP service area. CAP is statutorily authorized to levy this tax through 2016 and deposit the funds in the AWBA account if the money is not needed for certain CAP costs.
- A state general fund appropriation in an amount determined annually by the Arizona Legislature and the governor. This appropriation has ranged from \$0 to as much as \$2 million.

Other revenues may include administrative fees associated with interstate water banking and water banking services for others. However, the AWBA passes on costs and does not operate on a for-profit basis.

Operations

In 2003, AWBA had in excess of 1.2 million acre-feet of water storage permits.

Approximately 210,000 acre-feet were actually delivered and an estimated 190,000 acre-feet of long-term storage credits was earned. Of that, about 53 percent of the storage was in USFs and 47 percent in GSFs.

Storage operations in any given year are dependent on four factors: the amount of unused CAP water available to AWBA for delivery; the CAP capacity available to the AWBA for that delivery; available funds and costs for delivery and storage; and the recharge facility capacity available for use by the AWBA.

The U.S. Bureau of Reclamation annually determines the quantity of Colorado River water available for each Lower Basin state. CAP can then divert any water within Arizona's entitlement that is not being used by other higher priority users on the river. In a year when Arizona receives its full entitlement of 2.8 million acre-feet, CAP typically diverts 1.6 million acre-feet, however, 1.8 million acre-feet probably could be moved safely through the system. Pursuant to state law and CAP policy, any water not requested by another entity within Arizona is available to the AWBA.

The AWBA estimates its fund balance for 2004 is \$44.8 million. Of this amount, based on where the revenues were generated, \$36.6 million is available for use benefiting Maricopa County; approximately \$6.1 million and \$2.1 million are available for Pima and Pinal counties, respectively. In 2004, the AWBA will pay CAP \$70 per acre-foot of water to cover costs for pumping energy; operations, maintenance, replacement; and lost revenues from federal deliveries. The AWBA also pays USF fees at rates ranging from \$8 to \$18.60 per acre-foot.

Storage facility capacity is not currently a limiting factor in the AWBA's efforts to store CAP water, although it has been in past years. For 2003 and 2004, the quantity of water and funding available to the AWBA are the primary limiting factors.

For more information, visit www.awba.state.az.us, or contact Gerry Wildeman at glwildeman@adwr.state.az.us.