

**SUMMARY OF
APRIL 28TH “TUCSON” WATER FORUM
Challenges Facing CAP and Southern Arizona**

**Notes to CWAC, May 5, 2010, from
Ralph Marra, Tucson Water Resource Administrator**

CAP Board Members Representing Pima County - Pat Jacobs, Sharon Megdal, Warren Tenney, Carol Zimmerman

Purpose of Forum - Pima County members of the CAP Board wanted to inform constituents of the major issues facing CAP which can have an impact in Pima County

Navajo Generating Station and the Cost of Power

- National Park Service and environmental groups are pushing EPA to develop regional haze regulations that can potentially put the Navajo Generating Station out of commission by requiring a very large investment (up to \$1 billion) in Nitrogen Oxide emission controls.
- If it does go off line, CAP will have to purchase power off the grid at a cost 2 to 3 times higher than NGS costs.
- The Navajo and Hopi tribes would be impacted with approximately \$110 million lost to the Navajo and about \$12 million to the Hopi.
- Even if the more expensive alternative is installed, anticipated regulations on carbon and other coal-related pollutants could still shut down the plant.
- **Bottom Line:** CAP wants to use a cheaper treatment technology which is now being installed (at a cost of \$47 million) for 10 to 15 more years until alternative renewable power resources are developed.

Colorado River Shortage

- Stage 1 shortages (where water level drops below 1075-foot elevation in Lake Mead) are mathematically possible as soon as CY 2012, but are not very likely. The US Bureau of Reclamation's 24-month study does not project such a shortage.
- A shortage impacting high priority CAP allocations (cities & Indians) could occur before mid-2020s.
- Department of Interior is working with the Seven Basin States for interstate coordination and with Mexico to determine the latter's potential share of a shortage.
- **Bottom Line:** While excess water for AWBA and CAGR and others could be shorted in a couple of years, the interim 7-Basin States' shortage-sharing agreement and the work by CAP and the AWBA conducted to date will help protect most users.

ADD Water

- Demand for CAP water will eventually exceed available supply. In its first phase, the ADD Water program set up a collaborative process among stakeholders to determine the policies governing how ADD Water supplies will be shared and how it can be paid for. The CAP Board approved the stakeholders' "Summary of Consensus" in March 2010.
- The 2nd phase of ADD Water, the implementation phase, will begin in May or June 2010. Stakeholders will again take part in the process to make decisions about costs and financing mechanisms.
- Another question to be answered is to further define the CAGRDR's role in ADD Water.
- Bottom Line: ADD Water will make it possible to seek out new water resources for future use which will include reinforcing existing CAP allocations in time of shortage and for future growth.

CAGRDR

- CAP believes that the role of the CAGRDR is generally misunderstood. It is not providing for unsustainable growth; instead, it is a mechanism for growth that was developed to meet the requirements of the Assured Water Supply rules both for those who have direct access to the CAP infrastructure and for those who do not.
- While future water supplies are still an issue for future members of GRD, current obligations are being taken care of.
- CAGRDR prefers to replenish in the areas of hydrologic impact but that is not always possible given the locations of the State Demo Recharge Projects in Pima County.
- Bottom Line: CAGRDR is critical to the future of TAMA entities and is on track with meeting its current obligations. Future water supplies (groundwater, effluent or ADD water) will be evaluated as the new 10 year operation plan (2015) is developed.

30-Day CAP Reliability Work Session

1. TW is committed to utilizing its CAP allocation *via* recharge and recovery at CAVSARP, SAVSARP, and Pima Mine Road.
 - These are wet-water recharge and recovery facilities that can be used to provide the City of Tucson's 30-day wet-water reliability needs ($\approx 12,000$ AF).
 - These facilities were expressly master planned to serve multiple purposes including water pre-treatment, water banking to prepare for future shortages, drought management, and for short-term reliability needs.
2. Metro Water, the next largest water provider in the Tucson AMA, is planning to adopt recharge and recovery to utilize its CAP allocation as a source of wet-water supply.
 - As with Tucson Water, Metro's adoption of this approach will also have implications for both meeting its 30-day RELIABILITY and its longer-term FIRING needs.
 - The Town of Oro Valley, the third largest water provider, and Marana are still considering the advantages of a surface water treatment plant given concerns about future, increasingly stringent potable regulations.

3. Pipeline infrastructure is already in place in Tucson Water's system to help deliver CAP water not only to Tucson Water's customers but possibly also to others. Some of that infrastructure capacity is still potentially available to help:
 - WHEEL the CAP ALLOCATIONS of other parties
 - meet their 30-day wet-water RELIABILITY needs
 - meet their wet-water FIRING needs during longer-term CAP shortages
4. To address some regional needs, it may be possible to add recharge and recovery infrastructure at CAVSARP and/or SAVSARP to help accomplish #3 above.
5. Tucson Water will update and refine its conceptual reliability proposal for recharge and recovery in the next few months (preliminary concepts were previously provided to the Bureau in Dec 2008). The update will serve as a baseline analysis focusing on ways to meet its 30-day reliability needs by adding facilities at SAVSARP, CAVSARP, and/or the Pima Mine Road Recharge Project.
6. Tucson Water will also develop a second conceptual proposal superimposing the potential reliability needs of other parties on top of our own baseline, noting possible opportunities and system capacity constraints for purposes of future discussion.
7. Both the baseline concept noted under 5 and the superimposed analysis summarized under 6 will be provided to CAP and to the Bureau upon completion in the next couple of months.
8. CAP will use this information, possibly in concert with the Bureau, and present an update to the CAP Board in August or September regarding the current status of on-going conversations.