

ARIZONA WATER BANKING AUTHORITY
Thursday, March 25, 2004

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Arizona Water Banking Authority
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Web Page: www.awba.state.az.us

PLEASE POST

NOTICE OF PUBLIC MEETING

Pursuant to A.R.S. § 38-431.02, notice is hereby given that there will be a meeting of the Arizona Water Banking Authority Commission on March 25, 2004 at 10:00 a.m. at the Arizona Department of Water Resources, 500 North Third Street, Phoenix, Arizona 85004, third floor conference room. The meeting is open to the general public. A copy of the agenda for the meeting is posted below.

Dated this 23rd day of March, 2004

FINAL AGENDA

Arizona Water Banking Authority Commission Meeting

- I. Welcome/Opening Remarks
- II. Approval of Minutes of December 17, 2003 Meeting
- III. Water Banking Staff Activities
 - Deliveries
 - Monthly accounting report
 - Indian firming technical committee update
 - Preliminary drafting of 2003 Annual Report
- IV. Discussion Regarding Recovery of Long-term Storage Credits
 - Update on current status
 - Briefing on recovery well permit process
- V. Discussion Regarding Long-term Storage Credits Developed with General Fund Appropriation
 - Potential action to direct staff to develop resolution regarding reservation of credits within the general fund account

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Arizona Water Banking Authority meeting

- VI. Discussion Regarding Water Management Objectives for the Phoenix, Tucson and Pinal Active Management Areas
- VII. Call to the Public

Future Meeting Date:

Wednesday, June 16, 2004

All visitors must stop at the lobby to sign-in and receive a visitor's badge. Badges are to be displayed at all times. Visitors are also required to return to the lobby to sign out and return their badges. Thank you for your assistance in this matter.

Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Nan Flores at (602) 417-2418. Requests should be made as early as possible to allow time to arrange the accommodation.

ARIZONA WATER BANKING AUTHORITY
Draft Minutes

Summary of AWBA Meeting¹
December 17, 2003
Arizona Department of Water Resources



AUTHORITY MEMBERS
Herbert R. Guenther, Chairman
George R. Renner, Vice-Chairman
Charles L. Cahoy, Secretary
John Mawhinney
Maureen S. George

EX OFFICIO MEMBERS
Representative Jake Flake
Senator Linda Binder

Welcome/Opening Remarks

George Renner chaired the meeting in the absence of Senator Herb Guenther. Chuck Cahoy was also absent.

Approval of Minutes of September 10, 2003 AWBA Meeting

The Authority approved the minutes of the September 10, 2003 meeting.

Water Banking Staff Activities

Tim Henley reviewed water deliveries and stated that deliveries for 2003 will likely be approximately 210,000 acre-feet. There may be a decrease in storage in December due to an accounting problem with Wellton-Mohawk. Consequently, CAP may need to cut back to keep Arizona at 2.8 million acre-feet. He reminded the Authority members that the 275,000 acre-foot 2003 Plan of Operation that was approved was an optimistic plan and noted that the Authority stored about 35,000 acre-feet more than the pessimistic 175,000 acre-foot plan.

With regard to staff activities, Mr. Henley noted that staff continues to assist ADWR, specifically, Sandy Fabritz is on the Governor's Drought Task Force and is heading up the Indian Firming Committee. Ms. Fabritz updated the Authority on the recent activities of the Indian Firming Committee. She noted that there have been five meetings between August and December and that the committee has (1) identified a firming volume between 500,000 and 600,000 acre-feet over 100 year period; (2) determined that the obligation to maintain the 15,000 acre-foot Southside obligation will likely be negligible; (3) initiated evaluation of the water supply available for firming; and (4) started to discuss the financial aspects. She also noted that the Authority should have previously received all information from the committee meetings. John Mawhinney asked Ms. Fabritz if the legislature and governor have been kept informed of this process as it is a substantial obligation. Ms. Fabritz stated that Senator Guenther has been keeping them updated.

Ms. Fabritz reviewed the Ten Year Plan that was distributed in draft form. Mr. Renner questioned when the Plan was due. Mr. Henley reiterated that the preparation of the Ten Year Plan is a statutorily required process and that it should have been submitted to the governor in conjunction with the 2002 Annual Report. However, due to changes, uncertainty and coordinating with CAP, the Ten Year Plan was not submitted in July. Staff is trying to be consistent across the board with regard to demand, supply and other factors.

Mr. Renner commented that the issue of AWBA staff utilization by ADWR deserves some longer range attention. He stated that while he is cognizant of the crisis mode ADWR is in, the AWBA has statutory responsibilities and that if AWBA staff is doing other things, then the AWBA responsibilities are not being met. He does not want to see the over-utilization of the AWBA resources continuing into the future. Mr. Henley stated that ADWR is currently undergoing changes and will start to address this issue through staff assignments.

¹ Please note that these are not formal minutes but a summary of discussion and action of the meeting. Official minutes are prepared prior to the next Authority meeting and are approved at that meeting.

Presentation by Southern Nevada Water Authority Regarding Development of Water Resources

Kay Brothers, Deputy General Manager -Engineering and Operations for the Southern Nevada Water Authority was the presenter. She introduced Tom Maher and Ken Albright of her staff and Jim Davenport of the Colorado River Commission of Nevada. She stated that her presentation was a review of the most current Nevada water resource plan that would be taken to her Board for approval the following day. She noted that this is done annually. She reviewed the following via a Power Point presentation: (1) the water resources available to the SNWA and issues that impact them; (2) SNWA demand projections with the notation that this is the first year that a demand range has been used versus an actual number and that historically, demand projections have been low; (3) SNWA's drought plan and components; (4) actions that have been taken to develop in-state resources; and (5) the organizational structure of the SNWA. In summary, Ms. Brothers noted that interstate water banking is a very important interim resource in the plan.

The questions asked of Ms. Brothers are summarized below.

Q: What is the turf removal program?

A: SNWA offered \$1 per square foot for turf removal and should spend the entire \$13 million budgeted for the program. The turf removal must be permanent.

Q: What is the estimated date for utilization of the in-state water resources being proposed for development?

A: One projection is 2010 and another is 2017.

Q: What is the range of available Virgin River water based on and why is utilization of Virgin River water occurring later than projected in the last plan?

A: The range is based on annual or seasonal variation and utilization is actually projected earlier than in the previous plan, however, groundwater resources are being brought on-line earlier to buffer the impact of drought on the surface water resources.

Q: What groundwater supplies could be brought on in the 2-3 year time period?

A: About 17,000 acre-feet.

Q: Why does the demand curve flatten out around 2026?

A: The SNWA has a supply obligation to Southern Cal Edison that ends in 2026.

Mr. Renner commented that it appeared to him that the bridge being provided by the AWBA looks different now than it did in the early interstate discussions and it appeared that the reliance on the AWBA is becoming even more critical. Furthermore, the demand picture looks very different than it did in the past. Ms. Brothers replied that was the reason that the SNWA provided this information to the AWBA on an annual basis. Mr. Renner said he would like to see the AWBA included more in the SNWA planning loop and that actions be taken to improve communication between SNWA and the AWBA. Mr. Henley reiterated that there was contact between ADWR and the SNWA during development of the Interim Surplus Guidelines and that the information Ms. Brothers was presenting to the AWBA was going to be presented to the SNWA board the following day. Consequently, the AWBA wasn't really behind in the information exchange process. He reminded Mr. Renner that if the AWBA continues to have concerns regarding Nevada's reliance on interstate water, the decision could be made annually to offer no storage to Nevada. Mr. Renner replied that his concern from the outset was Nevada becoming dependent on a supply of water from Arizona that could be

perceived as permanent and that political action could be taken based on that perception which could be harmful to Arizona. He stated that he has seen nothing so far that has eased that concern, that the current situation only makes it worse in his mind and that he would like that message taken back to the SNWA board. Ms. Brothers stated that she believes the message is already there and that Nevada recognizes that Arizona must first take care of itself. She noted that Nevada supports Arizona in that endeavor and is a vocal proponent of changing the CAP priority on the river.

Discussion Regarding Issues Identified by AWBA Members

Mr. Mawhinney wanted to preface discussion of this agenda item with that statement that he has no problems or issues with AWBA staff and that he has always received all of the information that he has requested from them. His concern is that there are many things that the AWBA staff is doing and that there may not be adequate time for them to do other non-AWBA activities.

The first point he wanted to address was public participation. He stated that he wanted to encourage more public participation and thought that maybe the manner in which meetings were set up and conducted could be altered to encourage more public participation.

Mr. Mawhinney's next discussion point was recovery. He stated that the AWBA has not yet had to actually recover water but that there are pending requests for creation of ICUA from both Nevada and California. Mr. Henley noted that Dennis Underwood and Harry Ruzgerian from Metropolitan Water District of Southern California (MWD) were in the audience and that withdrawal of California's request was likely pending. Mr. Mawhinney replied that he would feel better if he knew that recovery was CAP's problem and not the AWBA's. Marvin Cohen stated that it has long been a concern that the AWBA has no authority to recover and that it is an issue that needs to be addressed very soon. Mr. Henley noted that the legislature intentionally prohibited the AWBA from obtaining recovery well permits but added that this prohibition doesn't eliminate the AWBA's need to work with CAP on recovery issues because the AWBA needs to store water where it can be recovered. He provided a historical background on past recovery efforts and noted that a recovery subcommittee had been established. Events over the last year established a process for recovery in the short-term but it was realized at that time that if a recovery plan had been developed 5 years ago, it would have been 100% wrong today. Recovery is very much a real-time event. Mr. Henley stated that, in his opinion, it is more important to establish shortage criteria on the river. He said that the state has been using Arizona's assumptions regarding shortage criteria in their planning process, however, there has been no federal buy in thus far. He stated that staff would work on developing a recovery plan if the AWBA directed but he would focus more on shortage discussions at the current time since first recovery is not anticipated until 2017 but a shortage declaration could come before that. Maureen George noted that recovery for the on-river users could come in the 4-5 year time frame. Mr. Henley replied that the on-river credits are located in the Pinal AMA and that the Nevada/California process has evolved to the point that recovery in the Pinal AMA can be done. Mr. Renner stated that it might be helpful to have Larry Dozier of CAP provide an update on recovery since it is ultimately CAP's responsibility. Gregg Houtz stated that ADWR could also provide a briefing on the recovery permit process. Mr. Mawhinney asked whether the AWBA's agreements with facility operators included a recovery provision. Mr. Henley stated that they did and gave the CAP authority to recover as the AWBA's agent. Larry Dozier commented that much was learned in the process of obtaining the recovery well permits in the Pinal AMA and that they were pleased that the historic agreements provided protection to CAP and that the irrigation districts complied as needed. Dennis Rule noted that in Tucson, under existing statute, third parties could prohibit recovery.

Mr. Mawhinney's next discussion point involved M&I firming. He asked how much water had been stored for M&I firming and the answer was in excess of 975,000 acre-feet. He noted that 346,969 acre-feet of credits had been accrued for water management purposes. He questioned whether M&I

firming was a water management objective and Mr. Henley replied that ADWR needs to make that determination but that the AWBA's constituency generally agrees that it is. Mr. Renner noted that this inquiry should be made of ADWR and directed AWBA staff to obtain an answer to this question. Cindy Shimokusu, Tucson AMA director stated that this subject has been discussed in Tucson and that AMA staff have brought it to the IPAG.

Mr. Mawhinney's next question involved interstate storage at GSFs. He stated that he believed that the Study Commission recommended that interstate storage pay at least the average cost and that was not the case when storage was done at a GSF due to the cost share. Mr. Henley agreed and replied that interstate storage at GSFs was not anticipated, however, the storage done in 2002 was at GSFs in Pinal County due to the emergency type situation that existed. He noted that most interstate storage done in the future would be done at USFs.

Next, Mr. Mawhinney noted that he did not think that the AWBA had a process for review of legislative activities. Mr. Renner replied that, thus far, this has been done through the omnibus bill process. Mr. Henley commented that one response could be creation of a subcommittee that would operate in a manner similar to the omnibus process. For example, the AWBA was not given authority to recover in the original legislation for a reason. Before that statute is changed, it should be subject to public review and comment and that could be achieved through a subcommittee of the AWBA.

Mr. Mawhinney's next questions focused on the AWBA accounting process, water deliveries and surplus availability. Mr. Renner stated that it would likely be beneficial to schedule a work study session in February to address accounting and budget issues. He thought that focused work study sessions would be more beneficial than increasing the number of Authority meetings from quarterly to monthly. Mr. Mawhinney questioned why only 209,000 acre-feet were delivered in 2003. Mr. Henley replied that it was due to other higher priority entities taking direct delivery of the water. Mr. Mawhinney asked whether the surplus declaration on the river had been quantified. Mr. Henley said that it was still under discussion. The ISG provides general guidelines, however, there are no agreements between the states that include specifics. He stated that he knew for certain it would be limited but there could be some additional water available to the CAP.

Ms. George stated that although the resolution was adopted that gave first priority to the on-river communities for general fund credits, she would like to formalize that relationship with the AWBA. She noted that the Mohave County Water Authority (MCWA) is currently in the process of developing an agreement with CAP to allow the MCWA to store water on their own behalf. She requested AWBA support for formalizing this process. It was suggested that this issue could be added to the February work study session proposed earlier.

Discussion and Approval of 2004 Annual Plan of Operation

Mr. Henley briefly reviewed the 2004 Annual Plan of Operation (Plan). There was a question regarding the AWBA's priority to deliver to GSFs over USFs. Mr. Henley stated that the real reason involved the planning required on behalf of the GSF operators as they develop their annual water plans. In their planning process, the AWBA water is included as a committed water supply and they make other power and water decisions on the basis of that quantity of water being available. If it is not available, the GSF operators can be severely impacted. USF operations are not greatly impacted by decreased water deliveries. Ms. George asked why there were no new facilities included in the Plan. Mr. Henley replied that there were none. The Authority approved the Plan.

Call to Public

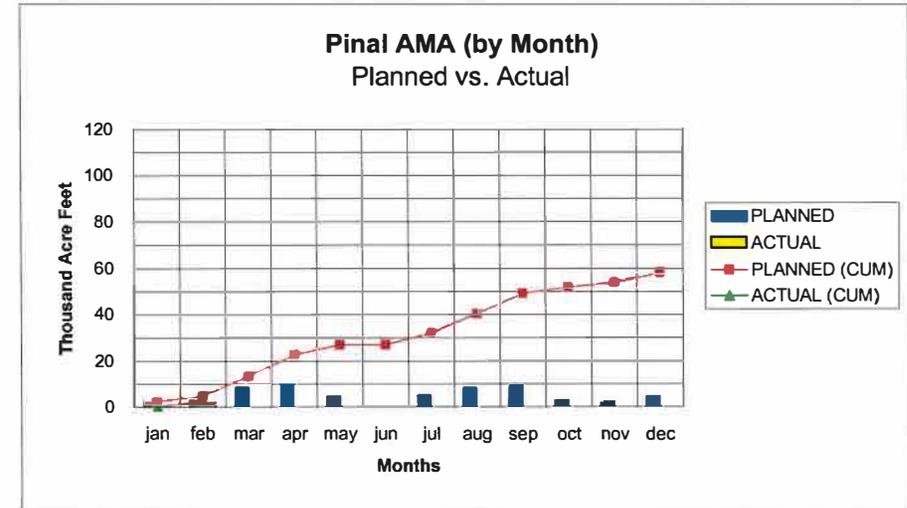
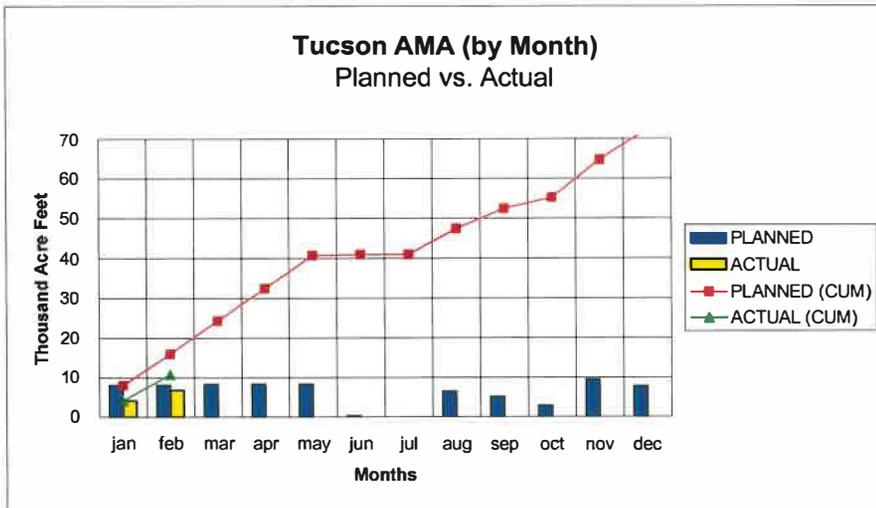
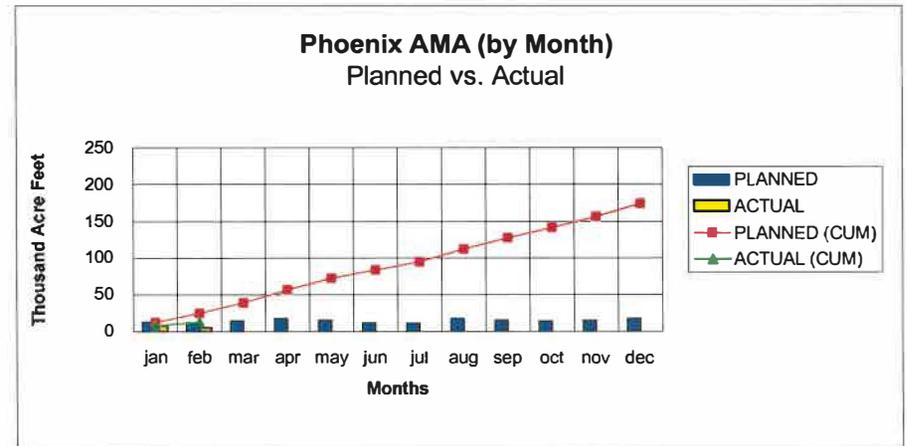
Dennis Underwood, vice president of MWD, informed the Authority that MWD is in the process of implementing the terms of the Quantification Settlement Agreement. He stated that a letter will likely be coming in the near future to withdraw the request for creation of intentionally created unused apportionment in 2004, however, he noted that California would like to have further discussions regarding interstate water banking.

Tom Harbour from CAP informed the Authority that they have received the permits for the Tonopah Desert Recharge projects and are anticipating that the facility will become operational in 2005.

The next AWBA meeting is scheduled for Wednesday, March 24, 2004.

The meeting concluded at 12:17 p.m.

2004 Plan of Operation



Actual deliveries updated
Plan of Operation

23-Mar-04
1-Jan-04

	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	total
Phoenix AMA													
GRUSP	3,623	2,850	0	0	0	0	0	0	0	0	0	0	6,473
	4,166	4,166	4,166	4,166	4,166	4,166	4,166	4,166	4,166	4,166	4,166	4,174	50,000
AGUA FRIA	1,006	0	0	0	0	0	0	0	0	0	0	0	1,006
	2,500	1,500	500	3,750	3,750	3,000	3,000	2,550	2,800	1,700	1,750	3,750	30,550
CHCID	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	50	50	50	100	75	75	50	83	0	0	533
NMIDD	618	1,178	0	0	0	0	0	0	0	0	0	0	1,796
	2,500	3,000	6,100	6,100	4,000	1,500	1,500	4,500	5,500	5,500	3,500	3,500	47,200
QCID	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	3,501	2,000	800	960	1,600	8,861
TID	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1,000	1,000	1,000	3,000
SRP	800	800	0	0	0	0	0	0	0	0	0	0	1,600
	800	800	800	800	800	0	0	800	800	800	800	800	8,000
HIEROGLYPHIC	1,711	444	0	0	0	0	0	0	0	0	0	0	2,155
	2,700	2,700	2,700	2,700	2,700	2,700	2,200	2,000	0	0	2,700	2,700	25,800
Subtotal	7,758	5,272	0	0	0	0	0	0	0	0	0	0	13,030
Total to date	7,758	13,030	13,030	13,030	13,030	13,030	13,030	13,030	13,030	13,030	13,030	13,030	13,030
<i>Projected total to date</i>	<i>12,666</i>	<i>24,832</i>	<i>39,148</i>	<i>56,714</i>	<i>72,180</i>	<i>83,646</i>	<i>94,587</i>	<i>112,179</i>	<i>127,495</i>	<i>141,544</i>	<i>156,420</i>	<i>173,944</i>	<i>173,944</i>
Pinal AMA													
CAIDD	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	5,000	5,000	3,500	1,000	1,000	1,200	16,700
MSIDD	0	1,020	0	0	0	0	0	0	0	0	0	0	1,020
	0	1,020	2,780	3,040	3,500	0	0	3,400	2,040	610	0	310	16,700
HIDD	277	991	0	0	0	0	0	0	0	0	0	0	1,268
	2,250	1,700	5,500	6,500	750	0	0	0	3,300	1,000	1,000	3,000	25,000
Subtotal	277	2,011	0	0	0	0	0	0	0	0	0	0	2,288
Total to date	277	2,288	2,288	2,288	2,288	2,288	2,288	2,288	2,288	2,288	2,288	2,288	2,288
<i>Projected total to date</i>	<i>2,250</i>	<i>4,970</i>	<i>13,250</i>	<i>22,790</i>	<i>27,040</i>	<i>27,040</i>	<i>32,040</i>	<i>40,440</i>	<i>49,280</i>	<i>51,890</i>	<i>53,890</i>	<i>58,400</i>	<i>58,400</i>
Tucson AMA													
Avra Valley	333	671	0	0	0	0	0	0	0	0	0	0	1,500
	650	650	650	650	650	0	0	650	650	350	650	650	6,200
Clearwater	0	1,500	0	0	0	0	0	0	0	0	0	0	1,500
	1,150	1,150	1,150	1,150	1,150	0	0	0	0	0	3,000	1,250	10,000
Pima Mine	1,712	1,049	0	0	0	0	0	0	0	0	0	0	2,761
	2,600	2,600	2,600	2,600	2,600	0	0	2,600	1,600	1,300	2,200	2,200	22,900
Lower Santa Cruz	1,987	3,549	0	0	0	0	0	0	0	0	0	0	5,536
	3,600	3,600	3,600	3,600	3,600	0	0	3,200	2,800	1,100	3,600	3,600	32,300
Kai Red Rock	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	250	250	250	250	0	0	0	0	0	0	1,000
Subtotal	4,032	6,769	0	0	0	0	0	0	0	0	0	0	11,297
Total to date	4,032	10,801	10,801	10,801	10,801	10,801	10,801	10,801	10,801	10,801	10,801	10,801	11,297
<i>Projected total to date</i>	<i>8,000</i>	<i>16,000</i>	<i>24,250</i>	<i>32,500</i>	<i>40,750</i>	<i>41,000</i>	<i>41,000</i>	<i>47,450</i>	<i>52,500</i>	<i>55,250</i>	<i>64,700</i>	<i>72,400</i>	<i>72,400</i>
TOTAL	12,067	14,052	0	0	0	0	0	0	0	0	0	0	26,119
Total to date	12,067	26,119	26,119	26,119	26,119	26,119	26,119	26,119	26,119	26,119	26,119	26,119	52,238
<i>Projected total to date</i>	<i>22,916</i>	<i>45,802</i>	<i>76,648</i>	<i>112,004</i>	<i>139,970</i>	<i>151,686</i>	<i>167,627</i>	<i>200,069</i>	<i>229,275</i>	<i>248,684</i>	<i>275,010</i>	<i>304,744</i>	<i>304,744</i>

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AWBA Monthly Accounting Report - February 2004

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Phoenix AMA														
GRUSP	actual	3,623	2,850	0	0	0	0	0	0	0	0	0	0	6,473
	planned	4,166	4,166	4,166	4,166	4,166	4,166	4,166	4,166	4,166	4,166	4,166	4,174	50,000
AFRP	actual	1,006	0	0	0	0	0	0	0	0	0	0	0	1,006
	planned	2,500	1,500	500	3,750	3,750	3,000	3,000	2,550	2,800	1,700	1,750	3,750	30,550
CHCID	actual	0	0	0	0	0	0	0	0	0	0	0	0	0
	planned	0	0	50	50	50	100	75	75	50	83	0	0	533
NMIDD	actual	618	1,178	0	0	0	0	0	0	0	0	0	0	1,796
	planned	2,500	3,000	6,100	6,100	4,000	1,500	1,500	4,500	5,500	5,500	3,500	3,500	47,200
QCID	actual	0	0	0	0	0	0	0	0	0	0	0	0	0
	planned	0	0	0	0	0	0	0	3,501	2,000	800	960	1,600	8,861
TID	actual	0	0	0	0	0	0	0	0	0	0	0	0	0
	planned	0	0	0	0	0	0	0	0	0	1,000	1,000	1,000	3,000
SRP	actual	800	800	0	0	0	0	0	0	0	0	0	0	1,600
	planned	800	800	800	800	800	0	0	800	800	800	800	800	8,000
HMRP	actual	1,711	444	0	0	0	0	0	0	0	0	0	0	2,155
	planned	2,700	2,700	2,700	2,700	2,700	2,700	2,200	2,000	0	0	2,700	2,700	25,800
Pinal AMA														
CAIDD	actual	0	0	0	0	0	0	0	0	0	0	0	0	0
	planned	0	0	0	0	0	0	5,000	5,000	3,500	1,000	1,000	1,200	16,700
MSIDD	actual	0	1,020	0	0	0	0	0	0	0	0	0	0	1,020
	planned	0	1,020	2,780	3,040	3,500	0	0	3,400	2,040	610	0	310	16,700
HIDD	actual	277	991	0	0	0	0	0	0	0	0	0	0	1,268
	planned	2,250	1,700	5,500	6,500	750	0	0	0	3,300	1,000	1,000	3,000	25,000
Tucson AMA														
AVRP	actual	333	671	0	0	0	0	0	0	0	0	0	0	1,500
	planned	650	650	650	650	650	0	0	650	650	350	650	650	6,200
CAVSARP	actual	0	1,500	0	0	0	0	0	0	0	0	0	0	1,500
	planned	1,150	1,150	1,150	1,150	1,150	0	0	0	0	0	3,000	1,250	10,000
PMR	actual	1,712	1,049	0	0	0	0	0	0	0	0	0	0	2,761
	planned	2,600	2,600	2,600	2,600	2,600	0	0	2,600	1,600	1,300	2,200	2,200	22,900
LSC	actual	1,987	3,549	0	0	0	0	0	0	0	0	0	0	5,536
	planned	3,600	3,600	3,600	3,600	3,600	0	0	3,200	2,800	1,100	3,600	3,600	32,300
Kai-RR	actual	0	0	0	0	0	0	0	0	0	0	0	0	0
	planned	0	0	250	250	250	250	0	0	0	0	0	0	1,000

February Water Deliveries with Projected versus Actual Deliveries to Facilities Greater than +/- 25%

Facility	Projected Delivery (AF)	Actual Delivery (AF)	Reason
CAVSARP	1,150	1,500	Actual deliveries greater than projected as they attempted to make up for deliveries lost in January.
HIDD	1,700	991	Actual AWBA deliveries decreased due to rain and cropping.
NMIDD	3,000	1,178	Actual AWBA deliveries decreased due to rain.
AFRP	1,500	0	Facility shutdown for three weeks for basin drying and because of rain. Pursuant to their facility permit, the facility must shut down when it rains.
HMRP	2,700	444	Facility capacity decreased due to basin drying and maintenance. Project was starting to show decreased infiltration rates.
PMR	2,600	1,049	Facility shut down for two weeks for scraping of basins.
GRUSP	4,166	2,850	

Fund Account Balances (\$ through February 29, 2004)

General	Phoenix (WD)	Tucson (WD)	Pinal (WD)	Phoenix (\$0.04)	Tucson (\$0.04)	Pinal (\$0.04)	Admin
8,259	6,606,482	405,649	170,262	21,073,880	1,814,231	65,554	1,291,476

February Revenues (\$ by Fund Account)

General	Phoenix (WD)	Tucson (WD)	Pinal (WD)	Phoenix (\$0.04)	Tucson (\$0.04)	Pinal (\$0.04)	Admin
0	1,348	58,334	0	0	0	0	60,788

February Expenditures (\$ by Fund Account)

General	Phoenix (WD)	Tucson (WD)	Pinal (WD)	Phoenix (\$0.04)	Tucson (\$0.04)	Pinal (\$0.04)	Admin
0	0	0	0	157,003	0	0	173,016

February Expenditures (Itemized-From Phoenix \$0.04 Cent Account)

Date	Amount (\$)	Description
2/3/2004	157,003	Storage Facility fees for July, October and November 2003 for GRUSP

Facility	Plan Delivery (Feb)	Actual Delivery (Feb)	Plan Estimated Cost (\$/AF) ¹	Cost for Feb (\$/AF) ²	Actual Deliveries (YTD)	Plan Deliveries (YTD)	Cost (YTD) ³	Plan Cost (total \$)	Plan \$ Remaining (EOY)	% of Plan \$ Remaining
AFRP	1,500	0	\$78.00	\$0	1,006	4,000	\$195,468	\$2,382,900	\$2,187,432	91.80%
GRUSP	4,166	2,850	\$88.59	\$252,482	6,473	8,332	\$572,779	\$4,429,500	\$3,856,721	87.07%
CHCID	0	0	\$42.00	\$0	0	0	\$0	\$22,386	\$22,386	100.00%
HMRP	2,700	444	\$78.00	\$34,632	2,155	5,400	\$168,090	\$2,012,400	\$1,844,310	91.65%
NMIDD	3,000	1,178	\$42.00	\$49,476	1,796	5,500	\$75,432	\$1,982,400	\$1,906,968	96.19%
QCID	0	0	\$42.00	\$0	0	0	\$0	\$372,162	\$372,162	100.00%
SRP/GSF	800	800	\$42.00	\$33,600	1,600	1,600	\$67,200	\$336,000	\$268,800	80.00%
TID	0	0	\$42.00	\$0	0	0	\$0	\$126,000	\$126,000	100.00%
CAIDD	0	0	\$42.00	\$0	0	0	\$0	\$701,400	\$701,400	100.00%
HIDD	1,700	991	\$28.00	\$27,748	1,268	3,950	\$35,504	\$700,000	\$664,496	94.93%
MSIDD	1,020	1,020	\$42.00	\$0	1,020	1,020	\$42,840	\$701,400	\$658,560	93.89%
AVRP	650	671	\$81.00	\$54,351	1,004	1,300	\$26,973	\$502,200	\$475,227	94.63%
CAVSARP	1,150	1,500	\$82.06	\$123,090	1,500	2,300	\$123,090	\$820,600	\$697,510	85.00%
Kai-RR	0	0	\$42.00	\$0	0	0	\$0	\$42,000	\$42,000	100.00%
LSC	3,600	3,549	\$81.00	\$287,469	5,536	7,200	\$448,416	\$2,616,300	\$2,167,884	82.86%
PMR	2,600	1,049	\$81.00	\$84,969	2,761	5,200	\$223,641	\$1,854,900	\$1,631,259	87.94%
								\$19,602,548	\$17,623,115	89.90%

¹ *Plan estimated cost* includes water delivery rate and applicable storage facility rates. Rates are set by agreement at GRUSP and CAVSARP and by policy at CAP facilities. The plan estimated cost should be the actual cost at the CAP facilities as facility rates are paid based only on water deliveries. The actual facility rate will differ from the estimated rate at GRUSP and CAVSARP due to their method of calculating fees, i.e. actual water deliveries to the GRUSP facility are less than water deliveries to the interconnect due to transportation losses.

² *Plan estimated cost* multiplied by *actual deliveries*. This is still an estimate as actual facility costs are not known for USFs until approximately 45 days after delivery.

³ Includes water delivery charge for total AF of water delivered, actual facility charges (as known) and estimated facility charges (as applicable).

To: AWBA Members

Thru: Tim Henley, AWBA Manager

From: Pat Schiffer, ADWR Chief Counsel

Date: 3/23/04

Subject: Recovery of AWBA Stored Water (A.R.S. § 45-834.01)

Recovery of renewable water supplies stored pursuant to the Underground Water Storage, Savings and Replenishment Program has evolved to be a significant water management tool. In addition to municipal water providers, the Arizona Water Banking Authority (AWBA) and the Central Arizona Water Conservation District (CAWCD) have accrued a great many storage credits for CAP water stored underground and in groundwater savings facilities (GSF). Because the AWBA is not statutorily authorized to hold recovery well permits, recovery of the AWBA storage credits requires assignment of the credits to a third party, such as CAWCD.

Stored water may be recovered only with a recovery well permit issued under A.R.S. § 45-834.01. Among other conditions, if the stored water will be recovered outside the area of impact of the stored water, or by an assignee of the storage credits (not the storer) inside or outside the area of impact,¹ the proposed recovery wells must meet all of the following requirements for a recovery well permit to be issued:

- Recovery must be consistent with the management plan and achievement of the management goal for the active management area. For example, if the stored water will be recovered outside the area of impact of the storage, the average annual rate of decline of the water table in the area must be less than four feet per year.
- If the recovery well is located within the service area of a city, town, private water company or an irrigation district, that city, town, private water company or irrigation district is either the entity seeking the recovery well permit, or consents to the location of the recovery well.
- If the recovery well is located outside a service area, but within three miles of the boundary of a service area, the closest city, town, private water company or irrigation district must consent to the location of the recovery well.

¹ HB 2590 (2004) passed the state House by a vote of 57-0, is currently before the Senate, and likely will become law by this summer. This bill will ease the consent restrictions for some AWBA stored water recovery by allowing assignees of **Colorado River** storage credits to recover **within** the area of impact of the stored water without obtaining the consent of service area providers.

Although most entities storing water today do so for their own use, many entities take advantage of the ability granted under A.R.S. § 45-854.01 to assign long-term storage credits to other entities through grant, gift, sale, lease or exchange. All AWBA storage credits that will be recovered must be assigned to another entity for recovery. See A.R.S. § 45-2457.

In 2003, when it appeared that long-term storage credits held by the AWBA on behalf of the Southern Nevada Water Authority (SNWA) would need to be recovered pursuant to the Interstate Water Banking Agreement, the AWBA began negotiating with CAWCD for the assignment and recovery of those credits. The negotiations required CAWCD obtain recovery well permits from the Department of Water Resources to recover the AWBA's long-term storage credits for water stored at the Central Arizona Irrigation and Drainage District (CAIDD) GSF and at the Maricopa-Stanfield Irrigation and Drainage District (MSIDD) GSF. While an agreement between AWBA and CAWCD for this recovery was never finalized, the appropriate permits were issued and CAWCD can now recover the long-term storage credits stored at the CAIDD and MSIDD GSFs and exchange the recovered water with the districts for their CAP subcontract water whenever the need should arise.

While CAWCD is the AWBA's primary option for firming M&I supplies during times of shortage, another option is available. The AWBA could contract directly with subcontract holders to recover AWBA firming credits in times of shortage. In that situation, the AWBA would assign credits to the subcontract holder, such as a municipal water provider, and the municipal water provider would obtain the recovery well permit to recover the assigned long-term storage credits, after assuring that the requirements of A.R.S. § 45-834.01 are met.

HOUSE OF REPRESENTATIVES

HB 2590

stored water; recovery wells

Sponsors: Representatives Burns J., Chase, Hershberger, et al.

DP Committee on Natural Resources, Agriculture, Water and Native American Affairs

X Caucus and COW

Third Read

As Passed the House

HB 2590 modifies the conditions for obtaining a permit to recover stored water within Active Management Areas (AMAs).

Current Status

HB 2590 passed the House Committee on Natural Resources, Agriculture, Water and Native American Affairs unamended.

History

Laws 1994, Chapter 291 authorized underground water storage and recovery projects and included a declaration of policy stating the general purpose of the law was to:

1. Encourage the use of renewable water supplies, particularly Arizona's entitlement to Colorado River water instead of groundwater, through a program that would provide for underground storage of water.
2. Allow for efficient and cost-effective management of water supplies by allowing the use of storage facilities for filtration and distribution of surface water instead of constructing surface water treatment plants and pipeline distribution systems. (ARS 45-801.01)

Water may be stored in an underground storage facility, or in a groundwater savings facility. In order to store water at a facility, a person must obtain a permit from the Arizona Department of Water Resources (ADWR). The permit must include information regarding the location of the storage facility, the maximum annual amount of water that may be stored, whether the water to be stored could be put to direct use, and any restrictions on where the water to be stored may legally be used.

Under current law, a person must obtain a recovery well permit from ADWR in order to withdraw (or recover) stored water. Specific limitations and restrictions apply. For water stored within an AMA, the director of ADWR must find that the recovery is consistent with the management goals and current management plan of the AMA. In addition, the person proposing to recover the stored water must obtain the consent of the nearest city, town, private water company or irrigation district (water provider) within three miles of the recovery well if:

1. the recovery well is located outside the area of impact of the stored water.
2. the recovery well is located within the areas of impact of the stored water and the person proposing to recover the stored water is not the person who stored the water.

Note: *Area of impact* means the water will be withdrawn from the location where the water migrated or is located.

Provisions

- HB 2590 modifies the conditions that apply in order to recover Colorado River water stored underground in an AMA when: 1. the recovery well will be located within the area of impact of the stored Colorado River water and 2. the person proposing to recover the water is not the person who stored the water . In this situation, there will no longer be a requirement to obtain consent from a nearby water provider, nor will there be a requirement for the director of ADWR to find that the recovery is consistent with the AMA management goal and management plan. (Note: this is currently the case that applies when the person proposing to recover the water is the storer of the water.)
- Clarifies that consistency with an AMA management goal and management plan, and consent from a nearby water provider will still be required for recovery within an area of impact, by a person who did not store the water if the stored water is not Colorado River water.
- Retains the current requirements that apply to recover water from outside the area of impact. Recovery will be allowed only if consistent with AMA goals and if consent is obtained from a nearby water provider.

Cheat sheet explanation:

Specifies the conditions for a person to recover stored water within an area of impact as follows:

- No consent required from a water provider if either:
 1. The person recovering the water is the one who stored the water.
 2. The stored water to be recovered is Colorado River water.

- Consent required from a water provider if all of the following apply:
 1. The person recovering the water is not the one who stored the water.
 2. The water to be recovered is not Colorado River water.
 3. The recovery well is within the service area of a water provider, or within three miles of a water provider.
 4. Recovering the water is consistent with the management plan and the management goal of the AMA.
 5. The recovery well is located within the same AMA.

- Requires recovery of stored water to be consistent with the management plan and achievement of the management goal for the AMA if either:
 1. recovery is outside the area of impact of stored water.
 2. Recovery is inside the area of impact, the person recovering the water is not the one who stored the water and the recovered water is not Colorado River water.
 - 3.
 - 4.
 5. ----- DOCUMENT FOOTER -----
 6. 46th Legislature
 7. Second Regular Session 3 March 4, 2004
 - 8.
 9. ----- DOCUMENT FOOTER -----

PLEASE NOTE: In most BUT NOT ALL instances, the page and line numbering of bills on this web site correspond to the page and line numbering of the official printed version of the bills.

REFERENCE TITLE: stored water; recovery wells

State of Arizona
House of Representatives
Forty-sixth Legislature
Second Regular Session
2004

HB 2590

Introduced by
Representatives Burns J, Chase, Hershberger, Huffman, O'Halleran: Alvarez,
Hubbs, Konopnicki, Senators Arzberger, Hellon

AN ACT

AMENDING SECTION 45-834.01, ARIZONA REVISED STATUTES; RELATING TO UNDERGROUND WATER STORAGE, SAVINGS AND REPLENISHMENT.

(TEXT OF BILL BEGINS ON NEXT PAGE)

1

1 Be it enacted by the Legislature of the State of Arizona:

2 Section 1. Section 45-834.01, Arizona Revised Statutes, is amended to
3 read:

4 45-834.01. Recovery of stored water; recovery well permit;
5 emergency temporary recovery well permit; well
6 construction

7 A. A person who holds long-term storage credits or who may recover
8 water on an annual basis may recover the water stored pursuant to a water
9 storage permit only:

10 1. If the person seeking to recover stored water has applied for and
11 received a recovery well permit under this article.

12 2. For water stored within an active management area, ~~from wells that~~
13 ~~are located~~ IF ONE OF THE FOLLOWING APPLIES:

14 (a) THE PROPOSED RECOVERY WELL IS LOCATED within the area of impact of
15 the stored water, as determined by the director, ~~if~~ AND EITHER the person
16 recovering the water is the storer OR THE STORED WATER TO BE RECOVERED IS
17 COLORADO RIVER WATER. ~~—~~ If the stored water to be recovered is effluent
18 that is stored in a managed underground storage facility and if the proposed
19 recovery well is not an already constructed well owned by the person
20 recovering the water and is located within the exterior boundaries of the
21 service area of a city, town, private water company or irrigation district,
22 that city, town, private water company or irrigation district must be
23 notified by the person recovering the stored water and must have the right to
24 offer to recover the water stored on behalf of that person. If the city,
25 town, private water company or irrigation district offers to recover the
26 water on behalf of the person seeking recovery and the water that is offered
27 for recovery is of comparable quality to the water that the person could
28 recover, the person seeking to recover the water shall consider accepting the
29 best offer from the city, town, private water company or irrigation district
30 overlying the area of impact that has offered to recover the stored water.

31 (b) THE PROPOSED RECOVERY WELL IS LOCATED OUTSIDE THE AREA OF IMPACT
32 OF THE STORED WATER, AS DETERMINED BY THE DIRECTOR, AND ALL OF THE FOLLOWING
33 APPLY:

34 ~~(b)~~ (i) THE PROPOSED RECOVERY WELL IS LOCATED within the same active
35 management area as storage. ~~if~~

36 (ii) The director determines that recovery at the proposed location is
37 consistent with the management plan and achievement of the management goal
38 for the active management area. ~~subject to the following:~~

39 ~~(i)~~ (iii) If the proposed recovery well is located within the
40 exterior boundaries of the service area of a city, town, private water
41 company or irrigation district, that city, town, private water company or
42 irrigation district is the person seeking to recover the water or has
43 consented to the location of the recovery well.

44 ~~(ii)~~ (iv) If the proposed recovery well is located outside, but
45 within three miles of, the exterior boundaries of the service area of a city,

1 town, private water company or irrigation district, the closest city, town,
2 private water company or irrigation district has consented to the location of
3 the recovery well.

4 (c) THE PROPOSED RECOVERY WELL IS LOCATED WITHIN THE AREA OF IMPACT OF
5 THE STORED WATER, AS DETERMINED BY THE DIRECTOR, THE PERSON RECOVERING THE
6 WATER IS NOT THE STORER, THE STORED WATER TO BE RECOVERED IS NOT COLORADO
7 RIVER WATER AND ALL OF THE CONDITIONS PRESCRIBED BY SUBDIVISION (b), ITEMS
8 (i) THROUGH (iv) OF THIS PARAGRAPH ARE MET.

9 3. For water stored outside of an active management area, if recovery
10 will occur within the same irrigation non-expansion area, groundwater basin
11 or groundwater sub-basin, as applicable, in which the water was stored.

12 B. Before recovering from any well water stored pursuant to a water
13 storage permit, a person shall apply for and receive a recovery well permit
14 from the director. The director shall issue the recovery well permit if the
15 director determines that:

16 1. If the application is for a new well, as defined in section 45-591,
17 or except as provided in paragraphs 2 and 3 of this subsection for an
18 existing well, as defined in section 45-591, the proposed recovery of stored
19 water will not unreasonably increase damage to surrounding land or other
20 water users from the concentration of wells. The director shall make this
21 determination pursuant to rules adopted by the director.

22 2. If the applicant is a city, town, private water company or
23 irrigation district in an active management area and the application is for
24 an existing well within the service area of the city, town, private water
25 company or irrigation district, the applicant has a right to use the existing
26 well.

27 3. If the applicant is a conservation district and the application is
28 for an existing well within the conservation district and within the
29 groundwater basin or sub-basin in which the stored water is located, the
30 applicant has a right to use the existing well.

31 C. A city, town, private water company or irrigation district in an
32 active management area may apply with a single application to the director to
33 have all existing wells, as defined in section 45-591, that the applicant has
34 the right to use within its service area listed as recovery wells on the
35 recovery well permit, if those wells otherwise meet the requirements of this
36 section.

37 D. If the applicant is a conservation district, the director may issue
38 an emergency temporary recovery well permit without complying with section
39 45-871.01, subsection F if the director determines that all of the following
40 apply:

41 1. The conservation district cannot reasonably continue to supply
42 central Arizona project water directly to a city, town, private water company
43 or irrigation district due to an unplanned failure of a portion of the
44 central Arizona project delivery system.

1 2. The emergency temporary recovery well permit is necessary to allow
2 the conservation district to provide immediate delivery of replacement water
3 to the city, town, private water company or irrigation district.

4 3. The application is for an existing well as defined in section
5 45-591 that is within the groundwater basin or groundwater sub-basin in which
6 the stored water is located, is within the conservation district and is
7 within the service area of the city, town, private water company or
8 irrigation district.

9 E. An emergency temporary recovery well permit issued pursuant to
10 subsection D of this section may be issued for a period of up to ninety days
11 and may be extended for additional ninety day periods if the director
12 determines that the conditions prescribed in subsection D of this section
13 continue to apply.

14 F. If the application for a recovery well permit is approved, the
15 director shall issue a permit and the applicant may proceed to construct or
16 use the well. If the application is rejected, the applicant shall not
17 proceed to construct or use the well. A new well shall be completed within
18 one year of receipt of the permit, unless the director in granting the permit
19 approves a longer period to complete the well. If the well is not completed
20 within one year or the longer period approved by the director, the applicant
21 shall file a new application before proceeding with construction.

22 G. A recovery well permit shall include the following information:

23 1. The name and mailing address of the person to whom the permit is
24 issued.

25 2. The legal description of the location of the existing well or
26 proposed new well from which stored water may be recovered pursuant to the
27 permit.

28 3. The purpose for which the stored water will be recovered.

29 4. The depth and diameter of the existing well or proposed new well
30 from which stored water may be recovered pursuant to the permit.

31 5. The legal description of the land on which the stored water will be
32 used.

33 6. The maximum pumping capacity of the existing well or proposed new
34 well.

35 7. If the permit is for a proposed new well, the latest date for
36 completing the proposed new well.

37 8. Any other information as the director may determine.

TO: AWBA Members

FROM: Gerry Wildeman 

SUBJECT: Information Regarding Credits Outside of the CAP Service Area

DATE: March 2, 2004



AUTHORITY MEMBERS
Herbert R. Guenther, Chairman
George R. Renner, Vice Chairman
Charles L. Cahoy, Secretary
Maureen R. George
John Mawhinney

EX OFFICIO MEMBERS
Senator Linda Binder
Representative Jake Flake

Attached is the background information regarding credits outside of the CAP service area as requested at the recent work-study session. For clarity in reviewing these documents, some additional information is provided. Please don't hesitate to contact me if you have any questions.

- ▶ In the November 1, 1997 Interim Report of the AWBA Study Commission, a variety of modeling scenarios were utilized yielding a cumulative shortage to on-river users ranging from 21,000 to 779,000 AF. The diversion method for calculating the shortage to P4 users based on the U.S. Bureau of Reclamation shortage sharing assumption had a cumulative shortage of 420,000 AF. This scenario was the "middle of the road" scenario and the USBR assumption was the more conservation assumption.
- ▶ In January 1998, Tim Henley prepared a memo that detailed the *pro rata* distribution of the 420,000 AF of credits between the three counties and recommended that the credits accrued in 1997 be distributed 144,000 AF to Mohave County, 4,500 AF to La Paz County and 1,500 AF to Yuma County. On January 21, 1998, the AWBA adopted the 1997 distribution and the 420,000 AF recommendation.
- ▶ The AWBA Study Commission Final Report stated that about 575,000 AF of credits should be reserved by the AWBA for river area M&I water providers. However, it should be noted that these model runs also showed that CAP M&I firming would be in the range of 3.03 to 4.29 MAF and the number currently being used for CAP M&I firming is about 2.5 MAF. Upon closer scrutiny of the model run used in the final report it was determined that there were errors in how the shortage criteria were calculated and that the 420,000 AF of credits was still appropriate.
- ▶ In March of 2002, a bill was introduced to the legislature to reserve all general fund appropriation credits accrued prior to July 1, 2001 for on-river firming. That bill was ultimately withdrawn following adoption of Resolution 2002-1.
- ▶ Resolution 2002-1 restated the January 1998 recognition of 420,000 AF as a reasonable number of credits and established priorities of use for general fund credits. The first priority was to develop and set aside a reasonable number of credits for on-river M&I use.

ARIZONA WATER BANKING AUTHORITY STUDY COMMISSION

INTERIM REPORT



Prepared by the Arizona Department of Water Resources
November 1, 1997

- Storage of supplies other than excess Colorado River water
- Water storage in surface reservoirs
- Land fallowing of senior rights
- Return flow credit development

The subcommittee recommends that the Study Commission continue to evaluate the identified measures as well as others that may be suggested by the public over the course of the next year. While these additional measures may all have benefits to water banking, none appears to be superior to Arizona's currently authorized approach of storing excess Colorado River water using artificial groundwater recharge methods. As studies progress involving the water augmentation needs within Arizona or in association with California and Nevada, the benefits and economic feasibility of employing additional water banking techniques will be better understood.

3. Water Banking Benefits Outside of the CAP Service Area Subcommittee

The Study Commission determined that it intends to place special emphasis on identifying opportunities for the AWBA to provide benefits on a statewide basis. The existing powers and duties of the Authority extend to providing shortage protection for M&I users of Colorado River water who are located outside of the CAP service area. The Study Commission formed a subcommittee to provide further information on these existing authorities and also determine if there are feasible opportunities to expand the AWBA to provide additional benefits.

The Water Banking Benefits Outside the CAP Service Area Subcommittee identified seven primary issue areas.

Issue 1

Determine the frequency and magnitude of potential shortages to those municipal and industrial water users of Colorado River water who are not Central Arizona Project subcontractors.

The subcommittee reviewed computer modeling studies performed by ADWR staff that identified potential shortages through the year 2100. These studies also identified a number of uncertainties on the method which may be employed to distribute shortages among various water users. Depending on the shortage sharing methods, the 100-year cumulative shortage to Colorado River area M&I water users could be as low as only 21,000 af or as high as 779,000 af.

The subcommittee believes that providing adequate shortage protection for Colorado River M&I water users outside of the CAP service area is critical. Water providers located along the Colorado River corridor usually lack a backup supply because water withdrawn from wells within the floodplain area is generally considered to be river water rather than groundwater. Therefore, when

shortage conditions exist, these providers may be faced with extremely damaging water supply reductions. The subcommittee concluded that predicting the frequency and magnitude of these potential shortages is very difficult at the present time but recommends using a conservative approach for planning purposes.

Issue 2

Should the AWBA be empowered to obtain and make available water supplies to new water providers or to supplement the supplies and allocations of existing providers in areas located outside of the CAP service area?

Water providers along the Colorado River have expressed concerns that their current level of water allocation will be inadequate to accommodate all of the anticipated growth. The Mohave County Water Augmentation Authority was formed to address the need for supplemental water supplies.

Quantifying the need for supplemental supplies is difficult and subject to a variety of assumptions. One common method includes use of census figures to project future population. Those figures are then multiplied by a gallons per person per day rate. Other methods factor in land use patterns and zoning to estimate an ultimate water need.

ADWR developed information regarding current allocations and projected future needs for water providers located along the Colorado River. The ADWR study indicates that only Lake Havasu City, of the large municipal providers, is likely to exceed its contract amounts by the year 2040, although many may be using a large portion of their allocations. ADWR acknowledges that the data base used for these estimates needs additional information and is in the process of updating its estimates.

The subcommittee believes that M&I water supply augmentation for the fast growing areas along the Colorado River corridor may be an appropriate additional role for the AWBA. Because of the location of the communities, most, if not all, water withdrawn or diverted will be considered Colorado River water. Priority 4 supplies of Colorado River water available for allocation along the Colorado River are limited to 164,652 af, and all but a few thousand acre feet have been allocated. It may, therefore, be difficult for new water providers to be established or for existing providers to obtain additional allocations.

While these problems are recognized, the subcommittee also concluded that it may be inappropriate, or at least premature, to give the AWBA the responsibility for supply augmentation if there will not be a need for such service for a long time. Before making a recommendation on this issue, the subcommittee would like to better determine if there is a need for additional M&I water and if so, if water providers have an interest in using the AWBA to develop those supplies.

Issue 3

Should the AWBA be empowered to store water at recharge sites that do not have direct access to excess water delivered through the Central Arizona Project?

The AWBA's enabling legislation limits the AWBA to obtaining water for storage that can be delivered through the CAP. The legislation does not allow the AWBA to independently own, develop, operate or construct storage facilities. The limitation that water delivered to a storage site must be delivered through the CAP means that all water must be stored either in western Arizona along the aqueduct route or at a facility within the CAP service area. In order to recover the water for the benefit of water users outside of the CAP service area, an exchange and forbearance mechanism must be established with CAP water users. If the AWBA could store water at a site near the Colorado River, it may be possible to deliver water to water users without requiring the exchange and forbearance agreements.

Two proposals were developed for discussion purposes: recharge to increase Colorado River return flows, and recharge and capture. The feasibility of the proposals is dependent upon favorable site-specific hydrogeologic conditions.

Storing water along the Colorado River may have advantages if the recovered water could be delivered without negatively impacting other Arizona water users' rights to divert Colorado River water. If water is stored for too long, that water will be lost to the Colorado River. Water storage must, therefore, either be for short periods of time or should not be initiated until much closer to the time frame when it would need to be recovered. Of the two storage methods identified by the subcommittee, it appears that the recharge and capture method is more practical and thus worthy of further investigation and study. The subcommittee recommends that this issue be investigated further, but only if a practical water recharge site can be identified.

Issue 4

Identify the needs and opportunities for the AWBA to provide assistance for water supply enhancement or drought protection for M&I water users who are neither located within the CAP service area nor located along the Colorado River.

Growth is occurring throughout the state and there is a need for water supply augmentation in certain areas that do not have direct access to the CAP or the Colorado River. Communities that may have ample long-term supplies may find that a local shortage could occur in times of drought. Another potential need for water could result from the ultimate determination of water rights through the adjudication process. The AWBA could be a supply source for obtaining substitute supplies by serving as a statewide water augmentation agency. One critical difficulty in attempting to develop water supplies for users who lack access to the CAP or the Colorado River is the feasibility of

implementing water exchanges on in-state river systems.

At present, there are obstacles to getting water to rural municipalities. It is not currently feasible to implement water exchanges on certain in-state river systems. However, this does not mean that rural community problems should not be addressed.

The subcommittee recommends that further consideration be given to this issue during the next year. The following activities should be addressed:

- Study population and growth trends of the rural counties in Arizona. ADWR may be able to provide direct assistance as would other governmental entities.
- Analyze the state to determine which areas would be likely to suffer the greatest impact if drought conditions were to arise. These areas should be categorized and prioritized for further study as to possible exchange scenarios or infrastructure development.
- Continue to work with the USBR and the U. S. Fish and Wildlife Service to examine endangered species impacts with respect to exchanges.

Issue 5

Should the AWBA be empowered to provide water supply enhancement assistance for non-M&I uses within Arizona such as environmental enhancement projects?

As use of water within Arizona increases, the competition for remaining supply also increases. The discussion of using banking mechanisms to supply water for uses other than M&I focused on two examples. First, water may be needed for environmental enhancement or endangered species mitigation programs. The second example was the federal government's need to obtain a replacement supply for the brine stream that is associated with the operation of the Yuma Desalting Plant. The USBR has indicated interest in using the AWBA as a partial solution to issues associated with operating the Yuma Plant.

The subcommittee believes that this issue merits further consideration but does not have a specific recommendation at this time. Future activities should involve further identification of potential environmental projects that could benefit from AWBA services. The USBR should be consulted directly regarding the range of interest that the federal government may have in using the AWBA to meet its short or long term needs.

Issue 6

Study and determine the mechanisms for forbearance and exchange which may be used to deliver Water Bank-developed supplies to water users outside of the CAP service area.

The AWBA is currently authorized to store water on behalf of Colorado River M&I contractors outside of the CAP service area. However, storage of water must occur as a result of deliveries through the CAP. When the stored water is recovered, it must be made available to the water users located in the Colorado River area. It is highly unlikely that the water will be directly transported from central Arizona groundwater basins back to the Colorado River area communities. An exchange agreement must, therefore, be made. Water users who normally would be receiving Colorado River water through the CAP must be willing to accept the recovered water as a substitute supply. As an alternative to utilizing CAP forbearance as the method for firming those contracts outside the CAP service area, the CAP could agree to indemnify the other post-1968 domestic users. Instead of creating unused water by forbearance, CAP could agree up-front to accept their shortage reduction plus any reductions that would have applied to the other post-1968 domestic water users.

The subcommittee believes this is an important issue to make the AWBA more useful for Colorado River communities. The concepts that the subcommittee has identified for creating forbearance within Arizona appear to have merit, but they require additional study and discussion over the next year.

Issue 7

Should M&I water users located outside of the CAWCD service area who receive credits from the AWBA to offset a water shortage be required to pay to have those credits replaced? Should the reimbursement rate be equal to what the bank originally paid for the credits or should it be at the rate in effect at the time the purchase of replacement water is needed?

Arizona Revised Statutes (A.R.S.) section 45-2457.B establishes the mechanism for M&I users outside of the CAWCD service area to take advantage of the AWBA to firm their supplies against the potential of shortage. First, the statute requires the AWBA to reserve a reasonable number of long-term storage credits accrued with the general fund appropriation for the benefit of those users. The AWBA is then instructed to distribute those credits back to those users only if the water users need the water to offset a shortage. The AWBA collects reimbursement for the cost to the AWBA of replacing the long-term storage credits distributed. (Similar requirements exist for use of general fund credits used for M&I shortages within the CAWCD service area.)

Discussion on this issue in the subcommittee focused on the need to clarify the statutory language to make it clear that the reimbursement of funds would not be needed in the same year water was being withdrawn from the Water Bank to protect against shortages. If a Colorado River

shortage was taking place, it would obviously be very difficult, and therefore very expensive for the AWBA to obtain a replacement supply. Mohave County representatives would like the statute clarified to show that the intent of the reimbursement provision is that the AWBA should wait until alternative sources are more readily available before obtaining a replacement.

The subcommittee has concluded that A.R.S. section 4524.57.B is ambiguous and should be amended to clarify that additional sources of water need not be purchased in the same year as when the supplies are withdrawn.

An additional issue is whether the replacement supply of water needs to be continued. The purchaser of water may be required to "pay back" the cost of the water but may not be required to actually replace the water. The subcommittee intends to further examine whether replacement is necessary. Concern was voiced, however, that a Colorado River community that has no backup supply may be extremely vulnerable in the future if the AWBA does not continuously restore drought protection supplies.

4. Indian Issues Subcommittee

The identification of appropriate mechanisms to allow Arizona's Indian communities to participate in water banking activities is one of the primary areas for consideration by the Study Commission. The Study Commission is also very interested in identifying ways the AWBA can assist in the settlement of Indian water rights claims, which is an existing function of the AWBA. The Indian Issues Subcommittee addressed these and other related issues.

The subcommittee adopted an approach of working with individual Indian Communities to identify problems and needs that could be solved with water banking programs. The subcommittee found that meetings with the Tribes were rewarding, and a great deal of information was exchanged.

The Indian Issues Subcommittee organized their work effort around four issue statements.

Issue 1

What are the respective water rights and supplies of the Arizona Indian tribes and how will they interact with the AWBA?

While no two tribes have identical circumstances, the subcommittee concluded that several of the tribes may share common issues or opportunities to interact with the AWBA. The tribes were consequently categorized as follows:

MEMORANDUM



To: Authority Members
From: Tim Henley, Manager
Subject: Long-term Storage Credits for outside CAP
Date: January 21, 1998

The Authority's enabling legislation requires the Authority to reserve a reasonable number of long-term storage credits accrued with the general fund appropriations for the benefit of the municipal and industrial (M&I) users of Colorado River water in Arizona that are outside of the Central Arizona Project (CAP) service area. In 1997, the Authority began to develop long-term storage credits with general fund appropriations, so it is appropriate for the Authority to address the issue of how many of those credits should be reserved for the areas outside the CAP service area.

Background

In 1997, the Study Commission determined the frequency and magnitude of potential shortages to the Colorado River water M&I users who are not CAP subcontractors. These users are commonly referred to as Priority 4 users because of their Colorado River use priority and include the following M&I contract holders.

<u>MOHAVE COUNTY</u>		<u>LA PAZ COUNTY</u>	
Bullhead City	15,210 af	Continental Telephone	1 af
Crystal Beach	132 af	City of Parker	1,030 af
Gold Standard Mine	75 af	Brook Water Co.	680 af
Golden Shores	2,000 af	Ehernburg Imp. Dist.	500 af
Havasu Water Co.	993 af	Hillcrest Water Co.	84 af
Lake Havasu City	19,180 af	Town of Quartzite	1,070 af
Lakeview City	400 af	TOTAL	3,365 af
Mc Allister	40 af		
Mohave County Water Auth.	18,500 af	<u>YUMA COUNTY</u>	
Mohave Valley I.D.D	41,000 af	Edward Roy	1 af
Mohave Water Cons. Dist.	1,800 af	Smucker Park	33 af
Western States Minerals	70 af	TOTAL	34 af
TOTAL	99,400 af		

In addition to these contracts there are several contracts for irrigation uses with the same priority. The Authority can only firm M&I supplies under its existing authority.

Utilizing various assumptions, the Study Commission analyzes three methods for determining shortages with each method having two cases for distributing shortages among the contract holders. Two cases were required because there are two differing points of view on how the contracts' shortage provisions will be enforced. While recognizing the difficulty in predicting shortage and the uncertainty in how shortages will be distributed, the Study Commission recommended a conservative approach for determining the number of credits necessary to firm M&I contractor supplies. They recommended an approach that would require the development of approximately 420,000 af of credits to firm the water supplies of the M&I users outside the CAP area for the next 100 years. The 100-year horizon was selected in recognition of the assured and adequate water supply requirements. I have attached the relevant pages from the Arizona Water Banking Authority Study Commission's "Interim Report" dated November 1, 1997 for your review.

Recommendation

After reviewing the recommendation of the Study Commission, I would recommend that from the credits developed with the general fund appropriations the Authority reserve 420,000 af of credits to supplement the current supplies of the Priority 4 M&I users outside the CAP service area. Reserving these credits will firm those current supplies for at least 100 years. I would further recommend that the 420,000 af be subdivided by county utilizing the existing contract amounts on a prorata basis as follows.

<u>Mohave County</u>	<u>La Paz County</u>	<u>Yuma County</u>
96%	3%	1%
403,200 af	12,600 af	4,200 af

While the enabling legislation requires the Authority to reserve the credits, it is silent on how or when those credits should be developed. Based on the current studies shortages are not expected until the mid 2020s, which means the Authority has several years to actually develop the credits.

Credits developed utilizing general fund appropriations can be used for four basic purposes: (1) firming M&I supplies for outside the CAP, (2) firming M&I supplies for CAP subcontractors, (3) assisting in American Indian settlements, and (4) fulfill the water management objectives of the Third Management Plan. The Authority will have to determine an appropriate distribution for the other three purposes. The Authority will also have to decide how the credits will be distributed in any given year among the four purposes. Recognizing that the other purposes have not been quantified, I would recommend that the approximately 150,000 af of credits developed utilizing general fund appropriations in 1997, be distributed to firm the M&I supplies for outside the CAP. Based on the above percentages the distribution would be as follows.

Mohave County

144,000 af

La Paz County

4,500 af

Yuma County

1,500 af

This recommendation for the annual distribution would only apply to the credits developed in 1997. The Authority should revisit this distribution annually or sooner if the other purposes for the uses of the credits are quantified during the next year.

I would also recommend that the Authority notify the appropriate entity in each of the counties of the total credits to be reserved for their benefit and the distribution of the credits developed in 1997.

The Study Commission continues to study mechanisms that could be employed to recover the credits.

ARIZONA WATER BANKING AUTHORITY
Final Minutes



January 21, 1998
Arizona Department of Water Resources

Welcome / Opening Remarks

Chairman Pearson opened the Arizona Water Banking Authority meeting. All members of the Authority were present except Senator Pat Conner and Representative Gail Griffin.

AUTHORITY MEMBERS
Rita P. Pearson, Chairman
Tom Griffin, Vice-Chairman
Bill Chase, Secretary
Grady Gammage, Jr.
Richard S. Walden

EX OFFICIO MEMBERS
Senator Pat Conner
Rep. Gail Griffin

Adoption of Minutes of December 17 Meeting

The December 17 meeting minutes were adopted as submitted.

Discussion of the 1998 Annual Plan of Operation staff activities

Mr. Henley stated that the closing figure for water delivered in 1997 for the Arizona Water Banking Authority (AWBA) was 326,235 af.

The AWBA plans to deliver 360,000 af of water in 1998. Approximately 30,000 af were delivered in January.

Ms. Kunasek stated that the AWBA's web page is still in the process of development and should be up and running in February.

The Innovations in American Government application is now complete and has been sent to the John F. Kennedy School of Government at Harvard University.

Discussion and Recommendation on Number of Credits to be Reserved for Outside CAP

Update on Interstate Discussions

Mr. Henley explained that the enabling legislation requires the AWBA to reserve a reasonable number of long term storage credits that would be accrued with the general fund appropriations for the benefit of municipal and industrial users outside the Central Arizona Project service areas.

Mr. Henley recommended setting 420,000 af of credits aside from the credits developed with general funds to firm the water of the "priority four" users. Mr. Henley stated that the 420,000 af should be subdivided among the three counties (Yuma, La Paz and Mohave Counties), with a major portion for Mohave County.

The credits developed with general fund monies can be used for four purposes: 1) firming the M&I supplies for outside the CAP, 2) firming the M&I supplies to CAP subcontractors, 3) assisting the on-going American Indian water rights settlements and 4) to fulfill the water management objectives that should be identified through the third management plan process.

Mr. Henley also recommended that the credits that were developed in 1997, approximately 150,000 af, be distributed to firm the M&I supplies for outside the CAP and that the credits be distributed on the basis of the percentages that were identified.

A motion to adopt the 1997 distribution as recommended by the AWBA staff was made. Ms. Pearson added that she would like to see more research done in the future and to have more community involvement and discussion about a long-term plan for how the credits will accrue for the different purposes. The 1997 distribution mechanism was adopted with the recommendations.

Mr. Henley stated that he would also like to request that the Authority members allow the AWBA staff to notify the different counties that the Authority has made the reservation and to give them an opportunity to comment.

Proposed Update to the Storage Facility Inventory

Ms. Kunasek gave an overview of the development of the storage facility plan.

A schedule listing the process to complete the plan has been prepared by the AWBA staff. A draft plan should be available in June 1998 for the Authority's review, and a final plan would be ready for approval by the Authority in August 1998.

A motion to adopt an amended Storage Facility Inventory that includes the schedule for the Plan's completion was made and the update was adopted.

Presentation and Discussion of Federal Register Proposed Rule on Interstate Banking issued 12/31/97

Mr. Henley referenced the review schedule of the timing process the AWBA staff should undertake in putting together public comments, which will then be submitted to the Secretary of Interior, Bruce Babbitt.

The AWBA staff will make the proposed federal rules available for feedback from interested parties. At the next AWBA meeting, February 18, the comments will be discussed. The Authority will then submit comments to the Secretary of the Interior.

The Bureau of Reclamation will promulgate a rule after reviewing public comments. The final rule will probably be complete in the summer of 1998.

Ms. Pearson summarized her concerns:

- The type of water that may be stored by the Bank;
- The use of the terms "entitlements" and "apportionment" almost interchangeably;
- The definition of an authorized entity is overly inclusive;
- The specificity required for the Interstate Storage Agreement; and
- The scope of environmental review.

Bill Chase questioned whether the definition "authorized entity" means that AWBA would have to hold an entitlement and whether the AWBA is even authorized to hold an entitlement.

Public Comments:

Bob McCain of AMWUA said they concurred with the AWBA comments and expressed appreciation for the work the Bureau of Reclamation had done. Jay Moyes of the Meyer Hendricks law firm noted that impacts on the power production should be taken into consideration. Le Grand Nielson of the Bureau of Reclamation stated that the Bureau will hold public hearings to take public comments, if requested, on the proposed rule.

Brief Discussion of Annual Report Process

Ms. Kunasek stated that by law, the AWBA must produce a report of the previous calendar year's activities by July 1, 1998. The final report will be ready for approval and signing at the June 17 AWBA meeting.

Update on Interstate Discussions

Mr. Henley reminded the Authority members that the Secretary of Interior's December Colorado River Water Users Association speech was included in the public packet.

Ms. Pearson added that the seven basin states will meet in the next few weeks. They will discuss the proposed interstate banking rule, as there is an interest by the seven states to provide joint comments. An update on the efforts of California to adopt a 4.4 plan should be forthcoming.

Call to the Public

Chairman Pearson adjourned the meeting at 11:15 a.m.

Arizona Water Banking Authority

Annual Report

1997



Submitted
July 1, 1998

- “Water war brewing in thirsty southwest,” *Chicago Tribune*, January 12, 1997.
- “Arizona to store Colorado water,” *Scottsdale Tribune*, January 25, 1997.
- “Pacts allow state to store unused Colorado River water,” *Tribune Newspapers*, Page B5, January 25, 1997.
- “Arizona signs pacts to bank water,” *Arizona Republic*, Page A1, January 25, 1997.
- “Arizona to bank its river water,” *Casa Grande Dispatch*, Page 1, January 25, 1997.
- “Arizona banks on water for future,” *Las Vegas Sun*, January 27, 1997.
- “Nevada’s free water drying up,” *Las Vegas Review-Journal*, January 29, 1997.
- “Arizona did well securing its water,” *Arizona Republic*, editorial, February 16, 1997.
- “Arizona takes its full share of river,” *USA Today*, October 17-19, 1997.
- “Water banking allows AZ to take full share of Colo. River,” *U.S. Water News*, December, 1997.
- “Arizona’s Water Bank: Help for Nevada?” *Arizona Republic*, B4, December 28, 1997.

On-Reservation Water Banking: Water Bank staff held preliminary meetings with Gila River Indian Community representatives and other Indian nations regarding on-reservation water banking. These meetings provided an opportunity to determine the level of interest by the Indian Communities and to better understand the Community’s concerns.

Interstate Water Banking. In December 1997, the U.S. Bureau of Reclamation issued its proposed federal rules governing interstate water banking for public comment. The federal rules will enable Arizona to enter into Interstate Storage Agreements to store a portion of its unused Colorado River entitlement for other states to help those states in times of future water shortage. Water Bank staff prepared extensive comments to the proposed rule and engaged in numerous discussions with Nevada and California over interstate water issues in anticipation of the release of the federal rule.

Credits Pledged to Mohave County and other Colorado River Communities: The Authority’s enabling legislation requires the Authority to reserve a reasonable number of long-term storage credits accrued with the general fund appropriations for the benefit of municipal and industrial users of Colorado River water in Arizona that are outside of the Central Arizona Project service area. In 1997, the Authority began to develop long-term storage credits with general fund appropriations. In accordance with the Bank’s statutory mandate, the Water Banking Authority pledged approximately 103,000 af of credits for communities in Mohave, La Paz, and Yuma counties, with the majority (99,400 af) pledged to Mohave County.

**ARIZONA
WATER
BANKING
AUTHORITY
STUDY
COMMISSION**

FINAL REPORT



DECEMBER 1998

□ **Issues Related to Opportunities for the Arizona Water Banking Authority to Provide Additional Benefits at Locations Outside of the Tri-county CAP Service Area.**

The Study Commission recognized that most of the water management benefits authorized by H.B. 2494 will occur within the CAP service area in Maricopa, Pinal, and Pima Counties. The Study Commission felt that there may be significant opportunities for other portions of the State to also benefit from water banking activities. The fast-growing communities in Mohave County were particularly identified as places where the AWBA may provide a significant benefit. Some of the issues discussed by the Study Commission are related to providing clarification how the AWBA can utilize its existing authorities while other look at additional opportunities.

The Study Commission identified seven primary issue areas.

- 1 *Determine the frequency and magnitude of potential shortages to Colorado River area M&I water users who are not Central Arizona Project subcontractors.*

The Study Commission reviewed computer modeling studies performed by ADWR staff that identified potential shortages through the year 2100. These studies also identified a number of uncertainties on the method which may be employed to distribute shortages among various water users. Depending on the shortage sharing methods, the 100-year cumulative shortage to Colorado River area M&I water users could be as low as only 21,000 af or as high as 779,000 af.

Recommendations

The Study Commission believes that providing adequate shortage protection for Colorado River area M&I water users is critical. Water providers located along the Colorado River corridor generally lack a backup supply because water withdrawn from wells within the flood plain aquifer is generally considered river water rather than groundwater. Therefore, when shortage conditions exist, these providers will be faced with extremely damaging water supply reductions. The Study Commission concluded that predicting the frequency and magnitude of these potential shortages is very difficult at the present time, but recommends that the AWBA adopt a conservative set of assumptions for planning purposes. Using these conservative assumptions, the Study Commission's investigations indicate that about 575,000 af of long term storage credits should be reserved by the AWBA for river area M&I water providers.

The USBR should clarify the method that will be used for determining how reduced deliveries to non-CAP fourth priority contractors will be shared between M&I and agricultural contractors. The Bureau should seek the input of all contractors within this category in establishing the method.

- 2** *Should the AWBA be empowered to obtain and then provide water supplies to new water providers or to supplement the supplies and allocations of existing providers in areas located outside of the CAP service area?*

Water providers along the Colorado River have expressed concerns that their current level of water allocation will be inadequate to accommodate all of the anticipated growth. The Mohave County Water Authority was formed to address the need for supplemental water supplies.

Quantifying the need for supplemental supplies is difficult and subject to a variety of assumptions. One common method includes use of census figures to project future population. Those figures are then multiplied by a gallons per person per day rate. Other methods factor in land use patterns and zoning to estimate an ultimate water need.

ADWR developed information regarding current water allocations and projected future needs for water providers located along the Colorado River. The ADWR study indicates that only Lake Havasu City, of the large municipal providers, is likely to exceed its contract amounts by the year 2040, although many may be using a large portion of their allocations. ADWR acknowledges that the data base used for these estimates would benefit from additional information and will continue to work with river area communities and the Mohave County Water Authority to refine its estimates.

Recommendation

The Study Commission believes that M&I water supply augmentation for the fast-growing areas along the Colorado River corridor may be an appropriate additional role for the AWBA. Because of the location of the communities, most, if not all, water withdrawn or diverted will be considered Colorado River water. Fourth priority supplies of Colorado River water available for allocation along the Colorado River are limited to 164,652 af, and all but a few thousand acre feet have been allocated. It may, therefore, be difficult for new water providers to be established or for existing providers to obtain additional allocations.

While these problems are recognized, the Study Commission concluded that it is inappropriate, or at least premature, to give the AWBA the responsibility for supply augmentation if there will not be a need for such service for several decades. As explained in a previous recommendation relating to short and long term supply

augmentation, there are too many uncertainties regarding augmentation techniques and financing for the AWBA to add this function at the present time. However, if the AWBA is granted the authority to “loan” long term storage credits as has been recommended by the Study Commission, some of the needs for supplemental water for river area communities can be addressed.

3 *Should the AWBA be empowered to store water at recharge sites that do not have direct access to the Central Arizona Project?*

The AWBA’s enabling legislation limits the AWBA to banking water that will be delivered through the CAP. The legislation does not allow the AWBA to independently own, develop, operate or construct storage facilities. The limitation that water delivered to a storage site must be transported through the CAP means that all water must be stored either in western Arizona along the aqueduct route or at a facility within the CAP service area. In order to recover the water for the benefit of water users outside of the CAP service area, an exchange and forbearance mechanism must be established with CAP water users. If the AWBA could store water at a site near the Colorado River, it may be possible to deliver water to water users without requiring exchange and forbearance agreements.

Two proposals were developed for discussion purposes: recharge to increase Colorado River return flows, and recharge and capture. The feasibility of the proposals is dependent upon favorable site-specific hydro-geologic conditions.

Recommendation

Storing water along the Colorado River may have advantages if the recovered water could be delivered without negatively impacting other Arizona water users’ rights to divert Colorado River water. If water is stored in the flood plain aquifer for too long, that water will be lost to the Colorado River. Therefore, water storage must either be for short periods of time or else should not be initiated until much closer to the time frame when it would need to be recovered. Of the two storage methods identified by the Study Commission, it appears that the recharge and capture method is more practical and thus worthy of further investigation and study. The Study Commission recommends that this issue be deferred for further investigation. Once the USBR has clarified what portion of the flood plain aquifers are considered to legally be Colorado River water, it can be determined if any practical water recharge sites exist.

- 4** *Identify the needs and opportunities for the AWBA to provide assistance for supply augmentation or drought protection for M&I water users who are neither located within the CAP service area nor located along the Colorado River.*

Growth is occurring throughout Arizona and there is an identified need for water supply augmentation in several areas that do not have direct access to the CAP or the Colorado River. Communities that may have ample long-term supplies may find that a local shortage could occur in times of drought. Another potential for water supply shortfalls could result from the ultimate determination of water rights through the adjudication process. The AWBA could be a supply source for obtaining substitute supplies by serving as a statewide water augmentation agency. One critical difficulty in attempting to develop water supplies for users who lack access to the CAP or the Colorado River is the feasibility of implementing water exchanges on in-state river systems.

Recommendation

At present, there are too many obstacles to delivering water to many rural municipalities to recommend that the powers and duties of the AWBA be expanded to include more geographic regions of the state.

It is not currently feasible to implement water exchanges within certain in-state river systems. However, this does not mean that rural community problems should not be addressed.

The Study Commission recommends that this issue be given further consideration the AWBA and ADWR. It is recommended that the agencies work directly with any interested community and also with the representatives of the Arizona Rural Water Association. The agencies should address the following issues:

- Study population and growth trends of the rural counties in Arizona. ADWR and other governmental entities may be able to provide direct assistance.**
- Analyze conditions throughout the state to determine which regions would be likely to suffer the greatest impact if drought conditions were to arise. These areas should be categorized and prioritized for further study for exchange scenarios or infrastructure development.**
- Continue to work with the Bureau of Reclamation and the U.S. Fish and Wildlife Service to examine if water exchanges create impacts to endangered species.**

- 5** *Should the AWBA be empowered to provide water supply assistance for non-M&I uses within Arizona such as environmental enhancement projects?*

As use of water within Arizona increases, the competition for remaining supply also increases. The discussion of how banking mechanisms could be used to supply water for uses other than M&I focused on two examples. First, water may be needed for environmental enhancement or endangered species mitigation programs. Second, the federal government may need to obtain a replacement supply for the brine stream that is associated with the operation of the Yuma Desalting Plant. The Bureau of Reclamation has indicated interest in using the AWBA as a partial solution to issues associated with operating the Yuma Plant.

Recommendation

The Study Commission believes that this issue merits consideration but does not have a specific recommendation at this time. Future activities should involve further identification of potential environmental projects that could benefit from AWBA services. The AWBA should consult directly with the USBR regarding the range of interest that the federal government may have in using the water banking program to meet its short or long term needs. Also, the proposed credit "loan" program, if authorized, will be available to non-M&I water uses throughout the State.

- 6** *Study and determine the mechanisms for forbearance and exchange which may be used to deliver Water Bank-developed supplies to water users outside of the CAP service area.*

The AWBA is currently authorized to store water on behalf of Colorado River M&I contractors outside of the CAP service area. However, storage of water must occur as a result of transportation through the CAP. When the stored water is recovered, it must be made available to the water users located in the Colorado River area. It is highly unlikely that the water will be directly transported from central Arizona groundwater basins back to the Colorado River area communities.

Recommendation

The Study Commission investigated several methods that would create the legal mechanism for the recovery and delivery of banked water to river area communities. The Study Commission recommends that the AWBA, the CAWCD, and the affected communities enter into exchange agreements and file notice of those agreements with ADWR as provided by current state law. Under Arizona water laws, the exchange mechanism allows a trade of water supplies without the

requirement for additional water allocations or contracts. Under this mechanism, the AWBA would transfer the long term storage credits to the river area community. The river community will arrange for the recovery of the banked water and the delivery of that water to the CAWCD or one of its customers. The CAWCD would then arrange a trade of its Colorado River water by allowing it to be diverted by the river area community. While the Study Commission believes that the described exchange mechanism is the best option available and can be accomplished without additional legislative authorization, it recognizes the role of the Bureau of Reclamation in administering contracts for water delivery in the Lower Colorado River. The Study Commission urges the AWBA, with the assistance of ADWR and CAWCD to initiate discussions with the USBR to determine what, if any, impediments may exist to executing an exchange agreement.

- 7** *Should M&I water users located outside of the CAWCD service area who receive credits from the AWBA to offset a water shortage be required to pay to have those credits replaced? Should the reimbursement rate be equal to what the AWBA originally paid for the credits or should it be at the rate in effect at the time the purchase of replacement water is needed?*

Arizona Revised Statutes (A.R.S.) § 45-2457.B establishes the mechanism for M&I users outside of the CAWCD service area to take advantage of the AWBA to firm their supplies against the potential of shortage. First, the statute requires the AWBA to reserve a reasonable number of long-term storage credits accrued with the general fund appropriation for the benefit of those users. The AWBA is then instructed to distribute those credits back to those users when the water users need the water to offset a shortage. The AWBA collects reimbursement equal to the AWBA's cost of replacing the distributed long-term storage credits. (Similar requirements exist for use of general fund credits used for M&I shortages within the CAWCD service area.)

Discussion of this issue by the Study Commission focused on the need to amend the statutory language to make it clear that the reimbursement of funds would not be needed in the same year water was being withdrawn from the Water Bank. If a Colorado River shortage was taking place, it would obviously be very difficult, and therefore very expensive for the AWBA to obtain a replacement supply. Mohave County representatives would like the statute clarified to show that the intent of the reimbursement provision is that the AWBA should wait until alternative sources are more readily available before obtaining a replacement.

Recommendation

The Study Commission concluded that A.R.S. § 4524.57.B is ambiguous and should be amended to clarify that additional sources of water need not be purchased

in the same year as when the supplies are withdrawn. (See Appendix for proposed amendment) The Study Commission also recommends that the concept of replacement of the credits, as required by current law, be continued. This mechanism creates a permanent source of water for drought protection. The Study Commission believes that this benefit is far more important than the mere repayment of money to the general fund.

□ Issues Related to Opportunities for Arizona Indian Communities to Participate in or Benefit from Arizona Water Banking Authority Activities.

Identification of appropriate opportunities that will allow Arizona's Indian communities to more fully participate in water banking activities was one of the primary areas for consideration by the Study Commission. The Study Commission was also very interested in identifying ways the AWBA can assist in the settlement of Indian water rights claims, which is an existing function of the AWBA.

The Study Commission adopted an approach of working with individual Indian Communities to identify problems and needs that could be solved with water banking programs. The Study Commission found that meetings with the tribes were rewarding, and a great deal of information was exchanged. It urges representatives of the AWBA to continue this practice by holding similar meetings in the future.

The Study Commission organized its work effort around four issue statements.

1 *What are the respective water rights and supplies of the Arizona Indian tribes and how will they interact with the AWBA?*

While no two tribes have identical circumstances, the Study Commission found that several of the tribes may share common issues or opportunities to interact with the AWBA. The tribes were consequently categorized as follows:

- Tribes with a CAP allocation and an implemented water rights settlement
 - Ak Chin Indian Community, Fort McDowell Indian Community, Salt River Pima-Maricopa Indian Community, and Yavapai-Prescott Indian Tribe
- Tribes with a CAP allocation and full or partially negotiated water rights settlements not yet implemented
 - San Carlos Apache Tribe and the Tohono O'odham Nation
- Tribes with CAP allocation but no water rights settlement
 - Gila River Indian Community, Pasqua Yaqui Tribe, Tonto Apache Tribe, and the Yavapai-Apache Nation

ARIZONA WATER BANKING AUTHORITY

ANNUAL REPORT
1998



Submitted
July 1, 1999

Benefits Outside the CAP Service Area Subcommittee Recommendations

- When determining the quantity of water needed to firm the River communities M&I supplies, the AWBA should adopt a conservative set of water shortage assumptions.
- The USBR should clarify the method that will be used for determining how reduced deliveries to non-CAP fourth priority contractors will be shared between M&I and agricultural contractors.
- The ADWR and the AWBA should work directly with any interested community and with representatives of the Arizona Rural Water Association to consider ways that rural communities can obtain additional water supplies in the future.
- The AWBA, the CAWCD, and affected communities along the Colorado River should enter into exchange agreements and file notice of those agreements with the ADWR to enable recovery and delivery of banked water to river area communities.

Indian Issues Subcommittee Recommendations

- In order to best familiarize itself with the wide ranging interests of Indian water rights issues, the AWBA should be updated by the ADWR on the status of Indian water rights settlement negotiations and progress on Indian related issues coming out of the ongoing adjudication process.
- Water storage and recovery techniques performed by the AWBA can and should be an important component of Indian water rights settlements but should be undertaken on a settlement by settlement basis.
- Legal questions about marketing Indian water must be explored in more detail

Conclusion

The AWBA's primary function, maximizing use of Arizona's 2.8 million acre foot apportionment of Colorado River water by recharging excess CAP water, will remain its primary function. Most of the new functions discussed above will be entirely discretionary and will only be undertaken if they do not jeopardize the AWBA's ability to recharge excess CAP water to protect Arizonans from water shortages in the future and to help Arizona achieve its groundwater management goals.

Reserving Credits for Areas Outside the CAP Service Area

The Authority's enabling legislation requires the Authority to reserve a reasonable number of long-term storage credits accrued with the general fund appropriations for the benefit of the municipal and industrial (M&I) users of Colorado River water in Arizona that are outside of the Central Arizona Project (CAP) service area.

The Study Commission determined the frequency and magnitude of potential shortages to the Colorado River water M&I users. Based on that information the AWBA determined that approximately 420,000 af of credits would be needed to firm the water supplies of the M&I users outside the CAP area for the next 100 years.

The Authority also determined the 420,000 af of credits could be further subdivided among the three Counties along the River pro-rata based on the amount of the post-1968 M&I entitlements in each County. Using the current post-1968 entitlements, the pro-rata share to each County would be as follows:

<u>Mohave County</u>	<u>La Paz County</u>	<u>Yuma County</u>
96%	3%	1%
403,200 af	12,600 af	4,200 af

While the enabling legislation requires the Authority to reserve the credits, it is silent on how quickly those credits should be developed. Based on the current studies shortages are not expected until the mid 2020s, which means the Authority could have several years to actually develop the credits.

General fund appropriation credits, can be used for four basic purposes: (1) firming M&I supplies for outside the CAP, (2) firming M&I supplies for CAP subcontractors, (3) assisting in American Indian settlements, and (4) fulfill the water management objectives of the Third Management Plan. The Authority will have to determine an appropriate distribution for the other three purposes. The Authority will also have to decide how the credits will be distributed in any given year among the four purposes.

Recognizing that in 1998, no other purposes for the use of the general fund appropriation credits were identified, the Authority reserved the approximately 150,000 af of general fund appropriation credits developed in 1997 for firming the M&I supplies for outside the CAP.

Using the pro-rata approach and the above percentages, the distribution of the 150,000 af among the Counties would be as follows:

<u>Mohave County</u>	<u>La Paz County</u>	<u>Yuma County</u>
144,000 af	4,500 af	1,500 af

Facility Plan

AWBA staff completed a Facility Plan for the Tucson Active Management Area. By law, the AWBA must follow a specific process prior to developing its Facility Plan. To develop the final Facility Plan in accordance with A.R.S. § 45-2453, the AWBA considered the amount of additional storage capacity needed to meet the AWBA's needs, consulted with the ADWR with respect to where water storage would most contribute to meeting the water management objectives, considered the advice of CAWCD regarding the feasibility of delivering and storing CAP water at any proposed storage facility; sought the advice of the ADEQ regarding any potential adverse impacts from a proposed storage facility; considered the potential costs to the AWBA of facilitating construction or development of a proposed storage facility and cost-effectiveness of any proposed storage facility; asked the CAWCD whether it or other entities would be willing to construct, maintain, and operate any proposed storage facility; and considered the way in which water stored at a proposed storage facility could be used by the AWBA to achieve policy goals.

The Facility Plan identified the facilities in the Tucson area that could be available to the AWBA to meet its statutory objectives. When developing its annual Plan of Operation, the AWBA will determine through a public notice process which facilities would actually be used and the quantity of water to be stored

ARIZONA WATER BANKING AUTHORITY
Final Minutes

March 20, 2002
Arizona Department of Water Resources



AUTHORITY MEMBERS
Joseph C. Smith, Chairman
Tom Griffin, Vice-Chairman
Bill Chase, Secretary
George R. Renner
Richard S. Walden

EX OFFICIO MEMBERS
Representative Mike Gleason
Senator Ken Bennett

Welcome/Opening Remarks

Richard Walden, Sen. Ken Bennett and Rep. Mike Gleason were absent from the meeting.

Minutes

The Authority approved the minutes from the December 19, 2001 meeting.

Water Banking Staff Activities

Tim Henley, manager of the Authority, reviewed the current deliveries. Mr. Henley stated that actual deliveries are on schedule with projected deliveries, although it is early in the year. However, it is shaping up to be a dry year, so actual deliveries could exceed projected if dry conditions continue.

Mr. Henley informed the Authority that staff are in the process of completing annual reports for water deliveries. Annual reports are due on March 31.

Mr. Henley recognized Chuck Cahoy who will again be providing counsel to the Authority. Mike Pearce, who had served as the Authority's counsel for the previous few years, left the Department of Water Resources (ADWR) and now works for Fennemore Craig. Mr. Pearce could be used in a contract capacity for work on the interstate agreements if needed. Mr. Henley reported that David Donnelly, Deputy General Manager of the Southern Nevada Water Authority (SNWA) would be retiring. Mr. Donnelly was a member of the interstate water banking negotiating team. Kay Brothers stated that Mr. Donnelly would retire on April 12 and that she would be assuming his duties at SNWA.

Mr. Henley provided the Authority with an update regarding legislation of interest to the Authority. He informed the Authority that there would be no comprehensive water management package going to the legislature this year. It may be presented next year when there is less discussion regarding the budget and more time for discussion and education regarding the water management issues.

A strike everything amendment to Senate Bill 1355 introduced by Senator Guenther would change the Authority's current statutory requirement to reserve a reasonable number of long-term storage credits accrued with general fund appropriation for M&I users outside the CAP service area. The new legislation would require the AWBA to reserve the 375,000 acre feet of credits accrued with general fund money before July 1, 2001 for this purpose. Mr. Henley stated that his concern with this amendment was that the Authority has the ability to do this and should do so on their own without changing the legislation. Mr. Henley stated that he had additional concerns, but would address them under a later agenda item. It was his belief that once the Authority addressed this issue, word could be passed on to Senator Guenther and the legislation could possibly be withdrawn.

Other legislation discussed was H.B. 2594 and H.B. 2643. H.B. 2594 gives exchanges between an agricultural improvement district and a multi-county water conservation district an exemption from the 12 month time period for completion of the exchange. This is pertinent because the Authority is often the recipient of water under these exchanges. H.B. 2643 returns *in lieu* tax dollars collected

by the Authority to the Water Protection Fund instead of the state general fund. Mr. Henley stated that hearings are currently being held on these pieces of legislation. He did not recommend any specific action be taken by the Authority.

Prioritization of the Use of Credits Developed with the General Fund

As discussed above, Mohave County requested Senator Guenther to sponsor the strike all amendment to reserve 375,000 acre feet of credits for them. Mr. Henley stated that there currently is no competition from other sources for the general fund credits, but that Mohave County has concerns regarding the future. He introduced Larry Dozier, Deputy General Manager of the Central Arizona Project (CAP) to discuss the issue associated with actual reservation of the credits.

Mr. Dozier informed the Authority that CAP is required to charge an *in lieu* tax for water used outside the three county CAP service area. Today, that tax is \$20-22 per acre-foot. Thus far, there has been no allocation of the general fund credits for a specific entity outside the service area. Consequently, the tax has not been charged on any of the credits developed with general fund money. However, if the legislative reservation occurs, the credits will be subject to the tax. Further, since the credits haven't actually been used by a particular entity, the tax cannot be passed on and would need to be paid by the Authority. This would generate a bill of about \$7.5 million at a time when the Authority has lost its general fund appropriation. Therefore, a resolution by the Authority was developed to serve in place of the legislative reservation.

George Renner stated that the resolution developed for the Authority only addressed "reasonable" and not a specific number of credits and questioned the reason for this. Mr. Dozier stated that the number that came out of the Study Commission was 420,000 acre feet, however, it is recognized that the number could change over time. Mr. Henley stated that it was his opinion that the resolution recognized "reasonable" as 420,000 acre feet even though it was not specifically stated in the "resolved" section of the resolution. He agreed with Mr. Dozier that picking a specific number is limiting because the true number could be either higher or lower at a later date due to changes in the system. Tom Griffin stated that this was discussed with Mohave County and that the county did not object to the resolution as written. This would hold true as long as full Authority approval was required to change what was "reasonable".

There was no further discussion and the Authority adopted the resolution. The Authority gave Mr. Henley approval to discuss this issue with Senator Guenther. Mr. Griffin stated that he would also be speaking with Senator Guenther.

State Budget Shortfall and Impact on Water Banking Authority

The state budget shortfall was discussed at the December meeting but the actual impact was not analyzed. In fiscal year (FY) 2002, the Authority did not receive the last \$1 million of the planned \$2 million general fund appropriation. The amount of general fund available to the Authority in FY 2003 is unknown, however, Mr. Henley's expectation is that there will be none. The impact of a zero general fund appropriation was evaluated.

The impact is minimal in the Phoenix and Tucson AMA's due to the amount of funds they generate.

The primary area of impact is the Pinal AMA. Based on currently available funds and projections through end of year, deliveries to the Pinal AMA will possibly need to be decreased about 12,000 acre feet due to lack of funds. Mr. Henley presented the following options:

- (1) Inform Pinal County partners that deliveries will be short and alternative water sources will need to be utilized. CAP would then need to recalculate the remaining water charges due. It should be borne in mind that actual losses may be more than 12,000 acre-feet because in dry years, the Pinal County irrigation districts have historically used more water. If those

additional deliveries are foregone, the actual acre-foot loss of storage could be closer to 30,000 acre-feet.

- (2) If revenues are higher than projected, the 2002 deliveries could be achieved, however, there would be no additional money to purchase water until May or June of 2003.
- (3) Funds could be moved from other accounts.
- (4) Utilize Nevada as a partner and initiate interstate water banking. Although all of the necessary agreements are not in place, there is the possibility that they could be ready by June. This would require additional action on the part of the Authority.

Mr. Henley stated that staff is not asking today for a decision about storing water for Nevada. June would be a realistic timeframe for addressing initiation of interstate banking.

Mr. Renner asked if the funds generated by interstate banking would be subject to legislative loss. Mr. Henley stated that they would not because they are received and disbursed almost simultaneously. Any carryover would be held by CAP not by the Authority.

Joseph C. Smith noted that he agreed with Mr. Henley that there will be no general fund money available in FY 2003. Further, it will probably be difficult to get it back in FY 2004. Mr. Smith also stated that he does not think the legislature is looking at any of the Authority's other funds at this time.

Mr. Griffin asked if action needed to be taken to direct staff. Mr. Henley stated that he would feel more comfortable as the previous action taken by the Authority was specifically to direct staff to negotiate agreements. Now they would be discussing actual storage, Mr. Henley would prefer it be through direction by the Authority.

The Authority directed staff to begin discussions with Nevada regarding the possibility of interstate storage in 2002 and 2003.

Update on Status of Interstate Agreements

Mr. Henley reported that the Storage and Interstate Release Agreement (SIRA) is in the middle of the public process. Thus far, the Bureau of Reclamation hasn't received numerous comments but they have had some requests for copies of documents. The expectation is that the SIRA will be finalized in the next month and be ready for approval in June.

Update on Status of AWBA Contract Agreements

Mr. Henley stated that the agreements had all been extended by letter until the end of April. Drafts of the agreements are being worked on but they are not yet ready for execution. He said that the Authority may decide to have a special meeting for approval of agreements since there are so many.

The Groundwater Savings Facility agreement is different because it is now only between the Authority and the partner. The Intergovernmental Agreement is different because it is no longer the mechanism for water delivery. The Excess Water Contract will be the contract for water delivery but the Authority's will be different from others because of the differences in the Authority's delivery and payment. The CAP is in the process of drafting a new Master Storage Facility agreement that will cover storage at all of the CAP facilities.

Mr. Renner asked if a new motion was needed to extend the deadline further. Mr. Henley replied in the negative because although the letters only extended 4 months, the Authority approved extension for up to one year.

Presentation by Tucson AMA Institutional and Policy Advisory Group (IPAG)

Sharon Megdal, representing the IPAG, provided an informational briefing regarding CAP storage and recovery in the Tucson AMA. The IPAG has reexamined the 1998 Regional Recharge Plan and is doing some updated analysis to include Authority activities in the AMA. An interactive spreadsheet has been developed for use as an analytical tool. The spreadsheet allows various scenarios to be modeled.

The model has shown that the M&I firming target for the Tucson AMA will be very difficult to meet and the IPAG has began analyzing a number of options to bridge the firming gap. Ms. Megdal also discussed the IPAG's interest in recovery, specifically looking at where water is stored and how it will be recovered. The IPAG intends to continue their dialogue with CAP, the Authority, ADWR and others regarding recovery.

Mr. Henley noted that the IPAG has provided assistance to the Authority in the past and he anticipates that they will continue to provide input regarding Authority activities in the AMA.

Update on Preparation of 2001 Annual Report

Gerry Wildeman stated that the Annual Report is still in the preliminary draft stage so copies were not distributed. Drafts of the report will likely be available about a month before the next meeting. Ms. Wildeman noted that the current report will be very similar to past reports, briefly discussed the statutory requirements regarding the Annual Report and requested Authority members to inform staff of any particular items they would like discussed in the report.

Mr. Henley discussed the development of the ten-year plan portion of the Annual Report. He stated that the new ten year plan will include changes to the revenues available to the Authority, an interstate water banking component and activities of other entities that could effect the Authority's availability of water (i.e. the CAGR). The ten-year plan will be incorporated into a larger planning process being developed between the Authority, ADWR, and CAP.

Mr. Renner stated that he would like to see included in the Annual Report a discussion regarding the Governor's Groundwater Management Commission.

Call to the Public

Marvin Cohen from the City of Tucson commented that Tucson is very concerned with developing additional storage and with recovery, particularly with linking recovery with storage. He stated that the Central Avra Valley Storage and Recovery Project could have additional 20,000 acre-feet of storage available in the future.

Mark Myers stated that his comments mirror Mr. Cohen's and Ms. Megdal's regarding interest in storage and recovery. He noted that his clients see interstate storage and recovery as a trial run for intrastate storage and recovery because interstate recovery is on a shorter timeline.

The next AWBA meeting is scheduled for Wednesday, June 19, 2002.

The meeting concluded at 11:28 a.m.

RESOLUTION 2002-1

COPY

of the

Arizona Water Banking Authority

WHEREAS, The Arizona Water Banking Authority (“Authority”) is mandated by A.R.S. § 45-2457 to reserve a reasonable number of long-term storage credits accrued with general fund appropriations for the benefit of municipal and industrial users of Colorado River water in this state that are outside the service area of the Central Arizona Water Conservation District (“CAWCD”);

WHEREAS, on January 21, 1998, the Authority adopted a motion identifying 420,000 acre feet as the reasonable number of long-term storage credits to be developed and set aside for the benefit of municipal and industrial users of Colorado River water in this state that are outside the service area of CAWCD;

WHEREAS, A.R.S. § 45-2457 also authorizes the Authority, in addition to making water available to municipal and industrial users of Colorado River water in this state that are outside the service area of CAWCD, to distribute credits: 1) to make water available to CAWCD to the extent necessary for CAWCD to meet the demands of its municipal and industrial subcontractors; 2) to implement the settlement of water right claims by Indian communities in this state; and 3) to fulfill the water management objectives set forth in chapter 2 of Title 45, Arizona Revised Statutes;

WHEREAS, the Authority recognizes the benefits for planning purposes of more clearly prioritizing the use of long-term storage credits accrued with general fund appropriations;

WHEREAS, the Authority recognizes that general fund appropriations are the sole source of funds with which it is authorized to accrue long-term storage credits for the benefit of municipal and industrial users of Colorado River water in this state that are outside the service area of CAWCD and that other funding sources are available to the Authority with which to achieve the other authorized uses of the general fund appropriation;

NOW, THEREFORE, BE IT RESOLVED by the Commission of the Authority, as follows:

1. That the first priority of the use of long-term storage credits accrued with general fund appropriations shall be to develop and set aside a reasonable number of long-term storage credits as determined by the Commission of the Authority for the benefit of municipal and industrial users of Colorado River water in this state that are outside the service area of CAWCD.
2. That the second priority use of long-term storage credits accrued with general fund appropriations shall be to implement the settlement of water right claims by Indian communities in this state.
3. That the third priority use of long-term storage credits accrued with general fund appropriations shall be to make water available to CAWCD to the extent necessary for CAWCD to meet the demands of its municipal and industrial subcontractors.

4. That the fourth priority use of long-term storage credits accrued with general fund appropriations shall be to fulfill the water management objectives set forth in chapter 2 of Title 45, Arizona Revised Statutes.

5. That, to effectuate these priorities, the Authority shall consider and determine that long-term storage credits are available, or that general fund appropriation will be available to develop the long-term storage credits projected to be needed, to fulfill higher priority objectives before distributing long-term storage credits for any lower priority use. In making this determination, the Authority may also consider whether long-term storage credits accrued with funds other than general appropriation funds are available to fulfill the higher priority objectives.

6. That Authority staff are directed to conduct their planning and operation of the Authority business to effectuate the priorities set forth in this resolution.

IN WITNESS WHEREOF, the Chairman of the Authority approves this Resolution by affixing his signature below on this 20th day of MARCH, 2002.



Joseph C. Smith, Chairman
Arizona Water Banking Authority

Attest:



William L. Chase, Secretary
Arizona Water Banking Authority

(Official Seal)

RESOLUTION 2002-1

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1. That the first priority of the use of long-term storage credits accrued with general fund appropriations shall be to develop and set aside a reasonable number of long-term storage credits as determined by the Commission of the Authority for the benefit of municipal and industrial users of Colorado River water in this state that are outside the service area of CAWCD.
2. That the second priority use of long-term storage credits accrued with general fund appropriations shall be to implement the settlement of water right claims by Indian communities in this state.
3. That the third priority use of long-term storage credits accrued with general fund appropriations shall be to make water available to CAWCD to the extent necessary for CAWCD to meet the demands of its municipal and industrial subcontractors.

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Joseph C. Smith, Chairman
Arizona Water Banking Authority

Attest:



William L. Chase, Secretary
Arizona Water Banking Authority

(Official Seal)

Arizona Department of Water Resources
Pinal Active Management Area

MEMORANDUM

To: Tim Henley, AWBA Manager

From: Randy Edmond, Acting Pinal AMA Area Director 

Subject: Pinal AMA GUAC Recommendation for Storage Using Withdrawal Fees

Date: March 15, 2004

The Pinal AMA GUAC at its February 26, 2004 meeting considered the matter of making recommendations to AWBA for future storage locations. The GUAC reviewed the recommendations made to AWBA in the Third Management Plan. The TMP recommended that until a regional recharge plan is developed for the Pinal AMA, AWBA continue to maximize storage of unused Colorado River water in the AMA's three groundwater savings facilities.

After some discussion, the GUAC recommended that since a regional recharge plan has not yet been developed, AWBA should continue its current policy of allowing demand to decide storage locations for storage done using withdrawal fees. The GUAC also recommended that all storage done for firming municipal CAP supplies using the ad valorem property tax needs be located within the GSFs operated by the Hohokam and Central Arizona IDD as the four CAP municipal subcontractors' well fields are all located within the Eloy Subbasin. Finally, the GUAC recommended that AWBA develop a working relationship with the Pinal County Water Augmentation Authority as PCWAA works to develop alternative storage locations for CAP water and the AMA's rapidly growing effluent supplies.