

ARIZONA WATER BANKING AUTHORITY

Wednesday, June 16, 2004

| No. | NAME (Please print) | Phone No. |
|-----|---|----------------|
| 1 | PAUL Nelson, USBR | 602-216-3878 |
| 2 | Marge Haberman, ^{Leuzot} Roca | 602-262-5351 |
| 3 | Bill Allen - Burgess & Diple | (602) 244 8100 |
| 4 | Mary Roca, USBR | 602-216-3884 |
| 5 | Tom Bushatzke, City Phoenix | 602-2618532 |
| 6 | Chuck Culbun, CAP | |
| 7 | Patrick Dent, CAP | |
| 8 | Tom Harbour, CAP | |
| 9 | Tom Harbour II | |
| 10 | Patrick Dent UN | |
| 11 | Harry Ruzgerian | 213 217 6082 |
| 12 | Mark ^{Metro/} Mypsa ^{Markey} | 520 742 0416 |
| 13 | Tom Maher SNWA | 702-862-3702 |
| 14 | McClain Peterson CREN | 702-486-2672 |
| 15 | Steve Hansen Volek | 715 885 5000 |
| 16 | Gay Bigelow | (520) 421-8643 |
| 17 | Perk, BENEMERIS | 495 5874 |
| 18 | Tricia McLaw | |
| 19 | Rich Siegel | on file |
| 20 | Cindy Shumokun | 520 770 3800 |
| 21 | Elizabeth Baskett | on file |
| 22 | Kathryn Sorenson | on file |
| 23 | Shane Cantano | on file |
| 24 | Kenneth Seasholes | ADWR |

| No. | NAME (Please Print) | Phone No. |
|-----|---------------------|---------------|
| 25 | ALAN P. KLEINMAN | 702-293-8087 |
| 26 | MARVIN CORTEZ | 480-425-2693 |
| 27 | Marilyn DeRosa | 623-478-3391 |
| 28 | Gregg Capps | 480-782-3585 |
| 29 | PAUL ODMK | 623-465-0445 |
| 30 | Paul Li | 602-254-5998 |
| 31 | JOHN BODENCHUK | ADWR |
| 32 | Cynthia Stefanovic | 602-542-2669 |
| 33 | RON WONG | (20) 682-2516 |
| 34 | Karen LaMartina | 520 791-2666 |
| 35 | Gary Given | 623-869-2158 |
| 36 | John LeSueur | 602 916-5408 |
| 37 | M. Brophy | 602-440-4811 |
| 38 | | |
| 39 | | |
| 40 | | |
| 41 | | |
| 42 | | |
| 43 | | |
| 44 | | |

Arizona Water Banking Authority
500 North Third Street, Phoenix, Arizona 85004
Telephone 602-417-2418
Fax 602-417-2401
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 June 16, 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 9th day of June, 2004

FINAL AGENDA

Arizona Water Banking Authority Commission Meeting

- I. Welcome/Opening Remarks
- II. Approval of Minutes of March 25, 2004 AWBA Meeting
- III. Water Banking Staff Activities
 - Deliveries
 - Indian FIRMING Technical Committee
- IV. Discussion Regarding Water Management Objectives for the Tucson and Phoenix Active Management Areas
- V. Discussion Regarding Ten-Year Plan 2005-2014
- VI. 2003 Annual Report
 - Overview of 2003 Annual Report
 - Approval of 2003 Annual Report
- VII. FY 2005 Operating Budget
 - Overview of 2005 Operating Budget
 - Adoption of 2005 Operating Budget
- VIII. Status of Current On-River FIRMING Discussions
- IX. Call to the Public

Future Meeting Date:
Wednesday, September 15, 2004

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 Minutes¹

March 25, 2004
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

Senator Herb Guenther welcomed the attendees. All members of the Authority were present except for Maureen George. Senator Guenther noted that Tom Griffin of the Mohave County Water Authority (MCWA) was present and would be addressing agenda item V on their behalf.

Approval of Minutes of December 17, 2003 AWBA Meeting

The Authority approved the minutes of the December 17, 2003 meeting.

Water Banking Staff Activities

Tim Henley reviewed water deliveries and stated that deliveries were slightly below projected. This was primarily due to rain and altered cropping patterns at the GSFs and facility maintenance at the USFs. He stated that it was his anticipation that demand would increase in the April and May timeframe.

Mr. Henley reviewed the February accounting report. He noted that the withdrawal fee accounts still did not total \$9 million. However, the legislature had not yet requested the \$9 million and with incoming withdrawal fees and the CAP reconciliation the money would be there when it was requested. Mr. Henley provided a brief update regarding the Indian Firming Technical Committee. He noted that it is beginning to look like the preferred option will be a mix and match type situation and that the next meeting will be scheduled in the next month or so. Mr. Henley also informed the Authority that staff are starting preparation of the 2003 Annual Report including filing the water use reports for 2003 with the ADWR. He noted that each AWBA Annual Report typically focuses on one subject and that this one would likely focus on Indian firming and bios of the Authority members. Additionally, if Authority members had anything else they would like to see included in the annual report, they should inform Gerry Wildeman.

Senator Guenther asked John Mawhinney if he had any questions regarding the monthly report. Mr. Mawhinney asked about water not being delivered on behalf of the AWBA, i.e. was it still being pumped out of the river? Mr. Henley referred to Brian Henning of the CAP to reply. Mr. Henning noted that, overall, CAP deliveries were down due to the rain. However, he stated that CAP is pumping water from the river and storing it in Lake Pleasant. Currently, they are about 60-70,000 acre feet above projected deliveries to Lake Pleasant and he noted

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.

that this will be helpful later in the year as CAP has a planned outage in October. Mr. Henley noted that CAP and AWBA staff work closely to insure that Arizona comes in as close as possible to 2.8 million acre feet. Mr. Mawhinney asked that future monthly reports also include revenues and expenditures to date on page 3.

Discussion Regarding Recovery of Long-term Storage Credits

Mr. Henning provided a brief history of the process undertaken in 2003 when it appeared that recovery for the Southern Nevada Water Authority (SNWA) would be necessary. Early in the year, SNWA indicated that 10,000 acre feet of ICUA would be needed. From March through June, ADWR, CAP and AWBA staff worked together to coordinate the information needed for recovery well permit applications. In August, the applications were submitted and in September CAP obtained two recovery well permits from ADWR, one for CAIDD and one for MSIDD. The total recovery capacity for the two permits is 20-25,000 acre feet. Actual pumping capacity exceeds that amount but the recovery cannot impact on-farm operations and is limited by demand in the winter months. Mr. Henning noted that CAP will supply the pumping power for the recovery wells. In the end, SNWA withdrew the request for creation of ICUA but Mr. Henning noted that it was a very important educational process for CAP staff. The recovery well permits have been obtained and can be used at any time in the future. Also, AWBA staff drafted the certifications needed by the Bureau of Reclamation, so that process was educational, as well.

George Renner questioned whether any action was proposed to be taken to assure long-term maintenance of the wells included in the recovery well permits to insure their availability in the future. Mr. Henning stated that such a process wasn't included in the recovery well permits, however, CAP should be proactive in coordinating annually with the irrigation districts to insure that all of the wells are operational. Mark Myers stated that this request for recovery was for water stored in the early 1990s and that CAP has a responsibility to recover these long-term storage credits for California and Nevada. He noted that recovery might be different in the future. As the AWBA begins recovery for firming purposes, the cities may already have recovery well permits. Mr. Henley noted that, to date, all interstate credits have been stored in the Pinal County irrigation districts, thus the CAP recovery well permits could be used to recover interstate credits. Mr. Renner asked if this discussion would be included in the 2003 Annual Report. Mr. Henley stated that it would.

Mr. Henley informed the Authority that there was also a briefing memo regarding recovery in their handouts. He noted that the process is fairly simple when the storing entity is the recovering entity, however, it is more difficult if the recovering entity is different. This is the case with the AWBA, as the AWBA is not statutorily authorized to hold recovery well permits. At issue is a current statutory provision that requires third party consent when the storer is not the recoverer. There is currently legislation (HB 2590) under consideration that would provide relief from the consent requirement for storage of Colorado River water and recovery within the area of hydrologic impact. This would be beneficial to the AWBA. Mr. Mawhinney asked if the statutory revisions also pertained to effluent storage. Mr. Henley stated that it did not. To date, the AWBA has not stored effluent although it is statutorily authorized to do so. He noted that expanding the scope to include effluent is something that the Authority may want to address at a later date.

Discussion Regarding Long-term Storage Credits Developed with General Fund Appropriations

Mr. Henley stated that this discussion began at the work-study session and was initiated by Ms. George. However, it has been an ongoing topic and information was distributed to the Authority that detailed past action associated with this issue. Mr. Henley briefly reviewed the past actions and summarized the current situation as follows: (1) when the legislation was drafted, flexibility was purposefully created with regard to this source of revenue; (2) there is uncertainty about what will be required for Indian firming; (3) Arizona is initiating discussions regarding shortages on the Colorado River which may change the reasonable number of credits required to be reserved from 420,000 acre feet to some unknown number; and (4) the shortage discussions may also change *when* credits are needed as long-term storage credits are only to be made available upon declaration of a shortage. Senator Guenther asked if the 420,000 acre foot number previously determined to be reasonable was a moving target. Mr. Henley stated that it could be based on what came out of the shortage discussions. For example, if there were 50,000 acre feet of agricultural use within the post-1968 contracts and the decision was made that agriculture would go to zero in a shortage (much like the CAP policy), then there may never be a short to on-river M&I uses. Senator Guenther asked if the 420,000 number was being re-evaluated. Mr. Henley stated that it wasn't, however, after the shortage discussions take place and some questions about shortages are answered, it may be necessary to re-evaluate the number.

Mr. Mawhinney opined that if the 420,000 acre foot number was upheld as reasonable, then the on-river communities are in better shape than the AMAs with regard to meeting their firming number based on credits already accrued with general fund revenues. Also that direct assignment of general fund credits to the on-river communities may lead other entities being firming to request the same thing, thus greatly impacting the Authority's flexibility.

Mr. Renner stated that CAP's position is support for more frequent, less severe shortages and is influenced by the junior priority position of the CAP. He noted that this viewpoint is different from the viewpoint of others within the Lower Basin. Jim Davenport, Colorado River Commission of Nevada, stated that Nevada supports shortage discussions and repeal of CAP's junior priority and has a goal of minimizing shortages with regard to both occurrence and intensity.

Charles Cahoy stated that he was unsure exactly what the MCWA was requesting the Authority to do.

Mr. Griffin addressed the Authority and stated that the concern of the on-river users has always been two-fold: (1) that the firming goal is a moving target; and (2) that competing uses for the general fund firming credits could lead to that goal not being met. He noted that the on-river communities are particularly vulnerable during drought because they have no alternative source of water and that the MCWA would prefer to see a contract between the MCWA and the Authority that addresses reservation of credits.

Mr. Renner stated that although he recognized the on-river dilemma, it would be difficult at this time for him to support a contract with a firming number when the shortage discussions have not yet taken place. Following those discussions, development of a contract may be more appropriate. Mr. Griffin asked how the on-river communities could get certainty. Mr. Renner replied that they have representation on the Authority and that the Authority must adhere to the priorities previously adopted by resolution. Mr. Mawhinney stated that anything more formal than that would give the on-river communities more certainty than other entities that the Authority is firming for. Mr. Henley noted that there is some difference between AMA and on-river firming due to the revenue source being utilized and the statutory requirements associated with those sources. Mr. Henley stated that over the next year there may be more certainty regarding both shortage and Indian firming that could warrant some assignment of credits to those uses, even if only partial assignment. Mr. Cahoy agreed with Mr. Renner that a contract would be premature at this point and stated that, from a subcontract holder perspective, it makes sense for all entities benefiting from firming to be on equal footing. Senator Guenther stated that a firmer commitment to the MCWA may be possible following the shortage discussions. Mr. Griffin stated that he would like to see staff develop the form of the contract/agreement with actual firming numbers left out at this time. Senator Guenther directed staff to begin to develop the contract and work on developing new numbers as additional information is gained through shortage discussions.

Allen Kleinman, Bureau of Reclamation, stated that it would be beneficial if the state and federal entities worked closely in the process of evaluating the respective obligation to firm for Indian water rights settlements.

Discussion Regarding Water Management Objectives for the Phoenix, Tucson and Pinal Active Management Areas

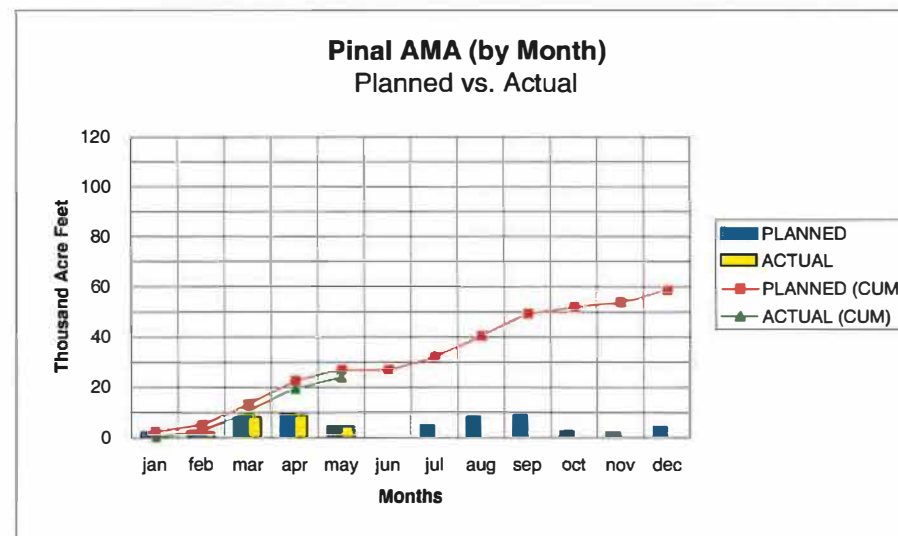
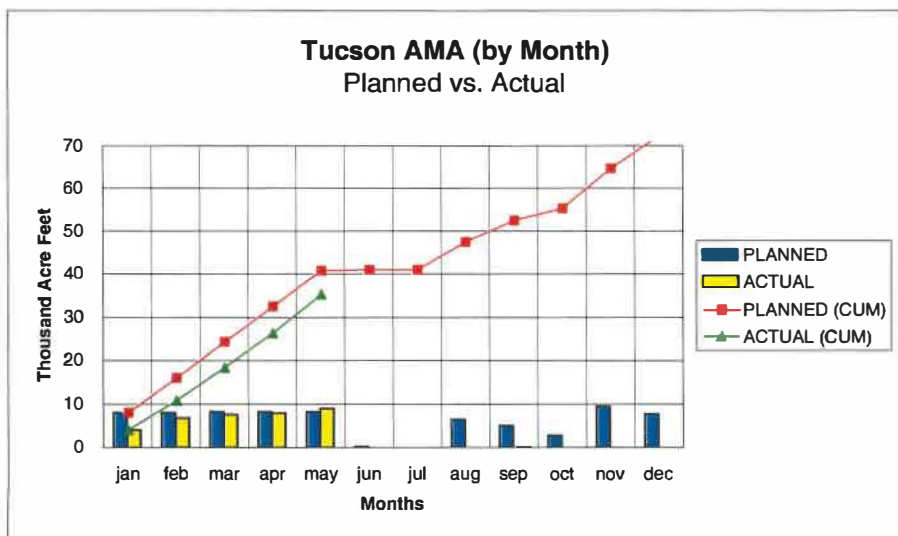
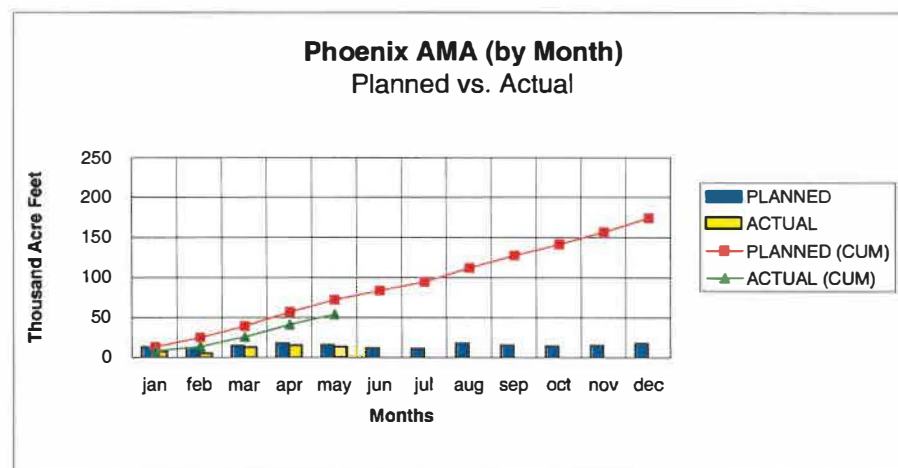
Mr. Henley stated that the question of water management objectives has been raised, Specifically with regard to expenditure of withdrawal fee revenues. These revenues can be expended to meet the water management objectives of the AMA upon request of the Director of ADWR. He noted that the Pinal AMA is the only AMA whose GUAC has met to discuss this issue. By memo, Randy Edmond presented the GUAC's recommendation to the AWBA. A copy of the memo was included in the handouts. The Tucson and Phoenix AMA GUACs will be providing similar information to the Authority in the near future. The Tucson GUAC will be meeting on April 16, 2004.

Additionally, legal counsel for ADWR has addressed the issue of whether or not firming can be legally considered to be a water management objective. A memo from the chief counsel is pending that will state that the determination has been made that firming is a legitimate water management objective. Consequently, upon request from the Director of ADWR, credits accrued with withdrawal fees could be used for firming purposes. Marie Pearthree, Assistant Director of Tucson Water, addressed the Authority and stated that they advocate the use of withdrawal fees for firming as the tax base in Pima County is insufficient to allow the firming goal to be met with *ad valorem* tax revenues only.

Call to Public

There was no additional public comment. The meeting concluded at 11:55 a.m.

2004 Plan of Operation



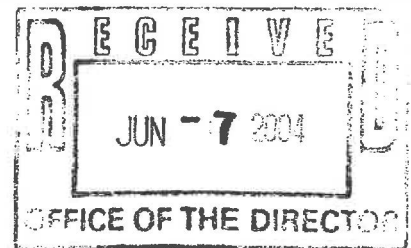
Actual deliveries updated
Plan of Operation

11-Jun-04
1-Jan-04

| | jan | feb | mar | apr | may | jun | jul | aug | sep | oct | nov | dec | total |
|-------------------------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Phoenix AMA | | | | | | | | | | | | | |
| GRUSP | 3,623 | 2,850 | 5,076 | 5,240 | 4,635 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21,424 |
| | 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 | 1,434 | 1,085 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,525 |
| | 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 | 4,742 | 5,679 | 4,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16,217 |
| | 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 | 800 | 800 | 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,000 |
| | 800 | 800 | 800 | 800 | 800 | 0 | 0 | 800 | 800 | 800 | 800 | 800 | 8,000 |
| HIEROGLYPHIC | 1,711 | 444 | 2,004 | 2,201 | 2,576 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,936 |
| | 2,700 | 2,700 | 2,700 | 2,700 | 2,700 | 2,700 | 2,200 | 2,000 | 2,700 | 0 | 2,700 | 2,700 | 25,800 |
| Subtotal | 7,758 | 5,272 | 12,622 | 15,354 | 13,096 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54,102 |
| Total to date | 7,758 | 13,030 | 25,652 | 41,006 | 54,102 | 54,102 | 54,102 | 54,102 | 54,102 | 54,102 | 54,102 | 54,102 | 54,102 |
| Projected total to date | 12,666 | 24,832 | 39,148 | 56,714 | 72,180 | 83,646 | 94,587 | 112,179 | 127,495 | 141,544 | 156,420 | 173,944 | 173,944 |
| 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 | 2,780 | 3,040 | 3,500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10,340 |
| | 0 | 1,020 | 2,780 | 3,040 | 3,500 | 0 | 0 | 3,400 | 2,040 | 610 | 0 | 310 | 16,700 |
| HIDD | 277 | 991 | 5,572 | 5,792 | 750 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13,382 |
| | 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 | 8,352 | 8,832 | 4,250 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23,722 |
| Total to date | 277 | 2,288 | 10,640 | 19,472 | 23,722 | 23,722 | 23,722 | 23,722 | 23,722 | 23,722 | 23,722 | 23,722 | 23,722 |
| Projected total to date | 2,250 | 4,970 | 13,250 | 22,790 | 27,040 | 27,040 | 32,040 | 40,440 | 49,280 | 51,890 | 53,890 | 58,400 | 58,400 |
| Tucson AMA | | | | | | | | | | | | | |
| Avra Valley | 333 | 671 | 652 | 390 | 557 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,603 |
| | 650 | 650 | 650 | 650 | 650 | 0 | 0 | 650 | 650 | 350 | 650 | 650 | 6,200 |
| Clearwater | 0 | 1,500 | 1,500 | 1,500 | 1,500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,000 |
| | 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 | 1,672 | 2,285 | 2,526 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,244 |
| | 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 | 3,739 | 3,739 | 3,749 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16,763 |
| | 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 | 29 | 695 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 724 |
| | 0 | 0 | 250 | 250 | 250 | 250 | 0 | 0 | 0 | 0 | 0 | 0 | 1,000 |
| Subtotal | 4,032 | 6,769 | 7,563 | 7,943 | 9,027 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35,334 |
| Total to date | 4,032 | 10,801 | 18,364 | 26,307 | 35,334 | 35,334 | 35,334 | 35,334 | 35,334 | 35,334 | 35,334 | 0 | 35,334 |
| Projected total to date | 8,000 | 16,000 | 24,250 | 32,500 | 40,750 | 41,000 | 41,000 | 47,450 | 52,500 | 55,250 | 64,700 | 72,400 | 72,400 |
| TOTAL | | | | | | | | | | | | | |
| TOTAL | 12,067 | 14,052 | 28,537 | 32,129 | 26,373 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 113,158 |
| Total to date | 12,067 | 26,119 | 54,656 | 86,785 | 113,158 | 113,158 | 113,158 | 113,158 | 113,158 | 113,158 | 113,158 | 113,158 | 226,316 |
| Projected total to date | 22,916 | 45,802 | 76,648 | 112,004 | 139,970 | 151,686 | 167,627 | 200,069 | 229,275 | 248,684 | 275,010 | 304,744 | 304,744 |

MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA



Executive Office

Copies to: Carr
Hendley
Houtz
Schiffer

June 1, 2004

Mr. Herbert R. Guenther, Director
Arizona Department of Water Resources
500 North Third Street
Phoenix, AZ 85004

Dear Mr. Guenther:

Interim Surplus Guidelines Agreement Between
the State of Arizona and The Metropolitan Water District of Southern California

This is in reply to your letter dated March 8, 2004, regarding execution of the draft Interim Surplus Guidelines (ISG) Agreement between Metropolitan and the State of Arizona.

Following the execution of the Quantification Settlement Agreement (QSA), we discussed terms that would provide benefits to both parties. At the time, it appeared execution of an ISG Agreement to replace the expired agreement would proceed. Subsequently, as a result of further discussion within Arizona, different terms were proposed which are reflected in your latest proposal.

After careful consideration, we must respectfully decline your proposal. Metropolitan is not planning to take "special" surplus water for the foreseeable future, even if available under the Interim Surplus Guidelines. This, along with many other actions we are taking, may delay or hopefully prevent a shortage from occurring.

Please be assured that Metropolitan is committed to doing its part to continue to support California's plan to limit demands for Colorado River water to its basic legal apportionment, absent a future declaration of general surplus conditions by the Bureau of Reclamation.

California has met the plan objective by living within its 4.4 maf allocation since January 2003. Further, the State and cooperating member agencies, including Metropolitan, are aggressively moving forward to implement the QSA and complementary conservation and other actions to ensure we meet the expectations stated by Arizona and the other Basin states during the QSA negotiations.

Mr. Herbert R. Guenther
Page 2
June 2, 2004

We look forward to continuing to work with the State of Arizona and representatives of the Central Arizona Project to coordinate and support our respective plans to meet the water supply needs of our residents.

Sincerely,



Ronald R. Gastelum
Chief Executive Officer

HR:adminwrn

o:\a\s\corres\HR_AZMWD ISG Agmt response to 030804 ADWR ltr_051904.doc

cc: Mr. Larry Dozier
Deputy General Manager
Central Arizona Water Conservation District
P.O. Box 43020
Phoenix, AZ 85080-3020

Mr. Timothy J. Henley, Manager
Arizona Water Banking Authority
500 North Third Street
Phoenix, AZ 85004

Mr. Robert W. Johnson, Regional Director
Lower Colorado Region
U.S. Bureau of Reclamation
P.O. Box 61470
Boulder City, NV 89006-1470

Ms. Patricia Mulroy
General Manager
Southern Nevada Water Authority
1001 South Valley View Boulevard
Las Vegas, NV 89153

Mr. Herbert R. Guenther

Page 3

June 2, 2004

cc continued:

Mr. David S. "Sid" Wilson, Jr.
General Manager
Central Arizona Water Conservation District
P.O. Box 43020
Phoenix, AZ 85080-3020

Mr. Gerald R. Zimmerman, Executive Director
Colorado River Board of California
770 Fairmont Avenue, Suite 100
Glendale, CA 91203-1035

ARIZONA DEPARTMENT OF WATER RESOURCES

Tucson Active Management Area Office
400 West Congress Street
Suite #518
Tucson, Arizona 85701
Telephone 520-770-3800 Fax 520-628-6759

Tucson AMA Institutional and Policy Advisory Group (IPAG) May 10, 2004 Meeting Summary

The Tucson AMA Institutional and Policy Advisory (IPAG) met on May 10th to consider whether Withdrawal Fee funds should be used for firming of M&I CAP subcontracts, and if so, which recharge facilities are most appropriate for that purpose.

There was consensus that AWBA's revenue from the Withdrawal Fees should be applied towards firming of M&I CAP subcontracts. The IPAG believes this will provide a water management benefit to the AMA by reducing the future reliance on groundwater to make up for a projected shortfall in recharge credits generated by the 4-cent *ad valorem* tax. The IPAG recommends that the AWBA's accounting of these credits specifically reflect the firming purpose.¹ The IPAG further recommends that the Authority adopt a policy committing these credits for firming of M&I subcontracts in the Tucson AMA.

The IPAG does not yet have a recommendation on which facilities should be given preference for M&I firming. However, there is an emerging consensus that a number of factors should be considered, including: the ability (and preferred method) to recover the water; the relative sizes of the subcontracts; and cost. Considerable discussion revolved around how each of the subcontractors intends to use its CAP allocation, and whether they will rely on their own infrastructure to recover the credits, or would prefer to have water recovered and wheeled to them by way of the CAP system. The group acknowledged the considerable institutional and hydrologic uncertainty, and reiterated its desire to make progress on regional recovery planning.

A subsequent IPAG meeting was not set, but it was suggested that the CAP subcontractors meet, and there is an expectation that a refined recommendation will ready in time for the July GUAC meeting.

¹ Statute requires the AWBA to maintain separate subaccounts by funding source, so transferring the credits into the *ad valorem* subaccount is not permitted.

Ten Year Plan for Calendar Year 2003

Introduction

Preparation of the ten year plan is statutorily mandated. The ten year plan must include a description of any water banking activities the AWBA intends to undertake in addition to the three primary AWBA functions of firming for M&I supplies, assisting in Indian water rights settlements, and fulfilling state water management objectives. The ten year plan must also provide an analysis of the AWBA's ability to complete those activities. The ten year plan is not a guarantee of future storage activities and is completed for planning purposes only. In any given year, the AWBA's activities are governed by the annual Plan.

The ten year plan for the year 2003 analyzes activity for the period 2005-2014 (Table 6) and was derived using the information found in Appendices B through G. AWBA accounting for previous years can be found in the 2003 Annual Report. AWBA staff developed the ten year plan based on the following guiding principles:

1. The intent of the plan is to evaluate if the AWBA can engage in water banking activities beyond the scope of the currently established AWBA role and to what extent.
2. The plan covers a ten year time period beginning with the next calendar year. For example, this ten year plan covers the time period 2005-2014.
3. The plan will be updated annually based on current priorities of the AWBA.
4. The plan is an important tool to be utilized in development of the next year's annual Plan of Operation.

Ten Year Plan Components

The following factors are recognized to be important elements in developing the model used to generate the ten year plan. Inclusion or exclusion of a specific factor or component of a factor was based on whether the extent of the effect of the factor could be predicted over the planning period, and whether the factor was anticipated to be at issue over the planning period.

1. Storage Partners and Storage Capacity

The AWBA has 13 water storage permits for GSFs with a total storage capacity of 743,359 acre-feet per annum. Appendix C describes the storage partners, storage permits and capacity available for use by the AWBA.

All of the permits associated with GSFs expire within this ten year plan. The AWBA's storage permits expire simultaneously with the partners' facility permits. Consequently, any difficulty on the part of the partners or the AWBA to obtain new permits could affect the ability of the AWBA to maintain adequate storage capacity to fulfill water banking activities. Discussions with ADWR recharge staff have indicated that there is typically no difficulty in obtaining new permits for GSF facilities. Nonetheless, impacts of this nature cannot be predicted and are not included in this ten year plan.

Table 6. Ten Year Plan

| ARIZONA WATER BANKING AUTHORITY – 10 YEAR PLAN 2005 – 2014 (Acre-feet) | | | | | | | | | | | | | | | |
|--|--------------------------|--------------------------|---------|------------------------------------|---------|--------------|---------|-------------------|---------|----------------|---------|--------------------|--------------------|----------------------|----------------|
| YEAR | (a) | (b) | | (c) | | (d) | | (e) | | (f) | | (g) | (h) | (i) | (j) |
| | CAP Water Avail for AWBA | CAP M&I Firming (4¢ Tax) | | Water Management (Withdrawal Fees) | | General Fund | | Indian Settlement | | Loaned Credits | | Storage for Others | Interstate Banking | | |
| | | Delivered | Credits | Delivered | Credits | Delivered | Credits | Delivered | Credits | Delivered | Credits | | Water Avail. | AWBA Capacity Avail. | Credits Earned |
| Pre-Plan ^(k) | n/a | 1,153,376 | | 464,676 | | 386,872 | | | | | | | | | 111,000 |
| 2005 | 492,918 | 234,531 | 216,638 | 93,200 | 84,879 | 0 | 0 | | | | | | 0 | 109,362 | 0 |
| 2006 | 633,159 | 283,117 | 257,635 | 105,948 | 97,142 | 0 | 0 | | | | | | 244,095 | 143,783 | 135,156 |
| 2007 | 621,749 | 322,191 | 292,868 | 103,882 | 94,975 | 0 | 0 | | | | | | 195,676 | 145,154 | 136,445 |
| 2008 | 634,365 | 325,775 | 296,030 | 98,062 | 89,498 | 47,993 | 44,823 | | | | | | 162,534 | 105,797 | 99,450 |
| 2009 | 613,364 | 299,796 | 272,598 | 119,740 | 108,952 | 45,906 | 42,887 | | | | | | 147,922 | 111,563 | 104,869 |
| 2010 | 544,735 | 199,206 | 182,013 | 96,992 | 88,336 | 43,938 | 41,059 | | | | | | 204,599 | 244,960 | 192,323 |
| 2011 | 513,688 | 195,501 | 178,626 | 89,381 | 81,429 | 42,095 | 39,346 | | | | | | 186,711 | 264,825 | 175,508 |
| 2012 | 509,982 | 192,085 | 175,504 | 85,677 | 78,041 | 40,377 | 37,750 | | | | | | 191,843 | 277,007 | 180,332 |
| 2013 | 471,855 | 188,110 | 171,878 | 81,150 | 73,926 | 38,756 | 36,243 | | | | | | 163,840 | 272,591 | 154,010 |
| 2014 | 443,673 | 183,786 | 167,941 | 75,615 | 68,907 | 37,230 | 34,824 | | | | | | 147,042 | 287,634 | 138,219 |
| TOTAL | | 3,365,107 | | 1,330,761 | | 663,804 | | | | | | | | | 1,427,312 |

FOOTNOTES:
 (a) See Appendix B
 (b) See Appendix D
 (c) See Appendix E
 (d) See Appendix F
 (e) Currently no Indian settlement requirements identified for the AWBA
 (f) Currently no requests for loaned credits
 (g) Currently the AWBA is not providing banking services for others
 (h) Available CAP Supplies minus AWBA intrastate delivery requirements
 (i) Additional capacity may be needed to fully accommodate the opportunity for interstate banking
 (j) See Appendix G
 (k) Cumulative totals for 1997-2004; 2004 credits estimated based on projected deliveries

The AWBA has nine water storage permits for USFs with a total storage capacity of 611,000 acre-feet per annum. The USF permit issued for the Pima Mine Road facility limits total storage for the term of the permit to 500,000 acre-feet with the ability to request an amendment to 600,000 acre-feet. This storage quantity limitation will not be a factor within this ten year plan. The GRUSP permit is the only permit that expires within this planning period.

As previously described in the GSF discussion, any difficulty in obtaining new permits could effect the capacity available to the AWBA. As the process of obtaining a new USF permit can be more complex and extensive than obtaining a new GSF permit, the possibility of impact is greater. Again, impacts of this nature cannot be predicted and are not included in the analysis of this ten year plan.

2. Recovery

This ten year plan does not include a recovery component because recovery for Colorado River shortages, Indian firming or interstate purposes is not anticipated within the scope of this ten year plan. Due to the on-going drought and public concern regarding reservoir levels, the CAP has completed dry year scenario modeling of the Colorado River system. These model runs show a small potential for shortage in 2011. However, due to projected M&I demand levels, there will be no shortages to M&I users within the scope of this ten year plan, even with the dry year hydrology used by CAP in modeling. Recovery for Indian firming purposes is also not anticipated due to demand levels. However, the Indian Firming Technical Committee continues to meet in 2004 as the issues of identification of water available for firming and evaluation of costs associated with firming are discussed. Lastly, while there exists the potential for requests for development of ICUA as occurred in 2003, recovery for interstate purposes is not anticipated. If requests were made, the recovery would occur pursuant to existing recovery well permits held by the CAWCD. Although recovery is not anticipated within the scope of this ten year plan, it is anticipated that the AWBA and CAWCD will initiate a planning process to develop a general recovery strategy and recovery principles early in this time period in recognition of the CAP subcontractors' need for long-range infrastructure planning.

3. Water management objectives

The early activities of the AWBA were focused on achieving the goal of full utilization of Arizona's Colorado River allocation. In 2002, Arizona fully utilized its 2.8 million acre-foot allocation. Additionally, the AWBA has focused its activities on meeting the firming goals and has stored almost 1 MAF of credits to meet these goals. Consequently, the evaluation of water management activities will become more complex as the available excess CAP water and storage facility capacity becomes limited, new storage facilities are sited and AWBA's funding sources are impacted by economic factors.

Central Arizona Groundwater Replenishment District (CAGRDR) Replenishment Reserve

Pursuant to statute, the CAGRDR must develop a 20% replenishment reserve. The CAGRDR replenishment reserve shares co-equal priority for excess water with AWBA M&I firming. However, the reserve has a higher priority for excess CAP water than the AWBA's deliveries for other non-firming purposes (i.e. water management). Therefore, a component for the

proposed replenishment reserve as well as the advance replenishment was included in the model beginning in 2003.

The CAP Water Forecast Group

The group is composed of CAP, CAGR, ADWR and AWBA staff and was formed to facilitate consistency and understanding between the entities with regard to assumptions used for short- and long-term Colorado River water supply and demand forecasts. Portions of this ten year plan were developed using projections obtained from this group.

AWBA General Fund Appropriation

Since inception, the AWBA has received an annual general fund appropriation of \$2 million. To date, the AWBA has primarily utilized the money to augment the revenues generated in Pinal County to develop credits to be used to firm on-river uses. It is recognized that the economic factors resulting in the loss of the AWBA's general fund appropriation will exist for some time. Therefore, the ten year plan was developed with no general fund appropriation through calendar year 2007. The model included a \$2 million general fund appropriation for the period 2008-2014.

4. Modifications within CAP with regard to pricing and pool allocation

In May 2000, the CAWCD Board adopted a policy for marketing the non-Indian agriculture (NIA) pool of excess water. This policy established a NIA pool of 400,000 acre-feet from 2004-2016. The pool will decline to 300,000 acre-feet from 2017-2023 and to 225,000 acre-feet from 2024-2030. This use will be the highest priority use for excess water. It is recognized that this is a factor that could impact the AWBA's ability to participate in recharge at groundwater savings facilities, however, as the policy has not yet initiated it is difficult to predict an effect. Therefore, only the 400,000 acre-foot pool concept was utilized in this ten year plan.

The CAWCD Board has also discussed the marketing of excess water for other users including the CAGR replenishment and replenishment reserve, incentive recharge programs, other M&I uses and the AWBA. These discussions have centered on the recognition that policies developed early on were intended to insure full utilization of CAP and Arizona's Colorado River allocation. As Arizona reached use of their full allocation in 2002, perhaps policies require modification. In light of current discussions, this ten year plan included a component for decreased availability of the incentive recharge pool.

5. Participation in Indian settlements

One objective of the AWBA is assisting with the settlement of water rights claims by Indian communities within Arizona. Settlements dealing with the CAP repayment and reallocation would require the state to firm some NIA priority water for Indian settlements. In order to achieve this, it is anticipated that the state will rely on the AWBA at some time within this ten year planning horizon. However, this issue was not considered in this ten year plan pending finalization of the Indian Firming Technical Committee process.

6. New recharge facilities and/or expanded capacities at existing facilities

The AWBA is currently in the process of completing a revised inventory of existing storage facilities in the state as required by A.R.S. § 45-2452. The revised inventory will be utilized in developing future ten year plans.

The CAP has been active in the evaluation of locations for additional storage facilities. In January 2002, the CAP initiated a regional feasibility study for sites in the East Salt River Valley. Out of this study two sites were identified, with one more favorable site located on the Queen Creek Wash. CAP is moving forward with design, land acquisition, and permitting of the Superstition Mountain USF and anticipates this facility (designed for 80,000 acre-feet of storage capacity) will be operational in mid-2006. The CAP also conducted a Western Arizona Recharge Capacity Feasibility Study in 2002. Construction will begin on the Tonapah Desert USF in the summer of 2004 and is anticipated to be operational by 2005, with 100,000 acre-feet of storage capacity. The AWBA has recognized additional capacity available in Maricopa County in this ten year period as a result of the anticipated construction of these facilities.

The SRP has applied to ADWR for a recharge facility permit for a project located in the west valley near the confluence of the Agua Fria River and New River. The project has a planned initial capacity of 30,000 acre-feet increasing to a maximum of 100,000 acre-feet. Storage at this facility was not included in this ten year plan because of uncertainty regarding development of an agreement between AWBA and SRP, cost of storage and availability of capacity to the AWBA.

7. Interstate banking

The ten year plan includes an interstate water banking component for Nevada but does not include California.

Conclusion

The ten year plan is intended to serve as a guide to assist the AWBA in the development of the Annual Plan of Operation (Plan). The AWBA is required to develop a Plan for activities to be undertaken the following calendar year. As part of the Annual Report, the ten year plan is reviewed and updated annually. Therefore, it is possible that the ten year plan may change significantly depending on the goals set by the AWBA.

Appendices

Appendix A.
**Colorado River Water Deliveries for Water Banking Purposes for Calendar Year 2003 by
Partner and Active Management Area**

Phoenix Active Management Area

| Partner | Quantity of Water (Acre-feet) |
|---|--------------------------------------|
| Agua Fria Recharge Project | 11,989 |
| Chandler Heights Citrus Irrigation District | 929 |
| Granite Reef Underground Storage Project | 22,599 |
| Hieroglyphic Mountains Recharge Project | 19,944 |
| Maricopa Water District | 4,600 |
| New Magma Irrigation and Drainage District | 22,378 |
| Queen Creek Irrigation District | 765 |
| Roosevelt Water Conservation District | 12,500 |
| Salt River Project | 10,354 |

Pinal Active Management Area

| Partner | Quantity of Water (Acre-feet) |
|---|--------------------------------------|
| Central Arizona Irrigation and Drainage District | 5,500 |
| Johokam Irrigation and Drainage District | 27,075 |
| Maricopa-Stanfield Irrigation and Drainage District | 10,950 |

Tucson Active Management Area

| Partner | Quantity of Water (Acre-feet) |
|--|--------------------------------------|
| Avra Valley Recharge Project | 3,539 |
| B.K Wong | 1,527 |
| Central Avra Valley Storage and Recovery Project | 7,660 |
| Kai-Red Rock | 3,092 |
| Lower Santa Cruz Recharge Project | 30,380 |
| Pima Mine Road Recharge Project | 17,315 |

APPENDIX B
CAP DELIVERY SCHEDULE
(Acre-feet)

| Year | CAP Demands | | | | Average Year Supply ⁽⁵⁾ | Available for AWBA ⁽⁶⁾ |
|------|--------------------|-----------------------|-------------------|----------------------|------------------------------------|-----------------------------------|
| | M&I ⁽¹⁾ | Indian ⁽²⁾ | Ag ⁽³⁾ | Total ⁽⁴⁾ | | |
| 2005 | 340,282 | 99,800 | 400,000 | 1,032,082 | 1,525,000 | 492,918 |
| 2006 | 374,541 | 102,300 | 400,000 | 891,841 | 1,525,000 | 633,159 |
| 2007 | 385,951 | 102,300 | 400,000 | 903,251 | 1,525,000 | 621,749 |
| 2008 | 368,835 | 106,800 | 400,000 | 890,635 | 1,525,000 | 634,365 |
| 2009 | 374,836 | 121,800 | 400,000 | 911,636 | 1,525,000 | 613,364 |
| 2010 | 422,937 | 142,328 | 400,000 | 980,265 | 1,525,000 | 544,735 |
| 2011 | 434,384 | 161,928 | 400,000 | 1,011,312 | 1,525,000 | 513,688 |
| 2012 | 420,625 | 179,393 | 400,000 | 1,015,018 | 1,525,000 | 509,982 |
| 2013 | 433,652 | 204,493 | 400,000 | 1,053,145 | 1,525,000 | 471,855 |
| 2014 | 461,834 | 204,493 | 400,000 | 1,081,327 | 1,525,000 | 443,673 |

- (1) Includes M&I, CAGR, CAGR replenishment reserve, Indian M&I lease and M&I incentive water
- (2) From settlement discussions
- (3) Based on current agricultural pool policy, includes 32,537 for Harquahala
- (4) Includes secondary excess uses of 192,000 AF in 2005 and 15,000 AF per annum 2006 through 2014.
- (5) Based on average year delivery of 1,600,000 AF per year minus losses
- (6) Average year supply minus CAP demands; AWBA last priority for intrastate use

APPENDIX C
STORAGE FACILITIES AVAILABLE TO THE AWBA¹
(as used in the 10 year plan)

| AMA and Facility Type | Facility Permit Expiration | Facility Permitted Capacity (Acre-feet) | Capacity Available to AWBA ⁽²⁾ (Acre-feet) | Year Water Last Stored | Volume of Water Last Stored (Acre-feet) |
|--|----------------------------|---|---|------------------------|---|
| PHOENIX – GSF⁽³⁾ | | | | | |
| New Magma IDD | 12/2007 | 54,000 | 45,000 | 2003 | 22,378 |
| Queen Creek ID | 12/2004 | 28,000 | 3,000 | 2003 | 765 |
| Salt River Project | 12/2005 | 200,000 | 20,000 | 2003 | 10,354 |
| PHOENIX – USF | | | | | |
| GRUSP | 12/2010 | 200,000 | 50,000 | 2003 | 22,599 |
| Agua Fria Recharge Project | 05/2019 | 100,000 | 40,000 | 2003 | 11,989 |
| Hieroglyphic Mtns. | 12/2021 | 35,000 | 26,000 | 2003 | 19,944 |
| PINAL – GSF | | | | | |
| Central Arizona IDD | 12/2007 | 110,000 | 15,000 | 2003 | 5,500 |
| Hohokam IDD | 12/2007 | 55,000 | 50,000 | 2003 | 27,075 |
| Maricopa-Stanfield IDD | 12/2004 | 120,000 | 50,000 | 2003 | 10,950 |
| TUCSON – GSF | | | | | |
| Kai – Red Rock | 12/2006 | 11,231 | 3,000 | 2003 | 3,092 |
| TUCSON – USF | | | | | |
| Avra Valley | 03/2018 | 11,000 | 7,000 | 2003 | 3,539 |
| CAVSARP | 07/2021 | 60,000 | 40,000 ⁽⁵⁾ | 2003 | 7,660 |
| Lower Santa Cruz | 09/2019 | 50,000 | 40,000 | 2003 | 30,380 |
| Pima Mine Road | 09/2020 | 30,000 | 28,000 | 2003 | 17,315 |
| Other Facilities Currently or Anticipated to be Available to the AWBA | | | | | |
| Vidler – USF | 09/2020 | 100,000 | 80,000 | ⁽⁴⁾ | 0 |
| West Maricopa Combine - USF | 05/31/2021 | 25,000 | | ⁽⁴⁾ | 0 |
| Tonopah Desert – USF ⁽⁶⁾ | | 100,000 | 100,000 | | n/a |
| Superstition Mountain ⁽⁶⁾ | | 80,000 | 40,000 | | n/a |
| SRP New River – USF ⁽⁶⁾ | | | | | n/a |

Footnotes:

- (1) As additional facilities are developed, they will be included in future plans. However, it should be recognized that availability of water and funding will likely be the limiting factors in future plans.
- (2) This does not reflect the actual “permitted” volume for these facilities, instead for the purposes of this plan, staff relied on average historical storage volumes and potential for future storage.
- (3) The AWBA holds water storage permits at Chandler Heights Citrus ID (3KAF), Maricopa Water District (18KAF), Roosevelt Water Conservation District, BKW Farms (16KAF), Kai-Avra (12KAD) and the Tonopah (15KAF) GSFs. These were not considered significant uses in this 10 year outlook.
- (4) No deliveries to date.
- (5) 20,000 acre-feet of additional capacity anticipated being available beginning in 2003.
- (6) Not yet permitted.

APPENDIX D
Credits Developed for M&I Firming Utilizing the 4¢ Tax ⁽¹⁾
(Acre-feet)

| | Year | Groundwater Savings | | | Underground Storage | | |
|--------------------------------|-----------------------|---------------------------------|---------------|----------------|---------------------------------|---------------|----------------|
| | | Capacity Available ⁴ | Capacity Used | Credits Earned | Capacity Available ⁴ | Capacity Used | Credits Earned |
| PHOENIX AMA² | Pre-plan ³ | | | 481,832 | | | 402,168 |
| | 2005 | 72,000 | 18,720 | 16,848 | 116,000 | 116,000 | 104,400 |
| | 2006 | 69,746 | 18,134 | 16,321 | 210,155 | 210,155 | 189,140 |
| | 2007 | 72,000 | 18,720 | 16,848 | 246,933 | 246,933 | 222,240 |
| | 2008 | 72,000 | 18,720 | 16,848 | 252,024 | 252,024 | 226,822 |
| | 2009 | 71,429 | 18,571 | 16,714 | 251,912 | 227,392 | 204,652 |
| | 2010 | 70,393 | 18,302 | 16,472 | 251,415 | 128,289 | 115,460 |
| | 2011 | 69,196 | 17,991 | 16,192 | 250,132 | 126,063 | 113,456 |
| | 2012 | 69,100 | 17,898 | 16,109 | 252,717 | 123,811 | 111,430 |
| | 2013 | 67,686 | 16,665 | 14,998 | 251,024 | 122,124 | 109,912 |
| | 2014 | 66,300 | 14,520 | 13,068 | 247,345 | 120,955 | 108,859 |
| | Total | | | | 642,250 | | |
| PINAL AMA² | Pre-plan ³ | | | 98,284 | | | |
| | 2005 | 115,000 | 10,718 | 9,861 | - | - | - |
| | 2006 | 115,000 | 11,502 | 10,582 | - | - | - |
| | 2007 | 115,000 | 12,392 | 11,400 | - | - | - |
| | 2008 | 115,000 | 11,733 | 10,795 | - | - | - |
| | 2009 | 115,000 | 11,219 | 10,322 | - | - | - |
| | 2010 | 115,000 | 10,742 | 9,883 | - | - | - |
| | 2011 | 115,000 | 10,298 | 9,474 | - | - | - |
| | 2012 | 115,000 | 9,884 | 9,093 | - | - | - |
| | 2013 | 115,000 | 9,496 | 8,736 | - | - | - |
| | 2014 | 115,000 | 9,132 | 8,402 | - | - | - |
| | Total | | | | 196,832 | | |
| TUCSON AMA² | Pre-plan ³ | | | 3,610 | | | 167,482 |
| | 2005 | 5,000 | 0 | 0 | 89,093 | 89,093 | 85,529 |
| | 2006 | 5,000 | 0 | 0 | 92,946 | 43,325 | 41,592 |
| | 2007 | 5,000 | 0 | 0 | 92,294 | 44,146 | 42,380 |
| | 2008 | 5,000 | 0 | 0 | 93,604 | 43,298 | 41,566 |
| | 2009 | 5,000 | 0 | 0 | 93,665 | 42,614 | 40,909 |
| | 2010 | 5,000 | 0 | 0 | 103,289 | 41,873 | 40,198 |
| | 2011 | 5,000 | 0 | 0 | 112,474 | 41,149 | 39,503 |
| | 2012 | 5,000 | 0 | 0 | 113,329 | 40,492 | 38,872 |
| | 2013 | 5,000 | 0 | 0 | 101,897 | 39,825 | 38,232 |
| | 2014 | 5,000 | 0 | 0 | 110,620 | 39,179 | 37,612 |
| | Total | | | | 3,610 | | |

Footnotes:

- (1) Developing M&I firming credits has the first priority for water and storage capacity.
- (2) M&I firming targets are Phoenix AMA-1.56 MAF, Tucson AMA-810 KAF, and Pinal AMA 230 KAF
- (3) Cumulative totals for 1997-2004; 2004 credits estimated based on projected deliveries.
- (4) The capacity available is based on the capacity remaining at the USFs and GSFs after all higher priority demands have been met.

APPENDIX E
Credits Developed for Meeting AMA Water Management Goals
Utilizing Withdrawal Fees ⁽¹⁾
(Acre-feet)

| | Year | Groundwater Savings | | | Underground Storage | | | |
|-------------|-----------|---------------------------------|---------------|----------------|---------------------------------|---------------|----------------|--------|
| | | Capacity Available ³ | Capacity Used | Credits Earned | Capacity Available ³ | Capacity Used | Credits Earned | |
| | | Pre-plan ² | | | 104,658 | | | 37,900 |
| PHOENIX AMA | 2005 | 53,280 | 53,280 | 47,952 | 0 | 0 | 0 | |
| | 2006 | 51,612 | 51,612 | 46,451 | 0 | 0 | 0 | |
| | 2007 | 53,280 | 53,280 | 47,952 | 0 | 0 | 0 | |
| | 2008 | 53,280 | 53,280 | 47,952 | 0 | 0 | 0 | |
| | 2009 | 52,857 | 52,857 | 47,571 | 24,521 | 24,521 | 22,069 | |
| | 2010 | 52,091 | 52,091 | 46,882 | 123,126 | 6,296 | 5,666 | |
| | 2011 | 51,205 | 51,205 | 46,085 | 124,069 | 1,795 | 1,615 | |
| | 2012 | 51,202 | 50,942 | 45,848 | 128,906 | 413 | 372 | |
| | 2013 | 51,021 | 47,431 | 42,688 | 128,899 | 834 | 750 | |
| | 2014 | 51,780 | 41,327 | 37,195 | 126,390 | 2,756 | 2,481 | |
| | Total | | | 561,234 | | | 70,853 | |
| | PINAL AMA | Pre-plan ² | | | 278,481 | | | 0 |
| | | 2005 | 104,282 | 34,920 | 32,127 | - | - | - |
| 2006 | | 103,498 | 36,774 | 33,832 | - | - | - | |
| 2007 | | 102,608 | 38,876 | 35,766 | - | - | - | |
| 2008 | | 103,267 | 36,117 | 33,228 | - | - | - | |
| 2009 | | 103,781 | 33,883 | 31,173 | - | - | - | |
| 2010 | | 104,258 | 31,826 | 29,280 | - | - | - | |
| 2011 | | 104,702 | 29,929 | 27,534 | - | - | - | |
| 2012 | | 105,116 | 28,174 | 25,920 | - | - | - | |
| 2013 | | 105,504 | 27,034 | 24,871 | - | - | - | |
| 2014 | | 105,868 | 25,964 | 23,887 | - | - | - | |
| Total | | | | 576,099 | | | 0 | |
| TUCSON AMA | | Pre-plan ² | | | 8,084 | | | 35,552 |
| | 2005 | 5,000 | 5,000 | 4,800 | 0 | 0 | 0 | |
| | 2006 | 5,000 | 5,000 | 4,800 | 49,621 | 12,561 | 12,059 | |
| | 2007 | 5,000 | 5,000 | 4,800 | 48,148 | 6,726 | 6,457 | |
| | 2008 | 5,000 | 0 | 0 | 50,306 | 8,665 | 8,318 | |
| | 2009 | 5,000 | 0 | 0 | 51,051 | 8,479 | 8,140 | |
| | 2010 | 5,000 | 0 | 0 | 61,416 | 6,779 | 6,507 | |
| | 2011 | 5,000 | 0 | 0 | 71,325 | 6,453 | 6,195 | |
| | 2012 | 5,000 | 0 | 0 | 72,837 | 6,148 | 5,902 | |
| | 2013 | 5,000 | 0 | 0 | 62,072 | 5,852 | 5,617 | |
| | 2014 | 5,000 | 0 | 0 | 71,441 | 5,568 | 5,345 | |
| | Total | | | 22,484 | | | 100,092 | |

(1) Withdrawal fees are used to develop credits for AMA water management goals after the 4¢ tax is utilized.
(2) Cumulative totals for 1997-2004; 2004 credits estimated based on projected deliveries.
(3) The capacity available is based on the capacity remaining at the USFs and GSFs after all higher priority demands have been met and water is stored using the 4¢ tax as illustrated in Appendix D.

APPENDIX F
Credits Developed Utilizing Annual General Fund Appropriations^(1,2)
(Acre-feet)

| | Year | Groundwater Savings | | | Underground Storage | | |
|--------------------|-----------------------|-----------------------|---------------|----------------|---------------------|---------------|----------------|
| | | Capacity Available | Capacity Used | Credits Earned | Capacity Available | Capacity Used | Credits Earned |
| PHOENIX AMA | Pre-plan ³ | | | 36,063 | | | 25,520 |
| | 2005 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2006 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2007 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2008 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2009 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2010 | 0 | 0 | 0 | 116,830 | 0 | 0 |
| | 2011 | 0 | 0 | 0 | 122,275 | 0 | 0 |
| | 2012 | 260 | 0 | 0 | 128,493 | 0 | 0 |
| | 2013 | 3,590 | 0 | 0 | 128,066 | 0 | 0 |
| | 2014 | 10,452 | 0 | 0 | 123,634 | 0 | 0 |
| | Total | | | 36,063 | | | 25,520 |
| | PINAL AMA | Pre-plan ³ | | | 271,318 | | |
| 2005 | | 69,362 | 0 | 0 | - | - | - |
| 2006 | | 66,724 | 0 | 0 | - | - | - |
| 2007 | | 63,733 | 0 | 0 | - | - | - |
| 2008 | | 67,149 | 31,250 | 28,750 | - | - | - |
| 2009 | | 69,897 | 29,586 | 27,219 | - | - | - |
| 2010 | | 72,431 | 28,047 | 25,804 | - | - | - |
| 2011 | | 74,773 | 26,622 | 24,492 | - | - | - |
| 2012 | | 76,942 | 25,297 | 23,273 | - | - | - |
| 2013 | | 78,470 | 24,064 | 22,139 | - | - | - |
| 2014 | | 79,904 | 22,913 | 21,080 | - | - | - |
| Total | | | | 444,075 | | | |
| TUCSON AMA | | Pre-plan ³ | | | 1,745 | | |
| | 2005 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2006 | 0 | 0 | 0 | 37,060 | 0 | 0 |
| | 2007 | 0 | 0 | 0 | 41,422 | 0 | 0 |
| | 2008 | 5,000 | 5,000 | 4,800 | 41,641 | 11,743 | 11,273 |
| | 2009 | 5,000 | 5,000 | 4,800 | 42,572 | 11,321 | 10,868 |
| | 2010 | 5,000 | 5,000 | 4,800 | 54,637 | 10,891 | 10,455 |
| | 2011 | 5,000 | 5,000 | 4,800 | 64,872 | 10,473 | 10,054 |
| | 2012 | 5,000 | 5,000 | 4,800 | 66,689 | 10,080 | 9,677 |
| | 2013 | 5,000 | 5,000 | 4,800 | 56,221 | 9,692 | 9,305 |
| | 2014 | 5,000 | 5,000 | 4,800 | 65,873 | 9,316 | 8,944 |
| | Total | | | 35,345 | | | 122,772 |

Footnotes:

- (1) General Fund appropriations are used to supplement the 4¢ tax and withdrawal fees in AMAs where funding is a constraint.
- (2) The on-river M&I firming target is 420 KAF.
- (3) Cumulative totals for 1997-2004; 2004 credits estimated based on projected deliveries.

APPENDIX G
Potential Credits Developed for Interstate Water Banking⁽¹⁾
(Acre-feet)

| Year | Available CAP Supplies⁽²⁾ | Available AWBA Capacity⁽³⁾ | Remaining Supply⁽⁴⁾ | Interstate Credits⁽⁵⁾ |
|--------------|---|--|---------------------------------------|---|
| Pre-plan | | | | 111,000 |
| 2005 | 0 | 109,362 | 0 | 0 |
| 2006 | 244,095 | 143,783 | 100,312 | 135,156 |
| 2007 | 195,676 | 145,154 | 50,522 | 136,445 |
| 2008 | 162,534 | 105,797 | 56,736 | 99,450 |
| 2009 | 147,922 | 111,563 | 36,358 | 104,869 |
| 2010 | 204,599 | 244,960 | 0 | 192,323 |
| 2011 | 186,711 | 264,825 | 0 | 175,508 |
| 2012 | 191,843 | 277,007 | 0 | 180,332 |
| 2013 | 163,840 | 272,591 | 0 | 154,010 |
| 2014 | 147,042 | 287,634 | 0 | 138,219 |
| Total | | | | 1,427,312 |

(1) Interstate Banking is the last priority of the AWBA.

(2) Water available for Interstate Banking is calculated by subtracting the water delivered and stored by individual subcontractors, contractors, and the AWBA for intrastate water banking from the Total Available Supply (see Appendix B).

(3) Reflects the unused capacity available to the AWBA at USFs and GSFs in the Phoenix, Pinal, and Tucson AMAs as well as capacity available from other storage facilities permitted by the AWBA outside of the AMAs. Additional capacity may be available at individual facilities based on the utilization by individual water storage permit holders

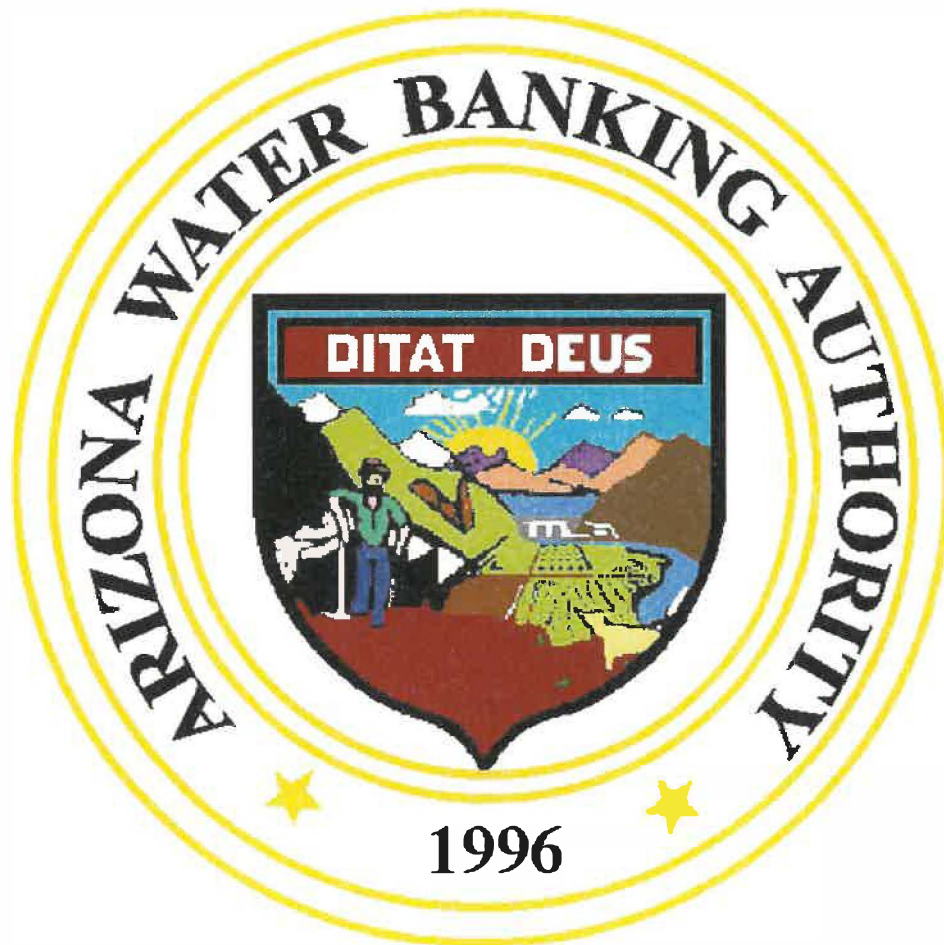
(4) Remaining supplies after subtracting the water delivered and stored by individual subcontractors, contractors, and the AWBA for intrastate water banking and water delivered for interstate water banking.

(5) Based on the Available Supplies or the Available AWBA Capacity, whichever is less, resulting stored water multiplied by an average 6% cut and loss factor.

DRAFT

ARIZONA WATER BANKING AUTHORITY

ANNUAL REPORT
2003



Submitted

July 1, 2004

DRAFT

Arizona Water Banking Authority

Annual Report 2003

**Honorable Janet Napolitano
Governor of Arizona**

Members

**Herbert R. Guenther
*Chairman***

**George R. Renner
*Vice-chairman***

**Charles L. Cahoy
*Secretary***

**Maureen R. George
*Member***

**John Mawhinney
*Member***

***Ex officio*
Senator Linda Binder
Representative Jake Flake**

DRAFT
Table of Contents

Arizona Water Banking Authority Annual Report Requirement 1

Members of the Arizona Water Banking Authority 2

Organizational Chart 3

Update 4

Activities and Projects - 2003 6

Firming for Indian Water Rights Settlements 6

Legislative Issues 7

Interstate Issues..... 7

Impacts to the Water Banking Fund Accounts and Revenues..... 9

2004 Annual Plan of Operation 10

Media Coverage..... 10

Agreement and Facility Permit Activity..... 11

Web Page..... 11

Monies Expended from the Banking Fund 12

Long-term Storage Credits 14

Long-term Storage Credits Distributed or Extinguished by the Authority 17

Ten Year Plan for Calendar Year 2003 18

Appendices 23

List of Tables

Table 1. Monies Collected and Expended in 2003 by Source of Funds 13

Table 2. Monies Collected and Expended through December 2003 and Monies Remaining Available to the Authority 13

Table 3. Number and Location of Long-term Storage Credits Accrued in 2003..... 14

Table 4. Cumulative Total and Location of Long-term Storage Credits Accrued through December 2003 15

Table 5. Average Annual Cost for the AWBA to Obtain a Long-term Storage Credit¹ 16

Table 6. Ten Year Plan..... 19

Arizona Water Banking Authority Annual Report Requirement

Arizona Revised Statutes § 45-2426 mandates that the Arizona Water Banking Authority (AWBA) file an annual report with the Governor, President of the Senate and Speaker of the House of Representatives on or before July 1 of each year for the previous calendar year. The report is required to be a full and complete account of the AWBA's transactions and proceedings and must include the following:

1. An accounting of all monies expended from the banking fund.
2. An accounting of all monies in the banking fund remaining available to the AWBA.
3. The amount of water stored by the AWBA.
4. The number of long-term storage credits distributed or extinguished by the AWBA.
5. The purposes for which long-term storage credits were distributed or extinguished by the AWBA.
6. A description of the water banking services and interstate water banking to be undertaken by the AWBA during the following ten year period and a projection of the capacity of the AWBA during that period to undertake those activities in addition to storing Colorado River water brought into the state through the Central Arizona Project (CAP) for all of the following purposes:
 - a. Protecting this state's municipal and industrial (M&I) water users against future water shortages on the Colorado River and disruptions of operation of the CAP.
 - b. Fulfilling the water management objectives of the state.
 - c. Making water available to implement the settlement of water rights claims by Indian communities within Arizona.
7. Any other matter determined by the authority to be relevant to the policy and purposes of the AWBA.

Members of the Arizona Water Banking Authority

Herb Guenther was appointed by Governor Napolitano and confirmed by the state Senate on March 3, 2003 as the eighth director of the Arizona Department of Water Resources (ADWR). As director of ADWR, Sen. Guenther serves as chairman of the AWBA.



"The Arizona Water Banking Authority is wise management and insurance against an uncertain future." ~H. Guenther



George Renner serves as a member of the AWBA in his capacity as President of the Central Arizona Water Conservation District (CAWCD). Mr. Renner was appointed to the CAWCD Board of Directors in 1992 by Gov. Symington and elected to consecutive six-year terms representing Maricopa County in 1994 and 2000. He was re-elected President of the CAWCD Board in March 2003. Mr. Renner currently serves as vice-chairman of the AWBA.



Charles (Chuck) Cahoy, an attorney for the City of Mesa, was appointed to the AWBA representing an entity that holds a CAP M&I subcontract. Mr. Cahoy was elected Secretary of the AWBA in May of 2003. Prior to his employment with the City of Mesa, Mr. Cahoy was employed by the ADWR. In that capacity, he served as legal counsel to the AWBA and was the principle draftsman of both the AWBA enabling legislation and existing recharge and recovery statutes.

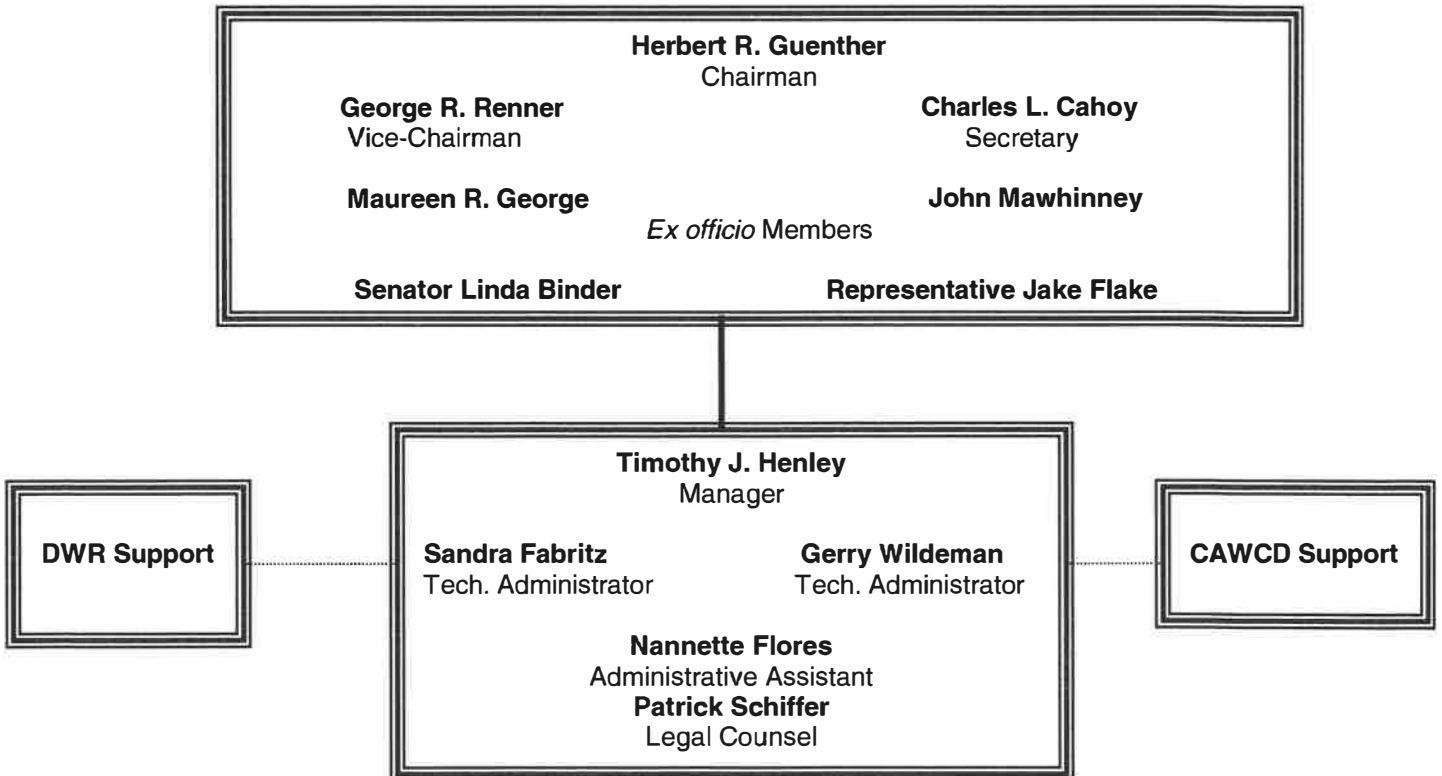


"The extended drought has shown us all the benefit of the forward thinking which created the Arizona Water Bank. It is now time to use that same thinking to explore new ways to meet the goals of the Bank and protect its existence." ~M. George

AWBA Members Maureen George and John Mawhinney were appointed by the governor to meet specific statutory requirements. Ms. George, city attorney for Lake Havasu City, represents an entity located in a county adjacent to the mainstream of the Colorado River that holds a valid contract with the Secretary of the Interior (Secretary) executed before June 1, 1996 for a diversion and beneficial consumptive use of Colorado River water in that county. Mr Mawhinney, a former state legislator, was selected as an individual knowledgeable in water resource management.



Organizational Chart



Update

Calendar year 2003 could best be described as a year of uncertainty and that uncertainty greatly impacted the planning and operations of the AWBA. From a water management perspective, uncertainty existed both regionally and locally. The failure of parties in California to execute the Quantification Settlement Agreement by December 31, 2002 resulted in discontinuation of surplus declarations for the Lower Colorado River basin in 2003 under the Interim Surplus Guidelines. This led to unanticipated requests for creation of Intentionally Created Unused Apportionment from both Nevada and California to which the AWBA had to respond. A detailed discussion regarding these events follows later in this report. Locally, the uncertainty was largely due to continuing drought conditions and the resultant uncertainty regarding the quantity of excess CAP water available for the AWBA. This uncertainty led to the AWBA approving an Annual Plan of Operation (Plan) for 2003 that included approximately 100,000 acre feet of water whose status was unknown with the recognition that the AWBA's projected storage for 2003 could only be met if other parties in Arizona did not fully utilize CAP water as scheduled. There was additional uncertainty regarding water supply in October and November of 2003 as the AWBA developed the 2004 Plan. The on-going drought conditions resulted in agricultural sector demand in excess of the 400,000 acre foot agricultural pool. The CAWCD did not make a decision regarding a supplemental agricultural pool until December of 2003. As any additional agricultural water would have meant less water for the AWBA, this uncertainty impacted the AWBA's planning process throughout the latter part of the year.

It was also a year of uncertainty with regard to budget and funding. As discussed later in this report, revenues in the AWBA banking fund were directly impacted as a result of the on-going state budget crisis. Revenues were also directly impacted as the CAWCD Board resolved for the first time since the AWBA's inception to retain the 4¢ *ad valorem* tax revenues for the 2003-2004 fiscal year.

Senator Herbert R. Guenther was appointed as the director of the ADWR by Governor Napolitano in December of 2002 and confirmed by the state Senate on March 3, 2003. Pursuant to statute, Senator Guenther serves as the chairman of the AWBA. Three new AWBA members were appointed by the Governor and confirmed by the Senate in 2003 to replace three of the original AWBA members whose appointments had expired. The new members were identified previously in this report. Leadership changes in both the state Senate and House of Representatives resulted in new AWBA *ex officio* members. Representative Jake Flake and Senator Linda Binder began serving in this capacity in 2003.

In 2003, the AWBA continued its quarterly meeting schedule with special meetings, workshops and study sessions scheduled as needed. Details about meetings held regarding firming for Indian water rights settlements can be found in the Activities and Projects section of this report.

The AWBA annually coordinates with current and potential recharge entities in the process of development of the Plan for the following year. As previously discussed, this process was filled with uncertainty as the 2003 Plan was being developed. As in the prior year, the amount of excess water available to the AWBA was limited and it was unclear even late in the planning process exactly how limited it would be. Additionally, development of ICUA had been requested in 2003. Consequently, development of the 2003 Plan was a process that required extensive cooperation and coordination between AWBA and CAWCD staff and the facility operators.

The necessity for extensive cooperation and coordination carried over into development of the 2004 Plan, as well, as there continued to be increased demand for excess CAP water. Pursuant to the 2004 Plan, the AWBA anticipates recharging almost 305,000 acre feet of water using both withdrawal fee and 4¢ *ad valorem* tax revenues. Use of both revenue sources accrues credits that the AWBA can utilize for firming of M&I supplies in case of operational outage or shortage or to meet water management objectives or to implement the settlement of Indian water right claims. For the 2004 Plan, the entities scheduled for delivery are SRP's GRUSP and groundwater savings facilities, CAWCD's Agua Fria, Avra Valley, Hieroglyphic Mountains, Pima Mine Road and Lower Santa Cruz facilities, Chandler Heights Citrus Irrigation District, New Magma Irrigation District, Queen Creek Irrigation District, Central Arizona Irrigation and Drainage District, Hohokam Irrigation and Drainage District, Maricopa Stanfield Irrigation and Drainage District, Tonopah Irrigation District, the Central Avra Valley Storage and Recovery Project and the Herb Kai Red Rock Facility.

Because of the on-going drought, entities in central Arizona continue to rely on the CAP to supplement their water supplies. As a result of increased demand there is less excess water available to the AWBA. In 2003, the AWBA recharged only slightly more than 213,000 acre-feet of CAP water, the lowest quantity since the AWBA began operations. This included the first storage at the newest CAP recharge facility, the Hieroglyphics Mountain Recharge Project (see Appendix A). Of this storage, more than 106,000 acre-feet were stored in the Phoenix Active Management Area (AMA), 43,525 acre-feet were stored in the Pinal AMA and more than 63,500 acre-feet were stored in the Tucson AMA. For the first time since inception, the AWBA stored more water at underground storage facilities than at groundwater savings facilities.

Total consumptive use of Colorado River water by Arizona for 2003 was approximately 2.82 million acre-feet. Distribution of that quantity was approximately 1.14 million acre-feet for direct uses along the Colorado River and CAP diversions of approximately 1.68 million acre-feet. Of the CAP diversions, AWBA use was slightly more than 213,000 acre-feet.

For more information about the Arizona Water Banking Authority, consult the AWBA web page at <http://www.awba.state.az.us> or contact Tim Henley (tjhenley@adwr.state.az.us), Sandy Fabritz (safabritz@adwr.state.az.us) or Gerry Wildeman (glwildeman@adwr.state.az.us) or by phone at 602-417-2418.

Activities and Projects - 2003

Firming for Indian Water Rights Settlements

Section 105 of the Arizona Water Settlement Act (Act) details how CAP water delivered to Indian tribes will be provided in times of shortage on the Colorado River and is the culmination of extensive discussion and disagreement between Arizona and the Department of the Interior that has taken place since the 1970s. Although the Act has not yet been executed and some concepts still require negotiation between the state and the federal government, the quantity of water to be firming has been identified. Consequently, the state has some idea of the potential obligation to be borne pursuant to the Act. In short, if the Act is passed, the state will be required to firm 15,000 acre feet toward the Gila River Indian Community Settlement and 8,742 acre feet for future Indian water rights settlements, and establish a 15,000 acre foot Southside Replenishment Bank. In recognition that the AWBA could potentially provide assistance to the state in meeting this obligation, Senator Guenther, as director of the ADWR, requested that the AWBA develop draft alternatives and recommendations regarding AWBA participation in Indian firming. At the May 7, 2003 AWBA meeting, the concept of Indian firming was presented and staff requested approval to hold an informational workshop regarding the issue. The AWBA approved the workshop.

On May 30, 2003, the workshop was convened. At this meeting, historical information regarding Indian settlements was presented, as was the concept of firming as detailed within the Act. Various individuals discussed the federal perspective regarding firming and the necessity for creation of the Southside Replenishment Bank. ADWR staff presented information regarding the potential water supply available to be used for firming. Specifically, the Law of the River and the operational parameters and computer model utilized by the Bureau of Reclamation for the Colorado River were discussed. The information obtained from the models indicated that the quantity of water to be stored to meet the long-term firming needs would range between 439,000 and 963,000 acre feet. There was also discussion regarding potential funding options and alternative ways in which the AWBA could participate. The meeting concluded with a recommendation to bring the issue before the AWBA at the June meeting for determination of potential future action. At the June meeting, the AWBA approved a motion to create a technical committee to further investigate the AWBA's potential to provide assistance to the state in meeting its Indian firming obligation.

At the first meeting of the Indian Firming Technical Committee (Committee), four objectives were identified: (1) identification of the water volume needed to firm the state's obligation under the Act; (2) identification of the water supply available; (3) identification of potential funding sources; and (4) identification of alternative approaches. The objectives were reviewed, a schedule for completion was proposed and the Committee was asked to consider the structure of the group, i.e. should the larger group break down into subgroups or work groups for evaluation of specific objectives. The current statutory authorities of the AWBA were also reviewed because certain alternatives could require legislative change for the AWBA to participate. Lastly, attendees were asked to review handout information regarding the Colorado River model for the next meeting which would focus on meeting the first objective of identification of firming volume.

The Colorado River Operational Model and the assumptions within it were the focus of the second meeting. ADWR staff presented information and discussed eight scenarios selected as representative of actual conditions. Attendees were asked to review the assumptions and were

informed that selection of assumption parameters would be the topic of the next meeting. There was additional discussion regarding the model runs at the third meeting, in addition to discussion regarding the Southside Replenishment Bank and the variety of potential water sources available for Indian firming. As Central Arizona Groundwater Replenishment District (CAGR) staff are in the process of developing a plan of operation that includes an analysis of these potential sources, they led the discussion. It was noted that there could ultimately be some competition for water between the AWBA and the CAGR and also within the AWBA between non-Indian firming and Indian firming.

In the next two meetings, the Committee determined that a reasonable firming volume ranged between 508,000 and 601,000 acre feet and that this would fully meet the state's firming obligation for the next 100 years. It was estimated that this would cost approximately \$60 million. The Committee continues to meet in 2004 as the issues of identification of water available for firming and evaluation of costs associated with firming are discussed. Summaries of all Indian firming meetings and copies of all handouts are available from the AWBA web page.

Legislative Issues

On May 6, 2003, Governor Napolitano signed House Bill 2477 that amended statutes pertaining to the CAWCD. Of import to the AWBA was the requirement for the CAGR to establish a replenishment reserve equal to 20 years of replenishment obligation. This was an issue that carried over from recommendations made by the Governor's Water Management Commission. Institution of this reserve requirement had the potential to negatively impact the quantity of excess water available for use by the AWBA. However, the statute was written such that CAGR's priority for use of excess Colorado River water for establishment of the replenishment reserve is co-equal to the AWBA priority for the use of water stored for M&I firming.

Interstate Issues

In 2003, the decision making processes of the Lower Basin states were largely guided by events taking place in California. The failure of California entities to successfully execute the Quantification Settlement Agreement (QSA) by December 31, 2002 resulted in the suspension of surplus declarations under the Interim Surplus Guidelines (ISG). Although the QSA was ultimately executed in October of 2003, the suspension triggered activity in the Lower Basin early in the year that directly impacted the AWBA.

Requests for Creation of Intentionally Created Unused Apportionment

On January 31, 2003, the Southern Nevada Water Authority (SNWA) sent a letter to the AWBA inquiring about the deadline for SNWA to request development of intentionally created unused apportionment (ICUA) in 2003 pursuant to the interstate water banking agreements¹. Because the previously discussed suspension of surpluses had the potential to impact the SNWA they were in the process of developing contingency plans to obtain water to meet demands in excess of their 300,000

¹ There were three agreements executed to permit interstate water banking on behalf of Nevada. The Agreement for Interstate Water Banking among the AWBA, the SNWA and the Colorado River Commission of Nevada (CRCN) was executed on July 3, 2001. The Agreement for the Development of Intentionally Created Unused Apportionment between the AWBA and the CAWCD and the Storage and Interstate Release Agreement among the United States, the AWBA, SNWA and the CRCN were executed on December 18, 2002.

acre foot allocation. At that time, the SNWA believed they would need to produce approximately 10,000 acre feet of ICUA. On the same day, the Metropolitan Water District of Southern California (MWD) reiterated a similar request of the CAWCD for credits they had developed in Arizona in 1992. The AWBA does not currently have an agreement for creation of ICUA with MWD so the request was made directly to CAWCD. The amount of recovery requested by MWD was almost 81,000 acre feet and both requests noted that this water would only be needed if the terms of the ISG were not reinstated in 2003.

By letter dated March 11, the SNWA was informed that a formal request for development of ICUA must be received by March 19, 2003 and should also include a request to waive the timeframe requirements detailed in the Agreement for Interstate Water Banking (Agreement). The Agreement included a three-year timeframe for requests for development of ICUA as it was recognized that establishing the framework for recovery would require time for planning and execution. However, in light of the situation being faced by the SNWA, the AWBA was willing to take steps to facilitate development of ICUA. The letter of request for waiver and development of ICUA was received on March 20, 2003.

On May 13, 2003, MWD submitted a preliminary request for development of ICUA for the credits held by CAWCD on their behalf. The AWBA could only comply with this request if there was agreement between MWD and the AWBA similar to the agreements between the AWBA and the SNWA, thus negotiations between the MWD and the AWBA were initiated at this time.

On May 29, 2003, the SNWA submitted a preliminary request for development of 20,000 acre feet of ICUA for 2004 and a request to initiate discussions regarding the potential development of ICUA in 2005 and 2006. On July 18, 2003, pursuant to requirements of the Storage and Interstate Release Agreement (SIRA), the AWBA informed all Arizona Colorado River entitlement holders of the SNWA request for development of ICUA. On August 1, 2003, also pursuant to provisions of the SIRA, the SNWA requested that the Secretary of the Interior release the 10,000 acre feet of ICUA for consumptive use in Nevada in 2003. In August, MWD made similar requests of both the Secretary of the Interior and CAWCD.

The AWBA is statutorily prohibited from holding recovery well permits, therefore, some other entity must recover the long-term storage credits developed by the AWBA. With respect to development of ICUA, all Colorado River entitlement holders must be afforded the opportunity to develop ICUA. However, the CAWCD has been recognized as potentially being the primary recovery entity for water stored by the AWBA for both interstate and intrastate purposes. Regardless of who is doing the actual recovery, it is recognized that the AWBA should be extensively involved in the recovery process. In 2003, the AWBA assisted the CAWCD with collecting well data needed to complete their recovery well permit application, attended meetings with CAP and irrigation district staff to discuss recovery, and facilitated processing of the permit application with the ADWR. The CAWCD was issued a recovery well permit in June of 2003, only three months after the request for ICUA was made.

The AWBA identified a number of issues associated with recovery in the process of the CAWCD obtaining their permit. First, pursuant to statute in effect at the time, specific entities had the ability to object to recovery of long-term storage credits when the recovering entity is different than the storing entity. As previously discussed, this would always be the case with the AWBA as it is prohibited from holding recovery well permits. On June 1, 2004, the governor signed legislation amending the statute

regarding recovery. Now, when the water stored is Colorado River water and the recovering entity is not the entity that stored the water, there is no requirement to obtain consent nor is there a requirement for the director of ADWR to find that the recovery is consistent with the AMA management plan and goals. Other issues identified in this process were long-term maintenance of specific wells identified in recovery well permits and the potential for well capacity constraints when recovery is done during CAP shortages.

In the end, there was no ICUA developed in 2003 as the QSA was executed in October and neither California nor Nevada exceeded their annual allocation. However, the requests for development of ICUA resulted in the CAWCD obtaining a recovery well permit in Pinal County that can be used at any time in the future. Additionally, the requests provided a successful trial run recovery situation for the AWBA, the CAWCD, the Secretary of the Interior and the states.

Interstate Water Banking

Pursuant to the interstate water banking agreements, the CAWCD transferred 50,000 acre feet of long-term storage credits to the AWBA sub-account for the SNWA in January. The credits were credits that had been developed and held by the CAWCD on behalf of the SNWA since the early 1990s. In July, the credits were transferred back to the CAWCD in anticipation of development of ICUA.

There was no water delivered or stored on behalf of the SNWA in 2003. The AWBA sub-account for the SNWA currently has a balance of 111,000 acre feet of long-term storage credits.

Impacts to the Water Banking Fund Accounts and Revenues

There are three primary revenue sources available to the AWBA and each was impacted to some extent in 2003, largely as a result of the on-going state budget crisis. In some cases, the impacts were to current revenues and in some cases the impacts were to existing monies in the Water Banking Fund (Fund). The three revenue sources are a general fund appropriation, groundwater withdrawal fees and an *ad valorem* property tax. Pursuant to statute, there are restrictions and limitations to how the different revenue sources can be expended with regard to purpose and location of use. The AWBA has the most flexibility in using long-term storage credits developed with the general fund appropriation revenues. It should be borne in mind that there is overlap between the fiscal year (FY), upon which the state budget operates, and the calendar year (CY), upon which the AWBA operates and this report is prepared. Consequently, CY 2003 included activity that occurred in the last half of FY 2003 and the first half of FY 2004.

Existing Fund Account Balance Impacts

On March 28, 2003, Governor Napolitano signed House Bill (HB) 2002, the FY 2003 Omnibus Reconciliation Bill (ORB), that authorized the ADWR to expend up to \$1,115,900 from the AWBA Fund for ADWR's operating expenses incurred in FY 2003. Although authorized, the ADWR ultimately did not expend any money from the AWBA Fund pursuant to the ORB.

On June 11, 2003, the AWBA approved the operating budget for the AWBA for FY 2004. This budget included \$1,830,300 of budget support for the operation of the ADWR to permit full retention of ADWR staff. Retaining ADWR staff insured that ADWR efforts in support of the AWBA and AWBA constituents would not be reduced or eliminated. Throughout the remainder of CY 2003, money was transferred to ADWR on a percentage basis at a rate such that the total amount approved for the FY would be achieved. AWBA members approved this ADWR support with the condition that it be viewed as a one time only event.

On June 17, 2003, Governor Napolitano signed HB 2531, the General Appropriations Act for FY 2004 and 2005 that included a fund transfer from the AWBA to the general fund in the amount of \$9 million. On June 30, 2003, Senator Guenther sent letters to Governor Napolitano, Speaker of the House, Jake Flake and President of the Senate, Ken Bennett, expressing his concern over this action. Due to the nature of the AWBA Fund accounts, it is the AWBA's belief that this transfer must come from the groundwater withdrawal fee accounts. As those revenues can be used to assist the state in settling Indian water rights claims and the \$9 million could have purchased more than 200,000 acre feet of long-term storage credits, this transfer will likely impact the ability of the AWBA to assist the state in meeting their obligation under any water rights settlement. The fund transfer did not occur in CY 2003, however, the transfer must occur before July 1, 2004. With current account balances, the \$9 million transfer will effectively utilize all monies remaining in the AWBA withdrawal fee accounts.

Revenue Impacts

Historically, the AWBA has received an annual \$2 million general fund appropriation from the state legislature but budget problems have impacted the appropriation over the last few years. In CY 2003, the AWBA did not receive any general fund appropriation money.

The CAWCD is statutorily authorized through 2016 to levy an *ad valorem* property tax in the three-county CAP service area that cannot exceed four cents per \$100 of assessed valuation and is used either for repayment or OM&R costs of the CAP. If the taxes levied are not needed for those purposes, an annual resolution of the CAWCD Board can direct them to the AWBA Fund. For the first time since the AWBA's inception, the CAWCD Board resolved that all taxes to be levied would be retained by CAWCD. CAWCD has determined that it will use these funds to support their OM&R activities thus reducing the cost of water to the AWBA.

2004 Annual Plan of Operation

Pursuant to the 2004 Plan, the AWBA projects recharge in excess of 304,000 acre feet. Of this quantity, almost 178,000 acre feet are projected to be recharged at underground storage facilities (USF) and almost 127,000 acre feet are projected to be recharged at groundwater savings facilities (GSF). This is the second Plan to project higher deliveries to USF than GSF. The 2004 Annual Plan of Operation is available on the AWBA web page.

Media Coverage

The AWBA received very limited press coverage during 2003 with the majority of articles being published in association with the requests for ICUA made by California and Nevada.

“California, Nevada ask Arizona for Water”, Arizona Republic, March 10, 2003

“Arizona’s Neighbors Working to Reclaim Water”, AP Newswires, March 10, 2003

Agreement and Facility Permit Activity

The AWBA executed a new agreement for water storage at the Central Avra Valley Storage and Recovery Project (CAVSARP) on March 3, 2003. The agreement established the various conditions for storage at the facility operated by Tucson Water Company and is effective until December of 2008.

The AWBA submitted one water storage permit application in 2003. The amended Lower Santa Cruz Recharge Project application was permitted in December of 2003. The new permit increased the maximum storage volume from 30,000 to 50,000 acre feet.

Web Page

The AWBA has maintained a web page (<http://www.awba.state.az.us>) since 1997 to provide timely and accurate information regarding the AWBA’s activities to the water community. The web page contains information about the AWBA, AWBA members and staff, the AWBA’s recharge partners, monthly water deliveries, the AWBA newsletter, AWBA announcements and scheduled meetings and meeting minutes. It also contains publications and documents that may be downloaded and provides links to other water related web sites. The AWBA staff continue to review and update the web page to insure that it contains accurate information that can be accessed in an efficient manner.

Monies Expended from the Banking Fund

Arizona Revised Statutes § 45-2425 mandates the various sources of monies for the Water Banking Fund (Fund) that is administered by the AWBA per the statute. In 2003, the AWBA obtained its funding from the following sources:

1. Fees for groundwater pumping are collected within the Phoenix, Pinal and Tucson AMAs. Fees are calculated two different ways because there exists a gradual increase in fees for entities not associated with irrigation districts within the Pinal AMA. In the Phoenix AMA, Tucson AMA and most areas of the Pinal AMA, fees for water banking purposes are charged at \$2.50 per acre-foot. Fees for entities in Pinal County who are not associated with an irrigation district were charged at \$0.75 per acre-foot in 1997 with planned increases of \$0.25 per acre-foot annually until the \$2.50 per acre-foot amount is reached. Therefore, the fee charged for these entities was \$2.25 per acre-foot in 2003. The fees for groundwater pumping are statutorily available to the AWBA through 2016. Long-term storage credits accrued with these monies must be used to benefit the AMA in which they were collected.
2. The CAWCD is statutorily authorized through 2016 to levy an *ad valorem* property tax in the three-county CAP service area that cannot exceed four cents per \$100 of assessed valuation and is used either for repayment or OM&R costs of the CAP. If the taxes levied are not needed for those purposes, an annual resolution of the CAWCD board can direct them to the Fund. In June of 2002, the CAWCD board resolved that all taxes to be levied for the following tax year would be deposited in the Fund. This money was deposited into the Fund in December of 2002 and May of 2003. In June of 2003, the CAWCD board resolved to retain the tax revenues. Consequently, there were no *ad valorem* tax revenues deposited into the Fund in December of 2003. Money from this source must be used to benefit the county in which it was collected.

Table 1 shows the money the AWBA received and expended in 2003 by source of funds. Table 2 shows the total money received, expended and remaining in the Fund through December 2003 by source of funds. The money listed as "Available" is money that is either remaining in the Fund or money that has been prepaid to CAWCD. Any money that remains in the Fund is available to be expended in subsequent years; any interest that accrues on this money is credited to the Fund and is available for use.

Table 1. Monies Collected and Expended in 2003 by Source of Funds

| Source of Funds | Money Collected | Money Expended |
|--|---------------------|--------------------------------|
| General Fund | \$0 | \$0 |
| Interstate Water Banking - Nevada¹ | \$399,570 | \$399,570 |
| 4¢ Ad valorem Tax | | |
| Maricopa County | \$9,434,806 | \$1,837,609 |
| Pinal County | \$358,241 | \$358,248 |
| Pima County | \$1,936,837 | \$185,701 |
| Subtotal for Ad Valorem | \$11,729,884 | \$2,381,558 |
| Groundwater Withdrawal Fee | | |
| Phoenix AMA | \$2,439,322 | \$3,652,303 |
| Pinal AMA | \$1,250,635 | \$1,078,077 |
| Tucson AMA | \$513,175 | \$3,965,728 |
| Subtotal for Withdrawal Fees | \$4,203,132 | \$8,696,108² |
| TOTAL | \$16,332,586 | \$11,477,236 |

¹OM&R reconciliation for water delivered in 2002; completed in August of 2003

² Includes carryover from previous years

Table 2. Monies Collected and Expended through December 2003 and Monies Remaining Available to the Authority

| Source of Funds | Money Collected | Money Expended | Money Available |
|--|----------------------|---------------------|---------------------|
| General Fund | \$10,695,000 | \$10,695,000 | \$0 |
| Interstate Water Banking - Nevada | \$8,746,945 | \$8,746,945 | \$0 |
| 4¢ Ad valorem Tax | | | |
| Maricopa County | \$53,858,037 | \$30,431,390 | \$23,426,647 |
| Pinal County | \$2,051,081 | \$2,050,088 | \$993 |
| Pima County | \$11,188,188 | \$8,262,875 | \$2,925,313 |
| Subtotal for Ad Valorem | \$67,097,306 | \$40,744,353 | \$26,352,953 |
| Groundwater Withdrawal Fee | | | |
| Phoenix AMA | 15,239,080 | \$6,252,303 | \$8,986,777 |
| Pinal AMA | 6,519,048 | \$6,407,829 | \$111,219 |
| Tucson AMA | 3,965,728 | \$3,965,728 | \$0 |
| Subtotal for Withdrawal Fees | \$25,723,856 | \$16,625,860 | \$9,097,996 |
| TOTAL | \$112,263,107 | \$76,812,158 | \$35,450,949 |

Long-term Storage Credits

The AWBA has established Long-term Storage Accounts with ADWR. The Phoenix AMA account number is 70-441150, the Tucson AMA account number is 70-411150 and the Pinal AMA account number is 70-431135. After receiving the AWBA's annual reports for its water storage and water transfer permits and the annual reports for the recharge facilities, ADWR calculates and issues long-term storage credits to the appropriate accounts. The AWBA receives credit for 95% of the recoverable quantity of stored water. The 5% that is not credited is termed the cut to the aquifer and provides additional groundwater replenishment benefits. This cut to the aquifer is mandated by statute and applies to almost all storage of water for long-term credit, with some exceptions. The recoverable amount of stored water is determined by subtracting facility losses from the quantity of water delivered to the facility. After credits are issued to the account, AWBA staff allocate the credits to the appropriate sub-accounts based on source of funding. The number and distribution of long-term storage credits for 2003 are listed in Table 3.

Table 3. Number and Location of Long-term Storage Credits Accrued in 2003

| Location and Funding Source | | Long-term Storage Credits Accrued (AF) |
|---------------------------------|----------------------------|--|
| Phoenix AMA | | |
| | 4¢ <i>Ad valorem</i> Tax | 33,395 |
| | Groundwater Withdrawal Fee | 66,372 |
| | General Fund | 0 |
| | AMA Total | 99,767 |
| Pinal AMA | | |
| | 4¢ <i>Ad valorem</i> Tax | 10,110 |
| | Groundwater Withdrawal Fee | 30,423 |
| | General Fund | 0 |
| | AMA Total | 40,533 |
| Tucson AMA | | |
| | 4¢ <i>Ad valorem</i> Tax | 2,685 |
| | Groundwater Withdrawal Fee | 57,342 |
| | General Fund | 0 |
| | AMA Total | 60,027 |
| Totals by Funding Source | | |
| | 4¢ <i>Ad valorem</i> Tax | 46,190 |
| | Groundwater Withdrawal Fee | 154,137 |
| | General Fund | 0 |
| | TOTAL | 200,327 |

The cumulative totals of long-term storage credits accrued by the AWBA through December 2003 are listed in Table 4. Since inception, the AWBA has focused its efforts on developing long-term storage credits for firming purposes. The AWBA has identified 2,700,000 acre feet as reasonable to firm the CAP M&I subcontracts over the next 100 years. In the CAP service area, the AWBA has met 35% of that goal through 2003. The AWBA has identified 420,000 acre feet as reasonable to firm the on-river communities over the next 100 years. Through 2003, the AWBA has developed 396,499 acre feet of long-term storage credits through the expenditure of general fund revenues. In 2002, the AWBA adopted a resolution that identified on-river firming as the highest priority of use for the general fund credits and established priorities for other uses (Indian settlements, etc.). Therefore, all or part of the general fund credits could be utilized to firm on-river M&I users.

Table 4. Cumulative Total and Location of Long-term Storage Credits Accrued through December 2003

| Location and Funding Source | Long-term Storage Credits Accrued (AF) |
|-----------------------------------|--|
| Phoenix AMA | |
| 4¢ <i>Ad valorem</i> Tax | 742,734 |
| Groundwater Withdrawal Fee | 113,181 |
| General Fund | 59,937 |
| AMA Total | 915,852 |
| Pinal AMA | |
| 4¢ <i>Ad valorem</i> Tax | 80,661 |
| Groundwater Withdrawal Fee | 218,667 |
| General Fund | 296,814 |
| Interstate Water Banking - Nevada | 111,000 |
| AMA Total | 707,142 |
| Tucson AMA | |
| 4¢ <i>Ad valorem</i> Tax | 130,051 |
| Groundwater Withdrawal Fee | 57,342 |
| General Fund | 39,748 |
| AMA Total | 227,141 |
| Totals by Source of Funds | |
| 4¢ <i>Ad valorem</i> Tax | 953,446 |
| Groundwater Withdrawal Fee | 389,190 |
| General Fund | 396,499 |
| Interstate Water Banking - Nevada | 111,000 |
| TOTAL | 1,850,135 |

The average annual cost for the AWBA to obtain an acre-foot of long-term storage credit is presented in Table 5. Table 5 illustrates that the unit cost per long-term storage credit has increased each year the AWBA has been in operation with the exception of 2001. Increases are typically a function of three primary factors: annual increases in the cost per acre-foot of water delivered, annual increases in the cost of storage facilities and increased percentage of total water stored in USFs. In 2003, the AWBA stored more water in USFs than in GSFs. Although earlier plans projected more storage in

USFs than GSFs, this was the first time since inception that the storage actually took place. It is anticipated that the increasing trend in cost of developing credits will continue in the future as more USFs become operational and water delivery and facility costs increase. However, the CAP policy regarding recharge rate facilities that became effective in 2004 should help stabilize costs to some extent.

Table 5. Average Annual Cost for the AWBA to Obtain a Long-term Storage Credit¹

| Year | Credits | Funds Expended | Average Cost | % Stored in GSF:% Stored in USF |
|-------------|----------------|-----------------------|----------------------|--|
| 1996 | None | None | \$0 | 0% : 0% |
| 1997 | 296,987 | \$6,387,000 | \$21.51 | 85% : 15% |
| 1998 | 202,542 | \$7,143,000 | \$35.27 | 68% : 32% |
| 1999 | 232,142 | \$8,733,000 | \$37.61 | 68% : 32% |
| 2000 | 272,122 | \$11,163,000 | \$41.02 | 60% : 40% |
| 2001 | 269,687 | \$10,893,590 | \$40.39 | 62% : 38% |
| 2002 | 255,000 | \$13,700,300 | \$53.73 ² | 64% : 36% |
| 2003 | 200,327 | \$11,077,666 | \$55.30 | 47% : 53% |

¹ The information in this table was obtained from previous Annual Reports. Any differences between the number of credits displayed here and the total cumulative number in Table 4 are due to the on-going nature of the accounting process.

² Average cost is for intrastate credits only.

Long-term Storage Credits Distributed or Extinguished by the Authority

The long-term storage credits developed by the AWBA to date have been identified as reserved for four purposes: firming the post-1968 Colorado River municipal and industrial (M&I) entitlements; firming the post-1968 M&I entitlements for entities outside the CAP service area; fulfilling the water management objectives set forth in Chapter 2 of Title 45 (Arizona Revised Statutes); and for interstate water banking purposes pursuant to agreements with Nevada. Credits for firming purposes may be distributed or extinguished when the Colorado River system is deemed to be in a shortage or if there is an operational disruption of the CAP. There were no shortages or unplanned CAP operational problems, therefore, no credits were distributed or extinguished for these purposes in 2003. Credits may be distributed or exchanged for water management purposes upon request of the director of ADWR. There were no requests made for distribution or extinguishment of credits for water management purposes in 2003.

Under the 1999 amendments to the AWBA legislation, the AWBA is authorized to develop credits with monies collected pursuant to water banking services agreements. In 2003, no credits were developed or distributed under such agreements.

Interstate credits may be recovered and exchanged at the request of Nevada. In 2003, there was no recovery of long-term storage credits on behalf of the SNWA².

² The SNWA did request development of ICUA in 2003, however, changing circumstances led to withdrawal of that request. For more information see discussion under "Interstate Issues" in the Activities and Projects Section.

Ten Year Plan for Calendar Year 2003

Introduction

Preparation of the ten year plan is statutorily mandated. The ten year plan must include a description of any water banking activities the AWBA intends to undertake in addition to the three primary AWBA functions of firming for M&I supplies, assisting in Indian water rights settlements, and fulfilling state water management objectives. The ten year plan must also provide an analysis of the AWBA's ability to complete those activities. The ten year plan is not a guarantee of future storage activities and is completed for planning purposes only. In any given year, the AWBA's activities are governed by the annual Plan.

The ten year plan for the year 2003 analyzes activity for the period 2005-2014 (Table 6) and was derived using the information found in Appendices B through G. AWBA accounting for previous years can be found in the 2003 Annual Report. AWBA staff developed the ten year plan based on the following guiding principles:

1. The intent of the plan is to evaluate if the AWBA can engage in water banking activities beyond the scope of the currently established AWBA role and to what extent.
2. The plan covers a ten year time period beginning with the next calendar year. For example, this ten year plan covers the time period 2005-2014.
3. The plan will be updated annually based on current priorities of the AWBA.
4. The plan is an important tool to be utilized in development of the next year's annual Plan of Operation.

Ten Year Plan Components

The following factors are recognized to be important elements in developing the model used to generate the ten year plan. Inclusion or exclusion of a specific factor or component of a factor was based on whether the extent of the effect of the factor could be predicted over the planning period, and whether the factor was anticipated to be at issue over the planning period.

1. Storage Partners and Storage Capacity

The AWBA has 13 water storage permits for GSFs with a total storage capacity of 743,359 acre-feet per annum. Appendix C describes the storage partners, storage permits and capacity available for use by the AWBA.

All of the permits associated with GSFs expire within this ten year plan. The AWBA's storage permits expire simultaneously with the partners' facility permits. Consequently, any difficulty on the part of the partners or the AWBA to obtain new permits could affect the ability of the AWBA to maintain adequate storage capacity to fulfill water banking activities. Discussions with ADWR recharge staff have indicated that there is typically no difficulty in obtaining new permits for GSF facilities. Nonetheless, impacts of this nature cannot be predicted and are not included in this ten year plan.

Table 6. Ten Year Plan

| ARIZONA WATER BANKING AUTHORITY – 10 YEAR PLAN 2005 – 2014 (Acre-feet) | | | | | | | | | | | | | | | |
|---|---------------------------------|--------------------------|---------|------------------------------------|---------|--------------|---------|-------------------|---------|----------------|---------|--------------------|--------------------|----------------------|----------------|
| YEAR | (a) CAP Water Avail for AWBA | (b) | | (c) | | (d) | | (e) | | (f) | | (g) | (h) | (i) | (j) |
| | | CAP M&I Firming (4¢ Tax) | | Water Management (Withdrawal Fees) | | General Fund | | Indian Settlement | | Loaned Credits | | Storage for Others | Interstate Banking | | |
| | | Delivered | Credits | Delivered | Credits | Delivered | Credits | Delivered | Credits | Delivered | Credits | | Water Avail. | AWBA Capacity Avail. | Credits Earned |
| Pre-Plan ^(k) | n/a | 1,153,376 | | 464,676 | | 386,872 | | | | | | | | | 111,000 |
| 2005 | 492,918 | 234,531 | 216,638 | 93,200 | 84,879 | 0 | 0 | | | | | | 0 | 109,362 | 0 |
| 2006 | 633,159 | 283,117 | 257,635 | 105,948 | 97,142 | 0 | 0 | | | | | | 244,095 | 143,783 | 135,156 |
| 2007 | 621,749 | 322,191 | 292,868 | 103,882 | 94,975 | 0 | 0 | | | | | | 195,676 | 145,154 | 136,445 |
| 2008 | 634,365 | 325,775 | 296,030 | 98,062 | 89,498 | 47,993 | 44,823 | | | | | | 162,534 | 105,797 | 99,450 |
| 2009 | 613,364 | 299,796 | 272,598 | 119,740 | 108,952 | 45,906 | 42,887 | | | | | | 147,922 | 111,563 | 104,869 |
| 2010 | 544,735 | 199,206 | 182,013 | 96,992 | 88,336 | 43,938 | 41,059 | | | | | | 204,599 | 244,960 | 192,323 |
| 2011 | 513,688 | 195,501 | 178,626 | 89,381 | 81,429 | 42,095 | 39,346 | | | | | | 186,711 | 264,825 | 175,508 |
| 2012 | 509,982 | 192,085 | 175,504 | 85,677 | 78,041 | 40,377 | 37,750 | | | | | | 191,843 | 277,007 | 180,332 |
| 2013 | 471,855 | 188,110 | 171,878 | 81,150 | 73,926 | 38,756 | 36,243 | | | | | | 163,840 | 272,591 | 154,010 |
| 2014 | 443,673 | 183,786 | 167,941 | 75,615 | 68,907 | 37,230 | 34,824 | | | | | | 147,042 | 287,634 | 138,219 |
| TOTAL | | 3,365,107 | | 1,330,761 | | 663,804 | | | | | | | | | 1,427,312 |

FOOTNOTES:
 (a) See Appendix B
 (b) See Appendix D
 (c) See Appendix E
 (d) See Appendix F
 (e) Currently no Indian settlement requirements identified for the AWBA
 (f) Currently no requests for loaned credits
 (g) Currently the AWBA is not providing banking services for others
 (h) Available CAP Supplies minus AWBA intrastate delivery requirements
 (i) Additional capacity may be needed to fully accommodate the opportunity for interstate banking
 (j) See Appendix G
 (k) Cumulative totals for 1997-2004; 2004 credits estimated based on projected deliveries

The AWBA has nine water storage permits for USFs with a total storage capacity of 611,000 acre-feet per annum. The USF permit issued for the Pima Mine Road facility limits total storage for the term of the permit to 500,000 acre-feet with the ability to request an amendment to 600,000 acre-feet. This storage quantity limitation will not be a factor within this ten year plan. The GRUSP permit is the only permit that expires within this planning period.

As previously described in the GSF discussion, any difficulty in obtaining new permits could effect the capacity available to the AWBA. As the process of obtaining a new USF permit can be more complex and extensive than obtaining a new GSF permit, the possibility of impact is greater. Again, impacts of this nature cannot be predicted and are not included in the analysis of this ten year plan.

2. Recovery

This ten year plan does not include a recovery component because recovery for Colorado River shortages, Indian firming or interstate purposes is not anticipated within the scope of this ten year plan. Due to the on-going drought and public concern regarding reservoir levels, the CAP has completed dry year scenario modeling of the Colorado River system. These model runs show a small potential for shortage in 2011. However, due to projected M&I demand levels, there will be no shortages to M&I users within the scope of this ten year plan, even with the dry year hydrology used by CAP in modeling. Recovery for Indian firming purposes is also not anticipated due to demand levels. However, the Indian Firming Technical Committee continues to meet in 2004 as the issues of identification of water available for firming and evaluation of costs associated with firming are discussed. Lastly, while there exists the potential for requests for development of ICUA as occurred in 2003, recovery for interstate purposes is not anticipated. If requests were made, the recovery would occur pursuant to existing recovery well permits held by the CAWCD. Although recovery is not anticipated within the scope of this ten year plan, it is anticipated that the AWBA and CAWCD will initiate a planning process to develop a general recovery strategy and recovery principles early in this time period in recognition of the CAP subcontractors' need for long-range infrastructure planning.

3. Water management objectives

The early activities of the AWBA were focused on achieving the goal of full utilization of Arizona's Colorado River allocation. In 2002, Arizona fully utilized its 2.8 million acre-foot allocation. Additionally, the AWBA has focused its activities on meeting the firming goals and has stored almost 1 MAF of credits to meet these goals. Consequently, the evaluation of water management activities will become more complex as the available excess CAP water and storage facility capacity becomes limited, new storage facilities are sited and AWBA's funding sources are impacted by economic factors.

Central Arizona Groundwater Replenishment District (CAGRD) Replenishment Reserve

Pursuant to statute, the CAGRD must develop a 20% replenishment reserve. The CAGRD replenishment reserve shares co-equal priority for excess water with AWBA M&I firming. However, the reserve has a higher priority for excess CAP water than the AWBA's deliveries for other non-firming purposes (i.e. water management). Therefore, a component for the

proposed replenishment reserve as well as the advance replenishment was included in the model beginning in 2003.

The CAP Water Forecast Group

The group is composed of CAP, CAGR, ADWR and AWBA staff and was formed to facilitate consistency and understanding between the entities with regard to assumptions used for short- and long-term Colorado River water supply and demand forecasts. Portions of this ten year plan were developed using projections obtained from this group.

AWBA General Fund Appropriation

Since inception, the AWBA has received an annual general fund appropriation of \$2 million. To date, the AWBA has primarily utilized the money to augment the revenues generated in Pinal County to develop credits to be used to firm on-river uses. It is recognized that the economic factors resulting in the loss of the AWBA's general fund appropriation will exist for some time. Therefore, the ten year plan was developed with no general fund appropriation through calendar year 2007. The model included a \$2 million general fund appropriation for the period 2008-2014.

4. Modifications within CAP with regard to pricing and pool allocation

In May 2000, the CAWCD Board adopted a policy for marketing the non-Indian agriculture (NIA) pool of excess water. This policy established a NIA pool of 400,000 acre-feet from 2004-2016. The pool will decline to 300,000 acre-feet from 2017-2023 and to 225,000 acre-feet from 2024-2030. This use will be the highest priority use for excess water. It is recognized that this is a factor that could impact the AWBA's ability to participate in recharge at groundwater savings facilities, however, as the policy has not yet initiated it is difficult to predict an effect. Therefore, only the 400,000 acre-foot pool concept was utilized in this ten year plan.

The CAWCD Board has also discussed the marketing of excess water for other users including the CAGR replenishment and replenishment reserve, incentive recharge programs, other M&I uses and the AWBA. These discussions have centered on the recognition that policies developed early on were intended to insure full utilization of CAP and Arizona's Colorado River allocation. As Arizona reached use of their full allocation in 2002, perhaps policies require modification. In light of current discussions, this ten year plan included a component for decreased availability of the incentive recharge pool.

5. Participation in Indian settlements

One objective of the AWBA is assisting with the settlement of water rights claims by Indian communities within Arizona. Settlements dealing with the CAP repayment and reallocation would require the state to firm some NIA priority water for Indian settlements. In order to achieve this, it is anticipated that the state will rely on the AWBA at some time within this ten year planning horizon. However, this issue was not considered in this ten year plan pending finalization of the Indian Firming Technical Committee process.

6. New recharge facilities and/or expanded capacities at existing facilities

The AWBA is currently in the process of completing a revised inventory of existing storage facilities in the state as required by A.R.S. § 45-2452. The revised inventory will be utilized in developing future ten year plans.

The CAP has been active in the evaluation of locations for additional storage facilities. In January 2002, the CAP initiated a regional feasibility study for sites in the East Salt River Valley. Out of this study two sites were identified, with one more favorable site located on the Queen Creek Wash. CAP is moving forward with design, land acquisition, and permitting of the Superstition Mountain USF and anticipates this facility (designed for 80,000 acre-feet of storage capacity) will be operational in mid-2006. The CAP also conducted a Western Arizona Recharge Capacity Feasibility Study in 2002. Construction will begin on the Tonapah Desert USF in the summer of 2004 and is anticipated to be operational by 2005, with 100,000 acre-feet of storage capacity. The AWBA has recognized additional capacity available in Maricopa County in this ten year period as a result of the anticipated construction of these facilities.

The SRP has applied to ADWR for a recharge facility permit for a project located in the west valley near the confluence of the Agua Fria River and New River. The project has a planned initial capacity of 30,000 acre-feet increasing to a maximum of 100,000 acre-feet. Storage at this facility was not included in this ten year plan because of uncertainty regarding development of an agreement between AWBA and SRP, cost of storage and availability of capacity to the AWBA.

7. Interstate banking

The ten year plan includes an interstate water banking component for Nevada but does not include California.

Conclusion

The ten year plan is intended to serve as a guide to assist the AWBA in the development of the Annual Plan of Operation (Plan). The AWBA is required to develop a Plan for activities to be undertaken the following calendar year. As part of the Annual Report, the ten year plan is reviewed and updated annually. Therefore, it is possible that the ten year plan may change significantly depending on the goals set by the AWBA.

Appendices

**Appendix A.
Colorado River Water Deliveries for Water Banking Purposes for Calendar Year 2003 by
Partner and Active Management Area**

Phoenix Active Management Area

| Partner | Quantity of Water (Acre-feet) |
|---|--------------------------------------|
| Agua Fria Recharge Project | 11,989 |
| Chandler Heights Citrus Irrigation District | 929 |
| Granite Reef Underground Storage Project | 22,599 |
| Hieroglyphic Mountains Recharge Project | 19,944 |
| Maricopa Water District | 4,600 |
| New Magma Irrigation and Drainage District | 22,378 |
| Queen Creek Irrigation District | 765 |
| Roosevelt Water Conservation District | 12,500 |
| Salt River Project | 10,354 |

Pinal Active Management Area

| Partner | Quantity of Water (Acre-feet) |
|---|--------------------------------------|
| Central Arizona Irrigation and Drainage District | 5,500 |
| Hohokam Irrigation and Drainage District | 27,075 |
| Maricopa-Stanfield Irrigation and Drainage District | 10,950 |

Tucson Active Management Area

| Partner | Quantity of Water (Acre-feet) |
|--|--------------------------------------|
| Avra Valley Recharge Project | 3,539 |
| B.K Wong | 1,527 |
| Central Avra Valley Storage and Recovery Project | 7,660 |
| Kai-Red Rock | 3,092 |
| Lower Santa Cruz Recharge Project | 30,380 |
| Pima Mine Road Recharge Project | 17,315 |

| <p align="center">APPENDIX B CAP DELIVERY SCHEDULE (Acre-feet)</p> | | | | | | |
|--|--------------------|-----------------------|-------------------|----------------------|------------------------------------|-----------------------------------|
| Year | CAP Demands | | | | Average Year Supply ⁽⁵⁾ | Available for AWBA ⁽⁶⁾ |
| | M&I ⁽¹⁾ | Indian ⁽²⁾ | Ag ⁽³⁾ | Total ⁽⁴⁾ | | |
| 2005 | 340,282 | 99,800 | 400,000 | 1,032,082 | 1,525,000 | 492,918 |
| 2006 | 374,541 | 102,300 | 400,000 | 891,841 | 1,525,000 | 633,159 |
| 2007 | 385,951 | 102,300 | 400,000 | 903,251 | 1,525,000 | 621,749 |
| 2008 | 368,835 | 106,800 | 400,000 | 890,635 | 1,525,000 | 634,365 |
| 2009 | 374,836 | 121,800 | 400,000 | 911,636 | 1,525,000 | 613,364 |
| 2010 | 422,937 | 142,328 | 400,000 | 980,265 | 1,525,000 | 544,735 |
| 2011 | 434,384 | 161,928 | 400,000 | 1,011,312 | 1,525,000 | 513,688 |
| 2012 | 420,625 | 179,393 | 400,000 | 1,015,018 | 1,525,000 | 509,982 |
| 2013 | 433,652 | 204,493 | 400,000 | 1,053,145 | 1,525,000 | 471,855 |
| 2014 | 461,834 | 204,493 | 400,000 | 1,081,327 | 1,525,000 | 443,673 |

| |
|--|
| <p>(1) Includes M&I, CAGRD, CAGRD replenishment reserve, Indian M&I lease and M&I incentive water</p> <p>(2) From settlement discussions</p> <p>(3) Based on current agricultural pool policy, includes 32,537 for Harquahala</p> <p>(4) Includes secondary excess uses of 192,000 AF in 2005 and 15,000 AF per annum 2006 through 2014.</p> <p>(5) Based on average year delivery of 1,600,000 AF per year minus losses</p> <p>(6) Average year supply minus CAP demands; AWBA last priority for intrastate use</p> |
|--|

**APPENDIX C
STORAGE FACILITIES AVAILABLE TO THE AWBA¹
(as used in the 10 year plan)**

| AMA and Facility Type | Facility Permit Expiration | Facility Permitted Capacity (Acre-feet) | Capacity Available to AWBA⁽²⁾ (Acre-feet) | Year Water Last Stored | Volume of Water Last Stored (Acre-feet) |
|--|-----------------------------------|--|---|-------------------------------|--|
| PHOENIX – GSF⁽³⁾ | | | | | |
| New Magma IDD | 12/2007 | 54,000 | 45,000 | 2003 | 22,378 |
| Queen Creek ID | 12/2004 | 28,000 | 3,000 | 2003 | 765 |
| Salt River Project | 12/2005 | 200,000 | 20,000 | 2003 | 10,354 |
| PHOENIX – USF | | | | | |
| GRUSP | 12/2010 | 200,000 | 50,000 | 2003 | 22,599 |
| Agua Fria Recharge Project | 05/2019 | 100,000 | 40,000 | 2003 | 11,989 |
| Hieroglyphic Mtns. | 12/2021 | 35,000 | 26,000 | 2003 | 19,944 |
| PINAL – GSF | | | | | |
| Central Arizona IDD | 12/2007 | 110,000 | 15,000 | 2003 | 5,500 |
| Hohokam IDD | 12/2007 | 55,000 | 50,000 | 2003 | 27,075 |
| Maricopa-Stanfield IDD | 12/2004 | 120,000 | 50,000 | 2003 | 10,950 |
| TUCSON – GSF | | | | | |
| Kai – Red Rock | 12/2006 | 11,231 | 3,000 | 2003 | 3,092 |
| TUCSON – USF | | | | | |
| Avra Valley | 03/2018 | 11,000 | 7,000 | 2003 | 3,539 |
| CAVSARP | 07/2021 | 60,000 | 40,000 ⁽³⁾ | 2003 | 7,660 |
| Lower Santa Cruz | 09/2019 | 50,000 | 40,000 | 2003 | 30,380 |
| Pima Mine Road | 09/2020 | 30,000 | 28,000 | 2003 | 17,315 |
| Other Facilities Currently or Anticipated to be Available to the AWBA | | | | | |
| Vidler – USF | 09/2020 | 100,000 | 80,000 | ⁽⁴⁾ | 0 |
| West Maricopa Combine - USF | 05/31/2021 | 25,000 | | ⁽⁵⁾ | 0 |
| Tonopah Desert – USF ⁽⁶⁾ | | 100,000 | 100,000 | | n/a |
| Superstition Mountain ⁽⁶⁾ | | 80,000 | 40,000 | | n/a |
| SRP New River – USF ⁽⁶⁾ | | | | | n/a |

Footnotes:

- (1) As additional facilities are developed, they will be included in future plans. However, it should be recognized that availability of water and funding will likely be the limiting factors in future plans.
- (2) This does not reflect the actual “permitted” volume for these facilities, instead for the purposes of this plan, staff relied on average historical storage volumes and potential for future storage.
- (3) The AWBA holds water storage permits at Chandler Heights Citrus ID (3KAF), Maricopa Water District (18KAF), Roosevelt Water Conservation District, BKW Farms (16KAF), Kai-Avra (12KAD) and the Tonopah (15KAF) GSFs. These were not considered significant uses in this 10 year outlook.
- (4) No deliveries to date.
- (5) 20,000 acre-feet of additional capacity anticipated being available beginning in 2003.
- (6) Not yet permitted.

APPENDIX D
Credits Developed for M&I Firming Utilizing the 4¢ Tax ⁽¹⁾
(Acre-feet)

| Year | Groundwater Savings | | | Underground Storage | | |
|-----------------------|---------------------------------|---------------|----------------|---------------------------------|---------------|----------------|
| | Capacity Available ⁴ | Capacity Used | Credits Earned | Capacity Available ⁴ | Capacity Used | Credits Earned |
| Pre-plan ³ | | | 481,832 | | | 402,168 |
| 2005 | 72,000 | 18,720 | 16,848 | 116,000 | 116,000 | 104,400 |
| 2006 | 69,746 | 18,134 | 16,321 | 210,155 | 210,155 | 189,140 |
| 2007 | 72,000 | 18,720 | 16,848 | 246,933 | 246,933 | 222,240 |
| 2008 | 72,000 | 18,720 | 16,848 | 252,024 | 252,024 | 226,822 |
| 2009 | 71,429 | 18,571 | 16,714 | 251,912 | 227,392 | 204,652 |
| 2010 | 70,393 | 18,302 | 16,472 | 251,415 | 128,289 | 115,460 |
| 2011 | 69,196 | 17,991 | 16,192 | 250,132 | 126,063 | 113,456 |
| 2012 | 69,100 | 17,898 | 16,109 | 252,717 | 123,811 | 111,430 |
| 2013 | 67,686 | 16,665 | 14,998 | 251,024 | 122,124 | 109,912 |
| 2014 | 66,300 | 14,520 | 13,068 | 247,345 | 120,955 | 108,859 |
| Total | | | 642,250 | | | 1,908,539 |

| Year | Groundwater Savings | | | Underground Storage | | |
|-----------------------|---------------------------------|---------------|----------------|---------------------------------|---------------|----------------|
| | Capacity Available ⁴ | Capacity Used | Credits Earned | Capacity Available ⁴ | Capacity Used | Credits Earned |
| Pre-plan ³ | | | 98,284 | | | |
| 2005 | 115,000 | 10,718 | 9,861 | - | - | - |
| 2006 | 115,000 | 11,502 | 10,582 | - | - | - |
| 2007 | 115,000 | 12,392 | 11,400 | - | - | - |
| 2008 | 115,000 | 11,733 | 10,795 | - | - | - |
| 2009 | 115,000 | 11,219 | 10,322 | - | - | - |
| 2010 | 115,000 | 10,742 | 9,883 | - | - | - |
| 2011 | 115,000 | 10,298 | 9,474 | - | - | - |
| 2012 | 115,000 | 9,884 | 9,093 | - | - | - |
| 2013 | 115,000 | 9,496 | 8,736 | - | - | - |
| 2014 | 115,000 | 9,132 | 8,402 | - | - | - |
| Total | | | 196,832 | | | |

| Year | Groundwater Savings | | | Underground Storage | | |
|-----------------------|---------------------------------|---------------|----------------|---------------------------------|---------------|----------------|
| | Capacity Available ⁴ | Capacity Used | Credits Earned | Capacity Available ⁴ | Capacity Used | Credits Earned |
| Pre-plan ³ | | | 3,610 | | | 167,482 |
| 2005 | 5,000 | 0 | 0 | 89,093 | 89,093 | 85,529 |
| 2006 | 5,000 | 0 | 0 | 92,946 | 43,325 | 41,592 |
| 2007 | 5,000 | 0 | 0 | 92,294 | 44,146 | 42,380 |
| 2008 | 5,000 | 0 | 0 | 93,604 | 43,298 | 41,566 |
| 2009 | 5,000 | 0 | 0 | 93,665 | 42,614 | 40,909 |
| 2010 | 5,000 | 0 | 0 | 103,289 | 41,873 | 40,198 |
| 2011 | 5,000 | 0 | 0 | 112,474 | 41,149 | 39,503 |
| 2012 | 5,000 | 0 | 0 | 113,329 | 40,492 | 38,872 |
| 2013 | 5,000 | 0 | 0 | 101,897 | 39,825 | 38,232 |
| 2014 | 5,000 | 0 | 0 | 110,620 | 39,179 | 37,612 |
| Total | | | 3,610 | | | 613,875 |

Footnotes:

- (1) Developing M&I firming credits has the first priority for water and storage capacity.
- (2) M&I firming targets are Phoenix AMA-1.56 MAF, Tucson AMA-810 KAF, and Pinal AMA 230 KAF
- (3) Cumulative totals for 1997-2004; 2004 credits estimated based on projected deliveries.
- (4) The capacity available is based on the capacity remaining at the USFs and GSFs after all higher priority demands have been met.

APPENDIX E
Credits Developed for Meeting AMA Water Management Goals
Utilizing Withdrawal Fees ⁽¹⁾
(Acre-feet)

| | Year | Groundwater Savings | | | Underground Storage | | |
|--------------------|-----------------------|---------------------------------|---------------|----------------|---------------------------------|---------------|----------------|
| | | Capacity Available ³ | Capacity Used | Credits Earned | Capacity Available ³ | Capacity Used | Credits Earned |
| PHOENIX AMA | Pre-plan ² | | | 104,658 | | | 37,900 |
| | 2005 | 53,280 | 53,280 | 47,952 | 0 | 0 | 0 |
| | 2006 | 51,612 | 51,612 | 46,451 | 0 | 0 | 0 |
| | 2007 | 53,280 | 53,280 | 47,952 | 0 | 0 | 0 |
| | 2008 | 53,280 | 53,280 | 47,952 | 0 | 0 | 0 |
| | 2009 | 52,857 | 52,857 | 47,571 | 24,521 | 24,521 | 22,069 |
| | 2010 | 52,091 | 52,091 | 46,882 | 123,126 | 6,296 | 5,666 |
| | 2011 | 51,205 | 51,205 | 46,085 | 124,069 | 1,795 | 1,615 |
| | 2012 | 51,202 | 50,942 | 45,848 | 128,906 | 413 | 372 |
| | 2013 | 51,021 | 47,431 | 42,688 | 128,899 | 834 | 750 |
| | 2014 | 51,780 | 41,327 | 37,195 | 126,390 | 2,756 | 2,481 |
| | Total | | | 561,234 | | | 70,853 |
| PINAL AMA | Pre-plan ² | | | 278,481 | | | 0 |
| | 2005 | 104,282 | 34,920 | 32,127 | - | - | - |
| | 2006 | 103,498 | 36,774 | 33,832 | - | - | - |
| | 2007 | 102,608 | 38,876 | 35,766 | - | - | - |
| | 2008 | 103,267 | 36,117 | 33,228 | - | - | - |
| | 2009 | 103,781 | 33,883 | 31,173 | - | - | - |
| | 2010 | 104,258 | 31,826 | 29,280 | - | - | - |
| | 2011 | 104,702 | 29,929 | 27,534 | - | - | - |
| | 2012 | 105,116 | 28,174 | 25,920 | - | - | - |
| | 2013 | 105,504 | 27,034 | 24,871 | - | - | - |
| | 2014 | 105,868 | 25,964 | 23,887 | - | - | - |
| | Total | | | 576,099 | | | 0 |
| TUCSON AMA | Pre-plan ² | | | 8,084 | | | 35,552 |
| | 2005 | 5,000 | 5,000 | 4,800 | 0 | 0 | 0 |
| | 2006 | 5,000 | 5,000 | 4,800 | 49,621 | 12,561 | 12,059 |
| | 2007 | 5,000 | 5,000 | 4,800 | 48,148 | 6,726 | 6,457 |
| | 2008 | 5,000 | 0 | 0 | 50,306 | 8,665 | 8,318 |
| | 2009 | 5,000 | 0 | 0 | 51,051 | 8,479 | 8,140 |
| | 2010 | 5,000 | 0 | 0 | 61,416 | 6,779 | 6,507 |
| | 2011 | 5,000 | 0 | 0 | 71,325 | 6,453 | 6,195 |
| | 2012 | 5,000 | 0 | 0 | 72,837 | 6,148 | 5,902 |
| | 2013 | 5,000 | 0 | 0 | 62,072 | 5,852 | 5,617 |
| | 2014 | 5,000 | 0 | 0 | 71,441 | 5,568 | 5,345 |
| | Total | | | 22,484 | | | 100,092 |

(1) Withdrawal fees are used to develop credits for AMA water management goals after the 4¢ tax is utilized.
(2) Cumulative totals for 1997-2004; 2004 credits estimated based on projected deliveries.
(3) The capacity available is based on the capacity remaining at the USFs and GSFs after all higher priority demands have been met and water is stored using the 4¢ tax as illustrated in Appendix D.

APPENDIX F
Credits Developed Utilizing Annual General Fund Appropriations^(1,2)
(Acre-feet)

| | Year | Groundwater Savings | | | Underground Storage | | |
|--------------------|-----------------------|-----------------------|---------------|----------------|---------------------|---------------|----------------|
| | | Capacity Available | Capacity Used | Credits Earned | Capacity Available | Capacity Used | Credits Earned |
| | | Pre-plan ³ | | | 36,063 | | |
| PHOENIX AMA | 2005 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2006 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2007 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2008 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2009 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2010 | 0 | 0 | 0 | 116,830 | 0 | 0 |
| | 2011 | 0 | 0 | 0 | 122,275 | 0 | 0 |
| | 2012 | 260 | 0 | 0 | 128,493 | 0 | 0 |
| | 2013 | 3,590 | 0 | 0 | 128,066 | 0 | 0 |
| | 2014 | 10,452 | 0 | 0 | 123,634 | 0 | 0 |
| | Total | | | 36,063 | | | 25,520 |
| | PINAL AMA | Pre-plan ³ | | | 271,318 | | |
| 2005 | | 69,362 | 0 | 0 | - | - | - |
| 2006 | | 66,724 | 0 | 0 | - | - | - |
| 2007 | | 63,733 | 0 | 0 | - | - | - |
| 2008 | | 67,149 | 31,250 | 28,750 | - | - | - |
| 2009 | | 69,897 | 29,586 | 27,219 | - | - | - |
| 2010 | | 72,431 | 28,047 | 25,804 | - | - | - |
| 2011 | | 74,773 | 26,622 | 24,492 | - | - | - |
| 2012 | | 76,942 | 25,297 | 23,273 | - | - | - |
| 2013 | | 78,470 | 24,064 | 22,139 | - | - | - |
| 2014 | | 79,904 | 22,913 | 21,080 | - | - | - |
| Total | | | | 444,075 | | | |
| TUCSON AMA | Pre-plan ³ | | | 1,745 | | | 52,196 |
| | 2005 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2006 | 0 | 0 | 0 | 37,060 | 0 | 0 |
| | 2007 | 0 | 0 | 0 | 41,422 | 0 | 0 |
| | 2008 | 5,000 | 5,000 | 4,800 | 41,641 | 11,743 | 11,273 |
| | 2009 | 5,000 | 5,000 | 4,800 | 42,572 | 11,321 | 10,868 |
| | 2010 | 5,000 | 5,000 | 4,800 | 54,637 | 10,891 | 10,455 |
| | 2011 | 5,000 | 5,000 | 4,800 | 64,872 | 10,473 | 10,054 |
| | 2012 | 5,000 | 5,000 | 4,800 | 66,689 | 10,080 | 9,677 |
| | 2013 | 5,000 | 5,000 | 4,800 | 56,221 | 9,692 | 9,305 |
| | 2014 | 5,000 | 5,000 | 4,800 | 65,873 | 9,316 | 8,944 |
| | Total | | | 35,345 | | | 122,772 |

Footnotes:

- (1) General Fund appropriations are used to supplement the 4¢ tax and withdrawal fees in AMAs where funding is a constraint.
- (2) The on-river M&I firming target is 420 KAF.
- (3) Cumulative totals for 1997-2004; 2004 credits estimated based on projected deliveries.

APPENDIX G
Potential Credits Developed for Interstate Water Banking⁽¹⁾
(Acre-feet)

| Year | Available CAP Supplies⁽²⁾ | Available AWBA Capacity⁽³⁾ | Remaining Supply⁽⁴⁾ | Interstate Credits⁽⁵⁾ |
|--------------|---|--|---------------------------------------|---|
| Pre-plan | | | | 111,000 |
| 2005 | 0 | 109,362 | 0 | 0 |
| 2006 | 244,095 | 143,783 | 100,312 | 135,156 |
| 2007 | 195,676 | 145,154 | 50,522 | 136,445 |
| 2008 | 162,534 | 105,797 | 56,736 | 99,450 |
| 2009 | 147,922 | 111,563 | 36,358 | 104,869 |
| 2010 | 204,599 | 244,960 | 0 | 192,323 |
| 2011 | 186,711 | 264,825 | 0 | 175,508 |
| 2012 | 191,843 | 277,007 | 0 | 180,332 |
| 2013 | 163,840 | 272,591 | 0 | 154,010 |
| 2014 | 147,042 | 287,634 | 0 | 138,219 |
| Total | | | | 1,427,312 |

(1) Interstate Banking is the last priority of the AWBA.

(2) Water available for Interstate Banking is calculated by subtracting the water delivered and stored by individual subcontractors, contractors, and the AWBA for intrastate water banking from the Total Available Supply (see Appendix B).

(3) Reflects the unused capacity available to the AWBA at USFs and GSFs in the Phoenix, Pinal, and Tucson AMAs as well as capacity available from other storage facilities permitted by the AWBA outside of the AMAs. Additional capacity may be available at individual facilities based on the utilization by individual water storage permit holders

(4) Remaining supplies after subtracting the water delivered and stored by individual subcontractors, contractors, and the AWBA for intrastate water banking and water delivered for interstate water banking.

(5) Based on the Available Supplies or the Available AWBA Capacity, whichever is less, resulting stored water multiplied by an average 6% cut and loss factor.

ARIZONA WATER BANKING AUTHORITY
(FY 2004 - July 2003 thru June 2004)

| | | <u>Actual</u> |
|--|---------------------|---------------------|
| FY 2004 ADMINISTRATIVE BUDGET | \$565,578 | \$477,134 |
| ADWR BUDGET SUPPORT¹ | \$1,830,300 | \$1,585,016 |
| FY 2004 WATER RECHARGE BUDGET | \$19,296,102 | \$15,819,250 |
| TOTAL FY 2004 AUTHORITY BUDGET | \$21,691,980 | \$17,881,400 |
| <hr/> | | |
| TOTAL EXPECTED REVENUES | \$16,790,000 | \$4,203,131 |
| CARRYOVER / (DEFICIT) from PREVIOUS YEARS | \$36,723,506 | \$36,723,506 |
| TOTAL REVENUES AVAILABLE | \$53,513,506 | \$40,926,637 |
| <hr/> | | |
| FY 2004 CARRYOVER / (DEFICIT)² | \$31,821,526 | \$14,045,237 |

¹ As a one time line item the AWBA is providing funding support to ADWR to insure water management functions performed by ADWR and beneficial to the AWBA and its partners are not curtailed due to ADWR budget limitations.

² Carryover after the transfer of \$9,000,000 pursuant to HB 2531

ARIZONA WATER BANKING AUTHORITY
 (FY 2005 - July 2004 thru June 2005)

| | |
|--|---------------------|
| FY 2005 ADMINISTRATIVE BUDGET | \$594,300 |
| FY 2005 WATER RECHARGE BUDGET (285 kaf) | \$19,834,842 |
| TOTAL FY 2005 AUTHORITY BUDGET | \$20,429,142 |

| | |
|--|---------------------|
| TOTAL EXPECTED REVENUES | \$5,594,300 |
| CARRYOVER / (DEFICIT) from PREVIOUS YEARS | \$14,045,237 |

4 cent tax

| | |
|----------|--------------|
| Maricopa | \$11,120,237 |
| Pinal | \$0 |
| Pima | \$2,925,000 |

Withdrawal Fee

| | |
|-------------|-----|
| Phoenix AMA | \$0 |
| Pinal AMA | \$0 |
| Tucson AMA | \$0 |

| | |
|---------------------------------|---------------------|
| TOTAL REVENUES AVAILABLE | \$19,639,537 |
|---------------------------------|---------------------|

FY 2005 CARRYOVER / (DEFICIT)

4 cent tax

| | |
|----------|----------------------|
| Maricopa | \$1,350,607 |
| Pinal | (\$259,870) |
| Pima | (\$1,879,070) |

Withdrawal Fee

| | |
|-------------|------------|
| Phoenix AMA | \$0 |
| Pinal AMA | \$0 |
| Tucson AMA | \$0 |

for information only

CAP 4 cent ACCOUNT

| | |
|----------|---------------------|
| Maricopa | \$20,000,000 |
| Pinal | \$300,000 |
| Pima | \$3,200,000 |

CAP 4 cent ACCOUNT Carryover

| | |
|----------|---------------------|
| Maricopa | \$20,000,000 |
| Pinal | \$40,130 |
| Pima | \$1,320,930 |

ARIZONA WATER BANKING AUTHORITY

FY 2005 ADMINISTRATIVE BUDGET**\$594,300**

STAFFING

| | Total FTE | Cost |
|---|-----------|------------------|
| Department of Water Resources Cost of Services | | \$507,000 |
| Personnel Services | 4.5 | \$245,800 |
| Water Bank Manager | | |
| Water Bank Technical Administrator | | |
| Administrative Assistant | | |
| Attorney | | |
| Employee Related Expenditures (at 28.75% of Personnel Services) | | \$70,700 |
| Indirect Cost (at 60.20% of Personnel Service & ERE) | | \$190,500 |
| Central Arizona Project Cost of Services | | \$10,000 |
| Personnel Services & ERE | | \$10,000 |
| Water System Engineer | | |
| Customer Service Coordinator | | |
| Hydrologist | | |
| Administrative Support | | |
| Subtotal Staffing | | \$517,000 |

OTHER COSTS

| | | |
|---------------------------------|-----|-----------------|
| Professional & Outside Services | | \$50,000 |
| Travel | | \$20,700 |
| Instate Travel | | \$14,750 |
| Out of State Travel | | \$5,950 |
| Other Operating Expenses | | \$6,600 |
| Standard per employee | 4.5 | \$600 |
| Miscellaneous | | \$3,900 |
| Equipment | | \$0 |
| | | \$0 |
| Subtotal Other Costs | | \$77,300 |

Attachment 2005-3

ARIZONA WATER BANKING AUTHORITY

TRAVEL

| | Meetings | \$/Meeting | Cost | |
|----------------------------|---|------------|-----------------|--------------|
| INSTATE TRAVEL | | | | |
| Authority Members | | | | |
| Chuck Cahoy | 5 | \$0 | \$0 | |
| Maureen George | 5 | \$250 | \$1,250 | |
| Herb Guenther | 5 | \$0 | \$0 | |
| John Mawhinney | 5 | \$100 | \$500 | |
| George Renner | 5 | \$0 | \$0 | |
| Subtotal | | | \$1,750 | |
| Authority Staff | | | | |
| Manager | 5 | \$0 | \$0 | |
| | 6 | \$400 | \$2,400 | (Las Vegas) |
| Technical Administrators | 10 | \$0 | \$0 | |
| | 8 | \$150 | \$1,200 | (Las Vegas) |
| Admin Assistant | 5 | \$0 | \$0 | |
| Other Support | 2 | \$400 | \$800 | |
| Motor Pool | | | \$1,600 | |
| Subtotal | | | \$6,000 | |
| Motor Pool | | | \$7,000 | |
| Instate Total | | | \$14,750 | |
| OUT OF STATE TRAVEL | | | | |
| Authority Members | No out of state travel is anticipated for Authority Members | | | |
| Authority Staff | | | | |
| Manager | 3 | \$600 | \$1,800 | (California) |
| | 3 | \$1,200 | \$3,600 | (Other) |
| Technical Administrators | 1 | \$550 | \$550 | |
| Other Support | 2 | \$800 | \$1,600 | |
| Total Out of State | | | \$5,950 | |
| Total Travel | | | \$20,700 | |

Attachment 2005-3 continued

OTHER OPERATING COSTS

| | | Cost |
|-----------------------------|-----------------|----------------|
| Miscellaneous | | |
| | Postage | \$1,800 |
| | Special copying | \$600 |
| | Other | \$1,000 |
| | Permits | \$500 |
| | | <u>\$3,900</u> |
| Other Operating Cost | | \$3,900 |

EQUIPMENT

| | Units | Unit Cost | Cost |
|------------------------|-------|-----------|------------|
| | | | \$0 |
| | | | <u>\$0</u> |
| Subtotal | | | \$0 |
| Total Equipment | | | \$0 |

ARIZONA WATER BANKING AUTHORITY

FY 2005 WATER RECHARGE BUDGET**\$19,834,842****COST ASSUMPTIONS**

| | | |
|--|---|---------|
| Cost of Water | | |
| CAP | (Energy Rate 2 plus \$5.00 towards Fixed O&M) | \$70.70 |
| Direct Recharge (Cost for using direct recharge facilities) | | |
| GRUSP | | \$19.04 |
| Avra Valley | | \$12.00 |
| Pima Mine Road | | \$12.00 |
| Lower Santa Cruz | | \$12.00 |
| Hieroglyphic Mountains | | \$9.26 |
| Aqua Fria Recharge Project | | \$8.98 |
| Clearwater | | \$12.27 |
| Cost Recovery for In-lieu Recharge | | |
| | (cost recovery from in-lieu partners) | \$24.17 |

WATER PURCHASES and RECHARGE (July 2004 thru June 2005)

| | Amount (acre feet) | Cost / acre foot | Total |
|-----------------------------------|--------------------|------------------|---------------------|
| CAP Delivery Cost | | | \$17,597,095 |
| Direct Deliveries | 170,500 | \$71.57 | \$12,202,685 |
| In-Lieu Deliveries | 114,604 | \$47.07 | \$5,394,410 |
| Direct Facility Use Charge | | | \$2,237,747 |
| GRUSP | 50,000 | \$19.04 | \$952,000 |
| Avra Valley | 5,950 | \$12.00 | \$71,400 |
| Pima Mine Road | 19,900 | \$12.00 | \$238,800 |
| Lower Santa Cruz | 28,300 | \$12.00 | \$339,600 |
| Hieroglyphic Mountains | 25,800 | \$9.26 | \$238,908 |
| Aqua Fria Recharge Project | 30,550 | \$8.98 | \$274,339 |
| Clearwater | 10,000 | \$12.27 | \$122,700 |
| Total FY 2005 | 285,104 | | \$19,834,842 |

REVENUES AVAILABLE for FY 2005 RECHARGE**\$5,594,300**

| | | |
|-----------------------------------|-------------------------------------|--------------------|
| 4 cent tax | | \$0 |
| Maricopa | | \$0 |
| Pinal | | \$0 |
| Pima | | \$0 |
| Withdrawal Fee | (Estimated for 2003 pumping) | \$5,000,000 |
| Phoenix AMA | | \$2,700,000 |
| Pinal AMA | | \$1,700,000 |
| Tucson AMA | | \$600,000 |
| Interest | | \$594,300 |
| General Fund Appropriation | | \$0 |

ARIZONA WATER BANKING AUTHORITY
 (FY 2006 - July 2005 thru June 2006)

| | |
|--|---------------------|
| FY 2006 ADMINISTRATIVE BUDGET | \$617,300 |
| FY 2006 WATER RECHARGE BUDGET (252 kaf) | \$17,553,500 |
| TOTAL FY 2006 AUTHORITY BUDGET | \$18,170,800 |

| | |
|--|--------------------|
| TOTAL EXPECTED REVENUES | \$4,910,000 |
| CARRYOVER / (DEFICIT) from PREVIOUS YEARS | \$1,350,607 |

| | |
|-----------------------|-------------|
| 4 cent tax | |
| Maricopa | \$1,350,607 |
| Pinal | \$0 |
| Pima | \$0 |
| Withdrawal Fee | |
| Phoenix AMA | \$0 |
| Pinal AMA | \$0 |
| Tucson AMA | \$0 |

| | |
|---------------------------------|--------------------|
| TOTAL REVENUES AVAILABLE | \$6,260,607 |
|---------------------------------|--------------------|

| | |
|--------------------------------------|----------------------|
| FY 2006 CARRYOVER / (DEFICIT) | |
| 4 cent tax | |
| Maricopa | (\$8,105,393) |
| Pinal | (\$270,000) |
| Pima | (\$2,917,500) |
| Withdrawal Fee | |
| Phoenix AMA | \$0 |
| Pinal AMA | \$0 |
| Tucson AMA | \$0 |

for information only

| | |
|-------------------------------------|---------------------|
| CAP 4 cent ACCOUNT | |
| Maricopa | \$30,000,000 |
| Pinal | \$340,130 |
| Pima | \$2,920,930 |
| CAP 4 cent ACCOUNT Carryover | |
| Maricopa | \$21,894,607 |
| Pinal | \$70,130 |
| Pima | \$3,430 |

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.

House Engrossed Senate Bill

State of Arizona
Senate
Forty-sixth Legislature
Second Regular Session
2004

SENATE BILL 1402

AN ACT

MAKING APPROPRIATIONS FOR THE DIFFERENT DEPARTMENTS OF THE STATE, FOR STATE INSTITUTIONS AND FOR PUBLIC SCHOOLS; AMENDING LAWS 2003, CHAPTER 262, SECTIONS 3, 11, 13, 14, 17, 58, 59, 63, 65, 70, 71 AND 75; PROVIDING FOR CERTAIN REPORTING REQUIREMENTS.

(TEXT OF BILL BEGINS ON NEXT PAGE)

1

1 combination, exceed the amounts specified in subsection C, D or E of this
2 section, ten days after the previous reporting date, the governor shall issue
3 a public notice stating the amounts appropriated from the state general fund
4 at the levels indicated and for the purposes provided.

5 Sec. 68. Transfer of fund monies to the water quality assurance
6 revolving fund; fiscal year 2004-2005

7 Notwithstanding any other law, on or before June 30, 2005, the sum of
8 \$500,000 is transferred from the assurance account established by section
9 49-1051, Arizona Revised Statutes, to the water quality assurance revolving
10 fund established by section 49-282, Arizona Revised Statutes.

11 Sec. 69. Transfer of fund monies to the state employee travel
12 reduction fund; fiscal year 2004-2005

13 Notwithstanding any other law, on or before June 30, 2005, the sum of
14 \$100,000 is transferred from the air quality in lieu fee account established
15 by section 49-551, Arizona Revised Statutes, to the state employee travel
16 reduction fund established by section 41-101.03, Arizona Revised Statutes.

17 Sec. 70. Transfer of fund monies to the legislative, executive
18 and judicial public buildings land fund

19 Notwithstanding any other law, on or before June 30, 2005, the sum of
20 \$1,500,000 is transferred from the risk management revolving fund established
21 by section 41-622, Arizona Revised Statutes, to the legislative, executive
22 and judicial public buildings land fund established by section 37-525,
23 Arizona Revised Statutes.

24 Sec. 71. Transfers of fund monies to the state general fund;
25 fiscal year 2004-2005

26 Notwithstanding any other law, on or before June 30, 2005, the
27 following amounts from the following funds or sources are transferred to the
28 state general fund for the purposes of providing adequate support and
29 maintenance for agencies of this state:

- 30 1. Motor vehicle pool revolving fund (ADA 4204) \$1,000,000.
- 31 2. Indirect cost fund (HSA 9001) \$2,000,000.
- 32 3. Industrial commission administrative fund (ICA 2177) \$2,000,000.
- 33 4. State lottery fund (LOA 2122) \$2,500,000.
- 34 5. School improvement revenue bond debt service fund (SFA 5020)
35 \$1,756,500.
- 36 6. Air quality fund - in lieu fee account (EPA 9599) \$3,000,000.
- 37 7. Arizona correctional industries revolving fund (DCA 4002) \$500,000.
- 38 8. Emergency medical services operating fund (HSA 2171) \$500,000.
- 39 9. School capital equity fund (SFA 2273) \$278,000.
- 40 10. Arizona water banking fund (WCA 2110) \$2,000,000. The Arizona
41 water banking fund transfer shall be from monies other than monies that have
42 been deposited in the Arizona water banking fund pursuant to section
43 48-3715.03, subsection B, Arizona Revised Statutes.

44 Sec. 72. Transfer of monies from the budget stabilization fund
45 to the state general fund; fiscal year 2004-2005