#### **Arizona Water Banking Authority**

3550 N. Central Avenue, Phoenix, Arizona 85012 Telephone 602-771-8487 Fax 602-771-8685 Web Page: www.azwaterbank.gov

#### **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 December 19, 2007 at 10:00 a.m. at the Arizona Department of Water Resources, 3550 North Central Avenue, Phoenix, Arizona 85012, Upper/Middle Verde conference room on the 2<sup>nd</sup> floor. The meeting is open to the general public. A copy of the agenda for the meeting is posted below.

Dated this 17<sup>th</sup> day of December, 2007

#### FINAL AGENDA

#### Arizona Water Banking Authority Commission Meeting

- I. Welcome/Opening Remarks
- II. Approval of Minutes of October 10, 2007 Meeting
- III. Discussion and Potential Approval of Amended ICUA Letter Agreement
- IV. Discussion and Approval of 2008 Annual Plan of Operation
  - Overview of public comment
  - Approval of 2008 Annual Plan of Operation
- V. Discussion and Approval of CY 2008 Water Delivery Budget
  - Overview of budget
  - Adoption of budget
- VI. Water Banking Staff Activities
  - Deliveries
  - State of Arizona budget shortfall
  - Public meetings
  - Exhibit at Colorado River Water Users Association
  - CAWCD Status Report on Recovery Planning
- VII. Update on Arizona Water Settlements Act Firming Efforts

#### Page 2

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Arizona Water Banking Authority meeting

- VIII. Interstate Water Banking
  - Overview of interstate accounting and firming obligation
- IX. Status of Distribution of AWBA Handouts
- X. Call to the Public

#### **Future Meeting Dates:**

Wednesday, March 19, 2008 Wednesday, June 18, 2008 Wednesday, September 17, 2008 Wednesday, December 17, 2008

All visitors must use the south elevators; please stop at the 2<sup>nd</sup> floor to sign-in and receive a visitor's badge. Badges are to be displayed at all times. Visitors are also required to sign out and return their badges. Thank you for your assistance.

Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Virginia O'Connell at (602) 771-8491. Requests should be made as early as possible to allow time to arrange the accommodation.

#### ARIZONA WATER BANKING AUTHORITY Draft Minutes<sup>1</sup>

October 10, 2007 Arizona Department of Water Resources

#### Welcome/Opening Remarks

Chairman Herb Guenther welcomed the attendees. All members of the Authority were present except for *ex-officio* member, Representative Lucy Mason. Maureen George noted she would not be attending the December meeting.

#### Approval of Minutes of June 20, 2007 Meeting

The Authority approved the minutes of the June 20, 2007 meeting with a clarification change noted by Chairman Guenther.

#### Water Banking Staff Activities

Virginia O'Connell reviewed water deliveries and stated that both intrastate and interstate deliveries were ahead of schedule. She noted that an additional 13,000 acre-feet of intrastate deliveries were expected by the end of the year, including 1,000 acre-feet for the Phoenix AMA and 12,000 acre-feet for the Pinal AMA.

Ms. O'Connell also reviewed the recovery schedule for developing Intentionally Created Unused Apportionment (ICUA) for the Metropolitan Water District of Southern California (Metropolitan). She noted that the Central Arizona Water Conservation District (CAWCD) had notified the Authority by letter that the recovery schedule for 2007 had been revised. The revised schedule is approximately 6,000 acre-feet less than the original schedule of 16,804 acre-feet. John Mawhinney inquired as to the reasons for the reduction in recovery. Tim Henley stated that the irrigation districts in the Pinal AMA were maximizing pumping capacity to meet the increased demand of the farmers and therefore some were not able to provide additional capacity to CAWCD. Mr. Mawhinney questioned the priority of recovery, including future recovery for Nevada, over the pumping needs of others. Tom McCann (CAWCD) responded that the recovery agreements between CAWCD and the irrigation districts state that district wells could be utilized for recovery to the extent that capacity was not needed for the irrigation district's own purposes. Mr. Mawhinney had concerns regarding water storage under this scenario. Mr. McCann commented that CAWCD is currently evaluating its future recovery capability. including the rehabilitation of existing district wells and installation of new wells on district lands, which the agreements allow. He noted that the original contracts with the districts were signed in 1992 and that CAWCD was considering new contracts that would be more in line with CAWCD's needs. Chairman Guenther commented that the farmers are experiencing an economic boon due to increased grain prices



AUTHORITY MEMBERS Herbert R. Guenther, Chairman Maureen R. George, Vice-Chairman Tom Buschatzke, Secretary John Mawhinney Gayle J. Burns

EX OFFICIO MEMBERS The Honorable Jake Flake The Honorable Lucy Mason

<sup>&</sup>lt;sup>1</sup> 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.

related to ethanol production and that reductions in pumping at this time would be detrimental to their operations. He noted that CAWCD's plans were to become independent with regard to recovery. Gayle Burns noted that CAWCD was considering a credit exchange as an alternative to recovery. Chairman Guenther acknowledged that other accounting methods for creating ICUA were being evaluated. Mr. Buschatzke questioned if changes in the accounting method would require an action by the Authority and pointed out that the next meeting was not until December. Mr. Henley noted that the letter agreement between Metropolitan, CAWCD and the AWBA specifies recovery as the method for creating ICUA and that an amendment would be required to include the credit exchange method as an alternative. Mr. McCann noted that CAWCD has a customer that has storage planned at a facility who was also responsive to participating in a credit exchange. Chairman Guenther reminded the Authority that the AWBA's role concerning ICUA, is to certify the amount of ICUA that was created.

Kim Mitchell noted that the AWBA received a certified copy of the *ad valorem* tax resolution for fiscal year 2008, which was adopted by the CAWCD Board of Directors in June. The resolution establishes a tax rate of  $4\phi$  per \$100 of assessed value on all taxable property within CAWCD's three county service area. Monies collected will be retained by CAWCD and used to offset the AWBA's water storage costs for M&I firming in the county in which the funds were collected.

Ms. Mitchell informed the Authority that ADWR had issued water storage permit renewals to the AWBA for storage at the Hohokam Irrigation & Drainage District Groundwater Savings Facility (GSF) located in the Pinal AMA and the New Magma Irrigation and Drainage District GSF located in the Phoenix AMA. The water storage permits are for 50,000 and 54,000 acre-feet per year, respectively.

Mr. Henley briefed the Authority on the status of Seven Basin States discussions and noted that the Secretary of the Interior (Secretary) and the Bureau of Reclamation (Reclamation) were still discussing various issues. He noted that Reclamation's Environmental Impact Statement (EIS) for Colorado River operations should be available within one month. The deadline for issuing the Record of Decision (ROD) is December 31, 2007. Chairman Guenther noted that the Basin States had resolved the issues regarding the Forbearance Agreement for creating and releasing Intentionally Created Surplus (ICS). However, discussions concerning the equalization trigger for Lakes Mead and Powell were ongoing.

#### Draft 2008 Annual Plan of Operation

Ms. O'Connell briefed the Authority on the draft delivery schedule for the 2008 Plan of Operation (Plan), noting that it was still preliminary because CAWCD was still in the process of reviewing orders. The total water deliveries at this time are approximately 285,000 acre-feet. This is a decrease of nearly 100,000 acre-feet from the 2007 Plan, which identifies approximately 376,000 acre-feet of storage. She pointed out that deliveries for interstate purposes were not included in the 2008 Plan at present, though there could be opportunities to store on behalf of Nevada at a later date if supplies are available and if capacity and funding for intrastate purposes have been utilized. Ms. O'Connell commented that there were fewer

supplies available to the AWBA because of increased orders from other CAP customers, but that an additional 30,000 acre-feet could potentially be available. In response to Mr. Buschatzke's inquiry as to the source of these additional supplies, Ms. O'Connell responded that the availability of supplies was based on earlier estimates and that there was no certainty as to the amount that will be available to the AWBA after orders are finalized. Ms. George asked how the reduction in supplies would affect the AWBA's obligation to Nevada. Chairman Guenther pointed out that the \$100 million resource account was established to protect Arizona water users in the event alternative water supplies were needed. Ms. O'Connell continued her review of the Plan noting that there were two new facilities on the delivery schedule: the Harquahala Valley Irrigation District (HVID) GSF and City of Tucson/Tucson Water's Southern Avra Valley Recharge Project (SAVSARP). There are currently no deliveries scheduled for HVID, however, staff has a meeting scheduled with the district to discuss a potential partnership for 2008. She added that although Tucson Water is maximizing its capacity at SAVSARP, 350 acre-feet of capacity has been made available to the AWBA for storage in December.

Chairman Guenther directed staff to present the draft 2008 Plan to the public in conjunction with the Groundwater Users Advisory Council (GUAC) meetings.

#### **Interstate Water Banking**

Ms. Mitchell updated the Authority on interstate activities noting that the Fiscal Year 2008 Interstate Report had been submitted to the Joint Legislative Budget Committee (JLBC) as required by statute. She reviewed the quarterly accounting report stating that adjustments had been made to the fourth quarter estimates in order to maintain the planned delivery totals identified in the 2007 Plan of Operation. Based on the 2007 Plan, 42 percent of the AWBA's obligation will be met by the end of the year. Mr. Mawhinney inquired how long the AWBA would be able to meet its obligation to Nevada assuming the maximum recovery rate of 40,000 acre-feet per year. Mr. Henley responded that with credits accrued by the end of the year, the AWBA could meet its obligation for approximately 13 years.

#### Arizona Water Settlements Act Firming Efforts

Mr. Henley briefed the Authority on the Agreement between the Secretary of the Interior and the State of Arizona for the Firming of Central Arizona Project Indian Water (Firming Agreement). There were no substantive changes since it had been presented at the AWBA meeting in June, however, examples for determining the firming obligation to the Gila River Indian Community (GRIC) under different shortage scenarios were now included as Exhibit A. He noted that the next step was to develop a firming plan with the GRIC and enter into a separate agreement that clearly defines the method by which that obligation will be met. Mr. Buschatzke asked if the GRIC had seen the Firming Agreement. Mr. Henley responded that staff for the GRIC had reviewed the draft, but he was not aware if the Tohono O'Odham had also seen it. He reminded the Authority that the Firming Agreement was between the Secretary and the AWBA and that the GRIC did not want to begin discussions on a firming plan until the two parties had reached an agreement. Mr. Mawhinney sought reassurance that the figures in Exhibit A were examples, not contractual provisions, and that the firming obligation for the Indians was calculated

in the same manner as the M&I obligation. Ms. George expressed concern over the potential difficulty in meeting all of the AWBA's obligations considering the decrease in supplies available to the AWBA in 2008. Mr. Henley noted that there were other means by which the AWBA could meet its firming obligation to the GRIC and that the Authority's concerns would be recognized in the agreement that is negotiated. Mr. Mawhinney asked which source of funding would be utilized to meet the \$3 million in assistance to the Secretary and if the Authority would be requesting additional funding for its other obligations. Mr. Henley responded that the AWBA's obligation to the Secretary, as well as other Indian firming obligations, will be funded from the \$13.5 million appropriation that had been dedicated for Indian firming. He added that withdrawal fees could also be utilized absent additional appropriations from the Legislature.

Mr. Henley noted that the Secretary had delegated signature authority for the Firming Agreement to Reclamation's regional director. Chairman Guenther announced that the regional directors for the upper and lower basins had changed and that Lorri Gray was the new director for the lower basin. Gregg Houtz noted that changes to the agreement had not been suggested and that a joint signing was being arranged for next month. He made clear that all of the agreements required under the Arizona Water Settlements Act needed to be executed by the second week of December. Mr. Mawhinney made a motion to authorize Chairman Guenther to sign the Firming Agreement absent any substantive changes. Ms. Burns provided the second to that motion. The motion carried. (Note: Subsequent to the meeting, the Firming Agreement was signed by the Regional Director and the Chairman.)

#### Arizona Shortage-Sharing Efforts

Ms. Mitchell noted that Authority members had directed staff to draft a resolution or policy regarding the replacement of credits used for On-River M&I firming. She reviewed the draft resolution noting it was based on the Director's Shortage Sharing Workgroup Recommendations. The draft resolution proposed the following: 1) to establish a subaccount for long-term storage credits (credits) that had been used and replaced by mainstream M&I users and that these credits would be available to the Authority for purposes identified in statute, 2) credits in the subaccount would be available to mainstream users only to the extent that 100% of the goal previously identified as reasonable for shortage protection that had not been reserved will be set aside, 3) entities that reimburse the Authority for the replacement of credits will have priority for credits accrued in the subaccount, and 4) credits remaining in the subaccount after meeting the 100% goal for mainstream users would be available to the Authority for other purposes identified in statute. An example of the accounting for the replacement credit subaccount is provided as Exhibit A to the resolution. Ms. Mitchell also reminded the Authority that pursuant to a previous resolution, the priority for utilizing credits accrued from general fund monies was to set aside credits for M&I users outside the CAWCD service area, to implement the settlement of Indian water rights claims in Arizona, to assist CAWCD in meeting the demand of its M&I subcontractors, and lastly to fulfill water management objectives of the State. In response to a guestion from the Authority, Ms. Mitchell stated that the term "reasonable for shortage" was from the 2005 Agreement to Firm Future Supplies. Ms. George noted that the shortage-sharing agreement did not place a cap on

replacement credits for mainstream users and added that entities that reimburse the Authority for the replacement of credits should have those credits deposited into a separate subaccount in their name. Authority members questioned how credits would be replaced in the future if water was not available. Mr. Henley responded that in accordance with statute, the AWBA has 10 years to replace the credits, though in that timeframe they could potentially become very expensive. All entities, except for the Indian tribes, are required to pay the replacement costs. Ms. George noted that Exhibit A to the resolution was only an example because it did not reflect the revised firming numbers. Chairman Guenther inquired as to the amount of general fund credits that needed to be replaced. Mr. Henley responded that credits did not require replacement at this time, but that the AWBA had just over 400kaf of accrued credits. Mr. Mawhinney noted that 230,280 acre-feet of those credits had been assigned to the Mohave County Water Authority and placed in a subaccount under the AWBA account. He inquired where the remaining credits were held and the funding that would be utilized to obtain the credits still needed for meeting the On-River firming obligation. Mr. Henley noted the remaining credits were held in the AWBA's long term storage account. Ms. George remarked that the On-River M&I entities could provide the funding to store water if funds were not available to the AWBA. Mr. Buschatzke commented that there were other entities that did not have a firming agreement with the AWBA, such as Arizona American Water Company, that should be given the opportunity to participate and have credits available to them. In response to Ms. Burns questions regarding the AWBA's obligation to these other mainstream M&I users, Mr. Henley commented that under a shortage declaration, the AWBA would be obligated to provide credits, if available, to post-1968 subcontract holders that requested them. Authority members agreed to continue discussions and postpone action on the resolution until next year after the Shortage Guideline ROD has been issued.

Mr. Henley reminded the Authority that at the last meeting members had also requested staff to develop various options for utilizing the \$8 million that would be provided by Nevada under the Arizona-Nevada Shortage-Sharing Agreement. He reviewed four options and the pros and cons of each. The options included: 1) accruing credits that could be used to meet the AWBA's general firming obligations, 2) assisting entities that would be impacted first under shortage conditions, while reserving some credits for the AWBA's general obligations, 3) reserving the entire amount of credits for users who will be impacted first, and 4) setting the funds aside in an account at the State Treasurers Office for future use. Mr. Mawhinney showed a preference for option 1, while Ms. George noted that with regard to option 2, it was important to first determine the amount of credits that are needed for firming lower priority users before reserving credits for general purposes. Mr. Buschatzke commented that the firming amounts should be examined both with and without Mexico's participation in shortage sharing. Kathryn Sorensen (City of Mesa) pointed out that there were other non-Indian agricultural (NIA) subcontrators that could be impacted during shortages in addition to mainstream M&I users and requested that the Authority consider these entities when developing its plan for expending the \$8 million. Chairman Guenther inquired as to when shortages could impact NIA supplies. Mr. McCann responded that shortages could impact lower priority users as early as 2011. Mr. Buschatzke commented on the need for water for M&I users by

2025 and beyond, noting shortages were expected to be more frequent out into the future.

#### Call to the Public

Dennis Rule (Tucson Water) requested that meeting materials be available prior to the meetings to allow the public time to prepare comments. Ms. Mitchell commented that for most documents this was not a concern, however, staff was hesitant to provide certain draft documents to the public before Authority members had an opportunity to review them. Mr. Henley noted that there were incidences in the past where draft documents had been provided to individuals who abused the privilege by misrepresenting information within those documents. Authority members requested that staff include this issue as an agenda item for the next meeting.

Mr. Mawhinney requested that staff provide a summary for new materials presented, such as CAWCD's revised recovery notification letter.

Additional questions and comments made by the public are included in the above discussion.

The meeting concluded at 11:50 a.m.



Executive Office

December 11, 2007

Mr. Herbert R. Guenther Chairman Arizona Water Banking Authority 3550 N. Central Avenue Phoenix, AZ 85012

Dear Mr. Guenther:

Amended Letter Agreement for the Creation of Intentionally Created Unused Apportionment with Credits Created Under the 1992 Demonstration Agreement between CAWCD and MWD

This letter agreement amends and supersedes the December 2006 recovery agreement entered into by the Arizona Water Banking Authority (AWBA), the Central Arizona Water Conservation District (CAWCD), and The Metropolitan Water District of Southern California (Metropolitan).

In 1992, Metropolitan entered into an agreement with CAWCD to demonstrate the feasibility of CAWCD storing Colorado River water in central Arizona for the benefit of an entity outside the State of Arizona (the Demonstration Agreement). The Demonstration Agreement was amended in 1994 and is included with this letter.

Pursuant to the Demonstration Agreement, CAWCD created 80,909 acre-feet of long-term storage credits (LTSC) that may be recovered for Metropolitan from 89,000 acre-feet of Colorado River water consumptive use. These credits are held in CAWCD's Long-term Storage Account. It is our understanding that the Arizona Water Banking Authority (AWBA) is expressly authorized to enter into contracts necessary to cause a decrease in Arizona diversions from the Colorado River, ensuring that Arizona will use less than its full apportionment of Colorado River water in years in which Metropolitan calls on the LTSC held on its behalf pursuant to the Demonstration Agreement. By letters dated April 12, 1993, and May 18, 1995, the Secretary approved the Demonstration Agreement and agreed to honor Metropolitan's right to withdraw LTSC by treating water recovered by CAWCD under the terms of the agreement as Arizona's unused apportionment made available to Metropolitan under its Colorado River water delivery contract.

It is proposed that Metropolitan, CAWCD, and AWBA enter into this letter agreement to facilitate appropriate accounting of Colorado River consumptive use by the Secretary of the Interior (Secretary) in connection with the Demonstration Agreement. Our collective signatures will constitute our agreement of the terms and conditions described as follows:

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Mr. Herbert Guenther Page 2 December 11, 2007

- 1. By August 1 of each year, Metropolitan and CAWCD will agree on the amount of LTSC to be recovered in the following calendar year. Metropolitan and CAWCD shall report that information to the U.S. Bureau of Reclamation (Reclamation) for inclusion in its Annual Operating Plan (AOP). Metropolitan and CAWCD may change the quantity of LTSC to be recovered in any year by mutual agreement.
- 2. By December 15 of each year, CAWCD will notify AWBA as to the amount of LTSC to be recovered and/or exchanged in the following year and its detailed plans for either the recovery and exchange method or the credit exchange method.
- 3. By December 31 of each year that Intentionally Created Unused Apportionment (ICUA) is requested for the following year, the AWBA will notify Reclamation and Metropolitan as to the amount of ICUA to be created in the following year. The amount of ICUA to be created shall be equal to the amount of LTSC to be recovered or exchanged.
- 4. By June 1 of the year following the year ICUA was created, the AWBA shall, if requested by Reclamation, submit written notice certifying the quantity of ICUA and method used to create the ICUA to Reclamation, Metropolitan and CAWCD.
- 5. Costs associated with recovering water and creating ICUA with LTSC shall be as provided in the Demonstration Agreement between CAWCD and Metropolitan. No costs associated with this agreement and/or the Demonstration Agreement shall be borne by AWBA.
- 6. The terms of this Agreement will remain in effect until 80,909 acre-feet of ICUA is created by the AWBA for the benefit of Metropolitan.

CAWCD has agreed to recover 16,804 acre-feet for Metropolitan in 2007. Reclamation has agreed to make this amount of ICUA available to Metropolitan in 2007.

If you agree with these terms, please sign below and return one duplicate original to Metropolitan and CAWCD at your earliest convenience.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Mr. Herbert Guenther Page 3 December 11, 2007

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA By: Jeffrey Kight General Manager

Date:

CENTRAL ARIZONA WATER CONSERVATION DISTRICT

David S. "Sid" Wilson, Jr.

General Manager

Date: 12-13-07

ACCEPTED AND AGREED TO:

ARIZONA WATER BANKING AUTHORITY

By:

Herbert R. Guenther Chairman

Date:

HMR:tt o:\a\s\c\2007\HMR\_AWBA\_CAWCD\_120407\_MWD RECOVERY AGREEMENT\_FINAL\_R1.doc

Enclosures (2)

# DRAFT 12/18/07 ARIZONA WATER BANKING AUTHORITY ANNUAL PLAN OF OPERATION

# 2008



# Herbert R. Guenther, Chairman

December 2007

## The Arizona Water Banking Authority

# Summary

The Arizona Water Banking Authority (AWBA; Water Bank) was created in 1996 to store the unused portion of Arizona's annual allocation of the Colorado River. Until the AWBA was created, Arizona had not used its full 2.8 million acre-foot share of Colorado River water. Leaving a portion of Arizona's water in the Colorado River was a lost opportunity; the AWBA has seized this opportunity to further secure dependable water supplies necessary to ensure the state's long-term prosperity.

The Water Bank stores unused Arizona Colorado River water to meet future needs for:

- Firming (to secure) adequate water supply to municipal and industrial users in the Central Arizona Project service area and along the Colorado River in times of shortages;
- Meeting the management plan objectives of the Arizona Groundwater Code;
- Assisting in the settlement of Indian water rights claims;
- Assisting the Colorado River fourth priority municipal and industrial users in developing credits that could be used to increase their future supplies for firming; and
- Assisting Nevada and California through interstate water banking.

Each year, the AWBA pays the delivery and storage costs to bring Colorado River water into Central and Southern Arizona through the Central Arizona Project canal. The water is stored underground in existing aquifers (direct recharge) or is used by irrigation districts in lieu of pumping groundwater (indirect or in lieu recharge). For each acre-foot stored, the AWBA accrues credit that can be redeemed in the future when Arizona's communities or neighboring states need this backup water supply.

The money that funds the AWBA and, specifically, water storage for the benefit of Arizona (intrastate storage) comes from three sources that are either from existing revenue sources or from fees charged to those benefiting directly from the stored water. Restrictions on the ways these monies can be used depend on the source of the monies, which currently include:

- Fees for groundwater pumping currently collected within the Phoenix, Pinal and Tucson Active Management Areas (AMA). These monies can only be used to benefit the AMA in which the fees are collected.
- A four cent *ad valorem* property tax collected in the three county CAP service area. These monies can only be used to benefit the county in which the tax is levied.
- A general fund appropriation received at the discretion of the Legislature.

Another source of funding is used for water storage to aid Nevada (interstate storage) and is received pursuant to an Agreement for Interstate Water Banking.

In 2008, the Water Bank will store approximately 188,000 acre-feet for intrastate storage at a cost of \$6.05 million. Presently, there is no interstate storage planned for 2008, given the reduced water available to the AWBA.

A general fund appropriation of \$13.5 million received from the Legislature in 2006 specifies that it will be used for Indian firming. The Water Bank will spend \$1.7 million of this appropriation in 2008 as part of the State's obligation to the Secretary of Interior under the Arizona Water Settlements Act.

To date, the AWBA has delivered for storage approximately 3.2 million acre-feet at a cost of \$217 million; 2.67 million acre-feet for intrastate storage at a cost of \$120 million and 518,000 acre-feet for interstate storage at a cost of \$96.4 million.

### INTRODUCTION

The Arizona Water Banking Authority (AWBA) was created to store Arizona's unused Colorado River water entitlement in western, central and southern Arizona to develop long-term storage credits to: (1) firm existing water supplies for municipal and industrial users (M&I) along the Colorado River and Central Arizona Project (CAP) M&I users during Colorado River shortages or CAP service interruptions; (2) help meet the water management objectives of the Groundwater Code; and (3) assist in the settlement of American Indian water rights claims. Changes in the AWBA's enabling legislation in 1999 authorized the AWBA to participate in other water banking activities, however, no new water banking activities are included in this annual Plan of Operation.

The AWBA's storage (or banking) of water is accomplished through the Underground Water Storage, Savings and Replenishment Act (UWS) enacted by the Arizona legislature in 1994 and administered by the Arizona Department of Water Resources (ADWR). Through this program, the AWBA stores renewable water that currently has no immediate, direct use in either underground storage (USF) or groundwater savings (GSF) facilities. A USF is a facility that allows water to physically be added to an aquifer. A GSF is a facility where the renewable water is used in place of groundwater, creating a groundwater savings. The UWS program mandates the accounting of the renewable water stored and the development of long-term storage credits. The long-term storage credits developed by the AWBA will then be utilized by the AWBA when future conditions warrant. The use of credits for the three objectives listed above may differ and is dependent on the source of funds utilized to develop them.

The AWBA is required by statute to approve an annual Plan of Operation (Plan) by January 1 of each year. Prior to approval of the final Plan, the AWBA is required to solicit public comment. This is achieved by presenting a draft of the Plan to the Groundwater Users Advisory Councils (GUAC) for the Phoenix, Pinal and Tucson Active Management Areas (AMA) and to the county board of supervisors for counties outside of the AMA's if water storage is proposed there within the Plan. Presentation of the draft Plan must be made at publicly-noticed open meetings at which members of the public are permitted to provide comment. The AWBA also accepts public comment in writing up to the time the final draft Plan is presented for approval.

The Plan is intended to govern the operations of the AWBA over the course of the entire calendar year. The AWBA recognizes that day-to-day adjustments in the normal operations of the CAP or the individual storage facilities caused by maintenance and fluctuations in the weather may affect the actual monthly deliveries made on behalf of the AWBA. If the adjustments do not impact the overall annual delivery projections

contained in the Plan, they will not be deemed modifications to the Plan and will be addressed by staff and reported to the AWBA members on an as-needed basis.

# 2007 PLAN OF OPERATION

In 2007, the AWBA's eleventh full year of operation, the AWBA recharged approximately 388,000 acre-feet of Colorado River water and Arizona's total use of Colorado River water is forecast to be 2.77 million acre-feet (MAF) by the Bureau of Reclamation data dated December 5, 2007 (see Figure 1).

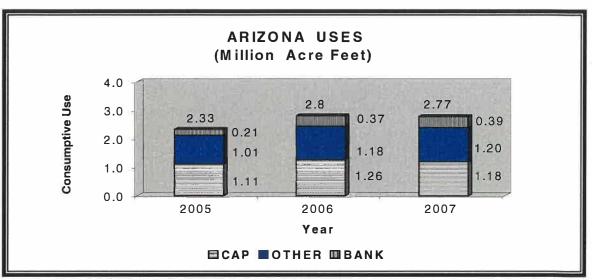


Figure 1

The Bureau of Reclamation forecasts total use of Colorado River water in the Lower Basin to be 7.44 MAF in 2007 (see Figure 2).

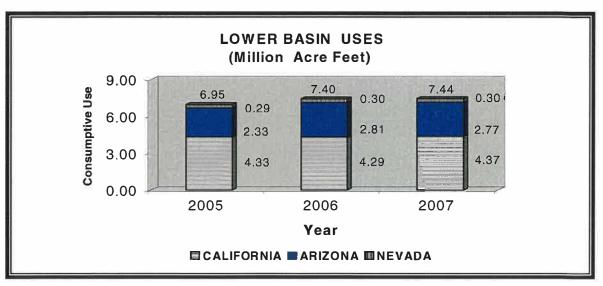


Figure 2

The AWBA recharged water at both USFs and GSFs in 2007. Table 1 lists the AWBA's recharge partners for 2007, the amount of water that can be stored under each AWBA water storage permit, and the amount of water delivered to the facility by the AWBA in 2007. Table 1 values are based on actual deliveries through November with December's deliveries estimated. The amount of water delivered to a facility is always greater than the amount of long-term storage credits earned by the AWBA because credits are computed by subtracting approximately 3-5% for losses and 5% for a "cut to the aquifer" from the total annual deliveries. Final figures for credits earned generally become available in the middle of the following year after review of the annual reports filed with the ADWR and are reported in the AWBA's Annual Report.

	Facility	Туре	Permit Capacity		rered -Feet)	
	,		(acre-feet)	Intrastate	Interstate	
	Agua Fria	USF	100,000	6,955	0	
	Hieroglyphic Mountains	USF	35,000	7,288	0	
MA	Tonopah Desert	USF	150,000	108,960	0	
XA	Chandler Heights Citrus	GSF	3,000	170	0	
Z	Queen Creek ID	GSF	28,000	9,197	0	
PHOENIX AMA	Gila River Indian IDD	GSF	37,520	15,483	0	
E E	Intrastate/Interstate AM	A Subto	tal	148,053	0	
	Phoenix AMA Subtotal		54	148,053		
	Central Arizona IDD	GSF	110,000	24,000	39,000	
4	Hohokam IDD	GSF	55,000	25,000	17,500	
A M	Maricopa-Stanfield IDD	GSF	120,000	23,000	60,090	
F	Gila River Indian IDD	GSF	18,480	7,626	0	
PINAL AMA	Intrastate/Interstate AMA	A Subtot	al	79,626	116,590	
	Pinal AMA Subtotal			196,216		
◄	Avra Valley	USF	11,000	6,600	0	
W N	CAVSARP	USF	80,000	14,500	0	
Ż	Lower Santa Cruz	USF	50,000	12,941	10,000	
TUCSON AMA	Intrastate/Interstate AMA	A Subtot	al	34,041	10,000	
2	Tucson AMA Subtotal			44,	041	
TOTAL	INTRASTATE & INTERST	ATE DE	LIVERIES	261,720	126,590	
TOTAL	DELIVERIES			388	,310	

#### Table 1

The Plan of Operation for 2007 proposed to deliver approximately 376,000 acre-feet of water with 249,000 acre-feet for intrastate deliveries and 127,000 acre-feet for interstate deliveries. In 2007, an increase in the value of agricultural commodities (small grains) created an associated increase in water demand. Due to the GSF partner's increased need for water, the AWBA was able to participate to a greater extent than originally projected, with overall deliveries 13,000 acre-feet higher than projected. The AWBA delivered approximately 388,000 acre-feet of water in 2007: 262,000 acre-feet for intrastate banking and 126,000 acre-feet for interstate banking. Figure 3 shows the acre-foot breakdown between GSFs and USFs for 2007 and a comparison between 2007 and previous years.

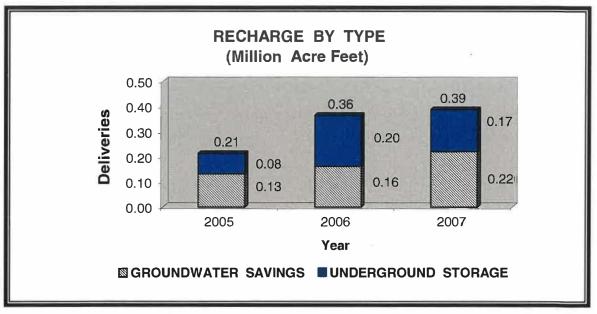


Figure 3	3
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# 2008 PLAN OF OPERATION

For 2008, the AWBA will store approximately 188,000 acre-feet of intrastate water. Water storage will be occurring in facilities from all three counties. For the first time the Plan of Operation incorporates storage to meet the State's obligations under the Arizona Water Settlements Act. Title III of the Settlements Act requires the State to contribute \$3 million to assist the Secretary of the Interior (Secretary) in meeting the Federal obligation to firm the Tohono O'Odham water. The Authority has chosen to expend monies from the \$13.5 million dedicated for Indian firming to develop long-term storage credits in the Tucson area, which will later be assigned to the Secretary to assist in meeting this obligation. In addition, there may be an opportunity to deliver water to the GRIC to meet a portion of the Southside Replenishment Bank obligation required under Title II. The AWBA has been given this obligation and requires the direct delivery of 15,000 acre-feet to develop the replenishment reserve under Title II of the Settlements Act. The AWBA is not planning any interstate storage in 2008.

When developing a Plan of Operation, the AWBA evaluates four critical factors: (1) the amount of unused water available to the AWBA for delivery; (2) the CAP capacity

available to the AWBA for the delivery of unused water; (3) the funds available and the costs required to deliver the unused water; and (4) the capacity available for use by the AWBA at the various recharge facilities. In addition to these critical factors, the AWBA takes into consideration recommendations made by the Groundwater Users Advisory Councils (GUAC) of the three AMAs regarding water management objectives and priorities for storage.

#### I. Water Availability

The factor of water availability consists of two parts: (1) the amount of water available on the Colorado River for diversion by the CAP within Arizona's allocation; and (2) the amount of CAP water available for delivery to the AWBA under the existing pool structure.

The Bureau of Reclamation distributed the Annual Operating Plan (AOP) for water year 2008 to the states in October of 2007. The AOP stated that the Normal Condition will govern the release of water for the states in the Lower Basin during calendar year 2008. Under this declaration, there are 2.8 MAF of water available for use within Arizona. Arizona's on-river use is forecast to be 1.2 MAF, leaving approximately 1.6 MAF available for diversion by CAP. Pursuant to the agreement between the Metropolitan Water District of Southern California, CAWCD, and the AWBA, approximately 25,000 acre-feet of Intentionally Created Unused Apportionment (ICUA) would be available to California from Arizona's apportionment.

With respect to availability of CAP water, the AWBA purchases water from the category that is termed excess water. Excess water is generally recognized to be all water available for delivery through the CAP, regardless of Secretarial declaration of condition, in excess of the quantities scheduled under long-term contracts and subcontracts. The availability of excess water is determined on an annual basis. Pursuant to current CAP policy, the AWBA has available to it any water not requested by another entity within Arizona. The AWBA shares an equal priority for water for municipal and industrial (M&I) firming with the Central Arizona Groundwater Replenishment District.

For a number of reasons, the amount of CAP water available to the AWBA was the significant limiting factor in this Plan. In past years, even though there was a great deal of interest for excess water by higher priority users, sufficient excess water was typically available for the AWBA. However for 2008, preliminary water orders by CAP customers, including requests from AWBA partners, exceeded CAP's projected supply of 1.575 MAF by 225,000 acre-feet. This increase in water orders was due to several factors, such as the price of incentive recharge water at a historic low of \$51/AF, increased water demand by irrigation districts in response to the commodity markets, increased use of water allocations for M&I subcontracts, and the need for Salt River Project (SRP) to maintain water storage in Roosevelt Lake because of continuing drought and associated lack of precipitation events reducing inflow to the SRP system. Since the AWBA can only order water not requested by higher priority users, these increased requests left little water available to the AWBA. After discussions with its customers, CAP was able to reduce its orders to within available supplies. Final CAP subcontract

orders were for 1.39 MAF, leaving approximately188,000 acre-feet available for the AWBA. This is almost 200,000 acre-feet less water available to the AWBA than in 2007.

Since supplies are limited, the 2008 Plan focuses on meeting intrastate deliveries first, utilizing funds available to the AWBA (discussed below). The Plan further prioritizes intrastate deliveries by delivering water for direct use utilizing the GSFs. After meeting those direct use opportunities, the remaining water is delivered to USFs. Additionally, because of the reduced water availability, the Plan does not include delivery and storage for interstate water banking for the State of Nevada. If water becomes available, the Plan could be amended to include interstate deliveries.

#### II. CAP System Capacity

Under normal operating conditions during a normal water supply year, CAP diverts approximately 1.6 million acre-feet. Although the CAP is capable of delivering approximately 180,000 acre-feet per month, the available capacity does not always total that because of unique situations, i.e. the filling of Lake Pleasant in the winter months, deliveries to the western portion of the aqueduct, New Waddell Dam releases to the aqueduct in the summer months and scheduled maintenance and outages. The CAP 2008 Operating Plan has planned maintenance south of the Brady pumping plant in the Tucson aqueduct for three weeks in the fall of 2008. This maintenance restricts deliveries to the southern end of the canal for this time period. While this factor imposes some temporal limitation on deliveries, it was not a limiting factor in developing this Plan.

#### III. Available Funds

The AWBA will have withdrawal fees collected in 2008 available for use in this Plan for intrastate storage. Withdrawal fees projected for collection in March of 2008 are \$3.4 million; of that amount, \$1.7 million is available for the Phoenix AMA, and approximately \$500,000 and \$1.2 million are available for the Tucson and Pinal AMAs, respectively. In addition, an appropriation of \$13.5 million was received by the Legislature in 2006. However, expenditure of this fund is limited to meeting the State's firming obligation under the Arizona Water Settlements Act (Settlements Act).

As in previous years, the CAWCD Board resolved to continue to retain the county *ad valorem* property taxes collected and not transfer those revenues to the AWBA Fund. Property tax revenues retained by CAWCD can be used to offset the cost of AWBA water deliveries in the tri-county CAWCD service area. The estimated *ad valorem* tax balances available for 2008, including carryover, are: Maricopa County (\$67.1 million); Pima County (\$5.7 million); and Pinal County (\$1.25 million).

Unlike other years, funding was not a limiting factor in developing the 2008 Plan. However, funding in the Pinal area did limit the amount of water available for storage. If more water was available, funding could have also been an issue for

Tucson. Nonetheless, the availability of funds is expected to be a consideration in the Pinal and Tucson areas in the future.

If water becomes available later in the year, there is approximately \$13.6 million available from the Nevada agreement that could be used to supplement funding available to the AWBA to insure that Arizona's full entitlement is diverted from the Colorado River.

#### IV. Available Storage Facility Capacity

AWBA staff conferred with facility operators to discuss their delivery schedules and their continued interest in participating with the AWBA. These discussions confirmed that there was significant interest in partnering with the AWBA and there was substantial permitted recharge capacity but, as in the past, previous commitments to other partners somewhat limited the availability of both the GSFs and the USFs to the AWBA. Additionally, the City of Tucson is interested in maximizing all available capacity for its own water storage.

For 2008, several partners that had previously stored water for the AWBA opted again not to provide storage capacity to the AWBA because other partners wanted to utilize their facilities. However, given the reduction in water availability, the AWBA still has sufficient capacity to meet its anticipated needs. If additional supplies become available, capacity should still be available to the AWBA.

The Water Delivery Schedule (Table 2) identifies the AWBA's partners for 2008 and the amount of water scheduled to be recharged. The second column in this section identifies the AWBA's water storage permit capacities for each facility based on the facility permits. The capacity available does not always equal the storage permit capacity because the storage facility operators may have agreements with other storage partners.

	BA-Recharge Sites A : GRUSP HIEROGLYPHIC MTNS AGUA FRIA TONOPAH DESERT TONOPAH Interstate	Permitted Capacity (AF) 200,000 35,000	Jan 0	Feb		Acre-feet		19.24							STALLS MIL
	A ; GRUSP HIEROGLYPHIC MTNS AGUA FRIA TONOPAH DESERT	(AF) 200,000 35,000		Feb			and the second		The second se						
	A ; GRUSP HIEROGLYPHIC MTNS AGUA FRIA TONOPAH DESERT	200,000 35,000		Feb	Max										
SF USF 기이에 IAH 네키지G	GRUSP HIEROGLYPHIC MTNS AGUA FRIA TONOPAH DESERT	35,000	0		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SF USF 기이예 I 에너지	HIEROGLYPHIC MTNS AGUA FRIA TONOPAH DESERT	35,000	0												
SF USF	AGUA FRIA TONOPAH DESERT			0	0	0	0	0	0	0	0	0	0	0	0
SF  >	TONOPAH DESERT		0	0	0	0	0	0	0	0	0	0	0	0	0
SF Izloløi Isl⊥		100,000	0	0	0	0	0	0	0	0	0	0	0	0	0
SF Izloløl Isl	I ONOPAH Interstate	150,000	1,892	5,058	0	0	0	0	0	0	0	0	0	0	6,950
r Zolsi L	WEST MARIC.COMBINE		0	0	0	0	0	0	0	0	0	0	0	0	0
rs N	WEST MARIC.COMBINE	1	0	0	0	0	0	0	0	0	0	0	0	0	6,950
rs N	SRP	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0,950
н 10 г	CHANDLER HGTS ID	3,000	0	0	0	0	0	50	50	50	50	0	0	0	200
	NEW MAGMA	54.000	0	0	0	0	0	0	0	0	0	0	0	0	0
	QUEEN CREEK	28,000	0	0	0	0	0	0	0	1,343	2,285	2,285	1,142	1,142	8,197
	TONOPAH ID	15,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	GILA RIVER INDIAN IDD	37,520	0	0	0	0	1,402	5,711	10,475	8,365	5,373	0	0	0	31,326
															39,723
Ī	TOTAL INTRASTATE		1,892	5,058	0	0	1,402	5,761	10,525	9,758	7,708	2,285	1,142	1,142	46,673
	TOTAL INTERSTATE		0	0	0	0	0	0	0	0	0	0	0	0	0
AMA TOTAL			1,892	5,058	0	0	1,402	5,761	10,525	9,758	7,708	2,285	1,142	1,142	46,673
PINAL AMA :															
C	CAIDD	110,000	2,000	2,000	1,000	1,500	2,000	5,500	5,500	5,500	3,000	2,000	1,000	1,000	32,000
	CAIDD Interstate		0	0	0	0	0	0	0	0	0	0	0	0	0
ц F	HOHOKAM	55,000	840	2,730	5,380	5,017	651	1,217	2,750	8,935	6,842	3,146	2,201	2,291	42,000
	HOHOKAM Interstate		0	0	0	0	0	0	0	0	0	0	0	0	0
	MSIDD	120,000	1,530	1,530 <sup>,</sup>	2,070	2,580	4,100	3,100	0	5,200	6,060	3,550	1,560	720	32,000
	MSIDD Interstate GILA RIVER INDIAN IDD	18,480	0	0	0	0	0 5.000	0	0	0	0	0	0	0	0
	ALA RIVER INDIAN IDD	10,400	0	0	0	0	5,000	0	U	0	0	0	0	0	111.000
	TOTAL INTRASTATE		4.370	6,260	8,450	9,097	11,751	9,817	8,250	19,635	15,902	8,696	4,761	4,011	111,000
	TOTAL INTERSTATE		4,570	0,200	0,400	0	0	0	0,230	0	0	0,030	0		0
	TOTAL INTERSTATE		4.370	6.260	8.450	9.097	11.751	9.817	8,250	19.635	15,902	8.696	4.761	4,011	111,000
TUCSON AMA:			4,010	0,200	0,400	0,001	11,701	0,017	0,200	10,000	10,002	0,000	4,701	4,011	
	AVRA VALLEY	11,000	700	700	700	350	500	700	700	700	700	300	300	650	7,000
	PIMA MINE RD	30.000	0	0	0	0	0	0	0	0	0	0	0	0	0
P	PMR Interstate		0	0	0	0	0	0	0	0	0	0	0	0	0
	LOWER SANTA CRUZ	50,000	870	0	0	0	0	2,930	3,800	3,800	3,800	2,700	1,900	3,800	23,600
<b>D</b> T	LSC Interstate		0	0	0	0	0	0	0	0	0	0	0	0	0
C	CAVSARP	80,000	0	0	0	0	0	0	0	0	0	0	0	0	0
S	SAVSARP	60,000	0	0	0	0	0	0	0	0	0	0	0	0	0
											_				30,600
ш	BKW	16,615	0	0	0	0	0	0	0	0	0	0	0	0	0
GSF IxI	KAI FARMS (Red Rock)	11,231	0	0	0	0	0	0	0	0	0	0	0	0	0
1															0
	TOTAL INTRASTATE		1,570	700	700	350	500	3,630	4,500	4,500	4,500	3,000	2,200	4,450	30,600
	TOTAL INTERSTATE		0	0	0	0	0	0	0	0	0	0	0	0	0
AMA TOTAL			1,570	700	700	350	500	3,630	4,500	4,500	4,500	3,000	2,200	4,450	30,500
Outside AMA:															
	HARQUAHALA VALLEY ID	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0
OUTSIDE TOT	AL					_						_	_		0
TOTAL INTRAS	STATE		7,832	12,018	9,150	9,447	13,653	19,208	23,275	33,893	28,110	13,981	8,103	9.603	188,273
TOTAL INTERS			0	0	0,100	0,111	0	0	0	0	0	0	0,100	0,000	0
TOTAL		1	7,832	12,018	9,150	9,447	13,653	19,208	-	33,893		13,981	8,103	9.603	188,273

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# DRAFT 12/18/07 NEW FACILITIES

One new facility, the Southern Avra Valley Storage and Recovery Project (SAVSARP), in the Tucson AMA may be used in 2008. The AWBA is in the process of drafting a new Water Storage Agreement with SAVSARP. No SAVSARP deliveries are scheduled in the 2008 Plan of Operation, yet if the Water Storage Agreement is executed in 2008, the AWBA may include deliveries to that facility if additional water becomes available.

# **INTERSTATE WATER BANKING**

The 2008 Plan of Operation does not include an interstate water banking component for the State of Nevada. Because of the reduced water supplies available to the Water Bank in 2008, it is important to complete intrastate water banking with the funds available to the AWBA before interstate water if offered. However, if water becomes available later in the year, either through precipitation events or the inability to accomplish underground storage due to maintenance or delivery problems, it may be possible to offer interstate water as part of the AWBA's deliveries.

# RECOVERY

Metropolitan Water District of Southern California (Metropolitan) has requested from CAWCD the recovery of 25,000 acre-feet of long-term storage credits for 2008. Pursuant to a letter agreement between Metropolitan, CAWCD, and the AWBA, those credits will be recovered and ICUA created in 2008. The letter agreement recognizes CAWCD is responsible for recovering the credits, the AWBA is responsible for creation of ICUA, and Metropolitan is responsible for the diversion of ICUA. Table 3 identifies the planned recovery schedule for 2008.

In June 2007, the CAWCD Board approved a conceptual recovery plan, which was developed by CAWCD staff through the stakeholder process. The stakeholder process will continue as CAWCD develops its final recovery plan. The recovery plan will assist the AWBA in determining appropriate locations for water storage.

Entity	Annual Amount (Acre-feet)
Maricopa-Stanfield Irrigation & Drainage District	10,000
Central Arizona Irrigation & Drainage District	11,000
Hohokam Irrigation & Drainage District	3,000
Central Arizona Groundwater Replenishment District	1,000
TOTAL	25,000

## Table 3. 2008 CAWCD Recovery Schedule

# DRAFT 12/18/07 PRICING

In August 2007, the CAWCD board adopted final water delivery rates for calendar year 2008. The rate for AWBA and other M&I Incentive recharge is \$51 per acre-foot. The delivery rate is the pumping energy rate 2 component (\$41 per acre-foot) plus 10 percent of the fixed OM&R charge (\$5.50 per acre-foot) plus a component to recover lost revenues from federal deliveries (\$5.00 per acre-foot). For 2008, the pumping energy rate 2 was calculated using the average of the actual or forecast above threshold energy rates for the previous three years.

In 2008, the AWBA maintained the cost share for the GSF partners at \$31 per acrefoot. Table 4 reflects the water delivery rate the CAP will charge the AWBA, the rate the GSF operators will pay for use of the AWBA's water and the various rates the AWBA will be charged to utilize the different USFs.

The Master Water Storage Agreement executed on July 1, 2002 describes the cost components that can be paid by the AWBA for storage at CAP facilities. On October 2, 2003, the CAWCD adopted a new policy regarding storage facility rates. Pursuant to the policy, the AWBA will pay an OM&R component for all water stored; that component is calculated by CAWCD annually for each AMA based on a rolling ten-year average. Additionally, for water stored for other than M&I firming purposes, the AWBA will pay a capital charge component. The capital charge is based on the total projected costs and projected storage of water over the lives of the facilities in the AMA and will not change annually unless there are significant changes in CAWCD's costs for recharge facilities in that AMA. There is no administration cost component in the facility cost because the AWBA pays the CAP administrative costs on an annual basis.

The rate established for interstate banking is \$217 per acre-foot, plus facility costs and facility capital costs.

Table 4.	2008	Water	and	Facility	Rates
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CAWCD delivery rate to	AWBA	\$51 per acre-foot				
Interstate rate		\$217 per acre-foot				
Groundwater Savings Fa	acility operator portion of delivery rate <sup>1</sup>					
Intrastate <sup>2</sup>		\$31 per acre-foot				
Interstate		\$26 per acre-foot				
Underground Storage Fa	acility rate paid by AWBA					
	Agua Fria Recharge Project (CAP) <sup>3</sup>	\$8.00 per acre-foot				
	Hieroglyphic Mtns. (CAP) <sup>3</sup>	\$8.00 per acre-foot				
	Tonopah Desert Recharge Project (CAP) <sup>3</sup>	\$8.00 per acre-foot				
	GRUSP	\$20.92 per acre-foot				
	West Maricopa Combine	\$28.00 per acre-foot				
	Avra Valley (CAP) <sup>4</sup>	\$15.00 per acre-foot				
	Lower Santa Cruz (CAP/Pima County) <sup>4</sup>	\$15.00 per acre-foot				
	Pima Mine Road (CAP) $^4$	\$15.00 per acre-foot				
	CAVSARP (Tucson Water)	\$13.57 per acre-foot				
	SAVSARP (Tucson Water)	TBD				

<sup>1</sup> This rate is paid directly to CAP by the GSF operators and is not available as revenue to the AWBA. The AWBA's rate for delivery of in lieu water is thus reduced to \$20/af for intrastate deliveries and \$191/af for interstate deliveries.

<sup>2</sup> The cost share portion for the Gila River Indian Irrigation District GSF is \$20/af through 2008 and reduces the AWBA rate to \$31/af for CY 2008.

<sup>3</sup> Additional capital charge of \$15 per acre-foot for interstate storage.

<sup>4</sup> Additional capital charge of \$9 per acre-foot for interstate storage.

For CAVSARP, the cost includes an administration component, a capital component and an O&M component. The cost was set by agreement dated March 3, 2003 with a 3% annual increase.

The estimated total cost of the AWBA's 2008 Plan of Operation is approximately \$5.8 million and includes the USF use fees and the CAP delivery rate minus the cost recovery from the GSF operator by the CAWCD.

#### ACCOUNTING

The AWBA's enabling legislation required the development of an accounting system that allows the tracking of all long-term storage credits accrued by the AWBA and the funding sources from which they were developed. The ADWR has established accounts that track both credits and funds.

Table 5 provides estimates of the funds available to be utilized by the AWBA including any funds carried over from previous years and an estimate of funds to be collected during the year, the funds to be utilized and the entity that holds the funds, and the credits that will accrue to those accounts based on the 2008 Plan.

	Funds Av	ailable (\$)	Funds Ut	tilized (\$)	Credits (AF)
	AWBA	CAWCD	AWBA	CAWCD	TEAL PARTY
Withdrawal Fees					
Phoenix AMA	\$1,700,000	-	\$1,549,000	-	42,940
Tucson AMA	\$500,000	-	\$500,000	-	6,970
Pinal AMA	\$1,200,000	-	\$1,200,000	-	52,670
Four Cent Tax					
Phoenix AMA	\$0	\$67,100,000	\$0	\$0	0
Tucson AMA	\$0	\$5,725,000 <sup>1</sup>	\$0	\$0	0
Pinal AMA	\$0	\$1,255,000	\$0	\$1,075,000	49,450
Other					
General	\$0				
Phoenix AMA		-	\$0	-	0
Tucson AMA		-	\$0	-	0
Pinal AMA		-	\$0	-	0
State Indian Firming	\$13,500,000				
Phoenix AMA		-	\$0	-	0
Tucson AMA			\$1,726,800	-	21,182
Pinal AMA		-	\$0	-	0
Gifts, Grants, Donations					
Nevada:	\$8,000,000 <sup>2</sup>				
Interstate Banking					
Nevada	\$13,65	55,000	\$	0	0
California	(not app	olicable)			
	Total Fund	s Available	Total Funds	Expended	Credits
Contraction of the second		35,000	\$6,05		173,212

# Table 5. Funding for 2008 Annual Plan of Operation

Includes \$970,209 in CAWCD's capital charge recovery for costs of construction of state demonstration projects when facilities are used for interstate purposes and by entities that do not pay the 4¢ ad valorem tax: 2004-2006 actual, 2007 estimated based on scheduled deliveries. <sup>2</sup> Southern Nevada Water Authority (SNWA) to provide \$8M to the AWBA to assist Arizona in offsetting impacts

from shortages pursuant to Arizona-Nevada Shortage-Sharing Agreement.

The 2008 Plan was developed expending all available withdrawal fees in the three AMAs with the exception of \$151,000 carryover in the Phoenix AMA. In addition, \$1.73 million will be expended from the Indian Firming fund to meet the AWBA's obligation under the Settlements Act. The 2008 Plan also requires utilization of a portion of the CAWCD funds.

Table 6 provides an estimate of the AWBA funds expended and the credits that have accrued to the various accounts based on the AWBA's recharge activities since inception.

	FUNDS	CRE	DITS <sup>1</sup>
	EXPENDED	AMOUNT (AF)	LOCATION
Withdrawal Fee			
Phoenix AMA	\$13,013,901	206,396	Phoenix AMA
Pinal AMA	\$11,161,067	322,766	Pinal AMA
Tucson AMA	\$6,031,355	83,617	Tucson AMA
Four Cent Tax			
Maricopa County	\$57,783,548	1,075,789	Phoenix AMA
Pinal County	\$3,609,108	116,231	Pinal AMA
Pima County	\$18,013,866	243,917	Tucson AMA
Other			
General Fund	\$11,100,865	403,830	
	\$1,522,115	42,316	Phoenix AMA
	\$6,394,964	306,968 <sup>2</sup>	Pinal AMA
	\$3, 183, 786	54,546	Tucson AMA
Interstate			
California	(not applicable)		
Nevada	\$96,399,272	529,096 <sup>3</sup>	
TOTAL	\$217,112,982	2,981,642	

#### Table 6. Cumulative Totals of Long-term Storage Credits 1997-2007

<sup>1</sup> Actual credits used for 1997-2006; credits estimated for 2007.

<sup>2</sup> 230,280 AF of credits reserved pursuant to contract dated February 2, 2005 with Mohave County Water Authority.

<sup>3</sup> Includes 50,000 acre-feet of credits transferred from CAWCD pursuant to Amended Agreement for Interstate Water Banking.

# PUBLIC REVIEW AND COMMENT

The AWBA staff held meetings with the GUACs for the Phoenix, Pinal and Tucson AMAs as required by statute. The Plan was distributed to the public and was posted on the AWBA web page for public review and comment.

4

#### Phoenix GUAC

In general, the GUAC supported the Plan and had no requests for changes to it. There were questions concerning the increased water demand, pricing for in-lieu deliveries, and Indian firming.

#### Pinal GUAC

The GUAC supported the Plan and had no requests for changes to it. Favorable comments were received on the progress made by the Water Bank and overall benefits the State is receiving from AWBA activities.

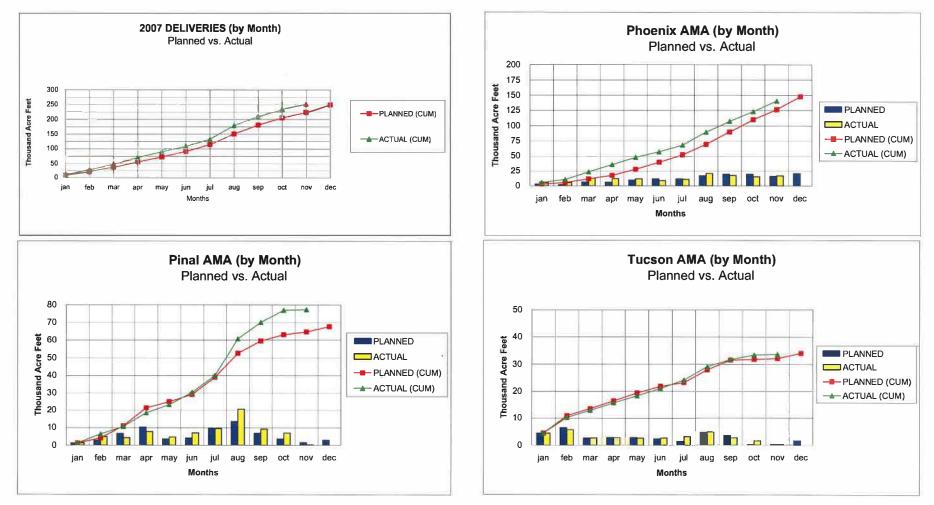
#### Tucson GUAC

General discussion regarding the Plan included: changes in AWBA storage at facilities and overall storage capacity available to the AWBA. There were questions concerning the increased water demand and its relationship to commodity markets and incentive water pricing.

ARIZONA WATER BANKI			\$4,975	,800		
REVENUES AV	All ABLE for	2008 REC	HARGE			
4 cent tax				\$0		
Maricopa <sup>1</sup>				\$0		
Pinal <sup>1</sup>				\$0		
Pima <sup>1</sup>						
			\$0			
Withdrawal Fee				,400,000		
Phoenix A			\$1,700,00			
Pinal AMA	4 <sup>2</sup>		\$1	,200,000		
Tucson A	MA <sup>2</sup>		9	\$500,000		
General Fund Appropri	iation			\$0		
State Indian Firming			\$13	,500,000		
Interstate			\$13	,655,000		
TOTAL			\$30	,555,000		
Additional 4 cent tax retained by th Projected based on 2007 collectio	e Central Arizona V	Water Consei	vation District			
	RY and RECHAP	GE RATE	3			
Water Delivery						
•	Rate (Intrastate	e)	\$51.00			
Interstate	-)	\$217.00				
Direct Bacharna Facilit	. Dete		Intractata	Other <sup>3</sup>		
Direct Recharge Facility			Intrastate	Other <sup>3</sup>		
Avra Valle			\$15.00	\$24.00		
Pima Min			\$15.00	\$24.0		
Lower Sa			\$15.00	\$24.0		
	hic Mountains		\$8.00	\$23.0		
-	Recharge Pro	ject	\$8.00	\$23.0		
Tonopah			\$8.00	\$23.0		
CAVSAR			\$13.57	\$13.5		
<sup>3</sup> Includes	a capital recov	ery for sta	ate demo pro	ojects		
Cost Recovery for In-lieu F	Recharge		\$31.00	\$26.0		
Cost Recovery for Gila Riv	ver Indian IDD	GSF	\$20.00			
WATE	R and RECHAR	GE COSTS				
	Water Stored	\$/AF		Total		
	(AF)					
4 cent tax				\$		
Maricopa	0	\$0.00		\$		
Pinal	Ő	\$0.00		\$		
Pima	Ő	\$0.00		\$		
Withdrawal Fee				3,249,00		
	40.070	¢00.40				
Phoenix AMA	46,673	\$33.19		1,549,00		
Pinal AMA	57,250	\$20.96	\$1	1,200,00		
Tucson AMA	7,576	\$66.00		\$500,000		
State Indian Firming	23,024	\$75.00	\$*	1,726,80		
Interstate	0	NA		\$		
Total 2008	134, 523		¢.	4,975,80		
	DJECTED CARF	YOVER		-,373,60		
Withdrawal Fees						
Phoenix	AMA			\$151,00		
			-			
State Indian Firming				1,773,20		
Interstate				3,655,00		

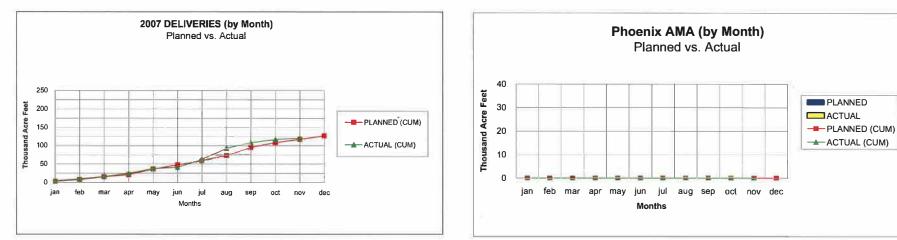
Central A	rizona Water Co	nservation Distri	ct
4 cent tax Availa	able		
Maricopa <sup>4</sup>		\$67,100,000	
Pinal⁴	\$1,255,000		
Pima⁴	\$5,725,000		
Total 2008		\$74,080,000	
	Water Stored	\$/AF	Total
	(AF)		
4 cent tax Utilize	ed		
Maricopa	0	NA	\$0
Pinal	53,750	\$20.00	\$1,075,000
Pima	0	NA	\$0
Total 2008	53,750		\$1.075.000

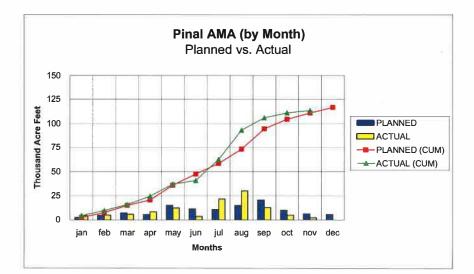
# 2007 Plan of Operation

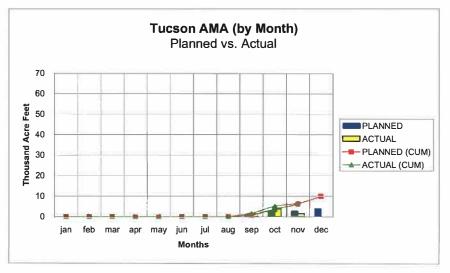


# 2007 Plan of Operation

INTERSTATE







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ual deliveries updated n of Operation	14-Dec-07 <i>1-Jan-0</i> 7	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	totai
oenix AMA Intrastate														
	GRUSP	0	0	0	0	0	0	0	0	0	0	0	0	0
	AGUA FRIA	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0	0	0
	AGUA FRIA	0	0	0	0	0	0	0	0	0	1,755	1,590 2, <i>600</i>	0 2,600	1,590 <u>6,955</u>
	HIEROGLYPHIC MTNS	0	0	0	0	0	1,888	0	0	0	1,677	2,491	0	6,056
	TONOPAH DESERT	0 5,561	0 5,348	0 12,878	0 12,261	0 12,050	0 6,983	0 11,244	<mark>0</mark> 15,487	0 10,763	0 9,357	<mark>2,700</mark> 12,305	2,700 0	<mark>5,400</mark> 114,237
		3,175	2,398	6,275	6,000	10,000	12,000	12,000	12,000	12,000	13,000	10,000	12,000	110,848
	CHCID	0	0 0	0 50	0 50	0 50	0 100	0 75	0	0	0	0	0	0
	NMIDD	0	0	0	0	0	0	75 0	75 0	50 0	<mark>83</mark> 0	0 0	0 0	533 0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	QCID	0	0 0	0 0	0 0	0	0	0	1,661	2,073 2,285	2,447	938	0	7,119
	SRP	0	0	0	0	0	0	0	1,343 0	2,200	2,285 0	1,142 0	1,142 0	8,197 0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	GRIIDD	0	0	0	0	0	0	0	3,992 <u>3,986</u>	5,074 5,781	2,189 <u>3,090</u>	0	0 2,626	11,255 15,483
Subtotal Total to date	-	5,561 5,561	5,348 10,909	12,878 23,787	12,261 36,048	12,050 48,098	8,871 56,969	11,244 68,213	21,140 89,353	17,910 107,263	15,670 122,933	17,324 140,257	0 140,257	140,257 140,257
Projected total t	o date	3,175	5,573	11,898	17,948	27,998	40,098	52,173	69,577	89,693	109,906	126,348	147,416	147,416
Interstate	GRUSP	0	0	0	0	0	0	0	0	0	0	0	0	0
	GRUSP	0	0	0 0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 0
	AGUA FRIA	0	0	0	0	0	0	0	0	0	0	0	0	0
	HIEROGLYPHIC MTNS	0 0	0 0	0 0	0 0	0 0	<u>0</u>	0 0	0 0	0 0	0 0	0 0	0 0	0 0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	TONOPAH DESERT	0	0	0	0	0	0	0	0	0	0	0	0	0
	CHCID	0 0	0 0	0 0	0 0	0 0	<u>0</u>	0 0	0 0	0 0	0 0	0 0	0 0	0 0
	Sholb S	0	0	0	0	0	0	0	0	0	0	0	0	0
	NMIDD	0	0	0	0	0	0	0	0	0	0	0	0	0
	QCID	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
		0	0	0	0	0	0	0	0	0	0	0	0	0
	SRP	0	0	0	0 0	0	0	0	0	0	0	0	0	0
	TID	0	0	0	0	0	0	0	0	0 0	0 0	0 0	0 0	0 0
		0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Total to date		0	0	0	0	0	0	0	0	0	0	0	0	0
Projected total t	o date	0 0	0 0	0 0	0 0	0	0	0 0	0	0	0	0	0 0	0 0
		-				-			Ū.		Ŭ	5		
Combined														·
Subtotal		5,561	5,348	12,878	12,261	12,050	8,871	11,244	21,140	17,910	15,670	17,324	0	140,257
Total to date	in data	5,561	10,909	23,787	36,048	48,098	56,969	68,213	89,353	107,263	122,933	140,257	140,257	140,257
Projected total t	o date	3,175	5,573	11,898	17,948	27,998	40,098	52,173	69,577	89,693	109,906	126,348	147,416	147,416

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14.1

tual deliveries updated an of Operation	14-Dec-07 <del>1-Jan-07</del>	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	
nal AMA														
Intrastate	CAIDD	0	0	1,771	4,621	1,608	4,000	2,000	3,500	0	2,549	340	0	20,
	MSIDD	0 520	0	1,000	5,000	1,000	1,000	4,000	2,000 4,600	2, <i>500</i> 1,800	1,000 0	1,000 0	1,500 0	<mark>20</mark> , 23,
	MSIDD	520 520	1,530 <u>1,030</u>	2,560 1,560	3,160 2,070	3,130 2, <i>590</i>	3,110 <u>3,130</u>	2,590 <u>3,110</u>	2,590	1,560	1,040	590	210	23,
	HIDD	853	3,482	0	0	0	0	5,009	10,656	5,000	0	0	0	25,
		800	1,900	4,200	3,300	0	0	2,750	7,050	0	0	0	0	20,
	GRIIDD	0	0	0	0	0	0	0	1,966	2,499	4,445	0	0	8,
Subtotal	-	1,373	5,012	4,331	7,781	4,738	7,110	9,599	1,964 20,722	2,847 9,299	1,522 6,994	340	<u>1,293</u> 0	
Total to date		1,373	6,385	10,716	18,497	23,235	30,345	9,599 39,944	60,666	9,299 69,965	76,959	77,299	77,299	77
Projected tot	al to date	1,320	4,250	11,010	21,380	24,970	29,100	38,960	50,600	54,660	56,700	58,290	60,000	67
Interstate	CAIDD	0	0	0	0	4,993	302	14,176	15,760	556	0	0	0	35
		0	0	3,000	1,000	5,000	5,000	7,000	8,000	7,000	2,000	500	500	39,
	MSIDD	4,648	5,041	6,155	8,584	7,542	3,420	3,420	13,000	8,280	0	0	0	60
		2,690	4,860	4,150	4,480	9,850	5,940	3,420	4,660	7,790	4,960	3,780	3,510	60
	HIDD	40 40	80 80	0 180	0 300	0 400	0 550	4,290 525	1,400 2,335	4,159 <u>6,050</u>	5,191 3.130	2,340 2,085	0 1,825	17 17
Subtotal	-	4,688	5,121	6,155	8,584	12,535	3,722	21,886	30,160	12,995	5,191	2,340	0	113
Total to date		4,688	9,809	15,964	24,548	37,083	40,805	62,691	92,851	105,846	111,037	113,377	113,377	113
Projected tot	al to date	2,730	7,670	15,000	20,780	36,030	47,520	58,465	73,460	94,300	104,390	110,755	116,590	116
Combined							_					_		<i>b</i> .
Subtotal		6,061	10,133	10,486	16,365	17,273	10,832	31,485	50,882	22,294	12,185	2,680	0	190
Total to date Projected tot	al to date	6,061 <sup>°</sup> <u>4,050</u>	16,194 11,920	26,680 26,010	43,045 42,160	60,318 <u>61,000</u>	71,150 76,620	102,635 97,425	153,517 <u>124,060</u>	175,811 148,960	187,996 1 <u>61,090</u>	190,676 169,045	190,676 176,590	190 1 <i>84</i>
-		4,000	11,920	20,010	42,100	01,000	70,020	97,420	124,000	140,900	101,090	109,045	170,030	104
Icson AMA Intrastate	AVRA VALLEY	885	706	665	560	383	350	753	710	556	412	233	0	e
Introducto		650	650	650	650	650	150	650	650	650	300	300	650	6
	CAVSARP	2,000	2,000	2,000	2,250	2,250	2,250	250	250	0	1,250	0	0	14
		2,000	2,000	2,000	2,250	2,250	2,250	250	250	0	0	0	1,250	14
	PIMA MINE	0	0	0	0	0	0	0	0	0	0	0 0	0	
	LOWER SANTA CRUZ	1,621	3,025	0	0	0	0	2,180	3,919	2,196	0	0	0	12
		1,829	3,800	0	0	0	0	512	3,800	3,000	0	0	0	12
	KAI-RED ROCK	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	
Subtotal		4,506	5,731	2,665	2,810	2,633 18,345	2,600 20,945	3,183 24,128	4,879 29,007	2,752 31,759	1,662 33,421	233 33,654	0 33,654	30
Total to date Projected tot	al to date	4,506 <u>4,479</u>	10,237 10,929	12,902 13,579	15,712 <u>16,479</u>	19,379	20,945	24,120	29,007	31,541	31,841	32,141	34,041	34
									1 · · ·					
Interstate	AVRA VALLEY	0	0	0	0	0	0	0	0	0	0	0 0	0	
	CAVSARP	0	0	0	0	0	0	0	0	0	0	0	0	
		0	0	0	0	0	0	0	0	0	0	0	0	
	PIMA MINE	0	0	0	0	0	0	0	0	0	0	0	0	
		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 1,627	0 3,592	0 1 / 71	0 0	6
	LOWER SANTA CRUZ	0	0	0	0	0	0	0	0	1,627 800	3,592 2,700	1,471 2,700	3,800	10
	KAI-RED ROCK	0	0	0	0	0	0	0	0	0	2,700	0	0	10
		0	0	0	0	0	0	0	0	0	0	0	0	
Subtotal		0	0	0	0	0	0	0	0	1,627	3,592	1,471	0	6
Total to date		0	0	0	0	0	0	0	0	1,627 <u>800</u>	5,219 <u>3,500</u>	6,690 <u>6,200</u>	6,690 10,000	( 10
Projected tot		U	U	U	U	U	U	U	U	000	3,000	0,200	10,000	10
Combined														2
Subtotal		4,506	5,731	2,665	2,810	2,633	2,600	3,183	4,879	4,379	5,254	1,704	0	40
Total to date Projected tot	al to date	4,506 <u>4,479</u>	10,237 <u>10,929</u>	12,902 13,579	15,712 16,479	18,345 19,379	20,945 21,779	24,128 23,191	29,007 27,891	33,386 <u>32,341</u>	38,640 <u>35,341</u>	40,344 <u>38,341</u>	40,344 44,041	40 44
TOTAL		40.100			04 400			45.010						_
TOTAL		16,128 16,128	21,212 37,340	26,029 63,369	31,436 94,805	31,956 126,761	22,303 149,064	45,912 194,976	76,901 271,877	44,583 316,460	33,109 349,569	21,708 371,277	0 371,277	371 371
Total to date														

1

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# CENTRAL ARIZONA PROJECT ANNUAL RECOVERY PLAN & USE

Calendar Year 2007

(values in acre-feet)

Revised12/05/07

## Pinal County Irrigation Districts Recovery Schedule:

	MSIDD		CAIDD		HIDD		TOTAL	
MONTH	SCH	Used	SCH	Used	SCH	Used	SCH	Used
Jan	0	424	0	0	0	0	0	424
Feb	1,100	181	0	0	0	0	1,100	181
Mar	1,500	892	756	756	0	0	2,256	1,648
Apr	1,300	0	756	756	0	0	2,056	756
May	1,100	131	756	1,187	0	0	1,856	1,318
Jun	500	265	756	1,270	0	0	1,256	1,535
Jul	0	224	756	1,257	0	0	756	1,481
Aug	600	0	756	1,037	0	0	1,356	1,037
Sep	1,200	0	756	1,163	0	0	1,956	1,163
Oct	1,300	0	756	874	0	0	2,056	874
Nov	600	0	756	504	0	0	1,356	504
Dec	800	0	0	0	0	0	800	0
Total	10,000	2,117	6,804	8,804	0	0	16,804	10,921

\* Recovered water will be posted as Ag Settlement Pool water on all monthly delivery reports.

\*\* Current Agreement will be amended to reflect credit exchange.

Total MWD credits for recovery	( 5% cut to aquifer + 4,909 af losses)=	80,909
		,

# Remaining credits to be recovered =

69,988

## AGREEMENT BETWEEN THE SECRETARY OF THE INTERIOR AND THE STATE OF ARIZONA FOR THE FIRMING OF CENTRAL ARIZONA PROJECT INDIAN WATER

1. <u>PREAMBLE</u>: THIS FIRMING AGREEMENT, hereinafter referred to as "Agreement" is made and entered into this  $1 \le 14$  day of  $1 \times 16 \times 16 \times 16$ , 2007, pursuant to the Act of June 17, 1902, 32 Stat. 388, and acts amendatory thereof and supplementary thereto, including, but not limited to the Colorado River Basin Project Act of September 30, 1968 (82 Stat. 885) (P.L. 90-537), as amended, the Arizona Water Settlements Act of December 10, 2004, (118 Stat. 3478) (P.L. 108-451), Arizona Revised Statutes, Title 45 Section 2423, as amended, and Arizona Revised Statutes, Title 45, Section 2491, between the UNITED STATES OF AMERICA, acting through the Secretary of the Interior, hereinafter referred to as the "Secretary," and the STATE OF ARIZONA, acting through the Arizona Water Banking Authority, hereinafter referred to as the "Authority;"

#### WITNESSETH, THAT:

#### 2. EXPLANATORY RECITALS:

2.1 WHEREAS, Paragraph 9 of the Arizona Water Settlements Agreement, effective September 20, 2006, (also known as the Master Agreement) among the United States of America, the State of Arizona, and the Central Arizona Water Conservation District, provided for the reallocation of 197,500 acre-feet per year of CAP NIA Priority Water to Indian tribes, subject to certain conditions, and further provided that the reallocated water retain the priority of CAP NIA Priority Water; and

2.2 WHEREAS, CAP NIA Priority Water is more vulnerable to reductions in times of shortage as compared to CAP Indian Priority Water or CAP M&I Priority Water; and

2.3 WHEREAS, Section 105 of P.L. 108-451 requires the Secretary and the State of Arizona to develop a firming program to ensure that 60,648 acre-feet of CAP NIA Priority Water shall, for a period of 100 years, be delivered during Water Shortages in the same manner as CAP M&I Priority Water; and

2.4 WHEREAS, Section 105(b)(1) of P.L. 108-451 requires the Secretary to firm 28,200 acre-feet of CAP NIA Priority Water reallocated to the Tohono O'odham Nation and to firm 8,724 acre-feet of CAP NIA Priority Water to be reallocated in the future to other Arizona Indian tribes; and

2.5 WHEREAS, Section 105(b)(2) of P.L. 108-451 requires the State of Arizona to firm 15,000 acre-feet of CAP NIA Priority Water reallocated to the Gila River Indian Community and to firm 8,724 acre-feet of CAP NIA Priority Water to be reallocated in the future to other Arizona Indian tribes, and further requires the State of Arizona to assist the Secretary in the Tohono O'odham Nation firming requirement; and

2.6 WHEREAS Section 207 of P.L. 108-451 requires the Secretary and the State of Arizona to enter into an agreement to carry out the obligation of the State of Arizona under Section 105(b)(2)(A) of P.L. 108-451 as a condition precedent to the enforceability of Title II of P.L. 108-451 and the Amended and Restated Gila River Indian Community Water Rights Settlement Agreement ("GRIC Settlement Agreement"); and

2.7 WHEREAS, Section 207 of the Gila River Indian Community Water Rights Settlement Act of 2004, Title II of P.L. 108-451, requires as a condition precedent to the enforceability of Title II of P.L. 108-451 and the GRIC Settlement Agreement that the State of Arizona enact legislation to authorize the firming required by section 105 of P.L. 108-451; and

2.8 WHEREAS, Section 306 of the Southern Arizona Water Rights Settlement

Amendments Act of 2004, Title III of P.L. 108-451, requires that the State of Arizona contribute \$3,000,000 toward the firming obligation identified in Section 105(b)(1)(A) of P.L. 108-451 either in the form of cash or in-kind goods and services in accordance with a schedule that is acceptable to the Secretary and the State; and

2.9 WHEREAS, Paragraph 8.23 of the GRIC Settlement Agreement confirms the State of Arizona's obligation to firm 15,000 acre-feet per year of CAP NIA Priority Water to the equivalent of CAP M&I Priority Water for a period of 100 years after the Title II Enforceability Date; and

2.10 WHEREAS, Paragraph 5.10 of the Tohono O'odham Settlement Agreement dated May 5, 2006, confirms the obligation of the Secretary to firm 28,200 acre-feet per year of CAP NIA Priority Water to the equivalent of CAP M&I Priority Water for a period of 100 years after the Title III Enforceability Date and confirms the requirement of the State of Arizona to provide assistance to the Secretary in firming that water; and

2.11 WHEREAS, in 2005, the Legislature of the State of Arizona enacted HB 2728 which created the Arizona Water Firming Program Study Commission ("Study Commission") and directed the Study Commission: (a) to study options for a water firming program to satisfy the State of Arizona's obligations under Section 105 of P.L. 108-451, (b) to identify appropriate mechanisms to firm water, (c) to study the existing powers and duties of the Authority and the general statutory authorities necessary to implement the firming program, and (d) to make recommendations regarding the appropriate statutory and regulatory provisions necessary to fully implement the water firming program; and

2.12 WHEREAS, the Study Commission met frequently in 2005 to perform technical studies and to discuss the issues related to Indian firming and the Study Commission then issued

its Final Report to the Legislature on January 6, 2006, which recommended that the Arizona State Legislature empower the Authority to include a variety of programs to address Indian firming needs within its Annual Plan of Operation and the 10-Year plan and identified the most feasible mechanism to satisfy the State's firming obligation and provide funding; and

2.13 WHEREAS, in 2006, the Arizona State Legislature enacted HB 2835, codified as amendments to Arizona Revised Statutes Title 45 Section 2423, which adopts the recommendations of the Study Commission and provides that the Authority shall be designated as the agent for the State of Arizona to carry out the obligations of the State under Section 105 of P.L. 108-451; and

2.14 WHEREAS, in 2006, the Arizona State Legislature enacted Arizona Revised Statutes Title 45 Section 2491 to provide statutory authority for the Authority to perform the measures necessary to satisfy the firming obligations; and

2.15 WHEREAS, in 2006, the State of Arizona enacted HB 2863 (Laws 2006, Chapter 344), which deposits \$13,500,000 from the General Fund into the Arizona Water Banking Fund in FY 2007 for the purposes of carrying out the firming obligations of the State beginning after the Enforceability Date of the P.L. 108-451.

NOW THEREFORE, in consideration of the mutual and dependent covenants herein contained, it is agreed as follows:

3. **DEFINITIONS**:

3.1 "Arizona Water Banking Authority" or "Authority" means the State entity created by the Arizona legislature codified as A.R.S. § 45-2401, *et seq*, and duly designated as the State of Arizona's agent for this Agreement.

3.2 "Central Arizona Project" or "CAP" means the federal reclamation project

authorized by the Colorado River Basin Project Act of 1968, 82 Stat. 885, as amended.

3.3 "CAP Indian Priority Water" means that CAP water having an Indian delivery priority.

3.4 "CAP M&I Priority Water" means that CAP water having municipal and industrial delivery priority.

3.5 "CAP NIA Priority Water" means that CAP water having non-Indian agricultural delivery priority.

3.6 "Delivery" means direct physical delivery of water, exchange of water, or delivery to a lessee.

3.7 "Title II Enforceability Date" means the date on which the Secretary publishes in the Federal Register a statement of findings as required by Section 207 of P.L. 108-451, as such section may be amended, providing full enforceability for the GRIC Settlement Agreement.

3.8 "Title III Enforceability Date" means the date on which the Secretary publishes in the Federal Register a statement of findings as required by Section 302 of P.L. 108-451, as such section may be amended, providing full enforceability for the Tohono O'odham Settlement Agreement dated May 5, 2006.

3.9 "Water Shortage" means available CAP water is insufficient to fully meet the demand of Arizona Indian Tribes and their lessees, if any, for that CAP NIA Priority Water reallocated to the tribes in accordance with P.L. 108-451.

4. <u>EFFECTIVENESS AND TERMINATION</u>: After execution by each of the respective parties, this Agreement shall become effective on January 1 of the next calendar year following the Title II Enforceability Date and shall terminate 100 years thereafter; <u>provided</u>, <u>however</u>, subsection 7.2(g) shall continue under its own provisions.

#### 5. AUTHORITY'S RESPONSIBILITY FOR FIRMING GRIC CAP WATER:

5.1 Subject to the provisions of subsection 5.2 below, the Authority shall, in each year of this Agreement in which there is a Water Shortage, firm 15,000 acre-feet of CAP NIA Priority Water reallocated to GRIC in accordance with P.L. 108-451, upon demand of GRIC. To satisfy this firming obligation the Authority shall cause to be delivered to GRIC up to 15,000 acre-feet of water in an amount determined as follows:

(a) Calculate the total water quantity that would have been available to GRIC as if it had received 15,000 acre-feet of CAP M&I Priority Water allocation with the remainder of its reallocated CAP water keeping its CAP NIA Priority Water status.

(b) Calculate the amount of CAP NIA Priority Water made available to GRIC that year.

(c) Subtract the amount calculated in (b) from the amount calculated in (a) to determine the amount of CAP water the Authority shall firm for GRIC.

5.2 In each year of this Agreement in which there is a Water Shortage, the Authority's obligation in subsection 5.1 above to firm CAP NIA Priority Water reallocated to GRIC under P.L. 108-451 shall commence at such time as GRIC entitlements to CAP Indian Priority Water and CAP M&I Priority Water for such year are fully exhausted. <u>See</u> Exhibit A, which is attached hereto and incorporated herein, for representative calculations.

5.3 The parties to this Agreement recognize that the Authority may enter into a separate contract with GRIC with respect to the conditions under which GRIC will demand and the Authority will cause to be delivered water firmed by subparagraph 5.1 of this Agreement, which contract may have the effect of modifying the extent to which GRIC will receive water otherwise available to GRIC under this Agreement, and further recognize that the Secretary need

not be a party to such contract.

6. <u>AUTHORITY'S RESPONSIBILITY FOR FIRMING CAP WATER FOR OTHER</u> TRIBES:

6.1 Subject to the provisions of subsection 6.2 below, the Authority shall, in each year of this Agreement in which there is a Water Shortage, firm 8,724 acre-feet of CAP NIA Priority Water to the extent such water has been reallocated to other Arizona Indian tribe(s) in accordance with Section 104(a)(1)(A)(iii) of P.L. 108-451, upon demand of such tribe(s). To satisfy this firming obligation, the Authority will cause to be delivered to such tribe(s) a quantity of water up to that portion of the 8,724 acre-feet of water reallocated to that tribe in an amount calculated as follows:

(a) Calculate the total water quantity that would have been available to each tribe as if it had received a quantity of CAP M&I Priority Water equal to the amount of firmed water reallocated to that tribe, with the remainder of that tribe's reallocated CAP water keeping its CAP NIA Priority Water status.

(b) Calculate the amount of NIA Priority Water available to that tribe that year.

(c) Subtract the amount calculated in (b) from the amount calculated in (a) to determine the amount of CAP water the Authority shall firm for that tribe.

6.2 In each year of this Agreement in which there is a Water Shortage, the Authority's obligation in subsection 6.1 above to firm 8,724 acre-feet of NIA Priority Water reallocated to other Arizona Indian Tribes under P.L. 108-451 shall commence with respect to each such tribe at such time as the entitlements of each such tribe to Indian Priority Water and M&I Priority Water, if any, are fully exhausted. <u>See</u>, Exhibit A hereto, for representative

calculations.

6.3 The parties to this Agreement recognize that the Authority may enter into a separate contract with such other Arizona Indian Tribe(s) with respect to the conditions under which such tribes will demand and the Authority will cause to be delivered water firmed by subparagraph 6.1 of this Agreement, which contract may have the effect of modifying the extent to which such other tribes will receive water otherwise available to such other tribes under this Agreement, and further recognize that the Secretary need not be a party to such contract.

# 7. <u>AUTHORITY'S RESPONSIBILITY FOR ASSISTING THE SECRETARY IN</u> FIRMING CAP WATER FOR THE TOHONO O'ODHAM NATION:

7.1 The Authority shall contribute \$3,000,000.00 in either cash or in-kind goods and services, which may include water, to assist the Secretary in fulfilling the federal obligation to firm 28,200 acre-feet of NIA priority water reallocated to Tohono O'odham Nation as set forth in P.L. 108-451.

7.2 The schedule for the Authority's \$3,000,000.00 contribution shall be as follows:

(a) Within the first year beginning January 1 after the Title III Enforceability Date, the Authority shall identify and reserve or create for the purpose of assisting the Secretary in fulfilling the federal obligation to firm the 28,200 acre-feet of NIA priority water reallocated to Tohono O'odham Nation sufficient Long Term Storage Credits (Credits) developed under Arizona state law to equal the number of Credits then in existence plus the number of Credits to be developed in that year by the Secretary that are available to be used to meet the federal firming obligation to the Tohono O'odham Nation, not to exceed a value of \$3,000,000.00 as calculated in accordance with subsection 7.2 (c) below.

(b) Within four years beginning January 1 after the Title III Enforceability

Date, the Authority shall identify and reserve or create for the purpose of assisting the Secretary in fulfilling the federal obligation to firm the 28,200 acre-feet of NIA priority water reallocated to Tohono O'odham Nation, such additional Credits as will, together with the Credits identified and reserved or created in subsection 7.2(a) above, equal a total value of \$3,000,000.00 as calculated in accordance with subsection 7.2(c) below.

(c) The total number of Credits reserved or created in subsections 7.2(a) and 7.2(b) shall be based upon the sum of: (i) the least expensive rate available to the Federal government for purchasing CAP water for storage from the CAWCD for the year in which the Credits were reserved or created; and (ii) any applicable fee specific to the facility where those credits are stored that may apply to the Authority; and (iii) an administrative fee equal to 5% of the cost of services which the Arizona Department of Water Resources provides to the Authority in any year in which Credits are transferred to the Authority's sub-account created under this Agreement.

(d) The Authority shall establish a separate sub-account to hold Credits reserved or created by the Authority under subsections 7.2(a) and 7.2(b). During the term of this Agreement, the Authority shall hold all such Credits in this sub-account until such time as the Secretary determines that a Water Shortage exists and that water deliveries are required to meet the federal firming obligation for the 28,200 af NIA priority water reallocated to the Tohono O'odham Nation.

(e) In any year of this Agreement in which the Secretary determines that a Water Shortage exists and that water deliveries are required to meet the federal firming obligation for the 28,200 af NIA priority water reallocated to the Tohono O'odham Nation, the Authority shall, upon request of the Secretary, direct Credits to be used to transfer water for that

purpose, not to exceed the number of Credits necessary to fulfill the federal firming obligation for that year for the 28,200 af NIA priority water reallocated to the Tohono O'odham Nation, until such time as the Credits held in the sub-account created under subsection 7.2(e) are exhausted.

(f) The Authority and the Secretary agree that assistance to the Secretary

under this paragraph does not include recovery and delivery of water.

(g) If after 100 years from the Title III Enforceability Date, any Credits

remain in the sub-account created under subsection 7.2(d) above, such Credits shall revert to the

Authority and the requirement to assist the Secretary in meeting the federal firming obligation to

the Tohono O'odham Nation shall be deemed satisfied.

7.3 In no event shall the Authority have any obligation under this Article 7 prior to the Title III Enforceability Date.

#### 8. MISCELLANEOUS PROVISIONS:

8.1 <u>OFFICIALS NOT TO BENEFIT</u>: No member of or Delegate to Congress, Resident Commissioner, or official of the Authority shall benefit from this Agreement other than as a water user or landowner in the same manner as other water users or landowners.

8.2 <u>CONTINGENT ON APPROPRIATION OR ALLOTMENT OF FUNDS</u>: The expenditure or advance of any money or the performance of any obligation by the United States under this Agreement shall be contingent upon the appropriation or allotment of funds. Absence of appropriation or allotment of funds shall not relieve the Authority from any obligations under this Agreement. No liability shall accrue to the United States in case funds are not appropriated or allocated.

8.3 <u>ASSIGNMENT LIMITED</u>; <u>SUCCESSORS AND ASSIGNS OBLIGATED</u>: The provisions of this Agreement shall apply to and bind the successors and assigns of the parties hereto, but no assignment or transfer of this Agreement or any right or interest therein by either party shall be valid until approved in writing by the Contracting Officer.

8.4 <u>PRIORITY OF CLAIMS OF THE UNITED STATES</u>: Fiscal claims of the United States arising out of this Agreement shall have priority over all others, secured or unsecured, to the extent provided by applicable law.

8.5 <u>EFFECT OF WAIVER OF BREACH OF AGREEMENT</u>: All rights of action for breach of any of the provisions of this Agreement are reserved to each party as provided by

appropriate law. The waiver of a breach of any of the provisions of this Agreement shall not be deemed to be a waiver of any other provisions hereof, or any other subsequent breach of any provisions hereof.

8.6 <u>REMEDIES UNDER AGREEMENT NOT EXCLUSIVE</u>: Nothing in this Agreement shall be construed in any manner to abridge, limit, or deprive either party of any means to enforce any remedy either at law or in equity for the breach of any provisions hereof, or any other remedy which it would otherwise have.

8.7 <u>BOOKS, RECORDS AND REPORTS</u>: Subject to applicable Federal laws and regulations, each party to this Agreement shall have the right during office hours to examine and make copies of the other party's books, records and reports and relating to matters covered by this Agreement.

8.8 <u>COMPLIANCE WITH CIVIL RIGHTS LAWS AND REGULATIONS</u>: The Authority shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), Section 504 of the Rehabilitation Act of 1973 (Public Law 93-112, as amended), the Age Discrimination Act of 1975 (42 U.S.C. 6101, <u>et seq.</u>), Title III of the American's with Disabilities Act of 1990, and any other applicable civil rights laws, as well as with their respective implementing regulations and guidelines imposed by the U.S. Department of the Interior and/or Reclamation.

8.9 Each party shall comply with all applicable federal or state laws relating to equal opportunity and non-discrimination.

8.10 There are no third-party beneficiaries, express or implied, to this Agreement.

8.11 This Agreement shall be subject to the provisions of A.R.S. § 38-511.

9. <u>NOTICES</u>: Any notice, demand, or request authorized or required by this Agreement

shall be deemed to have been given, when mailed, postage prepaid, or delivered to the below

addresses. The designation of the addressee or the address may be changed by notice given in

the same manner as provided in this section for other notices.

On behalf of the Authority, to both:

Regional Director Bureau of Reclamation Lower Colorado Region PO Box 61470 Boulder City, NV 89006-1470

and

Area Manager Bureau of Reclamation Phoenix Area Office 6150 West Thunderbird Road Glendale, Arizona 85306-4001

On behalf of the United States, to:

Chairman Arizona Water Banking Authority 3550 N. Central Ave. Phoenix, Arizona 85012

10. <u>AGREEMENT DRAFTING CONSIDERATIONS</u>: Section 1 through 10 of this Agreement have been drafted, negotiated, and reviewed by the parties hereto, each of whom is sophisticated in the matters to which this Agreement pertains, and no one party shall be considered to have drafted the stated sections.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, including Exhibit A, the day first above written.

Approved as to Legal Sufficiency:

By: Solicitor

# THE UNITED STATES OF AMERICA

Βv **Regional Director** Lower Colorado Region

Lower Colorado Region Bureau of Reclamation

ARIZONA WATER BANKING AUTHORITY

By: Chairman Att st: Secretary

# EXHIBIT A

1. This Exhibit A, made this  $1 \le TH$  day of  $M \subseteq V \in M \in \mathcal{R}$ , 2007, to be effective under and as a part of the Agreement shall become effective on the date of the Agreement's execution and shall remain in effect until superseded by another Exhibit A executed by the parties; <u>Provided</u>, That this Exhibit A or any superseding Exhibit A shall terminate with the termination of the Agreement.

# Exhibit A: Examples of Determination of State of Arizona Firming Obligation to the Gila River Indian Community (GRIC)

### Assumption 1. GRIC's Entitlement to CAP Water

Indian Priority Water

Original allocation HVID re-allocation Subtotal	173,100 af <u>18,100 af</u> <b>191,200 af</b>
M&I Priority Water Asarco re-allocation	17,000 af
NIA Priority Water RWCD re-allocation Settlement re-allocation Subtotal	18,600 af <u>102,000 af</u> <b>120,600 af</b>
Total CAP Water Entitlement	328,800 af

Assumption 2. The total annual amount of CAP NIA Priority Water is 364,698 acre-feet before 2044 and 317,395 acre-feet after 2044.

Assumption 3. The total annual amount of CAP Indian Priority Water is 343,079 acre-feet.

Assumption 4. The total annual amount of CAP M&I Priority Water is 638,823 acre-feet before 2044 and 686,126 acre-feet after 2044.

Assumption 5. The full CAP water supply that is the basis for long term contracts is 1,415,000 acre-feet per year, consisting of 68,400 acre-feet of Priority 3 water (Ak-Chin and Salt River Pima-Maricopa Indian Community water rights settlements) and 1,346,600 acre-feet of Priority 4 water.

Assumption 6: In those examples where it was necessary to allocate available CAP water between the Indian priority and M&I priority groups, it was assumed that the example occurred prior to year 2044 and that the allocation of CAP water between these two groups occurred in accordance with the appropriate formula contained in the Arizona Water Settlement Act agreements.

**Assumption 7:** In those examples showing an allocation of Arizona's shortage between the CAP and the fourth priority entitlement holders sharing the same priority as CAP, it was assumed these fourth priority entitlement holders would share 10.5 percent of Arizona's

shortage.

#### Example 1

**Scenario**: Assume that CAP receives less than a full water supply due to use by higher priority users in Arizona and not by a declared shortage on the Colorado River.

Assume the supply available to CAP is 1,365,000 acre feet (both priority 3 and priority 4 water) or 50,000 acre-feet less than that required to meet all long term contractor's needs (1,415,000 acre-feet). The water orders of contractors for all M&I and Indian priority water can be met without imposing a shortage on them.

The GRIC (or its lessees) order all of GRIC's 328,800 acre-foot entitlement.

**Step a.** Calculate the total water quantity that would have been available to GRIC as if it had received a quantity of CAP M&I Priority Water equal to the amount of firmed water reallocated to the Community, with the remainder of GRIC's reallocated CAP water keeping its CAP NIA Priority Water status.

• 15,000 acre-feet of M&I equivalent water would have been available without shortage

• The remainder of 105,600 acre-feet of NIA water would be subject to shortage sharing with the other NIA priority water supplies.

• The total NIA entitlements to CAP water = 364,698 acre-feet. GRIC's percentage of the NIA water would be equal to 28.96 percent.

• Since the CAP supply is 50,000 acre-feet under that required to meet all orders the NIA available supply = 314,698 acre-feet.

• GRIC's NIA share of the supply = .2896 \* 314,698 or 91,137 acre-feet.

• GRIC's total quantity would be 15,000 acre-feet of M&I equivalent water plus 91,137 of NIA water or **106,137 acre-feet**.

Step b. Calculate the amount of NIA priority water available to GRIC that year.

• Without firming GRIC would have held 120,600 acre-feet out of a total of 364,698 acre-feet of NIA Priority Water or 33.07 percent of the total NIA Priority Water. Multiplying this percentage times 314,698 acre-feet equals 104,071 acre-feet.

**Step c.** Subtract the amount calculated in (b) above from the amount calculated in (a) to determine the amount of CAP water the Authority shall firm for GRIC.

• Firming requirement is 106,137 acre-feet minus 104,071 acre-feet or 2,066 acre-feet.

• If there is a redistribution of NIA Priority Water in this year resulting from one or more entities not using their full entitlement to such water, and such reallocation results in the GRIC receiving more than 106,137 acre-feet of NIA Priority Water, there would be no firming obligation on behalf of the Authority.

#### Example 2

**Scenario**: Assume a shortage to CAP caused by a declared shortage to Lower Basin water deliveries.

Assume that the quantity of fourth priority water available to CAP water users is 897,000 acrefeet or about 85,000 acre-feet less than that required to meet the full needs of the Indian and M&I priority users (981,902 acre-feet). Assuming that the Indian and M&I Priority Water users ordered their full entitlements, these users would be required to take a reduction. All NIA deliveries would be reduced to zero.

Assume that GRIC (or its lessees) order all of GRIC's 328,800 acre-foot contract entitlement.

With 897,000 acre-feet of fourth priority water available, the Indian Priority Water users would receive 321,482 acre-feet and the M&I Priority Water users would receive 575,518 acre-feet per the priority formula contained in the Arizona Water Rights Settlement Act documents. The M&I Priority Water users would receive 90.09 percent of their total entitlement (575,518 acre-feet/638,823 acre-feet).

Step a. Calculate the total water quantity that would have been available to GRIC as if it had received a quantity of CAP M&I Priority Water equal to the amount of firmed water reallocated to the Community, with the remainder of GRIC's reallocated water keeping its CAP NIA Priority Water status.

• GRIC would have received 90.09 percent times 15,000 acre-feet or 13,514 acrefeet of M&I equivalent water.

• GRIC would have received zero acre-feet of its NIA priority water.

• The total quantity available to GRIC would be the **13,514 acre-feet** of M&I equivalent water.

Step b. Calculate the amount of NIA priority Water available to GRIC that year.

• The amount of NIA priority water available to GRIC that year = zero.

Step c. Subtract the amount calculated in (b) above from the amount calculated in (a)

above to determine the amount of CAP water the Authority shall firm for GRIC.

#### • The firming requirement is 13,514 minus zero acre-feet or 13,514 acre-feet.

#### Example 3

**Scenario:** Assume the same water supply conditions as Example 2, but also assume that GRIC (or its lessees) have only ordered 175,000 acre-feet of M&I and Indian priority water.

• Under the terms of the three step calculation for Example 2 the firming requirement would be 13,514 acre-feet.

• However, GRIC's order of 175,000 acre-feet is less than the sum of its entitlement to Indian and M&I priority water (191,200 acre-feet plus 17,000 acre-feet or 208,200 acre-feet). Had GRIC ordered all of its higher priority CAP water it would have been entitled to 15,315 acre-feet of M&I priority water (90.09 percent) and 170,403 acre-feet of Indian priority water (based on the formula contained in GRIC's Settlement Agreement). The sum of the water available under these two higher priority entitlements (185,718 acre-feet) is greater than GRIC's actual water order.

• Therefore, under the provisions of Paragraph 5.2 of the Agreement, the Authority would have no firming obligation.

#### Example 4

Scenario: Assume a 400,000 acre-foot Secretarial declared shortage to the Colorado River system and that Arizona's share of that shortage is 320,000 acre-feet. Assume the Colorado River entitlement holders River users (located along the Colorado River) sharing the 4<sup>th</sup> priority water with CAP take 33,600 acre-feet of that reduction, leaving the shortage to CAP at 286,400 acre-feet.

In this case, the water orders of contractors for all M&I and Indian priority water can be met without imposing a shortage on them. The overall CAP water supply is 68,400 acre-feet of Priority 3 water plus 1,060,200 acre-feet of 4<sup>th</sup> priority water or a total of 1,128,600 acre-feet.

The GRIC (or its lessees) order all of GRIC's 328,800 acre-foot entitlement.

**Step a**. Calculate the total water quantity that would have been available to GRIC as if it had received a quantity of CAP M&I Priority Water equal to the amount of firmed water reallocated to the Community, with the remainder of GRIC's reallocated CAP water keeping its CAP NIA Priority Water status.

• 15,000 acre-feet of M&I equivalent water would have been available without shortage

• The remainder of 105,600 acre-feet of NIA water would be subject to shortage sharing with the other NIA priority water supplies.

• The total NIA entitlements to CAP water = 364,698 acre-feet. GRIC's percentage of the NIA water would be equal to 28.96 percent.

• Since the CAP supply is 286,400 acre-feet under that required to meet all orders, the NIA available supply = 78,298 acre-feet.

• GRIC's NIA share of the supply = .2896 \* 78,298 or 22,675 acre-feet.

• GRIC's total quantity would be 15,000 acre-feet of M&I equivalent water plus 22,675 of NIA water or **37,675 acre-feet**.

Step b. Calculate the amount of NIA priority water available to GRIC that year.

• Without firming GRIC would have held 120,600 acre-feet out of a total of 364,698 acre-feet of NIA Priority Water or 33.07 percent of the total NIA Priority Water. Multiplying this percentage times 78,298 acre-feet equals **25,893 acre-feet**.

**Step c**. Subtract the amount calculated in (b) above from the amount calculated in (a) to determine the amount of CAP water the Authority shall firm for GRIC.

• Firming requirement is 37,675 acre-feet minus 25,893 acre-feet or 11,782 acre-feet.

#### Example 5

**Scenario**: Assume a 500,000 acre-foot Secretarial declared shortage to the Colorado River system and that Arizona's share of that shortage is 400,000 acre-feet. Assume the River users sharing the 4<sup>th</sup> priority water with CAP take 42,000 acre-feet of that reduction leaving the shortage to CAP at 358,000 acre-feet.

The water orders of contractors for all M&I and Indian priority water can be met without imposing a shortage on them. The overall CAP supply is 68,400 acre-feet of Priority 3 water plus 988,600 acre-feet of 4<sup>th</sup> priority water or a total of 1,057,000 acre-feet.

The GRIC (or its lessees) order all of GRIC's 328,800 acre-foot entitlement.

**Step a**. Calculate the total water quantity that would have been available to GRIC as if it had received a quantity of CAP M&I Priority Water equal to the amount of firmed water reallocated to the Community, with the remainder of GRIC's reallocated CAP water keeping its CAP NIA Priority Water status.

• 15,000 acre-feet of M&I equivalent water would have been available without

#### shortage

• The remainder of 105,600 acre-feet of NIA water would be subject to shortage sharing with the other NIA priority water supplies.

• The total NIA entitlements to CAP water = 364,698 acre-feet. GRIC's percentage of the NIA water would be equal to 28.96 percent.

• Since the CAP supply is 358,000 acre-feet under that required to meet all orders the NIA available supply = 6,698 acre-feet.

• GRIC's NIA share of the supply = .2896 \* 6,698 or 1,940 acre-feet.

• GRIC's total quantity would be 15,000 acre-feet of M&I equivalent water plus 1,940 acre-feet of NIA water or 16,940 acre-feet.

Step b. Calculate the amount of NIA priority water available to GRIC that year.

• Without firming GRIC would have held 120,600 acre-feet out of a total of 364,698 acre-feet of NIA Priority Water or 33.07 percent of the total NIA Priority Water. Multiplying this percentage times 6,698 acre-feet equals 2,215 acre-feet.

**Step c**. Subtract the amount calculated in (b) above from the amount calculated in (a) to determine the amount of CAP water the Authority shall firm for GRIC.

• Firming requirement is 16,940 acre-feet minus 2,215 acre-feet or 14,725 acre-feet.

#### Example 6

**Scenario:** Assume a 600,000 acre-foot Secretarial declared shortage to the Colorado River system and that Arizona's share of that shortage is 480,000 acre-feet. Assume the River users sharing the 4<sup>th</sup> priority water with CAP take 50,400 acre-feet of that reduction leaving the shortage to CAP at 429,600 acre-feet.

The overall CAP supply is 68,400 acre-feet of Priority 3 water plus 917,000 acre-feet of 4<sup>th</sup> priority water or a total of 985,400 acre-feet. Under the shortage sharing formula contained in the Arizona Water Settlements Act documents, there would be 326,569 acre-feet available to the CAP Indian Priority water users and 590,431 acre-feet of M&I Priority Water users. The CAP M&I Priority Water users would receive 92.42 percent of their water entitlement (590,431/638,823). There would be no water available for the NIA Priority Users.

The GRIC (or its lessees) order all of GRIC's 328,800 acre-foot entitlement.

**Step a**. Calculate the total water quantity that would have been available to GRIC as if it had received a quantity of CAP M&I Priority Water equal to the amount of firmed water

reallocated to the Community, with the remainder of GRIC's reallocated CAP water keeping its CAP NIA Priority Water status.

- 13,863 acre-feet of M&I equivalent water would have been available without shortage
- GRIC would have received zero acre-feet of its NIA priority water.
- The total quantity available to GRIC would be the **13,863 acre-feet** of M&I equivalent water.

Step b. Calculate the amount of NIA priority water available to GRIC that year.

• The amount of NIA priority water available to GRIC that year = zero.

**Step c**. Subtract the amount calculated in (b) above from the amount calculated in (a) to determine the amount of CAP water the Authority shall firm for GRIC.

• Firming requirement is 13,863 acre-feet.

	Year	Credits <sup>1</sup> Earned	Cumulative Credits	Percent of Goal Achieved (1,250,000 AF)	Achieved of Storage from SNWA		Funds Available		
	2002	61,098	61,098	5%	\$ 8,617,393	\$ 5,000,000	\$-		
a	2003	50,000	111,098	9%	\$-	\$ 3,723,945	\$ 106,552 <sup>3</sup>		
Actual	2004	14,162	125,260	10%	\$ 2,899,647	\$ 1,330,000	\$		
A	2005	111,805	237,065	19%	\$ 25,723,366	\$ 100,000,000	\$ 72,813,539 <sup>4</sup>		
	2006	175,569	412,634	33%	\$ 35,386,306	\$ -	\$ 37,427,233		
	2007								
Rec.	1 <sup>st</sup> Quarter	15,249	427,883	34%	\$ 2,937,376	\$-	\$ 34,489,857		
Ð	2 <sup>nd</sup> Quarter	23,847	451,730	36%	\$ 4,570,744	\$-	\$ 29,919,113		
Estimated	3 <sup>rd</sup> Quarter	61,335	513,065	41%	\$ 12,345,008	\$-	\$ 17,574,105		
	Sub-total				\$ 92,479,840				
	4 <sup>th</sup> Quarter <sup>5</sup>	16,031	529,096	42%	\$ 3,919,432	\$ -	\$ 13,654,673		
	Total				\$ 96,399,272	\$ 110,053,945	\$ 13,654,673		

# Long-term Storage Credits Accrued on Behalf of Nevada

<sup>1</sup> 2003 credits transferred from CAWCD pursuant to Amended Agreement for Interstate Water Banking. Credits for 2007 are estimated.

<sup>2</sup> In 2009, SNWA will begin making ten annual payments of \$23,000,000.

<sup>3</sup> Includes expenditure of \$3,617,393 from monies collected in 2003 as part of 2002 reconciliation.

<sup>4</sup> Includes expenditure of \$1,463,095 from monies collected in 2005 as part of 2004 reconciliation.

<sup>5</sup> Fourth quarter totals are adjusted to equal the planned totals in the 2007 Plan of Operation (planned expenditures = \$23,772,560; credits = 116,462).

## Arizona State Treasurer's Office Calculation of Interest Earnings for Water Banking Authority Reinvestment Method For Period of June 27, 2005 thru November 30, 2007

		Pool 3					
		Monthly	Days in	Days in	Earnings for		
Month	Invested Amount	Yield	Month	Year	Period		
June 2005	26,000,000.00	3.1172%	4	365	8,881.88		
July 2005	26,008,881.88	3.2014%	31	365	70,718.08		
August 2005	26,079,599.96	3.4005%	31	365	75,320.39		
September 2005	26,154,920.35	3.5475%	30	365	76,261.30		
October 2005	26,231,181.65	3.6669%	18	365	47,434.74		
October 2005	100,231,181.65	3.6669%	13	365	130,903.85		
November 2005	100,409,520.24	3.8494%	30	365	317,684.72		
December 2005	100,727,204.96	3.9975%	31	365	341,982.66		
January 2006	101,069,187.62	4.1374%	31	365	355,152.69		
February 2006	101,424,340.31	4.4543%	28	365	346,566.69		
March 2006	101,770,907.00	4.3770%	31	365	378,328.47		
April 2006	102,149,235.47	4.5526%	30	365	382,228.45		
May 2006	102,531,463.92	4.6378%	31	365	403,866.66		
June 2006	102,935,330.58	4.8013%	30	365	406,211.02		
July 2006	103,341,541.60	4.9615%	31	365	435,468.52		
August 2006	103,777,010.11	5.0202%	31	365	442,477.31		
September 2006	104,219,487.42	5.0989%	30	365	436,771.02		
October 2006	104,656,258.44	5.0423%	31	365	448,190.57		
November 2006	105,104,449.01	5.1630%	30	365	446,017.21		
December 2006	105,550,466.22	5.1279%	31	365	459,693.68		
January 2007	106,010,159.90	5.1560%	.31	365	464,225.75		
February 2007	106,474,385.65	5.3508%	28	365	437,047.89		
March 2007	106,911,433.54	5.1622%	31	365	468,735.46		
April 2007	107,380,169.00	5.2452%	30	365	462,929.15		
May 2007	107,843,098.15	5.1578%	31	365	472,417.18		
June 2007	108,315,515.33	5.2323%	30	365	465,813.10		
July 2007	108,781,328.43	5.1575%	31	365	476,499.47		
August 2007	109,257,827.90	5.1863%	31	365	481,259.18		
September 2007	109,739,087.08	5.2974%	30	365	477,806.99		
October 2007	110,216,894.07	5.1597%	31	365	482,993.68		
November 2007	110,699,887.75	5.0624%	30	365	460,608.59		
		-X1	Total Earning	gs _	11,160,496.33		

On June 27, 2005, Water Banking Authority received monies in the amount of \$26,000,000.00. (See Doc. # D05W0810). On October 19, 2005, they received \$74,000,000.00 (See Doc. #D06W0214). AWBA wants to know the earnings from the day the money was received to the current date had it been invested with the State Treasurer.

				W	ater De Calenc	lar Yea	Schedu ar 2008	le							
1 Spc - 9	and the second	Permitted Capacity			1	Acre-feet	1	1.1	1.11				-		
AV	VBA-Recharge Sites	(AF)	Jan	Feb	Mar	Apr	May	Jun	Jui	Aug	Sep	Oct	Nov	Dec	Total
PHOENIX AN															
	GRUSP	200,000	0	0	0	0	0	0	0	0	0	0	0	0	0
106	HIEROGLYPHIC MTNS	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0
LSU LSU	AGUA FRIA	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	TONOPAH DESERT	150,000	1,892	5,058	0	0	0	0	0	0	0	0	0	0	6,950
	TONOPAH Interstate		0	0	0	0	0	0	0	0	0	0	0	0	0
	WEST MARIC.COMBINE		0	0	0	0	0	0	0	0	0	0	0	0	0
															6,950
	SRP	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0
2	CHANDLER HGTS ID	3,000	0	0	0	0	0	50	50	50	50	0	0	0	200
LS L	NEW MAGMA	54,000	0	0	0	0	0	0	0	0	0	0	0	0	0
9	QUEEN CREEK	28,000	0	0	0	0	0	0	0	1,343	2,285	2,285	1,142	1,142	8,197
		15,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	GILA RIVER INDIAN IDD	37,520	0	0	0	0	1,402	5,711	10,475	8,365	5,373	0	0	0	31,326
	TOTAL INTRASTATE		1 000	5.050	0	0	1 100	F 704	40.505	0.750	7 700	0.005	4 4 4 0	1 1 10	<u>39,723</u>
			1,892	5,058	0	0	1,402 0	5,761	10,525 0	9,758	7,708	2,285	1,142	1,142	46,673
	TOTAL INTERSTATE			0				0		0	0	0	0	0	0
AMA TOTAL			1,892	5,058	0	0	1,402	5,761	10,525	9,758	7,708	2,285	1,142	1,142	46,673
PINAL AMA :		110,000	0.000	0.000	1 000	1 500	0.000	5 500	F F 00	5 500	0.000	0.000	1 000	1 000	00.000
	CAIDD	110,000	2,000	2,000	1,000	1,500	2,000	5,500	5,500	5,500	3,000	2,000	1,000	1,000	32,000
	CAIDD Interstate HOHOKAM	55,000	0 840	0 2,730	0 5,380	0 5,017	0 651	1,217	2,750	0 8,935	0 6,842	0 3,146	0	2,291	42,000
RSP	HOHOKAM Interstate	ວວ,ບບບ	840 0	2,730	5,360	5,017	0	1,217	2,750	0,935 0	0,842	3,146	2,201 0	2,291	42,000
Ŭ	MSIDD	120,000	1,530	1,530	2,070	2,580	4,100	3,100	0	5,200	6,060	3,550	1,560	720	32,000
	MSIDD Interstate	120,000	1,550	1,550	2,070	2,380	4,100 0	3,100	0	J,200 0	0,000	0,550	1,500	0	000
	GILA RIVER INDIAN IDD	18,480	0	0	0	0	5,000	0	0	0	0	0	0	0	5,000
	GILATINETTINDIANIDD	10,400					0,000	0							111,000
	TOTAL INTRASTATE		4,370	6,260	8,450	9,097	11,751	9,817	8,250	19,635	15,902	8,696	4,761	4,011	111,000
	TOTAL INTERSTATE		0	0,200	0,100	0,001	0	0,077	0,200	0	0	0,000	0	0	0
AMA TOTAL	- M.		4,370	6,260	8,450	9,097	11,751	9,817	8,250	19,635	15,902	8,696	4,761	4,011	111,000
TUCSON AN			4,070	0,200	0,430	3,007	11,701	3,017	0,200	13,000	10,002	0,000	4,701	4,011	111,000
	AVRA VALLEY	11.000	700	700	700	350	500	700	700	700	700	300	300	650	7,000
	PIMA MINE RD	30,000	0	0	0	0	0	0	0	0	0	000	000	000	0
	PMR Interstate		0	0	0	0	0	0	0	0	0	0	0	0	0
USF	LOWER SANTA CRUZ	50,000	870	0	0	0	0	2,930	3,800	3,800	3,800	2,700	1,900	3,800	23,600
<b>&gt;</b>	LSC Interstate		0	0	0	0	0	0	0	0	0	0	0	0	0
	CAVSARP	80,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	SAVSARP	60,000	0	0	0	0	0	0	0	0	0	0	0	0	0
															30,600
u u	BKW	16,615	0	0	0	0	0	0	0	0	0	0	0	0	0
GSF	KAI FARMS (Red Rock)	11,231	0	0	0	0	0	0	0	0	0	0	0	0	0
U U															0
	TOTAL INTRASTATE		1,570	700	700	350	500	3,630	4,500	4,500	4,500	3,000	2,200	4,450	30,600
	TOTAL INTERSTATE		0	0	0	0	0	0	0	0	0	0	0	0	0
AMA TOTAL			1,570	700	700	350	500	3,630	4,500	4,500	4,500	3,000	2,200	4,450	30,600
Outside AMA	A:														
	HARQUAHALA VALLEY ID	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0
OUTSIDE TO	DTAL													_	0
TOTAL INTR			7,832	12,018	9,150	9,447	13,653	19,208	23,275	33,893	28,110	13,981	8,103	9,603	188,273
TOTAL INTE	RSTATE		0	0	0	0	0	0	0	0	0	0	0	0	0
			7,832	12,018	9,150	9,447	13,653	19,208	23,275	33,893	28,110	13,981	8,103	9,603	188,273