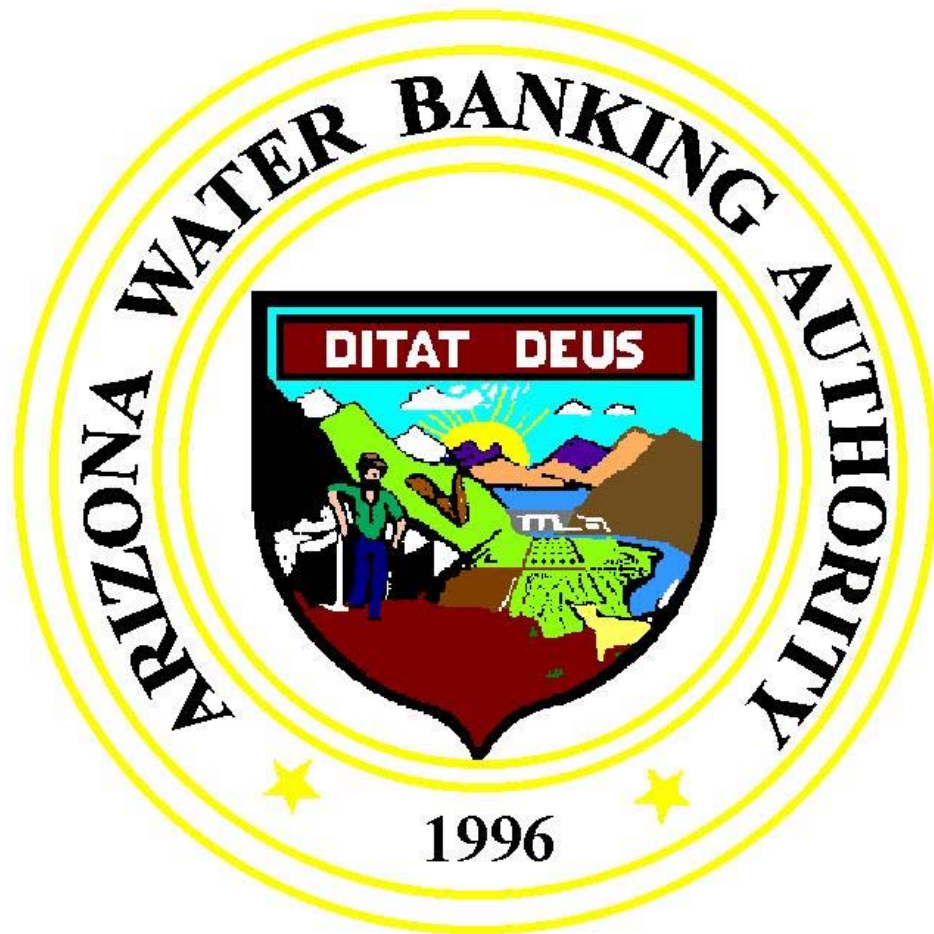


ARIZONA WATER BANKING AUTHORITY
ANNUAL PLAN OF OPERATION
2006



Herbert R. Guenther, Chairman

December 2005

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.

2005 PLAN OF OPERATION

In 2005, the AWBA's ninth full year of operation, the AWBA recharged approximately 209,000 acre feet of Colorado River water and Arizona's total use of Colorado River water is forecast to be 2.49 million acre feet by the Bureau of Reclamation data dated December 1, 2005 (see Figure 1).

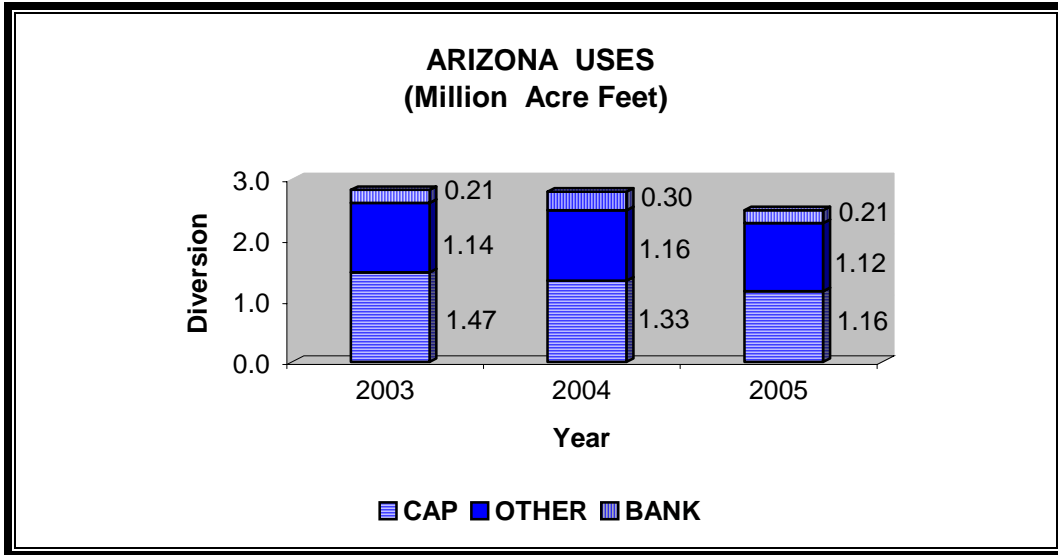


Figure 1

The Bureau of Reclamation forecasts total use of Colorado River water in the Lower Basin to be 7.1 million acre feet in 2005 (see Figure 2).

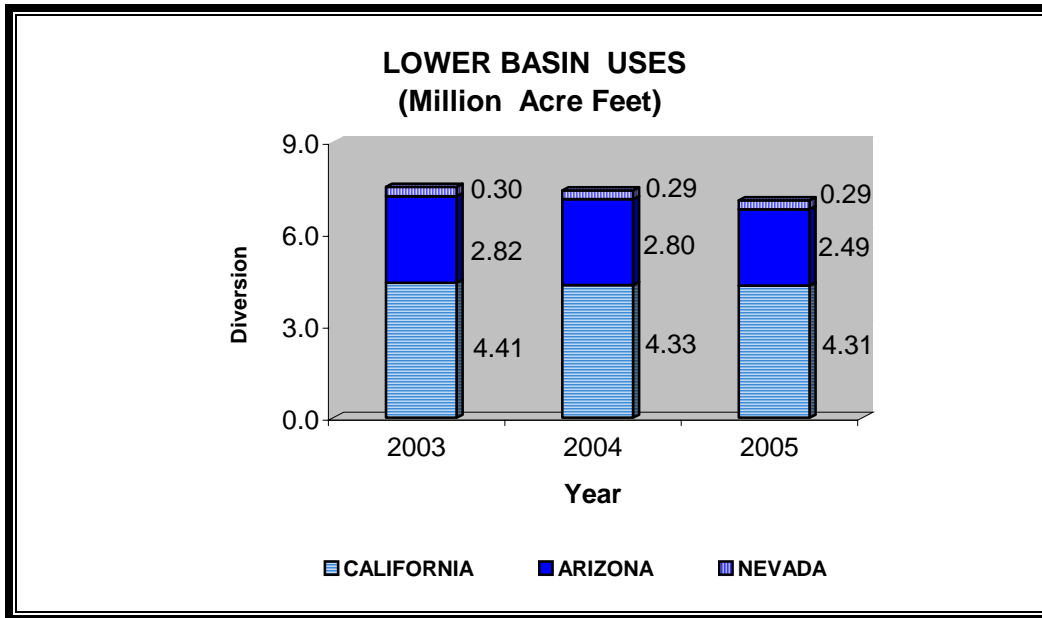


Figure 2

The AWBA recharged water at both USFs and GSFs in 2005. Table 1 lists the AWBA's recharge partners for 2005, 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

2005. 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.

Table 1

AMA	Facility	Type	Permit Capacity	Amount Delivered
Phoenix	Agua Fria (CAP)	USF	100,000 AF	1,895
	Hieroglyphic Mtn. (CAP)	USF	35,000 AF	5,089
	Chandler Hts Citrus ID	GSF	3,000 AF	340
	New Magma IDD	GSF	54,000 AF	23,460
	Queen Creek ID	GSF	28,000 AF	1,919
Pinal	CAIDD	GSF	110,000 AF	9,021
	CAIDD Interstate			20,898
	Hohokam IDD	GSF	55,000 AF	9,500
	Hohokam Interstate			10,144
	MSIDD	GSF	120,000 AF	9,000
	MSIDD Interstate			44,312
Tucson	Avra Valley (CAP)	USF	11,000 AF	3,322
	CAVSARP	USF	60,000 AF	9,000
	CAVSARP Interstate			1,450
	Lower Santa Cruz (CAP)	USF	50,000 AF	11,447
	LSC Interstate			29,117
	Pima Mine Road (CAP)	USF	30,000 AF	6,939
	PMR Interstate			11,588
	Kai-Red Rock	GSF	11,231 AF	461
Total			787,231 AF	208,902 AF

The Plan as originally approved was only scheduled to deliver approximately 115,000 acre feet but as additional water became available due to reduced demand by other CAP users the Plan was amended to include substantial interstate water banking. The 2005 Plan delivered approximately 130,000 acre feet for interstate banking. Most of this water was delivered to AWBA's GSF partners in Pinal County. AWBA funding for Pinal is limited which left significant storage capacity available in the area for interstate. Figure 3 shows the acre foot break down between GSFs and USFs for 2005 and a comparison between 2005 and previous years.

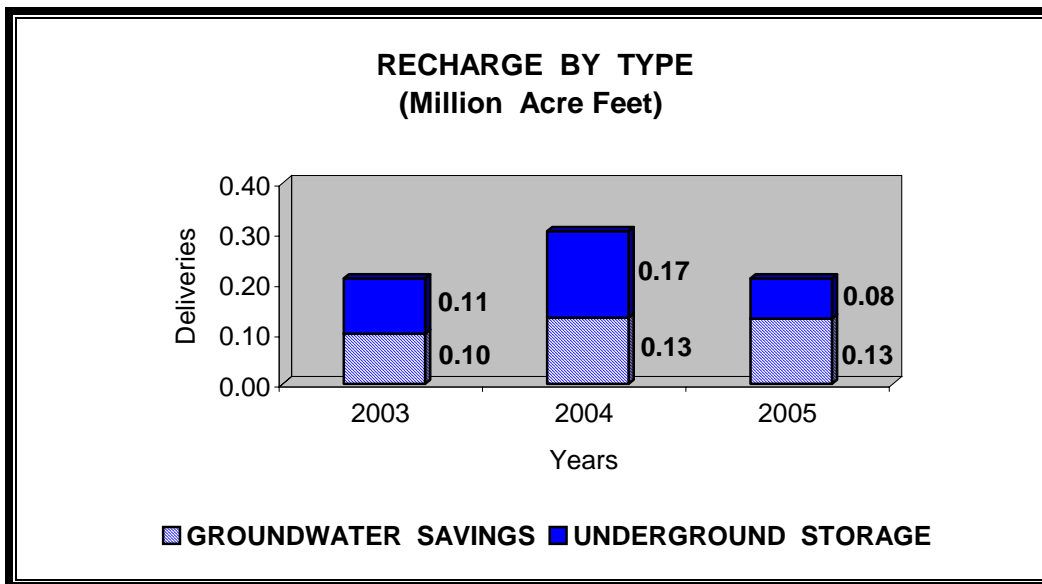


Figure 3

2006 PLAN OF OPERATION

For 2006, the AWBA will store approximately 347,431 acre feet of water. This represents 177,846 acre feet for intrastate banking and 169,585 acre feet for interstate banking. Water storage will be occurring in facilities from all three counties.

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)¹ 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 2006 to the states by letter dated December 12, 2005. The 2006 AOP stated that the Partial Domestic Surplus condition is the criterion governing operation of Lake Mead. Under a Normal declaration, there is 2.8 million acre feet of water available for use within Arizona. The Bureau of Reclamation does

¹ The Tucson GUAC recommended that the AWBA: (1) utilize all available funds and capacity until either was exhausted; and (2) utilize available capacity at CAVSARP, then Pima Mine Road while ensuring at least a proportionate share in the northwest USF and GSF facilities based on magnitude of CAP M&I subcontracts.

not anticipate that there will be any unused state apportionment available in 2005. Arizona's on-river use is forecast to be 1.2 million acre feet, leaving 1.6 million acre feet available for diversion by CAP. The amount of water available to be diverted by the CAP within Arizona's 2.8 million acre foot allocation was not a limiting factor in this Plan.

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 and the AWBA shares an equal priority for water for municipal and industrial (M&I) firming with the Central Arizona Groundwater Replenishment District. There continues to be a great deal of interest in the excess water by higher priority users. There remained sufficient excess water for AWBA's purposes.

II. Available Funds

The AWBA has significantly reduced funds available in 2006 in all of the AWBA Fund accounts. The AWBA will only have the withdrawal fees collected in 2006 available for use in this Plan. The CAWCD Board resolved to continue to retain the county *ad valorem* property taxes collected and not transfer those revenues to the AWBA Fund. While the property tax revenues retained by CAP can be used to offset the cost of AWBA water deliveries in the tri-county CAP service area, those funds are not shown in the AWBA fund accounts. The impact of availability of funds in developing the Plan differs by geographic location. Within the Phoenix AMA/Maricopa County, there were adequate revenues to fund the Plan. In the Pinal AMA/Pinal County and in Tucson AMA/Pima County, the availability of funds was a limiting factor in this Plan. However, funds are available from the Nevada agreement to utilize additional capacity in both those areas.

The total amount of revenue available in the AWBA Fund in 2006 is more than \$92.1 million. This amount includes (1) carryover from previous years in the Maricopa County *ad valorem* account; and (2) withdrawal fees projected for March of 2006. Of that amount, \$16.5 million is available in Maricopa County, and approximately \$500,000 and \$1.0 million are available in Pima and Pinal County, respectively. There are additional funds available at CAP in the form of the retained *ad valorem* property tax revenues. Estimated CAP *ad valorem* tax balances at the end of 2005 are: Maricopa County (\$42.4 million); Pima County (\$6.2 million); and Pinal County (\$530,000). In addition to these funds there is approximately \$74 million in the Nevada account.

III. 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. As previously noted, the Tucson AMA provided the AWBA with priorities for USF facilities. To the extent possible, those priorities were met.

For 2006, several partners that had previously stored water for the AWBA opted not to store because they found other partners to utilize their facilities. The two major partners that opted not to store for the AWBA are Salt River Project and New Magma IDD. This did reduce the capacity available to the AWBA for 2006.

IV. Table 2

Table 2 shows the AWBA's 2006 delivery schedule. Lines one through twenty nine represent the AWBA's 2006 Plan of Operation. This section identifies the AWBA's partners for 2006 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 and the amount of that capacity that is available to the AWBA in 2006. The capacity available does not always equal the storage permit capacity because the storage facility operators may have agreements with other storage partners. Line thirty lists the total amount of AWBA storage scheduled for the year 2006.

While no recovery is scheduled in 2006, the recovery of long-term storage credits may be necessitated sooner than originally anticipated because of potential requests from Nevada to develop Intentionally Created Unused Apportionment. AWBA and CAWCD will work with ADWR and stakeholders to begin the development of a recovery plan in 2006. In addition, a recovery plan will assist the AWBA in determining appropriate locations for water storage.

**Table 2
Water Delivery Schedule
Calendar Year 2006
(Acre-Feet)**

		January	February	March	April	May	June	July	August	September	October	November	December	Total	
PHOENIX AMA :															
USF	GRUSP	0	0	0	0	0	0	0	0	2,500	2,500	2,500	2,500	10,000	
	GRUSP Interstate	0	0	0	0	0	0	0	0	0	0	0	0	0	
	HIEROGLYPHIC	0	0	0	0	0	0	0	0	2,115	2,300	1,000	2,300	7,715	
	HIEROGLYPHIC Interstate	0	0	0	0	0	0	0	0	0	0	0	0	0	
	AGUA FRIA	0	0	0	0	0	249	1,690	2,800	2,800	2,800	2,800	2,800	15,939	
	TONOPAH DESERT	1,300	3,710	9,809	9,808	10,000	10,000	10,000	10,000	10,000	0	0	0	74,627	
	TONOPAH Interstate	0	0	0	0	0	0	0	0	0	10,000	10,000	10,000	30,000	
		138,281													
GSF	CHANDLER HGTS ID	0	0	50	50	50	100	75	75	50	83	0	0	533	
	QUEEN CREEK	0	0	0	0	0	0	0	0	0	0	700	1,000	1,700	
	TONOPAH ID	0	0	0	0	0	0	0	0	0	0	0	0	0	
		2,233													
	TOTAL INTRASTATE	1,300	3,710	9,859	9,858	10,050	10,349	11,765	12,875	17,465	7,683	7,000	8,600	110,514	
	TOTAL INTERSTATE	0	0	0	0	0	0	0	0	0	10,000	10,000	10,000	30,000	
AMA TOTAL		1,300	3,710	9,859	9,858	10,050	10,349	11,765	12,875	17,465	17,683	17,000	18,600	140,514	
PINAL AMA :															
GSF	CAIDD	0	0	0	0	0	0	2,000	2,000	1,500	1,000	1,000	1,500	9,000	
	CAIDD Interstate	0	0	0	5,000	5,000	5,000	5,000	5,000	0	0	0	0	25,000	
	HOHOKAM	0	500	3,600	5,400	0	0	0	0	0	0	0	0	9,500	
	HOHOKAM Interstate	50	0	0	750	0	0	2,500	0	4,500	2,700	1,500	2,500	14,500	
	MSIDD	410	720	1,560	1,550	1,560	0	0	1,560	1,150	490	0	0	9,000	
	MSIDD Interstate	1,030	1,440	5,720	3,210	5,300	840	2,080	8,740	7,500	5,240	3,690	2,970	47,760	
		114,760													
	TOTAL INTRASTATE	410	1,220	5,160	6,950	1,560	0	2,000	3,560	2,650	1,490	1,000	1,500	27,500	
	TOTAL INTERSTATE	1,080	1,440	5,720	8,960	10,300	5,840	9,580	13,740	12,000	7,940	5,190	5,470	87,260	
AMA TOTAL		1,490	2,660	10,880	15,910	11,860	5,840	11,580	17,300	14,650	9,430	6,190	6,970	114,760	
TUCSON AMA:															
USF	AVRA VALLEY	650	650	650	650	650	150	650	650	650	300	300	650	6,600	
	PIMA MINE RD	928	928	1,938	1,938	0	0	0	0	0	0	0	0	5,732	
	PMR Interstate					2,200	2,014	500	2,200	2,014	1,000	2,200	2,200	14,328	
	LOWER SANTA CRUZ	3,299	3,299	902	0	0	0	0	0	0	0	0	0	7,500	
	LSC Interstate			2,397	3,300	3,800	2,500	3,800	3,800	3,800	2,000	3,800	3,800	32,997	
	CAVSARP	2,000	0	2,000	2,000	2,000	2,000	2,000	2,000	2,000	3,000	1,000	0	20,000	
	CAVSARP Interstate	0	0	0	0	0	0	0	0	0	2,000	3,000	5,000		
		92,157													
GSF	KAI FARMS (Red Rock)	0	0	0	0	0	0	0	0	0	0	0	0	0	
		0													
	TOTAL INTRASTATE	6,877	4,877	5,490	4,588	2,650	2,150	2,650	2,650	2,650	2,650	3,300	1,300	650	39,832
	TOTAL INTERSTATE	0	0	2,397	3,300	6,000	4,514	4,300	6,000	5,814	3,000	8,000	9,000	52,325	
AMA TOTAL		6,877	4,877	7,887	7,888	8,650	6,664	6,950	8,650	8,464	6,300	9,300	9,650	92,157	
TOTAL INTRASTATE		8,587	9,807	20,509	21,396	14,260	12,499	16,415	19,085	22,765	12,473	9,300	10,750	177,846	
TOTAL INTERSTATE		1,080	1,440	8,117	12,260	16,300	10,354	13,880	19,740	17,814	20,940	23,190	24,470	169,585	
TOTAL		9,667	11,247	28,626	33,656	30,560	22,853	30,295	38,825	40,579	33,413	32,490	35,220	347,431	

NEW FACILITIES

The Tonopah Desert Recharge facility will be used for the first time in the 2006 Plan.

INTERSTATE WATER BANKING

The 2006 Plan includes an interstate water banking component. AWBA will store approximately 169,000 AF pursuant to the amended Interstate Water Banking agreement. This storage will occur at both USFs and GSFs in Pinal and Pima Counties.

PRICING

In June 2005, the CAWCD board adopted final water delivery rates for 2006. The rate for AWBA and other M&I Incentive recharge is \$82 per acre foot. The delivery rate is the pumping energy rate 2 component (\$72 per acre foot) plus 10 percent of the fixed OM&R charge (\$4.90 per acre foot) plus a component to recover lost revenues from federal deliveries (\$6.00 per acre foot). For 2006, 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 2006, the AWBA maintained the cost share for the GSF partners to \$30 per acre foot. Table 3 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 O&M component for all water stored; that component is calculated by CAP 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 \$174 per acre foot, plus facility costs and facility capital costs.

Table 3. 2006 Water and Facility Rates for Intrastate Banking

CAP's delivery rate to AWBA	\$82 per acre foot
Groundwater Savings Facility operator portion of delivery rate	\$30 per acre foot ¹
Interstate rate	\$174 per acre foot
Underground Storage Facility rate paid by AWBA	
Agua Fria Recharge Project (CAP) ²	\$8.00 per acre foot
Hieroglyphic Mtns. (CAP) ²	\$8.00 per acre foot
Tonopah Desert ²	\$8.00 per acre foot
GRUSP	\$20.00 per acre foot
Avra Valley (CAP) ³	\$12.00 per acre foot
Lower Santa Cruz (CAP/Pima County) ³	\$12.00 per acre foot
Pima Mine Road (CAP) ³	\$12.00 per acre foot
CAVSARP (Tucson Water)	\$12.79 per acre foot

¹ 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 \$43/af.

² Additional capital charge of \$15 per acre foot for interstate water

³ Additional capital charge of \$9 per acre foot for interstate water

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

The estimated total cost of the AWBA's 2006 Plan of Operation is approximately \$44.2 million which includes the USF use fees and the CAP delivery rate minus the cost recovery from the GSF operator by the CAWCD. Approximately \$15.2 million of the total is for intrastate storage and approximately \$28.2 million is for interstate storage.

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 4 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 2006 Plan.

Table 4. Funding for 2006 Annual Plan of Operation

	Funds Available (\$)		Funds Utilized (\$)		Credits (AF)
	AWBA	CAP	AWBA	CAP	
Withdrawal Fees					
Phoenix AMA	\$2,500,000	-	\$2,500,000	\$0	26,000
Tucson AMA	\$500,000	-	\$500,000	\$0	5,000
Pinal AMA	\$1,020,000	-	\$1,020,000	\$0	18,000
Four Cent Tax					
Maricopa County	\$14,089,000	\$42,380,000	\$7,481,000	\$0	77,000
Pima County	\$0	\$6,190,000	\$0	\$3,260,000	33,000
Pinal County	\$0	\$530,000	\$0	\$410,000	7,000
Other					
General Fund	\$0	-	\$0	-	
Phoenix AMA	\$0	-	\$0	-	0
Tucson AMA	\$0	-	\$0	-	0
Pinal AMA	\$0	-	\$0	-	0
Interstate Banking					
Nevada	74,000,000		28,987,000		158,000
California	(not applicable)				
	Total Funds Available		Total Funds Expended		Credits
	\$141,209,000		\$44,158,000		324,000

The 2006 Plan was developed expending all available withdrawal fees and requires utilization of some of the CAP funds, as well.

Table 5 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.

Table 5. Cumulative Totals of Long-term Storage Credits 1997-2005

	FUNDS EXPENDED	CREDITS ¹ AMOUNT	LOCATION
Withdrawal Fee			
Phoenix AMA	\$9,259,241	161,574 AF	Phoenix AMA
Tucson AMA	\$5,333,361	73,238 AF	Tucson AMA
Pinal AMA	\$8,881,525	272,956 AF	Pinal AMA
Four Cent Tax			
Maricopa County	\$39,675,291	871,408 AF	Phoenix AMA
Pima County	\$14,993,273	208,271 AF	Tucson AMA
Pinal County	\$2,587,281	92,645 AF	Pinal AMA
Other			
General Fund	\$10,695,000	396,499 AF	
	\$2,042,572	59,937 AF ²	Phoenix AMA
	\$6,977,540	39,748 AF ²	Tucson AMA
	\$1,674,888	296,814 AF ²	Pinal AMA
California			
Nevada	\$29,022,197	234,260 AF	
TOTAL	\$120,447,169	2,310,851 AF	

¹ Actual credits used for 1997-2004; credits estimated for 2005

² 230,280 AF of credits reserved pursuant to contract dated February 4, 2005 with Mohave County Water Authority

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 Table 2 was posted on the AWBA web page for public review and comment.

In general, the GUAC supported the Plan and had no requests for changes to it. At the Phoenix GUAC meeting, Mr. Buschatzke, representing the City of Phoenix, stated that the Bank has done a good job balancing the intrastate and interstate needs in this Plan. Mr. Cleveland, GUAC chair, asked if it made sense to maximize capacity in Pinal using an inter-AMA exchange of funding. He encouraged that this idea be investigated further.