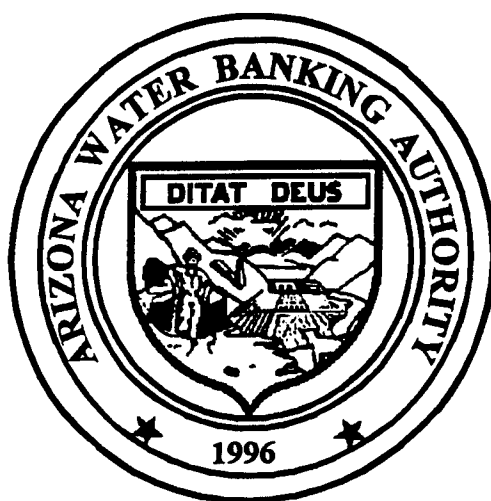


ARIZONA WATER BANKING AUTHORITY

1997 PLAN OF OPERATION



Rita P. Pearson, Chairman

Adopted
November 20, 1996

INTRODUCTION

The Arizona Water Banking Authority (Authority) was created with the passage of HB 2494 by the 1996 Legislature. The Authority consists of the following 7 members, 5 of whom are voting and two of whom are non-voting ex officio: the Director of the Arizona Department of Water Resources, who serves as chairman of the Authority (Rita P. Pearson); the President, or his designee, of the Central Arizona Water Conservation District Board (Grady Gammage); a representative of an entity with an M&I subcontract (Bill Chase); a representative of the Colorado River communities (Tom Griffin); and a person knowledgeable in water management (Richard S. Walden). A member of the Senate appointed by the President of the Senate and a member of the House appointed by the Speaker of the House serve as the two ex officio nonvoting members of the Authority.

Currently, Arizona does not use its full 2.8 million acre foot (maf) share of Colorado River water. The Arizona Department of Water Resources projects that the state will not fully use the resource until 2030. Between now and then, the accumulated amount of water left in the River could be as high as 14 million acre feet.

Leaving a portion of Arizona's water in the River, most of which is consumed by southern California, is a lost opportunity. The Arizona Water Banking Authority (AWBA) seizes this opportunity and gives Arizona the capability to further secure the dependable water supplies necessary to ensure the state's long-term prosperity.

The Arizona Water Banking Authority was created with the intention of storing unused Arizona Colorado River water to meet future needs for: 1) assuring adequate supply to municipal and industrial users in times of shortages or disruptions of the CAP system; 2) meeting the management plan objectives of the state's groundwater code; 3) assisting in the settlement of Indian water rights claims; and 4) exchanging water to assist Colorado River communities.

The Authority has approximately \$9.4 million in calendar year 1997 for direct (underground storage) and in-direct (groundwater savings) recharge. The revenues are generated from: groundwater pump taxes collected in the Phoenix, Pinal and Tucson Active Management Area; a four cent property tax collected in Maricopa, Pinal and Pima counties; and, an annual general fund appropriation.

Figure 3 further itemizes Arizona's estimated 2.7 maf of Colorado River use by month, including projected Colorado River uses along the River in Arizona of 1.38 maf; CAP subcontractor deliveries of an estimated 975,000 af, including M&I, Indian, Agriculture Pool

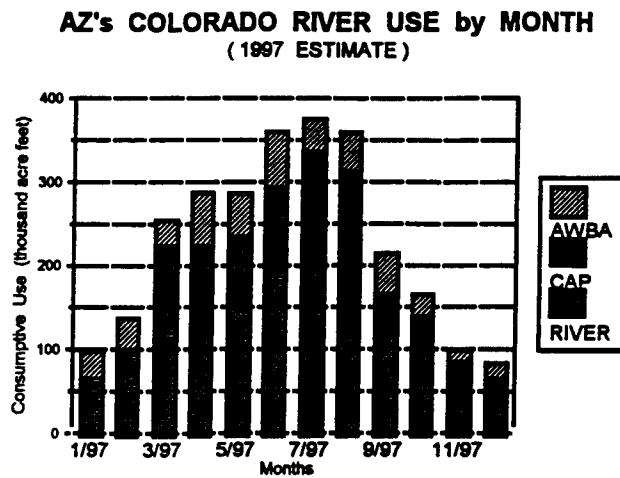


Figure 3

1, 2, and 3, and incentive recharge water, leaving approximately 400,000 af of capacity available for recharge by the Authority. The current Plan recharges approximately 370,000 af of water.

Only facilities available or that are expected to be available in 1997 have been included in this Plan. However, in order to ensure that the 370,000 af of water is recharged, the Plan includes the flexibility, that in the event a facility is not available as anticipated, the water that was scheduled to be used at that facility would be recharged at GRUSP for the benefit of the county where the funds were collected.

The Authority's policy for adopting this Plan of Operation provides the flexibility to accommodate changes, such as including additional facilities not currently listed on Table 1. Based on this policy, if such a facility or facilities becomes available and there is aqueduct capacity and funds available, this Plan could be modified at a later date to include those facilities.

Table 1 (attached) reflects estimated delivery of water by the CAWCD on behalf of the Arizona Water Banking Authority for banking in Arizona. Total deliveries to the Authority in calendar year 1997 will be constrained by CAP aqueduct capacity remaining after the CAP has scheduled its deliveries. It is the intention of the Authority to optimize, on a monthly basis, deliveries of Colorado River water in-order to utilize all of Arizona's entitlement and maximize the development of credits for the Authority.

In developing Table 1, the AWBA/CAWCD staff's developed a percent for each potential partner based on permitted capacities and the total amount of potential capacity for the AWBA. This method for the distribution of capacities evolved out of comments made at meetings of the Groundwater User Advisory Councils (GUAC's). After additional discussions, Table 1

BACKGROUND

Absent any existing Storage Site Criteria for selection of potential recharge sites or a facilities inventory of all existing facilities and available capacities, the Authority began putting together a proposed detailed plan for determining the cost and location for storing water in 1997.

The Authority staff made initial visits to virtually all permitted facilities in the three county CAWCD service area of Maricopa, Pinal and Pima counties. Through these meetings and comments provided on the draft Plan of Operation, the Authority was able to gain a better perspective of the potential in-lieu and direct recharge opportunities for 1997.

Information sheets were developed for each of the potential partners, reflecting their potential in-lieu or direct capacities (information sheets attached).

The CAWCD and ADWR have made the determination that all Pool 1 and Pool 2 water taken the previous year by irrigation districts must be taken in calendar year 1997 prior to credits being awarded to the Authority for water delivered to a district in-lieu. Because of this determination, the capacity to deliver Arizona Water Banking water assumes full utilization of historical Pool 1 and Pool 2 water in calendar year 1997. The Authority quickly learned that the demand for AWBA water was greater than the capacity of CAP to deliver that water to the Arizona Water Banking Authority.

The following steps were taken in developing this Plan of Operation:

- Step 1: Determined interest in participating in the Water Bank (acre feet).
 Determined CAP capacity constraints.

- Step 2: Calculated the amount of recharge potential in each AMA/county by funds
 allocated to AMA.

- Step 3: Adjusted monthly deliveries based on a ratio of individual permitted capacity to
 total permitted capacity. Modified this ratio based on the willingness to
 participate based on the terms offered by the Authority (final adjustment is
 reflected on Table 1).

ACCOUNTING

A.R.S. § 45-2457 stipulates that the Authority shall develop an accounting system for the long-term storage credits accrued by the Authority. The accounting system shall be designed to allow the Authority to determine which funding source of the banking fund paid for each long-term storage credit accrued by the Authority.

The Arizona Department of Water Resources has set-up the accounts per A.R.S. § 45-2457 for both funding and credits. Table 3 reflects estimates of the 1997 funding and credits, which will accrue to those accounts based on this Operating Plan.

Table 3				
FUNDING AND CREDIT ACCOUNTING				
For Calendar Year 1997				
DESCRIPTION	FUNDING		CREDITS	
	AVAILABLE	EXPENDED	AMOUNT	LOCATION
Withdrawal Fee				
Phoenix AMA	(not available)			
Tucson AMA	(not available)			
Pinal AMA	(not available)			
Four Cent Tax				
Maricopa County	\$5,700,000	\$5,620,000	194,200 acre feet	Phoenix AMA
Pima County	\$1,400,000	\$1,110,000	19,100 acre feet	Tucson AMA
Pinal County	\$ 300,000	\$ 300,000	20,000 acre feet	Pinal AMA
Other				
General Fund	\$2,000,000	\$2,000,000	133,000 acre feet	
		(\$1,800,000)	(120,000 acre feet)	(Pinal AMA)
		(\$200,000)	(13,300 acre feet)	(Phoenix AMA)
California	(not applicable)			
Nevada	(not applicable)			
TOTAL	\$9,400,000	\$9,030,000	366,600 acre feet	

TABLE 1
ARIZONA WATER BANKING AUTHORITY
CAP Water Delivery Schedule for AWBA Recharge
(Monthly Adjusted AWBA Volumes based on CAP Capacity Values)
Calendar Year 1997
(ACRE-FEET)

REVISED 4/16/96, 8:00 a.m.)

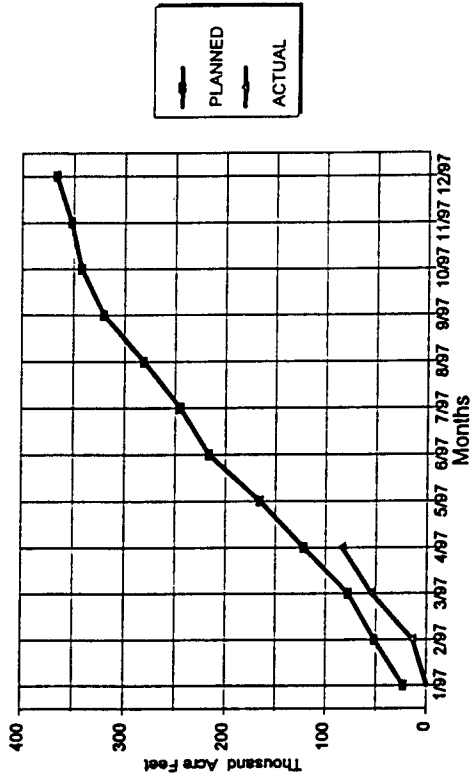
			January	February	March	April	May	June	July	August	September	October	November	December	Total		
Estimated CAP Deliveries: (M&I, Indian, Ag Pools)			34,000	54,000	124,000	97,000	96,000	120,000	158,000	148,000	89,000	34,000	28,000	25,000	975,000		
							100,000								975,000		
Available Excess CAP Capacity for AWBA:			27,000	30,000	26,000	54,000	48,000	59,000	33,000	36,000	36,000	22,000	10,000	15,000	400,000		
							42,000								398,000		
AWBA - Recharge Sites:																	
Phoenix AMA:																	
Direct >	GRUSP	200,000	80,000														
	FOR PHOENIX AMA			10,000	10,000	10,000	10,000	10,000	10,000						80,000		
				0	0	1,981	0	10,000	10,000	3,700	8,300	10,000	7,000	9,000	4,800	58,481	
	(FOR TUCSON AMA) (1)				(210)	(210)	(210)	(210)	(210)	(210)	(210)	(4,840)	(4,840)	(3,330)	(4,820)	(18,100)	
	AGUA FRIA										1,500	2,500			4,000		
											0	0			0		
Indirect >	CHANDLER HGTS CID	3,000	500			70	80	80	100	90	80				500		
				100	50		82	82	95	91	0				500		
	MWD (4)	30,000	20,000	630	570	3,000	3,320	3,870	2,010	1,980	2,230	1,430	830	330	20,000		
				0	0	0	0	0	0	0	0	0	0	0	0		
	NEW MAGMA	40,000	40,000	2,500	2,000	2,300	2,300	2,100	2,100	3,700	9,700	9,700	1,400	1,200	40,000		
				0	3,310	3,490	2,300	2,100	2,100	3,700	9,700	9,800	1,700	700	40,000		
	QUEEN CREEK	28,000	16,000	1,000	1,000		1,300	1,300	1,000	1,800	3,800	1,500	1,000	500	18,000		
				0	0		0	0	0	2,845	7,155	1,000	2,000	1,000	18,000		
	RWCD	100,000	95,000	4,000	8,000	4,000	8,000	8,000	8,000	4,000	5,000	8,000	5,000	3,000	87,000		
				0	0	3,889	8,000	8,000	8,000	8,000	8,000	4,000	7,000	2,500	58,889		
	SRP (2)	200,000	0														
	TONOPAH ID (3)	15,000	0														
PINAL AMA:																	
Indirect >	CAIDD	110,000	35,000	1,800	2,000	2,500	5,000	4,500	8,000	4,800	4,000	3,000	1,100	100	800	35,000	
				0	8,825	19,903	8,272	0	0	0	0	0	0	0	0	35,000	
	HOHOKAM	40,000	28,000		1,400	3,300	3,300	3,300	8,300	5,400	5,700	1,300	1,300		28,000		
					1,400	3,300	3,300	3,300	8,300	5,400	5,000	0	0		28,000		
	MSIDD	120,000	80,000	4,000	5,000	5,000	11,000	11,000	13,000	7,000	6,000	8,000	3,200	1,200	3,800	77,000	
				0	2,446	8,422	7,370	7,890	8,800	8,780	2,410	0	0	0	45,898		
TUCSON AMA:																	
Direct >	CENTRAL AVRA VALLEY (4)	5,000	4,500								1,200	1,200	900	1,200	4,500		
											1,200	1,200	900	1,200	4,800		
	AVRA VALLEY	5,000	2,100	210	210	210	210	210	210	210	210	210	210	210	2,100		
				0	0	0	0	300	300	300	300	300	300	300	2,100		
	PIMA MINE ROAD (4)	10,000	2,500								630	630	620	620	2,500		
											0	0	0	0	0		
	LOWER SANTA CRUZ (4)	30,000	10,000								2,800	2,800	1,800	2,800	10,000		
											2,800	2,800	1,800	2,800	10,000		
Indirect >	CORTARO MARANA ID (3)	10,000	0														
	BKW FARMS (3)	9,000	0														
	KAI FARMS (2)	11,000	0														
TOTAL:			966,000	413,800	23,100	28,840	25,980	44,180	43,810	50,560	28,620	36,280	38,950	21,770	9,980	14,650	388,800
					0	14,081	40,815	29,242	31,372	35,382	32,800	38,956	28,982	22,000	10,000	14,800	298,148
Remaining CAP Capacity:			3,900	1160	20	9,820	2,190	8,440	4,380	2,720	50	230	40	450	33,400		
				15,919	0	24,758	10,628	23,618	200	44	10,018	0	0	400	85,685		

Agua Fria Siphon Outage (June 18 - September 15, 1997) The HAV through HSV Pumping Plant Capacity will not be available for recharge downstream of the Waddell Turnout during this period.
(1) - Capacity Only Utilized to the extent Pima County Facilities are Not Available
(2) - \$21.00 Cost Prohibitive
(3) - Capacity Committed to Other Partners
(4) - Currently Not Permitted

1997 PLAN OF OPERATION

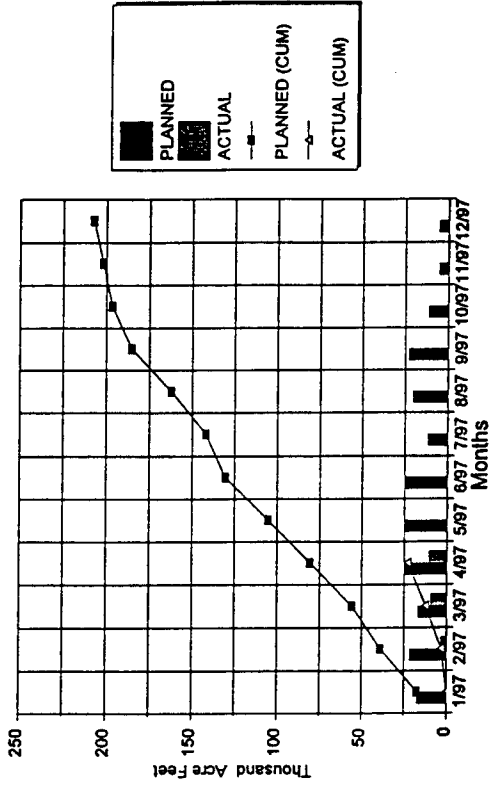
CUMULATIVE DELIVERIES (by Month)

Planned vs. Actual



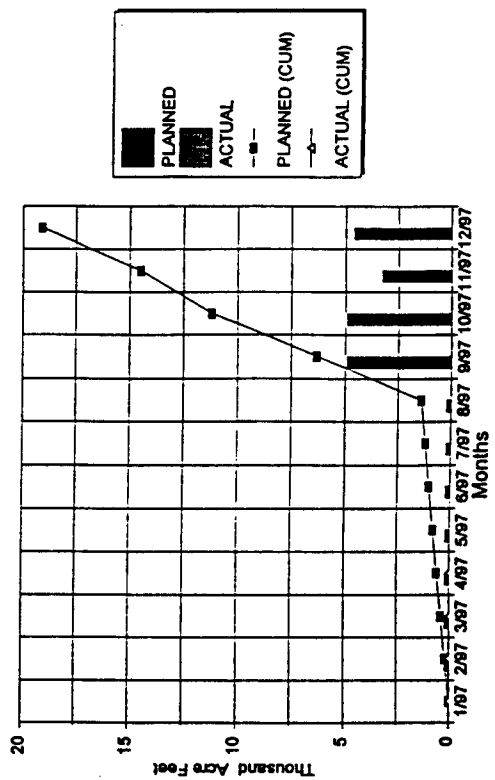
PHOENIX AMA DELIVERIES (by Month)

Planned vs. Actual



TUCSON AMA DELIVERIES (by Month)

Planned vs. Actual



PINAL AMA DELIVERIES (by Month)

Planned vs. Actual

