

ARIZONA WATER BANKING AUTHORITY

WEDNESDAY, JUNE 16, 1999

PLEASE PRINT

ARIZONA DEPARTMENT OF WATER RESOURCES

	NAME	REPRESENTING
1	Len Pope	Yuma County Water Users Association
2	Bruce Brown	Ecoplan Associates
3	Terresa Hovey	City of Mesa - Water Resources
4	Andrew Bivens	Colorado River Commission
5	Jeff Johnson	Southern W Water Authority
6	Bob McLean	AMWUA
7	Joe Alate	ABC
8	Benn Townsend	Senate
9	Martin Cohen	Pinal County Landowners ^{et al}
10	Mark Myers	Metro Water
11	Jake Logan	Sen. Jan Kuyf
12	Richard Siegel	SRP
13	JIM DAN NINER	MVWU DP
14	Docie Carpenter	Vicksburg Farms
15	LINDA JAMES (R.S. LYNCH)	IEDA
16	Kurt Fritsch	CRC of Nevada
17	Karl KOTLHOFF	CITY OF MESA
18	PAUL O'NEIL	CADDON/MSLDN
19	JAY MOYES	MOYES STORKEY LAW OFFICES
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Arizona Water Banking Authority

500 North Third Street, Phoenix, Arizona 85004

Telephone 602-417-2418

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Web Page: www.awba.state.az.us

FINAL AGENDA

Wednesday, June 16, 1999

10:00 a.m.

Arizona Department of Water Resources

Third floor conference room

- I. Welcome/Opening Remarks
- II. Approval of Minutes of May 19 Meeting
- III. May Deliveries/Staff Activities
- IV. Approval of FY 2000 Budget
- V. Approval of 1998 Annual Report
- VI. General Fund Appropriations Subcommittee Update
 - Update on Initial Subcommittee meeting
 - Discussion and action of recommended resolution - support for Indian Settlements while recognizing existing statutory obligation to firm outside the CAP Supplies
- VII. Discussion of Role of AWBA in Indian Settlements
 - Participation in various Indian Settlements discussions to explain potential role of AWBA
- VIII. Future Meeting Schedule
 - Discussion of changing frequency of meeting
 - Need for special meeting to discuss AWBA participation in Indian Settlements
- IX. Interstate Issues
 - Update on submittal of comments on surplus criteria
- X. Call to the Public

Future Meeting Dates:

Wednesday, July 21, 1999

Wednesday, August 18, 1999

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

ARIZONA WATER BANKING AUTHORITY
Draft Minutes

May 19, 1999

Arizona Department of Water Resources



AUTHORITY MEMBERS
Rita P. Pearson, Chairman
Tom Griffin, Vice-Chairman
Bill Chase, Secretary
George Renner
Richard S. Walden

EX OFFICIO MEMBERS
Representative Gail Griffin
Senate appointment vacant

Welcome/Opening Remarks

All members of the Authority (except Dick Walden) were present.

Minutes

The April 21st minutes were approved as submitted.

Plan of Operation and Other Staff Activities

Deliveries: Tim Henley, Manager of the AWBA, reviewed 1999 delivery figures. He explained that the AWBA is just about on target for 1999 water delivery projections with agricultural deliveries just slightly off. As the irrigation season approaches, constraints on deliveries may increase. Deliveries at GRUSP have been slightly curtailed due to problems existing between the SRP and the Salt River Pima Indian Community over water mounding and migrating north. The problem should be alleviated by locating additional facilities further south. SRP continues to recharge water at GRUSP but in lesser amounts.

SRP/CAWCD/AWBA Agreement: Last month, Dave Roberts of the SRP made a presentation describing the Gila River Indian Community Settlement discussions and how the AWBA, the SRP, and the CAWCD (in partnership) can contribute to the settlement. Part of the settlement would involve an agreement between the AWBA, the SRP, and the CAWCD to store approximately 200,000 acre feet of water at SRP groundwater savings facilities in order to "firm" 15,000 acre feet of water annually to partially settle the GRIC lawsuit. Tim Henley updated the group on this agreement. The agreement has been signed by all the parties, and the CAWCD began delivering water last weekend. All parties are optimistic about meeting delivery requirements.

The next step in the groundwater savings facility agreement among the AWBA/CAWCD/SRP is to examine how and if the water is to be earmarked for Indian water settlements. Once discussions are more developed, the Bank's role will become more clear.

Authority member Tom Griffin expressed his concern about allocating General Fund credits of Indian water settlements when no such arrangements have been made for Colorado River communities who have equal importance in the AWBA statutes. Mr. Griffin suggested forming and chairing a subcommittee to explore this issue. Rita Pearson agreed to the formation of this subcommittee and asked that the subcommittee meet prior to the next AWBA monthly meeting in order to brief the members on preliminary discussions. It would also be helpful for the subcommittee to recognize any concerns before the Indian settlements are finalized at the end of June.

Legislation Update: HB 2463 (Water Banking Amendments) passed out of the Legislature in late March, and the Governor signed the bill into law on April 1, 1999. The law becomes effective July 1, 1999. The bill has been filed with the Secretary of State. This final version of the bill is available from the AWBA if anyone wishes, but it does not differ at all from the introduced version of the bill.

Annual Report Overview

Kim Kunasek gave a brief overview of the structure of the 1998 Annual Report. By statute, it must be submitted by July 1, 1999. There was a heavy emphasis on the activities of the Study Commission. At next month's meeting, the Authority will need to approve the Annual Report.

Tim Henley reminded the group that next year's Annual Report will be more extensive, per changes in HB 2463 that require a ten-year overview of the goals of the AWBA and how the previous year's activities fit in with those goals.

Recovery Subcommittee Update

The AWBA's Recovery Subcommittee held a Recovery Workshop to begin exploring recovery concepts. The workshop was open to the public and consisted of a presentation and an open comment period. It took place on April 29, 1999 at the ADWR and was very well attended. Handouts from that meeting are included in the public packets. Once the preliminary information gathered by WestLand Resources is reviewed by a number of Arizona entities and when the information is finalized, it will be available on CD-ROM to the public through the ADWR Store.

Authority member George Renner asked that the AWBA brief the CAWCD Board at the next CAWCD Board meeting in June and to possibly work in conjunction with the CAWCD in developing and implementing a Recovery Plan.

Interstate Issues

Chairman Pearson informed the group that the Interstate Water Banking Rules have not yet been released but are expected soon.

Ms. Pearson also informed the group about progress with Indian water settlements. There are three sets of discussions surrounding the GRIC settlements, and good progress is being made. By next month's meeting, more detail will be available. The AWBA has an opportunity to firm certain quantities of water to enable the settlements to move forward. This is an appropriate activity for the AWBA as set forth in the statutes.

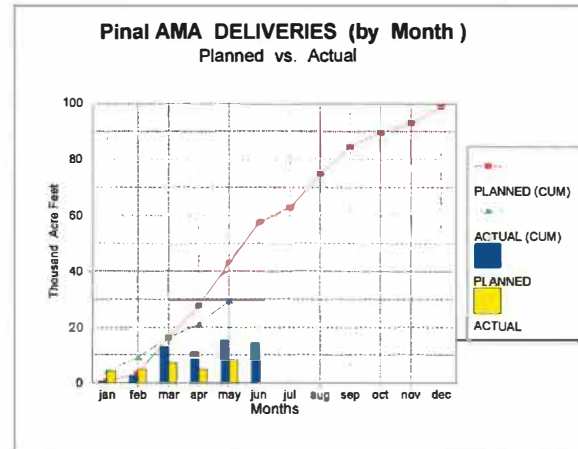
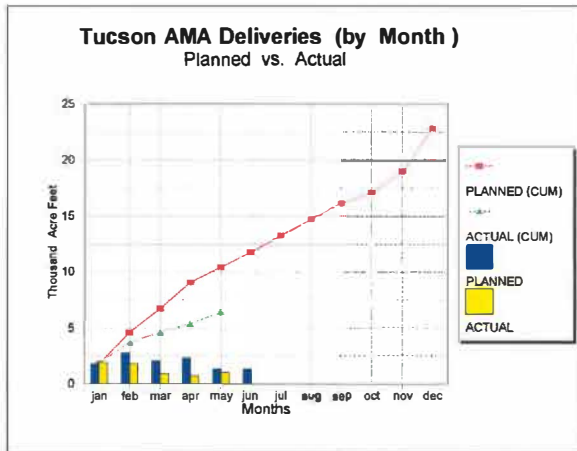
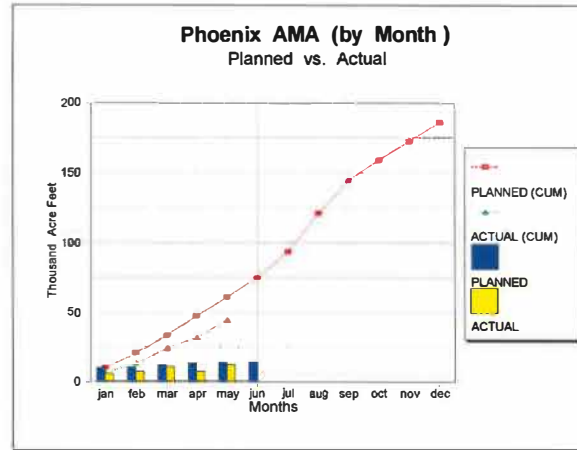
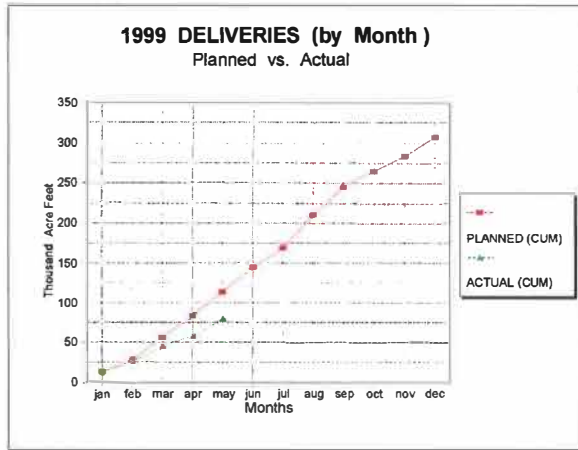
Herb Dishlip briefly described a Notice of Intent published this week in the Federal Register to solicit comments on the development of surplus criteria (i.e., what factors would go into a decision to declare a surplus on the Colorado River). The ADWR will conduct a process to meet with affected parties and to solicit these parties' comments before drafting comments. The deadline for these comments is June 30, 1999.

Call to the Public

Ms. Pearson explained that perhaps in the future, AWBA meetings will be held every other month. This will be discussed in more detail at next month's meeting.

The next meetings are on June 16, 1999 and July 21, 1999. The meeting was adjourned at 11:00 a.m..

1999 Plan of Operation



Actual deliveries updated 14-Jun-99

	jan	feb	mar	apr	may	jun
Phoenix AMA						
GRUSP	3,822	4,706	5,125	3,496	4,449	7,500
NMIDD	2,034	2,778	3,894	1,097	4,766	3,500
QCID	0	0	0	0	0	0
MWD	0	0	1,766	2,944	2,944	2,941
TID	0	0	0	0	0	0
VIDLER MBT	0	0	0	0	0	410
Subtotal	5,856	7,484	10,785	7,537	12,159	14,351
Total to date	5,856	13,340	24,125	31,662	43,821	58,172
Pinal AMA						
CAIDD	0	0	0	0	0	0
MSIDD	1,906	1,475	372	0	4,126	9,770
HIDD	2,274	3,429	6,793	4,890	4,080	4,800
Subtotal	4,180	4,904	7,165	4,890	8,206	14,570
Total to date	4,180	9,084	16,249	21,139	29,345	43,915
Tucson AMA						
Avra Valley	0	0	0	0	407	750
CAVSARP	678	633	811	727	620	600
Pima Mine	1,248	1,145	129	8	0	0
Lower Santa Cruz	0	0	0	0	0	0
Kai/Avra	0	0	0	0	0	0
Subtotal	1,926	1,778	940	735	1,027	1,350
Total to date	1,926	3,704	4,644	5,379	6,406	7,756
TOTAL	11,962	14,166	18,890	13,162	21,392	30,271
Total to date	11,962	26,128	45,018	58,180	79,572	109,843

Attachment 1999-1

ARIZONA WATER BANKING AUTHORITY
(FY 1999 - July 1998 thru June 1999)

	Budget	Actual
FY 1999 ADMINISTRATIVE BUDGET	\$418,590	\$331,000
FY 1999 WATER RECHARGE BUDGET	\$13,545,000	\$7,318,013
TOTAL FY 1999 BUDGET	\$13,963,590	\$7,649,013
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TOTAL EXPECTED REVENUES	\$13,538,600	\$13,720,000
CARRYOVER / (DEFICIT) from PREVIOUS YEAR:	\$9,063,109	\$9,063,109
TOTAL REVENUES AVAILABLE	\$22,601,709	\$22,783,109
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FY 1999 CARRYOVER / (DEFICIT)	\$8,638,119	\$15,134,096

Attachment 2000-1

ARIZONA WATER BANKING AUTHORITY
(FY 2000 - July 1999 thru June 2000)

FY 2000 ADMINISTRATIVE BUDGET	\$396,140
FY 2000 WATER RECHARGE BUDGET	\$11,931,250
TOTAL FY 2000 WATER BANKING AUTHORITY BUDGET	\$12,327,390
<hr/>	
TOTAL EXPECTED REVENUES	\$13,940,000
CARRYOVER / (DEFICIT) from PREVIOUS YEARS	\$15,134,096
TOTAL REVENUES AVAILABLE)	\$29,074,096
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FY 2000 CARRYOVER / (DEFICIT)	\$16,746,706

ARIZONA WATER BANKING AUTHORITY

FY 2000 ADMINISTRATIVE BUDGET**\$396,140**

STAFFING

	Total FTE	Cost
Department of Water Resources Cost of Services		\$270,400
Personnel Services	3.5	\$178,000
Water Bank Manager		
Water Bank Technical Administrator		
Administrative Assistant		
Attorney		
Employee Related Expenditures (at 20.58% of Personnel Services)		\$36,600
Indirect Cost (at 26.00% of Personnel Service & ERE)		\$55,800
Central Arizona Project Cost of Services		\$10,000
Personnel Services & ERE		\$10,000
Water System Engineer		
Customer Service Coordinator		
Hydrologist		
Administrative Support		
Subtotal Staffing		\$280,400

OTHER COSTS

Professional & Outside Services	(Development of Interstate Agreements)	\$100,000
Travel		\$6,450
Instate Travel		\$4,350
Out of State Travel		\$2,100
Other Operating Expenses		\$5,790
Standard per employee	3.5 \$820	\$2,870
Postage		\$1,820
Paper	Included under indirect cost	\$0
Miscellaneous		\$1,100
Equipment		\$3,500
Replace existing PCs		\$3,500
Subtotal Other Costs		\$115,740

Attachment 2000-3

ARIZONA WATER BANKING AUTHORITY

TRAVEL

		Meetings	\$/Meeting	Cost	
INSTATE TRAVEL					
Authority Members					
	Tom Griffin	5	\$400	\$2,000	
	Dick Walden	5	\$150	\$750	
	Bill Chase	5	\$0	\$0	
	George Renner	5	\$0	\$0	
	Rita Pearson	5	\$0	\$0	
Subtotal				<u>\$2,750</u>	
Authority Staff					
	Manager	5	\$0	\$0	
		4	\$200	\$800	(Las Vegas)
	Technical Administrator	5	\$0	\$0	
	Admin Assistant	5	\$0	\$0	
	Other Support	4	\$200	\$800	(Las Vegas)
Subtotal				<u>\$1,600</u>	
Instate Total				\$4,350	
OUT OF STATE TRAVEL					
Authority Members					
No out of state travel is anticipated for Authority Members					
Authority Staff					
	Manager	2	\$300	\$600	(California)
		1	\$900	\$900	(Other)
	Other Support	2	\$300	\$600	(California)
Total Out of State				\$2,100	
Total Travel				\$6,450	

Attachment 2000-3 continued

OTHER OPERATING COSTS

	Units	Unit Cost	Cost
Postage			
Meeting	2000	\$0.33	\$660
Newsletter	2000	\$0.33	\$660
Plan of Operation	250	\$1.00	\$250
Annual Report	250	\$1.00	\$250
Subtotal			\$1,820
Paper			
			Included under indirect cost
Subtotal			\$0
Miscellaneous			
Copying			Included under indirect cost
Special copying			\$400
Permits (2 @ 350/permit)			\$700
			\$1,100
Total Other Operating Cost			\$2,920

EQUIPMENT

	Units	Unit Cost	Cost
Replace existing PCs			\$3,500
Subtotal			\$3,500
Total Equipment			\$3,500

ARIZONA WATER BANKING AUTHORITY

FY 2000 WATER RECHARGE BUDGET **\$5,060,000**

COST ASSUMPTIONS

Cost of Water		
CAP	(Energy Rate 2 plus \$5.00 towards Fixed O&M)	\$44
Direct Recharge (Cost for using direct recharge facilities)		
	GRUSP	\$14.00
	Avra Valley	\$15.50
	Pima Mine Road	\$10.00
	Lower Santa Cruz	\$20.00
	CAVSARP	\$14.00
Cost Recovery for In-lieu Recharge		
	(50% cost recovery from in-lieu partners)	\$21

WATER PURCHASES and RECHARGE (July 1999 thru June 2000)

	Amount (acre feet)	Cost / acre foot	Total
CAP Delivery Cost			\$10,350,000
Direct Deliveries	115,000	\$44	\$5,060,000
In-Lieu Deliveries	230,000	\$23	\$5,290,000
Direct Facility Use Charge			\$1,581,250
GRUSP	90,000	\$14.00	\$1,260,000
Avra Valley	7,500	\$15.50	\$116,250
Pima Mine Road	10,000	\$10.00	\$100,000
CAVSARP	7,500	\$14.00	\$105,000
Total FY 2000	345,000	\$34.58	\$11,931,250

REVENUES AVAILABLE for FY 2000 RECHARGE **\$13,940,000**

4 cent TAX		\$7,240,000
Maricopa		\$5,600,000
Pinal		\$240,000
Pima		\$1,400,000
Withdrawal Fee	(Estimated for 1999 pumping)	\$4,700,000
Phoenix AMA		\$2,700,000
Pinal AMA		\$800,000
Tucson AMA		\$1,200,000
General Fund Appropriation	(Requested available July 1, 1999)	\$2,000,000

Attachment 2001-1

ARIZONA WATER BANKING AUTHORITY
(FY 2001 - July 2000 thru June 2001)

FY 2001 ADMINISTRATIVE BUDGET	\$397,820
FY 2001 WATER RECHARGE BUDGET	\$16,420,000
TOTAL FY 2001 WATER BANKING AUTHORITY BUDGET	\$16,817,820
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TOTAL EXPECTED REVENUES	\$13,900,000
CARRYOVER / (DEFICIT) from PREVIOUS YEARS	\$16,746,706
TOTAL REVENUES AVAILABLE	\$30,646,706
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FY 2001 CARRYOVER / (DEFICIT)	\$13,828,886

Attachment 2002-1

ARIZONA WATER BANKING AUTHORITY
(FY 2001 - July 2000 thru June 2001)

FY 2001 ADMINISTRATIVE BUDGET	\$304,020
FY 2001 WATER RECHARGE BUDGET	\$19,600,000
TOTAL FY 2001 WATER BANKING AUTHORITY BUDGET	\$19,904,020
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TOTAL EXPECTED REVENUES	\$13,850,000
CARRYOVER / (DEFICIT) from PREVIOUS YEARS	\$13,828,886
TOTAL REVENUES AVAILABLE	\$27,678,886
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FY 2001 CARRYOVER / (DEFICIT)	\$7,774,866

Arizona Water Banking Authority

Annual Report 1998

Honorable Jane Dee Hull
Governor of Arizona

Members

Rita P. Pearson
Chairman

Tom Griffin
Vice-chairman

Bill Chase
Secretary

Grady Gammage, Jr.
Member

Richard S. Walden
Member

Ex officio
Senator Pat Connor
Representative Gail Griffin

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Rita Pearson, Director of the Arizona Department of Water Resources and Chairman of the Arizona Water Banking Authority

Message from the Chairman of the Arizona Water Banking Authority

I am pleased to be provided with the opportunity to comment on the progress and the future of the Arizona Water Banking Authority.

1998 has been a tremendous year for the AWBA. The AWBA has continued to recharge water that would have otherwise gone unused by Arizona and at the same time replenishing aquifers and providing surface water alternatives to groundwater pumping. The AWBA stored water at seven groundwater savings facilities and began storing water at two new underground storage facilities in the Tucson Active Management area. All in all, the AWBA recharged approximately 220,000 acre feet of water in 1998.

One of the most exciting developments in 1998 was the work completed by the Arizona Water Banking Authority Study Commission. When it created the AWBA, the Arizona Legislature created a Study Commission to investigate opportunities for additional water banking uses, identify mechanisms to encourage participation in the program by Indian communities with rights to Colorado River water, and review the first year of the AWBA's operation. The Study Commission was broken down into five subcommittees to focus in more detail on additional water management opportunities available to the AWBA. The AWBA staff assisted the Study Commission by participating in subcommittee meetings and by assisting in the drafting of the subcommittee reports to the full Study Commission. The Study Commission's efforts resulted in numerous recommendations, including recommendations for legislative changes submitted to the Arizona Legislature in bill form (House Bill 2463) in December 1998.

At the end of 1997, the United States Department of the Interior released its draft interstate water banking rules which will someday enable Arizona to store its excess Colorado River water for use in Nevada and California. Throughout 1998, the AWBA and the ADWR provided extensive comments on the rules and raised several concerns. As of December 31, 1998, the proposed rule was still in draft form, and as such, no interstate water banking negotiations with Nevada or California have taken place. When the federal government finalizes the rule, and if the key portions of the rule meet with the ADWR Director's approval, the AWBA will commence discussions with our neighboring states to explore the possibility of interstate water banking.

When the AWBA was created in 1996, one of the policy goals was to enable it to assist in the settlement of Indian water rights. At the end of 1998, the AWBA focused much of its attention on ongoing Indian water rights settlement discussions. The AWBA may be able to assist in the settlement of disputes over water rights by "firming" a fixed quantity of Central Arizona Project water to guarantee supplies to Indian tribes.

In 1998, the AWBA has made great strides toward achieving all of its goals. The AWBA reflects Arizona's commitment to sound water policy. The AWBA provides Arizonans with added peace of mind that steps have been taken to ensure their high quality of life well into the future.

Arizona Water Banking Authority *Annual Report Requirement*

Arizona Revised Statutes section 45-2426 provides that the Arizona Water Banking Authority (AWBA) must file an Annual Report each year. The report must be submitted to the Governor of Arizona, President of the Arizona Senate, and Speaker of the Arizona House of Representatives on or before July 1 of each year and must contain a full and complete account of its transactions and proceedings for the preceding calendar year. The report must contain all of the following:

- An accounting of all monies expended from the banking fund.
- An accounting of all monies in the banking fund remaining available to the Authority.
- The amount of water stored by the Authority.
- The number of long-term storage credits distributed or extinguished by the Authority.
- The purposes for which long-term storage credits were distributed or extinguished by the Authority.
- Any other matter determined by the Authority to be relevant to the policy and purposes of this chapter.

In 1997, the statute was amended so that the Annual Report would reflect the activity of the previous calendar year (January to December) rather than the fiscal year (July to June).

ARIZONA WATER BANKING AUTHORITY

Members¹



RITA P. PEARSON - In March of 1993, Governor Symington appointed Rita Pearson Director of the Arizona Department of Water Resources. By statute, the Director also serves as Chairperson of the Arizona Water Banking Authority. Ms. Pearson also chaired the Arizona Water Banking Authority Study Commission.



GRADY GAMMAGE, JR.- Mr. Gammage serves as a member of the Arizona Water Banking Authority in his capacity as President of the Central Arizona Water Conservation District (CAWCD). Mr. Gammage founded the law firm of Gammage & Burnham in 1983, specializing in land use and real estate development.



THOMAS E. (TOM) GRIFFIN - Mr. Griffin was appointed to the Authority by Governor Symington in July 1996 as a representative of the communities along the Colorado River. Mr. Griffin served as Vice-Chairman of the Arizona Water Banking Authority and also served as Chairman of the AWBA Study Commission's subcommittee on Issues Outside the CAP Service Area. In 1985, he founded and still operates The Planning Group, a planning and development consulting firm in Arizona, California, and Nevada.

¹ Full biographies are available on the AWBA web page at <http://www.awba.state.az.us>.



WILLIAM L. CHASE, JR. - Mr. Chase was appointed to the Authority by Governor Symington in 1996 representing an entity that holds a Central Arizona Project Municipal and Industrial contract. Mr. Chase served as Secretary of the Arizona Water Banking Authority. Since December 1980, Mr. Chase has served as the Water Advisor for the City of Phoenix.



RICHARD S. WALDEN - Mr. Walden was appointed to the Authority in July 1996 by Governor Symington as a person knowledgeable in water resource management. He currently serves as President and Chief Executive Officer of Farmers Investment Company in Sahuarita, Arizona.

Ex Officio Members²



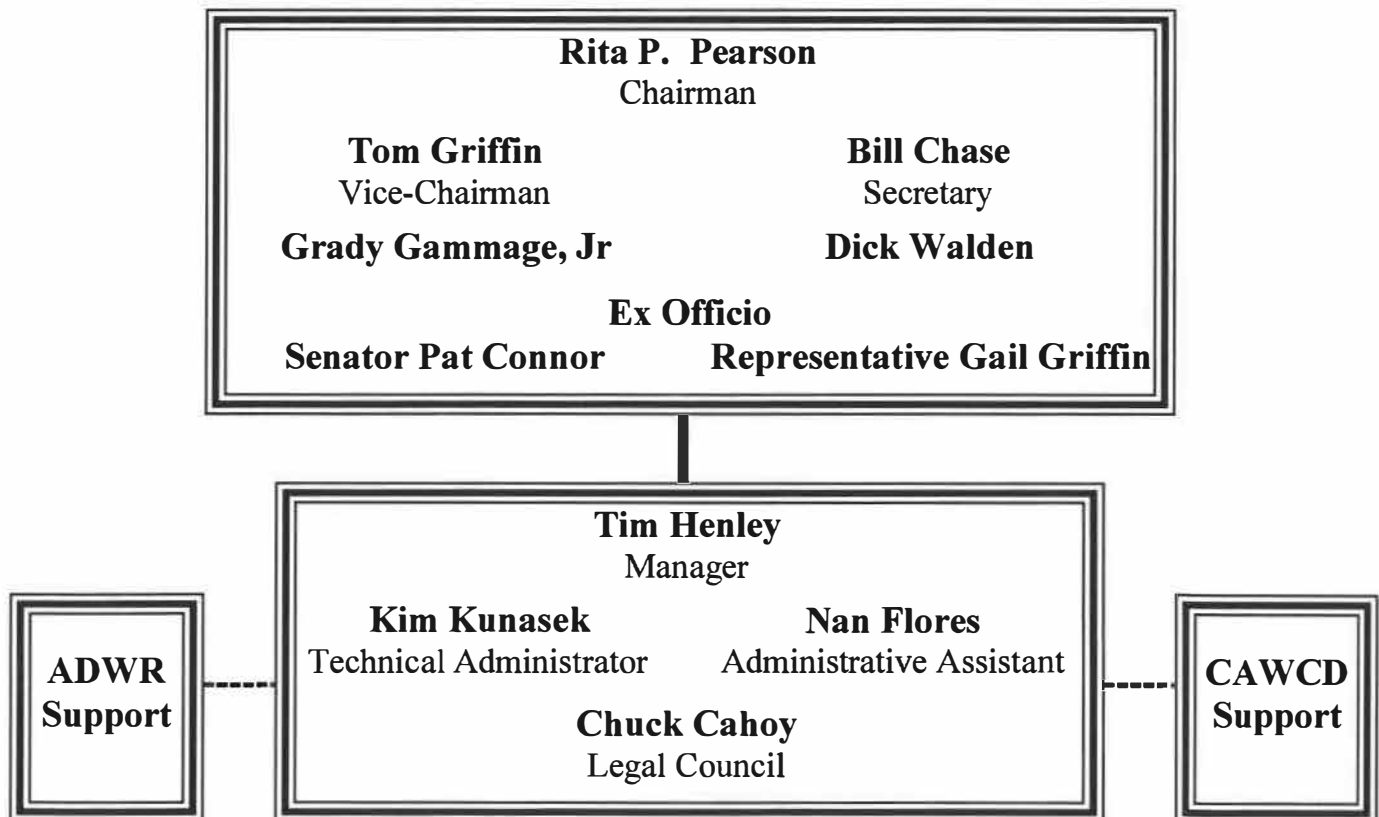
THE HONORABLE GAIL GRIFFIN - Representative Griffin was appointed as an *ex officio* member of the Arizona Water Banking Authority by Speaker of the Arizona House of Representatives Jeff Groscost. Ms. Griffin represents Legislative District 8 and serves as co-chairman of the House Natural Resources and Agriculture committee and as a member of the House Commerce, Environment and Government Operations committees. Ms. Griffin has lived in Arizona for almost 30 years and is a licensed real estate broker at Sierra Vista Realty.

² More information on the Arizona Legislature is available at: <http://www.azleg.state.az.us>.



THE HONORABLE PAT CONNER - Senator Conner was appointed as an *ex officio* member of the Arizona Water Banking Authority by Arizona Senate President Brenda Burns. Mr. Conner represents Legislative District 5 and served on the Senate Appropriations Committee, Senate Commerce & Economic Development Committee (as Vice Chairman), Senate Judiciary Committee, and Senate Natural Resources, Agriculture & Environment Committee (Chairman). Senator Conner is a native of Arizona and is involved in real estate and investments in the Yuma area and owns Soft Cloth Car Washes.

Organizational Chart



The Arizona Water Banking Authority *Update*

The AWBA has been working diligently to carry out its mission to take the formerly unused portion of Arizona's Colorado River allotment and recharge the water in Arizona to develop long-term storage credits for future use. This recharge by the AWBA does not substitute for existing uses or storage of Colorado River water by entities in Arizona but utilizes Colorado River water that would otherwise go unused by Arizona.

The AWBA holds monthly meetings at the ADWR to keep the public apprised of its progress and has held additional meetings with entities interested in participating in recharge either at underground storage facilities or groundwater savings facilities. Representatives from California and Nevada have attended several of these AWBA meetings, and possible future interstate water banking continues to be a topic of discussion.

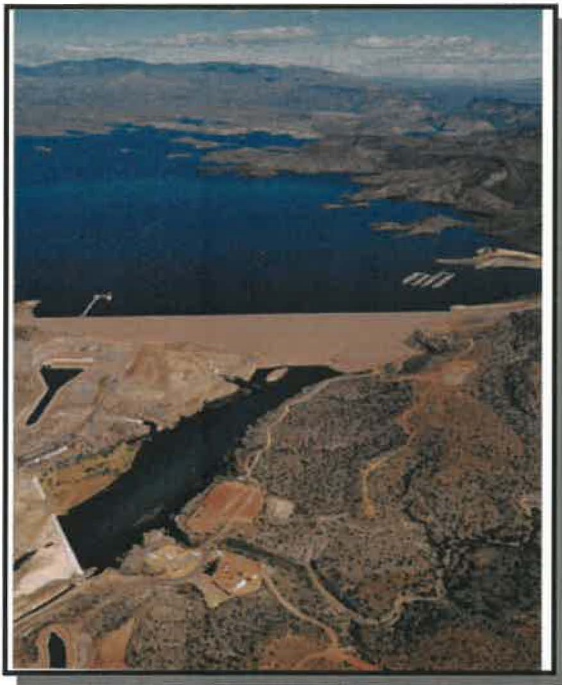
The AWBA members and staff meet annually with all current and potential recharge entities in developing the Annual Plan of Operation. These entities include the Salt River Project (SRP), the CAP, and all permitted irrigation districts in Maricopa, Pinal, and Pima counties. All potential recharge opportunities are then matched with delivery capacities of the CAP aqueduct. The AWBA systematically adjusts each entity's amount to match CAP delivery constraints. An analysis is then made of the amount of potential recharge in each Active Management Area (AMA) and county and the amount of funds generated monthly in each AMA and county to keep monies in the AMA or county of generation.

The AWBA recharged approximately 330,000 acre feet of CAP water in 1997 and approximately 220,000 acre feet in 1998. Total consumptive use by Arizona for 1997 was approximately 2.7 million acre feet, including: 1.38 million acre feet Colorado River uses along the Colorado River; CAP subcontractor deliveries of an estimated 975,000 acre feet, including municipal and industrial, Indian, Agricultural Pools 1, 2, and 3, and incentive recharge water; and approximately 330,000 acre feet for recharge by the AWBA. Total consumptive use by Arizona for 1998 was approximately 2.46 million acre feet, including: 1 million acre feet Colorado River uses along the Colorado River; CAP subcontractor deliveries of an estimated 1.23 million acre feet, including municipal and industrial, Indian, Agricultural Pools 1, 2, and 3, and incentive recharge water; and approximately 220,000 acre feet of recharge by the AWBA. The AWBA expects to recharge approximately 307,000 acre feet of water in 1999.

By storing substantial amounts of water in central Arizona, the AWBA safeguards against future shortages on the CAP system, assists in meeting the goals of the Arizona Groundwater Code, and aids neighboring states without harming Arizona. The AWBA is Arizona's "water savings account" and ensures that the water supplies future generations inherit from us are just as secure as those we inherited.

For more information about the Arizona Water Banking Authority, please consult our web page at <http://www.awba.state.az.us>, or contact Tim Henley (tjhenley@adwr.state.az.us) or Kim Kunasek (kskunasek@adwr.state.az.us) at (602)417-2418.

At a **Groundwater Savings Facility**, Colorado River water is delivered from the Central Arizona Project via smaller canals to irrigate crops leaving precious groundwater in the ground. About 50% of AWBA long-term storage credits have been developed at groundwater savings facilities such as the one pictured below.

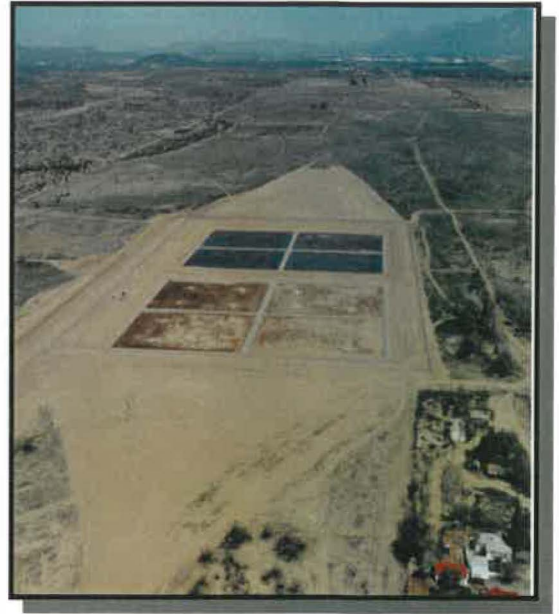


New Waddell Dam, pictured above, is operated by the Central Arizona Water Conservation District (CAWCD). The CAWCD provides operational support for the AWBA. New Waddell Dam is key to the CAWCD's ability to operate the CAP system.

In addition to providing operational support to the AWBA, CAWCD also operates two of the **Underground Storage Facilities** used by the AWBA.

The **Pima Mine Road Recharge Facility (PMR)**, located in the Tucson AMA, consists of approximately fourteen acres of spreading basins divided into eight cells or spreading basins (which resemble shallow ponds) that can be operated individually. Raw CAP water is delivered from the CAP aqueduct to the recharge basins via a conveyance pipeline to these spreading basins, and the water is allowed to seep into the ground. The water penetrates many layers of soils and ultimately reaches the underground aquifer.

The AWBA recharged 1,859 acre feet of CAP water at PMR in 1998 and plans to store up to 5,000 acre feet there in 1999.



Pima Mine Road Recharge Facility

Owned and operated by the
Central Arizona Project



Avra Valley Recharge Project

Owned and Operated by the
Central Arizona Project

The **Avra Valley Recharge Project**, located in the Tucson AMA, consists of approximately eleven acres of spreading basins which are divided into four cells which can be operated individually.

The AWBA recharged 2,739 acre feet of CAP water at AVRP in 1998 and plans to recharge 6,400 acre feet in 1999.

Arizona Water Banking Authority
Activities and Projects
1998

Below are summaries of several activities undertaken by the Arizona Water Banking Authority in 1998.

The Arizona Water Banking Authority Study Commission

Background

When it created the AWBA, the Arizona Legislature created a Study Commission to investigate opportunities for additional water banking uses, identify mechanisms to encourage participation in the program by Indian communities with rights to Colorado River water, and review the first year of the AWBA's operation. The Study Commission consisted of all five AWBA members and its two *ex officio* members plus nine people appointed by the Director of the Arizona Department of Water Resources (ADWR). The Study Commission was broken down into five subcommittees to focus in more detail on additional water management opportunities available to the AWBA. The AWBA staff assisted the Study Commission by participating in subcommittee meetings and by assisting in the drafting of the subcommittee reports to the full Study Commission.

Subcommittees

The Study Commission was comprised of five subcommittees: the Planning and Modeling Subcommittee, the Taxation and Finance Subcommittee, the Interstate and Intrastate Water Banking and Marketing Issues Subcommittee, the Water Banking Benefits Outside the CAP Service Area Subcommittee, and the Indian Issues Subcommittee.

The **Planning and Modeling Subcommittee** was formed to develop a consistent set of water planning assumptions to evaluate the availability of water supply to meet demands in order to best address the opportunities for additional water banking uses and Indian communities' participation in water banking. These assumptions were used in the Colorado River System Simulation (CRSSez) model to quantify the potential future shortages of water that may occur for existing municipal and industrial CAP subcontractors and others. The potential shortages represent the amount of water that must be banked to firm long-term water supplies. The output from the model also quantifies the potential amount of water that is surplus to the projected annual demands and is consequently available for banking purposes.

The **Taxation and Finance Subcommittee** investigated the funding mechanisms available to the AWBA under its current statutory authorities. AWBA staff prepared preliminary projections of the revenues expected from these sources and compared those revenues with the potential needs to accomplish currently authorized purposes. The subcommittee was required to consider whether the mechanism for the tax

collected pursuant to A.R.S. §48-3715.02 (four cent *ad valorem* tax in Maricopa, Pinal, and Pima Counties) was satisfactory and whether the tax provision should be continued as currently drafted. It also considered whether charges for the AWBA's interstate banking services should require out of state entities to

participate in storage and recovery options that are most compatible with Arizona's groundwater management objectives, even if those options are more costly, and how to determine any fees in lieu of taxes that out of state entities would be required to pay for water storage in Arizona.

"The efforts and results of the Study Commission are examples of the best kind of public policy development. We had a group of qualified and interested citizens and water professionals working together to develop recommendations as to how to manage a portion of Arizona's valuable water resources."



- Larry Dozier, Chairman
Taxation and Finance Subcommittee



"The Study Commission process was both thought-provoking and focused. The fact that consensus recommendations were adopted by as diverse a group as the Study Commission members with respect to a volatile topic like water policy reflects the effectiveness of the Study Commission process."

- Mark Myers, Chairman
Interstate and Intrastate Water Banking and Marketing Issues Subcommittee

The **Interstate and Intrastate Water Banking and Marketing Issues** subcommittee was charged with evaluating the opportunities for the AWBA to perform additional services that could assist water users in Arizona in meeting their needs for a reliable water supply. The Study Commission determined that a number of opportunities may exist for the AWBA to perform additional services that could assist water users in Arizona in meeting their needs for a reliable water supply. It also recognized that the program for banking water for interstate purposes could potentially be expanded in a variety of ways.

The subcommittee also identified three primary issue areas. It considered whether Arizona and the United States Bureau of Reclamation should develop a policy and process for transferring or leasing entitlements between parties in Arizona (including transfers with Indian tribes), whether the benefits and services provided by the AWBA should be expanded and, if so, which services are most appropriate, and whether the AWBA should be authorized to meet future needs for water supply by using techniques other than the long-term storage credit system.

The **Water Banking Benefits Outside the CAP Service Area** Subcommittee analyzed the additional opportunities for the AWBA to provide benefits and services to those portions of the state that are not a part of the CAP service area. The AWBA's enabling legislation established a role for the AWBA to provide limited banking services for municipal and industrial users of Colorado River water that are outside of the CAP service area. For the purpose of the subcommittee's discussions, the term "outside of the CAP service area" was defined to be those portions of Arizona that could not receive water directly through the CAP delivery system.



“The diversity and quality of the people serving on the Study Commission and subcommittees is shown by the successful results.”

- Tom Griffin, Chairman
Benefits Outside the CAP Service Area Subcommittee

The subcommittee first determined the frequency and magnitude of potential shortages to municipal and industrial water users of Colorado River water who are not Central Arizona Project subcontract holders. It then considered whether the AWBA should be empowered to obtain and make available water supplies to new Colorado River M&I water providers or to supplement the supplies and allocations of existing Colorado River M&I water providers in areas located outside of the CAP service area. The subcommittee examined whether the AWBA should be empowered to store water at recharge sites that do not have direct access to excess CAP water and identified the needs and opportunities for the AWBA to provide assistance for water supply enhancement or drought protection for M&I water users who are neither located within the CAP service area nor located along the Colorado River and whether the AWBA should be empowered to provide water supply enhancement assistance for non-M&I uses within Arizona such as environmental enhancement projects. The subcommittee studied and determined the mechanisms for forbearance and exchange that could be used to deliver AWBA-developed supplies to water users outside of the CAP service area. And finally, the subcommittee considered whether M&I water users located outside of the CAWCD service area who receive credits from the AWBA to offset a water shortage be required to pay to have those credits replaced and whether the reimbursement rate should be equal to what the AWBA *originally* paid for the credits or at the rate in effect at the time the purchase of replacement water is needed.

The **Indian Issues Subcommittee** was formed to consider the opportunities for the AWBA to further involve Indian communities in its water banking activities. The AWBA’s enabling legislation established an important policy for the state by providing that the public policy and general purposes of the laws are to provide the opportunity for storing water brought into Arizona through the CAP to be available to implement the settlement of water right claims by Indian communities within Arizona.

The subcommittee examined the respective water rights and supplies of the Arizona Indian tribes and how will they interact with the AWBA, how the AWBA could assist in achieving implementation of Indian water rights settlements, how the AWBA could provide additional water supplies or marketing services to Indian communities, and finally considered some of the unique challenges facing Indian community participation in AWBA activities.

“The Study Commission results illustrate the benefits and the future potential when the state and the tribes really work together.”

-Gary Hansen, Co-Chairman
Indian Issues Subcommittee



Final Report

The Study Commission has concluded its activities and completed both a comprehensive Interim Report (November 1997) and a Final Report (November 1998) containing research findings, conclusions, and recommendations regarding the issues it considered. These reports are available on the AWBA's web page (<http://www.awba.state.az.us>).

The Study Commission's final report contains, among other things, recommendations for statutory changes that would confer new powers and duties on the AWBA. If a bill amending the AWBA statutes passes the Arizona Legislature, the AWBA will have several new duties and responsibilities.

First, A.R.S. § 45-2401 would be amended to recognize a need in the future to provide for the efficient use of all water resources in Arizona and the need for a centralized source of water banking services. The bill would also amend A.R.S. §§ 45-2423 to allow the AWBA to perform banking services for specific entities in Arizona and would create a mechanism for distribution of long-term storage credits earned on behalf of specific Arizona entities.

The Interstate Water Banking and Marketing Subcommittee considered that some Arizona entities have expressed an interest in using the AWBA's services to store water they have a legal right to store. While nothing in Title 45 prevents these entities from banking water on their own, the subcommittee's consensus was that it may be more efficient for the AWBA to administer and oversee water banking for individual Arizona entities if they choose to do so.

Second, A.R.S. § 45-2423(B) would be amended to permit the AWBA to store effluent for the same purposes allowed for CAP water but only when all available excess CAP water has been stored or when excess CAP water is not available to the AWBA. In order to maximize efficient water management, when available excess CAP supplies are unavailable, the AWBA should be able to recharge effluent if it is available. Recharging effluent will not, however, take priority over the AWBA's duty to recharge as much CAP water as possible.

Third, A.R.S. § 45-2401 would be amended to state a need to protect non-CAP surface water supplies. The AWBA would have the ability to determine the amount of four-cent tax generated long-term storage credits needed to "firm" supplies for CAP municipal and industrial (M&I) subcontractors, and based on that determination, it could use any "excess" four-cent tax monies to firm supplies for *non*-CAP M&I surface water users (such as the Salt River Project, Maricopa Water Conservation District, and Roosevelt Water Conservation District) within the CAP service area. Under current law, long-term storage credits accrued with four-cent tax revenues can only be used to firm *CAP* M&I subcontractors' supplies in times of shortage or disruption of the *CAP* system. Ideally, non-CAP sources could be protected through the AWBA's water resource management authority.

Fourth, the legislation would create a mechanism for long-term storage credit lending. This would enable the AWBA to loan credits to any Arizona entity for use in Arizona and allows the AWBA to receive reasonable compensation for lending credits. An example of how this function could provide a useful function is for assistance with assured water supply requirements: while these long-term storage credits could not be used to meet a 100-year assured water supply requirement, a quantity of credits could be

purchased to help an entity working toward obtaining a 100-year water supply (for example, to meet a five-year supply until the longer-term arrangement is finalized).

Finally, the legislation would require the AWBA to include in each annual report a section that discusses how the previous year's activity fits in with the overall long-term goals of the AWBA. By adding information that projects into the future, the annual report could provide a better long-term projection of AWBA activities over the next ten years and how each year's activities are working toward accomplishing the AWBA's long-term goals. These goals may evolve and change over time, so updating each year will give the public a better grasp of the changing role (if any) of the AWBA.

Other Recommendations

In addition to the legislative changes recommended, the Study Commission also made other policy recommendations.

Planning & Modeling Subcommittee Recommendations

- Specific modeling assumptions should be used for planning purposes
- Specific quantities of water should be stored to protect against projected shortages
- Criteria for the USBR to adopt for a procedure for determining how shortages to Arizona fourth priority contractors will be shared between CAP contractors and non-CAP contractors
- The method the USBR should use to determine how reduced deliveries to the CAP will be shared between M&I priority subcontractors and Indian priority contractors.

Taxation & Finance Subcommittee Recommendations

- Current provisions of A.R.S. § 48-3715.02 (tax levied by the CAWCD with revenues spent by the AWBA) should be continued without modification
- Interstate water storage agreements for recharge and recovery should not necessarily reflect the lowest cost options for the participating states but should recognize the need to meet Arizona's groundwater management objectives, including provisions relating to management plans.
- The appropriate in lieu tax charges for interstate banking activities should be based upon the amount of ad valorem taxes paid per acre foot by non-Indian M&I and agricultural water users in the three county CAP service area. The tax collection should be compared to the average delivery over the previous three years.
- The Arizona Legislature should continue to provide adequate funding to the AWBA program, including the potential for increased levels of funding in the future.

Interstate and Intrastate Water Banking and Marketing Issues Subcommittee Recommendations

- The ADWR, the USBR, the CAWCD, and the AWBA should, in a coordinate manner, identify and establish policies and procedures regarding transfers and also for transporting non-CAP water through the CAP aqueduct system.

Benefits Outside the CAP Service Area Subcommittee Recommendations

- The AWBA should adopt a conservative set of water shortage assumptions for planning purposes. Using these conservative assumptions, 575,000 acre feet of long-term storage credits should be reserved by the AWBA for river area M&I water providers.
- The USBR should clarify the method that will be used for determining how reduced deliveries to non-CAP fourth priority contractors will be shared between M&I and agricultural contractors.
- The ADWR and the AWBA should work directly with any interested community and with representatives of the Arizona Rural Water Association to consider ways that rural communities can obtain additional water supplies in the future.
- The AWBA, the CAWCD, and affected communities along the Colorado River should enter into exchange agreements and file notice of those agreements with the ADWR to enable recovery and delivery of banked water to river area communities.

Indian Issues Subcommittee Recommendations

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

Conclusion

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

Reserving Credits for Areas Outside the CAP Service Area

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

The Study Commission determined the frequency and magnitude of potential shortages to the Colorado River water M&I users. They recommended the development of approximately 420,000 af of credits to firm the water supplies of the M&I users outside the CAP area for the next 100 years.

After reviewing the recommendation, the Authority reserved 420,000 af of credits to supplement the current supplies of the M&I users outside the CAP service area from the credits that will be developed with the general fund appropriations. Reserving these credits will firm those current supplies for at least 100 years. The Authority further determined that the 420,000 af of credits should be subdivided by county as follows:

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

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

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

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

Based on the above percentages, the distribution of the 150,000 af among the Counties would be as follows:

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

Facility Plan

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

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

The Facility Plan is available on the AWBA's web page (<http://www.awba.state.az.us>).

1999 Plan of Operation

The AWBA plans to recharge approximately 307,000 acre feet of water in 1999. The AWBA will recharge approximately 192,000 acre feet at groundwater savings facilities and approximately 115,000 acre feet at underground storage facilities. The AWBA's Plan of Operation anticipates recharging about 8,000 acre feet with two new partners: Vidler Water Company's MBT Ranch Underground Storage Facility in LaPaz County and Kai Farms/Avra Groundwater Savings Facility in the Tucson AMA. The 1999 Plan of Operation is available on the AWBA's web page.

Web Page

The AWBA improved and expanded the information contained on its web page (<http://www.awba.state.az.us>). The web page contains information about the AWBA, the AWBA's recharge partners, monthly updates in graph and table format on water deliveries around the state, announcements from the AWBA, a schedule of upcoming meetings, numerous publications that may be downloaded, links to other water-related sites, and a great deal of other information.

Media Coverage

The AWBA again received considerable press coverage over during 1998.

"Putting water in the bank," Las Vegas Review-Journal, January 1, 1998.

"One with the River," Las Vegas Review-Journal, March 15, 1998.

"Key benefits of water banking," Parker Pioneer, May 27, 1998, Front Page.

"Water law changes shown to area board," Casa Grande Dispatch, November 11, 1998.

"County Supervisors discuss water banking issues," Parker Pioneer, December 9, 1998.

"Saving for a Dry Day," River Report, Winter 1998.

"Babbitt Stresses Water Use Deal," Las Vegas Review-Journal, December 18, 1998.

The AWBA was discussed frequently during the debate over interstate water banking that arose during the 1998 gubernatorial race.

“Hull denies Nevada influence on water,” Tucson Citizen, October 6, 1998.

“Johnson’s water charges are wrong,” Arizona Daily Star, October 6, 1998.

“Hull not making water-use deals,” Mesa Tribune, October 6, 1998.

“Johnson’s future floats on water,” Arizona Republic, October 6, 1998.

“Johnson’s Waterloo?” The New Times, Page 6, October 15-21, 1998.

“A Desperate, Irresponsible Claim,” Editorial, Arizona Republic, October 11, 1998.

“Johnson’s noises about Hull’s water theft have no basis,” William H. Swann, Arizona Republic, October 26, 1998.

Indian Reservation Water Banking

AWBA and ADWR staff met with representatives from the Tohono O’Odham Nation, the Gila River Indian Community, and the Colorado River Indian Tribes regarding possible future on-reservation water banking. These meetings provided an opportunity to determine the level of interest by the Indian Communities and to better understand the Communities’ concerns and goals. In addition, AWBA and ADWR staff collected hydrologic data and maps and visited the potential underground storage facility sites.

Interstate Water Banking

On December 31, 1997, the United States Bureau of Reclamation (USBR) published a draft rule governing offstream storage of Colorado River Water for the Lower Basin states (Nevada, California, Arizona). The USBR held two public hearings in Ontario, California in February and March to hear interested parties’ concerns. The initial comment period was extended into April 1998. The AWBA and the ADWR submitted extensive comments. After reviewing the comments from numerous entities, the USBR in September reopened the public comment period but restricted those comments to two specific components of the proposed water banking regulations. The AWBA and the ADWR again submitted extensive comments to the narrow portion of the proposed rule (October 1998), but because the rule was not finalized, did not begin interstate water banking negotiations with Nevada and California representatives. The USBR took no further action on finalization of the rule in 1998.

Arizona Water Banking Authority
Monies Expended from the Banking Fund

Arizona Revised Statutes section 45-2425 established a Water Banking Fund (Fund). The AWBA administers the Fund. Section 45-2425 provides a breakdown of the sources of monies in the Fund.

The AWBA currently obtains its funding from the following sources:

- 1) Fees for groundwater pumping are currently collected within the Phoenix, Pinal, and Tucson Active Management Areas (AMAs). In the Phoenix AMA, Tucson AMA, and most areas of the Pinal AMA, pumping fees for water banking purposes are \$2.50 per acre foot. Fees are based on annual groundwater pumping and in-lieu deliveries in the AMAs. The groundwater users file their reports by March of each year. ADWR collects the fees and deposits them in the Fund. The AWBA actually receive the fees for the previous year groundwater use. *Money from this source must be used for the benefit of the Active Management Area in which it was collected.*
- 2) The CAWCD levies a four cent *ad valorem* property tax and dedicates it to the AWBA. The tax is collected by the counties in the CAP service area and place in the Fund. The Fund receives monies collected from the four cent tax in two installments: the first is due in November of each year, the Fund receives most of these revenues by the end of December; the second is due in April, the Fund receives most of these revenues by the end of May. To help finance the AWBA's efforts, the tax can be levied, collected and deposited in the Fund through 2016. *Money from this source must be used to benefit the county in which it was collected.*
- 3) A general fund appropriation is made to the Fund in the amount the Arizona Legislature and Governor believe to be appropriate. The appropriation is determined annually, in 1998 the appropriation was \$2 million. General fund monies are made available to the Fund in four equal payments on a quarterly basis. *Water stored with these funds may be used to assist communities along the Colorado River, to help Arizona meet its water management objectives, or as a component of an Indian water rights settlement.*

Any monies remaining in the Fund at the end of the year remain in the Fund and are available to be expended in subsequent years.

Table 1 shows fees the AWBA collected and expended in 1998 their source. **Table 2** shows total funds collected, expended and remaining in the Water Banking Fund by source through December 1998.

Table 1

<i>Monies Collected, and Expended in 1998 by Source</i>		
<i>Source</i>	<i>Collected</i>	<i>Expended</i>
General Fund		
Sub-Total	\$2,000,000	\$1,950,000
4¢ Ad Valorem Tax		
Maricopa County	\$6,752,000	\$4,047,000
Pinal County	\$242,000	\$173,000
Pima County	\$1,112,000	\$644,000
Sub-Total	\$8,106,000	\$4,864,000
Groundwater Pumping Fee		
Phoenix AMA	\$2,692,000	\$0
Pinal AMA	\$1,196,000	\$0
Tucson AMA	\$716,000	\$0
Sub-Total	\$4,604,000	\$0
Administration		
Sub-Total	\$407,000¹	\$329,000
TOTAL	\$13,119,000	\$7,143,000

¹ Interest collected on Fund balance

Table 2

<i>Monies Collected, Expended, and Available through December 1998</i>			
<i>Source & Location</i>	<i>Collected</i>	<i>Expended</i>	<i>Available¹</i>
General Fund			
Sub-Total	\$5,000,000	\$4,741,000	\$259,000
4¢ Ad Valorem Tax			
Maricopa County	\$15,747,000	\$7,480,000	\$8,267,000
Pinal County	\$579,000	\$468,000	\$111,000
Pima County	\$3,066,000	\$817,000	\$2,249,000
Sub-Total	\$19,392,000	\$8,765,000	\$10,627,000
Groundwater Pumping Fee (collected in 1998 only)			
Phoenix AMA	\$2,692,000	\$0	\$2,692,000
Pinal AMA	\$1,196,000	\$0	\$1,196,000
Tucson AMA	\$716,000	\$0	\$716,000
Sub-Total	\$4,604,000	\$0	\$4,604,000
Administration			
Sub-Total	\$1,002,000	\$707,000	\$295,000
TOTAL	\$29,998,000	\$13,506,000	\$15,785,000

¹ Includes monies remaining in Fund and prepayment to CAWCD

² Includes \$305,000 transferred to Admin. account for first two years of operation

Arizona Water Banking Authority
Long-term Storage Credits

The AWBA has established a Long Term Storage Account (Account Number 70-441150) with the ADWR. After receiving the AWBA's annual report, ADWR calculates and issues long term storage credits to AWBA's account. Under A.R.S. § 45-852.01, the ADWR only credits the account with 95% of the recoverable amount of stored water. For example, for each 100 acre feet the AWBA recharges (either at groundwater savings facilities or underground storage facilities), the ADWR credits the AWBA's long-term storage account with 95 acre feet of credits. The 5% that is not credited to the AWBA is known as the "cut to the aquifer" and provides additional groundwater replenishment benefits. The recoverable amount is determined by reducing the quantity of water delivered to the recharging facility by any losses that occur at the facility. After the credits are issued to the account, the AWBA's staff divides the credits into the appropriate sub-accounts based on funding sources.

Table 3 shows the long-term storage credits earned by the AWBA in each of the AMAs in 1998 divided by funding source. **Table 4** shows the long-term storage credits earned by the AWBA in each of the AMAs to date divided by funding source through December 1998.

Table 3

<i>Long-term Storage Credits Accrued in 1998</i>	
<i>Location & Funding Source</i>	<i>Credits Accrued</i>
Phoenix Active Management Area	
4¢ <i>Ad Valorem</i> Tax (for the benefit of the County)	103,743 af
Groundwater Pump Fee (for the benefit of the AMA)	0 af
General Fund	13,532 af
AMA Total	117,275 af
Pinal Active Management Area	
4¢ <i>Ad Valorem</i> Tax (for the benefit of the County)	7,992 af
Groundwater Pump Fee (for the benefit of the AMA)	0 af
General Fund	65,874 af
AMA Total	73,866 af
Pima Active Management Area	
4¢ <i>Ad Valorem</i> Tax (for the benefit of the County)	11,316 af
Groundwater Pump Fee (for the benefit of the AMA)	0 af
General Fund	0 af
AMA Total	11,316 af
Outside the Active Management Areas	
General Fund	0 af
Totals by Funding Source	
4¢ <i>Ad Valorem</i> Tax (for the benefit of the County)	123,051 af
Groundwater Pump Fee (for the benefit of the AMA)	0 af
General Fund	79,406 af
TOTAL	202,457 af

Table 4

<i>Long-term Storage Credits Accrued through December 1998</i>	
<i>Location & Funding Source</i>	<i>Credits Accrued</i>
Phoenix Active Management Area	
4¢ <i>Ad Valorem</i> Tax (for the benefit of the County)	231,082 af
Groundwater Pump Fee (for the benefit of the AMA)	0 af
General Fund	27,923 af
Sub-Total	259,005 af
Pinal Active Management Area	
4¢ <i>Ad Valorem</i> Tax (for the benefit of the County)	25,893 af
Groundwater Pump Fee (for the benefit of the AMA)	0 af
General Fund	193,338 af
Sub-Total	219,231 af
Pima Active Management Area	
4¢ <i>Ad Valorem</i> Tax (for the benefit of the County)	14,248 af
Groundwater Pump Fee (for the benefit of the AMA)	0 af
General Fund	0 af
Sub-Total	14,248 af
Outside the Active Management Areas	
General Fund	0 af
Totals by Funding Source	
4¢ <i>Ad Valorem</i> Tax (for the benefit of the County)	271,223 af
Groundwater Pump Fee (for the benefit of the AMA)	0 af
General Fund	221,261 af
TOTAL	492,484 af

Arizona Water Banking Authority

Number of long-term Storage Credits Distributed or Extinguished by the Authority

No long-term storage credits have been distributed or extinguished by the AWBA.

Appendix 1

ARIZONA WATER BANKING AUTHORITY
Colorado River Water Deliveries
for Calendar Year 1998

One acre foot = 325,851 gallons

Partner ***Water Delivered***
Phoenix Active Management Area (AMA)

Maricopa Water District.....	19,800 af
Queen Creek Irrigation District (QCID).....	12,086 af
Granite Reef Underground Storage Project (GRUSP).....	57,896 af
New Magma Irrigation and Drainage District (NMIDD).....	37,552 af
Chandler Heights Irrigation District (CHCID).....	88 af
Total Deliveries in Phoenix AMA.....	127,422 af

Pinal Active Management Area (AMA)

Central Arizona Irrigation and Drainage District (CAIDD).....	8,048 af
Hohokam Irrigation and Drainage District (HIDD).....	38,388 af
Maricopa-Stanfield Irrigation and Drainage District (MSIDD).....	33,311 af
Total Deliveries in Pinal AMA.....	79,747 af

Tucson Active Management Area (AMA)

Avra Valley Recharge Project (AVRP).....	2,739 af
Central Avra Valley Storage and Recovery Project (CAVSARP).....	7,465 af
Pima Mine Road.....	1,859 af
Total Deliveries in Tucson AMA.....	13,063 af

Total Water Banking Authority Deliveries.....219,232 af

RESOLUTION

WHEREAS, A.R.S. § 45-2457 authorizes the Arizona Water Banking Authority to utilize water stored with appropriations from the General Fund of the State of Arizona for the purposes of making water available to municipal and industrial users of Colorado River water during times of water shortage, to implement the settlement of water rights claims by Indian communities and to fulfill the water management objectives of Title 45, Chapter 2, Arizona Revised Statutes; and

WHEREAS, A.R.S. § 45-2457(A) specifically charges the Arizona Water Banking Authority with reserving a reasonable number of long-term storage credits for the benefit of municipal and industrial users of Colorado River water that are outside the service area of the Central Arizona Water Conservation District; and

WHEREAS, on January 21, 1998, the Arizona Water Banking Authority adopted a motion identifying a goal of reserving 420,000 acre feet of long-term storage credits to assist municipal and industrial users of Colorado River water in Mohave, La Paz and Yuma Counties during times of water shortage; and

WHEREAS, the Arizona Water Banking Authority has recently been presented numerous reports and accounts of plans under which the Authority will be requested to commit to making water available from General Fund appropriation monies for use in implementing the settlement of water rights claims by Indian communities and for other purposes;

IT IS HEREBY RESOLVED that the Arizona Water Banking Authority strongly supports the settlement of water rights claims by Arizona Indian communities and will consider requests for water stored by the Authority to facilitate the implementation of those settlements; however, the Authority recognizes its statutory responsibility toward municipal and industrial users of Colorado River water outside the service area of the Central Arizona Water Conservation District. Therefore, prior to the Authority committing to provide water for use in the implementation of Indian water rights claim settlements or for other purposes, the Authority shall consider the potential impact of that commitment on the Authority's ability to meet its statutory responsibility to municipal and industrial users of Colorado River water outside the service area of the Central Arizona Water Conservation District.

ARIZONA WATER BANKING AUTHORITY
General Fund Appropriations Committee
Draft Minutes



May 28, 1999
Arizona Department of Water Resources

Rita Pearson opened the meeting of the Arizona Water Banking Authority ("AWBA") General Fund Appropriations Committee at 8:35 a.m. She recognized that the meeting had been duly posted and noticed in accordance with Arizona's Open Meeting Laws. Committee members Rita Pearson, Bill Chase and Tom Griffin were present and constituted a quorum of the committee. Tim Henley, AWBA Manager, was present, along with a number of staff members from the AWBA and the Department of Water Resources.

AUTHORITY MEMBERS
Rita P. Pearson, Chairman
Tom Griffin, Vice-Chairman
Bill Chase, Secretary
George Renner
Richard S. Walden

EX OFFICIO MEMBERS
Representative Gail Griffin
Senate appointment vacant

Tom Griffin began the discussions regarding the prioritization of general fund monies among the uses of that monies specified by the AWBA statutes. Mr. Griffin was particularly concerned by the increasingly frequent requests for use of that money by persons appearing before the AWBA. Mr. Griffin pointed out that, under A.R.S. § 45-2457, the AWBA is charged with the responsibility of using some general fund monies for the benefit of Arizona communities along the Colorado River. He suggested the AWBA consider adopting a policy setting aside a certain amount of those funds over the next five years to meet the needs, that have already been identified by the AWBA, of those communities.

Ms. Pearson and Mr. Chase indicated agreement that the AWBA should be mindful of its responsibilities to the Colorado River communities. Ms. Pearson felt that the AWBA has been responsive to that obligation and has already stored a significant amount of water that is available for use by those communities if a shortage along the river arises. There was general discussion regarding the anticipated demands on the general fund monies, particularly those created by the Indian settlement discussions currently underway. There was also discussion about the use of some of the revenues generated by groundwater withdrawal fees for Indian settlements. The potential need for a request for an increased general fund appropriation was discussed. The impact of the in lieu tax charge on some CAP water sales was also discussed.

Given the uncertainty regarding the Indian settlements currently being negotiated and regarding the potential for increased general fund appropriations, it was decided by general consensus that it may be premature for the AWBA to adopt a policy specifically setting aside a certain amount of general fund appropriations over the next five years to meet the AWBA responsibilities to the Colorado River communities.

Mr. Chase moved that the committee recommend to the full AWBA that the AWBA adopt a resolution recognizing the statutory obligation of the AWBA to meet its responsibilities to the Colorado River communities in the State through use of general fund appropriations, particularly as the AWBA considers making commitments of water stored through use of general fund appropriations to implement Indian water rights settlements within the State. The motion was seconded and adopted.

The meeting was adjourned at approximately 9:40.

Critical Meeting Dates and Proposal for Reduced Meeting Schedule

January -- First month of operating year nothing critical

February -- Nothing critical

March -- first draft of Annual Report (will require public meetings/workshops to review ten-year plan)

April -- Public meeting/workshop

May -- Nothing critical

June -- Approval of Annual Report, approval of operating budget

July -- Nothing critical

August -- Nothing critical

September -- first draft of Annual Operation Plan

October -- Public meeting with GUAC to present Operating

November -- Nothing critical unless issues arise with Annual Operating Plan

December -- Approval of Annual Operation Plan

Possible Meeting Schedule

January - No

February - No

March - Yes

April - No

May - No

June - Yes

July - No

August - No

September -Yes

October -No

November - No

December - Yes

Assumption:

Sheet One:

- 1) M&I build-up Study Commission
- 2) Indian build-up CAP settlement discussion
- 3) Agricultural use CAP ag-pool discussions
- 4) Normal year supply = 1,485,000 AF available - 70,000 AF in losses
- 5) Four cent tax Pump Fee

Year	Phoenix 1999 value inflated @ 3%	Tucson 1999 value inflated @ 3%	Pinal 1999 value inflated @ 3%	Phoenix 1999 value constant	Tucson 1999 value constant	Pinal 1999 value constant
2000	\$ 7.00	\$ 1.24	\$ 0.24	\$ 4.60	\$ 0.71	\$ 1.20
2001	\$ 7.21	\$ 1.27	\$ 0.25	\$ 4.60	\$ 0.71	\$ 1.20
2002	\$ 7.43	\$ 1.31	\$ 0.25	\$ 4.60	\$ 0.71	\$ 1.20
2003	\$ 7.65	\$ 1.35	\$ 0.26	\$ 4.60	\$ 0.71	\$ 1.20
2004	\$ 7.88	\$ 1.39	\$ 0.27	\$ 4.60	\$ 0.71	\$ 1.20
2005	\$ 8.12	\$ 1.43	\$ 0.27	\$ 4.60	\$ 0.71	\$ 1.20
2006	\$ 8.36	\$ 1.48	\$ 0.28	\$ 4.60	\$ 0.71	\$ 1.20
2007	\$ 8.61	\$ 1.52	\$ 0.28	\$ 4.60	\$ 0.71	\$ 1.20
2008	\$ 8.87	\$ 1.57	\$ 0.29	\$ 4.60	\$ 0.71	\$ 1.20
2009	\$ 9.14	\$ 1.61	\$ 0.29	\$ 4.60	\$ 0.71	\$ 1.20
2010	\$ 9.41	\$ 1.66	\$ 0.30	\$ 4.60	\$ 0.71	\$ 1.20
2011	\$ 9.70	\$ 1.71	\$ 0.30	\$ 4.60	\$ 0.71	\$ 1.20
2012	\$ 9.99	\$ 1.76	\$ 0.31	\$ 4.60	\$ 0.71	\$ 1.20
2013	\$ 10.29	\$ 1.82	\$ 0.32	\$ 4.60	\$ 0.71	\$ 1.20
2014	\$ 10.59	\$ 1.87	\$ 0.32	\$ 4.60	\$ 0.71	\$ 1.20
2015	\$ 10.91	\$ 1.93	\$ 0.33	\$ 4.60	\$ 0.71	\$ 1.20
2016	\$ 11.24	\$ 1.98	\$ 0.34	\$ 4.60	\$ 0.71	\$ 1.20

6) Recharge Cost

- a) Cap delivery cost = energy two + 15% of fixed O&M
- b) Water delivery (Phoenix 75% direct/ 25% in-lieu, Tucson 100% direct, Pinal 100% in-lieu)
- c) USF fees
GRUSP = \$14 plus 3% inflation

Year	Water Available	Other Potential AWBA Activities								
		Indian Settlement						Interstate Banking		
		15,000 af for GRIC			Southside Pumping Mitigation			Water Available	Nevada Banking	Cost @ \$160/AF
Credits Required	Pump Fee Required	Pump Fee available	Credits Required	Pump Fee Required	Pump Fee available					
KAF	KAF	Million \$	Million \$	KAF	Million \$	Million \$	KAF	KAF	Million \$	
1999		61	\$ 1.34	\$ 5.20			\$ 1.90			
2000	250	50	\$ 1.10	\$ 6.60	1	\$ 0.05	\$ 2.26	154	140	\$ 22.40
2001	237	50	\$ 1.15	\$ 7.95	1	\$ 0.05	\$ 2.53	139	140	\$ 23.30
2002	226	50	\$ 1.15	\$ 9.30	1	\$ 0.06	\$ 2.75	127	130	\$ 22.50
2003	214				1	\$ 0.06	\$ 2.92	167	140	\$ 25.20
2004	284				1	\$ 0.06	\$ 3.03	235	130	\$ 24.33
2005	261				1	\$ 0.06	\$ 3.08	211	130	\$ 25.31
2006	232				1	\$ 0.07	\$ 3.08	182	130	\$ 26.32
2007	202				1	\$ 0.07	\$ 3.00	151	130	\$ 27.37
2008	172				1	\$ 0.07	\$ 2.87	120	130	\$ 28.47
2009	141				1	\$ 0.07	\$ 2.66	88		
2010	110				1	\$ 0.08	\$ 2.38	56		
2011	91				1	\$ 0.08	\$ 2.06	37		
2012	69				1	\$ 0.08	\$ 1.66	13		
2013	51				1	\$ 0.09	\$ 0.92	(14)		
2014	31				1	\$ 0.09	\$ 0.16	(33)		
2015	10									
2016	1									
2017	286									
2018	261									
2019	236									
2020	211									
2021	186									
2022	161									
2023	136									
2024	186									
2025	161									
2026	135									
2027	110									
2028	85									
2029	60									
2030	21									
2031	-									
2032	-									
2033	-									
2034	-									
2035	-									
2036	-									
2037	-									
2038	-									
2039	-									
2040	-									
		211	\$ 4.74		15	\$ 1.04		1,633	1,200	225