ARIZONA WATER BANKING AUTHORITY

Thursday, December 9, 2004

No.	NAME (Please print)	Phone No.
1	Dim Davenport	702486-2689
2	Xan Bwyhin	702-258-3108
3	PERI BENEMERIS	602-495-5874
4	SHANE LEONAND	480-982-9586
5	Harry Kuzgerian	2132176082
6	Tim Pierson	520-796-1349
7	Marge Halsennan	602-262-535
8	Konneth Sonstols	520-770-3800
9	KON WONG	570 692 8516
10	Brian Henninh	627-868-2567
11	Gary Given	627819-2158
12	Kathi Knok	602 926 5480
13	Wendy Goldo	600 926-3922
14	Kristine Stocker	602-924-5299
15	David Casagrande	6480-965-5841
16	HERB DISHLIP	480-897-1274
17	DONALD FROSS	602-417-2400, x-72
18	YAUL NRISON	602-216-3899
19	DEANNA IKEYA	623 - 773 - 7357
20	Rich Siegel	6022362277
21	MARVIN COHEN	440425 2433
22	Paul Li	6022545908.
23	Justin Ferris	520 971 1599
24	L.M. Doziw	

No.	NAME (Please Print)	Phone No.
25	Sheryl Sweeney Stephanie Aguirre	602 440-4824
26	Stephalive Aguirere	107-212-1800
27	Rodney Held	602-417-2400
28	ALAN R. KLEIDONAS	702-293-8081
29	Am Marie Chischilly	702-293-8081 796 520-621-1344
30	Am Marie Chischilly	520-791-1344
31		· .
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		

Arizona Water Banking Authority

500 North Third Street, Phoenix, Arizona 85004 Telephone 602-417-2418 Fax 602-417-2401 Web Page: www.awba.state.az.us

PLEASE POST

NOTICE OF PUBLIC MEETING

Pursuant to A.R.S. § 38-431.02, notice is hereby given that there will be a meeting of the Arizona Water Banking Authority Commission on December 9, 2004 at 10:00 a.m. at the Arizona Department of Water Resources, 500 North Third Street, Phoenix, Arizona 85004, third floor conference room. The meeting is open to the general public. A copy of the agenda for the meeting is posted below.

Dated this 8th day of December, 2004

FINAL AGENDA

Arizona Water Banking Authority Commission Meeting

- I. Welcome/Opening Remarks
- II. Approval of Minutes of September 15, 2004 and November 15, 2004 Meetings
- III. Water Banking Staff Activities
 - Deliveries
 - Update regarding Arizona Water Settlement Act
 - Status of 7-Basin States discussions
- IV. Discussion and Potential Approval of Agreement to Firm Future Supplies
- V. Interstate Water Banking
 - Update on 2004 Interstate Storage
 - Discussion and potential approval of amended Agreement for Interstate Water Banking
 - Discussion and potential approval of letter agreement for development of Intentionally Created Unused Apportionment for Metropolitan Water District
- VI. Discussion and Approval of 2005 Annual Plan of Operation
 - Overview of public comment
 - Approval of 2005 Annual Plan of Operation
 - Discussion and potential approval of amendment to the Plan to include development of Intentionally Created Unused Apportionment for Metropolitan Water District
- VII. CY 2005 Water Delivery Budget
 - Overview of budget
 - Adoption of budget

Page 2 Arizona Water Banking Authority meeting

VIII. Call to the Public

Future Meeting Date: Wednesday, March 16, 2005

All visitors must stop at the lobby to sign-in and receive a visitor's badge. Badges are to be displayed at all times. Visitors are also required to return to the lobby to sign out and return their badges. Thank you for your assistance in this matter.

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

ARIZONA WATER BANKING AUTHORITY Draft Minutes¹

September 15, 2004 Arizona Department of Water Resources

Welcome/Opening Remarks

Senator Herb Guenther welcomed the attendees. All members of the Authority were present.

Approval of Minutes of June 16, 2004 AWBA Meeting

The Authority approved the minutes of the June 16, 2004 meeting.

Water Banking Staff Activities

Tim Henley reviewed water deliveries and stated that deliveries continue approximately as projected. Mr. Henley noted that the

Tonopah Irrigation District that has partnered with the AWBA since inception took their first AWBA water in August.



AUTHORITY MEMBERS Herbert R. Guenther, Chairman George R. Renner, Vice-Chairman Charles L. Cahoy, Secretary John Mawhinney Maureen S. George

EX OFFICIO MEMBERS Representative Jake Flake Senator Linda Binder

Mr. Henley provided a brief update on the status of the Colorado River shortage discussions. He noted that there is an internal statewide process occurring in conjunction with a seven basin state process that has included formation of a technical committee to examine river operations during times of shortage. This is necessary because operational strategies are known for the top of the reservoirs but not for the bottom of the reservoirs. At the top, flood control is the primary factor of concern. It is Mr. Henley's belief that water supply will be the key issue at the bottom of the reservoirs. He noted that the group is looking for some criteria for implementation by the end of the year. There was a question regarding the role of water deliveries to Mexico in the discussions. Mr. Henley noted that under the treaty, Mexican deliveries should decrease in a pro rata fashion under extraordinary drought conditions. However, the group is currently looking at how that would happen because extraordinary drought and shortage are not necessarily the same thing. There was a question regarding operation of the Yuma Desalting Plant (YDP). Mr. Henley noted that operation of the YDP really comes into discussions regarding avoiding a shortage. There was a question regarding how the intrastate and interstate processes meshed. Mr. Henley replied that the interstate model runs provide information regarding volumes needed to avoid certain conditions while the intrastate process needs to address the manner in which the shortage is actually dealt with.

Mr. Henley next addressed the recovery planning process and stated that letters had been exchanged between the Authority and the Central Arizona Project (CAP) and that both parties had identified staff to participate on the team evaluating the issue.

With regard to the status of discussions with the Southern Nevada Water Authority (SNWA) to amend the existing interstate water banking agreement, Mr. Henley stated that the SNWA is interested in this as reliance on interim surpluses over the next decade is probably not as desirable as it seemed when the original agreement was drafted. A matrix was handed out that compared the existing agreement with the proposed amendments. In essence, the amendments would guarantee 1.2 million acre feet (AF) of water to be stored in Arizona with recovery of the water taking place earlier and in smaller quantities. Mr. Henley stated that the amendments would be mutually beneficial to both parties as Arizona would have a smaller commitment to recover water in any year and would receive payment for the water up front.

¹ Please note that these are not formal minutes but a summary of discussion and action of the meeting. Official minutes are prepared prior to the next Authority meeting and are approved at that meeting.

Also, the up front cost would include an in lieu tax component that directly benefits the Arizona Water Protection Fund. In addition, he noted that preserving good relations with Nevada is beneficial as the basin states move through the shortage discussion process. There were questions regarding the source of water and how the up front cost would be determined. Mr. Henley stated that it would be excess CAP water but may also include other types. With regard to cost, he stated that CAP is currently looking at various ways of arriving at a cost. For example, CAP is looking at purchasing water ranches and the Bureau of Reclamation is looking at land fallowing costing about \$150 per acre foot. No cost has been set at this time. Maureen George questioned whether the water would be replaced and Mr. Henley stated that it would not, unless the water used was groundwater. Also in response to Ms. George. Mr. Henley stated that intrastate on-river firming issues would be resolved prior to approval of the interstate amendments. Chuck Cahoy questioned whether quaranteeing storage would negatively impact other Arizona water users. Mr. Henley stated that only the AWBA could be impacted and could require a deferral in AWBA storage. He noted that a meeting in mid-November for potential approval of the amendments may be necessary. In response to public comment, Senator Guenther stated that any approval of amendments would take place at a public meeting of the Authority.

Status Update Regarding On-River Discussions

Mr. Henley reminded the Authority that they had directed staff to develop a mechanism to provide surety to the on-river water users that credits would be available to be recovered during times of shortage to make up lost water supplies. To that end, staff have been working with CAP staff to develop an agreement that addresses transfer of general fund credits to CAP on behalf of the on-river communities. Ms. George asked that staff continue to examine all possible options as agreement(s) were being developed and that she recognizes that there are concerns with transferring all of the general fund credits. There was a question regarding surety for all M&I subcontractors and Mr. Henley reviewed how firming for subcontractors in the tri-county CAP service area differs from firming for the on-river communities. He noted that the credits are not an asset of the M&I subcontractors. Mr. Cahoy also noted his concern with transferring credits in advance of an actual shortage and stated that he would need to see a compelling reason for transfer in advance of a shortage.

Discussion Regarding Previous FY 2005 Budget Approval

Mr. Henley stated that the Authority had approved the 2005 administrative budget at the June meeting and requested that a new water delivery budget be developed. He developed one but questioned whether or not a water delivery budget needed to be approved in conjunction with the administrative budget. He stated that it had been done that way in the past primarily because of concern over the extensive carryover and when it would be utilized. In essence, it was more for information purposes only. Furthermore, the actual expenditure of funds for water delivery is approved in December with approval of the following year's plan of operation. Then, final accounting for water delivery is done in the annual report for that year. His question was whether or not the Authority wanted to continue including water delivery in the fiscal year budget approved in June. George Renner suggested that it might be appropriate to have this information in an appendix to the administrative budget for informational purposes only. Mr. Cahoy stated his concern regarding whether it was a legal requirement to have this as a component of the budget. Ms. George shared Mr. Cahoy's concern.

Draft 2005 Annual Plan of Operation

Gerry Wildeman informed the Authority that the draft of Table 2 included in the handouts was the first draft of the 2005 Annual Plan of Operation. She reviewed the process for submitting orders to CAP and stated that things are still very preliminary at this point and based on three year forecasts submitted to CAP. She noted the following significant points: (1) the cost share for the groundwater savings facility partners would be \$30 per acre foot; (2) the Pinal area continues to be constrained by funds so there is significantly reduced storage in Pinal County for 2005; (3) Tucson will also be constrained by funds in 2005 to approximately 65,000 AF of storage; and (4) with the fiscal constraints in both Pima and Pinal counties, there will be additional CAP water left over. John Mawhinney questioned whether the AWBA wanted to allow 50,000 AF to go down the river. Mr. Henley replied that the Authority could direct staff to begin discussions with Nevada to determine if they would be interested in storing any of the remaining CAP water. Ms. Wildeman noted that the GUAC meetings at which the draft would be reviewed were scheduled for November 10 (Tucson) and November 18 (Pinal). The Phoenix GUAC meeting for November had not yet been scheduled.

Interstate Water Banking Issues

Mr. Henley informed the Authority that he had received a copy of a letter sent to CAP from the Metropolitan Water District of Southern California regarding development of 40,000 AF of ICUA in 2005. These credits were stored in the early 1990's as part of a demonstration project. At the time of storage, there was no entity authorized to allow recovery of the credits and transfer of the water back to California. Today, the AWBA is the authority and would thus be involved in the process of creating ICUA. Thus far, no action has been taken by CAP. Ms. George asked if the AWBA would be paid for any staff time involved, as they were not party to the original agreement. Mr. Henley replied that an administrative component could be included.

Discussion Regarding Amended 2004 Annual Plan of Operation

Mr. Henley explained that two changes were made to the existing plan of operation. First, a letter was received from the Southern Nevada Water Authority that requested storage of 10,000 AF of their unused allocation in Arizona in 2004. Through conservation programs, the SNWA has managed to end up with 30-40,000 AF of unused allocation and will not be able to store the entire amount within the state of Nevada. Therefore, an amendment of the plan would be necessary to include the 10,000 AF of interstate water banking. Prior to any interstate storage occurring, the water would need to be directed to Arizona by the Secretary.

Second, the AWBA had less than projected water storage at the Agua Fria (AFRP) and Hieroglyphic Mountains (HMRP) Recharge Projects throughout 2004. This was primarily a result of greater utilization of the facilities by other higher priority partners. The change in the plan was a transfer of water from the AFRP and the HMRP to the Granite Reef Underground Storage Project and New Magma Irrigation and Drainage District.

The Amended 2004 Annual Plan of Operation was approved pending receipt of the necessary letter from the Secretary. Maureen George opposed the approval.

Call to the Public

Beth Miller of the City of Scottsdale commented on the recovery planning process and stated that she thought it important that the M&I subcontractors be involved in the process. Senator Guenther replied that the process would involve public input during development. The meeting concluded at 11:40 a.m.

ARIZONA WATER BANKING AUTHORITY Draft Minutes

Summary of AWBA Meeting¹ November 15, 2004

Arizona Department of Water Resources

Welcome/Opening Remarks

Senator Herb Guenther welcomed the attendees. All members of the Authority except John Mawhinney were present. Mr. Mawhinney joined the meeting via telephone conference call.

Consideration of Motion for Executive Session

George Renner moved that the Authority convene in executive session to obtain legal opinion on various agenda items. The motion was approved and the Authority convened in executive session.

Reconvene in Open Session

The Authority reconvened in open session at 1:20 p.m.

BANKING PURING PURING BANKING PURING BANKING PURING BANKING PURING BANKING PURING PURIN

AUTHORITY MEMBERS Herbert R. Guenther, Chairman George R. Renner, Vice-Chairman Charles L. Cahoy, Secretary John Mawhinney Maureen S. George

EX OFFICIO MEMBERS Representative Jake Flake Senator Linda Binder

Discussion Regarding Development of an Agreement for Firming On-River M&I Supplies During Shortages

Tim Henley provided some background information regarding the Authority's statutory obligation and the manner in which the number of credits that would be reasonable was determined and allocated to the various on-river users. Mr. Henley then reviewed the terms of the agreement as detailed in the draft that was distributed to the public. There was a question whether the total number of credits had been created. Mr. Henley stated that the majority of the credits had been developed and would be transferred to the various on-river entities on a *pro-rata* basis during times of shortage.

Discussion Regarding Amendments to the Agreement for Interstate Water Banking

Mr. Henley briefly summarized the changes being proposed. He noted that the primary difference is that Arizona is guaranteeing Nevada interstate storage for a cost of \$330 million. The changes that he specifically noted in his summary were: (1) term is extended to 2060; (2) development of ICUA is now on a set schedule with a 40,000 acre foot limit except in times of shortage; and (3) there is a provision for another entity to complete this contract if the Authority is no longer in existence. Mr. Henley also explained the table that was distributed to the public. He noted that the table did not include infated costs or revenues. In summary, the table illustrated that the AWBA can store water early on for interstate purposes and thus never have insufficient credits for development of ICUA. Additionally, there are many opportunities for interstate storage in the later years of the time period.

The following questions were asked of Mr. Henley by the Authority and the public with respect to the amended agreement:

- 1. How extensive of an economic analysis has been completed and do we know that sufficient money is collected to meet the terms of the agreement?
- 2. Are shortages factored into the economic and supply analyses?

¹ Please note that these are not formal minutes but a summary of discussion and action of the meeting. Official minutes are prepared prior to the next Authority meeting and are approved at that meeting.

- 3. In a shortage, how much water can be delivered above Nevada's 300,000 acre foot entitlement? Exactly what happens in a shortage declaration?
- 4. Is recovery included in the money that Nevada pays under the amended agreement? How will recovery take place?
- 5. How do we insure that Arizona is not harmed in this process? How does the agreement address the appearance of selling Arizona's water to Nevada?
- 6. Will Arizona need to purchase farmland at any time to insure that the terms of the agreement are met? Will groundwater be used to meet the terms of this agreement?

The following general comments were made by the Authority and the public with respect to the amended agreement:

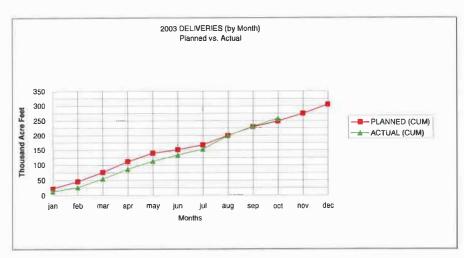
- 1. The model used to show that water supplies would be available may have incorrect assumptions in it.
- 2. The AWBA needs to keep in mind that the public needs to understand this and that additional information in the form of a discussion paper is needed.
- 3. Entities should bear in mind that the reasons for the original agreement still exist and that reaching agreement with these amendments may be even more important now.
- 4. Any economic analysis needs to consider the present value of payments.
- 5. The benefit of this deal to Arizona needs to be better defined and explained.
- 6. The magnitude of the term and financial aspects of the agreement are troublesome.
- 7. Recovery needs to be addressed.
- 8. The AWBA should emphasize storage at state demonstration project facilities.

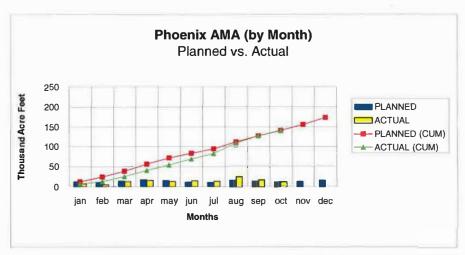
Call to the Public

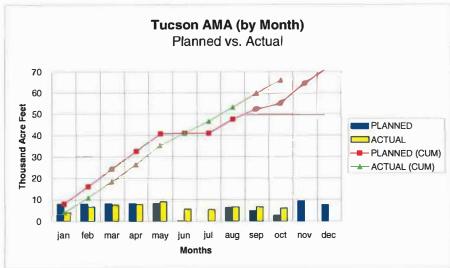
Questions and comments made by the public are included in the above discussion.

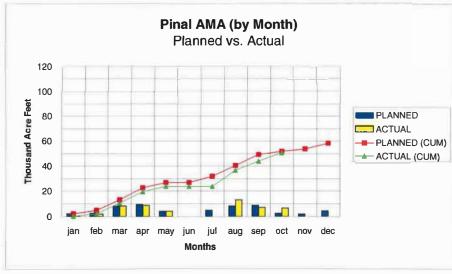
The meeting concluded at 3:15 p.m.

2004 Plan of Operation









Actual deliveries updated Plan of Operation	02-Dec-04 <i>1-Jan-04</i>	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	total
Phoenix AMA														
	GRUSP	3,623	2,850	5,076	5,240	4,635	4,404	6,631	7,711	5,316	5,897	0	0	51,383
		4,166	4,166	4,166	4,166	4,166	4,166	4,166	4,166 0.666	5,791	5,791	5,791	<i>5,799</i> 0	<i>56,500</i>
	AGUA FRIA	1,006	0 <i>0</i>	0 <i>0</i>	1,545 <i>1,545</i>	1,085 <i>1,085</i>	4,328 <i>4,328</i>	391 <i>391</i>	2,666 <i>2,666</i>	2,416 <i>1,200</i>	1,475 <i>1,200</i>	0 1,200	1,200	14,912 <i>15,821</i>
	CHCID	<i>1,006</i> 0	0	0	0	0	4,320	129	173	134	140	0	0	576
	GIGID	0	0	<i>50</i>	50	<i>50</i>	100	75	75	50	83	0	0	533
	NMIDD	618	1,178	4,742	5,679	4,000	3,339	4,094	9,626	4,803	3,040	0	0	41,119
		2,000	3,000	6,100	6,100	4,000	3,000	3,000	6,000	5,000	4,000	5,584	2,500	50,284
	QCID	0	0	0	0	0	207	0	2,725	2,199	1,455	0	0	6,586
		0	0	0	0	0	0	0	3,501	2,000	800	960	1,600	8,861
	TID	0	0	0	0	0	0	0	264	1,548	352	0	0	2,164
		0	0	0	0	0	0	0	<i>0</i> 800	<i>0</i> 800	1,000 800	1,000 0	1,000 0	3,000
	SRP	800 800	800 <i>800</i>	800 <i>800</i>	800 800	800 <i>800</i>	0	0 <i>0</i>	800	800	800	800	800	6,400 <i>8,000</i>
	HIEROGLYPHIC	1,711	444	2,004	2,201	2,576	2,652	2,442	2,132	1,187	33	0	0	17,382
	THEROGETTTIO	1,711	444	2,004	2,201	2,576	2,652	2,442	2,132	2,500	2,500	2,500	2,500	26,162
Subtotal	•	7,758	5,272	12,622	15,465	13,096	14,930	13,687	26,097	18,403	13,192	0	0	140,522
Total to date		7,758	13,030	25,652	41,117	54,213	69,143	82,830	108,927	127,330	140,522	140,522	140,522	140,522
Projected total	to date	9,683	18,093	31,213	46,075	58,752	72,998	83,072	102,412	119,753	135,927	153,762	169,161	169,161
DiI AAAA														
Pinal AMA	CAIDD	0	0	0	0	0	0	0	6,724	4,734	2,152	0	0	13,610
	CAIDD	0	0	0	0	0	0	5,000	5,000	4,500	2,000	1,500	1,700	19,700
	MSIDD	0	1,020	2,780	3,040	3,500	0	0	6,360	2,442	3,692	0	0	22,834
		0	1,020	2,780	3,040	3,500	0	0	3,400	8,040	1,110	0	810	23,700
	HIDD	277	991	5,572	5,792	750	0	0	0	0	854	0	0	14,236
	2	2,250	1,700	5,500	6,500	750	0	0	0	3,300	1,000	1,000	3,000	25,000
Subtotal		277	2,011	8,352	8,832	4,250	0	0	13,084	7,176	6,698	0	0	50,680
Total to date	to dete	277	2,288	10,640	19,472	23,722	23,722	23,722	36,806 40,440	43,982	50,680	50,680	50,680	50,680
Projected total	to date	2,250	4,970	13,250	22,790	27,040	27,040	32,040	40,440	56,280	60,390	62,890	68,400	68,400
Tucson AMA														
1 000011 7 1177 1	Avra Valley	333	671	652	390	557	588	709	668	650	584	0	0	5,802
	•	650	<i>650</i>	650	650	650	0	0	650	650	350	650	650	6,200
	Clearwater	0	1,500	1,500	1,500	1,500	0	0	0	0	0	0	0	6,000
		1,150	1,150	1,150	1,150	1,150	0	0	0	0	0	3,000	1,250	10,000
	Pima Mine	1,712	1,049	1,672	2,285	2,526	1,268 0	843 <i>0</i>	2,055	1,976	1,697	0	0	17,083
	Lower Santa Cruz	<i>2,600</i> 1,987	<i>2,600</i> 3,549	<i>2,600</i> 3,739	<i>2,600</i> 3,739	<i>2,600</i> 3,749	3,801	3,955	<i>2,600</i> 3,972	1,600 3,849	1, <u>300</u> 3,767	<i>2,200</i> 0	<i>2,200</i> 0	<i>22,900</i> 36,107
	Lower Santa Cruz	3,600	3,600	3,600	3,600	3,600	0,001	0,933	3,200	2,800	1,100	3,600	3,600	32,300
	Kai Red Rock	0	0	0	29	695	0	0	0	239	137	0,000	0,000	1,100
	1100110011	0	0	250	250	250	250	0	0	0	0	0	0	1,000
Subtotal	3	4,032	6,769	7,563	7,943	9,027	5,657	5,507	6,695	6,714	6,185	0	0	66,092
Total to date		4,032	10,801	18,364	26,307	35,334	40,991	46,498	53,193	59,907	66,092	66,092	0	66,092
Projected total	to date	8,000	16,000	24,250	32,500	40,750	41,000	41,000	47,450	52,500	55,250	64,700	72,4 00	72,400
TOTAL		12,067	14,052	28,537	32,240	26,373	20,587	19,194	45,876	32,293	26,075	0	0	257,294
Total to date		12,067	26,119	54,656	86,896	113,269	133,856	153,050	198,926	231,219	257,294	257,294	257,294	514,588
Projected total	to date	19,933	39,063	68,713	101,365	126,542	141,038	156,112	190,302	228,533	251,567	281,352	309,961	309,961

DRAFT AGREEMENT

AGREEMENT TO FIRM FUTURE SUPPLIES

	This	Agreement	to	Firm	Future	Supplies	("Agreeme	nt")	is	made	as	of
		, 20	04	("Effec	ctive Da	ate"), by	and betwee	n the	A	rizona	Wa	ter
Bankir	ng Aut	thority ("AW	ΒA	") and	the Mo	have Cour	nty Water A	uthor	ity	("MC	WA	"),
collect	ively r	eferred to as	the	"Partie	s" and in	ndividuall	y as the "Par	ty."				

RECITALS

- 1. AWBA is an agency of the State of Arizona and was created to store the State of Arizona's unused Colorado River water entitlement in western, central and southern Arizona and, in part, to develop long-term storage credits to firm existing water supplies for municipal and industrial ("M&I") users along the Colorado River during Colorado River shortages.
- 2. MCWA is a corporate and political body of the State of Arizona and a post-1968 M&I user of Colorado River water in the State of Arizona that is outside the service area of the Central Arizona Water Conservation District ("CAWCD").
- 3. AWBA is mandated by A.R.S. § 45-2457 to reserve a reasonable number of long-term storage credits accrued with general fund appropriations for the benefit of M&I users of Colorado River water in the State of Arizona that are outside the service area of CAWCD.
- 4. On January 21, 1998, AWBA adopted a motion identifying 420,000 acre-feet as the reasonable number of long-term storage credits to be developed and set aside for the benefit of M&I users of Colorado River water in the State of Arizona that are outside the service area of CAWCD. As of the Effective Date, AWBA has developed approximately 395,678 of the 420,000 acre-feet of long-term storage credits.
- 5. On March 20, 2002, AWBA adopted Resolution 2002-1, which provided, in part, that the first priority of the use of long-term storage credits accrued with general fund appropriations shall be to develop and set aside a reasonable number of long-term storage credits as determined by AWBA's commission for the benefit of M&I users of Colorado River water in the State of Arizona that are outside the service area of CAWCD.
- 6. On July 1, 2002, AWBA and CAWCD entered into the "Agreement Between the Central Arizona Water Conservation District and the Arizona Water Banking Authority Providing for the Delivery of Excess Central Arizona Project Water." The agreement

provides that "excess water" as defined in the agreement is available to AWBA for banking purposes in accordance with the terms of the agreement.

- 7. MCWA intends to enter into subcontracts on or before June 30, 2005, with various Colorado River users possessing contracts for M&I water uses with priorities equal to the Central Arizona Project ("CAP") to include their respective Shortages in this Agreement.
- 8. MCWA recognizes that it is necessary for it to take the following actions in order for it to perform under this Agreement: (1) establish a long-term storage credit account with the Arizona Department of Water Resources and (2) enter into a water exchange agreement with an entity that has access to CAP water in order to utilize the long-term storage credits developed for MCWA under this Agreement.
- 9. The Parties desire to provide: (1) a specific commitment by AWBA to insure the number of acre-feet of long-term storage credits identified in Exhibit A, attached hereto, are available for the benefit of MCWA during times of Shortage; and (2) that MCWA makes specific payments in consideration of AWBA's commitments set forth in this Agreement.

ARTICLE 1

DEFINITIONS

1.1. Definitions.

For the purposes of this Agreement, the following terms shall have the meaning defined in this Subarticle. Defined terms are identified by initial letter capitalization.

- 1.1.1. "ADWR" shall mean the Arizona Department of Water Resources.
- 1.1.2. "Agreement" shall mean this Agreement to Firm Future Supplies.
- 1.1.3. "AWBA" shall mean the Arizona Water Banking Authority.
- 1.1.4. "CAP" shall mean the Central Arizona Project, as authorized by the Colorado River Basin Project Act, 43 U.S.C. § 1501 *et seq.*, and as operated under that certain Master Repayment Contract dated December 1, 1988, Contract No. 14-06-W-245 between CAWCD and the United States Bureau of Reclamation, as amended.
 - 1.1.5. "CAWCD" shall mean the Central Arizona Water Conservation District.
- 1.1.6. "Effective Date" shall mean the date that this Agreement is fully executed by all parties.

- 1.1.7. "LTS Credits" shall mean long-term storages credits as defined in A.R.S. § 45-802.01.
- 1.1.8. "M&I Users" shall mean municipal and industrial users of Colorado River water possessing contracts for M&I water uses with priorities equal to CAP in the State of Arizona that are outside the service area of CAWCD.
- 1.1.9. "MCWA's LTS Credit Account" shall mean MCWA's LTS Credit account established with ADWR in connection with this Agreement-, which account shall separately track the firming credits held for each of MCWA's member agencies who have executed an MCWA sSubcontract.
- 1.1.10. "MCWA's Subaccount" shall mean the subaccount established by AWBA in connection with this Agreement.
- 1.1.11. "MCWA Subcontract" shall mean a contract entered into prior to June 30, 2005, between MCWA and an M&I User to include its Shortage in this Agreement. The number of acre-feet of LTS Credits subject to the MCWA Subcontracts, if any, are identified in Exhibit A, attached hereto.
- 1.1.12. "Prepayment" shall mean the payment by MCWA to AWBA of a portion of the Replacement Costs as set forth in Subarticle 3.2. herein.
- 1.1.13. "Replacement Costs" shall mean the cost to replace the LTS Credits as set forth in Subarticle 3.2. herein.
- 1.1.14. "Shortage" shall mean the shortage declared by the Secretary of the United States Department of the Interior in the Annual Operation Plan for Colorado River reservoirs.

ARTICLE 2

TERM OF THE AGREEMENT

2.1. Term.

2.1.1. This Agreement shall be effective when executed by all Parties. This Agreement shall terminate when all of the LTS Credits identified in Exhibit A as set forth in Subarticle 3.1.1. have been transferred to MCWA's LTS Credit Account or on December 31, 2096, whichever is earlier. Any LTS Credits remaining in MCWA's LTS Credit Account at the termination of this Agreement shall revert to the sole and exclusive benefit of AWBA pursuant to A.R.S. § 45-2457, unless this Agreement is extended by all Parties in a written agreement.

ARTICLE 3

LONG-TERM STORAGE CREDITS

3.1. LTS Credits for MCWA.

- 3.1.1. The number of acre-feet of LTS Credits subject to the MCWA Subcontracts, if any, as well as the number of LTS Credits designated by MCWA in an amount not to exceed its as MCWA's proportional share of the 420,000 acre-feet of LTS Credits developed and set aside for the M&I Users are identified in Exhibit A, attached hereto. Exhibit A may be amended from time to time to reflect additional acre-feet of LTS Credits subject to this Agreement, but in no event shall Exhibit A be amended or superseded by another Exhibit A after July 15, 2005. The initial Exhibit A is attached hereto and made a part of this Agreement, and shall be in force and effect in accordance with its respective provision until superseded by a subsequent exhibit executed by all parties. In the event that Exhibit A does not identify any acre-feet of LTS Credits on July 15, 2005. AWBA shall have the right to terminate this Agreement on July 16, 2005, and each Party shall be relieved of their respective duties and obligations under this Agreement.
- 3.1.2. The number of acre-feet of LTS Credits developed and set aside for the benefit of M&I Users as of the Effective Date are identified in Exhibit B, attached hereto. Exhibit B may be amended from time to time to reflect the actual number of acre-feet of LTS Credits developed by AWBA to benefit M&I Users. The initial Exhibit B is attached hereto and made a part of this Agreement, and shall be in force and effect in accordance with its respective provision until superseded by a subsequent exhibit executed by all parties. In the event that the number of LTS Credits identified in Resolution 2002-1 adopted by AWBA on March 20, 2002 (420,000 acrefeet) is modified by AWBA. the Parties agree to renegotiate in good faith the terms of this Agreement to reflect the modified number of LTS Credits to be developed and set aside for the benefit of M&I Users by AWBA.
- 3.1.3. AWBA shall take all actions necessary to insure that LTS Credits in the maximum number of acre-feet of LTS Credits identified in Exhibit A are developed and set aside for the benefit of MCWA. Such actions may include storage of Colorado River water, assignment of LTS Credits previously developed through the storage of Colorado River water, or any other action consistent with Title 45, Chapter 14 of the Arizona Revised Statutes. Nothing in this Subarticle, however, shall require AWBA to

- independently seek general fund appropriations from the Arizona State Legislature for the development of LTS Credits subject to this Agreement.
- 3.1.4. On or before July 31, 2005, AWBA shall establish the MCWA Subaccount and shall assign to the MCWA Subaccount the number of acre-feet of LTS Credits developed to benefit M&I Users identified in Exhibit A. The number of acre-feet of LTS Credits identified in Exhibit A that may be assigned to the MCWA Subaccount shall be reduced by a percentage equal to the number of acre-feet of LTS Credits identified in Exhibit B divided by 420,000. AWBA shall assign the remaining acrefeet of LTS Credits to the MCWA Subaccount once AWBA develops the entire 420,000 acre-feet of LTS Credits. By way of example only, Exhibit B provides that 396,000 acre-feet of the 420,000 acre-feet of the LTS Credits identified benefiting the M&I Users have been developed. Exhibit A identifies 71,356 acre-feet of LTS Credits. Under this scenario, AWBA would be required to assign 94% (396,000/420,000) of the 71,356 acrefeet of LTS Credits (67,075 acre-feet) to the MCWA Subaccount. Once AWBA develops the entire 420,000 acre-feet of LTS Credits, AWBA would be required to assign the remaining 6% of the 71,356 acre_feet of LTS Credits (4,281 acre-feet) to the MCWA Subaccount.
- 3.1.5. The sum total of the LTS Credits which may be transferred to MCWA's LTS Credit Account shall not exceed the amounts identified in Exhibit A and shall only be transferred to MCWA's LTS Credit Account from the MCWA Subaccount if: (1) the Secretary of the United States Department of the Interior declares a Shortage; and (2) MCWA has entered into a water exchange agreement with an entity who has access to CAP water. In the event that MCWA does not enter into such a water exchange agreement by June 30, 2005, AWBA shall have the right to terminate this Agreement on July 1, 2005, and each Party shall be relieved of their respective duties and obligations under this Agreement.
- 3.1.6. At MCWA's request, the amount of LTS Credits transferred to MCWA's LTS Credit Account in any given year pursuant to this Agreement shall be no greater than the amount of the Shortage actually borne by MCWA for that year, and, in no event, shall the sum total exceed the number of acrefeet of LTS Credits identified in Exhibit A. Any LTS Credits transferred to MCWA's LTS Credit Account under this Subarticle not utilized pursuant to a water exchange agreement shall be returned to the MCWA Subaccount before March 1 of the following year.
- 3.1.7. AWBA's obligations under Article 3 herein are contingent upon the Arizona State Legislature providing AWBA sufficient general funds to develop the number of acre-feet of LTS Credits above amounts identified in Exhibit B subject to this Agreement.

3.2. Payments by MCWA.

- 3.2.1. In consideration of AWBA's obligations under Subarticle 3.1. and pursuant to A.R.S. § 45-2457(B)(2)(a)(ii), MCWA shall pay the Replacement Costs of the LTS Credits transferred to MCWA's LTS Credit Account under this Agreement. MCWA shall prepay a portion of the Replacement Costs to AWBA (the "Prepayment") as set forth in Subarticle 3.2.3.1. The Prepayment does not reflect the total amount of the Replacement Costs.
- 3.2.2. MCWA's obligation to make the Prepayment shall be made regardless of whether any LTS Credits are transferred to MCWA's LTS Credit Account. No portion of the Prepayment shall be returned to MCWA in the event that LTS Credits are not transferred to MCWA's LTS Credit Account under Subarticle 3.1.
- 3.2.3. The Prepayment shall be calculated and charged to MCWA in accordance with Subarticle 3.2.3.1., and billed and paid by MCWA as provided in Subarticle 3.2.3.3. The Replacement Costs shall be calculated and charged to MCWA in accordance with Subarticle 3.2.3.2. and billed and paid by MCWA as provided in Subarticle 3.2.3.3.
 - 3.2.3.1. The Prepayment shall equal the total number of acre-feet of LTS Credits identified in Exhibit A as of July 15, 2005, multiplied by \$20.00.
 - 3.2.3.2. The Replacement Costs for the LTS Credits transferred to MCWA's LTS Credit Account shall consist of the following pricing components computed on a per acre-foot basis:
 - 3.2.3.2.1. Any cost to purchase water, transport water through the CAP and store water. AWBA agrees that the storage of water under this Agreement shall take into account the location, manner and cost of storing all water stored by AWBA in the State of Arizona. AWBA agrees that the selection of storage facilities for water stored under this Agreement and for others in Arizona shall not be made in a manner that unreasonably allocates the higher storage cost to the storage of water under this Agreement;
 - 3.2.3.2.2. A payment in lieu of property taxes, calculated as described in A.R.S. § 48-3715; and

- 3.2.3.2.3. Any additional costs as may be reasonably incurred by AWBA, including, but not limited to, costs AWBA is required by A.R.S. § 45-2424 to reimburse ADWR and CAWCD for the services provided by each agency to AWBA pursuant to the provisions of A.R.S. § 45-2424 and the "Intergovernmental Agreement Among the Arizona Department of Water Resources, Arizona Water Banking Authority and Central Arizona Water Conservation District" entered into on July 1, 2002.
- 3.2.3.3. The Prepayment and Replacement Costs shall be billed and paid as follows:
 - 3.2.3.3.1. MCWA shall pay to AWBA the Prepayment in twenty (20) equal consecutive quarterly payments due on or before the 15th day of March, June, September and December of each year, commencing the quarter immediately following a written request for payment by AWBA. In no event shall the first quarterly payment of the Prepayment be due before July 1, 2005.
 - 3.2.3.3.1.1. Replacement Costs for LTS Credits transferred to MCWA's LTS Credit Account under Subarticle 3.1. shall be first credited against the Prepayment. Once the Prepayment is exhausted, MCWA shall pay that portion of the Replacement Costs not already credited against the Prepayment as set forth in Subarticle 3.2.3.3.1.2.
 - 3.2.3.3.1.2. No later than March 15 of the year following the year in which AWBA transfers LTS Credits to MCWA's LTS Credit Account, AWBA shall provide MCWA with a yearend account reconciliation showing the LTS Credits transferred to MCWA's LTS Credit Account and whether the Replacement Costs of the LTS Credits exceed the balance of the If the year-end account-Prepayment. reconciliation demonstrates that additional Replacement Costs are owed to AWBA, MCWA shall pay those Replacement Costs within three (3) years of the date an invoice is submitted by AWBA.

3.2.3.3.2. Subject to the approval of AWBA, MCWA may assign to AWBA the number of LTS Credits held by MCWA in lieu of MCWA paying the Replacement Costs as set forth in Subarticle 3.2.3.2. herein. The assignment of LTS Credits transferred to AWBA under this Subarticle shall take place within thirty (30) days after ADWR transfers the LTS Credits subject to this Agreement to MCWA's LTS Credit Account.

ARTICLE 4

DELINQUENT CHARGES AND SURETY OF PERFORMANCE

4.1. Delinquency charges under the terms of this Agreement.

- 4.1.1. The Parties agree that monetary damages will be ineffective in remedying any breach of this Agreement, other than nonpayment, and that a court may order specific performance.
- 4.1.2. All payments due under this Agreement shall be paid promptly on the date required and, if not paid, shall be delinquent. Interest on delinquent payments may be assessed from the business day of the month on which the charge was due and shall accrue at the prime rate of interest as established by the greater of the rate prescribed in the Federal Register by the Department of the Treasury for application to overdue payments, or the interest rate of 0.5 percent per month described by Section 6 of the Reclamation Project Act of 1939 (Public Law 76-260). The interest charge rate shall be determined as of the due date and remain fixed for the duration of the delinquent period. Any payment received shall first be applied to any interest owed, and then to charges owed.
- 4.1.3. In the event any portion of the charges are disputed, the disputed amount shall be paid when due, but may be accompanied by a written statement indicating the basis for any dispute. If the dispute is found to be valid, MCWA shall be refunded any overpayment plus interest, accrued at the rate as set forth in Subarticle 4.1.2, prorated by days from the date payment was credited to MCWA to the date the refund check is issued.
- 4.1.4. In the event any delinquent amount is not paid by MCWA within thirty (30) days after receipt by MCWA of written notice from AWBA of the delinquency, AWBA shall have the right, without liability of any kind, to suspend its performance under this Agreement so long as the delinquent amount remains unpaid. Such suspension shall not affect the LTS credits

remaining in MCWA's LTS Credit Account. Nothing herein shall limit the rights of AWBA to use any other available legal remedy to effect collection of delinquent amounts.

4.2. Surety of performance under the terms of this Agreement.

- 4.2.1. In the event that a dispute arises over any action to be undertaken pursuant to the terms of this Agreement, the Parties recognize and acknowledge that time is of the essence in the conduct of the Parties under the terms of this Agreement.
- 4.2.2. AWBA shall use its best efforts to einsure that there are in effect all third party contracts necessary for the development of the LTS Credits as provided in Article 3 herein, the provisions of such contracts to be consistent with the provisions of this Agreement. AWBA shall use its best efforts to insure that all such third party contracts are enforced in a manner consistent with the terms of this Agreement.

ARTICLE 5

OTHER PROVISIONS

5.1 Uncontrollable forces.

5.1.1. Neither Party shall be considered to be in default in the performance of any of its obligations under this Agreement when a failure to perform shall be due to uncontrollable forces. The term "uncontrollable forces" shall mean any cause beyond the control of the Party unable to perform such obligation, including, but not limited to, failure of or threat of failure of facilities, flood, earthquake, storm, fire, lightning and other natural catastrophes, epidemic, war, riot, civil disturbance or disobedience, strike, labor dispute, labor or material shortage, sabotage, government priorities other than those of the Parties and restraint by court order or public authority, and action or nonaction by, or failure to obtain the necessary authorizations or approvals from, any government agency or authority, which by exercise of due diligence such Party could not reasonably have been expected to avoid and which by exercise of due diligence it shall be unable to overcome. Nothing contained herein shall be construed to require either Party to settle any strike or labor dispute in which it is involved.

11

//

5.2. Notices

5.2.1. Any notice, demand, or request authorized or required by this Agreement shall be in writing and shall be deemed to have been duly given if mailed, first class postage prepaid, or delivered at the following address:

If to the AWBA:

Manager Arizona Water Banking Authority Arizona Water Department of Water Resources 500 N. Third Street Phoenix, Arizona, 85004

If to MCWA:

Chairperson Mohave County Water Authority P.O. Box 2419 Bullhead City, AZ 86430

5.3. Assignment limited.

5.3.1 The provisions of this Agreement shall apply to and bind the successors and assigns of the Parties, but no assignment or transfer of this Agreement or any interest therein shall be valid unless and until approved in writing by the non-assigning Party.

5.4. No third party beneficiary.

5.4.1. This Agreement is solely for the benefit of the Parties and does not create, nor shall it be construed to create, rights in any third party unless expressly provided herein. No third party may enforce the terms and conditions of this Agreement, except for the holders of a MCWA Subcontract if both of the following occur: (1) AWBA approves the subject MCWA Subcontract in writing and (2) MCWA is dissolved and is no longer in existence.

5.5 Waiver.

5.5.1. The waiver by either Party of any breach of any term, covenant or condition of this Agreement shall not be deemed a waiver of any other term, covenant or condition, or any subsequent breach of the same or any other term, covenant or condition of this Agreement.

5.6.	Entire	agreement
J.U.		agiculiulu

5.6.1. The terms, covenants and conditions of this Agreement constitute the entire agreement between the Parties, and no understandings or obligations not expressly set forth in this Agreement shall be binding upon them. This Agreement may not be modified or amended in any manner unless in writing signed by the Parties.

5.7. Governing law.

5.7.1 This Agreement shall be governed by and construed in accordance with the laws of the State of Arizona.

5.8. Cancellation.

5.8.1. This Agreement is subject to cancellation in accordance with the provisions of A.R.S. § 38-511.

In Witness of this Agreement, the acknowledging execution of this document	Parties affix their official signatures below on the day of, 2004.
Arizona Water Banking Authority Moha	ve County Water Authority
Attest:	Attest:
Herbert R. Guenther, Chair	
Charles L Cahoy, Secretary	

EXHIBIT A

1.	This Exhibit A, made this day of and as part of the Agreement shall be Agreement's execution and shall remain Exhibit A executed by all of the parties. The superseded by another Exhibit A after Justinesseding Exhibit A shall terminate with	ecome effective on the date of the in effect until superseded by another this Exhibit A may not be amended or ly 15, 2005. This Exhibit A or any
2.	Acre-feet of LTS Credits:	
	MCWA: 71,356 acre-feet	
	<u>Total:</u> <u>71.356-acre-feet 0</u>	
acknov	In Witness of this Agreement, the Parties wledging execution of this Exhibit A on the _	
Arizon	na Water Banking Authority	_Mohave County Water Authority
Attest:	:	Attest:
Herbei	rt R. Guenther, Chair	
Charle	es L. Cahov. Secretary	

EXHIBIT B

1,	and as part of the Agreement's Agreement's execution and shall r	of, 2004, to be effective under hall become effective on the date of the emain in effect until superseded by another parties. This Exhibit B or any superseding rmination of the Agreement.
2.	Acre-feet of LTS Credits developed	by AWBA for the benefit of M&I Users:
	<u>Total:</u> <u>395,678</u>	
acknov	•	Parties affix their official signatures below, on the day of, 2004.
Arizo	na Water Banking Authority	Mohave County Water Authority
Attest	:	Attest:
Herber	rt R. Guenther, Chair	
Charle	es L Cahoy, Secretary	

TO:

Tim Henley, Manager

FROM:

Gerry Wildeman

SUBJECT:

Additional water available in 2004

DATE:

December 1, 2004



AUTHORITY MEMBERS Herbert R. Guenther, Chairman George R. Renner, Vice Chairman Charles L. Cahoy, Secretary Maureen R. George John Mawhinney

EX OFFICIO MEMBERS Senator Linda Binder Representative Jake Flake

I received an email today from Brian Henning regarding additional water available in 2004 and the potential for interstate storage. He spoke with Tom Harbour and was informed that about 6,000 AF could be stored at underground storage facilities in the Tucson AMA in December of 2004 as follows: 4,000 AF at LSC; 1,500 AF at PMR; and 500 AF at AVRP. The Phoenix AMA USF facilities are being fully utilized in December. If the AWBA desires to store this water for interstate purposes, a revised delivery request must be made. Please inform me of what additional action needs to be taken.

From:

"Dennis Rule" < Dennis.Rule@tucsonaz.gov>

To:

"Kenneth Seasholes" < kcseasholes@adwr.state.az.us>

Date:

12/8/04 1:15PM

Subject:

Re: TAMA interstate storage

Ken,

Tucson Water strongly urges that the "80/20" arrangement previously agreed to among IPAG members be honored for storage of this water. Accordingly, no more than 1,160 ac-ft should be stored between the Lower Santa Cruz Project and the Avra Valley Project. The remaining 4,640 ac-ft should be diverted off the river and temporarily stored in Lake Pleasant; this water then should be delivered for underground storage at CAVSARP after the first of the year.

As we all are aware, recoverability is an integral component of interstate banking plans. CAVSARP is the only storage facility in the Tucson AMA in which direct recovery and use is guaranteed; recovery from all other underground storage projects in this AMA still remains an unresolved issue.

Dennis A. Rule Tucson Water Department P.O. Box 27210 Tucson, AZ 85726-7210 520.791.5080x1451 520.791.3293 FAX 520.349.4072 CEL Dennis, Rule@tucsonaz.gov

>>> "Kenneth Seasholes" <kcseasholes@adwr.state.az.us> 12/7/2004 5:31:33 PM >>> IPAG,

A block of Excess CAP water was recently made available for 2004 interstate storage on behalf of Nevada. In keeping with previous IPAG discussions and GUAC consultation, 5,800 AF of this water will be stored in the Tucson AMA. The short time frame somewhat constrained facility choices, but all three of the AMA's State Demonstration Projects will be utilized.

4,000 AF @ Lower Santa Cruz Replenishment Project 1,500 AF @ Pima Mine Road Recharge Project 300 AF @ Avra Valley Recharge Project

Developing guidance for any interstate storage in 2005 is an unfinished piece of business that IPAG should address when it next convenes (likely after the beginning of the year).

Ken.

Kenneth Seasholes Area Director Tucson Active Management Area



BCOO-4200 WTR-4.03

United States Department of the Interior

BUREAU OF RECLAMATION
Lower Colorado Regional Office
P.O. Box 61470
Boulder City, NV 89006-1470
OCT 2 9 2004

e	H	nterior
200	N	11113
San Calledon	7	Si'
-	J	PSI:
-	Ĵ	\
? !	Ĵ	



CERTIFIED - RETURN RECEIPT REQUESTED

Mr. David S. Wilson
General Manager
Central Arizona Water Conservation District
23636 North Seventh Avenue
Phoenix, AZ 85024

- 1				1
}	VOV	2	201	
- 1				

Subject: Approval of Revised Calendar Year 2004 Diversion Estimate for Central Arizona Water Conservation District (CAWCD)

Dear Mr. Wilson:

In a letter dated August 20, 2004, Reclamation approved a revised annual diversion amount of 1,595,000 acre-feet (af) for CAWCD. The diversion approval was based on the premise that CAWCD is entitled to divert the balance of Arizona's 2.8 million acre-feet (maf) consumptive use apportionment that is not being diverted and consumed, within contract entitlements and approved estimated water requirements, by the senior priority contract holders within the State of Arizona. Reclamation has determined that two circumstances permit CAWCD to divert additional water.

First, Reclamation's diversion and consumptive use forecast is based on provisional data provided by the U.S. Geological Survey, and a small number of water users who report directly to Reclamation. Diversions and returns are reported daily for large water users and either monthly or annually for the remainder of users listed in the forecast.

End of year projections are calculated by one of two methods. Projections for large users are calculated by adding the daily use-to-date quantities to the estimated diversion schedules provided by water users through the 43 Code of Federal Regulations (CFR), Part 417 process. As the year progresses, diversion estimates from the monthly schedules are replaced by reported use-to-date quantities. Projections for small users who report annually are calculated using daily use ratios based on historic use patterns. Monthly schedules may be altered during the year when Reclamation approves requests for water order revisions.

While the forecasting ability allows Reclamation to manage Colorado River diversions on a realtime basis, the process described above includes the potential for inaccuracy due to the nature of provisional data and daily ratios of historic use. We have determined however, that the forecast is satisfactory for providing Reclamation with real-time management data and end of year projections of water use.

As of October 27, 2004, Reclamation's projections indicate that Arizona's total use-to-date is forecasted to be 38,000 af less than its consumptive use limit of 2.8 maf. As a result of these changed conditions, in accordance with 43 CFR Part 417.4, Reclamation is approving for CAWCD the diversion of water that is projected by our forecast to be unused within the State of Arizona. This approval is conditional. If consumptive uses by senior priority contractors increase above this projection, Reclamation will revise and reduce the approved amount contained in this letter.

Reclamation will make 38,000 af of additional diversion available to CAWCD in 2004 upon receipt of a written commitment by CAWCD to pay back any overruns associated with increased uses within their entitlements by senior priority contractors within Arizona that cause this increased diversion to exceed Arizona's 2004 consumptive use limit. The 2004 consumptive use limit consists of 2.8 maf of Arizona's basic apportionment, together with such water from the State of Nevada as is transferred by the Secretary of the Interior under Article II.B.6 of the Decree in Arizona v. California for storage under the Storage and Interstate Release Agreement (SIRA) entered into by the United States, the Arizona Water Banking Authority, the Southern Nevada Water Authority and the Colorado River Commission of Nevada, dated December 18, 2002.

Second, the Arizona Water Banking Authority has agreed to store 10,000 af of the State of Nevada's 2004 unused apportionment under the SIRA. In the 2004 Annual Operating Plan, the Secretary of the Interior, exercising authority under Article II.B.6 of the Decree in Arizona v. California, made this water available for use within the State of Arizona for the purposes of implementing the SIRA. Reclamation is therefore approving an increased diversion amount for CAWCD of 10,000 af.

The approved revised diversion amount for CAWCD for 2004 is as follows:

2004 CAWCD Revised Diversion Calculation (acre-feet)

August 20, 2004 Revised Diversion for CAWCD	1,595,000
Projected end-of-year under use by senior AZ contractors	38,000
AZ / NV SIRA	10,000
Total Revised Diversion for CAWCD	1,643,000

Please submit a revised monthly schedule reflecting the above revised diversion with your letter of commitment. The timely receipt of your revised diversion schedule is extremely important to

our ability to provide an accurate daily forecast of end-of-year use for all contractors in Arizona. If we receive revisions to approved diversion estimates by senior users within the State of Arizona, we will notify you of the approved changes.

We will continue to monitor and project consumptive use of Colorado River water throughout calendar year 2004. These projections are available on a daily basis on Reclamation's website at www.usbr.gov/lc/region/lcrivops.html. It is expected that Arizona contractors will use this information to adjust diversions to remain within approved annual quantities. CAWCD and Reclamation have agreed to review Arizona's forecasted calendar year 2004 use and CAWCD's approved diversion each month through the remainder of the year.

Thank you in advance for the timely submission of your revised diversion estimates and monthly schedule for 2004. If you have any questions, please contact Ms. Ruth Thayer at 702-293-8426.

Sincerely,

Robert W. Johnson Regional Director

cc: Mr. James H. Davenport
Chief, Water Division
Colorado River Commission of
Nevada
555 E. Washington Ave., Suite 3100
Las Vegas, NV 89101

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

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

Mr. Larry Dozier
Deputy General Manager
Central Arizona Water Conservation
District
23636 North 7th Street
Phoenix, AZ 85080-3020

Arizona Water Banking Authority
Amendments to the Agreement for Interstate Water Banking
Discussion Paper
November 29, 2004

Background

The Colorado River Compact is one of the components of the "Law of the River" that governs the operations of the Colorado River. The "Law of the River" is comprised of federal and state statutes, interstate compacts, court decisions and decrees, contracts with the United States, an international treaty, operating criteria and administrative decisions. Together, these have resulted in a division of the waters of the Colorado River among the various users. Over the years, the seven states that utilize the Colorado River (the Basin states) have had discussions over various issues and the majority of the issues have been resolved via negotiation instead of litigation. Most currently, the issue facing the Basin states is drought and the potential impact to river operations and water supply. Because Arizona is a junior user on the river, it is important for the state to take steps to protect the Colorado River water supply for Arizona water users. Consequently, a collaborative approach with respect to the current discussions is highly desirable for Arizona.

Under the 1964 decree in *Arizona v. California*, the allocation of water to the three states of the Lower Colorado River basin was recognized. This allocation was 4.4 million acre feet to California, 2.8 million acre feet to Arizona and 300,000 acre feet to Nevada. In 2004, California is projected to utilize 4.3 million acre feet, Nevada is projected to utilize 287,000 acre feet and Arizona is projected to use 2.8 million acre feet. Arizona's Colorado River water use included more than 300,000 acre feet of water delivered for water banking purposes.

Agreement for Interstate Water Banking between Arizona and Nevada

On July 3, 2001, the Agreement for Interstate Water Banking (2001 Agreement) between the Arizona Water Banking Authority (AWBA), the Southern Nevada Water Authority (SNWA) and the Colorado River Commission of Nevada was executed¹. In the 2001 Agreement, the AWBA agreed to use its "best efforts" to store water in Arizona in an amount sufficient to develop an aggregate total of 1.2 million acre feet of long-term storage credits. Those credits would then be recovered by Nevada at a later date as a temporary supply of water to allow Nevada to develop other longer term supplies of water. The 2001 Agreement contains specific provisions to insure that any water stored for Nevada is water that could not be utilized by water users in Arizona. Nevada would pay the full cost of water delivery and storage in addition to all costs associated with recovery of the long-term storage credits. The 2001 Agreement was negotiated recognizing the surplus provisions of the Interim Surplus Guidelines (ISG).

The ISG published on January 25, 2001 by the United States Department of the Interior, control the operation of the Lower Colorado River system for the next 15 years. The ISG

¹ For purposes of this discussion, the SNWA and Colorado River Commission will be collectively referred to as "Nevada".

provide more liberal surpluses to allow a transition period for California to reduce its reliance on Colorado River water and to implement measures to limit its total uses of Colorado River water in the state to 4.4 million acre feet. Consequently, at the time the 2001 Agreement was negotiated, Nevada anticipated that its water needs would be met through 2016 by surplus water made available through the ISG. After 2016, Nevada intended to utilize credits stored on its behalf in the Arizona water bank. However, surpluses under the ISG are no longer available because the current storage content of Lake Mead is below the critical threshold content established in the ISG. Consequently, Nevada is exploring alternative ways to meet needs. Amending the 2001 Agreement would provide Nevada a firmer water supply, therefore, Nevada approached Arizona to initiate negotiations to amend the 2001 Agreement.

The intent of the amended agreement is to assure Nevada access to the full 1.25 million acre feet anticipated under the 2001 Agreement. For this access, Nevada continues to bear the full cost of storing excess Central Arizona Project (CAP) water and later recovering that water. Nevada is also providing \$100 million to ensure that Arizona can acquire additional water resources if conditions warrant. The amended agreement provides a temporary water supply for Nevada allowing time for development of other non-Colorado River resources and it provides Arizona additional flexibility to achieve its long-term water management goals. This arrangement provides a good investment for both parties.

Benefits to Arizona

The amended agreement provides an opportunity for the State of Arizona to secure numerous benefits for Arizona water users and these provisions will be key components of the negotiations. Current projections indicate excess water within Arizona's 2.8 million acre foot entitlement will be available for storage in the future. The AWBA will not have sufficient instate funding to store the quantities of excess CAP water currently projected to be available. Interstate water banking is a mechanism that can insure full utilization of Arizona's 2.8 million acre foot entitlement. The amended agreement also provides additional financial resources that could be used to develop alternative water supplies. In addition, water stored for interstate purposes provides revenues for the Arizona Water Protection Fund, which is the sole state funding source for riparian protection in Arizona. It also provides a potential funding source to support the Arizona portion of the Multi-Species Conservation Program. Furthermore, because the amended agreement reduces the amount of water that Nevada may recover in any year, it may help accelerate the development of recovery arrangements for Arizona water users. Perhaps most importantly, execution of the amended agreement will help strengthen Arizona's interstate relationship with Nevada. A strong relationship is critical as the seven Basin states continue discussions regarding the on-going drought and shortages on the Colorado River.

An indication of the current collaborative atmosphere between Arizona and Nevada is Nevada's willingness to submit a letter to the Central Arizona Water Conservation District agreeing to assist Arizona in addressing its junior priority on the Colorado River.

Status/Timeline for Negotiations

The amended agreement was initially discussed with the Board of Directors of the CAWCD at the August meeting. A matrix comparing the 2001 Agreement and the amended agreement was distributed to the CAWCD Board and the AWBA Commission at their respective September meetings. The components of the amended agreement were discussed at the November meeting of the CAWCD and a special meeting of the AWBA held on November 15, 2004.

Discussion regarding the amended agreement is on the agenda of the December 2, 2004 meeting of the CAWCD Board. At that meeting, staff will be recommending that the Board President be authorized to support the amended agreement when it comes before the AWBA Commission for approval. If that authorization is granted, it is anticipated that action on the amended agreement would be on the agenda of the December 9, 2004 meeting of the AWBA Commission. This would then allow the SNWA to include approval of the amended agreement on the agenda of the next meeting of the Board of Directors scheduled for December 16, 2004.

Arizona Water Banking Authority Amendments to the Agreement for Interstate Water Banking Frequently Asked Questions November 29, 2004

1. How does Arizona benefit from this amended agreement?

There are a number of ways in which Arizona water users benefit from interstate water banking, in general, and from the amended agreement, in particular.

a. Interstate water banking is a mechanism whereby Arizona can fully benefit from its 2.8 million acre foot Colorado River entitlement.

The Arizona Water Banking Authority (AWBA) will have insufficient funds to store for Arizona the quantities of excess Central Arizona Project (CAP) water that the models project will be available. Interstate water banking is a mechanism within the authority of the AWBA, under A.R.S. § 45-2471, that insures that the 2.8 million acre foot allocation is fully utilized within Arizona for the benefit of Arizona in Arizona. While this is also a benefit under the 2001 Agreement, the original agreement only recovered the actual cost of storage and delivery at the time the water was stored. The amended agreement recovers those costs plus provides an additional \$100 million for development of alternative water supplies. It is presumed that any alternative water supplies developed under the amended agreement that are not needed to fully meet the Nevada obligation would be available for Arizona water users.

b. Interstate water banking provides revenues for the <u>Arizona Water Protection</u> Fund.

All excess CAP water delivered for interstate water banking purposes includes a fee that is collected in lieu of the *ad valorem* property tax that is currently levied within the tri-county CAP service area. In 2004, this property tax equivalency component was \$20 per acre foot. Thus, the development of 1.25 million acre feet of credits would bring in revenues in excess of \$24 million. While this is a benefit under both versions of the agreement, the amended agreement provides the funds up front. This allows more flexibility in the use of those funds for environmental purposes such as supporting the Arizona Water Protection Fund and Arizona's portion of the Multi-species Conservation Program.

c. Interstate water banking potentially accelerates the development of recovery plans.

Recovery of water to firm CAP Municipal & Industrial (M&I) uses is not anticipated until some time after 2020. Recovery associated with interstate water banking is on a much shorter time frame. When the 2001 Agreement was negotiated, it was anticipated that recovery would be initiated in 2016, but there was no certainty associated with that estimate. Under the schedule provided in the amended agreement, recovery may be

initiated in 2007. Consequently, recovery plans and processes would need to be developed much earlier for water banked for interstate purposes and those recovery efforts would serve as tests for future intrastate recovery. Furthermore, any infrastructure developed to facilitate interstate recovery would be available for future intrastate recovery.

d. The amount of the annual recovery for the benefit of SNWA is reduced.

One of the benefits to Arizona is that recovery arrangements made to facilitate recovery of Nevada's long term storage credits could then be used for recovery of long term credits for Arizona water users. Under the 2001 Agreement, there was no recovery schedule and Nevada could request recovery up to 100,000 AF in any given year. This lack of a fixed recovery schedule somewhat limits the ability to use the same arrangements for recovery for Arizona water users. The amended agreement establishes a recovery schedule with an upper limit of 40,000 acre feet in any year, except during shortage years. By reducing the annual maximum amount of recovery and providing a schedule for recovery the amended agreement allows more flexibility in recovery planning specifically as it relates to recovery infrastructure development and utilization. This flexibility will benefit Arizona users by allowing the integration of intrastate and interstate recovery arrangements.

During times of shortage, Nevada would be able to request recovery to assist in meeting reductions to their basic apportionment, similar to CAP M&I users. However, the amended agreement does require that when CAP M&I users are suffering shortages, Nevada will reduce it's request for recovery above its basic apportionment. The amended agreement provides for a reduction of any recovery above Nevada's basic apportionment on a *pro rata* basis with CAP M&I reductions.

e. Interstate water banking creates a positive relationship between Arizona and Nevada and maintains the current cooperative efforts to address shortage declarations and Arizona's junior status on the Colorado River.

Maintaining the positive relationship established between the two states in the process of developing the 2001 Agreement is critically important, particularly as the Colorado River Basin states continue discussions regarding Colorado River shortages. Arizona has already benefited from that relationship in a number of ways:

- Nevada has, and continues to, publicly state that they support Arizona's efforts to change the junior priority status of the CAP.
- Nevada has readily compromised and been willing to accept shortage operations that draw Lake Mead down to levels below the SNWA intake pipe, which directly benefits Arizona water users. This involves significant expense to Nevada for the construction of new intakes lower in the reservoir.
- Nevada supported the Arizona Water Settlement Act without expectation of gaining benefits.

2. How do we know that Arizona has sufficient water available to meet the guaranteed 1.25 million acre feet of credits?

In recent months, AWBA and CAP staffs have completed model runs to determine the ability of the AWBA to firm the 1.25 million acre feet. The runs conform to the model runs done by the Central Arizona Groundwater Replenishment District in the course of developing their plan of operation. The model runs show that in almost every year from 2005-2034, there is some amount of water available to the AWBA after all water uses in Arizona have been met². This quantity of available water is sufficient to develop long-term storage credits in annual amounts ranging from 10,000 acre feet to almost 372,000 acre feet. The model runs indicate that under normal conditions, the 1.25 million acre feet of credits can be developed by 2033, including credits already accrued. Under conservative scenarios, which included six years of shortages, the credits can be developed by 2035. Under more optimistic scenarios, the credits can be developed by 2030³.

3. What if the model is wrong?

If the model runs are ultimately inaccurate and there is not sufficient excess CAP water to meet to firm the 1.25 million acre feet for Nevada, the amended agreement provides \$100 million that could be used to develop alternative sources of water. When deciding what alternative sources would be utilized, emphasis would be placed on development of sources that could also benefit Arizona water users. Under no circumstances would the development of alternative sources adversely impact Arizona water users.

4. How do we guarantee that those credits can be recovered?

The AWBA could establish a trigger credit reserve level. If the trigger level is reached, then the AWBA could borrow credits from other sources available to the AWBA or begin utilizing the \$100 million to develop alternative water supplies thus insuring that long-term storage credits will always be available to be recovered on the schedule provided in the amended agreement

5. What will Nevada's financial obligation be under the amended agreement?

The amended agreement is structured such that the initial obligation is \$330 million payable via a \$100 million initial payment and ten annual installments of \$23 million beginning in 2009. The \$330 million identified in the amended agreement is only for the storage of water. All future recovery costs of these credits will be borne by Nevada.

² This assumes a normal Colorado River supply; there is no water available for the AWBA in 2021, 2022 or 2023.

³ The optimistic scenario includes some surplus water.

6. How was the obligation calculated?

This obligation was calculated using projected future costs for delivery and storage of CAP water with an additional sum of money included calculated based on the cost to develop alternative water supplies if necessary.

7. What if the \$330,000,000 is not sufficient to cover the cost of storing the water?

The amended agreement will include a provision that if the actual cost for water delivery and storage exceeds the amount paid by Nevada, reconciliation will take place. The reconciliation will require Nevada to pay the actual cost of storage and delivery as required under A.R.S. § 45-2471.C.

8. How can the AWBA insure that any money paid by Nevada pursuant to this amended agreement will be used only for its intended purposes?

The majority of the money received from Nevada is committed for payment for water deliveries and storage fees. The anticipation is that the money will be deposited in an interest bearing account with strict controls on its use. The AWBA Commission will provide oversight of expenditure of the funds from the account. Any expenditure of the funds will only occur after public input to the Commission. Those expenditures would then be detailed in the AWBA Annual Plan of Operation, subject to public review and comment prior to its approval. The specific mechanism for distribution of the additional money is not yet in place, however, the amended agreement is structured in a manner that provides Arizona time to finalize the mechanism that mandates the manner in which the money would be utilized.

9. How is it insured that provisions of the amended agreement will not require actions that harm Arizona water users?

Consistent with Arizona statutes, the amended agreement specifically states that no action will be taken to the detriment of Arizona water users. Arizona water users will always be allowed to order excess CAP water before the AWBA can order excess water. The AWBA will expend funds available for <u>intrastate</u> storage prior to storing water to meet the commitments of the amended agreement. As stated earlier, model runs have shown that there should be sufficient excess water to meet the commitments even under the current priorities. If this is not the case, additional money being paid by Nevada is available to insure that alternative water supplies can be developed. Again, Arizona users would be given the first opportunity to develop and use those alternative supplies. All provisions of the agreement must be in compliance with Arizona state law.

10. Will this amended agreement increase the likelihood of a shortage to CAP supplies for Arizona municipal and industrial water users?

No action will be taken pursuant to this agreement to the detriment of Arizona water users.

11. If Arizona does not make this commitment would the likelihood of a shortage to CAP supplies for Arizona municipal and industrial water users be reduced?

No. Shortages on the Colorado River, and subsequent shortages to Arizona users, are contingent upon water supply within the Colorado River basin. During normal years Arizona has the right to divert its full normal year entitlement. If for some reason Arizona chose not to divert its full entitlement in an effort to save water in the main stem reservoirs to help avoid shortages, then that portion of its entitlement could be made available to California or Nevada and would not be saved.

By failing to amend the agreement shortages to Arizona users may be increased. Absent the amended agreement Nevada will have to develop alternative supplies to substitute for those included in the amended agreement. Depending on how those supplies are developed Arizona's Colorado River entitlement could be negatively impacted.

12. Can any alternative water supplies developed pursuant to this agreement benefit Arizona users?

The amended agreement has the potential to increase water supplies available to Arizona users in two ways:

- By developing long term water supplies that will be available to Arizona users after the commitments to Nevada in the amended agreement are met;
- Any funds from the \$100 million that are not needed to develop shorter term alternative supplies for Nevada could then be utilized to develop supplies for Arizona users.

13. If a shortage is declared in the Lower Basin, how will Arizona and Nevada be impacted?

The specific impact is unknown because the seven Basin states are currently in discussions regarding the operational impacts of a shortage declaration. Notwithstanding those larger impacts, the amended agreement includes a provision that reduces the amount of water Nevada can request from its base recovery in any year that CAP M&I users are reduced because of a declared shortage. Reducing Nevada use in this manner provides an incentive to Nevada to support less frequent and smaller shortages to Arizona.

14. What happens to the 2001 Agreement if the amended agreement is not executed?

The provisions of the 2001 Agreement do not terminate and Arizona will continue to use its best efforts to store water on behalf of Nevada. Nevada would only pay the cost of storing and recovering the water. Consequently no additional revenues would be available to the AWBA to assist the AWBA in meeting its long term goals.

15. What is the significance of the change from "best efforts" to "guarantee"?

From Nevada's perspective, the benefit is a dependable water supply. From Arizona's perspective, there is a contractual commitment to store the long-term storage credits. The risk to Arizona is that excess CAP water may not be available to meet that commitment. To offset that risk, additional money is being collected to insure that alternative water supplies can be developed if necessary.

16. How can we be assured that Nevada is developing non-Colorado River resources to prevent continued dependence on water banked in Arizona?

SNWA has initiated an Integrated Water Planning Process that involves almost 30 stakeholders (including rural counties) to make recommendations to the SNWA Board of Directors regarding the development of non-Colorado River water resources and facilities and the integration with existing resources and facilities. SNWA has committed funds and begun preparing the appropriate Environmental Impact Statements and Environmental Assessments for developing non-Colorado River water resources. This includes approving a Memorandum of Agreement with the United States Fish and Wildlife Service for the development of conservation measures benefiting endangered species in the Muddy River. SNWA has also initiated construction on a groundwater delivery pipeline system to gather data to facilitate issuance of groundwater permits. Over \$10 million has been spent by SNWA on water planning and environmental analyses. Additionally, Congress recently enacted H.R. 4593, which grants federal rights of way across Bureau of Land Management lands for the SNWA groundwater delivery pipeline.

To: AWBA Members From: Tim Henley

The following scenario is for a normal year deliveries (2.8 MAF available to Arizona).

- 1 Table 1 shows CAP deliveries to users that have a higher priority than the Bank.
 - a. The deliveries are probably conservative in relation to water available to the Bank because column 2 & 4 are high but that is what is in the model.
 - b. I have also added additional M&I incentive recharge water in 2006 thru 2010.
- 2 Table 2 shows the water available to the Bank, and manner in which the credits are developed for both instate and SNWA.
 - a. The first dotted line indicates when the Bank is likely to expend all of its funds for in-state use (2017). This occurs because the funding authority for the 4 cent tax and the increased withdrawal fee end in 2016. Under this scenario no additional carryover is available.
 - b. The second dotted line indicates when 1.25 MAF of long-term storage credits have been created for SNWA by storing excess water.
 - c. In order to maintain a two-year supply of long-term storage credits (80,000 AF) in the SNWA account, the Bank would have to find some way to augment the account beginning in 2016. It was assumed any augmentation would have to be repaid and that the repayment could be completed by 2033. Under this scenario, a total of 300,000 AF would be needed to maintain a minimum balance of 80,000 AF of credits.
 - d. Nevada would be able to draw on the account until 2037.
- Table 3 shows the cash flow in the various accounts at an interest rate of 4%, which is the rate used in the Indian settlement discussions for the Lower Basin account.
 - a. The interstate excess water cost are based somewhat on CAP's long range financial forecast model.
 - b. The \$100,000,000 would grow to approximately \$221,000,000.
 - c. The \$230,000,000 would end up with a balance of approximately \$40,000,000 which the Bank would owe SNWA.
 - d. The Water Protection Fund and MSCP account are created by an initial payment of \$10,000,000 followed by five \$2,000,000 payments and it grows to approximately \$26,000,000 unless dispersements are needed before 2015. No attempt was made to determine how this account would be split between the Water Protection Fund and the MSCP nor was an attempt made to determine how the funds would be spent.
 - e. Any funds from the \$100,000,000 that were needed to store water before 2009 were repaid in 2011.
- Table 4 shows the cash flow in the various accounts at an interest rate of 3.5%, which is conservative when compared to the rate used in the Indian settlement discussions for the Lower Basin account.
 - a. The interstate excess water costs are the same as Table 3.
 - b. The \$100,000,000 would grow to approximately \$196,000,000.
 - c. The \$230,000,000 would end up with a balance of approximately \$16,000,000 which we would owe SNWA
 - d. The Water Protection Fund and MSCP account are created by an initial payment of \$10,000,000 followed by five \$2,000,000 payments and it grows to approximately \$25,000,000 unless dispersements are needed before 2015. No attempt was made to determine how this account would be split between the Water Protection Fund and the MSCP nor was an attempt made to determine how the funds would be spent.
 - e. Any funds from the \$100,000,000 that were needed to store water before 2009 were repaid in 2011.
- Under a Normal Year scenario it would appear that adequate excess water and funding would be available to meet the Bank's commitments under the Amended Agreement.

Firming SNWA 1.2 million acre feet (normal year)

TABLE 1	(1)	(2)	(3)	(4)	(5)	(6)	(7)
YEAR	ARIZONA COLORADO RIVER SUPPLY	ARIZONA ON-RIVER DEMANDS	CAP WATER DELIVERY	Indian On- Reservation Uses	M&I Uses (including CAGRD CAP Contracts)	NIA Uses	Secondary Excess Uses
	(Acre feet)	(Acre feet)	(Acre feet)	(Acre feet)	(Acre feet)	(Acre feet)	(Acre feet)
2005	2,800,000	1,212,882	1,512,118	132,800	464,701	400,000	385,891
2006	2,800,000	1,225,763	1,499,237	122,300	494,211	400,000	236,259
2007	2,800,000	1,238,645	1,486,355	102,300	509,269	400,000	170,903
2008	2,800,000	1,251,527	1,473,473	106,800	549,368	400,000	95,742
2009	2,800,000	1,264,408	1,460,592	121,800	566,335	400,000	96,372
2010	2,800,000	1,277,290	1,447,710	142,328	602,496	400,000	100,361
2011	2,800,000	1,278,766	1,446,234	161,928	622,294	400,000	58,446
2012	2,800,000	1,280,242	1,444,758	179,393	638,765	400,000	41,255
2013	2,800,000	1,281,718	1,443,282	204,493	650,535	400,000	55,162
2014	2,800,000	1,283,194	1,441,806	226,593	661,633	400,000	68,390
2015	2,800,000	1,284,670	1,440,330	244,955	673,175	400,000	66,635
2016	2,800,000	1,286,146	1,438,854	263,617	679,929	400,000	62,952
2017	2,800,000	1,287,622	1,437,378	284,280	691,702	300,000	70,640
2018	2,800,000	1,289,098	1,435,902	305,604	695,251	300,000	57,256
2019	2,800,000	1,290,574	1,434,426	326,266	698,800	300,000	63,989
2020	2,800,000	1,292,050	1,432,950	346,928	734,349	300,000	41,171
2021	2,800,000	1,293,489	1,431,511	390,289	736,954	300,000	4,707
2022	2,800,000	1,294,928	1,430,072	390,953	737,879	300,000	1,240
2023	2,800,000	1,296,367	1,428,633	391,615	738,805	298,213	C
2024	2,800,000	1,297,806	1,427,194	392,277	739,730	225,000	41,120
2025	2,800,000	1,299,245	1,425,755	392,939	740,613	225,000	43,086
2026	2,800,000	1,300,684	1,424,316	393,602	741,503	225,000	46,116
2027	2,800,000	1,302,123	1,422,877	394,264	742,394	225,000	36,380
2028	2,800,000	1,303,562	1,421,438	394,926	743,284	225,000	34,884
2029	2,800,000	1,305,001	1,419,999	394,926	744,174	225,000	33,719
2030	2,800,000	1,306,440	1,418,560	394,926	745,064	225,000	32,720
2031	2,800,000	1,307,784	1,417,216	394,926	745,461	0	60,936
2032	2,800,000	1,309,128	1,415,872	394,926	745,527	0	59,260
2033	2,800,000	1,310,472	1,414,528	394,926	745,594	0	56,665
2034	2,800,000	1,311,816	1,413,184	394,926	745,660	0	54,359

- (1) Normal year entitlement
- (2) Projected on-river uses
- (3) Water available to CAP [difference between (1) and (2)]
- (4) Projected Indian deliveries from latest GRD analysis
- (5) Projected M&I subcontracts deliveries from latest GRD analysis
- (6) Projected Non-Indian Agricultural deliveries based on pool schedule
- (7) Projected Excess water deliveries with priority over AWBA from GRD except additional 100 kaf in 2006 and 50 kaf in 2007 thru 2010

TABLE 2	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	CAP Uses	Water available to AWBA	In-state Credits	Additional Acquisition and Payback	SNWA Credits	SNWA cumulative total	SNWA ICUA	SNWA Account
	(Acre feet)	(Acre feet)	(Acre feet)	(Acre feet)	(Acre feet)	(Acre feet)	(Acre feet)	(Acre feet)
			2,025,000		121,000	121,000		
2005	1,383,392	128,726			0	121,000	0	121,000
2006	1,252,770	246,466			43,214	164,214	20,000	144,214
2007	1,182,472	303,883			96,611	260,825	40,000	220,825
2008	1,151,910	321,564			113,054	373,879	70,000	303,879
2009	1,184,507	276,084			70,759	444,638	100,000	344,638
2010	1,245,185	202,525			2,348	446,986	140,000	306,986
2011	1,242,668	203,566			3,316	450,302	180,000	270,302
2012	1,259,413	185,345			0	450,302	220,000	230,302
2013	1,310,190	133,092			0	450,302	260,000	190,302
2014	1,356,616	85,190			0	450,302	300,000	150,302
2015	1,384,765	55,565			0	450,302	340,000	110,302
2016	1,406,498	32,356		50,000	0	500,302	380,000	120,302
2017	1,346,622	90,756			0	500,30	2 420,000	80,302
2018	1,358,111	77,791	0		72,346	572,647	460,000	112,647
2019	1,389,055	45,371	0		42,195	614,843	500,000	114,843
2020	1,422,448	10,502			9,767	624,609	540,000	84,609
2021	1,431,950	0		50,000	0	674,609	580,000	94,609
2022	1,430,072	0	0	50,000	0	724,609	620,000	104,609
2023	1,428,633	0	0	50,000	0	774,609	660,000	114,609
2024	1,398,127	29,067	0		27,032	801,642	700,000	101,642
2025	1,401,638	24,117	0		22,429	824,070	740,000	84,070
2026	1,406,221	18,095	0	50,000	16,828	890,898	780,000	110,898
2027	1,398,038	24,839	0	50,000	23,101	963,999	820,000	143,999
2028	1,398,094	23,344	0		21,710	985,709	860,000	125,709
2029	1,397,819	22,180	0		20,627	1,006,336	900,000	106,336
2030	1,397,710	20,850	0		19,390	1,025,726	940,000	85,726
2031	1,201,323	215,893		-100,000	200,781	1,126,507	980,000	146,507
2032	1,199,713	216,159		-100,000	201,027	1,227,534	1,020,000	207,534
2033	1,197,185	217,343		-100,000	122,472	1,250,006	1,060,000	190,006
2034	1,194,945						1,100,000	150,006
	 TOTAL		3,802,259		1,250,006			

- (8) Total CAP uses with priority over AWBA
- (9) Water available to AWBA [difference between (3) and (8)]
- (10) Credits developed for Intrastate use. If Intrastate credits limited by funding then 186,000 af if limited by available water [(9) times 0.93 (losses)]. Negative indicates borrowed credits
- (11) Additional water acquired to insure SNWA account has two year supply. Negative is payback.
- (12) Credits developed for SNWA as last priority. [(9) minus (10)/0.93 times 0.93 (losses)]
- (13) Cumulative credits developed for SNWA
- (14) Cumulative ICUA developed for SNWA based on amended agreement recovery schedule
- (15) Credits available in SNWA account [difference between (13) and (14)]

Note: First dotted line indicates depletion of in-states funds, second 1.25 maf for Nevada

				4% Interest Rate	9	
TABLE 3	(16)	(17)	(18)	(19)	(20)	(21)
YEAR	Interstate Excess Water Cost	Total Annual Cost	Cumulative Cost	\$100,000,000 Interstate Portion of Water Banking Fund	\$230,000,000 Interstate Portion of Water Banking Fund	Water Protection Fund and MSCP
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
-						
2005						
2006	\$186	\$8,642,760			1	\$10,000,00
2007	\$192	\$19,945,548	\$28,588,308	\$84,611,530		\$10,400,00
2008	\$203	\$24,677,436	\$53,265,743	\$67,252,621		\$10,816,00
2009	\$210	\$15,977,741	\$69,243,484	\$44,278,193	\$23,000,000	\$13,248,64
2010	\$203	\$512,496	\$69,755,980	\$29,432,471	\$46,920,000	\$15,778,58
2011	\$217	\$773,723	\$70,529,703	\$30,609,769	\$71,263,804	\$18,409,72
2012	\$171	\$0	\$70,529,703	\$96,834,160	\$31,309,684	\$21,146,11
2013	\$180	\$0	\$70,529,703	\$100,707,527	\$55,562,071	\$23,991,96
2014	\$189	\$0	\$70,529,703	\$104,735,828	\$80,784,554	\$24,951,64
2015	\$199	\$0	\$70,529,703	\$108,925,261	\$107,015,936	\$25,949,70
2016	\$206	\$0	\$70,529,703	\$113,282,271	\$134,296,574	
2017	\$216	\$0	\$70,529,703	\$117,813,562	\$162,668,437	
2018	\$225	\$17,503,009				
2019	\$235	\$10,662,197				
2020	\$246	\$2,583,480			\$177,836,728	
2021	\$260	\$0	\$101,278,390		\$182,263,378	
2022	\$273	\$0	\$101,278,390			
2023	\$286	\$0	\$101,278,390		\$197,136,070	
2024	\$297	\$8,645,708				
2025	\$309	\$7,460,244		\$161,235,995		
2026	\$322	\$5,821,227	1			
2027	\$335	\$8,310,729			\$206,772,997	
2028	\$348	\$8,122,864			\$206,400,759	
2029	\$362	\$8,026,456	\$147,665,619	\$188,623,309	\$206,209,010	
2030	\$376	\$7,846,863		\$196,168,241	\$206,109,856	
2031	\$391	\$84,502,856		\$204,014,970	\$206,193,513	
2032	\$407	\$87,991,041	\$328,006,379		\$126,558,283	
2033				\$220,662,592	\$40,109,932	
2034						

- (16) Projected Interstate Water Banking cost including capital, OM&R, energy, in-lieu fees, recharge facility fee
- (17) Cost of Interstate banking [(16) times (12) divided by 0.93]
- (18) Cumulative cost of storing Interstate water
- (19) Account balance for \$100 million. Balance inflated at 4% Initial storage costs repaid from \$230 million account in 2012
- (20) Account balance for \$230 million. Balance inflated at 4% Initial storage cost transferred to \$100 million account in 2012
- (21) Account balance for \$10 million account created for Water Protections Fund and MSCP.

 Balance inflated at 4%

		3.5 % Interest Rate											
TABLE 4	(22)	(23)	(24)	(25)	(26)	(27)							
YEAR	Interstate Excess Water Cost	Total Annual Cost	Cumulative Cost	\$100,000,000 Interstate Portion of Water Banking Fund	\$230,000,000 Interstate Portion of Water Banking Fund	Water Protection Fund and MSCP							
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)							
2005	\$196	\$9.640.760	¢9 640 760	\$00,000,000		\$10,000,000							
2006	\$186 \$192	\$8,642,760 \$19,945,548			i.	\$10,000,000							
2007	\$203	\$24,677,436				\$10,350,000							
2009	\$210	\$15,977,741	\$69,243,484		\$23,000,000	\$10,712,250							
2010	\$210	\$512,496			\$46,805,000	\$13,087,179 \$15,545,230							
2010	\$217	\$773,723				\$18,089,313							
2012	\$171	\$0				\$20,722,439							
2013	\$180	\$0	\$70,529,703		\$54,664,670	\$23,447,724							
2014	\$189	\$0	\$70,529,703		\$79,577,933	\$24,268,395							
2015	\$199	\$0	\$70,529,703	\$105,646,439		\$25,117,789							
2016	\$206	\$0	\$70,529,703		1	Ψ20,117,700							
2017	\$216	\$0	\$70,529,703										
2018	\$225	\$17,503,009	\$88,032,713	\$117,132,096									
2019	\$235	\$10,662,197	\$98,694,910	\$121,231,719									
2020	\$246	\$2,583,480	\$101,278,390										
2021	\$260	\$0	\$101,278,390	\$129,866,448									
2022	\$273	\$0	\$101,278,390	\$134,411,774	\$181,360,089								
2023	\$286	\$0	\$101,278,390	\$139,116,186	\$187,707,692								
2024	\$297	\$8,645,708	\$109,924,098	\$143,985,252	\$194,277,461								
2025	\$309	\$7,460,244	\$117,384,342	\$149,024,736	\$192,128,864								
2026	\$322	\$5,821,227	\$123,205,569	\$154,240,602	\$191,132,021								
2027	\$335	\$8,310,729	\$131,516,298	\$159,639,023	\$191,796,672								
2028	\$348	\$8,122,864	\$139,639,162	\$165,226,389	\$189,907,951								
2029	\$362	\$8,026,456	\$147,665,619	\$171,009,312	\$188,147,565								
2030	\$376	\$7,846,863	\$155,512,482	\$176,994,638	\$186,425,348								
2031	\$391	\$84,502,856	\$240,015,337	\$183,189,451	\$184,828,731								
2032	\$407	\$87,991,041	\$328,006,379	\$189,601,082	\$103,837,282								
2033				\$196,237,119	\$15,846,240								
2034													

- (22) Projected Interstate Water Banking cost including capital, OM&R, energy, in-lieu fees, recharge facility fees
- (23) Cost of Interstate banking [(22) times (12)divided by 0.93]
- (24) Cumulative cost of storing Interstate water
- (25) Account balance for \$100 million. Balance inflated at 3.5% Initial storage cost repaid from \$230 million account in 2012
- (26) Account balance for \$230 million. Balance inflated at3.5% Initial storage cost transferred to \$100 million account in 2012
- (27) Account balance for \$20 million account created for Water Protections Fund and MSCP from in-lieu fee. Balance inflated at 3.5%

To: AWBA Members From: Tim Henley

The following scenario includes six years of shortages to CAP deliveries (2.3 MAF available to Arizona).

- 1 Table 5 shows CAP deliveries to users that have a higher priority than the Bank.
 - a. The shortages occur between years 2013 and 2018. The six years represent a 20% probability of shortage over the thirty year period.
 - b. Even with the shortage years the deliveries are probably conservative in relation to water available to the Bank because column 2 & 4 are high but that is what is in the model.
 - c. Additional M&I incentive recharge water was added in years 2006 thru 2010.
- 2 Table 6 shows the water available to the Bank, and manner in which the credits are developed for both instate and SNWA.
 - a. The first dotted line indicates when the Bank is likely to expend all of its funds for in-state use (2031). Shortages impact how quickly the Bank can expend its funds to develop in-state credits. Even though the funding authorities for the 4cent tax and the increased withdrawal fee end in 2016, under this scenario additional carryover is available.
 - b. The second dotted line indicates when 1.25 MAF of long-term storage credits have been created for SNWA by storing excess water (2034).
 - c. In order to maintain a two-year supply of long-term storage credits (80,000 AF) in the SNWA account, the Bank would have to find some way to augment the account beginning in 2015. It was assumed any augmentation would have to be repaid and that the repayment could be completed by 2033. Under this scenario, a total of 720,000 AF would be needed to maintain a minimum balance of 80,000 AF of credits.
 - d. Nevada would be able to draw on the account until 2034 because was assumed that SNWA used additional credits during the shortages.
- Table 7 shows the cash flow in the various accounts at an interest rate of 4%, which is the rate used in the Indian settlement discussions for the Lower Basin account.
 - a. The interstate excess water costs are based somewhat on CAP's long range financial forecast model.
 - b. The \$100,000,000 would grow to approximately \$239,000,000.
 - c. Because water would have to be stored later at a higher cost the \$230,000,000 would end up with a negative balance of approximately \$18,000,000, which SNWA would owe the Bank.
 - d. The Water Protection Fund and MSCP account are created by an initial payment of \$10,000,000 followed by five \$2,000,000 payments and it grows to approximately \$26,000,000 unless dispersements are needed before 2015. No attempt was made to determine how this account would be split between the Water Protection Fund and the MSCP nor was an attempt made to determine how the funds would be spent.
 - e. Any funds from the \$100,000,000 that were needed to store water before 2009 were repaid in 2011.
- Table 8 shows the cash flow in the various accounts at an interest rate of 3.5%, which is conservative when compared to the rate used in the Indian settlement discussions for the Lower Basin account.
 - a. The interstate excess water costs are the same as Table 3.
 - b. Because two additional years were need to develop 1.2MAF of credits the \$100,000,000 would grow to approximately \$210,000,000.
 - c. Because water would have to be stored later at a higher cost the \$230,000,000 would end up with a negative balance of approximately \$52,000,000, which SNWA would owe the Bank.
 - d. The Water Protection Fund and MSCP account are created by an initial payment of \$10,000,000 followed by five \$2,000,000 payments and it grows to approximately \$25,000,000 unless dispersements are needed before 2015. No attempt was made to determine how this account would be split between the Water Protection Fund and the MSCP nor was an attempt made to determine how the funds would be spent.
 - e. Any funds from the \$100,000,000 that were needed to store water before 2009 were repaid in 2011.
- Under the Shortage Year scenario while additional resources might have to be acquired utilizing a portion of the \$100,000,000 and SNWA might owe the cost to store excess water that exceeded the \$230,000,000 plus interest, it would appear the Banks commitments under the Amended Agreement could be met.
- This scenario did not include any surpluses, which have approximately a 15% chance of occurring during this thirty year period. If surpluses were to occur they could greatly reduce the need for additional water and the cost to SNWA.

Firming SNWA 1.2 million acre feet (includes shortages)

TABLE 5	(1)	(2)	(3)	(4)	(5)	(6)	(7)
YEAR	ARIZONA COLORADO RIVER SUPPLY	COLORADO ARIZONA RIVER ON-RIVER C		Indian On- Reservation Uses	M&I Uses (including CAGRD CAP Contracts)	NIA Uses	Secondary Excess Uses
2005	2,800,000				464,701	400,000	385,891
2006	2,800,000	1,225,763		122,300	494,211	400,000	236,259
2007	2,800,000	1,238,645			509,269		170,903
2008	2,800,000	1,251,527	1,473,473		549,368	400,000	95,742
2009	2,800,000	1,264,408	1,460,592	121,800	566,335	400,000	96,372
2010	2,800,000	1,277,290	1,447,710	142,328	602,496	400,000	100,361
2011	2,800,000	1,278,766	1,446,234	161,928	622,294	400,000	58,446
2012	2,800,000	1,280,242	1,444,758	179,393	638,765	400,000	41,255
2013	2,300,000	1,281,718	943,282	204,493	650,535	88,254	0
2014	2,300,000	1,283,194	941,806	226,593	661,633	53,580	. 0
2015	2,300,000	1,284,670	940,330	244,955	673,175	22,200	0
2016	2,300,000	1,286,146	938,854	263,617	679,929	0	0
2017	2,300,000	1,287,622	937,378	284,280	691,702	0	0
2018	2,300,000	1,289,098	935,902	305,604	695,251	0	O
2019	2,800,000	1,290,574	1,434,426	326,266	698,800	300,000	63,989
2020	2,800,000	1,292,050	1,432,950	346,928	734,349	300,000	41,171
2021	2,800,000	1,293,489	1,431,511	390,289	736,954	300,000	4,268
2022	2,800,000	1,294,928	1,430,072	390,953	737,879	300,000	1240
2023	2,800,000	1,296,367	1,428,633	391,615	738,805	298,213	0
2024	2,800,000	1,297,806	1,427,194	392,277	739,730	225,000	41120
2025	2,800,000	1,299,245	1,425,755	392,939	740,613	225,000	43,086
2026	2,800,000	1,300,684	1,424,316	393,602	741,503	225,000	46,116
2027	2,800,000	1,302,123	1,422,877	394,264	742,394	225,000	36,380
2028	2,800,000	1,303,562	1,421,438	394,926	743,284	225,000	34,884
2029	2,800,000	1,305,001	1,419,999	394,926	744,174	225,000	33,719
2030	2,800,000	1,306,440	1,418,560	394,926	745,064	225,000	32,720
2031	2,800,000	1,307,784	1 <u>,</u> 417,216		745,461	o	60,936
2032	2,800,000	1,309,128		394,926	745,527	0	59,260
2033	2,800,000	1,310,472	1,414,528	394,926	745,594	0	56,665
2034	2,800,000	1,311,816	1,413,184	394,926	745,660	0	54,359
2034	2,800,000	1,311,816	1,413,184	394,926	745,660	0	54,359

- (1) Normal year entitlement
- (2) Projected on-river uses
- (3) Water available to CAP [difference between (1) and (2)]
- (4) Projected Indian deliveries from latest GRD analysis
- (5) Projected M&I subcontracts deliveries from latest GRD analysis
- (6) Projected Non-Indian Agricultural deliveries based on pool schedule
- (7) Projected Excess water deliveries with priority over AWBA from GRD except additional 100 kaf in 2006 and 50 kaf in 2007 thru 2010

TABLE 6	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	CAP Uses	Water available to AWBA	In-state Credits	Additional Acquisition and Payback	SNWA Credits	SNWA cumulative total	SNWA ICUA	SNWA Account
			2,025,000		121,000	121,000		
2005	1,383,392	128,726	119,715		0	121,000	0	121,000
2006	1,252,770	246,466	186,000		43,214	164,214	20,000	144,214
2007	1,182,472	303,883	186,000		96,611	260,825	40,000	220,825
2008	1,151,910	321,564	186,000		113,054	373,879	70,000	303,879
2009	1,184,507	276,084	186,000		70,759	444,638	100,000	344,638
2010	1,245,185	202,525	186,000		2,348	446,986	140,000	306,986
2011	1,242,668	203,566	186,000		3,316	450,302	180,000	270,302
2012	1,259,413	185,345	172,371		0	450,302	220,000	230,302
2013	943,282	0	0		0	450,302	280,000	170,302
2014	941,806	0	0		0	450,302	340,000	110,302
2015	940,330	0	0	60,000	0	510,302	400,000	110,302
2016	943,546		0	60,000	0	570,302	460,000	110,302
2017	975,982		0	60,000	0	630,302	520,000	110,302
2018	1,000,855		0		0	690,302	580,000	110,302
2019	1,389,055		42,195		0	740,302	620,000	120,302
2020	1,422,448		9,767		0	740,302	660,000	80,302
2021	1,431,511	0	0	50,000	0	790,302	700,000	90,302
2022	1,430,072	0	0	50,000	0	840,302	740,000	100,302
2023	1,428,633		0	60,000	0	900,302	780,000	120,302
2024	1,398,127	29,067	27,032		0	900,302	820,000	80,302
2025	1,401,638		22,429	50,000	0	950,302	860,000	90,302
2026	1,406,221	18,095	16,828	60,000	0	1,010,302	900,000	110,302
2027	1,398,038		23,101	60,000	0	1,070,302	940,000	130,302
2028	1,398,094		21,710		0	1,070,302	980,000	90,302
2029	1,397,819		20,627	50,000	0	1,120,302	1,020,000	100,302
2030	1,397,710		19,390	50,000	0	1,170,302	1,060,000	110,302
2031	1,201,323		166,094		34,687	1,204,988	1,100,000	104,988
2032	1,199,713			-180,000	201,027	1,226,016	1,140,000	86,016
2033	1,197,185			-180,000	202,129	1,248,145	1,180,000	68,145
2034	1,194,945			-180,000	202,962	1,271,106	1,220,000	51,106
2034	1,194,945			-180,000	158,900	1,250,006	1,250,000	51,100
	TOTAL		3,802,259		1,250,006			

- (8) Total CAP uses with priority over AWBA
- (9) Water available to AWBA [difference between (3) and (8)]
- (10) Credits developed for Intrastate use. If Intrastate credits limited by funding then 186,000 af if limited by available water [(9) times 0.93 (losses)]. Negative indicates borrowed credits
- (11) Additional water acquired to insure SNWA account has two year supply. Negative is payback.
- (12) Credits developed for SNWA as last priority. [(9) minus (10)/0.93 times 0.93 (losses)]
- (13) Cumulative credits developed for SNWA
- (14) Cumulative ICUA developed for SNWA based on amended agreement recovery schedule
- (15) Credits available in SNWA account [difference between (13) and (14)]

Note: First dotted line indicates depletion of in-states funds, second 1.25 maf for Nevada

				4% Interest Rate		
TABLE 7	(16)	(17)	(18)	(19)	(20)	(21)
YEAR	Interstate Excess Water Cost	Total Annual Cost	Cumulative Cost	\$100,000,000 Interstate Portion of Water Banking Fund	\$230,000,000 Interstate Portion of Water Banking Fund	Water Protection Fund and MSCP
2005						
2006	\$186	\$8,642,760	\$8,642,760	\$90,000,000		\$10,000,00
2007	\$192	\$19,945,548	\$28,588,308			\$10,400,00
2008	\$203	\$24,677,436	\$53,265,743			\$10,816,00
2009	\$210	\$15,977,741	\$69,243,484		\$23,000,000	\$13,248,64
2010	\$203	\$512,496	\$69,755,980		\$46,920,000	\$15,778,58
2011	\$217	\$773,723	\$70,529,703			\$18,409,72
2012	\$171	\$0	\$70,529,703		\$31,309,684	\$21,146,11
2013	\$180	\$0	\$70,529,703		\$55,562,071	\$23,991,96
2014	\$189	\$0	\$70,529,703			\$24,951,64
2015	\$199	\$0	\$70,529,703		\$107,015,936	\$25,949,70
2016	\$206	\$0	\$70,529,703		\$134,296,574	* ==,= .=,.
2017	\$216	\$0	\$70,529,703		\$162,668,437	
2018	\$225	\$0	\$70,529,703		Ť	
2019	\$235	\$0	\$70,529,703			
2020	\$246	\$0	\$70,529,703	\$132,524,235		
2021	\$260	\$0	\$70,529,703		\$216,170,935	
2022	\$273	\$0	\$70,529,703			
2023	\$286	\$0	\$70,529,703		\$233,810,483	
2024	\$297	\$0	\$70,529,703			
2025	\$309	\$0	\$70,529,703	\$161,235,995	\$252,889,419	
2026	\$322	\$0	\$70,529,703			
2027	\$335	\$0	\$70,529,703	\$174,392,852	\$273,525,196	
2028	\$348	\$0	\$70,529,703		\$284,466,203	
2029	\$362	\$0	\$70,529,703	\$188,623,309	\$295,844,851	
2030	\$376	\$0	\$70,529,703	\$196,168,241	\$307,678,646	
2031	\$391	\$14,598,579	\$85,128,283		\$319,985,791	
2032	\$407	\$87,991,041	\$173,119,324	\$212,175,569	\$317,602,701	
2033	\$423	\$92,012,136	\$265,131,460		\$238,796,126	
2034	\$440	\$96,086,890	\$361,218,350	\$229,489,096	\$152,655,350	
2035	\$450	\$76,887,097	\$438,105,446		\$58,831,198	
					-\$18,055,899	

- (16) Projected Interstate Water Banking cost including capital, OM&R, energy, in-lieu fees, recharge facility fees
- (17) Cost of Interstate banking [(16) times (12) divided by 0.93]
- (18) Cumulative cost of storing Interstate water
- (19) Account balance for \$100 million. Balance inflated at 4%. Initial storage costs repaid from \$230 million account in 2012
- (20) Account balance for \$230 million. Balance inflated at 4%. Initial storage cost transferred to \$100 million account in 2012
- (21) Account balance for \$10 million account created for Water Protections Fund and MSCP.

 Balance inflated at 4%

			3	3.5 % Interest Rate	е		
TABLE 8	(22)	(23)	(24)	(25)	(26)	(27)	
YEAR	Interstate Excess Water Cost	Total Annual Cost	Cumulative Cost	\$100,000,000 Interstate Portion of Water Banking Fund	\$230,000,000 Interstate Portion of Water Banking Fund	Water Protection Fund and MSCP	
2005							
2006	\$186	\$8,642,760	\$8,642,760	\$90,000,000		\$10,000,000	
2007	\$192	\$19,945,548		\$84,204,744		\$10,350,000	
2008	\$203	\$24,677,436		\$66,508,268		\$10,712,250	
2009	\$210	\$15,977,741	\$69,243,484	\$43,294,911	\$23,000,000	\$13,087,179	
2010	\$203	\$512,496		\$28,273,271	\$46,805,000	\$15,545,230	
2011	\$217	\$773,723		\$29,262,836		\$18,089,313	
2012	\$171	\$0		\$95,287,035	\$30,593,884	\$20,722,439	
2013	\$180	\$0		\$98,622,081	\$54,664,670	\$23,447,724	
2014	\$189	\$0	\$70,529,703	\$102,073,854	T	\$24,268,395	
2015	\$199	\$0	\$70,529,703	\$105,646,439	\$105,363,161	\$25,117,789	
2016	\$206	\$0	\$70,529,703	\$109,344,065	\$132,050,872		
2017	\$216	\$0	\$70,529,703	\$113,171,107	\$159,672,652		
2018	\$225	\$0	\$70,529,703	\$117,132,096	\$188,261,195		
2019	\$235	\$0	\$70,529,703	\$121,231,719	\$194,850,337		
2020	\$246	\$0	\$70,529,703	\$125,474,829	\$201,670,098		
2021	\$260	\$0	\$70,529,703	\$129,866,448	\$208,728,552		
2022	\$273	\$0	\$70,529,703	\$134,411,774	\$216,034,051		
2023	\$286	\$0	\$70,529,703	\$139,116,186	\$223,595,243		
2024	\$297	\$0	\$70,529,703	\$143,985,252	\$231,421,077		
2025	\$309	\$0	\$70,529,703	\$149,024,736	\$239,520,814		
2026	\$322	\$0	\$70,529,703	\$154,240,602	\$247,904,043		
2027	\$335	\$0	\$70,529,703	\$159,639,023	\$256,580,684		
2028	\$348	\$0	\$70,529,703	\$165,226,389	\$265,561,008		
2029	\$362	\$0	\$70,529,703	\$171,009,312	\$274,855,643		
2030	\$376	\$0	\$70,529,703	\$176,994,638	\$284,475,591		
2031	\$391	\$14,598,579	\$85,128,283	\$183,189,451	\$294,432,237		
2032	\$407	\$87,991,041	\$173,119,324	\$189,601,082	\$289,627,835		
2033	\$423	\$92,012,136	\$265,131,460	\$196,237,119	\$208,694,082		
2034	\$440	\$96,086,890	\$361,218,350	\$203,105,419	\$120,765,814		
2035	\$458	<u>\$78,236,075</u>	\$439,454,424	\$210,214,108	\$25,542,686		

- (22) Projected Interstate Water Banking cost including capital, OM&R, energy, in-lieu fees, recharge facility fees
- (23) Cost of Interstate banking [(22) times (12) divided by 0.93]
- (24) Cumulative cost of storing Interstate water
- (25) Account balance for \$100 million. Balance inflated at 3.5%. Initial storage cost repaid from \$230 million account in 2012

-\$52,693,388

- (26) Account balance for \$230 million. Balance inflated at3.5%. Initial storage cost transferred to \$100 million account in 2012
- (27) Account balance for \$20 million account created for Water Protections Fund and MSCP from in-lieu fee. Balance inflated at 3.5%.





COLORADO RIVER COMMISSION OF NEVADA

December 1, 2004

Mr. David S. Wilson, General Manager Central Arizona Project P.O. Box 43020 Phoenix, AZ 85024

Dear Sid:

I would like to take this opportunity to reiterate Nevada's position regarding Arizona's subordination of its Central Arizona Project water as required under Section 301(b) of the Colorado River Basin Project Act of 1968 (CRBPA). As I have publicly stated many times, I do not believe Arizona's subordination is in the best interest of water management in the Lower Colorado River Basin.

With the tremendous growth in the southwest, the Colorado River has taken on an even more critical role in the water budgets of the three Lower Basin States than it did in 1968 when the CRBPA was enacted. Today, municipalities in Arizona, southern Nevada and southern California are dependent on Colorado River water. Nevada would support a cooperative effort among the Basin States and the Department of Interior to develop a workable shortage sharing and drought mitigation program that would recognize the need to provide for more equitable shortage sharing in the Lower Basin. To this end, Nevada would support a mutually acceptable equitable shortage sharing program or an amendment of Section 301(b) of the CRBPA.

The 2001 banking agreement between Nevada and Arizona to allow Nevada to store its own and Arizona's unused apportionment in Arizona, signaled the beginning of a strong partnership between the two states. The amendment of this agreement will provide more certainty to Nevada for a bridge supply, allowing us time to develop our in-state water resources and more flexibility for Arizona in managing their future water resources. This stronger partnership will allow us to work with the other Colorado River Basin States to develop shortage criteria more equitable for all.

Nevada looks forward to a strong, continued partnership with Arizona.

Sincerely,

Patricia Mulroy

General Manager

Southern Nevada Water Authority

Richard Bunker

Chairman

Colorado River Commission of Nevada



November 29, 2004

Tim Henley, Manager Arizona Water Banking Authority 500 North Third Street Phoenix, Arizona 85004

Re: Amendments to Nevada Interstate Contract

Dear Tim:

Metropolitan Domestic Water Improvement District (Metro Water District) recognizes the importance of Arizona assisting Southern Nevada in the form of a water resource "bridge" that can meet the needs of the Las Vegas area while the Southern Nevada Water Authority works to develop in-state supplies. In principle, the proposed new agreement with Nevada should serve to provide that much-needed bridge. While affording that benefit to Nevada, it should be recognized that the agreement increases water supply risks, both potential cost and availability, to water users in Central and Southern Arizona. We believe the additional risks can be managed if careful consideration is given to real concerns in order to ensure that the benefits of the proposed new deal materializes and distributed in a manner that benefits all entities and regions within the state.

Our first major concern relates to ensuring that the initial \$100 million payment actually is available to acquire the needed water supplies for the Nevada guarantee. What is to prevent the Legislature from simply instructing AWBA to request the funds from Nevada and then sweeping the funds into the general fund? It would be far better to specifically obligate the funds through contractual arrangements at the same time the agreement with Nevada is signed. If those funds get swept, we will be in a world of hurt when it comes to meeting the obligation to Nevada. Related to this concern is that the \$100 million initial payment should bear interest from the time the contract is signed until it is actually paid to AWBA.

Our second major concern relates to guaranteeing Nevada access to any shortage in its basic allocation in addition to the 40,000 acre-feet per year of new supply. For both public relations and practical supply recovery reasons, any such shortage make-up should be capped and be limited to no more than 50% of the actual shortage declared for Nevada. During times of shortage, Arizona farmers will be using most or all of their well capacity, and we may also have to be recovering for M&I usage in the later years of this agreement. This means that the recovery capacity required for Nevada may well be additional peaking capacity, which tends to be the most expensive to develop and maintain.

Third, as currently structured under the existing contract, interstate banking offers the potential for a number of benefits for Southern Arizona. These benefits include: (1) utilization of unused capacity in state demonstration recharge projects, thereby helping to hold down the cost per acrefoot of storage; (2) a 5% 'cut-to-the-aquifer' for any water stored; (3) reimbursement by Nevada

Re: Amendments to Nevada Interstate Contract

November 29, 2004

Page 2

of a portion of the capital costs of the facilities, which IPAG has recommended be used to close the large funding gap for M&I firming; (4) an opportunity to develop and test recovery agreements and infrastructure well in advance of any shortage in CAP M&I supplies; and (5) substantial Nevada contributions toward the cost of building and maintaining local recovery infrastructure.

Metro Water District believes it is critical that any new contract with Nevada protect and enhance these local benefits to interstate banking. We are concerned that, if continued high drought-related demand from Salt River Project severely restricts the quantity of excess CAP water available for interstate banking over the next few years, as has occurred over the past few years, the solution will be to purchase a water ranch and essentially stop actually bringing water in for recharge. It is the recharge activity with its commitment for later recovery that triggers all of the interstate banking benefits for Southern Arizona. Acquiring a water ranch might benefit AWBA, CAP and the seller of the water ranch, but it would likely be harmful to Southern Arizona and others that would like to see actual recharge activity occur. It is unfair and unreasonable to ask the region to accept both higher risk and lower benefits from the proposed transaction.

An alternative approach to utilizing a water ranch to meet the Nevada demand if excess CAP water is not available would be to focus on fallowing agreements or dry year option agreements either with major CAP agricultural users, both Indian and non-Indian. The basic question would be how much extra it would cost to pay the farmers to pump groundwater rather than use CAP water, thereby freeing up the CAP water for storage under the interstate agreement. The additional cost is likely to be relatively small, \$10 to \$30 per acre-foot, and would appear to be an appropriate use of a small part of the 'premium' paid by Nevada for this deal.

We request that the amount of interstate storage in the Tucson area be roughly proportional to the region's share of CAP M&I subcontracts (roughly 30%). This would result in storage of approximately 350,000-375,000 acre-feet of interstate water (out of 1.25 million acre-feet total) in the local underground storage facilities. The benefits associated with this amount of storage and later recovery would greatly facilitate our ongoing regional efforts to effectively manage our water resources and to plan for future shortages.

Please let me know if you have any questions or need further information.

Sincerely,

Mark Stratton, P.E. General Manager

C: AWBA Commission



Executive Office

December 1, 2004

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

Dear Mr. Henley:

Recovery Agreement for Water Stored Under the 1992 Demonstration Agreement between CAWCD and MWD

In 1992, The Metropolitan Water District of Southern California entered into an agreement with the Central Arizona Water Conservation District (CAWCD) to store Colorado River water in central Arizona. In 1994, Metropolitan and CAWCD amended the Demonstration Agreement.

Pursuant to the Demonstration Agreement, CAWCD stored 89,000 acre-feet for Metropolitan, and designated this amount as Interstate Underground Storage Credits in an Interstate Underground Storage Account and CAWCD assigned those credits to Metropolitan. By letter dated September 2, 2004 to CAWCD (copy enclosed), Metropolitan requested recovery of 40,000 acre-feet in 2005 in accordance with the terms of the Demonstration Agreement.

The Arizona Legislature and the Governor created the Arizona Water Banking Authority (AWBA) in 1996. The AWBA is the agency of the State of Arizona expressly authorized to store Colorado River water in Arizona on behalf of agencies in California and Nevada. It has statutory authority to cause a decrease in Arizona diversions from the Colorado River, ensuring that Arizona will use less than its full apportionment of Colorado River water in years in which California and Nevada agencies are contractually authorized to call on Long-term Storage (LTS) Credits held on their behalf by AWBA.

Mr. Timothy J. Henley Page 2 December 1, 2004

It is proposed that Metropolitan and AWBA enter into a letter agreement to facilitate implementation of recovery of storage credits of the Demonstration Agreement by clarifying the role of the AWBA in the transactions. This letter agreement shall govern the diversion by Metropolitan of quantities of water, which CAWCD would forbear diverting from the Colorado River into the Central Arizona Project during 2005. The terms and conditions of this agreement are as follows:

- 1. Pursuant to authorization from the Lower Colorado Regional Director of the Bureau of Reclamation (Reclamation), acting as the duly authorized representative of the Secretary of the Interior, AWBA agrees that Metropolitan shall take delivery in 2005 of 40,000 acre-feet of water stored under the Demonstration Agreement.
- 2. With authorization from Reclamation, AWBA and CAWCD shall develop Intentionally Created Unused Apportionment (ICUA). AWBA shall provide a recovery schedule in 2005, and provide all necessary certifications in this regard to Reclamation. CAWCD and AWBA shall reduce the total Interstate Underground Storage Credits assigned and available for use by Metropolitan by 40,000 acre-feet.
- 3. The request for ICUA by Metropolitan is acknowledged in the 2005 Draft Annual Operating Plan for Colorado River System Reservoirs prepared by Reclamation. The Annual Operating Plan states that upon proper certification, the Secretary of the Interior will make ICUA available to Metropolitan under Article II (B) (6) of the Decree. Such water shall be made available in accordance with the terms of this Agreement, and the ICUA recovery schedule submitted to Reclamation.
- 4. AWBA will enter into an agreement with CAWCD wherein CAWCD will cause the LTS Credits created under the Demonstration Agreement to be transferred to AWBA. AWBA will establish a sub-account in which those credits will be held. Upon Metropolitan's request to create ICUA, AWBA will transfer the available LTS Credits created under the Demonstration Agreement to CAWCD.
- Costs associated with recovering water and creating ICUA with LTS Credits shall be as
 provided in the Demonstration Agreement between CAWCD and Metropolitan. No costs
 associated with this Agreement and/or the Demonstration Agreement shall be borne by
 AWBA.

Mr. Timothy J. Henley Page 3 December 1, 2004

Please execute this letter agreement and return one duplicate original to me at your earliest convenience. If you have any questions, please contact Mr. Dennis B. Underwood, Vice President of Colorado River Resources, at (213) 217-6588.

Very truly yours,
1) Joster
Ronald R. Gastelum
Chief Executive Officer
HMR:adminwrm
o:\a\s\corres\HMR_AWBA MWD Draft Recovery Agreement
Enclosure
ACCEPTED AND AGREED TO:
Timothy J. Henley, Manager Arizona Water Banking Authority
D .

Mr. Timothy J. Henley Page 4 December 1, 2004

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

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

> Mr. Chuck Hauser General Counsel Southern Nevada Water Authority 1001 South Valley View Boulevard Las Vegas, NV 89153

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

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



Executive Office

September 2, 2004

Mr. Sid Wilson General Manager Central Arizona Water Conservation District 23636 North 7th Street Phoenix, AZ 85024

Dear Mr. Wilson:

Recovery of Interstate Underground Storage Credits in 2005

In 1992, Metropolitan entered into an agreement with the Central Arizona Water Conservation District to store Colorado River water in central Arizona. Metropolitan stored 89,000 acre-feet under the agreement.

Due to drought conditions in the Colorado River Basin and the limited availability of River water, Metropolitan requests the recovery of 40,000 acre-feet in 2005. We would like to take delivery of the Interstate Underground Storage Credits by exchange under the following schedule:

Month	Amount (AF)
January	4,000
February	4,000
March	4,000
April	4,000
May	4,000
June	0
July	0
August	4,000
September	4,000
October	4,000
November	4,000
December	4,000
Total	40,000

As it is likely considerable capacity will be available in our Colorado River Aqueduct in 2005, there is flexibility to revise the monthly schedule to best-fit CAWCD's operational requirements.

Mr. Sid Wilson Page 2 September 2, 2004

Metropolitan is fully committed to taking delivery of the stored water. If unforeseen circumstances arise, we would only request schedule modifications if these were mutually agreeable to CAWCD.

Thank you for your agency's cooperation. If you have any questions, please call me at (213 217-6588.

Very truly-yours.

Dennis Underwood Vice President

HMR:adminwrin

o;\a\s\corres\HMR_CAWCD MWD Schedule for 2005 Demo Water.doc

cc: Mr. Larry Dozier

Deputy General Manager

Central Arizona Water Conservation District

P.O. Box 43020

Phoenix, AZ 85080-3020

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

Ms. Patricia Mulroy, General Manager Southern Nevada Water Authority 1001 South Valley View Boulevard Las Vegas, NV 89153 Mr. Sid Wilson Page 3 September 2, 2004

cc continued:

Mr. Chuck Hauser, General Counsel Southern Nevada Water Authority 1001 South Valley View Boulevard Las Vegas, NV 89153

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

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

ARIZONA WATER BANKING AUTHORITY ANNUAL PLAN OF OPERATION 2005



Herbert R. Guenther, Chairman

December 2004

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.

2004 PLAN OF OPERATION

In 2004, the AWBA's eighth full year of operation, the AWBA recharged more than 304,000 acre feet of Colorado River water and Arizona's total use of Colorado River water is forecast to be 2.795 million acre feet by the Bureau of Reclamation data dated November 29, 2004. The CAP will adjust pumping from Lake Havasu into the canal to

bring Arizona's use as close to 2.8 million acre feet as possible. The AWBA has played a significant role in bringing Arizona to the third year of full utilization of the normal year entitlement (see Figure 1).

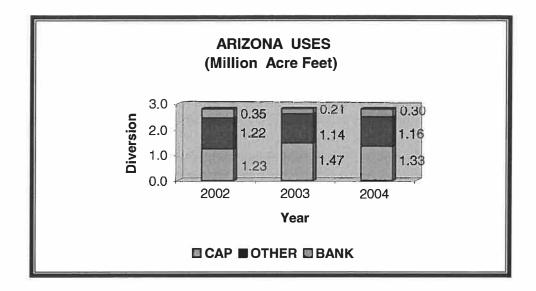


Figure 1

The Bureau of Reclamation forecasts total use of Colorado River water in the Lower Basin to be 7.41 million acre feet in 2004 (see Figure 2).

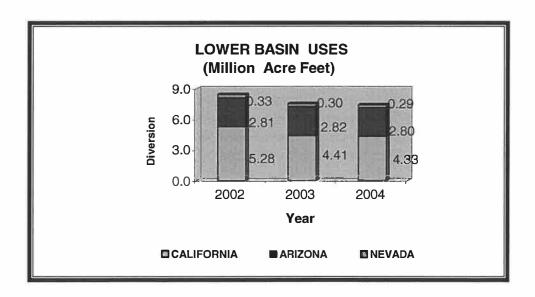


Figure 2

The AWBA recharged water at both USFs and GSFs in 2004. Table 1 lists the AWBA's recharge partners for 2004, 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 2004. Table 1 values are based on actual deliveries through October with November and 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	Туре	Permit Capacity	Amount Delivered
	Agua Fria (CAP)	USF	100,000 AF	17,201
	GRUSP	USF	200,000 AF	62,973
	Hieroglyphic Mtn. (CAP)	USF	35,000 AF	22,382
Phoenix	Chandler Hts Citrus ID	GSF	3,000 AF	576
Prideriix	New Magma IDD	GSF	54,000 AF	49,203
	Queen Creek ID	GSF	28,000 AF	9,146
	SRP	GSF	200,000 AF	8,000
	Tonopah ID	GSF	15,000 AF	2,646
	CAIDD	GSF	110,000 AF	19,700 ¹
Pinal	Hohokam ID	GSF	55,000 AF	18,382
	MSIDD	GSF	120,000 AF	23,700 ²
	Avra Valley (CAP)	USF	11,000 AF	6,752
	CAVSARP	USF	60,000 AF	6,000
Tucson	Lower Santa Cruz (CAP)	USF	50,000 AF	38,107
	Pima Mine Road (CAP)	USF	30,000 AF	18,939
	Kai-Red Rock	GSF	11,231 AF	1,100
Total			1,082,231 AF	304,807 AF

^{1,2} These deliveries include 3,000 AF to CAIDD and 7,000 AF to MSIDD for interstate water banking purposes

While the Plan originally had projected about 60% of the storage at USFs, the actual storage was closer to 57% at USFs and 43% at GSFs. This was the second year that storage at USFs exceeded storage at GSFs. This was again due, in part, to lack of funds limiting the amount of water that could be stored in the Pinal GSFs. The trend of a higher percentage of storage at USFs is expected to continue in the future as more USF capacity is developed and becomes available to the AWBA. Figure 3 shows the acre foot break down between GSFs and USFs for 2004 and a comparison between 2004 and previous years.

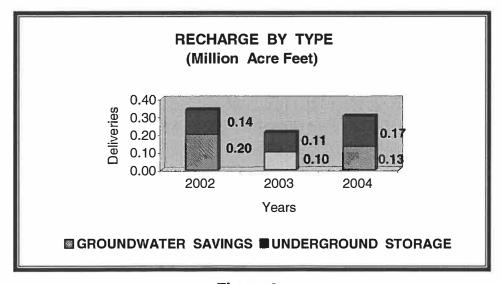


Figure 3

2005 PLAN OF OPERATION

When developing a Plan of Operation, the AWBA evaluates four critical factors: (1) the amount of unused water available to the AWBA for delivery; (2) the CAP capacity available to the AWBA for the delivery of unused water; (3) the funds available and the costs required to deliver the unused water; and (4) the capacity available for use by the AWBA at the various recharge facilities. In addition to these critical factors, the AWBA takes into consideration recommendations made by the Groundwater Users Advisory Councils (GUAC) of the three AMAs regarding water management objectives and priorities for storage. In 2004, the Tucson GUAC provided guiding principles with respect to storage in the Tucson AMA¹. In 2003, the Phoenix GUAC stated that they would prefer to see increased storage in the West Salt River Valley. That preference was included in development of this Plan.

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 2005 to the states by letter dated November 19, 2004. The 2005 AOP stated that the Normal 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 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. It should also be noted that because CAP could bear the burden for inadvertent overruns by Arizona, it is possible that their Colorado River diversions may be decreased towards the end of the year if it appears Arizona will exceed it's allocation. Conversely, there exists the possibility of increased CAP diversions if on-river uses are less than expected. Nonetheless, the amount of water available to be diverted by the CAP within Arizona's 2.8 million acre foot allocation was 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

¹For 2005, 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 <u>based on magnitude of CAP M&I subcontracts</u>.

Arizona Groundwater Replenishment District. For a number of reasons, the amount of CAP water available to the AWBA was the significant limiting factor in this Plan. First, because the AWBA can only utilize water not requested by another higher priority user, the on-going drought has resulted in a decreased amount of water available to the AWBA as others increase their use of CAP water. In 2005, there were increased orders for M&I Incentive water as well as an increase in the amount of M&I subcontract water ordered. Additionally, the Salt River Project ordered more than 120,000 acre feet of CAP water. Second, the drawdown of Lake Pleasant was reduced in 2005. Over the last three years, a significant quantity of water has been taken from Lake Pleasant for delivery to customers. CAP has determined that it is no longer feasible to have a net outflow from Lake Pleasant and will operate to insure that there is a net inflow into the reservoir. The end result is less water available for delivery to customers.

With a 1.6 million acre foot diversion, the CAP 2005 Operating Plan accommodates the delivery of approximately 1.58 million acre feet of water. CAP's plan delivers approximately 1.454 million acre feet of water to higher priority users leaving less than 129,000 acre feet available to the AWBA.

II. <u>CAP System Capacity</u>

Under normal operating conditions during a normal water supply year, CAP diverts approximately 1.6 million acre feet. While CAP staff believe that 1.8 million acre feet can be safely moved through the system, there are areas within the system that can become bottlenecks depending on the magnitude of downstream deliveries. In 2005, the CAP identified a bottleneck at the New River siphon in June and July due to the high downstream demand. This bottleneck essentially eliminated AWBA deliveries downstream of the siphon in those two months. Additionally, maintenance activities can also impact water deliveries. The CAP 2005 Operating Plan has planned maintenance at three pumping plants in the Tucson aqueduct for a week in the fall of 2005. This maintenance restricts deliveries to the southern end of the canal for this time period. While this factor imposed some temporal limitations on deliveries, it was not a significant limiting factor in developing this Plan.

III. Available Funds

The AWBA has significantly reduced funds available in 2005 in all of the AWBA Fund accounts. Due to legislative sweeps and expenditure of funds eliminating all carryover in the withdrawal fee accounts, the AWBA will only have revenues collected in March of 2005 available for use in this Plan. However, by Senate Bill 1402 signed by the governor in May of 2004, an additional \$2 million will be taken from the withdrawal fee accounts by the legislature in fiscal year 2005. In 2005, there is again no state general fund appropriation available to the AWBA. In 2004, the CAWCD Board resolved to continue to retain the county ad valorem property taxes collected in tax year 2005 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, the availability of funds was a limiting factor in this Plan. In the Tucson AMA/Pima County, the availability of funds was initially perceived to be a limiting factor in this Plan. However, due to the reduced quantity of water available for storage by the AWBA, revenues were not a limiting factor in developing this Plan. Nonetheless, the availability of funds is expected to be a consideration in the Tucson area in 2006 and beyond. For more specific information about the cost of the Plan, please refer to the pricing section

The total amount of revenue available in the AWBA Fund in 2005 is almost \$16.2 million almost \$18 million. This amount includes (1) carryover from previous years in the Maricopa County ad valorem account; and (2) withdrawal fees projected for March of 2005. Of that amount, \$164.1640 million is available in Maricopa County, and approximately \$610,000 and \$1.1918 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 2004 are: Maricopa County (\$16.7 million); Pima County (\$3.2 million); and Pinal County (\$0).

The AWBA is statutorily mandated to reserve long-term storage credits accrued with general fund appropriation revenues for the benefit of M&I users of Colorado River water outside the CAP service area. By policy, the AWBA identified 420,000 acre feet as the number of credits needed for this on-river firming. In 2002, the AWBA passed a resolution identifying on-river firming as the highest priority of use of credits developed with the general fund appropriation. In 2005, there are no general fund revenues available to the AWBA. The absence of a general fund appropriation means that no on-river firming credits will be developed in 2005. To date, more than 395,000 acre feet of credits have been developed using general fund appropriation revenues.

IV. Available Storage Facility Capacity

AWBA staff conferred with facility operators to discuss their delivery schedules and their continued interest in participating with the AWBA. These discussions confirmed that there was significant interest in partnering with the AWBA and there was substantial permitted recharge capacity but, as in the past, previous commitments to other partners somewhat limited the availability of both the GSFs and the USFs to the AWBA. As previously discussed, the Tucson AMA provided the AWBA with priorities for USF facilities. To the extent possible, those priorities were met. However, facility operational constraints impacted storage in the Tucson AMA.

As the AWBA had sufficient facility capacity to store all of the CAP water available, storage facility capacity was not considered a limiting factor in development of the 2005 Plan.

Table 2 shows the AWBA's 2005 delivery schedule. Line One of this table provides estimates of the CAP's monthly deliveries to its M&I, agricultural, incentive recharge,

and Indian customers. These deliveries have a scheduling priority over the AWBA's deliveries. These estimates do not include deliveries to New Waddell Dam.

Line Two shows the operational capacity of the CAP available after it makes its priority deliveries and its deliveries to New Waddell Dam. Although the CAP is capable of delivering approximately 180,000 acre feet per month, the available capacity does not always total that because of unique situations, i.e. the filling of Lake Pleasant in the winter months, deliveries to the western portion of the aqueduct, New Waddell Dam releases to the aqueduct in the summer months and scheduled maintenance and outages. During the fall and winter months, the capacity available to the AWBA is constrained because the CAP is making deliveries to Lake Pleasant. In June and July, capacity is constrained at the New River siphon due to the high volume of downstream demand.

Lines Three through Eighteen represent the AWBA's 2005 Plan of Operation. This section identifies the AWBA's partners for 2005 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 2005. The capacity available does not always equal the storage permit capacity because the storage facility operators may have agreements with other storage partners. Line Nineteen lists the total amount of AWBA storage scheduled for the year 2005. Line Twenty lists the CAP capacity remaining after the AWBA's deliveries are scheduled.

No recovery is scheduled in 2005. The AWBA will continue to work with CAWCD to pursue recovery concepts in 2005 and beyond.

(This section will be amended if recovery for California is approved in 2005)

Table 2 ARIZONA WATER BANKING AUTHORITY Water Delivery Schedule Calendar Year 2005 (ACRE-FEET)												2004 Deliveries (AF)						
_					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	
1	Esti	mated CAP Deliveries + Lo	osses:		63,000	65,000	114,000	148,000	180,000	197,000	198,000	182,000	123,000	81,000	48,000	55,000	1,454,000	
		(M&I, Indian, Ag Po	ol, Incentive	Recharge)														
2 /	Availabl	e Excess CAP Capacity for	AWBA:		7,253	8,078	13,688	8,324	8,340	2,988	6,463	14,798	13,620	15,417	12,211	17,546	128,726	
		- Recharge Sites :		Requested Capacity (AF)		XXXXXXX	•			,				6782		,		
F	РНОЕ	ENIX AMA:				V										AMA TOTAL	69,362	
3	USF	GRUSP	200,000	0	0	0	0	0	0	0	0	0	0	0	0		0	62, 97 3
4	00.	HIEROGLYPHIC MTN.	35,000	6,800	0	100	100	0	0	0	0	0	0		2,417	2,416	6,800	22,382
5		AGUA FRIA	100,000	5,000	500	0	0	1,000	1,000	0	0	0	0	0	1,000	1,500	5,000	17,201
6	GSF	CHCID	3,000	533	0	0	50	50	50	100	75	75	50	83	0	0	533	576
7		MWD	18,000	6,300	0	0	0	1,050	1,050	1,050	1,050	1,050	1,050	0	0	0	6,300	Ö
8		NEW MAGMA	54,000	35,084	0	0	0	0	4,000	1,500	3,000	6,000	6,500	6,000	5,584	2,500	35,084	49,203
9		QUEEN CREEK	28,000	7,645	0	0	0	0	0	0	0	2,285	2,000	800	960	1,600	7,645	9,146
10		SRP	200,000	8,000	800	800	800	800	800	0	0	800	800	800	800	800	8,000	8,000
F	PINA	LAMA:														AMA TOTAL	27,500	
11	GSF	CAIDD	110,000	9,000	0	0	0	0	0	0	2,000	2,000	1,500	1,000	1,000	1,500	9,000	19,700
12		HOHOKAM	55,000	9,500	275	1,000	5,600	2,625	0	0	0	0	0	0	0	0	9,500	18,382
13		MSIDD	120,000	9,000	300	0	1,960	880	1,440	0	0	1,750	920	720	450	580	9,000	23,700
ŀ	гисѕ	ON AMA:					tu 1999 n Paris									AMA TOTAL	<u>31,864</u>	
14	USF	AVRA VALLEY	11,000	3,225	338	338	338	0	0	338	338	338	300	247	0		3,225	6,752
15		CLEARWATER	60,000	10,000	0	0	0	0	0	0	0	0	0	4,000	0	6,000	10,000	6,000
16		PIMA MINE ROAD	30,000	6,939	2,040	2,040	2,040	819	0	0	0	0	0		0	0	6,939	18,939
17		LOWER SANTA CRUZ	30,000	10,700	3,000	3,800	2,800	1,100	0	0	0	0	0	*******************	0	0	10,700	38,107
18	GSF	KAI – RED ROCK	11,231	1,000	0	0	0	0	0	0	0	500	500	0	0	0	1,000	1,100
19	тот	A L (USF + GSF):		128,726	7,253	8,078	13,688	8,324	8,340	2,988	6,463	14,798	13,620	15,417	12,211	17,546	128,726	304,8071
20	Rema	ining CAP Capacity:			0	0	0	0	0	0	0	0	0	0	0	0	0	

¹This total includes 2,646 acre feet delivered to the Tonopah Irrigation District. Additionally, 3,000 acre feet of the deliveries to CAIDD and 7,000 acre feet of the deliveries to MSIDD were for interstate water banking purposes pursuant to the Amended 2004 Annual Plan of Operation.

NEW FACILITIES

There are no new storage facilities included in the 2005 Plan.

INTERSTATE WATER BANKING

The Plan does not include an-interstate water banking component. However, in the event that conditions change and opportunities may present themselves, the Plan may be amended to include interstate water banking as was done in 2002 and 2004.

PRICING

On June 17, 2004, the CAWCD board adopted final water delivery rates for 2005. The rate for AWBA and other M&I Incentive recharge is \$73 per acre foot. The delivery rate is the pumping energy rate 2 component (\$62 per acre foot) plus 10 percent of the fixed OM&R charge (\$4.70 per acre foot) plus a component to recover lost revenues from federal deliveries (\$6.00 per acre foot). The components of the rate are the same as those in the 2001-2004 rates. For 2005, 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 2005, the AWBA increased 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.

Table 3. 2005 Water and Facility Rates for Intrastate Banking

CAP's delivery rate to AWBA	\$73 per acre foot				
Groundwater Savings Facility operator portion of delivery rate	\$30 per acre foot 1				
Underground Storage Facility rate paid by AWBA					
GRUSP (SRP)	\$19.15 per acre foot				
Avra Valley (CAP) ²	\$12.00 per acre foot				
CAVSARP (Tucson Water)	\$12.50 per acre foot				
Hieroglyphic Mtns. (CAP) ²	\$8.00 per acre foot				
Pima Mine Road (CAP) ²	\$12.00 per acre foot				
Lower Santa Cruz (CAP/Pima County) ²	\$12.00 per acre foot				
Agua Fria Recharge Project (CAP) ²	\$8.00 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 See <u>pertinent</u> discussion below. This is O&M component only.

For GRUSP, the cost is comprised of an annual administration component, a component for use of the SRP interconnection facility, a transportation component and a general facility component. The cost was set by agreement dated December 31, 2001 with a 3% annual increase. 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 2005 Plan of Operation is approximately \$7.3 million which includes the USF use fees and the CAP delivery rate minus the cost recovery from the GSF operator by the CAWCD.

ACCOUNTING

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

Table 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 2005 Plan.

Table 4. Funding for 2005 Annual Plan of Operation

	2005	PLAN OF O	PERATION		
	Funds Available (\$)		Funds Utilized (\$)		Credits (AF)
	AWBA	CAP	AWBA	CAP	
Withdrawal Fees					
Phoenix AMA	\$2,400,000	-	\$2,400,000	\$0	45,000
	662,500¹		662,455		13,000
Tucson AMA	\$610,000	-	\$610,000	\$0	7,000
Pinal AMA	\$1,190,000	-	\$1,182,500	\$0	26,000
	1,182,500 ¹				
Four Cent Tax					
Maricopa County	\$13,764,413	\$16,763,187	\$1,054,567 2,792,112	\$0	20,000 53,000
Pima County	\$0	\$3,243,847	\$0	\$2,060,640	23,000
Pinal County	\$0	\$0	\$0	\$0	0
Other					
General Fund	\$0	-	\$0	-	
Phoenix AMA	\$0	<u>-</u>	\$0	-	0
Tucson AMA	\$0	-	\$0	-	0
Pinal AMA	\$0	-	\$0	-	0
Interstate Banking					
Nevada	(not applicable)				
California		plicable)			
	Total Fund	ls Available	Total Funds	Expended	Credits
		71,44 7 26,447			12 <u>12</u> ,000

¹The withdrawal fees available for use in 2005 are reduced by \$2 million due to legislative transfer

Since inception, the AWBA has primarily utilized only the general fund and county *ad valorem* property tax revenues to purchase and store water based on an early philosophy of emphasizing development of M&I firming credits. The exception was Pinal County that previously required expenditure of groundwater withdrawal fees on an annual basis to permit the AWBA to meet the demand for AWBA participation in that county. In 2004, the AWBA funded the Plan through expenditure of both groundwater withdrawal fees and *ad valorem* tax revenues in an effort to eliminate carryover of groundwater withdrawal fees. The AWBA faces

another unique situation in 2005. The 2005 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 1997-2004

CUMULATIVE_TOTALS						
		CREDITS 1				
	EXPENDED	AMOUNT	LOCATION			
With during Fac						
Withdrawal Fee	40.070.000	440.070.45	DI : ANAA			
Phoenix AMA	\$8,878,303	149,873 A F				
Tucson AMA	\$4,722,728	66,231 AF				
Pinal AMA	\$7,775,048	253,051 AF	Pinal AMA			
Four Cent Tax						
Maricopa County	\$39,393,624	867,960 AF	Phoenix AMA			
Pima County	\$13,212,072	188,169 AF				
Pinal County	\$2,600,367	94,500 AF	Pinal AMA			
Other						
General Fund	\$10,695,000	396,499 AF				
	\$2,042,572	59,937AF	Phoenix AMA			
	\$2,325,112	39,748AF	Tucson AMA			
	\$6,327,316	296,814 AF	Pinal AMA			
California						
Nevada	\$10,076,945	120,411 AF				
TOTAL	\$97,354,087	2,136,694 AF				

¹ Actual credits used for 1997-2003; credits estimated for 2004

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 <u>AWBA</u> web page for public review and comment. <u>No written comments were received from the public. (This section will be updated following receipt of all comments)</u>

Phoenix GUAC

In general, the GUAC supported the Plan and had no requests for changes to it. There were some questions regarding CAP's retention of the 4¢ ad valorem tax revenues and how those funds would be expended to meet the AWBA's goals. The GUAC also requested information regarding interstate water banking.

Pinal GUAC

General discussion regarding the Plan included: the anticipated length of time that the AWBA will utilize GSF facilities for storage; the manner in which recovery could take place in the Pinal AMA; and the status of the agreements for interstate water banking. The Pinal GUAC did not submit written comments to the Plan and supported it in general.

Tucson AMA

General discussion regarding the Plan included: storage facility priority and the manner in which the AWBA attempted to meet the recommendations; interstate water banking; the potential for interstate recovery in 2005 for California; the reasons for the decreased water available to the AWBA; and the potential for additional water coming available in 2005. A request was made to modify Table 2 to include subtotals for the AMA. A written comment was received from the Tucson GUAC that requested more storage at the Pima Mine Road facility. Table 2 was adjusted accordingly to fully maximize use of the PMR facility.

Public Comment

A written comment was received requesting alteration of the recovery language.

Language to be Included in the 2005 Plan of Operations if Necessary

Pursuant to letter agreement between the AWBA and the Metropolitan Water District of Southern California (MWD) executed December 9, 2004, the AWBA will distribute 40,000 acre feet of credits from the California subaccount in the Pinal AMA to the Central Arizona Water Conservation District (CAWCD) for recovery to allow development of Intentionally Created Unused Apportionment. The CAWCD currently holds recovery well permits in the Pinal AMA and is working with the irrigation districts to determine the specific manner in which the recovery will take place. The credits being recovered are credits stored by the CAWCD on behalf of MWD under the Demonstration Project in the early 1990's.





ATTORNEYS



MEMORANDUM

TO:

Tim Henley

FROM:

Marvin S. Cohen

DATE:

December 8, 2004

RE:

Draft AWBA Annual Plan of Operation

As I discussed with you this morning, the City of Tucson proposes that on Page 9 of the 2005 Draft Plan of Operation, the first paragraph be revised to read as follows:

"While no recovery is scheduled in 2005, the recovery of AWBA water may be necessitated sooner than originally anticipated because of potential requests from California or Nevada to provide Intentionally Created Unused Allocations. In addition, a recovery plan will assist AWBA in determining appropriate locations for water storage. AWBA will, as a high priority task, work with CAWCD and stakeholders in early 2005 to begin the development of a recovery plan."

This proposed language is consistent with the second bulleted item in David Modeer's letter to the AWBA dated June 4, 2004 commenting on the 2003 Annual Report and Ten Year Plan.

REVENUES AVAILABLE for 2005 RECHARGE

\$18,219,413

4 cent tax		\$13,764,413
Maricopa		\$13,764,413
Pinal		\$0
Pima		\$0
Withdrawal Fee	(Estimated for 2004 pumping)	\$4,455,000
Phoenix AMA		\$2,632,000
Pinal AMA		\$1,213,000
Tucson AMA		\$610,000
General Fund Approp	priation	\$0

COST ASSUMPTIONS

Cost of Water			
CAP	(Energy Rate 2 plus \$5.00 towards Fixed O&M)	\$73.00	
Direct Recharge	(Cost for using direct recharge facilities)		
	GRUSP	\$19.15	
	Avra Valley	\$12.00	
	Pima Mine Road \$12.00		
	Lower Santa Cruz \$12.00		
	Hieroglyphic Mountains	\$8.00	
	Aqua Frla Recharge Project \$8.00		
	Clearwater \$12.50		
Cost Recovery for In-li	Cost Recovery for In-lieu Recharge		
	(cost recovery from in-lieu partners)	\$30.00	

WATER PURCHASE and RECHARGE COSTS

	Watrer Stored	1	Cost/AF	Total
	(AF)			
4 cent tax				\$2,792,112
Maricopa	56,061	\$	49.80	\$2,792,112
Pinal	0	\$		\$0
Pima	0	\$		
Withdrawal Fee				\$2,454,953
Phoenix AMA	13,301	\$	49.80	\$662,455
Pinal AMA	27,500	\$	43.00	\$1,182,500
Tucson AMA	7,278	\$	83.81	\$609,998
Total 2005	104,140			\$5,247,065
SB 1402				\$2,000,000

Projected Carryover

4 cent tax		
Maricopa	\$10,972,301	
Pinal	\$0	
Pima	\$0	
Withdrawal Fee		
Phoenix AMA	\$45	
Pinal AMA	\$0	
Tucson AMA	\$2	
General Fund Appropriation	\$0	

ARIZONA DEPARTMENT OF WATER RESOURCES

Legal Division
500 North Third Street, Phoenix, Arizona 85004
Telephone 602 417-2420
Fax 602 417-2415



JANET
NAPOLITANO
Governor

HERB GUENTHER
Director

LEGAL MEMORANDUM

To:

Gregg Houtz, Deputy Counsel; Tim Henley, AWBA, Section Manager

From:

Ryan Smith, Deputy Counsel

Re:

AWBA Budget

Date:

October 13, 2004

cc:

Patrick Schiffer, Chief Counsel

A. ISSUE:

1. Under Title 45 Chapter 14, is the Arizona Water Banking Authority required to adopt a budget on a fiscal year basis?

B. BACKGROUND

During the September 7, 2004 Arizona Water Bank Authority ("AWBA") Commission meeting, a proposed budget was offered for the fiscal year 2005 (July 2004 through June 2005). The proposed budget includes an "administrative budget" and a "water recharge budget." Both budgets are based on a fiscal year.

The "administrative budget" is comprised of administrative, technical and legal support costs. The "water recharge budget is comprised of water acquisition, delivery and storage costs.

This memorandum addresses the propriety of adopting the administrative budget and water recharge budget on a fiscal year basis.

C. LEGAL ANALYSIS

1. The Statutory Scheme of Title 45 Chapter 14 Anticipates that: (1) AWBA Will Adopt a Budget on a Fiscal Year Basis for Administrative, Technical and Legal Costs and (2) AWBA Will Adopt a Budget on a Calendar Year Basis for Water Acquisition, Delivery and Storage.

Under A.R.S. § 45-2424, AWBA is required to adopt a budget for: (1) administrative, technical and legal support provided by the Arizona Department of Water Resources ("ADWR") (A.R.S. § 45-2424(C)) and (2) technical support provided by the Central Arizona Water Conservation District ("CAWCD") (A.R.S. § 45-2424(D)).

A.R.S. § 45-2424(C) provides:

The director, on an annual basis, shall prepare and submit to the authority a budget showing the cost of providing the services requested by the authority for the following *fiscal* year. The authority may adjust its request for services, or when satisfied with the budget, adopt it. The authority shall reimburse the department of water resources with monies from the banking fund for the services provided in accordance with an adopted budget. (Emphasis added.)

A.R.S. § 45-2424(D) provides:

The CAWCD shall provide technical support to the authority to the extent requested by the authority. . . . The CAWCD, on an annual basis, shall prepare and submit to the authority a budget showing the cost of providing the services requested by the authority for the following *fiscal* year. The authority may adjust its request for services, or when satisfied with the budget, may adopt it. The authority must reimburse the CAWCD with monies from the banking fund for the services provided the authority in accordance with an adopted budget. (Emphasis added.)

Because ADWR and CAWCD each submit to AWBA a budget showing the costs of providing services to AWBA for the following fiscal year, AWBA should adopt a

budget based on a fiscal year for its administrative, technical and legal costs in order to stay consistent with A.R.S. §§ 45-2424(C) and (D).

Besides A.R.S. §§ 45-2424 (C) and (D), nothing in Title 45 Chapter 14 requires AWBA to adopt a budget. The statutory scheme, however, anticipates that the AWBA will adopt a budget for costs related to water acquisition, storage and delivery on a calendar year basis. Indeed, A.R.S. § 45-2456(A) provides: "[b]y January 1 of each year the authority shall adopt a plan of operation for that <u>calendar year."</u> (Emphasis added.) The adopted annual plan of operation ("Annual Plan") must include, among other things, the following: (1) a projection of expenditures for acquiring water; (2) a projection of the cost of delivering that water through the Central Arizona Project ("CAP") to a storage facility, including fees for the operation, maintenance, pumping energy and capital costs of CAP as established by CAWCD; and (3) a projection of expenditures for water storage. A.R.S. § 45-2456(E).

Because the Annual Plan is based on a calendar year, it appears that Title 45 Chapter 14 allows AWBA to adopt its water recharge budget on a calendar year basis. If it were otherwise, and AWBA's water recharge budget were adopted on a fiscal-year basis, it would encompass two separate fiscal years to complete.

It is also important to note that like the Annual Plan, water deliveries made by CAP are based on a calendar year. CAP customers, including AWBA, place their water orders in October for the following calendar year. By adopting its water recharge budget on a calendar year basis, the AWBA's budget remains synchronized with CAP's water

deliveries, and the water recharge budget therefore accurately reflects how AWBA pays for water acquisition, deliveries and storage on an annual basis.

D. CONCLUSION

The statutory scheme of Title 45 Chapter 14 anticipates that: (1) AWBA will adopt a budget on a fiscal year for administrative, technical and legal costs and (2) AWBA will adopt a budget on a calendar year basis for water acquisition, delivery and storage.

Therefore, in order to stay consistent with the express language and statutory scheme of Title 45 Chapter 14, AWBA should adopt two budgets, one based on a fiscal year for administrative, technical and legal support and another budget based on a calendar year for water acquisition, water delivery and water storage. Adopting two separate budgets is consistent with Title 45 Chapter 14 and reflects the actual manner in which AWBA pays for the acquisition, delivery and storage of water.

AMENDED AGREEMENT FOR INTERSTATE WATER BANKING

among

The Arizona Water Banking Authority and The Southern Nevada Water Authority and the Colorado River Commission of Nevada

This Amended Interstate Water Banking Agreement (Agreement) is made as of January 1, 2005 (Effective Date), among the Arizona Water Banking Authority (AWBA), and the Southern Nevada Water Authority (SNWA) and the Colorado River Commission of Nevada (CRCN), collectively referred to as "Parties" and individually as "Party."

Recitals

- A. The Arizona Water Banking Authority is an agency of the State of Arizona expressly authorized by A.R.S. § 45-2401 *et seq.* to engage in the interstate banking of Colorado River water on behalf of the State of Arizona. The statutory conditions of A.R.S. §§ 45-2427 and 45-2471 have been satisfied, this Agreement conforms to all of the requirements of such sections and all other applicable provisions of Arizona law, and AWBA is empowered to enter into this Agreement.
- B. The Southern Nevada Water Authority is a Nevada joint powers agency and political subdivision of the State of Nevada, created by agreement dated July 25, 1991, as amended November 17,1994 and January 1,1996, pursuant to N.R.S. §§ 277.074 and 277.120. SNWA is authorized by N.R.S. § 538.186 to enter into this Agreement and, pursuant to its contract issued under section 5 of the Boulder Canyon Project Act of 1928, SNWA has the right to divert Intentionally Created Unused Apportionment released by the Secretary for use within the State of Nevada pursuant to Art. II(B)(6) of the Decree in *Arizona v California*, 376 U.S. 340, 343 (1964).
- C. The Colorado River Commission of the State of Nevada (CRCN) is an agency of the State of Nevada, authorized generally by N.R.S. §§ 538.041 and 538.251. CRCN is authorized by N.R.S. § 538.186 to enter into this Agreement. The CRCN, in furtherance of the State of Nevada's responsibility to promote the health and welfare of its people in Colorado River matters, makes this Agreement to facilitate the banking of Colorado River water, the crediting of Long-term Storage Credits, and the development of ICUA for SNWA.
- D. On July 3, 2001, the Parties entered into the original Agreement for Interstate Water Banking (Original Agreement). In the Original Agreement, and subject to its limitations, AWBA committed to use its best efforts to create Long-term Storage Credits in an initial amount of 1,200,000 acre-feet for SNWA, to be held in an SNWA Interstate Account established with the Arizona Department of Water Resources and, on request of SNWA, to recover such credits and cause the development of Intentionally Created Unused Apportionment of Colorado River water (ICUA) for SNWA. SNWA agreed to reimburse AWBA for its costs on an annual basis.

- E. On December 18, 2002, the United States, acting through the Secretary of the Interior, AWBA, SNWA, and CRCN entered into a Storage and Interstate Release Agreement (SIRA) pursuant to the Secretary's regulations at 43 C.F.R. Part 414, Offstream Storage of Colorado River Water and Development of and Release of Intentionally Created Unused Apportionment in the Lower Division States. In the SIRA, the Secretary committed to release ICUA developed by AWBA in accordance with the request of SNWA, the terms of the SIRA, and certain specified determinations of the Secretary.
- F. By this Amended Agreement for Interstate Water Banking, the Parties amend and restate in its entirety the Original Agreement to provide (1) a specific commitment by AWBA to have credited to the SNWA Interstate Account Long-Term Storage Credits in an aggregate amount, including those heretofore credited, of 1,250,000 acre-feet, (2) a commitment by AWBA, on request of SNWA, to recover such credits and to develop ICUA for SNWA's benefit up to a specified annual maximum, and (3) specified payments to be made by SNWA in consideration of AWBA's commitments respecting the crediting of such Long-Term Storage Credits.
- G. Prior to the Effective Date, AWBA established a long-term storage sub-account entitled "SNWA Interstate Account" with the Arizona Department of Water Resources (ADWR). As of the Effective Date Long-term Storage Credits had been credited to such account, consisting of (1) 50,000 acre-feet of Long-term Storage Credits, constituting all of the Long-term Storage Credits held by CAWCD for the benefit of SNWA as of the effective date of the Original Agreement, and (2) all of the Long-term Storage Credits existing by virtue of Colorado River water stored, or other Long-term Storage Credits transferred to such account, pursuant to the Original Agreement.

ARTICLE 1

DEFINITIONS, FUNDAMENTAL PRINCIPLES AND TERM

- 1.1 Definitions. For purposes of this Agreement, terms that are defined in Article I of the Decree in *Arizona v. California*, 376 U.S. 340 (1964), terms that are defined in Arizona Revised Statutes (A.R.S.) Title 45, Chapter 3.1, and terms that are defined in 43 C.F.R. Part 414 shall have the meaning there stated. The following terms shall have the meaning defined here, unless the context manifestly requires otherwise. Defined terms are identified by initial letter capitalization.
 - 1.1.1 "ADWR" shall mean Arizona Department of Water Resources.
 - 1.1.2 "Agreement" shall mean this Amended Agreement for Interstate Water Banking.
 - 1.1.3 "AWBA" shall mean the Arizona Water Banking Authority.
 - 1.1.4 "AWBA Plan of Operation" shall mean the plan by which AWBA shall operate during the Year as defined in A.R.S. § 45-2456.
 - 1.1.5 "Bureau of Reclamation" shall mean the United States Bureau of Reclamation, Lower Colorado Region.
 - 1.1.6 "CAP" shall mean the Central Arizona Project, as authorized by the Colorado River Basin Project Act, 43 U.S.C. § 1501 *et seq.*, and as operated under that certain Master Repayment Contract dated December 1, 1988, Contract No. 14-06-W-245 between CAWCD and the United States Bureau of Reclamation, as amended.
 - 1.1.7 "CAWCD" shall mean the Central Arizona Water Conservation District.
 - 1.1.8 "CRCN" shall mean the Colorado River Commission of Nevada.
 - 1.1.9 "Decree" shall mean the Decree entered by the United States Supreme Court in the matter of *Arizona v. California*, 376 U.S. 340 (1964), as supplemented or amended.
 - 1.1.10 "Excess CAP Water" shall mean CAP water that is available for distribution by CAWCD in accordance with §8.7(e) of the Master Repayment Contract or §5(d)(2) of the Stipulation Regarding a Stay of Litigation, Resolution of Issues During the Stay and Ultimate Judgment upon Satisfaction of Conditions, filed with the United States District Court on May 3, 2000, in *Central Arizona Water Conservation District v. United States, et al.*, No. CIV 95-625-TUC-WDB (EHC) and CIV 95-1720-PHX-EHC (consolidated), and in accordance with policies established by the CAWCD Board.

- 11.121.1.11 "ICUA" shall mean Intentionally Created Unused Apportionment as that term is defined in 43 C.F.R. § 414.2.
- 4.1.131.1.12 "Interstate Recovery Schedule" shall have the meaning defined in the Agreement for Development of Intentionally Created Unused Apportionment.
- 1.1.141.1.13 1.1.13-5"Long-term Storage Credit" shall mean Long-term Storage Credit as defined in A.R.S. § 45-802.01(11).
- 1.1.14 1.1.14 6"Master Repayment Contract" shall mean that Contract No. 14-06-W-245 dated December 1,1988, between CAWCD and the United States Bureau of Reclamation, as amended.
- 1.1.161.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1.15 1.1
- 1.1.171.1.16 1.1.16-8"SNWA" shall mean the Southern Nevada Water Authority.
- 1.1.181.1.17 1.1.17-9"SNWA Interstate Account" shall mean the Long-term Storage Credit Sub-account established by AWBA with ADWR pursuant to Subarticle 2.2.4 of the Original Agreement.
- 1.1.191.1.18 "Statutory Costs" means those costs specified in A.R.S. §§ 45-2471(C)

 (1) through (5), and (8) that are incurred by AWBA under Subarticle 2.1.1

 after the Effective Date in connection with causing the crediting of Longterm Storage Credits in a gross amount of 1,250,000 acre-feet to the SNWA Interstate Account.
- 1.1.201.1.19 1.1.18-12"Storage Facility" or "Storage Facilities" shall mean an Underground Storage Facility or a Groundwater Savings Facility as those terms are defined in A.R.S. § 45-802.01
- 1.1.211.1.20 1.1.19 13"Year" shall mean a calendar year.
- 1.2 Fundamental Principles of this Agreement
 - 1.2.1 This Agreement is among AWBA and SNWA and CRCN. It is intended to create a program of interstate banking of Colorado River water. This Agreement AWBA will not require AWBA to 16 engage in interstate banking to the detriment of any water user in Arizona in fulfilling its obligations under this Agreement.
 - 1.2.2 Under the terms of this Agreement, AWBA shall acquire and store mainstream Colorado River water in Arizona and cause Long-term Storage Credits to be credited and held in the SNWA Interstate Account. AWBA shall recover the Long-term Storage Credits at a later date and exchange the recovered water with other Colorado River water users in Arizona to develop ICUA. The Secretary is required to release this ICUA for consumptive use within the State

of Nevada pursuant to the Storage and Interstate Release Agreement entered into by the Secretary under the regulations adopted by the Secretary in 43 CFR Part 414. This Agreement is one part of a three part contractual relationship which also includes the Storage and Interstate Release Agreement and an Agreement for the Development of Intentionally Created Unused Apportionment. In furtherance of its performance under this Agreement, the AWBA has also entered into an Intergovernmental Agreement among AWBA, CAWCD, and ADWR, as amended, and a series of water storage agreements between AWBA and Storage Facility operators in the State of Arizona.

- 1.2.3 This Agreement shall govern the relative rights and responsibilities of AWBA, SNWA and CRCN for the delivery, storage and recovery of Colorado River water in Arizona and for the development of ICUA. No ownership rights in specific storage facilities shall accrue to either SNWA or CRCN by this Agreement. Neither SNWA nor CRCN shall have any rights in this interstate banking arrangement except as provided in this Agreement.
- 1.2.4 AWBA shall recognize priorities or preferences for the storage and recovery of water in Arizona established by the Agreement Relating to Implementation of Interim Colorado River Surplus Guidelines between SNWA and The Metropolitan Water District of Southern California, dated May 16, 2002.
- 1.2.5 This Agreement is intended to operate for the mutual benefit of the citizens of the State of Arizona and the citizens of the State of Nevada. It is entered into with the understanding that it is an act of comity, and with the understanding that interstate banking of Colorado River water among the States of the Lower Division must be undertaken in accordance with express authority granted under each state's law.

1.3 Term of Agreement

This Agreement becomes effective when executed by all Parties. This Agreement shall terminate when all of the Long-term Storage Credits specified in Subarticle 2.1.1 have been credited to the SNWA Interstate Account and all such credits have subsequently been recovered, or on June 1, 2060, whichever is sooner. Any Long-term Storage Credits remaining in the SNWA Interstate Account at the termination of this Agreement shall revert to the sole and exclusive benefit of AWBA, unless this Agreement is extended by written agreement of all Parties.

ARTICLE 2

DELIVERY AND STORAGE

- 2.1 Crediting Long-term Storage Credits for SNWA; Annual Plan of Operation
 - 2.1.1 AWBA shall take all actions necessary to ensure that Long-term Storage Credits in a gross amount of 1,250,000 acre-feet, including the Long-term Storage Credits referenced in Recital G, are credited to the SNWA Interstate

Account in sufficient time both to meet the requirements of Subarticle 2.1.3 and to allow the recovery of the full 1,250,000 acre-feet of such credits for the purpose of developing ICUA for SNWA within the term of this Agreement and the limitations of Subarticle 3.1.1. Such actions may include storage of Colorado River water, assignment of existing Long-term Storage Credits, or any other actions that will support the development of ICUA under this Agreement consistent with 43 C.F.R. Part 414 and the SIRA.

- 2.1.2 AWBA shall ensure that there are in effect in a timely manner all regulatory permits and approvals and all third-party agreements necessary to enable AWBA to meet its obligations under this Subarticle, including without limitation agreements for the purchase and delivery of Colorado River water, necessary water storage permits from ADWR, and agreements with Storage Facility operators.
- 2.1.3 The actions that AWBA takes to cause Long-term Storage Credits to be credited to the SNWA Interstate Account under Subarticle 2.1.1 shall be on a schedule that will ensure that there are Long-term Storage Credits in the SNWA Interstate Account as of the June 1 preceding each Year in which SNWA has the right to require the development of ICUA in an amount at least sufficient to support development of the maximum ICUA permitted under Subarticle 3.1 during that Year, without regard to whether SNWA has requested such maximum.
- 2.1.4 The amount of water to be stored during any Year shall be identified in the final AWBA Plan of Operation by January 1 of each Year.
- 2.2 Delivery and Storage of Water by AWBA for SNWA. Delivery and storage of any water under the terms of this Agreement shall be subject to the following requirements:
 - 2.2.1 The delivery of water to storage shall be pursuant to the Intergovernmental Agreement among AWBA, CAWCD and ADWR, as amended, whereby AWBA is entitled to purchase Excess CAP Water from CAWCD for interstate banking purposes.
 - 2.2.2 AWBA shall obtain and maintain all necessary water storage permits from ADWR to allow storage under the terms of this Agreement.
 - 2.2.3 The storage of water shall be pursuant to AWBA's agreements with various Storage Facility operators whereby AWBA is entitled to store water at those various Storage Facilities.
 - AWBA agrees that the storage of water under this Agreement shall take into account the location, manner and cost of storing all water stored by AWBA in the State of Arizona. AWBA agrees that the selection of storage facilities for water stored under this Agreement and for others in Arizona shall not be made in a manner that unreasonably allocates the higher storage cost to the storage of water under this Agreement.

2.3 SNWA Interstate Account

- 2.3.1 AWBA shall monitor the crediting and maintenance of Long-term Storage Credits in the SNWA Interstate Account from Year to Year. AWBA shall exercise due diligence in insuring that all Long-term Storage Credits credited through storage for SNWA or transferred or otherwise credited to the SNWA Interstate Account are properly accounted for in such account.
- AWBA shall timely file with ADWR an annual report for all water delivered and stored in accordance with the terms of this Agreement by March 31 of the Year following the delivery and storage. AWBA and SNWA and CRCN shall cooperate in the preparation of such report, and shall agree upon the accuracy of the data to be filed. ADWR determines the amount of Long-term Storage Credits that are credited to the SNWA Interstate Account in any Year and makes a report available to AWBA detailing the credits available in AWBA's Long-term Storage Account. Upon receipt of the report from ADWR, AWBA shall make that report available to SNWA and CRCN. The report may include adjustments or corrections made by ADWR to the Long-term Storage Credits in the SNWA Interstate Account.

2.4 Payments by SNWA

- 2.4.1 In consideration of AWBA's obligations under this Article 2, and in particular its obligation to ensure that Long-term Storage Credits in a gross amount of 1,250,000 acre-feet are credited to the SNWA Interstate Account, SNWA shall make payments to AWBA aggregating \$ 330,000,000.00, such payments to be made **by SNWA** as specified in Subarticles 2.4.1.1 and **2.4.1.2**
 - 2.4.1.1 SNWA shall make a payment of \$100,000,000.00 within 10 working days of the request by AWBA for such payment made after the Effective Date. which shall be deposited into a Resource Account, which shall be established by the AWBA. SNWA shall have no authority as to the use of the Resource Account.
 - 2.4.1.2 SNWA shall make ten payments of \$ 23,000,000.00 each by January 10 of each Year commencing in 2009 and ending in 2018, which shall be deposited into an interest-bearing Operating Account, which shall be established by the AWBA. Interest earned on the Operating Account shall accrue to that account for use in accordance with this Agreement.
 - 2.4.1.3 AWBA may, at its sole discretion, loan funds from the Resource Account to the Operating Account, for the purpose of fulfilling its obligations under this Agreement, but any loaned funds must be repaid from the Operating Account to the Resource Account, with interest, no later than June 10, 2018. For purposes of this paragraph,

interest shall be computed based on the average rate of return on the Operating Account.

- 2.4.2 The provisions of this Subarticle 2.4.2 shall apply for purposes of ensuring that payments by SNWA under this Agreement meet the requirements of A.R.S. § 45-2471(C).
 - 2.4.2.1 The Parties acknowledge that payments made by SNWA to AWBA prior to the Effective Date cover at least all costs specified in A.R.S. §§ 45-2471(C) (7) with respect to those Long-term Storage Credits referenced in Recital G (2).
 - The Parties acknowledge that except for the payments required by The 2.4.2.2 Parties further acknowledge AWBA's conclusion that, other than those costs for which SNWA will reimburse AWBA under Subarticle 2.4.3, AWBA has determined that the payments to be made by SNWA pursuant to under Subarticle 2.4.1 are will be sufficient to reimburse AWBA for all capital, operation, maintenance, energy, payment in lieu of property taxes, storage, contract, permitting, and other costs that it will incur pursuant to this Article 2 during the term of this Agreement, including without limitation those costs specified in A.R.S. §§ 45-2471(C) (1) through (5), and (8), under this Article 2 after the Effective Date, subject to the adjustment provisions of Subarticles 2.4.2.5 and 2.4.2.6. Such reimbursed costs include. without limitation, (1) any costs associated with ensuring that AWBA is able to perform its obligations under Subarticle 2.1.1. and (2) all Statutory Costs incurred by AWBA.
 - 2.4.2.3

 45The Parties further acknowledge that, for purposes of A.R.S. §
 45-2471(C)(1), AWBA's cost of acquiring Colorado River water is
 the cost charged by the United States to CAWCD under
 CAWCD's federal water delivery contract for delivering such water.
 - 2.4.2.52.4.2.4 By June 30 of each Year AWBA shall provide an annual accounting to SNWA for the period from the Effective Date through December 31 of the prior Year showing all transactions involving the Operating Account, including any loans from or repayment including any interest accrued to the Resource Account, and (1) a detailed statement of all Statutory Costs incurred by AWBA during the preceding Year and a summary statement by Year of all Statutory Costs incurred by AWBA in prior Years.
 - 2.4.2.32.4.2.5 If the annual accounting under Subarticle 2.4.2.4 indicates that there are insufficient funds in the Operating Account to complete the accrual of 1,250,000 acre-feet of Long-

term Storage Credits for crediting to the SNWA Interstate
Account, then the parties shall meet and confer regarding the
accrual of additional Long-term Storage Credits by AWBA and
the payment of additional funds by SNWA. At its sole discretion
SNWA may reduce AWBA obligation to develop 1,250,000 acre-feet
of Long-term Storage Credits for the SNWA Interstate Account. If
SNWA determines not to reduce ABWA obligation to develop
1,250,000 acre-feet of Long-term Storage Credits for the SNWA
Interstate Account, SNWA shall pay all additional costs required to
complete the accrual of 1,250,000 acre-feet of Long-term Storage
Credits.

- 2.4.2.6 By June 30 of the Year after the Year in which an aggregate of 1,250,000 acre-feet of Long-term Storage Credits have been credited to the SNWA Interstate Account and all loans from the Resource Account to the Operating Account have been repaid, with interest, AWBA shall pay to SNWA any remaining balance in the Operating Account and no additional payments shall be made by SNWA.
- 2.4.3 SNWA shall pay a fee equivalent to the approximate amount of administrative, legal, and technical expenses incurred for AWBA's services under this entire Agreement. Such fee shall equal 15% of ADWR's cost of such services as provided to and accepted by AWBA annually. ADWR's cost of services is computed as a lump sum for the fiscal year beginning July 1 and includes salaries, employee related expenses, and indirect costs.
- 2.4.4 The fee for administrative services as described in Subarticle 2.4.3 shall be paid on a quarterly basis. Unless otherwise agreed in advance, each quarterly payment shall be an equal one-fourth of the administrative charge for the fiscal year. AWBA shall provide an invoice for one quarter of the annual administration charge to SNWA on or before the 15th day of June, September, December and March for the quarter immediately following. If such day is not a business day, the invoice shall be made on the next succeeding business day.
- 2.4.5 SNWA shall pay the administrative service fees on or before the first day of the month following the notice of the fees. If such day is not a business day, the payment shall be made on the next succeeding business day.

ARTICLE 3

DEVELOPMENT OF INTENTIONALLY CREATED UNUSED APPORTIONMENT

- 3.1 Extent of Annual Development of ICUA for SNWA
 - 3.1.1 SNWA shall have the right to require the recovery of Long-term Storage Credits in the SNWA Interstate Account and the development of ICUA in any Year commencing in 2007, as follows:

- 3.1.1.1 In each of 2007 and 2008, SNWA may require the development of ICUA in an amount not exceeding 20,000 acre-feet.
- 3.1.1.2 In each of 2009 and 2010, SNWA may require the development of ICUA in an amount not exceeding 30,000 acre-feet.
- 3.1.1.3 In each subsequent Year, commencing in 2011, SNWA may require the development of ICUA in an amount not exceeding 40,000 acrefeet.
- During any Year as to which the Secretary has determined under Article 3.1.2 II(B)(3) of the Decree that a shortage condition exists, SNWA may require the development of ICUA (1) in such amount that, when considered together with the amount of basic apportionment available for use in Nevada, will allow 300,000 acre-feet to be consumptively used in Nevada, plus (2) the amount specified for such Year in Subarticle 3.1.1. . SNWA may require the development of ICUA under this Subarticle only if after consultation with SNWA, the AWBA has determined that sufficient recovery facilities are in place for that Year to meet the needs of CAP M&I water users and any other post 1968 domestic use contractor in Arizona and SNWA. If it is determined that sufficient recovery facilities are not available, SNWA may require the development of ICUA only to the extent that SNWA has contributed to new facilities in Subarticle 3.4.2.1 or additional facilities in Subarticle 3.5.1 plus any available existing recovery capacity not utilized by the CAP and Colorado River M&I water users.

3.1.23.1.3

- Article II(B)(3) of the Decree causes a reduction in the Colorado
 River water available for use by non-Indian municipal and
 industrial (M&I) CAP subcontractors in any Year under their
 subcontracts or any other post 1968 domestic use contractor in any
 Year under their contract, SNWA's right to required the recovery of
 Long-term Storage Credits and the development of ICUA shall be
 reduced proportionately to the reduction in M&I water supply
 use sustained by CAP subcontractors and any other post 1968
 domestic use contractor.
- 3.2 SNWA Notices for Development of ICUA
 - 3.2.1 For any Year in which SNWA will require the development of ICUA by AWBA and the release of ICUA by the Secretary, SNWA shall provide notice of the amount of such ICUA to AWBA by June 1 of the preceding Year.
 - 3.2.2 Between June 1 and September 15 of the Year in which a notice has been given under Subarticle 3.2.1, AWBA staff shall meet and confer with SNWA

- and CRCN concerning the proposed location, manner and estimated cost of the development of the specified ICUA.
- 3.2.3 On or before September 15 of the Year in which a notice for the development of ICUA has been given to AWBA under Subarticle 3.2.1, or as otherwise required by the Secretary, SNWA shall make a request of the Secretary for the release of such ICUA during the following Year and shall provide a copy of such notice to AWBA.

3.3 Development of ICUA

- 3.3.1 Upon receipt of a notice under Subarticle 3.2.1 for the development of ICUA, AWBA shall meet and confer with CAWCD to develop an Interstate Recovery Schedule under the terms of the Agreement for the Development of Intentionally Created Unused Apportionment. The Interstate Recovery Schedule shall utilize the recovery of Long-term Storage Credits to develop the ICUA.
 - 3.3.1.1 AWBA shall meet and confer with SNWA and CRCN concerning the location, manner and cost of recovery when developing the Interstate Recovery Schedule.
 - 3.3.1.2 AWBA agrees that the development of the Interstate Recovery Schedule shall take into account the location, manner and cost of recovering all water stored by AWBA in the State of Arizona. AWBA agrees that the selection of recovery facilities included in the Interstate Recovery Schedule shall not be made in a manner that unreasonably allocates the higher recovery cost to the recovery of water for the development of ICUA under the terms of this Agreement.
 - 3.3.1.3 Factors to be considered when preparing the Interstate Recovery Schedule shall include but are not limited to:
 - 3.3.1.3.1 Arizona water management goals,
 - 3.3.1.3.2 CAP operational requirements,
 - 3.3.1.3.3 Water quality requirements,
 - 3.3.1.3.4 Opportunities for shared or joint facilities, and
 - 3.3.1.3.5 Opportunities to reduce recovery costs,
- 3.3.2 Upon receipt of a copy of SNWA's request under Subarticle 3.2.3 to the Secretary for the release of ICUA during the following Year, AWBA shall prepare the following certifications, in accordance with the Agreement for the Development of Intentionally Created Unused Apportionment: (1) an Upcoming Year Delivery Certification; (2) an Interstate Recovery Schedule

Certification; and, (3) a Development of ICUA Certification. These three certifications shall be prepared and delivered to the Bureau of Reclamation no later than December 1 of the Year in which a notice for the development of ICUA was given to AWBA under Subarticle 3.2.1. AWBA shall identify the amount of ICUA specified to be developed in SNWA's notice under Subarticle 3.2.1 in the AWBA Plan of Operation for the following Year, and in such Year shall recover Long-term Storage Credits and develop ICUA in such amount, subject to the Secretary's determination and release of ICUA under Subarticles 5.4 and 5.5 of the SIRA. Recovery shall not commence until verification by the Secretary that ICUA will be released to SNWA under the terms of the Storage and Interstate Release Agreement.

- 3.3.3 The choice of facilities utilized to recover the Long-term Storage Credits used to develop the ICUA during any year shall be at the discretion of AWBA.
- 3.3.4 After the Secretary's notice of determination pursuant to Subarticle 5.4 of the SIRA respecting the availability and release of ICUA, AWBA shall recover Long-term Storage Credits and cause ICUA to be developed in the amount specified in the Secretary's notice. SNWA shall be responsible for all costs of developing the specified ICUA as provided in this Agreement.
- 3.3.5 Upon written request by SNWA to cease the development of ICUA, AWBA shall cease the development of ICUA by the amount of the request or by the amount of verified ICUA not yet developed, whichever is less. AWBA shall certify to the Secretary the amount of ICUA previously requested that will not be developed and shall request that the Secretary act in accordance with that certification and the terms of the Storage and Interstate Release Agreement.
- 3.3.6 AWBA shall notify ADWR of the actual amount of credits recovered in accordance with the terms of this Agreement and shall request that ADWR debit the SNWA Interstate Account by the amount of credits recovered when AWBA submits its annual report to ADWR. AWBA and SNWA and CRCN shall cooperate in the preparation of such report, and shall agree upon the accuracy of the data to be filed.

3.4 Charges for Developing ICUA

- 3.4.1 SNWA agrees that, except as provided in Subarticle 3.4.3, all costs of the development of ICUA as described in Subarticle 3.3 shall be borne by SNWA. Such costs shall be calculated and charged to SNWA in accordance with this Subarticle 3.4, and billed to and paid by SNWA as provided in Subarticle 3.5.
- 3.4.2 The charges to SNWA for the cost of ICUA caused to be developed by AWBA under this Agreement shall consist of the following pricing components:
 - 3.4.2.1 A capital component consisting of (1) the cost to develop any new recovery facility as to which the SNWA shall have a prior right of use, such cost to be paid in advance in a lump sum, or (2) a charge

- computed on a per acre-foot of ICUA developed basis to recover SNWA's proportionate share of the annual capital cost of other recovery facilities to be used for SNWA's benefit during the Year.
- 3.4.2.2 An operation and maintenance (O&M) component computed on a per acre-foot of ICUA developed basis to recover SNWA's proportionate share of the O&M cost (including pumping energy) incurred by the owner/operator of any recovery facility used during the Year to develop ICUA for SNWA.
- 3.4.2.3 An administrative component calculated as a lump sum to recover the actual administrative cost reasonably incurred by AWBA.
- 3.4.2.4 In the event that the cost of recovery for all or some of the water stored by AWBA in the State of Arizona increases due to unforeseen circumstances such as a cost for water treatment, or new state or federal regulations such as new water quality standards or additional environmental compliance requirements, SNWA agrees to share a reasonable proportion of such unanticipated costs, regardless of the location of such storage.
- 3.4.3 SNWA shall specify in its notice given under Subarticle 3.2.1 if, and the extent to which, ICUA is to be developed through the recovery of Long-term Storage Credits previously held by CAWCD for the benefit of SNWA under its October 15, 1992 agreement with The Metropolitan Water District of Southern California. The Parties acknowledge that pursuant to the terms of such agreement and prior to the effective date of the Original Agreement, SNWA made advance payments of the entire cost to recover such credits and to develop such ICUA.
- 3.5 Billing and Payment for Developing ICUA
 - 3.5.1 AWBA shall notify SNWA of any charges for the development of recovery facilities as described in Subarticle 3.4.2.1(2) after agreement between AWBA and SNWA that additional recovery facilities are required for the development of the certified ICUA.
 - 3.5.2 SNWA shall agree to an acceptable repayment schedule for costs specified in AWBA's subarticle 3.5.1 notice prior to the construction of any additional recovery facilities. Following receipt of the SNWA payments pursuant to that schedule, AWBA shall remit the appropriate payments to the appropriate recovery facility owner/operators in accordance with AWBA's contractual agreements with those operators.
 - 3.5.3 AWBA shall provide an estimate of the charges for any capital component described in Subarticle 3.4.2.1(2) and the recovery facility O&M described in Subarticle 3.4.2.2 to SNWA on or before the fifteenth of each month prior to

the actual recovery. Such estimates may include adjustments or corrections to previous estimates.

- 3.5.4 SNWA shall pay the estimate of the capital component described in Subarticle 3.4.2.1(2) and the recovery facility O&M charge described in Subarticle 3.4.2.2 on or before the tenth day of the month following receipt of the estimate. If such day is not a business day, the payment shall be made on the next succeeding business day. Following receipt of the SNWA payment, AWBA shall remit the appropriate payment to the appropriate recovery facility operators in accordance with AWBA's contractual agreements with those operators.
- 3.5.5 No later than March 15 of the Year following the Year in which ICUA was recovered under the terms of this Agreement, AWBA shall provide SNWA and CRCN a Year end account reconciliation showing the actual Long-term Storage Credits recovered and whether charges for recovering the credits exceed payments made or payments exceed the amount owed. If additional funds are owed to AWBA by SNWA, they shall be paid within 10 business days of the date notice is provided by AWBA. If funds are due to SNWA, they shall be applied to SNWA's current Year recovery facility O&M charge and used to offset current payments in an amount equal to the excess payment. If no recovery under the terms of this Agreement is included in the AWBA Plan of Operation for the current Year, the funds shall be carried over and used to offset the recovery facility O&M charge for the Year in which recovery resumes. If recovery has not resumed within three years, AWBA shall remit the remaining funds to SNWA.
- 3.5.6 Charges for administrative services as described in Subarticle 3.4.2.3 shall be paid on a quarterly basis. Unless otherwise agreed in advance, each quarterly payment shall be an equal one-fourth of the administrative charge agreed upon for the fiscal year. AWBA shall provide an invoice for one quarter of the annual administration charge to SNWA on or before the 15th day of June, September, December and March for the quarter immediately following. If such day is not a business day, the invoice shall be made on the next succeeding business day.
- 3.5.7 SNWA shall pay administrative charges on or before the first day of the month following the receipt of the notice. If such day is not a business day, the payment shall be made on the next succeeding business day.
- 3.5.8 The schedule dates and periods established by this Subarticle 3.5 may be changed upon written agreement of all parties.

ARTICLE 4

DELINQUENT CHARGES AND SURETY OF PERFORMANCE

4.1 Delinquency Charges under the Terms of this Agreement

- 4.1.1 All payments due under this Agreement shall be paid promptly on the date required and, if not paid, shall be delinquent. Interest on delinquent payments may be assessed from the business day of the month on which the charge was due and shall accrue at the prime rate of interest as established by the Bank of America, plus 6% per annum, prorated by days of the unpaid principal, computed daily until payment is received. Any payment received shall first be applied to any interest owed, and then to any charges owed.
- 4.1.2 In the event any portion of the charges are disputed, the disputed amount shall be paid when due, but may be accompanied by a written statement indicating the basis for any dispute. If the dispute is found to be valid, SNWA shall be refunded any overpayment plus interest, accrued at the rate set forth in Subarticle 4.1.1, prorated by days from the date payment was credited to SNWA to the date the refund check is issued.
- 4.1.3 In the event any delinquent amount is not paid by SNWA within thirty (30) days after receipt by SNWA of written notice from AWBA of the delinquency, AWBA shall have the right, without liability of any kind, to suspend recovery of any water under the terms of this Agreement so long as the delinquent amount remains unpaid. Such suspension shall not affect the Long-term Storage Credits remaining in the SNWA Interstate Account. Nothing herein shall limit the rights of AWBA to use any other available legal remedy to effect collection of delinquent amounts.
- 4.2 Surety of Performance under the Terms of this Agreement
 - 4.2.1 In the event that a dispute arises over any action to be undertaken pursuant to the terms of this Agreement, all parties recognize and acknowledge that time is of the absolute essence in the conduct of the parties under the terms of this Agreement.
 - 4.2.2 The parties agree that the water resources being stored, forborne, and made available through exchange for use by SNWA under the terms of this Agreement are unique and very likely cannot be replaced in a timely fashion by other resources. Accordingly, the parties agree that in any dispute over the development and release of ICUA, SNWA will likely be requesting an injunction ordering specific performance of the terms of this Agreement. The parties agree that if AWBA opposes the specific enforcement of this Agreement with respect to ICUA, AWBA shall have the burden to show by clear and convincing evidence that it has the ability to, and will, make alternative water resources, other than water controlled by the United States under the Decree, available at the SNWA system, free of adverse claims. If AWBA proposes to deliver such alternative water to SNWA, AWBA shall bear any additional costs that may be incurred over the costs that would have otherwise been incurred by SNWA for the delivery of ICUA under terms of this Agreement. SNWA shall be required to accept such alternative water resources if so ordered by a court of competent jurisdiction. Nothing in this

Subarticle shall limit SNWA's rights to seek money damages or a remedy at law.

4.2.3 AWBA shall ensure that there are in effect all third party contracts necessary for the development of ICUA as provided in Article 3, the provisions of such contracts to be consistent with the provisions of this Agreement. AWBA shall insure that all such third party contracts are enforced in a manner consistent with the terms of this Agreement.

ARTICLE 5

OTHER PROVISIONS

- 5.1 Consultation on the AWBA Annual Report
 - 5.1.1 AWBA is required to submit an annual report of its transactions and proceedings for the preceding year by July 1 each Year pursuant to A.R.S. § 45-2426. SNWA/CRCN agree to confer with AWBA staff in the development of the report.
- 5.2 Payment of federal charges relating to the Execution of a Storage and Interstate Release Agreement
 - 5.2.1 SNWA agrees that all federal charges associated with any amendment to the SIRA shall be borne by SNWA.
 - 5.2.2 These charges shall be calculated by and paid directly to the Secretary by SNWA in accordance with the Secretary's requirements.

5.3 Successors to AWBA and SNWA

In the event that the AWBA should be dissolved or cease to perform any of the functions provided for in this Agreement, the rights and obligations of the AWBA shall be binding upon, and inure to the benefit of, any agency of the State of Arizona that succeeds to such functions or, in the absence of any such agency, the State of Arizona. In the event that the SNWA should be dissolved or cease to perform any of the functions provided for in this Agreement, the rights and obligations of the SNWA shall be binding upon, and inure to the benefit of, any successor joint powers agency or other legal subdivision of the State of Nevada Arizona that succeeds to such functions or, in the absence of any such agency, the members of the SNWA.

5.4 Uncontrollable Forces

No Party to this Agreement shall be considered in default in the performance of any of its obligations under the Agreement (other than the obligation of SNWA to make payment) when a failure of performance shall be due to uncontrollable forces. The term "uncontrollable force" shall mean any cause beyond the control of the party unable to perform such obligation, including, but not limited to, failure or threat of failure of facilities, flood, earthquake, storm, fire, lighting, and other natural catastrophes, epidemic, war, civil disturbance or disobedience,

630735.6 DRAFT 12/3/04 strike, labor dispute, labor or material shortage, sabotage, restraint by order of a court or regulatory agency of competent jurisdiction, and action or non-action by, or failure to obtain the necessary authorizations or approvals from, any federal governmental agency or authority, which by exercise of due diligence such Party could not reasonably have been expected to avoid and which by exercise of due diligence it shall be unable to overcome. Nothing contained herein shall be construed to require any Party to settle any strike or labor dispute in which it is involved.

- 5.5 Notices, Requests and Payments
 - 5.5.1 All notices and other communications provided for in this Agreement shall be in writing and may be given in either of the following manners:
 - 5.5.1.1 Notices and requests shall be in writing and may be mailed first class postage paid to the parties at the following addresses:

AWBA: Arizona Water Banking Authority

500 North Third Street Phoenix, Arizona 85004

Attn: Manager

SNWA: Southern Nevada Water Authority

1001 S. Valley View Boulevard

Las Vegas, Nevada 89153 Attn: General Manager

CRCN: Colorado River Commission of Nevada

555 E. Washington Avenue, Suite 3100

Las Vegas, Nevada 89101

Attn: Director

- 5.5.1.2 Notices and requests may be given by facsimile and shall be deemed complete upon receipt from sender's facsimile machine indicating that the transmission was satisfactorily completed and after phone communication with administrative offices of the recipient notifying the recipient that a facsimile has been sent.
- 5.5.2 All payments required under the terms of this Agreement shall be made by Electronic Fund Transfer (EFT).
 - 5.5.2.1 AWBA will notify the Treasury, State of Arizona monthly of any anticipated EFTs to be made by SNWA.
 - 5.5.2.2 SNWA will submit all EFTs to the Treasury, State of Arizona; account number 001-000985; routing number 122101706, or to such other destination as AWBA may designate by notice.
 - 5.5.2.3 AWBA will ensure that all EFTs submitted by SNWA are properly accrued in the Nevada sub-account maintained at ADWR.

630735.6 DRAFT 12/3/04

- 5.6 On request, AWBA shall provide SNWA with a copy of all contracts, rate schedules, and other documents that are relevant to or that form the basis for the charges specified in the Agreement.
- 5.7 The parties to this Agreement are hereby notified of Arizona Revised Statutes section 38-511.
- 5.8 On reasonable advance written notice to AWBA and during normal business hours,
 SNWA shall have the right to inspect and audit all records of AWBA pertaining to
 (1) all Statutory Costs incurred by AWBA under Article 2 and (2) all costs incurred by AWBA under Article 3.
- <u>This Agreement is not intended to confer any rights on any person other than the</u>

 Parties hereto, and it shall not be construed as a third-party beneficiary contract or as conferring third-party beneficiary status or rights of any nature on any person.

In Witness of this Agreement, the Parties affix their official signatures below.

SOUTHERN NEVADA WATER AUTHORITY	DATE:
Attest:	
Patricia Mulroy, General Manager	Amanda Cyphers, Chair
Approved as to form:	
Charles K. Hauser, General Counsel	
COLORADO RIVER COMMISSION OF NEVADA	DATE:
Attest:	
George M. Caan, Executive Director	Richard Bunker, Chair
Approved as to form:	
(

630735.6 DRAFT 12/3/04

Sara A. Price, Senior Deputy Attorney General	
ARIZONA WATER BANKING AUTHORITY	DATE:
Attest:	
Charles L. Cahoy, Secretary	Herbert R. Guenther, Chair

Document comparison done by DeltaView on Friday, December 03, 2004 11:27:02 AM

Input:	
Document 1	pcdocs://west/630735/4
Document 2	C:\DOCUME~1\jdombek\LOCALS~1\Temp\wmtempdb8\~wt
	f0D3F4A59.doc
Rendering set	standard no color

Legend:	
<u>Insertion</u>	
Deletion	
Moved from	
Moved to	
Style change	
Format change	
Moved deletion	
Inserted cell	
Deleted cell	
Moved cell	
Split/Merged cell	
Padding cell	

Statistics:	
	Count
Insertions	35
Deletions	19
Moved from	2
Moved to	2
Style change	0
Format changed	0
Total changes	58