

ARIZONA WATER BANKING AUTHORITY

WEDNESDAY, APRIL 16, 1997

PHOENIX DEPARTMENT OF WATER RESOURCES

PLEASE PRINT

1	NAME: <i>[Signature]</i> REPRESENTING: SNWA	BUSINESS ADDRESS: 1001 S. Valley View LU, NV 89153	TEL: 702 258-3948 FAX:
2	NAME: Lee Storey REPRESENTING: M CWA	BUSINESS ADDRESS: Meyer Hendricks 3003 N. Central Ave Phx AZ 85012	TEL: 602 604-2110 FAX: 602 263-5333
3	NAME: G.L. EDWARDS REPRESENTING CRC-NO	BUSINESS ADDRESS: 555 R. WASHINGTON AV SUITE 3100 LAS VEGAS NV 89101	TEL: 702-486-2690 FAX 702-486-2697
4	NAME: Kew Taylor REPRESENTING Central Az Irrigation	BUSINESS ADDRESS: 231 S Sunshin ^e Blvd Eloy AZ 85231	TEL: 520 466-4336 FAX 520 466-7778
5	NAME: V. C. DANOS REPRESENTING AMWUA	BUSINESS ADDRESS: 4041 N. CENTRAL #900 PHX 85015	TEL: 248 8422 FAX 248 8423
6	NAME: TIMOTHY L. RECHT REPRESENTING ROBERT S. LYNCH (ICDA)	BUSINESS ADDRESS: 340 E. PALM LANE, STE 140 PHOENIX, AZ 85004-4529	TEL: 254-5908 FAX 257-9542
7	NAME: TIM PHILLIPS REPRESENTING NMWD	BUSINESS ADDRESS: 34630 N. SUNDRA QUON CREEK AZ 85242	TEL: 937-3570 FAX 937-0660
8	NAME: Harold Goodman REPRESENTING City of Glendale	BUSINESS ADDRESS: 5850 W. Glendale Av. Glendale, AZ 85301	TEL: 930-2582 FAX:
9	NAME: Elizabeth Story REPRESENTING Tonopah Irr. Dist	BUSINESS ADDRESS: F.O. Box 159 Tonopah, AZ 85354	TEL: (602) 386-4066 FAX:

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10	NAME: <i>Harry Ruzgerian</i> REPRESENTING <i>MWDSC</i>	BUSINESS ADDRESS: <i>LA, CA. 90054</i>	TEL: <i>213 217 6082</i> FAX <i>213 217 6949</i>
11	NAME: <i>Bob McLain</i> REPRESENTING <i>AMWUA</i>	BUSINESS ADDRESS: <i>on file</i>	TEL: FAX <i>on file</i>
12	NAME: <i>Lynda Person</i> REPRESENTING <i>Dames & Moore</i>	BUSINESS ADDRESS	TEL: <i>371-1110</i> FAX <i>861-7431</i>
13	NAME: <i>Floyd Marshy</i> REPRESENTING <i>City of Scottsdale</i>	BUSINESS ADDRESS	TEL: <i>391-5693</i> FAX <i>5619</i>
14	NAME: <i>Joseph Esler</i> REPRESENTING <i>PhxAMA</i>	BUSINESS ADDRESS <i>DWIZ</i>	TEL: FAX
15	NAME: <i>Bruce Hallin</i> REPRESENTING <i>GRP</i>	BUSINESS ADDRESS	TEL: <i>236-3212</i> FAX <i>2159</i>
16	NAME: <i>DANA WALKER</i> REPRESENTING <i>PHILIPS DODGE</i>	BUSINESS ADDRESS <i>2000 N. Central</i> <i>Phx, AZ 85004</i>	TEL: <i>234-6081</i> FAX <i>234-4847</i>
17	NAME: <i>Jan Laney</i> REPRESENTING <i>Az State Land Dept</i>	BUSINESS ADDRESS <i>1616 W Adams</i> <i>Phx 85007</i>	TEL: <i>542-3500</i> FAX <i>542-4668</i>
18	NAME: <i>Cynthia Stefanovic</i> REPRESENTING <i>Az State Land Dept.</i>	BUSINESS ADDRESS <i>1416 W. Adams</i> <i>Phx AZ 85007</i>	TEL: <i>542-3500</i> FAX <i>542-4668</i>

ARIZONA WATER BANKING AUTHORITY

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19	NAME: <i>Bill Chase</i> REPRESENTING <i>City of Phoenix</i>	BUSINESS ADDRESS <i>200 W Washington Ph 85003</i>	TEL: <i>261-8855</i> FAX <i>495-5650</i>
20	NAME: <i>Doug C. Nelson</i> REPRESENTING <i>ARWA</i>	BUSINESS ADDRESS <i>1700 N. 16th St Ste 120 - 307 Phx</i>	TEL: <i>395-1612</i> FAX <i>395-1943</i>
21	NAME: <i>DAVE ROBERTS</i> REPRESENTING <i>SRP</i>	BUSINESS ADDRESS	TEL: <i>236-2343</i> FAX <i>236-2159</i>
22	NAME: <i>PAUL ORME</i> REPRESENTING <i>CADD / MSDND</i>	BUSINESS ADDRESS	TEL: <i>(602) 465-0445</i> FAX <i>(520) 632-4344</i>
23	NAME: <i>JIM PETERSON</i> REPRESENTING <i>ORO VALLEY</i>	BUSINESS ADDRESS <i>1100 N. LACANADA DR ORO VALLEY, AZ</i>	TEL: <i>297-2591</i> FAX <i>297-6428</i>
24	NAME: REPRESENTING	BUSINESS ADDRESS	TEL: FAX
25	NAME: REPRESENTING	BUSINESS ADDRESS	TEL: FAX
26	NAME: REPRESENTING	BUSINESS ADDRESS	TEL: FAX
27	NAME: REPRESENTING	BUSINESS ADDRESS	TEL: FAX

Arizona Water Banking Authority
500 North Third Street, Phoenix, Arizona 85004
Telephone 602-417-2418
Fax 602-417-2401

FINAL AGENDA
Wednesday, April 16, 1997
9:30 a.m.

Arizona Department of Water Resources
3rd floor Conference Room

- I. Welcome / Opening Remarks
- II. Adoption of Minutes of March 19th Meeting
- III. Update on Plan of Operation
- IV. Discussion on Potential Amendment to Plan of Operation
- V. Discussion of Storage Site Criteria
- VI. Update on Discussions with Mohave County
- VII. Update on the AWBA Study Commission
- VIII. Update on Interstate Water Banking
- IX. Call to the Public
- X. Adjournment

Future Meeting Dates:

Wednesday, May 21, 1997, 9:30 a.m.
Wednesday, June 18, 1997, 9:30 a.m.

Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting the Arizona Water Banking Authority at (602) 417-2418 or (602) 417-2455 (TDD). Requests should be made as early as possible to allow time to arrange the accommodation.



KEY DATES / TIME LINE

(updated 4/10/97)

(Standing meeting dates are subject to change)

1997

April 15

Planning and Modeling Assumptions Subcommittee
- ADWR, 3rd floor conference room, 9:00 a.m.

I.P.A.G. Meeting - Tucson AMA Office, 1:30 p.m.

April 16

AWBA Meeting - ADWR, 3rd floor conference room, 9:30 a.m.

Water Banking Benefits Outside of CAP Service Area
- ADWR, 3rd floor conference room, 1:00 p.m.

April 18

Tucson GUAC Meeting - Tucson ADWR, 9:00 a.m.

April 24

Interstate and Intrastate Banking and Marketing Issues Subcommittee
- ADWR, 3rd floor conference room, 10:00 a.m.

Indian Issues Subcommittee - ADWR, 3rd floor conference room, 2:00 p.m.

May 1

Any additional requests or changes in Cost of Services budget submitted by Authority to DWR and CAWCD for FY 98

May 7

Phoenix GUAC meeting - Phoenix ADWR, 3rd floor conference room, 9:30 a.m.

May 9

Northwest Water Alliance Bd meeting - 11000 N. La Cañada Dr., Oro Valley, 7:30 a.m.

May 15

Pinal GUAC meeting - Pinal ADWR, 3:00 p.m.

KEY DATE / TIME LINE

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May 16

Tucson GUAC Meeting - Tucson ADWR, 9:00 a.m.

May 21

AWBA Meeting - ADWR, 3rd floor conference room, 9:30 a.m.

June 1

DWR/CAWCD submit Cost of Services budget proposals for FY 98 to Authority
Revised Cost of Services budget proposals approved by Authority (if necessary)
FY 98 Annual Operating Budget preliminarily reviewed by Authority

June

FY 98 Annual Operation Budget adopted by Authority

June 13

Northwest Water Alliance meeting - 11000 N. La Cañada Dr., Oro Valley, 7:30 a.m.

July 1

TARGET TO STORE 100,000 AF OF COLORADO RIVER WATER (45-2451)
Fiscal Year 1998 begins - General Fund appropriations available

July 11

Northwest Water Alliance Bd meeting - 11000 N. La Cañada Dr., Oro Valley, 7:30 a.m.

August 1

ANNUAL REPORT DUE TO GOVERNOR, PRESIDENT, SPEAKER (45-2426)
Submit to Governor, President and Speaker
(will submit an interim report, prior to the new July 1 annual report date for previous calendar year)

August 8

Northwest Water Alliance meeting - 11000 N. La Cañada Dr., Oro Valley, 7:30 a.m.

September

Proposed Interstate Banking rule expected to be published for public review

October 10

Northwest Water Alliance Bd meeting - 11000 N. La Cañada Dr., Oro Valley, 7:30 a.m.

October 15

Presentation of proposed Recovery Plan by Pinal County area irrigation districts

KEY DATE / TIME LINE

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November 1

STUDY COMMISSION INTERIM REPORT DUE

Interim report developed by Study Commission to be filed with the legislature

1998

January 1

ANNUAL PLAN OF OPERATION (45-2456)

Authority shall adopt a plan for calendar year 1998

June - August

Proposed Interstate Banking rule scheduled to be submitted for Congressional review

July 1

ANNUAL REPORT DUE TO GOVERNOR, PRESIDENT, SPEAKER (45-2426)

Submit to Governor, President and Speaker

August

Final Interstate Banking rules expected to be effective

- currently being promulgated by the U.S. Bureau of Reclamation

November 1

STUDY COMMISSION FINAL REPORT DUE

Final report must be filed with the legislature

ARIZONA WATER BANKING AUTHORITY
Draft Minutes

March 19, 1997
Arizona Department of Water Resources



Welcome / Opening Remarks

Chairman Rita Pearson presented official Governor appointment certificates to Bill Chase, Tom Griffin and Dick Walden.

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

Adoption of Minutes of February 19th Meeting

The February minutes were adopted as submitted.

EX OFFICIO MEMBERS
Senator Pat Conner
Rep. Bill McGibbon

Update on Facilities Inventory

Tim Henley, AWBA Manager, stated that the Facilities Inventory was adopted at the February 19 meeting. The Inventory found that no additional facilities are needed at this time in the Phoenix and Pinal AMA's. However, additional facilities may be recommend as regional recharge plans and the Third Management Plans are developed. The Inventory recognized an immediate need for additional facilities in the Tucson are and that the Water Bank will work with the current Tucson regional recharge process in developing the statutorially required Recharge Facilities Inventory Plan.

Update on Plan of Operation

Mr. James Jayne, AWBA Technical Administrator, noted that an agreement was executed on March 3 between the Salt River Project (SRP) and the AWBA for storage at the Granite Reef Underground Storage Project (GRUSP). Between March 4 and March 12, when deliveries were curtailed due to CAP capacities problems, 2,015 acre-feet of AWBA water was recharged.

The GRUSP agreement is a five year agreement, terminating December 21, 2001. The Water Bank agrees to include 50,000 af of recharge in the draft Annual Plan of Operation, but may modify the amount prior to final adoption. SRP is charging the Bank \$13.00 per af, increasing 3% per year, starting in 1998 (\$3.00 interconnect, \$2.00 South Canal, and \$8.00 facility fee). There is an annual administration fee of \$2,095.00.

Through March, approximately 51,000 af of water will have been recharged by the AWBA (49,100 af at Groundwater Savings Facilities and 2,015 af of direct recharge at GRUSP).

In the Tucson AMA, the Water Bank expects to begin using Avra Valley beginning in April. AWBA staff is scheduled to meet with Pima County representatives on the pending development of the Lower Santa Cruz facility soon.

Larry Dozier, CAWCD Deputy General Manager, stated that normal capacities are approximately 3,000 cfs but are currently restricted to about 2600 cfs. Mr. Dozier stated that water is scheduled to be released for the Agua Fria site beginning in September, assuming all necessary land owner easements and permits are received.

Discussion and Possible Action on the Mohave County Water Authority/RWCD/Mesa Proposal

Lee Storey, attorney at Myer, Hendricks representing MCWA, gave a brief overview of the proposal and expressed her appreciation to the Water Banking Authority for their consideration of the proposal. Ms. Storey asked that Water Banking Authority staff be given authorization to begin working with Mohave County interests on developing a solution. Clarification was made that no "deals" or agreements have been made to-date.

Ms. Pearson stated that the Water Banking Authority staff have had a number of meetings with representatives from Mohave County, RWCD and the City of Mesa to discuss some of the outstanding questions raised by the proposal. There are a number of options that could be explored that may be useful in helping Mohave County ensure an adequate water supply. Ms. Pearson directed the Water Banking Authority staff to explore potential alternatives and to bring back any recommendations to the Authority members.

Bullhead City Mayor Norm Hicks offered a brief overview of on-going issues in Bullhead City.

Mike Brophy, representing RWCD, concurred with statements made by Lee Storey.

Mr. Chase inquired about RWCD's in lieu capacities. Mr. Henley stated that RWCD currently has a 100,000 af permit and is scheduled to take 67,000 af of AWBA water for 1997.

Ms. Beth Miller, City of Mesa, stated that they are in full agreement with Lee Storey and Mike Brophy and that they stand ready to assist in working with Water Bank staff.

Mr. Chase noted that one of the areas of concern is the idea of dedicating 25,000 af / year of recharge for the benefit of the City Mesa, but was in agreement that Mesa needed an incentive or compensation for future forbearance. Mr. Chase asked Ms. Miller how flexible the City of Mesa was in considering other arrangements, other than what has been proposed.

Ms. Miller responded that the City of Mesa is open to discuss various alternatives.

Ms. Pearson recommended that Water Banking Authority staff meet with the parties involved in this proposal, utilizing the Study Commission and Subcommittee. Bring all information back to the Water Bank for discussion and further consideration and/or action.

Mr. Tom Griffin, Vice-Chairman, felt that Water Banking Authority staff should look at the fact that the General Fund monies were set aside for the benefit of areas outside the CAWCD service area. He expressed his desire to have the Mohave County issue dealt with before any other proposal is considered by the Water Bank.

Ms. Pearson stated that the proposal has helped the Water Bank focus on how to best store water for the benefit of rural Arizona. She recommended that the Study Commission explore potential solutions for the rural areas, including River communities, and report findings back to the Water Bank.

Bill Chase stated the Water Bank should also use the Study Commission to explore other elements of the Water Banking Authority. Ms. Pearson noted that while firming water supplies is the vital component of the Water Bank, augmentation of water supplies for future growth along the River is an issue that should be explored. However, the Water Bank does not currently have the statutory authority to augment intrastate supplies, but does interstate.

Mr. Chase stated that the Water Bank must quantify the amount of water needed to firm needs of M&I users (Note: this is being done by the Planning and Modeling Subcommittee of the Study Commission).

Update on the AWBA Study Commission

Mr. Herb Dishlip, ADWR Deputy Director, gave an overview of Study Commission activities and the agenda of the March 27th Commission meeting.

Mr. Dishlip noted that four subcommittees of the Study Commission have been formed:

- 1) Indian Issues (April 24, 2:00 p.m. at ADWR)
- 2) Interstate and Intrastate Banking and Marketing Issues (April 24, 10:00 a.m. at ADWR)
- 3) Subcommittee on Planning and Modeling Assumptions (April 15, 9:00 a.m. at ADWR)
- study the availability of supplies
- 4) Water Banking Benefits Outside of CAP Service Area (April 16, 1:00 p.m. at ADWR)

Due to the work of the subcommittees, there will not be a regularly scheduled Study Commission meeting for April.

Update on Interstate Banking

Mr. Dishlip gave an overview of activities pertaining to interstate water banking. He noted that the Bureau of Reclamation has begun to deal with issues regarding Article 2B6, with many of the issues being very difficult to resolve.

California continues to ask questions about the proposed rules and Nevada continues their strong interest in pursuing interstate water banking.

Mr. Dishlip stated that the surplus criteria issue continues to be unresolved, but does not feel it must be resolved to proceed with regulations.

Chairman Pearson stated that the six basin states are not inclined to support surplus declarations until California develops a substantive plan to reduce consumption to their 4.4 maf. The six California agencies have appointed a facilitator to help develop a plan to specifically address their over utilization of the Colorado River, including dates and monetary commitments.

Mr. Walden asked if there was a way to keep approximately 200,000 af of surplus from going to Mexico. Ms. Pearson stated that the Treaty with Mexico requires the delivery of any surplus to Mexico that goes unused in the U.S. Larry Dozier clarified that Arizona has first shot at using surplus, if demand exists.

Jerry Edwards, Chief Engineer, Colorado River Commission of Nevada, stated that Nevada views interstate water banking as an opportunity for Nevada. He further remarked that in the 22 years he has been involved with the Colorado River Commission, he has never witnessed such cooperation, as with the Water Banking Authority.

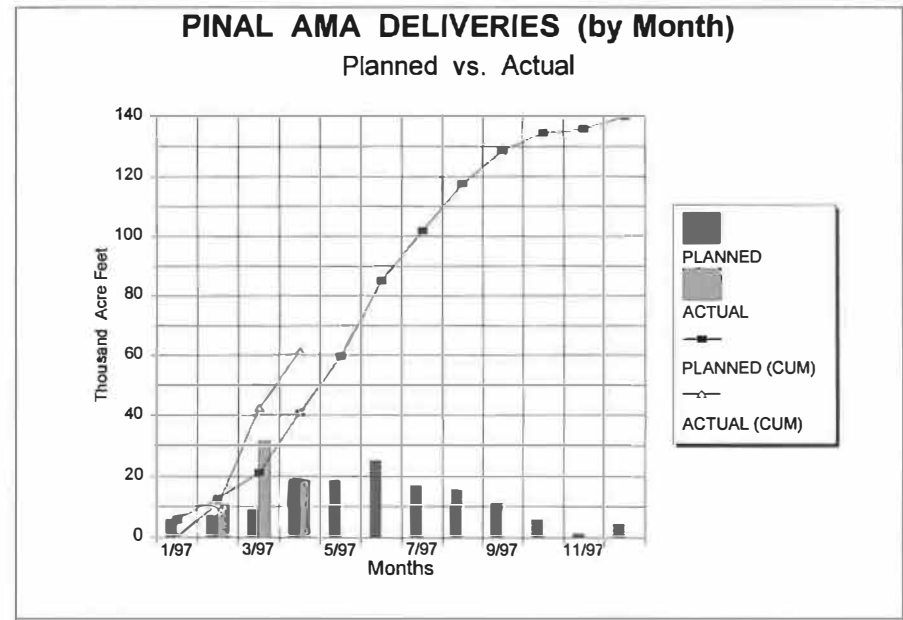
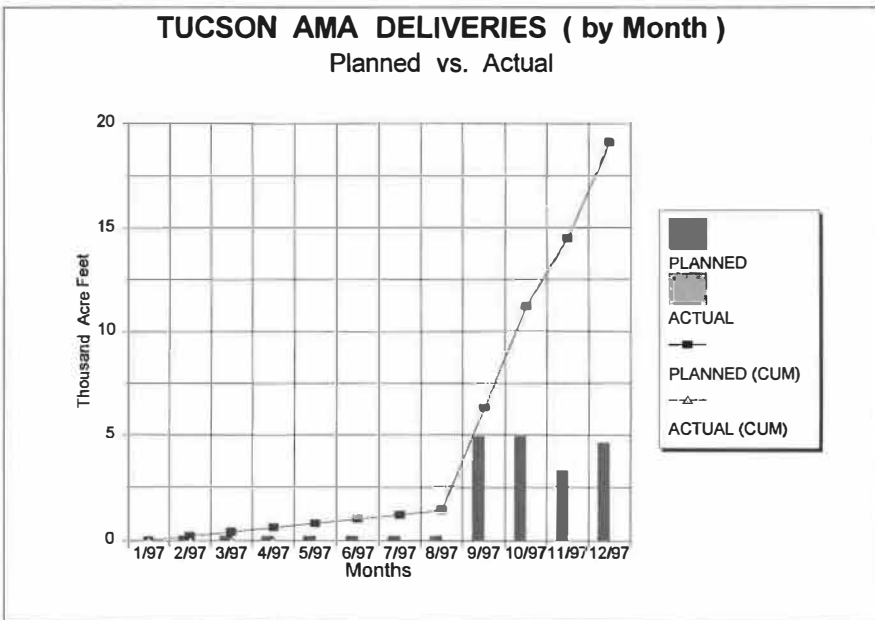
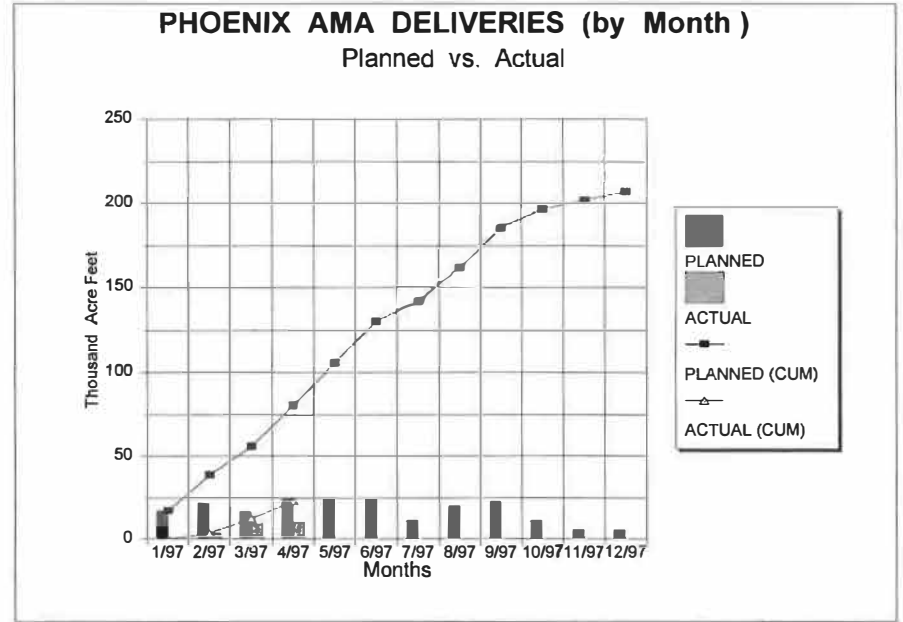
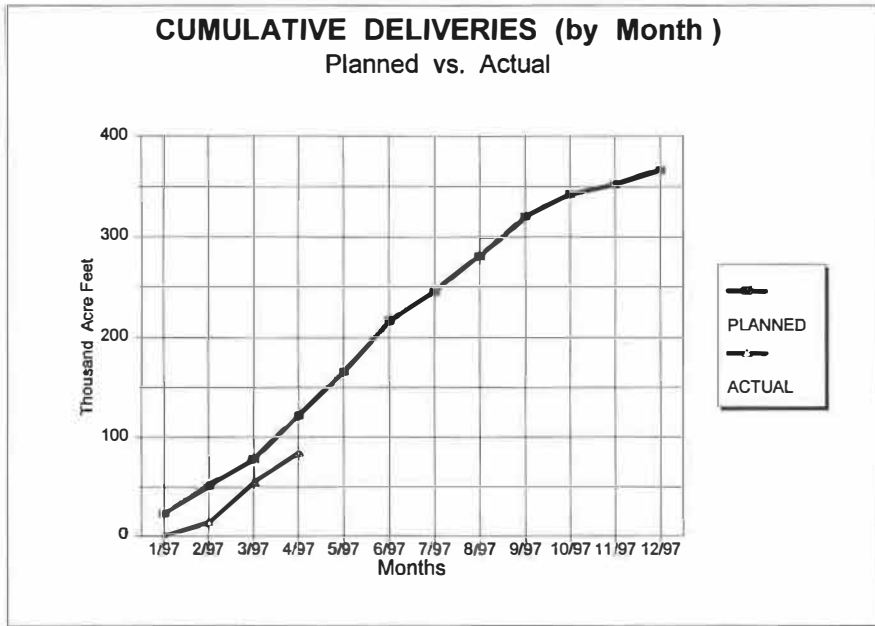
Call to the Public

Dennis Rule, Tucson Water, stated that bids for construction at CAVSARP are ready to go out and anticipate to begin delivery of approximately 1,000 af/month of water by early June. The remaining three basins are scheduled to ready for use by the end of July. Total capacity for the entire project is expected to reach 60,000 af eventually.

Next two Water Banking Authority meetings are scheduled at the AZ Department of Water Resources for April 16, 9:30 a.m. and May 21, 9:30 a.m.

Chairman Pearson adjourned the meeting at 10:50 a.m.

1997 PLAN OF OPERATION



CENTRAL ARIZONA IRRIGATION AND DRAINAGE DISTRICT

April 15, 1997

PROJECTED MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January	4,134.00	6,068.00		945.00	11,147.00
February	3,660.00	4,051.00		1,085.00	8,796.00
March	8,176.00	2,212.00		4,795.00	15,183.00
April	9,000.00	15,598.00		8,272.00	32,870.00
May	8,000.00	19,519.00		0.00	27,519.00
June	13,208.00	21,955.00			35,163.00
July	13,000.00	29,808.00			42,808.00
August	13,000.00	28,023.00			41,023.00
September	5,000.00	6,721.00			11,721.00
October	5,351.00	0.00			5,351.00
November	1,019.00	0.00			1,019.00
December	3,852.00	2,009.00			5,861.00
Total	87,400.00	135,964.00	0.00	15,097.00	238,461.00

ACTUAL MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January	4,134.00	6,068.00		0.00	10,202.00
February	3,660.00	4,051.00		6,825.00	14,536.00
March	8,176.00	2,212.00		19,903.00	30,291.00
April					0.00
May					0.00
June					0.00
July					0.00
August					0.00
September					0.00
October					0.00
November					0.00
December					0.00
Total	15,970.00	12,331.00	0.00	26,728.00	55,029.00

CHANDLER HEIGHTS CITRUS IRRIGATION DISTRICT

April 15, 1997

PROJECTED MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January		130.00		50.00	180.00
February		130.00		50.00	180.00
March		260.00		50.00	310.00
April		260.00		50.00	310.00
May		269.00		50.00	319.00
June		260.00		50.00	310.00
July		260.00		50.00	310.00
August		245.00		50.00	295.00
September				50.00	50.00
October				50.00	50.00
November					0.00
December					0.00
Total	0.00	1,814.00	0.00	500.00	2,314.00

ACTUAL MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January				0.00	0.00
February				100.00	100.00
March				50.00	50.00
April					0.00
May					0.00
June					0.00
July					0.00
August					0.00
September					0.00
October					0.00
November					0.00
December					0.00
Total	0.00	0.00	0.00	150.00	150.00

HOHOKAM IRRIGATION AND DRAINAGE DISTRICT

April 15, 1997

PROJECTED MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January		1,500.00		0.00	1,500.00
February		700.00		0.00	700.00
March		3,600.00		1,400.00	5,000.00
April		800.00		3,300.00	4,100.00
May		2,100.00		3,300.00	5,400.00
June		2,300.00		6,300.00	8,600.00
July		3,210.00		5,400.00	8,610.00
August		2,850.00		5,700.00	8,550.00
September		500.00		1,300.00	1,800.00
October		0.00		1,300.00	1,300.00
November		25.00		0.00	25.00
December		325.00		0.00	325.00
Total	0.00	17,910.00	0.00	28,000.00	45,910.00

ACTUAL MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January	3,970.00	1,326.00	0.00	0.00	5,296.00
February	3,684.00	972.00	0.00	1,400.00	6,056.00
March	8,368.00	5,166.00	0.00	3,300.00	16,834.00
April					0.00
May					0.00
June					0.00
July					0.00
August					0.00
September					0.00
October					0.00
November					0.00
December					0.00
Total	16,022.00	7,464.00	0.00	4,700.00	28,186.00

PROJECTED MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January	4,500.00	1,000.00	0.00	0.00	5,500.00
February	5,870.00	4,460.00	0.00	2,870.00	13,200.00
March	9,170.00	20,270.00	0.00	8,260.00	37,700.00
April	10,620.00	13,610.00	0.00	7,370.00	31,600.00
May	10,470.00	11,940.00	0.00	7,890.00	30,300.00
June	13,040.00	19,860.00	0.00	8,600.00	41,500.00
July	13,880.00	26,860.00	0.00	8,760.00	49,500.00
August	11,730.00	20,250.00	0.00	6,720.00	38,700.00
September	8,030.00	5,350.00	0.00	1,220.00	14,600.00
October	3,790.00	460.00	0.00	1,250.00	5,500.00
November	1,400.00	0.00	0.00	0.00	1,400.00
December	3,760.00	350.00	0.00	1,390.00	5,500.00
Total	96,260.00	124,410.00	0.00	54,330.00	275,000.00

ACTUAL MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January	5,644.00	3,860.00	0.00	0.00	9,504.00
February	4,872.00	5,921.00	0.00	2,446.00	13,239.00
March	8,454.00	17,184.00	0.00	8,422.00	34,060.00
April					0.00
May					0.00
June					0.00
July					0.00
August					0.00
September					0.00
October					0.00
November					0.00
December					0.00
Total	18,970.00	26,965.00	0.00	10,868.00	56,803.00

NEW MAGMA IRRIGATION AND DRAINAGE DISTRICT

April 15, 1997

PROJECTED MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January		0.00		1,975.00	1,975.00
February		0.00		1,625.00	1,625.00
March		3,920.00		3,200.00	7,120.00
April		7,280.00		2,300.00	9,580.00
May		7,200.00		2,100.00	9,300.00
June		8,952.00		2,100.00	11,052.00
July		11,270.00		3,700.00	14,970.00
August		2,538.00		9,700.00	12,238.00
September		0.00		9,600.00	9,600.00
October		0.00		1,700.00	1,700.00
November		0.00		700.00	700.00
December		0.00		1,300.00	1,300.00
Total	0.00	41,160.00	0.00	40,000.00	81,160.00

ACTUAL MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January				0.00	0.00
February				3,310.00	3,310.00
March				3,490.00	3,490.00
April					0.00
May					0.00
June					0.00
July					0.00
August					0.00
September					0.00
October					0.00
November					0.00
December					0.00
Total	0.00	0.00	0.00	6,800.00	6,800.00

PROJECTED MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January		2,149.00		0.00	2,149.00
February		1,892.00		0.00	1,892.00
March		5,967.00		0.00	5,967.00
April		5,979.00		0.00	5,979.00
May		5,878.00		0.00	5,878.00
June		5,620.00		0.00	5,620.00
July		3,609.00		2,845.00	6,454.00
August		0.00		7,155.00	7,155.00
September		0.00		1,000.00	1,000.00
October		0.00		2,000.00	2,000.00
November		0.00		1,000.00	1,000.00
December		0.00		2,000.00	2,000.00
Total	0.00	31,094.00	0.00	16,000.00	47,094.00

ACTUAL MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January				0.00	0.00
February				0.00	0.00
March				0.00	0.00
April					0.00
May					0.00
June					0.00
July					0.00
August					0.00
September					0.00
October					0.00
November					0.00
December					0.00
Total	0.00	0.00	0.00	0.00	0.00

ROOSEVELT WATER CONSERVATION DISTRICT

April 15, 1997

PROJECTED MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January	0.00	0.00	0.00	0.00	0.00
February	0.00	0.00	0.00	0.00	0.00
March	0.00	0.00	0.00	0.00	0.00
April	4,000.00	0.00	0.00	8,000.00	12,000.00
May	1,000.00	3,000.00		8,000.00	12,000.00
June	6,000.00	3,000.00		8,000.00	17,000.00
July	7,500.00	3,000.00		8,000.00	18,500.00
August	7,500.00	3,000.00		8,000.00	18,500.00
September	295.00	3,205.00		4,000.00	7,500.00
October	500.00	0.00		7,000.00	7,500.00
November	500.00	0.00		2,500.00	3,000.00
December	500.00	0.00		2,500.00	3,000.00
Total	27,795.00	15,205.00	0.00	56,000.00	99,000.00

ACTUAL MONTHLY IRRIGATION USE

MONTH	Groundwater	CAP Pool Water	Other Recharge	ABWA Recharge	Total
January	615.61			0.00	615.61
February	2,308.45			0.00	2,308.45
March	5,174.31			3,689.00	8,863.31
April					0.00
May					0.00
June					0.00
July					0.00
August					0.00
September					0.00
October					0.00
November					0.00
December					0.00
Total	8,098.37	0.00	0.00	3,689.00	11,787.37

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

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

			January	February	March	April	May	June	July	August	September	October	November	December	Total
Estimated CAP Deliveries: (M&I, Indian, Ag Pools)			34,000	54,000	124,000	97,000	96,000	120,000	158,000	146,000	59,000	34,000	28,000	25,000	975,000
						100,000									979,000
Available Excess CAP Capacity for AWBA:			27,000	30,000	26,000	54,000	46,000	59,000	33,000	39,000	39,000	22,000	10,000	15,000	400,000
							42,000								396,000
AWBA - Recharge Sites:															
Phoenix AMA:															
Direct >	GRUSP	200,000	80,000												
	FOR PHOENIX AMA			10,000	10,000	10,000	10,000	10,000	10,000						60,000
				0	0	1,961	0	10,000	10,000	3,700	6,300	10,000	7,000	3,000	4,500
	(FOR TUCSON AMA) (1)					(210)	(210)	(210)	(210)	(210)	(210)	(4,840)	(4,840)	(3,330)	(4,620)
	AGUA FRIA										1,500	2,500			4,000
											0	0			0
Indirect >	CHANDLER HGTS CID	3,000	500			70	80	80	100	90	80				500
				100	50		82	82	95	91	0				500
	MWD (4)	30,000	20,000	630	570	3,000	3,320	3,870	2,010	1,980	2,230	1,430	630	330	20,000
				0	0	0	0	0	0	0	0	0	0	0	0
	NEW MAGMA	40,000	40,000	2,500	2,000	2,300	2,300	2,100	2,100	3,700	9,700	9,700	1,400	1,200	40,000
				0	3,310	3,490	2,300	2,100	2,100	3,700	9,700	9,600	1,700	700	40,000
	QUEEN CREEK	28,000	16,000	1,000	1,000	1,300	1,300	1,000	1,600	3,600	1,500	1,000	500	2,200	16,000
				0	0	0	0	0	2,845	7,155	1,000	2,000	1,000	2,000	16,000
	RWCD	100,000	95,000	4,000	8,000	4,000	8,000	8,000	8,000	4,000	8,000	5,000	3,000	2,000	67,000
				0	0	3,686	8,000	8,000	8,000	8,000	4,000	7,000	2,500	2,500	59,686
	SRP (2)	200,000	0												
	TONOPAH ID (3)	15,000	0												
PINAL AMA:															
Indirect >	CAIDD	110,000	35,000	1,600	2,000	2,500	5,000	4,500	6,000	4,600	4,000	3,000	1,100	600	35,000
				0	6,825	19,903	8,272	0	0	0	0	0	0	0	35,000
	HOHOKAM	40,000	28,000		1,400	3,300	3,300	6,300	5,400	5,700	1,300	1,300			28,000
					1,400	3,300	3,300	6,300	5,400	5,000	0	0			28,000
	MSIDD	120,000	80,000	4,000	5,000	5,000	11,000	11,000	13,000	7,000	6,800	3,200	1,200	3,800	77,000
				0	2,446	8,422	7,370	7,890	8,600	8,760	2,410	0	0	0	45,898
TUCSON AMA:															
Direct >	CENTRAL AVRA VALLEY (4)	5,000	4,500								1,200	1,200	900	1,200	4,500
											1,200	1,200	900	1,200	4,500
	AVRA VALLEY	5,000	2,100	210	210	210	210	210	210	210	210	210	210	210	2,100
				0	0	0	0	300	300	300	300	300	300	300	2,100
	PIMA MINE ROAD (4)	10,000	2,500								630	630	620	620	2,500
											0	0	0	0	0
	LOWERSANTA CRUZ (4)	30,000	10,000								2,800	2,800	1,600	2,800	10,000
											2,800	2,800	1,600	2,900	10,000
Indirect >	CORTARO MARANA ID (3)	10,000	0												
	BKW FARMS (3)	9,000	0												
	KAI FARMS (2)	11,000	0												
TOTAL :			986,000	413,600	23,100	28,840	25,980	44,180	43,610	50,560	28,620	36,280	38,950	21,770	9,960
					0	14,081	40,815	29,242	31,372	35,382	32,800	38,956	28,982	22,000	10,000
Remaining CAP Capacity:			3,900	1160	20	9,820	2,190	8,440	4,380	2,720	50	230	40	450	33,400
			0	15,819	0	24,758	10,628	23,618	200	44	10,018	0	0	400	85,588

Note: Agua Fria Siphon Outage (June 16 - September 15, 1997) The HAV through HSV Pumping Plant Capacity will not be available for recharge downstream of the Waddell Turnout during this period.
 (1) - Capacity Only Utilized to the extent Pima County Facilities are Not Available
 (2) - \$21.00 Cost Prohibitive
 (3) - Capacity Committed to Other Partners
 (4) - Currently Not Permitted

ARIZONA WATER BANKING AUTHORITY

(REVISIONS as of 3/24/97)

Criteria for Storage Facility Prioritization

One of the significant tasks of the Arizona Water Banking Authority will be to determine in what manner and where water will be stored within the State of Arizona. Although a large number of policy considerations may guide the Authority in making these decisions, some of the decisions will be shaped by the Arizona Water Banking Authority statutes (A.R.S. §§ 45-2401 *et seq.*), the location of the Central Arizona Project aqueduct, economic factors, the cost of storage, recovery of water, water management objectives, Indian water rights settlements, Western Arizona objectives, environmental issues, regulatory and capacity issues.

One key issue for consideration by the AWBA in determining water storage location is assistance in meeting Groundwater Code Objectives. The Groundwater User Advisory Council's (GUAC's) shall be consulted if the proposed facility falls within an AMA. Two statutes provide guidance on where water should be stored - A.R.S. § 45-2453 describes the process and provides some criteria by which the Authority will select types of sites for additional storage facilities. A.R.S. § 45-2456 describes the factors the Authority should consider when developing the Annual Plan of Operation, while providing guidance on where water should be stored.

The Second Management Plans, promulgated under the Groundwater Management Code for the state's Active Management Areas (AMA), offer some guidance on where water storage should occur. The Second Management Plans deem water storage in the following locations to be inconsistent with the augmentation program of the Department of Water Resources:

- a) in remote or isolated locations where no benefits would be realized.
- b) in locations where storage would contribute to the migration of poor quality water.
- c) in localized areas of high groundwater levels.

[See Phoenix Second Management Plan, Ch. 7(H)(3)]

The Second Management Plan also states that water storage must meet one of the following tests to be deemed consistent with the management goal for the Active Management Area:

- a) storage must contribute to groundwater supplies that are currently being used or that could be used in the future so long as the areas which are recharged are not experiencing problems associated with a shallow depth to water.
- b) storage is contributing to an EPA/DEQ corrective management program.

[See Phoenix Second Management Plan, Ch. 7(H)(3)]

In addition to referencing the Groundwater Code objectives described in the Second Management Plan, the statute states that the Central Arizona Water Conservation District (CAWCD) shall be consulted in determining at what storage locations and during what times of the year water can be delivered for the Authority's use [A.R.S. § 45-2453(B)(3) and § 45-2456(B)(3)]. CAWCD is charged with informing the AWBA whether a facility is able to receive delivery of CAP water, either direct or indirect.

RANKING OF FACILITIES

There are many factors that should be considered when examining and comparing the various recharge facilities. Factors such as meeting Groundwater Code objectives, including the recovery of stored water and the ability for the CAP to deliver water to the facility should be considered first when examining a proposed site.

Assuming several storage facilities meet the foregoing criteria, the Authority will need to prioritize those facilities. Based on the results of the ranking process, sites will be grouped into priority categories. This "grouping" will allow for several number one priority facilities, several number two priority facilities and so on, as opposed to an individual ranking of all facilities.

The Authority will use a priority ranking to help in the selection of the facilities for future storage. Public meetings will be held by the Authority when conducting the ranking to gain local input on the potential use of existing or proposed sites, including presentations to the Groundwater User Advisory Councils (GUAC's) and the AWBA Study Commission.

The following categories will be utilized in examining proposed facilities for consideration by the AWBA, along with accompanying matrix.

1) COST

- **COST OF STORAGE**

What are the costs associated with using capacity at a groundwater savings or direct recharge facility? Storage at GSF's will be the least expensive, allowing for the development of a greater amount of long-term storage credits.

The following factors will be evaluated in relation to the costs associated with the proposed site:

- a) Cost of Water: in addition to the base cost of water delivered by CAWCD, the cost of credits are influenced by other factors such as amount of losses and transportation costs.
- b) Direct Recharge Facility: cost per acre foot for use of the facility by the AWBA.
- c) Groundwater Savings Facility: what amount are potential partners willing to pay.
- d) Environmental Mitigation Costs

- **COST OF RECOVERY**

What are the costs associated with recovery at a direct recharge or GSF facility?

The following factors will be used when evaluating proposed sites:

- a) Transportation Costs: does the water have to be transported from where it was recharged? What is the cost, including associated infrastructure and operation and maintenance costs? Are there existing wells available from M&I providers for recovery?
- B) Associated Energy Costs: will the cost to recover the water be effected by the pumping depth? Are capital and O&M costs associated with use of a facility?

2) WATER MANAGEMENT OBJECTIVES

Absent a need for storage in a specific area, water management objectives will be a primary goal of the AWBA. The following are a few specific factors to be considered when examining water management objectives:

- **PHYSICAL AVAILABILITY**
Does the existing or proposed storage facility increase the supply in areas where groundwater is relied upon, or increase the opportunities for conjunctive use?
The following factor will be used in evaluation of the proposed site:
 - a) location of recharge facility in relation to existing groundwater supplies.

- **SUBSIDENCE**
Will the existing or proposed storage facility under evaluation either prevent and/or help alleviate subsidence or earth fissures in the area or will it aggravate subsidence and earth fissures?
The following factor will be used in evaluation of the proposed site:
 - a) location in relation to subsidence areas.

- **WATER QUALITY**
Does storage at the facility impact the quality of native groundwater?
The following factor will be used in evaluation of the proposed site:
 - a) plume management;
 - b) improve ambient water quality;
 - c) improve the quality of the source water (stored water) through soil/aquifer treatment.

3) INDIAN WATER RIGHTS SETTLEMENTS

- **LOCATION OF STORAGE SITE**
The following factors will be used in evaluation of the proposed site:
 - a) proximity of proposed site to Indian communities;
 - b) opportunity to assist in resolution of Indian water rights settlements.

4) WESTERN ARIZONA OBJECTIVES

- **RECOVERY POTENTIAL**
 - a) can a site help provide certainty for western Arizona cities that a substitute supply will be available in the future?

- **COST OF REPLACEMENT**
 - a) what is the cost for replacement of the credit?

- **LOCATION OF RECOVERY**

a) have specific recovery locations been identified?

- **FORBEARANCE AGREEMENTS**

a) are forbearance agreements being required to assure recovery of the stored water?

5) ENVIRONMENTAL ISSUES

- **POTENTIAL HARM**

a) Does the proposed storage site cause harm or concern to other parties or the environment? (ADWR is prohibited from permitting a site that will cause unreasonable harm to land or to other water users, see (A.R.S. § 45-811.01(C)(3)).

- **POTENTIAL SOURCE OF CONTAMINATION**

Factors to consider for site location include: land uses such as landfills, agricultural and other past land uses around the proposed facility.

- **MIGRATION OF CONTAMINANT PLUMES**

Does the potential exist for the migration of any existing contaminant plumes in the area of proposed recharge?

- **WETLANDS HABITAT**

Could use of a proposed direct facility create wetlands or habitat, potentially establishing a future commitment for the AWBA?

6) REGULATORY ISSUES

- **REQUIRED PERMITS**

Given the statutory deadlines imposed, the time required to implement the proposed facility must be taken into consideration, including the issuance of proper permits. Does the propose facility have the required local, state and federal permits for the operation of the facility?

INFORMATIONAL FACTORS

In addition to the above factors, other issues for consideration are:

- Could existing facilities be enlarged to accommodate storage by the Arizona Water Banking Authority?
- Could existing effluent permitted facilities be modified to include recharge of Colorado River water by the AWBA?
- Does the capacity of the facility to accept water coincide with CAP ability to deliver the water?
- Infiltration Rate: the rate at which water enters the soil.

- Long-term Average Annual Recharge Rate - the average amount of water that can be expected to be recharged at a specific facility.
- Volume of potentially recoverable water in the recharge facility in acre feet (af).
- Other technical issues include, but are not limited to: the transmissivity of the aquifer, impeding layers in the vadose zone, surface elevation of facility.
- Regional Benefits - may include the sharing of conveyance, recharge and/or recovery facilities, potential recreational use, habitat restoration and multiple use benefits, such as combining flood control, recharge objectives and aesthetics.

Revised 3/24/97
b: \criteria.wpd\jgj



ARIZONA DEPARTMENT OF WATER RESOURCES

Groundwater Management Division
500 North Third Street
Phoenix, Arizona 85004
(602) 417-2400

MEMORANDUM

To: Tim Henley, AWBA
From: Katharine Jacobs, for the Groundwater Management Division
Subject: Criteria for Storage Facility Prioritization
Date: April 14, 1997

The Groundwater Management Division has reviewed the January 9, 1997 version of the AWBA memo on Criteria for Storage Facility Prioritization, and has some comments and suggestions. This memo contains an alternative approach to structuring the criteria that may be useful. These comments have been reviewed by the Tucson Regional Recharge Plan - Institutional and Policy Advisory Group and their comments have been included.

I. Identifying the Goal of Storage Projects

Clearly identifying the goal of the storage is key to appropriate use of siting criteria. Siting criteria are likely to be different, or at least weighted differently, to evaluate facilities that will serve different users and/or objectives.

It is widely recognized that a primary goal of the AWBA is to maximize the use of Colorado River Water. However, there are four specific legislative sub-goals. Although it may not be important to designate which goal is being met by every acre-foot of water stored, it is required by statute that different funding sources be used to benefit different groups of users. For example, the property taxes collected within the counties must be used to benefit the county from which they derive. This means that the "drought supply" and "water management" objectives are the most likely goals for water stored using these funds.

The quantity of water that can be stored to meet each objective is limited by availability of funds. It may be appropriate to target a certain amount of water in each AMA to meet the applicable objectives over a period of time (i.e. ten years). This could give more perspective to the types of

facilities needed.

II. Storage Siting Considerations Relative to Recovery

The criteria as described in the AWBA memo seem to blend the issues of storage and recovery. In fact, **recovery is a factor in choosing the storage location in certain identifiable circumstances, but is not relevant in others.** The attached flowcharts illustrate this point by

starting with each of the statutory AWBA goals, then describing the circumstances in which recovery is and is not relevant in the storage location decision.

Once it is clear which is the primary goal of the particular storage activity, it would be appropriate to **identify the likely beneficiaries** of the stored water in each AMA for each objective. For example, if the primary goal is drought supply, it would be appropriate to figure out, in conjunction with CAWCD, which contractors are likely to prefer drought supplies to be delivered through the canal and which prefer to recover water through their own wells.

CAWCD has jurisdiction over distribution of credits accrued through the four cent property tax, and they will make the ultimate determination (in consultation with their customers) regarding the distribution of drought supply credits. However, to implement the drought supply goal, **likely beneficiaries should be polled regarding their storage preferences.** (This could be done as part of the regional recharge planning process, if appropriate.) If they prefer to recover through their own wells, and if their groundwater supplies are inadequate over the long term, the storage facilities should be located to directly benefit their well fields. Although the contractors/beneficiaries may have difficulty projecting future conditions, they will at least have an opportunity to influence the siting of the storage which is intended to benefit them.

In the case of the "Interstate Banking" goal, an agreement is anticipated with specific entities who will forbear from use when California or Nevada divert water. During the process of developing the forbearance agreement, an assessment of the water needs of the forbearers will be developed. As with other objectives, siting for forbearing sub-contractors may or may not need to be in the vicinity of the sub-contractor's wellfields.

III. Geographically Specific Siting Considerations

After identifying the goal of the storage activity, and determining who the beneficiaries and/or affected parties are, it will be clear whether the siting considerations require geographically specific storage. (A preliminary assessment of geographic needs relative to water management objectives, prepared by the Groundwater Management Division, is included as an appendix to the AWBA Facilities Inventory). **If a specific geographic area for storage has been identified,** the process could be as follows:

- A) List existing and proposed facilities that could benefit target area.
- B) Identify site characteristics/capabilities, including pro's and con's (a standardized list of these can be developed in a checklist fashion) relative to primary and secondary objectives (water management objectives should be considered in this analysis). Do a preliminary qualitative assessment of sites on this basis.
- C) If no sites are known which adequately meet the objectives, evaluate whether new site concepts can be developed for the area. Develop concepts as needed and assess them as in B) above.
- D) Evaluate the **costs of storage (and recovery, if applicable) relative to the benefits** (including both primary and secondary objectives) for the alternative sites.
- E) Rank sites relative to each other based on an assessment of the costs relative to the benefits, considering both short and long-term perspectives and ability to accomplish multiple objectives. (Explicitly consider achievement of water management objectives in ranking sites, even if they are secondary goals. Achievement of multiple subgoals may rank higher than achieving a single goal.) **Since benefits are much harder to quantify than costs, it is important to keep this a relative ranking, and not try to calculate actual benefit/cost ratios.**

If no geographically specific area for storage is required, then water management objectives may be the primary goal (other than maximizing Colorado River water use, which is a given).

If no geographically specific siting consideration exists, the process could involve:

- A) List the facilities that can meet regional objectives, indicating which water management objective(s) can be met by each
- B) Proceed with B) through E) above.

The Groundwater Division would be glad to meet with you to discuss these concepts at your convenience.

cc: Rita Pearson
Jimmy Jayne
Herb Dishlip
Sid Wilson
Jim Holway
Alejandro Barcenas
Phil Foster
Mark Frank
Dennis Kimberlin
Chuck Cahoy
Steve Rossi
Drew Swieczkowski

WATER BANK GOALS

OBJECTIVE

STORAGE SITING CONSIDERATIONS

CA-NV INTERSTATE BANKING
(Primarily from CA and NV funding)

Forbearance by CAP contractor

Sub-Contractor needs wet water during forbearance

Store in vicinity of contractor's recovery wells

Sub-Contractor can rely on own groundwater supplies during forbearance

Location of storage not important for recovery

INDIAN SETTLEMENTS
(Primarily from State GF)

Recharge facilities should be in locations that will benefit reservations hydrologically

Ag/Domestic / Industrial Use

Storage in vicinity of wells/wellfields

Habitat Restoration / Subsidence Mitigation

Storage in vicinity of riparian/environmental amenity or overdrafted area

Transferable Credits

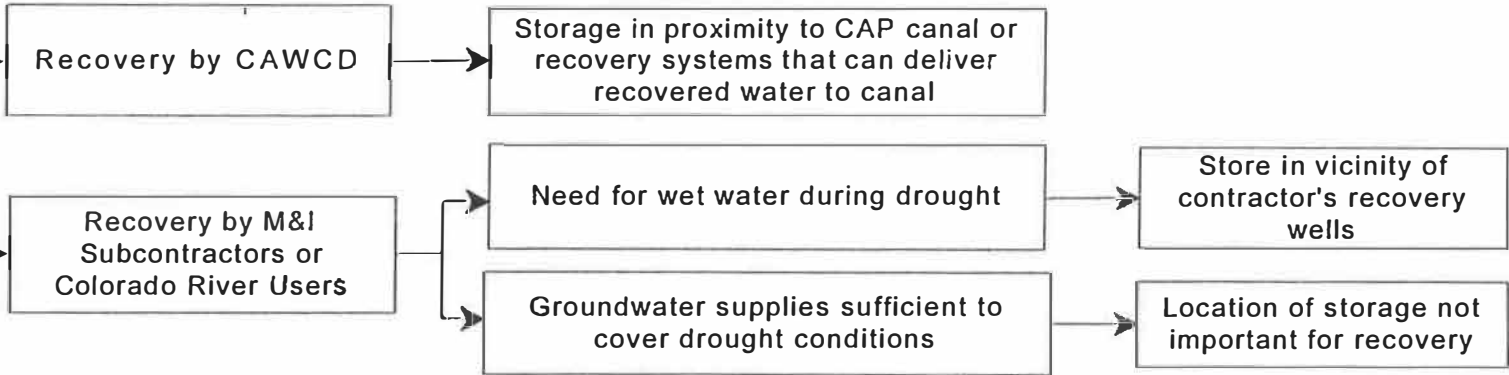
Storage location may not be important; recovery location needs to be sensitive to Indian concerns

WATER BANK GOALS

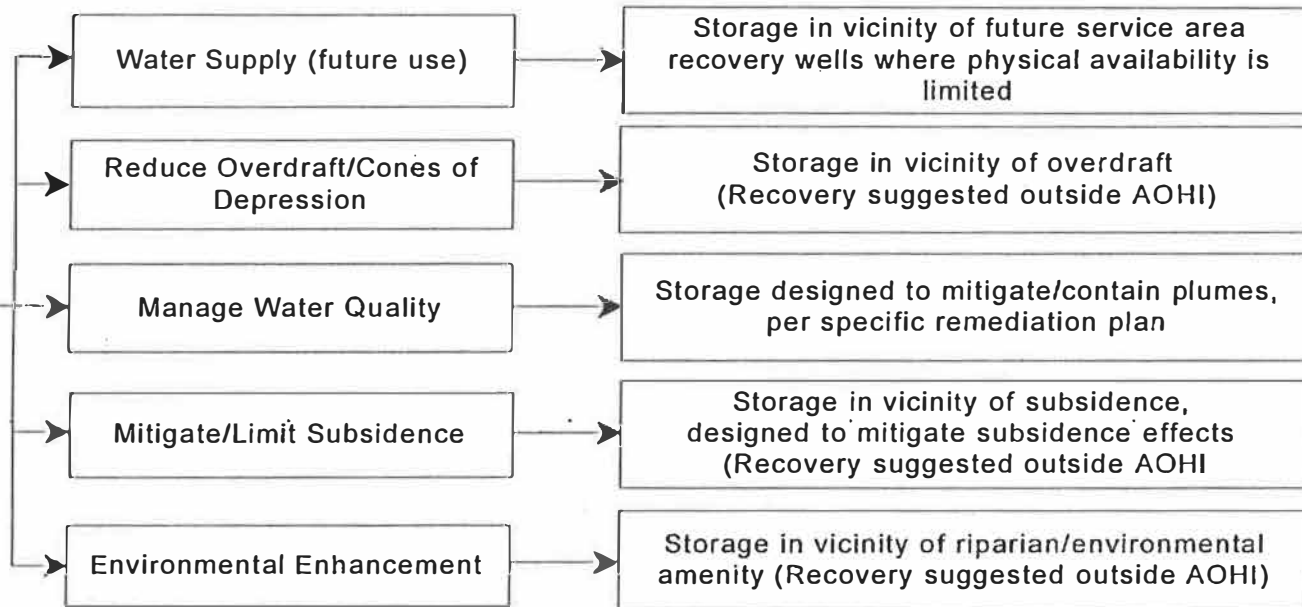
OBJECTIVE

STORAGE SITING CONSIDERATIONS

DROUGHT SUPPLY
(Primarily from \$.04 tax; credits go to CAWCD)



WATER MANAGEMENT
(Primarily from w/d fund)



ARIZONA WATER BANKING STUDY COMMISSION

Planning and Modeling Assumptions Subcommittee

Tuesday, April 15, 1997

9:00 a.m. - 11:00 a.m.

Arizona Department of Water Resources

500 North Third Street

Third Floor Conference Room B

Phoenix, Arizona

AGENDA

- I. Description of Colorado River System Simulation Model
- II. Description of Model Inputs-Water Supplies, Water Demands, Basic Model Operations and Base Case Assumptions
- III. Description of Model Outputs Reservoir Elevation, Probability of Surplus or Shortage
- IV. Summary of Key Variables and Discussion of Alternatives

Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting the Arizona Water Banking Authority Study Commission at (602) 417-2440 or (602) 417-2455 (TDD). Requests should be made as early as possible to allow time to arrange the accommodation.

ARIZONA WATER BANKING STUDY COMMISSION

Water Banking Benefits Outside of CAP Service Area

Wednesday, April 16, 1997

1:00 p.m. - 2:30 p.m.

Arizona Department of Water Resources

500 North Third Street

Third Floor Conference Room B

Phoenix, Arizona

AGENDA

- I. Organization of Subcommittee
- II. Identification of Issues
- III. Potential Role of AWBA in Meeting Future Needs
- IV. Identification of Data Needs
- V. Scheduling of Next Meeting
(Please bring calendars with you)

Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting the Arizona Water Banking Authority Study Commission at (602) 417-2440 or (602) 417-2455 (TDD). Requests should be made as early as possible to allow time to arrange the accommodation.

ARIZONA WATER BANKING STUDY COMMISSION

Interstate and Intrastate Banking and Marketing Issues

Thursday, April 24, 1997

10:00 a.m. - 12:00 p.m.

Arizona Department of Water Resources

500 North Third Street

Third Floor Conference Room B

Phoenix, Arizona

AGENDA

- I. Organization of Subcommittee
- II. Identification of Issues
- III. Identification of Data Needs
- IV. Status of Interstate Banking Regulations
- V. Scheduling of Next Meeting
(Please bring calendars with you)

Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting the Arizona Water Banking Authority Study Commission at (602) 417-2440 or (602) 417-2455 (TDD). Requests should be made as early as possible to allow time to arrange the accommodation.

Flow Chart of Rulemaking Process and Schedule for Regulations for Offstream Storage of Colorado River Water in the Lower Division States

	1997												1998																									
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug																		
	1	2	1	2	1	3	1	2	1	2	1	3	1	2	1	2	1	2	1	2	3	1	9	2	1	3	1	2	1	2	8	2	6	2	3	1		
1. Draft rule complete																																						
2. Regulatory info data & regulatory action alert forms complete																																						
3. Cost-benefit, reg. flex., & unfunded mandates analyses done																																						
4. Determination of Effects (DOE) completed																																						
5. Approval of DOE.																																						
6. Rulemaking package prepared for Department signing																																						
7. Internal review of draft rule (within Reclamation)																																						
8. External Federal review of draft rule (incl Solicitor's Office)																																						
9. Draft/final mini EA complete																																						
10. Assistant Secretary - Water and Science review																																						
11. Office of Regulatory Affairs review																																						
12. Office of Management and Budget review																																						
13. Publish date for proposed rule																																						
14. Proposed rule public comment period																																						
15. Review comments and prepare final rule for publication																																						
16. Final rulemaking package prepared for Department signing																																						
17. Internal review of final rule (within Reclamation)																																						
18. External Federal review of final rule (incl Solicitor's Office)																																						
19. Assistant Secretary - Water and Science review																																						
20. Office of Regulatory Affairs review																																						
21. Office of Management and Budget review																																						
22. Publish final review and submit for Congressional review																																						
23. Congressional review of rulemaking action																																						
24. Final rule effective																																						

Tentative Rulemaking Process and Schedule - Regulations for Offstream Storage of Colorado River Water in the Lower Colorado River Basin
 (Includes Sufficient Time to Complete a Mini Environmental Assessment ¹⁾)

<u>Step</u>	<u>Rulemaking Activity</u>	<u>Start</u>	<u>End</u>	<u>Elapsed Time Weeks</u> ²	
		<u>Date</u>	<u>Date</u>	<u>This Step</u>	<u>Total</u>
1	Development of draft rule. ³	01/14/97	04/04/97	11	12
2	Submittal of Regulatory Information Data Form and Regulatory Action Alert Form.	03/11/97	03/17/97	0	12 ⁴
3	Complete Cost/Benefit, Regulatory Flexibility, and Unfunded Mandates Analyses.	03/17/97	04/25/97	3	15
4	Completion of Determination of Effects.	03/10/97	04/25/97	0	15
5	Review and approval of Determination of Effects. ⁴	04/28/97	05/02/97	1	16
6	Preparation and submittal of rulemaking package for surnaming by Department.	05/05/97	05/09/97	1	17
7	Internal review of draft rule (within Reclamation).	05/12/97	05/30/97	3	20
8	External review of draft rule (Federal agencies outside Reclamation and Solicitor's Office).	06/02/97	06/20/97	3	23
9	Completion of draft/final mini environmental assessment. ⁵	01/14/97	07/01/97	0	23
10	Assistant Secretary - Water and Science review.	06/23/97	07/07/97	2	25
11	Office of Regulatory Affairs review.	07/08/97	07/28/97	3	28
12	Office of Management and Budget review. ⁶	07/28/97	09/26/97	9	37
13	Publish Date for proposed rule.	09/29/97	10/02/97	1	38
14	Public comment period for proposed rule.	10/02/97	12/01/97	9	47
15	Review of public comments and preparation of final rule for publication.	12/01/97	12/31/97	4	51
16	Preparation of final rulemaking package for surnaming by Department.	01/05/98	01/09/97	1	52
17	Internal review of final rule (within Reclamation).	01/12/97	01/30/97	3	55
18	External review of final rule (Federal agencies outside Reclamation and Solicitor's Office).	02/02/97	02/20/97	3	58
19	Assistant Secretary - Water and Science review.	02/23/98	03/13/98	3	61

¹ This schedule assumes minimal controversy and a mini EA in step 9.

² Review times of less than 30 days are business days; greater than 30 days are calendar days. Dates adjusted for holidays.

³ Assumes rule will continue to be modified as needed during various stages of review.

⁴ Cannot be submitted for approval until cost/benefit analysis, unfunded mandates, & regulatory flexibility analyses are completed.

⁵ Assumes 5 mo. to complete analysis and develop a draft mini EA; work was initiated in step 1. If environmental review shows need for more environmental compliance, the time to complete this rule could lengthen by 1 year for a full EA and 2 1/2 years for an EIS.

⁶ OMB may take 90 days to review a major or significant rule. This rulemaking action is considered significant because it raises novel legal or policy issues. An extra month for OMB review in Step 10 would extend the remaining steps by that much time.

20	Office of Regulatory Affairs review.	03/16/98	04/03/98	3	64
21	Office of Management and Budget review.	04/06/98	06/05/98	9	73
22	Final rule published and submitted to Congress for review.	06/08/98	06/12/98	1	74
23	Congressional review of rulemaking action.	06/12/98	08/11/98	9	83
24	Final rule becomes effective if Congress has taken no action to rescind it.	08/11/98	08/11/98	0	83

* Action item complete.