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**NOTICE AND FINAL AGENDA OF MEETING OF
THE ARIZONA WATER BANKING AUTHORITY COMMISSION**

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 Wednesday, **December 4, 2013 at 10:00 a.m.** at the Arizona Department of Water Resources, 3550 North Central Avenue, Phoenix, Arizona 85012, Upper Verde Conference Room. The meeting is open to the general public.

The agenda for the meeting is as follows:

- I. Welcome/Opening Remarks
- II. Approval of Minutes
 - October 16, 2013 meeting
- III. Water Banking Staff Activities
 - Monthly Deliveries
 - Update on recovery planning
 - Update on Indian firming discussions
- IV. Discussion and Approval of 2014 Annual Plan of Operation
 - Overview of public comment
 - Approval of 2014 Annual Plan of Operation
- V. Discussion and Approval of CY 2014 Water Delivery Budget
 - Overview of budget
 - Adoption of budget
- VI. Call to the public
- VII. Action Planning
 - Overview of action planning process
 - Facilitation on vision, current reality and commitments
 - Next Steps

Note: The AWBA Commission will recess for lunch at an appropriate time. No business of the AWBA will be discussed during the lunch recess.

Future Meeting Dates:

Wednesday, March 19, 2014
Wednesday, June 18, 2014
Wednesday, September 17, 2014
Wednesday, December 3, 2014

Dated this 3rd day of December, 2013

All visitors must use the south elevators; please stop at the 2nd floor to sign-in and receive a visitor's badge. Badges are to be displayed at all times. Visitors are also required to sign out and return their badges. Thank you for your assistance.

Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Michelle Moreno at 602-771-8530 or 602-771-8501 (TDD). Requests should be made as early as possible to allow time to arrange the accommodation.

I. Welcome/Opening Remarks

NOTES:

II. Approval of Minutes of Meeting

NOTES:

Move approval of October 16, 2012 AWBA meeting minutes

ACTION:

Approve minutes with any needed corrections.

ARIZONA WATER BANKING AUTHORITY
Draft Minutes

October 16, 2013
Arizona Department of Water Resources



AUTHORITY MEMBERS
Sandra Fabritz-Whitney, Chairman
Maureen R. George, Vice-Chairman
Clifford A. Neal, Secretary
Jim Hartdegen
John Mawhinney

EX OFFICIO MEMBERS
The Honorable Andy Tobin
The Honorable Gail Griffin

Welcome/Opening Remarks

Chairman Sandra Fabritz-Whitney welcomed attendees. All Authority members were present except for Jim Hartdegen and *ex-officio* members, Senator Gail Griffin and Speaker of the House Andy Tobin.

Approval of Minutes

Chairman Fabritz-Whitney requested a motion to approve the minutes of the September 4, 2013 regular quarterly meeting of the AWBA. Cliff Neal moved to approve the minutes. Maureen George provided the second to the motion, and the motion passed.

Water Banking Staff Activities

2014 Draft Plan of Operation. Virginia O'Connell, AWBA Manager, provided an update on the draft 2014 Plan of Operation. She informed Commission members that because of the government shut down, CAP does not have a final order from its federal customers. Still, the AWBA appears to be on target with the roughly 70,000 acre-feet of water identified in the preliminary draft Plan. She noted she is working with CAP staff to focus deliveries for the Phoenix AMA at the Agua Fria and Hieroglyphic Mountains Recharge Projects in the west valley and Superstition Mountains Recharge Project (SMRP) in the east valley. Deliveries are no longer scheduled for the Tonopah Desert Recharge Project as initially indicated. Commission members will be notified when the final delivery amounts become available.

Mr. Neal asked if the SMRP agreement between CAP and SRP leaves storage capacity available for the AWBA. Ms. O'Connell responded that there is storage capacity available for the AWBA in 2014. Mr. Mawhinney asked if the AWBA has sufficient financial resources to store additional water if it should become available. Ms. O'Connell responded that it was dependent on the AMA. There are funding resources and storage capacity available in the Phoenix AMA. In the Tucson AMA, there is some funding, but capacity is limited with additional storage capacity only available at the Lower Santa Cruz Recharge Project. In the Pinal AMA, there is capacity, but there are no funds available for additional storage.

Recovery Planning Update. Ms. O'Connell reminded Commission members that a draft of the first half of the recovery plan was provided at the last AWBA meeting in September. The draft was also provided to the Ad Hoc Recovery Planning Group for feedback. Several comments have been received. These comments and any additional comments will be reviewed for incorporation into the draft recovery plan. The Interagency Recovery Planning Group is continuing its work on the remaining sections of the recovery plan. While the second half of recovery plan has not been completed, the group has made considerable progress. She introduced Laura Grignano, CAP senior analyst, who gave a presentation on the recent updates to the plan, which

included an evaluation of the location of AWBA's existing long-term storage credits relative to future recovery needs (available on the AWBA's website). Based on credits accrued through 2012, some important points include:

- 70% of credits accrued for M&I firming are located in the Phoenix AMA and Phoenix AMA subcontractors hold 64% of the M&I CAP entitlement
- 20% of the credits accrued for M&I firming are located in the Tucson AMA and Tucson AMA subcontractors hold 33% of the M&I CAP entitlement
- 10% of the credits accrued for M&I firming are located in the Pinal AMA and Pinal AMA subcontractors hold 3% of the M&I CAP entitlement
- 73% of Interstate credits, 73% of shortage reparation credits, and 76% of general fund credits, including the 256,174 acre-feet reserved for the Mohave County Water Authority, are located in the Pinal AMA making this AMA the focus for recovery for these purposes
- 87% of credits accrued using withdrawal fees are located in the Pinal and Phoenix AMAs making these AMAs the focus of recovery for Indian firming absent any future general fund appropriations used for Indian firming

Ms. Grignano described two examples of how recovery could be distributed between AMAs. In both cases, the Pinal AMA would assume the majority of the recovery during the near and mid-term periods. In the long-term, the Pinal and Phoenix AMAs would share the majority (over 72,000 acre-feet) in the first example. In the second example, the Pinal AMA's share of recovery would be just over 63,000 acre-feet and the Phoenix AMA's share would be nearly 42,000 acre-feet. The Tucson AMA would assume 13,000 acre-feet of recovery in the first example and a little over 20,000 acre-feet in the second example.

Mr. Mawhinney expressed concern about the continued characterization of the AWBA meeting its M&I firming goal for the Tucson AMA given that projections indicate otherwise. He added that to suggest the withdrawal fee credits may be needed for this purpose instead of required is inappropriate. Mr. Neal asked how staff could refer to it any differently until the credits have been dedicated to that purpose. Mr. Mawhinney did not agree that the credits needed to be dedicated, only that it be recognized that they will be necessary.

Action Planning – Top Priority Items

Long-term storage credit purchase proposal. Ms. O'Connell informed AWBA Commission members that the long-term storage credit purchase proposal, approved at the September meeting, was submitted to the Governor's Office for review. Status updates will be provided to Commission members as they become available. She added that stakeholder comments to staff thus far have been supportive of the concept.

General Fund appropriation for Indian firming. Ms. O'Connell noted that at the September meeting, staff was also asked to prepare two papers. One paper describes various water management objectives that can be addressed using withdrawal fee credits. The second paper describes various options for using a general fund appropriation to meet Indian settlement obligations. Both papers are available on the AWBA's website. Ms. O'Connell summarized the first paper indicating the AWBA should have an estimated 820,000 acre-feet of withdrawal fee credits by the end of

2014. She described the various ways withdrawal fee credits could potentially be utilized to meet water management objectives beyond addressing M&I and Indian firming and added that there could also be other opportunities not yet realized. Some of the options identified may require a change in legislation.

Mr. Neal asked if the AWBA would be accruing a credit under option 3. f. that proposes the use of withdrawal fees to incentivize storage at GSFs by others. Ms. O'Connell responded saying the objective of that option is to decrease groundwater pumping at groundwater savings facilities (GSFs). The AWBA would not accrue credits, but would pay down the cost of others storing at the GSF. It is possible however that through further evaluation and discussion, this option could be developed in a way that may result in credits accrued by the AWBA.

Ms. O'Connell briefed Commission members on the second paper that provides specific options for how a general fund appropriation could be used for meeting the state's Indian settlement requirements. These options vary based on the availability of excess CAP water to the AWBA. Ms. O'Connell pointed out that under conditions where excess CAP water is available but limited, storing water for Indian firming purposes using general fund appropriations would reduce the amount of water stored for the AWBA's other obligations, potentially leaving monies available in the Water Banking Fund. Alternatively, if there is more water, a general fund appropriation would allow the AWBA to store that additional water, particularly in AMAs where money is limited. Assuming 2014 dollars, the options presented could produce anywhere from 5,700 to 90,000 acre-feet of credits assuming various levels of funding.

Mr. Neal asked given the AWBA's proposal to deliver the remaining 10,000 acre-feet of water for the Southside Replenishment Bank over the next two years (5,000 AF each year) due to the increased shortage risk in 2016, if withdrawal fees are used in 2014 to deliver the additional 4,000 acre-feet over the 1,000 acre-foot minimum, would the AWBA accrue fewer credits for water management objectives. Ms. O'Connell responded that this would be the case because the same funding source is needed to accomplish both purposes. She noted that because the AWBA had less water available for storage in 2013, there will be withdrawal fees available to pay for the additional 4,000 acre-feet of deliveries to the SSRB in 2014 while still storing an amount similar to 2013 for management purposes. For 2015, however, this will not be the case, since the withdrawal fees will have been fully expended in 2014. Delivering the additional 4,000 acre-feet of water to the Replenishment Bank in 2015 will mean that less water will be stored at the GSFs in the Pinal AMA that year.

Chairman Fabritz-Whitney inquired if withdrawal fees from the Phoenix AMA could be used to pay for the additional storage at the SSRB. Ms. O'Connell clarified that absent a legislative appropriation, only Pinal AMA withdrawal fees can be used for this purpose. Mr. Henley pointed out that once the AWBA has delivered 15,000 acre-feet to the Replenishment Bank the obligation will have been met. By delivering the remaining balance over the next two years, it will ensure the Bank has met its obligation in the event water is not available to the AWBA in 2016. Mr. Neal reiterated that the water the AWBA could otherwise have delivered to agriculture in 2014 will instead be delivered to the Gila River Indian Reservation for meeting the Replenishment Bank responsibilities.

Mr. Neal further inquired if general fund appropriations had previously been in the Indian reserve subaccount. Ms. O'Connell responded that \$12.4 of the \$13.5 million originally provided had been reappropriated by the legislature. Mr. Neal asked if such action was subsequently found to be unconstitutional. Ms. O'Connell replied no clarifying that it had been the finding regarding monies transferred from the interstate resource subaccount. General fund monies held in the Indian reserve subaccount would therefore still be at risk.

Mr. Mawhinney lauded the work product prepared by staff calling it innovative. Mr. Neal agreed and inquired about the next steps. Ms. O'Connell explained that the deadline for ADWR to submit its appropriation request to the Governor's Office is October 31st. For ADWR to include the request in its budget, the AWBA would need to know the amount and specifically what the money would be used for. Mr. Neal commented that from his perspective, the only item on the list that appears ripe for an appropriation request is the Replenishment Bank obligation.

Mr. Mawhinney offered that perhaps requesting money without a specific purpose would not be as problematic if the appropriation was requested in such a form that it remained directly in the control of the Legislature until the opportunity to spend it presented itself. He suggested the Joint Legislative Budget Committee (JLBC) could be given the authority to release the funds. While this would not be a direct appropriation, there would be an opportunity to use the funds when the time was right. The Legislature might find such a concept more attractive. The question would be what would trigger the release of the funds. Chairman Fabritz-Whitney responded saying she had not considered the JLBC holding the monies in an account. The first step however, is that the Executive branch must still agree to an appropriation.

Chairman Fabritz-Whitney reiterated her concerns. First, the request must be very specific and second there must be water. She explained that she is not comfortable asking for an appropriation to purchase water when there is no water available. Mr. Mawhinney suggested a worse situation would be for water to become available and to not have money available. Chairman Fabritz-Whitney suggested different monies are available including 4¢ tax monies and withdrawal fees, especially in the Phoenix and Tucson AMAs. Ms. George expressed concerns about putting monies in a fund controlled by the JLBC, noting the money would be at too much risk. Chairman Fabritz-Whitney asked if Mr. Mawhinney's suggestion would require a change in statute. Mr. Mawhinney commented that the idea was conceptual and that such details would need to be worked out. He reminded Authority members that the Tucson AMA is still far from reaching its M&I firming goals. Getting an appropriation for the Replenishment Bank would make withdrawal fees directly available for M&I firming. He continued indicating that Indian firming is an obligation the Legislature knowingly accepted and for which it had even provided an initial appropriation, which was then taken back. The objective is to remind the Legislature of this obligation. Chairman Fabritz-Whitney reminded the members that the AWBA has sufficient withdrawal fee credits to meet its Indian firming obligations today. Mr. Mawhinney had questions regarding the potential for more settlement obligations. Mr. Henley provided a brief update on the status of various settlements and indicated that no discussions are pointing toward additional obligation.

Mr. Neal suggested the AWBA request an appropriation for an amount sufficient to make the additional deliveries to the Southside Replenishment Bank for 2014 and to direct staff to work with the GRIC on developing the other options identified in the paper, particularly those involving non-traditional storage. A separate request for appropriation could perhaps be made the following year. Ms. George supported Mr. Neal's suggestions and also agreed with Mr. Mawhinney that the State took on the Indian firming obligation and should be held accountable. Ms. O'Connell informed Commission members that the total cost to fulfill the Replenishment Bank obligation is \$1.7 million. The amount needed to pay for 4,000 acre-feet in 2014 is \$664,000.

Mr. Neal made a motion that the AWBA request an appropriation for \$664,000 to pay for the additional 4,000 acre-feet of water deliveries to the Southside Replenishment Bank in 2014 as identified in the current draft Plan of Operation and to reserve the option to request a general fund appropriation to pay for an additional 4,000 acre-feet of deliveries to the Replenishment Bank in 2015, subject to hydrologic conditions at that time, and further, to direct staff to develop an Indian firming proposal with the GRIC and the WMAT that explores the use of non-traditional storage. Ms. George provided the second to the motion. The AWBA Commission voted 3-1 in favor with Chairman Fabritz-Whitney voting nay expressing concerns that an artificial deadline was being created for the Replenishment Bank obligation, which is not to fulfill the obligation by 2015, but rather to deliver 1,000 acre-feet each year over the next ten years.

Mr. Mawhinney asked that the AWBA hold discussions about any future appropriation requests in June or July instead of October as it did this year. Chairman Fabritz-Whitney acknowledged Mr. Mawhinney's request.

Call to the Public

Eric Braun, City of Mesa, clarified that while the City of Mesa had been identified in the paper on Options for Using a General Fund Appropriation to meet Indian Settlement Obligations, the reference in no way indicates support or lack of support for this particular option or any option described in the paper. Chairman Fabritz-Whitney thanked him for his comment and announced a break for lunch, noting the meeting would resume no later than noon.

Action Planning – Environmental Scan

Chairman Fabritz-Whitney called the meeting back into order. She explained the AWBA was going through an action planning process and that the first step in the process involved conducting an environmental scan. She introduced Terri Sue Rossi, AWBA Technical Administrator, indicating that Ms. Rossi was providing her facilitation services to the group.

Ms. Rossi explained the overall action planning process to the group indicating there were four steps:

1. Environmental scan
2. Vision and commitments
3. Stakeholder feedback
4. AWBA final decision

She then led the group in a facilitated activity (results are posted on the AWBA's

website under Reports/Other). Some implications of the environmental scan include:

- Diminishing resources: water and money
- Increasing competition for water and money
- Possibility of near term shortage
- Possibility of falling below 1025'
- Need to make tough decisions on priorities
- External pressures
- Potential for major changes in Colorado River operations
- Celebrate success of AWBA and others in accomplishing what has been done
- Only the storage part of the program has been done; there's still recovery
- Lack of political will and understanding
- Uncertainty
- Understand complexity of issues relative to staffing decisions
- Need for education
- Energy water nexus
- Sell/trade credits for strategic reasons

Chairman Fabritz-Whitney left the meeting at 1:00 p.m. Vice-Chairman Maureen George assumed the responsibilities of the Chair at that time.

The second step of the action planning process, vision and commitments, will be addressed at the next AWBA meeting scheduled for December 4th.

The meeting adjourned at 1:30 p.m.

III. Water Bank Staff Activities

NOTES: (No action required, agenda item for discussion only)

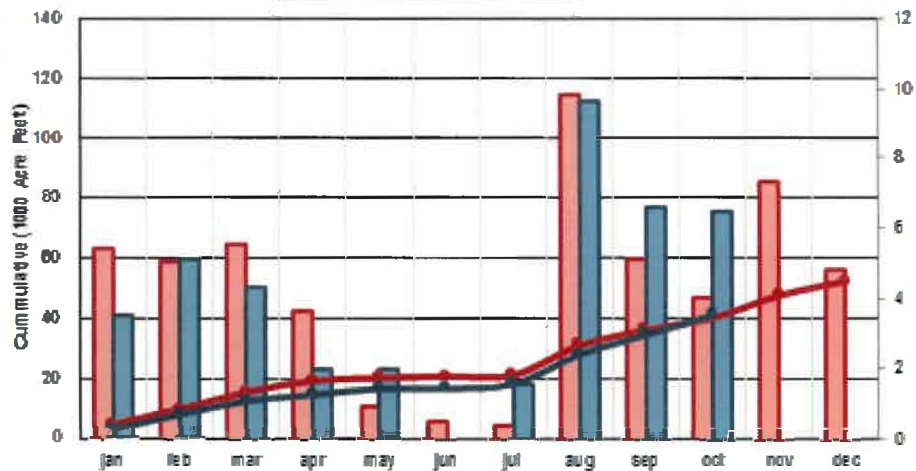
Call on **Virginia O'Connell** to update members on:

- Monthly deliveries
- Update on recovery planning
- Update on Indian firming discussions

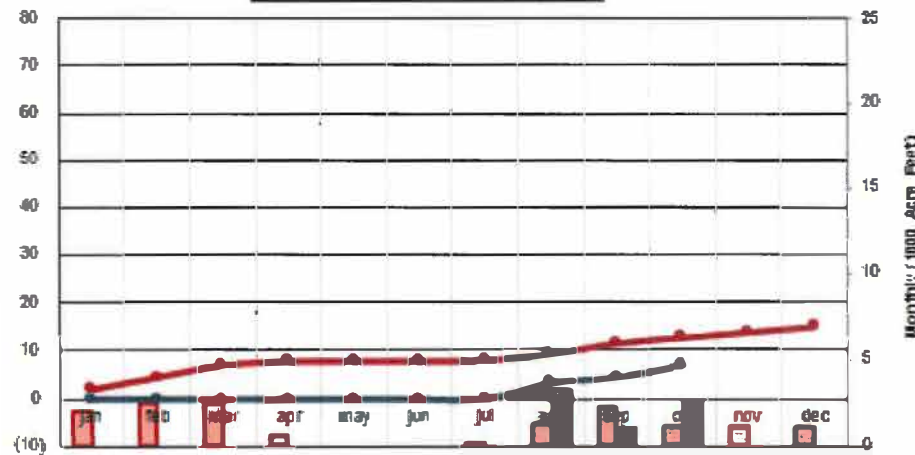
ACTION: None

2013 Plan of Operation - INTRASTATE

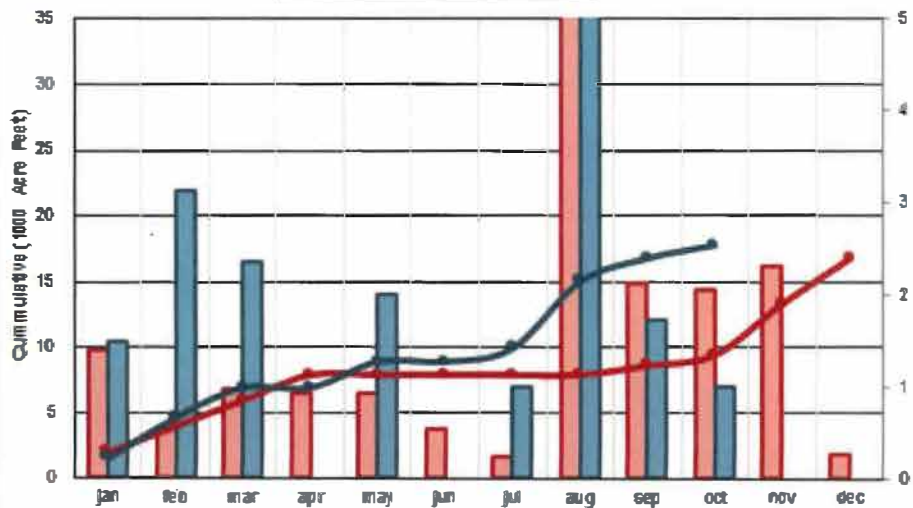
DELIVERIES - ALL AMAs
Planned vs. Actual



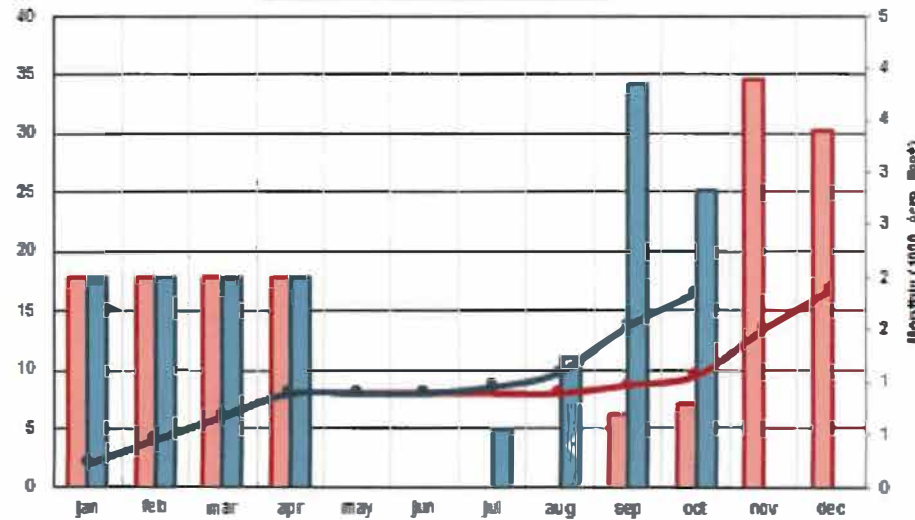
DELIVERIES - PHOENIX AMA
Planned vs. Actual



DELIVERIES - PINAL AMA
Planned vs. Actual



DELIVERIES - TUCSON AMA
Planned vs. Actual



■ PLANNED (MONTHLY)
 ■ ACTUAL (MONTHLY)
 — PLANNED (CUM)
 — ACTUAL (CUM)

Actual deliveries updated
Plan of Operation

22-Nov-13
7-Dec-11

	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	total
Phoenix AMA													
TONOPAH DESERT	0	0	0	0	0	0	0	0	0	0	0	0	0
	2,000	2,000	2,030	0	0	0	0	0	0	0	0	0	6,030
AGUA FRIA	0	0	0	0	0	0	0	3,034	0	1,269	0	0	4,303
	0	0	0	0	0	0	0	0	0	0	0	0	0
MCID	0	0	0	0	0	0	0	0	0	448	0	0	448
	0	0	0	0	0	0	175	1,343	2,285	1,142	1,143	1,142	7,230
SUPERSTITION MTNE	0	0	0	0	0	0	0	300	1,000	907	0	0	2,207
	0	500	500	702	0	0	0	0	0	0	0	0	1,702
Subtotal	0	0	0	0	0	0	0	3,334	1,000	2,624	0	0	6,958
Total to date	0	0	0	0	0	0	0	3,334	4,334	6,958	6,958	6,958	6,958
Projected total to date	2,000	2,500	2,530	702	0	0	175	1,343	2,285	1,142	1,143	1,142	14,562

Pinal AMA

CAIDD	0	0	0	0	0	0	0	2,868	1,732	0	0	0	4,600
	0	0	0	0	0	0	0	6,600	0	0	0	0	6,600
MSIDD	510	3,140	2,350	0	600	0	0	0	0	0	0	0	6,600
	0	0	0	0	0	0	0	1,650	1,650	1,650	1,650	0	6,600
HIDD	0	0	0	0	1,400	0	1,000	2,200	0	1,000	0	0	5,600
	408	536	389	335	335	536	247	218	472	400	670	254	6,600
Southside Bank	1,000	0	0	0	0	0	0	0	0	0	0	0	1,000
	1,000	0	0	0	0	0	0	0	0	0	0	0	1,000
Subtotal	1,510	3,140	2,350	0	2,000	0	1,000	5,068	1,732	1,000	0	0	17,800
Total to date	1,510	4,650	7,000	7,000	9,000	9,000	10,000	15,068	16,800	17,800	17,800	17,800	17,800
Projected total to date	1,408	536	389	335	335	536	247	8,468	2,122	2,050	2,320	254	20,800

Tucson AMA

AVRA VALLEY	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	183	700	883
CAVSARP	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
SAVSARP	2,000	2,000	2,000	2,000	0	0	0	0	0	0	0	0	8,000
	2,000	2,000	2,000	2,000	0	0	0	0	0	0	2,000	1,301	11,301
LOWER SANTA CRUZ	0	0	0	0	0	0	0	201	2,696	2,322	0	0	5,219
	0	0	0	0	0	0	0	0	0	0	0	0	0
PIMA MINE ROAD	0	0	0	0	0	0	0	0	800	500	0	0	1,300
	0	0	0	0	0	0	0	0	700	300	1,700	800	4,000
CMID	0	0	0	0	0	0	551	1,041	361	0	0	0	1,953
	0	0	0	0	0	0	0	0	0	0	0	0	0
BKW FARMS	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
KAI FARMS - Red Roc	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2,000	2,000	2,000	2,000	0	0	551	1,242	3,857	2,822	0	0	16,472
Total to date	2,000	4,000	6,000	8,000	8,000	8,000	8,551	9,793	13,650	16,472	16,472	16,472	16,472
Projected total to date	2,000	2,000	2,000	2,000	0	0	0	0	700	300	3,983	3,401	16,794

TOTAL	3,510	5,140	4,350	2,000	2,000	0	1,551	9,644	6,589	6,446	0	0	41,230
Total to date	3,510	8,650	13,000	15,000	17,000	17,000	18,551	28,195	34,784	41,230	41,230	41,230	41,230
Projected total to date	5,408	5,036	5,519	3,637	335	536	422	9,811	5,107	3,982	7,346	4,797	52,546

IV. Discussion and Approval of 2014 Annual Plan of Operation

NOTES: (Action required)

Call on **Virginia O'Connell** to provide an overview of the 2014 Annual Plan of Operation. (Powerpoint presentation)

ACTION:

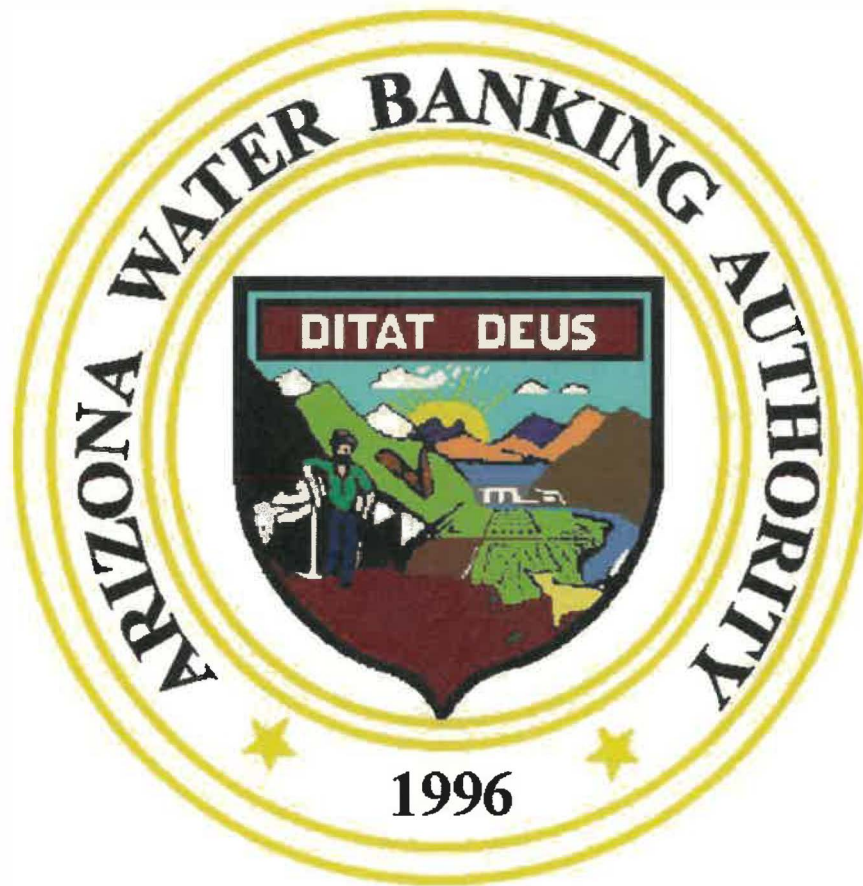
Move adoption of the Water Banking Authority 2014 Annual Plan of Operation as submitted with minor or technical changes

FINAL DRAFT

ARIZONA WATER BANKING AUTHORITY

ANNUAL PLAN OF OPERATION

2014



Sandra A. Fabritz-Whitney, Chairman

December 2013

The Arizona Water Banking Authority

Summary

The Arizona Water Banking Authority (AWBA) was created in 1996 to store the unused portion of Arizona's annual entitlement of Colorado River water. This water is delivered through the Central Arizona Project (CAP) aqueduct as excess CAP water and stored by the AWBA in the aquifers of central and southern Arizona. By storing this water, the AWBA accrues long-term storage credits that can be recovered in the future to provide back-up (firmed) supplies during shortages or to make water available pursuant to interstate banking contracts. Credits can also be extinguished to manage groundwater supplies and improve aquifer health. By storing this water, the AWBA not only assists the state in utilizing its full 2.8 million acre-feet entitlement but also secures a dependable water supply necessary to ensure the state's long-term prosperity.

From inception through 2013, over 4.1 million acre-feet (MAF) of excess CAP water has been delivered for AWBA storage. The cost to deliver and store this water totaled approximately \$315 million and represents 3.5 MAF for Arizona uses (\$206 million) and 594,000 acre-feet in support of interstate banking with Nevada (\$109 million). Additionally, 5,000 acre-feet of water has been delivered directly to the Gila River Indian Community at a cost of \$614,000 for establishing the Southside Replenishment Bank, a state requirement under the Arizona Water Settlements Act.

The money that funds the AWBA comes from three primary sources: general fund appropriations received at the discretion of the legislature, groundwater withdrawal fees collected in the Phoenix, Pinal, and Tucson Active Management Areas (AMA), and *ad valorem* property taxes of up to four cents per \$100 of assessed valuation levied and collected by the Central Arizona Water Conservation District (CAWCD) within its service area. The availability of these funds for AWBA use varies both on an annual basis and by the amounts collected within each AMA/County. There are also restrictions on the ways the AWBA may utilize these revenues for meeting its firming goals and obligations. Interstate banking costs for Nevada, the AWBA's only interstate partner at this time, are paid for by Nevada at the time storage occurs.

The amount of excess CAP water available to the AWBA and other lower priority users has decreased substantially the last few years because of an increase in demand from higher priority M&I and Indian CAP water users. This reduction has been directly reflected in the amount of water available to the excess pool created by CAWCD for use by the AWBA, CAGR, and the federal government. For 2014, the volume available for this pool is roughly 84,400 acre-feet. The portion that is available for use by the AWBA is 64,753 acre-feet. Of this amount, the AWBA will store 59,753 acre-feet of water at a cost of \$10.4 million and directly deliver 5,000 acre-feet of water for the Southside Replenishment Bank at a cost of \$830,000. There is no interstate storage planned for 2014.

The objective of the 2014 Plan of Operation is to utilize limited resources in a way that balances the need to make progress on M&I firming goals, such as for the Tucson AMA, with the AWBA's Indian settlement responsibilities and water management objectives.

FINAL DRAFT
INTRODUCTION

The AWBA was created to store Arizona's unused Colorado River water entitlement in central and southern Arizona to develop long-term storage credits to: (1) firm existing water supplies for Colorado River and CAP M&I water users during Colorado River shortages or CAP service interruptions; (2) help meet the water management objectives of the Groundwater Code; (3) meet the State's obligations in the settlement of Indian water rights claims; and (4) assist Nevada and California through interstate banking. 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 of water is accomplished through the Underground Water Storage, Savings and Replenishment Act enacted by the Arizona legislature in 1994 and administered by the Arizona Department of Water Resources (ADWR). Through this program, the AWBA stores unused renewable water supplies 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 (direct storage), while a GSF is a facility where the water is used in lieu of groundwater, creating a groundwater savings (indirect storage). The program mandates the accounting of the water stored and the development of long-term storage (LTS) credits. The LTS credits developed will then be distributed by the AWBA when future conditions warrant. The use of LTS credits for the first three objectives listed is dependent on the source of funds utilized to develop the credits.

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. A draft of the Plan was presented at meetings of the Groundwater Users Advisory Councils (GUAC) for the Phoenix, Pinal and Tucson AMAs. 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 makes the Plan available on its web page and 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 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 be addressed by staff and reported to the AWBA members on an as-needed basis.

FINAL DRAFT
2013 PLAN OF OPERATION

The AWBA had approximately 60,700 acre-feet of Colorado River water available for use in 2013. Arizona is forecast to use its full entitlement of 2.8 MAF (see Figure 1).

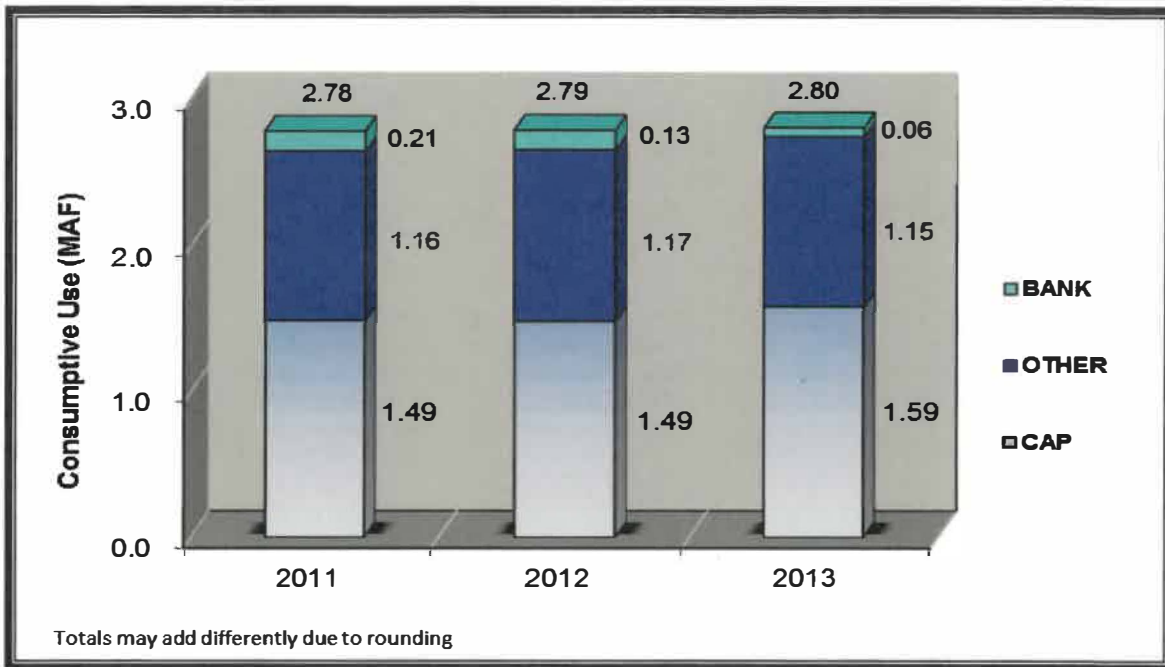


Figure 1. Recent Comparison of Colorado River Water Uses by Arizona

Forecasted direct use of Colorado River water in the Lower Basin is 7.46 MAF in 2013 as of November 22, 2013 (see Figure 2).

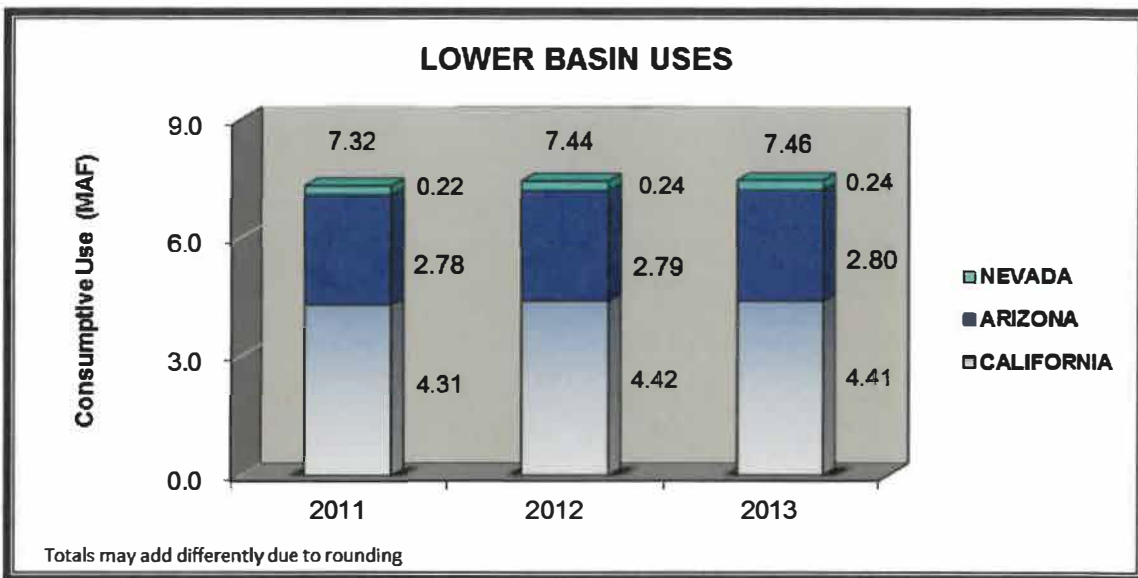


Figure 2. Recent Comparison of Lower Basin Uses of Colorado River Water

FINAL DRAFT

The AWBA recharged 59,701 acre-feet of water at both USFs and GSFs in 2013. Table 1a lists the AWBA's recharge partners for 2013, the amount of water that can be stored under each of the AWBA's water storage permits, and the amount of water delivered to the facility for the AWBA in 2013. The amount of water delivered to a facility is always greater than the amount of long-term storage credits accrued by the AWBA because credits are computed by subtracting approximately 1% to 3% for losses and 5% for a "cut to the aquifer" from the total annual deliveries. Final figures for credits accrued generally become available in the middle of the following year after review of the annual reports filed with the ADWR. These numbers are reported in the AWBA's Annual Report.

Table 1a. Recharge Partners and Water Storage Deliveries for 2013

AMA	Facility	Type	Permit Capacity (acre-feet)	Delivered* (acre-feet)		
				Intrastate	Interstate	
PHOENIX AMA	Tonopah Desert	USF	150,000	0	0	
	Agua Fria	USF	100,000	8,178	0	
	Hieroglyphic Mtns.	USF	35,000	1,000	0	
	Superstition Mtns.	USF	25,000	4,509	0	
	Queen Creek ID	GSF	28,000	2,930	0	
	Intrastate/Interstate AMA Subtotal				16,617	0
	Phoenix AMA Subtotal				16,617	
PINAL AMA	Central Arizona IDD	GSF	110,000	6,600	0	
	Hohokam IDD	GSF	55,000	6,600	0	
	Maricopa-Stanfield IDD	GSF	120,000	6,600	0	
	Intrastate/Interstate AMA Subtotal				19,800	0
	Pinal AMA Subtotal				19,800	
TUCSON AMA	Avra Valley	USF	11,000	0	0	
	Lower Santa Cruz	USF	50,000	6,047	0	
	SAVSARP	USF	60,000	13,284	0	
	Pima Mine Road	USF	30,000	2,000	0	
	Cortaro-Marana ID	GSF	20,000	1,953	0	
	Intrastate/Interstate AMA Subtotal				23,284	0
	Tucson AMA Subtotal				23,284	
TOTAL INTRASTATE & INTERSTATE DELIVERIES					0	
TOTAL RECHARGE DELIVERIES				59,701		

* November and December deliveries estimated

In addition to recharge deliveries, the AWBA also delivered water to meet the requirements of the Gila River Indian Community Water Settlement Program (Settlement Program). In 2009, the AWBA entered into an intergovernmental agreement (IGA) with the Gila River Indian Community that identifies the procedure for delivering water for meeting a replenishment obligation and for establishing the Southside Replenishment Bank identified in the Settlement Program. While these deliveries do not accrue long-term storage credits that may be recovered in the future, the Replenishment Bank receives a credit for each acre-foot of water delivered. The Replenishment Bank can be used as an option for offsetting any replenishment obligations created as a result of pumping limitations identified in the Arizona Water Settlements Act (Settlements Act) for the Southside Protection Zones. Table 1b identifies the amount of water the AWBA delivered to the Replenishment Bank since 2009. There was no replenishment obligation in 2013.

Table 1b. Replenishment Deliveries

Southside Replenishment Activities	2013 Deliveries (acre-feet)	Cumulative Deliveries (acre-feet)
Replenishment Obligations	0	0
Replenishment Bank	1,000	5,000
TOTAL DIRECT DELIVERIES	1,000	5,000

The 2013 Plan identified 51,546 acre-feet of scheduled water deliveries for recharge purposes. Additional water became available to the AWBA during the year from CAP customers that had turned back water. As a result, the AWBA recharged an estimated 59,701 acre-feet of water. Figure 3 identifies the storage breakdown between GSFs and USFs for 2013 and provides a comparison between 2013 and the two previous years.

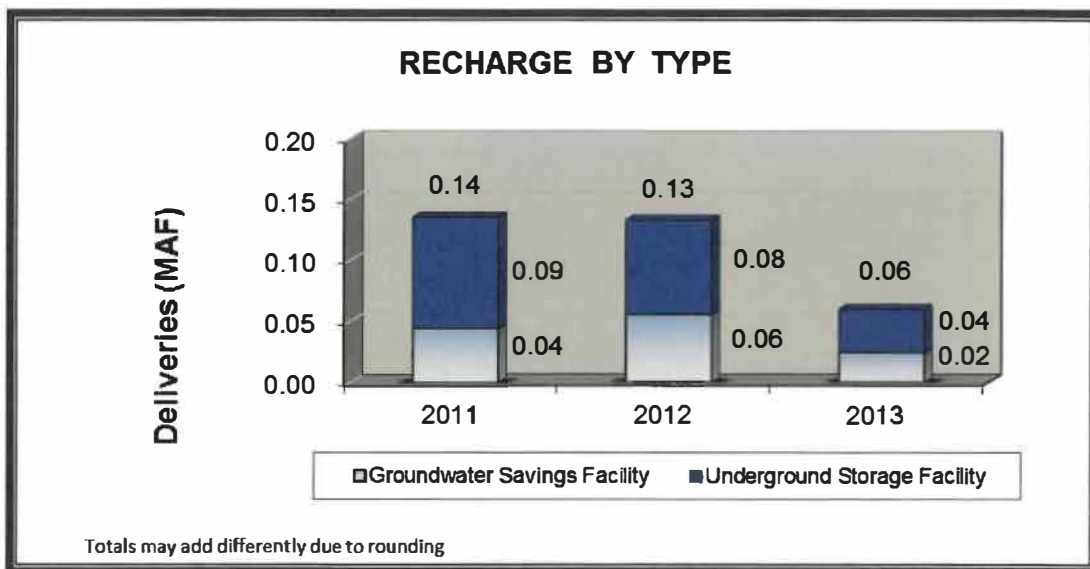


Figure 3. Recent Comparison of Annual Deliveries to GSFs and USFs

FINAL DRAFT
2014 PLAN OF OPERATION

The AWBA is scheduled to recharge 59,753 acre-feet of intrastate water in 2014. Water storage will be occurring in facilities in all three counties. The AWBA will also deliver 5,000 acre-feet of water for the Southside Replenishment Bank. The AWBA's total deliveries for 2014 will be approximately 64,753 acre-feet. The AWBA is not planning any interstate storage.

When developing its Plan of Operation, the AWBA evaluates four critical factors: (1) the amount of water available to the AWBA for delivery; (2) the CAP canal capacity available to the AWBA for the delivery of water; (3) the funds available and the costs required to deliver the 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. The amount of water available to the AWBA for 2014 is the limiting factor for 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 to the AWBA for delivery under the existing pool structure.

The proposed Annual Operating Plan (AOP) for water year 2014 distributed by the Bureau of Reclamation (Reclamation) stated that the Intentionally Created Surplus (ICS) Condition is the criterion that will govern the release of water for the states in the Lower Basin during calendar year 2014. Because Arizona is not creating or requesting ICS, the State will operate under normal conditions, which allows 2.8 MAF of water available for use within Arizona. Arizona's on-river use is forecast to be 1.2 MAF, leaving approximately 1.6 MAF available for diversion by CAP.

For 2014, the AWBA will purchase water from the Excess CAP water pool that is available for use by the AWBA and CAGRDR. The CAGRDR uses this pool to create its replenishment reserve and has an equal priority to the AWBA when using it for that purpose. The Federal government may also order water from this pool for meeting its Indian firming obligations. The CAWCD Board of Directors (Board) establishes the volume available in this pool annually. Because of continuing demand from higher priority users, the quantity available in this pool for 2014 is 84,408 acre-feet.

Subtracting the projected uses for the CAGRDR replenishment reserve (8,274 acre-feet) and Reclamation (11,381 acre-feet), leaves a remaining balance of 64,753 acre-feet for the AWBA. Water availability is the primary limiting factor in developing the 2014 Plan.

FINAL DRAFT

II. CAP System Capacity

CAP system capacity is approximately 1.8 MAF. Under normal operating conditions, CAP diverts approximately 1.6 MAF of water. Reclamation estimates that this amount will be available for delivery by CAP in 2014. This amount includes the volume of water to be delivered for the AWBA. Because there is still capacity available in the CAP aqueduct to deliver additional supplies, capacity within the CAP for the delivery of AWBA water is not a limiting factor in this Plan.

III. Available Funds

The AWBA will have withdrawal fees collected in 2014 and some funds carried over from the Phoenix and Pinal AMAs from 2013 available for use in this Plan. Total withdrawal fees are estimated at \$5.5 million and include \$2.7 million for the Phoenix AMA, \$2.4 million for the Pinal AMA and \$400,000 for the Tucson AMA.

As in previous years, the CAWCD Board resolved to retain the *ad valorem* property taxes collected in its three-county service area and not transfer those revenues to the AWBA Fund. Property tax revenues retained by CAWCD can be used to offset the cost of AWBA water deliveries in CAWCD's service area. Estimated funds available from CAWCD for the 2014 Plan are: Maricopa County (\$12.8 million), Pinal County (\$800,000), and Pima County (\$3.1 million).

Funding was not a limiting factor in developing the Plan given the amount of water that is available for AWBA use. If additional water becomes available, funding could limit the amount of water that can be stored in the Pinal AMA. The amount of funds collected in both the Pinal and Tucson AMAs is expected to be a limiting factor in these areas in the future.

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 from facility operators in all three AMAs in partnering with the AWBA. If additional supplies become available, the AWBA still has sufficient capacity to meet its anticipated needs. Storage capacity is therefore not a limiting factor for this Plan.

The Water Delivery Schedule (Table 2) identifies the AWBA's partners for 2014 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, which are based on the maximum permitted storage amounts of the facilities. The actual storage capacities available to the AWBA do not typically equal the AWBA's permitted volume because the storage facility operators may have agreements with other storage partners. In addition to recharge deliveries, Table 2 also identifies the amount of water scheduled for meeting the AWBA's Southside Replenishment obligations.

FINAL DRAFT
SHORTAGE REPARATION FUNDS

The Southern Nevada Water Authority (SNWA) agreed to provide \$8 million to the AWBA to assist Arizona in offsetting impacts from shortages pursuant to the Arizona-Nevada Shortage-Sharing Agreement. A total of \$4.5 million of these funds have been expended since the agreement was executed 2008. The AWBA will expend an additional \$1.5 million to store water in the Tucson AMA in 2014.

NEW FACILITIES

There are no new recharge facilities identified in the 2014 Plan.

**Table 2
Water Delivery Schedule (Acre-Feet)
Calendar Year 2014**

AWBA-Recharge Sites		Permitted Capacity (AF)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
PHOENIX AMA :															
USF	HIEROGLYPHIC MTN	35,000	500	500	500	500	0	0	0	0	0	0	0	0	2,000
	AGUA FRIA	100,000	500	500	500	500	1,500	647	0	0	0	0	0	0	4,147
	TONOPAHO DESERT	150,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	SUPERSTITION MTNS	35,000	1,000	1,000	1,000	1,500	0	0	0	0	0	0	0	0	4,500
															10,647
GSF	NEW MAGMA	54,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	QUEEN CREEK	28,000	0	0	0	0	0	0	0	1,230	2,000	1,000	1,000	0	5,230
	TONOPAHO ID	15,000	0	0	0	0	0	0	0	0	0	0	0	0	0
															5,230
AMA TOTAL INTRASTATE			2,000	2,000	2,000	2,500	1,500	647	0	1,230	2,000	1,000	1,000	0	15,877
PINAL AMA :															
GSF	CAIDD	110,000	0	0	3,000	2,000	700	0	0	0	0	0	0	0	5,700
	HOHOKAM	55,000	0	0	0	0	0	2,000	2,000	1,700	0	0	0	0	5,700
	MSIDD	120,000	400	500	900	900	900	500	200	200	400	400	300	100	5,700
															17,100
AMA TOTAL INTRASTATE			400	500	3,900	2,900	1,600	2,500	2,200	1,900	400	400	300	100	17,100
TUCSON AMA:															
USF	AVRA VALLEY	11,000	0	0	0	0	0	0	0	0	0	0	300	700	1,000
	LOWER SANTA CRUZ	50,000	1,000	1,000	1,000	0	0	0	0	0	1,000	1,000	1,500	0	6,500
	PIMA MINE ROAD	30,000	0	0	0	0	0	0	0	0	0	1,000	500	544	2,044
	CAVSARP	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	SAVSARP	60,000	2,000	2,000	2,000	2,000	0	0	0	0	1,000	1,000	2,000	2,000	14,000
															23,544
GSF	CORTARO-MARANA ID	20,000	0	0	0	0	482	1,000	1,000	750	0	0	0	0	3,232
	KAI FARMS (Red Rock)	11,231	0	0	0	0	0	0	0	0	0	0	0	0	0
	BKW Farms	14,316	0	0	0	0	0	0	0	0	0	0	0	0	0
															3,232
AMA TOTAL INTRASTATE			3,000	3,000	3,000	2,000	482	1,000	1,000	750	2,000	3,000	4,300	3,244	26,776
TOTAL INTRASTATE			5,400	5,500	8,900	7,400	3,582	4,147	3,200	3,880	4,400	4,400	5,600	3,344	59,753
TOTAL INTERSTATE			0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECHARGE			5,400	5,500	8,900	7,400	3,582	4,147	3,200	3,880	4,400	4,400	5,600	3,344	59,753
DIRECT DELMERY (Non-Storage):															
	Southside Replenishment Bank		0	5,000	0	0	0	0	0	0	0	0	0	0	5,000
	Southside Replenishment Obligation		0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL DIRECT		0	5,000	0	0	0	0	0	0	0	0	0	0	5,000
TOTAL DELIVERIES			5,400	10,500	8,900	7,400	3,582	4,147	3,200	3,880	4,400	4,400	5,600	3,344	64,753

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INDIAN SETTLEMENTS

The Plan does not specifically identify storage to meet the State's firming obligations under the Settlements Act; however it does incorporate replenishment deliveries required under the Gila River Indian Community (GRIC) Settlement Program.

Indian Firming

CAP supplies will not be shorted in 2014. There are also no long term system outages anticipated that would reduce deliveries to CAP customers. Therefore, there is no obligation for the AWBA to firm Indian supplies under this Plan.

The Settlements Act recognizes three categories where the State has firming responsibilities. The first two obligations pertain to firming of water for the GRIC and other Arizona tribes in times of shortage for a 100-year period; the third obligation pertains to providing assistance to the Secretary of the Interior (Secretary) in carrying out obligations of the Southern Arizona Water Rights Settlement Act.

1. GRIC - The AWBA must ensure that up to 15,000 acre-feet per year of CAP NIA priority water be made available to the GRIC during shortages. The AWBA did not receive a general fund appropriation for 2014 to assist in meeting this obligation. Withdrawal fees may be utilized for Indian firming purposes after appropriated funds are expended. The 2014 Plan does not identify expenditures specifically for this purpose. However, credits accrued through the use of withdrawal fees could be used to meet this obligation if necessary.
2. Other Tribes - The AWBA is also required to firm up to 8,724 acre-feet per year of CAP NIA priority water for other Indian Settlements. The White Mountain Apache Tribe has entered into a settlement which requires the AWBA to firm 3,750 acre feet per year of the 8,724 acre-feet CAP NIA priority water. As with the GRIC obligation, no general fund appropriations were made available for this purpose. However, credits developed under this plan using withdrawal fees could be used for this purpose if needed. Settlements for other Indian Tribes have not been enacted at this time.
3. Federal Assistance - The AWBA has completed the State obligation to contribute \$3 million in cash or in-kind services to assist the Secretary in meeting the Federal obligation to the Tohono O'odham Nation. This obligation was met by accruing an equivalent amount of LTS credits that will be distributed to the Secretary during shortages.

Southside Replenishment Bank

In addition to the firming requirements of the Settlements Act, the AWBA is required to deliver 15,000 acre-feet of water to the GRIC for the purpose of establishing the Southside Replenishment Bank. The Replenishment Bank will fulfill the obligations created under the Settlements Act for protection of the Reservation from off-reservation groundwater pumping. The AWBA must deliver a minimum of 1,000 acre-feet per year

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to establish the Replenishment Bank. Since 2009, the AWBA has delivered this amount each year, creating a cumulative total of 5,000 acre-feet.

Projections from Reclamation's August 2013 24-Month Study indicated there was a significant chance that a Lower Colorado River shortage could be declared in 2016. While a good winter snow pack and ample runoff could ease these projections, a shortage, if it occurs, would mean there would be no excess CAP water available for low priority CAP water users such as the AWBA. To avoid the risk of not being able to make the minimum delivery required, the AWBA is planning to deliver the remaining 10,000 acre-feet of water needed to complete the obligation during the next two years. The 2014 Plan therefore includes 5,000 acre-feet of direct deliveries to the GRIC at a cost of \$830,000. If hydrologic conditions improve, the AWBA will re-evaluate the amount of water that is delivered in 2015. Cumulative costs through 2014 total \$1,444,000.

Assignment of Long-term Storage Credits by the Tohono O'dham Nation

Pursuant to A.R.S. § 45-841.01, the Tohono O'dham Nation (Nation) must offer ten percent of the any credits they accrue at the Mission Mine Complex to the AWBA at a price per acre-foot that is equal to the AWBA's delivery and storage costs at the time of sale. If the Nation offers the AWBA credits in 2014, the AWBA will evaluate the offer to determine if it is reasonable to purchase those credits. While these credits may be used for M&I firming or for water management purposes, there is a restriction that the credits not be recovered within five miles of the exterior boundary of the reservation.

INTERSTATE WATER BANKING

The AWBA, SNWA, and CRCN executed a Third Amended and Restated Agreement for Interstate Banking on May 20, 2013. The amended agreement removed the AWBA's obligation to accrue 1.25 MAF of long-term storage on behalf of SNWA. Under the amended agreement, storage for interstate purposes will be determined by the parties on an annual basis and may include the storage of Nevada's unused apportionment. Storage will be paid for by Nevada on a pay-as-you-go basis. There is no interstate storage planned for Nevada in 2014.

RECOVERY

Recovery of AWBA long term storage credits is not anticipated in this Plan.

Staff representatives for ADWR, CAWCD and the AWBA continue to meet to develop a Joint Recovery Plan that will identify the duties and responsibilities of the parties as they relate to recovery of the AWBA's long term storage credits and delivery of the water created by that recovery. While the actual recovery of AWBA credits for CAP M&I priority subcontract firming is not projected for several decades, recovery for interstate, Indian CAP NIA priority, and on-River domestic supplies may occur sooner so a better understanding of how that recovery is expected to occur will be very beneficial. As the staffs continue these efforts they will seek input from all interested parties. If recovery for firming of Indian CAP NIA priority water and fourth priority domestic supplies along the River is necessary, potential opportunities to provide this firming exist.

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PRICING

In June 2013, the CAWCD Board approved its water delivery rate schedule for calendar years 2014/2015. The AWBA rate for recharge is equivalent to the rate for excess M&I water at \$166 per acre-foot, an increase of \$22 per acre-foot from the previous year.

Groundwater pumping costs in the Phoenix, Pinal and Tucson AMAs vary depending on energy sources used and the location of wells, i.e. depth to water. The AWBA cost share in 2014 for the GSF partners in the Phoenix and Pinal AMAs is \$34 per acre-foot. Based on the range of groundwater pumping costs and cost shares paid by other partners, it was determined the cost share in 2014 for the Tucson AMA will be \$16 per acre-foot.

Table 3 reflects the water delivery rate CAWCD will charge the AWBA, the cost share GSF operators pay, and the rates the AWBA pays to utilize different USFs. When storing water for other than M&I firming and water management purposes at CAWCD recharge facilities, the AWBA also pays a facility capital charge. There is no administrative cost component in the facility cost because the AWBA pays the CAWCD administrative costs on an annual basis. While no interstate banking is anticipated in this Plan, the rate established for interstate banking is \$189 per acre-foot, plus facility costs and facility capital costs.

Table 3. 2014 Water and Facility Rates

Recharge	Cost per Acre-foot
CAWCD delivery rate to AWBA for water storage	\$166
Interstate rate	\$189
Groundwater Savings Facility operator cost share rate ¹	
Intrastate	
Phoenix and Pinal AMAs	\$34
Tucson AMA	\$16
Interstate	\$26
Underground Storage Facility rate paid by AWBA	
CAWCD – Phoenix Facilities ²	\$8
CAWCD – Tucson Facilities ³	\$15
Avra Valley Recharge Project	\$15.45
Clearwater Facility (CAVSARP/SAVSARP)	\$15.62
Direct Deliveries	
CAWCD rate to AWBA for Southside Replenishment Bank deliveries	\$166

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 \$132/af for intrastate deliveries to the Phoenix and Pinal AMAs, \$150/af to the Tucson AMA, and \$163/af for interstate deliveries.

² Additional capital charge of \$15 per acre-foot for interstate storage.

³ Additional capital charge of \$9 per acre-foot for interstate storage.

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ACCOUNTING

The AWBA's enabling legislation required the development of an accounting system that allows the tracking of all credits accrued by the AWBA and the funding sources from which they were developed. The ADWR maintains the accounting of the credits. The AWBA accounts for the expenditure of the funds utilized from the Water Banking Fund. CAWCD accounts for the expenditure of the 4 cent tax and reports that expenditure to the AWBA.

The estimated total cost of the AWBA's 2014 Plan is approximately \$10.4 million. Table 4 provides estimates of the funds available to the AWBA, the funds to be utilized, the entity that holds the funds, and the credits estimated to accrue to those accounts based on the 2014 Plan.

Table 4. Funding for 2014 Annual Plan of Operation

	Estimated Funds Available		Estimated Funds Utilized		Estimated Credits
	AWBA	CAWCD ¹	AWBA	CAWCD	(AF)
Withdrawal Fees					
Phoenix AMA	\$2,700,000	-	\$675,000	-	3,880
Pinal AMA ²	\$2,440,000	-	\$2,287,200	-	10,160
Tucson AMA	\$400,000	-	\$167,000	-	860
Four Cent Tax					
Phoenix AMA	\$0	\$12,800,000	\$0	\$1,868,000	10,730
Pinal AMA	\$0	\$800,000	\$0	\$800,000	5,580
Tucson AMA ³	\$0	\$3,100,000	\$0	\$3,100,000	16,010
Other					
General	\$0				
Phoenix AMA		-	\$0	-	0
Pinal AMA		-	\$0	-	0
Tucson AMA		-	\$0	-	0
Shortage Reparations (NV):	\$1,500,000				
Phoenix AMA		-	\$0	-	0
Pinal AMA		-	\$0	-	0
Tucson AMA		-	\$1,500,000	-	7,760
TOTALS	\$23,740,000		\$10,397,200		54,980

¹ The figures shown are estimates provided by CAWCD staff, and are based on amounts anticipated to be collected during the 2014 tax year. If utilization is greater than estimated, there may be additional funds held by CAWCD that could be made available at the discretion of the CAWCD Board of Directors.

² Includes expenditure for 5,000 acre-feet of direct deliveries to establish the Southside Replenishment Bank under the Gila River Indian Water Settlement Program.

³ Estimates include revenue from CAWCD's capital charge for construction of state demonstration projects when facilities are used for interstate purposes and by entities that do not pay the 4¢ *ad valorem* tax.

The 2014 Plan was developed to prioritize storage in the Tucson AMA primarily to make progress on the M&I firming goal for that AMA. Expenditures in the Tucson AMA total \$4,767,000. Nearly all funds estimated to be collected in 2014 were utilized, including \$1.5 million in shortage reparation funds. The remaining water supplies were divided between the Phoenix and Pinal AMAs. As with the Tucson AMA, nearly all funds

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available for the Pinal AMA, including withdrawal fees carried over from the previous year, are expended under the Plan and total \$3,087,200. Expenditures include \$830,000 in withdrawal fees to pay for deliveries to the Southside Replenishment Bank. Funds utilized in the Phoenix AMA total \$2,543,000 and include a portion of both the withdrawal fees and four cent tax monies estimated to be available.

Table 5 provides an estimate of the AWBA funds expended and the location of the credits accrued since inception through 2013.

Table 5. Cumulative Long-term Storage Credits 1997-2013

FUNDING SOURCE	FUNDS EXPENDED	AMOUNT (AF)	CREDITS ¹ LOCATION
Withdrawal Fee			
Phoenix AMA	\$19,774,700	299,130	Phoenix AMA
Pinal AMA	\$17,012,800	402,270	Pinal AMA
Tucson AMA ²	\$8,301,400	100,930	Tucson AMA
Four Cent Tax			
Maricopa County	\$88,979,500	1,339,880	Phoenix AMA
Pinal County	\$10,450,200	198,500	Pinal AMA
Pima County	\$41,942,000	400,950	Tucson AMA
Other			
General Fund ³	\$11,100,900	403,830	
	\$1,522,100	42,320	Phoenix AMA
	\$6,395,000	306,970	Pinal AMA
	\$3,183,800	54,550	Tucson AMA
Indian Firming Appropriation	\$2,338,200	28,480	
	\$0	0	Phoenix AMA
	\$0	0	Pinal AMA
	\$2,338,200	28,480	Tucson AMA
Shortage Reparations	\$4,499,700	91,280	
	\$1,099,300	20,640	Phoenix AMA
	\$1,708,600	60,510	Pinal AMA
	\$1,691,800	10,130	Tucson AMA
Pinal Redirect ⁴	N/A	14,130	Pinal AMA
Interstate			
Nevada ⁵	\$109,087,900	600,650	
	\$11,444,400	51,010	Phoenix AMA
	\$71,508,200	439,850	Pinal AMA
	\$26,135,300	109,790	Tucson AMA
TOTAL	\$313,487,300	3,880,030	

¹ Actual expenditures and credits for 1997-2012; 2013 estimated.

² Includes expenditure of \$22,698 for the assignment of 234 acre-feet of credits to the AWBA from the Tohono O'odham Nation pursuant to §45-841.01.

³ 256,174 AF of credits reserved pursuant to contract with Mohave County Water Authority.

⁴ Credits accrued from water scheduled for the Tucson AMA and redirected to the Pinal AMA for storage at GSFs. Facility operators paid 100% of the water delivery rate.

⁵ Includes 50,000 acre-feet of credits transferred from CAWCD pursuant to Amended Agreement for Interstate Water Banking.

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Table 6 identifies the progress expected to be made on the AWBA's goals and obligations through 2014.

Table 6. Projected Percent of Goals and Obligations Achieved through 2014

Location and Objective	Funding Source	Goal	Obligation	Non-Credit Goal/Oblig. Achieved	Credits Accrued (AF)	Percent Goal/Oblig. Achieved
Phoenix AMA M&I Firming Groundwater Mgmt ¹	Ad valorem tax Withdrawal Fees	1,566,000 AF			1,350,610 303,010	86%
Pinal AMA M&I Firming Groundwater Mgmt ¹	Ad valorem tax Withdrawal Fees	243,000 AF			204,080 412,430	84%
Tucson AMA M&I Firming Groundwater Mgmt ^{1,2}	Ad valorem tax Withdrawal Fees	864,000 AF			416,960 96,170	48% 59%
On-River M&I Firming ³	General Fund	420,000 AF			403,830	96% ⁴
Indian Settlements: GRIC Firming	Withdrawal Fees	350,000 AF ⁵	up to 15,000 AF/YR		0	0%
Future Settlements	Withdrawal Fees	200,000 AF ⁵	up to 8,724 AF/YR		0	0%
Federal Assistance Tucson AMA	Appropriation Withdrawal Fees Cost of Services ⁶		\$3,000,000	\$3,000,000 \$2,338,171 \$630,490	34,102 28,481 5,621	100%
Southside Repl. Bank	Withdrawal Fees		15,000 AF Direct Delivery		10,000	67%
Other: Shortage Reparations- Nevada Pinal Redirect Credits ⁷	Gifts, Grants, Donations N/A	\$8,000,000		\$6,000,000	99,030 14,125	75% N/A

¹ Withdrawal fees could be utilized in addition to 4¢ ad valorem tax revenues for M&I firming if needed to reach firming goals.

² Includes 234 AF credits acquired from the Tohono O'odham Nation pursuant to §45-841. 01.

³ By resolution passed in 2002, the AWBA established on-river firming as the highest priority of use for credits accrued through expenditure of general fund appropriations. 256,174 AF are of credits reserved pursuant to contract with Mohave County Water Authority.

⁴ This percentage reflects full utilization of general fund credits accrued to date and would change as other objectives are identified by the AWBA.

⁵ Based on estimates from the Indian Firming Study Commission Report dated January 6, 2006.

⁶ Include \$14,883 and \$16,456 deducted for payment of cost of services for FY08 and FY09, respectively.

⁷ Credits accrued from 15,000 AF of water that was scheduled for the Tucson AMA and redirected to the Pinal AMA for storage at GSFs. These credits are currently identified for M&I firming in the Tucson AMA and would meet 1% of the firming goal.

PUBLIC REVIEW AND COMMENT

AWBA staff presented the Plan to the public in conjunction with the Groundwater Users Advisory Councils (GUAC) meetings for the Phoenix, Pinal and Tucson AMAs as required by statute. The Plan was also distributed to the public via email and made available on the AWBA web page for public review and comment. The GUACs supported the Plan and had no requests for changes to it.

In the Phoenix AMA, GUAC members inquired if there were limitations on the amount of withdrawal fees that could be expended from the Phoenix and Pinal AMAs for firming Gila River Indian Community supplies given that the reservation straddles both AMAs. Staff indicated there were no imposed limits. Absent general fund monies, the AWBA has proposed utilizing withdrawal fee credits for the Phoenix and Pinal AMAs that have been accrued on reservation first. Pinal AMA withdrawal fees would then primarily be used to firm GRIC supplies, while Phoenix AMA withdrawal fees would be used for firming future Indian settlements, including the White Mountain Apache lessees.

There were also questions regarding the likelihood that withdrawal fees collected in the Phoenix AMA would not be fully utilized because of the reduction in supplies available to the AWBA. Staff noted that any funds remaining at this time would be available to purchase additional water that typically becomes available to the AWBA throughout the year. The AWBA may also utilize withdrawal fees to acquire other sources of water if CAP water is not available and are the only funds currently available for meeting Indian settlement obligations. Furthermore, if CAWCD's authority to levy the four-cent *ad valorem* tax is not renewed, withdrawal fees will likely be the only funding source available to the AWBA if and when those funds are no longer available to offset AWBA costs.

In the Pinal AMA, there were comments in support of the AWBA's plan to make progress on the Southside Replenishment Bank responsibilities. In the Tucson AMA, members responded positively and expressed appreciation on the AWBA's efforts to focus storage in that AMA. The Metropolitan Domestic Water Improvement District also endorsed the AWBA's efforts to increase storage in the Tucson AMA, particularly at underground storage facilities that have existing or planned recovery systems (see attached letter).



November 27, 2013

Ms. Virginia O'Connell, Manager
Arizona Water Banking Authority
3550 North Central Avenue, Second Floor
Phoenix, Arizona 85012

Re: Draft 2014 Plan of Operation

Dear Ms. O'Connell:

Thank you for the opportunity to comment on the Draft 2014 Annual Plan of Operation for the Arizona Water Banking Authority (AWBA). By early 2014, the Metropolitan Domestic Water Improvement District's (District) engineering consultant will be finished with a pipeline routing and recovery well study for the Avra Valley Recharge Project (AVRP). The project's goal is to support on-going regional water resources management efforts within the Tucson Active Management Area (AMA) by 1) minimizing groundwater overdraft within our Metro-Main service area through recovery of District stored water at AVRP, and 2) having a recovery system that can directly access AWBA's M&I firm water during Colorado River shortages or CAP system interruptions. For these reasons, the District supports AWBA's draft 2014 Plan of Operation that includes storage at AVRP.

The District also endorses AWBA's decision to increase the volume of storage in the TAMA at underground storage facilities with existing or planned recovery systems. The draft 2014 plan recommends 17,044 acre-feet of storage at AVRP, Pima Mine Road, and SAVSARP or about 12 percent more storage than in 2013. The District hopes storage by AWBA at these facilities will further increase when expansion of recharge capacity occurs.

Again, thank you for the opportunity to comment on the draft plan. Please call me at (520) 575-8100, if you have any questions on the District's comments.

Sincerely,

A handwritten signature in black ink that reads "Mike Block". The signature is written in a cursive, slightly stylized font.

Michael W. Block
Water Resources Manager

MWB/mwb

c: Warren Tenney



Draft 2014 Plan of Operation

Arizona Water Banking Authority
December 4, 2013

2013 Activities

- Normal Operating Conditions
- Lower Basin Uses
 - California – 4.4 million acre-feet (MAF)
 - Nevada – 0.24 MAF
 - Arizona – 2.8 MAF
 - On-River – 1.2 MAF
 - Central Arizona Project 1.6 MAF

2013 Plan of Operation

- Planned Water Deliveries – 52,546 AF
- Projected End of Year Deliveries - 60,701 AF
 - Phoenix Active Management Area (AMA) – 16,617 AF
 - Pinal AMA – 19,800 AF
 - Tucson AMA – 23,284 AF
 - No Interstate storage
 - Southside Replenishment Bank – 1,000 AF

2013 Storage Deliveries (AF)

Recharge Sites		Permitted Capacity (AF)	Delivery Amount
Phoenix AMA	Agua Fria	100,000	8,178
	Hieroglyphic Mtns	35,000	1,000
	Superstition Mtns	25,000	4,509
	Queen Creek ID	28,000	2,930
Pinal AMA	Central Arizona IDD	110,000	6,600
	Hohokam IDD	55,000	6,600
	Maricopa-Stanfield IDD	120,000	6,600
Tucson AMA	SAVSARP	60,000	13,284
	Pima Mine Road	30,000	2,000
	Lower Santa Cruz	50,000	11,010
	Cortaro-Marana ID	20,000	1,953
TOTAL STORAGE DELIVERIES			59,701

AWBA Long-term Storage Credits 1997-2013 (Acre-Feet)

Funding Source	Phoenix AMA	Pinal AMA	Tucson AMA
Withdrawal Fees	299,130	402,270	100,930
4-Cent Tax	1,339,880	198,500	400,950
General Fund	42,320	306,970	54,550
Other:			
Indian Firming Appropriation	-	-	28,480
Shortage Reparation	20,640	60,510	10,130
Pinal Redirect (GSF operators paid 100% of cost)	-	14,130	-
Interstate - Nevada	51,010	439,850	109,790
TOTAL	1,752,980	1,422,230	704,830

* Long-term storage credits estimated for 2013

AZ Water Settlements Act Requirement

- AWBA Required to Deliver 15,000 AF to Gila River Indian Community to Establish Southside Replenishment Bank
- Requires Minimum Delivery of 1,000 AF per Year
- Can Be Used to Offset a Replenishment Obligation

Southside Replenishment Activities	2013 Deliveries (AF)	Cumulative Deliveries (AF)
Replenishment Obligations	0	0
Replenishment Bank	1,000	5,000
TOTAL DIRECT DELIVERIES	1,000	5,000

Public Review and Comment

Groundwater Users Advisory Council Meetings

- Phoenix AMA
 - Asked for clarification on use of withdrawal fees for firming Gila River Indian Community supplies
 - Had questions regarding the full utilization of withdrawal fees given the reduction in excess CAP water supplies available to the AWBA
- Pinal AMA
 - Supported the AWBA's plan to make progress on the Southside Replenishment Bank responsibilities
- Tucson AMA
 - Supported increased storage in the Tucson AMA overall and the efforts to store water at USFs that have existing or planned recovery systems

2014 Plan of Operation

Three Main Components to Consider

- Water Availability
- Funding
- Storage Facility Capacity

Water Availability

- 2014 Colorado River Lower Basin State Diversions
 - Normal Operating Conditions – 2.8 MAF
 - Central Arizona Project – 1.6 MAF
 - On-River – 1.2 MAF
- CAWCD Policy for Distributing Excess CAP Water
 - 175,000 AF AWBA/CAGRDR Replenishment Reserve Pool
 - Continued higher priority uses (M&I subcontract, Indian contract) resulted in reduction to pool
 - 84,408 AF available to pool in 2014
 - AWBA share of reduced pool – 64,753 AF



Funding Sources

- Withdrawal Fees Collected in Phoenix, Pinal and Tucson AMAs
- 4-Cent *Ad valorem* Tax
 - Levied by CAWCD in Maricopa, Pinal, and Pima Counties
 - Retained in CAWCD fund accounts since 2003
 - Utilized by CAWCD to offset AWBA water storage and delivery costs as part of project operating & maintenance costs
- General Fund Appropriations
- Shortage Reparation – Arizona/Nevada Shortage Sharing

Storage Facility Capacity

- Discussions with Storage Facility Operators on Storage Opportunities
- Significant Interest in Providing Storage Capacity
- Sufficient Storage Capacity Available if Additional Water Becomes Available, but subject to funding resources

2014 Water Delivery Schedule (AF)

AMA	Recharge Sites		Permitted Capacity (AF)	Delivery Amount
Phoenix	USF	Hieroglyphic Mtn	35,000	2,000
		Agua Fria	100,000	4,147
		Superstition Mtns	25,000	4,500
	GSF	Queen Creek ID	28,000	5,230
		Subtotal		15,877
Pinal	GSF	Central Arizona IDD	110,000	5,700
		Hohokam IDD	55,000	5,700
		Maricopa-Stanfield IDD	120,000	5,700
		Subtotal		17,100
Tucson	USF	Avra Valley	11,000	1,000
		SAVSARP	60,000	14,000
		Pima Mine Road	30,000	2,044
		Lower Santa Cruz	50,000	6,500
	GSF	Cortaro-Marana ID	20,000	3,232
		Subtotal		26,776
	Direct Delivery – Southside Replenishment Bank			5,000
	TOTAL DELIVERIES			64,753

2014 Water and Facility Rates

Recharge	Cost/AF
CAWCD delivery rate to AWBA for water storage	\$166
Groundwater Savings Facility operator cost share rate	
Phoenix and Pinal AMAs	\$34
Tucson AMA	\$16
Underground Storage Facility rate paid by AWBA	
CAWCD - Phoenix Facilities	\$8
CAWCD - Tucson Facilities	\$15
Avra Valley Recharge Project	\$15.45
Tucson Water Clearwater Facilities	\$15.62
Direct Deliveries	
CAWCD rate to AWBA for Southside Replenishment Bank Deliveries	\$166

Funding for 2014 Annual Plan of Operation

Funding Source	Estimated Available	Estimated Utilized	Estimated Credits (AF)
Withdrawal Fees			
Phoenix AMA	\$2,700,000	\$675,000	3,880
Pinal AMA	\$2,440,000	\$2,287,200	10,160
Tucson AMA	\$400,000	\$167,000	860
CAWCD Offset (4-cent tax)			
Phoenix AMA	\$12,800,000	\$1,868,000	10,730
Pinal AMA	\$800,000	\$800,000	5,580
Tucson AMA	\$3,100,000	\$3,100,000	16,010
General Fund	\$0	\$0	0
Shortage Reparation			
Tucson AMA	\$1,500,000	\$1,500,000	7,760
Interstate-Nevada	\$0	\$0	0
TOTAL	\$23,740,000	\$10,397,200	54,980

AWBA Goals and Obligations

- Firm existing CAP M&I Priority subcontracts during shortages or outages
- Firm Fourth Priority Colorado River Water users during shortages
- Assist in meeting the water management objectives of the Groundwater Code
- Meet State Indian Settlement obligations

Projected Goals/Obligations Achieved through 2014

Objective	Goal/Obligation	Credits Accrued (AF)	% Achieved
M&I Firming:			
Maricopa County	1,566,000 AF	1,350,610	86
Pinal County	243,000 AF	204,080	84
Pima County	864,000 AF	416,960	48 (w/fees 59 %)
On-River Firming	420,000 AF	403,830	96
Groundwater Mgmt:			
Phoenix AMA	-	303,010	
Pinal AMA	-	412,430	
Tucson AMA	-	96,170	
Indian Settlements:			
GRIC Firming	15,000 AF/Yr (Est. 350,000 AF)		0
Future Settlements	8,724 AF/Yr (Est. 200,000 AF)		0
Federal Assistance	Contribute \$3,000,000	34,102	100
Southside Repl. Bank	15,000 AF	10,000 (Non-recharge)	67
Shortage Reparation	Expend \$8,000,000	99,030	75
Pinal Redirect Credits	-	14,125	n/a

V. Discussion and Approval of CY 2014 Water Delivery Budget

NOTES: (Action required)

Call on **Virginia O'Connell** to provide an overview of the water delivery budget for the 2014 calendar year

ACTION:

Move adoption of the Water Banking Authority water delivery budget for CY 2014.

ARIZONA WATER BANKING AUTHORITY			
2014 WATER DELIVERY and RECHARGE BUDGET			\$4,629,200
REVENUES AVAILABLE for 2013 DELIVERIES			
Withdrawal Fee¹			\$5,540,000
	Phoenix AMA		\$2,700,000
	Pinal AMA		\$2,440,000
	Tucson AMA		\$400,000
Shortage Reparatons²			\$1,500,000
TOTAL			\$7,040,000
¹ Projected based on 2013 collections.			
² Provided by SNWA pursuant to Shortage Sharing Agreement			
DELIVERY and RECHARGE RATES			
Water Delivery			
	Recharge Rate (Intrastate)		\$166
	Replenishment Bank Rate		\$166
Direct Recharge Facility Rate			
	CAWCD – Phoenix Facilities		\$8
	CAWCD – Tucson Facilities		\$15
	Avra Valley Recharge Project		\$15.45
	Clearwater Facility (CAVSARP/SAVSARP)		\$15.62
Cost Recovery for In-lieu Recharge:			
	Phoenix & Pinal		\$34
	Tucson		\$16
WATER DELIVERY and RECHARGE COSTS			
	Water Delivered (AF)	\$/AF	Total
Withdrawal Fee			\$3,129,200
	Phoenix AMA	4,214	\$160
	Pinal AMA	11,039	\$132
	Direct delivery ³	5,000	\$166
	Tucson AMA	939	\$178
Shortage Reparatons	Tucson AMA	8,434	\$178
Total 2014		29,627	\$4,629,200
³ Pinal W/F used for direct deliveries to the GRIC for Southside Replenishment Bank.			
PROJECTED CARRYOVER			
Withdrawal Fees			
	Phoenix AMA		\$2,025,000
	Pinal AMA		\$152,800
	Tucson AMA		\$233,000
Shortage Reparatons			\$0
Central Arizona Water Conservation District			
Estimated water stored and 4-cent tax to be expended by the CAWCD to accrue Long-term Storage Credits for the AWBA			
	Water Delivered (AF)	\$/AF	Total
4 cent tax Utilized			
	Maricopa	11,663	\$160
	Pinal	6,061	\$132
	Pima	17,403	\$178
Total 2014		35,127	\$5,768,000

VI. Call to the Public

NOTES:

The AWBA Commission will take a _____ minute break for lunch. The meeting will resume no earlier than _____ o'clock to continue with the Action Planning process.

Future Meeting Dates:

Wednesday, March 19, 2014

Wednesday, June 18, 2014

Wednesday, September 17, 2014

Wednesday, December 3, 2014

VII. Action Planning

NOTES: (no action required, facilitated process)

Call on **Terri Sue Rossi** to give an overview of the action planning process and to facilitate the second component of that process.

ACTION: (none)

In the Concern of Protecting Against the Impact of Shortages: Environmental Scan

What are the actions, trends, paradigms and approaches emerging for the Arizona Water Banking Authority and others relative to protecting against the impact of shortages?

Arizona Water Banking Authority

October 16, 2013

ESTABLISHED

BOUNDARY IDEAS

EMERGING

DYING

ON THE HORIZON (BOUNDARY)	EMERGING	ESTABLISHED	DYING
<ul style="list-style-type: none"> ➤ # Expand authority (more than just AWBA) to fund infrastructure ➤ Private involvement in firming ➤ Rethink "I" portion of firming for "M&I" ➤ # Mitigate agricultural shortages – protect assured water supply for "M" [municipal] ➤ Individual subcontractors finish the firming goal – Bank does what it can do and no more ➤ # Mead "Banking" ➤ # Consider firming agricultural supplies ➤ # <u>Make AWBA repository of new supplies (surface water water management)</u> ➤ ^ Larger role in statewide water management ➤ Moving beyond 2096 (100 year goal) ➤ # Expand sources of water and funding 	<ul style="list-style-type: none"> ➤ Use of forbearance agreements ➤ Bank and Indian communities developing agreements ➤ # Supply augmentation ➤ Credits purchase and sale ➤ # Direct use of reclaimed water ➤ # Weather modification for river augmentation ➤ Ability to acquire or store other water sources ➤ Hydrologic realities ➤ Additional storage and recovery capacity ➤ Indian/interstate recovery obligations ➤ Opportunities outside AMAs ➤ # Recovery Planning ➤ Other methods of water banking - ICS ➤ # Inter-AMA flexibility ➤ More governance regarding water conservation ➤ Expand authority (more than just AWBA) to fund infrastructure 	<ul style="list-style-type: none"> ➤ Indirect reuse for potable supplies ➤ Direct reuse for turf and industrial ➤ Coordination of modeling among agencies ➤ Use of 100-year goals ➤ Ag conservation ➤ # Storage and recovery of long-term storage credits ➤ AMA specific funding - storage ➤ Leases and exchanges CAP/reclaimed water ➤ Groundwater savings facilities ➤ Storing Colorado River water underground ➤ M&I conservation ➤ Model using historic hydrology ➤ # Municipal customer demands are always met 	<ul style="list-style-type: none"> ➤ Type 1 rights are the answer to urban water ➤ Effluent has not value ➤ ^ Weather modification ➤ Storing excess CAP not the only solution ➤ ^ No more dams ➤ ^ Water bud ➤ "Toilet to tap" ➤ 4¢ tax ➤ Abundant excess CAP water ➤ Concerns about full use of Arizona entitlement ➤ General funds availability ➤ Southside replenishment goal ➤ Diminishing interstate storage ➤ # M&I use of groundwater as primary source ➤ ^ Affordability of agriculture CAP water ➤ Acting unilaterally ➤ Single action "Silver bullet" solution

KEY
 GREEN = # Pleasing
 Red = ^ Caution
 BOTH = # BOTH

In the Concern of Protecting Against the Impact of Shortages: Environmental Scan

What are the actions, trends, paradigms and approaches emerging for the Arizona Water Banking Authority and others relative to protecting against the impact of shortages?

Arizona Water Banking Authority

October 16, 2013

IMPLICATIONS

- | | |
|--|--|
| <ul style="list-style-type: none">➤ Diminishing resources: water and money➤ Increasing competition for water and money➤ Possibility of near term shortage➤ Possibility of falling below 2015➤ Need to make tough decisions on priorities➤ External pressures➤ Potential for major changes in Colorado River operations | <ul style="list-style-type: none">➤ Celebrate success of AWBA and others in accomplishing what has been accomplished so far➤ Lack of political will and understanding➤ Uncertainty➤ Understand complexity of issues relative to staffing decisions➤ Need for education➤ Energy water nexus➤ Sell/trade credits for strategic reasons |
|--|--|