

## ARIZONA WATER BANKING AUTHORITY

Wednesday - December 19, 2012

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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 **December 19, 2012 at 10:00 a.m.** at the Arizona Department of Water Resources, 3550 North Central Avenue, Phoenix, Arizona 85012, Upper/Middle Verde conference room on the 2<sup>nd</sup> floor. The meeting is open to the general public. As indicated in the following agenda, the Arizona Water Banking Authority Commission may go to executive session, which will not be open to the public, to discuss certain matters.

The agenda for the meeting is as follows:

- I. Welcome/Opening Remarks
- II. Approval of Minutes
  - September 19, 2012
- III. Discussion with and instruction to the Commission's attorneys concerning the AWBA's position on potential amendments to its Interstate Water Agreement with the Southern Nevada Water Authority. The Commission may discuss this matter in executive session pursuant to A.R.S. §38-431.03(A)(3) and (A)(4). The Commission may decide the matter in the public meeting or defer decision to a later date. Discussions and minutes of the executive session shall be kept confidential.
- IV. Water Banking Staff Activities
  - Deliveries
  - Update on credit distribution discussions
  - Update on AWBA coordination with Arizona Department of Water Resources on Fourth Management Plan
  - Update on the White Mountain Apache Indian Tribe settlement
- V. Discussion and Approval of 2013 Annual Plan of Operation
  - Overview of public comment
  - Approval of 2013 Annual Plan of Operation
- VI. Discussion and Approval of CY 2013 Water Delivery Budget
  - Overview of budget
  - Adoption of budget
- VII. Call to the Public

**Future Meeting Dates:**

Wednesday, March 20, 2013  
Wednesday, June 19, 2013  
Wednesday, September 18, 2013  
Wednesday, December 18, 2013

Dated this 18th day of December, 2012

\* This is a tentative agenda that is subject to change prior to the scheduled meeting date. Please contact the AWBA at (602) 771-8487 24 hrs in advance of meeting for final agenda.

All visitors must use the south elevators; please stop at the 2<sup>nd</sup> 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.*

## Clifford A. Neal

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Mr. Neal, the Water Resources Advisor for the City of Phoenix, was appointed to the AWBA Commission by Governor Janice K. Brewer on September 28, 2012 as the person appointed pursuant to section 38-211 who represents an entity that holds a Central Arizona Project municipal and industrial subcontract.

A graduate of the University of Arizona with a degree in civil engineering, Mr. Neal began his career as an engineer with the U.S. Bureau of Reclamation. After the Central Arizona Water Conservation District was created, Mr. Neal transitioned to CAP where he worked for over 25 years in various positions including most recently the manager of the Central Arizona Groundwater Replenishment District and the Manager of Resource Planning and Analysis. Mr. Neal assumed his current position at the City of Phoenix in June of 2012.

Mr. Neal lives in the Moon Valley area with his wife Sharon. They have two children.

**ARIZONA WATER BANKING AUTHORITY  
Draft Minutes**

**September 19, 2012  
Arizona Department of Water Resources**



**AUTHORITY MEMBERS**  
Sandra Fabritz-Whitney, Chairman  
Maureen R. George, Vice-Chairman  
Lisa A. Atkins, Secretary  
Marshall P. Brown  
John Mawhinney

**EX OFFICIO MEMBERS**  
Senator Steve Pierce  
Representative Andy Tobin

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### **Welcome/Opening Remarks**

Chairman Sandra Fabritz-Whitney welcomed the attendees. All members of the Authority were present except *ex-officio* members, Senate President Steve Pierce and Speaker of the House Andy Tobin. Commissioner Mawhinney was available via telephone conference. Chairman Fabritz-Whitney announced that Marshall Brown had accepted a position as the Director of Water Resources at the City of Aurora in Colorado and as such would resign from his position on the AWBA effective September 30, 2012. She expressed appreciation for Mr. Brown's service on the AWBA Commission. Mr. Brown likewise expressed his appreciation.

### **Approval of Minutes**

Lisa Atkins moved to approve the minutes of the June 20, 2012 meeting. Maureen George provided the second to that motion. The Authority approved the minutes of the June 20, 2012 AWBA meeting.

### **Water Banking Staff Activities**

Virginia O'Connell gave a brief summary of AWBA 2012 deliveries. Overall, she explained deliveries through August are on target with actual deliveries about 5% higher than planned deliveries. Specifically, deliveries are ahead of schedule in the Phoenix and Tucson AMAs by nearly 13,000 acre-feet. Actual deliveries in the Pinal AMA, however, are around 6,000 acre-feet below planned deliveries. Ms. O'Connell mentioned that monsoonal activities have resulted in a shift in storage from certain groundwater savings facilities to underground storage facilities.

Chairman Fabritz-Whitney asked if the increase in monsoonal activity was going to result in additional water being available at the end of the year. Patrick Dent, CAP, responded saying CAP anticipates "turn-back water", but cannot yet identify who will turn-back. He indicated that deliveries were behind by 40,000 acre-feet in July, on target in August, but down again in September. CAP is actively discussing deliveries with its customers to manage a year-end turn-back.

Ms. O'Connell indicated that two groups are working on issues related to the distribution of AWBA credits during shortages. The first group, called the Credit Distribution Group, is an interagency workgroup between the AWBA, ADWR and CAWCD. The second group is an ad hoc group, created by ADWR that includes stakeholder representatives as well as the three agencies. The Credit Distribution Group met recently at CAWCD and is planning another meeting on October 3<sup>rd</sup>. Because of staffing changes, much of this meeting was spent reviewing issues previously discussed by the group. This group will meet again in October to continue working on the issues.

Ms. O'Connell also briefed Commission members on the ADWR Ad Hoc Recovery Planning Group of which the AWBA is a participant. This group is continuing to go



through a list of questions submitted by the stakeholders and trying to establish who is responsible for addressing each issue. Ms. O'Connell noted that, to the extent the Credit Distribution Group can resolve some of these issues, it will be doing so. She described the meetings as being very helpful in understanding stakeholder concerns. The next Ad Hoc Recovery meeting is scheduled for September 26<sup>th</sup>.

Finally, Ms. O'Connell explained that stakeholders have expressed concern that the three agencies are not consistent when talking about shortages. To address this issue, the three agencies have also been meeting to establish a baseline model for evaluating shortages on the Colorado River and the impacts on CAP and on-river water users. Once a baseline is agreed upon, each agency could still develop model runs different from the base so long as the differences in the assumptions used are documented. This group is scheduled to meet again on October 17<sup>th</sup>.

Ms. George asked that before things get too far down the road, the AWBA should hold a study session specifically addressing modeling assumptions and legal advice between the AWBA and ADWR so members of the AWBA can provide appropriate guidance.

Terri Sue C. Rossi provided a refresher tour of the new delivery data function on the AWBA's website. She showed members how to locate and query the data. Ms. Rossi indicated that all the data has been checked and should be accurate going back to 1997. She added the link is now fully functional and accessible to everyone.

Regarding the Fourth Management Plan, Ms. O'Connell explained that at the end of last year, ADWR started a process of streamlining the narrative in the Third Management Plan by having less information regarding the historical development. This condensed version will then serve as the jumping off point for the Fourth Management Plan. ADWR is meeting with its Groundwater User Advisory Councils (GUACs) for stakeholder input. ADWR has also asked AWBA staff to update the sections of the Third Management Plan applicable to the AWBA and to provide some suggestions on how the AWBA could potentially assist ADWR in meeting the water management goals of the AMAs where the AWBA operates.

John Mawhinney commented that one of the statutory functions of the AWBA is to promote the achievement of the goals established in the Groundwater Code. He stated that the AWBA had not done a lot in that area. Mr. Mawhinney suggested this was an opportunity to come up with unique ideas to put more emphasis on this objective. Chairman Fabritz-Whitney and Ms. O'Connell agreed with Mr. Mawhinney and committed to participate in the development of the Fourth Management Plan to that end.

### **Interstate Water Banking**

Ms. O'Connell briefed the Commission on AWBA discussions with the Southern Nevada Water Authority (SNWA) regarding the Interstate Water Banking Agreement. She indicated that CAP has also participated in these discussions. AWBA staff last met with SNWA and CAP on August 9<sup>th</sup>. The parties discussed the possibility of storing a portion of Nevada's unused apportionment over the next few years. SNWA informed AWBA staff that they do not have additional funding for storage at this time because

they are focused on completion of the third intake, which is estimated to be completed in 2014. As such, the parties discussed the potential of amending the overall agreement specific to the payment schedule, the amounts and the repayment of the loan.

During the meeting, SNWA its desire to remain committed to accruing the full 1.25 million acre-feet of credits, but would like Arizona to consider alternative ways the obligation could be structured. Tim Henley added that there is a timing issue in the current Amended Agreement in that SNWA will begin \$23 million payments in 2014 and ending in 2024. The money loaned, however, needs to be repaid by June of 2018 making it difficult for Nevada to meet this repayment requirement. Staff recommended that any modifications to the agreement be addressed by amending the agreement rather than through another letter agreement. The next meeting is on September 24<sup>th</sup>.

Ms. O'Connell reminded the Commission about the arrangement to indirectly provide a loan to pay for the cost of storing water on behalf of Nevada to date using the \$100 million paid by Nevada and deposited into the AWBA's Nevada Resource subaccount. SNWA is required to repay the water storage costs, plus interest that would have accrued on the \$100 million absent the loan. She presented the interest schedule provided by the Arizona State Treasurer's Office who tracks what this amount would have been. Based on this adjustment, Nevada owes just over \$90 million, which includes nearly \$19 million in interest.

#### **Draft 2013 Annual Plan of Operation**

Ms. O'Connell reported to the Commission that CAP staff estimates that approximately 114,000 acre-feet of water will be available to the AWBA instead of the 73,000 acre-feet indicated earlier. This volume includes 1,000 acre-feet for the Southside Replenishment Bank. Using this volume, AWBA staff met with recharge partners in the three AMAs and prepared its preliminary water delivery schedule for 2013.

Ms. O'Connell noted that circumstances have changed in the Pinal AMA. Specifically, the Gila River Indian Community plans to store half the amount of water it stored the previous year with Pinal (i.e. CAIDD, Hohokam and MSIDD) recharge partners. All three partners expressed interest in taking all available AWBA water and as such agreed to share equally (6,600 acre-feet per partner) the amount available.

Recharge partners in the Tucson AMA also agreed to take 29,000 acre-feet of AWBA water available. Tucson Water agreed to take 12,000 acre-feet at SAVSRP. CMID agreed to take 4,000 acre-feet. Kai Farms agreed to take 2,000 and Metro agreed to take 1,000 acre-feet. CAP agreed to take the remaining 10,000 acre-feet at Lower Santa Cruz.

In the Phoenix AMA, the only GSF operator partnering with the AWBA is the Queen Creek Irrigation District (QCID) who agreed to take 7,230 acre-feet of AWBA water. The remaining water available to the Phoenix AMA will be stored by CAP primarily at Tonopah Desert Recharge Project but also a small amount at Superstition Mountains Recharge Project. Table 2, distributed during the meeting, details the volumes of water to be stored by each recharge partner.



Ms. O'Connell presented the water and facility rates for 2013. She noted CAP's water delivery rate increased from \$137 in 2012 to \$144 per acre-foot. The Interstate rate increased from \$163 to \$168 per acre-foot although no water will be stored for interstate in 2013. GSF operator cost share rates went up by \$1 per acre-foot.

Rates for recharge projects remained the same except for Tucson Water's Clearwater Facility that increases each year according to the agreement between the AWBA and Tucson Water. Ms. O'Connell pointed out, however, that Metro held its rate for the Avra Valley Recharge Project constant over 2012 levels even though its agreement with the AWBA would have allowed an increase.

Finally, rates for the Southside Replenishment Bank increased from \$122 per acre-foot to \$144 per acre-foot. Ms. O'Connell indicated that historically, the AWBA paid the federal rate, but that CAP had decided to charge the non-federal rate. Chairman Fabritz-Whitney asked why this was the case. Mr. McCann indicated that after looking at things more closely, CAP concluded the benefit of the Southside Replenishment Bank is really for the non-reservation customers, so the federal rate was not appropriate. He indicated that the difference between the two rates is that the federal rate does not include the capital charge.

Ms. O'Connell presented the preliminary funding plan for 2013 Plan of Operation. Overall, the Plan shows \$140 million available with expected expenses of \$16 million to deliver 114,000 acre-feet of water for 103,500 acre-feet of credits including the Southside Replenishment Bank.

Specifically, the funding plan shows \$2.1 million in withdrawal fees fully used. There is approximately \$135 million in four-cent tax available. The Plan of Operation anticipates \$11.5 million to be used in 2013. As in past years, there was no funding available from the State's General Fund. Another \$1.5 million is available from the Shortage Repairs Fund and this money will be used in the Tucson AMA.

Given revisions to the CAP resolution regarding the four-cent tax levied by CAP, Val Danos, Arizona Municipal Water Users Association, asked if the funds collected be used for OM&R and capital or will funds all be used for water storage. Mr. McCann explained that while the language has changed, the application of the money is the same. He further explained that there is practically speaking no funding in the Tucson or Pinal AMA accounts. There is a substantial amount in the Maricopa account. The CAP Board has not yet made a decision about how to spend the Maricopa monies.

Mr. Mawhinney expressed concern about the AWBA not requesting a general fund appropriation from the Legislature. He pointed out that \$13.5 million was appropriated to support the state's obligation under the Arizona Water Settlements Act of which \$12.4 million was subsequently swept. Mr. Mawhinney explained that this obligation has not gone away and other objectives need to be reached as well. He recommended talking to one of the *ex officio* members and asking one or both of them to sponsor such a request. Mr. Mawhinney also offered that the state is experiencing a \$200 million surplus, so the timing may be good.

Ms. George agreed with Mr. Mawhinney. Ms. Atkins asked if we could explain what we

would do with the money. Chairman Fabritz-Whitney cautioned that the AWBA is a commission appointed by the Governor and as such she would need to discuss the matter with the Governor. There would also need to be an analysis of what we would do with the money, including what isn't currently being done and if we've considered other options. There was some discussion about what the Bank's options would be if the Governor was not supportive of such a request. Chairman Fabritz-Whitney also cautioned that the large amount of four-cent dollars, while not deposited in the Water Banking Fund, will undermine any attempts for general appropriations. Mr. Mawhinney agreed with this point and suggested that the AWBA consider how to spend the money wisely but in a timely manner. He also recalled that the accounts were structured to protect unused monies from future Legislative sweeps.

Ms. Atkins asked if we need to wait until the next Bank meeting to take any action. Chairman Fabritz-Whitney replied there would be no need for another meeting. The Commission could direct staff to prepare a fact sheet and start talking to the Governor's office and others. Ms. O'Connell agreed to prepare a fact sheet as soon as possible and Chairman Fabritz-Whitney agreed to raise the issue with the Governor's office.

Ms. O'Connell highlighted some of the high points on Table 7 that describes to what degree the AWBA's goals and obligations are achieved. Ms. Atkins moved to have staff present the draft 2013 Plan to the public in conjunction with the GUACs in the three AMAs where the Bank will be storing water. Ms. George seconded Ms. Atkins's motion, and the Commission directed staff to move forward.

Ms. O'Connell reminded Commission members that the delivery schedule is still subject to change until CAP's 2013 schedule is set. After the 2013 schedule settles, AWBA staff can post the plan and take comments. A Final Draft of the 2013 Plan of Operation will be presented at the December Bank meeting.

### **Call to the Public**

Val Danos of the Arizona Municipal Water Users asked what the three agencies agreed to regarding modeling assumptions. Ms. O'Connell responded saying no agreements have been made. The three agencies have just started meeting on the topic.

Chairman Fabritz-Whitney announced the next AWBA meeting is scheduled for Wednesday, December 19, 2012 and the meeting adjourned at 11:05 a.m.

### **Executive Session**

Executive Session convened at 11:15 a.m. and ended at 11:35 a.m.

### **Reconvene in Open Session**

Chairman Fabritz-Whitney reconvened the Open Session of the AWBA at noon. Commissioner Mawhinney was not available when the Open Session was reconvened. She indicated there was no consideration of action related to items discussed in Executive Session. Mr. Brown moved to adjourn Open Session. Ms. Atkins seconded his motion.

The meeting was adjourned at 12:01 p.m.

## Changes to Interstate Water Banking Agreement

### Third Amended and Restated Agreement for Interstate Water Banking

- Term of agreement changes:
  - Agreement terminates when all (existing and future) LTSC in the SNWA Interstate Account have been recovered, unless extended by written agreement.
  - Existing LTSC in the SNWA Interstate Account must be recovered by December 31, 2063.
  - Future LTSC must be recovered within 50 years of the date of storage.
  - Oldest LTSC are recovered first.
- The AWBA no longer has an obligation to accrue future LTSC to be held in the SNWA Interstate Account.
- Payments by SNWA to date (\$122,738,945) meet the obligation to pay for existing LTSC (600,651 AF).
- Allows the parties to agree to future storage/accrual of LTSC in SNWA Interstate Account, including use of Nevada apportionment. (Subarticle 2.3 provides procedures for agreeing on amount of water to be stored and modifications during the year.)
- SNWA will bear all costs for future delivery and storage. Subarticle 2.5 provides for calculation of costs. Subarticles 2.7.3 and 2.7.4 provide for charges for administrative costs in years when AWBA delivers and stores water for SNWA.
- SNWA will pay \$20,000 per year for continuing administrative services in years when AWBA does not deliver and store water for SNWA, as described in Subarticles 2.7.1 and 2.7.2.
- There is no longer an Operating Account and a Resource Account. Costs for accruing existing LTSC are paid in full by SNWA (per Subarticle 2.2) and future costs will be billed directly to SNWA.

# **THIRD AMENDED AND RESTATED AGREEMENT FOR INTERSTATE WATER BANKING**

**among**

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

This Third Amended and Restated Interstate Water Banking Agreement (Agreement) is made as of this \_\_\_ day of \_\_\_\_\_, 201\_\_ (Effective Date), among the Arizona Water Banking Authority (AWBA), the Southern Nevada Water Authority (SNWA), and the Colorado River Commission of Nevada (CRCN), collectively referred to as "Parties" and individually as "Party." This Agreement amends, restates in its entirety, and supersedes that certain Agreement for Interstate Water Banking dated July 3, 2001, together with all prior amendments and modifications thereto.

## **Recitals**

A. The Arizona Water Banking Authority is an agency of the State of Arizona expressly authorized by A.R.S. § 45-2401 *et seq.* to engage in the interstate banking of Colorado River water on behalf of the State of Arizona. The statutory conditions of A.R.S. §§ 45-2427 and 45-2471 have been satisfied, this Agreement conforms to all of the requirements of such sections and all other applicable provisions of Arizona law, and AWBA is empowered to enter into this Agreement.

B. The Southern Nevada Water Authority is a Nevada joint powers agency and political subdivision of the State of Nevada, created by agreement dated July 25, 1991, as amended November 17, 1994 and January 1, 1996, pursuant to N.R.S. §§ 277.074 and 277.120. SNWA is authorized by N.R.S. § 538.186 to enter into this Agreement and, pursuant to its contract issued under section 5 of the Boulder Canyon Project Act of 1928, SNWA has the right to divert Intentionally Created Unused Apportionment released by the Secretary for use within the State of Nevada pursuant to Art. II(B)(6) of the Consolidated Decree.

C. The Colorado River Commission of the State of Nevada (CRCN) is an agency of the State of Nevada, authorized generally by N.R.S. §§ 538.041 and 538.251. More specifically, CRCN is authorized by N.R.S. §§ 538.161 and 538.186 to enter into this Agreement. The CRCN, in furtherance of the State of Nevada's responsibility to promote the health and welfare of its people in Colorado River matters, makes this Agreement to facilitate the banking of Colorado River water, the crediting of Long-term Storage Credits, and the development of ICUA for SNWA.

D. On July 3, 2001, the Parties entered into the original Agreement for Interstate Water Banking (Original Agreement). In the Original Agreement, and subject to its limitations, AWBA committed to use its best efforts to create for SNWA Long-term Storage Credits in an initial amount of 1,200,000 acre-feet, to be held in an SNWA Interstate Account established with the Arizona Department of Water Resources and, on request of SNWA, to recover for SNWA such credits and cause the development of Intentionally Created Unused Apportionment of Colorado River water (ICUA). SNWA agreed to reimburse AWBA for its costs on an annual basis.

E. On December 18, 2002, the United States, acting through the Secretary of the Interior, AWBA, SNWA, and CRCN entered into a Storage and Interstate Release Agreement (SIRA) pursuant to the Secretary's regulations at 43 C.F.R. Part 414, Offstream Storage of Colorado River Water and Development of and Release of Intentionally Created Unused Apportionment in the Lower Division States. In the SIRA, the Secretary committed to release ICUA developed by AWBA in accordance with the request of SNWA, the terms of the SIRA, and certain specified determinations of the Secretary.

F. The Original Agreement was amended on January 1, 2005 (Amended Agreement) and again on April 1, 2009 (Second Amended Agreement) whereby the Parties amended and restated in its entirety the Original Agreement to provide (1) a specific commitment by AWBA to have credited to the SNWA Interstate Account Long-Term Storage Credits in an aggregate amount, including those theretofore credited, of 1,250,000 acre-feet, (2) a commitment by AWBA, on request of SNWA, to recover such credits and to develop ICUA for SNWA's benefit up to a specified annual maximum, and (3) specified payments to be made by SNWA in consideration of AWBA's commitments respecting the crediting of such Long-Term Storage Credits.

G. Prior to the effective date of the Amended Agreement, AWBA established a long-term storage sub-account entitled "SNWA Interstate Account" with the Arizona Department of Water Resources (ADWR). As of the effective date of the Amended Agreement, the following Long-term Storage Credits had been credited to the SNWA Interstate Account: (1) 50,000 acre-feet of Long-term Storage Credits held by CAWCD for the benefit of SNWA as of the effective date of the Original Agreement; and (2) all of the Long-term Storage Credits existing by virtue of Colorado River water stored, or other Long-term Storage Credits transferred to such account, pursuant to the Original Agreement.

H. The Second Amended Agreement was further modified by "letter agreements" dated April 2, 2009, December 17, 2009, June 15, 2010, and December 8, 2010. The letter agreements addressed operational adjustments to the Second Amended Agreement and modification to the payment schedule.

I. AWBA has accrued 600,651 acre feet of the Long-term Storage Credits on behalf of the SNWA in the SNWA Interstate Account pursuant to the previous agreements, including 50,000 acre feet of Long-term Storage Credits described in Recital G created for the benefit of the SNWA under a separate agreement between SNWA and CAWCD and transferred to the AWBA under the Original Agreement.



J. SNWA has provided \$122,738,945 to AWBA for the delivery and storage of Colorado River water in Arizona on SNWA's behalf. This amount was exclusive of any funding provided to CAWCD for the Long-term Storage Credits described in Recital G.

K. On June 9, 2010, the Parties along with CAWCD entered into a Recovery Agreement addressing some of the details of interstate and intrastate recovery of Long-term Storage Credits. As described in the Recovery Agreement, there is no charge for recovery of the 50,000 acre-feet of Long-Term Storage Credits described in Recital G as SNWA has already pre-paid those costs.

L. SNWA, CRCN, and AWBA desire to enter into this Agreement to amend, restate, and supersede the Original Agreement and all amendments and modifications thereto such that this Agreement and the Recovery Agreement will govern the future rights and obligations of the Parties with respect to SNWA's existing Long-term Storage Credits in the SNWA Interstate Account, banking of additional Colorado River water in Arizona on behalf of SNWA, and related matters as set forth herein.

## ARTICLE 1

### DEFINITIONS, FUNDAMENTAL PRINCIPLES AND TERMS

- 1.1 Definitions. For purposes of this Agreement, terms that are defined in Article I of the Consolidated Decree, terms that are defined in Arizona Revised Statutes (A.R.S.) Title 45, Chapter 3.1, and terms that are defined in 43 C.F.R. Part 414 shall have the meaning there stated. The following terms shall have the meaning defined here, unless the context manifestly requires otherwise. Defined terms are identified by initial letter capitalization.
- 1.1.1 "ADWR" shall mean Arizona Department of Water Resources.
  - 1.1.2 "Agreement" shall mean this Third Amended and Restated Agreement for Interstate Water Banking.
  - 1.1.3 "AWBA" shall mean the Arizona Water Banking Authority.
  - 1.1.4 "AWBA Plan of Operation" shall mean the plan by which AWBA shall operate during the Year as defined in A.R.S. § 45-2456.
  - 1.1.5 "Bureau of Reclamation" shall mean the United States Bureau of Reclamation, Lower Colorado Region.
  - 1.1.6 "CAP" shall mean the Central Arizona Project, as authorized by the Colorado River Basin Project Act, 43 U.S.C. § 1501 *et seq.*, and as operated under that certain Master Repayment Contract dated December 1, 1988, Contract No. 14-06-W-245 between CAWCD and the United States Bureau of Reclamation, as amended.

- 1.1.7 "CAWCD" shall mean the Central Arizona Water Conservation District.
- 1.1.8 "CRCN" shall mean the Colorado River Commission of Nevada.
- 1.1.9 "Consolidated Decree" shall mean the Consolidated Decree entered by the United States Supreme Court in *Arizona v. California*, 126 S.Ct. 1543, 547 U.S. 150 (2006).
- 1.1.10 "Excess CAP Water" shall mean CAP water that is available for distribution by CAWCD in accordance with §8.7(e) of the Master Repayment Contract or §5(d)(2) of the Stipulation Regarding a Stay of Litigation, Resolution of Issues During the Stay and Ultimate Judgment upon Satisfaction of Conditions, filed with the United States District Court on May 3, 2000, in *Central Arizona Water Conservation District v. United States, et al.*, No. CIV 95-625-TUC-WDB (EHC) and CIV 95-1720-PHX-EHC (consolidated), and in accordance with policies established by the CAWCD Board.
- 1.1.11 "ICUA" shall mean Intentionally Created Unused Apportionment as that term is defined in 43 C.F.R. § 414.2.
- 1.1.12 "Interstate Recovery Schedule" shall have the meaning defined in the Agreement for Development of Intentionally Created Unused Apportionment.
- 1.1.13 "Long-term Storage Credit" shall mean Long-term Storage Credit as defined in A.R.S. § 45-802.01(11).
- 1.1.14 "Master Repayment Contract" shall mean that Contract No. 14-06-W-245 dated December 1, 1988, between CAWCD and the United States Bureau of Reclamation, as amended.
- 1.1.15 "Recovery Agreement" shall mean that agreement entitled "Recovery Agreement Among Arizona Water Banking Authority, Central Arizona Water Conservation District, Southern Nevada Water Authority and Colorado River Commission of Nevada," dated June 9, 2010.
- 1.1.16 "Recovery Facilities" shall mean constructed facilities capable of recovering both intrastate and interstate Long-term Storage Credits.
- 1.1.17 "Secretary" shall mean the Secretary of the Interior for the United States, Department of the Interior.
- 1.1.18 "SNWA" shall mean the Southern Nevada Water Authority.
- 1.1.19 "SNWA Interstate Account" shall mean the Long-term Storage Credit Sub-account established by AWBA with ADWR pursuant to Subarticle 2.2.4 of the Original Agreement.

1.1.20 "Storage Facility" or "Storage Facilities" shall mean an Underground Storage Facility or a Groundwater Savings Facility as those terms are defined in A.R.S. § 45-802.01.

1.1.21 "Year" shall mean a calendar year.

## 1.2 Fundamental Principles of this Agreement

1.2.1 This Agreement is among AWBA and SNWA and CRCN. It is intended to create a program of interstate banking of Colorado River water. AWBA will not engage in interstate banking to the detriment of any water user in Arizona in fulfilling its obligations under this Agreement.

1.2.2 Under the terms of this Agreement, AWBA shall utilize the existing Long-term Storage Credits accrued in the SNWA Interstate Account, as well as any new Long-term Storage Credits created pursuant to this Agreement, at a later date to develop ICUA for the benefit of SNWA. The Secretary is required to release this ICUA for consumptive use within the State of Nevada pursuant to the Storage and Interstate Release Agreement entered into by the Secretary under the regulations adopted by the Secretary in 43 CFR Part 414. This Agreement is one part of a four part contractual relationship, which also includes the Storage and Interstate Release Agreement (SIRA), an Agreement for the Development of Intentionally Created Unused Apportionment and a Recovery Agreement. In furtherance of its performance under this Agreement, the AWBA has also entered into an Intergovernmental Agreement among AWBA, CAWCD, and ADWR, as amended, and a series of water storage agreements between AWBA and Storage Facility operators in the State of Arizona.

1.2.3 This Agreement and the Recovery Agreement shall govern the relative rights and responsibilities of AWBA, SNWA and CRCN for the delivery, storage and recovery of Colorado River water in Arizona and for the development of ICUA. No ownership rights in specific storage facilities shall accrue to either SNWA or CRCN by this Agreement. Neither SNWA nor CRCN shall have any rights in this interstate banking arrangement except as provided in this Agreement.

1.2.4 AWBA shall recognize priorities or preferences for the storage and recovery of water in Arizona established by the Agreement Relating to Implementation of Interim Colorado River Surplus Guidelines between SNWA and The Metropolitan Water District of Southern California, dated May 16, 2002.

1.2.5 This Agreement is intended to operate for the mutual benefit of the citizens of the State of Arizona and the citizens of the State of Nevada. It is entered into with the understanding that it is an act of comity, and with the understanding that interstate banking of Colorado River water among the States of the Lower

Division must be undertaken in accordance with express authority granted under each state's law.

### 1.3 Term of Agreement

This Agreement becomes effective when executed by all Parties. This Agreement shall terminate when all of the Long-term Storage Credits accrued in the SNWA Interstate Account as of the Effective Date or developed thereafter have subsequently been recovered, unless this Agreement is extended by written agreement of all Parties. Recovery of the Long-term Storage Credits accrued in the SNWA Interstate Account as of the Effective Date shall be complete by December 31, 2063. Recovery of any Long-term Storage Credits created after the Effective date shall be complete no later than 50 years after the date of storage. Unless otherwise requested by SNWA, Long-term Storage Credits will be recovered on a first in, first out basis so that the oldest credits will be recovered first.

## **ARTICLE 2**

### **DELIVERY AND STORAGE**

#### 2.1 Current Balance in SNWA Interstate Account

As of the Effective Date, AWBA has created 600,651 acre feet of Long-term Storage Credits in the SNWA Interstate Account. Upon the request by SNWA for development of ICUA as described in Article 3, the AWBA shall use Long-term Storage Credits available in the SNWA Interstate Account to fulfill that request.

#### 2.2 Payments Previously Made by SNWA

In consideration of the Long-term Storage Credits created by AWBA prior to the Effective Date, SNWA made payments to AWBA aggregating to the sum of \$122,738,945. These payments are exclusive of any payments SNWA made to CAWCD for the 50,000 acre-feet of Long-term Storage Credits described in Recital G. The Parties acknowledge that the payments described above made by SNWA to AWBA for the delivery and storage of Colorado River water covered at least all costs specified in A.R.S. §§ 45-2471(C) and are not refundable.

#### 2.3 Request for Additional Water Storage by SNWA

- 2.3.1 On or before September 1, AWBA, SNWA, and CRCN shall confer concerning the amount of water anticipated to be available for storage, including any Nevada apportionment, and the proposed location, manner, and cost by which the interstate banking could be accomplished in the following Year.

- 2.3.2 Annually, AWBA develops a draft AWBA Plan of Operation. The draft AWBA Plan of Operation may include an interstate component.
- 2.3.3 On or before November 1, AWBA shall determine and advise SNWA and CRCN in writing as to the quantity of water and storage capacity available for interstate banking under the terms of this Agreement for the following Year. AWBA shall also provide an estimate of the costs calculated pursuant to Subarticle 2.5 associated with the delivery and storage of water available for interstate banking. AWBA shall also provide the data upon which the determinations and estimates in this Subarticle were based.
- 2.3.4 Within 30 days of the notice provided in Subarticle 2.3.3, SNWA shall specify in writing to AWBA its decision to accept all or any portion of the water and storage capacity available at the estimated cost.
- 2.3.5 After consultation with SNWA, the final decision on the quantity of water to be stored and the location of the storage under the terms of this Agreement shall be at the discretion of AWBA. However, except as otherwise provided in Subarticle 2.3.8.1, the maximum quantity of water to be stored in any Year shall not be greater than the amount specified by SNWA pursuant to Subarticle 2.3.4.
- 2.3.6 The quantity of water to be stored in accordance with the terms of this Agreement shall be identified in the final AWBA Plan of Operation by January 1 of each Year. Unless the final AWBA Plan of Operation is modified, this quantity of water shall be stored. AWBA shall provide SNWA and CRCN with a copy of the final AWBA Plan of Operations and any amendments thereto.
- 2.3.7 At any time after approval of the AWBA Plan of Operation, SNWA may request a change in the quantity of SNWA storage for the current Year. Such request for change shall be in writing to AWBA and, if the request results in a decrease in storage, it shall not be greater than the difference between the amount of water already stored in that Year for the benefit of SNWA and the amount of water scheduled in that Year to be stored for the benefit of SNWA. AWBA may, at its discretion and after discussion at an open public meeting, modify the AWBA Plan of Operation to reflect such a change.
- 2.3.8 AWBA may modify the AWBA Plan of Operation for reasons other than a request from SNWA.
- 2.3.8.1 If the modification results in an increase in the amount of Excess CAP Water available for storage for interstate banking, AWBA shall notify SNWA and CRCN in writing of the estimated cost for delivery and storage of the increase. SNWA shall have 30 days



after receipt of such notice to specify in writing to AWBA its decision to decline any or all of the increase.

2.3.8.2 If the modification results in a decrease in Excess CAP Water available for storage for interstate banking, AWBA will notify SNWA and CRCN in writing of such a modification, the reasons for the decrease in storage, the data upon which such determination was based, and the revised amount of water that AWBA will store for SNWA during the Year.

2.3.8.3 If SNWA directs Nevada unused apportionment to AWBA for storage pursuant to this Agreement, AWBA agrees that no decrease in the amount of storage for SNWA will be made after October 1 of each Year.

2.3.8.4 AWBA agrees to notify SNWA if costs are expected to increase by more than 20% due to the modification of the AWBA Plan of Operation or any other reason.

2.3.9 The schedule dates and periods contained in this Subarticle 2.3 can be changed upon written agreement of AWBA and SNWA.

2.4 Delivery and Storage of Additional Water by AWBA for SNWA. Delivery and storage of additional water under the terms of this Agreement shall be subject to the following:

2.4.1 The delivery of additional water to storage shall be pursuant to the agreement between CAWCD and the AWBA providing for the Delivery of Excess CAP Water, whereby AWBA is entitled to purchase Excess CAP Water from CAWCD for interstate banking purposes.

2.4.2 AWBA has obtained and shall continue to maintain all necessary water storage permits from ADWR to allow storage under the terms of this Agreement.

2.4.3 The storage of water shall be pursuant to AWBA's contracts with various Storage Facility operators whereby AWBA is entitled to store water at those various Storage Facilities.

2.4.4 AWBA shall monitor the accrual and maintenance of Long-term Storage Credits in the SNWA Interstate Account from Year to Year. AWBA shall exercise due diligence in ensuring that all Long-term Storage Credits developed in accordance with the terms of this Agreement have accrued and are properly accounted for in such account.

2.4.5 AWBA agrees that it shall timely file with ADWR an annual report for all water delivered and stored in accordance with the terms of this Agreement by

March 31 of the Year following the delivery and storage. AWBA, SNWA and CRCN shall cooperate in the preparation of such report, and shall agree upon the accuracy of the data to be filed. ADWR determines the quantity of Long-term Storage Credits that accrue in the SNWA Interstate Account in any Year and makes a report available to AWBA detailing the credits available in AWBA's Long-term Storage Account. Upon receipt of the report from ADWR, AWBA shall make that report available to SNWA and CRCN. The report may include adjustments or corrections made by ADWR to the Long-term Storage Credits in the SNWA Interstate Account created after the Effective Date of this Agreement.

## 2.5 Charges for Additional Delivery and Storage

2.5.1 SNWA agrees that all costs of the additional delivery and storage of water as described in Subarticle 2.4 (including the costs referred to in A.R.S. § 45-2471(C)) shall be borne by SNWA. Such costs shall be calculated and charged to SNWA in accordance with this Subarticle 2.5, and billed to and paid by SNWA as provided in Subarticle 2.6. The Parties acknowledge that, for purposes of A.R.S. § 45-2471(C)(1), AWBA's cost of acquiring Colorado River water is the cost charged by the United States to CAWCD under CAWCD's federal water delivery contract for delivering such water.

2.5.2 The charges to SNWA for the cost of water delivered under this Agreement shall consist of the following pricing components computed on a per acre-foot basis:

2.5.2.1 The fixed operation, maintenance and replacement (OM&R) rate, set annually for CAP municipal and industrial (M&I) subcontractors by the CAWCD Board;

2.5.2.2 The M&I capital charge, set annually for CAP M&I subcontractors by the CAWCD Board;

2.5.2.3 A pumping energy rate established by the CAWCD Board for M&I subcontractors. SNWA or CRCN may provide energy sufficient to fully or partially meet the pumping requirements for the delivery of water under the terms of this Agreement, if mutually agreeable among SNWA, CRCN, AWBA and CAWCD;

2.5.2.4 A payment *in lieu* of property taxes, calculated as described in A.R.S. § 48-3715; and

2.5.2.5 Such additional costs as may be reasonably incurred by AWBA with approval by SNWA.

2.5.3 The charges to SNWA for the cost of water storage under this Agreement shall consist of the following pricing components computed on a per acre foot of delivery basis:

2.5.3.1 Underground Storage Facility charges as paid by AWBA based on contractual agreements with those facility operators;

2.5.3.2 A capital charge for storage at Underground Storage Facilities constructed with State Demonstration Project funds as determined by CAWCD as owner/operator of the facilities;

2.5.3.3 If storage under the terms of this Agreement is accomplished at Groundwater Savings Facilities, SNWA shall pay a charge for storage as determined by AWBA in that Year; and

2.5.3.4 Such additional costs as may be reasonably incurred by AWBA with approval by SNWA.

## 2.6 Billing of and Payment for Additional Delivery and Storage

2.6.1 In any Year that additional water is to be delivered and stored by the AWBA for the benefit of SNWA, the AWBA will on or before January 1 of that Year, provide SNWA a statement detailing the total annual charge for the water to be delivered and stored in that Year for the benefit of the SNWA. The charges are described in Subarticle 2.5.

2.6.2 AWBA shall provide SNWA monthly invoices equaling one-twelfth of the total annual charge on or before the first of each month. SNWA shall pay the total amount of the invoice on or before the 10<sup>th</sup> of each month. If such day is not a business day, the payment shall be made on the next succeeding business day. Following receipt of the SNWA payment, AWBA shall remit the appropriate payment to CAWCD in accordance with AWBA's Master Water Storage Agreement with CAWCD.

2.6.3 The total annual charge for water delivery may be subject to a mid-year correction if the charges described in Subarticle 2.5.2 are changed by the CAWCD Board. In the event of a correction, AWBA shall re-compute the remaining equal monthly payments and invoice SNWA the corrected amount in the first monthly invoice following the correction.

2.6.4 No later than March 15 of the Year following a Year in which water was delivered and stored under the terms of this Agreement, AWBA shall provide SNWA a Year end account reconciliation. The payment account of SNWA shall be adjusted first to reflect the amount of water actually delivered by AWBA, and second to reflect any change in the OM&R and pumping energy rates applicable to the water delivered. If additional funds are owed to

AWBA, SNWA shall remit those funds within 10 business days of the date the notice is provided by AWBA. If funds are due to SNWA, they shall be remitted to SNWA within 10 business days, including interest accrued on those funds, unless SNWA requests that the funds including interest be used to offset the water delivery charge for a future Year in which additional storage and delivery occurs. If additional delivery and storage has not occurred within three years, SNWA may request that the AWBA remit all remaining funds.

2.6.5 The schedule dates and periods contained in this Subarticle 2.6 can be changed upon written agreement of AWBA and SNWA.

## 2.7 Administrative Service Cost for Stored Water

2.7.1 In any Year when AWBA does not deliver and store water for SNWA pursuant to this Agreement, SNWA shall be charged \$20,000 per year for AWBA's continuing administrative services in accordance with the terms of this Agreement.

2.7.2 Charges for administrative services as described in Subarticle 2.7.1 shall be paid on a quarterly basis. Unless otherwise agreed in advance, each quarterly payment shall be an equal one-fourth of the administrative charge for the Year. AWBA shall provide an invoice for one quarter of the annual administration charge to SNWA on or before the 15<sup>th</sup> day of December, March, June, and September for the quarter immediately following. If such day is not a business day, the invoice shall be made on the next succeeding business day.

2.7.2.1 The first payment for administrative costs due under this Agreement will be invoiced on June 15, 2013.

2.7.3 In any Year when AWBA delivers and stores water for SNWA pursuant to this Agreement, SNWA shall pay AWBA 15% of AWBA's actual administrative costs. AWBA's actual administrative costs are computed as a lump sum for the Year in which the storage occurred and includes salaries, employee-related expenses and indirect costs.

2.7.4 Charges for administrative services as described in Subarticle 2.7.3 shall be paid in arrears on an annual basis. AWBA shall provide an invoice for the annual administration charge to SNWA on or before the 15<sup>th</sup> day of January for the actual administrative costs incurred in the previous Year. Such invoice shall apply a credit for any payments made pursuant to Subarticle 2.7.1. If such day is not a business day, the invoice shall be made on the next succeeding business day.

- 2.7.5 SNWA shall pay the administrative service charges on or before the first day of the month following the notice of the charges. If such day is not a business day, the payment shall be made on the next succeeding business day.
- 2.7.6 The administrative service cost is not refundable.

### **ARTICLE 3**

#### **DEVELOPMENT OF INTENTIONALLY CREATED UNUSED APPORTIONMENT**

##### **3.1 Extent of Annual Development of ICUA for SNWA**

3.1.1 SNWA shall have the right to require the recovery of Long-term Storage Credits in the SNWA Interstate Account and the development of ICUA in any Year, as follows:

3.1.1.1 The initial year request for ICUA shall not exceed 20,000 acre-feet, the second year request for ICUA shall not exceed 30,000 acre-feet and any request for ICUA thereafter shall not exceed 40,000 acre-feet.

3.1.2 During any Year as to which the Secretary has determined under Article II(B)(3) of the Consolidated Decree that a shortage condition exists, SNWA may require the development of ICUA (1) in such amount that, when considered together with the amount of basic apportionment available for use in Nevada, will allow 300,000 acre-feet to be consumptively used in Nevada, plus (2) the amount specified for such Year in Subarticle 3.1.1. SNWA may require the development of ICUA under this Subarticle only if after consultation with SNWA and CRCN, the AWBA has determined that sufficient recovery facilities are in place for that Year to meet the needs of CAP M&I subcontractors and any post 1968 domestic use Colorado River contractor in Arizona and SNWA's request. If it is determined that sufficient recovery facilities are not available, SNWA may require the development of ICUA only to the extent that SNWA has contributed to new facilities in Subarticle 3.4.2.1 or additional facilities in Subarticle 3.5.1 plus any available existing recovery capacity not utilized by the CAP M&I subcontractors and post 1968 domestic use Colorado River contractors.

3.1.2.1 If a shortage determination by the Secretary under Article II(B)(3) of the Consolidated Decree causes a reduction in the Colorado River water available for use by non-Indian municipal and industrial (M&I) CAP subcontractors in any Year under their subcontracts or any other post 1968 domestic use Colorado River contractor in any Year under their contract, SNWA's right to



require the recovery of Long-term Storage Credits and the development of ICUA shall be reduced proportionately to the reduction in M&I water supply sustained by CAP subcontractors and any other post 1968 domestic use contractor.

### 3.2 SNWA Notices for Development of ICUA

- 3.2.1 By September 1, 2015 and each Year after that, SNWA shall provide AWBA and CAWCD a plan describing any potential ICUA requests for the following ten year period. SNWA and CRCN shall confer with AWBA and CAWCD when developing such a plan. The plan is for information and planning purposes only and is not binding.
- 3.2.2 For any Year in which SNWA will require the development of ICUA by AWBA and the release of ICUA by the Secretary, SNWA shall confer with the AWBA prior to June 1 of the preceding Year and provide notice of the amount of such ICUA to AWBA by June 1 of the preceding Year.
- 3.2.3 Between June 1 and September 15 of the Year in which a notice has been given under Subarticle 3.2.2, AWBA staff shall meet and confer with SNWA concerning the proposed location, manner and estimated cost of the development of the specified ICUA.
- 3.2.4 On or before September 15 of the Year in which a notice for the development of ICUA has been given to AWBA under Subarticle 3.2.2, or as otherwise required by the Secretary, SNWA shall make a request of the Secretary for the release of such ICUA during the following Year and shall provide a copy of such notice to AWBA.

### 3.3 Development of ICUA

- 3.3.1 Upon receipt of a notice under Subarticle 3.2.2 for the development of ICUA, AWBA shall meet and confer with CAWCD to develop an Interstate Recovery Schedule under the terms of the Agreement for the Development of Intentionally Created Unused Apportionment. The Interstate Recovery Schedule shall utilize the recovery of Long-term Storage Credits to develop the ICUA through recovery methods identified in the corresponding Storage and Interstate Release Agreement. These methods include recovery and exchange of Long-term Storage Credits for Colorado River water and/or credit exchange of Long-term Storage Credits for Colorado River water that would have otherwise been delivered for underground storage in that Year.
  - 3.3.1.1 AWBA shall meet and confer with SNWA concerning the location, manner and cost of recovery when developing the Interstate Recovery Schedule.

- 3.3.1.2 AWBA agrees that the development of the Interstate Recovery Schedule shall take into account the location, manner and cost of recovering all water stored by AWBA in the State of Arizona. AWBA agrees that the selection of recovery facilities included in the Interstate Recovery Schedule shall not be made in a manner that unreasonably allocates the higher recovery cost to the recovery of water for the development of ICUA under the terms of this Agreement.
- 3.3.1.3 Factors to be considered when preparing the Interstate Recovery Schedule shall include but are not limited to:
  - 3.3.1.3.1 Arizona water management goals,
  - 3.3.1.3.2 CAP operational requirements,
  - 3.3.1.3.3 Water quality requirements,
  - 3.3.1.3.4 Opportunities for shared or joint facilities, and
  - 3.3.1.3.5 Opportunities to reduce recovery costs.
- 3.3.2 Upon receipt of a copy of SNWA's request under Subarticle 3.2.4 to the Secretary for the release of ICUA during the following Year, AWBA shall prepare the following certifications, in accordance with the Agreement for the Development of Intentionally Created Unused Apportionment: (1) an Upcoming Year Delivery Certification; (2) an Interstate Recovery Schedule Certification; and, (3) a Development of ICUA Certification. These three certifications shall be prepared and delivered to the Bureau of Reclamation no later than December 1 of the Year in which a notice for the development of ICUA was given to AWBA under Subarticle 3.2.2. AWBA shall identify the amount of ICUA specified to be developed in SNWA's notice under Subarticle 3.2.2 in the AWBA Plan of Operation for the following Year, and in such Year shall recover Long-term Storage Credits and develop ICUA in such amount, subject to the Secretary's determination and release of ICUA under Subarticles 5.4 and 5.5 of the SIRA. Recovery shall not commence until verification by the Secretary that ICUA will be released to SNWA under the terms of the Storage and Interstate Release Agreement.
- 3.3.3 The choice of facilities utilized to recover the Long-term Storage Credits used to develop the ICUA during any year shall be at the discretion of AWBA.
- 3.3.4 After the Secretary's notice of determination pursuant to Subarticle 5.4 of the SIRA respecting the availability and release of ICUA, AWBA shall recover Long-term Storage Credits and cause ICUA to be developed in the amount

specified in the Secretary's notice. SNWA shall be responsible for all costs of developing the specified ICUA as provided in this Agreement.

3.3.5 Upon written request by SNWA to cease the development of ICUA, AWBA shall cease the development of ICUA by the amount of the request or by the amount of verified ICUA not yet developed, whichever is less. AWBA shall certify to the Secretary the amount of ICUA previously requested that will not be developed and shall request that the Secretary act in accordance with that certification and the terms of the Storage and Interstate Release Agreement.

3.3.6 AWBA shall notify ADWR of the actual amount of credits recovered in accordance with the terms of this Agreement and shall request that ADWR debit the SNWA Interstate Account by the amount of credits recovered when AWBA submits its annual report to ADWR. AWBA and SNWA shall cooperate in the preparation of such report, and shall agree upon the accuracy of the data to be filed.

#### 3.4 Charges for Developing ICUA

3.4.1 SNWA agrees that, except as provided in Subarticle 3.4.3, all costs of the development of ICUA as described in Subarticle 3.3 shall be borne by SNWA. Such costs shall be calculated and charged to SNWA in accordance with this Subarticle 3.4, and billed to and paid by SNWA as provided in Subarticle 3.5.

3.4.2 The charges to SNWA for the cost of ICUA caused to be developed by AWBA under this Agreement shall consist of the following pricing components:

3.4.2.1 A capital component consisting of (1) the cost to develop any new recovery facility as to which the SNWA shall have a prior right of use, such cost to be paid in advance in a lump sum, or (2) a charge computed on a per acre-foot of ICUA developed basis to recover SNWA's proportionate share of the annual capital cost of other recovery facilities to be used for SNWA's benefit during the Year.

3.4.2.2 An operation and maintenance (O&M) component computed on a per acre-foot of ICUA developed basis to recover SNWA's proportionate share of the O&M cost (including pumping energy) incurred by the owner/operator of any recovery facility used during the Year to develop ICUA for SNWA.

3.4.2.3 An administrative component calculated as a lump sum to recover the actual administrative cost reasonably incurred by AWBA.

3.4.2.4 In the event that the cost of recovery for all or some of the water stored by AWBA in the State of Arizona increases due to unforeseen circumstances such as a cost for water treatment, or new state or

federal regulations such as new water quality standards or additional environmental compliance requirements, SNWA agrees to share a reasonable proportion of such unanticipated costs, regardless of the location of such storage.

3.4.3 SNWA shall specify in its notice given under Subarticle 3.2.2 if, and the extent to which, ICUA is to be developed through the recovery of Long-term Storage Credits previously held by CAWCD for the benefit of SNWA under its October 15, 1992 agreement with The Metropolitan Water District of Southern California. The Parties acknowledge that pursuant to the terms of such agreement and prior to the effective date of the Original Agreement, SNWA made advance payments of the entire cost to recover such credits and to develop such ICUA.

### 3.5 Billing and Payment for Developing ICUA

3.5.1 AWBA shall notify SNWA of any charges for the development of recovery facilities as described in Subarticle 3.4.2.1(2) after agreement between AWBA and SNWA that additional recovery facilities are required for the development of the certified ICUA.

3.5.2 SNWA shall agree to an acceptable repayment schedule for costs specified in AWBA's Subarticle 3.5.1 notice prior to the construction of any additional recovery facilities. Following receipt of the SNWA payments pursuant to that schedule, AWBA shall remit the appropriate payments to the appropriate recovery facility owner/operators in accordance with AWBA's contractual agreements with those operators.

3.5.3 AWBA shall provide an estimate of the charges for any capital component described in Subarticle 3.4.2.1(2) and the recovery facility O&M described in Subarticle 3.4.2.2 to SNWA on or before the fifteenth of each month prior to the actual recovery. Such estimates may include adjustments or corrections to previous estimates.

3.5.4 SNWA shall pay the estimate of the capital component described in Subarticle 3.4.2.1(2) and the recovery facility O&M charge described in Subarticle 3.4.2.2 on or before the tenth day of the month following receipt of the estimate. If such day is not a business day, the payment shall be made on the next succeeding business day. Following receipt of the SNWA payment, AWBA shall remit the appropriate payment to the appropriate recovery facility operators in accordance with AWBA's contractual agreements with those operators.

3.5.5 No later than March 15 of the Year following the Year in which ICUA was recovered under the terms of this Agreement, AWBA shall provide SNWA and CRCN a Year end account reconciliation showing the actual Long-term

Storage Credits recovered and whether charges for recovering the credits exceed payments made or payments exceed the amount owed. If additional funds are owed to AWBA by SNWA, they shall be paid within 10 business days of the date notice is provided by AWBA. If funds are due to SNWA, they shall be applied to SNWA's current Year recovery facility O&M charge and used to offset current payments in an amount equal to the excess payment. If no recovery under the terms of this Agreement is included in the AWBA Plan of Operation for the current Year, the funds shall be carried over and used to offset the recovery facility O&M charge for the Year in which recovery resumes. If recovery has not resumed within three years, AWBA shall remit the remaining funds to SNWA.

- 3.5.6 Charges for administrative services as described in Subarticle 3.4.2.3 shall be paid on a quarterly basis. Unless otherwise agreed in advance, each quarterly payment shall be an equal one-fourth of the administrative charge agreed upon for the fiscal year. AWBA shall provide an invoice for one quarter of the annual administration charge to SNWA on or before the 15<sup>th</sup> day of June, September, December and March for the quarter immediately following. If such day is not a business day, the invoice shall be made on the next succeeding business day.
- 3.5.7 SNWA shall pay administrative charges on or before the first day of the month following the receipt of the notice. If such day is not a business day, the payment shall be made on the next succeeding business day.

## **ARTICLE 4**

### **DELINQUENT CHARGES AND SURETY OF PERFORMANCE**

- 4.1 Delinquency Charges under the Terms of this Agreement
- 4.1.1 All payments due under this Agreement shall be paid promptly on the date required and, if not paid, shall be delinquent. Interest on delinquent payments may be assessed from the business day of the month on which the charge was due and shall accrue at the prime rate of interest as established by the Bank of America, plus 6% per annum, prorated by days of the unpaid principal, computed daily until payment is received. Any payment received shall first be applied to any interest owed, and then to any charges owed.
- 4.1.2 In the event any portion of the charges is disputed, the disputed amount shall be paid when due, but may be accompanied by a written statement indicating the basis for any dispute. If the dispute is found to be valid, SNWA shall be refunded any overpayment plus interest, accrued at the rate set forth in

Subarticle 4.1.1, prorated by days from the date payment was credited to SNWA to the date the refund check is issued.

4.1.3 In the event any delinquent amount is not paid by SNWA within thirty (30) days after receipt by SNWA of written notice from AWBA of the delinquency, AWBA shall have the right, without liability of any kind, to suspend recovery of any water under the terms of this Agreement so long as the delinquent amount remains unpaid. Such suspension shall not affect the Long-term Storage Credits remaining in the SNWA Interstate Account. Nothing herein shall limit the rights of AWBA to use any other available legal remedy to effect collection of delinquent amounts.

#### 4.2 Surety of Performance under the Terms of this Agreement

4.2.1 In the event that a dispute arises over any action to be undertaken pursuant to the terms of this Agreement, all Parties recognize and acknowledge that time is of the absolute essence in the conduct of the Parties under the terms of this Agreement.

4.2.2 The Parties agree that the water resources being stored, forborne, and made available through exchange for use by SNWA under the terms of this Agreement are unique and very likely cannot be replaced in a timely fashion by other resources. Accordingly, the Parties agree that in any dispute over the development and release of ICUA, SNWA will likely be requesting an injunction ordering specific performance of the terms of this Agreement. The Parties agree that if AWBA opposes the specific enforcement of this Agreement with respect to ICUA, AWBA shall have the burden to show by clear and convincing evidence that it has the ability to, and will, make alternative water resources, other than water controlled by the United States under the Consolidated Decree, available at the SNWA system, free of adverse claims. If AWBA proposes to deliver such alternative water to SNWA, AWBA shall bear any additional costs that may be incurred over the costs that would have otherwise been incurred by SNWA for the delivery of ICUA under terms of this Agreement. SNWA shall be required to accept such alternative water resources if so ordered by a court of competent jurisdiction. Nothing in this Subarticle shall limit SNWA's rights to seek money damages or a remedy at law.

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

- 4.2.4 As required by A.R.S § 45-2471(E), if the terms of this Agreement are breached by SNWA or CRCN, AWBA shall cease the creation of ICUA until the breach is cured.

## **ARTICLE 5**

### **OTHER PROVISIONS**

#### **5.1 Consultation on the AWBA Annual Report**

- 5.1.1 AWBA is required to submit an annual report of its transactions and proceedings for the preceding year by July 1 each Year pursuant to A.R.S. § 45-2426. SNWA agrees to confer with AWBA staff in the development of the report.

#### **5.2 The terms established by Subarticles 3.1, 3.2 and 3.5 may be changed upon written agreement of AWBA's authorized representative and the SNWA's General Manager.**

#### **5.3 Payment of federal charges relating to the Execution of a Storage and Interstate Release Agreement.**

- 5.3.1 SNWA agrees that all federal charges associated with any amendment to the SIRA shall be borne by SNWA.

- 5.3.2 These charges shall be calculated by and paid directly to the Secretary by SNWA in accordance with the Secretary's requirements.

#### **5.4 Successors to AWBA and SNWA**

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

#### **5.5 Uncontrollable Forces**

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

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

## 5.6 Notices, Requests and Payments

5.6.1 All notices and other communications provided for in this Agreement shall be in writing and may be given in either of the following manners:

5.6.1.1 Notices and requests shall be in writing and maybe mailed first class postage paid to the Parties at the following addresses:

AWBA: Arizona Water Banking Authority  
3550 North Central Avenue  
Phoenix, Arizona 85012  
Attn: Manager

SNWA: Southern Nevada Water Authority  
1001 S. Valley View Boulevard  
Las Vegas, Nevada 89153  
Attn: General Manager

CRCN: Colorado River Commission of Nevada  
555 E. Washington Avenue, Suite 3100  
Las Vegas, Nevada 89101  
Attn: Executive Director

5.6.1.2 Notices and requests may be given by facsimile and shall be deemed complete upon receipt from sender's facsimile machine indicating that the transmission was satisfactorily completed and after phone communication with administrative offices of the recipient notifying the recipient that a facsimile has been sent.

5.6.2 All payments required under the terms of this Agreement shall be made by Electronic Fund Transfer (EFT).

5.6.2.1 AWBA will notify the Treasury, State of Arizona monthly of any anticipated EFTs to be made by SNWA.

5.6.2.2 SNWA will submit all EFTs to the Treasury, State of Arizona at the account number designated by AWBA, or to such other destination as AWBA may designate by notice.



5.6.2.3 AWBA will ensure that all EFTs submitted by SNWA are properly accrued in the Nevada sub-account maintained at ADWR.

- 5.7 On request, AWBA shall provide SNWA with a copy of all contracts, rate schedules, and other documents that are relevant to or that form the basis for the charges specified in the Agreement.
- 5.8 The Parties to this Agreement are hereby notified of Arizona Revised Statutes section 38-511.
- 5.9 On reasonable advance written notice to AWBA and during normal business hours, SNWA shall have the right to inspect and audit all records of AWBA pertaining to the performance of AWBA's obligations pursuant to this Agreement.
- 5.10 This Agreement is not intended to confer any rights on any person other than the Parties hereto, and it shall not be construed as a third-party beneficiary contract or as conferring third-party beneficiary status or rights of any nature on any person.
- 5.11 This Agreement contains the entire understanding between the Parties relating to the transactions contemplated by this Agreement, notwithstanding any previous negotiations or agreements, oral or written, between the Parties with respect to the subject matter hereof. All prior or contemporaneous agreements, understandings, representations and statements, oral or written, regarding the subject matter of this Agreement are merged in this Agreement and shall be of no further force or effect.

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

SOUTHERN NEVADA WATER  
AUTHORITY

DATE \_\_\_\_\_

\_\_\_\_\_  
Patricia Mulroy, General Manager

Approved as to form:

\_\_\_\_\_  
Dana R. Walsh, Deputy Counsel

COLORADO RIVER COMMISSION OF  
NEVADA

DATE \_\_\_\_\_

\_\_\_\_\_  
Jayne Harkins, Executive Director

Approved as to form:

\_\_\_\_\_  
Jennifer Crandell, Senior Deputy Attorney General

ARIZONA WATER BANKING  
AUTHORITY

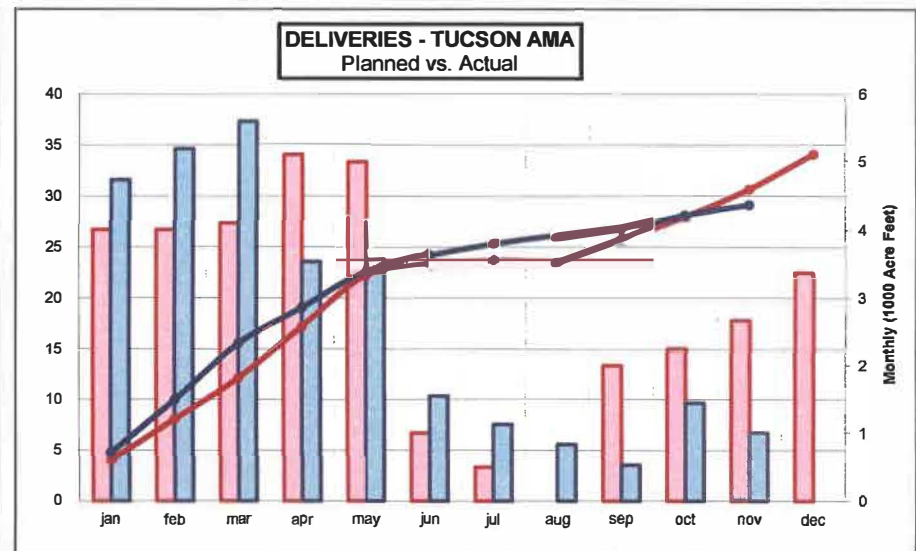
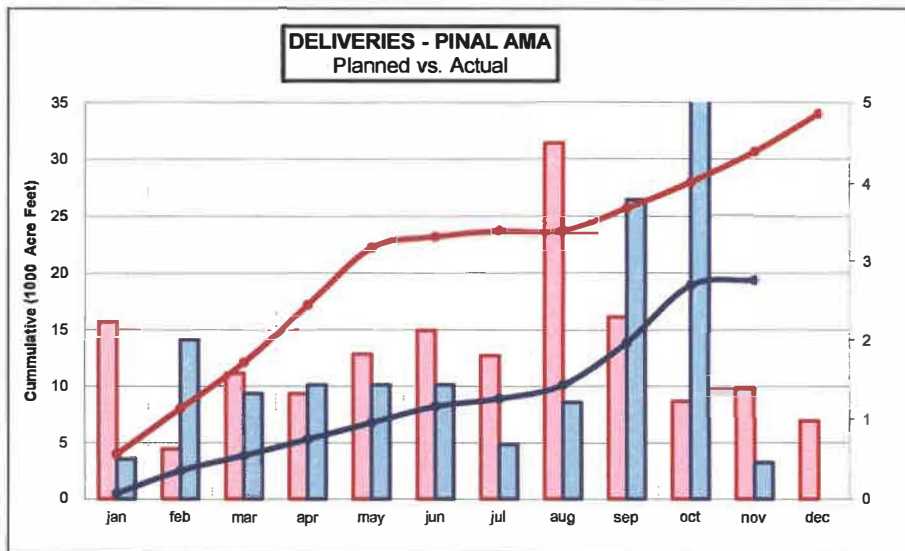
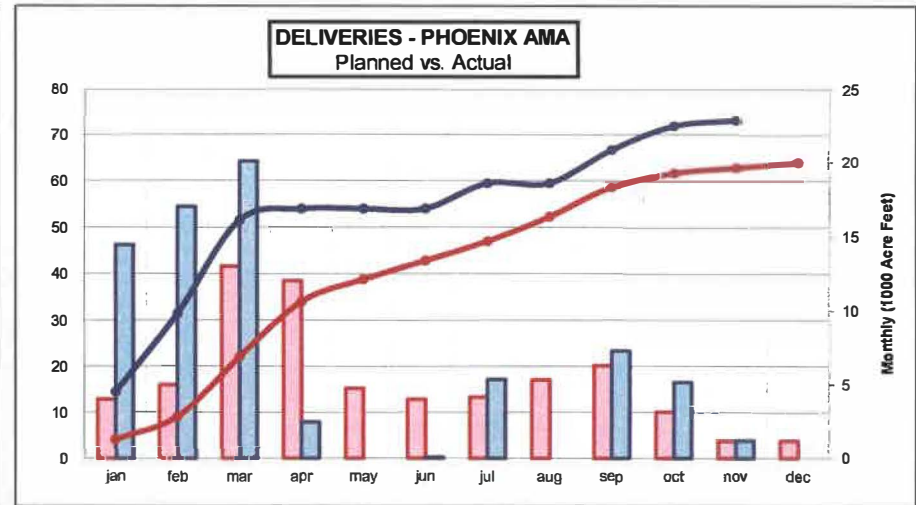
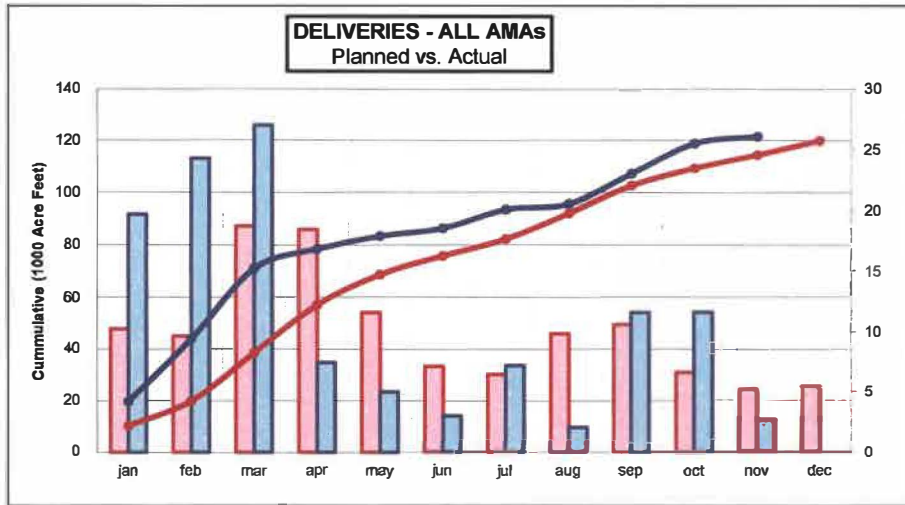
DATE \_\_\_\_\_

\_\_\_\_\_  
Sandra Fabritz-Whitney, Chair

Approved as to form:

\_\_\_\_\_  
Nicole D. Klobas, Deputy Counsel

# 2012 Plan of Operation - INTRASTATE



█ PLANNED (MONTHLY)   
 █ ACTUAL (MONTHLY)   
 —●— PLANNED (CUM)   
 —●— ACTUAL (CUM)

November 19, 2012



David V. Modeer  
General Manager  
Central Arizona Project  
P.O. Box 43020  
Phoenix, Arizona 85080-3020  
623-869-2333



Jeffrey Kightlinger  
General Manager  
Metropolitan Water District of  
Southern California  
P.O. Box 54153  
Los Angeles, California 90054  
213-217-6000



SOUTHERN NEVADA  
WATER AUTHORITY

Patricia Mulroy  
General Manager  
Southern Nevada  
Water Authority  
1001 South Valley View  
Las Vegas, Nevada 89153  
702-258-3100

Mr. Terry Fulp, Regional Director  
U.S. Department of the Interior  
Bureau of Reclamation  
Lower Colorado River Region  
P.O. Box 61470  
Boulder City, Nevada 89006

Dear Mr. Fulp:

On behalf of the Central Arizona Project (CAP), the Metropolitan Water District of Southern California (MWD), and the Southern Nevada Water Authority (SNWA), we are writing to express our desire to keep any unused state apportioned water in Lake Mead this year. As you are keenly aware, the Colorado River has experienced prolonged drought conditions for much of the last twelve years that resulted in significant depletions of water stored in both Lake Mead and Lake Powell. While water year 2011 offered hope for recovery, water year 2012 was the third driest year on record, and storage declined significantly this year, with Lake Mead now just 52% full. At the same time, our ongoing conservation efforts have reduced demands in the Lower Colorado River Basin which may result in unused Colorado River water that could be available this year pursuant to Article II(B)(6) of the Consolidated Decree. We see this as an opportunity to retain unused state apportioned water in Lake Mead to alleviate low reservoir storage conditions and help avoid shortages in the near future.

Over the last several years we have worked diligently with the Bureau of Reclamation and other entitlement holders on the Colorado River to stretch available water supplies. These efforts have included partnering in interstate water banking programs, funding the pilot run of the Yuma Desalting Plant, funding the construction of the Warren H. Brock Reservoir, and implementing aggressive water conservation programs in our service territories. CAP, MWD, and SNWA have implemented these and other programs to augment Colorado River system storage by capturing otherwise non-storable flows and to create Intentionally Created Surplus (ICS). These actions resulted in approximately 455,000 af of ICS stored in Lake Mead by the end of 2011, with another 123,000 af of water stored and conveyed by Brock Reservoir since its construction, with more being created and captured this year.

Despite our efforts to help aid Lake Mead's storage, we are now at risk of a shortage declaration in the next few years if drought conditions continue. CAP, MWD, and SNWA urge you not to reallocate any unused state apportioned water this year but rather to leave the water in

Mr. Terry Fulp  
Page 2  
November 19, 2012

Lake Mead for the overall benefit of the Colorado River system and the millions of people who are reliant upon the system.

Thank you for your time and attention in this matter. Please contact us directly with any questions or concerns.

Sincerely,



David V. Modeer  
General Manager  
Central Arizona Water  
Conservation District



Jeffrey Kightlinger  
General Manager  
Metropolitan Water District  
of Southern California



Patricia Mulroy  
General Manager  
Southern Nevada  
Water Authority

cc: Sandra Fabritz-Whitney, Director – Arizona Department of Water Resources  
Tanya M. Trujillo, Executive Director – Colorado River Board of California  
Jayne Harkins, Executive Director – Colorado River Commission of Nevada  
Tom McCann, Assistant General Manager – Central Arizona Project  
William Hasencamp, Manager, Colorado River Resources – Metropolitan Water District of Southern  
California  
John Entsminger, Senior Deputy General Manager – Southern Nevada Water Authority  
Bruce Moore, Acting Director – Surface Water Resources, Southern Nevada Water Authority

### Arizona Colorado River Simulation System (CRSS) Modeling Assumptions

Parameter	Arizona Baseline Assumptions	Remarks
<b>Hydrology</b>	1906-2008 historical natural flow used to predict future flow conditions using the Indexed Sequential Method.	Plan to incorporate the Paleo and Down-Scaled Climate hydrologies as sensitivity analyses once the data is available.
<b>Model Run Period</b>	The model run period is 100 years based upon the current year (for example, 2012 to 2111).	
<b>Initial Reservoir Conditions</b>	Actual January 1 elevations for the current year of the model run.	
<b>Lake Powell Equalization / 602a Storage</b>	For the 2007 Interim Guidelines FEIS, equalization was based upon the Lake Powell "Equalization" line, which is in effect until 2026. After 2026, the 602a storage algorithm goes into effect. For Arizona modeling, the "Equalization" line was extended past 2026 until it reached Lake Powell's maximum permissible elevation.	
<b>Lake Mead Surplus Operations</b>	Surplus deliveries as described in 2007 Interim Guidelines: <ul style="list-style-type: none"> <li>- Flood Control Surplus</li> <li>- Quantified Surplus (70R)</li> <li>- Domestic Surplus – above elevation 1,145 and below Quantified Surplus. Ends in 2026.</li> <li>- Intentionally Created Surplus (ICS) – above elevation 1,075 and no Flood Control. ICS extends through 2026, except Tributary Conservation (SNWA) which goes through 2057.</li> </ul>	
<b>Mexico Surplus</b>	Mexico receives an additional 200,000 acre-feet under Flood Control Surplus conditions.	Once the official USBR model is available, Arizona will use this model to incorporate the details specified in Minute 319. Deliveries to Mexico will be increased: <ul style="list-style-type: none"> <li>- 40,000 acre-feet when Lake Mead is between 1,145 and 1,170 ft. msl</li> <li>- 55,000 acre-feet when Lake Mead is between 1,170 and 1,200 ft. msl</li> <li>- 80,000 acre-feet when Lake Mead is at or above 1,200 ft. msl but below levels for flood control releases</li> <li>- 200,000 acre-feet during flood control releases</li> </ul>

Parameter	Arizona Baseline Assumptions	Remarks
<b>Lake Mead Shortage Operations</b>	<p>Shortages based on Lake Mead elevations as described in the 2007 Interim Guidelines:</p> <ul style="list-style-type: none"> <li>- Below 1,075 feet and above 1,050 feet: 400,000 acre-feet Lower Basin shortage;</li> <li>- Below 1,050 feet and above 1,025 feet: 500,000 acre-feet Lower Basin shortage;</li> <li>- Below 1,025 feet: 600,000 acre-feet Lower Basin shortage;</li> <li>- Below 1,000 feet, reconsultation required.</li> </ul> <p>The shortage guidelines are assumed to extend beyond 2026.</p>	
<b>Mexico Shortages</b>	<p>As it was modeled for the 2007 Interim Guidelines FEIS, deliveries to Mexico are reduced during shortage declarations by 16.7%.</p> <ul style="list-style-type: none"> <li>- 66,667 acre-feet in the first shortage tier</li> <li>- 83,333 acre-feet in the second shortage tier</li> <li>- 100,000 acre-feet in the third shortage tier</li> </ul>	<p>Once the official USBR model is available, Arizona will use this model to incorporate the details specified in Minute 319. Deliveries to Mexico will be reduced:</p> <ul style="list-style-type: none"> <li>- 50,000 acre-feet when Lake Mead is between 1,075 and 1,050 ft msl.</li> <li>- 70,000 acre-feet when Lake Mead is between 1,050 – 1,025 ft. msl.</li> <li>- 125,000 acre-feet when Lake Mead is below 1,025 ft msl.</li> </ul>
<b>Arizona Shortage Deliveries</b>	<p>Arizona shortage deliveries are 320,000 acre-feet, 400,000 acre-feet, and 480,000 acre-feet based on the shortage elevations listed above</p>	
<b>Arizona Priority 4 Shortage Sharing</b>	<p>The Director’s recommendation to the Secretary is the agreement between the Priority 4 mainstem users and the CAP as described in the 2006 Shortage Sharing Agreement. Shortages for Priority 4 mainstem users would be based on their entitlements.</p>	
<b>Operation of Yuma Desalination Plant</b>	<p>Yuma Desalination Plant not operated.</p>	
<b>Upper Basin Demand Projections</b>	<p>Upper Basin demand schedule with a build-up to 4.8 million acre-feet by 2031.</p>	<p>Current discussions to refine the locations of water use in the UB which may affect flows downstream. When this information becomes available, may use this data. Also, future runs may consider shifting the demand curve for a closer fit of actual UB uses to projections.</p>
<b>California and Nevada Demands</b>	<p>Nevada and California demand projections as shown in the 2007 Interim Shortage Guidelines FEIS.</p>	
<b>Arizona Mainstem Non-Indian Municipal Contractors Demands</b>	<p>Mainstem municipal contractors’ demands based on 2006 Department of Economic Security (DES) population projections for the period 2006 to 2055. The projections were extrapolated to 2110 using trend lines up to entitlement limits.</p>	<p>Plan to update these demands every 5 years or as needed.</p>

Parameter	Arizona Baseline Assumptions	Remarks
<b>Arizona Mainstem Non-Indian Industrial and Other Contractors Demands</b>	Mainstem industrial contractors demands based on the average consumptive use and diversion for the 2005-2009 period based on Reclamation's Water Accounting Reports.	Plan to update these demands every 5 years or as needed.
<b>Arizona Mainstem Non-Indian Agricultural Demands</b>	Mainstem agricultural contractors demands based on the average consumptive use and diversion for the 2005-2009 period based on Reclamation's Water Accounting Reports.	Plan to update these demands every 5 years or as needed.
<b>Arizona Mainstem Tribal Demands</b>	Mainstem tribal demands based on the average consumptive use and diversion for the 2005-2009 period based on Reclamation's Water Accounting Reports.	Ten Tribes schedules developed in 2000 and used in the Interim Surplus FEIS and the 2007 Interim Guidelines FEIS. These schedules have depletions greater than the 2005-2009 period uses by about 130kaf. This demand schedule can be used for sensitivity analyses.
<b>Central Arizona Project (CAP) Municipal and Industrial Priority Contractor Demands</b>	CAP M&I demands increase to 638,830 acre-feet through the year 2043. After 2043, the amount increases to 686,130 acre-feet due to the conversion of 47,300 acre-feet of NIA Priority water to CAP M&I priority. Demand schedules based on data developed for the CAGRDR 2005 10-Year Plan of Operation.	New demand schedules will likely be developed as part of the 2015 10-Year Plan of Operation for the CAGRDR. These demands should be incorporated into the model and calculations when it becomes available.
<b>CAP Indian Priority Demands</b>	CAP Indian Priority demands increase to 343,080 acre-feet by 2028 and remain constant thereafter. Demand schedules developed as part of the Indian Firming Study Commission and are based on data from Reclamation.	New demand schedules will likely be developed as part of the 2015 10-Year Plan of Operation for the CAGRDR. These demands should be incorporated into the model and calculations when it becomes available.
<b>CAP Non-Indian Agricultural (NIA) Priority Demands</b>	CAP NIA Priority Water builds up to 364,700 acre-feet by 2034. After 2043, the NIA Priority Water is reduced to 317,400 acre-feet due to the conversion of 47,300 acre-feet to CAP M&I priority. This pool developed as part of the Indian Firming Study Commission. Also, the CAP Agricultural Pool based on Arizona Water Settlements Act and this pool declines in magnitude ending in 2031.	New demand schedules will likely be developed as part of the 2015 10-Year Plan of Operation for the CAGRDR. These demands should be incorporated into the model and calculations when it becomes available.
<b>CAP Shortage Sharing</b>	Shortage sharing between CAP Indian and M&I contractors based on formula described in the Gila River Indian Community Water Rights Settlement Agreement	



## Arizona Water Banking Authority

3550 N. Central Avenue, Phoenix, Arizona 85012

Telephone 602-771-8487

Fax 602-771-8686



### AUTHORITY MEMBERS

Sandra Fabritz-Whitney, Chairman  
Maureen R. George, Vice Chairman  
Tom Buschatzke, Secretary  
Lisa A. Atkins  
John Mawhinney

### EX OFFICIO MEMBERS

Honorable Steve Pierce  
Honorable Kirk Adams

December 18, 2012

Mr. Scott Miller  
Active Management Area Director  
Arizona Department of Water Resources  
3550 N. Central Avenue  
Phoenix, Arizona 85012

**RE: Comments on Concept Paper "Enhanced Aquifer Management: Alternative Cut to the Aquifer"**

Dear Mr. Miller:

The Arizona Water Banking Authority (AWBA) appreciates the opportunity to provide comments to the Department on its concept paper concerning modifications to the current five (5) percent cut to the aquifer provided as part of the Fourth Management Plan goals of enhanced aquifer management. While the AWBA supports the recovery of long-term storage credits (credits) in areas where the water was originally stored, there may be situations where recovery outside of the area of impact (AOI) may be beneficial for managing groundwater elevations in the Active Management Areas (AMA). In addition, by basing the cut to the aquifer on recovery locations, it could potentially impact certain provisions for Interstate Water Banking.

The AWBA recognizes that the concept paper may provide some entities flexibility for the storage and recovery of water for drought protection. It may also be useful to the AWBA when storing water for water management purposes. The Director of the Department can request that the AWBA extinguish credits accrued with groundwater withdrawal fees to improve aquifer health in certain areas. Although, rather than extinguishing these credits, the AWBA could also collaborate with its recovery agents to recover credits in areas suitable for recovery, i.e., areas with higher water elevations, and deliver that water for meeting the AWBA's firming obligations. In doing so, the AWBA would meet multiple goals and obligations simultaneously, thereby maximizing limited future water resources.

The concept paper identifies the AOI as within 1 mile of an underground storage facility (USF) or within the boundaries of a groundwater savings facility (GSF). Contrary to a USF, where water is added to the aquifer, storage at a GSF may not provide a hydrologic connection to the stored water given the expanse and actual irrigation locations within the GSF. There could in fact be locations within a GSF where recovery would hamper efforts to improve aquifer health. In these instances, the aquifer may benefit from recovery locations outside of the boundaries of the GSF if those areas satisfy the average decline rate of less than 4 feet per year. Given that the AWBA is not authorized to recover its credits and must rely on other entities as its recovery agent, these entities would be encouraged to recover water from within the AOI of the GSF to avoid losing the ability to recover the total amount of credits. Understanding that current recovery practices allow recovery in areas experiencing higher decline rates if they are within the boundaries of a GSF, depending on the location of that recovery, it could result in negative impacts to the aquifer. The AWBA would hope to encourage recovery in areas that would not cause additional impacts to the aquifer.


It is important to note that modifying the 5% cut could have unintended impacts to AWBA credits. The AWBA seeks to store water in areas that have current or potential future recovery capabilities thus allowing its credits to qualify for the minimum reductions. However, the AWBA does not have priority for storage capacity at these facilities. Storage by the AWBA is subject to storage capacity availability in a given year. In addition, the planned storage volumes at recharge facilities for that year can change due to unanticipated precipitation events or operational issues. In situations where storage capacity decreases, the AWBA must find other storage partners who can provide the needed capacity. It is possible these locations may not be in areas planned for future recovery, thus the AWBA could see an unintended decrease in the amount of credits that can be recovered for storage unrelated to drought, such as recovery for interstate purposes. Fewer credits would also mean fewer credits available for firming shortages which could result in more groundwater pumping.

For interstate storage, not knowing the quantity credits available until they are to be recovered will make it almost impossible for the AWBA to meet its reporting requirement under the Storage and Interstate Release Agreement (SIRA) between the AWBA, the Bureau of Reclamation and our interstate partners. The SIRA requires the AWBA to annually verify the amount of water stored for interstate banking and the credits assigned to the interstate subaccount based on that storage. The Bureau then incorporates the AWBA's numbers into its annual Article 5 accounting report. This report is the official accounting of Colorado River water activities for the preceding year. Not knowing the specific cut at the time of storage would not allow the AWBA to verify the credits developed as required by the SIRA. Another issue arises when storing the unused apportionment from another state such as Nevada. Pursuant to the interstate agreement the AWBA must make every effort to store the water in a manner that does not unreasonable allocate higher cost to its partner. Recognizing the AWBA priority at storage facilities and that interstate storage has the last priority within the AWBA, most of the interstate storage and recovery could occur at facilities that would be required to have the largest cuts. Increasing the cut would increase the unit cost to our interstate partners compared to other AWBA storage potentially putting the AWBA in a situation where it could be in violation of its interstate agreement.

The AWBA recognizes this concept could provide more flexibility in many case but feels that it may only complicate the AWBA accounting requirements both internally and with the Bureau of Reclamation. Recognizing the AWBA is already providing significant water management benefits, the AWBA would request the Department consider including future AWBA storage and recovery in the category that has no cut to the aquifer or if it is determined that a cut to the aquifer is needed that the cut be limited to 5%. Because AWBA Interstate storage is not providing drought protection, there should continue to be a cut to the aquifer, which would provide benefits to the aquifer. That cut should be 5% at the time of storage; this would allow the AWBA to meet its reporting requirements under the SIRA.

Thank you for the opportunity to comment on this concept.

Sincerely,



Virginia O'Connell, Manager  
Arizona Water Banking Authority

## Enhanced Aquifer Management: Alternative Cut to the Aquifer

Over the last few months ADWR has received a number of comments regarding the Fourth Management Plans and issues that need to be addressed in the AMAs to achieve the Safe Yield goals. While the Management Plans authorities are generally limited to conservation, ADWR has been looking outside the present authorities to identify additional approaches to reaching Safe Yield.

For decades, more groundwater has been pumped from Arizona's aquifers than has naturally recharged back into the aquifers. This imbalance between pumping and recharge has left some aquifers significantly depleted. Using renewable supplies and recharging water underground can serve to reduce this imbalance. Artificial recharge is a means of storing excess water supplies so that they may be used in the future. Artificial recharge is an increasingly important tool in the management of Arizona's water supplies, particularly in meeting the goals of the Groundwater Management Act. Storing water underground to ensure an adequate supply for the purpose of satisfying current and future needs has proven to be both a practical and cost-effective alternative to direct use of renewable supplies.

Arizona's Underground Water Storage ("UWS") Program provides regulations under which water may be stored and rights to recover that water may be accrued or acquired. The statutes and policies of the UWS or "recharge" program, when read together, can be seen to establish a number of objectives. These objectives include:

- Protecting the general economy and welfare of the state by encouraging the use of renewable water supplies, especially Colorado River water, instead of groundwater, through a flexible and effective regulatory program for the underground storage, savings, and replenishment of water;
- Allowing for the efficient and cost-effective management of water supplies by allowing the use of storage facilities for filtration and distribution of surface water instead of constructing surface water treatment plants and pipeline distribution systems;
- Furthering the conjunctive management of the water resources of this state to reduce the overdraft and achieve the management goals of the AMAs;
- Storing water underground for seasonal peak demand and for use during years of shortage; and
- Augmenting the water supply for future growth and development.

Since its inception in 1986, the Recharge Program has become increasingly flexible over time with regard to storage and recovery locations and the number and types of programs available. With the increased flexibility has come an increased complexity and the potential for recharge projects to aggravate, as well as mitigate, local water problems. High water tables, low water tables, water quality, physical availability, and third party impacts are all conditions that can be affected positively or negatively by the siting and operation of recharge facilities. In addition, there is no requirement that a storer recharge and recover in the same sub-basin, which has created a spatial and hydrologic disconnect between where water is recharged and where it is

recovered. In some cases, it has led to water being recovered or used in different sub-basins far from where it was recharged. While some areas have experienced aquifer rebound and stabilization from these practices, other areas have declined. Additionally, given the significant number of credits in storage, there is a great potential for future groundwater level impacts depending on where stored water is recovered. This imbalance in areas with significant historic pumping and resulting cones of depression may pose an impediment to continued economic development and raises questions about Arizona's long term groundwater supply.

Certain permitted artificial recharge activities conducted under the UWS Program require that a percentage of the recharged volume be made non-recoverable as a general benefit to the aquifer. These required non-recoverable volumes are called "cuts" to the aquifer. The cuts apply to the storage of water for long-term storage credits. They do not apply to water that is stored and recovered annually. Currently, the cuts to the aquifer equal five percent.

ADWR has been analyzing how the cut to the aquifer provision could be used and modified to support comprehensive aquifer management in the AMA through recharge and recovery incentives and disincentives. One possible approach to address groundwater level imbalances in the AMAs, while allowing flexibility for those recharging and recovering for drought protection, is to encourage recharge and recovery in certain areas by modifying the cut to the aquifer percentages. The proposal applies to all future recharge and replenishment occurring within Active Management Areas and Irrigation Non-Expansion Areas. As envisioned, all existing credits will be grandfathered in and not subject to the changes. Essentially the concept is as follows:

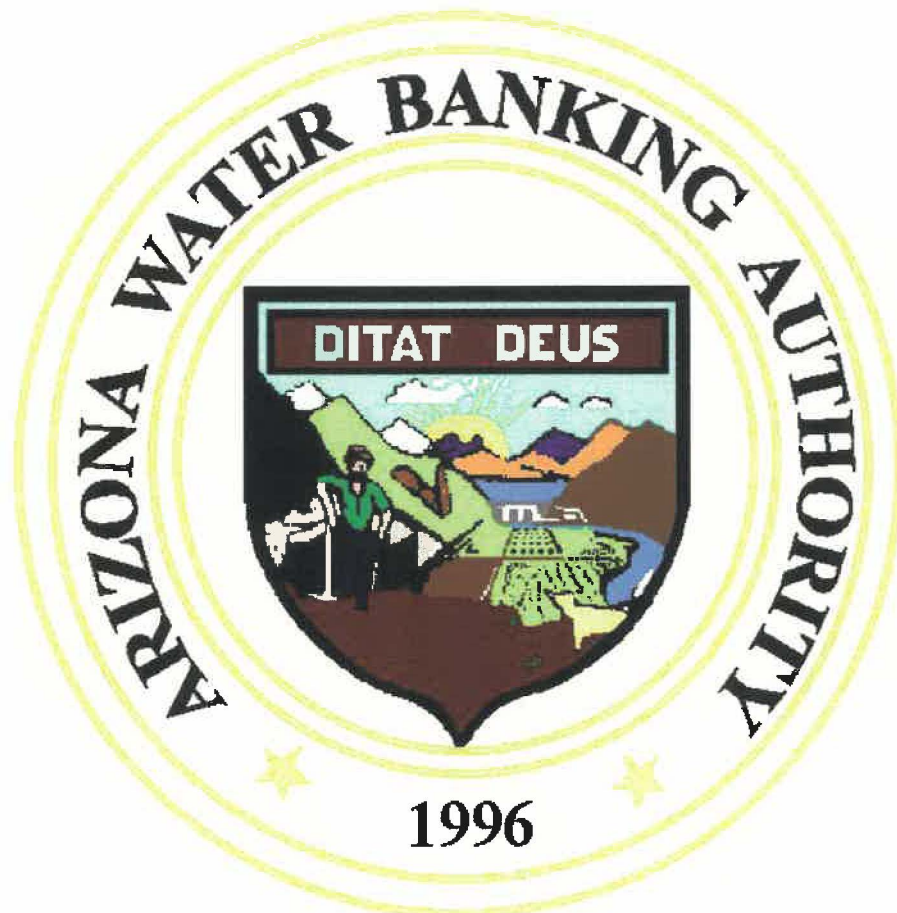
- 0% cut to the aquifer for those who recharge and recover that water within 1 mile of the recharge facility or inside the boundaries of a Groundwater Savings Facility.
- 10% cut to the aquifer for those who recharge and recover that water outside 1 mile of the recharge facility or outside the boundaries of a Groundwater Savings Facility but do so within the same sub basin.
- 20% cut to the aquifer for those who recharge and recover that water outside 1 mile of the recharge facility or outside the boundaries of a Groundwater Savings Facility but do so within a different sub basin.
- ADWR may consider granting greater than 100% credit for water recharged in areas that will uniquely benefit by that recharge.

The use of recharge and recovery incentives to manage aquifer water levels will require regular water-level monitoring. It will be necessary to take existing hydrologic tools available to ADWR and refine them for use in this context, starting with ADWR's Groundwater Models. On-going monitoring of water levels and potential impacts will ensure that incentivized recharge and recovery supports water management goals and doesn't exacerbate existing issues or create new ones.

This program is intended to be a dynamic tool for managing water levels. To ensure that incentives and disincentives act together to improve the long-term health of the aquifer and aren't causing unintended consequences, the program should be evaluated regularly to determine its impact and redefine desirable areas for recharge and recovery. Such an evaluation should be performed at established intervals, such as every 5-10 years, and triggered by specific, observed groundwater levels.

DRAFT

**ARIZONA WATER BANKING AUTHORITY**  
**ANNUAL PLAN OF OPERATION**  
**2013**



Sandra A. Fabritz-Whitney, Chairman

December 2012

# The Arizona Water Banking Authority

## Summary

The Arizona Water Banking Authority (AWBA; Water Bank) was created in 1996 to store the unused portion of Arizona's annual allocation of the Colorado River. By storing this unused water, the AWBA secures a dependable water supply necessary to ensure the state's long-term prosperity.

The Water Bank stores unused Arizona Colorado River water to meet future needs for:

- Firming (to secure) adequate water supply to municipal and industrial users in the Central Arizona Project service area and along the Colorado River in times of shortages;
- Meeting the management plan objectives of the Arizona Groundwater Code;
- Meeting the State's obligation pursuant to Indian Water Rights Settlements;
- Assisting the Colorado River fourth priority municipal and industrial (M&) users in developing credits that could be used to increase their future supplies; and
- Assisting Nevada and California through interstate water banking.

Each year, the AWBA pays the delivery and storage costs to bring Colorado River water into Central and Southern Arizona through the Central Arizona Project (CAP) canal. The water is stored underground in existing aquifers (direct recharge) or is used by irrigation districts in lieu of pumping groundwater (indirect or in lieu recharge). For each acre-foot stored, the AWBA accrues credit that can be redeemed in the future when Arizona's communities, Indian Tribes or neighboring states need this backup water supply.

The money that funds the AWBA and, specifically, water storage for the benefit of Arizona (intrastate storage) comes from three sources. Restrictions on the ways these monies can be used depend on the source of the monies, which currently include:

- Fees for groundwater pumping currently collected within the Phoenix, Pinal and Tucson Active Management Areas (AMA). These monies can only be used to benefit the AMA in which the fees are collected. Included as a benefit to the AMA are both municipal and industrial firming and Indian firming.
- A four cent *ad valorem* property tax collected in the three county CAP service area. If these monies are deposited in the Water Banking Fund they can only be used to benefit the county in which the tax is levied.
- A general fund appropriation received at the discretion of the Legislature.

Another source of funding is used for water storage to aid Nevada (interstate storage) and is received from Nevada pursuant to an Agreement for Interstate Water Banking.

In 2013, the Water Bank will store approximately 52,500 acre-feet of CAP water at a cost of approximately \$7 million. The amount of water available to the AWBA has decreased substantially because of increased demand from M&I priority subcontract and Indian contract orders. In addition, unlike previous years, the Central Arizona Groundwater Replenishment District (CAGRDR) ordered its full pool amount of 35,000 acre-feet for replenishment obligations. Because of the increased demand from higher

priority users, the 175,000 acre-feet AWBA/CAGRDR Replenishment Reserve pool was reduced to 61,371 acre-feet. This trend is anticipated to continue into the future. There is no interstate storage planned for 2013. In addition to delivering water for storage, the AWBA will deliver an additional 1,000 acre-feet of water directly to the Gila River Indian Community for the Southside Replenishment Bank at a cost of \$144,000.

To date, the AWBA has delivered for storage just over 4 million acre-feet (MAF) of water at a cost of approximately \$305 million; 3.5 MAF for intrastate storage at a cost of \$196 million and 594,000 acre-feet for interstate storage at a cost of \$109 million. A total of 4,000 acre-feet has been delivered for Southside Replenishment Bank purposes at a cost of \$470,000.

## **INTRODUCTION**

The AWBA was created to store Arizona's unused Colorado River water entitlement in western, central and southern Arizona to develop long-term storage credits to: (1) firm existing water supplies for M&I along the Colorado River and CAP M&I users during Colorado River shortages or CAP service interruptions; (2) help meet the water management objectives of the Groundwater Code; and (3) meet the State's obligations in the settlement of Indian water rights claims. Changes in the AWBA's enabling legislation in 1999 authorized the AWBA to participate in other water banking activities, however, no new water banking activities are included in this annual Plan of Operation.

The AWBA's storage 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 renewable water that would not be used in either underground storage (USF) or groundwater savings (GSF) facilities. A USF is a facility that allows water to physically be added to an aquifer. A GSF is a facility where the water is used in place of groundwater, creating a groundwater savings. 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 utilized by the AWBA when future conditions warrant. The use of LTS credits for the three objectives listed is dependent on the source of funds utilized to develop them.

The AWBA is required by statute to approve an annual Plan of Operation (Plan) by January 1 of each year. Prior to approval of the final Plan, the AWBA is required to solicit public comment. 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.



## 2012 PLAN OF OPERATION

In 2012, the AWBA recharged and directly delivered approximately 136,800 acre-feet of Colorado River water. Arizona is forecast to use its full entitlement of 2.8 MAF (see Figure 1).

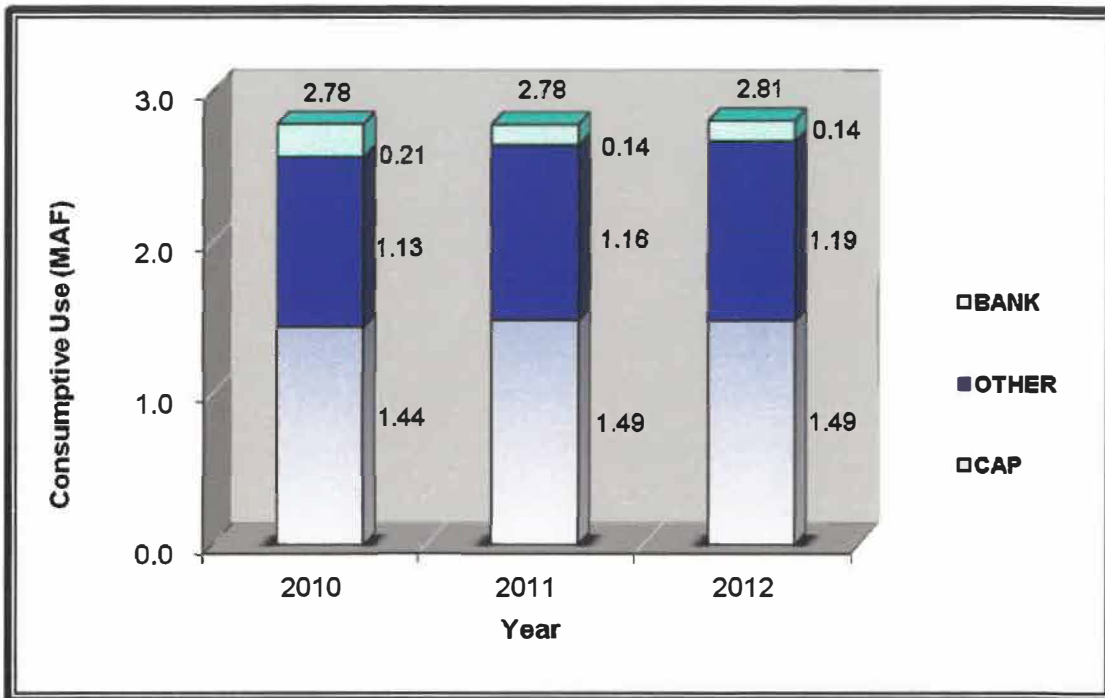


Figure 1. Recent Comparison of Colorado River Water Uses by Arizona

Forecasted direct use of Colorado River water in the Lower Basin is 7.49 MAF in 2012 as of November 30, 2012 (see Figure 2).

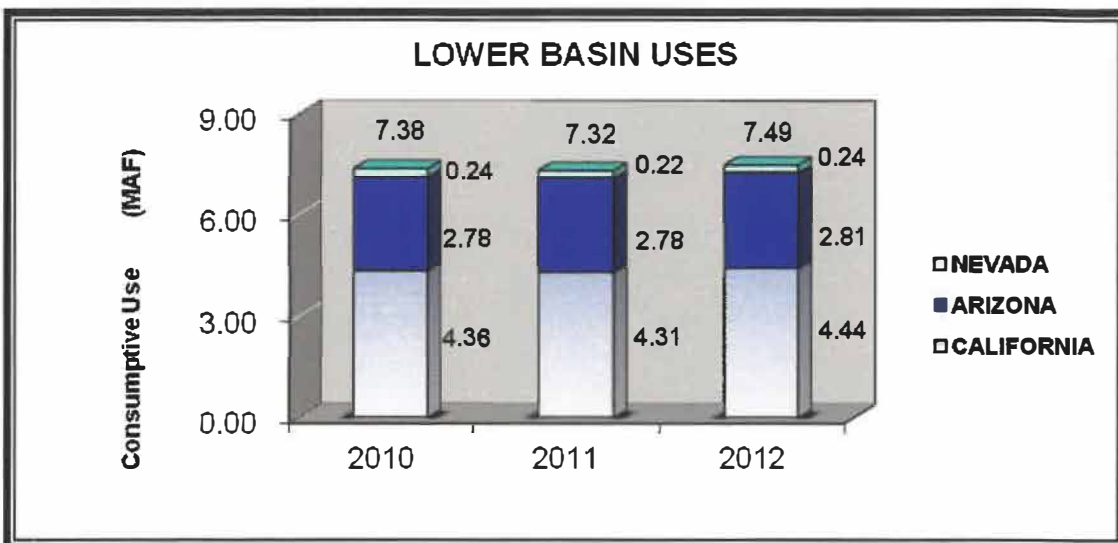


Figure 2. Recent Comparison of Lower Basin Uses of Colorado River Water



The AWBA recharged water at both USFs and GSFs in 2012. Table 1a lists the AWBA's recharge partners for 2012, the amount of water that can be stored under each AWBA water storage permit, and the amount of water delivered to the facility for the benefit of the AWBA in 2012. The amount of water delivered to a facility is always greater than the amount of long-term storage credits earned by the AWBA because credits are computed by subtracting approximately 3% for losses and 5% for a "cut to the aquifer" from the total annual deliveries. Final figures for credits earned generally become available in the middle of the following year after review of the annual reports filed with the ADWR and are reported in the AWBA's Annual Report.

**Table 1a. Recharge Partners and Water Deliveries for 2012**

AMA	Facility	Type	Permit Capacity (acre-feet)	Delivered* (acre-feet)		
				Intrastate	Interstate	
PHOENIX AMA	Tonopah Desert	USF	150,000	46,815	0	
	Superstition Mtns.	USF	25,000	2,386		
	New Magma ID	GSF	54,000	26,400	0	
	Queen Creek ID	GSF	28,000	5,230	0	
	<b><i>Intrastate/Interstate AMA Subtotal</i></b>				<b><i>80,831</i></b>	<b><i>0</i></b>
	<b><i>Phoenix AMA Subtotal</i></b>				<b><i>80,831</i></b>	
PINAL AMA	Central Arizona IDD	GSF	110,000	8,670	0	
	Hohokam IDD	GSF	55,000	3,670	0	
	Maricopa-Stanfield IDD	GSF	120,000	8,670	0	
	<b><i>Intrastate/Interstate AMA Subtotal</i></b>				<b><i>21,010</i></b>	<b><i>0</i></b>
	<b><i>Pinal AMA Subtotal</i></b>				<b><i>21,010</i></b>	
TUCSON AMA	Avra Valley	USF	11,000	1,000	0	
	Lower Santa Cruz	USF	50,000	11,4010	0	
	SAVSARP	USF	60,000	15,000	0	
	Pima Mine Road	USF	30,000	6600	0	
	BKW Farms	GSF	14,316	200	0	
	Cortaro-Marana ID	GSF	20,000	4,339	0	
	Kai Farms-Red Rock	GSF	11,231	1,851	0	
	<b><i>Intrastate/Interstate AMA Subtotal</i></b>				<b><i>34,000</i></b>	<b><i>0</i></b>
	<b><i>Tucson AMA Subtotal</i></b>				<b><i>34,000</i></b>	
<b>TOTAL INTRASTATE &amp; INTERSTATE DELIVERIES</b>					<b>0</b>	
<b>TOTAL RECHARGE DELIVERIES</b>				<b>135,841</b>		

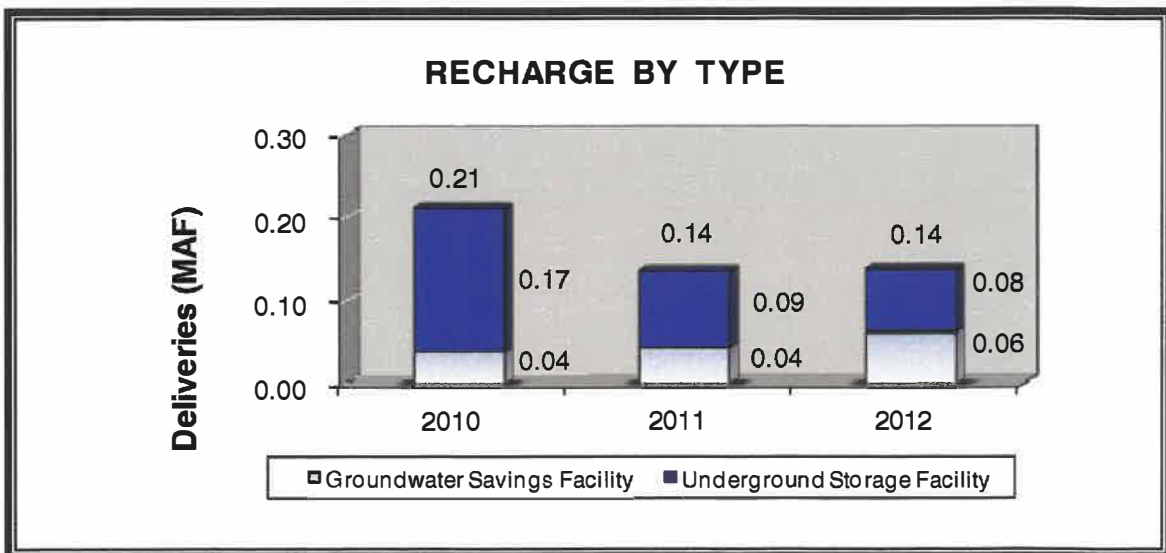
\* November and December deliveries estimated

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/or 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 then be used as an option for offsetting any replenishment obligations created as a result of pumping limitations included in the Arizona Water Settlements Act (Settlements Act). Table 1b identifies the amount of water the AWBA delivered to the Replenishment Bank. There was no replenishment obligation in 2012.

**Table 1b. Replenishment Deliveries**

Southside Replenishment Activities	2012 Deliveries (acre-feet)	Cumulative Deliveries (acre-feet)
Replenishment Obligations	0	0
Replenishment Bank	1,000	4,000
<b>TOTAL DIRECT DELIVERIES</b>	<b>1,000</b>	<b>4,000</b>

The AWBA again participated in the AWBA/CAGRDR Replenishment Reserve Excess CAP water pool created by CAWCD. The 2012 Plan identified the delivery of 119,002 acre-feet of water 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 135,841 acre-feet of water in 2012: Figure 3 identifies the storage breakdown between GSFs and USFs for 2012 and provides a comparison between 2012 and previous years.



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

## 2013 PLAN OF OPERATION

The AWBA will store 51,546 acre-feet of intrastate water in 2013. Water storage will be occurring in facilities in all three counties. The AWBA is not planning any interstate storage. The AWBA will also deliver 1,000 acre-feet of water for the Southside Replenishment Bank.

When developing a 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. For 2013, the amount of water available to the AWBA 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 2013 distributed by the Bureau of Reclamation (Bureau) stated that the Intentionally Created Surplus (ICS) Surplus Condition is the criterion that will govern the release of water for the states in the Lower Basin during calendar year 2013. Because Arizona has not created 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 2013, the AWBA will purchase water from the Excess CAP water pool that is available for use by the AWBA and CAGRDR for replenishment reserve purposes. Under this pool the AWBA shares an equal priority for municipal and industrial (M&I) firming with the CAGRDR for replenishment reserve purposes. The Federal government may also order water from this pool for meeting its Indian firming obligations. The CAWCD Board of Directors (Board) originally identified a volume of 175,000 acre-feet for this pool. However for 2013, due to higher than expected priority M&I subcontractor and Indian orders the CAWCD Board adjusted the quantity available in this pool to 61,371 acre-feet.

Subtracting the projected uses for the CAGRDR replenishment reserve (3,565 acre-feet) and the Bureau (5,260 acre-feet), leaves a remaining balance of 52,546 acre-feet for the AWBA. Given the reductions to the pool, water availability is the primary limiting factor in developing the 2013 Plan.

## II. CAP System Capacity

Under normal operating conditions, CAP can divert approximately 1.6 MAF of water. Reclamation estimates that the full amount will be available for delivery by CAP in 2013. This quantity includes the volume of water available to the AWBA. Because there is still capacity available in the CAP 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 2013 available for use in this Plan. Total withdrawal fees are estimated at \$3.1 million, which includes \$1.5 for the Phoenix AMA, \$1.2 million for the Pinal AMA and \$400,000 for the Tucson AMA.

As in previous years, the CAWCD Board resolved to continue to retain the county *ad valorem* property taxes collected 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 the tri-county CAWCD service area. Estimated funds available from CAWCD for the 2013 Plan are: Maricopa County (\$14 million), Pinal County (\$1.15 million), and Pima County (\$3.2 million).

While funding was not a limiting factor in developing the Plan for the Phoenix and Tucson AMAs, funding did limit the amount of water available for storage 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 2013 and the amount of water scheduled to be recharged. The second column in this section identifies the AWBA's water storage permit capacities for each facility based on the facility permits. The capacity available as shown does not always equate to the storage permit capacity 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.

## **SHORTAGE REPARATION FUNDS**

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. Approximately \$3 million of these funds have been

expended since 2008. The AWBA will expend an additional \$1.5 million to store water in the Tucson AMA in 2013.

## **NEW FACILITIES**

There are no new recharge facilities identified in the 2013 Plan.

**Table 2  
Water Delivery Schedule (Acre-Feet)  
Calendar Year 2013**

AWBA-Recharge Sites		Permitted Capacity (AF)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>PHOENIX AMA :</b>															
<b>USF</b>	HIEROGLYPHIC MTN	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	AGUA FRIA	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	TONOPAH DESERT	150,000	2,000	2,000	2,030	0	0	0	0	0	0	0	0	0	6,030
	SUPERSTITION MTNS	35,000	0	500	500	702	0	0	0	0	0	0	0	0	1,702
															7,732
<b>Gsf</b>	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	175	1,343	2,285	1,142	1,143	1,142	7,230
	TONOPAH ID	15,000	0	0	0	0	0	0	0	0	0	0	0	0	0
															7,230
<b>AMA TOTAL INTRASTATE</b>			2,000	2,500	2,530	702	0	0	175	1,343	2,285	1,142	1,143	1,142	14,962
<b>PINAL AMA :</b>															
<b>Gsf</b>	CAIDD	110,000	0	0	0	0	0	0	0	6,600	0	0	0	0	6,600
	HOHOKAM	55,000	0	0	0	0	0	0	0	1,650	1,650	1,650	1,650	0	6,600
	MSIDD	120,000	408	536	989	935	935	536	247	218	472	400	670	254	6,600
															19,800
<b>AMA TOTAL INTRASTATE</b>			408	536	989	935	935	536	247	8,468	2,122	2,050	2,320	254	19,800
<b>TUCSON AMA:</b>															
<b>USF</b>	AVRA VALLEY	11,000	0	0	0	0	0	0	0	0	0	0	183	700	883
	LOWER SANTA CRUZ	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	PIMA MINE ROAD	30,000	0	0	0	0	0	0	0	0	700	800	1,700	800	4,000
	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	0	0	2,000	1,901	11,901
															16,784
<b>Gsf</b>	CORTARO-MARANA ID	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	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
															0
<b>AMA TOTAL INTRASTATE</b>			2,000	2,000	2,000	2,000	0	0	0	0	700	800	3,883	3,401	16,784
<b>TOTAL INTRASTATE</b>			4,408	5,036	5,519	3,637	935	536	422	9,811	5,107	3,992	7,346	4,797	51,546
<b>TOTAL INTERSTATE</b>			0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL RECHARGE</b>			4,408	5,036	5,519	3,637	935	536	422	9,811	5,107	3,992	7,346	4,797	51,546
<b>DIRECT DELIVERY (Non-Storage):</b>															
	Southside Replenishment Bank		0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
	Southside Replenishment Obligation		0	0	0	0	0	0	0	0	0	0	0	0	0
	<b>TOTAL DIRECT</b>		0	1,000	0	0	0	0	0	0	0	0	0	0	1,000
<b>TOTAL DELIVERIES</b>			4,408	6,036	5,519	3,637	935	536	422	9,811	5,107	3,992	7,346	4,797	52,546

## 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 2013. 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. The AWBA did not receive a general fund appropriation for 2013 to assist in meeting this obligation. Withdrawal fees may be utilized for Indian firming purposes after appropriated funds are expended. The 2013 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 in 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.

### Southside Replenishment Bank

In addition to the firming requirements of the Settlements Act, the AWBA, acting as agent for the State, is required to deliver 15,000 acre-feet of water to the GRIC for the purpose of establishing the Southside Replenishment Bank. The AWBA must deliver a minimum of 1,000 acre-feet per year to establish this Bank. The Southside Replenishment Bank will fulfill the obligations created under the Settlements Act for protection of the Reservation from off-reservation groundwater pumping. The 2013 Plan includes 1,000 acre-feet of direct deliveries to the GRIC for this purpose, creating a

cumulative total of 5,000 acre-feet toward meeting this obligation. Cumulative costs through 2013 total \$614,000.

### 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 2013, 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 2013 Plan does not include an interstate storage for Nevada. The AWBA and SNWA executed a letter agreement, December 9, 2010, which suspends certain provisions of Second Amended Agreement for Interstate Water Banking (Second Amended Agreement). Pursuant to the letter agreement, AWBA agreed to forego storing additional water for SNWA through the end of calendar year 2014 and SNWA agreed to forego requiring the development of ICUA during this period. In order to accommodate these operational adjustments, and unless otherwise agreed to by the AWBA and SNWA, payment dates specified in Subarticle 2.4.1.2 of the Second Amended Agreement will be extended by six years.

From 2009 to the present, Legislative transfers from the AWBA Nevada Resource subaccount total \$19.65 million.

## **RECOVERY**

No recovery of AWBA long term storage credits is anticipated in this Plan.

Staff representatives for ADWR, CAWCD and the AWBA continue to meet to develop a draft Intergovernmental Agreement (IGA) among the ADWR, CAWCD and AWBA. This draft IGA will identify the duties and responsibilities of the parties as they relate to recovery of long term storage credits and delivery of the water created by that recovery. While the actual recovery of AWBA credits for firming is not expected for several years, a better understanding of the how that recovery is expected to occur would be very beneficial. As the staffs continue these efforts they will seek input from all interested parties.

## **PRICING**

In June 2012, the CAWCD Board approved its water delivery rate schedule for calendar years 2013/2014. The AWBA rate for recharge is equivalent to the rate for excess M&I water at \$144 per acre-foot.



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 2013 for the GSF partners in the Phoenix and Pinal AMAs is \$34 per acre-foot, which is comparable to the average groundwater pumping costs in these areas. Based on the range of groundwater pumping costs and cost shares paid by other partners, it was determined the cost share in 2013 for the Tucson AMA will be \$16 per acre-foot.

Table 4 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, 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 \$168 per acre-foot, plus facility costs and facility capital costs.

**Table 3. 2013 Water and Facility Rates**

<b>Recharge</b>	<b>Cost per Acre-foot</b>
CAWCD delivery rate to AWBA for water storage	\$144
Interstate rate	\$168
Groundwater Savings Facility operator cost share rate <sup>1</sup>	
Intrastate	
Phoenix and Pinal AMAs	\$34
Tucson AMA	\$16
Interstate	\$26
Underground Storage Facility rate paid by AWBA	
CAWCD – Phoenix Facilities <sup>2</sup>	\$8
CAWCD – Tucson Facilities <sup>3</sup>	\$15
Avra Valley Recharge Project	\$15
Clearwater Facility (CAVSARP/SAVSARP)	\$15.63
<b>Direct Deliveries</b>	
CAWCD rate to AWBA for Southside Replenishment Bank deliveries	\$144

<sup>1</sup> 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 \$110/af for intrastate deliveries to the Phoenix and Pinal AMAs, \$128/af to the Tucson AMA, and \$142/af for interstate deliveries.

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

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

## 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.

The estimated total cost of the AWBA's 2013 Plan is approximately \$7 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 2013 Plan.

**Table 4. Funding for 2013 Annual Plan of Operation**

	Estimated Funds Available (\$)		Estimated Funds Utilized (\$)		Estimated Credits (AF)
	AWBA	CAWCD <sup>1</sup>	AWBA	CAWCD	
<b>Withdrawal Fees</b>					
Phoenix AMA	\$1,500,000	-	\$1,500,000	-	10,480
Pinal AMA <sup>2</sup>	\$1,200,000	-	\$1,200,000	-	8,830
Tucson AMA	\$400,000	-	\$400,000	-	2,310
<b>Four Cent Tax</b>					
Phoenix AMA	\$0	\$14,000,000	\$0	\$471,000	3,290
Pinal AMA	\$0	\$1,150,000	\$0	\$1,122,000	9,380
Tucson AMA <sup>3</sup>	\$0	\$3,200,000	\$0	\$776,000	4,480
<b>Other</b>					
<b>General</b>	\$0				
Phoenix AMA		-	\$0	-	0
Pinal AMA		-	\$0	-	0
Tucson AMA		-	\$0	-	0
<b>Shortage Reparations (NV):</b>	\$1,500,000				
Phoenix AMA		-	\$0		0
Pinal AMA		-	\$0		0
Tucson AMA		-	\$1,500,000		8,650
<b>Interstate Banking- Nevada</b>					
Operating <sup>4</sup>	\$0		\$0		0
	<b>Total Funds Available</b>		<b>Total Funds Expended</b>		<b>Credits</b>
	\$22,950,000		\$6,969,000		47,420

<sup>1</sup> The figures shown are estimates provided by CAWCD staff, and are based on amounts anticipated to be collected during the 2012 tax year and include funds carried over from the previous year if needed to meet the estimated funds utilized during the 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.

<sup>2</sup> Includes expenditure for 1,000 acre-feet of direct deliveries to establish the Southside Replenishment Bank under the Gila River Indian Water Settlement Program.

<sup>3</sup> 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.

<sup>4</sup> Pursuant to a letter agreement between AWBA and SNWA executed December 9, 2010, storage of water on behalf of SNWA and annual payments to the Operating account have been suspended through 2014.

The 2013 Plan was developed expending all available withdrawal fees in the three AMAs and \$1.5 million in Shortage Reparation funds in the Tucson AMA. The Plan also shows CAWCD utilizing a portion of the four-cent tax collected in Maricopa and Pima

Counties and all of the four-cent tax collected in Pinal County, including funds carried over from the previous year, to offset water costs for credits accrued to the AWBA. Table 5 provides an estimate of the AWBA funds expended and the location of the credits accrued since inception through 2012.

**Table 5. Cumulative Long-term Storage Credits 1997-2012**

<b>FUNDING SOURCE</b>	<b>FUNDS EXPENDED</b>	<b>AMOUNT (AF)</b>	<b>CREDITS<sup>1</sup> LOCATION</b>
<b>Withdrawal Fee</b>			
Phoenix AMA	\$18,875,551	290,382	Phoenix AMA
Pinal AMA	\$15,280,367	393,632	Pinal AMA
Tucson AMA <sup>2</sup>	\$7,886,313	98,086	Tucson AMA
<b>Four Cent Tax</b>			
Maricopa County	\$87,767,572	1,333,628	Phoenix AMA
Pinal County	\$9,312,705	188,867	Pinal AMA
Pima County	\$40,144,935	389,918	Tucson AMA
<b>Other</b>			
General Fund <sup>3</sup>	\$11,100,865	403,830	
	\$1,522,115	42,316	Phoenix AMA
	\$6,394,964	306,968	Pinal AMA
	\$3,183,786	54,546	Tucson AMA
Indian Firing Appropriation	\$2,338,171	28,481	
	\$0	0	Phoenix AMA
	\$0	0	Pinal AMA
	\$2,338,171	28,481	Tucson AMA
Shortage Reparations	\$2,999,742	82,376	
	\$1,099,339	20,642	Phoenix AMA
	\$1,708,580	60,507	Pinal AMA
	\$191,823	1,227	Tucson AMA
Pinal Redirect <sup>4</sup>	N/A	14,125	Pinal AMA
<b>Interstate</b>			
Nevada <sup>5</sup>	\$109,087,822	600,651	
	\$11,444,369	51,009	Phoenix AMA
	\$71,508,152	439,851	Pinal AMA
	\$26,135,300	109,791	Tucson AMA
<b>TOTAL</b>	<b>\$304,794,041</b>	<b>3,823,974</b>	

<sup>1</sup> Actual expenditures and credits for 1997-2011; 2012 estimated.

<sup>2</sup> 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.

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

<sup>4</sup> 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.

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

Table 6 identifies the progress made on the AWBA's goals and obligations through 2013.

**Table 6. Projected Percent of Goals and Obligations Achieved through 2013**

Location and Objective	Funding Source	Goal	Obligation	Non-Credit Goal/Oblig. Achieved	Credits Accrued (AF)	Percent Goal/Oblig. Achieved
<b>Phoenix AMA</b> M&I Firming Groundwater Mgmt <sup>1</sup>	Ad valorem tax Withdrawal Fees	1,566,000 AF			1,336,915 300,859	85%
<b>Pinal AMA</b> M&I Firming Groundwater Mgmt <sup>1</sup>	Ad valorem tax Withdrawal Fees	243,000 AF			198,251 402,464	82%
<b>Tucson AMA</b> M&I Firming Groundwater Mgmt <sup>1,2</sup>	Ad valorem tax Withdrawal Fees	864,000 AF			394,396 94,773	46% 57%
<b>On-River M&amp;I Firming<sup>3</sup></b>	General Fund	420,000 AF			403,830	96% <sup>4</sup>
<b>Indian Settlements:</b> GRIC Firming	Withdrawal Fees	350,000 AF <sup>5</sup>	up to 15,000 AF/YR		0	0%
Future Settlements	Withdrawal Fees	200,000 AF <sup>5</sup>	up to 8,724 AF/YR		0	0%
Federal Assistance Tucson AMA	Appropriation Withdrawal Fees Cost of Services <sup>6</sup>		\$3,000,000	\$3,000,000 \$2,338,171 \$630,490 \$31,339	34,102 28,481 5,621 n/a	100%
Southside Repl. Bank	Withdrawal Fees		15,000 AF Direct Delivery		5,000	33%
<b>Interstate Water Banking - NV</b>	Contract with Nevada		1,250,000 AF <sup>7</sup>		600,651	48%
<b>Other:</b> Shortage Reparations- Nevada Pinal Redirect Credits <sup>8</sup>	Gifts, Grants, Donations N/A	\$8,000,000		\$4,499,742	91,450 14,125	56% N/A

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

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

<sup>3</sup> 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 of credits reserved pursuant to contract with Mohave County Water Authority.

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

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

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

<sup>7</sup> Pursuant to the Amended Agreement for Interstate Water Banking, the AWBA has committed to have this number of long-term storage credits within the Nevada sub-account.

<sup>8</sup> 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

The AWBA staff held meetings with the Groundwater Users Advisory Councils (GUAC) for the Phoenix, Pinal and Tucson AMAs as required by statute. The Plan was distributed to the public and was posted on the AWBA web page for public review and comment. In general, the GUACs supported the Plan and had no requests for changes to it.

In the Phoenix AMA, GUAC members asked for clarification on use of the 4-cent *ad valorem* tax and questioned whether CAWCD was obligated to offset the AWBA's costs as part of their O&M costs. AWBA staff noted that while the CAWCD Board's resolution on use of the 4-cent tax does not specifically identify AWBA storage as part of the O&M costs, CAWCD has made funds available for this purpose. CAWCD staff also commented that the CAWCD Board has recognized the importance of the AWBA and has been committed to offsetting AWBA costs.

In the Pinal AMA, there were comments from the public requesting that the AWBA consider storing additional water if additional funding and water become available.

In the Tucson AMA there were comments questioning whether the AWBA should continue its historic practice of scheduling deliveries for direct use (GSFs) before deliveries to USFs when water supplies are limited rather than prioritizing storage locations based on meeting certain goals and obligations. This issue was confirmed by a letter from the Southern Arizona Water users Association (attached).



SOUTHERN ARIZONA WATER USERS ASSOCIATION  
PO Box 35481  
Tucson AZ 85740-5481

December 10, 2012

Ms. Sandra Fabritz-Whitney, Chairperson  
Arizona Water Banking Authority  
3550 North Central Avenue, Second Floor  
Phoenix, Arizona 85012

**RE: Draft AWBA 2013 Plan of Operations**

Dear Ms. Fabritz-Whitney:

The Southern Arizona Water Users Association (SAWUA) appreciates the continued support given by the Arizona Water Banking Authority (AWBA) to develop viable plans for achieving the M&I firming water goals in the Active Management Areas (AMAs). A concern of SAWUA members is whether the AWBA will be able to fulfill the M&I firming water goal within the Tucson AMA in light of reductions in the availability of Excess CAP water in 2013.

SAWUA believes the reduction in Excess CAP water is a trend that AWBA needs to assess. If the M&I firming goal in the Pinal AMA (243,000 acre-feet) and Phoenix AMA (1,566,000 acre-feet) has been reached then Excess CAP water should be redirected to other unfilled AWBA goals. Table 7 from the draft 2013 Plan of Operations notes that the Pinal AMA will be at 83% of the M&I firming goal through 2013 with 200,551 acre-feet of credits earned by the Ad valorem tax and at 400,164 acre-feet if Groundwater Withdrawal credits are utilized. The combined credits would equate to 247% of the M&I firming goal for the Pinal AMA. The Phoenix AMA would be at 101% of the M&I firming goal if both the Ad valorem tax and Groundwater Withdrawal fees are used through 2013. More notably, the TAMA will only be significantly short of its goal with only 54% of its M&I firming goal.

AWBA initial draft Plan had 29,000 acre-feet of Excess CAP water storage in the TAMA for M&I firming. The revised draft Plan now has 16,784 acre-feet. SAWUA does not support this large reduction given there are sufficient funds for M&I firming in the TAMA and given the remaining amount of M&I firming required for the TAMA.

At the November TAMA GUAC meeting, AWBA staff explained that priority is given to storing at Groundwater Saving Facilities (GSF) because the water is directly being used in agricultural activities. This is why with the reduction of Excess CAP water, the amount of water for the Pinal AMA had not changed from the initial draft Plan. While we appreciate the emphasis given GSF storage, SAWUA believes an equal, or even higher priority, ought to be given to meeting the M&I firming goal in the Tucson AMA, especially if the funds exist from the Tucson AMA for such storage. AWBA staff has acknowledged that the AWBA will not be able to meet the firming goal for the Tucson AMA, which is all the more reason that as much of the available Excess water ought to be used to meet that firming goal.

**MEMBERS**

Area Water Group  
BKW Farms  
Community Water Company  
of Green Valley  
CICO Farmers Water Co.  
Flowing Wells Irrigation District  
Green Valley Domestic Water  
Improvement District  
H&L Farms  
Town of Marana Municipal  
Water System  
Metro Water District  
Oro Valley Water Utility  
Pima County Regional Wastewater  
Reclamation Department  
Red Rock Utilities, LLC  
Sahuaria Water Company  
Town of Nogales Wastewater  
Treatment and Reclamation Facility  
Tucson Water Department

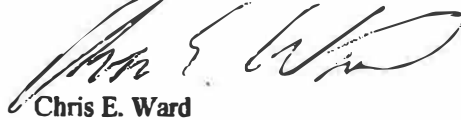
**CONTACT INFORMATION**

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*Choosing long-term quality water for Southern Arizona*  
www.sawua.com

We trust that AWBA will make certain that the promise of achieving the M&I firming needs of all of the CAP M&I subcontractors is achieved in an equitable and timely manner.

Sincerely,



Chris E. Ward  
President

c: John Mawhinney  
Lisa Atkins  
Cliff Neal  
Maureen George  
Virginia O'Connell ✓  
Val Little  
Jeff Biggs  
Leo Leonhart  
Dan M. Offret  
Kathleen Ferris

**ARIZONA WATER BANKING AUTHORITY**  
**2013 WATER DELIVERY and RECHARGE BUDGET** **\$4,600,000**

<b>REVENUES AVAILABLE for 2013 DELIVERIES</b>	
<b>Withdrawal Fee<sup>1</sup></b>	<b>\$3,100,000</b>
Phoenix AMA	\$1,500,000
Pinal AMA	\$1,200,000
Tucson AMA	\$400,000
<b>Shortage Reparatons<sup>2</sup></b>	<b>\$1,500,000</b>
<b>TOTAL</b>	<b>\$4,600,000</b>

<sup>1</sup> Projected based on 2012 collections.

<sup>2</sup> Provided by SNWA pursuant to Shortage Sharing Agreement

<b>DELIVERY and RECHARGE RATES</b>	
<b>Water Delivery</b>	
Recharge Rate (Intrastate)	\$144
Replenishment Bank Rate	\$144
<b>Direct Recharge Facility Rate</b>	
CAWCD – Phoenix Facilities	\$8
CAWCD – Tucson Facilities	\$15
Avra Valley Recharge Project	\$15
Clearwater Facility (CAVSARP/SAVSARP)	\$15.63
<b>Cost Recovery for In-lieu Recharge:</b>	
Phoenix & Pinal	\$34
Tucson	\$16

<b>WATER DELIVERY and RECHARGE COSTS</b>				
		<b>Water Delivered (AF)</b>	<b>\$/AF</b>	<b>Total</b>
<b>Withdrawal Fee</b>				<b>\$3,100,000</b>
Phoenix AMA		11,389	\$132	\$1,500,000
Pinal AMA		9,600	\$110	\$1,056,000
Direct delivery <sup>3</sup>		1,000	\$144	\$144,000
Tucson AMA		2,509	\$159	\$400,000
<b>Shortage Reparatons</b>	Tucson AMA	9,407	\$159	<b>\$1,500,000</b>
<b>Total 2013</b>		<b>33,905</b>		<b>\$4,600,000</b>

<sup>3</sup> Pinal W/F used for direct deliveries to the GRIC for Southside Replenishment Bank.

<b>Central Arizona Water Conservation District</b>				
Estimated water stored and 4-cent tax to be expended by the CAWCD to accrue Long-term Storage Credits for the AWBA				
		<b>Water Stored (AF)</b>	<b>\$/AF</b>	<b>Total</b>
<b>4 cent tax Utilized</b>				
Maricopa		3,573	\$132	\$471,000
Pinal		10,200	\$110	\$1,122,000
Pima		4,868	\$159	\$776,000
<b>Total 2013</b>		<b>18,641</b>		<b>\$2,369,000</b>