

ARIZONA WATER BANKING AUTHORITY
Final Meeting Summary

September 11, 2024
Arizona Department of Water Resources
(Hybrid Meeting)



AUTHORITY MEMBERS
Thomas Buschatzke, Chair
Mark Clark, Vice-Chair
Eric Braun, Secretary
Mark Taylor
Joseph Olsen

EX OFFICIO MEMBERS
The Honorable Sine Kerr
The Honorable Austin Smith

I. Welcome

Chair Tom Buschatzke and Commission members Mark Clark, Joseph Olsen, and Eric Braun attended in person. Commission member Mark Taylor attended online via virtual conference. *Ex-officio* members Senator Sine Kerr and Representative Austin Smith were not in attendance.

The meeting was called to order at 10:00 a.m.

Chair Buschatzke started the welcoming remarks by recognizing the events of 9/11 in 2001, and asked for a short moment of silence to recognize all who sacrificed on that date.

II. Approval of Meeting Minutes

Chair Buschatzke asked for a motion. Commissioner Braun moved to approve the June 17, 2024 AWBA Regular Meeting minutes as presented. Commissioner Clark provided the second to the motion. Chair Buschatzke asked for a discussion. There was no discussion. The minutes were approved unanimously.

III. Water Banking staff activities

Quarterly report on AWBA credit purchases for calendar year 2024.

Rebecca Bernat reported on a second purchase of Intentionally Created Surplus (ICS) firming credits for this year. The AWBA purchased 2,133 AF under an agreement with the Gila River Indian Community (Community) at \$276/AF, the same price as earlier this year. The transaction cost \$588,708. So far this year, the AWBA has accrued 5,256 AF of ICS from the Community in the Phoenix AMA, and 529.4 AF of Long-term Storage Credits (LTSCs) purchased from the Tohono O'odham Nation in the Tucson AMA. Dr. Bernat added that the Community has committed to not divert ICS water from Lake Mead until after 2026.

Chair Buschatzke asked Commission members if there were any questions. There were none.

Status report on Colorado River conditions. Kristen Johnson, Colorado River Program Manager at ADWR, provided a short update on Colorado River Basin hydrology, noting a lack of available policy updates. Ms. Johnson highlighted that Lake Powell is at 40% capacity with 9.311 MAF, and Lake Mead is at 33% capacity with 8.702 MAF. Total system storage is 44%, the same

as this time last year. The end of water year (WY) 2024 is approaching quickly, and when WY 2025 begins on October 1st, they will start looking at projections.

Ms. Johnson shared projections from the Bureau of Reclamation (Reclamation). The observed unregulated inflow into Lake Powell for WY 2024 was 7.94 MAF (83% of average). Projections for WY 2025 show a most probable of 8.97 MAF (93% of the average from 1964 to 2025). As WY 2025 has not yet started, there are many unknowns and Reclamation's projections show a lot of variability for the min, most, and probable max.

Results for the September 2024 24-month study have not yet been released. August numbers were used as the basis for operations in both Lake Powell and Lake Mead moving into WY and calendar year (CY) 2025. In Lake Powell there is a wide band of variability moving into the future. The end of CY (EOCY) 2024 has a projected most probable elevation of 3,574.08 feet (38% full), and for the EOCY 2025 the projection is 3,580.02 (40% full). Based on these numbers, Reclamation is planning a 7.48 MAF release from Glen Canyon Dam next year. In Lake Mead, the band of variability narrows as inflows come mostly from Lake Powell releases. The EOCY 2024 most probable elevation is 1,062.32 ft (33% full), and the EOCY 2025 most probably is 1,060.52 ft (32% full). Based on these projections, Reclamation determined on August 15th that the Lower Basin will be operating in a Tier 1 shortage condition again in 2025. Projections to the EOCY 2025 and into CY 2026 remain in Tier 1. The probable min is hovering on the border between Tier 1 and Tier 2a, so there is uncertainty moving into 2026 that will depend on how the snow year and additional conservation measures impact the modelling.

All system conservation agreements in the Lower Basin that have been executed and included in the August 24-month study were shown, highlighting that the cumulative total through the interim period is 2.6 MAF. This does not include the recent addition of the Imperial Irrigation District (IID) system conservation agreements executed on August 12th, as the 24-month study was released on August 15th. With that 700,000 AF of additional system conservation included in the modelling, it is suspected that the September 24-month study will show the probable min and other estimates shifting up. The IID agreements will put the Lower Basin over the 3 MAF goal that was part of the supplemental EIS for the 2007 guidelines in the Drought Contingency Plan (DCP).

Ms. Johnson concluded by noting that Reclamation continues to work through its process, and is seeking additional clarification from those who submitted alternatives in March. It is her understanding that a possible draft EIS is still expected from Reclamation by the end of the calendar year.

Chair Buschatzke asked if the recent new Minute entered into by Mexico, regarding an additional 400,000 AF of conservation as an equivalent to the 3 MAF in the US, was included in the August 24-month study. Ms. Johnson did not know, and would have to respond later.

Commissioner Olsen asked for clarification on the 2,400 AF of CAP conservation agreements for 2026, and whether it is independent of the Reclamation funding for compensated system conservation that ends after 2025. Chair Buschatzke noted that Marcus Shapiro may be able to answer that.

Chair Buschatzke asked if there were further questions from Commission Members. There were

none.

Report from the Central Arizona Water Conservation District (CAWCD). Mr. Marcus Shapiro, Water Systems Supervisor at CAWCD, provided an outlook on the 2025 delivery supply and anticipated deliveries. He first acknowledged the previous question, noting that he also would have to look into it.

As 2025 will be in a Tier 1 shortage, there will be a 512,000 AF reduction that comes from the 2006 guidelines (320,000 AF) and the DCP agreements (192,000 AF). This cuts all of the Agriculture pool and part of the Non-Indian Agriculture (NIA) pool of supply.

Currently, CAWCD is estimating a normal Colorado River supply of 1,665,364 AF, but is expecting to receive an official number from Reclamation in the next few weeks. This supply will be reduced by 512,000 AF as stated, plus an additional 75,000 AF of losses through system operation. CAWCD plans to add 50,000 AF of water from Lake Pleasant, resulting in a pre-mitigation delivery supply of 1,128,364 AF.

Under DCP agreements for a Tier 1 shortage, the NIA pool will be mitigated at 75% with 44,909 AF of ICS out of Lake Pleasant and an exchange agreement with Salt River Project (SRP). CAWCD is also aware of system conservation agreements in 2025 that total 267,733 AF, which will add wheeling water for Queen Creek (currently estimated at 1,983 AF). In total, the Central Arizona Project (CAP) delivery supply is anticipated to be 907,523 AF.

Anticipated long-term contract orders are approximately 1,254,698 AF. The unmitigated and shorted NIA pool volume will be 50,608 AF. System conservation, tribal firming, and compensated conservation total 298,550 AF, bringing the total volume scheduled for delivery to 907,523 AF, which balances with the delivery supply.

CAWCD is currently awaiting orders from water users, so all numbers provided today are preliminary estimates. Once water orders are received, these numbers will be fine-tuned and there will likely be some changes. The net result pertinent to the AWBA is regarding firming obligations to the Gila River Indian Community. Based on the numbers presented today, CAWCD is currently estimating that obligation to be 6,102 AF.

Chair Buschatzke asked Commission members if there were any questions. There were none.

Report on Recovery Planning activity (AWBA/CAWCD).

Rebecca Bernat (AWBA) and Angie Lohse (CAWCD) both presented on recovery planning, in that order.

Dr. Bernat reminded the Commission that with no projected reduction to the CAP M&I priority supply, no firming is anticipated in 2025. The AWBA does have a firming agreement, and with one more executed in the last quarter, there are a total of 18 executed agreements to date. The AWBA also recently met with another subcontractor to discuss their firming options, and continues to meet monthly with CAWCD and ADWR regarding recovery planning.

Ms. Lohse, from Resource Planning and Analysis at CAWCD provided a recovery planning and implementation update focused on the Tonopah Desert Recharge Project (TDRP). The facility was built between 2004-2006, with operations beginning in 2006 and continuing until 2014 when the facility was put into reserve status as there was no further need to store there. It was reopened for one year in 2022. TDRP is located approximately 7 miles northwest of Tonopah and 40 miles west of Phoenix. The AWBA has stored approximately 513,000 AF of the total 869,000 AF of water that has been stored at the facility. This equates to 25% of the AWBA's credits in the Phoenix AMA.

The location of TDRP was chosen after evaluations in the western portion of the CAP system, and was considered ideal due to its distance from existing pumping and the presence of excess water supplies in the vicinity to store. However, with fewer wells in the vicinity there was little information on the hydrogeology with regards recovering water at the facility, plus water quality considerations for recovery were less prominent at the time.

CAWCD has continued to invest in direct recovery at TDRP. While planning began in 2009, more intensive infrastructure investment began in 2016, including drilling three aquifer bore holes. This showed that sediments were more lithified with depth, and that arsenics and fluorides exceeded Maximum Contaminant Levels (MCLs). Despite these limitations, onsite recovery still seemed feasible, with shallower well depths and smaller yields than anticipated. A hydrotest well was drilled in 2017, which indicated that arsenic and fluoride concentrations would be higher than previously assumed, resulting in higher capital and operating costs for water treatment. One recommendation was to look at alternate recovery sites outside of the recharge facility itself. In 2019 an alternate location study was initiated, which was largely a GIS exercise using existing information on hydrogeological conditions, groundwater quality, various wells in the area, and land ownership. The identified recommended alternate sites were then investigated with geophysical surveying and a 40-acre parcel was acquired. In 2023 and 2024, two pilot recovery wells (PRW) were drilled, in the northern portion of TDRP (PRW-1) and on the acquired 40-acre site, approximately 0.75 mi east (PRW-2). Both were drilled to 1,000 feet and were cased, with two screened intervals. These wells were intended to support the assessment of the technical feasibility, and design, of a recovery wellfield and treatment facility. Drill cuttings were analyzed, sediment types and water producing zones were identified, and zonal testing was conducted to evaluate well production and water quality, characterizing the horizontal and vertical variations at the site. PRW-2, on the 40-acre parcel, showed that conditions were not as favorable as intended. PRW-1, the onsite well, did have lower water quality issues. Challenges remain at both sites. These results were similar to the previous drilling results from the bore holes and hydrotest well.

CAWCD is moving forward in evaluating the feasibility of a facility on the 40-acre parcel, because of the larger production capacity estimated at PRW-2. Data from the pilot well is being used to generate a high-level analysis of potential well locations near the corners of the parcel, to minimize hydraulic interference. The work will also include an assessment of water quality treatment options available, and the overall cost of the well drilling and treatment facilities. Results are anticipated in the beginning of 2025. CAWCD is also revisiting recovery options outside of TDRP, either as supplement or substitute to the 40-acre parcel.

Chair Buschatzke asked Commission members if there were any questions for Ms. Lohse.

Commissioner Olsen asked what the benefit of recovery on the 40-acre parcel was, if water quality was 3-4 times lower. Ms. Lohse responded that CAWCD considered the parcel to be a better location because of the higher well productivity, as there would potentially be a solution to the water quality issues even with higher treatment costs.

Commissioner Braun asked if there was an annual target volume for recovery out of TDRP. Ms. Lohse responded that they are looking at 10,000-15,000 AF per year. While they may not be able to reach that volume, at least through an onsite wellfield, CAWCD is hoping to anticipate an annual volume within that range.

Commissioner Taylor asked for further explanation on where the originally stored water was now, if there were surface layers of higher quality water with lower concentrations of arsenics and fluorides or if the stored water had mixed with the existing aquifer, noting there is a high cost and disposal requirement for water treatment. Ms. Lohse responded that well drilling has shown that water quality does decrease at depth, so recovery wells would be shallower than originally anticipated, and that due to the time since storage, stored water has migrated to the Southeast. She noted that this is why surveying focused to the East of the facility for well siting, and that the 40-acre parcel was acquired due to indications that water quality would be better there, although they may not have gone far enough East. Commissioner Taylor asked if it is known that the original recharge water has mixed in with the existing water, or if there are thin layers of recharged CAP water with better water quality. Ms. Lohse replied that they have seen some mixing but a lot of migration of water off-site, which is causing the lower quality water and lower overall production at the site. Commissioner Taylor asked for confirmation that what is being recovered at the site is then native groundwater. Ms. Lohse agreed.

Chair Buschatzke asked if there were any further questions for Ms. Lohse and Dr. Bernat. There were none.

IV. Discussion and Potential Action to Approve Purchase and Sale Agreements for Long-term Storage Credits between the AWBA and the Tohono O’odham Nation.

In the Tucson AMA.

Dr. Bernat presented a single-year (2024) agreement with the Tohono O’odham Nation for the purchase of Long-term Storage Credits (LTSC) located in the Tucson AMA. The agreement is for the purchase of 21,324.39 AF at a per acre foot cost of \$400, for a total cost of \$8,529,756. This rate was negotiated and is consistent with the only other credit sale in the Tucson AMA in 2024. The AWBA is proposing to use 4-cent tax and withdrawal fees to make this purchase. There are \$7,951,897 of Pima County water storage tax fees available, and the remaining balance of \$577,859 will be made up with withdrawal fees from the Tucson AMA. The credits are located at the Lower Santa Cruz Recharge Project and the Pima Mine Road USF.

Chair Buschatzke asked if there were any question from the Commission.

Commissioner Braun asked if the water storage tax amount was from one year’s water storage funds, or if it is an accumulation from previous years. Dr. Bernat responded that the number includes the \$7,822,128 of carryover that the CAWCD Board of Directors reserved for the

AWBA for previous purchases that were not finalized, as well as \$129,769 granted by the Board last August. Commissioner Braun asked for clarification on how much carryover is still available, or if the \$7.8 million is all of it. Dr. Bernat responded that all carryover is intended to be spent in this transaction. Commissioner Braun commended Dr. Bernat on achieving an agreement.

Chair Buschatzke asked if there were any further questions from the Commission. Commissioner Braun moved to approve the agreement. Commissioner Olsen seconded. Chair Buschatzke asked if there were any comments from the public. There were none. The agreement was approved unanimously.

In the Phoenix AMA.

Dr. Bernat then presented the second Purchase and Sale Agreement for LTSCs between the Tohono O'odham Nation and the AWBA. This is again a single-year (2024) agreement, for 6,871 AF of credits in the Phoenix AMA, at a cost of \$485/AF. This cost is higher because demand in Phoenix AMA is higher. The total cost of this transaction is \$3,332,424. AWBA staff are proposing to use all carryover water storage tax funds in Maricopa County, \$3,332,022, supplemented with \$402 of Phoenix AMA withdrawal fees. These credits are located at Hieroglyphic Mountains USF.

Chair Buschatzke asked for questions or comments from Commission members. There were none. Commissioner Olsen made a motion. Commissioner Braun seconded. Chair Buschatzke made a call to the public, followed by a call for any further discussion from Commission members. There was no discussion.

The agreement was approved unanimously.

V. Preliminary AWBA 2025 Plan of Operation

Dr. Bernat presented the Preliminary Plan of Operation, informing the Commission that staff are asking for direction to present at the upcoming Groundwater Users Advisory Councils in the Tucson AMA (September 13th), the Pinal AMA (September 18th), and the Phoenix AMA (September 19th). Today's presentation will be the highlights of the preliminary plan.

Next year will be a Tier 1 shortage, which impacts the NIA pool as explained by Mr. Shapiro. The AWBA will not be storing any water, and will use other means to achieve its goals. The AWBA intends to purchase Intentionally Created Surplus (ICS) firming credits, and could purchase LTSCs as well.

The estimated funds for 2025 are comprised solely from withdrawal fees due to the recent purchase of LTSCs using all water storage tax carryover. The AWBA estimates having \$1,676,210 of withdrawal fees collected in the Phoenix AMA and \$367,337 in the Tucson AMA. These numbers do not include money that has been reappropriated to the Arizona Navigable Stream Adjudication Commission. The Phoenix AMA money is intended to be spent on ICS firming credits, to potentially develop 5,327 AF. The Tucson AMA funds could be used to purchase LTSCs if there are opportunities. With no purchase agreements lined up for 2025, the

AWBA did not request the CAWCD Board of Directors to reserve 4-cent tax funds. However, the Board may be asked to amend its resolution should opportunities arise next year. In total, the AWBA is looking at spending a little over \$2,000,000 to develop 6,245 credits.

Due to the impacts of a Tier 1 shortage on the NIA pool, a firming obligation to the Gila River Indian Community (Community) will be triggered. In March, that volume was presented as 10,000 AF, but the recent decision of CAWCD to release 50,000 AF from Lake Pleasant provides more water to the NIA pool, resulting in a smaller obligation. Currently, the AWBA is anticipating a 6,102 AF firming obligation to the Community, although this will not be final until after CAWCD receives final water orders by October 1st. The AWBA has agreed with the Community to fulfill this obligation with firming credits. There is no M&I or On-River (sub)contractor firming anticipated, and Nevada will not request Intentionally Created Unused Apportionment until 2028.

Dr. Bernat finished with a summary of the credits held by the AWBA. This showed the 6,102 AF deduction for firming the Community in 2025, as well as a credit of 12,350 AF to the Pinal withdrawal fee account and a debit of 12,350 AF from the Phoenix withdrawal fee account. This is the volume of LTSCs that have not been requested for exchange pursuant to the DCP agreement for reciprocal exchanges. Entities have until the end of 2026 to do so, and this remaining volume could be exchanged next year.

Chair Buschatzke pointed out a footnote in this summary regarding NIA water. As a matter of policy, the state of Arizona will no longer be offering NIA water in Indian water rights settlements. This outcome is reflected in the current Northern Arizona Indian Water Rights Settlement legislation in Congress, as well as the Yavapai Apache Nation Settlement legislation in Congress. This footnote was included by request of the Chair and may not have been in an earlier version of the Preliminary Plan.

Chair Buschatzke asked if there were any questions or comments from Commission members.

Commissioner Taylor noted that no water storage credits are planned for 2025, and commended Dr. Bernat on her work in finding and pursuing LTSCs as evidenced earlier in the meeting. Mr. Taylor asked how 2025 looks for finding more credits and therefore necessitating requesting more storage tax money from CAWCD. Dr. Bernat responded that the AWBA should have the opportunity to purchase LTSCs in the Tucson AMA from the Tohono O'odham Nation, who under statute must offer 10% of their accruable credits to the AWBA every year. Currently, there are no other prospects for 2025, but should the AWBA have the opportunity, they can ask the CAWCD Board of Directors to amend the resolution made this year. Commissioner Taylor asked if there have been any opportunities for buying reclaimed credits, and Dr. Bernat responded that entities have been contacted but to date none has expressed a desire to sell.

Chair Buschatzke asked if there were further questions or comments from Commission members. There were none.

Chair Buschatzke asked Commission members if they are comfortable with staff presenting the Preliminary Plan at the upcoming GUAC meetings. Commissioners agreed. Chair Buschatzke

directed staff to make the presentations at the CUACs and receive comments.

VI. Report on reciprocal transfers of long-term storage credits pursuant to the Lower Basin Drought Contingency Plan Implementation Plan

Madeleine Oliver presented an update on the reciprocal transfer of LTSCs pursuant to DCP, where parties in the Tucson and Phoenix AMAs stored CAP water in the Pinal AMA that could later be exchanged with the AWBA for credits located in their own AMA. So far in 2024, six requests have been processed, for a total of 30,353 AF. In this last quarter, the AWBA account in Pinal AMA was credited 3,302 AF at Maricopa-Stanley Irrigation and Drainage District, and 4,518 AF at Hohokam GSF (Pinal AMA). Equivalent amounts were deducted from the AWBA accounts at Agua Fria Constructed USF (Phoenix AMA) and Southern Avra Valley Storage and Recovery Project (Tucson AMA). There remain 12,350 AF in the Pinal AMA eligible for exchange by December 31, 2026.

Chair Buschatzke asked for questions from Commission members. There were none.

VII. Call to the Public

Chair Buschatzke called for public comments on agenda items other than those already offered for comment. There were none.

Future Meeting Dates:

Wednesday, December 11, 2024

The meeting adjourned at 10:59 a.m.