ARIZONA WATER BANKING AUTHORITY Final Meeting Summary

December 5, 2023 Arizona Department of Water Resources

(Hybrid Meeting)

I. Welcome

Chair Tom Buschatzke and Commission members Joseph Olsen and Mark Taylor attended in person. Commissioner Braun attended online. Commissioner Clark, Senator Sine Kerr and Representative Smith were not in attendance.



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

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

Chair Buschatzke announced attorney Anthony Proano will be replacing Jeff Heilman for a while. Ayesha Vohra, long-time AWBA attorney is still supporting the work of the AWBA.

II. Approval of Meeting Minutes

Chair Buschatzke asked for a motion. Commissioner Olsen moved to approve the September 13, 2023, AWBA Regular Meeting minutes with any needed corrections. Commissioner Taylor provided the second to the motion. Chair Buschatzke asked for a discussion. There was no discussion. The minutes were unanimously approved.

III. Water Banking staff activities

Quarterly report on AWBA credit purchases for calendar year 2023. There were no purchases to report for this quarter.

Status report on Colorado River conditions. Kristen Johnson, manager of ADWR's Colorado River Management Section, gave the Colorado River Basin update. Lake Powell is at 3,571 feet, Lake Mead at 1,064 feet. The total system storage is currently 43% (it was 33% last year at this time). This is thanks to a good water year in 2023, combined with extensive conservation efforts across the Lower Basin.

As of November 1, 2023, the most probable unregulated inflow forecast for water year 2024 was 8.62 MAF. As of last Friday, new projections unfortunately showed a value of 7.62 MAF. It has been a dry season so far.

According to the November 24-month study projections issued by the Bureau of Reclamation, Lake Powell's most probable EOCY 2023 projections are for 3568.8 ft, and most probable EOCY 2024 projections are for 3579.55 ft. Lake Mead (largely supplied by outflows from Lake Powell), has most probable EOCY 2023 projections of 1067.71 feet (Tier 1 for CY 2024), and then

according to the most probable EOCY 2024 projections, we could be in a Tier 1 again in 2025 (1,055.18 feet).

On November 20, 2023, Chair Buschatzke and CAWCD General Manager Brenda co-hosted an Arizona Reconsultation Committee meeting and presented a proposal for the Post-2026 Colorado River operation systems. The first objective of the proposal, Ms. Johnson explained, is to increase the predictability of reductions by looking at combined system contents, rather than individual lake elevations. This objective would eliminate the reliance on forecast data, as well as reduce the influence of water conservation and use behavior on the volume of water released from Lake Powell to Lake Mead, which is a topic of friction between the Upper Basin and Lower Basin states. The second objective of the proposal is to share the risks and benefits of the system equitably between the Lower and Upper Basins by protecting critical elevations, and to have all Upper Basin and Lower Basin states participate in reductions.

Ms. Johnson described a graph depicting the reduction approach using system contents. The framework would provide first a linear function for water reductions, followed by a static reduction that would ensure predictable and less variable reduction volumes year to year, followed by another linear function for water reduction that would not go below the protection volume levels.

Commissioner Olsen asked what the level of reduction would be, should this framework be our current operating guidelines. Ms. Johnson said the reductions would be close to the bottom of the static ramp. Commissioner Taylor asked how the levels between Lake Mead and Lake Powell will be balanced from an energy standpoint. Chair Buschatzke explained that all seven states are analyzing this to avoid using the by-pass tube at Lake Powell.

Commissioner Taylor asked how often the reductions would be evaluated under this presented framework. Chair Buschatzke said it would still be an annual determination, but simply that lake elevations would not be the triggers. Commissioner Taylor asked if all the basin states were in agreement with this concept. Chair Buschatzke replied that there is enough agreement that this system content approach is the right path.

Chair Buschatzke asked Ms. Johnson how much conservation under the 3-MAF conservation plan currently in place until 2026 is included in the Bureau of Reclamation projections of Lake Mead elevation. Ms. Johnson replied approximately 1.1 MAF—not all conservation agreements are included in these projections.

Commissioner Braun highlighted the need to reduce the structural deficit by making non-voluntary reductions, considering that even with all conservation planned for 2024, Lake Mead's most probable EOCY projections show a decline of 12 feet in 2024. Chair Buschatzke added that the Lower Basin's proposal for the draft SEIS is working on protecting critical elevation through 2026. He added that the framework presented at the ARC is a new paradigm. He expressed his appreciation for the work of ADWR and CAP staff, and is confident an alternative proposal will be delivered by March 2024.

Ms. Johson concluded with information regarding the Bureau of Reclamation's launch of a simplified user interface CRSS model for the public. Two workshops with stakeholder groups involved in the model creation process were held, in addition to a workshop for the representatives from all 38 sovereign governments in the Colorado River Basin.

Director Buschatzke asked if there were more questions. There were none.

Report from the Central Arizona Water Conservation District. Jaxon White, CAWCD Water System Engineer, presented the 2024 CAP Operating Plan. Deducting 512,000 AF from the 2007 Guidelines and the Drought Contingency Plan, as well as 75,000 AF of losses, but then adding a 50,000 AF release from Lake Pleasant to the normal supply of 1,662,429 gives a pre-mitigation delivery supply of 1,125,429 AF.

He added that the 2024 orders were for 1,252,685 AF, and that 41.1% of the NIA pool would be cut in 2024. As part of Arizona DCP implementation, 75% of the NIA pool is mitigated. There is firming from the AWBA (6,170 AF) and from Reclamation, compensated mitigation, 10,000 AF provided from the SRP-CAP exchange, 5,000 AF from Lake Pleasant, and the use of CAWCD ICS. In 2024, there will be an additional reduction of 284,784 AF of system conservation, resulting in CAP diversions of 897,924 AF.

Commissioner Taylor asked about the NIA Pool B. Ken Seasholes, CAWCD Manager of Resources Planning and Analysis said that the 41% of the reduction was for pool A, which is mitigated. The 45,000 AF allocated to the NIA pool B is also mitigated. Chair Buschatzke asked whether some water users chose financial compensation to keep water in Lake Mead as a form of mitigation, which is part of the 3-MAF reduction in the Lower Basin Proposal for the Draft SEIS. Mr. Seasholes confirmed these water users were eligible for financial compensation.

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

Report on Recovery Planning Activities. Rebecca Bernat explained that one more subcontractor entered into a firming agreement, which brings the total executed agreements to 17.

Mr. Seasholes, Manager, Resources Planning and Analysis at CAWCD gave an update about Tonopah Desert Recharge Project and reiterated CAWCD's commitment to finding practical ways to recover water from this facility. A test well in 2017 indicated there was variability in geology in the area and water quality issues. CAWCD acquired a 40-acre parcel where they thought there would likely be more recovery productivity and anticipated developing a well field and a treatment facility. Starting in July 2022, CAWCD entered a contract with Montgomery and Associate and with Yellow Jacket to build a well in that new parcel. The recovery capacity in that area, hoped to be 15,000AF/year, has turned out to be disappointing so far. There is also a presence of arsenic and fluoride in the water. Transmissivity and lithification continue to be an issue in the new parcel as well. A decision will have to be made by the end of 2024. A report will be issued in the first quarter of 2024 and viable concepts will be discussed with stakeholders. With limited recovery volume possible, Mr. Seasholes mentioned the potential need to rethink the recovery method of LTSCs at Tonopah Desert Recharge Project for firming.

Commissioner Taylor asked if the percentage of the water that needs to be treated, as well as treatment costs, will be in the upcoming CAWCD 2024 report. Mr. Seasholes confirmed that would be the case.

Commissioner Olsen asked if the quality of the water in the well on the 40-acre parcel was better than the initial well. Mr. Seasholes replied that the water quality levels were similar.

Commissioner Braun asked about the recovery and firming timeline. Chair Buschatzke said we will have an idea of how much we will need to recover at Tonopah Desert Recharge Project once we know more about the 2026 guidelines.

Mr. Seasholes concluded his recovery planning update by saying that CAWCD is working with ADWR to renew recovery agreements with agricultural districts.

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

IV. Future Potential Long-Term Storage Credit Purchases

Presentation of the market for long-term storage credits. Dr. Bernat presented the market for LTSCs. AWBA staff collected information about the cost of transactions since 2014 in the Tucson AMA. Dr. Bernat thanked subcontractors for sharing pricing information. The results show transactions between 9 sellers and 10 buyers. The price of LTSCs has increased, due to the increase in the cost of storage from increased CAP rates. Dr. Bernat explained that there are not enough transactions to conduct a statistical analysis to determine if the volume of water exchanged is a significant price factor. She knows, however, that there are entities that would prefer selling large volumes of LTSCs in one transaction. The number of transactions peaked in 2021. In 2023, only one entity other than the AWBA purchased LTSCs; this might be due to the anticipated need for LTSCs, or to uncertainty in the market.

Commissioner Taylor asked how many transactions are based on previous contracts or true market cost. Dr. Bernat replied that she did not systematically ask how the price was determined when reaching out to CAP M&I subcontractors. Commissioners Olsen said that 15 transactions are from Metro water and based on 5-year IGAs with an escalator-based index in cap rates.

Dr. Bernat compared the annual AWBA average purchase cost to the average purchase cost of all entities in the Tucson AMA. On average we have purchased water at a slightly higher price than other entities in the Tucson AMA.

In the Phoenix AMA, when using WestWater Research data presented at the CAWCD Board of Director on June 1, 2023, Dr. Bernat showed that the AWBA has purchased credits at a price lower than the average market price. In the Phoenix AMA, the disparity of price is much more important than in the Tucson AMA.

Dr. Bernat concluded with two different factors that might impact the cost of credit in the future: system conservation; and the federal government paying entities for not using water at a rate of \$400/AF in 2026.

Commissioner Olsen applauded Dr. Bernat for her research efforts with such time constraints and said the presentation was helpful for determining a pathway forward. He noted that there are likely to be less LTSC transfers in the future in the Tucson AMA because of water compensation, and party-to-party water exchanges. He added that the Commission should seriously consider whether or not there is flexibility to go away from the historical purchase algorithm.

Commissioner Taylor said that he agrees that the algorithm may not work in the future. He added that the Plan of Operation features a pretty aggressive amount of LTSCs that could be acquired, and wonders if the AWBA needs outside consultants like WestWater Research to get a feel for the true market, and for the potential numbers of LTSCs that are available for purchase. He added that looking at past prices does not tell the true cost of LTSCs today. Commissioners Olsen and Taylor agreed that AWBA results show that the pricing method needs to be changed.

Commissioner Braun thinks the approach in the past has worked until it has not in the last few years with the availability of LTSCs. He suggests asking staff to see what people are willing to sell LTSCs at, and if there are potential opportunities for the AWBA to meet some target volumes each year. He suggested asking staff to come back with potential opportunities the Commission could consider under executive session for negotiating contract and ensure to potential sellers the information remains confidential, and it would provide the commission some data points, which might help the Commissioner inform the direction they want to guide staff in how they approach the pricing methodology or if the AWBA needs more resources to meet our goals.

Chair Buschatzke added that Dr. Bernat has been recruiting for another staff person, and should test the water so to speak with the entities willing to sell. He also added that AWBA will need to work with CAWCD in terms of the money made available to purchase LTSCs by the Board. With the Federal government conservation program, Chair Buschatzke said people will expect more money for water.

Chair Buschatzke directed AWBA staff to reach out to interested parties.

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

Discussion and possible direction to staff on the ability of the AWBA to purchase long-term storage credits accrued through effluent storage in the Tucson AMA. Dr. Bernat presented the location of 323,534 LTSCs in the Tucson AMA: 63% are stored at the Lower Santa Cruz River Managed USF, and 12% in the Santa Cruz Managed USF. Almost all effluent sales since 2014 come from water stored at these two facilities. She then showed a map of these facilities, with the area of impact of storage and permitted recovery wells. Results showed that there are 26 recovery wells operated by 3 CAP M&I subcontractors in the area of impact of the Lower Santa Cruz Managed Recharge Project; and 15 recovery wells operated by 2 CAP M&I subcontractors in the area of impact of the Santa Cruz River Managed Recharge Project. These subcontractors might be able to recover water effluent LTSCs in these areas. The next step, she concluded, would be to talk to subcontractors to determine if they could recover these LTSCs. A decision on a case-by-case basis might be necessary.

Commissioner Taylor said that he is in favor of staff going forward with effluent LTSCs. He recommended asking subcontractors if they have issues with using LTSCs of effluent, and also finding the potential availability of credits and their cost. Commissioner Olsen agreed with Commissioner Taylor about talking to subcontractors to determine the viability of having effluent LTSCs and added that historically effluent LTSCs have trended at a lower price. Commissioner Braun agreed with the other members. Chair Buschatzke gave AWBA staff direction to move forward with the appropriate inquiries.

V. Discussion and Consideration of Action to Approve AWBA 2024 Plan of Operation

Dr. Bernat reviewed the 2024 Plan of Operation (2024 Plan). She noted that the firming volume for 6,170 acre-feet for the Community is the only item that changed since she presented the Plan in September. Dr. Bernat reviewed the questions and answers that were raised by the public at the Groundwater Users Advisory Council meetings in the Phoenix, Pinal, and Tucson AMAs.

Commissioner Taylor said he is in favor of the Plan and asked whether AWBA was going to ask for 4-cent tax money from the CAWCD Board to purchase LTSCs or if the fund listed in the Plan of Operation was carry over money. Dr. Bernat confirmed there was carry over money and replied that AWBA did not request additional 4-cent tax money from CAWCD for 2024, but that there is a provision in the IGA with CAWCD and ADWR that reads the AWBA can request more funds if opportunities arise.

Chair Buschatzke entertained a motion. Commissioner Taylor moved to approve the AWBA 2024 Plan of Operation as submitted with minor or technical changes. Commissioner Olsen seconded the motion.

Chair Buschatzke asked if there were public comments. There were none. He asked for discussion. The motion was approved unanimously.

VI. Discussion and consideration of action to approve AWBA Calendar Year 2024 Water Operating Budget

Dr. Bernat explained the goal of the 2024 water operating budget is to approve the expenditures listed in the Annual Plan of Operation.

Chair Buschatzke asked if there were questions. There were none. Chair Buschatzke asked for a motion. Commissioner Olsen moved to adopt the AWBA operating budget for the 2024 calendar year. Commissioner Braun seconded the motion.

Chair Buschatzke asked for comments from the public. There were no comments. Chair Buschatzke asked for a discussion. There was none. The motion passed unanimously.

VII. Call to the Public

Chair Buschatzke called for public comments. There were no comments.

Future Meeting Dates:

Wednesday, March 20, 2024 Wednesday, June 26, 2024 Wednesday, September 11, 2024 December meeting date is to be determined.

The meeting adjourned at 11:46 a.m.