ARIZONA WATER BANKING AUTHORITY Draft Meeting Summary

March 22, 2023 Arizona Department of Water Resources (Hybrid Meeting)

I. Welcome

Chair Tom Buschatzke and Commission members Mark Clark, Mark Taylor, Eric Braun, Senator Sine Kerr, and Representative Austin Smith attended in person. Commission member Joseph Olsen attended via video conference.

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

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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

Chair Buschatzke introduced newly appointed Commission member Mark Taylor who was designated by CAWCD Board President Terry Goddard to represent CAWCD. Senator Kerr and Representative Smith were introduced by the Chair as newly designated *ex officio* members, as well as Sara Konrad as a new AWBA staff member.

II. Consideration of action to approve a Resolution Honoring the Service of Alexandra Arboleda

Chair Buschatzke read aloud a resolution honoring the service of Alexandra Arboleda on the AWBA Commission and asked for a motion. Commissioner Clark moved to approve the resolution, Commissioner Braun provided the second to the motion, and the resolution was unanimously approved.

III. Commission elections for the offices of Vice-Chair and Secretary

Chair Buschatzke asked for nominations for the offices of Vice-Chair and Secretary. Commissioner Braun nominated Commissioner Clark for the office of Vice-Chair and Commissioner Clark nominated Commissioner Braun for the office of Secretary. The nominations were unanimously approved.

IV. Approval of Meeting Minutes

Chair Buschatzke asked for a motion. Commissioner Clark moved to approve the December 7, 2022 AWBA Regular Meeting minutes with any needed corrections. Commissioner Braun provided the second to the motion. Chair Buschatzke asked for a discussion. There was no discussion. The minutes were unanimously approved.

IV. Water Banking staff activities

AWBA Manager position. Chair Buschatzke announced that the position of AWBA Manager has been posted.

Quarterly report on AWBA credit purchases for calendar year 2023. Rebecca Bernat provided an update on credit purchases during the first quarter of 2023. The AWBA completed a purchase of 1,326.77 acre-feet (AF) of long-term storage credits (LTSCs) from the Tohono O'odham Nation pursuant to A.R.S. § 45-841.01. The LTSCs were purchased using \$321,926.31 of Tucson Active Management Area (AMA) withdrawal fees.

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

Status report on Colorado River conditions. Kristen Johnson, Manager of ADWR's Colorado River Management Section, gave the Colorado River Basin update. She reported that, as of March 20, 2023, Lake Powell was at an elevation of 3,520.98 feet (ft) with storage of 5.316 million acre-feet (MAF) or 23 percent of capacity. Lake Mead was at elevation 1,046.01 ft with storage of 7.397 MAF or 28 percent of capacity. Total system storage is 32 percent full.

Ms. Johnson noted that this year's snowpack is well above average, currently 142 percent of the median. Although this is encouraging, the runoff conditions are yet to be known. In prior years, extremely dry soil conditions led to poor runoff conditions.

Ms. Johnson reported on the historic and forecasted water year 2023 unregulated inflow into Lake Powell. The 30-year average (1991-2020) is 9.60 MAF. This year's minimum probable forecast is 8.96 MAF (93 percent of the 30-year average). The most probable forecast is 10.87 MAF (113 percent of average) and the maximum probable forecast from January is 14.93 MAF (155 percent of average).

The Lake Powell 24-Month Study (24-MS) plots indicate the probable minimum projection at the end of calendar year 2024 is slightly below elevation 3,525 ft. The 24-MS plots for Lake Mead show the general band of probability falling above a Tier 3 shortage condition, however, the probable minimum projection does show a small probability of a Tier 3 shortage condition in 2024.

Ms. Johnson then compared the three operating alternatives expected to be analyzed in Supplemental Environmental Impact Statement (SEIS). The three alternatives are the current operating regime (2007 Interim Guidelines), the Consensus-Based Modeling Alternative (CBMA), and the California proposal. These alternatives have been submitted to Reclamation for modeling purposes. They do not represent a negotiated final operating agreement among the basin states.

She pointed out the major distinctions between the California and CBMA proposals. Most

notably, in California's proposal, contributions toward the additional protection volumes are voluntary and not guaranteed. As understood by Arizona, California's implementation of the protection volumes is proposed to be managed on a priority basis pursuant to the 1968 Colorado River Basin Project Act and the Arizona v. California consolidated decree. In contrast, the CBMA proposes an equitable proportion of mandatory cuts by all users across the three Lower Basin states. The model results for Lake Mead and Lake Powell pool elevations from the two proposals are comparable with overall protection volumes set at 2 MAF. Both proposals also include an absolute protect at elevation 1,000 ft to not fall below power pool.

Charts created by CAWCD present reductions in volumes, as well as the water that would remain available under each alternative. The CBMA proposal provides for greater cuts at higher elevations to every Lower Basin State and Mexico while the California proposal would result in larger cuts to Arizona (and Nevada) as Lake Mead's elevation falls.

Chair Buschatzke added that Reclamation has not released what proposals they plan to model due to legal requirements of the National Environmental Policy Act (NEPA) process. He also pointed out that under the California proposal's worst-case scenario, Arizona would only receive 608 thousand acre-feet (KAF). Ms. Johnson explained that in this case, users with Presented Perfected Rights would receive water, and there would be some water available for Second Priority users, these being Yuma County water users and Tribes along the River. No water would be available for Third Priority users under this scenario. These include a portion of agricultural users in the Yuma area and CAP Municipal and Industrial (M&I) subcontractors.

Chair Buschatzke confirmed that the end of calendar year 2023 projections are based on a 7.0 MAF release from Lake Powell to Lake Mead. The Chair pointed out two things that can significantly change the tier determination for Lake Mead. First, in November 2022 Reclamation accepted applications for their compensated system conservation program. The applications total roughly 600 KAF of conservation, however, it is unknown how many of these applications will be approved. This volume of conserved water would significantly change the outcome of this graphic for the better. Second, it is expected that more than 7.0 MAF will be released from Lake Powell to Lake Mead which could result in a significant improvement in the expected shortage condition, for example, Tier 1 or 2a. He also pointed out that the projections of the worst-case scenario for Lake Powell elevations are no longer below minimum power pool. However, he cautioned the Commission to also consider a scenario such as 2011, a wet year with 16 MAF of runoff, which was then followed by two very dry years in 2012 and 2013.

Chair Buschatzke asked Commission members if there were any questions.

Commissioner Braun observed that the hydrology is a slight step back from precipice, not a full step, and the urgency remains in the long term. He asked if there are any indications of what Mexico would voluntarily sign on to. Chair Buschatzke answered that a group has been meeting with Mexico. The Chair also noted that he had recently met with the Deputy Secretary of the Interior, Tommy Beaudreau, and implored him to accelerate discussions

to align with the timeframe of the release of the Record of Decision, expected in mid-July, and the August 24-Month Study. Chair Buschatzke believes that a 30 percent reduction to Mexico, which would be equitable to Arizona's reductions, would be a reasonable outcome. The Chair added that the Mexican delegation is aware of the issue and has been very proactive in their desire to be part of the solution.

Commissioner Taylor asked what the process would be for Mexico's commitment. Chair Buschatzke responded that he expects that the SEIS will be broad enough to cover Mexico, but that he didn't know whether the federal government might utilize Minute 323, another minute, or if there was another mechanism.

Commissioner Taylor also asked about the breakdown of Presented Perfected Rights and Third Priority users in the Yuma area. Patrick Dent, CAWCD Assistant General Manager, answered that the Colorado River Indian Tribes and Yuma County Water Users' Association, along with a few other users, utilize just under 500 KAF. Approximately 60 KAF are utilized by Fourth Priority on-River users. In total, there is 1.1 MAF of current use with the balance comprised of other Yuma area districts which are primarily Second and Third Priority.

Senator Kerr inquired about the expected snowmelt inflow to Lake Mead. Mr. Dent replied that there is snow accumulation in the Grand Canyon area which might result in as much as 300 KAF of additional runoff, referred to as intervening flow. Additionally, water is currently being released to Lake Havasu from Alamo Lake via the Bill Williams River. This occurs every five to seven years, with the last time being in 2018. Senator Kerr followed up with a question on whether more runoff is expected to reach the Colorado River due to the wet spring. Mr. Dent responded that the productivity of hydrology over the last few months has indeed improved soil moisture conditions and runoff forecasts reflect that.

Chair Buschatzke asked when we will know with confidence what the actual runoff flows will be. Mr. Dent replied that would be in April. Chair Buschatzke mentioned that ADWR and CAP are planning on hosting a public meeting in May to provide an update on the Colorado River's hydrology.

Chair Buschatzke pronounced that this update is good news. Stakeholders are awaiting the outcomes of the SEIS process. It is important to consider low-flow scenarios and the resulting potential cuts to Arizona. Having cuts in place is necessary to protect the system in case poor hydrology occurs.

Report from the Central Arizona Water Conservation District. Mr. Marcus Shapiro, CAWCD Water Systems Supervisor, started his report with water deliveries to groundwater savings facilities (GSFs) in the Pinal AMA under Arizona's Implementation Plan for the Lower Basin Drought Contingency Plan (LBDCP). Under the agreement, the AWBA will exchange its LTSCs accrued in the Phoenix and Tucson AMAs for an equal volume of LTSCs accrued by other storing entities in the Pinal AMA. This will allow these

storing entities to recover and use the water in the AMA where they are located. Mr. Shapiro noted that all of the 2022 deliveries were completed, totaling 45,500 AF.

Mr. Shapiro added that in 2023, no wet CAP water supplies are available to the AWBA, and that, due to an almost 100 percent cut to the Non-Indian Agriculture (NIA) priority pool, the AWBA has a firming commitment of 14,575 AF in 2023 to the Gila River Indian Community (Community).

Chair Buschatzke asked Commission members if there were any questions. Commissioner Taylor asked if the exchanges have already taken place. Dr. Bernat and Chair Buschatzke explained the exchange process. The water has been stored in 2022, and the next step will be for ADWR to create LTSCs after certifying their existence. Once LTSCs are created in 2023, then the storing entities can initiate the exchanges. When the exchanges occur, LTSCs will be deducted from the AWBA's Phoenix and Tucson AMA LTSC accounts to be credited to the storing entities' accounts in these AMAs; then LTSCs will be deducted from the storing entities' Pinal AMA long-term storage accounts to be credited to the AWBA's Pinal AMA account. Overall, the number of LTSCs available to the AWBA will not change.

Report on Recovery Planning Activities. Dr. Bernat began by reviewing the two different recovery methods, the first being independent recovery (distribution of LTSCs from the AWBA's LTSC accounts to the subcontractors' accounts) and the second being direct delivery (distribution of LTSCs from the AWBA's LTSC accounts to CAWCD's account, allowing CAP to recover and deliver water through the CAP canal).

The AWBA has met with all but three CAP M&I subcontractors to discuss firming methods. Twenty-three percent of the water is estimated to be delivered directly by CAP and an estimated 77 percent through independent recovery. Dr. Bernat noted that a couple of subcontractors might forgo receiving LTSCs from the AWBA.

Subcontractors who opt for independent recovery will need to enter into a firming agreement with the AWBA. The AWBA has received 27 requests to enter into agreements. So far 16 have been fully executed, and 11 are in progress. A fully executed agreement does not necessarily mean that the subcontractor will utilize independent recovery. The current agreements are good until 2026, but every year, the subcontractor may decide not to utilize independent recovery and request direct delivery from CAP instead.

Dr. Bernat then reviewed the firming timeline. Since a shortage is expected in 2024, the AWBA is currently preparing for firming. Reclamation typically releases the April 24-MS in April. CAP will provide water supply estimates for 2024. Between April and May, the AWBA anticipates having individual meetings with subcontractors to discuss their choice of firming method. Subcontractors will also have the opportunity to inform the AWBA which LTSCs they would prefer to receive.

The AWBA will refine the proposal as more is known about the volumes of available water. Over the summer, the AWBA will consult with CAWCD and subcontractors to ultimately decide which LTSCs will be distributed from which facility. After the release of the August 24-MS, it will be known which tier the system will operate under in 2024. In September, the AWBA will confirm firming proposals as firming plans and will finalize them in October, after subcontractors have placed their orders for CAP water. The AWBA firming plans will be reflected in the 2024 Plan of Operation which will be presented for approval by the Commission in December 2023.

Ken Seasholes, CAWCD Resource Planning and Analysis Manager, provided an update on the progress of developing a direct recovery facility at and near the Tonopah Desert Recharge Project (TDRP). Last summer the CAWCD Board approved the purchase of a 40-acre parcel ¾ mile to the east of TDRP, based on hydrogeologic indications of more favorable recovery capacity. CAWCD has entered into a contract for the technical work and oversight to drill two recovery wells, one on the TDRP site and the other on the 40-acre parcel. In January, ADWR issued the Notice of Intent to Drill. Mr. Seasholes indicated that there have been challenges with lining up well drillers, supply chain, and inflation. At the last CAWCD Board meeting, the Board approved a \$3M contract to drill the two wells, which does not include equipping the wells but does include testing to confirm capacity and water quality. If the results are favorable, CAWCD would develop a more comprehensive site plan for the direct recovery facility. This would diversify the ways that CAWCD can achieve recovery and would be the first instance of recovery water moved to the CAP aqueduct.

Chair Buschatzke asked Commission members if there were any questions.

Commissioner Taylor asked about the firming timeline in 2024, specifically when the AWBA would distribute LTSCs and whether wet water is distributed based on orders. Dr. Bernat replied that LTSCs would be distributed during the calendar year. Chair Buschatzke added that subcontractors who would use their own facilities to pump will need to file annual water use reports with ADWR. An end-of-the-year deadline allows subcontractors to attribute pumping over the course of the year to those LTSCs for their annual report. Mr. Seasholes answered Commissioner Taylor's question about wet water distribution. October 1st is the deadline for subcontractors to submit their water orders. The wet water that would be firmed is not specifically attributable to their subcontract but would be identified as a firming volume. As part of the delivery schedule, CAWCD will effectuate exchanges within the agreements that it has to make CAWCD partners' water available to the parties that are firmed.

After checking that the percentage of independent recovery is based on volume, Commissioner Braun asked what volume of water independent recovery would equate to in 2024. Dr. Bernat replied that it is not possible to provide a volume, because the firming volumes are not known. Commissioner Braun questioned if there will be capacity in 2024 for the volumes that could be requested by subcontractors without recovery infrastructure. Mr. Seasholes replied that it depends in part on the magnitude of reductions. If the reductions are drastic, the volume would be greatly reduced which may result in changes

to how ordering would take place. With very deep reductions, prioritizing getting water to treatment plants will be necessary. Coordination among subcontractors will be required for deep reductions. Commissioner Braun thanked Mr. Seasholes for the discussion which demonstrated how unclear it is for CAWCD, the AWBA, and for subcontractors to make water available, and how this highlights the need for physical recovery facilities at TDRP.

Chair Buschatzke asked if CAP has recovery agreements with SRP for any of their wells. Mr. Seasholes replied that there currently are no recovery agreements with SRP. The concept of recovery has been evolving over the past decades, resulting in a shift towards more reliance on independent recovery, either through subcontractors' own infrastructure or through partnerships. Additionally, the AWBA has earned a significant amount of LTSCs at both the Salt River Project GSF and the Granite Reef Underground Storage Project. This, coupled with the flexibility and coordination amongst the shared customers between CAP and SRP, leads Mr. Seasholes to believe that it would be preferable for SRP would perform the recovery for its cities rather than having the LTSCs be transferred to CAP and then to SRP. The Chair then commented that since SRP's reservoir system is full, they have already reduced their groundwater mix for their deliveries and should not need their full well pumping capacity in the near term. CAP's customers are also concerned with keeping costs down and are trying to achieve this through partnerships. Another uncertainty is how much the AWBA will firm. Discussions regarding firming began in December and are continuing.

Commissioner Olsen asked why some subcontractors indicated that they may forgo firming. Dr. Bernat explained that those subcontractors would be accruing LTSCs with the firming credits. Chair Buschatzke added that these subcontractors may be considering giving up water as a contribution for the good of the state. Alternatively, these subcontractors may not be using the full portion of their allocation.

Mr. Seasholes added that there is a significant volume of both M&I and Indian priorities supply that is being used to accrue LTSCs. Reducing these volumes would reduce the impact of a shortage overall. This will be part of the discussion about how to best manage the LTSCs that the AWBA holds and how to manage the impacts of shortages that may go deeper than what was previously planned.

Senator Kerr asked if the number of firming agreements were average numbers. Dr. Bernat clarified that these are exact numbers because this is the first set of firming agreements. Senator Kerr then asked for information on the source of water and the volume stored at TRDP. Mr. Seasholes replied that TRDP is a direct recharge facility in the western part of the Phoenix AMA with an annual capacity of 150 KAF, and that the AWBA has accrued approximately 500 KAF of LTSCs there.

Representative Smith and Commissioner Olsen asked about the total number of firming agreements. Dr. Bernat replied that there could be 52 firming agreements because they are 52 CAP M&I subcontracts.

VI. Discussion of firming proposal for the Gila River Indian Community for potential shortage year 2024

Dr. Bernat briefed Commission members on the AWBA's firming obligation to the Community. Under the Arizona Water Settlements Act of 2004, the AWBA, as agent for the State, has a requirement to firm up to 15,000 AF per year for the Community when supplies are insufficient to meet demand.

Dr. Bernat stated that the Colorado River System 5-Year Probabilistic Projections for January 2023 indicated a 93 percent chance of any shortage condition in the Lower Basin in 2024, which included a 17 percent chance of a Tier 1 shortage condition, a 17 percent chance of a Tier 2a shortage condition, and a 60 percent chance of a Tier 2b shortage condition.

Based on CAWCD's preliminary NIA Priority supply estimates for 2024, the AWBA's firming obligation would be 9,446 AF under a Tier 1 shortage condition, 15,000 AF under a Tier 2a shortage condition, and 14,017 AF under a Tier 2b shortage condition. Firming Credits developed in 2016, 2017 and 2018 will continue to be used to satisfy a firming obligation in CY 2024. The Firming Proposal will be updated as additional information becomes available and 2024 water orders are finalized.

Chair Buschatzke added that this is water that the AWBA previously delivered to the Community and that the Community will recover the water on the Reservation using their own facilities. The Chair then asked why the obligation is greater in 2023 in a Tier 2a shortage condition (14,575 AF) than in a bigger shortage condition in 2024 (Tier 2b – 14,017 AF). Dr. Bernat answered that in 2023 in Tier 2a shortage, there is still a small amount of water available to the NIA pool. In 2024, projections show that a Tier 2b shortage will not only impact the entire NIA pool but also a portion of the M&I priority pool. The AWBA has an obligation to firm the Community to an equivalent to the M&I subcontracts.

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

VII. Discussion concerning the distribution of AWBA LTSCs for firming CAP M&I priority subcontract supplies and Mohave County Water Authority (MCWA) contract supplies

Report on the availability of AWBA LTSCs for firming CAP M&I priority subcontractors and MCWA. Dr. Bernat presented the results of two independent analyses regarding the estimated distribution of LTSCs. The first analysis looked at the ability of the AWBA to firm CAP M&I subcontractors using LTSCs created with the water storage tax. The second analysis looked at the ability of the AWBA to firm MCWA using LTSCs created with general fund monies. These analyses are independent of one another because the funding used to store the water came from different sources.

As presented in the 2023 Plan of Operation, the AWBA currently has 1,582,453 AF in the Phoenix AMA, 234,791 AF in the Pinal AMA, and 512,213 AF in the Tucson AMA. These are LTSCs that the AWBA can use to firm CAP M&I subcontractors. The AWBA has a separate account of 256,174 AF of LTSCs reserved for MCWA.

The CAP M&I analysis shows how long LTSCs would last under different firming levels in each AMA. If the AWBA firmed 20 percent of CAP M&I subcontractor demand, LTSCs would last for 20 years in the Phoenix AMA, almost 29 years in the Pinal AMA, and almost 14 years in the Tucson AMA. If the AWBA were to firm 100 percent of demand, it would run out of LTSCs in 2028 in the Phoenix AMA, in 2029 in the Pinal AMA, and as early as 2026 in the Tucson AMA.

The analysis of the availability of LTSCs reserved for MCWA indicated that firming 20 percent of MCWA's consumptive use would result in enough LTSCs for almost 90 years. If the AWBA were to firm 100 percent of MCWA's consumptive use, there would be enough LTSCs for almost 18 years.

Chair Buschatzke pointed out the total amount of general fund LTSCs reserved for on-River entities is 403,830 AF. MCWA has entered into agreement with the AWBA to reserve 256,174 AF. The AWBA has LTSCs available for other on-River entities, however, those entities would need to enter into agreement with the AWBA to reserve LTSCs by committing to repaying the cost of the credits.

Chair Buschatzke confirmed that 20 percent has been AWBA's long-term firming target. This information was presented to the Commission in December to begin the discussion of whether to continue with a firming target of 20 percent and how quickly or conservatively the LTSCs would be distributed.

Chair Buschatzke asked Commission members if there were any other questions.

Commissioner Taylor asked whether the 20 percent firming goal would apply in the same manner to MCWA and other entities as it would to CAP M&I subcontractors. The Chair responded that a discussion of the firming goals will be included on the agenda, with a potential executive session for legal advice for the next Commission meeting.

Commissioner Braun asked if the modeling was specific for a Tier 3 shortage condition. Dr. Bernat clarified that the analysis was not specific to any tier, but instead was based on demand.

Stakeholder meeting to discuss the distribution of AWBA LTSCs for firming CAP M&I priority subcontract supplies scheduled for Tuesday, April 11, 2023 at 10 am (in person in Phoenix with virtual attendance options). Chair Buschatzke announced that a stakeholder meeting will be held on April 11th. He hopes this meeting will occur after the draft EIS is published so that the alternatives Reclamation will analyze under the SEIS are known.

Commissioner Taylor asked to clarify that the firming numbers presented earlier are based on the current number of LTSCs that the AWBA has (as of the end of 2023) and don't include the possibility of buying additional LTSCs. He went on to ask if the AWBA would be considering purchasing LTSCs with the 4-cent tax monies. Chair Buschatzke replied that the cost of LTSCs is a large factor in that decision, and that has been part of an ongoing debate on how much the AWBA should spend to buy more LTSCs. Chair Buschatzke opined that from a conservative standpoint, it would be prudent not to make assumptions about the AWBA's ability to purchase more LTSCs.

Commissioner Clark thanked Dr. Bernat for the presentation on MCWA's reserved LTSCs.

VIII. Call to the Public

There were no additional comments.

The meeting adjourned at 11:54 a.m.

Future Meeting Dates:

Wednesday, June 21, 2023 Wednesday, September 20, 2023 Wednesday, December 6, 2023