

ARIZONA WATER BANKING AUTHORITY  
Draft Meeting Summary  
(Virtual Meeting)

December 1, 2021



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## I. Welcome/Opening Remarks

Chair Tom Buschatzke and Commission members, Mark Clark, Alexandra Arboleda, Eric Braun and Joseph Olsen attended online via video conference. *Ex-officio* members, Senate President Karen Fann and Representative Gail Griffin, were not in attendance.

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

## II. Approval of Meeting Minutes

Chair Buschatzke asked for a motion to approve the minutes from the September 15, 2021 meeting. Commissioner Arboleda moved to approve the minutes. Commissioner Olsen provided the second to the motion. The minutes were unanimously approved.

## III. Water Banking Staff Activities

**Technical Administrator Position.** Ms. O'Connell informed Commission members that Simone Kjolsrud, the AWBA's Technical Administrator, resigned on October 1 to take a position with the City of Chandler. Staff wishes her well in her new role. Ms. O'Connell commented that the job posting for her replacement is on the Arizona State Jobs website under the Department of Water Resources (ADWR). It has also been made available on other recruiting websites. Applications will be accepted until the position is filled.

Chair Buschatzke commented that ADWR had announced to its employees last week that many of the job classifications within ADWR had been restructured to one or two higher grade levels to allow for higher wage compensation. He was unclear if the changes were reflected in the current job postings. He noted that the adjustments were an outcome of the \$2.79 million general fund appropriations made available by the legislature last session for this purpose.

**Quarterly Report of AWBA credit purchases.** Ms. O'Connell provided an update on credit purchases for the fourth quarter of 2021. She noted there was one long-term storage credit (LTSC) transaction, which is still in-process and is the final purchase for the year. The purchase is pursuant to the AWBA's agreement with Freeport Minerals that was approved in September 2020. The agreement allowed for the purchase of up to 1,900 acre-feet of LTSCs accrued at the Farmer's Investment Co. GSF located in the Tucson AMA. The purchase is for 853.10 acre-feet of LTSCs based on 898 acre-feet of water stored last year. The total purchase price is \$136,496.00 and will be paid for with

### AUTHORITY MEMBERS

Thomas Buschatzke, Chair  
Mark Clark, Vice-Chair  
Alexandra Arboleda, Secretary  
Eric Braun  
Joseph Olsen

### EX OFFICIO MEMBERS

The Honorable Karen Fann  
The Honorable Gail Griffin

Pima County Water Storage Tax funds.

Cumulative purchases for the year total 12,893 acre-feet and include 8,697 acre-feet of LTSCs purchased with water storage tax funds and 4,196 acre-feet of intentionally created surplus (ICS) firming credits purchased using withdrawal fees. Expenditures for the year totaled \$3.19 million.

Chair Buschatzke asked how expenditures for LTSC purchases compared with the funds reserved by the CAWCD Board for this purpose. Ms. O'Connell responded that from a credit purchase perspective, the AWBA purchased roughly 34,000 acre-feet fewer credits than the 42,600 acre-feet anticipated under the 2021 Plan. She added that the Tohono O'dham Nation (Nation) and the Ak-Chin Indian Community, who have credit purchase agreements with the AWBA, entered into agreements with other parties. The Nation entered into a two-year agreement with the Central Arizona Groundwater Replenishment District for 25,000 acre-feet each year beginning in 2020 with a cost of \$250 per acre-foot, which increased proportionally in 2021 to the CAP water delivery cost. The costs under the Ak-Chin Indian Community's agreement are not known. Chair Buschatzke thanked the entities that participated with the AWBA during the year. There were no additional questions.

**Colorado River Status Update.** Rachel von Gnechten, a Water Resources Engineer with ADWR's Colorado River Management Section gave the Colorado River Basin update. She started with a brief review of the Colorado River system reservoir levels as of November 23, 2021. Fontenelle Reservoir was at 68% capacity, Flaming Gorge at 78%, Blue Mesa at 26%, followed by Morrow Point at 93% and finally Navajo at 52%. Ms. von Gnechten reported that as of the November 23<sup>rd</sup> Lake Powell was at an elevation of 3,542.47 feet with storage of 7.059 million acre-feet (maf) or 29% of capacity. Lake Mead was at elevation 1,065.41 feet with storage of 8.839 maf or 34% of capacity. The reservoir system as a whole has roughly 22.35 maf in storage or 37% of the system capacity, which is approximately a 5.6 maf decrease from this time last year.

Ms. von Gnechten presented the traditional "tea-cup" diagrams illustrating Reclamation's 24-month study projections. The end of Calendar Year 2021 projection for Lake Powell is 3,537.49 feet or 6.72 maf of storage (28% of capacity) and for Lake Mead is 1,067.28 feet or 8.99 maf of storage (34% of capacity). The end of Water Year 2022 (October 2022) projection for Lake Mead is 3540.91 feet or 6.95 maf of storage (29% of capacity). Lake Mead is projected to end Water Year 2022 at 1,053.53 feet or 7.94 maf of storage (30% of capacity). Reclamation has announced a 7.48 maf release from Powell to Mead for Water Year 2022.

Ms. von Gnechten then moved to show several slides depicting a new visualization. She explained that the new "cloud" illustrates a more complete picture of risk for the reservoirs, rather than merely illustrating the 90%, 50% and 10% percentiles because the new graph shows each individual trace when the CRMS model is run in ensemble mode. She explained that one could easily see individual traces falling both above the 90<sup>th</sup> percentile and below the 10<sup>th</sup> percentile.

She explained the risk in out-years of operating in shortage in the next five years. The five-year table, prepared by Reclamation, shows a 78% chance of Tier 1 shortage in 2023 and 16% chance of Tier 2 shortage in 2023. For the remainder of the projection period there is a greater than 90% chance of some level of shortage for each year, 2023 through 2026.

Following the thorough review of the basin hydrology and projections, Ms. von Gnechten provided an update on the “500+ Plan” that has been developed by the Lower Basin states. She explained the adaptive management language in the Lower Basin Drought Contingency Plan (LBDCP) and that the “1030 Consultation” trigger was met when the August 24-month study showed possibility of Lake Mead falling below elevation 1,020’. She noted Lower Basin states had been working since August to determine, via modeling, appropriate additional actions to collective take to protect the critical 1,020’ Lake Mead elevation. She displayed a graph depicting the 10<sup>th</sup> percentile modeling from the June 24-month study both with and without an additional 500,000 acre-feet remaining in Lake Mead which illustrated the significantly reduced risk in Lake Mead dropping below 1,020’.

Ms. von Gnechten noted the 500+ Plan is a two-year commitment from Arizona, California, and Nevada as well as the United States to keep additional volumes in Lake Mead through creating additional Intentionally Created Surplus (ICS), reducing the amount of ICS deliveries entities had originally planned for, system Conservation or system Efficiency. Of note, she reported Arizona had committed \$40 million to the plan’s execution and the Southern Nevada Water Authority had approved up to \$20 million. The Central Arizona Water Conservation District (CAWCD) was to vote on Thursday, December 2, 2021 on spending additional funds as well as executing a Memorandum of Understanding to implement the 500+ plan. Ms. von Gnechten commented that the four guiding principles for the 500+ plan are that the water savings must be voluntary, temporary, compensated, and the water must remain in Lake Mead. As of the Bank’s meeting, Arizona was hoping to conserve approximately 30,000 acre-feet from the on-river community and approximately 193,000 acre-feet from Central Arizona Project (CAP) water users. She emphasized that those numbers were preliminary and could still go up or down. She also emphasized that the projections she shared earlier did not include any of the additional conservation actions and Reclamation would not include the additional conservation actions in its modeling until legally binding agreements had been executed.

Chair Buschatzke asked if there were any additional comments or questions. Commissioner Olsen asked if the 1030 Consultation minimal probable inflows to Lake Mead were based on the absolute minimal or the 10<sup>th</sup> percentile minimal. Chair Buschatzke responded that it was based on the minimum probable. At the time the LBDCP was negotiated, the cloud diagram in the presentation was not available. The minimum probable was chosen to be more conservative, rather than the most probable, which is the official trigger under the 2007 guidelines for shortages and the operational coordination of Lakes Mead and Powell.

Commissioner Braun asked Chair Buschatzke how confident he was that Arizona will get to the 223,000 acre-feet in 2022. Chair Buschatzke responded that he was very confident the goal would be reached but the numbers could change among the entities, especially the federal column since they do not have water. They are working on agreements with multiple tribes. If the tribe is from Arizona, then more water would come from Arizona even though the water will be identified as a federal contribution. Collectively, the 500,000 acre-feet should be achieved. More is currently available, which is good if some agreements do not come to fruition. He added that 2023 is also in reasonably good shape but will depend on whether the Lower Basin will be in a Tier 2 shortage condition. He pointed out that what may not have been realized from the presentation is that Lake Mead levels had increased by eight tenths of a foot since the last 24-Month study. While it is not much, it is still a positive aspect. Additionally, the 500,000 acre-feet should add about seven to eight feet to the projected elevation of Lake Mead in the August 24-Month study for 2023. Unfortunately, the good precipitation in the Upper Basin in October reversed in November to be very dry, which is also the case in Arizona and California, where the state water project saw a decrease in precipitation from 130% of normal to 50% of normal. The winter is not off to a good start. La Nina typically brings drier conditions to the Lower Basin with mixed results in the Upper Basin. For these reasons, it is important to deliver the 500+ plan. An announcement is anticipated at the Colorado River Water Users Conference along with other possible events and plans from the Upper Basin.

**Central Arizona Project System Update.** Marcus Shapiro, CAWCD Water Systems Supervisor, briefed Commission members on four points including updates on CAP water operations for 2021, 2022, the 500 + plan and the four-cent water storage tax. He reaffirmed to Commission members that there was no excess CAP water available to the AWBA in 2021 and that CAP's diversions and deliveries are in line with what was anticipated under CAP's 2021 Annual Operating Plan. He noted that the Colorado River will be operated in a Tier 1 shortage condition in 2022, which will reduce Arizona's supply by 512,000 acre-feet: 320,000 acre-feet under the 2007 guidelines and 192,000 acre-feet in LBDCP contributions. Because these reductions impact excess supplies there will be no supplies available to the AWBA. Additionally, reductions will eliminate agricultural (AG) settlement pool and cut into the non-Indian agricultural (NIA) pool by 43%. Under the DCP agreements, the NIA pool will be fully mitigated in 2022 and the AG settlement pool will be mitigated by 104,000 acre-feet. He pointed out that the AWBA has a role in both mitigation efforts. For the Ag settlement pool, the AWBA will be facilitating LTSC transfers as part of the USF to GSF storage agreements, which will amount to 45,500 acre-feet in mitigation. For the NIA pool, the AWBA has an obligation to firm up to 15,000 acre-feet in supplies for the Gila River Indian Community. Based on the 43% cut to the NIA pool, the AWBA's firming obligation is 6,429 acre-feet. With regard to the 550+ plan, CAWCD and ADWR met jointly in November to brief stakeholders. CAWCD is currently working with water users to create additional reductions to water deliveries and diversions necessary to develop the 223,000 acre-feet. Those plans will be forthcoming in the near future. Lastly, concerning the four-cent tax, CAWCD is seeking legislation to maintain the authority to levy the tax at the current rate through January 2045, which is consistent with the final payment CAWCD will

make under its federal repayment obligation.

Chair Buschatzke asked if members had any questions or comments. Commissioner Braun inquired if CAWCD was intending to utilize the tax revenues for repayment. Mr. Shapiro responded that the use of the four-cent tax is determined annually by the Board and discussed at those meetings. Commissioner Braun commented that having the timing of the extension tied to the repayment obligation implicitly makes the statement that the tax will be used for that purpose but there has not been discussion or commitment for it to be used for that purpose. The water storage tax has been historically used by the AWBA for storage and by CAWCD for operation, maintenance and repairs (OM&R) of the project. He noted that the future of water storage by the AWBA appears very limited and that he would like to explore the ability of restating use of the tax for recovery since that is the future of the AWBA. It is logical that if the funds were used for storage, they should also be used for recovery. He commented that he would like to hear Commission member perspectives. Chair Buschatzke responded that it was his understanding the proposed legislative changes would extend the tax but would not change the current statutorily authorized uses. Mr. Shapiro responded that he was not familiar with the specific language being proposed, but would agree in general terms. He added that the CAWCD Board meeting scheduled for the next day includes an agenda item concerning the state legislative agenda for CAWCD for 2022. There is still work to be done by staff as it moves forward and opportunity for comment. Chair Buschatzke asked AWBA attorneys to confirm that the three authorized uses of the tax were OM&R, repayment and water storage by the AWBA. Nicole Klobas confirmed the three uses were correct. Commissioner Arboleda added that it is also her understanding that the proposal is just to extend the timeframe but not to change the purposes.

Chair Buschatzke asked if there were any additional questions. There were none. He noted there has been much work done to implement the LBDGP, which will continue in the future. He thanked Mr. Shapiro for all his efforts.

**Report on Recovery Planning Activities.** Ms. O'Connell provided an update on recovery planning activities. She informed members that the interagency recovery planning group, which includes staff from ADWR, CAWCD and the AWBA, continues to meet monthly to prepare for potential shortages. She noted that at the AWBA's last quarterly meeting in September, AWBA staff indicated they were working on developing a Municipal and Industrial (M&I) Firming agreement that CAP M&I subcontractors would enter into if they intend to receive firming credits directly from the Bank. The agreement is now more appropriately referred to as a credit distribution agreement. The timing of the agreement has been pushed back. Staff anticipates releasing a draft for M&I subcontractor review in January with feedback requested by the end of February so that a final draft can be presented at the March Bank meeting.

Ms. O'Connell continued her report stating that during this same timeframe, interagency staff will also be coordinating with CAP M&I subcontractors to prepare for potential shortages. Based on Reclamation's 5- year probability table discussed earlier, there is a chance of a Tier 2b shortage in 2024. Preparations now would be consistent with the

planning efforts identified in the recovery planning timeline for shortages occurring within two years. Based on the timeline, interagency staff will begin estimating potential firming volumes. Additionally, staff will begin consultations with CAP M&I subcontractors on proposed firming methods, whether they prefer a delivery from CAP or if they plan to receive credits directly from the Bank. Separate meetings will be held in each Active Management Area (AMA) with two in the Phoenix AMA, likely the east and west sides of the valley. Afterwards, there will be opportunity for separate one-on-one meetings between AWBA staff and M&I subcontractors who plan to enter into a credit distribution agreement. She noted that if it still appears next year that there will be a shortage in 2024, much of the work will have already been completed. Therefore, in 2023, planning should be more about confirming what was accomplished in 2022.

Chair Buschatzke asked if there were any additional questions. There were none.

#### **IV. Discussion and Consideration of Action to Approve the AWBA 2022 Plan of Operation**

Ms. O'Connell reviewed the draft 2022 Plan of Operation (2022 Plan), noting that as previously stated, the Lower Basin will be operating under a Tier 1 shortage condition. With no excess CAP water available in 2022, the AWBA will continue making progress on its goals through credit purchases. As a result of the Tier 1 shortage condition, the AWBA will also have its first-ever firming obligation to the Gila River Indian Community (Community).

Ms. O'Connell reviewed the credits anticipated to be developed under the 2022 Plan. She noted that estimated withdrawal fees available for 2022 reflect the legislative transfer of \$1.2 million for use by ADWR. The fund transfer was applied proportionately based on action taken by the Commission in July this year, which includes approximately \$1 million from Phoenix AMA withdrawals and \$200,000 from Tucson AMA. In the Phoenix AMA, available withdrawal fees will be used to purchase 2,980 acre-feet of ICS firming credits from the Community at \$261.60 per acre-foot (\$866,400). In the Tucson AMA, staff anticipates purchasing 1,450 acre-feet of LTSCs for a total cost of \$396,000. The 2022 Plan also includes expenditure of \$7 million in water storage tax funds reserved by the CAWCD board for AWBA LTSC purchases. This includes \$4 million in Maricopa County funds and \$3 million in Pima County funds for the purchase of 14,740 acre-feet and 10,970 acre-feet of LTSCs in the Phoenix and Tucson AMAs, respectively. The rate per LTSC is \$271 in the Phoenix AMA and \$273 in the Tucson AMA. The total projected cost of the 2022 Plan is \$8.26 million and is anticipated to result in the development of 30,140 acre-feet of credits.

Ms. O'Connell also briefed Commission members on the credits that will be distributed under the 2022 Plan for firming purposes. She reviewed a table that identified the credits available through 2021 for each firming objective, the credits to be distributed in 2022, the credits remaining and the projected firming volumes for the next 100-years, with the exception of tribal firming volumes that extend through 2107. Based on the final accounting of CAP water orders, the AWBA has an obligation to firm 6,429 acre-feet of

NIA supplies for the Community. The AWBA will satisfy this obligation by extinguishing an equal volume of the 44,000 acre-feet of Firming Credits accrued on-reservation from pre-delivered water. She informed Commission members that the firming plan will be taken to the Community's water team for proforma approval and that no issues were anticipated. She indicated that the AWBA did not have an obligation to firm NIA supplies for the White Mountain Apache Tribe because the settlement is not yet enforceable. The enforceability date is April 30, 2023. Likewise, the settlement for the Hualapai Tribe is subject to congressional approval. The AWBA has no other firming requirements in 2022. Chair Buschatzke clarified that the tribal settlement obligation is also for 100-years, but that it ends in 2107 because the obligation started in 2007. He also added that it is likely that legislation will be introduced to Congress to extend the enforceability date for White Mountain Apache Tribe Quantification Act because they are behind schedule primarily because of efforts to site the dam. He noted he would keep staff apprised of future actions.

Ms. O'Connell reported that the Preliminary 2022 Plan was presented to the public at the Groundwater Users Advisory Council meetings in the Phoenix, Pinal and Tucson AMAs. She noted there was general support for Plan. In the Phoenix AMA there were questions concerning the AWBA's ability to purchase LTSCs under a tightening market. Staff had responded that the AWBA has existing LTSC purchase agreements that could be utilized. However, the decision to purchase or sell LTSCs is an annual determination between the parties. The rate per LTSC is equal to the AWBA's water storage rates. Any new agreements would be discussed openly at Commission meetings. There was also a question inquiring if the AWBA's ICS Firming credits in Lake Mead would be used to firm the Community. Staff responded that they would be the first credits used to firm the Community after 2026, subject to Colorado River operating guidelines. Ms. O'Connell commented that the final draft 2022 Plan was also distributed to interagency staff, stakeholders and the Community for review. There were no additional changes.

Chair Buschatzke asked for any further discussion by commission members. Commissioner Arboleda asked if staff evaluated how shortage conditions, at different levels, might impact the availability of withdrawal fees if pumping increases. Ms. O'Connell responded pumping could potentially increase during shortages. However, that information would not be known until 2023 when fees are submitted with the annual groundwater use reports. Staff typically looks at average revenues from the last two years. The potential for increased pumping as well as possible fallowing could play a role, including what is happening on the Salt/Verde system. Staff would evaluate factors next year to get a better estimate for the 2023 Plan. Chair Buschatzke pointed out that it would be difficult to completely make that type of determination because there are so many other factors that determine how much water is pumped. For example, if there were increased pumping during a shortage, one might conclude it was due to the shortage, but it could instead be related to other things like market factors for agriculture. He added that, as part of DCP, Pinal AMA withdrawal fees have been repurposed for mitigation purposes to support groundwater infrastructure and irrigation efficiency projects in that AMA. At present, the \$4 million that is currently available has been vastly underutilized. There have been issues including supply chain problems that

have prevented requests for funding for the projects that were anticipated making it unclear how much pumping will actually occur.

Chair Buschatzke asked for a motion and a second.

Commissioner Olsen moved to adopt the Arizona Water Banking Authority 2022 Plan of Operation as submitted with minor or technical changes. Commissioner Clark provided the second to the motion.

Chair Buschatzke called for public comment. There were no comments. He asked for any further discussion by commission members. There was no additional discussion. The motion passed unanimously.

## **V. Discussion and Consideration of Action to Approve the AWBA Calendar Year 2022 Water Operating Budget**

Ms. O'Connell briefed Commission members on the 2022 Water Operating Budget, which reflects \$8.26 million in estimated expenditures identified in the 2022 Plan of Operation. She noted the Commission would be approving expenditures of withdrawal fees from the Arizona Water Banking Fund (AWB Fund) as well as water storage tax monies deposited to the AWB Fund by CAWCD for LTSC purchases. She clarified that water storage tax funds are not deposited to the AWB Fund until a purchase is made.

Chair Buschatzke asked if there were any questions or comments. There were no comments. He asked for a motion and a second.

Commissioner Clark moved to adopt the Arizona Water Banking Authority Water Operating Budget for Calendar Year 2022 as presented. Commissioner Arboleda provided the second to the motion. Chair Buschatzke called for public comment. There were no public comments. The motion passed unanimously

## **IX. Call to the Public**

There were no additional comments. Chair Buschatzke wished everyone happy holidays and that he hoped to see everyone at the Colorado River Water Users Association conference.

The meeting adjourned at 11:08 a.m.

## **Future Meeting Dates:**

Wednesday, March 16, 2022

Wednesday, June 15, 2022

Wednesday, September 21, 2022

Wednesday, December 7, 2022