

ARIZONA WATER BANKING AUTHORITY
Draft Meeting Summary
(Virtual Meeting)
September 15, 2021



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 10:02 a.m.

II. Approval of Meeting Minutes

Chair Buschatzke asked for a motion to approve the minutes from the July 29, 2021 meeting. Commissioner Clark moved to approve the minutes. Commissioner Arboleda provided the second to the motion. The minutes were unanimously approved.

III. Water Banking Staff Activities

Quarterly Report of AWBA credit purchases. Ms. O'Connell provided an update on credit purchases during the third quarter of 2021. As part of the Lower Basin Drought Contingency Plan, the AWBA agreed to fund the development of 50,000 AF of Intentionally Created Surplus (ICS) created by the Gila River Indian Community. During the third quarter, the AWBA funded the creation of 4,662 AF of ICS at a cost of \$1,186,012 (\$254.40/AF) using Phoenix and Pinal Active Management Area (AMA) withdrawal fees. This resulted in 4,196 AF of ICS Firming Credits after the 10% reduction for losses: 3,455 AF of ICS Firming Credits in the Phoenix AMA and 741 AF of ICS Firming Credits in the Pinal AMA. Withdrawal fees available for funding ICS in the Pinal AMA were from carryover funds remaining in the account. Withdrawal fee revenues levied through 2026 in the Pinal AMA, will not be made available to the AWBA, but instead will be used to support groundwater infrastructure and irrigation efficiency projects. To date, the AWBA has purchased 29,734 AF out of the 50,000 AF specified under the IGA, resulting in 26,761 AF of cumulative ICS Firming Credits. Total credits developed in 2021 is 12,060 AF, at a cost of \$3,052,498. This includes long-term storage credits and ICS Firming Credits.

Chair Buschatzke asked if there were any questions. There was no discussion.

Colorado River Status Update. Craig McGinnis, ADWR Colorado River Management, gave an update on the Colorado River system. Lake Mead and Lake Powell are both at historic low elevations. He briefed the Commission on this year's Snow Water Equivalent (SWE) chart. SWE is a measure of the amount of liquid water contained in snowpack.

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

The 2021 SWE peaked at 89% of average. Based on the U.S. Bureau of Reclamation's (Reclamation) August 2021 24-Month Study, Lake Powell end of calendar year projections for 2021 are elevation 3,535 ft. or 27% of capacity and end of calendar year projections for Lake Mead are elevation 1065 ft. or 34% of capacity. Reclamation's August 2021 24-Month Study is predicting an 8.23 MAF release from Lake Powell in 2021 and a 7.48 MAF release in 2022. The August 24-Month Study for Lake Mead elevations confirms a Tier 1 operating condition in calendar year 2022 (most probable Lake Mead elevation of 1065 ft. on 12/31/21) and the most likely operating condition for calendar year 2023 is right on the line between a Tier 1 and Tier 2 (most probable Lake Mead elevation of 1050 ft. on 12/31/22).

Chair Buschatzke asked if the Lake Powell August 24-Month Study graph includes Drought Response Operations Agreement (DROA) water moving from Upper Basin Colorado River Storage Project (CRSP) reservoirs into Lake Powell. Mr. McGinnis confirmed that it does.

Chair Buschatzke commented that the August 24-Month Study minimum probable projection reflects Lake Mead elevation below 1030 ft. by July 2023. This is significant because the Lower Basin Drought Contingency Plan (LBDCP) includes an adaptive management trigger known as the 1030 trigger. If the minimum probable projection in any 24-Month Study projects Lake Mead falling below elevation 1030 ft., this requires consultation between Arizona, California, Nevada and the Secretary of Interior to discuss taking additional actions to protect Lake Mead from falling below elevation 1020 ft. The three lower basin states have begun consultation and have a series of meetings scheduled between September and December. These meetings are attended by CAP General Manager Ted Cooke, Director Buschatzke, CAP staff and ADWR staff. There will be a more detailed update on additional actions to protect elevation 1020 ft. at the December 1st meeting, with a joint ADWR and CAP public briefing likely in the Fall. In the Upper Basin, under the DROA emergency actions, Reclamation is moving 181,000 AF of water from Upper Basin reservoirs into Lake Powell between July through December. Their goal is to protect elevation 3525 ft. and elevation 3,490 ft. to protect power generation. Power generation is designed to work down to elevation 3,490 ft. However, there are concerns about the ability to generate hydropower below 3,525 ft. Adaptive management triggers in both the Upper Basin and the Lower Basin have been reached and will require additional actions to protect elevation 1020 ft. in Lake Mead and 3,525 ft. in Lake Powell.

Chair Buschatzke asked if there were any questions.

Commissioner Braun asked which hydrologic scenario is used to produce the "most probable" projection in the Bureau's 24-Month Study. Chair Buschatzke commented that he believes the 24-Month Study projections utilize historic hydrologic records since 1981 and requested staff follow up to confirm. Commissioner Braun also asked if the 7.48 MAF release from Lake Powell is the volume which balances the two reservoirs. Mr. McGinnis responded that the Lake Powell mid-elevation release tier (3,525 - 3,575 ft) would result in a 7.48 MAF release, provided that Lake Mead remains above 1025 ft. However, if Lake

Mead falls below elevation 1,025 ft., the balancing release would instead be 8.23 MAF. Chair Buschatzke commented that Reclamation's September 24-Month Study would be available later that day. ADWR does not anticipate any significant changes between the August and September 24-Month Studies. Reclamation will also release the five-year probabilistic projections during the week of September 20th. Chair Buschatzke encouraged Commissioners to review the updated five-year probability table when it becomes available.

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

Central Arizona Project (CAP) System Update. Marcus Shapiro, CAWCD Water Systems Supervisor, gave an update on CAP water operations and reviewed Arizona's contributions to support Lake Mead conservation efforts for 2019 - 2022. The 2021 total includes the required LBDCP Tier Zero contribution of 192,000 AF. In 2021, there is approximately 373,795 AF of conservation anticipated. This includes the additional 40,000 AF of conservation by the Gila River Indian Community as part of Reclamation's DCP contributions. The projected conservation in 2022 is 373,853 AF, which is nearly the same as the 2021 volume.

Chair Buschatzke clarified that Arizona's total 2022 contributions include the Tier 1 shortage volume, plus the additional conservation described in the presentation. The total volume goes beyond what is required under the LBDCP. Mr. Shapiro confirmed that the estimated Lake Mead Contributions of roughly 374,000 AF in 2022 includes the 192 KAF LBDCP contribution. However, it does not include the 320 KAF Tier 1 shortage reduction under the 2007 Interim Guidelines. The total is roughly 700 KAF.

Chair Buschatzke commented that he appreciates everyone involved in conserving water in Lake Mead and contributing to this success story. It demonstrates how serious Arizona is about Colorado River issues and the success we've had in taking action to protect Lake Mead.

Vice-Chair Clark commented that Bullhead City just completed a project to eliminate effluent recharge wells at the wastewater treatment plant and construct a pipe to release treated effluent directly to the river, increasing the return flow volumes.

Mr. Shapiro briefed the Commission on the CAP delivery supply outlook for 2022, with mitigation water included. The initial supply available for diversion is 1.67 MAF, which is reduced by 512 KAF under Tier 1 operating conditions. System losses are 75 KAF and Lake Mead contributions total 87,883 AF, therefore the physical delivery supply is 995,117 AF. The physical mitigation supplies will be roughly 113,561 AF, for a total physical CAP delivery volume of 1,108,678 AF. Long-term contract orders are projected to be 1,066,678 AF. With Lake Mead contributions of 87,883 AF, plus firming and exchange water estimated at 93,529 AF, the mitigation obligation to the agricultural settlement pool will be 42 KAF and estimated deliveries for long-term contracts of 1,066,678 AF. Mr. Shapiro noted that it is unlikely there will be any water made available

to the AWBA in 2022.

Chair Buschatzke commented that Mr. Shapiro's presentation provides an excellent overview, simplifying a complex set of agreements needed to implement the mitigation component of Arizona's implementation plan for the LBDCP. Chair Buschatzke appreciates the efforts of CAP staff to coordinate the complex details of mitigation implementation.

Commissioner Braun asked how CAP turn back water will be distributed if it becomes available during the year and whether it will likely be made available to the AWBA for storage. Mr. Shapiro responded that turn back water would likely be prioritized to meet obligations to higher priority users. Any remaining water after meeting all obligations, would likely be made available as part of future supplies. Chair Buschatzke commented that we need to prioritize ways to keep water in Lake Mead to protect elevation 1020 ft.

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

Report on Recovery Planning Activities. Simone Kjolsrud, Technical Administrator, provided an update on recovery planning activities. Ms. Kjolsrud briefed the Commission members on the Recovery Planning Advisory Group (RPAG) meeting held on September 8th. The meeting included an update on the Bureau's August 24-Month Study and June five-year probabilistic projections for Lake Mead operations, projections for AWBA firming volumes and recovery capacity estimates and a review of the triggers to initiate consultation for M&I firming. AWBA staff also provided a summary of the operational coordination required between the AWBA, ADWR, CAP and M&I subcontractors in the three years prior to an M&I firming year and gave an update on the development of the AWBA M&I firming agreement. The meeting agenda included a member roundtable with discussion questions to encourage RPAG member feedback. The discussion included clarifying questions regarding the credit distribution timeline and operational considerations. RPAG members also suggested small group meetings with M&I subcontractors to ensure all M&I subcontractors are aware of recovery planning information. The next RPAG meeting will be held in May 2022.

Ms. Kjolsrud reviewed the triggers to initiate consultation for M&I firming and provided a summary of the operational coordination required to implement M&I recovery. The 2021 Joint Recovery Update defines a series of triggers used to initiate progressive levels of consultation between the three agencies and CAP M&I subcontractors. The consultation triggers begin three years prior to the potential year when M&I firming might be needed. Each of the triggers are based on Reclamation's April projections. The first trigger occurs when the April five-year probabilistic projections show a greater than 15% probability of a reduction to the CAP M&I priority pool in the third year. The next two triggers occur when the April 24-Month Study projects Lake Mead elevations reaching operational tiers resulting in reductions to the M&I priority pool. The two-year out trigger is based on the "min probable" projection and the final trigger is based on the "most probable" projection. Ms. Kjolsrud noted that the August 24-Month Study "minimum probable" projection is below elevation 1045 ft. in 2023 and staff notified M&I subcontractors that the AWBA will

begin consultation in January 2022 based on the second trigger.

In the two years prior to a potential M&I firming year, the three agencies will coordinate on estimated firming volumes and the AWBA will begin consulting with subcontractors on the proposed firming method and credit distribution plan. These estimates will be included in the AWBA Ten-Year Plan. Further coordination will occur at the CAP water user briefing in August and initial requests for CAP recovery will be submitted with CAP water orders by October 1st.

Ms. Kjolsrud provided an update on development of the AWBA M&I firming agreement. Staff anticipates sharing a draft with stakeholders in early October and requesting feedback requested by the end of October. The draft agreement will be presented to the AWBA Commission at the December meeting. The agreement will be a long-term agreement with annual determinations in shortage years. The first term will be through 2026, with ten-year terms thereafter. The agreement will affirm the statutory requirements, include a chronological timeline for actions between parties, describe credit distribution and recognize that transferred credits satisfy the AWBA firming responsibility. The agreement will also contain a liability provision to address any issues that may arise related to water quality or operational issues. Ms. Kjolsrud noted that CAP is also developing a separate firming agreement for subcontractors who will rely on CAP for recovery of AWBA credits.

Chair Buschatzke asked if the M&I firming consultation triggers are based on the Full Hydrology or the Stress Test hydrology. Ms. Kjolsrud responded that the Full Hydrology scenario has historically been used as the baseline. Ms. O'Connell confirmed that the Full Hydrology was used and added that AWBA staff would still consider all information available to ensure that we are prepared. Commissioner Braun commented that he would like to see a methodology that has been agreed to by the M&I subcontractors. Utilizing the Stress Test Hydrology would likely be something the M&I subcontractors consider good planning. Mr. Braun requested AWBA staff consult with M&I subcontractors on the methodology. Chair Buschatzke agreed that the Stress Test Hydrology is a more conservative approach and this issue should be raised with stakeholders. He commented that using the Stress Test Hydrology may be a better approach.

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

IV. Preliminary AWBA 2021 Plan of Operation

Ms. O'Connell reviewed the draft Preliminary 2022 Plan of Operation (2022 Plan), noting that the Lower Basin will be operating under a Tier 1 shortage condition next year. With no excess CAP water available in 2022, the Bank will use alternate methods to continue making progress on credit development. The AWBA anticipates purchasing long-term storage credits (LTSC), as well as ICS Firming Credits from the Gila River Indian Community. While there will not be water available for storage, the water delivery rates are included in the 2022 Plan because water delivery rates are a factor in

determining the cost per acre foot for LTSC purchases in the AWBA purchase agreements.

The funds available for 2022 credit development include withdrawal fee revenues and Water Storage Tax funds in the Phoenix and Tucson AMAs. In the Phoenix AMA, staff anticipates roughly \$866,400 in withdrawal fee revenues available to purchase 2,980 AF of ICS firming credits at a rate of \$261.60/AF. In the Tucson AMA, staff anticipates roughly \$396,000 in withdrawal fee revenues available to purchase approximately 1,450 AF of LTSCs.

During the June 2021 CAWCD board meeting, the CAWCD board approved the reservation of water storage tax funds for AWBA credit purchases, \$4 million in Maricopa County funds and \$3 million in Pima County funds. The target credit purchase amounts utilizing water storage tax funds are roughly 14,740 AF in the Phoenix AMA using Maricopa County funds and 10,970 AF in the Tucson AMA using Pima County funds.

The total projected cost of the 2022 Plan is approximately \$8.3 million and is anticipated to result in the development of over 30,140 AF of LTSCs and ICS firming credits.

Ms. O'Connell reviewed the estimated credit accrual and estimated firming volumes through 2022. The 2022 Plan includes a firming obligation to the Gila River Indian Community. The credits accrued for the Community include 105,000 AF of LTSCs accrued on reservation and 44,000 AF of firming credits. There are also approximately 27,000 AF of ICS Firming Credits. The AWBA expects to extinguish 8,112 AF of the 44,000 AF of firming credits, leaving 35,888 AF remaining for future firming requirements. Ms. O'Connell noted that the firming volume could change based on actual orders submitted in October.

Chair Buschatzke asked Commissioners if it would be helpful to show a further breakdown of the AWBA firming obligations for future tribal settlements under the Arizona Water Settlements Act and show the estimated firming volumes for each individual settlement. Vice-Chair Clark agreed that would be helpful to see the firming obligations for each individual settlement. Chair Buschatzke commented that the Hualapai settlement is making its way through Congressional approvals and Arizona's firming obligation under that tribal settlement is 557.5 AF per year.

Chair Buschatzke asked for any further discussion by commission members. There was no additional discussion. Chair Buschatzke directed staff to schedule and hold public meetings on the Preliminary 2022 Plan of Operation in conjunction with the Groundwater Users Advisory Council Meetings in the Phoenix, Pinal and Tucson AMAs.

V. Discussion and Consideration of Action to Approve the AWBA Storage and Facility Inventory Report

Ms. Kjolsrud reviewed the 2021 AWBA Storage and Facility Inventory Report.

The AWBA is statutorily required to develop a Storage Facility Inventory of all storage facilities in Arizona. The purpose of the Inventory Report is to determine whether sufficient storage facilities exist to meet the water storage needs of the AWBA for the following ten years, with the report updated at least every five years. The Storage and Interstate Release Agreement (SIRA) requires identification of recharge facilities in the Inventory prior to the AWBA utilizing those facilities for interstate water storage. The AWBA does not anticipate interstate storage in the near term. The availability of storage capacity is an important factor affecting the AWBA's ability to store water. However, the AWBA must also consider the availability of water and funding. Future limitations on both will likely reduce the AWBA's need for storage capacity. In the most recent ten-year plan, the AWBA does not anticipate water will be available for storage.

Ms. Kjolsrud reviewed the total permitted storage volumes at each of the storage facilities where the AWBA holds active storage permits. The AWBA is only one of several water storage partners at these facilities. The facility operators and other storage partners also store water at each of these facilities. For planning purposes, the AWBA estimates how much storage capacity might be available to the AWBA at each facility. However, the actual capacity available each year is based on facility operations and the volume of storage scheduled by other storage entities. The graph shows the total capacity available by AMA, rather than the exact capacity available to the AWBA, because it cannot be known in advance. In the Phoenix AMA, there is approximately 390 KAF of capacity at USFs and GSFs where the Bank has active storage permits. There is roughly 360 KAF of GSF capacity in the Pinal AMA and a little over 200 KAF of capacity in the Tucson AMA.

Chair Buschatzke asked for public comment. There was none.

Chair Buschatzke asked for any further discussion by commission members. There was no additional discussion.

Commissioner Olsen moved to approve the Arizona Water Banking Authority 2021 Storage and Facility Inventory Report. Commissioner Braun provided a second to the motion. The motion passed unanimously.

IX. Call to the Public

There were no additional comments. The meeting adjourned at 11:04 a.m.

Future Meeting Dates:

Wednesday, December 1, 2021