

ARIZONA WATER BANKING AUTHORITY  
Final Minutes

September 25, 2019  
Arizona Department of Water Resources



AUTHORITY MEMBERS

Thomas Buschatzke, Chair  
Ray L. Jones, Vice-Chair  
Kathryn Sorensen, Secretary  
Alexandra Arboleda  
Mark Clark

EX OFFICIO MEMBERS

The Honorable Karen Fann  
The Honorable Gail Griffin

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**Welcome/Opening Remarks**

Chair Thomas Buschatzke welcomed the attendees. All members were in attendance. *Ex-officio* members, Senate President Karen Fann and Representative Gail Griffin, were not in attendance. Chair Thomas Buschatzke welcomed a new staff member, Simone Kjolsrud, Technical Administrator.

**Approval of Minutes**

Chair Buschatzke asked for a motion to approve the minutes from the June 19, 2019 regular quarterly meeting. Mark Clark moved to approve the minutes. Secretary Kathryn Sorensen provided the second to the motion and the minutes were unanimously approved.

**Water Banking Staff Activities**

Virginia O'Connell discussed two documents regarding the AWBA's reporting requirements for interstate water banking.

**Long-term Storage Verification Letter.** In accordance with the Storage and Interstate Release Agreement (SIRA), by September 1 each year, the AWBA must provide the Bureau of Reclamation (Reclamation) a final accounting of its interstate banking account for the Southern Nevada Water Authority (SNWA). This information is used by Reclamation for its annual Colorado River accounting report. In 2018 the AWBA delivered 13,500 acre-feet (AF) of water for storage, accruing 12,805 AF of long-term storage credits (LTSCs). There were no LTSCs transferred in or out of the account and no LTSCs were recovered to develop Intentionally Created Unused Apportionment (ICUA). The cumulative number of LTSCs for SNWA is 613,846 AF, which includes 50,000 AF of LTSCs accrued by the Central Arizona Water Conservation District (CAWCD) before the AWBA was established. Ms. O'Connell clarified that under sub-article 3.3.1 of the SIRA, LTSCs accrued on behalf of SNWA cannot exceed 1.2 MAF. After subtracting the 50,000 AF of LTSCs from CAWCD, the total amount of LTSCs accrued through AWBA storage is 563,846 AF.

**Fiscal Year 2019 Report to Joint Legislative Budget Committee (JLBC).** Ms. O'Connell informed Commission members that the AWBA is required by statute to submit a fiscal year (FY) accounting report to the JLBC in any year where the AWBA is owed or receives money for interstate banking. The report includes a detailed

accounting of monies received or disbursed, including payments for storage or prepayments made to CAWCD. The AWBA stored 13,500 AF of water for SNWA in calendar year 2018. All storage occurred in the last half of calendar year (first half of FY 2019). The estimated cost of storage was \$3,280,060.08, which was paid by SNWA in twelve levelized monthly payments. The AWBA paid CAWCD monthly water delivery and storage is complete based on actual storage facilities used. These costs were \$11,760 less than estimated. End of the year costs were also reconciled based on the actual water rate, which was substantially lower due to decreases in the tax equivalency and energy rates. As a result, the AWBA provided a refund to SNWA in the amount of \$224,554.68 which includes interest on the money owed. The remaining balance in the interstate banking account is \$19,598, which represents interest accrued on the payments received by SNWA through the end of 2018.

**Colorado River Status Update.** Craig McGinnis, ADWR Colorado River Management, gave an update on the Colorado River system (presentation available online). He noted that reservoirs throughout the basin are above their previous storage levels compared to this time last year, largely due to good hydrology. As of September 19, 2019, Lake Powell is currently at elevation 3,616.59 ft. and Lake Mead is at elevation 1,083.15 ft. Due to system conservation contributions, increased side inflows and exceptional winter snow-pack, storage in Lake Mead has increased by more than 22 ft from initial January projections. Total system storage is at 53 percent of capacity. Projected unregulated inflow into Lake Powell for 2019 is at 13.1 MAF or 121% of the 30-year average. The most probable year-end elevations in Lakes Powell and Mead is 3,613.91 ft and 1,089.06 ft., respectively. Projections from the Bureau of Reclamation's September and August 24 Month Study scenarios show there will be no shortage in 2020. With the year-end elevation in Lake Mead above 1,075 ft. and below 1,090 ft., under DCP, Arizona is required to contribute 192,000 AF during water year 2020 (Tier Zero). The most probable scenario shows Lake Mead staying above elevation 1,075 ft through calendar year 2020. Based on the August 24-Month Study, the release from Lake Powell will be 8.23 MAF for water year 2020. However, based on the most probable scenario, the possibility exists of an adjustment up to 9 MAF. Mr. McGinnis noted that probable minimum inflow scenario actually leaves Lake Mead elevation higher than the most probable scenario, due to a lower projected release from Lake Powell in water year 2020.

**CAP System Update.** Marcus Shapiro, CAWCD Water Systems Supervisor, gave an update on the CAP system and reviewed the conservation and forbearance programs that have contributed water to Lake Mead for 2019. Water that is part of the Ag Forbearance program, as well as CAP excess water, provided a combined total of just over 112 KAF of conservation for 2019. The Pilot System Conservation Program (PSCP) contributed total just over 41 KAF. Other System Conservation Activities include the 117 KAF of intentionally created surplus (ICS) created by the Gila River Indian Community (GRIC) as part of the offset component of Arizona's implementation plan for the Lower Basin Drought Contingency Plan (LBDCP). Of the 117 KAF of ICS, 17 KAF is

tied to the amount the AWBA will fund for developing ICS credits that will be used to satisfy future firming obligations to the Community. The total CAWCD conservation volumes for 2019 are expected to total approximately 277 KAF.

Mr. Shapiro reviewed projections for CAP delivery supply in 2020. The total delivery supply is expected to be 1.475 MAF, taking into consideration the LBDCP mandatory reductions of 192 KAF, system losses of approximately 75 KAF, and 72 KAF of water made available from Lake Pleasant. CAWCD anticipates 2020 water orders will total 1.2 MAF for long-term contracts, leaving 275 KAF available for the Agricultural Settlement Pool and 83 KAF for the creation of ICS planned by the GRIC. Actual deliveries are projected at 1.39 MAF with no excess water available for the AWBA.

Chair Buschatzke asked if there will be an ag forbearance program within the 275 KAF of Ag pool water. Mr. Shapiro responded that there is an ag forbearance 3 program that allows groundwater savings facilities to continue to operate while forbearing some of their Ag pool supplies. Projects under this program will account for approximately 25 KAF.

**AWBA Website Transition.** Simone Kjolsrud, AWBA, updated the Commission on the AWBA website transition. Ms. Kjolsrud provided a “sneak peek” of the new AWBA website which is expected to go live before the next quarterly meeting. Her presentation included a review of the new layout and design, as well as a demonstration of the new interactive GIS map. The map features a layer which allows users to select a specific USF/GSF facility and view additional details about the facility capacity and the number of AWBA credits broken down by intrastate and interstate storage volumes. The map also features an option to download the full dataset.

## Report on Recovery Planning Activities

**Ten-year firming projections.** Ms. O’Connell updated Commission members on the ten-year shortage probabilities for Lake Mead and the associated ten-year AWBA firming potential (2020-2029) that now include the contributions made under the DCP tiers. She discussed two scenarios: full hydrology (1906-2017) and the stress test hydrology (1988-2017). The tier with the highest probability was used to determine the corresponding firming volume. She noted that under full hydrology, the highest probability shows Lake Mead elevation above 1,090 ft. for most of the ten-year period beginning in 2023. The highest probability for 2020-2022 shows Lake Mead elevation between 1075-1090 ft (Tier zero), which does not trigger a firming obligation, but does require that Arizona contribute 192,000 acre-feet to Lake Mead. The highest probability for the remaining years (2023-2029) projects Lake Mead elevation between elevation 1050 ft and 1075 ft (Tier 1). The total potential firming volume under a Tier 1 shortage is just under 81,000 AF and would only affect NIA Indian firming obligations. Under the stress test hydrology, the firming projections do show firming requirements for CAP M&I sub-contractors, NIA Indian firming and a very small amount of On-River firming. The AWBA is anticipated to have a firming requirement beginning 2024 through 2029 for a

total amount of approximately 165,000 AF.

Commission member Arboleda noted that under the stress test hydrology there may be firming obligations coming up relatively soon and asked if the Bank is prepared for meeting its recovery obligations. Ms. O'Connell responded that the AWBA is prepared to meet its firming obligations under tribal settlements. There are two firming methods the Bank will use prior to 2026 to firm supplies for the Gila River Indian Community that utilize both long-term storage credits (LTSCs) and firming credits accrued on-reservation. These credits can be viewed as pre-firming because the deliveries have already been made to satisfy an obligation the Bank will extinguish the credits and the Community will pump the water. After 2026, the Bank can utilize ICS firming credits developed under its agreement with the Community as part of DCP. The Community is creating 50,000 AF of ICS that will result in 45,000 AF of ICS firming credits that can be used for future firming.

Ms. O'Connell noted that recovery opportunities for M&I firming are being discussed during the Recovery Planning Advisory Group (RPAG) meetings. At the most recent meeting, some of the cities indicated they would prefer to recover AWBA LTSCs independently. Cities that do not have recovery infrastructure may still need a delivery from CAP. This is still being addressed as part of the recovery planning discussions. There is also a policy that allows for credit exchange with the Central Arizona Groundwater Replenishment District (CAGRDR). The AWBA could request that the CAGRDR accept AWBA LTSCs instead of replenishing water. The water the CAGRDR would have delivered for replenishment could be delivered to firm an entity instead.

**Recent recovery planning advisory group meeting.** Ms. O'Connell updated Commission members on recovery planning activities. Staff is coordinating with staff from ADWR and CAWCD on updates to the recovery plan based on discussions and work that has been accomplished through the Recovery Planning Advisory Group (RPAG). At the meeting on September 10, RPAG members received an outline of the proposed updates to the 2014 Joint Recovery Plan (2014 Plan). They showed support for an update rather than an addendum to the 2014 Plan. The update will be a stand-alone document that follows the same chapter structure as the 2014 Plan for consistency and understanding. Each chapter will be circulated for review and comments as it becomes available. Feedback on the outline was requested by September 24, 2019 and no comments were received. Staff also agreed to provide a timeline for the recovery plan update. Ms. O'Connell noted that there was also a question raised during the last AWBA meeting in June on whether legislation was anticipated. She indicated that based on RPAG discussions, legislation was not anticipated for the upcoming session, but that the possibility existed for the following year.

Commissioner Sorensen noted that the RPAG discussion included an option for cities to receive a distribution of AWBA credits who then work out their own arrangements for recovery. Commissioner Sorensen asked if independent recovery was expected to be a recovery mechanism included in the recovery plan. Ms. O'Connell responded that it

was.

Chairman Buschatzke asked if the legal framework is currently in place for independent recovery. Ms. O'Connell explained that the AWBA has a statutory obligation to distribute credits to CAWCD and that distributing credits directly to an M&I sub-contractor would require a statutory change. However, CAWCD could potentially implement a policy that recognizes independent recovery by subcontractors.

Commissioner Clark asked if there is the potential to create an agreement with CAP to use a recovery partner for on-river firming. Ms. O'Connell responded that staff would need to review which agreements might be needed.

**Report on CAWCD recovery planning efforts.** Angie Lohse, CAWCD Resource Planning and Analysis, provided an update on CAWCD's recovery planning efforts. She pointed out that recovery options include direct recovery from Tonopah Desert Recharge Project (TDRP) pumped into the canal. CAWCD is continuing to move forward on feasibility studies at TDRP. This year, CAWCD is focused on performing geophysical work, testing two different types of geophysical methods to evaluate which method is most applicable to determine the depth to the aquifer. The next step will be to determine where best to apply that method, at alternative recovery sites within the sub-basin, outside of TDRP. Geophysical survey work will begin in October 2019. There has been considerable coordination with adjacent landowners because the work is outside the vicinity of TDRP. CAWCD anticipates having the results by the end of the year. By January 2020, CAWCD will have a much better idea of which geophysical method works best and how CAWCD is planning to move forward.

Commission Sorensen asked what the funding source is for the feasibility work. Ms. Lohse responded that she would look into which fund is used for that work and provide that information to the Commission.

Angie Lohse, CAWCD Resource Planning and Analysis, provided an update on recovery capacity agreements with the irrigation districts as part of the Ag Pool Groundwater Irrigation & Efficiency Program created under DCP. There are three districts in the Pinal AMA and two in the Phoenix AMA. The CAWCD board has committed \$5 million in funding to create recovery capacity with these five irrigation districts. CAWCD has term sheets that have been drafted into agreement language and shared with the irrigation districts. Some of the terms include 2,500 AF per year of recovery capacity with an investment of \$1 million over a 25-year period. CAWCD continues to work through language to address sensitivity to water quality issues important for some of the irrigation districts and continues to work with ADWR on funding as well. Additional updates on these agreements will be provided at upcoming CAWCD meetings.

### **Long-term Storage Credit Purchase from Ak-Chin Indian Community**

Ms. O'Connell briefed Commission members on an amendment to the AWBA's credit

purchase and sale agreement with the Ak Chin Indian Community that was executed in April 2018. The amendment would allow for the purchase of credits in the Tucson AMA as well as the Phoenix AMA. The current agreement has a three-year term and allows for the purchase of up to 6,600 acre-feet of LTSCs in the Phoenix AMA each year upon mutual agreement. The full amount was purchased in 2018 under two separate transactions. The Community has indicated an interest in selling its Tucson AMA credits as well.

Ms. O'Connell noted that the AWBA is behind in meeting its M&I firming goal for the Tucson AMA. Without excess CAP water available for AWBA storage, the opportunity to purchase credits in Tucson would allow the Bank to continue to make progress on its firming goal. The amended agreement will give the Bank the opportunity to purchase up to 4,815 AF of LTSC per year in the Tucson AMA

The formula for determining annual costs is the same, except that the facility storage costs are based on CAP's Tucson facilities. The credits proposed for purchase this year include 6,600 af in the Phoenix AMA; 3,300 each for the Hieroglyphic Mtn USF and the RWCD GSF and 4,815 AF in the Tucson AMA from the LSCR. The cost would be just under \$1.49 million in the Phoenix AMA using Maricopa Water Storage Tax funds and just under \$1.1 million in the Tucson AMA using Pima County Water Storage Tax funds.

Commissioner Arboleda moved to approve the First Amendment to the Purchase and Sale Agreement for Long-term Storage Credits between the AWBA and Ak Chin Indian Community (Amended Agreement), and the purchase of the Central Arizona Project water long-term storage credits identified under the Amended Agreement for calendar year 2019 using \$1,488,498.00 and \$1,096,182.90 in Maricopa County and Pima County Water Storage Tax funds, respectively. Seconded by Mark Clark, Chair Buschatzke asked for public comment. Seeing none, the Commission unanimously passed the motion.

### **Preliminary 2020 Plan of Operation**

Ms. O'Connell reviewed the draft Preliminary 2020 Plan of Operation (2020 Plan). She noted that for 2020, the Lower Basin will be operating under a Tier Zero condition. Under DCP, Arizona's mandatory contribution to Lake Mead is 192,000 AF. With no excess CAP water available to the Bank, the Bank will use alternate methods to continue making progress on its firming goals. The AWBA anticipates purchasing LTSCs, as well as ICS firming credits from the Gila River Indian Community. There is no interstate storage proposed for 2020.

Ms. O'Connell reviewed the CAWCD 2020 Water and Facility Rates, even though the AWBA does not anticipate making any water deliveries in 2020, this information is also used to calculate the AWBA LTSC cost under credit purchase agreements. In 2020, the water delivery rate increases by \$12/AF to \$211/AF and the CAP underground storage facility rates remain the same. The cost share rate paid by GSF

operators also remains the same and was included in the event supplies, such as turn back water, becomes available.

Ms. O'Connell reviewed the funding sources available to the AWBA in 2020 and the estimated volume of credits AWBA expects to develop utilizing those funds. Ms. O'Connell noted that withdrawal fees estimated to be available take into consideration legislative transfers for fiscal year 2020. All withdrawal fees in the Phoenix and Pinal AMAs will be used for the purchase of ICS firming credits. Withdrawal fees in the Tucson AMA will be used for credit purchases. In 2020, the AWBA will operating under the new IGA procedures for credit purchases using the water storage tax funds. During the June 2019 CAWCD board meeting, the CAWCD board approved the reservation of water storage tax funds for AWBA credit purchases, \$3 million in the Phoenix AMA and \$3 million in the Tucson AMA. The total projected cost of the 2020 Plan is approximately \$8.8 million and is anticipated to result in the development of over 36,000 AF of credits.

Ms. O'Connell reviewed the progress the AWBA would make toward projected firming goals under the 2020 Plan. By the end of 2020, the AWBA would reach 98% of its numeric M&I firming goal in the Phoenix AMA, 92% in the Pinal AMA and 58% in the Tucson AMA (70% including withdrawal fee LTSCs). The goal for on-River firming remains consistent at 96% and the firming goal for the Gila River Indian Community would be at 49%. The credits accrued for the Community include 105,000 AF of LTSCs accrued on reservation, 44,000 AF of firming credits and over 23,000 AF of ICS firming credits.

Director Buschatzke provided direction to hold public meetings on the draft 2020 Plan of Operation in conjunction with the Groundwater User Advisory Councils in the Phoenix, Pinal and Tucson AMAs. The Commission unanimously directed to staff to move forward with the plan.

### **AWBA Staffing Requirements**

Ms. O'Connell provided background information on the administration budget for the AWBA. She clarified that by statute, ADWR provides administrative, technical and legal support to the AWBA to the extent requested. Staff hired to support the AWBA are employees of ADWR. The AWBA's administration budget represents an annual cost of services paid to ADWR; a reimbursement of costs for the services provided by ADWR. Each year, the Commission can choose to request additional services, or it can adopt the budget as presented. The AWBA also pays a cost of services to CAWCD which is identified in the administration budget. The cost of services paid to both ADWR and CAWCD are identified in the Intergovernmental Agreement among the three agencies. The funds used to pay for AWBA administration have historically been the interest accrued on the funds in the water banking fund, including interest on the water storage tax funds held by CAWCD. This does not include any funds from on-river or interstate.

Current AWBA staff include a manager and a technical administrator. The AWBA also

pays for half-time legal support and a consultant contracted by ADWR. The AWBA receives technical and administrative support allowable as indirect costs, such as financial, hydrology and IT services. The Commission has requested additional staffing in the past to support additional workload, new responsibilities or for succession planning. Ms. O'Connell indicated that staff is currently working on recovery planning. However, the additional work has been offset by a reduction in other areas. The AWBA is not currently storing excess water and there has been a reduction in work associated with water storage. She noted that she feels comfortable the AWBA has the appropriate level of staffing and that if conditions changed, adjustments could be made to the cost of services as needed.

Commissioner Sorensen noted that she had previously requested this agenda item, thanked Ms. O'Connell for the update and explained her intention was to confirm the AWBA was comfortable with staffing levels based on anticipated future workloads.

### **Call to the Public**

Chair Buschatzke asked for public comment. There were no comments. The meeting adjourned at 11:23 a.m.