

**ARIZONA WATER BANKING AUTHORITY**  
**Draft Minutes**

**November 30, 2017**  
**Arizona Department of Water Resources**



**AUTHORITY MEMBERS**  
Thomas Buschatzke, Chair  
Ray L. Jones, Vice-Chair  
Kathryn Sorensen, Secretary  
Pamela Pickard

**EX OFFICIO MEMBERS**  
The Honorable Steve Yarbrough  
The Honorable J.D. Mesnard

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### **Welcome/Opening Remarks**

Chair Thomas Buschatzke welcomed the attendees. Commission members Secretary Kathryn Sorensen and Pamela Pickard attended in person. Vice-President Ray Jones attended via teleconference. *Ex-officio* members, Senate President Steve Yarbrough and Speaker J.D. Mesnard, were not in attendance.

### **Approval of Minutes**

Chair Buschatzke asked for a motion to approve the minutes from the September 20, 2017 regular quarterly meeting. Secretary Sorensen moved to approve the minutes. Ms. Pickard provided the second to the motion and the minutes were approved.

### **Water Banking Staff Activities**

**Monthly Deliveries.** Ms. O'Connell, AWBA Manager, reviewed deliveries through October of 2017 saying deliveries are 83% of target. She indicated that deliveries were down due to precipitation that occurred earlier in the year causing a decrease in storage capacity available at the Queen Creek Irrigation District groundwater savings facility (GSF). Some of those deliveries have since been shifted to Hieroglyphic Mountains Recharge Project (1,900 AF), and some were shifted to the Cortaro-Marana Irrigation District GSF in the Tucson AMA (1,100 AF), which is why deliveries exceed planned deliveries in Tucson. The Central Arizona Irrigation & Drainage District GSF started taking its water late but is expected to take all its water by year end. Ms. O'Connell indicated that she expects all scheduled water to be stored.

**Credit Purchases.** Ms. O'Connell gave an update on credit purchases. Transactions since the last quarterly meeting included 9,082 acre-feet from the City of Surprise and 12,570 acre-feet from the City of Tucson. Cumulative credits developed in 2017 is 80,177 acre-feet for a cost of just over \$18 million, slightly over 66,000 acre-feet in Phoenix and approximately 14,000 acre-feet in Tucson.

**Colorado River Status Update.** Jeff Inwood, ADWR Colorado River Management, gave an update on the Colorado River system. As of November 19, 2017, total system content is currently at 54% compared to 50% at this same time last year. Lake Powell is at 59% or 14.4 million acre-feet (MAF) with an elevation of 3,625 feet. Lake Mead is at 39% or 10 MAF with an elevation of just over 1,081 feet, six feet above the first shortage tier. Mr. Inwood explained that the Bureau of Reclamation (USBOR) is estimating 11.9 MAF of direct natural flow into Lake Powell. The historic average for the entire record is 10.7 MAF. Based on just the last 17 years of data, the average is 8.6 MAF. The current projection for 2018 is 8.9 MAF.

The expected year-end elevation in Lake Mead is 1,083.5 feet. Regarding conservation activities from the last ten years, approximately 1.5 MAF have been saved through U.S. Intentionally Created Surplus (ICS), Mexico Deferred Delivery, System Conservation

Water and Other Voluntary Contributions. Mr. Inwood noted that the elevation of Lake Mead would have been 10 feet lower but for these efforts.

Regarding the probabilities of Lake Mead reaching critically low levels (i.e. 1,025 feet elevation), three modeling efforts by USBOR have been conducted. Based on the risk as assessed when the 2007 Interim Guidelines were established, the probability of reaching 1,025 feet of elevation was 7%. At the time, Lake Mead was at an elevation of 1,115 feet. Based on the entire historic record, the probability of reaching critical levels is 12%. Based on the assumption that the hydrology in the past 28 years of historical record (i.e. "stress test") continues into the future, the probability jumps to 47%, further reinforcing the need for additional conservation contingency planning in order to bend the line (i.e. reduce the risk) back down to single digits.

Secretary Sorensen asked for an explanation of the difference between other voluntary contributions and system conservation water. Mr. Inwood explained that system conservation water includes the System Pilot Conservation Program plus conservation efforts by the Gila River Indian Community (GRIC) and the Ft. McDowell/Yavapai Nation. Other voluntary contributions include efforts by the lower basin entities including Arizona, Nevada, CAP and SNWA. Conservation volumes include 456,000 acre-feet of U.S. ICS, 217,000 acre-feet of Mexico Deferred Delivery, 596,000 acre-feet of other voluntary contributions and 186,000 acre-feet of system conservation. Chair Buschatzke asked if the system conservation water included the Colorado River Indian Tribes (CRITs) and the Tohono O'odham Nation. Mr. Inwood replied that it did.

**CAP System Update.** Patrick Dent, CAWCD Water Operations Manager, gave an update on the CAP system. He noted that the CAP System Conservation program totaled 185,000 acre-feet in 2017 and includes the Agricultural Forbearance Program and CAP Excess water. The Pilot System Conservation Program totaled 19,292 acre-feet and includes Bullhead City, the Tohono O'odham and the CRITs. Other System Conservation includes 80,000 acre-feet for the GRIC. In total, Arizona conserved nearly 300,000 acre-feet in 2017. Secretary Sorensen asked if the Agricultural Forbearance Program was compensated or if it was a waiver of the requirement to take agricultural pool water. Mr. Dent responded saying it was a waiver.

For the 2018 CAP Annual Operating Plan, CAP is projecting that about 227,000 acre-feet of excess water will be available after the Agricultural Settlement Pool has been filled. Nearly 150,000 acre-feet is expected to remain in Lake Mead, 35,000 acre-feet will be delivered to the CAGR, 38,000 acre-feet will be used by the AWBA and 5,000 acre-feet will be used by the USBOR. Mr. Dent described the process used to reach these volumes including discussions with ADWR's Colorado River staff and AWBA staff. The organizations originally targeted around 200,000 to 210,000 acre-feet for Arizona. In mid-November, the organizations met and jointly discussed the modeling and outlook on the River, along with historic use and CAP's assumptions for available supply and concluded 150,000 was a good number. This left 80,000 acre-feet for CAGR, AWBA and USBOR. After fully meeting orders received from CAGR and USBOR, the remainder was offered to the AWBA.

Secretary Sorensen appreciated CAP working collaboratively with ADWR and the AWBA to determine how much water should stay in Lake Mead. She asked if everyone

was relatively comfortable with the decision. Mr. Dent replied saying “relatively” is a good word to use. The goal was to end 2018 at the same lake level as we expect to reach at the end of 2017. The organizations looked at many things including contributions by other states, and at the end of those discussions everyone was relatively comfortable.

Secretary Sorensen asked Mr. Dent to specifically explain what assumptions changed between the earlier target that she described as 192,000 acre-feet and the eventual 150,000 acre-feet. Mr. Dent replied saying for budgeting purposes, CAWCD was targeting 192,000 acre-feet, but after considering updated modeling, actual intervening flows and water orders, the three organizations felt comfortable backing off a little bit on that number. Chair Buschatzke supported keeping the elevation at the year-end 2017 levels adding that this will be a robust buffer if the hydrology and conservation efforts fall short.

Mr. Dent described in detail the 2018 CAP forbearance volumes totaling nearly 160,000 acre-feet. Secretary Sorensen asked if the 99,000 acre-feet of CAP excess water included 20,000 acre-feet from Tucson Water. Mr. Dent responded affirmatively. Ms. Pickard added that CAP’s Excess Water Committee is an on-going process for stakeholders to address how Excess CAP water can best be used.

Secretary Sorensen asked how the 80,000 acre-feet was allocated between the AWBA, CAGR and USBOR and where the USBOR stands. Mr. Dent replied saying allocations have been done in several ways. At times, CAWCD has used a strict pro rata basis of what was available. As the supply has tightened, CAWCD has looked more closely at water orders. There has been a preference for making water available to people expecting wet water (i.e. groundwater savings facilities). This year, CAWCD was able to fully meet water orders, then CAWCD added to that. CAWCD reached out to the CAGR and allocated enough to satisfy the existing obligation order. The USBOR reached out to their partners who could not take any additional water. Still, CAWCD gave the USBOR additional water for storage at CAP recharge facilities.

Secretary Sorensen asked why the CAGR did not want to use any excess water for the replenishment reserve. Mr. Dent indicated that after reaching out to the parties, CAWCD simply made a decision. There was a clear priority for obligations and some issues about funding for replenishment reserve. The eventual balance seemed to satisfy the parties involved.

**Recovery Planning Update.** Ms. O’Connell indicated that since releasing the Joint Recovery Plan in 2014, staff from CAP, ADWR and AWBA have continued to work on pieces necessary for implementation. Most recently, the organizations created a Recharge Planning Advisory Group. ADWR invited a cross section of stakeholders from irrigation districts, CAP M&I subcontractors, small providers, on-River users and others to participate in the group. All of those invited accepted the invitation. The objective is to provide greater planning clarity. Meetings will begin in mid-January, and the three agencies are looking forward to input from stakeholders. Secretary Sorensen expressed appreciation for reaching out to stakeholders and asked that we keep a strong focus on flexibility for subcontractors in terms of meeting their needs and ultimate customer demands even as conditions change.

### **2018 Plan of Operation**

Ms. O'Connell reviewed the AWBA's Plan of Operation for 2018. The Plan includes a total of 38,000 acre-feet in water storage deliveries for Arizona: 22,100 acre-feet for the Phoenix Active Management Area (AMA), 8,100 Acre-feet for the Pinal AMA and 7,800 acre-feet for the Tucson AMA. Additionally, and for the first time since 2010, the Plan also includes an interstate component. The AWBA will store 13,500 acre-feet of Nevada's unused Colorado River entitlement: 9,500 acre-feet in the Phoenix AMA and 4,000 acre-feet in the Tucson AMA. The Plan also identifies nearly 24,620 acre-feet in potential credit purchases. The total estimated cost of the Plan is just over \$16 million, including \$3.28 million for interstate storage that is paid for by Nevada.

Ms. Pickard moved to adopt the AWBA 2018 Plan of Operation as submitted with minor or technical changes. Ms. Sorensen seconded the motion. Chair Buschatzke asked for comments from the public. Hearing no other questions and comments, the Commission adopted the AWBA 2018 Plan of Operation.

### **CY 2018 Water Delivery Budget**

Ms. O'Connell reviewed the CY 2018 Water Delivery Budget associated with the 2018 Plan. She reminded AWBA Commission members the amount they are approving are the expenditures from the Arizona Water Banking Fund (AWB Fund), which total \$9.75 million. The remaining \$6.4 million needed to achieve the 2018 Plan is an offset from CAWCD through annual Board resolutions regarding the 4¢ ad valorem tax. Revenues collected are used in part to pay for AWBA delivery and storage costs as part of the operation and maintenance costs of the project. Expenditures from the Arizona Water Banking Fund (AWB Fund) include \$1.5 million in withdrawal fees for water storage and Indian firming, \$3.28 million in interstate funds for water storage for Nevada and \$3.6 million in 4¢ tax revenues deposited to the AWB Fund by CAWCD for credit purchases when finalized. Ms. Pickard moved to adopt the Water Banking Authority water delivery, recharge and credit purchase budget for CY 2018. Secretary Sorensen seconded the motion and the budget was adopted.

### **Call to the Public**

Chair Buschatzke asked for any additional public comment. Hearing none, the meeting was adjourned at 11:09 a.m.