

Arizona Water Banking Authority Preliminary 2024 Plan of Operation

The Arizona Water Banking Authority (AWBA)'s Preliminary Plan of Operation for 2024 identifies the estimated credits that could be developed in the following year toward its firming goals and obligations. It also assesses the need to distribute or extinguish long-term storage credits (LTSCs) or other firming credits to satisfy a firming and/or replenishment responsibility, or to make water available for interstate purposes.

Water Availability

Based on the Bureau of Reclamation's August 2023 24-Month Study, the Secretary of the Interior declared a Tier 1 shortage for Colorado River operations in 2024. As a result, Arizona's Colorado River entitlement will be reduced by 512,000 acre-feet. This amount includes 320,000 acre-feet in reductions under the 2007 Interim Guidelines and 192,000 acre-feet in additional contributions to Lake Mead under the Lower Basin Drought Contingency Plan (LBDCP). Consequently, there will be water reductions to a portion of the Central Arizona Project (CAP) non-Indian agricultural (NIA) pool, which will trigger AWBA's firming requirement under the Arizona Water Settlements Act. With no water available to Central Arizona Water Conservation District (CAWCD)'s Statutory Firming Pool for storage, the AWBA's 2024 Plan of Operation will focus on developing credits through non-storage alternatives. The below tables present the core components of the Preliminary Plan for 2024.

Credit Development

The AWBA has several options for credit development in 2024 through non-storage means, such as the payment for Intentionally Created Surplus (ICS) developed in Lake Mead as part of the LBDCP, and the acquisition of LTSCs through purchase agreements. The estimated cost of the 2024 Plan is \$13.6 million and could develop up to 38,742 acre-feet of credits. The AWBA estimates purchasing 6,246 acre-feet of ICS firming credits (5,638 acre-feet after the 10% assessment¹) using withdrawal fee revenues collected in the Phoenix AMA. Additionally, the AWBA could purchase up to 33,120 acre-feet of LTSCs: 9,260 acre-feet in the Phoenix AMA (at a price of \$359/AF) using water storage tax funds, and 23,860 acre-feet in the Tucson AMA (at a price of \$360/AF) using both withdrawal fees and water storage tax funds. The purchase rate per LTSC is based on the Central Arizona Project's water storage rates for 2024. This is the method for determining LTSC costs previously used by the AWBA.² However, the cost to purchase LTSCs is becoming increasingly market driven with prices typically higher than CAP water storage

¹ See Section 3 of the May 20, 2019 Intergovernmental Agreement Between the Arizona Water Banking Authority and the Gila River Indian Community for the Development of Intentionally Created Surplus Firming Credits.

² Although the August 24-month study shows a Tier 1 shortage for 2024, the CAWCD Board of Directors set the 2024 water rate with delivery volumes equal to the Tier 3 shortage level volume to take into account reduced revenues due to conservation anticipated within the CAP service area.

rates. A tightening market could affect the AWBA’s ability to acquire LTSCs in 2024. The AWBA may adjust its current pricing method to increase LTSC purchase opportunities with consideration given to the location of the credits available for sale.

Table 1 summarizes estimates of the funds available to the AWBA, the funds to be utilized, the entity that holds the funds, and the credits estimated to accrue to those accounts based on the 2024 Plan.

Table 1. Funding for the 2024 Annual Plan of Operation

Funding Source	Estimated Funds Available		Estimated Funds Utilized		Estimated Credits (AF)	
	AWBA	CAWCD	AWBA	CAWCD	Water Storage	Developed Credits
Withdrawal Fees						
Phoenix AMA ¹	\$ 1,728,924	-	\$ 1,728,924	\$ -	0	5,638
Tucson AMA ²	\$ 764,006	-	\$ 764,006	\$ -	0	2,120
Water Storage Tax³						
Phoenix AMA ⁴	\$ -	\$ 3,321,000	\$ -	\$ 3,321,000	0	9,260
Pinal AMA	\$ -	\$ -	\$ -	\$ -	0	0
Tucson AMA ²	\$ -	\$ 7,818,000	\$ -	\$ 7,818,000	0	21,740
Total	\$ 13,631,930	\$ 13,631,930	\$ 13,631,930	\$ 13,631,930	0	38,758

¹ Funds used to develop ICS Firming Credits at \$276/AF pursuant to AWBA’s 2019 IGA with the Community. Developed credits include a 10% loss factor.

² The purchase rate of \$360 per LTSC is based on Tier 3 CAP water rate for 2024.

³ Carryover from funds reserved by the CAWCD Board of Directors for AWBA LTSC purchases in 2021 and

⁴ The purchase rate of \$359 per LTSC is based on Tier 3 CAP water rate for 2024.

Firming Requirements & Agreement to Exchange LTSCs

The reduction in Colorado River supplies for 2024 will not impact fourth priority on-River contractors or CAP municipal and industrial (M&I) priority water users. However, the reductions to CAP NIA priority supplies will result in a firming requirement for the Gila River Indian Community (Community). The AWBA has an obligation to firm up to 15,000 acre-feet of CAP NIA supplies when supplies are insufficient to meet demand. The firming volume for 2024 is currently estimated to be 6,153 acre-feet.³ To satisfy this firming obligation, the AWBA and the Community elected to extinguish an equal volume of firming credits⁴ developed on-Reservation. Table 2 identifies the years in which the firming credits

³ Determined from CAWCD estimates shared on August 31, 2023

⁴ Credits developed pursuant to the *Agreement between the Arizona Water Banking Authority and the Gila River Indian Community for the Development of Firming Credits* executed June 30, 2016.

were developed, the annual costs paid by the AWBA to develop the credits, the credits estimated to be used and the remaining balance. The actual firming volume will be based on CAWCD's final accounting of CAP water orders for 2024 and incorporated into AWBA's Plan of Operation.

Table 2. Firming Proposal for the Gila River Indian Community - Tier 1 Shortage in 2024

Year	Firming Credits Developed (AF)			Firming Credits Utilized (AF)			Remaining Balance (AF)
	Firming Credits Developed	Cost/AF	Total Cost	CY 2022	CY 2023	CY 2024	Through CY 2024
2015	16,000	\$157	\$2,512,000	6,429	9,571		0
2016	12,000	\$161	\$1,932,000		5,004	6,153	843
2017	7,000	\$164	\$1,148,000				7,000
2018	9,000	\$160	\$1,440,000				9,000
TOTAL	44,000		\$7,032,000	6,429	14,575	6,153	16,843

In 2022, nine Arizona parties stored a portion of their CAP water at groundwater saving facilities (GSFs) in the Pinal AMA, pursuant to an exchange agreement made with the AWBA.⁵ Under the agreement, the AWBA could exchange up to 38,475 LTSCs stored in the Phoenix AMA and up to 4,750 LTSCs stored in the Tucson AMA for 43,225 acre-feet of LTSCs the Arizona parties have in the Pinal AMA.

Table 3 identifies the credits currently available to the AWBA to meet its objectives, the credits estimated to be utilized in 2024, and the remaining credit balances. The table also reflects the possible LTSC debit from the AWBA’s accounts in the Phoenix and the Tucson AMAs, and the LTSC credit to the AWBA’s account in the Pinal AMA, should the total volume of 43,225 acre-feet be exchanged in 2024.

⁵ Lower Basin Drought Contingency Plan (“LBDCP”) Implementation Plan: Agreement to Exchange Long-Term Storage Credits between AWBA and the City of Avondale; City of Chandler; City of Goodyear; City of Peoria; City of Phoenix; City of Scottsdale; City of Tucson; Freeport Minerals Corporation; and EPCOR Water Arizona Inc. All exchanges must be completed by December 31, 2026.

Table 3. Estimated Credit Balances and Firming Volumes through 2024

Objective and Location	Estimated Credits Available as of Dec 31, 2023 ¹	Estimated Credits Used in 2024	Estimated Credits Remaining as of Dec 31, 2024
	Acre-feet		
CAP M&I Firming (4-cent tax)	2,329,457	0	2,329,457
Phoenix AMA	1,582,453	0	1,582,453
Pinal AMA	234,791	0	234,791
Tucson AMA	512,213	0	512,213
On-River M&I Firming (gen. fund)	403,830	0	403,830
Tribal Settlement Obligations: ²	162,176	6,153	156,023
Community - 15,000 AFY	162,176	6,153	156,023
LTSCs	105,390	0	105,390
Firming Credits	22,996	6,153	16,843
ICS Firming Credits	33,790	0	33,790
WMAT - 3,750 AFY	0	0	0
Hualapai - 557.5 AFY	0	0	0
Future Settlements- 4416.5 AFY	0	0	0
Federal Assistance (SAWRSA)	34,102	0	34,102
Groundwater Mgmt. ³ (W/Fees)	777,591	0	777,591
Phoenix AMA	251,411	38,475	212,936
Pinal AMA ⁴	417,706	-43,225	460,931
Tucson AMA	108,474	4,750	103,724
Shortage Reparations ⁵	109,489	0	109,489
Phoenix AMA	20,642	0	20,642
Pinal AMA	60,507	0	60,507
Tucson AMA	28,340	0	28,340
Pinal Redirect Credits ⁶	14,125	0	14,125
Interstate - SNWA	613,846	0	613,846
Phoenix AMA	60,021	0	60,021
Pinal AMA	440,241	0	440,241
Tucson AMA	113,584	0	113,584

¹ Includes all credits accrued and utilized through 2023

² The White Mountain Apache Tribe Water Rights Quantification Act enforceability date is December 30, 2027. The Hualapai Tribe settlement enforceability date is April 15, 2029.

³ Withdrawal Fee LTSCs may be used for CAP M&I firming and/or Tribal settlement obligations if needed.

⁴ Up to 43,225 LTSCs could be credited to the AWBA's account in the Pinal AMA, pursuant to the Lower Basin Drought Contingency Plan ("LBDCP") Implementation Plan: Agreement to Exchange Long-Term Storage Credits between AWBA and the City of Avondale; City of Chandler; City of Goodyear; City of Peoria; City of Phoenix; City of Scottsdale; City of Tucson; Freeport Minerals Corporation; and EPCOR Water Arizona Inc.

⁵ LTSCs accrued pursuant to Arizona-Nevada Shortage-Sharing Agreement executed in 2007.

⁶ Credits accrued from water provided to Pinal AMA GSFs at full cost to the GSF operators.