

AWBA Preliminary 2023 Plan of Operation

The AWBA's Preliminary Plan for 2023 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 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 2022 24-Month Study, the Secretary of the Interior declared a Tier 2a shortage for Colorado River operations in 2023. As a result, Arizona's Colorado River entitlement will be reduced by 592,000 acre-feet. This amount includes 400,000 acre-feet in reductions under the 2007 operating guidelines and 192,000 acre-feet in additional contributions to Lake Mead under the Lower Basin Drought Contingency Plan (LBDCP).

Consequently, there will be no water available to the non-Indian agricultural (NIA) pool. With reductions to the NIA pool, the AWBA will have a firming requirement under the Arizona Water Settlements Act. Based on CAWCD's most recent estimates, supplies are not expected to impact CAP municipal and industrial (M&I) subcontractors under a Tier 2a shortage. If there are additional reductions implemented to protect critical elevations in Lake Mead during 2023 that result in a firming responsibility for subcontractors, the AWBA will amend its Plan of Operation accordingly. The AWBA will continue to coordinate with subcontractors on developing firming plans going forward. These would be incorporated into the amended plan as necessary.

Furthermore, there will be no water available to CAWCD's Statutory Firming Pool that is used by the AWBA. As a result, the AWBA's 2023 Plan will focus on developing credits through non-storage alternatives. The following tables, which are a component of the AWBA's Annual Plan of Operation, represent the Preliminary Plan for 2023.

Credit Development

The AWBA has several options for credit development through non-storage means, including 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 2023 Plan is \$14 million and could potentially develop 44,784 acre-feet of credits. The AWBA estimates purchasing 6,815 acre-feet of ICS Firming Credits (6,134 acre-feet after assessment) using withdrawal fee revenues collected in the Phoenix AMA. Additionally, the AWBA could potentially purchase up to 38,650 acre-feet of LTSCs: 10,640 acre-feet in the Phoenix AMA (\$312/AF) and 28,010 acre-feet in the Tucson AMA (\$314/AF) using both withdrawal fees and water storage tax funds. The purchase rate per LTSC is based on Tier 2a water rates for 2023, the method for determining costs previously used by the AWBA. However, the cost to purchase LTSCs is becoming increasingly market driven with prices typically higher than CAP water storage rates. A tightening market could affect the AWBA's ability to acquire LTSCs in 2023. The AWBA will continue to seek practicable 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 2023 Plan.

AWBA Preliminary 2023 Plan of Operation

Table 1. Funding for 2023 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	\$1,832,000	-	\$1,832,000	-	0	6,134
Tucson AMA	\$ 978,000	-	\$ 978,000	-	0	3,110
Water Storage Tax²						
Phoenix AMA	\$ -	\$3,321,000	\$ -	\$3,321,000	0	10,640
Pinal AMA	\$ -	\$ -	\$ -	\$ -	0	0
Tucson AMA	\$ -	\$7,818,000	\$ -	\$7,818,000	0	24,900
	Total Funds Available		Total Funds Expended		Total Credits	
	\$ 13,949,000		\$ 13,949,000		0	44,784

¹ Funds used to develop ICS Firming Credits at \$268.80/AF pursuant to AWBA's 2019 IGA with the Community. Developed credits include a 10% loss factor.

² Carryover from funds reserved by the CAWCD Board of Directors for AWBA LTSC purchases in 2021 and 2022.

Firming Requirements

The reduction in Colorado River supplies for 2023 will impact CAP NIA priority supplies and will therefore 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 2023 is currently estimated to be 15,000 acre-feet. To satisfy this firming obligation, the AWBA and the Community elected to extinguish an equal volume of Firming Credits¹ developed on-Reservation. The actual firming volume will be based on CAWCD's final accounting of CAP water orders for 2023 and incorporated into the AWBA's Plan of Operation.

The reduction in Colorado River supplies for 2023 will neither impact fourth priority on-River contractors nor CAP M&I subcontractors. In the event of a small reduction in M&I supplies, AWBA staff can coordinate with CAWCD to ensure water orders are met, potentially through CAGR exchange (i.e., AWBA transfers credits to CAWCD; CAWCD distributes credits to CAGR and provides wet water to M&I).

Table 2 identifies the credits currently available to the AWBA to meet its objectives, the credits estimated to be utilized in 2023 and the remaining credit balances.

¹ 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.

AWBA Preliminary 2023 Plan of Operation

Table 2. Estimated Credit Balances and Firming Volumes through 2023

Objective and Location	Estimated Credits Available as of Dec 31, 2022 ¹	Estimated Credits Used in 2023	Estimated Credits Remaining as of Dec 31, 2023
	Acre-feet		
CAP M&I Firming (4-cent tax)	2,329,507	0	2,329,507
Phoenix AMA	1,582,489	0	1,582,489
Pinal AMA	234,791	0	234,791
Tucson AMA	512,227	0	512,227
On-River M&I Firming (gen. fund)	403,830	0	403,830
Tribal Settlement Obligations:²	169,281	15,000	154,281
Community - 15,000 AFY	169,281	15,000	154,281
<i>LTSCs</i>	<i>105,390</i>	<i>0</i>	<i>105,390</i>
<i>Firming Credits</i>	<i>37,571</i>	<i>15,000</i>	<i>22,571</i>
<i>ICS Firming Credits</i>	<i>26,320</i>	<i>0</i>	<i>26,320</i>
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)	776,265	0	776,265
Phoenix AMA	251,411	0	251,411
Pinal AMA	417,706	0	417,706
Tucson AMA	107,148	0	107,148
Shortage Reparations⁴	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 Credits⁵	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 2022

² WMAT enforceability date is April 30, 2025; Hualapai settlement subject to congressional approval.

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

⁴ LTSCs accrued pursuant to Arizona-Nevada Shortage-Sharing Agreement executed in 2007.

⁵ Credits accrued from water provided to Pinal AMA GSFs at full cost to the GSF operators.