



2022 AWBA Annual Report

AWBA Quarterly Meeting

June 28, 2023

2022 Plan of Operation

- First-ever obligation to firm the Gila River Indian Community (Community): Extinguished 6,429 AF of firming credits
- Long-term storage credit purchases: 13,273 AF
 - Phoenix AMA: 10,358 AF
 - Tucson AMA: 2,915 AF
- Intentionally Created Surplus Firming Credits development: 2,540 AF
 - Phoenix AMA: 2,473 AF
 - Pinal AMA: 67 AF
- No water storage deliveries

2022 Plan of Operation Expenditures

Funding Source	Phoenix AMA	Pinal AMA	Tucson AMA	Total
Water Storage Tax	\$ 3,107,370	-	\$ 874,482	\$ 3,981,852
Withdrawal Fees	\$ 718,877	\$ 19,358	-	\$ 738,235
Total	\$ 3,826,247	\$ 19,358	\$ 874,482	\$ 4,720,087

Other Activities

- The AWBA Commission approved the AWBA Standard Template Agreements for firming CAP M&I Subcontractors
- AWBA staff met with CAP M&I Subcontractors to discuss the two firming methods
- AWBA staff continued monthly coordination with ADWR and CAWCD

Objective and Location	Credits Available thru 2022 ¹	Estimated Credits Used in 2023	Estimated Credits Remaining
	Acre-feet		
CAP M&I Firming (4-cent tax)			
Phoenix AMA	1,582,453	0	1,582,453
Pinal AMA	234,791	0	234,797
Tucson AMA	512,213	0	512,213
On-River M&I Firming (gen. fund)	403,830	0	403,830
Tribal Settlement Obligations: ²			
Community - 15,000 AFY	169,281	14,575	154,706
LTSCs	105,390	0	105,390
Firming Credits	37,571	14,575	22,996
ICS Firming Credits	26,320	0	26,320
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)			
Phoenix AMA	251,411	0	251,411
Pinal AMA	417,706	0	417,670
Tucson AMA	107,148	0	107,148
Shortage Reparations⁴	109,489	0	109,489
Pinal Redirect Credits⁵	14,125	0	14,125
Interstate - SNWA	613,846	0	613,846

AWBA Credits Utilization



¹ Credits accrued or acquired through 2022

² White Mountain Apache Tribe (WMAT) enforceability date is December 31, 2027; Hualapai Tribe settlement enforceability date is December 31, 2029

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.

Ten-Year Plan

- Planning tool, updated annually
- January 1, 2024 through December 31, 2033
- Includes:
 - Firming projections and estimates: 2024-2027
 - Recovery capacity for M&I subcontractors: 2024-2033

Assumptions

- No excess CAP water available in 2024-2033
- Projected shortage reductions based on the 2007 Guidelines and the Lower Basin Drought Contingency Plan
- LTSC purchases determined annually through the Plan of Operation
- All remaining ICS firming credits anticipated to be purchased by 2026

Credit Distribution or Extinguishment

- Firming volume estimations (2024-2027) based on projected shortage tiers
 - Used Reclamation's five-year projections
 - Used CAWCD demand estimations for M&I subcontractors, Tribal firming and on-River firming
- Recovery capacity analysis (2024-2033) for different shortage tiers
 - Used CAWCD demand estimations for M&I subcontractors
 - Included information provided by recent discussions with subcontractors

Shortage Probabilities (2024-2027)

Operational Tier	Tier Reductions (acre-feet)	Reclamation's Five-Year Table - Shortage Probability ¹			
		2024	2025	2026	2027 ²
Surplus Condition (≥1,145)		0%	0%	0%	7%
Normal Year (<1145 and >1075)		7%	43%	53%	43%
Normal (<1145 and >1090)		0%	0%	13%	13%
Tier Zero (≤1090 and >1075)	192,000	7%	37%	40%	33%
Any Shortage (≤1075)		93%	57%	47%	50%
Tier 1 Shortage (≥1050 and ≤1075)	512,000	93%	43%	27%	33%
Tier 2 Shortage (≥1025 and <1050)		0%	13%	20%	10%
Tier 2a (>1045 and <1050)	592,000	0%	10%	3%	7%
Tier 2b (≥1025 and ≤1045)	640,000	0%	3%	16%	3%
Tier 3 Shortage (<1025)	720,000	0%	0%	0%	7%

¹ Shortage probabilities from Reclamation's projections of future Colorado River system conditions, April 2023 CRMMS-ESP. These projections do not represent the full range of future possibilities that could occur with different modeling assumptions.

² For modeling purposes, simulated years beyond 2026 assume a continuation of the 2007 Interim Guidelines, the 2019 Colorado River Basin Drought Contingency Plans, and Minute 323, including the Binational Water Scarcity Contingency Plan. With the exception of certain provisions related to ICS recovery and Upper Basin demand management, operations under these agreements are in effect through 2026. Reclamation is beginning a process in 2023 to develop operations for post-2026, and the modeling assumptions described here are subject to change for the analysis to be used in that process.

Estimated Firming Volumes (2024-2027)

Operational Tier	Tribal Firming (acre-feet)			
	2024	2025	2026	2027
Normal Year	0	0	0	0
Tier 1 Shortage	9,447	10,026	10,163	10,485
Tier 2a Shortage	14,900	14,712	14,669	14,566
Tier 2b Shortage	14,017	13,840	13,799	13,703
Tier 3 Shortage	12,669	12,510	12,473	12,386
Most Probable Firming Volumes	9,447	10,026	0	0

	Total AWBA Firming (acre-feet)
4-Year Total Volumes	19,473

Estimated M&I Recovery Capacity (2024-2033)

Year	Tier 1 (acre-feet)	Tier 2a (acre-feet)	Tier 2b (acre-feet)	Tier 3 (acre-feet)
2024	0	2,052	10,386	25,487
2025	0	2,397	11,899	27,285
2026	0	4,412	14,034	29,669
2027	0	6,571	16,141	32,153
2028	0	8,255	18,212	34,347
2029	0	10,049	19,683	36,121
2030	0	11,417	21,739	36,255
2031	0	11,865	22,406	37,378
2032	0	12,588	22,729	39,248
2033	0	12,884	23,053	41,743

** Estimated recovery well capacity incorporates 2022 feedback from impacted M&I subcontractors*

Utilization of AWBA Credits

Location and Objective	Credits Available in 2024 (acre-feet)	Estimated Credits Used/Exchanged through 2027 (acre-feet)	Estimated Credits Remaining End of 2027 (acre-feet)
CAP M&I Firming	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	403,830	0	403,830
Tribal Settlement Obligations:	162,176	19,473	142,703
Community - 15,000 AFY	162,176	19,473	142,703
LTSCs	105,390	0	105,390
Firming Credits	22,996	19,473	3,523
ICS Firming Credits	33,790	0	33,790
White Mountain Apache Tribe - 3,750 AFY	0	0	0
Hualapai - 557.5 AFY	0	0	0
Future Settlements - 4416.5 AFY	0	0	0
Federal Assistance (Southern Arizona Water Rights Settlement Act)¹ \$3 million provided in LTSCs	34,102	0	34,102
Groundwater Management²	777,591	0	777,591
Phoenix AMA	251,411	(38,475)	212,936
Pinal AMA	417,706	43,225	460,931
Tucson AMA	108,474	(4,750)	103,724
Shortage Reparations	109,489	0	109,489
Pinal Redirect Credits	14,125	0	14,125
Interstate – SNWA	613,846	5,000	608,846

¹ Credits could be requested by Reclamation during this time period.

² Reflects maximum volume of credits that could be exchanged pursuant to LTSC exchange agreement under the Implementation Plan.

Conclusion

- Tier 1 Shortage Condition anticipated in 2024 and 2025
- Normal operating conditions anticipated in 2026 and 2027
- Only Tribal firming anticipated (2024-2025)
 - 19,473 acre-feet for the Community (12% of credits dedicated to the Community)
- Expected development of ICUA on behalf of SNWA beginning in 2026 (2,500 acre-feet annually)



Questions?
