

2017 Annual Report and Ten-Year Plan

AWBA Quarterly Meeting

June 20, 2018

Presented by

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2017 Plan of Operation

- **AWBA Storage Deliveries – 17,630 AF**
 - Phoenix AMA - 4,130 AF
 - Pinal AMA – 11,400 AF
 - Tucson AMA – 2,100 AF
- **Arizona Consumptive Use – 2.51 MAF**
 - On-river 1.09 MAF
 - Central Arizona Project 1.42 MAF



Monies Expended for Credit Development in 2017

Funding Source	Phoenix AMA	Pinal AMA	Tucson AMA	Total
	(\$ Million)			
4-Cent Tax	\$14.50	\$0.89	\$2.97	\$18.36
Withdrawal Fees	\$1.90	\$0.95	\$0.57	\$3.41
General Fund	-	-	-	\$0
Intrastate Total	\$16.40	\$1.84	\$3.54	\$21.77
Interstate - Nevada	-	-	-	\$0
TOTAL	\$16.40	\$1.84	\$3.54	\$21.77

Number and Location of Credits Developed in 2017 (AF)

Funding Source	Phoenix AMA	Pinal AMA	Tucson AMA	Total
Long-term Storage Credits				
4-Cent Tax	59,082	4,759	13,172	77,014
Withdrawal Fees	3,909	5,420	2,918	12,246
General Fund	-	-	-	-
Total LTSC	62,991	10,179	16,090	89,260
Firming Credits – GRIC IGA				
Phoenix W/Fees	12,000	-	-	-
TOTAL Credits	74,991	10,179	16,090	101,260

Percentage of AWBA Goals Achieved through 2017

Objective	Funding Source	Goal (AF)	Credits Accrued (AF)	Progress Toward Goals/Oblig.
M&I Firming				
Phoenix AMA	Maricopa 4¢	1,566,000	1,478,641	94%
Pinal AMA	Pinal 4¢	243,000	220,642	91%
Tucson AMA	Pima 4¢	864,000	473,014	55% W/Fees 67%
Groundwater Mgmt				
Phoenix AMA	Withdrawal Fees		247,659	
Pinal AMA	Withdrawal Fees		409,902	
Tucson AMA	Withdrawal Fees		103,031	
On-River M&I Firming	General Fund	420,000		96%

Percentage of AWBA Goals Achieved through 2017

Objective	Obligation	Goal (AF)	Non- LTS Credit Obligation Achieved	Credits Accrued (AF)	Progress Toward Goals/Oblig.
Indian Settlements:					
GRIC Firming	up to 15,000 AF/YR	350,000		140,390	40%
Future Settlements	up to 8,724 AF/YR	200,000		0	0%
Federal Assistance	\$3,000,000		\$3,000,000	34,102	100%
Southside Replenishment Bank	15,000 AF Direct Delivery		15,000		100%

2018 Plan of Operation - Arizona

- **Total Supplies Available to Pool – 43,000 AF**
 - CAGR Reserve 0 AF
 - Federal 5,000 AF
- **Projected AWBA Recharge Deliveries**
 - 38,000 AF deliveries for storage (\$11.14 M)
- **Credit Development**
 - LTSC Purchases ~ 15.6 KAF (\$3.62 M)
 - GRIC Firming Credits – 9KAF (\$1.44 M)



2018 Plan of Operation - Nevada

- Nevada Unused Apportionment – 13,500 AF
 - 9,500 AF (Phoenix AMA)
 - 4,000 AF (Tucson AMA)
- \$3.28 million paid by SNWA
- 12,563 AF of projected interstate credits
- 613,604 AF cumulative interstate credits



Recovery Planning

- Continued collaboration on next steps
- CAP System Use Agreement (approved Feb. 2017)
- CAWCD activities:
 - Developing recovery agreements with partners
 - Evaluating recovery infrastructure potential
- Continued modeling of Colorado River conditions and potential shortage impacts
- WMAT Lessee firming discussions
- Planning and launching RPAG process
 - first meeting held January of 2018



TEN-YEAR PLAN (2018-2027)



Purpose of Ten-Year Plan

- **Supports development of AWBA Annual Plan of Operation for following year**
- **Provides triggers for implementing firming procedures with GRIC**
- **Creates strategy for meeting goals and obligations over time**
- **Supports policy development**



Key Plan Assumptions

- **Excess CAP water unavailable during plan**
- **Overall theme still shortage conditions**
- **CAWCD adopted 2019-2024 rate schedule**
- **Budget based on projected cost of developing credits as though AWBA received Excess CAP water directly**
- **No general fund appropriations**
- **No legislative authorizations for others to use AWBA funds except in FY 2019**



Water Available to AWBA

- **No Excess CAP water**
- **If water becomes available then normal operations**
- **Overall theme still shortage**

	Probabilities %		
	Shortage	Surplus	Normal
2019	0%	0%	100%
2020	52%	0%	48%
2021	64%	3%	33%
2022	68%	6%	26%
2023	65%	10%	25%
2024	65%	13%	22%
2025	66%	17%	17%
2026	66%	20%	15%
2027	67%	22%	12%
2028	65%	23%	12%



Credit Development Plan

- **Target = 383,000 AF**
- **Indian Firming**
 - Utilizes Phoenix and Pinal AMA withdrawal fee revenues
 - 95,000 acre-feet in Phoenix AMA
 - 70,000 acre-feet in Pinal AMA
- **CAP M&I Firming**
 - Maricopa and Pinal County 4¢ tax use based on achieving goal by 2022 (52,000 and 20,000 acre-feet)
 - Maximizes use of Pima 4¢ tax revenues (132,000 acre-feet)
 - Assumes withdrawal fee credits for Tucson AMA (15,000 acre-feet)



Result of Credit Development Plan

Objective	Funding Source	Goal (AF)	Credits Accrued (AF)	Progress Toward Goals/Oblig.
M&I Firming				
Phoenix AMA	Maricopa 4¢	1,566,000	1,566,000	100%
Pinal AMA	Pinal 4¢	243,000	243,000	100%
Tucson AMA	Pima 4¢	864,000	595,200 711,500	69% Withdrawal Fees 82%
On-River M&I Firming	General Fund	420,000	403,830	96%
Indian Settlement				
GRIC	Withdrawal Fees	350,000	299,100	85%
Future Settlements	Withdrawal Fees	200,000	0	0%
Groundwater Management				
Phoenix AMA	Withdrawal Fees		244,900	
Pinal AMA	Withdrawal Fees		410,100	
Tucson AMA	Withdrawal Fees		116,300	
Shortage Reparation Funds	Agreement	\$8,000,000	109,489	100%

Firming Plan – 2016 Annual Report

Year	Probability of Shortage ¹				NIA Indian Firming ² (af)			Total AWBA Firming Volume
	Any	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier3	(af)
2018	0%	0%	0%	0%	-	-	-	-
2019	31%	31%	0%	0%	-	-	4,600	-
2020	32%	31%	1%	0%	-	910	8,667	-
2021	34%	26%	8%	0%	-	2,062	9,585	-
2022	39%	27%	10%	3%	-	3,146	10,448	-
2023	46%	31%	11%	4%	-	4,166	11,261	-
2024	47%	28%	11%	7%	-	5,129	12,027	-
2025	52%	30%	12%	9%	-	5,975	12,720	-
2026	55%	27%	18%	10%	546	7,193	13,840	546
2027	56%	25%	18%	13%	1,824	8,381	14,938	1,824
TOTALS					2,370	36,961	98,085	2,370

Firming Plan – 2017 Annual Report

Year	Probability of Shortage ¹				NIA Indian Firming ² (af)			Total AWBA Firming Volume (af)
	Any	Tier 1	Tier 2	Tier 3	Tier 1	Tier 2	Tier3	(af)
2019	0%	0%	0%	0%	-	-	558	-
2020	52%	52%	1%	0%	-	-	1,003	-
2021	64%	43%	21%	0%	-	-	1,689	-
2022	68%	38%	23%	7%	-	-	4,462	-
2023	65%	29%	24%	12%	-	-	4,899	-
2024	65%	22%	26%	17%	-	375	5,327	375
2025	66%	19%	25%	23%	-	842	5,746	842
2026	66%	13%	28%	24%	-	1,299	6,155	1,299
2027	67%	11%	27%	30%	-	1,687	6,518	6,518
2028	65%	9%	26%	31%	-	2,070	6,876	6,876
TOTALS					-	6,273	43,234	15,910

Conclusions...

- **Excess CAP water available in 2018**
- **No Excess CAP post-2018**
- **Possible firming requirement by 2024 but volumes manageable**
- **Firming requirement only affects NIA priority**
- **Sufficient credits already stored to meet most conservative firming estimate**
- **M&I firming goals could be attained in Phoenix and Pinal AMAs by 2022**
- **84% of M&I firming goal could be attained in Tucson if withdrawal fee credits are included at end of planning period**



Recommended actions...

- **Focus on Indian firming goals and corresponding agreements**
- **Coordinate with ADWR and CAWCD on recovery planning, modeling, etc.**
- **Continue seeking opportunities to achieve goals/obligations independent of Excess CAP water**



Recommended actions...

- **Reinstate quarterly meetings with CAWCD and AWBA regarding AWBA operations and finances**
- **Support efforts to retain water in Lake Mead**
- **Consider developing a contingency fund for potential water surplus conditions**



Questions?

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June 20, 2018

azwaterbank.gov

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