



MEMORANDUM

To: AWBA Commission Members

From: Virginia O'Connell, Director

Subject: Amended 2020 Plan of Operation

Date: June 17, 2020

AUTHORITY MEMBERS
Thomas Buschatzke, Chairman
Ray L. Jones, Vice-chair
Kathryn A. Sorensen, Secretary
Alexandra Arboleda
Mark Clark

EX OFFICIO MEMBERS
The Honorable Karen Fann
The Honorable Gail Griffin

As approved by the AWBA Commission on June 17, 2020, the 2020 Annual Plan of Operation (Plan) has been amended to reflect changes made to the original Plan due to unexpected supplies made available to the AWBA. Attached to this memorandum are replacement paragraphs that describe these changes, the insertion of the Water Delivery Schedule (Table 2), and Amended Tables 3, 4, and 5. These changes constitute the Amended 2020 Plan of Operation (Amended Plan).

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Water Availability

According to the Bureau of Reclamation’s August 2019 24-Month Study, which sets the annual operations for Lake Mead and Lake Powell in 2020, Lake Mead will operate in the Normal or ICS Surplus Condition. In addition, the drought contingency plans for the Upper and Lower Basins are now in effect. Because Lake Mead is projected to begin the year below 1,090 feet, a Tier Zero condition, Arizona must contribute 192,000 acre-feet in water savings to Lake Mead in 2020. These contributions come largely from excess CAP water supplies. As a result, the Central Arizona Water Conservation District (CAWCD) did not make these water supplies available to the Statutory Firming Pool that is used by the AWBA, the Central Arizona Groundwater Replenishment District (CAGR) for replenishment reserves and the U.S. Bureau of Reclamation (Reclamation) for purposes of meeting its obligations under the Arizona Water Settlements Act.

In June, CAWCD informed the AWBA that unexpected water supplies would be made available to the Statutory Firming Pool. These supplies are currently in Lake Pleasant and consist of turn-back water from 2019 and inflows from the Agua Fria River due to higher spring runoff. The supplies are being made available in order to create space in Lake Pleasant for incoming Colorado River supplies.

The total amount of water that has been made available to the Statutory Firming Pool is 68,083 acre-feet. The CAGR has requested 11,332 acre-feet and Reclamation has requested 6,695 acre-feet, leaving 50,056 acre-feet available to the AWBA.

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Available Funds

As in previous years, the CAWCD Board resolved to retain the water storage property taxes collected in its three-county service area for costs related to operation and maintenance (O&M) and/or for repayment of the Project. Water storage tax revenues retained by CAWCD have been used to offset the cost of AWBA water deliveries and storage at its recharge projects as part of O&M. Water delivery and storage costs under the Amended Plan include expenditures of an estimated \$8.75 million in Maricopa County revenues, \$1.59 million in Pinal County revenues, and \$422,900 in Pima County revenues. These funds are in addition to those reserved by the CAWCD Board for credit purchase, which includes \$3 million in Maricopa County funds and \$3 million in Pima County funds. As identified in Table 4, estimated expenditures of water storage tax funds in 2020 under the Amended Plan total \$10.76 million.

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Available Storage Facility Capacity

AWBA staff conferred with facility operators to discuss the availability of storage capacity in 2020. While capacity was available in all three AMAs, storage locations were limited to one facility in both the Phoenix and Tucson AMAs. Consequently, storage capacity was a limiting factor in developing the Amended Plan. In the Phoenix AMA, storage is currently limited to the Tonopah Desert Recharge Project. Concerns have been raised regarding additional AWBA storage at this facility due to future recovery potential at the site. Therefore, staff will continue to seek opportunities to redirect water to the most beneficial and effective storage locations should they become available.

The Water Delivery Schedule (Table 2) identifies the storage sites for the AWBA's partners for 2020 and the amount of water scheduled for storage. The second column in this section identifies the AWBA's water storage permit capacities for each facility, which in some cases are based on the maximum permitted storage amounts of the facilities. The actual storage capacities available to the AWBA do not typically equal the AWBA's permitted volume because the storage facility operators may have agreements with other storage partners.

Amended 2020 Plan of Operation

Table 2 Water Delivery Schedule (Acre-Feet) Calendar Year 2020															
AWBA-Storage Sites		Permitted Capacity (AF)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
PHOENIX AMA :															
USF	AGUA FRIA	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	GRUSP	93,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	HIEROGLYPHIC MTN	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	SUPERSTITION MTNS	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	TONOPAH DESERT	150,000	0	0	0	0	0	0	10,000	15,000	14,056	0	0	0	39,056
															39,056
GSF	NEW MAGMA IDD	54,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	QUEEN CREEK ID	28,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	TONOPAH ID	15,000	0	0	0	0	0	0	0	0	0	0	0	0	0
															0
AMA TOTAL INTRASTATE			0	0	0	0	0	0	10,000	15,000	14,056	0	0	0	39,056
PINAL AMA :															
GSF	CAIDD	110,000	0	0	0	0	0	0	0	1,500	1,500	0	0	0	3,000
	HOHOKAM	55,000	0	0	0	0	0	0	0	1,000	1,500	500	0	0	3,000
	MSIDD	120,000	0	0	0	0	0	0	0	3,000	0	0	0	0	3,000
															9,000
AMA TOTAL INTRASTATE			0	0	0	0	0	0	0	5,500	3,000	500	0	0	9,000
TUCSON AMA:															
USF	AVRA VALLEY	11,000	0	0	0	0	0	0	200	600	600	400	200	0	2,000
	LOWER SANTA CRUZ	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	PIMA MINE ROAD	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	CAVSARP	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	SAVSARP	60,000	0	0	0	0	0	0	0	0	0	0	0	0	0
															2,000
GSF	CORTARO-MARANA ID	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	KAI FARMS (Red Rock)	11,231	0	0	0	0	0	0	0	0	0	0	0	0	0
	BKW Farms	14,316	0	0	0	0	0	0	0	0	0	0	0	0	0
															0
AMA TOTAL INTRASTATE			0	0	0	0	0	0	200	600	600	400	200	0	2,000
TOTAL INTRASTATE															
			0	0	0	0	0	0	10,200	21,100	17,656	900	200	0	50,056
TOTAL INTERSTATE															
			0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECHARGE															
			0	0	0	0	0	0	10,200	21,100	17,656	900	200	0	50,056
DIRECT DELIVERY (Non-Storage):															
	Southside Replenishment Bank		0	0	0	0	0	0	0	0	0	0	0	0	0
	Southside Replenishment Obligation		0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL DIRECT		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL DELIVERIES			0	0	0	0	0	0	10,200	21,100	17,656	900	200	0	50,056

Pricing

In June of 2019, the CAWCD Board approved its final water delivery rate schedule for calendar years 2019/2020. The AWBA 2020 rate for recharge is equivalent to the rate for excess M&I water at \$211 per acre-foot, an increase of \$12 per acre-foot from the previous year. CAWCD storage facility rates have remained the same. The AWBA’s rate for use of Tucson Water’s Clearwater facilities and Metro Water’s Avra Valley Recharge Project increases by three percent each year. Table 3 reflects the water delivery rate charged by CAWCD for AWBA recharge deliveries, the cost share GSF operators pay for AWBA storage, and the rates the AWBA pays to utilize different USFs. There is no administrative cost component in the facility cost because the AWBA pays the CAWCD and any Salt River Project (SRP) administrative costs on an annual basis

Table 3. Amended 2020 Water and Facility Rates

Recharge Rates	Cost per Acre-foot
CAWCD delivery rate for AWBA	\$211.00
Groundwater Savings Facility operator cost share rate ¹	
Phoenix and Pinal AMAs	\$34.00
Tucson AMA	\$16.00
Underground Storage Facility rate paid by AWBA	
CAWCD – Phoenix Facilities	\$13.00
CAWCD – Tucson Facilities	\$15.00
Clearwater Facility (CAVSARP/SAVSARP)	\$18.64
Metro Water (Avra Valley Recharge Project)	\$18.45

¹ This rate is paid directly to CAP by the GSF operators and is not available as revenue to the AWBA

Accounting

Expenditures under the Amended Plan increased by \$10.8 million for a total cost of \$19.6 million. The AWBA estimates accruing approximately 46,550 acre-feet of long-term storage credits by storing the unexpected water supplies, bringing the total amount of credits developed under the Amended Plan to 82,200 acre-feet.

Table 4. Funding for Amended 2020 Annual Plan of Operation

Funding Source	Estimated Funds Available		Estimated Funds Utilized		Estimated Credits (AF)	
	AWBA	CAWCD	AWBA	CAWCD	Water Storage	Developed Credits
Withdrawal Fees¹						
Phoenix AMA	\$1,353,200	-	\$1,353,200	-	0	4,930
Pinal AMA	\$882,400	-	\$882,400	-	0	3,210
Tucson AMA	\$622,100	-	\$622,100	-	150	2,440
Water Storage Tax²						
Phoenix AMA	\$0	\$11,750,000	\$0	\$11,748,500	36,320	12,590
Pinal AMA	\$0	\$1,593,000	\$0	\$1,593,000	8,370	
Tucson AMA	\$0	\$3,422,900	\$0	\$3,422,900	1,710	12,280
General Fund	\$0					
Phoenix AMA		-	\$0	-	0	0
Pinal AMA		-	\$0	-	0	0
Tucson AMA		-	\$0	-	0	0
	Total Funds Available		Total Funds Expended		Total Credits	
	\$19,623,600		\$19,622,100		46,550	35,450

¹ Phoenix and Pinal AMA funds are used to develop ICS Firming credits pursuant to IGA with the Gila River Indian Community. Includes a 10% loss factor.

² Includes \$3 million each in Maricopa and Pima County funds reserved by the CAWCD Board of Directors for LTSC purchases. Water Storage Tax funds used for water delivery and storage costs are offset by CAWCD as part of the O&M of the Project.

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Achievement of Goals and Obligations

Table 5 identifies the progress expected to be made on the AWBA’s goals and obligations through 2020 under the Amended Plan. Proposed purchases of ICS Firming credits and LTSCs are included in the totals.

Table 5. Projected Percent of Goals and Obligations Achieved through 2020

Location and Objective	Funding Source	Estimated Goal	Non-Credit Goal Achieved	Credits ¹ Accrued (AF)	Goal Achieved
CAP M&I Firming					
Phoenix AMA	Water Storage Tax (4¢ <i>Ad valorem</i>) collected by County	1,566,000 AF		1,565,749	99.98%
Pinal AMA		243,000 AF		231,941	95%
Tucson AMA		864,000 AF		499,217	58%
On-River M&I Firming²	General Fund	420,000 AF		403,830	96%
Indian Settlement Obligations:					
GRIC Firming ³ <i>up to 15 KAF/year</i>	General Fund Withdrawal Fees	350,000 AF ⁴		170,724	49%
				0	
Future Settlements - <i>up to 8.7 KAF/year</i>	General Fund Withdrawal Fees	200,000 AF ⁴		0	N/A
Federal Assistance (SAWRSA)- <i>\$3 million</i>	General Fund		\$3,000,000	34,102	100%
	Tucson W/Fees		\$2,338,171	28,481	
	Cost of Services ⁵		\$630,490	5,621	
Southside Repl. Bank - <i>15 KAF direct delivery</i>	General Fund Pinal W/Fees			15,000	100%
				1,342	
				13,658	
Groundwater Management⁶					
Phoenix AMA	Withdrawal Fees collected by AMA			251,411	N/A
Pinal AMA ⁷				417,480	N/A
Tucson AMA				106,732	N/A
Other:					
Interstate Banking - SNWA	Agreement with Nevada			613,846	N/A
Shortage Reparations	Agreement with Nevada	\$8,000,000	\$8,000,000	109,489	N/A
Pinal Redirect Credits ⁸	N/A			14,125	N/A

¹ Actual credits through 2019; estimated credits for 2020.

² By resolution passed in 2002, the AWBA established on-River firming as the highest priority of use for credits accrued through expenditure of general fund appropriations. Pursuant to the Agreement to Firm dated February 4, 2005, a total of 230,280 AF of credits were transferred to the AWBA long-term storage subaccount for MCWA in 2005. An additional 25,894 AF of credits were reserved under Exhibit C of the Amended Agreement to Firm, dated December 8, 2010, for a total of 256,174 AF.

³ Credits developed pursuant to accepted firming methods identified under Firming IGA with the Community. Credits include 88,313 AF and 17,077 AF of LTSCs accrued at the Gila River Indian Irrigation and Drainage District GSF in the Phoenix and Pinal AMAs, respectively; 44,000 AF of Firming Credits; and 21,334 AF of ICS Firming credits.

⁴ Based on estimates from the Indian Firming Study Commission Report dated January 6, 2006.

⁵ Expenditures include \$14,883 and \$16,456 deducted for payment of cost of services for FY08 and FY09, respectively.

⁶ Withdrawal fees could be utilized in addition to 4¢ ad valorem tax revenues for M&I firming if needed to reach firming goals and for Indian settlement obligations in the absence of general fund appropriations.

⁷ Total includes credits extinguished for replenishment purposes.

⁸ Credits accrued from water provided to Pinal AMA GSFs at full cost to the GSF operators.