

ARIZONA WATER BANKING AUTHORITY
ANNUAL PLAN OF OPERATION
2021



Thomas Buschatzke, Chair

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EXECUTIVE SUMMARY

The operation of the Arizona Water Banking Authority (AWBA) continues to change. Initially, the AWBA primarily stored excess Central Arizona Project (CAP) water to create long-term storage credits (LTSCs) to mitigate the effects of future Colorado River shortages on municipal and industrial (M&I) water users, provide groundwater management benefits, assist the State in the settlement of Indian water rights claims, and assist both California and Nevada through interstate banking arrangements. In time, what began as opportunities to beneficially utilize the State's full entitlement of Colorado River water grew in certain cases into obligations the AWBA must fulfill. With reductions in excess CAP water supplies, the AWBA is relying on additional opportunities to meet its responsibilities.

The AWBA has made considerable progress toward meeting its objectives, developing over 4.4 million acre-feet (MAF) of credits for future use, 3.8 MAF for Arizona uses and over 0.6 MAF for interstate purposes on behalf of Nevada. In recent years, and with the adoption of the Lower Basin Drought Contingency Plan, excess Central Arizona Project water supplies have been used to conserve water in Lake Mead leaving little to no water supplies available to the AWBA. Although the AWBA started 2020 with no excess CAP water available for storage, the AWBA ended the year storing over 60,000 acre-feet of unexpected supplies that became available during the year. In 2021, the Colorado River will again operate under a Tier Zero condition, requiring Arizona to conserve 192,000 acre-feet of water in Lake Mead. With no excess CAP supplies available for storage, the AWBA will concentrate on alternative methods for making progress on its firming goals.

The AWBA 2021 Plan of Operation proposes to develop an estimated 45,060 acre-feet of credits for a total cost of \$10.84 million. Long-term storage credit acquisitions are anticipated to occur in both the Phoenix and Tucson Active Management Areas (AMA). Potential credit purchases total 42,610 acre-feet and are estimated to cost \$10.14 million. Additionally, the AWBA plans to acquire approximately 2,450 acre-feet of Intentionally Created Surplus Firming Credits pursuant to its intergovernmental agreement with the Gila River Indian Community; a component of Arizona's plan for implementing the LBDCP. The AWBA plans to use approximately \$0.7 million in withdrawal fees collected in the Phoenix AMA for this purpose. These ICS Firming credits will be used to meet the AWBA's future firming obligations to the Community under the Arizona Water Settlements Act.

The 2021 Plan does not include the distribution of AWBA credits for firming purposes because 2021 will be a normal year for Colorado River operations. Additionally, the Southern Nevada Water Authority did not request the development of intentionally created unused apportionment. Therefore, there will be no credits recovered for interstate purposes.

INTRODUCTION

The AWBA was initially created in 1996 to store Arizona's unused Colorado River water entitlement in central and southern Arizona, and to develop long-term storage credits (LTSCs) for the following purposes: (1) firming existing water supplies for Colorado River and CAP M&I water users during Colorado River shortages or CAP service interruptions; (2) helping meet the water management objectives of the Groundwater Code; (3) meeting the State's obligations in the settlement of Indian water rights claims; and (4) assisting Nevada and California through interstate banking. The AWBA's enabling legislation has been amended over time allowing it to store other renewable supplies and to purchase credits in addition to storing excess CAP water supplies. The 2021 Plan does not include the storage of other renewable supplies but does include credit purchases.

Although the AWBA can utilize general fund appropriations to conduct its business, in recent years the only funds available to the AWBA have been groundwater withdrawal fees collected in the Active Management Areas (AMA) and *ad valorem* property taxes levied and collected by the Central Arizona Water Conservation District (CAWCD). The availability of these funds for AWBA use varies both on an annual basis and by the amounts collected within each AMA/County. There are also restrictions on how the AWBA may utilize these revenues to meet its firming responsibilities. The costs to store water for Nevada, the AWBA's only interstate partner at this time, are paid by Nevada at the time storage occurs.

The AWBA's storage of water is accomplished through the Recharge Program that is administered by the Arizona Department of Water Resources (ADWR). Through this program, the AWBA stores renewable water supplies in either underground storage facilities (USF) or groundwater savings facilities (GSF), also referred to as indirect storage. The Recharge Program mandates an accounting of the water stored and the corresponding LTSCs accrued. The credits will be distributed by the AWBA when they are needed in the future. The use of these credits is dependent on the source of funds utilized to develop the credits.

The AWBA is required by statute to approve an annual Plan of Operation (Plan) by January 1 of each year. Prior to approval of the final Plan, the AWBA is required to solicit public comment. Presentation of the draft Plan must be made at publicly noticed open meetings at which members of the public are permitted to provide comment. A draft of the Plan was presented at meetings of the Groundwater Users Advisory Councils (GUAC) for the Phoenix, Pinal and Tucson AMAs. The AWBA also makes the Plan available on its web page and accepts public comment in writing up to the time the final draft Plan is presented for approval.

The Plan is intended to govern the operations of the AWBA over the course of the entire calendar year. The AWBA recognizes that day-to-day adjustments in the normal operations of the CAP or the individual storage facilities may affect the actual monthly deliveries made on behalf of the AWBA. If the adjustments do not impact the overall annual delivery projections contained in the Plan, they will be addressed by staff and reported to the AWBA members on an as-needed basis.

REVIEW OF 2020 PLAN OF OPERATION

In 2020, Lake Mead operations were governed by normal or Intentionally Created Surplus (ICS) Conditions under the Interim Guidelines.¹ Additionally, the Lower Basin was governed by a Tier Zero condition under the Lower Basin Drought Contingency Plan (LBDCP), which requires Arizona to contribute 192 KAF in water savings to Lake Mead. Arizona is also expected to conserve 60,400 AF of water for system conservation and create 142,873 AF of ICS. As a result, Arizona’s adjusted apportionment of Colorado River water approved for use in 2020 is approximately 2.45 MAF (Figure 1).

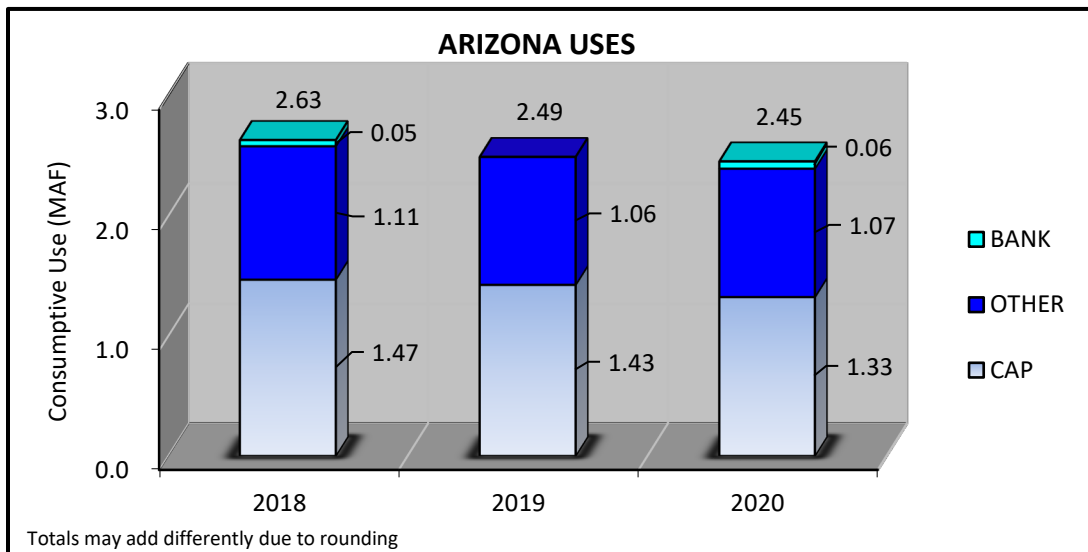


Figure 1. Recent Comparison of Colorado River Water Uses by Arizona

The approved use of Colorado River water in the Lower Basin is 6.77 MAF, which also reflects contributions to Lake Mead by California and Nevada through system conservation, the creation of ICS, and Nevada’s Tier Zero contribution of 8,000 AF (Figure 2).

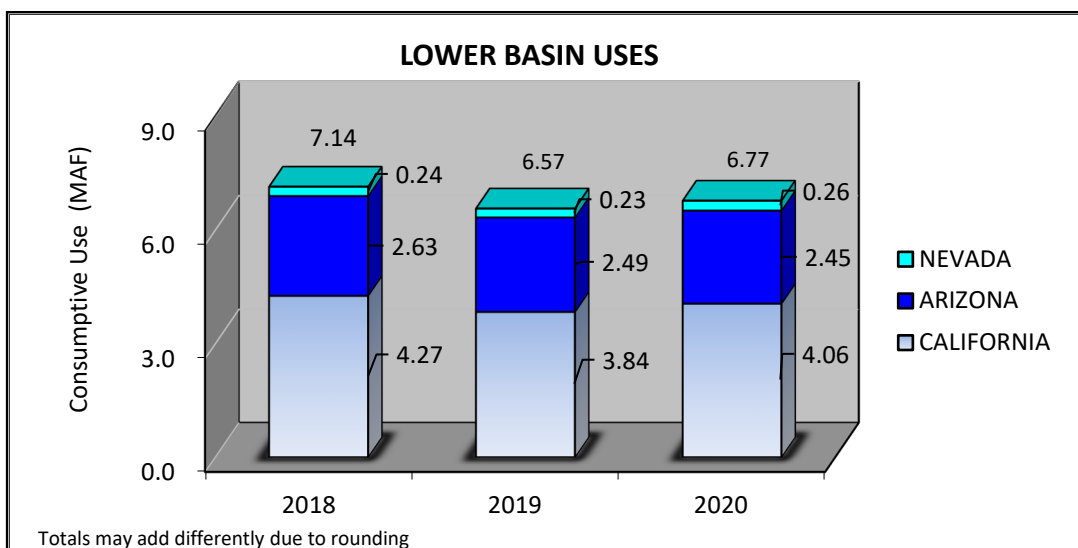


Figure 2. Recent Comparison of Lower Basin Uses of Colorado River Water

¹ Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead

The AWBA started 2020 with no excess CAP water available for storage as these supplies were largely used to meet the main portion of Arizona’s Tier Zero contribution. However, the AWBA amended its Annual Plan of Operation (APO) mid-year to include storage of just over 60 KAF from unexpected supplies in Lake Pleasant and water turned back from higher priority CAP water users during the year. As shown in **Table 1**, this water was stored in all three AMAs. The AWBA utilized all available storage capacity in the Phoenix and Tucson AMAs and funding in the Pinal AMA.

The amount of water delivered is always greater than the amount of long-term storage credits (LTSCs) subsequently accrued because physical losses (approx. 1 to 3 percent) and a 5 percent "cut to the aquifer" are subtracted from the delivery volumes. Final figures for credits accrued generally become available in the middle of the following year after review of the annual reports filed with the ADWR. These numbers are reported in the AWBA’s Annual Report.

Table 1. Recharge Facilities and Water Storage Deliveries for 2020

AMA	Facility	Type	AWBA Permit Capacity (AF)	Delivered* (AF)
PHOENIX AMA	Agua Fria	USF	100,000	0
	Hieroglyphic Mtn.	USF	35,000	0
	Superstition Mtns.	USF	25,000	0
	Tonopah Desert	USF	150,000	35,255
	New Magma IDD	GSF	54,000	1,000
	Queen Creek ID	GSF	28,000	0
	Tonopah ID	GSF	15,000	400
	Phoenix AMA Subtotal			
PINAL AMA	Central Arizona IDD	GSF	110,000	4,500
	Hohokam IDD	GSF	55,000	3,000
	Maricopa-Stanfield IDD	GSF	120,000	4,500
	Pinal AMA Subtotal			
TUCSON AMA	Avra Valley	USF	11,000	2,000
	Lower Santa Cruz	USF	50,000	0
	Pima Mine Road	USF	30,000	4,300
	SAVSARP	USF	60,000	5,400
	Cortaro-Marana ID	GSF	20,000	0
	BKW Farms	GSF	14,316	0
	Kai Farms-Red Rock	GSF	11,231	0
	Tucson AMA Subtotal			
TOTAL RECHARGE DELIVERIES				60,355

*November and December deliveries estimated

In addition to water storage, the AWBA made progress on achieving its firming goals through other means of credit development.

Long-term Storage Credit Purchases

In 2020, the AWBA purchased a total of 27,080 AF of LTSCs for a total cost just over \$6.48 million. This amount includes 12,580 AF of LTSCs purchased in the Phoenix AMA using just under \$3 million in Maricopa County water storage tax funds, 14,500 AF of LTSCs purchased in the Tucson AMA using \$3 million in Pima County water storage tax funds and \$486,090 in Tucson AMA withdrawal fees. **Table 2** identifies the LTSCs purchased by location.

Table 2. LTSC Purchases in 2020 by Location

Recharge Facility	Purchased (AF)
Phoenix AMA	
Hieroglyphic Mtn. USF	9,174.76
Roosevelt Water Conservation District GSF	2,835.24
Salt River Project GSF	570.00
Tucson AMA	
Pima Mine Road USF	14,500.00

Intentionally Created Surplus Firming Credits

To assist in facilitating the offset goals of Arizona’s Implementation Plan for the LBDCP (i.e. replacement of ICS deliveries contemplated to occur before December 31, 2026), the Gila River Indian Community proposed creating at least 200,000 acre-feet of ICS that will be left in Lake Mead for the duration of the Interim Period. The AWBA entered into an intergovernmental agreement (IGA) with the Community to pay for the creation of 50,000 acre-feet of that ICS for purposes of satisfying a future firming obligation to the Community.² Due to a one-time 10 percent reduction for system and evaporation losses, the 50,000 acre-feet of “Firming ICS” created will result in 45,000 acre-feet of ICS credits. These ICS credits are referred to as ICS Firming Credits under the IGA and may be purchased in installments consistent with the annual rate schedule identified under the IGA.

In 2020, the AWBA paid for 7,488 acre-feet of Firming ICS, which resulted in 6,390 acre-feet of ICS Firming credits. The AWBA used withdrawal fee monies collected in the Phoenix and Pinal AMAs for this purpose. The 2020 rate for payment of Firming ICS was \$247.20 per acre-foot. Cumulative ICS Firming credits acquired since 2019 total 19,584 acre-feet. ICS Firming credits will be used to meet firming obligations that occur after 2026.

Table 3 provides an estimate of funds expended for water storage and credit purchases by AMA, including all firming credits developed with the GRIC.

² IGA between the AWBA and the Gila River Indian Community for the Development of ICS Firming Credits, executed May 20, 2019.

Table 3. AWBA Cumulative Expenditures and Credits Developed 1997-2020¹

Funding Source	Phoenix AMA		Pinal AMA		Tucson AMA		Total	
	Funds Expended (\$M)	Credits Accrued (AF)	Funds Expended (\$M)	Credits Accrued (AF)	Funds Expended (\$M)	Credits Accrued (AF)	Funds Expended (\$M)	Credits Accrued (AF)
Withdrawal Fees	\$ 34.2	395,820	\$ 23.8	442,018	\$ 10.8	112,765	\$ 68.8	950,603
Ad valorem Tax	\$ 142.6	1,565,604	\$ 16.6	234,731	\$ 64.8	507,826	\$ 224.0	2,308,160
General Fund²	\$ 1.5	42,316	\$ 6.4	306,968	\$ 3.2	54,546	\$ 11.1	403,830
Indian Appropriation	\$ -	-	\$ -	-	\$ 2.6	28,481	\$ 2.6	28,481
Shortage Reparations³	\$ 1.1	20,642	\$ 1.7	60,507	\$ 5.2	28,340	\$ 8.0	109,489
Pinal Redirect⁴		-	\$ -	14,125	\$ -	-	\$ -	14,125
Subtotal	\$ 179.5	2,024,381	\$ 48.4	1,058,349	\$ 86.6	731,958	\$ 314.5	3,814,688
Interstate – Nevada⁵	\$ 13.7	60,021	\$ 71.5	440,241	\$ 27.1	113,584	\$ 112.1	613,846
Total	\$ 193.0	2,084,402	\$ 119.9	1,498,590	\$ 113.6	845,542	\$ 426.6	4,428,534

¹ Actuals through 2019, 2020 estimated. Totals may add differently due to rounding.

² A total of 256,174 acre-feet of credits reserved for the Mohave County Water Authority pursuant to the Amended Agreement to Firm Future Supplies

³ Monies made available to the AWBA from the Southern Nevada Water Authority to assist Arizona in offsetting impacts from shortages pursuant to the 2008 Arizona-Nevada Shortage-Sharing Agreement.

⁴ Credits accrued from water scheduled for the Tucson AMA and redirected to the Pinal AMA for storage at GSFs. Facility operators paid 100% of the water delivery rate.

⁵ Includes 50,000 acre-feet of credits transferred from CAWCD pursuant to Amended Agreement for Interstate Banking.

2021 PLAN OF OPERATION

When developing its Plan of Operation (Plan), the AWBA evaluates three critical factors for accruing LTSCs: (1) the amount of water and CAP canal capacity available to the AWBA for delivery, (2) the storage capacity available for use by the AWBA at the various recharge facilities, and (3) the funds available to store water or purchase existing credits. The AWBA also assesses the need to distribute credits whether for firming purposes or to make water available for interstate purposes. In addition to these critical factors, the AWBA takes into consideration comments solicited from the public as well as recommendations made by the Groundwater Users Advisory Councils (GUAC) of the three AMAs.

According to the Bureau of Reclamation's August 2020 24-Month Study, which sets the annual operations for Lake Mead and Lake Powell in 2021, Lake Mead will operate in the Normal or ICS Surplus Condition. In addition, Lake Mead is projected to begin the year between 1,075 feet and 1,090 feet, a Tier Zero condition under the LBDCP. Therefore, as in 2020, Arizona will again contribute 192,000 acre-feet in water savings to Lake Mead in 2021. These contributions will largely come from excess CAP water supplies. As a result, there will be no water available to CAWCD's Statutory Firming Pool that is utilized by the AWBA. Consequently, the 2021 Plan focuses on other methods for developing credits. The following tables, which are a component of the AWBA's Annual Plan of Operation, represent the Preliminary Plan for 2021.

Available Funds

The AWBA will have an estimated \$837,800 in withdrawal fee revenues available for use in calendar year 2021: \$693,900 for the Phoenix AMA and \$143,900 for the Tucson AMA. Total available revenues take into consideration over \$1.2 million in funds reallocated by the legislature for fiscal year 2021 for use by ADWR. Additionally, as a component of DCP, withdrawal fees levied in the Pinal AMA during calendar years through 2026 will not be made available to the AWBA but will be used by ADWR to support groundwater and irrigation efficiency projects in the Pinal AMA.³

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. The AWBA may also request that the CAWCD Board reserve these funds for use by the AWBA to purchase LTSCs. Monies used for credit purchases must be deposited to the Arizona Water Banking Fund. The AWBA requested that \$4 million in Maricopa County funds and \$6 million in Pima County funds be reserved for LTSCs purchases in 2021. This request was approved by the CAWCD Board in June 2020 as part of the Board's resolution on use of the water storage tax for the 2021 tax year.

³ A.R.S. § 45-611(C)(3), § 45-613(D) and § 45-615.01

Pricing

Although the 2021 Plan does not include storage of excess CAP water, the AWBA utilizes CAP water rates as factors in pricing credit purchases. In June of 2020, the CAWCD Board approved its final water delivery rate schedule for calendar years 2020/2021. The AWBA 2020 rate for recharge is equivalent to the rate for excess M&I water at \$213 per acre-foot, an increase of \$2 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 increases 3 percent each year.

Table 4 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 4. 2021 Water and Facility Rates

Recharge Rates	Cost per Acre-foot
CAWCD delivery rate for AWBA	\$213.00
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)	\$19.20

¹ This rate is paid directly to CAP by GSF operators, effectively reducing the AWBA's water delivery rate for in lieu water.

Purchase of Long-Term Storage Credits

The AWBA estimates purchasing approximately 42,610 AF of LTSCs in 2021. On a request from the AWBA, the CAWCD Board reserved \$10 million in water storage tax funds for this purpose. The AWBA plans to purchase an estimated 42,020 AF of LTSCs using these funds: \$4 million using Maricopa County funds (16,640 AF) and \$6 million using Pima County funds (25,380 AF). Additionally, the AWBA proposes to purchase an estimated 590 AF of LTSCs using withdrawal fees collected in the Tucson AMA. In addition to cost, consideration will also be given to the location of the credits that are available for sale.

Assignment of Credits by the Tohono O’odham Nation

Pursuant to A.R.S. § 45-841.01, the Tohono O’odham Nation (Nation) must offer the AWBA ten percent of any LTSCs determined accruable by ADWR from storage at the Mission Mine Complex at a price per acre-foot that is equal to the AWBA’s delivery and storage costs at the time of sale. If the Nation offers the AWBA credits in 2021, the AWBA will evaluate the offer to determine if it is reasonable to purchase those credits. There is a restriction that the credits may not be recovered within five miles of the exterior boundary of the reservation.

Arizona Water Settlements Act Requirements

CAP supplies will not be shorted in 2021 and no long-term system outages are anticipated that would reduce deliveries to CAP customers. Therefore, the AWBA has no obligation to firm Non-Indian Agricultural (NIA) Priority CAP water supplies in 2021.

The Arizona Water Settlements Act (AWSA) recognizes three categories where the state has firming responsibilities. The first two obligations relate to firming of NIA Priority CAP water for the GRIC and other Arizona Indian tribes in times of shortage for a 100-year period; the third obligation pertains to assisting the Secretary of the Interior (Secretary) in carrying out the obligations of the Southern Arizona Water Rights Settlement Act (SAWRSA).

1. GRIC - The AWBA must ensure that up to 15,000 AFY of NIA Priority CAP water be made available to the GRIC during shortages. The AWBA has dedicated 168,974 AF of credits for this purpose to date pursuant to its firming agreements with the Community.⁴ This amount includes 105,390 AF of withdrawal fee credits accrued from water stored at the Gila River Indian Irrigation and Drainage District GSF, 44,000 AF of “Firming credits” accrued on Community lands and 19,584 AF of “ICS Firming credits” accrued in Lake Mead. For 2021, the AWBA estimates accruing an additional 2,450 AF of ICS Firming credits,⁵ bringing the total volume of dedicated credits to 171,424 AF or 49 percent of the AWBA’s estimated firming goal of 350,000 AF. If needed, existing withdrawal fee credits could also be used for this purpose.
2. Other Indian Tribes - The AWBA is also required to firm up to 8,724 AFY of CAP NIA priority water for other Indian Settlements. The White Mountain Apache Tribe has entered into an agreement that will require the AWBA to firm 3,750 AFY of the 8,724 AF once the agreement becomes enforceable. The AWBA has not dedicated credits specifically to this obligation. However, as with the AWBA’s obligation to the GRIC, existing withdrawal fee credits could be made available for this purpose.
3. Federal Assistance - The AWBA has completed the State’s obligation to contribute \$3 million in cash or in-kind services to assist the Secretary in meeting the Federal obligation to the Tohono O’odham Nation. This obligation was met by accruing an

⁴ Intergovernmental Agreement (IGA) between the AWBA and the GRIC executed June 16, 2015; and IGA between the AWBA and the GRIC for the Development of ICS Firming Credits executed May 20, 2019.

⁵ Purchase of 2,722 AF of ICS created by GRIC at established 2020 rate of \$254.40/AF and 10% loss factor.

equivalent amount of credits that will be distributed to the Secretary during shortages.

Southside Replenishment Bank

In addition to the firming requirements of the AWSA, the AWBA was required to deliver 15,000 AF of water to the GRIC to establish the Southside Replenishment Bank. This obligation was satisfied in 2015. The Replenishment Bank can be used to fulfill obligations created under the AWSA for protection of the Reservation from off-reservation groundwater pumping.

In October 2020, ADWR informed the AWBA that there was no replenishment obligation for the 2019 reporting year. Pursuant to A.R.S. § 45-2623(A), if any replenishment obligation exists, the AWBA must satisfy the replenishment obligation by June 1 of the third calendar year following the year the obligation was created.

Interstate Water Banking

The AWBA, Southern Nevada Water Authority (SNWA), and Colorado River Commission of Nevada (CRCN) executed a Third Amended and Restated Agreement for Interstate Banking on May 20, 2013. The amended agreement allows for storage to be determined annually by the parties and may include Nevada's unused apportionment. Storage is paid for by SNWA on a pay-as-you-go basis. There is no interstate storage planned for 2021, and SNWA has not requested the recovery of LTSCs for the development of intentionally created unused apportionment.

Accounting

The AWBA's enabling legislation required the development of an accounting system that allows the tracking of all LTSCs accrued by the AWBA and the funding sources from which they were developed. ADWR maintains the accounting of the LTSCs, the AWBA accounts for the expenditure of the funds utilized from the Water Banking Fund, and CAWCD accounts for expenditures of the water storage tax monies and reports that expenditure to the AWBA. The AWBA also maintains an accounting of non-storage firming credits, replenishment activities, and the funds used for these purposes.

The estimated cost of the 2021 Plan is \$10.84 million and is anticipated to develop 45,060 AF of credits. **Table 5** provides 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 2021 Plan.

Table 5. Funding for 2021 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	\$693,900	-	\$693,900	-	0	2,450
Pinal AMA	\$0	-	\$0	-	0	0
Tucson AMA	\$143,900	-	\$143,900	-	0	590
Water Storage Tax²						
Phoenix AMA	\$0	\$4,000,000	\$0	\$4,000,000	0	16,640
Pinal AMA	\$0	\$0	\$0	\$0	0	0
Tucson AMA	\$0	\$6,000,000	\$0	\$6,000,000	0	25,380
	Total Funds Available		Total Funds Expended		Total Credits	
	\$10,837,800		\$10,837,800		0	45,060

¹ Phoenix AMA funds are used to develop ICS Firming credits pursuant to IGA with the Community. Credits includes a 10% loss factor.

² Funds reserved by the CAWCD Board of Directors for LTSC purchases.

Distribution or Extinguishment of AWBA Credits

Recovery of AWBA LTSCs for firming or for the development of intentionally created unused apportionment is not anticipated in 2021. Therefore, the 2021 Plan does not include the distribution or extinguishment of AWBA credits for firming purposes.

In preparation for the distribution and recovery of AWBA credits in future years, staff representatives for ADWR, CAWCD and the AWBA, continue to make progress on the steps necessary for an implementable recovery plan. These efforts are being conducted in cooperation with a Recovery Planning Advisory Group (RPAG) that was convened in January of 2018. Updates to the recovery plan released in 2014 are anticipated to be completed in early 2021 and are envisioned to include a more direct role by CAP subcontractors in the recovery of AWBA LTSCs.

Achievement of Goals and Obligations

Table 6 identifies the progress expected to be made on the AWBA’s goals and obligations through 2021. Proposed purchases of ICS Firming credits and LTSCs are included in the totals.

Table 6. Projected Percent of Goals and Obligations Achieved through 2021

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		1,582,244	101%
Pinal AMA		243,000 AF		234,731	97%
Tucson AMA		864,000 AF		533,206	62%
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		171,424	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 Tucson W/Fees		\$3,000,000	34,102	100%
			\$2,338,171	28,481	
	\$630,490		5,621		
	Cost of Services ⁵		\$31,339	n/a	
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				107,734	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 and 2021.

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 19,584 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 water storage 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.

PUBLIC REVIEW AND COMMENT

AWBA staff presented the 2021 Plan to the public in conjunction with the Groundwater Users Advisory Councils (GUAC) meetings for the Phoenix, Pinal and Tucson AMAs as required by statute. The Plan was also distributed to the public for review and comment.

The GUACs in all three AMAs supported the Plan as presented and commended the accomplishments of the AWBA. In the Phoenix AMA there were questions on what the term “firming” means. Staff clarified that LTSCs accrued by the AWBA can be recovered to mitigate reductions in Colorado River supplies during times of shortage. By providing this back-up supply, the shorted supply is firmed-up.