

Arizona Water Banking Authority

Memo

To: Commission Members

From: Rebecca Bernat

Date: March 21, 2023

Re: Agenda Item No. 6 - Firming Proposal for Gila River Indian Community for Potential Shortage Year 2024

Under the Arizona Water Settlements Act of 2004 (AWSA), the AWBA, as agent for the State, has a requirement to firm up to 15,000 acre-feet per year (through 2107) of CAP Non-Indian Agricultural (NIA) Priority water for the Gila River Indian Community (Community) when supplies are insufficient to meet demand. The AWBA and the Community entered into an Intergovernmental Agreement (IGA) on June 16, 2015 to establish an annual process to ensure the State's obligations to the Community are satisfied when shortages occur. The IGA outlines the steps that must be taken by each party to develop a firming plan as the potential for shortage approaches. Exhibit B to the IGA identifies agreed-upon firming methods that may be used to develop the firming plan.

Due to Colorado River shortage declarations by the Secretary of the Interior in calendar years (CY) 2022 and 2023, the AWBA had firming requirements in both years for the Community. The Community and the AWBA agreed to utilize Firming Credits, as described in number 4 of Exhibit B to the IGA, to satisfy these firming obligations. The amounts of Firming Credits utilized in CY 2022 and 2023 were determined by the NIA priority supplies available to the Community for Tier 1 and Tier 2a shortage conditions, respectively.

Colorado River shortages are anticipated to continue for CY 2024. The U.S. Bureau of Reclamation's (Reclamation) Colorado River System 5-Year Probabilistic Projections for January 2023 indicated a 93 percent chance of any shortage condition in the Lower Basin in 2024, which included a 17 percent chance of a Tier 1 shortage condition, a 17 percent chance of a Tier 2a shortage condition, and a 60 percent chance of a Tier 2b shortage condition.

Based on Central Arizona Water Conservation District's preliminary NIA Priority supply estimates for CY 2024, the AWBA's firming obligation would be 9,446 acre-feet under a Tier 1 shortage condition, 15,000 acre-feet under a Tier 2a shortage condition, and 14,017 acre-feet under a Tier 2b shortage condition.

Staff from the Community and the AWBA propose that Firming Credits continue to be used to satisfy a firming obligation in CY 2024. Given the uncertainty of Colorado River operations in 2024, a Firming Proposal has been developed for a Tier 1 shortage condition ([Table 1](#)), a Tier 2a shortage condition ([Table 2](#)) and a Tier 2b shortage condition ([Table 3](#)). Each identifies the years in which the Firming Credits were developed, the annual costs paid by the AWBA to develop the credits, the credits estimated to be used and the remaining balance. The Firming Proposal will be updated as additional information becomes available and 2024 water orders are finalized.

Table 1. Firming Plan for Gila River Indian Community for Shortage Year 2024 - Tier 1 Shortage Condition

Year	Firming Credits Developed (AF)			Firming Credits Utilized (AF)			Remaining Balance (AF)
	Firming Credits Developed	Cost/AF	Total Cost	Through CY 2022	CY 2023	CY 2024	Through CY 2024
2015	16,000	\$157	\$2,512,000	6,429	9,571		0
2016	12,000	\$161	\$1,932,000		5,004	6,996	0
2017	7,000	\$164	\$1,148,000			2,450	4,550
2018	9,000	\$160	\$1,440,000				9,000
TOTAL	44,000		\$7,032,000	6,429	14,575	9,446	13,550

Table 2. Firming Plan for Gila River Indian Community for Shortage Year 2024 - Tier 2a Shortage Condition

Year	Firming Credits Developed (AF)			Firming Credits Utilized (AF)			Remaining Balance (AF)
	Firming Credits Developed	Cost/AF	Total Cost	Through CY 2022	CY 2023	CY 2024	Through CY 2024
2015	16,000	\$157	\$2,512,000	6,429	9,571		0
2016	12,000	\$161	\$1,932,000		5,004	6,996	0
2017	7,000	\$164	\$1,148,000			7,000	0
2018	9,000	\$160	\$1,440,000			1,004	7,996
TOTAL	44,000		\$7,032,000	6,429	14,575	15,000	7,996

Table 3. Firming Plan for Gila River Indian Community for Shortage Year 2024 - Tier 2b Shortage Condition

	Firming Credits Developed (AF)			Firming Credits Utilized (AF)			Remaining Balance (AF)
Year	Firming Credits Developed	Cost/AF	Total Cost	Through CY 2022	CY 2023	CY 2024	Through CY 2024
2015	16,000	\$157	\$2,512,000	6,429	9,571		0
2016	12,000	\$161	\$1,932,000		5,004	6,996	0
2017	7,000	\$164	\$1,148,000			7,000	0
2018	9,000	\$160	\$1,440,000			21	8,979
TOTAL	44,000		\$7,032,000	6,429	14,575	14,017	8,979