

Arizona Water Banking Authority

Memo

To: Commission Members

From: Virginia O'Connell

Date: March 21, 2022

Re: Agenda Item No. 4 - Firming Proposal for Gila River Indian Community for Potential Shortage Year 2023

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.

With the first-ever Colorado River shortage declaration by the Secretary of the Interior for calendar year (CY) 2022, the AWBA also had its first firming requirement for the Community. Based on the NIA priority supplies available to the Community in 2022 for a Tier 1 shortage condition, and the firming calculations identified in Section 2 of the IGA, the AWBA's firming requirement was 6,429 acre-feet. The Community and the AWBA agreed to utilize Firming Credits, as described in number 4 of Exhibit B to the IGA, to satisfy this firming obligation.

Colorado River shortages are anticipated to continue for CY 2023. The U.S. Bureau of Reclamation's (Reclamation) Colorado River System 5-Year Probabilistic Projections for February 2022 indicated a 100 percent chance of any shortage condition in the Lower Basin in 2023, which included an 87 percent chance of a Tier 1 shortage condition and a 13 percent chance of a Tier 2a shortage condition. However, Reclamation's 2022 24-Month Study for March shows a Most Probable end of year Lake Mead elevation of 1049.37 feet, which would result in a Tier 2a shortage condition. Based on Central Arizona Water Conservation District's current NIA Priority supply estimates for CY 2023, the AWBA's firming obligation

would be 9,463 acre-feet under a Tier 1 shortage condition and 14, 898 acre-feet under a Tier 2a shortage condition.

Staff from the Community and the AWBA propose that Firming Credits continue to be used to satisfy a firming obligation in CY 2023. Given the uncertainty of Colorado River operations in 2023, a Firming Proposal has been developed for both a Tier 1 shortage condition (**Table 1**) and a Tier 2a shortage condition (**Table 2**). 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 2023 water orders are finalized.

Table 1. Firming Proposal for Gila River Indian Community for Shortage Year 2023 - Tier 1

Firming Credits Developed (AF)				Firming Credits Utilized (AF)		Remaining Balance (AF)
Year	Firming Credits Developed	Cost/AF	Total Cost	Through CY 2022	CY 2023	Through CY 2023
2015	16,000	\$ 157	\$ 2,512,000	6,429	9,463	108
2016	12,000	\$ 161	\$ 1,932,000			12,000
2017	7,000	\$ 164	\$ 1,148,000			7,000
2018	9,000	\$ 160	\$ 1,440,000			9,000
TOTAL	44,000		\$ 7,032,000	6,429	9,463	28,108

Table 2. Firming Proposal for Gila River Indian Community for Shortage Year 2023 - Tier 2a

Firming Credits Developed (AF)				Firming Credits Utilized (AF)		Remaining Balance (AF)
Year	Firming Credits Developed	Cost/AF	Total Cost	Through CY 2022	CY 2023	Through CY 2023
2015	16,000	\$ 157	\$ 2,512,000	6,429	9,571	-
2016	12,000	\$ 161	\$ 1,932,000		5,327	6,673
2017	7,000	\$ 164	\$ 1,148,000			7,000
2018	9,000	\$ 160	\$ 1,440,000			9,000
TOTAL	44,000		\$ 7,032,000	6,429	14,898	22,673