## Firming Proposal for Gila River Indian Community for Potential Shortage Year 2022

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.

The U.S. Bureau of Reclamation's (Reclamation) Colorado River System 5-Year Projected Future Conditions table for August 2020, using full hydrology assumptions, indicated a 23 percent chance for a Tier 1 shortage in calendar year 2022. These projections reflect a drier trend than previously anticipated under the AWBA's Ten-Year Plan (2021-2030), prompting the parties to begin discussions of a preliminary firming proposal. Since then, based on Reclamation's January 2021 5-year projections, the probability for a Tier 1 shortage in 2022 has increased to 60 percent, elevating the need to prepare for shortage.

In accordance with the IGA, the firming proposal must be developed using the firming calculations identified in Section 2 of the IGA. The volume that is firmed is affected by the volume of contracted CAP NIA priority water supplies and the total volume of water that is available to the pool in a shortage year. We anticipate that contracts will be issued for 46,629 acre-feet of previously unallocated NIA priority water in time for deliveries during calendar year 2022, increasing the pool from 201,103 acre-feet to 247,732 acre-feet. This increase in contracted users will affect the proportional volume of water that is available to the Community in a shortage year and respectively, the volume of water that must be firmed by the AWBA. Therefore, the firming proposal includes estimated firming volumes with and without the reallocation of NIA water supplies. These estimates indicate that the firming volume could range between 7,538 acre-feet and 8,943 acre-feet. However, these are early estimates based on previous demands and are likely to change based on actual water orders placed in October.

Staff from the Community and the AWBA propose that Firming Credits be used to satisfy a firming obligation in 2022 as described in number 4 of Exhibit B to the IGA. The Firming Proposal identified below identifies the years in which the Firming Credits were developed as well as the annual cost to develop the credits. It also shows estimates of credits used depending on the status of the NIA priority water reallocation and the remaining balance. These volumes will be updated as additional information becomes available and 2022 water orders are finalized.

Firming Proposal for the Gila River Indian Community for Calendar Year 2022

| Firming Credits Developed (AF) |  |  |  | Firming Credits Used (AF) ${ }^{\mathbf{1}}$ |  | Remaining Balance (AF) |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | Firming <br> Credits <br> Developed | Cost/AF | Total Cost | Without NIA <br> Reallocation | With NIA <br> Reallocation | Without NIA <br> Reallocation | With NIA <br> Reallocation |
| 2015 | 16,000 | $\$ 157$ | $\$ 1,512,000$ | 7,538 | 8,943 | 8,462 | 7,057 |
| 2016 | 12,000 | $\$ 161$ | $\$ 1,932,000$ |  |  | 12,000 | 12,000 |
| 2017 | 7,000 | $\$ 164$ | $\$ 1,148,000$ |  |  |  | 7,000 |

${ }^{1}$ Estimates for CAP water availability in 2022 provided by CAWCD.

