

# Section 1: Background, Purpose and Scope

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## Background

The Arizona Water Banking Authority (AWBA) has stored more than 4 million acre-feet of Central Arizona Project water (CAP water) underground since its inception in 1996. In the event of a declared shortage on the Colorado River, the AWBA's long-term storage credits (LTSCs) will be recovered to provide firming for CAP M&I subcontractors and Fourth Priority (P-4) on-River M&I users. AWBA LTSCs will also be recovered to meet Arizona's obligations pursuant to Indian water rights settlements and to meet interstate water banking obligations with Nevada. The Arizona Department of Water Resources (ADWR), the AWBA, and the Central Arizona Water Conservation District (hereafter referred to as CAP) have a long history of interagency coordination to plan for the recovery of AWBA LTSCs. In 2014, the three agencies published the *Recovery of Water Stored by the Arizona Water Banking Authority: A Joint Plan by AWBA, ADWR and CAP* (2014 Plan). Building on past planning efforts and extensive collaboration among the agencies and stakeholders, the 2014 Plan provided a roadmap for the recovery of AWBA LTSCs.

The 2014 Plan identified future activities and commitments by all three agencies, AWBA, ADWR and CAP. CAP committed to pursue short and long-term agreements that secure recovery capacity and perform technical studies for future recovery projects. The AWBA aimed to seek opportunities to recharge in locations with future recovery in mind. With diminishing excess CAP supplies, AWBA pursued alternative options for achieving its firming goals, including opportunities that reduce reliance on recovery. All three agencies committed to continued coordination, and monitoring of factors influencing Colorado River supplies, demands and shortage impacts. Updates to the 2014 Plan were also anticipated.

Since the release of the 2014 Plan, stakeholders have continued to express a desire for additional recovery planning and implementation activities. The increasing likelihood of shortages on the Colorado River and the additional reductions to Arizona required under the Lower Basin Drought Contingency Plan (LBDCP) added to the importance of additional planning. In response, ADWR, AWBA, and CAP identified the next steps for more in-depth recovery planning.

In January 2018, ADWR, along with AWBA and CAP, convened the Recovery Planning Advisory Group (RPAG) with a vision to provide greater planning clarity and to ensure stakeholder perspectives are fully considered as recovery planning and implementation concepts are updated and refined. It was acknowledged that the input from RPAG is critical for the success of the recovery program. RPAG is a 14-member advisory group comprised of the following representatives from agricultural, municipal, tribal, utility and on-river entities:

*Brian Betcher – Maricopa-Stanfield IDD*  
*Brian Draper – City of Mesa*  
*Cynthia Campbell – City of Phoenix*  
*Dave Roberts – Salt River Project*  
*Dee Korich – Tucson Water*  
*Mike Boule/Fred Stevens – City of Surprise*  
*Gene Franzoy – Gila River Indian Community*  
*John Kmiec – Marana Water*

*Maureen George/Jamie Kelley – Mohave County Water Authority*  
*Robert Lotts – Arizona Public Service*  
*Troy Day – EPCOR*  
*Wally Wilson – Metro Water*  
*Warren Tenney – Arizona Municipal Water Users Association*  
*William Garfield – Arizona Water Company*

In addition to the above representatives, there were alternates that also participated. Meetings were publicized and members of the public had opportunities to provide input.

RPAG met ten times during 2018 and 2019 (see Appendix A – RPAG Meeting Summary). Numerous topics were discussed and evaluated including updated modeling, shortage impacts, recovery methods, credit distribution and firming proposals, credit sustainability, and a near-term firming exercise (see Appendix B – Firming Exercise Form). Throughout the process, RPAG members were asked to apprise and seek input from those they represent.

RPAG members and others were central in furthering recovery planning efforts and their contributions and feedback are reflected in this Update.

## Purpose and Scope

This Update is a collaborative effort among the AWBA, ADWR, CAP and stakeholders. It aims to incorporate recovery planning accomplishments that have occurred since the 2014 Plan, while also providing current information on anticipated recovery needs and identifying any changes in approach from what was previously envisioned. The Update is intended to:

- Clarify roles and interactions of the primary institutions involved in the recovery of AWBA LTSCs
- Clarify participation of beneficiaries in recovery
- Establish planning-level certainty around key recovery concepts
- Analyze and project the potential timing and magnitude of recovery under a range of future supply and demand conditions
- Identify potential recovery partners and opportunities to meet recovery needs
- Identify key recovery decision points and actions to be taken within the planning horizon
- Provide the framework for continued cooperation between CAP, ADWR, AWBA, CAP customers and stakeholders

## Appendix A – Summary of RPAG Meetings

Meeting	Date	Summary
1	1/17/18	Meeting 1 included a review of RPAG’s objectives, process, key questions and the 2014 Joint Recovery Plan. RPAG’s objective was to provide input into the next phase of recovery planning and implementation. The key recovery questions included: When? How much? Cost? How?
2	3/17/18	Meeting 2 was a review and discussion on recovery modeling using direct natural flow hydrology and updated projections with a review of the results on recovery timing, frequency and magnitude.
2a	5/10/18	Meeting 2a was a special meeting to review modeling using stress test hydrology. A review of the modeling results shows the probability of recovery increasing, but not the recovery volumes.
3	5/22/18	Meeting 3 was an update of AWBA LTSCs accrual by AMA and funding source. The meeting included a review of the recovery methods identified in the Plan – credit exchange, indirect and direct. There was a request for RPAG stakeholders to submit proposals on credit distribution and firming methods.
4	7/17/18	Meeting 4 had proposal presentations by RPAG stakeholders for credit distribution and firming methods. The proposals were organized into a matrix for comparison.
5	8/28/18	Meeting 5 was a review of the matrix and matrix revisions to condense similar proposals. There was discussion and agreement to complete a near term firming exercise by RPAG stakeholders.
6	9/24/18	Meeting 6 included presentations on the firming exercise. The exercise highlighted the interest by M&I subcontractors in independent recovery to satisfy near-term firming. This would likely delay the need for CAP direct recovery in the near-term, reducing costs (see Appendix B for the Firming Exercise Form).
7	10/24/18	Meeting 7 focused on an AWBA credit sustainability analysis. Larger entitlement holders have a greater impact on credit longevity. A recovery methods schematic was introduced showing CAP recovery or independent recovery options.
8	2/19/19	Meeting 8 was a review of the recovery methods schematic. Additional information was provided on recovery implementation agreements.
9	4/16/19	Meeting 9 was a review of recovery method implementation and a discussion on the Update to the 2014 Plan.
10	9/10/19	Meeting 10 was a review and discussion of the table of contents for the Update to the 2014 Plan.

# Appendix B – Firming Exercise Form (M&I)

The form below was completed by RPAG members to show how they would handle a near-term shortage. This firming exercise highlighted RPAG members near-term implementation plan and helped identify any recovery implementation issues. Completion of the exercised showed RPAG members largely would rely on independent recovery to address a near-term shortage.

<p><b>2022 M&amp;I Firming Exercise:</b> Generally based on modeling results presented to the RPAG, this exercise assumes an estimated 546,300 acre-feet of M&amp;I pool orders in 2022 and an estimated 35,181 acre-feet of AWBA M&amp;I firming (6.4%). To prepare and submit the form, please follow these guidelines:</p> <ol style="list-style-type: none"> <li>1. Fill out one form for each subcontractor. Answer for yourself only.</li> <li>2. Indicate projected M&amp;I order for 2022 broken down by the four delivery categories listed below.</li> <li>3. Calculate requested reduction at 7% (rounded up from 6.4%).</li> <li>4. Answer the three questions.</li> <li>5. Return completed form to Vineetha Kartha at <a href="mailto:vkartha@azwater.gov">vkartha@azwater.gov</a> by Friday, SEPTEMBER 14, 2018.</li> </ol> <p>Questions about what to do? Contact Terri Sue Rossi at <a href="mailto:tsrossi@azwater.gov">tsrossi@azwater.gov</a>.</p>		
Subcontractor Name:		Projected normal M&I Order in 2022 (AF):
AMA:	Delivery to WTP (AF):	Direct, non-potable: (AF):
Subcontract Entitlement (AF):	Delivery to USF (AF):	Delivery to GSF (AF):
M&I Cut (2022 M&I Order x 7%):		
What actions will you take to address the 7% cut to your M&I order specifically?		What entities are you relying on for help, if any, and how are they helping you? What entities might be affected by your actions?
What issues with your approach (operational, legal, or financial) can you identify today that will need further regulatory analysis for potential change?		