

Information Brief

Meeting Date: March 21, 2012

Subject: Reducing the Amount of AWBA Long-term Storage Credits Distributed for M&I Firming during Shortages to Extend Credits for Future Years

Issue: Should The AWBA reduce the amount of credits it will distribute in any year to extend its long-term storage credits for future years.

Description: The AWBA is required to distribute long-term storage credits accrued with four-cent tax monies to CAWCD to the extent necessary to meet the demands of the M&I subcontractors and it may distribute long-term storage credits accrued with the withdrawal fees under the same circumstances. The statute does not define what “to the extent necessary” means so it is up to the AWBA to define that term.

Background: When the AWBA was first established in 1996 there was a question about how many credits would be needed for future M&I subcontract firming. At that time, the AWBA determined for various reasons, mainly cost and water availability concerns, that it would limit its firming goal for CAP M&I subcontracts to 20% of the CAP M&I subcontract entitlements. Should the AWBA reduce the amount of the long-term storage credits it will distribute for M&I firming during shortages so that more credits are available further into the future?

Analysis: The AWBA’s current 20% limit assumption to some extent serves this purpose. Modeling would indicate that there is a 6% probability that the actual reduction to CAP M&I subcontractors could be greater than 20%. By maintaining this assumption the AWBA is preserving long-term storage credits for future years.

The question arises, however, are the long-term storage credits projected to be accumulated by the AWBA for CAP M&I subcontract firming going to be sufficient to firm those subcontracts for the 100-year firming period. Based on the modeling, this is only an issue for Pima County. In order to insure long-term storage credits would be available for the full 100-year period for Pima County the 20% limit could be reduced to a 10% limit. The major impact of reducing the limit on the long-term storage credits the AWBA would make available during shortages is CAP subcontractors would need to find other supplies to meet their needs for the difference between the 10% cap and the 20% cap. Additional groundwater pumping would not be an option because the drought exemption would not be available. It could also leave a significant quantity of long-term storage credits unused in Maricopa and Pinal Counties. That raises a second question, should the AWBA have different caps for the different counties, leaving Maricopa and Pinal Counties at a 20% cap while reducing the cap in Tucson to 10% as an example. This could raise equity issues especially if groundwater is not available to make up the difference.

Another option for extending credits would be to apply additional reductions to the CAP request at the time the request is made to the AWBA. These reductions could be in effect until the 20% cap was reached at which time the 20% cap would come into play. After 2044, under maximum shortages to CAP, the subcontractor would be receiving approximately 76% of its entitlement, adding the 20% firming would increase this to approximately 96% of the subcontract entitlement. Recognizing the subcontractor would need to be planning for a reduction of 4% of their entitlement to cover this situation, the AWBA could reduce the distribution by 4% during other shortages. Applying this example to all three counties would have no benefit to Maricopa and Pinal Counties, but would allow the AWBA to distribute credits to Pima County through the full 100-year period. Various percent reductions could be tested to determine the most appropriate amount. A variation of this option would be to apply different percentages in the different counties.

One of the concerns with the AWBA applying additional reductions over the 20% cap are that the AWBA might be forcing some subcontractors to implement additional conservation measures. The groundwater code already caused CAP M&I subcontractors to reduce use and conserve groundwater. A major reason for these provisions in the Groundwater Code was to ensure that groundwater would be available for the future, including times of shortages. The additional reduction could impact CAP M&I subcontractors differently with a greater impact to those with limited groundwater supplies.

Observations:

Recognizing that the 20% limit assumption already preserves long-term storage credits, there is a minimal benefit to Maricopa and Pinal Counties, that additional reductions could require more use of an M&I subcontractor's renewable supplies when credits are still available, and that the CAP M&I subcontractors have also developed drought management plans that already identify reductions in water use, staff does not feel it is appropriate that the AWBA add an additional reduction over the assumed 20% to the amount of credits it will distribute in any given year for CAP M&I subcontract firming. However, staff does suggest that the AWBA revisit this policy in the future after shortages have occurred and there is additional information on shortage operations and credit availability.