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Colorado River Water & Arizona Agriculture

On Tuesday, 15 August 2023 officials from the U.S. Bureau of Reclamation (USBR) presented their 24-Month study reports with projections and operational plans for 2024 (USBR, 15 August 2023). We are still dealing with the drought but there is some improvement in the 2024 plans for Colorado River water allocations for Arizona.

The wet winter and spring experienced in the Southwest in 2023 has provided some relief on the dire situation we were facing on the Colorado River system and reservoir levels have improved. But unfortunately, one good precipitation season does not solve all the problems and they will still need to be dealt with.

The current plan for lower Colorado River water management is basically a return to the Drought Contingency Plan (DCP) Tier 1 schedule (Figure 1).

DCP Tier Reductions

Lake Level (fas)		Reduction (KAF)	Total Reduction	Total % Reduction
1,075	1	512	512 K AF	18
1,050	2a	80	592 K AF	21
1,045	2b	48	640 K AF	23
1,025	3	480	1.2 M AF	43

DCP = Drought Contingency Plan

fas = feet above sea level on Lake Mead

KAF = thousand acre-feet

MAF = million acre-feet

Figure 1. Drought Contingency Plan Tier reductions for Arizona.

Tier 1 plans take us back to an 18% reduction or 512,000 acre-feet (KAF) of Arizona's Colorado River allocation of 2.8 million acre-feet (MAF). Arizona was operating under Tier 1 guidelines in 2022.

The irrigation districts in central Arizona that have lost access to Central Arizona Project (CAP) water will not be receiving any additional water in 2024 based on this plan. The districts immediately adjacent to the mainstem of the Colorado River will continue to receive the same amount of water as they have been receiving the past two years. For Arizona and the other lower basin states, these are basically the same water allocation guidelines that were in place in 2022.

The urban areas and American Indian tribes will not experience any additional reductions based on the USBR plans. However, some cities and tribes have volunteered to reduce their Colorado River water allocations in exchange for payments from the federal government.

For example, in 2023 Arizona, California, and Nevada agreed to a plan that will conserve an additional 3 MAF of Colorado River water through 2026 in exchange for \$1.2 billion from the federal government. If approved by the USBR, this plan would reduce Colorado River allocations to the Imperial Irrigation District in California, which has some of the most senior water rights on the river.

The Gila River Indian Community (GRIC), which has a Colorado River allocation of 653 KAF, committed in April 2023 to relinquish temporarily 125 KAF in exchange for \$400 per AF from the federal government. The federal government is also funding GRIC infrastructure projects to increase wastewater reuse in irrigation.

Thus, some of the Colorado River water that is technically allocated to Arizona under Tier 1 guidelines will stay in Lake Mead due to previously agreed upon conservation measures.

Regarding other lower basin states and the current USBR plan, Nevada will have slightly more Colorado River water in 2024 than in 2023. Mexico will deal with a 5% reduction in Colorado River water from their base and once again California will not be suffering any required cuts in their Colorado River water allocation.

Overall, this is good news. We have some temporary relief on the Colorado River system and no additional reductions will be required in 2024. This puts the seven Colorado River basin states and Mexico in a better position to negotiate the guidelines and agreements required for 2026 since all the existing agreements expire in two years.

Reference

USBR, 15 August 2023. 24-Month Study reports.

- 24-Month Study Projections (Overview)
- August 2023 Most Probable
- August 2023 Probable Minimum

• August 2023 Probable Maximum

August 2023 Lake Powell and Lake Mead: End of Month Elevation Charts