



● Colorado River Management Report

Summary

This report provides a summary of activities related to management of Metropolitan's Colorado River resources for the month of December 2015, as well as a summary of the projects funded by the Colorado River System Conservation Agreement in 2015.

Purpose

Informational

Detailed Report

Implementation of Colorado River Drought Response Memorandum of Understanding

In December of 2014, Southern Nevada Water Authority (SNWA), Central Arizona Project (CAP), the U.S. Bureau of Reclamation (Reclamation), and Metropolitan entered into a memorandum of understanding for pilot drought response actions on the Lower Colorado River. The agencies agreed to use best efforts to implement actions that would slow the decline in Lake Mead. At the Colorado River Basin States meeting that adjourned on December 15, the agencies provided a summary of the activities completed to date that have benefited Lake Mead in 2014 and 2015. These actions are in addition to the System Conservation Agreement programs, described below, that have added water to Lake Mead in 2015. Furthermore, SNWA reported that it left a total of 12,500 acre-feet (AF) of Nevada's water in Lake Mead that would otherwise have been banked off-stream; CAP reported that it left a total of 215,000 AF of water in Lake Mead under its recently developed Intentionally Created Surplus (ICS) program and Arizona water that it could have banked but chose to leave in Lake Mead; Metropolitan reported that it implemented actions to reduce its planned draw on ICS by 58,000 AF by reaching agreement to store conserved water from Imperial Irrigation District and funding conservation within Metropolitan's service area to reduce its demand on Colorado River water. Collectively, these actions have significantly reduced the likelihood of a first ever shortage declaration on the Colorado River in 2017.

Colorado River Basin Study Next Steps Process to Enter Second Phase

In May 2015, Reclamation, with assistance from the Colorado River Basin States (Basin States), issued the Moving Forward Phase I Report as a follow-up to the 2013 Colorado River Basin Supply and Demand Study. The Phase I report included a refined analysis of the potential for increased urban conservation, agricultural conservation and transfers, and environmental and other non-consumptive flows. In December, Reclamation notified the Basin States of its intentions to begin the Moving Forward Phase II process in early 2016, which will include selection and implementation of pilot projects for the actions that were studied in the Phase I report. A kickoff meeting to develop a process for completing Phase II will be held in January or February 2016.

Summary of Colorado River System Conservation Pilot Program 2015 Implementation Activities

In July 2014, Reclamation, CAP, SNWA, Denver Water, and Metropolitan (collectively, the funding agencies) entered into an agreement that established a two-year pilot program whereby entitled users of Colorado River water would be compensated for voluntary reductions in water use to create conserved water to benefit the overall Colorado River System. These benefits include creating higher reservoir levels, increasing power generation, and reducing salinity. Under the agreement, Reclamation agreed to contribute up to \$3 million to the program, while the other funding agencies, including Metropolitan, agreed to contribute up to \$2 million each. The purpose of the pilot program is to determine whether system conservation undertaken through voluntary, compensated reductions in use is a feasible method to partially mitigate the impacts of ongoing drought on the Colorado River System, by increasing water elevation levels in Lakes Mead and Powell with the ancillary benefit of enhancing flows in areas upstream of storage reservoirs. Under the pilot program, the funding agencies jointly select various

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projects in the Colorado River Basin for inclusion in the pilot program to create conserved water for the benefit of the Colorado River System.

Request for and Evaluation of Pilot Project Proposals

Following execution of the pilot program agreement, staff has been coordinating with the other funding agencies to implement the program. Reclamation was selected as the administrator for projects in the Lower Basin while the Upper Colorado River Commission (UCRC) was selected as the administrator for projects in the Upper Basin. A Request for Proposals was released to Lower Basin entities in October 2014 for projects that would begin in 2015. A Request for Proposals was released to Upper Basin entities in May 2015, for projects that would begin in 2015, and a second Request for Proposals was released to Upper Basin entities in September 2015, for projects that would begin in 2016.

The funding agencies also set up a review committee that consists of representatives from each of the original funding entities, plus the UCRC in the case of Upper Basin proposals. The review committee evaluates the proposals on a number of factors, including cost, geographic diversity, and project type diversity. Once a proposal has been selected, the respective administrator notifies the applicant and begins negotiating an implementation agreement for participation in the pilot program. An additional specific project funding agreement is executed by the funding agencies prior to the execution of the implementation agreement by the administrator and the applicant.

Summary of Current Pilot Projects

Currently, 12 pilot projects are under contract: five in Wyoming, three in Colorado, two in Arizona, one in California, and one in Nevada. Of these 12 projects, eight are projects that reduce agricultural irrigation, either through fallowing or split season deficit irrigation; while there is one project for each for: purchasing agricultural water rights, wastewater recovery, reduction in groundwater storage, and irrigation efficiency improvement. There are four additional projects under consideration from the 2015 round of proposals that could be approved for funding in early 2016.

The contracted projects are estimated to conserve a total of over 37,000 AF of water, with over 60 percent of the savings occurring in the first year of the program. It is estimated that over 90 percent of the savings will occur from projects in the Lower Basin. While there are fewer projects in Lower Basin states, these projects result in greater water savings. The table below lists the contracted projects that were approved in 2015:

Colorado River System Conservation Agreement Projects Approved in 2015

<u>Project Partner</u>	<u>State</u>	<u>Project Type</u>	<u>Total Estimated Water Conserved (AF)</u>
SNWA	NV	Ag Water Right Purchase	15,000
The Nature Conservancy	CO	Split Season Deficit Irrigation	188
Wells Farming and Excavation	WY	Split Season Deficit Irrigation	75
Cottonwood Capital Corporation	CO	Split Season Deficit Irrigation	1,202
Tohono O'odham Nation	AZ	Reduced Groundwater Recharge	10,080
Bullhead City	AZ	Wastewater Recovery	4,400
Dennis Schroeder Living Trust	WY	Split Season Deficit Irrigation	74
P/T Livestock Inc.	WY	Split Season Deficit Irrigation	88
Piney Creeks Ranch	WY	Split Season Deficit Irrigation	32

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Calvin Barnes Limited Family Partnership	WY	Split Season Deficit Irrigation	248
AMI, Inc., and Grand Valley Farms, Inc.	CO	Fallowing	668
Coachella Valley Water District	CA	Irrigation Efficiency	5,000

The review committee has begun evaluating the proposals submitted for consideration for implementation in 2016 for projects in the Upper Basin. A total of 32 proposals were received across all four Upper Basin states; three municipal projects, one infrastructure improvement project, and one research study, with the remaining projects being a mix of fallowing and deficit irrigation. While the proposals include many fallowing and deficit irrigation projects, there are some new ideas, including using an on-site reservoir to store conserved water until after the irrigation season to ensure the water is not consumed by downstream users. Additional information is being gathered for the proposals and the funding agencies are scheduled to make a decision on which proposals to fund in early 2016. A total of \$1.8 million is available for these projects.