



COLORADO

Colorado Water Conservation Board

Department of Natural Resources

1313 Sherman Street, Room 721
Denver, CO 80203

TO: Colorado Water Conservation Board Members

FROM: Ted Kowalski
Michelle Garrison

DATE: November 3, 2015

SUBJECT: Agenda Item 20, Interstate, Federal & Water Information Section
Colorado River System Conservation Agreement

Background

Facing declining levels in Lakes Mead and Powell, the Upper Colorado River Commission (UCRC¹), the U.S. Bureau of Reclamation (Reclamation), and four water providers² that depend on Colorado River Basin supplies are working together to initiate pilot projects designed to develop and test tools that could potentially be used as part of a drought contingency plan. To this end, in July 2014, the four water providers and Reclamation (collectively the Funding Partners) entered into an agreement to explore potential solutions. Through this agreement, the Funding Partners established a Pilot Program to help State and Federal water officials manage the ongoing record drought conditions in the Colorado River Basin by testing on-the-ground water conservation opportunities. The purpose of this Pilot Program is to explore and learn about the effectiveness of voluntary measures that could be used, when needed, to help maintain water levels in Lake Powell and Lake Mead above the levels needed to maintain hydroelectric power production and protect Colorado River compact entitlements. The Funding Partners have committed \$11 million to test and demonstrate the effectiveness of temporary, compensated, and voluntary water demand management actions through pilot projects in both the Upper and Lower Basins in 2015 and 2016. Of the funds committed, at least \$2.75 million is intended for use in the Upper Colorado River Basin and the UCRC has agreed to facilitate the implementation of this Pilot Program. The Funding Agreement can be viewed on Reclamation's website at: <http://www.usbr.gov/newsroom/docs/2014-07-30-Executed-Pilot-SCP-Funding-Agreement.pdf>.

¹ The UCRC is an interstate, administrative agency established by the Upper Colorado River Basin Compact of 1948 (Upper Basin Compact). UCRC members consist of a Commissioner representing each of the four Upper Division States of Colorado, New Mexico, Utah and Wyoming (Upper Division States) and a Commissioner appointed by the President of the United States who serves as the Chair of the Commission. The Commission assists the Upper Division States in developing their apportionments of Colorado River water pursuant to the Colorado River Compact of 1922 and the Upper Basin Compact, and has specific responsibilities to assist in implementing the Upper Basin Compact consistent with laws of the Upper Division States.

²² The four major water providers that have contributed funds for the System Conservation Agreement are the Southern Nevada Water Authority, Denver Water, the Central Arizona Water Conservation District, and the Metropolitan Water District of Southern California.



In May, 2015, the CWCB and the UCRC issued a Request For Pre-proposals (RFP) to invite users of Colorado River System water in the Upper Division States (Colorado, New Mexico, Utah and Wyoming) to submit proposals to participate in the Pilot Program. Also in May, the CWCB Staff updated the Board about the Pilot Program, and the Board affirmed the Pilot Program as an approved water conservation program by approving the following language: "The Colorado Water Conservation Board approves the Upper Colorado River Commission's System Conservation Pilot Program as a water conservation program subject to C.R.S. 37-92-103(2) and 37-92-305." As a reminder, these statutory provisions allow a water user to forebear consumptive uses and not have this forbearance negatively impact their water rights in any future change of water rights application or any abandonment proceedings.

In June, the UCRC and the Funding Partners received more than a dozen proposals, and the UCRC and the Funding Partners decided to pursue implementation agreements for 10 projects in 2015 (5 in Colorado and 5 in Wyoming). Most of these project proponents have signed implementation agreements, and the projects have been implemented.

This Pilot Program was initiated to allow water managers to explore and learn about potential demand management solutions. The Pilot Program has taught the Funding Partners and the UCRC a number of valuable lessons already, and the CWCB Staff will share with the Board some of the lessons learned to date. In addition, the Staff will describe the process for the second request for proposals. The second request for proposals was issued in September and it requested the submission of proposals by November 1, 2015. The UCRC and the Funding Partners will meet in early December to review the proposals and make selections.

Staff Recommendation

This item is informational in nature, but the Staff welcomes the Board's input and comments.

Additional Background

During the past 15 years, drought and increased uses in the Colorado River Basin have resulted in a substantial decrease in Lake Powell storage and contributed to sustained decreases in water elevations and storage at Lake Mead. Since 2000, Colorado River System storage has decreased from 95 percent to 48 percent of capacity. Given declining reservoir levels, the Bureau of Reclamation (Reclamation), the Colorado River Basin States, and water agencies within the Colorado River Basin States are actively working together and discussing proactive strategies to mitigate the impacts of the ongoing drought. These efforts are commonly referred to as Colorado River Basin drought contingency planning. In the Upper Basin, the drought contingency planning effort is being pursued to protect critical elevations at Lake Powell. Lake Powell is the main storage unit of the Colorado River Storage Project (CRSP), the "bank account" that allows the Upper Division States to meet their Colorado River Compact obligations. Electric power generation from Glen Canyon Dam at Lake Powell helps supply the electrical needs of 5.8 million people. Revenue from hydropower generation supports critical activities, including salinity control projects and important environmental programs (such as the Upper Colorado River and San Juan Endangered Fish Recovery Programs and the Glen Canyon Dam Adaptive Management Program), repayment of the cost of constructing the CRSP facilities, and paying project operating costs. It is therefore imperative that the storage elevation in Lake Powell be maintained above the level at which the dam can generate hydroelectric power (minimum power pool). Allowing storage in Lake Powell to fall below minimum power pool would also result in reduced capacity to make releases from the reservoir, increasing the risk that the Upper Division States will fail to comply with their Colorado River Compact obligations.

In the Upper Division States, the drought contingency planning effort currently involves three strategies: 1) expanding the temporal and geographic extent of weather modification activities; 2) extending and coordinating the operations of upstream CRSP reservoirs (strategically using water supplies from Navajo Reservoir, the Aspinall Unit, and Flaming Gorge Reservoir); and 3) “demand management” (voluntary, compensated reduction in consumptive use). With regard to demand management specifically, future efforts could assist the Upper Division States by temporarily reducing consumptive uses during drought conditions.

To that end, Denver Water, the Southern Nevada Water Authority, the Central Arizona Water Conservation District, and the Metropolitan Water District of Southern California, and the U.S. Bureau of Reclamation have entered into an agreement, on July 30, 2014, captured in Agreement No. 14-XX-30-W0674 for a Pilot Program for Funding the Creation of Colorado River System Water Through Voluntary Water Conservation and Reductions in Use, described generally above. Through this agreement, the municipal providers each contributed \$2 million and Reclamation contributed \$3 million to test and demonstrate the concept of demand management through pilot projects in both the Upper and Lower Basins in 2015 and 2016. This Pilot Program will allow the Upper Division States to learn about, and generate information related to, the feasibility of demand management.