

Demand Management Feasibility Investigation Step II Work Plan
November 18, 2020

1) Purpose and Need for this Work Plan

The Colorado Water Conservation Board's (CWCB) mission is to conserve, develop, protect, and manage Colorado's water for present and future generations. In carrying out this mission, the CWCB is considering whether a Demand Management program as contemplated in the Demand Management Storage Agreement may provide additional protection to Colorado water users and the state as a whole.

In Fiscal Year 2019-2020, the CWCB conducted the initial stage of the Demand Management Feasibility Investigation as directed by the CWCB Board of Directors' November 2018 Support and Policy Statement and the 2019 Work Plan. The CWCB has completed the work of the 2019 Work Plan, and hereby adopts this Step II Work Plan, designed to guide the next steps in Colorado's investigation.

The CWCB will continue to implement the strategies and policies as initially adopted in the November 2018 Support and Policy Statement, attached here and fully incorporated herein.

While the 2019 Work Plan was designed to identify and analyze key threshold issues associated with a potential Demand Management program in Colorado, this Step II Work Plan will analyze key outstanding questions and priority issues. This effort will rely and build on work completed under the 2019 Work Plan, including but not limited to information contained in the July 2020 Update to the Board.

The CWCB Board and staff recognize that Demand Management is one potential element of the broader Colorado River state strategy. It is yet to be determined whether Demand Management will be a feasible tool to help maintain compliance with compact obligations. The Demand Management investigation continues in parallel with many other projects, programs, and discussions regarding the Colorado River Compact. This Work Plan, however, is limited to the Demand Management Feasibility Investigation within Colorado.

2) Background:

Under the terms of the Colorado River Compact, the Upper Division States (Colorado, Wyoming, New Mexico, Utah) are required to not deplete the Colorado River below 75 million acre-feet over 10 years at Lee Ferry, Arizona. If the Upper Division States fail to meet this obligation, it could be asserted that the Upper Division States are in violation of the Compact. Compact administration could result in mandatory water usage cutbacks throughout the Upper Division States, including Colorado.

Looking for solutions to help avoid or mitigate impacts from a Compact administration scenario and add additional security to the system, in 2019 the Upper Division States adopted a Drought Contingency Plan for the Colorado River Basin which includes the authorization of a potential 500,000-acre-foot water storage account in Lake Powell. As part of the

agreement, the Upper Division States agreed to explore the feasibility of a potential Demand Management program for the purpose of creating a storage pool of water that may be used to ensure ongoing Compact compliance or mitigate the risks associated with Compact administration.

While it is yet to be determined whether a Demand Management program will be developed in Colorado, the CWCB is the steward of the state's water policy and therefore the agency with the authority to consider the feasibility of and potentially implementation of a Demand Management program within Colorado. As part of its core mission of protecting Colorado's water, the CWCB is dedicated to protecting the very people that rely on Colorado's water (water users) for their livelihoods and wellbeing. The Board has directed that staff consider the feasibility of a potential Demand Management program that would be voluntary, temporary, compensated, and equitable. Exploring the opportunities of such a program, however, requires a great deal of water-user input, data gathering, legal expertise, and ultimately approval from all of the Upper Division States, the Upper Colorado River Commission, and the U.S. Secretary of Interior if a program is to be established in the Upper Basin.

3) Step II Work Plan Overarching Goals

- a) The goals below are all intended to support the ultimate goal of determining whether Demand Management is feasible from Colorado's perspective. The feasibility determination is specifically contemplated and defined in the Demand Management Storage Agreement (DSMA)¹ and implicates several related questions for the state, including: whether Demand Management is achievable, whether it is worthwhile from Colorado's perspective, and whether it is advisable to make a feasibility determination. Each of these inquiries is meant to inform the ultimate feasibility determination.
 - i) Achievable: Determine whether Demand Management would be achievable from Colorado's perspective.
 - (1) This goal is focused on the question of whether it would be achievable for Colorado to implement a Demand Management program pursuant to the terms of the Demand Management Storage Agreement, and in compliance with state and federal law. Such a determination implicates issues of funding, beneficial use, administration and accounting of the water, verifying conserved consumptive use, and similar questions that relate to the on-the-ground operation of a program and potential projects.
 - (2) The first stage of the feasibility investigation, largely focused on identifying and considering threshold issues, provided a large body of useful information in considering whether it may be achievable to establish a Demand Management program. This work will provide the baseline and foundational information for the further achievability analysis, and will assist in analyzing the question identified in (ii), of whether a Demand Management program is worthwhile for Colorado. Additionally, the System Conservation Pilot Program and other efforts and studies

¹ The DMSA is available at <https://www.usbr.gov/dcp/docs/final/Attachment-A2-Drought-Management-Storage-Agreement-Final.pdf>

have helped to inform some questions associated with the achievability issue. This and other related work will be incorporated in this analysis.

ii) Worthwhile for Colorado: Determine whether a Demand Management program is worthwhile for Colorado.

(1) This goal is focused on whether - assuming it is possible to establish a Demand Management Program that complies with and satisfies the elements of the Demand Management Storage Agreement and applicable law- it can be done in a way that is palatable and beneficial to the state from a Colorado perspective. For example, this raises questions of how secondary impacts and benefits may be identified, tracked, and mitigated, and whether a program can be set up in an equitable and proportional way.

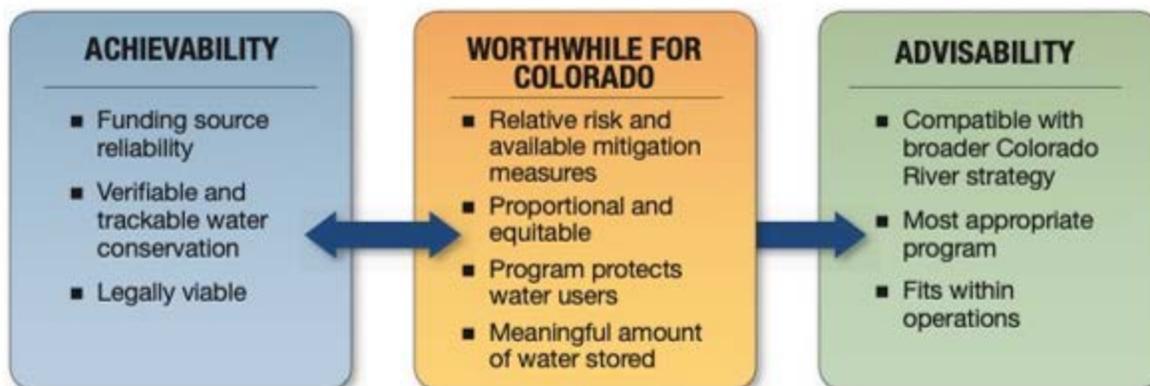
(2) Goals (i) (Achievability) and (ii) (Worthwhile for Colorado) may inform each other. For example, although it may be determined in considering the Achievability goal that it is *possible* to verify conserved consumptive use and track the water to the state line, this will raise the question of whether the procedures and mechanisms necessary to accomplish this are too costly or too onerous so as to not make it worthwhile for Colorado when balanced against the amount of security provided to the state by a potential program. This analysis will be considered in contrast to the option of taking no action and reacting to circumstances as they arise, which could risk potential Compact administration and the additional costs, uncertainty, litigation, and potential intrastate controversies associated with it.

iii) Advisable: Determine whether it would be advisable to make a feasibility determination relating to Demand Management.

(1) This question contemplates whether Demand Management may be the most appropriate tool for Colorado to utilize to create additional security and provide protection to water users. As there may be several ongoing discussions and issues that may change over time, this question must be addressed at the time a feasibility determination is under consideration by the CWCB. Therefore, the first two questions of whether a program may be achievable and whether it would be worthwhile for Colorado should be answered before the advisability question is addressed.

Below is a visual representation of these steps.

Determining Demand Management Feasibility



4) Engagement and Process Considerations

- a) The CWCB leads the Demand Management feasibility investigation on behalf of the state. The tasks outlined in the remainder of this Work Plan are designed to help the Board consider outstanding issues and open questions to be analyzed in the Demand Management feasibility investigation. This section addresses process issues to ensure the Board continues to lead this investigation and is fully informed on the full range of Demand Management issues and efforts across the state.
- b) Board engagement
 - i) Stakeholder briefings: Throughout the course of this Work Plan, the Board will invite key stakeholder groups, conservancy districts, conservation districts, Tribal Nations, non-governmental organizations, and others to present to and dialogue with the Board at its regularly-scheduled meetings. These briefings will provide the Board with varying perspectives across the state on Demand Management issues. The Project Management Team will assist and advise the Board in coordinating these discussions.
 - ii) Workshops: The Board will hold workshops periodically throughout the course of this Work Plan as warranted to provide opportunities for more in-depth discussion and review of specific issues raised in and associated with the feasibility investigation.
- c) Progress reports
 - i) Throughout the course of this Work Plan, the Project Management Team will provide regular progress reports to the Board, seeking input, clarification, and guidance as appropriate. These updates may inform the Board's determinations to hold workshops, make policy findings, or complete additional tasks.
 - ii) In addition to these reports, the Project Management Team will also update the Board on progress made on specific tasks referred to in this document.
- d) Public outreach and engagement
 - i) Public outreach and engagement continue to be an important element of the Demand Management Feasibility Investigation.

- ii) As part of this Work Plan, the Project Management Team, with assistance from the consultant team, will develop a communications tool kit designed to assist in general Demand Management messaging for feasibility and potential pilot program phases of the investigation. Regular updates will be provided to the Board on these efforts.
- iii) Additionally, the Project Management Team will work with the consultant team, key stakeholders, and others across the state to better understand communications networks and how varying types of media outlets are used across the state. This work is intended to provide additional information regarding how various water users, stakeholders, and others with interest in a potential Demand Management Program, receive information and provide input. The Project Management Team will use the information gathered in this analysis to adjust the communications strategies as needed and consider implementing additional communications tools and methods.
- iv) In the meantime, CWCB staff will utilize existing communications mechanisms to provide regular public updates on the Demand Management Feasibility Investigation, potentially including but not limited to:
 - (1) Public workshops (held virtually as needed).
 - (2) Utilization of social media and CWCB website to provide regular updates and seek feedback throughout the course of the Work Plan.
 - (3) Regular updates will be provided proactively and as requested to key stakeholders, water users, and others across the state, including but not limited to the Basin Roundtables, Interbasin Compact Committee, and the Public Education Participation and Outreach Workgroup.
- e) Ongoing discussions with Tribal Nations
 - i) The Project Management Team will continue to engage with the Ute Mountain Ute and Southern Ute Tribes on a government-to-government basis.
 - ii) As the above tasks are completed, the Project Management Team will consult with the Tribal Nations on framework development and potential demonstration projects.
- f) Interbasin Compact Committee engagement
 - i) Project Management Team will request feedback from the Interbasin Compact Committee on the following issues:
 - (1) Substantive equity and proportionality issues and potential solutions to create more equity and proportionality relating to a draft framework.
 - (2) Process-related mechanisms for ensuring equity and proportionality within the draft framework.
 - (3) Potential equity and proportionality issues relating to specific projects, programs, or efforts relating to Demand Management.

5) Tasks

- a) Develop a draft strawman framework of a Demand Management program.
 - i) The Project Management Team will work with the consultant team and staff to develop a draft framework, which is intended to provide an analysis of potential Demand Management program structure and design.
 - ii) This framework will be based on and incorporate work completed by the workgroups, consultant team, and others throughout the course of the 2019 Demand Management

Work Plan adopted by this Board. The progress made to date will form the basis and serve as the starting point of the framework.

- iii) The Project Management Team will provide regular updates and incorporate feedback from the Board on this effort.
- iv) After developing an initial draft framework, the Project Management Team will seek feedback from workgroup members, IBCC members, Tribal Nation representatives, stakeholders, and others as appropriate, on elements of the framework.
- v) In developing this draft framework, the elements below may be considered, including but not limited to:
 - (1) Program and process design and timeframe for contribution to a potential Demand Management pool.
 - (2) Equity in program design and processes.
 - (3) Analysis of potential costs of a program and feasible funding sources.
 - (4) Project-specific and local impacts and benefits, as well as resources available to assist in identifying those impacts and benefits.
 - (5) Potential procedures and guidelines for monitoring and verification of program participation.
 - (6) Environmental, recreational, and other potential benefits and impacts of a program.
- b) Analyze and learn from existing, ongoing, and/or new programs and projects.
 - i) The Project Management Team will work with CWCB staff and others to identify outstanding questions, issues, and research needs that may be assessed through existing efforts and projects, including but not limited to Alternative Transfer Method arrangements that may inform the Demand Management Feasibility Investigation and report on information gathered. The Project Management Team will also identify issues associated with existing efforts that may benefit from additional analysis and research and will prioritize and conduct or direct this analysis to be completed through use of existing funding sources.
 - ii) The information gained in this process and throughout development of the framework will help inform potential implementation of projects aimed at addressing key data gaps and outstanding questions.
 - iii) The identification of remaining questions and issues warranting further analysis will be based on work done to date by the workgroups and others throughout the course of the 2019 Demand Management Work Plan, and the specific questions identified by the workgroup members as outlined in the July 2020 Demand Management Feasibility Investigation Update and attachments thereto. These issues may include but are not limited to:
 - (1) Understanding the various impacts, benefits, and issues associated with a diversity of demand management activity in varying locations and under varying conditions
 - (2) Best management practices relating to potential conservation activity to mitigate potential on-farm impacts and increase benefits; and
 - (3) Identification and measurement of potential impacts and benefits associated with various types of conservation activities.
- c) Ongoing assessment of potential larger-scale pilot program
 - i) Based on work completed in the above tasks, on an ongoing basis, consider whether it may be appropriate to develop a programmatic-scale Demand Management pilot

- program, potentially in collaboration with the other Upper Division States, should they wish to participate.
- d) In addition to regular progress reports, the Project Management Team will issue a report to the Board summarizing the key findings of this step in the feasibility investigation upon its completion.

6) Summary of Step II Work Plan

- i) Consistent with its mission to conserve, develop, protect, and manage Colorado's water for present and future generations, the CWCB enters the second step of analyzing the feasibility of a Demand Management program. With the approval of Step II, CWCB moves steadily forward with determining the feasibility of a Demand Management program, with particular focus on the questions of whether it would be achievable, worthwhile for Colorado, and advisable.



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SUPPORT AND POLICY STATEMENTS

REGARDING COLORADO RIVER DROUGHT CONTINGENCY PLANS, DEMAND MANAGEMENT AND COMPACT ADMINISTRATION

Since 2000, the certainty and security of the Colorado River water supply have been called into question. The entire Colorado River Basin is currently in the worst hydrologic cycle in the historic record. Between 2000 and 2018, the Basin has experienced the driest year on record (2002), and the driest consecutive two-year period on record (2012 and 2013). It has also experienced above-average runoff only five out of 19 years, and withstood a decline in storage levels at the two largest reservoirs in the Colorado River Basin - Lake Mead and Lake Powell - to less than half of full capacity. Further, recently published data indicate a likely continuation of the trend of reduced flows and increased demand throughout the Colorado River Basin. Regardless of whether this is an extended drought or the new normal hydrology, the potential impacts to the state and its citizens could be significant.

The importance to Colorado of its namesake river cannot be overstated. Originating as snowfall high in the Colorado mountains, water from the Colorado River is put to wide range of uses by agricultural, municipal, tribal, industrial, and non-consumptive water rights holders across the state. The Colorado River is an irreplaceable resource for the entire state.

Continued drought or worsening water supply conditions in the Upper Colorado River Basin could increase the risk of: (a) Lake Powell storage declining below critical elevations to maintain operational functionality; and (b) mandated curtailment of the exercise of water rights to maintain compliance with the Upper Colorado River Basin and Colorado River Compacts. Both risks could have serious implications for Colorado.

Faced with this reality, Colorado's Commissioner to the Upper Colorado River Commission and staff at the Colorado Water Conservation Board and Attorney General's Office have been working with the other Colorado River Basin States, the Federal Government, and relevant stakeholders to develop a Drought Contingency Plan (DCP) that can help minimize and mitigate the risks associated with consistently below average water supplies in the Colorado River Basin. The DCP is comprised of several agreements, involving the Secretary of Interior, the Upper Basin states, the Upper Colorado River Commission, and the Lower Basin states. The DCP as a whole establishes the provisions and framework within which the seven Basin States may act in conjunction with the Secretary of the Interior to mitigate risks of extended drought, while protecting their respective rights and interests consistent with the "Law of the Colorado River."



The DCP documents were posted in final review draft form on the CWCB's website on October 9, 2018. The seven basin states and the Department of Interior are currently in the process of vetting the DCP agreements with the public. Before the DCP agreements would be implemented in either the Upper or Lower Colorado River Basin, it is anticipated that they would be authorized by Congress and executed by the relevant signatory parties.

The Upper Basin DCP includes, among other things, a Drought Response Operations Agreement and a Demand Management Storage Agreement. The Drought Response Operations Agreement directs management of the Initial Units¹ consistent with existing operational permitting, and is intended to reduce the risk of Lake Powell declining below minimum power pool elevation. If Lake Powell were to drop below minimum power pool elevation, it would become financially and physically difficult to maintain existing water uses, compact compliance obligations, and hydropower generation. The Demand Management Storage Agreement is intended to help assure compact compliance and reduce the risk of mandatory curtailment by securing the ability to store water at the Initial Units at no charge for compact compliance purposes.

The Upper Basin DCP agreements do not certify, warrant or otherwise guarantee that a demand management program will be established in the Upper Basin. The agreements only provide an opportunity for the Upper Division States (Colorado, New Mexico, Utah, and Wyoming) to use available storage space at the Initial Units only if an approved Upper Basin demand management program is established. Such use would be free of charge and the water stored would not be subject to release under the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations of Lake Powell and Lake Mead. Before any demand management program could be implemented in the Upper Basin, each state and the Upper Colorado River Commission must evaluate the feasibility of demand management concepts, reach agreement on a number of key points, and provide formal approvals.

Demand management activities that could be promoted in Colorado as a result of the DCP would likely involve intentionally reducing consumptive uses from the Colorado River System, and storing the conserved water at the Initial Units to help assure the Upper Basin's continued compact compliance. Any such actions require careful consideration of the impacts to individuals, communities, and local economies.

As the agency authorized to consider and establish the state's water policy, the Colorado Water Conservation Board has a responsibility to evaluate and implement mechanisms for the effective management and wise administration of the Colorado River within Colorado. Specifically, it is the express responsibility and within the purview of the Board to:

- i. devise and formulate methods, means, and plans for bringing about the greater utilization of the waters of the state (C.R.S. 37-60-106(1)(c) (2017));
- ii. gather data and information looking toward greater utilization of the waters of the state (C.R.S. 37-60-106(1)(d));

¹ The Initial Units refer to the units authorized under the Colorado River Storage Project Act, including Glen Canyon Dam, Flaming Gorge, Aspinall Unit (comprised of Blue Mesa, Morrow Point and Crystal Reservoirs), and Navajo Reservoir.



- iii. cooperate with the other states and Federal Government for the purpose of bringing about the greater utilization of the waters of the state of Colorado (C.R.S. 37-60-106(1)(e));
- iv. formulate and prepare drafts of state and federal legislation designed to assist in securing greater beneficial use and utilization of the water of the state and protection from flood damages (C.R.S. 37-60-106(1)(g));
- v. investigate and assist in formulating a response to the plans, purposes, procedures, requirements, law, proposed laws, or other activities of the federal government and other states which affect or might affect the use or development of water resources of this state (C.R.S. 37-60-106(1)(h)); and
- vi. foster the conservation of the water of the state by the promotion and implementation of sound measures to enhance water use efficiency in order to serve all the water needs of the state and to assure the availability of adequate supplies for future uses, and that necessary water services are provided at a reasonable cost. (C.R.S. 37-60-106(i)(r)).

In fulfilling its statutory obligations, the Board also recognizes that water rights holders and other stakeholders have a vital interest in understanding the elements and conditions of any possible demand management program in Colorado, as well as the state's intentions in investigating and potentially pursuing such a program within Colorado, in order to ensure that their rights, respective interests, and communities are valued and protected.

At the January 2018 meeting, the Board directed staff to proactively engage in a state-wide discussion regarding demand management. Since that time, CWCB staff has initiated outreach with interested water rights holders and stakeholders and robust discussions about the concept of demand management, and has developed a greater understanding of various perspectives, concerns, and considerations regarding demand management within Colorado.

The Board has also heard directly from interested water rights holders and stakeholders on demand management considerations via letters and public testimony at its September 2018 meeting.

With this contextual background, the Colorado Water Conservation Board sets forth the following Support and Policy Statements Regarding Colorado River Drought Contingency Plans, Demand Management, and Compact Administration.

STATEMENT OF SUPPORT

The Colorado Water Conservation Board expressly endorses the collective efforts of the seven Colorado River Basin States and Federal Government to plan and prepare for drought contingencies in the Colorado River Basin. Furthermore, the Board joins with Colorado's Commissioner to the Upper Colorado River Commission to present its full support for finalizing the Colorado River Basin Drought Contingency Plan documents in substantial conformance with the final review draft documents posted on the CWCB website on October 9, 2018, and for obtaining appropriate Congressional authorization of the DCP.



DEMAND MANAGEMENT POLICY STATEMENT

In consideration of the past, present and potential future hydrologic conditions confronting the Colorado River Basin, and in light of the above considerations, it will be the Colorado Water Conservation Board's policy to:

- (1) Develop the state's position and approach on whether and how to develop any Upper Basin Demand Management Program that could potentially be implemented within Colorado consistent with state law to avoid or mitigate the risk of involuntary compact curtailment and to enhance certainty and security in the Colorado River water supply.

Furthermore, in formulating the state's demand management position, it will be the Board's strategy to:

- (2) Convene a process to identify and evaluate the issues the state must address as part of any potential demand management program to be considered in Colorado and the Upper Basin.
- (3) Operate within, and subject to, the terms and conditions of the interstate Upper Basin Demand Management Storage Agreement (Agreement Regarding Storage at Colorado River Storage Project Act Reservoirs Under an Upper Basin Demand Management Program), including, but not limited to, the express understandings that:
 - a. Any water conserved under an Upper Basin Demand Management Program will be stored at the Initial Units without charge;
 - b. Any water conserved and stored under an Upper Basin Demand Management Program will be solely for the purpose of helping assure compliance with the Colorado River Compact;
 - c. Any water conserved and stored under an Upper Basin Demand Management Program shall not be released from Lake Powell except at the request of the Upper Colorado River Commission for the exclusive purpose of helping assure compact compliance; and
 - d. Any water conserved and stored under an Upper Basin Demand Management Program will be subject to evaporation assessments and volumetric limitations.
- (4) Engage in activities that further the goals expressed in Colorado's Water Plan, with specific consideration given to the principles and collaborative efforts set forth in Chapter 9.1 and Principle 4 of the Conceptual Framework in Chapter 8.
- (5) Investigate voluntary, temporary, and compensated reductions in consumptive use of waters that otherwise would deplete the flow of the Upper Colorado River System for the specific purpose of helping assure compact compliance. Consistent with the Upper Basin Demand Management Storage agreement, the Board may also join the UCRC and other Upper Basin States in any evaluation of importing of waters from outside the natural Colorado River watershed to augment the Upper Colorado River System for compact compliance purposes.



- (6) Prioritize avoidance of disproportionate negative economic or environmental impacts to any single subbasin or region within Colorado while protecting the legal rights of water rights holders. The Board will work with water rights holders and stakeholders to assess the feasibility of and promote mechanisms for obtaining roughly proportionate contributions of water consumptively used from the Colorado River System to a Demand Management program over a given timeframe from participants on each side of the Continental Divide.
- (7) Comply with applicable state law, including, but not limited to, the requirement that no action related to demand management cause material injury to other water rights holders.
- (8) Consider and be fully informed by the input and considerations of water rights holders and stakeholders potentially impacted by application of demand management strategies within Colorado, and institute a public review process for any such proposed demand management program.
- (9) Work with Colorado's Commissioner to the Upper Colorado River Commission to cooperate with the other Upper Division States of Wyoming, Utah, and New Mexico, as well as the Department of the Interior, to investigate and potentially develop a regional demand management program that considers and incorporates Colorado's demand management approach, and to ensure that water conserved within Colorado under any demand management program is not diverted and consumptively used by any other state.

COMPACT ADMINISTRATION POLICY STATEMENT

The Board understands that:

- 1) Investigation and development of an Upper Basin Demand Management Program will require resolving numerous technical, legal, economic, and policy questions with multiple water rights holders and stakeholders over an extended period of time; and
- 2) Continuation of the current trend in the Colorado River Basin's hydrologic cycle could hasten the time when formal action may be needed to accomplish compliance with the Colorado River Compact,

If the quantity of conserved water made available through the demand management strategies described in this policy is not sufficient to ensure Colorado's compliance with the Colorado River Compact, it will be the Board's policy to:

Encourage and collaborate with the Division of Water Resources to engage in timely and extensive public outreach regarding development of any alternative measures or rules for compact compliance administration to fully inform and seek input from intrastate water rights holders and stakeholders with interests in the Colorado River. Such process would be with the goal, but not the requirement, of achieving general consensus within the state, without constraining the Division of Water Resources' lawful administration of water rights in order to meet Colorado's compact obligations.

