

8. Interbasin Projects and Agreements

The policy of the state of Colorado is to:

- A. Protect Colorado's ability to fully develop our compact entitlements, and continue to support intrastate agreements that strengthen Colorado's position in interstate negotiations.
- B. Encourage multi-partner, multi-purpose, cooperative projects through financial incentives and technical support.
- C. Use the Draft Conceptual Agreement as an integrated package of concepts to:
 - 1. Encourage environmental resiliency,
 - 2. Foster high conservation standards,
 - 3. Develop stakeholder support for interstate cooperative solutions, and
 - 4. Identify a path forward for a potential multi-purpose and cooperative transmountain diversion project.

Colorado has many challenges associated with its location: it is the only state in which every major river system starts within the State, and then permanently exits to downstream states. Because of this fact, Colorado is often referred to as "the Headwaters State."

Intrastate agreements and understanding among stakeholders better allows Colorado to speak with one voice in interstate and federal negotiations and litigation.¹ Therefore, intrastate agreements are critical to Colorado's interstate future. The chapter describes some recent examples of intrastate agreements, including the Basin Roundtable (BRT) and Interbasin Compact Committee (IBCC) process. Finally, the path forward is examined, as "next steps."

8.1. Existing Stakeholder Agreements and Projects

There have been a number of intrastate agreements among diverse and disparate stakeholders within Colorado, which benefit individual stakeholders, but they also benefit all of us by equipping us to effectively protect state interests in interstate matters. Following are recent examples of intrastate agreements within Colorado that should be models for future collaboration and agreement.

Arkansas River Voluntary Flow Agreement

The Upper Arkansas River benefits from a Voluntary Flow Management Program, a unique arrangement between state and federal agencies, nonprofits, water management organizations, and commercial rafting organizations. This voluntary program, first established in 1990, provides for increased recreational flow on the river as well as beneficial flows for wildlife. Parties to the agreement include Colorado Parks and Wildlife, Southeastern Colorado Water Conservancy District,

Pueblo Board of Water Works, Trout Unlimited, the Arkansas River Outfitters Association, and the Bureau of Reclamation.

This arrangement among these various water providers, water rights owners, nonprofit organizations, and governmental entities meets environmental and recreational needs in the Upper Arkansas basin. The program benefits from the Bureau of Reclamation's Fryingpan-Arkansas Project facilities, providing a flow of at least 700 cfs at the Wellsville gage from July 1st to August 15th. In addition to these recreational flows, operations during the spring and fall months are intended to provide optimal conditions for a healthy brown trout fishery. Under the agreement, the Division of Water Resources coordinates among the parties to provide notice when conditions occur that trigger operational changes.

These efforts in the upper basin help bolster the recreational economy and bring tourists from all over the world to enjoy the opportunities available. These ideal conditions would not be possible without the cooperation of entities and interests lower in the basin and an attitude of collaboration. Importantly, the agreement is, as indicated, voluntary: the parties are under minimal obligation to participate, but remain involved after the success of the agreement has proven benefits that are realized year after year.

Colorado River Cooperative Agreement

In the fall of 2013, a historic agreement was reached between eighteen parties reliant on supplies from the Colorado River within Colorado. The Colorado River Cooperative Agreement (CRCA) represents the culmination of years of negotiation between Denver Water and several Western Slope entities, with the desired goal of protecting Colorado River watersheds, while allowing Denver Water to develop future supplies. In addition to the eighteen signatories, the process brought together over forty stakeholders, including water providers, county commissioners, local municipalities, ski resorts, and environmental groups.

Under the CRCA, Denver Water agrees to invest in the future of environmental flows in the Upper Colorado River, specifically in Grand and Summit counties. Through financial support and by pursuing an instream flow water right in cooperation with Grand County and the CWCB, Denver will be able to move forward with the expansion of Gross Reservoir unopposed by other signatories. Of particular note in this process is the newly established "Learning by Doing" process, which provides a collaborative means for stakeholders to address the management of Upper Colorado streams. The funding and methods provided by Denver Water will be utilized in a manner that parties create together, and any new development will happen cooperatively by the affected stakeholders.

The counties and municipalities also gain innovative ways to more effectively manage for environmental flows and greater certainty in flow management. Collaborative operation of Denver Water and Western Slope facilities, such as Dillon Reservoir, the Moffat Collection System, and the Shoshone power plant protocol, will assist in the smart management of environmental and recreational flows. On a river system as complicated as the Colorado, the CRCA represents a new way of looking at water management, with the best interests of as many parties as possible taken into consideration. Many BIPs identified local control and multipurpose collaboration as a key concern of basin stakeholders, and the CRCA represents how agreement can be reached, with these concerns in mind.

Elkhead Reservoir

The 2006 enlargement of Elkhead Reservoir provides another excellent example of multiple interests coming together on a single project. In this case, Elkhead Reservoir, near Craig, was originally constructed for energy and recreational uses. An extensive expansion was planned with a total cost of \$31 million. In the planning process, 5,000 acre-feet of storage were planned for endangered fish management, providing the Yampa basin with a source of water to enhance environmental flows.

The reservoir originally was solely owned by the city of Craig and is currently managed conjunctively by the city, the Colorado River Water Conservation District (CRWCD), and Colorado Parks and Wildlife. Beyond updating existing facilities to meet newly identified uses and needs, this project also uses state funds and allows for cost sharing. With the identified goal of endangered fish management and flow enhancement, the Upper Colorado River Recovery Program contributed \$13.6 million to the total cost of the project. Recognizing the value of these enhanced flows and the value of a demonstrable multipurpose project, \$6.5 million of that total came from the State of Colorado Species Conservation Trust Fund. For the purpose of “in-river fish habitat and river flow maintenance and enhancement uses, and uses in furtherance of the Recovery Program,” the CRWCD and CWCB collaborated on an adjudicated water right in this critical habitat reach on the Yampa.

The remainder of the funding came from the CWCB construction loan program and the CRWCD. Besides the flows for endangered fish and energy flows for the Craig Station Power Plant, this reservoir is recognized as a prime location for recreation: sport fishing and boating. The stakeholders worked together to address the potential conflicts between sport fish and endangered fish species, installing a fish screen as part of the enlargement process. In this project, there were several different stakeholders and a range of interests. The proponents, who came together with a shared vision and with an eye toward multiple purposes, were able to leverage funding to achieve this project.

Windy Gap Firming Project

The Windy Gap Firming Project is a collaboration between thirteen northeastern Colorado providers to improve the reliability of water supplies from the Windy Gap Project. The original project started delivering water in 1985 and is operated by Northern Water's Municipal Subdistrict. The firming project proposes to build a new East Slope reservoir called Chimney Hollow to provide dedicated storage, which would supply a reliable 30,000 acre feet of water a year.

The thirteen project participants have been committed to addressing environmental impacts caused by the firming project. The Subdistrict, on behalf of project participants, spent several years negotiating measures to mitigate environmental impacts. The Subdistrict worked with state wildlife biologists to develop the fish and wildlife mitigation plan, which operates to mitigate higher stream temperatures, increase flushing flows to clean sediment in the stream, and provide nutrient removal to offset water quality impacts in Grand Lake and the Colorado River. Federal reviewers incorporated the plan into the Final Environmental Impact Statement.

The project participants have also agreed to voluntary enhancement measures to address concerns with the current condition of aquatic life in the Colorado River, including a state-authorized plan to provide \$4 million to fund future stream restoration and habitat-related projects on the Colorado River and \$250,000 to study a stream bypass around Windy Gap Reservoir. As part of the 1041 permit approved by Grand County, the Subdistrict has entered into several agreements with local governments and environmental nonprofits that provide ecological enhancements. The Windy Gap

Bypass Funding Agreement provides \$2 million to construct a bypass around the reservoir, which is matched by \$2 million in funding from the state. An Intergovernmental Agreement between the Subdistrict, Grand County, CRWCD, Middle Park Water Conservancy District, and Northwest Colorado Council of Governments provides a reliable water supply to Middle Park to meet their future water needs and additional water supplies that Grand County may use for environmental purposes. The “Learning by Doing” cooperative effort associated with the CRCA provides a long-term commitment to coordinate project operations with other water providers and to monitor aquatic conditions to maintain and enhance the environment.

The result of this collaboration between Eastern and Western Slope entities and state agencies is that the conditions for aquatic life in the Colorado River will be improved and the Windy Gap Firming Project will move ahead to meet water supply needs on the East Slope.

WISE Partnership

The Water, Infrastructure, and Supply Efficiency (WISE) Partnership serves as a great example of collaboratively utilizing infrastructure to meet increasing water demands. The project brings together water providers in the Denver metropolitan area, seeking to meet these challenges jointly rather than on an individual basis. The WISE Partnership explores methods by which existing infrastructure belonging to the various providers might be used to the benefit of all cooperating partners.

In response to the drought of 2002, Aurora Water began construction on the Prairie Waters Project, an innovative supply and filtration system. This new undertaking helped firm Aurora’s supply, and created a large system of treatment and water transport infrastructure. Looking to the future, Aurora began working with Denver Water and the members of the South Metro Water Supply Authority on this partnership, which will utilize Prairie Waters capacity with Denver and Aurora’s unused supply and reusable flows. While firming up supply in times of drought for these providers, the partnership also provides for the sale of water to South Metro as a new and sustainable supply.

The WISE Partnership shows remarkable promise because it allows for flexibility in the face of hydrologic uncertainty and establishes triggers for how to modify yields based on available flows. In addition, South Metro Water Supply Authority members utilize back up water supplies when WISE water is not available.

State Funding for Collaborative Projects

The use of state funding for a multipurpose project was mentioned as an outstanding feature of the Elkhead Reservoir project. As Colorado moves from the planning phase to project implementation phase, we anticipate that the opportunities for funding will become more competitive. The Basin Implementation Plans have indicated that multipurpose projects and processes should be prioritized.

Additional examples of state support through funding are the Chatfield Reallocation project, the Wild and Scenic Alternatives processes, the Animas-La Plata Project, and a collaborative process to assess the best approaches to secure water for the Upper Colorado River Basin Recovery Implementation Program. The multiple stakeholders involved, as well as the multiple purposes served by these major projects, made them appropriate candidates for state funding. For the Chatfield Reallocation and Animas La-Plata projects, the state served as a partner in the planning, permitting, and development of operational procedures, as well as providing financing.

The projects and processes described in this subsection represent the brand of collaboration that will be necessary as Colorado moves into the future of water supply planning. The practices demonstrated here, including local involvement, stakeholder consultation, innovative practices, and multiple uses will also be integral to future successful projects and processes. The Basin Implementation Plan and Colorado's Water Plan process have engaged communities, stakeholders, and basin roundtables like never before, hence the state is presented with the opportunity to capitalize on that involvement, and transfer that sense of engagement to the project implementation level.

8.2. Conceptual Intrastate Agreements and Points of Consensus

During the extreme drought in 2002, it was evident that Colorado had not sufficiently brought stakeholders and technical information together to adequately plan for Colorado's future. Some municipalities were weeks away from running out of water. Farms were being dried up to meet municipal needs at an alarming rate, projects were stuck in a quagmire of distrust and misunderstanding, and the environment was usually missing from the conversation. In response, Colorado initiated three important efforts:

- 1) The Statewide Water Supply Initiative ([SB03-110](#))
- 2) The Colorado Water for the 21st Century Act, which created the Basin Roundtables and Interbasin Compact Committee ([HB05-1177](#))
- 3) The Water Supply Reserve Account Grant Program ([SB06-179](#))

The first was to establish a funding source to support the CWCB in developing the technical backbone for statewide planning, known as the Statewide Water Supply Initiative (SWSI).

The second was to establish nine stakeholder groups for the Metro area and the Arkansas, Colorado, Gunnison, North Platte, Rio Grande, South Platte, Southwest, and Yampa/White/Green river basins. These groups are known as Basin Roundtables (BRTs). Their membership includes representatives for the environment, recreation, domestic water suppliers, agriculture, and industry. These members are joined by representatives from each county, municipalities within each county, and conservancy and conservation districts. A BRT may also vote in additional members, who may serve as voting or nonvoting members. The major charge of the BRTs was to determine their municipal, industrial, agricultural, environmental, and recreational needs, and identify projects and methods to meet those needs.

In addition to these nine groups, the Interbasin Compact Committee (IBCC) was formed. The IBCC is made up of two representatives from each BRT, six governor appointees, two legislative appointees, and the Director of Compact Negotiations. The IBCC's main charge is to work with the BRTs to develop and ultimately ratify cross-basin agreements. A detailed list of the IBCC membership is available [here](#).

The BRT and IBCC processes have evolved over the years, and several work products were developed to reach consensus across the state. These include:

- 1) Statewide Basin Roundtable Summits and the Roadmap documents that followed
- 2) IBCC 2010 Letter to then outgoing Governor Ritter and then Governor-elect Hickenlooper
- 3) IBCC Draft No and Low Regrets Action Plan
- 4) Draft IBCC Conceptual Agreement

Statewide BRT Summits

The three Statewide Basin Roundtable Summits held over the last several years have helped focus Colorado and the hundreds of stakeholders involved in water planning throughout the state. The summits have been an opportunity to learn across basins, make sure that statewide planning is heading in the right direction, and to set the course forward.

IBCC 2010 Letter

In December of 2010, the IBCC completed a letter to the Governor. This letter brought together much of the thinking of the IBCC at that time and laid the foundation for establishing the No and Low Regrets Action Plan and Conceptual Agreement.

The general consensus was the status quo scenario is not a desirable future for Colorado.

Much of this work is still relevant today and has helped guide the formation of Colorado's Water Plan. The IBCC wrote, "The enormous challenge of meeting future water needs facing water users and the State requires the collective input of all stakeholders and a collaborative decision-making process that reaches common ground to plan a sustainable water future that meets our numerous and diverse needs.... Our system of water allocation should be guided and supported by a comprehensive framework that will marshal ever-scarcer government resources in a manner that supports economic growth; protects our environment; provides for municipal, agricultural, and industrial needs; and supports rural, recreation, and ecotourism-based economies."

The IBCC reached consensus that the path Colorado was heading down was not good for Colorado. The IBCC wrote, "status quo will likely lead to large transfers of water out of agriculture resulting in significant loss of agricultural lands, more dried-up streams threatening ecosystems and recreation-based economies, water-inefficient land use decisions, and continued paralysis on water supply projects. We have discussed status quo as the default position--the results that will likely occur if we, the water community, allow current trends to continue unchanged. Inaction is a decision itself, a decision with significant consequences. The general consensus was the status quo scenario is not a desirable future for Colorado."

In describing the path for the future, the IBCC established the following, regarding water supply options: "It is clear that no one strategy can meet Colorado's growing water needs without harming values important to all Coloradans. Therefore, a mix of solutions is needed. At the IBCC's August 2010 meeting, it agreed that a future mix of water supply solutions should include all four sources to meet the water supply gap in Colorado: conservation, IPPs, agricultural transfers, and new supply development, while also protecting Colorado's significant water-dependent ecological and recreational resources."

No and Low Regrets Action Plan

Based on the dialogue and direction from November 2012, March 2013, and June 2013 IBCC meetings, as well as numerous subcommittee meetings, a draft No and Low Regrets Action Plan has been developed. The draft document reflects 100% consensus by the IBCC members, as a menu of options that should be considered for review and incorporation by the Basin Roundtables as part of the Basin Implementation Plan, and by CWCB as a component of Colorado's Water Plan and Statewide Water Supply Initiative. The IBCC resolved all the issues that they "could not live with." This work has been incorporated into section 6.1.

Scenario planning underscores the critical importance of beginning pursuit of the no/low regrets actions now, with full implementation occurring within the next 10 to 15 years. Without the full implementation of these foundational actions, the gap between demands and water supplies will be much greater than originally projected. This means that even under a weak economy scenario, new water supplies would be needed. Under the scenarios in which demands for water are greater and supplies lower, additional new supplies and agricultural transfers will be needed beyond what was envisioned by the Basin Roundtables.

The IBCC identified the following no/low regrets goals:

1. *Minimize Statewide Acres Transferred (per Basin Goals) and Implement Agricultural Sharing Projects.*
2. *Plan and Preserve Options for Existing and New Supply.*
3. *Establish Low to Medium Conservation Strategies.*
4. *Implement Nonconsumptive Projects.*
5. *Have a High Success Rate for Identified Projects and Processes.*
6. *Implement Storage and Other Infrastructure.*
7. *Implement Reuse Strategies.*

This Action Plan is incorporated throughout Colorado's Water Plan and is available [here](#).

Draft IBCC Conceptual Agreement

Starting in 2013, the IBCC focused its discussion on a conceptual framework for future detailed negotiations on a potential new transmountain diversion (TMD). This discussion stemmed from the No and Low Regrets Action Plan, as the IBCC decided that additional discussion and consideration on this particular issue was necessary. Consensus on the Draft Conceptual Agreement was reached in June of 2014, and was submitted to the CWCB for inclusion in Colorado's Water Plan.

The Draft Conceptual Agreement focused on the following seven points of consensus:

1. The East Slope is not looking for firm yield from a new TMD project and would accept hydrologic risk for that project.
2. A new TMD project would be used conjunctively with East Slope interruptible supply agreements, Denver Basin Aquifer resources, carry-over storage, terminal storage, drought restriction savings, and other non-West Slope water sources.
3. In order to manage when a new TMD will be able to divert, triggers are needed.
4. An insurance policy that protects against involuntary curtailment is needed for existing uses and some reasonable increment of future development in the Colorado River system, but it will not cover a new TMD.
5. Future West Slope needs should be accommodated as part of a new TMD project.
6. Colorado will continue its commitment to improve conservation and reuse.
7. Environmental resiliency and recreational needs must be addressed both before and conjunctively with a new TMD.

Though not specifically designated as such, many elements proposed in the seven points serve as risk management tools. For example, the triggers concept in point #3 and the "insurance policy" for existing uses in point #4 are strategies by which the risk of Compact and other interstate related

issues associated with a new TMD may be managed. This will also help reduce the risk that agriculture statewide will have to bear the full brunt of meeting a future water supply shortfall.

The complete Draft Conceptual Agreement is included in full in [Appendix 8-A](#). The CWCB supports these points of consensus as the foundation for any new future transmountain diversion projects seeking state support. Though the agreement is not a binding contract, the considerations described would be necessary to move a project forward with state support.

8.3. Next Steps

In order to support the policies and further the conceptual agreements and points of consensus, several next steps will be needed:

- Colorado will protect the ability use develop Colorado's compact entitlements and continue to support intrastate agreements that strengthen Colorado's position in interstate negotiations.
- Colorado will prepare for a future with scarcer water supplies (i.e. hope for the best, plan for the worst). The State of Colorado will work with other states to evaluate options to achieve sustainable water solutions that balance development of Colorado's compact entitlements and risk of a Compact deficit. This concept is further described in the IBCC's conceptual agreement ([Appendix 8-A](#)), under point #4. CWCB will also support continued outreach to stakeholders regarding these interstate cooperative solutions.
- CWCB will work with stakeholders to refine what conservation targets can be achieved, as addressed in Section 6.3.

ⁱ See Section 2.2 for a description of Colorado interstate compacts and agreements.