



Colorado's Water Plan is our state's framework for solutions to our water challenges. It guides future decision-making and sets forth the measurable objectives, goals, and critical actions needed to ensure the state's most valuable resource is protected and available for generations to come. Implementation at the state, local, and individual level is critical to Colorado moving forward.

Supply and Demand Gap

Statewide Water Supply Initiative (SWSI)

The ongoing SWSI update will serve two primary purposes: provide a consistent statewide framework for examining future water supply and demand under different scenarios, and provide tools and data for Basin Roundtables to use in updating their Basin Implementation Plans (BIPs) and developing detailed local solutions to identified gaps.

Since this is the first time that SWSI is completed in the context of Colorado's Water Plan (CWP) and the Basin Implementation Plans (BIP), this SWSI update will be different from previous versions. SWSI 2010 was a relatively straightforward update of the original SWSI 2004 analysis, and did not focus on methodology refinement. In addition to complementing CWP and the BIPs, this SWSI update will also include a number of new approaches and additions, such as quantifying a scenario planning approach, providing a more detailed and scientifically rigorous hydrologic modeling approach, and addressing agricultural, environmental, and recreational gaps. As a result, the first step in this SWSI update involves reviewing and refining the methodologies.

The methodology development process started with a review of previous SWSI methods for each subject area along with other pertinent studies and approaches. This review is being documented in a draft technical memo for each of the methodologies that recommends the most appropriate approach for the update. The draft documentation is being reviewed by the CWCB at the July board meeting, prior to distribution to the Technical Advisory Groups (TAGs), with meetings anticipated for September. The CWCB is using the TAG process to get stakeholder feedback and ensure that the new methodologies are scientifically sound, effective, and appropriate. TAG participants are encouraged to compile feedback from other roundtable members and local constituents. The TAG review will focus on technical issues, including key concepts and assumptions, data sources, and fatal flaws.

Due to the new scenario planning approach, the SWSI update will result in a much more scientifically rigorous and complex analysis. This approach will focus on hydrologic modeling to enable more detailed site-specific analyses of impacts to water resources throughout the state. The modeling will also help provide more consistency across the subject matter areas. The result will be a wealth of data on impacts or "hydrologic gaps" at specific locations under each of the five planning scenarios. This approach will leverage the State's considerable investment in Colorado's Decision Support System (CDSS) tools and also incorporate other modeling tools as appropriate. Due to data gaps, consistency issues, and roundtable feedback concerning planned projects (i.e. IPPs), the analysis will not interpret or include projects in the modeling analysis, and consequently will not calculate an "infrastructure gap" similar to prior SWSIs. The infrastructure gap was a basinwide and statewide calculation that subtracted the supply of planned projects from projected new demands. Instead, the SWSI update will prepare Roundtables for the forthcoming BIP updates by working towards compiling and standardizing project information. This will then give Basin Roundtables the opportunity to further evaluate projects in more detail in their forthcoming BIP updates, with appropriate decisions about the details and assumptions concerning the modeling of specific projects.



Conservation & Land Use

Regulation 84

The Colorado Department of Public Health & Environment (CDPHE) Water Quality Control Division held a public meeting on July 18 seeking input and participation in a stakeholder process regarding <u>Regulation 84 - Reclaimed Water</u>. CWP recognizes water reuse as a critical step toward meeting future water needs. The Water Quality Control Commission promotes the use of reclaimed water while ensuring the protection of public health and the environment. Denver Water has proposed the four new uses be added to Regulation 84:

- Livestock washdown and watering
- Irrigation for edible crops in an urban/community garden setting
- Irrigation for edible crops in commercial agriculture, including marijuana grow facilities
- Indoor toilet and urinal flushing

The meeting focused on livestock washdown and watering. The process to review proposed uses is a collaborative approach between the Water Quality Control Division, Denver Water and other interested stakeholders. The Water Quality Control Commission rulemaking hearing for the proposed changes to the regulation will be held in August 2018. Sign up to get updates on the process.



Growing Water Smart

CWP sets a goal that by 2025, 75% of Coloradans will live in communities that have incorporated water-saving actions into land use planning. To help communities integrate land use and water planning to achieve this goal, the Sonoran Institute and Lincoln Institute of Land Policy developed a new Colorado Community Assistance Program called *Growing Water Smart*. *Growing Water Smart* combines topical sessions with team-based action planning. The first workshop will be held September 11-13 in Keystone, CO. Learn more.



Agriculture

Bureau of Reclamation Funding Available for Salinity Control Projects

The Bureau of Reclamation held three listening sessions to help applicants understand the requirements of an upcoming Funding Opportunity Announcement (FOA) for projects that reduce salinity contributions to the Colorado River system. These federal grants reduce salt-loading into the Colorado River system by improving water delivery efficiency throughout canal and ditch systems, and improving aging infrastructure. This program leverages a significant amount of federal funding for the benefit of agricultural water users in western Colorado. CWCB staff will be working with conservation districts in salt-loading areas on the west slope as the FOA application process opens in August, providing technical assistance grants to assist prospective grantees in preparing an application.

Ag Water NetWORK

CWP estimates our state could lose up to one-fourth of its remaining irrigated ag land by 2050 due to 'buying and drying' of ag land for development. The plan recommends measures such as greater water conservation, storage, and ag water leasing to minimize further 'buy and dry.'

<u>Colorado Cattlemen's Ag Water NetWORK</u> is developing a web-based screening tool to help ag water right holders assess their water leasing potential. The lease screening tool will allow irrigators to input basic information about their water right and get a rating of its suitability for leasing water for other uses, such as municipal, industrial, recreational and aquatic life support. The lease screening tool represents a first step in helping to expand opportunities for ag water right holders to participate in compensated, temporary, voluntary ag water leasing.



Point of Rocks Water Company

In November of 2016, the North Sterling Irrigation District began discussions with BNN Energy to determine the potential of providing 6,800 acre-feet of water per year for oil production in Northern Weld County. After several meetings, agreement and delivery negotiations, and jointly working through permitting requirements, the two parties reached an agreement and began construction.

The North Sterling Board of Directors and District management educated and discussed the deal with the District's farmers. In order to facilitate the deal and to make it completely voluntary, the Point of Rocks Water Company II LLC was formed, in which farmers representing 98.8% of the land in the District signed up to participate in the 10-year deal. In three short months, BNN Energy built a diversion structure at the reservoir and buried 37 miles of 18-inch pipeline with 4 pumping stations. Pumping began on May 31 and after working through a few issues in the system, the first water was delivered to BNN Energy ponds on June 8, 2017.

Storage

Water Supply Planning and Permitting Process

The water supply planning and permitting process plays a major role in water resource management in Colorado as it can be lengthy and resource-intensive. CWP calls for improving efficiency and coordination in this process. To put this into action, the State of Colorado and U.S. EPA Region 8 jointly convened a Lean event in March 2016 that brought together stakeholder groups to address these challenges. Lean (or process improvement) is a set of principles and methods to improve customer experience by identifying and eliminating waste from a process.

The result of the Lean event was a series of recommendations to improve communication and cooperation across federal, state, and local regulators. The Lean team met on July 6 to discuss implementation of those recommendations, including the *Colorado Water Supply Planning and Permitting Handbook*. The handbook will serve as a tool to help entities wanting to develop a water supply project better understand the process. The handbook will also include a series of helpful hints emphasizing the need to engage agencies and relevant stakeholders and to incorporate regulatory requirements at the earliest stages of project planning. The Lean team is finalizing the handbook and should release it for public viewing in early September.

More information and materials are available on <u>CWP website under</u> <u>the "Implementation"</u> tab.

Innovation

TAP-IN Colorado

TAP-IN hosted its first "reverse pitch" event, TAP-IN: *Source & Cycle*, on June 21 in Denver with 130 attendees. In contrast to traditional pitch competitions where entrepreneurs pitch ideas to potential investors and customers, a reverse pitch puts end users in front of entrepreneurs to pitch their specific challenges.

At TAP-IN: *Source & Cycle*, subject matter experts shared their insights; six end users pitched their problems; and the room of water experts, entrepreneurs, and business professionals engaged in a dialogue about water innovation locally, nationally, and globally.

The next reverse pitch event is on August 24 in Fort Collins and will focus on the agriculture, food, beverage, and brewery industries. Problem-solve with us!

Funding

Colorado's Water Plan Grant Funding

Funding is critical to implementing CWP. A new grant opportunity is available through the CWCB to provide financial assistance on select projects, programs, and activities that make progress on the critical actions and measurable objectives identified in CWP.

The Critical Action Plan in Chapter 10 features near-term, high-impact actions that support and enhance Colorado's water values. This will be the CWCB's guide during the grant approval process; the Board will select applications that demonstrate the best opportunity to meet these goals. The grant funding categories include: supply and demand gap; water storage; conservation and land use; engagement and innovation; agricultural; and environmental and recreation projects.

Guiding documents and application materials can be found on both the <u>CWCB website under the "Loans & Grants"</u> tab and on <u>CWP</u> website under the "Implementation" tab.

Additional Critical Goals

Colorado's Clean Energy Transition

On July 11, Governor John Hickenlooper signed an executive order committing the state to climate action. He also announced that Colorado will join the U.S. Climate Alliance, a bipartisan group of states in the United States that are committed to achieving the U.S. goal of reducing carbon dioxide emissions 26-28% from 2005 levels by 2025. The executive order sets forth the following goals for the State of Colorado to achieve:

- Reduce statewide greenhouse gas emissions by more than 26% from 2005 levels by 2025;
- Reduce carbon dioxide emissions from the electricity sector by 25% by 2025 and 35% by 2030 from 2012 levels; and
- Achieve electricity savings of 2% of total electricity sales per year by 2020.



In his statement, Governor John Hickenlooper said "Coloradans value clean air and clean water. Our strong economy is a reflection of how our exhilarating outdoors attracts young entrepreneurs and the talent they need for their businesses, the vast majority of our residents, and indeed the country, expect us to help lead the way toward a clean and affordable energy future. In this process, we no doubt can address climate change while keeping a priority on household budgets."

In addition to the above goals, Colorado also is committing to:

- Work strategically with any interested utility or electric cooperative on a voluntary basis to maximize use of renewable energy without increasing costs to taxpayers;
- Create a statewide electric vehicle plan by January 1, 2018;
- Develop a greenhouse gas emissions tracking rule through the Department of Public Health and Environment;
- Identify opportunities to partner with local governments on locally-led climate resilience actions;
- Institutionalize the state's greening government initiative;
- Formalize and expand upon cross-agency actions to provide economic development strategies and other supportive services to communities impacted by the changing energy landscape, and submit a written annual report detailing those efforts and accomplishments;
- Incorporate the emissions reductions goals into the Colorado Climate Plan and solicit stakeholder input regarding additional measures or strategies to advance these goals.

View the complete executive order.

Basin Roundtable & Interbasin Compact Committee (IBCC) Survey

In October 2016, a doctoral student from the University of Colorado conducted a survey about experiences with the Basin Roundtable/ IBCC process to learn more about the role that collaborative processes can play in governing our water resources. Some highlights of her findings from the <u>technical report</u> include:

- 92.5% of respondents agreed that the group they participate in (i.e. a Roundtable or the IBCC) makes decisions based on consensus;
- While only 31% of respondents agreed that participating in the process caused them to change their values about water management in Colorado, 98% agreed that they learned more about other stakeholders' values as a result of participating, and 84% agreed that they formed new working relationships with stakeholders with different values.

Front Range Joint Basin Roundtable Meeting

The Arkansas, Metro, and South Platte Basin Roundtables had a joint meeting on June 20 in Denver. They discussed Alternative Transfer Methods (ATMs), the role of the Interbasin Compact Committee (IBCC), CWP implementation, stream management plans, education and outreach efforts, and the Water Supply Reserve Fund (WSRF) needs assessment.

Colorado's Water Plan Measurable Objectives

Colorado's Water Plan was created by Coloradans for Coloradans, and the entire state has the responsibility to help implement the plan. Everyone has a role to play to achieve the measurable objectives and critical actions set forth in the plan.



Supply-Demand Gap

Colorado's Water Plan sets a measurable objective of reducing the projected 2050 municipal and industrial gap from as much as 560,000 acre-feet to zero acre-feet by 2030.

Agriculture

Colorado's Water Plan sets an objective that agricultural economic productivity will keep pace with growing state, national, and global needs, even if some acres go out of production. To achieve this objective, the State will work closely with the agricultural community, in the same collaborative manner that has produced agricultural transfer pilot projects, to share at least 50,000 acre-feet of agricultural water using voluntary alternative transfer methods by 2030.

Land Use

Colorado's Water Plan sets a measurable objective that by 2025, 75 percent of Coloradans will live in communities that have incorporated water-saving actions into land-use planning.

Colorado's Water Plan sets a measurable objective to cover 80 percent

of the locally prioritized lists of rivers with stream management plans, and 80 percent of critical watersheds with watershed protection plans, all by 2030.

Watershed Health,

Environment, and Recreation

Funding

Colorado's Water Plan sets an objective to sustainably fund its implementation. In order to support this objective, the State will investigate options to raise additional revenue in the amount of \$100 million annually (\$3 billion by 2050) starting in 2020. Such funds could establish a repayment guarantee fund and green bond program focused on funding environmental and recreational projects. In addition, such funds could further support conservation, agricultural viability, alternative transfer methods, education and outreach, and other plan implementation priorities.

Storage

Colorado's Water Plan sets a measurable objective of attaining 400,000 acre-feet of water storage in order to manage and share conserved water and the yield of IPPs by 2050. This objective equates to an 80 percent success rate for these planned projects

Education, Outreach, and Innovation

Colorado's Water Plan sets a measurable objective to significantly improve the level of public awareness and engagement regarding water issues statewide by 2020, as determined by water awareness surveys. Colorado's Water Plan also sets a measurable objective to engage Coloradans statewide on at least five key water challenges (identified by CWCB) that should be addressed by 2030.

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