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Mike King, DNR Executive Director

James Eklund, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Rebecca Mitchell, Section Chief

Water Supply Planning Section

DATE: September 4, 2015

AGENDA ITEM: 7. Colorado's Water Plan Update

Staff recommendation: This is an informational item only. No Board action is required.

Background

Pursuant to Executive Order D 2013-005 CWCB board and staff continue to align existing efforts in order to successfully deliver the grassroots-based Colorado's Water Plan. The first draft of Colorado's Water Plan was presented to Governor John Hickenlooper on December 10, 2014. The second draft is now available for public review and online at www.coloradowaterplan.com. Additional work will continue in coordination with the Governor's Office throughout 2015. CWCB board and staff will continue to solicit statewide participation and public comment through September 17, 2015 at midnight, before the draft plan is finalized and submitted to the Governor no later than December 10, 2015. Staff will lead a discussion on the items listed below.

Discussion

Staff will lead a discussion on the following items:

- 1. Colorado's Water Plan Timeline
- 2. Interbasin Compact Committee
- 3. Finalizing Colorado's Water Plan
- 4. Input Received Between June 20 and August 31, 2015
- 5. Public Input Presentations

1. Colorado's Water Plan Timeline

The second draft of Colorado's Water Plan was released to the public on July 10, 2015. The final public comment period began with release of the second draft and will end September 17, 2015. Once all comments are considered and incorporated as appropriate, the final Colorado's Water Plan will be delivered to the Governor no later than December 10, 2015.

2. Interbasin Compact Committee (IBCC)

The IBCC met on August 25, 2015. Staff will update the Board on IBCC and Basin Roundtable discussions.

3. Finalizing Colorado's Water Plan

Staff will lead a discussion with the Board regarding the final details related to finalizing the water plan and solicit feedback regarding the final draft, which will be submitted to the Governor no later than December 10, 2015.



4. Input Received Between June 20 and August 31, 2015

In the past comment period CWCB received and reviewed 1,289 comments. Additional comments are expected through September 17, 2015 and a final summary of all comments will be prepared. A summary spreadsheet is attached including the staff responses. Included were 12 unique email submissions, 13 webforms through the Colorado's Water Plan website, 2 mailed letters, and 562 form letters sent by email. Along with the input submitted were 7 documents, which were reviewed and included in the CWCB Board packet. Additionally, an attachment to the Board packet includes all of the 700 letters submitted by hand through Clean Water Action.

5. Public Input Presentations

This agenda item will provides an expanded opportunity for public input regarding Colorado's Water Plan. This is the final opportunity for public comment to the CWCB Board on Colorado's Water Plan at a CWCB Board meeting. Preference will be given to groups that submit formal written input in advance to cowaterplan@state.co.us. Comments will be accepted online through midnight on September 17, 2015.



em	Date	Input Provided By	Method of Input Submission	Summary of Input	Documents	Staff Responses and Recommendations
mber					Submitted for Review	
	4/3/2015	Delta Board of County Commissioners	Sent letter to the CWCB		1 document	Thank you for your support. CWCB staff will pass your comment letter along to the Gunnison Basin Roundtable.
	7/6/2015	Denver Metro Chamber of Commerce sent by Mizrain Cordero	Email to cowaterplan	Please find a letter as well as a set of goals and strategies attached. Thank you for your attention and please do not hesitate to let us know if you would like us to provide more concrete examples and detail if that would be helpful.	2 documents	Thank you for your comments, which are consistent with Colorado's Water Plan.
	7/7/2015	Gregg Ten Eyck, Leonard Rice Engineers, Inc.	Form submission	A modest suggestion: Consider rephrasing the following sentence: A healthy environment that includes healthy watersheds, rivers, streams, and wildlife. (page 392) to read as: A healthy environment that includes healthy watersheds, rivers and aquifers, streams, and wildlife	N/A	This is an interesting suggestion and CWCB staff will consider making this change in the final draft of Colorado's Water Plan.
	7/13/2015	Peter Nichols, BHGR Law	Email to cowaterplan, forwarded by CWCB staff Jacob Bornstein	Regarding Chapter 10, in case my thinking wasn't clear. What I envision is sort of like the scenarios where you show the sources in stacked bar graph. What I'm hoping to see if the action items in a stacked bar graph to show how much each contributes to the respective legs of the stool, and environmental/recreational cushion. That will help illustrate which should be priorities, as well as any remaining distance that will require additional action to get to the ultimate goals for each source. Thanks for your consideration.	a N/A	CWCB staff and Board are working to determine if and how the actions in the plan can be made measurable. The commenter's suggestion is an interesting way to accomplish this and will be considered as part of the final revisions of Colorado's Water Plan.
	7/14/2015	Chet Haltom, citizen	Email to cowaterplan	Please read this article, as my comments relate directly to it. http://www.postindependent.com/news/17142711-113/aurora-colorado-springs-opposing-proposed-glenwood-whitewater-parks. In my humble opinion, 1,250 cfs is a bare minimum for the recreation industry of not only Glenwood springs, but as far as aspen, vail and parachute, to exist. I remember one summer, 2011 I believe, when the flow was allowed to drop below 1000 and all the fish started dying (yes, its already stated that we need a minimum of 1,250 cfs just to keep the water cold enough for trout to survive, not thrive.) The advertisements on the brochures lining displays across the entire state had a lot of living up to do that year. Colorado Water Conservation Board I hope you are checking your notes, because this is a thing already wink emoticon.	N/A	The CWCB and the Basin Roundtables will be working to support conservation, environment, and recreation in the Basin Implementation Plans and Colorado's Water Plan. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan, and is explored in Section 6.6. Thank you for your comments.
	7/23/2015	Upper Yampa Water Conservancy District sent by Kevin McBride	Email to cowaterplan	The Upper Yampa Water Conservancy District Board has asked me to send this letter in regards to the support of the Framework Agreement by the IBCC. As an aside, I want to tell you from my personal perspective what an excellent experience working on the IBCC with you, your staff, and IBCC Director Stulp is and I look forward to future discussions.	1 document	Thank you for bringing these concerns to CWCB staff's attention. It is important to note that the Conceptual Framework is a <i>framework</i> , not an agreement. As such, there will continue to be conversations concerning many aspects included in the Conceptual Framework, including topics related to your concern about native flows in the Yampa River.
	7/31/2015	Laura Spann, citizen	Form submission	Just a small note: on page 24, water conservancy and water conservation districts are listed as special districts. They are technically not special districts but follow their own rules under separate statutes. I wonder if you could just address this by changing the title of the section to "Districts." It's a small detail, but it seems relevant because special districts have to abide by certain regulations that conservancy and conservation districts do not.		Thank you for this suggestion and CWCB staff will make this change in the final draft of Colorado's Water Plan.
	8/5/2015	Charles & Patricia Kurnik, citizen	Form submission	We applaud your efforts to date working to conserve Colorado's vital river resources. Living in Longmont, we enjoy walking along the wildlife corridor that exists along the St. Vrain River. Our life also depends on this water for obvious reasons – drinking, bathing, and local produce we purchase at the Boulder County Farmer's Market each weekend in the spring, summer, and fall. We would lik to see the antiquated system of water rights updated to address the challenges of the 21st century. This system may have been needed to help grow the population of the American West in the 19th century, but Colorado hardly needs help growing at this point in time. Absent modernizing these antiquated laws, we urge the Board to examine a leasing scheme being implemented in Californi by the Palo Verde Irrigation District and the Metropolitan Water District. We would also like to see state-wide efficiency programs for water implemented. These programs have proven to be effective in the electricity space. Colorado has an annual savings target of 3.7% of electrical load annually. A similar target for water would prove invaluable to our river resources, likely avoiding the damaging effects of constructing additional diversion projects such as the Northern Integrated Supply Project. We urge the Board to address Colorado's water needs through conservation and modernizing water law. We realize this may be politically difficult, but losing the water resources we currently have would not be easily forgiven by future generations of locals and tourists alike.	e t a	Colorado's water law affords significant agility in the face of new challenges the state may face. In addition, Colorado's Water Plan proposes some amendments. For instance, while water leasing such as that suggested by the commenter is allowable under current law, the plan encourages more of this. Some legal modifications may be needed to allow leasing to be accomplished more easily. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. As is currently described in the No and Low Regrets Action Plan and Colorado's Water Plan, there should be a minimum statewide water conservation target of 320,000 acre-feet by 2050, which includes 150,000 acre-feet from passive and 170,000 acre-feet from active conservation efforts. The section on municipal and industrial conservation is also updated in the second draft of Colorado's Water Plan with an added conservation stretch goal, consistent with the IBCC's recent development of a 400,000 acre-feet aspirational active conservation stretch goal.
	8/6/2015	Special District Association of Colorado sent by Michael Valdez	Form submission	We offer the following revisions for your consideration. I am attaching a letter that has WORD track changes to assist you in seeing the proposed amendments.	1 document	Thank you for this suggestion and CWCB staff will consider making these changes in the final draft of Colorado's Water Plan.

Item	Date	Input Provided By	Method of Input Submission	Summary of Input	Documents	Staff Responses and Recommendations
umber					Submitted for Review	
8/9/2015		Larry Fancher, citizen of Pueblo, SB 115 process	Form submission	At this time Black Hills Energy is in the process of demolishing Electrical Power Plant in Pueblo, Unit 5,6. This operation has 200cfs water rights, Priority No5, established Oct 1932 and storage rights of 105 Acre feet. Since these rights are Industrial water rights they may not be transferred, sold or leased. In demolition plans submitted to the Public Utilities Commission for these power units there is nothing indicating that the intake on the Arkansas River is to be demolished. At the Clark Power Plant in Canon City on the Arkansas River when that plant was demolished last year the intake structure on the river was demolished. With no plan to demolish intake structure on Arkansas that allows take of water for BHE Units 5,6 does this mean that this water, 200cfs, will be allowed to continue to allow flow into city of Pueblo for recreational uses which is not one of the uses of Industrial water rights? In addition will the 105 acre feet storage tights mentioned also be allowed after demolition of the BHE Units 5,6? To further struggle with this issue one must realize that this flow through of 200 cfs has allowed storage without augmentation plans of 450 acre feet in what is called Runyon Lake, an old gravel pit structure previously owned by Colorado Fuel and Iron Corporation. The allowed '105 acre feet storage BHE right is used in three separate ponds westerly of the BHE power plant Units5,6. It seems that once the BHE unit is demolished that flow should not be allowed, take should not be allowed, upon completion of demolition. Storage of water in Runyon Lake must have an augmentation plan as well. What is the position of the Div 2 Water Engineer Steve Witte on this matter? Will this water right of 200cfs be placed on the Abandonment List? If so when? There are in priority water rights east of Units 5,6 on the Arkansas River that get no water as depletion due to upstream use or evaporation or seepage keeps any from reaching those who have priority rights. I have put these same questions to Black Hills Energy		As this comment is not directly related to Colorado's Water Plan, CWCB staff will follow up separately with the commenter on this issue.
11	8/13/2015	Linda Marsh, citizen	Form submission	Dam up the Gunnison at Doinquez canyon. That will create recreation, economy, jobs. Let CA. come up with a cheaper way to get salt water turned into fresh water. That's where all the nerds live in Silicone Valley. Las Vegas can turn more of its' grey water into irrigation water and use turf. Help small farmers in Colorado by working with Agriculture department to create more agriculture so we don't depend on CA. Work with Irrigation departments so we can water earlier in the morning and later at night to conserve on evaporation.)	Thank you for your comment. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. The four values driving Colorado's Water Plan recognize the importance of recreation and agriculture. Those four values are 1) vibrant and sustainable cities, 2) viable and productive agriculture, 3) a robust recreation and tourism industry, and 4) a thriving environment that includes healthy watersheds, rivers, streams, and wildlife.
12	8/18/2015	Gary Hausler, citizen	Form submission	Neither the first or second draft of the SWP addresses importation as a source of meeting the 2050 supply gap. Both drafts do not rule out additional trans-mountain diversions. A presentation is available that demonstrates consideration of further transmountain diversion to meet Front Range requirements is not a viable option. The water in the Colorado River Basin may be available on paper but is not available on the ground. A proposal, which I have developed, for importation of water from the Mississippi Rive has been publicized for over 10 yrs. More than adequate water is available in the main stem of the Mississippi River south of Cairc III (240,000,000 AF\yr) with a pipeline system to bring the water to the Colorado's Front Range economically feasible. This project has been ignored by CWCB and the water community in the state. With the State of Kansas actively studying a pipeline to bring 1,000,000 + AF\ft of water annually from the Missouri River to its western border, it appears to me that Colorado should contact the Kansas Water Authority and explore a combined project that would be mutually beneficial to both states. The proposal that is referred to in these comments is available but exceeds the maximum file size for uploading to this site. The CWCB is remiss if not negligent if this importation scheme is not considered.	le ir	Water sources from the Midwest have been explored and are not currently viable at this time due to several factors including logistics, federal vs. interstate issues, permitting issues, and energy costs. It is worth noting that other people have proposed this issue at the basin roundtable level, and there are discussions going on statewide. Thank you for your comment.
13	8/18/2015	State Representative Kathleen Curry	Email to cowaterplan	Hi everyone at Colorado Water Plan office! This is former State Rep Kathleen Curry writing to complement you on the second draft of the CWP. I just tried to read it top to bottom, but have to admit that I focused on the agriculture-related sections and kind of speed-read the rest. I thought that the way you approached the ET discussion, and tried to explain the complications with terminology, in the ag efficiency section was one of the best and most readable analyses of this topic that I have ever come across Excellent. I am a member of the Upper Gunnison River Water Conservancy District Board of Directors, and I think we will be developing some comments on behalf of the District, so I won't go into too much detail here. But speaking as a small business owner and as the spouse of a local rancher, I was so very pleased that the plan acknowledged the challenges associated with the re-timing of flows, the fact that agricultural production is a business, and that we are contributing to local and national food security. If you would please forward this email to the folks that worked on the ag sections of the plan I would be most grateful. I think they did a really good job. My personal opinion is that there just isn't enough water to do everything we want to do, and that we need to face that fact. It is going to be challenging, but this document is useful as a tool that states the problem, identifies some options, and moves the conversation to the next level.		Thank you for your comments, they were passed along to the staff involved in writing the sections related to agriculture.

Item Number	n Date Input Provided By Method of Input Submission mber		Method of Input Submission	Summary of Input	Documents Submitted for Review	Staff Responses and Recommendations
14	8/19/2015	Clean Water Action	Dropped off letters to the CWCB	700 letters from the community	700 letters	The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. As is currently described in the No and Low Regrets Action Plan and Colorado's Water Plan, there should be a minimum statewide water conservation target of 320,000 acre-feet by 2050, which includes 150,000 acre-feet from passive and 170,000 acre-feet passive
15	8/19/2015	Peter Bridgman, citizen	Form submission	Why is the CO Plum\bing Board dragging their feet on the introduction of Grey Water in all CO homes both new and old to be used for flushing toilets? As flushing toilets is the biggest water user inside the home. I hope you are able the answer this question a little faster than the first one I asked. As I am still waiting for that answer despite being publically promised an answer very soon at the Water Fluency Course and that was a week ago now.	N/A	Thank you for comment. The Executive Director of the Colorado Department of Natural Resources testified at the latest Plumbing Board meeting in late August explaining the importance of adopting the greywater standards in order to help meet the future water supply gap and support the implementation of Colorado's Water Plan. The Executive Director is confident that the Plumbing Board will adopt the greywater standards within the near future at an upcoming meeting. Please be in touch with the Colorado Plumbing Board directly as current legislation states that the Plumbing Board will come up with plumbing specifications for indoor greywater use.
16	8/20/2015	Collin Robinson, citizen	Form submission	Consider adding to 10.3(IV)a legislative measure modifying Water Court and ATM proceedings that change irrigation water rights to add criteria for retaining or replacing associated agricultural production in time, place, and amount, in order to prevent injury to local economic and food security interests, similar to the existing augmentation plan requirement that water be made available to offset stream depletions in time, place, and amount to prevent injury to local water rights. e.g. a change case could dry-up a hayfield that produced X dollars worth of hay during every Y years in County Z, so long as it applies an adequate fraction of the CU credit to, say, vegetable production not previously in place, that can reasonably be expected to yield the same X dollars worth of vegetables per Y years in County Z, and then dedicate the remaining CU credit to whatever uses desired in whatever location tenable under existing water law.	N/A	The exploration of evaluations of agricultural transfers will allow municipalities to demonstrate how the local economy will continue to be supported. The Arkansas Basin Roundtable produced a report that shows how transfers can be made while keeping local communities whole. Several municipalities such as Aurora Water have implemented many of these measures.
17	8/24/2015	Barbara Coddington, citizen	Email to cowaterplan	PLEASE READ AND COMMENT ON HOW COLORADO WILL AVOID A SIMILAR FATE: Attention In some areas, fracking makes up a significant share of overall water demand. In 2010, for example, fracking in the Barnett Shale region of Texas consumed an amount of water equivalent to 9 percent of the city of Dallas' annual water use.21 An official at the Texas Water Development Board estimated that one county in the Eagle Ford Shale region will see the share of water consumption devoted to fracking and similar activities increase from zero a few years ago to 40 percent by 2020.22 Unlike other uses, water used in fracking is permanently lost to the water cycle, as it either remains in the well, is "recycled" (used in the fracking of new wells), or is disposed of in deep injection wells, where it is unavailable to recharge aquifers. Already, demand for water by oil and gas companies has harmed farmers and local communities: In Texas, water withdrawals by drilling companies caused drinking water wells in the town of Barnhart to dry up. Companies drilling in the Permian Basin have drilled wells and purchased well water drawn from the Edwards-Trinity-Plateau Aquifer, drying up water supplies for residential and agricultural use.23 Wells that provided water to farms near Carlsbad, New Mexico, have gone dry due to demand for water for drilling and years of low rainfall.24 Competition for limited water resources from fracking can increase water prices for farmers and communities—especially in arid western states.	N/A	Fracking currently uses approximately 18,000 acre feet per year, which is a very small proportion of Colorado's overall water use. However, there may be some areas where there are greater regional effects. In addition, power plants that burn natural gas to make energy use less water than traditional power plants. Therefore, from an overall resource management perspective, fracking and the resulting energy production do not consume a significant amount of water compared to current levels. Colorado's Water Plan seeks to work collaboratively to uphold Colorado's water values and does not put a value judgment on any one beneficial use. Thank you for your comments.
18	8/27/2015	Andrew Massell, Blue River Group, Sierra Club	Email to cowaterplan	First, high conservation should be a priority in every water district! Less use of grass should be a priority. Quality of life is enhanced by healthy water sources. The economy of Colorado is highly dependent on high country tourism, which requires healthy water sources.	N/A	The four values driving Colorado's Water Plan recognize the importance of healthy water sources and tourism. Those four values are 1) vibrant and sustainable cities, 2) viable and productive agriculture, 3) a robust recreation and tourism industry, and 4) a thriving environment that includes healthy watersheds, rivers, streams, and wildlife. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. As is currently described in the No and Low Regrets Action Plan and Colorado's Water Plan, there should be a minimum statewide water conservation target of 320,000 acre-feet by 2050, which includes 150,000 acre-feet from passive and 170,000 acre-feet from active conservation efforts. The section on municipal and industrial conservation is also updated in the second draft of Colorado's Water Plan with an added conservation stretch goal, consistent with the IBCC's recent development of a 400,000 acre-feet aspirational active conservation stretch goal. Thank you for your comments.
19	8/27/2015	Dave Miller, citizen	Dropped off a letter to the CWCB		1 document	The commenter asks several questions. First, the Basin Roundtables represent diverse stakeholders, made up of Colorado water users and providers, as well as environmental interests and local governments. The Colorado's Water Plan development process is also open through 9/17/2015 to any member of the public who wishes to comment. Secondly, Colorado's Water Plan does not include any specific projects. Further analysis of any specific projects will be part of the next update of the Statewide Water Supply Initiative and further Basin Roundtable work.

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20	8/28/2015	Shane Wright, citizen	Email to cowaterplan	As you must know, the Colorado Water Conservation Board was created to "conserve" every drop of water from running from the state. Not to conserve or protect rivers. The water community such as the IBCC Metro and South Platte Roundtable disproportionately represent the views of water developers. This is not the viewpoint that the people of Colorado hold. It is the last vestiges of Water Buffalo mentality that lacks creativity, big picture thinking and any sort of innovative conservation ideas. The people of Colorado want clean and wild rivers that are fish able and swim able. Not more damns. Not more diversions. It is time for the politics of the water world to catch up to the conservation visions of the people. This plan reflects the water providers and politicians perspective and is not inclusive of real people. Old law. Old ideas. It is time that we regulate development and agriculture and build a more innovative vision for Colorado Water that refl ects the values of the people. This plan is a joke.	N/A	The four values driving Colorado's Water Plan are 1) vibrant and sustainable cities, 2) viable and productive agriculture, 3) a robust recreation and tourism industry, and 4) a thriving environment that includes healthy watersheds, rivers, streams, and wildlife. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual framework which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. The Conceptual Framework and related chapter will be updated based on the status of ongoing discussions of the IBCC. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. As is currently described in the No and Low Regrets Action Plan and Colorado's Water Plan, there should be a minimum statewide water conservation target of 320,000 acre-feet by 2050, which includes 150,000 acre-feet from passive and 170,000 acre-feet from active conservation efforts. The section on municipal and industrial conservation is also updated in the second draft of Colorado's Water Plan with an added conservation stretch goal, consistent with the IBCC's recent development of a 400,000 acre-feet aspirational active conservation stretch goal. Thank you for your comments.
21	8/28/2015	Shane Wright, citizen	Email to cowaterplan	I heard John Stulp say smugly how they were proud that so many letters did not get into the final format. This is politics and old archaic thinking in my opinion. Not valuing conservation or recreation and giving all the control as always to big agriculture and municipal water developers. Its old. Dumb. Tired thinking. We can do so much better. Protecting and conserving our rivers and our environment is good for our long term economy it is just not as good for short term political cycles. This whole process makes me sad and is a living example of what happens when there is power of the few overwhelming the voices of the many. One of the most back room political and inside public processes I have ever seen. Big Bummer.	N/A	At each CWCB Board meeting since September, 2013 there has been a public input agenda item regarding Colorado's Water Plan. All of the comments received via the Colorado's Water Plan website or by email to cowaterplan@state.co.us were included in the CWCB Board packets for review and comment and are also linked. Depending on the date of submission, input has or will be reviewed at the next scheduled CWCB Board meeting. While not every individual receives a direct email reply regarding their input, a CWCB staff response and/or recommendation regarding all input received is included in a summary spreadsheet within the related Board packet and also available for review online, the link is provided here: http://coloradowaterplan.com/. Additionally, the 9 statewide Basin Roundtables were all involved in drafting the Basin Implementation Plans, which are a large part of Colorado's Water Plan. Each Basin Roundtable is made up of a diverse set of stakeholders and the inclusion of both an environmental and recreational representative is required by the Colorado Water for the 21st Century Act. In addition, representatives from each county, municipalities within each county, industry, agriculture, and domestic water suppliers are required. Lastly, a representative from each water conservation and conservancy district are also stipulated. There are also several other at large seats, and many of these are held by environmental interests, and many of the local government representatives are also focused on environmental and recreational issues since their citizens care about these topics and the area may be dependent on tourism. Additionally, all Basin Roundtable meetings are open to the public. The CWCB has been in regular communication with environmental groups and many of their comments on the plan were incorporated.
2	8/30/2015	Fred Bauder, citizen	Email to cowaterplan	My comments on the Colorado Water Plan: Agriculture takes nearly all Colorado water, 90% or so, with about 50% used to raise hay. Agriculture produces about 2% of Colorado's gross economic product. Clearly, there is plenty of room for flexibility. Irrigated hay meadows are pretty, if they have not been planted for optimum yield with one high-yielding grass variety, but so are dry meadows. Often those water rights are high in priority, but, in terms of economic yield, very low. There is plenty of room for transferring water from uses which produce minimum return to uses which return high rates of return.	N/A	The four values driving Colorado's Water Plan are 1) vibrant and sustainable cities, 2) viable and productive agriculture, 3) a robust recreation and tourism industry, and 4) a thriving environment that includes healthy watersheds, rivers, streams, and wildlife. The plan aims to balance these values to ensure the best future for Colorado. Thanks for taking the time to comment.
3	8/30/2015	Susan Williams, citizen	Form submission	The reason government has projected an increase in our population upon which it is creating this policy is because it is actively seeking more population in order to boost its economic outlook. Every city in the Metro area and every city of any size in the State of Colorado has an Eco-Devo Dept. all hewing to the same line - bring your business to Colorado, we'll give you tax breaks and mountains and pie in the sky. Never a mention of the water we don't have. In fact, when concerned citizens pushed for a law requiring information on water supply to be included in all real estate transactions, they were shot down by their own government. We are being hijacked by the eco-devo element in this state into a disaster that will kill our agriculture, our wildlife and eventually our tourism as well. Agriculture is going to be incredibly important to our country when climate change takes hold of the U.S. Any locale like Colorado that can still grow crops will be essential to our stability. So, cut off the promotion of our state as a destination. Stop selling Colorado like a product. Stop letting the gas and oil industry irrevocably taint the water that it uses, that cannot be reused. Remember the Colorado that refused the Olympics bid on account of its negative ecological footprint. Conserve the precious water we have.	N/A	The four values driving Colorado's Water Plan are 1) vibrant and sustainable cities, 2) viable and productive agriculture, 3) a robust recreation and tourism industry, and 4) a thriving environment that includes healthy watersheds, rivers, streams, and wildlife. The plan aims to balance these values to ensure the best future for Colorado. Thanks for your comment.

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24	8/31/2015	South Metro Water Supply Authority, sent by	Email to cowaterplan	Please find the attached letter outlining SMWSA's comments on the 2nd Draft Colorado Water Plan. Thank you for all your work on the CWP, and we appreciate the opportunity to contribute to the development and further improvement of the final document.	1 document	Staff appreciates the detailed comment letter provided by SMWSA. Below are responses to each major category of discussion in the comment letter: Municipal conservation tone: Staff will review the tone concerning urban landscapes to ensure that its benefits are described not only in Chapter 5, but also in section 6.3.1. Urban landscapes will continue to play an important role providing benefits to the urban environment, such as cooling effects, storm water retention, and recreational spaces but their composition, design, and water saving capacity will most likely look different in the future than they do today. Conservation goal SMWSA expressed several comments concerning the IBCC's conservation stretch pool. This goal was clarified by the IBCC during the August meeting to ensure that the intent of allowing for local flexibility is expressed. This language was also adjusted in the conceptual framework and the intent is not to affect the federal permitting process by instituting an ammerical conservation target that a local water provider would need to reach. Staff recognizes that this is an IBCC aspirational goal that allows for local flexibility and will review the language to ensure this is adequately expressed. The changes discussed in August will be incorporated into the final plan. Storage goal: SMWSA expresses an interest in developing a storage stretch goal prior to finalization of the plan. Please note that work by the IBCC's conservation subcommittee on the conservation stretch goal began prior to the executive order calling for a water plan. Thus far, no entity has submitted in writing a suggestion for what a storage stretch goal should be: If a value is retent goal for storage cannot be developed between now and the finalization of Colorado's Water Plan, staff will commit to adding an action, such as suggested by SMWSA, to develop and work with the Board to adopt such a stretch goal. Storage action: The storage action concerning the assessment of storage will be broadened. Evaluation of agricultur
25	8/31/2015	Terry Dikeman, citizen	Form submission	Prioritize reservoir over habitats, a large reservoir like flaming gorge, lake mead would be such a large source of income from game and fish, recreation, water supply	N/A	Thank you for taking the time to send your comment. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan, and is explored in Section 6.6.
26	8/31/2015	Philip Weathers, citizen	Form submission	Reuse or Recycling of Fracking water> This is not a commentary on fracking. It is a suggesting on water conservation as it applies to the fracking water after it has been used. As I understand it, there are 3 options for "used/contaminated" fracking water. 1. Sequester it underground after the petroleum is removed 2. Clean it to the point it can be reused in another fracking location 3. Clean it to the point it can be reintroduced into the waterways. My understanding is that the most common is sequestration. Reuse or recycle into the waterways is a way to significant conservation. Reuse or recycle will cost more than sequestration but for the sake of water supply and environmental protection, Reuse or recycle should be a requirement and part of the cost of doing business.	N/A	Many oil and gas companies use recycled water as part of the fracking process and operation. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. Thank you for your comment.

Item	Date	Input Provided By	Method of Input Submission	Summary of Input	Documents	Staff Responses and Recommendations
Number					Submitted for Review	
27	8/31/2015	Ken Baker, citizen	Email to Alan Hamel, Board member. Forwarded to cowaterplan	The Colorado Plan speaks only to "clean water", and water available only in the Colorado Basin and the Arkansas Basin. The abundant, but not so clean, water of the Platte is left out of consideration because of the cost of cleaning the water. My point of reference here is that it is not even a consideration. There may be ways of using the Platte water for outside uses, uses other than drinking, bathing, clothes washing, etc. that do require clean water. The not-so-clean water may have acceptable uses that could justify piping the water back to the Great Metro Complex—uses that could justify the expense of flow back. Clean water uses could be limited to clean water needs, and not to other uses where clean water is not required. In my vision, I could see a South Platte Water Authority, or similar legal administration, charged with the duty of creating storage and reuse of surface and ground water. The UAWCD created a regional augmentation plan several years ago, and in a thumb nail sketch of what could happen in the South Platte, has continued to provide a limited, but effective water source for small capacity users. The same principle, under the 1969 Act, or an expansion of that scheme, could allow less than clean water to be captured in surface or alluvial storage and returned for uses other than clean water use. This would mean a grand scale, State supported project. Eventually, a filtering process will be developed. It may be expensive, but it will happen. New subdivisions and new commercial and industrial developments can be designed to integrate both clean water and less than clean water. In the meantime, the water users in basins of origin for clean water can continue to irrigate, and continue to expand their industry and population growth without concern for developing future water use from an exhausted supply, and eventually exhausting irrigation uses. The technology developed in the South Platte project will pour over to other water users in the State. I mention this, because I have always considered th		Colorado's Water Plan considers more than just clean water sources, as the commenter suggests. Furthermore, it does not propose specific projects. Specific projects are found in the Basin Implementation Plans (BIP), and the South Platte BIP does consider further development of South Platte River water. Thank you.
28	8/31/2015	M. Esposito	Form submission	Years ago, Roy Romer suggested something to do with replenishing aquifers, because we were using more water from the state's aquifers than natural processes were putting back into the aquifers. That comment should have been taken more seriously. In years when rain is plentiful, we can fill our reservoirs, but any water we can't store goes out of state. Romer suggested filling aquifers during these times of plentiful water, instead of losing the water. Why not drill wells down to the aquifers, not to take out water but to put it back in? The current Colorado Plan is based upon supplying a future population with a limited available supply of clean water. The clean water source is basically a trans-mountain source that will confront future growth of population in the basin of origin with a limited, or unavailable clean water source. The subject of my query is whether the available abundant source of water in the north eastern South Platte region can be developed in a 30, 40, or 50 year State project that could pump back usable water to new developments in the greater Metro area.	t	Thank you for your comment. Aquifer storage and recharge are highlighted in the plan in Section 6.5.
29	6/19/2015-9/17/2015	Put Water Conservation First	1 form emails	The final Colorado Water Plan must contain a commitment to conservation and actionable steps to effectively serve as the bluepring for Colorado's water. Specifically, the Plan needs the following meaningful goals and actions to be successful: 1) Increased funding for programs that assess and protect the health of our rivers and their flows. 2) A state-wide municipal water conservation goal of 10% by 2020. 3) No new large trans-mountain diversions. They are costly, damaging, and unpopular with Coloradans. 4) Provide farmers the funds and incentives they need to modernize agriculture and water-sharing practices that will keep more water in our rivers. 5) Increased and accelerated water recycling programs in the Front Range, which will decrease the need for new water projects. As a Coloradan who understands the value of one of our most precious and limited resources, you have my full support to create as strong of a Colorado Water Plan as possible to protect our rivers, promote conservation and efficiency, and guide our use of water for decades to come. Thank you for your continued dedication and hard work on this issue.		1) Regarding streamflow management plans, there is currently \$1 million allocated in the 2015 Projects Bill. CWCB is also currently working on guidance for a streamflow management plan grant program, and working to further define and clarify what streamflow management plan means in Colorado's Water Plan. 2) As is currently described in the No and Low Regrets Action Plan and Colorado's Water Plan, there should be a minimum statewide water conservation target of 320,000 acre-feet by 2050, which includes 150,000 acre-feet from passive and 170,000 acre-feet from active conservation efforts. The section on municipal and industrial conservation will be updated in the second draft of Colorado's Water Plan with an added conservation stretch goal, consistent with the IBCC's recent development of a 400,000 acre-feet aspirational active conservation stretch goal. 3) The IBCC continues to work on developing a draft Conceptual Framework which explores innovative ways to address the issue of transmountain diversions in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work at the time of drafting. 4) Agricultural water sharing and modernizing agricultural efficiencies are aspects of Colorado's Water Plan and included in Section 6.4 and Subsection 6.3.4. 5) The Basin Implementation Plans and Colorado's Water Plan incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone are not be enough to meet Colorado's future water needs. Additional balanced options need to be examined. These topics are explored in Section 6.3.

tem	Date	Input Provided By	Method of Input Submission	Summary of Input	Documents	Staff Responses and Recommendations
Number			·		Submitted for Review	
30	6/19/2015-9/17/2015	Prioritize Urban Water Conservation in CO Water Plan, Put urban water conservation in Colorado's water plan, 1 Percent Could Make a Big Difference in Colorado's Water Plan & Make Water Conservation the Priority in Our Cities and Towns	55 form emails	I want you to know that I support prioritizing water conservation in our cities and towns. As a citizen of Colorado, I cherish our state's healthy and free-flowing rivers and streams. I also value the wildlife and recreation-based economies that are dependent on healthy river systems. Water conservation is faster, better, and cheaper than new water projects, which would cost billions to build, harm our environment, wreck our rivers, and increase our water bills. With just a 1 percent annual reduction in our water usage, we can conserve enough water to serve 1.8 million families in Colorado. We should adopt this 1 percent annual goal through 2050 in our state water plan. Thank you for your leadership and for protecting the future of Colorado's rivers.		The Basin Implementation Plans and Colorado's Water Plan incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone are not be enough to meet Colorado's future water needs. Additional balanced options need to be examined. These topics are explored in Section 6.3. As is currently described in the No and Low Regrets Action Plan and Colorado's Water Plan, there should be a minimum statewide water conservation target of 320,000 acre-feet by 2050, which includes 150,000 acre-feet from passive and 170,000 acre-feet from active conservation efforts. The section on municipal and industrial conservation is also updated in the second draft of Colorado's Water Plan with an added conservation stretch goal, consistent with the IBCC's recent development of a 400,000 acre-feet aspirational active conservation stretch goal. For more information and a calendar visit www.coloradowaterplan.com.
31	6/19/2015-9/17/2015	Support conservation, not dams and diversion, in that Colorado Water Plan	171 form emails	In your State of the State address, you have said that "every discussion about water should start with conservation." I could not agree more now it's time to put your words into action! Many of Colorado's rivers including the Colorado River itself, which flows from Colorado to Los Angeles and Mexico are already drained and depleted. Further, climate change is a new and bigger threat that will likely decrease the water flowing in our rivers. Despite this, some Colorado cities are trying to build more dams and diversions to take even more water out of our rivers. This is the wrong path forward! We need to protect and restore the rivers in Colorado so that people in the Southwest can have safe, clean, drinking water and healthy rivers flowing throughout our region of the U.S. As you and your staff formulate Colorado's Water Plan, please provide leadership in three key areas: 1. Push for water conservation, reuse, and recycling as key steps in securing our future water needs. 2. Do not support new dams and diversions from Colorado's rivers. 3. Start focusing on river restoration. I urge you and Colorado's Water Conservation Board to protect Colorado's future by safeguarding our rivers for future generations.	N/A	The Basin Implementation Plans and Colorado's Water Plan incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone are not be enough to meet Colorado's future water needs. Additional balanced options need to be examined. These topics are explored in Section 6.3. With regard to new transmountain diversion projects, the IBCC provided a draft Conceptual Framework which explores innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan does not include any specific transmountain water project, but it discusses how we can move forward with this option should it be needed, based on the IBCC's work. River restoration will be an important tool for addressing our environmental and recreational needs and this is consistent with the goals of Colorado's Water Plan.
2	6/19/2015-9/17/2015	Time is of the essence for water conservation	1 form email	Unless Colorado acts now to prepare for the growing demand on our water supply, California's present day could be in our notsordistant future. We need the next Colorado Water Plan draft to set clear goals and actions, have measurable targets, and place the health of our rivers at the top of the priority list. I support a water plan that includes: - A 10% by 2020 water conservation goal for Colorado's cities and municipalities - More funding for our rivers to monitor and protect their health, with clear targets and strategies - No new, large transmountain diversions disrupting our state and costing taxpayers tons of money - Incentives and funding to modernize our agricultural infrastructure and support voluntary, flexible, compensated water-sharing agreements - A specific path for improving water recycling along the Front Range, including spelled out incentives and funding. Poll after poll has shown that Coloradans are ready for innovative solutions for conserving and managing our water, NOW it's time for our state to act.	N/A	The four values driving Colorado's Water Plan are 1) vibrant and sustainable cities, 2) viable and productive agriculture, 3) a robust recreation and tourism industry, and 4) a thriving environment that includes healthy watersheds, rivers, streams, and wildlife. The plan aims to balance these values to ensure the best future for Colorado. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan, and is explored in Section 6.6. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. As is currently described in the No and Low Regrets Action Plan and Colorado's Water Plan, there should be a minimum statewide water conservation target of 320,000 acre-feet by 2050, which includes 150,000 acre-feet from passive and 170,000 acre-feet from active conservation efforts. The section on municipal and industrial conservation is also updated in the second draft of Colorado's Water Plan with an added conservation stretch goal, consistent with the IBCC's recent development of a 400,000 acre-feet aspirational active conservation stretch goal. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual framework which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. The Conceptual Framework and related chapter will be updated based on the status of ongoing discussions of t

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3	6/19/2015-9/17/2015	Keep the Water plan strong, make it smarter, Colorado's Water Plan	328 form emails	The second draft shows that Colorado's Water Plan is headed in the right direction. There are still several issues that need to be resolved in order for the final Plan to lead Colorado into a smart water future that protects our rivers, including: 1) Maintaining the reasonable urban conservation goal of saving 400,000 acre-feet of water by 2050 — which equates to nearly a 1% per year water use reduction in our cities and towns. 2) Avoiding new large trans-mountain diversions. 3) Establishing strong criteria to ensure we avoid impacts to rivers, promote water conservation and involve local communities. 4) Providing specific funding for the protection of Colorado's rivers and streams. The second draft's setting of a common-sense goal for water conservation, creation of a framework for scrutinizing large new trans-mountain diversions, and acknowledgment of the need for specific river protection plans is the right direction for Colorado's water future. While the second draft continues to be transformed into the final Plan, the issues above must be addressed so that the plan can truly guide Colorado's water policy for decades to come.	N/A	The four values driving Colorado's Water Plan are 1) vibrant and sustainable cities, 2) viable and productive agriculture, 3) a robust recreation and tourism industry, and 4) a thriving environment that includes healthy watersheds, rivers, streams, and wildlife. The plan aims to balance these values to ensure the best future for Colorado. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan, and is explored in Section 6.6. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. As is currently described in the No and Low Regrets Action Plan and Colorado's Water Plan, there should be a minimum statewide water conservation target of 320,000 acre-feet by 2050, which includes 150,000 acre-feet from passive and 170,000 acre-feet from active conservation efforts. The section on municipal and industrial conservation is also updated in the second draft of Colorado's Water Plan with an added conservation stretch goal, consistent with the IBCC's recent development of a 400,000 acre-feet aspirational active conservation stretch goal. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual framework which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. The Conceptual Framework and related chapter will be updated based on the status of ongoing discussions of t
34	6/19/2015-9/17/2015	Make Colorado's Water Plan Emphasize Healthy Rivers, Conservation, and Partnerships	1 form email	As you work to finalize Colorado's Water Plan in 2015, I urge you to ensure that the final plan puts its greatest emphasis on aggressive water conservation, maintaining healthy rivers, and promoting water partnerships - and avoids controversial and damaging new projects for large transbasin diversions. Healthy rivers are a vital part of Colorado's quality of life, recreational economy, and environment. Irrigated lands are also key in providing locally-produced food, sustaining local economies, and providing quality habitat. These are critical values for me as a Colorado sportsperson. Instead of drying up our rivers and farms, Colorado should emphasize water conservation so that we can use our water supplies as wisely as possible. Colorado's Water Plan should set strong but achievable goals - reducing per capita consumption by even 1% a year would help reduce the drain on rivers and agriculture, and represents a level of conservation improvement that we've easily exceeded over the past 10 years yet the Draft Plan does not embrace even this modest goal. Conservation needs to be more strongly emphasized. Colorado also needs to invest in its healthy rivers. Investment in healthy rivers depends on the State to make investments on behalf of its citizens. Investing in the health of our rivers is simple common sense given the vital role rivers play in Colorado's multi-billion fishing and outdoor recreation economy, in drawing other businesses, residents, and visitors to our State, and in maintaining a high quality of life for our citizens. Large transbasin diversion projects are not the answer for Colorado and should not be promoted in the Plan. Such projects will hurt our rivers, fisheries, and west slope communities, and it isn't even clear that there is enough undeveloped water legally available to support the projects in the future. Conservation and innovative partnerships for water sharing are better solutions. Thank you.		The four values driving Colorado's Water Plan are 1) vibrant and sustainable cities, 2) viable and productive agriculture, 3) a robust recreation and tourism industry, and 4) a thriving environment that includes healthy watersheds, rivers, streams, and wildlife. The plan aims to balance these values to ensure the best future for Colorado. Meeting Colorado's nonconsumptive needs is a critical aspect of Colorado's Water Plan, and is explored in Section 6.6. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. As is currently described in the No and Low Regrets Action Plan and Colorado's Water Plan, there should be a minimum statewide water conservation target of 320,000 acre-feet by 2050, which includes 150,000 acre-feet from passive and 170,000 acre-feet from active conservation efforts. The section on municipal and industrial conservation is also updated in the second draft of Colorado's Water Plan with an added conservation stretch goal, consistent with the IBCC's recent development of a 400,000 acre-feet aspirational active conservation stretch goal. With regard to new transmountain diversion projects, the IBCC provided a draft conceptual framework which explored innovative ways to address this issue in a balanced manner. Scenario planning indicates that a new transmountain diversion may not be needed in the future, however some futures suggest that new transmountain diversions may be a necessary part of Colorado's water supply portfolio. Colorado's Water Plan will not include any specific transmountain water project, but it will discuss how we can move forward with this option should it be needed, based on the IBCC's work. The Conceptual Framework and related chapter will be updated based on the status of ongoing discussions of t
35	6/19/2015-9/17/2015	Input on Poudre and South Platte Water Plan	4 form emails	The Colorado Water Plan process for the Poudre and South Platte Rivers is going the wrong direction because no river protection organizations like Save The Poudre were allowed to help write it. Your Colorado Water Conservation Board needs to fix this problem so that the Plan represents the diversity of Coloradans and protects our rivers. Here's three things the Colorado Water Plan for the Poudre and South Platte Rivers should do: 1. The Plan should not endorse any dam/reservoir schemes, especially the billion-dollar boondoggle Northern Integrated Supply Project and its Glade Reservoir. 2. The Plan should focus on alternatives to new dams and reservoirs, including water conservation, efficiency, recycling, and water-sharing agreements with farmers. 3. The Plan should focus on restoring our rivers we need to put more water back in the Poudre River, not take more water out.		Each Basin Roundtable is made up of a diverse set of stakeholders and the inclusion of both an environmental and recreational representative is required by the Colorado Water for the 21st Century Act. In addition, representatives from each county, municipalities within each county, industry, agriculture, and domestic water suppliers are required. Lastly, a representative from each water conservation and conservancy district are also mandated. There are also several other at large seats, and many of these are held by environmental interests, and many of the local government representatives are also focused on environmental and recreational issues since their citizens care about these topics and the area may be dependent on tourism. The four values driving Colorado's Water Plan are 1) vibrant and sustainable cities, 2) viable and productive agriculture, 3) a robust recreation and tourism industry, and 4) a thriving environment that includes healthy watersheds, rivers, streams, and wildlife. The plan aims to balance these values to ensure the best future for Colorado. Meeting Colorado's Monconsumptive needs is a critical aspect of Colorado's Water Plan, and is explored in Section 6.6. The Basin Implementation Plans and Colorado's Water Plan will incorporate conservation and reuse as critical components to helping meet future water needs, however those strategies alone might not be enough to meet Colorado's future water needs. Additional balanced options need to be explored. These topics are explored in Section 6.3. As is currently described in the No and Low Regrets Action Plan and Colorado's Water Plan, there should be a minimum statewide water conservation target of 320,000 acre-feet by 2050, which includes 150,000 acre-feet from passive and 170,000 acre-feet from active conservation efforts. The section on municipal and industrial conservation is also updated in the second draft of Colorado's Water Plan with an added conservation stretch goal, consistent with the IBCC's recent development of a 400,000 acre-feet

PUBLIC INPUT ITEM 1



DELTA COUNTY, COLORADO

BOARD OF COUNTY COMMISSIONERS

COUNTY COURTHOUSE • 501 PALMER STREET • SUITE 227 • DELTA • COLORADO • 81416-1796 PHONE: (970) 874-2100 FAX: (970) 874-2114

www.deltacounty.com

Dist. 1: C. Douglas Atchley - Dist. 2: C. Bruce Hovde - Dist. 3: J. Mark Roeber

April 3, 2015

APR 16 2015

Colorado Water
Conservation Boar

Colorado Water Conservation Board 1313 Sherman Street, Room 718 Denver, CO 80203

RE: Colorado Water Plan Comments

Delta Board of County Commissioners supports the Gunnison Basin Water Implementation Plan and the priority goal of protecting existing water uses in the basin and that any proposed future transmountain diversions is limited. Delta County strongly supports the Roundtable's statement that existing uses include agricultural, municipal, domestic, industrial, recreational and environmental and that any new projects must be evaluated in terms of potential impacts on the mix of uses. Existing uses must be kept in their current balance to support our local economy and assist Delta County to plan for additional demand on limited water. Any new projects to address additional storage must prioritize the existing uses in the current ratios.

Delta County is home to over 100 separate ditch companies and the sustained use of agricultural water is the primary economic driver in our county. This provides the base to support the additional goals of the Gunnison Basin Roundtable Implementation Plan in that agricultural water supplies should be improved to address anticipated future shortages, promote the use of hydropower, identify and address municipal and industrial water shortages, and to encourage the beneficial relationships between agricultural and recreational users. In addition, Delta County strongly supports the modernization of water infrastructure as existing conveyance systems are of similar age and repair costs will soon exceed local funding capacity.

Delta County looks forward to working with the state of Colorado and the Gunnison Basin Roundtable to educate all sectors of the economy on the importance of attaining the goals detailed in the Colorado Water Plan.

Sincerely,

Delta Board of County Commissioners

. Mark Roeber, Chairman

C. Douglas Atchley, Vice Chairman

C. Bruce Hovde, Commissioner

PUBLIC INPUT ITEM 2







July 6, 2015

TO: Governor John Hickenlooper, Colorado Water Conservation Board, and the Interbasin Compact Committee

RE: Input to the "Colorado Water Plan" from Colorado's business community

The Colorado business community recognizes that water is vital to the very existence of our life in Colorado. It is connected to every economic resource in this state including our homes, our businesses and our recreation, making it a resource of critical importance to our entire community.

The first draft of the State Water Plan was completed in 2014 and focuses on a vibrant economy, a strong environment and efficient and effective water infrastructure that promotes smart land use. As the plan gets finalized, we want to take this unique opportunity to reflect the business community's thoughts on the way our state prioritizes, utilizes and sustains this important natural resource and provide input on measurable goals that should be included in the plan.

Enclosed are our thoughts and suggestions regarding the goals and strategies we believe should be included in the Colorado Water Plan to ensure sufficient water supply by 2050.

We've kept our recommendations in this document fairly general. We would happy to provide more concrete examples and detail if that would be helpful.

Thank you in advance for your consideration of our comments and most importantly for setting the important goal of completing and adhering to a comprehensive water plan.

Sincerely,

Mizraim Cordero

Director

Colorado Competitive Council

Kelly of Brough

Kelly Brough
Chief Executive Officer
Denver Metro Chamber

Tom Clark

Tom Clark

Chief Executive Officer
Metro Denver EDC

Colorado's Water Plan: Recommended Strategies from the Business Community

THE ISSUE

Water is vital to the very existence of our life in Colorado. It is connected to every economic resource in this state, including our homes, our businesses and our recreation, making it one of our most important resources.

The first draft of the State Water Plan was completed in 2014 and focuses on a vibrant economy, a strong environment and efficient and effective water infrastructure that promotes smart land use. As the plan gets finalized, we have a unique opportunity to shape the way our state prioritizes, utilizes and sustains this important natural resource and provide input on measurable goals that should be included in the plan.

WHAT IS COLORADO WATER LAW?

Early in Colorado's history, our water laws took a broad approach toward settlers' rights. Eventually these laws were challenged in front of the Colorado Supreme Court, which ruled that water could be diverted from a stream and that ditches could be built across both public and private land. These founding principles became Colorado's Prior Appropriation Doctrine. This doctrine is often explained in its simplest terms: First in time, first in right. Whoever puts the first claim on an amount of water has the right to use it, regardless of the original location of the water.

WHY COLORADO NEEDS A PLAN: CRITICAL WATER ISSUES WE FACE TODAY

The following are key factors to consider in how we allocate water for our future:

- 1. Approximately two-thirds of the water originating in Colorado flows out of the state in order to satisfy Colorado's compacts with other states.
- 2. Colorado is closely tied to six other western states in a reliance on Colorado River water.
- 3. Colorado's population is expected to double by 2050, with most of the growth falling along the Front Range corridor.
- 4. More than 80 percent of the state's water use is attributable to agricultural production.
- 5. Colorado's municipal and industrial sectors use about 7 percent of water in the state but account for the majority of the state's total economy and serve as a driving force behind our economic growth.
- 6. Colorado's Prior Appropriation Doctrine has served the state well for more than a century. It has adapted to allow for protection of the environment and recreation, and it will need to adapt to allow for efficiencies such as rainwater capture. The doctrine and its adaptability should remain in place.
- 7. Colorado needs more water storage to meet future demands. We do not have enough storage to take advantage of existing rights to capture and save water for future years.

THE CHALLENGE

After meeting with business leaders across the state, we developed a set of goals and principles we believe should be included in the State Water Plan as it gets finalized.

Conservation goals:

- 1. The plan should set a goal of **15 percent reduction in water consumption by 2050** to be achieved primarily through enhanced water use efficiency in every sector. The goal should give basins flexibility to allow for year-to-year progress or average growth.
- 2. Water providers should continue to be **required to submit water conservation plans** to the CWCB and include local efficiency metrics.
- 3. Water providers should be encouraged to **provide a reliable source of water that is resilient to climate change** and the effects of demand hardening.







Colorado's Water Plan: Recommended Strategies from the Business Community

Water storage: The biggest challenge to ensuring Colorado has the water storage it needs is the inability to navigate the project permitting process in an efficient and timely manner at the state and federal levels.

Water storage goals:

- 1. Water storage options, both structural and underground, must be included in the plan.
- 2. The state should identify the costs, benefits and permitting challenges of all of the water infrastructure and storage projects listed as Identified Project and Processes (IPPs) in the 2010 Statewide Water Supply Initiative (SWSI), with the goal of having all IPPs completed by 2050.
- 3. State agencies should participate as **cooperating agencies in federal regulatory processes** from the onset of project scoping.
- 4. When a water project is set for federal review, the state should **designate a single lead agency to provide a coordinated set of comments** representing all state agencies and provide one position on mitigation and enhancement.
- 5. The state should provide input between issuance of a draft Environmental Impact Statement (EIS) and the Final EIS.

Water Reuse for domestic, agricultural, industrial, recreational and other beneficial purposes should be encouraged. This can improve water quality by reducing discharge of treated effluent to surface waters and reduce demand on drinking water sources.

Water reuse goals:

- 1. The state should adapt policies to move toward **reusing 100 percent of water** obtained through trans-mountain diversions from the Western Slope to the Front Range.
- 2. Policy should encourage **reuse in graywater**, **recycled water and industrial wastewater** in a manner that protects public health and the environment.
- 3. An all-of-the-above, **comprehensive view of water planning**, **regulations and management** should be adopted by the state, removing barriers for green infrastructure including rainwater capture, storm water and black water.

NEXT STEPS

It is undeniable that Colorado offers great agricultural tradition, unique cities, recreational opportunities and a healthy environment. Clean, reliable water is central to our way of life. The draft plan represents significant leadership and progress, and has incorporated objectives and measurable outcomes that we believe are key to solving Colorado's water challenges.

The Chamber, C3 and all of our partners challenge the governor's office, the Colorado Water Conversation Board, policy makers and water leaders across Colorado on behalf of the state's business community to establish a vision that completes the plan. To achieve the goals behind this collective vision for Colorado's water it will take all of us.

Learn more at coloradocompetes.org/water or denverchamber.org.







PUBLIC INPUT ITEM 6



July 21, 2015

Upper Yampa Water Conservancy District

Mr. James Eklund Director Colorado Water Conservation Board 1313 Sherman St., Room 718 Denver, CO 80203

RE: Colorado Water Plan/IBCC Framework

Dear Mr. Eklund:

Developments, subsequent to the HB1177, and more recently the "Colorado Water Plan" have brought welcome transparency and cooperation addressing management of the Colorado River as a whole. This letter specifically addresses negotiations occurring at the Inter Basin Compact Committee (IBCC) and particularly the recent "Conceptual Framework" document. This letter is intended to reiterate the UYWCD's current positions

HB1177 created Roundtables from the various river basins within Colorado and the IBCC members are selected from those Roundtables. The IBCC was developed to facilitate negotiations between basins within Colorado. The Board of the Upper Yampa Water Conservancy District (UYWCD) has over time taken positions that are pertinent to these negotiations. The Colorado River compacts were developed to avoid a prior appropriation scheme that could have limited the amount of water available to citizens of Colorado due to faster development of downstream States. The Upper Yampa Board's consistent position has been that our river basin be included in the benefits of Colorado's portion of water under the Colorado River Compacts. In other words, no basin in the State should be disproportionally impacted by any management of Colorado River with respect to the compliance with Colorado River Compact(s).

The Board exhibited its concern with respect to future development of water resources within the basin with a resolution regarding the proposal from the Northern Water Conservancy District.

18 JANUARY 2007 minutes,

Director Sharp proposed the following resolution:

RESOLUTION: Resolved that The Upper Yampa Water Conservancy District will oppose the Northern Colorado Water Conservancy District's proposed Yampa Diversion project unless our concerns are resolved. Our concerns include at least the following: The protection of the future water development capability in the upper Yampa River basin, the protection of the stability of the Programmatic Biological Opinion and ROD for the Yampa Plan on which many water users in the basin rely, the protection of recreational usage of the River through Dinosaur National Monument, and the protection of water quality of the River.

The resolution passed as worded.



Upper Yampa Water Conservancy District

A "white paper" was adopted by the Yampa/White/Green Basin Roundtable that reiterates the need for protecting native flows for use within the basin and thus not disproportionally impacting the basins of the Yampa and White Rivers. The White paper states

"A distinction must be made between existing Y/W/G in-basin consumptive uses (including projected PBO depletions), new development for use within the West Slope Basins as a whole, and "New Supply" to the Eastern Slope. Arrangements other than the prior appropriation doctrine were the core of the State of Colorado's arguments at the time of the original Colorado River Compact in 1922, between the Upper Basin States in 1948, and should now be included in the Colorado Water Plan between river basins... Further, it will assume that the depletion allotments (previously negotiated in the Yampa Basin and under discussion in the White River) as part of an endangered fish recovery program's programmatic biological opinion (PBO), are available for development of in-basin BIP projects."

The UYWCD board supported these ideas through the following motion.

March 19, 2014

Director Brenner moved to support the White Paper as presented, with a strong a cover letter expressing the District's great reservations on any major trans-basin water diversions particularly due to low water levels in Lake Powell. Also the need for equitable apportionment to be adopted for the Yampa River, and the acknowledgment of the value of the contribution of the Yampa River to the State's compact obligations. Director Monger seconded the motion, which was unanimously approved.

These statements underlie the Boards current position. An equitable apportionment of the native flow within the Yampa, negotiated through the IBCC process, is urged by the UYWCD Board. Management of the Colorado River by avoidance of a formal compact administration, or federal intervention due to low reservoir levels in Lakes Mead and Powell, is an admirable goal of the conceptual agreement. The avoidance program, now called the "collaborative program", must be voluntary and compensated. Further that program must be developed with an understanding of an apportionment of native flows in the Yampa River Basin for future in-basin development and firm protection of existing absolute Yampa River water rights from compact curtailment. Without such an agreement, the UYWCD Board asserts that the apportionment of the Yampa River by Article XIII of the 1948 Upper Colorado River Compact which precludes curtailment of existing absolute Yampa River rights.

In conclusion, the UYWCD remains very skeptical of the intent of the seven points of the Conceptual Framework. The document contains numerous contradictions and lacks clarity on what mechanisms could be used to control any final agreement. For example, principle #1 states, "East Slope water providers are not looking for firm yield from a new² TMD and the project proponent would accept hydrologic risk for that project", however in the following description a TMD is described as, "administered under Colorado's priority system, diverting water only when it is physically and legally available in priority". Principle #3 states, "In order to manage when a new TMD would be able to divert, triggers are needed." These triggers are not in statute, have no legal standing, and are conceptual at best. Therefore, the UYWCD cannot agree to use the seven points of the Conceptual Framework as any more than discussion points in future negotiations.

Upper Yampa Water Conservancy District

Sincerely,

John Redmond

Board of Directors Chairman

Upper Yampa Water Conservancy District

P.O. Box 775529

Steamboat Springs, CO 80477

970-871-1035

CC:

John Stulp, IBCC Chairman; Colorado Water Conservation Board Jon Hill, Chairperson; Yampa/White Basin Roundtable, Colorado Water Conservation Board Colorado Water Plan, Colorado Water Conservation Board

PUBLIC INPUT ITEM 9

We offer the following revisions for your consideration:

Section 6.3.1

Municipal and Special Water District Water Conservation and Efficiency 6.3.1 Municipal and Special Water District Water Conservation Governor John Hickenlooper stated that "Every conversation about water should start with conservation." Municipalities, Special Water District, and other Water water providers and municipalities have progressed in water conservation over the last decade, as was seen in Chapter 5. Building on those efforts, future actions will define which direction Colorado takes to close the supply and demand gap.

• Section 9.2. Economics and Funding

The State of Colorado will continue to work within Colorado's local structure.

Local governments have considerable authority in making water development and management decisions. Colorado's counties, special districts, and municipalities exercise a broad range of powers to address the needs of their constituents that are explicitly conferred to them by state law. The local control structure within Colorado is discussed in more detail in Section 2.3 of Colorado's Water Plan. The range of local authorities includes broadly authorizing counties and municipalities to balance environmental protection with the need to provide for planned and orderly land use. Counties and municipalities have various tools at their disposal, including: creating special districts, requiring Master Plans for development, assessing impact fees to offset new development on existing infrastructure, and 1041 powers, which allow local governments to regulate construction or extensions of major new water and sewage treatment systems. The State of Colorado will work collaboratively with local governments within this existing framework and Colorado's Water Plan is a valuable tool for both levels of government in that work.

PUBLIC INPUT ITEM 14



August 19, 2015

Dear Director Eklund.

Thank you for taking the time over the last year to listen to the concerns of Coloradans across the state. As you enter this final month of public comments on the State Water Plan, we respectfully submit the attached 700 individual comments from concerned citizens around the state.

At Clean Water Action, we are committed to ensuring that all Americans have access to fishable, swimmable, drinkable water. In Colorado, that means we need to plan carefully for the future of Colorado's water supply as well as being diligent about water quality in our state. We know that water is the lifeblood of our state, and that every Coloradan depends on water for their lives, their livelihoods, and their quality of life.

At Clean Water Action, strongly encourage a plan that prioritizes urban, suburban, and rural water conservation. We want a plan that proactively works to keep our rivers healthy and flowing; and we are opposed to projects that expand or create new transmountain diversions. The enclosed letters reflect the same sentiment.

Again, thank you for your time and effort in this important plan.

Sincerely,

Sara Lu

BECEIVE

AUG 1 9 2015

Colorado Water Conservation Board The following quotes represent the best of the letters we have collected.

"We are raising our kids here, and are trying to instill in them a value for ecological awareness in today's world. Water is one of our state's most precious resources! Please create a plan that will keep Colorado's rivers healthy. Let's avoid expanding or building transmountain diversion projects." – Sara Weyley, Denver

"I am deeply concerned with the allocation and use of the surface waters in this state. Many other states in the Western US are currently experiencing record droughts that could have been avoided through proper planning and foresight... I urge you to seek a plan that maintains environmental flows in these rivers, as well as providing water for residents and agriculture." – Michael Gieschen, Ft. Collins

"We wanted to give our kids a better quality of life, and I think you would agree that water is our most important surface resource. Keeping our CO rivers healthy is essential in maintaining a #1 quality of life that we have been blessed with!" – Dr. Sherri Beck, Evergreen

"We need to protect our rivers, streams, and watersheds. I've spent countless hours in the backcountry. I can't imagine a world where people don't have the privilege to experience the beauty of Colorado." – Michael Richard, Golden

"Whether we are walking along a beautiful creek or tubing down a river, we are always doing something water related, and it is important to keep it that way. It's not only important to plan for our future, but also for the future of our kids." – Makayla Wolfe and Charlotte Ingold, Lyons

"I am an economist who has a different perspective on this issue. Water and its protection are one of the best investments we as a society can make. Any dollar or hour you spend on its protection NOW will have a manifold payoff in the future." – Andrew Friedson, PhD, Denver

"I have been hiking and camping in Colorado for my entire life... I urge that the Colorado Water plan have a huge emphasis on water conservation in such a way that individuals never have to fear losing their water or paying large bills while massive industries use and pollute water sources. I also feel strongly that farmers should be rewarded, not punished for modernizing their practices and saving water." — Alex Goetz, Lakewood

"I am dismayed by the drawdown of the Colorado River basin at a rate that cannot be sustained. Quite simply, the state needs a more aggressive plan for managing this all important resource." – Terry Loewenberg, Erie

"As you consider options for the State Water Plan, please prioritize conservation and efficiency and avoid any project that would expand or build new transmountain diversion projects. As a mountain resident, I've seen how such diversion projects hurt local communities as well as the animal and plant life that makes our state such a treasure." – Sonya Yeager-Meeks, Bailey

"Keeping Colorado rivers healthy is important to me and my 7-year old son because we value the beauty and benefits of the water sources around us personally, recreationally, and ecologically." – Julie Thomas, Boulder

PUBLIC INPUT ITEM 19

Colorado's unanswered water planning questions

Colorado's economic and environmental futures are in serious jeopardy, because of continuing failures to ask and objectively answer the following basic water planning questions:

As the primary headwater state and water source for our nation's arid Southwestern Region, why are Colorado's escalating water shortages, user costs, and farm dry-up rates now among the highest of all western states?

Why is Colorado the only western state that has never formulated and maintained a professional State Water Plan to guide development of its vital interstate water entitlements for current and future generations, as originally directed by Colorado Water Conservation Board's (CWCB) 1937 Legislative Charter?

After twelve years of collaborative water planning with a multi-million dollar Statewide Water Supply Initiative (SWSI), and two years after Governor Hickenlooper's Executive Order to create our state's first Colorado Water Plan, why has CWCB's 410 page Second Draft Colorado Water Plan failed to include recent evaluations of three conventional trans-mountain diversion (TMD) alternatives (Big Straw, Flaming Gorge, and Yampa) for Colorado's state-wide water needs?

Why is CWCB's Second Draft Colorado Water Plan promoting high cost and harmful trans-mountain reuse-to-extinction projects for Front Range growth? <u>Note</u>: Aurora's Prairie Waters Project, Colorado Springs' Southern Delivery System (SDS), and South Metro Denver's Water Infrastructure Supply Efficiency Project (WISE) will substantially increase Front Range water user costs, escalate dry-up of Eastern Colorado farms and environments, and continue to risk permanent loss of Colorado's vast undeveloped and unused legal share of the Colorado River.

Why is Colorado the only western state trying to develop and maintain a meaningful State Water Plan with nine Basin Roundtables, manned by local, non-professional volunteers? <u>Note</u>: Some of these local planners have serious conflicts of interest as major land and water owners/brokers/speculators, as well as advisors for numerous state funded water studies.

How can Colorado's leaders expect a meaningful, consensus-building, Colorado Water Plan from five Eastern Colorado Roundtables, representing 85% of our state's population and agriculture vs. four Western Colorado Roundtables, representing 15% of Colorado's population and agriculture, 85% of Colorado's total river outflows, and 100% of Colorado's vast unused legal share of the Colorado River? *Note: Colorado's currently undeveloped Colorado River entitlements could support about five million additional people, with today's declining water consumption criteria.*

Why has Colorado's recent 12 year statewide water planning process failed to consider U. S. Bureau of Reclamation's (USBR) extensive Gunnison-Arkansas Project Studies during the 1940s and 50s?

<u>Note</u>: USBR's Gun-Ark Studies would have efficiently exported up to 450,000 acre-feet for vital Eastern Colorado needs, without adversely impacting any senior Gunnison Basin water rights. Upper Gunnison consumptive needs for hay and cattle have declined about 35% since the 1960s.

Why have Colorado's water planners failed to consider USBR's detailed 1987-1989 evaluations of eighteen cost-effective Upper Gunnison/Aspinall Marketable Pool Trans-mountain Alternatives?

<u>Note</u>: USBR's currently undeveloped Aspinall Marketable Pool Water Rights and Blue Mesa Reservoir were originally authorized by Colorado Congressman Wayne Aspinall and Congress during the late 1950s to primarily help Colorado develop and beneficially use 300,000 acre-feet of its vulnerable Colorado River Rights from Colorado's largest untapped Gunnison River Basin.

Why were Colorado Water Resources and Power Development Authority's (CWRPDA) joint Phase 2 Upper Gunnison-Uncompany Basin Trans-mountain Water Studies with USBR suddenly cancelled by Colorado's Department of Natural Resources during 1990, without any public explanation? Also, why were Colorado's two highest governor-appointed state water officials suddenly fired on the same day during 1990, without any public explanation?

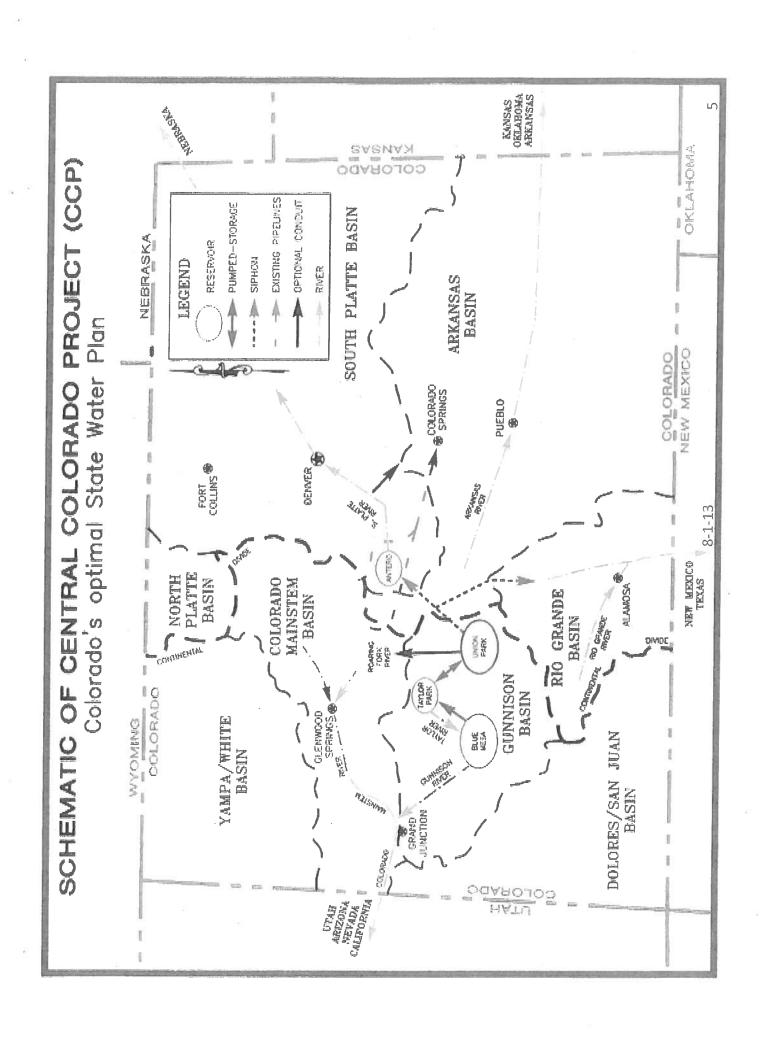
Why are Colorado's current water planners ignoring a proposed, U. S. Patented, high altitude, multiple river basins, pumped water and energy storage solution in Gunnison National Forest, called Central Colorado Project (CCP)? <u>Note</u>: CCP's April 2007 White Paper explains how it is uniquely designed to reduce western water and energy costs by multiplying the reliabilities and productivities of limited renewable water and energy resources throughout five major Southwestern river basins (Gunnison, Colorado, South Platte, Arkansas, and Rio Grande), as well as the western power grid.

Why are Colorado's water planners ignoring CCP's unprecedented recent engineering evaluations (summary attached)? Annual net revenues from CCP's 3,000 megawatt Union Park-Taylor Park pumped-energy storage and peaking power operations for prevention of western blackouts will more than cover CCP's regional water solutions costs. CCP's pumped-water storage and gravity deliveries, when and where needed, will multiply productivities of existing reservoirs, delivery systems, and water rights throughout five major Southwestern river basins on both sides of the Divide. Note: CCP's surplus revenues can also be used for local and regional forest fire and flood control needs. CCP's "oversight" may explain why Colorado's Front Range water managers are retiring early with exorbitant compensation packages.

Conclusion: Innovative high altitude multi-basin pumped-water and energy storage projects could help Colorado and all western states reach their renewable energy goals from sporadic wind and solar operations, much sooner than projected. High altitude multiple river basin pumped-storage projects are also near and long-term solutions for highly variable western droughts, growth, recreation, environments, and climate change, throughout the 21st Century and beyond. All Colorado, western, and national leaders should immediately call for objective economic and environmental comparisons of innovative high altitude, multi-river, pumped-water and energy storage projects with traditional alternatives, as required by National Environmental Policy Act rules and good science. A State Audit of Colorado's failed water planning practices is also needed.

Allen D. (Dave) Miller, *Com* B. S. Business, Univ. of Colorado, 1954; M. S. Transportation, Univ. of Tenn., 1963; Active U.S. Air Force Air Mobility Innovator 1954-1974; Retired Air Force Colonel, and active Western water and energy innovator since 1974; 719-481-2003 Fax 719-481-3452; P. O. Box 567, Palmer Lake, CO 80133 centralcoloradoproject@comcast.net_www.centralcoloradoproject.us Encls: CCP Schematic; CCP's Preliminary Regional Water & Energy Benefit-Cost Summary; U.S. Patent Abstract, dated 1-11-11. Cc: Gov. Hickenlooper; CO Legislators; local, state, western, and national leaders.





PRELIMINARY ESTIMATE OF COSTS FOR CONSTRUCTING AND OPERATING THE CENTRAL COLORADO PROJECT (CCP) MULTI-BASIN WATER SUPPLY AND STORAGE SYSTEM - ALL FEATURES INCLUDED, prepared by Horst Ueblacker, P. E., June 6, 2009 Description of Additional Multi-Basin Water-Supply Features: Pump Lift from Blue Mesa Reservoir to Taylor Park Reservoir for up to 300,000 acre-leet annually, with gravity delivery conduits from Union Park Reservoir (1.2 million acre-feet) for selective diversons to South Platfe, Arkansas, Rio Grande, and Gunnison River Basins, when and where needed for growth, droughts, climate change, recreation and environments. (Note: Regional modeling will determine expected values and revenues from CCP's integrated multi-basin water suppply augmentation capabilities.) Power and Energy Requirements Pump Lift Operation Blue Mesa - Taylor Park Reservoir. 126.0 MW (Power); 919,800 MWh (Energy)

Item	Features/Capacity/Size			Jan 09 Costs
1	Blue Mesa Pumping Plant Intake Structure: Q=500cfs		\$	7,382,250,00
2	Blue Mesa Pumping Plants: 3 EA. @ Q=500 cfs		\$	195,034,625.50
3	Blue Mesa Pipeline: Q=500 cfs, L=187,000', d=9'		\$	426,990,900.00
4	Enlargement of Taylor Park Reservoir. 167,500 acre-feet (HWL El. 9,360 feet)		\$	36,482,592.00
_ 5	Union Park Dam, Reservoir, Waterways, and Access Roads: (see 3,000 MW Union Park PHES Operation)		\$	-
6	Union Park Tunnal: Q=500 cfs, d=11', L=75,400'		\$	434,275,200.00
7	South Cottonwood Creek Pipeline: Q=500 cfs, d=9', L=15,500'	7	\$	18,659,750.00
8	Arkansas Valley Siphon: Q=500 cfs, d=9; L=64,300°		\$	498,470,280.00
9	Sevenmile Creek Pipeline: Q=500 cfs, d=9', L=4,300'		5	4,708,500,00
10	Trout Creek Pass Tunnet: Q=500 cfs; d=11', L=29,900'		S	136,463,760.00
11	Sall Creek Drop. Structure/Creek Stabilization: Q=500 cfs, L=23,000'		\$	7,817,600.00
	Transmission Line: 69KV (900 Amps), L=150,000"	\Box	\$	10,113,636.36
13	Rio Grande Besin Conduit: Q=200 cfs, d=6.5', L=184,694'	$_{\rm I}$	\$	222,095,018.00
14	Roaring Fork Valley Conduit: Q=200 cfs', d=6.5', L=85,061' (Pipeline); Q=400 cfs, d=10', L= 47,045' (Tunnel)		S	277,292,288,00
	Subtotal	T	\$	2,27E,676,377.86
	Unlisted Items (20%)		S	455,115,275.57
	Subtotal		\$	2,730,691,663.43
	Engineering, Administrative and Legal Services (25%)		S	682,672,913.36
	Total Construction Cost		Ş	3,413,364,666.79
	Interest During Construction @ 4.196%, n = 5 years		\$	775,886,552,32
	lotal Investment	- 13	\$	4,192,261,119.11
	Annual Cost	1		
	Amortized Investment 50 yrs. @ 5%		\$	229,637,830.64
	OM (Excluding power and energy costs/revenues) @ 4.98%	- 1:	S	11,435,963.97
1	Replacement Storage @ Blue Mesa (\$50/acre-ft.)	15	5	15,000,000.00
1	Annual Power and Energy Costs: \$1,686,750.09/MW; \$45.77/MWh	- 15	5	254,629,757.34
! !	otal Annual Cost	- 14	ŧ.	516,703,551.95
/	nnual Cost per acra-ft (\$lacre-ft.)	- [<u> </u>	1,702.35

PRELIMINARY ESTIMATE OF PROBABLE REVENUES AND CONSTRUCTION COSTS FOR UNION PARK/TAYLOR PARK PUMPED HYDRO ENERGY STORAGE OPERATION, Horst Ueblacker, P. E., June 3, 2009 PAGE 1 OF 2

ENERGY STORAGE OPERATION, F	idiet nspiecker, P. C., Jo	116 2 2003			PAGE 1 OF 2	
Power and Capacity						
Head	240.58	Maters				
Limiting Forebay Volume	41,939,000.00	M^3			•	
1	40,000.00	l acre feet				
Res.Surface Area @ El.10,120 ft.	10,040.00	Acres				
Flow Rate Min	1,164.97	M*3/5				
Flow Rale Max	1,456.22	M^3/S				
Storage Time Min	8.00	hours				
Storage Time Max		hours				
Power Min	2,474.48	MW				
Power Max	3,093.11	MW				
Energy	24,744.85	MWh/day	~ Assumes	15% of forebay v	olume is unused	·
Revenue						
Cycle Value	\$1,104,130					
Annual Revenue	\$401,903,194					
Avoided NG Cost	. S253,325,388					
Avoided CO ₂ Emissions		tons[metric] of CO2 avoids	edivenr			
CO, value		value per annual CO2 red	•			
Avoided SO, Emissions		tons[metric] of SO2 avoide				
SO, value	•	Annual Traded Value	wyco			
Tolai	4.4-444	Total Annual Value				
Total		Counted Annual Revenue		ł		
LORI	2430,400,230.32	Counted Annual Revenue				
Cost Breakdown by %	* .	86		%	•	
Environmental impact Statements and	Federal Permils			2%	\$82,398,318	
Power Station Structures and Improver	nents		•	9%	\$351,058,033	
Reservoirs, Dams, Waterways, and Ac	cess Roads	•		22%	\$890,519,820	
Reversible Pump Turbines and Valva G	Savemors.			9%	5370,792,430	
Generator Motors and Static Starting E	quipment	•		6%	\$257,494,743	
Accessory Electrical Power and Plant S	Substation Equipment			10%	\$408,970,317	
Engineering, Administrative, and Legal	Services			14%	5569,399,842	
Subsurface Exploration, Design, and C	onstruction			27%	\$1,090,404,406	
OTHER:				•	80	
Cost Estimate Based on Needed Facilit	ies and other Costs			TOTAL	\$4,021,037,909	

PRELIMINARY ESTIMATE OF PROBABLE REVENUES AND CONSTRUCTION COSTS FOR UNION PARK TAYLOR PARK PUMPED HYDRO ENERGY STORAGE OPERATION, Horst Usblacker, P. E., June 3, 2009 contd.

Payback Period and Life Cycle \$4,021,037,910 Cost based on Max Cost of shortest storage duration & itemized cost entries. overniaht cost yes yes arno CO2 valued at \$48,565,102,72 at \$5/tor

Does CO2 Have Market Value? Annual Rev

\$655,228,583 Revenue based on Min storage time and buying vs.selling data

13 years

PAGE 2 OF 2

Payback Time Life Time Net Present Value

\$93,102,943,163 100 year plant lifetime

Interest Rate Construction Time Annual % increase in Cost

6.50% \$20,105,190 per year 5 years

Horst was one of the world's most respected geo-technical engineers, and water, energy, and dam experts, before dated June 2009, were prepared by Horst Jeblacker PE (5-19-39 to 3-3-11) of UEBLACKER ASSOCIATES, Consulting Engineers, Geologists, Constructors, Lakewood, his untimely heart failure and death. In addition to these highly professional benefit-cost evaluations of CCP, Mr. Ueblacker and his internatinal team of experts completed a 125 page Phase 1 Feasibility Level Geological and Geotechnical Investigation "Geological conditions are favorable for This modern, strategically located dam and reservoir can safely store 1,200,000 acre-feet of high quality multi-year drought protection for Colorado's flve major river basins. The dam's total estimated construction cost is \$394,563,000. With its off-setting peaking power revenues, and dam UEBLACKER ASSOCIATES also completed an 83 page Phase 2 Stability Evaluation Report of Union Park Dam under Hydrologic Loading, dated July 2004. This report included a 40 page Hydrologic Evaluation for Union Park Reservoir by Alan J. Leak, WRC only \$329 per acre-foot, Union Park Dam may become the world's most cost-effective water storage facility. Engineering, Denver, Colorado, dated July 14, 2004. The results indicated "the inflow design flood can be safely retained the proposed 575 ft. high and 2,050 ft. wide roller compacted concrete gravity dam, requiring no emergency spiliway". 🕬 These Preliminary Engineering Evaluations of Central Colorado for Union Park Dam, dated February 2004. This detailed report concluded: construction of a large roller-compacted concrete (RCC) Dam in Union Canyon. unprecedented high altitude pumped-water and energy storage capabilities, Colorado. ō



(12) United States Patent

4.159.188 A

(10) Patent No.: US 7,866,919 B2

(45) Date of Patent:

Jan. 11, 2011

(54) SYSTEM AND METHOD FOR: 5:: CONTROLLING WATER FLOW BETWEEN MULTIPLE RESERVOIRS OF A RENEWABLE WATER AND ENERGY SYSTEM

Inventor: Allen David Miller, Palmer Lake, CO.

(73) Assignee: Natural Energy Resources Company, Palmer Lake, CO (US)

Subject to any disclaimer, the term of this (*) Notice: patent is extended or adjusted under 35 U.S.C. 154(b) by 295 days.

(21) Appl. No.: 12/102,651.

Apr. 14, 2008 (22) Filed:

Prior Publication Data

US 2008/0253837 A1 Oct. 16, 2008

Related U.S. Application Data

(60) Provisional application No. 60/911,451, filed on Apr. 12, 2007.

(51) Int. Cl.: E02B 9/02 (2006.01)E02B 13/00 (2006.01):

........... 405/80; 405/51; 405/53; U.S. Cl.

Field of Classification Search 405/51-53, 55, 75, 80; 210/747, 170.01 See application file for complete search history.

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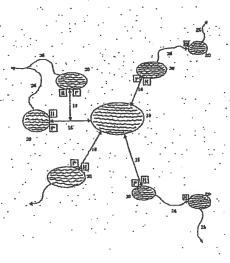
OTHER PUBLICATIONS

"Blenheim-Gilboa Pumped Storage Power Project," available at http://www.nypa.gov/facilities/blengil.htm. printed Jul. 13, 2010. copyright 1996-2010, 2 pages:

Primary Examiner-Tura Mayo-Pinnock (74) Attorney, Agent, or Firm-Sheridan Ross P.C.

A high altitude pumped-storage system for selectively integrating, storing, and distributing water and energy to increase the regional productivity of existing and future water and energy resources throughout multiple river basins is disclosed. This system addresses in part the increased requirement of supplying energy demands from a renewable energy source, such as wind, solar, or water generated power. The system includes at least one primary reservoir connected to multiple secondary reservoirs by conduits. The system allows for selectively distributing water and energy between secondary reservoirs and at least one primary reservoir. The system may comprise one or more hydroelectric power generation facilities. A method for increasing the regional efficiency of existing and future systems for producing, storing, and delivering energy from sources such as hydroelectric, wind and solar power from the water collected by the system described herein is also disclosed.

16 Claims, 4 Drawing Sheets



PUBLIC INPUT ITEM 24



8400 East Prentice Avenue Suite 1500 Greenwood Village, CO 80111

Phone 303 409 7747 Fax 303 409 7748

August 31, 2015

James Eklund Director, CWCB 1313 Sherman Street, Room 721 Denver, Colorado 80203 cowaterplan@state.co.us

Dear Mr. Eklund:

South Metro Water Supply Authority (SMWSA) is an organization of 13 water providers that work together to plan, source, and develop water for Douglas and Arapahoe Counties. Collectively, SMWSA members currently serve about 300,000 people (80% of Douglas County and 10% of Arapahoe County) and its customers are expected to grow to over 500,000 by 2050. The South Metro area is home to 7 of Colorado's 9 Fortune 500 companies and it produces 30% of all of Colorado's earned income.

Thank you to you, your staff, and the CWCB Board Members for your collective hard work on Colorado's Water Plan (CWP). SMWSA is an active participant in the plan's development having worked directly on the South Platte/Metro BIP and submitting comments at various stages of the CWP's development including:

- April 21, 2014 SMWSA input responding to CWCB's Guidance Document for Municipalities
- May 1, 2014 Comments on the Draft Water Quality Chapter
- June 6, 2014 Letter on the draft permitting section
- September 8, 2014 Comments on the Draft Economics and Funding section
- September 9, 2014 Comments on the Draft Meeting Colorado's Water Gap section
- September 17, 2014 Letter on precipitation harvesting

Thank you for incorporating many of these comments into the 2nd Draft CWP. We are pleased with many parts of the plan and offer these comments as part of Colorado's robust stakeholder process for developing and improving the CWP.

Since the beginning of the CWP process, SMWSA focused its time and attention in four areas: 1) Agricultural Transfers; 2) Streamlined Water Project Permitting Processes; 3) New and Updated IPPs; and 4) New Supply Projects. Below are comments on the 2nd Draft CWP. However, rather than organizing our comments around these 4 topics, our

comments are organized around the chapters in the July 2015 Second Draft of Colorado's Water Plan. These comments are intended to help shape the Final 2015 CWP to be submitted to the Governor on December 10, 2015.

Comments on 2nd DRAFT CWP Overall Tone

SMWSA believes the overall tone of the CWP should be changed with respect to how irrigated agriculture and irrigated urban landscapes are described. Changes in tone throughout the plan are needed so the reader is not left with the impression that only irrigated agriculture provides benefits and irrigated urban landscapes are a negative and do not provide benefits. The current draft reads as if all things irrigated agriculture are good and all things irrigated urban landscapes are bad and this is not an impression Colorado's Water Plan should portray. Much of the CWP discusses the benefits of irrigated agriculture (maintaining late season flows, providing open space, etc.). There are similar benefits derived from irrigated urban landscapes, tree canopies, parks, and recreational fields. Page 82 in Chapter 5 describes some of the points, however, SMWSA believes that similar points regarding the importance of urban landscape should be made in Chapter 6.

Comments on DRAFT Chapter 6 - Water Supply Management for the Future (July 2015)

Note, several comments are provided on Chapter 10 that may require similar revisions to parts of Chapter 6.

- 1. Table 6.3.1-1 SMWSA cautions against trying to develop a statewide conservation goal. It is unlikely that one goal will be appropriate for the entire state. By definition, a statewide goal would need to be achievable statewide. As we have seen in the South Metro area, necessity has driven innovation and aggressive conservation programs. A statewide, one-size-fits-all approach to conservation may stifle the type of innovation that occurs when local entities are able to create solutions that are appropriate for their jurisdiction. A statewide goal that incentivizes all water providers to push the envelope will, by definition, be overly burdensome on some communities who have not made significant progress on conservation in recent years. Conversely, if a statewide conservation goal were more middle of the road, it may provide a disincentive for entities who are already on the leading edge of conservation like SMWSA members to do more. For these reasons, the time and effort the state puts into conservation may be better spent supporting and incentivizing local conservation initiatives rather than developing a statewide conservation goal.
- 2. p. 164-165 The second draft of Colorado's Water Plan includes a "conservation stretch goal" that was not included in the previous draft. SMWSA has the following comments on this stretch goal. These comments are made on the language in the 2nd draft of CWP. Language changes discussed at the 8/26/15 IBCC meeting, if incorporated, may address some of these comments.
 - a. Why only one stretch goal? The second draft of CWP includes a stretch goal for conservation, but does not include a similar stretch goal for storage or any of the other solutions put forward in the CWP. The CWP purports to be an "all of the above" plan where all solutions (conservation

- and reuse, IPPs, alternative ag transfers, and development of new Colorado River supplies) as well as storage are needed. One single solution is not a silver bullet, and Colorado cannot overly rely on one solution. Including a stretch goal for only conservation is not balanced and is counter to the "all of the above" plan. SMWSA does not believe that it is the intent of the CWP to overly rely on conservation as the solution to Colorado's water challenges. SMWSA recommends that complimentary stretch goals be developed for storage (including surface storage and ASR) between now and finalizing the plan in December, and that the final plan include a recommendation for developing stretch goals for the other solutions. Recommended language for a complimentary storage stretch goal is suggested below in Comments on Draft Chapter 10.
- b. Achievability SMWSA understands that a "stretch goal" is meant to be aspirational and push the envelope. However, the danger of a stretch goal is that it gets used as a precondition for implementing other solutions before it is understood whether the stretch goal is achievable or not. The South Platte/Metro roundtables went through a very detailed conservation analysis in their BIP, breaking down what has been done and what can be done with various parts of conservation. This analysis went well beyond the simplistic low, medium, and high conservation levels articulated in other BIPs. This detailed analysis revealed practical conservation levels the experts implementing municipal conservation in Colorado believe attainable. Please rework the write up of the conservation stretch goal to very clearly differentiate between practical goals and aspirational goals, with the latter not being used to meet the M&I gap until proven achievable. The write up needs to be very clear that the quantified 400,000 acre-feet stretch goal is aspirational, it is unknown if it can be achieved, and it should not be attached as a condition to implementing other solutions. CWP needs to be clear on this point so that others, particularly federal permitting agencies, do not view a potentially unattainable stretch goal as State policy and make it a condition of permitting. This would not only exacerbate an already broken permitting system, but be counter to the intent of the CWP to help create an efficient process for permitting water projects.
- c. Tying a potentially unachievable stretch goal to other "legs of the stool" As mentioned above, the danger of a stretch goal is that by its definition it may or may not be achievable, yet it gets attached as a condition to the implementation of other solutions. This is most concerning in the case of federal permitting as mentioned above, but is already showing up in the state planning process. The 6/26 draft of the "Conceptual Framework" not only ties future transmountain diversions (TMDs) to this potentially unachievable stretch goal, but ties all new M&I water projects to this goal. SMWSA does not believe this is appropriate. SMWSA recommends that the second paragraph under Principle 6 be removed and additional drafting of the CWP does not tie a potentially unachievable conservation stretch goal to other legs of the stool.

- d. Flexibility for locally appropriate solutions Many parts of the CWP recognize the importance of local control and articulate the need for flexibility to implement locally appropriate solutions. The conservation stretch goal and associated actions have inconsistent language and needs to be rewritten to maintain flexibility for local water providers to be innovative and creative as they implement locally appropriate solutions. Encouraging integrated water resource planning geared towards implementing water conservation best practices that are locally appropriate is great. Language confusing this with requiring certain high conservation measures as a prerequisite for state support or financing should be removed.
- 3. SMWSA recommends the following changes be made to the conservation related Actions beginning on p. 171 and that similar changes be made to corresponding sections of Chapter 10.
 - a. Add to Action #1 recognizing the importance of local control that is well articulated in other parts of the CWP. The action could read: "the CWCB will adopt policies stating that in order to obtain a state endorsement and financial assistance for water management projects, water providers must conduct comprehensive integrated water resource planning geared towards implementing water conservation best practices at the high customer participation levels, recognizing the importance of local control and flexibility in selecting and implementing locally appropriate best practices."
 - b. Action #5 to help address the concerns described above, rewrite this action to read: "Adopt a stretch goal to encourage demand-side innovation that is aspirational and places Colorado at the conservation forefront. Support a stakeholder process that assists local water providers in selecting and implementing locally appropriate conservation best management practices and monitors the achievability of the stretch goal over time."
- 4. Section 6.3.2 Reuse SMWSA supports the draft's current focus on regional reuse projects. 10 of our members are participating in the WISE Partnership, a prime example of a collaborative regional reuse project. SMWSA recommends that the current language and Critical Actions encouraging regional reuse be retained, but supplement with language and Critical Actions supporting the continued implementation of local (water provider level) reuse projects. In addition to participating in regional reuse projects such as WISE, many of our members also have local projects to fully reuse their water via exchanges, non-potable reuse for irrigation, or re-diverting return flows. These individual projects/programs are critical to South Metro's efficient use of our water supplies, and regional reuse projects such as WISE should supplement, not replace, these local efforts.
- 5. Section 6.5 Framework for Evaluation of Agricultural Transfers Under Actions on page 241, it states that "a framework for the evaluation of agricultural transfers will be developed from a technical and legal perspective before consideration of requiring such an evaluation." On page 238, under the IBCC recommendations, a

similar concept is written up. However, the IBCC recommendation includes a good description of several initial concerns with this concept. SMWSA reiterates these concerns, particularly the fact that requiring such an evaluation could encroach on private property rights and become a permitting hurdle functioning like an Environmental Impact Statement (EIS). SMWSA does not currently believe that such a framework would be helpful and recommends removing Action #12 on page 241. If the Action is not removed, SMWSA recommends that the Action be revised to say "a framework for an evaluation of agricultural transfers may be developed. In order to help determine if such a framework is appropriate, CWCB will host a stakeholder group to provide input from a technical, legal, and policy perspective. The stakeholder group will include local government, agricultural producers, municipalities, and environmental interests, and will identify and document the pros and cons of developing a framework prior to embarking upon its development."

Comments on DRAFT Chapter 8 - Interbasin Projects & Agreements (July 2015)

- p. 319 under "Actions" the second draft CWP states that CWCB will monitor ongoing conceptual framework discussions and consider adopting the conceptual framework. SMWSA recommends that CWCB adopt the conceptual framework with the language tying potentially unachievable conservation levels to <u>all</u> new M&I water projects removed. Language changes discussed at the 8/26/15 IBCC meeting, if incorporated, may address this comment.
- 2. p. 319 the "Actions" included in the second draft CWP indicate that CWCB will work to uphold Colorado's compact entitlements and balance development of these entitlements with the risk of a compact deficit in the Colorado River System. SMWSA supports these actions but recommends they be supplemented with one or more "Action" that align state policies to develop and beneficially use these compact entitlements that current and previous generations of Coloradoans fought so hard to protect.

Comments on DRAFT Chapter 9 - Alignment of State Resources and Policies (July 2015)

Section 9.1

 p. 325 and p. 327 - SMWSA recommends adding language to the section "The State of Colorado will continue to uphold Colorado's water entitlements under Colorado's compacts, equitable apportionment decrees, and other interstate agreements." As mentioned above, SMWSA supports this action, but recommends that the State of Colorado not only uphold Colorado's compact entitlements, but align state policies to develop and beneficially use these water entitlements.

Section 9.2 Economics and Funding

1. SMWSA supports the additional detail and concepts added to this section since the first draft. SMWSA encourages CWCB to retain this detail in the Final CWP.

2. SMWSA also believes that increasing Colorado's ability to fund important water projects could be one of the most meaningful outcomes of the CWP. In an effort to assist with M&I Projects and to incentivize regional partnership projects, SMWSA recommends that a key priority after finalizing the CWP be the development of a state guarantee repayment fund.

Section 9.4 Framework for a More Efficient Permitting Process

- 1. This section is a great improvement over the section as originally drafted and SMWSA appreciates CWCB's work to improve this important section.
- 2. SMWSA offers the following comments to further strengthen this section and more robustly achieve the directive of the Executive Order to "streamline the State role in the approval and regulatory process regarding water projects."
- 3. SMWSA has reviewed and supports the comments Northern Water Conservancy District included on State Permitting Processes in their April 28, 2015 letter. It appears that some but not all of these comments were incorporated in the second draft CWP. SMWSA encourages CWCB to review those comments again and further incorporate them into the Final CWP.
- 4. SMWSA recommends that the section in general and the Actions in particular be supplemented to include the following:
 - a. The State should commit to supporting project proposals once they have successfully completed the State permitting process.
 - b. In the "Preliminary technical review for state processes" discussion beginning on p. 363, add language that makes it clear that for projects that require NEPA analysis, State agencies should rely on NEPA studies and analyses to make their decisions. This was recommended by the South Platte/Metro BIP and is implied in the current language, but it should be more clearly stated to ensure coordination and involvement of state agencies in NEPA so additional technical analyses that result in added expense and delays are not needed to meet state requirements. SMWSA also recommends that this section describe any changes to State law that are necessary to ensure this consistency.
 - c. SMWSA supports #1 under Actions that calls for working with permitting agencies to determine how to make them more efficient and effective. SMWSA recommends language specifically recommended in the South Platte BIP be added to this Action specifying a "date certain" for this to occur, and including specific goals and timeline for completion of these goals.
 - d. SMWSA encourages CWCB to add a subsection to this section of the CWP including recommendations to improve the Federal Processes. Although Colorado cannot unilaterally implement changes to Federal Processes, it can collaborate with Federal agencies on certain reforms, and Colorado's congressional delegation can work with other states to effect changes. Including this type of a section in the CWP can give the backing and urging to Colorado's agencies and congressional delegation to work on much needed reforms to the Federal process. As recently as August 19, 2015, Sen. Bennett asked for this type of input and detail from Colorado's

- water community and the CWP is an ideal place to do this. The South Platte/Metro BIP Section 5.5.11.1 can serve as a starting point for this subsection of the final CWP, and is attached to this letter for consistency.
- e. SMWSA encourages CWCB to add the following specific recommendations from the South Platte/Metro BIP to this section of the final CWP and that item 2 and item 3 below be included in Chapter 10.
 - 1. Colorado should designate the Colorado Department of Natural Resources (DNR) as Colorado's lead agency for any water project requiring state or local permits, and as Colorado's Cooperating Agency for every water project in Colorado that is required to comply with NEPA and that requires any type of federal permit. This would allow coordination minimizing overlapping reviews or redundant or conflicting comments by involved state agencies. In this role, DNR would have to recognize other state agencies' statutory responsibilities and requirements for permitting. This would also assure Colorado's early, timely, and coordinated input into the NEPA process so the appropriate NEPA studies could be conducted in a coordinated manner, eliminating redundancy, while satisfying the many and varied informational and permitting needs of multiple state and federal agencies.
 - 2. Consideration should be given to tailoring state statutes and regulations to specifically meet the needs for permitting water supply projects. As an example, current Colorado Department of Public Health and Environment (CDPHE) 401 Certification regulations require an anti-degradation review of proposed water projects. Such reviews are designed for, and are applicable, to permitting of point source discharge, such as wastewater treatment plants. These analyses are difficult to adapt to water supply project evaluations and reviews. This inconsistency requires extensive additional analyses and studies, thus causing additional incurred costs by the project proponent and increased time for state employees to review projects.
 - 3. Changes should be made to applicable Colorado statutes and regulations in an effort to bring efficiency to the permitting process. Regulations or guidance should specify that state input into any NEPA compliance actions associated with water projects should begin early in the process and continue throughout the process to conclusion.

Comments on DRAFT Chapter 10 - Critical Acton Plan (July 2015)

In general, SMWSA believes that Chapter 10 should include specific action items that will make a meaningful difference in implementing the BIPs and CWP. Several parts of the current draft of Chapter 10 are specific and actionable, but many parts are a list of concepts. Several of SMWSA's comments below are intended to help make Chapter 10 more specific and actionable.

SMWSA also believes that the list of Critical Action in Chapter 10 is too long and all encompassing to provide a meaningful road map for what needs to be done over the coming months and years. SMWSA recommends that either the CWCB Board as an entity or through a stakeholder process, prioritize these Critical Actions. SMWSA would be happy to participate in a prioritization process or provide input to CWCB Board members.

As noted in Chapter 10, additional information and context for each of the critical actions is further explained in the referenced section. SMWSA offer the following comments on the table of Critical Actions and anticipates that any changes made to Chapter 10 in response to these comments will also be made in the appropriate referenced section.

- 1. Critical Action to Align Funding #2 calls for creating a public private partnership center of excellence. SMWSA supports this action and recommends that partners out side of water, such as those in transportation and other sectors who have been implementing P3s, be included.
- 2. Critical Action to Align Funding #3 calls for the development of a common grant inquiry process coordinate across agencies for environmental and recreational projects and methods. A common grant inquiry process across agencies would also be of great benefit to M&I and agricultural project proponents. SMWSA recommends developing this process for all types of projects and methods, not just environmental and recreational.
- 3. Critical Action to Align Funding #6 calls for an investigation of the potential for the CWCB to become a project beneficiary. SMWSA believes that CWCB already has this ability as demonstrated by the Chatfield Reallocation Project and others, and SMWSA recommends reworking this Action to identify specific areas where CWCB becoming a project beneficiary can make a meaningful difference in implementation of the CWP.
- 4. Critical Actions to Explore New Funding #2 calls for the establishment of a state repayment guarantee fund. SMWSA strongly supports this action, recommends that it be reworded to read "In order to encourage and support regional partnership or multipurpose projects, establish a state repayment guarantee fund," and prioritize this Critical Action as an important immediate next step.
- 5. Critical Actions to Improve Permitting #1 calls for a series of "lean events." What is a lean event? SMWSA assumes it is similar to a task force made up of permitting agencies and stakeholders. If so, SMWSA recommends this action be made specific and actionable by specifying who would be on this task force, specific goals for the group that build on and do not duplicate previous efforts, and a timeline for providing specific recommendations on how to make permitting more efficient and effective.
- 6. Critical Actions to Improve Permitting #3 calls for relevant state agencies to actively participate as a cooperating agency in NEPA. SMWSA believes this action should be made more specific by identifying legislative or administrative changes necessary to require that for project that require NEPA analysis, State agencies must participate as a cooperating agency, ensure their issues are included in scoping, and rely on NEPA studies and analyses to make their decisions.

- 7. Critical Actions to Address Water Quality #1 includes concepts of evaluating water quality impacts from BIP proposed projects, exploring graywater and reuse, and supporting green infrastructure. These appear to be separate issues which SMWSA may or may not support. For example, SMWSA is implementing reuse and continues to explore graywater and additional levels of reuse. However, evaluating water quality impacts from BIP proposed projects is already be done through the 401 certification process. If additional or redundant evaluation is being proposed, SMWSA may have concerns.
- 8. SMWSA recommends including two Critical Actions (or making the general statements in the current draft more specific) to address direct potable reuse and desalination/brine disposal. Section 7 may need to be revised or supplemented to support these actions. Critical Actions could include:
 - a. Establish a regulatory framework through the CDPHE for direct potable reuse to ensure the technical feasibility and safety of this option for meeting future M&I water needs in Colorado.
 - b. Develop a collaborative program between CWCB and CDPHE to evaluate and promote new and emerging technologies for inland desalination and compare the feasibility, costs, and impacts of different brine/waste disposal methods.
- 9. Critical Actions to Promote Storage #2 SMWSA recommends reworking this action from "Assess storage opportunities to determine where existing storage can and should be expanded or rehabilitated to prepare for climate change, improve sharing and use of conserved water, and meet Colorado's compact obligations" to "Assess storage opportunities (both surface storage and ASR) to determine where existing storage can and should be expanded or rehabilitated to help meet Colorado's water gaps."
- 10. Critical Actions to Promote Storage If the conservation stretch goal is retained, SMWSA recommends a similar storage stretch goal that reads very similar to Critical Actions to Increase Conservation #4. Add a Critical Actions to Promote Storage #5 that reads "Adopt a stretch goal to encourage innovative surface storage and ASR solutions that places Colorado at the water management forefront. Support a stakeholder process that examines options for local water providers to establish storage targets consistent with the stretch goal and the amount of storage possible given past projects and local opportunities."
- 11. Critical Actions to Increase Conservation #4 As previously mentioned, SMWSA recommends that the CWP include stretch goals for conservation <u>and storage</u>, or not include stretch goals at all.
- 12. Critical Actions to Maintain Ag. #2 calls for a stakeholder group to help develop a framework for an evaluation of agricultural transfers. As mentioned above in comment #5 on Chapter 6, SMWSA is concerned that such an evaluation could encroach on private property rights and become a permitting hurdle functioning like an EIS. SMWSA recommends removing this Action. If the Action is not removed, SMWSA recommends that the Action be revised to say "Host a stakeholder group to help determine if a framework for an evaluation of agricultural transfers is appropriate from a technical, legal, and policy perspective."

- 13. SMWSA recommends the *italicized* phrase be added to the name of section 10.d. Protect *and Develop* Compact Entitlements and Manage Risks. SMWSA further recommends that the title of the table be renamed to be Critical Actions to Protect Compacts, *Develop Entitlements*, and Manage Risks.
- 14. Critical Actions to Protect Compacts, *Develop Entitlements*, and Manage Risks #1 calls for maintaining the litigation fund. SMWSA fully supports the action and recommends CWCB assess the need to increase the litigation fund rather than simply maintain it.
- 15. Critical Actions to Protect Compacts, *Develop Entitlements*, and Manage Risks #2 SMWSA recommends adding the *italicized* phrase to this Action: Continue to comply with Colorado's compact and equitable apportionment decrees and support strategies to proactively manage compact obligations and develop Colorado's compact entitlements.
- 16. Critical Actions to Protect Compacts, *Develop Entitlements*, and Manage Risks #2 SMWSA recommends adding the *italicized* phrase to this Action: Prioritize the development of a programmatic approach to prevent a Colorado river Compact deficit while fully developing Colorado's compact entitlements.

Thank you for your continued work on Colorado's Water Plan. Please let me know if SMWSA can be of assistance or answer any questions.

Sincerely,

Eric Hecox, Executive Director

Eric B. Read

Attachment South Platte/Metro BIP Section 5.5.11.1 Recommendations to Improve the Federal Process

- The State of Colorado could support a more efficient EIS process for water supply projects. This could include the development of a framework for analysis which can be used to assess future projects. Greater efficiency, cooperation, predictability, and consistency in the permitting process could be achieved by establishing guidelines for what the lead federal agency and all state and federal agencies involved in the process require for approval. Efficiency and predictability of the permitting process could be further enhanced by the State compiling agreed upon ranges, tools, and methodologies for assessing contentious topics such as hydrology modeling, system risk, conservation as a demand reducer, and others.
- To increase the efficiency, consistency, and predictability of the EIS process, the State could work cooperatively with Federal agencies to develop a Programmatic EIS. Colorado's Water Plan could be used as the platform for a Programmatic EIS. Under a Programmatic EIS, no specific projects are approved, but it would create an analysis from which future specific approvals can rely.
- Starting in 2010, the Corps, Colorado Department of Natural Resources (DNR including CWCB), and the US Environmental Protection Agency (EPA) embarked upon a process called Collaborative Approach to Water Supply Permit Evaluation (CAWS). The major outcome of CAWS was an informal agreement among the three parties that conservation should be used as a demand reducer in analyzing the purpose and need for a project rather than during the alternatives analysis portion of the NEPA process. Though this informal agreement was not publicly documented, an important policy tool going forward could be the use of conservation as a demand reducer in the purpose and need segment of the EIS process. By doing this, water providers will have greater incentive to implement proactive conservation strategies to demonstrate decreased demand and strain on existing resources.
- Scoping for 404 or NEPA permitting must follow federally required processes. Delays often result when new areas of analysis are identified late in the permitting process after scoping has occurred. By ensuring that regulating agency concerns are addressed in their entirety during the scoping process, applicants can more accurately plan for the costs associated with the analysis and avoid delays.
- The State of Colorado could encourage the Corps and EPA Region 8 to revise their 1990 memorandum of agreement (MOA) on sequencing. Their current MOA says that the Corps must determine the Least Environmentally Damaging Practicable Alternative (LEDPA) first and then look at compensatory mitigation to authorize the LEDPA. A revision would enable public works projects to use compensatory mitigation in the identification of the LEDPA. This revision could be limited to public works projects.