

Interbasin Compact Committee (IBCC) Meeting Summary
Tuesday, February 20, 2018
Marriott Denver West, Golden

IBCC Members Present

Jackie Brown (Alt.
Yampa/White)
Stan Cazier
Jeris Danielson
Lisa Darling
Jeff Devere (Alt.
Yampa/White)

T. Wright Dickinson
Joanne Fagan
Steve Harris
Taylor Hawes
Keith Holland
Melinda Kassen
Eric Kuhn

Peter Nichols
Terry Scanga
John Stulp
Bill Trampe
Wayne Vanderschuere
Jim Yahn

IBCC Members Absent

Mike Alnutt
Carlyle Currier
Sean Cronin
Tom Gray

Jim Lochhead
Kevin McBride
John Rich
Cleave Simpson

Bruce Whitehead
Senator Sonnenberg
Representative Arndt

CWCB Staff

Viola Bralish
Craig Godbout
Megan Holcomb

Greg Johnson
Brent Newman
Becky Mitchell

Lauren Ris
Dori Vigil
Ben Wade

Peak Facilitation Group

Heather Bergman
Katie Waller

CWCB Action Items

1. Distribute South Platte Storage Study and Severance Tax presentations to all IBCC members.
2. Set up presentations about the Conceptual Framework at each of the roundtables in conjunction with outreach efforts on the Colorado River.
3. Organize diverse panels about the Conceptual Framework for both the West Slope combined and Front Range combined roundtable meetings.
4. Schedule a call with the Conceptual Framework Task Group to generate ideas about the presentations and the panels.
5. Communicate with roundtable chairs regarding delivery method for the candidate letters, as well as the support (list of candidates, printing/photocopying, etc.) that CWCB can provide for distribution.
6. Draft another version of the candidate letter per the IBCC's feedback and work with members of the task group to make edits and finalize the document via email.
7. Organize another meeting with the Funding Concepts Task Group to explore different proposals, agriculture, and the role of the roundtables.
8. Find meeting location for next IBCC meeting that is more central and schedule for early May.

South Platte Storage Study Project

Joe Frank from the Lower South Platte Water Conservancy District and Mary Presecan from Leonard Rice Engineers presented their work on the South Platte Storage Study (SPSS) project. Below are the highlights of this presentation (full presentation is attached):

- The SPSS was authorized by House Bill 16-1256, sponsored by J Paul Brown and prepared in coordination with the Colorado Water Conservation Board (CWCB), the Colorado Division of Water Resources, and the South Platte Basin and Metro roundtables. It was managed by CWCB and the Lower South Platte Water Conservancy District.
- The objectives of this study were to estimate the amount of water leaving the state in excess of the legally required minimum, identify multipurpose storage option along the lower South Platte River, and consider new reservoirs, enlargements, and alternative storage mechanisms.
- The SPSS focused on the larger South Platte basin, but the legislation focused on the area below Greeley.
- Existing data was compiled to reach the findings as a matter of efficiency.
- The average annual median flow leaving Colorado in excess of the Compact is 293,000 AF.
- In the future, about 116,000 acre feet per year (AFY) will be available at Kersey and 230,000 AFY at Julesburg, taking into account 60 percent of South Platte Basin identified projects and processes (IPP) implementation and perfection of conditional water rights.
- There will likely be 20 to 30 percent less water available in the future.
- The SPSS could help meet a portion of the municipal and industrial (M&I) and agricultural needs. It is estimated that the gap will be 500,000 AFY in 2050.
- The consultants used a screening process with criteria to narrow down the possible storage sites that could be analyzed to 22 surface reservoirs, seven aquifer storage sites, and no gravel pits. These sites were analyzed by the consultants at Leonard Rice.
- The cursory “triple bottom line” (economic, social, and environmental) analysis offered a method to further narrow down sites, although a site not being included past this point does not mean that it should be eliminated from consideration forever.
- The cursory triple bottom line analysis took into consideration a variety of factors and weighed them, including storage capacity, estimated cost, and unit cost. Cost does not include the price of Compact modifications, treatment, permitting, and social costs.
- Groundwater storage sites were analyzed differently using the 2007 CWCB groundwater storage assessment data. They were also scaled smaller as supplemental storage, augmentation flow options, and other aquifer storage and recovery (ASR) methods.
- Eventually, eight representative storage concepts were identified for analysis.
- As an example, Wildcat Reservoir was chosen as a sample surface storage concept in the mid-basin area. This concept would include an 800-cubic feet per second (CFS) diversion structure off of the river, a gravel pit, and a bi-directional, 100-mile pipeline to deliver water to Brighton.
- Another concept in the western portion of the basin includes recovery wells and a bi-directional pipeline to deliver water to Brighton.
- The storage concept results showed a predicted firm yield of 9,000 to 62,000 AFY with the construction of a pipeline and 7,000 to 47,000 AFY without a pipeline. The average annual yield was predicted between 43,000 to 81,000 AFY with a pipeline and 35,000 to 60,000 AFY without a pipeline. The cost varies by project, ranging from \$190 million to \$1 billion, excluding the cost of water treatment and social/political capital. The unit cost is predicted at \$3,000 to \$47,000/AFY.

- The individual storage concepts are not able to address a majority of the 2050 South Platte Basin supply gap below Denver, projects are not additive, and multiple projects would show a diminishing return.
- One project could satisfy 22 percent of the M&I gap, and individual storage concepts are not able to capture most of the available water based on the median numbers.
- Based on these findings, the following key conclusions were identified:
 - A large supply of water is physically and legally available, but only during wet years and over short periods of time.
 - Mainstem options have the most benefit but are likely not permissible and have significant social impacts.
 - Many off-channel options appear feasible and could be combined in many different concepts, but yields are severely limited by diversion constraints.
 - Concepts are expensive relative to previous supply projects in Colorado.
 - Any options and concepts could be candidates for further study under the right circumstances; none should be eliminated now.
 - Even several conjunctively operated storage projects would be not capable of addressing the majority of the South Platte Basin supply gap.
- The key obstacles in the study include:
 - Off-channel storage effectiveness is severely constrained by diversion capacity
 - Water quality will affect M&I uses and groundwater recharge
 - Environmental flow requirements could reduce available water
 - Collaboration will be needed to implement the most effective concepts
 - SPSS generalized costs do not include important components specific to each project
- The SPSS results in the following recommendations:
 - Develop better estimates of future hydrology and exchange potential.
 - Assess potential for using existing irrigation infrastructure to divert and deliver water to storage.
 - Seek cooperative storage projects with multiple users, components, and purposes.
 - Investigate how storage would support future alternative transfer method projects.
 - Investigate conjunctive surface and groundwater storage options.
 - Evaluate storage options upstream of Greeley.
 - Analysis was based on free river conditions; consider other water sources, e.g., reusable return flows.
 - Explore short-list of feasible concepts with Roundtable support in more detail (engineering, operations, cost).
 - Site-specific and owner-specific analyses will be needed to validate individual storage concepts.

Questions

IBCC members asked questions regarding the SPSS. Questions are indicated in italics, followed by the answer.

Was climate change incorporated into the hydrological analysis mentioned in the recommendation about better understanding hydrology?

No. This includes 60 percent implementation of IPPs and removes Denver Water and Aurora Water return flows. There will likely be other entities with return flows that can be removed. This analysis does not consider the conditional exchange water rights.

Was there an analysis of storage projects versus reuse projects, especially considering the cost of treatment and social capital?

Denver Water and Aurora Water return flows were removed, but a good next step would be to look at how all colors of water can be incorporated into a storage project. Many regional reuse projects morph into something larger than just reuse. Reuse projects have impacts on all other users and should be considered alongside appropriate storage and alternative transfer methods (ATMs).

Based on these results, will meeting the demands of the South Platte Basin require a transbasin diversion from the Arkansas and Colorado Rivers?

When the South Platte Basin Implementation Plan was developed, it took into consideration that a wide variety of tools would be needed to meet demand. All options need to be kept on the table while the South Platte Basin is doing as much as possible to manage water within the basin.

Are power costs included in the cost estimates?

No. Power costs would be significant.

Is there a sponsor for this project?

Identifying a sponsor would be a next step in advancing this project. While there are engineering considerations when answering this question, there also must be significant consideration for funding and partnerships. These project costs will likely be significantly higher than typical water project costs, as the less-complicated projects have already been completed.

There are many aquifer storage and recovery (ASR) projects in the South Platte Basin. Was the amount of water stored in ASR quantified?

ASR is a broad term and needs to be defined. There are already reuse projects in the area. In some of the high-water years, there is lots of recharge that is used in junior agricultural wells. These are not on tributaries to the South Platte River. There are places where water can be stored and captured, and there will likely be legislation coming up regarding ASR.

Did the cost estimate include legal costs?

No.

What is the cost of the long-term lease of water from M&I?

The numbers are likely between 100 to 300 AFY or higher.

Where is the information from the presentation available?

The entire report is available on www.southplattebasin.com. Supplemental information, including point flow analysis, will be available soon.

Comments

- Going forward, the hydrology of the Colorado River Basin will change significantly due to warming and climate change. This should be factored into all current decision making.
- Regarding treatment costs, there will be costs for M&I as well as agriculture and wildlife habitat.
- It seems that these results would likely apply to any other river basin in the intermountain west. The numbers may differ, but the concept remains.
- The South Platte River is used until it is dry. What makes it unique is that there are flows that go out of state that can be captured. Treatment costs increase when water is moved. It is not unique to have to use downstream water to satisfy upstream needs.
- This information should be presented at the West Slope roundtables' joint meeting in April.

Conceptual Framework Task Group

The IBCC appointed a task group at the November meeting to identify possible next steps for advancing the Conceptual Framework included in Colorado's Water Plan. This group met in-person at Colorado Water Congress. The group discussed the need to educate roundtables and IBCC members about the Conceptual Framework—how it was developed, why people agreed to it, etc. Based on the discussion at Water Congress, CWCB staff drafted a summary document outlining next steps and action items. This draft document (attached at the end of this meeting summary) identifies education and outreach on the Conceptual Framework, education and outreach on Colorado River issues and activities, and vetting of the Conceptual Framework against a project of statewide significance as action items to advance the Conceptual Framework. The first two action items are heavily focused on education and engagement, which is something that CWCB is working on, particularly with the roundtables. Members of the IBCC discussed how these action items should turn into on-the-ground action. Below are the highlights of this conversation.

Education and Outreach

- Outreach and education should be conducted on a variety of levels: general education about the state and organization of water in Colorado and targeted technical outreach on topics like demand management.
- All outreach and education efforts should be informed by a feedback loop started by the IBCC to ensure the information being transmitted is timely and accurate.
- General education is important, because water is a technical topic and people generally need to have a solid foundation of knowledge to be able to engage in discussion.
- The roundtables need to all have a solid base of knowledge regarding the Conceptual Framework and its application.
- The IBCC should focus on telling people why it is taking a certain action rather than what that action is. This will allow people to better understand the context and application of the Conceptual Framework.
- CWCB is already working to better engage with the roundtables on Colorado River issues and activities; an additional education and outreach campaign could be easily incorporated into this effort without too many additional resources.
- There are a few options for engaging the roundtables: having CWCB engage the roundtables, having IBCC representatives reach out to their respective roundtables, or having IBCC representatives reach out to roundtables through two joint meetings (one for West Slope roundtables and one for Front Range roundtables). Each of these options has benefits and drawbacks related to message consistency, trust in the person delivering the message, and timing/efficiency.
- The IBCC could organize panels for the two joint roundtable meetings so that all participants can hear broad perspectives on topics such as watershed management and environmental issues. This would also give participants a chance to hear from others around the state. These panels should be organized in a way that does not reinforce an east-west divide.
- Having CWCB sharing information with the roundtables will come across as more formal than if an IBCC representative were to share the same message.
- Given CWCB's limited staff resources, they will have to continue to work with the IBCC to identify the proper timing and content for any presentation to the roundtables. The lift for CWCB staff will be considerably less if this outreach effort is combined with CWCB's existing outreach and engagement strategy. An additional campaign could likely be implemented in the next three to five months.

- There may be additional opportunities to better educate people around the state at the summer Colorado Water Congress during the workshop portion.
- Starting education efforts at the roundtable level would be best as it would stimulate dialogue that could offer unique ideas not addressed by the IBCC.

Vetting of the Conceptual Framework

- It could make sense for the IBCC to assess a project or a package of projects of statewide significance against the Conceptual Framework to better understand how it can be used.
- Anything done with the Conceptual Framework should reflect action and forward motion.
- The current roundtable projects presented in various basin plans may not be the most compelling projects in the current environment based on recent developments.
- While CWCB staff is enacting an education campaign, the IBCC can spend time running a project through the Conceptual Framework. It is important that the IBCC does not lose sight of any of the roundtables' plans and priorities.
- The South Platte Roundtable has a project that could be used as a pilot for assessing the application of the Conceptual Framework.

Next Steps

After considering the above points, the IBCC agreed to the following next steps:

- CWCB staff will present about the Conceptual Framework to each of the roundtables in conjunction with existing CWCB engagement strategies.
- CWCB will organize a conference call with the Conceptual Framework Task Group to discuss the best approach to developing diverse panels for each of the joint roundtable meetings.
- The IBCC will review the project concept that comes out of the South Platte Storage Study and vet it using the Conceptual Framework at the next IBCC meeting.

Severance Tax Update

Carly Jacobs, Budget and Policy Analysis for the Colorado Department of Natural Resources (DNR), shared an update on severance tax issues. Below presentation highlights:

- Colorado collects severance tax on nonrenewable minerals as they are "severed" from the earth. Ninety-five percent of severance tax revenue in Colorado comes from oil and gas.
- Fifty percent of severance tax revenue goes to the Department of Local Affairs, while the other 50 percent goes to the Department of Natural Resources and is divided equally between the operational fund and the perpetual base fund.
- Severance tax is a volatile revenue stream and often not predictable, even when compared to other sources dependent on oil and gas. Severance tax changes on average 82 percent a year, while the Federal Mineral Lease stream and the Oil and Gas Conservation Commission (OGCC) stream change on average 28 percent and 13 percent, respectively.
- Severance tax is particularly volatile because of fluctuations in oil and gas market conditions, property tax credit offsets, and the Colorado Supreme Court decision *BP America v. Colorado Department of Revenue*.
- *BP America v. Colorado Department of Revenue* allows oil and gas companies to take previously prohibited deductions against severance tax liability. This has required the State to issue \$120 million in refunds and will cause a permanent reduction in all future severance tax revenue.
- Severance tax is becoming increasingly hard to predict due to the Colorado Supreme Court case. The forecast in September 2017 indicated healthy severance tax revenue and the

forecast in December 2017 indicated a significant decrease from the previous forecast. Revenue is now trending below the December 2017 forecast.

- Senate Bill 17-260 requires transfers of severance tax revenue to the General Fund in June 2018. This money will come out of the Operational Fund and Perpetual Base Fund of DNR and the Department of Local Affairs.
- Programs under the Operational Fund are divided into two tiers – Tier 1 and Tier 2. All of Tier 1 programs must be fully funded before any Tier 2 projects are funded. Many water and environmental programs are administered as Tier 2 programs and could lose funding permanently.
- The current forecast indicates that there is not enough money to fully fund Tier 1 projects, meaning that Tier 2 projects will not get funded either. These budget shortfalls are expected to continue through 2020. The Perpetual Base Fund will also see a significant decrease in resources based on the forecast.
- The forecast will likely change from what was forecasted in December 2017, so it is hard to make assumptions going forward. The only way forward is to prepare for the unexpected and plan for a range of outcomes.

Questions

Carly Jacobs answered IBCC member questions. Questions are indicated in italics, followed by the answer.

What are the impacts of having a budget shortfall? Will employees stop getting paid?

Work is occurring behind the scenes to identify the best path forward. Should no solution be reached, particularly regarding transfers to the General Fund, there would likely be challenges in making payroll and fulfilling other base operating expenses. However, the ideal path forward would be a legislative solution.

Can you elaborate on the possibility of Tier 2 projects losing funding permanently?

Funds in the amount of \$140 million would be needed in revenue to fully fund Tier 1 and trickle into Tier 2. Due to the Colorado Supreme Court case, there will be long-lasting impacts of severance tax revenue, particularly on Tier 2 projects.

What is the point of Senate Bill 17-260 and what are some possible legislative solutions?

This bill was based on forecasted severance tax revenue in the 2016/2017 legislative season, which was very different than the most recent December 2017 forecast. In terms of legislative solutions, there has been talk of altering the severance tax model to spend money after it has been received rather than based on the forecasted amount and addressing the transfer issue. It is expected that there will be some sort of legislative solution in the near future.

What assumptions are made about product production, levels of production, and fluctuation in price?

DNR economists look at price and production when creating their forecast. Right now that process is trending down and that change is reflected in the current numbers. It is likely the forecast will change when it is redone in March.

The Colorado Water Plan and other IBCC interests are in Tier 2. Have DNR and the Governor's Office started identifying other ways to fund the Water Plan?

There may be available alternate funding sources. There is no clear answer regarding the Water Plan, but CWCB is working hard to find funding, including adjusting their existing pots of money. Once all the refunds are processed over the next 16 months, there will be a new, and likely more predictable, normal.

Why is the money for the refunds listed as expected?

Some people may not take their refunds, and the State is at the mercy of the tax payers. The rate and time at which people request refunds will impact this situation. The statute of limitations for the Supreme Court case expires in 16 months.

Funding Concepts Task Group

The IBCC appointed a task group at the November meeting to identify next steps for advancing the funding concept and the appropriate role for the IBCC. This group met and identified possible next steps in a draft document, attached at the end of this meeting summary. Members of the IBCC discussed what was included in the draft document and how it should be converted to action. Below are the highlights of this conversation.

- The task group identified the IBCC's role as identifying how funding would be invested and to package these needs in a way that would be likely to help a ballot initiative succeed.
- This group did not have the information about severance tax, and therefore it did not factor into their discussion. This new information illustrates the importance of finding a stable revenue stream for water issues.
- The role of agriculture should be more prominent in this document. The way it is currently written suggests that the only way agricultural projects could get funding is if they put money back into the streams as the result of a project, and that is not always the reality of outcomes from these types of projects.
- The IBCC should give better direction to the task group to help advance this concept further.
- Agriculture and environmental interests are not positioned against each other in Colorado like they are in other states. The inclusion of agriculture is not just about water but about relationships and agricultural sustainability. This document needs to capture primary ideas about the use and prioritization of funding so that IBCC members can engage their respective roundtables and constituencies.
- This group should set priorities and then work through them systematically.
- The best funding source for projects is still Water Supply Reserve Fund (WSRF) grants.

Next Steps

The IBCC agreed that CWCB will organize another meeting with the same task group and further explore the most effective inclusion of agriculture and the roles of the roundtables.

Candidate Letter Task Group

The IBCC appointed a task group at the November meeting to identify possible next steps for sending a letter to candidates in the 2018 election. This group met and drafted a letter, attached at the end of this meeting summary. Members of the IBCC discussed the draft letter and possible next steps. Below are the highlights of this conversation.

Content

- It is still unclear to whom the letter should be addressed, to whom it should be sent, and the timing.
- Rather than attaching documents, supporting documents are included as links within the letter that can be accessed electronically.
- There should be a mention of the roundtables, particularly if the recipient is running for a local office. The letter could contain a reference to the candidate's roundtable representative.

- There should be highlights from the Water Plan included in this letter.
- The letter should remain one page in length so that people read it in its entirety. This could be challenging to maintain if more information from the Water Plan is added or other information in general.
- The letter could do a better job expressing the urgency of the situation.
- Explaining what the Water Plan does versus the values it contains would be a more effective use of limited space.
- The hyperlinks could easily be missed and unopened; changes should be made that draw the reader into the links.

Timing and Delivery

- Letters should be delivered along with a list of IBCC members so candidates know who they can reach out to with questions.
- This letter should be the first interaction with candidates and efforts should continue until there are final results from the election.
- There are issues with CWCB being too involved in the political process of elections. However, CWCB staff may be able to assist the roundtables with the logistics of distribution.
- The letter could be distributed by the roundtables with only a changeable address so that it can be personalized to the candidate.
- If the roundtables are going to be involved, they need to have some sort of involvement in the content of this letter.
- The roundtables can send the letters to the non-statewide candidates while the IBCC sends letters to the statewide candidates.
- Using the roundtables to deliver the letter has benefits, as well as downsides such as lack of consistency between candidates in different areas.
- To simplify the logistics, the letter could be sent out after the primaries rather than before. However, candidates are more likely to be focused on their opponent after the primaries versus before the primaries.

Next Steps

After considering the above points, the IBCC agreed to the following:

- Via email, the Candidate Letter Task Group and CWCB staff will edit the letter to reflect feedback on the following issues:
 - Add a reference to the roundtables
 - Include key findings of the Colorado Water Plan
 - Refer to the urgency of the issue earlier
 - Outline the need for funding
- After the letter has been redrafted, it will be sent to the IBCC for final approval.
- The basin roundtable chairs will be asked to deliver the letter to candidates who are not running for a statewide office.
- CWCB staff can likely assist with the logistics of sending out the letter. Greg Johnson will check with the Attorney General's Office to ensure there are no legal concerns about this.
- CWCB staff will send a list of the final candidates to the roundtables.
- John Stulp will sign the letters and help handle distribution.
- The candidate letter will be distributed before the primary election and soon after the candidate list is finalized.

Next Steps for the Next IBCC Meeting

- CWCB staff will send a Doodle poll to the IBCC to select the next meeting date in early May.
- CWCB staff will find a central meeting venue, likely Summit County.
- The following items will be on the next meeting agenda:
 - Vetting a South Platte project against the Conceptual Framework
 - Reviewing the document from the Funding Concepts Task Group
 - Reviewing the final candidate letter