

**Interbasin Compact Committee (IBCC)
November 30, 2011; 8:30am - 4:00pm
Embassy Suites, Loveland, CO
Meeting Summary**

Attendees

Members

Ginny Brannon	Eric Kuhn	Travis Smith
Stan Cazier	Jim Lochhead	John Stulp
Carlyle Currier	Olen Lund	Bill Trampe
Jeris Danielson	Peter Nichols	Carl Trick
Jeff Devere	Mark Pifher	Wayne Vanderschuere
T. Wright Dickinson	Jim Pokrandt	Steve Vandiver
Jennifer Gimbel	John Porter	Eric Wilkinson
Steve Harris	Mike Preston	Jay Winner
Taylor Hawes	John Rich	
Melinda Kassen	Mike Shimmin	

CWCB Board Members

Geoff Blakeslee – Yampa/White Basin
John McClow – Gunnison Basin

Staff

Heather Bergman – Peak Facilitation	Todd Doherty – CWCB	Greg Johnson – CWCB
Jacob Bornstein – CWCB	Mikaela Gregg – Peak	Sue Morea – CDM
Viola Bralish – CWCB	Facilitation	Nicole Rowan – CDM
Tom Browning - CWCB	Eric Hecox – CWCB	Dori Vigil – CWCB

Members of the public were also in attendance.

Welcome: IBCC Director John Stulp

IBCC Director John Stulp opened the meeting with the following introductory comments:

- The IBCC, IBCC subcommittees, and the basin roundtables (BRTs) have been very busy the last few months; their dedication and hard work is recognized and greatly appreciated. The work of the Colorado Water Conservation Board (CWCB) staff and CDM in helping monitor and support BRT and IBCC efforts has also been a valuable contribution to the process.
- The BRTs are in the midst of developing and analyzing their basin water supply portfolios. While the basins are at different stages in this process, tradeoffs and common themes are beginning to emerge and will help advance the IBCC and BRT conversations and implementation efforts.
- A statewide meeting held last month by the Nonconsumptive Needs Subcommittee is helping to align and advance statewide conservation efforts.
- The Metro Roundtable and Colorado Basin Roundtable held a joint meeting in which they began a very important and productive dialogue regarding tradeoffs and values relating to their portfolio work.

- The last IBCC meeting revealed a need to have an in-depth conversation regarding risk management. This effort is being aided by CWCB staff in the hope that today's meeting will provide an opportunity for the IBCC to advance the conversation in greater detail.
- A 2012 Statewide Roundtable Summit is being planned for March in an effort to bring BRTs together again, as the last summit was a great success and a valuable opportunity for cross-basin education and collaboration.

Basin Roundtable Portfolios

Basin roundtable representatives provided a brief update regarding their roundtables' portfolio(s), outcomes, and work with the Portfolio Tool, focusing on the substance of their portfolio work and the associated trade-offs being made. Highlights from these presentations are below.

Colorado Basin Roundtable

- A subcommittee was developed to help lead and direct the portfolio work for the BRT.
- The BRT would like to compliment staff for the development of such an effective tool to help evaluate tradeoffs, to demonstrate risks and the interconnection between risk and trade-offs, and to help outline potential steps that can be taken to mitigate negative impacts.
- The BRT has developed three scenarios representing 1) a best-case scenario using medium demand and high supply; 2) a scenario that outlines the use of the Colorado River to meet West Slope needs at medium demand (which demonstrates extreme dry-up of agricultural land); and 3) a worst-case scenario with no new supply and high demand—the result of which demonstrates severe impacts.
- The portfolio development process has further raised the unanswered questions the IBCC and BRTs have been struggling with regarding how much supply is available, what the risks are, what the threats of a Compact call are, how much water can be saved through conservation, etc.
- While the BRT is not specifically invested in any one of the portfolios, there has been value in spending time with this exploratory process, testing options and scenarios, and evaluating the trade-offs.
- The Colorado BRT found that the joint meeting with the Metro Roundtable offered an opportunity to discuss inputs used in the portfolios and to begin to discuss trade-offs. Trade-offs are a critical component to advancing the dialogue, portfolios, and implementation, but the group did not have time to address the topic fully. The Colorado BRT is looking forward to another opportunity to meet with the Metro Roundtable in order to advance this conversation using various consumption and demand levels.
- The BRT is hoping to gain additional input information from today's meeting to help expand and refine their understanding of other basins' scenarios and options being used for developing various portfolios.

Metro Roundtable

- The portfolios developed by the Metro Roundtable used an 85%-87% success rate for identified projects and processes (IPPs).
- The Roundtable has developed a white paper outlining the basin's conservation research and findings.
- The Roundtable spent a good amount of time addressing reuse and looking at realistic expectations and applications for reused water (e.g., seasonality of the reuse supply, winter storage, pipe and pump systems required to capture reuse, etc.).
- The Roundtable attempted to use the Colorado River for new supply and agriculture as a means of meeting the state's municipal and industrial (M&I) gap. However, it was decided that the Roundtable did not have enough information to accurately assign specific quantities, so rather than develop arbitrary numbers to develop the portfolio, for the purpose of analysis, the

Roundtable applied a 50/50 distribution of new supply and agricultural transfers to fill the M&I gap.

- The Metro developed portfolios using high supply, medium demand, and high IPP success rates with and without the development of a trans-mountain diversion.
- The Roundtable also created a worst-case scenario using high-demand factors. This portfolio demonstrated high levels of buy-and-dry from agriculture and unrealistic rotational fallowing values.
- An additional portfolio was developed to factor in climate change variability. This scenario eliminated the 10% safety factor that had been used in the other portfolios, added a .3 factor for increasing demand and decreasing supply, and increased the amount of conservation, assuming a stage 3-4 response from municipalities.
- The Metro Roundtable used a zero conservation level within their portfolio, because, given what the State has done in the last 10 years regarding passive conservation, the group identified that current and predicted trends will apply 80% savings to meet the gap. Unfortunately, the Portfolio Tool does not allow for representation of this, which is why the Roundtable had to use zero.
- The Metro looked at all factors that could affect reuse in order to move away from hypothetical applications. Infrastructure, absence of storage, finances, system losses, agriculture, and the environment were identified as critical components. Based on this information, a .6% reuse rate was identified as a realistic average, acknowledging that some systems could do better while others will not be able to reach this level. The Roundtable also recognized that this number could realistically be increased—as with conservation—as technology and state conservation legislation advance.
- The Colorado Basin Roundtable/Metro Roundtable meeting was a great educational opportunity; it allowed for each roundtable to hear the rationale behind the various quantities and scenarios used in the portfolios the other was considering. Land use issues were also discussed, which demonstrated differing opinions and the need for further exploration and discussion of the topic.

South Platte Basin Roundtable

- The South Platte BRT is not as far along in the portfolio development exercise as the Colorado and Metro. However, the group has spent a good amount of time developing an understanding of the Tool and its capabilities in order to facilitate more informed portfolio development.
- The central concern/theme for the BRT is how to minimize agricultural dry-up, which the Roundtable understands is a shared focus of the 1177 process.
- The BRT has identified 8% as a reasonable level for agricultural dry-up. Current portfolio work generally shows 20% dry-up, which is obviously unacceptable.
- Thus far in the BRT's portfolio work, 10% of passive conservation is being applied to meet new M&I demands, while a fairly low IPP success rate is being used as there is competition for the same water resources.

North Platte Basin Roundtable

- The BRT worked to develop a portfolio based on the mid-demand scenario.
- The BRT did not feel it had the expertise to evaluate IPP success rates in other basins and therefore hopes to reference the rates used in each basin's own portfolio(s). It is important to the BRT that all IPPs that support agriculture are "turned on" in the portfolio.
- The BRT believes that the Front Range needs to carry the responsibility for advancing conservation efforts with a non-mandated approach. Therefore, a low conservation level of 30% was used in the portfolio.
- Reuse was set at .75% which triggered concerns regarding how reuse will impact agriculture and conservation. The North Platte BRT used a .75% reuse rate because they thought it was a reasonable figure, yet there was little expertise available on the roundtable to help determine this.

However, it was also thought that it was in the state's best interest to apply a .75% reuse rate to new supplies only.

- 300,000 acre-feet was allotted for new supply out of the Colorado River with the possibility of new water for an agriculture demand component.
- The option for oil shale drilling was turned off due to concerns regarding environmental risks and impacts.

Discussion: Roundtable Portfolios

- This effort revealed surprising impacts to other basins when attempting to minimize new supply developments.
- In response to a question regarding how the BRTs addressed environmental issues, IBCC members provided the following responses.
 - The South Platte discussed the direct link between irrigated agricultural dry-up and environmental issues, which demonstrates the need to sustain agriculture in order to protect natural habitats. The BRT allotted 350,000 acre-feet of new supply to be applied 50/50 between agriculture and nonconsumptive needs, recognizing that consumptive needs are currently only at 250,000 acre-feet and that the nonconsumptive component will need to be factored into IPPs and new supply projects.
 - The North Platte also made the connection between the impacts of agricultural dry-up and nonconsumptive uses and impacts.
- In response to a question about how the BRTs addressed IPPs in their portfolios, IBCC members provided the following responses.
 - It is interesting that there are such discrepancies between the success rates identified in the various portfolios.
 - The Colorado Basin Roundtable used success rates identified by CWCB.
 - For the South Platte, a major factor affecting IPPs that differs from other basins is the competition for existing supplies and the finite nature of existing resources. This issue was a significant factor considered when the BRT addressed IPPs. Public attention and response to the development of new supply projects was also taken into consideration as an element that affects providers in their development plans and efforts. Half of the yield in the South Platte is predicted to come from agricultural dry-up, which will directly affect the demand for new supply and IPP success rates.
 - The Metro BRT determined that there were too many factors affecting the various IPPs and not enough known about IPPs in other basins in order to draw any conclusions regarding project success rates.
 - There seems to be a need to further refine and provide the BRTs with more information in order to better work with and identify IPP success rates.
 - Many BRTs are waiting to see how IPP success rates are identified by each basin in order to more accurately develop their portfolios.
 - There is concern regarding the influence of the Supreme Court in making water decisions impacting IPPs (e.g., the Burlington Ditch and Upper Yampa cases). However, CWCB staff feels this issue has been taken into account with the numbers used in the Portfolio Tool and through the discussions many of the BRTs are having as they develop their portfolios.
 - There was a suggestion that a next step/refinement for the Portfolio Tool could be to think about how to factor in the potential economic impacts/costs of agricultural dry-up (as per-unit and total costs). In response to this suggestion, CWCB staff suggested that they could provide a cost summary (based on analyses they have already done) to help the BRTs evaluate IPP success rate, but they would not be able to provide a new, comprehensive economic analysis at this time.

- It seems that costing information could be critical to help identify IPPs that are unrealistic and not supported and to help remove bias when it comes to identifying IPPs that should or should not be supported and/or prioritized.
- There remains a need to address how environmental and recreational components can be incorporated in the portfolio process, as they are not specifically addressed in the Portfolio Tool. Additional thoughts on this topic include:
 - It may be valuable to develop a specific environmental and recreational portfolio.
 - There was an underlying assumption that these issues would be addressed by each BRT during the portfolio development process even though there is not a specific component within the Tool.
 - There seems to be a need to help educate the BRTs regarding some of the critical nonconsumptive issues so they can adequately address the critical issues.
 - There are nonconsumptive tools currently available that could be referenced and brought into the process.

Water Fixture Legislation Updates: Denver Water

The IBCC Conservation Subcommittee Chair Wayne Vanderschuere and Jim Lochhead from Denver Water provided a brief update regarding recent efforts to pass water fixture legislation. Highlights from this presentation are below.

- In the December 2010 letter to the governors, the Conservation Subcommittee identified the need to look into conservation legislation. Denver Water has been working to support and advance water fixture legislation aimed at requiring low-flow toilets throughout the state. Unfortunately, after a recent voting session, the bill did not pass the Interim Water Resources Committee. However, Denver Water, with the support of Senator Schwartz and the Colorado River District, has decided to continue to advance this legislation. The Conservation Subcommittee met recently to evaluate if it was appropriate for the Subcommittee and the IBCC to take a position on the legislation.
- Several members of the Subcommittee are of the opinion that this is a very modest legislative proposal and an opportunity for the IBCC to advance its efforts toward implementation. Similar legislation has been adopted in three other states. The new toilet requirements would apply to new construction only. It is predicted that this effort would save approximately 20,000 gallons of water within the state each year. Denver Water is hoping the IBCC will support this effort and in turn help it gain support from local representatives in order to move the legislation forward.
- The central arguments presented in opposition to the legislation focus on 1) the potential negative impacts on sewer discharges and treatment plants (which Denver Water and others believe to be a non-issue), and 2) the opinion that conservation efforts should not be mandated by state government.

Discussion: Water Fixture Legislation

- It may be valuable for the IBCC to understand the political landscape surrounding this issue (e.g., which legislators are not in favor of the effort and why) so that the IBCC can help address these issues in a more focused way.
- There are questions regarding whether the rural and smaller sewer system companies have been contacted in order to address how their systems could be affected by the change in toilet requirements. Thus far only Metro area systems have been evaluated, but Denver Water is working to look into other systems to gauge more wide-range effects.
- There is a push for this legislation now because there is a strong belief that this is a modest proposal with little risk and if Colorado does not take the initiative now, then it will be lagging behind in advancing state conservation efforts.

- It would be valuable to see information regarding how this legislation could affect septic systems and homes reliant on them.
- There is concern regarding the potential effects of this legislation on reuse. Denver Water has looked into diversion, treatment, and timing issues, the findings of which show little to no potential risk to reuse.
- One IBCC member suggested that if there is not sufficient support needed to advance the water fixture legislation statewide, then perhaps this could be redirected as a regional effort. A response to this suggestion stated that it would be more difficult to implement the necessary changes at the regional level due to the need for large-scale manufacturing of the updated toilets.

Suggested Next Steps Regarding the Water Fixture Legislation

- There seems to be a need to provide IBCC members with an opportunity to look over the proposed water fixture legislation in order to have a more informed discussion regarding whether or not the IBCC should support the legislation.
- It may be valuable for the IBCC to revisit this topic at its February meeting.
- It would be helpful if Denver Water could provide the IBCC with supplemental written information addressing some of the major concerns and issues for and against the legislation, including those that were raised by the IBCC at this meeting.
- There may be a need for the IBCC to first consider whether or not it should officially support/endorse any legislation before the IBCC specifically considers supporting the water fixture legislation.
- It may be valuable for the IBCC to hear Senator Schwartz's perspective regarding the legislation.
- It would be helpful if the Conservation Subcommittee could continue to work with Denver Water to help coordinate information sharing with the IBCC between now and the February IBCC meeting.

IBCC Agreement

The Conservation Subcommittee will proceed with development of a comprehensive conservation strategy. Additionally, the Subcommittee will work with Denver Water to ensure that both the "toilet legislation" language and a fact sheet or other document addressing the concerns raised by the IBCC are provided to the IBCC in advance of the February IBCC meeting.

Portfolio Common Elements and Thematic Portfolios

Eric Hecox, CWCB staff, provided a brief overview of the progress the IBCC and BRTs have made in order to reach this stage of portfolio development and analysis. The portfolios developed by the BRTs will help reveal common elements and support and advance implementation efforts. These portfolios are and will continue to be a central topic for the IBCC over the next several months. The portfolio work will serve as the foundation for the March Statewide Roundtable Summit. The end goal for the portfolio work will be to identify commonalities among the portfolios and common options for implementation approaches that should be further addressed by the IBCC. In summary, the portfolio exercise is part of a five-phase framework:

- 1) The IBCC/CWBC will provide information to the BRTs to help build portfolios;
- 2) BRTs will build portfolios, provide input on tradeoffs, and provide feedback on implementation plan elements;
- 3) The IBCC/CWBC will reconcile common elements and finalize thematic portfolios;
- 4) Feedback from the BRTs regarding the thematic portfolios will be gathered;
- 5) The information gathered will be used to develop an implementation plan, support the development of SWSI 2016, and inform policy and intrastate discussions.

Discussion: Portfolio Process

- There seems to be a need for the IBCC to have a specific conversation regarding the agricultural gap in order to ensure the prevention of agricultural dry-up statewide. There also seems to be a need to have a larger conversation regarding nonconsumptive needs in relation to agricultural needs.
- The Arkansas Roundtable has created a subcommittee to specifically address agricultural needs, demands, dry-up prevention, economics, etc. This effort may provide a different perspective from which the BRTs and IBCC could/should address various agricultural issues.
- It may be too premature for the IBCC to look to implementation as there remains a vast range of portfolio options and few specific commonalities.
- It seems unrealistic to expect the basin roundtables to find consensus one or more portfolios in order to support the IBCC's efforts to build thematic portfolios and move toward implementation.
- It may be that some of the common implementation strategies are already being identified by the IBCC subcommittees.
- There is concern that not all of the BRTs are going to be ready by March to present concrete portfolios and have the discussions necessary to develop a portfolio of common elements and a path toward implementation.
- It may be valuable to use the March Summit as an opportunity to share and discuss basin nonconsumptive efforts and progress in addition to other specific issues affecting portfolio work.
- It sounds like in order to get to the proposed end goal, the BRTs are going to need to provide an endorsed portfolio. There is concern that such a request is not in line with the original request from the IBCC for the BRTs to "play" with the Portfolio Tool and begin to look at the potential trade-offs.
- There seems to be a need to focus more on risk evaluation and sharing before the portfolios can be completed.
- This portfolio process has created a need for some BRTs to reevaluate their IPPs, which creates an additional process that must be completed before an accurate and realistic portfolio can be developed.
- There is concern that common elements cannot be identified and, even if they could be identified, that the IBCC and/or BRTs do not have the ability/authority to control or implement the elements identified.
- Timing seems to be an issue; there may be a need for the BRTs to have more time with the portfolio process in order to develop more realistic scenarios, trade-offs, values, etc.
- There is concern that if the portfolio process is rushed, then the IBCC may be viewed as returning to a top-down process.
- It was suggested that the Summit be used as an educational meeting, an opportunity for each basin to inform the others about critical factors discussed by their roundtable and to help each basin understand the rationale behind various elements within other portfolios. This information can then be used to help inform the BRTs' work to finalize or further refine their portfolio(s). There may be a need for the subcommittees to evaluate how BRTs' portfolios can occur and the associated risks.

IBCC Agreement

The IBCC agreed with the portfolio process as outlined by CWCB staff but stated that the IBCC's review of the portfolios should not occur until the IBCC meeting in the May/June 2012 timeframe to allow BRTs more time to review information gathered at the Summit and revisit their respective portfolio discussions.

Public Engagement, Participation, and Outreach Committee (PEPO)

CWCB staff and PEPO members provided a brief update regarding PEPO's work over the last year and their recent efforts to better define PEPO's mission and action plan in order to streamline the connection

between their education and outreach efforts and the messages and deliverables of the IBCC and IBCC subcommittees.

PEPO Workgroup Mission

1. Create a process to inform, involve, and educate the public on the IBCC's activities and the progress of the interbasin compact negotiations. This will be accomplished by communicating the vision, mechanics, and relevance of the 1177 process to the general public, and securing and relying upon other groups whose focus is to provide water education to the public.
2. Create a mechanism by which public input and feedback can be relayed to the Interbasin Compact Committee and its members. This will be accomplished by encouraging participation of a broad range of stakeholders through roundtable representatives.
3. Provide water education opportunities to roundtable and IBCC members to help them make more informed decisions.

PEPO Next Steps

Short-term tasks

1. **Message:** PEPO will develop basic and consistent outreach messages based off what has already been agreed to in the letter to the governors from December 2010. The messages may include the following:
 - a. We have a stakeholder-driven process in the state working on solving our future water needs.
 - b. Our water needs exceed our planned supplies, creating a "gap." We need a portfolio of solutions that incorporates water from conservation, reuse, agriculture to municipal transfers, and the development of new supplies to minimize the impact to agriculture, the environment, and recreation.
 - c. This will cost money in the future.
 - d. We are also supporting agriculture, environmental, and recreational projects and many projects can be multi-purpose, meeting more than one need.
 - e. Our water future is connected statewide (i.e., transbasin projects, agricultural and recreational economies, impacts of compact calls).
 - f. The public can get involved in the current work of the IBCC (including why and how they can/should be engaged).
2. **Mechanisms & Audiences:** Potential audiences and mechanisms to deliver the message:
 - a. Water 2012 Coalition: Develop content for traveling exhibits and partner with community events, libraries, and museums to host the display; drive people to roundtable involvement to maintain identity of the 1177 process
 - b. Civic Groups/Local Government: Develop a presentation template that can be adapted for regional groups
 - c. News Media/General Public: Develop a one- to four-sentence blurb that incorporates the above messages for local authors to use when writing local stories; develop a list of statewide story topics to flesh out some of these concepts; distribute media advisory packages to roundtables to assist in implementing education action plans
 - d. Support the Colorado Foundation for Water Education (CFWE) Water Leaders project by promoting the "a day without water" video competition

Mid-term tasks

1. PEPO will continue supporting basin roundtable education action plans and be a forum for roundtable-to-roundtable exchanges concerning how to educate roundtable members and the broader public on meeting our future needs.

2. PEPO will look at how their activities complement work done by other efforts, including the CWCB marketing campaign on the “value of water.”
3. PEPO will wait until subcommittee products are complete and will then review the documents and suggest a path forward for appropriate outreach to both roundtables and the public (within PEPO’s capacity). Subsequent meetings with the subcommittee will help determine which efforts should be incorporated into PEPO’s scope of work.

IBCC Agreement

The IBCC agreed to and supports the next steps and direction outlined by PEPO: to work to develop public outreach and education messages and methodologies for use beginning in 2012. Prior to making messages public, PEPO will distribute draft messages to the IBCC for review via email.

Report from the October 13th Nonconsumptive Meeting

The Nonconsumptive Needs Subcommittee Chairs Taylor Hawes and Melinda Kassen provided a brief summary of the central conversations and outcomes from the statewide nonconsumptive meeting.

Highlights from this presentation are outline below.

- The meeting identified the importance of looking to and encouraging projects and processes that are multi-dimensional—projects that address nonconsumptive and consumptive needs and uses.
- It is important that all stakeholders share information about the work being done, lessons learned, and success stories, as there are a lot of nonconsumptive efforts and opportunities throughout the state that people can learn from and use to help guide more opportunistic and multidimensional projects. There seems to be a need to develop a “tool box” or list of resources to help stakeholders communicate information about their nonconsumptive needs and projects.
- Project funding was identified as a shared issue for all nonconsumptive efforts and stakeholders. It was suggested that it would be valuable to create a list of potential resources that could help stakeholders secure funding for future projects and efforts.
- There was a strong opinion from many attending the meeting that support for and efforts to address nonconsumptive issues are lagging behind other efforts (e.g., new supply, IPPs, etc.), and there is a need for more unified and directed action in order to catch up. Examples of efforts that could facilitate this movement include the development of a statewide matrix that would provide a more robust analysis of each basin’s nonconsumptive needs and gaps and the development of nonconsumptive scenarios to supplement the Portfolio Tool, specifically addressing the protection of nonconsumptive values.
- It was suggested that the IBCC request that each BRT develop a nonconsumptive implementation plan for their basin that identifies the nonconsumptive gaps. It would be valuable for each basin to identify what areas are currently protected, the level of value resulting from current protection efforts, and any areas that are not protected but may need to be. These identified areas could then be prioritized based on the need for and value of the protection effort and, if possible, the BRT could provide suggestions regarding how the gaps in protection could/should be addressed. This project could help identify nonconsumptive implementation and optimization strategies for 2012.

Discussion: Nonconsumptive Next Steps

- If the IBCC is going to make a request of the BRTs to further analyze and prioritize their nonconsumptive needs and gaps, it will be important for this to be done in a way that is not top-down and appropriately accommodates all the other BRT work.
- It is important for the BRTs to identify protected and unprotected areas; there may be cases in which some areas are unprotected but do not need protection (because they are not at risk) and should therefore be identified differently.
- CWCB prepared a handout summarizing existing tools for assessing nonconsumptive needs. This handout, titled “Technical Assistance for Basin Roundtables, CWCB, and IBCC” may help the

BRTs further analyze their nonconsumptive needs and gaps. The intent of the request for the BRTs to do additional analysis is not for the BRTs to develop new data but to take current information (e.g., data from the nonconsumptive mapping project) to the next level with additional analysis, discussion, expertise, and discussion. The purpose is to expand the basin nonconsumptive projects to show protection needs and priority levels in order to better guide implementation efforts.

- There is concern that this request does not match the way in which some BRTs previously addressed their nonconsumptive mapping exercise; prioritization may not be something the basins are comfortable or capable of doing. Some BRTs may not have the expertise needed to prioritize identified areas; there may be a need to include county water commissioners and/or other experts.
- It is important that the information gathered from this project is incorporated into the bigger statewide picture and the multidimensional efforts of the IBCC. It may be useful for the Nonconsumptive Needs Subcommittee to prepare metrics for assessing the potential impacts of a given portfolio on nonconsumptive values.

IBCC Agreement

The IBCC agreed to the proposed recommendations and next steps of the Nonconsumptive Needs Subcommittee: to work with staff to share the nonconsumptive work request with the roundtables, to develop one or more portfolios to share with the IBCC, to identify metrics for evaluating the nonconsumptive impacts of all the portfolios being developed.

Risk Management

New Supply Subcommittee

At the September IBCC meeting the IBCC asked the New Supply Subcommittee to consider addressing the overarching issue of “risk management,” which seems to come up regularly in IBCC and BRT conversations but has yet to be definitively addressed. The New Supply Subcommittee has begun to define risk management, giving context to the risk discussion and examining how risk management strategies change if different amounts of new supply development are included in the portfolios. The New Supply Subcommittee Chairs briefly highlighted the focus of the Subcommittee’s work.

- A critical component of the risk management conversation is the issue of overdevelopment of the Colorado River, knowing how much water is actually available and what risk management strategies could be used to mitigate the risk of overdevelopment (or underdevelopment).
- The Subcommittee acknowledges that a range of quantities will most likely be the best available answer regarding how much water could be developed from the Colorado River. This range of water availability, in addition to other factors such as climate variability and the requirements of each basin, will serve as a foundation for more directed risk management discussions and analysis. The central questions for these discussions will focus on when and how the available new supply will be developed and the specific elements and factors that must be addressed in order to manage and mitigate risk(s).
- The Subcommittee would like the support of the IBCC in its outlined efforts in order to further support and expand the dialogue and process and to help create an outcome that can assist the IBCC as it moves toward implementation.
- To help support this process, CWCB staff has drafted a risk management document providing background information, risk management components and subcomponents, issues, and existing efforts.

Questions/Comments: New Supply Subcommittee Risk Management Directive

- In order to help minimize some of the confusion and ambiguity surrounding water availability and development, it may be valuable to reframe the central question to look at basin resilience

and the nonconsumptive needs of the state (i.e., how resilient is the Colorado Basin in reference to various identified potential issues and to meet the overarching municipal, industrial, and agricultural needs of the state?).

- There seems to be a need to look at the statewide perspective before looking at basin resilience.
- There seems to be a need to address legislative issues within the Subcommittee's discussion.
- The risk management discussion is going to be based on assumptions and predictions; it is important for the IBCC to continue to discuss overarching assumptions and make the connections that will advance the process as a whole.

CWCB Review of the Colorado River Water Availability Study (CRWAS) Phase II

At the November Colorado Water Conservation Board meeting, the Board reviewed the recommendation from CWCB staff that the Board request the General Assembly to authorize \$2,000,000 from the Construction Fund to be appropriated to CWCB for work associated with Phase 2 of the CRWAS. Board members provided the IBCC with a brief summary of their discussion of CRWAS Phase 2, specifically relating to the issue of risk management. Highlights from this summary are below.

- The Board was in general agreement that there is a strong need to address issues relating to risk and that such efforts may require a delay of the CRWAS Phase 2 until a risk management study can be completed. It is important not to conflate CRWAS Phase 2 with the risk analysis, which might create confusion regarding the various issues and project outcomes.
- The Board considered how much money should be put into the Project Bill in order to support efforts related to risk management and CRWAS Phase 2. There was a motion for \$2 million to be set aside to be used to support both efforts.
- The Board needs to reconvene to discuss funding and project details in order to develop a formal recommendation for a risk management study and the second phase of the CRWAS. There is a general assumption that the BRTs and the IBCC will be engaged in developing the scope of work for the risk management study (e.g., what issues should be addressed by the CWCB, IBCC, BRTs, etc. and what the requirements for a timeline and funding would be). At this time there is funding currently available for a scoping assessment.

CWCB Risk Management Memo

Eric Hecox provided a summary of the risk management document developed by CWCB staff. The memo is an effort to outline the work and issues identified thus far regarding risk; the different types and interpretations of risk; the categories of risk that the IBCC may want to work to address; the risk to environmental and recreational attributes based on various risk management strategies; the risk to municipal and industrial systems; the risk of a declining agricultural industry; and current risk management strategies and efforts. The memo is a work in progress, and as the basin portfolios are finalized, the risk management strategies will be updated based on the portfolio scenarios. Key issue areas addressed in the risk management memo include:

- 1) Additional and new storage
 - a. Aquifer storage and recovery on the Front Range
 - b. Augmentation
 - c. Current storage amounts and how storage can be used to help manage risk
- 2) Triggers
 - a. Management triggers and examples of where risk management can be voluntary
 - b. Drought planning as a source of information and reference of how triggers come into play
- 3) Efficiency
 - a. Drought plan: efficiency goals, conservation efforts, etc.

- 4) Alternative agricultural transfers
 - a. Interruptible supply, water banking and agreements, and situations in which different methods can be helpful for managing different types of risk
- 5) Infrastructure
 - a. Storage
 - b. Flexible and cooperative infrastructure
 - c. Strategic reserves
- 6) Environmental values
 - a. Consumptive/nonconsumptive needs summary and the identification of tools
- 7) Basin studies
 - a. Augmentation
- 8) Development opportunities
 - a. Aquifer, conjunctive use, augmentation, integrated resource plans, etc.

Discussion: Risk Management

- It is important to make sure that the scope of the risk management conversation and analysis does not get too broad, that the focus remains on the big picture for the state; this is not the time to focus on basin-specific issues.
- It is important to recognize that CWCB staff developed the risk memo in support of the efforts of the New Supply Subcommittee and as a potential outline for scoping the risk analysis study.
- It is important to manage and be realistic regarding expectations for what could develop from the risk management study. It will be important to clearly outline in the scope what the IBCC wants to gain, what the purpose/end goal is, and how the information will be used to support ongoing and future IBCC efforts.
- It may be valuable to address the need to continue to develop the Colorado River and any other water resource with a process/plan in place to prevent curtailment when development reaches or exceeds a 'safe' level.
- The IBCC will not be able to control decisions made regarding curtailment; however, it can gather the information needed to help the State make an informed decision with the fewest negative effects.
- It is important to recognize that other states are not yet having this conversation and are counting on unused water from Colorado as their risk management strategy.
- It may be valuable to organize the scope of work for the risk analysis study to look at three central categories: 1) technical issues, 2) legal issues, and 3) policy issues. It would also be helpful for the scoping process to identify which group(s) (CWCB, IBCC, and/or BRTs) could/should address each issue area.
- If the risk analysis study is approved by the Colorado Water Conservation Board, it may be valuable to for CWCB staff to outline the scoping options for the IBCC to discuss at the next IBCC meeting.
- The IBCC seems to be following a productive path. In phase one of its work, the IBCC looked at how much water is available and determined that the range of water needed is too wide to provide a clear direction. Phase two encompasses the Portfolio Tool and an opportunity to look at how much water is needed and what the trade-offs are in order to develop a balanced water supply plan for the future. Now the IBCC is looking to move into the third stage to focus on risk and outline steps needed in order to make a water plan successful. Phase three will help the IBCC develop recommendations for implementation and solution development.

IBCC Agreement

The IBCC agreed to support the pursuit of a risk analysis study and indicated that the IBCC's support should be communicated to the Colorado Water Conservation Board. The IBCC also agreed that the New Supply Subcommittee should work with staff to clarify the scope for a potential CWCB risk management study.

Water Supply Reserve Account (WSRA) Criteria and Guidelines

Todd Doherty, CWCB staff, provided an update regarding the work of the WSRA Subcommittee to amend the WSRA grant program's criteria and guidelines as discussed by the IBCC and CWCB in September. Major changes made include:

- Consideration of requests from the Statewide Account in March and September
- Inclusion of a CWCB grant/loan package to leverage WSRA grant dollars against CWCB loans
 - WSRA grant requests for projects that may qualify for loans through the CWCB loan program will receive preference in the Statewide Evaluation Criteria if the grant request is part of a CWCB loan/WSRA grant package.
 - For these CWCB loan/WSRA grant packages, the applicant must have a CWCB loan/WSRA grant ratio of 1:1 or higher.
- A new match requirement for requests from the Statewide Account of at least 5% of the total grant amount from basin funds; the total 20% match requirement remains intact
- Revised allocation of WSRA funds between the Basin and Statewide Accounts, from 27% to 36% for the Basin Accounts and 73% to 64% for the Statewide Account.

IBCC Agreement

The IBCC agreed to approve the revised WSRA Criteria Guidelines assuming clarification will be made to the following statement: "A minimum match of 5% of the total grant amount must be from basin funds."

Closing Remarks

Director Stulp closed the meeting by reminding the IBCC that the 1177 process is working but that its success has not been without bumps in the road and such bumps will continue to arise as the process advances. It is important that the IBCC continue to move forward and discuss the difficult and important issues in order to make recommendations for the good of the state. The foundation of the IBCC's success remains the letter to the governors, a consensus document that continues to help guide the IBCC process a year later. The process has also been greatly aided by the Colorado Agricultural Water Alliance (CAWA), the Colorado Water Conservation Board, CWCB staff, and many others. It is important for the IBCC to continue to build relationships and work together for the future of the state.

Next Steps

IBCC

IBCC members will continue to work with their roundtables to develop one or more portfolios. The IBCC will examine and integrate the portfolio work from the roundtables at the IBCC meeting in late May or early June. Roundtables will need to submit the work that they have done on the portfolio(s) at least two weeks prior to this meeting to have their work included in the IBCC's deliberations in May/June. Staff will more accurately identify this deadline once a date is set for the May/June IBCC meeting.

IBCC Subcommittees

1. The Identified Projects and Processes (IPP) Subcommittee will work with staff to refine the information currently available on IPPs as part of their effort to identify an amount or range of water from IPPs that can be applied to the gap.
2. The Public Engagement, Participation, and Outreach Committee (PEPO) will work to develop public outreach and education messages and methodologies for use beginning in 2012. Prior to making messages public, PEPO will distribute draft messages to the IBCC for review via email. IBCC members will review messages in a timely fashion and, if they are not comfortable with the content, will provide ideas for how the messages can be revised or improved.
3. The Nonconsumptive Needs (NCN) Subcommittee will proceed with the next steps outlined at the meeting.
 - a. The Subcommittee will work with staff to share the nonconsumptive work request with the roundtables. This work includes developing an NCN Implementation Plan, suggesting and prioritizing project to address NCN gaps, initiating 3-5 NCN projects, identifying one or more NCN pilot projects, and defining technical questions that need to be answered before this work can be done. The Subcommittee will work with Jacob Bornstein and the roundtables to determine how these tasks relate to and build on the work the roundtables have already done on nonconsumptive needs.
 - b. The Subcommittee will develop one or more portfolios to share with the IBCC and will identify metrics for evaluating the NCN impacts of all the portfolios being developed. After evaluating the NCN impacts of the portfolios, the Subcommittee may also develop an additional portfolio that minimizes impacts and maximizes protections for NCN.
4. The New Supply Subcommittee will work with staff on ideas for a potential new CWCB risk management study. This effort will include getting ideas and feedback from the roundtables. The full list of brainstormed ideas or tasks for inclusion in the study will be shared with the IBCC when it is available. The IBCC will then work with staff to determine which of these items should be included in the scope of work for the new risk management study, which can be addressed using existing resources, and which can be addressed at a later time.
5. The Conservation Subcommittee will proceed with development of a comprehensive conservation strategy. Additionally, the Subcommittee will work with Denver Water to ensure that both the “toilet legislation” language and a fact sheet or other document addressing the concerns raised by the IBCC are provided to the IBCC in advance of the February IBCC meeting.

Colorado Water Conservation Board (CWCB) Staff

1. CWCB staff will summarize the costing work they have done to date and share it with the IBCC.
2. Staff will continue to develop the tool box for addressing nonconsumptive needs, as outlined in the next steps from the NCN Subcommittee.
3. CWCB staff will continue planning the Statewide Roundtable Summit for early March 2012. The Summit will focus on the work of the roundtables to develop one or more portfolios using the Portfolio and Tradeoff Tool. Roundtables will share the work they have done to date, including the assumptions they made, considerations they explored, and tradeoffs they discussed while preparing the portfolio(s). The Summit will also include sessions on specific topics related to portfolio development; these topics will be identified in the next several weeks. IBCC members who have ideas for topic discussions should share those with staff.

Upcoming Meetings:

- February 29, 2012 – IBCC meeting, Denver
- March 1, 2012 – Statewide Basin Roundtable Summit, Broomfield