Interbasin Compact Committee (IBCC)
March 5, 2010
8:30a.m. – 5:15p.m.
Doubletree Hotel
Denver, CO

IBCC Members

Alex Davis	Jeris Danielson	Rod Kuharich
Bill Trampe	John Porter	Stan Cazier
Carl Trick	Kent Crowder	Steve Harris
Chips Barry	Marc Catlin	Steve Vandiver
Dan Birch	Melinda Kassen	T. Wright Dickinson
Eric Kuhn	Mike Shimmin	Taylor Hawes
Eric Wilkinson	Peter Nichols	Wayne Vanderschuere
Jay Winner	Ray Wright	

Staff /Technical Team/Board Members

Eric Hecox, CWCB	Rebecca Mitchell, DNR	Veva Deheza, CWCB
Todd Doherty, CWCB	Sue Morea, CDM	Ted Kowalski, CWCB
Greg Johnson, CWCB	Nicole Rowan, CDM	Ray Alvarado, CWCB
Jacob Bornstein, CWCB	Viola Bralish, CWCB	John Stulp, Dept. of Ag
Dick Wolfe, DWR	Jim Martin, DNR	John McClow, CWCB

Members of the Public were present

Welcome, Introductions, Framing the Day – Alex Davis

The meeting started at 8:45. Alex Davis started the meeting and reviewed the agenda and goals for the day. She also reminded the IBCC of why we are working on portfolios. The IBCC discussed the status quo approach to meeting our future water needs relied on ag transfers. The IBCC did not like status quo and is using a scenario planning approach to see if we can come up with an alternative to status quo. We are building portfolios for each scenario and then we will look for commonalities between portfolios.

She also went over the 2010 meeting plan, reminding the group that Gov. Ritter challenged the IBCC to develop 3 portfolios and a framework for how we would achieve those portfolios.

Panel Discussion – Taylor Hawes, Eric Kuhn, Peter Nichols, Dan Birch, Mark Pifher
Presenters from Dec. IBCC meeting discussed common elements of mid-supply/mid-demand portfolios developed at the December meeting.

Eric Kuhn – Reported that his group looked at the tradeoffs under different levels of IPP's, Ag transfers, and conservation rather than come up with a sample portfolio. Their assumption was a mid-supply

scenario and that meant 350kaf. They didn't vary the mid-supply assumption. They also had the objective of reducing Ag transfers so they kept new supply at 350kaf and examined the tradeoffs between IPP's and conservation. They found that if you are going to only have a small amount of ag transfers the more that the IPP's aren't developed, the greater the conservation that has to happen to meet the demands, so there's a direct tradeoff there.

It may be worth an entire meeting to talk about IPP's. Making the assumption that 60% are going to be successful or 30% we felt wasn't right because it is on a yield basis not a project basis. Some IPPs are very small projects and others are very significant supplies. To the extent the IPPs are developed sooner, the less ag transfers will need to occur.

They also came to the conclusion that many IPPs have local issues that may not be solvable by this group. Therefore, it's going to come down to conservation and the numbers especially along the Front Range are going to make people a little squeamish but that is going to have to be the trade off.

In terms of the Colorado River, we need to bring in the time part of this and it makes a lot of difference. Do you do the most expensive projects first or last if there's uncertainty in demand or do you do the ones that are the most certain or most risky first? You can make an argument for either one and we need to have that discussion.

Mark Pifher – Part of group 2 in December meeting and had an extensive discussion on the IPP's. They were more optimistic on the IPP success rate and felt that we should be able to fill out the portfolio to a greater extent through IPP's. What we need to focus on is the impediments to the IPP's.

On conservation we concluded that 30% off of 2000 was achievable but there are some caveats on that. I was surprised to see that we were looking at 20-25% off of 2008 today. Now we have a new base line and we need to discuss whether these levels are provider-by-provider or by basin.

We had a discussion about reuse; what portion of the IPP's already had reuse figured into them? Those type of questions need to be answered and we thought some of the assumptions on reuse rates were a little high so we tempered them. Our factor in our group went down to a 1.3 ratio for a couple of reasons; we didn't think the infrastructure was there and it wasn't economically achievable without the pipes, pumps and treatment plants to capture it. So that is why we thought only 50% was reusable and then how efficient are you in bringing it back through.

On new supplies on the Colorado River we took the same approach as Eric Kuhn was talking about using the mid-supply number of 350kaf. We were thinking 175 on the east slope and 175 on the west slope but we're also cognizant of the nonconsumptive recreational and environmental demands and we felt that some of the water not being used on the west slope could be used to meet those other demands.

Our approach to Ag to urban was the default approach; you see what you can get out of the other three and then you say what more do I need and that's how we came up with our ag number. Questions that we wrestled with were how will it be transferred and from what lands you should be taking the water? We think at least in the Arkansas basin there are quite a number of acres that are less productive or very

saline lands and if you could figure out a way to legally transfer that water for use and financially compensate landowners and add to the supply of the more productive lands or high value lands.

One thing that we might discuss today is the impediments we see relative to making these portfolios a reality and the approach you would take; the list of impediments I came up with was a long one especially when you look at some of the IPP difficulties we've had to date. When you look at things like; endangered species, wild and scenic, NEPA, 1041, and 401 certifications and the challenges to regional solutions. I think another way to find water supplies is through regionalization.

In terms of impediments to specific part of the portfolio:

- Conservation - there are costs associated with it and how do you use conserved water. Some people may be assuming that it would go to nonconsumptive uses and others may feel that it would go to consumptive use in the future. Question of how do you achieve equity today in conservation when there are different starting points across the state, can you have a uniformed number?
- New projects - one of the impediments may be how many of those are already encompassed in the IPP's and how many are already being counted on by the Front Range? There is also climate change that the state is taking a shot at addressing
- Ag-Transfers - you have socio-economic impact , and the inability to move the water (limited exchange capacity)

What do you need to overcome these impediments? To make any project a reality you need a supply, money, and approvals. There are a whole lot of subcategories under each of those that can be discussed in the breakout groups..

Peter Nichols – Part of group 3 at December meeting, we were primarily from rural Colorado and we wanted to minimize Ag transfers as much as possible. We looked at IPP's and the status quo levels developed by CWCB. If we were able to increase the IPP success rate by a third in the Metro and the South Platte that would make a dramatic difference in the amount of water that would have to come out of Ag in the next 40 years. So for our portfolio we used the status quo levels, but increased the Metro and South Platte by 1/3.

We looked at conservation very carefully and the big demands are along the Front Range. We felt we should be pushing really hard for heavy conservation in that area so we put it at 40%. We also thought we should look at the M&I portions separately. The thought being that industrial demands are in big blocks and maybe it's easier to achieve because you are looking at one single demand and you can make the case rather than trying to explain to a diverse group of urban customers.

We took the mid-range scenario for the Colorado River; we allocated 100kaf to the east slope and 250kaf to the west slope thinking that unused portions on the west slope would be reserved for their future growth.

We also examined reuse. We found that if reuse was increased by 1/3 (up to 80%) it makes a big difference in the amount of ag transferred.

In terms of Ag transfers we recognize they are inevitable, however we don't think that rural Colorado should be a state sacrifice area. We talked about how Ag is transferred matters maybe more than how much. We need to think about how we can give incentives for temporary transfers rather than permanent ones.

Dan Birch – Part of group 1 in the December meeting, my group somewhat deviated from the directions. The discussion for us got started around what the nature might be of a Transmountain project. There's a certain feeling that the economics might work out ok if it's a very large project or a relatively small project but something at 100kacft might be a very difficult because you're dealing with all the fixed costs of a larger project and spreading it out across a much smaller yield. We started out assuming that there's a 30kacft supply coming from the west slope and then given that lets take a look at what you might be able to do being fairly aggressive with water conservation at 30%, for IPP's a high percentage success rate, and what the ag transfer is as the default number. We ended up with the highest number for Ag transfers of 221kacft and we recognize that's not a number that anyone wants to see. However, we also thought you could take a look at that number and recognize that there's going to be a certain amount of that happens because irrigated farm lands are developed onto, some are marginal ag lands, and some lands are going to come out of production because people want to sell. If you take a look at those 3 factors that's kind of the natural rate of Ag conversion and what is that number? Any balance in terms of ag transfers there may be a way to make it more acceptable and that should be discussed in this forum. Are there temporary ag transfers that can be done and different ways to offset the economic impacts?

Taylor Hawes – I was given the task of figuring out how we might include environmental flows into the model. Today we don't really have any way of looking at that or measuring it like we do with ag lands. At the last meeting everyone assumed that their portfolio did a good job of protecting environmental values. I did want to remind everyone as to why this is important; I think whatever we come up with there's got to be an environmental protection. The reasons to care about this are to: avoid conflict; ease the permitting issues such as endangered species, water quality, wetlands, etc.; maintain the recreational based economy on the west slope; and to leave a healthy environment to the next generation.

What we're proposing is to include a trigger of protecting 80% of base flows and 50% of peak flows for those areas where the transbasin component of the portfolio would be developed.

I want to add some caveats. This is not perfect and we are open to other ideas; we just need some way to measure the environmental impacts that is quantifiable and based on science. Also, this doesn't replace the need for site specific analysis.

Questions for the panel

T. Wright – this is to Mark , are regionalization concepts achievable? Also, to Dan are those the kind of densities you've been talking about and how do we incentive them to make them achievable?

Mark P. – I think it's achievable, we are working on a regionalization right now with Aurora/South Metro/Denver. The science shows that working cooperatively we can get a much bigger bang for the buck and we can reduce the overall costs. Can we get each entity to relinquish some of their individual jurisdiction for the betterment of all? It's hard to say but I think it's viable.

Dan B – I think on the density issue the number on the handout is 35kacft; there's going to be some redevelopment that occurs that's going to result in higher density development. Some shift in thinking about how water utilities do business which would entail working with planning commissions and city councils, I don't know you could achieve 35kacft it will take some much different way of thinking then water utilities have traditionally done.

Eric K – I just want to add about this regionalization issue, I'm going to suggest when we do have this discussion on IPP', I think it is going to take a change in culture. You go back to the historic arrangement that was made in the 50's that made Dillon's project feasible was to limit it to just Denver or Colorado Springs that's the reason everyone was able to reach a compromise now we are talking about breaking that arrangement. How do you do that in our framework of water rights, these raises all kinds of cultural issues that have to be addressed as we move forward in this we will have to get through some of the institutional constraints which I feel we've been ignoring.

Melinda – in terms of the tradeoff between IPP's and additional Colorado river water, given that there is a list of IPP's do we know what that portfolio is in terms of this much Colorado river water, conservation, reuse, ag transfer water?

Alex – we've been struggling to unravel the IPP "black box." In the tool what we have is the SWSI data and the memo breaks out what we know about the IPPs.

Breakout Groups

The IBCC broke into groups to discuss a framework for how different components of the portfolios would be achieved.

Report from Breakout Sessions

<u>Group 1 – Mike Shimmin</u> – The group discussed the need to have additional details on the IPP's. We talked about general roadblocks to the IPPs. We discussed how the federal permitting agencies may favor ag dry up or conservation over the local ideas. Another road block we discussed was the lack of a regional perspective. There is no process for integrating the IPPs into regional planning. We discussed how can have a more regional perspective. The IPP's one at a time lack an integration perspective. You may have a structural IPP that may not address conservation because it was planned separately. How do you reintegrating these different pieces into the puzzle as the IPP's are being reviewed? The permitting agencies need to understand there's an integrated plan just maybe not all incorporated into that particular IPP

Water Conservation in terms of road blocks to implementing some specific number, there's a lot of confusion about the numbers, how they're generated and what's being measured. We need to better understand what we are talking about; what do these numbers include? What are really achievable using sound science, economics, and technology? The lack of specific information on conservation is hindering our ability to specify the conservation component of the portfolio. We need to understand what purpose conservation serves in the overall plan (i.e. new growth, drought protection, other?). We need to identify whether the savings achieved before 2000 and 2008 are permanent. We may need some separation between big providers and small providers and how conservation is being implemented and counted up. Ideas for next steps: separate municipal from industrial and talk about conservation possibilities in both areas. We may need some statewide standards such as standard plumbing fixtures or standards to limit turf grass in common space.

Ag transfer issues: we discussed three basic ideas to preventing Ag dry up – 1) assure municipalities that alternatives to buy and dry are viable. These arrangements will be different if it is a temporary dry year supply or if you are trying to build it into a base supply for a municipality. 2) create some sort of regional water pool to free up instead of going out and trying to buy the water from individual water right owners. 3) environmental uses needs to be figured into the equation but we didn't get too far into how to do that.

Group 2 – Ray Wright We had a discussion about existing IPP's and that some of them probably rely on the same water source or others are less realistic. We discussed the time frame of developing any project but particularly large projects and how the IPP's may be abandoned for less desirable but more expeditious projects. We also discussed that to successfully complete water projects today stakeholders needs to be engaged early and often. Jeris Danielson suggested that CWCB could take on an education role attempting to spur a culture change in how the stakeholders look at these projects. Bringing everyone to the table as soon as possible would help. Marc Caitlin felt this group would be able to develop and maintain a handbook or a roadmap for the players and a checklist of where project proponents need to go initially and get that buy in early.

In discussing conservation we spent some time making sure we understood the numbers. Tthe consumptive fraction of M&I water might be a factor that we need to understand more about rather than just gpcpd. The road blocks to conservation are largely cultural. We have an expectation of plenty and disposable incomes to do pretty much what we want, we agreed while rate structures have a big place in effective conservation there are also some down sides. Melinda Kassen suggested that maybe it makes more sense to giveaway plumbing fixtures then to build a million dollar pipeline. We were hopeful that water conservation might be accomplished by not framing it as saving water but by promoting a change in expectation and a change in lifestyle.

We discussed ag dry up noting there's two ways to keep water in ag, first, get a major infusion of new water from the Colorado River into the Metro area and second, make sure Ag is profitable. We also discussed how Ag transfers will be much more palatable if there is a replacement for the local economy.

Group 3 – Jay Winner road blocks to current IPP's - one of our thoughts was the need to drill down on which of these projects are feasible and which ones are identifying the same water as their water supply. We also discussed NEPA compliance, and how larger projects attract more attention. We also discussed how the process the way it is now favors the vocal minority. How can the water community support these IPP's? We discussed selective education starting with smaller groups. We also discussed expand projects to include robust multipurpose projects. This is an area we felt could use state support. Multipurpose regional projects are discouraged in the permitting process in favor of smaller single purpose project. In terms of next steps we discussed how the IBCC process could be helpful. We felt it was important to start with the broader framework, but stopping there was not very helpful. We eventually need to find specific projects that fit into the broader framework.

We also discussed road blocks to conservation. We discussed whether the west slope should do the same as the east slope? We also discussed what 20% saving from a 2008 baseline would like. It would require changes in landscaping and would require individual water budgets and tighter standards for new development.

Ag transfers are we trying to save Ag or make transfers more palatable? We have to protect property rights, profitability of the farmers, and their rights to sell their water. Lease and fallowing looks good for the state but is very expensive and very difficult to do. The state could help by facilitating a better link between farmers and communities.

Group 4 – Wayne Vanderschuere (IPP's and conservation) and Commissioner Stulp (Agriculture) For road blocks to IPPs we identified extensive permitting and financing issues. In terms of permitting we discussed many of the issue mentioned by the other groups. In terms of funding, you have to be able to finance the project. How do you overcome some of these IPP road blocks? We discussed looking for projects with multiple uses and benefits and having an all inclusive public process in the beginning.

Conservation road blocks include the certainty of savings and permanency existing conservation. We've seen reductions in water use over the last several years but it is difficult to figure out how much of that is permanent. Some of it may be conservation and some of it is socio-economic that will increase again when the economy recovers. We discussed how cultural/education changes are necessary. How do you get a cultural recognition that we live in a dessert and having blue grass for our lawns may not be appropriate? Can we start thinking about a smart water grid between municipalities and how do we optimize those ideas? Keep in mind from municipals point of view water utilities are a capital intensive business with lots of fixed costs and if you start to spread those over a smaller sales base that increases per unit cost of the commodity. This drives up rates and becomes unpopular with your customers and governance. One possibility may be to demonstrate water conservation and steward ship programs as a stipulation for approval and support for ag to urban and/or Colorado River water development.

John Stulp: road blocks of Ag transfer - buy and dry is the preferred method by municipalities. Just the flat economics of agriculture makes this attractive. Many farmers use their water as their 401k. Another road block is we're not getting young people back to Ag. Overcoming road blocks - the regional idea can apply to water users/owners. The super ditch idea we think has merit and will continue to go

forward. We also need to look at incentives for some of these temporary transfers that can be done quicker and cheaper as opposed to temporary transfers. We also discussed conservation easements and tying the water to the land. Finally, we discussed standards. Before transferring ag water should there be certain standards put in place for health, safety, and conservation? One way to overcome a roadblock, find new water supply that's not agriculture and there are no silver bullets it's probably a combination of all that is above.

State Demographer Presentation – Elizabeth Gardner, David Keiser (economist), and Cindy Degrone

Elizabeth Gardner gave an overview of the State Demographer Office and the state's population forecasting methodology.

"Other" Scenarios – (AECOM) Blaine Dwyer, and Ray Alvarado
(Presentation link)

Jennifer Gimbel asked for feedback on what ranges should be used for our planning scenarios. What should be used for low, mid, or high given the results of the CRWAS?
Eric Kuhn – We ought to plan for a very low Colorado and see where that goes, I suggest that we plan for a low number and then you can handle anything in the range up to high or medium.
Stan Cazier – Agreed with Eric Kuhn but also said the other thing we need to look at is the probability.
Jeris – we need to have some sense of probability, why waste our time studying if its 0 or 900k.
Eric K – The hydrologic uncertainty is not the problem it's the legal uncertainty.
Eric W – it seems we're putting 5 different models together, do we need more info on that spectrum represented. I'd like to have more info to see what's driving the low to high scenarios. I'd also like to see the individual climate models broken out rather than grouped together giving a 0-900 range.
Steve Harris – What would the range look like if the other upper basin states did not fully develop their compact entitlement? The analysis should short each state equally rather than only shorting Colorado.

Tool Enhancements – Nicole Rowan
Nicole Rowan discussed the additional trade-offs that were added to the tool since the December meeting. These trade-offs were described in a memo handed out during the meeting.

Alex Davis asked for feedback on these 4 options for the next meeting in April.

1. Should we look at the differences between portfolios? At Friday's meeting we focused on the similarities between various portfolios for the mid-supply/mid-demand scenario. Should we examine the differences?
2. How do we begin to incorporate risk in to the discussion of portfolios?
3. How do we begin to incorporate economics in to the discussion of portfolios?
4. What are some of the information gaps that need to be filled?

Water Supply Reserve Account Criteria and Guidelines – Todd Doherty (see presentation)
The IBCC/CWCB Sub-committee's recommendations were sent out ahead of time. The IBCC went over the recommended changes to the Criteria and Guidelines.

T. Wright – Raised a concern about funds being withheld from the basins that have not completed their needs assessments. I don't like CWCB telling the basin whether they can use the money and I'd like to strike the sentence on p. 13. If we can come up with a sentence that focuses on closer linking grants to the needs assessment but not withholding the money from the basins I would agree with it.

Bill Trampe agreed with T. Wright to strike the sentence from the Criteria and Guidelines.

Alex – we respect the right for the basins to do what they want to do with the money but the statute says the basin needs assessments have to be done.

Carl T. – CWCB has the right to deny the grants when they come up for submission, I think some criteria needs to be put out there.

Eric W – the monies being spent are state monies and there has to be accountability and continuity if not it's going to undermine our credibility

Wayne – disagrees with T. Wright's motion, this is free State money and you have to keep it between the lines.

T. Wright – telling the local basins that they can't do what they deem appropriate I don't agree with.

Bill – I'm not sure everything is included in these needs assessments when that are completed at a certain time. There has to be some level of give and take with this process so new issues as they come up can be incorporated. We experienced this with Selenium in the Gunnison Basin.

Alex – Needs assessment is not engraved in stone, the roundtable can add to them with new studies.

Alex asked T. Wright to work on some language. He agreed and will circulate it to the members to comment on. This part of the sub-committees recommendation was tabled.

Mike Shimmin – Raised a concern with the language on pg 15 specifically the "except language." The South Platte needs assessments have been pulled from 3 different documents and I'm not sure that the IPP's have all been included. Maybe the language should refer to implementing a basin roundtable's consumptive and nonconsumptive needs assessment rather than IPPs.

This part of the sub-committees recommendation was also tabled so new language could be worked on.

The IBCC agreed to all of the sub-committees recommendations except for the language on p. 13 relating to the basin accounts, and the language on p. 15 relating to the statewide evaluation criteria. New language for these sections will be worked on and circulated to IBCC members.

Meeting concluded at 5:10. The next meeting will take place April 22, 2010 in Denver.