**Interbasin Compact Committee (IBCC)**
**Thursday, February 28, 2019**
**Hyatt Regency Aurora-Denver, Aurora, Colorado**
**Meeting Summary**

**Special Guest**
Dan Gibbs, Executive Director of the Colorado Department of Natural Resources

**IBCC Members Present**
Dave Bennett (Metro Basin alternate), Paul Bruchez, Stan Cazier, Aaron Citron, Sean Cronin, Carlyle Currier, Jeris Danielson, Lisa Darling, Joann Fagan, Russ George, Tom Gray, Andy Mueller, Robert Sakata, Terry Scanga, Cleave Simpson, Bill Trampe, Wayne Vanderschuere (Ex Officio), Pat Wells, Bruce Whitehead, Mely Whiting, and Jim Yahn

**IBCC Members Absent**
Mike Allnut, Jackie Brown, Senator Donovan, Steve Harris, Keith Holland, Jim Lochhead, John Rich, and Representative Roberts

**Colorado Water Conservation Board (CWCB) Board Members**
Steve Anderson-Gunnison Basin

**CWCB Staff**
Viola Bralish, Craig Godbout, Megan Holcomb, Greg Johnson, Becky Mitchell, Brent Newman, Kevin Reidy, Lauren Ris, Russ Sands, and Ben Wade

**Water Efficiency Panel**
Anne Castle, Beorn Courtney, Damian Higham, Amelia Nuding, and Kevin Reidy

**Guest Speaker**
Tim Wohlgenant

**Facilitation**
Heather Bergman and Dan Myers

**Audience**
Approximately 14 people observed the meeting.

**OPENING REMARKS**

Becky Mitchell, Director of the Colorado Water Conservation Board (CWCB), welcomed the group to the IBCC's first meeting of 2019 and introduced new Colorado Department of Natural Resources (DNR) Executive Director Dan Gibbs. Gibbs, in turn, introduced new IBCC Director of Compact Negotiations Russ George. Their comments are summarized below.

- Gibbs thanked the outgoing Governor's appointees to the IBCC for their service on this body and recognized the six new members.
- Gibbs's previous position was as Summit County Commissioner. He also has experience as a state senator and representative, a staffer to former Senator Mark Udall, wildland firefighter, and IBCC member.

- As a state senator and representative, Gibbs served areas with serious water challenges. He approaches water issues through the lens of forest health and as a longtime participant in watershed governance.
- Water is a focus of Governor Jared Polis's administration, particularly as concerns implementing the Colorado's Water Plan (CWP). The IBCC is critical to those implementation efforts.
- Gibbs introduced the IBCC's new Director of Compact Negotiations, Russ George. George has been a mentor for Gibbs for years and returns to the IBCC after being the originator of the basin roundtable system and Colorado's Water for the 21st Century Act. George is stepping up to serve Colorado at a time when it needs him most.
- George thanked Gibbs and the IBCC and expressed his eagerness to get started. He pledged that the IBCC would be a good partner to the DNR and Governor Polis.
- It is worthwhile to revisit the IBCC and basin roundtable system's history and consider what has kept it productive. Much of the system's value lies in the fact that conversations can begin at the grassroots level and inform statewide work. The water challenges facing Colorado are as serious as they have ever been, and they are urgent. The IBCC is up to the task of addressing these challenges.
- IBCC members can have an enormous impact on the people they serve. The IBCC will work in areas where it can make unique and valuable contributions in the water world.
- The IBCC is served by great CWCB staff and has strong relationships with the basin roundtables and related working groups. George and staff will work to decide how best to use IBCC meeting time to meet the group's goals. This is a time for IBCC members to provide new ideas.
- IBCC members should take what is discussed at these meetings back to their roundtables and should let them know that the strength of the IBCC is in conversations starting and ending with the roundtables.

***Clarifying Questions***

IBCC members asked several clarifying questions about the opening remarks. Questions are indicated in italics, with responses below in plain text.

*Seeing as they do not represent roundtables, what is the role of Governor's appointees in outreach efforts?*

Governor's appointees can serve as eyes and ears for the IBCC by attending roundtable meetings. Director Gibbs wants to sit down with each new appointee to discuss the best ways to collaborate. The Governor wants to see appointees take a ground-up approach to understanding what is happening in the basins. The IBCC was designed to help basins resolve their differences over events and decisions of statewide interest. Governor's appointees represent a statewide perspective and should consider how IBCC discussions affect the state as a whole.

*Is the basin roundtable system working as Director George envisioned it?*

When the system was created 14 years ago, conversations were not happening between basins. State leaders could see a collision coming in the courts, where there are winners and losers. It was clear that a system where everyone wins would be better. Progress has been made toward such a system. That said, Director George has been stunned to see how quickly people have gone back to a defensive mentality as the possibility of Colorado River Compact curtailment has arisen. That is not acceptable. The solution to these challenges will be found within the IBCC.

**SAN LUIS VALLEY RENEWABLE WATER RESOURCES PROJECT**
Rio Grande Basin Representative and Rio Grande Water Conservation District General Manager Cleave Simpson briefed the IBCC on a proposed water project in the San Luis Valley. His comments are summarized below.

- An organization called Renewable Water Resources (RWR) recently informed the Rio Grande Water Conservation District (RGWCD) that it had acquired a 12,000-acre ranch on the north end of the San Luis Valley. RWR plans to drill 30 confined aquifer wells and to pump 22,000 acre-feet (AF) of water over Poncha Pass, along US Highway 285, and up Trout Creek Pass to the South Platte Basin. RWR asked RGWCD to help it manage a $60 million fund to buy and retire water rights across the Valley, drying up irrigated farmland. RWR also wants to create a $50 million community fund for Saguache County, which is one of the poorest counties in the state.
- It is unclear whether RWR has secured the funding for the project or is still seeking it. RGWCD carefully considered the proposal and declined to partner with RWR. RGWCD thinks that Saguache County will oppose the project.
- RGWCD will vigorously oppose the project if it is filed in court because the Valley's water system is severely over-appropriated. There is no remaining unappropriated water from the Valley's aquifer, so RWR would be legally required to retire the rights to as much water as it proposes to take out. RWR proposes to buy and retire double the amount of water it will take out. It sees this as a win-win, but this would hurt agriculture in the valley. 300,000-400,000 AF are pumped from the entire Valley each year.
- RGWCD wanted to engage the IBCC on this project and to highlight some of its challenges: the project proponents say that the San Luis Valley has an obligation to retire stream flows and unconfined wells, which is not true.
- San Luis Valley leaders have a plan for creating a sustainable aquifer system through temporary fallowing, conservation, and limited retirement of water rights.
- Project proponents told RGWCD that South Metro Denver (Douglas County, Parker, etc.) was the proposed beneficiary of the water. Simpson and Lisa Darling discussed the project, and Darling assured Simpson that she was not involved in the project and was shocked that her basin was identified as the project's end user.
- San Luis Valley leaders are trying to make transmountain diversions (TMDs) from the Valley more difficult through 1041 county regulations, new confined aquifer use rules, and rules on groundwater withdrawals.
- There are no water speculators at IBCC meetings. Those individuals are important players in conversations on statewide water issues.

***Clarifying Questions***
IBCC members asked several clarifying questions concerning Simpson's briefing. Questions are indicated in italics, with responses below in plain text.

*How many acres of irrigated agriculture would be dried up if the proposed 20,000 AF of water rights were retired?*
Retiring 20,000 AF of water would dry up 10,000 acres of land, but because RWR proposes to double that figure, 20,000 acres of agricultural land would be retired.

*When project proponents say they will take no new water from "the system," are they referring to the San Luis Valley?*
Yes, they are referring to the Valley's confined aquifer system. The portion of the Valley where RWR's ranch is located currently withdraws only 9,000 AF, so the company would need to purchase the remainder from other water users.

*Is RWR using the ranch's (Rancho Rosado) water rights?*
RWR has said it does not need to use the ranch's water rights because it is paying other users to dry up their water rights. The ranch has some surface water rights, but RWR would need to conduct a historical consumptive use analysis and put the rights in a pipeline. Another factor affecting the use of the ranch's water rights could be the San Luis Valley Water Protection Act, which would prevent the project proponents from impacting Great Sand Dunes National Park, Bureau of Land Management (BLM) land, or government wildlife refuges in the Valley. That could make the project more challenging.

*What would the cost of the project be (including water rights and power)?*
There have been conflicting reports, but $700 million is a figure that has been quoted. It is unclear if that includes acquisition, legal, engineering, and pipeline costs. The project proponents have offered to pay farmers $2,000-2,500 per AF of water.

*How can this project really be "renewable"? Would RWR inject water into the aquifer?*
The unconfined and confined aquifer systems respond less to pumping than they do to inflows. With more snowpack and fewer withdrawals, the system becomes more "renewable."

*Is this project an official identified project or process (IPP) for the Rio Grande Basin?*
No.

***Group Discussion***
Group members discussed Simpson's briefing. Their comments are summarized below.

- The project proponents claim that this project is good for Colorado, the environment, and the Valley. RGWCD says that the project is an outdated solution to Colorado's water demand and challenges RWR to find an environmental group who approves of the project or a basin that is glad that it agreed to a past TMD.
- It is important to recognize that the IBCC is not currently addressing water speculation in its statute or work.
- The RGWCD may ask the project proponents to present at the Rio Grande Basin Roundtable. It could also be useful for Metro Basin and Rio Grande Basin representatives to speak directly about the issue.
- This project may cost double what RWR is estimating.
- A project like this would be viewed through the lens of the IBCC's Conceptual Framework. Nothing in the CWP requires a third-party entity like RWR to go through that process, but the IBCC could use the Framework as a tool to find a potential solution.
- The six Metro Area counties are consuming more and more water as their populations grow. The IBCC needs to work to find a solution that protects the values of the Western Slope and other Front Range basins.
- There have been similar projects proposed in the past in the San Luis Valley.

**CWP TECHNICAL**

CWCB's Greg Johnson introduced his colleague Russ Sands to discuss the Technical Analysis to the CWP (formerly known as the Statewide Water Supply Initiative or SWSI). Their comments are summarized below.

- Russ thanked outgoing IBCC members and Director John Stulp for their service and welcomed the new members.
- The CWCB is working to simplify jargon and terminology to better communicate with the general public.
- CWCB staff have visited each of the basin roundtables to inform stakeholders about the evolution of the CWP and the upcoming Technical Analysis. They are also discussing forthcoming updates to the Basin Implementation Plans (BIPs) while addressing concerns about the process. The CWP is now around three years old and the original target of updating the document near its fifth anniversary is approaching quickly.
- The CWCB is preparing the Technical Analysis via a stakeholder-driven approach, including using Technical Advisory Groups to develop the methodologies. The Technical Analysis team was tasked with quantifying the five water demand scenarios documented in the water plan and previously developed by the IBCC and roundtables. CWCB is also using Colorado's Decision Support Systems to conduct hydrological modeling to provide more detailed information about potential water supply and demand issues across the state.
- The CWCB is unifying the branding of the Colorado Water Plan in addition to making its data more easily digestible and accessible.
- The Colorado Water Plan has three phases: the **A**nalysis, **B**asin integration/planning, and a **C**omprehensive policy update. The process is designed so that basins can help the CWCB improve the data and analysis with local input. CWCB polling conducted at roundtable and IBCC meetings in 2018 showed strong basin support for creating a BIP working group and for CWCB assistance/funding with the BIP process.
- Basin leaders do not want to spend scarce resources from the Water Supply Reserve Fund (WSRF) to update the BIPs and have acknowledged some fatigue with the planning process. Accordingly, the CWCB has submitted a funding request as part of the CWCB projects bill for the current legislative session. Over the next four years this funding would assist with updates to the entire water plan process, including: basin plans, comprehensive water plan updates, the development of a project database, improved statewide outreach, and improvements to the database for municipal water use and conservation reporting.
- CWCB's staff and board have been discussing the appropriate length of the planning cycle. The current iteration is slated to span seven or eight years, but a longer time frame could be considered.
- This January, the CWCB convened an Implementation Working Group with three representatives from each basin to provide practical guidance on forthcoming BIP updates and how to use data from the Technical Analysis. The CWCB will also host a Statewide Basin Roundtable Summit on September 25-26 in Winter Park to more formally kick off the two-year basin plan update process.
- The CWCB hears roundtable members' concerns about striking an appropriate balance between planning and implementation. As such, between 2018 and 2020, the CWCB will have provided $56 million in new water plan funding, 88% of which will go directly to grants for project implementation. In addition, numerous other CWCB grant and loan programs are continually assisting with implementation efforts across the state.

- The CWCB has made some amount of progress on 65% of CWP actions. However, in many cases, the CWCB does not always have the data it needs. Future efforts will work to collect better data to help with tracking of CWP implementation.
- The Implementation Working Group is helping to provide input on priority elements of basin plan updates, as well as elements that may play a more supportive or optional role.
- The Implementation Working Group is also helping to prepare for the creation of a statewide project database, including a discussion of relevant data and how to identify different levels of project importance and readiness.
- Finally, the CWCB is offering a series of webinars covering specific facets of the Technical Analysis. The webinars are recorded and posted on the CWCB website. There are also comment forms on CWCB's website that stakeholders can use to ask questions or provide comments on particular topics in advance of each webinar.

**PANEL DISCUSSION: SMART CITIES AND A NEW ERA OF WATER EFFICIENCY**

CWCB's Kevin Reidy presented on his work on water conservation and introduced panelists Anne Castle (University of Colorado), Beorn Courtney (ELEMENT Water Consulting), Amelia Nuding (Western Resource Advocates), and Damian Higham (Denver Water). Their respective presentations and discussion are summarized below.

**Kevin Reidy**

- The CWP provides measurable objectives of conserving 400,000 AF of water from municipal and industrial uses by 2050 and ensuring that 75% of Coloradoans live in communities that have incorporated water conservation actions into land use planning by 2025.
- There have been several pieces of recent legislation related to these goals:
    - The Colorado WaterSense Law was passed in 2014 and mandates that only water fixtures with a certain level of efficiency can be sold as of 2017. The law has helped to accelerate passive water savings through fixture replacement.
    - In 2016, the legislature passed a law allowing household water collection in rain barrels (limited to two rain barrels per home).
    - A 2015 land use planning law helps local governments and planners evaluate best practices for incorporating water demand management into land use practices.
- The State of Colorado does not have authority over the land use practices of municipal water providers and special districts. CWCB and the Colorado Department of Local Affairs (DOLA) conducted voluntary training for water providers on best practices in demand management. This led to the formation of a Colorado Water and Land Use Planning Alliance composed of stakeholders from land use, water planning, academia, and nonprofits. The Alliance meets quarterly and discusses innovative solutions to water conservation and land use challenges.
- Reidy reviews municipal water efficiency plans from all over the state. Thirty-one such plans have been completed since the CWP was written, as well as three regional plans in areas that are not required to create plans and/or lack the resources to complete them individually. Large municipal water providers, aka "covered entities" (those delivering over 2,000 acre-feet per year of treated water) are required to create such plans every seven years to be eligible to receive state funding.
- The CWCB and other entities are providing training on commercial and industrial audits, which can vary dramatically based on the size of a given facility. Municipalities are trying to better analyze changes in water demand and related effects on the local water system. Fort

Collins recently used a water efficiency grant to train utilities from around the state on water auditing.

- The CWCB is also working on information projects like an ongoing initiative to provide realtors with information on local water systems to share with prospective homebuyers. Similarly, Colorado State University (CSU) is creating a system for water and land use planners to use to communicate with one another.
- The CWCB is also working to provide methodologies to municipalities to help better understand where water loss is occurring. The CWCB will hold five free workshops on the subject around the state starting this spring, featuring a contractor who has worked on 450 mandated water loss evaluations in California. Those evaluations are not yet mandatory in Colorado, so CWCB wants to incentivize providers to assess water loss as part of its efforts to save 400,000 AF of water.
- The CWCB is awarding grants related to water conservation and land use planning and hopes to have the same amount of funding to use for those grants next year.
- The CWCB water conservation staff work closely with a variety of partners, including DOLA on land use planning, the Division of Water Resources (DWR) on rainwater harvesting, students from the Colorado School of Mines on water efficiency in the Sterling Ranch development, the Colorado Department of Public Health and the Environment (CDPHE) on reuse, and several nonprofits.
- The CWCB works with the Sonoran Institute to convene land and water planners and elected officials for action-oriented training on coordinating their efforts and is working with the Babbitt Center for Land and Water Policy to create a guidance document on municipal water efficiency to integrate into land use planning.
- CSU's One World One Water Institute is partnering with Razix Solutions to create an information system on water's role in the development process, which is especially helpful for special districts outside of the State's jurisdiction.

**Anne Castle**

- CWCB has created detailed guidance on how to create mandated water efficiency and conservation plans. In 2015, the legislature voted to require water suppliers' plans to evaluate best management practices for implementing water through land use planning. Those processes are traditionally separate in part because land use is a necessarily local issue.
- The recent legislation encourages water providers to control conservation with newly designed uses of tap fees, irrigation restrictions, and other measures. Suppliers have traditionally been able to tweak rate structures and tap fees, but the new legislation gives them a role in the initial configuration of new developments, which has a major bearing on water use over time.
- The CWP's goal of ensuring that 75% of Coloradoans live in communities that have incorporated water conservation actions into land use planning by 2025 can be met in part by getting land use planners involved in water conservation.
- Castle worked on a CWCB-funded joint project with the Babbitt Center on how best to integrate water conservation and land use planning. The end result is aimed at water suppliers and involved numerous interviews and workshops, an extensive literature review, and four drafts. CWCB approved the final document last month, which contains case studies and examples of relevant best management practices ranging from the basics to the most creative solutions that have been used in the state. This "recipe book" for water suppliers can be adapted to the unique circumstances of each supplier.

**Amelia Nuding**

- Nuding has been working on two grant-funded projects on performance contracting for water and energy efficiency. Water usually plays a minor role in performance contracting, but Nuding has been working to improve the technical protocols that companies use to evaluate the water savings from their activities.
- Performance contracting is a powerful financing tool that allows cities to pay for the services of private companies in proportion to the water savings generated for their utilities. Water performance contracts mean that the cost of water conservation services will not increase until the savings from those services have been realized.
- One of Nuding's projects focused on replacing aging water meters, which often inaccurately reflect water consumption. Newer meters are better at identifying leaks and providing utilities with more reliable information on water usage. Nuding worked with the Pacific Northwest National Laboratory and the National Renewable Energy Laboratory to develop protocols for water meter replacement projects guaranteed by private companies. These performance contracts provide the certainty that utilities are looking for when they replace their meters. The Colorado Energy Office has adopted these protocols, and all performance contracts will pass through the Office. A water performance contract for replacing water meters is underway in southern Colorado.
- Nuding's second project centered on tap fees, which are the one-time charges that new developments pay to support water infrastructure. The fees are typically tens or hundreds of thousands of dollars. Some communities have restructured tap fees to incentivize water conservation from the beginning of construction. Nuding has developed workshops and a technical guide to designing a conservation-oriented tap fee; the trend is catching on, but more utilities need to know about this practice and how it best works.

**Beorn Courtney**

- Courtney has been working on the State's "1051" database of municipal water efficiency reporting since 2013. Courtney was also involved with SWSI in 2010 and learned important lessons about the missing data for municipal water demand and how the data can be used to project future demands.
- In 2010, many places in the state only had data on total water use but did not have a breakdown of residential use, outdoor use, etc. Knowing those details is important to understanding different parts of the water use system.
- Water providers are required to provide information to this database each year; 53 providers reported in the most recent year, which allowed CWCB and its consultants to better understand baseline water demand. 70% of the state's population is accounted for in the database, but some basins account for almost everyone who lives there, and others barely report at all.
- In addition to the 1051 database (which is preferable because it is collected annually with consistent categories), the CWCB has received relevant data from water efficiency plans, outreach efforts, and basin implementation plans. That alternative data is critical to providing an understanding of water efficiency in remote areas.
- Courtney and CWCB are working on obtaining more data and hope that the utility of the data becomes clear in the water plan's Technical Analysis, which could encourage more municipalities to report.
- The database captures information on the type of water supplied in a given area (non-potable reuse, outdoor use, residential use, etc.). It also captures information on water loss by detecting the differences between the amount of water distributed to customers and what they were metered and billed for.

- The database also flags some unusable or illogical data that identify areas where CWCB needs better data and where it can focus its outreach efforts to address reporting issues.

**Damian Higham**

- Higham directs potable reuse efforts for Denver Water. Higham is working with CDHPE, water providers, and nonprofits to get ahead of any eventual need to reuse water in Colorado.
- There is no federal regulation on water reuse, but other states have attempted it in urgent drought situations. For example, Texas quickly designed and built two potable reuse systems during a drought situation without much prior planning and without developing corresponding public health regulations beforehand. By contrast, California has taken a methodical approach to developing regulations on reuse but has not yet completed those efforts. Colorado wants to be proactive on water reuse.
- The CWCB recently completed work on a project to craft a framework for water reuse regulations. The next phase in the process is to work with experts from across the nation to prepare specific regulatory language that meets Colorado's needs.
- Potable reuse is important for Colorado's water goals because it can produce two or three gallons of water per gallon supply. Potable reuse systems are expensive and difficult to operate, largely because reverse osmosis is the "gold standard" technology in those systems. Disposing of waste generated by reverse osmosis in inland locations is difficult, so Higham investigated other solutions.
- The largest barrier to potable reuse is the public stigma about its quality.
- Denver Water hosted a pilot potable reuse project that used biological inputs to convert non-potable water into safe drinking water. The project team tested the water's quality, tasted it, and provided it to Declaration Brewing and Invintions Winery for use in beverage manufacturing. Water Reuse Colorado made those beverages available at outreach events to dispel public stigma about the recycled water.
- Denver Water will not be producing potable reused water in the near term, but Higham's work provides Colorado with a tool for meeting identified gaps in supply.

***Discussion***

The panelists responded to questions from Kevin Reidy about water conservation. Their comments are summarized below.

*What project are you most proud of that will have an impact on water conservation?*

**Castle:** The guidance document for land use and water planning cooperation will benefit supply planners. The document will also allow land use planners to conserve water through the development process in ways that water districts cannot.

**Nuding:** Nuding is proud of her work on conservation-oriented tap fees, which has helped fuel the adoption of the practice: in Aurora, a five-year-old tap fee program has saved enough water for 350 families each year.

**Courtney:** SWSI and the Technical Analysis. The exercise has evolved to allow the team to be sensitive to factors that will have unknown influences on water use. Courtney has conducted case studies on the Sterling Ranch development, which has been an exciting example of conservation ideas put into practice.

**Higham:** The potable reuse pilot project was exciting and challenging and set the tone for a regulatory process that will allow Colorado to quickly and effectively implement potable reuse in the future. Several utilities in Colorado are now actively planning potable reuse projects.

*What is the biggest challenge you see coming or would like to work on in the future?*
**Castle:** Demand management in connection with the Colorado River Compact will be critical to sustaining the river's supplies in the future.

**Nuding:** Making low water-use landscaping the norm in urban areas. That sort of landscaping can be beautiful and well-watered.

**Courtney:** There is a lot of potential to improve outdoor use. The Technical Analysis does not include good data on municipal irrigation. The agricultural sector has good data on irrigated land and water use, but municipal areas could provide more data on how to be more efficient in irrigated uses.

**Higham:** Salinity in Colorado's rivers is an important challenge to address.

***Clarifying Questions***
IBCC members asked questions about the panelists' remarks. Questions are indicated in italics, with responses below in plain text.

*What was the cost per acre-foot of Denver Water's potable reuse scheme?*
Denver Water did not do much analysis of the project's cost. The scheme was designed to demonstrate that Denver Water could produce potable reused water. The water from the project was probably expensive but using an environmental buffer like a reservoir or aquifer would produce a different cost than sending the water directly to a distribution system. The reused water might be cost-effective if it was used in conjunction with traditional supplies in situations when those supplies are scarce.

*Is anyone tracking the effectiveness of efforts to track water efficiency? Is water use going down?*
The 1051 database gives CWCB annual data that was once only available every seven years. The data shows a reduction in water use dating to 2008-10, but providers are unsure why. It is a huge effort to determine the causes of water use trends at the state level, but that is the next step for CWCB's water conservation team. Retrofitting developments and changing landscapes in urban areas could be providing savings. More data will be needed to pinpoint those factors.

**COLORADO RIVER SYSTEM**
CWCB's Brent Newman provided an update on the Colorado River System. His comments are summarized below.

- Upper Basin states are considering a demand management storage agreement. If signed, such an agreement would NOT lead to a demand management program. The agreement creates an opportunity for Upper Basin states to store water in Lake Powell that is not subject to the 2007 Interim Guidelines.
- The CWCB, the Colorado Attorney General, and the Upper Colorado River Commission (UCRC) are working on a drought contingency plan (DCP) in the state and the Upper Colorado River Basin. The Upper Basin states have approved the DCP and are now ready to implement federal legislation.

- The situation is more complicated in the Lower Basin. Arizona approved the DCP just before the deadline to do so, and California's Imperial Water District (which diverts more water than the rest of California and Nevada combined) has yet to sign. The District will not adopt the DCP until the federal government takes meaningful action on the Salton Sea problem.
- Bureau of Recreation Commissioner Brenda Burman recently provided notice of the federal register comment period for the governors of the seven basin states to provide input on the operation of Lakes Powell and Mead. The Commissioner will retract the notice if the states agree on the DCP before the deadline.
- Colorado hopes that federal legislation on managing the lakes will take place this spring. If it does not, Colorado and its Upper Basin neighbors will continue to discuss the feasibility of demand management. In 2014 and 2018, the UCRC passed resolutions stating that any demand management would be a temporary, voluntary, and compensated reduction in diversions to conserve water that is otherwise consumptively used. A variety of Upper Basin stakeholders have since studied potential curtailment and compact compliance.
- The CWP calls for compact water use to be maximized while actively avoiding a compact deficit. After reviewing Colorado River law, the CWCB board instructed staff to talk to basin roundtables, conservation districts, and other stakeholders about challenges and opportunities surrounding the DCP. CWCB staff will continue to engage stakeholders in 2019 to develop its position on how to correctly implement a DCP.
- In any demand management scenario, the following considerations must be addressed:
    - Consistency with prior appropriation and state water laws
    - Preservation of water rights
    - Economic and environmental considerations
    - Monitoring and verification of water conservation
    - Administration and accounting
    - Sideboards and limits
    - Water Court involvement
    - Parity in the benefits and burdens shared among basins
    - Funding
- When the draft DCP was released, the CWCB held a special meeting to review it and consider how a potential demand management plan would work. CWCB produced a draft policy statement with sideboards for demand management and subjected the statement to an intensive public comment period. The CWCB will use the resulting policy statement on the CWCB's role and steps for investigating demand management to develop the state's position on whether and how demand management could be implemented to avoid or mitigate the risk of involuntary curtailment.
- The CWCB is asking its board to approve its 2019 work plan at the upcoming meeting. This does not entail setting up an operational demand management plan or exploring the administrative impacts of compact curtailment. Rather, it involves considering an array of issues for Colorado and the Upper Basin to consider their interests and positions based on policy, technical, and legal considerations, informed by stakeholder and expert input.
- The CWCB wants to convene a small and efficient work groups (guided by the above considerations for demand management) to evaluate facets of the demand management question. The groups' membership will be determined by CWCB's board. Other stakeholders will have their voices heard through public meetings, the IBCC, basin roundtables, and online comments.
- The CWCB, DNR and the Attorney General's Office will also be holding quarterly workshops around the state to provide Coloradoans with the chance to provide feedback.

- The CWCB will finalize a work plan for demand management discussions in March and will then touch base with the UCRC to ensure that Colorado is not getting out ahead of other Upper Basin states. Next January, CWCB staff will report to the board and recommend work priorities surrounding demand management in 2020. There is no broader timeline for agreeing to demand management; the CWCB will take the time necessary to do this correctly.
- If IBCC members hear something in the media about demand management that is different from what CWCB has said, they should reach out to Newman to discuss it.

***Clarifying Question***
An IBCC member asked a question after Newman's remarks. The question is indicated in italics, with the response below in plain text.

*Where are the other Upper Basin states in this process?*
The other Upper Basin states are focused on outreach and working with stakeholders. CWCB has worked with staff from the other states to provide insights from CWCB's work plan that could apply to the development of other states' work plans.

**FUNDING DISCUSSION**

Director of Compact Negotiations Russ George provided an update on water project funding efforts and introduced Tim Wohlgenant of Funding Colorado's Water Future to discuss his coalition's work. Their remarks are summarized below.

- The IBCC discussed categories of water projects in need of funding, starting in November of 2017. In 2018, the IBCC began coordinating with the Walton Family and Gates Foundations on their work in this area. The Walton Family Foundation accepted a working draft of an IBCC funding framework document in the summer of 2018, and the two organizations agreed to cooperate on these efforts moving forward.
- Wohlgenant is new in his role as Coalition Director with Funding Colorado's Water Future. His background includes time working for the World Wildlife Foundation's Environmental dispute resolution arm, which was foundational for his work in building consensus among stakeholders to reach lasting environmental solutions. He has also worked with the Colorado Cattlemen's Agricultural Land Trust, Western Land Group, and the Trust for Public Land.
- The coalition is a broad and diverse group of agricultural, environmental, and municipal stakeholders working to close Colorado's water funding gap. In Wohlgenant's experience, groups need three things to pass a ballot measure: a strong coalition, high-level elected officials championing the measure, and an educated electorate. This coalition is already strong, but the latter components require more work.
- As discussed at the IBCC's October meeting, the coalition worked with the IBCC to identify six overlapping funding categories to pursue: healthy rivers, watershed health and quality, conservation and efficiency, productive agriculture, and Colorado River Compact obligations.
- The IBCC and the coalition want funding to be roughly equal among the six categories. However, challenges within Colorado's compact obligations pose an existential threat to the state's water supply, so that category may take precedence over the others. Different categories could take precedence at different times.
- The IBCC and the coalition set out some key principles to guide funding decisions:

    - Any funding distributed to implement the CWP will be consistent with the doctrine of prior appropriation.
    - Stakeholders and basin roundtables will be actively involved in the process.
    - Funding will be made available in a manner consistent with the Conceptual Framework.
    - The connection between groundwater and surface water will be recognized in funding decisions.
- The IBCC and the coalition agreed that whatever entity governs dispersible funds needs to be able to work in all six identified categories. CWCB makes sense as a funding mechanism because the strategy discussed by the IBCC and the coalition is embedded in its operations.
- It will be important to identify guardrails that accompany funding to meet the principles that the IBCC and the coalition agreed to.
- Funding sources remain unknown. The coalition is exploring many options and hopes to narrow those options down to a few viable ones. Several statewide tax measures failed in November, so it is clear that ballot measures are not an easy way to create a revenue stream.
- The IBCC and basin roundtables have a critical role to play in educating the electorate about the pending water crisis. There are not many people in the state who understand the pressure on Colorado's water supply, but people would come together to protect Colorado's water once they know that there is a plan and need to do so. The coalition is launching a media campaign to educate people about the effects of challenges in water supply and demand on quality of life in this state.
- The coalition has taken the initiative in finding the early-stage resources and money that are so critical to campaigns like this. CWCB and IBCC resources cannot be used for legal reasons.
- Director George's goal is for the IBCC to identify how it can be an effective partner for the coalition and secure partners for the coalition to get the ballot measure to the finish line.

***Group Discussion***

IBCC members discussed George and Wohlgenant's remarks. Their comments are summarized below.

- Colorado's agricultural sector is diverse in crops and geography. The Colorado Ag Water Network has been working within the agricultural community to move beyond Western Slope versus Front Range water conflict. The group serves as a nice parallel to the IBCC.
- The CWP identified a $3 billion funding shortfall for water projects over the next 30 years, which would suggest that the coalition should aim to secure $100 million annually in addition to existing funding sources.
- There were concerns that an additional $100 million a year would be insufficient for Colorado's water needs, particularly in terms of ensuring that any demand management plan is voluntary, temporary, and compensated. $100 million should be considered a starting point. If Colorado can secure an additional $100 million a year, it can have conversations with the federal government about assistance and begin to devise ways to accelerate investments during water crises.
- A water storage initiative failed during former Governor Bill Owens' administration in large part because the initiative did not identify where the money would be spent. Describing what IPPs are and how feasible they are will be critical. CWCB is compiling a list of IPPs so that the public knows that it is not being asked to write a blank check.

- Demand management funding will need to be flexible for variations in annual water availability.
- Education will be key to the success of water funding measures. The coalition will be working with BRTs to leverage paid media campaigns with local advocacy.
- Polling has shown that Coloradoans know that water supply is important, but recognition of that fact is often tied to the quality of skiing in a given year. Leaders need to work to make water a higher priority for the public. Water policy has the advantage of carrying a reasonable price tag for making a substantial difference on critical issues in comparison with other policy challenges.
- IBCC members reiterated the need to use clear language and to avoid the use of acronyms in outreach to the public.
- The failure of two transportation funding ballot measures in November provides lessons for the IBCC and the coalition. Coloradoans are tax averse, so it will be critical for the coalition to build support while assessing the likelihood that a ballot measure would be successful. The coalition must also ensure that the projects slated for funding are well-defined.
- Several factors distinguish the transport measures from a future water measure. There were two competing transport measures, but the water community will work to rally behind a single measure. The transport measures were also more expensive than a water measure would be.

**DISCUSSION OF IBCC WORK PLAN FOR 2019 AND BEYOND**

IBCC members discussed their priorities for the IBCC to address in 2019 and their vision for the role of the IBCC in the years ahead. Their comments are summarized below.

- The IBCC has followed the legislation that created it in significant ways in its 14 years of existence. However, today marks a new chance to discuss fresh ideas of areas in which the IBCC can lead without duplicating efforts with other water stakeholders.
- At the October IBCC meeting, group members identified big river issues, roundtable engagement, and educating Colorado's executive and legislative branches about water issues as potential priorities for future work.
- The demand management conversation is a major priority. IBCC members could have difficult conversations about demand management with their basins to find bottom-up ideas for approaching the issue. The Western Slope basin roundtables have formed committees on demand management and are coming together in early May to discuss their position on the issue. This should be a grass-roots conversation. The IBCC's role is to tie the basins together.
- However, there is concern that the subject matter complexity of demand management could limit the benefits of having those conversations at the basin level. If that is the case, IBCC members should take input from basins and interest groups about their priorities for demand management but flesh out demand management questions at IBCC meetings.
- It will be critical for the IBCC to unpack the language in CWCB policy that aims to avoid disproportionate impacts from demand management to any one basin or community. The language was designed to secure broad support, but its real-world implications need to be understood.
- Gunnison Basin stakeholders often have an immediately negative reaction to discussions of demand management, but leaders from that basin recognize the need to discuss relevant issues like the definition of consumptive use (which remains unclear). Thirty years ago, the DWR said that consumptive use would be predicated on senior water rights. This poses challenges for those with old water rights that are junior to the Colorado River Compact.

The insecurity of junior water rights threatens to put ranchers out of business. The IBCC could be the proper forum to address consumptive use questions.

- There is a need for the IBCC to discuss the definition of a "project of statewide significance," which is how the organization has couched its discussions of the steps necessary to fulfill compact obligations through Colorado River management and potential demand management. The South Platte Storage Project is another project of statewide significance that the IBCC should discuss.
- It could be helpful for the IBCC to place deadlines on its work on projects of statewide significance and water funding.
- The IBCC needs to identify ways to improve messaging on demand management for non-experts. IBCC representatives have a role to play in educating their basins about demand management and Colorado River issues.
- The funding conversation should happen at the IBCC, which could play a unique role in creating the specificity and guidelines that will be necessary for water funding to win voter support.
- The IBCC should discuss the meaning of "equitable engagement" as referenced in CWCB's policy statement on demand management. The phrase applies to basin and interest groups, but could also apply to agriculture, the environment, and regional concerns.
- The IBCC and roundtables play unique roles in bringing people with opposing views together to discuss difficult policy issues. That function will be important for discussions of demand management, particularly as concerns West Slope and Front Range interests.
- With demand management issues in mind, Front Range counties are working on supply-oriented projects like South Metro Water's Water Infrastructure and Supply Efficiency (WISE) Partnership. Front Range counties are considering how supplies can be shared most equitably.
- Colorado will need to prioritize IPPs in every basin but doing so will be expensive. Citizens across the state will need to support those efforts. The IBCC can serve as a think tank focused on solving the demand challenges posed by Colorado's population growth.
- The IBCC may be skipping some steps in the demand management process by focusing on funding and implementation now. Reservoir planning is the first line of defense against demand management, and many of the basin roundtables are working on that planning. IBCC members could use meeting time to discuss those efforts in their basins and could make reservoir planning a priority.
- IBCC partners could pay for a comprehensive study of why funding measures failed on the ballot in November. There are no second chances with ballot measures, so the water community needs to make sure it is prepared to succeed.
- There is a need to consider the societal impacts of demand management, which would be relevant beyond the world of water policy. Water shortages would have serious repercussions for communities and agriculture. It is in the interest of groups like the landscaping community to preserve livelihoods by, for example, replacing bluegrass with buffalo grass.
- Water politics was becoming more unifying and grass-roots in recent years, but demand management is divisive and has encouraged defensive thinking. The IBCC can play a role in facilitating important but uncomfortable conversations on water issues that acknowledge opposing perspectives.
- The IBCC should reopen discussions of the Conceptual Framework this year. There are disconnects among current IBCC members about the meanings of the DCP and demand management. The IBCC attempted to discuss the Conceptual Framework through the lens of the South Platte Storage Project, but the exercise was not effective, perhaps because the

project was not a TMD, which is the type of project that the Framework was largely designed to address.

- The fourth principle of the conceptual framework (which states that the project proponents behind a TMD accept all of its hydrological risks instead of existing users) needs to be discussed in more detail. Several stakeholders have interpreted that stipulation as not being applicable to demand management and TMDs, while others think that it covers both.
- The IBCC needs to break its work into manageable pieces rather than trying to do everything at once.
- The IBCC could test the Conceptual Framework on the RWR project in the San Luis Valley. That conversation could touch on the meaning of specific principles.
- The IBCC should reflect on what questions need to be answered before deciding to endorse or not endorse a demand management program. Until those questions are answered, IBCC members will be unable to keep their constituents informed on the subject. The process of deciding whether to pursue demand management might be contingent upon how it works.
- Phase Three of the Colorado River District's Risk Study could provide answers to questions concerning how demand management would work.

**NEXT STEPS**

- CWCB staff will review the notes from this meeting and order priorities for discussion at the next IBCC meeting. If any IBCC member has a comment or suggestion of priority to discuss next time that was not discussed adequately today, they should email CWCB staff.
- At the next IBCC meeting, members will discuss the priorities captured by CWCB staff, with a particular focus on urgent issues related to drought.
- IBCC members should come to the next meeting prepared for a forthright conversation on difficult issues that the IBCC is uniquely positioned to address. Part of that conversation might include a discussion of how to be fair in deciding things of importance to people not represented on the IBCC.
- IBCC members are encouraged to serve as intermediaries between the IBCC and their roundtables.
- The CWCB board will discuss the timeline for DCP and demand management conversations at its March meeting.
- Monthly meetings of CWCB's Implementation Working Group for BIP planning will continue through June. The Technical Analysis will be released in July.
- IBCC members are encouraged to provide feedback on these meeting notes so that they can be as useful as possible in communicating IBCC discussions to the roundtables.
- The meeting notes will be posted on the IBCC website with speaker presentations.
- The CWCB is always working to update roundtable and IBCC mailing lists.