

**Arkansas Basin Roundtable
May 14, 2014 - Pueblo, Occhiato Center
Meeting Notes**

Roundtable Business

Betty Konarski called the meeting to order at 11:30 am. Members and visitors introduced themselves. Twenty two (22) members were present. There are 41 active roundtable members at this time – 20 is a quorum.

April minutes

April minutes were approved by consensus.

Review Agenda

A change was made in order to include an update regarding the Purgatoire River Project by Jeris Danielson.

Report of the Executive Committee

Will be incorporated into the meeting where appropriate.

Public Comment - none

IBCC/CWCB Report

Alan Hamel – Things continue to be busy at CWCB, particularly regarding the Colorado Water Plan. The CWCB is meeting in our basin, in Pueblo, next Wednesday and Thursday. The meeting will be held at the Pueblo Convention Center. On Tuesday afternoon, we will be hosting a water tour for CWCB members. The Colorado Water Plan has been moved to the first day, and grant and loan applications will be considered on Thursday.

Becky Mitchell – Section Chief, CWCB Water Supply Planning Section

The July CWCB meeting will be held in Rangely, and draft Basin Implementation Plans will be presented to the CWCB board at that time.

Becky encouraged roundtable members and interested members of the public to attend, and specifically mentioned a presentation of final results of the Zero Liquid Discharge Pilot Study, some of which was performed in the Arkansas Basin.

Jeris Danielson – IBCC

The IBCC met on April 29th, and discussed the development of contingency plans being created by the Upper and Lower Colorado River Basin groups.

At the last meeting, we talked about seven points regarding transmountain diversions. IBCC members were paired up East Slope/West Slope to discuss and refine those points.

Jeris – Purgatoire River Fishery Restoration Project-Reach 3

Jeris reminded members that they had approved the use of excess grant monies for restoring a second stretch of the Purgatoire River. Along with donations, those funds have been used, and Reach 3 work has been completed.

Basin Implementation Plan Update – Conservation – Mark Shively

Mark presented a potential path forward for the BIP Conservation section. Discussion followed.

- 1) SWSI 2010, The Baseline, the Last Check-In
 - a. Use to create foundation and context, VERY briefly describe the high points of the existing document, offer link to same, do not waste limited bandwidth regurgitation old tired news!
- 2) What has been done in post-SWSI years?
 - a. SECWD Regional Conservation Planning & Tool Kit
 - b. Pueblo working on creation of conservation plan (last “covered entity”)
 - c. Many plans already in place (Excel sheet from CWCB)
 - d. Trumpet success stories, brag! (What are some good ones? Your input here)
 - e. Success in per capita use
- 3) What is going to be done, situation as-is.
 - a. Success stories, data. Movement in per capita use, etc.
 - b. HB1051 reporting due June 30th, will yield new data/new paths
- 4) What could be done with external (financial/execution) assistance?
 - a. CWCB Grants for Plan Creation, Implementation, Education & Outreach (75% funding accelerates adoption of increased efficiency)
 - b. Best Management Practices
 - c. Levels of Conservation
 - d. How do you measure your success?
 - e. Identify target audience/expand the reach of your message
 - f. Reduce inconsistent messaging! (Frame positively)
- 5) Greater dialogue is indicated between water entities (you) and land use authorities (municipal and county boards and councils, and their planning commissions and departments). While land use planning, zoning, and site plan decisions fall outside the domain of water entities, you can consider a resolution of the Roundtable to encourage all land use authorities in the basin to adopt an appropriate standard for water and energy efficiency in new home construction. One such standard is the EPA WaterSense Specification for New Homes. Tap fees are in the domain of water entities, and can be used as a carrot or stick.
- 6) Energy efficiency is water efficiency, and water efficiency is energy efficiency.
- 7) Recommendations:
 - a. Take steps to match fixed expenses to fixed revenues; avoid revenue squeeze associated with reduced demand achieved through efficiency.
 - b. Capture every e-mail address in the basin.
 - c. Create water budgets for every user.
 - d. Deliver an easily understood consensus message in every school in the Basin = “Water Ambassadors”.
 - e. Create a 30,000’ regional message, drill down locally, stay on consistent message, and repeat, repeat, repeat from multiple trusted sources.
 - i. Water is precious
 - ii. Use it thoughtfully
 - iii. Support solutions for the future
 - iv. And you’ll have water for generations to come
 - f. Use words every person can understand, words that resonate
 - g. Talk to ever widening circles of citizens, not just to one another in the water industry, until you engage every citizen in your issue.

- h. Briefly explain Ag efficiency issues in plain language (to casual observers – most of the water is used by Ag, why not just reduce Ag use by 5%?). Demystify complex steps that could be taken to remove obstacles (augmentation requirement as part of Compact Compliance).

RT member comments included the following:

- One size does not fit all. The concept of Good, Better, Best is okay, but each community may need to define that for themselves.
- Not sure the Roundtable has the expertise or ability to judge what is Good, Better or Best.
- Not all communities are the same or can be measured the same.
- We're seeing inconsistent policies from the statewide level.
- The consequences of conserving should be referenced in the plan.
- In rural communities, municipal water is often used for livestock. How to take this into account?
- It would be helpful to have some kind of a system that identifies how people are doing.
- The governor's executive order includes smart land use. This plan is mostly municipal. We do not need to have evaluative terms on the differences that occur in communities.
- Set a threshold of 2,000 acre feet per year and above?
- The thrust is to get everyone to use water more efficiently. Not everyone will be able to respond in the same way.
- Concern about the planning effort ending in regulatory efforts.

Basin Implementation Plan Update - Nonconsumptive

Because the Roundtable shifted the approach to focus on public outreach, we don't yet have structured goals for the BIP. Environmental needs sometimes are consumptive. Not all environmental and recreational uses are Nonconsumptive.

Watershed Health Working Group

There is a lot of information out there, and we are getting great information from many entities. This effort is seeing great success thus far.

Nonconsumptive and Public Outreach Update/Next Steps - Kyle Hamilton

We've been brought in to help the Nonconsumptive committee and our work has expanded to include assistance with the outreach meetings. We are trying to reach out to the general public as well as rafting and fishing communities, as well as other Nonconsumptive communities. We are also working with The Nature Conservancy and others who have been using GIS mapping, to see where we want to go next with that. All of this will lead to sections of the BIP.

Please refer back to the Roundtable's website from time to time, as new information is being added to the website all the time. The information is rich.

A suggestion was made to add a list of grant-funded projects to the website. Elise will do that before the next meeting.

Arkansas River Basin Forum Summary and Clicker Survey – Jean Van Pelt

- Colorado's Water Plan
 - Keynote James Eklund, CWCB Director
 - Basin Perspectives on the State Plan Panel

- Moderator John Stulp
- Sean Cronin, South Platte BRT Chair
- Mike Gibson, Rio Grande BRT Chair
- John McClow, Gunnison BRT
- Jim Pokrandt, Colorado BRT Chair
- Arkansas River Basin Implementation Plan
 - “How Did We Get Here?” Ark Basin BIP Panel
 - Historical projects
 - Overview of accomplishments
 - Mapping Direction
 - “Where Do We Go Next? Ark Basin BIP Panel
 - Consumptive & Non-Consumptive needs
 - Constraints & opportunities
 - Watershed health
 - Conservation
 - Municipal
 -
- Clicker Survey Results (90 participants)
 - Results and this presentation may soon be found on our website, www.arkansasbasin.com

Basin Implementation Plan Public Meeting Feedback

- Calhan – Upper Black Squirrel Aquifer – Residents are concerned about decline of aquifer. Land use planning vs water district needs.
- Hugo – Successful public meeting. Anti-regulation crowd with declining groundwater supply. Living snowfences. Buffalo wallows that hold water. Aquifer recharge.
- Biggest problem is getting them to actually fill out and return input forms. It might help to put time in the meeting for filling out the forms.
- Trinidad area –35-40 people, majority under 50. Received 6 inches of snow during the meeting. Got about 6 sheets back at the end of the meeting. Elise has only received one back by mail, none by email so far.
- Salida – about 45 people. Kyle Hamilton gave the presentation. Lots of people filled out questionnaires. Folks attended from Blake, Chaffee, Fremont and Custer counties.
- Lamar – Meeting was advertised in the paper and on the radio, and water districts were invited. Had about 20 people show up. It was an outstanding meeting. Our district often feels left out of water conversations. There is great concern about dams, especially a dam on Fountain Creek. One of the concerns is that if you build a dam you lose the head of water, which is needed here on the SE end of the basin. Need to come up with a plan that maybe guarantees a flow in the river in the instance of a dam on the upper Fountain.

Six meetings remain. RT members discussed possible procedures for remaining meetings. Paul identified major newspapers, and prepared a PSA. Elise is point person. We will identify and send out the updated meeting list to newspapers and radio stations. Do you need support for your meeting? Contact Elise – she will schedule them. She will also get you handouts if you need them. Those of you that got good attendance sent out personal emails. If you have a network, feel free to send invitations yourself. If you want us to do it, send your list to Elise.

Alan Hamel commented on the partnership between the Arkansas River Basin Water Forum and the Arkansas Roundtable. It is outstanding to see the amount of involvement that we're getting at this important moment in time. It will add to the quality of our Basin Implementation Plan. It really adds to the goal of making it a community – oriented plan.

Basin Implementation Plan – Section 3.0 Constraints and Opportunities

PRESENTATION – Arkansas River Compact: History, Litigation, and the Subsequent Need for Rules

Dan Steuer - Assistant Attorney General, Federal and Interstate Water Unit

- ❖ This presentation available in its entirety at arkansasbasin.com

History of the Arkansas River Compact

- Late 1800s: Most of the major irrigation systems in the Arkansas River valley were developed primarily in the 1880s
- 1901: Kansas sues Colorado in the United States Supreme Court
- 1907: Supreme Court decides the case on the merits, and declines to award any relief to Kansas
- 1910-20s: Numerous suits filed by Kansas water users in federal district court against Colorado users
- 1928: Colorado sues Kansas, seeking an injunction against such suits.
- 1930: States agree to a storage project that would later become John Martin Reservoir. Fully funded in 1936, construction began in 1939, partial storage began in 1943, completed 1948
- 1943: Supreme Court grants Colorado's request for an injunction against Kansas citizens' suits
- 1945: Congress authorizes states to negotiate a compact
- 1948: Compact completed and signed in December, ratified by both legislatures in 1949. *See* § 37-69-101, C.R.S. Congress approved the Compact on May 31, 1949. 63 Stat. 145.

Arkansas River Compact

- Article I: Purpose of the compact is to resolve existing and future disputes between CO and KS over the waters of the Arkansas and to "Equitably divide and apportion" those waters and "the benefits arising from . . . John Martin reservoir" between the two states
- Article III: Definition of "waters of the Arkansas River" excludes transmountain/imported water, and the Compact only addresses the waters of the Arkansas River (*see* Art. IV.A.)
- Article IV.D: "This compact is not intended to impede or prevent future beneficial development of the Arkansas river basin in Colorado and Kansas . . . Provided, that the waters of the Arkansas river . . . *shall not be materially depleted in usable quantity or availability* for use to the water users in Colorado and Kansas under this compact by such future development or construction."

Kansas v. Colorado (1985)

- 3 claims: 1) Colorado's increase in well pumping since 1948 had caused a decline in stateline surface flows in violation of Art. IV.D.; 2) Colorado's Winter Water Storage Program at Pueblo Reservoir violates the Compact; 3) Colorado's failure to abide by the Trinidad Reservoir operating principles violates the Compact

Kansas v. Colorado (1995)

- Kansas wins on the 1st claim. Post-Compact wells, and improved/increased pumping by existing wells, all fall within Art. IV.D.'s prohibition against causing material depletions to usable stateline flows.
- Court holds that pre-compact pumping allowance for then-existing Colorado wells is 15,000 afy

Kansas v. Colorado (2004)

- Approves use of 10 year rolling average for determination of depletions or credits to Kansas.

- Approves the use of Colorado water court as the initial venue for determination of replacement plan credits applied to Colorado's Compact obligations. Kansas can still seek relief in the Supreme Court if it believes it is injured by Colorado court determinations.

Fifth and Final Report of the Special Master (2008)

- Includes the final judgment and decree of the Special Master
- Incorporates the Use Rules in Appendix J.1
- Appendix A.3 treats post-1985 depletions (that is to say, depletions that post-date Kansas filing the lawsuit) differently than pre-1986 depletions.
- "Post-1985 Depletions shall be 100% replaced, with no reduction on the basis of usability, except as provided in Appendix J.2 of the Decree"
- Appendix J.2 exception: "Notwithstanding the foregoing, no Replacement shall be required for depletions caused by post-1985 water uses if John Martin Reservoir is spilling and Stateline water is passing Garden City, Kansas"

1996 Use Rules

- Promulgated under the State Engineer's Compact rule-making authority, § 37-80-104, C.R.S., which states "The state engineer shall make and enforce such regulations with respect to deliveries of water as will enable the state of Colorado to meet its compact commitments. In those cases where the compact is deficient in establishing standards for administration within Colorado to provide for meeting its terms, the state engineer shall make such regulations as will be legal and equitable to regulate distribution among the appropriators within Colorado obligated to curtail diversions to meet compact commitments"
- SEO determined that curtailment of post-compact well pumping and diversions of ground water by junior appropriators will increase usable stateline flow (and make additional water available to senior surface rights holders in CO).
- Thus, diversions of tributary ground water must be discontinued unless a plan is in place to replace out of priority depletions.
- Presumptive stream depletion factors (PDFs) for different types of water use are established
- Stream depletions must be replaced in **time, location, and amount**
- Use Rules provide a more cost-effective way for well users to replace depletions, by allowing use of Rule 14 plans approved through the SEO rather than augmentation plans approved through water court

Irrigation Improvement Rules

- As with the Use Rules, promulgated under the State Engineer's Compact rule-making authority, § 37-80-104, C.R.S.
- Art. IV.D. of the Compact says that water development post-Compact, including "improved or prolonged functioning of existing works", cannot deplete usable stateline flow. SEO determined that Compact rules are necessary because the Compact does not establish standards for administration of surface water irrigation improvements to ensure compact compliance. Thus, prerequisites for rules under § 37-80-104 was met.
- Special Master's first report (1994) examined Art. IV.D. and "found that it protects the usable flows of the river as of the time of the Compact (including return flows from existing irrigation uses) from material depletion caused by any increased consumptive use in Colorado."
- Court said that "Improved and increased pumping by existing wells clearly falls within Article IV-D's prohibition against 'improved or prolonged functioning of existing works,' if such action results in 'material[] deplet[ions] in usable' river flows."
- Following that rationale, improvements to existing surface water irrigation systems also fits the phrase "improved or prolonged functioning of existing works"

- Early part of the 2000s saw a big rise in irrigation improvements like center pivot systems that increased the need for these rules
- ISAM (Irrigation System Analysis Model) developed to reduce costs to individual farmers. ISAM incorporates assumptions about a variety of variables and evaluates proposed improvements without requiring farmers to acquire an individualized engineering report
- Rules only cover surface water systems because ground water systems already addressed through the Use Rules
- Rule 8 individual applications, can only involve the subject water right and no other water sources (if other water sources, it must be part of a Rule 10 plan)
- Rule 10 allows a group of farmers to join in one application, and use other waters to maintain historical return flows
- Rule 11 general permits (for types of improvements that don't need to be evaluated individually because the SEO has determined that they won't cause a compact violation)

References Not Cited Earlier

- Use Rules (and associated info):
<http://water.state.co.us/groundwater/GWAdmin/UseAndMeasurement/ArkGWUseMeasRules/Pages/ArkansasRBRules.aspx>
- Irrigation Improvement Rules (and associated info):
<http://water.state.co.us/SurfaceWater/RulemakingAndAdvising/ArkRiverAC/Pages/ArkSWIrrigImpRules.aspx>
- Special Master's Reports: <http://www.supremecourt.gov/SpecMastRpt/SpecMastRpt.aspx>
- Kansas v. Colorado cases: 185 U.S. 125 (1902); 206 U.S. 46 (1907); 320 U.S. 383 (1943); 514 U.S. 673 (1995); 543 U.S. 86 (2004); 556 U.S. 98 (2009)

PRESENTATION – Primer on Types of Plans for Various Uses of Water in the Arkansas River Basin **Bill Tyner, Division of Water Resources, Division 2**

Note - this presentation available in its entirety at arkansasbasin.com. Maps and charts are not included here.

Let's Start with Wells

- Wells that can be used without any replacement plan
- Wells that can only be used if they are operated under a plan to replace out-of-priority stream depletions

Exempt wells that can be used without a replacement plan

- Decreed and/or permitted wells as described in section 37-92-602, C.R.S. (exempt wells)
- Wells not exceeding 15 gpm used for ordinary household purposes, fire protection, livestock watering, irrigation of not more than 1 acre of home gardens and lawns
- Wells not exceeding 50 gpm that were in production as of May 22, 1971 and were used for ordinary household purposes for not more than three single family homes, fire protection, livestock watering and irrigation of not more than one acre of home gardens and lawns

Other exempt wells that can be used without a replacement plan

- Wells not exceeding 15 gpm used for drinking and sanitary facilities in individual commercial businesses
- Wells to be used exclusively for fire fighting purposes if said wells are capped and locked
- Wells used exclusively for monitoring and observation

Wells completed in the Dakota/Cheyenne Formations and permitted or decreed prior to April 1996 (and continue only pre-1996 uses) must measure and report use annually.

Last group that can be used without a replacement plan – Non-Tributary Wells

- Non-Tributary determination by Water Court

- Non-Tributary determination by the State Engineer
 - “Non-tributary ground water” means ... the withdrawal of which will not, within one hundred years of continuous withdrawal, deplete the flow of a natural stream ...at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal.
 - Example – withdrawal of 100 acre-feet per year cannot deplete the flow by more than 0.1 acre-feet per year within 100 years as calculated by a proper engineering determination

Arkansas Well Use Rules

- The Arkansas Use Rules have a dual purpose; to protect senior Colorado surface water rights from out of priority depletions caused by junior tributary ground water rights and to prevent depletions to usable Stateline flow that would otherwise occur as a result of pumping post-Compact wells in Colorado.
- Non-exempt tributary wells may not be pumped, except under annual State Engineer approved replacement plans, substitute water supply plans or Court approved augmentation plans.

Okay, let's look at how wells can comply with the requirement to replace depletions when they need to. Compliance can be by:

- *Rule 14 Plans*
- Most high capacity wells that existed prior to 1986 are in one of these plans that can be approved annually by the State Engineer.
 - Lower Arkansas Water Management Association (LAWMA)
 - Colorado Water Protective & Development Association (CWPDA)
 - Arkansas Groundwater Users Association (AGUA)
- *Substitute Water Supply Plans*
For sand and gravel extraction as described in section 37-90-137(11), C.R.S.
 - Replace evaporation from any ground water exposed after 1981
 - Replace water lost in mined product
 - Replace depletions for dust suppression, material washing, concrete batching, etc.
- *Water Court Decreed Plans for Augmentation*
 - 308(4) pending Water Court application for a plan for augmentation example – example: GP Farms near Holly
 - 308(5) No pending Water Court application – example: CDOT Highway Project
 - 308(7) Public Health Emergency – example: City of Walsenburg Northlands Water Supply

Plans for Augmentation

- Designed for more permanent operations
- Allow other water right owners to participate in the Water Court process
- Can be the most costly to complete

Notable Examples of Plans for Augmentation

- Tri-State Generation and Transmission Association, Inc. - Future Power Plant Case 2007CW074
- Upper Arkansas Water Conservancy District Blanket Plan Case 1992CW084 (and others)
- Lower Arkansas Water Management Association Case 2002CW181
- Colorado Springs Case No. 1984CW202
- City of Rocky Ford Case 2006CW049

Irrigation Improvement Rules - what types of irrigation improvements are subject?

- Lining of canals and off-farm laterals
- Pipelines or chemicals to reduce losses from canals and off-farm laterals
- Head stabilization ponds and tailwater recovery pits

- Sprinklers & drip systems that replace flood and furrow methods
- Replacing a side-roll sprinkler with a center-pivot system, replacing impact sprinklers with spray nozzles, or adding surface water as a source for a sprinkler
- **Most Common Improvement: Conversion of Irrigation Method**

So How Do Farmers Comply with the Rules?

- Predominant method has been to join plans (Rule 10 Plans) that use other water sources to maintain return flows
- Lower Arkansas Valley Water Conservancy District, aided by funding from the Colorado Water Conservation Board helped with the initial plans in 2011, 2012, 2013 and 2014
- LAVWCD is working with the Fort Lyon Plan to facilitate self-management beyond the 2014-15 Plan Year
- Lower Arkansas Water Management Association has submitted a Rule 10 Plan for some farms below John Martin Reservoir for 2014
- Rule 8 Plans can be submitted that show how the irrigation operation is designed to ensure no change in return flows

DISCUSSION – Section 2.2

Mark McCluskey – CDM Smith

Water Administration in the Basin. The complications and constraints particular to our Basin will be included in the Basin Implementation Plan.

RT Comments:

- Constraints are in terms of current conditions. We may just be too short-sighted to see the possibilities that will arise in the future.
- Re: Ag efficiency, we think in terms of conservation, but is greater productivity also a measure of efficiency?
- They have a desalinization system on the Colorado River. We may want to put some of this in use.
- If we add reservoirs, TDS have a chance to come out and improve water quality.
- Tamarisk removal. Won't be able to use that salvaged water as a new use.
- We shouldn't just say that we shouldn't bother to help Ag efficiency. Maybe it doesn't save water, but it saves Ag. Mention in the plan and work with those who really understand that.
- Be careful to word the plan in ways that take the Compact with Kansas into consideration.

Other business

- CWCB in Pueblo May 21st – May 22nd
- Next Meeting – June 11th, Location TBD
- Adjourn

Links:

www.arkansasbasin.com Input forms are available in printable pdf and online survey formats, along with a Public Meeting Schedule, Roundtable Meeting Agendas and Meeting Notes, and other information regarding the Arkansas Basin.

<http://coloradowaterplan.com/>