



Arkansas Basin Roundtable

PLANNING OUR
WATER FUTURE

ROUNDTABLE MEETING NOTES

August 8, 2018 – Pueblo Community College, Pueblo, CO

Roundtable Business

Sandy White called the meeting to order at 12:30 pm. Members and visitors introduced themselves. Twenty-nine (29) members were present.

Approval of minutes of prior meeting

A motion was duly made, seconded and passed unanimously to approve the meeting notes of the July meeting.

Public Comment – none

REPORTS:

Executive Committee – Sandy White

- Vacancy for At-Large Environmental representative voting position. No responses thus far. Self-nominations will be accepted through September 15th, with an election at the October meeting.

IBCC Report – Jeris Danielson, Terry Scanga

- The IBCC will meet next on October 18th in Durango.

CWCB Report – Jack Goble, Ben Wade

Jack Goble

- The CWCB met in July in Glenwood Springs. The board and staff were invited from SECWCD to attend the 60-year anniversary of Ruedi Reservoir.
- CWCB staff along with other agencies have put together a draft funding assistance document. It summarizes a list of available resources for drought and wildfire recovery.
- CWCB has two resources: flood and drought response fund of \$500,000. Watershed restoration program. Both require a 50% match. Deadline is November 2nd, typically approved in January. CWCB has just announced that they will allow early applications for projects in fire-affected areas. These applications could be heard at the September board meeting if submitted soon.
- Colorado Flood Threat Bulletin – webpage has 3 things: Daily news regarding precipitation and flood threat, outlook for the next 15 days, state map showing precipitation in the recent past.

Ben Wade

- Training Highlight: Conservation
 - Colorado Water Loss Initiative – open enrollment
 - 4 work sessions over 2 years beginning spring 2019
 - Deadline September 28th: www.coloradowaterloss.org
- Drought impacts tour took place July 23, 24 in Durango
 - Drought portal: www.coh20.co
 - NEW financial assistance fact sheet
- DOLA handout
- Closing: 30 Day Public Comment Periods
 - Aug 15 – CO Flood Mitigation Plan
 - Aug 24 – CO Drought Mitigation and Response Plan



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- Water Education Initiatives
- Upcoming Meetings
 - PEPO Annual Meeting: August 21, Vail
 - CWCB @ CO Water Congress: August, Vail
 - CWCB Board Meeting: September 18-20, Steamboat Springs
 - IBCC Meeting: October 18, Durango

Non-Consumptive Needs Committee – Bob Hamel

- Met July 30th in Canon City
- Name Change to Environmental/Recreation Committee? Will propose a change to the bylaws in October.
- Meetings will be held on the 4th Monday of the month, usually at the Canon City BLM office. The meeting can move around the basin when appropriate.
- Would like everyone to be on the email list of meeting announcement, all are invited and your ideas are welcome.
- Will be inviting agency liaisons to be more involved.
- Bob Hamel thanked all who have been involved in the Voluntary Flow Management Agreement, especially in this summer of drought.

PEPO/ARBWF – Jean Van Pelt

- PEPO Coordinator position was advertised. Two resumes have been received. The process has been put on hold for committee vacations. Will have more info at the September meeting.
- PEPO hosted a tour of projects in the Upper Basin for Rio Grande roundtable members. It was well attended and well received.
- Documentary showings continue to be scheduled, and Jean has DVDs to distribute to folks who promise to share them with boards and other interested parties. Six showings have been done, six are pending.
- The Purgatoire Water Forum is being held today, their first ever.

Needs Assessment Committee – Chelsey Nutter

- All four applications were submitted to the CWCB that were approved last month.
- Colorado Water Plan Grant (environmental) – Spring Creek Fire: debris basins. Huerfano County Water Conservancy District is the applicant. ARWC is the vendor.
- CO Water Plan Grant – LAVWCD: North La Junta Phase 3. Channelizing the stream.
- CO Water Plan Grant – LAVWCD: head stabilization ponds. New study shows 34% seepage. State is supposed to be monitoring 8 of these ponds every year.

Arkansas River Watershed Collaborative – Carol Ekarius

- Spring Fire between La Veta and Walsenburg.
 - Post-fire issues are expected to be severe. Debris basins described above.
- July 25th flood at the Hayden Pass Fire. Damaged a private bridge that could easily fail if there is another flood. This is the last of the money for the 2016 fires.
- Beulah Fire – they still don't have their own water.
- Junkins Fire – still have a little funding – doing more cleaning of debris that continues to come down after rains.
- ARWC has gotten its IRS non-profit determination letter, so is officially a non-profit.
- Soil health tour– Lower Ark farmers are taking a field trip to South Dakota. That is taking place this week.



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Colorado River Risk Study – Phase III

- Continued efforts will be self-funded by those west-slope districts that are involved.

BIP Coordinator – Gary Barber

- Framing a Joint 2018 South Slope Roundtable Meeting
 - Wet/Dry line is right around I-70, with the south in drought, and northern counties experiencing a normal year.
 - CWCB 2014 Climate Change Report shows a wet/dry line through Colorado.
 - Ad hoc planning meeting of interested parties at CO Water Congress Summer Conference.
 - A planning meeting between the Southwest, Rio Grande and Arkansas Basin executive committees the week of September 4-7th with CWCB staff support. This meeting will develop the agenda for a joint meeting.
 - Joint Roundtable meeting in early to mid-October.
 - Agenda items:
 - Watershed Health & Fire Mitigation – share processes for response to drought
 - Pre and Post-fire mitigation
 - Storage – preservation of existing storage, expansion of existing reservoirs, alluvial aquifer storage
 - Preservation of Agriculture
- Al Tucker – we're going to run out of funding for the BIP Coordinator in November. There will be a gap in funding and will be looking for alternate funding. Al expressed his appreciation for Gary's efforts.

BREAK

PROGRAM

Please check out full presentations at www.arkansasbasin.com.

SECWCD PROGRAMS & PROJECTS UPDATE – Jim Broderick, Chris Woodka

- 2018 is the 60th anniversary of the district.
- Functions of the District
- Fryingpan-Arkansas Project
 - Basalt is where the Roaring Fork and Fryingpan Rivers converge
 - Ruedi Reservoir (first storage vessel, built as compensatory storage for the west slope in exchange for the project)
 - 31 miles of tunnel, including the Boustead Tunnel, which diverts to
 - Turquoise Reservoir
 - Releases into Mt Albert Forebay, which was built for power generation
 - Dumps into Twin Lakes, which goes down the Arkansas River, to Pueblo Reservoir, terminal storage. 245,000 acre-feet
 - Fountain Valley Conduit moves water from Pueblo Reservoir to the Fountain Valley
 - Annual allocations of ~ 45,000 AF
- Finances of the District
- Projects
 - Excess Capacity Master Contract



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- Recovery of Storage
- Pueblo Dam Hydro
- Arkansas Valley Conduit
- Pueblo Dam Interconnect
- Arkansas Valley Conduit
 - Benefits
 - Clean drinking water for 50,000 people in 40 service areas east of Pueblo.
 - Relieve state water quality enforcement issues.
 - Reliable supply for future growth.
 - Challenges
 - Big up-front expenses.
 - Federal funding nexus.
 - Need for more immediate solutions.
 - Scale of project: 130 miles, with 260 miles of pipeline and multiple delivery points.

CONTROLS ON SELENIUM, URANIUM AND SALTS: AVONDALE – LAS ANIMAS: 1989 – 2017; Carleton Bern, Ph.D,

USGS

- Data from USGS and State gages, 1989-2017
- Discharge specific conductance, QW samples
- Discharge
 - Difference is consumption = flows consumed by evapotranspiration (ET)
 - On average, 44% of flow is consumed within this reach
 - Consumption drives up salt concentrations
- Salt Concentrations
 - Salt concentrations increase downstream simply due to ET
 - Addition concentration increase is from within-reach sources
 - Wet period -> worst downstream quality (1996-2000)
- Salt Loads, Totals
 - Over 1989-1995 and 2001-2017, 71% of salt exiting the reach was already present at Avondale
 - Over the 1996-2000 'flush' -> 45%
- Within-Reach Load
 - 1989-1995 93,000 tons/year
 - 1996-2000 171,000 tons/year
 - 2001-2017 75,000 tons/year
- Precipitation Shows:
 - Wetter years might help flush salts out of the reach
 - Drier years appear linked to storage of salts within the reach.
- Uranium Loads:
 - Uranium behavior mimics overall salt behavior
- Selenium Loads:
 - Avondale to Las Animas reach is a sink for selenium most years
 - Average 1,200 kg/year
- What have we learned from the 28-year record?
 - Year to year variability is substantial and important for context.



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- Strongest controls on water quality during most years are upstream sources and consumption (evapotranspiration).
- Most years, 71% of the salt and U in the Arkansas River at Las Animas came from upstream of Avondale. Only 29% could come from geologic or agricultural sources in the reach.
- The agricultural region between Avondale and Las Animas is generally a sink for selenium, not a source.
- Water quality declined during 1996-2000 (35% increase in TDS). High runoff and ample rain helped flush salts and uranium out of the system.
- Implications of salt storage and salt flushing as major controls:
 - Drought will drive salt storage
 - More efficient irrigation is allowing salt storage?
 - Expect water quality declines during multi-year wet periods
 - Need to better understand where/how salts are stored in the landscape.

NEXT STEPS/LINKS

- Next Meeting – September 12, Pueblo Community College
- Arkansas Basin Roundtable: www.arkansasbasin.com
- PEPO: www.pepoarkbasin.com
- Arkansas River Basin Water Forum: <http://www.arbwf.org/>
- CWCB: <http://cwcb.state.co.us/Pages/CWCBHome.aspx>
- Colorado Water Plan: <http://coloradowaterplan.com/>