Poudre Basin Water Sharing Working Group: an update for the Poudre Runs Through It participants


- **Water Utilities**: City of Fort Collins Water Utility, City of Greeley Water & Sewer, Tri-Districts, West Fort Collins, Northern Water

- **Consultants**: Open Water Fdn. (data base), Lawrence, Jones, Custer and Grasmick Law Firm (legal agreements), CSU Human Dimensions of Natural Resources Dept. (surveys)

- **Facilitation**: CSU Colorado Water Institute

- **Funding**: Colorado Water Conservation Board – interested in alternative transfer methods to buy and dry
Target Outcomes of Working Group

- Description of benefits provided by irrigated ag
- Clear descriptions of water sharing mechanisms that seem appropriate in our basin
- Perceptions of irrigators/shareholders/utilities about ATMs (first such study ever done)
- Prototype agreements for each type of water sharing
- An improved basin-wide data base to enable future collaboration
Types of water sharing (ATMs) discussed by the working group

- **Water Swaps** – trading multiple-use water (CBT) owned by irrigators for agricultural water owned by a utility
- **Leases Agreements** – ag water shares used for urban water supply in response to drought or another crisis
- **Interruptible Supply Agreements** – longer term contracts to help utilities meet drought firming and recovery, emergencies
- **Buy and Supply** – Purchase, lease or re-sell with conservation easement and caveat about water sharing or base supply. Provides most certainty for participants. An ATM that shows promise but needs to be developed. It could be expedited by the creation of a regional land/water conservation entity.
Some of what we found out

- Basin participants have a diversity of characteristics and needs
- Viability of ATM mechanisms is site-specific
- Water utilities need supply security even if they want agriculture to be viable
- Irrigators are willing to consider some ATMs, they support reducing “buy and dry” - but want the right to sell if needed
- Trust in current water markets varies among participants
- Future: participants want to keep water in the basin and want to explore shared infrastructure and storage
Some of what we found out about ATMs

- Short term leases and water swaps are seen as more favorable than interruptible supply by both irrigators and utilities. Both have been used successfully.
- Interruptible supply agreements, formerly seen as the main ATM around the west, have some obstacles to overcome.
- The “buy and supply” approach provides more supply security for utilities, has moderate support among utilities and irrigators and merits further study – The principal reason we are here this morning.
• Alternative Transfer Methods: expectations are still high at the state level

- Colorado Legislature has passed several laws to facilitate water sharing
- Governor and Basin Roundtables want a **State Water Plan** that includes ATMs and water sharing
- “Buy and Dry” is seen as unsustainable: (by the CWCB, Inter-basin Compact Committee, Basin Roundtables, Western Governors Assn., county advisory boards & many other groups.)
- Agriculture is still a key economic driver that supports local communities and links regions across the State and has grown faster than the rest of the economy
- ATMs are of particular importance in South Platte Basin because it is so productive and has more growth pressure
Thank You

Questions, Discussion
Slides that follow are for questions and answers should they arise
The “Buy and Supply” Concept cont.

- Brings together multiple entities and resources and the full array of values provided by irrigated ag
- Voluntary: landowners needing to sell have a new option
- An easement is placed on the land and water with a caveat that some water will be shared for drought firming or in some cases, base supply
- Potential partners: open space programs, utilities, land trusts, GOCO, Farm Bill funds, impact investors
- A land/water bank or conservancy district could be formed as an umbrella organization to expedite transactions of this type
- Meanwhile, creative partnerships like those we are working on can pilot the concept
Changing the Way we Think About the Water Used by Agriculture

- “At 75%, ag is using more than its share”
- “Water transferred from ag will be our main source of base supply for urban use”
- “Buy and dry” is necessary for having a secure urban supply
- “Water is different, we can import food and fiber from elsewhere”
- Much of this water returns to urban areas as milk, meat, grain, vegetables
- Water sharing with ag can provide drought year firming without permanent transfer
- Can’t we develop creative long term agreements for water sharing (some base supply)
- Be local, buy local, food security, food safety etc.
Widespread Public Support for Maintaining Water for Ag

- 96% of the 500 randomly selected Colorado residents surveyed felt it was important to maintain water for ag production*

- Respondents felt that in a dry year, after domestic use, water for ag was a much higher priority (75%) than water for:
  - Instream flows (20%)
  - Landscaping (1.8%)
  - Rafting and fishing (1.5%)

*Studies done by Dr Alan Bright and others at CSU in 1996, 2001, 2006 for the Colorado Department of Agriculture
Water Swaps, Trading

- 2013 successful example, NP Irrigators traded CBT water to Fort Collins for Ag/River Water (drought, fire, flood & water quality issues)
- Swaps are best done with trans-basin (foreign) water that has no return flow requirements (like NP shares)
- No water court or state approval required
- Irrigators get more water than they give as an incentive
- Could be done via longer-term agreements to provide more certainty for both parties
Interruptible Supply Agreements

- **Standard** = Longer – term lease agreements, multi-year duration
- Limited water delivered by ag to utilities and return flows provided during drought, drought recovery (CRS 37-92-309)
- Water made available via fallowing, deficit irrigation or planting drought tolerant crops to reduce consumptive use (on marginal lands etc)
- Incentives could combine payment, rental water guarantee during normal years
- **Variation** = irrigators enable utilities to use ag water they own by foregoing rental water, providing dry up (cover cropping) and return flow recharge areas
Short Term Leases

- Unexpected events (infrastructure failure, natural disasters, construction, water court delays etc.) can create short term need for water utilities (ie 2002, 2003, 2013)

- Those owning water with agricultural decrees can lease water for payment via short-term agreement.

- Substitute Water Supply Plan (administrative approval) is used (CRS 37-92-308)

- Basin-wide collaboration can anticipate and ensure reasonable pricing instead of gouging
Benefits Provided by the Irrigated Landscape

- Locally-grown food/fiber
- Open space, amenity value
- Community separators
- Wildlife habitat
- Robust economic activity
- Ground water recharge
- Flood surge control
Benefits Provided by the Irrigated Landscape

- Agricultural Tourism
- Extended recreational flows
- Intergenerational knowledge base
- Cultural diversity
- Coping with climate change
- Potential for sharing water and infrastructure
Storage per Capita Comparison

Note: Based on 2010 population

- Storage Owned or Controlled by Provider
- Pro Rata Portion of CBT Project Storage
Rich History of ag-related water development