Arkansas Basin Roundtable
November 9th, 2011
Meeting Notes

Roundtable Business

Chairman Barber called the meeting to order at 12:30 pm. Members and visitors introduced themselves. Twenty five (25) members were present. There are 39 active roundtable members at this time - 18 is a quorum.

October Minutes
A motion was made and seconded to approve the minutes of the October meeting. The motion passed unanimously.

Reviewed agenda
There has been no IBCC meeting since last meeting. They will be meeting November 20th.

Public comment –
Growgreen USA – John and James Paterson
These gentlemen introduced a product that claims to solve nitrate pollution. It is a microbe-based nutrient that doesn't leach into the soil.

Representative Marsha Looper – Denver Basin Study/Fracking
Ms. Looper spoke about a study that reveals that the Denver Basin aquifers are much thinner than anticipated. She requests that we bring a presentation of this study to the Roundtable.
A second study has been done; The Colorado Hydraulic Fracturing State Review Study, the purpose of which is to look at whether current rules are enough to protect groundwater.
Next, Marsha would like to see a study that identifies exactly how much water is actually in the Denver Basin. She has drafted a bill that emphasizes the importance of this issue, and will also study the impacts of large-scale oil and gas production in the Denver Basin and how to mitigate those impacts.

IBCC/Sub-Committee Reports – Jeris Danielson, Jay Winner

New Supply sub-committee has put together a white paper on risk assessment.

Conservation subcommittee – will be having more meetings on this, since the toilet legislation did not pass.

Three Roundtable Subcommittee – Jay Winner
There will be a West Slope and Colorado River District meeting next week. They want to know what level of conservation we will use for the Portfolio Tool. They have agreed to all use a "low" level of conservation for the time being.

Aspinall Pool Subcommittee – Jeris Danielson
Working on how Blue Mesa Reservoir can be used as an insurance policy against a future call on the Colorado River. The committee has adopted a work plan for the request for work study. An RFQ has been completed. There is space in Blue Mesa. The water could come from elsewhere. The issue is whether it's possible to use excess capacity storage in Blue Mesa that won't be dumped each year.

Project Exploration Committee: Flaming Gorge – Gary Barber
Gary Barber & Betty Konarski have been recommended to be the Reps from the Arkansas Basin RT on this committee.
Reed Dils – It's not clear who will make the decision about who will be the Environmental rep. Reed is hoping that there will be a separate environmental rep, one from the East Slope, one from the West Slope.

Consensus was reached that Gary Barber and Betty Konarski will become the representatives to this committee from the Arkansas Basin RT.

Ag Water Gap – Reeves Brown
The committee has fully realized the challenge ahead of us. The committee is enthusiastic about what we're doing. The first step is to try to value every acre foot of water used for Ag. We will attempt to quantify that in a model that includes recreation, the environment, local food production, and traditional Colorado Ag.

Presentations

Colorado River Availability Study and DSS – Ray Alvarado
This study reflects the natural hydrology, reflects climate change. It will be available as an online tool. The public will be able to access the data. There are 5,500 data runs.
CRWAS Web Viewing Tool
Report Builder
Overview Map
Information

From a map, we will be able to select by river reach and get information from model. Information like natural flow, stream flow, available flow, etc. will be available. Sourced from historical data. The modeling on the west slope has 2,200 data points, at head gates, etc.

Report Builder
- Select a basin to focus on
- You may select a specific Water District
- Select a Model Node: diversions, head gates, ditches
- Select a Model parameter: total command, total supply, and consumptive use, control right, from river by exchange, from carrier by priority, etc.
- Select scenarios
  - All scenarios
  - 2040 climate change scenario
  - 2070 scenario

RUN REPORT – a graph is the outcome. You can zoom in to information on the graphs. Each graph opens into its own page, and may be saved.

At higher elevations, the hydrology and timing doesn't change that much. Snowmelt changes to precipitation, but timing is similar.

This model was driven by the state DSS tool. The portfolio tool is a separate tool. Can implement scenarios from the portfolio tool in this model.

Examining Ag Water's Value in the Basin - James Pritchett, CSU
Examples, Opportunities and Limitations

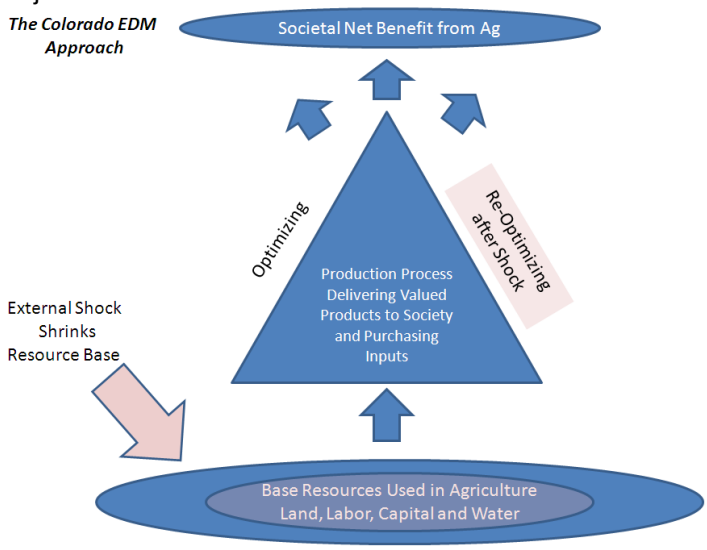
James presented four studies with elements that might be applied to the Arkansas Basin to assist the Arkansas Basin RT in valuing Ag.

What's the value of water in a basin?
- Value-added agriculture (ethanol example)
- Municipal preferences re; ag water
- In-stream water values
- Recreational water values
- Water used for local food systems

Ethanol Example
If water is transferred, can a biofuel industry exist?
- If water transfers away, does sufficient capacity exist for biofuel production?
- How important is interstate trade in meeting the needs of a biofuel industry?

Methods & Studies that might work for the Arkansas Basin
- Equilibrium Displacement Model (EDM)
- Identify the Biofuel Footprint

How does an economy adjust?



Water Footprint

Primary use, ripple effects

*The ethanol example was presented to show the capabilities of the EDM model.

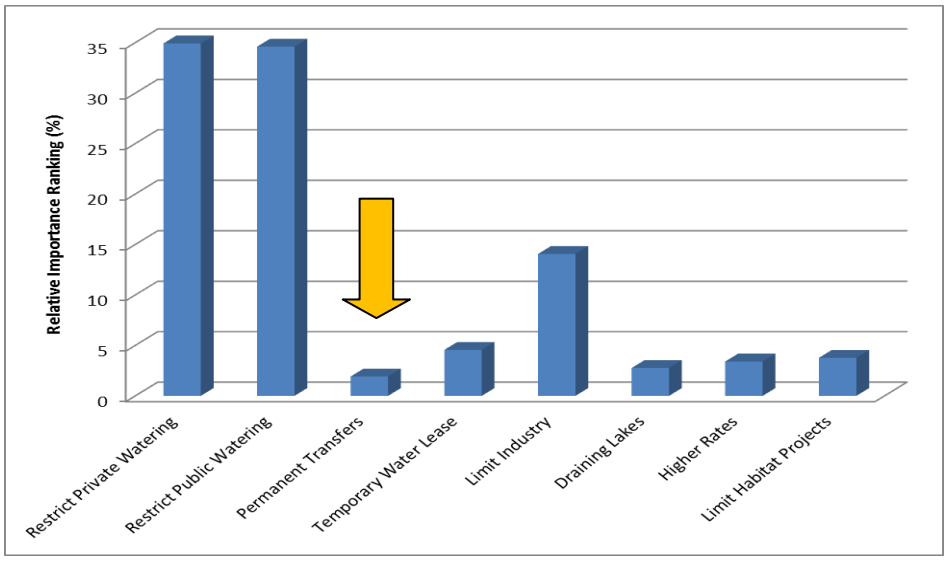
Study: The Demand Side of the Equation: What Do Households Want?

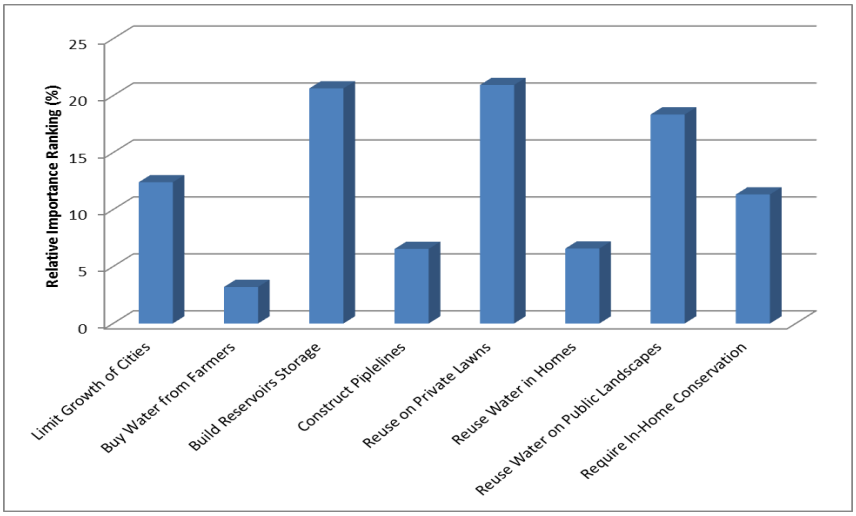
What strategies do households rank as the "best" when setting priorities for meeting future needs?
What are households willing to pay for?

Methods

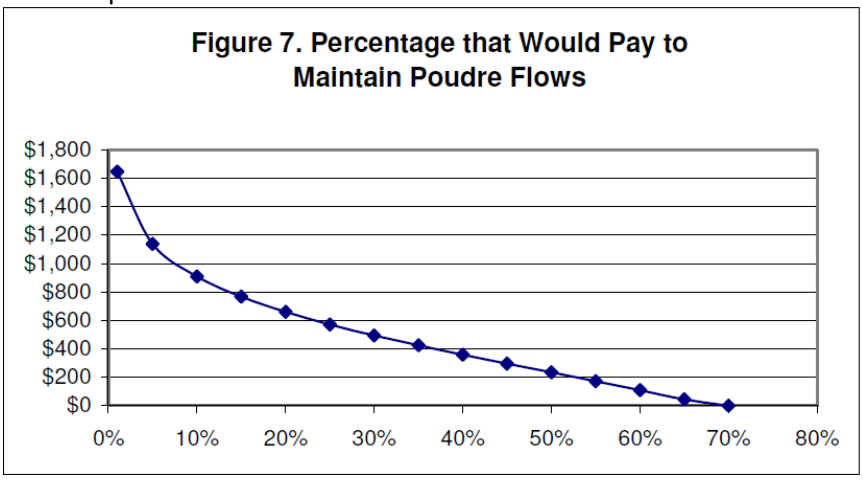
- Internet survey of randomly selected households
- 6250 Households in 17 western states
- 535 responses in Colorado
- Demographics compared with Census Data

Results:





Study: *What is the Value of Instream Flows?* By John Loomis, PhD
"Estimating the Economic Benefits of Maintaining Peak Instream Flows in the Poudre River through Fort Collins, Colorado"
John showed a hydrograph that compared a 30-year average of peak flows vs a 30 or 50% reduction in peak flows. They surveyed people as they were coming off the river and asked them what they would be willing to pay to maintain peak flows in the river.



In the case of the Arkansas Basin, would look at the value of Instream Flows for bird watchers, fishing, Pueblo Reservoir recreation, among other recreational users.

Study: *What is the Value of Local Food Systems?* Dawn Thilmany and Allie Gunter
"What is the economic impact of a local purchasing program by a school district in Weld County, Colorado?"

	Labor Income	Output
Direct	$9,139	$20,900
Indirect	$1,541	$5,352
Induced	$2,218	$6,825
Total	$12,898	$33,077

FOR US
What is the value of Ag water in the Arkansas River Basin, when….?

Roundtable members asked questions and contributed their viewpoints, including the following:
We need to set a baseline first.
What policies are currently in effect that affect the value of Ag in the Arkansas Basin?
Can the Tipping Point Study be integrated into this question?
Need to look at the cost to communities of delivering services to Ag. It costs a county more to provide services to urban areas rather than rural areas because of population density.
Make sure that we measure the non-renewability of groundwater.

Please give additional feedback to Elise.

Review of the next meeting's agenda – December 14th, computer lab.
January 11th, 2011

The meeting was adjourned at 3:00 p.m.

Respectfully submitted,
Terry Scanga