

# Laramie County Control Area Steering Committee

## Meeting Summary

December 1, 2014

Herschler Building, Cheyenne, WY

Draft for Review

Approved

### Participants:

Bill Bonham, *Laramie County Stock Growers*  
Randy Bruns, *Econ Development*  
Jim Cochran, *LC Conservation District*  
Bill Edward, *Southeast Wyoming Builders Association*  
Dennis Ellis, *Industry*  
Greg Gross, *Ag/Irrigators*  
Kristi Hansen, *Academia*  
Jim Hastings, *Alternate*  
Gary Hickman, *Cheyenne/Laramie County Health*  
Scott Horgen, *Industry*  
Brenda Johnson, *Alternate*  
Judy Johnstone, *Small municipalities*  
Rick Kaysen, *City of Cheyenne*  
Jim Lernick, *Ag/Irrigators*

Brian Lovett, *LC Conservation District*  
Leslie Mead, *South Cheyenne Community Development Association*  
Jim Murphy, *Cheyenne Board of Public Utilities*  
Joe Patterson, *Southeast Wyoming Builders Association*  
Bonnie Reider, *South Cheyenne Community Development Association*  
Bill Shain, *Small municipalities*  
Mike Sullivan, *City of Cheyenne*  
Lisa Tabke, *Cheyenne Board of Realtors*  
Tom Taylor, *Private Property Owner*  
Tim Wilson, *Cheyenne Board of Public Utilities*  
Scott Zimmermon, *Rocky Mountain Farmers Union*

### Facilitators:

Steve Smutko, *UW Ruckelshaus Institute*  
Shannon Glendenning, *UW Ruckelshaus Institute*

### Agenda:

1. Introduction by Nephi Cole
2. Presentation by Bern Hinkley on Laramie County Hydrogeology
3. Discussion and Questions
4. Presentation on Role of Steve Smutko and Ruckelshaus Institute
5. Adjourn

### Handouts:

- Steve Smutko distributed a document summarizing his and the Ruckelshaus Institute's role in this process, attached

### Presentations:

- Bern Hinkley, Hydrogeology of Laramie County

### Action Items Completed:

1. Bern Hinkley presented information about the hydrogeology of Laramie County
2. Steve Smutko discussed his role as a facilitator to the process of developing actionable management strategies for the Laramie County Control Area

### Action Items Pending:

### Summary:

Nephi Cole, advisor for the Governor, welcomed everyone and thanked them for coming. He facilitated the last meeting of the Steering Committee. He will still attend, but participate as an audience member. Future meetings will be facilitated by Steve Smutko.

Steve introduced himself and discusses that his role is to provide a process where the Steering

Committee can work together and make recommendations and move forward in the Control Area.

The purpose of this meeting was to provide information to the Steering Committee and the public about the aquifers in Laramie County and specifically the Control Area.

Bern Hinkley, water resources consultant presented information about water resources in Laramie County and described the modeling from “Hydrologic Study of the Laramie County Control Area”. A copy of the presentation will be posted on the UW Ruckelshaus website.

After Bern’s presentation the meeting was opened up to question from the Steering Committee members.

Q=Question                      A= Answer                      C= Comment

Q: In reference to Bern’s analogy, the aquifers that underlie Laramie County are “one big swimming pool” or “one sandbox” but has a lot of different geology. One person asked how long it takes water being deposited on the west end of the County to reach the east side and if the whole system is connected.

A: Bern replied that the different layers are connected, theoretically. He postured that it could take thousands of years for water to move down gradient across the County, especially since the County does not have highly permeable geology that would allow fast water movement.

Q: In regards to the modeling of future scenarios, where districts within the Control Area were given different reduction rates depending on their local geology and the impacts to groundwater levels calculated, one person asked if it mattered where water was extracted within each district mattered on the ground water levels.

A: Bern responded that the district lines were established based on political factors, not geologic. If that method is to be explored further, the lines should be drawn based on a geology map, not a political map, to show what areas are connected.

Q: How much the flow in Horse Creek was used in the development of this model?

A: Flows in Horse creek were not modeled or considered in this model. It could be considered in future models, but was not a consideration in this model.

C: It was commented that science is descriptive, not prescriptive.

Q: in the model’s scenarios of reduced use, would the reductions incorporate efficiencies?

A: Conservation and efficiency are loaded words. Drip uses less than a sprinkler, but flood irrigation vs drip irrigation doesn’t change net consumption since water used in flood irrigation doesn’t leave the system.

Q: What about recent peaks in water levels during large rain years? Do the models incorporate storage in the form of reservoirs?

A: The changes in water levels are related to local effects of recharge. Surface water was not a significant part of the model. The models do not show streams delivering water. In stream flows can recharge areas and bring up water levels, this local delivery and recharge changes the time for recharge from the thousands of years to move across the landscape to annual increases, mentioned earlier.

Q: As the model looks into the future, does it incorporate other inputs from outside of the control area?

A: The only major projects that were incorporated into the model were those from the City of Cheyenne with their comprehensive plans. For example, wastewater increases from Cheyenne were incorporated, but projects that haven't been approved, like the Billions pipeline, were not.

C: The implications of these model runs and the scenarios is that this information is vital. The report lays out some recommendations, some I agree with, but they are well laid out. The committee has the ability to pick and choose recommendations. The committee is a body that is making recommendations.

C: Committee has some latitude to fashion some recommendations

C: The State Engineer has corrective controls laid out clearly in statute, but his last tool is this committee as an alternative to the State Engineer coming in and saying that this is what we are going to do.

C: We need a definition of what we are doing here

C: W.S. 41-3-915(c) read aloud:

(c) Appropriators of underground water from a control area may agree to any method or scheme of control of withdrawals, well spacing, apportionment, rotation or proration of the common supply of underground water. The state engineer shall encourage and promote such agreements and supply the parties with information and advice. When the state engineer, with the advice of the control area advisory board, shall find that any such agreement, executed in writing and filed in his office, is consistent with the intent, purposes and requirements of this act [§§ 413901 through 413938], and would not be detrimental to the public interest or to the rights of other persons not parties to the agreement, he shall approve the agreement, and thereafter such agreement shall control, until terminated as hereinafter provided, in lieu of any order issued pursuant to subsection (a) of this section.

C: In summary, the statute, legislature, and State Engineer has given us the opportunity to develop tools that are more powerful than his.

Q: How are flow factors shown in the maps? The water moves from west to east?

A: The topo slide shows the direction. Permeability of the geology can then be overlain with the direction and that can tell us the speed the water travels. Every square in the model has a prescribed permeability. The model, at a gross scale, can tell us how the water moves.

Q: In the calculations of the water budget, how much conductivity between upper formations and the land fox hills?

A: It's not a well understood formation

Q: is there any information from logging from mineral development that can help us understand the upper formations?

A: Typically the logs look much deeper. They might refine the model, if available, but not change it drastically

C: One company was permitted high production wells. They have a production well and two monitoring wells. Pump tests start 12/2.

Q: Should the city of Cheyenne be a part of this group? If the result is dependent on everyone signing off, and we want to be fair, should they be a part of this group to make sure the final decision is viewed as fair.

C: Can Cheyenne contribute to a solution?

C: Everyone should be at the table that draws from the water in the county. Our committee could be a model or serve as an example for different areas. Different communities and areas in the County may never affect each other. Local control should be the basis of the committee

C: Cheyenne should be part of this. There are decisions being made in the future about Cheyenne.

C: there might be a time in the future where the communities can help each other.

Q: What about the other states that can “drain out bank accounts” despite our best efforts.

A: Nebraska has instituted severe allocations of water. Geology doesn’t respect the political boundaries.

C: Western Laramie County should be considered and we should think about possible storage or water.

A: If we stored surface water and then released it as a stream flow, it moves water a lot faster

C: From the model, the creation of Cheyenne’s well field did not have an impact on other communities. What about adding water to the county? Water could be pumped and redistributed.

A: Would require a massive infrastructure project.

Q: What was considered in regards to economic growth of the county when making this model?

A: The modelers projected the future based on the past. They used the City of Cheyenne’s Master Plan.

Q: Would this model have the ability to test the model? Can you run it with different scenarios and potential solutions?

A: The State Engineer’s Office might have money

A: If you’re doing a model run, it needs to be fully specified in very precise terms.

C: How does the committee know that the recommendation will work?

C: What is the goal? What is fairness? What is consensus? Are we looking at aquifer recovery?

C: Maybe we should have multiple control areas in Laramie County. The three different areas can be treated differently.

Q: Are there case studies where something like this has worked?

A: this is a situation where the committee needs information as you deliberate. I hope that Lisa can provide information to make some educated recommendations. But in the end it has to be agreed to by everyone at the table.

C: I want to challenge the committee, from my experience in Pine Bluffs we know that the science is inexact. Don’t get bogged down with the science and use the model that identifies the problems.

C: this needs to be an overview of economic development on Laramie County based on the resource of water. Water for irrigation has been useful and successful for the past 40 years, what are better uses for

the next 40 years? How can it benefit the most people, people are the beneficiaries ultimately, We have a lot of latitude, and don't get bogged down with whose it is, and how do we do it fairly?  
C: economic development looks different depending on where you're standing. We need a way to balance those.

Steve Smutko handed out an overview of the collaborative process, attached. His role is to guide the steering committee. Interviews will be schedules with all the Committee members to find where the wiggle room is and what everyone is thinking.

**Next Meeting**

**Date:** December 15, 2014 6-8pm

**Location:** Herschler Building, Room B63, 122 West 25th Street, Cheyenne, WY