

Laramie County Control Area Steering Committee
Meeting Summary
February 16, 2015
Herschler Building, Cheyenne, WY

<input type="checkbox"/> Draft for Review	<input checked="" type="checkbox"/> Approved
<p>Participants:</p> <p>Randy Bruns, <i>Econ Development</i> Jim Cochran, <i>LC Conservation District</i> Bill Edwards, <i>Southeast Wyoming Builders Association</i> Dan Frank, <i>Laramie County Stock Growers</i> Greg Gross, <i>Ag/Irrigators</i> Kristi Hansen, <i>University of Wyoming</i> Jim Hastings, <i>Alternate</i> Gary Hickman, <i>Cheyenne/Laramie County Health</i> Scott Horgen, <i>Industry</i> Judy Johnstone, <i>Small municipalities</i> Rick Kaysen, <i>City of Cheyenne</i> Jim Lerwick, <i>Ag/Irrigators</i> Brian Lovett, <i>LC Conservation District</i></p>	
<p>Leslie Mead, <i>South Cheyenne Community Development Association</i> Max Minnick, <i>Cheyenne Board of Realtors</i> Jim Murphy, <i>Cheyenne Board of Public Utilities</i> Joe Patterson, <i>Southeast Wyoming Builders Association</i> Bonnie Reider, <i>South Cheyenne Community Development Association</i> Lisa Tabke, <i>Cheyenne Board of Realtors</i> Tom Taylor, <i>Private Property Owner</i> Troy Thompson, <i>Laramie County Commissioners</i> Tim Wilson, <i>Cheyenne Board of Public Utilities</i></p>	
<p>Facilitators and Consultants:</p> <p>Steve Smutko, <i>UW Ruckelshaus Institute</i> Shannon Glendenning, <i>UW Ruckelshaus Institute</i> Bern Hinckley, <i>Hinckley Consultant</i></p>	
<p>Agenda:</p> <ol style="list-style-type: none"> 1. Welcome; steering committee member introductions; agenda review and approval; announcements 2. Review and adoption of 2/2/15 meeting summary 3. Discussion of irrigators' proposal 4. Presentation of Cheyenne Water use 5. Groundwater control alternatives 6. Approaches in other states 7. Generation of control options 8. Wrap up and next steps 9. Adjourn 	<p>Handouts:</p> <p>Draft Agenda Draft Meeting Summary- 2/2 meeting Interest Statements Groundwater control alternatives and map of control area-Bern Hinckley Approaches in other states- Kristi Hansen Cheyenne Water Use Statistics- Tim Wilson</p> <p>Presentations:</p> <p>Tim Wilson, <i>Cheyenne Water Use</i> Bern Hinckley, <i>Groundwater Control Alternatives</i> Kristi Hansen, <i>Approaches in other states</i></p>
<p>Action Items Completed:</p> <p>Agenda Approved 2/2/15 Meeting summary approved Tim Wilson presented Cheyenne's water use Bern Hinckley presented a summary of groundwater control alternatives Kristi Hansen presented groundwater management strategies in other states</p>	
<p>Summary:</p> <ol style="list-style-type: none"> 1. <i>Welcome; steering committee member introductions; agenda review and approval; announcements</i> Steve Smutko welcomed the committee and described the handouts. The meeting agenda was reviewed and approved 2. <i>Review and adoption of 2/2/15 meeting summary</i> The 2/2/15 meeting summary was reviewed and approved. 	

3. Discussion of irrigators' proposal

The meeting was opened up for questions regarding the irrigators' proposal from the previous meeting. Chris Lidstone, of Lidstone Associates, was present to answer questions.

Q= Question R= Response C= Comment

Q: I would like to see how the proposal stabilizes the aquifer or increases water in the aquifer, specifically the High Plains.

R: The intent of this plan was to create a market based proposal. The goal is to buy high production wells. It designs a management council, where the council would research with due diligence on the existing water rights, and make sure that the right wells are being bought up. The council can selectively look at areas, and select better wells within those areas that would make a difference.

C: the spreadsheet shows a 30% reduction over 13 years, depending on the payments.

Q: Is there a map showing the locations of these high production wells and the aquifer, and who would benefit from the retirements? Are they so far east that they would benefit Nebraska, not people in the western part of the county?

R: There's a list of wells for sale from the buyout program. There are wells in Carpenter and Pine Bluffs area. About half the wells on the list are in the stressed area and the other half are in the higher areas.

C: It would be helpful for a map to show wells, gallons per minute and where they are located.

C: The most western wells in the buyout program were just east of Cheyenne

C: From Burns west, the wells aren't showing a lot of stress, but the water is available for a better and higher use

Q: If you're going to take wells out of production, the assumption is less water is being extracted. Without metering, how do you know?

R: This plan doesn't talk about metering. It looks at charging irrigators on a per-acre basis, with the assumption that an acre of land uses X acre-feet of water. The plan takes land out of production. There is flexibility in the plan. Monitoring wells could be used to see the progress and impacts of any decision.

Q: In order to implement the plan, would it require legislative changes? It looks like there is a tax, some entity has to be a taxing entity, and then some agency needs to administer it. What would it take to enact the plan?

R: Troy Thompson- From the county perspective, if we look at the owners of the wells, we could create an Improvement and Service District under the provisions of Title 29, then assess a property tax. But we would need a budget and goal, and then assess a mill to get to that goal. Also there could be statutory amendments to W.S. 41-2-108 and 109 to allow the Water Commission to implement a plan for reasonable and appropriate reporting by well owners or operators. There could be statutory amendments to W.W. 35-1-303 and W.S. 35-1-305 to put authority of monitoring water for the promotion of public health under the jurisdiction of established boards of health. Include in the enabling legislation the authority to collect an annual fee on each well located with the control area (or other designated geographical area). The annual fee could be based on the type of well, production and capacity.

Q: What is required to develop an improvement district?

R: That requires a vote

C: From the Board of Public Utilities standpoint, I don't think they can assess a fee without legislation

Q: Would we have to create a bureaucracy for this?

C: The conservation district has the ability to tax, and the tax could be managed by the county. So, no new bureaucracy.

Q: How can you do a tax within a municipality? Individuals don't have wells

R: If you assess a property tax, then it is associated with the value of the property

Q: How would the assessment districts be divided up?

R: If we went that route, then it would have to be discussed and divided.

C: That would require two votes, one to establish the district, and then one to establish a tax.

C: I noticed that the plan doesn't do anything based on hydrologic areas.

R: The plan is based on the county. Within the framework of the market based proposal, the plan could look for different applications of well spacing in the potential implementation in the areas that are more stressed. Spacing could also be looked at based on well depth.

Steve Smutko asked the committee to comment on things they liked about the plan and things they would like to see changed. The point of this exercise was not to seek consensus.

Components of plan that committee members liked:

- I like the proposal because it is market driven. It allows the best and most efficient irrigators to stay in production and is best for the local economy.
- Nothing in the plan I don't like. I don't think a fee is excessive to ensure water in the long run.
- All users have skin in the game, even though smaller users are paying more.
- Provides transparency and oversight.
- There is a reduction target, but want to see it more defined
- Provided information we didn't have before, and helped put the situation in context.
- It is not a government taking.

Components of plan committee members want to see changed:

- As wells are retired, there has to be a way to measure the wells in the area, There needs to be a way to identify usage in neighboring wells that would benefit from others retiring.
- Do not like the fee schedule, the state has created the problem, it should be up to the state to come up with the money.
- Against another bureaucracy.
- There's an assumption that these fees or taxes will be passed in an election, which is not guaranteed. There are issues with timing and risk. There is no guarantee that this will be successful with voters.
- The plan needs to be based on actual usage, not assumptions based on acreage. Need to meter.
- The plan does not encourage conservation.
- Concerned it is not an equitable plan. Homeowners are paying a lot more than municipalities and irrigators on a per-usage basis.
- Need a specific target.
- There is a constant inference that a domestic well is having impacts on the eastern part of the county. There is no hydrogeological link between the eastern part of the county and the western part.

C: There are things in this plan here we can use

C: I'm still in the information gathering stage, I need to see other proposals and ideas to evaluate this plan

C: This plan doesn't allow the government to take property without compensation. This plan is a starting point for ideas to be considered.

C: Can we develop a plan that creates economic development? I don't want to limit house wells and domestic use. Do we need different plans for different areas? Metering doesn't give answers faster than monitoring wells.

Q: If the irrigators have known about this problem for 20 years, what have you done to address this issue? We still see water levels declining?.

R: We have totally changed the technology and have reduced water use by 20%. Subsurface irrigation is the next technology, but it costs about \$1500/acre. We need to reduce draw from the aquifer by eliminating irrigated acres.

Q: Would subsurface dripping reduce water use?

R: It decreases water use by 20%, but increases energy costs by 15%

Q: how do we know the irrigators will be using less water?

R: we know because some wells have gone dry. We have reduced out nozzles from 800-900gpm to 600 per quarter section.

C: It is possible to be more efficient with water, but not use less.

C: We've seen a change in the wells ordered. Years ago a good well was 2,500 gpm. Now a good well is 600gpm.

C: Reduction doesn't happen without retiring acres from irrigation.

C: You've said you're limited on consumption, what's limiting your consumption now?

R: We believe we have a far better understanding on how to select the crop and what risks to take, than a bureaucracy has to make that decision.

C: Selling of water rights is for the benefit for the county. The first thing that goes away is land that should not be used, the poos quality land. If a well is in an area of maximum drawdown, and it has been pumping, then that's a valuable well. The plan doesn't have a blanket value on an acre of land.

4. *Presentation of Cheyenne Water Use*

Tim Wilson presented information about Cheyenne's water usage and provided a handout with four graphs.

Graph 1 shows the population served by Cheyenne's water system has increase by about 15% from 1994 to 2014. When comparing 1994 to 2014, the water supplied decreased by about 18.9%. Cheyenne serves water to the city of Cheyenne, South Cheyenne Water and Sewer District and F.E. Warren Air Force Base.

Graph 2 shows the total volume of in-basin water collected in acre-feet and water returned to Crow Creek

Graph 3 shows the total service area by the City of Cheyenne and the water use per acre over time.

Graph 4 is a depiction of the population served since 1994 and per capita daily total of gallons used. When comparing 1994 to 2014, the per capita use decreased by 29%.

Q: On graph 2, the grey line shows that more water was returned to Crow Creek than is collected from the basin, where is that water coming from?

R: The water is from the water is from Cheyenne's water reclamation plants / wastewater treatment plants.

Q: For the user values, where are those numbers coming from?

R: That's from meters. Cheyenne's entire system is metered, metering is essential. It gives us indications if leaks and overuse.

Q: Have you seen an effect in the well field since the implementation of management strategies and the water-wise conservation plan?

R: Overall we have seen stabilization. There are some wells we still see a decrease in water levels, others have water levels that are increasing. The 35 wells we have are actively monitored and turned on and off based on out data.

Q: So from your experience, what scenario are you seeing from the AMEC report?

R: We have seen stabilization.

C: The AMEC report did not look at changes in management in Cheyenne or outside of the control area.

Q: On graph 2, the difference between what's returned to Crow Creek and what is captured in basin, does that include imported water?

R: What goes into Crow Creek is proportional to what is collected in the basin.

Q: Has Cheyenne established a level for the aquifer, to where you want to get back to?

R: The aim is stabilization, but there isn't a set level at this time.

Q: is there a way to bring in more water into the basin and the system?

R: Not without expanding the reservoirs.

Q: Is there another way or method other than using groundwater to buffer the surface water?

R: Our surface water is highly corrosive, so we mix around 25-30% of groundwater to prevent corrosion in pipes within the system. There are other chemicals that can be used to buffer, but groundwater also brings in other minerals the surface water doesn't have.

5. Groundwater control alternatives

Bern Hinckley presented groundwater control alternatives and provided a handout and map. The slides presented were from the December meeting. One map shows that there are 5 areas of concentrated groundwater use in the control area. We have seen an overall decline in groundwater levels.

Groundwater recharge is a valid use in Wyoming state stature, but there are not many opportunities to do so.

Previous studies have predicted this type of drawdown we are seeing currently.

By the early 1970's it was understood that irrigation was having an effect on groundwater levels. A pie chart shows that 98% of water consumption is from irrigation. The model uses 89%, but includes the entire county. Efficiencies and conservation measures do not change the water budget. This issue is about irrigation.

The modeling shows that there is little connectivity across the county. Retiring acreage in one area will not help another area. The highest and best use takes place within smaller areas, unless you transport water across the landscape.

One of the model runs, Model 4, a ban on new wells, does not change the current problem. The only solution is to retire acreage from irrigation.

Going through the strategies that have been discussed and used in other areas some might work in our area. In areas where water level declines have been a known issue for 40 years, the focus should be on current use, not future use.

6. Approaches in other states

Kristi Hansen presented information on groundwater management strategies in Nebraska and Kansas. The information is based on documents found on the committee website and from interviews with resource managers. A handout of summaries for the South Platte Natural Resources District-Nebraska, the North Platte Natural Resources District- Nebraska, the Sheridan 6 Local Enhanced Management Area Kansas, and Horse Creek Basin- Wyoming.

Jim Lerwick discussed that the committee is challenged to bring the State Engineer a government policy, and that the committee might not be equipped with the ability to determine if there is no harm to others who aren't at the table. He noted that a good strategy might be to make a policy for specific areas, not a blanket wide policy for the entire area and that the committee needs to think on a local basis.

7. Wrap up and next steps

For the next meeting, committee members were instructed to think about the options discussed by Bern Hinckley.

8. Adjourn

Next Meeting

Date: March 2, 2015 5:30-8:30pm

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