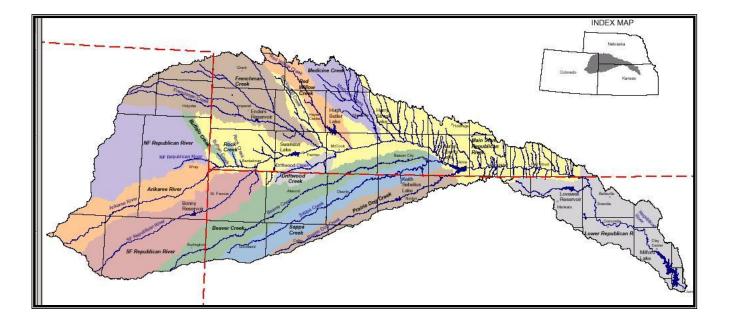
# REPUBLICAN RIVER COMPACT ADMINISTRATION

# **50<sup>th</sup> ANNUAL REPORT**

FOR THE YEAR 2010



# **BURLINGTON, COLORADO**

AUGUST 31, 2011

# MINUTES OF THE ANNUAL MEETING OF THE REPUBLICAN RIVER COMPACT ADMINISTRATION

August 31, 2011

**Burlington Colorado** 

### **Minutes**

A transcript of this meeting was prepared by a court reporter. Upon review by each of the States and final approval by the Compact Administration, the transcript will serve as the official minutes of the 51<sup>st</sup> Annual Meeting of the Compact Administration. Copies of the transcript may be obtained from the offices of each of the commissioners. Below is a summary of the meeting.

## Introductions

The 51<sup>st</sup> Annual Meeting of the Republican River Compact Administration (RRCA) was called to order by Chair Dick Wolfe at 9:12am on August 31<sup>st</sup>, 2011, at the Burlington Community and Education Center in Burlington, Colorado. Commissioner Wolfe asked the City Administrator for Burlington, Bob Churchwell, to address the Administration and those in attendance. Each Commissioner introduced staff in attendance and members of the audience introduced themselves. Attendees included:

Name	Representing
Dick Wolfe	Colorado Commissioner, Chair
Brian P. Dunnigan	Nebraska Commissioner
David W. Barfield	Kansas Commissioner
Mike Sullivan	Colorado Division of Water Resources
Willem Schreuder	Colorado – Principia Mathematica
Peter Ampe	Colorado Attorney General's Office
Megan Sullivan	Colorado Division of Water Resources
Chris Grunewald	Kansas Attorney General's Office
Burke Griggs	Kansas Department of Agriculture
Scott Ross	Kansas Department of Agriculture
Chris Beightel	Kansas Department of Agriculture
Justin Lavene	Nebraska Attorney General's Office
Jim Schneider	Nebraska Department of Natural Resources
Tom O'Connor	Nebraska Department of Natural Resources

A list of attendees recorded on the attendance sheets or by introduction is attached as Exhibit A.

### **Modification and Approval of Agenda**

Commissioner Wolfe noted there were modifications made to the agenda. The first modification added an additional assignment to the engineering committee from the 2010 meeting to modify the rules and regulations to reflect the current version of the accounting procedures and model. The second modification entailed taking action on the procedure for address missing precipitation data. The third modification addressed the need to take action on the relocation of the Guide Rock stream flow measurement gage. Commissioner Barfield moved to adopt the amended agenda. Commissioner Dunnigan seconded and the motion was approved unanimously.

A copy of the amended agenda is attached as Exhibit B.

## Status of Previous Annual and Special Meeting Reports and Transcripts from 2010, 2009 and 2008

Draft reports and transcripts from 2010 meeting were provided to each state. A thorough review had not yet been completed. The RRCA anticipated that this item would be taken up for action/approval at a later date.

It was noted that no action needed to be taken in regards to reports and transcripts from the 2008 and 2009 meetings of the RRCA. Reports and transcripts were provided to each state and are still under review. It was agreed by the Commissioners that any action regarding the reports and transcripts should be postponed and addressed at some future meeting.

## Report of the Commissioner from Colorado

Commissioner Wolfe opened by stating he would be highlighting hydrologic conditions during the 2010 calendar year in Colorado. The three major branches of the Republican River along with Bonny Reservoir would be discussed.

Commissioner Wolfe stated that on the North Fork of the Republican River 20,420 acre-feet passed the Stateline Gage during the 2010 calendar year. This is approximately 8,200 acre-feet less than the 1935 to 2010 average annual flow of 28, 660 acre-feet. On the Arikaree, stream flows at the Arikaree River Gage at Haigler totaled 2,360 acre-feet for calendar year 2010. This amount was approximately three times the recorded for calendar year 2009, which totaled 780 acre-feet. Flows on the Arikaree have declined significantly from that seen historically. On the South Fork of the Republican River, 12,760 acre-feet passed the gage at Benkelman Nebraska during calendar year 2010. Stream flows on the South Fork continue to increase but are still significantly less than the 72-year average of approximately 24,000 acre-feet.

Bonny Reservoir is the only federal reservoir in Colorado's portion of the Republican River Basin and is located on the South Fork. Commissioner Wolfe indicated Bonny Reservoir was approximately 18 percent full with an active storage of approximately 7,372 acre-feet. Colorado released 5,007 acre-feet from Bonny Reservoir from July 9, 2010 to August 27, 2010. An additional 2,248 acre-feet was released from June 20, 2011 through July 7, 2011. Colorado intends to make additional releases from Bonny Reservoir starting in September 2011. Commissioner Wolfe pointed out that these releases were being made in an effort to reach compact compliance.

Commissioner Wolfe announced that Colorado was working with the Republican River Water Conservation District to increase participation in federal land fallowing programs. Through 2010, 19,755 acres were retired under the Conservation Reserve Enhancement Program (CREP), 11,359 acres were retired under the Environmental Quality Incentives Program (EQIP), and 1,546 acres were retired under the Agricultural Water Enhancement Program (AWEP). Also, the Republican River Water Conservation District has made efforts to purchase surface water rights within the Republican River Basin, leading to very little active surface water irrigation within the Basin.

Commissioner Wolfe reported that Colorado had adopted well measurement rules for all large capacity wells with the Republican River Basin. As of March 1, 2009 all large-capacity wells were required to have certified measurement device/method in place or be declared inactive. Pumping totals were required to be submitted to the State Engineers Office by December 1, 2010. Well measurement staff is in place to process enforcement and administration of the well measurement rules.

The status of the Republican River Compact Compliance Pipeline was then addressed by Commissioner Wolfe. The Republican River Water Conservation District had a ground-breaking ceremony on Monday, August 29, 2011; construction began on this date as well. The construction is estimated to be completed by summer of 2012, with deliveries to the North Fork anticipated in the latter part of 2012. Commissioner Wolfe gave notice to the Colorado General Assembly that approval of the pipeline by Nebraska and Kansas was in the negotiation stages. Commissioner Wolfe proceeded to thank said States for their efforts in reaching a final resolution on the matter. Commissioner Wolfe closed by touching on the pending litigation between the three States and provided confirmation that a special master had been assigned to the case.

## **Report of the Commissioner from Nebraska**

Commissioner Dunnigan reported that using current accounting procedures, Nebraska had a positive five-year average for the period ending in 2010 and based on projected accounting would likely be in compliance through 2011 as well. Commissioner Dunnigan stated that Nebraska intends to stay in compliance with the help of the Upper, Middle and Lower Republican Natural Resource Districts (NRDs), whose boards have voted to adopt a third generation of Integrated Management Plans (IMPs). Said IMPs were modified to from their previous form to address concerns regarding water-short year administration.

Commissioner Dunnigan pointed out that all of the IMPs adopted by the NRDs contain controls that would require, when necessary, the shutdown of wells in rapid response areas during water-short years as part of compliance efforts, as well as provisions to administer stream flows in a manner that will ensure Nebraska maintains compliance. The IMPs also contain provisions to continue to reduce ground water pumping volumes and conduct evaluations annually to determine if additional long-term pumping adjustments are necessary. The revised IMPs contain comprehensive forecasting mechanisms designed to predict the compliance outcome for Nebraska in dry years. The IMPs also contain detailed descriptions of triggers to indicate when additional management actions are needed. Commissioner Dunnigan welcomed constructive dialogue from Kansas in hopes of addressing any existing or potential concerns surrounding the implementation of the IMPs.

Nebraska will also continue to work with the Tri-Basin Natural Resources District to finalize an IMP. While involvement by the Tri-Basin Natural Resources District is not necessary to ensure compliance, the plan would limit groundwater depletions to the same volume as groundwater imports. The 27-member Republican River Sustainability Task Force continues to meet and works towards defining and meeting water sustainability goals in the Republican River Basin. The task force also develops and recommends plans to help avoid water-short years within the Republican River Basin. The task force will be working to summarize their efforts in a report to the Nebraska legislature.

Commissioner Dunnigan assured the RRCA that Nebraska would continue to invest in long-term solutions such as CREP and AWEP to reduce consumption in the Republican River Basin. Nebraska also continues to invest in the science necessary to support future sound management practices. This work includes specific evaluations of augmentation sites throughout the Republican River Basin, and the evaluation of riparian vegetation on water supplies, just to name a few. In collaboration with the Republican River Management District Association, Nebraska is developing modeling tools to support the evaluation of potential conjunctive management options throughout the Republican River Basin. Commissioner Dunnigan affirmed Nebraska's willingness to work with the other States through the WaterSMART Basin Studies program to develop the aforementioned tools.

Commissioner Dunnigan concluded by reiterating Nebraska's intent to comply with the Republican River Compact. Nebraska will continue to evaluate the needs of the Republican River Basin and make changes as necessary to remain in compliance and continued collaboration with all stakeholders in the basin, including Colorado and Kansas, the NRDs, surface water districts, individual water users, and the U.S. Bureau of Reclamation (USBR).

Commissioner Dunnigan introduced Tom O' Connor from the Nebraska Department of Natural Resources. Mr. O'Conner opened by mentioning that data had been omitted from the first version of the 2010 Water Administration Report. A new revised version was distributed to interested parties and made available on the Nebraska E&R website. Mr. O'Conner then proceeded to report on the water administration activities in Nebraska for calendar year 2010. In summary, activities included issuance of closing notices for failure to submit water use reports, issuance of various pumping schedules, regulating notices and closing notices to water users associated with Riverside Canal, Meeker-Driftwood Canal, Cambridge Canal, Frenchman Valley and H&RW Irrigation Districts, as well as opening and closing notices to various storage permit holders.

## **Report of the Commissioner from Kansas**

Commissioner Barfield opened by discussing pertinent legislative issues in the State of Kansas that relate to the Republican River Basin. The first was the appointment of Dale Rodman by Governor Brownback as the 15<sup>th</sup> Kansas Secretary of Agriculture. The second was an initiative by Governor Brownback to focus on the state of the Ogallala aquifer. As part of this focus, a summit was held on July 21, 2011 to discuss water supply issues which resulted in the formation of a legislative committee. Kansas is expecting to see two to three specific pieces of legislation during the 2012 year as a result of the summit. Additional legislation may also be seen during the 2013 legislative year.

Commissioner Barfield then proceeded to discuss the 2011 legislative session, focusing on three significant bills. The first created the Water Right Conservation Program allowing citizens to voluntarily place water rights into a non-use status for up to 10 years. The second was a change to House Bill 231 which created accounts in an effort to make the program more attractive and provide additional flexibility. The third was a substitute for House Bill 2133, which addressed how potential funds, received through litigation with Colorado and Nebraska, could be potentially utilized.

Commissioner Barfield reported that climate conditions in parts of Kansas, as a result of La Nina, are reminiscent of some of the driest years on record. A drought declaration is in effect in 52 of the 105 counties in Kansas. As a result Kansas has instituted, in addition to amendments to the flex account, an emergency drought term program that allows water users to borrow from their 2012 authorization in order to finish out their 2011 crops. As of August 30, 2011, 706 applications to make use of the program were accepted for filing.

In other areas of Kansas, Commissioner Barfield reported it had been a very active water administration year. Very timely rains had produced great crops in the Republican part of the basin in northwest and north central Kansas. Portions of northeastern Kansas are dealing with significant flooding issues caused by high flows in the Missouri River.

Commissioner Barfield then turned to discussing the Republican River Basin specifically, reporting that Kansas was fully in compliance with the compact. It was noted that the entire basin is either closed in appropriations or managed under the principle of safe yield. Also, all wells are metered and actively administered to ensure records are kept.

Groundwater Management District No. 4 in the northwest Kansas has been very active in exploring the continued economic viability of the ground water resource. In order to concentrate their efforts, they have identified six high priority areas that have seen significant water level declines. The District is very involved with programs under AWEP and other state and federal programs to reduce water use. A version of the Republican River Compact model is utilized by the Groundwater Management District No. 4 to project future conditions within the District's boundaries. A brief discussion of the Groundwater Management District No. 4's activities with stakeholders concluded Commissioner Barfield's report.

### Report by the U. S. Bureau of Reclamation

The USBR report was given by Mr. Aaron Thompson of the Nebraska office. Mr. Thompson highlighted the USBR's operation in 2010 within the Republican River Basin. Mr. Thompson noted that a report had been distributed containing all the pertinent information with one notable exception:

• On October 2010 a safety issue with Red Willow Dam was reported. The USBR is working on a corrective action report and on August 30, 2011 a bid was opened for the construction repairs. The apparent low bid came in at 15.3 million.

The USBR's operations report is attached as Exhibit C.

## Report by the U.S. Geological Survey

Mr. John Miller reported on the activities of the U.S. Geological Survey (USGS) in the Republican River Basin for 2010. Mr. Miller provided a packet containing the annual data report published by the USGS and all of the graphs presented at the meeting. The water year reported on for each site is from October 1 to September 30. Mr. Miller proceeded to summarize the mean and median flows detailed in his report.

Upon completion of Mr. Miller's report, Commissioner Barfield discussed the interesting hydrologic conditions within the basin and noted patterns of low and high precipitation.

The USGS report is attached as Exhibit D.

## **Engineering Committee Report**

Ms. Megan Sullivan of Colorado presented the Engineering Committee Report. Copies of the report were presented to the RRCA.

The Engineering Committee and technical representatives from each of the three States worked on a number of items assigned at the August 12, 2010 annual meeting. Ms. Sullivan provided an update on the status of each assignment as follows:

- Complete the user's manual for accounting procedures and provide a resolution for its adoption. This assignment should be continued on to next year as the three States could not come to an agreement.
- Exchange by April 15, 2011 the information listed in Section V of the RRCA Accounting
  Procedures and Reporting Requirements: Each state exchanged its model data sets by April 15,
  2011 or shortly thereafter. The States exchanged their final data, with the exception of Colorado
  meter data, in August of 2011. Willem Schreuder of Principia Mathematica completed a model
  run based on this data and provided the results on the RRCA website. Data sets were collected
  by the Engineering Committee for stream flow, climate records, diversion records, and reservoir
  evaporation records for the three States in cooperation with the USGS, U.S. Bureau of
  Reclamation, and U.S. Army Corps of Engineers for 2010. However, final accounting for 2010
  was not completed.
- Continue efforts to resolve concerns related to varying methods of estimating ground and surface water irrigation recharge and return flows within the Republican River Basin and related issues: Kansas provided a copy of six articles regarding irrigation efficiencies both Colorado and Nebraska. No additional progress was reported on this issue.
- Retain Principia Mathematica to perform ongoing maintenance of the groundwater model and periodic updates requested by the engineering committee: Each state separately contracted with Principia Mathematica for said service.

- Continue development of a five-year accounting spreadsheet/database for adoption at the 2010 annual meeting or earlier: No progress was reported on the assignment. Ms. Sullivan recommended continuing the assignment through the following year.
- Continue review of Colorado's augmentation proposal: The proposal is subject of non-binding arbitration and was not pursued by the engineering committee.
- Continue efforts to finalize accounting data for 2008 and 2009.
- By October 15, 2010, the Engineering Committee will meet to discuss issues surrounding model inputs and accounting data and provide meter data: Unresolved issues subject to non-binding arbitration as well as Kansas data requests continue to prevent agreement on accounting data. Colorado was unable to provided final meter data. Preliminary data was collected and is under review.
- By October 15, 2010, the Engineering Committee will meet to discuss issues preventing agreement on final accounting for 2006 to 2009: Unresolved issues subject to non-binding arbitration and Kansas data requests continue to prevent agreement on model results and accounting data.
- Discuss water-short year accounting for Beaver Creek: The proposal is subject of non-binding arbitration and has not been pursued by the engineering committee.
- Discuss and resolve the issue of missing precipitation data: A subcommittee of groundwater modelers from each state met to resolve this issue. Recommendations were detailed in an attachment to the Engineering Committee report. Ms. Sullivan advised the RRCA to take specific actions to accept the procedure outlined in the Engineering Committee Report for compact years 2008 and forward.

The Engineering Committee discussed a number of other issues not specifically assigned by the RRCA. The first is the need to relocate the stream flow measurement gage at Guide Rock to a point approximately two miles downstream from its present location. The Engineering Committee recommended that the RRCA recognize this need and assign the task to the committee for further review.

The second issue was a request by the State of Colorado to consider applying revised area-capacity tables to current and past accounting for Bonny Reservoir.

The third issue that was discussed by the Engineering Committee related to a petition for a variance request for a new surface water permit in the State of Nebraska. Nebraska will send the submitted application, and any future applications, to the other States and the USBR and allow the mandated 60 days for comment.

The fourth topic of discussion was a request by the State of Nebraska to develop a framework for submitting and reviewing any future augmentation proposals that came before the RRCA.

Ms. Sullivan concluded the Engineering Committee report by listing the tasks that should be reviewed by the Engineering Committee in the coming year.

The Engineering Committee's report is attached as Exhibit E.

### **Conservation Committee Report**

Mr. Pat Erger, representing the USBR, provided the Conservation Committee status report on the study of the effect of non-federal reservoirs and terraces. The study plan was approved by the RRCA at their annual meeting in 2004 and essentially utilized a water balance model to estimate impacts of reservoirs and terraces.

Mr. Erger informed the RRCA that the study had been completed. The last unresolved issue was a question of where to store the study data. This issue was to be further explored by the Engineering Committee. Mr. Erger reported that the actual study costs had been 1.3 million and that as a result of the study a number of master's theses and one doctoral thesis would be published.

#### Status of 2006, 2007, 2008, 2009 and 2010 Final Accounting

Commissioner Wolfe noted that this topic was not up for action at the current meeting. The RRCA recognizes that the States will continue to work through the Engineering Committee on finalization of data and other information required for adoption of final accounting for these years.

#### Amending Rule 14

Commissioner Dunnigan informed the commission that at the previous year's annual meeting the RRCA discussed amending Rule 14. This task was assigned to the Engineering Committee and is not reflected in the Engineering Committee Report. Commissioner Dunnigan moved to add the action to the current list of Engineering Committee assignments. The motion was seconded by Commissioner Barfield and passed unanimously.

### Action on Engineering Committee Report and assignments

Commissioner Barfield, without re-reading the items, moved to assign the 15 items listed in Ms. Sullivan's report to the Engineering Committee and approve the Engineering Committee report. Commissioner Dunnigan seconded and the motion passed unanimously.

Commissioner Barfield then moved to adopt the procedure that was outlined by the Engineering Committee for filling missing precipitation data in the groundwater model for 2008 forward. Commissioner Dunnigan seconded and the motion passed unanimously.

Commissioner Dunnigan put forth a motion to approve the relocation of the Guide Rock stream flow gage. The new location would be at the Highway 136 river bridge just south of Guide Rock, Nebraska. Commissioner Barfield seconded and the motion passed unanimously.

## **Remarks from the Public**

Commissioner Wolfe opened the floor for public comments by providing a brief background on the history of Colorado's compliance actions as they relate to Bonny Reservoir, the Compact Compliance Pipeline, and negotiations with Kansas and Nebraska.

Mrs. Audrey Hayes was the first to speak. Mrs. Hayes spoke on behalf of herself in support of preserving Bonny Lake and asked the Colorado to reconsider their actions.

Mr. Lincoln Wilson, a resident of Hale, CO, spoke briefly and asked the RRCA if there had been any research done to judge the impacts of Bonny Reservoir as a point of recharge to the Ogallala aquifer.

Mr. Harold Shandy, a resident of Hale, CO, was the third to speak. Mr. Shandy raised a number of practical considerations with the draining of Bonny Reservoir.

Mr. Richard Pettibone, a resident of Kanorado, KS, voiced his support for the continued existence of Bonny State Park and petitioned Colorado to reconsider their actions.

Mrs. Sue Jarrett, a resident of Wray, CO, spoke in opposition for the compliance measures Colorado had and will take to come into compliance with the Compact. She also discussed her concern regarding water level declines and there potential effects on domestic water supplies.

Mrs. Deb Daniel, spoke on her own behalf and encouraged the RRCA to hold future meetings within the boundaries of the Republican River Basin.

Mr. Russell Marshall, spoke on his own behalf encouraging the RRCA to renegotiate the conditions of the Compact.

Commissioner Wolfe and Commissioner Barfield closed the public comment section of the meeting by responding to the comments and concerns of the public.

## **Future Meeting Arrangements**

Commissioner Barfield acknowledged that the next two meetings of the RRCA would be held in the State of Kansas; one meeting in the Lower Republican Basin and the other in the Upper Republican Basin. The details will be disseminated to the States once a decision has been made as to dates, location, etc. All Commissioners agreed to discuss over the next year, the possibility of holding the next annual meeting in July or August.

### **Adjournment**

Commissioner Wolfe called for a motion to adjourn. Commissioner Dunnigan so moved and Commissioner Barfield seconded. The motion passed unanimously. The meeting adjourned at 11:44 am.

Dick Wolfe, Chair, Colorado Commissioner

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David W. Barfield, Kansas Commissioner

Brian Dunnigan, Nebraska Commissioner

# <u>Exhibits</u>

Exhibit A:	List of meeting attendees
Exhibit B:	Agenda
Exhibit C:	USBR Operations Report
Exhibit D:	USGS Report
Exhibit E:	Engineering Committee Report
Exhibit F:	Annual Meeting Transcript

# <u>Exhibit A</u>

# Republican River Compact Commissioners Annual Meeting

## Attendance List

Burlington CO

August 31, 2011

Name Representing

Dick Wolfe	Colorado Commissioner, Chair
Brian P. Dunnigan	Nebraska Commissioner
David W. Barfield	Kansas Commissioner
Mike Sullivan	Colorado Division of Water Resources
Willem Schreuder	Colorado – Principia Mathematica
Peter Ampe	Colorado Attorney General's Office
Megan Sullivan	Colorado Division of Water Resources
Chris Grunewald	Kansas Attorney General's Office
Burke Griggs	Kansas Department of Agriculture
Scott Ross	Kansas Department of Agriculture
Chris Beightel	Kansas Department of Agriculture
Justin Lavene	Nebraska Attorney General's Office
Jim Schneider	Nebraska Department of Natural Resources
Tom O'Connor	Nebraska Department of Natural Resources
Robert Merrigan	MR-NRD
Rien Holloway	Tri-Basin NRD
Craig Scott	United States Bureau of Reclamation
Brad Edgerton	FCID
Chris Beightel	KS-DWR
Burke Griggs	KS-DWR
Chris Grunewald	KS-Department of Agriculture
Chelsea Juricek	KS-DWR
Hongsheng Cao	KS-DWR
Byron Weathers	Republican River Water Conservation District
Jack Dowell	W-Y GWMD
Dave Keeler	Colorado Division of Water Resources
Richard Vail	Colorado Department of Parks and Wildlife
Grady McNeill	Colorado Department of Parks and Wildlife
Jim Martin	Colorado Division of Water Resources
Ben Krause	Colorado Division of Water Resources
Ivan Franco	Colorado Division of Water Resources
Chris Kucera	Colorado Division of Water Resources
Devin Ridnour	Colorado Division of Water Resources
Katie Radke	Colorado Division of Water Resources

#### Attendance List

# Burlington CO

Name	Representing
Mike Kube	United States Bureau of Reclamation
Kip Gjerde	United States Bureau of Reclamation
Paul Koester	Nebraska Department of Natural Resources
Sam Perkins	KS-DWR
Nate Jenkins	UR-NRD
Patrick J Eger	United States Bureau of Reclamation
Tom Riley	Fiztwater Group
Deb Daniel	Republican River Water Conservation District
Jim Koel Liket	KSU Manhattan
David Robbins	Republican River Water Conservation District
Dennis Montgomery	Republican River Water Conservation District
Tom Manaus	САРА
John Miller	USGS
Mike Delka	Bostwick Irrigation District
Shane Statur	Nebraska Department of Natural Resources
Mike Clements	LR-NRD
Aaron Thompson	United States Bureau of Reclamation
Shirley Phard	HACL
Dennis Coryell	Republican River Water Conservation District
Kenneth Albert	FVID
Bethleen McCall	САРА
Tom Mawaus	САРА
Richard Vail	CDPW
Russell Marshall	
Dianne Vance	
Richard Ramos	
Alice Yoder	
Ted Mosier	
Dayle Parapet	
Troy Boyd	
Dawn Schlosser	
Jon Van Nostrand	
C. H. Kendyul Henderson	

# Attendance List

# Burlington CO

Name	Representing
Jack Shawdy	
Debra Dulinia	
Harry Rogen	
Jake Mallory	
Gary Stivers	
Rick Carson	
Donny Musier	
Debbie Alexander	
Darrell Amalk	
Everett Moreland	
Larry Neutzman	
Brenda & Kenneth Cendrey	
Amy Barnes	
Mary White	
Sandra & Jim Weber	
Rita Campell	
Bob Esenarch	
Leo Schaal	
Leon and Shirley Mattheis	
Helen Newbury	
Betty Smith	
Norm Travis	
Larry Weyerman	
Rod Dallman	
Dallas Schaal	
Richard Flock	
Don Caldwell	
Melva Stahlecker	
Robin Liming	
Jessica Erker	
Lois Henry	
Dick Pettibone	
Harold W. Prichard	

# Attendance List

# Burlington CO

Name	Representing
Jessi Fisher	
Chris Castillo	
Susan Richards	
Donald Rutraul	
Ted Shelby	
Eva Kissman	
Audrey Hase	
Don Stewart	
Pauline Kewach	
Judy Andrews	
Steve Pare	
Roberta & Merle Worden	
Jim Koellket	
Kay Stivers	
Tom Riley	
Allen Peterson	
Ezra S. Yoder	
Lincoln Wilson	
R.B. Smith	
Rynal Amack	
Rodney Fisher	
Kathy Amack	
Sanchez Filkens	
Brian Tracy	
Leland Monroe	
Shirley Johnson	
Beulah P. Scherer	
Dorathy Penny	
Ruby L. Munson	
Bob Chuckwell	
Cyle Shaw	
Mary & Harold Shandy	
Dale Hanson	

## Attendance List

# **Burlington CO**

August 31, 2011

Name Representing

Lewis & Merna Carlin Carol J. Boden Louis & Fenn Stout Dick White Don fell Raymond Palhowist Dick Pettibone Delman & Rolieta Moellenurg Rosetta Palkowitsh Gordon Kraich Phyllis Peterson Chris Grunewald Larry Beckman Loren Lambert

## <u>Exhibit B</u>

## AGENDA FOR

# 51<sup>ST</sup> ANNUAL MEETING OF THE

## **REPUBLICAN RIVER COMPACT ADMINISTRATION**

## August 31, 2010, 9:00 AM MST

## Burlington Community and Education Center, Burlington, Colorado

- 1. Introductions
- 2. Modification and Adoption of the Agenda
- 3. Status of Report and Transcript for August 12, 2010 Annual Meeting
- 4. Status of Previous annual and Special Meetings Reports and Transcripts from 2008 and 2009
- 5. Report of Chairman and Commissioner's Reports
  - a. Nebraska
  - b. Colorado
  - c. Kansas
- 6. Federal Reports
  - a. Bureau of Reclamation
  - b. U.S. Army Corps of Engineers
  - c. U.S. Geological Survey
- 7. Committee Reports
  - a. Engineering Committee
    - i. Assignments from 2010 Annual Meeting
    - ii. Committee Recommendations to RRCA
    - iii. Other Matters
    - iv. Recommended assignments for Engineering Committee
  - b. Conservation Committee
- 8. Old Business
  - a. Status of 2006, 2007, 2008, 2009 and 2010 Final Accounting
  - b. Status of modification of Rules and regulations to reflect the current version of the accounting procedures and model
- 9. New Business and Assignments to Compact Committees
  - a. Action on Engineering Committee Report and assignments
  - b. Action on procedure for missing precipitation data
  - c. Action on the relocation of the Guide Rock stream flow gage
- 10. Remarks from the Public
- 11. Future Meeting Arrangements
- 12. Adjournment

The 50<sup>th</sup> RRCA annual report is hereby approved on this 12<sup>th</sup> day of September 2013.

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David W. Barfield, Chair, Kansas Commissioner

Dick Wolfe, Colorado Commissioner

۹. Brian Dunnigan, Nebraska Commissioner



# NEBRASKA-KANSAS AREA OFFICE ACTIVITIES REPORT

# **REPUBLICAN RIVER**

# **COMPACT MEETING**

**Burlington**, CO

U.S. Department of the Interior Bureau of Reclamation Great Plains Region Nebraska-Kansas Area Office



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Bureau of Reclamation Nebraska-Kansas Area Office

# **REPUBLICAN RIVER COMPACT MEETING**

August 31, 2011 Burlington, Colorado

# **Operations and Maintenance Activities**

#### 2010 Operations

As shown on the attached Table 1, precipitation in the Republican River Basin varied from 96 percent of normal at Lovewell Reservoir to 143 percent of normal at Bonny Reservoir. Total precipitation at Reclamation project dams ranged from 21.46 inches at Medicine Creek Dam to 31.66 inches at Harlan County Dam.

Inflows varied from 69 percent of the most probable forecast at Enders Reservoir to 180 percent of the most probable forecast at Harlan County Lake. Inflows into Enders Reservoir totaled 7,752 AF while inflows at Harlan County Lake totaled 239,054 AF.

Average farm delivery values for total irrigable acres were as follows:

District Frenchman Valley H&RW Frenchman-Cambridge

Almena

Bostwick in NE

Kansas-Bostwick

Farm Delivery 1.0 inches 0.0 inches 4.6 inches

1.8 inches 3.8 inches 9.2 inches

#### 2010 Operation Notes

**Bonny Reservoir** -- The annual precipitation total of 24.57 inches at Bonny Dam was 143 percent of average. The annual computed inflow of 15,989 AF to Bonny Reservoir was between the normal-year and wet-year forecasts. The reservoir level began the year at elevation 3651.00 feet and gradually increased to elevation 3654.58 feet on May 22<sup>nd</sup>. Runoff from storms in early July increased the reservoir level 4.2 feet to a peak elevation of 3657.87 feet on July 8<sup>th</sup> (14.1 feet below full pool). River releases were made during the months of July and August in accordance with orders of the State of Colorado. A total of 5,007 AF was released. Another 2,422 AF was released into Hale Ditch. The reservoir elevation at the end of the year was 19.7 feet below the top of conservation at 3652.27 feet.

Enders Reservoir -- The annual precipitation total of 24.40 inches at Enders Dam was well above normal (128 percent). The 2010 inflow into Enders Reservoir of 7,752 AF was between the dry-year and normal-year forecasts. This was the 43<sup>rd</sup> consecutive

year with below-normal inflows in which the conservation pool did not fill. The reservoir level began the year at elevation 3091.32 feet (21.0 feet below top of conservation). The reservoir level increased slightly during the spring to a peak elevation of 3092.87 feet on June 24<sup>th</sup> and then gradually decreased through mid October reaching elevation 3091.87 feet on October 13<sup>th</sup>. Due to the extremely low water supply available, no water was released from Enders Reservoir. The end of the year reservoir level was 19.8 feet (3092.49 feet) below the top of conservation

Swanson Lake -- The annual precipitation total of 23.01 inches at Trenton Dam was 115 percent of normal. The inflow of 41,512 AF to Swanson Lake was between the normal-year and wet-year forecasts. The lake level began the year at elevation 2738.17 feet and gradually increased to a peak elevation of 2745.59 feet (6.4 feet below the top of conservation) on June 22<sup>nd</sup>. The reservoir level decreased during the irrigation season and reached a minimum elevation of 2739.54 feet on November 11<sup>th</sup>. The district diverted 19,469 AF into Meeker-Driftwood Canal from June 23<sup>rd</sup> through September 3<sup>rd</sup>. At the end of the year the reservoir level was 11.9 feet below the top of conservation at 2740.14 feet.

Hugh Butler Lake -- The annual precipitation total of 21.73 inches at Red Willow Dam was 111 percent of normal. The annual inflow of 20,120 AF into Hugh Butler Lake was slightly above the wet-year forecast. The reservoir level at the first of the year was 2554.07 feet, 27.7 feet below the top of conservation. Due to dam safety concerns, releases were made throughout the year to maintain the reservoir elevation between 2552.00 and 2554.00 feet. No irrigation releases were made from Hugh Butler Lake in 2010. The end of year storage at Hugh Butler Lake was the lowest end of December storage ever recorded at the site (elevation 2553.52 feet), 28.3 feet below the top of conservation.

Harry Strunk Lake -- The annual precipitation total of 21.46 inches at Medicine Creek Dam was 104 percent of normal. The inflow of 49,407 AF was between the normal-year and wet-year forecasts. The reservoir level at the beginning of 2010 was only .5 foot below the top of conservation. The reservoir was allowed to fill on April 16<sup>th</sup> and the reservoir level gradually increased to elevation 2368.76 feet (2.7 feet into flood pool) on June 23<sup>rd</sup>. Uncontrolled spills reached approximately 90 cfs from the dam. Irrigation releases began on July 14<sup>th</sup> and ran through September 7<sup>th</sup> reducing the reservoir level to 2363.15 feet. The district diverted 24,280 AF into Cambridge Canal. Late fall and early winter inflows increased the level of Harry Strunk Lake to only 0.4 foot below the top of conservation at the end of the year (2365.71 feet).

Keith Sebelius Lake -- The annual precipitation at Norton Dam totaled 27.48 inches, which is 112 percent of normal. The total inflow of 12,245 AF was between the normal-year and wet-year forecasts. The reservoir was 9.7 feet below the top of conservation pool at the first of the year (2294.64 feet). The reservoir level slowly increased to elevation 2296.33 feet on June 11<sup>th</sup>. Runoff from June storms increased the level of Keith Sebelius Lake to a peak of 2299.48 feet on June 24<sup>th</sup>. Irrigation releases were made during July and August reducing the lake level by 1.4 feet. A total of 3,330 AF was diverted into Almena Canal. The lake level ended the year at

elevation 2296.81 feet (7.5 feet below the top of conservation).

Harlan County Lake -- The annual precipitation at Harlan County Dam totaled 31.66 inches of rainfall, which is 139 percent of normal. The 2010 inflow of 239,054 AF was between the normal and wet-year forecasts. Harlan County Lake began 2010 approximately 0.5 foot above the top of conservation pool, at 1946.19 feet. The lake level was maintained during January and allowed to fill to elevation 1947.89 feet by March 5<sup>th</sup>. The lake level was maintained near elevation 1947.0 feet through early June. Storm runoff increased the reservoir level to a peak elevation of 1949.66 feet on June 30<sup>th</sup>. River releases were staged up to 900 cfs and maintained through July 28<sup>th</sup> to evacuate flood storage. Irrigation releases started June 26<sup>th</sup> and continued through mid September. The lake level decreased to elevation 1944.85 feet by October 5<sup>th</sup>, and then increased through the fall and early winter. The reservoir elevation was 1946.05 feet (0.3 foot in the flood pool) on December 31, 2010. A ten year summary of Harlan County Lake operations is shown on Table 3.

Lovewell Reservoir -- The 2010 precipitation at Lovewell Dam totaled 26.39 inches, which was 96 percent of normal. The reservoir elevation at the beginning of 2010 was 1579.26 feet (3.3 feet below the top of conservation pool). The pool level gradually increased, filling the conservation capacity on May 16<sup>th</sup> (1582.6 feet). Runoff from June storms increased the reservoir level to a peak elevation of 1587.58 feet on June 27<sup>th</sup>. A 500 cfs flood release was made from July 1<sup>st</sup> through July 16<sup>th</sup>. The flood release combined with canal releases to decrease the reservoir level and the flood pool was evacuated on July 25<sup>th</sup>. Irrigation releases to the canal began in earnest on June 23<sup>rd</sup> and continued through September 14<sup>th</sup>. A total of 38,043 AF was diverted into Courtland Canal from Lovewell Reservoir. The reservoir level at the end of the year was 1579.47 feet (3.1 feet below top of conservation).

#### Current Operations (As of 8/15/11)

**Bonny Reservoir** – The reservoir level is approximately 19.0 feet below the top of conservation. Bonny Dam has recorded 14.34 inches of precipitation during the first seven months of the year (123% of average). A total of 2,024 AF was released during June and July. The reservoir level is 1.1 foot less than last year at this time.

Swanson Lake – The lake level is currently 10.4 feet from full and is nearly the same as last year at this time. Precipitation for the year is 105% of normal (14.24 inches). Irrigation releases are being made from Swanson Lake.

Enders Reservoir - The reservoir level is currently 18.3 feet below full and 1.7 feet above last year at this time. Enders Dam recorded 16.95 inches of precipitation during the first seven months of the year. Normal precipitation during this period is 12.92 inches. Due to the water supply shortage, H&RW Irrigation District is not irrigating for the tenth year in a row. This is the eighth consecutive year that Frenchman-Valley Irrigation District has not received storage water for irrigation.

Hugh Butler Lake – The lake level is currently 27.3 feet below full. The precipitation total so far this year is 15.47 inches (121% of normal). The lake level is 0.7 foot above last year at this time. Releases are being made from Hugh Butler Lake to maintain the reservoir elevation within the parameters provided by the Interim Operating Plan implemented after cracking was discovered in the embankment.

Harry Strunk Lake – The lake level is currently 3.0 feet below the top of conservation. Releases were made throughout the late winter and spring to maintain the reservoir elevation below the flood pool. The lake filled on April 17<sup>th</sup> with the reservoir level peaking on May 30<sup>th</sup> at 2.3 feet into the flood pool. Precipitation at the dam during the first seven months of the year was 15.90 inches (115% of normal). The lake level is currently 2.0 feet below last year at this time.

Keith Sebelius Lake – Currently 7.4 feet below full. Lake level is 0.9 foot below last year at this time. Irrigation releases began on July  $3^{rd}$  with limited delivery expected in 2011. Precipitation at the dam during the first seven months of the year was 15.45 inches (96% of normal).

Harlan County Lake – The current water surface level is approximately 0.4 foot below full. The lake level is 0.8 foot below last year at this time. Harlan County Dam has recorded 17.87 inches of precipitation so far this year. The available irrigation supply from Harlan County Lake on June 30<sup>th</sup> was 156,000 AF, indicating that "Water-Short Year Administration" would not be in effect. Irrigation releases began on June 14<sup>th</sup>.

Lovewell Reservoir – The reservoir level is currently 0.5 foot above the top of conservation and approximately 4.2 feet above last year's elevation at this time. Lovewell Dam recorded 19.51 inches of precipitation during the first seven months of the year (113% of average). Flood releases were made during the spring. The reservoir level peaked on May 27<sup>th</sup>, 7.5 feet into the flood pool.

#### Bureau of Reclamation Nebraska-Kansas Area Office

A summary of data for the first seven months of 2011 is shown on Table 2.

#### Other Items

#### Inspections

Comprehensive Facility Reviews were conducted at Enders, Trenton, and Lovewell Dams during 2010. Annual Site Inspections were conducted at all other NKAO facilities in 2010.

#### Safety of Dams

Enders Dam - A small depression was discovered near the outlet works stilling basin in August 2004. The depression has been attributed to a failure of the basin underdrain system. In the fall of 2008, Reclamation completed a drain grouting operation and installed temporary drainage features to correct the problem. Installation of a permanent groundwater control system was completed in the fall of 2010.

Red Willow Dam- A Safety of Dams Corrective Action Study was initiated in late February of 2010 as a result of the discovery of cracking in the Red Willow Dam embankment in October 2009. Releases continue to be made as necessary to maintain the reservoir elevation in the target range of 2552.0 to 2554.0 feet to ensure safety of the structure as well as the downstream area. Reservoir operations will continue to maintain this target range until repairs are complete.

Reclamation issued a solicitation on July 5 and the bid opening date is scheduled for August 30 for the repairs A contract award is expected by the end of September with construction beginning later this year. The construction period is currently estimated to be approximately 26 months.

# **Resource Management Activities**

#### Lower Republican Basin Feasibility Study

Title V, Section 510, of the Consolidated Natural Resources Act, S. 2789, Public Law 110-229 (May 8, 2008), authorized the Bureau of Reclamation to conduct the Lower Republican River Basin Feasibility Study (FS) to improve water supply reliability, increase water storage, and to improve water management efficiency. Federal funds have not been appropriated for Reclamation to perform any of the study tasks. If Congressional appropriations are received, Reclamation estimates that the feasibility study report and/NEPA compliance document could be prepared within 30 months.

Bureau of Reclamation Nebraska-Kansas Area Office Republican River Compact Administration August 31, 2011

#### Congressional Tour of Lower Republican River Basin

On April 8, 2010, the Kansas Water Office hosted an event at Lovewell Reservoir to present information on the Lower Republican Feasibility Study. The tour included presentations of alternatives from the Lower Republican Appraisal Report.

Attendees included representatives from the Kansas Water Office, the Kansas Division of Water Resources, the Kansas Division of Wildlife and Parks, the Kansas Farm Bureau, the Nebraska Department of Natural Resources, the Lower Republican Natural Resource District, the Bostwick Irrigation District in Nebraska, the Kansas Bostwick Irrigation District No. 2, the Republican Riparian Management Agency, Bureau of Reclamation, the Corps of Engineers

#### WaterSMART Basin Study Program

The states of Kansas and Nebraska submitted separate Basin Study proposals under Reclamation's WaterSMART Basin Study Program. Basin studies are comprehensive water studies that define options for meeting future water demands in river basins where imbalances in water supply and demand exist. While neither proposal was selected for funding as submitted, Reclamation is proposing to contribute up to \$100,000 towards an agreement to develop a cost-shared Plan of Study. This Plan of Study could serve as the basis for a potential Republican River Basin proposal for fiscal year 2012 that would exhibit a collaboration amount all three parties to the Republican River Compact and Final Settlement Stipulation of 2003, i.e. Nebraska, Kansas, and Colorado.

# WaterSMART Water Energy and Efficiency Grants and WaterSMART System Optimization Reviews

## **Bostwick Irrigation District in Nebraska**

On August 4, 2009, Commissioner Mike Conner announced that the Bostwick Irrigation District in Nebraska has been selected for two challenge grants. Projects include the replacement of open ditch laterals with buried pipe and a System Optimization Review (SOR), which will review the entire District and make recommendations for system improvements. The lateral pipe projects and the SOR were completed in 2010.

On July 29, 2010, Commissioner Mike Conner announced that the Bostwick Irrigation District in Nebraska has been selected for a WaterSMART challenge grant for a project which will replace 6.8 miles of open ditch lateral with buried pipe. The lateral projects were completed in the spring of 2011.

On May 19, 2011, Secretary of Interior Ken Salazar announced that the Bostwick Irrigation District in Nebraska has been selected for a WaterSMART challenge grant for a project

which will replace approximately 7.8 miles of open ditch lateral with buried pipe and will upgrade the operations of the Franklin Pump Canal with the installation of a variable frequency drive which will improve pumping efficiency. Construction on the laterals is set to begin in the fall of 2011.

#### Kansas Bostwick Irrigation District No. 2

In January, 2011, Reclamation announced that Kansas Bostwick Irrigation District No. 2 has been selected for a WaterSMART challenge grant for a project that will replace approximately 5.4 miles of open ditch lateral with buried pipe. Construction of these laterals is set to begin in the fall of 2011.

#### **Frenchman-Cambridge Irrigation District**

On May 19, 2011, Secretary of Interior Ken Salazar announced that the Frenchman-Cambridge Irrigation District has been selected for a WaterSMART challenge grant for a project that includes the installation of a pumping plant and pipeline which will allow the FCID to use their limited water supply more efficiently.

#### Water Conservation Field Services Program

#### **Republican River Basin Irrigation Management Project**

Reclamation continues to provide financial assistance through the Water Conservation Field Services Program (WCFSP) to the University of Nebraska Extension Service for an irrigation management demonstration project. Information is presented at annual field days at each site and at an average of 16 other meetings/conferences per year.

The primary goal of the program is to demonstrate research-based irrigation management strategies in farmer fields and provide a hands-on practical teaching environment for farmers and consultants to learn how to implement these practices.

#### Almena Irrigation District No. 5

In 2010, Reclamation provided financial and technical assistance through the WCFSP for a buried pipe lateral project on the Almena delivery system.

#### **Bostwick Irrigation District in Nebraska**

Reclamation is providing financial and technical assistance through the WCFSP for the automation of 10 check structures on Franklin Canal to improved delivery system operations.

#### **Drought Assistance**

#### Stockville, Nebraska – Municipal Well

Through the Reclamation States Emergency Drought Relief Act of 1991, Reclamation

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provided drought assistance to the Village of Stockville, Nebraska for the installation of a municipal well. The well construction was completed in July, 2010.

#### **Reservoir Management**

#### ADA compliance activities

The Great Plains Region has set a goal to complete universal accessibility upgrades at Reclamation facilities in 2010. All facilities are now considered to be ADA compliant.

#### Funding shortages in Nebraska Parks

Nebraska Game and Parks Commission has reduced services at three Reclamation reservoirs; Enders, Swanson and Box Butte. Reclamation continues to work with the Commission by assisting them in land resources management and recreation facility improvements using cost sharing cooperative agreements.

#### **Invasive Species**

The threat to the proper function of all aspects of NKAO projects caused by exotic and invasive species continues to be an issue for both Reclamation and our managing partners and contractors. The control of noxious weed and invasive species has become a serious budgetary issue for the NKAO's managing partners in Nebraska and Kansas.

The greatest potential threat to the NKAO's projects from exotic species would occur from an infestation of Zebra and/or Quagga Mussels (ZQM) at the reservoirs and associated water distribution facilities. Many of the NKAO's projects areas are located within a day's travel from waters known to be infested with ZQM. The NKAO has been working with our managing partners to increase public awareness, and perform monitoring at high risk reservoirs.

#### **Red Willow Reservoir**

Safety of Dams issues at Red Willow Dam required the NKAO to lower the water level to the reservoir's inactive pool. The reservoir will be held at approximate elevation 2553. This situation severely limits the reservoir's recreation, fisheries, flood control, and water supply benefits. The NKAO has worked cooperatively with the Nebraska Game and Parks Commission to address emerging issues at Red Willow such as extending a boat ramp and aerially seeding the drawdown zone with native grasses.

#### Lovewell Reservoir

In the spring 2011, water levels increased to about 7.5' above the top of conservation. The water levels were sustained at high level for an extended period of time causing damage to existing recreation facilities and creating extensive shore line erosion.

TABLE 1 NEBRASKA-KANSAS PROJECTS Summary of Precipitation, Reservoir Storage and Inflows CALENDAR YEAR 2010

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Percent 115 401 235 352 Probable 101 127 92 139 65 134 153 192 96 154 Of Most 121 41 ~ Total Inflow 17,984 185,740 340,094 45,405 15,989 7,752 41,512 12,245 239,054 64,386 26,202 20,120 49,407 50,038 100,264 492,406 Ř 0075 **0CT 8** SEP 7 AUG 24 AUG 23 AUG 31 SEP 20 **APR 28 JAN 1** JAN 1 JAN 1 **NOV 11** SEP 11 JAN 1 **UAN 1** NAU Minimum Storage 10213 8274 55414 303015 39294 59224 10270 15662 5673 29626 17400 22450 83738 93457 61821 187347 ЧĽ JUL 8 JUL 4 **JUN 14** JUN 16 JUL 19 **JUN 23** JUL1 APR 25 **JUN 24 JUN 22 JUN 23 JUN 24 JUN 27 JUN 23** JUL 24 JUN 26 Maximum Storage Content Date 29349 25016 21500 67896 17105 7578 39813 369129 52419 102105 137964 83144 290986 17941 127401 86127 ≞ ≮ Gain or 1,240 4,310 -269 1,564 428 306 3,214 526 -15,730 -323 -1,894 254 7,411 1,081 6,771 -15,186 Loss ЧĽ Storage 12-31-10 14,523 9,350 11,460 16,743 62,085 6,034 33,936 20,600 318,364 98,916 63,328 198,060 91,110 60,831 108,981 27,054 Ř Storage 12-31-09 10,213 61,100 33,630 17,386 320,258 78,514 213,790 83,699 107,417 8,922 10,220 15,662 55,314 26,528 98,662 6,357 Ř 115 Percent Of 110 Average 172 118 114 109 143 128 104 112 139 133 \$ 90 88 72 Total Precip. 18.96 24,14 27.59 27.09 24.57 24.40 23.01 21.73 21.46 27.48 31.66 26.39 31.42 20.86 28.09 15.12 Inches **Keith Sebelius** Hartan County Harry Strunk Davis Creek **Hugh Butler** Cedar Bluff Box Butte Reservoir Waconda Swanson Lovewell Calamus Webster Enders Bonny Merritt Kirwin

TABLE 2 NEBRASKA-KANSAS PROJECTS Summary of Precipitation, Reservoir Storage and Inflows

**JANUARY - JULY 2011** 

Probable 88 80 108 125 115 124 190 63 Of Most % 12,039 Inflow 7,286 29,280 5,847 29,634 72,463 Total 5,747 118,589 Ч 1,864 -2,009 -3,609 -6,900 -270 124 6,766 -14,551 Gain or Loss Ч 71,585 6,345 Storage 18,484 19,677 38,260 7,881 33,081 314,907 Ч 7-31-11 Storage 16,620 71,855 23,286 14,781 6,221 35,090 7-31-10 329,458 ЧF 31,494 123 96 120 105 115 113 Percent Of Average % 121 131 Total 15.45 14.34 16.95 14.24 15.90 15.47 17.87 19.51 Precip. Inches Keith Sebelius Harlan County Harry Strunk Hugh Butler Reservoir Swanson Lovewell Enders Bonny

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156,000 147,800	320,258 318,364	128% 119%	108% 139%	24.50 31.66	41,721 46,893		94,079 194,055	136,747 94,079 239,054 194,055
174,000	319,311	131%	133%	30.31		45,985		114,938
111,700	255,393	·	118%	26.92	*	38,197	21,237 38,197	21,237
14,400	116,299	·	91%	20.62		29,609		12,280
14,100	128,111		%66	22.51		32,620	0 32,620	0
0	107,050	-	100%	22.83		30,601	0 30,601	0
62,000	113,346	83%	73%	16.70		34,307	51,237 34,307	51,237
116,100	160,463	60%	74%	16.86		43,988	•	98,518
152,600	242,853	109%	123%	27.97		40,833		87,346
(AF)	(AF)	(22.76 inches) (% of Average)	(22.76 inches)	(Inches)	_	(AF)		(AF)
Water Supply On June 30th	Year Content	Reclamation Dams	Precip. (% of Average)	Precip.		Gross Evap.		utflow
Projected Irrig.	End of	Rep. Basin				,	•	

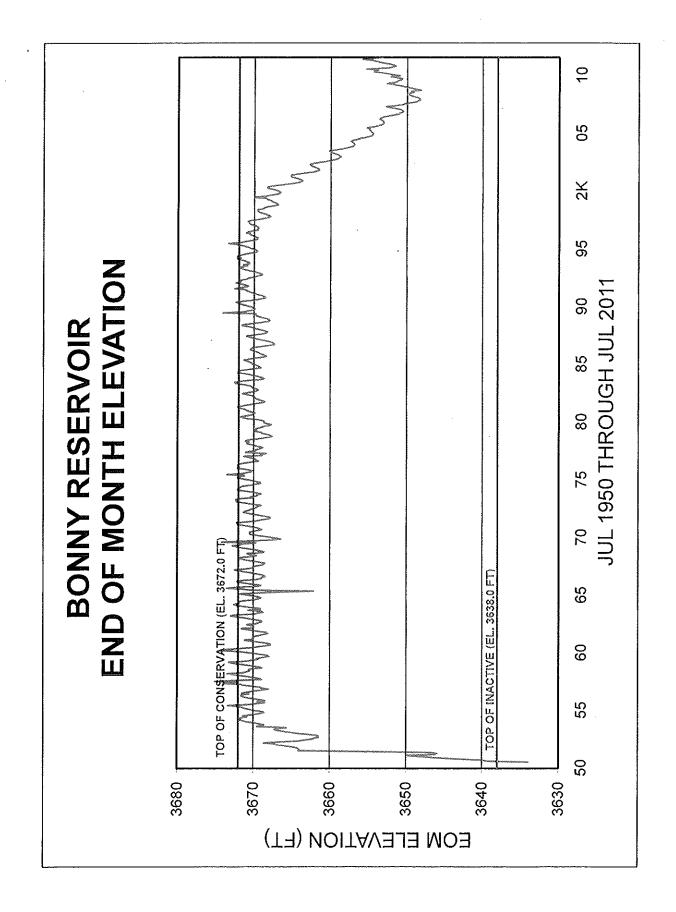
\*NOTE: On June 30, 2011 Projected Irrig. Water Supply was 156,000 AF.

RECLAMATION Managing Water in the West

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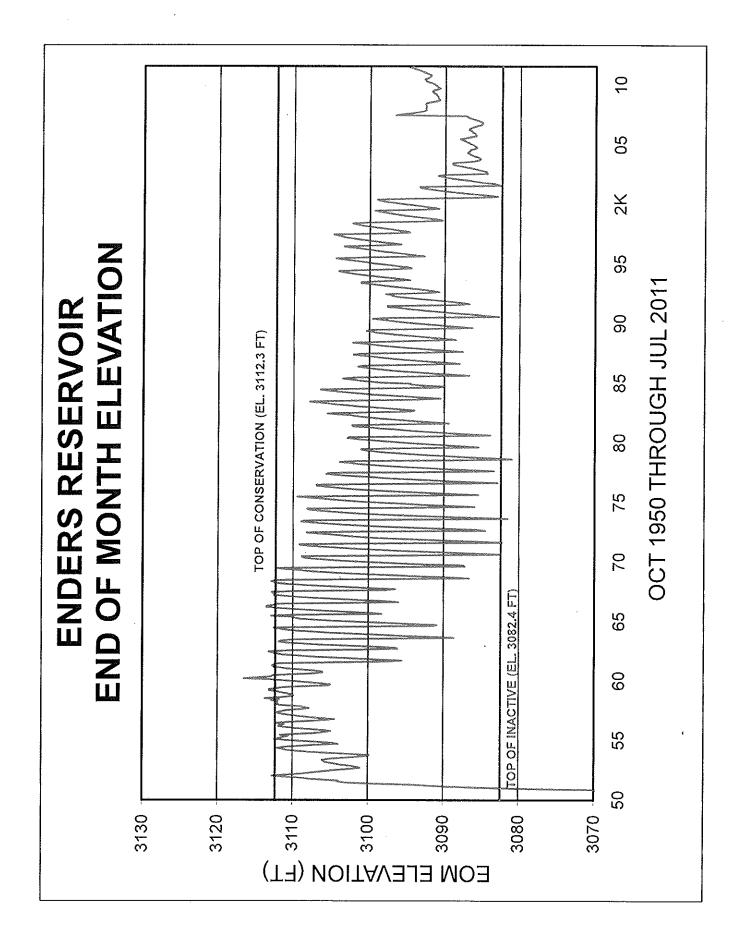
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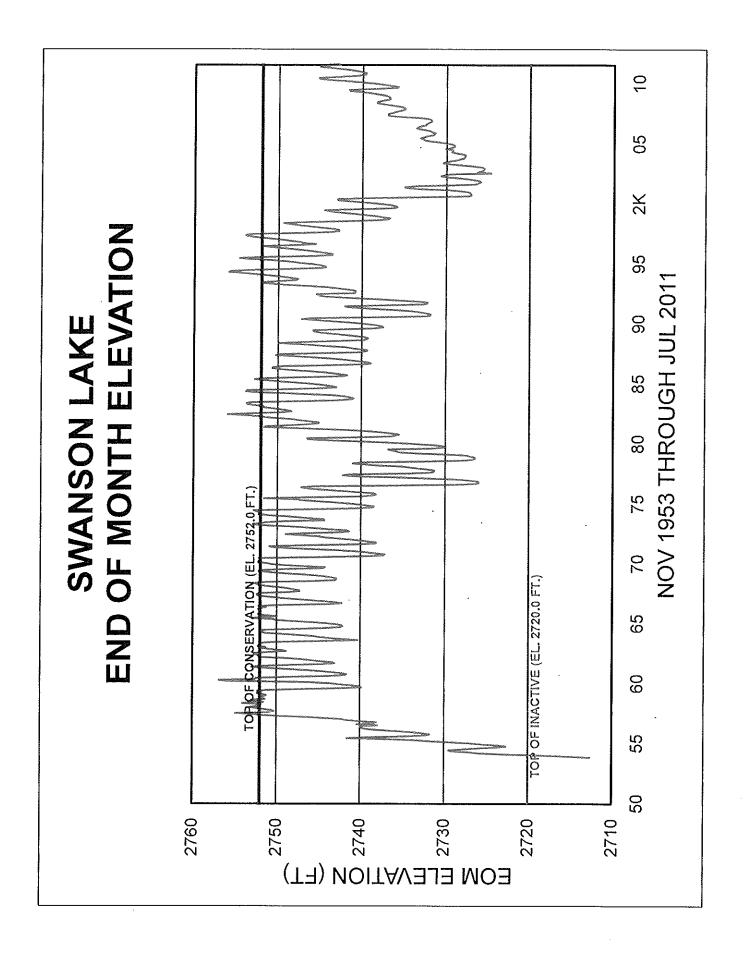


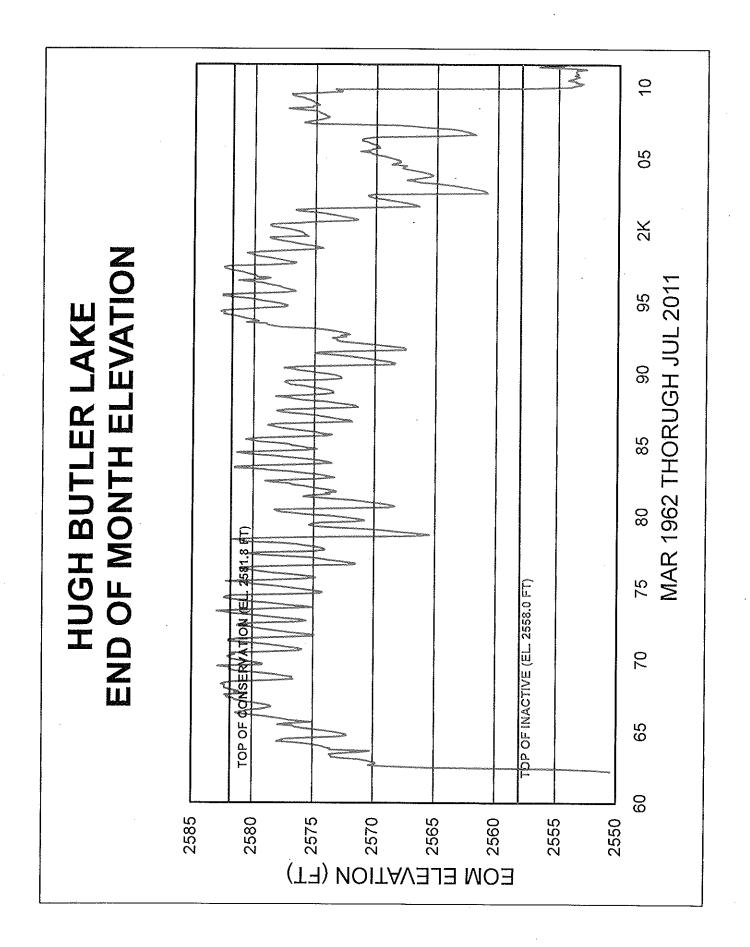
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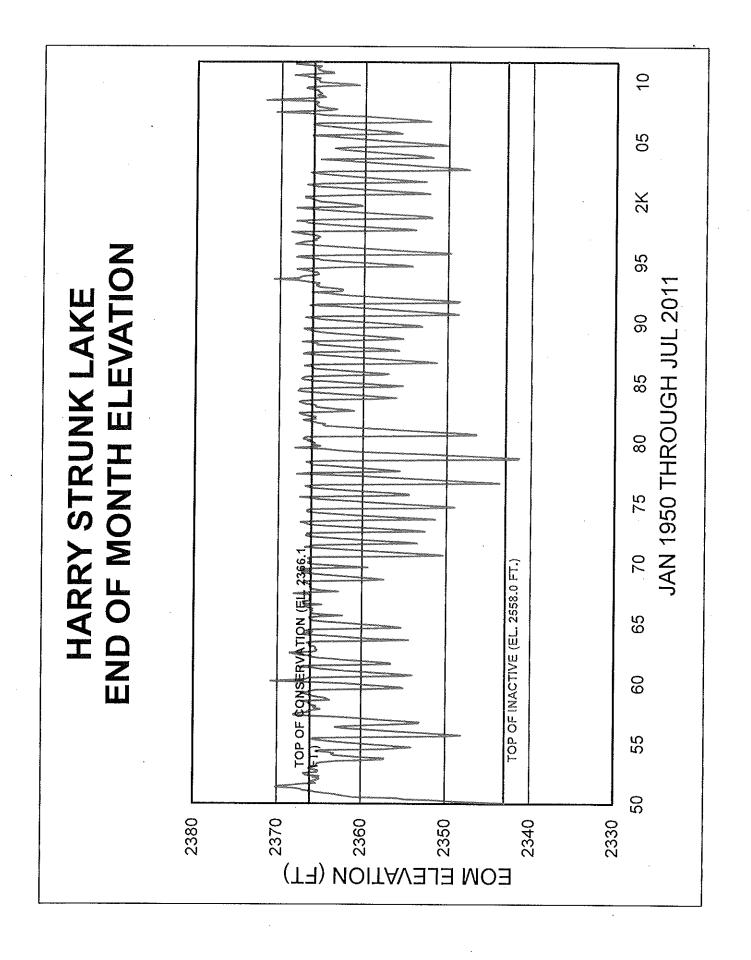


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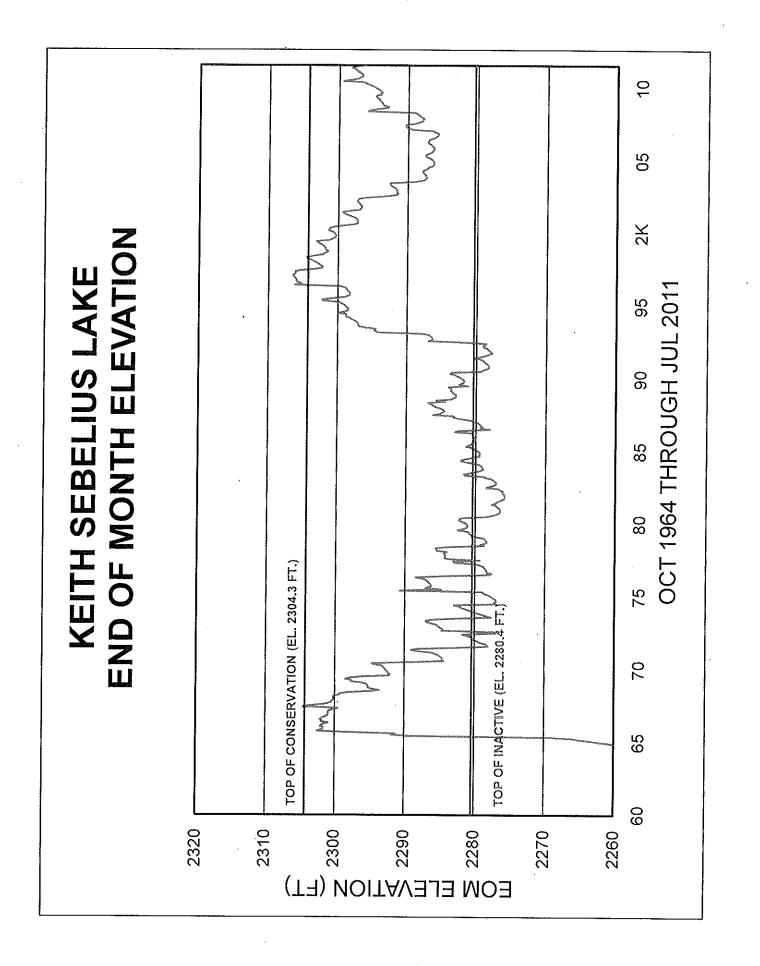




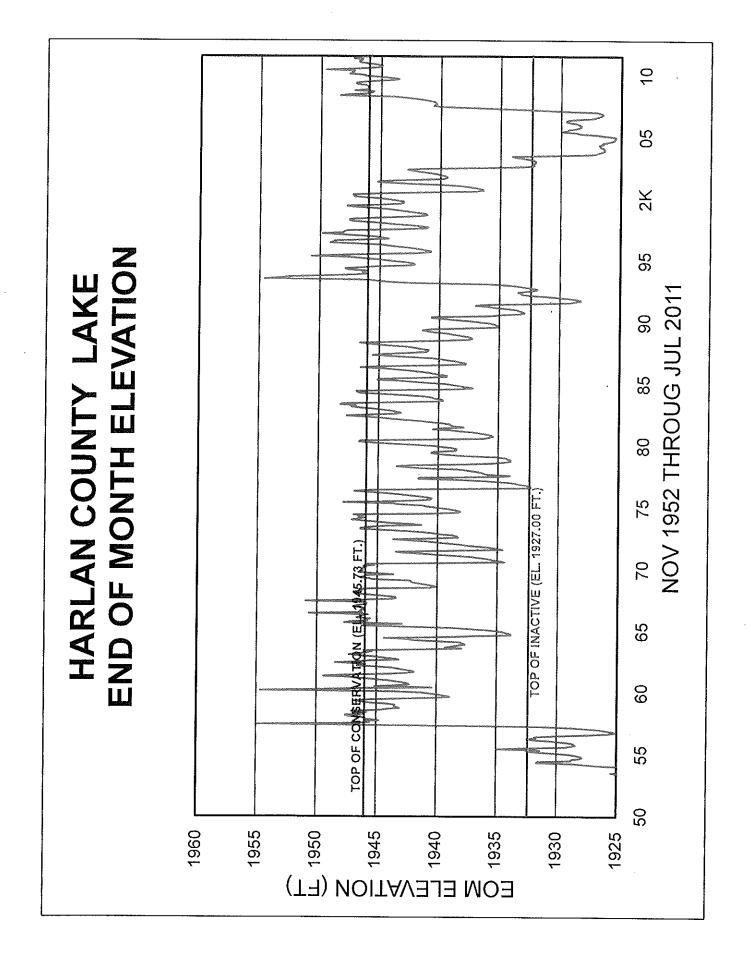
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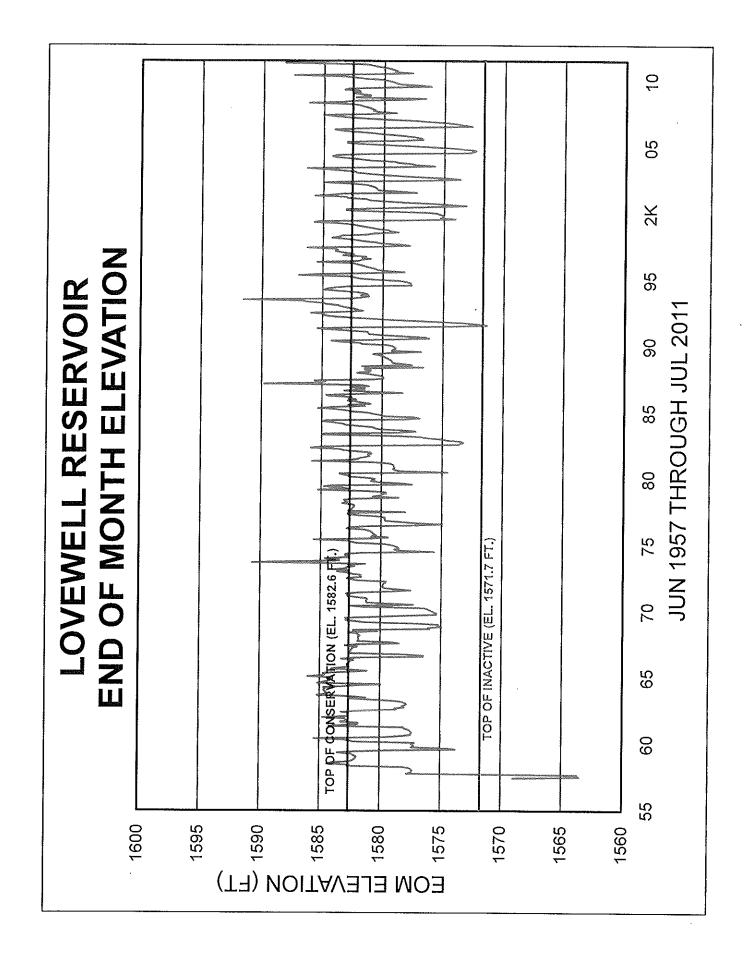
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By John Miller, North Platte Field Office Chief **Republican River Compact Administration** Presented to August 31, 2011 Burlington, CO

#### Nebraska Stream-Gaging Data **Republican River Compact** Water Year 2010

(DCP, date-collection platform; NDNR, Nebraska Department of Natural Resources; USACE, U.S. Army Corps of Engineers; USBR, U.S. Bureau of Reclamation; USCS, U.S. Geological Survey]

		Mean discharge	nrje (tt <sup>a</sup> /s)	WY 2010 as	WY 2010 as	MYs used	
Station	Station name	Ŵ	Long-	percentage of	rank/years	for long-torm	
number		2010	term	long-term mean	(1 highest)	mean	
USGS Compact stations support	USGS Compact stations supported by the National Streamflow Information Browsen (NSIB)	ā					

on Program (NSIP) USGS Compact

06821500 Arikatee River at Halgler, Nebr	3,42	17.1 20.0%	1010 - 5010 - 5010 - 5010	
06823000 North Fork Republican River at Colo-Nebr State Line	29.6	42.3 Store for a store 2004	<b>65/75</b>	
08823500 Buttalo Croek near Haigler, Nebr	3,47	8.2 56.0%	60/70 - 1941 - 2010	
08824000 Rock Creek at Parks, Nebr	7,43	12.1 - 17 - 10 - 17 - 17 - 17 - 17 - 17 - 1	<u>85/70</u> 1941 - 2010	
066275500 South Fork Republican River near Banketman, Nebr	19,40	36.3 Provide a state of the second state of th	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
08835500 Frenchman Creek at Culbertson, Nabr	48.3	67.7		Since Enders Reservoir
06836500 Drittwood Creek near McCook, Nebr	4.73	8.48	50/64	
065380000 Red Willow Creek near Red Willow, Nebr	59.6	13.5 441.5%	01/40 11/40	Since Hugh Burlert ake
06847500 Sappa Creek near Stamford, Nebr (USACE funds DCP)	30.90		23.054	
00952500 Courtiend Canal at Nebc-Kans State Line (USBR DCP)	59. <u>9</u>	76 76 76	1. 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	
USGS stations supported by USGS and/or other Føderal or State agencles				

08938630 Oceanity Inter of Character Market	840		48/60	
UCCOUNT REPAIRING AN ON AN ONLY WOULD	8.7	96.7	1951 - 2010	Funded by USACE and NSIP
06337000 Ropublican River at McCook, Nebr	4.17	128 55.8%	45/56 1955 - 2010	
				Funded by USBR, NDNR, and NSIP
06844500 Republican River near Orteans, Nebr	529	233	25/83 ************************************	Fundad by LISACE

NDNR stations with USGS/USACE support for DCP, Web display, review, and publishing

	Since Harry Struk Lake OSCONTINUED
53/60 - 53/60 - 53/60 - 53/60 - 2010	2002 - 0361
62	<b>215</b>
28.0	203
06834000 Frenchman Creek at Palisade, Nebr	06843500 Republican River at Cambridge, Nobr 08853020 Republican River at Guide Rock, Nebr

Online Annual Water Data Reports available at or through http://wdc.water.usgs.gov http://ne.water.usgs.gov



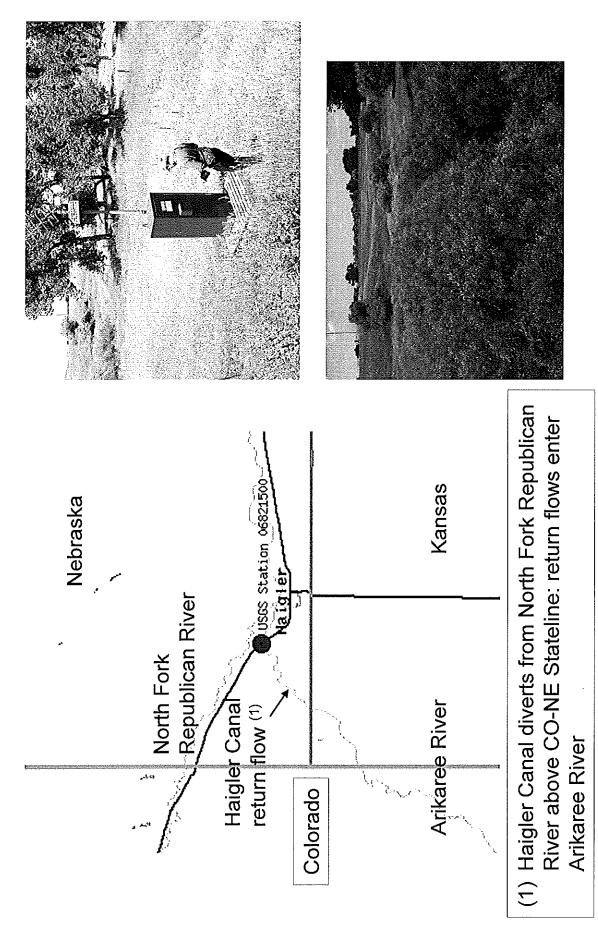
# Summary Charts – Compact Stations

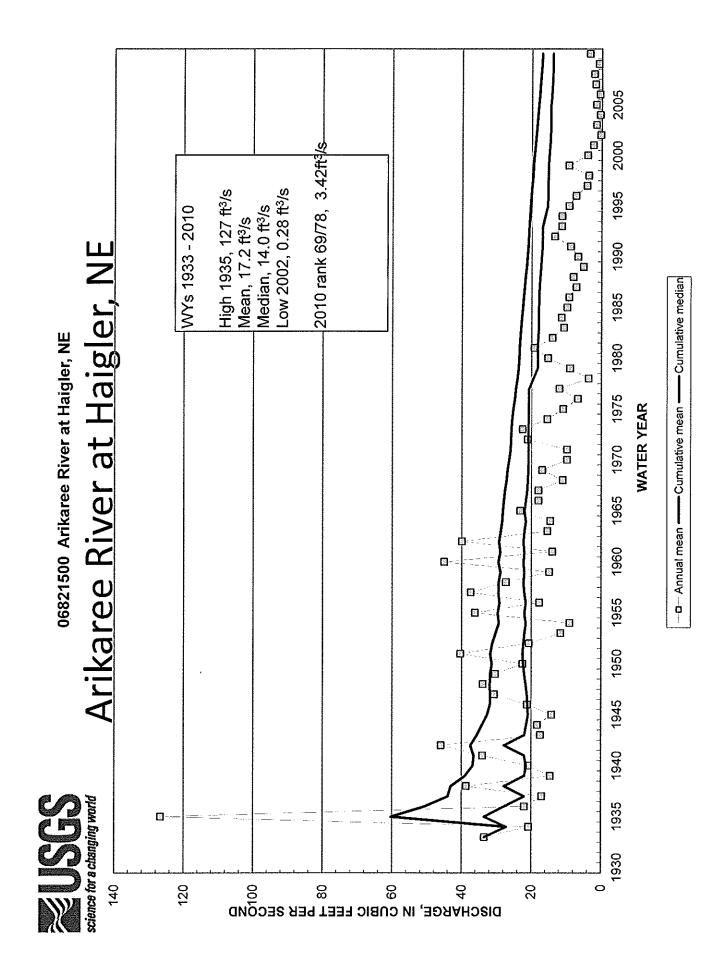
- Published data for Water Year (WY) 2010
- Operated by the USGS Nebraska Water Science Center (NE WSC)
- Streamflow Information Program (NSIP) Stations funded by the USGS National





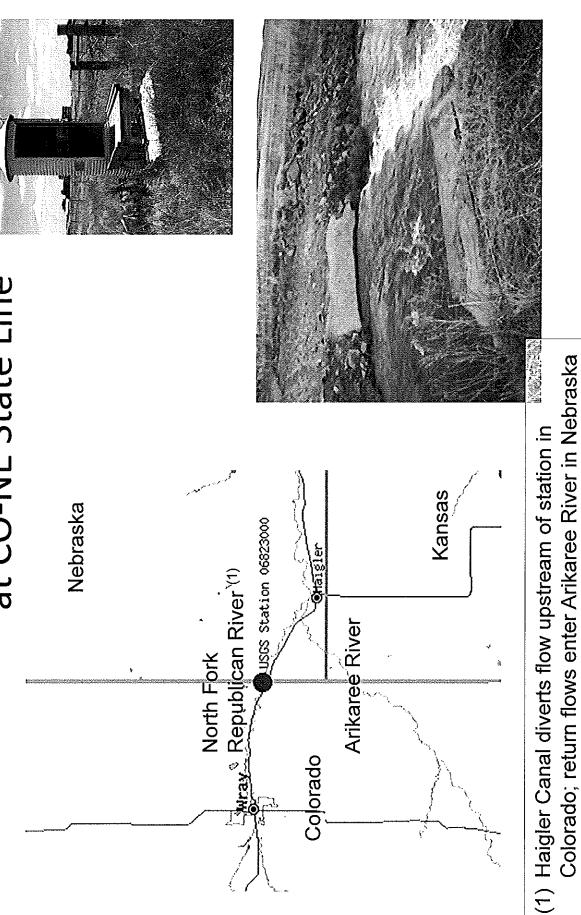
### Arikaree River at Haigler, NE

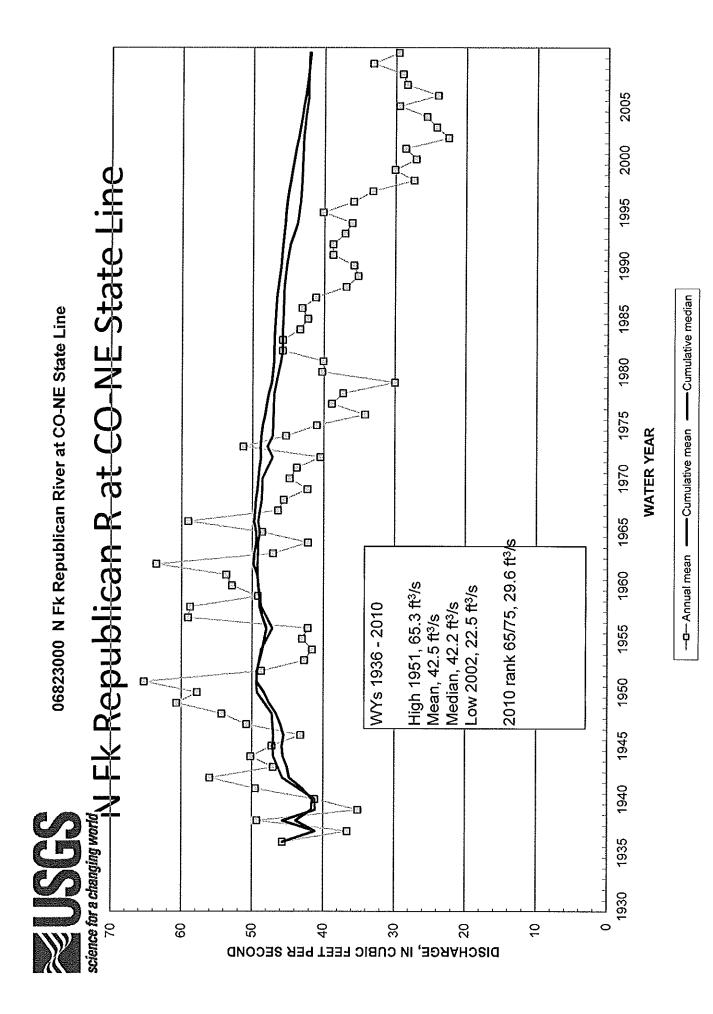




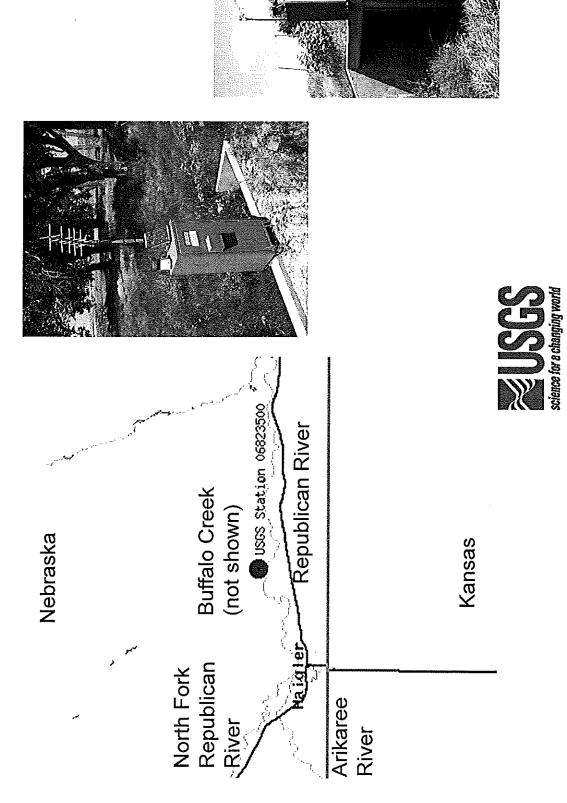


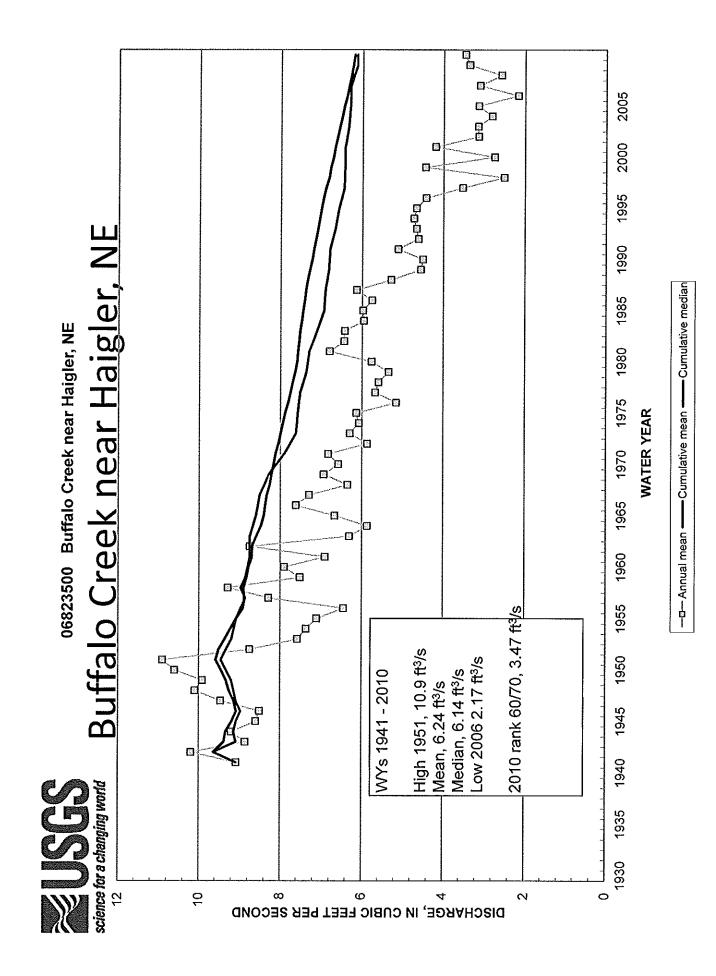
#### N Fk Republican River at CO-NE State Line





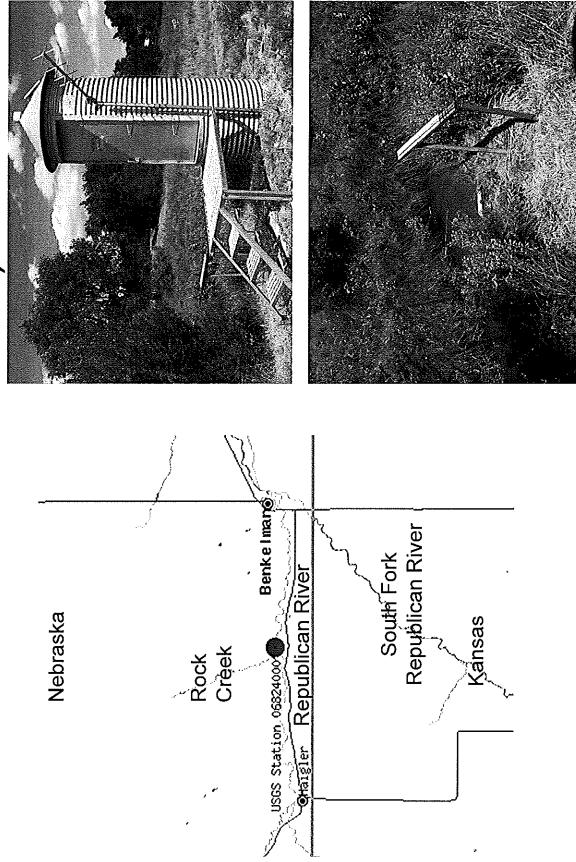
### Buffalo Creek near Haigler, NE

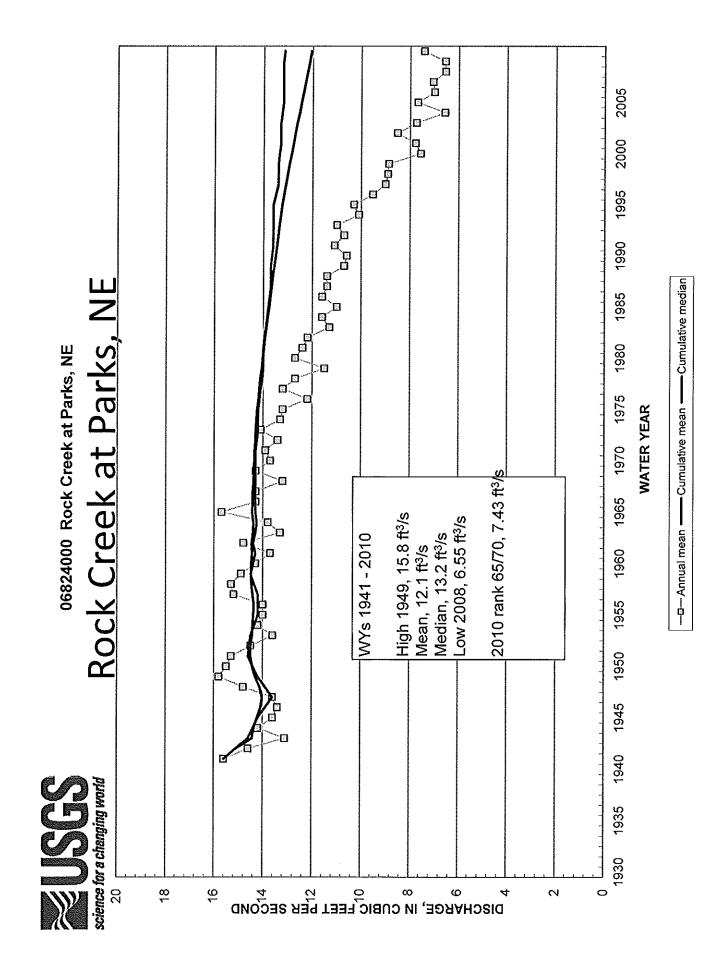






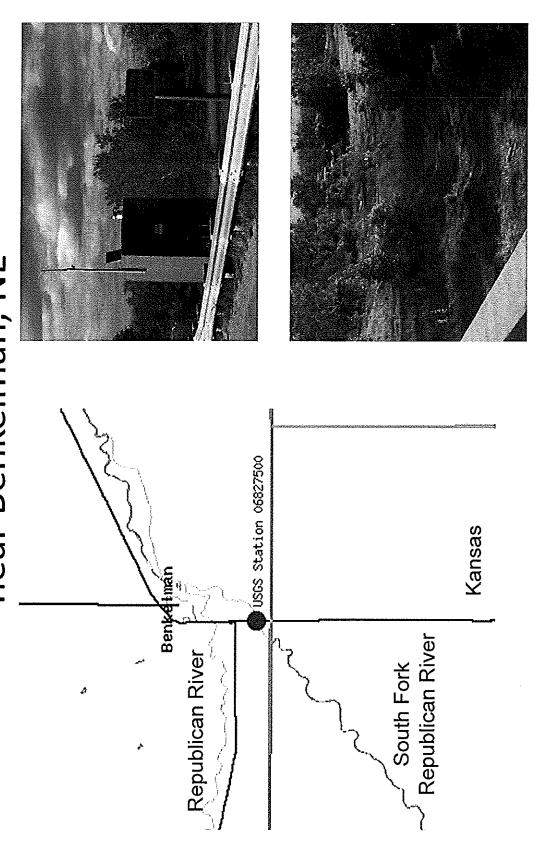
#### Rock Creek at Parks, NE

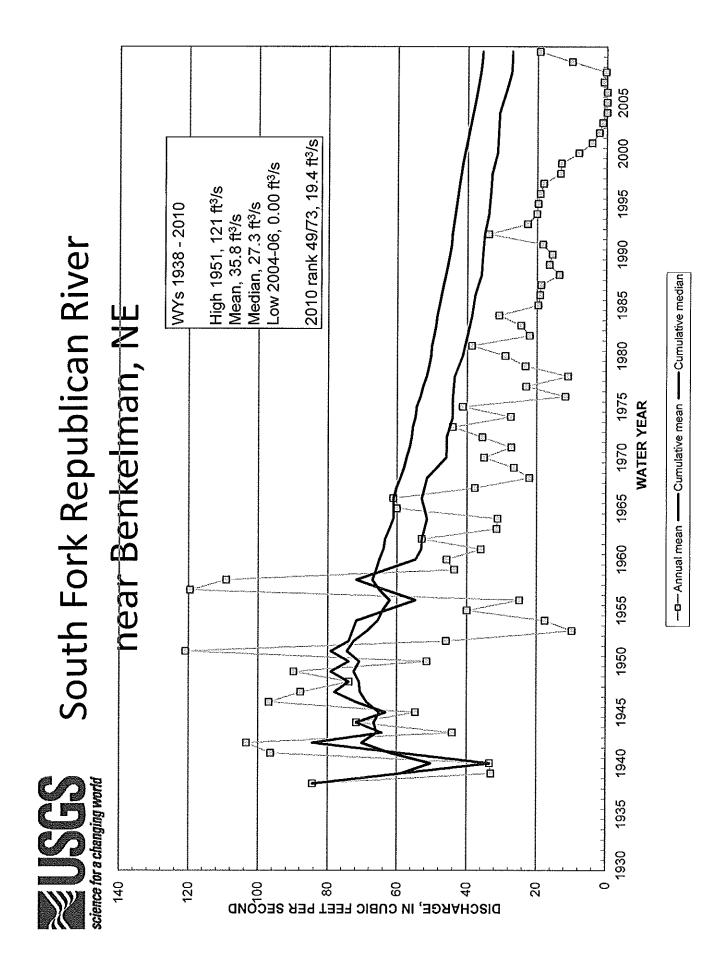


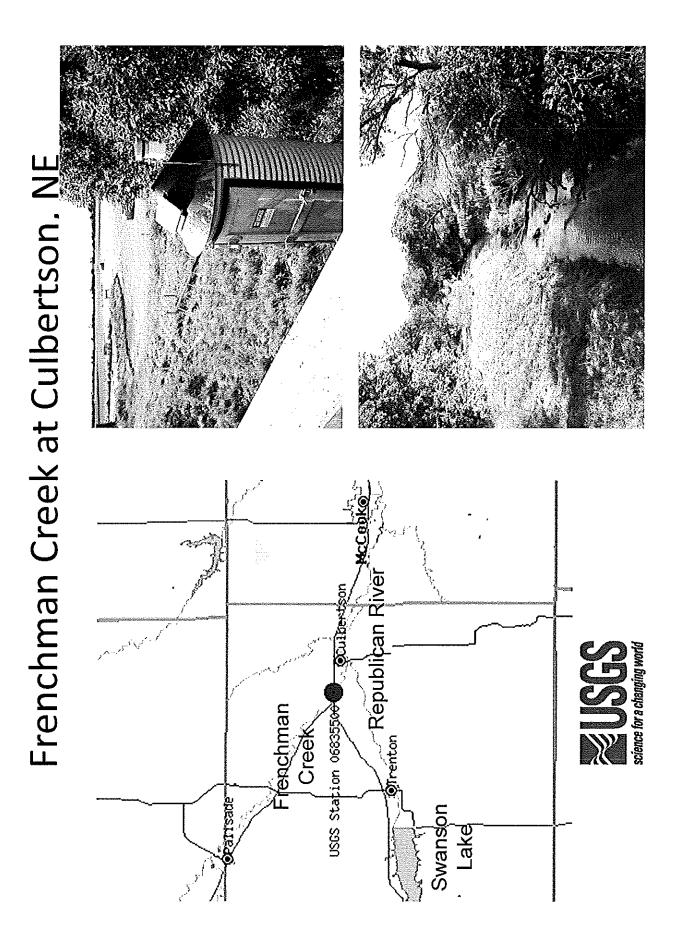


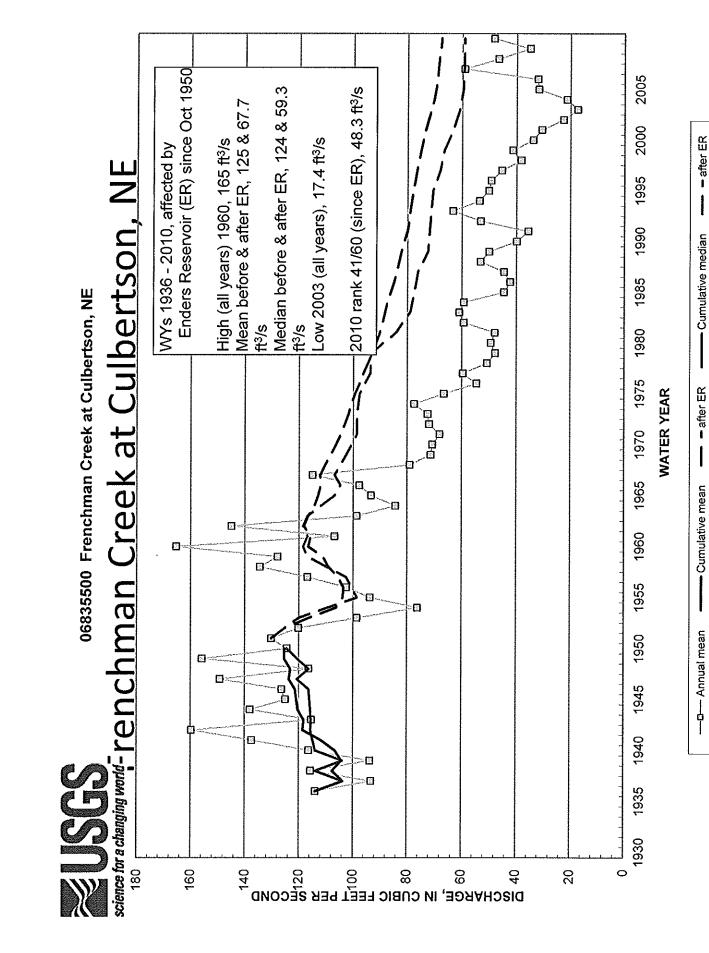


#### South Fork Republican River near Benkelman, NE





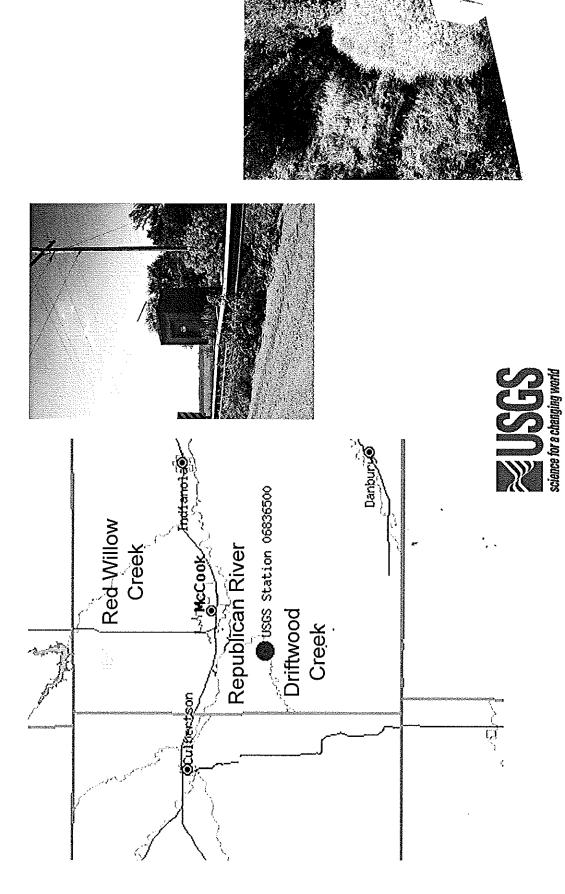


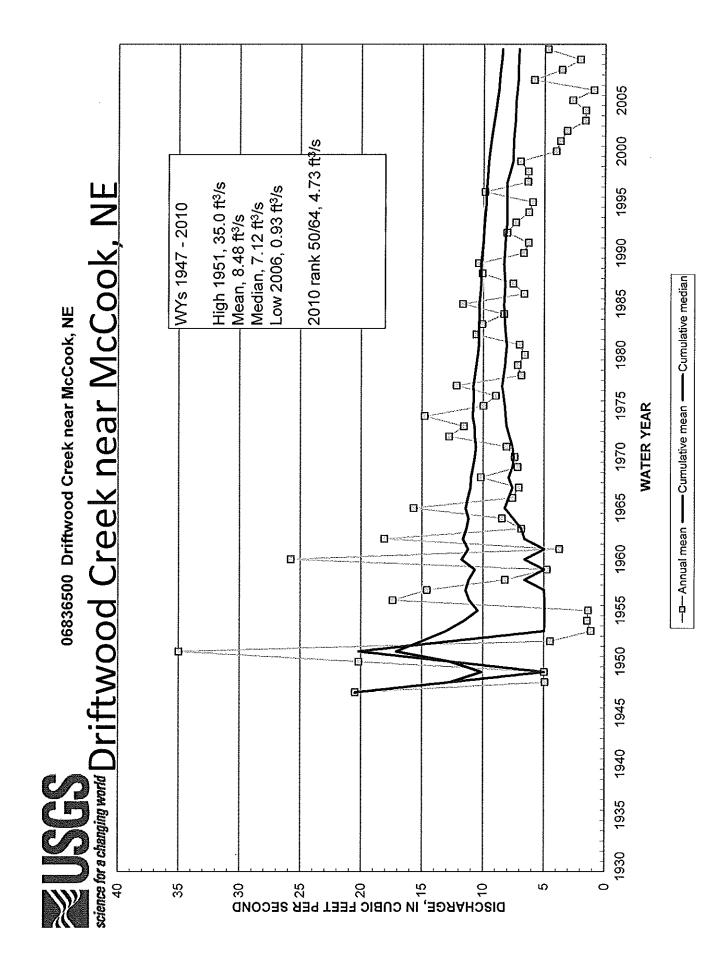


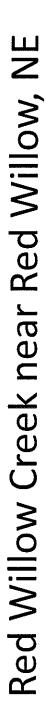
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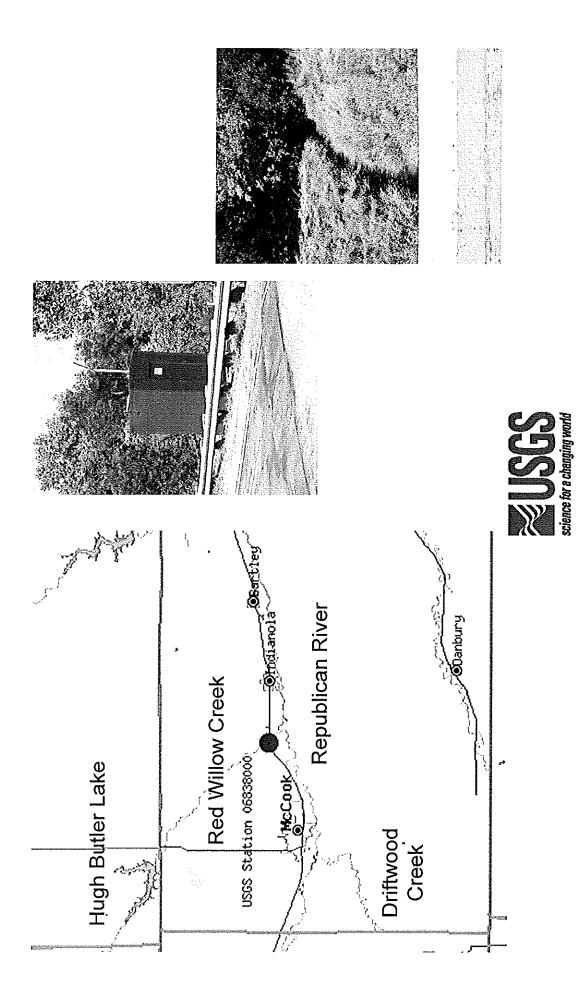
I

## Driftwood Creek near McCook, NE



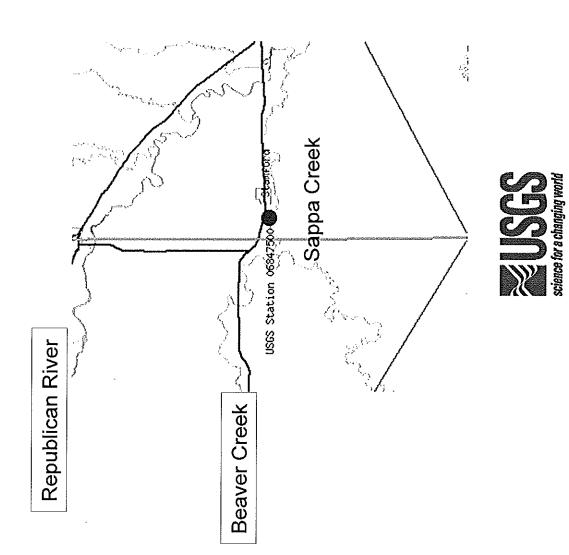


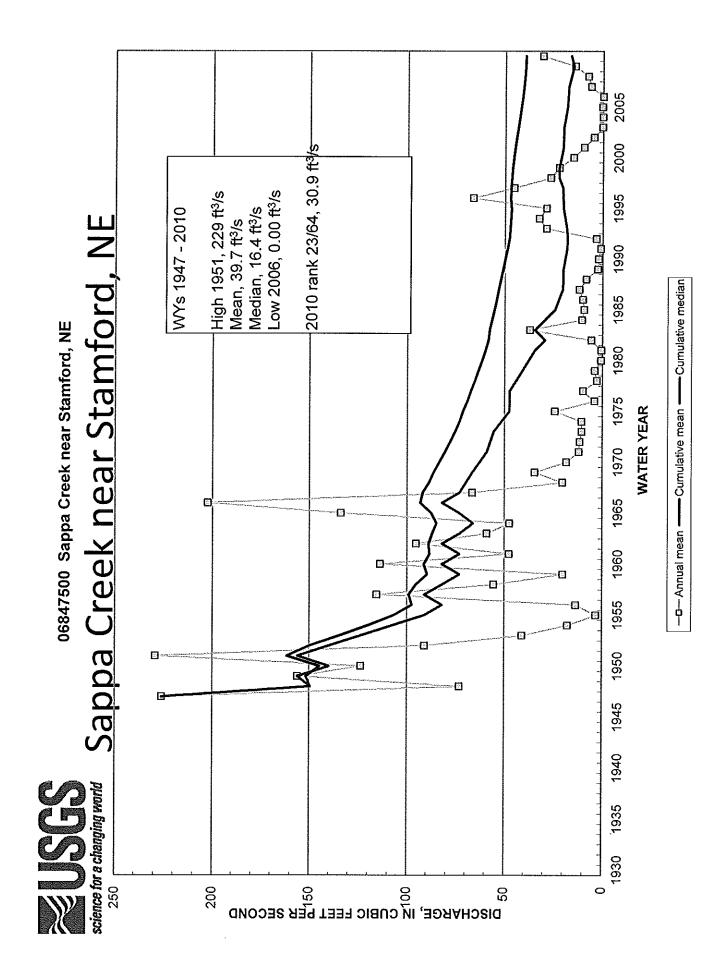


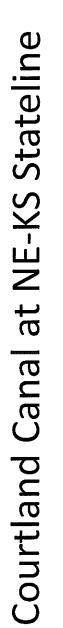


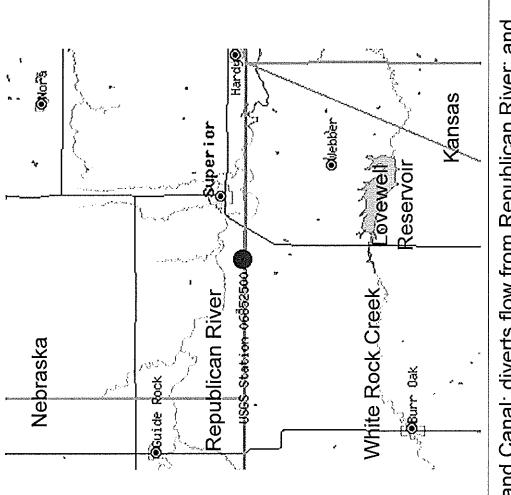
2005 Median before & after HBL, 41.4 & 12.1 H<sup>3</sup>/s i I High (all years) 1947, 62.6 ft³/s Mean before & after HBL, 42.0 & 13.5 ft<sup>3</sup>/s Hugh Butler Lake (HBL) since Sep 196 Red Willow Creek near Red Willow, NE 2010 rank 01/49 (since HBL), 59.6 ft<sup>3</sup>/s 2000 ា after HBL 1995 Low (all years) 2004, 4.75 ft3/s WYs 1940 - 2010, affected by I 1990 Cumulative median 1985 8) 8) 1980 ~ © \_0 ł 1975 after HBL WATER YEAR 1970 I 0< 1965 Cumulative mean 1960 Ο 1 1955 *.* 1950 4 17 1945 1 5 1940 science for a changing world 1935 1930 2 00 50 <del>4</del>0 30 0 20 9 DISCHARGE, IN CUBIC FEET PER SECOND

### Sappa Creek near Stamford, NE





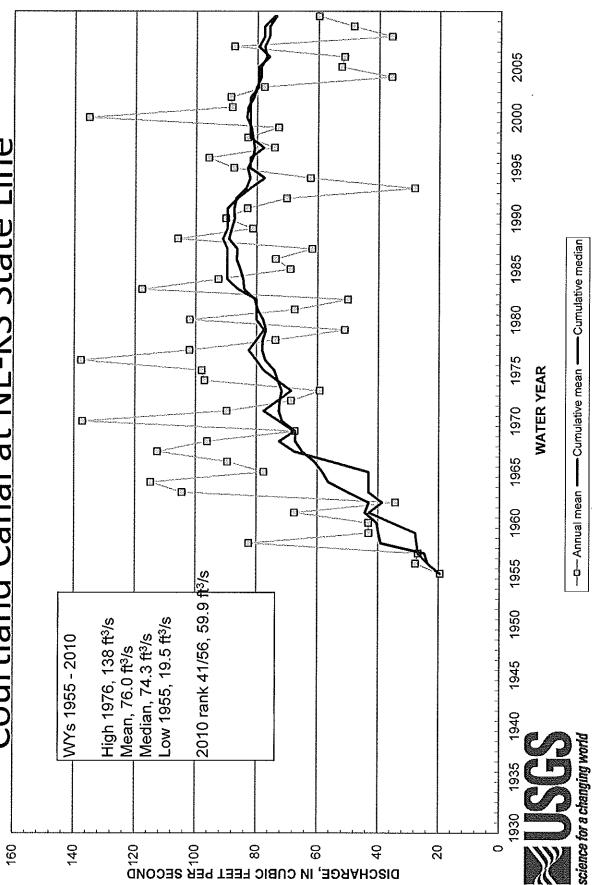






connects to and extends beyond Lovewell Reservoir in Kansas Courtland Canal: diverts flow from Republican River; and

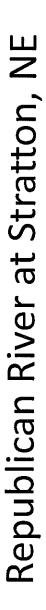


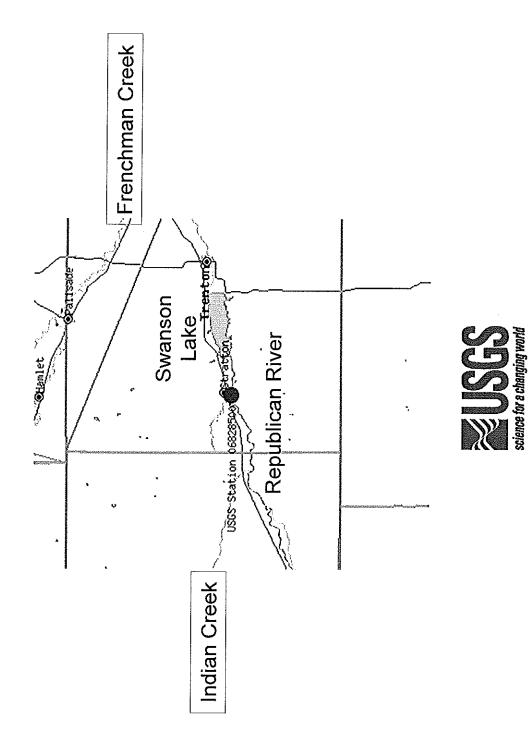


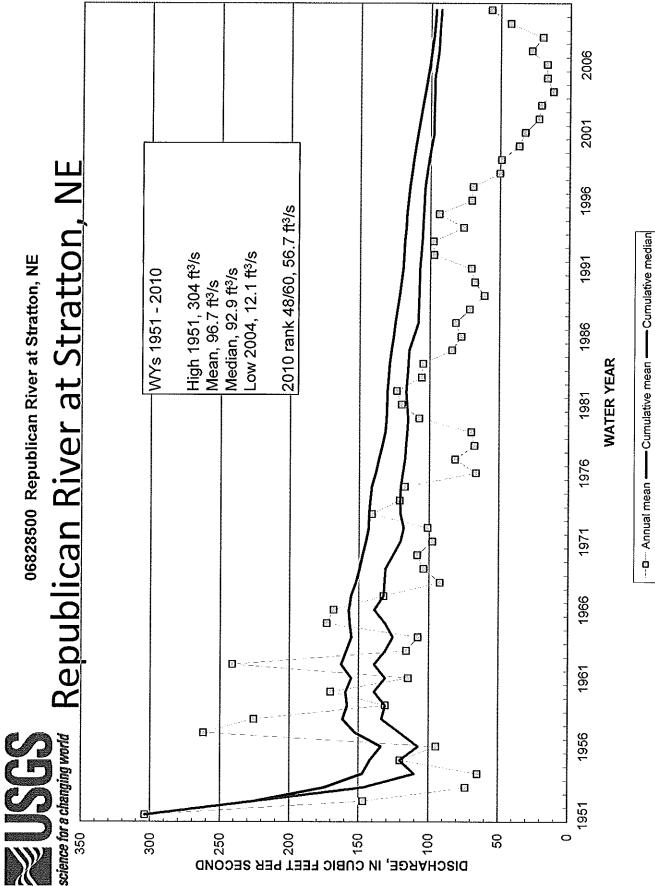
# Summary Charts – Other USGS Stations

- Published data for Water Year 2010
- Operated by the USGS Nebraska Water Science Center
- Stations funded by:
- other Federal agencies
- State and local agencies with USGS match from the Cooperative Water Program

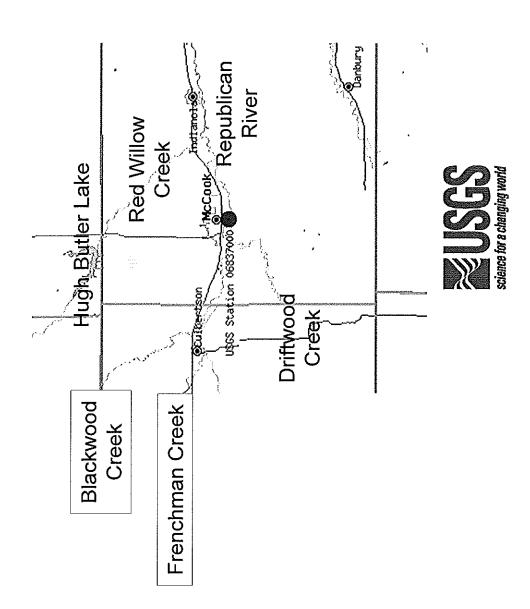


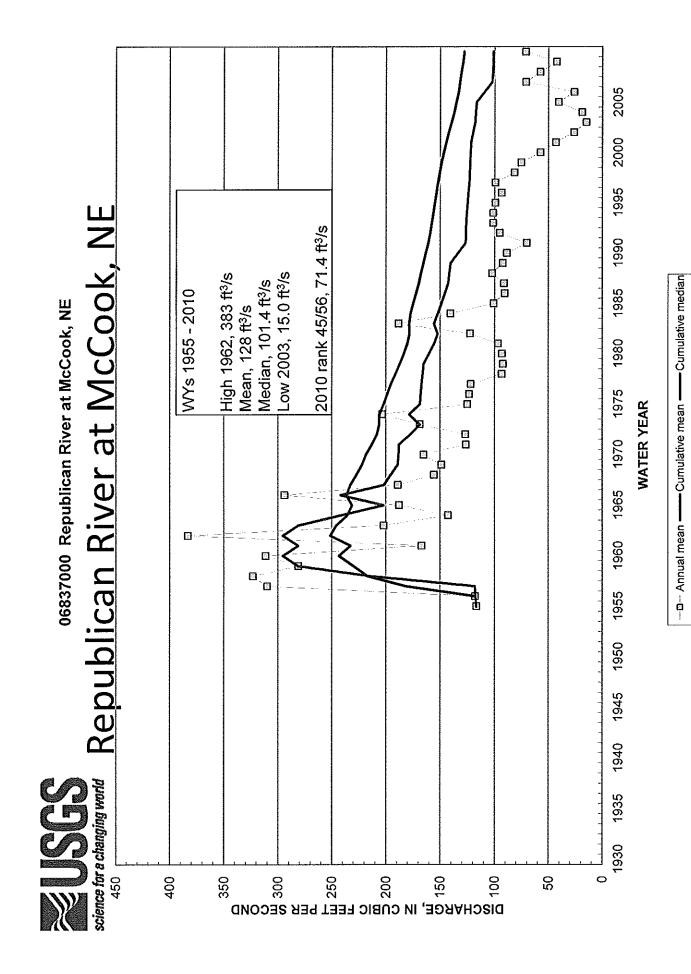


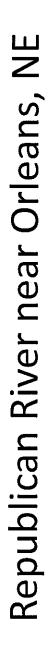


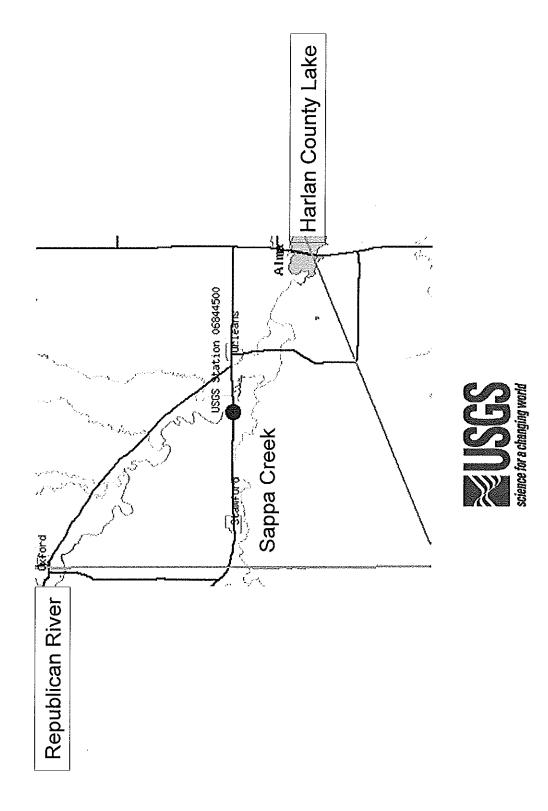


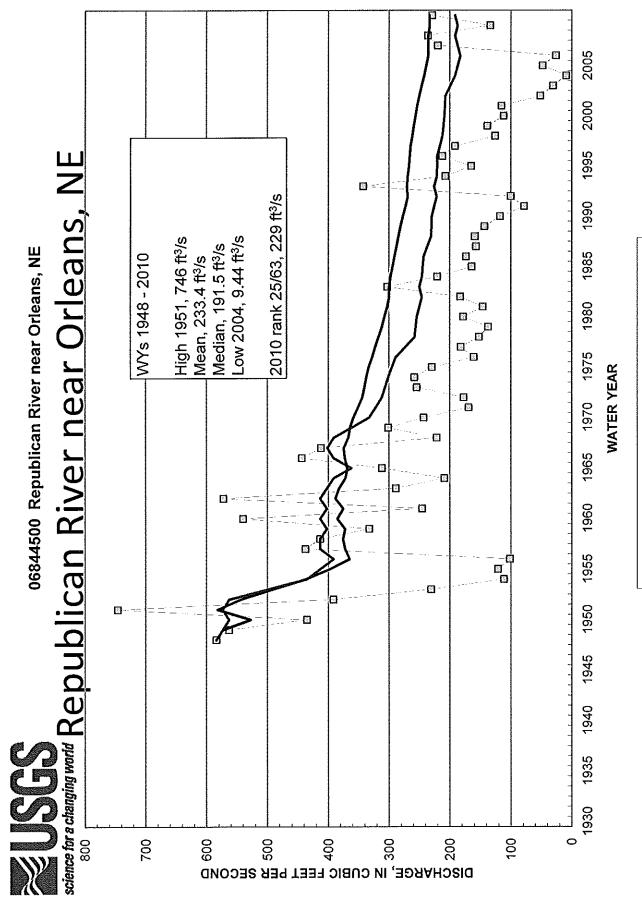
# Republican River at McCook, NE





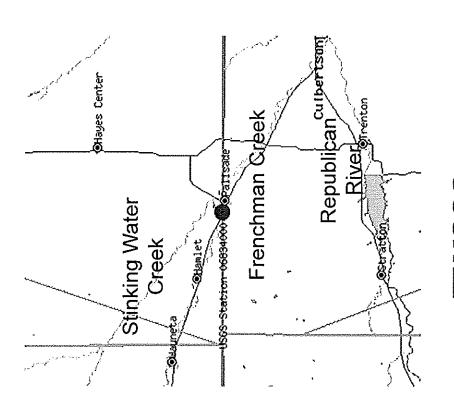




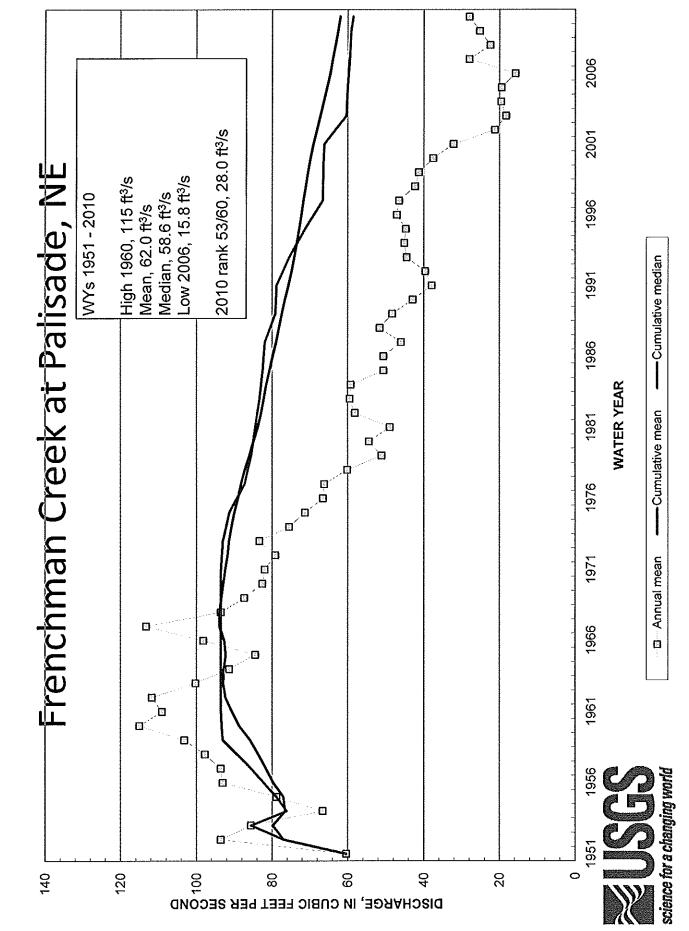


	Summary Charts – NDNR Stations
•	Published data for Water Year 2010
•	Operated by Nebraska Department of Natural Resources (NDNR)
٠	Stations funded by:
	<ul> <li>– NDNR – Field operation</li> </ul>
	– USGS and NDNR – DCP support, Web display, data
	review, and publication by USGS
	science for a changing world

# Frenchman Creek at Palisade, NE

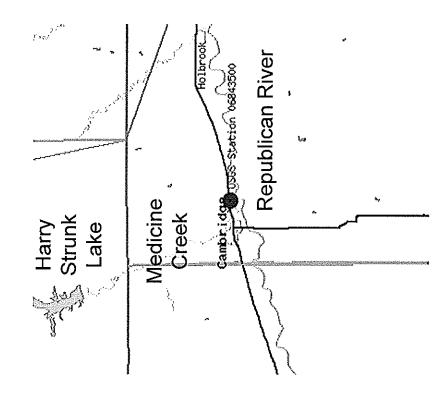




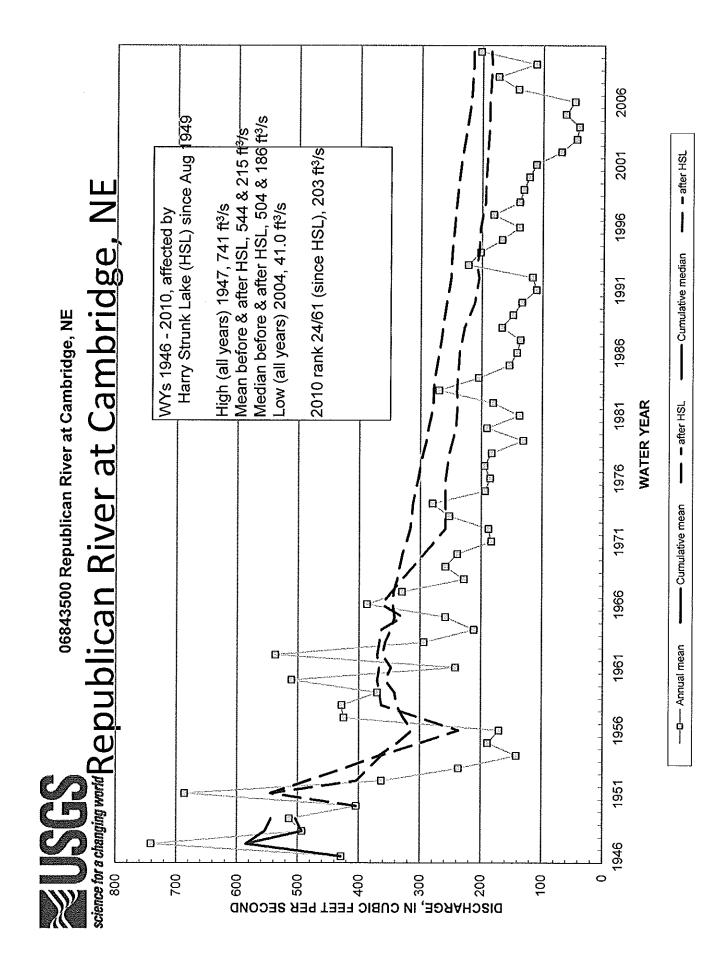


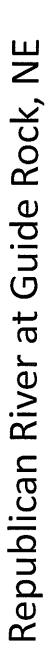
06834000 Frenchman Creek at Palisade, NE

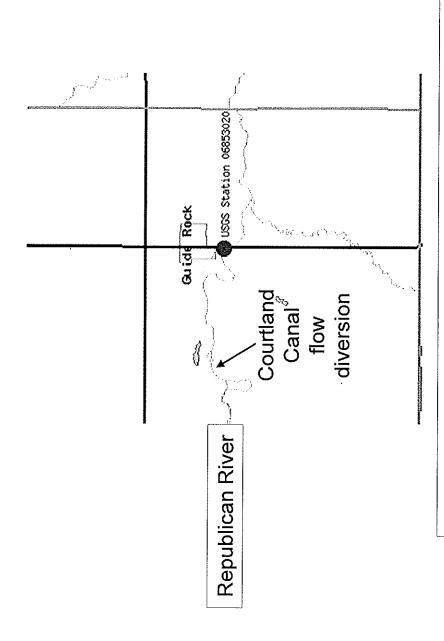
# Republican River at Cambridge, NE













Station was recently moved by the NDNR to a former location just downstream of the Courtland Canal diversion

TION	(402) 328-4100 http://ne.water.usgs.gov	Richard C. Wilson Associate Director of Studies (402) 328-4120 <u>wilson@usgs.gov</u> Ronald B. Zelt Ronald B. Zelt Associate Director of NAWQA (402) 328-4140	<u>rbzelt@usgs.gov</u> 37
CONTACT INFORMATION	USGS Nebraska Water Science Center 5231 South 19 <sup>th</sup> St. Lincoln, NE 68512-1271	۲ f Data	imlambre@usgs.gov

# **Engineering Committee Report**

# **Republican River Compact Administration**

# August 31, 2011

# ASSIGNMENTS

At the August 12, 2010 Annual Meeting of the Republican River Compact Administration, the Commissioners assigned the Engineering Committee the following tasks:

- 1. Finalize work on a user's manual for the RRCA Accounting Procedures and provide a recommendation to the Administration for adoption at next year's annual meeting or earlier.
- 2. Exchange by April 15, 2011 the information listed in Section V of the RRCA Accounting Procedures and Reporting Requirements, and other data required by that document. By July 15, 2011 the states will exchange any updates to these data.
- 3. Continue efforts to resolve concerns related to varying methods of estimating ground and surface water irrigation recharge and return flows within the Republican River Basin and related issues.
- 4. Retain Principia Mathematica to perform on-going maintenance of the ground water model and periodic updates requested by the Engineering Committee for calendar year 2011. The billable costs shall be limited to actual costs incurred, not to exceed \$15,000 in total and will be apportioned in equal 1/3 amounts to the States of Colorado, Kansas, and Nebraska respectively.
- 5. Continue development of a five-year accounting spreadsheet/database for adoption at the 2011 annual meeting or earlier.
- 6. Continue to review Colorado's augmentation proposal, as appropriate.
- 7. Continue efforts to finalize accounting data for 2008 and 2009. By October 15, 2010, the Engineering Committee will meet to discuss issues surrounding model inputs and accounting data. Also, by October 15, 2010 Colorado will provide meter data as required under the FSS.
- 8. By October 15, 2010, the Engineering Committee will meet to discuss issues preventing agreement on final accounting for 2006-2009.
- 9. Discuss Water Short Year accounting for Beaver Creek.
- 10. Discuss and resolve the issue of missing precipitation data.

# WORK ACTIVITIES RELATED TO THESE ASSIGNMENTS AND OTHER ISSUES

The Engineering Committee and technical representatives from the States of Colorado, Kansas, and Nebraska participated in several collaborative work activities and phone conferences and the following assignments and work activities were completed:

- 1. Complete the user's manual for accounting procedures and provide a resolution for its adoption.
  - a) The States reviewed the 2006 draft initiated by Kansas and provided comments. However, a final draft of the manual was not completed; the assignment should be continued next year.
- 2. Exchange by April 15, 2011 the information listed in Section V of the RRCA Accounting Procedures and Reporting Requirements, and other data required by that document. By July 15, 2011 the states will exchange any updates to these data.
  - a) Each state exchanged its model data sets by April 15, 2010 or shortly thereafter. A preliminary run of the RRCA groundwater model was developed by Willem Schreuder of Principia Mathematica and posted on the RRCA web site he maintains for the Administration.
  - b) The States exchanged their final data, with the exception meter data, in August of 2011. Willem Schreuder of Principia Mathematica completed a model run based on this data and posted the results on the RRCA web site.
  - c) Final accounting for 2010 was not completed.
  - d) Data sets were collected by the Committee for stream flow, climate information, diversion records, and reservoir evaporation records of the three states in cooperation with the U.S. Geological Survey, U.S. Bureau of Reclamation, and U.S. Army Corps of Engineers for 2010.

# 3. Continue efforts to resolve concerns related to varying methods of estimating ground and surface water irrigation recharge and return flows within the Republican River Basin and related issues.

- a) Kansas provided a copy of six articles regarding irrigation efficientcies:
  - (a) Corn Yield Response to Deficit Irrigation report by Kansas State University
  - (b) Efficient Irrigation: Improving your bottom line by saving energy, water, and soil. By Jerry D. Schwien and Kate Jones
  - (c) Irrigation Management Series: Large Acreage Center Pivot Systems. By Danny H. Rogers, Freddie R. Lamm, and Cooperative Extension Service
  - (d) Center Pivot Design. By The Irrigation Association
  - (e) Sprinkler Evaporation Losses and Efficiency. By Terry A. Howell, Arland D. Schneider, and Judy A. Tolk
  - (f) Reducing Sprinkler Water Losses. By Arland D. Schneider and Terry A. Howell

Both Colorado and Nebraska will review the reports. No additional progress has been made on this assignment.

- 4. Retain Principia Mathematica to perform on-going maintenance of the ground water model and periodic updates requested by the Engineering Committee.
  - a) Each state separately contracted with Principia Mathematica.
- 5. Continue development of a five-year accounting spreadsheet/database for adoption at the 2010 annual meeting or earlier.
  - a) The assignment was not completed; the assignment should be continued next year.
- 6. Continue to review Colorado's augmentation proposal, as appropriate.
  - a) Proposal was the subject of arbitration. No additional information was discussed by the Engineering Committee.
- 7. Continue efforts to finalize accounting for 2008 and 2009. By October 15, 2010, the Engineering Committee will meet to discuss issues surrounding model inputs and accounting data. Also, by October 15, 2010 Colorado will provide meter data as required under the FSS.
  - a) The Engineering Committee discussed this assignment. Unresolved issues subject to non-binding arbitration as well as Kansas' data requests continue to prevent agreement on accounting data. Colorado was unable to provide final meter data. Preliminary data was collected and is under review.
- 8. By October 15, 2010, the Engineering Committee will meet to discuss issues preventing agreement on final accounting for 2006-2009.
  - a) The Engineering Committee discussed this assignment. Unresolved issues subject to non-binding arbitration and Kansas' data requests continue to prevent agreement on model results and accounting data.
- 9. Discuss Water Short Year accounting for Beaver Creek.
  - a) Topic was raised during arbitration and under discussion outside the Engineering Committee. Topic was not pursued by the Engineering Committee
- 10. Discuss and resolve the issue of missing precipitation data.
  - a) A subcommittee of ground water modelers from each state met to resolve the issue and developed a procedure to fill gaps from missing data. The recommended procedure is detailed in attached Exhibit A. The Engineering Committee recommends that the RRCA takes specific action to accept this procedure and to direct that the procedure be applicable for climate data for the groundwater model for compact year 2008 and forward.

# **Other Issues**

In addition to the above assignments, the Engineering Committee discussed the following issues:

1. Due to stream bank instability, the stream flow gage at Guide Rock must be relocated approximately two miles downstream from its present location. The Engineering

Committee recommends that the RRCA recognize that the gage must be relocated and to assign the Engineering Committee the task to develop a procedure to account for inflows along the two mile stream segment between the diversion dam and the relocated stream gage.

- 2. In the fall of 2010, the U.S. Bureau of Reclamation conducted a sediment survey on Bonny Reservoir and subsequently revised the area-capacity tables for the reservoir. The State of Colorado requests the Engineering Committee discuss the application of the revised area-capacity tables to current and past accounting, specifically past accounting input data that has not been accepted by the RRCA.
- 3. The State of Nebraska recently received a petition for a variance for a surface water permit. Section III. C of the Final Settlement Stipulation outlines a general procedure for notification of new surface water rights so as to provide the RRCA an opportunity for discussion. It is anticipated that additional petitions for variances will be received by Nebraska, necessitating that a procedure be developed for notifying the members of the RRCA, to allow for a comment period as well as discussion on potential impacts to the RRCA's accounting and ground water model.
- 4. The State of Nebraska requests the Engineering Committee discuss developing a framework for submitting and reviewing future augmentation plans.

# **RECOMMENDED ASSIGNMENTS FOR THE COMING YEAR**

The Engineering Committee recommends the Republican River Compact Administration assign the following tasks:

- 1. Finalize work on a user's manual for the RRCA Accounting Procedures and provide a recommendation to the Administration for adoption at next year's annual meeting or earlier.
- 2. Exchange by April 15, 2012 the information listed in Section V of the RRCA Accounting Procedures and Reporting Requirements, and other data required by that document. By July 15, 2012 the states will exchange any updates to these data.
- 3. Continue efforts to resolve concerns related to varying methods of estimating ground and surface water irrigation recharge and return flows within the Republican River Basin and related issues.
- 4. Retain Principia Mathematica to perform on-going maintenance of the ground water model and periodic updates requested by the Engineering Committee for calendar year 2012. The billable costs shall be limited to actual costs incurred, not to exceed \$15,000 in total and will be apportioned in equal 1/3 amounts to the States of Colorado, Kansas, and Nebraska respectively.
- 5. Continue development of a five-year accounting spreadsheet/database for adoption by the RRCA.
- 6. Continue to review Colorado's augmentation proposal, as appropriate.
- 7. Continue efforts to finalize accounting for 2008, 2009, and 2010.
- 8. Continue discussion of issues preventing agreement on final accounting for 2006-2010.

- 9. Develop a procedure to account for inflows to the stream segment between the Guide Rock diversion dam and the relocated stream flow gage.
- 10. Discuss the application of the revised Bonny Reservoir area-capacity tables to current and past accounting data.
- 11. Develop a notification and application review procedure for the RRCA for surface water applications, such as the petition for a variance for a surface water permit recently received by the State of Nebraska.
- 12. Discuss developing a framework for an application and approval process for future augmentation plans.
- 13. Apply the procedure described in Exhibit A of this report to fill in missing precipitation data in the ground water model, for Compact Year 2008, 2009, and 2010, and for subsequent years.
- 14. Discuss archiving the data and materials from the Conservation Committee study.

The Engineering Committee Report and the exchanged data will be posted on the web at <u>www.republicanrivercompact.org</u>.

## Attachments

Exhibit A: Procedure for filing in missing precipitation data

SIGNED BY

Megan A.)Sullivan Engineer Committee Member for Colorado

Scott E. Ross Engineer Committee Member for Kansas

James Schneitler Engineer Committee Member for Nebraska

# 51st ANNUAL MEETING OF THE REPUBLICAN RIVER COMPACT ADMINISTRATION

Wednesday, August 31, 2011

9:12 a.m.

The above-entitled meeting was taken at the Burlington Community Center, 340 South 14th Street, Burlington, Colorado, before Denise A. Freeman, Registered Professional Reporter and Notary Public within Colorado.

1 REPUBLICAN RIVER COMPACT ADMINISTRATION:
2 For Colorado: DICK WOLFE, P.E., COMMISSIONER
3 PETER J. AMPE, ESQ.
MICHAEL SULLIVAN, P.E., DEPUTY STATE ENGINEER MEGAN A. SULLIVAN, P.E.
5 For Nebraska: BRIAN P. DUNNIGAN, P.E., COMMISSIONER
6 JUSTIN LAVENE, ESQ.
JIM SCHNEIDER, P.E. 7 TOM O'CONNOR, P.E.
8 For Kansas: DAVID BARFIELD, P.E., COMMISSIONER
9 BURKE W. GRIGGS, ESQ.
CHRISTOPHER M. GRUNEWALD, ESQ. 10 SCOTT ROSS, P.E.
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### 1 PROCEEDINGS

2 COMMISSIONER WOLFE: Good morning, everyone. Thank you for being here. My name is Dick Wolfe. I am 3 the Colorado Commissioner on the Republican River 4 5 Compact Administration. Before we get started, I want 6 to have Bob Churchwell, the city administrator for 7 Burlington, to come forward, please. 8 And I want to remind everyone today to 9 please, if you are using the microphone, to speak up and 10 state your name for the record because we do have a 11 stenographer here today who will be taking a recording 12 of this, so we want to make sure it gets on the record 13 correctly. 14 So, Bob, please proceed. 15 MR. CHURCHWELL: Thank you, Dick. I don't 16 think I need this. All my employees say I've got a big enough mouth the way it is. 17 18 But we want to welcome each and every one of you here today. We want to welcome the representatives 19 20 from Colorado and Nebraska and Kansas in your efforts to deal with the water issues. We thank you -- all of you 21 folks for coming out and participating in this 22 23 conversation so that everybody's voice can be heard. 24 And we just want to welcome you to 25 Burlington, and, folks, have a good meeting here this

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3

1 afternoon.

2 COMMISSIONER WOLFE: Thank you, Bob. 3 Also on your way in, there was a sign-up sheet. If you do plan on making a public comment --4 5 it's identified later in our agenda -- we would like to 6 have you identify that on that sheet so that we can get 7 that here so I know approximately how many people are 8 planning on making a public comment. That will help us 9 plan our time a little better. 10 So if you failed to mark that, we will be 11 taking a break somewhere here before we get to that 12 point, and I would ask you to get with Katie Radke, who 13 is at the back table there, or Dave Keeler, and we will 14 get that sheet updated if you want to plan on making a 15 public comment. 16 Also as part of our introductions, I would 17 like to introduce some of our staff members that are 18 here today as well as some representatives from Colorado that work with some of our groundwater management 19 20 districts in eastern Colorado within the Republican 21 River Basin. 22 Here at the front table with me, to my left, 23 is Meg Sullivan, who is our engineer adviser on the 24 Compact Administration. Pete Ampe, to my immediate 25 right, he's the first assistant attorney general with

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4

2 the deputy state engineer.

3 We also have -- I've mentioned -- Katie

4 Radke, who you met coming in, as well as Dave Keeler,

5 who is in the back there, who is our lead water

6 commissioner here in the basin, as well as some of his

7 staff, Devin Ridnour, Ben Krause.

8 We also have here Ivan Franco, who will be

9 right up here in front. He will be replacing Meg

10 Sullivan as our engineer adviser, so I hope all of

11 you've had an opportunity to meet Ivan. We look forward

12 to having him on this.

13 Also we have here with us, representing

14 Colorado, Willem Schreuder with Principia Mathematica.

15 He's over here to my left against the wall.

16 Some other folks I would like to identify --

17 and you always run the risk, when you are doing these

18 kind of introductions, that you are going to miss

19 someone, and someone may have come in after we had a

20 chance to identify you, so I apologize if I miss some of

21 you.

22 But we also have Jack Dowell with W-Y

23 Groundwater Management District here with us today.

24 Nate Midcap with the Central Yuma, Sandhills, Marks

25 Butte, and Frenchman Groundwater Management District.

1 Deb Daniel is here. She is the new manager 2 of the Republican River Water Conservation District. 3 And I would also like to take this opportunity -- I don't think Stan Murphy is here with us today. 4 5 But Stan just retired as general manager 6 with the Republican River Water Conservation District, 7 so we want to recognize Stan for all of his service and 8 years as the manager of the District since its creation 9 in 2004 and his prior service as manager of some of the 10 groundwater management districts in this part of the 11 basin prior to that. 12 So we want to thank Stan for all of his 13 years of service and wish him the best in retirement. And I know Deb is going to do a great job following in 14 15 his footsteps, so we wish her well. 16 Also at the Republican River Water 17 Conservation District, the board president, Dennis 18 Coryell, is also here with us today, as well as the legal counsel with the District, Dennis Montgomery and 19 20 David Robbins. Thank you for being here. 21 We also have a couple representatives from 22 the CAPA group in the basin, Tony Mangus and also 23 Bethleen McCall. 24 And also I would like to recognize, from our

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25 executive director's office with the Department of

2 water is here as well. And some of you have had an

3 opportunity to meet Alex.

4 So I thank all of you for being here today

5 and representing Colorado and all your efforts to assist

6 Colorado in our efforts here in the Republican River

7 Basin for achieving compact compliance.

8 So at this time I would like to turn it over

9 to Commissioner Dunnigan, if you would like to make some

10 introductions at this time.

11 COMMISSIONER DUNNIGAN: Thank you, Chairman

12 Wolfe. I will introduce at the table first. To my

13 immediate right is Justin Lavene from the Attorney

14 General's Office. Jim Schneider from the Department of

15 Natural Resources, and Tom O'Connor from the Department

16 of Natural Resources.

17 I would also like to introduce staff that I

18 have from the Department: Shane Stanton, Paul Koester,

19 and Jesse Bradley. Representing the Nebraska Irrigation

20 District, I have Don Felker, Mike Delka, and Brad

21 Edgerton here today.

22 With the Nebraska Natural Resources District

23 representing the Republican Natural Resources District,

24 Nate Jenkins is here. Bob Wierhead representing the

25 Middle Republican Natural Resources District.

1 Rich Holloway, representing the Tri-Basin 2 Natural Resources District. And manager Mike Clemens 3 representing the Lower Republican Natural Resources 4 District. 5 And as Chairman Wolfe said, you always risk 6 the possibility of leaving somebody out. I hope I did 7 not, and I apologize if I did. Thank you. 8 COMMISSIONER WOLFE: Thank you, Commissioner. 9 10 At this time, Commissioner Barfield, if you 11 would like to make some introductions 12 COMMISSIONER BARFIELD: Certainly. Thank 13 you, Chairman Wolfe. 14 My name is David Barfield. I am the chief 15 engineer with the Division of Water Resources in Kansas, 16 a commissioner of the Compact Administration. 17 Again here at the table, to my right is 18 Scott Ross. He's our water commissioner over northern Kansas and our water engineering committee lead. 19 20 To my left first is Burke Griggs. He's legal counsel for the division. And Chris Grunewald is 21 22 with the Attorney General's Office, the Kansas Attorney 23 General's Office. 24 Also with me is Chris Sable, Chelsea

25 Geracheck, Paul Chankow, and Sam Griffith. That's who's

1 here from Kansas.

2 COMMISSIONER WOLFE: Thank you. 3 I would also like to take this opportunity 4 to give thanks to those representatives on the 5 engineering committee. You have done a great job this 6 past year assisting the commissioners in getting through 7 our duties that we have to take care of today, so thank 8 you very much for all of your efforts over the past year 9 working off-line on these matters. 10 As we get into the discussion on the 11 committee reports, you will see that the engineering 12 committee has got quite a few assignments to work on and 13 have been working on. And so we appreciate all the effort and time you've put into that in addition to your 14 15 other duties. 16 There was a copy of the agenda at the back 17 of the room, which was the initial agenda that was 18 advertised. We do have some modifications to that, and 19 I will try and identify those changes there. And then I 20 will ask the other commissioners if there is anything that I missed before we adopt the revised agenda. 21 22 I would like to offer under Old Business, 23 under 8(b), that we add an additional assignment to the 24 engineering committee from the 2010 meeting to modify 25 the rules and regulations to reflect the current version

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9

1 of the accounting procedures and model.

2 And Commissioner Dunnigan will do the 3 introduction on that, but I wanted to identify that on the agenda for action. 4 5 Also we have under New Business, under 6 agenda Item 9, two items, (b) and (c). 7 The first one is 9(b), which is to take 8 action on the procedure for the missing precipitation data. And this will also be discussed as part of Megan 9 10 Sullivan's report from the engineering committee. We 11 will be taking action on that. 12 Also 9(c), we will be taking action on 13 relocation of the Guide Rock stream flow gage. And Commissioner Dunnigan will be doing the introduction as 14 15 well on that one. 16 Commissioners, are there any other amendments to the agenda? 17 COMMISSIONER BARFIELD: No. I move adoption 18 of the agenda as amended. 19 20 COMMISSIONER DUNNIGAN: Second. 21 COMMISSIONER WOLFE: We have a motion and a 22 second. All those in favor signify by saying aye. 23 COMMISSIONER DUNNIGAN: Aye. 24 COMMISSIONER BARFIELD: Aye. 25 COMMISSIONER WOLFE: Aye.

1 Motion approved.

2 Agenda Item No. 3 is the status report and

3 transcript of the August 12, 2010 annual meeting. This

4 has been prepared. It has been circulated for review

5 and comment.

6 We are not taking an action item on this.

7 It's just to reflect that each state has that in their

8 possession now and will be providing review and comment

9 on that. And we will be taking our final action and

10 approval of that transcript and those minutes from that

11 meeting at a later date.

12 So are there any comments from the

13 commissioners as far as that agenda item?

14 Commissioner Dunnigan.

15 COMMISSIONER DUNNIGAN: Chairman Wolfe, I

16 would like it reflected in the minutes a discussion, as

17 reflected on page 76 of the transcript from last year,

18 relating to amending the rules. Thank you.

19 COMMISSIONER WOLFE: Thank you.

20 Any other comment on that? Thank you.

21 Agenda Item No. 4 is also a status report on

22 the previous annual and special meeting reports and

23 transcripts from the 2008 and 2009 meetings as well.

24 That's been undergoing review by each of the

25 states, and we have not finalized completion of

1 recommended changes to that, so this is just to 2 recognize in the record again that we are still in the 3 process of reviewing and finalizing that. And we'll take that up for action at a future meeting date. 4 5 Any comments in regards to that agenda item? 6 COMMISSIONER BARFIELD: No. 7 COMMISSIONER DUNNIGAN: No. 8 COMMISSIONER WOLFE: Thank you. 9 All right. We are on to agenda Item No. 5, 10 reports from the commissioners, each of the states. I will go ahead and start with my report. 11 12 I would like to first just highlight some of 13 the hydrologic conditions for calendar year 2010 in Colorado. We would like to report on activities and 14 15 hydrologic conditions on each of the three major 16 branches in the basin, as well as Bonny Reservoir. 17 And first on the North Fork of the 18 Republican River, 20,420 acre-feet passed the Stateline Gage in calendar year 2010. This is approximately 8,200 19 20 acre-feet less than the 1935 to 2010 average annual flow 21 of 28,660 acre-feet. 22 On the Arikaree, stream flows at the 23 Arikaree River Gage at Haigler totaled 2,360 acre-feet 24 for calendar year 2010, about three times the amount 25 recorded for 2009, which totaled 780 acre-feet. Flows on

1 the Arikaree have declined significantly from the

2 average of 12,170 acre-feet for the period of 1933 to3 2010.

4 On the South Fork of the Republican River, a
5 total of 12,760 acre-feet passed the Benkleman Gage in
6 2010. This is a thirty percent increase from the 8,400
7 acre-feet that passed the gage in 2009, and six times
8 the total for 2008.

9 Stream flows on the South Fork continue to10 improve from the drought years of zero flow but are

11 still significantly lower than the 72-year average of

12 approximately 24,000 acre-feet.

13 As far as Bonny Reservoir, this is located14 on the South Fork just north of Burlington. It is the

15 only federal reservoir in Colorado's Republican River

16 Basin. Bonny Reservoir is approximately 18 percent full

17 with an active storage as of last week of 7,372

18 acre-feet.

19 The releases that we have made from Bonny

20 Reservoir in 2010, from July 9, 2010 to August 27, 2010,

21 was 5007 acre-feet. An additional 2248 acre-feet was

22 released this past June 20 through July 7. And we will

23 also be making additional releases from Bonny Reservoir

24 starting in September of 2011.

25 I wanted to highlight for the commissioners

1 and the public what Colorado has been doing in terms of

2 our efforts towards compact compliance over the past

3 year and few years.

4 As I have indicated, we have continued to

5 make releases from Bonny Reservoir to help our efforts

6 in terms of overall basin-wide compact compliance as

7 well as our obligations to meet the subbasin

8 nonimpairment test on the South Fork, and as it stands

9 now, the water currently stored in Bonny Reservoir is

10 significantly less than the previous year.

11 Also in cooperation with the Republican

12 River Water Conservation District, through some of the

13 land-fallowing programs through CREP and EQIP, in 2010,

14 or at least through 2010 -- and this is cumulative up to

15 that point -- 19,755 acres have been currently retired

16 under the CREP program; 11,359 acres under various

17 EQIPs; and 1546 acres under the AWEP.

18 Approximately 10,000 acres are still

19 available under the 2006 CREP program. We are also

20 looking currently on an amendment to the CREP program

21 which will add an additional 20,000 acres, and that's

22 currently under review by the U.S. Department of

23 Agriculture.

24 The Republican River Water Conservation

25 District continues to pursue purchasing surface water

1 rights in the basin. As a result of their efforts over

2 the last several years, there is very little surface

3 water irrigation left in the basin.

4 We also adopted well measurement rules

5 that -- 2010 is the second year of our administration

6 under those well measurement rules.

7 And as of March 1, 2009, all high-capacity

8 wells in the basin were required to have a measurement

9 device installed and verified by a certified tester or

10 be declared inactive.

11 By December 1 of 2010, pumping totals for

12 the irrigation year for all active wells were required

13 to be submitted to the State Engineer.

14 The measurement team is staffed with four

15 full-time positions, and staff is currently and actively

16 enforcing the well measurement rules and well permits

17 within the basin.

18 Some of the activities of the well

19 measurement team include, in 2010 they began the field

20 inventory process for 3733 active and inactive wells

21 located in the Republican River Basin.

22 The team processed 445 well meter

23 verification tests, issued 577 notices of rule

24 violation/orders to comply, and sent out approximately

25 1800 notices of annual well pumping reporting

1 requirements, and processed 3194 annual pumping reports.

2 So thank you, staff, for all of your efforts

3 over the last year in completing that.

4 We also, in cooperation with the Republican

5 River Water Conservation District, are moving forward

6 with construction of the compact compliance pipeline.

7 The District had ground-breaking ceremonies this week.

8 On Monday, August 29, they started construction of that

9 pipeline.

10 It is anticipated that that project will be

11 completed in the summer of 2012, making deliveries of

12 water to the North Fork of the Republican River in the

13 latter part of 2012.

14 I would also just like to update folks

15 briefly on our current negotiations with Kansas and

16 Nebraska on approval of the compact compliance pipeline.

17 As you know, we have been working rigorously

18 over the last couple years in those efforts to get

19 approval of that. We continue those negotiations.

20 I believe we have been -- still continue to

21 make progress in those discussions, and I appreciate

22 each of the states' efforts in working with Colorado in

23 working towards final resolution of those remaining

24 issues so that we can seek approval by the compact

25 commissioners here in the very near future for approval

1 of the compact compliance pipeline.

2 Lastly, I would just like to report on the 3 pending litigation. Since the last compact meeting, the 4 United States Supreme Court accepted Kansas' petition 5 and appointed a special master to run the case. So the 6 litigation is proceeding, but no trial date has been 7 set. 8 And that concludes my report. At this time 9 I will turn it over to Commissioner Dunnigan for your 10 report. 11 COMMISSIONER DUNNIGAN: Thank you, Chairman 12 Wolfe. 13 First of all, I would like to thank Colorado and the City of Burlington for hosting this year's 14 15 Republican River Compact Administration meeting. The facilities are great. Thank you very much. 16 17 The State of Nebraska is in compliance with 18 the Republican River Compact. Using current accounting procedures, Nebraska has had positive balances during 19 20 2007, 2008, 2009 and 2010, which has led to compliance with the five-year average. Based on preliminary 21 22 estimates, Nebraska will again be in compliance for the 23 five-year period ending in 2011. 24 In the future Nebraska will continue to

25 remain in compliance with the Republican River Compact.

1 The Upper Republican, Middle Republican, and, most

2 recently, the Lower Republican Natural Resource District

3 boards have all voted to adopt a third generation of

4 integrated management plans.

5 These plans were modified from the previous

6 version to address concerns of water-short year

7 compliance brought up during the 2008 arbitration. These

8 plans also further solidify Nebraska's long-term

9 commitment to compact compliance.

10 The basin NRDs have demonstrated an on-going

11 commitment to compliance through the adoption of this

12 third-generation integrated management plan.

13 All of the integrated management plans

14 adopted by the basin NRDs contain controls that would

15 require, when necessary, the shutdown of wells in rapid

16 response areas during water-short years as part of

17 compliance efforts, as well as provisions to administer

18 stream flows in a manner that will ensure Nebraska

19 maintains compliance.

20 The integrated management plans also contain

21 provisions to continue to reduce groundwater pumping

22 volumes and conduct evaluations annually to determine if

23 additional long-term pumping adjustments are necessary.

24 The updated integrated management plans

25 incorporate complex forecasting and triggers that rely

1 on conservative dry-year projections to proactively

2 identify the potential for non-compliance, thereby

3 providing the necessary information to proactively

4 reduce consumption to levels necessary to ensure compact

5 compliance.

6 These triggers go well beyond the

7 requirements imposed by the compact and FSS because

8 Nebraska knows that future noncompliance is not an

9 option.

10 Nebraska understands that Kansas may have

11 concerns about the implementation of these most recent

12 integrated management plans and would, once again,

13 invite constructive dialogue through the engineering

14 committee to discuss any such concerns.

15 The department also continues to work with

16 the Tri-Basin Natural Resources District to finalize an

17 integrated management plan.

18 While not a necessary component to ensure

19 compact compliance, this plan will, among other

20 objectives, require the NRD to limit groundwater

21 depletions to the same volume as groundwater imports.

22 The Republican River Sustainability Task

23 Force continues to meet. The purpose of the 27-member

24 Republican River Basin Water Sustainability Task Force

25 is to define water sustainability for the Republican

1 River Basin, develop and recommend a plan to help reach 2 water sustainability in the basin, and develop and 3 recommend a plan to help avoid a water-short year in the basin. 4 5 The task force will be working to summarize 6 their efforts in a report to the legislature. 7 Nebraska continues to invest in long-term 8 solutions to reduce consumption in the basin. State and local natural resource districts and financial resources 9 10 continue to be invested in CREP and AWEP programs. 11 These programs have worked to provide 12 permanent and temporary reductions in irrigated lands throughout the basin. Nebraska also continues to invest 13 in the science necessary to support future sound 14 15 management decisions. 16 This work has included the development of a 17 wide array of management tools, specific evaluations of 18 augmentation sites throughout the basin, and the evaluation of riparian vegetation on water supplies, 19 20 just to name a few. 21 The department is also pursuing efforts in 22 coordination with the Nebraska Republican River Management District Association to develop modeling 23 24 tools to support the evaluation of potential conjunctive 25 management options throughout the basin.

1 The department continues to be open to 2 working with the other states through the WaterSMART 3 Basin Studies program to develop these tools and believes that such collaboration is called for pursuant 4 5 to Section IV.E. of the final settlement stipulation. 6 In closing, I reiterate that Nebraska will 7 continue to comply with the Republican River Compact. 8 The State will continue to proactively evaluate the basin and make the necessary changes to remain in 9 10 compliance. 11 We will continue to work with all 12 stakeholders in the basin, including the other states, 13 the NRDs, the surface water districts, individual users, and the Bureau of Reclamation. 14 15 I will now have Tom O'Connor give the report 16 of water administration activity in Nebraska for calendar year 2010. 17 MR. O'CONNOR: Thank you. I would like to 18 mention here that the first version of the 2010 water 19 20 administration report omitted an entry for November and December 2010. A modification has been made to the 21 22 report as posted on the Nebraska E&R website, and I have 23 copies of the revised reports here to distribute to 24 whoever is interested. 25 Report of water administration activities

1 for the Republican River Basin In Nebraska for the

2 calendar year 2010:

January 19. Letters were sent to irrigators
reminding them that 2009 water use reports must be filed
in the Cambridge field office.

6 February 16. Fifteen closing notices were

7 issued to water users that failed to submit their

8 required annual water use reports. These were to be

9 filed in the Cambridge field office by December 31.

10 These water users were not allowed to divert water

11 during the 2010 calendar year.

12 May 17. One regulating notice was sent to

13 Riverside Canal notifying them that they were not

14 allowed to divert water in excess of the amount of their

15 appropriation without prior consent.

16 June 28. Six regulating notices were sent

17 to water users above Meeker-Driftwood Canal notifying

18 them that they were not allowed to divert water in

19 excess of the amount of their appropriation without

20 prior consent.

June 28. Thirty-eight closing notices were
issued to water users above Meeker-Driftwood Canal
notifying them that they shall not divert water until
further notice.

25 July 7. One notice of the pumping schedule

2 they could legally divert.

3 July 16. One regulating notice was sent to

4 Riverside Canal.

5 July 19. One notice of the pumping schedule

6 was sent to a water user.

7 August 2. One regulating notice was sent

8 again to Riverside Canal.

9 August 2. Thirty-seven open/regulating

10 notices were issued to water users above

11 Meeker-Driftwood Canal notifying them that they were not

12 allowed to divert water in excess of the amount of their

13 appropriation without prior consent.

14 August 2. Six regulating notices were also

15 issued to water users above Meeker-Driftwood Canal, and

16 two notices of the pumping schedule were sent to water

17 users notifying them of the amount they could legally

18 divert.

19 August 3. One hundred five closing notices

20 were issued to water users above Cambridge Canal

21 notifying them that they shall not divert water until

22 further notice.

23 August 3. Thirty-nine regulating notices

24 were sent to water users above Cambridge Canal notifying

25 them that they were not allowed to divert water in

1 excess of the amount of their appropriation without

2 prior consent.

3 August 4. One notice of the pumping

4 schedule was sent to a water user.

5 August 8. Twenty-nine closing notices were

6 issued to water users above Meeker-Driftwood Canal

7 notifying them that they shall not divert water until

8 further notice.

9 August 9. Fifty-eight open/regulating

10 notices were sent to water users above Cambridge Canal

11 notifying them that they were not allowed to divert

12 water in excess of the amount given of their

13 appropriation without prior consent.

14 August 9. Four regulating notices were also

15 sent to Frenchman Cambridge and Frenchman Valley-H&RW

16 Irrigation Districts notifying them that they were not

17 allowed to divert water in excess of the amount of their

18 appropriation.

19 August 13. Two regulating notices were sent

20 to Frenchman Cambridge Irrigation District notifying

21 them that they were not allowed to divert water in

22 excess of the amount of their appropriation.

23 August 23. Eight closing notices were

24 issued to water users above Meeker-Driftwood Canal

25 notifying them that they shall not divert water until

1 further notice.

2 August 23. One regulating notice was also 3 sent to Frenchman Cambridge Irrigation District notifying them that they were not allowed to divert 4 5 water in excess of the amount of their appropriation 6 without prior consent. 7 August 26. One water appropriation was canceled above Swanson Reservoir. 8 9 September 3. Thirty-seven open/regulating 10 notices were issued to water users above 11 Meeker-Driftwood Canal notifying them that they were not 12 allowed to divert water in excess of the amount of their appropriation without prior consent. 13 14 September 3. Six regulating notices were 15 also sent to water users above Meeker-Driftwood Canal 16 notifying them that they were not allowed to divert 17 water in excess of the amount given of their 18 appropriation without prior consent. 19 November 1. Ten opening notices were sent 20 to reservoirs notifying them that they may store water. 21 December 2010. Water use reports were 22 mailed to water appropriations in the Republican River 23 Basin. These were to be filed in the Cambridge field 24 office by December 31. 25 COMMISSIONER DUNNIGAN: Chairman Wolfe, that

- 1 concludes Nebraska's report.
- 2 COMMISSIONER WOLFE: Thank you,
- 3 Commissioner.
- 4 Commissioner Barfield?
- 5 COMMISSIONER BARFIELD: Yes. Thank you,

6 Chairman Wolfe.

- 7 Again, I would like to provide some
- 8 comments, first of all, of a general nature relating to

9 the State of Kansas and legislative issues and then some

10 specific comments on the Republican Basin.

11 In January Sam Brownback became Kansas' 46th

- 12 governor. He was formerly secretary of ag, agriculture,
- 13 and a U.S. representative and a two-term U.S. senator.
- 14 Governor Brownback appointed Dale Rodman the 15th Kansas
- 15 Secretary of Agriculture.
- 16 Secretary Rodman was retired from a career
- 17 of active business, including 37 years of car dealing.
- 18 The governor has initiated several new
- 19 initiatives. He is holding a series of economic
- 20 summits, as part of his administration's commitment to
- 21 growing our state's economy, over a wide variety of
- 22 topics. But one of them I think that I wanted to note
- 23 here in this forum is his initiative on the Ogallala.
- 24 The Ogallala is a significant source of -- a
- 25 significant water resource in our respective states,

1 including Kansas, providing a lot of economic activity 2 but is also substantially overappropriated resulting in 3 water level declines and declines in yields and sort of 4 uncertainties about the future. 5 So he held a summit in Colby, Kansas, on 6 July 21. And we had individuals attending that with a 7 broad range of perspectives and contributing sort of 8 ideas about the future of the Ogallala in Kansas. 9 And there's a committee that is sort of 10 following up on some of the brainstorming that happened. We are expecting two to three specific pieces of 11 12 legislation in 2012. 13 And as a result of that, sort of to get 14 started, and then, I think, broader discussions and 15 maybe more legislation in 2013 as we sort of seek to 16 figure out how to continue to use the Ogallala and 17 benefit from the economics thereof but extend the life 18 of that resource. And so I will continue to report on that in future times here. 19 20 We had a pretty active legislative session 21 in Kansas. There were 14 water resource bills. We were 22 expecting a pretty quiet session. Then had a fairly 23 active one. None of them are very -- extremely 24 earthshaking. I will just note three of them for 25 purposes here.

One of them was to legislatively authorize
 what's called the Water Right Conservation Program that
 would allow people to voluntarily put their water right
 in a nonuse status for up to 10 years.
 And that enrollment would be on sufficient
 cause for nonuse and prevent damage of that water right
 to sort of balance preservation of those property rights

8 with conserving use of them and not requiring them to

9 use water to preserve that water right.

10 There were also changes in House Bill 231 to 11 something called flex accounts to seek to make that 12 program more attractive and seek to provide more 13 flexibility, but it requires a 10 percent conservation 14 requirement.

15 And, finally, there was a Senate substitute 16 for House Bill 2133 that deals with a fund that the 17 legislature created in case damages are received from 18 either Colorado or Nebraska in this litigation. It sort of talks about how those moneys would be utilized in the 19 20 legislation. It sort of amended how that would be done. 21 Climate conditions. We have had a very 22 interesting climate year in Kansas. 23 As a result of La Nina, over the past year 24 Kansas -- the southern half of Kansas is currently

25 experiencing its worst drought since at least 2002. And

in some areas, in 2011 to date, it is the driest year
 since really we've been keeping records since the late
 1800s. It's drier in some respects than the 1930s dust
 bowl.

5 There's been a drought declaration in 52 of 6 Kansas' 105 counties, and there's a pending declaration 7 to extend that into southeast Kansas. The U.S. drought 8 monitor of August 16 showed continuing intensification 9 of the drought in southwest and south central Kansas. 10 As a result of this, I have had to sort of 11 innovate. We have a lot of farmers in southwest and 12 south central Kansas that have enough season they can 13 double crop. Get a wheat crop and then grow a corn or

And typically they can get that wheat crop
in with just a few inches of irrigation. In many cases
really there's no precipitation even back through the
latter half of last year. They've had to irrigate six
inches to get the wheat home.
And then we are running out of authorization
to get their corn home. And so I instituted, in
addition to the amendments to the flex account, an
alternative, something called an emergency drought term

14

some other crop behind it.

24 program that, as such, it allows water users to borrow

25 from their 2012 authorization to finish out their crops

1 in 2011. So they could make adjustments to 2011.

2 We expected interest in that, 50 or 75 3 permits. As of yesterday, I think we had 706 drought 4 terms that we had accepted for filing. So it's going to 5 be an interesting year next year as they sort of make 6 their decisions about how to use that smaller allocation 7 next year. 8 It's been a very active year for water 9 administration, again, in south central and southeast 10 Kansas, administering rivers that -- much more significantly than past years. 11 12 Alternatively, in the north half of the 13 state, including the Republican Basin, we have had a tremendous year. Very timely rains have produced great 14 15 crops in the Republican part of the basin in northwest 16 Kansas and north central. 17 A month-long -- several-month-long flood on 18 the Missouri River -- we have been dealing with significant flooding issues in northeast Kansas, along 19 20 with Nebraska and other Missouri basin states. So it's been quite an interesting year weatherwise. 21 22 Turning to the Republican River Basin

23 specifically, Kansas is fully in compliance with the

24 compact in relation to the final settlement stipulation.

25 Our entire basin is either closed in

1 appropriations or managed under the principle of safe 2 yield, which is a pretty -- a very restrictive yield 3 application. 4 We are fully metered. We have been for a 5 couple years and have an aggressive water use program to 6 ensure that those records are kept. And have a very 7 active compliance and enforcement program to make sure 8 that people comply with those programs. Those are all ongoing, as they have been in the past. 9 10 In Kansas, northwest Kansas, the Ogallala 11 portion of that is covered by the northwest Kansas 12 Groundwater Management District No. 4, and they have 13 been very active, even before the governor's initiative, over recent years to try and determine how to provide 14 15 for enhanced management of the water resources, again, 16 toward the objective of continuing the economic viability of this resource now and into the future. 17 18 They have gone through a process of identifying six high priority areas that have the most 19 20 significant declines and where they believe their actions should be concentrated. They also are very 21 22 involved with programs under AWEP and other state and 23 federal programs to reduce water use and have been 24 focusing those programs in these high priority areas.

25 They have also used a version of the

1 Republican River Compact model to sort of look into the

2 future in terms of what their part of the basin looks

3 like.

4 And the district staff have gone to each of

5 these high priority areas over the last year or two and

6 sought to engage them in dialogue about the future of

7 their areas and potential enhanced management

8 alternatives.

9 One of the HPAs, as they are called in

10 Sheridan County, has been working to determine how they

11 can essentially enact systematic allocations in their

12 high priority area and working with me and my staff on

13 that.

14 And, in fact, one of the legislative items

15 that the Ogallala committee is endorsing move forward

16 would help them do that in a way that balances their

17 needs with state processes.

18 I think, with that, I will conclude my

19 report.

20 COMMISSIONER WOLFE: Thank you,

21 Commissioner.

22 At this time I think we will move on to

23 agenda Item No. 6 on federal reports. And here with the

24 Bureau of Reclamation is Aaron Thompson.

25 MR. THOMPSON: Thank you, Chairman Wolfe --

1 I am pleased to be here -- also appreciate Commissioner

2 Dunnigan and Commissioner Barfield.

3 My name is Aaron Thompson. I am here with 4 the Bureau of Reclamation. I represent the Bureau of 5 Reclamation's activities in the Nebraska, Kansas area 6 office. I serve as area manager for that region. 7 Today we are going to submit a written 8 report to the Compact Administration. I have given each commissioner a copy of the report. 9 10 It highlights -- or it contains our 2010 11 operations. It highlights our 2011 operations through 12 August 15 of this year. 13 It also has our reservoir management activities, which highlights our WaterSMART efficiency 14 15 grant, our WaterSMART operational system improvements, 16 and our water conservation field services program. 17 And one item that is not in the report that 18 I would like to highlight is, in October of 2010, we found a safety dam issue with Red Willow Dam. We have 19 20 been working on a corrective action report to correct the safety dam issue there at the dam. 21 22 Yesterday we had bid openings for the 23 repair. The expected construction time is expected to 24 last about two years, and the apparent low bid yesterday

25 was at \$15.3 million.

1 And that is all the Bureau of Reclamation 2 would like to report. If you have any questions on the 3 report, I would be happy to take them at this time or send them to me at a later date. 4 5 COMMISSIONER WOLFE: Thank you, Aaron. I 6 appreciate that report. Any questions for Aaron? 7 COMMISSIONER BARFIELD: No. COMMISSIONER DUNNIGAN: No. 8 9 COMMISSIONER WOLFE: Thank you. 10 I would like to also take this opportunity 11 to thank you, Aaron, for his work over the last -- this 12 past year in our efforts in terms of future operations 13 at Bonny Reservoir. 14 His staff has been very cooperative in 15 working with us in trying to address future concerns 16 about what Bonny Reservoir will be like in the event we 17 drain it down to a very low condition and concerns about 18 operational issues there. 19 So we appreciate their efforts in assisting 20 us to try and address those concerns. So thank you, Aaron. I appreciate that. 21 22 I don't believe we have anyone here from the 23 U.S. Army Corps of Engineers. I think we did receive 24 something via e-mail from them, but in case I missed 25 anybody that may have shown up from the Corps?

2 Geological Survey.

3 MR. MILLER: I would like to thank everybody for the opportunity to present the data that was 4 5 collected by the U.S. Geological Survey in the 2010 6 water year. 7 Again, I am John Miller with the U.S. Geological Survey from the field office in North Platte, 8 Nebraska. I am going to give a quick report on the 9 10 stream flow status on many sites within the Republican 11 River Basin. 12 The first set of slides -- go ahead and 13 proceed a few slides here for the sake of time. That's 14 a handout from the back table. I hope there's a few of 15 those left. If not, we can make a couple more copies. 16 You, obviously, can't see the data there 17 very well, but with those handouts, you can look at 18 those if you can get ahold of one. 19 First, we'll go ahead and proceed. The first set of slides is going to be the compact sites 20 that are operated by the U.S. Geological Survey that are 21 funded through our Anset program. 22 23 The first site -- for the sake of time, I'll 24 just point out the median flow -- or the mean flow for

25 the 2010 water year. The water year is from October 1

1 to September 30 for each of these sites. I will point

2 out the mean and also where it's ranging over the entire

3 years of data collection.

4 For the Arikaree River, the ranking is the

5 69th lowest year out of 78 years of data collection.

6 The mean was 3.42 -- 3.4 CFS in the 2010 water year.

7 The North Fork of the Republican River, the

8 mean for this last water year was 29.6 CFS, and it

9 ranked 65th out of 75 years of data collection.

10 The next slide is Buffalo Creek near

11 Haigler, Nebraska. The mean for this last year was

12 3.47. It ranked 65th out of 70 years of water

13 collection. That's 65th lowest. Hopefully, I am saying

14 that right.

15 The next slide is going to be Rock Creek

16 near Parks. The mean flow from last year was 7.43 CFS,

17 and it ranked 65th out of 70 years of data collection.

18 The next slide is going to be South Fork

19 near Benkelman, Nebraska. The mean flow was up actually

20 quite a bit this last year to 19.4 CFS, and it ranked

21 49th out of 73 years of data collection.

22 The next slide is Frenchman Creek near

23 Culbertson, ranking 41st out of 60 years of data

24 collection. And its mean flow this past year was

25 48.3 CFS.

1 The next slide is going to be Driftwood 2 Creek near McCook, Nebraska. And its mean flow was 3 4.73 CFS for the last year, ranking 50th out of 64 years of data collection. 4 5 And then Red Willow Creek near Red Willow, 6 Nebraska, its mean flow is up substantially, and this is 7 due to the work that's being done on Hugh Butler Dam and 8 the releases that have been -- that are being made there. Its mean flow this past water year was 59.6 CFS, 9 10 ranking 1st in 49 years of data collection. 11 Sappa Creek near Stamford, the mean flow was 12 30.9 CFS this last year, ranking 23rd out of 64 years of data collection. 13 14 And I believe this is the last site that's 15 within the compact. Cortland Canal Site, the mean flow 16 this past year was 59.9 CFS, ranking 41st out of 56 17 years of data collection. The next set of sites are sites that are 18 19 probably of interest. There's just a couple of them. 20 They are also operated by the U.S. Geological Survey. 21 The first site there is Republican River at 22 Stratton. The mean flow this past year was 56.7 CFS, 23 ranking 48th out of 60 years of data collection. 24 And the Republican River at McCook with a 25 mean flow of 71.4 CFS, ranking 45th out of 56 years of

1 data collection.

2 Then the last set of sites -- actually, one

3 more. The Republican River near Orleans ranked 25th out

4 of 63 years of data collection with an average flow of

5 229 CFS.

6 And then there's just one more set of sites

7 that are operated by the Nebraska Department of

8 Resources, DNR. We displayed their data on the web and

9 reviewed the record. It's a cooperative effort.

10 The first slide is Frenchman Creek at

11 Palisade with a mean flow of 28 CFS, ranking 53rd out of

12 60 years of data collection.

13 The final slide is the Republican River at

14 Cambridge with a mean flow this past year of 203 CFS,

15 ranking 24th out of 61 years of data collection.

16 And the final slide. Here's the contact

17 information for our management in Lincoln, Nebraska. In

18 the upper right there, all of this information that was

19 displayed and given today can be looked at in much more

20 detail at our website, in the upper right.

21 There's also just loads of historic data --

22 measurements and stream flow data -- that can be

23 accessed. If you need help getting through our website,

24 you can get hold of somebody -- Duane Curtis would be

25 the person to ask in our Lincoln office. His name isn't

1	up there, but he's the guy that can get around pretty
2	efficiently on our website there.
3	That concludes my report. If there's any
4	questions, I can address those now.
5	COMMISSIONER WOLFE: Thank you, John. Any
6	questions for John?
7	COMMISSIONER BARFIELD: You don't have Hardy
8	information?
9	MR. MILLER: I don't.
10	COMMISSIONER BARFIELD: Does Kansas maintain
11	that one?
12	MR. MILLER: That is correct.
13	COMMISSIONER BARFIELD: I would just note,
14	these variations were quite interesting, and we sort of
15	try and look at and understand as well.
16	Again, as I was noting, the range of
17	hydrologic conditions is pretty amazing, and the
18	persistence of dry trends or and wet trends as
19	well I had one of my staff assemble for the State of
20	Nebraska a precip that in 2007 every they have been
21	above the 84th percentile all four years.
22	So we saw a persistent pattern of water
23	use or low precip and now a persistent pattern of
24	good rains that I think are reflected in some of those

25 gages.

1 Again, one part of the basin and another can 2 have a lot of variability as well. So it makes it sort 3 of hard to figure out what all this means, but I appreciate your report. 4 5 MR. MILLER: Thank you. COMMISSIONER WOLFE: Thank you, John. 6 7 At this time I would like to have Megan 8 Sullivan, the engineering adviser for Colorado, give the engineering committee report. 9 10 MS. SULLIVAN: Thank you, Commissioner 11 Wolfe. 12 The engineering committee and technical 13 representatives from the states of Colorado, Kansas, and Nebraska participated in several collaborative work 14 15 assignments and phone conferences with regards to the 16 assignments from the August 12, 2010 annual meeting. 17 The following assignments and work activities were 18 completed: 1. Complete the user's manual for accounting 19 20 procedures and provide a resolution for its adoption. a) The States reviewed the 2006 draft initiated by 21 22 Kansas and provided comments. However, a final draft of the manual was not completed. The assignment should be 23 24 continued on to next year.

25 2. Exchange by April 15, 2011 the information listed

- 1 in Section V of the RRCA Accounting Procedures and
- 2 Reporting Requirements, and other data required by that
- 3 document. By July 15, 2011, the States will exchange
- 4 any updates to these data.
- 5 a) Each state exchanged its model data sets by
- 6 April 15, 2010 or shortly thereafter. A preliminary run
- 7 of the RRCA groundwater model was developed by Willem
- 8 Schreuder of Principia Mathematica and posted on the
- 9 RRCA website he maintains for the administration.
- 10 b) The States exchanged their final data, with the
- 11 exception of Colorado meter data, in August of 2011.
- 12 Willem Schreuder of Principia Mathematica completed a
- 13 model run based on this data and posted the results on
- 14 the website.
- 15 c) Final accounting for 2010 was not completed.
- 16 d) Data sets were collected by the committee for
- 17 stream flow, climate information, diversion records, and
- 18 reservoir evaporation records of the three states in
- 19 cooperation with the USGS, U.S. Bureau of Reclamation,
- 20 and U.S. Army Corps of Engineers for 2010.
- 21 3. Continue efforts to resolve concerns related to
- 22 varying methods of estimating ground and surface water
- 23 irrigation recharge and return flows within the
- 24 Republican River Basin and related issues.
- 25 a) Kansas provided a copy of six articles regarding

- 2 will review the reports. No additional progress has
- 3 been made on this assignment.
- 4 4. Retain Principia Mathematica to perform ongoing
- 5 maintenance of the groundwater model and periodic
- 6 updates requested by the engineering committee.
- 7 a) Each state separately contracted with Principia
- 8 Mathematica for that service.
- 9 5. Continue development of a five-year accounting
- 10 spreadsheet/database for adoption at the 2010 annual
- 11 meeting or earlier.
- 12 a) The assignment was not completed. The assignment
- 13 should be continued on to next year.
- 14 6. Continue to review Colorado's augmentation
- 15 proposal, as appropriate.
- 16 a) This proposal was the subject of arbitration. No
- 17 additional information was discussed by the engineering
- 18 committee.
- 19 7. Continue efforts to finalize accounting data for
- 20 2008 and 2009. By October 15, 2010, the engineering
- 21 committee will meet to discuss issues surrounding model
- 22 inputs and accounting data. Also by October 15, 2010,
- 23 Colorado will provide meter data as required under the
- 24 final settlement stipulation.
- 25 a) The engineering committee discussed this

- 1 assignment. However, unresolved issues subject to
- 2 non-binding arbitration as well as Kansas' data requests
- 3 continue to prevent agreement on accounting data.
- 4 Colorado was unable to provide final meter data.
- 5 Preliminary data was collected and is under review.
- 6 8. By October 15, 2010, the engineering committee will
- 7 meet to discuss issues preventing agreement on final
- 8 accounting for 2006 to 2009.
- 9 a) The engineering committee discussed this
- 10 assignment. Unresolved issues subject to non-binding
- 11 arbitration and Kansas' data requests continue to
- 12 prevent agreement on model results and accounting data.
- 13 9. Discuss water-short-year accounting for Beaver
- 14 Creek.
- 15 a) This topic was raised during arbitration and under
- 16 discussion outside the engineering committee. The topic
- 17 was not pursued by the engineering committee.
- 18 10. Discuss and resolve the issue of missing

19 precipitation data.

- 20 a) A subcommittee of groundwater modelers from each
- 21 state met to resolve the issue and developed a procedure
- 22 to fill in gaps from missing data. The recommended
- 23 procedure is detailed in attached Exhibit A, the report.
- 24 The engineering committee recommends that
- 25 the RRCA take specific action to accept this procedure

1 and to direct that the procedure be applicable for

2 climate data for the groundwater model for compact year

3 2008 and forward.

4 In addition to the above assignments, the

5 engineering committee discussed the following issues:

6 The first one is, due to stream bank

7 instability, the stream flow gage at Guide Rock must be

8 relocated approximately two miles downstream from its

9 present location.

10 The engineering committee recommends that

11 the RRCA recognize that the gage must be relocated and

12 to assign the engineering committee the task to develop

13 a procedure to account for inflows along the two-mile

14 stream segment between the diversion dam and the

15 relocated stream gage.

16 The next issue is, In the fall of 2010, the

17 U.S. Bureau of Reclamation conducted a sediment survey

18 on Bonny Reservoir and subsequently revised the

19 area-capacity tables for the reservoir.

20 The State of Colorado requests the

21 engineering committee discuss the application of the

22 revised area-capacity tables to current and past

23 accounting, specifically past accounting input data that

24 has not been accepted by the RRCA.

25 The third issue is, the State of Nebraska

1 recently received a petition for a variance for a 2 surface water permit. Section III.C of the final 3 settlement stipulation outlines a general procedure for notification of new surface water rights so as to 4 5 provide the RRCA an opportunity for discussion. 6 It is anticipated that additional petitions 7 for variances will be received by Nebraska, and if such 8 variances are granted, Nebraska will send the submitted applications to the other states and the Bureau of 9 10 Reclamation and allow the states 60 days for comment. 11 The fourth issue is, the State of Nebraska 12 requests the engineering committee discuss developing a framework for submitting and reviewing future 13 augmentation plans. 14 15 The recommended assignments for the coming 16 year. The engineering committee recommends the RRCA assign the following tasks: 17 No. 1. Finalize work on a user's manual for 18 the RRCA accounting procedures and provide a 19 20 recommendation to the administration for adoption at next year's annual meeting or earlier. 21 22 No. 2. Exchange, by April 15, 2012, the 23 information listed in Section V of the RRCA Accounting 24 Procedures and Reporting Requirements and other data 25 required by that document. By July 15, 2012, the States

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1 will exchange any updates to these data.

2 No. 3. Continue efforts to resolve concerns 3 related to varying methods of estimating ground and surface water irrigation recharge and return flows 4 5 within the Republican River Basin and related issues. 6 No. 4. Retain Principia Mathematica to 7 perform ongoing maintenance of the groundwater model and 8 periodic updates requested by the engineering committee 9 for calendar year 2012. 10 The billable costs shall be limited to 11 actual costs incurred, not to exceed \$15,000 in total, 12 and will be apportioned in equal one-third amounts to 13 the states of Colorado, Kansas, and Nebraska, 14 respectively. 15 The fifth assignment is to continue 16 development of a five-year accounting spreadsheet for adoption by the RRCA. 17 Next, continue to review Colorado's 18 augmentation proposal, as appropriate. 19 20 No. 7. Continue efforts to finalize accounting data for 2008, 2009 and 2010. 21 22 No. 8. Continue discussion of issues 23 preventing agreement on final accounting for 2006-2010. 24 No. 9. Develop a procedure to account for

25 inflows to the stream segment between the Guide Rock

1 diversion dam and the relocated stream flow gage.

2 No. 10. Discuss the application of the

3 revised Bonny Reservoir area-capacity tables to current

4 and past accounting data.

5 No. 11. Discuss any accounting changes that

6 may be needed for surface water diversions for the

7 purpose of recharging groundwater.

8 No. 12. Discuss developing a framework for

9 an application and approval process for future

10 augmentation plans.

11 No. 13. Apply the procedure described in

12 Exhibit A of this report to fill in missing

13 precipitation data in the groundwater model for compact

14 years 2008, 2009 and 2010 and for subsequent years.

15 And the last and final, discuss archiving

16 the data and materials from the Conservation Committee

17 study.

18 Commissioner Wolfe, that is the engineering

19 committee report.

20 COMMISSIONER WOLFE: Thank you. Are there

21 any questions on the report? We will be taking action

22 on this other agenda item, No. 9.

23 Thank you for the report. And I think that

24 essentially covers 7(a), and at this time we will go to

25 agenda Item 7(b) on the report from the Conservation

1 Committee.

2 Pat Erger. I think there's a microphone

3 right there at the end of the table.

4 MR. ERGER: Good morning, Commissioners.

5 Thank you very much for having the Bureau of Reclamation

6 here to make this presentation on the Conservation

7 Committee.

8 As you all are well aware, back in 2004,

9 during the final settlement stipulation, there was a

10 plan put together to study impacts of nonfederal

11 reservoirs and land terraces on the basin water supplies

12 of the Republican River Basin.

13 I'm here today to tell you that we have

14 completed that study. And as we discussed yesterday, we

15 gave you an overview of the preliminary findings of that

16 report.

17 Dr. Derrel Martin, UNL, and Dr. Jim

18 Koelliker, KSU, made those presentations yesterday. The

19 study uses a water balance model to quantify the

20 impacts.

21 As we discussed yesterday -- and we talked

22 at great lengths about that -- and also in Megan's

23 report we talked about how to store all that data

24 generated by the study.

25 Two other important things that I would like

1 to present today and report on is that the States and 2 Reclamation have spent 100 percent of the plan's study 3 costs. Originally the study cost \$1 million. The actual study cost was 1.3 million. 4 5 The States' combined impact services have 6 met the requirements of the final settlement stipulation 7 agreement for the final study. 8 And to date so far, four papers have been 9 completed as a result of the work directly related to 10 this study, one doctor thesis and three master's theses. 11 Additional papers are going to be prepared by 12 Dr. Koelliker and Dr. Martin. 13 And these papers will be to the American Society of Agricultural and Biological Engineering 14 15 communities. 16 And I will be glad to answer any other additional questions. 17 COMMISSIONER WOLFE: Any questions for Pat? 18 19 COMMISSIONER DUNNIGAN: No. 20 COMMISSIONER BARFIELD: No. 21 COMMISSIONER WOLFE: Thank you, Pat. We 22 appreciate your efforts and the report. 23 At this time we are on agenda Item 8 under 24 Old Business. Agenda Item 8(a) is the status of the 25 2006, 2007, 2008, 2009 -- and I think we should add

1 2010 -- final accounting there.

2 Again, this is not for action at this point.

3 Just to recognize that the States continue to work

4 through the engineering committee on finalization of

5 data and other information required for adoption of

6 final accounting for those years, and so that is still

7 under way.

8 And it will continue to be addressed as part

9 of the engineering committee assignments of this

10 forthcoming year.

11 Are there any comments or other questions in

12 regards to this agenda item?

13 COMMISSIONER BARFIELD: No.

14 COMMISSIONER DUNNIGAN: No.

15 COMMISSIONER WOLFE: The next agenda item is

16 8(b). I would like to turn this over to Commissioner

17 Dunnigan to introduce for the commissioners.

18 COMMISSIONER DUNNIGAN: Thank you, Chairman

19 Wolfe.

20 At last year's meeting there was discussion

21 about amending the rules and regulations to reflect the

22 actions taken at last year's RRCA meeting, specifically

23 amending Rule 14.

24 That was assigned to the engineering

25 committee, and I don't believe that was reflected in the

1 engineering committee report. So under agenda Item 2 9(a), I would make the motion to have that assigned. COMMISSIONER WOLFE: Thank you, 3 4 Commissioner. 5 Commissioner Barfield, any comment on that? 6 COMMISSIONER BARFIELD: No. 7 COMMISSIONER WOLFE: Thank you. 8 At this time we are at agenda Item 9. Before we take any final actions on that, I would like 9 10 to take about a 10-minute break. 11 Again, for those of you who plan to provide 12 public comment, I'd ask you, if you could, please, to go 13 to the back table where you've signed it and make sure 14 you have identified to either David Keeler or Katie 15 Radke your intention to speak so I can gather those 16 during the break and determine how much time we need to allocate for that. 17 So we'll come back in about 10 minutes and 18 continue action on agenda Items 9, 10 and 11. 19 20 (Break was taken from 10:18 to 10:50.) 21 COMMISSIONER WOLFE: We are going to get 22 back to agenda Item 9. 23 For those of you who aren't normally 24 familiar with the Compact Administration and our process 25 and how we work throughout the year, it may appear, if

1 you are just coming to today's meeting, that we are

2 moving rather quickly through the agenda and some things

3 that seem to be very complicated subject matters have

4 been worked on over the year.

5 But we did have a work session yesterday

6 afternoon and spent several hours here with the

7 engineering committee as well as the commissioners going

8 over that information and having that discussion and

9 recommendations that would be taken for consideration

10 today.

11 So that folks understand a little bit of

12 that background, this is what we have done ad hoc this

13 morning in putting this agenda together.

14 But if you do ever have any questions about

15 any of this process or any information on here, I

16 encourage you to contact either the commissioners or the

17 engineering committee members about that. This is all

18 public information. We certainly want to make sure that

19 we have answered any questions that you have about the

20 process.

21 At this time we are going to agenda Item

22 9(a), the action on the engineering committee report and

23 assignments. And I think, before we do that,

24 Commissioner Dunnigan would like to make a motion to add

25 an assignment to that.

- 1 So Commissioner Dunnigan.
- 2 COMMISSIONER DUNNIGAN: Thank you, Chairman
- 3 Wolfe.
- 4 I would like to make a motion to add an
- 5 assignment to amend the rules as discussed on page 76 of
- 6 the transcript from last year to the engineering
- 7 committee assignment list.
- 8 COMMISSIONER BARFIELD: I would second that.
- 9 COMMISSIONER WOLFE: There's been a motion
- 10 and a second. And just for the record, Megan, will that
- 11 be Item No. 15 on the list?
- 12 MS. SULLIVAN: Yes.
- 13 COMMISSIONER WOLFE: That will be Item
- 14 No. 15 on the assignment list for the coming year. Any
- 15 other discussion on that motion? Hearing none, all
- 16 those in favor say aye.
- 17 COMMISSIONER DUNNIGAN: Aye.
- 18 COMMISSIONER BARFIELD: Aye.
- 19 COMMISSIONER WOLFE: Aye.
- 20 Motion passed.
- 21 Let's go ahead then and take some action on
- 22 the entire committee report and those assignments.
- 23 COMMISSIONER BARFIELD: I will go ahead. I
- 24 won't reread the list, but I guess I would move that we
- 25 assign the engineering committee the 15 items then --

1 with the addition of Brian's motion here -- that Megan 2 listed in her report, that we provide that as the 3 assignments for the next year to the engineering 4 committee. 5 COMMISSIONER DUNNIGAN: Second. COMMISSIONER WOLFE: There's been a motion 6 7 and a second. 8 And, Commissioner Barfield, as part of that 9 motion, is it the understanding that we would be also 10 approving the entirety of the report as well, including 11 those assignments? 12 COMMISSIONER BARFIELD: We are making 13 assignments here. I guess there's always been a 14 question about whether we approve or accept the report. 15 I guess I am just moving the assignments in this motion. 16 COMMISSIONER WOLFE: I just want to be clear 17 because the agenda item said we were taking action on 18 the reports. I just want to make sure, when we act on this motion, that we understand what we are acting on. 19 20 COMMISSIONER BARFIELD: I guess I would add that we are accepting the engineering committee report 21 22 then in this motion. 23 COMMISSIONER WOLFE: Any other discussion on 24 agenda Item No. 9(a)? All those in favor say aye. 25 COMMISSIONER DUNNIGAN: Aye.

1 COMMISSIONER BARFIELD: Aye. 2 COMMISSIONER WOLFE: Aye. 3 Motion approved. 4 Next is agenda Item 9(b). This is in 5 regards to the action on the procedure for the missing 6 precipitation data. This was discussed by Megan as Item 7 No. 10 in the engineering committee report. 8 To accept the recommendation on using the 9 method and including that in the user manual and 10 adoption of that for the groundwater model for the years 11 2008 through 2010. 12 Would anybody like to entertain a motion on 13 that? 14 COMMISSIONER BARFIELD: I will make an 15 attempt here. 16 Yes, I would move that the Compact 17 Administration direct the engineering committee to adopt 18 the procedure that they presented to us yesterday during the work session and implement that procedure for years 19 20 2008 and following and that they document that appropriately. 21 22 COMMISSIONER DUNNIGAN: Second. COMMISSIONER WOLFE: There's a motion and a 23 24 second. Any discussion? All those in favor say aye. 25 COMMISSIONER DUNNIGAN: Aye.

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1 COMMISSIONER BARFIELD: Aye.

2 COMMISSIONER WOLFE: Aye.

3 Motion approved.

4 The last agenda item under 9 is 9(c), and

5 this is to take action on the relocation of Guide Rock's

6 stream flow gage. And I am going to turn it over to

7 Commissioner Dunnigan for a motion.

8 COMMISSIONER DUNNIGAN: Thank you, Chairman

9 Wolfe.

10 I would like to make a motion to approve

11 moving the Guide Rock gage from its present location to

12 a location downstream at the Highway 136 river bridge

13 just south of Guide Rock, Nebraska. I also recognize

14 the assignment relating to this issue that was given to

15 the engineering committee.

16 COMMISSIONER BARFIELD: I would second.

17 COMMISSIONER WOLFE: There's been a motion

18 and a second. Any further discussion? Hearing none,

19 all those in favor say aye.

- 20 COMMISSIONER DUNNIGAN: Aye.
- 21 COMMISSIONER BARFIELD: Aye.
- 22 COMMISSIONER WOLFE: Aye.

23 Motion approved.

24 And I believe that's all we had as far as

25 action items on the agenda. Was there anything else

1 that we missed? I think we have got it.

2 At this time we will move on to agenda Item 3 No. 10, remarks from the public. I would like to just make a few introductory remarks before we get started. 4 5 We do have a microphone up here. I think I 6 have got a list of those who have signed up who want to 7 make remarks before the commissioners and the public. 8 So if we have missed your name, as we get through the 9 list, if you are still interested and want to make 10 remarks, please come forward. 11 Also, for the benefit of the stenographer, 12 when you come forward, please announce your name and also, if you could spell your last name, that would be 13 helpful. We've got it written down here, but we want to 14 15 make sure that we get it correctly in the record. 16 And I know that there's a number of 17 individuals who have come here today to speak in regards 18 to Bonny Reservoir. And so to the extent that representatives are here today, we appreciate your 19 20 attendance and remarks you may have on that. 21 And I think, based on the number of people 22 that I have seen identified sign up, it doesn't appear 23 that there's an attempt to have a vast number of people 24 come up to make duplicative comments regarding that, so 25 we appreciate that.

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1 But to the extent you have remarks that are 2 similar to the previous speakers who've come up, we'd 3 appreciate it if you would try to limit that, just in the interest of time. 4 5 But I would like to maybe, just before we 6 get started -- and there may be some others who want to 7 come up and speak on something other than Bonny 8 Reservoir, but we know there are some folks here that 9 want to address the commission in regards to that. 10 But I would like to just make a few 11 introductory remarks before we get started on that as 12 far as where Colorado is moving forward in regards to Bonny Reservoir, briefly. 13 14 I am not going to go into a lot of details. 15 And certainly my staff is always available for responses to questions that come up. 16 17 Alex Davis is here today as well on behalf 18 of the department, and she is available for answering questions as well after we break after the meeting or 19 20 any subsequent time that you have any questions about what efforts that Colorado and the Department of Natural 21 Resources is taking in terms of Bonny Reservoir and 22 23 Bonny State Park. 24 As you know, Parks and Wildlife is moving

25 forward with a plan to repurpose operations at the

1 reservoir site and the lands around it as part of a

2 repurposing to more of a passive recreation area from a

3 more active recreation area that's there now with the

4 boating on the lake, for example.

5 And so those efforts are under way. And I'm
6 not going to attempt to try to address all the specifics
7 that are going on.

8 Alex Davis has been one of the lead

9 representatives from the department and has attended, I

10 know, a number of meetings here in the basin in regards

11 to that, and I presume there may be still some further

12 discussion in regards to that as that process moves

13 forward.

14 It's been a long and complicated process to 15 move forward through that repurposing because there's a 16 number of entities involved in this operation of Bonny 17 State Park with federal agencies involved, state 18 agencies involved. We have got water administration 19 going on. We have got compact compliance issues that 20 are at stake as well. 21 And so it has taken a considerable amount of 22 time working over the last years to work through the 23 myriad of regulations and agreements that have been out 24 there, and I know some of you have been more involved in 25 that process than others. But we hope we have tried to

1 bring clarity to that process and the complexity that

One of the things, as the state engineer and

2 there is out there in trying to repurpose that site.

3

a commissioner on the Compact Administration in terms of 4 5 my responsibilities, is an obligation under the compact 6 to make sure that we maintain our compliance with the 7 Republican River Compact. 8 And as I reported earlier in my report this 9 morning about the efforts of the State, along with the 10 Republican District and users in the basin out here, they have been difficult decisions. 11 12 I know that the users in the basin have contributed upwards of -- in the end, when it's all said 13 and done, probably close to \$100 million of their own 14 15 money to implement and take actions to achieve compact compliance. 16 17 So it's certainly been difficult and an 18 expensive proposition to go down this path, but we have looked very hard at the options that have been before us 19 20 to reach compact compliance. 21 We have been working with the other states 22 in those efforts. And some of these decisions that have 23 been made have been very difficult and have come down to

24 choosing the best of our worst options.

25 And certainly Bonny Reservoir fits into that

1 equation. And I want to, I guess, state that it's not 2 a -- it's not an easy decision to try to afford in the 3 near term to drain water out of Bonny Reservoir to achieve compact compliance. 4 5 And we have been trying to do this 6 thoughtfully in making sure that whatever decisions we 7 make and agreements that we reach with Kansas and 8 Nebraska, that we don't have any irrevocable processes 9 that we have set in place that would prevent us from 10 trying to keep Bonny Reservoir as a viable operation to 11 the extent we can here in the basin. 12 We know in the short term that we have got 13 to drain Bonny Reservoir to achieve compact compliance. It's not an easy decision to make. We know the impacts 14 15 that it has on the community and the concerns that are 16 out there.

17 But I think we want folks to understand that 18 we don't know what the future holds on this, but we don't want to make any of those decisions today that 19 20 would prevent us from -- if there's an opportunity in the future that Bonny Reservoir could retain some water 21 22 and allow Colorado to maintain compact compliance, I 23 think it's in Colorado's interest that we try to do what 24 we can to look for those opportunities. 25 We can't guarantee anything today. We don't

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1 know what the future holds on that.

2 Based on projections that we see now and the 3 uncertainty about climate change in the -- certainly in 4 the very near term in the years ahead, Bonny Reservoir 5 will have to be drained for us to achieve compact 6 compliance and to maintain that or Colorado will be 7 subject to ongoing penalties from the other states under 8 the compact. 9 So I wanted to lay that out as just a little 10 bit of the framework to help people understand what Colorado has been doing in its efforts to achieve 11 12 compact compliance. 13 And so, with that, I would like to start 14 with our people who have come forward and who have asked 15 to speak before us today. I am not going in any 16 particular order of preference, just in terms of the sheets that were handed to me. 17 And I apologize if I mispronounce your name, 18 but as you come forward, if you could state your name 19 20 and spell it for the record for the stenographer, we would greatly appreciate that. 21 22 The first I have on my list here is Audrey 23 Hayes, if you could come forward. There's a microphone 24 right here on the end of the table. It should be on. 25 If not, just push the button on the bottom of it until

1 you get a digital display.

2 MS. HASE: My name is Audrey Hase,

3 A-U-D-R-E-Y, H-A-S-E.

4 Just for everyone in here, just to clarify

5 because there have been some misunderstandings to what

6 my intentions have been in regard to trying to have some

7 support for saving Bonny Reservoir.

8 I completely understand that irrigation and

9 farming drives our economy out here, and I would never

10 sacrifice -- sacrifice the irrigators to save Bonny

11 Reservoir, and no one would ever do that.

12 So I just want to be on the same page with

13 you guys to let you know that -- everyone here, we just

14 want to make it clear we are not trying to save Bonny at

15 the expense of the irrigator.

16 And we know -- we have shut about 30,000

17 acres down already, and our economy cannot accept that

18 anymore. So if we have to drain Bonny, that's what we

19 have to do to be in compact compliance.

20 So I just want to make that clear because I

21 know some of the irrigators are getting nervous about

22 what we are trying to do. We want to just save this

23 lake, if at all possible, but still be in compact

24 compliance.

25 So my question is for you, Mr. Barfield, is

1 there any way that these options that we have thrown out 2 in the last few months about maybe with this evaporation 3 issue -- Nebraska getting a certain amount, Kansas getting a certain amount, and Colorado getting a certain 4 5 amount to put in their debit column for evaporation --6 that we could utilize that to save Bonny or that Kansas 7 uses Bonny for storage and we share the park so that we 8 can save Bonny but yet keep us in compliance so we can save the irrigation that we still have? 9 10 I don't want to put you on the spot. I know this is an extremely complicated issue. But I think you 11 12 can see from the people in this room, we have a reservoir here that we've had for 60 years and we do not 13 want to see it go down the tubes. 14 15 And we have petitions, 4500 signatures, that 16 we have got, and there are tons of Kansas signatures on 17 that, too. Your people in western Kansas are using that 18 reservoir also. So I don't want to put you on the spot, but I just wanted to ask that question. Thank you. 19 20 COMMISSIONER WOLFE: I appreciate your remarks. And I guess it's the Chair's prerogative -- I 21 understand we are in negotiations on this, but to the 22 23 extent Commissioner Barfield would like to respond -- I 24 don't think we are obligated to in the public remarks 25 section, but if Commissioner Barfield would like to

1 provide any comments.

2 I would like to preface, before he says 3 anything, that there have been numerous discussions about these various options. 4 5 I don't know to what extent Mr. Barfield is 6 aware of some of the options you referred to in your 7 remarks there, but there have been a lot of options 8 looked at with Kansas in regards to operation of Bonny 9 Reservoir, and we continue to look at those and try and 10 seek the best solution there. 11 So, Commissioner Barfield, if you feel so 12 inclined to make any remarks, I will let you do that. 13 COMMISSIONER BARFIELD: I wonder if I could 14 suggest this course: Maybe hear the public comment, and 15 I will make a statement at the end, if that's okay. Let 16 me sort of hear the full extent of the comments here, if 17 that's okay. COMMISSIONER WOLFE: Thank you, Ms. Hase. 18 19 Don Stewart. 20 MR. STEWART: I would defer. That's what 21 I wanted to say. 22 COMMISSIONER WOLFE: I think the statement 23 was, he would defer to others who are coming forward to 24 speak. 25 Lincoln Wilson.

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1 MR. WILSON: I am not going to defer. I

2 love my voice.

Good morning. Lincoln Wilson, W-I-L-S-O-N. 3

Hale, Colorado. 4

5 I appreciate the opportunity to be here. A

6 couple questions specifically. I was at -- I attended

7 the Kansas governors economic summit and received good

8 information.

9 One of the issues is the replenishing of --

10 does Bonny Reservoir support the active source to

11 replenish the aquifer? Since we are in this drought

12 condition, we are in a situation that water is the life

13 blood of irrigation, and it is also a recreational

resource for these communities, communities being our 14

15 cities -- Goodland, Wray, Burlington, et cetera.

16 What steps has Colorado's compact, the

Republican River Compact, taken to consider maintaining 17

18 Bonny Reservoir or a level of Bonny Reservoir as regards

to its ability to replenish Colorado's aquifer? 19

20 And second question, what specific long-term

or short-term plans has the Compact come up with -- or 21

Colorado -- in regards to looking at allowing the water 22

23 to stay in Bonny Reservoir?

24 I have not heard any plans specifically

25 other than, We hope that it will come back. Are there

1 any specific plans? Thank you.

COMMISSIONER WOLFE: Thank you for your 2 3 comments. And, likewise, I think we will wait until we hear all the speakers' remarks. There may be some 4 5 similarities in some of the questions and we can 6 respond. So thank you. 7 Harold Shandy. I am not quite sure I can 8 read the handwriting, but if I'm saying your name incorrectly, I apologize. 9 10 MR. SHANDY: Hi there. My name is Harold 11 Shandy. I live over in Hale, Colorado. I am not a 12 farmer. I have never been a farmer. My background is, 13 I was a stationary engineer for just under 30 years. And as such dealt with water problems and evaporation 14 15 and that continually. 16 The last meeting I was at was approximately four years ago. And I asked the question then about 17 18 what amount of water that came into the state flowed into the Republican and the restrictions of those flows. 19 20 I didn't get an answer then. I haven't got an answer today. 21 22 It's not just about saving Bonny Reservoir. 23 It's about saving farmers all over eastern Colorado, 24 Kansas, Nebraska, and has to be dealt with as such.

25 The problem -- that I guess I have addressed

Colorado with -- is the flow control itself. The bridge
 that goes over 385 for the Republican flows into the
 reservoir area itself. Right now I doubt if I could
 crawl under it. Thirty years ago they rode horses under
 it. Those are drastic changes.
 The graphs that you brought forth from 1935
 until today showed a decline in flow. So we are making
 our decisions on flow today. It's terrible compared to

9 then. There's no doubt.

10 But maintaining those areas are terrible.

11 And I think those things have to be addressed before any

12 further commitment of draining or change can be done.

13 We don't know what we have got to work with until that

14 happens.

15 The other thing is, I see the Corps of

16 Engineers isn't here again, but -- so my understanding

17 is that the dam at Bonny has to have or needs a

18 saturation point of 11 feet to maintain the safety of

19 the dam itself.

20 I live below Bonny. That interests me

21 greatly. If it's not going to be a safe dam, then I

22 think it needs to be removed entirely. Or at least the

23 center section to where we don't suffer a catastrophic

24 release at some point.

25 Last, but not least, is the -- I haven't

2 stagnant water, mosquito abatement, those kind of 3 things. We have already got West Nile disease diagnosed this summer here in Hale. That's a serious 4 5 consideration. 6 No one has even addressed it. I think those 7 things need to be done. That's about all for me. 8 COMMISSIONER WOLFE: Thank you, Mr. Shandy. 9 The next one on my list here is Dick Malone. 10 I am having a little difficulty reading the handwriting but, hopefully, I am not butchering it that bad. 11 12 MR. PETTIBONE: Richard Pettibone, 13 P-E-T-T-I-B-O-N-E. Kanorado, Kansas. I am a Kansan. Anyway, I was asked to give 14 15 my opinion as a Kansan about Bonny Reservoir and also 16 the flow. 17 I have had some excellent people ahead of me 18 addressing some claims and everything. But, as you know -- maybe a lot of people don't know -- this is not 19 20 the only compact in the United States. 21 There are multitudes of compacts, and I think a lot of them are still in progress. However, 22 Kanorado says I live on the state line, and I do farm in 23 24 Kanorado in Kansas and in Colorado. And the Bonny Reservoir is important to people in Kansas alone, as to 25

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1 heard anything on health considerations as far as

1 other people.

And, economically -- a lot of these 2 3 questions have already been asked and talked about --4 economically, the reservoir is important as is our 5 water. My water is depleting on irrigation wells on the 6 farm right now, so we have concerns. 7 Like I said, it's loss of recreation area. 8 And if I understand right, a federal law originally said that recreation has priority over other water uses. 9 10 However, Colorado, I think, leased the 11 reservoir from the feds years ago, if I am correct on 12 that. I am not sure. So, anyway, I am just here to say that we would support Kansas in our area to not drain 13 the reservoir if at all possible. 14 15 And probably most of this goes back to 16 foresight of a lot of our legislators in 1940. How did 17 they know the conditions that we are in today? And 18 somewhere there has to be a way to alleviate changes 19 with time. 20 Thank you. 21 COMMISSIONER WOLFE: Thank you, 22 Mr. Pettibone. 23 Sue Jarrett. 24 MS. JARRETT: Hi. My name is Sue Jarrett,

25 J-A-R-R-E-T-T. I live north of Wray, Colorado. I am a

1 rancher.

2 Many years ago I went to college and left 3 the ranch to be an accountant, and I wasn't a speaker. 4 I moved back to the ranch, and in setting a house on the 5 ranch, we uncovered a new industry coming into our 6 state, and I have become an activist and a speaker. 7 My No. 1 issue was water quality, not 8 quantity. I stood up and fought to preserve the quality 9 of our Ogallala aquifer, which is also the drinking 10 water, and we have become very involved with water 11 regulations -- the Safe Water Drinking Act, the Safe 12 Water Act, the Groundwater Act -- from the state to the 13 federal. 14 And no matter where I went -- if I went to 15 my county commissioners, they said, Oh, that's a state 16 issue. I go to my state, they say, That's a federal 17 issue. I go to the federal. They say, Go back locally. 18 So I have been all over. And I even went so far as to 19 Japan to speak on the Ogallala aquifer. 20 Now we have used the Ogallala aquifer to mass produce commodities to lower the cost of 21 22 production. But in today's market, we are actually 23 making money raising commodities out here. But we have 24 a very valuable resource, and I am right on the edge of 25 it. Colorado, of course. Nebraska has the primary part

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1 of it.

But we have to understand something. USDA,
all these federal agencies, have all kinds of reports on
this aquifer. And when we developed irrigation out
here, we took valuable farmland, and we added water to
it, and we made it produce more. That was great for the
time.

8 But we have mined that to the point, if we
9 don't seriously look at the mining of the aquifer as
10 part of this and take into account -- now I heard
11 today -- and I have to quantify. I own one irrigation
12 well. My father developed two on our ranch. It's a
13 homestead ranch.
14 I sold one, and I now own one. I have lost

15 my father. So I am the irrigator, but I'm a rancher16 first. I run a cow-calf operation.

There are areas where we have mined it to
the point that people don't even have water for their
homes. They are now hiding water.
We have to seriously look at mandatory

things. We have tried to volunteer. I served on the
conservation board. I was one of the first chairs of
the Republican River repairing project at Tristate
trying to get volunteer things going.

25 Nobody wants to lose the value of irrigated

land. It's a great economic driver. But if you look at
 the land in the region, the wells are owned by a select
 few. Most of the people are dryland farmers. They are
 ranchers.

5 And in Yuma County, where I live, natural

6 gas is our driving economic factor, the development of

7 it and the business of it. Irrigation isn't far behind,

8 but dryland farming and ranching is right up there, too.

9 If all the water is gone -- we still have

10 land and, without water, what are we going to do with it

11 if we don't even have water for the cities and people

12 and animals?

I will be blackballed again for standing up
and saying this, but a couple days ago there was
shoveling for a pipeline. That pipeline ain't far from
the ranch I own.

17 When I was in Japan, I became aware of a

18 group -- and there's a documentary called Blue Gold.

19 Nationally and internationally we spend millions of

20 dollars to try and get water into the ground to preserve

21 it. It's the safest, cheapest, best way to store water22 for future use.

23 Now my state, Colorado, has determined,

24 after all these years, that there's only two ways to get

25 into compliance right now.

1 One is to take all these irrigation wells 2 and pump them into a pipeline and dump them into the 3 North Fork to meet compact compliance. And the other one is to drain Bonny. I, as an individual, don't 4 5 support either one. I will be blackballed for saying 6 it, but I don't. It's the stupidest thing I have heard 7 of, but we are forced into doing something because three 8 states went to court and fought. 9 We hear Kansas say, We really didn't mean to 10 drag Colorado in; Nebraska was dragged in because of 11 this agreement. The point is, the compact was signed by 12 three states, and everybody wants their piece of the 13 pie. 14 Kansas -- and I used to travel to farm 15 shows. I run computers to help farmers start conserving 16 water. They have got irrigation wells and Colorado has 17 them and Nebraska has them. 18 Somewhere somebody has got to put common sense into it. That's what seems sorely lacking today 19 20 in today's world. 21 We get paid to produce these commodities 22 with farm bills, and we say we have to have the 23 irrigation for the farms to drive the economy, which we 24 need, but everything has to be in moderation and 25 everybody has to give up a piece.

1 I watched our Republican River board that 2 was created wait forever to buy surface water to come 3 into compliance. They finally did. 4 Waited a long time to spend 49 million to 5 buy this groundwater. They still had to let the farmer 6 farm it, instead of leaving it sit there, because they 7 couldn't use historic use. 8 That's why I bring up the documentary Blue 9 Gold. Every person in this room and on this panel 10 should have to watch that documentary because we have 11 created laws that force us to do one thing that's 12 contrary to something else we are doing. 13 And we really do lack common sense in this fight, in my opinion, of all three states. That's all I 14 15 have to say. 16 COMMISSIONER WOLFE: The last individual I 17 had signed up that wanted to make public remarks is Deb 18 Daniel. 19 MS. DANIEL: Thank you, Commissioner Wolfe. 20 My name is Deb Daniel, D-A-N-I-E-L. 21 And I think, as you can see, Commissioners, 22 by the crowd that we have here today, that I would 23 encourage all of the states to continue to have these 24 meetings within the basin where the water users are

25 being affected.

1 As you can see, there's a lot of people that 2 are interested and want to have a voice in this. And I 3 thank you, Commissioner Wolfe, for doing this for the 4 last two years. 5 And I encourage the other commissioners, 6 Commissioner Barfield and Commissioner Dunnigan, to 7 consider this when you have your next meeting. So that 8 way those of us that your decisions are affecting can 9 have a bit of a voice. So I thank you for that, and 10 that's all the comments I have today. 11 COMMISSIONER WOLFE: That's all that we had 12 signed up. Was there anybody else who intended to make 13 some remarks that did not check on the list here? 14 Yes, please come up, sir. 15 MR. PETERSON: I am Alan Peterson, 16 P-E-T-E-R-S-O-N.

17 And I just want to make a comment that, if

18 Bonny Dam is completely taken out so it's free flow --

19 the home where I was born near Guide Rock, Nebraska, was

20 full of water in 1935, and we should remember that when

21 we try to destroy it in these days. Thank you.

22 COMMISSIONER WOLFE: Thank you,

23 Mr. Peterson.

24 Anybody else? I see a hand back here.

25 Please come forward.

1 MR. MARSHALL: Thank you. My name is Russel

2 Marshall, R-U-S-S-E-L, M-A-R-S-H-A-L-L.

3 Yesterday in the coffee shop, I was invited 4 to come here. And I probably wouldn't have been here, 5 but he said, Don't stand up and say anything, but just 6 come and sit down and shut up. 7 Okay. That isn't my nature because I love 8 people around me. I love everybody. And I claim to be 9 a Jayhawker because I was born in Kansas and I lived in 10 Kansas for 60 years. 11 And I learned to water ski in Bonny Dam, and 12 I drank my share of the water out of it, but it didn't 13 lower the water level. And I appreciated it being 14 there. And I am not standing up here because of the 15 recreation of Bonny Dam even though that's extremely 16 important. 17 I stood up because I want to address the 18 point of greed and selfishness. Now if we were on a teeter-totter, the one with the most weight controls the 19

20 teeter-totter. And that's the situation we are in

21 today, as I see it, because what they are trying to do

 $22\$  is to enforce an antique compact that was made 70 years

23 ago.

And those men who made it that day made a

25 good compact for that day and at that time, but they

1 couldn't foresee the future as to how things would be in 2 2011. And today here the group of us can't foresee 3 what's going to happen next year and the next. 4 There's only one person that knows the 5 future, and he has the power to control the future 6 because he makes the future. And that isn't exactly 7 what I want to talk about as much as the fact of the 8 greed and selfishness. 9 I know, in 1979 in Washington, D.C., we 10 farmers had the opportunity of expressing our viewpoint 11 in Washington, D.C. to the Congressional agriculture 12 committee in Washington, D.C., and there were about 13 30,000 of us farmers that had an issue of economic 14 survival. 15 And I had the opportunity of speaking for an 16 hour to the agriculture committee and telling them of 17 our problem. And there was a crowd. The meeting room 18 had a lot of people in it, all American ag people. And a lot of people agreed with them. A lot of them didn't. 19 20 But the final bottom line is, what is right? 21 And the majority of us as human beings have 22 an amount of selfishness, and that's what it is. It's 23 greed and selfishness. We know that. That's the way 24 humanity is made. Okay.

25 But we can control that by choices we make.

1 And I see that there's a lot of things about this

2 compact that I don't know, and I maybe need to know the

3 details a little more before I stand up and talk.

4 But I do know that whenever an agreement or 5 a compact is made between two people, as long as they 6 are both alive, they can adjust that compact according 7 to the condition of today. Because the ones that made 8 this compact over 70 years ago didn't know what the 9 conditions would be in Burlington, in this area, in 10 2011.

11 So I would like to suggest that using common 12 sense -- the people who are appointed or elected to the 13 power of authority to change this compact and make it 14 fit the situation we are in today use common sense in 15 doing it.

To me, I couldn't see common sense in
picking water up out of the ground and pour it down a
pipe and go dump it into a sandpit, and it goes back
down to where you pumped it out of. And spend millions
of dollars doing it. Well, it doesn't make sense to do
that. It's not common sense.
I don't have much longer to live in this old
world. Another 20 years and I will probably be gone.
But I am thinking about, if time should continue lasting

25 longer, your children and grandchildren are going to be

1 involved in the decisions we make today, and I hope that

2 I can encourage each one of you who are in the power of

3 authority to consider whether it's common sense.

4 I know that, if I were in your position,

5 that I would probably do as you are doing, which is

6 following the orders of those who are up higher.

7 Because if I don't do that, I am going to lose my job,

8 and we all need a paycheck.

9 And I believe that's about all I have to
10 say, but I encourage you to really give consideration if
11 there's any possible way that you can put this compact
12 on pause.

13 I just now happen to think, what's going to happen to this water -- when they open the gates here 14 15 the 1st of September, how is that going to benefit the 16 state of Kansas? Are they going to use it for 17 irrigation at the time that the farming season is over? 18 Maybe it could be postponed that they don't drain the water until farming season if they are going 19 20 to use it for irrigation. 21 Well, I think I have said enough and maybe 22 too much, but I appreciate the privilege of standing up 23 here and saying what I believe. In making all these

24 decisions, I hope you will consider greed and

25 selfishness and do the right thing.

1 COMMISSIONER WOLFE: All right. Is there 2 anybody else before we close this portion of the 3 meeting? 4 All right. Maybe I will just take a couple 5 of minutes just to maybe respond in general to some of 6 the statements that I heard, and I will allow the 7 opportunity if Commissioners Barfield or Dunnigan want 8 to respond. 9 I think people have got to recognize, too --10 and I think some of the comments here about those who 11 preceded us -- and I have a lot of faith in those who 12 preceded us that they made decisions to the best of 13 their abilities when they were deciding upon the compact and all the actions that have taken place up to this 14 15 point in time. 16 I have known some of those individuals. I 17 have high regard for them. A lot of those people are 18 representatives from this basin out here, and I think all of the actions that have gotten us to where we are 19 20 today are based on the will of the people in the basin and those they have elected to serve them and represent 21 22 them here. 23 It's not only us as commissioners on this

24 board. There's local groundwater boards. There's

25 legislative people, and there's federal people in there.

1 There's a lot of actions that have taken place to get us

2 to this point.

3 And I think I can speak on behalf of the commissioners here, in working with Commissioners 4 5 Barfield and Dunnigan, that they, I believe, have tried 6 to bring as much ability to this decision-making process 7 and common sense, recognizing and taking input along the 8 way from everybody who's impacted by this. 9 And, again, as I indicated, they're not easy 10 decisions. There's a lot of complicated issues that 11 have to be decided as we work through this process, but 12 I have high regard for these individuals that have been working on this process for decades. 13 14 And I think they've put a lot of heart and 15 soul into the decisions they have made to get us to this 16 point. And this is not the end. As we have talked 17 about, these are decisions that face us at this point at 18 this temporary time that we all have here and trying to move forward into the future. 19 20 And I think we are continuing to make as 21 good decisions as we can based on what we know today. 22 As you have indicated -- somebody spoke 23 about, we can't predict the future, but we can try to 24 make decisions today to help create the future, and 25 that's what we are trying to do in making these

1 decisions we are working on.

We have not answered all the questions. We
have made statements before about the needs of the
people here in the basin, of what they want to do into
the future in terms of recognizing there is a mining of
the aquifer going on. What do you want for the future
of this basin?
And we are going to continue those efforts.
I will, as state engineer and commissioner on this

10 administration, continue to work with the constituents11 in this basin beyond today in trying to answer those12 questions.

13 Some of the questions that have come up I know have been looked into. Somebody raised the 14 15 question -- I think Mr. Shandy -- about, is Bonny Reservoir safe? Yes, we know it to be safe. 16 17 We have worked with the Bureau. We've had 18 our own dam safety engineers look at this. We do not have any concerns about lowering the water level in 19 20 Bonny Reservoir and no concerns that it may pose a risk to downstream people that live in that pathway. 21 22 It was built there as a flood protection 23 facility, and we do not have any concerns on that. We 24 have looked at that.

25 I know there's people -- he also raised an

1 issue about the health issues. I know that's part of 2 some of the stuff that the department and state looks at 3 with the users here in the basin as well to address 4 those concerns. These are ongoing things that we deal with, 5 6 not at Bonny Reservoir, but at over 3000 reservoirs that 7 we have in the state. We regularly have these kind of 8 issues come up at all these sites. 9 Many of these reservoirs are drained 10 regularly for irrigation purposes and other purposes, so 11 it's not an unknown realm that we live in in dealing 12 with those issues. 13 So we are going to continue to work with all those stakeholders who are impacted by those issues that 14 15 you have concerns about. 16 I think Mr. Wilson had brought up questions about options we have looked at in terms of keeping 17 water in Bonny Reservoir. 18 19 Yes, we have looked at all the options that 20 have been presented to us. And not only that we have talked about in our negotiations but that constituents 21 22 of the basin have brought forward to us. We have been 23 talking about those over the last few years. 24 And I'd be happy, outside the context of 25 this meeting, to sit down and talk in more detail about

1 those.

2 You raised issues about whether these 3 releases out of Bonny Reservoir help to sustain the 4 aquifer. Yes, they do. We have seen it by the 5 increased stream flow that we have seen over the last 6 few years. 7 You saw the presentation by the USGS. We 8 have seen it by recording these releases, monitoring 9 those, and to the extent these recharge the aquifer and 10 make it down to Benkelman, we see a real effect of these 11 releases that are out there. They are known. 12 And we have got to recognize this 13 interaction between the surface water and groundwater 14 system that's out there that everybody relies on, not 15 only for irrigation purposes, but for municipal and 16 domestic purposes, we recognize those needs that are out 17 there. I think that's, I guess, in trying to 18 respond to the notes I took in terms of some of the 19

20 comments that were made. I wanted to make those

21 remarks.

22 Commission Barfield, I don't know if you had

23 any remarks that you want to make as well.

24 COMMISSIONER BARFIELD: Yes, certainly, I

25 will.

I appreciate you all coming and voicing your
 concerns. I am certainly aware very generally of all
 those concerns and recognize the passion you all have
 for them.

5 Common sense is not always a simple thing.

6 This is a complicated situation. As I was talking about

7 with the Ogallala summit, there was also a reference --

8 we have our places as well.

9 We are in a situation we find ourselves in

10 that cannot be sustained and difficult choices have to

11 be made and intelligent choices have to be made in terms

12 of how we can sustain as much as possible in terms of

13 the benefits of the aquifers and natural resources that

14 we can. But those choices are not easy.

15 As Kansas commissioner to the Republican

16 Compact, it's my duty to make sure we fulfill our

17 obligations, and it is my duty to preserve our

18 entitlements under the compact.

19 I don't believe the compact is antiquated.

20 It's a fairly simple document on its part. It

21 essentially is an allocation of the basin's water

22 supply, and it informs each of the states how much of

23 the water supply they can develop and not get in the way

24 of the other states developing their equitable share.

25 That's, in essence, what it is.

2 going to give this piece of the pie to this other party,

3 and that's not an easy place to go to.

4 So I commend Dick. He's working hard to
5 figure out, how can Colorado get the most benefit from
6 its piece of the pie.

7 Kansas has not required or asked Colorado to 8 take any specific action to get into compliance. We aren't requiring that, so we haven't asked them to drain 9 10 Bonny, but we have insisted that they figure out a way 11 to deliver their share so that Kansas can enjoy the 12 benefits of its portion of the basin's water supply. 13 So that's sort of the dynamic that is 14 forcing the State of Colorado to have its dialogue with 15 you all to figure out how best to move forward. 16 Colorado in the South Fork is using its 17 share and part of our share. And, again, this channel 18 is to figure out how to move forward. 19 So we will continue to work with them. 20 There actually has been a tremendous amount of dialogue, so we want to afford Colorado the 21 flexibility that it has within the compact. We just 22 23 have to insist that they stay within their share so 24 that we can enjoy our portion.

25 Bonny is -- the inflows into Bonny are in

1 significant decline. I think those of you who are 2 aware, in the early '90s and before, it was a stable 3 resource that you all enjoyed. 4 And since the late '90s, it's seen a 5 significant decline, and that decline is rooted in the 6 depletion of the inflows that are occurring above it, 7 both predominantly to the base flow that comes out of 8 the Ogallala and some is reduction in runoff. 9 And, again, I think you have a resource 10 that's been very valuable and may continue to have a 11 role here, but there's some realities, I think, that 12 have to be faced. 13 And I am confident that Dick and all of the 14 partners here in Colorado will figure out the best way 15 to accomplish it, just as we have to figure out how to deal with our challenges. So, with that, I will stop. 16 17 COMMISSIONER WOLFE: Thank you, 18 Commissioner. 19 Commissioner Dunnigan, do you have anything? 20 It sounds like you weren't directly implicated in this, 21 but --22 COMMISSIONER DUNNIGAN: I really don't have 23 any comments. My commitment on behalf of the state of 24 Nebraska is to work very hard with Colorado and Kansas

25 on this compact and find the solutions that we can find.

# 1 COMMISSIONER WOLFE: Thank you. And I

2 agree.

3 And if it wasn't stated, I think we all

4 recognize our roles as commissioners in the compact that

5 we have here.

6 I think the compact was set up with an

7 understanding that it recognized the needs in the basin

8 and the available water supply and provided the

9 framework through this commission into the future to

10 address these issues as they come up.

11 One of the fortunate things, I think, we

12 have is the ability to meet like this as professionals

13 in trying to address these complicated issues, but we

14 recognize through our ultimate role as compact

15 commissioners that the compact is there and approved by

16 the United States. It's mandatory and it's not

17 discretionary.

18 So we have a fulfillment under that compact

19 that we are all trying to reach in recognizing all the

20 needs in the basin.

21 So we do appreciate the input. We want to

22 continue to hear from you beyond today in how we can

23 continue to move forward to address all of the needs

24 within the basin. So we appreciate your attention and

25 time here today and hope you have safe travels back to

1 where your home is.

2 At this time I think we will address agenda 3 Item No. 11 about future meeting arrangements. It's my 4 understanding that the next commission meeting will be 5 in Kansas. And I will turn it over to Commissioner 6 Barfield, and if he has any prearrangement information 7 for us, he can tell us at this time. 8 COMMISSIONER BARFIELD: Well, Kansas will host the next two annual meetings, and we 9 10 traditionally -- well, I plan to have one in the upper basin in Kansas, in northwest Kansas, and one of those 11 12 two meetings in the lower basin. 13 I am expecting to have next year's annual meeting in the lower basin and likely in Junction City, 14 15 but I haven't made any final decisions but intend to make those decisions in the coming weeks or months. 16 17 I don't know if we want to pick a date for that meeting -- a tentative date for the meeting or just 18 save that for the future. 19 20 COMMISSIONER WOLFE: I think we typically 21 try to coordinate that at a later date, but I think we 22 have run into this issue before, I think, that it does 23 require that we hold it before August. Is that normally 24 the case? 25 COMMISSIONER BARFIELD: Yeah. We are

1 required to hold it before the end of July unless we 2 agree otherwise. And so it will be either the end of 3 July, most likely, or the first part of August if we reach agreement. 4 5 COMMISSIONER WOLFE: I just know, when we 6 made attempts to set up here, we had to find 7 arrangements and everything. 8 So once you find a location and some dates 9 that you think would work, if you could just contact us 10 and we will set that time. We should be able to make that work. Just so the folks know here, it should be in 11 12 the July, August time frame of next year. 13 And before I forget on that point, too, any 14 other future actions that may come before this 15 commission, like approval of the compact compliance 16 pipeline, does not have to wait until that future annual 17 meeting date. We anticipate, once we reach a verbal 18 agreement on that, that our proposal would be to call a 19 20 special meeting of this body to take formal action on 21 that or any other action that comes before us then that 22 we have identified in this agenda here today. 23 So the folks know that we don't have to wait 24 an entire year to take action on items before the

25 commissioners.

1	COMMISSIONER BARFIELD: That's correct. I
2	appreciate your hosting the meeting, and thank you.
3	COMMISSIONER WOLFE: Thank you.
4	Commissioner Dunnigan, do you have anything
5	in regards to the meeting date?
6	COMMISSIONER DUNNIGAN: No.
7	COMMISSIONER WOLFE: At this time I would
8	entertain a motion to adjourn.
9	COMMISSIONER DUNNIGAN: So moved.
10	COMMISSIONER BARFIELD: Second.
11	COMMISSIONER WOLFE: There's a motion and a
12	second. All those in favor, say aye.
13	COMMISSIONER DUNNIGAN: Aye.
14	COMMISSIONER BARFIELD: Aye.
15	COMMISSIONER WOLFE: Aye.
16	We are adjourned. Thank you.
17	(WHEREUPON, the meeting concluded at 11:44 a.m.)
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1 STATE OF COLORADO)

2 ) SS. REPORTER'S CERTIFICATE

3 COUNTY OF DENVER )

4 I, Denise A. Freeman, do hereby certify

5 that I am a Registered Professional Reporter and

6 Notary Public within the state of Colorado.

7 I further certify that this meeting was

8 taken in shorthand by me at the time and place herein

9 set forth and was thereafter reduced to typewritten

10 form, and that the foregoing constitutes a true and

11 correct transcript.

12 In witness whereof, I have affixed my

13 signature this 12th day of September, 2011.

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5 MEGAN A. SULLIVAN, P.E.
  Division of Water Resources
6 Department of Natural Resources
   1313 Sherman Street, Room 818
7 Denver, Colorado 80203
8 Caption: 51st Annual Meeting of the Republican River
   Compact Administration, August 31, 2011
9
  Dear Ms. Sullivan:
10
  Enclosed is the transcript of the 51st Annual Meeting of
11 the Republican River Compact Administration held
   August 31, 2011:
12
13
         Previously filed. Forwarding signature page
     and amendment sheet(s).
14
      _ Signed, no changes.
15
     ____ Signed, with changes, copy of which is enclosed.
16
   _X__ No signature required.
17
       Signature waived.
18
       Forwarding original transcript unsigned;
19
      signature page and/or amendments will be forwarded,
     if received.
20
       Original exhibits included in ongoing notebook
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      and will be filed with counsel at conclusion of
     discovery.
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