

MINUTES OF THE
SPECIAL MEETING OF THE
REPUBLICAN RIVER COMPACT ADMINISTRATION
March 11, 2008
Kansas City, Missouri

Welcome and Introduction

The special meeting of the RRCA was called to order at 10:08 a.m. on March 11, 2008, at the Holiday Inn/KCI Expo Center in Kansas City, Missouri. Chairman Ann Bleed welcomed everyone in attendance. Everyone introduced him or herself and signed the attendance sheet, which is attached as an exhibit. Attendees included:

<u>Name</u>	<u>Representing</u>
Ann Salomon Bleed	Nebraska Commissioner
David W. Barfield	Kansas Commissioner
Dick Wolfe	Colorado Commissioner
Peter J. Ampe	Colorado Attorney General's Office
Kenneth W. Knox	Colorado Department of Water Resources
Megan A. Sullivan	Colorado Department of Water Resources
John B. Draper	Counsel, Kansas Department of Water Resources
Leland Rolfs	State of Kansas
Scott Ross	Kansas Department of Water Resources
Brad Edgerton	Nebraska Department of Natural Resources
Paul Koester	Nebraska Department of Natural Resources
Justin D. Lavene	Nebraska Attorney General's Office
James Schneider	Nebraska Department of Natural Resources
Ron Theis	Nebraska Department of Natural Resources
James R. Williams	Nebraska Department of Natural Resources

Approval of agenda

Dr. Bleed asked for any changes or additions to the agenda. Commissioner David Barfield noted that Kansas provided an alternate agenda to Nebraska at Nebraska's request that he believed was designed to clearly lay out the primary purpose of the current meeting, which Mr. Barfield stated was to consider the dispute that Kansas had and ask for resolution at the RRCA. Mr. Barfield passed out copies of the alternate agenda.

Mr. Barfield expressed that Kansas would like to receive a response to Kansas's letter, as well as to Kansas's request for a remedy to violations. He again proposed that the attendees consider the alternate agenda provided by Kansas and expressed his belief that the alternate agenda covered the same ground and sought to incorporate Colorado's items as well. Mr. Barfield expressed willingness to work under the proposed agenda, but requested that Kansas's agenda be incorporated into the minutes of the meeting.

Dr. Bleed asked for confirmation, and Commissioner Wolfe confirmed that Colorado did not have any disputed issues at that point.

Item no. 3: consideration of the disputed issues submitted by Nebraska and Kansas

Kansas's issues

Mr. Barfield stated that Kansas's issues were documented in correspondence that all Compact Commissioners had and was disseminated on Kansas's website and other places. Mr. Barfield reviewed Kansas's issues, which included Kansas's belief that Nebraska had failed the first test of compliance under the settlement according to the agreed-upon data assembly by the RRCA. This first test occurred in 2006, which the first water short year. Mr. Barfield went on to state that Kansas had been shorted of water and that Kansas's water users had been injured in the Kansas Bostwick Irrigation District and the main stem Republican River. Further, Mr. Barfield expressed his belief that with lag depletions, the situation will only worsen. He also stated that there was recognition of these matters at the annual meeting, and that Kansas's Attorney General stated that Kansas would consider its options and act accordingly because it's important that the State of Nebraska get in compliance with the Republican River Compact (Compact) so that Kansas can have water.

Mr. Barfield stated that on December 19, Kansas sent Nebraska a letter stating what Kansas demanded for the past violations and what Kansas believed Nebraska needed to do to get in compliance with the settlement so that Kansas gets its water. Further, he stated that there was technical analysis supporting the conclusions and what needed to occur for remedy. He stated that documentation of that analysis and model runs showed what it would take for Nebraska to get back into compliance. The letter also requested that Nebraska agree to the actions, including the recovery of economic damages for the 2005/2006 violations. Mr. Barfield stated that subsequently, Kansas asked that Nebraska either agree or provide a well-documented alternative method for compliance that would satisfy Kansas and get Nebraska to the same place that Kansas's proposed remedy would in terms of getting groundwater consumptive use to levels consistent with Nebraska's allocation in dry years, in particular.

Mr. Barfield stated that Kansas had not received anything from Nebraska until he received the notebook at the current meeting.

Colorado was invited to ask questions of Kansas, but did not have any.

Dr. Bleed stated that Nebraska had worked very hard since December 19, 2008 to analyze what Kansas had done.

Nebraska's Issues

Dr. Bleed stated that Nebraska had some concerns with Kansas's proposal. She expressed the belief that the Kansas modeling and the scenarios used to determine the required reductions in the proposed met remedy had some problems.

Firstly, Dr. Bleed stated that the scenario Kansas used to look at the target was a dry period, and so they set the target for limitations (or the amount of depletions to the stream during a dry period. Dr. Bleed went on to state that Kansas used a wet period to determine how much had to be reduced by the pumping. She expressed the belief that the problem with that is that in wet periods, depletions from the stream will be much higher because there's more water to deplete from the stream during a wet period than during a dry period. Hence, by using the wet period to set the reductions required, Dr. Bleed asserted that Kansas overestimated the reductions that needed to be required.

Secondly, Dr. Bleed stated that Nebraska attempted to replicate Kansas's modeling. She stated that the major difference that Nebraska looked at was that Nebraska used a more realistic distribution of pumping volumes. She stated that the key issue was that the distributions of pumping volumes in the alluvium along the river itself did not change greatly over time, but as development increased, it occurred more in the uplands and that had a major impact. Dr. Bleed stated that as a result, when Nebraska replicated Kansas's scenario using a 50-55 percent precipitation period for both the scenarios of the target and the reduction, they determined that the long-term five-year average was 42,300 acre-feet more than is required under the Compact.

Dr. Bleed stated that Nebraska had alternative remedies to propose for Nebraska to manage for compact compliance. She further stated that Nebraska had been working hard over the last three years with the Upper Republican, Middle Republican, and Middle Republican Natural Resources Districts (NRDs), as well as the Tri-Basin NRD, where the mound credit is. Dr. Bleed stated that Nebraska had looked at revising the management plans in the aforementioned NRDs to achieve compact compliance both in normal precipitation years and in dry years. She also stated that Nebraska was concerned that if there's another severe drought year that Nebraska had in 2002, that Nebraska would be in compliance in those drought years.

Dr. Bleed stated that Nebraska did several model runs to develop the plans. She described the key model run, which was for the ground model, and looked at phreatophyte use and reservoir levels from 1988 to 1991. She went on to say that the starting groundwater head levels in that model run were from Nebraska's estimate of 2007 head levels. She described the models further: pumping volumes were based on an 80 percent reduction in pumping from the baseline pumping (the baseline period was from 1998 to 2002). All pumping throughout was reduced by 20 percent, so it was 80 percent of baseline. All other inputs except the groundwater pumping volumes were based on 2006 input data. Dr. Bleed stated that the model runs used the number of irrigated acres that were developed in 2006. She went on to describe that Nebraska ran the model and came up with the depletions to the stream from groundwater pumping, then put them into the RRCA accounting sheets. For those accounting sheets, they were based on data from 1996 to 2006. That period had precipitation of about 21.06 inches, and the long-term average precipitation was about 20.98 inches. Hence, Dr. Bleed stated that Nebraska figured that was a fairly representative period. Also, she stated that Nebraska adjusted streamflows and reservoir levels to better reflect current conditions.

Dr. Bleed stated that the surface water data used was the average from 1996 to 2006. She also stated that the nonfederal reservoir evaporation data was the average from 2004 to 2006. The canal diversion data was again the average of 1996 to 2006, with a few exceptions. Haigler Canal diversions were set to 4,000 acre-feet. Further, Culbertson Canal Extension was set to zero. That was the input.

Dr. Bleed went on to say the stream gaging input was the average from 1996 to 2006, except that the average from 2000 to 2006 was used for the South Fork Republican River, Beaver Creek, Sappa Creek, and Prairie Dog Creek. Any potential flood flows were set to zero.

Dr. Bleed stated that the results of the analysis were that under average precipitation conditions, a 20 percent reduction from baseline groundwater pumping provided compliance with the compact. Again, she stated that baseline groundwater pumping was the average volume pumped in each NRD for the years 1998 to 2002.

Dr. Bleed stated that this was the result for all three states for the average for the years 2008 to 2012. She stated that the Colorado pipeline was not included. Based on these model runs, Dr. Bleed stated that Colorado would still be in a deficit situation. Further, she stated that Kansas would have a consumptive use 148,280 acre-feet under their allocation. Nebraska would have been 18,950 acre-feet under the allocation for those years. That's the individual years for the modeling Nebraska did, 2008 to 2012.

Dr. Bleed went on to say that Nebraska set the controls in the rules and regulations of the integrated management plans to achieve a 20 percent reduction in average groundwater pumping under average precipitation conditions. She stated that Nebraska was concerned about assurance that Nebraska was in compliance with the compact in dry years. Therefore, she discussed a second control in the integrated management plans that dictates that the average net depletions due to groundwater pumping in each NRD shall be no greater than each NRD's allotted percentage of allowable groundwater depletions. She went on to explain the allowable groundwater depletions as the maximum level of depletions to streamflow from groundwater pumping that can be allowed in a given year without Nebraska exceeding its allocation. Further, she stated that that allotted percentage is based on the percentage of depletions to streamflow from groundwater pumping in each NRD for baseline years 1998 to 2002.

Dr. Bleed went on to explain that the averaging for the allowable depletions would be based on the same years as would be used to determine the average for Nebraska's compliance with the compact. Water short years would have two year average. If it's not a water short year, it would be a five-year running average.

Additionally, Dr. Bleed stated that the plans have the ability to do some augmentation plans and incentive, or additional purchases of surface water. This is to provide streamflow quickly to adjust for the varying precipitation in the basin. Dr. Bleed expressed her belief that managing groundwater wells because of the lag effect of wells is not a very responsive way to manage short-term variations in streamflow.

Dr. Bleed expressed Nebraska's belief that it's imperative that the RRCA strive to ensure that the accounting is as accurate as possible. Further, she expressed Nebraska's belief that to ensure accuracy, the RRCA must address accounting pertaining to the calculation

of the groundwater calculated beneficial consumptive use (CBCU). She also expressed Nebraska's belief that the allocation of Harlan County Lake evaporation must be accurate and that evaporation from the nonfederal reservoirs is an issue. Dr. Bleed also expressed the belief that return flows from Bureau Canals must be looked at, as well as the Haigler Canal Diversions, return flows, and wasteway returns.

Dr. Bleed expressed Nebraska's belief that there was a discrepancy between groundwater model and surface water accounting points that should be addressed. Further, she expressed concern about how the diversions and returns from the Riverside Canal are accounted for in the compact.

Dr. Bleed asserted that the most complicated issue was the way the current accounting uses the scenarios from the groundwater modeling runs to calculate the beneficial consumptive use from groundwater well pumping and the mound credit. She stated that the current accounting procedures use two groundwater model scenarios to estimate depletions to streamflow due to groundwater pumping and that Nebraska has looked at the other alternative scenarios that could be used and that they have been discussed with the engineering committee. She expressed Nebraska's belief that there's no reason to believe that one alternative set is any better than another.

Dr. Bleed went on to say that Nebraska's problem is that depending on which set of scenarios is used, significantly different numbers will result. Without a reason for those different numbers, she said Nebraska has concerns. She stated that the estimates of the impact vary depending on which set of scenarios is used.

Dr. Bleed went on to discuss two sets of scenarios out of eight total that Nebraska came up with and expressed certainty that others could be developed. She explained that scenario no. 1, which may be referred to as the baseline scenario, is when there are inflows from the Platte River resulting in the mound credit in the model, and all three states' groundwater pumping is turned on. She said that the alternative is to turn off one state's groundwater pumping and compare that with the baseline run to get one answer. She said that the difference between those two scenarios is the depletion to the stream from Nebraska's groundwater pumping.

Dr. Bleed brought up another way to do the model runs, emphasizing that it is not a problem with the model itself, but with the sets of model runs being used to determine the depletions. She explained that one could turn off all the pumping and not have the mound credit importation on (so everything is off), then turn on one state's (in this case, Nebraska's) pumping and look at the difference. She stated that similar accounting procedures could be used to look at the groundwater imported water supply credit. Again, she stated the alternative sets of scenarios give dramatically different estimates of the imported water supply credit. She expressed Nebraska's belief that this needs to be addressed and a mutual agreement reached by all parties.

Dr. Bleed went on to discuss allocation of CBCU from Harlan County Lake evaporation. She stated that the current procedures allocate reservoir evaporation to Nebraska and Kansas based on diversion by the two major Bostwick districts. She brought up Kansas's argument that the current procedures unfairly allocate reservoir evaporation when one district does not divert and stated that that issue needed to be resolved.

Dr. Bleed then discussed calculation of CBCU from the evaporation from nonfederal reservoirs and stated that the final settlement stipulation itself states that for purposes of compact accounting, the states will calculate the evaporation from nonfederal reservoirs located in an area that contributes runoff to the Republican River above Harlan County Lake in accordance with the methodology set forth in the Republican River Compact accounting procedures.

Dr. Bleed expressed Nebraska's belief that the final settlement stipulation language, which Nebraska believes is controlling if there's a discrepancy between the accounting procedures and the final settlement stipulation language, excludes evaporation from nonfederal reservoirs below Harlan County Lake from inclusion in Nebraska's CBCU. She stated that Kansas had stated (in the engineering committee) that they believed that evaporation from the nonfederal reservoirs located below Harlan County should be included in Nebraska's CBCU. She stated that in 2005 and 2006, the difference would have been 1,076 acre-feet in 2005 and 652 acre-feet in 2006.

Dr. Bleed went on to discuss procedures to estimate return flow from the Bureau of Reclamation irrigation districts. She stated that this was identified as an issue that needed to be addressed during the negotiations of the final settlement stipulation and accounting procedures. She pointed out that attachment 7 in the Republican River accounting procedures has a footnote on the table dealing with return flows that says that average field efficiencies for each district and percent loss that returns to the stream may be reviewed and, if necessary, changed by the RRCA to improve the accuracy of the estimates. She expressed Nebraska's belief that this does not need to be reviewed.

Dr. Bleed then discussed procedures to estimate return flows from the Bureau of Reclamation irrigation districts and expressed Nebraska's belief that the field efficiencies and percent loss that returns to the stream must be reviewed.

Dr. Bleed then discussed accounting points and pointed out a discrepancy in the accounting points used in the groundwater model and the accounting points used for the administration of surface water. She went over several examples using a PowerPoint presentation that was provided to meeting participants in a binder published by Nebraska.

Next, Dr. Bleed discussed other issues involving Haigler Canal and Riverside Canal. She stated that current accounting procedures do not correctly account for diversions, field returns, and wasteway returns from Haigler Canal to the Arikaree sub-basin and Main Stem. Further, she stated that the current accounting procedures do not correctly account for return flows from Riverside Canal in the Frenchman Creek sub-basin. She stated that return flows are not getting accounted for in the correct sub-basin and that return flows are also underestimated because the drain return flows are not subtracted from the diversions at the head gate. She also discussed the Riverside project, which she said was similar. She stated Nebraska's belief that the return flows that go into the Main Stem should be subtracted from the Main Stem and added back into Frenchman Creek as part of the virgin water supply.

All parties agreed to move on to agenda item IV, recognition of Nebraska's and Colorado's compact compliance efforts, before moving to item III.C. (Colorado's issues) and that Colorado would present their issues the following day.

Recognition of Nebraska's compact compliance efforts

Dr. Bleed moved on to discuss Nebraska's compliance efforts. She stated that Nebraska had been working very hard to come into compliance with the compact by revising the integrated management plans, reducing pumping volumes, using incentive plans to retire irrigated acres, performing vegetation management to clear the channel of vegetation, purchasing surface water, and passing legislation for future funding for other compliance efforts.

Dr. Bleed stated that the original integrated management plans were based on a 5 percent reduction in baseline pumping. After 2002 (one of the driest years in record), which was the year the settlement stipulation was signed, Dr. Bleed stated that Nebraska realized that they'd have to further reduce consumptive use. She also said that after 2002, irrigators in the basin also realized that Nebraska needed to reduce consumptive use and voluntarily made reductions in their pumping volumes.

Dr. Bleed showed a graph of the pumping from 1998 to 2006 by the Upper, Middle, and Lower Republican NRDs, including annual pumping volumes in each NRD, and the 20 percent reduction in the baseline pumping. She stated that the reduction was based on the 1998 to 2002 pumping levels and that Nebraska is requiring a 20 percent reduction in those pumping levels. Dr. Bleed stated that the only district that had controls on in 2002 was the Upper Republican NRD. However, the Middle, Lower, and Upper Republican NRDs reduced pumping. Controls went on in the Middle and Lower Republican NRDs in 2005. Dr. Bleed stated that in the last few years, the pumping volumes had been at about the 20 percent reduction level even without new controls in the integrated management plans.

Dr. Bleed discussed the Upper Republican NRD water use and the conservative nature of producers when managing their irrigation. She also discussed efforts in the Middle Republican and Lower Republican NRDs to reduce pumping. Further, she discussed the Environmental Quality Incentive Program (EQIP), in which the state produced money and signed up 12,296 acres for reduction. Some are permanently retired.

Dr. Bleed also discussed the CREP program, used to conserve irrigation water. She stated that 39,039.72 acres had been signed up in the Republican Basin and that the total reduction in irrigated acres since Nebraska signed the stipulation is 51,336 acres.

Next, Dr. Bleed discussed the legislation passed to establish a Vegetation Task Force in the state. The task force, funded with \$2 million per year to do vegetation management, has cleared 3,000 acres in the channel itself between Harlan County Lake and Hardy. Dr. Bleed also discussed Nebraska's plans to go upstream from Harlan County Lake to Cambridge and further upstream to clear the channel vegetation. She stated that the focus will be on invasive species, but that the basic purpose for the compact is to allow the channel to have the flows go through the channel and increase the channel capacity.

Dr. Bleed discussed that Nebraska had purchased surface water to provide timely response of flows for compact compliance. She stated that in 2006, Nebraska purchased 23,518 acre-feet of surface water and in 2007, 51,000 acre-feet of surface water. She stated that Nebraska has plans to continue to use surface water as one of the tools to

respond to variability of flows in a timely manner. She also discussed legislation passed in 2007 to ensure that there would be future funding for compact compliance. This legislation provided the NRDs the authority to issue bonds and the authority to levy taxes on irrigated acres up to \$10 per acre and to levy a property tax of up to \$0.10 per \$100 taxable valuation to be used for compact compliance.

Next, Dr. Bleed discussed future plans to initiate some augmentation planning. She stated that Nebraska is finalizing preliminary feasibility studies and that the sites selected would be best based on aquifer properties and location. She stated that the target completion date for the augmentation plan would be the summer of 2009. Mr. Knox asked Dr. Bleed what the monetary expenditure for the surface water allocations would be and she said that she'd get it to him at a later date.

Dr. Bleed expressed that she and the other commissioners found successful resolution of the issues very important for the RRCA.

Damage and accounting issues

Dr. Bleed expressed a desire to sit down and work with Kansas's and Colorado's modelers to better understand questions on the model. She stated that Nebraska doesn't have an understanding of what Kansas used as the basis for their request for damages.

Mr. Barfield stated that Kansas's water users have been shorted substantially as a result of violations, including Kansas Bostwick Irrigation District and Kansas's users. He expressed his belief that economic damages would be appropriate to compensate Kansas for Nebraska's use of Kansas's water. He discussed the possibility of those financial damages being either Kansas's damages or Nebraska's benefit, whichever are greater in Kansas's view, in addition to the other pieces that were in the aforementioned letter.

Mr. Barfield invited John Draper (special counsel to the State of Kansas) to speak, who added that the issue of damages is an important component of the remedy that Kansas is seeking and that in the responses that Kansas has received from Nebraska, that aspect has been ignored. Draper stated that Kansas interpreted that as disagreement regarding the concept that there should be any kind of remedy for the past violations of the compact and the FSS in 2005 and 2006. He posed the question of whether it is appropriate for a state to include some kind of remedy for a past violation.

Draper stated that the timetable that was set out in the final settlement stipulation had just been reached, and that was for the water short period 2005, 2006. He stated that as included in the transmittal, the amount of violation as Kansas calculated it was over 80,000 acre-feet during those two years.

Further, Draper stated that Kansas's understanding of the accounting issues was that they're marginal, but that there was a sizable violation that occurred in 2005 and 2006. Therefore, he stated that it would be important for Kansas, consistent with the law that applies to compacts in the U.S., to obtain an appropriate remedy for that – the past failure to comply with the Supreme Court decree.

Dr. Bleed stated that Nebraska had made no conclusion that it is not going to consider damages as part of a remedy. She stated that Nebraska needed a better understanding of

what kind of damages Kansas was seeking. Draper and Dr. Bleed both clarified that Nebraska had not rejected the idea of paying damages.

Draper stated that Kansas feels it's appropriate to consider the benefits that have accrued to Nebraska as a result of the violations as the primary criteria and that compensation in some form is necessary in order to deter further noncompliance.

Justin Lavene (with the Nebraska Attorney General's office) stated that Nebraska needs an understanding of where Kansas is coming from regarding the aforementioned issue. Further, he stated that further articulation of those issues, including past harm to Kansas would be beneficial for Nebraska assess the situation.

Dr. Bleed expressed her belief that it would be appropriate to get together with the modeling people to better understand how Kansas was using the model and how Nebraska was using the model, and the differences therein.

Mr. Wolfe stated that though Colorado had not taken a position on damages, Colorado believes it is of great interest if damages are assessed and whether Colorado is involved in that, those types of things should be used to help bring Colorado into compact compliance.

Questions to Nebraska

Mr. Barfield raised a question about Nebraska's assertion that Kansas used a dry period to set one criteria and a wet period to set another criteria. Mr. Barfield stated that he responded to that concern on page 2 of Kansas's February 19 letter. He stated that Kansas's methodology was not to do that.

Further, Mr. Barfield stated that Kansas took the most recent period of record and repeated it over time, and that that period included both wet and dry periods. He also stated that Kansas's analysis was focused on figuring out what Nebraska needed to do to be in compliance during dry periods. Mr. Barfield posed questions regarding the aforementioned methodology. Jim Schneider (Nebraska Department of Natural Resources) responded that the problem was with comparing what happened then to a target that's derived solely from a dry period, and that is attempting to find out what kind of groundwater pumping levels would need to be required to meet the 175,000 acre-foot target that stems from the analysis of 2002 through 2006 and counting, which Dr. Schneider and Mr. Barfield confirmed, was a dry period.

Dr. Bleed explained that if there's no water in the stream, there will be no depletions because there's no water to deplete. However, she explained that if the stream is wet, the depletions will be high because there's a larger amount of water to deplete. She stated that as a result, the amount of reduction in pumping is overestimated. Mr. Barfield expressed that Kansas looked at a period that went up and down with wet and dry, and that the dry period was establishing the target. Dr. Bleed raised concerns about the lag effect of the impact of wells. Mr. Barfield stated that although Kansas used that replicating period to model the future, they weren't using an average of that period to really come to the conclusion that they came to, and that it was really the critical dry periods of those cycles that caused Kansas to land where it did. Mr. Barfield stated that Kansas would look at the analysis further and assess whether it says something different.

Mr. Barfield raised a question about Nebraska's difficulty in replicating the model. Dr. Schneider confirmed that though Nebraska used the same data and assumptions, a different conclusion was reached. Mr. Barfield stated that there are several assumptions that must be made to run the model. Dr. Schneider stated that though the general pattern of the results was similar, the annual output was not, and that the largest discrepancy was the methodology employed to distribute the pumping in Nebraska. Dr. Bleed stated that the model itself was probably not the problem, but the input.

Dr. Schneider stated that Nebraska took the results from the December 19 letter from Kansas's model run and compared them to the accounting for 1990-2006 as opposed as comparing them to the target Kansas developed from 2002-2006. He went on to say that Nebraska used similar assumptions, like reduction in groundwater pumping, increases in streamflow due to reductions in groundwater pumping, some of that would be diverted, but that Nebraska followed generally the same assumptions Kansas used. Dr. Schneider clarified for Mr. Barfield that the 42,300 represents the long-term average of the net for Nebraska, five-year compliance test under Kansas's modeling results as performed by Nebraska. Dr. Schneider clarified that actually, Nebraska used Kansas's results, took the output from the model run Kansas provided, the annual output, and took historic accounting data, historic surface water diversions, historical locations, and did a year-by-year analysis of what the annual balance would be for Nebraska. Further, he stated that this represented the long-term average of the five-year compliance test.

Dr. Bleed and Dr. Schneider clarified that to develop the integrated management plans, Nebraska looked at the total amount of pumping on average for the 1998-2002 period and looked at what percent of that total pumping was done by the Upper Republican, Middle Republican, and the Lower Republican. Further, this was considered baseline pumping, which is what Nebraska reduced from. Dr. Bleed also stated that the NRDs had to reduce pumping levels by 20 percent. She also stated that while Nebraska looked at other percentages, 20 percent is what the modeling suggested would get Nebraska into compliance in the not-too-distant future during average precipitation years. Dr. Bleed also acknowledged that as the lag effect changes in the future, things may have to change, but that the compliance plans are set for the next five years. She stated that Nebraska will then revisit and make changes later if needed. Dr. Bleed confirmed that the base period was used to distribute the pumping goals. When figuring out pumping reductions, it was tied to the pumping volume total, distributed by the number of acres being irrigated. Further, she stated that it was not necessarily based on the allocation at a given time.

Dr. Schneider confirmed that in the integrated management plan run, the precipitation data were based on long-term average precipitation, and that average precipitation every year was assumed. Average pumping was also assumed. Further, Dr. Schneider confirmed that once Nebraska took the model output and put it into what Nebraska felt was the correct accounting analysis, Nebraska was in compliance.

Dr. Bleed and Mr. Barfield confirmed that Nebraska has to be in compliance in dry years, but the aforementioned procedures have determined the base for the normal long-term average.

Dr. Schneider stated that return flows were based on the pumping volumes and Mr. Barfield responded that Kansas does not believe that assumption is appropriate since as

people go to allocation systems, they become much more efficient in their operations to maintain economic viability. Further, Mr. Barfield expressed his belief that the accounting needs to account for that.

In response to Mr. Barfield's question, Dr. Bleed stated that the long-term average of the integrated management plans has to show a reduction of 20 percent from the baseline in pumping. Further, she stated that the critical standard in the dry year is that each NRD must make sure that their net depletions to streamflow are no greater than their allotted percentage of the total depletions. Again, she stated that that percentage was based on the baseline usage from 1998-2002, and that that criterion is looked at on an average basis, with the average depending on whatever average is being used for those same years in the compact.

Compliance during water short years

Dr. Bleed stated that various ways of augmenting streamflow may be looked into, or purchases of surface water. She stated that if the concept is to get the background pumping or the overall pumping down to a level so that on short notice, these other methodologies may be used to ensure that the net depletions are not greater than their allotted percentage of the allowable groundwater pumping. She also stated that Nebraska struggles with this with the integrated management plans with the lag effect from pumping wells. Dr. Bleed also stated that if augmented streamflow is needed, Nebraska will then have to work out some kind of understanding through dry year leasing or an augmentation pipeline plan to make sure that the net depletions are within that allowable percentage by NRD.

Mr. Barfield, Dr. Bleed, and Dr. Schneider discussed details of the Nebraska Integrated Management Plans, overall pumping limits, allowable depletions, and timetables for review. Dr. Bleed described the annual forecast process in Nebraska, and stated that the pumping allowable in the five-years may be adjusted during the effective time on an as-needed basis.

Dr. Bleed state that a surface water purchase was being contemplated for 2008.

Discussion of accounting issues

Mr. Barfield and Dr. Schneider discussed details regarding the issues Nebraska raised with the way the groundwater model is used to determine consumptive use of groundwater by the respective states and the imported water supply credit.

Mr. Barfield described Kansas's concern with the current accounting for evaporation from Harlan County Lake when only one state used water for irrigation. Kansas suggested that assignment of evaporation should be a constant value based on historical usage of the water.

Evaporation from non-Federal reservoirs was discussed, along with Haigler Canal accounting, and the location of selected accounting points within the groundwater model.

Additional compliance issues

The states reviewed the decrease in pumping in recent years, and voluntary programs to cease irrigation. They also reviewed the availability of surface water for purchase for the purpose of compact compliance. The provisions of LB701 and the new tools available for compliance were discussed, along with the court challenge to taxing provisions in the bill.

Adjournment

After discussing the possible next steps that could be taken, the meeting adjourned at 3:43 p.m.

MINUTES OF THE
CONTINUATION OF THE
SPECIAL MEETING OF THE
REPUBLICAN RIVER COMPACT ADMINISTRATION
March 12, 2008
Kansas City, Missouri

Introductions

The meeting was called to order by Chairwoman Bleed at 8:37 a.m., March 12, 2008, at Holiday Inn/KCI Expo Center in Kansas City, Missouri. Those in attendance included:

<u>Name</u>	<u>Representing</u>
Ann Salomon Bleed	Nebraska Commissioner
David W. Barfield	Kansas Commissioner
Dick Wolfe	Colorado Commissioner
Peter J. Ampe	Colorado Attorney General's Office
Kenneth W. Knox	Colorado Department of Water Resources
Megan A. Sullivan	Colorado Department of Water Resources
John B. Draper	Counsel, Kansas Department of Water Resources
Leland Rolfs	State of Kansas
Scott Ross	Kansas Department of Water Resources
Brad Edgerton	Nebraska Department of Natural Resources
Paul Koester	Nebraska Department of Natural Resources
Justin D. Lavene	Nebraska Attorney General's Office
James Schneider	Nebraska Department of Natural Resources
Ron Theis	Nebraska Department of Natural Resources
James R. Williams	Nebraska Department of Natural Resources

Colorado augmentation plan

Chairman Bleed turned the meeting over to Commissioner Wolfe to give a presentation on the pipeline augmentation plan that Colorado is proposing. Colorado gave a lengthy and very informative presentation and the states discussed possible augmentation plan details and issues.

Additional meetings and adjournment

After a break, Dr. Bleed announced that the RRCA would be continuing this special meeting of the RRCA on April 11, followed by an Engineering Committee meeting, and a continuation of the special meeting of the RRCA on May 15th and 16th. The issues discussed at this meeting were assigned to the Engineering Committee to review Colorado's proposed augmentation plan for further clarification. The meeting adjourned at 12:23 p.m.

MINUTES OF THE
CONTINUATION OF THE
SPECIAL MEETING OF THE
REPUBLICAN RIVER COMPACT ADMINISTRATION
April 11, 2008
Kansas City, Missouri

Introductions

The meeting was called to order by Chairman Dunnigan at 8:14 a.m., April 11, 2008, at the Holiday Inn/KCI Expo Center in Kansas City, Missouri. Those in attendance included:

<u>Name</u>	<u>Representing</u>
Brian P. Dunnigan	Nebraska Commissioner, Chairman
Dick Wolfe	Colorado Commissioner
David W. Barfield	Kansas Commissioner
Peter J. Ampe	Colorado Attorney General's Office
Kenneth W. Knox	Colorado Department of Water Resources
Megan A. Sullivan	Colorado Department of Water Resources
Dale Book	Spronk Water Engineers/Consult. to Kansas
John B. Draper	Counsel, Kansas Department of Water Resources
Scott Ross	Kansas Department of Water Resources
Brad Edgerton	Nebraska Department of Natural Resources
Paul Koester	Nebraska Department of Natural Resources
Justin D. Lavene	Nebraska Attorney General's Office
James Schneider	Nebraska Department of Natural Resources
Ron Theis	Nebraska Department of Natural Resources
James R. Williams	Nebraska Department of Natural Resources

Approval of Agenda

After the introductions were made, Chairman Dunnigan asked for comments on the agenda. Commissioner Barfield indicated that for the record the majority of the agenda would be discussed by the Engineering Committee. The Republican River Compact Administration accepted motions to recess into the Engineering Committee at 8:19 a.m.

Discussion of future meeting dates and data exchange

Proceedings of the Special Meeting of the Republican River Compact Administration reconvened at 2:17 p.m.

Mr. Barfield moved that the Special Meeting be continued in Lincoln, Nebraska May 15 and 16, 2008. Commissioner Wolfe seconded the motion.

Mr. Wolfe stated for the record that he delivered a letter to Mr. Dunnigan and Mr. Barfield, pursuant to Section VII.A.3 of the final settlement stipulation, requesting approval of Colorado's Compact compliance pipeline as part of their augmentation plan. Both Mr. Dunnigan and Mr. Barfield indicated that by their receipt of the letter, they were not necessarily expressing approval or disapproval of the request.

Mr. Barfield brought up the original agenda item 6a, Accounting for Imported Water Supply Credit and ground water Computed Beneficial Consumptive Use. He stated that it appears that Nebraska did not have a specific proposal on the table. Jim Schneider indicated that an alternate method of accounting had indeed been presented.

Justin Lavene stated that Nebraska had not received any feedback with questions on specific issues. Mr. Lavene asked for feedback. John Draper asked that Nebraska present specific proposals to the RRCA and further consideration would be reviewed if necessary.

Adjournment

The meeting was adjourned at 2:36 p.m.

MINUTES OF THE
CONTINUATION OF THE
SPECIAL MEETING OF THE
REPUBLICAN RIVER COMPACT ADMINISTRATION
May 16, 2008
Lincoln, Nebraska

Introductions

The meeting was called to order by Chairman Dunnigan on May 16, 2008, at the Holiday Inn, in Lincoln, Nebraska. Chairman Dunnigan indicated that this meeting was a continuation of meetings that were held on March 11th and 12th and April 11th, 2008.

Those in attendance included:

<u>Name</u>	<u>Representing</u>
Brian P. Dunnigan	Nebraska Commissioner, Chairman
Dick Wolfe	Colorado Commissioner
David W. Barfield	Kansas Commissioner
Peter J. Ampe	Colorado Attorney General's Office
Kenneth W. Knox	Colorado Department of Water Resources
Megan A. Sullivan	Colorado Department of Water Resources
John B. Draper	Kansas Department of Water Resources
Scott Ross	Kansas Department of Water Resources
Lee Rolfs	Kansas
Brad Edgerton	Nebraska Department of Natural Resources
Paul Koester	Nebraska Department of Natural Resources
Justin D. Lavene	Nebraska Attorney General's Office
James Schneider	Nebraska Department of Natural Resources
James R. Williams	Nebraska Department of Natural Resources

Opening Remarks

Commissioner Dunnigan stated his appreciation for the series of the special meetings and that the meetings had been helpful for the parties.

Commissioner Barfield indicated that this series of special meetings has been driven by Kansas' concerns with Nebraska's non-compliance with the Compact and the settlement. Commissioner Barfield stated that Kansas had formally submitted the matter to the RRCA.

Commissioner Wolfe thanked his staff for their efforts and asked to recognize the Republican River Water Conservation District for their efforts as well. Commissioner Wolfe noted that the Colorado Legislature did approve a \$60.6 million dollar loan to the Republican River Water Conservation District as part of their \$71 million dollar loan package for construction and

operation of the pipeline that had been discussed previously. Wolfe also reported that they had recently filed with the Secretary of State in Colorado for promulgation of well measurement rules in the Republican River Basin. That hearing is to be held July 2nd and 3rd, 2008 to seek approval for rules requiring measuring devices on all high capacity wells in the Republican River Basin.

Engineering Committee Report

James Williams, Chair of the Engineering Committee, reported that three items would be discussed in the annual Engineering Committee Report when presented at the Annual Meeting. The first item would refer to return flows from canals fed by Bureau of Reclamation projects. The Engineering Committee was in agreement regarding two additional agreements. First of all the groundwater model cell representing the accounting point at the Guide Rock Diversion Dam is going to be moved upstream two miles to match the location of the Guide Rock Diversion Dam. Secondly, on the Riverside Canal, a portion of the return flows from the fields goes back into the Frenchman Creek sub-basin above the gauge, the stream gauge there and a portion goes into the main stem of the Republican River. The Engineering Committee has agreed that those return flows should be accounted for in the proper basin. And that percentage is going to be based on the portion of lands above the gauge and in the main stem.

Dispute resolution

Commissioner Barfield stated that Kansas, Colorado, and Nebraska have discussed three items for dispute resolution. Mr. Dunnigan read the resolution. The motion to accept the resolution passed.

Commissioner Wolfe offered the following resolution for consideration by the RRCA, "Pursuant to Subsection VII.C.2 of the FSS, the RRCA hereby affirms that CDR of Boulder, Colorado, remains the person or entity that will select an arbiter or arbiters if the states cannot agree on an arbiter or arbiters pursuant to the dispute resolution process of the FSS."

The motion to accept the resolution passed.

Adjournment

It was confirmed that the next meeting of the RRCA would be the Annual Meeting to be held in Lincoln, Nebraska, August 13, 2008. The meeting was then adjourned at 10:03 a.m.

MINUTES OF THE
ANNUAL MEETING OF THE
REPUBLICAN RIVER COMPACT ADMINISTRATION
August 13, 2008
Lincoln, Nebraska

Introductions

The meeting was called to order by Chairman Dunnigan on August 13, 2008, at the Holiday Inn, in Lincoln, Nebraska.

Those in attendance included:

<u>Name</u>	<u>Representing</u>
Brian P. Dunnigan	Nebraska Commissioner, Chairman
Dick Wolfe	Colorado Commissioner
David W. Barfield	Kansas Commissioner
Peter J. Ampe	Colorado Attorney General's Office
John M. Cassidy	Colorado Attorney General's Office
Kenneth W. Knox	Colorado Department of Water Resources
Megan A. Sullivan	Colorado Department of Water Resources
John B. Draper	Kansas Department of Water Resources
Scott Ross	Kansas Department of Water Resources
Brad Edgerton	Nebraska Department of Natural Resources
Justin D. Lavene	Nebraska Attorney General's Office
James R. Williams	Nebraska Department of Natural Resources

Minutes

A copy of the transcript of this meeting is attached to these minutes.

Introductions

The 48th Annual Meeting was called to order by Chairman Brian Dunnigan at 8:47am, August 13, 2008, at the Downtown Holiday Inn in Lincoln, Nebraska. Mr. Dunnigan welcomed everyone in attendance. Each Commissioner introduced key staff and representatives of various water districts.

Approval of Agenda

Commissioner Barfield moved to approve the agenda after clarification of items 6(c) and 8(b). Commissioner Wolfe seconded the motion. The agenda was approved as proposed with all commissioners in favor.

Approval of Minutes

Commissioner Dunnigan moved to approve the annual minutes of the August 15, 2007 meeting. Mr. Barfield seconded the motion. The previous minutes were approved with all commissioners in favor.

Report of the Chairman from Nebraska

Chairman Dunnigan gave the report for Nebraska with Brad Edgerton reporting on the water administration activities in Nebraska for calendar year 2007. Chairman Dunnigan stated that Nebraska has made significant progress toward compliance of the compact. The natural resource districts, surface water irrigation districts and the Nebraska Department of Natural Resources have worked with the citizens to decrease consumptive use of water in the basin. The efforts have been aided by high rainfall during 2007 and 2008 and stream flows have recovered as a result.

New integrated management plans have been approved in the Lower, Middle and Upper Republican Natural Resource Districts (NRDs). Allocations were decreased in all 3 districts and additional measures were added to ensure compliance by decreasing consumptive use.

Substantial amounts were paid by Nebraska and the 3 NRDs during 2007 for the leasing of water rights within the Republican Basin. Nebraska estimated their dry-year leasing of surface water decreased consumptive use by more than 50,000 acre-feet during 2007 and provided more than 39,000 acre-feet to Kansas.

Nebraska reported that Water-Short Year Administration was not in effect in the Republican River Basin during 2008. Nebraska carried out the following measures to avoid a water short year during 2008 and make more water available downstream. The Riverside Canal Company agreed to forego diversion from Frenchman Creek during the 2008 irrigation season. According to Nebraska this action ensured maintaining 2,000 acre-feet in the river above Harlan County Lake, not diverting into Riverside Canal. This reduced Nebraska's consumptive use in the Frenchman sub-basin. Second, an agreement was made with Frenchman Valley Irrigation District. An estimated 8,000 acre-feet remained in the river above Harlan County Lake which would have otherwise been diverted into the Culbertson Canal thus reducing Nebraska's consumptive use. In addition, the irrigation district also agreed to not divert water to the Cambridge Canal until June 22, 2008 to increase Harlan County Lake water storage. Thus an additional 5,000 acre-feet was available for storage in Harlan County Lake that otherwise would have been diverted. Combined these measures more than avoided water short year status.

\$1.63 million in funding for dry-year leasing of surface water was provided by the Nebraska Legislature through LB 701's Water Resources Cash Fund. LB 701 was a comprehensive water law that enabled the NRDs to levy additional taxes for local support of measures for compact compliance. A lawsuit was filed challenging the taxation authority of LB 701 halting payments for contracts for \$9 million made by NRDs with surface water irrigators to obtain rights to reduce consumptive use of water in the basin in

2007. The Nebraska Legislature responded by passing LB 1094 in 2008 creating a method to ensure immediate payment of state funds for obligations made in 2007 by NRDs for compact compliance. If the challenge to LB 701 succeeds, the Nebraska Department of Natural Resources anticipates the Legislature will provide additional funding options to implement IMPs.

LB 701 also put into place a comprehensive planning approach for riparian vegetation and created a task force committee including \$2 million per year for management of invasive species. The task force contracted for services to remove excessive phreatophytes along the Republican River.

Nebraska continues to explore stream augmentation and to participate in CREP and EQIP, which have removed nearly 38,000 acre-feet from production. Nebraska continues to take an active role with the compact administration reengineering committee and is working with other states to develop more accurate accounting methods.

The Bureau of Reclamation placed a call on all appropriated reservoirs above Swanson Lake, Enders Reservoir, Hugh Butler Lake, and Harry Strunk Lake on August 25, 2006 that continued into 2007.

Harry Strunk Lake filled in March, 2007, and those junior reservoirs upstream of Harry Strunk Lake were opened. On March 8, 2007, letters were sent to all junior permit holders between Harlan County Lake and Guide Rock Diversion Dam informing them of the potential for water short year administration during 2007. Shortly after a high water event on Frenchman Creek, the Nebraska Department of Natural Resources declared the dam at Champion Lake to be unsafe. On June 15th, 2007, an order was issued to evacuate all the storage water in that facility. That order remains in effect today.

On June 30th, 2007, the irrigation supply in Harlan County Reservoir was estimated by Reclamation to be less than 130,000 acre-feet. On July 4th, 2007, senior permits were regulated and closing notices were issued to all permits junior to February 26, 1948, located between Harlan County Lake and the Guide Rock Diversion Dam as provided by the Republican River Compact Final Settlement Stipulation. This order was lifted on August 25, 2007.

Pioneer Irrigation District irrigated with a limited supply during 2007. Meeker-Driftwood, Culbertson extension, Red Willow and Bartley canals did not divert due to a shortage of storage water. Surface water irrigators on Culbertson, Riverside, Cambridge, Naponee, Franklin, Franklin Pump, Superior and Courtland Canal were compensated not to irrigate in 2007. The estimated consumptive use portion of Culbertson and Riverside Canal's natural flow was protected through Harlan County Lake.

A total of 26,000 acre-feet was released from Harry Strunk Lake during the irrigation season and the estimated consumptive use portion of that water was protected to Harlan County Lake. The State of Nebraska leased the rights to 12,500 acre-feet of Nebraska Bostwick's storage water supply. This water was available for use by Kansas Bostwick

Irrigation District. In addition to the 12,500 acre-feet of storage water, all of the natural flow available at Guide Rock Diversion Dam was made available to Kansas Bostwick. All natural flow permits located upstream of Harlan County Reservoir and downstream of Guide Rock Diversion Dam were regulated to their legal limit during 2007.

Report of the Commissioner from Colorado

Mr. Wolfe gave the report for Colorado.

Total recorded stream flow in the North Fork Republican River at the Colorado-Nebraska state line was 20,560 acre-feet, 10,420 acre-feet less than the 1935-2006 annual average of 30,980 acre-feet. Total recorded stream flow in the South Fork in 2007 near Benkelman was 674 acre-feet, an improvement over the previous three years when there was no recorded flow. And for context, the 1938 to 2006 annual average is 27,000 acre-feet. Total recorded stream flow on the Arikaree state line was 1,330 acre-feet, which is a significant decline from the 12,920 acre-foot annual average for the period 1933 to 2006. Active storage in Bonny Reservoir as of Sunday, August 10th, 2008, was 10,030 acre-feet. For context, the capacity at the top of the conservation pool was 41,340 acre-feet, and the reservoir is designed to hold 170,160 acre-feet at the top of the flood pool at full capacity.

Mr. Wolfe gave an update on the status of the Pioneer Ditch litigation where the plaintiffs allege injury to their senior surface water rights requesting curtailment of wells in the Northern High Plains Basin. An interim agreement was reached on June 5, 2008 for the remainder of the irrigation year thus prompting a stay in the hearing. The Yuma County water authority is working to pass a bond issue that would generate funds to purchase the surface water rights. The case has been stayed until February 2009.

Under the EQIP, land use retirement program, Colorado reported 1,203 acres under the 3 year lease program, 2,258 acres under the 5 year, and 6,177 acres permanently retired. As part of the CREP program in 2007 there were 17,194 acres. In other conservation measures, a 1 year lease for 206 acres occurred in 2007 plus 1830 acres of conservation dry-up as part of the Pioneer Laird Lease. Colorado is seeking to complete the original 30,000 acres in the CREP program and filed for an addendum for an additional 30,000 acres.

Republican River Compact rules and compact compliance are ongoing efforts. The State Engineer's Office initiated the process to promulgate rules and regulations governing the diversion, use and control of water resources in the basin for compliance within the compact. Mr. Wolfe continues to receive comments on the rules and will consider what the next steps are in moving forward with them or holding them in abeyance. Colorado continues to move forward on adopting rules to govern the measurement of groundwater diversion in the basin. The rules will assist in gathering accurate pumping information and authorize the need to make and enforce regulations to meet its compact obligations. Draft rules were completed and a public hearing held on July 2, 2008 for public comment. The rules were adopted July 14, 2008 and require the install of a flow measuring device on all wells greater than 50 gallons per minutes within the Republican

River Basin by March 1, 2009. Staff and resources needed to enforce and implement the rules are in process.

Colorado continues to work on the augmentation plan and compact compliance pipeline as a long-term solution to aid in meeting their state's obligation to the compact. They presented a proposed plan to the RRCA on March 12, 2008 and have participated in several informational and technical meetings with Kansas and Nebraska.

In summary, Colorado is working on promulgation and the requirement of measuring devices on groundwater wells, implementing land retirement programs, constructing and operating the pipeline, and operating the Bonny Reservoir to achieve compact compliance.

Report of the Commissioner from Kansas

Mr. Barfield provided the report from Kansas.

Climatic conditions in Kansas have included multiple years of drought, and very unusual weather in 2007 including a severe winter storm, an F1 tornado devastating Greensburg, Kansas, and severe flooding. 2008 was milder and near normal with a great range of precipitation from very wet in the southwest to large deficits in the west. Stream flow and reservoir levels are near normal to above average through much of the state with the west still somewhat dry.

Mr. Barfield reported on the updates from the Kansas Legislature. Recent efforts have been made to pass a bill with regards to intensive groundwater use control areas where appropriation exceeds recharge. The provision would allow for a hearing process and corrective control provisions to improve management of those areas. The bill was unable to pass. Senate bill 89 dealing with the utilization of monies recovered as a result of litigation with respect to violations of the Republican River Compact. House bill 2860 is the result of a municipality seeking to use eminent domain to obtain water. The bill would prohibit the chief engineer from approving an application in the area for two years to give the legislature time to review the use of eminent domain for such a purpose. Updated litigation of the Kansas v. Colorado Arkansas River case included a fifth and final decree on January 31, 2008, which Kansas is hopeful will be concluded by the end of 2008. Lastly, the Kickapoo Tribe in Kansas filed suit for failing to build a reservoir on Plum Creek within the reservation. Kansas is not named in the suit but will likely play a role in the case if quantifying the tribe's water right is part of the settlement.

In terms of Republican River matters, Kansas closed northwest Kansas to new surface water rights and alluvial groundwater rights in 1984 and has had a very restrictive policy with regard to new rights elsewhere in the basin as well. Thus, they have not had to take a lot of action, in terms of curtailing use, because the action has kept them within compact allocations. Kansas is also working on improving measuring. While Kansas required all surface water users on alluvial groundwater users to be metered in 1987, they are currently in the third year of a four-year program with northwest Kansas groundwater management District No. 4 to meter all high capacity wells. They are over 80% of those

points of diversion being metered and checked at this point. They are also using a new state program that's similar to CREP and EQIP, utilizing the acronym water TAP, standing for the Water Right Transition Assistance Program. It is a pilot program authorized in 2006 by House Bill 2710 that creates a voluntary incentive base to retire water rights. The Prairie Dog Creek is the target for this program to provide additional buffer in terms of compliance. Kansas is currently looking into ways to improve participation in the program.

Report from the Bureau of Reclamation

Aaron Thompson presented the report for the Bureau of Reclamation with Marv Swanda going over hydraulic data.

Mr. Thompson gave a brief update on several studies, including the Lower Republican feasibility study, the Frenchman Valley appraisal study, and the draft appraisal study report (final report is scheduled for October 1, 2008). Legislation was passed in 2006 extending the drought program authority to 2010. In 2007 and 2008 both Kansas and Nebraska sought drought assistance. Installation of municipal wells for Mason City and Stockville are expected in fall 2008. The Water 2025 program funding to the Bostwick Irrigation District in Nebraska and the Bostwick Irrigation District No. 2 in Kansas is just over the million dollar mark for varied laterals. The Bureau continues to have water conservation programs and demonstration projects including limited projects with UNL led by Steve Melvin. Beginning in October 2008 the Bureau is partnering to implement a new initiative, Water for America, to address increasing demands on a limited water supply.

Mr. Swanda gave the report on the 2007 operational data on the reservoirs in the basin, federal reservoirs and the current state of affairs. The report from the Bureau is included with the annual report.

Precipitation in the Republican River Basin varied from 90% of normal at Bonny to 130% of normal at Enders Dam. Total precipitation at the dams ranged from 15 ½ inches at Bonny to over 31 inches at Lovewell. Inflows varied from 68% of most probable forecast for Bonny to 191% of the most probable at Harry Strunk Lake.

Almena delivered approximately one inch of water, while Kansas Bostwick, above Lovewell, delivered 5 inches, and below Lovewell, 7 inches. In 2007 Bonny started the year 21 feet below the top of conservation. Below normal in-flows were reported during every month of the year. A total of 1359 acre-feet was released to the river from May 22 to June 5, 2007 as directed by Colorado. 87 acre-feet were released to Hale Ditch for irrigation purposes. New historical low reservoir elevation was reached in December 2007. The end of the year was finished with the water level in Bonny Reservoir 23 ½ feet below the top of the conservation pool.

Enders started 2007 over 26 feet below the top of conservation. Storage water was not released for either Frenchman Valley or H&RW. This was the 60th consecutive year for the H&RW not to divert water. Frenchman Valley also did not divert water for 2007.

Swanson began the year with 20 feet below full. Hugh Butler was 18 ½ feet below full while Harry Strunk was 8 feet below the top of conservation. Releases were not made from Swanson or Hugh Butler Lakes to the Meeker-Driftwood units or Red Willow canals. Harry Strunk Lake reached the top of conservation on April 23, 2007 and peaked at 6 feet into the flood pool on June 3, 2007. Big storm events occurred at the end of May 2007. Frenchman-Cambridge Irrigation District entered into an agreement with the Republican River Basin Coalition to purchase 26,000 acre-feet of water in 2007.

Keith Sebelius Lake was 18 feet below full level at the beginning of 2007. Irrigation releases were made from the lake in 2007. The Kansas Department of Wildlife and Parks and the district entered into an agreement to maintain a minimum pool at the lake.

Beginning elevation at Harlan County was 19 feet below the top of conservation in 2007. Inflow for the year totaled just over 198,000 acre-feet. No irrigation diversions were made for the Nebraska Irrigation District in 2007. An agreement was in place with Nebraska's Department of Natural Resources to purchase the water supply for 2007. The Bureau projected a water short year putting administration into effect.

Lovewell started the year 2007 6 ½ feet below the full level. The reservoir failed on April 25, 2007. It finished the year 1 ½ feet down.

Bonny Reservoir is about 21 feet below the top of full about one foot above last year at this time.

Swanson is 14 ½ feet from full and 1.2 feet above last year at this time with precipitation 108 % of normal. Frenchman-Cambridge Irrigation District is not irrigating from Swanson.

Lake level at Enders is 20.5 feet below full level and the reservoir is 3.8 feet below last year at this time. H&RW is not irrigating for the 7th year in a row due to short water supply. Frenchman-Valley is not taking storage water from the lake.

Hugh Butler storage is 6 ½ feet below full level in the lake. Precipitation is 143% of normal for the area. Irrigation releases are being made for diversion into Red Willow Canal.

Harry Strunk is less than one feet below the top of conservation. The lake filled at the end of April and increased nearly 8 feet into the flood pool by May 25th due to large storms. Frenchman-Cambridge is irrigating from it into the Cambridge Canal. Precipitation was 140% of normal.

Keith Sebelius is 11 feet below the full level. The lake is 5.3 feet above last year at this time. Irrigation release began July 13, 2008.

Harlan County is two-tenths of a foot below the full point. It is 15 ½ feet above last year's level. Bostwick Irrigation District in Nebraska is irrigating from Harlan County for the first time since 2003.

Lovewell is 1 ½ feet below full level. The reservoir filled on April 26, 2008 and peaked to 4.7 feet into the flood pool with storms in May and June. Irrigation releases began on May 27, 2008. Maintenance work will be performed at the reservoir in mid-September and releases may be made to the river at this time.

A safety of dams project was completed in 2007 at Norton Dam. Additional work is to be completed in 2009.

A small depression was found in 2004 at Enders and a corrective action study is being conducted to be completed by October 1, 2008. A corrective action study is also under way at Red Willow Dam with an issue with drains.

Report from the U.S. Army Corps of Engineers

Jim Pennaz, the chief of the hydrologic engineering branch of the Kansas City District Army Corps of Engineers, presented the report from the U.S. Army Corps of Engineers. Mr. Pennaz presented the Harlan County Dam Safety Study which has three areas of concern. First, the spillway gate design is being looked into to rehabilitate or strengthen the design. Secondly, they are looking into providing additional freeboard with the crest flood wall and third, there is an issue with spillway stability during extreme flooding events that may require additional foundation anchors to stabilize it. The study report will be available in early 2009. Repairs will be dependent on Corps budgets and at this time Mr. Pennaz stated that they "are not very robust." With the report a draft environmental assessment will also be released.

The second issue presented by Mr. Pennaz was the Lovewell Water Manual Revision that would take 2 feet of storage in the flood control pool and use it for irrigation support. This would only be accomplished if the Harlan County reservoir had less than 109 acre-feet of storage through June 30 and thus the revisions are time dependent. There would be no storage in Lovewell for irrigation supply when Harlan County water storage is over 119 acre-feet.

Engineering Committee Report

The Engineering Committee met six times during the year, and held a number of conference calls to try to resolve various disputes related to compact accounting and streamflow augmentation. The Engineering Committee was unable to complete an accounting for 2008 due to the unresolved disputes.

The committee was able to resolve two matters and recommended to the Republican River Compact Administration that they approve two changes for the accounting procedures. First, the committee agreed with the proposal for distributing estimated return flows from Riverside Canal. The proposal is attached to the Engineering

Committee report. Second, the committee agreed to relocate the groundwater model accounting cell in the vicinity of Guide Rock to match the surface water stream gage located at the Guide Rock Diversion Dam. The details were included as Attachment B to the Engineering Committee report.

The report included suggested assignments for the committee for the upcoming year.

Conservation Committee Report

The Conservation Committee Report was presented by Scott Guenther of the Bureau of Reclamation. Copies of the fourth annual Conservation Committee report were distributed, discussing the relative effects of tilling, terraces, and small dams on streamflow in the basin.

Arbitration Update

Pete Ampe provided an update on the various disputes among the states. He described the resolution passed by the RRCA on May 16, 2008 at the special meeting of the RRCA. Mr. Ampe stated that the states hoped to have selected and contracted with an arbiter within 30 days.

Report from the U.S. Geological Survey

Phil Soenksen, data chief with the USGS gave a summary of streamflow within the basin. Mr. Soenksen described the issues the Survey had with the Sappa Creek gage and their reasons for relocating it. He also described efforts to rebuild the gage on the North Fork Republican River at the Colorado – Nebraska state line.

Ad hoc Legal Committee

The issue of water from one state being used in a neighboring state was discussed. The RRCA agreed to continue studying the issue.

Lower Republican Feasibility Study

Mr. Barfield volunteered to draft a letter to the Bureau of Reclamation and the congressional delegations thanking them for authorizing the feasibility study on the Lower Republican and encouraging them to fund the effort. The RRCA voted in favor of providing the letter as described.

Approval of Committee Reports

The RRCA voted to approve the Engineering Committee report, with some corrections. The RRCA voted to request that the ad hoc legal committee continue to work on their assignment regarding the transfer of water for one state to another.

Closing Remarks

Mr. Barfield provided closing remarks related to compliance.

Resolution honoring Ann Bleed

Mr. Dunnigan entered a motion honoring Ann Bleed for her service to the Compact Administration. The resolution was approved.

Adjournment

The meeting was adjourned at 11:06 a.m.