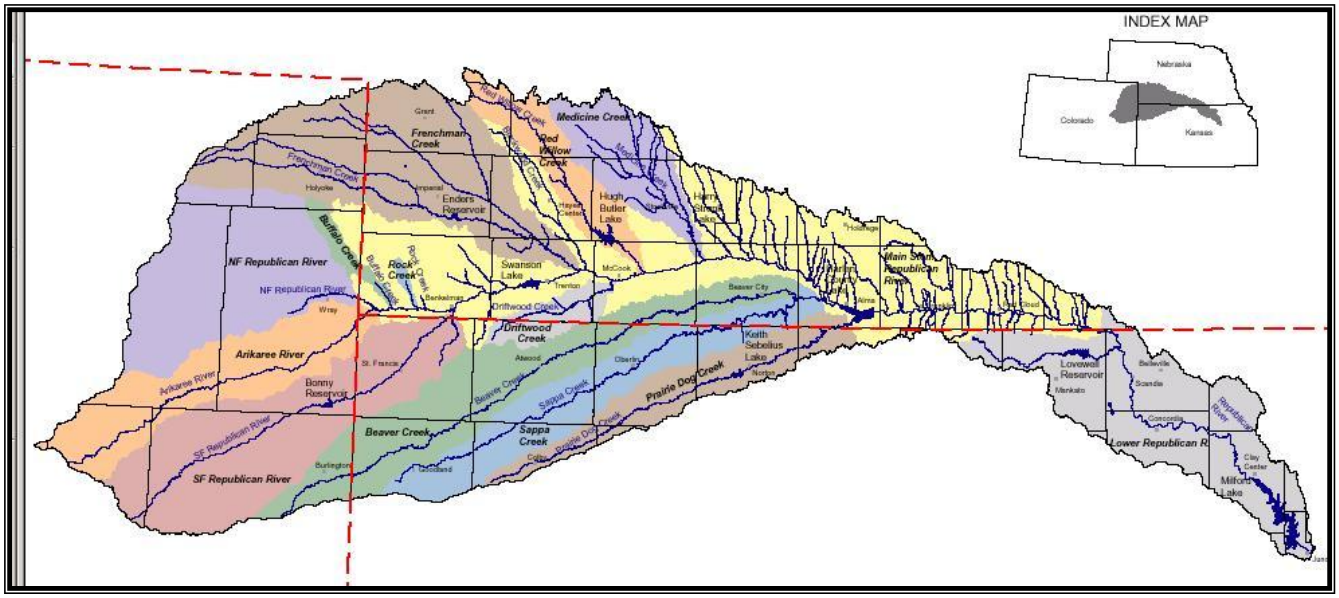
REPUBLICAN RIVER COMPACT ADMINISTRATION

49th ANNUAL REPORT

FOR THE YEAR 2009



BURLINGTON, COLORADO

AUGUST 12, 2010

SUMMARY REPORT OF THE ANNUAL
MEETING OF THE REPUBLICAN RIVER
COMPACT ADMINISTRATION

August 12, 2010

Burlington Colorado

Minutes

A transcript of the 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 50th 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 50th Annual Meeting of the Republican River Compact Administration (RRCA) was called to order by Chair Dick Wolfe at 9:15am on August 12th, 2010, at the Burlington Community and Education Center in Burlington, Colorado. Commissioner Wolfe welcomed everyone 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
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 two modifications to the agenda. The first modification changed Item 3 from "approval of previous annual and special meeting reports" to "status." The second modification added a motion to dissolve the ad hoc legal committee (Item 8(c)). 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 Meetings Reports and Transcripts from 2008 and 2009

Draft reports and transcripts from the 2008 and 2009 meetings of the RRCA were provided to each state. Due to time constraints, a thorough review had not been completed. The RRCA anticipated that this item would be taken up for action for approval at the next meeting.

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 2009. Commissioner Dunnigan reported that based on preliminary estimates, Nebraska will again be in compliance with the Republican River Compact for the five-year compliance period ending in 2010. Commissioner Dunnigan stated that compliance was a testament to the work conducted in partnership with Nebraska's Natural Resource Districts (NRDs), its surface water users, and the people of the Republican River Basin. Commissioner Dunnigan also indicated that Nebraska will continue to remain in compliance with the Republican River Compact.

Commissioner Dunnigan noted that the primary Natural Resource Districts (NRDs), in partnership with the Nebraska Department of Natural Resources, revised the Integrated Management Plans (IMPs) that have been in place for two and one-half years. Commissioner Dunnigan indicated that the IMPs are working and highlighted that under the IMPs, each of the NRDs cannot deplete more than their share of the water in the Republican River Basin. The revised IMPs contain an in-depth monitoring plan which includes a comprehensive forecasting mechanism designed to predict the compliance outcome for Nebraska in dry years. The IMPs also contain detailed descriptions of the triggers to indicate when additional management actions are needed. Responsibility for the additional management actions depends on the current situation in each NRD, who share projected shortfalls and are required to implement the necessary controls to ensure Nebraska's compliance. Finally, the IMPs provide for an occupation tax and the framework for Nebraska to continue to manage consumptive use.

Commissioner Dunnigan reported that the States of Colorado, Kansas, and Nebraska spent considerable time and effort to discuss concerns related to the Colorado Compliance Pipeline and Nebraska's Crediting Issue, both of which were subject to the arbitration process. Nebraska also met with the U. S. Bureau of Reclamation (USBR) to address concerns related to the revised IMPs and Commissioner Dunnigan reported that considerable progress was made in clearing up misunderstandings.

Commissioner Dunnigan stated that Nebraska will continue to work closely with surface and ground water users to develop conjunctive management strategies that benefit all users, where NRDs, Irrigation Districts, and the USBR will play an important role in implementation.

Commissioner Dunnigan noted that Nebraska will also continue participation in Conservation Reserve Enhancement Programs (CREP), the Environmental Quality Incentive Program (EQIP), and other incentive based management programs. Commissioner Dunnigan reported that Nebraska will continue to explore stream augmentation options and indicated that vegetation management has increased stream flow and the capacity of the stream channel.

Commissioner Dunnigan concluded that Nebraska will continue to comply with the Republican River Compact and the State will continue to evaluate the needs of the basin and make changes as necessary to stay in compliance in the spirit of openness transparency and partnership. Noncompliance is not an option for the State of Nebraska.

Commissioner Dunnigan introduced Tom O'Connor from the Department of Natural Resources. Mr. O'Conner reported on the water administration activities in Nebraska for calendar year 2009. 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 Meeker-Driftwood Canal, Red Willow Canal, Cambridge Canal, and Frenchman-Cambridge, Frenchman Valley and H&RW Irrigation Districts, as well as opening and closing notices to various storage permit holders. In addition, letters were sent to junior permit holders downstream in Harlan County Reservoir stating that the USBR predicted that 2010 will not be a water short year.

Report of the Chair from Colorado

Commissioner Wolfe reported that although Colorado was not in compliance with the Republican River Compact, Colorado is making great strides in trying to reach compliance. Colorado could not have made these strides without the collaborative efforts of the water users in the basin, the Republican River Water Conservation District (RRCWD), and the respective groundwater management districts. Commissioner Wolfe also expressed his appreciation for the efforts by both the States of Kansas and Nebraska in trying to reach resolution on Colorado's Compact Compliance Pipeline.

Commissioner Wolfe provided a snapshot of Colorado's hydrographic conditions in the Republican River Basin indicating that streamflows, while improving from the 2002 drought, were still below the period of record averages. Commissioner Wolfe also reported on activity at Bonny Reservoir, from which a total of 3,554 acre-feet was released over three separate periods during the 2009 calendar year. These releases were made in an effort to aid Colorado in compact compliance.

The collaborative efforts made by Colorado towards compact compliance included the RRCWD's CREP and EQIP programs. As of 2009, more than 19,600 acres were retired under the CREP program and over 10,700 under EQIP. Another 830 acres were enrolled in the Agricultural Water Enhancement Program (AWEP), a continued version of EQIP. As of 2010, approximately 10,000 acres were still available under the 2006 CREP program. A CREP amendment was also under consideration in Colorado, which was under the Environmental Assessment process and if approved will add up to 25,000 more acres.

Commissioner Wolfe noted that the RRCWD also purchased the majority of surface water diversions in the Republican River Basin, effectively retiring those lands historically irrigated by surface water. This effort led to a result of very little active surface water irrigation in Colorado.

Commissioner Wolfe reported that in 2008, measurement rules were adopted by Colorado which required by March 1, 2009, the installation of a measurement device on all of the approximately 4,000 high-capacity wells, or in the alternative, the well must be declared inactive. Calendar year 2009 was the first year of the program.

Finally, Commissioner Wolfe reported that legislation was enacted to aid the State Engineer in enforcement actions, not only in the Republican Basin, but statewide. The new legislation allows for the

assessment of a $500 per day fine that was previously exclusive to ground water violations. The $500 per day fine can now be assessed for surface water violations.

Report of the Commissioner from Kansas

Commissioner Barfield noted two significant anniversaries for 2010. The first was the 75th anniversary in May of 2010 of the devastating flood of 1935, which had a profound impact on all three states. Secondly, Commissioner Barfield observed that the August 2010 meeting was the 50th annual meeting of the RRCA.

Commissioner Barfield reported that Kansas is in compliance with all tests of compliance under the Final Settlement Stipulation (FSS). Kansas was also fully metered within the Republican River Basin and all meters had been inspected.

Commissioner Barfield noted that climate conditions in 2009 had improved over recent years. Precipitation in Kansas was generally good, with streamflow and reservoir levels at normal or above.

Commissioner Barfield reported that the Kansas State Government experienced significant budget shortfalls, totaling about a billion dollars, requiring a significant reduction in Kansas' activities and staffing. Included in the reduction of services was the elimination of the Water Right Conservation Program, which allowed a water user to contract with the Chief Engineer so as to temporarily not use a water right but preventing abandonment. In addition, staff positions for safety inspections of dams were eliminated and the responsibility of the inspections returned to the owners of the dams.

In regards to regulations, Commissioner Barfield reported that he enacted a number of significant changes to rules and regulations related to water administration. Specifically, regulations were established outlining procedures for special hearing processes in relation to Intensive Groundwater Use Control Areas (IGUCAs). Commissioner Barfield also reported that regulations on impairment investigations for groundwater systems were in development.

Commissioner Barfield provided an update on the Arkansas Compact, noting that the litigation that was initiated in 1985 was concluded in 2009 when the States of Kansas and Colorado agreed on some updates to the Colorado Use Rules. The two States jointly filed a motion with the Supreme Court to conclude that litigation. In 2010, the Compact Administration updated its 1980 Operating Plan to reflect the numerous agreements the two States had negotiated over recent years. Also, that Colorado State Engineer Dick Wolfe had responded to Kansas' concerns about surface water improvements in the Basin and their potential effects on Compact Compliance. Commissioner Barfield expressed Kansas' appreciation for that response. Finally, Kansas requested the Compact Administration to consider an update to the Hydrologic-Institutional Model related to groundwater irrigation return flow changes.

With respect to activities within the Republican River Basin in Kansas, Commissioner Barfield reported that the Northwest Kansas Groundwater management District No. 4 received an award for an Agricultural Water Enhancement Program grant for the USDA NRCS for $2.6 million. The grant will allow them to convert irrigated acreage to non-irrigated land in their six designated high priority area. The GMD 4 is looking to reduce their groundwater use in some of the areas that are overappropriated, in a way that would allow those reductions to occur through the modification of their management programs and rules jointly developed between the GMD and the Kansas Division of Water Resources.

Next, Commissioner Barfield noted that Kansas submitted a motion for leave to file a petition and brief in support with the U.S. Supreme Court regarding Nebraska's non-compliance during water-short year 2006. This subject was among the disputes submitted to the RRCA in early 2008 and then submitted to non-binding arbitration in late 2008. The arbitration was concluded in August of 2009. Kansas submitted its motion under Kansas v. Nebraska, Colorado No. 126 Original, to the Supreme Court on May 3, 2010 and Nebraska and Colorado replied in early July of 2010. As of August 2010, the Court had not indicated as to whether it intends to take the case.

Commissioner Barfield reported that in 2010 the RRCA States concluded two more arbitrations. The first, concerned Colorado's augmentation proposal and the second, Nebraska's crediting proposal. The States retained Ms. Martha Pagel of Scheabe, Williamson & Wyatt of Portland Oregon to arbitrate both disputes. On May 5, 2010 Ms. Pagel heard oral arguments regarding legal motions and ruled on those motions May 17, 2010. Arbitration trials were held in Kansas City, Kansas July 12-14, 2010. A final decision on both disputes was to be issued no later than September 30, 2010.

Commissioner Barfield then responded to the report by the Commissioner from Nebraska , stating that Kansas agreed with Commissioner Dunnigan that compliance is not an option but a requirement. However, Kansas had concerns whether the current plan of the IMPs will accomplish what was asserted as, from Kansas' viewpoint, Nebraska's IMPs don't appear to bring the kind of certainty that Kansas expects with regard to future compliance during critical periods. Commissioner Barfield continued, indicating that Kansas sees Nebraska's current compliance to be significantly influenced by the wet hydrology of the recent years. Commissioner Barfield expects that when it turns dry again, with higher depletions, more problems will result. Commissioner Barfield recognized that Nebraska is seeking to find a solution to the problem and that Colorado is also working to find a solution to its compliance problems and Kansas will continue to work with both States to address these issues and concerns.

Report by the U. S. Bureau of Reclamation

The U.S. Bureau of Reclamation (USBR) report was given by Mr. Marv Swanda of the McCook office. Mr. Swanda highlighted the USBR's operation in 2009 within the Republican River Basin:

- Precipitation measured at the USBR's reservoirs varied from 78% of normal at Lovewell to 136% of normal at Swanson Lake.
- Inflows varied from 51% of the most probable at Enders to 118% of the most probable at Harry Strunk.
- Water supplies for irrigation districts ranged from zero inches at H&RW to 6½ inches at Kansas Bostwick.
- Precipitation at Bonny Reservoir totaled 26 inches and was about 155% of normal. The greatest ever recorded at the dam. The annual computed inflow of 11,700 acre-feet for Bonny was very close to the normal year forecast. River releases were made in May, June, and December in accordance with orders from the State of Colorado for compact compliance. A total of 3,361 acre-feet of river outflow was recorded.
- At Enders, the annual precipitation totaled just over 29 inches, about 156% of normal and the greatest ever recorded for that site. Reservoir levels began 21 feet below the top of the conservation pool and no water was released.

- At Swanson Lake, the annual precipitation totaled just over 27 inches, about 136% of normal. Inflow of about 37,000 acre-feet was slightly above normal-year forecast. Irrigation diversions were made into the Meeker-Driftwood Canal for the Frenchman-Cambridge Irrigation District; the first time since 2002.
- Precipitation at Hugh Butler Lake totaled about 24 inches which was 122% of normal. Reservoir levels peaked at just 4½ feet below full and irrigation releases were made. Discovery of cracks in the embankment resulted in the evacuation of 21,000 acre-feet from Hugh Butler Lake.
- At Harry Strunk, annual precipitation totaled 29 inches which is 140% of normal. The reservoir level at the beginning of 2009 was just less than a foot below the top of the conservation pool. The reservoir was allowed to fill in April to over one foot into the flood pool prior to irrigation. Late fall/early winter inflows increased the level back to one half of a foot below the top of the conservation pool.
- Precipitation at Keith Sebelius Lake totaled 32 inches which is 131 percent of normal. Irrigation releases were made for the Almena Irrigation District.
- At Harlan County, the 2009 inflow of just over 136,000 acre-feet was between normal and wet-year forecast. At the beginning of 2009, the levels were less than a half a foot below the top of the conservation pool. Flood releases were made during the first three months of the year and the reservoir elevation was about half a foot into the flood pool at the end of the year.
- For Lovewell, precipitation totaled 21 inches which was 78% of normal. Reservoir elevation at the beginning of 2009 was 1½ feet below the top of the conservation pool. The pool level increased which the conservation space filled in March.

Mr. Swanda also reported on the current operations at USBR reservoirs:

- At Bonny Reservoir, the reservoir level was 18 feet below the top of the conservation pool. Eleven inches of precipitation was recorded in the first six months of 2010, which is 124% of average. Reservoir inflow for the period was the greatest since 2001 but half of the historic average. Releases were made to the Hale Ditch and for compact compliance.
- Swanson Lake was nine feet from full and approximately four feet higher than the previous year. Frenchman-Cambridge was again irrigation from Swanson Lake.
- Enders Reservoir was 20 feet below full. H&RW was not irrigating for the ninth year in a row and Frenchman Valley Irrigation District did not receive irrigation water for the seventh consecutive year.
- Hugh Butler Lake was 28 feet below full and received 15 inches of precipitation which was 156% of normal.
- Harry Strunk was near the top of conservation with precipitation 133% of normal.
- Keith Sebelius was six feet below full with some limited irrigation releases. Precipitation was 19 inches or 153% of normal.
- Harlan County water surface levels were just about conservation pool, just into the flood pool. USBR calculated that 2010 was not a water shortage year.
- Lovewell recorded about 18 inches of precipitation during the first six months of the year, 133% of average. Irrigation releases continued during the summer.

Finally Mr. Swanda touched on some safety-of-dams issues:

- At Norton Dam, the safety-of-dams work that began in 2007 was completed in 2009.
- At Enders Dam, a small depression was discovered in 2004 and work continues to remedy the situation.
- At Red Willow, in late October a sinkhole and subsequently transverse cracking in the embankment was discovered, which resulted in a reservoir restriction of an elevation of 2552 to 2554, just above the dead pool. The USBR began a Corrective Action Study to determine what alternatives are available to fix the dam.

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

Report by the Army Corps of Engineers

The report for the Army Corps of Engineers (Corps) was provided by Edward Parker, the lead hydrologist for the water management sector in the Kansas District.

Mr. Parker reported on activities for Harlan County Reservoir and the Lovewell project on White Rock Creek in Kansas:

- For Harlan County the Corps conducted a study on channel capacity. Since the 1950's, channel capacity declined from 4,000 cfs to around 2,000 cfs in 1997. Due to the extended drought, no releases were made from 1998 through 2007. With the condition of the project lately focused on storage, more so than in past years, the Corps took the opportunity to determine the current channel capacity. During March for a two week period, 1,000 cfs was released with no significant damage downstream.
- On Lovewell Reservoir, the Corps modified the water control manual to permit during water short years, pursuant to a formal agreement with the USBR, excess storage up to 2 feet, for irrigation benefits. The amount of water allowed is based on the operating plan for Harlan County.

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 2009. Mr. Miller provided a packet containing the annual data report published by the USGS and all of the graphs presented at the meeting.

Mr. Miller presented the annual mean discharge data for fifteen sites in the Republican River Basin. Ten of the fifteen sites are Compact gages funded through the USGS NSIP program. The Compact gages were: the Arikaree River at Haigler, the North Fork of the Republican at the Colorado State Line, Buffalo Creek near Haigler, Rock Creek at Parks, South Fork of the Republican near Benkelman, Frenchman Creek at Culbertson, Driftwood Creek near McCook, Red Willow Creek near Red Willow, Sappa Creek near Stamford and the Courtland Canal, Nebraska-Kansas State Line. Mr. Miller noted that all site were within the top ten lowest for the period of record for the annual mean discharge.

The five other sites that Mr. Miller indicated would be of interest were: the Republican River at McCook, the Republican River near Orleans, the Republican River at Stratton, Frenchman Creek at Palisade, and the Republican River at Cambridge. The last two gages are operated by the Nebraska Department of Natural Resources.

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.

At the RRCA Annual Meeting on August 12, 2009, the Engineering Committee was assigned nine tasks related to compact accounting, including the completion of accounting for 2009. The Engineering Committee met several times by phone and exchanged preliminary data. However due to on-going, unresolved disputes, the accounting for 2009 was not finalized.

The Engineering Committee did reach consensus, after reviewing the accounting procedures that Kansas' groundwater CBCU variable in the Mainstem Virgin Water Supply formula was missing. The Engineering Committee recommended revisions to the accounting procedures to include this CBCU element in the Mainstem formula, as well as changes to the Frenchman and Mainstem sub-basin formulas for the return flows of the Riverside Canal. The Engineering Committee also recommended the adoption of the proposal to relocate the accounting point used in the groundwater model for the North Fork Republican River sub-basin to the Colorado-Kansas State Line.

In addition, the Engineering Committee discussed the use of provisional USGS data for the Courtland Canal, Station 06852500 as opposed to the USBR data for the same gage. The Committee recommended the use of the USGS data.

Next Mr. Jim Schneider, Nebraska's Engineering Advisor, addressed comments made by the State of Kansas regarding Nebraska's revised IMPs. Mr. Schneider indicated that the Department of Natural Resources worked collaboratively with the IMPs of the past year and spent much time conducting extensive analyses to conclude that the process within the IMPs will ensure Compact compliance for the State of Nebraska during all climatic conditions, including dry conditions. Mr. Schneider stressed that Nebraska would welcome any discussion that the State of Kansas would like to have.

Ms. Sullivan concluded the Engineering Committee report with the tasks recommended for the next year for the Engineering Committee.

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

Conservation Committee Report

Mr. Scott Gunether of the USBR regional office in Billings, Montana 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.

The study essentially utilizes a water balance model to estimate impacts of reservoirs and terraces. There are basically three elements to the water balance model. The first is the collection of input data which is complete. The second is the water balance modeling aspect. Although not yet complete, a great deal of progress has been made, including the identification of the impact of reservoirs and terraces in the field. The last element is the transfer of the impact of reservoirs and terrace to the mouth of each designated sub-basin. This is yet to be completed and requires the identification and summarization of

all land use information and practices in a particular basin, which is part of the post-processing of the model results.

A brief report was transmitted to the RRCA, giving examples of some of the results to date. This report will be posted to a website at a later date.

In regards to administrative items, the Final Settlement Stipulation (FSS) indicated that the study costs should not exceed a million dollars. The States were to be responsible for $250,000 of that and the remainder to be from federal funds via the USBR. The three States have exceeded the $250,000 identified in the FSS and the study costs have exceeded the $1 million mark, mostly due to two additional, unexpected work elements, namely a survey of terrace conditions and the mapping of terrace lands in Kansas. Some additional in-kind services from the States may be incurred later in the year, specifically from participation in conference calls and other meetings.

Finally Mr. Guenthner reported that the Conservation Committee does intend to document the finding of the study. Both Dr. Derrel Martin and Dr. Jim Koelliker, the principal investigators, have plans for professional paper to document the study. The Conservation Committee will also probably issue a concluding report.

Status of Dispute Resolution

Commissioner Wolfe noted that Commissioner Barfield covered the status of the Dispute Resolution in his report.

Status of 2006, 2007 and 2008 Final Accounting

Commissioner Wolfe noted that this topic was covered in the Engineering Committee report. There are some outstanding issued that are under consideration by the Committee and the Commissioners so as to reach final resolution and to ultimately seek approval of the final accounting.

Status of RRCA regulation regarding the approval of a diversion in one state that is used in another state

Mr. Burke Griggs provided an update on the Ad Hoc Legal Committee which was formed to resolve the issue of the approval of the diversion of water from one state that is used in another state. The Ad Hoc Legal Committee considered the issue and concluded that there is no clear legal resolution of it and has decided to not pursue it any further.

Status of the Lower Republican River Feasibility Study

Commissioner Barfield provided an update of the status of the Lower Republican River Feasibility Study. This study is a follow-up to the prior study that was conducted after the FSS was concluded by the States of Kansas and Nebraska and the USBR to look at alternatives for improved management in the Lower Basin, such as raising Lovewell, improving efficiencies in the canal systems and looking at other storage sites in Kansas and Nebraska in the lower part of the Republican River Basin.
The follow-up study on the feasibility of the most promising alternatives has been authorized by Congress. The next step is the funding of the Federal Government 50% share, which was still pending.

Commissioner Dunnigan reported that Nebraska stands ready to support the feasibility study with funding when Federal funding comes in.

Action on Engineering Committee Report and assignments

Commissioner Wolfe called for a motion to approve the Engineering Committee report and the respective assignments.

Commissioner Dunnigan so moved and Commissioner Barfield seconded. Commissioner Barfield clarified that the RRCA was accepting the report and assigning the Engineering Committee the tasks they recommended. Commissioner Wolfe affirmed the clarification and the motion passed unanimously.

Commissioner Barfield then commented on a particular data issue in the Engineering Committee Report. Specifically, the statement where Nebraska's position is that it does not agree that the backup data in the NRDs is required in the FSS. Commissioner Barfield stated that Kansas believes that the Compact and the FSS requires disclosure for underlying data where there's a legitimate need for such. Kansas will send a formal request for that data from the NRDs in the near future with background as to why Kansas believes it is required under the FSS.

Mr. Jim Schneider of Nebraska responded to clarify that the statement in the Engineering Committee Report is simply reiterating Nebraska's position that the backup data is not required as part of the regular annual reporting. Mr. Schneider offered to work with Kansas to see if Nebraska can accommodate Kansas' request on a one-time basis as needed.

RRCA resolutions regarding changes to the RRCA's ground water model and RRCA's Accounting Procedures and Reporting Requirements

Commissioner Wolfe called for a motion to waive the 15-day notice requirement under Rule 13. Commissioner Barfield so moved and Commissioner Dunnigan seconded. The motion passed unanimously.

Commissioner Wolfe called for a motion to amend Rule 14 to reflect the date of August 13, 2011 for the revisions to the RRCA ground water model and accounting procedures if the RRCA accepts the two following procedures. Commissioner Barfield moved and Commissioner Dunnigan seconded. The motion passed unanimously.

Commissioner Wolfe read the resolution of the report from the RRCA on changes to the groundwater model. In summary, on August 13, 2008, the RRCA accepted the proposal to move the groundwater model accounting cell at Guide Rock. In addition, in its August 12, 2009 and August 12, 2010 reports, the Engineering Committee recommended that the groundwater accounting point for the North Fork sub-basin be moved to the Colorado Nebraska state line. It is the resolution of the RRCA to adopt the proposal set forth in Attachment B of the Engineering Committee 2010 report and to adopt Version 12s2 of the groundwater model to reflect these changes.

Commissioner Wolfe called for a motion to approve Version 12s2 of the RRCA groundwater model where the changes are intended to apply to the accounting years 2009 and on. Commissioner Wolfe noted that the changes are currently not applicable to unapproved accounting for prior years and each State reserves its rights as to whether it applies to prior unapproved accounting. Commissioner Dunnigan so moved and Commissioner Barfield seconded.

Commissioner Wolfe called for discussion. Commissioner Dunnigan stated that Nebraska's position going forward will be that as this body identifies an error in accounting procedures or in the

groundwater model that once those errors are identified and agreed to as errors that they should be incorporated in any accounting that has not been finalized in the past.

The motion passed unanimously.

Commissioner Wolfe read the second resolution of the RRCA regarding changes to the RRCA's Accounting Procedures and Reporting Requirements. In summary, the Engineering Committee recommended that the RRCA amend the RRCA Accounting Procedures and Reporting Requirements to correct the formulas used to compute the virgin water supply for both Frenchman and the Mainstem so as to properly account for the return flows from the Riverside Canal. The Engineering Committee also recommended amending the Accounting Procedures and Reporting Requirements to include in the formula used to compute the Mainstem Virgin Water Supply, the groundwater impacts attributed to Kansas well Pumping as calculated by the groundwater model.

Commissioner Wolfe called for a motion to approve the changes to the RRCA Accounting Procedures and Reporting Requirements where these changes are intended to apply to accounting years 2009 and on and is not currently applicable to unapproved accounting for prior years and each State reserves its arguments as to whether it applies to prior unapproved accounting. Commissioner Barfield moved and Commissioner Dunnigan seconded. The motion passed unanimously.

The RRCA Resolutions are attached as Exhibits F & G

Resolution for Lee Rolfs

Commissioner Barfield read the resolution recognizing the contributions of Lee Rolfs of Kansas. In summary: Mr. Rolfs served as legal counsel to the Division of Water Resources Kansas Department of Agriculture for over 31 years. In his capacity as legal counsel, Mr. Rolfs represented the interests of the State of Kansas and its residents of the Republican River Basin. Mr. Rolfs played a central role in litigation of Kansas v. Colorado and Nebraska, No. 126 Original and in the settlement of that litigation. Commissioner Barfield on behalf of the RRCA expressed sincerest gratitude and appreciation to Lee E. Rolfs for his excellent and dedicated service. Commissioner Barfield moved to approve the resolution and Commissioner Dunnigan seconded. The motion passed unanimously.

The RRCA Resolution is attached as Exhibit H

Motion to dissolve the Ad Hoc Legal Committee

Commissioner Wolfe called for a motion to dissolve the Ad Hoc Legal Committee. Commissioner Dunnigan so moved and Commissioner Barfield seconded. The motion passed unanimously.

Remarks from the Public

Mr. Brad Edgerton, manager for the Frenchman-Cambridge Irrigation District spoke on behalf of the District. Mr. Edgerton provided background on the Frenchman-Cambridge system and water rights. Mr. Edgerton noted that Colorado is approaching the volume of water equivalent to the contracted amount of water the District board has for Trenton Dam/Swanson Reservoir. The contracted amount is equivalent to three irrigation seasons for the 17,000 acres in the Meeker-Driftwood Canal. For six consecutive years the water users of the Meeker-Driftwood Canal had zero water available. While the District appreciates Colorado's efforts towards compliance and understands the sacrifices made, the District does not believe it is enough.

Mr. Edgerton continued, stating that the District petitioned (Nebraska) DNR to reevaluate the Republican River Basin as allowed under Nebraska statutes. The petition was denied by DNR. The

District appealed the decision, believing that the reevaluation will illustrate how far the basin is over-developed and that a sound understanding of the problem will allow Nebraska to develop reasonable management solutions.

The District believes that a sustainable supply should be the goal and Mr. Edgerton expressed the hope that the newly formed Republican River Sustainable Task Force would spread into Colorado.

Future Meeting Arrangements

Commissioner Wolfe indicated that some items such as previous annual reports and meeting reports had not been complete. In light of this a Special Meeting may take place in the fall to address these issues. The RRCA's next annual meeting will again be hosted by Colorado and will be held in Burlington, in August of 2011. The exact date will be set at a later date.

Commissioner Barfield noted that the RRCA's Rule 9 requires the regular meeting to be held prior to August 1, unless the States agree to waive the requirement. Commissioner Barfield questioned why the meeting could not be moved back to July. Commissioner Wolfe noted that past meetings were held in August because some data for the accounting was not available until the end of July. All Commissioners agreed to discuss over the next year, the possibility of holding the next annual meeting in July.

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 11:28 am.

_____

Dick Wolfe, Chair, Colorado Commissioner

_____

David W. Barfield, Kansas Commissioner

_____

Brian Dunnigan, Nebraska Commissioner

Exhibits

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: RRCA Resolution regarding Changes to the RRCA's Accounting Procedures and Reporting Requirements
Exhibit G: RCA Resolution regarding Changes to the RRCA Ground Water Model
Exhibit H: RRCA Resolution honoring Lee R. Rolfs

The 49th annual RRCA report is hereby approved on this 12th day of September 2013.

David W. Barfield, Chair, Kansas Commissioner

Dick Wolfe, Colorado Commissioner

Brian Dunnigan, Nebraska Commissioner

EXHIBIT A

Republican River Compact Commissioners' Annual Meeting

Attendance List

Burlington CO August 12, 2010

NAME	REPRESENTING
Dick Wolfe	Colorado Commissioner, Chair
Brian P. Dunnigan	Nebraska Commissioner
David W. Barfied	Kansas Commissioner
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
Mike Sullivan	Colorado Division of Water Resources
John Miller	USGS
Dale Book	Spronk Water Engineers, Consultant, State of Kansas
Sam Perkins	Kansas Department of Agriculture
Paul Koester	Nebraska Department of Natural Resources
Shane Stanton	Nebraska Department of Natural Resources
Jesse Bradley	Nebraska Department of Natural Resources
Jason Kepler	Nebraska Department of Natural Resources
Brad Edgerton	Frenchman-Cambridge Irrigation District, Nebraska
Mike Clements	Lower Republican Natural Resource District, Nebraska
Dale Cramer	Frenchman-Cambridge Irrigation District, Nebraska
Mike Delka	Bostwick Irrigation District, Nebraska
Chelsea Juricek	Kansas Department of Agriculture
John Van Nostrand	Burlington Record
Stan Murphy	Republican River Water Conservation District, Colorado
Scott Guenthner	USBR
Patrick Erger	USBR
Marv Swanda	USBR
Aaron Thompson	USBR
Dan Smith	Middle Republican Natural Resource District, Nebraska
Jasper Fanning	Upper Republican Natural Resource District, Nebraska
Edward Parker	Corps of Engineers
Bob Eisenach	Hitchcock and Red Willow County Irrigation District, Nebraska
Jerry Kotschwar	Frenchman Valley Irrigation District, Nebraska
Kenneth Albert	Frenchman Valley Irrigation District, Nebraska
Don Felker	Frenchman Valley Irrigation District & Hitchcock and Red Willow County Irrigation District, Nebraska
Dave Keeler	Colorado Division of Water Resources

Republican River Compact Commissioners' Annual Meeting

Attendance List

Burlington CO August 12, 2010

Devin Ridnour	Colorado Division of Water Resources
Deb Daniel	Plains and East Cheyenne Ground Water District, Colorado
Dirk Dinnel	Upper Republican Natural Resource District, Nebraska
Tom Riley	Flatwater Group, Nebraska
Jim Koelliker	Kansas State University, Manhattan Kansas
Derrel Martin	University of Nebraska at Lincoln, Nebraska
Diane Homm	Homm Ranch, Colorado
Don Blankenau	Legal counsel for State of Nebraska
Marcus Powers	Nebraska Attorney General's Office
Autumn Bernhardt	Colorado Attorney General's Office
Katie Radke	Colorado Division of Water Resources
Tony Mangus	CAPA
Jack Dowell	W-Y Ground Water District, Colorado
Nate Midcap	Central Yuma, Frenchman, Sand Hills, and Marks Butte Ground Water Management Districts, Colorado
Joe Newton	CAPA
David Robbins	Legal counsel for Republican River Water Conservation District, Colorado
Dennis Coryell	Republican River Water Conservation District, Colorado

Exhibit B

AGENDA FOR

50TH ANNUAL MEETING OF THE

REPUBLICAN RIVER COMPACT ADMINISTRATION

August 12, 2010, 9:00 AM MST

Burlington Community and Education Center, Burlington, Colorado

1. Introductions
2. Modification and Adoption of the Agenda
3. Status of Previous Annual and Special Meetings Reports and Transcripts from 2008 and 2009
4. Report of Chairman and Commissioner's Reports
    a. Nebraska
    b. Colorado
    c. Kansas
5. Federal Reports
    a. Bureau of Reclamation
    b. U.S. Army Corps of Engineers
    c. U.S. Geological Survey
6. Committee Reports
    a. Engineering Committee
        i. Assignments from 2009 Annual Meeting
        ii. Committee Recommendations to RRCA
        iii. Other Matters
        iv. Recommended assignments for Engineering Committee
        v. Response to Kansas data requests
    b. Conservation Committee
7. Old Business
    a. Status of Dispute Resolution
    b. Status of 2006, 2007 and 2008 Final Accounting
    c. Status of RRCA regulation regarding the approval of a diversion in one state that is used in another state
    d. Status of the Lower Republican River Feasibility Study
8. New Business and Assignments to Compact Committees
    a. Action on Engineering Committee Report and assignments
    b. Additional Items
        i. Resolution for Lee Rolfs
    c. Motion to dissolve ad hoc legal committee
9. Remarks from the Public
10. Future Meeting Arrangements
11. Adjournment

RECLAMATION

Managing Water in the West

Nebraska-Kansas Area Office

Report

To The

Republican River

Compact Administration

Burlington, CO

U.S. Department of the Interior
Bureau of Reclamation
Great Plains Region

August 2010

Forward

The Bureau of Reclamation, Nebraska-Kansas Area Office submits this Report to the Republican River Compact Administration at their annual meeting, held in Burlington, Colorado, on August 12, 2010. The Report describes Reclamations 2009 Operations and the Operations for the first six months of 2010 Operations. The Report also describes other Reclamation Republican River Compact related activities.

Operations and Maintenance Activities

2009 Operations

As shown on the Appendix Table 1, precipitation in the Republican River Basin varied from 78 percent of normal at Lovewell Reservoir to 156 percent of normal at Swanson Lake. Total precipitation at Reclamation dams ranged from 21.33 inches at Lovewell Dam to 32.01 inches at Norton Dam.

Inflows varied from 51 percent of the most probable forecast at Enders Reservoir to 118 percent of the most probable forecast at Harry Strunk Lake. Inflows into Enders Reservoir totaled 6,577 AF while inflows at Harlan County Lake totaled 136,747 AF.

Average farm delivery values for each irrigated acre were as follows:

District	Farm Delivery
Frenchman Valley	0.7 inches
H&RW	0.0 inches
Frenchman-Cambridge	
- Meeker-Driftwood, Bartley	4.0 inches
- Red Willow Canal	3.1 inches
- Cambridge Canal	6.0 inches
Almena	0.6 inches
Bostwick in NE	5.8 inches
Kansas-Bostwick	6.5 inches

2009 Operation Notes

Bonny Reservoir – The annual precipitation total of 26.56 inches at Bonny Dam was 155 percent of normal and the greatest ever recorded at the site. The annual computed inflow of 11,698 AF to Bonny Reservoir was very close to the normal-year forecast. The reservoir level began the year at elevation 3649.96 feet and gradually increased to a peak elevation of 3652.66 feet by the end of April (19.3 feet below full pool). Bonny Dam received 4.46 inches of precipitation in June and 4.61 inches in July, 166% of average for the two month period. Rainfall during October was 3.59 inches, 318% of average for the month. These rains resulted in the

reservoir level increasing approximately 1.5 feet (1,500 acre-feet) from October 1st through November 30th. River releases were made during the months of May, June and December in accordance with orders of the State of Colorado for Republican River Compact compliance. A total of 3,361 AF of river outflow was recorded for this purpose. An additional 674 AF was released into Hale Ditch as directed by the Colorado State Water Commissioner. The reservoir elevation at the end of the year was 21.0 feet below the top of conservation at 3651.00 feet.

Enders Reservoir – The annual precipitation total of 29.69 inches at Enders Dam was well above normal (156 percent), and the greatest ever recorded for the site. The 2009 inflow into Enders Reservoir of 6,577 AF was between the dry-year and normal-year forecasts. This was the 42nd consecutive year with below-normal inflows in which the conservation pool did not fill. The reservoir level began the year at elevation 3090.99 feet (21.3 feet below top of conservation). The reservoir level increased slightly during the spring to a peak elevation of 3091.91 feet on June 18th and then gradually decreased through early October. The minimum elevation (3090.59 feet) occurred on October 5th. Due to the extremely low water supply available, no water was released from Enders Reservoir. The end of the year reservoir level was 21.0 feet below the top of conservation.

Swanson Lake – The annual precipitation total of 27.25 inches at Trenton Dam was 136 percent of normal. The inflow of 37,749 AF to Swanson Lake was slightly above the normal-year forecast. The lake level began the year at elevation 2737.16 feet and peaked at 2742.04 feet (10 feet below the top of conservation) on June 17th. The reservoir level decreased during the irrigation season and reached a minimum elevation of 2735.58 feet on October 13th. Irrigation diversions were made into Meeker-Driftwood Canal for the first time since 2002. The district diverted 23,274 AF from June 8th through August 28th. At the end of the year the reservoir level was 13.8 feet below the top of conservation at 2738.17 feet.

Hugh Butler Lake – The annual precipitation total of 23.96 inches at Red Willow Dam was 122 percent of normal. The annual inflow of 13,279 AF into Hugh Butler Lake was between the dry-year and normal-year forecasts. The reservoir level at the first of the year was 2575.27 feet, 6.5 feet below the top of conservation. The reservoir level peaked at 2577.18 feet (4.6 feet below full) on June 26th. Irrigation releases began on June 28th and ended on August 27th dropping the pool level 4.1 feet. The district diverted 5,166 AF into Red Willow Canal and 10,711 AF into Bartley Canal. October precipitation totaled 4.86 inches, the greatest October total recorded at the site. Discovery of embankment cracking at Red Willow Dam in late October resulted in the evacuation of 21,000 AF from Hugh Butler Lake. The end of year storage at Hugh Butler Lake was the lowest end of December storage ever recorded (elevation 2554.07 feet), 27.7 feet below the top of conservation.

Harry Strunk Lake – The annual precipitation total of 28.90 inches at Medicine Creek Dam was 140 percent of normal and the second highest ever recorded at the dam. The inflow of 42,805 AF was between the normal-year and wet-year forecasts. The reservoir level at the beginning of 2009 was only .8 foot below the top of conservation. Releases were made during the first four months of 2009 to maintain the reservoir elevation approximately .5 foot below the flood pool. The reservoir was allowed to fill on April 26th and the reservoir level gradually increased to elevation 2367.27 feet (1.2 feet into flood pool) on June 16th. Irrigation releases began on June 23rd and ran through September 4th reducing the reservoir level to 2360.22 feet. The district diverted 23,961 AF into Cambridge Canal. Medicine Creek Dam recorded 5.34

inches of precipitation during October, the most ever recorded for the month. Late fall and early winter inflows increased the level of Harry Strunk Lake to 0.5 foot below the top of conservation at the end of the year (2365.54 feet).

Keith Sebelius Lake – The annual precipitation at Norton Dam totaled 32.01 inches, which is 131 percent of normal. The total inflow of 7,452 AF was slightly below the normal-year forecast. The reservoir was 10.4 feet below the top of conservation pool at the first of the year. The reservoir level gradually increased peaking at 2294.85 feet on June 16th. Irrigation releases were made during July reducing the lake level by .75 feet. The lake level ended the year at elevation 2294.64 feet (9.7 feet below the top of conservation).

Harlan County Lake – The annual precipitation at Harlan County Dam totaled 24.50 inches of rainfall, which is 108 percent of normal. The 2009 inflow of 136,747 AF was between the normal- and wet-year forecasts. Harlan County Lake began 2009 approximately .4 foot above the top of conservation pool, at 1946.12 feet. Flood releases were made during the first three months of the year. The reservoir level increased gradually during the spring peaking at 1947.46 feet on June 21st. Irrigation releases started in mid June and continued through early September. The lake level decreased to elevation 1943.57 feet on September 30th. Lake levels increased through the fall and flood releases began on December 29th to maintain the pool level near the top of conservation. The reservoir elevation was 1946.19 feet (0.5 foot in the flood pool) on December 31, 2009. A ten year summary of Harlan County Lake operations is shown on Appendix Table 3.

Lovewell Reservoir – The 2009 precipitation at Lovewell Dam totaled 21.33 inches, which was 78 percent of normal. The reservoir elevation at the beginning of 2009 was 1581.13 feet (1.5 feet below the top of conservation pool). The pool level gradually increased, filling the conservation capacity on March 4th (1582.6 feet). Flood releases were initiated and continued into April to maintain the reservoir level near the top of conservation. The pool level gradually increased during May peaking at 1583.48 feet on June 5th. Irrigation releases to the canal began on May 18th and continued through September 12th, dropping the reservoir level 7.5 feet. Water was then diverted into Lovewell Reservoir via Courtland Canal through early November. The reservoir level at the end of the year was 1579.26 feet (3.3 feet below top of conservation).

Current Operations

Appendix Table 2 shows a summary of data for the first six months of 2010.

Bonny Reservoir – The reservoir level is approximately 18.0 feet below the top of conservation. Bonny Dam has recorded 11.14 inches of precipitation during the first six months of the year (124% of average). Reservoir inflow for the period is the greatest since 2001, but only half of the historic average. Releases have been made into Hale Ditch and also for compact compliance. The reservoir level is 2.5 foot higher than last year at this time.

Swanson Lake – The lake level is currently 9 feet from full and is approximately 4 feet higher than last year at this time. Precipitation for the year is 120% of normal (12.29 inches). Frenchman-Cambridge Irrigation District is irrigating from Swanson Lake for the second year since 2002.

Enders Reservoir - The reservoir level is currently 20 feet below full and 1.0 foot above last year at this time. Enders Dam recorded 12.89 inches of precipitation during the first six months of the year. Normal precipitation during this period is 9.98 inches. Due to the water supply shortage, H&RW Irrigation District is not irrigating for the ninth year in a row. This is the seventh consecutive year that Frenchman-Valley Irrigation District has not received storage water for irrigation.

Hugh Butler Lake – The lake level is currently 28 feet below full. The precipitation total so far this year is 15.41 inches (156% of normal). The lake level is 21 feet below last year at this time. Hugh Butler Lake continues to be maintained at historic low levels to reduce risks related to the Red Willow Dam embankment cracking.

Harry Strunk Lake – The lake level is currently near the top of conservation. Releases were made through early April to hold the pool level below top of conservation. Reservoir releases resumed in May with Cambridge Canal diversions beginning on May 18thth. Precipitation at the dam during the first six months of the year was 14.23 inches (133% of normal).

Keith Sebelius Lake – Currently 6 feet below full. Lake level is 4.7 foot above last year at this time. Irrigation releases began on July 12th with limited delivery expected in 2010. Precipitation at the dam during the first six months of the year was 19.00 inches (153% of normal).

Harlan County Lake – The current water surface level is near the top of conservation pool and is nearly the same as last year at this time. Harlan County Dam has recorded 23.15 inches of precipitation so far this year. The available irrigation supply from Harlan County Lake on June 30th was 147,800 AF, indicating that "Water-Short Year Administration" would not be in effect. Irrigation releases began on June 26th.

Lovewell Reservoir – The reservoir level dropped from the flood pool on July 25th and is slightly higher than one year ago. Lovewell Dam recorded 17.81 inches of precipitation during the first six months of the year (133% of average). Irrigation releases began on June 2nd.

Maintenance Related Activities

Inspections

Annual Site Inspections were conducted at all NKAO facilities in 2009.

Safety of Dams

Norton Dam – Construction of a weighted filter and drain system to collect seepage through the left abutment and along the outlet works alignment was completed in the fall of 2007. A residual seep was discovered upon completion of the construction contract, when the dewatering system was shut down. A cutoff wall was installed in the fall of 2009 to stop the residual seepage and therefore preventing internal erosion of the foundation materials beneath and downstream of the weighted filter and drain system.

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. Reclamation

installed additional instrumentation in the area and has collected additional data on water levels around the basin. Additional weight was added to the basin in June 2007 to increase the stability of the outlet basin after a 10 ft rise in lake elevation. 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 is scheduled for the fall of 2010.

Red Willow Dam – The river outlet works stilling basin was dewatered for inspection in July 2005. During the inspection a small quantity of fine clean sand was discovered near the right basin under drain system outlet indicating that material was being transported through the basin underdrain system. Plugs were installed in the drain outlets to prevent any further movement of material. Grouting to prevent further movement of material and remediating voids is scheduled to be completed in FY10.

On October 20, 2009 a sinkhole was discovered on the downstream embankment approximately 130 feet upstream of the outlet works building along the alignment of the conduit. Subsequent investigations revealed the presence of transverse cracking in the embankment above the outlet works alignment and in several additional locations along the embankment. In late October 2009 a reservoir level restriction was put in place to reduce the risks associated with the cracked embankment. In February 2010, Reclamation initiated a Corrective Action Study to identify alternatives to reduce risks at the dam and to determine a preferred alternative by fall of 2010. A Modification Report is planned for transmittal to Congress in spring 2011 with a potential contract award for repairs to the dam in the summer of 2011.

Emergency Management Operations

Orientation Meetings are held annually to discuss the Emergency Action Plan (EAP) for all NKAO dams. Federal, state, county and local organizations that would be impacted by an emergency at NKAO dams are invited to attend. Radios which contact the downstream 24-hour warning points are tested monthly.

Standing Operating Procedures

All NKAO SOP's have been updated based on the current guidelines.

Security

Security at all Reclamation dams has increased since September 11, 2001. Site security plans for all fifteen NKAO facilities have been finalized and published.

American and Reinvestment Act of 2009 Project

Reclamation received ARRA funds to re-coat the interior of the outlet works conduit at Enders Dam.

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.

Both Nebraska and Kansas have indicated that they will provide in-kind support and/or funding for the Feasibility Study. The Republican River Compact Administration Commissioners renewed their support for the Feasibility Study at the 2009 annual meeting.

On April 8, 2010, the Kansas Water Office hosted a Congressional Tour at Lovewell Reservoir to present information on the Lower Republican Feasibility Study. Reclamation made presentations concerning the alternatives from the Lower Republican Appraisal Report.

Frenchman Valley Appraisal Study

At the request of the Nebraska Department of Natural Resources, Reclamation prepared an appraisal study to examine opportunities for more efficient management in the Frenchman Basin which has experienced dramatically reduced surface water supplies, including reduced inflows to Enders Reservoir.

Reclamation's Frenchman Unit (Unit) lacks the water supply to provide the benefits envisioned when the project was formulated, most notably supplying irrigation water from Enders Reservoir to project acres of the Unit. The purpose of the study is to determine whether the problems and alternatives analyzed have sufficient potential to justify further Federal involvement while meeting the following study objectives:

- Maintain the viability of the FVID and H&RWID
- Maintain recreation at Enders Reservoir
- Protect the Federal investment in the Unit

Three alternative plans were developed:

- Flow-Through Alternative
- Recreation Alternative, and
- Groundwater Recharge Alternative.

These alternatives were compared to the Future-Without Project Condition, which represents the project future conditions if no Federal action were taken.

The study reviewed and updated the conclusions and recommendations from the 1977 Frenchman Unit Appraisal Report. A Final Draft was distributed to cooperating agencies in fall of 2009.

Reclamation is preparing the final report.

Water Conservation Activities

Reclamation continues to provide financial and technical assistance for water conservation projects in the Basin.

Almena Irrigation District No. 5 – Reclamation is providing financial and technical assistance through the WCFSP for a buried pipe lateral project.

Bostwick Irrigation District in Nebraska – Reclamation is providing financial and technical assistance through both the Water 2025 Program and the WCFSP for the replacement of open ditch laterals with buried pipe. In addition, Reclamation also provided technical and financial assistance for the automation of 10 check structures on Franklin Canal.

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, which will review the entire District and make recommendations for system improvements.

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.

Kansas Bostwick Irrigation District No. 2 – Reclamation is providing financial and technical assistance through the Water 2025 Program for the replacement of open ditch laterals with buried pipe.

Republican River Basin Conservation Alliance - Kansas

The Republican River Basin Conversation Projects Alliance is a group of stakeholder in Northwest Kansas formed to develop a cooperative and coordinated application for specific water conservation projects to be completed if and when Republican River Compact award funds accrue to Kansas from either Colorado or Nebraska. One alternative involves an evaluation of the best use of water due to the Kansas Upper Republican basin by Colorado to comply with the compact and Final Settlement Stipulation. Through a cooperative agreement with the Kansas Water Office, Reclamation is providing assistance to conduct a reconnaissance level study on options for the beneficial uses of Compact water provided by Colorado. The evaluations are to consider the economic benefits, social and environmental benefits, potential conservation benefits, and an estimate of the costs to implement.

Lower Republican River Stakeholder Advisory Committee - Kansas

Reclamation was a member of the Lower Republican River Stakeholder Advisory Committee (LRRSAC), a group of water users/interests in the basin formed to develop and recommend potential

water conservation projects in the lower basin.

Alternatives evaluated include increasing storage opportunities, improving surface water delivery system efficiency, improving on-farm irrigation efficiency, reducing demands, aquifer recharge, reducing Minimum Desirable Streamflow violations, and improving water quality.

The LRRSAC presented a report titled "Recommendations for improvement of the water supply, management, efficiency, and conservation in the Lower Republican River Basin, January 2010" to Kansas Water Office Director Tracy Streeter. On January 28, 2010, the Kansas Water Authority approved inclusion of the Lower Republican River Systems Management as a basin priority issue in the Kansas-Lower Republican basin section, Kansas Water Plan.

Republican River Basin Irrigation Management Project – Nebraska

Reclamation continues to provide financial assistance through the Water Conservation Field Services Program to the University of Nebraska Extension Service for an irrigation management demonstration project. In 2009, field demonstrations included sites located near Alma, Edison, Loomis, Imperial, Benkelman, and Curtis. 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.

Water Rights Mapping

Frenchman-Cambridge Water Rights – Reclamation worked with the Nebraska Department of Natural Resources (NDNR) and the Frenchman-Cambridge Irrigation District in the map transfer process

Bostwick Irrigation District in Nebraska – NDNR worked with the Bostwick Irrigation District for mapping the entire district for the map transfer process. Reclamation recently completed cultural resource review of the Bostwick Irrigation District in Nebraska for the map transfer.

Kansas Bostwick Irrigation District No. 2 – Reclamation has been working with the Kansas Division of Water Resources (KDWR) to map the Kansas Bostwick Irrigation District and the private irrigation water rights in the Lower Republican Basin.

Almena Irrigation District No. 5 – Reclamation worked with KDWR to map the Almena Irrigation District water rights and the private rights from Norton Dam to the Kansas-Nebraska state line.

Future Project Mapping Activities – Reclamation plans to begin mapping the project acres of the Frenchman Valley Irrigation District and H & RW Irrigation District

Reclamation plans to provide assistance to the Republican Basin Natural Resource Districts to map

private water rights within Reclamation project boundaries (co-mingled water rights).

Drought Assistance

Reclamation provides drought assistance through the Reclamation States Emergency Drought Relief Act of 1991.

Nebraska Municipal Well – The Village of Stockville has been approved for drought assistance for the installation of a municipal well. Reclamation issued a construction contract for the well which is scheduled to be completed in August, 2010.

Reservoir Resource Management

ADA compliance activities – The Great Plains Region has set a goal to complete universal accessibility upgrades at Reclamation facilities by 2010. With the work scheduled for completion later this year, the NKAO (Nebraska-Kansas Area Office) will essentially meet this goal.

Invasive Species – The threat to the proper function of all aspects of NKAO projects caused by exotic and invasive species continues to be a 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.

Appendix

TABLE 1
NEBRASKA-KANSAS PROJECTS
Summary of Precipitation, Reservoir Storage and Inflows
CALENDAR YEAR 2009

Reservoir	Total Precip. Inches	Percent Of Average %	Storage 12-31-08 AF	Storage 12-31-09 AF	Gain or Loss AF	Maximum Content AF	Storage Date	Minimum Content AF	Storage Date	Total Inflow AF	Percent Of Most Probable %
Box Butte	19.98	118	6,375	10,213	3,838	13,522	JUL 14	6,076	AUG 28	15,432	100
Merritt	28.14	137	61,100	61,100	0	67,602	JUN 14	48,661	SEP 19	182,155	99
Calamus	26.14	108	109,027	107,417	-1,610	127,965	APR 19	82,324	SEP 20	278,685	105
Davis Creek	25.20	102	10,126	8,922	-1,204	28,956	JUL 7	8,734	SEP 24	47,962	99
Bonny	26.56	155	9,276	10,220	944	11,860	MAY 4	9,293	JAN 1	11,698	98
Enders	29.69	156	15,368	15,662	294	16,200	JUN 18	15,017	OCT 8	6,577	51
Swanson	27.25	136	51,989	55,314	3,325	69,029	JUN 17	46,987	OCT 13	37,749	108
Hugh Butler	23.96	122	26,451	6,357	-20,094	29,136	JUN 26	6,327	DEC 23	13,279	91
Harry Strunk	28.90	140	33,151	33,630	479	36,852	JUN 17	25,375	SEP 4	42,805	118
Keith Sebelius	32.01	131	16,313	17,386	1,073	17,682	JUN 16	16,152	OCT 5	7,452	96
Harlan County	24.50	108	319,311	320,258	947	337,577	JUN 21	285,161	OCT 5	136,747	112
Lovewell	21.33	78	31,438	26,528	-4,910	38,354	JUN 5	18,853	SEP 4	41,606	64
Kirwin	27.86	118	88,425	98,662	10,237	117,565	JUN 17	88,615	JAN 1	78,204	354
Webster	23.50	99	68,885	78,514	9,629	93,666	JUN 17	69,063	JAN 1	61,300	326
Waconda	22.05	86	206,420	213,790	7,370	229,378	JUN 18	200,541	FEB 23	222,698	163
Cedar Bluff	23.22	111	83,542	83,699	157	83,895	MAY 8	79,327	SEP 7	14,391	93

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

JANUARY - JUNE 2010

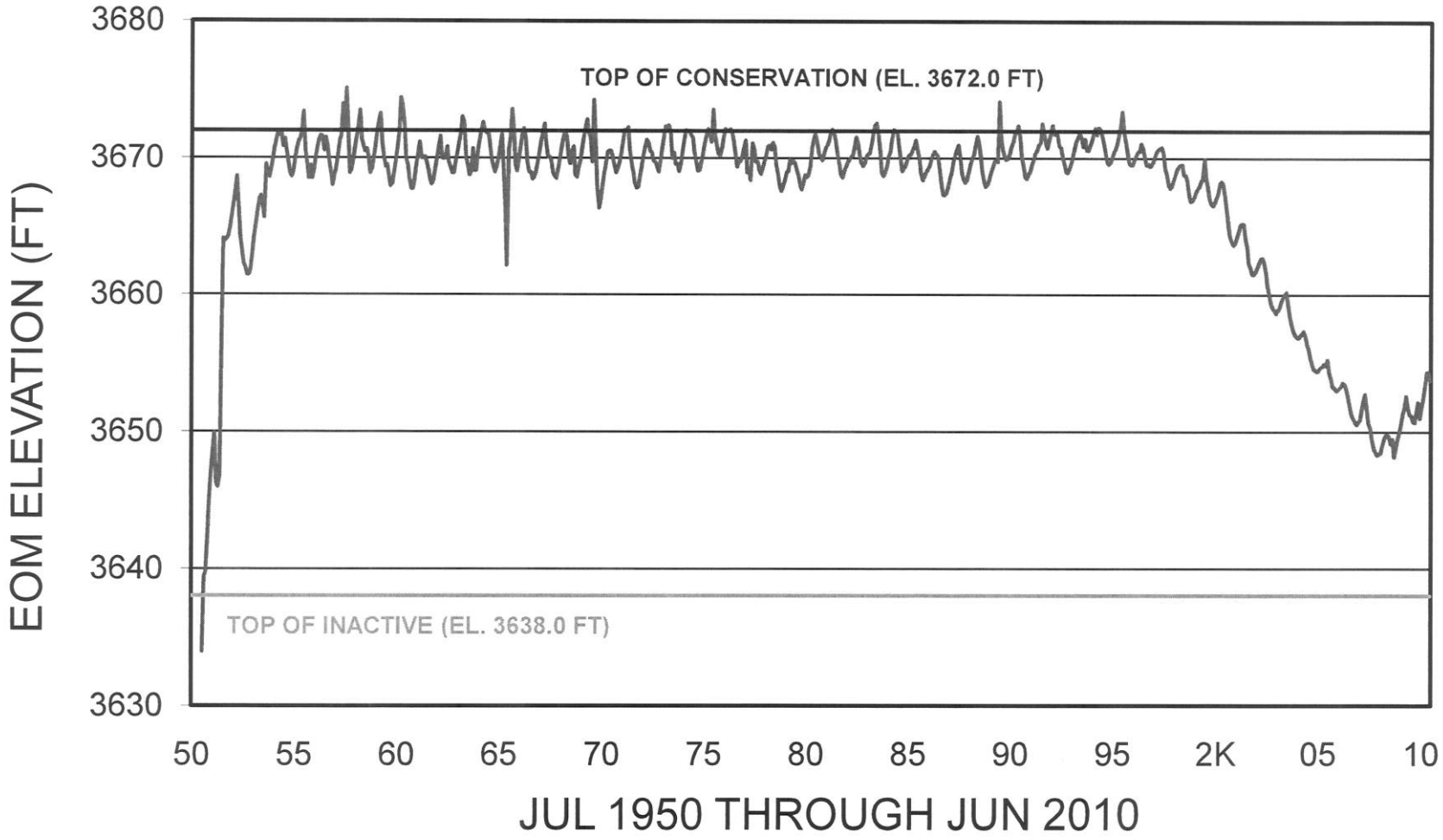
Reservoir	Precip. Inches	Percent Of Average %	Storage 6/30/2009 AF	Storage 6/30/2010 AF	Gain or Loss AF	Inflow AF	Percent Of Most Probable %	AVERAGE PREC.	MOST PROBABLE INFLOW
Bonny	11.14	124	10,511	13,037	2,526	7,306	97	8.98	7,500
Enders	12.89	129	16,076	17,038	962	4,602	78	9.98	5,900
Swanson	12.29	120	67,506	81,692	14,186	33,899	133	10.26	25,500
Hugh Butler	15.41	156	28,941	6,441	(22,500)	14,372	177	9.86	8,100
Harry Strunk	14.23	133	35,859	39,324	3,465	29,762	143	10.73	20,800
Keith Sebelius	19.00	153	17,521	24,912	7,391	10,355	211	12.43	4,900
Harlan County	23.15	202	328,917	368,695	39,778	173,918	231	11.48	75,300
Lovewell	17.81	133	36,599	52,083	15,484	31,155	153	13.40	20,300
Kirwin	18.38	152	111,016	122,564	11,548	72,338	473	12.06	15,300
Webster	13.75	117	86,637	78,706	(7,931)	45,430	332	11.80	13,700
Waconda	16.37	130	217,701	259,122	41,421	274,805	345	12.59	79,700
Cedar Bluff	9.93	95	86,436	101,920	15,484	25,073	285	10.49	8,800

TABLE 3
HARLAN COUNTY LAKE

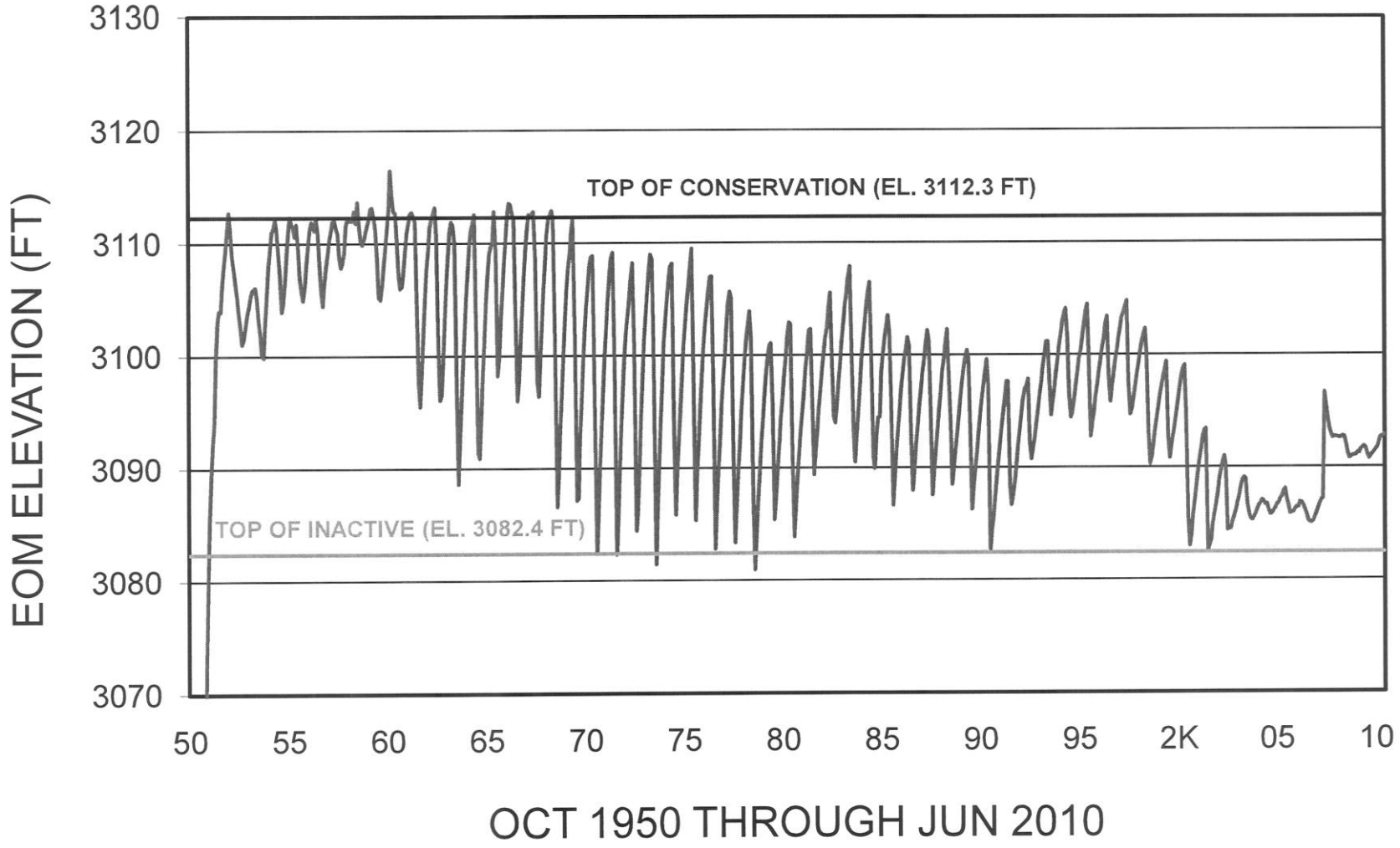
Year	Inflow (AF)	Outflow (AF)	Gross Evap. (AF)	Precip. (Inches)	Precip. (% of Average) (22.76 inches)	Rep. Basin Reclamation Dams (% of Average)	End of Year Content (AF)	**Projected Irrig. Water Supply On June 30th (AF)**
1999	164,141	99,304	42,472	24.74	109%	95%	292,312	**186,700**
2000	134,191	166,484	45,006	23.20	102%	87%	215,004	**174,400**
2001	157,844	87,346	40,833	27.97	123%	109%	242,853	**152,600**
2002	60,094	98,518	43,988	16.86	74%	60%	160,463	**116,100**
2003	48,430	51,237	34,307	16.70	73%	93%	113,346	**62,000**
2004	25,099	0	30,601	22.83	100%	111%	107,050	**0**
2005	53,682	0	32,620	22.51	99%	107%	128,111	**14,100**
2006	30,077	12,280	29,609	20.62	91%	101%	116,299	**14,400**
2007	198,528	21,237	38,197	26.92	118%	114%	255,393	**111,700**
2008	224,841	114,938	45,985	30.31	133%	131%	319,311	**210,000**
2009	136,747	94,079	41,721	24.50	108%	128%	320,258	**156,000**

*NOTE: On June 30, 2010 Projected Irrig. Water Supply was 147,800 AF.

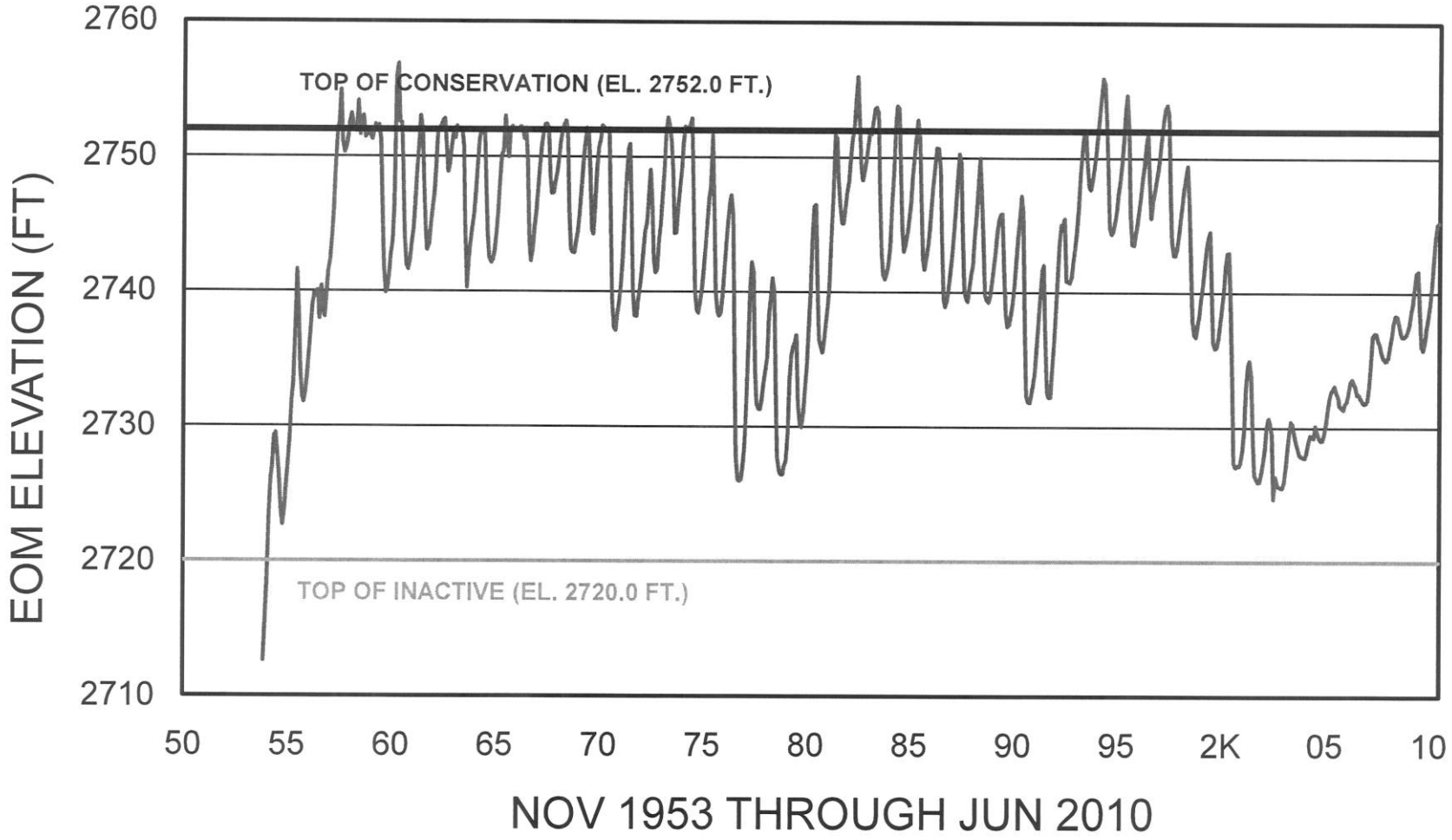
BONNY RESERVOIR
END OF MONTH ELEVATION



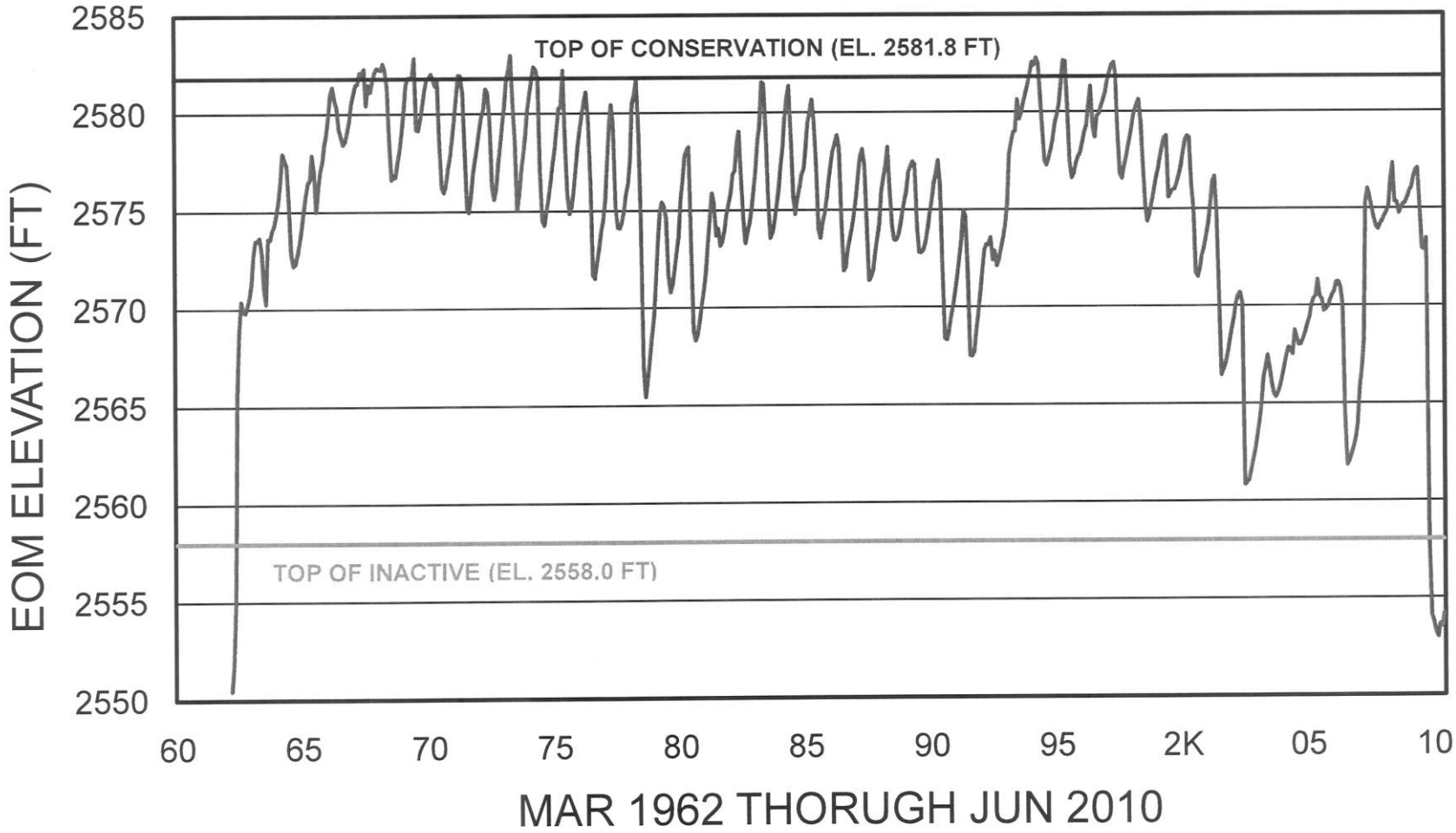
ENDERS RESERVOIR
END OF MONTH ELEVATION



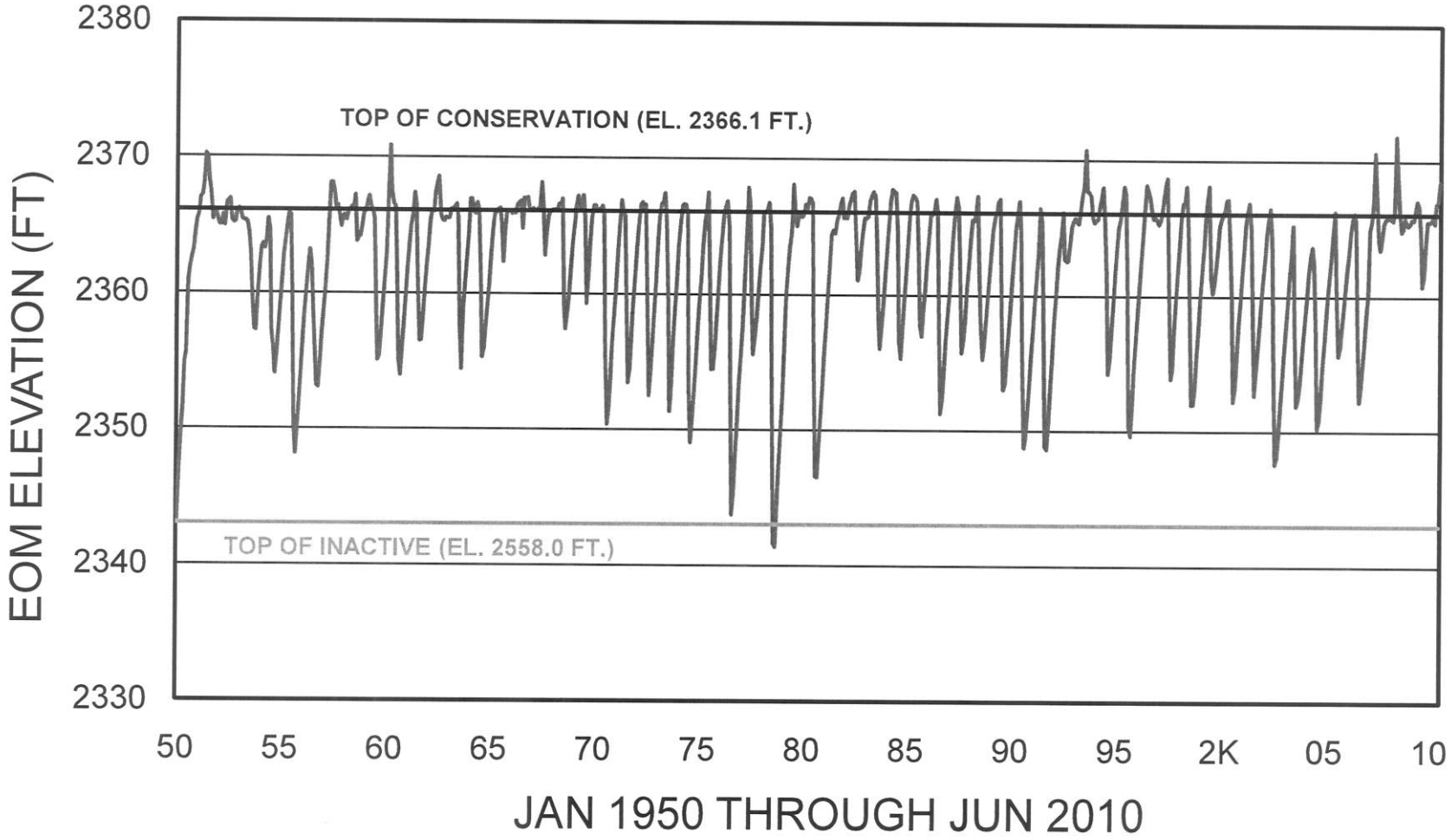
SWANSON LAKE
END OF MONTH ELEVATION



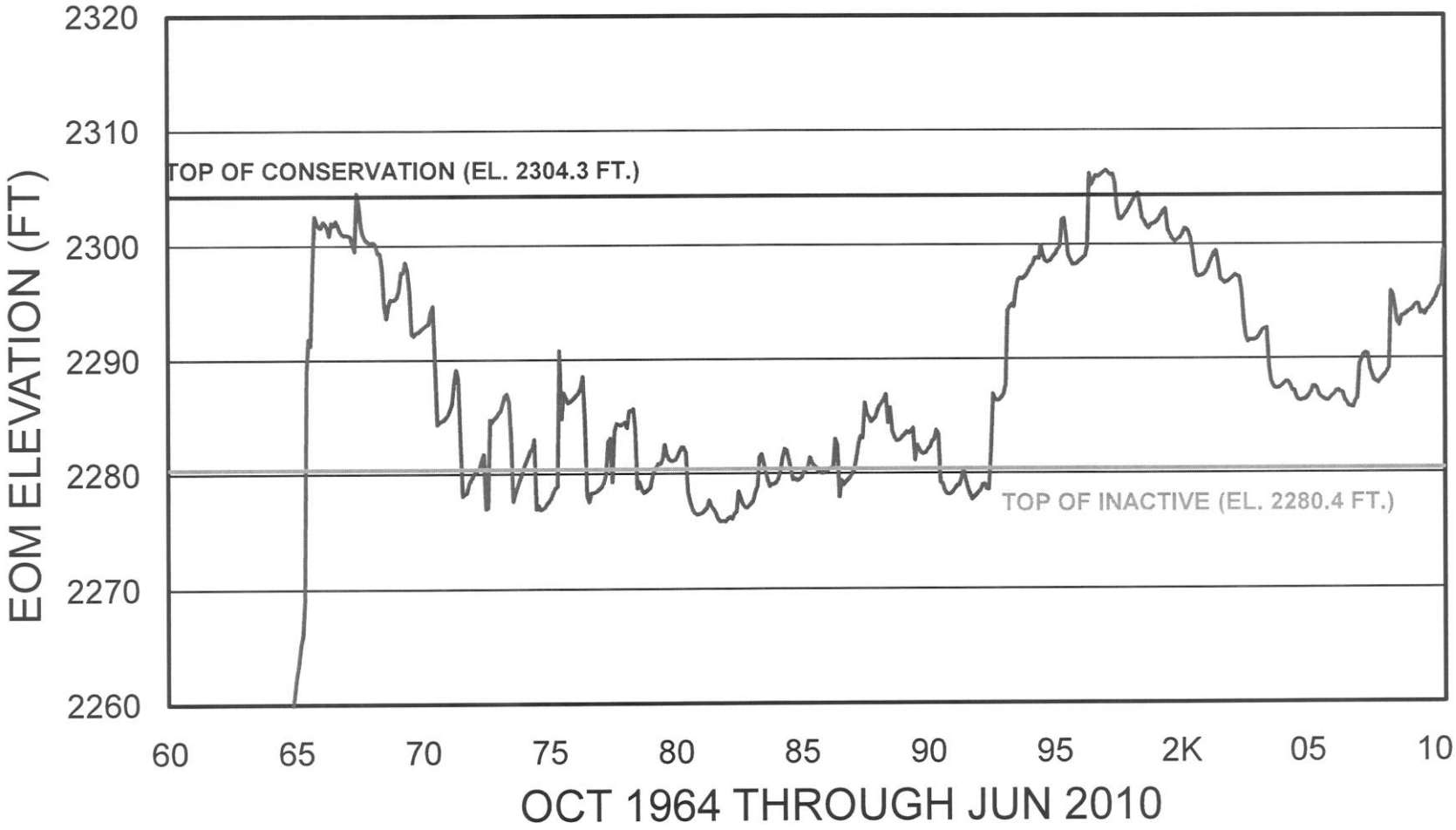
HUGH BUTLER LAKE
END OF MONTH ELEVATION



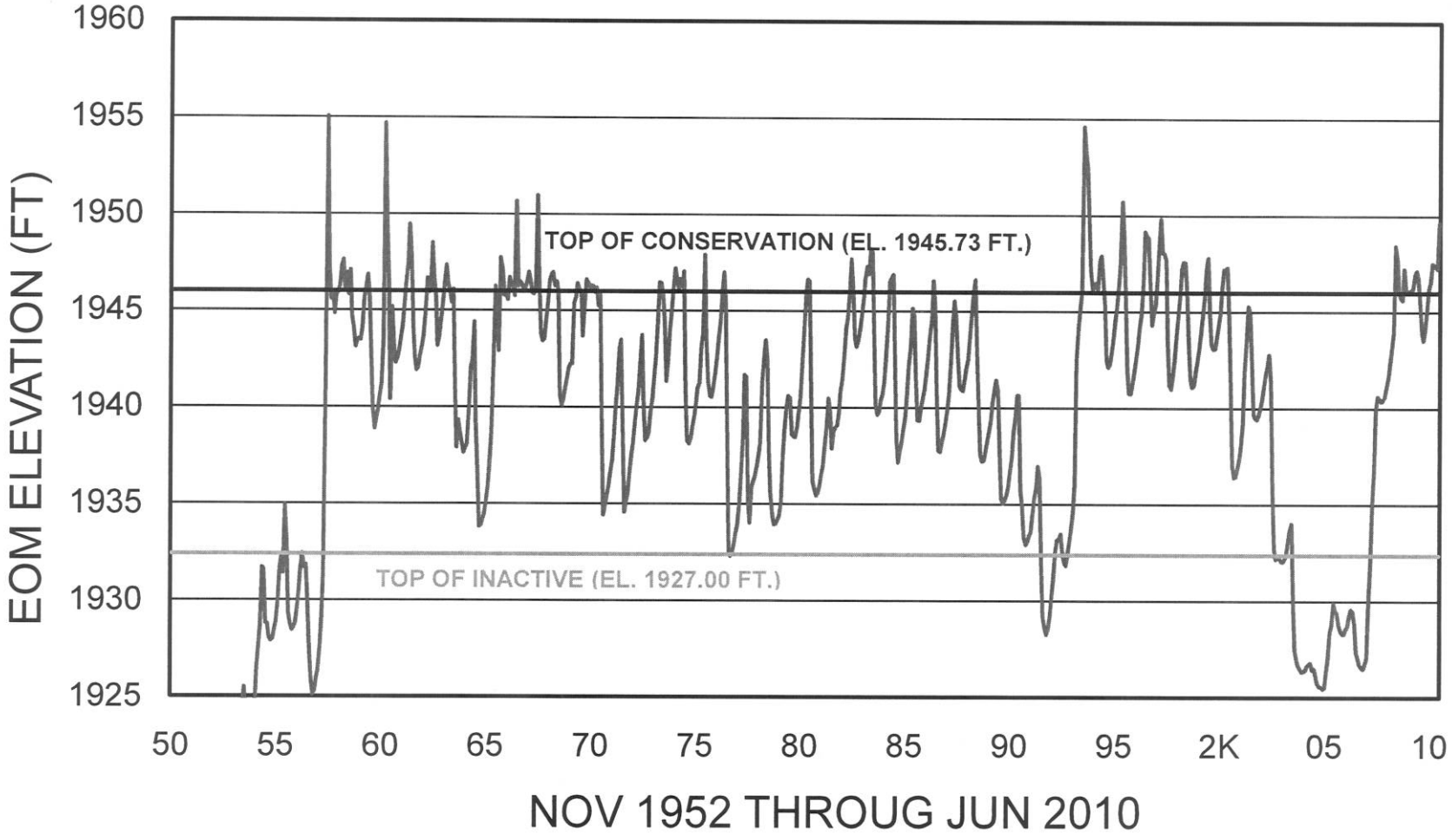
HARRY STRUNK LAKE
END OF MONTH ELEVATION



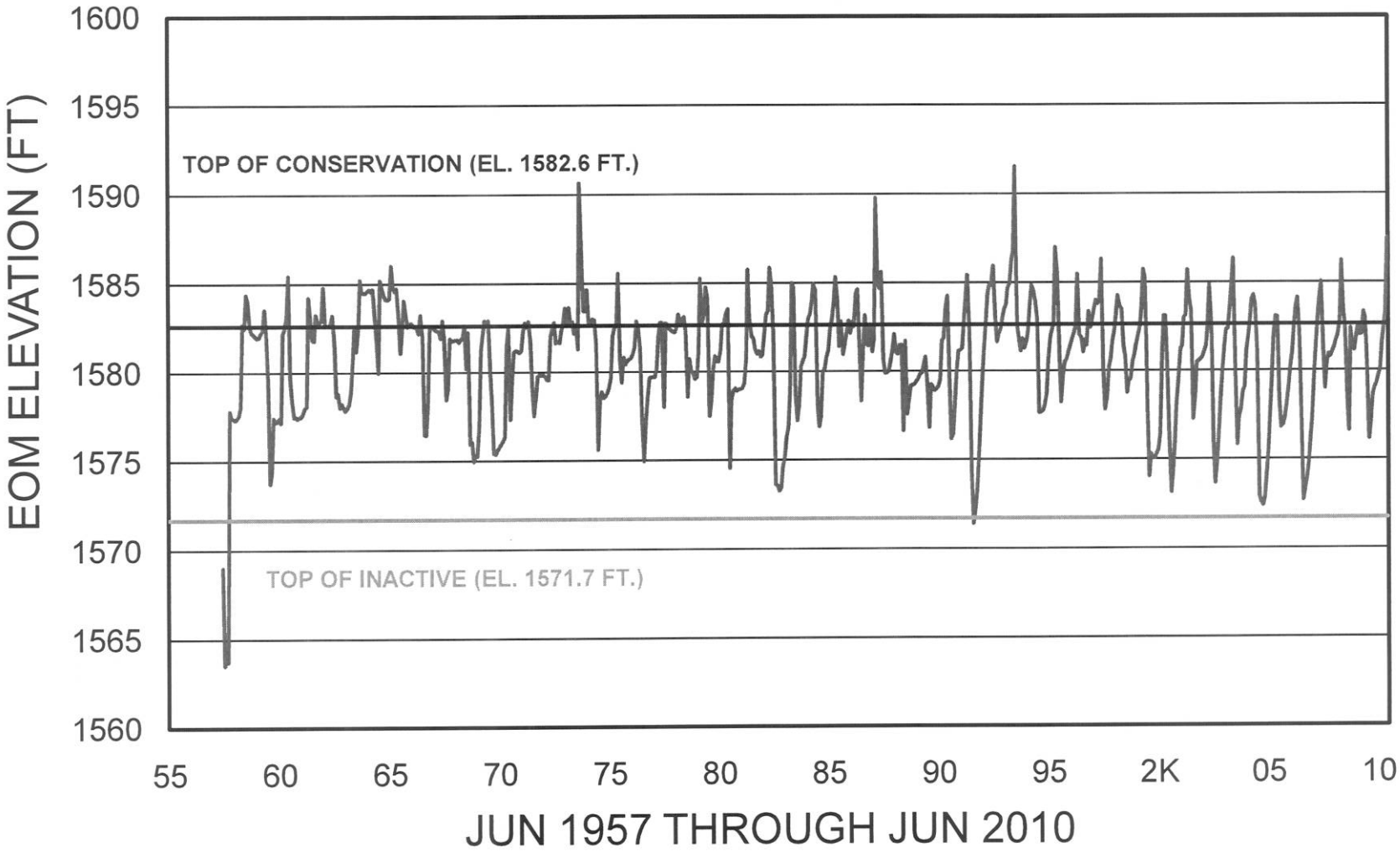
KEITH SEBELIUS LAKE
END OF MONTH ELEVATION



HARLAN COUNTY LAKE
END OF MONTH ELEVATION



LOVEWELL RESERVOIR
END OF MONTH ELEVATION



Republican River Compact
Nebraska Stream-Gaging Data
Water Year 2009

PRESENTED TO
REPUBLICAN RIVER COMPACT ADMINISTRATION
BY JOHN MILLER, NORTH PLATTE FIELD OFFICE CHIEF
AUGUST 12, 2010
BURLINGTON, CO.

Summary handout – stations published by U.S. Geological Survey (USGS)

Republican River Basin streamflow-gaging stations with records published by USGS for water year (WY) 2009

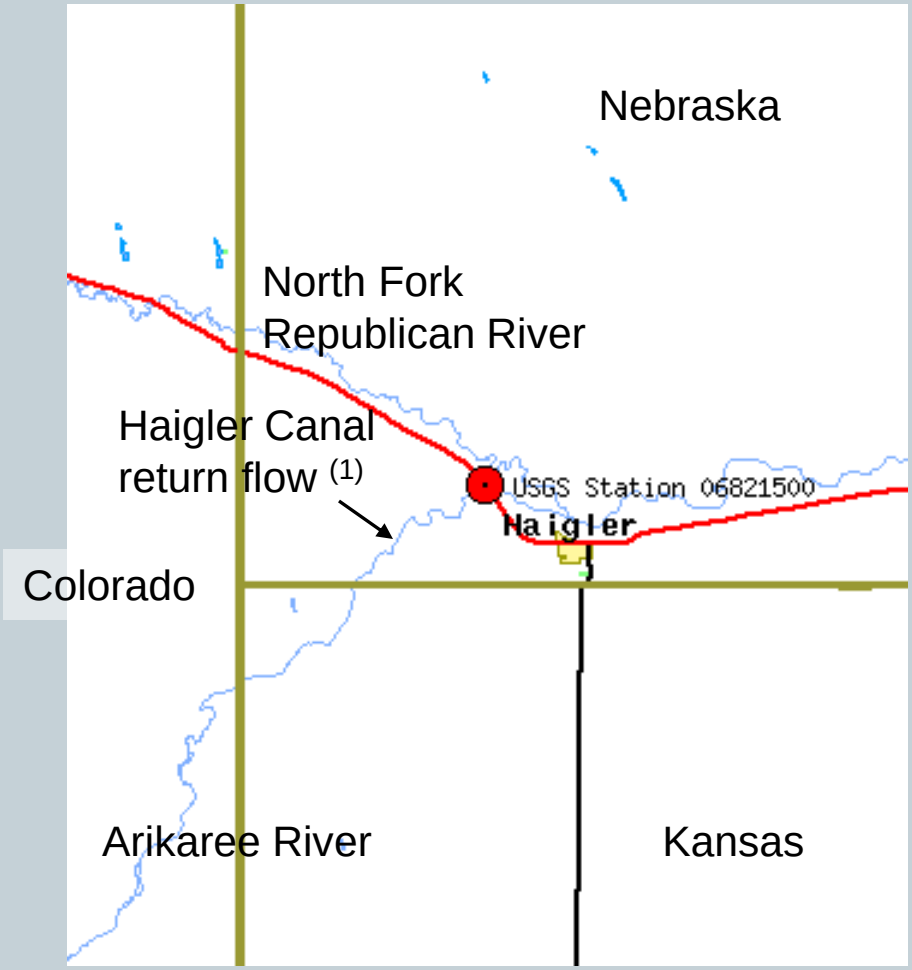
[DCP, data-collection platform; NDNR, Nebraska Department of Natural Resources; USACE, U.S. Army Corps of Engineers; USBR, U.S. Bureau of Reclamation; USGS, U.S. Geological Survey]

Station number	Station name	Mean discharge (ft^3/s) WY 2009	Mean discharge (ft^3/s) Long-term	WY 2009 as percentage of long-term mean	WY 2009 as rank/years (1 highest)	WYs used for long-term mean	Remarks
USGS Compact stations supported by the National Streamflow Information Program (NSIP)							
06821500	Arikaree River at Haigler, Nebr	0.9	17.2	5.2%	74/77	1933 - 2009	
06823000	North Fork Republican River at Colo-Nebr State Line	33.2	42.2	78.7%	61/74	1936 - 2009	
06823500	Buffalo Creek near Haigler, Nebr	3.37	6.24	54.0%	60/69	1941 - 2009	
06824000	Rock Creek at Parks, Nebr	6.56	12.1	54.2%	68/69	1941 - 2009	
06827500	South Fork Republican River near Benkelman, Nebr	10.10	36	28.1%	62/72	1938 - 2009	
06835500	Frenchman Creek at Culbertson, Nebr	35.1	68	51.6%	52/59	1951 - 2009	Since Enders Reservoir
06836500	Driftwood Creek near McCook, Nebr	2.06	8.54	24.1%	57/63	1947 - 2009	
06838000	Red Willow Creek near Red Willow, Nebr	8.9	12.5	71.2%	37/48	1962 - 2009	Since Hugh Butler Lake
06847500	Sappa Creek near Stamford, Nebr (USACE funds DCP)	14.40	39.8	36.2%	33/63	1947 - 2009	
06852500	Courtland Canal at Nebr-Kans State Line (USBR DCP)	48.4	76.3	63.4%	46/55	1955 - 2009	
USGS stations supported by USGS and/or other Federal or State agencies							
06837000	Republican River at McCook, Nebr	42.7	129.2	33.0%	50/55	1955 - 2009	Funded by USBR, NDNR, and USGS
06844500	Republican River near Orleans, Nebr	134	234	57.3%	48/62	1948 - 2008	Funded by USACE
NDNR stations with USGS/USACE support for DCP, Web display, review, and publishing							
06828500	Republican River at Stratton, Nebr	43	97.4	44.1%	50/59	1951 - 2009	
06834000	Frenchman Creek at Palisade, Nebr	25.3	62.6	40.4%	53/59	1951 - 2009	
06843500	Republican River at Cambridge, Nebr	112	215	52.1%	53/60	1950 - 2009	Since Harry Strunk Lake
06853020	Republican River at Guide Rock, Nebr					1951 - 2008	DISCONTINUED

Summary Charts – Compact Stations

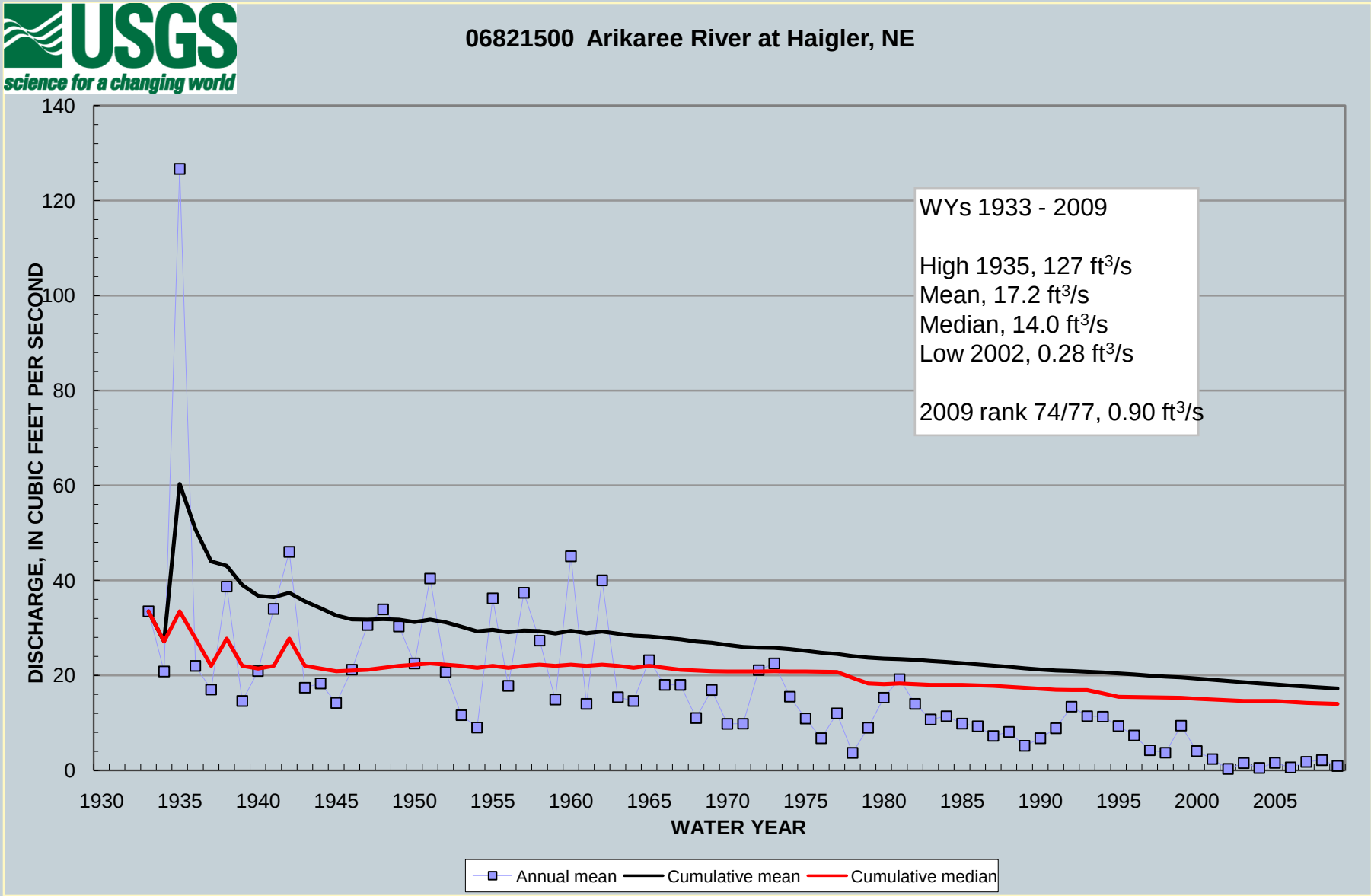
- Published data for Water Year (WY) 2009
- Operated by the USGS Nebraska Water Science Center
- Stations funded by the USGS National Streamflow Information Program (NSIP)

Arikaree River at Haigler, NE



(1) Haigler Canal diverts from North Fork Republican River above CO-NE Stateline: return flows enter Arikaree River

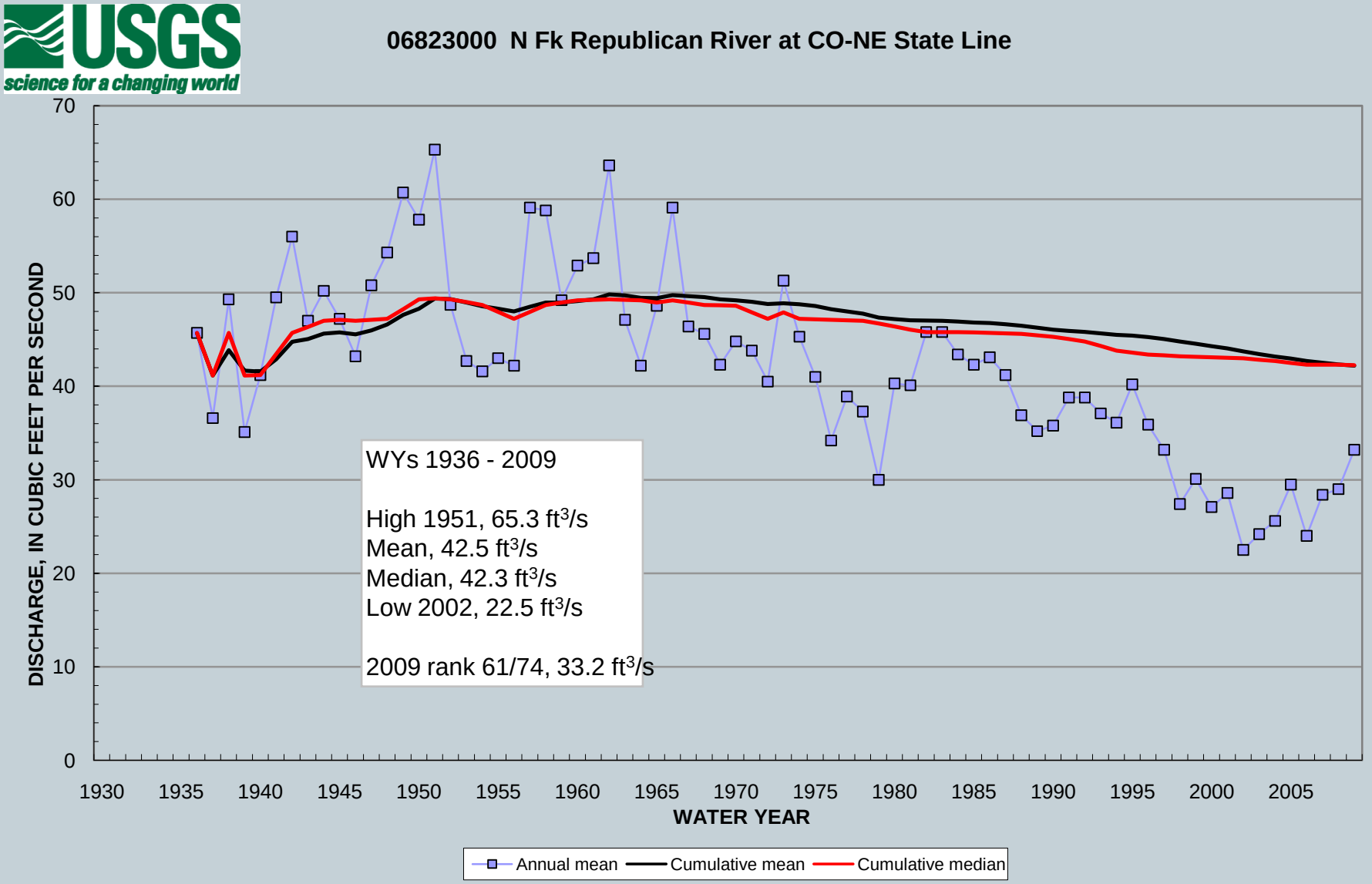
Arikaree River at Haigler, NE



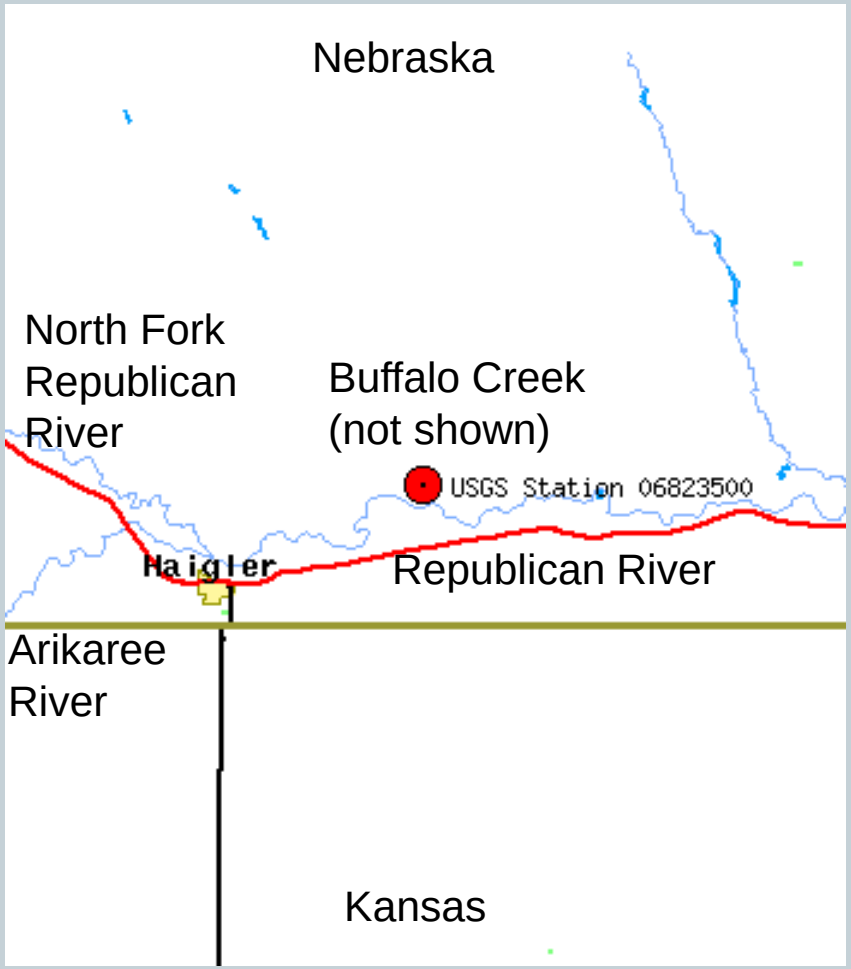
N Fk Republican River at CO-NE State Li

(1) Haigler Canal diverts flow upstream of station in Colorado; return flows enter Arikaree River in Nebraska

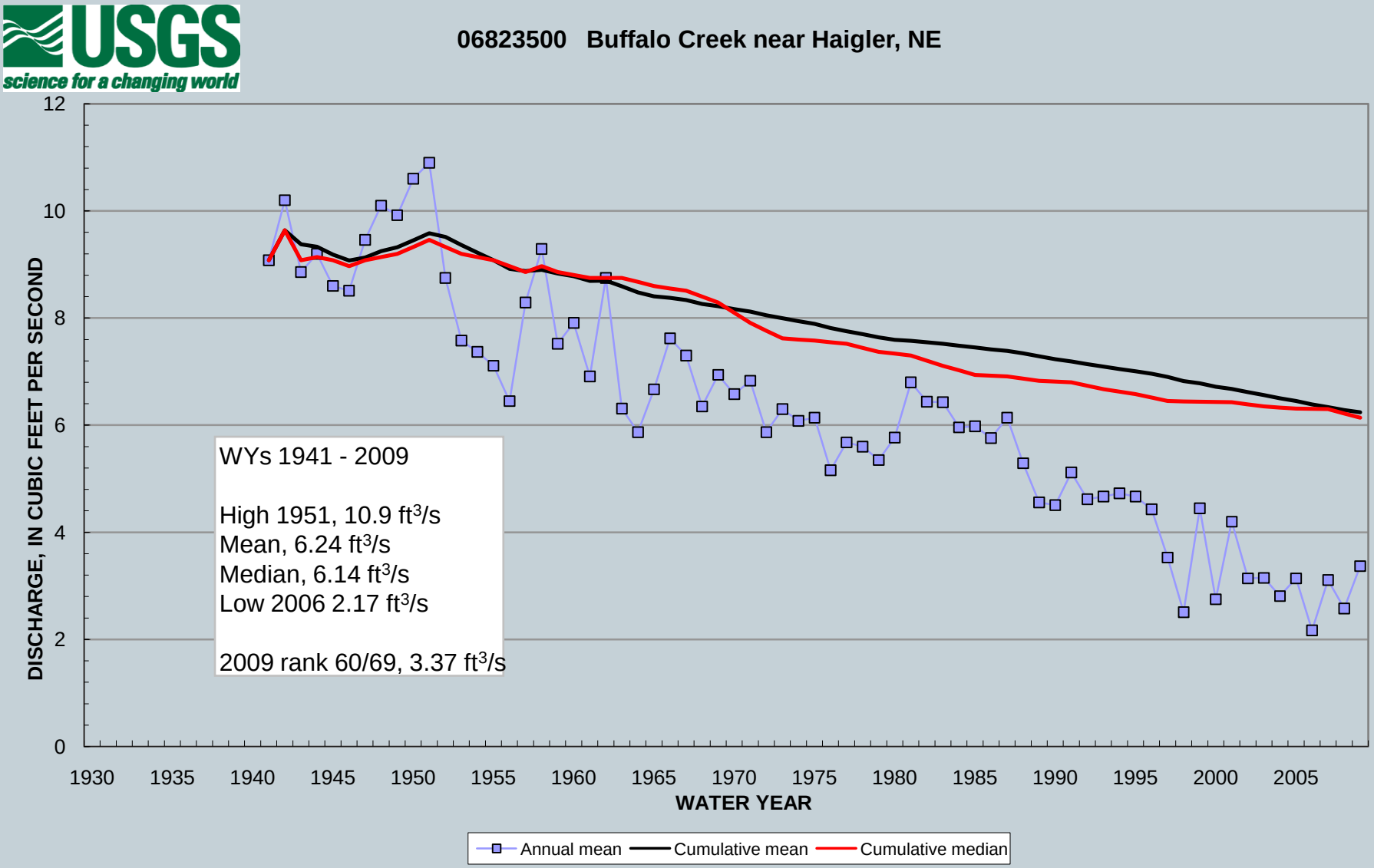
N Fk Republican R at CO-NE State Line



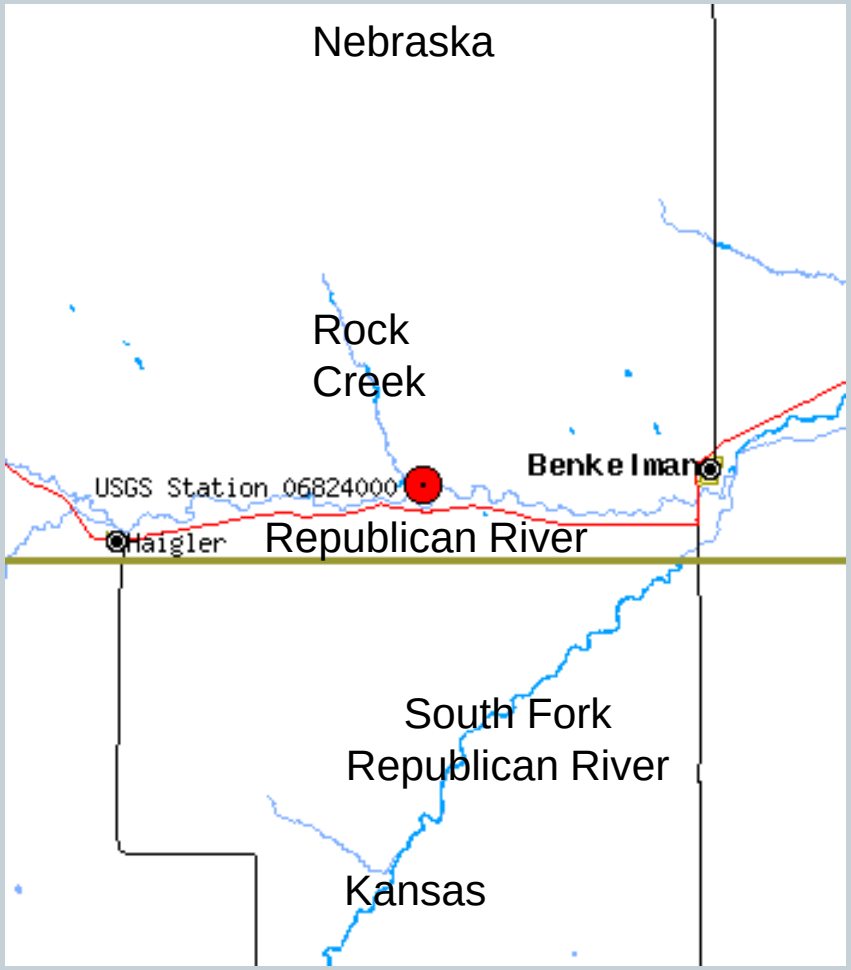
Buffalo Creek near Haigler, NE



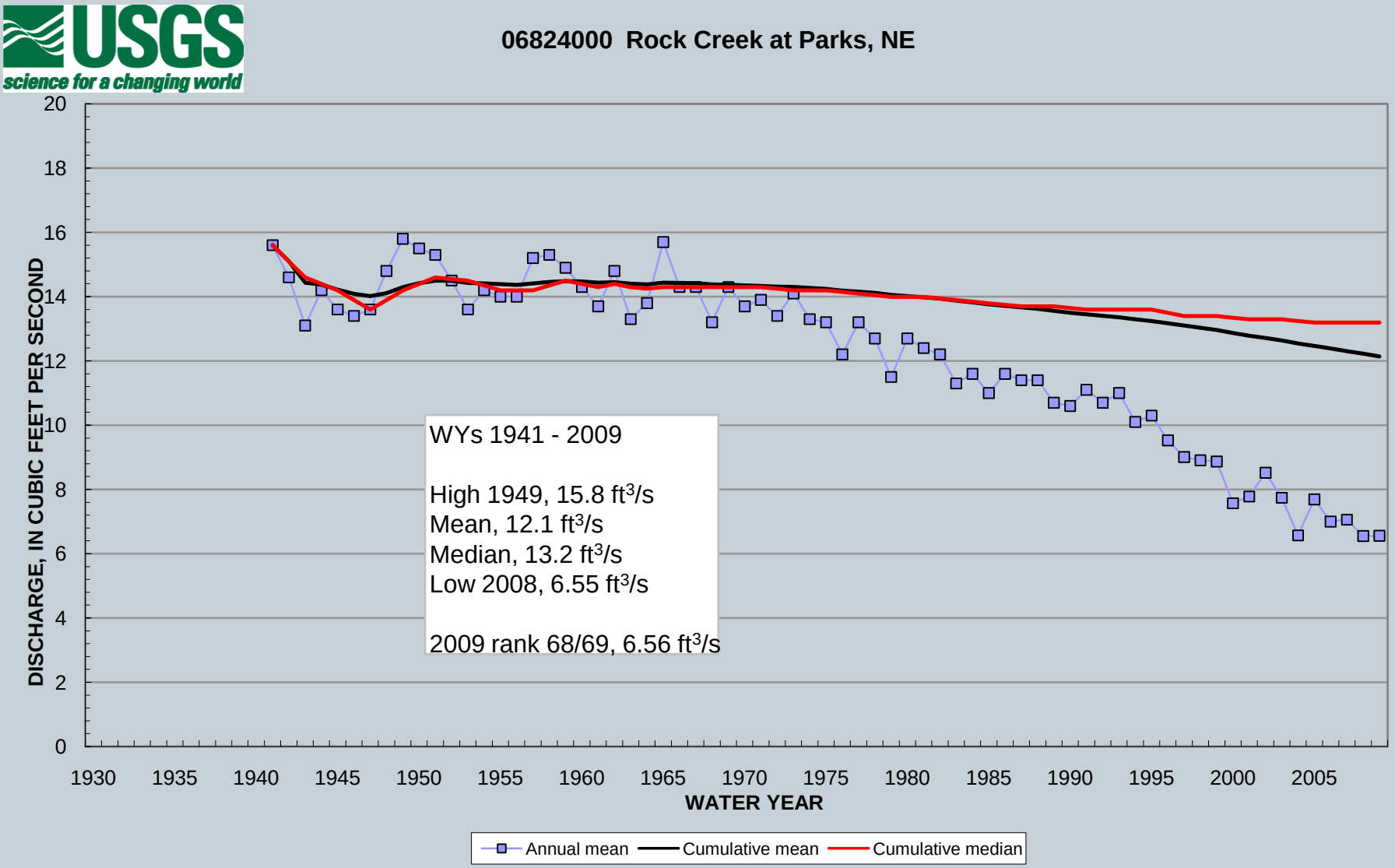
Buffalo Creek near Haigler, NE



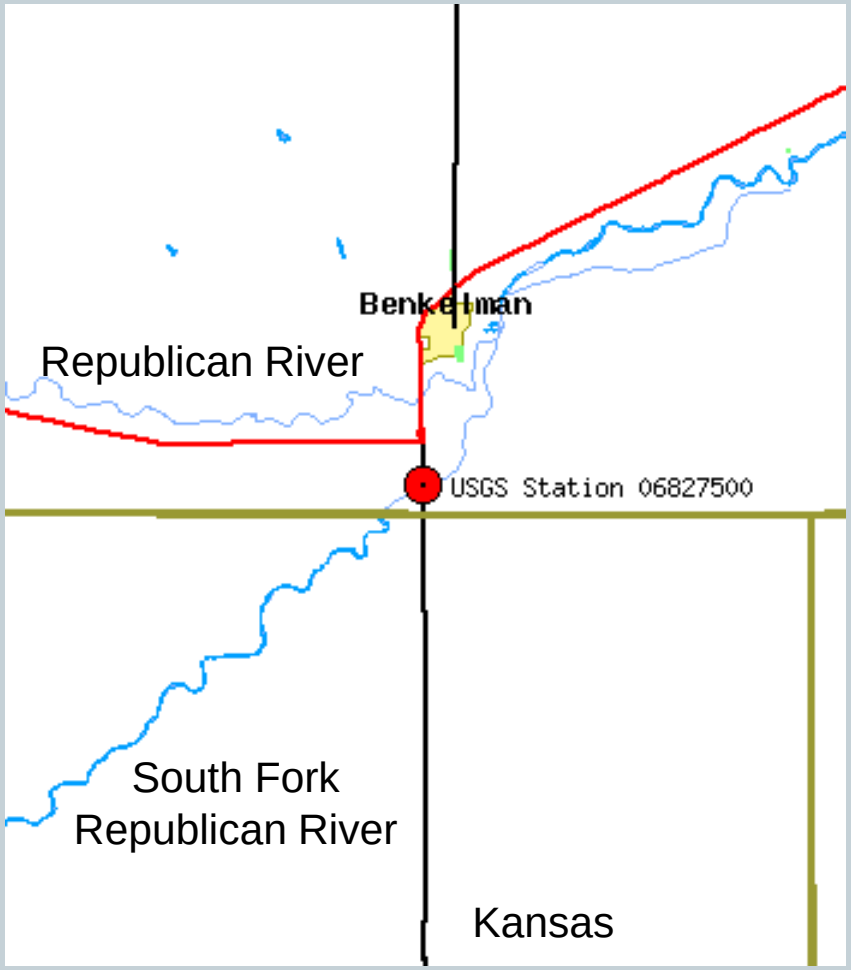
Rock Creek at Parks, NE



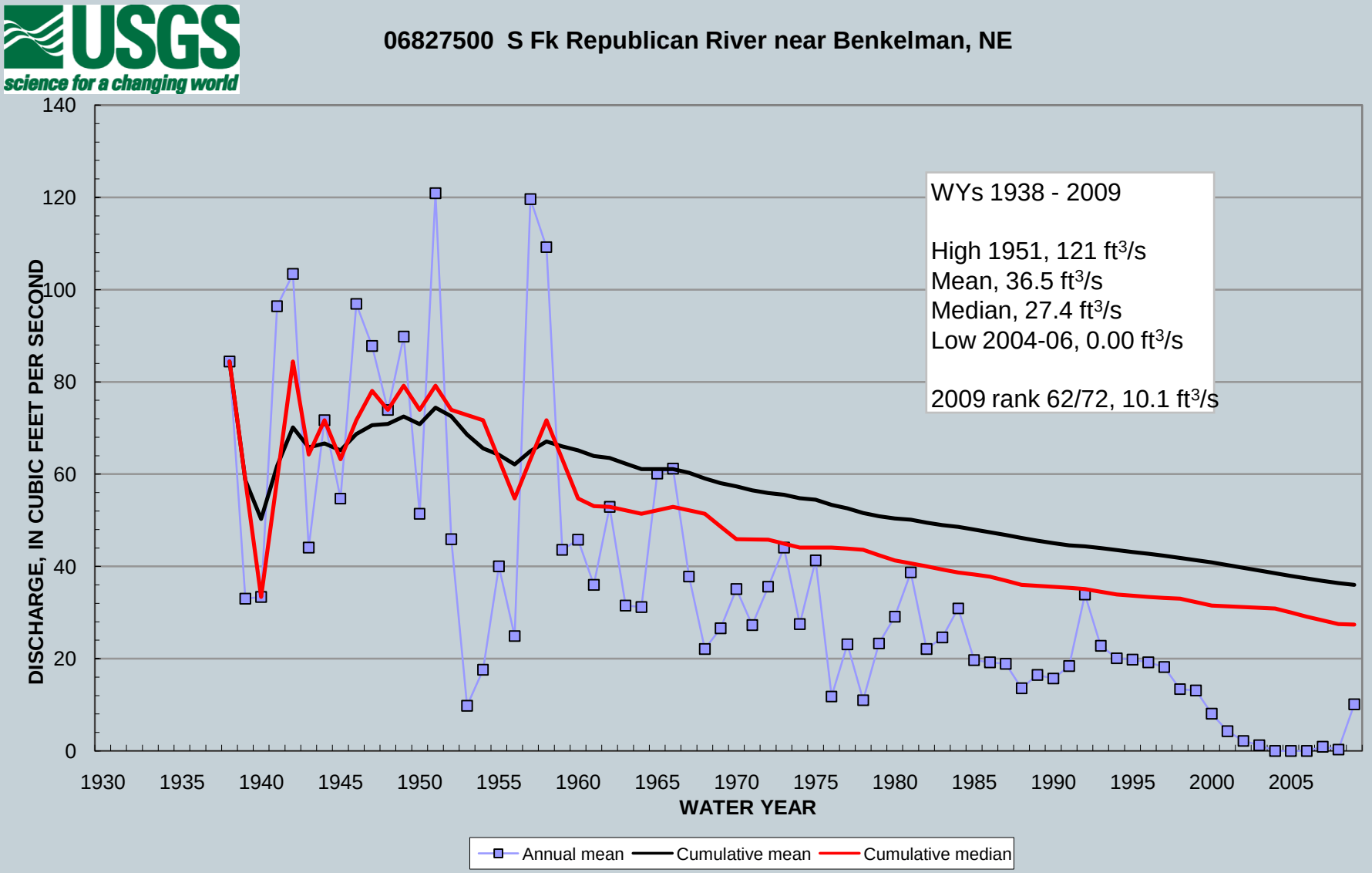
Rock Creek at Parks, NE



South Fork Republican River near Benkelman, NE

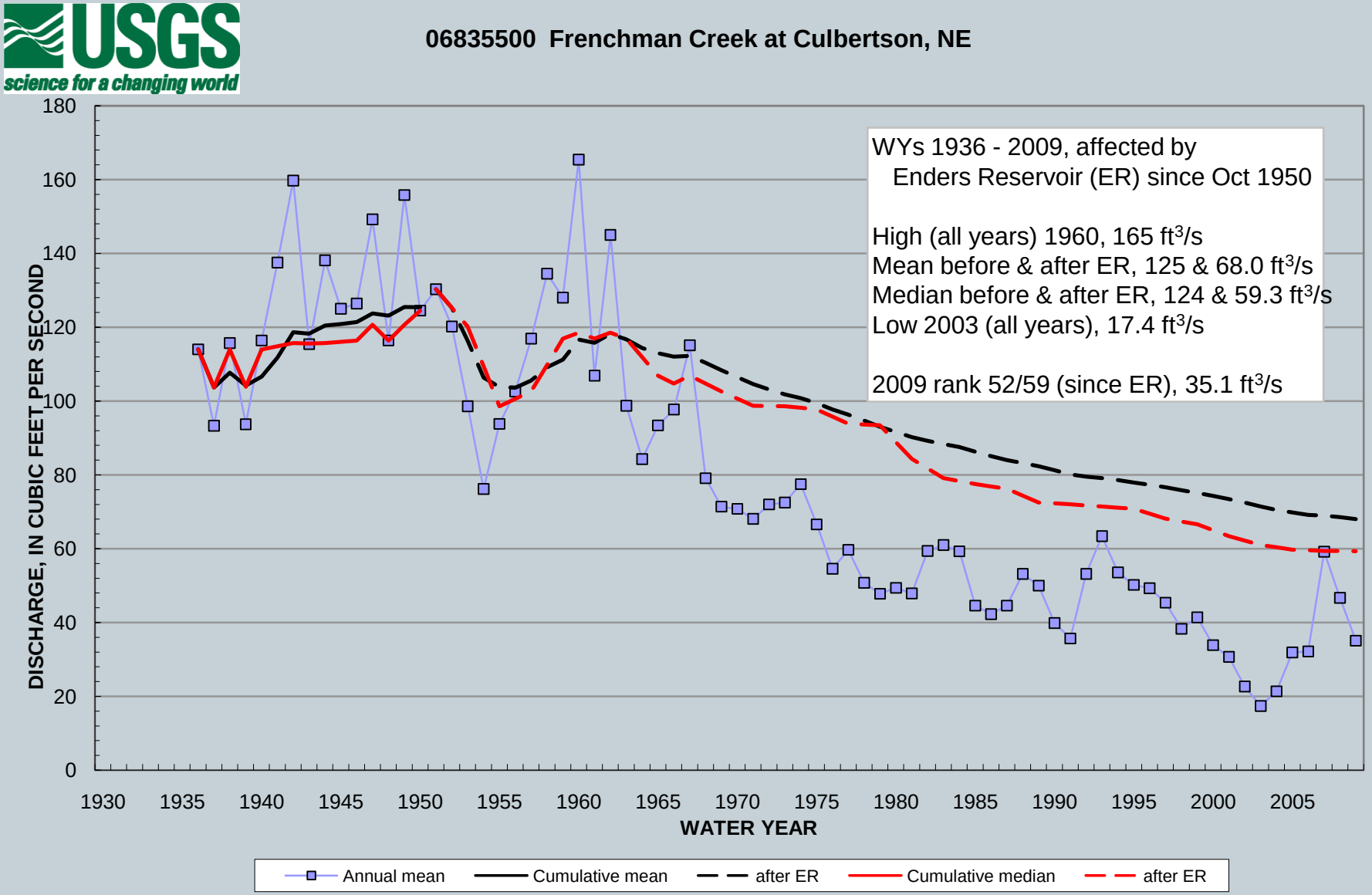


South Fork Republican River near Benkelman, NE

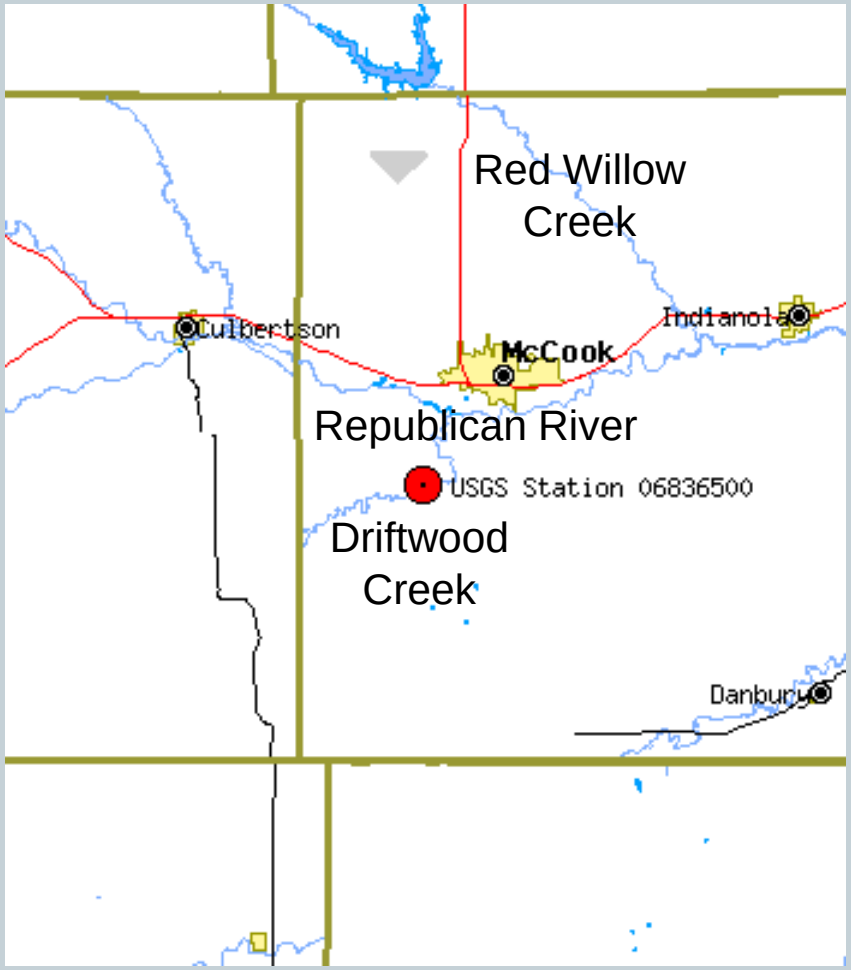


Frenchman Creek at Culbertson, NE

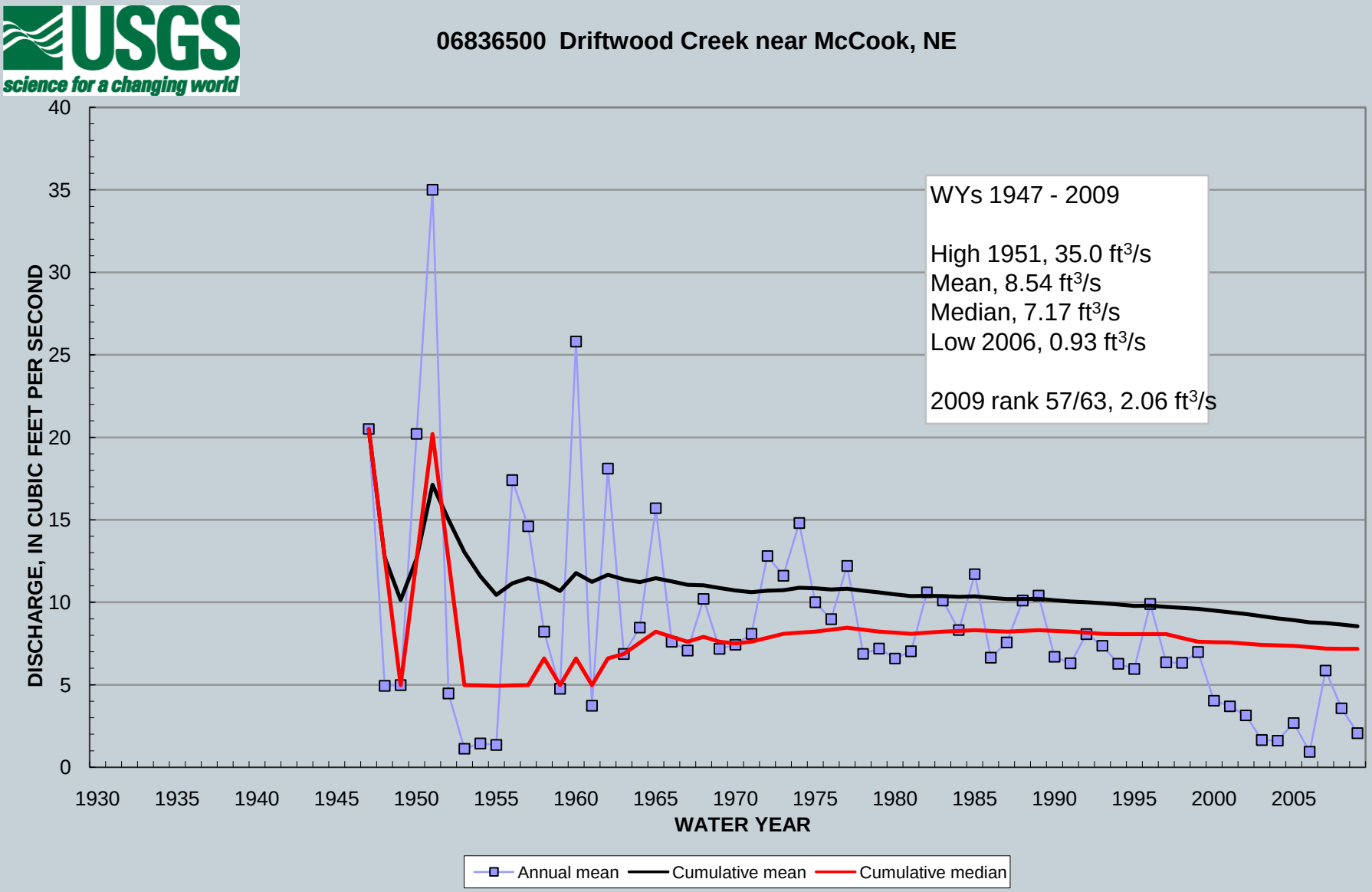
Frenchman Creek at Culbertson, NE



Driftwood Creek near McCook, NE

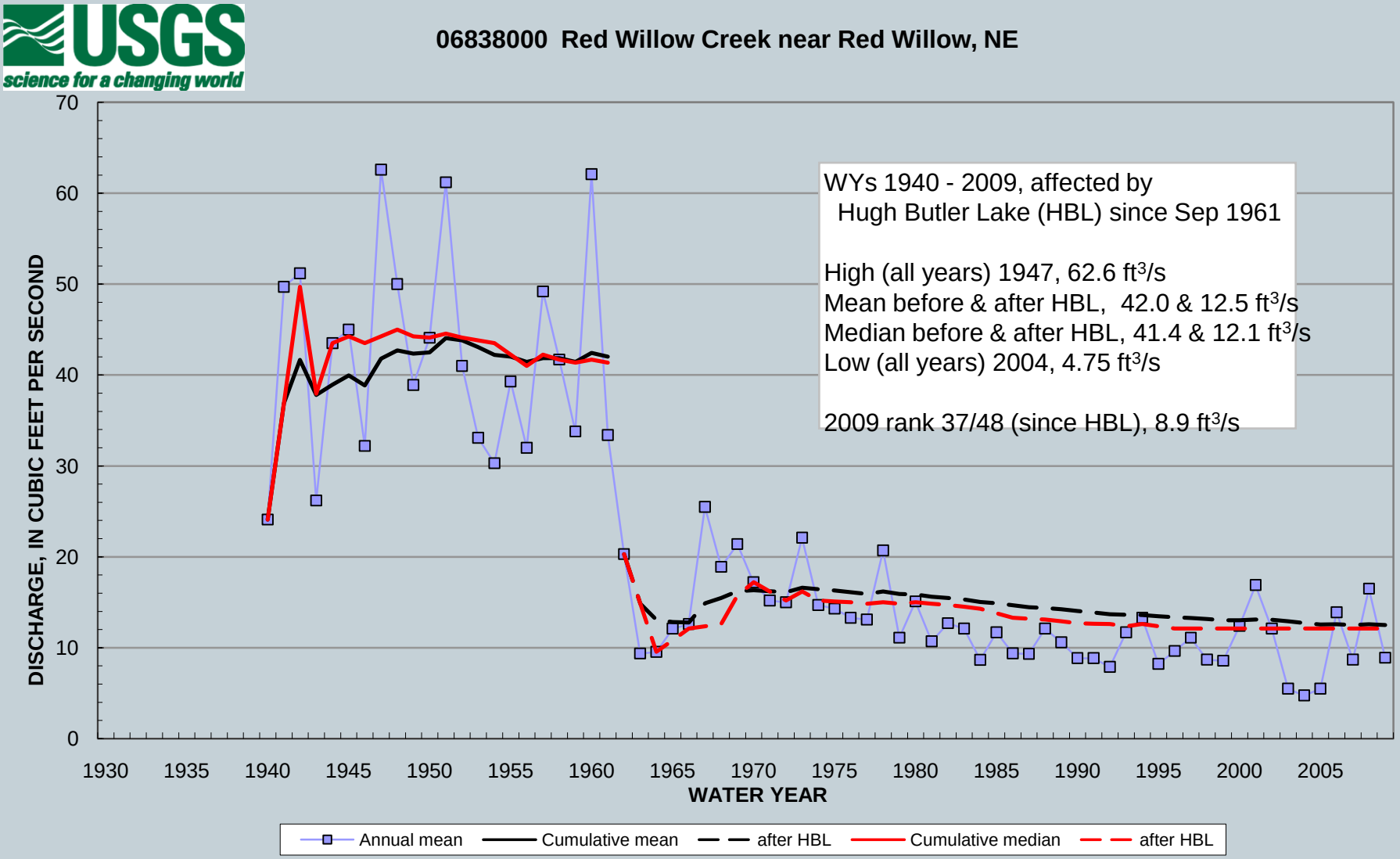


Driftwood Creek near McCook, NE



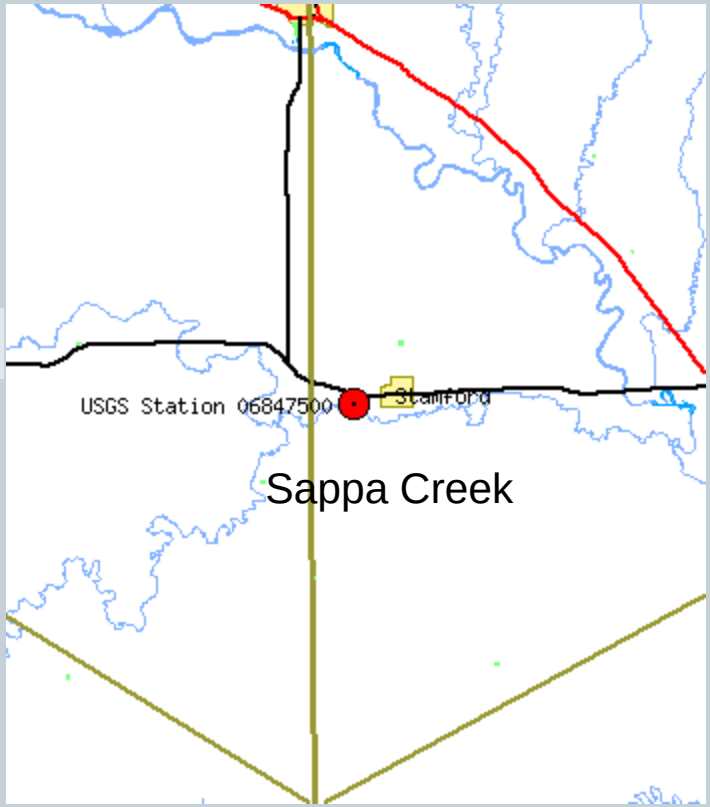
Red Willow Creek near Red Willow, NE

Red Willow Creek near Red Willow, NE



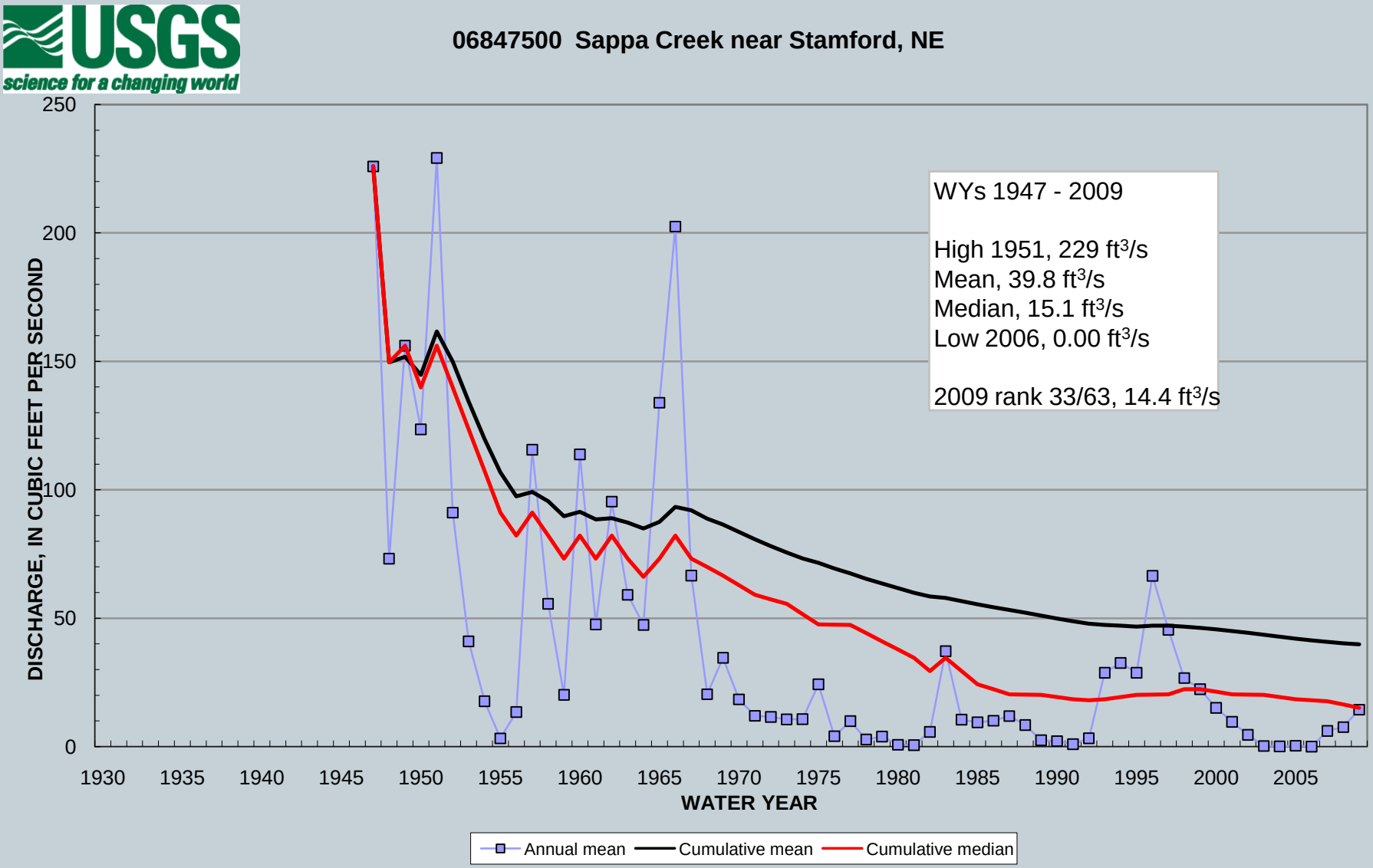
Sappa Creek near Stamford, NE

Republican River

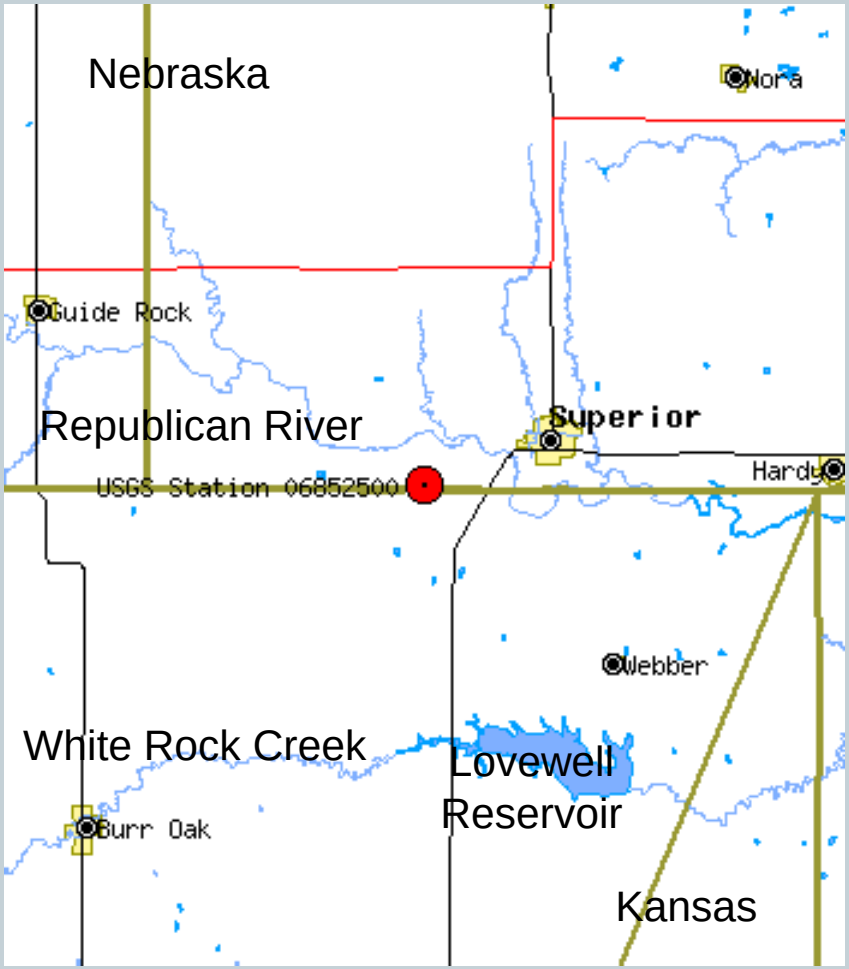


Beaver Creek

Sappa Creek near Stamford, NE

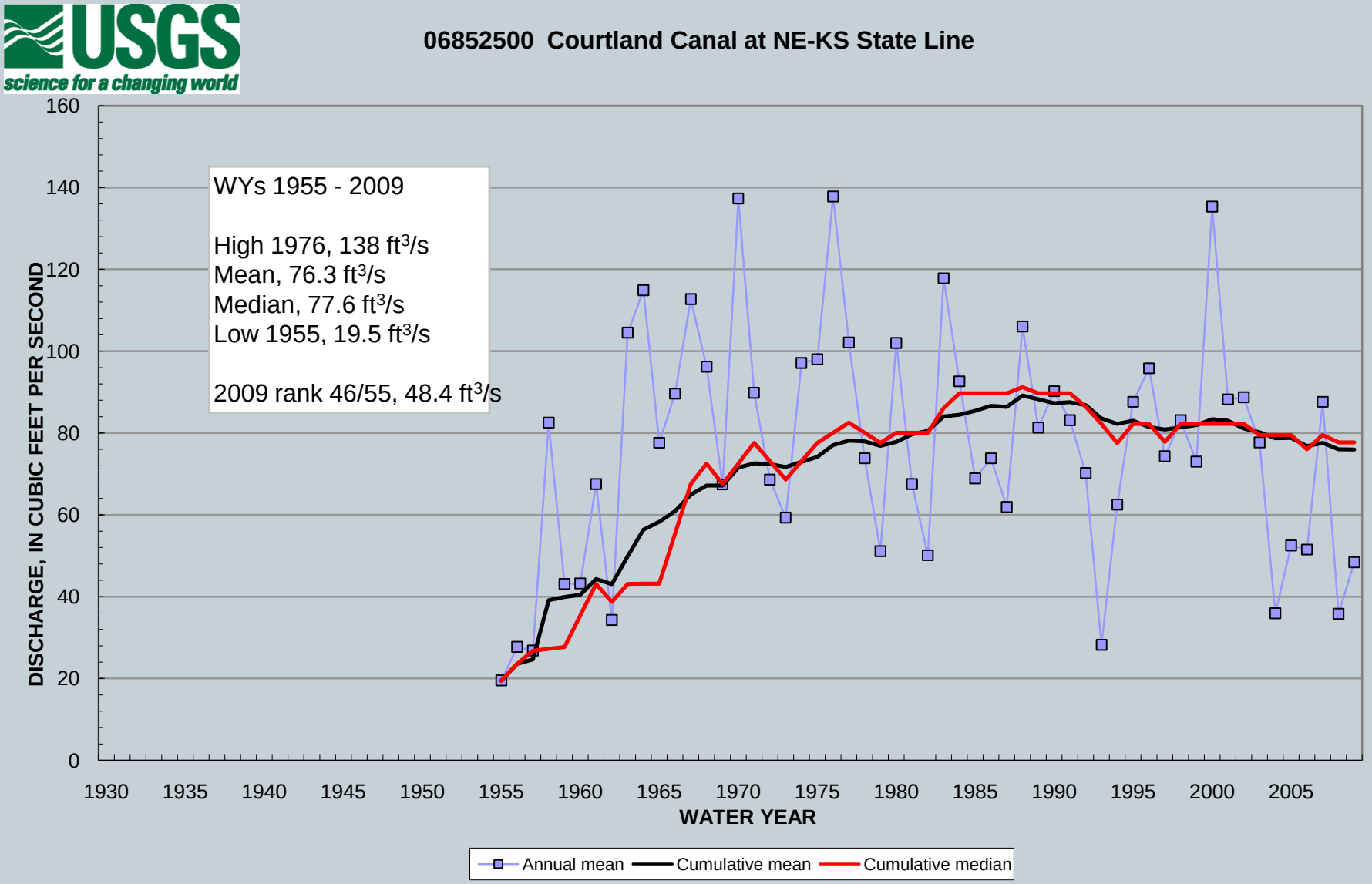


Courtland Canal at NE-KS Stateline



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

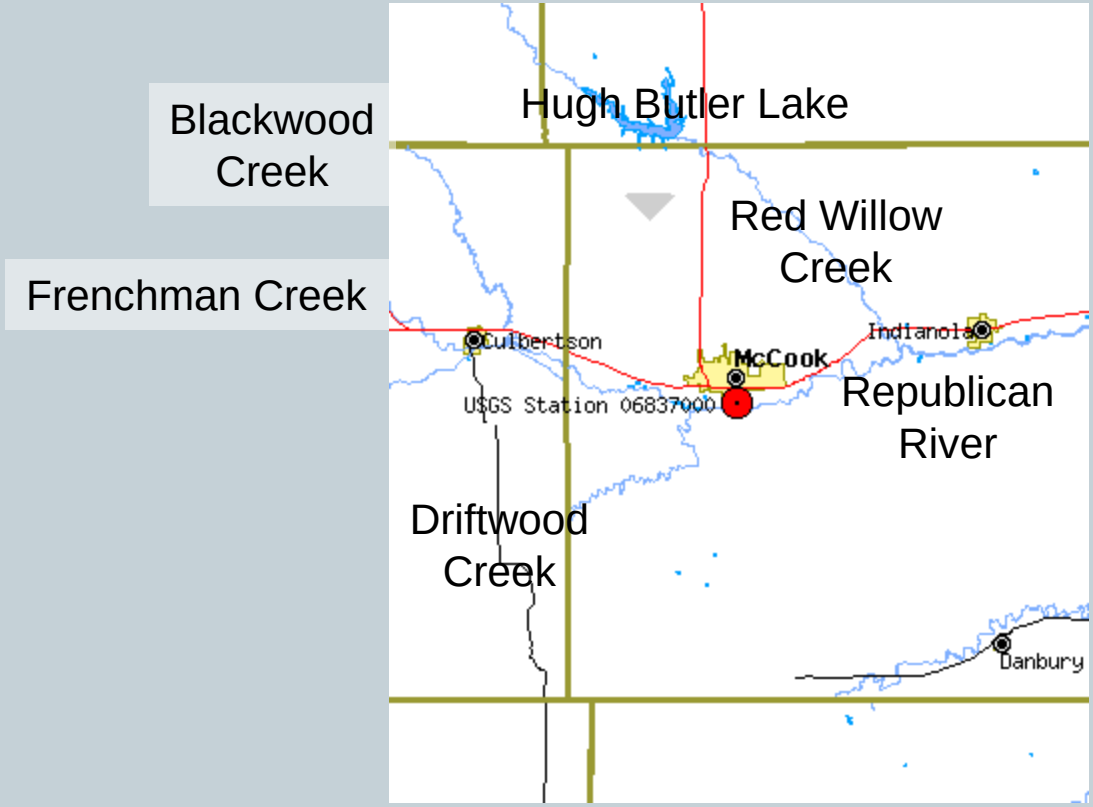
Courtland Canal at NE-KS State Line



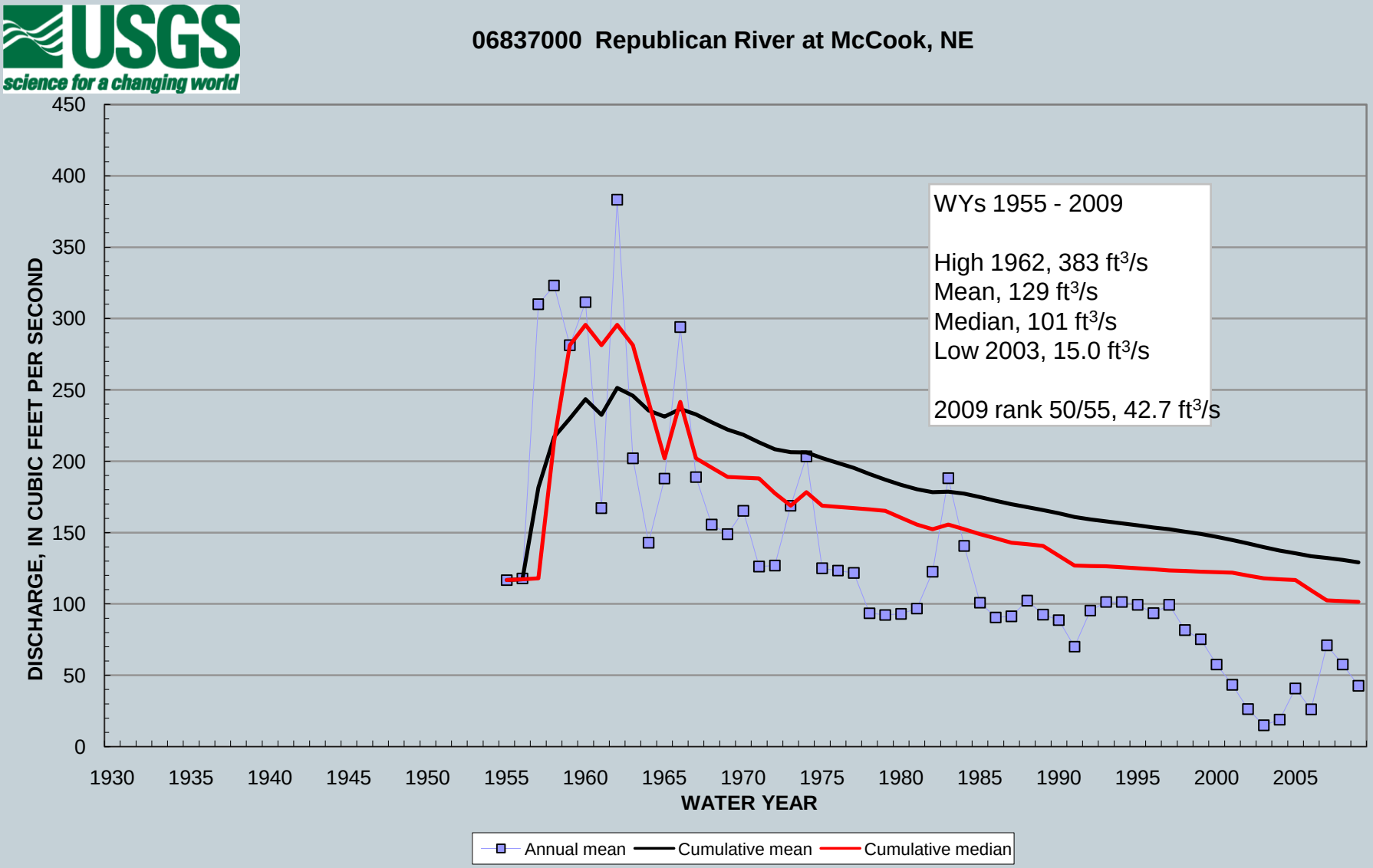
Summary Charts – Other USGS Stations

- Published data for Water Year 2009
- 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

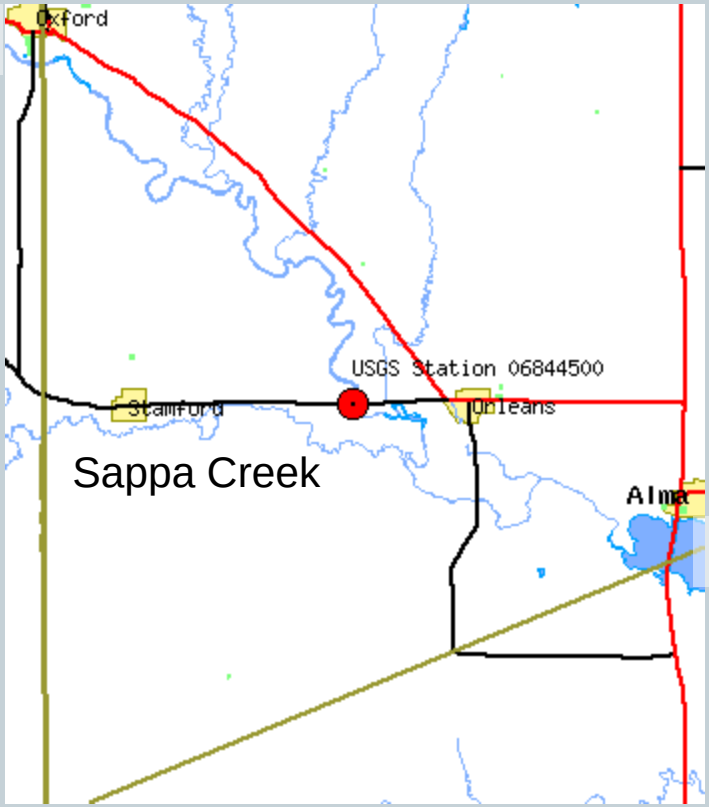


Republican River at McCook, NE



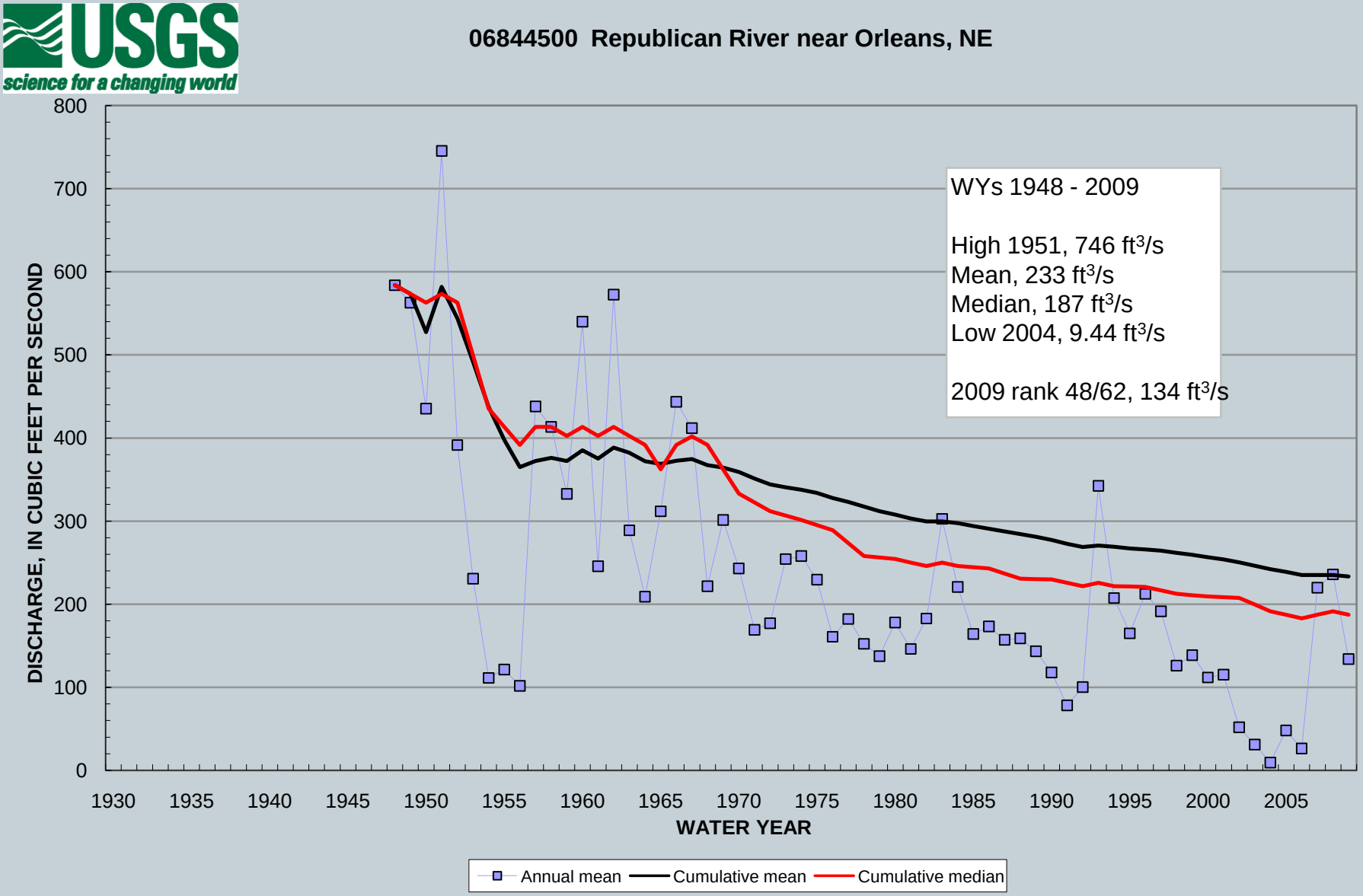
Republican River near Orleans, NE

Republican River



Harlan County Lake

Republican River near Orleans, NE

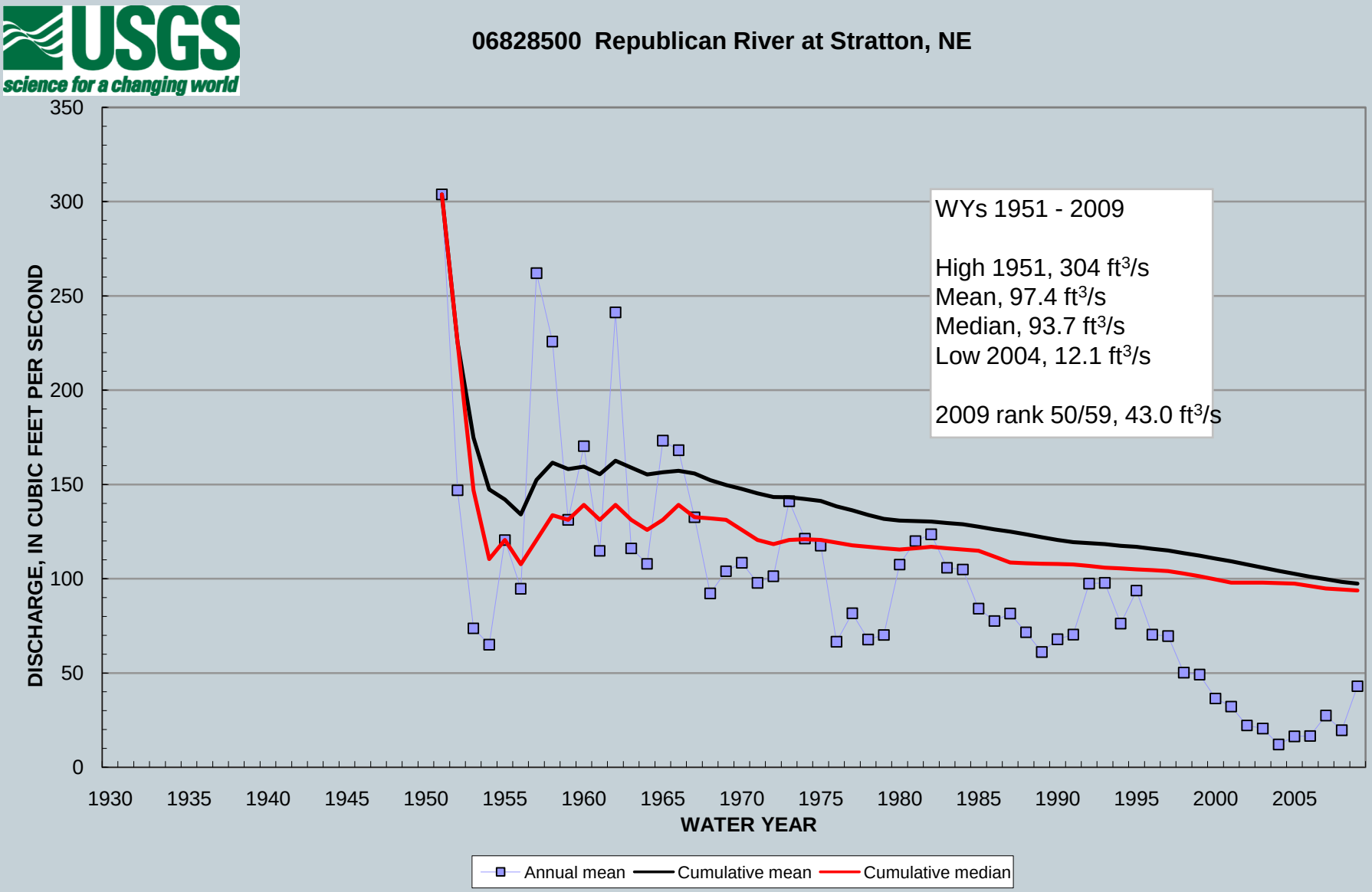


Republican River at Stratton, NE

Frenchman Creek

Indian Creek

Republican River at Stratton, NE

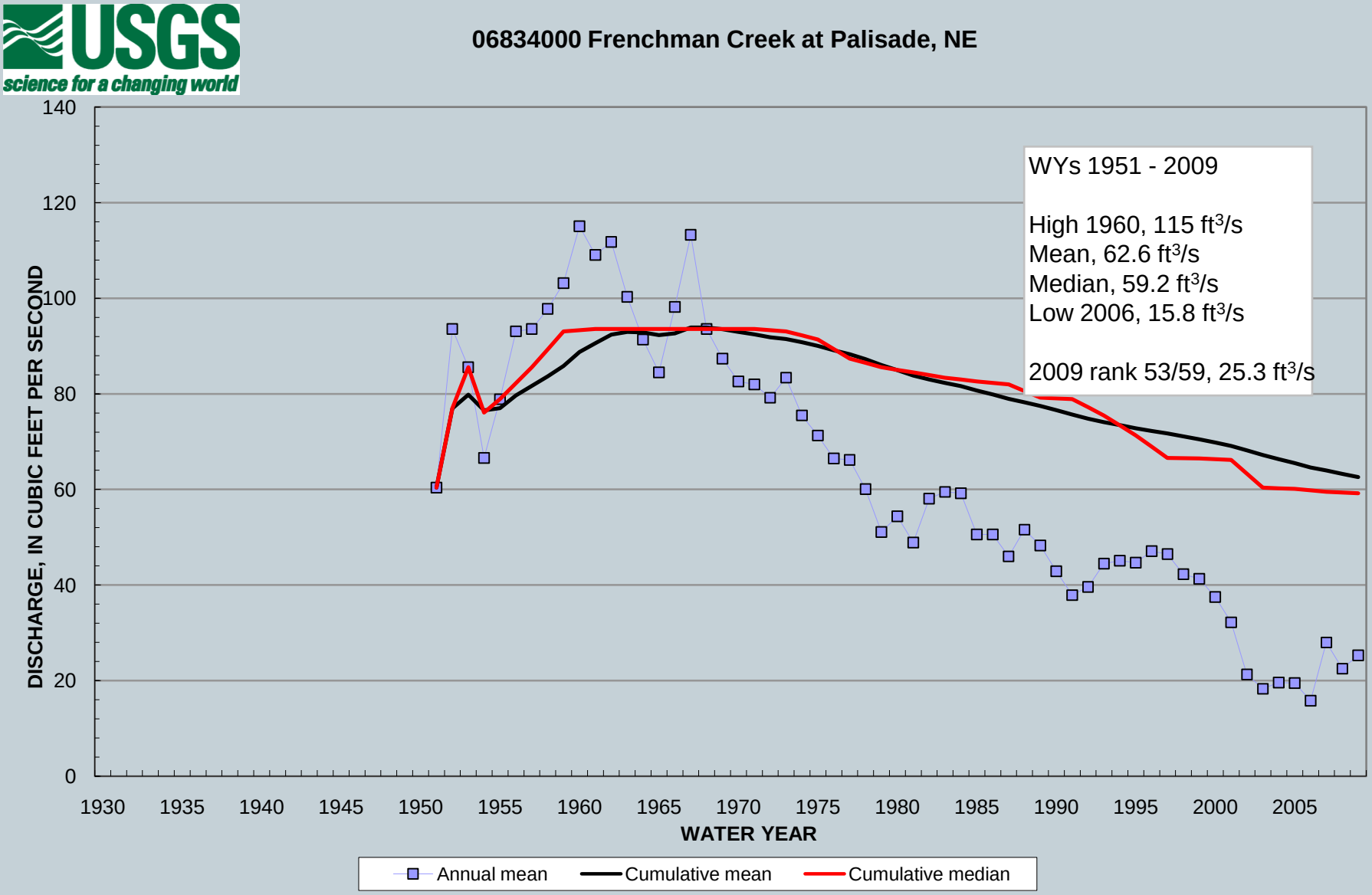


Summary Charts – NDNR Stations

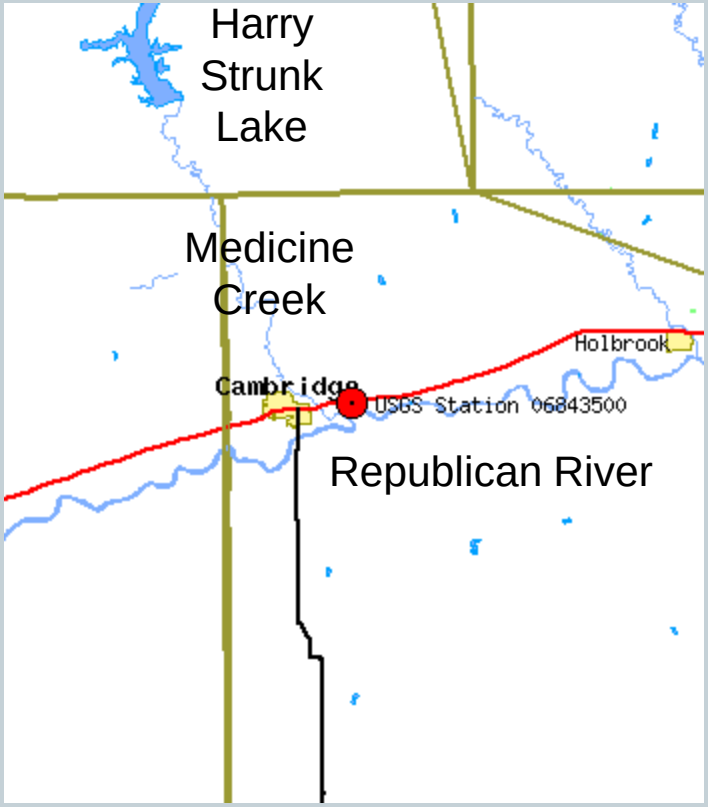
- Published data for Water Year 2009
- Operated by Nebraska Department of Natural Resources (NDNR)
- Stations funded by:
  - NDNR – Field operation
  - USGS and NDNR – DCP support, Web display, review, and publication by USGS

Frenchman Creek at Palisade, NE

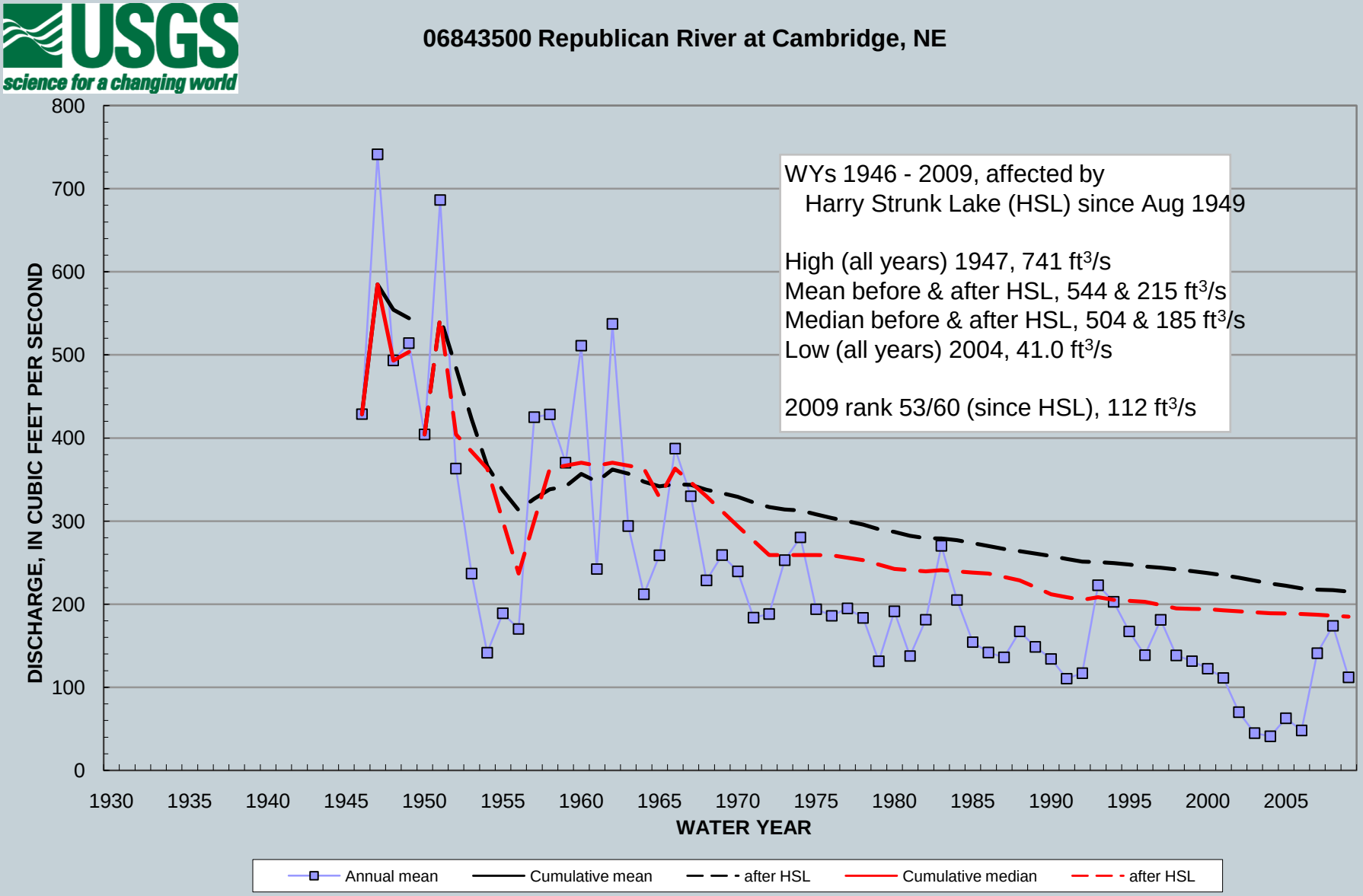
Frenchman Creek at Palisade, NE



Republican River at Cambridge, NE



Republican River at Cambridge, NE



CONTACT INFORMATION

USGS Nebraska Water Science Center (402) 328-4100
5231 South 19th St. http://ne.water.usgs.gov
Lincoln, NE 68512-1271

Robert B. Swanson
Director
(402) 328-4110
rswanson@usgs.gov

Richard C. Wilson
Associate Director of Studies
(402) 328-4120
wilson@usgs.gov

Jason Lambrecht
Associate Director of Data
(402) 328-4124
jmlambre@usgs.gov

Ronald B. Zelt
Associate Director of NAWQA
(402) 328-4140
rbzelt@usgs.gov

Engineering Committee Report

Republican River Compact Administration

August 12, 2010

ASSIGNMENTS

At the August 12, 2009 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 Republican River Compact *Accounting Procedures and Reporting Requirements* (RRCA Accounting Procedures, dated July 27, 2005) and provide a recommendation to the Administration for adoption at next year's annual meeting.
2. Complete exchange of data requested by Kansas in its August 1, 2008 and July 17, 2009 letters by October 1, 2009.
3. Exchange by April 15, 2010 the information listed in Section V of the RRCA Accounting Procedures and Reporting Requirements, and other data required by that document. By July 15, 2010 the states will exchange any updates to these data.
4. Continue to review Colorado's augmentation proposal, as appropriate.
5. 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. Within 90 days, the states will exchange information and the Engineering Committee will meet to recommend next steps.
6. Develop a revision to the RRCA's Accounting Procedures to reflect agreements by the RRCA at its 2008 and 2009 annual meetings, and provide the RRCA with a recommendation of any appropriate formatting changes.
7. Retain Principia Mathematica to perform on-going maintenance of the ground water model and periodic updates requested by the Engineering Committee.
8. Continue development of a five-year accounting spreadsheet/database for adoption at the 2010 annual meeting or earlier.
9. Review accounting procedures to determine if Kansas groundwater CBCU in the Mainstem is properly included in the Mainstem virgin water supply calculation and if necessary, provide a recommendation to the RRCA at the next annual meeting.

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. **Complete exchange of data requested by Kansas in its August 1, 2008 and July 17, 2009 letters by October 1, 2009.**

   a) Nebraska provided the data they had available. Remaining portion of the data request is retained in the NRD records. Nebraska believes this remaining data is not required under the FSS.

   b) Colorado meter data was not completed. Best available data will be provided by October 15, 2010.

3. **Exchange by April 15, 2010 the information listed in Section V of the RRCA Accounting Procedures and Reporting Requirements, and other data required by that document. By July 15, 2010 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 available final data by August 6, 2010. Willem Schreuder of Principia Mathematica will complete a run based on this data.

   c) Final accounting for 2009 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 2009.

4. **Continue to review Colorado's augmentation proposal, as appropriate**.

   a) Proposal is the subject of an arbitration process. No additional information was discussed.

5. **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. Within 90 days, the states will exchange information and the Engineering Committee will meet to recommend next steps.**

   a) Each state performed a cursory review of their respective engineering repositories for published studies/information pertaining to ground water irrigation recharge. Neither Nebraska nor Colorado found any pertinent information. Kansas assembled a bibliography of possible studies/information; however no additional progress has been made on this assignment.

6. **Develop a revision to the RRCA's Accounting Procedures to reflect agreements by the RRCA at its 2008 and 2009 annual meetings, and provide the RRCA with a recommendation of any appropriate formatting changes.**

   a) A revised accounting procedures was drafted to reflect:

      - Changes to both the Frenchman sub-basin and the Mainstem formulas pertaining to the return flows from the Riverside Canal.

7. **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.

8. **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.

9. **Review accounting procedures to determine if Kansas groundwater CBCU in the Mainstem is properly included in the Mainstem virgin water supply calculation and if necessary, provide a recommendation to the RRCA at the next annual meeting.**

   a) Based on a review of the accounting procedures, the Engineering Committee confirmed that Kansas groundwater CBCU was missing from the Mainstem Virgin Water Supply calculations. The accounting procedures were revised to reflect the inclusion of this CBCU element in the Mainstem formula and the Engineering Committee recommends adoption of this change.

COMMITTEE RECOMMENDATION

The Committee recommends the adoption of the revisions to the Accounting Procedures that reflect the changes to the Frenchman and Mainstem subbasin formulas for the return flows of the Riverside Canal and the change to the Mainstem subbasin formula to include Kansas groundwater CBCU, as described in attachment A

The Committee recommends the adoption of the proposal to relocate the accounting point used in the RRCA groundwater model for the North Fork Republican River sub-basin to the Colorado – Nebraska state line in accordance with Art. III of the Compact, as discussed in attachment B.

ADDITIONAL ITEMS

The Engineering Committee discussed the use of provisional USGS data for the Courtland Canal, Stations 06852500, as opposed to USBR data for the same gage. It is the committee's recommendation to continue to use USGS data.

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, 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 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.

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

Attachments

A) Revised Republican River Compact Administration Accounting Procedures and Reporting Requirements
B) Proposal to move the North Fork Accounting Point

SIGNED BY

Megan A. Sullivan
Engineer Committee Member for Colorado

Scott E. Ross
Engineer Committee Member for Kansas

James Schneider
Engineer Committee Member for Nebraska

ATTACHMENT A

PROPOSAL TO CORRECT FORMULAS OF THE REPUBLICAN RIVER COMPACT ADMINISTRATION'S ACCOUTING PROCEDURES USED TO CALCULATE FRENCHMAN CREEK VIRGIN WATER SUPPLY AND THE MAINSTEM VIRGIN WATER SUPPLY

REPUBLICAN RIVER COMPACT ACCOUNTING

CORRECTION OF FORMULAS USED TO CALCULATE

FRENCHMAN CREEK VIRGIN WATER SUPPLY

AND MAINSTEM VIRGIN WATER SUPPLY

Republican River Compact Administration

August 12, 2010

Burlington, Colorado

At the August 12, 2008 Republican River Compact Administration Annual meeting, the Engineering Committee proposed corrections to the RRCA's Accounting Procedures formulas to include return flow from the Riverside Canal in the Frenchman sub-basin Virgin Water Supply and in the Main Stem Virgin Water Supply. The change to Frenchman Creek VWS should be as follows:

VWS = Frenchman Creek in Culbertson, Nebraska Gage Stn. No. 06835500 + CBCUc + CBCUk + CBCUn + 0.17 x Culbertson Diversion RF + Culbertson Extension RF + **0.78 x Riverside Diversion RF** + ΔS Enders Reservoir – IWS

A detailed discussion of this change can be found in attachment B of the August 12, 2008 Engineering Committee Report.

In addition to the inclusion of the Riverside Canal return flows, the Engineering Committee has determined that the ground water impacts attributed to Kansas well pumping (GWk) as calculated by the Ground Water Model were not included in the calculations for the Main Stem Virgin Water Supply.

The following correction should be made the RRCA's Accounting Procedures formulas for the Main Stem Virgin Water Supply to include both the Riverside Canal Return Flow and the GWk component:

Main Stem VWS =

Republican River near Hardy Gage Stn. No. 06853500
- North Fork of the Republican River at the State Line, Stn. No. 06823000
- Arikaree Gage at Haigler Stn. No. 06821500
- Buffalo Creek near Haigler Gage Stn. No. 06823500
- Rock Creek at Parks Gage Stn. No. 06824000
-South Fork Republican River near Benkelman Gage Stn. No. 06827500
- Frenchman Creek in Culbertson Stn. No. 06835500
- Driftwood Creek near McCook Gage Stn. No. 06836500
- Red Willow Creek near Red Willow Gage Stn. No. 06838000
- Medicine Creek below Harry Strunk Lake Gage Stn. No. 06842500
- Sappa Creek near Stamford Gage Stn. No. 06847500

- Prairie Dog Creek near Woodruff, Kansas Stn. No. 68-485000
+ CBCUc
+ CBCUn
+ 0.6 x Dk
+ % x Pk
+ 0.5 x M&Ik
+ EvNFRk
+ Harlan County Lake Ev charged to Kansas
+Amount of transportation loss of the Courtland Canal above the Stateline that does not return to the river, charged to Kansas
+GWk
- 0.9 x Red Willow Canal CBCU
- 0.9 x Hugh Butler Ev
- Harry Strunk Ev
+ 0.6 x Dn below Medicine Creek gage
+ % x Pn below Medicine Creek gage
+ 0.5 * M&In below Medicine Creek gage
+ EvNFRn below Medicine Creek gage
+ 0.6 x Dn below Beaver Creek gage
+ % x Pn below Beaver Creek gage
+ 0.5 * M&In below Beaver Creek gage
+ EvNFRn below Beaver Creek gage
+ 0.6 x Dn below Sappa Creek gage
+ % x Pn below Sappa Creek gage
+ 0.5 * M&In below Sappa Creek gage
+ EvNFRn below Sappa Creek gage
+ 0.6 x Dn below Prairie Dog Creek gage
+ % x Pn below Prairie Dog Creek gage
+ 0.5 * M&In below Prairie Dog Creek gage
+ EvNFRn below Prairie Dog Creek gage
+ Change in Storage Harlan County Lake
+ Change in Storage Swanson Lake
- Nebraska Haigler Canal RF
- 0.78 X Riverside Canal RF
- 0.78 x Riverside Canal RF
- 0.17 x Culbertson Canal RF
- Culbertson Canal Extension RF to Main Stem
+ 0.24 x Meeker Driftwood Canal RF which returns to Driftwood Creek
- 0.9 x Red Willow Canal RF
+ Courtland Canal at Kansas-Nebraska State Line Gage Stn No. 06852500
- Courtland Canal RF in Kansas above Lovewell Reservoir
-IWS

ATTACHMENT B

PROPOSAL TO MOVE THE GROUND WATER MODEL ACCOUNTING CELL NORTH FORK REPUBLICAN RIVER SUB-BASIN

REPUBLICAN RIVER COMPACT ACCOUNTING

NORTH FORK REPUBLICAN RIVER SUB-BASIN

GROUND WATER MODEL ACCOUNTING POINT

Republican River Compact Administration

August 12, 2010

Burlington, Colorado

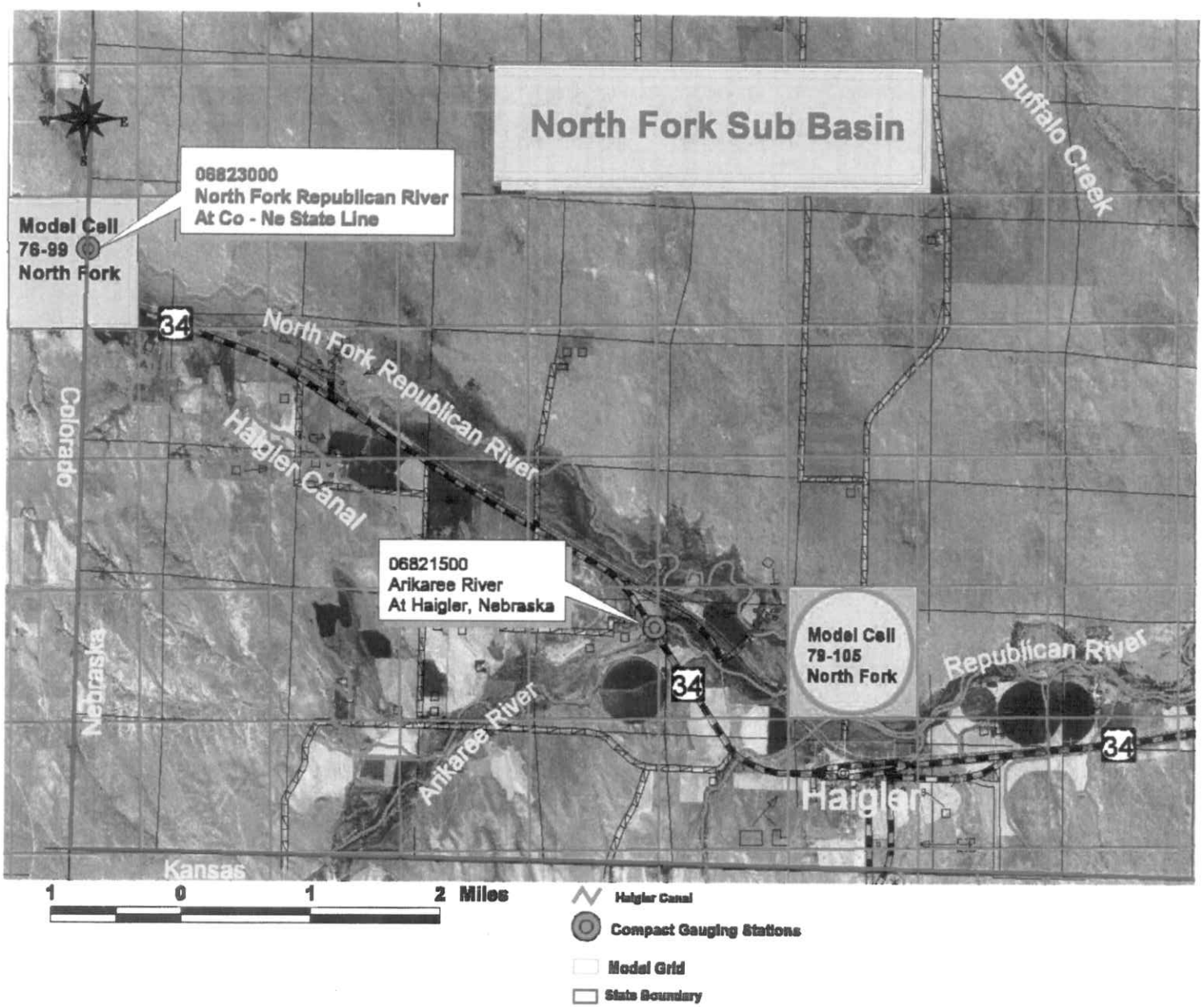
To be consistent with the description of the Main Stem of the Republican River as identified in Article III of the Republican River Compact as:

> The North Fork of the Republican River in Nebraska and the main stem of the Republican River between the junction of the North Fork and the Arikaree River and the lowest crossing of the river at the Nebraska-Kansas state line and the small tributaries thereof, also including the drainage basin Blackwood Creek;

And the definition of the North Fork Republican River sub-basin described in Appendix C of the Final Settlement Stipulation of the Republican River Compact Administration as:

> **Sub-Basin:** The Designated Drainage Basins, except for the Main Stem, identified in Article III of the Compact. For the purposes of Compact accounting the following Sub-basins will be defined as described below:
>
> > North Fork of the Republican River in Colorado drainage basin is that drainage area above the USGS gaging station number 06823000, North Fork Republican River at the Colorado-Nebraska State Line

Cell 76-99 (segment-reach 130-28) of the Republican River Compact Administration Ground Water Model will be used to measure ground water impacts for the North Fork sub-basin, instead of cell 79-105 (segment-reach 152-12).


North Fork Sub Basin
Buffalo Creek
06823000
North Fork Republican River
At Co - Ne State Line
Model Cell
76-99
North Fork
34
North Fork Republican River
Haigler Canal
Colorado
Nebraska
Kansas
06821500
Arikaree River
At Haigler, Nebraska
Model Cell
79-105
North Fork
Republican River
Arikaree River
Haigler
1 0 1 2 Miles
Haigler Canal
Compact Gauging Stations
Model Grid
State Boundary

Resolution of the Republican River Compact Administration

Changes to the RRCA's Ground Water Model

Whereas on August 13, 2008, the Republican River Compact Administration accepted the proposal set forth in the Engineering Committee's August 12, 2008 report to move the Ground Water Model Accounting Cell at Guide Rock, and

Whereas the Engineering Committee recommended in its August 12, 2009 and August 12, 2010 reports to move the Ground Water Model accounting point for the North Fork sub-basin to the Colorado-Nebraska state line.

Now, therefore, it is the resolution of the Republican River Compact Administration to approve and adopt the proposal set forth in Attachment B of the Engineering Committee's August 12, 2010 report, a copy of which is attached as Exhibit A, and to adopt Version 12s2 of the Ground Water Model, which reflects these changes.

Approved by the Republican River Compact Administration this 12th day of August, 2010.

Dick Wolfe,P.E.
Colorado Member
Chair

8-12-2010
Date

David Barfield, P.E.
Kansas Member

August 12, 2010
Date

Brain Dunnigan, P.E.
Nebraska Member

8/12/2010
Date

Resolution of the Republican River Compact Administration

Changes to the RRCA's Accounting Procedures and Reporting Requirements

Whereas the Engineering Committee recommended in its August 12, 2010 report, to amend the Republican River Compact Administration Accounting Procedures and Reporting Requirements to correct the formulas used to compute the Virgin Water Supply for both Frenchman Creek and the Main Stem so as to properly account for the return flows from the Riverside Canal, and

Whereas the Engineering Committee also recommended in it August 12, 2010 report to amend the Republican River Compact Administration Accounting Procedures and Reporting Requirements to include in the formula used to compute the Main Stem Virgin Water Supply, the ground water impacts attributed to Kansas well pumping (GWk) as calculated by the Ground Water Model.

Now, therefore, it is the resolution of the Republican River Compact Administration to approve and adopt the proposal set forth in Attachment A of the Engineering Committee's August 12, 2010 report, a copy of which is attached as Exhibit A, and to adopt a revised Accounting Procedures and Reporting Requirements, dated August 12, 2010, that reflect these corrections.

Approved by the Republican River Compact Administration this 12th day of August, 2010.

Dick Wolfe

8-12-2010

Dick Wolfe,P.E.
Colorado Member
Chair

Date

David W Barfield

August 12, 2010

David Barfield, P.E.
Kansas Member

Date

Brian P. Dunnigan

8/12/2010

Brain Dunnigan, P.E.
Nebraska Member

Date

RESOLUTION OF THE REPUBLICAN RIVER COMPACT ADMINISTRATION

HONORING

MR. LELAND E. ROLFS

WHEREAS, Leland E. Rolfs of Topeka, Kansas, retired from his position in 2008 as Legal Counsel to the Division of Water Resources, Kansas Department of Agriculture, after having served faithfully in that position for over thirty-one years; and

WHEREAS, in his capacity as Legal Counsel, Lee has diligently represented the interests of the State of Kansas and its residents of the Republican River Basin, as well as those of Kansas' other interstate basins; and

WHEREAS, Lee has worked in an exemplary manner throughout his career to cooperate with the States of Colorado and Nebraska in the effective administration of the Republican River Compact, and to improve the workings of the Republican River Compact Administration; and

WHEREAS, Lee played a central role in the litigation of *Kansas v. Nebraska & Colorado,* No. 126 Original, which sought to resolve fundamental disputes concerning the quantification and allocation of the waters of the Republican River, as well as the other disputes associated with the Republican River Compact; and

WHEREAS, Lee played a commensurate leadership role in the settlement of that litigation, working with legal counsel and the technical experts from the other States to achieve the Final Settlement Stipulation of 2003, which produced a more satisfactory resolution of Compact disputes than protracted litigation could have accomplished; and

WHEREAS, Lee's vast knowledge of water law, his positive attitude, his friendly personality, and his congenial temperament have been great assets to the Compact Administration and the State of Kansas.

NOW THEREFORE, BE IT HEREBY RESOLVED that the Republican River Compact Administration does hereby express its sincerest gratitude and appreciation to Leland E. Rolfs for his excellent and dedicated service.

BE IT FURTHER RESOLVED that the Republican River Compact Administration honor Mr. Rolfs' service by including this resolution and appropriate dedicatory remarks in the annual report for Compact year 2009, and hereby instructs the administration to send copies of this resolution to the Rolfs family and to the Governor of the State of Kansas.

ADOPTED by the Republican River Compact Administration on this 12th day of August 2010, at the fiftieth annual meeting of the RRCA, held in Burlington, Colorado.

Dick Wolfe, State Engineer,
Colorado Commissioner, (Chairman)

Brian Dunnigan, Director,
Nebraska Commissioner

David W. Barfield, Chief Engineer,
Kansas Commissioner

50TH ANNUAL MEETING OF THE

REPUBLICAN RIVER COMPACT ADMINISTRATION

AUGUST 12, 2010

9:15 A.M.

Burlington Community and Education Center

Burlington, Colorado

PANELS:

FOR COLORADO:

Commissioner Dick Wolfe

Mr. Peter Ampe

Ms. Megan Sullivan

FOR KANSAS:

Commissioner David Barfield

Mr. Burke Griggs

Mr. Chris Grunewald

Mr. Scott Ross

Mr. Chris Beightel

FOR NEBRASKA:

Commissioner Brian Dunnigan

Mr. Justin Lavene

Mr. Jim Schneider

Mr. Tom O'Connor

P R O C E E D I N G S

* * *

COMMISSIONER WOLFE: Good morning, everyone. I'm Dick Wolfe, State Engineer for Colorado and Compact Commissioner for Colorado for the Republican River Compact Administration. Welcome to Burlington.

At this time, I'd like to introduce some of the staff members here at the table that are from Colorado with me. To my immediate right is Mr. Peter Ampe. He's First Assistant Attorney General at the Colorado State Attorney General's Office. And to my left is Megan Sullivan, who is the engineer advisor for Colorado.

David, do you want to go ahead and introduce your staff here at the table for Kansas?

COMMISSIONER BARFIELD: Yes. Thank you, Dick.

Again, thank you for hosting the meeting. With me -- my name, for the record, is Dave Barfield. I'm chief engineer for the Kansas Division of Water Resources and Commissioner for the State of Kansas to the Administration.

At the table here to my right is Chris Grunewald, attorney with the -- for the Kansas Attorney General's Office. Burke Griggs, an attorney with the

Department of Agriculture. And to my left is Scott Ross. He's water commissioner for our Stockton Field Office that covers all of northwest Kansas, and he's our engineering committee lead. And then Chris Beightel is our program manager for Water Management Services.

COMMISSIONER WOLFE: Commissioner?

COMMISSIONER DUNNIGAN: Thank you, Commissioner Wolfe.

My name is Brian Dunnigan, and I'm the director of the Nebraska Department of Natural Resources.

And with me at the table today from Nebraska, to my immediate left, Justin Lavene from the attorney general's office; Jim Schneider, deputy director; and Tom O'Connor.

Thank you.

COMMISSIONER WOLFE: Thank you.

Just a couple other procedural things. There's copies of the agenda on the table when you came in. If you didn't get one, they should be back there. And there's refreshments in the back, some doughnuts and coffee you're welcome to, so please help yourself to those. And if you haven't found the restrooms already, you go out these doors here, go down to your left and again to the left, down to the next hallway and those

will be there.

We also have a court reporter here today recording this for transcription. And as we go through and make introductions, I'm going to, at this next step, allow folks in the audience to introduce themselves. And we'll pass around the mike, and so we'll make sure that the court reporter hears those as well.

So my deputy, Mike Sullivan, over here to the left, is here with me as well. And we're going to start there, and we'll just pass this mike around so we can hear everyone.

So, Mike, take it away.

MR. SULLIVAN: I'm Mike Sullivan with the Colorado Division of Water Resources.

MR. MILLER: John Miller with the U.S. Geological Survey out of North Platte, Nebraska.

MR. BOOK: Dale Book, consultant for the State of Kansas.

MR. PERKINS: Sam Perkins, Division of Water Resources, Kansas.

MR. KESTER: Paul Kester, Department of Natural Resources, Nebraska.

MR. STANTON: Shane Stanton, and I'm a field office manager for the State of Nebraska in Cambridge.

MR. BRADLEY: Jesse Bradley with the Nebraska Department of Natural Resources.

MR. KEPLER: Jason Kepler with the Nebraska Department of Natural Resources.

MR. EDGERTON: Brad Edgerton. I'm manager of Frenchman-Cambridge Irrigation District.

MR. CLEMENTS: Mike Clements, manager, Lower Republican NRD in Alma, Nebraska.

MR. CRAMER: Dale Cramer, former president of Frenchman-Cambridge Irrigation District.

MR. DELKA: Mike Delka, manager of the Bostwick Irrigation District in Nebraska.

MS. JURICEK: Chelsea Juricek, the Stockton Field Office, for Kansas Division of Water Resources.

MR. VAN NOSTRAND: John Van Nostrand, manager of the Burlington Record.

MR. MURPHY: Stan Murphy, the general manager for the Republican River Water Conservation District in Colorado.

MR. GUENTHNER: Scott Guenthner with the Bureau of Reclamation out of our regional office in Billings.

MR. ERGER: Patrick Erger from the Bureau of Reclamation out of the Billings office in the regional office.

MR. SWANDA: Marv Swanda with the Bureau of Reclamation out of the McCook Field Office, McCook, Nebraska.

MR. THOMPSON: Aaron Thompson, the area manager for the Bureau of Reclamation Nebraska-Kansas Office.

MR. SMITH: Dan Smith, manager of Middle Republican Natural Resources District, in Curtis, Nebraska.

MR. FANNING: Jasper Fanning, manager of the Upper Republican Natural Resources District.

MR. PARKER: Edward Parker, with the Corps of Engineers at Kansas City.

MR. EISENACH: Bob Eisenach, board member of Hitchcock and Red Willow County Irrigation District.

MR. KOTSCHWAR: Jerry Kotschwar, Frenchman Valley Irrigation District.

MR. ALBERT: Kenneth Albert, the director of Frenchman Valley Irrigation District in Culbertson, Nebraska.

MR. FELKER: Don Felker, manager of Frenchman Valley/H&RW, Nebraska.

MR. KEELER: Dave Keeler, Republican River in Colorado.

MR. RIDNOUR: Devin Ridnour, Republican

River in Colorado.

MS. DANIEL: Deb Daniel, Plains and East Cheyenne Ground Water Districts in Colorado.

MR. DINNEL: Dirk Dinnel, assistant manager, Upper Republican NRD.

MR. RILEY: Tom Riley with the Flatwater Group.

MR. KOELLIKER: Jim Koelliker, Kansas State University, Manhattan.

MR. MARTIN: I'm Derrel Martin, University of Nebraska at Lincoln.

MS. HOMM: Diane Homm, the Homm Ranch.

MR. BLANCA: I'm Don Blanca. I'm outside legal counsel for Nebraska.

MR. POWERS: Marcus Powers, Nebraska Attorney General's Office.

MS. BERNHARDT: Autumn Bernhardt, Colorado Attorney General's Office.

MR. SULLIVAN: In the back, which helped us put this meeting together, is Katie Radke with the Colorado Division of Water Resources.

COMMISSIONER WOLFE: Thank you all.

Also, too, to help us out and also help the reporter, make sure you've signed in the sign-in sheet. If you haven't done that, if you'll make sure you get

that signed in before you leave today, we would appreciate it.

At this time, we're going to move on to Agenda Item 3 -- excuse me, 2. We do have a couple of modifications to the agenda. The first one is, on Agenda Item 3, instead of approval of the previous annual and special meeting reports, that will just be a status.

The other addition to the agenda will be under Item 8, Subitem (c). This is an addition, and this will be a motion to dissolve the ad hoc legal committee.

Commissioners, are there any other amendments to the agenda at this time?

COMMISSIONER BARFIELD: Well, I guess I would move that we adopt the agenda as you've recommended we amend.

COMMISSIONER DUNNIGAN: Second.

COMMISSIONER WOLFE: All right. All those in favor signify by saying aye.

COMMISSIONER DUNNIGAN: Aye.

COMMISSIONER BARFIELD: Aye.

COMMISSIONER WOLFE: Motion approved.

All right. We're on to Agenda Item No. 3. This in regards to the status of the previous annual and

special meeting reports and transcripts from 2008 and '9.

Those have been now provided to the states for review, but due to the time constraints, we have not collectively had an opportunity to review all of those and making appropriate modifications to those two years. So it's anticipated that this will be taken up for future action at the -- what we anticipate, the next special meeting we'll talk about under Agenda Item 10. And that will allow each of the states an opportunity to review those and seek approval of those, hopefully, at that next meeting.

So if there's any other special remarks, Commissioners, that you would like to make in regards to those two years for the record, I would be happy to do that at this time.

COMMISSIONER BARFIELD: No.

COMMISSIONER DUNNIGAN: No.

COMMISSIONER WOLFE: No? All right. Thank you.

All right. At this time, we're on Agenda Item No. 4. Commissioner Dunnigan?

COMMISSIONER DUNNIGAN: Thank you, Chairman Wolfe.

I'm pleased again this year to inform all

of you that the State of Nebraska is in compliance with the Republican River Compact. Using current accounting procedures, Nebraska has a positive five-year average for the period ending in 2009.

Based on preliminary estimates, it appears that Nebraska will again be in compliance for the five-year compliance period ending in 2010. This is a testament to the work conducted to date in partnership with Nebraska's Natural Resources Districts, its surface water users and the people of the Republican River Basin.

In the future, Nebraska will continue to remain in compliance with the Republican River Compact. The primary NRDs, in partnership with the Department of Natural Resources, have revised the Integrated Management Plans that have been in place for 2 1/2 years.

These IMPs are working. Among other things, the IMPs clearly state that each of the NRDs cannot deplete more than their share of the water in the basin. This is not merely a goal, but rather a requirement of each plan.

I've previously stated the Department and the Natural Resources Districts feel that it is important to investigate other options and further

regulations that can be incorporated in the future plans addressing water-short years.

In the first week of August, the State of Nebraska, along with the Upper and Middle Republican Natural Resources Districts, successfully adopted revisions to the existing Integrated Management Plans. These revisions address the concerns of long-term compliance brought up during the 2008 arbitration.

The revised plans now contain an in-depth monitoring plan, including a comprehensive forecasting mechanism that allows Nebraska to look ahead and anticipate compliance issues, rather than waiting until six months after a year is over to see the results of Compact accounting.

This forecast is designed to predict the compliance outcome for Nebraska if dry conditions are experienced in the upcoming year and accurately predicts when those potential dry conditions would require additional actions by Nebraska to remain in compliance.

The revised plans contain a detailed description of the triggers that will indicate when additional management actions are needed. The responsibility for the needed management actions depend on the current situation in each NRD and those NRDs, with a share of any projected shortfall, will be

required to implement the necessary controls that will ensure Nebraska's compliance in dry periods.

Finally, the plans also provide for an occupation tax in these NRDs and the additional framework for Nebraska to continue to manage consumptive use over the long-term to meet Compact compliance.

During the first half of this year, the States of Colorado, Kansas and Nebraska spent considerable time and effort to address concerns related to the Colorado Compliance Pipeline and Nebraska's crediting issued through the arbitration process.

We consider both of these issues to be of importance and look forward to their resolution.

The Department has also held meetings with the Bureau of Reclamation to address their misunderstandings of the revised IMPs, and we have made considerable progress in the last two weeks.

In order for Nebraska to utilize its Compact allocation to the benefit of the entire basin, we will need to work closely with both surface and groundwater users to develop conjunctive management strategies that benefit all users.

We will continue to see improvements over time as the IMPs continue to take hold. It is our belief that a healthy surface water system will

contribute to Nebraska's ability to comply with the Compact. Conjunctive management studies that identify the best uses of those streamflow supplies during wet and dry conditions will further enhance Nebraska's ability to fully utilize its Compact allocation while also continuing to ensure Compact compliance.

The Natural Resources Districts, the Irrigation Districts, and their respective boards, and the Bureau of Reclamation will play an important role in implementing these strategies in a basin.

The future also holds continuing participation in Conservation Reserve Enhancement Program and the Environmental Quality Incentive Program and other incentive-based management strategies.

Nebraska continues to explore stream augmentation options. Vegetation management has increased streamflow and the capacity of the stream channel.

Nebraska will continue to take an active role in the Engineering Committee and will always work with the other states to improve existing accounting methods and ensure they accurately reflect water use in the basin.

In closing, I wish to assure all of you, as well as my counterparts from our neighboring states,

that Nebraska will continue to comply with the Republican River Compact. The State will continue to evaluate needs of the basin and make changes as necessary to stay in compliance in the spirit of openness, transparency and partnership.

We expect to continue to work with all stakeholders in the basin, including the other states, the NRDs, the surface water districts, and individual users and the Bureau of Reclamation. Noncompliance is not an option for the State of Nebraska.

I will now have Tom O'Connor give the report of water administration activities in Nebraska for calendar year 2009.

Tom?

MR. O'CONNOR: Thank you.

In January 2009, 53 letters were sent to irrigators reminding them -- in the Republican River Basin, reminding them the 2008 water use reports must be filed with the Cambridge field office.

In February, 15 closing notices were issued to those water users that failed to submit the required annual water use reports. These water users were not allowed to divert water during the 2009 calendar year.

June 24, one pumping schedule was sent to a water user. June 26, a regulating notice was sent to a

water user. June 29, 17 closing notices were issued to water users above Meeker-Driftwood Canal. June 29, one regulating notice was sent.

July 6, the regulating notice was sent and also eight closing notices were issued to water users above the Red Willow Canal. On July 8, 26 regulating notices were sent to water users above Cambridge Canal, and 30 closing notices were issued to water users above Cambridge and Meeker-Driftwood Canal. July 9, 16 closing notices were issued to storage permit holders above Harry Strunk Lake. And July 16, 31 written negative notices were sent to water users above Cambridge Canal.

August 6, four regulating notices were sent to Frenchman-Cambridge, Frenchman Valley and H&RW Irrigation Districts. And also 18 closing notices were issued to water users above Bartley and Red Willow Canal. On August 26 to the 31st, 36 regulating notices were sent to water users above Bartley, Red Willow and Meeker-Driftwood Canals.

September 10, one opening notice was sent to a storage permit holder.

November 2, two opening notices were sent to storage permit holders. November 18, letters were sent to junior permit holders downstream in Harlan

County Reservoir, stating that the U.S. Bureau of Reclamation's prediction that 2010 will not be a water-short year.

And November 18, water use report forms were sent out to all private water use permit holders in the Republican River Basin.

Thank you.

COMMISSIONER DUNNIGAN: That concludes Nebraska's report. Thank you.

COMMISSIONER WOLFE: All right. Thank you so much. Those are great reports.

At this time, I'll report on behalf of Colorado.

And although I can't report today that Colorado is in compliance with the Compact, we have certainly made what we believe are great strides in trying to reach compliance.

And we certainly couldn't have done it without all of the great people that helped me in accomplishing that. My staff included is here today, our staff members here in the basin that introduced themselves, the water users in the basins, the Republican River Water Conservation District, and the respective groundwater management districts have all been working in a collaborative effort to assist

Colorado to reach compliance.

And even though we have not reached compliance to date, there have been a tremendous amount of effort and costs for projects and so forth to soon get us there.

And I also appreciate the efforts by both the States of Kansas and Nebraska in those discussions and collaborative efforts that we've undertaken over the past year, and even as of last night, in trying to reach resolution on Colorado's Compact Compliance Pipeline, which is obviously our major component for Colorado to achieve Compact compliance. So we do greatly appreciate all of those efforts and support that folks have given us to reach that end.

We did have a couple other folks who -- from Colorado I saw that kind of snuck in here at the end. Mr. David Robbins, who's legal counsel for the Republican River Water Conservation District, and also Dennis Coryell, who is the president of the Republican River Water Conservation District. So thank you for being here today.

I'd like to just provide a quick snapshot of the -- some of the major hydrologic conditions of 2009 as far as Colorado's portion goes, and then touch on some of the efforts that we have done in terms of

achieving Compact compliance, and then I'll turn it over to Kansas for their report.

As far as the North Fork on the Republican River, in 2009 we had 24,410 acre-feet pass the state-line gage. This is approximately 6200 acre-feet less than the 1935 to 2009 average annual flow of 30,630 acre-feet.

On the Arikaree, streamflows at the Arikaree River gage at Haigler totaled 780 acre-feet for 2009, about half the amount recorded for 2008, which totaled 1570 acre-feet. Flows on the Arikaree have declined significantly from the average of 12,450 acre-feet for the period of 1933 to 2009.

On the South Fork of the Republican River, a total of 8,487 acre-feet passed the Benkelman gage in 2009. This is six times the total of 1420 acre-feet that passed the gage in 2008 and 12 times the total of 2007. As you can see by that, streamflows on the South Fork continue to improve from the drought years of zero flow, but are still significantly lower than the 71-year average of 26,020 acre-feet.

Bonny Reservoir is located on the South Fork of the Republican River, just north of Burlington here. It is the only Federal reservoir in Colorado's Republican River Basin. Bonny Reservoir is

approximately 35 percent full with an active storage, as of last week, of 14,328 acre-feet.

In 2009, we made a number of releases from Bonny Reservoir: In May of 2009, 884 acre-feet; in June 1,048; and in December, 1632 acre-feet. And in regards to the December releases, I appreciate the Bureau's efforts. We had waited until that timeframe to make those releases and your cooperation -- certainly with the holidays approaching at that time, we appreciate the cooperation from the Bureau in their efforts to assist in those releases. Those total releases for those three periods were 3,554 acre-feet.

We're currently releasing from Bonny based on an order that I issued on July 9, due to -- this release was precipitated by heavy rainstorm events at the beginning of July that stalled over the area, ultimately raising the level of the reservoir to 17,771 acre-feet.

The releases, as of last month, have lowered the storage in Bonny Reservoir to approximately -- the releases have amounted to about 3400 acre-feet to date.

Next I'd like to just touch on some of the efforts that Colorado, in cooperation with the Republican River Water Conservation District and the

other water users in the basin, have taken to continue to achieve Compact compliance.

As I just reported, as far as the South Fork, we're continuing to make releases from Bonny Reservoir to reduce our evaporation and seepage charges on the South Fork. And we'll continue to do so in our efforts to achieve, not only our statewide compliance, but also our requirement under the Sub-Basin Non-Impairment Test.

The Republican River Water Conservation District has been very active since 2006 in regards to the CREP and the EQIP programs. My understanding, through 2009, that there's been a little over 19,600 acres that have been currently retired under the CREP program, a little over 10,700 acres under EQIP, and approximately 830 acres under AWEP, which is the continued version of EQIP, and there's approximately still 10,000 acres still available under the 2006 CREP program.

There's also a CREP amendment that's being considered in Colorado. We're now in the EA process, and it's my understanding that will add up to -- I think up to 25,000 acres. It's either 20- or 25,000 acres, but I think it's potentially up to 25,000 acres. If I've got that wrong, I'll correct that. But a total

between those two programs of 55,000 acres over that period, and -- in the upcoming year.

The District still continues to make surface water purchases, both on the North Fork and the South Fork of the Republican River. Those efforts have led to a result that there's very little surface water irrigation left in the basin, and I know the District is still continuing efforts to acquire water rights and retire those surface water rights and reduce our consumptive use associated with irrigation on those lands.

The other effort that has been undertaken by the State is in regards to the measurement rules that I adopted, promulgated in 2008. First year effectively in operation was 2009, was the first year of administration underneath those new rules.

And by March 1 of 2009, all the high capacity wells, which is approximately 4,000 wells in the Basin, had to have a measurement device installed and verified by a certified tester or be declared inactive.

And by December 1 of this -- of 2009, pumping totals for the irrigation year for all active wells had to have been submitted to the State Engineer, and we have received those reports and that information

is currently being analyzed.

Last year, I reported that four new positions were created for the well measurement program in Compact compliance efforts, but two positions had remained unfilled. This year, we now have -- the measurement team is fully staffed and actively enforcing the measurement rules in well permits in the Basin.

Lastly, I'd like to just mention some new legislation that was adopted in Colorado. Again, it applies statewide and is applicable in terms of our enforcement efforts, not only in the Republican River Basin, but throughout the state. They enacted a provision that allows us to assess violations for -- or fines, excuse me, for violations of orders of the State Engineer for surface water violations.

We had a provision that was already in place to assess that $500-a-day fine for groundwater violations, but that now applies also to surface water violations. And it has helped Colorado in its efforts to receive timely enforcement on those violations.

And that's all I have to report, so I'll turn it over to Commissioner Barfield.

COMMISSIONER BARFIELD: Thank you, Chairman Wolfe, and I'll provide a report for the State of Kansas.

I would -- actually, before I go on to my report, I just want to note for the record, I guess, two different things related to the -- sort of anniversaries that maybe the Compact should recognize.

First of all, May 30 of this year marked the 75th anniversary of the devastating 1935 Republican River flood. That flood had a profound impact on all three states, including the subsequent development of the Federal flood control reservoirs, you know, that were implemented via the Republican River Compact of 1943.

So, actually, also, I think this meeting marks the 50th anniversary -- or the 50th annual meeting of this Administration, so maybe we should have done a little more to celebrate. But we've been around a while working.

I would note, getting into Kansas' report, that Kansas is fully in compliance with all tests of compliance under the Final Settlement Stipulation, as we've been since the adoption of the FSS. We are also now fully metered within the Republican River Basin, and all of the meters have been inspected.

So climate conditions, I guess, and things have improved quite a bit over recent years, I think, in all the states. Precipitation in Kansas this year is

generally good. There are some areas of shortage, but in the Republican in northwest Kansas, they're having another good year. Our streamflows and reservoir levels statewide are currently normal or above normal through most of the state.

I'd just like to say a few words for the record about our budget. Kansas State Government -- I think all state governments share this predicament -- has experienced some significant shortfalls of -- totaling about a billion short of what has been experienced, requiring some pretty significant reductions in our activities.

My staff is about a quarter -- has about a quarter fewer positions -- well, it has about a quarter of its positions vacant at this time and about 1.1 million less funding than just a couple years ago, requiring reductions in some of our services that people find important.

Legislation, I guess, I typically give a brief report in terms of some of the most significant water legislation. Fortunately, it was a relatively quiet year for the water legislation. That's usually not a bad thing.

In reduction of service, I had to discontinue a pretty popular program called the Water

Right Conservation Program that allowed people to have a contract between themselves and the chief engineer to temporarily, up to ten years, not use their water right, but prevent being subject to abandonment under the Water Appropriation Act. That was a discretionary sort of program that we eliminated, so there is a fair amount of legislation to try and find ways to remedy that problem.

And Senate Bill 316 was enacted, that if -- that allowed if you're in closed area that -- and maintain your diversion work, that that would be considered doing sufficient cause for nonuse.

There's also significant activity under Senate Bill 510 that essentially would create a new beneficial use called conservation use, where a water right holder would want to put it in conservation use and essentially maintain it for the future and not be subject to abandonment. That was not enacted, but I think we'll be hearing more about that in the next session.

There was also some activity related to dam safety. We had to eliminate a couple positions that were granted to us to do safety inspections of dams. It's a requirement of the dam owner.

We were funded to do those inspections on their behalf. The funding for those positions was not

there. We eliminated our service to them, meaning they had to do the inspections, and so there was some legislation to try and take away the requirements for them to inspect their dams.

That did not pass. We have a committee working to sort of work through that issue.

In regard to regulations, I have enacted or in process of enacting a number of significant changes to our rules and regulations related to water administration. Again, I mentioned the Water Right Conservation Program was suspended.

There's a special process under a Kansas statute called Intensive Groundwater Use Control Areas, or IGUCAs, as we called them. We really never had any regulations related to how IGUCAs would be -- the hearings would be conducted, and I established a fairly extensive set of regulations that outline those procedures for these special hearing processes and to require the periodic review of all existing IGUCAs over the coming years.

I'm also in the process of developing a significant set of regulations on impairment investigations, where a water right holder claims that another water right holder is impairing them.

We've had regulations dealing with this and

doing impairment investigations and surface water systems quite regularly in the past and actions. We've had increasing calls of impairment in groundwater systems, and this set of regulations essentially lays out how we conduct an impairment investigation and actions in groundwater systems, which is much more complex, and how the groundwater management districts are a part of that process. Those regulations are close to adoption.

I might say a few words about the other interstate river compacts, and particularly the Republican River Compact; we frequently report on that. And I reported last year that that litigation on the Arkansas River that was initiated in 1985 was concluded last year when the States of Kansas and Colorado agreed on some updates to the Colorado Use Rules. And the two states jointly filed a motion with the Supreme Court to conclude that litigation, so we're -- I think we're all pleased about that.

In February of this year, the two states, the Compact Administration updated its 1980 Operating Plan to reflect the numerous agreements the two states had negotiated over recent years.

State Engineer Dick Wolfe here has initiated a response to some of Kansas's concerns about

surface water improvements in the Basin and their potential effect on Compact compliance, and he's in the process of developing some regulations on that issue responsive to those concerns, and we appreciate those activities.

And recently -- in recent months, we've asked the Compact Administration, pursuant to the decree, to consider an update to the Hydrologic-Institutional Model related to groundwater irrigation return flow changes.

With respect to specific activities within the Republican Basin in Kansas, our groundwater -- Northwest Kansas Groundwater Management District No. 4 covers much of the northwest Kansas part of the Republican Basin. Last month, it was announced that that GMD receive an award for an Agricultural Water Enhancement Program, or AWEP, a grant from the USDA NRCS.

So the $2.6 million grant will allow them to convert irrigated acreage to non-irrigated land in their six designated high priority areas.

I'm also working closely with GMD 4 in those high priority areas. They are looking for ways to reduce their groundwater use in some of the areas that are overappropriated, and specifically we are looking at

finding ways to allow those reductions to occur through the modification of their management programs and rules jointly developed between the GMD and ourselves.

So we're actually going to have a rule moving forward to test whether that process will -- you know, will be able to be legally defended.

There are ways to do those kind of allocations through the IGUCA provisions that I mentioned a few minutes ago. The GMD would like to find a way to do it through another process, so we're working with them on that.

I would note for the record again that in regard to some of the Republican River matters, that Kansas submitted a motion for leave to file a petition and brief in support with the U.S. Supreme Court regarding Nebraska's noncompliance during water-short year 2006.

This was among the disputes that the -- that were submitted to the RRCA in early 2008, submitted to nonbinding arbitration in late 2008, and that were concluded -- and that arbitration was concluded in August of 2009. Kansas submitted its motion on May 3, 2010. Nebraska and Colorado replied in early July 2010.

As of this meeting, it's my understanding that there has been no word from the Court as to whether

it intends to take the case. Presumably, the Court will make that determination later this year or possibly next year.

The Supreme Court motion was submitted under Kansas v. Nebraska, Colorado, No. 106 Original -- 126, excuse me. The Supreme Court motion was submitted under Kansas v. Nebraska, Colorado, No. 126 Original.

Later this year, the States will conclude two more arbitrations. There's some reference to that in Mr. Dunnigan's report. The first arbitration concerned Nebraska's augmentation proposal, and the second, Nebraska's crediting proposal.

As you will recall, both proposals were voted upon by the RRCA in Lincoln. The RRCA did not adopt either proposal. Consequently, both Colorado and Nebraska initiated nonbinding arbitration proceedings pursuant to the FSS.

The States retained Ms. Martha Pagel as partner -- a partner in Schwabe, Williamson & Wyatt of Portland, Oregon to arbitrate both disputes.

On May 5, 2010, Arbitrator Pagel heard oral arguments in Portland regarding legal motions filed by the states. She ruled on those motions on May 17, 2010.

The States concluded -- conducted limited discovery in June and July. The arbitration trials for

both disputes were held in the federal courthouse in Kansas City, Kansas. The Arbitrator Pagel heard the evidence in the Colorado Pipeline Compliance dispute in July -- on July 12 and 13 and in the Nebraska crediting proposal on July 14.

The States filed post trial briefs for the Arbitrator Pagel on July 30, 2010. She will issue a final decision on both disputes not later than September 30, 2010.

The States will have until November 1, 2010 to give notice if the arbitrator's decision is acceptable or rejected.

I guess I'd like to give a bit of a response to you-all's reports. First, in regard to Mr. Dunnigan's report, I guess Kansas agrees that compliance is not an option and is a requirement. I guess we have serious concerns whether the current plan of the Integrated Management Plans will accomplish what you assert in the future and fully address the concerns that we have had.

We just received the two IMPs and are just in the middle of conducting our review. As I understand it, they build on the past IMPs and add new surface water administration during Compact call years and the potential for additional groundwater regulation during

those periods.

As you know, Brian, I and the Kansas experts have reviewed and provided testimonies in the 2009 arbitration on the IMPs -- regarding the second generation of IMPs and found that they have been sufficient during critical periods when this Compact must work and the arbitrator agreed with that.

Again, while we haven't completed any comprehensive review yet, from what we know, we -- serious concerns remain. They don't appear to bring the kind of certainty that Kansas expects with regard to future compliance during, again, the critical periods that this Compact must work.

You know, the IMP pumping reductions start from one of the highest, if not the highest, five-year groundwater pumping periods of record, which is substantially higher than normal. So the IMP's pumping reductions must be viewed in that historic comment -- context.

Irrigation requirements via CREP, while welcome, are not permanent in Nebraska as they are in Colorado and Kansas, and thus will lead to potential problems in the future as some of that may come back to irrigation.

From everything we know about the future,

Nebraska's groundwater depletions will continue to go up even under these IMPs, at least I haven't seen anything that says that that increasing trend is going to be reversed.

There are a number of procedural and legal concerns I think that we have in our review to date. I guess I'll leave it at that.

Kansas sees Nebraska's current compliance to be significantly influenced by the wet hydrology of the recent years. And we know, I think all, that one day it will turn dry again, and with higher depletions, more problems will result.

With all that being said, we do recognize that Nebraska is seeking to find a solution to the problem. And, you know, also, Dick, in your report, we recognize that Colorado as well is taking -- you know, working to find a solution to its compliance problems, and Kansas will continue to work with both of you States to address these issues and concerns.

So, with that, I'll conclude my statement.

COMMISSIONER WOLFE: All right. Thank you, Commissioner Barfield, for your report.

At this time, we're to Agenda Item 5 on the Federal Reports. With the Bureau of Reclamation, it's my understanding, Marv Swanda, are you going to do the

Bureau report?

MR. SWANDA: Yes.

COMMISSIONER WOLFE: All right. Please come forward and we'll get you a microphone so we can all hear. Ms. Sullivan has got it here.

MR. SWANDA: Thank you.

My name is Marv Swanda, S-W-A-N-D-A. I am the McCook office manager of Bureau of Reclamation in McCook, Nebraska.

As usual, we've prepared a report on all of the federal reservoirs, and I think I set a few of the copies up there for your use.

I'd like to just quickly go through kind of our 2009 operations and where we are currently in 2010. In 2009, precipitation at the Republican River and our reservoirs varied from 78 percent of normal in Lovewell to 136 percent of normal in Swanson Lake.

Inflows varied from 51 percent of the most probable at Enders to 118 percent of the most probable at Harry Strunk.

Our irrigation districts that we supplied water to ranged from zero inches at H&RW to 6 1/2 inches at Kansas Bostwick.

At each particular reservoir, Bonny in 2009, the annual presip total of 26 inches was about

155 percent of normal and the greatest ever recorded at the dam.

The annual computed inflow of 11,700 acre-feet for Bonny was very close to the normal-year forecast.

River releases were made during the months of May, June and December in accordance with the orders of the State of Colorado for Republican River Compact compliance. A total of 3361 acre-feet of river outflow was recorded for that purpose.

At Enders, the annual presip flow of just over 29 inches at Enders is well above normal, about 156 percent, and the greatest ever recorded for that site.

The reservoir level began the year at about 21 feet below the top of conservation. Due to the extremely low water supply, no water was released from Enders in 2009.

At Swanson Lake, the annual presip total was just over 27 inches at Trenton Dam, which is 136 percent of normal. The inflow of just over 37,000 to Swanson was slightly above the normal-year forecast.

Irrigation diversions were made into the Meeker-Driftwood Canal for the Frenchman-Cambridge Irrigation District, and that was the first time since

2002.

Hugh Butler Lake, the annual presip total of about 24 inches at Red Willow Dam was 122 percent of normal. The reservoir level peaked just 4 1/2 feet below full on June 26, and we did irrigate out of there to the Red Willow Canal.

And due to a discovery of cracking in the embankment in late October, resulted in Reclamation evacuated 21,000 acre-feet of storage from Hugh Butler Lake.

Now I'll kind of finish up my report with the current status of our safety of dams activities out there.

At Harry Strunk, the annual presip total was about 29 inches at Medicine Creek, which is 140 percent of normal, the second highest ever recorded at the dam.

The reservoir level at the beginning of 2009 was just less than a foot below the top of conservation, and we held that to half a foot down, as we normally do through the winter months. And the reservoir was allowed to fill on up in late April and gradually increased over one foot into the flood pool prior to irrigation.

Late fall and early winter inflows

increased the level of Harry Strunk back to that half foot below the top of conservation at the end of the year.

Keith Sebelius Lake, the annual presip at Norton Dam totaled 32 inches, which is 131 percent of normal. Irrigation releases were made during July for the Almena Irrigation District.

At Harlan County, the 2009 inflow, just over 136,000 acre-feet, was between the normal- and wet-year forecasts. Harlan County began in 2009, less than a half a foot below the top of conservation. Flood releases were made during the first three months of the year, and the reservoir elevation finished about half a foot in the flood pool at the end of 2009.

For Lovewell, the 2009 presip at the dam totaled 21 inches, which was 78 percent of the normal. The reservoir elevation at the beginning of 2009 was just a half a foot -- 1 1/2 foot below the top of conservation, and the pool level increased, filling conservation space in March.

Current operations at our reservoirs: At Bonny Reservoir, the reservoir level is 18 feet below the top of conservation. Bonny recorded -- it was recorded about 11 inches of presip there in the first six months of the year, which is 124 percent of average.

The reservoir inflow for the period is the greatest since 2001, but only half of the historic average. Releases have been made into Hale Ditch and also for Compact compliance. This year, the reservoir level is 2 1/2 feet higher than it was at this time last year.

Swanson Lake is currently 9 feet from full and is approximately 4 feet higher than last year at this time. Frenchman-Cambridge Irrigation District is again irrigating from Swanson Lake for the second year since 2002.

Enders Reservoir is currently 20 feet below full. Due to the water supply shortage, H&RW Irrigation District is not irrigating for the ninth year in a row. This is the seventh consecutive year that Frenchman-Valley Irrigation District will not receive storage from the reservoir.

Hugh Butler Lake, as indicated, we're 28 feet below full. We have received 15 inches, or a little more than that, about 156 percent of normal presip out there.

Harry Strunk, currently, near top of conservation, intending to make releases for Cambridge Canal for Frenchman-Cambridge Irrigation District. The precip at the dam in the first six months is about

133 percent of normal.

Keith Sebelius, currently we're 6 foot below full. There were some limited irrigation releases made this summer. Presip at the dam during the first six months was 19 inches, which is 153 percent of normal.

Harlan County, current water surface level is just about conservation pool, still a little bit into the flood pool. We did indicate that this is not a water shortage year, again, to the RRCA.

And Lovewell recorded about 18 inches of presip during the first six months of the year, 133 percent of average. Irrigation releases continue out of there.

And I'd just like to touch on just a couple of safety-of-dams issues. Norton Dam, we have finished up the safety-of-dams work there that began in 2007. That was completed in 2009.

Enders Dam, we -- a small depression was discovered in 2004, and we are continuing to work on that. And we hope to install a permanent groundwater control system in there this fall to take care of the issues out there.

And in regards to Red Willow, as I indicated, in late October, a sinkhole was discovered.

And then subsequently we found transverse cracking in the embankment, and that resulted in a reservoir restriction that was in our target range of 22 -- 2552 to 2554, which is just above the dead pool, and we continue to maintain that at this time.

In February, our reclamation began, a Corrective Action Study to determine what alternatives we need to address to fix the dam. We have since then narrowed those alternatives down to -- I think it's a number three or so -- and by the fall, we hope to have a preferred alternative, 2010, for what the fix would be at the dam.

We did hold a public meeting in the spring of this year to keep the public informed, and we'll probably have one this fall to update them at that time.

We will be preparing a Modification Report that will be transmitted to Congress and OMB by the spring of 2011 with a potential contract award for mid to late summer of 2011.

So the activities continue out there, and we are on a very tight timeframe to get the preferred alternative determined and continue to move on so that we can again begin storing water at some point.

And I'll just mention there are some other items in the report concerning our resource management

activities, that kind of thing.

And as always, historic graphs are at the end of this report, and that will conclude my report.

COMMISSIONER WOLFE: Thank you, Marv.

Commissioners, do you have any questions for Marv?

Fair enough. Thank you, Marv. I appreciate the report.

Next we have Ed Parker with the U.S. Army Corps of Engineers.

Welcome, Ed.

MR. PARKER: Thank you.

Good morning. My name is Edward Parker, P-A-R-K-E-R. I'm the lead hydrologist for the water management sector in the Kansas District of the Corps of Engineers.

I want to thank the Commission for the opportunity to attend your 50th meeting and present my couple of items of interest that I hope you'll find enlightening.

There -- we have, well, two particular projects of interest that we've had dealings with during the past year:

Harlan County Lake, we did some studies of last spring. We've had some issues with the downstream

channel capacity that I'm sure you're quite aware of. Since the late 1950s, in the past, it was estimated about 4,000 cfs that we could let out of the project without causing any kind of significant downstream damage. By 1967, it dropped to about 3,000. And by 1996, it dropped to about 2,000.

Then from May of '98 through 2007, because of the extended drought and other circumstances, we did not make any significant flow releases out of the project.

And since the condition of the project has lately been more storage than past years, we believe it was a good opportunity to try to determine how much the capacity was now, particularly in lieu of, as Commissioner Barfield mentioned earlier, the anniversary of the 35th -- the '35 flood.

During March, for a period of about two weeks, we let 1,000 cfs out of the project and didn't ascertain any significant damage downstream. And hopefully we can still do it, at least a little bit of additional water out of there, if the need be.

The other issue I'd like to bring up is the Lovewell project on White Rock Creek in Kansas. We have historically allowed some excess storage in the project for irrigation benefit in the bottom couple of feet of

the flood pool.

During the past year, we modified our water control manual, with the approval of our Division Office, to permit during water-short years the formal agreement with the Bureau to store up to 2 feet. And the decision on how much water is allowed is based on the same calculation and consensus operating plan for the shut-off elevation in Harlan County.

Essentially, if it's a water-short year, if the irrigation supply is under 19,000, then we don't allow any excess storage at Lovewell. And between 109,000 and 119,000, we gradually allow up to 2 feet. Anything less than 109,000, we allow the full 2 feet storage, the ideology being during those periods, the need for a flood control pool at Lovewell is less and the need for irrigation is much more, and it helps balance the beneficial purposes.

And that concludes my report.

COMMISSIONER WOLFE: All right. Thank you, Ed.

Commissioners, any questions?

All right. Thank you.

At this time, we'll have the report from John Miller with the U.S. Geological Survey. And I know you're getting the PowerPoint set up, so if you want to

go ahead, John.

MR. MILLER: Okay. Thank you.

COMMISSIONER WOLFE: If you can get the lights up in front, whoever remembers how we did it yesterday, to turn those off. Thank you.

MR. MILLER: There is a packet that I have provided for each of the Commissioners containing the annual data report published by the U.S. Geological Survey, and also all of the graphs that will be presented in the presentation today.

Well, we had this going here just a little while ago.

Okay. So today I'm going to present the annual mean discharge data for 15 sites in the Republican River Basin. 10 of the 15 are Compact sites that are funded through the USGS NSIP program.

This first slide is a handout that is available to everybody. I think there's a stack up here, possibly a stack in the back, representing the '09 annual mean discharge as it compares to the period of record.

As I just stated, the first ten sites we'll go through are the Compact sites that are operated by the USGS through the NSIP program. We'll be starting with the upper end of the basin, Nebraska.

The first site is the Arikaree River at Haigler. It receives returns from the Haigler Canal that diverts upstream to the North Fork. The North Fork Republican River has influences through the spring and summer months on the flows there.

The graphs kind of speak for themselves. I won't have a whole lot to say, but the annual discharge for this year is down just a little bit as compared to last year.

And then also you can see the trend with the data from the period of record for this site, which goes all the way back to early '30s.

Next site is the North Fork of the Republican River at the Colorado state line. This site -- this was probably reported -- oh, last year, I suppose, but the wilderness site has just recently been redone.

Also, the -- with the help of Dave Keeler, this site with discharge measurements has helped us with the record.

Go ahead, next slide.

The flows for the water year '09 are up just a little bit at 33.2 -- sorry, still there? It's still working. Go ahead.

Next slide is the Buffalo Creek near

Haigler, Nebraska. Go ahead and toggle to the graph there. The annual flow was up just a little bit from last year at 3.37.

Also, you'll notice that they are ranked, and that is on the handout as far as how it compares with each of the previous years. And all of the sites that I'll be reporting on today are within the top 10 lowest for the period of record for the annual mean discharge.

Okay. Go ahead.

The Rock Creek at Parks gage. Go ahead. Flows are down. They are fairly static from last year.

South Fork of the Republican River near Benkelman gage. That was a picture of a dry channel that's now been wet, I think, for just about a solid -- a solid year now. The -- it's been -- it was reported earlier, the flows are up at the South Fork. The mean -- annual mean discharge there, which is 10.1, ranking 11th there.

Frenchman Creek at Culbertson, Nebraska, down slightly from last year. It had some fairly significant peaks go through there the previous two years.

Next slide. Driftwood Creek near McCook, Nebraska. Annual mean down just a little bit from last

year.

And then next slide is the Red Willow Creek near Red Willow.

And then Sapa Creek near Stamford. Continued slight trend upward there.

And then the last slide that -- within the Compact, the Courtland Canal, Nebraska-Kansas State Line. And the discharge there was 48.4, up slightly from last year.

Okay. Continuing on, three sites that are possibly of interest that are operated by the USGS in Nebraska, with matching funds from state and local agencies: First site there is Republican River at McCook. Flows there are down just a little bit from last year, annual mean flow of 42.7.

The next site would be Republican River near Orleans. And the annual flow down just a little bit again. The previous two years is fairly significant peaks and the early spring rate, winter period.

And the last site, Republican River at Stratton, up slightly from last year.

Then there's two other sites that have possible interest. They are -- the field operations are conducted by the Nebraska Department of Resources, Natural Resources.

The first site would be Frenchman Creek at Palisade. The flow is fairly static from the previous year, 25.3.

And then the last site, Republican River at Cambridge. It's down slightly from previous water year.

And the final slide that I have is contacts of the managers in the Nebraska District Office in Lincoln.

Thank you.

COMMISSIONER WOLFE: Thank you, John.

Commissioners, any questions of John?

All right. Thank you for the lights.

We're moving through our agenda fairly well. I think at this time it would be appropriate to take a break. If we could all reconvene in about 15 minutes. There's refreshments in the back and -- does that work for the Commissioners, about a 15-minute break?

All right. Let's do that then.

(Recess taken from 10:20 a.m. until 10:39 a.m.)

COMMISSIONER WOLFE: At this time, we're on to Agenda Item 6, Committee Reports. The first one is the Engineering Committee Report by Megan Sullivan.

MS. SULLIVAN: Thank you, Commissioner.

At the August 12, 2009 annual meeting of the Republican River Compact Administration, the Commissioners assigned the Engineering Committee nine tasks. The Engineering Committee and technical representatives from the States of Colorado, Kansas and Nebraska participated in several collaborative work activities and phone conferences in relation to this -- in relation to these assignments and other issues.

The following assignments and work activities were completed:

First assignment was to complete the user's manual for accounting procedures and provide a resolution for its adoption. 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 for next year.

Second assignment was to complete the exchange of data requested by Kansas in its August 1, 2008 and July 17, 2009 letters by October 1, 2009. Nebraska provided the data they had available. The remaining portion of the data request is retained in the NRD records. Nebraska believes this remaining data is not required under the Final Settlement Stipulation.

Colorado meter data was not completed. The best available data will be provided to Kansas and

Nebraska by October 15, 2010.

But their assignment was to exchange by April 15, 2010 the information listed in Section V, or Roman Numeral V, of the RRCA Accounting Procedures and Reporting Requirements and any other data required by that document. By July 15, 2010, the States will exchange any updates to this data.

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 website he maintains for the Administration.

The States exchanged their available final data by August 6, 2010. Willem Schreuder of Principia Mathematica will complete a run based on this data at a later date.

Final accounting for 2009 was not completed. However, 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 2009.

The fourth assignment was to continue to review Colorado's augmentation proposal, as appropriate.

This proposal is the subject of an arbitration process. No additional information was discussed by the Committee.

The fifth assignment was to continue efforts to resolve concerns relating -- sorry -- related to varying methods of estimating groundwater and surface water irrigation recharge and return flows within the Republican River Basin and related issues. Within 90 days, the States will exchange information and the Engineering Committee will meet to recommend the next steps.

Each state performed a cursory review of their respective engineering repositories for published studies or information pertaining to groundwater irrigation recharge. Neither Nebraska nor Colorado found any pertinent information. Kansas assembled a bibliography of the possible studies and information. However, no additional progress was made on this assignment.

Sixth assignment was to develop a revision to the RRCA's Accounting Procedures to reflect agreements by the RRCA at its 2008 and 2009 annual meetings and provide the Administration with a recommendation of any appropriate formatting changes.

A revised accounting procedure was drafted

to reflect changes to both the Frenchman sub-basin and the Mainstem formulas pertaining to the return flows from the Riverside Canal.

Seventh task was to retain Principia Mathematica to perform ongoing maintenance of the groundwater model and periodic updates requested by the Engineering Committee. Each State has separately contracted with Principia Mathematica for this task.

Number 8 is to continue the development of a five-year accounting spreadsheet/database for adoption at the 2010 annual meeting earlier. And this is -- excuse me -- this assignment was not completed, and the assignment should be continued for next year.

And the ninth assignment was to review accounting procedures to determine if Kansas groundwater calculated beneficial consumptive use, or CBCU, in the Mainstem is properly included in the Mainstem Virgin Water Supply calculation and if necessary, provide a recommendation to the Administration at the next annual meeting.

Based on a review of the accounting procedures, the Engineering Committee confirmed that Kansas groundwater CBCU was missing from the Mainstem Virgin Water Supply calculations. The accounting procedures were revised to reflect the inclusion of this

CBCU element in the Mainstem formula, and the Engineering Committee recommends adoption of this change.

The Committee recommendations to the Administration is: The Committee recommends the adoption of the revisions to the Accounting Procedures that reflect the changes to the Frenchman and Mainstem sub-basin formulas for the return flows of the Riverside Canal and the change to the Mainstem sub-basin formula to include Kansas groundwater CBCU, as described in Attachment A.

The Committee also recommends the adoption of the proposal to relocate the accounting point used in the RRCA groundwater model for the North Fork Republican River sub-basin to the Kansas-Nebraska state line in accordance with Article III of the Compact, as discussed in Attachment B.

In addition, the Engineering Committee discussed the use of provisional USGS, or U.S. Geological Survey, data for the Courtland Canal, Station 06852500, as opposed to U.S. Bureau of Reclamation data for the same gage. It is the Committee's recommendation to use the USGS data.

At this time, I believe -- excuse me, I need to look at the agenda -- we have some other

matters.

Jim, you have something you would like to discuss?

COMMISSIONER WOLFE: Could I just make a quick clarification? This may have been just been a misstatement.

In your second recommendation, I thought you said that the -- this accounting point would be moved to the Kansas-Nebraska state line. Is that the Colorado?

MS. SULLIVAN: It should be the Colorado-Nebraska state line. I apologize.

COMMISSIONER WOLFE: All right. Thank you. Mr. Schneider?

MR. SCHNEIDER: Thank you, Mr. Chairman.

I would -- at this point, I would like to address the comments made by the State of Kansas earlier regarding Nebraska's revised IMPs from an engineering and scientific standpoint.

I would like to point out that the Department of Natural Resources has worked collaboratively with the IMPs over the last year and spent literary thousands of hours and conducted very extensive analyses, including tens of thousands of model runs and other numerous analyses in order to conclude

that the process that we have laid out within these IMPs will indeed ensure Compact compliance for the State of Nebraska during all climatic conditions, including dry conditions.

And I would stress that we've been struggling with a lot of technically careless and uninformed opinions that are being put out in the open about these IMPs, and I would urge the State of Kansas not to make the same mistake and that we would welcome any discussion that the State of Kansas would like to have on that issue.

And certainly the Engineering Committee might be the appropriate forum for us to include that within the -- within discussions as we go forward over the next year.

Thank you.

COMMISSIONER WOLFE: Go ahead, Megan.

MS. SULLIVAN: Okay. Recommended assignments for the coming year for the Engineering Committee:

First, finalize the work on the 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.

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.

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

Fourth assignment: Retain Principia Mathematica to perform ongoing maintenance of the groundwater model and periodic updates as requested by the Engineering Committee for the 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 one-third amounts to the States of Colorado, Kansas and Nebraska respectively.

Fifth assignment: Continue development of a five-year accounting spreadsheet/database for adoption at the 2011 annual meeting or earlier.

No. 6: Continue to review Colorado's augmentation proposal, as appropriate.

No. 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 Final Settlement Stipulation.

No. 8: By October 15, 2010, the Engineering Committee will meet to discuss issues preventing agreement on final accounting for the years 2006 through 2009.

No. 9: Discuss water short year accounting for Beaver Creek.

And No. 10: Discuss and resolve the issue of missing precipitation data.

And that concludes the report of the Engineering Committee.

COMMISSIONER WOLFE: Are there any questions for Ms. Sullivan at this time in regards to the report of the Engineering Committee?

All right. So is that all there is to report for now for the Engineering Committee?

Are we ready to move on to the Conservation Committee? All right. At this time, we'll have Scott Guenthner come up and give us a report on the Conservation Committee. We have a microphone you can use there.

MR. GUENTHNER: For the record, I'm Scott Guenthner. I'm with the Bureau of Reclamation out of our regional office in Billings.

I'm here today, however, to report on the status on behalf of the Conservation Committee. The study of non-federal reservoirs and terraces on -- the effect of those on water supply, that's being conducted according to a study plan approved by the Compact Administration at their annual meeting in 2004.

The study has been conducted substantially in accordance with that study plan. We have, however, added two significant work elements to that that we didn't expect. That was the terrace condition survey and the mapping of terrace lands in Kansas. We didn't envision doing that, those two elements.

We have previously reported to you in previous meetings the status reports, that that was being done, so we won't go into details today on that.

The study essentially utilizes a water balance model to estimate impacts of reservoirs and terraces. We've also reported on that previously.

There are basically three elements to that water balance model. There's input data that we've collected in the past six years. That element is essentially complete.

There is the water balance modeling aspect. I'd have to report today that there is a lot of that work done, although I don't think we can say it is

complete. We've done a lot of work that identifies the impact of reservoirs and terraces in the field.

The element that is missing is that impact has not been transferred to each -- to the mouth of each designated sub-basin. That is yet to be completed, and part of that has to do with identifying and summarizing all the land use information and practices in a particular basin. That work is presently underway. That's part of the post processing of the model results that we have been talking about.

We did transmit to the Compact Administration a brief report last week. It's an eight-page document. It really is -- gives examples of some of the results to date. We'd be willing to work with the state representatives on the Conservation Committee and get that report posted to a website so that it is available for others to look at.

Right now, the report has only been transferred to the Compact Administration and to the members of the Conservation Committee. So we can make that report available.

I noticed from our discussion yesterday that there were a few minor errors in the report. I think we would choose to correct those before we get it posted to a website.

In more administrative type of things related to the study, the Final Settlement Stipulation indicated that the study costs should not exceed a million dollars. The States were to be responsible for 250,000 of that, and the other were to be federal funds that come through the Bureau of Reclamation.

From our summary of those costs, collectively, the three States have exceed the 250,000 that was identified in the Settlement Stipulation and study costs have exceeded the $1 million, mostly due to the two elements of work that we added that I mentioned earlier.

I would expect that there would be some additional costs due to in-kind services from the State by participating in some conference calls and other meetings this fall. I think it's the hope of the Conservation Committee that we would have our results finalized this fall. I am not sure if that's a doable thing or not, but that's what our goal is.

One last element: The Conservation Committee does intend to document the findings of the report. We've been issuing these status reports, and I think we'll continue to do that.

I know that Dr. Derrel Martin and Jim Koelliker, here today, they're the principal

investigators. I know they have plans for professional papers that will document the study.

In addition to that, we will probably have some sort of concluding report from the Conservation Committee.

That concludes my report for today.

COMMISSIONER WOLFE: All right. Thank you, Scott. Appreciate that and your efforts of the Committee as well.

Commissioners, any questions at this time?

COMMISSIONER DUNNIGAN: No.

COMMISSIONER BARFIELD: Just one -- just one comment. These microphones are giving us trouble, aren't they?

I appreciate your report. I appreciate the hard work. Obviously, I do think there does need to be a final report, and I appreciate the Bureau and study lead wanting time to finish it up properly and -- but obviously the FSS requires the completion. And I think a final report is consistent with that, and I'd urge you to get it done as quick as you can. I know Dr. Koelliker wants to retire, so -- but that's all I have.

COMMISSIONER WOLFE: I understood, talking to him yesterday, that he was going to make this his

retirement project, so -- anyway, we do appreciate your efforts on that and look forward to a final report. Thank you.

At this time, we'll move on in the agenda to Item 7, Old Business. We've already discussed the dispute resolution. I have nothing more to add. I think Commissioner Barfield did an excellent job describing the status of the current dispute resolution process.

In regards to Agenda Item 7(b), Status of the 2006, '7, and '8 Final Accounting, I think that has been reported on, discussed as part of the Engineering Committee Report as well.

There are some outstanding issues that are under consideration by the Committee and the Commissioners to reach final resolution on that and ultimately seek approval of the final accounting. So it's just a mere reflection in the record that we want to keep tabs on the status of those particular years that had not had their final accounting approved.

I don't know if you Commissioners, you had anything you wanted to add to that specifically at this time?

COMMISSIONER BARFIELD: No. We -- just to report, we had significant discussions on this in the

work session last night, and I think we all want to get to agreement on the inputs especially as quick as possible and identify what remains to get to the agreement on the accounting.

So we'll work -- work hard to get that done, best as we can, this fall. So we don't keep piling them up one after the other.

COMMISSIONER WOLFE: Yeah. I think there was some confusion there about the process. There may have been some approval of the input data and approval aspects of changes in models and things that we have coming under consideration resolutions.

But here we're ultimately talking about after those processes, to have final accounting done with all of those changes approved and input data approved as part of that process.

Agenda Item 7(c), Mr. Burke Griggs, did you want to give us an update on that, please.

MR. GRIGGS: Thank you.

This is a brief report from the Ad Hoc Legal Committee. The Administration formed the Ad Hoc Legal Committee to resolve the issue of the approval of the diversion of water from one state that is used in another state.

Having considered the issue and concluded

that there is no clear legal resolution of it, the Ad Hoc Legal Committee has decided not to pursue it any further.

COMMISSIONER WOLFE: Thank you for that reporting.

Any questions for Mr. Griggs?

All right. At this time, we're on Agenda Item 7(d), the Status of the Lower Republican River Feasibility Study.

Commissioner Barfield?

COMMISSIONER BARFIELD: Yes.

The Bureau did have a bit of a statement on this in their report. The Lower Republican Feasibility Study is a follow-up to the prior study that was conducted after the FSS was concluded by the States of Nebraska, Kansas and Bureau of Reclamation that looks at alternatives for improved management in the Lower Basin, including alternatives like raising Lovewell, improving efficiencies in the canal systems, looked at other storage sites in Kansas and Nebraska in the lower part of the Basin.

As reported last year, that study, the follow-up study on the feasibility study that looks at the most promising alternatives in greater detail has now been authorized by Congress. That's the first step.

We are awaiting the Federal Government to fund their share. It's a 50/50 cost share between the Federal Government and the two States, and we will continue to work with our Federal Congressional representatives to seek to secure that funding, is the -- really, the current status.

COMMISSIONER WOLFE: Commissioner Dunnigan, questions?

COMMISSIONER DUNNIGAN: Thank you.

We had discussed this issue earlier this year also, and at that particular point in time, I stated that Nebraska stands ready to support the appraisal -- or the feasibility study with funding when the Federal funding comes.

COMMISSIONER WOLFE: All right. Thank you for that update.

At this point, we're on to Agenda Item 8, New Business and Assignments to the Compact Committees.

First is the action on the Engineering Committee Report and assignments that Ms. Sullivan had reported to us.

So at this time, I would entertain a motion for approval of the Engineering Committee Report and the respective assignments.

COMMISSIONER DUNNIGAN: So moved.

COMMISSIONER BARFIELD: Second.

COMMISSIONER WOLFE: All right. Any discussion?

COMMISSIONER BARFIELD: So just for clarity, we're receiving or accepting -- or whatever -- the report and essentially assigning to them what they recommended that we assign them; is that right?

COMMISSIONER WOLFE: That's my understanding.

COMMISSIONER DUNNIGAN: Right.

COMMISSIONER BARFIELD: Okay.

COMMISSIONER WOLFE: All right. Discussion?

All those in favor, signify by saying aye.

COMMISSIONER BARFIELD: Aye.

COMMISSIONER DUNNIGAN: Aye.

COMMISSIONER WOLFE: Aye. Any opposed?

Motion approved.

COMMISSIONER BARFIELD: I'm sorry. I guess I would just add one comment on the data issue.

There was a statement in the report that Nebraska doesn't agree that the backup data in the NRDs is required in the FSS. And I guess -- it's stated, I believe, because that's their position.

I guess I'd just like to state that we

believe that the Compact and the FSS require disclosure of underlying data where there's a legitimate need for such. The NRDs have the data.

And we'll be sending a formal request for that data in the near future and maybe a bit of backup as to why we think that is -- is required under the FSS, so I would just note that -- that will happen, so . . .

COMMISSIONER WOLFE: Okay. Any response? Mr. Schneider?

MR. SCHNEIDER: Yeah. Just to clarify, too, that position simply refers to the fact that it seems clear to us that it's not required as part of our regular annual reporting, and that's why we haven't done so. But we would certainly work with Kansas to see if we can accommodate that on a one-time basis as needed.

COMMISSIONER BARFIELD: Okay. We'll work on that.

COMMISSIONER WOLFE: All right. Thank you.

All right. As part of Agenda Item 8(a), as a result of some of the recommendations out of there, there were -- there's a series of steps we need to go through to adopt, ultimately, a couple of resolutions by the Compact Administration regarding the RRCA groundwater model changes and also the RRCA's Accounting Procedures and Reporting Requirements.

And I'll attempt to step us through this with a series of motions and seeking approval by the Commissioners. Ultimately, we'll have to, if this all goes as planned, adopt and approve four motions to get through this process.

The first of these that we need to actually take action on is in regards to a motion to waive the 15-day notice requirement under Rule 13. So that's the first motion that I'd like to entertain for approval by the Compact Administrators.

COMMISSIONER BARFIELD: Are you looking for a so moved?

COMMISSIONER WOLFE: Yes.

COMMISSIONER BARFIELD: Yes. I would move that we waive the 15-day notice requirement of Rule 13 for adoption of the minutes of the rules.

COMMISSIONER WOLFE: All right.

COMMISSIONER DUNNIGAN: Second.

COMMISSIONER WOLFE: Second? All right.

All those in favor, signify by saying aye.

COMMISSIONER DUNNIGAN: Aye.

COMMISSIONER BARFIELD: Aye.

COMMISSIONER WOLFE: Aye. Motion approved.

Second motion for consideration is I would entertain a motion to amend Rule 19 -- 14 -- did I say

13 -- I'm sorry, Amend Rule 14 to reflect today's date for the revisions to the groundwater -- excuse me, revisions to the RRCA groundwater model and accounting procedures if the RRCA accepts the following two resolutions.

COMMISSIONER DUNNIGAN: The model version, is that in that?

COMMISSIONER WOLFE: Yes. The motion would reflect revisions to the RRCA groundwater model, as well as the Accounting Procedures and Reporting Requirements.

COMMISSIONER BARFIELD: So moved. I believe the -- well, let's hear a second.

COMMISSIONER DUNNIGAN: Second.

COMMISSIONER WOLFE: Thank you. Discussion?

COMMISSIONER BARFIELD: I think the dates will be reflected in the following two resolutions that you refer to in the motion.

COMMISSIONER WOLFE: That is correct.

COMMISSIONER BARFIELD: So we'll get specific in the following two resolutions.

COMMISSIONER WOLFE: Yes. That will be reflected in there. And I will -- when we get to those two motions to act on, I will read those respective motions into the record.

COMMISSIONER BARFIELD: All right. For the purposes of the -- those here that aren't familiar with our Rules, Rule 14 essentially adopts the accounting procedures and the groundwater model as our procedures for doing the Compact accounting.

So as we amend those procedures to reflect our agreements, that is, we amend the model to reflect our agreement, we're just adopting the official versions of those two documents. So that's what we're up to here.

COMMISSIONER WOLFE: That is correct. Thank you, Commissioner.

Any other discussion?

All those in favor signify by saying aye.

COMMISSIONER DUNNIGAN: Aye.

COMMISSIONER BARFIELD: Aye.

COMMISSIONER WOLFE: Aye. Motion approved.

Okay. We're going to take each of these next two resolutions separately.

I'll start with the resolution of the report from River Compact Administration changes to the RRCA groundwater model. I'll go ahead and read the resolution as it's drafted, and then I'll make a statement in regard to a motion to approve that resolution.

Whereas, on August 13, 2008, the Republican River Compact Administration accepted the proposal set forth in the Engineering Committee's August 12, 2008 report to move the groundwater model accounting cell at Guide Rock; and whereas the Engineering Committee recommended in its August 12, 2009 and August 12, 2010 reports to move the groundwater accounting point for the North Fork sub-basin to the Colorado-Nebraska state line.

Now, therefore, it is in the resolution of the Republican River Compact Administration to approve and adopt the proposal set forth in Attachment B of the Engineering Committee's August 12, 2010 report, a copy of which is attached as Exhibit A, and to adopt Version 12, S as in Sam, 2, the number 2, of the groundwater model, which reflects these changes.

Approved by the Republican River Compact Administration this 12th day of August, 2010, by the Undersigned Commissioners.

At this time, I would entertain a motion to approve Version 12-S2 of the RRCA groundwater model, and these changes are intended to apply to the accounting years 2009 and on. And it is not currently applicable to unapproved accounting for prior years, and each State reserves its rights as to whether it applies to prior

unapproved accounting.

COMMISSIONER DUNNIGAN: So moved.

COMMISSIONER BARFIELD: Second.

COMMISSIONER WOLFE: All right. Any discussion in regards to the motion?

COMMISSIONER DUNNIGAN: I would just like to state for the record that Nebraska's position going forward will be that as this body identifies an error in accounting procedures or in the groundwater model, that once those errors are identified and agreed to as errors, that they should be incorporated in any accounting that has not been finalized in the past. And that's what we'll continue to discuss with Colorado and Kansas in the future.

COMMISSIONER WOLFE: Okay. Thank you.

Mr. Barfield, any comments?

COMMISSIONER BARFIELD: Not at this time.

COMMISSIONER WOLFE: Okay. Thank you.

All right. All those in favor, signify by saying aye.

COMMISSIONER DUNNIGAN: Aye.

COMMISSIONER BARFIELD: Aye.

COMMISSIONER WOLFE: Aye. Motion approved.

The second and last resolution for consideration today in regards to these motions is in

regards to a resolution to the changes to the RRCA's Accounting Procedures and Reporting Requirements.

Whereas, the Engineering Committee recommended in its August 12, 2010 report to amend the Republican River Compact Administration Accounting Procedures and Reporting Requirements to correct the formulas used to compute the virgin water supply for both Frenchman Creek and the Mainstem so as to properly account for the return flows from the Riverside Canal; and whereas, the Engineering Committee also recommended in its August 12, 2010 report to amend the Republican River Compact Administration Accounting Procedures and Reporting Requirements to include in the formula used to compute the Mainstem Virgin Water Supply the groundwater impacts attributed to Kansas well pumping (GWk) as calculated by the groundwater model.

Now, therefore, it is the resolution of the Republican River Compact Administration to approve and adopt the proposal set forth in the Attachment A of the Engineering Committee's August 12, 2010 report, a copy of which is attached as Exhibit A, and to adopt the Revised Accounting Procedure and Reporting Requirements, dated August 12, 2010, that reflects these corrections.

Approved by the Republican River Compact Administration this 12th day of August, 2010, by the

undersigned Compact Commissioners.

Just as I'm reading that, is that correct that both of these refer to Attachment A? Okay. But it referred to Exhibit A in there. Is that -- both of those refer to Exhibit A? Oh, there's -- okay. I do see that they do reflect separately. Okay. Thank you.

Okay. At this time, I would entertain a motion to approve changes to the RRCA Accounting Procedures and Reporting Requirements, and these changes are intended to apply to accounting years 2009 and on and is not currently applicable to unapproved accounting for prior years, and each State reserves its arguments as to whether it applies to prior unapproved accounting.

COMMISSIONER BARFIELD: So moved.

COMMISSIONER DUNNIGAN: Second.

COMMISSIONER WOLFE: All right. Any discussion in regards to the proposed motion?

Hearing none, all those in favor signify by saying aye.

COMMISSIONER DUNNIGAN: Aye.

COMMISSIONER BARFIELD: Aye.

COMMISSIONER WOLFE: Aye. Motion approved.

Okay. At this time, we're on Agenda Item 8(b) --

COMMISSIONER BARFIELD: Can I just say

something follow-up?

COMMISSIONER WOLFE: Sure.

COMMISSIONER BARFIELD: So who's going to amend the Rules? I mean, we actually -- we've essentially put everything in place, but somebody needs to actually amend it, and then the Compact Administration needs to sign it.

When and how that's going to be -- are we sort of authorizing you-all to put those new things in there, and then you'll pass a resolution around and it will be dated today? Is that the intention?

COMMISSIONER WOLFE: Yeah. We'll take that on and make those changes and circulate those --

COMMISSIONER BARFIELD: Okay.

COMMISSIONER WOLFE: -- to the other two States and the Accounting Procedures as well.

COMMISSIONER BARFIELD: All right.

COMMISSIONER WOLFE: Since we are the hosting State this year and I'll ask Ms. Sullivan, as part of the Engineering Committee, to facilitate that and then she'll work with the Engineering Committee to make sure we've got those there and then circulate them then to the Commissioners.

COMMISSIONER BARFIELD: Okay. Thank you.

COMMISSIONER WOLFE: Thank you for pointing

that out.

Okay. Any other discussion in regards to the report or assignments?

All right. At this time, I'd like to turn it over to Commissioner Barfield in regards to proposed resolution for Mr. Lee Rolfs.

COMMISSIONER BARFIELD: Well, the Administration from time to time recognizes certain individuals that have contributed significantly to the success of the Compact Administration. We always wait until they're gone to do so, for some reason, and Lee Rolfs was an attorney with the Department for 31 years and was a part of the annual meetings of the Compact for most of that career. And anyway, I'd like to read the resolution and then request that we pass it.

It's entitled Resolution of Republican River Compact Administration Honoring Mr. Lee E. Rolfs.

Whereas, Lee E. Rolfs of Topeka, Kansas retired from his position in 2008 as legal counsel to the Division of Water Resources Kansas Department of Agriculture after having served faithfully in the position for over 31 years.

And whereas, in his capacity as legal counsel, Lee has diligently represented the interests of the State of Kansas and its residents of the Republic

River Basin, as well as those of Kansas's other interstate basins.

And whereas, Lee has worked in an exemplary manner throughout his career to cooperate with the States of Colorado and Nebraska in the effective administration of the Republican River Compact and to improve the workings of the Republican River Compact Administration.

And whereas, Lee has played a central role in litigation of Kansas v. Colorado and Nebraska, No. 126 Original, which sought to resolve fundamental disputes concerning the quantification and location of water of the Republican River, as well as other disputes associated with Republican River Compact.

And whereas, Lee played a commensurate leadership role in the settlement of that litigation, working with legal counsel and the technical experts from the other States to achieve the final settlement stipulation of 2003, which produced a more satisfactory resolution of Compact disputes than protracted litigation could have accomplished.

And whereas, Lee's vast knowledge of water law, his positive attitude, his friendly personality, and his congenial temperament have been great assets to the Compact Administration and the State of Kansas, now

therefore, be it hereby resolved that the Republican River Compact Administration does hereby express its sincerest gratitude and appreciation to Lee E. Rolfs for his excellent and dedicated service.

Be it further resolved that the Republican River Compact Administration honor Mr. Rolfs' service by including this resolution and the appropriate dedicatory remarks in the Annual Report for the Compact year of 2009 and hereby instructs the Administration to send copies of this resolution to the Rolfs family and to the Governor of the State of Kansas.

And then it says, Adopted by the Republican River Compact Administration on this 12th day of 2010 at the 50th Annual Meeting of RRCA held in Burlington, Colorado.

So I would move that we sign this resolution.

COMMISSIONER DUNNIGAN: Second.

COMMISSIONER WOLFE: All right. Motion, second. Any discussion?

I'd like to also just express our gratitude as well. I know I did not work for a long period with Mr. Rolfs, but I do concur with the remarks you stated in here and his efforts and his personality and so forth was very beneficial, I think, in seeking cooperative

relationships between the States. So please express our sincerest gratitude, as well, to Mr. Rolfs.

COMMISSIONER BARFIELD: All right. Thank you.

COMMISSIONER WOLFE: All those in favor, signify by saying aye.

COMMISSIONER DUNNIGAN: Aye.

COMMISSIONER BARFIELD: Aye.

COMMISSIONER WOLFE: Aye. Motion approved.

Thank you, Commissioner Barfield, for bringing that forward to the Commissioners.

At this time, we're on to Agenda Item 8(c). This is in regards to a request to dissolve the Ad Hoc Legal Committee.

So at this time, I'd entertain a motion to absolve -- dissolve, excuse me -- attorneys probably understand the nuance there -- dissolve the Ad Hoc Legal Committee as there are no current assignments to that Ad Hoc Committee. So I would at this time entertain that motion.

COMMISSIONER DUNNIGAN: So moved.

COMMISSIONER BARFIELD: Second.

COMMISSIONER WOLFE: All right. Any discussion?

All those in favor, signify by saying aye.

COMMISSIONER DUNNIGAN: Aye.

COMMISSIONER BARFIELD: Aye.

COMMISSIONER WOLFE: Aye. Motion approved.

Thank you to those who are on that Ad Hoc Committee for your advice and recommendations.

At this time, we're on to Agenda Item 9, Remarks from the Public. Do we have anyone here in the audience who would like to address the Commissioners at this time?

Mr. Edgerton. We have a microphone that you can utilize there. Welcome.

MR. EDGERTON: Commissioners, my name is Brad Edgerton. I'm the manager for Frenchman-Cambridge Irrigation District, which serves 45,600 acres with natural flow from the Republican River and Red Willow Creek.

In addition to the natural flow, we have three federal reservoirs that we can call on for storage water when the flow of the river is insufficient to meet our permitted diversion rate.

On July 11, 1951, the State of Nebraska granted the Bureau of Reclamation a storage permit for Trenton Dam totaling 122,800 acre-feet. Eight days later, on July 19, 1951, Frenchman-Cambridge Irrigation District Board of Directors signed a contract with the

Bureau of Reclamation for 91,359 acre-feet of that storage supply.

91,000 acre-feet is equivalent to three irrigation seasons for the 17,000 acres in the Meeker-Driftwood Canal. Colorado is fast approaching that volume of water, which has been illegally diverted from the stream by the terms of the Republican River Compact and the Final Settlement Stipulation.

During this same period, water users in Nebraska responsible for the construction costs of the project under the Meeker-Driftwood Canal had zero water for six consecutive years.

We do appreciate the work Colorado has done towards compliance with the Compact and understand the sacrifice Colorado water users are making to help achieve compliance.

However, Commissioner Wolfe, it's not enough. You need to do more and now. You agreed to a five-year rolling average, not a 15-year average.

In March of 2008, Frenchman-Cambridge Irrigation District petitioned DNR to reevaluate the Republican River Basin as allowed in State Statutes 46-713.2. That petition was denied by DNR.

Frenchman-Cambridge recently appealed Director Dunnigan's decision not to scientifically

evaluate the Republican River Basin. We believe reevaluation will illustrate just how far we have overdeveloped. A sound understanding of the real problem will allow Nebraska to develop reasonable management solutions.

We have always believed that a sustainable supply should be the goal. Minute groundwater is not sustainable. We have said that the upper -- it was said that the Upper Republican NRD lag effect has peaked. I don't believe this. As long as there is base flow in the streams to deplete, those depletions in the upper basin will continue to increase until the streams are dry.

This should be a major concern for this Commission, and I would hope that the work Nebraska has started with the newly formed Republican River Sustainable Task Force would spread into Colorado. We simply cannot use more water than what Mother Nature gives us and expect it to be there for the next generation.

If you think water is not going to be valuable in the future, then we should use it up now. If you think different, then it is your duty as representatives of State Government to protect that resource for all, now and forever.

Thank you.

COMMISSIONER WOLFE: Thank you. Any questions?

Thank you. Any other comments from the audience?

Seeing none, we will continue to move on.

We're on to Agenda Item No. 10, Future Meetings. We had discussed yesterday, in light of some of the items like the status of previous annual reports and meeting reports, having not been completed yet, that having those before us, that we would take those up at a special meeting with other matters that would come before this Administration around the first part of November. We will work amongst ourselves to set a date that's acceptable to everyone to do that and identify which agenda items should be included in that agenda.

Also, we'll have a year from now, again, in August of 2011, the next annual meeting in Colorado. We think we've -- we like the arrangements that we've had here in Burlington. And although we haven't finalized it, I would anticipate that we might have next year's annual meeting, as well, here in Burlington, if that works to everyone's satisfaction. But we'll obviously have to get those dates set and make sure we have a facility like this to conduct that meeting.

So before we adjourn, are there any last comments or remarks from the Commissioners?

COMMISSIONER BARFIELD: Do we want to set a date yet? And I guess I have a question with respect to the date of the annual meeting. It seems like every year we have to write each other.

Okay. Rule No. 9 says: The Republican River Compact shall hold a regular meeting prior to August 1 of each year. And then it says we can waive that if we all agree, and I think every year we've done that.

Are we getting closer to the point where maybe we could not have to move into August to conduct the meeting? I mean, could we do a July meeting, as sort of our Rules envision, or are we still to the point where we can't get the work done in time?

COMMISSIONER WOLFE: And some of you may know the history on this, but I understand part of the reason for going into August is because some of the estimates for some of the accounting stuff isn't done until the end of July. And I don't know if that's what caused this to move into August or not, but that's my understanding of it, so --

COMMISSIONER BARFIELD: Well, I think that's correct, although I think Colorado -- we could do

it earlier, let me just state it that way. And I guess I'm asking -- I know there's some -- you know, it took time to really sort of figure out all the procedures, and I think the extra time was needed.

I guess I'm asking the Administration whether it's still necessary to meet in August? And maybe we don't have to fix a date today. Maybe -- I don't know if you need time to make that determination or not.

You all had certain input, I think, that was -- that the last input was not available until July 1, if I remember right. We're moving to eagle data, but I'm not sure -- and that's county ag statistic data, correct?

COMMISSIONER WOLFE: That's correct.

COMMISSIONER BARFIELD: Well, I guess I would just ask the administration, maybe the Engineering Committee can consider this, if we could move it into July, I think it will be good.

COMMISSIONER WOLFE: From my perspective, I'm not opposed to that. I think if there was some reason that we were holding off because of the availability of data, and if that's not a continuing concern, I have no problem moving it up into July if that works for everyone.

COMMISSIONER DUNNIGAN: Whatever works is fine with Nebraska.

COMMISSIONER WOLFE: Well, I think given the way the Rule reads now, unless we take this action with you, writing these letters to waive that into August, so why don't we try to anticipate that we would conduct this by the end of July next year, and we'll talk amongst ourselves and the Engineering Committee to make sure we're on task to get all of the assignments and data in place and try to set that date as soon as we can and get it on everyone's calendar by the end of July.

COMMISSIONER BARFIELD: All right. Thank you.

COMMISSIONER WOLFE: We'll work on, obviously, the availability of this facility if we indeed go to Burlington again, but I think it's a good suggestion.

COMMISSIONER BARFIELD: I appreciate your hosting and I think it's been a good meeting and very good accommodations and good hosting. Thank you much.

COMMISSIONER WOLFE: Well, maybe we'll fill this entire place next year after the three States approve the Compact Compliance Pipeline, so we'll work on that.

Any other comments? Commissioner Dunnigan?

COMMISSIONER DUNNIGAN: No other comments.

COMMISSIONER WOLFE: All right. At this time, I'd entertain a motion for adjournment.

COMMISSIONER DUNNIGAN: So move.

COMMISSIONER BARFIELD: Second.

COMMISSIONER WOLFE: All those in favor, signify by saying aye.

COMMISSIONER DUNNIGAN: Aye.

COMMISSIONER BARFIELD: Aye.

COMMISSIONER WOLFE: Aye.

We are adjourned. Thank you all much and be safe in your travels back home.

(The meeting adjourned at 11:28 a.m.)