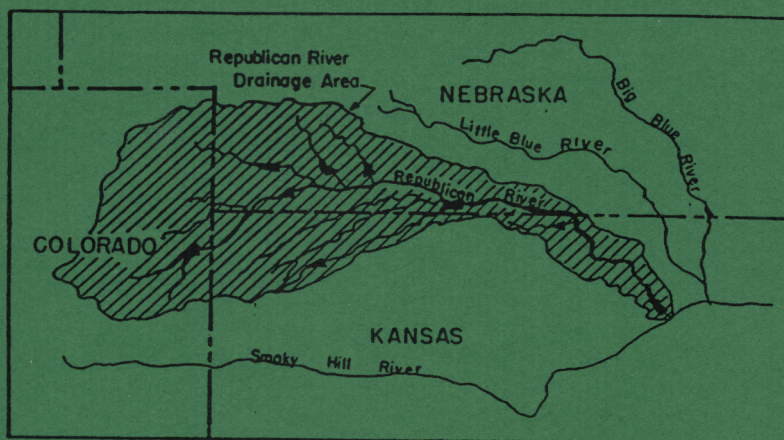




REPUBLICAN RIVER COMPACT ADMINISTRATION

THIRTY-THIRD ANNUAL REPORT



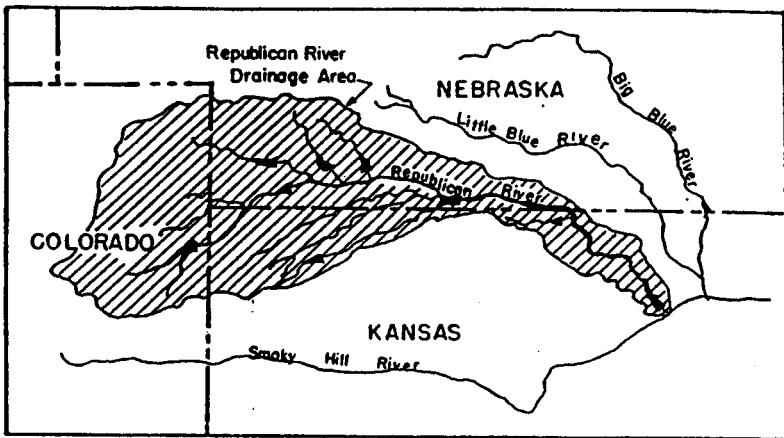
For The Year 1992

Topeka, Kansas

June 10, 1993

REPUBLICAN RIVER COMPACT ADMINISTRATION

THIRTY-THIRD ANNUAL REPORT



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THIRTY-THIRD ANNUAL REPORT
REPUBLICAN RIVER COMPACT ADMINISTRATION

In conformity with the Rules and Regulations of the Republican River Compact Administration, the Thirty-Third Annual Report is submitted as follows:

1. Pursuant to Rule 12, as amended, this report covers the period from July 14, 1992 to June 10, 1993.
2. Members of the Republican River Compact Administration are the officials of each of the states who are charged with the duty of administering the public water supplies and are as follows:

David L. Pope, Chief Engineer-Director, Division of Water Resources, State Board of Agriculture, Kansas

Hal D. Simpson, State Engineer, Colorado

J. Michael Jess, Director, Department of Water Resources, Nebraska
3. The Thirty-Fourth Annual Meeting of the Administration was held on June 10, 1993 at Topeka, Kansas. The minutes of the meeting are included in this report.
4. A report from the Engineering Committee with summary tabulations of the computed annual water supply and consumptive use for the 1992 water year in the Republican River Basin was presented and accepted by the Administration and is included in this report.
5. Reports were received from the Bureau of Reclamation on operation and administration of their projects in the basin of the Republican River.
6. By consensus, David L. Pope, Kansas member of the Administration, served as Chairman from July 14, 1992 to June 10, 1993.

**MINUTES
34TH ANNUAL MEETING
REPUBLICAN RIVER COMPACT ADMINISTRATION**

The meeting was called to order by Chairman Pope at 8:30 a.m., June 10, 1993 in the Board Room of the Kansas State Board of Agriculture, Topeka, Kansas. Those attending were:

<u>Name</u>	<u>Representing</u>	<u>Location</u>
David L. Pope	Kansas Commissioner	Topeka, KS
Hal D. Simpson	Colorado Commissioner	Denver, CO
J. Michael Jess	Nebraska Commissioner	Lincoln, NE
Bob Kutz	U.S. Bureau of Reclamation	Grand Island, NE
Nathan Myers	U.S. Geological Survey	Lawrence, KS
Claude Geiger	U.S. Geological Survey	Lawrence, KS
Jim Goering	Corps of Engineers	Kansas City, KS
Sue Owen	Corps of Engineers	Kansas City, KS
Lee Rolfs	Kansas Div. of Water Resources	Topeka, KS
DeAnn Hupe Seib	Kansas Div. of Water Resources	Topeka, KS
David Barfield	Kansas Div. of Water Resources	Topeka, KS
Scott Ross	Kansas Div. of Water Resources	Stockton, KS
Dale Mahan	Kansas Div. of Water Resources	Topeka, KS
James Bagley	Kansas Div. of Water Resources	Topeka, KS
Kelly Freed	Kansas Div. of Water Resources	Topeka, KS
Stephen Hurst	Kansas Water Office	Topeka, KS
Glen E. Kirk	Kansas Water Office	Topeka, KS
David Leib	Kansas Water Office	Topeka, KS
Kenny Nelson	Kansas-Bostwick Irr. Dist.	Courtland, KS
Wayne Bossert	Groundwater Management District	Colby, KS
Galen Biery	KS Lower Republican BAC	Topeka, KS
Alan Berryman	Colorado Div. of Water Resources	Greeley, CO
Cliff Seigneur	Colorado Atty. General Office	Denver, CO
Ann Bleed	Nebraska Dept. of Water Resources	Lincoln, NE
Russell Oakland	Nebraska Dept. of Water Resources	Lincoln, NE
Don Blankenau	Nebraska Dept. of Water Resources	Lincoln, NE

Chairman Pope asked for introductions of those present.

Approval of Minutes

The minutes of the 33rd Annual Meeting stood as previously circulated, approved, and published in the 32nd annual report. Commissioner Simpson noted that in the 32nd annual report, pages 4 and 5 are identical.

Report of the Chairman - David L. Pope

Chairman Pope reported that weather conditions, in contrast to the last several years, turned wet in Kansas beginning last summer and extending into the winter and spring.

The Kansas legislature approved major amendments to the Kansas' Water Transfer Act. After extensive debate and consideration, both last year and this year, the Bill was passed and amendments will go into effect July 1, 1993. The Act was originally passed in 1983, which allows an extraordinary process to regulate the transfer or movement of large amounts of water from one area of the state to another. The trigger which initiates consideration under this law used to be moving water more than 10 miles in a quantity greater than 1,000 acre-feet per calendar year. Now the trigger will be moving a quantity of 2,000 acre-feet of water per calendar year a distance of 35 miles or more.

Kansas had some changes to the public employee retirement program during the last legislative session of which Jerry Hilmes of the Engineering Committee took advantage and announced his retirement. His last day of work was April 17, 1993.

It was a tight year in terms of agency budgets. Despite this, the Division had some moderate increases and ended up in relatively good shape.

The Republican River basin continues to be an active area for administration. Most of

Kansas in the northwestern portion of the state has been closed to new appropriations, surface water and groundwater, for almost ten years now. There is no change in that status. Permits in the portion of Groundwater Management District No. 4 that is in the Republican basin are granted only on a safe yield basis, but the vast majority of that area is essentially closed to new appropriations. The Groundwater Management District is also considering ways to reduce historic pumpage.

In the basin below the Kansas-Nebraska line there has been a moratorium on new permits for groundwater use in the alluvial aquifer for the last three years. That evaluation has been completed, applications processed, and this area is now considered fully appropriated. The Belleville formation area is also closed to new permits due to the fact that safe yield computations are now applied to new permits. Surface water permits for skimming off high flows are about the only new permits available.

Steve Hurst, Director, Kansas Water Office, reported on a study they are undertaking on depletions to the Republican River between Harlan County Reservoir and Milford Reservoir.

Chairman Pope also mentioned water was available from State Water Plan Funds to allow the Division to implement a sub-basin water management plan.

Chairman Pope reported that until the middle of last summer (1992), due to shortages of water in the Republican basin below the state line, we had a number of users curtailed, both

groundwater and surface water.

Report of the Colorado Commissioner - Hal Simpson

Colorado monitors the mountain snow courses on a monthly basis. This spring the snow pack has increased, as compared to the long-term average statewide. On May 1, the snow pack was 149% of average, with concentrations higher in the southern part of the state and lower in the northern part. Colorado expected flooding, but the cool weather curtailed that. Colorado is still receiving some new snow at higher elevations.

With the help of Colorado's satellite monitoring system, staff graphed hourly streamflow at about 40 key gaging stations throughout the state to monitor flooding potential. These graphs provide continuous hourly hydrograph from mid-May to the current time. These hydrographs show the effects of temperature, rainstorms, and also indicate the channel capacity in that reach to know when the situation was getting serious. The system was well received by everyone, including the Governor.

On the high plains, Colorado had above average precipitation. The wheat crop was looking good until a very bad hail storm hit east of Denver last week.

Water levels in the Ogallala formation are dropping about 1 to 2 feet a year, which is less than projected due to the effects of improved efficiency, economics, and a change in crop types.

They plan to do some 20-year projections on groundwater levels. Dennis Montgomery was appointed head of the Groundwater Commission.

Since becoming State Engineer in August, there has been some reorganization of staff in creating regional teams. These teams will support a field division and work as a team responsible for actions or activities in that basin. It provides for more cross training and flexibility. There is a new branch called the "Technical Support Branch" which will focus on data management, data collection, data quality and modeling. They plan to do more data collection, especially in the area of groundwater pumping. The State Engineer's office plans to bring on two people from the private sector with experience in decision support system technology. Because of Amendment I to Colorado's State Constitution, state salaries are frozen until May 1994. They lost one staff person due to budget cuts.

Regarding new legislation, a bill was passed that allows Colorado to require any gravel pit constructed after 1980 to augment the stream to offset evaporation caused by the groundwater pit. The original fee for that permit was \$350.00, which was insufficient to have consultants do the review. The fee has been raised to \$1,435.00, which will allow Colorado to keep consultants doing the review work.

The Colorado legislature authorized expenditures of \$1.4 million, part of a \$7 million program to develop a decision support system for the Colorado River basin. The system involves extensive data collection, development of models and interfaces in a user-friendly

system, so they can address difficult questions in the Colorado River basin. There are many political and environmental problems involved in exporting water from the West slope to the East slope. Colorado is evaluating the possibility of using 100 MAF of non-tributary groundwater in the Denver Basin for municipal purpose. The bill also included funding of \$350,000 for finalizing the South Platte Water Rights Management Support System which will utilize GIS work station technology, new concepts in data management, and the satellite monitoring system.

The Endangered Species Act is creating interesting problems for Colorado. In the Colorado River basin, Colorado has four endangered fish species. On the Platte River there is the Whooping Crane and other endangered species. Every time a species is listed as endangered, it changes the whole Compact operation. It would be better to try to recover a species before it gets listed, because it's a totally different situation after that. We should try to recover any species in the Republican River basin before they get listed as threatened or endangered.

Report of the Nebraska Commissioner - Mike Jess

Shortly before last year's Compact Meeting, Nebraska began receiving substantial moisture over and above the previous couple of years. Harlan County Reservoir rose during an irrigation month (July-August), when you would normally expect levels to go down.

The groundwater control area in the Upper Republican Natural Resource District made no significant changes in the rules and regulations this past year. The District's Board has adopted a safe yield policy, as opposed to a controlled depletion policy, which limits the number of wells and the amount of water that the wells may pump. This has been challenged in court.

Nebraska legislature adjourned this week after 90 full days. Don Blankenau reported L.B. 131 is a bill that expands the well registration requirement. In Nebraska a great number of wells used for domestic purposes are small capacity and have not been required to be registered. L.B. 131 now requires that they be registered. This has resulted in the Department expanding its staff by a total of 6 new personnel. In the past, Nebraska law hasn't allowed groundwater to be transferred off the overlying land, which created a problem for some golf courses. A bill was passed allowing exports of up to 150 AF annually, but only for industrial purposes.

L.B. 301 is a bill passed by the legislature to allow municipalities to obtain a permit for the purpose of securing a surface water flow to recharge their municipal well field. L.B. 301 allows them to get a permit to regulate those users. In signing that bill, the Governor also created, by executive order, a task force named the Nebraska Water Council. The purpose of this task force is to examine the existing system of water law in Nebraska, both the surface and groundwater, and to determine what sort of policy objectives or laws, if any, should be adopted by the legislature concerning conjunctive use.

Division Supervisor Russ Oaklund, Nebraska Department of Water Resources, reported that restrictions and regulations are already in place for Medicine, Frenchman, and the upper reach of the Republican. It is expected they will remain in effect until the end of August. Restrictions on Red Willow Creek in the lower Republican will probably remain in effect until mid-September. Significant precipitation totals for the Republican River basin in Nebraska diminished the irrigation draw on the reservoirs. The rains were timely during the months of July and August, and canals were able to operate longer than initially scheduled. Water supply was considerably better than anticipated at the onset of the 1992 irrigation season. Oaklund reported that the department investigated and adjudicated the Franklin Pump Canal and the Nebraska-Bostwick District. As a result, 20 acres were cancelled from the Franklin pump and 120 acres from the Nebraska-Courtland.

Report of the Bureau of Reclamation - Bob Kutz

Bob Kutz reported on some administrative changes within the Bureau. They have a new Secretary of Interior, Assistant Secretary, and new Commissioner of Reclamation. Congress passed the Omnibus Water Bill, H.R. 29, which was called Reclamation Project Authorization and Adjustment Act, P.L. 102-575. The bill included reformulation of the Cedar Bluff project to abandon the irrigation district. There was also an increase in the amount of funding available to the Groundwater Recharge Demonstration Act. Kutz also noted current discussions in congress to add a surcharge to water deliveries to fund a natural resources restoration fund.

The Bureau recently awarded the contract for Phase II of the Courtland Canal lining. This will line another 1.3 miles of canal and rebuild about 11,000 feet of canal in the process. The project will begin mid-September.

The precipitation for 1992 was not much above average, but was very timely and almost zeroed out a lot of the irrigation demand of the Republican projects. Frenchman-Cambridge used an average of 9", Nebraska-Bostwick an average of 5", and Kansas-Bostwick about 2". The inflows varied from 58% of normal at Enders to 192% at Keith Sebelius. The inflow to Harlan County lake was 105,893 acre-feet, compared with 67,293 acre-feet in 1991. As a result of the low demand in 1992, and a tremendous inflow during March 1993, almost all of the Bureau's reservoirs are in excellent shape. Frenchman-Cambridge announced a 12" base supply; Enders, a 4-1/2" farm delivery; Almena, 3-1/2"; and the two Bostwick Districts, 13".

There will be an in-depth safety inspection of dams on Red Willow Dam this summer. A guard rail across the spillway bridge at Trenton Dam is almost complete. After completing the guard rail, the Bureau will begin painting the spillway gates. The Bureau needs to replace a short section from the outlet conduit to the gate that puts the water over in the side of the spillway on Bonny Dam. The Bureau will probably be adding more toe drains and installing an early warning system at Bonny reservoir. Enders Dam will probably be adding an additional toe drain also. The Bureau is presently replacing its programmable control system at McCook, which is half complete at this time. They will be reducing staff down to 43 total, with 30 in Grand Island. Mr. Kutz handed out 10-year moving averages of the inflow to all the Bureau

reservoirs in the Republican Basin.

U.S. Corps of Engineers - Sue Owen

Sue Owen, of the U.S. Corps of Engineers, reported on Harlan County Reservoir operations. The Corps had been prepared to draw the reservoir down to an elevation of 1927. to support irrigation. Due to reduced demands in 1992, the lake ended the season at 1931.9. The 1993 plan called for a minimum elevation of 1928.5. With the high spring flows, 138,000 AF is available for irrigation in 1993. The lake is within a half-foot of the top of the multi-purpose pool. The Bureau has sent the Harlan County Reservoir Depletion Analysis out for comment. The Corps is planning public workshops for late July to go over the results of the study. Public hearings may be held in November.

Report of the Engineering Committee

Jim Bagley assumed chairmanship of the Engineering Committee this year, due to the retirement of Jerry Hilmes. Mr. Bagley presented the committee's report with tables 1 and 2 summarizing computations of the virgin water supply, adjusted allocations and consumptive use. Consumptive use for both Kansas and Colorado was below adjusted allocations in all their respective sub-basins. Nebraska was over its adjusted allocations in 6 sub-basins.

Commissioner Simpson encouraged the committee to meet telephonically during the next year.

Commissioner Simpson moved to accept the report. Chairman Pope seconded the motion. Commissioner Jess stated the State of Nebraska took exception to the narrative in the report about Nebraska being above its allocations. Commissioner Jess said everything was fine except the last paragraph on page 1. The Engineering Committee agreed to make some changes that will take out that portion of language that is unacceptable to Commissioner Jess. Chairman Pope moved that the report be received as amended. Commissioner Simpson and Commissioner Jess agreed and the motion passed.

Chairman Pope wished to note for the record that the calculations show that the total consumptive use for each state is below both the original Compact and adjusted allocations. Consumptive use for Kansas and Colorado was below the adjusted allocations in all their respective sub-basins. Nebraska, however, was over its adjusted allocations in six sub-basins: Sappa Creek, Beaver Creek, Medicine Creek, Driftwood Creek, Buffalo Creek, and the South Fork of the Republican River.

Commissioner Jess noted this conclusion could be reached only if groundwater consumptive use is included. Nebraska objects to the inclusion of groundwater. Chairman Pope noted for the record his disagreement with Commissioner Jess' objection.

Chairman Pope moved and Commissioner Simpson seconded the adoption of a resolution honoring and thanking Gerald E. Hilmes for his work on the Compact. The motion passed unanimously.

Chairman Pope requested that a copy of the letter which the Compact Commission sent to the Corps of Engineers regarding Harlan County be appended to the Minutes.

Report of the Special Legal Committee

DeAnn Hupe Seib of Kansas spoke on behalf of the committee. As assigned at the last annual meeting, the Committee had completed an exchange of historical documents among the three states. The exchange was not completed within 90 days of the meeting, however.

The Special Legal Committee tele-conferenced in April of this year and again on May 11th to determine the intent of the Commissioners' resolution. It was agreed that the Legal Committee should report back to the Commissioners on what they had found in the historical documents regarding groundwater's inclusion in the Compact. Kansas volunteered to draft a Legal Committee report. Kansas drafted a memorandum using only those documents in its possession regarding the inclusion of groundwater in the Compact. Copies were furnished to Don Blankenau and Cliff Seigneur prior to the annual meeting. Ms. Seib presented the draft to those attending. The draft concluded that groundwater was included in the Compact.

The Legal Committee asked for guidance as to what type of report will be required from them.

Chairman Pope stated that it has been Kansas' position that it is not a question of whether groundwater is included in the Compact, but it is more a matter of how it is included. Not only do the historical documents that Kansas has seen so far support the fact that groundwater is included, but the actual actions of the administration for many, many years have included groundwater in the formulas and computations. Notwithstanding this, Kansas wished to respond to Nebraska's question raised in the last year or so. So, in good faith, Kansas wanted to dig as deeply as possible in terms of the historic record and see if any documents could be found which might enable us to resolve our differences.

Chairman Pope said it would be useful for the Legal Committee to continue in this process of collecting and analyzing historical documents.

Chairman Pope passed out a resolution labeled Resolution A. The resolution provided the Legal Committee direction on its historical research for the coming year. The discussion that followed centered on what documents should be included in the review. In those exchanges of documents to date Colorado had focus on documents prior to 1954 and Kansas had focus on documents prior to 1960.

Commissioner Jess indicated that he didn't necessarily agree with limiting the Legal

Committee's work in this manner.

The Commissioners discussed the desirability of looking in federal archives in Washington, D.C. and Denver. Bob Kutz indicated he had sent a request to Washington and had submitted what he had found to the Compact. He was confident that there were more documents somewhere.

After discussion, the Resolution was amended as follows:

Based on the language in the Republican River Compact and a review of all available historical documents relating to the negotiation and interpretation of the meaning of the Compact, the Legal Committee shall report on the inclusion of groundwater in the computation of "virgin water supply" and as to the computation of allocations and consumptive use.

The memorandum is to be delivered to the Commissioners no later than May 1, 1994. Should agreement not be reached by the Legal Committee as to the inclusion of groundwater in the Compact as it relates to virgin water supply, allocations and consumptive use by March 1, 1994, each representative on the Legal Committee may submit their own memorandum to the

Commissioners.

Chairman Pope moved for its adoption. Commissioner Simpson seconded. The motion passed.

Chairman Pope passed out a second related resolution identified as Resolution B. After discussion, it was amended to read as follows:

BE IT RESOLVED that each state shall allow access by a representative(s) of each state to all historical documents of the Republican River Compact over which they exert control. The documents shall include those which relate to the original discussions of: 1) a Nebraska and Kansas Compact on the Arikaree and the South Fork of the Republican River; 2) a Nebraska and Colorado Compact on the North Fork of the Republican; 3) the Nebraska, Colorado and Kansas Compacts in the Republican River Basin; and, 4) documents including the Republican River Compact Administration.

BE IT FURTHER RESOLVED that each shall provide copies of the historical documents upon request of each state.

Chairman Pope moved for its adoption. Commissioner Jess seconded. The motion passed.

Chairman Pope passed out a third related resolution labeled as Resolution C. After discussion, it was amended to read as follows:

BE IT RESOLVED that the Engineering Committee shall compile a list of all technical reports known to each state, or easily discoverable by each state, that relate to the Republican River basin surface water hydrology, groundwater geology and hydrology, and interaction between groundwater and surface waters of the Republican River basin.

BE IT FURTHER RESOLVED that the Engineering Committee shall compile the list and provide it to the Commissioners of the Republican River Compact Administration no later than November 1, 1993.

Chairman Pope moved for its adoption. Commissioner Simpson seconded. The motion passed.

Unfinished Business

The first item under unfinished business was Kansas' continued concern regarding administration and enforcement of the Compact. Chairman Pope indicated that Kansas put this

item on the agenda in recognition of Kansas' continued concern for several years about several matters related to the administration and enforcement of the Compact. Kansas still has those concerns and desires progress toward resolving them. Kansas is concerned about consumptive uses of water within the basin as a whole and individual sub-basins. According to the computations of the Compact Administration, there continues to be uses in excess of the Compact allocations. Kansas is concerned about the lack of an effective enforcement mechanism in the Compact. The Compact's procedures are nothing more than an after-the-fact accounting process that do not address Kansas' concerns. These concerns are especially problematic in water-short years. The fundamental trends of over-use are clear. Although it is clear groundwater is included in the Compact, Kansas thinks improvement could be made on how it is accounted for.

Chairman Pope noted that both Kansas and Colorado have taken actions through their own state laws to limit new appropriations of water and things of that nature a number of years ago. Kansas started raising these concerns a number of years ago, beginning in the 1970's. Concerns were raised about what to do about shortages of water that might occur and are occurring. Since the mid-1980's, there have been repeated attempts by Kansas to get these issues resolved. In 1989, Kansas proposed a specific solution, which failed by a vote of 2 to 1, with Nebraska voting no.

Chairman Pope sought to respond to Nebraska's previous comments that Kansas has not used all of its allocations, so it has no cause to complain. Chairman Pope stated he thinks this

is a misunderstanding of the actual situation. Kansas takes the position that compliance with the Compact is required and is an obligation of each state. Kansas believes it is not necessary for it to demonstrate injury. Despite this, Kansas been injured. Over-use of Compact allocations in sub-basins above Harlan County Reservoir translates into depletions of inflow to that project as we have seen in recent years. Since both the Kansas and Nebraska-Bostwick Irrigation Districts rely directly on releases of water from Harlan County for irrigation, these depletions to inflow have resulted in less water being available for delivery to those projects. Less than a full supply of water has also impacted recreation uses in the project. Kansas notes this also translates into less water available for other downstream uses, both in terms of reduced return flows from the Bostwick project and reduced natural flows that would cross the state line, and be available to satisfy Kansas uses downstream of the state line.

Chairman Pope further indicated that while the figures may show that the Kansas Compact allocation is higher than Kansas' use, the use figures do not include all of Kansas' use. The only consumptive water use that is shown for Kansas, below the state line, is that amount of water that is actually diverted above the state line at Guide Rock for use in the Kansas-Bostwick Irrigation District. Chairman Pope stated that the Compact records show that the amount of over-use in Nebraska translates roughly into the amount of shortage being experienced by the Kansas-Bostwick irrigation project in the years 1989, 1990 and 1991. These depletions upstream directly translate into water that is not available to Kansas. Kansas' consumptive use included in the Compact's computations is limited by the water available for diversion. If water is not available for release from Harlan County Reservoir, then it cannot be diverted.

Therefore, in those years, Kansas' actual use is artificially low.

Chairman Pope asked David Barfield to pass out graphics which indicate trends occurring in the Republican River basin. The first, entitled "Total for all Basins, Nebraska Consumptive Use," summarized Nebraska's total consumptive use of both surface water and groundwater as compared to the original Compact allocations and the adjusted allocation. Kansas is concerned about the increasing trend in Nebraska's consumptive use, as compared to the original Compact allocations and the adjusted allocation.

The second chart, entitled "Republican River, all sub-basins, Comparison of States' use and allocation," shows each of the three states' total annual consumptive use versus its original allocations. Kansas' other consumptive uses diverted below the stateline are not included. Each state is obligated to comply with the terms of the Compact. Kansas does not feel this is being done. It is Kansas' opinion there is not only an obligation, but also the authority, provided in the Compact to see that the Compact is complied with.

Chairman Pope concluded these remarks by expressing that Kansas continues to hope that its concerns can be resolved through the auspices of the Republican River Compact Administration. Kansas is frustrated that little or no progress has been made. Kansas again renews its formal request that Nebraska limit its consumptive uses to those within the Compact allocations. Nebraska is liable for its failure to comply with the Compact allocations and, as far as Kansas is concerned, the tab is running. Kansas urges Nebraska to take whatever actions it

deems necessary to comply with its allocations. Groundwater is included in this Compact, according to the procedures that are adopted by the Compact administration. Kansas thinks that is supported by both the historical review so far and the procedures adopted by the Compact Commission. Kansas would like to see some activities take place this next year to try and deal with this issue.

Commissioner Jess reported that Nebraska does not share this view with Kansas. The Compact provides no guidance for allocating water on a daily basis. Nebraska certainly does not know on June 10th, for instance, how much water is supposed to cross from Nebraska into Kansas. The Compact gives us no direction. It essentially tells us to make an annual accounting. In that vein, the Compact makes an annual accounting, and the directions that we give to our Engineering Committee tells him that the water users in Kansas have not seen a situation where there is an inadequate amount of water for Kansas needs.

Commissioner Jess believes that Nebraska has been in full compliance with the Compact. Nebraska is interested in looking for a solution, too. Nebraska does not see that this situation is a continuing problem for Kansas because of non-compliance of Nebraska.

Commissioner Simpson asked if there were deliveries below Harlan County reservoir in both Nebraska and Kansas that rely on that water supply. Chairman Pope stated that there are users in both states below Harlan County that use that reservoir as part of their supply. There is a Nebraska-Bostwick Irrigation District and a Kansas-Bostwick Irrigation District (two

separate districts) both of which have contracts for water supply storage in Harlan county and both rely on that supply.

Commissioner Simpson asked if there were alternative supplies also diverted by those irrigators, wells or surface water. In total supply, is there a shortage? Chairman Pope said there was definitely a shortage. Some of the users do have alternative supplies in the form of wells, but that is not the typical condition for the Kansas Bostwick lands. Many of those lands are not overlying an alluvial aquifer or some other kind of natural system. They are not situated right next to a stream where they can pump directly onto their land.

Mr. Bob Kutz stated that the Kansas & Nebraska-Bostwick districts are totally different organizations and have two totally different contracts. The Kansas-Bostwick supply does not all come from stream flow and Harlan County Reservoir. It also uses some storage water out of Lovewell reservoir. As far as using groundwater to supplement their supply, about all of the irrigators in the Nebraska-Bostwick have the possibility to do that because most all of the District's lands are in the Republican River basin. In the Kansas-Bostwick there is just a small percentage of the acres in the river basin that could have supplemental wells.

Kenny Nelson, Manager, Kansas-Bostwick, stated that he estimated less than 10% of the lands in the Kansas Bostwick have the physical ability to get groundwater and there are no new permits available.

Commissioner Simpson asked how many acres are in each Bostwick district. Mr. Bob Kutz said Nebraska-Bostwick has 22,787 acres and Kansas Bostwick has 41,888 acres.

Commissioner Simpson asked Commissioner Jess if Nebraska irrigators have access to wells and have they tried to drill wells. Commissioner Jess stated that there are wells. Commissioner Simpson asked if Nebraskans can still obtain wells. Commissioner Jess stated it is not a closed area. Chairman Pope asked what had to be done to obtain wells. Commissioner Jess responded that they drill them.

Commissioner Simpson said he agreed with Commissioner Jess that daily administration of this Compact is not practical with so much groundwater use. Commissioner Simpson said he does believe that when consumptive use approaches or exceeds the state's allocation, something should be done to bring it back in line. He noted that the Compact Administration has the authority to promulgate rules and regulations to help with the administration of the Compact, but expressed his belief such efforts would likely be futile until the groundwater issue is resolved.

Commissioner Jess indicated that he has talked to members of the Nebraska legislative committee that concerns itself with water matters. L.B. 301 was discussed by Don Blankenau earlier. Study efforts will be going on this summer by the Nebraska Water Council, which has about 25 members.

Chairman Pope indicated that Kansas does not necessarily feel that it was necessary to have daily administration to address Kansas' concerns. Kansas shares Commissioner Simpson's view that the administration could adopt rules and regulations that could deal with a number of issues, such as shortages. Chairman Pope said that if Colorado or Nebraska are limited to their Compact allocations, then the water not diverted over and above those allocations would have been stored in Harlan County Reservoir in 1991, available for use below the dam. You don't have to have daily administration to get water into the hands of the users which are entitled to it. For example, in 1991 the amount of water that Nebraska over-used above Harlan County Reservoir was almost exactly the same amount as the unfulfilled need in the Kansas-Bostwick. It's hard for Kansas to understand how that type of over-use can be considered compliance with the Compact. There is over-use, and there are demands which are not being satisfied in Kansas.

Don Blankenau inquired whether Kansas had contacted the Natural Resources Districts in Nebraska to discuss its concerns with those entities. Chairman Pope said he was not sure that was Kansas' responsibility to do that. Chairman Pope felt it was Nebraska's responsibility to use whatever mechanism it desired to address concerns. Blankenau urged Kansas to explore this option.

Chairman Pope indicated it was his understanding that states are held responsible not only for themselves, but for all of the people in their systems. In terms of interstate river compacts, a state can't get off the hook by saying, "Go ask someone else." If all upstream states comply

with the Compact, as a natural consequence, the rest of the water ends up in Kansas where it belongs. It is not necessary for Kansas to have used every drop that may have occurred at any point during the year before Nebraska has to do anything. The burden should be on each state to stay within its allocations on an annual basis. Whether those allocations are adjusted annually or not is another question we can discuss. The Compact may not provide specific direction in terms of the daily allocation, but it doesn't necessarily have to. It certainly provides for allocations, and it provides direction in terms that the Commissioners appointed by each state are to administer the terms of the Compact to effectuate its purposes. That's all the direction we really need, other than just good faith and the wherewithal to get it done.

Mr. Bob Kutz of the Bureau stated that, "It is obvious when looking at the archives and the history of this Compact that when it came into being the groundwater withdrawals weren't enough to be considered a significant impact on surface supplies, and they were taken very lightly. You have a changed world. If this Compact doesn't change to take care of that changed world, the courts are going to do it for you. I think you need to look at the Compact itself. I don't see how you can close your eyes to the fact that the definition of virgin water supply in the Compact itself says '...unaffected by the activities of man...' Right there lies your answer, gentlemen. End of statement."

Chairman Pope said he agreed.

Chairman Pope said that Kansas has made a number of attempts to resolve its concerns.

Kansas has laid a proposal on the table. Kansas invited Nebraska and Colorado, if they have ideas or alternatives, to propose them within this next year, at the latest. It would be a lot more efficient and cheaper, and probably more effective, if matters were resolved between the states, rather than taking the time and expense to resolve our concerns in court.

Chairman Pope asked Commissioner Jess if there was anything that the Compact Administration, in the form of a motion, resolution, or other action, could do that would be helpful to encourage Nebraska's committee or legislature in trying to deal with these issues. If an action here, properly drafted, would lend support to this, Chairman Pope would be happy to participate.

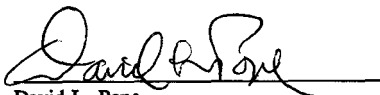
Commissioner Jess thanked Chairman Pope for the offer, but could not think of anything just at that moment.

New Business

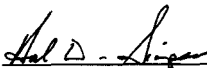
Commissioner Simpson moved the Engineering Committee be given their normal assignment of computing virgin water supply, adjusted allocations, and consumptive uses as they have in the past years. Chairman Pope seconded the motion. The motion passed.

A tentative date for next year's meeting was set for Thursday, June 9, 1994, and will be hosted by Kansas.

Upon motion and a second, the meeting was adjourned at 12:40 p.m.



David L. Pope
Kansas Commissioner (Chairman)



Hal D. Simpson
Colorado Commissioner



I. Michael Jess
Nebraska Commissioner

Report of the Engineering Committee
to the
Republican River Compact Administration
for the
1992 Water Year

The Engineering Committee carried out its assignment to compute the virgin water supply, consumptive use and adjusted allocations by the exchange of data and checking the computations made by the computer program developed by the Engineering Committee. It is noted that Jerry Hilmes, Division of Water Resources, Kansas State Board of Agriculture, resigned his position effective May 17, 1993. As a consequence, James Bagley fulfilled Mr. Hilmes duties for the Engineering Committee for the State of Kansas.


The Engineering Committee completed its normal assignment of computing virgin water supply, consumptive use and adjusted allocations for the 1992 water year. The computations were made using the computer program developed by the Engineering Committee which utilizes the revised formulae approved by the administration in 1990. Data provided by each state for the diversion of water in 1992 were reviewed. Reported groundwater use was included for only those wells producing from the alluvial aquifers.

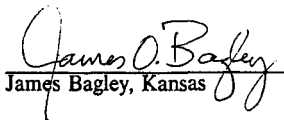
The results of the computations are shown in Tables 1 and 2 attached to this report. Table 1 is a summary of the 1992 computed annual virgin water supply and original and adjusted allocations. Table 2 is a summary of the 1992 computed consumptive use.

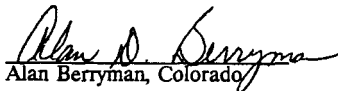
According to the calculations resulting in Tables 1 and 2:

1. The computed annual virgin water for the basin for water year 1992 is 514,650 acre-feet. This is almost 100,000 acre-feet more than 1991 and nearly 36,000 acre-feet more than the original compact virgin water supply.
2. Adjusted allocations were less than or equal to original compact allocations in all sub-basins in each state except for the North Fork and Main Stem of the Republican River in Kansas and Nebraska where the adjusted allocations were larger than the original compact allocations. The adjusted allocation for Colorado was less than the original while the adjusted allocations for Kansas and Nebraska were larger than the original.
3. The computed consumptive use for the basin for water year 1992 was 292,090 acre-feet. This is almost 85,000 acre-feet less than in water year 1991. For calculated consumptive use by subbasin, and for each state, see Table 2.

Respectfully submitted:


Ann Salomon Bleed, Nebraska


James Bagley, Kansas


Alan Berryman, Colorado

Appendix A

Table 1

1992 Computed Annual Virgin Water Supply and
Original and Annual Adjusted Allocations

Sub-basin and the Original Compact Virgin Water Supply	Computed Annual Virgin Water Supply Republican River Basin 1992 (Acre Feet)				Comparison of Original Compact Allocations and 1992 Adjusted Allocation (Acre Feet)							
	Ground Water	Surface Water	Total Basin		Colorado		Kansas		Nebraska		Total Basin	
					Compact Alloc.	Adj. Alloc.	Compact Alloc.	Adj. Alloc.	Compact Alloc.	Adj. Alloc.	Compact Alloc.	Adj. Alloc.
Prairie Dog Cr.	27600	7010	12930	19940			12600	9100	2100	1520	14700	10620
Sappa Cr.	21400	17260	3230	20490			8800	8800	8800	8800	17600	17600
Beaver Cr.	16500	13570	400	13970	3300	2800	6400	5420	6700	5670	16400	13890
Medicine Cr.	50800	4550	31710	36260					4600	3280	4600	3280
Red Willow Cr.	21900	3060	18480	21540					4200	4200	4200	4200
Driftwood Cr.	7300	2480	3580	6060			500	420	1200	1000	1700	1420
Frenchman Rv.	98500	35130	59370	94500					52800	52800	52800	52800
South Fork of the Republican Rv.	57200	10890	28600	39490	25400	17530	23000	15870	800	550	49200	33950
Rock Cr.	11000	0	7790	7790					4400	3120	4400	3120
Buffalo Cr.	7890	1060	3990	5050					2600	1660	2600	1660
Arikarae Rv.	19610	5120	9750	14870	15400	11670	1000	760	3300	2500	19700	14930
N.F. Republican Rv in Colorado	44700	710	33950	34660	10000	7750			11000	8520	21000	16270
N.F. and Main Stem of Republican Rv. incl. Blackwood Cr. in Nebraska*	94500	84460	115570	200030			138000	173860	132000	167050	270000	340910
TOTALS	478900	185300	329350	514650	54100	39750	190300	214230	234500	260670	478900	514650

Table 2

1992 Computed Consumptive Use within the
Republican River Basin (Acre Feet)

Sub-basin	Colorado			Kansas			Nebraska			Total Basin		
	Ground Water	Surface Water	Total	Ground Water	Surface Water	Total	Ground Water	Surface Water	Total	Ground Water	Surface Water	Total
Prairie Dog Cr.				7010	1220	8230 9100 *	1000	200	1200 1520 *	8010	1420	9430 10620
Sappa Cr.				2500	10	2510 8800 *	16150	1260	17410 8800 *	18650	1270	19920 17600
Beaver Cr.	0	0	0 2800 *	3220	20	3240 5420 *	10350	0	10350 5670 *	13570	20	13590 13890
Medicine Cr.							5190	1090	6280 3280 *	5190	1090	6280 3280
Red Willow Cr.							3060	720	3780 4200 *	3060	720	3780 4200
Driftwood Cr.				0	0	0 420 *	2480	0	2480 1000 *	2480	0	2480 1420
Frenchman Rv.							35130	11010	46140 52800 *	35130	11010	46140 52800
South Fork of the Republican Rv.	5100	8000	13100 17530 *	4970	10	4980 15870 *	820	0	820 550 *	10890	8010	18900 33950
Rock Cr.								0	0 3120 *	0	0	0 3120
Buffalo Cr.								1060	640 1700 1660 *	1060	640	1700 1660
Arikaree Rv.	4360	0	4360 11670 *	60	0	60 760 *	700	0	700 2500 *	5120	0	5120 14930
N.F. Republican Rv in Colorado	710	3390	4100 7750 *				0	1510	1510 8520 *	710	4900	5610 16270
N.F. and Main Stem of Republican Rv. incl. Blackwood Cr. in Nebraska*				20	17190	17210 173860 *	81410	60520	141930 167050 *	81430	77710	159140 340910
TOTALS	10170	11390	21560 39750 *	17780	18450	36230 214230 *	157350	76950	234300 260670 *	185300	106790	292090 514650

(* indicates adjusted allocations from Table 1)

RESOLUTION
OF THE
REPUBLICAN RIVER COMPACT ADMINISTRATION

June 10, 1993

to

Gerald E. Hilmes

WHEREAS, Gerald E. Hilmes has worked with other members of the Republican River Compact for over twenty years; and

WHEREAS, Mr. Hilmes' has faithfully carried out his duties as a member of the Engineering Committee and, in turn, as Chair of the Engineering Committee; and

WHEREAS, Mr. Hilmes' dedication to diligently and objectively carrying out assignments to the Engineering Committee and to the correctness of compilations have earned the respect of fellow Committee members and of the full membership of the Compact;

NOW, THEREFORE, BE IT RESOLVED that the Republican River Compact Administration would like to acknowledge its gratitude and appreciation to Gerald E. Hilmes for his service not only to the citizens of the State of Kansas but also, through his work for the Compact, to the citizens of the States of Colorado and Nebraska as well.



David L. Pope, P.E.
Chief Engineer and Chairman
Republican River Compact Administration

ROY ROMER
Governor



JERIS A. DANIELSON
State Engineer

OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES

1313 Sherman Street-Room 818
Denver, Colorado 80203
(303) 866-3581
FAX [303] 866-3589
July 25, 1991

Colonel Wilbur H. Boutin, Jr.
District Engineer, Kansas City District
U.S. Army Corps of Engineers
700 Federal Building
601 East 12th Street
Kansas City, MO 64106-2896



Re: Harlan County Reservoir Operations

Dear Colonel Boutin:

This letter is written pursuant to unanimous action taken by the members of the Republican River Compact Administration on July 19, 1991, in response to the announcement by the Corps not to draw Harlan County Reservoir below elevation 1,929 m.s.l. until certain studies are conducted. All three members of the Administration serve in their capacity by virtue of their responsibilities to administer water rights in their respective states.

The major purposes of the Republican River Compact are to:

"provide for the most efficient use of the waters of the Republican River Basin (hereinafter referred to as the "Basin") for multiple purposes; to provide for an equitable division of such waters; to remove all causes, present and future, which might lead to controversies; to promote interstate comity; to recognize that the most efficient utilization of the waters within the Basin is for beneficial consumptive use; and to promote joint action by the States and the United States in the efficient use of water and the control of destructive floods."

The Compact equitably apportions the waters of the basin and charges the Administration with the duty to administer its provisions.

The announcement by the Corps raises several serious concerns regarding the appropriate role of the U.S. Bureau of Reclamation, which has contracts with the Kansas and Nebraska Bostwick irrigation districts, and the role of the states and the Republican River Compact.

Based upon a review of the documents pertaining to the Bostwick irrigation project, the Corps' decision appears contrary to the project authorization and congressional intent. The Corps' position in effect places the incidental uses of the reservoir above the primary authorized use of conservation storage for irrigation purposes. In this regard, we agree with the conclusions of the Bureau of Reclamation as stated in the letter to you from Robert Kutz dated July 1, 1991. However, our most serious concerns relate to the apparent disregard for the primary role of the states to administer water during periods of shortage in accordance with state water law, project water rights and the provisions of the Republican River Compact. The conclusions listed in Paragraph No. 13 of Appendix A (Statement of Operational Objectives for the Reservoir) to the Field Working Agreement between the Corps and the Bureau of Reclamation entered into April 3, 1957, recognize this responsibility.

It is the opinion of the Administration that the failure of the Corps to release water from the reservoir pursuant to the contract between the irrigation districts and the United States constitutes a violation of the Republican River Compact because it deprives the State of Kansas, and possibly Nebraska, a portion of their allocations under the Compact, with the possible exception of essential short term operations for dam safety.

Accordingly, we strongly request the following action:

1. The Corps should immediately allocate the necessary funds to supplement those committed by the Bureau of Reclamation to repair the dam as soon as possible.
2. Releases of water should be made to lower the reservoir in preparation for the repairs during this irrigation season so as to maximize beneficial use of water pursuant to contract terms and to prevent severe economic hardship. This will allow the riprap to be inspected and repairs to begin as soon as funds are made available.
3. If the Corps feels any further decision is needed regarding the allocation of water from the reservoir for next year or thereafter, it should directly consult the states involved for a decision that is consistent with the views of the states, state water laws and the Republican River Compact.

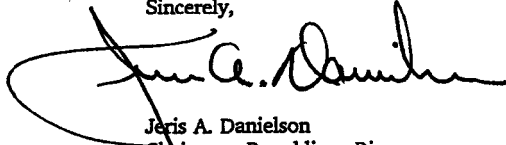
As representatives of the states we recognize the benefits of recreation and other purposes. We would be happy to work with the Federal government and other interested parties to accommodate optimum utilization of the reservoir for multiple purpose benefits. We do not object to the consideration of future changes in reservoir operations so long as they are accomplished consistent with the views of the states and the provisions of the Republican River Compact.

Colonel Wilbur H. Boutin, Jr.
July 25, 1991

Page 3

Thank you very much for your consideration. If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeris A. Danielson". The signature is fluid and cursive, with a large loop at the beginning.

Jeris A. Danielson
Chairman, Republican River
Compact Administration

JAD/pjl

cc: Lt. Gen. Henry J. Hatch, Commander, U.S. Army Corps of Engineers
David L. Pope, Compact Commissioner for Kansas
J. Michael Jess, Compact Commissioner for Nebraska
Robert Kutz, Project Manager, U.S. Bureau of Reclamation