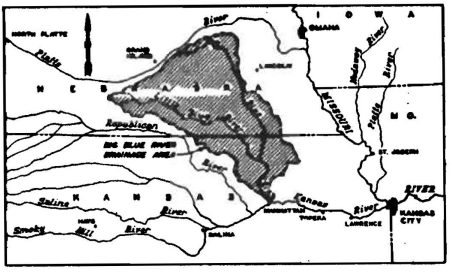
KANSAS-NEBRASKA
BIG BLUE RIVER COMPACT

TWENTY-EIGHTH ANNUAL REPORT



FISCAL 2001

LINCOLN, NEBRASKA
JUNE 6, 2001

KANSAS-NEBRASKA BIG BLUE RIVER

COMPACT ADMINISTRATION

The Honorable George W. Bush
President of the United States

The Honorable William Graves
Governor of Kansas

The Honorable Mike Johanns
Governor of Nebraska

Pursuant to Article VIII, Section 1 of the Rules and Regulations of the Kansas-Nebraska Big Blue River Compact Administration, I submit the Twenty-Seventh Annual Report. The report covers activities of the Administration for Fiscal Year 2001.

Respectfully,

Clayton Lukow
Compact Chairman

TABLE OF CONTENTS

2000-2001 MEMBERSHIP

Representatives of the United States

Clayton Lukow

Kansas Representatives	Nebraska Representatives
David L. Pope, Topeka [1]	Roger K. Patterson, Lincoln [1]
Terry Blaser, Waterville [2]	Kenneth Regier, Aurora [3]

2000-2001 OFFICERS

Clayton Lukow, Chairman
Pam Bonebright, Secretary
Denise Rolfs, Treasurer

2000-2001 COMMITTEES

Budget Committee

Keith Paulsen, Chairperson
Bob Lytle

Engineering Committee

Jeff Shafer, Chairperson
Bob Lytle
Keith Paulsen
Kent Askren

Water Quality Committee

Dale Lambley, Chairperson
Annette Kovar
Glen Kirk
Denis Blank
Pat Rice
Tom Stiles

Legal Committee

Jim Cook, Chairperson
Leland Rolfs

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1 Term continuous but coincides with duties of the state official who administers water law.
2 Term expires April 25, 2004.
3 Term expires September 19, 2001.

MINUTES OF
KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION
TWENTY-EIGHT ANNUAL MEETING

Call to Order

The Kansas-Nebraska Big Blue River Compact Administration annual meeting was held June 6, 2001, in the Conference Room of the Nebraska Department of Natural Resources, Lincoln, Nebraska. The meeting was called to order at 9:00 a.m. by Clayton Lukow, Compact Chairman.

Introductions and Announcements

Introductions of attendees were made. Those in attendance were:

Clayton Lukow	Compact Chairman, Holstein, Nebraska
Roger Patterson	Nebraska Commissioner
David Pope	Kansas Commissioner
Denise Rolfs	Compact Treasurer
Pam Bonebright	Compact Secretary
Kenneth Regier	Nebraska Citizen Representative
Terry Blaser	Kansas Citizen Representative
Keith Paulsen	Nebraska Department of Natural Resources, Lincoln
Jeff Shafer	Nebraska Department of Natural Resources, Lincoln
Jim Cook	Nebraska Department of Natural Resources, Lincoln
Bob Lytle	Kansas Dept. of Agriculture, Topeka
Dale Lambley	Kansas Dept. of Agriculture, Topeka
Bob Joseph	U.S. Geological Survey, Lincoln
Ron Fleecs	General Manager, Lower Big Blue Natural Resources District, Beatrice
Dave Clabaugh	Lower Big Blue Natural Resources District, Beatrice
Craig Romary	Nebraska Department of Agriculture, Lincoln
John Turnbull	General Manager, Upper Big Blue Natural Resources District, York
Mike Onnen	General Manager, Little Blue Natural Resources District
Richard Jiskra	Board Member, Lower Big Blue Natural Resources District
Harold Stokebrand	Board Member, Lower Big Blue Natural Resources District
Annette Kovar	Nebraska Department of Environmental Quality, Lincoln
Pat Rice	Nebraska Department of Environmental Quality, Lincoln
Steve Chick	Natural Resources Conservation Services, Lincoln

Minutes of the 2000 Meeting

Chairman Lukow stated that the minutes for 2000 annual meeting had been reviewed and signed by both states and were distributed prior to the 2001 meeting. There being no additions, corrections or comments, the minutes stood approved as distributed.

Report of the Chairman

Chairman Lukow stated that the agenda had been circulated prior to the meeting and that will stand as circulated.

Chairman Lukow noted what a difference a year makes with regards to the rains in the basin. He also made note of the new administration which would lead to a different focus and possibly different direction with regard to the administration officials in charge of natural resources.

Lukow stated that he believed that the Commissioners in charge of this compact have insisted, as have their staff, on sound science as the basis for their water management decisions and that he hopes that will not change.

Lukow pointed out the exceptional program presented last year by Phil Barnes with the Kansas State University and Tom Stiles with the Kansas Department of Health and Environment, with regards to water quality and the procedures that were used to address water quality issues in the Big Blue Basin.

Nebraska Report

Ron Fleecs from the Lower Big Blue NRD submitted a written report which is included herein as **Exhibit L**. He highlighted portions of the report. In regards to water quality, his district and all districts in Nebraska will be losing a lot of state funding for water quality. The NRDs are going to have to look to determine if water quality is

important enough to increase property tax in order to make up for the state funds being lost. Also the District has what is called a Phase II Ground Water Management Area, 60 square miles, where they are working with the landowners on management practices to try to lower the nitrates. The NRD believes the Buffer Strip program has been very successful. They have 106 contracts involving 725 acres making payments of $32,000. The Big Blue River Compact Well Monitoring program, showed spring levels for 2001 were down about a half a foot from the previous spring. He pointed out that only about 5% of the total basin above Beatrice is controlled by flood control dams. He has informed the Weather Service out of Kansas City about the effects of this flood control because he is concerned that if flood warnings continue to be issued in this area without taking the flood control into consideration people are not going to pay much attention to the warnings. The 180 dams provide about 98,000 acre-feet of flood storage, and that keeps some water out of Tuttle Creek at times. Those dams also have about 27,000 acre-feet of sediment storage behind the structures.

Commissioner Patterson questioned Fleecs about the 6% of basin above Beatrice which has facilities in place to control floods, how is that connected to why the Weather Service missed the flood stage by eight feet? Fleecs states that it depends on where the rain falls. Commissioner Pope questioned how many dams provided the 27,000 acre-feet of sediment storage. Fleecs report it was for the 180 total dams. Pope also questioned the 253 listed at the bottom of the last page of the report. Fleecs reported that included some grade stabilization structures as well. Pope inquired as to how many more total structures are pending. Fleecs stated there are not any pending just what the landowners want to do and what the NRD feel are important. They are concentrating some on Turkey Creek because they don't have much flood control on that portion of the basin. About 34% of the basin is controlled by flood control dams.

Mike Onnen from the Little Blue NRD submitted a written report which is included herein as **Exhibit M**. He highlighted portions of the report. The NRD has a large project pending approval, it covers a drainage area of about 66,700 acres and has five dams identified to be constructed in hopefully four to five years depending on funding. Those structures will provide approximately 2,000 acre-feet of sediment storage and about 5,500 acre-feet of flood storage. He highlighted conservation accomplishments by pointing out that they had 341 acres of buffer strips put in their district. He highlighted wellhead protection activities and indicted those have been very effective in building community relations with their municipalities. They have worked extensively with the cities of Bruning and Fairbury, both of whom have identified wellhead protection areas and are doing some management practices and well closures with them. The City of Fairbury is very key because they are the supplier of water for the rural water system. They are focusing on best management practices and the areas that would impact the water quality of those communities. Rural water project service has been a huge success especially over the Kansas border since Washington County was pretty much devoid of water. Last year they sold about ten million gallons to the Kansas residents.

Onnen pointed out that last year there was a decline in ground water levels, with an average decline for the district of 1.3 feet. He also pointed out that included in the report is a map of static water well locations that are scattered throughout the district.

Commissioner Pope inquired whether the map was showing observation wells or static water level wells? Onnen reported that they are just the observation wells, the 300 or so wells that they look at both in the spring and fall. He stated that they are existing irrigation wells with the exception of two wells, one put in at the research center in 1982 as a supply well for construction and one other well that does not have a pump in it. They are measured around November 1st and April 1st.

John Turnbull submitted the report for the Upper Big Blue NRD (UBB). This written report is included herein as **Exhibit N**. New well drilling has been pretty steady with about a million irrigated acres in the district, the most irrigated acres of any NRD in the state. 14% of the state's total irrigation is in the Upper Big Blue NRD. Ground water measurements had an average decline across nine counties of about 2¼ feet. Ground water levels, based on about 600 well observations, are running about 4½ to 5 feet higher than in 1961. Ground water nitrates continue to go up across the district. Under their soil and water conservation activities they have had a lot of projects. A new program for water use is renozzling of pivots from high pressure to low to medium pressure and cost share for buried line to get people to convert from gravity irrigation systems to pivots. One of the requirements is that they have to show at least a 10% reduction of water use before those applications are approved. Those who receive cost-share money must file water use reports for the following three years. They just reviewed the information that came in through this last winter, about 100 pivots. The average water pumped was eight inches for this last year, which was a dry season. The year before was four inches, which was fairly wet and the prior year was five. There have been 15 gravity systems reported, and those run from about ten inches to one that was 60 inches. Turnbull highlighted the Indian Creek Reservoir Project, this is about four to five years out.

Chairman Lukow indicted that he was pleased to hear about the dramatic decrease in water usage that the pivots make.

Commissioner Patterson continued the Nebraska report. He again reported on the creation of the Department of Natural Resources. He gave a quick update on the Wyoming litigation. He reported that a settlement had been reached by Nebraska, Wyoming and Colorado. The Solicitor General of the United States has also signed off on the settlement. The Special Master had a hearing and received a detailed description of the settlement. He's in the process of drafting his report and he has scheduled a hearing for July 16th, to get any final

information needed. His report will go to the Supreme Court in August and when the Court comes back into session, it would be one of the first things on the docket, and the case could be dismissed.

Commissioner Patterson pointed out that we have a new attorney in the Department, assistant to Jim Cook, his name is Dave Vogler.

The Platte River Cooperative Agreement is still being worked on. The three states and the Department of Interior are developing a program for endangered species recovery. There was a lot of pressure from the Interior to come to closure last year but the planning time has been extended through the summer of 2003.

Some of the legislative highlights were then reported. The Department had six bills in the water and natural resource area that made it through the legislature by May 31st, which is when they adjourned. The Governor signed several bills. One of the bills involved a change in how water quality funding for the NRDs is being provided. Patterson stated this is an interim solution at best. It was something that was pulled together to replace 2+ million dollars coming in from fertilizer tax and that now the NRDs will get about half of that from pesticide fees. The legislature also added about a quarter of a million dollars of general funds but the unfunded balance is expected to come from the NRDs and they are going to have to raise property tax or find some other source of funds. Also passed was what was known as the department clean up bill, LB 129. That bill did a number of minor things. It made some modifications so that we can now issue temporary permits for construction activities for ten acre-feet or less without consideration of whether there is unappropriated water. The bill also allows for water to be taken for firefighting without a permit. Another bill, LB 135, made a number of changes in the NRD groundwater management authorities. LB 472 is a bill that authorizes the transfer of ground water off of overlying land if it's used for domestic use under 50 gallons per minute. LB 667 turned out to be the catchall water bill for this session. One of the things it did was modify the requirement that if you are irrigating from a well

within 50 feet of the bank of a stream you need a surface water permit. We have some very large islands in the Platte that were viewed as being treated unfairly under that statute because any well within the outer banks of the outside channels were being treated as surface water uses. The bill changed the standard to 50 feet from the bank of a channel. A provision was included that allowed natural resources districts in basins, for which Nebraska is a defendant in interstate water litigation, (the Republican basin) to establish different provisions for management of water wells drilled after January 1 of this year. It further goes on to say "…or the date that litigation commenced if it is in any other interstate basin." This is viewed as a tool to aid the NRDs. It's discretionary on how they use this. LB 667 also updated Nebraska Water Well Registration statutes. We will be registering our wells online fairly soon. Added was a new requirement for the filing of water well registration and surface water right ownership updates when the property changes hands. There is also a provision that the decommissioning of any well, unless it's a driven sandpoint, has to be done by a licensed well contractor or pump installation contractor. The Legislature also passed quite a few interim study resolutions.

Carbon sequestration is being addressed by studies carried out by our Department with assistance from Steve Chick of NRCS and others. One study is a policy look at carbon sequestration and how it may work should that opportunity develop in our state. Secondly there is an assessment being done to see what potential there is across the state to sequester carbon. These reports are due in December 2001 and January 2002.

Administration and Gaging

Keith Paulsen reported this spring has been wet. Last year there were reports of shortages everywhere. There were some shortages in the basin on June 9th in the Geneva area, upper end of Turkey Creek. Some people were shut off for a couple of weeks in that area, this was unusual because of the timing and the location. There were a couple

of illegal diversions down in the lower end of the basin during the middle of the summer. There was a shortage on the upper end of the Big Blue basin above Seward. The last time there was a shortage was about 20 years ago. This recent shortage was during the first part of August so it only lasted for a couple of weeks. With the amount of precipitation received this spring the Blue should not have any problems. There were no calls from Kansas last year on the Little Blue or the Big Blue. Final records showed Nebraska short on one day but the expected early on shortages did not occur. Only one water right was cancelled this year. No adjudications this year or planned for next year.

Chairman Lukow questioned Jim Cook concerning LB 667 about whether it will stand the constitutional test. Cook knows of the concern regarding the NRD's rights in regards to regulatory ground water wells being retroactive to January 1. He states that case law in Nebraska is not terribly clear on this issue. Cook believes its likely the bill would meet a constitutional test. Lukow inquired about a bill introduced into congress in the last day or two regarding carbon. Steve Chick felt it might be the same bill introduced last year and that this would favor farmers and ranchers in stewardship incentive payments for good conservation. The appearance is that it this years farm bill could be a lot "greener" than the current bill.

Kansas Report

Litigation

The damages and remedies phase of the *Kansas v. Colorado* lawsuit continues. The total amount of water that Kansas has been shorted at the Stateline for the period 1950 through 1994 is 420,070 acre-feet. On January 28, 2000, trial on the issues of damages was concluded. A key issue is whether Colorado owes Kansas interest on the these damages. During August 2000, Special Master Littleworth filed his Third Report wherein he recommended that damages for the past

violations be based upon evidence provided by Kansas, and interest should be limited to the period after 1968. This would result in an amount of about $38 million. Both parties were given the opportunity to file exceptions.

On March 30, 2001, the U.S. Supreme Court heard oral arguments on the exceptions to the Third Report of the Special Master. Colorado argued that prejudgement interest should not be included, which would result in about $9 million in damages. Kansas contends that prejudgement interest is necessary for a complete remedy due to the time value of money, and should be calculated since the first violation of the Compact in 1950, resulting in damages of about $57 million.

A decision by the U.S. Supreme Court on the issue of damages is expected sometime before the end of June, 2001. A final phase before the Special Master will deal with whether Colorado has been in compliance with the Compact since 1996 and whether the changes in the Colorado administration of the Arkansas River basin water rights have been sufficient to keep Colorado in compliance with the Compact in the future. It is expected that this phase will occur later this year or next year.

In the matter of *Kansas v. Nebraska*, Vincent McKusick, Special Master appointed to hear the case, filed his "First Report of the Special Master" on January 28, 2000. In it he recommended that Nebraska's Motion to Dismiss be denied. On April 5, 2000, Nebraska filed exceptions to the first report of the Special Master, and on April 7, 2000 Colorado did the same. Kansas filed its response to the exceptions by Nebraska and Colorado on May 25, 2000. The Supreme Court issued a ruling to deny the motion by Nebraska to dismiss the lawsuit on June 30, 2000. This was particularly important to Kansas because the court had invited Nebraska to file the motion so that the question of whether groundwater is regulated by the Republican River Compact could be resolved. The depletion of streamflow caused by groundwater pumping is a critical part of Kansas' case.

In October of 2000, the Special Master issued a case management order identifying a number of legal issues for resolution and setting forth an aggressive, detailed trial preparation schedule that has trial commencing on March 1, 2003. The parties are now involved in the discovery phase of trial preparation. Initial disclosures by the parties and the United States were completed by April 16, 2001 as required by order of the Special Master. The parties are now actively involved in inspections of federal agencies sites for documents that are relevant to the case.

Legislation

During the 2001 legislative session, there was one bill that was of particular interest to the Division of Water Resources and other water related agencies. Senate Bill No. 237 enacts the "Kansas Water Banking Act" which allows the creation of water banks, private not-for profit corporations that lease water from water rights that have been deposited in the bank to other water users who pay for the right to use water otherwise not available. Depositors are financially compensated for the deposit of all or a portion of their water right(s). This bill provides for the creation of one pilot groundwater bank prior to July 1, 2002, and one surface water bank thereafter. The Division of Water Resources will be responsible for developing rules and regulations for implementing water banking, and for the overall review of applications for deposit and leases of water to insure that no impairment of the resource or of water right holders occurs. The operations of the bank must result in a reduction in consumptive use of 10% or more.

This bill also provides for flex accounts for water right holders which allows for five-year allocations instead of a one-year authorized quantity. In exchange for the added flexibility, the user must reduce their actual use by 10% compared to a base period.

This bill also provides civil penalties for certain violations of Kansas Statutes including use of an unauthorized point of diversion, failure to limit the use of water to the authorized place of use, failure to submit or comply with a conservation plan, excessive water use beyond the authorized quantity, failure to install or maintain water flow meters, and other conditions and limitations associated with the Water Appropriation Act.

Another important bill, Senate Bill No. 204, passed that modified certain processes related to stream classifications and water quality standards.

Water Rights and Water Use Reports

The Division of Water Resources continues to respond aggressively to legislation passed in 1999. It requires all water rights with a perfection period that expires prior to July 1,1999 to have a Certificate of Appropriation, which defines the extent to which water has been put to beneficial use, by January 1, 2004. Water rights with a perfection period that expires after July 1, 1999 must have a Certificate of Appropriation issued within the following five-year period. Significant efforts are being made by Field Office Staff to conduct the necessary tests of diversion works and the preparation of draft certificates and the project is on schedule.

It is important that the most accurate water use data is available for statewide analysis and the quantification of water rights. Because of this, the Division of Water Resources continues an aggressive water use program. A total of 11,502 irrigation water use reports and 2,585 non-irrigation use water use reports were mailed to water users in January of 2001. As of May 25, 2001, 11,487 of the irrigation reports have been returned, and 2,258 of the non-irrigation reports have been returned. That equates to a compliance rate of 98%.

Sub-Basin Management Programs

There are five sub-basin management programs currently active in Kansas. They are the Upper Arkansas, the Middle Arkansas, the Rattlesnake, the Solomon and the Pawnee/Buckner Basins. The management effort in each basin is complete when a management plan is developed, approved by the Chief Engineer, and implemented. The Rattlesnake Basin has an approved plan by the Chief Engineer and implementation is beginning. A management plan is near completion for the Pawnee/Buckner. In the Upper Arkansas Basin a draft management plan has been developed which outlines 6 recommended strategies. In the Lower Arkansas Basin, evaluation of the hydrologic characteristics is taking place, and initial management strategies are being developed. Hydrologic data are being collected in the Solomon Basin in preparation for the development of preliminary management plans and strategies.

Water Quality

Water quality continues to be an important issue in Kansas, and the Governor's Water Quality Initiative which began in 1995 is ongoing, as well as the establishment of Total Maximum Daily Loads (TMDL.) In response to a complaint filed by the Kansas Natural Resource Council and the Sierra Club, Kansas is in an eight (8) year schedule to submit TMDLs to EPA in each of the 12 major river basins. Kansas is setting these TMDLs on an accelerated pace to meet the Clean Water Act requirement. TMDLs have been set in the Kansas-Lower Republican, the Lower and Upper Arkansas River Basins, and the Cimarron. The Neosho, Verdigris and Walnut Rivers are scheduled to be submitted to the EPA in 2002. Additional detailed water quality information will be provided in the Water Quality Committee Report.

Special Projects

The Blatant and Recurring Overpumping Project is a compliance and enforcement effort. The top users of groundwater in several of the Groundwater Management Districts that use in excess of their authorized quantities have been targeted for this project. These water users are provided technical assistance and are required to install and maintain a functioning water meter, as well as develop and implement a water conservation plan. The plan, among other items, requires monthly water use reporting. Additional enforcement will occur if future compliance is not achieved by these users.

Lukow asked Pope what was the time frame by which his water banking legislation came to fruition compared to when it was first conceived. Pope stated that the genesis goes back five or six years. The idea was first brought up in the 1995 Kansas State Water Plan. The task force first formed in February of 1996, that report was completed in 1999, legislation was introduced in 2000. It didn't pass, was debated intensively, and then this year it passed.

Federal Agency Report

Bob Joseph distributed the USGS report. He is the new study section chief with USGS in Lincoln office. It is included herein as **Exhibit O**. The USGS operates two gages for the compact. No questions followed his report.

Secretary's Report

Pam Bonebright requested that everyone sign in and please indicate a mailing address for updating the mailing list.

Patterson moved to adopt the Secretary's Report. Pope seconded the motion. Lukow declared the MOTION CARRIED.

Treasurer's Report

Denise Rolfs reported that the FY 2000 audit was completed and showed the Compact was in good standing.

Rolfs distributed copies of the FY 2001 Treasurer's report. The report reflected the following:

Funds Available	$ 31,022.25
Total Expenditures	12,904.68
Balance on hand as of June 6, 2001	18,117.57
Estimated Additional FY2001 Expenses	3,000.00
Estimated Additional Interest Income	14.50
Estimated Balance on June 30, 2001	$ 15,132.07

Patterson moved to accept the Treasurer's Report. Pope seconded the motion. Lukow declared the MOTION CARRIED.

Water Quality Committee Report

Dale Lambley from the Water Quality Committee submitted a written report which is included herein as **Exhibit P**. Lambley reported on Committee activities and highlighted portions of the report. He restated what the Water Quality Committee's goals were. Basically they were to implement and conduct a water quality monitoring program.

Tuttle Creek Reservoir in Kansas is still considered as atrazine impaired." However, the amount of atrazine flowing into the reservoir is being reduced. The long term trend in the Blue River and on down the Kansas River is a downward trend and so there are lower levels of atrazine. Because of changes in the herbicides that were available, some of the farmers in Nebraska and the upper end of the basin actually increased atrazine use. When the program started, Kansas farmers were using atrazine and a higher portion of Nebraska farmers

were using cyanizine. Cyanizine was taken off the market and Nebraska farmers had to shift to atrazine. Even though the shift was made, the atrazine levels didn't increase, they are still on the long term decline.

Chairman Lukow inquired about acres planted with corn that is Roundup ready and whether that has made a difference to atrazine levels. Lambley stated that it is making a difference because the levels are lower in the newer products that are coming out. Lukow inquired if there were any negative water quality features of Roundup. Lambley stated that Kansas has found some short term flashes in the water, but they don't consider it as much of a water quality problem as they did atrazine. Mostly because the chemical life is so short. Lukow asked if the water quality specialists foresee a problem arising from Roundup such as occurred with atrazine or some of the other products. Rice responded by saying that there was always a possibility and perhaps practices need to change. There is always the possibility of a big problem but hopefully not.

Pope moved to adopt the Water Quality Committee Report. Patterson seconded the motion. Lukow declared the MOTION CARRIED.

Engineering Committee Report

Shafer distributed copies of the Engineering Committee Report which is included herein as **Exhibit A through K**.

Most of the information in the report was provided by the USGS. The data shows nothing that would not be expected. This past year, there was one day in which the Big Blue River did not meet the target flow as set forth in the compact. On August 17th the Big Blue River as Barneston had a daily mean flow of 89 cfs, one cfs less than the target of 90 cfs (Exhibit A). The Little Blue River met or exceeded the target flows during the 2000 Water Year. The list of registered wells in the regulatory areas (exhibits H and I) were examined in detail this past year using GIS technology. As a result of the study,

a well that was abandoned and decommissioned was removed and three wells were added to the Big Blue regulatory list. On the Little Blue regulatory list, a registration number was corrected that had been incorrectly listed for the past few years.

Patterson moved to adopt the Engineering Committee Report. Pope seconded the motion. Lukow declared the MOTION CARRIED.

Legal Committee

Cook reported the legal committee did not have any issues assigned to them, nor did they have any meetings.

Patterson asked what kinds of things the legal committee had been involved in previously. Pope could only remember a time concerning a question of what effect wells in the regulated reach have on stream flow and there were some studies and analysis done at that time.

Pope moved to adopt the Legal Committee Report. Patterson seconded the motion. Lukow declared the MOTION CARRIED.

Budget Committee

Paulson distributed copies of the budget analysis chart which is included herein as **Exhibit Q**. With the exception of some minor inflation based increases on the services from the USGS, most costs remained the same. You will notice that we are spending more than our income, but due to our carryover we are not in an emergency situation. Present assessments to each state are $8,000; therefore our annual income is $16,000 plus the interest earned. Our proposed FY 03 expense is projected to be $17,150. As you recall we raised the assessments a couple of years ago to address this same problem. Although we will not be able to continue to spend more than our income indefinitely, the budget committee is not recommending that we raise the assessments at this time, but some time within the next ten years we will need to either raise the assessments or cut costs.

Pope stated that he agreed that the status quo be maintained.

Patterson moved to adopt the Budget Committee Report. Pope seconded the motion. Lukow declared the MOTION CARRIED.

Old Business

There was no old business.

New Business

Chairman Lukow expressed concern because of other lawsuits that have occurred on different interstate rivers in the area and wondered if there was any way that this compact could perform education to the public as to what the status of this Compact is. Pope stated that Kansas is very comfortable with its working relationship with Nebraska on this compact, and that this particular compact has done a good job of dealing with the issues of stateline flow and also the attention to the water quality issues. Pope feels this compact administration has been effective. Pope indicated that perhaps a news release explaining the accomplishments of the compact would be helpful. Fleecs stated that they could put an insert into their newsletter. Cook stated that it would be good to give some history as well as some up to date information. Nebraska will use the NRD newsletters, and in Kansas the Conservation Districts each have a newsletter. Pope suggested that Kansas and Nebraska work together on a news release and Patterson suggested that the Legal Committee take the lead.

Patterson moved to assign a news release to the Legal Committee for an overview of the compact as well as a snapshot of some of the joint activities that have been accomplished together. Pope suggested having this in the next month or two and it should be submitted to the

Commissioners before it is released. Pope seconded the motion. Lukow paraphrased the motion as follows: To approve the establishment of a mechanism to inform the public of the Compact's activities. Lukow declared the MOTION CARRIED.

Onnen wanted to have included in the release a statement to thank those in the field who are doing water management practices, putting in buffer strips, doing banding instead of broadcasting and that often times we miss the opportunity to tell people that those kind of best management practices are having a positive impact on water quality and quantity in the district.

Patterson suggested that next year we do a field trip, with some press to give people a little pat on the back for their practices.

Chairman Lukow identified the next annual meeting date of May 16, 2002. The meeting will be located in Beatrice. Possibly a field trip the afternoon before. Patterson made the motion to accept this date. Pope seconded the motion. Lukow declared the MOTION CARRIED.

Committee membership for the upcoming year was assigned as follows:

Budget Committee:	Keith Paulsen, Chairperson Bob Lytle
Legal Committee:	Jim Cook, Chairperson Leland Rolfs
Engineering Committee:	Jeff Shafer, Chairperson Keith Paulsen Iona Branscum Bob Lytle

Water Quality Committee: Dale Lambley, Chairperson
Annette Kovar
Glen Kirk
Denis Blank
Pat Rice
Tom Stiles

There being no further business, Chairman Lukow adjourned the meeting at 11:45 a.m.

Clayton Lukow, Compact Chairman

David Pope, Kansas Commissioner

Roger K. Patterson, Nebraska Commissioner

REPORT OF THE ENGINEERING COMMITTEE
TO
KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINSTRATION
MAY 18, 2000 – June 6, 2001

The Engineering Committee held a conference call in preparation for the compact meeting. The Compact Administration did not give the committee any special assignments.

The 2000 data were collected in accordance with the agreements with the United States Geological Survey (USGS) and the Lower Big Blue Natural Resource District (LBBNRD).

REVIEW OF STREAMFLOW DATA

During the 2000 water year (October 1, 1999 thru September 30, 2000) the mean daily streamflow at the Barneston gage on the Big Blue River (see Exhibit A) fell below the target flow established by the compact for one day (August 17). The Hollenberg gage on the Little Blue River (see Exhibit B) was above the target flow values established by the Compact.

Exhibits C and D show the monthly mean discharge at the Barneston gage and Hollenberg gage from 1970 to 2000.

REVIEW OF GROUNDWATER DATA

The groundwater hydrographs for the wells in Gage and Jefferson Counties (Exhibits E and F) show no trend.

The well measurements taken by the LBBNRD (Exhibit G) show that ground water levels decreased approximately 1 to 4 feet in most of the measured wells during the 2000 water year and declined an average of 2 feet since the 1999 water year measurements.

REVIEW OF WELLS IN REGULATORY REACHES

The lists of registered wells in the regulatory reaches (Exhibits H and I) were reviewed in detail during the past year. Spatial analysis technology was used to compare the Nebraska Department of Natural Resources well database to the mapped regulatory areas. As a result, one well was removed (due to abandonment) and three wells were added to the Big Blue River regulatory reach. A registration number was corrected for the list of wells in the Little Blue River regulatory reach.

REVIEW OF SEEPAGE DATA

Seepage measurements were taken in October of 2000 on both the Big and Little Blue Rivers (Exhibits J and K). Both rivers had gaining streamflows.

Respectively Submitted,

Jeffrey T. Shafer, Chair
Nebraska

Robert F. Lytle Jr.
Kansas

Keith A. Paulsen
Nebraska

Iona Branscum
Kansas

Exhibit A

STATION NUMBER 06882000 BIG BLUE R AT BARNESTON NEBR STREAM SOURCE AGENCY USGS
LATITUDE 400240 LONGITUDE 0963512 DRAINAGE AREA 4370.00 DATUM 1162.20 STATE 31 COUNTY 067
PUBLISHED
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	292	288	334	e270	e280	381	371	392	349	2060	532	189
2	284	276	337	e270	e300	375	361	369	323	1160	600	179
3	282	284	341	e250	e310	385	348	358	291	821	471	163
4	280	286	351	e245	e320	416	334	354	283	6270	354	159
5	280	285	352	e230	e330	436	340	343	263	5630	303	157
6	282	293	361	e220	e330	412	328	338	250	4120	268	156
7	289	295	369	e240	e340	398	332	335	251	4770	240	158
8	290	302	364	e250	e340	396	314	330	238	5100	218	156
9	288	320	353	e260	348	376	320	330	215	3340	189	160
10	287	313	340	e260	357	362	318	325	205	2160	159	161
11	282	310	338	e270	356	354	315	330	177	1530	142	161
12	285	314	336	e270	347	354	309	329	166	1080	123	160
13	282	313	333	e280	350	353	316	317	148	767	117	155
14	276	312	335	e280	354	353	320	304	183	565	111	153
15	281	306	344	e270	356	352	321	300	316	447	106	143
16	273	308	346	e270	339	336	401	294	465	382	91	144
17	263	310	337	e260	352	332	421	295	367	358	89	145
18	268	326	e310	e260	368	355	411	294	319	357	92	145
19	274	317	e290	e270	364	376	389	287	234	383	169	145
20	277	305	e250	e270	361	368	383	291	339	455	411	170
21	283	315	e175	e260	363	366	376	301	337	539	391	167
22	284	324	e200	e260	374	404	368	327	302	701	320	169
23	280	403	e240	e250	449	409	367	308	255	858	322	167
24	281	391	e260	e230	438	426	359	291	462	717	372	171
25	287	371	e280	e220	442	405	356	276	447	522	331	178
26	289	358	e300	e218	431	401	348	320	1570	425	309	173
27	293	353	e300	e220	426	394	351	322	2180	364	287	169
28	295	344	e290	e220	412	389	345	331	2380	393	280	169
29	299	334	e290	e230	408	374	348	318	2620	758	248	167
30	291	333	e280	e240	---	370	360	324	2500	824	219	166
31	284	---	e280	e260	---	356	---	367	---	532	212	---
TOTAL	8781	9589	9616	7803	10545	11764	10530	10000	18435	48388	8076	4855
MEAN	283	320	310	252	364	379	351	323	614	1561	261	162
MAX	299	403	369	280	449	436	421	392	2620	6270	600	189
MIN	263	276	175	218	280	332	309	276	148	357	89	143
AC-FT	17420	19020	19070	15480	20920	23330	20890	19840	36570	95980	16020	9630

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2000, BY WATER YEAR (WY)

MEAN	553	313	241	290	649	1369	874	1264	2069	1369	714	706
MAX	7451	1526	851	1596	2876	10560	5280	5207	10460	12270	5227	3420
(WY)	1974	1999	1998	1973	1984	1979	1984	1995	1951	1993	1954	1989
MIN	61.5	77.5	87.4	67.6	116	137	132	96.0	69.3	30.7	21.1	50.6
(WY)	1941	1937	1977	1937	1940	1968	1934	1934	1934	1934	1934	1939

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1933 - 2000	
ANNUAL TOTAL	390070		158382			
ANNUAL MEAN	1069		433		868	
HIGHEST ANNUAL MEAN					2781	1993
LOWEST ANNUAL MEAN					115	1934
HIGHEST DAILY MEAN	14800	May 21	6270	Jul 4	50000	Jun 9 1941
LOWEST DAILY MEAN	175	Dec 21	89	Aug 17	1.0	Nov 30 1945
ANNUAL SEVEN-DAY MINIMUM	242	Dec 19	104	Aug 12	15	Aug 3 1934
INSTANTANEOUS PEAK FLOW			11600	Jul 4	57700	Jun 9 1941
INSTANTANEOUS PEAK STAGE			16.57	Jul 4	34.30	Jun 9 1941
ANNUAL RUNOFF (AC-FT)	773700		314200		628600	
10 PERCENT EXCEEDS	2770		444		1800	
50 PERCENT EXCEEDS	455		318		280	
90 PERCENT EXCEEDS	289		170		103	

Exhibit B

STATION NUMBER 06884025 LITTLE BLUE R AT HOLLENBERG, KS STREAM SOURCE AGENCY USGS
LATITUDE 395848 LONGITUDE 0970016 DRAINAGE AREA 2752.00 DATUM 1216.10 STATE 20 COUNTY 201
PUBLISHED
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	149	164	e165	e180	198	196	220	152	467	401	98
2	110	145	165	e155	e185	194	193	207	125	353	325	92
3	110	146	174	e140	e180	208	189	194	128	284	293	86
4	112	148	194	e130	e190	210	182	188	125	1710	256	89
5	116	150	187	e125	e190	204	183	177	120	6100	228	88
6	118	151	173	e130	e190	197	181	174	122	7540	214	69
7	117	153	172	e135	e185	195	180	171	103	9180	213	79
8	116	154	170	e140	e185	207	176	176	109	5460	579	82
9	118	157	169	e150	e185	205	174	179	97	2100	276	81
10	120	156	167	e180	e180	197	175	176	90	1410	190	81
11	121	157	167	e185	e175	200	173	174	93	1010	170	80
12	130	159	168	e180	e170	196	171	165	89	744	158	79
13	110	160	167	e175	e160	198	171	156	92	610	141	78
14	116	160	167	e170	e155	200	172	153	95	528	130	77
15	120	161	169	e170	e160	204	170	154	147	475	121	77
16	121	160	167	e175	e170	202	208	153	126	426	117	76
17	119	161	e165	e175	e170	199	210	155	105	408	106	76
18	121	161	e150	e170	e175	210	195	154	95	492	98	76
19	124	160	e120	e165	e185	228	190	152	90	452	104	76
20	125	160	e110	e165	199	218	194	152	145	1660	165	92
21	131	161	e100	e160	200	209	201	159	177	1520	269	93
22	132	166	e110	e160	200	220	189	152	157	958	207	93
23	132	193	e120	e160	240	223	182	149	935	733	186	97
24	134	192	e135	e160	237	246	177	168	1180	913	163	99
25	138	174	e150	163	229	237	178	152	852	621	139	98
26	141	171	e170	164	229	226	182	181	663	479	126	94
27	141	171	e175	e165	226	223	177	192	875	401	114	96
28	142	168	e175	e170	212	211	172	162	1320	628	110	94
29	143	166	e170	e180	204	198	174	157	959	1330	108	90
30	146	164	e170	e185	---	195	174	157	658	649	105	83
31	146	---	e170	e185	---	189	---	147	---	481	97	---
TOTAL	3884	4834	4930	5032	5546	6447	5489	5206	10024	50122	5909	2569
MEAN	125	161	159	162	191	208	183	168	334	1617	191	85.6
MAX	146	193	194	185	240	246	210	220	1320	9180	579	99
MIN	110	145	100	125	155	189	170	147	89	284	97	69
AC-FT	7700	9590	9780	9980	11000	12790	10890	10330	19880	99420	11720	5100

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2000, BY WATER YEAR (WY)

MEAN	322	255	188	181	343	801	570	775	941	1101	549	377
MAX	2163	1113	424	576	1059	3816	2379	2302	4373	9014	2572	1320
(WY)	1987	1997	1993	1984	1993	1993	1987	1995	1984	1993	1985	1977
MIN	45.3	81.1	102	98.5	115	118	125	108	151	111	72.5	32.0
(WY)	1992	1992	1977	1977	1992	1981	1981	1992	1981	1991	1991	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1975 - 2000	
ANNUAL TOTAL	138501		109992			
ANNUAL MEAN	379		301		535	
HIGHEST ANNUAL MEAN					1891	1993
LOWEST ANNUAL MEAN					195	1991
HIGHEST DAILY MEAN	5110	May 21	9180	Jul 7	39300	Jul 26 1992
LOWEST DAILY MEAN	100	Dec 21	69	Sep 6	26	Oct 1 1991
ANNUAL SEVEN-DAY MINIMUM	109	Sep 14	77	Sep 13	27	Sep 27 1991
INSTANTANEOUS PEAK FLOW			9790	Jul 7	47800	Jul 26 1992
INSTANTANEOUS PEAK STAGE			11.44	Jul 7	21.21	Jul 26 1992
ANNUAL RUNOFF (AC-FT)	274700		218200		387600	
10 PERCENT EXCEEDS	599		413		885	
50 PERCENT EXCEEDS	276		170		211	
90 PERCENT EXCEEDS	120		98		109	

Exhibit C

Station 06882000 BIG BLUE R AT BARNESTON NEBR
MEAN DISCHARGE PUBLISHED
Normal monthly means (All days)

Year	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept
1970	219.1	190.7	174.3	252.1	284.2	211.6	229.1	275.6	544.7	81.3	339.4	286.2
1971	550.0	223.1	137.1	153.4	1596	2683	326.2	2274	672.2	418.6	166.5	121.5
1972	106.5	220.2	137.1	115.7	129.6	146.4	181.3	1124	348.1	717.1	486.6	235.7
1973	148.6	458.2	305.3	1596	960.2	3035	2742	1014	813.0	1082	235.0	3386
1974	7451	1014	497.5	930.2	1181	530.3	427.6	1162	623.2	130.5	248.8	121.7
1975	111.4	143.1	150.3	157.2	212.0	949.6	440.3	894.5	2678	627.6	231.9	160.2
1976	109.7	138.8	161.0	129.1	176.8	255.8	1027	433.9	235.5	238.5	88.3	66.6
1977	97.6	85.7	87.4	88.4	121.7	151.0	186.8	440.2	511.4	193.5	1445	2744
1978	376.1	464.1	211.9	135.7	148.4	4912	2394	2436	1579	3263	318.9	967.0
1979	157.2	176.6	160.0	155.9	505.2	10560	961.8	1527	1231	1407	343.9	187.2
1980	172.8	530.8	207.3	239.4	686.6	1444	1263	305.6	1374	190.0	346.5	125.0
1981	247.8	120.3	132.5	129.2	151.9	148.6	165.1	389.0	149.5	319.6	649.3	615.5
1982	128.5	252.2	312.4	164.2	2307	1310	439.8	3765	3372	2705	844.6	452.4
1983	457.1	236.4	220.6	504.5	2099	1218	1352	1301	3802	789.9	324.0	176.7
1984	808.5	438.9	276.4	322.6	2876	1534	5280	4646	9445	1552	661.2	294.9
1985	369.0	259.4	546.2	338.7	693.9	506.4	339.8	1529	450.3	1306	1258	1572
1986	1221	355.3	281.8	314.2	366.4	743.5	1560	1247	789.1	7220	1896	1327
1987	4676	811.7	721.3	434.3	417.5	7527	4449	1659	3071	1193	1675	1048
1988	353.6	466.1	413.5	335.8	457.0	401.1	407.1	443.6	239.8	480.9	159.2	134.6
1989	403.8	190.6	201.5	208.5	224.4	402.9	221.6	192.2	643.6	877.5	378.7	3420
1990	227.5	204.4	199.3	239.2	211.5	283.8	238.7	564.3	2521	1605	1563	178.1
1991	145.1	164.8	171.3	195.5	464.4	250.5	496.0	795.4	2298	582.5	181.3	104.9
1992	96.8	146.8	170.9	190.6	176.1	352.0	314.8	417.3	1022	4075	1835	709.5
1993	418.8	562.8	520.1	246.1	1879	5914	1466	2056	3567	12270	1788	2503
1994	954.0	514.7	442.0	364.7	529.7	1232	376.9	1354	1004	1400	666.9	604.8
1995	272.2	353.5	339.0	374.7	397.8	538.1	566.5	5207	1655	975.1	742.0	287.1
1996	214.6	240.6	251.5	240.8	501.7	272.2	331.2	4909	2287	501.9	1034	417.8
1997	301.3	1501	429.6	331.9	615.2	596.0	622.0	725.0	1701	1437	650.1	256.5
1998	420.0	661.4	850.7	453.7	1184	1746	2066	1212	2787	1327	990.4	582.4
1999	614.3	1526	391.5	400.9	440.9	435.9	1722	2863	3067	1775	836.7	347.0
2000	283.3	319.6	310.2	251.7	363.6	379.5	351.0	322.6	614.5	1561	260.5	161.8

Station 06882000 BIG BLUE R AT BARNESTON NEBR
MEAN DISCHARGE PUBLISHED
Normal annual means (All days)

Year	
1970	256.5
1971	774.9
1972	331.0
1973	1312
1974	1200
1975	562.7
1976	254.3
1977	511.9
1978	1445
1979	1465
1980	570.4
1981	269.2
1982	1332
1983	1028
1984	2325
1985	765.7
1986	1457
1987	2322
1988	357.7
1989	611.5
1990	672.1
1991	484.6
1992	798.2
1993	2781
1994	790.8
1995	983.3
1996	937.1
1997	762.3
1998	1186
1999	1203
2000	432.7

Exhibit D

Station 06884025 LITTLE BLUE R AT HOLLENBERG, KS
MEAN DISCHARGE PUBLISHED
Normal monthly means (All days)

Year	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept
1974	*	*	*	*	*	328.6	346.6	451.3	368.0	167.8	224.0	99.5
1975	114.3	133.9	135.3	128.7	159.6	825.6	314.9	359.4	2092	1474	339.5	133.0
1976	106.1	147.4	141.1	120.4	176.0	215.7	838.4	285.4	166.8	279.0	238.0	117.0
1977	123.5	111.1	101.8	98.5	159.0	152.2	227.8	733.6	1090	317.8	1563	1320
1978	208.3	238.5	163.6	113.5	137.8	2635	826.4	517.9	359.2	700.7	201.2	644.3
1979	117.5	151.5	163.8	121.1	615.0	3693	454.6	1063	465.7	497.9	274.3	130.6
1980	172.4	398.0	150.3	178.0	383.8	677.9	1024	219.6	485.3	142.2	132.6	49.2
1981	89.7	92.5	105.2	113.1	124.2	118.1	124.9	375.9	151.4	573.5	548.1	262.6
1982	115.4	244.3	240.0	144.7	1010	618.6	228.3	1945	908.8	2299	417.6	193.0
1983	255.3	150.1	160.3	206.6	556.1	389.6	388.6	858.5	1895	279.6	201.4	798.7
1984	1225	267.4	174.5	576.5	867.9	552.1	2040	2059	4373	482.3	252.6	143.4
1985	231.4	170.3	239.5	169.0	442.6	239.1	232.8	942.1	475.5	320.4	2572	822.0
1986	613.7	251.6	234.5	226.1	216.4	271.7	1098	585.1	339.7	712.1	827.4	770.9
1987	2163	389.4	340.4	253.0	240.0	3205	2379	1414	748.0	562.5	454.5	327.8
1988	181.0	206.8	209.3	213.5	315.3	219.5	230.2	189.3	165.6	237.9	94.5	117.3
1989	210.6	130.3	135.5	146.2	132.0	169.0	139.7	134.0	623.3	1289	356.0	854.4
1990	128.0	125.3	108.4	155.5	150.0	199.7	160.2	368.9	1612	294.6	771.9	113.6
1991	94.6	114.6	117.5	124.4	196.3	159.8	227.6	370.2	728.5	111.2	72.5	32.0
1992	45.3	81.1	101.9	115.4	115.5	179.8	163.9	108.5	344.3	4746	1088	725.6
1993	641.5	405.4	424.1	202.9	1059	3816	856.7	1102	2568	9014	1290	1148
1994	547.1	314.7	294.0	230.5	257.5	755.7	412.5	661.3	561.8	580.6	230.7	176.6
1995	149.2	188.8	191.1	162.6	169.0	221.9	244.0	2302	828.3	320.4	359.5	120.3
1996	127.1	149.8	141.5	119.9	206.6	185.7	196.1	1572	671.4	359.8	433.7	205.7
1997	145.4	1113	141.0	177.7	283.4	263.3	248.4	328.9	1197	429.4	280.7	197.4
1998	205.3	344.4	295.8	198.6	472.6	572.3	1079	345.5	496.3	644.8	693.9	191.1
1999	242.9	538.4	230.4	252.6	299.5	278.5	487.7	1136	788.6	335.4	398.1	125.7
2000	125.3	161.1	159.0	162.3	191.2	208.0	183.0	167.9	334.1	1617	190.6	85.6

* Indicates a no-value month

Station 06884025 LITTLE BLUE R AT HOLLENBERG, KS
MEAN DISCHARGE PUBLISHED
Normal annual means (All days)

Year	
1974	*
1975	518.8
1976	235.4
1977	500.7
1978	566.1
1979	649.7
1980	332.5
1981	224.8
1982	697.7
1983	508.0
1984	1079
1985	574.0
1986	513.6
1987	1047
1988	197.9
1989	361.1
1990	348.9
1991	194.9
1992	657.7
1993	1891
1994	420.5
1995	441.3
1996	365.6
1997	398.2
1998	460.8
1999	426.5
2000	300.5

* Indicates a no-value year

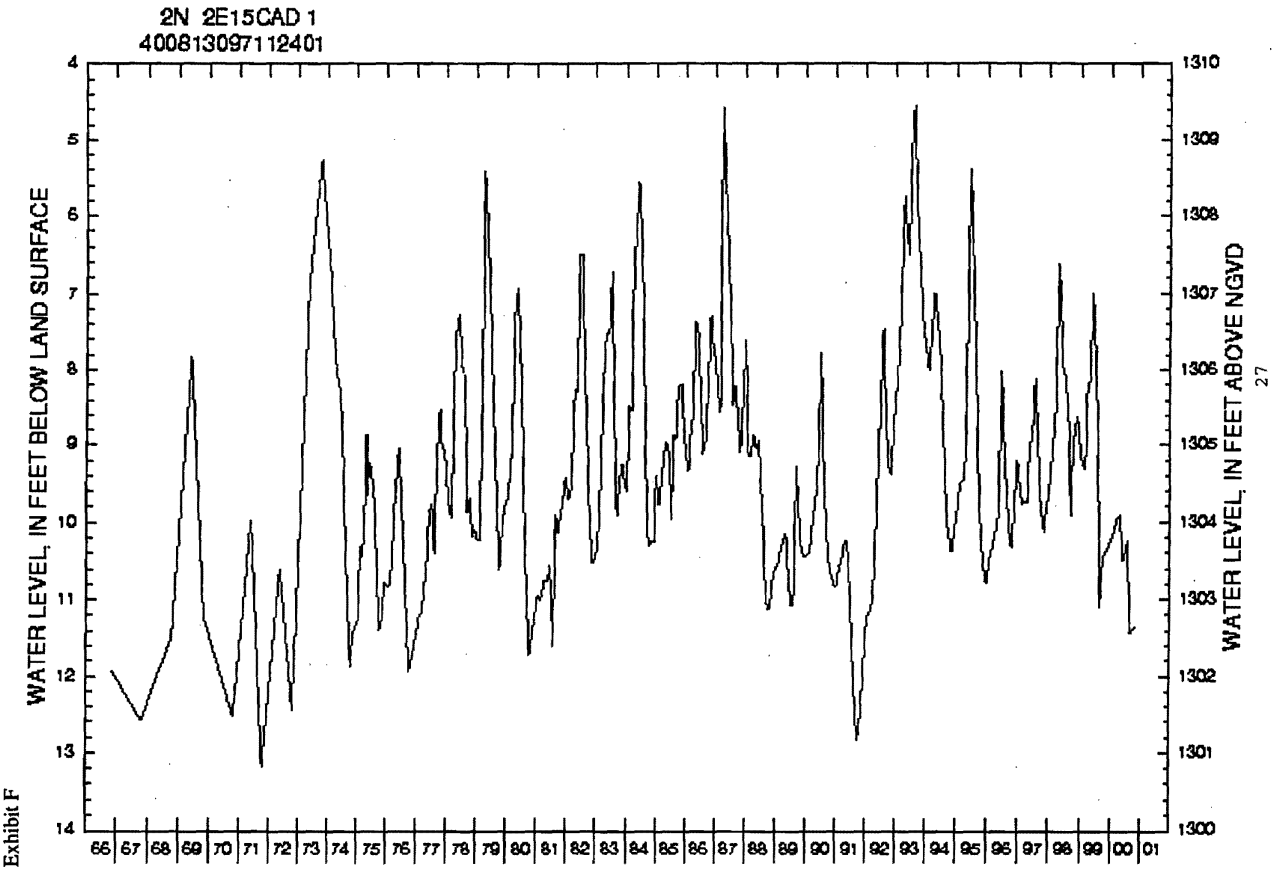


Exhibit F

27

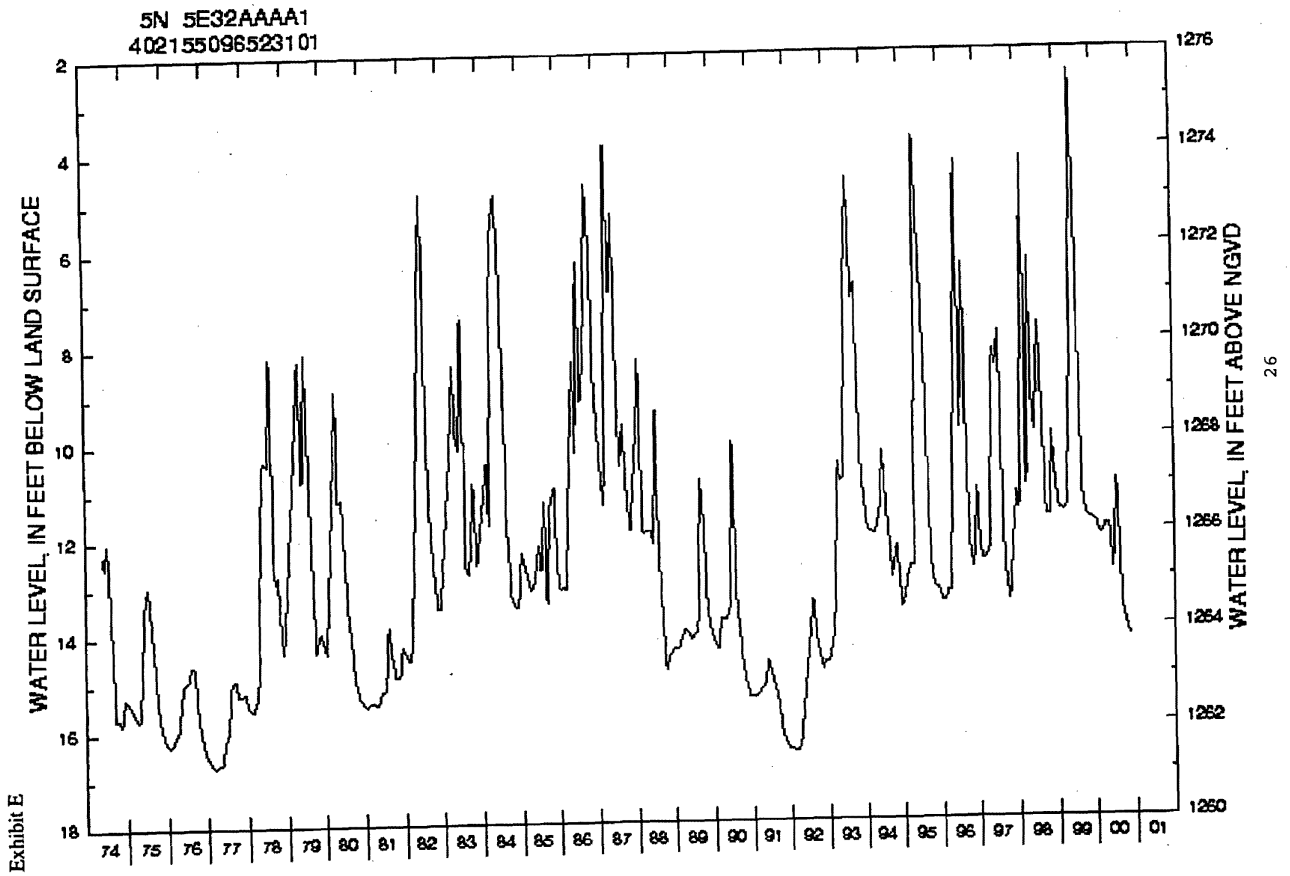


Exhibit E

26

Exhibit G

BIG BLUE RIVER COMPACT STATIC WATER LEVELS 2000

LEGAL	SECTION	LOCATION	WELL	DEPTHS00	DEPTHI00	DEPTHF00
				3/14/2000	7/19/2000	12/4/2000
4N-5E	2	AAAA	OW	90.86	94.29	92.40
4N-5E	2	CBBB	IW	16.19		17.75
4N-5E	2	DDAA	IW	18.87		20.30
4N-5E	3	CDBC	IW	22.11		26.40
4N-5E	4	BBBC	IW	13.54		15.72
4N-5E	4	AAAA	OW	18.06	24.07	21.28
4N-5E	7	BBAA	IW	80.55		84.42
4N-5E	9	CBCC	IW	69.05		72.90
4N-5E	10	DDAA	IW	27.19		28.92
4N-5E	11	DACA	IW	16.55		17.32
4N-5E	12	CCCD	OW	13.87	14.13	14.15
4N-5E	14	ABBB	IW	13.93		15.05
4N-5E	14	DDDD	OW	20.90	22.37	DRY
4N-5E	22	BCCC	IW	65.46		69.99
4N-5E	25	AACD	IW	18.53		19.83
4N-6E	6	CBBB	IW	90.56		92.53
4N-6E	8	AABB	IW	91.30		93.63
4N-6E	18	DDCC	OW	6.69	5.86	7.11
5N-4E	12	ABBA	IW	17.72		19.48
5N-4E	13	BADD	IW	15.98		17.18
5N-4E	15	DBBB	IW	17.33		18.85
5N-4E	22	DCCC	IW	46.02		49.43
5N-4E	23	BABB	IW	15.26		16.54
5N-4E	24	AACD	IW	19.11		19.75
5N-4E	25	DDAA	IW	45.62		48.95
5N-5E	7	CADD	IW	59.81		63.24
5N-5E	16	CBBA	IW	72.27		77.40
5N-5E	17	ABBB	IW	41.83		46.59
5N-5E	17	CDAA	OW	64.69	83.19	68.84
5N-5E	20	BCCD	IW	19.54		20.30
5N-5E	21	DDBB	IW	49.77		54.77
5N-5E	29	CBBB	IW	11.72		14.71
5N-5E	33	AADD	IW	17.41		19.30
5N-5E	35	ABBB	IW	101.61		103.69

OW - OBSERVATION WELLS

IW - IRRIGATION WELLS

Exhibit H

BIG BLUE RIVER BASIN
WELLS LOCATED IN REGULATORY AREA

Registration Number	Location	Completion Date	Depth (FT)	Registration Pumping Capacity (GPM)
G-34172	4N-5E-10AC	05-02-70	91	750
G-36485	4N-5E-11BC	03-28-72	82	750
G-38314	4N-5E-02DD	01-16-73	188	1,300
G-47820	4N-5E-12BB	11-01-75	117	1,200
G-50085	4N-5E-01BA	05-25-76	130	800
G-50086	5N-5E-33AC	05-26-76	123	800
G-53566	5N-5E-20CC	05-05-73	68	600
G-54047	4N-5E-24BB	03-01-76	84	800
G-54048	4N-5E-12BA	03-01-76	121	600
G-54260	4N-5E-14AA	06-01-74	70	800
G-54261	4N-5E-14AB	05-02-70	70	800
G-56152	4N-5E-04BB	04-14-77	91	1,000
G-59128	5N-5E-29AA	04-25-77	60	400
G-59727	5N-5E-33CB	04-19-78	91	1,200
G-60850	5N-5E-20BC	04-28-78	54	800
G-61085	5N-5E-29BC	04-21-78	88	800
G-61086	5N-5E-29CB	04-23-77	80	1,000
G-64213	5N-5E-21DC	07-28-80	99	800
G-68243	5N-5E-20CB	06-23-82	52	800
G-69638	2N-7E-04DD	08-24-84	99	800
G-72465	5N-5E-35CC	02-12-90	204	800
G-72756	5N-5E-35DC	02-20-90	274	800
G-73992	5N-5E-30AC	06-24-91	92	700
G-81769	4N-5E-13CD	04-22-94	65	250
G-94572	4N-5E-01CA	06-22-73	123	700
G-100477	5N-5E-28AA	??-??-75	??	800
G-100788	5N-5E-29AB	03-19-99	65	500

Exhibit I

LITTLE BLUE RIVER BASIN
WELLS LOCATED IN REGULATORY AREA

Registration Number	Location	Completion Date	Depth (FT)	Registration Pumping Capacity (GPM)
G-44015	2N-2E-27DB	07-15-74	136	265
G-58158	2N-2E-16AA	08-15-77	29	650
G-59427	2N-2E-26AB	01-30-78	40	450
G-66380	2N-2E-26AB	07-31-77	40	175
G-66381A	2N-2E-26AB	04-10-81	40	175
G-66381B	2N-2E-23DC	04-10-81	42	175
G-66381C	2N-2E-26AB	04-10-81	42	175
G-66381D	2N-2E-23DC	04-10-81	41	175
G-66381E	2N-2E-26AB	04-10-81	39	175
G-66381F	2N-2E-26AB	04-10-81	38	175
G-69789	2N-2E-25AB	12-31-84	108	500
G-76386	2N-2E-26DC	07-12-79	40	480
G-86458	2N-2E-27DB	10-26-94	139	670
G-86459	2N-2E-27DB	10-25-94	155	550
G-102220	2N-2E-24DD	04-22-97	124	600

Exhibit J

Big Blue River Seepage Investigation
Current Meter Measurements
Downstream Order

	October 11, 2000 (cfs)
Big Blue River 1.5 miles north of DeWitt in the SW1/4NE1/4 of 12-5N-4E	138
Clatonia Creek 1 mile northeast of DeWitt in the NW1/4NW1/4 of 17-5N-5E	.22
Turkey Creek 1.5 miles west of DeWitt in the SE1/4NW1/4 of 15-5N-4E	14.0
Turkey Creek 0.5 miles south of DeWitt in the SE1/4NW1/4 of 24-5N-4E	14.0
Turkey Creek 1.5 miles southeast of DeWitt in the NW1/4SW1/4 of 29-5N-5E	14.7
Big Blue River 2.5 miles southeast of DeWitt in the NW1/4NE1/4 of 33-5N-5E	154
Soap Creek 3.5 miles southeast of DeWitt in the SE1/4SW1/4 of 27-5N-5E	.06
Unnamed tributary to the Big Blue River 1 mile north of Hoag in the NW1/4NE1/4 of 10-4N-5E	0
Snake Creek 2 miles northeast of Hoag in the NW1/4NW1/4 of 1-4N-5E	0
Big Blue River 1 mile east of Hoag in the NE1/4NW1/4 of 13-4N-5E	159
Cub Creek 2 miles south of Hoag in the SW1/4SW1/4 of 24-4N-5E	.21
Bottle Creek 1.5 miles northwest of Beatrice in the NW1/4SW1/4 of 30-4N-6E	0
Unnamed tributary to the Big Blue River 0.5 miles northwest of Beatrice in the SW1/4SW1/4 of 29-4N-6E	.29
Indian Creek at Beatrice in the SE1/4SE1/4 of 28-4N-6E	.90
Big Blue River at Beatrice in the SW1/4NW1/4 of 3-3N-6E	163

Exhibit K

Little Blue River Seepage Investigation
Current Meter Measurements
Downstream Order

	October 12, 2000 (cfs)
Little Blue River 2.7 miles south of Alexandria in SE1/4SE1/4 of 23-3N-1W	64.2
Big Sandy Creek 0.8 miles south of Alexandria in SE1/4SE1/4 of 11-3N-1W	19.8
Big Sandy Creek 1.2 miles west of Powell in SE1/4SE1/4 of 16-3N-1E	23.0
Little Blue River 1.2 miles southwest of Powell in SE1/4SE1/4 of 22-3N-1E	85.9
Little Sandy Creek 2.0 miles east of Powell in NW1/4NE1/4 of 19-3N-2E	.55
Whiskey Creek 2.1 miles northwest of Fairbury in SW1/4SE1/4 of 33-3N-2E	.06
Little Blue River 1.3 miles northwest of Fairbury in NW1/4NE1/4 of 9-2N-2E	79.0
Tributary to Little Blue River 0.8 miles southwest of Fairbury in NE1/4SW1/4 of 22-2N-2E	0
Little Blue River 0.8 miles south of Fairbury in NW1/4NE1/4 of 26-2N-2E	86.3
Brawner Creek 0.4 miles southeast of Fairbury in SE1/4NE1/4 of 23-2N-2E	0
Rose Creek 4.0 miles southwest of Endicott in NW1/4NW1/4 of 12-1N-2E	4.70
Smith Creek 0.2 miles northwest of Endicott in NW1/4SE1/4 of 5-1N-3E	.93
Little Blue River 0.3 miles south of Endicott in SE1/4SW1/4 of 4-1N-3E	96.2
Rock Creek 0.3 miles southeast of Endicott in SE1/4SE1/4 of 4-1N-3E	.05
Coon Creek 2.6 miles northwest of Steele City in NW1/4NE1/4 of 15-1N-3E	0
Little Blue River 0.5 miles south of Steele City in NW1/4NW1/4 of 30-1N-4E	95.8
Little Blue River 0.6 miles west of Hollenberg in NE1/4SW1/4 of 8-15N-4E	99.0

EXHIBIT L

ACTIVITIES IN LOWER BIG BLUE NRD 2000-2001

WATER QUALITY FUNDING

The NRDs will lose approximately two million dollars in funding of water quality programs at the end of FY01 when a $1.00/ton fee from commercial fertilizer is eliminated. NRDs have used this money for cost share on water quality best management practices and groundwater monitoring programs. The LBB NRD provided incentives on deep nitrate sampling of soils, anhydrous application meters, flow meters, soy-based drip oil, etc.

Alternative funding has been approved by the state legislature and signed by the governor (LB 329e) that will provide one million dollars annually through various increases in pesticide and license fees and $250,000 in general funds for NRD Water Quality Programs. NRDs will have to match 150 percent of the state dollars under this program. NRDs will also have the ability to raise property taxes to make up the difference in the new fund compared to what was received in fiscal year 99-00.

Water Quality monitoring continues in the LBB NRD. The NRD sampled 473 irrigation wells across the district in the summer of 2000. Most wells were sampled for nitrate-nitrogen with a few wells tested for pesticides. Since groundwater quality monitoring began in 1987, 764 different irrigation wells have been monitored across the NRD. This year the district re-certified operators in its 60 square mile Phase II area. Operators were first required to be certified when the district's groundwater management plan went into affect in 1997. Certification is received by attending a class on irrigation water and nitrogen management, as well as other BMP's.

EQIP CONTRACTS

There are a total of 185 EQIP contracts in the Lower Big Blue NRD as of October 1, 2000.

In the Lower Turkey Creek, 120,000 acres have been approved for a fifth year as a priority area. $202,500 has been allocated for this work with thirty applications received during this sign-up period. In its third year, the 67,300 acre Beatrice Tribbs priority area has received $225,000.

The NRCS is currently ranking 49 applications in the two priority areas. These projects focus on erosion control, flood prevention, livestock management, wildlife habitat, and increased efficiency in nutrient and pesticide usage to protect surface and groundwater. In addition, $70,798 has been approved for the non-priority area in the Lower Big Blue NRD. There were 82 applications in this area that requested $1,166,034. Horseshoe Creek in Kansas and Nebraska has been approved for $150,000 in funding in FY 2001.

LAND TREATMENT

Demand for cost share for land treatment practices (terraces, waterways etc.) remains very high. The Lower Big Blue NRD budgeted $120,000 this year to address the need for cost-share money. When combined with the $134,400 available from the state cost-share program, $254,400 was used for land treatment practices for 126 landowners. We had 173 requests for over $ 560,000. A total of 142 miles of terraces, 141 acres of grassed waterways, and 119,700 feet of tiled outlets were constructed.

The NRDs new Small Dam Cost-Share Program currently has six dams constructed two under construction and three in the design stage.

The Nebraska Buffer Strip Program began in December of 1999. The NRD has 106 10-year contracts involving 725 acres for $32,000 in annual payments. There are two UNL riparian buffer demonstration sites in the NRD.

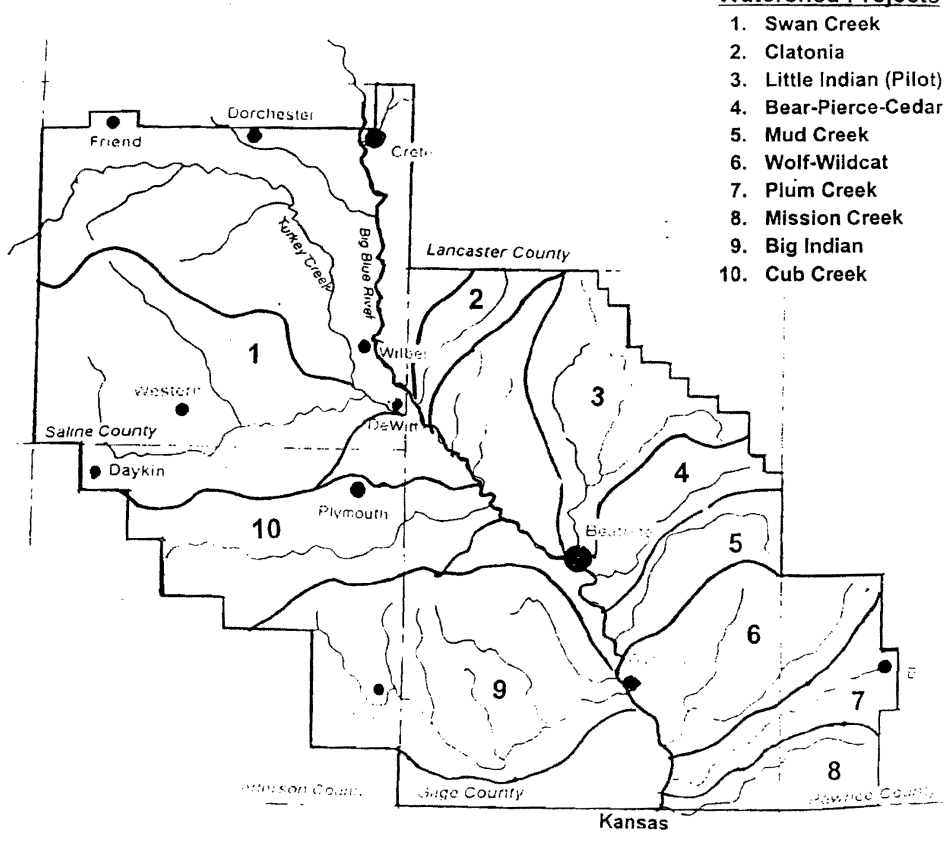
Proper well decommissioning for water quality protection and personal safety has received ever-increasing interest. Thirty-nine wells have been properly closed with cost-share money from state and NRD programs so far this fiscal year.

BEATRICE WEST PUBLIC WATER PROJECT

The NRD sponsors a public water project along Highway 4 west of Beatrice. Water is purchased from the City of Beatrice to serve 43 customers. Financing is through a rural development loan in the amount of $328,000. The Homestead National Monument is served by this project. Construction was completed in the late summer of 2000 and service began on October 1, 2000.

Blue River Compact Well Monitoring Spring 2001 -0.50 ft

LOWER BIG BLUE NATURAL RESOURCES DISTRICT



Phone (402) 228-3402
P.O. Box 826
FAX (402) 223-4441
805 Dorsey Street
Beatrice, Nebraska 68310

FLOOD CONTROL DATA - LOWER BIG BLUE NRD

Big Blue Basin in Nebraska	-	2,906,000 acres	
Big Blue Basin above Beatrice	-	2,444,600 acres	(84.1%)
Big Blue Basin above Crete	-	1,695,000 acres	(58.8%)
Turkey Creek	-	459,400 acres	(15.8%)
Swan Creek	-	162,300 acres	(35.0% of Turkey Creek)
Remainder of Big Blue in LBBNRD			
Above Beatrice	-	290,200 acres	(10.0%)
Remainder of Big Blue			
Below Beatrice	-	461,400 acres	(15.9%)

FLOOD CONTROL PROJECTS COMPLETED IN LBBNRD ABOVE BEATRICE

Clatonia	-	Completed	8 dams	11,998 acres controlled
Cub	-	Completed	17 dams	40,585 acres controlled
Little Indian	-	Completed	24 dams	19,150 acres controlled
Walnut	-	Completed	4 dams	2,925 acres controlled
Swan	-	Completed	19 dams	70,144 acres controlled
			72 dams	144,802 acres controlled
				(5.9% of 2,444,600 acres)

FLOOD CONTROL PROJECTS COMPLETED IN LBBNRD BELOW BEATRICE

Big Indian	-	Completed	32 dams	81,085 acres controlled
Bear-Pierce-Cedar	-	Completed	26 dams	40,455 acres controlled
Mud Creek	-	Completed	11 dams	36,475 acres controlled
Plum Creek	-	Completed	25 dams	21,178 acres controlled
Wolf-Wildcat	-	Completed	5 dams	21,475 acres controlled
Mission	-	Completed	7 dams	11,482 acres controlled
			108 dams	212,150 acres controlled
		Total Built	180 dams	356,952 acres (34% in NRD)

Flood storage (Flood Control) provided by all 253 dams and grade stabilization structures
97,822 acre feet, or 31.8 Billion gallons of water.

REPORT TO THE LITTLE BLUE RIVER COMPACT

JUNE 6, 2001

WATERSHED PROTECTION PROJECT

The Little Blue NRD is in the process of preparing an application for the Little Sandy Watershed Project located in the four corners of Jefferson, Thayer, Fillmore and Saline Counties. The watershed is made up of 66,700 acres, and the District has selected five dam sites to pursue for watershed construction.

We have contracted with Schemmer Associates of Omaha to do the engineering design work, and the application should be submitted to the State Department of Natural Resources on July 1st, 2001.

Pending funding approval, land rights acquisition is expected to begin in 2002 with possibility of the first construction occurring in 2003. Besides flood control benefits, the projects are expected to contribute significant groundwater recharge, and one site has been identified as a recreation development.

CONSERVATION ACCOMPLISHMENTS

For many years, the Little Blue NRD has been active in providing cost-share assistance for soil and water conservation practices across the District.

Accomplishments for 2000

159,824 Feet Terraces
66,522 Feet Waterways
4 Livestock Dugouts
4 Water Impoundment Structures
210 Acres of Pasture and Range Seeding
13 Planned Grazing Systems
13 Tree Plantings
57,028 Feet of Underground Tile Outlets
7 Water and Sediment Control Basins
8 Diversions
341.2 Acres Buffer Strips

Also utilizing Fertilizer Tax Fees for water quality purposes, the Little Blue NRD provided money for practices such as Irrigation Management, Underground Return Lines for Reuse Systems, Irrigation Flow Meters, Drop Nozzle Packages for Center Pivots, Chemical and Fertilizer Applicator Regulators, Soil Sampling Practices and Gates and Gaskets for Irrigation Pipeline.

WELLHEAD PROTECTION AREA ACTIVITIES

Several communities in the Little Blue NRD have requested assistance in developing wellhead protection for their municipal supplies. Communities that we are currently working with include Bruning, Fairbury, Hastings, Fairfield, Clay Center, Edgar, Reynolds and Deshler.

The District provides services such as assistance with Contaminant Source Inventories and the development of plans including Best Management Practices for the surrounding agricultural land.

RURAL WATER PROJECT SERVICE

With the completion of the Little Blue Public Water Project – South which extends into northern Washington County, Kansas, the Little Blue NRD now maintains two sizable rural water districts and serve a total of 400 active service connections. Approximately 68 of those connections lay in northern Washington County. The District purchases nearly 48,000,000 gallons of water from the City of Fairbury for distribution in our system. Approximately 10,000,000 gallons of water was sold to customers in Kansas.

The project has had a very favorable impact on residents both in southern Jefferson County and northern Washington County, Kansas. We are pleased to be able to provide this service.

GROUNDWATER LEVELS FOR SPRING OF 2001

The Little Blue NRD monitors over 320 irrigation wells throughout the District on a biannual basis. The spring 2001 water levels indicated a general decline in the District's average groundwater table of 1.29 feet. Charts are attached to these notes, showing the location of the monitoring wells and the average spring-to-spring groundwater level change since 1974.

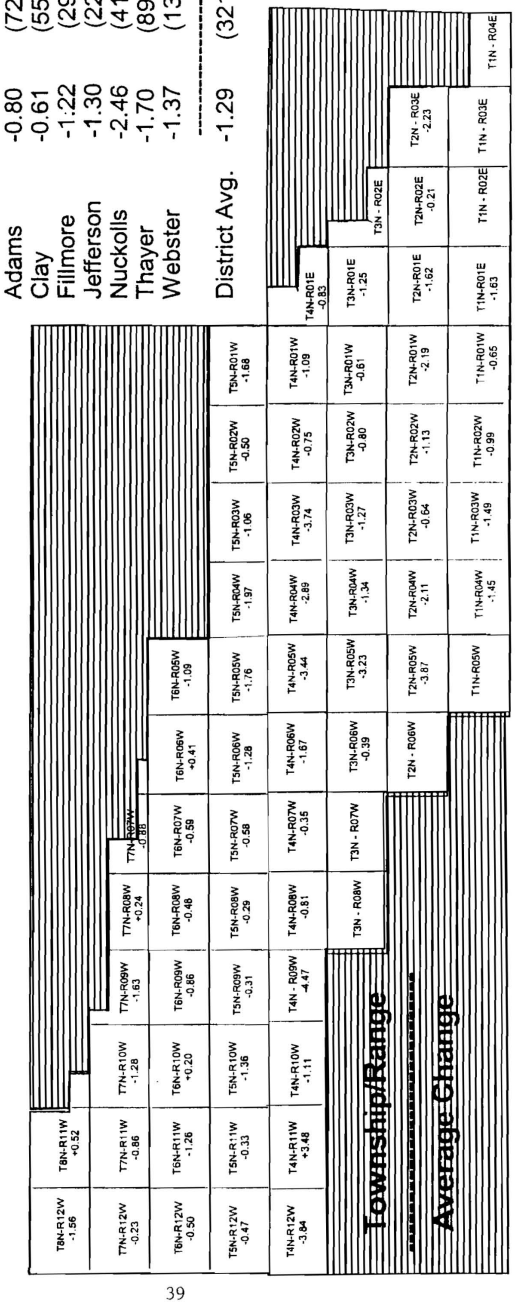
The District has also conducted groundwater nitrate sampling on approximately 300 wells. Areas where higher levels of nitrate are common are being further scrutinized by the NRD to determine if additional management activities are required.

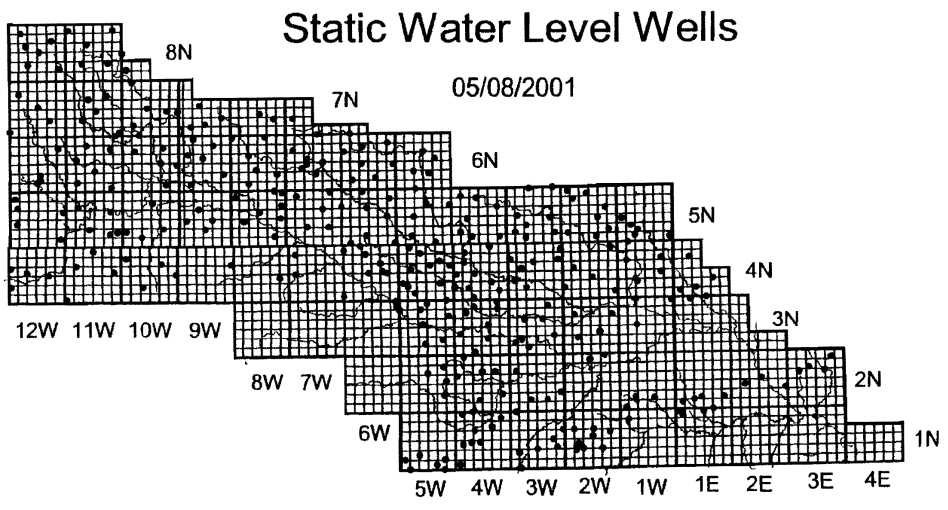
Currently, groundwater management activities requiring producer training and moderate agricultural regulation are being imposed in the Hardy, Nebraska and Bruning, Nebraska areas with additional studies ongoing in the Deshler and Edgar vicinities.

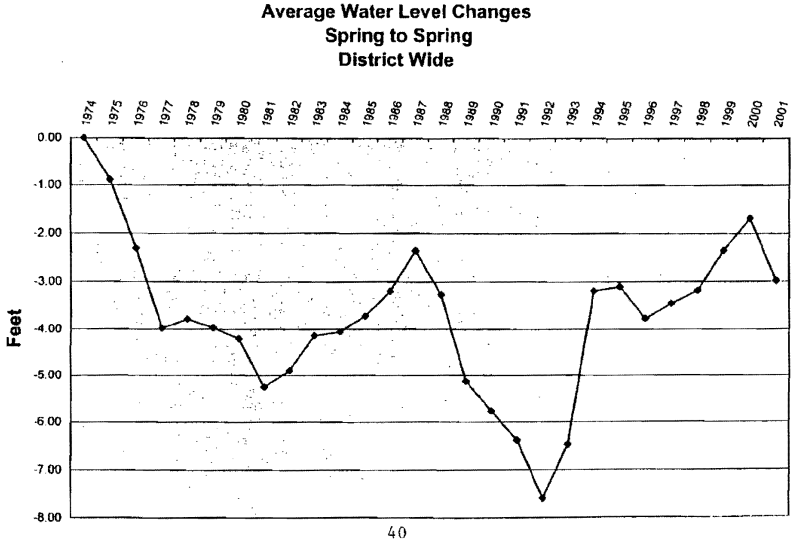
MDO/ro

Little Blue Natural Resources District

Change in Static Water Level
Average by Township
Spring 2000 to Spring 2001







Kansas-Nebraska Big Blue River Compact
Nebraska Report - Upper Big Blue NRD
Rod DeBuhr
June 6, 2001

Well Drilling Activities

Seventy-four irrigation wells (55 new & 19 replacement) were drilled in 2000. The total number of registered irrigation wells in the District is 11,287 as of May 22, 2001.

Ground Water Level Changes

The annual groundwater level change for the District was a decline of 2.25 feet. The attached map shows the area of greatest changes and the county averages. With this change the average ground water level is 11.44 feet above the allocation trigger.

Groundwater Nitrates

The entire district remains in phase I management for groundwater nitrates. The district is divided into 12 management zones (see attached map). The trigger level for phase II management is 9 ppm. Under phase I management the application of anhydrous may not occur until November 1, while application of dry and liquid nitrogen fertilizers must wait until March 1.

Soil and Water Conservation Activities

The District provided cost-share for 80 soil and water conservation projects in fiscal year 2000. The total cost for these projects was $230,714, of which $93,786 was district funds and $136,928 was state funded through the Nebraska Soil and Water Conservation Program. The projects included; Irrigation surge valves (3), Irrigation water return lines (1), Renozzlng of pivots for low or medium pressure(18), Diversions(1), Grade stabilization structures(1), Grassed waterways(1), Mechanical outlets(7), Sediment control basins(2), Terraces(37), Water impoundment dams(2), Windbreak planting(3), Windbreak renovation(4)

Indian Creek Reservoir Planning

The Indian Creek Project is a multipurpose dam and reservoir proposed to be constructed near the town of Cordova, Nebraska. The contributing drainage area is approximately 48 square miles, and the proposed reservoir would have a conservation pool of 3,000 acre feet covering 320 acres. Project purposes include flood control, erosion control, wildlife and fishery development, public recreation, and some ground water recharge.

The District recently completed detailed aerial photography and digital terrain modeling for two possible reservoir sites. Preliminary feasibility studies are in progress, including geotechnical and soils analysis, infiltration studies, rainfall analysis, and water quality assessment. The District expects to complete analysis of reservoir operations and benefit to cost comparisons during the next year. A decision to proceed, or not proceed, with the project will then be considered by the District.

Nebraska Department of Natural Resources
Data Bank
Processed: May 22, 2001

NOTE: ---- indicates no drilling year given

Registered Groundwater Wells
Summary by Natural Resources District and Drilling Year
Upper Big Blue

Year	Number of Wells															Estimated Average					Num
	Aqu	Grd	Hea	Inj	Obs	Oth	Geo	PWO	Dew	Com	Dom	PWS	Mon	Rec	Liv	Irr	Well Depth	Stat Level	Pump Level	Yield GPM	Est Tot Acr Irr	Repl Well
----	0	0	0	0	0	0	0	0	0	0	4	5	0	1	1	27	131.8	44.3	56.3	458.9	3,019	2
1904	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	120.0	88.0	90.0	225.0	0	0
1918	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	80.0	40.0	65.0	200.0	0	0
1923	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	45.0	15.0	15.0	60.0	10	0
1924	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	50.0	16.0	50.0	200.0	25	0
1927	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	190.0	83.0	93.0	1000.0	100	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	60.0	20.0	0.0	400.0	51	0
1934	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	95.0	45.0	45.0	650.0	150	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.0	0.0	0.0	0.0	100	0
1936	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	162.5	90.5	106.5	600.0	160	0
1937	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	138.7	89.7	108.0	353.3	10	0
1938	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	265.5	133.5	157.5	450.0	100	0
1939	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	67.0	17.0	25.0	750.0	590	0
1940	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	100.8	51.2	64.6	684.4	2,070	0
1941	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	12	87.9	41.8	53.3	895.8	1,770	0
1942	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	143.8	45.0	74.7	870.8	1,340	0
1943	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	14	94.2	34.5	42.0	826.6	2,757	0
1944	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	93.6	38.7	46.0	728.2	3,988	0
1945	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	112.0	55.0	51.7	864.4	3,683	0
1946	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	34	119.8	53.0	61.6	792.0	5,056	0
1947	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	135.1	60.4	71.0	875.3	7,837	0
1948	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	96	141.1	55.8	70.0	860.1	14,008	0
1949	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	40	119.2	46.4	60.6	915.5	5,950	0
1950	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	29	114.7	47.6	64.5	892.5	3,905	0
1951	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	18	172.7	74.1	89.4	886.6	2,253	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	110.0	50.0	54.4	756.7	3,727	0
1953	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	119	103.8	46.0	57.5	782.9	15,670	0
1954	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	310	131.1	57.0	70.8	851.2	40,960	0
1955	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	467	142.2	60.5	77.5	878.6	61,979	0
1956	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	1166	151.2	63.6	82.4	931.7	150,117	0
1957	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	782	181.9	74.9	97.5	976.1	97,286	2
1958	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	75	170.6	71.8	90.9	941.5	8,469	0
1959	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	98	181.9	78.3	106.3	1013.5	11,681	3
1960	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	77	182.5	74.5	97.2	995.1	9,111	1
1961	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	84	183.8	75.2	97.3	1036.3	11,659	3
1962	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	65	195.4	76.7	102.8	1027.1	9,333	4
1963	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	138	193.3	77.2	101.2	1013.0	16,865	2
1964	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	272	205.8	81.7	107.2	1082.4	36,900	12
1965	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	352	206.0	82.0	104.4	1109.6	40,750	8
1966	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	382	199.2	79.3	100.4	1118.8	41,644	13
1967	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	471	202.1	82.8	110.2	1155.4	52,068	12
1968	0	0	0	0	0	0	0	0	2	0	1	1	4	0	0	0	292	213.6	83.5	111.2	1147.9	32,710	13
1969	0	0	0	0	0	0	0	0	1	0	1	2	1	0	0	0	169	214.8	89.5	115.9	1063.7	18,902	6
1970	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	218	213.4	83.8	116.3	1064.6	24,979	14
1971	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	270	203.7	81.8	109.7	1072.6	29,104	15
1972	0	0	0	0	0	0	0	0	0	0	2	0	4	0	0	0	255	204.4	85.7	116.9	1078.7	28,441	25
1973	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	241	210.6	86.5	114.4	1011.8	27,733	23
1974	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	431	215.2	81.3	110.4	969.4	52,917	31
1975	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	560	210.5	85.7	117.5	985.9	64,408	36
1976	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	693	215.7	82.8	117.1	954.6	77,657	58
1977	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	537	215.7	81.6	116.8	964.3	57,925	68
1978	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	137	212.6	84.8	121.3	949.2	15,827	25
1979	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	186	215.1	83.0	117.2	912.6	22,928	30
1980	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	206	205.3	80.2	111.3	879.5	25,399	42
1981	0	0	0	0	0	0	0	0	0	0	1	0	7	0	0	0	192	216.0	85.1	124.0	889.1	22,116	46
1982	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	0	81	211.7	84.8	118.8	908.3	10,010	22
1983	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	42	217.6	82.7	116.7	931.4	5,291	11
1984	0	0	0	0	0	0	0	0	0	0	1	2	4	2	0	0	79	205.4	86.5	118.5	887.5	9,780	30
1985	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	36	214.7	85.9	106.0	931.3	4,511	16
1986	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	30	191.4	93.3	117.9	933.8	3,808	19
1987	1	0	0	0	1	0	0	0	1	0	0	1	0	3	0	0	42	204.6	79.1	111.0	850.9	4,593	24
1988	0	0	0	0	0	0	0	0	0	0	1	0	7	6	0	0	96	216.9	79.0	110.6	908.0	12,339	23
1989	0	0	0	0	0	0	1	0	0	0	3	0	4	6	0	0	145	215.4	82.9	116.3	901.9	18,385	20
1990	0	0	0	0	0	0	1	0	0	0	1	0	1	16	1	0	111	211.2	80.4	108.1	847.0	13,811	25
1991	0	0	0	2	0	0	0	0	0	0	1	1	2	66	2	0	61	138.8	66.8	58.9	434.1	8,005	13
1992	0	0	0	0	0	0	0	0	0	0	0	1	2	19	0	0	120	200.1	77.8	101.8	797.0	14,058	26
1993	0	0	1	0	0	0	0	0	0	0	1	16	1	39	0	3	58	154.0	62.3	69.8	456.4	6,926	4
1994	1	0	4	6	0	1	0	0	0	0	1	60	0	97	7	17	68	140.0	59.0	48.7	237.3	6,451	10
1995	0	0	1	0	0	1	0	2	0	3	64	1	25	2	7	104	195.2	81.3	100.6	486.2	8,970	19
1996	0	0	1	0	1	0	0	0	0	1	61	1	4	0	12	172	202.3	80.9	116.4	621.8	20,345	18
1997	0	0	0	0	1	0	0	0	0	0	79	7	3	0	7	114	195.9	83.3	109.0	568.2	14,492	31
1998	0	1	0	0	0	1	0	0	0	4	57	1	15	0	8	73	189.6	73.7	94.7	449.2	8,829	23
1999	0	6	1	0	0	0	0	0	0	2	85	2	49	0	10	76	155.1	63.5	73.6	318.7	9,623	26
2000	0	2	0	0	0	1	0	0	0	2	77	2	18	0	7	74	184.8	75.8	100.3	382.9	7,916	19
2001	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	10	155.3	62.7	71.7	542.9	1,223	2
	2	9	9	8	3	6	0	10	0	40	515	123	374	13	72	11287					1,357,563	875

Registered Groundwater Wells Database
Summary Table Legend and Notes:

Use

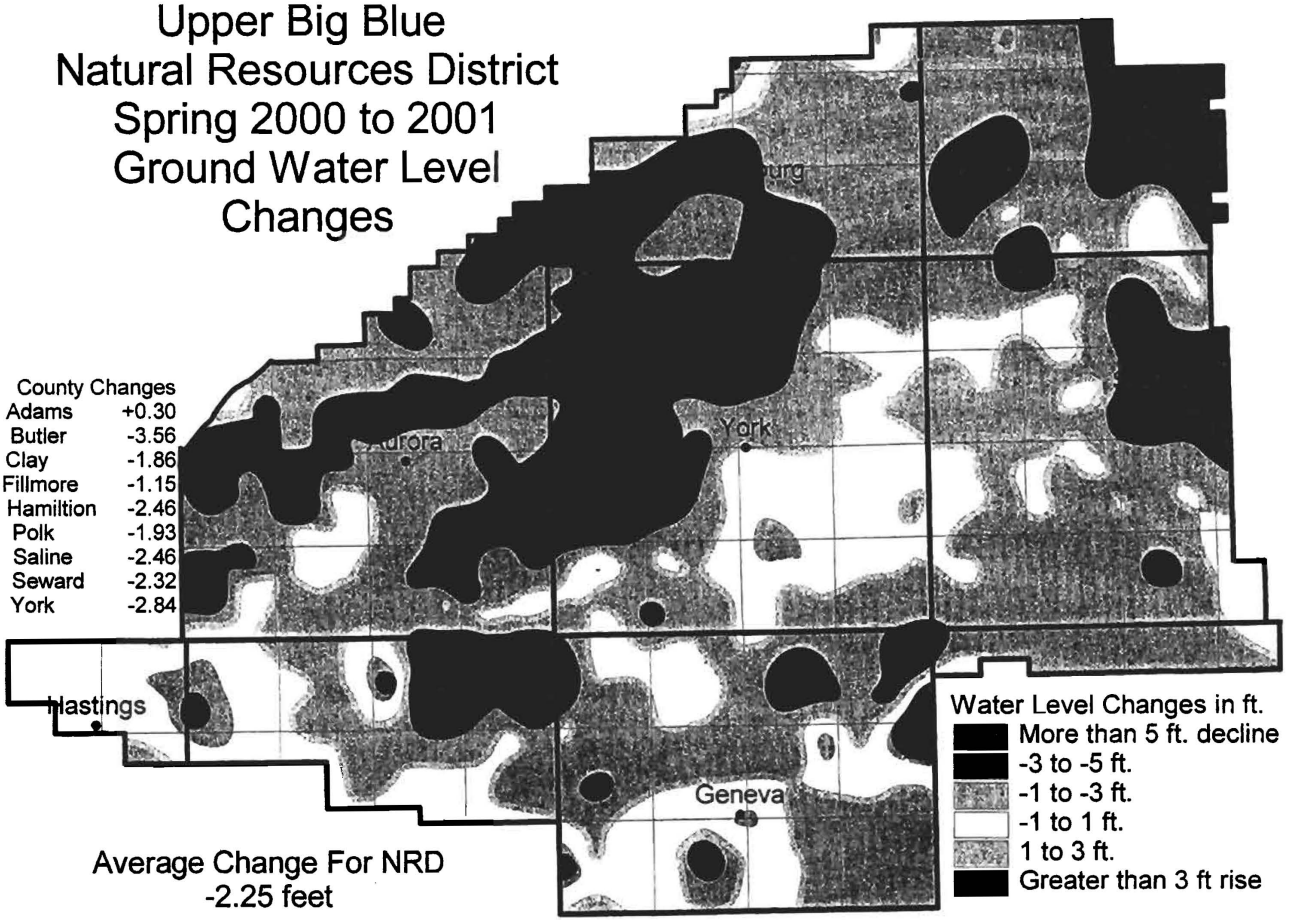
Code	Water Use
Aqu	Aquaculture
Com	Commercial/Industrial
Dom	Domestic
Grd	Ground Heat Exchanger
Hea	Heat Pump (Ground Water Source)
Irr	Irrigational
Inj	Injection
Obs	Observation (Ground Water Levels)
Oth	Other - Lake Supply, Fountain, Geothermal, Wildlife, Wetlands, Recreation, Plant & Lagoon, Sprinkler, Test, Vapor Monitoring
PWS	Public Water Supply with Spacing Protection
Mon	Monitoring (Ground Water Quality)
Rec	Recovery
Liv	Livestock
Geo	Geothermal
PWO	Public Water Supply without Spacing Protection
Dew	Dewatering (Over 90 Days)

Estimated Average
Well Depth - Estimated average total well depth in feet
Static Level (Stat Level) - Estimated average Static Water Level in feet
Pumping Level (Pump Level) - Estimated average Pumping Water Level in feet
Estimated Average Yield Gallons per Minute (Yield GPM) - is the estimated average pumping rate in gallons per minute

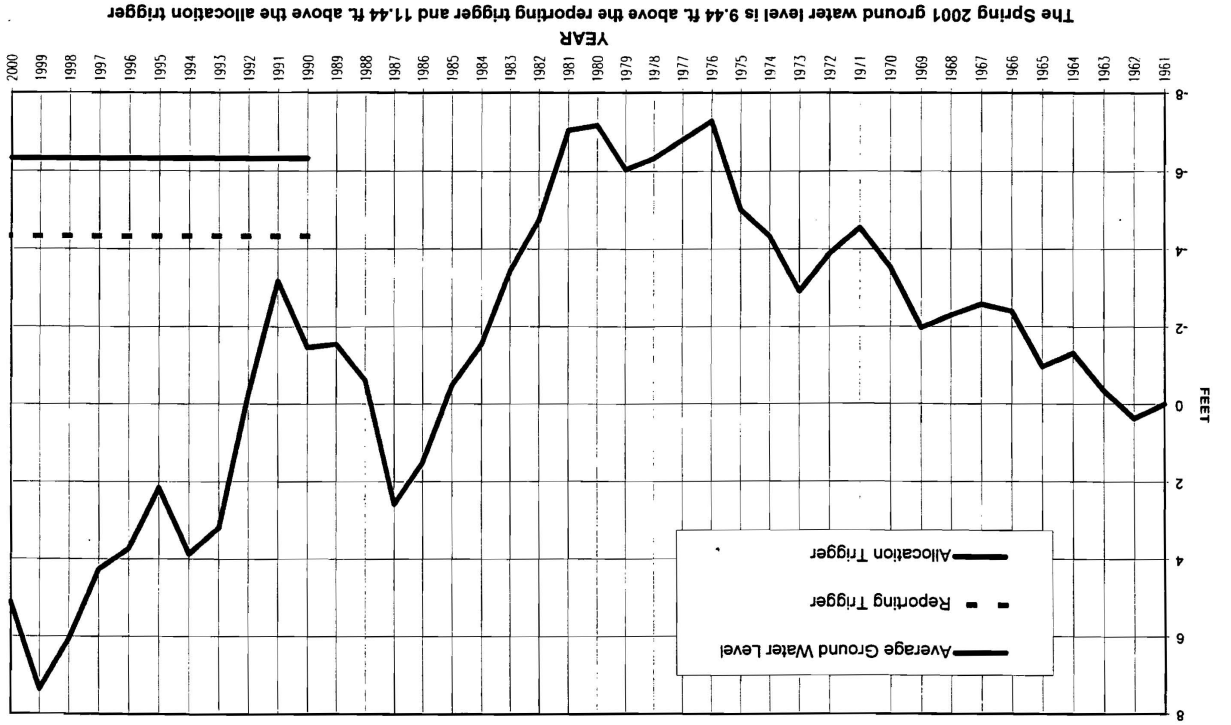
Estimated Total Acres Irrigated (Est Tot Acr Irr)

Replacement Wells (Num Repl Well) - is the total number of Replacement Wells

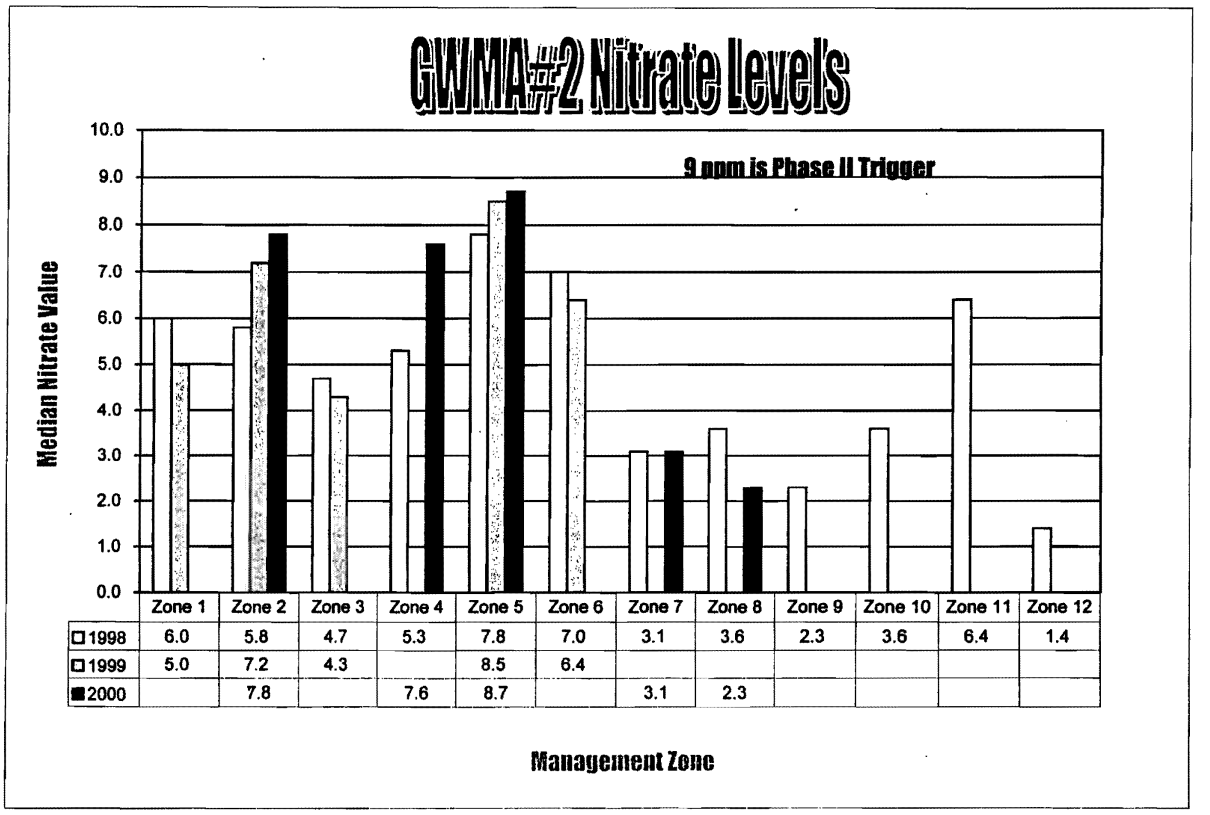
Upper Big Blue Natural Resources District Spring 2000 to 2001 Ground Water Level Changes



Average Change For NRD
-2.25 feet



UPPER BIG BLUE NRD - AVERAGE GROUND WATER LEVELS
TRIGGERS COMPARED TO HISTORIC LEVELS



	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12
□1998	6.0	5.8	4.7	5.3	7.8	7.0	3.1	3.6	2.3	3.6	6.4	1.4
□1999	5.0	7.2	4.3		8.5	6.4						
■2000		7.8		7.6	8.7		3.1	2.3				

Upper Big Blue Natural Resources District's Ground Water Management Area Management Zones

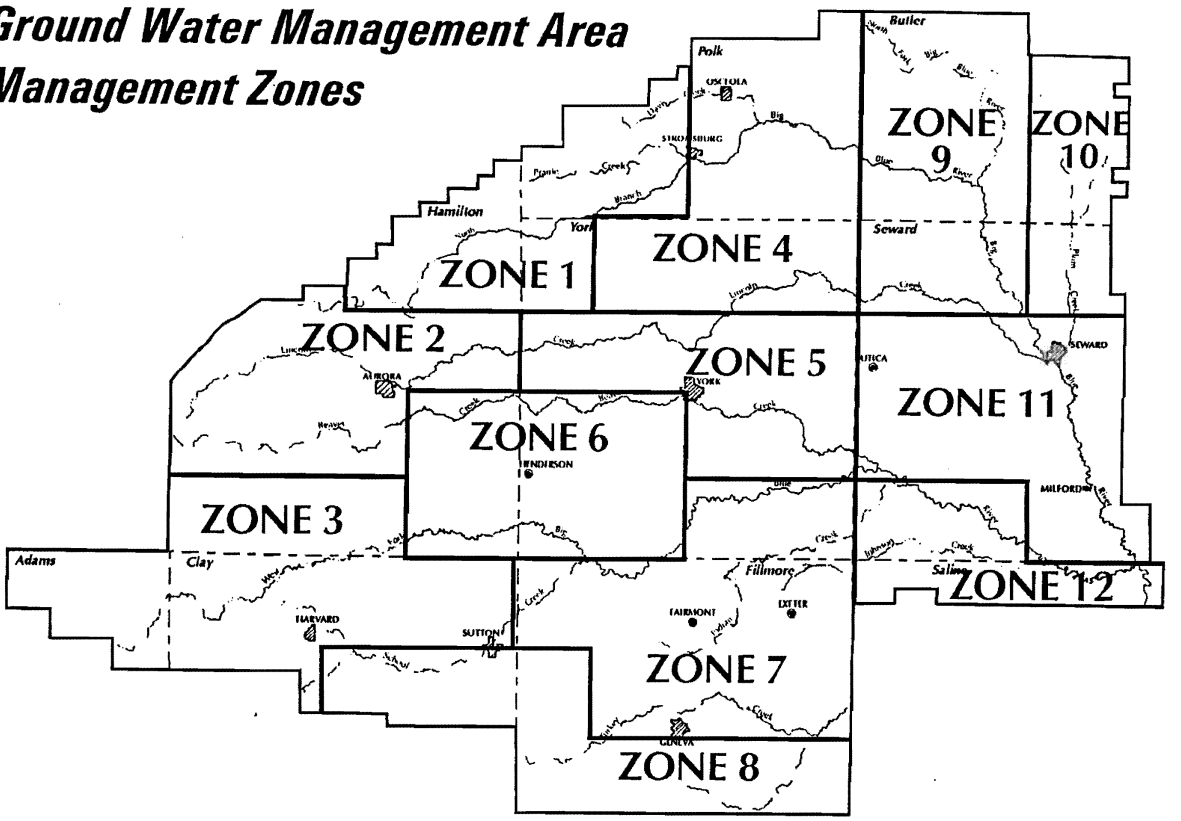


EXHIBIT O

KANSAS-NEBRASKA BIG BLUE RIVER COMPACT
U.S. Geological Survey - 2000 Water Year
June 7, 2001

The U.S. Geological Survey is presently operating two streamflow gaging stations for the Compact Administration: The Big Blue River at Barneston, NE, and Little Blue River near Hollenberg, KS. Daily discharge records were computed at the two sites. Data collection platforms are being maintained for transmission of gage heights. The two sites are on the Nebraska District's WEB site on the Internet for viewing of the previous seven days. The Internet address for the streamflow is:
http://www-ne.cr.usgs.gov/rt-cgi/gen_tbl_pg

To obtain preliminary discharge information for the current year up to 30 days previous and to obtain historical discharge data, logon the USGS National WEB site at:
http://water.usgs.gov/ne/nwis
or link through Nebraska District local site.

Low-flow measurements were made at sites in the Big Blue River and Little Blue River basins in October 2000. Flows were in the normal range for the October date of the measurements in the Big Blue River Basin; Big Blue River at Beatrice (Oct. 2000 meas.=163 cfs, about 55% exceedance, Oct. 11 median=205 cfs). Flows were less than the normal range in the Little Blue River Basin; Little Blue River at Hollenberg, KS (Oct. 2000 meas. = 99.0 cfs, about 80% exceedance level, Oct. 12 median = 136 cfs)

The mean daily discharge of the Big Blue River at Barneston for WY2000 was 433 cfs, as compared to the mean discharge for WY1999 of 1203 cfs and to the mean discharge for the period of record (1933-99) of 874 cfs. The minimum daily discharge during WY2000 was 89 cfs on August 17, 2000.

The mean daily discharge of the Little Blue River near Hollenberg, KS for WY2000 was 301 cfs, as compared to the mean discharge for WY1999 of 427 cfs and compared to the mean discharge for the period of record (1975-99) of 544 cfs. The minimum daily discharge during WY2000 was 69 cfs on September 6, 2000.

The daily records for the two gaging stations for WY2000, the hydrographs of the two ground-water observation wells in Gage and Jefferson Counties, Nebraska, and a listing of the low-flow measurements were provided to the Compact's Engineering Committee. Current stage-discharge rating tables for the two stream gages and tables of monthly mean flows for each year for the gaging stations since 1970 were also provided.

The estimate of the Compact Administrations's share of the cost to operate the two streamflow gaging stations for the period July 1, 2002 to June 30, 2003 and the cost for making the low-flow measurements in the fall of calendar-year 2002 were given to the Budget Committee.

EXHIBIT P

KANSAS - NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION REPORT

Water Quality Committee
June 6, 2001

Background: In 1995, the Water Quality Committee and affiliated work groups began pursuing four (4) primary objectives designed to enhance water quality in the Big Blue River Basin of Kansas and Nebraska. These objectives were to:

1) design and implement a basin wide water quality monitoring program;

2) develop and conduct a baseline survey of farm practices utilized in the basin with emphasis on pesticide and nutrient use;

3) initiate and conduct water quality stewardship education and outreach programs; and,

4) develop water quality Best Management Practices (BMPs) and economics support information suitable to the basin.

The baseline wide water quality monitoring system became operational mid-April of 1997 and water monitoring has continued to this time. A baseline farm practices survey was completed and published in March, 1998.

Since 1995, the Water Quality Committee and affiliated groups have held a wide variety of work group sessions and jointly sponsored a number of field days, tours or other activities. Working sessions have been held on an as need basis. However, the committee has annually met within the month proceeding the annual meeting of the Kansas - Nebraska Big Blue River Compact Administration for a review of the progress of various projects and to establish committee goals for the upcoming year.

Committee Activities Report: The most recent meeting of the Kansas - Nebraska Big Blue River Compact Administration's Water Quality Committee met from 10:00 a.m. to 2:30 p.m. on May 23, 2001 at the offices of the Lower Big Blue Natural Resources District, 805 Dorsey Street, Beatrice, NE. Those participating included committee members Annette Kovar and Pat Rice (Nebraska Department of Environmental Quality), Glen Kirk (Kansas Water Office) and Dale Lambley (Kansas Department of Agriculture. Other meeting attendees included: Phil Barnes and Dan Devlin (KSU), Tom Franti (UNL), Craig Romery (NDA), Don Vogel (NE Corn Growers Assoc.), Jessica Baetz (KS Corn Growers Assoc.) and Jack Dutra (JD Information Services). All have been active in working with the committee and the Big Blue River Basin water quality effort. Due to a death in the family, Denis Blank (Nebraska Department of Agriculture) was unable to attend and Rich Reiman served as NDA representative. Our other committee member Tom Stiles (Kansas Department of Health and Environment) was involved

with work related TMDL activities in Florida and was also unable to attend this meeting.

Water Monitoring: Dr. Phillip Barnes, Department of Biological and Agricultural Engineering, Kansas State University has been a lead worker in the basin wide water quality monitoring program. Phil provided a review of current water quality conditions in the basin, particularly as these relate to atrazine concentrations. Some highlights of his report are as follows:

- water samples are regularly collected at 22 locations within the basin.

- samples are screened for atrazine, alachlor, metolachlor and acetochlor herbicides; nutrient levels and coliform bacteria.

- Tuttle Creek Reservoir in Kansas is still considered as atrazine impaired. However, the amount of atrazine flowing into the reservoir is being reduced.

- atrazine levels fluctuate with rainfall events and from year to year, but the long term trend appears to be a continued reduction or downward trend in atrazine concentrations in surface waters of the basin.

- because of changes in the availability of certain herbicides in the marketplace, many Nebraska farmers increased atrazine use. This was particularly true of producers in the upper portion of the basin. However despite increased use, atrazine levels in downstream surface waters did not increase. This seems to be a good indicator that management practices put into place are working.

- the largest proportion of the atrazine now moving into the waters of the Big Blue River originates in that portion of the river system located between Beatrice, NE and Marysville, KS. This is an area that is characterized by clay soils and increased grain sorghum production acreage. In that area, up to 5% of the total atrazine applied is lost in surface runoff. Losses need to be reduced to 2% or less.

- in that area 50% of the atrazine loss occurs during the month of May; another 45% is lost during June (ave. figures).

State Administrative & TMDL Updates: Both Kansas and Nebraska are involved in TMDL development. Dale Lambley reported that Kansas had submitted TMDLs for three of the state's river basins (inc. The Kansas - Lower Republican Basin). The state is now working on development of TMDLs for the Missouri and Marais des Cygnes basins. Annette Kovar handed out copies of a coliform bacteria TMDL that NDEQ had developed and submitted for the West Fork Big Blue River Basin. NDEQ is currently working on TMDLs covering two other portions of the Big Blue River basin. The 5 year rotational monitoring cycle used by NDEQ returns to the Blue River next year and will provide additional information. Annette and Pat Rice indicated that there appears to be more NE legislative push for increased water monitoring. Also they conveyed word from Steve Walker (NDEQ) who wanted to advise the committee as to the status of the EPA grant which provides major funding support to operation of the basin wide water

quality monitoring system. This is the last year of the grant. However, Steve advises that he believes there is a good possibility we can obtain additional funding from EPA. Steve believes that we can likely obtain funding to cover two additional years of monitoring.

The State Conservation Commission in Kansas has conducted an inventory of the TMDL implementation needs for the Kansas - Republican River Basin. The inventory addresses fecal coliform bacteria, nutrients, pesticides, sediment, and dissolved oxygen impairments and the cost of implementation of practices needed to ameliorate water quality problems in high priority TMDL watersheds. Copies are available upon request. It should be noted that TMDL educational efforts directed toward the farm community are also underway in both states.

Education, Research and Stewardship Activities: Tom Franti (UNL) and Dan Devlin (KSU) reviewed the status of several research and education efforts which are underway in the basin. UNL and KSU have been closely coordinating their educational and research programs in the basin and also jointly sponsored the Blue River Basin Riparian Buffer Field Tour which was held on September 12, 2000. Some research and educational projects were highlighted as follows:

- Nebraska BMP Adoption Study: Work is being done by UNL with producers in the Indian Creek, Turkey Creek and Big Sandy Creek watersheds to determine the level of outreach and extension efforts needed to obtain producer BMP adoption. Indian Creek producers are the recipients of a high level extension and outreach effort which includes establishment of nine on-farm demonstration field sites. The sites demonstrate BMPs for weed control and for reducing atrazine runoff. In the Turkey Creek watershed, producers receive only periodic newsletters and are invited to participate in occasional water quality/BMP meetings. Producers in the Big Sandy watershed receive no special newsletters or BMP outreach programs. The results of this study will provide information on the degree of effort needed to obtain producer adoption of BMPs and should have applicability in areas outside the basin. This is a 319 funded project. Tom Franti noted and Dan Devlin concurred that some confusion exists among field crop producers on whether or not certain herbicides have atrazine as a constituent. Most farmers and retailers operate in terms of product trade names which often do not reflect chemistry.

- Indian Creek Survey: As part of the above effort, UNL Cooperative Extension has conducted a survey of changes which have occurred in atrazine use and farming practices in the Indian Creek Watershed. A comparison was made between the 1997 and 2000 cropping seasons. Although general atrazine use appears to have increased in many areas, atrazine use rates for irrigated corn in the watershed was slightly reduced over the 1997 season. This appears due to the adoption of banding practices by irrigated corn producers in the watershed. Use of banding by grain sorghum producers in the watershed also increased. The survey also found that the amount of cultivation had decreased and use of crop rotations had substantially increased during the period. Crop rotation means that atrazine would be applied only every other year.

- Evaluation of atrazine and non-atrazine alternatives in no-till corn: The objective of this study has been to compare some common atrazine herbicides and non-atrazine herbicides in conventional tillage and no-till corn. This study was started in 1997 and is being conducted at

the Clay Center and Lincoln, NE university research farms. Information obtained will assist farmers in determining their most effective options relative to obtaining weed control and water quality protection for their tillage system.

- Riparian Buffer Strip Research and Promotion: The UNL and KSU Extension Services in cooperation with NDA and the Nebraska Corn Growers Association are working to expand the interest of farmers and other property owners in developing and maintaining riparian forest buffers. The purpose of this effort is to accelerate riparian buffer adoption with an eye toward enhancing both water quality and farm income. A portion of this effort is supported by a USDA-CREES competitive grant jointly awarded UNL and KSU. NDA has also provided money to assist in promotion of riparian buffers. UNL and KSU are in the process of preparing a joint riparian training program for Cooperative Extension staffers. In addition, a research site was established in 2000 on Clear Creek in Polk County, NE which is designed to allow researchers to compare water runoff, sediment loss, and chemical loss between a highly buffered watershed and an adjacent watershed with no riparian buffers. This project should provide some important basic data on effectiveness of riparian filters. Although the project site is located in the Platte Basin, information obtained will also be relevant to the Big Blue Basin. Other efforts are underway to demonstrate alternative riparian forest product uses and assess effectiveness of stiff grass hedges in providing water quality protection. Work is also being done in establishing a similar riparian buffer research and education project in Washington County, KS. This is a also part of the joint KSU-UNL grant from USDA.

- The Kansas on-farm Integrated Agricultural Management Systems Sites continue to operate testing water quality BMPs. Two of these sites (Washington/Riley counties) are in the Big Blue River Basin. Much information has been obtained and Kansas is considering wrapping up work at the Washington county site. These sites are funded by USDA and the various commodity commissions.

- Kansas has employed five watershed specialists whose job it is to contact and work with property owners in getting water quality BMPs on the ground. Three of these specialists have been assign to the northeast Kansas area. In addition, work continues with the Dairy Environmental Program in the Black Vermillion Watershed. To this point, 25 dairies have signed up to work with the program and install pollution control structures. This is approximately 75% of the dairies in the watershed.

- TMDL Education: TMDL information and education programs are taking place among the agricultural community in both states. Much of this work is being done by the State Cooperative Extension programs in cooperation with the producer associations of both states. The KS and NE Corn Growers Associations have been particularly active in assisting with this effort, just as they have been active in the other Blue River water quality protection efforts. A TMDL education component has been added to the Nebraska Corn and Soybean Production Clinics.

- Kansas has also been conducting research into sources and movement of fecal coliform bacteria. This is one of the common contaminants in surface waters of both states, and may be the most common impairment of surface waters in the Blue River system.

- The Nebraska Corn Growers Association is also promoting the "Husker Farmer Program". This program is similar to Farm*A*Syst and is a process which can be used by farmers to reduce agricultural chemical losses and meet TMDL responsibilities. A similar type of effort is being piloted in Kansas under the name of the "River Friendly Farmers Program".

- The NDA has conducted it's fifth program for disposal of unwanted pesticides since 1994. To date, 1.5 million pounds of waste pesticide products have been collected.

State Riparian Buffer Strip Programs: The Nebraska Buffer Strip Program got off to a great start, and the Kansas Governor's Buffer Initiative appears to be gaining steam. Both have become very popular programs with landowners. Unfortunately, Nebraska is now at the stage where there are more applicants than money. Nebraska has received 252 applications representing 1792 acres in the basin. The 1,792 acres signed up in the Little Blue, Lower Big Blue and Upper Big Blue NRDs for buffer development are a combination of irrigated, non irrigated and riparian acres. Kansas has signed or has tentative contracts with 402 landowners representing 2,987 riparian acres within the Kansas - Lower Republican Basin which includes the Kansas portion of the Blue River system.

Funding remains a concern for the riparian programs. On the day prior to the recent Compact Water Quality Committee meeting, a bill was enacted by the Nebraska Legislature which shifted approximately $1 million from the $1.5 million fund NDA had developed for the NE Buffer Strip Program and redirected it to fund other state activities. Funding for the Kansas program is scheduled to increase from $80,000 in FY 2001 to $265, 134 in FY 2002. However, the program will also dramatically expand geographically in FY 2002 to include high priority TMDL watersheds in the Lower Arkansas and Upper Arkansas River Basins.

To assist in meeting the challenge offered by fund shortages relative to demand, the Nebraska Corn Growers Association has hired nine persons (crop consultants) to make farm calls promoting sign-up of stream side areas into Continuous CRP. Continuous CRP offers an incentive based option for funding riparian area establishment. However, dollars offered under the program are not sufficient to lure many irrigation farmers into the program. FSA needs to make provision for higher irrigated land values. The Nebraska Corn Growers Association has brought this issue to the attention of the National Buffer Initiative Task Force for their consideration.

New Objectives: The Water Quality Committee has two new objectives in mind for the immediate future:

1) development of a FIFRA Sec. 24c special registration label which will allow atrazine use by Nebraska growers during late fall or early spring. Current labeling allows use only near or at planting time which tends to coincide with heaviest spring precipitation and runoff periods. Kansas already has such a label and research indicates that effective weed control can be obtained.

Once the Section 24c label has been obtained, the KSU and UNL Extension Services will initiate an extensive effort to work with producers (particularly grain sorghum producers) in the five county area between Beatrice, NE and Marysville, KS.

2) work will be initiated to secure funding and develop materials necessary to conduct a resurvey of chemical use and farm practices in the Big Blue River Basin. The goal of this effort is to conduct a resurvey of practices following the 2003 fall harvest season. This would be a follow up to the baseline survey conduced in the fall of 1996.

Respectfully submitted,

Dale Lambley

Dale Lambley, Chair
Water Quality Committee

THE COST OF MEETING TMDLs IN AGRICULTURE

Tracy Streeter, Executive Director
State Conservation Commission

The State Conservation Commission (SCC) has conducted an inventory of the implementation needs for the Kansas – Lower Republican River Basin. As prescribed in TMDL documentation submitted by the Kansas Department of Health and Environment (KDHE) and approved by EPA, the inventory is a standard process for quantifying the cost of Best Management Practices (BMP) and technical assistance. The inventory addresses fecal coliform bacteria, nutrients, pesticides, sediment, and dissolved oxygen impairments in TMDL high priority watersheds. The inventory only captures costs associated with non-point source contributions and does not include TMDL-designated watersheds identified as medium or low priority.

The SCC has begun the needs inventory for the Cimarron and Arkansas River Basins which will be completed in early 2001. The agency will begin the inventory process for the Marais Des Cygnes and Missouri River Basins later this year once TMDL areas are designated. As KDHE completes the TMDL process statewide, an inventory will eventually be conducted for each of the 12 major river basins.

The Kansas – Lower Republican River Basin

Located in northeast Kansas, this basin encompasses approximately 10,500 square miles. Watersheds designated high priority for TMDL implementation represent approximately 44 percent or 4,575 square miles of the entire basin.

Inventory Data Sources:

- **Natural Resources Conservation Service (NRCS), National Resources Inventory (NRI)**
- **Kansas Riparian Inventory**
- **Input from local NRCS, conservation district and Kansas State University Research & Extension personnel**
- **County Appraisers Office**
- **Input from Local Environmental Protection personnel**
- **KDHE Livestock Census & Confined Animal Feeding Operation data**
- **Historical cost data - SCC programs**
- **NRCS Workload Analysis**

How the Data Was Used:

Eutrophication & Pesticides

The 1992 NRI was used to provide percent of cropland needing treatment, by county. The data was updated through 1999 by the local conservation district and NRCS office. The percent of cropland needing treatment was applied to the total acres of cropland in the high priority TMDL watershed to arrive at the number of acres needing treatment in the watershed. The local conservation district and NRCS office provided the cost per acre to treat cropland to arrive at the total cost.

The Riparian Inventory is completed in nine of the 20 counties having high priority TMDL watersheds. In those counties, the Inventory measured, on a per mile basis, the different land uses within 100 feet of both sides of all perennial and intermittent streams. The streams with cropland only or a mix of cropland and permanent vegetation was measured to arrive at the miles of riparian areas in need of permanent vegetation. 11 digit hydrologic unit boundaries were added to this GIS database to calculate the need by watershed. These miles were multiplied by an average cost to establish different types of vegetation likely to be used in that county to arrive at the total cost. This cost does not include any costs to state or federal government should these areas be enrolled in the Conservation Reserve Program and the Kansas Water Quality Buffer Initiative. NOTE: Some of the TMDL high priority watersheds are mapped on a 14-digit hydrologic unit basis. As a result, some of the riparian inventory data does not accurately reflect the actual TMDL watershed.

Fecal Coliform Bacteria & Dissolved Oxygen

Livestock Waste

Livestock operations ranging from cow/calf to confined animals under 1,000 animal units were evaluated to determine the operations in need of some form of BMP. Those BMP's range from removing cattle from streams and proper grazing management to total containment of confined livestock waste.

The NRI was utilized to determine the percent of the grassland needing treatment, by county. The grassland costs were established using the same process as that used to determine cropland needs.

Local input was used to determine the confined livestock operations in need of BMP's. This includes wintering areas, temporary background feeding operations, permanent confined feeding facilities and dairies. These operations were placed in two groups; those under and those over $5,000 in BMP costs. The local NRCS, conservation district and Extension agent jointly determined the number and type of operations falling into these two categories. This local group also determined the average cost for BMP's in their county for small and large operations, and dairies. KDHE Registered and Permitted

sites were reviewed to determine if adequate pollution control measures existed and to ensure facilities with adequate pollution controls were not included in the inventory.

The Riparian Inventory was conducted in the same method described above in watersheds impaired by fecal coliform bacteria and dissolved oxygen.

Human Waste

The inventory quantified the number of failing or non-existent onsite wastewater (septic) systems to determine the costs resulting from human wastes. The county appraiser identified all rural households in the high priority TMDL watersheds. The county sanitarian utilized existing data and sampling techniques to determine the percent of total households with failing or no septic systems. The sanitarians also sampled to determine the number of systems adjacent to receiving water bodies (100 meters). The estimated number of failing systems was multiplied by the average system installation cost obtained from SCC cost-share data and KDHE data to determine the total cost.

Technical Assistance (All impairments)

The technical assistance needs for agricultural BMP's was obtained from the 1999 Kansas Workload Analysis, conducted by NRCS. This analysis determined the number of staff years needed, by county, to address the natural resource needs identified in the NRI described earlier. The analysis subtracted the number of existing staff in each county to arrive at the additional staffing need or gap. To arrive at the number of staff needed for TMDL implementation, the gap for the entire county was multiplied by the percent of the county acres in a high priority TMDL watershed. For example, if the Workload Analysis indicated a county gap of 4 staff years and 40 percent of the county is in a TMDL watershed, the TMDL technical need is 1.6 staff years (4 * .4). NRCS costs per staff year of $50,000 were used to establish the inventory's technical assistance costs.

The Local Environmental Protection Program personnel estimated the technical assistance costs per failing onsite wastewater system to equal 5 percent of the system's cost. Based upon the SCC average cost per system of $4,569, the technical assistance cost per system is $228. The cost per system was multiplied by the total number of failing systems to arrive at the total inventory cost for this BMP.

Summary of Kansas-Lower Republican TMDL Implementation Costs:

RESOURCE NEED	UNITS	AMOUNT
Cropland Treatment (Acres)	195,715	$30,169,260
Grassland Treatment (Acres)	502,354	$12,558,860
Failing Onsite Wastewater Systems (Number of)	5,165	$23,598,885
Livestock Waste Systems (Number of)	1,671	$10,817,800
Riparian Area/Stream Buffer Restoration (Miles)*	2,691	$2,299,576
Technical Assistance - Onsite Wastewater Systems	5,165	$1,179,944
Technical Assistance - All Other Practices (Staff Years)	13.22	$6,612,466
TOTAL		**$87,236,791**

* Includes estimates for nine of twenty counties

EXHIBIT Q

BIG BLUE RIVER COMPACT ADMINISTRATION BUDGET ANALYSIS
As of JUNE01

	2000 FY		2001 FY		2002	FY03
	Actual	Adopted May 1999	Estimate (To Date)	Adopted May 2000	Proposed	Adopted June 2001	Proposed
EXPENDITURES							
Operations							
Stateline Gages	$10,650.00	$10,650.00	$11,090.00	$11,090.00	$11,500.00	$11,500.00	$11,960.00
Observation Wells	$1,110.00	$1,140.00	$1,110.00	$1,140.00.	$1,140.00	$1,140.00	$1,140.00
Low-flow Measurements	$1,200.00	$1,200.00	$1,250.00	$1,250.00	$1,300.00	$1,300.00	$1,350.00
Water Quality Committee	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Fidelity Bond	$100.00	$100.00	$100.00	$100.00	$100.00	$100.00	$100.00
Secretary Honorarium	$750.00	$750.00	$750.00	$750.00	$750.00	$750.00	$750.00
Treasurer Honorarium	$750.00	$750.00	$750.00	$750.00	$750.00	$750.00	$750.00
Staff Travel Expenses	$225.37	$200.00	$200.00	$200.00	$200.00	$200.00	$200.00
Annual Report	$0.00	$200.00	$94.87	$200.00	$200.00	$200.00	$200.00
Annual Audit	$500.00	$500.00	$500.00	$500.00	$500.00	$500.00	$500.00
Postage and Office Supplies	$45.32	$100.00	$59.81	$100.00	$100.00	$100.00	$100.00
Miscellaneous Expenses	$0.00	$100.00	$0.00	$100.00	$100.00	$100.00	$100.00
Total Expenses	$15,330.69	$15,690.00	$15,904.68	$16,180.00	$16,640.00	$16,640.00	$17,150.00
INCOME AND CARRY OVER							
Assessments (Both States)	$14,000.00	$14,000.00	$16,000.00	$16,000.00	$16,000.00	$16,000.00	$16,000.00
Interest Earned	$218.46	$218.46	$229.90	$400.00	$400.00	$400.00.	$400.00
Carry Over from Prior Year	$15,919.08	$15,799.72	$14,806.85	$14,649.92	$15,132.07	$14,913.64	$14,673.64
Total Income and Carry Over	$30,137.54	$30,018.18	$31,036.75	$31,049.92	$31,532.07	$31,313.64	$31,073.64
Balance End of Year	$14,806.85	$14,328.18	$15,132.07	$14,869.92	$14,892.07	$14,673.64	$13,923.64

KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION
TREASURER'S REPORT
FISCAL YEAR 2001

Carry Over from Fiscal Year 2000: $14,806.85

Receipts during Fiscal Year 2001:

State of Nebraska	$ 8,000.00	
State of Kansas	$ 8,000.00	
Interest Earned	$ 228.60	
Total receipts	$16,228.60	$16,228.60

Total funds available for Fiscal Year 2001: $31,035.45

Disbursement by the Administration for Fiscal Year 2001:

Date	Voucher No.	Payee and Purpose	Amount
7-21-00	290	Brier Payne Meade Insurance(Bond)	$ 100.00
10-23-00	291	U.S. Geological Survey	2,690.00
2-22-01	292	U.S. Geological Survey	4,050.00
3-26-01	293	Lower Big Blue NRD	1,110.00
4-17-01	294	U.S. Geological Survey	2,800.00
4-17-01	295	Kennedy & Coe (Audit)	500.00
4-25-01	296	Pamela Bonebright (Postage & Suppies)	59.81
5-29-01	297	NE Dept of Natural Resources(printing annual report)	94.87
6-4-01	298	Pamela Bonebright	750.00
6-4-01	299	Denise Rolfs	750.00
6-7-01	300	Denise Rolfs (Travel/subsistence)	97.59
6-14-01	301	Pamela Bonebright (subsistence)	19.23
7-12-01	301	U.S. Geological Survey	2,800.00

Total disbursements $15,821.50

Funds available in Fiscal Year 2001: $31,035.45
Disbursements: 15,821.50

Funds for carry over to FY 2002: $15,213.95

Denise J. Rolfs
Treasurer

KENNEDY AND COE, LLC
CERTIFIED PUBLIC ACCOUNTANTS

INDEPENDENT AUDITORS' REPORT ON FINANCIAL STATEMENTS

To the Chairman
Kansas - Nebraska Big Blue River Compact Administration

We have audited the accompanying statement of financial position of the Kansas - Nebraska Big Blue River Compact Administration, as of June 30, 2001, and the related statements of activities, cash flows, and revenues and expenses compared to budget for the year then ended. These financial statements are the responsibility of the Administration's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with U.S. generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Kansas - Nebraska Big Blue River Compact Administration as of June 30, 2001, and the changes in its net assets and its cash flows for the year then ended in conformity with U.S. generally accepted accounting principles.

Respectfully submitted,

Kennedy and Coe, LLC

Topeka, Kansas
November 29, 2001

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KANSAS - NEBRASKA BIG BLUE RIVER
COMPACT ADMINISTRATION
Topeka, Kansas

Exhibit A

Statement of Financial Position
June 30, 2001

Assets	
Cash in bank	$ 15,214
Liabilities and Net Assets	
Net assets - unrestricted	$ 15,214
Total liabilities and net assets	$ 15,214

The accompanying notes are an integral part of these financial statements.

KANSAS - NEBRASKA BIG BLUE RIVER
COMPACT ADMINISTRATION
Topeka, Kansas

Exhibit B

Statement of Activities
Year Ended June 30, 2001

Unrestricted Net Assets	
Revenues:	
Kansas contribution	$ 8,000
Nebraska contribution	8,000
Interest	229
Total revenues	16,229
Expenses:	
Surface and ground water investigations	13,450
Staff travel	117
Auditing and accounting services	500
Printing annual report	95
Fidelity bond	100
Secretary - Treasurer services	1,500
Office supplies and postage	60
Total expenses	15,822
Increase (decrease) in unrestricted net assets	407
Net assets, beginning of year	14,807
Net assets, end of year	$ 15,214

The accompanying notes are an integral part of these financial statements.

KANSAS - NEBRASKA BIG BLUE RIVER
COMPACT ADMINISTRATION
Topeka, Kansas

Exhibit C

Statement of Cash Flows
Year Ended June 30, 2001

Cash flows from operating activities:	
Increase (decrease) in net assets	$ 407
Net cash (used) by operating activities	407
Cash flows from investing activities	-
Cash flows from financing activities	-
Net (decrease) in cash	407
Cash, beginning of year	14,807
Cash, end of year	$ 15,214

The accompanying notes are an integral part of these financial statements.

KANSAS - NEBRASKA BIG BLUE RIVER
COMPACT ADMINISTRATION
Topeka, Kansas

Exhibit D

Statement of Revenues and Expenses Compared to Budget
Year Ended June 30, 2001

	Budget	Actual	Variance Favorable (Unfavorable)
Revenues:			
Kansas contributions	$ 8,000	$ 8,000	$ -
Nebraska contributions	8,000	8,000	-
Interest	400	229	(171)
Total revenues	16,400	16,229	(171)
Expenses:			
Surface and ground water investigations	13,480	13,450	30
Staff travel	200	117	83
Auditing and accounting services	500	500	-
Printing annual report	200	95	105
Fidelity bond	100	100	-
Secretary - Treasurer services	1,500	1,500	-
Office supplies and postage	100	60	40
Miscellaneous	100	-	100
Total expenses	16,180	15,822	358
Excess (deficit) of revenues over expenses	$ 220	$ 407	$ 187

The accompanying notes are an integral part of these financial statements.

KANSAS - NEBRASKA BIG BLUE RIVER
COMPACT ADMINISTRATION
Topeka, Kansas

Notes to Financial Statements
Year Ended June 30, 2001

Note A - Summary of Significant Accounting Policies

The Kansas - Nebraska Big Blue River Compact Administration (the Administration) is an interstate administrative agency established, upon adoption of rules and regulations pursuant to Article III (3,4) of the Kansas - Nebraska Big Blue River Compact on April 24, 1973, to administer the Compact.

The following is a summary of the more significant policies:

1) Basis of Accounting

The financial statements have been prepared on the accrual basis financial accounting in accordance with U.S. generally accepted accounting principles. All activities of the Administration are classified as unrestricted for financial reporting purposes.

2) Function

The major function of the Administration is to establish "such stream-gaging stations, ground water observation wells, and other data-collection facilities as are necessary for administrating the compact".

The purpose of the compact is to:
A) Promote interstate comity between the States of Nebraska and Kansas.
B) To achieve equitable apportionment of the waters of the Big Blue River Basin between the two states and to promote orderly development thereof.
C) To encourage continuation of the active pollution-abatement programs of the waters of the Big Blue River Basin.

3) Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles may require the management to make estimates and assumptions that affect certain reported amounts and disclosures.