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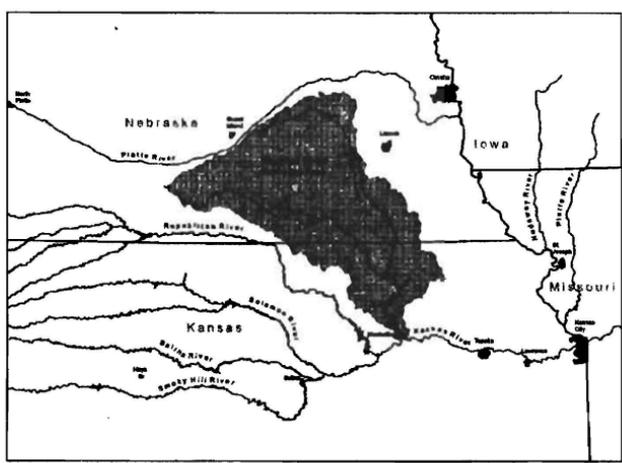


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KANSAS-NEBRASKA BIG BLUE RIVER COMPACT

THIRTY-FIRST ANNUAL REPORT



FISCAL 2004

MANHATTAN, KANSAS
MAY 13, 2004

**KANSAS-NEBRASKA BIG BLUE RIVER
COMPACT ADMINISTRATION**

**The Honorable George W. Bush
President of the United States**

**The Honorable Kathleen Sebelius
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 Thirty-First Annual Report. The report covers activities of the Administration for Fiscal Year 2004.

Respectfully,



**Gary Mitchell
Compact Chairman**

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**KANSAS - NEBRASKA BIG BLUE RIVER
COMPACT ADMINISTRATION
31st ANNUAL MEETING**

May 13, 2004
9:00 a.m.
Kansas Farm Bureau Building
2627 KFB Plaza
Manhattan, KS
(785) 587-6000

AGENDA

1. Call to Order
2. Introductions and Announcements
3. Minutes of the 27th Annual Meeting
4. Chairman's Report
5. Kansas Report
6. Nebraska Report
7. Federal Agency Report
8. Secretary's Report
9. Treasurer's Report
10. Committee Reports
 - a. Legal
 - b. Engineering
 - c. Budget
 - d. Water Quality
11. Old Business
12. New Business
13. Adjourn

2003-2004 MEMBERSHIP

Representative of the United States

Gary Mitchell

Kansas Representatives

David L. Pope, Topeka ¹

Sharon Schwartz, Washington ²

Nebraska Representatives

Roger K. Patterson, Lincoln ¹

Kenneth Regier, Aurora ³

2003-2004 OFFICERS

Gary Mitchell, Chairman
Debra Mendez, Secretary
Jeff Shafer, Treasurer

2003-2004 COMMITTEES

Budget Committee

Jeff Shafer, Chairperson
Bob Lytle

Water Quality Committee

Dale Lambley, Chairperson
Tom Stiles
TBA
Annette Kovar
Glen Kirk
Rich Reiman
Pat Rice

Engineering Committee

Jeff Shafer, Chairperson
Keith Paulsen
Bob Lytle
Iona Branscum

Legal Committee

Leland Rolfs, Chairperson
TBA

-
- 1 Term continuous but coincides with duties of the state official who administers water law.
 - 2 Term expires April 5, 2008.
 - 3 Term expires September 19, 2006.

**MINUTES OF
KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION
THIRTY-FIRST ANNUAL MEETING**

Call to Order

The Kansas-Nebraska Big Blue River Compact Administration annual meeting was held May 13, 2004, in the Conference Room of the Farm Bureau Building in Manhattan, Kansas. Gary Mitchell, Compact Chairman, called the meeting to order at approximately 9:00 a.m.

Chairman Mitchell introduced the new Kansas Advisor, Representative Sharon Schwartz from Washington, Kansas, and welcomed everyone to the Kansas-Nebraska Big Blue River Compact Administration annual meeting.

Introductions and Announcements

Introductions of attendees were made. Those in attendance were:

Gary Mitchell	Compact Chairman
David Pope	Compact Commissioner from Kansas; Chief Engineer, Kansas Division of Water Resources
Representative Sharon Schwartz	Compact Citizen Advisor from Kansas
Debra Mendez	Compact Secretary
Denise Rolfs	Compact Treasurer
Dale Lambley	Kansas Dept. of Agriculture, Chair of the Compact Water Quality Committee
Tom Stiles	Kansas Dept. of Health and Environment
Brad Horchem	U.S. EPA, Region 7, working on a special project with Tom Stiles and Dale Lambley
Ron Fleecs	Manager, Lower Big Blue Natural Resources District, Beatrice
Dick Eastman	Lower Big Blue Director, Nebraska Resource Commission
Jim Cook	Nebraska Dept. of Natural Resources
Doug Christensen	NRCS - Nebraska
Mike Onnen	Manager, Little Blue Natural Resources District
Craig Romary	Nebraska Dept. of Agriculture, Davenport, Nebraska
Rich Reiman	Nebraska Dept. of Agriculture
Iona Branscum	Kansas Division of Water Resources, Topeka Field Office Water Commissioner
Rod DeBuhr	Upper Big Blue Natural Resource District, York, Nebraska
Keith Paulsen	Nebraska Dept. of Natural Resources, Lincoln Field Office
Jeff Shafer	Nebraska Dept. of Natural Resources

Bob Lytle
Ken Regier

Roger Patterson

Phil Soenksen
Phil Barnes
Kent Askren
Fred Rogge
Kent Weatherby

Kansas Division of Water Resources
Compact Citizen Advisor from Nebraska; Member of the Upper Big Blue Natural Resource District Board of Directors
Compact Commissioner from Nebraska; Director, Nebraska Dept. of Natural Resources
U.S. Geological Survey, Nebraska
Kansas State University
Kansas Farm Bureau, Topeka
Kansas River Water Assurance District, Topeka
Kansas River Water Assurance District, Topeka

Minutes of the 2004 Meeting

Chairman Mitchell asked for discussion of last year's Annual Report and minutes. It was noted that the historic data on the graph on page 39 was off three months. The 2002 data was correct, but the background data needs to be shifted three months to the left (starting Jan. instead of Oct.). It was also noted that the fiscal year Treasurer's Report had not been published in the Annual Report. The Treasurer's Report as of May 15, 2003, (the annual meeting) was included, but not the Year-End Report. However, the information for the fiscal year is covered in the Auditor's Report. It was moved and seconded that the Thirtieth Annual Report be approved with the acknowledgement of the correction of the graph on page 39 for the Little Blue River at Hollenberg. The minutes were approved unanimously as discussed.

Report of the Chairman

Chairman Mitchell had no report.

Kansas Report

Commissioner Pope further introduced Representative Sharon Schwartz, Kansas' new Citizen Advisor Member. Representative Schwartz is a very active member of the Kansas Legislature related to water issues. She serves on both the House Environment Committee and the House Agriculture Committee. Representative Schwartz also chairs the Sub Committee for the Agriculture and Natural Resources portion of the Kansas Budget. She lives in the basin and has a farming operation on a tributary of the Little Blue, so she's very familiar with the conditions within the basin.

Litigation

The long-standing Kansas vs. Colorado case over the Arkansas River Compact is not quite over yet. It has been going on for almost 20 years now. The trial is completed, as reported last year. It went through four different segments. What remains is the review by the U.S. Supreme Court of the Fourth Report of the Special Master making recommendations to the court in regards to how future compliance issues will be handled for the Compact. In addition to the future compliance issue, there is also the issue of the method of calculating pre-judgment

interest. These issues have been briefed before the Supreme Court, and Oral Argument is expected in the fall. Hopefully there will be a final decision of the Court in the case soon. There will still be a lot of work to be done between the States and the various parties to implement the decisions of the court and make sure things get done the way they are suppose to. The big issue in play before the Supreme Court is whether or not the Court will accept the Kansas recommendation to appoint a River Master to oversee Compact compliance. Colorado has opposed, and the Special Master agreed with Colorado in the Fourth Report he issued. Kansas' view is that if it is left without a practical way to resolve future disputes, it might lead to more trips to the Supreme Court. The other side of the argument is that if there is a River Master, it would be like continuing the litigation indefinitely. The Fourth Report of the Special Master was favorable to Kansas in regards to the amount of water that Colorado will have to provide.

Another case is the Kansas vs. Nebraska case, which was settled a couple of years ago. There is a lot of work being done by the States implementing the settlement, collecting and analyzing the data, exchanging the data and preparing to run the computer model that was constructed by agreement of the parties. This is the first actual year of the Compact compliance. The States continue to try to discuss issues and are working well together.

Water Administration

There are still certain parts of Kansas that are experiencing severe drought, mostly in the northwestern and western Kansas area. Kansas still has in the eastern half of the state five or six streams under administrative regulation for minimum desirable streamflow, including Republican River, Chapman Creek, and the Delaware River.

Another issue of interest to the Compact Administration is the problem of a dispute Kansas has had for many years with the Corps of Engineers on how to operate the tributary reservoirs to the Missouri River – Milford on the Republican, Tuttle Creek on the Blue River and Perry on the Delaware. There has been progress made this year. Kansas met a couple of times with the Assistant Secretary of the Army, and Corps of Engineers. An agreement for a temporary deviation from the Corps of Engineers' Operating Manual will allow water, if available, to be stored in the flood pools of the reservoirs and subsequently used for navigation support on the Missouri River as necessary. This should diminish greatly the amount of drawdown in the conservation pools. This year Kansas has some water in the flood pools; and a certain amount was released for navigation support in April. Compared to the six to seven feet they were down, Kansas reservoirs are in a lot better shape than past years.

Legislation

In the water area there were a couple of bills that were important to the Division of Water Resources that were administrative in nature. One related to continuing to use the fee schedule that was put into place a couple of years ago when the fees were raised due to our budget shortfall. There was a sunset of these that was to expire this coming fiscal year. The issue was whether the fees would continue at the same rate or if they would revert to the old rates. The Legislature debated the issue and decided to extend them until 2010.

Another bill related to deadlines DWR had for getting work done related to certifying existing water rights. Out of about 5,000 water rights DWR needed to resolve by July 1, 2004, all were completed except about 200. DWR was not going to make the deadline, so the Legislature did provide a two-year extension of time. These particular water rights were complex ones, where there were non-use issues. DWR has to resolve the abandonment question before the water rights could be certified.

There was another bill related to water that got controversial at one point. It was related to how to treat the water rights for evaporation from sand and gravel operations where the water table is intercepted. Ultimately a compromise was worked out. Water rights will continue to be required, but there were changes made that will accommodate some concerns and needs of the industry, in particular to the amount of time they have to develop the project.

There were several other bills dealing with a variety of issues that had hearings held but were not passed. There was a request made by several agencies for bonding for water infrastructure; there was discussion on how to deal with acquisition of water rights; there was a proposal for the State to acquire some lands with water rights (which would be phased out to save water) out in the central part of the state (funding for this did not get approved); and there was discussions about whether our water shortages should be resolved by additional regulation, or by encouraging removal of irrigation by incentive programs. Some of the underlying policy issues will continue to be debated in the future.

Nebraska Report

Commissioner Patterson started his report with a recap from two years ago when the group talked about how different the Big Blue Compact is than a lot of other ones that himself, Commissioner Pope, and others are involved in, and how well it works, and how they wanted to inform the general public a little about the Compact and the relationship between Kansas and Nebraska. Jim Cook and Lee Rolfs had started on an article, and Mr. Cook and Jeff Shafer finished it. The article, "Spotlight on the Big Blue River Compact," was in the Nebraska Resources Newsletter, and was sent out to several thousand people who receive the newsletter from the Nebraska Department of Natural Resources. (Exhibit F)

There was some augmentation for the Big Blue River done out of the smaller Natural Resource District reservoirs again, but not as much as in previous years.

Elsewhere in the state, Commissioner Patterson and Commissioner Pope are both involved in Missouri River issues. Nebraska has been particularly very active in Missouri River. Nebraska's Governor took the lead with Governor Rounds of South Dakota putting a proposal together to give to the Federal agencies to comply with the endangered species problem. Five Governors signed the letter. Ultimately the proposal was accepted by the U.S. Fish and Wildlife Service as an environmental compliance piece for endangered species. The Corps of Engineers is working to acquire shallow water habitat on the river trying to get enough habitat in place so flows don't have to be lowered. Most of the time, the River would still be minimal navigation support, but not all the time. The forecast of Missouri is 68% of normal, as Nebraska is in the fifth year of a drought and about 18 MAF in storage lower than normal. These facts have

provoked maybe a half of dozen of lawsuits. All the lawsuits have been consolidated in front of one judge. A hearing will be held in a week to sort through some of the issues.

The Corps has finally made a decision on the new Master Manual after 15 years, and unless the judge sides with either of the various extremes on this, the Master Manual will be sustained and implementation will commence. One of the things both Commissioner Patterson and Commissioner Pope want is to make sure the two states have a seat at the table with the Federal Agencies in the future operation of the River, as well as the Tribes and some of the other stakeholders. It's a concept that the Corps of Engineers seems to endorse.

Nebraska is continuing to work on the Platte River program. Last year it was reported that the National Academy of Sciences had been called in by Congressman Osborne to look at the underlying science the Fish and Wildlife Service had been using on the Platte. That report had just been completed. In general, NAS said that the decisions that Fish and Wildlife had made in the past were supportable based on science.

Litigation

The Republican River settlement has been utilizing a lot of DNR staff's time. Nebraska has been working with the Natural Resource Districts in the basin to get management plans in place for 2005, so Nebraska can make sure they stay in compliance. The unprecedented drought is making it difficult for both states because of the low flows at most of the reservoirs. The only reservoirs that have any water are Medicine Creek in Nebraska and Lovewell in Kansas.

Legislation

There was a major initiative on water in the Legislature this last session. Last year the Water Policy Task Force was formed. This was a task force that was set up by the Legislature, appointed by the Governor, to look at several issues on how water is managed in the State. There were 49 members on the task force. These were citizens from all of the various sectors across the State of Nebraska. The task force put together a consensus package, after 18 months of work with a professional facilitator. The package went to the Legislature, and LB 962 was passed. **(Exhibit G)** What this bill will do is put Nebraska in a more pro-active approach to how water is managed in the State. One of the new requirements for DNR is to do an annual assessment of all of the river basins in the State of Nebraska, taking into account water rights that have been issued and ground water development that has occurred, and make a determination whether that basin has been fully appropriated or not. If so there will be a statutory stay on water rights, ground water wells, and expansion of irrigated acres. Then the State and the NRDs in that basin will work together to develop a management plan for the basin on how to move forward. The Governor gave 2 ½ million dollars to start the process. It is estimated that about 4 ½ million dollars a year is needed for funding this project. The Governor indicated that he'd support what is needed in the upcoming budget, most likely from the general fund. His philosophy is that everybody in the state benefits by good water management.

Water Administration

Ken Regier reported that Nebraska is still suffering the effects of the drought. As a result of the dryer weather of the spring, planting proceeded at a faster pace. The majority of the corn was planted in April. Any other year it is well into May. Planting is nearly complete outside of a few acres of soybeans.

The water table has dropped again. There is, however, a water management plan in place, and if certain triggers are met, management control will be implemented.

Keith Paulsen reported that 2003 was another hot and dry year, particularly in the Big Blue River Basin. Extensive water regulation was required in the Big Blue River Basin this past year.

By mid-June the flow in the Little Blue River at the state-line gage was slowing diminishing and was approaching a flow of only about 200 cfs. Shortages on the Little Blue appeared likely in the next coming months. On or about June 22, a large portion of the Little Blue River Basin in Nebraska received a rain, which by some reports was in excess of 15 inches in some locations. This rain and a few smaller subsequent rains in the Little Blue Basin lessened demand and increased the water supply. No closing orders were issued in the Little Blue River Basin in 2003.

Water regulation in the Big Blue River Basin started July 16, on the North Fork of the Big Blue River for a localized shortage near Seward, Nebraska. This shortage resulted in the closing of 55 permits and regulating 23 rights. On July 17, in response to low flows at the state-line, water users junior to the Compact were issued closing orders. In addition to those permits already closed on the upper end an additional 834 permits were closed and an additional 479 permits were regulated. The flow at the state-line increased somewhat and 20 water users downstream of the localized shortage in the basin with priority dates in 1969 were opened on July 22, and on July 24, the 30 permits with priority dates in 1970 were also opened. On July 28, the Lower Big Blue NRD came to the rescue for the second year in a row and started voluntary releases from three reservoirs on the lower end of the basin. On July 29, opening orders were issued to 789 rights that were closed for the Compact. On July 31, the releases from two of the NRD reservoirs were stopped, and on August 5, releases from the third NRD reservoir were stopped. The flow in the river at the state-line again diminished so on August 11, 97 rights with priority dates junior to 1980 were closed. By August 13, all users junior to the Compact were again closed. During the closure periods, compliance checks in the fields were conducted. On August 19, in response to increased flow in the river, all the users that were closed to the Compact were opened. It was not until September 3, that the water users upstream from Seward, Nebraska on the North Fork of the Big Blue were opened, and once again all 1,391 permits in the Big Blue River Basin were opened.

Flow conditions are not looking very promising in either basin this spring. The flows on both the Big and Little Blue Rivers this spring have only about half of normal thus far. Without timely significant rains, shortages are expected in both basins sometime in July.

Commissioner Pope questioned Mr. Paulsen about how Nebraska deals with compliance issues with so many permits. Mr. Paulsen informed that there are only three staff in the field office. They get help from the survey crew and the planning department. On a typical day there are four to five people in the field. Mr. Paulsen says that they may be lax on weekends, and he admits Sunday is probably the most venerable time. The squeal system is pretty strong in Nebraska, whereas if someone is shut off and they know their neighbor is supposed to be shut off, the problem is reported. Efforts are concentrated more on making sure the people that are closed are off rather than monitoring that the people that are regulated are not pumping over their right.

Natural Resources Districts

Upper Big Blue NRD. Rod DeBuhr submitted the report for the Upper Big Blue NRD. (Exhibit H) Mr. DeBuhr stated that surface water issues are not as prevalent as ground water issues. There is roughly 29,000 acres irrigated from surface water permits in the Upper Big Blue NRD, but there are over a million acres irrigated from groundwater pumps.

As of March 1, all new wells in the Upper Big Blue NRD will be required to be metered. There are two trigger levels with the NRD's regulations. The reporting trigger has been raised up about a foot from where it was previously set, and with that measurement of the wells this spring, it is now just 1.14 feet above that first reported trigger. Mr. DeBuhr noted that even with a normal year of rainfall, it is likely these regulations would be triggered. With all the wells, and all the operators, it will be an administrative task to start the annual water use reporting and get everything reported, everything divvied up as far as who irrigates what land, and what wells irrigates what lands. If the water drops that 1.14 feet, this will begin in 2006.

The second trigger is allocation. The first allocation is set at 48 inches for three years or an average of 16 inches per year. Sprinkler irrigators shouldn't have much problems staying under that, but some of the gravity irrigators, gated pipe irrigators will struggle with these numbers, especially in dry conditions.

Upper Big Blue NRD is very active in promoting efficiency of irrigation, conversion from gravity irrigation to center pivots. There are cost share system programs available for the conversion in the amount of \$5,000. There are also some metering cost share options in the amount of 50% to try to encourage more people to measure their output. The cost share programs use local and state money.

In response to questions about funding, Commissioner Patterson explained that the NRDs have the authority for a 4 ½ cent levy on property tax, and they can add an additional cent for certain activities associated with groundwater management. There is a soil and water conservation fund at the state level that the legislature appropriates money to that is distributed to the NRDs.

Mr. DeBuhr stated that the Upper Big Blue NRD's budget was \$265,000. Commissioner Patterson noted that there is usually 2 ½ - 3 million dollars in the soil and water conservation fund, plus there is an additional 1 - 1 ½ million dollars in a development fund that can be applied

for to be used for specific projects. The soil and water conservation fund is sent to the NRDs based on formulas.

Little Blue NRD. Mike Onnen, manager of the Little Blue NRD, submitted a written report for the Little Blue NRD. (Exhibit I) Mr. Onnen mentioned that the local NRD applied for and was awarded a grant for \$15,000 from the Environmental Trust for a rainfall assessment program to collect rainfall and report to a central computer system. The Nebraska DNR has developed a web site, which will be the reporting center for the gages. The program is called the Nebraska Rainfall Assessment and Information Network, N E Rain, for short. It takes in about 2/3 of the land area of the state - all of the districts in the Platte, the Republican, the Deluth, and the Blue basins. There are 800 - 900 gages across the 13 NRD areas that are reporting their data. The districts are just now in the process of getting volunteers to read the gages, but it is hopeful that by the end of summer the program will be operational.

Lower Big Blue NRD. Ron Fleecs, Manager of the Lower Big Blue NRD, submitted the report for the Lower Big Blue NRD. (Exhibit J) Mr. Fleecs also distributed copies of the Lower Big Blue NRD Newsletter (Exhibit K) that is circulated four times a year as an insert in the major newspapers in the NRD, about 30,000 copies. The newsletter keeps people up to date on what's going on in the district. Mr. Fleecs noted the first page article about the "Free Family Fishing Day," which is being held at the Big Indian Recreation Area, one of the lakes that Nebraska has been drawing water from each year to help meet the Compact requirements.

Mr. Fleecs made note that there were 65 new well permits issued this past year, which is not many compared to the Upper Big Blue NRD, but that there are only 2,000 wells in the Lower Big Blue NRD.

Lower Big Blue NRD has a large amount of highly volatile land. About \$200,000 cost share money is spent on land treatment. About ½ of that money is from the soil and water conservation fund. The NRD only cost shares 50% of the actual cost. Mr. Fleecs said that the NRD's taxing authority in the multi-county area this year was about \$710,000, adding that a \$50,000 house would be approximately \$16.

Federal Report

Phil Soenksen distributed the U.S. Geological Survey Report. (Exhibit L)

Secretary's Report

It is proposed that Debra Mendez will take over as secretary beginning with this meeting, as Pam Bonebright has taken a different job within Nebraska DNR and will no longer be able to carry out the duties of Compact secretary.

Treasurer's Report

Denise Rolfs handed out copies of the Treasurer's Report. Ms. Rolfs stated that the FY 2003 audit was completed and showed the Compact in good standing. It was published in the Thirtieth Annual Report.

Ms. Rolfs announce her resignation, after 32 years of being with the Compact in one capacity or another.

The Treasurer's Report was unanimously approved, acknowledging that an End of Fiscal Year Report will be received as well.

Legal Committee Report

Lee Rolfs reported that the Legal Committee had no assignments made to it this last year, and did not undertake any activities. No further report.

Engineering Committee Report

Jeff Shafer submitted the Report of the Engineering Committee. (Exhibits A - E)

Mr. Shafer also handed out and reviewed the report, "Rate of Stream Depletion for the Kansas-Nebraska Big Blue River Compact Regulatory Area Wells." (Exhibit M) Last year the Legal Committee and Engineering Committee completed a joint report of the regulatory area wells and how to deal with them. Nebraska was directed to prepare a report with oversight from the Engineering Committee as a whole to determine whether regulation of the irrigation wells within the regulatory reach would yield a measurable increase in state-line flow, and if so when that increase would occur.

On another subject, this past year Nebraska submitted a grant application to the Bureau of Reclamation for a study to answer three questions: 1) What is the total annual need in acre-feet of augmentation water in order to meet state-line targets for the Big Blue and the Little Blue Rivers. 2) What is the value in dollars per acre-foot of the augmentation water to the junior irrigators in Nebraska and to the water users in Kansas junior to the MDS flows. Those MDS flows are the same as the state-line target flows. 3) What are the legal issues that need to be addressed in order to put into place a flow augmentation project. Nebraska has not received the \$50,000 grant funding yet, but the State will continue to explore options on how to get this study funded.

Bob Lytle added to the Engineering Committee Report that the study on well impact requested last year was reasonable, but pointed out that should there be any changes in the parameters and assumptions used to generate the report, that the Engineering Committee should go back and re-evaluate, re-assess, and make sure that they arrive at the same conclusion. Mr. Shafer agreed. The assumption is to use this report until there is better data.

In regards to the study, Mr. Shafer asked for acknowledgement that the report had been completed as requested. It was moved, seconded, and unanimously approved to accept the Engineering Committee Report, including the study "Rate of Stream Depletion for the Kansas-Nebraska Big Blue River Compact Regulatory Area Wells."

Budget Committee Report

Bob Lytle submitted the Report of the Budget Committee that included the budget analysis chart. (Exhibit N) Mr. Shafer explained why it is suggested that the amount of the Observation Wells be cut. He stated that the observation wells were originally developed as a need for the groundwater model. At this time it is felt that groundwater levels can be monitored by measuring 1/2 of the wells.

It was noted that there was a typo on the report. Where it refers to the Nebraska Department of Water Resources, it should read the Nebraska Department of Natural Resources.

Chairman Mitchell asked for and received unanimous acceptance of the Budget Committee Report with the noted change.

Water Quality Committee Report

Dale Lambley submitted and highlighted portions of the Report of the Water Quality Committee. (Exhibit O) There are three attachments with the Report of the Water Quality Committee.

Commissioner Pope acknowledged the work of the Water Quality Committee and the agencies that have worked with the Committee. This is a primary example of where two States work together on water quality matters. Commissioner Pope noted his appreciation. Commissioner Pope also acknowledged the work of the Kansas River Water Assurance District.

Chairman Mitchell asked for and received unanimous acceptance of the Water Quality Committee Report.

Old Business

No old business to report.

New Business

Chairman Mitchell extended a thank you to Farm Bureau for the use of the facility.

Commissioner Pope suggested that in light of Denise Rolfs resignation and the change in Pam Bonebright's position at Nebraska DNR, that Debra Mendez be selected as the Compact secretary as a part-time position on her own time, so it would be a paid position. Commissioner Pope indicated that he understood that Jeff Shafer was willing to assume the duties of Compact treasurer as part of his functions at the Nebraska DNR.

It was moved and accepted the appointment of Ms. Mendez as Secretary and Mr. Shafer as Treasurer.

Commissioner Pope also restated that Jim Cook has announced his retirement so there is an open spot on the Legal Committee. Commissioner Patterson said he would assign someone to replace Mr. Cook for the Legal Committee for Nebraska.

Committee membership for the upcoming year was listed as follows:

Budget Committee

Jeff Shafer, Chairperson
Bob Lytle

Legal Committee

Lee Rolfs, Chairperson
TBA

Engineering Committee

Jeff Shafer, Chairperson
Keith Paulsen
Bob Lytle
Iona Branscum

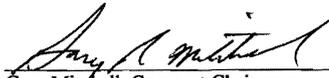
Water Quality Committee

Dale Lambley, Chairperson
Tom Stiles
TBA (Kansas Water Office)
Annette Kovar
Rich Reiman
Pat Rice

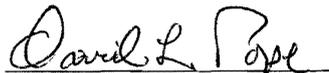
Chairman Mitchell announced that there were recognitions to be awarded. Plaques were given to Denise Rolfs, Jim Cook, and Ron Fleecs for their many years of service to the Compact Administration. Terry Blazer and Pam Bonebright were not present, but will also receive plaques for their service.

Nebraska will be hosting the Kansas-Nebraska Big Blue River Compact Administration annual meeting next year. There was no date set, but it was stated that the meeting would be about this same time of year, someplace in Nebraska.

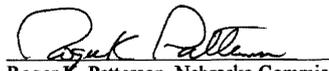
Being no further business, Chairman Mitchell adjourned the meeting at 11:55 a.m.



Gary Mitchell, Compact Chairman



David L. Pope, Kansas Commissioner



Roger K. Patterson, Nebraska Commissioner

**REPORT OF THE ENGINEERING COMMITTEE
TO THE
KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION
May 13, 2004**

The Engineering Committee held a conference call on April 29th, 2004 in preparation for the compact meeting.

The 2003 data were collected in accordance with the agreements with the United States Geological Survey (USGS) and the Lower Big Blue Natural Resources District (LBBNRD).

REVIEW OF STREAMFLOW DATA

The Compact sets forth the following stream flow targets:

	Big Blue River	Little Blue River
May	45 cfs	45 cfs
June	45 cfs	45 cfs
July	80 cfs	75 cfs
August	90 cfs	80 cfs
September	65 cfs	60 cfs

During the 2003 water year (October 1, 2002 thru September 30, 2003) the mean daily streamflow at the Barneston gage on the Big Blue River (Exhibit A) fell below the target a total of 13 days and the Hollenberg gage on the Little Blue River (Exhibit B) fell below the target a total of 3 days.

Recent and Historical Data for the two gages can be found at the following USGS websites:

Big Blue River - http://waterdata.usgs.gov/ne/nwis/uv/?site_no=06882000

Little Blue River - http://waterdata.usgs.gov/ne/nwis/uv/?site_no=06884025

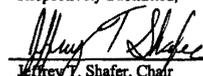
REVIEW OF GROUNDWATER DATA

The USGS provided the data for hydrographs for two wells in Gage and Jefferson Counties (Exhibit C). The LBBNRD provided the groundwater data for the portion of the Big Blue River near Beatrice listed in Exhibit D.

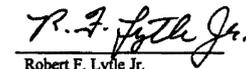
REVIEW OF WELLS IN REGULATORY REACHES

The lists of wells within the regulatory reaches are shown in Exhibit E.

Respectively Submitted,



Jeffrey T. Shafer, Chair
Nebraska



Robert F. Lytle Jr.
Kansas



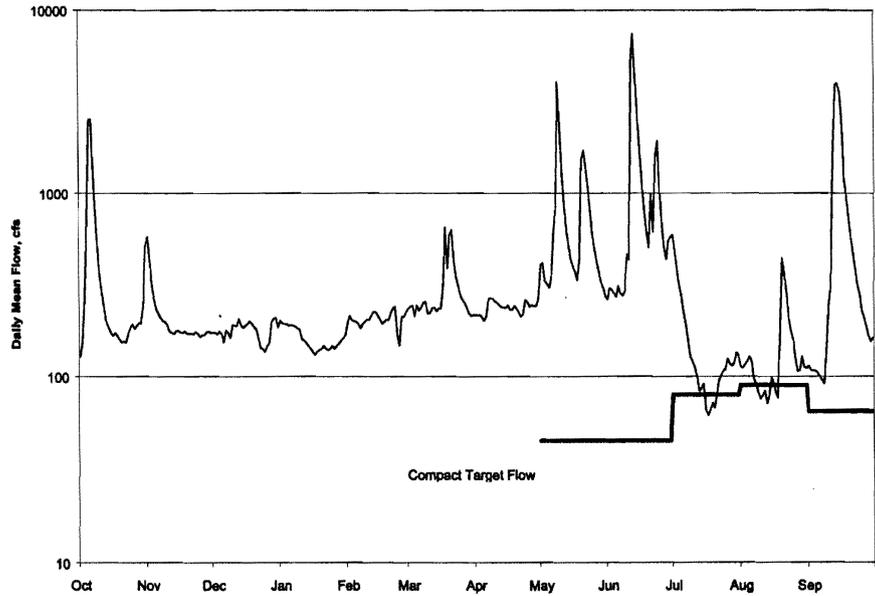
Keith A. Paulsen
Nebraska



Iona Branscum
Kansas

Exhibit A

BIG BLUE RIVER AT BARNESTON, NEBRASKA - 06882000

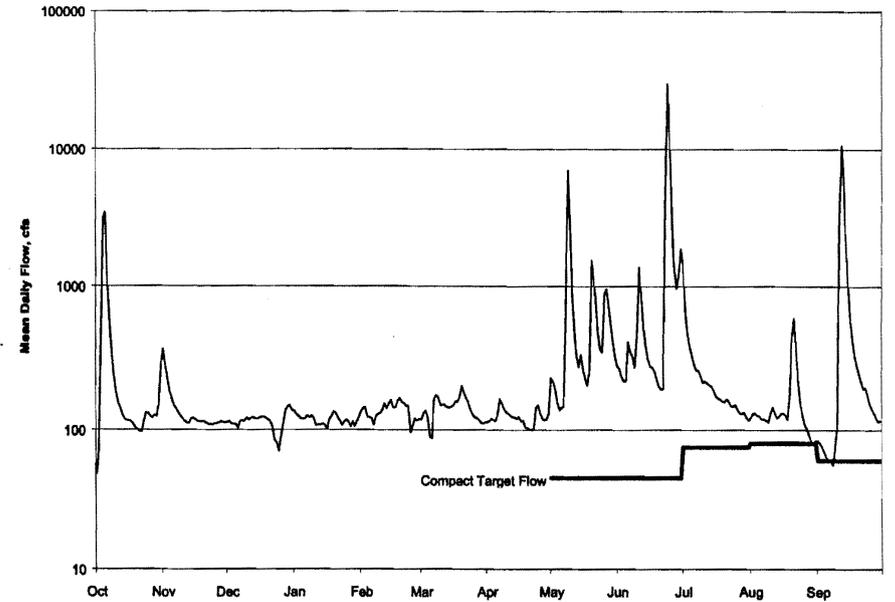


	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	13385	6160	5408	4914	5616	8950	6976	24550	36691	4856	4181	23352
MEAN	432	205	174	159	201	289	233	792	1223	157	135	778
MAX	2560	572	204	197	235	644	263	4120	7510	585	434	4070
MIN	127	162	135	130	146	209	198	267	258	62	72	92
AC-FT	26550	12220	10730	9750	11140	17750	13840	48690	72780	9630	8290	46320

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1933 - 2003	
ANNUAL TOTAL	147044	145039	859	1993
ANNUAL MEAN	403	397	2781	1891
HIGHEST ANNUAL MEAN			115	1934
LOWEST ANNUAL MEAN			5790	May 28
HIGHEST DAILY MEAN	7020	May 28	7510	Jun 13
LOWEST DAILY MEAN	49	Aug 5	62	Jul 17
ANNUAL SEVEN-DAY MINIMUM	60	Aug 3	72	Jul 15
MAXIMUM PEAK FLOW			57700	Jun 9 1941
MAXIMUM PEAK STAGE			34.30	Jun 9 1941
ANNUAL RUNOFF (AC-FT)	291700	287700	622000	
10 PERCENT EXCEEDS	665	645	1770	
50 PERCENT EXCEEDS	231	200	279	
90 PERCENT EXCEEDS	115	111	105	

Exhibit B

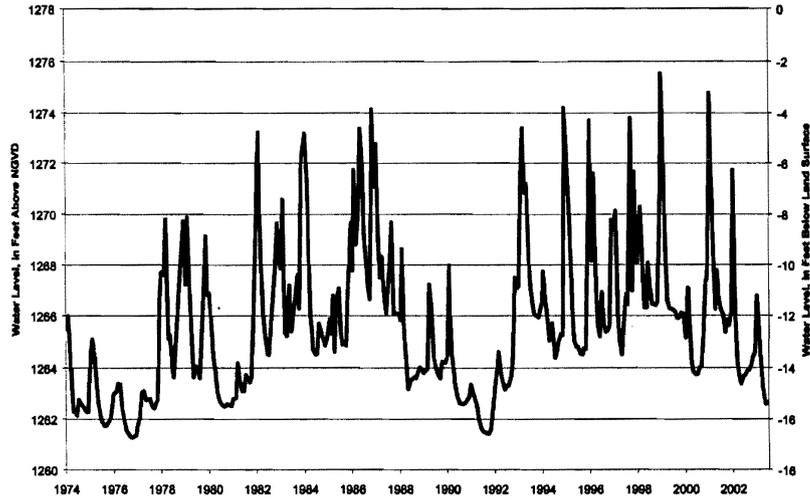
LITTLE BLUE RIVER AT HOLLENBERG, KANSAS - 06884025



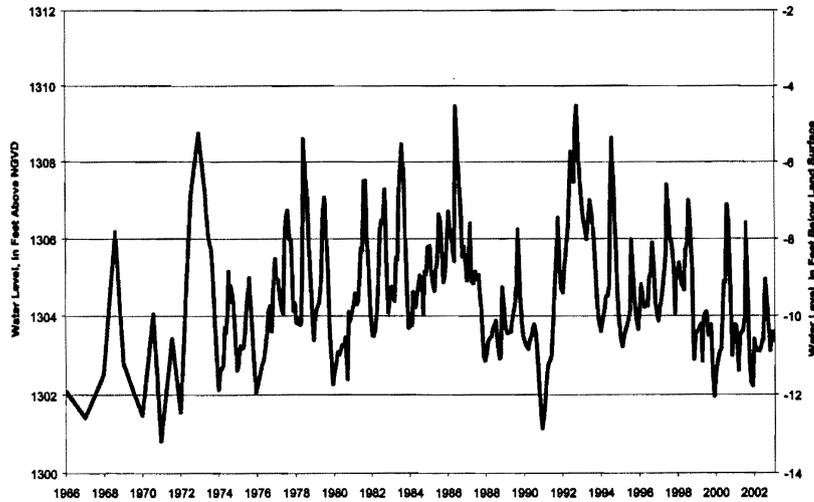
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	311	244	181	176	324	786	532	804	984	1019	508	383
MAX	2163	1113	424	576	1059	3816	2379	2302	4373	9014	2572	1320
(WY)	1987	1997	1993	1984	1993	1993	1987	1995	1984	1993	1985	1977
MIN	45.3	81.1	96.7	98.5	115	118	123	108	151	83.8	72.5	32.0
(WY)	1992	1992	2001	1977	1992	1981	2003	1992	1981	2002	1991	1991

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1975 - 2003	
ANNUAL TOTAL	85070	160970	522	1993
ANNUAL MEAN	233	441	1891	1991
HIGHEST ANNUAL MEAN			195	1991
LOWEST ANNUAL MEAN			29100	Jun 24
HIGHEST DAILY MEAN	5790	May 28	39300	Jul 26 1992
LOWEST DAILY MEAN	40	Aug 8	48	Oct 1
ANNUAL SEVEN-DAY MINIMUM	45	Sep 24	66	Sep 3
MAXIMUM PEAK FLOW			47800	Jul 26 1992
MAXIMUM PEAK STAGE			21.21	Jul 26 1992
ANNUAL RUNOFF (AC-FT)	168700	319300	378400	
10 PERCENT EXCEEDS	322	479	857	
50 PERCENT EXCEEDS	153	132	203	
90 PERCENT EXCEEDS	58	105	107	

402155096523101 - Gage County



400813097112401 - Jefferson County



BIG BLUE RIVER COMPACT STATIC WATER LEVELS 2003

LEGAL	SECTION	LOCATION	WELL	DEPTH SPRING	DEPTH IRR	DEPTH FALL
4N-5E	2	AAAA	OW	92.50	98.65	94.42
4N-5E	2	DDAA	IW	17.54	23.05	19.07
4N-5E	3	CDBC	IW	22.62	25.73	23.76
4N-5E	3	DAAA	IW	19.43	24.75	20.76
4N-5E	4	AAAA	OW	14.45	18.84	16.43
4N-5E	4	BBBC	IW	19.97	26.25	22.91
4N-5E	7	BBAA	IW	84.06	88.99	87.43
4N-5E	9	CBCC	IW	72.01	84.60	75.32
4N-5E	10	DDAA	IW	29.28	34.25	31.41
4N-5E	11	DACA	IW	16.95	18.69	17.72
4N-5E	12	CCCD	OW	14.36	14.88	14.97
4N-5E	14	ABBB	IW	14.33	17.11	15.79
4N-5E	14	DDDD	OW	DRY	DRY	DRY
4N-5E	22	BCCC	IW	68.97	79.44	73.31
4N-5E	25	AACD	IW	19.93	19.91	20.48
4N-6E	6	CBBB	IW	92.54	97.22	94.41
4N-6E	8	AABB	IW	93.16	97.47	102.57
4N-6E	18	DDCC	OW	6.53	7.46	7.53
5N-4E	12	ABBA	IW	19.04	20.43	20.09
5N-4E	13	BADD	IW	17.19	19.28	17.48
5N-4E	15	DBBB	IW	18.36	23.25	19.39
5N-4E	22	DCCC	IW	49.48	55.25	51.72
5N-4E	23	BABB	IW	16.10	20.26	17.13
5N-4E	24	AACD	IW	19.60	20.18	19.89
5N-4E	25	DDAA	IW	49.11	53.48	51.98
5N-5E	7	CADD	IW	61.61	69.30	64.75
5N-5E	16	CBBA	IW	74.63	100.00	80.83
5N-5E	17	ABBB	IW	44.00	62.18	49.27
5N-5E	17	CDAA	OW	66.53	87.29	72.10
5N-5E	20	BCCD	IW	19.93	22.12	20.56
5N-5E	21	DDBB	IW	52.94	64.87	57.62
5N-5E	29	CBBB	IW	13.92	19.53	16.27
5N-5E	33	AADD	IW	18.79	24.06	20.53
5N-5E	35	ABBB	IW	103.61	108.88	105.75

OW - OBSERVATION WELLS

IW - IRRIGATION WELLS

**BLUE RIVER BASIN
REGULATORY AREA WELLS**

Big Blue River

Registration Number	Location	Completion Date	Depth (FT)	Registration Pumping Capacity (GPM)
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-50086	5N-5E-33AC	05-26-76	123	800
G-54047	4N-5E-24BB	03-01-76	84	800
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-81769	4N-5E-13CD	04-22-94	65	250
G-100788	5N-5E-29AB	03-19-99	65	500
G-110669	4N-5E-13CC	06-29-2001	64	375
G-110847	4N-5E-03DA	07-02-2001	82	800
G-110849	5N-5E-29DD	07-02-2001	102	800

Little Blue River

Registration Number	Location	Completion Date	Depth (FT)	Registration Pumping Capacity (GPM)
G-58158	2N-2E-16AA	08-15-77	29	650
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

- Spotlight on the Big Blue River Compact -

by Jim Cook and Jeff Shafer

The Big Blue River drains almost 10,000 square miles in south central Nebraska and north central Kansas. About 75% of the basin is in Nebraska with the remainder in Kansas. The two major tributaries in Nebraska are the Little Blue River and the Big Blue River. The Little Blue River drains approximately 2,700 square miles in all or parts of 10 Nebraska counties. Its headwaters are near Minden and the river exits the state south of Fairbury. The Big Blue River drains approximately 4,600 square miles in all or part of 14 counties. Its headwaters extend from near Hastings to south of Columbus and the river exits the state south of Beatrice.



priority); 3) ensure that no illegal diversion are taking place; and 4) regulate wells installed after November 1, 1968, within the alluvium and valley side terrace deposits downstream of Walnut Creek on the Little Blue River and Turkey Creek on the Big Blue River, unless it is determined by the Administration that such regulation would not yield any measurable increase in flows at the state-line gages.

	State-Line Target Flows	
	Big Blue River	Little Blue River
May	45 cfs	45 cfs
June	45 cfs	45 cfs
July	80 cfs	75 cfs
August	90 cfs	80 cfs
September	65 cfs	60 cfs

The total storage limitations are 200,000 acre-feet in the Little Blue Basin and 500,000 acre-feet in the Big Blue Basin. The storage limitations do not apply to reservoir projects less than 200 acre-feet in size, flood retention structures, or storage necessary to accomplish low-flow augmentation for water quality, fish and wildlife, or recreation.

Compact Background

On January 25th, 1971, after 10 years of negotiations, Nebraska and Kansas signed the **Big Blue River Compact**. The purposes of the compact are:

- A. "To promote interstate comity..."
- B. To achieve an equitable apportionment of the waters of the Big Blue River Basin ... and
- C. To encourage continuation of the active pollution-abatement programs in each of the two States and to seek further reduction in ... pollution of the waters of the Big Blue River Basin."

Water Quality

The Big Blue River Compact is unique in that it contains provisions for water quality. It provides that the states agree to cooperate in investigating, preventing, and controlling pollution of water in the Basin. Under the compact, the states do not have water quality enforcement ability against each other through the Compact Commission, and therefore agree only that the appropriate agencies from each state will cooperate in managing water quality. The water quality committee is currently undertaking a basin-wide monitoring program, surveying pesticide and nutrient use on farms, conducting water quality education programs, and developing best management practices for the basin.

Compact Administration

The Compact Administration meets each May to exchange engineering data and to report on developments within the basin. The Administration includes the state officials charged with administering water rights, two citizen commissioners, and a representative of the Federal Government. The current membership includes:

- Gary Mitchell, United States Representative (*Chairman*)
- Roger Patterson, Nebraska Commissioner
- Kenneth Regier, Nebraska Citizen Representative
- David Pope, Kansas Commissioner
- Terry Blaser, Kansas Citizen Representative

Drought

Like most of Nebraska, the Big Blue and Little Blue River basins have experienced severe drought conditions the past three years. As a result, the flows in both the Big Blue River and Little Blue River have fallen below the state-line targets multiple times and diversions were closed in accordance with the Compact. To minimize closing diversions Nebraska has applied for a grant to study the potential value of augmenting flow to meet those state-line targets. Should the grant proposal be approved, Nebraska will seek to 1) determine the annual need for water necessary to meet the state-line targets; 2) determine the annual value of that water to junior natural flow appropriators; and 3) identify the legal issues necessary to put a flow augmentation project into place.

Equitable Apportionment

The Compact provides for the equitable apportionment of the water of the Big Blue River Basin by setting **target flows at the state-line and by limiting the total reservoir storage in Nebraska**. The state-line target flows are shown in the table. When flows fall below the target, Nebraska is required to 1) limit diversions by natural flow appropriators to their decreed appropriations; 2) close natural flow appropriators with priority dates junior to November 1, 1968 (in accordance with the doctrine of

Meeting Date

The Kansas-Nebraska Big Blue River Compact meeting is scheduled for May 13th, 2004, in Manhattan, Kansas.

developed and the goal will have to be to restore, in an incremental manner, that basin to the "fully appropriated" status. Specific objectives for the first ten year increment of implementation of the IMPs for the "over appropriated" basin are contained in the bill and are consistent with the proposed New Depletion Plan for the Platte River Cooperative Agreement.

- The IMPs may rely on a number of voluntary measures as well as the surface water and groundwater regulatory controls that are authorized by current law and are enhanced by LB962. Among the authorized groundwater controls are allocation of groundwater withdrawals, rotation of use, reduction of irrigated acres, and other measures. NRDs are given specific authority to include incentive programs in the IMPs.

- If there are disputes between the DNR and NRDs over the development or implementation of an IMP and if they cannot resolve those disputes, a five member Interrelated Water Review Board (IWRB) will make the final decision about which components to put into the plan or how the plan shall be implemented. The Board will consist of five members including the Governor or his or her appointee, one additional member of the Governor's choice and three additional members appointed by the Governor from a list of at least six persons nominated by the Nebraska Natural Resources Commission.



Transfers of Surface Water Rights

- Transfers of surface water rights from one location to another will continue to be allowed. In specified instances DNR will also be authorized to issue temporary and permanent permits that either change the purpose for which water is used or change the permit to use from one type to another, e.g. from direct use to storage. Only a temporary transfer or change will be allowed if it involves a change in use to a different preference category. Temporary permits may be for as long as 30 years and may be renewable. Safeguards are added to ensure that changes in type



of permits or changes in use will not adversely impact existing users or be contrary to the public interest.

- An expedited transfer approval process is provided for some irrigation transfers if there will be no change in the diversion point, no diminution of water supply for other appropriators, no increase in the number of acres irrigated, etc. For transfers that meet those and the other criteria, neither publication of notice nor hearings will be required.

Adjudication of Surface Water Rights

- The period of allowable non-use of surface water rights before cancellation without acceptable excuses is extended from 3 years to 5 years. If there are excusable reasons for nonuse, the allowable period of non-use without cancellation is extended from 10 to 15 years. If the unavailability of water was the reason for nonuse, the period of allowable non-use before cancellation may be extended from 10 years to up to 30 years or, upon petition by the appropriator, even longer if the permit is in a basin that has been determined to be over appropriated or fully appropriated and water is expected to be restored for use in accordance with an integrated management plan.

- When an appropriation held in the name of an irrigation district or company is cancelled as to use on a particular tract of land, the district shall have up to 5 years to assign the right to another tract or another use.

Transfers of Groundwater off the Overlying Land

- Natural resources districts are authorized to require as a management area control: (1) district approval of transfers of groundwater off the land where it is withdrawn, and (2) district approval of transfers of rights to use groundwater that result from district allocations imposed under the Groundwater Management and Protection Act. The district must deny or condition the transfer if needed to: (1) ensure consistency of the transfer with the purposes of the management area, (2) prevent adverse impacts on groundwater users, surface water appropriators, or the state's ability to comply with an interstate compact, decree, or agreement, and (3) otherwise protect the public interest and prevent detriment to the public welfare.

- Natural resources districts also are empowered to permit groundwater transfers off the overlying land to augment supplies in wetlands or natural streams for

the purpose of benefiting fish or wildlife or producing other environmental benefits. The determination of whether to grant a permit is to be based upon stated factors, including whether the use is a beneficial use, the availability of alternative supplies, negative effects of the proposed withdrawal, cumulative effects of the proposed and other transfers, and consistency with groundwater management plans and integrated management plans.

Funding Provisions

- LB962 establishes a Water Resources Trust Fund into which state appropriations and other funds relative to the implementation of LB962 may be deposited and from which expenditures may be made for that implementation. The funds available may be used for determining which basins, subbasins and reaches need to have IMPs developed and for implementation of those IMPs. In most instances, funds provided to natural resources districts and other local subdivisions will require at least a 20% local match.



- For FY2004-05, LB962A appropriates \$2.5M. \$1M of that amount will be provided through a transfer from the Environmental Trust Fund and the other \$1.5M will come from the General Fund. The \$1.5M General Fund appropriation comes indirectly through a transfer to the General Fund of the same amount from the Petroleum Release Remedial Action Cash Fund administered by the Department of Environmental Quality.

- Natural resources districts will have the authority to levy up to an additional 1 cent per \$100 assessed valuation if needed to perform their responsibilities under the Groundwater Management and Protection Act. They may also exceed the allowable annual budget increase for the same reason.

Other Provisions

- The Water Policy Task Force will continue to meet through 2009 to provide guidance on water policy matters.

- Public water suppliers (cities, villages, rural water districts, etc.) will be entitled to spacing protection for up to two years around a proposed wellfield if application for a permit to transfer the water from that wellfield is filed pursuant to the Municipal and Rural Domestic Groundwater Transfers Permit Act administered by DNR. The spacing protection will be from the boundaries of the tract that is proposed for the wellfield and will be the greater of 1000' or the spacing protection provided by the NRD within which the wellfield would be located.



- The bill extends from June 30, 2005 to June 30, 2009 the last date of reporting petroleum releases if financial assistance from the Petroleum Release Remedial Action Cash Fund is to be requested.

- LB962 also makes numerous "housekeeping" amendments to several state surface water and groundwater statutes. Those include revisions relating to: map requirements for surface water rights; use of water out of small reservoirs for watering range livestock; annual reporting by surface water users; the review and administration of instream flow appropriations; water well spacing and registration requirements; definitions for the Groundwater Management and Protection Act; the controls that NRDs may adopt in groundwater management areas; municipal transfers into NRD declared moratorium or temporary suspension areas; standardization of requirements for NRD hearings and notices thereof; the imposition of water penalties for violation of NRD cease and desist orders; and the necessity for hearings before DNR grants permits to transfer groundwater off the overlying land for industrial purposes.

For additional information on any of those provisions, contact the Department of Natural Resources.



Nebraska
Department of Natural Resources
301 Centennial Mall South
P.O. Box 94676
Lincoln, Nebraska 68509-4676
Phone: 402-471-2363
Website: <http://www.dnr.state.ne.us>

Well Drilling Activities

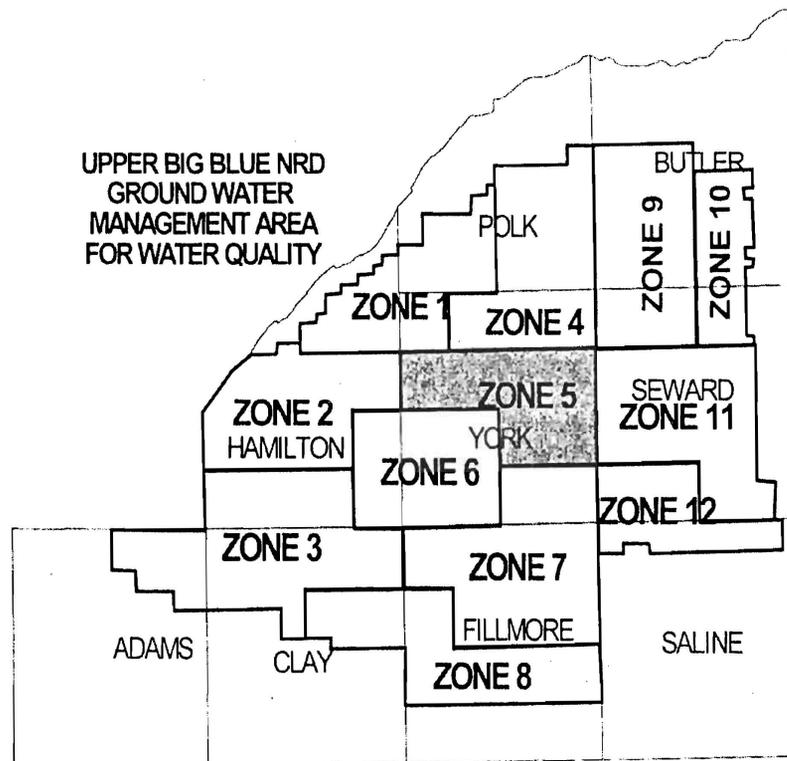
Two hundred eighty six permits were issued for irrigation wells (218 new & 68 replacement) in 2002. At the end of 2003 there were 11,574 active irrigation wells in the District.

Ground Water Level Changes

The average groundwater level change for the District from Spring 2003 to Spring 2004 was a decline of 2.57 feet. This is the fourth consecutive year of declines totaling 9.55 feet. The attached map shows the area of greatest changes and the county averages. With this change, the average ground water level is 4.14 feet above the allocation trigger. The District adopted revisions to the groundwater management regulations in January 2004. Effective March 1, 2004 all newly constructed wells must be equipped with a flowmeter prior to operation. The revised rules established a new reporting trigger that is three feet above the allocation trigger. If the average ground water level falls below this trigger annual groundwater use reporting will be required. If we have a normal to dry growing season in 2004 this is likely to happen.

Groundwater Nitrates

The district is divided into twelve management zones for ground water quality management. The primary ground water quality management concern is nitrate. In April 2003 a six township area in central York county (Zone 5) was designated a Phase II management area to address increased ground water nitrate levels. The median ground water nitrate level in Zone 5 is 9.5 ppm based on 2002 sampling. At their May meeting the NRD board will consider including 6 more townships (Zone 6) into a Phase II management area. Zone 6 had a median ground water nitrate level of 9.0 ppm based on 2003 sampling. The trigger level for phase II management is 9 ppm. Phase II management requires farm operators to attend a training session on best management practices related to fertilizer and irrigation management. It also requires deep (36") soil sampling, irrigation scheduling and annual BMP reports. The rest of the district remains in phase I management for groundwater nitrates. Under phase I management the application of anhydrous ammonia may not occur until November 1, while application of dry and liquid nitrogen fertilizers must wait until March 1.

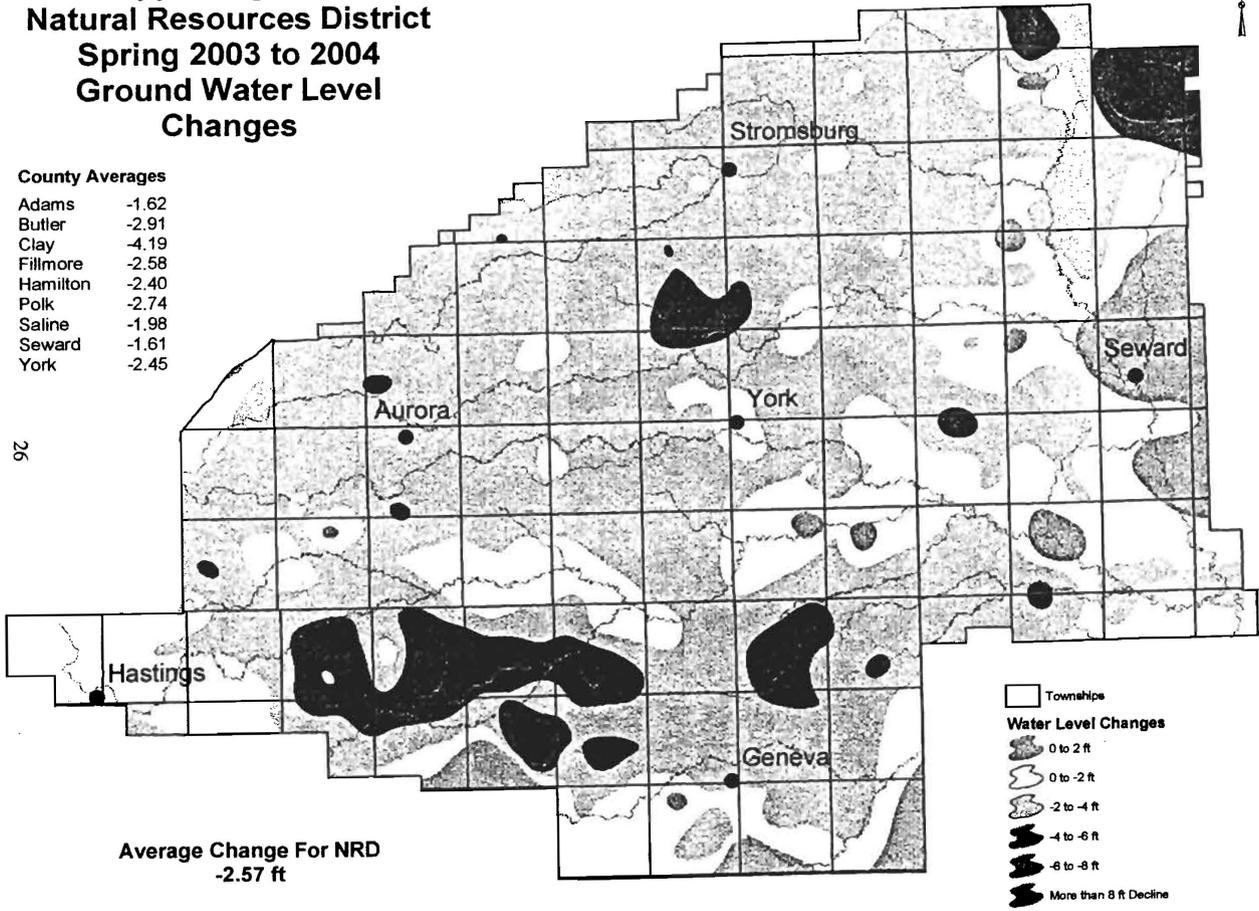


Upper Big Blue Natural Resources District Spring 2003 to 2004 Ground Water Level Changes

County Averages

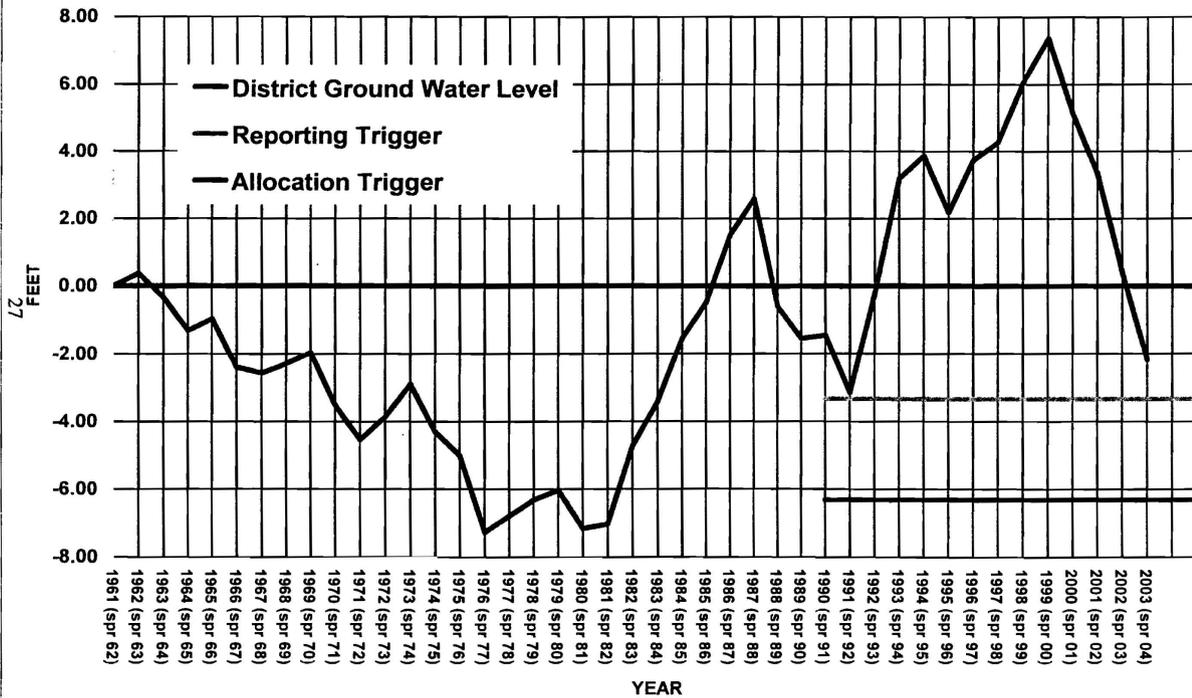
Adams	-1.62
Butler	-2.91
Clay	-4.19
Fillmore	-2.58
Hamilton	-2.40
Polk	-2.74
Saline	-1.98
Seward	-1.61
York	-2.45

26



Average Change For NRD
-2.57 ft

UPPER BIG BLUE NRD - AVERAGE GROUND WATER LEVELS TRIGGERS COMPARED TO HISTORIC LEVELS SPRING 2004



The Spring 2003 ground water level is 1.14 ft. above the reporting trigger and 4.14 ft. above the allocation trigger

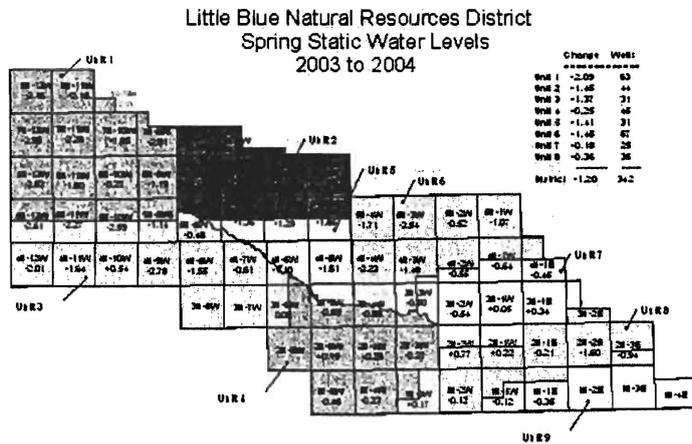
Little Blue Natural Resources District Conservation Report to the Blue River Compact

MAY 13, 2004

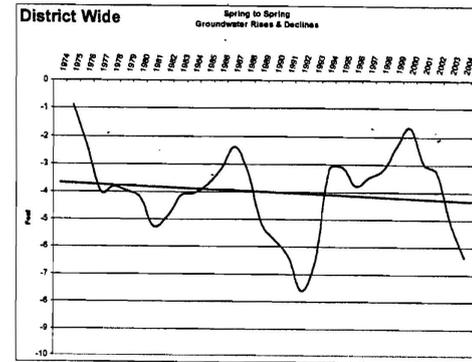
Spring 2004 Groundwater Levels

The Little Blue NRD measured 342 irrigation wells in the spring 2004 static ground water level monitoring program. The district experienced average declines of 1.2 feet since the spring of 2003, with the greatest declines again found in western Adams and Webster Counties. The largest single township decline was 2.98'. Interestingly enough, we had 7 townships that showed a slight rise over 2003 measurements. Several of those townships were impacted by heavy rains in June when a strong storm cell settled on Thayer County, dropping as much as 13" of rain. A tornado also destroyed nearly 100 pivots in the county.

The map below shows the recent annual water level recordings comparing spring 2003 with spring 2004. The averages shown on the accompanying chart reflect geographic water management units identified by the Board in our 1996 Groundwater Management Plan, which were delineated based on similar hydrologic characteristics.



The District has conducted extensive studies in Unit 8 in the southern portion of the district where the long-term groundwater level trends is down. The District also obtained a \$42,000 grant from the Environmental Trust to do more extensive studies and mapping of that area. The study will be conducted over the next two years to better understand the complex, yet narrow and isolated aquifer, and make decisions for management. The Board is currently working on changes to our Groundwater Management Plan to allow more rapid action in problem areas.



The chart at left reflects the long-term trends in static water levels in the Little Blue NRD since 1974. Through the period, the levels have fluctuated in direct relation to the rainfall received. The last four years reflect the intense nature of the drought and heavier than normal pumping in our area.

Generally, the water table has been fairly stable, fluctuating within a 4 foot window.

Water Metering and Reporting

In the early 1980s, the Little Blue NRD began gearing up for the allocation of groundwater because of declining water tables in the north and western portion of the district. At that time, nearly 3,000 flow meters were installed throughout the major aquifer of the district. Because the water table declines leveled off and actually made significant rises through the mid to late 80s, allocation was placed on hold. The trend line as shown above has been reasonably stable over the past 22 years. As a result of our earlier commitments, the district did offer to perform flow meter maintenance for operators who voluntarily reported crop and water use annually. We currently have 1,176 meters still operating in our voluntary program with nearly 110,000 acres reported. The charts below show the crops, acreages and water pumped per acre for the past six years.

Operator Cropping Reports – Reported Acreages

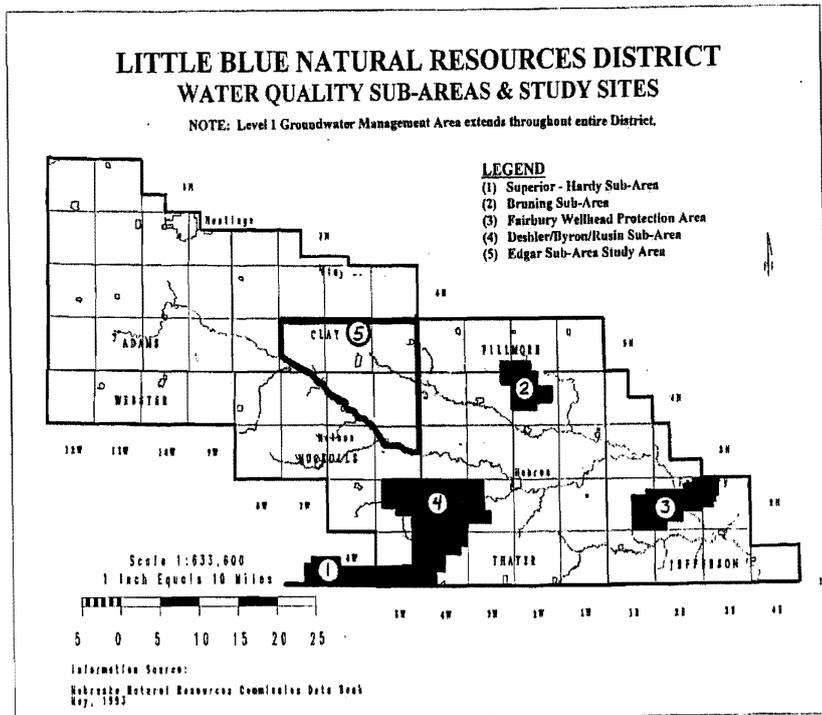
	Corn	Beans	Milo	Alfalfa	Other	Total
1998	87,208	28,045	995	3,215	1,148	120,611
1999	77,538	31,962	618	3,966	1,031	115,115
2000	65,755	30,611	191	3,481	316	100,354
2001	61,608	35,970	856	3,123	968	102,525
2002	61,973	38,608	294	3,799	2,469	107,143
2003	71,046	32,133	876	3,632	1,994	110,216

Pumpage information collected by Little Blue NRD

	All Acres	Pivot	Gravity
1998	8.7		
1999	11.4	10.1	15.7
2000	13.6	11.1	17.0
2001	10.6	8.2	13.9
2002	16.5	13.6	19.9
2003	12.8	10.3	16.9

Water Quality Activities

One of NRDs authorities is non-point pollution. Throughout 2003, the District sampled nearly 400 irrigation wells for nitrates. This past year's focus was in the central third of the district and identified problem sub-areas. The map below shows the areas where these sub-areas have been established. Four active areas of the district, comprising 100,800 acres, are now in some level of advanced management. Operator training, required demonstration fields with soils sampling and irrigation scheduling, and annual operator reports are major components of the program. Efforts in Area #2 to reduce nitrogen residuals in soils have been effective as levels have declined for the past 3 years. The 5th area, near Edgar, was recently designated and includes approximately 186 square miles. Nitrate levels in all designated areas have exceeded the 7 ppm levels identified in our plan for initial trigger for action.



Little Sandy Watershed Protection Project

Construction on the Little Sandy Watershed Project in Jefferson, Thayer, Fillmore and Saline Counties is underway. The first dam site was completed in November 2003. It is the smallest of the 5 dam project, with flood storage of 141 acre feet. Construction was to have begun on the second structure last fall, but a challenge to our cultural resources investigations and a subsequent filing of objection to our storage permit have placed this project on hold while the DNR determines the objector's rights for a hearing. The second site would have 1,333 ac. ft. of flood storage and provide the setting for a 160 acre public recreation area. The district still hopes to let bids for the dam and recreation facilities this spring.



Soil and Water Conservation Focus in 2003

The Little Blue continues to provide significant financial resources to assist landowners in completing conservation projects. In 2003, the district provided over \$200,000 in local funds and administered \$165,000 in state funds for various soil and water conservation practices on the land. These programs have been the backbone of our conservation activities since 1977. Key eligible projects include: terraces, waterways, diversions, dams, dugouts, grazing land improvements, irrigation reuse systems, irrigation return lines, flow meters, irrigation system drop nozzles, gates and gaskets, and well decommissioning.

Soil and Water Conservation Accomplishments for 2003

Practice	Units	Quantity
Terraces	Feet	119,003
Waterways	Feet	43,495
Underground Tile Outlets	Feet	23,720
Water Sediment Structures	Each	8
Soil Sampling	Each	5
Concrete Block Chute	Feet	2,268
Diversions	Feet	13,315
Livestock Dugouts	Each	3
Planned Grazing Systems	Each	12
Critical Area & Range Seeding	Acres	77.5
Tree Plantings	Each	24
Irrigation Management Plans	Each	18
Water Flow Meters	Each	9
Drop Nozzle Packages	Each	25
Chemical & Fertilizer Applicator Regulators	Each	15
Water Wells Decommissioned	Each	94
Buffer Strips	Acres	385
Gates and Gaskets	Each	86

Exhibit J

Lower Big Blue NRD Highlights of 2003-2004

Water Quality & Quantity

- Decommissioned 17 wells last year.
 - Average cost \$544/well – Average cost-share \$237/well
 - 455 wells have been decommissioned since 1992
 - Water quality sampling – 444 wells – nitrate/nitrogen 7.38 ppm average
 - 65 Well Permits approved for wells pumping more than 50 gpm
 - Groundwater levels – 59 wells measured
 - > Spring 2003 to Spring 2004 showed a decrease of 1.95 ft.
 - > Fall of 2003 to Spring 2004 showed an increase of 2.11 ft.
 - Blue River Compact Well Readings
 - > Fall 2002 to Fall 2003 averaged 1.23 ft lower.
 - > Spring 2003 to Spring 2004 averaged .71 ft. lower.
 - > Difference from Spring 2003 to mid Irrigation 2003 averaged 6.19 ft. lower.
 - > Irrigation 2003 to Fall 2003 increased 3.76 ft.
 - > Fall 2003 to Spring 2004 increased 1.72 ft.

Land Treatment – 70% of NRD Treated

- NSWCP – NRD funds: \$95,000, State: \$106,955 \$201,955 total funds
 - 167 applications requesting \$580,986
 - Approved 100 applications for \$261,500
 - Since 1978 installed:
 - 1,448 miles of terraces
 - 92 miles of tile outlets
 - 2,780 acres grassed waterways
- Buffer Strips 189 contracts - 1480 acres \$48,517 annual payments
- Small Dam Cost-Share Program
 - Initiated in 1997
 - Constructed 11 dams
 - 3 will be let for construction this winter

EQIP

\$19 million expected state wide for 2004 – general
 \$4.4 million expected state wide for 2004 – GWSW

Applications received by Lower Big Blue NRD for 2004:	148	General
	30	GWSW
	<u>3</u>	AFO
	181	

Ranking to be completed by May 28, 2004

2003 EQIP - Lower Big Blue NRD

220 applications	-	\$2.1 million	-	General
10 pivots	-	\$154,000	-	GWSW
6 animal waste	-	\$224,830	-	AFO

General	-	\$530,217	-	35 Contracts
Pivot	-	\$72,400	-	4 (1-LBB)
AFO	-	\$191,438	-	4 (1-UBB)

41 Contracts in LBB - \$776,351

LBBNRD has 282 contracts - #1 in State of Nebraska of 3,260 contracts

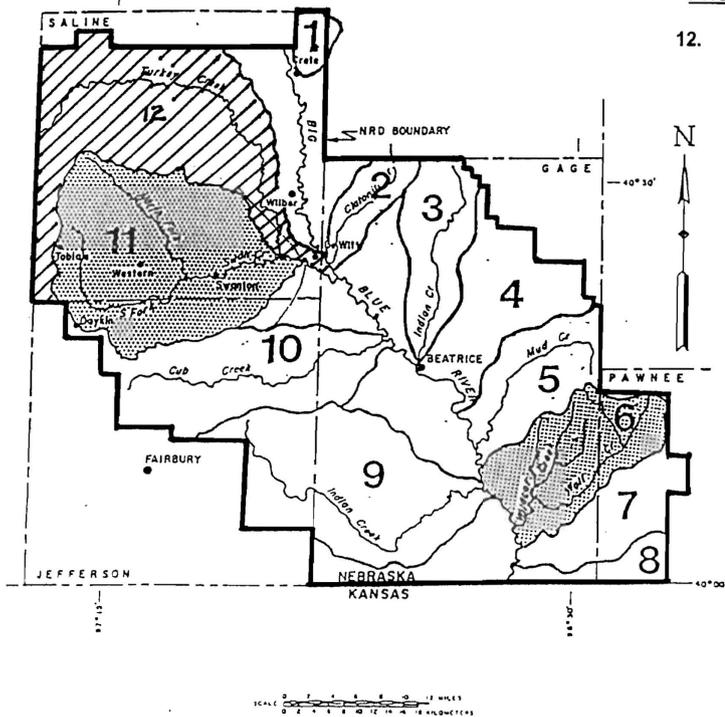
Surface Water Releases – 2003

- 07/15/03 NRD had begun releasing water from Swan Creek dam – 12 cfs
- 07/17/03 DNR issued cease orders to 545 junior irrigators – Flows at Barneston – 64 cfs
- 07/28/03 NRD opened valves of two watershed dams to add 15-20 cfs
- 07/29/03 DNR sent letters to junior irrigators to resume pumping
- 07/31/03 Barneston Gauge – 140 cfs
- 08/12/03 DNR shut down 150 surface water users
- 08/14/03 DNR shut down all surface water users
- 8/19/03 DNR lifted shut down order

Lower Turkey Creek

- This project contains 139,000 acres in the northern half of Saline County.
- Consulting engineers study began in October 2003. Phase I is to determine feasibility for state grant of 65-70% of cost. Phase I is planned for completion by mid June 2004.
- If feasible, Phase II will begin. Would consist of: final economics, environmental assessment, geologic investigation of feasible sites, state review, and final report. Estimated completion April 2005.
- Looking at 16-18 sites at a cost of \$7,000,000
 - \$4.8 million construction
 - \$2.2 million land rights
- Drainage areas controlled by structure = 63,000 acres (45% of watershed)
- Permanent pool – 760 acres (acre feet = 5,250)
- Flood pool – 1,613 acres (acre feet = 15,750)
- Stream flow augmentation approximately 450 acre feet would be needed
 - Stream flow – Fish & wildlife benefits
 - Big Blue River Compact – 15-20 cfs for 14 days

LOWER BIG BLUE NRD
PROJECT LOCATION MAP
NEBRASKA



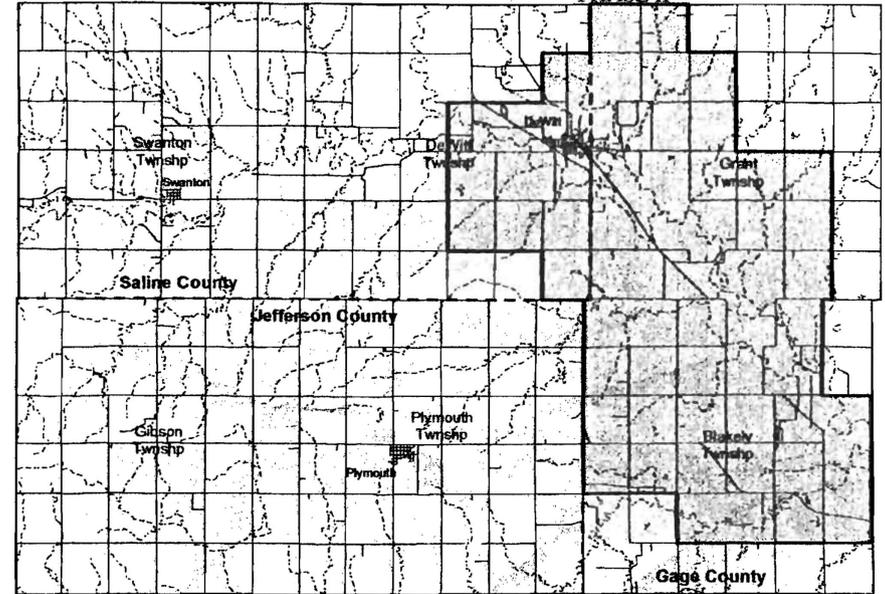
COMPLETED PROJECTS

1. Walnut Creek
2. Clatonia Creek
3. Little Indian
4. Bear-Pierce-Cedar
5. Mud Creek
6. Wolf-Wildcat
7. Plum Creek
8. Mission Creek
9. Big Indian
10. Cub Creek
11. Swan Creek

PROJECT IN PLANNING

12. Lower Turkey Creek

GWMA
PHASE II



**PHASE II GROUNDWATER MANAGEMENT
AREA INFORMATION**

Reporting of best management practices on demonstration fields to the NRD needs to be completed by March 1, 2004.

Well permits are required from the NRD before any well that will pump more than 50 gpm is constructed. This requirement covers the entire NRD.

Fall application of nitrogen fertilizer prohibited before November 1st

The NRD has many cost-share programs available to producers in this area.

Contact Dave Clabaugh at the Lower Big Blue NRD with your questions.
Phone 402 -228-3402 e-mail 35clabaugh@lbbnrd.org

Lower Big Blue NRD Newsletter

WATERSHED CAPITAL OF NEBRASKA

FREE FAMILY FISHING DAY

May 22, 2004

Adults & Kids Fish FREE!! (No License Required)

3rd Annual Youth Fishing & Casting Derby

9:30 a.m. to 11:00 a.m.

Registration: 8:30 a.m. to 9:30 a.m.

Bait Available, Rods/Reels Available by Pre-Registration Only

Medals in 4 age groups for Largest, Smallest, & Most Fish Caught -- Prizes for all participants!

Fish Identification and Knot Tying Displays

Hands-on Archery Demonstrations by Archery Club Members and Archery Range Tours, Boat Ride & Safety Presentation by Nebraska Game & Parks, Family Fun Events Include Vise Grip Throw And Youth Casting Contest

FREE Hot-Dog Lunch

Kids bring your parents and make a day of it

To Be Held At:

Big Indian Recreation Area

(6 miles East 3/4 North of Odell)



Caravan from Beatrice to Location will leave Chaulauqua Park at 8:15 a.m. (West of Hwy. 77 on South 6th Street)

For more information call: 402-228-3402, 402-228-3779 or 729-6370

Email: sobotka@lbbnrd.org

Sponsored by Optimist Club of Beatrice, Big Indian Archery Club & Lower Big Blue NRD

PRE-REGISTRATION FORM

Pre-registration is not required but will help speed up registration before the contest. Please fill out the registration below and mail it to Lower Big Blue NRD or call: (402) 228-3402 or e-mail sobotka@lbbnrd.org.

Please Print Clearly

NAME: _____ City: _____ Age: _____

NAME: _____ City: _____ Age: _____

NAME: _____ City: _____ Age: _____

Total Number That Will Be Eating Lunch: _____

Total Number Of Rods/Reels Needed: _____

(Limited Rods/Reels Available)

Mail to: Lower Big Blue NRD • P.O. Box 826 • Beatrice, NE 68310



Rain Gauge Readers Needed

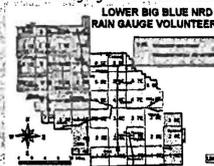
The Lower Big Blue NRD is looking for volunteers to take rain gauge readings at their home and/or place of business. The Lower Big Blue NRD is partnering with 12 other NRDs statewide to develop a rain gauge reading consortium. You will become a part of a special network of rain gauge readers across Nebraska.

The information that you provide through your readings will affect local, State of Nebraska and the National Weather Service reporting.

The Lower Big Blue NRD will furnish a free rain gauge for you to use. This gauge is a special unit that is approved by the National Weather Service and is necessary for the work that you will be doing for taking measurements. Through your daily readings, you will have a direct impact on how the National Weather Service will report conditions in Nebraska.

The NRD is looking for volunteers in all 46 townships in the District. The map above shows the townships in the District with a volunteer. If you are interested in volunteering and live or work in a township without a volunteer, please contact the NRD at 728-3402 or e-mail Scott Theis at theis@lbbnrd.org.

Funding for the project was made possible by a grant from the Nebraska Environmental Trust.



Manager Announced Retirement 32 Years of Service

After nearly 32 years as the Manager of the Lower Big Blue NRD, Ron Fleck announced at the January board meeting that he would be retiring as of June 30, 2004. Ron stated, "I feel it is the right time to turn the reins over to another individual who, with guidance from the directors and staff, will lead the district forward to meet future opportunities and challenges."

Ron also stated "The past 32 years as the district's Manager have been very rewarding to me with many projects that were implemented and installed on the land. This could have only been accomplished with support of the directors and an excellent staff."

The board is in the process of selecting a new manager.

Soil & Water Conservation Cost-Share Sign-Up

Landowners in the Lower Big Blue NRD planning to install terraces, diversions, grassed waterways, or other conservation practices will have the opportunity to apply for cost-share assistance during the week of June 7th - 11th at their local NRCS office.

Landowners applying for cost-share assistance can do so at the NRCS offices in Beatrice, Fairbury, Wilber, and Pawnee City.

Approximately \$200,000 will be available for the 2004-2005 cost-share program. The cost-share rate for assistance will be 50%. Last year, with cost-share assistance, landowners installed over 120 miles of terraces and 70 acres of grassed waterways in the Lower Big Blue NRD.

May Primary



The Primary Election is May 11, 2004, and the General Election is November 2, 2004.

The Lower Big Blue NRD has one sub-district that will be voted on in May to determine which two candidates will advance to

the General Election in November.

District 2, which include southern Gage County and all of Jefferson County within the Lower Big Blue NRD, has three candidates appearing on the May Ballot.

The candidates are: Gordon Engelman of Diller, James Dammow of Diller, Dean Pretzer of Diller.

The district will also need to appoint an individual from sub-district 4 at the January, 2005 board meeting as no candidates filed from the sub-district.

Swan 5 Rehabilitation Volunteers



Saline County 4-H members and volunteers complete the rehabilitation project at Swan 5, Willard L. Meyer Recreation Area, by planting willows for bank stabilization on the islands created to protect shorelines.



Pictured from left to right: (Front Row) Eric Smith, Saline County 4-H Associate; Amanda O'Donohy; Isaac Sobotka; Randy Pryor, Saline County Extension Educator; Keri Murphy; Sydney Kincaid; Andrew Pryor; & Mason Needles. (Back Row) Ernie O'Donohy; Kessa Rezy; Cheri Murthey; Randy Meyer; & Andrew Brandt.

DON'T FORGET Permits Are Needed For Wells

Permits are needed from the NRD before wells, capable of pumping more than 50 gallons per minute, are constructed. Regulations of the districtwide Groundwater Management Area require the permits. The permit fee is \$50.00. Failure to obtain a permit prior to construction will result in a \$250.00 late permit fee.

Chemigation Permit Deadline Approaching

Persons who intend to apply chemicals through an irrigation system must first obtain a permit from the NRD. The individual who applies the chemicals must be a certified chemigation applicator. The fee for a new chemigation permit is \$30 and it must be turned in before June 1st.

Chemigation permits issued in 2003 need to be renewed by June 1, 2004. The chemigation fee is \$10 for each renewal. Permit holders who do not plan to chemigate this year but may chemigate the following season,



Dave Clabough, Water Resource Specialist, conducts an annual inspection of chemigation safety equipment.

are advised to go ahead and renew their permit this year. This process will not only save you money, but it will provide you the option of chemigating in an emergency situation without obtaining the emergency permit at \$100.

Permit holders in the Lower Big Blue NRD are reminded that an annual on-site inspection of safety equipment is required for permit approval. Please call the NRD office at 228-3402 to set up an inspection.

Spring 2004 Groundwater Level Measurements

Fifty-nine irrigation wells measured this spring showed that groundwater levels have declined when compared to the Spring 2003 levels. Water level measurements completed by the Lower Big Blue NRD show a decrease in 2004 Spring groundwater levels that averaged -1.95 feet across the district when compared to the spring of 2003. Last year's drought conditions resulted in a longer irrigation season across the NRD, and a lower groundwater level is the result.

Gage County wells showed an average decrease in water levels from one year ago of -1.39 feet in twenty-one wells measured. Two wells had increases, with the largest being 0.54 feet. Eighteen wells declined with the largest being -3.49 feet.

Saline County had an average decline of 2.54 feet in twenty-two wells measured. One well had an increase of 0.61 feet. Twenty-one showed a decline with the largest being 6.59 feet.

The levels, when compared to the base year of 1982, which is the year used to compare all levels because of the average weather condition during this period, show that the Spring 2004 groundwater levels averaged 0.29 feet higher than the Spring 1982. Groundwater levels rose over the fall and winter months of 2003-04. The average increase in the NRD was +2.11 feet this Spring in the 56 wells measured.

SPRING 2004 GROUNDWATER LEVEL MEASUREMENTS

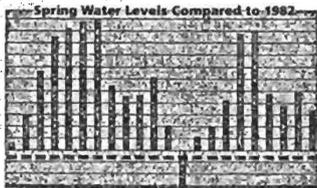
COUNTY	WELLS	CHANGE FROM SPRING 2003 TO SPRING 2004
Gage	21	-1.39 Ft
Saline	22	-2.54 Ft
Jefferson	16	-1.87 Ft
NRD Avg.	59	-1.95 Ft

CHANGE FROM FALL 2003 TO SPRING 2004

COUNTY	WELLS	CHANGE FROM FALL 2003 TO SPRING 2004
Gage	21	+ 2.28 Ft
Saline	20	+ 1.36 Ft
Jefferson	15	+ 2.82 Ft
NRD Avg.	56	+ 2.11 Ft

CHANGE FROM SPRING 1982 TO SPRING 2004

COUNTY	WELLS	CHANGE FROM SPRING 1982 TO SPRING 2004
Gage	18	+ 2.14 Ft
Saline	19	+ 6.84 Ft
Jefferson	12	+ 9.70 Ft



Free Domestic Drinking Water Analysis (Nitrate Content)

The Lower Big Blue NRD will again be sampling irrigation wells across the district for nitrate content. Monitoring of nitrate levels in groundwater to determine overall water quality in the district began in 1987. The NRD will also be testing domestic drinking water wells at this time at no charge to rural residents of the district. Domestic wells, which are very susceptible to contamination due to their construction, location, age, and shallow water level, can be contaminated from a number of sources.

Please call the Lower Big Blue NRD at 228-3402 with your name, address, and the legal description of the well you are interested in having tested.

Abandoned Well Cost-Share Program

Abandoned wells are a serious threat to people, livestock, and groundwater. If you have an abandoned well on your property, the Lower Big Blue will cost share on the decommissioning of that well. The District will provide assistance in the amount of 60% of the actual cost to plug a well, up to a maximum of \$300.

Wells must be decommissioned by a licensed well or pump installation contractor.



Visit us online!!
www.lbbnrd.org

2004 Fishing Contest & Sponsors

On May 22, 2004, The Lower Big Blue NRD, Optimist Club of Beatrice & The Big Indian Archery Club will host the 3rd annual fishing contest at the Big Indian Recreation Area. This day is also the Nebraska Game and Parks Statewide FREE Fishing Day.

Lower Big Blue NRD Recreation Areas

1. Willard L. Meyer Recreation Area (Swan Lake), 3 miles east and 7 miles north of Tolson. Standing Rehabilitation project and stacking completed in Spring 2004.
2. Walnut Creek Wildlife Management Area, located 2.5 miles northwest of Crest, offers a variety of outdoor activities and is a favorite fishing spot for many in south-east Nebraska.
3. Catalina Public Use Area, located 1 mile north of Cassing, is a nice place to relax and fish.
4. Leisewe Lake Wildlife Management Area, located 3 miles south of Plymouth, is a favorite hunting and fishing spot.
5. Cub Creek Recreation Area, located 3 miles west, and 4.5 miles south of Plymouth, offers outdoor activities for all seasons.
6. Big Indian Recreation Area, located 6 miles east of Ord, is one of Nebraska's most popular lakes, offering facilities for a wide variety of outdoor activities.
7. Wolf-Wildcat Wildlife Management Area, located 6 miles south of Virginia, has facilities for hunting and fishing on 160 acres of public access land.
8. Bear Creek Wildlife Management Area, located 4 miles north and 2.5 miles east of Beatrice, offers hunting and fishing opportunities.

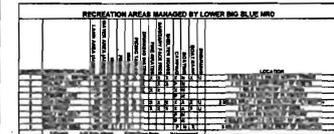
Fishing Contest Here

Lower Big Blue NRD Staff & Directors

DIRECTORS	
Laverne Grammatico	President, Champion
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Ken Broderson	President, Treasurer
Orlando Zimmerman	Director, Secretary
Charles Engstrom	Director
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Michael Ramsey	President
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Marcel Stubbins	Director
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Dave S. Clabough	Water Resource Specialist
L. Scott Sobotta	Land Resource Specialist
Scott Thier	Operations Supervisor
Buddy Meyer	Operations Supervisor Assistant
Jan Fisher	Administrative Secretary
Lucy Mohrman	Saline County NRCS Clerk
Robb May	Gage County NRCS Clerk

This newsletter is the official publication of the Lower Big Blue NRD, 802 Street, P.O. Box 526, and is published in Beatrice, NE 68310. It is a supplement to the Beatrice Daily Sun, Crest News, Rural Service, Other Beatrice, and Nebraska Special. Approval and acceptance for mailing are based on the mailing list by returning the above address, phone (402) 228-3402, or FAX (402) 228-4441. Comments regarding any information in this newsletter should be directed to the editor, Dave Sobotta.



LOWER BIG BLUE
Natural Resource District
P.O. Box 526
Beatrice, NE 68310

Exhibit L

KANSAS-NEBRASKA BIG BLUE RIVER COMPACT
U.S. Geological Survey—Water Year 2003

The U.S. Geological Survey (USGS) continues to operate two streamflow gaging stations for the Compact Administration—Big Blue River at Barneston, NE (06882000), and Little Blue River at Hollenberg, KS (06884025). Each station automatically records streamflow stage every 30 minutes using an electronic data logger (EDL). These instantaneous values are transmitted via GOES satellite, to USGS offices where they are used to compute preliminary values of instantaneous and daily discharge. Periodic visits are made to the stations to maintain and calibrate the equipment, make discharge measurements, and download the data directly from the EDL as a backup to the satellite data. The discharge measurements are used to develop and adjust the stage-discharge relations (rating curves) that are needed to convert stage values to corresponding values of discharge.

Current (real-time) and historic data on surface-water, ground-water, and water-quality for the Nation can be accessed online via the general Water Resources website or from the National Water Information System Web (NWISWeb) site. Daily, monthly, and annual streamflow statistics are also available from NWISWeb. Real-time data—up to 31 days of unit values or 18 months of daily values—for Nebraska and nearby sites (including both Compact stateline streamflow sites) can also be accessed from the Nebraska District Web site.

<http://water.usgs.gov/> Water Resources site
<http://waterdata.usgs.gov/nwis/> NWISWeb site
<http://ne.water.usgs.gov/> Nebraska Web site

Before the data are finalized, updates and revisions are made as needed, based on a series of quality checks and reviews. Finalized values of daily discharge and summary statistics are published in the Survey's annual water-resources data report for Nebraska. Streamflow data for water year 2003 were recently published for both the Big and Little Blue River stations. Beginning last year, and continuing into the future, the data report was released primarily as an online report. The Nebraska report, and those from other states, can be accessed at the Web site show below.

<http://water.usgs.gov/pubs/wdr/> USGS Water Data Reports

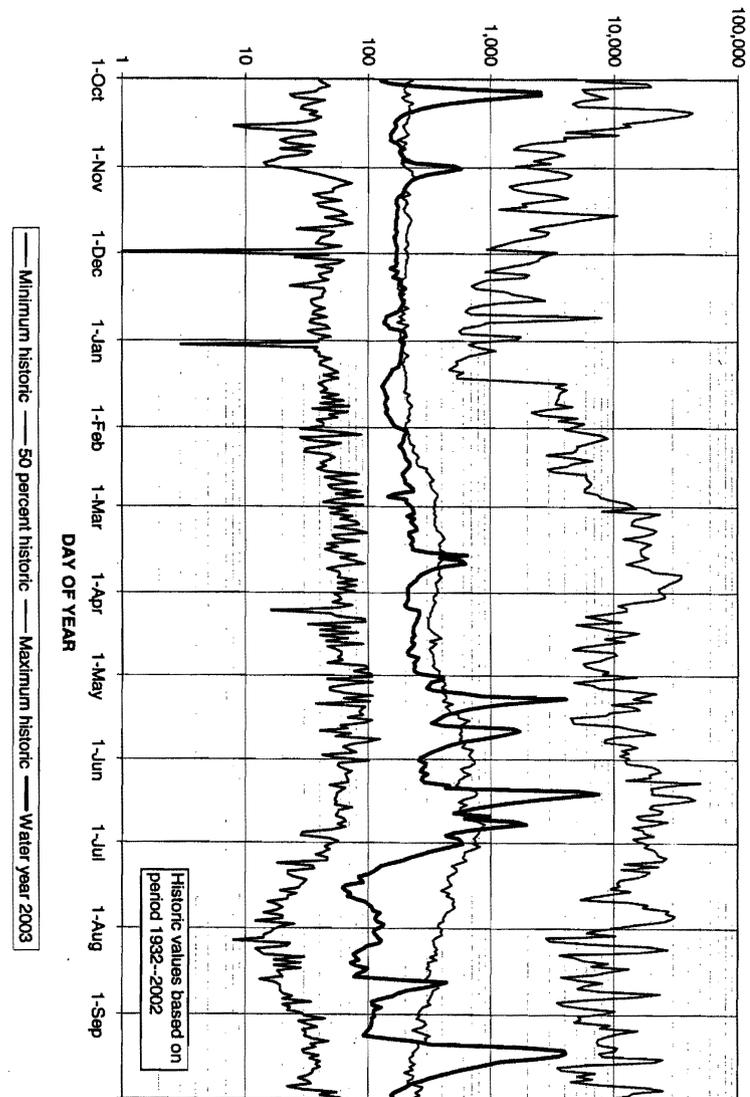
For the **Big Blue River at Barneston**, the annual mean discharge of 397 ft³/s for WY 2003 was less than the 407 ft³/s for WY 2002 and the 865 ft³/s for the prior period of record, 1933–2002 WYs. The maximum and minimum daily discharges during WY 2003 were 7,510 ft³/s on June 13 and 62 ft³/s on July 17. A plot of the daily discharges for WY 2003 compared to the historic minimum, median, and maximum values for each day of the year is attached. No new record daily minimums or maximums were set during the WY. The largest runoff events occurred during October, March, May–June, and August–September.

For the **Little Blue River at Hollenberg**, the annual mean discharge of 441 ft³/s for WY 2003 was larger than the 216 ft³/s for WY 2002 but was less than the 525 ft³/s for the prior period of record, 1975–2002 WYs. The maximum and minimum daily discharges during WY 2003 were 29,100 ft³/s on June 24 and 48 ft³/s on October 1. A plot of the daily discharges for WY 2003 compared to the historic minimum, median, and maximum values for each day of the year is attached. Several record daily minimums were set during December, and February–April; and several record daily maximums were set during October, May–June, and September. The largest runoff events occurred during October, May–June, and August–September.

The daily discharge records for WY 2003 and daily-value statistics for the periods of record for the Big and Little Blue River streamflow gaging stations were provided to Jeff Shafer of the Nebraska Department of Natural Resources. Jeff downloaded the data for the two ground-water observation wells in Gage and Jefferson Counties, Nebraska, from a USGS website. The estimate of the Compact Administration's share of the cost to operate the two streamflow gaging stations for the period July 1, 2004 to June 30, 2005 were also sent to Jeff.

Phil Soenksen
May 12, 2004

DAILY DISCHARGE, IN CUBIC FEET PER SECOND



06882000 Big Blue River at Barneston, NE
(Drainage area = 4,447 mi²)

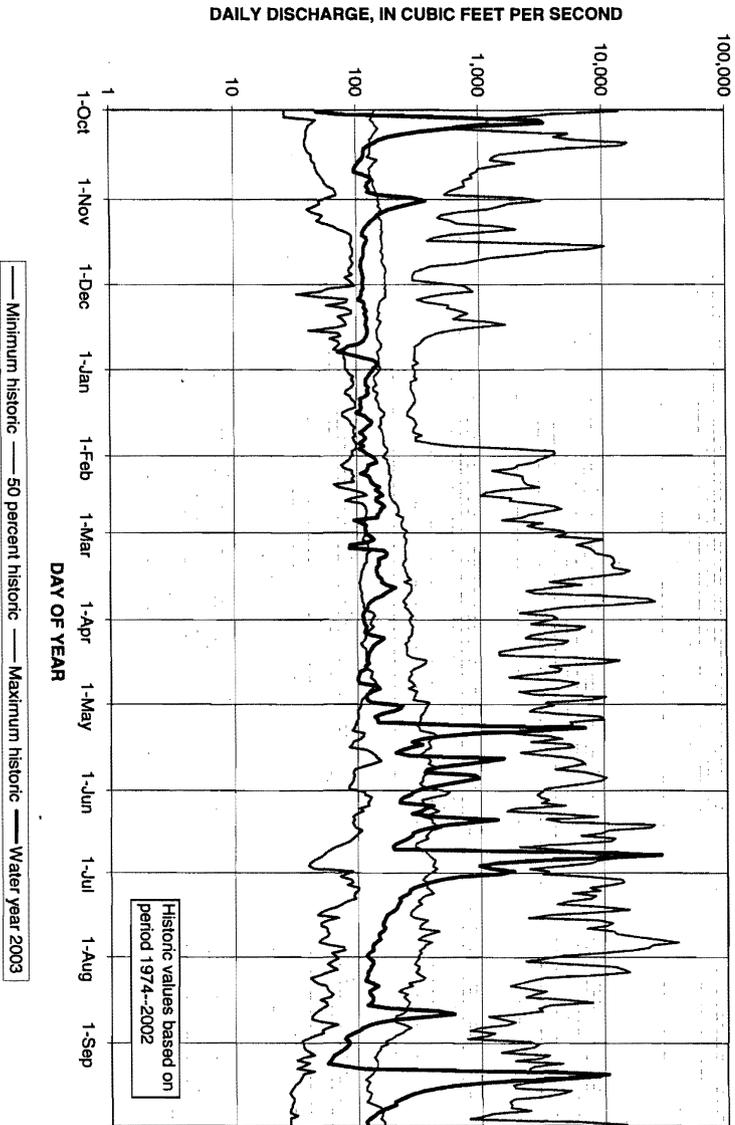
Rate of Stream Depletion for the Kansas-Nebraska Big Blue River Compact Regulatory Area Wells

Nebraska
Department of Natural Resources

May 27, 2003



06884025 Little Blue River at Hollenberg, KS
(Drainage area = 2,752 mi²)



Background

At the May 15, 2003 meeting of the Kansas-Nebraska Big Blue River Compact Administration a joint resolution of the Legal and Engineering Committees was adopted by the Commissioners. The resolution directed the Nebraska Department of Natural Resources to calculate the Streamflow Depletion Factor (SDF) for each regulatory area well and to further develop a set of curves showing the amount and timing of the depletion.

The resolution established the following methodology for making the determination of streamflow effects and what to do in response to those effects:

“When the state-line flow on the Big Blue or Little Blue River falls below the minimum mean-daily flow value as prescribed in the Compact, Nebraska will determine, subject to review by the Engineering Committee, whether regulation of irrigation wells within the appropriate regulatory reach would yield a measurable increase in state-line flow, and if so, when that increase would occur.”

“To make those determinations, Nebraska shall calculate the streamflow depletion factor for each regulatory area well using the methodology described in the Engineering Committee Report. When determining the amount of streamflow depletion, the time in which the regulatory well began pumping will be established. Additionally, the amount of depletion for each well will be calculated regardless of whether the streamflow depletion factor threshold value of 28 percent identified in the Engineering Report is reached. Should it be determined that the calculated cumulative increase in streamflow that would be gained at the State line by the end of September of that year by regulating the regulatory wells would equal 3 cfs or more, each well for which regulation would contribute to that increase should be regulated until the minimum streamflow is occurring or until October 1 of that year, whichever date is earlier.”

Methodology

The methodology used for calculating the stream depletions that are shown later herein came from “Techniques of Water-Resources Investigations of the United State Geological Survey, Chapter D1, Computation of Rate and Volume of Stream Depletion by Wells”, 1970.

For the curves calculated herein, the SDF values for each well were interpolated from large-area charts produced by the Missouri Basin States Association in 1982. The depletion rate was calculated by multiplying the well pumping rate (from well registrations) by the irrigation system efficiency (system type determined from aerial photography). The irrigation efficiency for gravity systems was assumed to be 0.5, and the efficiency for pivots was assumed to be 0.8.

Preliminary Investigation Results

In order to get an idea of what the depletion rate curve would look like and whether more and better information is needed, a preliminary investigation was completed for both the Little Blue and Big Blue regulatory area wells. For the preliminary investigation, it was assumed that the wells began pumping July 1st and followed a regular schedule of pumping for seven days and then being turned off for seven days.

For the Little Blue River, the results show that the maximum cumulative depletion of the wells is slightly greater than 1 cfs. At the present level of well development, it is unlikely for these wells to ever need to be regulated.

For the Big Blue River, the results show that the maximum cumulative depletion is near 3.5 cfs. The cumulative depletion actually passes the three cfs target at the end of the fifth pumping cycle. Additional analyses were then run shutting the pumping off for the remainder of the season after the first and second cycles to see how much of the residual remained. The results show that there would be 3.3 cfs of additional streamflow on September 30th if the pumps are shut off rather than left on after the first cycle and ~ 3.0 cfs if the pumps are shut off rather than left on after the second cycle. Therefore, at the present level of development it appears that the third week of July may be the critical time period. This may change based on flows dropping below the minimum stateline flow before July 1, widespread pumping beginning prior to that date, or pumping is more constant than the week on/week off scenario evaluated. In any of those events, an additional analysis will need to be done to determine the difference between leaving the wells on and shutting them off.

Charts for each regulatory area follow.

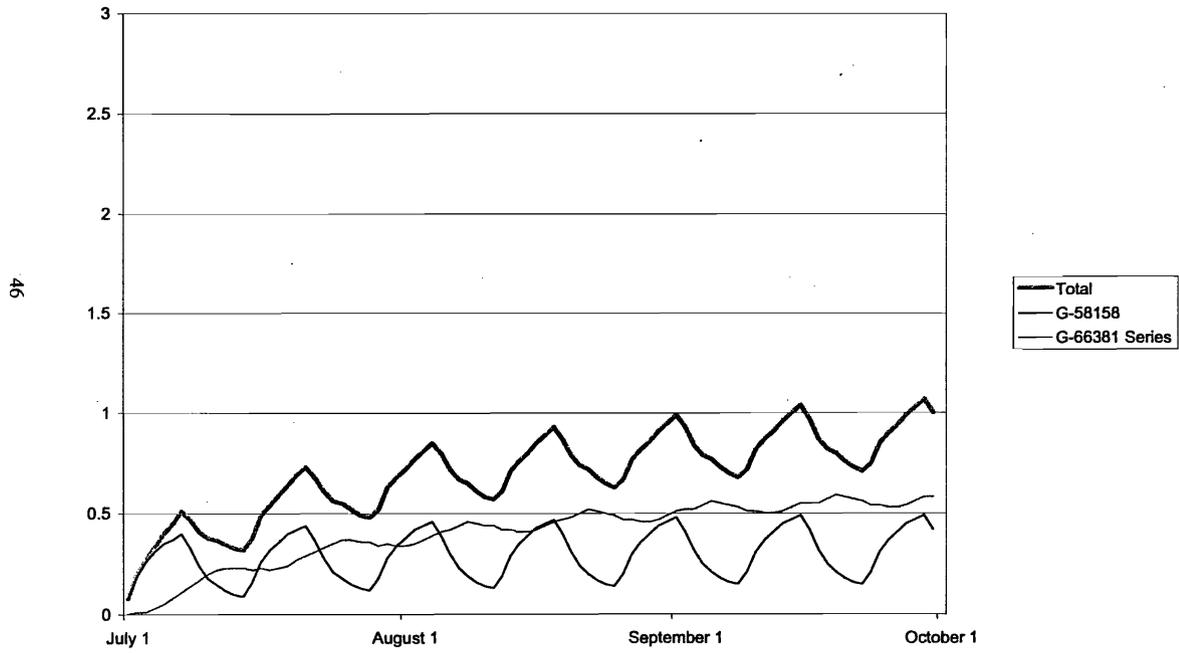
Potential Future Analysis

- Measurement of actual well pumpage
- Determination of which fields return flows directly to the river and the rate of the returns
- Refinement of the SDF values

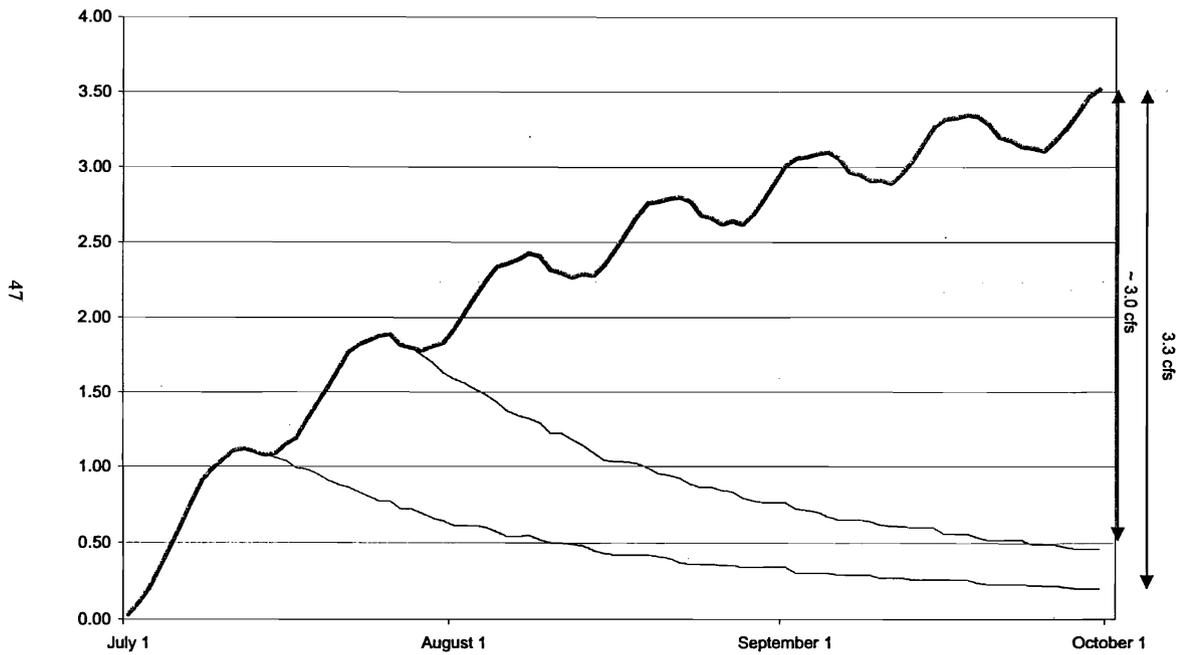
Attachments

- A copy of the Joint Resolution
- A list of regulatory area wells for the Little Blue and Big Blue Regulatory Areas
- Charts showing the depletion rate for each regulatory area well in the Little Blue River for 3, 7, 15, 30, and 60 days pumping and a cumulative depletion chart
- Charts showing the depletion for each regulatory area well in the Big Blue River for 3, 7, 15, 30, and 60 days pumping and a cumulative depletion chart

Little Blue Regulatory Wells
Week On/Week Off Pumping Schedule



Big Blue Regulatory Wells
Week On/Week Off Pumping Schedule



**Joint Recommendation of the Engineering and Legal Committees
Boundaries of the Regulatory Reaches
and
Regulation of Irrigation Wells in Regulatory Areas
May 15, 2003**

The Engineering and Legal Committees met in Marysville, Kansas on April 9, 2003 to discuss committee assignments as directed by the Compact Administration at the Twenty-Eighth Annual Meeting. Prior to and following that meeting, the Legal Committee reviewed all available historic information concerning the geographic delineation of the "regulatory reaches", i.e. those areas within which irrigation wells installed after November 1, 1968 are subject to regulation under Article V, paragraph 5.2 (4) of the Compact. Based on that review, the Legal Committee determined that the best interpretation of the Compact is that the regulatory reaches are the areas delineated by the Compact-referenced Exhibits A and B of Supplement No. 1 to the Report of the Engineering Committee.

The Engineering Committee reviewed the available well logs and well construction information for the junior wells that fall outside of the areas delineated on Exhibits A and B. A summary of that information is included in the 2003 Engineering Committee Special Report. From that review, it appears that those wells downstream of the upper boundary of the delineated regulatory reaches produce little, if any water from the alluvium and valley side terrace deposits as described in the Compact.

Based on the finding of both committees, it is jointly recommended that the areas delineated by Exhibits A and B be established by the Administration as the areas within which irrigation wells are subject to regulation. The irrigation wells currently located within those areas are as listed in the 2003 Engineering Committee Report and are hereinafter referred to as the current "regulatory area wells."

The committees also recommend that when there is uncertainty about a new well's location relative to the delineated boundaries of the regulatory reach, the Engineering Committee should review the drilling log and well construction report for that well. From that information the committee should determine the source of the water supply and whether the well is hydraulically connected to the river. The Engineering Committee should then decide whether or not that well is considered within the regulatory reach; if it is, it will be added to the list of regulatory area wells.

Article V, paragraph 5.2 (4) of the Compact states that if it is determined, following Administration authorized investigations, that the regulation of the wells in a regulatory reach fails to yield any measurable increase in flows at a state-line gaging station, the regulation of such wells shall be discontinued.

The Engineering Committee has reviewed the results of previous investigations and other available information pertaining to the effects of groundwater pumping on state-line flows. Also reviewed were previous references in the Compact Administration records concerning the usefulness and accuracy of those investigations. No consensus was reached in the past by the Administration as to how to deal with the varying lag times between when wells are pumped and when that pumping

affects the stream.

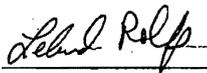
The Engineering and Legal Committees have agreed that a useful tool for determining streamflow depletions is the streamflow depletion factor methodology described in the Missouri River Basin Hydrology Study Final Report and in the 2003 Engineering Committee Report. If that tool is to be used by the Compact Administration, a standard or measure needs to be established for determining if regulation of the regulatory area wells is merited. Until a more accurate or otherwise preferable methodology is proposed by the Engineering Committee, the following methodology for making the determination of streamflow effects and what to do in response to those effects is hereby proposed:

When the state-line flow on the Big Blue or Little Blue River falls below the minimum mean-daily flow value as prescribed in the Compact, Nebraska will determine, subject to review by the Engineering Committee, whether regulation of irrigation wells within the appropriate regulatory reach would yield a measurable increase in state-line flow, and if so, when that increase would occur.

To make those determinations, Nebraska shall calculate the streamflow depletion factor for each regulatory area well using the methodology described in the Engineering Committee Report. When determining the amount of streamflow depletion, the time in which the regulatory area well began pumping shall be established. Additionally, the amount of depletion for each well will be calculated regardless of whether the streamflow depletion factor threshold value of 28 percent identified in the Engineering Report is reached. Should it be determined that the calculated cumulative increase in streamflow that would be gained at the State line by the end of September of that year by regulating the regulatory area wells would equal 3 cfs or more, each well for which regulation would contribute to that increase should be regulated until the minimum state-line streamflow is occurring or until October 1 of that year, whichever date is earlier.

Finally, it is recommended by the Legal Committee and the Engineering Committee that serious consideration be given to the construction of additional storage reservoirs along tributaries to the Big and Little Blue Rivers. The release of additional stored surface water could be a more effective remedy for achieving the minimum mean daily flows than regulation of irrigation wells.

Respectfully submitted,


Leland Rolfs,
Legal Committee Chair

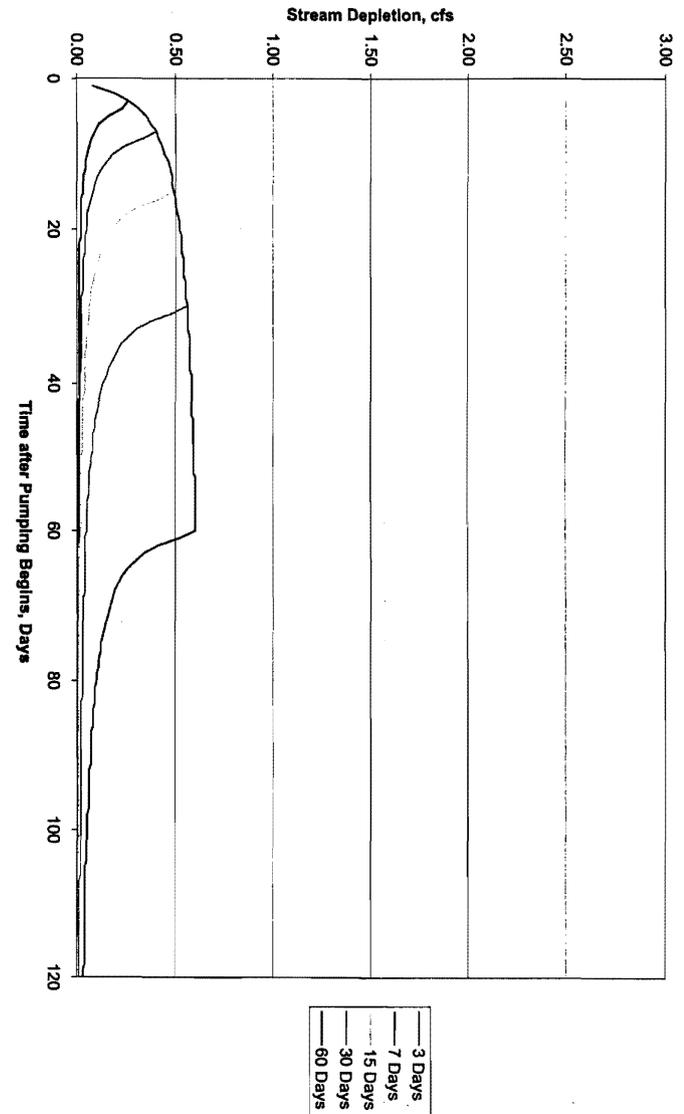

Jeffrey T. Shafer,
Engineering Committee
Chair

Little Blue River Regulatory Area Wells

Well ID	SDF Number (days)	Pumping Rate (gpm)	Irrigation Type
G-058158	5	650	Gravity
G-066381 Series	50	1050	Pivot

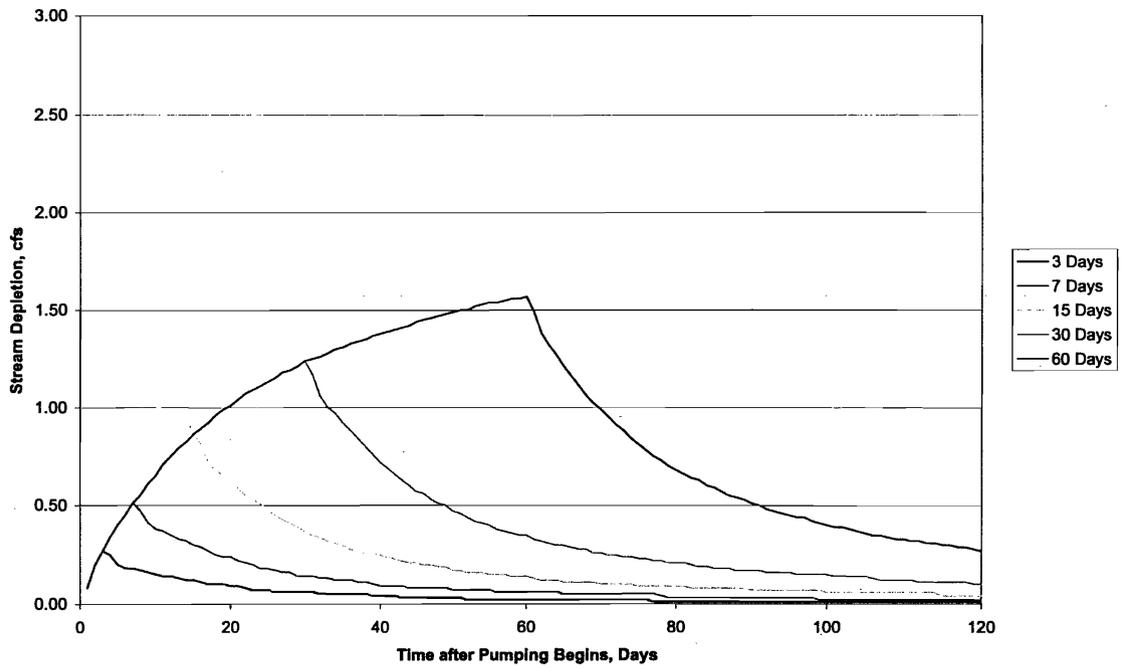
Big Blue River Regulatory Area Wells

Well ID	SDF Number (days)	Pumping Rate (gpm)	Irrigation Type
G-036485	75	750	Gravity
G-038314	200	1300	Gravity
G-047820	100	1200	Gravity
G-050086	30	800	Gravity
G-054047	50	800	Pivot
G-054260	50	800	Gravity
G-054261	100	800	Gravity
G-056152	500	1000	Gravity
G-059128	20	400	Gravity
G-059727	200	1200	Gravity
G-081769	5	250	Gravity
G-110669	50	675	Gravity
G-110788	30	500	Gravity
G-110847	50	800	Pivot
G-110849	50	800	Pivot



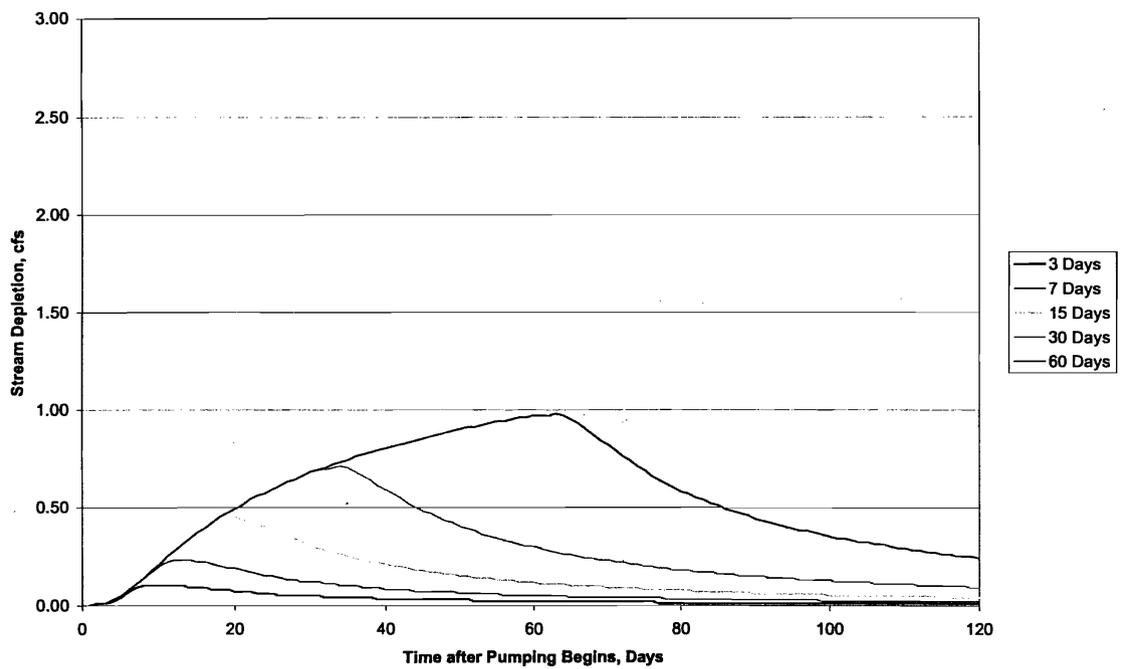
G-58158

Little Blue River Regulatory Wells



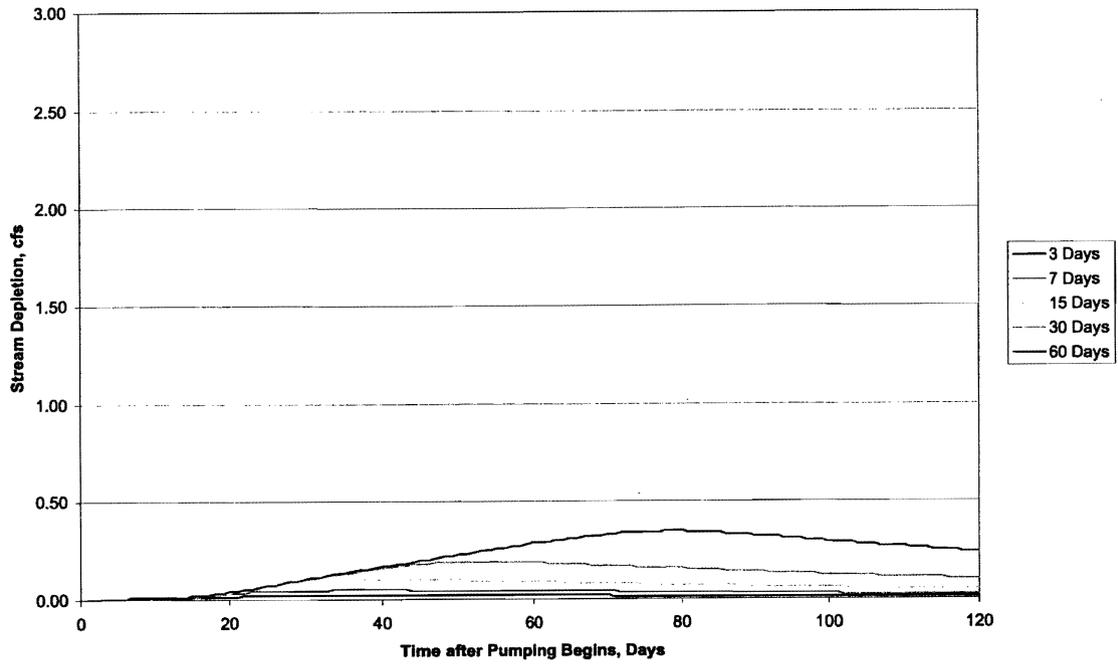
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G-66381 Series



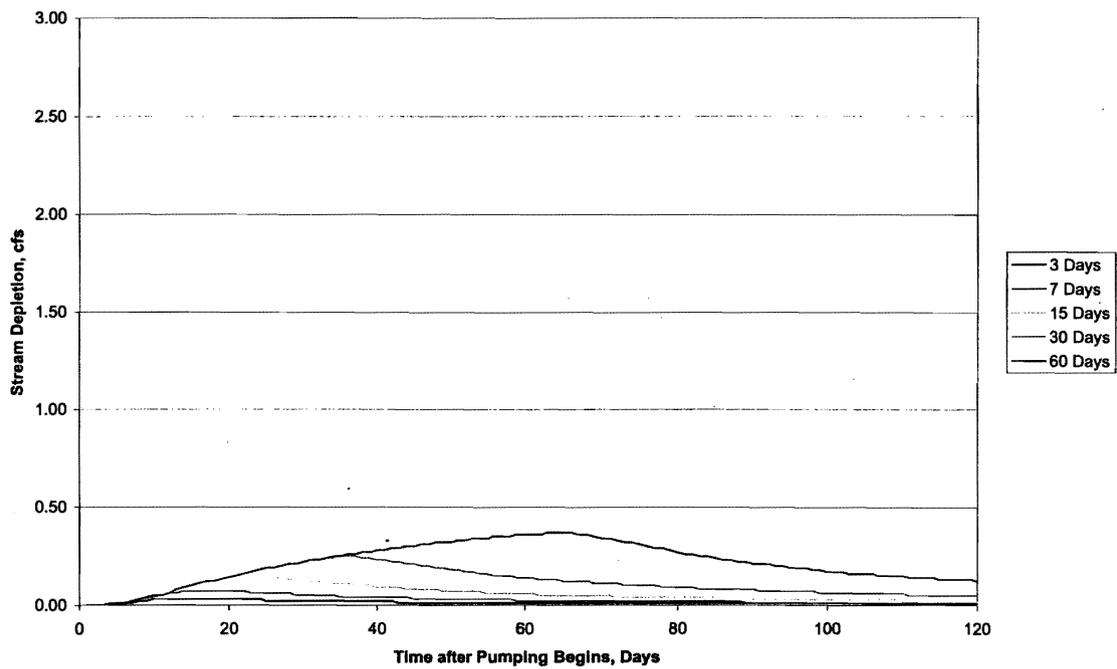
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G-38314



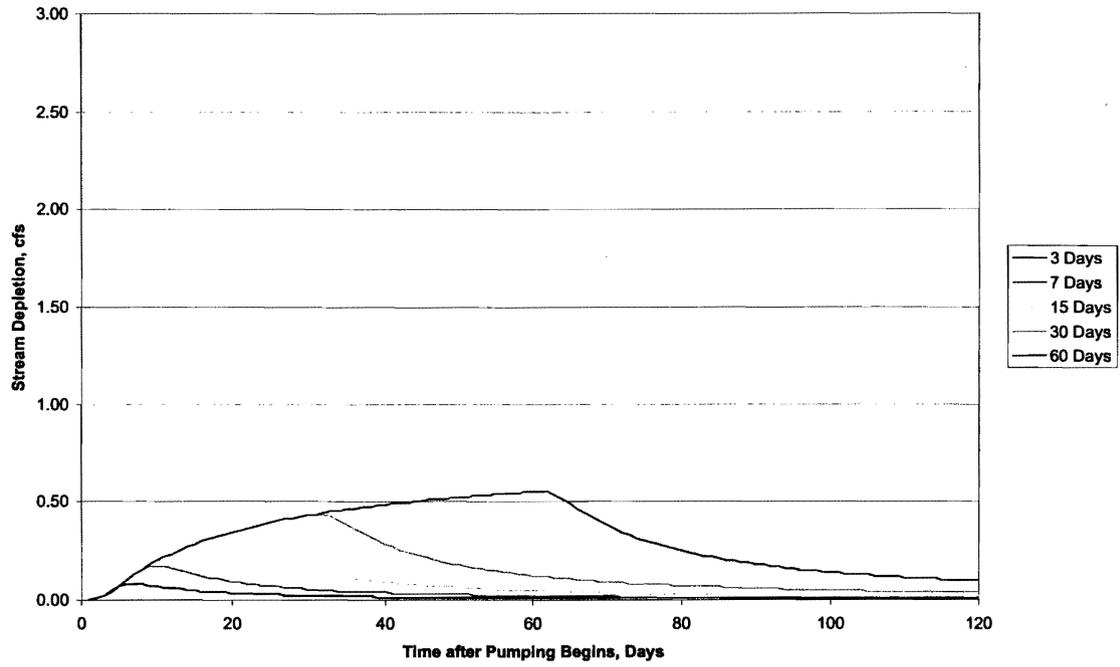
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G-36485



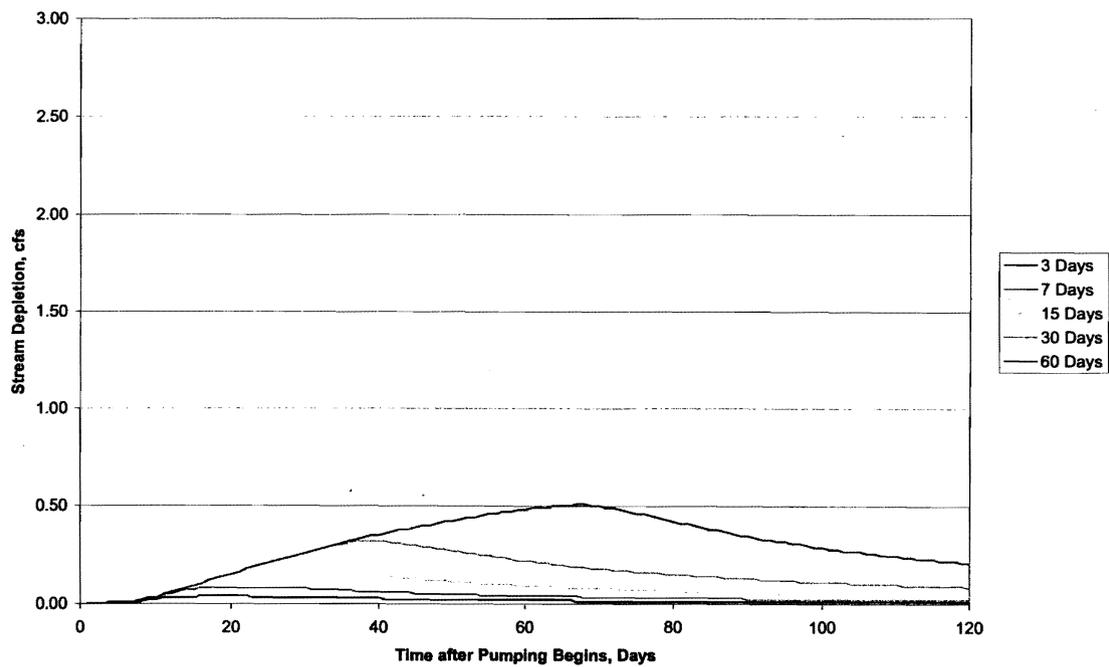
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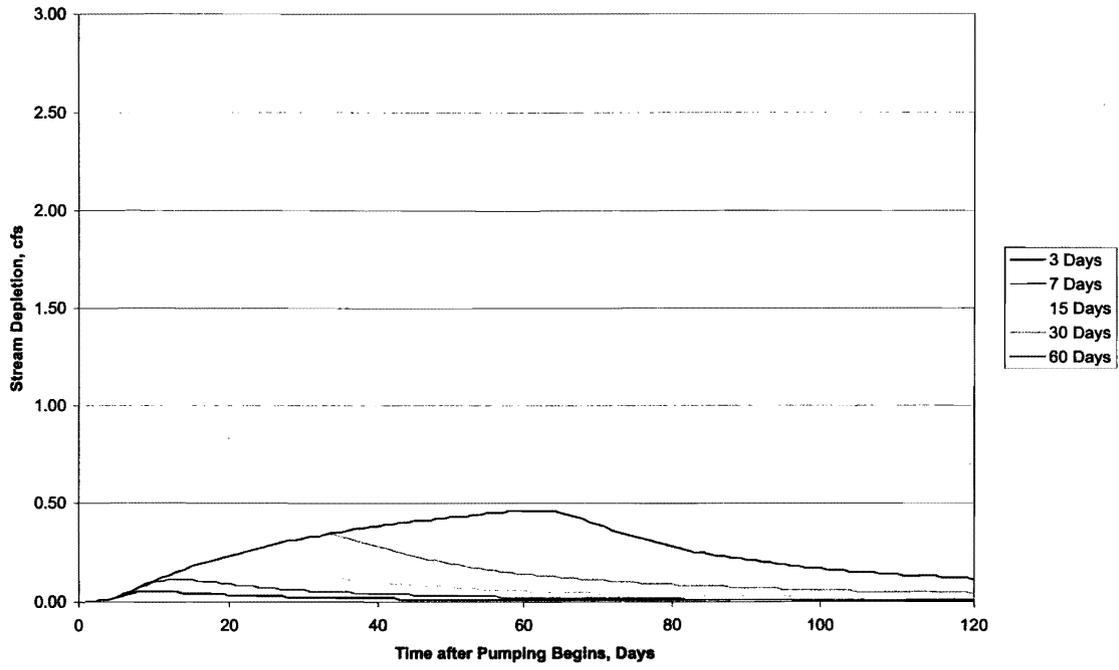
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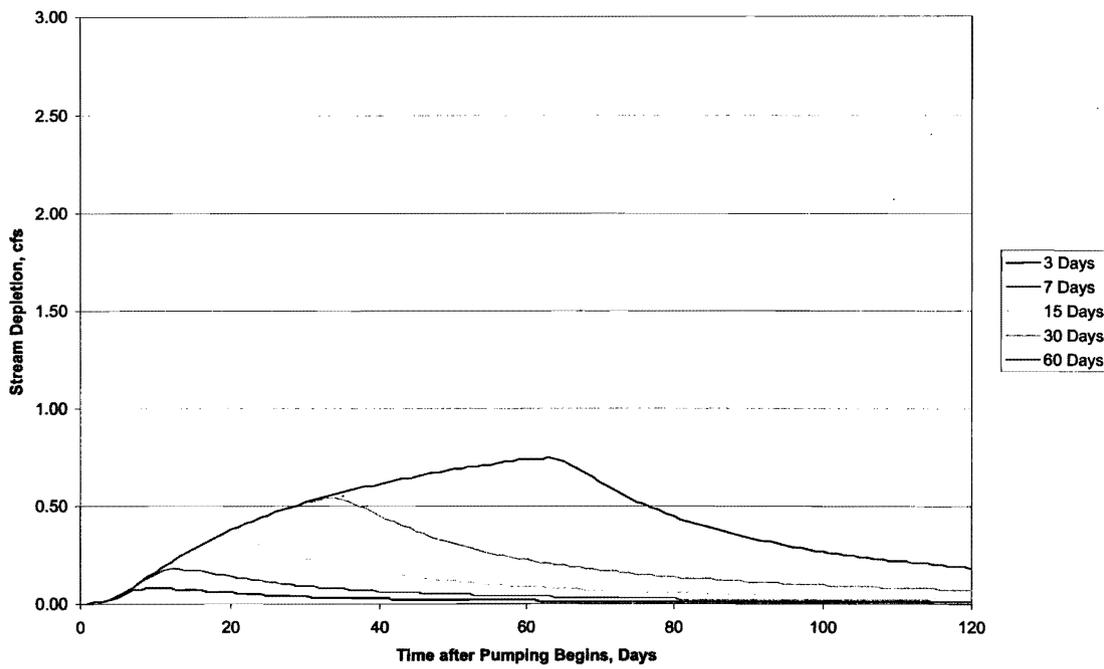
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G-54260



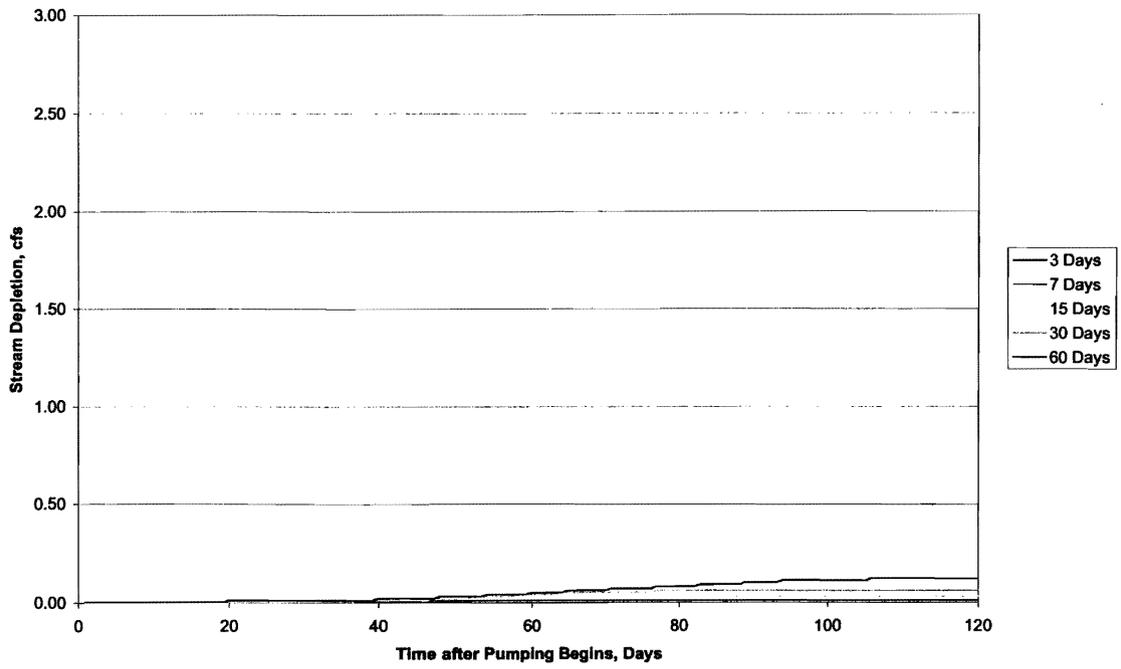
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G-54047



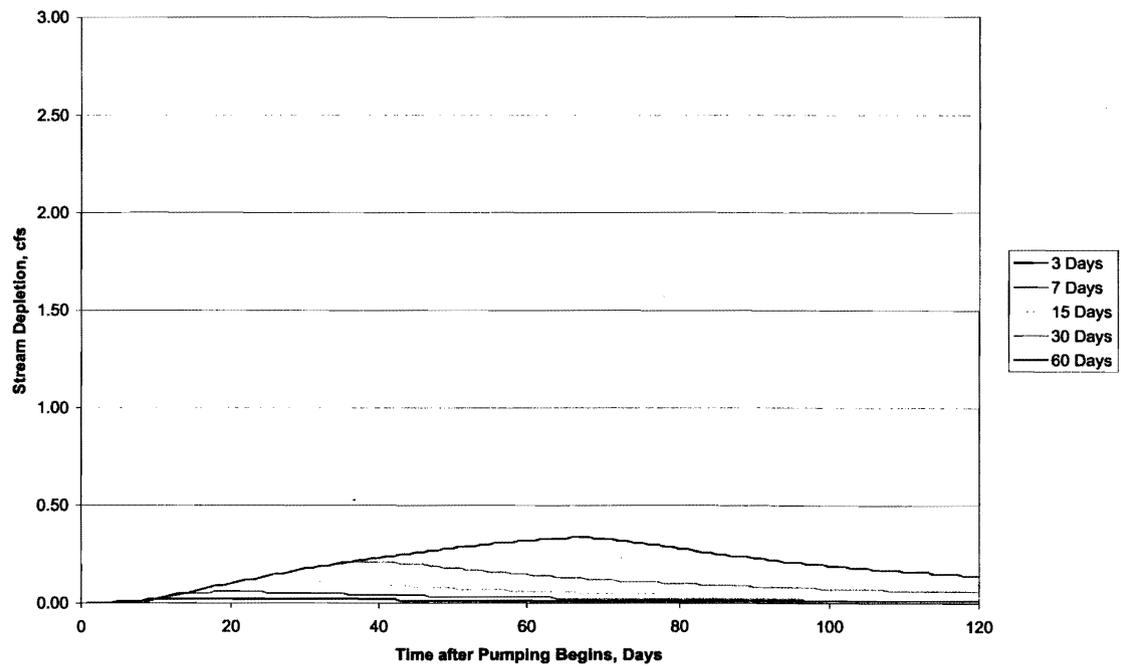
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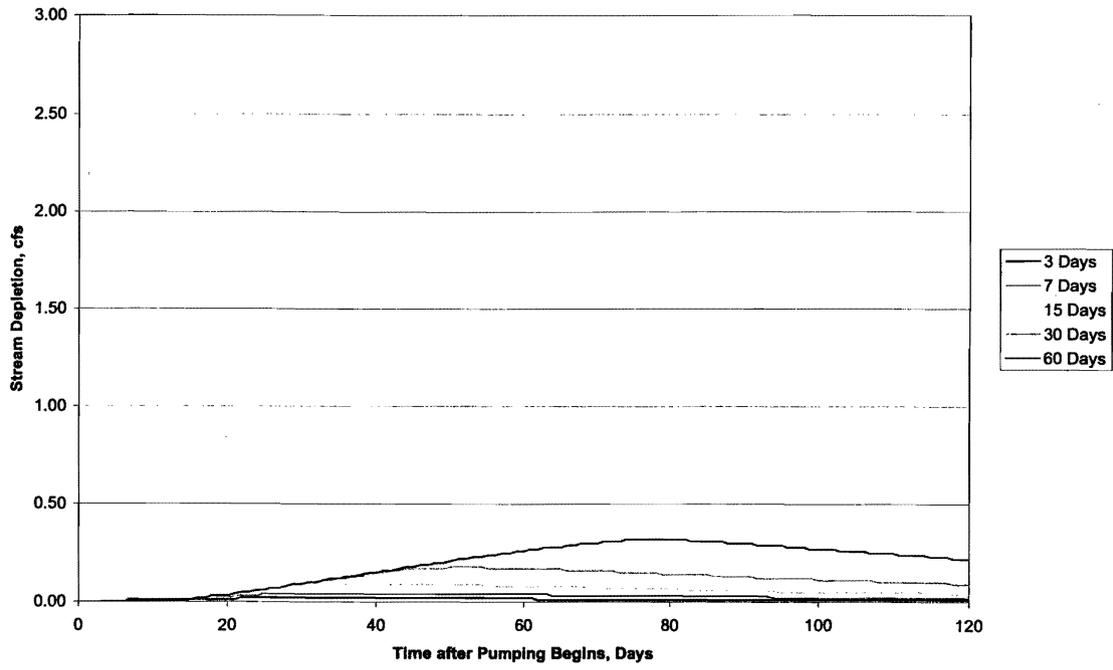
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G-54261



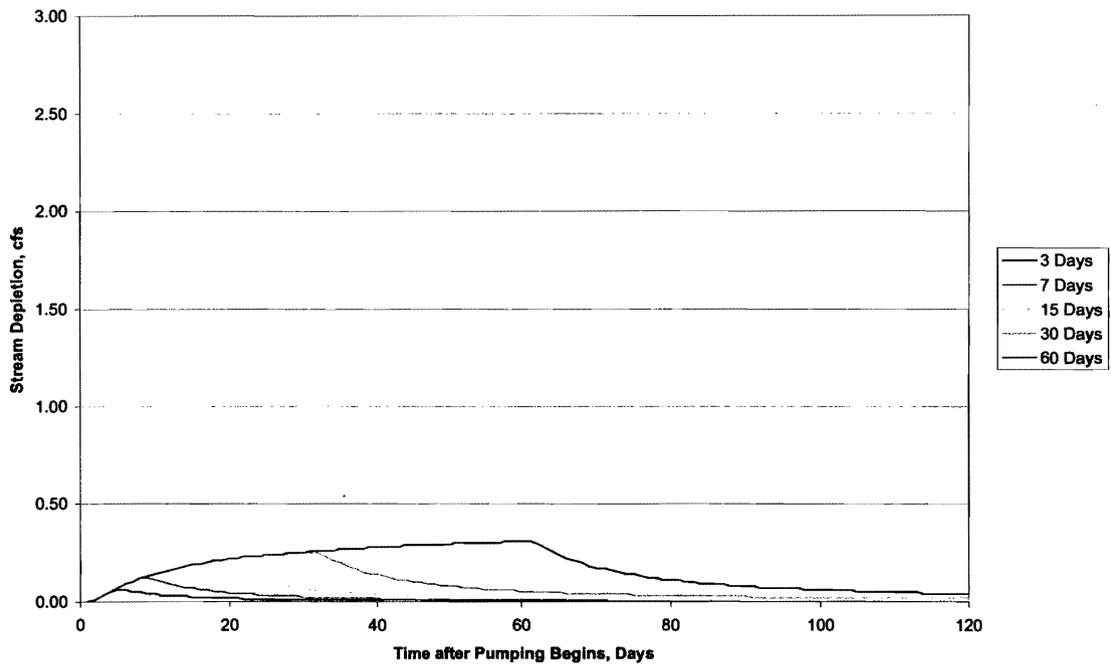
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G-59727



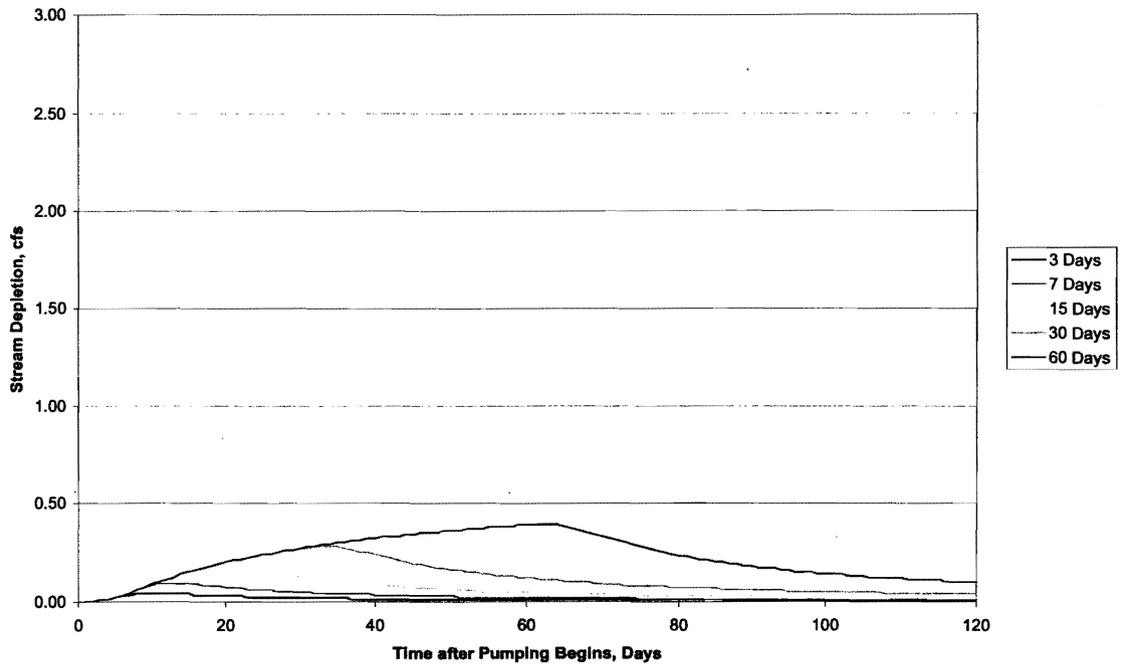
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G-59128



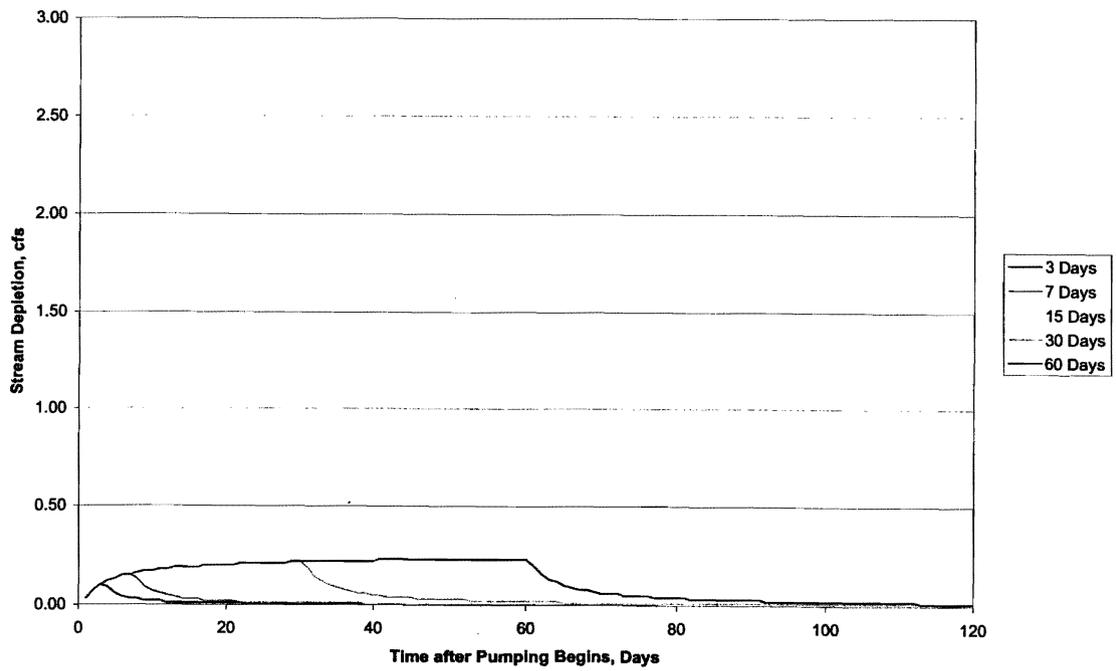
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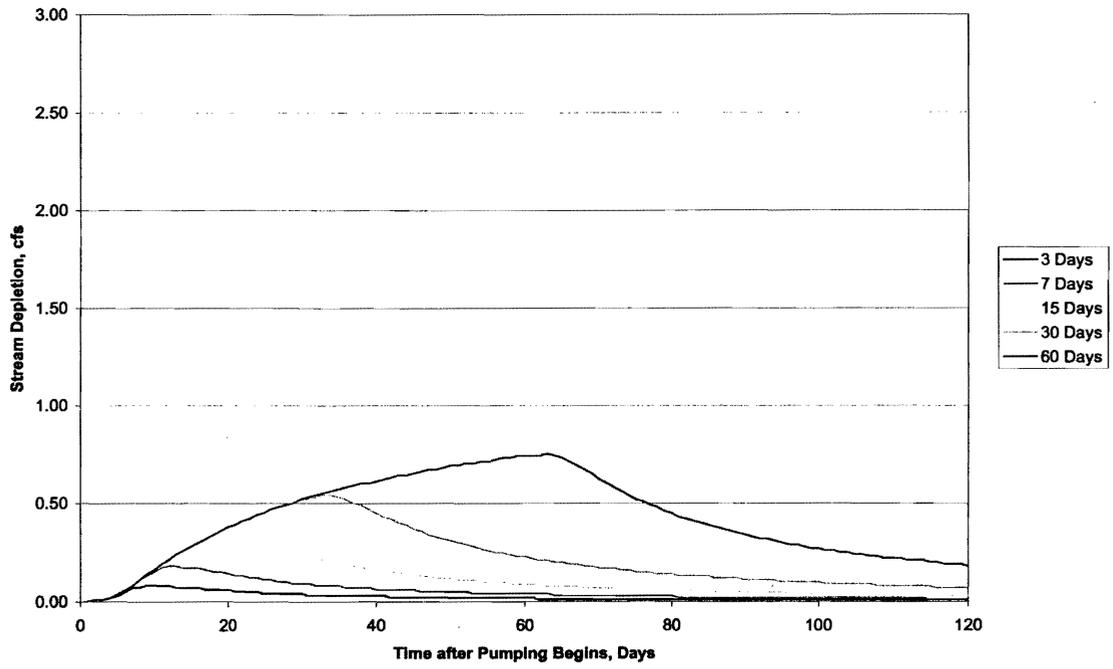
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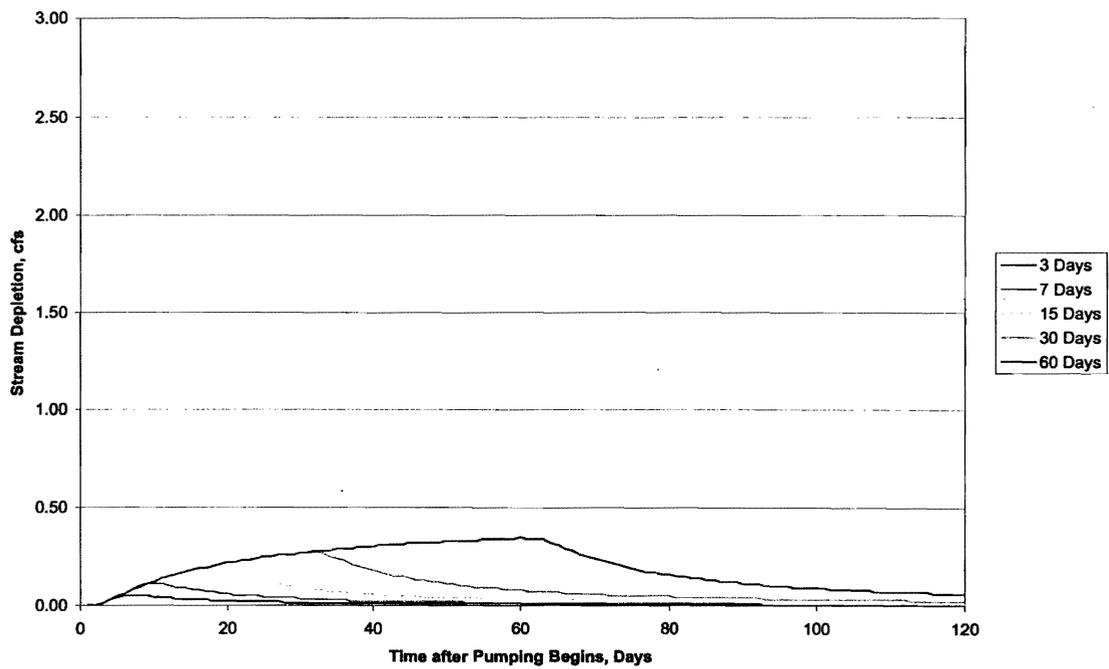
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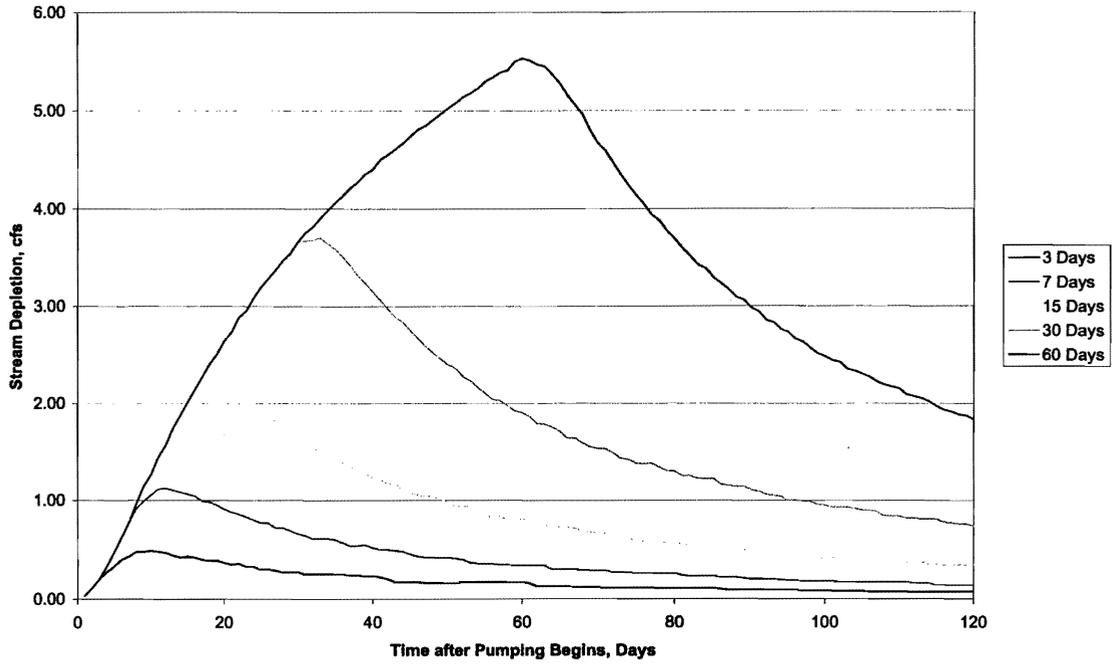
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G-110778



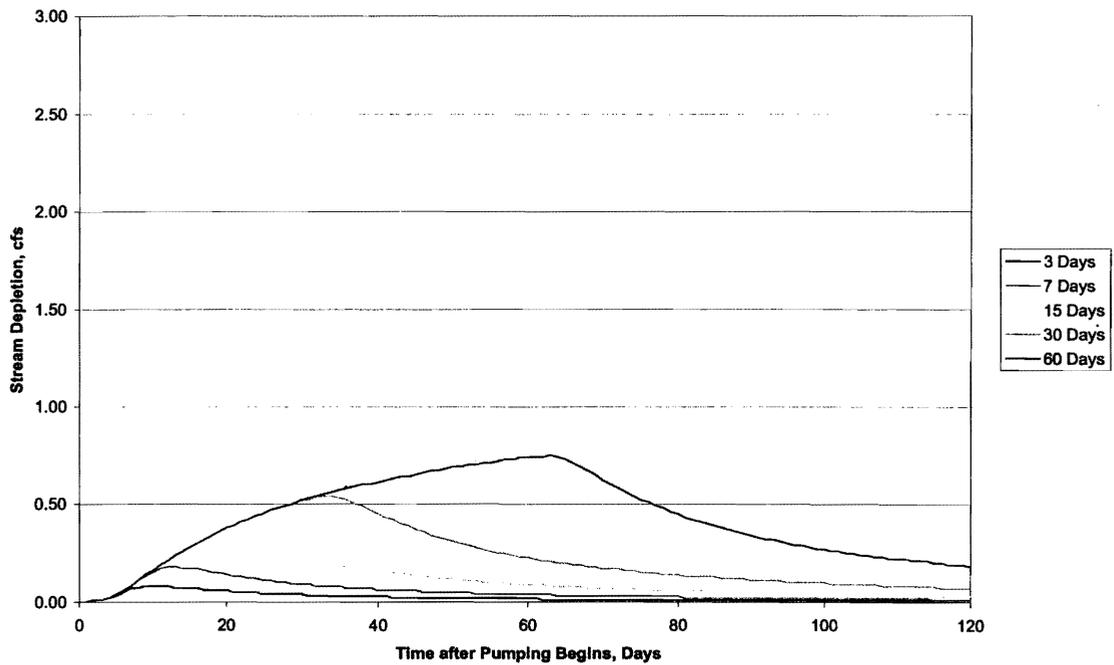
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Big Blue River Regulatory Wells



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G-110849



68

As of MAY 04

	2003		2004		2005		FY 06	
	Actual	Adopted May 2002	Estimate (To Date)	Adopted May 2003	Proposed	Adopted May 2004	Proposed	
EXPENDITURES								
Operations								
Stateline Gages	\$12,050.00	\$11,960.00	\$12,420.00	\$12,420.00	\$12,840.00	\$12,840.00	\$13,740.00	
Observation Wells	\$1,110.00	\$1,140.00	\$1,480.00	\$1,480.00	\$1,020.00	\$1,020.00	\$1,020.00	
Low-flow Measurements	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
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	\$0.00	\$0.00	\$0.00	
Staff Travel Expenses	\$284.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	
Annual Report	\$76.00	\$200.00	\$100.00	\$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	\$49.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	
Miscellaneous Expenses	\$40.00	\$100.00	\$250.00	\$100.00	\$100.00	\$100.00	\$100.00	
Total Expenses	\$15,709.00	\$15,800.00	\$16,650.00	\$16,600.00	\$15,810.00	\$15,810.00	\$16,710.00	
INCOME AND CARRY OVER								
Assessments (Both States)	\$16,000.00	\$16,000.00	\$16,000.00	\$16,000.00	\$16,000.00	\$16,000.00	\$16,000.00	
Interest Earned	\$66.00	\$300.00	\$20.00	\$150.00	\$50.00	\$50.00	\$150.00	
Carry Over from Prior Year	\$15,076.00	\$15,076.00	\$15,433.00	\$15,506.00	\$14,803.00	\$14,803.00	\$15,043.00	
Total Income and Carry Over	\$31,142.00	\$31,476.00	\$31,453.00	\$31,656.00	\$30,853.00	\$30,853.00	\$31,193.00	
Balance End of Year	\$15,433.00	\$15,676.00	\$14,803.00	\$15,056.00	\$15,043.00	\$15,043.00	\$14,483.00	

Exhibit N

REPORT OF THE BUDGET COMMITTEE
to the
BIG BLUE RIVER COMPACT ADMINISTRATION

The Budget of the Big Blue River Compact Administration remains in good standing. The year end balance for 2003 was \$15,433. This figure is also identified as the net assets for the end of FY 2003 in the Annual Audit conducted by Kennedy and Coe, LLC. The estimated year end balance for FY 2004 is \$14,807.

There are a few proposed modifications to the 2005 Budget. First, the cost of well measurements was reported to be increasing from \$15 to \$20 per measurement. The Budget Committee recommends that the number of wells measured be reduced by half, thus reducing deficit spending while still providing enough data to maintain good water level information. The wells to be discontinued will be determined by the Engineering Committee prior to the Spring of 2005. Second, the Honorarium of \$750 for the Treasurer is no longer in the 2005 Budget because it has been recommended by the Compact Administration that this position be taken over by staff of the Nebraska Department of Water Resources as regular work duties. Third, the amount of projected interest has been reduced to \$50 for FY 2005 and 2006.

Although the overall expenditures are increasing primarily because of the cost of maintaining the stateline gaging stations, a projected 2006 balance of \$14,483 is substantial. The Budget Committee recommends that the current assessments of \$8,000 per state not be changed at least for the next two fiscal years.


Bob Lytle


Keith Paulsen

Exhibit O

KANSAS - NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION REPORT

Water Quality Committee
May 13, 2004

BACKGROUND: In 1995, the Water Quality Committee and affiliated partner agencies and associations 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) develop water quality Best Management Practices (BMPs) and economics support information suitable to the basin; and,
- 4) initiate and conduct water quality stewardship education and outreach programs in the basin.

Most Water Quality Committee projects are planned and conducted through the use of work groups made up of governmental agency, land grant university and private sector partners. The full committee and affiliated partners meet annually for a review of the status of existing projects and to establish goals for the upcoming year. Work groups meet as needed. In recent years we have held an annual meeting during the month preceding the annual meeting of the Kansas - Nebraska Big Blue River Compact Administration. Project workgroups meet as the need arises. Over the years we have developed an excellent working relationship with most decisions being made by consensus.

ANNUAL MEETING: The 2004 annual meeting of the Kansas - Nebraska Big Blue River Compact Administration's Water Quality Committee was held on Monday, April 26 from 9:30 a.m. to 2:30 p.m. at the offices of the Lower Big Blue Natural Resource District, 805 Dorsey Street, Beatrice, NE. Committee members present at this years meeting included Pat Rice (NDEQ), Annette Kovar (NDEQ), Tom Stiles (KDHE), and Dale Lambley (KDA). Other participants included Don Vogel (NE CGA), Verlon Barnes (NRCS/NDEQ Liaison), Dan Devlin (KSU Agronomy), Phil Barnes (KSU Biological and Agricultural Engineering), Tom Franti (UNL Extension), Jack Dutra (Syngenta), Paul Hay (UNL Extension), Jim Krueger (NRCS-KS), Mike Kucera (NRCS-NE), Dick Ehrman (NE Association of Resource Districts), Brad Horchem (EPA/KDA/KDHE), and Rachael Herpel (The Groundwater Foundation). Ron Fleecs (Lower Big Blue NRD) was also able to join for the late portion of the meeting.

Water Quality Monitoring Program Report: The basin water quality monitoring system became operational in mid-April of 1997 and has continued to present. During 2003, 29 locations were sampled within the basin. Phil Barnes provided the WQ Committee an update of the water quality monitoring program findings. A copy of his hand outs are attached to this report. (Attachment. A).

Over time, the WQ monitoring program has provided the following basic information:

- most atrazine contaminated inflow takes place during intense spring rainfall events during May and June;
- preliminary data indicates that bacteria and sediment loading mirrors atrazine loading;
- some June atrazine spikes appear to coincide with planting of grain sorghum, but could also be from post-applications to corn;
- although approximately 50 percent of the flow to Tuttle Creek Reservoir comes from the Big Blue River, the Big Blue accounts for slightly more than 65 percent of the atrazine load;
- the primary atrazine loading area into the Big Blue River system lies in a four county area straddling the KS-NE border and basically from Crete, NE south;

Dale Lambley and Phil Barnes reported that on March 29, 2004 they met in Lincoln, NE with NDEQ representatives to redesign the WQ monitoring program with an eye toward making the best use of remaining available funds. At that time it was decided to focus 2004 monitoring toward obtaining more information from those areas where the primary atrazine loading is occurring. Consequently, new collection points have been added on the Big Blue at Dewitt and Wilber, NE and on the Little Blue at Steele City, NE. However overall monitoring points will be reduced from 29 in 2003 to 21 locations for this season. Grab samples will be taken weekly from April through September, but reduced to monthly during the other months. At this point, sufficient funds are available to continue the basin water quality monitoring program for one more year. The pool of funds available to KSU for 2004 was supplemented by KDA and NDA who each committed \$20,000 of their EPA Pesticide Performance Grant dollars for continuation of the program for this season.

NE Statewide Bacteria/Pesticide Monitoring Projects Report: Dick Ehrman gave the WQ Committee a report on two cooperative monitoring projects which are underway in Nebraska. Cooperators include NDEQ, NDA and various natural resource districts. The projects, supported by a grant from EPA with supplemental money from NDA would provide equipment and training for NRD offices to conduct surface and groundwater analyses for coliform bacteria, atrazine, aloachlor, metolachlor and acetochlor. Both the Upper and Lower Big Blue NRDs are cooperators. Additional information on both projects is provided by Attachment B.

Conservation Security Program Report: Mike Kucera and Jim Krueger reviewed work being done by NRCS in both NE and KS as they lay the ground work for the Conservation Security Program. Drafts were shared and reviewed with the WQ Committee on efforts in the two states to identify "Specific Management Intensity Actions" and new practice lists. Possible payment schedules were also discussed. Program implementation at the state level would take place after publication of the final rule by USDA and decisions are made on funding.

Plans are for the CSP to be put into place on a watershed basis. Under the proposed program, producers entering a tract of land under Tier I could receive a base payment for existing practices, assuming that they are in compliance with current requirements. Under Tier II, producers could receive payments for additional new practices placed on the tract. Under Tier III producers could enroll their entire operations (owned plus leased) if they met all conservation requirements on lands within the operation and receive up to \$50,000 per year in payment. NRCS specialists believe approximately 2 percent of the producers in KS and NE would presently be in position to receive Tier III classification.

USDA has received more public comments on the initial draft CSP rule than have been received on any past USDA program. However, when and if implemented, the conservation impacts on water quality in the Big Blue Basin could be substantial.

Research and Extension Reports: Tom Franti, Dan Devlin and Paul Hay gave an update of research and extension activities relating to WQ efforts in the Big Blue Basin. In both states activities originally developed in the Blue River effort are now being expanded into other areas. Also local extension leaders are taking the lead in working with producers. For example, much work has been on the Blue River with promotion and planting of riparian buffers. Nebraska now has field projects underway in northeastern Nebraska similar to that previously done in the Blue River Basin. UNL is now also producing a video on buffer management and maintenance. Tom also reported that work is being done at Wagon Train Lake near Lincoln, NE under grant on modeling of BMP economics. Tom also advised the committee that Suat Irmak, a new water specialist, had been hired for south central NE and would be working the western part of the Big Blue Basin. This should help fill a void resulting from the closure of the Clay Center, NE research and extension facility due to budget shortfalls.

Dan Devlin reported that work continues at KSU on SWAT modeling of the Lower Little Blue. The basic purpose of this study is to target areas of highest loading potential, determine and locate prevention practices and see how the results relate or fit the known water quality data from the basin monitoring program. Work also continues with NRCS and SCC on riparian buffer demonstrations projects on the Little Blue River. Mike Christianson continues his work in the area as KSU Watershed Specialist and promotion of WQ BMPs.

Dan reminded the committee that this is the final year of work at the KSU Washington County, KS demonstration site. This is a farm site which actually has functioned both for BMP effectiveness research and WQ BMP demonstrations.

Paul Hay gave an update of WQ related activities in the Gage County area. Paul reported that Round Up Ready technology has taken significant hold in the area with about 98 percent of the soybean and nearly 50 percent of the corn acreage now being planted to Round Up Ready varieties. Phil Barnes noted that the water quality monitoring program showed a marked decrease in acetochlor herbicide concentrations during 2003, and that may have been a direct result of adoption of Round Up Ready technology.

Paul also noted that 3 day workshops had been held for large livestock producers in the area and that a very successful Earth Day festival had been held which was directed toward youth of the area.

Groundwater Foundation Report: Rachael Herpel reported that the Groundwater Foundation's Blue River Project will be directed toward community source water protection and community leaders in the lower basin. This would be the first "urban focus" or non-agricultural project undertaken since the Compact's WQ Committee was established. We wish the Groundwater Foundation success with the project and will assist if needed. The Foundation's project will focus on both water quality and water conservation.

NDEQ Report: Pat Rice discussed construction and NPDES permitting requirements of the new livestock waste management act which is being implemented in NE. The new law will require approximately 700 additional livestock facilities to be permitted.

KDHE Report: Tom Stiles advised the committee that KDHE is now in the process of conducting the initial review of the TMDLs established for the KS - Lower Republican Basin. Also, the 2004 303D list picked up a number of impairments for streams above Tuttle Creek Reservoir. Streams and impairments which Tom highlighted are provided in Attachment C.

Tom also introduced Brad Horchem. Brad is a EPA Region VII employee who is currently working with Tom Stiles and Dale Lambley on a special project to inventory and geographically locate WQ BMPs which are being put into place in Kansas-Lower Republican Basin watersheds with High Priority TMDLs. Brad will also be assisting KDA in assessing the extent of atrazine BMPs in Grasshopper Creek, which is in north eastern Kansas but outside the Big Blue River Basin. Brad expressed EPA Region VII's support for the joint effort represented by the Compact's WQ Committee.

NE Corn Growers Report: Don Vogel reported that the NE Corn Growers continue enhancement of their already successful "Husker Farms Program" and continue to recruit participants. Displays are being prepared which will be placed at cooperating retail agricultural dealers to solicit interest and participation by additional farmers. Producers are also asked to provide responses to a simple survey and are offered the carrot of a free well water nitrate analysis. Don reported that the top 5 percent of the Husker Farm participants will be recognized as "Husker Farm Elite" and will receive special recognition during festivities at the 2004 Husker Harvest Days.

EQIP Report: Jim Krueger and Mike Kucera also gave a brief report of facts and figures relative to FY 97 - 03 EQIP contracts in the Big Blue River drainage area. This program has been of great interest to producers and participation is comparable on both sides of the state line. As an example of participation, at the end of 2003 there were 147 EQIP contracts in Marshall County, Kansas with an approved value of \$1,851, 791.

Other Business: Dan Devlin noted that nearly 8 years have passed since the WQ Committee, in cooperation with KS and NE National Agricultural Statistics, had prepared and conducted the Blue River Basin Farm Practices Survey. He recommended that timing was right for a follow up survey. Following discussion, it was decided that the committee would seek funding for a new survey. Dale Lambley and Craig Romary will take the lead in determining potential costs and seeking funds. Work on design of the original survey questionnaire was done by KDA, NDA, UNL, KSU and KS and NE NASS personnel.

In 2003, the WQ Committed and partners prepared and submitted a grant request to the US Environmental Protection Agency for development of a Tuttle Creek Lake Interstate Watershed Initiative. This proposal was not selected by EPA Headquarters for funding. Consequently the group decided to refine the grant proposal and resubmit for consideration for 2004. Work on grant application development was done during November and December, 2003 with Steve Walker/NDEQ coordinating. Funding for another farm practices survey and three additional years of monitoring were included in the Watershed Initiative grant proposal.

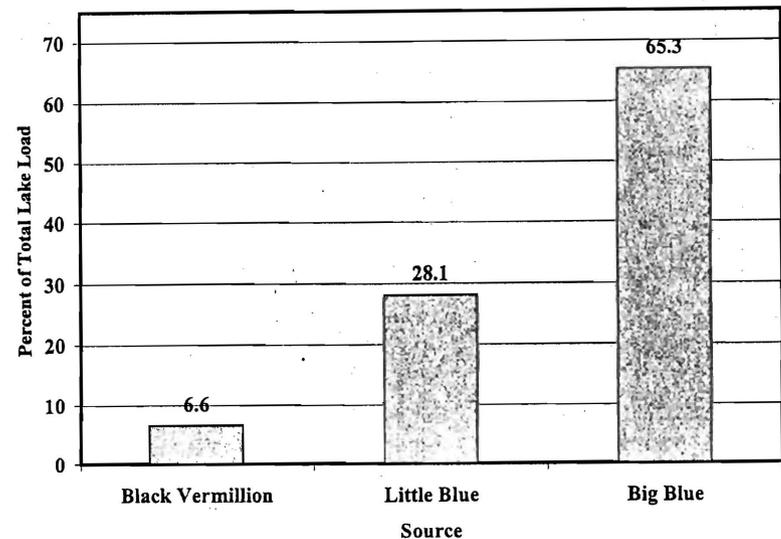
EPA's final decision on the grant request is not anticipated until late May, 2004. Consequently, Dale Lambley recommended that the WQ Committee hold further decisions on development of new activities until announcement of funding decisions by EPA Headquarters. If that agency selects to fund the committee grant request, the group would be quite busy implementing and completing grant activities. If funding is not granted, the committee will reassess future activities and options.

Ron Fleecs advised the group that he will be retiring June 30, 2004. The WQ Committee would like to express it's appreciation to Ron and the Lower Big Blue NRD for their participation and assistance with the joint Big blue River water quality efforts. Also we appreciate their willingness to host the many WQ Committee meetings. Best wishes for a happy retirement to Ron.

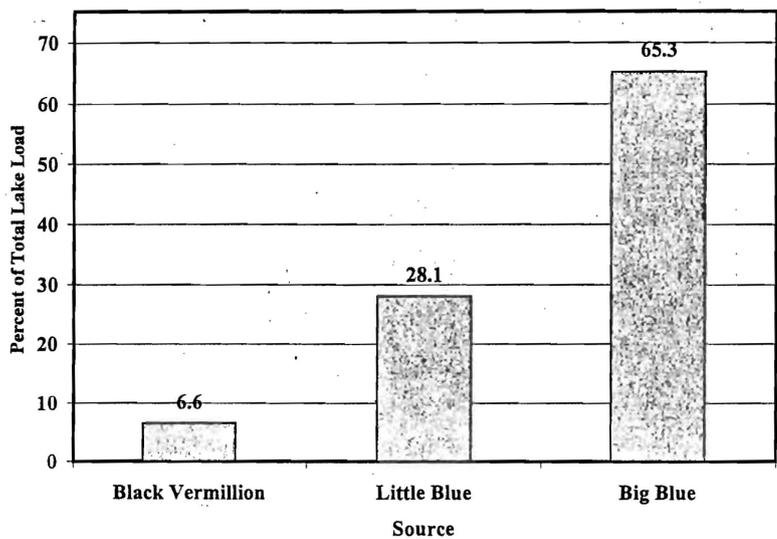
Sincerely

Dale Lambley, Chair
Water Quality Committee

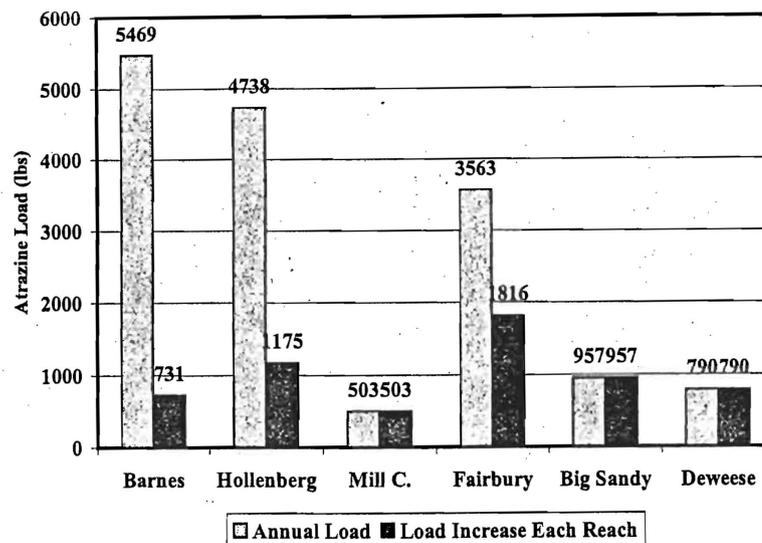
Tuttle Creek Reservoir Atrazine Sources



Tuttle Creek Reservoir Atrazine Sources



Little Blue Loading



Nebraska Cooperative Monitoring Projects

Nebraska Dept. of Environmental Quality
Nebraska Dept. of Agriculture
Natural Resources Districts

BACTERIA:

- Funded by a TMDL grant through USEPA Region VII
- Colilert™ analytical equipment placed in 22 NRD offices
- Equipment to be used for:
 - NRD surface/ground water monitoring
 - NDEQ basin rotation monitoring (either NRD or NDEQ personnel)
 - NDEQ priority waters (either NRD or NDEQ personnel)
- Supporting info: www.idexx.com/water/products/colilert

PESTICIDES:

- Funded by a FIFRA grant through USEPA Region VII and NE Dept. of Ag funds
- Immunoassay/ELISA methods used by NDEQ for surface water (and some ground water) monitoring
- Analytical equipment w/ reagents for atrazine, alachlor, metolachlor, and acetochlor placed in 10 NRD offices
- Equipment to be used for:
 - NRD ground/surface water monitoring
- Supporting info:
 - www.abraxiskits.com
 - Click on 'Product List,' then 'ELISAs, Environmental,' then 'Pesticides'
 - www.sdix.com
 - Click on 'Water Quality'

2004 Impaired Water Listings in the Tuttle Creek Drainage

1. Upper Little Blue River – Hollenberg
 - a. Biology
 - b. Copper (Acute)
2. Upper Big Blue River – Oketo
 - a. Biology
 - b. Atrazine
 - c. pH
 - d. Copper (Acute)
3. Lower Big Blue River – Blue Rapids
 - a. Biology
 - b. Atrazine
 - c. Beryllium
 - d. pH
 - e. Copper (Acute)
4. Black Vermillion River – Vliets
 - a. Biology
 - b. Atrazine
 - c. Copper (Acute)
5. Rose Creek – Narka
 - a. Atrazine
6. Mill Creek – Hanover
 - a. Atrazine

TMDL Projects for 2004 – Revisions to Existing TMDLs

1. Tuttle Creek Atrazine, including Upper & Lower Big Blue, Mill Creek, Black Vermillion River and Rose Creek.
2. Tuttle Creek Alachlor
3. Tuttle Creek Eutrophication, including Upper and Lower Big Blue River pH.
4. Tuttle Creek Siltation, including Upper Big Blue River Biology, Upper and Lower Big Blue River Copper, Lower Big Blue River Beryllium, Upper Little Blue River Biology and Copper and Black Vermillion River Biology and Copper.

KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION

Treasurer's Report

May 13, 2004

Balance on hand July 1, 2003	\$15,432.64
Income so far this fiscal year	
State assessments	16,000.00
Interest earned	<u>16.92</u>
Funds available so far this fiscal year	31,449.56
Expenditures so far this fiscal year	<u>9,491.17</u>
Balance on hand as of May 13, 2004	<u>21,958.39</u>
Estimated expenditures for remaining of Fiscal Year 2004:	
U.S. Geological Survey	\$3,105.00
Printing of Annual Report	100.00
Lower NRD - Observation Wells	1,480.00
Postage, Supplies	100.00
Secretary & Treasurer Honorarium	1,500.00
Annual Audit	500.00
Miscellaneous	174.00
Secretary & Treasurer Travel expenses	<u>200.00</u>
Total estimated additional expenditures	<u>\$7,159.00</u>
Balance on hand as of May 13, 2004	\$21,958.39
Estimated additional interest earned	3.60
Estimated additional expenditures	<u>7,159.00</u>
Estimated balance on June 30, 2004	<u>\$14,802.99</u>

DANA F. COLE & COMPANY, LLP
 CERTIFIED PUBLIC ACCOUNTANTS
 1248 O STREET, SUITE 500
 LINCOLN, NEBRASKA 68508

December 14, 2004

To the Board of Directors
 Kansas-Nebraska Big Blue
 River Compact Administration
 P.O. Box 94676
 Lincoln, NE 68509

Dear Members of the Board:

We have audited the financial statements of Kansas-Nebraska Big Blue River Compact Administration for the year ended June 30, 2004, and have issued our report thereon dated December 14, 2004. Professional standards require that we provide you with the following information related to our audit.

Our Responsibility under U.S. Generally Accepted Auditing Standards

As stated in our engagement letter dated November 15, 2004, our responsibility, as described by professional standards, is to plan and perform our audit to obtain reasonable, but not absolute, assurance that the financial statements are free of material misstatement and are fairly presented in accordance with U.S. generally accepted accounting principles. Because an audit is designed to provide reasonable, but not absolute, assurance and because we did not perform a detailed examination of all transactions, there is a risk that material misstatements may exist and not be detected by us.

As part of our audit, we considered the internal control of Kansas-Nebraska Big Blue River Compact Administration. Such considerations were solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control.

Significant Accounting Policies

Management is responsible for the selection and use of appropriate accounting policies. In accordance with the terms of our engagement letter, we will advise management about the appropriateness of accounting policies and their application. The significant accounting policies used by Kansas-Nebraska Big Blue River Compact Administration are described in Note 1 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during the year. We noted no transactions entered into by the Organization during the year that were both significant and unusual, and of which, under professional standards, we are required to inform you, or transactions for which there is a lack of authoritative guidance or consensus.

Audit Adjustments

For the purpose of this letter, professional standards define an audit adjustment as a proposed correction of the financial statements that, in our judgment, may not have been detected except through our auditing procedures. An audit adjustment may or may not indicate matters that could have a significant effect on the Organization's financial reporting process (that is, cause future financial statements to be materially misstated). In our

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Kansas-Nebraska Big Blue
River Compact Administration
December 14, 2004
Page two

judgment, none of the adjustments we proposed, whether recorded or unrecorded by the Organization, either individually or in the aggregate, indicate matters that could have a significant effect on the Organization's financial reporting process.

Disagreements with Management

For purposes of this letter, professional standards define a disagreement with management as a matter, whether or not resolved to our satisfaction, concerning a financial accounting, reporting, or auditing matter that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the Organization's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Issues Discussed Prior to Retention of Independent Auditors

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the Organization's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

This information is intended solely for the use of the Audit Committee, the Board of Directors, and management of Kansas-Nebraska Big Blue River Compact Administration and is not intended to be and should not be used by anyone other than these specified parties.

Yours truly,



THOMAS M. OBRIST
For the Firm

e-mail: obrist@danacole.com
direct line: 402-479-9324

TMO:laf

KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION

FINANCIAL STATEMENTS

JUNE 30, 2004

DANA F. COLE & COMPANY, LLP
CERTIFIED PUBLIC ACCOUNTANTS

DANA F. COLE & COMPANY, LLP
 CERTIFIED PUBLIC ACCOUNTANTS
 1249 O STREET, SUITE 600
 LINCOLN, NEBRASKA 68508

KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION
 STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS
 YEAR ENDED JUNE 30, 2004

INDEPENDENT AUDITORS' REPORT

RECEIPTS	
Kansas contribution	8,000
Nebraska contribution	8,000
Interest	18
Total receipts	<u>16,018</u>
DISBURSEMENTS	
Surface and ground water investigations	13,530
Staff travel	262
Auditing and accounting services	565
Printing annual report	76
Fidelity bond	100
Secretary-Treasurer services	1,500
Awards	246
Bank charges	4
Total disbursements	<u>16,283</u>
DECREASE IN CASH	(265)
CASH, beginning of year	<u>15,433</u>
CASH, end of year	<u>15,168</u>

See accompanying notes to financial statements.

Board of Directors
 Kansas-Nebraska Big Blue River Compact Administration
 Lincoln, Nebraska

We have audited the accompanying statement of cash receipts and disbursements of Kansas-Nebraska Big Blue River Compact Administration for the year ended June 30, 2004 and the related statement of cash receipts and disbursements compared to budget for the year ended June 30, 2004. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

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

As described in Note 1, this financial statement has been prepared on the cash receipts and disbursements basis of accounting, which is a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America.

In our opinion, the statements referred to above present fairly, in all material respects, the cash balance at June 30, 2004 and the cash receipts and disbursements of Kansas-Nebraska Big Blue River Compact Administration for the year ended June 30, 2004, on the basis of accounting described in Note 1.

Dana F. Cole & Company, LLP

Lincoln, Nebraska
 December 14, 2004

KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION
STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS, COMPARED TO BUDGET
YEAR ENDED JUNE 30, 2004

	Budget	Actual	Variance Favorable (Unfavorable)
RECEIPTS			
Kansas contribution	8,000	8,000	
Nebraska contribution	8,000	8,000	
Interest	150	18	132
Total receipts	<u>16,150</u>	<u>16,018</u>	<u>132</u>
DISBURSEMENTS			
Surface and ground water investigations	13,900	13,530	370
Staff travel	200	262	(62)
Auditing and accounting services	500	565	(65)
Printing annual report	200	76	124
Fidelity bond	100	100	
Secretary-Treasurer services	1,500	1,500	
Postage and office supplies	100		100
Awards		246	(246)
Bank charges	100	4	96
Total disbursements	<u>16,600</u>	<u>16,283</u>	<u>317</u>
EXCESS (DEFICIT) OF RECEIPTS OVER DISBURSEMENTS	<u>(450)</u>	<u>(265)</u>	<u>(185)</u>

See accompanying notes to financial statements.

KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION
NOTES TO FINANCIAL STATEMENTS

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization and Nature of Activities

The Kansas-Nebraska Big Blue River Compact 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 Administration is incorporated as an Organization exempt from income tax under Code Section 501(c)(3) of the Internal Revenue Code.

Basis of Presentation

The financial statement of the Organization has been prepared on the cash receipts and disbursements basis method of accounting. Therefore, investments, receivables and payables, long-lived assets, accrued income and expenses and amortization and depreciation, which may be material in amount are not presented. This financial statement is not intended to present the financial position, results of operations or cash flows in conformity with generally accepted accounting principles.

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 administering the compact".

The purpose of the compact is to:

- A) Promote interstate comity between the States of Kansas and Nebraska.
- 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.

Cash and Cash Equivalents

The Organization considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. At June 30, 2004, the Company had no cash equivalents.