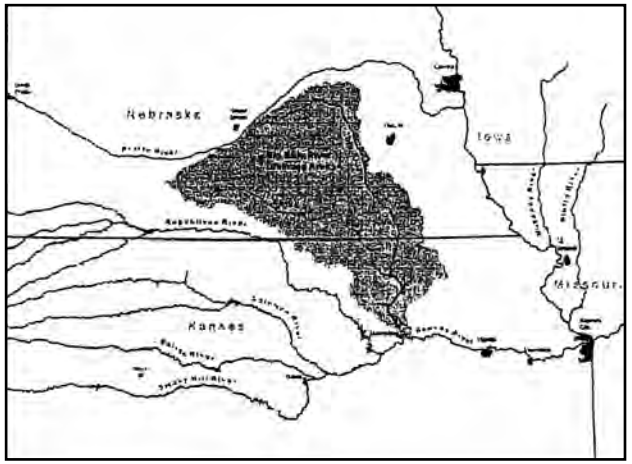
KANSAS-NEBRASKA
BIG BLUE RIVER COMPACT

THIRTY-SEVENTH ANNUAL REPORT



FISCAL 2010

Beatrice, Nebraska
May 19, 2010

Form 9-1366 continued	U.S. Department of the Interior U.S. Geological Survey Joint Funding Agreement	Customer #: Agreement #: Project #: TIN #:	NE016 10C4NE016034000 8626 48-6029925

8. The maps, records, or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records, or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program and, if already published by the party of the first part shall, upon request, be furnished by the party of the first part, at costs, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records, or reports published by either party shall contain a statement of the cooperative relations between the parties.
9. USGS will issue billings utilizing Department of the Interior Bill for Collection (form DI-1040). Billing documents are to be rendered **quarterly**. Payments of bills are due within 60 days after the billing date. If not paid by the due date, interest will be charged at the current Treasury rate for each 30 day period, or portion thereof, that the payment is delayed beyond the due date. (31 USC 3717; Comptroller General File B-212222, August 23, 1983).

U.S. Geological Survey
United States
Department of the Interior

USGS Point of Contact

Name: Jason Lambrecht
Address: 5231 South 19 St
Lincoln, NE 68512

Telephone: 402-328-4124
Email: jlambre@usgs.gov

Signatures

By Robert Swanson Date 5/28/10
Name: Robert B. Swanson
Title: NWSC Director

By _____ Date _____
Name:

Kansas-Nebraska Big Blue River
Compact Administration

Customer Point of Contact

Name: Brian Dunnigan
Address: PO Box 94676
Lincoln, NE 68509-4676

Telephone: 402-471-2366
Email: bdunnigan@dnr.ne.gov

Signatures

By Brian P. Dunnigan Date 6/02/2010
Name: Brian P. Dunnigan
Title: Director

By David Barfield Date 6/1/2010
Name: David Barfield
Title: Chief Engineer

APPROVED
AS TO FORM & CONTENT
BY NDNR LEGAL COUNSEL
DATE 6/2/10

KANSAS – NEBRASKA BIG BLUE RIVER

COMPACT ADMINISTRATION

June 22, 2011

The Honorable Barack H. Obama
President of the United States of America

The Honorable Sam Brownback
Governor of Kansas

The Honorable Dave Heineman
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-Seventh Annual Report. The report covers the activities of the Administration of the compact for the Fiscal Year 2010.

Respectfully,

Gary R. Mitchell
Compact Chairman

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Form 9-1366
(Oct. 2005)

U.S. Department of the Interior
U.S. Geological Survey
Joint Funding Agreement
FOR
WATER RESOURCES INVESTIGATIONS

Customer #:	NE016
Agreement #:	10C4NE016034000
Project #:	8626
TIN #:	48-6029925
Fixed Cost Agreement	☑ Yes ☐ No

THIS AGREEMENT is entered into as of the **28th day of May, 2010**, by the **U.S. GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF THE INTERIOR**, party of the first part, and the **KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION**, party of the second part.

1. The parties hereto agree that subject to availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation **the Blue River State line gages Big Blue River at Barneston, Nebraska and Little Blue River at Hollenberg, Kansas,** herein called the program. The USGS legal authority is 43 USC 36C; 43 USC 50; and 43 USC 50b.
2. The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) includes In-Kind Services in the amount of $0.

by the party of the first part during the period

(a) **$14,700** **July 1, 2010** **to** **June 30, 2011**

by the party of the second part during the period

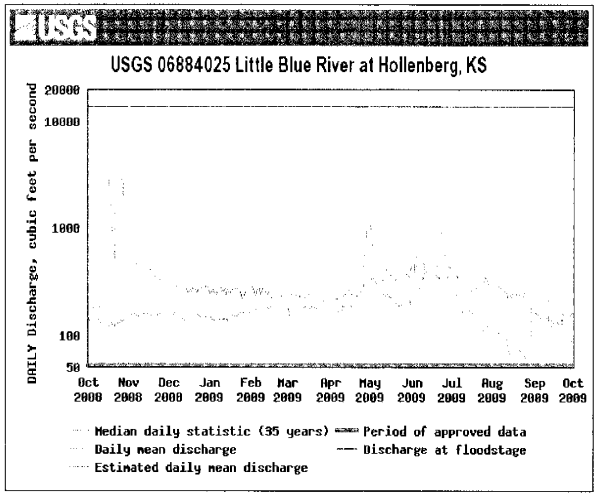
(b) **$14,700** **July 1, 2010** **to** **June 30, 2011**

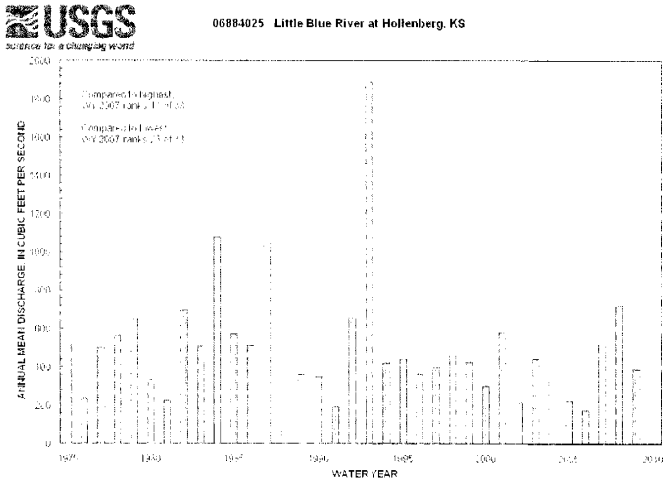
(c) Additional or reduced amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties.

(d) The performance period may be changed by mutual agreement and set forth in an exchange of letters between the parties.

3. The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.
4. The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.
5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.
6. During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.
7. The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.

For **Little Blue River at Hollenberg**, 9 discharge (and stage) measurements, ranging from 75.3 ft^3/s (1.99 ft) to 12,200 ft^3/s (12.98 ft), and three inspections were made during WY 2009. The annual mean discharge of 388 ft^3/s was less than the WY 2008 mean of 722 ft^3/s and the new historical mean of 500 ft^3/s for WYs 1975–2009 (35 years of record). The maximum and minimum daily discharges were 12,400 ft^3/s on Oct. 24, 2008 and 58 ft^3/s on Aug. 23, 2009.





Dave Heineman
Governor

STATE OF NEBRASKA
DEPARTMENT OF NATURAL RESOURCES
Brian P. Dunnigan, P.E.
Director

April 19, 2010

IN REPLY TO:

Gary Mitchell, Chairman
Kansas-Nebraska Big Blue River Compact
325 2600 Avenue
Solomon, KS 67480

David Barfield, P.E. Commissioner
Kansas-Nebraska Big Blue River Compact
109 SW 9th Street, 2nd Floor
Topeka, KS 66612-1283

Kenneth Reiger, Nebraska Advisor
Kansas- Nebraska Big Blue River Compact
215 Donegal
Aurora, NE 68818

Sharon Schwartz, Kansas Advisor
Kansas-Nebraska Big Blue River Compact
2051 20th Road
Washington, KS 66968

Dear Compact Members:

Nebraska is hosting the annual meeting of the Kansas-Nebraska Big Blue River Compact Administration on May 19th, 2010, at 9:30 a.m. The meeting will be held at the Lower Big Blue Natural Resources District office in Beatrice, Nebraska. The street address is 805 Dorsey Street.

A tentative meeting agenda has been included with this notice. If there is anyone who did not receive a copy of this letter who you believe should be aware of the meeting, please inform them.

Sincerely,

Brian P. Dunnigan

Brian P. Dunnigan, P.E.
Director

Enclosure
cc: Jason Kepler, Andrea Kessler, Jean Angell, Keith Paulsen, Burke Griggs, Katie Tietsort, Tom Stiles, Galen Biery, Pat Rice, Walt Aucott, Phill Soenksen, John Turnbull, Mike Onnen, Dave Clabaugh, Annette Kovar, Rich Reiman, Dan Howell, Paul Graves, Bob Lytle, Lindsey Douglas

admin-dir/dunnigan/2010
301 Centennial Mall South, 4th Floor • P.O. Box 94676 • Lincoln, Nebraska 68509-4676 • Phone (402) 471-2363 • Telefax (402) 471-2900

Kansas-Nebraska Big Blue River Compact Administration
37th Annual Meeting

May 19, 2010, 9:30 a.m.
Lower Big Blue Natural Resources District, 805 Dorsey Street, Beatrice, Nebraska

Draft Agenda

I. Call to Order

II. Introductions and Announcements

III. Minutes of the 36th Annual Meeting

IV. Report of the Chairman

V. Reports of Other Members
   a. Kansas
   b. Nebraska
   c. United States Geological Survey

VI. Report of Secretary

VII. Report of Treasurer

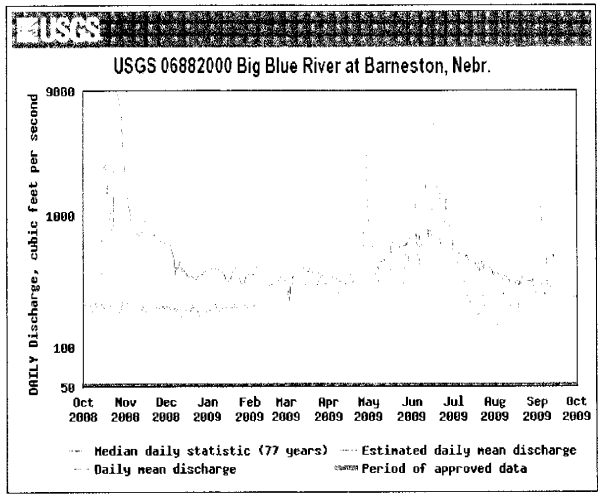
VIII. Committee Reports
   a. Legal
   b. Engineering
   c. Water Quality

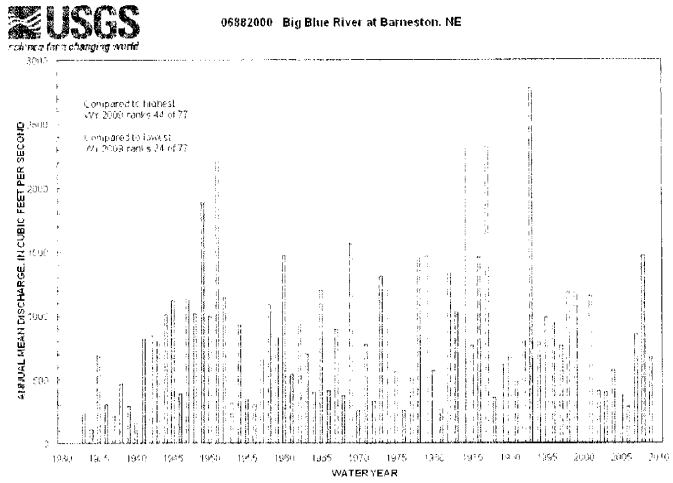
IX. Old Business

X. New Business
   a. Lower Big Blue NRD Observation Well Contract
   b. Rules Change

XI. Adjourn

For **Big Blue River at Barneston**, 9 discharge (and stage) measurements, ranging from 193 ft^3/s (3.66 ft) to 4,790 ft^3/s (10.30 ft), were made during WY 2009. The annual mean discharge of 673 ft^3/s was less than half that of WY 2008 (1,470 ft^3/s) and less than the new historical mean of 846 ft^3/s for WYs 1933--2009 (77 years of record). The maximum and minimum daily discharges were 8,760 ft^3/s on June 16 and 108 ft^3/s on Aug. 25, 2009.





Instant Information about Water Conditions: Ask the River to Text You a WaterAlert
Released: 5/17/2010 10:38:02 AM

Sign up at http://water.usgs.gov/wateralert.

Now you can receive instant, customized updates about water conditions by subscribing to WaterAlert, a new service from the U.S. Geological Survey. Whether you are watching for floods, interested in recreational activities or concerned about the quality of water in your well, WaterAlert allows you to receive daily or hourly updates about current conditions in rivers, lakes and groundwater when they match conditions of concern to you.

"Real-time water data are essential to those making daily decisions about water-related activities, whether for resource management, business operations, flood response or recreation," said Matt Larsen, USGS Associate Director for Water. "WaterAlert continues USGS efforts to make data immediately available and relevant to every user."

WaterAlert allows users to receive updates about river flows, groundwater levels, water temperatures, rainfall and water quality at any of more than 9,500 sites where USGS collects real-time water information. This information is crucial for managing water resources, including during floods, droughts and chemical spills.

"This is fantastic," said Jim Cantore, Weather Channel field meteorologist. "The new WaterAlert system from the USGS provides the latest river information to people in harm's way. This could be the first alert to a developing flood and can even help out during drought periods."

WaterAlert also allows kayakers, rafters and boaters to better understand when conditions are optimal and safe for recreational activities.

"The WaterAlert service is a fantastic resource for boaters of all abilities and disciplines," said Wade Blackwood, executive director of the American Canoe Association. "During rain events, water levels on some rivers can rise quickly. This service will be useful as a warning system and will keep paddlers aware of water conditions in order to paddle safely."

WaterAlert users start at http://water.usgs.gov/wateralert and select a specific site. Users then select the preferred delivery method (email or text), whether they want hourly or daily notifications, which data parameter they are interested in, and the threshold for those parameters. Users can set the system to alert them when conditions are above a value, below a value, and between or outside of a range.

For example, emergency managers may be interested in setting up alerts when thresholds are exceeded, such as in the case of a flood. Water-supply managers could set an alert for times when groundwater well levels are low enough to require shutdown of supply pumps. Recreational rafters may find it useful to set a threshold that lets them know when the water levels are high enough to pass over rocks but not so high as to be unsafe. There is no limit to the number of subscriptions per user at a single site or multiple sites.

The USGS operates an extensive, real-time water information network, involving 9,081 continuous and partial record streamgages, as well as 369 lake, 1,278 well and 3,632 precipitation gages throughout the United States. USGS Water Science Centers in each state can provide more detailed information on water conditions and USGS response to local events.

MINUTES OF THE 37TH ANNUAL MEETING
OF THE
KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION

Call to Order

The Thirty-seventh annual meeting of the Kansas-Nebraska Big Blue River Compact Administration was held on May 19, 2010 in the office of the Lower Big Blue Natural Resources District in Beatrice, Nebraska. The meeting was called to order at 9:35 am by Compact Chairman, Gary Mitchell. Mr. Mitchell thanked the Lower Big Blue Natural Resources District for hosting the meeting, and noted that he was the product of bipartisanship because he was appointed by President Bush and has not been replaced by President Obama. Mr. Mitchell suggested that those in attendance introduce themselves.

Introductions

Those in attendance were:

Gary Mitchell	Compact Chairman and Federal Member
Brian Dunnigan	Nebraska Ex Officio Member, Director of the Nebraska Department of Natural Resources
Ken Regier	Nebraska Compact Advisory Member
Jim Schneider	Deputy Director of the Nebraska Department of Natural Resources
Jason Kepler	Compact Engineering Committee, Nebraska Department of Natural Resources
Jean Angell	Compact Legal Committee Chair, Nebraska Department of Natural Resources
John Turnbull	Upper Big Blue Natural Resource District Manager
Jeremy Gehle	Nebraska Department of Natural Resources, Lincoln Field Office
Tom O' Connor	Nebraska Department of Natural Resources, Lincoln Field Office Supervisor
Tom Stiles	Kansas Department of Health and Environment
Adam Deitz	Kansas Department of Agriculture, Division of Water Resources, Legal Intern
Will Myers	Nebraska Department of Environmental Quality
Daryl Anderson	Little Blue Natural Resource District
Jason Lambrecht	United States Geologic Survey, Lincoln Data Chief
Bob Lytle	Compact Secretary, Compact Engineering Chair and Budget Committees, Kansas Department of Agriculture, Division of Water Resources
Katie Tietsort	Topeka Field Office Water Commissioner, Kansas Department of Agriculture, Division of Water Resources
Burke Griggs	Compact Legal Committee, Kansas Department of Agriculture, Division of Water Resources
David Barfield	Kansas Ex Officio Member, Chief Engineer, Kansas Department of Agriculture, Division of Water Resources
Dave Clabaugh	Lower Big Blue Natural Resource District Manager
Sharon Schwartz	Kansas Compact Advisory Member, Kansas Legislative Representative

Approval of the Minutes of the 36th Annual Meeting

Compact Chairman Mitchell noted that the minutes of the 2009 Annual Meeting were e-mailed to the appropriate parties back in December of last year (2009) for comments, corrections and additions. Compact Secretary, Bob Lytle handed out copies of the minutes to those who needed them and stated that he had received comments from some and that those were made part of the minutes. Ex Officio Member Barfield made a clarification in the Kansas Report concerning the Arkansas River Compact. Ex Officio Dunnigan had a few editorial comments which he said did not change the content of the minutes. Mr. Lytle indicated that these changes will be made prior to publishing the Thirty-sixth Annual Report, but that the signature page of the minutes should be signed today. He further encouraged suggestions and corrections to the minutes be made prior to the meeting. With these modifications noted, the minutes of the 2009 Annual Meeting were approved.

Kansas Report

Ex Officio Member Barfield handed out a written Report of the Kansas Commissioners to the Big Blue Compact Administration which he highlighted. Since the last Compact meeting Governor Mark Parkinson appointed Josh Svaty to serve as the Kansas Secretary of Agriculture replacing Adrian Polansky who is now the Executive Director of the USDA Farm Service Agency.

Kansas state government revenue shortfalls continued in 2010 totaling nearly $1 billion, making it necessary to have substantial budget reductions and enact a one-cent sales tax increase through 2013. The Kansas Division of Water Resources' staff is down about one-quarter, and has reduced or eliminated some services provided.

Under Legislation, Commissioner Barfield explained Senate Bills 316 and 510 which relate to due and sufficient cause for nonuse of a water right. Rights that are not used for five consecutive years can be subject to abandonment. SB 316 provides sufficient cause for nonuse in areas that have been closed to further to appropriations. SB 510 would have provided for conservation to be a beneficial use of water, but did not pass. A few changes were made to the Division's regulations including discontinuing the Water Rights Conservation Program, and clarifying the processes for impairment investigations in groundwater systems.

Commissioner Barfield highlighted recent activities with interstate water Compact Litigation. On the Arkansas River Compact, agreement was reached with Colorado concerning their use rules which governs how they replace their river water depletions in the Arkansas River and its tributaries that are due to groundwater pumping that is junior to the Compact. The Special Master issued his final report and decree, and agreement on this issue was the last piece of the lawsuit and paved the way to indicate to the court that the litigation had concluded. With respect to the Republican River Compact, on June 30, 2009 the arbitrator issued his final decision concerning Nebraska's non-compliance for 2005 and 2006. Both states accepted and rejected parts of the decision. This was the end of the arbitration process as required by the 2003 settlement stipulation. Two new arbitrations were initiated this year, Colorado's proposed compliance pipeline and augmentation plan, and Nebraska's crediting issue involving water credits for damage payments. On May 3, 2010, Kansas petitioned the United States Supreme Court to enforce the Final Settlement Stipulation due to Nebraska's noncompliance in 2005 and 2006.

KANSAS-NEBRASKA BIG BLUE RIVER COMPACT REPORT
U.S. Geological Survey—Water Year 2009

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). An electronic data logger (EDL) at each station automatically records streamflow stage every 15 minutes. These instantaneous values are transmitted via satellite to USGS offices, where they are used to compute preliminary values of instantaneous and daily discharge that are immediately posted to the Web (addresses shown below). 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 annually on a site-by-site basis on a national Web page (address shown below).

During water year (WY) 2009 (October 1, 2008 to September 30, 2009), periodic visits were made to the stations to maintain and calibrate the sensing and recording equipment, make discharge measurements, and download the data directly from the EDLs, as a backup to the satellite data. The discharge measurements were used to determine shifts from the stage-discharge relations (rating curves) that were then used to convert stage values to corresponding values of discharge.

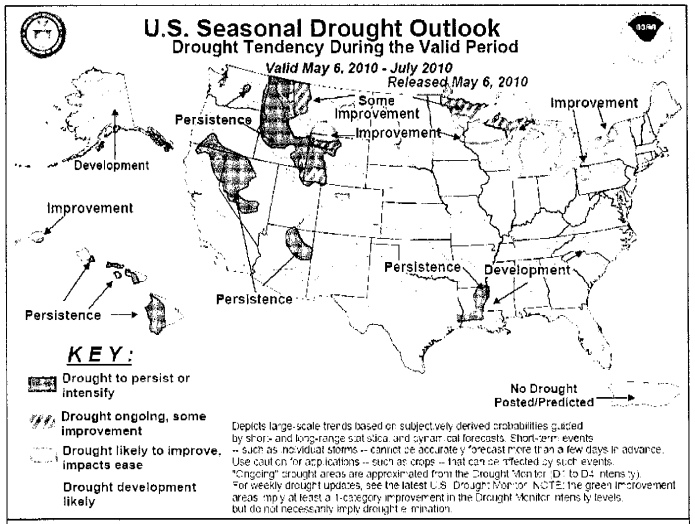
For each of the State delegations and the Compact chairman, copies of the WY 2009 published data (manuscript, discharge daily values, statistics tables, and discharge hydrograph) from *WDR2009: Water-Data Report 2009* are attached for each station. These site-data sheets (PDF files) are available online at http://wdr.water.usgs.gov/wy2009/search.jsp along with other data for the Nation. Also attached are plots of the annual mean discharges for the periods of record, and plots of the daily discharges for WY 2009 compared to those for the median daily statistic for each day of the year.

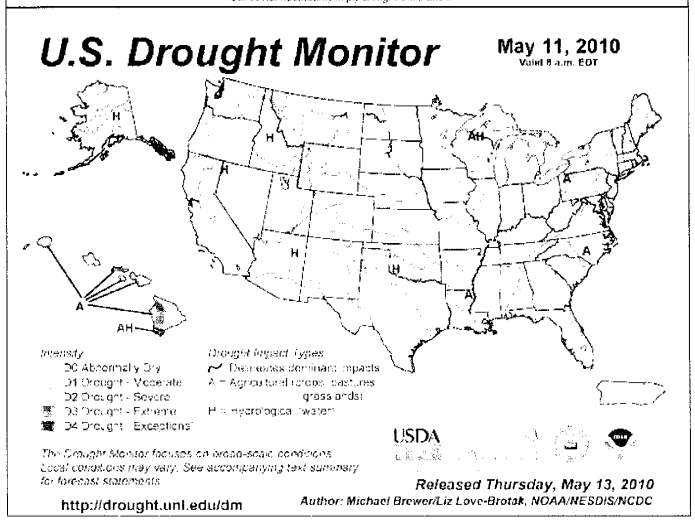
Current (real-time) and historical data on surface water, ground water, and water quality for the Nation can be accessed and downloaded via the National Water Resources website (http://water.usgs.gov/) or from the Nebraska Water Resources website (http://ne.water.usgs.gov/). Daily, monthly, and annual streamflow statistics are also available under "Surface Water" on the National site and under "Historical data: Streamflow" on the Nebraska site. Up to 120 days of unit values data and all daily values can be accessed using the real-time options.

Jason Lambrecht
Chief, Hydrologic Data Section

U.S. Geological Survey, Nebraska Water Science Center
5231 S. 19th St., Lincoln, NE 68512-1271
(jmlambre@usgs.gov)
402-328-4124 (office), 402-328-4101 (fax), 402-416-2363 (mobile)

May 18, 2010





In news from the Compact Area in Kansas, during the past year there were three disaster declarations including severe storms with flooding and tornados on June 2S, 2009, and severe winter storms on December 23, 2009 and again on March 9, 2010. An ongoing project in the Lower Big and Little Blue Basins is a watershed restoration and protection strategy project using best management practices including livestock waste management systems, sediment control structures, and riparian buffers to improve the water quality. Finally, the state had been considering repairing a low-head dam in the Big Blue River near Marysville to help the river intake of Washington County RWD#1. However, the 2010 Legislature approved a bill which will provide funding for enhancing its well field, a much less costly solution to the District's needs than the dam project would have been.

Kansas Advisor member and State Legislator Sharon Schwartz added to the discussion about budget shortfalls, indicating that Kansas is not alone with its troubles, and that the Legislature passed a 1 percent sales tax which provides for a projected balanced budget but that is very optimistic because it assumes a 4 percent growth rate which has not occurred the past few years. Representative Schwartz mentioned her involvement with Senate Bill 510, and that she believes it will be revisited. She also commented on Washington County RWD#1, indicating she is hopeful that the addition to the groundwater well field is sufficient to meet the future needs of the District.

Katie Tietsort, Topeka Field Office Water Commissioner, distributed copies of her report and summarized its high points. The climate conditions in the Big and Little Blue Basins plus nearby Mill Creek Basin saw a range of 25 to 40 inches of rainfall across the area in 2009 as compared to an average of 30 to 35 inches. Temperatures were nearly 8 degrees above average in the Lower Blue and nearly 4 degrees below average in the Upper Blue Basin. There does not appear to be a precipitation pattern across the basin according to the Standard Precipitation Index.

There were no administrative activities within the Big and Little Blue River Basins for the 2009 water year as required by minimum desirable streamflow values on the Big Blue River at Marysville, and the Little Blue River at Barnes. In fact, no minimum desirable streamflow was administered on any eastern Kansas rivers in 2009. Administration is initiated after the minimum is not met for 7 consecutive days.

In mid December the Topeka Field Office moved from its downtown Topeka location in the Mills building where the Headquarters of the Division of Water Resources is located to Forbes Field in South Topeka. This provides for improved security because the hard copies of all the water right files are not located in the same location as the microfilm backup where both could be lost or damaged. The easy interstate access in all directions and field vehicles parked next to the building are benefits as well.

On January 4, 2010, the Chief Engineer issued an order which requires the installation of totalizing water meters on all non-domestic and non-temporary diversions of water in the Little Blue River Basin and in the Mill Creek Basin. An order has not yet been made for the Big Blue River Basin. The main goal of these orders is to help with the accuracy of annual water use reporting. Meters are to be installed by December 31, 2010.

Water Commissioner Tietsort discussed the Blatant and Reoccurring Overpumping Program, BRO, which identifies users who divert more than their authorized amount of water. The first violation results in a notice being sent that informs the user of his authorized amount. The second, a $500 civil penalty is issued and the authorized amount for the following year is reduced by the amount exceeded. The third, a $500 per day penalty is issued and 2 times the amount over-pumped is removed from the next year. The 4th violation results in a one year suspension and the 5th the right is revoked.

The Corps of Engineers Tuttle Creek Dam Safety Assurance Project was completed on September 11, 2009. The concern was that without improvements to the dam, a 5.7 plus magnitude earthquake could cause the dam to fail in part because of its location relative to the Humboldt Fault Line. 351 underground concrete walls were installed beneath the downstream slope of the dam, each of which is 4 feet wide, 45 feet long and 60 feet deep. The project was completed 2 years ahead of schedule and 75 million dollars under budget.

Finally, Water Commissioner Tietsort provided an update on the Trans Canada Keystone Pipeline which runs from Alberta to Illinois and Oklahoma transporting crude oil. The US portion of the pipeline is 1,379 miles, with work currently being done in Marshall County, Kansas. The project is behind schedule, and the line in Kansas is a 36 inch pipe at a minimum depth of 4 feet depending on land use. Any stream crossings are directionally bored under the channel.

Nebraska Report

Ex Officio Member Dunnigan began the Nebraska report by stating that Nebraska Compact Advisory member Ken Regier has been appointed by Nebraska Governor Dave Heineman to serve another term running through October 2013.

As required by Nebraska law, basins not currently in an integrated management planning process are required to be evaluated to determine whether they are fully appropriated. The 2010 Annual Report of Nebraska River Basins included a preliminary determination that no new basins, including the Big Blue, were found to be fully appropriated. The Lower Platte Basin was not evaluated.

The 2010 legislative session was primarily focused on the need to reduce the upcoming fiscal years budgets. Lawmaking was almost entirely limited to budgetary matters. Nevertheless, there was some legislation that pertained to water resources management, regulation and planning in Nebraska. Commissioner Dunnigan elaborated on a few of these bills. LB 682 and 683 removed references to outdated laws. LB 689, 862 and 210 significantly affected fiscal resources available to the State and NRDs for activities related to integrated management planning processes. These bills become operable in 2012 and will create a loss in revenue of 7.5 million annually.

Jeremy Gehle of the Nebraska Department of Natural Resources Lincoln Field Office distributed copies of his report concerning water administration activities in the Big and Little Blue Basins (see Exhibit E). The spring of 2009 began dry in the Blue Basins with precipitation in the Big Blue Basin at 75% of normal and the Little Blue at 50% of normal. Timely summer rainfall across the Big Blue Basin kept the flow in Big Blue River near historic high levels for the majority of the year. Streamflow at the Barneston gage exceeded target values through-out the administration period. The flow in the Little Blue River was below normal and fell below the target value in August.

On August 13 a total of 248 closing orders were issued to junior irrigation permit holders and storage reservoirs. 155 regulating orders were also issued to senior irrigation permit holders. These orders remained in effect until August 27th. Administrative field checks indicated good compliance with orders.

Atrazine criteria

EPA continues to evaluate its data and models to establish §304(a) aquatic life criteria for triazine herbicides, specifically atrazine. Nebraska currently has aquatic life criteria for atrazine to protect against acute toxicity at 330 ug/l (1-hr ave.) and chronic toxicity at 12 ug.l (4-d ave.). The numbers that EPA settles on will likely be equation or model-based. There is a considerable pressure from outside of EPA to adopt more stringent criteria (in the range of 1 to 2 ug/l). However, it is uncertain whether this request can be supported by scientific evidence. If EPA finally adopts 304(a) criteria for atrazine, Nebraska will make the appropriate changes to its Water Quality Standards.

Nutrient criteria

Nutrient criteria have been the predominant national Water Quality Standards issue for several years and the attention to this issue will be continued or increased given the Florida criteria promulgation by EPA and the Chesapeake Bay program. In Nebraska, we continue to work on revising our nutrient criteria for lakes and reservoirs so that they are acceptable to and approvable by EPA, while still being scientifically defensible and, realistic. We are also continuing to wrestle with the issue of criteria for flowing waters and how to define them given the lack of evidence that links biological integrity to nutrient levels in Nebraska streams and rivers.

Pathogens

Nebraska continues to follow the national effort at new recreational criteria development that was mandated by the Beach Act, since EPA has stated that non-Beach states will likely be required to adopt the new criteria. EPA is considering several options including culture-based criteria on different organisms and genetic tracers. Nebraska's criteria, which is based on E. coli cultures, does not appear to be one of EPA's options.

For more information contact:
John Bender
NDEQ
402-471-4201
john.bender@nebraska.gov

valuable input on their permit. EPA's permit should be out on public notice at the end of May 2010 and will have a very short comment period of 45 days. EPA hopes to have their permit in place by late 2010. A few key items of EPA's permit are; Integrated Pest Management (IPM) as a method of Best Available Technology (BAT), different permits for different categories of pesticides, reporting for certain facilities, notice of intent based on either size or type of applicators, and post application surveillance to satisfy monitoring requirements.

Nebraska is looking at a different approach for their pesticide permit. First we are not looking at integrated pest management in our permit. We believe that IPM comes before the permit or the decision to use a pesticide and is a management practice that is difficult or impossible to regulate. We still intend to use permit by rule for many of the categories of pesticide application. We are looking at different water body conditions to separate permit conditions and requirements. There may be some conditions that require a notice of intent to receive authorization but at this time we envision those may be limited to state resource water, drinking water under the influence of surface water, and endangered species areas.

General Impact:

The application of pesticides to remove phragmites and other invasive species in streams and lakes is an important water management tool. Federal funding through the EQUIP program administered by USDA and overseen by the Dept. of Natural Resources (DNR), Dept. of Agriculture (DOA), Game and Parks, and the NRDs, has been available to landowners and water management agencies. Applying for and issuing permits, which EPA and NDEQ have not been required in the past, has the potential to delay needed pesticide applications. In addition, pesticides are applied to water to control other invasive species and pests, such as mosquito larvae, which could present public health issues. The potential delay in addressing mosquitoes could become a health issue if they needed to wait for a site specific permit or general permit.

The potential thousands of permits needed would be overwhelming on a site specific or general permit basis with Notices of Intent (NOI).

Estimated Applicator Impact:

The Nebraska Department of Agriculture provided the following estimate of applicators by category that would be most impacted by the permit-by-rule.

Ag Plant commercial/non-commercial: 3,926
Forestry: 14
Turf and Ornamental: 2,829
Aquatic: 270
Right-of-Way: 1,505
Public Health (mosquito): 434
Aerial application: 337

For more information contact:
Steve Goans
NDEQ
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Upcoming Water Quality Standards Issues

Ammonia criteria change for freshwater mussels

EPA has given notice in the Federal Register that new, more stringent criteria will be necessary to protect aquatic life. These new criteria result from an analysis of toxicity data on freshwater mussels. Both the acute and chronic criteria will be based on a relationship with temperature and pH. In general, criteria to protect against acute toxicity will be about 25 to35% of the current values at normal summer water temperatures and pH. Criteria to protect against chronic toxicity will be about 20% of the current values. Implementation of these criteria will most likely be dependent on the distribution of freshwater mussels, which have historically been found in the Big Blue River basin. The comment period has closed and EPA is evaluating those comments received. If EPA finalizes the proposed criteria as §304(a) criteria under the Clean Water Act, Nebraska will be obligated to change the current ammonia criteria in its Water Quality Standards. This could occur as soon as 2011.

Flows in both basins in Nebraska so far this year (2010) have been running above the median, so as long as precipitation remains normal, Mr. Gehle indicated he is optimistic that administration will not be necessary during this year's administrative period.

Nebraska Natural Resource District Reports

Lower Big Blue NRD

Dave Clabaugh gave the report for the Lower Big Blue Natural Resource District. He indicated that he had handouts and also a bad cold so he planned to make his report brief.
The Lower Big Blue District is considered the capital of watershed projects in Nebraska, with over 200 water protection structures within the district. Mr. Clabaugh highlighted three ongoing projects.

Tuttle Creek Lake Project: The Lower Big Blue District (LBB) is part of the Tuttle Creek Lake Targeted Watershed Grant Program, a cooperative effort between Kansas and Nebraska to address water quality problems upstream of Tuttle Creek Reservoir (near Manhattan Ks) caused by excessive sediment, nutrients, herbicides and bacteria. Two landowners meetings were held in Odell, NE, and a third in Beatrice. Monitoring sites have been selected and will be sampled for water quality and flow to see how effective land treatment practices have been.

Big Indian Watershed Improvement Project: In 2007 the Lower Big Blue NRD partnered with several local, state and federal agencies to initiate the Big Indian Community-Based Planning Process to reduce sediment and phosphorous loading into Big Indian Lake. Local landowners and stakeholders in the watershed of Big Indian Lake developed a management plan that includes land treatment practices and in-lake improvements. Construction of the in-lake improvements and the implementation of best management practices began in April 2010.

Lower Turkey Creek Project: This project was approved for funding through the Natural Resources Development Fund (NRDF) in November of 2005. The primary purpose of this project is flood control with seven structures controlling the runoff of 43,600 acres in Saline County. The first two structures where completed in 2008 and 2009, with a third to be completed this summer. Land acquisition for the fourth site is underway for Fall 2010 construction. Other benefits include downstream flow augmentation, erosion and sediment control, wildlife habitat and recreation.

Upper Big Blue NRD

Mr. Turnbull, District Manager, handed out copies of the Upper Big Blue District Report and highlighted several items. In 2009, there were 145 permits for irrigation wells, 107 new and 38 replacements. At the end of 2009 there were 11,726 in the District, a reduction of 200 wells due to identifying unused wells and abandoning and properly capping them. The average groundwater change in the district from 2009 to 2010 was 0.07 feet. Wells have been measured since 1961 and from 1961 to 2010 the groundwater level has declined by only ½ a foot.

The district is involved in two educational programs, one is CROP-TIP which is a 24 acre irrigation demonstration plot designed to show producers ways to reduce groundwater withdrawal and nitrate leaching through improvements in irrigation methods and fertilizer application rates. Additionally, the district has contracted with a farmer north of York, Nebraska who has two adjacent center pivots with

similar soil types. The farmer will manage one of the pivots and the district the other with both planted to the same variety corn and planting rates. The district's circle will use watermark sensors and will have limited irrigation and fertilizer. The yields will then be compared. The district believes they will be within 5 bushels per acre of the farmer's, or pay the difference.

Another educational program the UBBNRD is involved with is the Nebraska Agricultural Water Management Demonstration Network which encourages producers to improve irrigation scheduling by using ET gages and Watermark sensors to determine crop water demands. The ET gage simulates evaporation and the watermark sensors measures soil moisture. The Upper Big Blue District is selling this equipment to irrigators at a reduced rate to encourage adoption of this scheduling practice. This year the University of Nebraska plans to have an interactive website up and running to allow cooperators to post data directly to the website where it can be used by other irrigators. As of May 18th, the District has sold 800 sensors and related equipment to be used to schedule irrigation on approximately 80,000 acres.

The Upper Big Blue NRD is the lead agency for a Blue Basin groundwater modeling effort to identify the hydrologic connection between the aquifer and the Blue River System. The modeling was completed in 2009 and is currently under review by the Nebraska Department of Natural Resources.

Commissioner Barfield asked what the main impetus for getting people to use limited irrigation in an area that is not fully or over appropriated. Mr. Turnbull responded by saying that there is the political fear that their area could declared fully appropriated, and it allows producers to trim their costs on pumping, fertilizer and labor, and therefore maximize their net profit. The district has been, however, working on getting producers to use these water saving practices for a long time.

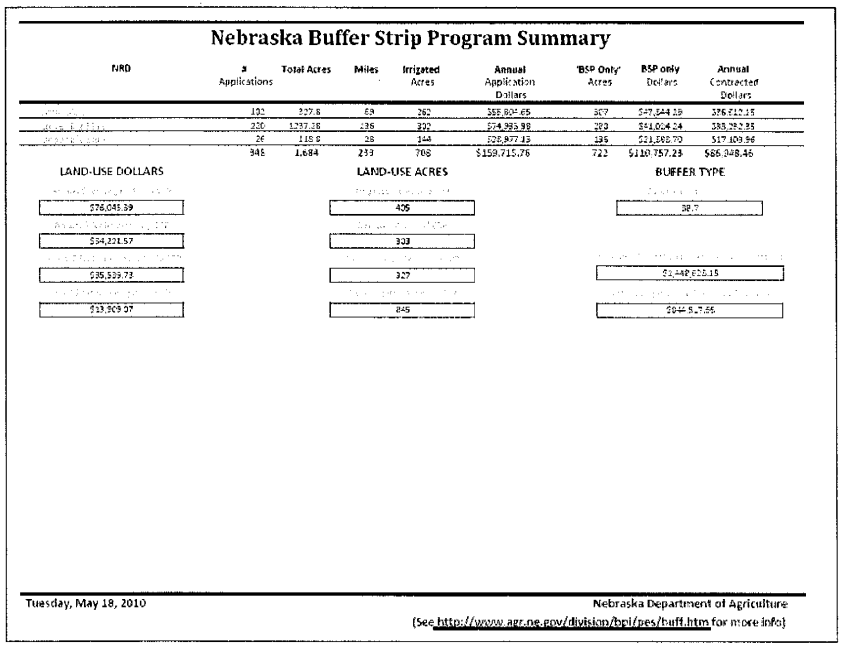
Little Blue NRD

Daryl Anderson distributed the Little Blue NRD Report and he summarized portions of it. The spring 2010 groundwater level measurements were completed. A total of 341 irrigation and monitoring wells were measured, with an overall decline of 0.55 feet from the 2009 levels. There were 65 new wells drilled, many of them for new pivots replacing gravity irrigation to get the well near the center. They have seen a few new wells associated with sod-busting (new lands put to irrigated crop land). The District is considering changing their rules to prevent new wells if much of the land is considered to be highly erodible.

The District received a grant through the Integrated Management Plan Program to install a network of 48 water level monitoring wells equipped with data loggers to track continuous water levels. They will also help the District learn more about the geology of the area. This same funding source is responsible for a grant to conduct a district wide hydrologic study. The District continues to work with the Corps of Engineers to identify the best plan for groundwater contamination clean-up of a 6 square mile area of the Naval Ammunition Depot near Hastings Nebraska. The District received one additional fund from the Federal Ag Water Enhancement Program to assist producers in improving their irrigation water management practices on their farms.

United States Geological Survey Report

Jason Lambrecht, USGS Data Chief, Lincoln, introduced himself again and indicated that had recently become the Data Chief in Lincoln replacing Phil Soenksen last August. He distributed a written report as



Nebraska Buffer Strip Program Summary

NRD	# Applications	Total Acres	Miles	Irrigated Acres	Annual Application Dollars	'BSP Only' Acres	BSP only Dollars	Annual Contracted Dollars
	102	327.6	69	262	388,804.65	307	$47,644.19	$76,712.15
	220	1237.16	198	332	$24,386.98	203	$31,004.24	$88,282.35
	26	119.9	28	144	$28,877.13	185	$21,988.70	$17,109.96
	948	1,684	259	768	$159,715.76	723	$110,757.29	$86,048.46

LAND-USE DOLLARS	LAND-USE ACRES	BUFFER TYPE
$76,045.39	405	38.7
$84,221.57	333	
$35,539.73	327	$1,449,555.15
$13,909.97	845	$944,5.7.66

Tuesday, May 18, 2010 — Nebraska Department of Agriculture

(See http://www.agr.ne.gov/division/bpi/pes/buff.htm for more info)

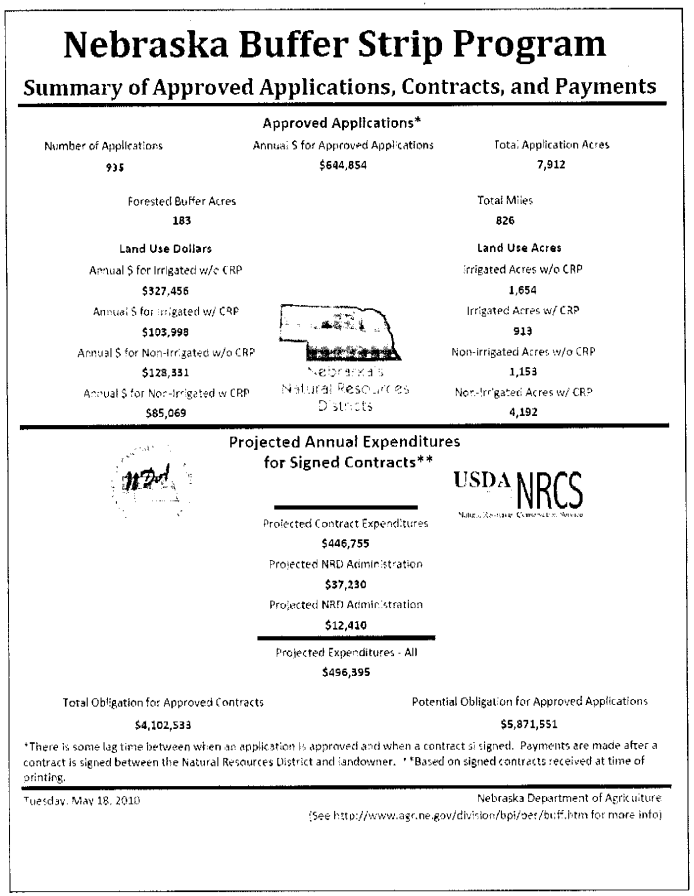
Pending Pesticide Rule

On January 7, 2009 the 6th Circuit Court of Appeals vacated the U.S. Environmental Protection Agency (EPA)'s pesticide rule. The National Cotton Council and several environmental groups sued EPA over the exemption from permits for the application of pesticides. The EPA rule had exempted certain pesticides applied to waters in accordance with Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) labeled instructions from requiring a National Pollutant Discharge Elimination System (NPDES) permit under the federal Clean Water Act (CWA). The EPA pesticide rule had been appealed judicially in almost all of the federal circuits and consolidated for decision in the 6th Circuit, so the decision applies nationally. A stay was granted by the court in April of 2009 for two years. An NPDES Permit will be required for applications of pesticides to waters in April 2011.

Current Status:

With the stay issued by the court the Department requested that Governor Heineman not sign the Environmental Quality Council revisions to Title 119, Chapter 28 Permit-by-Rule, that will establish a general permit-by-rule for the application of pesticides to, over, or near waters of the state, provided specific requirements are satisfied. Our goal with this proposed regulation was to address a gap in permit coverage by putting a general permit in place with minimal disruptions to current practices. The courts stay has allowed this to occur.

Department staff is involved as a member of a national workgroup with EPA to develop their new general permit that will be issued in six states and tribal jurisdictions which are not authorized for the NPDES program. This inclusion of states and tribes in a workgroup before public notice is a new approach for EPA that provided



Nebraska Buffer Strip Program

Summary of Approved Applications, Contracts, and Payments

Approved Applications*

Number of Applications	Annual $ for Approved Applications	Total Application Acres
935	$644,854	7,912

Forested Buffer Acres	Total Miles
183	826

Land Use Dollars		Land Use Acres	
Annual $ for Irrigated w/o CRP		Irrigated Acres w/o CRP	
$327,456		1,654	
Annual $ for Irrigated w/ CRP		Irrigated Acres w/ CRP	
$103,998		913	
Annual $ for Non-Irrigated w/o CRP		Non-Irrigated Acres w/o CRP	
$128,331		1,153	
Annual $ for Non-Irrigated w CRP		Non-Irrigated Acres w/ CRP	
$85,069		4,192	

Nebraska's Natural Resources Districts

Projected Annual Expenditures for Signed Contracts**

USDA NRCS

Projected Contract Expenditures	$446,755
Projected NRD Administration	$37,230
Projected NRD Administration	$12,410
Projected Expenditures - All	$496,395

Total Obligation for Approved Contracts	Potential Obligation for Approved Applications
$4,102,533	$5,871,551

*There is some lag time between when an application is approved and when a contract is signed. Payments are made after a contract is signed between the Natural Resources District and landowner. **Based on signed contracts received at time of printing.

Tuesday, May 18, 2010

Nebraska Department of Agriculture

(See http://www.agr.ne.gov/division/bpi/per/buff.htm for more info)

well as gaging station data for the Compact stateline gaging stations on the Big and Little Blue Rivers. These gaging stations provide 15 minute data that are transmitted every hour for streamflow and water level information updates. This information can be found on the USGS website. Several visits are made to these gages to calibrate them so rating curves can be made to determine accurate discharges.

The streamflow on the Big Blue River at Barneston for the 2009 Water Year ranged from 193 cfs to 4,790 cfs, with the annual mean being 673 cfs, less than half of the 2008 annual mean of 1,470 cfs. The streamflow on the Little Blue River at Hollenberg for the 2009 Water Year ranged from 75.3 cfs to 12,200 cfs, with the annual mean being 388 cfs again less than the 2008 annual mean of 722 cfs.

Mr. Lambrecht described a new feature of the USGS website called water alert which enables someone to choose a particular parameter, for instance a certain flow rate, and when that parameter is being exceeded or is not being met a user can receive text messages to that effect.

Secretary's Report

Compact Secretary, Bob Lytle, asked for everyone to be sure to sign the attendance sheet and to include a current e-mail address so that he can forward the draft minutes of today's meeting for everyone's review and comments/corrections later this fall or winter. He indicated the additional modifications to the 2009 minutes received today and just prior to the meeting will be made prior to having the State Printer publish the 2009 Annual Report which he then plans to mail to all appropriate parties in late June or early July.

Treasurer / Budget Report

Jason Kepler distributed the Treasurer's Report and a Budget Analysis Table to those in attendance. He indicated that he was filling in for Andrea Kessler, the Compact Treasurer, who recently had a baby and was not able to attend today's meeting. Currently, the Compact Administration has a balance of just below $23,000, and will have an estimated end of the 2010 fiscal year balance of just above $18,000. So, the Administration's account will be down a little. Accounting for this reduction is what is shown on the Budget Table. The cost for the stateline gaging stations for the year were higher because there was an extra payment to the USGS that was carried over from the previous fiscal year (2009). An annual payment was made on May 18, 2010 yesterday and is reflected in the table as well. Jason highlighted the proposed budget figures and recommended that the state assessments for both states remain at $ 8,000 a piece. The proposed budget was unanimously approved.

Committee Reports

Legal Committee Report

Jean Angell, Legal Committee Chair, reported that the Legal Committee took two actions. The first was brought to the committee's attention by the treasurer who noted that a contract did not exist between the Compact Administration and the Lower Big Blue NRD for the monitoring well measurements that have been done each year since 1988. At that time a contract was recommended by the Engineering Committee but apparently one was never drafted and entered into. The Legal Committee has prepared a draft and proposed final contract for the parties to sign today. The second action taken was also brought up by the treasurer. As noted, Andrea Kessler recently had a baby and she wondered if someone else could pay bills in her absence. The rules of the compact currently only provide for the

treasurer to pay bills from the Compact checking account. The committee therefore proposes to change the Compact rules to allow for a designee to be named to make disbursements of administrative funds in the absence of the treasurer. A motion was made by Kansas to approve both the monitoring well contract and the change in the compact rules, seconded by Nebraska with both actions being voted upon and passed unanimously.

Commissioner Barfield noted that there have been a few changes made to the rules of the Compact and as such requested that an assignment be made to the Legal Committee to update the Compact Rules so that the changes made today and at the past few meetings are properly documented in the Compact Rules.

Engineering Committee Report

Bob Lytle, Engineering Committee Chairperson, distributed the Engineering Committee Report. Jeremy Gehle, who was filling in for Keith Paulsen of the Nebraska Field Office, indicated in his report that during the compact time frame from May through September of 2009 the stateline target flows were met at the Barneston gage on the Big Blue River. At the Hollenberg gage on the Little Blue River the flow fell below the 80 cfs target on August 13TH and only briefly returned on the 18TH and 20TH. Administrative notices were sent to junior surface water right holders on August 13Th and on September 1, 2009 the Little Blue Basin was reopened to junior water users. Mr. Lytle briefly went through the Committee Report, its hydrographs and historic water data. There was one new well drilled on December 4, 2009 in the Big Blue regulatory reach, a stretch of approximately 20 miles upstream adjacent to both rivers encompassing the river alluvium. The Engineering Committee report was approved by the Administration.

Water Quality Committee

Will Myers with the Nebraska Department of Environmental Quality, Water Assessment Section, distributed the Water Quality Committee Report and highlighted portions of the report. The Tuttle Creek Watershed Grant Project, now managed by Mr. Myers, is an interstate multi-jurisdictional targeted watershed grant project. The sub-watersheds within the Blue Basin most targeted for BMPs are Horseshoe Creek in Kansas, and Swan Creek, Cub Creek and Big Indian Creek in Nebraska. The desired outcome is to reduce the amount of pesticides, sediment and nutrients, not only in Tuttle Creek Reservoir, but also river courses within the basin as a whole. There have been a total of 51 conservation practices contracts in Nebraska and 21 in Kansas, which include no-till farming systems, riparian buffer strips, and others. Monitoring has been ongoing and will be used to document the water quality conditions pre-project and at the close of the project scheduled for September 30, 2011.

Mr. Myers highlighted the Department's 2010 Integrated Report to the EPA on impaired water bodies (Section 303(d) and TMDLs) in the Big and Little Blue Basin. Within the Nebraska portion of the basin there are impairments for atrazine, E. coli, algae bloom and others. Specifics are found in the report, which is currently under review by the EPA Region 7. Also noted was the fact that there is still funding available for the Nebraska Buffer Strip Program through the Nebraska Department of Agriculture and through the NRDs. He also discussed a pesticide rule that was vacated by the 6th Circuit of Appeals which had allowed the application of certain pesticides without having to obtain a NPDES permit (discharge). The suit was brought by the National Cotton Council and other environmental groups. The stay was granted in April of 2009 for two years, after which anyone applying an aquatic pesticide will

Application and contract acres for the Blue River Basin Natural Resources Districts are shown in the attached report. Approximately, 25% of the statewide dollars and 21% of the acres are found within these three NRDs.

Two years ago, NDA increased irrigated rental rates to be somewhat competitive with cash land rentals and commodity economics. This coincided with the ten-year anniversary of the program and subsequent buffer contract expirations (those contracts signed within the first year or two of the program). Because of a lower interest in the program during that time, likely due to both commodity price increases and the remaining 'hard to sell' audience, the program built up a large cash reserve. Over the last year, $650,000 were diverted from the program account by the Nebraska Legislature. Although the program has currently obligated a similar amount to previous years, fewer acres are being funded. It appears that more landowners are opting for the state program alone, rather than using the state program and the USDA CRP together.

Definitions:

Miles – equals miles of stream bank buffered. Divide this by two to get miles of stream/river buffered on both sides. This includes buffers for wetlands and impoundments. These are estimates based on information provided on the application.

Annual Application Dollars – Dollars obligated from approved applications, but have yet to be contracted.

BSP only acres – those acres where the Nebraska Buffer Strip Program is paying all of the incentive, i.e. those where CRP or other program is not also involved.

BSP only Dollars – Nebraska Buffer Strip Program Dollars obligated toward the previous category.

Annual contracted dollars – dollars actually contracted and that will be paid annually by the program

Potential obligation for approved applications – the amount NDA will pay if all approved applications are contracted over the life of those 5 to 10 year contracts

Potential obligation for approved contracts – the amount NDA will be paying annually for those contracts which are currently signed and in place, over the life of those 5 to 10 year contracts.

Land use dollars/land use acres – simply shows the breakdown of dollars and acres by irrigated/non-irrigated, and with CRP/without CRP. *(see summaries below)*

For more information contact:
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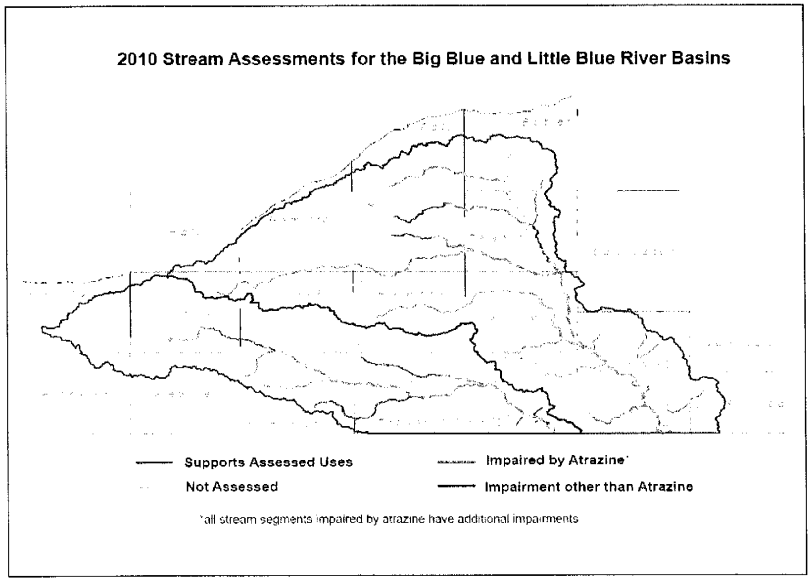
craig.romary@nebraska.gov



Kansas Approves Plan To Evaluate TMDL Success

This month, the Kansas Department of Health and Environment (KDHE), Watershed Management Section, which is responsible for CWA Section 319 projects, will approve the 9-Element Watershed Plan for the Tuttle Creek Lake Watershed Restoration and Protection Strategy (WRAPS) group. This will be the first such plan approved for a Kansas watershed. The plan identifies the initial critical areas to focus implementation efforts to abate loads to the Big and Little Blue Rivers and Tuttle Creek Lake. Pollutants of concern are bacteria, atrazine, phosphorus and total suspended solids (sediment). The plan relied on existing TMDLs developed by KDHE and will undertake its first revision in five years to ascertain the success of initial implementation, incorporate new data and information and to make any necessary adjustments as KDHE revises the original TMDLs pertaining to the watershed. It is anticipated that the WRAPS group will engage with Nebraska counterparts to collaborate on pollutant load reductions on both sides of the Stateline.

For more information contact:
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KS Dept. of Health & Environment
785-296-6170
tstiles@kdheks.gov

Nebraska Buffer Strip Program

The program currently has approximately $645,000 obligated in approved applications on approximately 7,900 acres of filter strips and riparian forest buffers. Approximately $446,000 of this has been contracted for payments. This obligated amount is similar to previous years, however we just passed a period with a large number contract expirations and subsequent application renewals and new applications received – thus the large difference in obligation amount and contracted amount. NDA is continuing to accept applications at this time.

need to have a permit. Nebraska intends to permit these by authorization by general rule which would eliminate major paperwork and permit applications.

Regarding Water Quality Standards in Nebraska there are four major concerns, those being ammonia criteria, atrazine criteria, nutrients and pathogens. The EPA has given notice in the Federal Register that new, more stringent, criteria will be necessary to protect aquatic life. It is anticipated that the criteria will need to be reduced by 25 to 35 % of current values.

Tom Stiles of the Kansas Department of Health and Environment provided an update of water quality initiatives in Kansas. The biggest event in Kansas is the pending approval of the Tuttle Creek Watershed Plan which is an EPA required plan with nine key elements addressing non-point source pollution and achieving established TMDLs. This was the first one completed in the State. It is expected that an avalanche of these plans will ensue. The plan was drafted in large part by Kansas State University and represents a solid start to water quality management. Tom noted that the committee did not meet this past year, but that next year many mandates and work needs to be done, so it is likely that next year at the compact meeting there will be a lot on the agenda from the Water Quality Committee. Tom expressed his belief that Kansas and Nebraska have and have had a good working relationship, and of the four states in our region only Kansas and Nebraska submitted their integrated report to EPA on time. Mr. Stiles indicated that the TMDLs in the Big and Little Blue Basin need to be updated because they are 10 years old and are really obsolete, except that of atrazine which was recently updated.

Representative Schwartz commented that there needs to be baselines established for water quality so that improvement can be shown. It is critical for legislative support and funding of these efforts. Tom agreed completely. Chairman Mitchell inquired as to how Tuttle Creek had become so loaded with phosphorous since it does not move in the soil. Mr. Stiles explained that it comes with the transport of the sediment to the reservoir, and solving the sediment loads in Tuttle Creek will result in a reduction in phosphorous as well. The Water Quality Committee Report was approved by the Administration.

The Compact Administration Officials discussed the lack of activity and communication between the two states the last few years, and it was agreed to recommend that the Water Quality Committee be charged with meeting at least once prior to the next annual meeting of the compact. Mr. Myers said he would relay this to the Committee Chairperson, and would follow up on an assignment from last year's meeting concerning a letter addressing CRP lands being returned to production. Mr. Stiles responded to an inquiry from Commissioner Barfield as to when the committee would meet, by suggesting a meeting be held in August and again just prior to next year's Compact Meeting.

Old Business

There was no old business to be discussed.

New Business

The location and date of the next annual meeting was discussed. The compact rotates between the two states on a two year cycle. Commissioner Barfield recommended the meeting be held in Marysville, Kansas on May 18, 2011.

Committee Membership and Special Assignments

Committee appointments were made as follows:

Budget Committee	Legal Committee
Andrea Kessler NE Chair	Burke Griggs KS Chair
Bob Lytle KS Member	Jean Angell NE Member
Water Quality Committee	**Engineering Committee**
Pat Rice NE Chair	Bob Lytle KS Chair
Annette Kovar NE Member	Katie Tietsort KS Member
Rich Reiman NE Member	Jason Kepler NE Member
Katie Howard KS Member	Keith Paulsen NE Member
Tom Stiles KS Member	
Dan Howell KS Member	

The assignment of drafting a letter concerning CRP lands given to the Water Quality Committee was noted. Additionally, the assignment to the Legal Committee of codifying the Compact Rules was also noted.

Adjournment

At 11:45 am Chairman Gary Mitchell declared the Thirty Seventh Annual Meeting of the Big Blue River Compact Administration adjourned.

Gary R. Mitchell, Compact Chairman

Brian P. Dunnigan, Nebraska Commissioner

for Paul Graves
David W. Barfield, Kansas Commissioner

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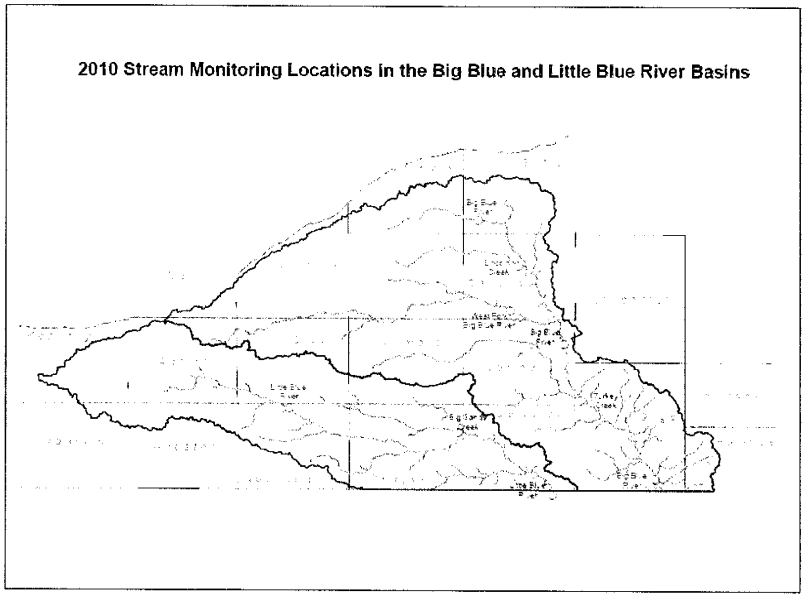


Potential assessment categories for waterbodies in the 2010 Integrated Report are:

Category 1 – Waterbodies where all designated uses are met.

Category 2 – Waterbodies where some of the designated uses are met but there is insufficient information to determine if all uses are being met.

Category 3 – Waterbodies where there is insufficient data to determine if any beneficial uses are being met.

Category 4 – Waterbody is impaired, but a TMDL is not needed. Sub-categories 4A, 4B, 4C and 4R outline the rationale for the waters not needing a TMDL:

> ***Category 4A*** – Waterbody assessment indicates the waterbody is impaired, but all of the required TMDLs have been completed.
>
> ***Category 4B*** – Waterbody is impaired, but "other pollution control requirements" are expected to address the water quality impairment(s) within a reasonable period of time. Other pollution control requirements include but are not limited to, National Pollutant Discharge Elimination System (NPDES) permits and best management practices.
>
> ***Category 4C*** – Waterbody is impaired but the impairment is not caused by a pollutant. This category also includes waters where natural causes/sources have been determined to be the cause of the impairment. In general, natural causes/sources shall refer to those pollutants that originate from landscape geology and climactic conditions. It should be noted, this general description does not exclude parameters and can be utilized when appropriate justification is provided.
>
> ***Category 4R*** – Waterbody data exceeds the impairment threshold, however a TMDL may not be needed. The category will only be used for nutrient assessments in new or renovated lakes and reservoirs. Newly filled reservoirs usually go through a period of trophic instability – a trophic upsurge followed by the trophic decline (Holdren, et. al. 2001). Erroneous or non representative water quality assessments are likely to occur during this period. To account for this, all new or renovated reservoirs will be placed in this category for a period not to exceed eight years following the fill or re-fill process. After the eighth year monitoring data will be assessed and the waterbody will be appropriately placed into category 1, 2, or 5.

Category 5 – Waterbodies where one or more beneficial uses are determined to be impaired by one or more pollutants and all of the TMDLs have not been developed. ***Category 5 waters constitute the Section 303(d) list subject to EPA approval/disapproval.***

The 2010 Integrated Report assessment status for waterbodies of the Big Blue and Little Blue River Basins are found in the table below.

Basin	Category 1	Category 2	Category 3	Category 4A	Category 4B	Category 4C	Category 4R	Category 5	Basin Total
Big Blue Streams	0	15	32	0	0	0	0	16	63
Big Blue Lakes	0	8	13	0	0	0	0	10	31
Little Blue Streams	0	5	24	0	0	0	0	9	38
Little Blue Lakes	0	4	3	0	0	0	0	6	13

Parameters indentified as impairing beneficial uses in these river basins include: algal blooms, atrazine, E. coli, elevated pH, fish consumption advisory, impaired aquatic community, low dissolved oxygen, nutrients, and selenium.

The EPA has approved seven TMDLs written by NDEQ for these river basins. Five of the approved TMDLs were for E. coli, one was for sediment and one was for phosphorus. NDEQ is now working on writing several TMDLs for the atrazine impairments in these basins and will submit them to EPA in 2010. *(see maps below)*

Report of the Kansas Commissioners
to the
BIG BLUE RIVER COMPACT ADMINISTRATION
at the
2010 Annual Meeting
Beatrice, Nebraska
May 19, 2010

1. **Administration Changes**
In July 2009, Governor Mark Parkinson appointed Joshua Svaty to serve as Kansas Secretary of Agriculture replacing former Secretary Adrian Polansky, is serving as State Executive Director of the USDA Farm Service Agency in Kansas. Secretary Svaty is a fifth-generation Kansas farmer and previously served three terms as a state representative in the Kansas Legislature. He is a strong advocate for prudent management of water resources.

2. **State Budget**
Kansas state government revenue shortfalls continued this year totaling nearly $1 billion, necessitating substantial budget reductions and enactment of a one-cent increase in the sales tax through 2013. The Kansas Department of Agriculture, Division of Water Resources is operating with about one-quarter of its positions vacant and over $1.5 million in reduced funding compared to the beginning of fiscal year 2009. DWR has had to discontinue or reduce some services, substantially limit travel, and defer replacement of old equipment.

3. **Legislation**
A number of water resources bills were introduced in the 2010 legislative session including:
   a) SB 316 (nonuse in closed areas) was enacted. It specifies that a groundwater right supplied by an aquifer closed to new appropriations by regulation or order of the chief engineer, and where means of diversion are available to put water to beneficial use within a reasonable time, shall be deemed to have due and sufficient cause for nonuse and shall not be deemed abandoned.
   b) SB 510 (conservation as a beneficial use of water) was not worked. It would have established "conservation use" as a new and distinct beneficial use of water. The owner of a vested or certified water right in good standing would have the option of changing his water right to conservation use – and the option of changing back to the original use or another use. Water rights in conservation use would be protected from abandonment.
   c) SB 558 (securing the interstate water litigation fund) was not worked. It would have prohibited transfers from or use of the interstate water litigation fund for other purposes.
   d) SB 574 (replenishing the interstate water litigation fund) was not passed. It would have established a schedule to transfer general funds into the interstate water litigation fund from 2012 through 2017 for use in monitoring and enforcing interstate water compacts, settlements, judgments and decrees.
   e) HB 2283 (rural water district annexation) was enacted. It adds requirements governing the process of rural water district annexation by a city.

f) HB 2428 (reservoir sustainability) was not passed. It would have authorized increased levels of state funding for stream bank stabilization projects, simplified procedures for securing state-controlled storage for water supplies in federal reservoirs, and facilitated renovation of multipurpose lakes for flood control, public water supply, and/or recreation.

g) HB 2493 (dam hazard classifications and inspections) was not worked. The initial language of the bill would have repealed a law requiring owners of high-hazard or significant-hazard dams to retain a professional engineer to inspect the dams on a three-year or five-year cycle, respectively. An alternate version of the bill would have exempted from regulation dams impounding less than 100 acre-feet at the spillway and any watershed district dam regardless of the volume impounded.

4. Regulations

a) Water resources rule changes in the past year included:

i. Water Rights Conservation Program: Amended to cease accepting applications after December 31, 2009. The agency is proposing a better long-term solution (see SB 510 under Legislation, above).

ii. Due and sufficient causes for nonuse of water rights: Amended to clarify the existing adequate moisture criteria, add new criteria for nonuse in closed areas, and add requirement for maintaining functional diversion works for most due and sufficient causes.

iii. Water flowmeters: Amended to require meter seals that prevent altering totalizer readings unless parallel water records are kept (simplifies requirements for public water suppliers).

iv. Fifteen acre-feet exemptions: Amended in GMD 2 to prevent granting exemptions in combination with other water rights if the combined total would exceed 15 acre-feet. Amended in GMD 5 to require offsets in designated stream basins and 1-mile spacing throughout the district.

b) Water resources rule changes in process include:

i. Impairment investigations: Proposed amendments will require groundwater complainants to demonstrate that their well and pump system are adequate; establish a formal process for GMDs to provide input and assistance for impairment investigations within their boundaries; more specifically detail the steps involved in impairment claims and investigations; and establish procedures for instances when impairment is found to result from regional lowering of the water table.

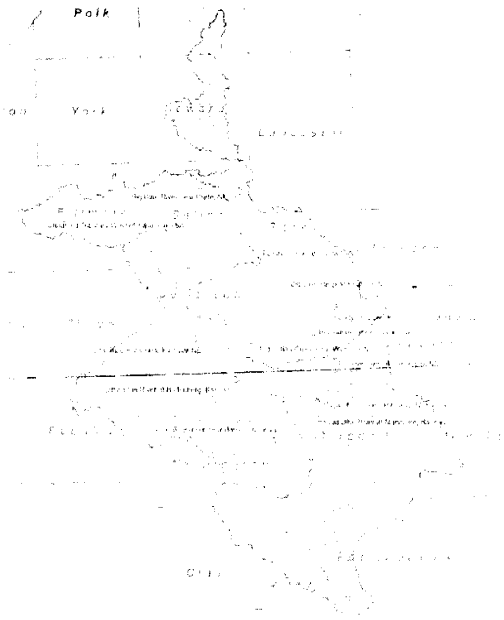
ii. Stream obstructions and channel changes: Draft amendments will update, clarify and streamline the criteria for approval of stream alterations.

5. Compact Litigation

a) Arkansas River Compact

i. Colorado Use Rules: After months of negotiations, last summer Kansas and Colorado reached agreement on Colorado's use rules that dictate required replacements for river depletions due to pumping high-capacity irrigation wells along the Arkansas River from near Pueblo, Colorado to the Colorado-Kansas

Big Blue River/Tuttle Creek Lake Targeted Watersheds Grant Monitoring Locations



Local, State, Federal and Private Sector Gathering Atrazine Data

The Lower Big Blue Natural Resources District (LBBNRD), the United States Department of Agriculture – Natural Resources Conservation Service, the Nebraska Department of Environmental Quality and Department of Agriculture are working cooperatively with Syngenta to address concerns over atrazine in surface waters within the basin. As part of the re-registration of atrazine, Syngenta has been collecting both surface and groundwater data from several states including 4 sites in Nebraska. The data will be used by EPA to establish a level of concern and possible water quality criteria. The focus of Syngenta's monitoring is surface water while the NRD will monitor some of the groundwater wells in the area.

For more information contact:
Patrick O'Brien
NRD/NDEQ Liaison
(402) 471-2219
po'brien@nrdnet.org

Summary of Section 303(d) and Total Mazimum Daily Load (TMDL) Activities in the Big Blue and Little Blue River Basins

The Nebraska Department of Environmental Quality (NDEQ) submitted the 2010 Integrated Report to EPA Region 7 on March 30, 2010. The Integrated Report is the combination of the Clean Water Act (CWA) Section 303(d) list of impaired waterbodies and the CWA Section 305(b) Water Quality Report. NDEQ is currently awaiting EPA approval of the 2010 Integrated Report.

Big Blue River/Tuttle Creek Lake Interstate Targeted Watershed Grant Project

The Big Blue River/Tuttle Creek Lake Interstate Targeted Watersheds Grant (TWG) Project is a collaborative effort between Nebraska and Kansas to address multi-jurisdictional water quality problems involving excessive runoff of sediment, nutrients, herbicides, and bacteria. Tuttle Creek Lake is a major source of water (up to 50 percent of the flow) for the Kansas River, which supplies public drinking water for the urban populations of Kansas City, Topeka, and Lawrence. Tuttle Creek Lake is listed on the Kansas Section 303(d) list as impaired for sedimentation, eutrophication, atrazine, and alachlor. In addition to Tuttle Creek Lake water quality issues there are many other reservoirs and stream segments listed as impaired within the Big Blue and Little Blue River Basins in Nebraska and Kansas. The TWG project builds upon existing watershed partnerships by integrating funding sources from federal, state, and local programs to implement conservation practices as well as existing local watershed and total maximum daily load plans. The EPA is providing $810,000 in grant funds and the LBBNRD and LBNRD are providing match funds of $108,000 and $162,000 respectively for a total project cost of $1,080,000.

One of the challenges of this project has been lower than anticipated landowner participation and slow implementation of desired conservation practices. To address this issue the targeted sub-watershed area and the number of conservation practices eligible for cost-share assistance were expanded in an effort to assist with securing landowner agreements. Currently, all of the project money allocated for conservation practices in Nebraska and Kansas has been obligated prior to the signup deadline of March 31, 2010. In Nebraska this includes 51 individual contracts for a total of $350,664. In Kansas this includes 21 individual contracts for a total of $142,267.

A significant amount of historical water quality data has already been collected throughout the project area. This information will be used to document pre-project baseline water quality conditions and pollutant loadings. The water quality monitoring component for this project is currently being conducted at thirteen locations on a weekly basis and at four locations during significant runoff events. This monitoring began in April and will continue through September 2010. The purpose of this monitoring is to document and characterize water quality conditions in the Tuttle Creek Lake watershed during and after implementation of BMPs. Specifically, the monitoring data will be assessed to determine if the implementation of no-till farming systems, riparian buffer strips, and other BMPs have improved water quality, reduced the number of water quality criteria violations, and reduced sediment, nutrient, and herbicide loadings. The water quality modeling component of the project will be conducted late 2010 into 2011 with the project report to follow. The TWG project is scheduled to be completed by September 30, 2011. *(see map below)*

For more information contact:
Will Myers
NDEQ
402-471-4227
will.myers@nebraska.gov

state line. This agreement provides for a continuing process to set the level of replacement of these wells annually.

ii. Litigation concluded: In August 2009, after reaching the Use Rules agreement, Kansas and Colorado made a joint filing with the U.S. Supreme Court to officially conclude Ark River litigation against Colorado. This litigation spanned more than two decades, starting when Kansas filed suit against Colorado in 1985 to enforce the terms of the compact. The case resulted in four opinions of the U.S. Supreme Court. Among other things, the Court approved a final decree which specifies how future compliance by Colorado will be determined and required Colorado to pay $34 million in damages to Kansas for past overuse of water, plus $1.1 million in legal costs.

iii. Updated operating plan: At a special meeting this February, the Arkansas River Compact Administration adopted updates to the 1980 operating plan for John Martin Reservoir operations and accounting.

b) Republican River Compact

i. Arbitration over Nebraska's noncompliance in 2005-2006: The arbitrator issued his final decision on June 30, 2009. The states each accepted and rejected parts of his decision. This concluded the nonbinding arbitration required under the 2003 final settlement stipulation.

ii. Arbitration over Colorado's proposed compliance pipeline and augmentation plan: Arbitration is ongoing regarding Colorado's proposal to pump groundwater and deliver it to the North Fork Republican River for credit against its excessive augmentation plan depletions.

iii. Arbitration over Nebraska's crediting issue: Arbitration is ongoing regarding Nebraska's concept involving water credits for damage payments.

iv. Kansas petitioned U.S. Supreme Court to enforce settlement terms: On May 3, 2010, Kansas filed suit in the U.S. Supreme Court to enforce the final settlement stipulation with regard to Nebraska's noncompliance in 2005-2006.

6. News from the Big Blue River Compact Area in Kansas

a) Disaster declarations: During the past year there were five federal disaster declarations in Kansas related to severe weather, three of which included all or part of the Big Blue River basin in Kansas:

i. June 25, 2009: Severe storms, flooding, straight-line winds, and tornadoes

ii. December 23, 2009: Severe winter storm

iii. March 9, 2010: Severe winter storms and snowstorm

b) Watershed restoration project: An ongoing project funded through the Kansas Watershed Restoration and Protection Strategy (WRAPS) program is designed to improve water quality in the Lower Little Blue River and Lower Big Blue River through implementation of best management practices including livestock waste management systems, water retention and sediment control structures, and riparian buffers. These stream reaches are currently impaired by fecal coliform bacteria.

c) Washington County RWD well field project: For several years the state has been considering a project to upgrade the low-head dam in the Big Blue River at Marysville to improve the intake works for Washington County Rural Water District No. 1. However, a less expensive alternative has been found. The 2010

appropriations bill approved by the Legislature includes a proviso for enhancing the RWD's well field instead of upgrading the dam.

7. **Assignments**
If it pleases the Chairman, Kansas' committee assignments remain the same as in 2009 except Katherine (Katie) Howard replaces Lindsey Douglas on the Water Quality Committee. Ms. Douglas no longer works for the Kansas Department of Agriculture; she currently works for the Kansas Department of Transportation. Ms. Howard is KDA's Environmental-Lab Issues Director.

8. **2011 Annual Meeting**
Kansas looks forward to hosting the 2011 and 2012 annual meetings of the Big Blue River Compact Administration. We propose to hold the 2011 annual meeting on Wednesday, May 18, 2011 in Marysville, Kansas. We will provide advance written notice of the meeting including the specific location, start time, and proposed agenda.

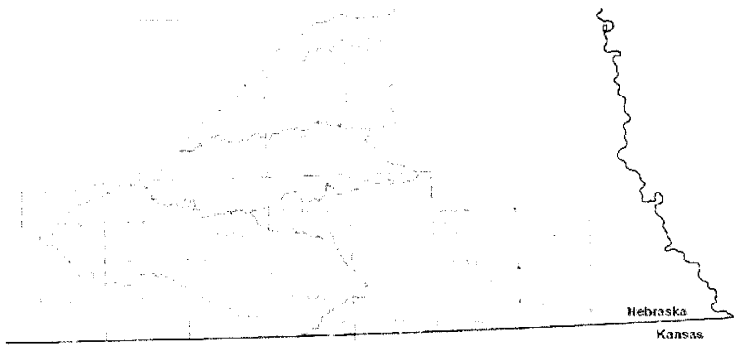
KANSAS – NEBRASKA BIG BLUE RIVER COMPACT ANNUAL MEETING

Water Quality Committee
May 19, 2010

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, implement, and conduct 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.

KANSAS - NEBRASKA
BIG BLUE RIVER
COMPACT REPORT



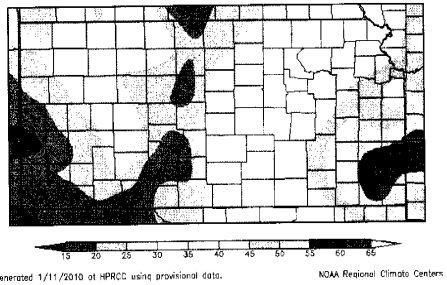
Water Quality Report
May 19, 2010

Kansas- Nebraska Big Blue River Compact Meeting 2010
Report by Kansas Department of Agriculture- Division of Water Resources
Topeka Field Office
May 2010

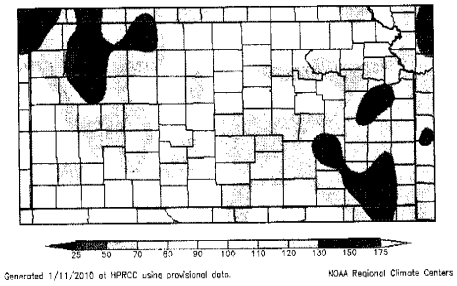
Climatic Conditions- Precipitation & Temperatures

The High Plains Regional Climate Center reported 25 to 40 inches of precipitation in calendar year 2009 for the Big and Little Blue River basin area, including the Mill Creek subbasin, against an average annual of 30 to 35 inches in this region. Average or above average annual precipitation was received in much of the basin with the far northwest portion of the basin receiving less than average precipitation. This pattern has continued from last year.

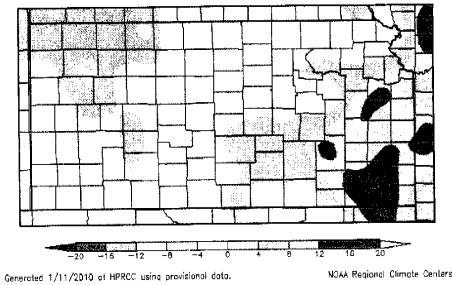
Precipitation (in)
1/1/2009 – 12/31/2009



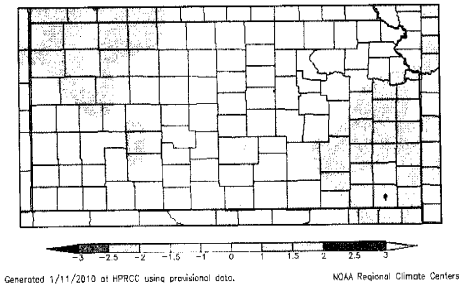
Percent of Normal Precipitation (%)
1/1/2009 – 12/31/2009



Departure from Normal Precipitation (in)
1/1/2009 – 12/31/2009



12-Month SPI
1/1/2009 – 12/31/2009



Temperatures for the calendar year 2009 ranged from nearly 8 degrees above average in the lower Big Blue to nearly 4 degrees below average in the upper Big Blue.

The Standardized Precipitation Index (SPI's) reflects long-term precipitation patterns and compares the precipitation for 12 consecutive months with the same 12 consecutive months during all previous years of available data. Because SPI's with longer periods of data reflected tend toward zero if no specific trend is taking place and because the SPI tends towards zero throughout the basin, it still appears that no trend is showing at this time.

Administration Activities

Minimum Desirable Streamflow (MDS) on the Big Blue River at the Marysville U.S.G.S. gage ranges by month from 65 cubic feet per second (CFS) (fall) to 150 cfs (spring). MDS on the Little Blue River at the Barnes U.S.G.S. gage ranges by month from 60 cfs (fall) to 150 cfs (spring). No MDS administration occurred in this basin, or any other Eastern Kansas basin, in calendar year 2009.

Minimum Desirable Streamflows (cfs)

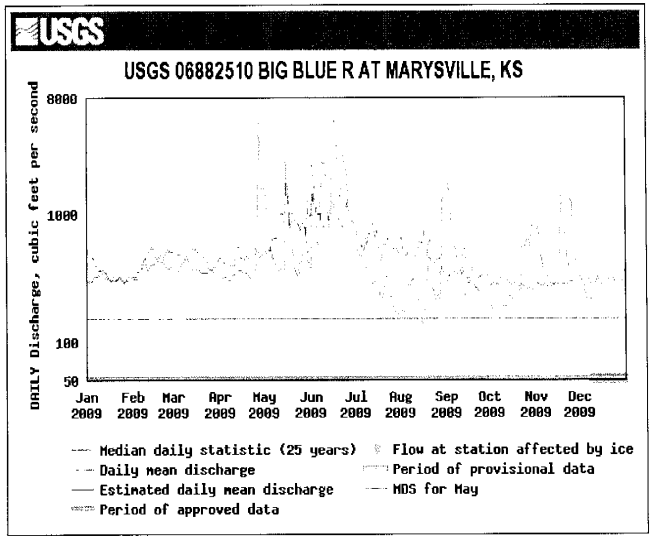
Watercourse	Month											
	J	F	M	A(a)	M(a)	J(a)	J	A	S	O	N	D
Big Blue												
Marysville	100	100	125	150	150(d)	150(d)	80	90	65	80	80	80
Little Blue												
Barnes	100	100	125	150	150(d)	150(d)	75	80	60	80	80	80

(d) Subject to the stateline flows contained in the Blue River Compact.

Streamflow

Streamflow in the basin remained above median daily statistic for both gages for nearly the entire calendar year. Statistics reflect 25 years of data at Marysville and 51 years of data at Barnes. There were no days that streamflow fell below the MDS value at the gage at Marysville, Kansas, on the Big Blue River. There was one day of streamflows below the MDS value in August (August 25) at the gage near Barnes, Kansas, on the Little Blue River, however precipitation occurred that made the event one day in duration.

USGS 06882510 BIG BLUE R AT MARYSVILLE, KS



Big Blue River Regulatory Area Wells

Registration Number	Location T-R-S	Completion Date	Depth (FT)	Registration Pumping Capacity (GPM)	Filing Date
G-036485	4N-5E-11BC	3/28/1972	82	750	4/24/1972
G-038314	4N-5E-2DD	1/16/1973	188	1,300	1/29/1973
G-047820	4N-5E-12BB	11/1/1975	117	1,200	12/4/1975
G-050086	5N-5E-33AD	5/26/1976	123	800	6/9/1976
G-054047	4N-5E-24BB	3/1/1976	84	800	1/6/1977
G-054260	4N-5E-14AA	6/1/1974	70	800	1/14/1977
G-054261	4N-5E-14AB	5/2/1970	70	800	1/14/1977
G-056152	4N-5E-4BB	4/14/1977	91	1,000	5/11/1977
G-059128	5N-5E-29AA	4/25/1977	60	400	1/4/1978
G-059727	5N-5E-33CB	4/19/1978	91	1,200	4/20/1978
G-081769	4N-5E-13CD	4/22/1994	65	250	6/24/1994
G-100788	5N-5E-29AB	3/19/1999	65	500	6/2/1999
G-110669	4N-5E-13CC	7/12/1995	64	375	6/29/2001
G-110847	4N-5E-3DA	5/4/1979	82	800	7/2/2001
G-110849	5N-5E-29DD	4/30/1983	102	800	7/2/2001
G-151969	5N-5E-33BB	12/11/2008	112	800	1/20/2009
G-155061*	4N-5E-10BB	12/4/2009	98	800	1/27/2010

Little Blue River Regulatory Area Wells

Registration Number	Location T-R-S	Completion Date	Depth (FT)	Registration Pumping Capacity (GPM)	Filing Date
G-058158	2N-2E-16AD	8/15/1977	29	650	9/6/1977
G-139240	2N-2E-9DD	0/0/1956	50	400	3/23/2006

* G-155061 is a new registered well

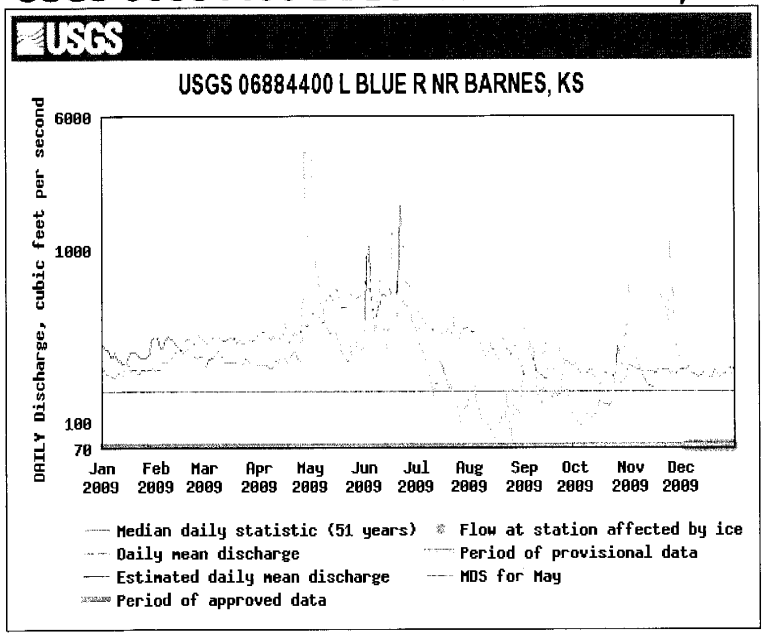
EXHIBIT F

STATIC WATER LEVELS 2009

LEGAL	SECTION	SITE	TYPE	Spring 2009	Fall 09
4N-5E	2	AAAA	OW	93.46	95.29
4N-5E	2	DDAA	IW	17.99	19.66
4N-5E	3	CDBC	IW	-	
4N-5E	3	DAAA	IW	18.95	19.95
4N-5E	4	AAAA	OW	14.44	15.84
4N-5E	4	BBBC	IW	20.16	22.49
4N-5E	7	BBAA	IW	88.11	87.19
4N-5E	9	CBCC	IW	72.35	74.97
4N-5E	10	DDAA	IW	26.46	29.37
4N-5E	11	DACA	IW	16.86	17.25
4N-5E	12	CCCD	OW	14.39	14.66
4N-5E	14	ABBB	IW	13.66	14.88
4N-5E	14	DDDD	OW	-	
4N-5E	22	BCCC	IW	70.39	73.5
4N-5E	25	AACD	IW	19.08	20.22
4N-6E	6	CBBB	IW	93.91	95.5
4N-6E	8	AABB	IW	95.33	96.94
4N-6E	18	DDCC	OW	8.81	8.72
5N-4E	12	ABBA	IW	18.82	19.59
5N-4E	13	BADD	IW	15.79	16.57
5N-4E	15	DBBB	IW	17.84	19.15
5N-4E	22	DCCC	IW	49.44	61.1
5N-4E	23	BABB	IW	15.75	16.76
5N-4E	24	AACD	IW	18.41	18.86
5N-4E	25	DADA	IW	49.56	50.67
5N-5E	7	CADD	IW	61.42	67.4
5N-5E	16	CBBA	IW	75.02	80.73
5N-5E	17	ABBB	IW	44.41	49.3
5N-5E	17	CDAA	OW	70.63	76.11
5N-5E	20	BCCD	IW	23.39	19.9
5N-5E	21	DDBB	IW	53.44	57.29
5N-5E	29	CBBB	IW	13.68	15.99
5N-5E	33	AADD	IW	20.33	20.29
5N-5E	35	ABBB	IW	104.42	107.64

EXHIBIT E

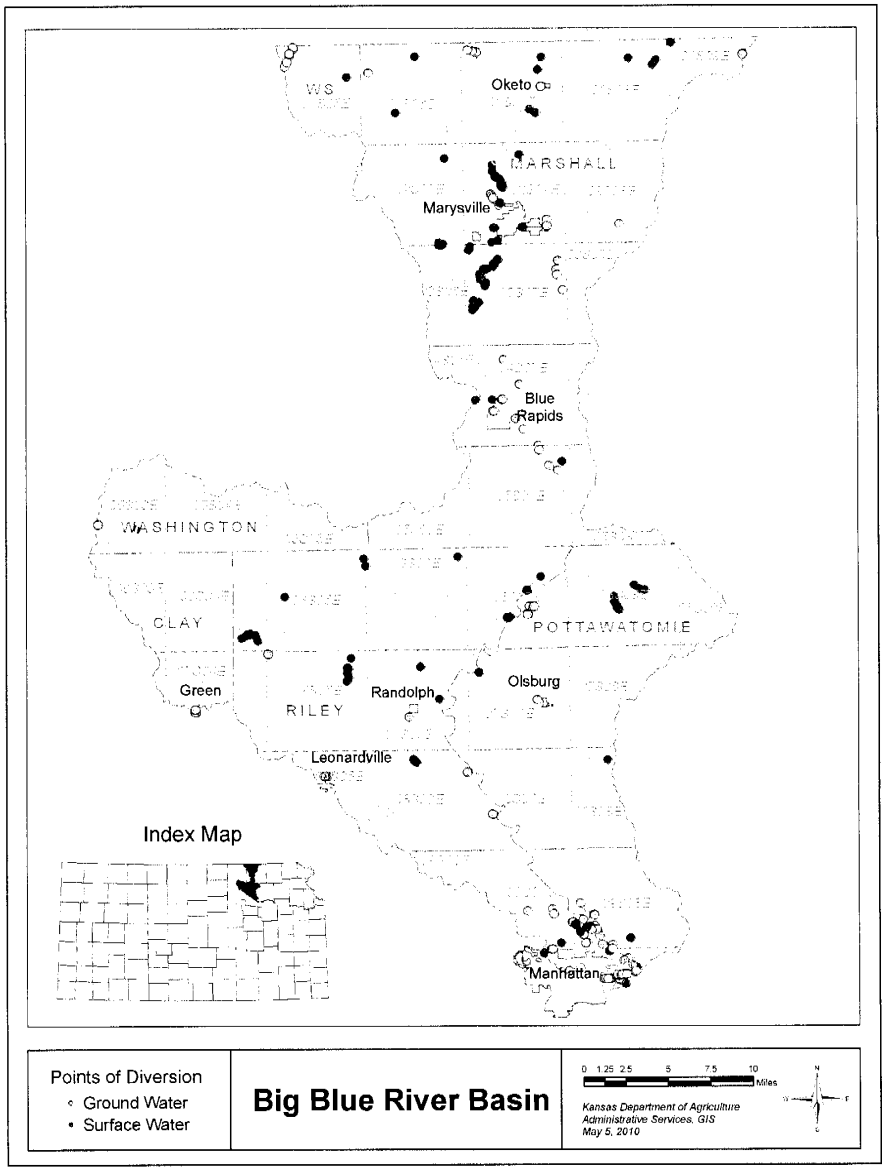
USGS 06884400 L BLUE R NR BARNES, KS



New Well Development

In calendar year 200 in the Big Blue River basin, the Kansas Department of Agriculture Division of Water Resources approved 5 new groundwater permits, covering one new irrigation project and 4 granting additional rights from existing municipal wells that benefit from assurance releases from the Kansas River Water Assurance District below Tuttle Creek Lake, and 2 new surface water permits, covering evaporation from a watershed reservoir and a recreational reservoir. In the Little Blue River basin, the Division approved 2 groundwater permits, which covered one new well for a local school district and one existing well for additional rate and quantity on an existing irrigation project. 4 permits were granted in the Mill Creek basin; 1 on an existing municipal supply well, 1 for a new irrigation project, and 2 for stockwatering operations. Additionally, three Basin Term Permits, one each for Big Blue, Little Blue, and Mill Creek, were granted for the Trans-Canada Keystone Pipeline construction.

3


Oketo
MARSHALL
Marysville
Blue Rapids
WASHINGTON
CLAY
POTTAWATOMIE
Green
RILEY
Randolph
Olsburg
Leonardville
Manhattan
Index Map
Points of Diversion
Ground Water
Surface Water
Big Blue River Basin
0 1.25 2.5 5 7.5 10 Miles
Kansas Department of Agriculture
Administrative Services, GIS
May 5, 2010

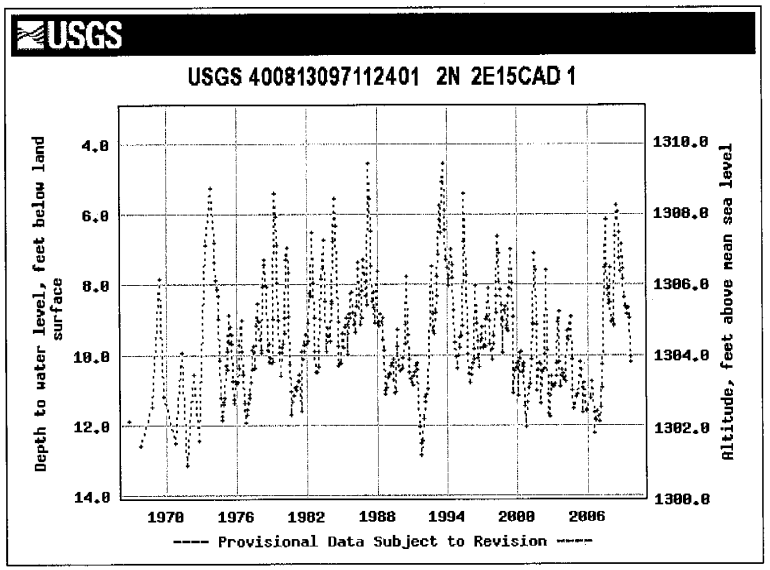

USGS
USGS 400813097112401 2N 2E15CAD 1
Depth to water level, feet below land surface
4.0
6.0
8.0
10.0
12.0
14.0
Altitude, feet above mean sea level
1310.0
1308.0
1306.0
1304.0
1302.0
1300.0
1970
1976
1982
1988
1994
2000
2006
---- Provisional Data Subject to Revision ----

EXHIBIT D

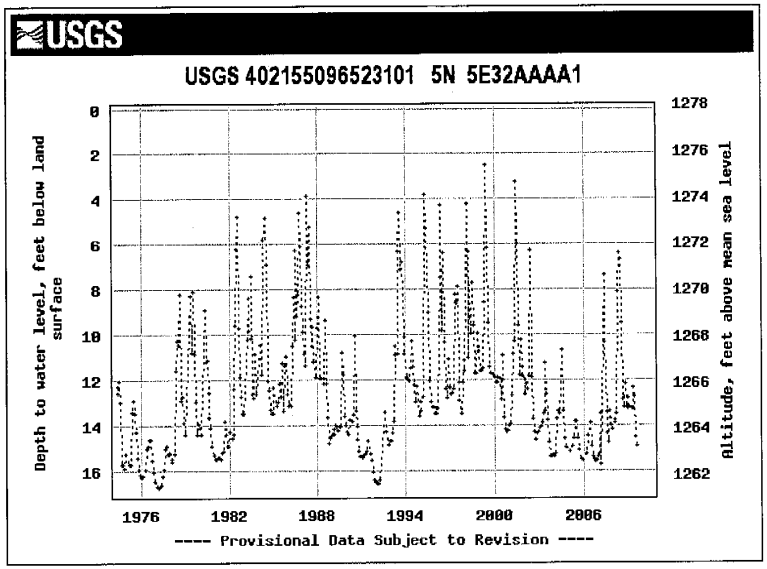
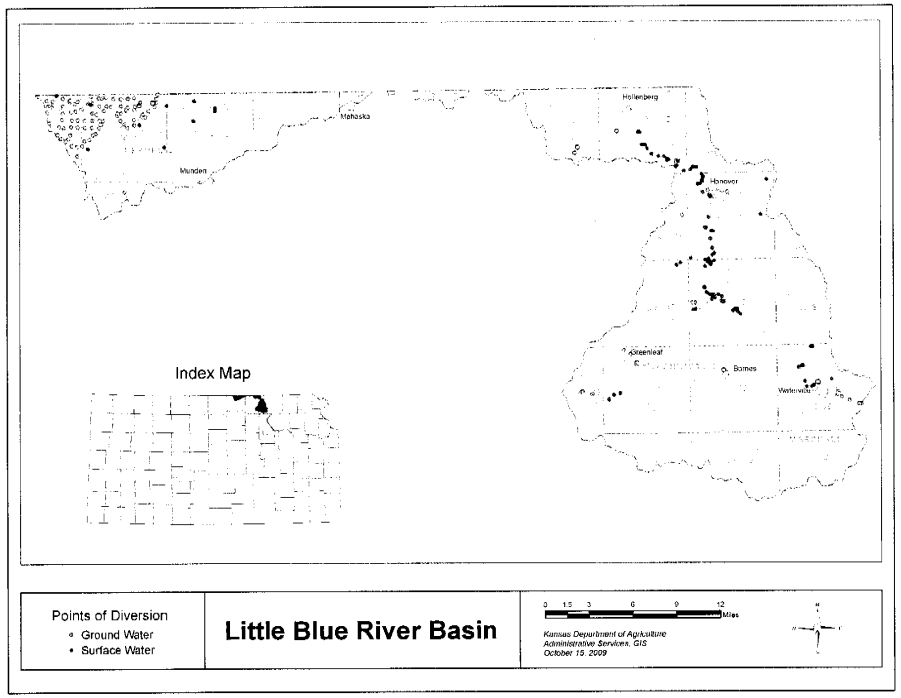
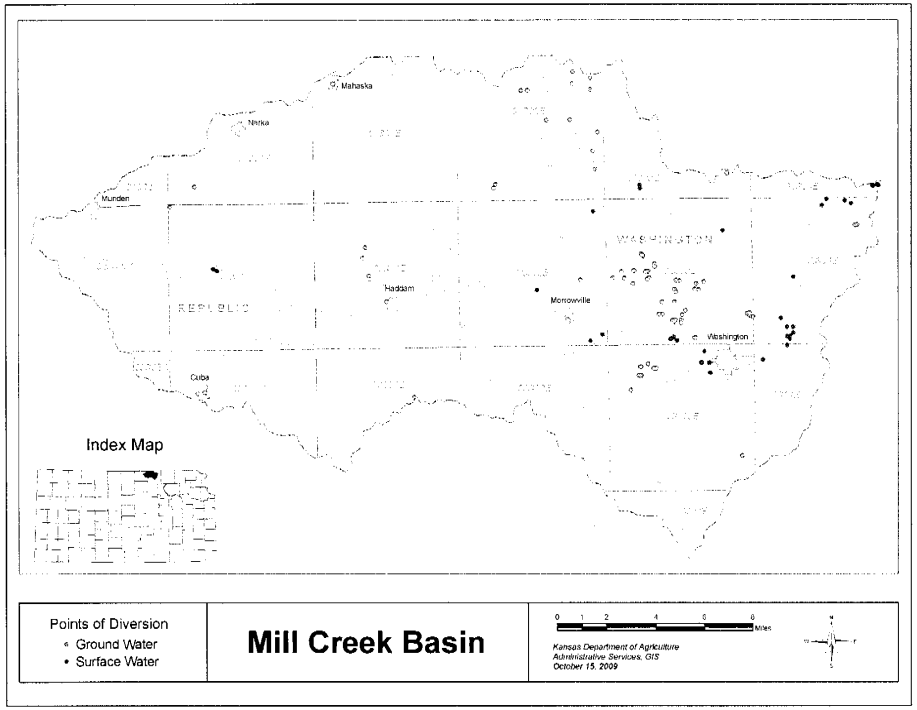


EXHIBIT C

http://nwis.waterdata.usgs.gov/ne/nwis/gwlevels?site_no=402155096523101&begin_date=... 4/29/2010



5



Kansas Department of Agriculture's Topeka Field Office Moved to Forbes Field

Prior to December 14, 2009, the Topeka Field Office (TFO) was located in downtown Topeka in the same building that houses the Division of Water Resources headquarters. Because of this, the hard files of all the water rights stored in the TFO for the eastern 1/3 of the state of Kansas had their "back-up" microfilm being stored in the same building. For obvious reasons, this was a concern. In 2009, the Kansas Department of Agriculture's Laboratory, housed in Building 282 at Forbes Field in Topeka, was being renovated. Due to that renovation, a unique opportunity arose whereby the building floor plan was able to be revised to accommodate the Topeka Field Office, including an area of garage that could hold all the field equipment and supplies. The TFO moved out to the KDA Laboratory building in mid-December. Incidental benefits of the move include easy interstate access in all directions and the ability to have field vehicles right at the building, which facilitates field work.

06884025 Little Blue River at Hollenberg, KS—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	186	676	307	e246	e286	e153	164	1,110	241	298	105	315
2	183	607	303	e253	e282	e160	168	633	520	261	103	254
3	183	558	297	e265	e251	211	169	487	835	242	104	210
4	180	516	286	e248	e234	215	169	401	469	239	105	216
5	179	488	270	e238	e253	215	163	359	312	220	103	190
6	178	458	285	e247	e278	208	166	326	258	197	101	170
7	182	426	284	e258	e262	197	167	297	276	182	103	134
8	178	409	288	e264	e237	204	170	276	323	169	99	119
9	180	401	280	e274	e270	198	170	255	549	160	94	105
10	182	398	245	e258	e265	191	188	241	392	150	96	101
11	180	415	262	e254	e250	175	181	239	296	144	91	100
12	184	423	285	e267	e250	178	176	235	251	149	82	317
13	255	586	287	e238	e236	181	191	240	226	149	72	161
14	342	532	274	e266	e250	180	197	229	215	179	62	121
15	1,860	462	e242	e238	225	179	190	229	248	165	69	116
16	3,100	424	e253	e242	220	180	184	222	738	163	72	122
17	2,180	400	e265	e259	224	182	181	211	1,190	147	77	124
18	1,250	382	e259	e274	218	181	188	204	929	143	83	129
19	851	371	e275	e277	208	179	203	199	461	131	68	125
20	605	363	e271	e273	209	178	200	193	438	142	81	126
21	494	349	e262	e269	200	180	190	189	909	132	70	124
22	4,820	340	e251	e264	195	180	185	188	1,840	125	63	173
23	12,400	333	e267	e260	196	185	186	189	788	119	58	134
24	8,910	328	e273	e231	201	181	186	195	553	112	59	110
25	5,230	322	e279	e217	202	173	208	252	557	108	60	103
26	3,590	319	e279	e229	199	170	1,260	249	562	104	69	101
27	2,360	314	e291	e244	191	164	1,040	218	338	108	70	98
28	1,580	310	e290	e259	e178	165	396	225	331	119	68	89
29	1,170	311	e276	e262	---	168	334	202	382	107	62	86
30	937	311	e280	e271	---	169	1,030	190	324	103	279	85
31	779	---	e258	e277	---	165	---	255	---	101	350	---
Total	54,888	12,532	8,524	7,922	6,470	5,645	8,600	8,938	15,751	4,868	2,978	4,358
Mean	1,771	418	275	256	231	182	287	288	525	157	96.1	145
Max	12,400	676	307	277	286	215	1,260	1,110	1,840	298	350	317
Min	178	310	242	217	178	153	163	188	215	101	58	85
Ac-ft	108,900	24,860	16,910	15,710	12,830	11,200	17,060	17,730	31,240	9,660	5,910	8,640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	344	232	177	178	317	701	503	799	930	925	512	368
Max	2,163	1,113	424	576	1,059	3,816	2,379	2,302	4,373	9,014	2,572	1,320
(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)

EXHIBIT B

—2—

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06884025 Little Blue River at Hollenberg, KS—Continued

SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1975 - 2009	
Annual total	301,921		141,474			
Annual mean	825		388		500	
Highest annual mean					1,891	1993
Lowest annual mean					173	2006
Highest daily mean	13,200	Jul 18	12,400	Oct 23	39,300	Jul 26, 1992
Lowest daily mean	178	Oct 6	58	Aug 23	26	Oct 1, 1991
Annual seven-day minimum	180	Oct 4	64	Aug 23	27	Sep 27, 1991
Maximum peak flow			12,900	Oct 23	47,800	Jul 26, 1992
Maximum peak stage			13.01	Oct 23	21.21	Jul 26, 1992
Annual runoff (ac-ft)	598,900		280,600		362,300	
10 percent exceeds	1,620		539		840	
50 percent exceeds	367		229		200	
90 percent exceeds	226		104		102	

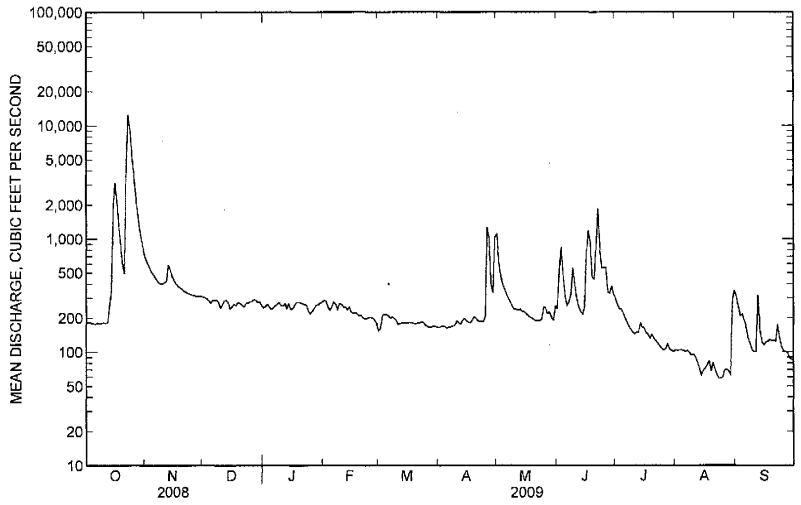
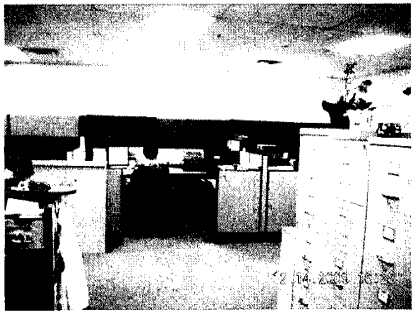


EXHIBIT B

The new Topeka Field Office contact information is:
Kansas Department of Agriculture
Division of Water Resource, Topeka Field Office
PO Box 19323
Building 282, Forbes Field
Topeka, Kansas 66619-0323
Telephone: (785) 862-6300
Fax: (785) 862-9110
www.ksda.gov/dwr



Metering

On January 4, 2010, the Chief Engineer Division of Water Resources issued the Order Regarding the Installation of Water Flowmeters in the Little Blue River basin and the Order Regarding the Installation of Water Flowmeters in the Mill Creek basin requiring the installation of totalizing water flowmeters on all non-domestic, non-temporary diversions of water by December 31, 2010. The Little Blue River Order was sent to the owners of 189 water right files and the Mill Creek Order was sent to the owners of 76 water right files. In consideration of continued resource constraints and budgetary uncertainties, the Big Blue River Order was not yet initiated (approximately 142 water right files). Field Office staff conducted a public meeting in each basin to inform owners that attended why the Order was initiated, to whom it was issued, what the Order means and how to gain compliance with the Order. The meeting also included a refresher about water rights under the Kansas Water Appropriation Act.

While, as previously described, the KDA-DWR requires that the totalizing water flowmeter installed be on the List of Certified Water Flowmeters maintained by the Division, be installed in a manufacturer approved measuring chamber with flow-straightening vanes, have a specific amount of upstream and downstream spacing, and be protected by a seal, as well as meeting all manufacturer-required installation specifications, the Division's main goal in issuing meter orders is to allow the reporting of accurate water use data annually and for potential administration to be carried out. We identify accurate as operating within 6% of the Divisions certified test meters. If a previously-installed water flowmeter tests to within the 6% tolerance and is accurately measuring water diverted, but does not have the required chamber or flow-straightening vanes, or does not meet the required 5 up and 2 downstream pipe diameters of unobstructed spacing, we will grant meter exception identifying that as long as the installed meter works accurately and no piping changes occur, we will not take enforcement action on the installation, however if they replace the meter or make piping changes, they must meet all current requirements at the installation.

We have been inspecting the installations by county and have nearly all previously or newly installed meters inspected in Republic and Marshall Counties and nearly all groundwater installations in Washington County. We plan to test for exceptions during June 2010 and check all new installations then, as they will have to be 100% per requirements.

BRO- Blatant Recurring Overpump Program
See "Consequences of Overpumping" Fact Sheet.

Again in 2009, the BRO program focused on state-wide overpumping. In this Basin and surrounding area, thresholds were Top Tier- overpumps of 100 AF or more, Second Tier- overpump >10 AF but less than 100 AF, and Tier Three- overpumpers from BRO program previous years. We issued no civil penalties or any Notices of Non-Compliance in these basins.

Tuttle Creek Dam
On September 11, 2009, the US Army Corps of Engineers announced the completion of the Tuttle Creek Dam Safety Assurance Project. The foundation stabilization work at Tuttle Creek Dam was completed first. This modification was part of the $175 million Tuttle Creek Dam Safety Assurance Project, which was undertaken to improve the safety of the dam, which is 157-foot-tall and 7,500-foot-long rolled earth and rockfill embankment structure. The concern was that without the improvements, a 5.7 to 6.6 magnitude earthquake could inflict significant damage to the dam because the dam is near the Humboldt Fault, which has produced an earthquake with a magnitude of 5.1. The foundation work was performed by contractor Treviicos South Inc. of Boston. They built 351 underground concrete walls beneath about 1 mile of the downstream slope of the dam. Each wall is 4 feet wide, 45 feet long, and 60 feet deep. The walls will support the dam, preventing failure during an earthquake. The final wall was completed on August 31, 2009.

A temporary Dam Failure Warning System to warn downstream public of potential danger was no longer necessary once work was complete and was removed in November 2009.

06882000 Big Blue River at Barneston, Nebr.—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	254	1,540	612	e386	359	e267	272	1,050	312	487	151	1,870
2	243	1,270	596	e386	e352	e225	267	651	1,220	424	149	1,730
3	239	1,100	597	e397	e361	e282	264	484	1,400	417	167	1,330
4	234	977	e557	e392	e361	e305	266	408	674	443	191	976
5	235	889	e526	e392	379	350	278	357	450	404	247	729
6	236	835	e452	e392	416	350	257	335	381	383	256	612
7	244	791	e361	e392	428	335	253	313	1,310	362	252	502
8	237	763	e405	e400	378	358	259	299	2,130	325	316	443
9	237	717	e397	e395	363	351	265	283	2,670	302	268	392
10	253	707	e429	e386	375	352	290	274	2,130	269	281	340
11	374	730	452	e383	406	331	278	270	1,360	241	238	306
12	347	761	382	e370	418	307	282	275	893	227	191	436
13	376	776	398	e360	456	309	313	282	698	217	160	554
14	369	883	e377	e330	438	301	315	265	647	213	135	359
15	1,890	953	e363	e326	397	299	308	363	1,630	219	118	288
16	2,920	1,000	e355	e317	365	312	303	430	5,830	221	141	271
17	1,920	953	e340	e326	359	316	301	337	3,600	198	177	302
18	1,570	870	e348	e344	364	304	307	309	3,230	182	192	332
19	1,240	823	e350	381	361	295	306	294	1,750	174	236	282
20	946	777	e346	382	353	292	294	261	1,250	180	833	253
21	779	728	e330	403	350	294	286	244	1,170	245	368	257
22	829	689	e325	385	328	296	293	239	2,600	278	188	247
23	6,520	690	e331	359	318	300	297	237	2,840	217	142	238
24	8,760	674	e353	e333	315	315	297	239	2,030	190	119	222
25	8,500	659	e359	e304	316	334	308	259	1,520	182	108	212
26	7,550	643	e359	e303	330	306	943	428	978	159	114	209
27	7,000	628	e357	e303	317	291	4,700	701	882	151	111	209
28	5,440	620	e370	e314	308	307	2,020	691	825	150	140	202
29	3,630	628	e375	e340	---	308	1,110	455	740	148	1,230	188
30	2,650	625	e386	362	---	297	832	362	583	147	1,880	186
31	1,900	---	e381	361	---	285	---	314	---	131	1,870	---
Total	67,922	24,699	12,569	11,204	10,271	9,574	16,764	11,709	47,733	7,886	10,969	14,477
Mean	2,191	823	405	361	367	309	559	378	1,591	254	354	483
Max	8,760	1,540	612	403	456	358	4,700	1,050	5,830	487	1,880	1,870
Min	234	620	325	303	308	225	253	237	312	131	108	186
Ac-ft	134,700	48,990	24,930	22,220	20,370	18,990	33,250	23,220	94,680	15,640	21,760	28,720

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	562	308	239	285	616	1,287	846	1,321	2,026	1,287	690	689
Max	7,451	1,526	851	1,596	2,876	10,560	5,280	5,207	10,460	12,270	5,227	3,420
(WY)	(1974)	(1999)	(1998)	(1973)	(1984)	(1979)	(1984)	(1995)	(1951)	(1993)	(1954)	(1989)
Min	61.5	77.5	87.4	67.6	116	137	132	96.0	69.3	30.7	21.1	50.6
(WY)	(1941)	(1937)	(1977)	(1937)	(1940)	(1968)	(1934)	(1934)	(1934)	(1934)	(1934)	(1939)

EXHIBIT A

06882000 Big Blue River at Barneston, Nebr.—Continued

SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1933 - 2009	
Annual total	563,907		245,777			
Annual mean	1,541		673		847	
Highest annual mean					2,781	1993
Lowest annual mean					115	1934
Highest daily mean	15,900	Jul 18	8,760	Oct 24	50,000	Jun 9, 1941
Lowest daily mean	234	Jan 1	108	Aug 25	1.0	Nov 30, 1945
Annual seven-day minimum	237	Oct 3	132	Aug 22	15	Aug 3, 1934
Maximum peak flow			9,660	Jun 16	57,700	Jun 9, 1941
Maximum peak stage			14.04	Jun 16	[a]34.30	Jun 9, 1941
Annual runoff (ac-ft)	1,119,000		487,500		613,500	
10 percent exceeds	3,910		1,290		1,740	
50 percent exceeds	621		353		278	
90 percent exceeds	282		213		106	

[a] At site and datum then in use.

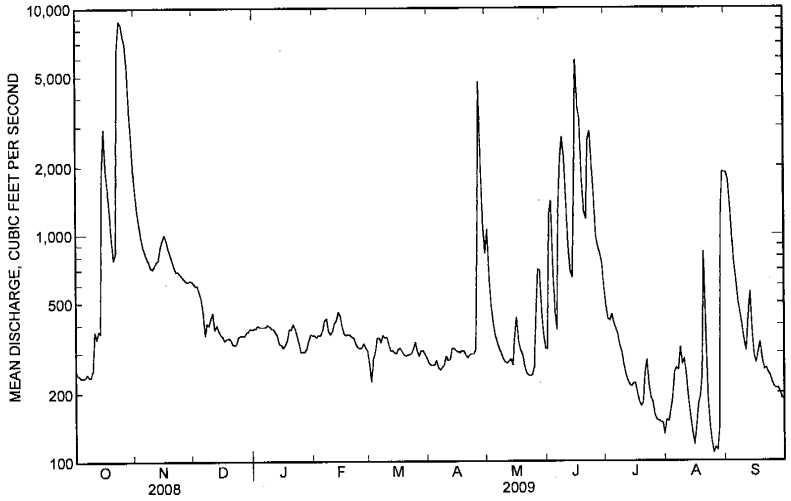


EXHIBIT A

The final work on the dam involved structural modifications of the 18 spillway gates east of the dam. The gates were painted, and work was completed in November 2009. Construction equipment will remain at the dam for another year to restore the downstream side of the dam and place riprap on the upstream and downstream slopes. The Corps reported the Project as being about $75 million under budget and completed two years ahead of schedule.

Trans Canada Keystone Pipeline

The 2,148-mile Keystone Pipeline is planned to transport crude oil from Hardisty, Alberta to U.S. Midwest markets at Wood River and Patoka, Illinois and to Cushing, Oklahoma. The U.S. portion of the project includes construction of approximately 1,379 miles of pipeline and pump stations, with current work being performed near Marshall County Kansas, and expected to be fully underway within the month. The Kansas to Oklahoma portion of the line is 36 inch pipe and will be buried a minimum depth of cover of four feet, depending on land use.

Keystone has contracts with shippers totaling 495,000 barrels per day with an average term of 18 years. The Company had identified that construction of Kansas facilities would be completed in 2009 with a system in-service date of operation of 2009. The Company appears to be behind-schedule.

KANSAS DEPARTMENT OF AGRICULTURE

FACT SHEET

Kansas Department of Agriculture • 109 SW 9th Street • Topeka, KS 66612 • (785) 296-3556 • www.ksda.gov

July 23, 2009

Consequences of Overpumping

Kansas water rights have established legal limits for the quantity of water authorized, diversion rate, place of use, type of use, and other conditions and limitations. Owners should be aware of the legal limits of their water rights because violations can result in costly penalties.

This fact sheet focuses on penalties for diverting more water than is authorized by a water right or permit. Using more water than is authorized is called overpumping.

In general, the Division of Water Resources applies the following progressive penalties when an individual diverts more water than is authorized by his or water right or permit to appropriate water:

- **First offense**: Notice of noncompliance.
- **Second offense**: $500 fine and water penalty. Generally, the water penalty consists of reducing the authorized quantity for the following year by the same amount as was overpumped.
- **Third offense**: $500 per day fine and a water penalty twice the amount overpumped. That means the authorized quantity for the following year is decreased by twice the amount overpumped.
- **Fourth offense**: A one-year suspension of the overpumper's authorization to use water.
- **Fifth offense**: The water right or permit is revoked.

There may be exceptions to the progression listed above. For example, if overpumping is flagrant, the agency may proceed to a stricter penalty without waiting for repeat offenses to occur.

The Division of Water Resources sends orders for civil penalties issued by the chief engineer by certified mail. The order explains the reasons for the penalties and identifies the amount of water authorized by the water right or permit to appropriate water. If the authorized quantity is reduced for the next year, the reduced amount is identified in the order.

In 2008, the Division of Water Resources began routinely applying water penalties in addition to fines. As a result, a number of water rights or permits to appropriate water have had their authorized quantities reduced for 2009.

The Division of Water Resources allows water users the flexibility to determine how they will comply with their reduced allocations in a manner that creates the least impact on their operations. For example, an irrigator who has received such a penalty may have to plant a crop that requires less water or reduce their acres planted to comply with the reduction in their authorized quantity.

It is very important for individuals who have been penalized for overpumping to not repeat the violation, as it leads to more severe penalties and could eventually lead to a temporary or permanent loss of the water right or permit.

Division of Water Resources
Kansas Department of Agriculture
109 SW 9th Street, 2nd Floor
Topeka, KS 66612
(785) 296-3717

Review of wells in the Regulatory Reaches

Exhibit F is a listing of the wells within the regulatory reaches. There was one new well drilled in the Big Blue regulatory reach during this reporting period. The well was completed on 12-4-2009.

Respectfully submitted,

Bob Lytle, Chair
Kansas

Jason Kepler, Member
Nebraska

REPORT OF THE ENGINEERING COMMITTEE
TO THE
KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION

May 19, 2010

The Engineering Committee did not meet during the past year, and it was not given any special assignments from the Compact Administration. The 2009 data for this report were collected as provided by the United States Geological Survey (USGS) and the Lower Big Blue Natural Resource District (LBBNRD).

Review of Streamflow Data

The Compact sets forth the following streamflow targets at the stateline gaging stations:

	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 May thru September time period of the 2009 water year the mean daily streamflow at the Barneston gage on the Big Blue River (Exhibit A) exceeded the Compact target flows. Therefore, no water right administration was required. At the Hollenberg gage on the Little Blue River (Exhibit B) the flow fell below the 80 cfs target required by the Compact during the month of August on the 13th and returned only briefly above the target on the 18th and the 20th. Flows did return above the target for the remainder of the Compact period on August 30th. Administration notices were sent to junior surface water right holders on August 13, 2009, and on September 1, 2009 the basin was reopened to junior water rights.

Real-time and historical data for these gaging stations can be found at the following websites:
Little Blue River – http://waterdata.usgs.gov/ne/nwis/uv/?site no=06884025
Big Blue River – http://waterdata.usgs.gov/ne/nwis/uv/?site no=06882000

Review of Groundwater Data

The USGS provided the hydrographs for the well in Gage County, Nebraska (Exhibit C) and the well in Jefferson County, Nebraska (Exhibit D). The LBBNRD provided the groundwater levels for the Big Blue Basin near Beatrice (Exhibit E).

2010 Big Blue River Compact Administration Report

Water Administration Activities in Nebraska

The spring of 2009 in the Blue Basins in Nebraska began on a dry note. Precipitation in the Big Blue Basin in the spring of 2009 was approximately 75% of normal while the Little Blue Basin was only at approximately 50% of normal. Timely summer rains fell across the Big Blue River Basin while the upper end of the Little Blue Basin continued to suffer. In between run-off events the flow in the Little Blue Basin was below normal and fell below target flows in August. The flow of the Big Blue River stayed around historic median flows for the majority of the year, but dipped below median flows in July and August. The flow on the Big Blue at Barnston exceeded the minimum target values through-out the administration period.

On August 13th a total of 248 closing orders were issued to junior irrigation permits and storage reservoirs. 155 regulating orders were also issued to the senior irrigation permits in the Little Blue Basin on August 13th. The orders remained in effect until August 27th. Administration checks in the field during this period indicated compliance with the closing and regulating orders. As expected, farmers in the affected areas were anxious for rain or for closing orders to be lifted.

Flows in both basins in Nebraska have been running above the median thus far in 2010. So long as precipitation stays normal, I'm cautiously optimistic that we will stay above target flows throughout the year.

Kansas-Nebraska Big Blue River Compact
Nebraska Report - Upper Big Blue NRD
Rod DeBuhr, Water Department Manager
May 18, 2010

Well Drilling Activities

One hundred and forty-five permits were issued for irrigation wells (107 new & 38 replacements) in 2009. At the end of 2009 there were registered 11,726 irrigation wells in the District. This is a reduction of over 200 active irrigation wells compared to the end of 2008. As part of our certification of irrigated acres and annual groundwater withdrawal reporting requirement we are identifying unused well and trying to get the owners to abandoned them or place them on inactive status and cap them properly to protect groundwater quality.

Ground Water Level Changes

The average groundwater level change for the District from spring 2009 to spring 2010 was a slight decline of 0.07 feet. The attached map shows the area of greatest changes and the county averages. With this change, the average ground water level is 5.73 feet above the allocation trigger. Mandatory reporting of irrigated acres and other water uses began in 2006. As of April, 2010, there were 1,158,918 ground water irrigated acres reported to the NRD.

2009 was the third year that ground water withdrawal reports were required in the Upper Big Blue NRD. Metering is not required at this time. Wells that are not metered must provide an estimate of pumping rate and time of operation. The average water withdrawal for irrigation in 2009 was 7.1 inches per acre. The following table is a summary of reported ground water withdrawal on the Upper Big Blue NRD in 2009.

UPPER BIG BLUE NATURAL RESOURCES DISTRICT

SUMMARY OF 2009 GROUND WATER IRRIGATION WITHDRAWAL

Withdrawal /Irrigated Acre	Acres	Acre Inches	Average Inches per Acre	% of Acres	Cumulative %	No. of Pools	Average Acres/Pool
Not Irrigated*	5,673	0	0.0	0.5%	0.5%	72	79
0.1" TO 4"	165,457	497,728	3.0	14.3%	14.8%	992	167
4.1" to 8"	617,964	3,750,732	6.0	53.3%	68.0%	3,184	194
8.1" to 12"	290,582	2,767,163	9.6	25.1%	93.1%	1,548	188
12.1" to 16"	58,813	791,344	13.6	5.1%	98.2%	418	141
> 16"	21,156	444,748	21.6	1.8%	100.0%	219	97
Total	1,159,645	8,251,716	7.1			6433	180
	AC. FT.	687,643					

March 9, 2010 - Data is subject to change

7. This contract shall terminate at such time as the KNBBRCA Engineering Committee discontinues making annual requests for reading, or when terminated in writing by either of the parties.

Brian P. Dunnigan, P.E., Director — May 19, 2010
Nebraska Department of Natural Resources

David W. Barfied, P.E., Chief Engineer — May 19, 2010
Kansas Department of Agriculture,
Division of Water Resources

David S. Clabaugh, Manager — May 19th, 2010
Lower Big Blue Natural Resources District

CONTRACT

between the

Kansas-Nebraska Big Blue River Compact Administration

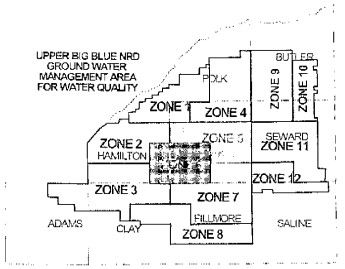
and the

Lower Big Blue Natural Resources District

for Ground Water Measurement Tabulations

1. The Kansas-Nebraska Big Blue River Compact Administration (KNBBRCA) contracts with the Lower Big Blue Natural Resources District (LBBNRD) for the reading of ground water levels within the Big Blue River Basin at times and sites requested annually by the Chair of the KNBBRCA Engineering Committee.
2. The KNBBRCA will provide to the LBBNRD maps showing the locations of the wells for which water level readings are requested, which number of wells will not exceed 36.
3. The LBBNRD agrees to make water level readings on each of the wells. These readings are to be made at the times agreed to annually by the KNBBRCA Engineering Committee and the LBBNRD, but will not be more than three readings per year
4. The LBBNRD agrees to collect the data and to provide a tabulation of the results to the Chair of the Engineering Committee at the address furnished by said Chair.
5. The KNBBRCA agrees to pay to the LBBNRD that amount agreed to annually between the LBBNRD and The KNBBRCA, but no more than $2,000 annually.
6. The aforementioned annual agreements shall be set forth in a writing executed by the Chair of the KNBBRCA Engineering Committee and the Manager of the LBBNRD, which writing will be forwarded to the KNBBRCA Treasurer.

Groundwater Nitrates



The district is divided into twelve management zones for ground water quality management. The primary ground water quality management concern is nitrate. A ten township area York County and two townships in Hamilton County (Zones 5 & 6) were designated a Phase II management area to address increased ground water nitrate levels. The 2009 median ground water nitrate level in Zone 5 dropped from 12.0 ppm to 11.0 ppm. In Zone 6 the median nitrate dropped from 10.0 ppm to 9.1 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.

CROP-TIP

CROP-TIP is an irrigation demonstration sponsored by The District and Cornerstone Bank near York. The purpose of the project is to show producers ways to reduce groundwater withdrawal and reduce nitrate leaching through improvements in irrigation methods. Corn and soybeans were grown in the 24 acre demonstration field in 2009. In the spring of 2007 a subsurface drip irrigation system was installed on one-half of the project acres. Gated pipe irrigation is used on the other half of the field. In 2009, which was the sixth year of the project, 3.5 – 9.0 inches was applied to the gate pipe irrigation plots while 1.2 – 2.8 inches was applied the subsurface drip irrigation plots. On June 21st hail caused considerable damage to the crops. The yield goal for corn was 220 bu. / ac. The corn yields ranged from 173 to 208 bu. / ac. Soybeans yields ranged 50 to 58 bu. / ac.

Nebraska Agricultural Water Management Demonstration Network

This is another program to encourage producers improve irrigation scheduling using Etgages and Watermark sensors to determine crop water use. The Etgage simulates crop water use through evaporation through ceramic and green canvas membrane. Watermark sensors are used to measure soil moisture in a nearby field to confirm the ETgage's accuracy. This program began In the Upper Big Blue NRD with a collaborative effort with the University of Nebraska Extension. The program is now being implemented in several NRDs. The Upper Big Blue NRD is selling this equipment to irrigators at a reduced cost to encourage adoption of the scheduling practice. The data collected has been posted on the NRD's website. This year the University of Nebraska plans to have an interactive website up and running to allow cooperators to post data directly to the website where it can be used by other irrigator. This program, which originated in the Upper Big Blue NRD, has expanded to several other parts of Nebraska. As of May18th the District has sold 800 sensors and related equipment this year. These sensors will be used to schedule irrigation on approximately 80,000 acres. This will more than double the real time soil moisture irrigation scheduling in the District.

It is estimated that approximately 140,000 acres will use real time soil moisture to schedule irrigation.

Flow meter cost-share

In 2006 the Nebraska Environmental Trust awarded the Upper Big Blue NRD $900,000 over three years. This program ends on June 30th. Over 1,800 meters will be installed.

Soil and Water Conservation Cost-share Assistance

In FY08-09 the District funded 105 soil and water conservation projects with landowners. These ranged from irrigation practices such as buried pipelines and conversion to center pivot or subsurface drip irrigation to construction of terraces, waterways and planting of trees for windbreaks and wildlife. The funds totaling $250,471.78 came from the Nebraska Soil and Water Conservation Program ($112,852.39) and local NRD property tax revenue ($137,619.39).

Groundwater Modeling

The Upper Big Blue NRD is the lead agency for the Blue Basin groundwater modeling effort to identify the hydrologic connection of the aquifer and the Blue River system. This was a cooperative effort among the NRDs in the basin. The modeling was completed in 2009 and is currently under review by the Department of Natural Resources. The District is currently working on expanding the model area to include parts of the Upper and Lower Platte river basins along the northern border of the Upper Big Blue NRD.

Visit our Website

You can learn all about the District's programs and activities at www.upperbigblue.org.

Kansas-Nebraska Big Blue River Compact
2010 Annual Meeting
Legal committee report
May 19, 2010

1. The Legal Committee of the Kansas-Nebraska Big Blue River Compact Administration ("Administration") proposes amending the Compact Rules and Regulations to allow for the disbursement of funds in the absence of the Treasurer. As required by the Kansas-Nebraska Big Blue River Compact Administration (Administration) Rules and Regulations, Article VI, Paragraph 2, the Legal Committee mailed a copy of the proposed amendment to each Member of the Administration: Chairman Gary Mitchell, Kansas Commissioner David W. Barfield, Nebraska Commissioner Brian Dunnigan, Nebraska Advisor Kenneth Regier, and Kansas Advisor Sharon Schwartz. The proposed amendment is as follows:

Article VII

2. Disbursements of Administration funds shall be made by checks signed by the Treasurer or the Treasurer's designee upon vouchers approved by the Budget Committee Chairman. The Treasurer's designation must be made in a writing provided to the Administration.

2. In order to continue the arrangement by which the Lower Big Blue Natural Resources District provides the Administration with ground water level readings, the Legal Committee requests that the Administration formalize such an agreement in writing. In keeping with the practice followed since 1988, the Legal Committee suggests the execution of a contract authorizing a year-to-year arrangement, with a clause allowing for annual renewal by the Engineering Committee. The contract as drafted includes limitations on the numbers and locations of the readings and the remuneration for such service. The proposed contract is attached as part of the Legal Committee report.

Respectfully submitted,

Jean E. Angell

Jean E. Angell, Committee Chair

Burke W. Griggs

Attachment

Article VII

2. Disbursements of Administration funds shall be made by checks signed by the Treasurer or the Treasurer's designee upon vouchers approved by the Budget Committee Chairman. The Treasurer's designation must be made in a writing provided to the Administration.

ACTION NUMBER TWO

Background:

Ms. Andrea Kessler, Administration Treasurer, upon receiving an invoice from the Lower Big Blue Natural Resources District ("LBBNRD") for the reading of groundwater well levels, became aware that neither a contract nor an action by the Administration officially authorized payment for the LBBNRD's services. Each year since 1988, the LBBNRD has furnished to the Engineering Committee up to three ground water measurements from up to 35 wells at a cost of up to $1260.00 per year. The Administration had entered into a one-year contract for the service in 1988. At the May 13, 1993, meeting the Administration approved the Engineering Committee report which recommended that the Administration continue contracting with the LBBNRD for the collection of ground water level data, however no contract was executed.

Proposed Action:

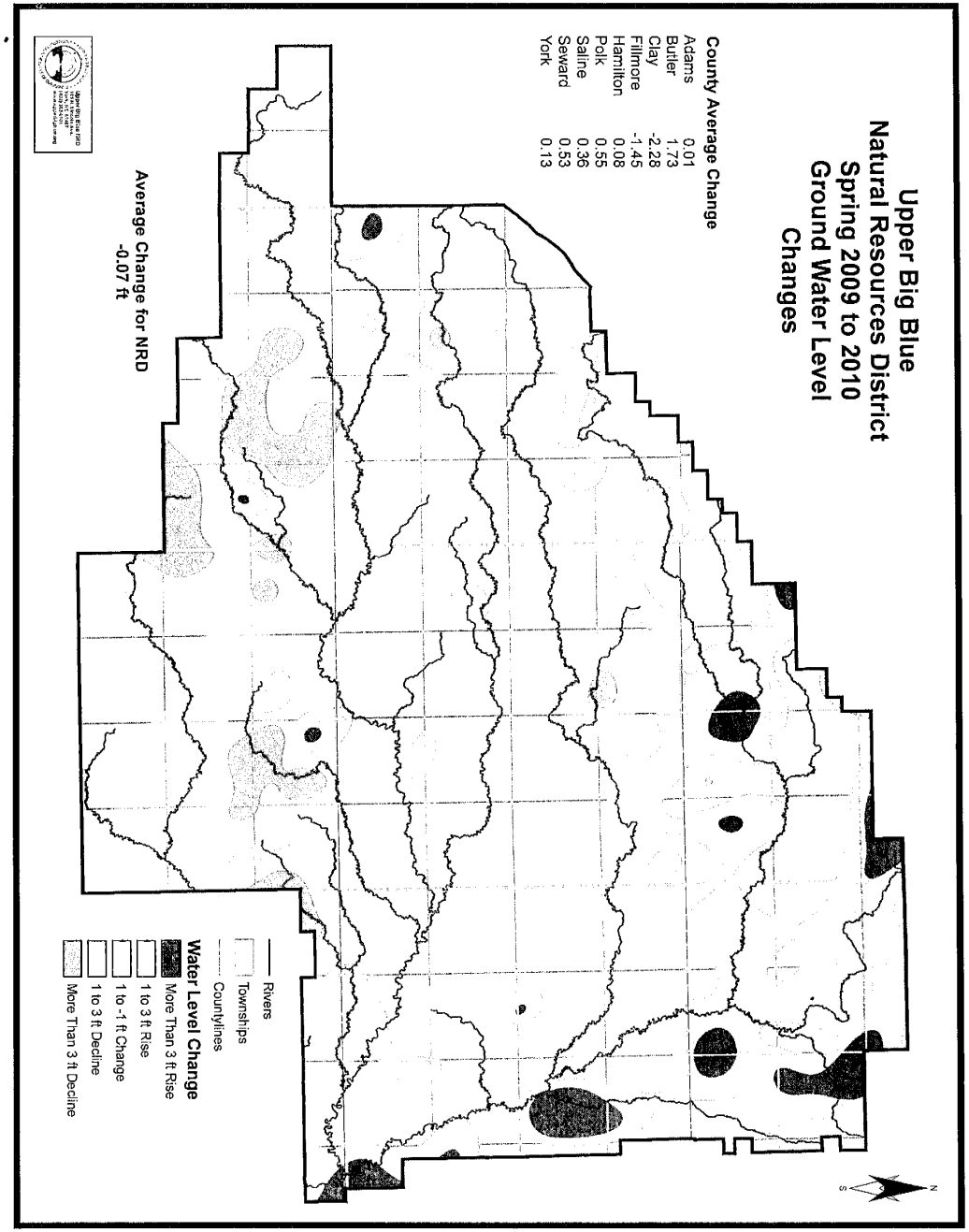
To continue the arrangement by which the LBBNRD provides the Administration with groundwater well readings, the Legal Committee requests that the Administration formalize such an agreement in writing. The Legal Committee suggests the execution of a contract authorizing a year-to-year arrangement, with a clause allowing for annual renewal by the Engineering Committee. The contract as drafted includes limitations on the number and locations of the readings and the remuneration for such service. The proposed contract is attached.

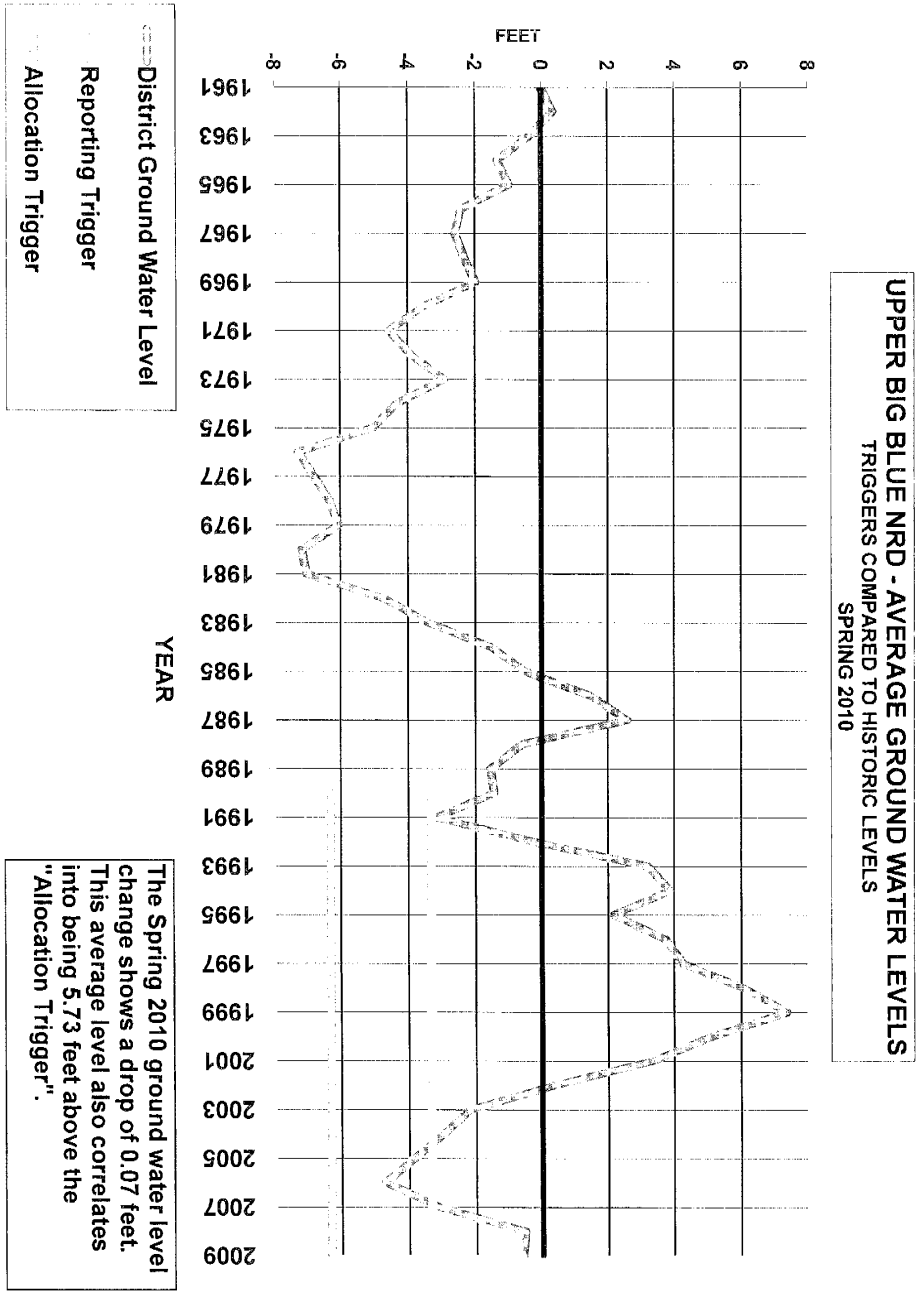
Sincerely,

Jean E. Angell

Jean Angell
Committee Chair

cc: Jason Kepler, Andrea Kessler, Keith Paulsen, Katie Tietsort, Tom Stiles, Galen Biery, PatRice, Walt Aucott, Phil Soenksen, John Turnbull, Mike Onnen, Dave Clabaugh, Annette Kovar, Rich Reimer, Dan Howell, Bob Lytle, Steve Gaul, Paul Graves, Lindsey Douglas, Burke Griggs, Tom O'Connor, Jeremy Gehle





Dave Heineman
Governor

STATE OF NEBRASKA
DEPARTMENT OF NATURAL RESOURCES
Brian P. Dunnigan, P.E.
Director

May 4, 2010

IN REPLY TO:

Gary Mitchell, Chairman
Kansas-Nebraska Big Blue River Compact
325 2600th Avenue
Solomon, KS 67480

David W. Barfield, P.E., Kansas Commissioner
Kansas-Nebraska Big Blue River Compact
Kansas Division of Water Resources
109 S.W. 9th Street, 2nd Floor
Topeka, KS 66612-1283

Sharon Schwartz
Kansas Advisor
Kansas-Nebraska Big Blue River Compact
2051 20th Road
Washington, KS 66968

Kenneth Rieger, Nebraska Advisor
Kansas-Nebraska Big Blue River Compact
215 Donegal
Aurora, NE 68818

Brian P. Dunnigan, P.E., Nebraska Commissioner
Kansas-Nebraska Big Blue River Compact
Nebraska Department of Natural Resources
301 Centennial Mall South, 4th Floor
P.O. Box 94676
Lincoln, NE 68509

Dear Compact Administration Members:

The Legal Committee of the Kansas-Nebraska Big Blue River Compact Administration ("Administration") proposes that two actions be taken by Administration at the 2010 annual meeting to be held in Beatrice, Nebraska on May 20, 2010.

ACTION NUMBER ONE

Background
The Kansas-Nebraska Big Blue River Compact Rules and Regulations, Article VII, Paragraph 2, provides for disbursement of Administration funds only by the Administration Treasurer. The Administration's bank requires two signatures on the Administration's checking account.

Proposed Action:
To allow for the disbursement of funds in the absence of the Treasurer, and to satisfy the Administration's bank's requirement of two signatures on the Administration's checking account, the Legal Committee requests that the Administration amend the Rules and Regulations of the Kansas-Nebraska Big Blue River Compact in the following manner:

301 Centennial Mall South, 4th Floor • P.O. Box 94676 • Lincoln, Nebraska 68509-4676 • Phone (402) 471-2363 • Telefax (402) 471-2900

Lower Big Blue Natural Resources District

Established in 1972 for the Development and Conservation of Soil and Water Resources

Lower Big Blue NRD Highlights of 2009-2010
Blue River Compact Annual Meeting - May 19, 2010

Water Quality & Quantity Summary

- Decommissioned 37 wells last year.
- Average cost $575/well – Average cost-share $309/well
- 668 wells have been decommissioned since 1992
- Water quality sampling – 322 wells – nitrate/nitrogen 5.54 ppm average
- 1145 of the 2200 irrigation wells have been sampled
- 42 Well Permits approved for wells pumping more than 50 gpm
- 578 Well Permits have been issued since 1997
- Groundwater levels – 55 wells measured
  - > Spring 2009 to Spring 2010 showed an increase of 0.60 ft.
  - > Fall 2009 to Spring 2010 showed an increase of 3.07 ft.
  - > Spring 1982 baseline to Spring 2010 are an average 1.68 ft.
- Blue River Compact Well Readings
  - > Spring 2009 to Spring 2010 averaged 0.38 ft. higher.
  - > Fall 2009 to Spring 2010 increased 2.54 ft.

Tuttle Creek Lake Targeted Watershed Grant Project

The Lower Big Blue NRD is part of the approved Tuttle Creek Lake Targeted Watershed Grant Project. This project is a collaborative effort between Kansas and Nebraska to address multi-jurisdictional water quality problems involving excessive runoff of sediment, nutrients, herbicides and bacteria. The first two landowner meetings were held in Odell, Nebraska, in the Fall of 2006 and Fall of 2007. A third meeting was held April 2008 at the Homestead National Monument in Beatrice, Nebraska.

In January 2010, representatives from Nebraska (NDEQ, NRD, NRCS, NDA) and Kansas met at the Lower Big Blue NRD to coordinate efforts. Due to the upcoming September 2011 project deadline, financial and technical cooperation among agencies, landowners and contractors has been crucial. Topics covered included technical service providers, land treatment practices, monitoring, and expenditures. Additional technical service has been approved, and has been operating through the NRD. There have been 50 contracts written to-date in Nebraska, and those are currently being carried out. Monitoring sites will be sampled and analyzed for quality and flow. These components of the grant project continue to be fulfilled in cooperation as weather and scheduling have allowed.

805 Dorsey • P. O. Box 826 • Beatrice, Nebraska 68310-0826 • Phone 402-228-3402 • Fax 402-223-4441 • www.lbbnrd.org

BIG BLUE RIVER COMPACT BUDGET ANALYSIS May 2010

	FY 2008-2009		FY 2009-2010		FY 2010-2011	FY 2011-2012
	Actual	Adopted May 2008	Estimated May 2010	Adopted May 2009	Estimated May 2009	Proposed May 2010	Estimate
EXPENDITURES							
Operations							
Stateline Gages	$ (10,334.00)	$ 14,000.00	$ 21,256.00	$ 14,000.00	$ 14,500.00	$ 14,500.00	$ 14,900.00
Observation Wells	$ (680.00)	$ 700.00	$ 660.00	$ 700.00	$ 700.00	$ 700.00	$ 700.00
Water Quality Committee	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fidelity Bond	$ -		$ -	$ -	$ -	$ -	$ -
Secretary Honorarium	$ -		$ -	$ -	$ -	$ -	$ -
Staff Travel Expenses	$ -			$ -	$ -	$ -	$ -
Annual report - Printing	$ (82.48)	$ 200.00	$ 217.41	$ 200.00	$ 200.00	$ 200.00	$ 200.00
Annual Audit	$ (775.00)	$ 750.00	$775.00	$ 800.00	$ 750.00	$ 800.00	$ 825.00
Postage and Office Supplies	$ -	$ 100.00	$ 205.97	$ 100.00	$ 100.00	$ 100.00	$ 100.00
Miscellaneous Expenses	$ -	$ 100.00	$ 50.00	$ 100.00	$ 100.00	$ 100.00	$ 100.00
Total Expenses	$ (11,871.48)	$ 15,850.00	$ 23,164.38	$ 15,900.00	$ 16,350.00	$ 16,400.00	$ 16,825.00
INCOME & 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	$ 144.02	$ 300.00	$101.39	$ 300.00	$ 300.00	$ 140.00	$ 140.00
Carry Over from Prior Year	$ 21,126.28	$ 20,768.92	$ 25,398.82	$ 20,768.92	$ 21,218.92	$ 21,168.92	$ 20,908.92
Total Income and Carry Over	$ 37,270.30	$ 37,068.92	$ 41,500.21	$ 37,068.92		$ 37,308.92	$ 37,048.92
Balance End of Year	$ 25,398.82	$ 21,218.92	$ 18,335.83	$ 21,168.92		$ 20,908.92	$ 20,223.92

Big Indian 11A Watershed Improvement Project: In 2007, the Lower Big Blue NRD partnered with several local, state and federal agencies to initiate the Big Indian Community-Based Planning Process to reduce sediment and phosphorus loading to Big Indian Lake.

A locally-led group comprised of landowners and stakeholders in the Big Indian watershed developed a watershed management plan. The plan centers on implementing land treatment practices in the watershed, along with the completion of in-lake improvements, together these two objectives will allow watershed conditions to meet water quality goals adopted by the council.

Funding for the installation of conservation practices in the watershed and for construction of In-lake improvement has been secured and Tyler Weishahn was hired as the Land Resources Specialist to help with project implantation and to work with local landowners. Construction of in-lake improvements and the installation of best management practices started in April 2010 and are expected to be completed by December 2011.

GROUNDWATER MANAGEMENT AREA

There is no well drilling moratorium in the Lower Big Blue NRD. The entire Lower Big Blue NRD was declared a Groundwater Management Area in 1997. Permits are required for wells pumping 50 or more gallons per minute. The district has a 60 square mile Phase II area where operators have to meet educational requirements and submit reporting forms on residual nitrogen sampling and other BMPs. Reports are due on March 1st each year. The Phase II area has nitrate-nitrogen levels in the groundwater that are between 6 ppm. and 9 ppm. The rest of the NRD is in a Phase I area where nitrate-nitrogen levels are less than 6 ppm. Operators use voluntary measures to prevent and reduce groundwater contamination. Information to increase public awareness on issues relating to groundwater use, contamination and BMP's is being utilized across the entire NRD.

The NRD has several incentive programs that address water quality and quantity problems. The district provides incentives for the purchase of equipment that allows farmers to more accurately apply fertilizer and chemicals. Groundwater users are offered cost-share on water flow meters to obtain information on the flow rate of their wells and amount of gallons pumped. This information helps irrigators schedule their irrigations more efficiently and lets them know of well deficiency problems.

GROUNDWATER QUALITY AND QUANITY MONITORING

The district monitors 100 groundwater wells twice a year for fluctuation in static water levels across the NRD. Monitoring of groundwater levels to date has shown levels to be above trigger levels for possible regulations on pumping. Groundwater quality monitoring is conducted every year on irrigation wells through out the district. Nitrate-nitrogen is the main parameter being tested, but pesticides scans are conducted every year on a smaller number of wells. Approximately 300 irrigation wells and 100 domestic wells are sampled annually

Just over 1100 irrigation wells in the NRD have been sampled for nitrate since monitoring began in 1987. This is over half of the irrigation wells in the district. Recently the NRD has also been offering whole house water tests for residents who request it. Well care sheets provided by the Groundwater Foundation are mailed out with all the results as well as explanation about the tests conducted on the wells.

REPORT OF THE TREASURER
TO THE
KANSAS-NEBRASKA BIG BLUE RIVER COMPACT ADMINISTRATION
May 19, 2010

Balance on Hand July 1, 2009	$25,398.82
State Assessments	$16,000.00
Interest Income through April 20, 2010	$86.39
Funds Available as May 14, 2010	**$41,485.21**
Expenditures as of May 14, 2010	
USGS	($17,722.00)
Lower Big Blue Natural Resources District	($660.00)
Printing Annual Report	($117.41)
Postage and Office Supplies	($105.97)
Balance on Hand	**$22,879.83**
Estimated Expenditures through June 30, 2010	
USGS - final payment for year	$3,534.00
Dana Cole - Audit	$775.00
Printing Annual Report	$100.00
Postage and Office Supplies	$100.00
Miscellaneous	$50.00
Total Estimated Additional Expenditures	**$4,559.00**
Estimated Income through June 30, 2009	
Interest Income	**$15.00**
Estimated End of Fiscal Year Balance	**$18,335.83**

All-Hazard Mitigation Planning

The Little Blue NRD and Lower Big Blue NRD have been working together on an All-Hazard Mitigation Plan for Gage, Saline, Jefferson, Thayer, Fillmore, Nuckolls, Clay, Adams and Webster Counties. Upper Big Blue NRD is also a contributor for the project. We contracted with Olsson Associates from Lincoln to prepare the plan. The draft was submitted to Federal Emergency Management Agency (FEMA) late last fall and following comments, some modifications are now underway. We plan to have the document finalized in the next three months, then we will be in a position for assistance on hazard mitigation projects for the local sponsors. The plans must be updated every five years.

Action steps and Timelines

- 1981- Groundwater level measurement program begins.
- 1986- District adopts Groundwater Management Plan
- 1987- District wide groundwater monitoring network established to provide baseline data on groundwater quality
- 1988- The Nebraska Department of Environmental Quality conducted a SPA study in an area northwest of the city of Beatrice
- 1990- The NRD begins the first year of additional study in the proposed SPA
- 1994- The three year Special Protection Area study was completed
- 1997- District amends its Groundwater Management Plan to include groundwater quality regulations and the entire district is declared a Groundwater Management Area. At the same time a 60 Square mile Phase II area established.
- 2006- NRD begins the Blue Basin Groundwater Study in conjunction with the Upper Big Blue NRD and the Little Blue NRD
- 2008 - Blue Basin Groundwater Study completed

Future

Above average rainfall has brought static water levels back to above base line levels. If static water levels were to decline to trigger levels set in the Districts groundwater management plan, the NRD would enact policies set forth in the plan. Water sampling for nitrate-nitrogen will continue, particularly in areas with known hot spots of nitrate problems.

Blue Basin Groundwater Modeling Study

The Lower Big Blue, Upper Big Blue and Little Blue NRDs have approved a Blue River Groundwater Model Study for the Blue River Basin. This study was completed this year and will be used for evaluating the hydrologic connectivity of streams and groundwater in the Blue River Basin of Nebraska. Where possible, the COHYST database was used. Additional data, such as streambed conductance, estimates of stream base flow, and geologic layer refinements were also used in the model. Total land area in the 10/50 zones as determined by the model was 2.7 % of the land area in the three NRDs.

Irrigation Management Project: The District is in the third year of a joint irrigation scheduling program with the Cooperative Extension Service and the NRCS assisting and educating producers in the use of ET gages, data loggers, moisture sensors, and irrigation scheduling to reduce pumping rates. The district has 45 producers signed up to install the irrigation management equipment this summer.

Swan 5 Watershed Improvement Project: The NRD has completed the Swan 5 Watershed Improvement Project.

EDUCATION

The district works with schools to educate kids about conservation. The NRD hands out trees and talks about buffer strips to about 500 5th graders at Camp Jefferson during Earth Day. High school students participate in land judging and the Envirothon every year. Doane College has also been working with the NRD on some GIS work as well as water sampling. The NRD also puts on a family fishing day in conjunction with the Game and Parks free fishing day, and Hunters Education classes at the Big Indian Archery Range. Newsletters are sent out to inform the residents of what the NRD is doing and what programs are offered. The NRD participates in a Test-Your-Well program in conjunction with the Groundwater Foundation for schools, FFA chapters, or science clubs who want to become involved in water quality activities.

Land Treatment – 73% of Land in the NRD meets NRCS soil erosion standards

- NSWCP – NRD Funds: $65,000, State: $107,263
  - 153 applications requesting $795,832
  - Approved 69 applications for $242,834
  - In the last year :
    - > 110 miles of terraces
    - > 30 miles of tile outlets
    - > 50 acres grassed waterways
- Buffer Strips 268 contracts - 1,200 acres $86,319 annual payments
- Small Dam Cost-Share Program
  - Initiated in 1997
  - Constructed 20 dams, Total cost - $368,919

Flood Control

- 11 flood control projects control runoff from 34% of the district, or 157,000 acres.
- The NRD has over 250 Watershed structures in the 11 watersheds

Wymore Rural Water Project

- 145 potential users have signed up for rural water east and south of the town of Wymore
- Construction is to begin the Fall of 2010

Agricultural Water Enhancement Program (AWEP)

The Little Blue NRD was one of twenty-one projects awarded nationally under the Federal Ag. Water Enhancement Program. Our program is a three-year grant to assist cooperators in improving their irrigation water management practices on their farms. Last year, we received $1 million in funding. Contracts were signed for gravity to pivot conversions or subsurface drip systems, converting some irrigated acres back to dryland and improving irrigation efficiency. This year's grant will only be for $300,000. The funds are being focused on our wellhead protection areas and our water quality subareas.

Irrigation Management Project Successful

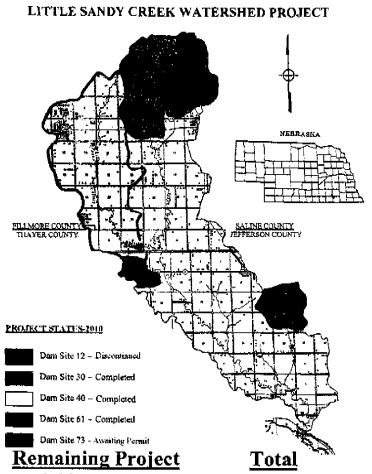
LBNRD has been involved in Nebraska Ag Water Management Demonstration Network for 5 years. The NRD started with 5 producers and will have close to 160 producers in 2010 covering about 75,000 irrigated acres. The goal of the project is to save producers 1 inch of water, but by post surveys most producers have saved themselves 2 inches of water. The project includes soil moisture sensors and ET gages that are cost-shared by the NRD.

A website hosted by UNL also displayed ET information for over 100 producer's sites within the Little Blue District. Agronomist utilizes this site weekly to help them determine irrigation scheduling for producer's neighbors. This year the NRD will be hosting 8 sites for remote access to this equipment.

Little Sandy Creek Watershed Progress

Progress on the Little Sandy Creek Watershed has been slowed because of issues with the Corps of Engineers 404 Permitting process. We have been trying to obtain a 404 permit for the last project, Site 73, for 18 months now and the Corps of Engineers has slowed water resources projects with new demands and expectations on the permitting process. We are hoping to obtain our permit in late summer.

Three dams have been completed on the Little Sandy Creek Watershed Project, one has been scrapped because of the cost to secure the 404 permit, and Site 73 is the only one that remains.



Here are some statistics from the Little Sandy Creek Project:

	Completed Projects	Remaining Project	Total
Total drainage controlled	20,892 Ac.	3,995 Ac.	24,887 Ac.
Total Surface Area	233 Ac.	56 Ac.	289 Ac.
Total Permanent Storage	1,730 Ac. Ft	354 Ac. Ft	2,084 Ac. Ft.
Detention Flood Storage	4,592 Ac. Ft.	858 Ac. Ft.	5,450 Ac. Ft.

Hydrogeologic Study Approved

The NRD has also tentatively received a grant through the IWMPP to conduct a hydrogeologic study of the entire district. We have pretty good data in some areas but large data gaps exist. The soil log information from the monitoring well network will be of assistance. Other goals of the study will be to identify more accurately the boundaries of sensitive aquifers, where seasonal declines are most prevalent and where water user conflicts are most likely to exist. Another goal is to refine or perhaps change entirely the boundaries of the sub-areas which exist in our Groundwater Management Plan so management is more focused.

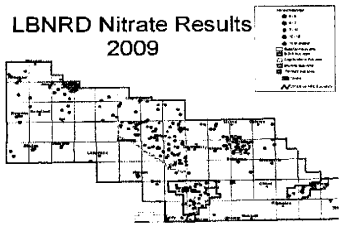
Groundwater Cleanup on Naval Ammunition Depot

The District continues to work with the Army Corps of Engineers to identify the most desirable plan for groundwater contamination clean-up of a 6 square mile area of the Naval Ammunition Depot (NAD) just southeast of Hastings. Contamination occurred as a result of ammunitions production and by-product disposal during the operation of the NAD through the 1940s-50s. The contamination includes volatile organic compounds (VOCs), primarily TCE and TCA, and explosives residues, primarily TNT and RDX.

The Corps current plans to install 14 extraction wells with varying capacities (totaling 3,400 gpm) in an effort to intercept and contain the contamination. The water would be treated to drinking water standards and made available for other beneficial uses. The LBNRD Board has consistently insisted that the water be made available to local potential users to offset the water drawn from the aquifer. Our initial plans included providing up to 2,800 gpm to the City of Hastings for a new 220 MW coal-fired energy center. However, recently the Federal Meat Animal Research Center at Clay Center made an offer to the Corps of Engineers to allow them to place the treatment facility on MARC property if MARC could have the water for livestock, irrigation and groundwater recharge purposes. If this plan comes to fruition, the energy center would be left out of the equation.

The MARC folks are trying to design "leaky ponds" which would facilitate groundwater recharge in the off-season before the discharge water could escape downstream, therefore providing a groundwater mound just down gradient of the contamination plume. The philosophy is good but the last report shows that the effectiveness of such facilities for the full amount of the discharge water, particularly in winter or during rainy periods, is questionable. However, the NRD Board has gone on record favoring recharge in this area if it can be accomplished. Another Corps option is simply discharging the water to the west fork of the Big Blue River, an option that is not looked upon favorably by the NRD Board. We'll keep you posted.

Summer 2009 Water Quality Sampling Results



Bruning – 13.88 PPM Byron-Deshler-Ruskin – 10.17 PPM Clay-Nuckolls – 10.42 PPM and Fairbury 7.31PPM. Districtwide the NRD sampled 261 irrigation wells.
Out of the 261 samples 47 groundwater wells were sampled for Atrazine with 40 wells showing detections, but none over 1 PPM, 31 wells had a detection of Metolachlor.

Lower Turkey Creek Project

The Lower Turkey Creek Project was approved for funding through the Natural Resources Development Fund (NRDF) in November 2005. The primary purpose of this project is flood control. The seven flood control structures will control runoff from 43,600 acres, or approximately 33% of the 131,200 acres located in Saline County

- First two structures completed in 2008 and 2009
- Third structure will be constructed this summer
- Land acquisition for the fourth site underway for Fall 2010 construction
- The Lower Turkey Creek Project contains 131,200 acres of the 294,900 total Turkey Creek Watershed.
- The seven structures will provide 490 surface acres of permanent pool and 1450 surface acres of flood pool.
- Annual damages will be reduced by 31% in the 16,700 acres in the 100 year flood plain.
- Average annual benefits will be $400,000.
- Dollar damages – 100 year, $1,836,706

Estimated Cost of Project
TOTAL COST $ $6,204,095

Stream Flow Augmentation
- Turkey Creek flows improved through retained flows for releases over longer period of times (flood storage releases)
- Drains within structures providing some year-round flows into tributaries and Turkey Creek
- 3,500 acre feet of sediment storage would be available for release during extreme low flows.

- Erosion and Sediment Control
  - 7 structures have estimated 3500 acre feet of sediment storage (1.03" runoff from each acre of drainage area above structures)
  - Presently 75% of drainage area above 7 structures is treated with grass and terraced cropland. In addition, between 10-15% of the drainage area is on non HEL soil and requires no land treatment practices (Class I & II lands)

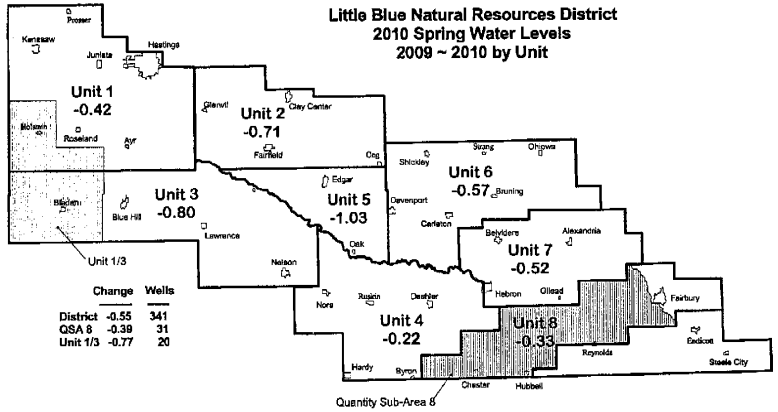
Other Purposes
- Surface Water Quality – 490 acres of surface water
- Wildlife Habitat – Upland birds, fisheries
- Wetland creations in upper reaches of permanent pools

KANSAS-NEBRASKA BIG BLUE RIVER COMPACT
Report by Little Blue Natural Resources District
MAY 2010

Spring 2010 Groundwater Levels

The Spring 2010 static groundwater levels were completed by the Little Blue NRD in April. A total of 341 irrigation and monitoring wells were read showing a slight decline of **0.55 feet** from spring of 2009. This compares to rises in the water table the last two springs (+0.22' and +1.19'). Dryer yet cooler summer conditions persisted in 2009 causing an extended growing season and more pumping in 2009.

In the District's Groundwater Management Plan, sub-areas of the district were established based on areas of similar groundwater geologic conditions, and broken into manageable sized areas. The map below shows the average one-year groundwater decline for each of our established sub-areas.



Despite these one year declines, triggers established in our Groundwater Management Plan have not been reached. Unit 8 is the area of the most consistent groundwater declines. A new well and irrigated acres moratorium has been in place for five years. We have also gotten about 50% of the wells in this sub-area metered and have been working with producers to implement best management irrigation practices.

Pumpage Reports

The District has collected voluntary groundwater pumpage data from producers for many years. It is note-worthy that reports have been gathered from between 100,000 and 123,000 acres annually or about 15% of our total irrigated acres. On the next page, you'll find a table that shows pumpage data for the last number of years. It is interesting to note that 95% of all reporting units were below the 12" application rate in 2008 and 78% were below 12" in 2009.

On the chart, it is easy to see the affects of drought from about 2000 through 2006. During the period from 2000 to 2009, reports indicated that over 20,000 acres of these acres converted from gravity to pivots. Based on the average water usage of 5.3 acre inches less for pivots than gravity, those 20,000 acres would translate into a water savings of 8,833 acre feet per year for those same acres.

District Wide
Irrigation Pumpage Summary

Cropping Year	Acres Report by Producers						Water Applied		
	Corn	Beans	Milo	Alfalfa	Other	Total	Pivot	Gravity	All Acres
1999	77,538	31,962	618	3,966	1,031	115,115	10.1	15.7	11.4
2000	65,755	30,611	191	3,481	316	100,354	11.1	17.0	13.6
2001	64,192	38,192	948	3,145	988	107,465	8.2	13.9	10.6
2002	61,973	38,608	294	3,799	2,469	107,143	13.6	19.9	16.5
2003	71,046	32,133	876	3,632	1,994	110,216	10.3	16.9	12.8
2004	72,418	33,679	372	3,388	2,146	112,005	7.6	13.1	10.4
2005	74,790	38,748	487	2,764	2,709	119,498	8.5	13.5	10.7
2006	74,489	41,976	185	3,247	2,108	123,005	7.8	13.0	10.0
2007	80,366	27,049	127	2,660	2,714	112,916	6.8	10.6	7.9
2008	71,112	33,139	112	2,559	2,102	109,313	4.4	7.3	5.2
2009	72,585	37,860	145	2,358	2,337	115,285	7.5	13.5	8.8
Average							8.7	14.0	10.7

New Wells Development

The Little Blue NRD still allows the installation of new high capacity wells. In 2009, there were 65 new wells drilled in the NRD; 62 were irrigation wells of which 21 were replacement wells, two were wildlife wells and one was for electricity. We've seen quite a few wells being installed where gravity irrigation is converted to pivot and the producer wants to get the well to the center of the circle.

We have also experienced a little more sod-busting of questionable grazing lands. As a result, our board is examining the possibility of changing our rules and regulations which would require a "pre-application" for an irrigation well. In reviewing the information for the well, we would look at the soils to be irrigated to determine the level of highly erodible soils in the tract. If a certain threshold, deemed to be too erosive for irrigation, was encountered, the board could reject the application.

The board has contracted with a consultant to do a detailed soils evaluation of all soils in our district to categorize each soils by its characteristics to aid the board in drawing the line in the sand, so to speak. We expect to have this information completed by this fall.

Monitoring Wells Installation

The NRD secured a grant through the Nebraska Integrated Water Management Plan Program (IWMPP) for the purpose of installing a network of 48 dedicated water level monitoring wells throughout the district. Another purpose of the wells is to gather some soil profile data to help fill in data gaps that exist in our geology. Nine of the wells have been installed to date and each will be equipped with a data logger to track continuous water levels.