Nebraska Resources Newsletter

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Agency Numbers to Remember

Agency address:
Nebraska
Department of Natural Resources
301 Centennial Mall South
Fourth Floor
P.O. Box 94676
Lincoln, Nebraska 68509-4676
Agency phone number:
(402) 471-2363
Agency fax number:
(402) 471-2900
Agency homepage address:
http://www.dnr.state.ne.us

Editor's Note:

With the passage and adoption of **LB962 and LB962A** a special addition of the Nebraska Resources newsletter is being prepared to help inform readers on the specifics and details contained in those bills.

Draft Platte River Environmental Impact Statement Released

by Jim Cook

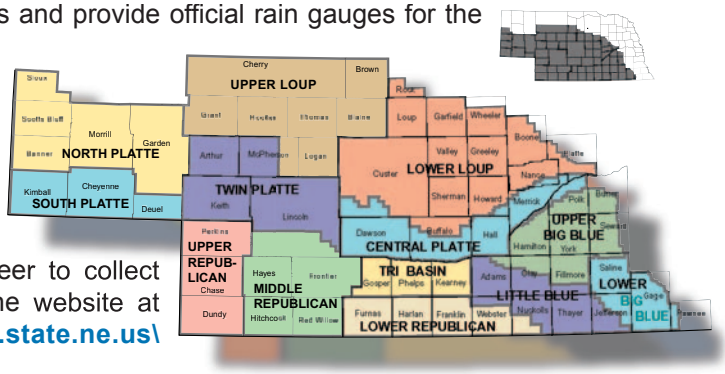
The **Draft Environmental Impact Statement (DEIS)** for the Platte River Recovery Implementation Program was released by the Department of Interior in late January. The purposes of that document are to describe the proposed Program and Department of Interior identified alternatives to that Program and to evaluate their effects on the environment, their economic impacts, etc.. **June 2, 2004 is the current deadline for comments on the DEIS**. Those comments **must be sent to the Platte River EIS Office (PL-100) , P.O. Box 25007, Denver, Colorado 80225-0007**. For further information regarding the DEIS or to obtain a copy of it, contact the Platte River EIS team at the same location or at telephone #: (303) 445-2096.

When the DEIS was originally issued, the comment deadline was April 2, 2004. That deadline was based upon an expected late January release date of a draft

Continued on page 3

Nebraska Rainfall and Information Network

The **Nebraska Rainfall and Information Network (NeRAIN)** is looking for volunteers, in the designated area *(please see map)*, to help collect and record precipitation information. The collected information will then be sent to the Nebraska Department of Natural Resources by telephone or electronically and will be accessible through the agency's website. The project data will help in the development of water models and give a more detailed precipitation collection system in Nebraska. The program was started in Colorado and is being introduced to adjoining states to help create a regional date base. The **Little Blue NRD** took a leading role in the application process for an **Environmental Trust Fund** grant of $15,000. The grant monies will be used to help train volunteers and provide official rain gauges for the project. Numerous contacts across Nebraska are being established, if you would like more information on the program or would like to be a volunteer to collect data please visit the website at **http:\\dnrdata.dnr.state.ne.us\nerain\index.asp** .



- Spotlight on the Big Blue River Compact -

by Jim Cook and Jeff Shafer

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

Compact Background

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

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

Compact Administration

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

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

Equitable Apportionment

The Compact provides for the equitable apportionment of the water of the Big Blue River Basin by setting **target flows at the state-line and by limiting the total reservoir storage in Nebraska**. The state-line target flows are shown in the table. When flows fall below the target, Nebraska is required to **1)** limit diversions by natural flow appropriators to their decreed appropriations; **2)** close natural flow appropriators with priority dates junior to November 1, 1968 (in accordance with the doctrine of priority); **3)** ensure that no illegal diversion are taking place; and **4)** regulate wells installed after November 1, 1968, within the alluvium and valley side terrace deposits downstream of Walnut Creek on the Little Blue River and Turkey Creek on the Big Blue River, unless it is determined by the Administration that such regulation would not yield any measurable increase in flows at the state-line gages.

State-Line Target Flows

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

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

Water Quality

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

Drought

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

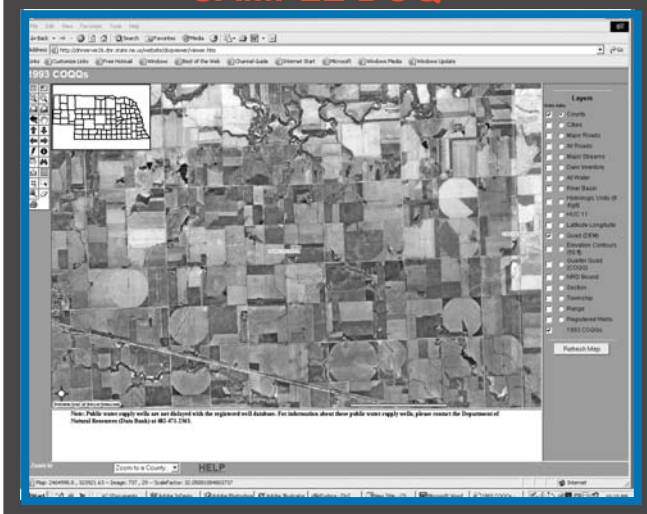
Meeting Date

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

Digital Orthophoto Quadrangles (DOQs)

SAMPLE DOQ

by Rex Gittins



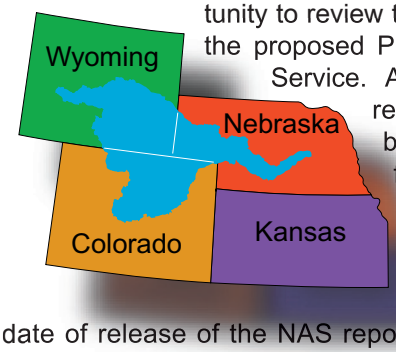
In 1999, on recommendations from the GIS Steering Committee, the agency entered into a work-share agreement with U. S. Geological Survey to revise DOQs based on **new 1999 source imagery** projected in both UTM and State Plane coordinates. Production of these DOQs for the entire State was completed in early February. The DOQs provide a valuable visual backdrop for many abstract GIS maps and analyses, and as such they are used for development of NHDs, project studies and other geospatial databases.

Both the 1999 and 1993 COQ (compressed form) & DOQ coverages are available on CD upon request, the COQs are also disseminated over the Internet through the Data Bank at

http://www.dnr.state.ne.us/databank/doqall.html

Draft Platte River EIS Continued from page 1

report by the National Academy of Sciences. That NAS report will address the science that relates to the importance of the Platte River to the target species (whooping cranes, piping plovers, interior least terns, and pallid sturgeons). The DEIS comment deadline was extended to June 2 because the NAS report's release has been delayed. It is now due to be delivered to the Governance Committee about the time this newsletter is released. Only after the Governance Committee has had an opportunity to review the NAS report will a Draft Biological Opinion on the proposed Program be completed by the Fish and Wildlife Service. All three documents, that is the DEIS, the NAS report, and the Draft Biological Opinion, need to be considered together and all must be available for review before comments are finalized on the DEIS.



The June 2, 2004 deadline for comments on the DEIS is likely to be extended again. The new date will depend greatly upon the date of release of the NAS report and the content of that report. If that report suggests that the Fish and Wildlife Service has used faulty science relative to the Platte River's importance to the threatened and endangered species or has used sound science incorrectly, substantial additional delays are possible.

National Map Initiative

by Rex Gittins

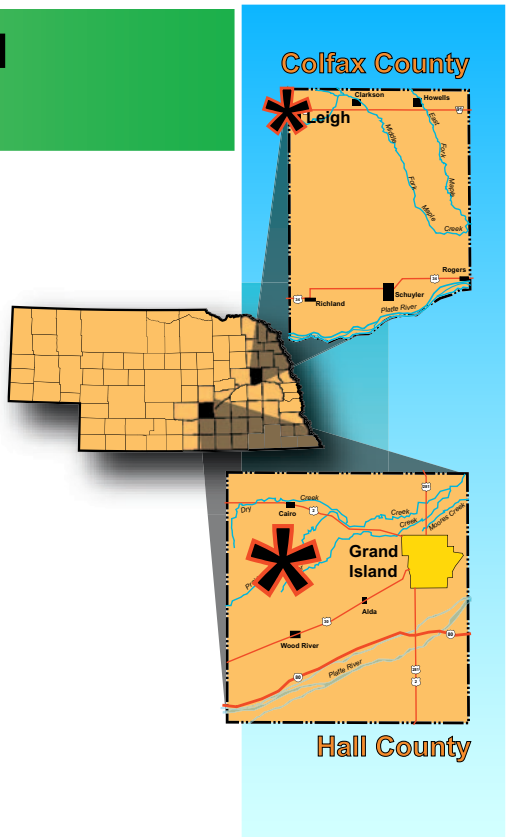
DNR has signed a Memorandum of Understanding with USGS to be a partner in the National Map initiative.

"Through partnerships with federal, state, and local governments and the private sector, the USGS is committed to providing the Nation with access to current, accurate, and nationally consistent topographic maps and geospatial and remotely sensed data and information to help informed decision making by resource managers and the public. This synthesis of information, products, and capabilities, The National Map, will be a seamless, continuously maintained set of geographic base information that will serve as a foundation for integrating, sharing, and using other data easily and consistently. This MOU supports the mission of the USGS through collaborative efforts to establish partnerships necessary for the development, maintenance, dissemination, and use of ***The National Map****." – excerpt from Memorandum of Understanding Between the U.S. Geological Survey and Nebraska Department of Natural Resources for Coordination and Cooperation Pertaining to The National Map.*

Internet map applications and geospatial data and web map services *(currently available to the public through DNR's web site)* can now be accessed through the National Map web portal.

Nebraska Resources Development Fund Project Applications Received

by Tom Pesek



The Central Platte NRD and the Lower Elkhorn NRD briefed the Natural Resources Commission on two new project applications at the Commission's March 25th meeting. The **Central Platte NRD is sponsoring the Upper Prairie/Silver/Moores Creek Project**, which is planned to provide 100-year flood protection to northwest Grand Island. The project includes various features, including dry dams, detention cells, an overflow channel, and a diversion channel. **The NRD has requested a Nebraska Resources Development Fund grant of $9,866,860.20 or 60%** of the project's estimated total cost.

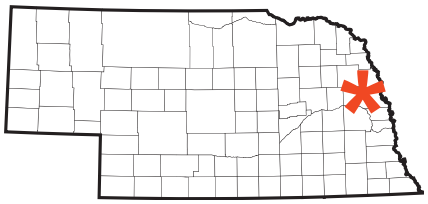
The **Lower Elkhorn NRD, sponsor of the Leigh Dam Project, has requested a NRDF grant of $4,300,000 or 75%** of the project's estimated total cost. The project involves the construction of an earthen dam on the West Branch Maple Creek just upstream of Leigh. The resulting 160-acre reservoir and 480-acre project area would be developed to provide various recreational activities. The dam would also provide flood damage reduction benefits in Leigh and downstream. Review of these project applications by DNR staff and other state agencies has begun.

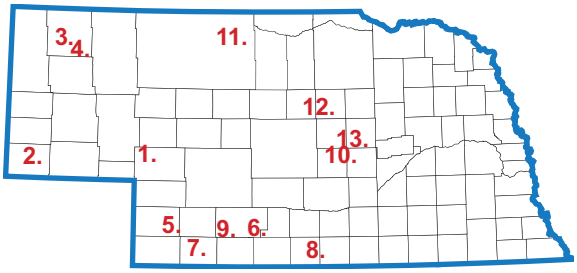
Winslow Levee Project Funded

by Tom Pesek

At its November 20, 2003, meeting, the Commission approved a **Nebraska Resources Development Fund grant of $456,582 (75% of total project cost)** for this levee project which will provide Winslow with protection from floods up to the 50-year flood event in the Elkhorn River.

At its March 25, 2004, meeting, the Natural Resources Commission made an initial obligation of funds of $62,165.25 to the Winslow Levee Project. This action makes Nebraska Resources Development Fund (NRDF) funds available to the Village of Winslow and the Lower Elkhorn NRD, project co-sponsors, for feasibility study costs and to carry out final design.





The table below shows the capacity, maximum storage level reached during **Water Year 2003** (Oct.1, 2002-Sept.30, 2003), carry over at the end of September 2003 and storage as of March 31, 2003 (unless noted) for 15 reservoirs, 13 of which are located in Nebraska.

Reservoirs Storage Comparison for Water Year 2003

Reservoir		Capacity: Top of Irr. Pool in Acre-feet	Maximum Storage (for Water Year 2003) Acre-feet	Maximum Storage % Average	Carryover September 30,2003 Acre-feet	Carryover % Average	Storage as of March 31, 2004 in Acre-feet
Pathfinder (ownership)	a	1,016,510	599,207	66%	72,233	18%	275,281
Glendo (ownership)	a	184,870	140,352	84%	104,499	77%	356,620
1.**Lake MacConaughy**	a	1,948,000	834,092	51%	442,429	34%	666,300
2.**Oliver** *(no irr. water stored)*	b	2,680	1,430	54%	1,144	59%	*(10/20/03)*1,140
3.**Whitney**	a	10,000	10,970	106%	5,400	128%	10,800
4.**Box Butte**	a	31,060	13,555	69%	4,417	85%	9,950
5.**Enders**	a	44,480	13,775	40%	10,960	66%	11,960
6.**Harry Strunk Lake**	a	37,140	34,219	84%	16,858	74%	28,240
7.**Swanson Lake**	a	120,160	32,944	30%	27,886	43%	29,170
8.**Harlan County Lake**	a	342,560	178,816	53%	117,523	47%	115,800
9.**Hugh Butler Lake**	c	37,780	17,160	51%	15,202	59%	17,170
10.**Sherman**	d	69,080	69,940	103%	31,370	67%	48,470
11.**Merritt**	e	74,490	75,670	102%	38,490	78%	73,680
12.**Calamus**	f	127,400	134,500	115%	48,490	67%	118,940
13.**Davis Creek**	g	32,459	31,720	109%	10,970	80%	9,550

Records used for average
a 1960-2002, b 1981-2002, c 1962-2002, d 1963-2002, e 1964-2002, f 1985-2002, g 1994-2002

2003 State of Nebraska *Employee & Supervisor/Manager of the Year Awards*

Since 1985, state government, on behalf of the Governor's Office, has sponsored a recognition program honoring both exceptional employees and career service employees. Governor Johanns proclaimed the month of October 2003, as State of Nebraska Employee Recognition Month and a ceremony honoring the Employees/Managers of the Year was held in the State Capital Rotunda on October 28, 2003. In addition to that ceremony several Length of Service ceremonies were held across Nebraska during the month of October honoring employees for length of service to the State of Nebraska.

Receiving the **Supervisor of the Year Award for the Nebraska Department of Natural Resources was Allan Ruhge**, a 45-year veteran with the department. Allan is Supervisor of the photogrammetry and survey section of the department. Over the past 45 years Allan has seen vast changes and improvements in the method survey field data is collected and the procedure used to take that raw data and complete the mapping process. The fields of survey and mapping have advanced from chains and rods, to satellites, computers and GPS instruments. Allan grasped modern technology advancements helping improve productivity and accuracy of department projects.

In the past year most of Allan's time has been spent surveying dams to create contour maps, floodplain zoning cross-sections for the Platte River and establishing coordinates and elevations on monitoring wells in the Platte Basin in western Nebraska. Allan is a state employee who has donated numerous extra hours to his work. Alan is married, has three grown children, and five grandchildren, who he enjoys and is very proud of.

Receiving the **Employee of the Year Award for DNR was Jeff Hogan**, an Application Developer with the Information Technology Division. An applications developer does the behind the scenes automation that makes programs and projects available and usable to others. Jeff has four years of service with the department and enjoys the daily challenges associated with his job. Appreciated by his co-workers, Jeff is a "go-to-guy" when software and hardware solutions are needed. This past year Jeff worked on completing the new digital orthophoto quadrangles (DOQs) featuring 1999 imagery for the entire state and worked with the new on-line well registration service available through the department website.

Jeff is married and has two young daughters that put a smile on his face.

DNR is fortunate to have employees like Allan and Jeff. Both award winners are to be congratulated for their outstanding service to DNR and the State of Nebraska and its citizens.

Length of Service Awards

James W. Vassos.....40 years
William H. Birkel.....35 years
Terry L. Cartwright.....30 years
Margaret F. Hoagstrom.....30 years
Guy H. Lindeman.....30 years
Deborah A. Bandiola.....25 years
Susan E. Berlowitz.....25 years
Keith M. Meikle.....25 years
Brian P. Dunnigan.....20 years
Bradley D. Edgerton.....20 years
Daniel R. Kloch.....15 years
Karen Kuster.....15 years
Kimberly A.Menke.....15 years
Barbara L. Hasterlo.....10 years

New Officers Elected

At their annual organization meeting held January 28, 2004, members of the Nebraska Natural Resources Commission elected officers for the coming year. Elected to serve one-year term as Chairperson was Beverly Donaldson of Omaha. Elected to serve as Vice-Chairperson was Jim Van Marter of Holdrege who represents Municipal Water Users on the Commission.

These two members will head the sixteen-member Natural Resources Commission which has broad responsibilities in soil and water conservation and development of those resources in Nebraska.

The Department of Natural Resources also welcomes a new member of the Commission. Representing the South Platte River Basin and a board member of the South Platte NRD is newly selected member Keith Rexroth of Sidney, Nebraska.

Nebraska Resources

Nebraska Department of Natural Resources
301 Centennial Mall South, 4th Floor
P.O. Box 94676
Lincoln, Nebraska 68509-4676

State of Nebraska
Mike Johanns, Governor

Nebraska
Department of Natural Resources
Roger K. Patterson, Director

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Nebraska Department of Natural Resources....
....dedicated to the sustainable use and proper management of the State's natural resources.