

# TRI-BASIN TOPICS

Winter 2005

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**“Dedicated to the Conservation of our Natural Resources”**

## **NRD Permits Required When Irrigating New Land, Pumping Water For Neighbors**

Do you share a well with a neighbor? Do you pump groundwater from one field to another? Tri-Basin Natural Resources District (TBNRD) rules and regulations require a **Groundwater Transfer** permit when you are pumping groundwater from a well you own to water a piece of ground that is owned by another entity. A groundwater transfer is also required when both fields are owned by the same landowner but they are located more than a mile apart. Groundwater transfers that were ongoing before September 15, 2004 do not require NRD approval. Landowners are encouraged to complete groundwater transfer permit forms and present them to the NRD to keep on file as a way to document existing transfers. All groundwater transfers initiated after September 15, 2004, must be **approved** by the TBNRD Board of Directors (“board”) before any water may be transferred.

After a groundwater transfer has been approved, the owner of the land upon which the well is located must install a permanent flowmeter on that well. The landowner must also submit an annual water use report to the NRD.

Also as of September 15, 2004, NRD integrated water management rules prohibit landowners in the Republican basin and in the Platte basin west of Highway 183 from developing any additional irrigated acres. If you own land in this Integrated Management Area and have a situation where you would like to irrigate more acres than are certified as irrigated on a parcel, you may apply to the TBNRD



board for a **Certified Irrigated Acre Transfer**. This request must be accompanied by an aerial photo showing the certified acres the owner desires to turn back to a non-irrigated land use and the location of the acres that the landowner wants to irrigate in the future.

After approval by the board, the permit will be submitted to the county assessor. The assessor will measure the parcels and report the corrected number of irrigated acres listed on the property tax rolls to the NRD. If the assessor determines the number of certified irrigated acres is equal to or less than the number requested for transfer, both parcels will be adjusted, and the transfer will be considered complete. If the assessor determines that the number of certified acres available on the original parcel or parcels are insufficient to complete the requested transfer, the landowner must either withdraw or correct and resubmit a certified acre transfer permit request.

The TBNRD board reviews transfers for both groundwater and irrigated acres at their regular board meetings, held the second Tuesday of each month. Landowners need to submit transfer permit requests to the TBNRD office by the first Tuesday of the month. Notification will be sent to landowners regarding the board’s decision on all permits.

If you want more information about either the Groundwater or Certified Irrigated Acre transfer processes, please call the TBNRD office toll free at 1-877-995-6688 or e-mail us at [tribasin@tribasinprd.org](mailto:tribasin@tribasinprd.org).



## Managers Message

By: John Thorburn

### Elephants on the Plains

I read with interest a recent proposal from professors at Cornell University to “restore” the Pleistocene-era ecology of the Great Plains. They propose to populate the Plains with elephants, camels, tortoises and lions. I don’t think that this idea of a “Pleistocene Park” is any more likely to catch on than the “Buffalo Commons” proposal of a decade ago. It can, however, serve to remind us what a dramatically different place Nebraska was just 12,000 years ago.

When scientists speak about an era thousands of years in the past, most people quickly lose their perspective of time. The Pleistocene epoch (from 1.8 million years ago up to 12,000 years ago) was a long time ago when we think of it in terms of human years. The United States as a nation is just 230 years old. The entire record of written human history spans little more than 5000 years.

Yet we need to keep in mind that our planet Earth formed about 4.5 billion years ago. Vertebrate animals emerged at least 500 million years ago. The dinosaurs went extinct and the Rocky Mountains began to rise out of the Mesozoic seas 66 million years ago. Human ancestors roamed the Earth at least 2 million years ago. Speaking in geologic terms, 12,000 years in the past is just a blink of an eye.

If we were able to travel back in time just as far as that geologic “blink”, we would be startled by how different central Nebraska was then, yet we would also recognize many things. Starting with the land itself, we would be standing in a mix of pine forests and grasslands. The Platte River would be many times its present size, swollen by glacial meltwater from the Rockies, but it probably wouldn’t be much deeper than it is now. The Platte roamed all across Nebraska during the Pleistocene, laying down sand and gravel beds that are the repository of much of our groundwater, but by this time it would have followed something like its present course west of Kearney. Instead of turning Northeast at Kearney in the familiar “big bend”, however, it continued southeast, joining the Republican River somewhere near present-day Superior, Nebraska.

The forests and swollen river reflect a cooler, wetter climate. Central Nebraska was never covered by glaciers like the eastern part of our state, but at times it had a harsh, tundra climate similar to the North Slope

of Alaska. By this time, however, the glaciers were in retreat and the climate would be more like central Saskatchewan with long cold winters, yet mild summers.

As we look at the animal life along the banks of the Platte, we would see the familiar and bizarre side-by-side. Migratory birds such as cranes, ducks and geese have utilized the Platte as a stopping point for millions of years. At the end of the Pleistocene, they might have roosted in a backwater beaver pond. They would have been joined in the pond by moose, elk and musk oxen. There would be predators like grizzly bears, dire wolves, saber-toothed tigers, perhaps even Navie American hunters stalking around in the weeds. Most animals would give wide berth to the proprietors of this pond. Pleistocene beaver grew eight feet long and weighed as much as 450 pounds. Their front teeth were six inches long.

Giant beaver are just one example of the “megafauna” of the Pleistocene. They were joined by



mammoth (10 to 14 feet tall) and *Bison Antiquus*, large, extinct bison with horns six to eight feet across. One of the most curious creatures that we would be likely to see would be a Giant Sloth. These slow-moving herbivores grew up to 20 feet long, with 12” long claws.

The Pleistocene Epoch is part of our very recent geologic past. Nonetheless, our environment has changed substantially since then. Much as we might like to turn the clock back, importing elephants and lions won’t bring the Pleistocene Epoch back to the Great Plains. You can go down to the banks of the Platte today, however, and see how an imported species can radically change our environment in the blink of an eye. The once open, sandy riverbed is now choked with tall, dense stands of *Phragmites* grass. I doubt that even elephants could stop the glacial, but unrelenting advance of this “mega-grass”.

# 2005 Summer Interns

This summer Tri-Basin is happy to have intern Kalen Arehart of Loomis back this summer, and we welcome Josh Johnson of Holdrege as a summer intern. Kalen is a member of Mount Calvary Lutheran Church. He graduated from Loomis Public High School, and is currently working towards his Business degree at Nebraska Wesleyan.

Josh graduated from Holdrege High School, and received a degree in Agri-Business Management and Technology from Southeast Community College. He is now studying Agri-Biology at the University of Nebraska at Kearney.

We really appreciate all their hard work this summer!

Kalen and Josh

## Landowners in Tri-Basin NRD With Irrigated Land in the Republican River Basin

- \* **Flowmeters must be installed on all irrigation wells in the Republican River Basin in Gosper, Phelps and Kearney Counties by December 31, 2005.**
- \* **If you have an approved Republican Basin Flowmeter Cost-Share Agreement your flowmeters must be installed no later than September 30, 2005 to qualify for 50% cost-share. If eligible, your cost-share application can be extended to September 30, 2005.**

**Call Tri-Basin NRD Toll Free (1-877-995-6688)  
for questions.**

**Note: You must receive cost-share approval  
before purchasing/installing flowmeters.**

### Check out these web sites:

<http://www.epa.gov/OW/you/chap3.html>

<http://www.thedenverchannel.com/news/4838453/detail.html>

<http://tribasinprd.org/domesticwatertest.html>

[http://www.dnr.state.ne.us/dnrnews/news2004/summer2004\\_sm.pdf](http://www.dnr.state.ne.us/dnrnews/news2004/summer2004_sm.pdf)

<http://www.farmersalmanac.com>

[http://net.unl.edu/swi/pers/water\\_worries.html](http://net.unl.edu/swi/pers/water_worries.html)

-Effective Water Use

-Platte River Running Dry

-Domestic Nitrate Testing

-LB 962

-Farmers Almanac Forecasts

-Nebraska Reservoirs



# CALENDAR OF EVENTS

(All meetings are at NRD office in Phelps County Ag Center unless otherwise noted.)

## December

- November 8 - NRD Board Meeting at 7:30 p.m.\*
- November 24 - Thanksgiving (Office Closed)
- November 25 - Office Closed for Thanksgiving Holiday

## January

- December 13 - NRD Board Meeting at 7:30 p.m.\*
- December 26 - Office Closed in Observation of Christmas

## February

- January 2 - Office Closed in Observation of New Year's Day
- January 10 - NRD Board Meeting at 7:30 p.m.
- January 16 - Martin Luther King Jr. Day (Office Closed)

\* Times are tentative

## WATER CONSERVATION TIP

- Water your lawn only when it needs it. Use a soil moisture indicator to find out when your lawn and garden need watering. Be sure you are not watering the street or sidewalk.

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Tri-Basin Natural Resources District,  
1308 Second Street,  
Holdrege, NE 68949 (308) 995-6688  
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E-mail [tribasin@tribasinprd.org](mailto:tribasin@tribasinprd.org)

### TRI-BASIN NRD STAFF

John Thorburn ..... General Manager  
Richard Holloway ..... Assistant Manager  
Charles Brooks ..... Land Resources Coordinator  
Carie Lynch ..... Administrative Secretary  
Roger David ..... Conservation Technician  
Steve Nelson ..... Land Resource Technician  
Tammy Fahrenbruch ..... Office Manager  
Esther Smith ..... Office Clerk  
Shennon Helms ..... Inf. & Education Assistant  
Nicole Salisbury ..... Office Assistant  
Marlene Macklin ..... Minden Office Secretary  
Jill Wessels ..... Elwood Office Secretary  
Patty Abrahamson ..... Holdrege Office Secretary

A mailing list is maintained and requests to be placed on the list should be sent to the above address. Comments and suggestions may be addressed to the General Manager.

### TRI-BASIN NRD BOARD OF DIRECTORS

Brad Lundeen, Chairman Wilcox, NE	Gary Lindstrom Wilcox, NE
Phyllis Johnson, Vice Chairman Bertrand, NE	Ed Harris Loomis, NE
Todd Garrelts, Treasurer Holdrege, NE	David Nickel Kearney, NE
David Olsen, Secretary Minden, NE	David Raffety Kearney, NE
David Nelson Upland, NE	Larry Reynolds Lexington, NE
Harold D. Erickson Holdrege, NE	Ray Winz Holdrege, NE
Dick Helms Arapahoe, NE	

—IN THIS ISSUE—  
\*Permits Needed For  
Water Transfers  
\*Wise Water Use  
\*Flowmeter Installation Notice

RETURN SERVICE REQUESTED

**1308 Second Street  
Holdrege, NE 68949**

*Natural Resources District*



Non-Profit Permit  
U.S. Postage  
PAID  
Holdrege, NE 68949  
Permit No. 220