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LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT  
Dedicated to the conservation, preservation and wise use of our natural resources

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## Register Wells Now to Avoid Possible Future Restrictions

The Lower Platte North Natural Resources District is encouraging owners of high-capacity wells (greater than 50 gallons per minute) to make sure their wells are properly registered before the end of the year, to avoid possible restrictions if the basin's water supply is declared "fully-appropriated" by the state.

The Nebraska Department of Natural Resources is currently assessing water conditions in the Lower Platte and the state's other major river basins as part of LB962, a major overhaul to the state's water law that went into effect in 2004.

Under LB962 provisions, a basin's surface water and groundwater are both taken into account when deciding whether the water supply can sustain further development for irrigation and other high-volume water uses. The number and capacity of wells and their effect on surface water rights are used to determine when a basin is "fully-appropriated" (at the maximum level of sustainable development) or "over-appropriated" (water levels in decline due to over-development).

While the state's decision won't be known until January 2006, the NRD considers it very possible that the Lower Platte basin will be declared fully-appropriated, said NRD Manager John Miyoshi.

"If that's the case, there will be a stay or moratorium on new drilling for irrigation and other high-capacity wells, but existing wells will be grandfathered," Miyoshi said. "If a well isn't properly registered, though, it is not protected."

The NRD estimates that approximately 20% of the district's irrigation wells are not properly registered, said Water Resources Manager Larry Angle.

"According to state statutes, an unregistered well is considered illegal, and the state can require it to be decommissioned or plugged," Angle said. "So it's very important for owners to make sure their registrations are properly filed before the end of the year."

Well owners can check the registration status of their wells at the Department of Natural Resources website:

<http://dnrdata.dnr.state.ne.us/wellssql>.

Well registration, change of ownership, and other forms are available at:

<http://www.dnr.state.ne.us/docs/wellforms.html>.

Permits for drilling new wells are available on the Lower Platte North NRD website at: [www.lpnrd.org/downloads/forms.html](http://www.lpnrd.org/downloads/forms.html).

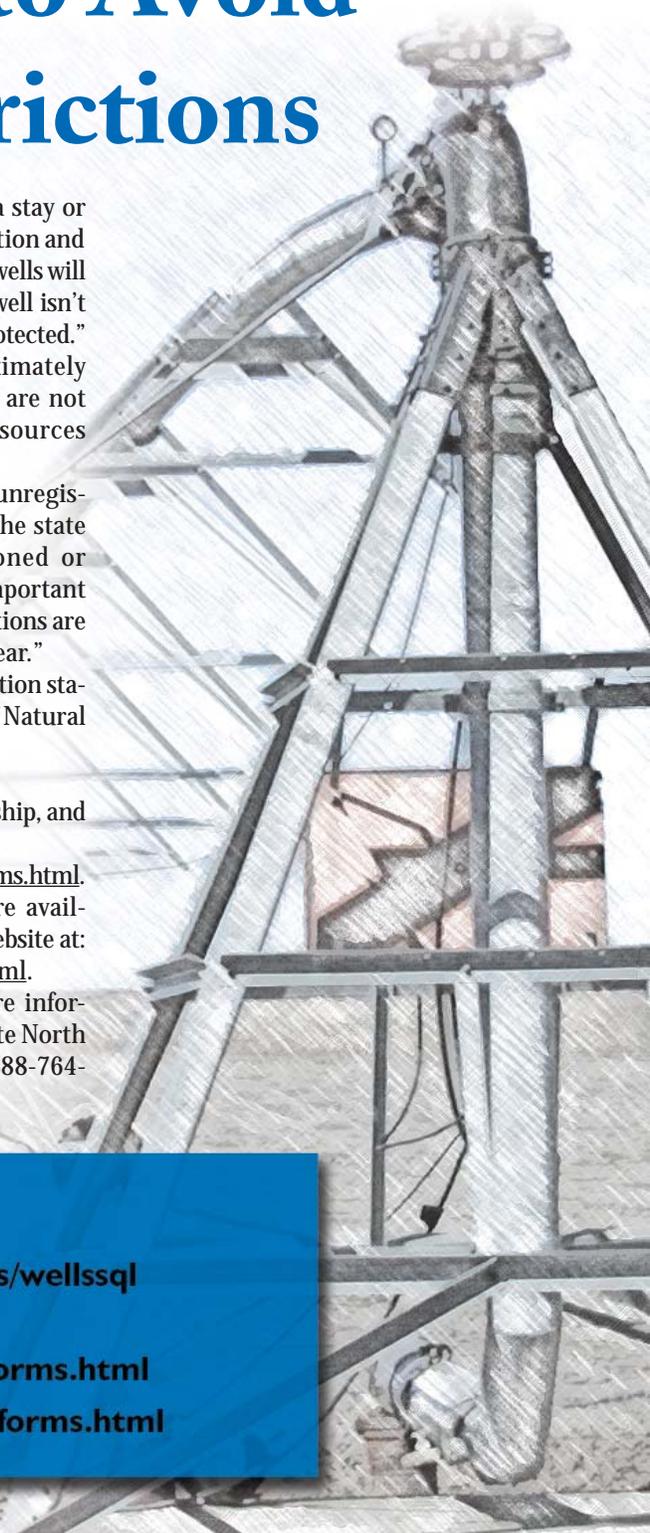
Well owners who would like more information should contact the Lower Platte North NRD at (402) 443-4675, toll-free 1-888-764-0543, or email [lpnrd@lpnrd.org](mailto:lpnrd@lpnrd.org).

### ONLINE RESOURCES

**Well Registration Status:** <http://dnrdata.dnr.state.ne.us/wellssql>

**Well Registration, Change of Ownership,  
& Other Forms:** <http://www.dnr.state.ne.us/docs/wellforms.html>

**NRD Well Permits:** <http://www.lpnrd.org/downloads/forms.html>



# Rural Water Systems Set for Fall Construction

With construction expected to begin this fall on two rural water systems, the Lower Platte North NRD communities of Bruno and Colon should be able to say goodbye to their water problems by spring 2006.

Both Bruno and Colon have had difficulties with their water supplies in recent years. The Bruno water system often struggled during hot summer months to keep up with demand, and Colon has had problems meeting federal water quality standards for arsenic and nitrates.

The NRD will operate both of the new rural water systems. The Butler County system will link Bruno to David City, and the Saunders County system will link Colon to Wahoo.

The NRD will be purchasing water from the larger communities (David City and Wahoo) and delivering it to the smaller communities (Bruno and Colon). In Bruno's case, the NRD will resell water to the local water utility, who in turn will resell it to local customers. In Colon, the local water utility is dissolving, and the NRD will sell water directly to individual residents.

Both systems are being constructed using a combination of grant funds and local matching funds from the NRD and the affected communities. The Butler County system will cost \$696,000 and is receiving a \$492,000 grant from USDA, leaving \$164,000 in local costs. The Saunders County system will cost \$915,000 and is receiving a \$250,000 Community Block Development Grant and a \$500,000 USDA grant, leaving \$165,000 in local costs.

Despite being 4 miles shorter, the Saunders County system will cost more than the Butler County system because the pipeline will have to cross a creek, and the first mile out of Wahoo will have a larger-capacity pipe to serve new development.

The Butler County system has been designed to serve up to 357 rural customers in addition to Bruno; residents along the pipeline can tap on to the system for a fee and purchase water from the NRD. Details for rural hookups on the Saunders County system are still being determined.

The NRD expects bids to be let for both systems this summer, with construction beginning this fall. Barring any delays, both systems should be ready to go into service in spring 2006.

For more information about the rural water systems, contact Mike Sousek at the Lower Platte North NRD: [msousek@lpnrd.org](mailto:msousek@lpnrd.org) or (402) 443-4675.



**Wahoo-Colon  
Water Line**



**David City-Bruno Water Line**

# Flooding

Wahoo Area, May 12, 2005

Heavy rains on May 11 and 12 lead to flooding in several areas of the Lower Platte North NRD. These photos show flooding in and around Wahoo from Sand and Wahoo Creeks. Highways leading into town were closed for several hours on May 12 as floodwaters peaked.

Clockwise from Top Right:

- 1 & 2 - Wahoo Concrete and surrounding areas, looking northwest from Highway 77 north of Wahoo
- 3 - 1st Street in Wahoo looking east
- 4 & 5 - Saunders County Fairgrounds looking south
- 6 - Bridge on County Road N looking north
- 7 - Bridge on County Road N looking east
- 8 - County Road M looking west (future site of Lake Wanhoo dam)





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# Monitoring Underway for Toxic Algae

Following widespread toxic algae alerts that plagued many Nebraska lakes last summer and fall, the Nebraska Department of Environment Quality has already begun a monitoring program for 2005 to detect any possible recurrences.

In the Lower Platte North NRD, sampling began at Fremont Lakes in early May. The initial sampling showed one lake (#20) had elevated levels of toxic algae, and a Health Alert was issued. Under a Health Alert, the affected lake is temporarily closed to full-body contact activities, including swimming, wading, and pets in the water (hunting dogs included). Fishing and no-wake boating is still permitted during the Health Alert, although catch-and-release fishing only is recommended.

Once a Health Alert is issued, it remains in effect until toxic algae levels in the lake drop below the limit of 15 parts per billion. At that point, a Health Advisory will remain in effect until toxic algae levels are below 2 parts per billion. Full-body contact is allowed under Health Advisories, although the public is advised to use caution and avoid the water if algae blooms are present. Levels are checked once a week by the Nebraska Department of Environmental Quality.

The monitoring program for 2005 will be expanding to include other area lakes, including Czechland Lake near Prague. Czechland Lake was one of the lakes that was temporarily placed on Health Alert status last fall due to toxic algae.

Elevated levels of toxic algae can have a number of health effects on both humans and animals. The poison produced by the algae can cause skin irritation, diarrhea, and vomiting, and in extreme cases, death from liver or respiratory failure.

The Nebraska Department of Environmental Quality posts weekly updates on toxic algae conditions in Nebraska each Friday on their website at <http://www.deq.state.ne.us>. A Toxic Algae Fact Sheet is also available on their site (excerpts are at right). For more information, contact DEQ at (402) 471-2186 or [MoreInfo@NDEQ.state.NE.US](mailto:MoreInfo@NDEQ.state.NE.US).



◀ Watch for signs like this at lake entrances - they indicate lakes that are currently on Health Alert status.

## TIPS FOR DEALING WITH TOXIC ALGAE

(excerpted from "Toxic Algae Fact Sheet," Nebraska Department of Environmental Quality. Full text available at [www.deq.state.ne.us](http://www.deq.state.ne.us))

### Here are some tips on what you can do, and things to avoid:

- Be aware of areas with thick clumps of algae and keep animals and children away from the water.
- Don't wade or swim in water containing visible algae. Avoid direct contact with algae.
- Make sure children are supervised at all times when they are near water. **Drowning, not exposure to algae, remains the greatest hazard of water recreation.**
- If you do come in contact with the algae, rinse off with fresh water as soon as possible.
- Don't boat or water ski through algae blooms.
- Don't drink the water, and avoid any situation that could lead to swallowing the water.

### Is it safe to eat fish from lakes that are under a Health Alert?

The toxins have been found in the liver, intestines and pancreas of fish. Most information to date indicates that toxins do not accumulate significantly in fish tissue, which is the meat that most people eat. It is likely that the portions of fish that are normally consumed would not contain these toxins. However, it is ultimately up to the public to decide whether they want to take the risk, even if it is slight. Fishing is permitted at lakes that are under a Health Alert, but anglers may want to consider practicing catch and release at these lakes.

### Where can I find out more information about lake sampling for toxic algae?

The Nebraska Department of Environmental Quality is conducting weekly and monthly sampling at select public lakes that are either popular recreational lakes, or have historically had toxic algae problems. This information is updated weekly on the agency web site, [www.deq.state.ne.us](http://www.deq.state.ne.us).

### What should I do if I have concerns regarding a private lake?

As part of the University of Nebraska Water Quality Extension Program, UN-L has developed a "Volunteer Monitoring Program" and lake test kits that will be sent to interested lake associations, owners, etc. so they can collect a sample and send it to UN-L for analysis. To obtain more information and a test kit please contact the program at (402) 472-7783, or (402) 472-8190.

### If I think a public lake has a toxic algae bloom, who do I call?

Please contact the Department of Environmental Quality's Surface Water Section at (402) 471-0096, or (402) 471-2186.

### If I am experiencing health symptoms, who do I call?

If you experience health symptoms, notify your physician, and also report it to the Nebraska Health and Human Services System at (402) 471-2937. You can also contact the Nebraska Regional Poison Center at 800-222-1222 for more information.

# Spring is Sprung at Czechland Lake

## 300 Students Attend Spring Conservation Sensation

Czechland Lake Recreation Area near Prague received its annual spring wake-up call on May 4th, hosting 300 area elementary students at the 14th annual Spring Conservation Sensation.

Fifth and 6th graders from 10 area schools attended the 2005 event, which features fun, hands-on activities designed to teach them about the importance of conserving natural resources. The students rotated through eight 25-minute sessions focusing on a variety of topics.

At the "Dig That Stuff" activity, students worked in teams in a fast-paced game that taught them about the properties of different soils. "How Many Bears" put the students into the role of animals trying to forage for enough food to survive. The "Geo-Hunt" session let students try out Global Positioning System units as they tried to locate hidden objects.

At other stations, students got to plant trees; play migratory birds in a game that showed the difficulties of migration; practice casting, knot-tying and other fishing skills; examine the parts of a lake ecosystem; and learn about water conservation by spinning the "Water Wheel of Fortune."

Attending the 2005 event were classes from Abie Public School, Ashland/Greenwood Elementary, District 23 (Colon), LBS-Logan View, North Bend Elementary, Platteville District 11 (Fremont), St. John Nepomucene (Weston), St. Mary's (David City), St. Wenceslaus (Wahoo), and Weston Public.

The event was sponsored by the Lower Platte North Natural Resources District, with partial funding from the Nebraska Department of Environmental Quality/EPA Region 7. Additional presenters came from the Natural Resources Conservation Service, the Nebraska Game and Parks Commission, the Lower Platte South NRD, and the Nebraska Association of Resources Districts. High school students from Mead served as group leaders and activity assistants. In-kind services were provided by the Nebraska Game and Parks Commission.



▲ How Many Bears?



▶ Geo-Hunt



▶ Migration Headache



▼ Tree Planting

▶ Water Wheel of Fortune



▼ Fishing



▶ Wildlife ID



◀ Lake Ecosystems

▼ Dig That Stuff





# Parts of NRD Show Slight Rebound in Groundwater Levels

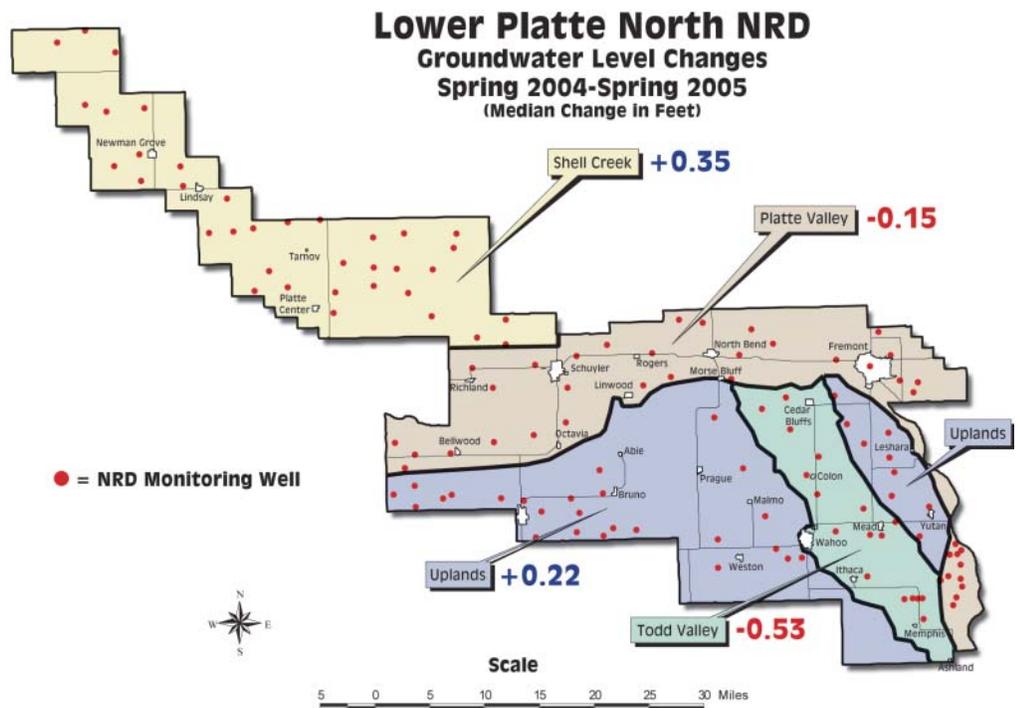
After three straight years of decline, groundwater levels showed a slight rebound in parts of the Lower Platte North NRD from spring 2004 to spring 2005.

The NRD measures groundwater levels twice a year (once in the fall and once in the spring). Currently there are 141 wells in the NRD's monitoring network, most of which are owned by private cooperators.

The comparison of results from spring 2004 and spring 2005 showed slight increases in two of the district's four aquifer regions. The other two regions had slight declines, but at a much lower rate than had been the case in the previous three years.

The Shell Creek region showed the biggest increase, rising .35 feet. The Uplands region increased of 0.22 feet. The Platte Valley region decreased .15 feet, and the Todd Valley decreased .53 feet. (Results are given as the median change in feet.)

Despite positive indicators in the 2004-2005 results, groundwater levels in the district still remain low due to drought. Even with average or above-average precipitation it could take several years for them to climb to pre-drought levels.



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