

IN THE LOUP

Lower Loup NRD Voluntary IMP Approved

The plan to manage water use and supply in the Lower Loup Natural Resources District has been approved by the NRD Board of Directors and the Nebraska Department of Natural Resources (DNR).

LLNRD General Manager Leon “Butch” Koehlmoos said, “the integrated management plan’s chief objective is to achieve and sustain a balance between water uses and water supplies for the long term.” He said that the final product was

the result of a joint effort between the NRD, DNR, and water-use stakeholders.

Koehlmoos said that the IMP will allow for continued economic growth and still protect current groundwater and surface water users. He said that much of the plan reflects regulations already in place by the NRD and DNR so that the average user may not notice any changes in water regulation. He said that if any modifications were

required in the future, those changes would have to be approved by both the NRD and DNR.

The LLNRD Integrated Management Plan was created following a series of meetings where water use stakeholders offered guidance and suggestions in the plan’s various elements. The IMP is on the NRD web site, www.llnrd.org. Click on the “Resources” tab, then “Downloads,” and the link is near the bottom of the page.

Average Groundwater Levels Fall Slightly

Springtime groundwater measurements across the Lower Loup NRD show a slight decrease in 2016. The district-wide average was a decline of 0.14 foot (just under 1 3/4 inches).

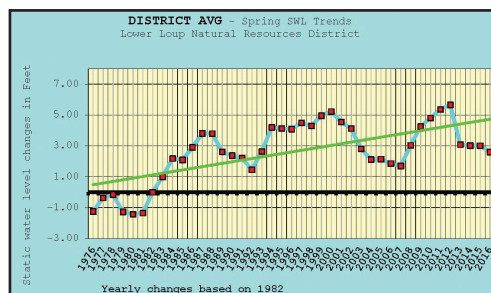
LLNRD General Manager Leon “Butch” Koehlmoos said the district does annual monitoring of groundwater levels. The monitoring began in 1976 and has been done each of the 40 years since.

The NRD’s Assistant General Manager, Russell Callan, said that when observed over the four decades, groundwater levels

continue to show an upward trend. The Lower Loup NRD numbers show the largest increase in groundwater levels in Boone County, 0.67 foot and the largest decline in Rock County, 1.3 feet.

The trend line for the District average can be found below. The

complete report can be found at www.llnrd.org. Click on the “Resources” tab, then “Downloads,” and the link is near the bottom of the page.



INSIDE THIS ISSUE:

South Loup Watershed Plan	2
Columbus Area Water Study	2
Davis Creek Rec Area Expansion	2
Message From The Manager	3
Hazard Mitigation Plan Update	3
Groundwater Nitrates Up Slightly	4

South Loup Watershed Plan Nearly Complete

A plan to protect the groundwater and surface water quality and quantity within the South Loup River Basin is nearing completion.

The plan, initiated by the Lower Loup NRD, in partnership with the Central Platte, Upper Loup, and Twin Loup NRDs, as well as the Nebraska Department of Natural Resources and Nebraska Department of Environmental Quality (NDEQ), addresses impairments from E. coli contamination and a downward

trend in groundwater and surface water levels.

Kicked off in May of 2015, the plan was guided by input from residents of the basin at a series of four meetings held over the last year. The local participants represented agriculture, various communities, natural resources agencies and other local entities.

Lower Loup NRD Water Modeling Coordinator Tylr Naprstek said that the plan is expected to be finalized

sometime in June and submitted for approval from NDEQ and the Environmental Protection Agency.

Upon EPA's final approval, Naprstek said the plan will be enacted and cost-share structures will be put into place for the various conservation methods and targeted areas identified by the plan. The South Loup River stretches from near Stapleton in Logan County to where it joins the Middle Loup near Boelus in Howard County.

Study Of Columbus Area Aquifer Continues

The Lower Loup NRD, in partnership with the City of Columbus, continues to develop an overall assessment of water resources in the district's largest community.

NRD Assistant General Manager Russell Callan said that, when complete, the study will offer

data on the hydrology of the Columbus area, providing details on groundwater locations and levels. He said that locations will be identified for potential groundwater recharge projects and a detailed groundwater model will be developed.

Callan said that the Columbus study includes an inventory of the area floodplain and an analysis of storm water data.

The study is being conducted by HDR, an engineering firm from Omaha.

Expansion Okayed For Davis Creek Rec Area

A North Loup firm, Frahm Construction, was the low bidder for the first phase of a planned expansion at the Davis Creek Recreation Area south of North Loup.

The low bid of \$740,805 was approved by the LLNRD Board at its May meeting. The U.S. Bureau of Reclamation will provide \$428,000 of the total costs.

The improvements will include 42 new campsites with electrical hook-ups. The expansion will also feature

a new shower-house and a primitive restroom facility.

Lower Loup NRD General Manager Leon "Butch" Koehlmoos said that the expansion became necessary due to the popularity of the facility. He said that overflow crowds have meant the public has been utilizing areas not intended for camping.

Work on the expansion is expected to begin later this summer. A second phase in the rec area expansion is scheduled to include another boat

ramp, a fish cleaning station, and new parking area.



Two new picnic shelters are now in place at Davis Creek Rec Area.

A Message From The Manager

Hello, and welcome to another edition of the Lower Loup Natural Resources District's quarterly newsletter, "In The Loup." Thank you for letting us share our news.

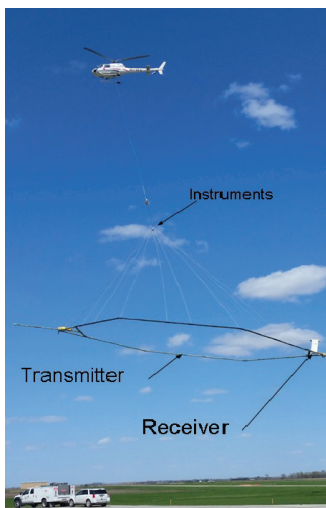
As you may note from the various articles in this publication, there are a number of projects taking place in the district. Among those, aerial electromagnetic surveying is scheduled to be conducted over the Columbus area starting in mid to late July.

Lasting up to 3 weeks and dependent on the weather, a low flying helicopter will cover approximately 600 miles of flight lines around the Columbus area, recording geologic measurements in the aquifer. The work will provide valuable data

about the connectivity of the various layers of aquifers in the area.

This project is part of an ongoing effort to better understand and manage groundwater resources and is being flown in coordination with neighboring NRDs and the Nebraska Department of Natural Resources.

In other news, the LLNRD just completed several renovations at Pibel Lake Recreation Area in southeast Wheeler County. A new settling basin on the upper end of the lake will be a major boost to water quality. Access to the east side of the lake has been created and improvements made to the lake's outlet structure.



*Aerial
Electromagnetic
Survey Equipment*



*LLNRD General Manager
Leon "Butch" Koehlmoos*

There are also two new ADA compliant fishing piers, a new picnic shelter, and a pedestrian bridge on the north side of the lake. The Pibel Lake Renovation was funded in part by a grant from the Nebraska Environmental Trust and a Section 319 grant from the Nebraska Department of Environmental Quality.

NRD Hazard Mitigation Plan Being Updated

The Lower Loup NRD is starting an update of its regional hazard mitigation plan (HMP). The plan covers multiple entities, such as communities, schools, fire and police departments, hospitals and special districts.

HMPs are community-guided documents that identify vulnerabilities to natural or man-made hazards. The plans identify projects to reduce or eliminate these vulnerabilities.

Among the natural disasters covered by an HMP are tornadoes, flooding, drought, hail, and severe winter storms. Other disasters covered include agricultural plant and animal diseases, wildfires, and chemical spills.

Entities participating in the plan are eligible to seek pre- and post-disaster mitigation grants. The Lower Loup NRD planning effort was kicked off with a planning workshop on June 9th in Ord. Representatives

from many entities were present for the kickoff.



*The HMP will cover flooding like this
in Spalding in 2010.*



2620 Airport Drive
Ord, Nebraska 68862

Phone: 308-728-3221
Fax: 308-728-5669
E-mail: larrys@llnrd.org
www.llnrd.org

IN THE LOUP is a publication of the Lower Loup Natural Resources District. It is published quarterly by the LLNRD and is distributed to the residents of the 16 counties that make up the District. IN THE LOUP is edited by Larry Schultz, NRD Information/Education Coordinator.

Nebraska's NRDs . . .
Protecting Lives, Protecting
Property, Protecting the Future.

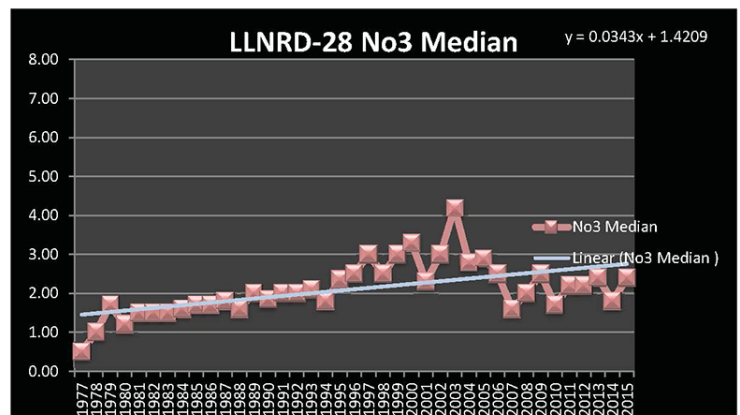
Average Groundwater Nitrate Levels Edge Up

Average groundwater nitrate (NO3) levels across the Lower Loup Natural Resources District rose slightly in 2015. When water samples from 998 locations in the district were averaged, the groundwater nitrate level rose from 4.7 parts per million (ppm) in 2014 to 5.1 ppm in 2015.

Those figures do not include the NRD's lone Groundwater Quality Management Area, Area 28, which is located south of the Loup River from southeast of Palmer to south of Columbus. High nitrate readings there bring the numbers to an average of 11 ppm in 2015, compared to 11.7 ppm in 2014.

The Lower Loup NRD has initiated several regulations to control high nitrates in Area 28, including a requirement to utilize groundwater flowmeters. The requirement means that the high nitrate levels in the water can be used to reduce fertilizer application.

DATE 2015



The 2015 Lower Loup NRD average for groundwater nitrate, when considered without the Water Quality Area 28 data, still shows an upward trend over time. Area 28 is also trending upward.