

#### **Average Groundwater Levels Hold Near Steady**

Average groundwater levels stayed near their previous mark across the Lower Loup Natural Resources District following spring measurements by NRD staff. When readings from wells across the NRD were averaged, the decline in groundwater was 0.01 feet.

NRD General Manger Leon "Butch" Koehlmoos said that the NRD data comes from annual monitoring of groundwater levels, a practice that has been ongoing for decades. He said that the minute decline recorded in 2015 is not remarkable when compared to data accumulated over four decades. Those readings show a series of peaks and valleys in groundwater levels in the lower Loup River Basin.

#### 2015 Average Groundwater Level Change by County (in feet)

Boone	-0.21	Merrick	1.09
Buffalo	0.35	Nance	-0.03
Butler	0.15	Platte	0.63
Custer	-0.07	Rock	-0.21
Garfield	-0.61	Sherman	0.34
Greeley	0.84	Valley	-0.21
Howard	0.15	Wheeler	-0.69
Loup	-0.33		

NRD Assistant General Manager Russell Callan said that groundwater levels are best viewed as trends and not one-year snapshots. Callan said that when observed over multiple decades, groundwater levels continue to trend upward, even when including data from severe droughts, like the one in 2012.

The largest average decline in the NRD came in Rock County, down 1.25 feet. It should be noted, however, that just a portion of Rock County is in the LLNRD and only fifteen wells are measured. The largest average rise in groundwater levels was found in Merrick County, 1.09 feet. Again, only a small portion of Merrick County, the Palmer area, is inside the NRD boundaries, and just five wells are measured there.

Koehlmoos said that the Lower Loup NRD will continue to be a watchdog for groundwater levels and that the NRD Board of Directors has an excellent record on management of groundwater for the district.

Callan said that the data from the NRD's groundwater level monitoring is available on the NRD web site,

www.llnrd.org. Click on the "Resources" tab at the top of the main page, then click on downloads. The 2015 Spring Static Water Level Monitoring Program report is located near the bottom of the page.

Callan urged residents of the Lower Loup NRD to contact district officials with any questions. The LLNRD Headquarters office phone number is (308) 728-3221. The office is located at 2620 Airport Drive, just off North Highway 11, behind the Airport Motel in Ord.

Crop water use information is now available at www.llnrd.org, click on the "Resources" tab and follow the drop box to "Crop Water Use."

#### **INSIDE THIS ISSUE:**

Columbus Levee		
Firm Selected for Project		
Message From The Manager		
No New Irrigated Acres		
in 2016	4	
U		

## **LLNRD Contributes to Levee Recertification**

The Lower Loup Natural Resources District Board of Directors has approved a \$1.38 million contribution to the recertification of the Loup River Levee recertification project in Columbus.

The levee, which runs approximately 7 miles along the Loup River on the south side of the city, faces upgrades to meet the latest federal regulations. The levee protects about 30 to 35 percent of Columbus from flooding. The levee also protects numerous property owners from the need for costly flood insurance.

The earthen structure, built in the

# Firm Hired For Columbus Water Project

HDR, an engineering firm with offices in Lincoln and Omaha, has been selected to manage the Lower Loup NRD's study of the water resources in the community of Columbus.

NRD Water Modeling Coordinator Tylr Naprstek said that HDR is currently gathering data from all available sources. He said the firm will look at available water, current water uses, and data from several water modeling projects to develop a specific water model for the community. The model will allow NRD officials to make decisions on water availability, flow, recharge, and the impacts of development. 1960s by the U.S. Army Corps of Engineers, must be raised in certain locations to meet accreditation standards set by the Federal Emergency Management Agency (FEMA). With recertification, any levee failure would allow the city to receive federal assistance.

Columbus City Administrator Joe Mangiamelli told the LLNRD Board of Directors that the now \$5 million project has faced many hurdles since it begain in 2008. Federal authorities required new studies and reviews and added new requirements, including the replacement of toe drains. It is the second time the Lower Loup NRD has approved a contribution to the recertification. In 2009, the NRD had approved a \$600,000 contribution to the project, which was later scrapped due to delays at the federal level which meant a change in timeline and additional costs. The NRD Board approved the new contribution at its meeting in May.

NRD General Manager Leon "Butch" Koehlmoos said the levee project aligns with the NRD mission to protect lives and property, now and into the future.



The map above shows the approximate expanded floodplain in Columbus that would exist without the recertification of the Loup River Levee.

## A Message From The Manager

Hi everyone, and welcome to another edition of *"In The Loup."* I hope you will enjoy reading our latest newsletter. It is packed with information that concerns our natural resources in the District.

I'm going to touch on a couple of bills passed this year by the Nebraska Legislature and how they will affect the Natural Resources Districts. The Nebraska Legislature adjourned Sine Die this year on May 29th, day 89 of a 90-day legislative session. Although it was an off year for legislation that affected natural resources, there were a couple of bills that will have an impact on the LLNRD.

The first is the signing of LB 207 into law on March 18, 2015 by Governor Ricketts. The Legislature gave final approval to the bill by a vote of 44-0-5. LB 207 amends the Nebraska Chemigation statutes to duplicate the penalty language in the Nebraska Groundwater Management and Protection Act.

Chemigation is used to inject fertilizer or pesticides through an irrigation system to the crop in the field. Proper equipment to safely apply the chemicals and training in the use of the equipment are required to prevent backflow to the well or spills above ground should the system fail for any reason. A permit for the application of the chemicals and both initial inspections by the natural resources districts and further spot inspections are required to legally chemigate. There were very few violations of the Chemigation Act. However, those violators that chose to chemigate without a permit or without the proper equipment sometimes found it cheaper than investing in the right safety equipment. Fines were normally assessed by the courts at \$100.

This is no longer the case. Amendments passed in LB 207 put in statute that fines will be \$1000/day per site for the first offense under the Act, and subsequent violations would range from \$1,000 to \$5,000 each day per site of a violation. The process for handling a violation through the Natural Resources Districts remains the same.

The second bill signed into law by Governor Ricketts on May 26th, is LB 206, Amendments to the Erosion and Sediment Control Act. This bill updates the Act to address both sheet and rill and ephemeral gully erosion. The intent of the bill is to address the excess erosion which causes accumulation of sediment upon the lands of any other person to the detriment or damage of such other person.

This will be a significant change to the original act. The bill gives the authority to each NRD to petition the district court for a cease and desist order on an owner or operator if it is determined that the erosion is the result of an activity not normally associated with tillage, seeding, or cultivation of the farm land and immediate discontinuance



LLNRD General Manager Leon "Butch" Koehlmoos

of such activity is necessary to reduce or eliminate damage to the neighboring property.

The order would be lifted once the violation was brought back into compliance within proper soil-loss tolerance levels or the sediment from the excess erosion was prevented from entering the neighboring property. The bill would allow each district to provide any level of cost-share to the owner or operator to comply with the act. However, the availability of costshare assistance would not offset the requirement of the owner or operator of the land to comply with the terms of a schedule of compliance or administrative order.

Bills signed by the governor become law three calendar months after the Legislature adjourns unless they have an emergency clause or a specified operative date.



Ord, Nebraska 68862

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

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

PRESORTED STANDARD U.S. POSTAGE PAID GRAND ISLAND. NE PERMIT NO. 464

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.

> POSTAL PATRON

#### **NRD Board Votes No On New Irrigated Acres**

The Lower Loup Natural Resources District Board of Directors voted to approve a Water Resources Committee recommendation that will mean no new irrigated acres will be offered in the district in fiscal year 2016.

The decision, made at the June 2015 meeting of the NRD Board of Directors, was based on multiple concerns. Many Board members cited a desire to complete the LLNRD's Integrated Management Plan with the Nebraska Department of Natural Resources.

NRD General Manager Leon "Butch" Koehlmoos said that there were also concerns that new irrigation might push the NRD closer to an imbalance in water use versus water supply. He said that studies show that, in times of peak use (June, July, August), the basin might not have the excess



No new irrigated acres will be granted in the Lower Loup NRD in FY 2016.

needed to grant new irrigation.

He said that the North Loup River continues to flow at optimum levels, but the Middle and South Loup Rivers might be affected by new irrigation.

Koehlmoos said that the LLNRD Board will continue to evaluate the opportunity for new irrigation on an annual basis. Decisions by DNR on the appropriation status of the basin will also affect the potential for new irrigation. Those status updates are done at the end of each year.