

KNOW YOUR NRD

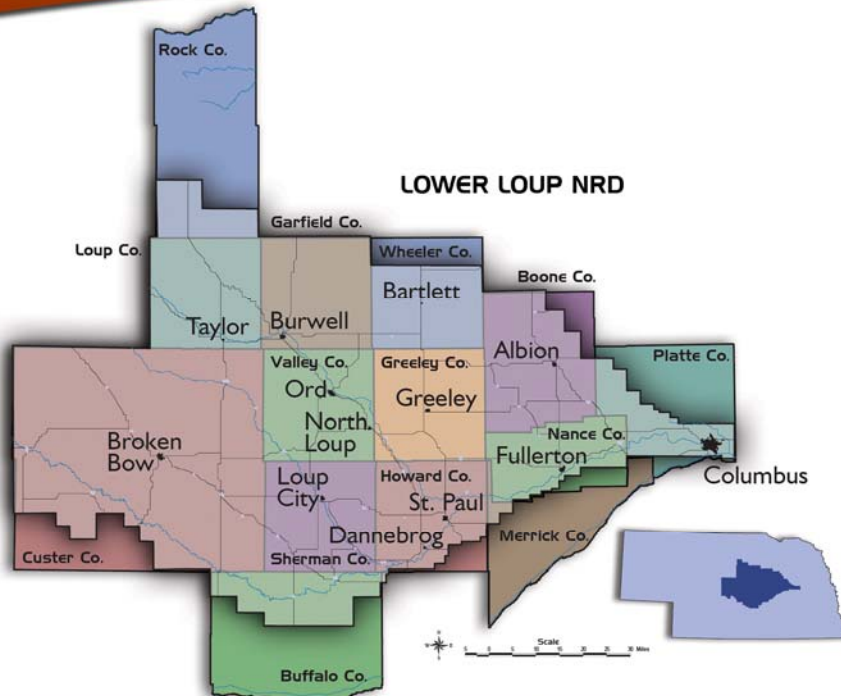


Nebraska's Natural Resources Districts
Making the Good Life Better Since 1972

Summer/Fall 2009

LLNRD QUICK FACTS:

- District Population: 70,754 (2000 Census)
- District Size in Acres: 5,070,720
- Encompasses 514 miles of rivers
- 10,656 Registered Irrigation Wells
- 1,152,833 Certified Irrigated Acres
- Planted nearly 12 million trees since 1972
- Distributed \$7.2 million in cost-share funding to landowners
- 2006 - Self-imposed moratorium on new high capacity irrigation wells
- 2008 - Self-imposed moratorium on expansion of irrigated acres
- 2009 - Lower Platte River Basin fully-appropriated designation reversed
- 2009 - New Groundwater Rules approved to allow limited irrigation development under LB-483



Protecting Lives

Protecting Property

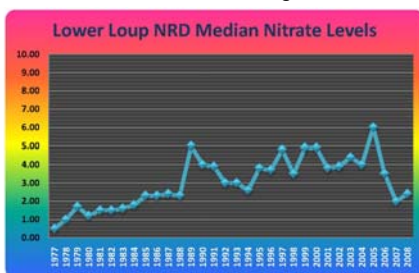
Protecting the Future

Nitrate Levels Fall In 2008

NRD efforts to protect groundwater are paying off as nitrate levels in the LLNRD averaged about 2 parts per million in 2008.

When data from the District's lone Phase III Groundwater Quality Management Area is eliminated, the average level falls even further, to about 1.9 parts per million.

The NRD is divided into 28 water quality areas. Groundwater quality and quantity is managed through the NRD's Groundwater Management Plan.



NRD Funds Levee Work

NRD funding totaling \$839,964 to assist with the cost of recertifying levees that protect the lives and property of Columbus residents have been approved by the LLNRD Board of Directors. The NRD Board voted to provide funds for 30 percent of the design and construction costs to recertify the Loup River and Whitetail Lake levees to meet new standards set by the Federal Emergency Management Agency.

The Loup River levee prevents about 30 percent of the city of Columbus from being in a flood plain. The Whitetail Lake levee protects another 71 homes in the subdivision south of Columbus.

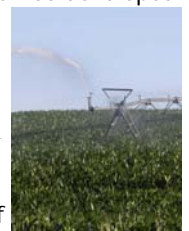
The Loup River levee certification is estimated to cost \$1.5 million and the Whitetail Lake levee work is expected to cost \$741,000.

Limited New Irrigation

Up to 2,000 new acres of groundwater irrigation can be developed under rules approved by the Lower Loup NRD Board of Directors. The Board also set criteria that will be used to rank applications for the new irrigation.

Up to 10,000 acres of irrigation can be developed over the next four years in the NRDs in the lower Platte River Basin under a bill passed in the Legislature's last session. LB-483 allows limited groundwater development by NRDs in river basins where a fully-appropriated designation has been reversed.

The LLNRD's criteria for ranking applications include stream depletion factors, groundwater and surface water status, irrigation concentration, the type and number of acres being developed, and soil classification.

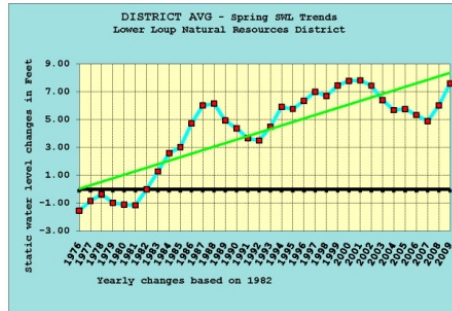


ELKHORN-LOUP MODELING (ELM) STUDY

Groundwater Levels Rise

The groundwater levels across the Lower Loup NRD, on average, rose 1.21 feet from 2008 to 2009. The numbers were compiled as part of the NRD's ongoing commitment to water quantity management.

NRD technicians completed measurements of static water levels in 315 wells across the District this past spring. All areas of the District showed a rise in static water levels. The biggest increase came in the NRD's Area 6, made up of parts of Boone, Nance and Platte Counties, where levels increased 1.93 feet. Area 7, located in southwest Custer County, showed the smallest increase, 0.35 feet.



Columbus Hospital Lake Project

Residents of and visitors to Columbus will benefit from the recreational opportunities of the Hospital Lake project. The Lower Loup NRD is funding 50% of the local costs of the effort as well as trees and grass seed for landscaping. The park has been developed on vacant land donated by the Columbus Community Hospital.

The Community Lake Enhancement and Restoration (CLEAR) Program of Columbus sponsored the \$241,122 project, located on eight acres east of the hospital. The Nebraska Department of Environmental Quality and the Nebraska Game and Parks Commission are also partners in the project.

Irrigated Acres Certification Compliance

A second round of infrared aerial photography has been approved by the Lower Loup Natural Resources District Board of Directors to assure compliance with the District's rules on the certification of irrigated acres.

More than 1.1 million irrigated acres have been certified with the LLNRD. The infrared photos were taken in September, 2008, when color differences between irrigated and dryland corn were most evident. A second round of photography this year will allow for comparison and identification of new irrigation.

Cost for the project is approximately \$100,000. Parties found out of compliance with the certification regulations face cease and desist orders from the NRD that could include fines of up to \$5,000 per day.

Hazard Mitigation Planning

Projects that protect District residents and property from the effects of natural disasters like tornadoes, flooding, and winter storms will be the emphasis of a Hazard Mitigation Plan being developed by the Lower Loup NRD.

The plan is required by the Federal Emergency Management Agency (FEMA) before federal funding can be awarded for projects that decrease the effects of natural disasters.

Representatives from counties, cities, school districts, and other public agencies are providing input on the elements of the plan.



- Lower Loup and 7 other NRDs are study participants
- USGS and UNL Conservation and Survey Division are compiling data
- Grant funding received for Phase III work

The ELM Study is focused on the availability of the groundwater resource, the effect of man's uses on the groundwater resource, and the interaction of groundwater and surface water.

Primary concerns of the study are the effect of groundwater withdrawal on the availability of surface water and the long-term effects of withdrawal on the groundwater resource.

The ELM Study covers approximately 30,800 square miles and will characterize the groundwater system within the study area and provide a regional groundwater flow model.

Find out more about Nebraska's NRDs at www.llnrd.org or www.nrdnet.org

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