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Protecting Lives, Protecting Property, Protecting the Futu

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# Nebraska's NRDs Celebrate 50th Anniversary and Plants **100 Millionth Tree**

Since 1972, Nebraska's Natural Resources Districts (NRDs) have been applying over 11,000 conservation practices to over 865,000 acres covering the state of Nebraska. Conservation practices used by the NRDs to help educate farmers and ranchers, improve soil health, increase irrigation efficiency, and make grazing land more productive. These conservation practices have been adapted and utilized by each district over the past 50 years, but all still hold true to all 23 NRDs.

One of the longest running conservation programs is the NRD Conservation Tree Program. This program gives out hundreds of thousands of trees across the state of Nebraska with a large portion of those seedlings being grown here in Nebraska at the U.S. Forest Service's Bessey Nursery in Halsey.

Through federal and local funding and landowner support, the NRDs are able to combat the declining tree population with restoration projects. NRDs provide not only the planting of trees, but also weed barrier installation to control weeds.

NRD directors and staff will be planting the 100 millionth NRD provided tree on the Capitol grounds this fall commerating 50 years of NRDs.



# **Directors of the Lewis and Clark Natural Resources District**

LCNRD activities are guided by 11 elected directors from 5 subdistricts with 2 directors serving from each subdistrict and 1 serving at-large. The directors are elected by the voters who live in each subdistrict and serve 4 year terms, with 5 or 6 seats up for election every 2 years.



Back Row: Dave Condon (Creighton), Jeff Steffen (Crofton), Curtis Armstrong (Ponca), Gary Howey (Hartington), Matt Weinandt (Wynot), Chris Johnson (Bloomfield)

Front Row: Marcel Kramer (Crofton), Carolyn Heine (St. Helena), Bill Christensen (Hartington), Russ Schmidt (Menominee) Not Present: Leroy Hoesing (Newcastle)



Scan the OR CODE for more information about LCNRD.

For more information on any of these programs, events, and staff listings please see our website, lcnrd.nebraska.gov or contact the office (402)254-6758.

### Lewis & Clark Natural Resources District Celebrates 50 years of Conservation

Fifty years ago, Natural Resources Districts (NRDs) were created by Nebraska Legislative Bill 1357. The legislation combined 154 county conservation boards and special entities into 23 NRDs based on watershed boundaries, with the goal of managing local resources with locally elected directors from within each district. NRDs are local government entities with broad responsibilities to protect natural resources and have been assigned 12 authorities by legislature. The priority authorities for Lewis & Clark Natural Resources District include soil conservation and erosion control, water quantity and quality, flood prevention and control, information and education, forestry and pasture, wildlife habitat, and recreation. LCNRD has been dedicated to protecting and enhancing natural resources for 50 years and will continue protecting them for years to come.





1969- Nebraska Legislative Bill 1357 introduced

1975- LCNRD delivering trees to Magnet residents after tornado

## LCNRD Celebrates 50th Anniversary with Picnic

LCNRD is hosting a picnic at Felber Park in Hartington, NE on August 2nd from 11 a.m. to 2 p.m. Join us to celebrate 50 years of conservation accomplishments in Northeast Nebraska. Hotdogs, chips, drinks, popsicles and ice cream will be served. There will be activites and information provided by LCNRD, Natural Resources Conservation Service (NRCS), and the Nebraska Game and Parks Commission.

## Sign Up for **Research Farms Bus Tour**

The Bow Creek Watershed Project will be hosting a bus tour, August 4-6th, to Dakota Lakes Research & Education Farm (Pierre, SD) and Menoken Farm (Bismark, ND), two leading regenerative ag research and education farms. The tour will highlight how regenerative practices are implemented on working farms. Learn from their journeys as you navigate you own, putting profit and fun back into farming! The tour cost is \$200 for the two day educational trip, and should not be missed! Contact Becky Ravenkamp at (402) 254-6758 or visit lcnrd.nebraska.gov.



Lewis & Clark Natural Resources District

# Newsletter

#### Summer 2022





2020- Drilling test well in Aten



2022- 50 years of natural resources conservation



LCNRD is hosting our first Amateur Photo Contest. The goal is to promote residents from within the district to get outside and enjoy the beauty of our natural resources. Submit your photos with the following criteria:

- Subject matter related to natural resources (wildlife, nature, recreation, agriculture, etc).
- Photographers must be residents of the District (eastern half of Knox, Cedar, or Dixon Counties).
- Photo submitted electronically: lcnrd@hartel.net.
- Provide photographer's name, address, phone number, as well as the title and location of the photo.
- Submit photos by December 31, 2022.





# Groundwater Levels - LCNRD Spring of 2022

The static water levels of 33 irrigation wells located throughout the Lewis and Clark Natural Resources District (LCNRD) are measured in the spring and fall each year. The following indicates the aquifers monitored and the change in water levels compared to the spring of 2021:

- Sand and Gravel: Average decline 1.9 feet
- Missouri Alluvium: Average decline 2.7 feet
- Niobrara Bedrock Aquifer: Average decline 2.3 feet
- Dakota Sandstone Aquifer: Average decline 4.7 feet



Irrigation system in LCNRD

The 2022 spring water levels, although lower than recent years, remain above the recorded lowest spring levels prior to the drought conditions of 2012. The average water levels for the spring of 2022, considering all wells measured, are 1.9 feet higher than the spring 2013 readings which was the first year after the 2012 drought. Groundwater levels of irrigation wells are monitored and recorded by the LCNRD to monitor potential fluctuations in water levels.

Adopting wise irrigation practices is important to maximizing crop yields and ensuring sustainable groundwater levels. Conserving water resources protects them this season and the next.

# **LCNRD** Water Quality Projects

#### **Bow Creek Watershed Project**

The goal of the Bow Creek Watershed Project is to provide education about *E. Coli* levels that exceed the state recommended levels for recreation use in the Bow Creek Watershed. The project encourages farmers and land owners to consider practices and programs such as learning farms, best managment practices (BMPs), septic system upgrades, and others. Eligible acres must be located within the Bow Creek Watershed boundary.

The Bow Creek Watershed Project is in partnership with Natural Resources Conservation Service (NRCS), Nebraska Environmental Trust (NET), Nebraska Department of Environment and Energy (NDEE), University of Nebraska (UNL), and Nebraska Game and Parks Commission (NGPC). Reducing pollulant loads will make Bow Creek safer for recreational and livestock use and will increase aquatic habitat for a thriving and diverse ecosystem and wildlife population.



#### **Bazile Groundwater Management Area**

The Bazile Groundwater Management Area (BGMA) of the Lewis & Clark NRD was initiated to address rising nitrate levels in the Creighton area, including city and domestic wells. At that time more than 50% of irrigation wells monitored indicated nitrate levels greater than 10 parts per million (ppm), meeting the trigger for Phase III management. LCNRD Phase III requirements include annual crop reporting, deep soil sampling, and recommend guidelines to adopt best management practices (BMPs) to turn around the trend of increasing nitrate levels. The BGMA includes the recharge area for the primary drinking water source that supplies the City of Creighton.

LCNRD and three other NRDs working in the area, sponsor three UNL research demostration sites to evaluate nitrogen in the soil and water in relation to implemented conservation practices. One site focuses on soil health, one focuses on crop rotation, and the other nitrogen inhibitors. Visit *bgma.nebraska.gov* for more information.

Cost share programs offered by LCNRD in the BGMA include Deep Soil Sampling, Conversion to Chemigation, and Siphoning Nitrates with Irrigated Pasture or Hay. Visit *lcnrd.nebraska.gov/water-resources*.



## Annual Private Well Testing

Private wells are an important part of our rural communities and could possibly present a health risk if not attended to properly. A way to mitigate this risk is to test your well water.

Annual tests of private wells are recommended for coliform or *E. coli* bacteria and nitrates. There are other contaminants that could be present at levels that exceed EPA drinking water standards, however, *E. coli* and nitrates are common contaminants in northeast Nebraska.

Generally, well tests should be done annually, but especially after flooding or whenever there is a change in taste, color, or a smell detected. Other times to test your well is if there is reoccuring stomach illness, a new water user that is an infant, is elderly or has a compromised immune system, repairs or alterations have been made, or if a new or domant water system is being activated.

Testing should be done late spring or early summer and not during long times of excessively dry weather. The best location to sample is straight from the tap, following sampling directions closely.

LCNRD offers a Domestic Water Suitability test kit to test for parameters of your drinking water. The cost of the complete kit is \$70.00. You can also bring in samples from domestic wells to test for bateria and/or nitrates present in your drinking water.



#### "Know Your Well" Program

"Know Your Well" is a Nebraska Environment Trust (NET) grant funded program that shows groups of interested high school students the basics of groundwater, well construction, and most importantly how to properly test your well for drinking water quality by conducting field tests of standard water quality parameters. Students also send samples to a university laboratory that conducts tests for the same parameters allowing the students to compare results for accuracy from the field to the laboratory. Testing is done for different analytes include pH, conductivity, ammonia, atrazine, calcium, *E. coli*, iron, and nitrates. The results are provided to the landowner for their records.

As of this spring, the NET grants have been awarded to expand the "Know Your Well" program across the state of Nebraska, including within Lewis & Clark NRD. Funds will be utilized to educate NRD staff of the curriculum to educate the students of the district, work with domestic well owners, expand the program to additional schools.

The "Know Your Well" Program is a great opportunity to educate students on how to protect this water resources. If you have any interest in this program or want more information reach out to your NRD today.

# Household Water Inventory for Better Water Conservation

Summer is a great time to inventory the water usage in your home and consider where improvements can be made within your household. There are many ways you can help protect groundwater resources with sustainable water use choices.

- Replace old water fixtures.
- Use low water usage appliances such as low flow shower heads, toilets, dishwasher, and clothes washer.
- Take quicker showers (5 minutes or less).
- Combine small loads of laundry into larger loads.
- Use manual lawn watering or monitor very closely.
- Water at night and only as needed.
- Turn water off while brushing teeth, washing/ shaving face, or washing dishes.

These simple changes to water usage can help you and your family conserve water, reduce pollution, and lower your water bill.