



Innovative Nitrogen Dashboard continued...

“We are proud to support this innovative initiative to provide agriculture producers with more tools for nitrogen management,” said Kelly Brunkhorst, Nebraska Corn Board executive director. “By empowering producers with their own data, we can improve fertilizer efficiency, maximize profits and protect our valuable water resources.”

Producer Connect will be free to producers and offer a wide range of features designed to simplify nitrogen and water management. Ag producers will have a password-protected log in and only be able to see their own data. A few features will include:

- **Historical data analysis:** By analyzing past nitrogen usage and crop performance, the dashboard will enable producers to identify trends in water use, fertilizer application and crop yield.
- **Environmental impact assessment:** The platform will assist farmers in quantifying the impact of nitrogen usage, aiding in compliance with regulations and demonstrating commitment to sustainable practices.
- **Information exchange:** The dashboard will allow for communication between the producers and the local NRD. Users will be able to submit crop reports online. Producers will also be able to view current research results to improve profitability.

Producer Connect is currently in its initial stages of development and is expected to launch January 2024. The initial roll out will be in Phase 2 and Phase 3 Groundwater Quality Management Areas and areas that have irrigation allocations. LCNRD will use Producer Connect for landowners to complete crop reporting requirements in the Bazile Groundwater Management Area of the district.

“This partnership between the Nebraska Corn Board and Nebraska’s NRDs showcases the power of collaboration and a shared vision in driving sustainable change to improve producers profitability and nitrogen-use efficiency while protecting Nebraska’s water resources,” Gigstad said. “It exemplifies why Nebraska leads the nation in irrigated



“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 quality and quantity, well construction, and most importantly how to properly test wells 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 and includes: pH, conductivity, ammonia, atrazine, calcium, E. Coli, iron, and nitrates. The results are provided to the landowner for their records.

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

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.

Visit our Facebook page to keep updated on what’s happening in LCNRD!

Innovative Nitrogen Dashboard to Improve Fertilizer Efficiency, Water Quality

The Nebraska Corn Board, Nebraska Association of Resources Districts (NARD) and 17 of Nebraska’s 23 Natural Resources Districts (NRDs) are pleased to announce the development of a nitrogen dashboard in partnership with Longitude 103, a leading provider of agricultural technology solutions.

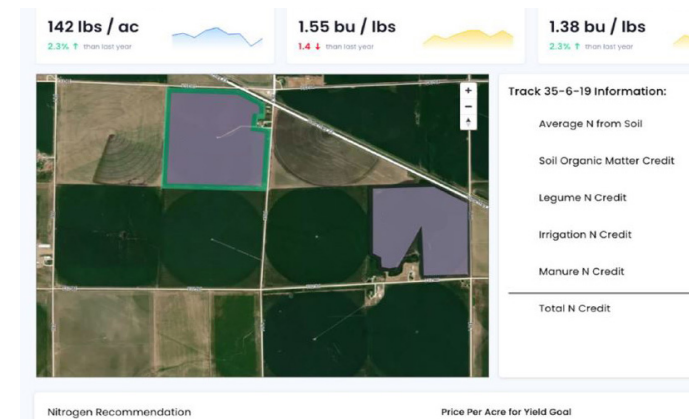
Producer Connect, a web and mobile application suite, allows producers to access their crop reporting data and includes a fertilizer recommendation based on yield goals. This collaborative effort aims to empower agriculture producers to optimize inputs, which will enhance agricultural profitability, water quality and irrigation efficiency.

In the last 10 years, Nebraska has made gains in nitrogen management through split-fertilizer application and irrigation efficiency, but there are opportunities for further improvement. Nebraska’s agricultural economy depends on groundwater and fertilizer; however, overuse of fertilizer can contaminate groundwater, which Nebraskans depend on for drinking water.

“With the growing concern of increased nitrate in groundwater, it is essential for NRDs and ag producers to work together to address the problem,” said Dr. Orval Gigstad, NARD president. “By developing a tool that is

mutually beneficial for both ag producers and our natural resources it’s a win-win situation. We applaud the Nebraska Corn Board for helping lead the way.”

The partnership between the Nebraska Corn Board and Natural Resources Districts exemplifies the commitment of key stakeholders to foster a thriving agricultural industry while protecting our water quality and quantity.



The Nebraska Corn Board has generously contributed funds to assist with the development of Producer Connect, recognizing the potential it holds in transforming the landscape of modern farming. (continued on back.)

2023 Annual Amateur Photography Contest

The Lewis & Clark Natural Resources District (LCNRD) is hosting the second annual Amateur Photo Contest. The contest promotes residents spending time outdoors enjoying the beauty of our natural resources and capturing some photos while they are at it.

Submit your photos by **December 31, 2023** following the criteria outlined below:

- Subject matter related to natural resources (wildlife, nature, recreation, agriculture, etc).
- Photos must be taken in the district (Cedar, Dixon or eastern half of Knox Counties).
- Photographers must be amateurs and residents of the district (Cedar, Dixon or eastern half of Knox Counties).
- Photos must be submitted electronically to [lcnrd@hartel.net](mailto:lcnrdd@hartel.net).
- Each submission must include the photographer’s name, address, and phone number.
- Each photo must include a title and location where the photo was taken.
- Prizes are awarded to the top 3 photos and the winning photos will be made into a canvas print to be sent to the photographers and first place will be displayed in the LCNRD office.

“The opportunities for amazing photos in northeast Nebraska are endless,” noted Matt Weinandt, LCNRD director, “It will be exciting to see what the residents of the district send in to the contest this year.”

2023 NACD Poster Contest

The Lewis and Clark Natural Resource District (LCNRD) would like to invite students to participate in a national poster contest sponsored by the National Association of Conservation Districts (NACD) and the NACD Auxiliary. NACD, founded in 1946, is a nonprofit organization representing nearly 3,000 conservation districts in 50 states and U.S. territories. This year's theme for the contest is **"One Water."**

This poster contest is open to students, grades K through 12, judging categories between grades K-1, 2-3, 4-6, 7-9, and 10-12. Posters will be considered at the local, state, and national levels, with the top posters in each judging category moving on to the next level. The top three posters in each judging category at the national contest level will receive \$200 for first place, \$150 for second, and \$100 for third. Judging is based on four criteria, Conservation Message (50 percent), Visual Effectiveness (30 percent), Originality (10 percent), and Universal Appeal (10 percent). Posters can be created using any flat or two-dimensional effect, such as paint, crayon, colored pencils, colored paper, or other materials.

The theme **"One Water"** should be on the poster. Rules and registration for the poster contest can be found at <https://www.nacdnet.org/general-resources/stewardship-and-education-materials/contests/>. If you have any questions, contact the LCNRD office at 402-254-6758 or lcnrld@hartel.net.

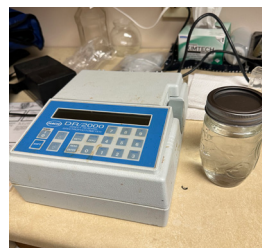
The deadline for receipt of posters at the local level is **October 3, 2023**. Please send or deliver all posters to the LCNRD, 608 N Robinson, PO Box 518 Hartington, NE 68739. Prizes will be awarded to the local winners for each age category.



How's your water?



Collect water sample



Nitrate testing

Get your domestic well water test kit and nitrate test today!

Education & Outreach

Opportunities

The Lewis & Clark Natural Resources District (LCNRD) offers a variety of hands-on activities, classroom presentations, career exploration and more!

All activities are free of charge! Most activities can be adjusted to fit specific classroom needs for Kindergarten through 12th grade. A list of activities and presentations can be found at lcnrld.nebraska.gov/education/classroom-presentations-activities.

To set up a classroom visit or inquire about educational materials, contact the LCNRD office at 402-254-6758 or lcnrld@hartel.net.



Arbor Day presentation at Crofton Elementary



Hartington high schoolers doing a stream assessment of the Bow Creek

Annual Well Water 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 is 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 when system repairs or alterations have been made, when a new or dormant water system has been activated, when there is a reoccurring stomach illness, and when a new water user is an infant, is elderly, or has metabolic or immune system problems.

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 \$77.00. You may also bring in samples from domestic wells to test for bacteria and/or nitrates present in your drinking water.

NDEE Extends Private Well Reverse Osmosis Rebate Program

The Nebraska Department of Environment and Energy (NDEE) has extended the Private Well Reverse Osmosis Rebate Program.

Applications will now be accepted and reviewed for consideration on a month-to-month basis. Submitted applications will be given equal consideration as long as funding for the program remains available in the month in which the application is submitted. Participation in the rebate program still requires pre-approval from NDEE. The installation of any reverse osmosis small water treatment system cannot begin until a rebate agreement is signed between the private well owner and NDEE.

Private well reverse osmosis system rebates are available to property owners of private wells with drinking water test levels above 10 parts per million (ppm) of nitrate. Applicants will be eligible for up to \$4,000 in rebates per small treatment installation that is effective in the removal of nitrate to a level below 10 ppm. Testing costs, purchase price of the system, and installation costs are eligible expenses that can be included in a rebate application.

Applicants will be required to submit water quality data from the State laboratory with testing results dated no earlier than January 1, 2022. Testing is available to any private citizen in

the state, kits can be ordered online at <https://www.nebraska.gov/dhhs/water-test-kits/private.html>.

Applications from property owners will also be required to contain a cost estimate for the installation of a reverse osmosis treatment device certified by the American National Standards Institute. That cost estimate must come from a licensed plumber or an entity that has performed at least five successful Private Well Reverse Osmosis Small Water Treatment installations.

NDEE will disperse approved rebates following successful installation and demonstration of effective removal of nitrate to a level below 10 ppm. Follow-up testing will need to be submitted to the department to demonstrate successful removal of nitrate to a level below 10 ppm. Installations and follow-up testing need to be completed by September 30, 2024.

All requirements for the Reverse Osmosis Rebate Program, including the application forms and an instructional video, can be found on NDEE's website at <http://dee.ne.gov/Publications/pages/22-051>. Inquiries can also be made to NDEE State Revolving Fund Section Supervisor Steve McNulty at smcnulty@nebraska.gov or 402-471-4200. LCNRD staff has assisted in the completion of applications and can provide assistance to those interested in applying.



A reverse osmosis system installed under a kitchen sink.

Bow Creek Grazing Workshop

The Bow Creek Watershed Project will be hosting a Grazing Workshop on September 22nd. Converting sunlight and water into forage and forage into pounds of meat is what livestock producers do. The more efficiently it is done, the more profit can be realized.

Ralph Tate, a Certified Educator for Holistic Management International (HMI) from Papillion, Nebraska, will discuss these processes for commercial livestock producers and finish operations. During the workshop, Ralph will present the principles of grass and forage management, rotational grazing, and how both impact profit per acre. Attendees will have the opportunity to see the principles in action at local farms.

Pat Steffen will share experiences of rotationally grazed pastures with his commercial cattle and his lessons to share about fence and water infrastructure. Matt Kathol is in his second year of grazing multi-species forage crops on cropland with cattle. Forage analysis from the past two years will be presented as well as actual grazing numbers from 2022 and anticipated grazing for 2023.

Pasture plant composition will be assessed by UNL Extension Beef Specialist, Ben Beckman. Jason Thiele, Nebraska Game and Parks Private Lands Biologist, will discuss how management can change plant communities in pastures and rangeland.

The workshop will be held on September 22nd from 9:00 AM - 3:30 PM at the Hartington Golf Course. Lunch is provided with registration. To register contact Becky Ravenkamp at the LCNRD by calling 402-254-6758 or by emailing bravenkamp@lcnrld.org.



UNL Students learn about grazing the multi-species forage crop on the Kathol Farm near Hartington.