2022 Recognition Awards

Each year service recognition awards are presented to directors and staff reaching milestone anniversaries. The following were presented awards prior to the December 2022 Board of Directors meeting.

DIRECTOR SERVICE RECOGNITION

15 Years of Service



- Brian Keiser Brian was elected to Subdistrict 1, replacing his father Daryl Keiser. Brian has served on the Water Utilization, Western Projects, Water Banking, Resubdistricting and Building committees.
- Steve Sheen Steve was elected to Subdistrict 3 to replace Tom Brennan. Steve has served on the Water Utilization, Western Projects and Programs committees.





• Ed Stoltenberg Ed was elected to Subdistrict 7 to replace Don Kelly. Ed has served on the Water Quality, Programs and Eastern Projects committees.

25 Years of Service

Barry Obermiller Barry was appointed to Subdistrict 10 to replace Bill Haskins. Served on the Water Utilization, Programs, Eastern, Variance/Appeals, Resubdistricting, Building, Budget, Executive committees. He also served as Treasurer from 1999-2004, Vice-Chairman from 2005-2008, Chairman from 2009-2012, and Secretary from 2013-2017.



Barry Obermiller accepts 25 Year Service Award from Chairman Mick Reynolds

NARD Hall of Fame Director of the Year



Lyndon Vogt, General Manager, presents Hall of Fame certificate to Jim Bendfeldt

Jim Bendfeldt Jim was inducted into the NRD Hall of Fame by NARD in 2022 for significant contributions to improving the state's natural resources. Elected to Subdistrict 5 to replace John Tarrell. Served on the Western Projects, Water Quality, Variance, Budget Executive, Integrated Management, Water Banking, Programs, Policy and Building committees; and on the NARD Board of Directors. Jim was Board Secretary from 2009-2012, Vice-Chairman from 2013-2016 and Chairman from 2017-2020.

STAFF SERVICE RECOGNITION

10 Years of Service

Thirty Mile Irrigation District Employees

- Jim Harris, Manager: Jim supervises operations of the canal, orders water when needed controls the head gates, river gates, and monitors river returns. Jim also sets the water delivery schedule for the irrigation customers.
- Mike Ostergard, Technician: Mike assists Harris with all of the operations of the canal and



Jim Harris, Mike Osteraard & Marci Ostergard accept 10 Year Service Awards

• Marci Ostergard, Secretary: Marci is part-time bookkeeper assisting with billing/finances.



Shane Max, Resources Conservationist Shane measures groundwater levels for the ground water quantity program and samples wells for water quality, inspects Chemigation systems, assists with prescribed burns, maintenance and canal projects.

anniversary clock to Shane Max

15 Years of Service

Jesse Mintken, Assistant Manager Jesse oversees field staff and software for GIS projects; coordinates flood risk reduction projects with engineering firms, local, state and federal agencies; coordinates water and drought mitigation projects in the District; compiles data for the Groundwater Management Program; and supervised construction of irrigation canal projects in Dawson County.



Lyndon Vogt presents 15 Year Service Award to Jesse Mintken

Important Dates

* January 1 Nitrogen Certification test due

* February 16 **CPNRD Water Programs Update - Central City** * March 1 Deadline: Transfer applications for irrigated acres

* March 31 Crop Report due for Groundwater Management Program

* April 1 Last day to order Conservation Tree Seedlings

CPNRD-Ron Bishop Memorial College Scholarship applications due * April 15

* June 1 Chemigation permits due

* September 15 Chemigation reinspections must be completed

Follow Central Platte NRD on:





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Staff

9

General Manager: Lyndon Vogt Assistant Manager: Jesse Mintken Administrative Assistant: Kelly Cole Communications Assistant: Brody Vorderstrasse Cozad Ditch Manager: Michael Schmeeckle Cozad Ditch Rider: Jake Laird GIS Coordinator: Angela Warner GIS Image Analyst: Luke Zakrzewski Hydrologist: Brandi Flyr Information/Education Specialist: Marcia Lee Precision Conservation Specialist: Darren Cudaback Prescribed Fire Planning Specialist: Nelson Winkel Projects Assistant: Tom Backer

Range Management Specialist: David Carr

Resources Conservationist: Shane Max Secretary/CPNRD: Deb Jarzynka Secretary/NRCS-Grand Island: Colleen Buettner Secretary/NRCS-Central City: Kyla Friedrichsen Secretary/NRCS-Lexington: Samantha Keith Secretary/NRCS-Kearney: Shelly Lippincott Secretary/Thirty Mile Irrigation District: Marci Ostergard Thirty Mile Irrigation District Manager: Jim Harris Thirty Mile Irrigation District Technician: Mike Ostergard UNL/CPNRD Demo Project Coordinator: Dean Krull Water Quality Specialist: Tricia Dudley Water Resources Specialist: Dan Clement Water Resources Technician: Courtney Widup

Resources Conservationist: Bill Hiatt

Nebraska's NRDs: Protecting Lives Protecting Property Protecting Your Future

CENTRAL PLATTE IN PERSPECTIVE

Volume 27 No. 3 January 2023

Central Platte NRD Newsletter

215 Kaufman Ave

Grand Island NE

(308) 385-6282

Attend Annual Water Programs Update - February 16

Kegistration is open for Central Platte NRD's annual Water Programs Update. NRD staff will give updates on both water quality and water quantity developments and progresses. Guest speakers will offer insights in the anticipated weather pattern for the 2023 growing season, drainage law regarding landowner and renter responsibilities, and results of new sensor-based fertigation trials.

The public is encouraged to attend. There is no registration fee and catered lunch will be provided with an RSVP.

Time: 9:30 a.m. – 2:30 p.m. Date: Thursday, February 16, 2023 Location: Merrick County Youth & Ag Education Center, 1784 Fairgrounds Rd, Central City RSVP for meal count by February 10th (308) 385-6282 | lee@cpnrd.org

Attendance replaces the requirement to take CPNRD's Nitrogen Management Certification Test for the Groundwater Quality Management Program. Professionals may register to receive Continuing Education Credits for the Professional Water Well Contractors License and Certified Crop Advisors Water & Soil Sredentials.

SCHEDULE

9:30 - 9:35	Welcome: Lyndon Vogt, General Manager
9:40 - 10:00	Groundwater Management Plan Updates: Courtney Widup, Water Resources Technician
10:05 - 10:30	Drainage Law Landowner vs Renter Responsibilities: Don Blankenau, Attorney
10:45 - 11:15	Water Quantity Update: Luke Zakrzewski GIS Image Analyst
11:20 - 12:00	Water Quality & Nitrogen Use: Central Platte NRD Staff
12:00 - 12:45	Catered Lunch
12:45 - 1:15	Nitrogen Management Timeline Fertigation Trials – UNL/CPNRD Sentinel Fertigation
	Dean Krull, UNL Demo Project Coordinator; Taylor Cross, UNL Grad Research Student
	James Herrick, Implementation Specialist
1:15 - 1:45	Landowner Testimonial Transition to Data-Driven Fertigation: Noah Seim, Seim Farms
2:00 - 2:30	2023 Weather Outlook: Martha Durr, State Climatologist

Also In This Issue

- COHYST & CPNRD Water Mitigation Update
- Grower vs Sensor-Based Fertigation
- Service Recognition Awards
- Marsh Utilizes WREP for Flood-Prone Fields
- CPNRD's WFPO Flood Reduction Plans
- Pasture Improvement Funding Available
- Are You Prepared for a Wildfire?
- Uranium Awareness
- Insert: Tree Order Form & Irrigation Reminders

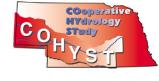
Williams Family Receives **Johnny Appleseed Award**

Congratulations to father and son tree-planting duo Monte and Lincoln Williams of Clarks. The Williams Family was recently recognized with the Johnny Appleseed Award from the Nebraska Statewide Arboretum for planting nearly 93,000 trees. Their endeavor began in 1975, when Monte purchased 1,400 seedlings from Central Platte NRD to plant as a windbreak for livestock protection and have continued the tradition of planting nearly two thousand trees annually.

PAGE 5

COHYST & CPNRD Water Mitigation Update

CPNRD is required by both Nebraska state statute and the Platte River Recovery Implementation Program (PRRIP), to monitor the quantity and timing of water use within the District. Monitoring is done with the purpose to offset some of the water depletions caused by groundwater pumping. In the absence of groundwater flowmeters to track groundwater pumping, CPNRD and the Nebraska Department of Natural Resources (NeDNR)



rely on the COHYST Groundwater Model to track depletions caused by groundwater pumping and to determine the benefits of water mitigation projects. COHYST integrates a surface water operations model, a groundwater flow model and a soil-water balance model. This model assists NeDNR and CPNRD with meeting the legally required water mitigation targets of local integrated management plans and the PPRIP by assessing the impact of water uses and management practices on long-term water supplies.

Originally developed in 1998, the COHYST is undergoing a significant update. The model update was necessary as the underlying groundwater modeling software is no longer supported. A consultant was hired to modify the model to the newest software format and input the most recent data. This two-year model update process is nearing completion and will allow the partners to evaluate progress toward meeting water mitigation targets for the 2023 Robust Review. Nebraska COHYST partners: Central Platte, Twin Platte, Tri-Basin NRDs; Central Nebraska Public Power & Irrigation District, Nebraska Public Power District and Nebraska Game & Parks Commission.

Your CPNRD Contact: Brandi Flyr, Hydrologist (308) 385-6282 | flyr@cpnrd.org | visit cohyst.nebraska.gov.

Grower vs Sensor-Based Fertigation (SBF)

During the 2022 growing season, sensor-based fertigation (SBF) studies were conducted by UNL on two farms in the CPNRD with a focus on improving nitrogen (N) management. SBF utilizes multispectral sensors equipped on drones to collect images and detect weekly N deficiencies in corn from V6 to R3 growth stages. With the use of N-Time™, the collected images are analyzed to create an actionable nitrogen prescription on SBF treatment sectors. Results from SBF studies conducted throughout Nebraska since 2019, show the practices to be 96% more efficient in N usage and 56% more profitable when compared to the grower's management. New treatments introduced to the study included increasing the applied N rate when a treatment area is triggered as deficient. With these new treatments, SBF results continued to increase efficiency and profitability.

Note: Marginal Net Return (MNR) values were calculated on both fields at \$0.80 per lb of N & \$6.80 per bushel of corn

2022 Research Results	Field 1	Field 2			
Nitrogen Use Efficiency	Nitrogen savings of 98 lbs N/acre. No statistical differences in yield.	Nitrogen savings of 100 lbs N/acre. No statistical differences in yield			
	Improved MNR by \$93/acre	improved MNR by \$62/acre			
Nitrogen use efficiency (NUE) was increased by 35% to 47% compared to the grower's N management					

Following harvest, soil samples were taken in each treatment sector at two depths, 0-8" and 8-24".

Soil Nitrate Results	Field 1		Field 2		
	0" - 8"	8" - 24"	0" - 8"	8" - 24"	
Growers N Management	10.8 ppm (26 lb N/ac)	6.25 ppm (30 lb N/ac)	16.6 ppm (40 lb N/ac)	15.2 ppm (72 lb N/ac)	
SBF N Management	6.02 ppm (14 lb N/ac)	2.6 ppm (12 lb N/ac)	9.1 ppm (22 lb N/ac)	4.7 ppm (23 lb N/ac)	
Soil data corresponds with NUE trends performed in the SBF sectors compared to the grower's management sectors.					

Overall this study provides promising results to improve nitrogen usage in corn production to minimize over-application and potential leaching of residual nitrogen through the soil profile. The timing of N applications and the importance is shown in this data to achieve and maintain high yields and improve NUE's. While corn and N prices fluctuate from year to year, those prices don't influence the effective and efficient use of nitrogen that this method provides.

To learn more about this study attend CPNRD's Water Programs Update on February 16th in Central City or contact:

Taylor Cross, UNL Grad Research Student (757) 617-4022 | tcross3@huskers.unl.edu

For sensor-based fertigation Sentinel Fertigation (531) 530-7627 | info@sentinelfertigation.com

Marsh Utilizes WREP Funds for Flood-Prone Fields

Gayle Marsh says one thing has made his family farm in central Nebraska successful for four generations: frugality. He has insisted on staying small so he can manage his 560 acres independently. That emphasis was evident in Marsh's

management plan for a 55-acre area of his operation that frequently flooded. "We maybe got a harvest on those acres three out of five years," he said. Other years, he might lose \$40,000 on inputs for a crop that would be drowned out.

Every fall after harvest, the Marsh family tried to increase drainage on the site using a disk to mechanically break up compacted clay soil layers down to 24", helping with drainage after snowmelt and allowing them to plant. Inevitably, the clay soils would swell and the site would pond water during the growing season. As a result, these acres were only marginally profitable. It didn't make sense to keep these acres in production, Marsh realized.



Gayle Marsh Easement, Spring 2022

After evaluating several wetland programs Marsh felt the Wetlands Reserve Enhancement Partnership (WREP) fit his operation best. Marsh signed the 55 flood-prone acres up for WREP in 2012 because WREP allows landowners to pass pivot irrigation systems over enrolled acres. The wetland portion of the site was restored by removing sediment that had accumulated from the uplands and an upland buffer was established to prevent sediment from accumulating in the future. Marsh says he loves seeing the variety of wildflowers and native grasses that grow on those acres each spring. He also loves that he doesn't have to worry if he's going to be able to raise a crop there anymore.

Another benefit he's seen from the WREP investment was the impact on wildlife. "It's brought these acres back to nature, back to what this was 100 years ago. The wildlife has really expanded out there," he said.

Marsh reinvested the easement payment back into the property by purchasing a corner system for the pivot to effectively irrigate the field corners. The 55 acres of marginal cropland was transitioned to forage production; in which

the Rainwater Basin Joint Venture (RWBJV) partners provided 85% cost-share to establish perimeter fence, livestock water and pivot bridges to allow the pivot to cross the perimeter fence while preventing livestock from escaping.

In addition to pivot upgrades, the Marshes worked with NRCS and the NRD to install a soil moisture probe in the field to allow real-time monitoring of the soil moisture profile through the growing season. The data is integrated into a mapping package that allows the pivot to precisely apply irrigation to the portions of the field that have the greatest water needs and reduce application to other areas, like the wetland, that don't need irrigation inputs.

After enrollment in WREP, the farm was in the Net Farm Income Study, conducted by RWBJV and UNL, to compare conventional pivot irrigated tracts with farmed wetlands to evaluate economic vitality of conservation programs. Results show that producers who utilized the cost share saw a return on their investment in three years, and forage production on flood-prone acres provided greater net farm income

Marsh agrees with the study and recommends other producers consider the program, especially if they have livestock and need a quality pasture option. If you have a field that might be a good fit for WREP, contact your local Natural Resources Conservation Service or the Rain Water Basin Joint Venture at (308) 382-8112.

Article accreditation: Chrystal Houston, Upper Big Blue Natural Resources District

CPNRD's WFPO Flood Reduction Plans

In 2020, CPNRD successfully obtained the following Watershed and Flood Prevention Operation (WFPO) grants to determine what options are feasible for flood reduction:

- Lower Wood River Watershed -Buffalo, Hall, Merrick Counties
 An Environmental Assessment Study (EAS) is currently in
 the process of seeking congressional approval to migrate
 from an EAS to an Environmental Impact Study. If approved,
 would give the NRD access to more funding opportunities.
- Spring/Buffalo Creek Watersheds Dawson County EAS is in the process of evaluating alternatives such as stream enhancements, new and existing drainage, and berms to redirect the flow of flood waters.
- **Elm/Turkey Creek Watersheds** Buffalo, Dawson Counties EAS has alternatives identified to move forward with and to develop a draft plan.

These studies are in the initial two-year phase of the process to outline projects that could benefit the watersheds. Learn more about the projects at: cpnrd.org/flood-reduction/in-the-works

The NRCS WFPO Program provides for cooperation between units of federal, state, local and tribal government (project sponsors) to protect and restore watersheds up to 250,000 acres. Nebraska has over 60 approved WFPO plans that provides \$80 million in annual benefits. The statewide projects can be found on the NRCS website at www.nrcs.usda.gov under the Watershed and Flood Prevention Program

Your CPNRD Contact: Jesse Mintken, Assistant Manager (308) 385-6282 | mintken@cpnrd.org

Pasture Improvement Funding Available

Five Natural Resources Districts (NRDs) were recently awarded grant funding for the *Partnering to Preserve Central Nebraska's Core Grasslands* project sponsored by the National Fish & Wildlife Foundation to provide landowners technical and financial assistance to improve range conditions for grassland birds and cattle in Nebraska. Partnering NRDs include Central Platte, Twin Platte, Tri-Basin, Middle Republican and Lower Loup.

The total grant award is \$300,000 with funds available through July 2025. Central Platte NRD was awarded \$149,500 in additional funding for the project through the Nebraska Environmental Trust. There are also opportunities for cost-share funding for landowners through the USDA Natural Resources Conservation Service.

CPNRD offers the following funding for pasture improvements:

- **Grazing Deferment:** \$30 per acre to defer grazing in a pasture for one growing season to enable a prescribed burn to be successfully applied in the following year to aid in cedar reduction.
- **Burn Preparation:** \$62.50 per acre to remove Eastern Red Cedar by cutting.

"This is an exciting opportunity for local farmers and ranchers to improve their pastures. Increasing encroachment of unwanted trees into pastures is a concern in our District. Activities like cutting and burning are necessary to preserve grazing and improve wildlife habitat," said David Carr, CPNRD Range Management Specialist.

Your CPNRD Contact: David Carr, Range Management Specialist (308) 385-6282 | carr@cpnrd.org

Are You Prepared for a Wildfire?

Do you feel confident that your home and operation would endure a wildfire? If you live on the outskirts of town, you likely have many trees, shrubs and other vegetation that offer wonderful benefits; but they can also be a significant threat to your home and buildings under wildfire conditions.

Wildfires are a natural occurrence, however, when wildfire occurs in secluded areas, firefighters can become quickly overwhelmed and need to put their safety ahead of your property. During a large wildfire, you will probably be evacuated and thus rely on the fire prevention work you've done ahead of time to keep your home and belongings safe. Since Nebraska weather can change rapidly from one day to the next; it's important to prepare today for a wildfire tomorrow.



Interested in learning how to make your home and/or property more fire adaptable? Call to schedule a site visit during February or March 2023.

Your CPNRD Contact: Nelson Winkel, Prescribed Fire Planning Specialist (308) 385-6282 | winkel@cpnrd.org

Uranium Awareness

CPNRD takes annual groundwater samples to test for uranium and nitrate levels. Some irrigation wells within the District continue to see uranium levels well above the EPA's drinking water standard of 30 parts per billion (ppb). If a domestic well is located near an rrigation well that is contaminated, it's important to have the domestic well tested.



Uranium can not be detected by taste, smell or sight. The only way to know if uranium levels are high and if there is a health concern is to have your well tested. Although most uranium ingested in the body is released in feces; the remainder enters the body's blood and may be deposited in the bones. Studies have indicated that ingesting high levels over a long period of time may lead to an increase in kidney damage and is especially concerning those diagnosed with kidney disorders.

Reverse osmosis (RO) treatment systems are the most common type of treatment used for uranium removal and are very effective. RO system rebates are available to private well owners with drinking water test levels above 10 parts per million of nitrate. If your well is also high in uranium, the RO system would remove both contaminants with the proper filters. Applicants are eligible for up to \$4,000 in rebates per small treatment installation including testing costs, purchase price of the system and installation costs. The rebate application period closes March 31, 2023; with installation and follow-up testing to be completed by September 30, 2024.

To learn more about the RO Rebate Program contact the Nebraska Department of Environment and Energy: Steve McNulty, State Revolving Fund Section Supervisor (402) 471-4200 | steve.mcnulty@nebraska.gov