



North Platte
NATURAL RESOURCES DISTRICT



YOUR RESOURCE REPORT

Protecting Lives - Protecting Property - Protecting the Future

**JAN-MAY
2022**

IMPORTANT DATES

BOARD MEETINGS

Second Thursday of each Month

SEAMETRIC BATTERY REPLACEMENT

in the Spring

EPIC PROGRAM SIGN-UP

Feb. 14-25

NSWCP DEADLINE

Feb. 18

GROUNDWATER LEVELS MEASUREMENT

begins Mar. 15

TREE PRUNING & COMMUNITY FORESTRY WORKSHOP

From 9:00 a.m. to 3:00 p.m.
Mar. 16 • at NPNRD

EARTH DAY

Fri. Apr. 22

ARBOR DAY

Fri. Apr. 29

NITRATE SAMPLING

Ongoing

CHEMIGATION INSPECTIONS

after June 1st

NRD WEEK

Jul. 11-15
celebrate NRD's 50th year!

PRODUCER ROUNDTABLE MEETINGS

From 12 Noon to 1:30 p.m.

Feb. 9 • Garden County
in Lewellen

— *More information to come*

Feb. 16 • Morrill County
in Bridgeport

— *More information to come*

Feb. 23 • Scotts Bluff, Sioux
& Banner County
at NPNRD

— *More information to come*

About the North Platte Natural Resources District

by

AMANDA SHEPPERD

Forestry Technician & Community Educator

Natural Resource Districts, which are unique to Nebraska, are local government entities with broad responsibilities to protect the State's natural resources. In 1969 Senator Maurice Kremer introduced and the Nebraska Legislature enacted Legislative Bill (LB) 1357 to combine 154 special purpose entities in the state into 24 Natural Resources Districts by July 1972. Created to solve flood control, soil erosion, irrigation runoff, and groundwater management issues, Nebraska's NRDs are involved in a wide variety of programs and projects. The Districts are governed by a locally-elected board of directors that live within the river valleys and are impacted by the legislative impact that happens in their areas as well. Districts are organized by Nebraska's major river basins to allow for the implementation of better management practices across similar topography and area resource concerns; this has resulted in a wide variety of innovative projects and programs, uniquely tailored for each area they serve.

Today there are 23 NRDs, the North Platte NRD one of these, located in the North Platte River valley, that is on the western side of Nebraska, neighboring Wyoming. The North Platte NRD is a 22 member team that is ready to serve you. The North Platte NRD is centrally located in the Panhandle between the Upper Niobrara White NRD and the South Platte NRD. The largest source of irrigation water is the North Platte River, along the river is a system of which dams and canals, operated by the U.S. Bureau of Reclamation since the early 1900s, diverts water from the river and stores it to irrigate about 300,000 acres, some groundwater also is used to irrigate. The district consists of more than 3 million acres with a population of more than 45,000 people, 18 communities. Land use consists of range (63 percent), crop and pasture (33 percent), and lakes/wetlands, forest, and other uses (4 percent). At the North Platte District, within agriculture, the predominant products are cattle, corn, sugar beets, dry edible beans, alfalfa, and wheat. Most crops require irrigation because the annual average precipitation is 14 to 17 inches.

For more information please contact the North Platte NRD at (308) 632-2749, or find more information on our website at www.npnrd.org, or find us on social media on Facebook, Twitter and Instagram at "North Platte NRD".

Encouraging Producers Innovation through Conservation (EPIC) Cost-share



Guest written by

JOHN BERGE

& SCOTT SCHANEMAN

Interim General Manager

The old adage of "killing two birds with one stone" illustrates the rarity of a program administered by the North Platte Natural Resources District (NPNRD) that addresses two or more of our goals and statutory objectives. In an effort to address the goals and obligations of the Integrated Management Plan (IMP), the staff and Board of Directors created the "Encouraging Producer Innovation in Conservation" (EPIC) program in 2016. The purpose of this program was to provide grant dollars for innovative agricultural practices to realize water savings, reduce nitrate contamination, improve soil health, and improve wildlife habitat. That's FOUR birds with one stone. In this case, the stone is utilizing those grant dollars to buy-down allocation in the over-appropriated basins (OA) in our District. This has been a wildly successful program allowing us to reduce stream

(continued on inside)

Encouraging Producers Innovation *(continued)*

depletions by thousands of acre-feet by leveraging local property tax dollars against the state's Water Resources Cash Fund, while at the same time addressing all the additional goals listed above.

Sign up for EPIC for the next water year will take place from **February 14 through February 25**. Any groundwater irrigator in the OA can apply for funds, and applications are scored based on the Unit Response Function (URF) zone (depletion factor) of their irrigated lands. With a higher URF zone, the more advantageous to a reduction of stream depletion. In the event an irrigator is funded, payment amounts for allocation buy down are a flat rate of \$15 per acre inch. Payments are made at the end of the water year after compliance inspections. Annual allocation buy-downs are limited to no more than 12 inches per acre in the Pumpkin Creek Basin and no more than 14 inches per acre in the OA section of the North Platte River Valley.

Applications will be taken by appointment only. Please call our office at 308-632-2749 to schedule your appointment, **between February 14 through February 25**.

Cost Share

by
TODD FILIPI
Resource Conservation Coordinator

Applications are now being accepted for the 2022 Nebraska Soil and Water Conservation Program Funds (NSWCP) through the North Platte Natural Resources District. Cost-share programs are available to landowners in Banner, Garden, Morrill, Scotts Bluff and southern Sioux counties (NPNRD boundary) for soil, water and range conservation improvements.

The NSWCP Cost-Share Program reimburses cooperating landowners for a

portion of the cost of installing conservation practices on their farm or ranch. The NRCS provides technical assistance to the landowner for installation. The cost-share rate is 50 percent of the actual or average cost as set by the state (whichever is less). The maximum annual payment per landowner is \$5,000. Applicants must receive approval from the North Platte NRD Board of Directors before beginning work.

Eligible practices include windbreaks, irrigation water management, planned grazing systems, range seeding or pasture planting, grassed waterways, livestock watering facilities and grade stabilization structures to name a few. Stop in to discuss the options and how they might help your operation.

The application deadline is February 18th, 2022. Applications can be taken at USDA Natural Resources Conservation Service (NRCS) offices in Scottsbluff, Bridgeport, and Oshkosh or at the NRD office in Scottsbluff.



Seametrics Pilot Program & Cost Share Opportunity for Seametric Meters

by
CRAIG UHRIG
Water Resources Coordinator

Seametrics has presented a pilot program offering the replacement of Seametrics AG2000, meters with Seametrics AG3000, meters (at a reduced cost to the landowner). Since this is a pilot program to test the performance and fitness of the AG3000 meters and the services provided by Seametrics only 50 Seametrics AG3000 flow meters can be sold and installed in the NPNRD. A



cost-share application must be filled out before the flowmeter is purchased. Cost-share applications can be obtained from either the NPNRD office or the NRCS field offices in the district.

NPNRD or NRCS staff completes an onsite inspection of the installation and will recommend or not recommend cost-share reimbursement to the landowner. Once the meter qualifies for reimbursement the NPNRD will provide the appropriate cost-share dollars back to the landowner. The cost-sharing program is at a rate of 75% of the actual cost of the flowmeter up to a max of 562.50. Installation costs and shipping will not be eligible for the cost-share. AG3000 Series is a spool-type electromagnetic flowmeter for use in irrigation applications in 2" to 12" pipes.



PROTECTING
LIVES

PROTECTING
PROPERTY

PROTECTING
THE FUTURE

Surface Water Infrastructure

Guest written by

JOHN BERGE

As the 2019 tunnel collapse on the Goshen/Gering-Fort Laramie Irrigation District supply canal reminded all of us that our unique system of surface water delivery is in danger of collapse. These events put our surface and co-mingled irrigators at risk. Additionally, because of our hydrologically connected water system where our groundwater sources are largely influenced by surface water in-flows and return flows, our groundwater sources for irrigation, drinking water, and municipal sources could be put at risk.

In the nearly two years since the tunnel collapse, the staff and Board of Directors of the North Platte Natural Resources District (NPNRD) have been exploring options to be able to help with some of the short- and long-term infrastructure needs of the surface water districts. In our investigations, we have asked for assessments from a select number of irrigation districts as to their needs and potential costs for repairs. These assessments have confirmed our suspicion that the North Platte Project, over a century old, has infrastructure needs

include siphons, tubes, gates, concrete walls for permanent diversion, and the like. The cumulative costs for all our 26 districts and mutual canal companies could run in the tens of millions. It is in this process that we have discussed issues with several districts in our NRD and have engaged with the Nebraska Department of Natural Resources to determine if there might be a state funding nexus to assist as well. Finally, with the recent passage of the federal infrastructure package which includes several billion dollars for water infrastructure, we anticipate that there will be a federal funding nexus.

With either state or federal resources (or both) the North Platte NRD stands at the ready to assist with technical support in writing the proposals for funding, potentially matching monies for grant applications, and for assistance in inspections and upkeep after repairs and updates have been made. We look forward to working with our surface water partners to ensure that tax dollars are used appropriately. Most importantly, however, our goal is to ensure that irrigated production agriculture and the greater economy that this industry supports are modernized to ensure profitability and reliability for the long-term and that the water system that the North Platte Project supports provides a reliable water supply for domestic water users, municipalities and habitat for generations to come.



Planning for Drought in the New Year

by

AMANDA SHEPPERD

Forestry Technician & Community Educator

The North Platte NRD is committed to helping our constituents have the most updated information on drought conditions in our area. The websites below are available to give guidance and statistics on current conditions. The North Platte NRD has established a drought plan to be implemented if drought conditions persist. Check out that plan and other helpful links at the NPNRD website <https://www.npnrd.org/drought/climate/weather/>.

Drought Resources can be found at:

- North Platte River Basin Tea-Cup Diagram
https://www.usbr.gov/gp/hydromet/teacup_form.html
- Water Resources Data System & State Climate Office
<http://www.wrds.uwyo.edu/wrds/nrcs/snowprec/snowprec.html>
- Drought Monitor for Nebraska - The U.S. Drought Monitor is jointly produced by the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric

Administration. Map courtesy of NDMC.

<https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?NE>

For more information and resources on Drought or any other of the North Platte NRD's programs, go to www.npnrd.org or call the office at 632-2749.



Tree Program

by

TODD FILIPI

Resources Conservation Coordinator

The North Platte NRD is currently taking tree orders and is available to help with windbreak planning, planting, site prep, and potential cost-share. As continued drought and increased age has taken a toll on our farmstead and field windbreaks now is the time to evaluate, maintain, renovate and or replace. We have all witnessed the decline of our windbreaks over the last several years, but few have considered renovation or maintenance which can be a less costly and more beneficial approach. The Nebraska Forest Service in conjunction with UNL has several publications which will help evaluate the best management practices based on a few short survey answers. Here at the North Platte NRD, we can help with identifying locations and developing renovation and establishment plans tailored to your specific site.

Initial site prep can be just as important as care after planting so be planning now. Cool-season, sod-forming grasses can be awfully hard on initial establishment so if you intend to plant into such a spot be thinking of ways to potentially set back those grasses now to allow



your new saplings a chance to take root. Chemical application and tillage are two of the more commonly used methods but be mindful of wind erosion if you do decide to use tillage going into the winter months with our fine sandy soils.

Another potential issue to be thinking about and planning for is potential damage to your new and old trees from wildlife pests. Deer and rabbits can all do extensive damage over the winter months to trees and shrubs of all ages but rodents and especially the Plains Pocket Gopher damage can be at its worst. Especially during dry years, pocket gophers are actively searching late into the season for tender roots to chew on as a food source. Gophers will eat tree roots any time of the year but going into the fall and winter months when other plants have long gone dormant, tree roots can become a favorite especially on species such as Colorado Blue Spruce, Ponderosa Pine, and Honeylocust. Any damage to the roots is detrimental especially when they are young and simply don't have many roots and the subsequent energy storage to survive the winter and recover. Unfortunately, non-lethal methods to stave off gophers are few and far between so methods such as scissor traps and poisoning them with a gopher machine are oftentimes the most effective methods. Please follow all labels and restrictions should you decide to use poison.

The North Platte NRD offers 1-2 year old conservation-grade saplings for sale. They are sold as either bare-root or as plug saplings. Please note that the plug and bare-root saplings are the same age and size, with the only difference being that the plug was grown in its own individual dirt container that can help to reduce initial transplant shock. The plugs are \$2.00 per tree while bare root trees are \$1.00. Species are sold in multiples of 10 and an updated list of available species can be found on our website below. Trees will arrive in early spring. The NRD also offers a machine planting service for an additional \$1 apiece with a minimum number required to initiate the service. Another service offered by the NRD is chemical site prep at \$.30 a tree to set back existing grasses and competition. Please call for minimums. Tree order and tree planting/spraying request forms and the NRD Tree Planting brochure are available at the NPNRD office at 100547 Airport Road, Scottsbluff or can be viewed at and printed from our website at <https://www.npnrd.org/programs/tree-planting/> and mailed in. For more information, call Todd or Ken at the NRD at (308) 632-2749 or at your USDA-NRCS office in Scottsbluff, Bridgeport, or Oshkosh.

The North Platte NRD Hazard Mitigation Plan

by

DAVE CHRISTIAN

Projects Coordinator

The North Platte Natural Resources District sponsors a district-wide hazard mitigation plan. The plan is ongoing and is designed to give municipalities and other entities that may have vulnerable infrastructure easier access to grants, loans, and aid if that infrastructure is damaged or destroyed by a natural or man-made disaster. The idea of the plan is to have a framework in place for emergencies so that interaction with relief agencies is streamlined and the initial steps in dealing with an emergency have been completed previously.

The program is administered by the Nebraska Emergency Management

Agency (NEMA) under the guidance of the Federal Emergency Management Agency (FEMA). Cities, counties, schools, and local government entities may participate, as well as private organizations such as irrigation companies, drain committees, and others who have a vulnerable infrastructure. Each entity develops an individual hazard mitigation plan, which becomes a part or chapter of the larger plan for the entire NRD. Participating entities are initially asked to pass a resolution that states that they are participating in the larger plan and then fill out a form listing their infrastructure, vulnerabilities, and ideas for improvements that would help protect lives or property. This list may include one or more projects for consideration that would help their readiness for disasters or help protect people or property.

The data is gathered from each of the participating entities and put into the framework by JEO, a consulting firm that

has organized the project and put the plan together. The plan must be updated and re-approved by FEMA every five years, and JEO has organized the project each time. The update that is now underway is the second update since the plan was originally laid out. When completed, the plan will be submitted to FEMA by JEO for approval.



District Efforts in Combatting Nitrates in Groundwater

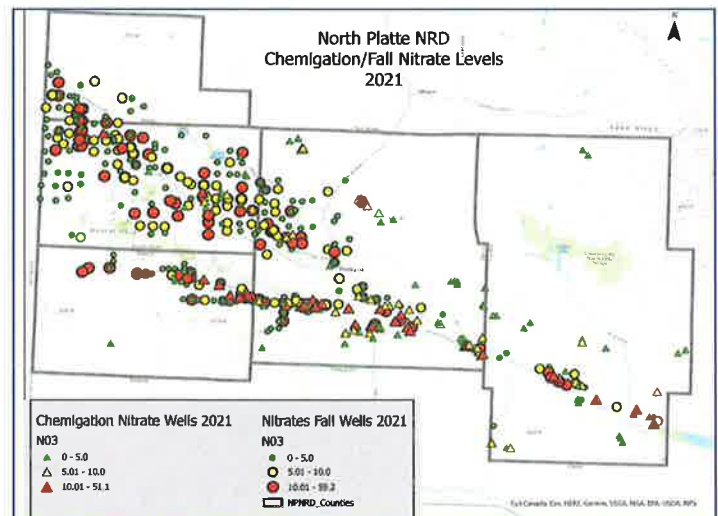
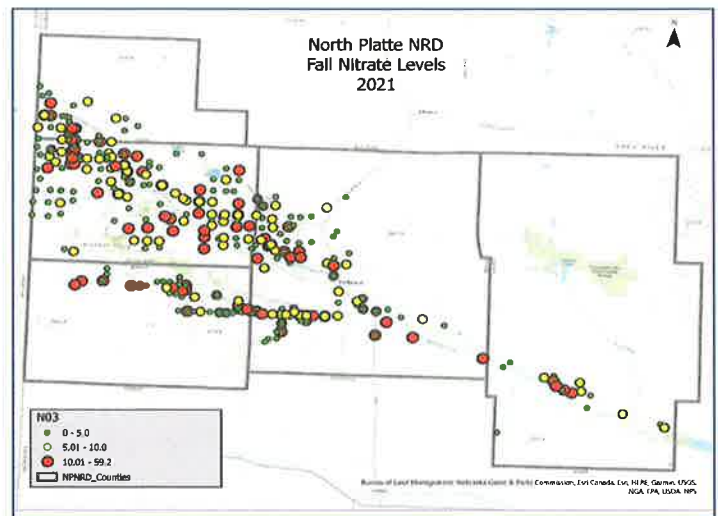
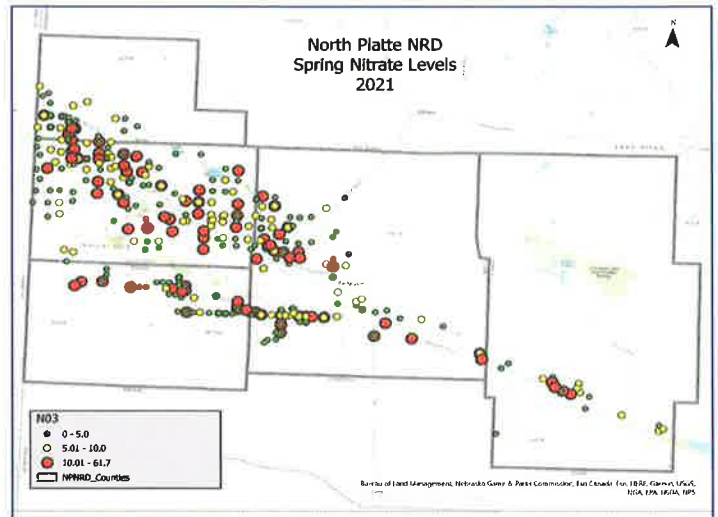
by
SCOTT SCHANEMAN
Interim General Manager

For the past 50 years, the North Platte NRD (NPNRD) has been monitoring and testing groundwater for nitrate levels in all four and one-third counties that make up the North Platte NRD District. Over 800 dedicated monitoring wells are sampled for not only nitrates but pesticides and uranium as well. For the last five years, staff at the NPNRD noticed an uptick in nitrate levels in some monitoring wells throughout the district. Groundwater nitrate samples in those areas have shown an increase up to three times the safe drinking water standard that is set by the Environmental Protection Agency, which is 10 mg/L. This upward trend of nitrate contamination in groundwater shows no sign of leveling off.

The Lisco-Oshkosh-Lewellen (LOL) groundwater quality sub-management area is an example of what can happen to a community that is plagued with elevated nitrate levels. The historical data has shown to have up to eight times the safe drinking water standard. This sub-management area has been under regulatory administration regarding the use of nitrogen since 1993, with varying to limited degrees of success. Under the regulatory requirements in the LOL sub-management area, residents have witnessed some reduction in nitrate levels in groundwater, but not to the levels of expectation originally sought by the NPNRD Board of Directors and residents of that area. As technology evolves and new farming techniques and methods are slow to be incorporated by district farmers and ranchers, we as a district have begun to understand the need to promote the implementation of new practices in crop production. As a new awakening of consumer concern regarding the production of agricultural products and the water used to produce them moves to the forefront of our discussions, we as Natural Resources Leaders in the State need to provide answers to our constituency. The residents of the state demand that our water is clean and free of harmful contaminants, and rightly so! This is a major reason why the NPNRD has instituted a new baseline nitrate study of the entire district in combination with new District Rules and Regulations to combat rising nitrate levels in groundwater.

In 2019, the NPNRD Board of Directors authorized the formation of a Nitrogen Advisory Panel to analyze the growing levels of contamination by nitrogen in groundwater, as well as provide recommendations for nutrient management that could be incorporated into District Rules and Regulations. The advisory panel, after several meetings, provided the Board of Directors with their suggestions, in which those ideas were used in the development of new district rules regarding the use of nitrogen. The new rules were passed by the board in the Fall of 2019.

To implement the rules fully, the NPNRD Board of Directors approved a two-year district-wide nitrate study in January 2021, aimed at the collection of nitrate data seasonally. While the NRD has troves of data, the data does not show consistent seasonal trends. The purpose of this study is to provide a complete picture of groundwater nitrogen credits that would be available to farmers as they build their fertility plans for the growing season. The seasonal data will also be beneficial in understanding the interaction of surface water with groundwater as it recharges the aquifer and the dilution effect it provides the aquifer. The conclusion of the study should provide the board and the staff with the tools necessary to make decisions based on good data; this will provide the residents of the district some confidence in the water flowing from their tap.





P.O. Box 280 | 100547 Airport Road
Scottsbluff, NE 69363-0280

NON-PROFIT
PRESORTED
STANDARD
Permit No. 10
Ogallala, NE

**CONTACT
US**

PHONE
308.632.2749

FAX
308.632.4346

EMAIL
npnrd@npnrd.org

WEB
https://www.npnrd.org

**OFFICE
HOURS**

Monday – Friday
7:30 A.M. – 4:30 P.M.

**VISIT
US**

In person,
NPNRD.ORG, or at



BOARD OF DIRECTORS

- Roger Eirich – *Chairman*
Sub-District 4 since 2013
- Kent Andreas – *Vice Chairman*
Sub-District 4 since 2013
- Pete Lapaseotes – *Secretary*
At-Large since 2005
- Ryan Reuter – *Treasurer*
Sub-District 1 since 2018
- Gary Darnall – *Director*
Sub-District 3 since 2003
- Dave Deines – *Director*
Sub-District 3 since 2005
- Chuck Henkel – *Director*
Sub-District 2 since 2013
- Dan Weinreis – *Director*
Sub-District 1 since 2009
- Mark Westphal – *Director*
Sub-District 2 since 2019

- Keelie Williamson – *Natural Resources Technician*, kwilliamson@npnrd.org
- Jody Fiscus – *Water Resources Technician*
jfiscus@npnrd.org
- David Christian – *Projects Coordinator*
dchristian@npnrd.org
- Ethan Woehrle – *Water Resources Technician*
ewoehrle@npnrd.org
- Lynn Okicki – *Natural Resources Technician*
lokicki@npnrd.org

Resource Conservation Department

- Todd Filipi – *Resource Conservation Coordinator*
tfilipi@npnrd.org
- Ken Ridgeway – *Resource Conservation Technician*, kridgeway@npnrd.org

Geographic Conservation Department

- Travis Preston – *GIS Coordinator*
tpreston@npnrd.org
- Lydia Hendrickson – *GIS Data Analyst*
lhendrickson@npnrd.org

Administration Department

- Danielle Schafer – *Office Manager*
dschafer@npnrd.org
- Renay Smith – *Secretary / Accounts Payable Clerk*, rsmith@npnrd.org
- Susie Kaufman – *Receptionist / Accounts Receivables Clerk*, skaufman@npnrd.org
- Paula Kihlthau – *Bookkeeper*
pkihlthau@npnrd.org

Database Department

- Kyle Ann Hopkins – *Data Management Coordinator*
khopkins@npnrd.org

Greenhouse & Special Projects

- Jennifer Berge Sauter – *Special Projects Coordinator in Greenhouse*
jberge-sauter@npnrd.org

Information / Education Department

- Amanda Shepperd – *Forestry Technician & Community Educator*
ashepperd@npnrd.org

NPNRD & NRCS Clerks

- Geri Alworth – *NRCS Clerk*
Oshkosh, geri.alworth@usda.gov
- Becky Schaneman – *NRCS Clerk*
Scottsbluff, Becky.Schaneman@usda.gov

Unless specifically noted or credited, articles printed in this newsletter are not copyrighted and may be reproduced without permission if the proper credit is given to the North Platte Natural Resources District as the source of the article. The NPNRD can be reached by phone at (308) 632-2749; by email at ashepperd@npnrd.org.

STAFF

General

- Scott Schaneman – *Interim General Manager*
sschaneman@npnrd.org

Water Department

- Craig Uhrig – *Water Resources Coordinator*
cuhrig@npnrd.org
- Seth Popp – *Water Resources Technician*
spopp@npnrd.org



North Platte
NATURAL RESOURCES DISTRICT