Upper Niobrara White Natural Resources District

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Plan for the future, plant trees today!

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SCAN ME

UNWNRD Amateur Photo Contest

The 2025 Amateur Photo Contest is underway! District residents are encouraged to submit their best snap shots of Northwest Nebraska by July 1st, 2025. Photo requirements are listed below:

- The photo must be taken within the district (Box Butte, Dawes, Sheridan, Sioux Counties).
- The photographer must be a resident of the district.
- The subject of the photo must be natural resources related.
- The photographer must be an amateur. No professional photographers, please.
- The photo must be submitted via email to: Kylen Armstrong (armstrong@unwnrd.org) and include the photographer's name, address and phone number.
- Please include a title for your photo as well as the location it was taken.
- Cash prizes will be awarded to the best photo in each category: Agriculture, Wildlife, Recreation, Nature, and Other.



Upper Niobrara White Natural Resources District

Reflections

Upper Niobrara White Natural Resources District
Serving Box Butte, Dawes, Sheridan and Sioux Counties

June 2025

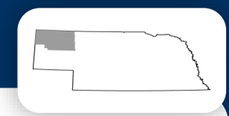




PHOTO CONTEST DEADLINE: July 1st
See back page for more details!

Ponderosa Pine Reforestation Project

The Nebraska Forest service has been working diligently to replace the Ponderosa Pine population in areas of Northwest Nebraska affected by forest fires.

Since 2018, nearly 500,000 Ponderosa Pine seedlings have been hand planted into burn footprints across both Dawes, Sheridan and Sioux Counties. The seedlings are grown locally at the Bessey Nursery in Halsey, Nebraska and hand planted by CRW Resources out of Hayden, Idaho.

This particular hand plant crew of 15 is rather impressive to watch. They are able to plant more than 20,000 trees in one day! Crew members load up their packs with as many seedlings as they can carry and hike off into some rough terrain, scaling hills and stepping over remnants of the Ponderosa Pines that once decorated the landscape. A tool called a HoeDad, that looks similar to a pick axe, is used to first scalp the ground with the side of the instrument to clear away any grass or debris and is then swung over head and into the ground to create a hole to plant the tree. Crew members then step near the base of the tree to compact the dirt around the new seedling. The survivability of these seedlings differs from year to year depending on moisture with some years reaching nearly 80% survival.

The Nebraska Forest Service partners with area land owners to plant these trees at a 90% cost share rate. The longevity of this program depends on funding from the Nebraska Forest Service as well as proactive stewards of the land.

For more information on this project please contact Bryce Gerlach or Luke Gazak with the Nebraska Forest Service, housed in the Upper Niobrara White NRD Offices.



No Till Grass Drill Available for Rent

10ft Haybuster
$12/acre
$2/mile one-way delivery & set up

Free Home Well Water Sampling

Make sure your water is safe to drink!

We test for:
Bacteria & Nitrates

NeRAIN Program: The Best Way to Know Just How Much Rain We *ARE* or Are *Not* Getting

Weather. It's one of the main topics discussed at coffee shop meetings, when saying hello to the pastor on Sunday morning or just catching up with a friend. Some of the conversations start with; "it's so dry, the trees are begging for dogs to come visit". While on the other extreme you hear "I wish whoever is doing that rain dance would stop!"

Clever puns are only a part of these exchanges. Stick around long enough and an argument – sometimes heated – will ensue. During dry times the battle cries will be based on who has the least amount of rain and during wet cycles there will be claims that Noah is building a second arc behind the barn. From here, a precipitation bidding war will usually take place until a victor emerges. Winning one of these battles is considered a badge of honor and allows the champion to return home and exclaim "guess what I did today!"

While persistence pays, accurate measurements can doom even the most storied exaggerator. Savy fabricators will seek every angle possible to triumphantly exit the CO-OP, café or gas station. Enter the NeRAIN program.

The Nebraska Rainfall Assessment and Information Network (NeRAIN) is a program designed to get citizens involved with monitoring weather across the state. The network consists of several hundred volunteers that spend a few minutes each day recording precipitation measurements along with outstanding weather events and uploading them to the NeRAIN website. Due to weather changing in time and space, many volunteers are needed in order to accurately measure and describe rainfall, snowfall patterns, and hail swaths across the state.

Volunteers are provided an All-Weather precision rain/snowfall gage where precipitation can be measured down to 1/100th of an inch. Certainly, more accurate than a farm show rain gage, five-gallon bucket or the dog dish! What's the catch? Simple – each day, participants are asked to record the measurement on the NERAIN website using a computer or smartphone. The data is then uploaded to the program's interactive map and available for public viewing.

For more information visit https://nednr.nebraska.gov/NeRAIN/ or call the 308-432-6190 and talk to Robbin Randall, the UNWNRD NeRAIN Coordinator.

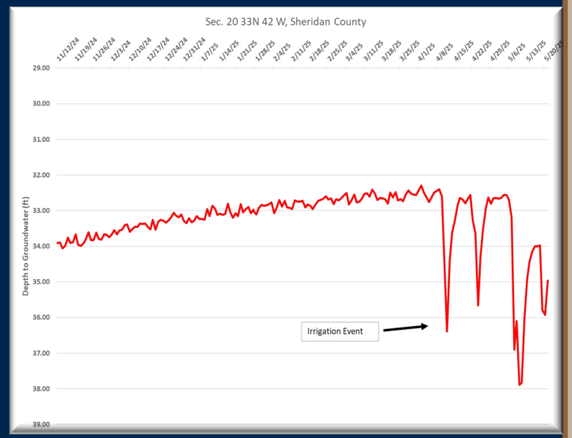
Don't miss this opportunity to be the person the conversation ends with. Volunteer today!

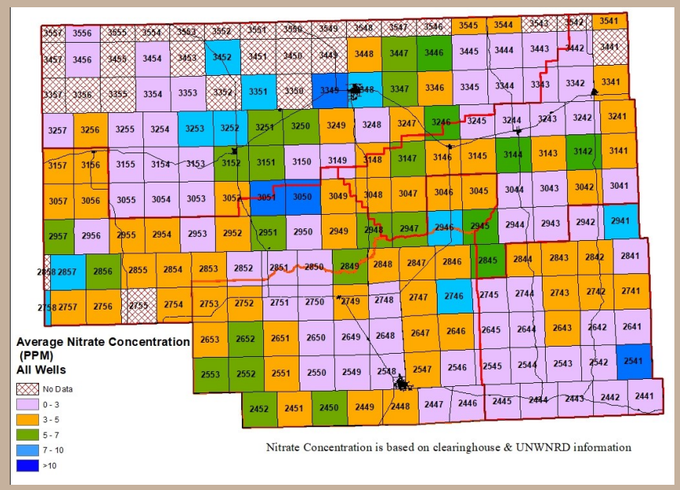
New Tools for Managing Groundwater

The management of groundwater is complex when considering factors such as aquifer properties, saturated thickness, recharge, climate and water use. The Upper Niobrara White Natural Resources District (UNWNRD) is always seeking opportunities to gather more information and scientific data that can be used in the decision-making process. Since the inception of the UNWNRD in 1972, groundwater level measurements have been obtained to monitor changes. Over time additional locations have been added and the network now includes 178 observation sites distributed across the district.

Recently, in partnership with the Nebraska Department of Natural Resources, the UNWNRD obtained equipment to obtain daily groundwater measurements from 15 locations as well as telemetry units that upload the information for viewing. The information collected will be useful in tracking seasonal changes in ground-water levels, groundwater recovery following irrigation events and response to precipitation events. As well the data will be used to calibrate the UNWNRD ground-water model. The graph illustrates the information being collected.

More information can be found at: www.unwnrd/water-levels/.





‹ Water Quality

The average nitrate concentration of the most recent samples taken from wells within each township across the District.

Nitrate concentrations of less than 10 parts per million (ppm) is considered safe for human consumption.

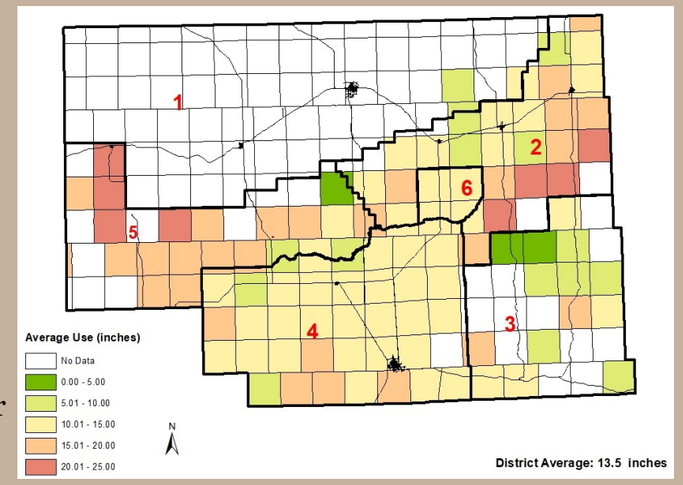
UNWNRD tests domestic wells yearly for District residents free of charge!

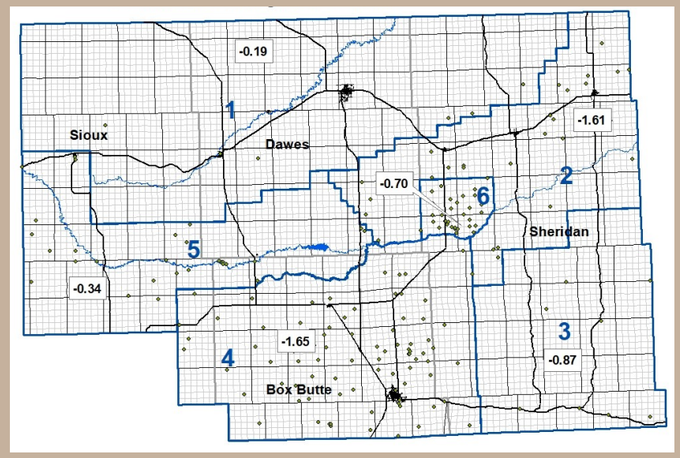
Water Use ›

The 2025 average water use across the District is calculated based on all the wells in a township which range from 1 to 106.

Sub-areas 4 and 6 are currently in the first year of a five year allocation limiting water use to 65 acre inches over that five year period.

Irrigation flow meters are read each fall to determine the amount of groundwater used during the irrigation season.





‹ Water Levels

The average change in static groundwater level or depth to groundwater within each sub-area across the District from spring 2024 to spring 2025.

UNWNRD Staff measures static groundwater levels from several observation wells once in the fall and again in the spring in order to monitor changes in the water table from year to year.