

FALL 2021 NEWSLETTER

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Contact us at
402-376-3241



MNNRD ACTIVE GRANTS

NET: Long Pine Creek Watershed Phase III

NET: Long Pine Creek Watershed Phase IIII

NET: Expansion of Water Quality & Quantity Monitoring Sites

NET: SINREC - (Year two of three)

319 NDEE: Long Pine Creek Watershed Phase II

319 NDEE: Long Pine Creek Watershed Phase III

NET: No-Till Drill

NET: Forest and Grassland Utilization: Green Diamond

**NDEE: Nonpoint Source Water Quality Grant
Waste Reduction - Composting**

USFS/NFS: Woody Innovations Applications – Boiler System

**USDA-NRCS:-Watershed & Flood Prevention Operations
Program – Long Pine Creek and 3 Cherry Co. Watersheds**

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MNNRD Staff & Director's

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TREE PROGRAM

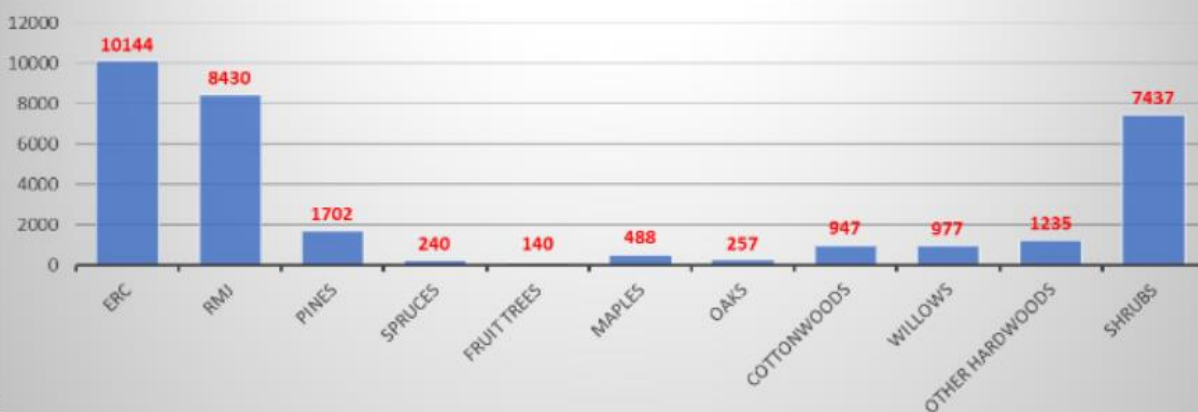


- In 2021, a total of 42 windbreaks were installed by the MNNRD crew with 19,225 trees and 68,061 feet of fabric weed barrier. A total of 32,033 trees were sold including the 19,225 planted by the MNNRD crew as well as 12,808 hand plants.

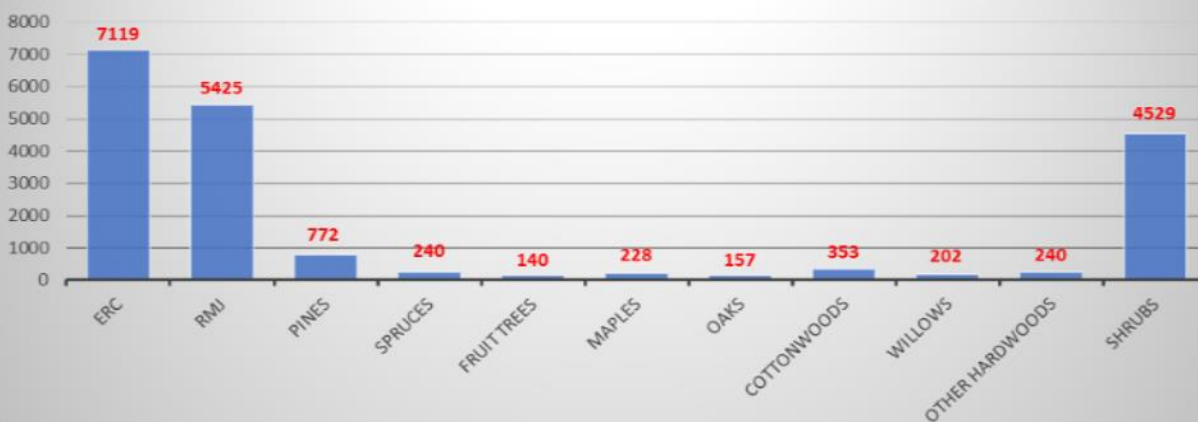
- It is time to start planning for next year's tree plantings. The MNNRD is now taking tree orders for spring 2022. The district has a listing of various species available and can also take special orders. Order ASAP to help guarantee selection, as some species have limited inventory. Cost share assistance, project design, weed barrier, drip irrigation, and planting services are all available. Check out our new website, call 402-376-3241, or stop by the office to make your order.



2021 Total Number Trees Sold by MNNRD



2021 Trees Planted by MNNRD



NSWCP



- Sign-up for 2021-2022 has concluded. The MNNRD will be taking applications for 2022-2023 starting in May 2022.
- Trees 50% up to \$4,000
- Planned Grazing 60% up to \$5,000
- Miscellaneous practices include grassed waterway, pasture seeding, critical area planting 60% up to \$5,000



Long Pine Creek Watershed

The MNNRD with the help of FYRA Engineering are addressing threats to water quality, streambed channelization, aquatic habitat, and infrastructure within the Long Pine Creek Watershed (LPCW) by implementing Best Management Practices (BMPs) as well as beginning engineering services (design, permitting, and construction oversight) on two priority areas of Sand Draw Creek (SDC). These 2 projects on SDC will help address those threats and maintain stability and integrity along those sections of SDC.

The NRCS Watershed Work Plan (EA) in the LPCW: Long Pine Creek Watershed Improvement Project, through the Watershed & Flood Preventions Operations (WFPO) Program is in the final stages of approval. The Plan-EA has been submitted to the National Water Management Center for final approval. This planning focuses on 9 conservation purposes. Once the planning has been completed and approved, the MNNRD will work with USDA-NRCS funding to address priority resource concern areas throughout the watershed.

Voluntary Integrated Management Plan

The Middle Niobrara NRD (District) and the Department of Natural Resources (Department) have been working on a Voluntary Integrated Management Plan (VIMP) since 2015.

Stakeholder meetings were held to take input on the VIMP. On August 13, 2020, the District and the Department came to an agreement on the draft version of the VIMP. On September 14, 2020, a Public Hearing was held to take input from the public on the VIMP. After the Public hearing, the District and the Department approved the VIMP which officially became effective January 1st, 2021. MNNRD Staff and Water Programs Committee are discussing future opportunities in the district to expand irrigated acres. A yearly review with the Department and MNNRD will occur in December 2021. You may contact the district with any questions at 402-376-3241.



Cherry County WFPO's Watersheds A, B, and E

Funding Year: 2020 - Present

Applicant: MNNRD

Community: Cherry County, Nebraska

Project Type: Watershed Planning

Funding Mechanism: USDA-NRCS

Mitigation Efforts: Planning efforts to find proposed solutions and alternatives through nine conservation purposes in Cherry County Watersheds A, B, and E through watershed protection, water management, and public fish and wildlife.



Nitrate Changes 2011-2021 (10 Year)

County	2011 Avg PPM	2021 Avg PPM	2011-2021 Avg PPM	2011-2021 Avg PPM Change
Brown	4.98	6.80	5.89	1.82
Cherry	2.39	3.13	2.76	0.74
Keya Paha	7.70	7.41	7.56	-0.29
Rock (Western Edge)	6.30	6.70	6.50	0.40
District Average	5.34	6.01	5.68	0.67

NITRATES

A total of 323 wells were sampled for nitrate contamination in 2021 by MNNRD staff. These are a mix of Irrigation, Livestock, and Domestic wells across the 4 counties covered by the MNNRD. CDC/EPA guidance states that nitrate levels above 10 Parts per Million (PPM) are unsafe for humans to consume. High levels of nitrates in well water often result from improper well construction, well location, overuse of chemical fertilizers, or improper disposal of human and animal waste. Sources of nitrate that can enter your well include fertilizers, septic systems, animal feedlots, industrial waste, and food processing waste. Wells may be more vulnerable to such contamination after flooding, particularly if the wells are shallow, have been dug or bored, or have been submerged by floodwater for long periods of time. If you would like to have your well tested for nitrate or bacteria contamination stop into the office to get a free sample bottle and instructions.

STATIC WATER LEVELS

MNNRD District Statics Spring 2011-2021		2021-2020 (1 Year)	2021-2018 (3 Year)	2021-2016 (5 Year)	2021-2011 (10 Year)
Lowest		-4.3	-2.21	-7.53	-2.39
Highest		6.03	16.7	18.24	17.95
Average		0.1	4	4.14	3.5
% Wells Showing Increase		50.28	94.68	88.24	90.36
Cherry Statics Spring 2011-2021		2021-2020 (1 Year)	2021-2018 (3 Year)	2021-2016 (5 Year)	2021-2011 (10 Year)
Lowest		-2.36	-2.21	-7.53	-2.39
Highest		6.03	8	10.39	17.95
Average		0.34	2.85	2.52	4.19
% Wells Showing Increase		59.78	91.92	81.44	85.29
Brown Statics Spring 2011-2021		2021-2020 (1 Year)	2021-2018 (3 Year)	2021-2016 (5 Year)	2021-2011 (10 Year)
Lowest		-4.3	-1.43	-0.96	-0.08
Highest		5.38	13.54	16.09	10.48
Average		-0.14	4.46	5.89	2.99
% Wells Showing Increase		36.36	97.73	97.78	96.55
Rock Statics Spring 2011-2021		2021-2020 (1 Year)	2021-2018 (3 Year)	2021-2016 (5 Year)	2021-2011 (10 Year)
Lowest		0.49	3.76	2.96	1.5
Highest		5.19	16.71	18.24	5.78
Average		1.94	11.87	12	4.3
% Wells Showing Increase		100	100	100	100
Keya Paha Statics 2011-2021		2021-2020 (1 Year)	2021-2018 (3 Year)	2021-2016 (5 Year)	2021-2011 (10 Year)
Lowest		-3.95	-1.27	-1.11	-0.47
Highest		3.76	8.72	8.58	6.77
Average		-0.83	4.44	4.13	2.66
% Wells Showing Increase		27.27	97.14	91.43	88.67

KIDS TREE PLANTING DAY



A Kids Tree Planting Day was coordinated and scheduled with the Valentine Middle School and Ainsworth Public Schools on April 30th, 2021, to plant 350 potted Colorado Blue Spruce in and around areas of Valentine and Ainsworth. About 60 middle school students grades 5-8 brought shovels and bags along with eager spirits to learn about trees and their benefits, Nebraska's Arbor Day, and most importantly about proper tree planting. The students were able to plant approximately 350 trees in 90 minutes. With help from the teachers and MNNRD Staff, students were also able to water the trees.

No-Till Drill

The MNNRD has No-Till Drills made available for rent.

- 4 ft No-Till Drill (Four-wheeler)
- 7.5 ft Haybuster No-Till Drill (Tractor)
- 10 ft Haybuster No-Till Drill

The Ainsworth, NE Pheasants Forever (PF) has a No-Till Drill made available for rent. Please contact Kevin Johnson at (402) 760-1803.

- 10 ft Great Plains No-Till Drill (Tractor)

All four drills are capable of planting food plots or seeding native grasses. We also have food plot seed, alfalfa and can also obtain grass seed varieties for your planting needs.



Woody Biomass Utilization

The MNNRD is continuing to utilize woody biomass products throughout the district. From its inception in 2014, the MNNRD has created approximately 2,500 tons of wood chips. Taking unwanted trees and turning them into a profitable and desirable resource benefiting Nebraska's environment and economy, is a better alternative to piling and burning unwanted trees that releases carbon back into the atmosphere. Creating chips and applying them to the soil has been shown to increase soil moisture retention, infiltration rates, aggregate stability, and general soil biology.

The MNNRD has expanded its woody biomass program further by cooperating with local producers on several composting projects. Compost is the product manufactured through controlled aerobic, biological decomposition of biodegradable materials. The product has undergone mesophilic and thermophilic temperatures, which significantly reduces the viability of pathogens and weed seeds. The composting process stabilizes the carbon so that it is beneficial to plant growth. Compost is typically used as a soil amendment but may also contribute to plant nutrients.

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