



Pennington SWCD

February 2023

Outstanding Conservationists



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Terry and Geraldine Hunt were named the Outstanding Conservationists for 2022. In December, the Hunts were recognized at the Minnesota Association of Soil and Water Conservation Districts Convention in Bloomington. We were proud to have the Hunts represent Pennington County.

The Hunt farm was established in 1934 by Terry's great-grandparents. They currently manage 700 acres of pastureland with 150 cow-calf pairs. Through the Environmental Quality Incentives Program (EQIP), 460 acres of pasture is rotationally grazed, and ten watering facilities were installed. It took 2.2 miles of water pipeline and 3.4 miles of fence to complete their rotational grazing systems.

Over one mile of farmstead windbreaks have been planted by the Hunts. In 2022, additional trees were planted for wildlife habitat through the Conservation Stewardship Program (CSP). Cover crops were also implemented through CSP for weed suppression, reducing soil erosion, and improving soil health and organic matter.

Terry and Geraldine will be honored at the Pennington SWCD Banquet in April. The 2022 Outstanding Conservationist selection was chosen from the townships of Numedal, River Falls, Norden, Polk Centre, Bray, Sanders, and Black River.



PENNINGTON SWCD
Serving Pennington County
Since 1948

Office Hours

7:30 a.m. – 5:00 p.m. M-TH
7:30 a.m. – 4:00 p.m. F

Mission Statement

To provide landowners and other agencies with technical assistance in identifying and improving resource issues.

Board of Supervisors

- Linda Hanson
- ADawn Nelson
- Kevin Wilde
- Greg Hilgeman
- Ricky Peterson

Board meetings are held the third Thursday of every month at 9:00 a.m.

District Staff

- Peter Nelson.....
District Manager
- Barb Molskness.....
District Coordinator
- Larissa Fitzgerald.....
District Technician
- Bryanna Grefthen.....
Water Resource Specialist
- Erika Olson.....
Resource Technician.....
- Donna Christianson.....
Outreach Coordinator
- Logan Handyside.....
Engineer
- Justin Muller.....
Engineering Technician

**Assisted by
NRCS**

- Nico Bennett.....
District Conservationist

**Assisted by
Pheasants Forever**

- Micah Ranum.....
Farm Bill Biologist

**An Equal Opportunity
Provider and Employer**

Meet the new faces in the Pennington Office



Hello, my name is Erika Olson. I am originally from Otsego, MN. After high school, I attended North Dakota State University where I obtained my bachelor’s and master’s degree in Natural Resource Management.

During my time in graduate school, I worked closely with water quality research and monitored E. coli levels in stormwater within Fargo, ND. During this time, I discovered my passion for conservation and public outreach. I joined the SWCD staff in September 2022 as the Resource Technician.

In my free time I enjoy fishing, four wheeling, and spending time outdoors with friends, family, and our pets. I look forward to meeting new people and working alongside the SWCD staff.



Hello, my name is Micah Ranum and I will be working as the Farm Bill Biologist with Pheasants Forever. I look forward to assisting landowners in designing, developing, and funding habitat improvements on private lands.

I was born and raised in Thief River Falls and graduated from the University of North Dakota with a bachelor’s in Fisheries and Wildlife Biology. For the last five years, I have been working for the North Dakota Game and Fish Department as a Wildlife Technician.

I am a proud husband and father of two wonderful children. I enjoy hunting, fishing, and anything else that can get me and my family outdoors. I’m happy to return to my hometown and help get more habitat on our landscape.



Pennington SWCD Engineering Staff

Starting January 1, 2023, the Pennington Soil and Water Conservation District (SWCD) attained the talents of an engineer and an engineering technician. We would like to welcome Logan Handyside and Justin Muller to the Pennington SWCD staff. Logan and Justin were previously employed by the Red River Valley Conservation Service Area (RRVCSA). The RRVCSA is composed of sixteen soil and water conservation districts in northwest Minnesota. These districts used the RRVCSA or hired private firms for engineering services.

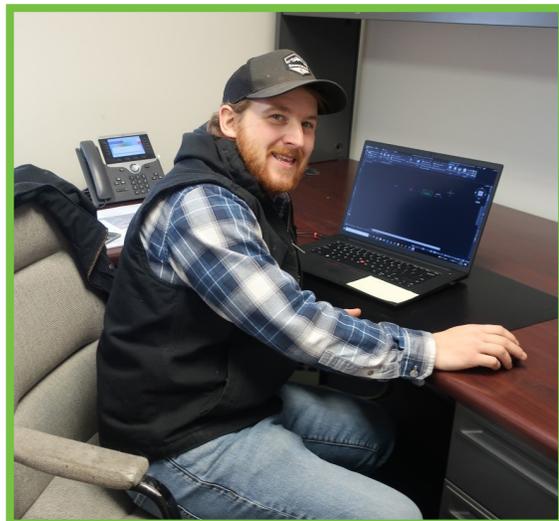


After years of discussion and a Performance Review and Assistance Program analysis (PRAP), the RRVCSA Board voted to split the technical service area into a north and south pod. The north pod, consisting of Kittson, Roseau, Marshall, Pennington, Red Lake, East Polk, West Polk, Norman, and Mahnomen Soil and Water Conservation Districts, formed an agreement to share engineering services and personnel. Pennington SWCD volunteered to be the lead for the north pod and hire the staff.

The engineering staff are here to assist private landowners with best management practices that conserve water and soil resources. Some of the conservation practices may include, but are not limited to, water and sediment control basins, grassed waterways, wetland restorations, grade stabilization structures, streambank stabilization and side water inlet projects. The staff will conduct site inspections, surveys, design, construction staking, construction inspection, and project certification.



Hello, my name is Justin Muller. I joined the engineering staff at the Pennington SWCD on January 1st as an Engineering Technician. I will be working on surveys, design, construction assistance, and as-built drawings for a variety of non-point water quality management practices for the north pod (nine district area).



I graduated from the U of M Crookston with a bachelor's degree in Natural Resource Management. I worked for the Kittson SWCD for eight years and just recently finished my tenure as an Engineering Technician for the Red River Valley Conservation Service Area.

I'm married and have three daughters. I enjoy anything outdoors, hunting, fishing and trying to keep up with my girls. I am very excited for the opportunity to work with everyone in the area.



Pennington SWCD Celebrates 75 Years

Excitement defines the atmosphere as we prepare to celebrate the District's 75th Anniversary. Many special events are planned, which will make 2023 a year to remember! You don't want to miss it! An anniversary celebration wouldn't be complete without history, so let's look back at how the district was started.

In 1948, the Pennington County Soil Conservation District was organized by farm committees assisted by the Agricultural Extension Service, the State Soil Conservation Committee, and the Soil Conservation Service (today NRCS). Only eight townships were included in the original district: Norden, North, Silverton, Cloverleaf, Goodridge, Rocksbury, Black River and River Falls. The main reasons for forming a Soil Conservation District were to assist farmers with drainage, weed eradication, crop management, and pasture improvement. Other goals were conservation education, soil clinics, and 4-H soil projects.

The first two board members were appointed by the State Soil Conservation Committee. The County Agent was instrumental in finding candidates to run for the three remaining elected positions. The original board members included Paul Engelstad, Alfred Longren, Maynard Mehrkens, E. H. Pomerence, and Odin Hanson. The first "official" board meeting took place on September 22, 1948. A District Conservationist and an Engineering Aid were assigned to the District when they opened an office several months later in the old county courthouse (west of the current Pennington County Government Center).

The Pennington County Soil Conservation District worked cooperatively with local, state, and federal units of government to conserve soil and water. Landowners were assisted in the planning and application of conservation practices. The District also provided guidance to local units of government in land-use decisions.

By 1957 all twenty-one townships were part of the District. In 1967, the name was changed from Pennington County Soil Conservation District to Pennington Soil and Water Conservation District.

In the 75 years of service, there have been many changes in programs, practices, and technology; however, our mission is much the same...



Getting Conservation on the Land!



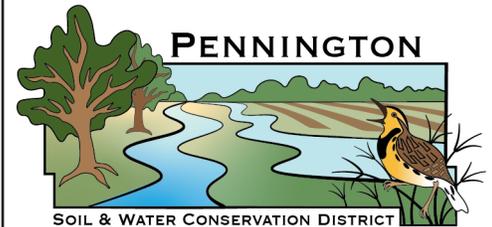
Meet Your SWCD Supervisors

Mission Statement:

To provide landowners and other agencies with technical assistance in identifying and improving resource issues.



Pennington SWCD Board of Supervisors



*Art Work Created By Patrice Delaney
Pennington SWCD 2021 Summer Intern*



Ricky Peterson

Ricky represents the Townships of Rocksbury, Norden, Silverton, and North. He has served on the Board for 14 years. He was raised on a farm east of Thief River Falls and is a retired UPS driver. He enjoys seeing riverbanks restored and says our tree program is extremely valuable in stopping soil erosion and providing wildlife habitat. When asked what he enjoys most about being on the SWCD Board he replied, ***“Working with the other supervisors and staff. No challenge is too big for them. They are real go-getters in making sure projects get done.”***



Kevin Wilde

Kevin represents the Townships of Cloverleaf, Highlanding, Kratka, and Smiley. He has served on the Board for one and a half years. He operates a small grain farm and raises beef cattle. Kevin enjoys working and playing outdoors. When asked what he enjoys most about being on the SWCD Board he replied, ***“Being new to the Board, I am excited to learn and play a role in the unique projects and programs the District is involved in to improve our natural resources for Pennington County residents.”***



Greg Hilgeman

Greg represents the Townships of River Falls, Wyandotte, Mayfield, and Deer Park. He has served on the Board for 21 years. He is a newly retired farmer living on his 1904 family farm. His son has now taken over the operation of the farm. Greg feels our tree program is invaluable and is excited to see the effects the 1W1P will have on water quality. When asked what he enjoys most about being on the SWCD Board he replied, ***“The relationship the Board and staff have in working together as a team to accomplish our goal of enhancing the value of water and soil resources.”***



ADawn Nelson

ADawn represents the Townships of Sanders, Numedal, Bray, Black River, and Polk Centre. She has served on the Board for two years. ADawn and her husband own a repair business and operate a small grain and livestock farm west of Thief River Falls. She is an Ag, Food, and Natural Resource Instructor at Northland Community & Technical College. When asked what she enjoys most about being on the SWCD Board she replied, ***“I enjoy seeing the forward progression of government entities all working together to better our environment. From education to home and ag projects, they all make our county a better place to live.”***



Linda Hanson

Linda represents the Townships of Goodridge, Star, Reiner, and Hickory. She has served on the Board for 23 years. She grew up on a dairy farm in Iowa and moved to Goodridge after getting married. She operates a 160 cow robotic dairy facility with her husband and their three sons. Linda loves seeing side water inlets and septic projects being put into place. When asked what she enjoys most about being on the SWCD Board she replied, ***“I love to be on the leading edge of new conservation ideas and practices and encouraging landowners to participate in them.”***

Partners in Conservation!

Auchenpaugh and Benson Receive Beautification Award

The “wow” meter registers high when you drive into the yard named “Long Shadows.” You’ll discover two homes on this Smiley Township property, one belonging to Faye Auchenpaugh, and the other to her daughter, Marisa and son-in-law, Wade Benson. “Grandpa’s Farm” is how Marisa refers to this property, purchased by Melvin and Helen Torkelson in the 1940’s. It is a high priority of Faye and Marisa’s to remember their ancestors when transforming this beautiful yard.



There is a pavilion in the center of the yard where family gatherings take place. It’s a screened-in area built where the old farmhouse stood. The original cement steps are still utilized. A pergola accented by beautiful flowers is the exact footprint of the old kitchen.

Faye’s home was built where the chicken coop once stood. Marisa and Wade’s hip-roof style home was built where the barn was located. Both homes are enhanced by multiple flowerbeds. Original farmstead perennials such as hollyhocks, peonies, irises, oriental poppies, and lilies have been rescued from years of neglect and transplanted into their new location. With the variety of perennials and annuals, the colors are amazing!

Besides the footprints of buildings and remnants of flowers, there are several other nostalgic items of interest. The foundation of the old granary remains with names of family members Melvin inscribed when it was built. The old well pump is proudly displayed, and hoops from Helen’s rain barrel are part of the planter.

One cannot miss the old schoolhouse moved to the property in 2015. It has been completely renovated and is a fun place to host guests. Faye and her siblings attended this school, and she will gladly share her stories of times’ past. As you step inside and see the childhood pictures and memorabilia, this old schoolhouse is a history lesson in itself.

Each year, the Pennington SWCD awards a beautification winner from candidates nominated by township officials. The 2022 Rural Beautification winners, Faye, Marisa, and Wade, will be honored at the SWCD Banquet on April 13th, 2023.





Clean Water Funds

Streambank Stabilization Projects

Minnesota Native Landscapes (MNL) completed construction on two streambank stabilization projects in November 2022. The sites are located on the Red Lake River at the Greenwood St. Bridge and across from Oakland Park. Nearly 800 feet of streambank was stabilized, 878 cubic yards of rock rip rap installed, and 1,880 live stakes were planted between the two projects. Funding for the projects came from a competitive Clean Water Fund grant, the Red Lake Watershed District, and the City of Thief River Falls. The total cost of project construction was \$228,404 with \$170,369 coming from the Clean Water Fund grant. Houston Engineering Inc. provided the engineering services.

The projects were identified as high priority in the 2017 Thief River Falls Water Quality Study. Stabilization of these banks will provide protection for high quality unimpaired waters and reduce sediment to an impaired reach downstream on the Red Lake River. The projects will reduce an estimated 260 tons per year of sediment entering the Red Lake River. Reducing the amount of sediment entering the river will improve water quality, drinking water, recreation, fish habitat, and aesthetics.



Greenwood Street Bridge Streambank Stabilization Project completed in November of 2022.

Floodplain Ordinance and Flood Insurance Map Update

The Pennington County Floodplain Management Ordinance was updated October 25, 2022. The most significant change to the Ordinance is the new Flood Insurance Rate Maps (FIRM) that replaces maps from 1990. The new maps are more accurate and easier to read when determining whether a property or structure is affected by flood hazard areas.

The Flood Insurance Rate Maps became effective December 1, 2022. The interactive map boundaries are accessible to the public on the Pennington County website. Paper maps can be viewed at the SWCD office. Generally, the floodplain boundary decreased, especially in the eastern portion of the county.

The ordinance regulates development in the flood hazard areas of unincorporated Pennington County and the City of St. Hilaire. The City of Thief River Falls has a separate floodplain ordinance. The purpose of the ordinance is to promote public health, safety, and general welfare by minimizing losses and disruptions from flooding. A permit application is required if you are planning to build in the shoreland or floodplain area. Permit applications are available at the SWCD office or on our website.

What's Happening to My Trees?



Article Co-authored by Grant Nelson and Larissa Fitzgerald
Photo Credit: Grant Nelson

Tree problems came down to a few basic elements in 2022: too much rain and not enough rain. A healthy tree can typically fight off disease. However, our weather for the last two years has not provided the proper growing conditions needed to retain healthy trees. The drought in 2021, followed by a cold winter, then an abundance of rain early in 2022, exposed trees to an environment ideal for fungal diseases.



NEEDLE CAST

Spruce trees were hard hit by *Rhizosphaera* needle cast in 2022. Trees with this disease die from the bottom up, with noticeably browning needles that will eventually fall off. Fungicides with the active ingredient chlorothal-ipil, copper hydroxide, or mancozeb will protect new spruce needles from infection by *Rhizosphaera*.



BUR OAK BLIGHT

Last year, bur oak blight was found in a stand of trees near the edge of Thief River Falls. Bur oak blight is a fungal leaf disease caused by a native fungal pathogen, intensified by very wet conditions. Trees that contract bur oak blight will display leaf browning in the form of wedge-shaped lesions, which will ultimately result in leaf loss. This will start at the top of the tree and work its way down. Infected trees may still go on to live long lives.



OAK WILT

Oak wilt is caused by a non-native, invasive fungus typically spread by sap-feeding beetles from infected trees to healthy trees. It can also be spread through root grafts. Leaves of infected trees will wilt and drop from the top of the tree first. Infected trees will eventually die. Fungal mats will develop under the bark following the death of the tree. This will cause the bark to split open. Trunks of infected living trees should be injected with Propizol fungicide early in the year to suppress the fungus. Treatment of non-infected oak trees in close proximity is also advised.

The best medicine for tree disease is prevention, which means keeping your trees healthy. Use fertilizer spikes as directed on the label, water the roots not the branches or leaves, keep mulch away from the trunk of the tree, and monitor the health of your trees to prevent the spread of disease.



SPRING 2023 TREE & SHRUB ORDER FORM

Pennington Soil and Water

Conservation District

201 Sherwood Ave S
Thief River Falls, MN 56701
(218) 683-7075

Order early for best selection!

Website: www.penningtonswcd.org

Follow us on Facebook: Pennington Soil & Water Conservation District

NAME: _____	HOME or CELL PHONE: _____
ADDRESS: _____	WORK PHONE: _____
EMAIL ADDRESS: _____	

Please note: Pennington SWCD agrees to furnish said nursery stock to purchaser as *only* a local distributor to landowners. We express or imply no warranty or guarantee of productiveness or survival of the nursery stock we furnish and make no provisions for replacement. We reserve the right to substitute species and sizes if the species or size listed are not available from the nursery. Pennington SWCD has the right to cancel orders due to availability. Once our supply of trees is depleted, we cannot obtain any additional trees.

*** ALL TREES ARE TO BE USED FOR CONSERVATION PURPOSES ONLY ***

All trees and shrubs are sold in bundles of 25 (except potted spruce)

Average tree size: 18 - 24 inches

SPECIES	MATURITY	TYPE	NO. OF BUNDLES	PRICE PER BNDL (25)	TOTAL \$
Potted Black Hills Spruce (1 gal. 12-18")	50-80 Feet	Evergreen		\$15.00 each	
Cedar, Eastern Red	15-25 Feet	Evergreen		\$60.00	
Cedar, White (American Arborvitae)	40-60 Feet	Evergreen		\$60.00	
Pine, Red	50-70 Feet	Evergreen		\$60.00	
Pine, Scotch	60-80 Feet	Evergreen		\$60.00	
Spruce, Colorado Blue	60-80 Feet	Evergreen		\$60.00	
Ash, Green	40-60 Feet	Tall Hardwood		\$50.00	
Cottonwood, Siouland	80-100 Feet	Tall Hardwood		\$50.00	
Hackberry	40-60 Feet	Tall Hardwood		\$50.00	
Maple, Silver	60-90 Feet	Tall Hardwood		\$50.00	
Maple, Red	50-70 Feet	Tall Hardwood		\$50.00	
Oak, Bur	70-80 Feet	Tall Hardwood		\$50.00	
Poplar, Hybrid (Norway)	80-100 Feet	Tall Hardwood		\$50.00	
Birch, Paper	20-30 Feet	Medium Hardwood		\$50.00	
Chokecherry, Common	20-30 Feet	Medium Hardwood		\$50.00	
Plum, American	20-25 Feet	Medium Hardwood		\$50.00	
Crab, Red Splendor	15-25 Feet	Medium Hardwood		\$50.00	
Willow, Flame	15-20 Feet	Shrub		\$50.00	
Nannyberry	12-15 Feet	Shrub		\$50.00	
Dogwood, Redosier	12-15 Feet	Shrub		\$50.00	
Indigo, False	8-15 Feet	Shrub		\$50.00	
Lilac, Common	8-10 Feet	Shrub		\$50.00	
Lilac, Villosa (Late)	6-10 Feet	Shrub		\$50.00	
Juneberry	6-15 Feet	Shrub		\$50.00	
Sandcherry, Western	6-10 Feet	Shrub		\$50.00	
Elderberry	5-12 Feet	Shrub		\$50.00	

Also available:

- Plantskydd Animal Repellent (powder mix, granular or pre-mixed)
- Tree protector tubes, stakes, and weed barrier fabric

Orders under \$100 require payment in full. Orders over \$100 require a minimum of 50% down payment.

Make Checks Payable to: Pennington SWCD

You will be notified **by mail** when to pick up your trees.

Subtotal	_____
6.875% Sales Tax	_____
Total	_____
Down Payment	_____
Amount Due	_____

FOR OFFICE USE ONLY:	CHECK OR CASH	CHECK #:	RECEIPT #:	DATE:
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CONSERVATION EDUCATION

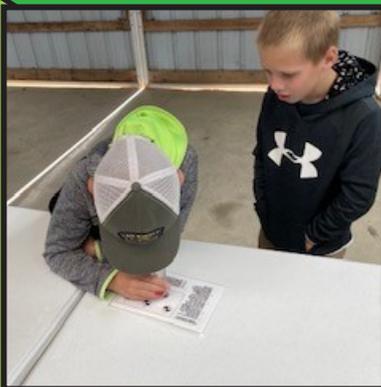
Outdoor Ed Day

Each September, the Pennington SWCD sponsors an Outdoor Education Day for area 6th graders at Oakland Park. Hands-on activities teach the students about the environment and our natural resources. During the course of the day, students create edible landfills, taste glaciers, and take the incredible journey of a water drop. Other activities include a deer population game, aquatic invasive species, water hauling relay, trapping, archery, minnow racing, casting, and tree bingo. This year, 187 students from Goodridge, Grygla, St. John Lutheran, and Franklin Middle School participated in this fun, educational day.



NW MN Water Festival

The NW Minnesota Water Festival is a two-day learning event held every September for 4th graders at the Warren and Fertile fairgrounds. The students learn about water resources and conservation practices. Hands-on activities are based on the topics of: groundwater, aquatic invasive species, aquatic life, watersheds, flooding, and water quality. This year, 20 schools (554 students) took part in this fun, interactive event.



Long Lake Conservation Camp



Pennington SWCD provided scholarships for two campers to attend Long Lake Conservation Camp during the summer of 2022. Bennett and Maverick Iverson had an awesome week learning about conservation and natural resource management along with plenty of free time to participate in some fun camping activities like swimming, fishing, bog exploration, canoeing, campfires, and so much more.



Hey Kids,

How would you like to attend Long Lake Conservation Camp for a week this summer? Well, here's your chance. The Pennington SWCD is awarding two scholarships for youth ages 10-14 to attend Outdoor Explorers Camp July 9-14, 2023. The camp is located near Palisade, MN, just south of Grand Rapids. Students will learn about conservation, natural resource management, and enjoy a fun-filled week of outdoor activities. To learn more about the camp visit: <https://www.longlakecc.org/outdoor-explorers-camp>.

To be eligible for this awesome opportunity, all you need to do is get your parent's permission and write a paragraph telling us why you would like to attend the camp. The staff will review submissions and two candidates will be selected by the SWCD Board. Mail or email your paragraph along with your parent's name and telephone number to:

Donna Christianson
Pennington SWCD
201 Sherwood Ave S
Thief River Falls, MN 56701
or
donna.christianson@pennington.mnswcd.org



Deadline to submit your paragraph is April 1st.
Winners will be notified by April 30, 2023.

Buckthorn Invasion



Buckthorn Berries

You might think that all shrubs are good for wildlife, right? The answer is no! You may have noticed even with a drop in temperature, there were trees or shrubs that still had green leaves. Those plants are likely invasive common or glossy buckthorn. These plants crowd out our native landscape and provide no nutritional value to wildlife. Buckthorn also present issues with soybean growers, as these trees are an overwintering host for soybean aphid eggs and the crown rust fungus. The best time to spot and remove buckthorn is late fall.

The picture to the right shows Emily Savageau removing buckthorn along Regina Goodhall's property. Regina stated, **"I was surprised to find buckthorn on my property and would like to thank Grant Nelson from the Extension Office for identifying it for me."**

If you are interested in removing buckthorn from your property, please stop by our office and pick up one of our Extractigator removal tools to use for FREE! We have a variety of sizes available that will remove buckthorn from the roots. For buckthorn that is larger than 2 inches in diameter, the cut-stump method with a pesticide application would be a better option. After treatment, it is important to monitor the area as buckthorn seeds can persist in the soil for up to five years.

The Pennington SWCD office is here to help address any questions on equipment use, plant identification, and more! If you notice plants past your property lines, please encourage others to remove buckthorn on their property as well.



Photo Credit—Regina Goodhall

"That is a fun tool to use!"

Zebra Mussel and Walleye: A Bad Relationship

Aquatic Invasive Species (AIS) affect ecosystems as they invade a waterbody, which could impact your fishing experience. The University of Minnesota sponsored a study published in 2020 examining the effects of zebra mussels on Minnesota's state fish, the walleye. The study found walleyes growth rate in zebra mussel infested lakes was 19% slower than uninfested lakes¹. Zebra mussels inadvertently increase water clarity while filter feeding on phytoplankton. They disrupt the natural food web, reducing the available food for walleye. Walleye prefer cool temperatures and low light conditions, therefore increased water clarity caused by zebra mussels may reduce walleye production. While the effects of AIS vary from lake to lake, the study noted infested lakes had a noticeable change in walleye behavior likely from changes to habitat and available food¹. The effects on walleye were more prevalent when multiple AIS were present. This is a great example of why it is important to CLEAN.DRAIN.DRY all equipment and dispose of bait properly to stop the spread of AIS and protect our waters and native species!

1. Hansen, G.J.A., Ahrenstorff, T.D., Bethke, B.J. et al. Walleye growth declines following zebra mussel and Bythotrephes invasion. *Biol Invasions* 22, 1481–1495 (2020). <https://doi.org/10.1007/s10530-020-02198-5>

Pennington SWCD
would like to remind you to:

- **CLEAN** off all aquatic plants and animals.
- **DRAIN** water from all equipment.
- **DISPOSE** of unwanted bait in the trash.



Thank you for doing your part to protect
Minnesota Waters!

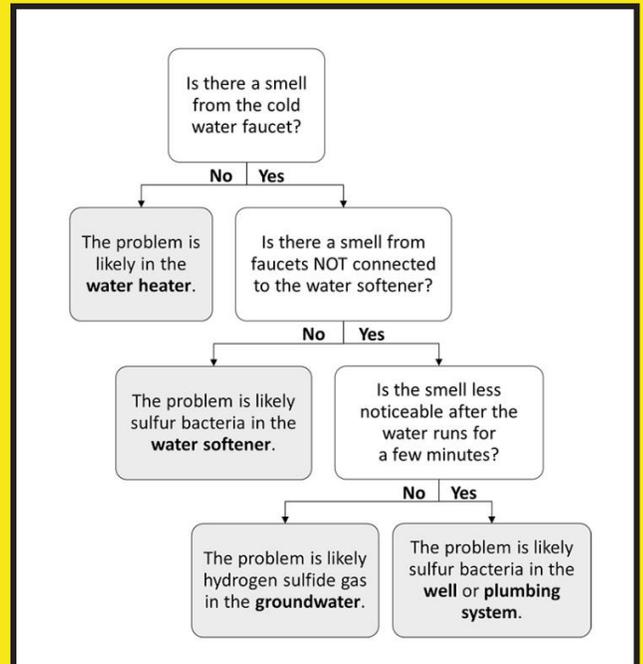
penningtonswcd.org • 218-683-7075

Last One in is the Rotten Egg

Do you notice a rotten egg smell with your well water? This odor can be caused by hydrogen sulfide gas. Hydrogen sulfide gas results from the natural reactions of soil and rocks. It can be produced by certain sulfur bacteria in groundwater, wells, plumbing, or reactions within the water heater. Signs of hydrogen sulfide gas include black stains on silverware, faucets, and other plumbing fixtures, as well as corrosion on metal parts of plumbing systems. If you have sulfur bacteria, you may notice a white, gray, or black bacterial slime. This slime can clog wells and plumbing systems. While sulfur bacteria are not harmful, they promote the growth of other bacteria.

To determine treatment options, you must identify the source of the hydrogen sulfide gas or sulfur bacteria. See the Minnesota Department of Health (MDH) flow chart (to the right) to help determine the source location. Based on the issue location, MDH has guidance on how to reduce the rotten egg smell. These options range from special filtration systems to disinfection or chlorination of wells and plumbing systems.

In most cases, the rotten egg smell does not indicate sanitary quality of the water, but in some cases the hydrogen sulfide gas may be caused by sewage or other pollutants. To ensure safe drinking water, homeowners should test their water for coliform bacteria annually, nitrates biannually, and lead and arsenic at least once. Water test kits are available at the SWCD office year round and each summer the SWCD hosts a well clinic for landowners to test E.coli, nitrates, and coliform bacteria at a reduced cost.



One Watershed, One Plan Updates (1W1P)

Pennington SWCD and the county recently approved the Clearwater River and Middle-Snake-Tamarac Rivers Comprehensive Watershed Management Plans. All four Comprehensive Watershed Management Plans have been approved for Pennington County beginning with the Red Lake River, which was one of five pilots throughout the state. These Comprehensive Watershed Management Plans build on existing efforts, state and local knowledge, and a science-based approach to watershed management. Like previous water plans, the One Watershed, One Plan process involves a broad range of stakeholders including local governments, state agencies, and community members.

The Red Lake River Comprehensive Watershed Management Plan was approved in 2017 and the partnership began implementing projects in 2018. Most of the projects are grade stabilization projects, streambank protection, and ditch outlet stabilization projects. The Red Lake River Partnership has received three grants to implement projects and will be eligible for the next round of funding in 2024. The Thief River Comprehensive Watershed Management Plan was approved in 2019 and received two rounds of implementation funding. Implementation funding is from the Clean Water Fund.

Thank you to all the stakeholders involved throughout the planning efforts. Your input and commitment led to a better plan and leads to more effective project implementation. The Pennington SWCD staff, and partners, look forward to working with landowners to conserve soil and water resources through the One Watershed, One Plan program.



SWCD Photo Contest

January 1 through December 20, 2023

Contest rules and photo requirements:

- Photos must be taken in Pennington County.
- Photos must focus on an element of nature.
- Only one submission per person per month.
- Photos must be original and owned by you.
- No watermarks, people, or advertisements allowed in photos.

Submissions

- Photos can be submitted in the comment section of our Facebook post or via email at: erika.olson@pennington.mnswcd.org.
- Each photo submission must include your name, telephone number, and township where the photo was taken (if known).

Prizes

- Every month, a winner will be chosen and awarded a prize. Those winners will be entered into a grand prize drawing the end of December.

Consent

- Submission of your photo gives permission to Pennington SWCD to use the photo for any legal use, including but not limited to: publicity, social media, copyright purposes, illustration, advertising, and website content.

Cost-Share for Doing Your Business...

Septic system upgrade grant funding helped provide cost-share for new septic systems to four Pennington County landowners in 2022. The grant is available again this year for landowners with a failing septic system that meet income requirements. Failures could include sewage backing up into a dwelling or establishment, sewage discharging to the ground surface or surface waters, or systems that fail to protect groundwater.

A low-interest loan through the Agriculture Best Management Practice (AgBMP) Loan Program is another option for septic system upgrades. AgBMP loans have interest rates up to three percent. If you are having problems with your septic system and are interested in either of these options, please contact Peter or Larissa at the Pennington SWCD. More information can also be found on our website.

Please note: All septic systems in Pennington County *must* be installed according to state and local rules. This includes obtaining a permit from the Pennington SWCD. This permit application can be found on our website and brought into our office with the required fee.

2023 Pennington SWCD Septic System Upgrade Grant Income Limits									
Based on adjusted gross income and number of people in household									
	Cost-Share Amount	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
Low Income	100%	\$40,770	\$54,930	\$57,676	\$60,422	\$63,168	\$65,914	\$68,660	\$71,406
Moderate Income	75%	\$42,809	\$57,677	\$60,561	\$63,445	\$66,329	\$69,213	\$72,097	\$74,981
Grant Income Limit	50%	\$44,949	\$60,561	\$69,090	\$83,250	\$97,410	\$111,570	\$125,730	\$139,890

Back to the Basics - Wetlands 101



Historically, Minnesota was made up of over 20 million acres of wetlands. Today, it is estimated that Pennington County has less than 10% of its pre-settlement wetlands left. Wetlands are determined by the presence of three indicators – hydric soils, water-loving vegetation, and evidence of water either some or all of the year.

When people think of wetlands in our area, they tend to think of cattails, reed canary grass, and standing water. While these can be found in a lot of our local wetlands, not all wetlands are created equal. In Pennington County, it is not uncommon for aspen and green ash trees to be found in wetland areas. It is also not uncommon for a wetland to sit higher on the landscape than a non-wetland area and be wet in the spring and dry and farmable during the summer.

In Minnesota, wetlands are protected by the state's Wetland Conservation Act (WCA). If you are planning to do earth work that may impact wetlands, please reach out to Larissa at the Pennington SWCD before you start. She can verify if there are wetlands present and inform you of WCA rules that may apply.

USDA PROGRAMS

The Environmental Quality Incentive Program (EQIP) provides technical and financial assistance for landowners to address natural resource concerns that deliver environmental benefits such as: improved water quality, reduced soil erosion, improved plant health, soil health, and improved wildlife habitat. Applications for EQIP are accepted throughout the year. If your application is accepted for funding, you will enter into a contract with NRCS to receive financial assistance for implementing chosen practices. Payment rates are reviewed annually.

The Conservation Stewardship Program (CSP) offers an opportunity for landowners to enhance their operation while adopting conservation enhancement activities. CSP can help plan and implement conservation practices and enhancements that address natural resource concerns within your operation. CSP helps you build your existing conservation efforts to strengthen your operation for sustainability. CSP has a contract length of five years to help achieve your operational goals.

If you have any questions about either of these programs, please call your local NRCS office at (218) 681-1612.

USDA is an Equal Opportunity Provider, Employer, and Lender

AgBMP Low Interest Loans

Last year, \$2.93 million was loaned for practices that improved water quality in Pennington, Red Lake, Marshall, Polk, and Roseau Counties. These loans were made possible through the AgBMP Loan Program. Rural landowners, farmers, farm supply businesses, and water quality cooperatives are all eligible to apply. The loan application process is easy, with applications being accepted on a continual basis. First, the SWCD will review the application to determine if the practice qualifies. If it does, the applicant chooses a lending institution to obtain a low interest loan (3% max interest plus fees). Once approved, the Minnesota Department of Agriculture (MDA) provides the funds to the lending institution for the project. Here is a list of eligible practices:

- Septic Systems
- Well Repair/Replacement
- Conservation Tillage Equipment
- Erosion Control Practices
- Feedlot Improvements
- Manure Management
- Wetland Restoration
- Chemical Management
- Other (must improve water quality)

See your local SWCD office if you have any questions about the AgBMP Loan Program.



**PENNINGTON SOIL & WATER
CONSERVATION DISTRICT**
201 Sherwood Ave S, Suite 3
Thief River Falls, MN 56701-3400

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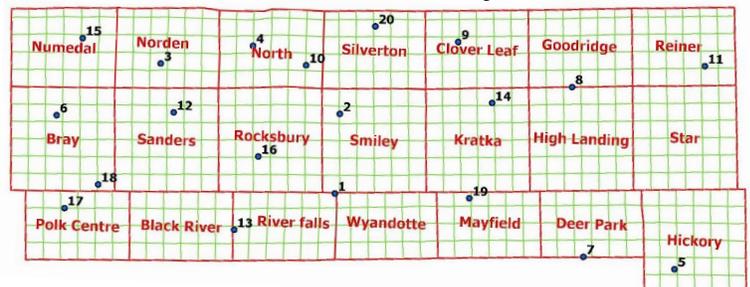
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#	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	TOTAL
1	8.00	5.24	4.18	3.76	0.77	0.52	0.41	22.88
2	6.13	5.67	3.39	3.02	0.79	1.63	0.37	21.00
3	6.32	6.10	3.50	2.42	1.11	0.96	0.43	20.84
4	3.81	4.11	2.55	1.92	0.50	1.44	0.07	14.40
5	6.34	5.14	5.51	2.80	1.91	1.60	0.51	23.81
6	4.32	4.49	3.73	3.33	1.38	1.02	0.38	18.65
7	7.72	5.46	4.96	2.30	1.07	1.70	0.32	23.53
8	7.25	6.03	3.47	2.20	1.08	1.95	0.50	22.48
9	0.00	6.03	4.95	3.13	1.96	1.99	0.05	18.11
10	5.37	5.56	3.04	2.50	1.20	2.13	0.47	20.27
11	3.99	4.94	4.12	1.95	2.61	1.89	0.79	20.29
12	6.07	6.03	3.71	2.91	1.62	0.77	0.42	21.53
13	7.42	4.87	2.71	4.05	0.49	0.53	0.41	20.48
14	7.63	6.44	3.65	1.77	0.69	1.03	0.52	21.73
15	4.57	5.39	4.39	2.77	1.01	0.80	0.42	19.35
16	5.69	3.79	3.45	2.92	0.48	1.45	0.33	18.11
17	6.16	5.15	5.07	3.48	1.08	0.73	0.45	22.12
18	5.92	5.35	4.08	3.00	0.65	0.55	0.28	19.83
19	0.00	5.56	3.26	2.28	0.91	0.77	0.53	13.31
20	5.47	5.95	4.02	3.12	0.94	1.81	0.35	21.66
AVE	6.01	5.37	3.89	2.78	1.11	1.26	0.40	20.82

2022 Rainfall Monitoring

Pennington County rainfall amounts were excessively high during the first few months of 2022 and extremely low during the last few months. This crazy rollercoaster effect generated a precipitation amount just slightly higher than our 30 year total average of 19.62 inches. Total rainfall for the 2022 growing season (April thru October) averaged 20.82 inches. This compares to 16.41” in 2021; 18.75” in 2020; 23.16” in 2019; and 16.03” in 2018.

“THANK YOU” to all our rainfall monitors!



WANTED: We are currently looking for a volunteer to collect rainfall data in Star Township. A rainfall kit will be supplied for your use. If you would like to volunteer, please contact Donna Christianson at (218) 683-7075 or donna.christianson@pennington.swcd.org. Thank You!

Check out our website at: www.penningtonswcd.org