



CONSERVATION NEWS

2024

KANABEC SWCD

EMPOWERING CONSERVATION SINCE 1951

INCENTIVIZED LAND PROTECTION OPPORTUNITY

The Kanabec Soil and Water Conservation District (SWCD) has had the pleasure over the past two years to provide an incentive program called the RIM (Reinvest in Minnesota) Conservation Easement for private landowners in the Kettle and Snake River Watersheds. The program was created to protect and preserve the natural qualities of the Kettle and Snake Rivers. By putting land into a RIM Conservation Easement, we have been able to protect 256 acres in Kanabec County with a total payout to landowners at just over \$575,000.

A conservation easement is a permanent and binding agreement that limits the use and the development of your land in order to preserve its natural resource features that have important fish and wildlife habitat value. If you are interested in the program and your land is selected, **you would be paid 60% of the county assessed land value for the conservation easement. This is an entirely voluntary program.** You would still retain ownership of the property and the land is **not** open to the public. The easement does not affect buildings already on your property and in many cases the easement will not conflict with your already intended land use.

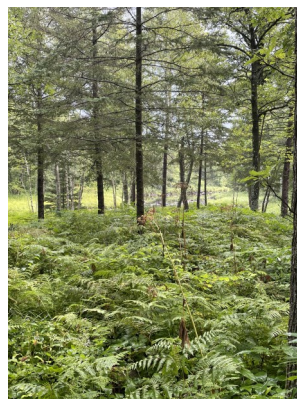


A landowner in northern Kanabec county has already enrolled 108 acres into this program. This preserved land includes over 3,220 feet of shoreline along the Snake River and is adjacent to several acres of MN DNR State Land.

Read his testimonial about how preserving his land with a conservation easement is important to him and our future.

"When I was in elementary school I grew up summers at our log cabin on the south end of Big Pine Lake near Finlayson. At the time we had another pandemic--polio--and

without a vaccine our family lived at the cabin during summer months. I grew up in country that had been logged and burned back in the late 1800s, and was being naturally reforested. We also planted tens of thousands of pine seedlings from the state's General Andrews Nursery at Willow River each spring.



My mother used to say: "We do not own this land--we are really only temporary custodians of the land. We needed to preserve it for the future." Her message stuck: that is what I have done in my 53 years of ownership, and want to do now with the RIM environmental easement for the future. Land speculators are swarming now with cash offers, presumably to develop and flip the land for resale. But the land was, is and will always be home to the deer, bears, wolves, coyotes, red and gray foxes, fishers, mink, weasels, snow shoes, ruffed grouse, turkeys, red and gray and flying squirrels and chipmunks, ground hogs, song birds, hummingbirds, hawks and owls, eagles, and other wildlife that live there. It's their home--I have been just a visitor. Via RIM so will those who follow me."

We have had the unique opportunity to work with many landowners in the past two years and look forward to advocating with the state to continue to provide payments to landowners for land protection.

For more information on this program, or to apply, please contact Jerah at (320) 679-1391 or Jerah@KanabecSWCD.org

BOARD OF SUPERVISORS

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(320) 493-3825
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CONTINUED SUPPORT,
WHICH HELPS MAKE THIS
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How You Can Help Keep Waterways Clean!

Warm summer days are quickly approaching and along with it is the season of mindful preventative measures to protect our waterways from invasive species. So how can you as a watercraft user help keep the invasive species out of our waterways? Clean., drain, dry, and dispose. Every time you take your watercraft out of the water and especially if you are going to a different body of water, you should be cleaning weeds and debris off your boat.

After you get out of the water you should:

- Clean:** Remove all aquatic plants and creatures from your watercraft, trailers, and recreation equipment before leaving the access.
- Drain:** Boat, ballast tanks, portable bait containers, motors, and drain bilge, livewell and baitwell by removing drain plugs before leaving a water access or shoreline. Be sure to keep drain plugs out and keep anything that holds water open to drain while transporting.
- Dispose:** Be sure to throw out unwanted bait, including minnows, leeches, and worms in the trash. Reminder it is illegal to release bait into a waterbody or release aquatic animals from other waterbodies.



So why is it important to stop the spread of invasive species? Invasive aquatic plants can form dense mats on the surface that impact water recreationalists by clogging up motors and can plug up shorelines. The invasive aquatic plants also outcompete native vegetation which provides unsuitable habitat and food for native wildlife. Invasive species like zebra mussels are filter

feeders that can filter one quart of water per day to eat on algae.

These filter feeders reduce the food for native species, and they also attach to everything they can which includes native mussels which will kill them. Because they attach to everything, they are also a hazard for swimmers when they attach to docks, swim rafts and rock.

So, to help keep our waterways free of these aquatic nuisances be sure to clean and drain all watercraft and dispose of all unused bait. For more information on aquatic invasive species visit the A.I.S. information page on the DNR website. [Aquatic Invasive Species | Minnesota DNR \(state.mn.us\)](http://Aquatic Invasive Species | Minnesota DNR (state.mn.us))



Zebra Mussel infested native mussel

Financing Solutions for Clean Water

Agricultural Best Management

Practices Loans

(AgBMP)

Each year \$10 million is available for loans in Minnesota. The AgBMP Loan Program is funded by the Minnesota State Legislature, the Minnesota Public Facilities Authority, and the U.S. Environmental Protection Agency and is administered through the Minnesota Department of Agriculture. No grants are given by this program. The AgBMP Loan Program provides financing at below-market interest rates.

These 3% low-interest loans save you money, making it more economical to implement practices that improve and protect water quality.

Loan Years	Loan Amount	Interest Paid		Interest Savings
		3%	9%	
5	\$10,000	\$781	\$2,455	\$1,674
5	\$30,000	\$2,344	\$7,365	\$5,021
7	\$50,000	\$5,496	\$17,574	\$12,078
10	\$100,000	\$15,873	\$52,011	\$36,138



Loans for:

- Feedlot improvements, manure storage basins, and spreading equipment
- Conservation tillage equipment
- Terraces, waterways, sediment basins
- Shore and river stabilization
- Septic systems
- Other projects

Loan Terms:

- Maximum loan amount is \$200,000
- Maximum loan length is 10 years
- Maximum interest rate is 3%
- Lender may charge customary fees
- Lender may require collateral
- Borrower must meet lending criteria

For additional questions or to apply contact:

Jerah@KanabecSWCD.org or (320) 679-1391

CERTIFY YOUR FARM

The Minnesota Agricultural Water Quality Certification Program (MAWQCP) certifies farmers for managing the land within their operation in a way that protects water quality. Area Certification Specialists assist farmers through the certification process. The MAWQCP has five endorsements available to water quality certified producers: Climate Smart Farm, Soil Health, Integrated Pest Management, Wildlife, and Irrigation Water Management. Many conservation practices targeting water quality have benefits for other conservation goals, and the endorsements provide additional recognition to water quality certified producers who are going above and beyond to implement conservation on their farms. Additionally, producers who obtain the Climate Smart Endorsement will receive a copy of the "Farmers' Guide to Carbon Market Contracts in Minnesota" and are eligible for a \$1,000 payment through the MAWQCP Climate Smart Farms Project. You can get started by contacting your local Soil and Water Conservation District or Northeast Certification Specialist, Ryan Clark at 218-384-3891 X6



RAIN BARREL- RAIN CATCHER

- COLLECT YOUR ROOF STORMWATER FOR WATERING AROUND YOUR YARD.
- RAIN BARRELS NOT ONLY SAVE YOU MONEY BUT LESSEN THE STRAIN ON WATER RESOURCES
- REBATES (\$22.50 EACH) ARE AVAILABLE WITHIN PRIORITY AREAS. CONTACT KANABEC SWCD FOR MORE DETAILS.
- EASY TO INSTALL
- MADE OF 100% RECYCLED PLASTIC

\$100/each
Limit 2

For more information, Contact us at:
320-679-1391



RENT THE NO-TILL DRILL!!

- \$14 Per acre (\$175 minimum)
- \$500 Deposit
- 50% Down payment for estimated acres to plant

INCREASE PLANT DIVERSITY **IMPROVE SOIL HEALTH!**

If Interested Contact
Emily Larson
emily@kanabecswcd.org
320-679-1391

- Minimum 3/4 ton pickup to pull drill
- Maximum speed: 30 mph
- Tractor needs hydraulics
- Minimum horsepower needed: 75+
- Working width: 12'
- Row spacing: 7.5"
- Transport width: 157"





Lower Your Crop Input Costs

Are you working to improve any of these things in your farming operation?

- Lower input costs
- Improved soil health / soil productivity
- Increased water infiltration
- Better weed control
- Reduce compaction

This is where adding cover crops or reducing your tillage may help provide some of these results. From a past trip to North Dakota, it was impressive to hear about farm's improved financial bottom line with the widespread use of soil health practices such as cover crops and reduced tillage. Burleigh County, North Dakota is an epicenter of sorts with an impressive number of farmers using soil health practices. They see the need for increased cattle feed and conserving soil moisture and have been using cover crops and reduced tillage to meet these needs. For many using these practices over time has helped

to improve their

financial bottom line. So much so that even bankers have commented that they can identify which farmers are using these practices by their improved financial condition.

Over time, using soil health practices in your operation you can lower your crop input costs.

However, time may be needed to see some of these benefits. Many factors may play into how long it takes to see the benefits on your farm. It may depend on your farming operations, the types of soils you have, their condition and how many soil health practices you're looking to incorporate into your operation. It's really about improving your soil so that your soil can work for you to provide more of what your crops need. Over time this may lessen what you spend on crop inputs.

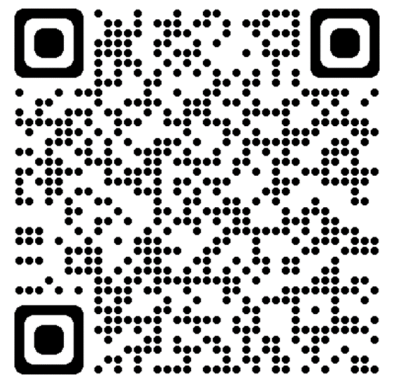
For example, by planting a diversity of cover crop species you can grow the biological diversity on and in your soil. Your soil biology may increase, improving your soil's resistances against fungal and root diseases. It may increase your predatory insects, so you see less crop insect pests. Also, certain species of cover crops may help combat weed problems through allelopathic influences (biochemicals plants give off to



A healthy soil with good soil structure and improved infiltration

harm neighboring plants), such as rye. This is why lettuce won't grow after a rye crop. . To see more research results on the economics of cover crops, see this publication from SARE (<https://www.sare.org/wp-content/uploads/Cover-Crop-Economics.pdf>) or scan the QR code.

In considering cover crops for your operation, take a look at this summary on cover crops from Gary Zimmer, a Wisconsin dairy farmer and president of Midwestern Bio-Ag.; "Of all the inputs you use on your farm, seeds are the cheapest thing to transport and spread. Along with addressing more minerals than just nitrogen, phosphorus and potassium (NPK), growing as many different kinds of plants as you can, as often as you can, is the greatest improvement you can make on your farm. Cover crops have the potential to reduce chemical use, reduce the need for applied nitrogen, and improve soil structure and soil biology. I believe that the greatest opportunity for success on any farm comes from this system, but you need to be committed to it and invested in it. When you are, you will have the potential to grow your highest return crops, year in and year out, more sustainably and more profitably." – from the book, *Advancing Biological Farming* by Gary F. Zimmer, p. 212 published in 2011 by Acres U.S.A.



Cover Crop (340) (Prevent plants are not eligible)		Nutrient Management (590)		Prescribed Grazing (528)		Residue and Tillage Management - No-Till & Strip Till (329)	
Cover Crop-Basic 1-2 species*	\$50/ac/yr.	Nutrient Mgmt.**	\$20/ac/yr.	Prescribed Grazing**	\$40/ac/yr.	No Till & Strip Till*	\$20/ac/yr.
Cover Crop-3+ Species*	\$60/ac/yr.						
Residue and Tillage management - Conservation Tillage (345)							
Conservation Tillage*	\$10/ac/yr.	Percent Residue Cover Following a crop at the time of subsequent crop planting					
		Corn Crop		Must be 60% or Greater			
		Soybean Crop		Must be 30% or greater			
Small Grain Crop		Must be 60% or greater					
*Implementation can occur on different acres within the three-year contract or on the same acres consecutively **Implemented on the same acres annually							



The table above showcases the incentive payment rates that you may be eligible for in starting to plant cover crops, reduce your tillage, or start nutrient management or rotational/prescribed grazing in your operation.

Please contact us if you'd like to learn more about soil health practices. Incentive payments may be available from 1 to 3-year time frames. As you have questions or would like to learn more, please let us know what else you'd like to see in the way of workshops, field days or speakers on a particular soil health topic.

Contact us at Deanna@KanabecSWCD.org or Emily@KanabecSWCD.org or (320) 679-1391.

HELPING PEOPLE HELP THE LAND

NATURAL RESOURCES CONSERVATION SERVICE

Every Successful Farm Starts with a Plan

The Natural Resources Conservation Service (NRCS) works to help farmers, ranchers and forest landowners invest in their operations and local communities to keep working lands working, boost rural economies, increase the competitiveness of American agriculture and improve the quality of our air, water, soil and wildlife habitat.

Simply put – NRCS helps America’s farmers, ranchers and forestland owners make conservation work for them.

Our Conservation Technical Assistance (CTA) program enables every acre of voluntary conservation applied through every program NRCS administers. It is the foundation of our financial and technical assistance delivery system.

Every farm and acre is unique and requires tailored management; and every decision maker has different management concerns and needs. Our technical assistance is one-on-one, personalized advice and support to help producers make the best decisions for their lands – and is offered free of charge.

This personalized assistance provides producers with the science-based data and tools to make informed decisions about where to target efforts to get the greatest return on their investment and ensure the long-term sustainability of American agriculture.

A comprehensive conservation plan is the first step to managing all the natural resources on a farm. NRCS walks the farm with the producer and develops options to address that producer’s needs. Our toolbox includes aerial photos, soil surveys, engineering solutions and individual science-based analysis customized for the producer’s property. The plan we develop with the producer combines existing production methods with recommended conservation practices to best manage that farm’s unique natural resources, while allowing the producer to grow sustainably and productively. Supported by our expert analysis and recommendations, the producer chooses which option best meets their needs. These decisions become the producer’s conservation plan, a step-by-step guide to reach their objectives.

This planning process also makes it easier to identify how and when the farmer, rancher or forest landowner could qualify for Farm Bill financial assistance to help them install conservation systems or receive incentives for trying new ones. We have the expertise to see our customers through this process. Because identifying when, where and how to implement practices is not plug and play.

The final plan provides a roadmap for the producer to meet their natural resource conservation goals. It includes helpful information on each of the producer’s practices, such as how they benefit the farm, how to maintain them, and how they help the soil, water and wildlife.

By developing a conservation plan and adding conservation to the land, farmers, ranchers and forest landowners can protect the land’s ability to provide for their family and future generations.



With offices in communities nationwide, NRCS staff provide the information, tools and delivery systems necessary for producers – in every state and territory – to conserve, maintain and improve their natural resources. Contact your local USDA service center to find out more.

Local NRCS Field Offices:

Mora:	(320) 679-3781	2008 Mahogany St, Mora, MN
Milaca:	(320) 983-2154	1016 5 th St SE, Milaca, MN
Hinckley:	(320) 384-7432	260 Morris Ave, Hinckley, MN
Cambridge:	(763) 689-3224	110 Buchanan St N, Cambridge, MN
Aitkin:	(218) 927-2413	130 Southgate Drive, Aitkin, MN

USDA is an equal opportunity provider, employer and lender.

KANABEC SOIL & WATER SWCD CONSERVATION DISTRICT

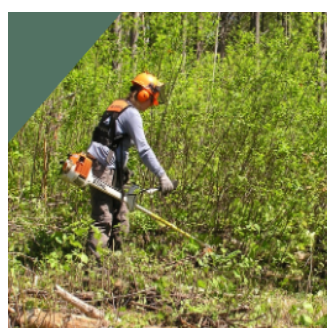
Kanabec Soil & Water Conservation District (SWCD) is a local organization serving the residents and landowners of Kanabec County. We are dedicated to promoting the wise and sustainable use of our land and water related resources. We provide incentive-based opportunities for landowners to improve soil and water quality.

Our Services:

- Conservation Practice Funding
- Conservation Easements
- Spring Tree Sale
- Forest Stewardship Plans
- Agriculture Water Quality Certification
- Aquatic Invasive Species
- Conservation Technical Assistance
- Soil Health Practice Incentives
- No-Till Drill Rental

Visit our website

Follow us on Facebook



Buckthorn Management



CONTACT US

<https://www.kanabecswcd.org/>

Eddie Johnson
Forester
eddie.johnson@co.pine.mn.us
(320) 216-4245

2008 Mahogany St. Ste. 3
Mora, MN 55051

Use the QR code below to access videos on Buckthorn management!



Buckthorn was brought to America from Europe to be used as a hedgerow. However, due to its ability to spread quickly and its lack of natural predators, buckthorn quickly invaded and took over native areas. Buckthorn management can be a arduous task, but with dedication, you can restore your woodland into a natural oasis.

Kanabec SWCD Staff



Pictured Left to Right: Emily Larsen (Conservation Technician), Deanna Pomije (Watershed Coordinator), Jerah Mattson (Administrative Assistant) and Josh Tank (Shared Services Forester)

The District has welcomed two new staff members, Emily Larsen and Josh Tank.

Joining the District in November of 2023, Emily graduated from Minnesota State University Moorhead in 2021 with a Bachelor's of Science degree in Ecology and Evolutionary Biology. She is originally from northern Minnesota in the Red River Valley and worked mostly in that area in conservation. She grew up helping with the family farm and garden. She enjoys plants, hiking and hanging out at home with her cat. She moved to the area to join the Soil and Water office to work more with private landowners and the community to improve agricultural lands, shoreline and water quality.

Josh started with us in April of 2023. His background is in biology, landscape management, and forest and recreational resources. Josh worked to provide information and expertise to forest landowners in Kanabec and Pine County. In his free time, Josh enjoys hiking and exploring the natural areas of Minnesota. He has recently moved on to Washington Conservation District. Feel free to direct any forestry related questions to Eddie Johnson at 320-216-4245.

Candidate: Kevin Belkholm

District 1: Grass Lake, Brunswick & South Fork Townships

I am running for my 5th term as SWCD supervisor because I believe citizens have a responsibility to participate in their government and in America we can each have a voice in how our country is run. It is incumbent upon us to have our voices heard in a way that is respectful to our constitution and our fellow citizens. I feel it is important for farmers and other landowners to be represented when land use decisions are being made and it is important for tax dollars to be spent prudently and effectively. Government should have a light touch not a heavy hand.

I am a lifelong farmer and have spent my life studying crop production, soil health, water infiltration, water management, tillage, manure management, rotational grazing, fertility and ph and how all these can come together to make a profit farming while protecting our environment. I am an avid boater and swimmer and am familiar with our area lake and river resources. I believe government needs local input in designing their programs.

Candidate: Jon Sanford

District 3: Kanabec & Arthur Townships

I would like to continue on the board to work towards cleaning up our lakes, rivers and forests. We have numerous projects we are currently working on, this includes a new total Snake River watershed plan encompassing Kanabec, Pine, Aitkin and Mille Lacs counties that is just coming to fruition. That will be a great new tool with state and federal government monies to help land owners of all kinds in our county. We have many more issues going on in our county that most people do realize. Farmland health, forest management, lake shore, farm and field erosion, aquatic species invading our lakes. The list is many!

I have been involved in our lake association groups, have attended many seminars regarding conservation, and been involved in community activities. I have been to the Capitol seeking more money to help clean up our county. I believe I am a good listener to hear and learn from numerous people and sources.

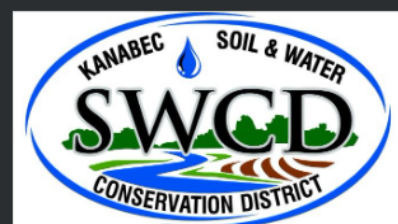
Candidate: Kim Johnson

District 5: Haybrook, Ford, Kroschel, Pomroy, Peace, Hillman & Ann Lake Townships

I have had the good fortune to represent Kanabec County as a Supervisor of our Soil and Water Conservation District for the past four years. This has been a significant time for private land conservation efforts now that the Minnesota Legislature has created major funding for the state-wide One Watershed One Plan (1W1P) system. Under the 1W1P structure conservation efforts focus on entire watersheds, not just those portions of the watershed that lie within the borders of each county. This allows us to tackle big conservation issues that impact the watershed and find solutions that aren't just passing problems downstream to our neighbors.

A good part of the last four years has focused on planning the governance structure under the 1W1P organization and developing budgets and work plans for guiding our activities. We are now finished with this planning process and have received funds for implementation. I look forward to the next four years as we finally have the opportunity to get projects rolling in Kanabec County and the entire Snake River Watershed.

Election Candidates



Office Hours Monday-Friday 8:00am-4:30pm

After hours appointments available by request

Deanna@KanabecSWCD.org

Jerah@KanabecSWCD.org

Emily@KanabecSWCD.org

WWW.KanabecSWCD.org

(320) 679-1391

Snake River Funding Opportunities

Seeking Interested Landowners...

Do you have concerns on your land?

Would you like someone to look at it with you and discuss options for improved conservation practices? No cost for assessments.

Now that the Snake River Watershed Plan is completed, we are starting implementation of the plan. Just last December, the new seven-member partnership received funds to start implementing our watershed plan. Generally speaking, the plan details out which conservation practices, if installed within priority areas of the watershed will result in cleaner waters for our lakes and streams. So, reaching out to landowners within priority areas will be a focus in this year's staff outreach efforts. We may be reaching out to you seeking out your interest in addressing your land's objectives.

For example, the area for soil erosion practice outreach focus will be within the Middle and Lower Snake sub-watershed areas, see the colored sub-watersheds (light pink, dark green) on the Figure 1 map. These are the areas that have been identified with steeper slopes or areas more prone to erosion.

Another example; practices to protect drinking water will be sought in areas where there is shallow bedrock, coarse textured soils, or already high groundwater nitrates detected. Such drinking water protection practices include sealing abandoned wells, cropland nutrient management, septic upgrades or the filtering of livestock feedlot runoff. The focus area for drinking water protection work varies throughout the lower watershed in Pine and Kanabec Counties.

Focusing on priority areas allows us to concentrate our resources into areas where we anticipate moving the needle toward cleaning waters by installing specified conservation practices.

About 90% of Kanabec County falls within the Snake River Watershed. Aitkin, Pine and Mille Lacs Counties entail our other watershed partners also seeking interested landowners.

Goals for the Snake River Watershed:

- ✓ Improve water quality
- ✓ Control erosion / sedimentation
- ✓ Protect high quality lands (conservation easements)
- ✓ Prevent drinking water contamination
- ✓ Increase water storage to help control flooding



Previously completed streambank erosion control project

We need your help. If you are a landowner within the Snake River Watershed (see the multi-colored map) and would like someone from the Soil & Water office to visit your land with you, look at your concerns, hear your land objectives and hear about conservation objectives for consideration. Please contact your local Soil & Water office (SWCD): the Kanabec SWCD at (320) 679-1391, Pine SWCD at (320) 246-4240, Mille Lacs SWCD at (320) 983-2160, Aitkin SWCD at (218) 927-7284 or Deanna@KanabecSWCD.org.



Manure pit closure



Shoreland native plant restoration project

Examples of conservation practices are many, especially with our diverse land-use within the watershed.

- Shoreland Projects (erosion control, native plantings)
- Agriculture Practices (rotational grazing, fencing exclusion, manure pit closure)
- Soil Health Practices (cover crops, reduced tillage)
- Erosion Control (grassed waterway, water & sediment control basins)
- Forestry Work (stewardship planning, tree planting, forest stand improvement)



Fencing – exclusion of cattle from sensitive areas



Rotational Grazing – see our federal, NRCS partners Kanabec County NRCS (320) 679-2080

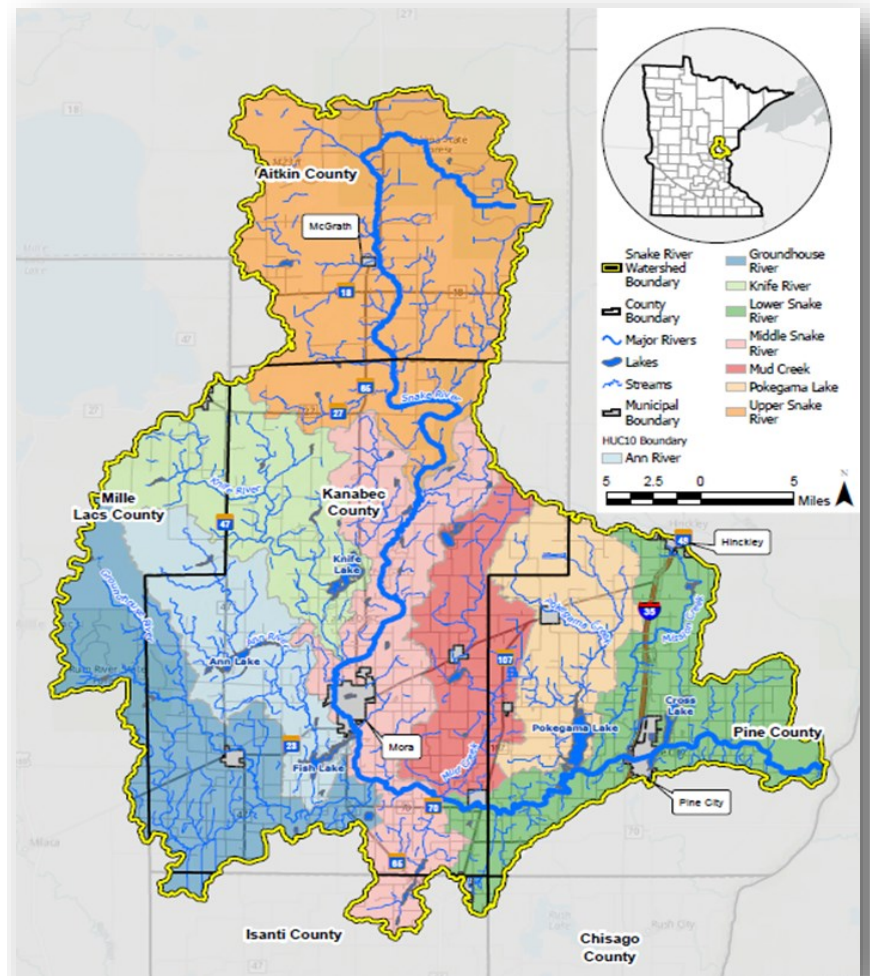
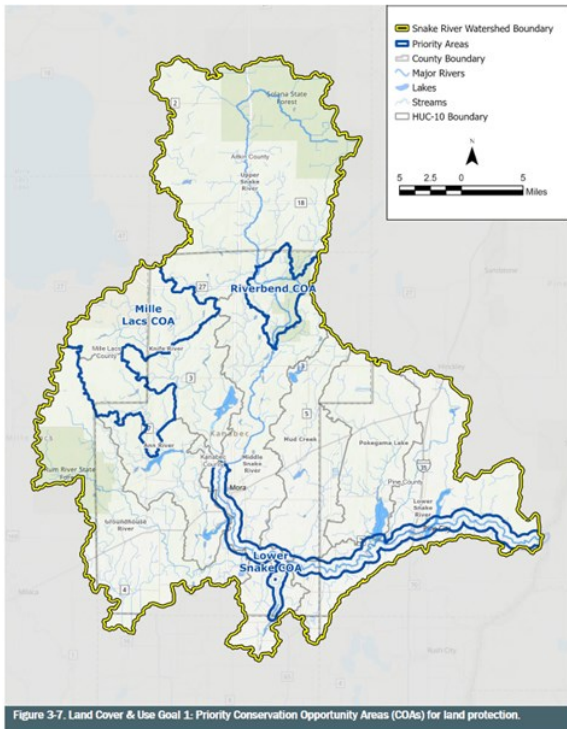


Figure 1: Snake River Watershed Map

Funding Coming for Forestry Projects in Kanabec Area:

A new pot of money from the State is soon to be used to improve watershed management in the Kanabec area. One Watershed, One Plan (1W1P) was created to identify and prioritize watershed management issues that are present in the Snake River Watershed (Fig. 2).

Watersheds are landscape areas that “contain all the land and water features that drain surface water to a specific location” (MN DNR). Watershed borders do not follow political boundaries but are characterized by the flow of water across the landscape.



The Snake River Watershed covers a vast majority of Kanabec County and covers portions of Pine, Aitkin, and Mille Lacs Counties as well. The Steering Committee of the Snake 1W1P uses this plan to allocate state dollars to implement projects and strategies that will improve and protect the Snake Watershed.

Landowners within the watershed are eligible to receive these State dollars as cost-share to implement conservation on their land. The 1W1P

provides funding for a wide variety of conservation practices across the watershed such as shoreline restoration, phosphorus reduction in lakes, improving storm water practices, and many more. The 1W1P targets areas that would be impacted most by these practices, so not every landowner will be eligible for cost-share (Fig. 2).

Landowners doing forestry practices might be eligible for financial assistance for:

- Woodland stewardship plans
- Timber stand improvement
- Habitat improvements
- Invasive species management
- Tree/shrub planting and reforestation
- Increasing native vegetation cover in riparian areas, shorelands, and across the landscape
- Many more!



Feel free to reach out to us if you are interested in finding funding for forestry practices or curious if you are eligible for cost-share dollars.

Eddie Johnson, Pine District Forester

Eddie.johnson@co.pine.mn.us

(320) 216-4245

Pine County

(320) 679-1391

Kanabec County

Figure 2. Priority areas in the Snake River Watershed for land protection

Unused Wells – Seal them to Protect Drinking Water

1.2 million Minnesotans get their drinking water from a private well.

Every unused well that is not properly sealed poses a **safety, health and environmental threat** to your family and community as well as a potential **legal risk** to the homeowner.

Wells are no longer used for a variety of reasons. There isn't enough water, the well needs repairs, the wells become contaminated, the land use changed or the house has connected to a community water system. Some wells are simply 'lost' or abandoned when property changes hands.

Physical Safety – Children and small animals can easily fall into an unprotected, open well. Also, accidents can occur when equipment is unsuspectingly driven over a crumbling well or well pit.

Health & Environment - An unused well can act like a drain, allowing surface water runoff, contaminated water, or improperly disposed waste a direct pathway into drinking water sources. When this occurs, the quality of everyone's water is threatened – city water wells, neighbor's wells, even your current well. Therefore, it is recommended that homeowners test their water annually. For more information, visit: Owner's Guide to Wells: [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.health.state.mn.us/communities/environment/water/docs/wells/construction/handbook.pdf](https://www.health.state.mn.us/communities/environment/water/docs/wells/construction/handbook.pdf)

Legal Responsibilities - Consider the responsibility and liability issues if an old well on your property is proved to be a conduit for contaminants that reach a drinking water source for neighbors or your city. Selling your property? You are required to provide a well disclosure statement to the buyer before a purchase agreement is signed. The statement indicates the location, number of wells, and if the well is being used or not.

Test your water.

Inspect your well.

Protect your well.

Seal unused wells.



Various abandoned well types, indoors and outdoors.

Minnesota laws do not require a well that is in use to be sealed unless the well is contaminating the groundwater or has the potential to cause health problems. If the well is not in use or the well poses a threat to health or safety, MN law requires that you must have the well-sealed.

Funding Assistance & Sealing Process

The cost to seal a well can vary considerably. Access to the well, special geological conditions, debris in the well, depth and diameter of the well are all factors that can affect the cost of well sealing. Therefore, it is important to get several estimates to compare costs.

You may be eligible for funding assistance to seal an abandoned well. The SWCD office offers up to 50% of the cost to seal wells, based on the lowest of two bids. Contact our office for more information at (320) 679-1391.

To seal a well a MN licensed well driller is required. They first remove any obstructions in the well, such as the pump or casing pipes. The well void is then filled, usually with bentonite. This is a material that once mixed with water, expands 30 times its dry volume. After the well is sealed the licensed contractor will complete a 'well and boring sealing record' that is provided to the landowner and the MN Dept. of Health.

Ash Tree Pest - Confirmed in Kanabec County

For many landowners in the Twin Cities, and perhaps now many in Kanabec County, EAB is an acronym that is tossed around a lot. For those unfamiliar with the acronym, EAB stands for Emerald Ash Borer. It is the name of a non-native beetle that attacks and kills species of Ash trees (*Fraxinus sp.*). EAB kills trees as larva by eating away at the vascular tissue of the tree, called the xylem and the phloem. The vascular tissue is just inside the bark of trees. By damaging the vascular tissue; the tree's ability to transport water and nutrient resources throughout the tree is limited. After many larva have invaded and eaten away at the tree's vascular tissue, the tree is no longer able to sustain itself, thus killing it in as little as 6 years.

EAB's first appearance in Minnesota was found in St. Paul in 2009. Since then, EAB has spread all throughout SE MN, the Twin Cities Metro, and is starting to move north to where it was recently discovered nearby Quamba in Kanabec County. The invasion and prevalence of EAB is quite a problem for Minnesota because of the large amount of ash trees we have in the state, and particularly in Kanabec County.

Even though EAB has only been confirmed in Quamba, it doesn't mean that it isn't elsewhere in the county, but just under the radar. It takes a few years for ash trees to show signs of EAB invasions. However, by then; it is often too late. Lakeshore owners might have planted ash on their property and woodland owners may have natural ash throughout their woods. It will be important as property owners to keep an eye out for EAB presence on your property in the coming years. Once identified on your property there may be ways to stop the spread of EAB to other ash trees on your property. See managing for EAB below.

There are three things the Minnesota Department of Agriculture encourages landowners to think about when it comes to EAB.

Identifying and reporting EAB: <https://www.burnsvillemn.gov/1941/How-to-Identify-an-EAB-Infestation> is a link that shows examples of EAB presence on ash trees. If you suspect your tree is infected, consult a tree care specialist and report the findings to reportapest@state.mn.us. The quicker EAB is reported, the quicker it can be treated and its spread prevented.

Moving of Firewood: Transporting firewood that is infected with EAB is the fastest way EAB is spread. Adult beetles drill holes into living and dying Ash to lay their eggs. The larva that hatch eat their way out of the tree, which is how they can eat away the tree's vascular tissue. Larva that were recently laid into dead or chopped up Ash trees can hitch a ride to new areas if that firewood is moved to different locations. Limiting the movement of firewood will help limit future spread. Refer to <https://www.mda.state.mn.us/plants-insects/firewood-information> for more information. When in doubt, only burn firewood that was harvested from the same area.

PREVENT THE SPREAD, DON'T MOVE HARDWOOD FIREWOOD!

Managing for EAB: If EAB is confirmed in your ash trees, there are a couple of management strategies. One is to remove the tree and properly dispose of the wood so that EAB does not spread to neighboring trees. Having to remove old, stately Ashes is disheartening and can be expensive, but removing a host tree can help prevent neighboring Ashes from suffering the same fate. Landowners have also found success at using insecticides injections that deter EAB from entering / attacking the tree. This is a preventative measure only and won't "cure" the tree, if it has significant infection. Consult tree care specialists before carrying out these actions.



Pictured Left: Adult Ash Borer

Pictured Right: The "S" shaped tunnels on the Ash are a great way to identify if EAB is present on your trees

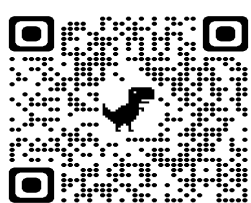
MDA Reminds Farmers of Proper Bulk Fertilizer Storage

Storage areas for dry and liquid fertilizer must be permitted

St. Paul, MN: Ahead of the planting season, the Minnesota Department of Agriculture (MDA) is reminding farmers of proper storage guidelines for bulk fertilizer.

Bulk liquid fertilizer can contaminate soil, surface water, and groundwater if a storage tank or pipe leaks. Dry fertilizer can also leach into the environment if it is placed on the ground and mixes with snow and rain.

To limit the risk of environmental impacts, liquid fertilizer tanks must be inside a containment system that will hold any spills. This is called secondary containment. Dry fertilizer must be stored on an impervious surface and in a roofed area that will protect its contents from the elements. There may be other requirements depending on the location of the stored dry fertilizer.



Scan for Permit Application

Farmers storing any amount of dry bulk fertilizer on the farm must get an MDA bulk storage permit. Farmers must also get an MDA permit if they're storing more than 6,000 gallons of liquid fertilizer.

The storage permit application must include drawings for secondary containment. An application, along with a \$100 fee, must be submitted prior to the start of construction or storage of any dry fertilizer or more than 6,000 gallons of liquid fertilizer. The permit application can be found at www.mda.state.mn.us/bulk-fertilizer-storage.

Failing to comply with bulk fertilizer storage requirements may result in further enforcement actions by the MDA. Contamination from a release may also result in a costly environmental cleanup that could be averted when liquid bulk fertilizer tanks or dry fertilizer is in an MDA permitted containment. As a reminder, a release of fertilizer into the environment is an incident that must be immediately reported to the Minnesota Duty Officer at 1-800-422-0798.

For more information on bulk storage and permits, contact Matthew Parins at 651-201-6587 or Matthew.Parins@state.mn.us.

