Le Sueur County Environmental Services



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Aquatic Invasive Species-Take the Pledge

Summer is here and I hope you are enjoying some time out on the water! The State of Minnesota and Le Sueur County are asking you take the Pledge to Protect Minnesota Waters this summer and beyond!

Take the pledge on the following website: https://www.dnr.state.mn.us/data/ais-pledge.

It only takes a few minutes to sign up. You must be 18 years old.

I will always take these required steps to prevent the spread of aquatic invasive species (AIS):



Clean my boat and gear to remove plants and prohibited invasive species.



Drain all water and leave plugs out during transport.



Dispose of unwanted bait in the trash.



Never release bait, plants, or aquarim pets into Minnesota waters.



Dry docks, lifts, and rafts for 21 days before moving them from one water body to another.

Figure 1. Aquatic Invasive Species-Pledge to Protect Minnesota Waters

Photo Credit: Minnesota Department of Natural Resources and Le Sueur County

Aquatic Invasive Species-Take the Pledge

I will take these additional steps to reduce the risk of spreading AIS whenever possible:



Decontaminate my equipment.



Spray my equipment with high pressure water or rinse it with very hot water (120 degrees for 2+ minutes or 140 degrees for 10+ seconds).



Dry my boat and gear for 5 days before using in another water body.

Figure 2. Aquatic Invasive Species-Pledge to Protect Minnesota Waters

Photo Credit: Minnesota Department of Natural Resources and Le Sueur County

Are you committed to preventing and limiting the spread of Aquatic Invasive Species?







To learn more about the event, please visit the following website:

https://www.co.le-sueur.mn.us/556/Education-and-Outreach.

Upper Cannon River Watershed Flood Risk Reduction Study

The initial Flood Study for the Cannon River Watershed was put on hold due to lack of funding. Le Sueur County is in the process of applying for a Hazard Mitigation Grant Program to obtain federal dollars to help pay for the study. The grant program would cover up to 75% of the total costs and there is a required 25% match component. Le Sueur County is currently working with and reaching out to local partners and stakeholders to come up with the match needed for the grant. The total match needed is valued at \$100,000.

The work that has already been completed thus far for the flood study includes preliminary watershed modeling and calibration of the Upper Cannon River Watershed. Tasks that still needs to be completed include: finishing up modeling of existing conditions of the Upper Cannon River Watershed, installing the flood warning gage coordination, assessing different concepts for flood reduction alternatives (locations, cost-benefit analysis), developing a report, and hosting a few different public meetings. Projects and practices will be identified within the watershed and assessed on what will provide the greatest benefit for storing water on the landscape, reducing flooding impacts, and building resiliency for all communities within the study area. The study is important in that it will provide opportunities for organizations to apply for different funding streams in order to implement on the ground projects and practices.

The image located below is the study area. The study area includes the entire Upper Cannon River Watershed.

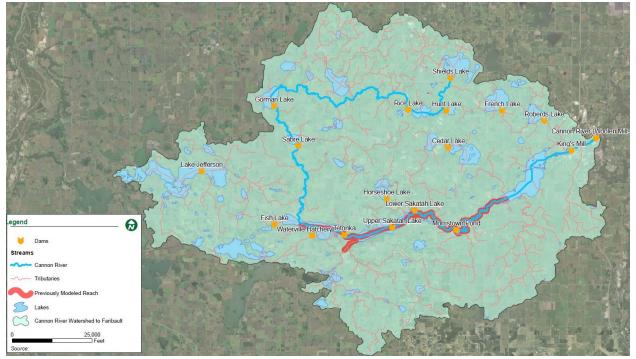


Figure 3. Upper Cannon River Watershed Flood Study Area

Photo Credit: Bolton & Menk

Le Sueur County Geologic and Groundwater Atlas

Le Sueur County has partnered with the University of Minnesota and the Minnesota Department of Natural Resources to begin a County Geologic and Groundwater Atlas. The atlas is very important in that it provides a comprehensive geologic and groundwater mapping of the County's mineral and water resources. The atlas will act as a guide for the County when deciding on future land and water management activities. Additionally, once the atlas is complete, it will provide additional information and resources for staff to initiate projects and programs that will protect and improve resources within the county as well as residents.

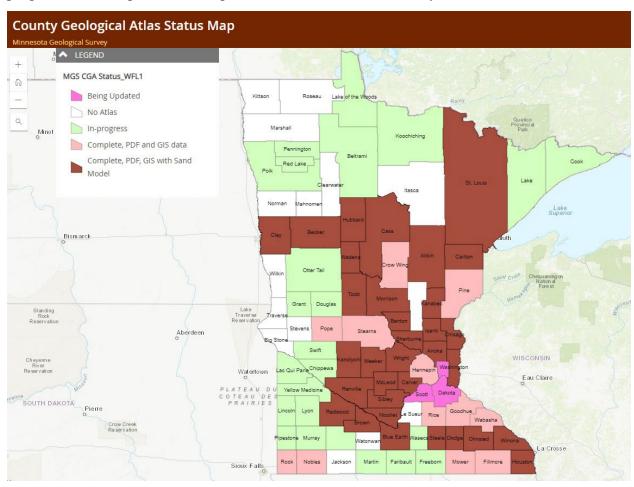


Figure 4. Minnesota Counties Geological Atlas Status Map Photo Credit: University of Minnesota

Development of the atlas will not begin until Spring 2025. However, before an atlas can be developed Le Sueur County needs to verify locations of roughly 1,000 wells. Well locations can most certainly be a hit or miss when trying to verify. It is dependent on the information that is provided with the well permit. There will be a few different phases that Le Sueur County will undertake in order to identify well locations.

Phase 1: Le Sueur County is going to identify as many well locations as possible with information that is currently provided such permit information, tax records, and aerial imagery.

<u>Phase 2</u>: If a well cannot be identified with the information mentioned above, Le Sueur County will be conducting site visits to verify well locations. We will be contacting landowners before we come out on site via a phone call or letter.

To learn more about the County Geologic and Groundwater Atlas Program in Minnesota, please visit the following website: https://cse.umn.edu/mgs/county-geologic-atlas.















Water Resource Spotlight

This issue we are spotlighting Greenleaf Lake!

Greenleaf Lake is located roughly 6.0 miles east of the City of Le Center. The lake has a surface area of 302 acres and its' watershed is very small. Greenleaf Lake has a maximum depth of approximately 19 feet. The landscape around the lake is predominately wetlands, woods, and agriculture, and it does have some development located on the north half of the lake. Additionally, there is a DNR access that is located on the northeast side of the lake.

Greenleaf Lake is located within the Lower Minnesota River Watershed. According to the Lower Minnesota River WRAPS, Greenleaf Lake is not meeting state water quality standards, is impaired for nutrient, and has a 66% nutrient reduction goal. There are a variety of practices that have been identified to help improve the water quality within Greenleaf Lake Practices that can help reduce nutrient loading into Greenleaf Lake include: riparian



buffers, soil health practices such as cover crops, tillage management, perennial cover, alternative tile intakes, water and sediment control basins, septic system improvements, and lastly in lake management to reduce internal loading of nutrients.

Minnesota Native Plant

Prairie Coreopsis (Coreopsis palmata)



Figure 7. Prairie Coreopsis Inflorescence

Photo Credit: Holly Bushman

Praire Coreopsis, is a perennial that is a part of the Asteraceae (Aster) family. It is also commonly known as Stiff Tickseed and Finger Coreopsis. It grows from 1-3 feet in height. The root structure of Prairie Coreopsis is fibrous and is comprised of rhizomes. Prairie Coreopsis leaves range anywhere from 2-4 inches long, are stalkless (also known as sessile), and are divided by three lobes. Furthermore, the leave pairs are arranged opposite on the stem. The

inflorescence (flower head) is a typical ray shape and contains venations on the petals which can be seen with the naked eye. Flowers are bright yellow in color and blooms from June to August.

This plant prefers medium to dry soils and does particularly does well in poor soil conditions. Prairie Coreopsis is known to be drought resistant. Lastly, this species prefers full or partial sunny areas. You'll find this plant thriving in prairies, fields, and other sunny areas. Prairie Coreopsis attracts a wide range of pollinators such as bees, hummingbirds, butterflies, and other insects.



Figure 8. Leaf Arrangement of Prairie Coreopsis

Photo Credit: Holly Bushman

Fun Fact:

Beekeepers are fond of this plant due to the source of honey that it provides from the bees that pollinate the flowers.

Non-Native Plant

Common Mullein (Verbascum thapsus)

Common Mullein is a biennial that is a part of the Scrophulariaceae (Figwort) family. Common Mullein is also commonly referred to as Great or Wooly Mullein. This species is native to Europe, northern Africa, and Asia. Common Mullein has been around the United States as early as the 1700s, and was likely introduced for medicinal purposes.

Common Mullein can grow anywhere from 5 to 10 feet tall! The leaves are quite large and can be up to 15 inches long! Additionally, the leaf blade is thick, soft, and fuzzy due to be covered in dense hairs. The fuzzy soft leaves are a signature characteristic of this species. Leaves start out as basal rosette and the second year a stem shoot is produced. The inflorescence (flower head) blooms from June to September and is shaped as a tall spike. Flowers are yellow in color, have five petals, and encompass the entire inflorescence spike.



Figure 9. Leaf Arrangement of Common Mullein

Photo Credit: Holly Bushman

Figure 10. Inflorescence of Common Mullein *Photo Credit: University of Wisconsin-Madison Horticulture*











Figure 11. Common Mullein Plant *Photo Credit: Holly Bushman*

The root structure of Common Mullein consists of a deep taproot. This species prefers dry soils; especially in sandy areas or disturbed sites. Lastly, this species prefers full sun to partial shade.

Common Mullein can be found in meadows, pastures, roadsides, vacant lots, wood edges, and other open areas. This species is prolific breeder and is difficult to manage once well established. Likely, this nonnative species is here to stay in the United States.

Fun Fact: Common Mullein has been used as a medicinal plant and has also been used as fish bait or a poison for fish. Additionally, this plant can come in handy if you run out of toilet paper while enjoying the outdoors.

Environmental Services Department Changes



The Environmental Services Department Contact Information will stay the same!

Our physical address has now changed to our mailing address (which is located above).

Contact Information

Environmental Services Department

Planning & Zoning, Feedlots, Solid Waste, & Septics

Phone: 507-357-8538

Email: environmentalservices@co.le-sueur.mn.us

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Le Sueur County Soil & Water Conservation District (SWCD)

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Natural Resource Conservation Service (NRCS)

Steve Breaker-District Conservationist

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Minnesota Department of Natural Resources (DNR)

Alan Gleisner-Area Hydrologist Carli Wagner-Aquatic Invasive Species Specialist

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To see which DNR staff is the Area Hydrologist for your region, please click on the following link: https://files.dnr.state.mn.us/waters/area_hydros.pdf