



CONSERVATION TODAY

Sibley Soil and Water Conservation District & USDA

Summer 2021



The Wetland Conservation Act in Minnesota

What is the Wetland Conservation Act (WCA): First passed in 1991, WCA regulates the draining, filling and in some cases, excavating within wetlands. The goal of WCA is to achieve a no net loss of wetlands in Minnesota. In Sibley County, the Sibley Soil and Water Conservation District (SWCD) administers WCA with assistance from the Minnesota Board of Water and Soil Resources (BWSR). The basic requirement of WCA is that “wetlands must not be drained or filled, wholly or partially, unless replaced by restoring or creating wetland areas of at least equal public value under an approved replacement plan.” – *Minn. Stat. §103G.222, subd. 1(a)*.

What is a wetland: For the purposes of WCA, wetlands are defined by the presence of hydric soils, hydrology, and hydrophytic vegetation. By using the procedures in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual, wetland delineators can map the boundaries of wetlands. Wetlands are also classified by “type” according to the Circular 39 method. This system classifies wetlands based on the frequency and depth of inundation, as well as the vegetative community present in the wetland. The Circular 39 method has 20 wetland types, and 8 of these wetland types can be found in Minnesota. Many agricultural producers may be familiar with certified wetland determinations (CWDs) done by NRCS. This system uses terms like farmed wetland (FW), wetland (W), farmed wetland pasture (FWP) and converted wetland (CW) to classify wetlands. While CWDs can be helpful in reviewing projects for WCA compliance, the criteria and methods used by NRCS are very different than what is required for WCA.

Wetlands in Minnesota: Minnesota once contained as many as 18.6 million acres of wetlands. It is estimated that over 50% of this acreage has been lost to drainage and development. In Southern Minnesota, this percentage is much higher. Wetlands have been proven to provide many benefits, including flood control, erosion control, habitat, and recreational opportunities.

Projects impacting wetlands: While the goal of the WCA is to achieve no net loss of wetlands, that does not mean that projects impacting wetlands cannot happen. Often, there are simple solutions that can help avoid impacts to wetlands, while still achieving the project goals. These are called “no-loss” situations. In other situations, it is possible that a project qualifies for one or more of the eight exemption standards.

Wetland - Dryden Twp.



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Sibley SWCD

Joel Wurscher,
District Manager

Jeremy Buckentin,
District Technician

Jack Bushman,
Conservation Technician

Eric Miller,
Farm Bill Technician

SWCD Board

Kathleen Thies - District 1

Paul Wiemann - District 2

Loren Evenson - District 3

Wayne Grams - District 4

Robert Nielsen - District 5

Board Meetings

Second Tuesday of
Each Month
4 p.m., SWCD Office

USDA - NRCS

Jacob Stich,
District Conservationist



Office Hours

By Appointment
Monday - Friday
8 a.m. - 4:30 p.m.



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This means that the activity is exempt from WCA replacement requirements. In some cases, the only way to move a project forward may be for the landowner to purchase replacement credits from a wetland bank. This process offsets the loss of wetlands by the restoration or creation of wetlands of equal public value. Landowners who are interested in moving forward with projects in and around wetlands are encouraged to contact the Sibley SWCD office in advance of completing any work. While not always necessary, it is possible that the landowner may be encouraged to submit an application to receive a formal determination. These determinations typically fall into the following categories:

Exemption - Determining whether an activity would be exempt from WCA replacement requirements.

Replacement - Determining if a proposed replacement plan is acceptable.

No-Loss - Determining whether the activity will result in no loss of wetlands.

Wetland Boundary or Type - Determination of the boundary and/or type of a wetland.

These applications are reviewed by the Technical Evaluation Panel (TEP). The TEP will make technical findings to the Local Government Unit (LGU). TEPs consist of three technical professionals. For projects near public waters, a TEP might also include a DNR employee. Determinations are good for 5 years, unless otherwise noted. An application can contain a variety of information related to the project, but the formal application timeline and review will not start until a joint application form is received.

Other Wetland Regulations: Aside from the WCA, three other programs are of statewide importance, the MN DNR's Public Waters Work Permit Program (PWPP), the federal Clean Water Act Section 404 permit program, and the Swampbuster provisions of the Food Security Act of 1985.

Swampbuster - Agricultural producers will be familiar with the USDA's Swampbuster provisions. Swampbuster applies to those who receive farm program benefits, and compliance with these provisions are necessary should producers wish to continue receiving them.

PWPP - The basic rule of the PWPP is that a permit must be obtained from the DNR for work affecting the course, current, or cross-section of public waters, including public waters wetlands.

Section 404 – Administered by the United States Army Corps of Engineers (USACE), 404 states that a permit must be obtained from the Corps. for non-exempt discharges of dredged or fill material into water of the United States, including jurisdictional wetlands.

For those located in the High Island Creek Watershed, it is also important to note that the High Island Creek Watershed District has adopted rules and regulations related to work in wetlands. It is the responsibility of the applicant to ensure that their project meets the requirements of all federal, state and local regulations.

Questions about the Wetland Conservation Act in Sibley County can be directed to:

Jack Bushman
Conservation Technician, Sibley SWCD
507-702-7077 (office); 507-479-0946 (cell)
Jack.Bushman@sibleyswcd.org

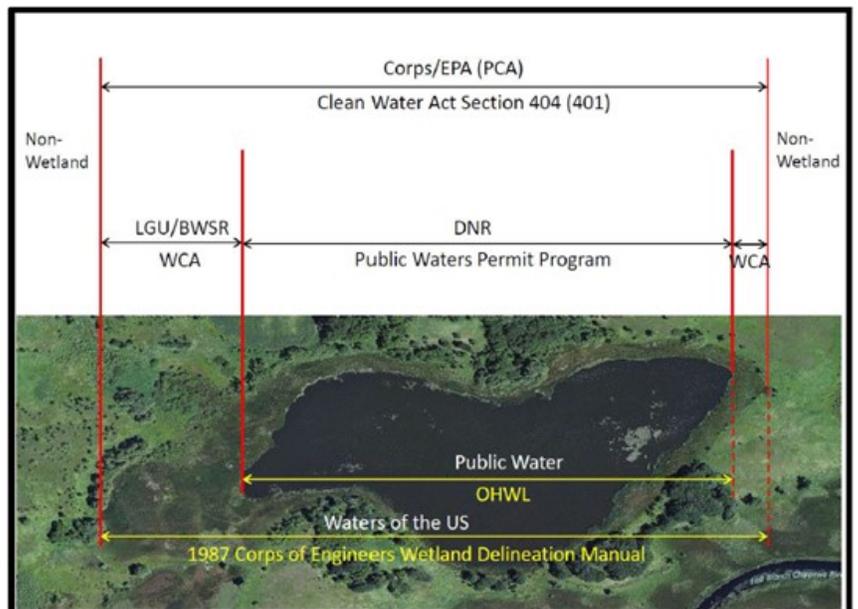


Figure 1. Jurisdiction of main wetland regulatory programs in Minnesota on a hypothetical wetland.



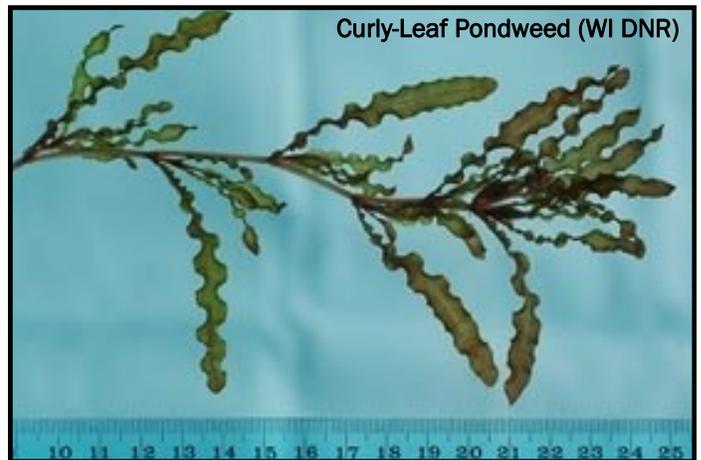
AIS Spotlight: Curly-Leaf Pondweed

Have you been out fishing or boating in the Spring and noticed dense mats of weeds with lasagna-like leaves? More than likely that is curly-leaf pondweed. This commonly found invasive grows from the shore to water depths up to 15 feet. It can tolerate low water clarity and will readily invade disturbed areas. Turions (the seed) sprout in the fall, and it is generally the first pondweed to come up in the spring. It typically flowers, fruits, and produces turions in June before dying back in mid-summer, leading to massive algal blooms.

Curly-leaf pondweed is native to Eurasia, Africa, and Australia. It was first noted in Minnesota around 1910 and was likely introduced when common carp were intentionally introduced into Midwest waters as a game fish in the 1880's. The species was likely spread through the movement of watercraft and water-related equipment. Curly-leaf pondweed is a prohibited invasive species in Minnesota, which means it is unlawful (a misdemeanor) to possess, import, purchase, transport or introduce this species except under a permit for disposal, control, research, or education.

Curly-leaf pondweed impacts:

- Dense mats at the water's surface inhibit water recreationists.
- Overtakes habitat and outcompetes native aquatic plants, potentially lowering diversity.
- Provides unsuitable shelter, food, and nesting habitat for native animals.
- Midsummer die-offs can litter the shoreline with dead plants.



Curly-Leaf Pondweed (WI DNR)

Algae Facts

Algae are microscopic plants that grow virtually in all waters of Minnesota. This diverse group of simple, plantlike organisms captures most of the sun's energy and produces more oxygen (a byproduct of photosynthesis) than all plants combined. In fact, algae were probably the first organisms capable of photosynthesis until the appearance of plants on Earth. Algae come in many different types, including green algae, blue-green algae, and golden-brown algae.

As with most everything in the natural environment, too much algae can cause problems. Algae respond quickly to changes in nutrient levels, temperature, and light intensity. As a result of these factors, major increases in population size can occur in short periods of time. These blooms can occur in mid to late Summer and create both a nuisance or harmful situations. Algae blooms appear as long floating strings, mats, or large areas of very green, brown, gray and murky water, causing an unsightly appearance. Their population can soar to bloom proportion within a few days and may persist for several weeks before conditions change. There is no single factor which causes an algae bloom. Excessive nutrients from both non-point sources (agricultural land & urban areas) and point sources (wastewater plants) are one of the major factors. Most algae are harmless; however under certain conditions a type of algae called "blue-green" algae can become toxic. Just a warning, when it comes to algae and waterbodies, if the water looks bad and smells bad, stay out of it!



Algal Bloom - Silver Lake



The Benefits of Upland Storage and Wetlands

Jeremy Buckentin – District Technician – Sibley SWCD

Wetlands and other water storage areas can provide numerous benefits for many different things. These areas can help reduce flooding, erosion, and trap and recycle excess nutrients. Wetlands can help to absorb huge rain events, and trap sediment from surface runoff. They provide habitat for plants and animals and even help to re-supply water that all of us use each day. Wetlands have often been perceived by many as unusable or undesirable areas, but in fact the benefits listed below depict a different point of view:

Wildlife Benefits

Wetland areas support a rich food web and create diverse habitat that many insects, plants, and animals rely upon throughout their life cycle.

Wetland's harbor unique conditions that allow for the development of organisms which form the very bottom of the food web, such as microscopic algae. Smaller organisms are fed upon by insects which in turn provide food for small animals and birds. With the added diversity of submerged, fringe, and upland plants, larger animals and birds of prey become successfully established.

Nutrient Reduction and Carbon Storage

Wetlands and other storage areas provide ideal conditions that are required to remove nitrogen, sulfur, and phosphorus from surface waters. Microbes within the soil substrates of these areas allow for nitrogen and sulfur cycling, breaking down plant and animal biomass through the process of mineralization. Plants help to transform inorganic phosphorus into usable organic phosphorus as they create biomass and grow. Beyond standard nutrient cycling, wetland areas are also known as "Carbon Sinks" as they help to capture and store carbon within plant biomass instead of releasing it into the atmosphere.

Hydrologic Cycle and Flood Mitigation

Upland storage and wetland areas help to lessen the impact of localized flooding through water storage. These areas are capable of receiving and retaining surface water from large rain events and work to and slowly release water through groundwater flow or into the atmosphere through evaporation and transpiration through plants. Through water retention, wetlands help to lessen streambank, shoreline, and drainage ditch erosion by mitigating and slowing down that rush of surface water created by sudden surges in precipitation.

Water Quality and Hydrology

A major benefit for wetland areas is their ability to improve water quality. As surface water enters wetland storage areas, much of its suspended sediment and inorganic nutrients are trapped and eventually recycled before discharging into open water lakes, rivers, streams and other water conveyance systems. The water stored within these wetland areas also travels down, overtime, through the soil profile and enters underground aquifers that many of us use for drinking water. This process of recharging an unconfined aquifer can take years as water slowly navigates through pores and cracks throughout the soil profile.

Recreational

Wetland areas can also provide great recreational opportunities for any outdoor enthusiast. Bird watching, canoeing, and hunting are just a few of the many ways people can physically enjoy their local wetland areas.



Restored Wetland Complex - Sibley Co.

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Knowing some of the great benefits associated with wetlands, some people reading this may be wondering how we can get more of these great features back onto our local landscape. Fortunately, there are many ways that local landowners can help make a difference. Programs are typically available at both the state and federal level for the restoration of wetland and upland habitat. CRP and RIM/CREP are commonly used programs that help to re-establish these types of habitats.

There are also programs that assist with agricultural management to help reduce nutrient runoff, control drainage, and store more water, sediment, and nutrients in the upland. Drainage water management, sediment ponds, and nitrogen bioreactors are just a few water storage techniques that help regulate water flow and mitigate impacts downstream.

Take drainage water management for example. Here is a system designed to be retrofitted into new or existing cropland drainage tile systems. A control box is constructed near the outlet end of that drainage system which is set by the landowner, to varying elevations, to keep water held in the soil profile. The landowner, when needed, can opt to remove the water gates in order to access the cropland for planting or harvest, but during times with no field activity, can store water within the field. The control boxes can be either serviced manually or can be fully computerized to automatically control the drainage flow out of the field. It is a fantastic option for farmers as they maintain all the benefits of tiling with the added ability to further manage their land and retain water, which can be especially useful during times of drought. Keeping that water in field will also help provide some of the same benefits that a wetland can provide through groundwater recharge, reductions in nutrients reaching surface waters and flood mitigation.

Wetlands and water storage systems can certainly provide many different benefits to all, and by working towards fully utilizing their potential, we can provide a much more healthy and sustainable future for generations to come! If you would like to find out more information about how you can help to retain surface water, feel free to get in touch with your local Sibley County Service Center. Contact the Sibley USDA Farm Service Agency/Natural Resources Conservation Service at 507-237-5435 or Sibley Soil and Water Conservation District at 507-702-7077.



Photo Credit: BWSR



Do your part to stop the spread of Aquatic Invasive Species!

The 2021 open water season is upon us! Boaters are traveling far and wide to recreate on all the great water resources that Minnesota has to offer. This summer, Sibley Soil and Water Conservation District is asking that Sibley County residents do their part and take the pledge to stop the spread of aquatic invasive species in Minnesota. By signing and returning the form below, you are not only letting us know that you plan to take all necessary steps to stop the spread, but will also get entered into a drawing for 3 great prizes! Drawing will take place on August 10th and all winners will be notified!

1st prize: 13qt. Engel bait cooler

2nd prize: \$25 Scheels gift card

3rd prize: Camo life jacket



Pledge to:

CLEAN

- Boats, trailers, and gear
- Remove all weeds, mud, and hitchhiking contaminants from axels, wheels, undercarriage, motor, prop, nets, and gear before leaving the boat landing

DRAIN

- Water from boat, bilge, motor, and livewell
- Remove drain plug and open all water draining devices
- Trash unused bait

DRY

- Everything for at least five days before going to other waters
- Decontaminate with high pressure water (120F or warmer)



AIS Pledge



Name:

Address:

Phone Number or Email:

I am interested in providing input on the Sibley County AIS Prevention Plan (circle one):

YES

NO

Please cut this out and mail to:

Sibley SWCD
Attn: AIS Pledge
P.O. Box 161
Gaylord, MN 55334

This form can also be completed at www.sibleyswcd.org/aispledge

One entry per person



NRCS Re-Organization

Minnesota NRCS went through a reorganization of its organizational structure. This action allows Minnesota NRCS to better serve customers at the local level, provides for equitable workload distribution among staff, and will result in better customer service. The reorganization reduced the number of Area Offices from six to four and realigned the field level staff to operate in the four-area structure. Within each Area are Customer Service Teams comprised of multiple field offices. The Glencoe Customer Service Team includes Meeker, McLeod, Sibley and Nicollet Counties. The staff within the team will assist customers across county lines to address resource concerns.

NRCS Team Members:

- Jacob Stich** – Customer Service Team Lead – Glencoe Field Office
- Michael Hemmann** – Civil Engineer Technician – Glencoe Field Office
- Melissa Rothwell** – Soil Conservationist – Litchfield Field Office
- Christopher Engh** – Soil Conservation Technician – Litchfield Field Office

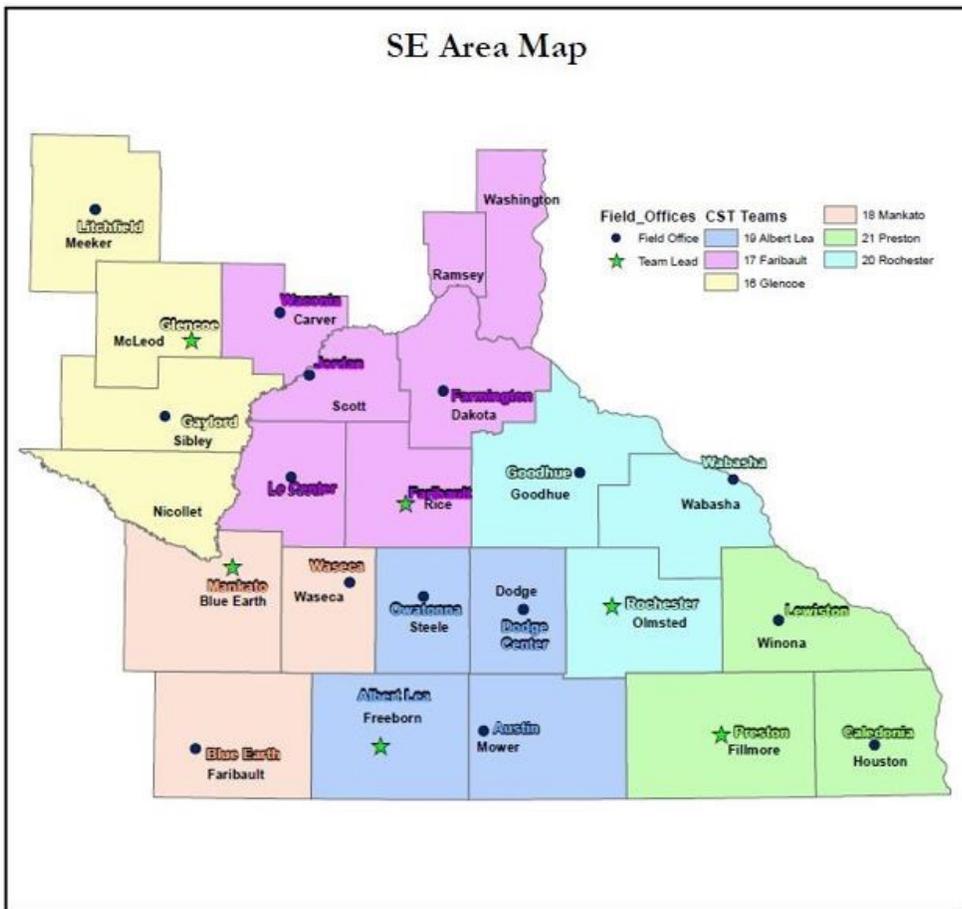
- Jacob.Stich@usda.gov
- Michael.Hemmann@usda.gov
- Melissa.Rothwell@usda.gov
- Christopher.Engh@usda.gov

If you have any resource concerns on your operation, don't hesitate to give us a call and see what we can help you with. Don't wait too long, we need some planning time in order to apply for program assistance. Our office continues to be closed to the public, so a phone call or email works best. You can reach us at 507-237-5435 ext. 3.

Join the NRCS Team:

At the U.S. Department of Agriculture's **Natural Resources Conservation Service (NRCS)** we need people who are committed to action. People who want to apply their education and experience to make sure that all of us enjoy the benefits of productive soil, clean water, clean air, and abundant wildlife that come from a healthy environment. NRCS offers career opportunities in Natural Resources and Conservation. Our Conservation Careers include Soil Conservationists and Soil Conservation Technicians, Engineers, Soil Scientists, Rangeland Management Specialists, Biologists, and many more. NRCS also hires in the fields of finance, human resources, public and legislative affairs, and other professional fields aimed at supporting NRCS to meet its mission. More information about NRCS Careers can be found at <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/careers/>

Current NRCS Job advertisements can be found on www.USAjobs.com Alerts can be set to notify you when new positions have been advertised.



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SIBLEY SOIL AND WATER CONSERVATION DISTRICT

Upcoming Dates:

August 4-8, 2021.....Sibley County Fair
September 6, 2021.....Labor Day
October 11, 2021.....Columbus Day
November 11, 2021.....Veterans Day
November 25, 2021.....Thanksgiving Day

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