



#### **Mission Statement**

Improving the water quality/quantity issues in the watershed, while also promoting a healthy agricultural, industrial, and recreational based economy for the region.

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### **HCWP Annual Meeting March 14, Remember to RSVP**



The 17th Annual HCWP Information and Appreciation Meeting is scheduled for Thursday, March 14, 2019 at the Renville Community Center. Heidi Rauenhorst, HCWP Coordinator, will give the annual HCWP update, including recent Best Management Practices, water quality monitoring, aquatic invasive species, and other activities in the last year. Kevin Kruize from the Land O'Lakes SUSTAIN program will discuss how the SUSTAIN program helps farmers customize sustainability solutions throughout the food system through in-field consultations with farmers, customized recommendations to improve farm stewardship, and helping food companies provide sustainably-sources ingredients. Ethan Jenzen, Area Hydrologist from the Spicer Minnesota Department of Natural Resources office, will discuss water quality issues in the Hawk Creek Watershed. A free lunch will follow the presentations for those who RSVP. The agenda is still being finalized and will be posted on the

HCWP website <u>hawkcreekwatershed.org</u> as soon as possible. Postcards and an email will also be sent soon with more information. If you would like to be on our mailing and/or email list, please contact HCWP to be added to the list(s). **If you would like to attend the HCWP Annual Meeting, please RSVP by March 6.** To view past HCWP Annual Meeting topics, go to the Get Involved tab on the HCWP website.

## **Cost-Share Money Available for Best Management Practices**

Do you have gullies, washouts, runoff problems, or erosion problems on your property? Are you interested in finding out what you can do to increase conservation practices on your property? HCWP has funding available for the design and installation of Best Management Practices (BMPs) to fix erosion and water quality issues on your property and to help reduce the amount of pollutants entering our streams and lakes. Cost-share funds are available up to 75% of total BMP project costs, depending on funding availability. Since 1999, HCWP has worked with over 950 landowners on over 1,650 projects aimed to reduce erosion and improve water quality. Let HCWP help find a solution to your erosion and water quality issues.

Some of the practices that may qualify for funding include, but are not limited to:

**Ag Waste Upgrades Alternative Intakes Bank/Grade Stabilizations Controlled Drainage Cover Crops** 

**Farmable Terraces Feedlot and Water Diversions Grassed Waterways Lakeshore Restorations** Rain Gardens

**Side/Drop Inlets Streambank Erosion Control** Water/Sediment Control Structures Water Retention/Runoff Reduction **Wetland Restorations** 

Call HCWP at (320) 523-3666 for assistance with your erosion or runoff problem.

The following offices are also available for information on potential projects:

Chippewa County: SWCD/NRCS (320) 269-2139 x 3, Ag Inspector (320) 269-7447 Kandiyohi County: SWCD/NRCS (320) 235-3906, Drainage (320) 235-3266 Renville County: SWCD/NRCS (320) 523-1550 x 3, Ag Inspector (320) 523-3712

## Cover Crops: Cost-Share, Meetings, and Field Days



A cover crops field day stop included this corn field interseeded with cover crops.

tact HCWP to join the mailing list.

also able to view different no-till/strip till techniques and equipment along with various cover crop application types. Another field day is planned for this fall. If you would like to receive a notice of the field day, con-

The fourth year of a cover crops cost-share program was available to producers through a collaborative effort between HCWP, Renville County Soil and Water Conservation District (SWCD), and Renville County, with over 1,900 acres signed up in 2018. The program helps to pay for cover crop seed and seed application. On February 21, 2018, HCWP, along with Renville SWCD, hosted a meeting to discuss the benefits of cover crops and soil health. A panel of local farmers talked about how they are successfully implementing cover crops and reduced tillage in their operations. To demonstrate how the farmers are making cover crops and reduced tillage successful,

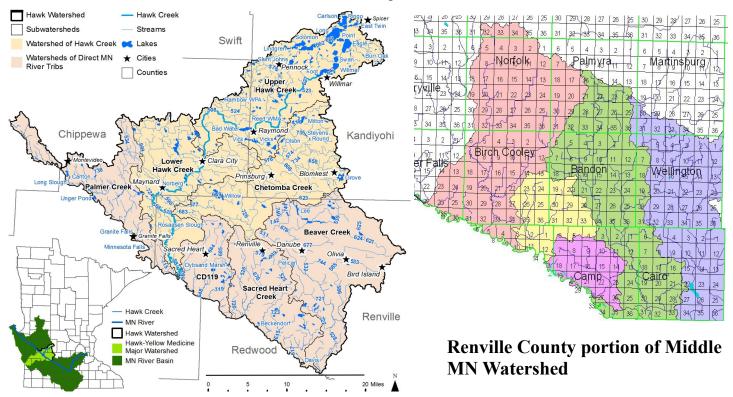
**HCWP** and Renville SWCD hosted a field day on September 14, 2018. The field day took place in central Renville County, where participants boarded a bus that took them to local producers' fields where cover crops and reduced tillage have been incorporated into corn, soybean, and small grain rotations. The participants at the field day were

Field day attendees look at cover crop seeding equipment while standing in a field of cover crops.



## What Areas are Covered by HCWP Cost-Share Funds?

HCWP has Best Management Practices (BMP) cost-share funds available for the entire Hawk Creek Watershed, which covers the eastern portion of Chippewa County, the western portion of Kandiyohi County, and the western portion of Renville County (see map below left). Towns located within the Hawk Creek Watershed boundary include Maynard, Clara City, Raymond, Prinsburg, Blomkest, Pennock, Sacred Heart, Renville, Danube, Olivia, Bird Island, and parts of Montevideo, Granite Falls, and Willmar. In addition, HCWP BMP cost-share funds are available for the Renville County portion of the Middle Minnesota Watershed, which encompasses Morton, Franklin, and Fairfax (see map below right). If you live or own property in these watershed areas, contact HCWP for more information and possible cost-share assistance!



#### **Hawk Creek Watershed**

#### **Become a Citizen Monitor!**

#### Why should I become a Citizen Monitor?

Becoming a member of the HCWP Citizen Monitoring Network is fun and exciting! It's an opportunity to be outdoors, learn more about your environment, and contribute valuable information to the Minnesota Climatological Network. Plus, you get to use some great equipment, like the rain gauge in the photo to the right.

#### What does a Citizen Monitor do?

A Citizen Monitor can monitor either rainfall, stream transparency with a Secchi tube, and/or lake transparency with a Secchi disc. Transparency measures the amount of sediment or particles in the water (the more particles in the water, the less clear the water).

#### How do I become a Citizen Monitor?

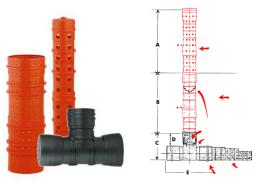
Call HCWP at (320) 523-3666 and tell us you would like to monitor rainfall and/or transparency. We will send you the monitoring equipment, provide more information, and help get you set up.



# Featured Best Management Practice: Alternative Tile Intakes

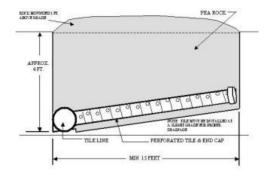
Valuable topsoil and nutrients can be lost down a traditional open tile intake and end up as debris, sediment, and pollutants in our ditches, streams, rivers, and lakes. HCWP can help with the cost of replacing an open tile intake with many different styles of alternative intakes (see below). HCWP can pay for 75% cost-share on the design and installation of an alternative intake (up to \$500 per intake). Landowners can choose the alternative tile intake design that best suits the needs of their fields and operation.

Hickenbottom Intake: This technique involves replacing an open intake with a perforated riser. Hickenbottom inlets come in a variety of diameters and Hickenbottom inlets, parts, tees, offsets, and risers snap together for installation ease.





Rock or Blind Intake: This design involves digging a trench, placing drainage pipes in the bottom, and filling the trench with small rock. This reduces the amount of sediment being lost down the intake. This system is farmable.





<u>Pattern Tile with Open Intake Removed</u>: This design involves the installation of subsurface drainage pipes in a very tight pattern or coiled in a small area.

#### Water Quality Inlet:

Resists plugging and filters debris so it does not enter the drainage system. Available in several different diameters and heights.



#### Quick Drain Low Profile Inlet:

The low profile allows farm equipment to pass over it without damage.



#### Quick Drain Riser:

Resists plugging from crop residue. Available in different diameters and heights.

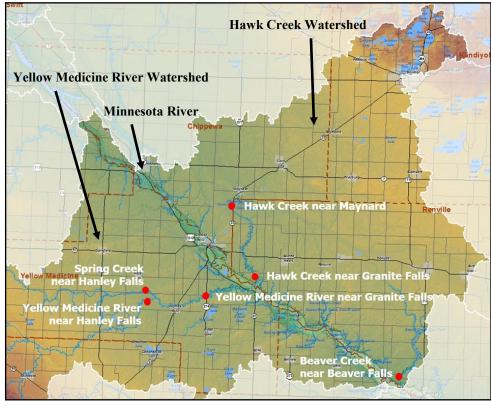


## **HCWP Water Quality Monitoring**

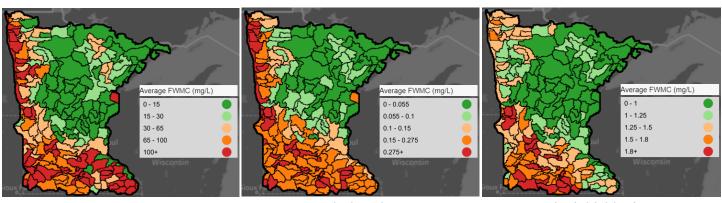
#### **Watershed Pollutant Load Monitoring Network**

HCWP contracts with the Minnesota Pollution Control Agency (MPCA) to conduct water quality monitoring as part of the MPCA's Watershed Pollutant Load Monitoring Network, which is a long-term program that collects water quality data from streams and rivers throughout Minnesota and tracks water quality trends. HCWP

collects water quality samples at three sites in the Hawk Creek Watershed (Hawk Creek near Maynard, Hawk Creek near Granite Falls before it enters the Minnesota River, and Beaver Creek near Beaver Falls and Redwood Falls before it enters the Minnesota River) and at three sites in the Yellow Medicine River Watershed (Spring Creek near Hanley Falls, Yellow Medicine River near Hanley Falls, and Yellow Medicine River near Granite Falls before it enters the Minnesota River). The maps below are from MPCA's Data Viewer and show the flow weighted mean concentrations of total suspended solids (TSS), total phosphorus, and total Kjeldahl nitrogen for the state. The Hawk Creek Watershed has some of the highest concentrations of TSS, phospho-



rus, and nitrogen in the state, with TSS and phosphorus levels over two times higher than the criteria. The criteria for nitrogen is currently under review. To view water quality data, search for "MPCA Data Viewer" through an internet search engine or visit the MPCA's website <a href="mailto:public.tableau.com/profile/mpca.data.services#!/vizhome/WatershedPollutantLoadMonitoringNetworkWPLMNDataViewer/WPLMNBrowser">public.tableau.com/profile/mpca.data.services#!/vizhome/WatershedPollutantLoadMonitoringNetworkWPLMNDataViewer/WPLMNBrowser</a>.



**Total Suspended Solids** 

**Total Phosphorus** 

Total Kieldahl Nitrogen

#### **Discovery Farms Minnesota**

HCWP also contracts with Discovery Farms Minnesota to gather field scale water quality information. Discovery Farms Minnesota is a farmer-led effort to gather water quality information from farming systems under real-world conditions and is funded by the Minnesota Agricultural Water Resources Center, Minnesota Corn Research and Promotion Council, Minnesota Soybean Research and Promotion Council, the Minnesota Department of Agriculture (MDA), and the Natural Resources Conservation Service. HCWP helps monitor and maintain two intensive in-field monitoring sites: one near Fairfax in Renville County monitoring sub-surface tile drainage and one near Brownton in McLeod County monitoring both sub-surface tile drainage and overland flow within a grassed waterway. These two sites are monitored year round. Below are photos of the equipment set up for the sub-surface tile near Fairfax and the grassed waterway near Brownton. In addition to the two intensive in-field monitoring sites, HCWP also monitors six satellite sites collecting water quality data in Renville County. Real-time data is available on the Discovery Farms Minnesota website discoveryfarmsmn.org.



Looking down a sub-surface tile Agri-Drain at the Discovery Farms monitoring site near Fairfax.



The overland flow of water in a grassed waterway passes through the flume pictured here at the Discovery Farms monitoring site near Brownton.

#### Minnesota Department of Agriculture Pesticide Monitoring

HCWP also contracts with the MDA to collect pesticide monitoring samples. MDA conducts comprehensive surface water monitoring for pesticides each year in lakes, rivers, and streams throughout Minnesota as directed by the Minnesota Pesticide Control Law. HCWP collects water quality samples at three locations: Hawk Creek near Granite Falls before it enters the Minnesota River, Yellow Medicine River near Granite Falls



before it enters the Minnesota River, and South Fork Crow River near Cosmos. In 2017, 1,218 surface water samples were collected from 208 river, stream, or lake monitoring locations throughout Minnesota and analyzed for 150 pesticide compounds. Seventy pesticide compounds were detected, with 2, 4-D, atrazine, and metolachlor the three most detected pesticide parent compounds. In addition to surface water monitoring, MDA also monitors groundwater and private wells. More information is available on the MDA's Monitoring and Assessment For Agricultural Chemicals In The Environment page mda.state.mn.us/ pesticide-fertilizer/monitoring-assessment-agricultural -chemicals-environment.

### Zebra Mussels Found in Eagle Lake

Zebra mussels, an aquatic invasive species (AIS) in Minnesota, have found their way into Eagle Lake in Kandiyohi County. After a property owner reported a one-half inch zebra mussel found on the north side of Eagle Lake this last summer, the Minnesota Department of Natural Resources (DNR) confirmed the zebra mussel



Zebra Mussels

report in August 2018. This is the first lake in the Hawk Creek Watershed that has confirmed zebra mussels. With the interconnectivity and close proximity of Eagle Lake to the other lakes in the Willmar area/upper Hawk Creek Watershed, these other lakes are vulnerable to zebra mussel infestation. To protect these other lakes, it is important to follow state AIS laws. Nearby lakes not in the Hawk Creek Watershed that have been confirmed with zebra mussels include Green Lake, Lake Calhoun, Lake Florida, Lake George, and Nest Lake. The Minnesota River, which makes up the southern boundary of the Hawk Creek Watershed, was put on the DNR's AIS Infested Waters List in 2017 for zebra mussels.

There has been a threefold increase in water bodies in Minnesota that have been put on the DNR's AIS Infested Waters List in 10 years (2007-2017). About one third of the listings are for zebra mussels and about one third of the listings are for Eurasian watermilfoil. An AIS of emerging concern is starry stonewort. It was first confirmed in Lake Koronis (near Paynesville in Stearns County) in 2015 and has since been confirmed in 14 lakes in Stearns, Pope, Wright, Beltrami, Itasca, Cass, and Hennepin Counties.

If you want to see what water bodies near you or what water bodies you are planning to visit are infested with AIS, you can view an interactive map of Minnesota's infested waters on the DNR website <a href="mailto:dnr.state.mn.us/invasives/ais/infested.html">dnr.state.mn.us/invasives/ais/infested.html</a>.



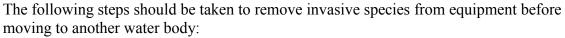
Starry Stonewort

#### What can I do to stop the spread of AIS?

<u>CLEAN</u> all aquatic plants, zebra mussels, and other invasive species from all watercraft, trailers, and equipment before leaving the water access or shoreland. If it touched the water, check it and clean it!

<u>DRAIN</u> all equipment and drain bilge, livewell, and baitwell by removing drain plugs before leaving the water access or shoreland. Keep drain plugs out and water-draining devices open with transporting watercraft.

<u>DISPOSE</u> of unwanted bait in the trash. It's illegal to release bait into a water body or release aquatic animals from one water body into another.



- Spray with high-pressure water
- Rinse with very hot water (120 degrees for at least two minutes or 140 degrees for at least 10 seconds)
- Dry for at least five days

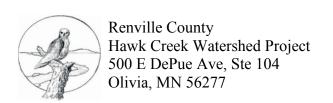
Kandiyohi County has a permanent watercraft decontamination unit available free of charge at 4 Seasons Lawn & Beach located at 206 6<sup>th</sup> Avenue in Spicer (near the water tower). It is available from 8:00 am to 5:00 pm. Call (320) 214-6730 for more information or to schedule a decontamination for any type of watercraft.

#### What do I do if I think I found an AIS?

If you suspect a new infestation of an AIS, note the exact location, take a photo or keep the specimen, and call your local DNR AIS specialist, which for the Hawk Creek Watershed area is Eric Katzenmeyer from the Hutchinson DNR office. He can be reached at (320) 234-2550 or eric.katzenmeyer@state.mn.us.







## Want to receive notices about upcoming HCWP meetings and events?

Join our mailing list by calling (320) 523-3666 or emailing jordan@hawkcreekwatershed.org.



## hawkcreekwatershed.org