

Hawk Creek Headlines

Hawk Creek Watershed Project • 500 East DePue Avenue • Olivia MN • 56277 • (320) 523-3666

Winter 2010

Hawk Creek Watershed 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."

"When you put your hand in a flowing stream, you touch the last that has gone before and the first of what is still to come."

Looking for solutions to soil erosion on your farm!



The Hawk Creek Watershed Project has money available for implementation of Best Management Practices (BMPs) to help reduce the amount of pollutants entering the watershed.

Cost sharing and technical assistance funds are available. Apply early as funding is distributed for qualified practices on a first come, first serve basis.

Don't hesitate to call...if you don't, then someone else will!

Some of the practices that qualify for funding include:

- Buffer Strips**
- Ag Waste Systems**
- Side Inlet Pipes**
- Terraces**
- Alternative Intakes**
- Wetland Restorations**
- Livestock Exclusions**
- Stream Bank Erosion Control**
- Grassed Waterways**
- Nutrient Mgmt Plans**
- Sediment Basins**

To see if your land qualifies, or for more information contact:

Hawk Creek Watershed Project
320-523-3666

Chippewa NRCS/SWCD
320-269-2139 ext. 3

Kandiyohi NRCS/SWCD
320-235-3906 ext. 3

Renville NRCS/SWCD
320-523-1550 ext. 3

Chippewa Co. Ag Inspector 320
-269-7447

Kandiyohi Co. Ag Inspector 320
-235-3266

Renville Co. Ag Inspector 320
-523-3712

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Hawk Creek Needs You to Become a Citizen Monitor!

Why should you become a Citizen Monitor?

Becoming a member of the Hawk Creek Watershed Project Citizen Monitoring Network is fun and exciting. It allows you to know more about your environment and have a positive impact on the Hawk Creek water monitoring process. Plus, you get some great equipment.

What does a Citizen Monitor do?

*A citizen monitor can either monitor for rainfall, transparency tube readings on streams, or transparency readings with a secchi disk on lakes.

*Transparency measures the amount of sediment in the water.

The more sediment that is in the water the less "transparent" the water.

To measure transparency, a monitor is supplied with a transparency tube or secchi disk for lakes.



How do I become a Citizen Monitor?

Call the Hawk Creek Watershed Project at (320) 523-3666.

Tell us if you prefer monitoring rainfall and/or transparency.

We will send you some more information and help get you set up.

From Dean's Desk...

It has been a wild year for water management. As of October 1st most of the watershed has received about 15 inches more rain this year than what the annual average rainfall has been for the last ten years...and we still have 2 months to go! Let's hope and pray we have a "drought" until the end of the year.



We have had some events that caused a lot of damage. The rapid thaw in March resulting in flooding, due in large part to ice jams. There is little we can do to prevent such events, but we need to repair and stabilize the damage to prevent further erosion on the damaged areas. The ice broke up at a much thicker stage than normal and it acted like dozer blades as it pushed into the bends of the streams. I've lived on the lower end of Hawk Creek my entire life, and never have I seen that much bank loss in one event. There is not much we can do to repair the damage in the rugged bluffs on the lower Hawk Creek; all that we can do is look at finding some strategic locations to temporarily store some of the water in the upland. Wetland restorations are one way of accomplishing this, but if the land is going to remain into crop production there needs to be another option, especially considering these events are not annual occurrences and are highly unpredictable.

How about the idea of installing some control structures in drained basins and managing them to temporarily hold water? Under this option landowners would receive financial compensation for any rain event that would negatively impact the crop production on that land. It is a realistic alternative that I think could work. Let Hawk Creek know what you think; give us some feedback! (320-523-3666)

In the mean time, we have been working with the three County ditch authorities to repair stream banks on smaller manageable areas, including Chetomba Creek, by rip-rapping and installing side inlet pipes. If you see any old or new problem areas when you are in the fields this fall, make note of them, and give us a call.

We have cost-share dollars available to fix any erosion problem. If it is on a County ditch system we cost-share with the County to keep your ditch assessments down and there is no out-of-pocket expense to the landowner.



CRP Wetland Restoration Incentives Available

Hawk Creek has a new opportunity for landowners, "wetland restoration" incentives. This incentive will operate in the same manner as the buffer incentive that has been offered to producers in the past. The Hawk Creek Watershed Project grant will pay the producer a sum of money as an "incentive" to enroll land into a wetland restoration.

These funds are **in addition** to any other program payments, such as CRP or WRP.

In order to qualify the hydrology must be restored (i.e. break tile lines, cap intakes, or build small dikes).

Landowners will receive: \$100 / acre for a 10 year contract
 \$150 / acre for a 15 year contract
 \$300 / acre for a perpetual easement

Remember, these payments are IN ADDITION to other payments, such as CRP. For reference, CRP rates for wetland restorations in our watershed pay anywhere from \$118 to \$212 per acre, depending upon the soil types, and contracts can be 10 to 15 years long or perpetual.

	1. Caddisfly
	2. Crayfish
	3. Dragonfly
	4. Stonefly
	5. Gilled Snail

"Bug" Answers

Hawk Creek Participating in Intensive Watershed Monitoring



In the summer of 2010, the Minnesota Pollution Control Agency (MPCA) began work on the Hawk Creek and Yellow Medicine Rivers as part of its “Intensive Watershed Monitoring (IWM) or 10x Target approach. According to the MPCA’s website, *“Intensive Watershed Monitoring utilizes a ‘pour point’ method of sampling; this systematic sampling near the mouth of watersheds of different size scales is used to measure the condition of the upstream watershed in an unbiased way. The intensive approach allows assessment of the watershed for aquatic life, aquatic recreation, and aquatic consumption use support of the states’ streams in each of the state’s 84 major watersheds on a rotating 10 year cycle. These uses are assessed to make sure that the goals of the Clean Water Act are being met; having “fishable, swimmable” waters.”*

How is it done?

Intensive Watershed sampling will take place over 2 years, with the 1st year (Phase 1) focusing on identifying problems and the second year (Phase 2) focusing on investigating and identifying the sources of impairments. Sites selected are on natural stream reaches instead of channelized portions. Sites are placed near road crossings at least one mile from larger bodies of water such as lakes, wetlands, and larger rivers. Sites are not selected if the drainage area is less than 5 square miles. The number of sites increases as the size of the watershed increases. Biological, Water Chemistry, and Fish tissue containments are monitored to determine the condition for all watersheds.



Biological sampling

Most of the sites sampled in 2010 were for fish and invertebrates for the determination of aquatic life use support. Fish are sampled through electro-shocking, and invertebrates are sampled with nets.



Water Chemistry Sampling

Hawk Creek Watershed Project completed all the sampling for the IWM water chemistry sampling. Sixteen sites were located throughout the watershed, along with 3 sites in Yellow Medicine and Redwood Counties. All samples were sent to a certified lab for analysis. Sites were sampled ten times throughout the summer, and were sampled for nitrate-nitrites, ammonia, dissolved oxygen, pH, conductivity, water temperature, total phosphorus, Kjeldahl nitrogen, chlorides, sulfates, calcium, magnesium, total suspended solids, total volatile solids, and E. coli. Testing the streams for E. coli assesses the stream for aquatic recreation, and dissolved oxygen, water temperature, suspended solids data assesses the stream for aquatic life.



Fish Contaminants Sampling

At the pour point (mouth) of each major watershed. Fish are collected for analysis of mercury and PCB’s to assess if the surface water is meeting the beneficial use of aquatic consumption. Mercury and PCB analysis is conducted on fish tissue.

Top carnivore species such as northern, walleye, channel catfish, and bass are particularly important for mercury analysis, while rough fish species, such as carp and suckers are important to PCB analysis.

What’s Next?

After the initial round of sampling, problem areas will be identified through fish, invertebrate, and water chemistry sampling completed this summer. The Phase 2 portion will take place in the summer of 2011 and will include additional water chemistry, completion of any biological sampling that might have not been finished due to high water conditions this summer, and investigation and identification of any impairments.

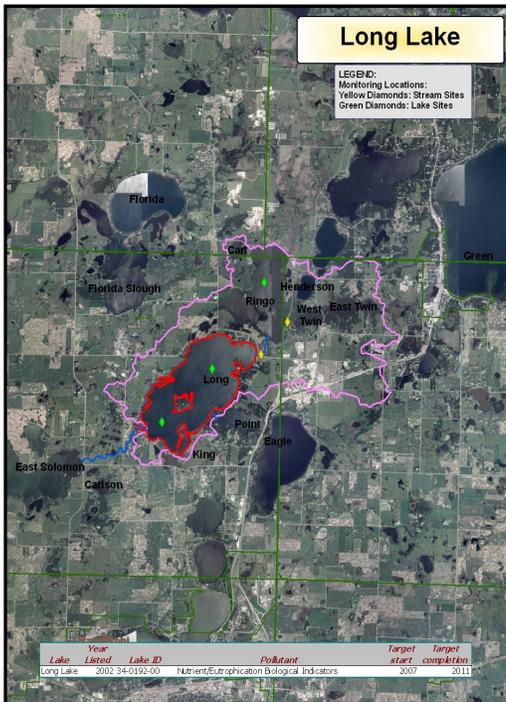
Funding Available for Engineering Service (Technical Assistance)



Hawk Creek Watershed Project currently has funds available to pay for technical assistance. Technical assistance can include; engineering services, grazing plans, nutrient management plans, rain garden designs, and other practices that require design work. Some practices that may require engineering design work are; terraces, grassed waterways, stream bank stabilizations, water and sediment control basins (638s), among other practices. If you have an erosion or water quality concern that has not been addressed due to the lack of a design and/or expertise to get the project done, maybe now is the time to re-look at the problem.

Call Hawk Creek Watershed Project staff at 320-523-3666 to inquire about this opportunity to get fully funded design work completed.

Long Lake TMDL Update



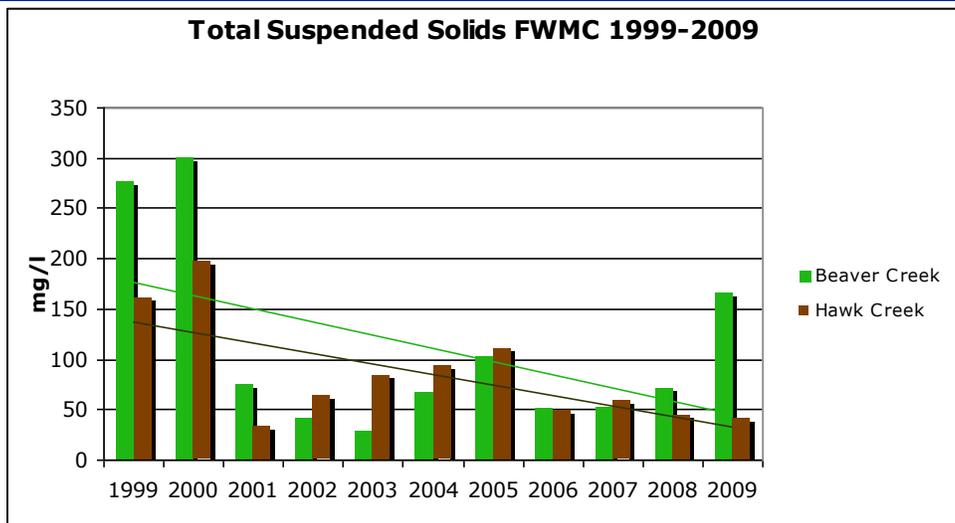
Hawk Creek Watershed Project is currently making progress with the Long/Ringo Lakes Excessive Nutrient TMDL. At this point an Assessment Report is in a preliminary draft form. This report will undergo a public review process upon its completion.

A number of individuals and groups have expressed interest in being part of a “stakeholder group.” This group will be called upon to review this document, as well as the Implementation Plan. The stakeholder group will be utilized in the development of both reports as it is critically important that the residents, farmers, and business owners who live in and do business in this watershed have input as to what direction to take to address this TMDL.

The primary issue with Long and Ringo Lakes is excessive phosphorus levels. Lake monitoring results are discussed at length in the Assessment Report, while the Implementation Plan will address methods and practices to reduce phosphorus inputs throughout the watershed.

The Long/Ringo Lakes TMDL is scheduled for completion by June 30, 2011. For more information, or to express interest in being a part of the stakeholder group, please call HCWP at 320-523-3666.

Sediment in Beaver Creek Reducing!



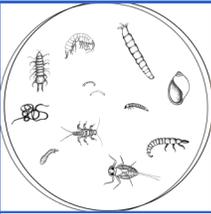
In the arena of water quality all too often the negative aspects are focused on.

Ongoing water quality monitoring by the Hawk Creek Watershed Project has revealed a note worthy trend in both the Beaver Creek and Hawk Creek Watersheds.

Total Suspended Solids (TSS) has decreased significantly in both streams over the past decade.

Naturally, people ask us, “How?”

The hypothesis is that there is a direct correlation between the quantity of Best Management Practices (BMPs) implemented in our major watershed area and the amount of TSS in our streams. A search of the number of BMPs implemented in the MN River – Granite Falls Watershed (the Hawk Creek Watershed Project work area) show that this major watershed implemented a total of 2,170 BMPs from 1997-2008 (BWSR LARS and e-Link reporting system). This is the most BMPs implemented over that time period among major watersheds in the MN River Basin. For the sake of comparison, the #2 watershed, the Lower Minnesota River Watershed, implemented 1,585 BMPs. These BMPs were implemented by SWCDs, Watershed Projects, Counties, and others. This informal study shows that if BMPs are implemented, improvements in water quality can be expected. Another big part of this success story is the MN River CREP program. This highly successful conservation program allowed a large portion of the Beaver Creek floodplain, and the lower Hawk Creek corridor to be preserved for perpetuity through Reinvest in Minnesota (RIM) easements. Lands enrolled into this program include wetland restorations and riparian areas. The water quality of these 2 watersheds was greatly improved thanks in large part to this valuable program.



Kid's Corner...Bugs, Bugs, Everywhere



Did you know... there is a whole world of life in rivers. There are tiny animals living in the water are **benthic**, meaning they live on the bottom of the stream. Some are **macro-invertebrates** because they are large and easy to see (*macro*) and because they have no backbone (*invertebrate*).

The most common of these creatures include insects, clams, snails, crayfish, and worms. Some live their whole lives in the water, and others leave the water as adults to feed and reproduce.

Macro-invertebrates are important as food to all the creatures living in the water especially young fish. Some are considered by scientists to be **indicator species** and are a way of telling whether or not a river is polluted. In rivers, macro-invertebrates attach to rocks and plants where there is fast-flowing water. They are good indicators of water quality because they do not move around and are easy to collect. The moving water gives them food and oxygen. If the water is polluted. There is less food and oxygen for the aquatic macro-invertebrates. If the water has **pollutant-intolerant macro-invertebrate species** in it, that is a good indication that the water is clean and of high quality. If there are mostly **pollutant-tolerant macro-invertebrates** in the water, there is a chance that the water is polluted and only those types of species can survive.

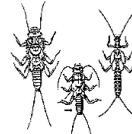
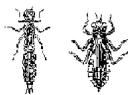
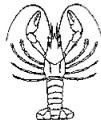
Visit this website to see some of the "bugs" in your rivers: <http://www.epa.gov/owow/nps/kids/masterbugtheater.html>

Test your Macro invertebrate Knowledge...

Match the picture with the correct common "bug" name
by putting the name underneath the picture

Answers can be found on page 2

- Caddisfly
- Gilled Snail
- Dragonfly
- Stonefly
- Crayfish



Search for these fish species that are found in lakes and rivers in Minnesota. Good luck!

A E B O W F I N A T D E R Y E
L K W A L L E Y E U I F S M D
E B E L C A R P W O I R P E A
H E L N O R T H E R N P I K E
U T H L F G I K D T I R E I H
R W H I T E C R A P P I E H L
L U U P U M P K I N S E E D L
S Y E L L O W P E R C H S D U
H S I F N U S L L I G E U L B
S S A B H T U O M L L A M S R
P K S U U H S I F E L D D A P
W H I T E B A S S A U G E R S
P H W B L A C K C R A P P I E
G R E E N S U N F I S H S S A
I M O M U S K I E H H F I O E

Monsters of the Minnesota River and tributaries

Here are a few of the "monsters" that can be found in the Minnesota River and its tributaries. There are many other fish that live in the river such as walleye, northern pike, sunfish, and perch.



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Carp feed by slurping in mud from the bottom of a lake or river, spitting out the muck, and eating edible food, such as seeds and insects. Because this disturbs the lake bottom and suspends mud and nutrients, this feeding method can muddy up a lake or wetland.



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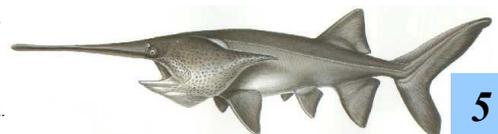
Catfish can't "sting" you. But these fish have a sharp spine in the top and side fins.



Short-nosed gar can take in oxygen by swimming to the surface and gulping air into their swim bladders. This ability to "breathe" means they can survive in water that has almost no oxygen.

- | | | |
|------------------|-----------------|-----------------|
| BLACK CRAPPIE | LARGEMOUTH BASS | SMALLMOUTH BASS |
| BLUEGILL SUNFISH | MUSKIE | TROUT |
| BOWFIN | NORTHERN PIKE | WALLEYE |
| BULLHEAD | PADDLEFISH | WHITE BASS |
| CARP | PUMPKINSEED | WHITE CRAPPIE |
| GREEN SUNFISH | SAUGER | YELLOW PERCH |

Paddlefish are one of the few true large river species found in Minnesota. Paddlefish are long-lived species, surviving for at least 20 years. Their snout has thousands of sensor pits which may help in the detection of food.





**Prairie Country RC&D
Hawk Creek Watershed Project
1005 High Ave. NE
Willmar, MN 56201**

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Contributing Partners:

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Eagle Lake Association
Kandiyohi County
Kandiyohi Water Plan
Kandiyohi NRCS/SWCD
Long Lake Association
MN Department of Natural Resources
Minnesota Pollution Control Agency
Pheasants Forever
Prairie Country RC&D
Prairie Woods Environmental Learning Center
Renville County
Renville Water Plan
Renville NRCS/SWCD
US Fish and Wildlife Service
And...
Citizens and Landowners of the Watershed

