## Hawk Creek Headlines

Hawk Creek Watershed Project • 500 East DePue Avenue • Olivia MN • 56277 • (320) 523-3666 **Fall 2009** 

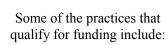
#### Hawk Creek Watershed Mission Statement

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

Don't empty the water jar until the rain falls."

- Philippine proverb -

## Looking for solutions to soil erosion on your farm!



**Buffer Strips Side Inlet Pipes** 

Cost sharing and technical

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

years long.

The Hawk Creek Water-

available to help reduce the

amount of pollutants enter-

ing the watershed through

implementation of Best

**Management Practices** 

assistance are available.

distributed for qualified

first serve basis.

practices on a first come,

Apply early as funding is

(BMPs).

shed Project has money

**Ag Waste Systems Terraces** Alternative Intakes Wetland Restorations Livestock Exclusions **Stream Bank Erosion Control Grassed Waterways Nutrient Management 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

## New Grant Offers Wetland Restoration Incentives



Hawk Creek Watershed Project recently received grant funding for a wide variety of best management practices that conserve soil and protect water quality. A new initiative included is a wetland restoration incentive program. This incentive will operate in the same manner as the buffer incentive that has been offered to producers in the past. Both of these incentive programs pay the producer a sum of money as an "incentive" to enroll, and these funds are in addition to any other program payments, such as CRP or WRP.

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

Also included in this grant are funds for several other best management practices (BMPs), including: side inlet pipes, blind intakes (rock, pattern tile), grass waterways, feedlot upgrades, livestock exclusion from streams, buffer incentives, sediment control basins (638s), conservation drainage, and other practices.

\$118 to \$212 per acre, depending upon the soil types, and contracts can be 10 to 15

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## NEW CRP PRACTICE-CP41 (Prairie Wetland Practice)

### Eligibility Requirements:

- \*\*Small non-floodplain wetlands and associated buffers
- \*\*Cropping History-three of ten crop years from 1990-2002
- \*\*Acreage must meet Farmable Wetland Program eligibility requirements
  - \*40 acres for wetlands or constructed wetlands
  - \*20 acres for intermittently flooded prairie wetlands
  - \* 40 acres per tract for eligible wetlands and buffers
- \*Participants must agree to restore the hydrology of the wetlands to establish vegetative cover \*\*Subject to the natural overflow of a prairie wetland

#### Payment:

\*\*Based on Soil Rental Rates

\*\* \$118-\$179 (Chippewa Co.), \$133-\$206 (Kandiyohi Co.), \$139-\$212 (Renville Co.)

\*\*Contract duration can be 10 or 15 year contacts

\*\*Signing Incentive Payment (SIP = \$100/acre (One-Time Payment)

\*\*Up to 90% Cost-share

Wetlands increase sediment trapping efficiencies, improve water quality, prevent soil erosion and provide habitat for waterfowl and other wildlife.

Contact the USDA Service Center in your County for more details!!

## Meet Cory Netland-Hawk Creek Coordinator

Cory was born and raised on a farm in NE Swift County, near Sunburg, MN, where he developed a passion for hunting, trapping, fishing, and the outdoors in general. Being an outdoors enthusiast, Cory feels it is imperative to protect our precious natural resources. In 2003, Cory graduated from the University of Minnesota Duluth with a Bachelor of Science degree in Biology. For the past three years he has been employed as a Farm Bill Technician with the Renville Soil and Water Conservation District; prior to that he held a similar position with the Lac qui Parle Soil and Water Conservation District. In addition, Cory has served on a volunteer basis as the Habitat Coordinator for both the Lac qui Parle and Renville Chapters of Pheasants Forever.



spreading the word.

O wrong: Excellent! You've got the smarts to be an environmental champion.

Now go out there and make a difference!

are going to make a difference. I to 3 wrong: Pretty good–  $\operatorname{Find}$  the correct and start

How did you do? More then five wrong: Uh oh...better study up 3 to 5 wrong: You've gotta do better then that if you

- ) (2
- (9) D
- 2) Dthen fish die
- 4) False, decomposed material uses up oxygen and
  - 3) True
    - я (7
  - 1) False, we all live in a watershed

#### STAARTS

## From Dean's Desk... Hawk Creek helps with Bio-filter Reactor

The Hawk Creek Watershed Project, in Cooperation with Kandiyohi County's Ag Inspector Loren Engelby and MN Board of Soil and Water's Drainage Management Engineer Joel Peterson, installed a demonstration project this past summer consisting of a woodchip bioreactor on a county tile system.



Several methods of reducing the amount of nitrate in drainage water are being explored. The primary method involves good management of nitrogen fertilizer application rates, and the use of improved drainage system designs. However, edge of field treatment of drainage water is a strategy that may be needed to reach goals for decreasing the amount of nitrate in drainage water. The use of a woodchip bioreactor is one such method for removing nitrate from drainage water.

Woodchip Bioreactors remove nitrates from drainage water by the same natural process that is utilized in wastewater treatment ponds and wetlands. Tile water flows through an underground trench filled with woodchips enabling anaerobic soil microbes to feed on the carbon in the woodchips.

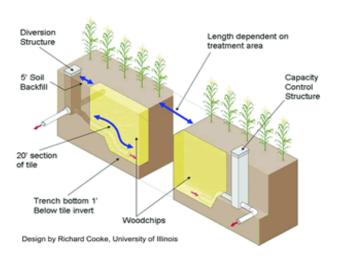
A woodchip bioreactor can be made by digging a trench approximately six feet deep and 2 to 3 feet wide. The length of the trench is dependent on the amount of water being treated. It is estimated that about 10 feet of trench is needed per acre of drained land. The trench is filled nearly full of woodchips and then covered with topsoil. Drainage water is directed to the bottom of the trench with plastic drainage pipe. Water is removed from the downstream end of the bioreactor with another section of perforated plastic tile that then directs the water into a drainage main or ditch.

Because of the limited scope of the construction site, our trench was 9'W X 30' L. A total of 28 cubic yards of hardwood chips were used. The system was designed with an observation well at both the intake and discharge ends of the bioreactor and both wells will be monitored and tested to determine the effectiveness of removing nitrogen. The total cost of this bioreactor was \$2,934.00. The life expectancy of the reactor is at least 20 years.

Similar bioreactors in Illinois have cut nitrate flows significantly. During ordinary flow periods, more than 60% of the nitrate is removed from tile drains.

If you are interested in hosting a demonstration site, or for more information, call the Hawk Creek Watershed Project at 320-523-3666.





## Septic System Loan Program Nearing Conclusion – Act Now!

Hawk Creek Watershed Project has offered 10 year low interest (3%) loan funds to upgrade non-compliant or failing individual septic treatment systems (ISTS), since 2001. This program has been highly successful with 370 households having upgraded their septic system utilizing these funds to date. This loan program is operated in conjunction with a grant that is due to expire in 2010. The loan agreement expires on May 5<sup>th</sup>, 2010 in Renville County, on May 16, 2010 in Chippewa

County, and on May 28th in Kandiyohi County. At that time we will be exploring options to continue the program. However, we have been informed that we likely cannot avoid a funding gap through the summer of 2010. While we are optimistic that the program will continue in the fall of 2010, we highly recommend acting now if you have been considering a septic system since it is not a sure thing that we will receive additional funding for this program.

Why upgrade your system? According to the University of Minnesota a failing ISTS can contribute from 500,500 to 1 million fecal coliform colony forming units to a watercourse. In addition, research shows that phosphorus contributions are also significant. Both of these pollutants can lead to a water body being impaired. Phosphorus in lakes leads to an impairment known as "excessive nutrients." Hawk Creek Watershed Project is currently undertaking a Total Maximum Daily Load (TMDL) study on Long Lake (near Willmar) for this impairment. Fecal coliform bacteria in excess can cause a stream to be listed on the Federal 303d impaired waters list. Beaver Creek and Hawk Creek are currently listed for this stream impairment. We all use public waters, let's all do our part to keep them clean!

## City of Olivia Completes Rain Garden with help from local agencies

Starting in the spring of 2009, the City of Olivia, with help from the Hawk Creek Watershed Project and the Renville County Soil and Water Conservation District (SWCD) began the process of creating a rain garden for 4-plex apartment buildings and parking lot located on the southern end of Olivia. The rain garden was designed by WENCK Associates Inc. The rain garden takes about 1.1 acres of rooftop, lawn and parking lot. It was designed to hold a 1-inch rainfall for a 24-hour period. Renville SWCD and Hawk Creek staff designed the planting layout and the planting list for the rain garden which consisted of native grasses and flowers that like dry and wet "feet."

The first test of the rain garden was in early August. Olivia received about 3.5 inches in 2 days, the rain garden held up and most of the plants survived, unfortunately some of the plants that were in the bottom of the garden were covered up by floating mulch.









Thanks to the City of Olivia Public Works Department, Haney Construction, Wenck Associates, and Renville SWCD for all their hard work on completing this project. Not only is it a well designed rain garden, it is also a great visual project along Highway 71.

Other cities have put in rain gardens in great locations. Chippewa County Courthouse has a nice rain garden located off of the eastern end of the new parking lot. This rain garden takes rain water from the parking lot and surrounding landscape. In Kandiyohi County the Willmar High School has two small gardens in the front of the building that takes rain water from the roof tops of the building.

Remember Hawk Creek does have cost-share funding for rain gardens on residential and commercial areas. The rain garden should have a water quality benefit, and relieve some of the pressure on the storm water drains.

If you are interested call your local SWCD/NRCS office or the Hawk Creek office for more information.

# Kid's Corner

## TEST YOUR WATER SMARTS!

We all need clean water. After all, our bodies are at least 65% water. Fish and wildlife depend on clean water to survive. We need clean water to grow crops and to operate factories, and we need clean water for drinking, swimming, fishing and boating.

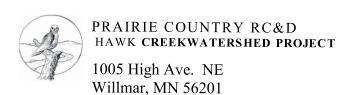
Go to the Environmental Pollution Control Agency's "What's Up With Our Nation's Waters" page at: <a href="http://www.epa.gov/owow/monitoring/nationswaters/">http://www.epa.gov/owow/monitoring/nationswaters/</a> to test your water smarts. Read the articles on the left side of the page under the "What's Inside" section, and then take the quiz below to see how well you did on learning about watersheds, water and the pollutants that enter them! (Answers can be found on page 2 of this newsletter).

- 1. True or False. Watersheds are located mainly in mountainous regions with high rainfall.
- 2. Circle the correct answer. Most of the pollutants entering our waters come from the following sources:
  - A. Wastewater treatment plants
  - B. Runoff from fields and streets
  - C. Factories along rivers
- 3. True or False. Dirt, bacteria and nutrients are the most common pollutants in our waters.
- 4. True or False. Leaves should be raked down a storm drain so they can decompose in the stream and provide food for fish.
- 5. Circle the correct answer. The following organizations monitor the quality of our waters.
  - A. Volunteer organizations, including kids like you
  - B. State, local and tribal agencies
  - C. The federal government
  - D. All of the above
- 6. Circle the correct answer. Nutrients that enter our waters come from the following sources.
  - A. Leaking septic systems
  - B. Excess fertilizers washing off lawns
  - C. Pet waste
  - D. All of the above
- 7. Circle the correct answer. What percentage of rivers and streams assessed in the most recent national water quality report scored a GOOD rating, meaning the waters fully supported their designated uses?
  - A. 10%
  - B. 32%
  - C. 65%
  - D. 93%

## **Protecting Our Water Quality**

Not only is it important to reduce our water consumption, we must also follow a few simple tips, we can help our wastewater clean and save on expensive treatment processes.

- Try to use biodegradable detergents and cleaning products
- Try to use unbleached toilet paper
- Don't pour fats and oils down the kitchen sink or outside drain-wipe pots and pans with a paper towel and put it in the trash can instead
- Avoid using garbage disposals and don't wash food scraps down the sink. Instead, put them in a compost bin
- Don't pour water from washed paintbrushes downs the drain
- Don't use your toilet as a garbage can-never flush cotton tips, diapers or other non-biodegradable products down the toilet.
- Try to minimize the use of garden pesticides and fertilizers, and never pour them down the drain
- Don't wash leaves, dirt or oil down the street gutters or backyard drains-sweep the gutters and keep them clean and free of debris



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#### **Contributing Partners:** Chippewa County Chippewa Water Plan Chippewa NRCS/SWCD City of Willmar City of Olivia **Ducks Unlimited** 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

