April 1 ,2001



Sauk Lake Watershed Newsletter

Sauk River Watershed District Board Meeting

The Sauk River Watershed District board meets every first and third Tuesday of the month, 8 p.m. at the SRWD office in Sauk Centre. These meetings are open to the public.

Sauk Lake Association

Meeting first Monday of the month, 7 p.m., at the SRWD office. For more information call Bob Bjork (320)351-2513.

Volunteers Needed

Anyone interested in volunteering boat or personal time to the Big Sauk Lake project please call the watershed office, (320) 352-2231.

Funds available

Grants/Loans are available through the watershed for septic system and feedlot improvements, shore land restoration and other Best Management Practices within the Sauk Lake Watershed.

Phosphorus - Free Fertilizer Available

Phosphorus—free fertilizer is available at comparable prices in stores for urban and agricultural needs.

Sauk Lake Receives MPCA Clean Water Partnership Grant & Loan to Prevent Further Degradation

On January 11, 2001, the SRWD received approval from the Minnesota Pollution Control Agency (MPCA) for the Sauk Lake Basin Restoration Project. The funding for this project is through the U.S. Environmental Protection Agency's Clean Water Partnership/319 grant and loan (Table 1). The loan award is \$300,000 and the grant award is \$325,000. Donations were also received from local organizations and residents (\$18,000 cash and \$72,700 in-kind).

After a Phase 1 diagnostic study in 1993, funded by the Environmental Protection Agency, Sauk Lake was found to be hypereutrophic (depleted oxygen due to increase in nutrients and plant life) and non-supportive to swimming, with total phosphorus levels near double the ecoregion average. Decreasing water clarity as well as an increase in aquatic vegetation and algae growth have been apparent since the early 1980's. SRWD and the Sauk Lake Advisory Committee composed both short and long term lake management goals.

Our primary goal for Sauk Lake is to prevent further degradation of water quality and improve the subwatersheds of Ashley Creek, Hoboken Creek, Dutchman Creek and the upper reaches of the Sauk River. According to the 1993 Diagnostic Study, the runoff and sedimentation from these watersheds are the primary sources of nutrient loading to Sauk Lake.

Table 1: Distribution of funds for the Sauk Lake Project	
Project Element	Element Budget
Information and Education	\$ 6,000 (grant)
Monitoring and Evaluation	\$ 40,000 (grant)
Ag-Waste & Land use Management	\$106,000 (grant) \$131,000 (loan)
Shoreland & Wetland Restoration	\$ 9,000 (grant) \$ 11,000 (loan)
Septic Sytems	\$ 55,000 (loan)
Administration and Technical Staff	\$ 67,000 (grant)

Loans Available for Septic System Uporades

The Sauk River Watershed Distric (SRWD) has available State Revolving Loan Fund (SRF) dollars to assist lakeshore residents of Sauk Lake, as well as rural residents of the Sauk Lake Watershed, in upgrading their sentic system.

The SRF loan dollars are offered to lakeshore residents at 3.5% interest for 7 year repayment schedule on septic systems and 3.5% for 10 year repayment schedule on feedlot improvements.

The SRWD also has loan dollars available for individuals within the Sauk Lake watershed that have soil erosion problems, particularly on crop land. If interested, please contact the SRWD

APPLICATIONS will be accepted at the SRWD office until April 31, 2003 or until funds are depleted.

The application deadline has been set to allow time for the internal-office processing (according to state statute 103D) to be completed.

DNR'S Best Management Practices

to maintain desirable water quality.

Agricultural Areas

- Maintain buffer strips
- control fertilizer and pesticide use.
- Implement proper erosion control and tillage techniques.
- Follow animal feedlot management techniques.
- Avoid stream bank erosion by excluding livestock from

open water, river banks and stream banks.

Urban Areas

- Avoid developing critical areas.
- Develop a sediment and erosion control plan.
- Align development with natural terrain.
- Maintain natural vegetation and buffer strips.
- Use water treatment devices such as retention ponds, infiltration trenches, extended detention, and sediment basins.

Forested Areas

- Pre-plan to protect water quality.
- Maintain natural vegetation and filter strips in shore and bluff impact zones
- Properly design, place, and align roads, skid trails and water crossings.
- Limit activities in critical areas.

What is a Watershed and how does it affect you?

A watershed is the surrounding land area that drains into a lake, river or river system. According to U.S. Department of Agriculture, this is how your watershed affects you.

How do watersheds work?

The landscape is made up of many interconnected basins, or watersheds. Within each watershed, all water runs to the lowest point(a stream, river, or lake). On its way, water travels over the surface and across farm fields, forest land, suburban lawns and city streets, or it seeps into the soil and travels as ground water. Large watersheds like the ones for the Mississippi River are made up of many smaller watersheds across several states.

Are all watersheds the same?

Everything we do

in our watershed

water, air, plants,

affects the soil,

and animals.

Not at all. Watersheds come in many different shapes and sizes and have many different features. Watersheds can have hills or mountains or be nearly flat. They can have farmland, rangeland, small towns, and big cities. Parts of your watershed can be so rough, rocky, or marshy that they're suited only for certain trees, plants, and wildlife.

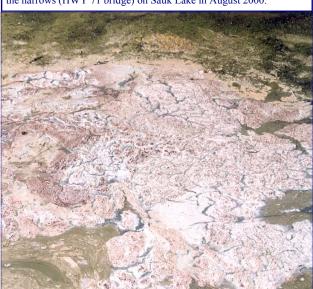
Your watershed community.

Everyone lives in a watershed. You and everyone in your watershed are part of the watershed community. The animals, birds, and fish are, too. You influence what happens in your watershed, good or bad, by how you treat the natural resources—the soil, water, air, plants, and animals. What

happens in your small watershed also affects the larger watershed downstream.

There are many things you and your watershed community can do to keep your watershed healthy and productive. To learn what you can do to take care of your watershed, call the Sauk River Watershed District at (320)352-2231, today.

The photo below is an example of a blue-green algal bloom found at the narrows (HWY 71 bridge) on Sauk Lake in August 2000.



The SRWD would like to thank all the businesses, individuals, and organizations that have pledged time and funds to the Sauk Lake Basin Restoration Project.

Big Sauk Lake Association
City of Sauk Centre
MN Dept. of Natural Resources
MN Board of Water and Soil
Resources
Stearns County Soil and Water
Conservation District
Sauk Centre Residents
Todd County Planning and Zoning
Todd County Soil and Water Conservation District
Stearns County Environmental
Services
U.S. Fish and Wildlife Service
U of MN Extension Services

So, You Think You Don't Have A Septic System Problem...

Many people think that if their toilet flushes and the sink drains then they don't have a sewer (septic system) problem. From their perspective, if it goes out the little drain the problem is solved and not much is thought about what happens beyond that. Since this article is in the Sauk River Watershed Newsletter many people may think this only applies to people living on a lake or adjacent to a river (see adjoining article "What is a Watershed). The fact is everyone's wastewater has the potential to contaminate our lakes and streams.

Typically, a rural resident has a septic system to process their wastewater (Fig 1). A septic system has two parts: a water tight septic tank and the soil treatment system. Some have their septic tank pumped on a frequent basis while others attach a drain field and rarely have it pumped unless there is a problem. The drain field is used to disperse and decompose the wastewater once it has resided in the septic tank for a period of time. This water is then processed naturally by the ground and eventually recycled by nature. This sounds logical, but there are right ways and wrong ways to do this.

It has been a common practice by some rural residents to attach their septic

(Continued on page 4)

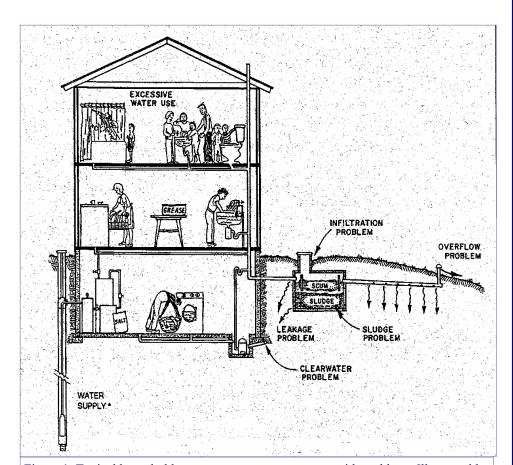


Figure 1. Typical household wastewater treatment system with problems *Illustrated by Andy Hopfensperger, University of Wisconsin-Madison Dep't of Ag Engineering*

Does Your Septic System Meet Code?

"The improper location, design, installation, use, and maintenance of individual sewage treatment systems adversely affects the public health, safety, and general welfare by discharge of inadequately treated sewage to the ground surface, surface waters, and ground waters."

"In accordance with the authority granted in MN Statutes, Chapters 103F, 103G, 115,116, the Minnesota Pollution Control Agency (MPCA) provides the minimum standards and criteria" that must be met by each homeowner for individual sewage treatment systems.

If a homestead is not in compliance with the standards specified by the MPCA, a citation will be issued. If the problem is still not resolved, the homeowner will be brought to civil court and ordered to fix the system and possibly serve jail time.

For more information contact your local Planning and Zoning offices regarding Rule 7080. Or visit the web:

www.revisor.leg.state.mn.u s/arule/7080

Sauk River Watershed District

524 4th Street Sauk Centre, MN 56378 (320)-352-2231



Let's work together to keep our lakes clean!

The Sauk River Watershed District was established in 1986 with the purpose to "enhance, preserve, and protect water quality and the natural environment of the district. The District was also formed to eliminate problems associated with water quality and quantity, as well as, recreation, aesthetics and economics."

The SRWD currently has 11 large projects and several smaller work sites along the 119 miles of the Sauk River. The Sauk River Watershed District encompasses an area from Osakis Lake to St. Cloud. Our mission statement is "Water Quality is Our Concern".

(Continued from page 3) Septic Problems drain field to agricultural drain tiles. This is a cheaper solution than building an entirely new drain field. However, these are two different draining systems and should not be used in interchangeably.

The drain tile in a field is meant to drain the wet areas of the field so a farmer can cultivate, plant and harvest. These systems have an outlet into a local ditch which eventually carries the excess water in to a lake or stream.

The septic system drain has a direct inlet from the residents household system but does not have a direct outlet. The septic tank decomposes much of the solid wastes and the overflow water takes the dissolved portions and disperses them into a drain field.

The water resides in the drain where it can be absorbed and filtered through the soil

Combining these two systems does not allow for effective decomposition of wastewater and forces contaminates back into the water supply before they've had a chance to filter and fully decompose. Incomplete treatment can result in health risks for humans and water quality problems.

A person could say, "We've been doing this for years. I remember 30-40 years ago (before drain tiles and adequate septic systems), we just let it run out into the field or in the ditch. Why should we change now?" If that person would also remember 30-40 years ago children had swimming lessons in Sinclair Lewis Park. They might also remember a time when the lake wasn't full of mattress weeds and

algae that make it impossible for fishing or other recreational activities. They might also remember when one could eat more than two fish per week out of Sauk Lake without worrying about getting sick or contamination. The environment can only withstand so much then it will negatively react to our practices. The combination of several seemingly small practices create larger problems.

So what can be done about non-compliant septic systems? Like anything else improvements cost money. The SRWD has funding available to help assist people in situations where their septic systems are not up to code and wish to improve their current practices. The homeowner can apply for a 3.5% interest loan to help pay for the costs of fixing their septic system. For more information on loan dollars call the SRWD at 352-2231. For septic

Citizen Lake Monitoring Program, You Can Help!

Minnesota citizens who want to assist in collecting data on specific lakes may want to participate in the Minnesota Pollution Control Agency's Citizen Lake-Monitoring Program.

Established in 1973, the program provides an easy, cost-

effective method of evaluating lake water quality.

The MPCA provides each participant with a Secchi disc for measuring water clarity—along with instructions for its use. Participants record the Secchi disc readings each week from June 15 to September 15.

After review, a summary of the season's information is sent to all participants.

If interested or would like more information, contact the Minnesota Pollution Control Agency at (612) 296-6300.