

www.srwdmn.org
Check us out on the web at :

Sauk Centre, MN 56378
524 4th St South

Sauk River Watershed District

Sauk River Watershed
District

524 Fourth Street South
Sauk Centre MN,
56378

Send Comments and
Questions to:
srwd@srwdmn.org

Did you know...

Three Minnesota State Record Fish have been caught within the Sauk River Watershed District including: Rock Bass (tie) at 2 pounds on Lake Osakis, Yellow Bullhead at 3 pounds 10.5 ounces on Lake Osakis and the White Sucker at 9 pounds 1 ounce on Big Fish Lake.

There are 243 lakes over 10 acres in the Sauk River Watershed District

The Sauk River Watershed District contains all or part of 27 cities, 49 townships and 10 school districts.

The Sauk River travels a total of 119.37 miles from Lake Osakis to its confluence with the Mississippi River near St. Cloud

The largest lake in the Sauk River Watershed District is Lake Osakis and it is the 40th largest lake in the state.

The Ten most common Minnesota lake names:
Mud, Long, Rice, Bass, Round, Horseshoe, Twin, Island, Johnson Spring

<http://www.dnr.state.mn.us/FAQ/MNFACTS/water.html>
Sauk River Watershed District Overall Plan



**Thank You 2005
Volunteers**
*for all your time,
effort and energy
given to help
water quality!*

Did you Know?...

- The Sauk River Watershed District covers portions of Douglas, Pope, Todd, Stearns and Meeker Counties
- Meetings are held at 7PM at the District office on the 1st and 3rd Tuesdays of every month.
- Services are provided to residents wishing to volunteer.
- The SRWD has an active education program for schools. (See page 3)
- Assistance is available for land improvements that positively affect water quality.

January-March 2006

Newsletter



Sauk River Watershed District



The Foam Phenomenon: What is This Stuff?



White foam sometimes shows up along lakeshores.

Several times a year people ask 'is someone dumping soap into the lake or 'what is that foam from?'

The foam phenomenon is often the result of natural processes, not environmental pollution. Foam can be formed when the physical characteristics of the water are altered by the presence of organic materials in the water.

The foam that appears along lakeshores is most often the result of natural die-off of aquatic plants. Plants are made up of organic material, including oils (i.e., corn oil and vegetable oil). When the plants die and decompose, the oils contained in the plant cells are released and float to the surface.

Once the oils reach the lake surface, wind and wave action pushes them to the shore. The concentration of the oil changes the physical nature of the water, making foam formation easier. The turbulence and wave action at the beach introduces air into the organically enriched water, which forms the bubbles.

Foam commonly occurs in waters with high organic

content such as productive lakes, bog lakes, and in streams that originate from bog lakes, wetlands, or woody areas.

Oftentimes, streams that originate from woody areas will have a brown tint in the water. The brown tint is often caused by the presence of tannin, which is a substance that gives wood its brown color.

The tannin is released during the decomposition of wood along with other materials that cause foaming when they are introduced in water. It is quite common to find foam in dark-colored streams, especially during late fall and winter, when plant materials are decomposing in the water.

Some foam in water can indicate pollution. When deciding if the foam is natural or caused by pollution, consider the following:

Wind direction or turbulence

Natural foam occurrences on the beach coincide with the onshore winds. Often, foam can be found along a

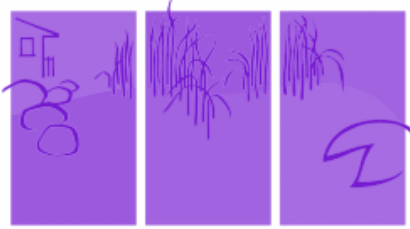
shoreline and streaks of foam may form on open waters during windy days. Natural occurrences in rivers can be found downstream of a turbulent site.

Proximity to a potential pollution source

Some entities such as the textile industry, paper production facilities, oil industries, and fire fighting activities work with materials that cause foaming in water. If these materials are released to a water body in large quantities, they can cause foaming. In addition, the presence of silt in water, such as from a construction site can cause foam.

Natural foam is usually persistent, light, not slimy to the touch.

(Source: Environmental Assistance and Surface Water Quality Divisions, Michigan Department of Environmental Quality, 800-662-9278)



Shoreland Education Workshop Series

The Shoreland Education Workshop Series offers opportunities to learn about improving shoreland management for better water quality. The

Shoreland Education Workshop Series includes four types different workshops. These workshops are offered through a collaborated effort by the Sauk River Watershed District, Stearns County SWCD, Stearns Environmental Services, and the Stearns County Water Management Committee.

Registration is required for each workshop. There are limited spaces available. Contact the SRWD for registration forms or visit www.srwdmn.org to register online. Meals and materials are provided for all workshops.



In-Depth Shoreland Landscaping Workshop



Two Opportunities:

\$20/person for Sauk River Watershed Residents, \$40/person for all others

February 25 **and** March 11, 2006; 8:30 AM to 4:00 PM

Gerard's Event Center, Sauk Centre

April 7 **and** April 28, 2006; 8:30 AM to 4:00 PM

Rockville area --- location to be determined

This two-day series will guide participants through a step-by-step shoreland design process.

Master Gardeners, shoreland property owners, nursery, landscape, and natural resource professionals will walk away with hands-on experience in planning a lake-friendly shoreland project.

Workshop participants will learn:

- *Fundamentals of shoreland landscaping
- *Site analysis and design
- *Home owner, environmental and regulatory considerations
- *Plant and materials selection site preparation, planting, permits and regulations



Did you know...

The Shoreland Education Workshop Series is a program of the University of Minnesota Extension Service, Water Resources Center and Sea Grant.

Shoreland Planting Workshop



May 31, 2006 9:00 AM to 4:30 PM

St. Michael's Hospital, Sauk Centre

\$10/person for Sauk River Watershed Residents

\$20/person for all others

Participants will obtain hands-on experience while spending one day assisting with the site preparation and planting to restore this 500' degraded shoreline project. This shoreline is used by the patients, residents and staff of the St. Michaels Nursing Home and Hospital. We hope you

help us beautify their surroundings while learning about lake and river protection.

Workshop participants will learn:

- *Site preparation
- *How to identify shoreland zones
- *How to determine suitable plants for each zone
- *Installation of biomaterials for erosion control
- *Special planting techniques

SRWD Programs for Schools and Other Groups



Sauk River Watershed District Youth Education Programs support the local Kindergarten through 12th grade science curriculums. Programs also are open to scout troops, 4-H programs and other groups. Below are some of the programs. Check out the others on www.srwdmn.org

Treasures From the Chest

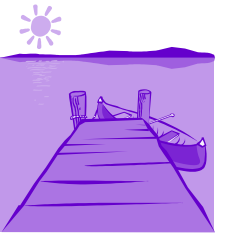
Explore the world of water through the use of the Fresh Water Treasure Chests. Each chest is equipped with specimens, books, videos, curriculum material and the tools for your class or group to learn about our water resources. Students can work in a team or individual environment on many of the activities. *Grades K-12.*

Lake Ecology Curriculum Training

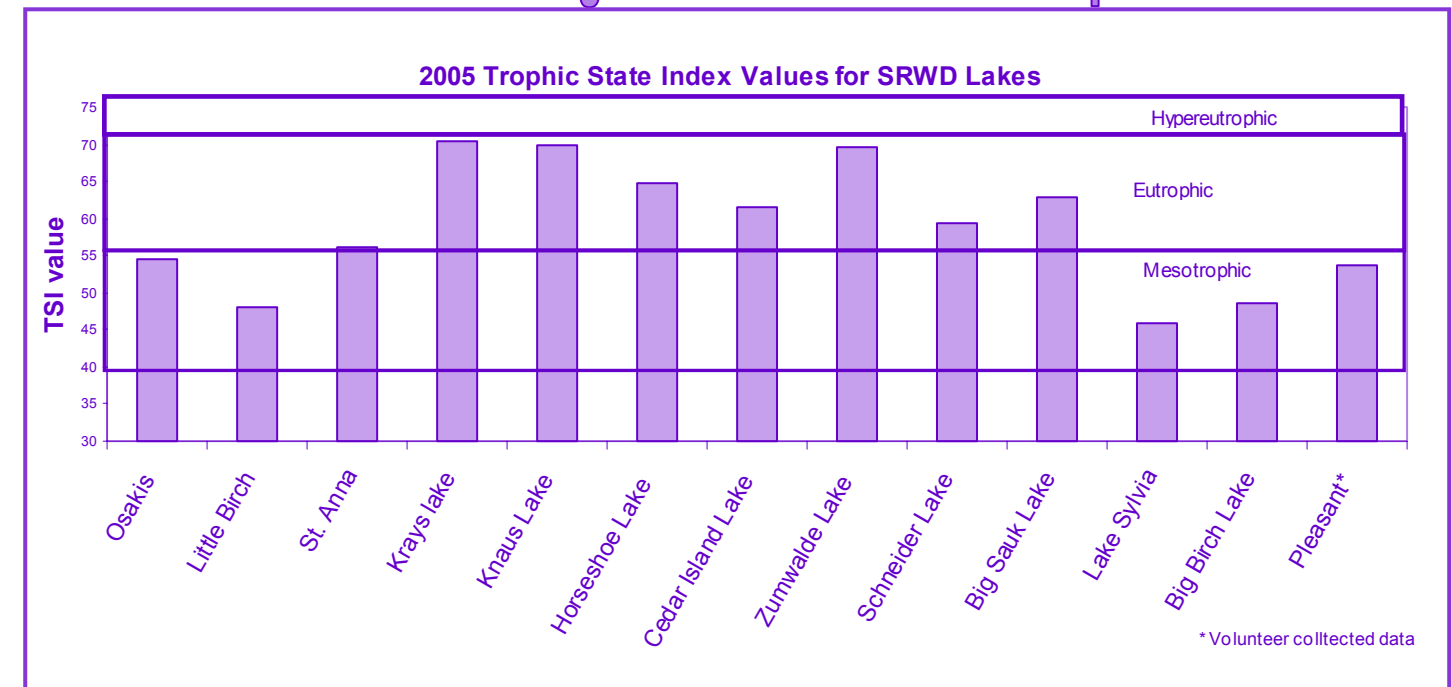
Explore a woodland pond teeming with life or study the complex or dynamic interaction of an ecosystem! These topics and many more, including hands-on experiments, are part of a curriculum that has been developed for middle school students that focuses on Minnesota's most important natural resource and is called "Minnesota Lake Ecology". *Grades 5-6.*

River Clean-ups

Students team up with the watershed district to clean-up the shores of our lakes and rivers. Students get a brief overview of how garbage pollutes wildlife habitats. Boots and garbage bags are provided. *Grades 3-10.*



TSI Rankings: How Do the Lakes Compare



Oligotrophic:

TSI < 30 Clear water, oxygen present in entire water column throughout the year, salmon fisheries in deep lakes.

Mesotrophic:

TSI 30 – 40 Deeper lakes still exhibit oligotrophic characteristics, but some shallower lakes will have lack of oxygen at the bottom of lake during the summer.

TSI 40 – 50 Water moderately clear, but increasing probability of no oxygen at bottom of lake during summer.

Eutrophic:

TSI 50 – 60 Decreased transparency, no oxygen at bottom of lake during the summer, weed problems, warm-water fisheries only.

Hypereutrophic:

TSI 60 – 70 Dominance of blue-green algae, algal scums probable, extensive aquatic plant problems.

TSI >70 Heavy algal blooms possible throughout the summer, summer fish kills, few aquatic plants, dominance of rough fish.