



# Annual Report

# 2011

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Thirty Lakes Watershed District  
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[www.30lakes.org](http://www.30lakes.org)

## TLWD 2011 Annual Report

### 2011 Annual Report Thirty Lakes Watershed District Brainerd, MN

This annual report is submitted pursuant to Minnesota Statutes Chapter 103.D. It summarizes the activities of the Thirty Lakes Watershed District for the calendar year of 2011.

#### **Background**

Thirty Lakes Watershed District was established by Order of the Minnesota Water Resources Board on May 18, 1971 in response to two nominating petitions.

The primary goal of Thirty Lakes Watershed District is the protection of the surface and subsurface water within the District Boundaries.

The primary purpose of the District is to conserve natural resources through land use planning, flood control and other conservation projects to protect public health, safety and welfare.

There are 34 lakes and 18 protected wetlands within the 70 square miles of the Thirty Lakes Watershed District boundaries. The entire District lies within Crow Wing County, and 60% of the total area is covered with surface water. Portions of the cities of Nisswa, Merrifield and Breezy Point are within the District, as well as portions of the townships of Lake Edward, Pelican, Mission and Unorganized First Assessment. The largest lakes within the District are Pelican Lake, Lake Edward, Lake Hubert and North Long Lake.

#### **Introduction**

The Board of Managers of the Thirty Lakes Watershed District holds regular meetings on the second Monday of each month. All regular meetings are open to the public and were held at the District office located at 322 Laurel Street, Brainerd, MN. Proper notices of special meetings are published in the prescribed manner.

The Annual Election of Officers for the Board of Managers is held during the regular May or June meeting.

The **Managers and Officers** at the beginning of 2011 were as follows:

Mark Young, President/Chair Pine Crest Resort 13873 County Road 109 Merrifield, MN 56465 218-831-0539	Gorden Hardy, Vice President/Chair 22426 County Road 3 Merrifield, MN 56465 218-829-2737
Thomas Swenington, Secretary/Treasurer 29421 Huxtable Point Road Merrifield, MN 56465 218-765-3798	

## TLWD 2011 Annual Report

### Citizen Advisory Committee

The Thirty Lakes Watershed Board of Managers is grateful to have the following individuals comprise the Citizen Advisory Committee:

Bob Albrecht 22 Third Street N.W. Crosby, MN 56441 (218) 546-6633	County Commissioner Rosemary Franzen 14732 Inglewood Drive Baxter, MN 56425 (218) 820-7640
Rick A. Johnson 27913 County Road 4 Pequot Lakes, MN 56472 (218) 562-4201	

### Staff

Tasha Lauer, Administrator 14451 Blackberry Court Baxter, MN 56425 (218) 330-4310	Contracted Employee Darren Mayers-CW SWCD 322 Laurel Street, Suite 13 Brainerd, MN 56401 218-828-6197

## 2011 PROJECTS AND ACTIVITIES

### Thirty Lakes Watershed District Permits

Onsite inspections and/or TLWD permits were made to 29 properties that had been granted Construction Permits from Crow Wing County. The District conducted the inspections only to address possible stormwater issues both during and after construction.

### Annual Overflight

The entire watershed district was flown. Areas of environmental concern were recorded and formed into digital images taken from an altitude of approximately 2,000 feet. All images are numerically correlated to maps of the area. These photographs will provide important historic information for future land use decisions.



### Web Site

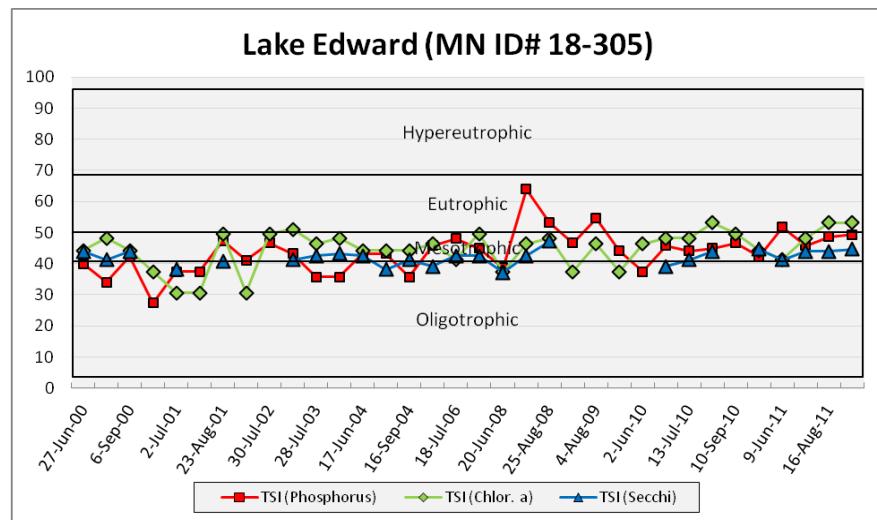
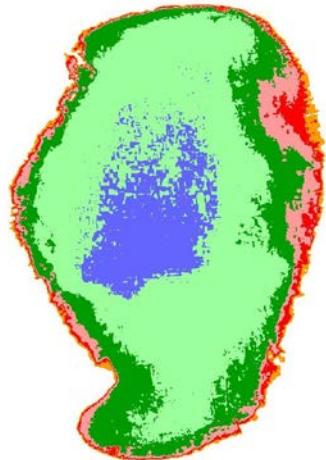
The web site of Thirty Lakes Watershed District, [www.30lakes.org](http://www.30lakes.org), continues to be regularly updated with current information, meeting minutes and photographs.



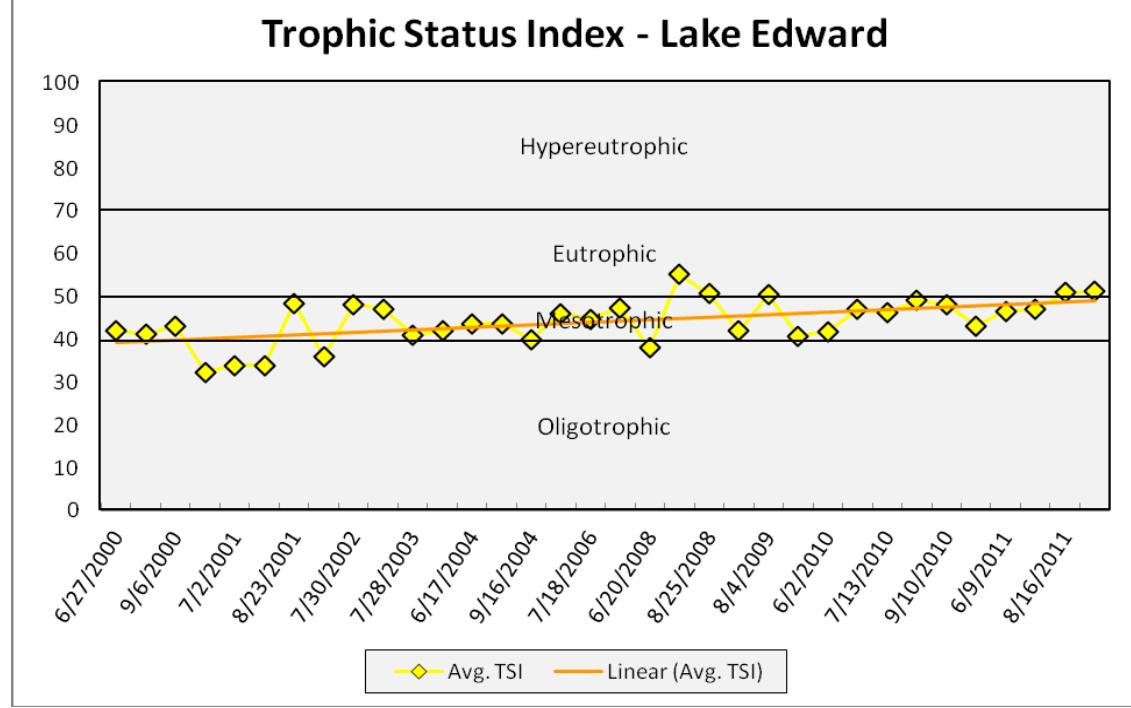
<http://www.30lakes.org/index.html#152011.1.26.21.ME>

### Water Quality Monitoring

Seventeen (17) lakes were tested four times during the summer of 2011 to determine their Trophic Status. Of the 52 lakes and wetlands within the District, 12 to 18 are tested each year on a rotation basis. All data was submitted to the MPCA EQUIS system and made available on the Thirty Lakes Watershed District website.



### Trophic Status Index - Lake Edward



### Lake Level Monitoring

Lake gauges were placed in twenty two (22) lakes within the District, and their levels were recorded every one to two weeks from May through October. Eleven Volunteers checked 12 of the lakes, while District Staff monitored the rest. All data was submitted to a DNR Hydrologist and made available on the Thirty Lakes website.

### Pelican Lake Stormwater Project-update

Thirty Lakes Watershed District and CW SWCD had been working with the "Stakeholders" and Tim Ramerth of Westwood Professionals Services. We have designed a plan that has been accepted by all. This plan was submitted to the Board of Soil and Water Resources for funding through the Clean Water Legacy Program by TLWD and CW SWCD. The CW SWCD has received funding in the amount of \$39,000 for this project. Easements were drafted and approved by all Stakeholders. The project started construction on October 20, 2010. The solution included 4 treatment areas; 3 were designed and planted as raingardens and the 4<sup>th</sup> doubles as a grass lawn edged by native wet-meadow flowers. A berm constructed along the lake was planted in native shrubs and grasses as a goose deterrent. Funding has been set aside for maintenance for the next ten (10) years.

Educational Signs are placed in each of the 4 project sites along with one larger main sign showcasing the entire system.

**WORKING TOGETHER FOR CLEAN WATER**  
*Restoring Natural Hydrology to Crow Wing County*

**Raingardens: Nature's Water Filter**

- These gardens are planted with native prairie grasses, flowers, and shrubs.
- Raingardens capture the stormwater runoff from adjacent parking lots and buildings.
- Fast draining soils and long rooted plants absorb nutrients and remove pollutants from the runoff as it passes through.

**Breezy Point Stormwater Project**

Now water that reaches Pelican Lake will be healthy for plants, fish and people!

**Result = A cleaner Pelican Lake**

photos provided by CW SWCD & TLWD



Breezy Point Resort Project



### **Cost-Share Program**

Our Cost-Share Program is a 50% Cost Share with the land owner, up to amounts of \$2500. We have had 14 Shoreline Restorations and 1 Rain Garden installed this year. The total grant amount given was \$30,775.62 in 2011. Pollution reduction: Reduced sediment load by approximately 29 tons/year, reduced phosphorus load by 24.5 lbs/year, reduced soil erosion by 28.5 tons/year, according to the BWSR pollution reduction calculator.



### **Bass Lake 18-402 Water Quality Project**

A Ground Water Intrusion Overflight was conducted on Bass Lake 18-402 using water penetrating cameras that can identify ground water intrusions into lake water. TLWD and City of Nisswa are currently working with the landowners to identify what issues need to be addressed.

### **Vegetation Control**

We started looking into vegetation control using muskrats on Little Pelican Lake. We will be placing platforms in the lake a V pattern to stimulate the muskrat's path into the excessively vegetated areas, and placing a sign at the lake access nearest to this area.

### **Training and Workshops, etc**

Staff and Managers have attended BWSR Academy with a presentation given, MAWD Annual Meeting, BMP Workshops, U of MN Master Gardener Garden Expo, BAELN Workshops, DNR Shoreline Restoration Meeting, TLWD Open House, and Collaboration with the CW SWCD Tree Sale.

## **Work Plan for 2012**

### **Cooperation**

The District will strengthen its cooperation with the cities, county, CW SWCD, Lake Associations and other LGUs.

### **Annual Overflight**

The District will continue to have annual overflights to document land use, and water quality.

### **Website**

The District will continue to utilize the web site to post monitoring data and other important reports to improve water quality, etc.

### **Water Quality Monitoring**

The District will continue its extensive TSI monitoring programs.

### **Lake Level Monitoring**

The District will continue its lake level monitoring programs.

### **Cost Share Program**

The District will continue its Cost Share Program. We are extending the program to lower income properties this year, and have two property owners already interested as of February 2012.

### **Bass Lake 18-402 Water Quality Project**

The District will continue to monitor and work on implementing solutions to improve the water quality in this lake.

### **Vegetation Control**

We started looking into vegetation control using muskrats on Little Pelican Lake. We will be placing platforms in the lake a V pattern to stimulate the muskrat's path into the excessively vegetated areas.

### **Septic System Funding Program**

The District plans to start a grant program for lower income residents to help with costs of upgrading or installing a septic system. We will be reviewing a grant system for businesses to help with costs of upgrading maintaining or installing an advanced septic system. Crow Wing County staff are important members of this program.

### **Public Awareness and Education**

The District will create more public awareness and education through advertisements, flyers, workshops, lake associations, township meetings, surveys and having an open house.