



## Association starts water testing

One of the most important goals of the Lake Association is to ensure that the high quality of our lakes continues. To that end, the Association started water testing both the Little and Big Lakes last summer so we would have a baseline. Three samples were taken on July 29, Sept. 1 and Sept. 29. Testing will also be done this summer.

The lab that did the evaluations of the samples is RMB Environmental Laboratories, Inc. in Detroit Lakes. You can see all of the testing information on their website at <http://www.rmbel.info>

The results of the testing is on the right. Below are the definitions of the terms used.

**Chlorophyll-a:** Pigment that makes plants and algae green. Chlorophyll-a is measured in lakes to determine algal concentration.

**Phosphorus:** Nutrient needed for plant growth. Phosphorus can enter a lake through runoff from manure and fertilizer or through seepage from leaking septic and holding tanks. High levels of phosphorus usually mean lots of algae.

**Secchi Depth:** Measure of water clarity that can indicate the overall health of a lake. A black and white metal disc is lowered into the water on a rope until it can't be seen anymore and raised to the point it can be seen. The depth of the disk to the surface of the water is the Secchi Depth.

**Trophic State Index:** Overall trophic state index (TSI) of a lake is the average of the TSI for phosphorus, the TSI for chlorophyll-a and the TSI for secchi depth; therefore, it can be thought of as the lake condition taking into account phosphorus, chlorophyll-a and secchi depth.

The TSI ranges from 0-100. 0-30 is Oligotrophic, where water is very clear, phosphorus is low, and algae is sparse. 30-50 is an in-between stage where the number of aquatic plants and algae increase due to more available phosphorus. A TSI of over 50 describes a lake that is eutrophic, with a high density of plants and algae that could be unpleasant for swimming at certain times in the summer.

**Mesotrophy:** Water moderately clear most of summer. May be "greener" in late summer. No oxygen at the bottom of the lake results in loss of trout. Walleye may predominate.

**Oligotrophy:** Clear water, oxygen throughout the year at the bottom of the lake; very deep, cold water.

	Big Lake	Little Lake
<b>Total Phosphorus Mean:</b>	16	7.1
<b>Total Phosphorus Min:</b>	11	6.4
<b>Total Phosphorus Max:</b>	26	8
<b>Chlorophyll-a Mean:</b>	5.7	2
<b>Chlorophyll-a Min:</b>	4	1
<b>Chlorophyll-a Max:</b>	7	3
<b>Secchi Depth Mean:</b>	9	16
<b>Secchi Depth Min:</b>	7	15
<b>Secchi Depth Max:</b>	10	17
<b>Trophic State Index Mean</b>	45	35
<b>Trophic State:</b>	Mesotrophic	Oligotrophic
<b>Size</b>	418 acres	180 acres
<b>Maximum depth</b>	33	51

## What you can do to help our water quality

**Shoreline buffer:** A natural vegetation buffer along the lakeshore can filter and absorb runoff so that it doesn't run into the lake. Lakes that have very little natural vegetation around them are more vulnerable to nutrient runoff, which can directly feed plants and algae and cause a decline in water clarity.

Also, St. Louis County has regulations about how much vegetation, brush and trees can be removed near the lake, so to avoid fines you should check with the County Planning Department before removing any vegetation. And new shoreline regulations by the DNR are more restrictive than in the past.

*A side benefit is that a buffer discourages geese from visiting your lawn.*

**Fertilizer:** Fertilizer should not be applied within 75 feet of the lake. Minnesota law bans the use of phosphorus fertilizer, because phosphorus is the nutrient turning Minnesota's lakes and streams green with algae. When shopping for your lawn and landscaping supplies purchase fertilizers that contain zero phosphorus, and only buy brands that have clearly indicated a middle number of zero (X-O-X) on the packaging.



## We all play a part in keeping our lakes free of Aquatic Invasive Species



The threat to our lakes posed by aquatic invasive species, such as Milfoil or Zebra Mussels, has been in the news and on our radar ever since the DNR announced it wanted to put a public access on Big Pequawaywan. This issue is even

more a hot topic with the confirmation that VHS, a virus that has caused fish kills elsewhere on the Great Lakes, is now in Lake Superior.

In recognition of the connection between these invasives and public accesses, the Lake Association passed a resolution last summer asking for a moratorium on public accesses until the DNR solves the problem of the spread for these invasives. Senator Tom Bakk introduced a bill (S.F. 2890) on this issue in this legislative session; but it uncertain if the bill will pass. Minnesota Seasonal Recreational Property Owners Coalition (MSRPO) is supporting a five-year moratorium as well as increased fines for transporting these invasives.

The five-year delay is intended to give resource managers and the public time to discover the best way to stop the spread of AIS throughout the land of 10,000 lakes. There are over 5000 fishable lakes in Minnesota larger than 100 acres. 2000 lakes already have public access.

Despite the Association resolution and many letters to the DNR from cabin owners asking them to reconsider the access, there is no indication that they are doing so. In the meantime, all of us can play a role in reducing the chances that our lakes get infested. The Association considers this issue one of its top action items this year.

***This is a very serious issue because some of these species are very difficult, if not impossible, to remove once a lake is infected. And the cost of doing so would be born by property owners (not the DNR). Once a lake is infected, fishing, swimming and boating can all be ruined.***

The US Fish and Wildlife Service lists these impacts these species have on lakes:

- Reduce game fish populations
- Ruin boat engines and jam steering equipment
- Make lakes unusable by boaters and swimmers
- Reduce native species
- Reduce property values

***As much as we all like to be nice to our friends, if they ask if they can bring their boat to your cabin to put it in the lake, the safe thing is to say no. A better alternative is to let them use your boat instead.***

And if you take your boat from Pequawaywan Lakes to area lakes, including Lake Superior and the St. Louis River, you could be bringing back unwelcomed company. Fish Lake, Island Lake and Pike Lake are some of the nearby lakes that are also infested. The DNR is considering large fines for boaters who spread these species from lake to lake.



These invasive species can hide in bait buckets, boat trailers, wheel wells, etc. And some like Spiny water fleas or Zebra Mussels can

travel when they are in a microscopic stage and impossible to see, so a visual examination of your boat is not going to be enough. And boat washes have not been found to be totally affective.

And don't forget the hazards of that bait bucket. Existing law prevents the harvest of minnows or fish as bait from any Minnesota water designated as "infested waters." Lake Superior has been in that category for several years.

We know that sometimes there seems like more "No's" in life than anything else. But these invasive species can really make a lake unsuitable for all forms of recreation as well as destroy the native fishing population.

It's not just worth the risk. Please talk to your neighbors about the risk if you see him or her bringing boats or jet skies into our lakes. We all need to do our part to keep our lakes clear of these invasives.

The Lake Association will be distributing more information this summer on how all of us can help prevent these destructive species from entering our lakes.

And you can find out more on these websites:

[www.protectyourwaters.net](http://www.protectyourwaters.net)

[www.dnr.state.mn.us/invasives/preventspread.html](http://www.dnr.state.mn.us/invasives/preventspread.html)

[www.msppo.org](http://www.msppo.org)



## Area News and Events

### Volunteer Fire Department

Greetings from Pequawaywan Lake Fire Department and EMS. We hope everyone had a safe winter — it was definitely a mild one by our standards.

We had another busy year at our department with 19 911 calls — 5 fire-related and 14 medical. Thanks to all of our members for their time and contribution to our community. They are truly the most valuable asset of our department.

We still have openings available for two First Responders and two Fire Fighters. It is important we recruit new members to replace our long-time volunteers who are getting to retirement age. Please contact Fire Chief John Lucia if interested.

As everyone is aware the early spring has brought fire danger to the area earlier than we can ever recall. There is a fire ban in effect as of April 6, until further notice. Campfires are okay, but please use extreme caution.

We are expecting to receive a 1988 4-wheel drive rescue rig from the Duluth Air Guard that will replace our existing van. This is a much needed upgrade and much safer vehicle. Thank you to Ted Wallace for his efforts in securing this rig for our department.

We also applied for a FEMA Grant to help us with the purchase of a new multi-use Fire/EMS rig. Unfortunately, we were unsuccessful but are in the process of writing a new grant request for 2011. We are hoping to be successful this time, as we have a rapidly aging fleet of rigs.

As the summer boating season approaches we hope everyone will be safe on the water. Last year we had some close calls with jet skis and water skiers. Please use common sense when participating in these sports and respect your neighbors, as we all enjoy the use of the lake. Please be sure to follow rules regarding speed and distance from shoreline and other boats while out enjoying the lakes.

Refer to the DNR website: <http://files.dnr.state.mn.us/rlp/regulations/boatwater/boatingguide.pdf> regarding boating and personal watercraft rules and regulations.

Our annual pancake breakfast is Sunday, July 4th from 8 a.m. to Noon. We hope to see everyone there.

Have a safe spring and summer!  
*John Lucia, Fire Chief*

### Valley Homemakers

The annual first gathering of **Valley Homemakers** will be for the cleaning of Lakeside Chapel Thursday, May 26, at 6 p.m., in anticipation of services beginning Sunday, May 30. After the cleaning, the group will enjoy a supper together at the Pequawaywan Inn. Regular meetings will be held the 4th Thursday of the month through the summer and into the fall.

### Pequawaywan Township

Congratulations to Scott Mead who was re-elected to a three-year term as township supervisor and to April Smitke who was reelected clerk.

Township meetings are the second Tuesday of each month at 7:30 p.m. at the Fire Hall. Minutes and other information can be found on the township's web site at <http://pequaywantownship.org>

Also watch the township sign at the corner of Pequawaywan Lake and West Branch Roads for meeting announcements (including Association meetings).

### Lakeside Chapel

Services begin Sunday, May 30, at 10 a.m., 8905 Pequawaywan Lake Road, and continue through Labor Day.

### Recycling

North Star Recycling Center is open Saturdays, 9 a.m. to noon, accepting cans, glass, plastic, paper, cereal boxes, and cardboard.



## Do your part to keep our two Pequawaywan Lakes the best place to live and have a cabin! Get involved and join one of these committees

Members are encouraged to join a committee. These committees are a good way to get involved and help make this an even better area.

**Environmental Protection:** Tree issues, invasive species, loon watch, pest management, and area mining

**Contact:** Lorene Sorlien

**Events Committee:** Evaluate and plan community events such as the annual picnic, solicit volunteers to provide treats for monthly meetings.

**Contact:** Lori Gherna

**Finance:** Responsible for Association finances and reports.

**Contact:** Jim Guldseth and Jan Kolehmainen

**History of Lakes Area:** Compile history of the association and area through interviews with long-time residents and solicitation of historical photos and documents from residents.

**Contact:** Phyllis Mead,

**Lake Quality:** Develop programs or communications that promote water quality in our lakes, water testing, shoreline (regulations, protection, erosion prevention), zoning issues

**Contact:** Mark Merrill

**Program Committee:** Identify topics for meetings and obtain speakers, educational programs and materials

**Contact:** Marilyn Bamford or Judy Strom

**Safety - Watercraft - Fire:** Develop programs or communication concerning safety on water and land, buoy placement, and boating courtesy and regulations.

**Contact:** Scott Mead

**Service Committee:** Identify services to benefit members, such as Trash or Yard Waste Day, determine costs, and solicit volunteers.

**Contact:** Dick Arndt

## Association officers

At the annual meeting in August, Dick Arndt was elected Vice President and Ted Granquist was elected Secretary.

Other officers are: Phyllis Mead, President; Judith Strom, Vice President; Jim Guldseth, Treasurer; Mark Merrill, Director at Large, Little Lake; and Jan Kolehmainen, Director at Large, Big Lake.