

PELICAN GROUP OF LAKES IMPROVEMENT DISTRICT (PGOLID) 2017 ANNUAL REPORT

Introduction:

Minnesota Statutes section 103 B.571 (4) require Lake Improvement Districts to file an Annual Report to the County Board, the Commissioner of Natural Resources, and the Minnesota Pollution Control Agency. This direction has been and will be interpreted to be the Otter Tail County Commissioners, Land and Resource Management, Bill Kalar, the DNR Director, and Tim James at the MPCA office in Detroit Lakes.

The functions of the PGOLID are overseen by a nine member board of directors that are elected by property owners to 3 year terms with 2 term limits. Following is a list of the directors for 2017 and the year in which their term expires:

Jay Elshaug, Chairman, 2019
Paul Horstmann, Vice Chairman, 2017
Melody Jensen, Secretary, 2018
Arlan Swenson, Treasurer, 2017
Suzanne Lervick, 2017
Bill Kelsven, 2018
Bert McDonough, 2018
Peg Severson, 2019
John Kruse, 2019

Current Program Status:

1. Monitoring of Water Quality:

PGOLID, through RMB Labs and the PGOLID Lake Resource Coordinator, Moriya Rufer, continue to monitor lake and stream water quality. 2017 is the sixteenth year of this program. This information continues to be incorporated into a Comprehensive Lake Management Plan. All monitoring results and the Lake Management Plan are available on the PGOLID website: www.pgolid.org.

- a. The PGOLID Water Resource Coordinator does monthly evaluation of the streams surrounding the PGOLID lakes. She collects the water quality parameters: *E. coli* Bacteria, Total Suspended Solids, Chlorophyll a (algal concentration), two kinds of Phosphorus (Ortho and Total), Total Dissolved Solids, and Temperature which are taken at nine sites including the several inlets and one outlet. The sites include the inflow at Strom's inlet, the Spring Creek inlet, the Bob Creek inlet and at other locations. These are the sites in which the data show the majority of the nutrient loading into Pelican Lake.
- b. The PGOLID Water Resource Coordinator also monitors 6 sites total in Pelican, Little Pelican, Bass and Fish Lakes. These sites are tested for total phosphorus, chlorophyll a (algal concentration), clarity, water temperature and oxygen, and zebra mussels. In 2017, algae and zooplankton are also being tested to see how the zebra mussels have affected the biology of the lake.

2. Mosquito Control and other environmental issues

The board of PGOLID continues to oversee the management of pests that influence the lake environment. These pests destroy trees, carry diseases and generally have a negative impact on the quality of the lakes experience for residents as well as guests. In recent years the primary concern has been the impact from mosquitoes which have the potential to carry diseases such as West Nile Virus. Each year spraying for mosquitoes occurs generally on Thursday evenings during the summer months. In addition the monitoring effort for Tent Caterpillars, which have been present in this area, continues. No spraying has occurred for the Tent Caterpillar.

3. Invasive Species

Since 2004, PGOLID has been very vigilant in working to prevent invasive species in their lakes and educating lake residents. These activities have included chemical treatment of invasive plants, the DNR Watercraft Inspection Program, and Educational Seminars conducted by the PGOLID Water Resource Coordinator. Two invasive species have been confirmed in the PGOLID lakes – Zebra mussels and Curly-leaf pondweed. A third invasive species that is near PGOLID lakes, but not established in the lakes yet is Eurasian flowering rush.

- a. Zebra mussels were found in Pelican Lake in 2009. They can attach to hard surfaces such as boat lifts and docks and clog water intake pipes. Unfortunately, currently there is no known treatment for zebra mussels. PGOLID is keeping up on the latest developments in this area.
- b. The PGOLID Lake Coordinator monitors the PGOLID lakes for Zebra mussel veliger density, and Zebra mussel adult distribution and density. We're determining where in the lake the Zebra mussels are most densely populated. We are also working with the University of Minnesota Aquatic Invasive Species Institute in their research on zebra mussels.
- c. Curly-leaf pondweed is an invasive plant that can form large mats early in the summer and interfere with recreational activities. PGOLID has been treating Curly-leaf pondweed (CLP) in the PGOLID lakes for the past 10 years. This treatment costs up to \$26,000 per year. The treatment process usually starts with a plant survey in early May to detect the locations of the CLP for treatment that year. Treatment needs to occur before the water is 60 degrees, so it usually occurs in late May. This year, areas in Little Pelican, Pelican, and Bass Lakes were treated. CLP areas and thickness has decreased drastically since 2005. See the map from the 2017 survey, past treatment reports and before and after photos on the PGOLID website here: <http://pgolid.org/programs/ais/>.
- d. Eurasian flowering rush is a nuisance plant in the lakes upstream in the Pelican River from Little Pelican Lake. Each summer, the PGOLID Water Resource Coordinator canoes down the Pelican River and hand-removes any established Eurasian flowering rush. So far, this control has been working to prevent the spread of this invasive plant downstream into the PGOLID lakes.
- e. PGOLID participates in the DNR Watercraft Inspection program in the summer. DNR interns inspect boats entering and leaving Pelican Lake for invasive species, and educate boaters about invasive species prevention.

4. Navigation Aids

The LID now owns and maintains a number of buoys that are marked as PGOLID property and they are strategically placed in the LID to mark channels, rocks, no wake zones, and other navigation needs. The locations of the buoys can be found on our website: <http://pgolid.org/programs/safety-buoys/>. This year, lights were added to the tops of the buoys for added safety at night.

5. Fish Lake Dam

Since the early 1930's, the water levels in the lakes in the LID have been controlled by a concrete structure of three weir levels, which is located in the Pelican River below Fish Lake. The dam was flooded during the high water years, but now due to erosion and age it no longer effectively limits the outflow. It has been determined that the dam is under the ownership and control of the DNR. In the past, some repairs were attempted on the dam, but PGOLID feels they were insufficient for long-term sustainability.

In 2016, PGOLID applied for a [DNR Conservation Partners Legacy](#) grant to replace the current Dam with natural rock rapids, like what is at Dunton Locks County Park on Lake Sallie. See pictures on our website here: <http://pgolid.org/dam>. A dam like this would still hold water levels to their current levels, and would not need future repairs or maintenance. Natural rock rapids also enhances fish and wildlife habitat and fish passage downstream. PGOLID was awarded a grant from the State of Minnesota for \$305,000 and the US Fish & Wildlife Service for \$98,650. We also received funding support from PLPOA, Red River Sportsmens Club, and FM Muskies Inc. Construction will begin this fall with estimated completion this winter. Regular updates will be available on the PGOLID website here: <http://pgolid.org/dam>.

6. Septic Systems Inspections

PGOLID has completed many septic system survey reports in the past decade. To read about the different studies and their reports, please visit: <http://pgolid.org/programs/septic-systems/>.

7. Plant Surveys

In the summer of 2003, Blue Water Science (St. Paul) conducted a plant survey in the 4 PGOLID lakes. This survey is how we originally found Curly-leaf pondweed. In 2010, PGOLID hired a contractor to do another survey to compare to the 2003 results. This survey was also done to see if any new invasive species are present in the PGOLID lakes. The results of this survey showed some additional Curly-leaf pondweed, but no other invasive species such as Eurasian watermilfoil or Eurasian flowering rush. The full report can be found on the PGOLID website: <http://pgolid.org/programs/plant-surveys>.

8. Shoreland Projects

In 2009, PGOLID was awarded a \$25,000 grant from the DNR for Shoreline Restoration. This grant money paid for native plants, shrubs and trees to be planted along shorelines. Plants, shrubs and trees prevent shoreline erosion and act as a buffer to filter runoff from yards into the lake. Nine private properties were planted during this grant, which ended on June 30, 2011.

In 2011, PGOLID was awarded an additional \$21,500 for new projects in the spring of 2012 and 2013. Seven properties were planted with this grant.

In 2012, PGOLID was awarded a third grant totaling \$20,000 for 2013-2015. Two properties were planted in the spring of 2014, and one in the spring of 2015.

The last DNR grant expired this June, and this program is not being offered by the DNR anymore.

9. Tree Program

PGOLID started a new tree planting program last year with the goal of planting young trees within the shore impact zone (0-15 feet from the lake). Many of the trees in these areas are mature and when they die there would be no trees left on the shoreline if they aren't replaced. This project hopes to start a seed that promotes tree growth within PGOLID providing shoreline stabilization and fish and wildlife habitat.

In 2016, 70 trees were planted. In 2017, 35 trees have been planted. We hope to continue this program into the future.

9. Information and Education

PGOLID puts a high value on the dissemination of information and education to its constituents. The PGOLID Water Resource Coordinator is the main conveyer of this education along with the PGOLID Board Members. These educational programs have included: educational seminars for lake residents in the summer educational presentations at PGOLID and PLPOA meetings, maintenance of the PGOLID website, act as a contact and resource for community education and outreach and availability to PGOLID residents, keep abreast of new state/county/local government lake regulations and disseminate the information in an understandable way to PGOLID residents, work with upstream landowners, farmers, ranchers, and other lake associations to act in a proactive manner in the protection of the water quality that flows into the PGOLID. Education has focused on the following topics: water quality, invasive species, shoreline restoration, septic system and holding tank maintenance, aquatic plants and algae, the importance of maintaining native aquatic plants such as bulrush, boater stewardship and DNR regulations.

PGOLID has a website that is simple, easy to use, and works on mobile devices. Information about PGOLID, the annual meeting, and programs can be found on the website: <http://pgolid.org>.

10. Cormorant Watershed Agreement

The Cormorant Lakes Watershed District (CLWD) manipulates the water levels in the Cormorant Chain of Lakes through a controlled outlet where Spring Creek exits Big Cormorant Lake (NE of Cormorant Village). PGOLID maintains an agreement with the CLWD that regulates how much water can be discharged from Big Cormorant Lake into Spring Creek because this discharge can affect Pelican Lake's water levels. In 2013, PGOLID signed an agreement with CLWD. This agreement is especially important when the lake levels are at or exceed the Ordinary High Water Mark.

11. Water Surface Use Ordinances

The Otter Tail Board has delegated to PGOLID authority to establish water surface use ordinances, all of which are subject to final approval of the Department of Natural Resources (DNR). During 2012 and 2013 a delegation of property owners approached PGOLID to explore a remedy involving a high density of watercraft crowding a relatively small area of Pelican Lake causing noise, ingress and egress problems, and potential safety issues. Through discussions with the DNR and the Otter Tail Sheriff it has been determined that in order for the DNR to approve any water surface use restrictions there first must be a commitment by Otter Tail law enforcement to enforce any ordinances, there must be documented safety issues, there must be a concern for the protection of natural resources or any proposed ordinances need to demonstrate an enhancement of the recreational use and enjoyment of a majority of lake users.

The PGOLID Board and the Pelican Lake Property Owners Association Board (PLPOA) have jointly chosen to publicize the property owners issues and have asked for voluntary assistance of lake users not to overcrowd the target areas of Pelican Lake and it is PGOLID's desire that this issue would be resolved through voluntary means. At the present time there are no plans to seek approval for water surface use restrictions from the DNR.

Respectfully submitted,

PGOLID Board of Directors