



INVASIVE SPECIES COMMITTEE (ISC) REPORT

Onekama Township/ Portage Lake Watershed Committee February 2, 2016

Meeting with Lake Manager January 22, 2016 – Each page of the 2015 Lake Management Draft Report was reviewed by Bre Grabill, our Lake Manager. This year's report has several graphs and comparative data from past years. The executive summary and the recommendations for next year are attached to this report. After the draft is approved by the committee, the report will be **posted on the Portage Lake Watershed Forever website. Email and facebook notices will be posted** when this is completed. A summary of the key findings in the report will be discussed throughout the year.

Surveys of the aquatic vegetation of Portage Lake were conducted on June 15, July 22, August 6, August 27 and September 22, 2015. All Eurasian watermilfoil (ewm) that was found was treated. There were **86 acres of Eurasian watermilfoil (ewm) treated** this year which is a decrease of 48 acres from the 134 acres treated in 2014. Also, as part of **the Aquatic Invasives Study grant, 200 samples of ewm** were collected from 2 sites during the summer for testing. These samples were sent to Michigan Technological University for genetic analysis and also to SePRO to simultaneously determine herbicide sensitivity of each hybrid type. The process of collecting these samples and preparing them to be sent was very labor intensive.

After 7 years of treating ewm, our **native plants continue to have good diversity and density**. The list of all the aquatic plants found and their densities are listed in the report. Coontail, Sago pondweed and wild celery are the 3 most common native aquatics found in Portage Lake. It is important to monitor our natives as they are important to provide habitat for fish and aquatic organisms.

PHRAGMITES TREATMENT 2015 -Wildlife and Wetlands Report/Vickie Smith - These maps and reports are included in the 2015 Management Report. This year we had the smallest amount of phragmites that we've ever treated. 84 acres were treated in 2009 and **approximately 4 acres were treated** this year. A walking survey of the entire shoreline of Portage Lake was done in September and all invasives found in this area were treated. This survey found nearly 4 acres of **Purple Loosestrife** which was also treated in September. The use of **biological controls are being considered** to treat (PL) next spring. They were first approved for use in the US in 1996 and have been used with a great deal of success in Michigan and neighboring states.

Water Quality: There are thirteen water quality indicators that are monitored several times during the summer. The more important values are dissolved oxygen, total phosphorus, nitrates, and chlorophyll.

A useful chart for interpreting the data is included with the report. Several areas are monitored along the shoreline, at the 2 deep hole basins at 3 different depths, and 7 streams and 4 storm drains. Discussed DO levels and TP in the 2 deep basins, chlorophyll levels, stream #9 and 3rd street storm drain.

Committee Discussion and areas of Concern:

Swimmer's itch is a problem in several neighboring lakes. We have had isolated reports but are not aware that we have this problem in Portage Lake. However, we have not had a good method to collect data. Next summer we will develop reporting methods that can be used. We will have reporting forms available and also a designated spot to report concerns on line. WE will also do public education programs about swimmer's itch and increase awareness and reporting.

Ecoli is also tested at 3 sites and all samples have always come back very low. Discussed the statewide standardization of ecoli testing. Obtain the village and other results of testing for ecoli and post.

Narrow Leaf Cattail: Even though we continue to see increasing amounts of the invasive cattail, we do not recommend that we treat. It has become a nuance to many other lakes and they are treating it as any other invasive. However, we feel that all cattails are beneficial wetland plants. Shoreline owners have used PLM to treat on their property.

Volunteer Surveying of aquatic plants: The Portage Lake Watershed has supplemented the Lake Manager's surveys of our aquatics by also having volunteers do additional surveying. In 2013 the Watershed purchased equipment and contracted with a company to utilize the data collected to produce detailed maps of the aquatic vegetation. We did not contract for this service last year and determined that we could identify trends by doing this every other year. The PLWF will contract with ciBioBase again this year. *CI BioBase is cloud based software that automates processing of Lowrance™ depth finder sonar log files to make aquatic vegetation and bathymetric maps. We will need volunteers to help with this mapping as it is very time consuming. You collect data using high-tech, low-cost Lowrance™ HDS depth finders and record your raw sonar and GPS to an SD card in the unit. These files are then uploaded to our CI BioBase account online using a file upload tool. The output is available in your account and can be viewed online or exported to third party GIS or statistical software.* To see the maps created with this program you can go online to portagelakewatershed.com and view the 2013 and 2014 Lake Management reports.

Financial: This year our Lake Manager will be applying for our permit online using MiWaters. It is recommended that we apply early as this is a new DEQ program and permits may take longer to obtain this year. The committee would also recommend that you consider signing the contract for 5 years rather than 1 year. We have worked with this company for 8 years and are very satisfied with their work.

Submitted by,

Mary Reed, Chair
(ISC: Herb Lenon, Ted Lawrence, Jim Simons, Chuck Reed)