Portage Lake News

Newsletter Produced by PLM Lake & Land Management Corp. Spring 2020



Portage Lake Manager Bre Grabill PLM Lake & Land Management Corp. P.O. Box 424, Evart, MI 49631 Phone (800) 382-4434 www.plmcorp.net

NOTICE Portage Lake 2020 Treatment Program

The property owners in this area are planning to have the waters chemically treated to control lake weeds and/or algae. This notice is being circulated in accordance with Department of Environmental Quality (EGLE) procedures. Due to the uncertainty of weather, the treatment schedule is approximate. Please watch your shoreline for the posting of the 8.5 x 11 inch, yellow or green signs. The signs will indicate the date of the treatment, the products used, and any restrictions on the use of treated water for swimming, watering lawns, etc. One or more treatments involving water restrictive products may be applied. Please be aware that only products approved by the State of Michigan and the Federal government are being used. We have experienced *no adverse effects on people, fish, wildlife or domestic pets since apply-ing these products.* We anticipate using one or more of the products listed. Please read the restrictions. Again, the restrictions that apply to the products actually used in a particular treatment will be found on the signs posted on the day of treatment.

2020 Tentative Treatment Schedule

Treatments will be occurring throughout the summer months. Please watch your shoreline for posting signs with specific restrictions. Please also note that you will see PLM on your lake many times this summer. We will not always be treating the lake, but performing many surveys, water quality testing, etc. Thank you for your understanding as we work to preserve and protect PortageLake. The following **weeks** of have been tentatively set but may be adjusted as the season progresses due to many factors (permit restrictions, growth, weather, etc.) Always watch for posting signs. May 4: Water Quality Testing June I: Water Quality Testing, Lake Survey

June 15: AVAS Survey, Spot/Optional Weed Treatment, July 27: Survey, Water Quality Testing August 10: Spot/Optional Weed Treatment,

September 14: AVAS Survey, Water Quality Testing

A Natural Shoreline: A Better decision for you, your lake and your wallet

Lake Stewards can help keep your lake healthy by using ecological principals to maintain a natural shoreline. Having a buffer at the shoreline helps prevent erosion, which saves you from a loss of shoreline property and increased sedimentation in the water. Erosion and sedimentation causes poor water quality. Seawalls and natural shorelines (also known as bioengineering or "lakescaping") are two types of buffering systems.

Seawalls are often perceived as a more stable system and therefore used more often, but in fact they are less stable, more damaging to the lake ecosystem, and typically cost much more money to install and maintain over the years. Seawalls do not allow for absorption of energy from waves hitting the wall, causing wave energy to force back into the lake, causing more erosion and loss of sediment at the base of the wall. Seawalls also lead to negative impacts on fish, turtles, amphibians, etc while a natural shoreline or "lakescape" absorbs some if not all the energy from waves and wind.

Lakescapes use native plants, biodegradable products and natural materials to provide a stable shoreline to protect from erosion with providing ecological features, a living buffer, that adapts over the seasons and years. A few of the benefits to using native plants, grasses and shrubs are: providing food and habitat; minimal maintenance; provides shade which lowers air and water temperatures; attracts birds leading to decreases in insects; root systems anchor soil in **place**; sustains biodiversity and helps keep out exotic species such as Phragmites and Purple Loosestrife; filters more water than turf grass; reducing geese on your property as geese like to see their predators and prefer manicured lawns and seawalls.

WATER USE RESTRICTIONS

Navigate /2,4-D: Swimming or bathing: I day. Household use, irrigation, lawns and turf: 0 Days. Growing crops and non-crops "gardens": Indefinite unless assay indicates 100 ppb or less. Potable water: Indefinite unless assay indicates less than 70 ppb. Fish consumption: No restrictions.

Sculpin G/2,4-d amine: Swimming or bathing: I day. Household use, irrigation, lawns and turf: 0 Days. Non-crops "gardens": 2-14 Days depending on treatment conditions. Growing crops: assay of less than 100ppb. Livestock watering: See product label. Fish consumption: No restrictions.

Renovate/Triclopyr: Swimming or bathing: I day. Irrigation of Established lawns and turf: 0 Days. Household use & Irrigation excluding grasses: I20 days or once assay determines product to be non-detectable. Fish consumption: No restrictions.

Diquat dibromide: Swimming or bathing: I day. Animal consumption of treated water: I day. Domestic water use and irrigation of turf & ornamentals: 3 days. Crop irrigation: 5 dayss.

Florpyrauzifen-Benzyl/ProcellaCOR: Swimming or bathing: I day. Household use, irrigation, lawns and turf: 0 Days. Non-crops "gardens": 2-14 Days depending on treatment conditions. Growing crops: until assay indicates Ippb or less. Livestock watering: N/A. Stingray: Swimming or bathing: Iday. Animal consumption of treated water: I day. Domestic water use and irrigation of turf & ornamentals: I4days. Crop irrigation: 14 days.

Hydrothol 191/Dimethylalkylamine salt of Endothall Aquathol K/Dipotassium salt of Endothall

Aquastrike salt of Endothall : Swimming or bathing: I day. Household uses, irrigation, livestock watering: 2 weeks. Flumioxazin (Clipper/Schooner/Propeller): Swimming / bathing: I day. Domestic water use and irrigation of turf & ornamentals: 3 days. Crop irrigation: 5 days.

PLM Blue, Cygnet Select: water dye (tracer), Copper Sulfate: copper sulfate, Cutrine Plus-Ultra, Captain-XTR, Se-Clear and SeClear G: chelated copper, Cygnet Plus, PolyAn: Adjuvant, AquaSticker, M.D. pellets: gram negative, naturally occurring bacteria. PLM Enzyme: enzymes, NO RE-STRICTIONS!!

**Certified Applicators: Salvatore Adams, Jason Broekstra, Adam Cichon, Bill D'Amico, Jaimee Desjardins, Jeff Fischer, Christopher Garner, BreAnne Grabill, Dustin Grabill, Steve Hanson, Kyle Heath, Jake Hunt, Caleb Hutchinson, Jacob Irons, Douglas Isanhart, Adam Kehr, Michael Krueger, James Lee, Anna Lindquist, Blake Mallory, Michael Pichla, Wile Preston, Eric Reed, Cameron Robinson, James Scherer, Alison Schermerhorn, Ben Schermerhorn, Casey Shoaff, Lucas Slagel, Keith terHorst, Jeff Tolan, Andy Tomaszewski, Dennis Vangessel, Andrew Weinberg

Onekama Township Board Members David Meister, Supervisor Michelle Johnson, Clerk LaVonne Beebe, Treasurer Bob Blackmore, Trustee James Wisniski, Trustee Invasive Species Committee Ted Lawrence Herb Lennon Mary Reed Chuck Reed Jim Simons





2019 Treatment of EWM occurred in ~2.8% of Portage Lake. Only a very small portion of the lake requires any EWM Treatments!

Portage Lake Review In 2019, approximately 60 acres of Eurasian watermilfoil (EWM), Phragmites & Purple Loosestrife were managed in and around Portage Lake. As the graph to the left shows, the overall acreage of the EWM infestation has decreased over time, requiring substantially less treatment than when the program began. However, this does not mean our work is done. The Portage Lake Management Program is in place to continually monitor Portage Lake and keep the exotic plants under control, an annual maintenance program.

The abundance of healthy native plants in Portage Lake increases the long term stability of the lake. The native plant community is tracked annually, has been protected and is quite strong with over 17 native plant species found annually. Native plant populations will vary seasonally, but have remained strong despite the exotic plant control measures. Proper exotic plant control will selectively target exotic species, while promoting native plant growth.

Starry Stonewort- Exotic Plant WATCHLIST

Starry stonewort has been quickly spreading throughout Northern Michigan. Starry stonewort (Nitellopsis obtusa) looks like a rooted plant but it is actually an algae. The plant is native to Europe and Asia and was first discovered in the St. Lawrence River in 1978. In 1983, it was found in the Detroit River and has since infested many Michigan lakes. Starry stonewort resembles the native aquatic plant Chara. Unlike Chara, which is generally considered to be a beneficial plant, starry stonewort has a tendency to inhabit deeper portions of the lake and can form dense blankets several feet thick. These mats can severely impede navigation and limit growth of more beneficial plants. Starry stonewort anchors to the sediments through rhizoids (primitive root structures) which can also absorb nutrients.

Like Chara, starry stonewort also absorbs nutrients from the water through its cell walls. Starry stonewort has tiny, star-shaped, tan colored reproductive structures called bulbils that are firm to the touch when compared to its soft branches. These reproductive bulbils have been shown to stay viable for several years in lake sediments. It is unclear what effects starry stonewort may have on a lake's fishery. However, the encroachment of starry stonewort into fish spawning beds may be a cause for concern. Both algaecides and mechanical harvesting appear to be somewhat effective in controlling starry stonewort. However, given its propensity to produce massive amounts of growth, efforts to keep this invasive algae at bay will be difficult and potentially expensive. We are constantly on the lookout for new infestations of SSW for quick action. Please keep your eyes on the look out!



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