

Rice Lake Drawdown request for 2014-2015

Background to this request

The invasive Curlyleaf Pondweed (CLP) plant has been increasing in overall growth the past several years to reach a density level not seen since prior to the last series of drawdowns ending in 2004-2005. CLP grows under the ice over the winter and prevents native (good) plants from getting established. CLP also adds abundant amounts of nutrients, such as phosphorous, to the water column, which leads to severe algae blooms after the CLP breaks loose from the lake bottom and dies off in late spring/early summer.

At the 2014 Rice Lake Area Association (RLAA) annual meeting on May 6, 2014, the membership requested that the RLAA Board of Directors begin to take some action to combat the increasing growth of CLP and to help clean up the lake to reduce the chances for severe algae blooms each year.

The RLAA Board of Directors agreed to take the following actions which would lead to conducting a drawdown on Rice Lake to control the growth of CLP and to help improve the quality of the lake by reducing the nutrients entering the lake from our immediate watershed:

- Conduct a complete aquatic plant survey to measure both native and non-native species.
 - Part 1 of the survey done in June confirmed overabundance of CLP with recommendation to treat the problem with a drawdown.
- Conduct a fish survey to determine the remaining population after the 2013-2014 winterkill.
 - Preliminary results of the fish survey showed a dominance of baby carp and bullheads with few game fish. Recommendation is if a drawdown is conducted, it should help eliminate the remaining rough fish with the reduction of dissolved oxygen by not winter aerating.

What is a Drawdown and why do it?

A drawdown is a method of lowering the water level on a body of water to expose the lake bottom and freeze out the non-native plant seeds which are waiting to grow early the following season. Invasive, exotic non-native aquatic plants such as Curlyleaf Pondweed and Eurasian Water Milfoil are unable to survive a winter of exposure to the elements and will cease to grow the following season. The decrease in the density of Curlyleaf and elimination of Milfoil will allow the native plants to flourish, which is one of the changes in the lake which we noticed after the first drawdowns in the 1990's. If the correct weather conditions occur (ground freezes before snow cover), it is possible to "freeze out" many of these nuisance seedlings and prevent them from growing.

A drawdown is a very cost effective alternative to reducing unwanted nuisance plant growth; other methods such as spraying with an herbicide can cost thousands of dollars and only offer control for a small percentage of the entire lake. Cutting weeds with a harvester can cost well over \$20,000 per year (this method is used in other lakes such as the Minneapolis chain of lakes as well as Weaver Lake in Maple Grove).

Rice Lake has been fortunate to be controlled by a man-made dam (located behind Maple Grove Senior High School) which can lower the lake level up to 6 feet, exposing roughly 50% of the lake bottom. Results achieved by a drawdown on Rice Lake can be very positive. *(The last drawdown conducted in 2004-2005 was determined to be the most successful and has given us 10 years where CLP treatment has not been necessary.)* The lake level usually returns to normal in early spring less than 1 week after closing the gate at the dam.

What will it cost?

The Rice Lake Area Association will pay for all costs regarding the drawdown (including DNR permit and labor necessary) to conduct a drawdown on Rice Lake this fall/winter. **Typically this cost is less than \$250.** The drawdown will commence in mid-October, 2014. A letter will be sent to all Lakeshore Owners indicating this timing so boats can be removed from the lake before the water is too low.

Drawdown Request Process

The drawdown process has changed during the past several years since the last one conducted in 2004-2005. Under the current DNR guidelines (see Minnesota Statutes 103G.408), these tasks must be completed to allow the DNR to grant a permit for the City of Maple Grove to manage the drawdown:

1. RLAA requests the City of Maple Grove to sponsor the drawdown permit request after first demonstrating the need to conduct a drawdown:
 - a. A sanctioned aquatic plant survey justifies the need to reduce non-native vegetation.
 - b. At least 75% of the riparian landowners (those who own lake/creek property) approve of the drawdown.
2. City of Maple Grove submits the drawdown request to the DNR.
3. A public hearing is held at least 30 days in advance of the expected start of the drawdown.
4. Proper notification is made to all riparian landowners and posted in the local newspapers for the general public.

Is the Drawdown a “one-time” effort?

No, a drawdown is most effective if conducted over a period of several years, based on what the overall objectives are for this activity. For a drawdown on Rice Lake to take place, RLAA would like to insure the following objectives are considered over the course of a 3-year period:

- Year 1
 - Reduce the CLP growth
 - Complete the reduction of the carp population (based on results of the upcoming fish survey) by not aerating the lake to support a fish population.
 - Construct an Exclusion Area for growing native vegetation without the impact of fish presence.
 - Use the exposed shoreline to conduct a complete & comprehensive assessment for erosion.
- Year 2
 - Reduce the CLP growth
 - Aerate to support the fish population
 - Continue supporting Exclusion Area
 - Add more native plants as needed
 - If carp become a problem, take steps to reduce their impact
- Year 3
 - Reduce CLP
 - Aerate (to support fish)
 - Take down Exclusion area fencing, leaving newly established vegetation to grow
 - Shoreline stabilization and restoration (where needed)

What negative impact will the drawdown have?

The negative impacts of a drawdown are few in nature compared to the benefits. Here are some potential negative impacts:

- Open water lake use will be reduced from mid-October through early ice out (April/May).
- Ice rinks will need to be moved out to deeper water.
- Some aquatic species such as frogs and turtles may be at risk if they do not find suitable shelter in time.
 - Note: The DNR local hydrologist has asked RLAA to conduct the drawdown early enough before winter (mid-October) to give these critters sufficient time to find winter-over shelter.

By signing your name below you are authorizing the Rice Lake Area Association (RLAA) permission to present this request for a drawdown to be conducted beginning in mid-October 2014 through early spring 2015 to the City of Maple Grove. For more information about this drawdown request or RLAA in general, feel free to visit our website (<http://RiceLake.Homestead.com/>).

Thank you,

Rice Lake Area Association Board of Directors

George Schneider Rick Stulac Scott Roeglin Bill Kidder Luke Johnson Mark Ellingson

Homeowner Printed Name _____

Homeowner Printed Address _____

Comments (optional): _____

Yes, I support a Drawdown to be conducted fall/winter 2014-2015

No, I do not support a Drawdown to be conducted fall/winter 2014-2015

Signature _____ Date _____

Homeowner Printed Name _____

Homeowner Printed Address _____

Comments (optional): _____

Yes, I support a Drawdown to be conducted fall/winter 2014-2015

No, I do not support a Drawdown to be conducted fall/winter 2014-2015

Signature _____ Date _____

Homeowner Printed Name _____

Homeowner Printed Address _____

Comments (optional): _____

Yes, I support a Drawdown to be conducted fall/winter 2014-2015

No, I do not support a Drawdown to be conducted fall/winter 2014-2015

Signature _____ Date _____

Homeowner Printed Name _____

Homeowner Printed Address _____

Comments (optional): _____

Yes, I support a Drawdown to be conducted fall/winter 2014-2015

No, I do not support a Drawdown to be conducted fall/winter 2014-2015

Signature _____ Date _____

Homeowner Printed Name _____

Homeowner Printed Address _____

Comments (optional): _____

Yes, I support a Drawdown to be conducted fall/winter 2014-2015

No, I do not support a Drawdown to be conducted fall/winter 2014-2015

Signature _____ Date _____

Homeowner Printed Name _____

Homeowner Printed Address _____

Comments (optional): _____

Yes, I support a Drawdown to be conducted fall/winter 2014-2015

No, I do not support a Drawdown to be conducted fall/winter 2014-2015

Signature _____ Date _____

Homeowner Printed Name _____

Homeowner Printed Address _____

Comments (optional): _____

Yes, I support a Drawdown to be conducted fall/winter 2014-2015

No, I do not support a Drawdown to be conducted fall/winter 2014-2015

Signature _____ Date _____

Homeowner Printed Name _____

Homeowner Printed Address _____

Comments (optional): _____

Yes, I support a Drawdown to be conducted fall/winter 2014-2015

No, I do not support a Drawdown to be conducted fall/winter 2014-2015

Signature _____ Date _____

Homeowner Printed Name _____

Homeowner Printed Address _____

Comments (optional): _____

Yes, I support a Drawdown to be conducted fall/winter 2014-2015

No, I do not support a Drawdown to be conducted fall/winter 2014-2015

Signature _____ Date _____