

# **Lost Lake Protection & Rehabilitation District**

## **April 10, 2017**

Herbicide Treatment Permit Discussion with Wisconsin DNR, Onterra (environmental consultants) and other aquatic plant specialists at St. Germain Community Center.

Present:

DNR- Kevin Gauthier

Nick Greely

DNR-Steve Gilbert

Paul Novorolsky

Vilas County- Cathy Higley

Tom Groth

UW-Ext. – Susan Knight

Jim Guckenberger

Onterra- Tim Hoyman

Marv Anderson

Onterra – Eddie Heath

Jim Ulett

Lakeland Times- Becky

Ted Ritter

Business Connection- Lois

Via teleconference: Bob Truppe, Gary Heeler, Scott Van Egeren, Paul Wrancki

Kevin Gauthier, DNR lakes biologist, facilitated the meeting with 5 points to be covered:

- Curly Leaf Pondweed
- Monitoring before and proposed
- Short & Long term goals for population management
- Eurasian Water Milfoil
- Turion monitoring

He stated that decision for treatment and application for license begins at the local level.

Eddie Heath from Onterra said they have been surveying the lake annually for Eurasian milfoil and Curly leaf pondweed Eurasian milfoil started small and with some hand harvesting, levels have remained low. Curly leaf was found 3 years ago but was detected early so it's not too invasive. Their efforts in working with the lake management team have noticed a consistent increase in year three and it has been noted to pursue chemical treatment in 2017. About 30 acres have been identified as being affected by curly leaf pondweed.

Jim Ulett said that the Board has had several informational meetings with property owners and it was unanimous to allocate funds and move forward with a treatment plan to cease the spread of the infestation.

Susan Knight with UW-Extension stated that Curly leaf is in half as many lakes as the Eurasian Milfoil and there has been a ten year ongoing project of lakes management on Eurasian milfoil, however curly leaf is more uncertain. In some lakes it has been eliminated, but in others there is still some growth. Curly leaf likes cold flowing water as its habitat. Little St. Germain Lake treated for curly leaf in 2014-2015. The area that was affected started out with 26% before treatment and after treatment it is at 1.6% on that specific area. In 2016 the treatment areas will be the same.

Onterra recommends treating an area for 5-7 years. Some years may not need a treatment but it should be planned for in case it becomes necessary to apply it. Eddie said the district needs to know their goals in order to determine a management plan.

Susan noted that Spider Lake had been treated from 2016-2016 and treatment has had a negative impact on other plants as well, so this treatment does not come without consequences; it is not going to hit curly leaf alone. Eddie responded to say that fern pondweed and flat stem pondweed are susceptible to the chemicals, others are not which is why they do the application early to limit the impacts. There's definitely a concern that curly leaf may displace native plants changing the water quality. But if not treated AIS may take over, making way for more invasives. Fern leaf pondweed blankets the bottom to keep the sediment down.

Tim Hoyman with Onterra said that when curly leaf dies off there will likely be a spike of phosphorous leading to algae bloom. That's something that's hard to measure. Kevin from DNR said the point intercept survey a few years ago was at 40 points and will look to increase points in affected area in late summer. To clarify, he said there will be some native plant impact. Some will be slow to recover but there's an ample population source to re-grow. The will be targeting the curly leaf pondweed and a small part of other plants will be affected.

Marv Anderson asked how much local history from other lakes in regards to collateral damage is available and how much difference does it make. Kevin said it's uncertain because every lake is different, some expand and some crash. Herbicides may move quicker in some areas. Tim Hoyman noted that there's always a risk but it doesn't always expand in the Northwoods like in some other areas of the state. It needs to be observed, document when and if expansion appears and determine the time best suited to manage it.

Marv asked if there's any measured effects to plant and fish life. Kevin said there are no specific answers to that as yet as data is being collected as we move through this process. Jim Ulett mentioned that the herbicide is pointed to treat below the surface. Tim Hoyman said it's applied just below the surface and mixes in the water. It's likely it will stay there long enough to be effective. In fact, weeks later there may still be some chemical traces remaining however it would be below measurable levels. Jim said the larger the area, the more it will dilute down. Eddie noted that the herbicide applied will be 1.5-2.5 per million and by 14 hours after treatment it will likely be below measureable levels.

Marv asked what impact there may be by the outlet and dam. Tim Hoyman suggested that they lower the water level the day of the treatment and then raise it back to normal levels to keep it from flowing over and going downstream. Eddie pointed out that concentration and exposure time can make a difference, the speed of flow lowers the exposure time.

Eddie also noted that Eurasian milfoil is a perennial plant and the treatment is applied to kill the root. Curly leaf is an annual with a pine cone like structure that grows even under the ice with sunlight causing rapid growth. It creates turions that go into the sediment and sprout in the future. The goal is to kill the plant before the turions produce which is why a 5-7 year plan is suggested. They don't know how long turions have banked and can be viable. Repeated treatments can be hard on the lake and it's possible to do less treatments with early detection.

They would target areas with the largest population of turions with a multi-year program for the greatest impact. There's a 5-tier density scale for determining the dominant areas to target. They would do mapping surveys each year in late June.

Tim said that the annual report is informational and some lake districts want to expand treatment when they see quick success but he cautions that it takes time to manage and treatment in some other areas may not be as effective. Eddie said hand harvesting of curly leaf pondweed has been tried but herbicide treatment is needed for larger areas. Kevin suggested to keep the population suppressed additional hand harvesting in conjunction with the chemical treatment may help. Jim Ulett asked Kevin if he's suggesting hand harvesting in lieu of treatment or in addition to the treatment. Kevin replied that it would be in addition to the treatment. Jim said they have had divers with suction equipment pulling roots and have gotten a lot out. Need to include both methods in the management plan.

Eddie reiterated that the treatment area is still slated for next year with re-evaluation of the same area to see if sprouts are irrelevant and to determine treatment if needed. It's possible you may need to wait a year to see how effective it was on the turions.

When asked if the permit process occurs every year, Kevin replied "yes" that they need to evaluate the data. Ted Ritter mentioned that the conditional use permit is still available and doesn't become active until Onterra goes out on the lake. Kevin said that the permit is also based on predictions provided by Onterra. Jim Guckenberger said there were a lot of turions in the bay and have the potential to sprout. Eddie said there were a lot produced last year and they have determined that this is the time to act.

Kevin said the Eurasian milfoil is not acting overly aggressive but the footprint may be expanding and getting denser. Jim Ulett said the lake district is focused on the curly leaf pondweed. They've treated the Eurasian milfoil and are managing it with Onterra. They're turning their focus to the curly leaf because it's affecting more of the lake usage and they will go back to addressing the Eurasian milfoil in the future.

Susan cautioned that there's the possibility if you get rid of curly leaf that the Eurasian may move into that area and take over. Marv Anderson said they have a lot of native plant and there's less concern for Eurasian at this time. Ted Ritter noted that the areas treated for curly leaf on Little St. Germain Lake now have more native plants and a tolerable level of Eurasian.

Eddie from Onterra said the key is to develop managing goals and be careful not to be reactive. The management plan should also include a strategy to include the Eurasian.

Steve Gilbert with the DNR has a concern for habitat and the unknown impacts the treatment may have for the fish habitat. It flows downstream in to Lost Creek and could affect the spawning below the dams. Possibly spot treatments would keep it more contained and have less adverse effects.

Scott Van Egeren said that treatment for curly leaf pondweed will be a long term project. There are still a lot of questions and unknowns. Monitoring is extremely important as they are

collecting data on turions. Kevin suggested they pick a spot for hand harvesting and survey it again in the spring. Eddie took it further and said the native plants survey post inspection should be done in June to create an on-going strategy. April & May pre-treatment surveys are valuable.

Concentration monitoring of the treatment area and turion monitoring are crucial. The Rapid Response Grant will help but gathering samples is labor intensive and costly. Eddie asked Kevin if the DNR had any resources to assist in the sampling. Kevin said they may have interns available but no staffing to help.

Jim Ulett mentioned that the dam is controlled by the lake district with restrictions by the DNR that need to be followed. They'll need level requirements to present to the DNR for permission to lower the water level.

Gary Heeler felt that hand harvesting would require an army to make an impact.

Respectfully Submitted,

Lois Ruediger