

Save Black Lake Coalition

Community Meeting

Thursday, September 22, 2011

The meeting convened at 6:30 at Black Lake Bible Camp. Coalition steering committee chair Deb Wallace lead the meeting. She expressed the coalition's appreciation to Thurston County for their assistance and especially for their efforts to speed up the process. Deb specifically expressed thanks to Rich Doenges and Janie Civile for their dedication to our project. The county applied for a grant on our behalf and we received the grant on June 19, 2011. The grant financed a survey of the noxious and nuisance weeds in Black Lake.

The county quickly solicited bids and the contract was awarded to Tetra Tech. Their bid was under budget and they were able to complete their work by October 1, 2011 so we will be eligible for the next grant cycle. The next grant would finance the actual management or abatement of the weeds.

Janie Civile is the Thurston County Lakes Aquatic Resource Manager for Lakes. She spoke about the various weeds found in Black Lake. The lake has a significant concentration of spatterdock or cow lily (the lily pads with a yellow flower), which are native plants. The fragrant white or pink water lily (pad) is a noxious weed. These pink and white lily pads are now present in high density levels in our lake. When they decay, the rhizomes or rootstalks rot.

Black Lake contains the infamous eurasion milfoil, which is a noxious weed (it looks like a Christmas tree branch). The water nymphs, although native, are also a problem when they grow out of

control. The filamentous green algae (which is everywhere) is normal for the lake, but has become very productive.

The Thurston County Noxious Weed Board has been surveying the lake for milfoil since 2007. The county sends divers into the lake to identify milfoil. When the divers encounter milfoil, they use a hydraulic vacuum to remove it. The County received a grant from the Dept of Natural resources, which paid the \$7000 cost. Divers removed over 600 pounds of Eurasian Watermilfoil this year.

Janie identified the areas around the lake where there are the highest concentrations of pink water lilies. The yellow irises are also noxious plants. Janie was able to identify the areas containing the highest iris population.

Harry Gibbons, Toni Pennington, and Shannon Brattenbo of Tetra Tech have 60 years of collective experience with aquatic plants. Harry spoke at the meeting regarding the findings of the survey. According to Harry, aquatic plants are essential for habitat and some algae is critical for nutrients. We need to develop a long term integrated management plan to preserve the balance between aquatic plants and algae. Harry confirmed that, while necessary in some quantity, weeds that grow out of control affect the health of the lake.

Harry confirmed that milfoil is a very big problem. It spreads through fragmentation. This means the little leaflets can spread and root and make another plant. If you hand pick your weeds, get them by the roots and make sure you grab the little leaflets.

Irises will completely fill in the lake if they are not controlled. They are damaging to the habitat because they crowd out the native plants.

Some native plants are perfect for the shoreline AND inhibit geese. The geese don't like larger plants along the shoreline because they think there may be a hidden predator. The survey will provide a list of approved native plants to plant along the shore instead of irises.

The white and pink water lilies choke out the native animals and plant life. They use too much oxygen, which hurts wildlife and increases bacteria production.

The water nymphs are native nuisance plants, which grow thick and dense. They interfere with recreation and degrade the habitat and water quality. Water nymphs are spread by seed so they do not fragment like milfoil. The nymphs need to be controlled, but not completely eradicated.

The nutrients that contribute to the blue green algae come primarily from the personal use and groundwater flow. The geese are also significant contributors to the development of the algae.

The spatterdock is the native nuisance lily. However, it is a beneficial plant that we do not want to eliminate. It can be controlled by manually picking it if it interferes with your recreational property use. While we hope to decrease the population, the goal is to replace the noxious white or pink lily with the spatterdock.

The plan is to control the native nuisance weeds and eliminate the invasive non native species. This will be a long term approach. It is akin to taking care of your own yard. The goal is to get it under control so that it can be maintained in the long term.

The milfoil will need to be hand pulled. Tetra Tech's plan will maximize habitat and recreational use, but a long term management program will still be necessary.

Harry explained that noxious weeds can be controlled by using the following methods:

1. Environmental manipulation – Not really feasible here as we have little ability to control the environment.
2. Biological control – rarely results in eradication. Grass carp and insects (like a weevil) who feed on invasive weeds can be introduced. However, they only reduce, rather than eliminate, the noxious weeds. It is not likely we could get a permit for grass carp.
3. Manual control – barriers, hand pulling and raking. This is labor intensive and very expensive.
4. Mechanical – machine harvest the weeds.
5. Chemical – apply chemicals to control the weeds.

Harry, who is an environmentalist, generally avoids the use of chemicals. However, short term chemical use may be necessary when the noxious weed population is high.

Some manual techniques for controlling weeds on your property were discussed. You can use burlap and lay it on the bottom as a weed barrier. You can use sandbags to hold it down and it will last four years. There are other bottom barriers available. You can obtain an online permit with the Department of Fish and Wildlife for a half acre of coverage.

However, it is important to bear in mind that too many manual weed barrier permits obtained by private residents could affect your ability to get the large scale permits you need for the overall weed control plan.

Machine harvesting in Black lake is problematic because it stirs up the bottom and also spreads the fragments. Since our lake has very little water flow into it, harvesting would be self defeating because it could actually increase the weed spreading. Diver assisted dredging is effective because the diver vacuums the plants and gets the fragments. Since it is extremely costly, it is probably not feasible.

Chemical controls are not something you want to use on an ongoing basis. Harry recommends the use of chemicals to eradicate the plants so that you can get the lake to a manageable level. One application can eradicate the invasive weeds to the point where they can be controlled with manual methods in the future.

There were 6 herbicides considered in formulating the plan. We don't need the strongest pesticide because the milfoil is being manually removed by the county using divers. However, the divers can't get to the milfoil that thrives among the lilies due to poor visibility. Chemicals known as Clearcast and Triclopyr could work together for the various species. Sonar, another type of herbicide, would also kill the water nymphs. However, Harry did not believe the level of milfoil in Black Lake justifies the use of this more potent chemical. The stronger chemical would kill too many plants, which would subsequently increase the algae bloom.

Harry recommended a combination of manual, mechanical (in the long term) and chemical. You need a monitoring program so you can react fast and deal with potential overgrowth or new invasive species.

You can change your plan based on what the monitoring efforts reveal. An adaptive long term program is necessary. You need a multi-year strategy with an adaptable and sustainable program. Harry favors an aggressive approach with the non-native species and a long term approach with the native plants. The chemicals have all been analyzed for environmental impact, and are approved by the Dept of Ecology. These products have no direct toxicological effect on the animals.

After conducting the survey, Tetra Tech suggested the following four proposals for managing the weeds:

1. Do nothing.
2. Manual and mechanical removal.
3. Mid-term eradication.
 - *single chemical application
 - *followed by manual or mechanical removal
 - *long term monitoring
4. Short term eradication
 - *most aggressive
 - *two years of chemical application
 - *survey on the 3rd year
 - *one year manual removal
 - *most rapid approach

Based on an informal show of hands of those attending the meeting, solution 3 and 4 received the most positive responses, with solution 4 receiving the most affirmative responses.

Harry continued to stress that ongoing monitoring is critical to the future success of weed management. It is important to educate all of the neighbors, as well as those who bring their boats and watercraft

from outside. The invasive weeds can be transferred into the lake on boats coming in from other bodies of water.

Tetra Tech formulated a time-line to ensure that we will qualify for the next grant cycle. The plan is to implement the actual weed removal by June of 2012.

Vern Bonfield spoke about our fundraising efforts. We raised \$12,000, which exceeded the \$10,000 necessary to match the initial grant. Those present at the last two community meetings donated additional monies to enable us to set up a separate account for postage.

The coalition has completed the paperwork to qualify as a non-profit organization. We hired a web designer to develop a web page. It is already up and running (SaveBlackLake.org). The website will eventually contain information regarding blue green algae, lake history and pictures of the various weeds. The meeting minutes will be accessible and it is hoped that we will actually be able to put video of the meetings on the site. You will find suggestions for manual weed control for your property, including instructions on how to build bottom barriers. There will also be announcements of upcoming lake events such as the regatta, fishing derbies and dates for fish stocking.

The next community meeting will be held on Tuesday, October 11, 2011 at 6:30 pm at Black Lake Bible Camp. Bring your neighbors and send us their e-mail addresses so we can get them involved. Tell them we serve coffee and excellent cookies.

The meeting was adjourned at approximately 8:15. Respectfully submitted – Linda Tobin