

Loon Lake Wood Debris Study

Public Meeting Summary

Overview and Purpose of Loon Lake Wood Debris Study

Washington State Department of Natural Resources (DNR) conducted the Loon Lake Wood Debris Study to understand the source and nature of organic material in Loon Lake, which is located in Stevens County in northeastern Washington. State Senator Bob Morton, 7th Legislative District, initiated this study with DNR's Commissioner of Public Lands, Doug Sutherland in 2007 after residents expressed the desire to learn more about the "muck" in the lake.

The study consists of three phases:

- Phase I: Review of historic and scientific data
- Phase II: Sediment study including field sampling and analysis
- Phase III: Report results and determine next steps

Public Meeting Overview

An introductory public meeting was held in April and community input was received on the scope and specifics of the sampling approach. Following that sampling work and analysis of the results, a second community meeting was held as described below to share the results.

Date: Jan. 7, 2009

Time: 6 – 7:30 p.m.

Location: Loon Lake School

Approximately 30 people attended the public meeting to view study results and discuss next steps.

Notification

Notification and advertisement of the public meeting occurred in the following ways:

- **Letter to community:** Senator Morton sent a letter to his Loon Lake contact list
- **Web site notices:** Information was posted on DNR's Loon Lake Wood Debris Study Web site and the Loon Lake Property Owners Association Web site
- **Press release:** DNR sent a press release to local media
- **Community newsletter:** Information was provided to Mark Whittaker for the community newsletter

Public Meeting Format and Materials

Public meeting attendees were greeted at a welcome table and had access to the Draft Site Investigation Report for Loon Lake, maps of the sampling locations, and photos of the sampling and analysis as well as actual vegetation samples from the lake.

The meeting began with Senator Bob Morton welcoming attendees and providing historical context for the Loon Lake Wood Debris Study. Fran McNair, DNR, provided an overview of DNR and introduced the project team. Dr. Roger McGinnis, Hart Crowser, described the process and results of the study. Clay White, Stevens County, presented a brief overview of the steps for residential applications for dredging in front of properties along the lake.

After the presentations, Pat Serie, Envirolssues, facilitated a question and answer period.

The meeting adjourned at 7:30 p.m.

Presentation Overview

Senator Morton welcomed the attendees and introduced the meeting. He told the community that study results did not support a wood waste cleanup in the lake, but that there was \$100,000 remaining in his budget for this project and said that he would bring the study to the state to see what else might be done to address homeowner concerns.

Fran McNair, DNR, introduced the project team.

Roger McGinnis, Hart Crowser, described the process that Hart Crowser undertook with DNR to create the Sampling and Analysis Plan (SAP). He explained the actual sampling occurred in September, at the recommendation of Department of Ecology, when the water was the most clear.

Roger showed the sampling site locations and told the community they moved some of the locations closer to shore for a better chance to find wood waste. Many of the sites were based on the community input received at the April public meeting.

Roger provided photos of the testing methods and samples, and described the physical characteristics of the sediment. He said that much of the “muck” is composed of diatoms and phytoplankton (tiny living organisms), and some pine needles. His team analyzed the surface samples as well as samples from deeper in the muck to make sure to catch any presence of wood waste.

Roger described the chemical analysis that his team did. They found no difference between samples near the historical saw mills and the reference samples. He said that they analyzed the nutrients in the samples and found a consistent amount of nitrogen and phosphorus in all the samples except for LL-03 which showed less organic matter and more sand. Roger indicated that this might be due to high amounts of fertilizer or detergents in the water but is not associated with wood waste. Since they did not find wood waste, they did not do bioassay toxicity testing because of the high costs of these tests.

Clay White, Stevens County, gave an overview of the permit process for dredging. He said that the goal of the county is to work with the community to make this process as simple as possible. He distributed a handout with tips. Clay encouraged applicants to get neighbors together and come in early to get the permit process going. He encouraged residents to submit joint applications to defer some of the permitting costs. He also let attendees know that the county has a fast-track program to help streamline the process.

Questions and Answers

Pat Serie, meeting facilitator, led the question and answer portion of the meeting. Those questions and responses are included below.

- How many sampling sites were there?
Roger McGinnis: There were four reference sites and 21 locations along the east side. We did take more than one sample at each of those 21 sites. Some of the samples were surface and some were deeper core samples.
- I saw some data from Deer Lake, two or three miles from here that has the same acreage, elevation, and depth as Loon Lake. Loon Lake had a railroad and a sawmill on it, and has muck in it. Why do you think that there is no muck in Deer Lake and there is in Loon Lake?
Roger McGinnis: I am not familiar with Deer Lake so I don't know what the issues might be. Loon Lake's sediment is very nutrient rich which promotes the growth of vegetation.

- The permit process is probably going to cost thousands of dollars per resident once you get down to DNR's right-of-entry, insurance and SEPA. I dredged last year and after the wind and the ice, I will have to repeat the process. We're not going to get anywhere doing this. We need a different solution.

Clay White: There are a lot of costs with the Shoreline Management Act. We [at Stevens County] share your frustrations. There are a lot of jurisdictions involved and it would be nice to have it streamlined by the state. What's in our control is to defer some of the costs and to encourage you to get together with your neighbors to save money on the permitting process. Also, the Stevens County permit is good for five years.

- Getting the material out of the lake is one thing, but if it is put on the shore, it gets washed back in and most people don't have a place to put it.

Clay White: Yes, it needs to be removed from the shoreline environment. You need to find an area of land that you can move that to. Luckily, it's not toxic material so you should be able to find places that will accept it.

- If all of us get together, are you willing to let us do a large dredge and get a state or county bid?

Clay White: We would encourage you to do that and I think that the other agencies would encourage it as well. It's better for the lake if you don't piecemeal the dredging. One of the issues when we talked about this before this study was the cost of materials for this process and working together would defer some of those costs.

Fran McNair: We know that dredging is a temporary fix. We need to figure out why the vegetation is growing there. There is something else at play here that needs to be addressed. The Loon Lake Association has done a great job of putting out information about fertilizers. Maybe Senator Morton can look at that so that we can solve the problem rather than a quick fix.

- If you had found wood waste, and found that it was associated with the sawmill activity from years ago, what would we be facing? What is the difference between what we are going to do now versus what we would have done, had you found it to be wood?

Fran McNair: The normal process is that you would approach the entity that put the wood waste in the water. The sawmills don't exist anymore so this would be considered an "orphan site" by the Department of Ecology (ECY) and we could have asked for toxics money from ECY to clean up the wood waste. The state would have to do that with property owners because there are some private shorelines here. There are a number of sites across the state that qualify for this type of money. Money is very tight so it's not clear how you would do in getting funding this year. But, because it's organic matter, we have to look at how we impact the lake. We may need to get more people on sewer or talk to people about using less fertilizer on the lake.

- We're talking about organizations like the Loon Lake Property Owners Association putting together an application for a lake management district but DNR owns a large part of this lake and a considerable amount of the lake shore. If we were to form a lake management district, would you participate and contribute to the costs?

Fran McNair: DNR doesn't get funding from the general fund. DNR's aquatics division gets money from harvesting geoduck and leasing land. We would like to participate but we may not have the money to do it. We may be able to participate in staffing or technical assistance. We will always work with you to try to get grants.

- It sounds like you are just backing off and saying that because it's not wood waste, there's nothing you can do.

Fran McNair: What we're saying is that because it's not wood waste, there is a different avenue. Dredging is one way but we know that that's a temporary fix. The question is how we find the dollars to eliminate the nitrates and phosphates in the water. That's the long-term fix. We can work with you to help you find grants to make that happen.

Senator Morton: There is \$100,000 left in this project. I will introduce this to the legislature and ask that this be designated for Loon Lake. I will be meeting with the new commissioner next Tuesday. It is his policy decision on how he wants to deal with this. Last year, it was turned over to the aquatics division of DNR. There is a fine line we need to walk with mingling private and public funds. There are many private and public partnerships but the state is not legally able to take public money and make it into private enterprise or business. This is a public lake but it's also private. If the state steps in to remove the material on the lots that are affected, that's a benefit to the private owners.

- There have been logs floating in Carlson Bay for four years, banging together and chipping off. I've found wood chips, sawdust and pinecones in the water. If you grind a tree up into dust, that's vegetation and that's what you've found. I can't believe that there is no wood waste in these locations.

Roger McGinnis: Even in very old "muck" you can still see the sediment structure. When we did the microscopic exam and looked at the cellular structure, it was definitely aquatic vegetation. Tree vegetation and aquatic vegetation are very different. Sawdust will retain its cellular structure so we would have seen that in the microscopic exam.

Senator Morton: The scientists have broken down the muck in that lake. No matter what we're calling it, the main issue is getting it out of the lake. We're very lucky that it is not toxic.

- Dredging a small area is very expensive and basically useless because we have to do it every year.

Fran McNair: That is why we are encouraging you to work together.

- You're saying we have to foot the bill for dredging. What is that \$100,000 going to be used for?

Senator Morton: I will put in as generally as possible for the Loon Lake Project. Right now, I don't know what we can do with that.

- What do you estimate a project like this would cost? Six years ago, I got a bid for \$18 million for just *part* of the bay.

Fran McNair: We don't have an answer to that at this time.

- This condition has been here for many years. What happens if we don't do anything?

Public response: We'll lose our lake! Our fish will die.

- If DNR owns the land under the lake, how are you going to take care of it? It's your material. Do we have to come to you to get a permit from you to remove your material?

Fran McNair: Actually, the mud belongs to the state but the vegetation doesn't. We don't provide permits, those come from the county.

- How does this affect the definition of navigability and our second class shorelines? The line of navigability has not been determined yet. I have a right to get to my dock. A sailboat has a six foot keel and I need a channel straight out to get to the middle of the lake. My shoreline should be drawn from the point of the water level but the lake is not full and if there is muck in there, it's not navigable.

Dave Harsh: At statehood, when this rule was written, they weren't using sailboats. It hasn't been determined by the board of Natural Resources but, in general, the shoreline is drawn four to six feet from the adjudicated level of Loon Lake.

- If the muck is not toxic, does that mean it's safe for us to walk in, safe for kids to play in? Is there any sand at the bottom of the muck?
Roger McGinnis: In some locations, we did get some sand-like material. The samples didn't show any toxic effects. It is not dangerous waste or toxic waste.
- Ultimately, we're all in this together. It doesn't matter that the state is out of money, we have to work together to find a long-term solution. We know what the muck is, but we need to work together. Maybe we need to dredge now so this doesn't get worse.
Senator Morton: DNR is a separate entity from the rest of the state agencies. We elected a new commissioner, and we will see what his policies are.
Fran McNair: I was in a transition meeting and told Commissioner-elect Peter Goldmark that lake management needs to be a focus. Loon Lake is not the only lake with issues. Lake vegetation is a problem statewide that we've got to deal with.
- What effect, if any, does this have on the water quality in the lake? What do we do to fix it?
Roger McGinnis: The nutrients are the issue and they can cause algae which will affect the clarity of the lake and eventually have an adverse effect on fish. Ideally, there would be money to do something proactively before the conditions get this bad.
- We had a lot of freshwater runoff this spring and it's getting earlier every year. In July, the water level was below 15 meters. Low levels mean no fish in some areas unless there is a spring.

Pat adjourned the meeting at 7:30 p.m. and encouraged attendees to contact the project team with questions. She said that the report would be finalized and posted to the Web site.