

LAKES REGION PLANNING COMMISSION

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MINUTES
LRPC COMMISSION MEETING
 Gilford Community Church
 Gilford, NH
 April 26, 2010

PRESIDING: Robert Snelling, Chairman **CALL TO ORDER:** 6:00 PM

QUORUM: Yes **COMMUNITIES PRESENT:** 9

MEMBERS PRESENT:

Maggie LaBerge, Alexandria
 John Cotton, Andover
 David Kerr, Barnstead
 Maureen Criasia, Center Harbor
 Anne Cunningham, Freedom
 Robert Oram, Freedom
 Scott Dunn, Gilford
 Richard Wait, Gilford
 Stanley Bean, Jr., Gilmanton
 Todd Elgin, Holderness
 Robert Snelling, Holderness
 Warren Hutchins, Laconia
 William Bayard, Meredith
 Herbert Vadney, Meredith
 Barbara Perry, Moultonborough
 Wayne Crowley, Northfield
 Doug Read, Northfield
 Patricia Jones, Ossipee
 Patricia Farley, Tamworth
 Thomas Peters, Tamworth
 Jay Kitchener, Tuftonboro
 Roger Murray, III, Wolfeboro
 Chuck Storm, Wolfeboro

OTHERS PRESENT: Jody Connor, Amy Smagula, NH Department of Environmental Services (NHDES); Brett Durham, Squam Lakes Association; Alexandria: Bonnie O'Brien-Poire, Ed Skroback; Belmont: Ken Knowlton, Rep. Jim Pilliod; Center Harbor: Bruce Bond; Gilford: John Goodhue, Lee Duncan, Alan Kirkman, Joe Paterno, Stephanie Verdile; Moultonborough: John Desrochers, Sam Perry; New Durham: Rich Rines; Ossipee: Roger ter Kuile; Tamworth: Dave Farley, Wolfeboro: Kurt Dietzer, Joe Williams; Joe Letourneau. Media: Lauren Tiner, Gilford Streamer; Gail Ober, Laconia Citizen; Adam Drapcho, Laconia Dialy Sun. LRPC: Kimon Koulet, Marie Gelinas; and other interested parties.

Excused: Steve Favorite, Bristol; Herb Farnham, Moultonborough.

1 Welcome and Introduction

Chairman Robert Snelling called the meeting to order at approximately 6:00 p.m. and welcomed all members. He asked for a motion for those present to declare a quorum for the purpose of conducting business, a motion was made and unanimously approved. *M/S/P Storm/LaBerge*

2 Minutes of March 29, 2010 Commission Meeting

Chairman Robert Snelling asked if there were any corrections to the minutes of the March 29, 2010 meeting. There being none, the minutes were unanimously approved as presented. *M/S/P Waitt/Perry*

R. Snelling said last month's commission meeting focused on household hazardous waste program, and the growing concern of medical waste and proper of pharmaceuticals.

R. Snelling said there will be a brief demonstration on permeable asphalt held in the church parking lot following the meeting, and church members will provide a tour of the church and community facility for those interested. He said tonight's meeting will focus on the impact of milfoil and invasive species on our waterbodies, and what we have learned from different strategies.

3. LRPC FY 2011 Budget

The Commissioners unanimously approved the proposed FY 11 LRPC budget as presented. *M/S/P LaBerge/Waitt*

4. Overview of Exotic Species in NH

R. Snelling introduced Jody Connor, NH DES Limnology Center Director said limnology is the study of fresh water. He deals with various water quality issues in the state ranging from lake assessments to exotic plants to boat inspections to volunteer monitoring to pool inspections, fresh water to coastal water beaches to mercury analysis in fish. He presented a brief overview of exotic species in New Hampshire. He said variable-leaf milfoil is a plant which seems to thrive in the state's relatively acidic water bodies. It begins in small patches that become a large problem if nothing is done. Milfoil grows at a rate of an inch per day, and can spread through seeds as well as through fragmentation. This can occur when a propeller rips through a plant and cuts it into small pieces and floats.

He said milfoil can reproduce in various ways and grows in a large range of conditions from organic mud to rocks, which makes the invasive species difficult to keep track of. It's unknown how the plant was introduced to the state, but boats, motors, and trailers can work as a transportation method for milfoil which can grow and spread by fragmentation in the water by its seeds to create new plants. When a water body is newly infested, the first patch is often found by the public boat launch. He said an unchecked infestation can crowd out native plants rendering the local ecology unsuitable for many native aquatic animals within a few years of its initial introduction to a lake or pond. One theory of how exotic plants came to be in the lakes and ponds is pet stores purchasing exotic plants for aquariums back in the 1960's.

His list of potential impacts includes an economic nightmare once the weed has grown so thick that infested waters are impossible to swim in and impassable by boats. Property values decrease as the nearby lake or pond becomes more of an eyesore than an asset. J. Connor said the water drains from that lake to water bodies downstream, the milfoil floats along for the ride spreading throughout the Lakes Region and the southern part of the state. His department has logged 83 infestations on 74 of the state's water bodies.

J. Connor said variable milfoil is the largest plant, which he described as a disorganized feathery plant with five leaflets that whirl around a root system and will flower above-water. DNA testing will identify

is the milfoil native or exotic. He said there are 14 different types of milfoil: Variable Milfoil, Fanwort, Eurasian Water-Milfoil, Brazilian Elodea, Curly-leaf Pondweed, European Naiad, Water Chestnut, Purple Loosestrife, Common Reed, Parrot Feather, Yellow Floating Heart, Hydrilla, Flowering Rush, and European Frogbit.

Control strategies include restricting access of infested areas to recreation, installing fragment barriers to block sunlight and contain fragments, simple hand-harvesting or diver-assisted suction harvesting (DASH) devices, mechanical harvesting, drawing down the water level, dredging or the use of herbicide. The use of chemicals is not their choice of treatment, however, he said that none of the other techniques have proven effective in large-scale infestations, at least not without the initial application of 2,4-D. This systemic herbicide will kill all of the plant and will not harm other plants or animals when applied with discretion. Drawdown has pros and cons in treating milfoil. One of the cons is that it kills muscles and aquatic plant life. Dredging is expensive and typically will not eradicate milfoil. R. Snelling said there is some speculation on towns that allow construction itself, that the sub-straight creates a higher potential for the growth of milfoil. J. Connor said this is what has been found when dredging area sediment and nutrients are exposed, milfoil will thrive.

J. Connor said he and Amy Smagula, in conjunction with the NHDES, published the *Aquatic Plants & Algae* of New Hampshire's Lakes and Ponds is a reference field guide give the reader a generalized summary of the plants and their ecology, and aid in the identification and understanding of the most frequently seen species.

5. Research Initiatives

R. Snelling introduced Amy Smagula, NH DES Limnologist/Exotic Species Program Director who presented detailed results of many studies the department has commissioned due to \$1 million federal funding awarded in 2004 in conjunction with Sen. Judd Gregg, the EPA, and NOAA. Milfoil is the number one problem in the state. They studied the environment surrounding the milfoil that allows them to grow (bedrock, lake basin, sediment, and environmental characteristics). She said the Waterways Experimental Station Project evaluated twelve aquatic herbicides ranging from Penoxsulam to Diquat to Synthetic Herbicides to Nematodes to 2,4-D. The studies confirmed that 2, 4-D was the best available treatment chemical, though one study is investigating the use of freeze dried nematodes into the water that springs back into life and eat away at milfoil. She said they do not want to introduce something that is going to cause problems for something else, expecting that the nematode studies will take many years to produce a new viable milfoil control technique. Studies have shown that 2,4-D treatment, in its granular form, is still the most effective method. Herbicides do not kill seeds as there are 10-40 seeds per stalk, 871,000 seed heads, and 209,000 seeds per acre.

One audience member asked if 2, 4-D has anything to do with the decrease of salmon in local waters. A. Smagula said that 2, 4-D does not affect the fisheries, yet milfoil got out of control, and it could ruin the structure of the habitat by creating a monoculture of the same plants.

Ken Knowlton of Belmont said he thinks cyanobacteria have defeated milfoil. He referenced an instance where a pond was treated with the herbicide 2,4-D and experienced a subsequent algae bloom which required the closing of beaches, and was associated with a cluster of Amyotrophic Lateral Sclerosis also known as Lou Gehrig's disease. He said milfoil does not make people sick or kill them. Research has shown 2,4-D can increase cyanobacterias by increasing phosphates. A. Smagula said cyanobacterias blooms have been occurring across the state for a long time. People need to be cognizant with what they are doing in their watershed noting that construction and other environmental disturbances can set the framework for cyanobacteria which is fair game in any lake. She said her department has been sharing data with a Dartmouth College study which is examining the link between

cyanobacteria and Lou Gehrig's disease. No correlation has been seen with milfoil treatments at this point.

A. Smagula commented on the Plant Replacement Project noting not to leave a void where milfoil has been removed by transplanting native plants.

6. Innovative Techniques on Squam Lakes

R. Snelling then introduced Brett Durham, Squam Lakes Association Director of Recreation who said the lake his organization is dedicated to preserving 38 acres of infestation in the Squam Lakes Area, and has attempted many management techniques which include: plant survey and mapping, Lake Host and Weed Watchers, handpulling/DASH, benthic barrier, herbicides, and drawdown. Drawdown is the ability to control and displace large volume of water, requires several freeze-thaw cycles with no snow, affects all aquatic life, and is only a short-term cure. He found that through a combination of labor intensive hand-pulling of smaller patches, 2,4-D treatments on larger infestations, and encouraging neighbors to keep an eye out for milfoil before it progresses, significant and lasting progress can be made. He noted that concerns of the chemical's impact on the environment should be balanced by the parallel threat of a milfoil infestation. Once it reaches a dominant position in the lake, the ecosystem's diversity is history. Monoculture not only gets the plants, but also of the insects and fish that can live in them. Milfoil treatment for the Squam Lakes Association adds up to over \$200,000 per year with the cost of equipment, supplies, consulting, volunteer labor/divers.

7. Other Business

There being no other business, the meeting adjourned at approximately 7:50 PM for a brief demonstration on permeable asphalt held in the church parking lot, and a tour of the church and community facility.