

Waukewan Shore Owners Association
Minutes of Annual Meeting
Meredith Community Center
July 11, 2009

Directors Present

Kay M. Anderson
Deborah F. Corr
William Corr
Duncan McNeish
John P. Pazzani
Douglas W. Steele
Robert S. Wenstrup

Members Present

A large number, too
many to list

Guest

Professor Steve Kahl,
UNH, Durham

Meeting Agenda:

- Call to order and recognize quorum of members
- Elect John P. Pazzani as director
- Discuss road salt runoff measurements and effect of chloride on lake water
- Introduce invited speaker Professor Steve Kahl, UNH, Durham
- Present financial report for past financial year
- Weed watcher report
- Lake host report
- Note new display at the Waukewan kiosk
- Note the threat of Japanese knotweed
- Update on this year's Kodiak summer camp
- Recognize Jim James for his maintenance of the Waukewan kiosk
- Note courtesy boat inspection 7/25/09 at the Waukewan small boat launch ramp
- New business
- Adjourn

President Robert Wenstrup recognized a quorum of members present and the meeting to order at 9:10 AM.

Election of John P. Pazzani as director

Following the directors' nomination of John P. Pazzani, the membership present elected him a director for a term of three years.

The president then discussed measurement of chloride from winter road salting in streams feeding Lake Waukewan. These measurements were made possible by a grant to the DES Lake Volunteer Assessment Program that allowed processing of samples without fee. After announcement of this new test last summer the WSOA directors voted to take samples of stream runoff during the spring 2009 snow melt. Volunteers took samples for analysis at the DES lab in Concord on April 5 or May 5, 2009. Results showed

concentrations of chloride ranging from 11 to 66 mg/liter in 10 of the 12 samples, as compared to a reference level of 2 mg/liter for rural lakes. Levels as high as 250 mg/liter were measured during Melissa Greenawalt-Yelle's investigation.

After these results were received, the president received a long-awaited copy of Melissa Greenawalt-Yelle's Plymouth State University master's thesis that assessed the Lake Waukegan water quality by assessing biological, water chemistry and land use. Her thesis showed that chloride content in Lake Waukegan water correlated with the dramatic rise in specific conductivity in the water from 1991 to 2005. Specific conductivity has long been considered the most serious threat to Lake Waukegan water quality. The main component of stream and lake specific conductivity is sodium and chloride, the components of winter road salt. In addition the runoff of chloride from surrounding streams continued throughout the year, not just during spring runoff.

Ms. Greenawalt-Yelle noted the following in her thesis: "Rising chloride levels in the Waukegan watershed may contribute to numerous changes in the lake and its tributaries; past research has indicated that, above concentrations of 10 mg/L chloride, phytoplankton were replaced by blue green algae, many of which are responsible for toxic blooms in lakes....Lake Waukegan has experienced several blooms of the cyanobacteria *Anabaena* since 2004; these have occurred nearest the most urbanized subwatersheds with the highest chloride levels..... As *Anabaena* presents a human health hazard and results in increased water treatment costs, further management efforts may be directed at decreasing chloride inputs to Lake Waukegan."

The problem of road salt entering the lake is compounded by the fact that much of the salt runoff comes from state roads around the lake.

The directors have decided to continue chloride measurements in streams feeding Lake Waukegan and have included chloride measurements in the routine summer test taken by VLAP volunteers throughout the summer months.

After this data was presented to the Meredith selectmen in May, they agreed to meet with the WSOA to discuss this issue further.

This is an issue that will be discussed further in the future.

Dr. Kahl's Invited presentation

The president then introduced the featured speaker, Professor Steve Kahl, now a research professor at UNH, Durham. He has long maintained that the increase in specific conductivity is the most serious threat to our lake. Dr. Kahl has long been a friend of the WSOA. As founder of the Center for the Environment at Plymouth State University, he began using two graduate students to collaborate on one project, a comprehensive study of Lake Waukegan water quality from two perspectives: a study of the impact of impervious ground cover and development on water quality and a corresponding study of biological and chemical health based on a study of water in streams feeding the lake.

Linda Madorma, MS and Melissa Greenawalt-Yelle, MS, featured speakers at last year's annual meeting collaborated on this study.

Professor Kahl began by comparing lake water to a complex chemical and biological mix in a laboratory Petri dish. A healthy sample of lake water must be free of foreign materials. Salt and its constituent sodium and chloride ions are foreign to lake water. As foreign materials, their addition to lake water threatens the health of the lake. We must reduce the transfer of foreign materials if we wish to maintain a healthy lake environment.

He then continued the theme of reducing the inflow of surface runoff from our lake, a consequence of development (i.e. rapid increase in impervious surfaces—paved areas, roofing, decks—on land previously covered by vegetation) in the watershed, but particularly around the shoreline.

He showed images of his shoreline house in Maine; the house was barely visible from the water because of the heavy growth of shrubs and trees along the shoreline. He contrasted that with the now too common practice of grass to the shoreline. He commented that grass to the shoreline without a raised buffer and/or vegetation along the shoreline allows water from impervious surfaces to run off over the grass, carrying nitrogen, phosphorus, loose soil and debris right into the lake.

In contrast he said that no runoff from his property reaches his lake. Period.

He noted that shore owners have a simple choice: protect your shoreline and lake water from surface runoff or pay the price—reduction in the value of your property as lake quality deteriorates, loss of recreation use as weeds and algae clog the shoreline water.

As examples, confirmation can be found by observing almost any of the urban lakes in New England.

Personal example and peer pressure work. His example has had an effect on his lake in Maine. We can do the same for Lake Waukegan.

Minutes of the July 19, 2008 annual meeting

A motion was made and seconded to approve the published minutes of the July 19, 2008 annual meeting. The minutes were approved as published.

Treasurer's report

Deborah Corr presented the treasurer's report. The membership present voted to accept the treasurer's report as presented.

Weed Watchers program, Lake Host program and Kodiak summer camp

Anne Sayers reported on the weed watchers program, the lake host program and activities at the Kodiak summer camp.

She noted the proliferation of a new upland weed, the Japanese knotweed. This weed has proliferated this summer in the wet weather. Information on this serious threat can be found on the Internet. Eradication requires special care because small cuttings can spread easily. Plants can be cut back and back and bagged in plastic, exposed to the sun to die and then disposed. Herbicides can be used to kill the remaining plant. Digging is not an option because the roots can deep many feet into the soil.

The lake host program continues this summer with a full complement of volunteers and paid lake hosts. The WSOA and Waukegan Watershed Advisory Committee contributions have increased this year to cover reduced funding in this difficult economic climate.

Anne reported a raucous Kodak summer camp this year. Counselors often did not supervise young campers adequately, especially in the water. Nearby residents called Center Harbor and New Hampton police and selectmen to control activities.

Maintenance of the Waukegan kiosk

The president thanked Jim and Jane James for their many years of maintenance of the WSOA kiosk at the small boat launch ramp.

Courtesy boat inspections on July 25

The president announced that Bob and Irene Saunders will be at the Waukegan small boat launch ramp on Saturday morning, July 25, to provide courtesy boat inspections for anyone interested. This is a courtesy inspection and educational in nature.

New business

The president then opened the floor to the membership to discuss topics of concern. Glen Feener asked if the association approved a proposal to reduce the lake level. The president responded that a resident had requested that the Department of Environmental Services lower the lake level so that her lawn would not be flooded. He then explained that DES has the authority to consider all factors in considering lake level, but that the dam owner has rights to control the lake level within safe limits.

Glen Feener then asked if the president favors this proposal. He said he personally does not.

Adjournment

The meeting was adjourned at 11:57 AM.

Meeting records prepared by Robert Wenstrup, July 12, 2009