

**Minutes of the
The Lake Waramaug Association Annual Meeting
June 8, 2014 at The Lake Waramaug Country Club**

Paul Frank called the meeting to order and introduced guest Craig Nelson, First Selectman of Warren.

Paul then asked for a moment of silence in remembrance of the members we lost in the past year: Alice Adams, Dora Blinn, Mechy Bonachea, Matthew Cowles, and Ted Scheidl.

TREASURER'S REPORT, John Santoleri

John reported that the Association's finances remain stable and that revenues are continuing to cover our expenditures. For the fiscal year just ended, we have just under \$132,000 in our checking and Vanguard Money Market accounts.

ELECTION OF DIRECTORS, Betty Sutter

The 15 Board members of the Association serve staggered three-year terms. Members with terms expiring this year are Gail Berner, Richard Kleinberg, Maria Mostajo, and Elaine Peer, each of whom has agreed to continue to serve. In addition, there is one vacancy on the Board.

The four incumbent Board members whose terms are expiring were nominated for new terms and Peter Haddad (a longtime Lake resident and former President of the Lake Waramaug Country Club) was nominated to fill the vacancy. This slate was elected unanimously to serve until April 30, 2017, or until their successors are elected and shall qualify.

FOURTH OF JULY FIREWORKS AND FLARES, Rudy Montgelas

Rudy, our new Fireworks Chairman, thanked Paul Frank for his good work in organizing the fireworks during his Presidency -- a complicated and multifaceted task -- and he also thanked Rod Funston for his longtime service in charge of the flares. Rudy noted that the display is costing somewhat more this year, and thanked the members who contributed to the fireworks for their generosity.

Rudy demonstrated the safe use of the flares and told us that he has prepared an instruction and safety sheet on using the flares that would be available after the meeting.

As usual, the lighting of the flares on July 4th will take place at 9:00 p.m., with the fireworks to follow at 9:30. The rain date for the display is July 5th.

PRESIDENT'S COMMENTS, Paul Frank

Paul introduced the Board members who were present, and praised Chris Beckett for her good work in the expansion and redesign of our newsletter. He reminded us that this is his last meeting as our President, and also told us that the Association will be hiring an administrator to help the Board with certain tasks. We're looking for a fulltime

resident who is a good writer and is comfortable with technology.

Boat Launch: Paul reminded us that all motor boats, including those from the State Park, must be inspected and stickered, either at the Washington boat ramp or at Dowler's Garage in New Preston.

Road Safety: The Association is continuing the special police patrols on selected weekends through Labor Day, to enforce the speed limit and to help ensure the safety of all those who use the Lake roads.

Paul also reported that Board member Betty Sutter has been working with the DOT to try to get them to repair several badly damaged sections of West Shore Road, some of which on the lake side seem to be in danger of collapsing. Some of these areas are deteriorating quickly, and need to be shored up.

Land Use Regulations: Paul told us that Board members Richard Kleinberg and Heather Allen, Co-Chairs of the Land Use Committee, are continuing to monitor land use applications around the Lake. He also noted that a recent change in Zoning regulations in Washington now allows for inflatable floats no larger than 120 square feet and no higher than 4 feet as an alternative to wood or metal floats, which can be no larger than 100 square feet. Washington allows one dock no larger than 360 square feet and one float per property, while Warren allows one dock, one float, and one so-called inflatable water toy, all with the same limits in size as in Washington. And Paul reminded us that a zoning permit is always required for docks and floats.

Slow-No-Wake Zone: The proposed Slow-No-Wake zone in the narrow arm of the Lake between Arrow Point and the State Park is still being considered by the State, after a public hearing in Warren and an extended comment period allowing all interested parties to be heard. It is a slow process, and nothing is expected to happen this summer.

Cell Phone Tower: A cell phone tower has been proposed for New Preston Hill. Although it would be in New Milford, it would be visible from the Pinnacle and so is a matter of aesthetic as well as environmental concern for the Lake. The Association Board has not yet had a chance to discuss this, but will do so at their August meeting.

THE STATE OF THE LAKE, Tom McGowan

Water Clarity: Tom reported that the year-round average transparency in 2013 was 8 feet, and that a water-clarity depth of 6 feet or more indicates a healthy lake. The goal of the Task Force is to achieve a transparency of 8 to 10 feet, which they have done in 12 of the last 16 years, largely by reducing the volume and frequency of algae blooms; the other 4 years were only slightly less. This compares with the 3 to 5 foot average water-clarity depth when the Task Force was founded in 1975; at that time, even levels as low as 1 or 2 feet were not uncommon. You can't find many lakes that have turned around the eutrophication process to that degree, Tom said.

Invasive Plants: Tom told us that the Task Force is continuing to keep the curlyleaf

pondweed under control. The whole shoreline is inspected in the spring and fall, and divers either hand-remove any weeds or, in the case of larger beds, cover them with a special material that can later be taken out and re-used. There was a significant increase in the curlyleaf pondweed last year, and Tom noted that it will never be completely eradicated and will always have to be managed. At least the Lake does not have other invasives such as Eurasian Millfoil-which is very aggressive-and Tom emphasized the importance of the boat inspection program in ensuring that no other invasives enter the Lake.

Phosphorus: Tom told us that, fortunately, the big Tanner field on Route 341 in Warren is now being planted in hay instead of corn; this means that there will be no plowing and resultant erosion in this area.

Tom also reported that the program of bringing up cool water just before the Lake turns over in the spring and fall continues to work well in prolonging the life of the diatoms and delaying the onset of the bluegreen algae.

Alewives: In 1960, the State stocked the Lake with alewives as food for sports fish such as bass and trout. The problem has been that the alewives eat zooplankton, which eats algae, and so the balance of nature was taken away; this had a lot to do with the decline in water quality during the 1970s. In the mid-1980s, the Task Force began to stock the Lake with brown trout every year, which eat the alewives: a simple, natural solution that also provides fishermen with well-fed trout to catch.

Tom also reported that an additional problem created by an excessive amount of bluegreen algae is that they emit a toxin as they die off. In sufficient quantities, this toxin can affect water quality and possibly constitute a health hazard, especially for children swimming in the Lake and swallowing the water, and dogs or other animals drinking out of the Lake. The State Health Department will now be monitoring public beaches for masses of algae and the resultant toxin. Dr. Kortmann feels that we do not have a problem here and that the risk of excessive algae blooms is low, due to all of the Task Force's work over the years.

Erosion Control: Tom reminded us that there are numerous erosion sites along the Lake's feeder streams, especially the principal one, Sucker Brook. The sediment coming into these streams carries phosphorus into the Lake, and has also created a large delta at the mouth of Sucker Brook. This problem gets worse every year as more land is cleared.

Tom reported that the grant application to the Department of Agriculture for erosion remediation along Sucker Brook at the Tanner farm on Route 341 in Warren is moving along. The grant will cover 75% of the one-half-million dollar project-which Tom said is "at the top of our agenda right now"-and the Task Force will pay the 25% that is the farmer's share. This project will stabilize 2200 feet of Sucker Brook frontage at the farm. Both sides of the brook will be re-shaped and stabilized; the brook will be fenced to

keep out the cows; and controlled crossings will be built for the cows so that they can cross the brook without doing any damage to the banks. The farm bridge across the brook will also be reconstructed, spacing out the abutments to reduce overflow from the brook.

Tom also told us that there are some severe erosion sites along Route 45, but that the DOT claims that it does not have the money to fix them unless or until the situation becomes a disaster.

MAINTAINING A HEALTHY LAKE, Sean Hayden, Soil Scientist and Executive Director of the Northwest Connecticut Conservation District

Sean, an expert on low-impact development techniques, came to speak to us about the many simple ways that homeowners can modify their landscape in order to capture and treat storm-water run-off. The whole idea of these techniques, Sean said, is to remove any pollutants from run-off before it reaches adjoining water, so that land near a lake or other water body can be developed without adversely affecting water quality.

Sean began by showing us a map of Connecticut's rivers, which the State has been evaluating for the "impairment" of aquatic life due to pollutants. Impaired rivers were shown in red, and there were quite a number of them, including our own East Aspetuck. The primary source of pollutants is storm-water run-off, Sean told us, and the main cause of this run-off is impervious surfaces.

The next graphic was of lakeside land delineating the Upland, Riparian, and Littoral (near-shore) zones, and Sean emphasized the importance of a plant buffer near the shore in the Littoral zone. This area of plants, roots, and organic matter-what Sean calls a "zone of magic"-allows storm-water to infiltrate the soil, where it is stripped of pollutants before any water enters the lake. The deeper the roots in this zone, the better the clean-up process.

Sean then showed us several photographs of landscaped areas near lakes to demonstrate both environmentally unfriendly and low-impact development. The first photo showed a long, sloping lawn with no trees and a long, straight driveway leading to the lakeshore. Lawns are not nearly as good at capturing and treating run-off, Sean told us, as trees, shrubs, and other native plants; in addition, the impervious surface of the straight driveway funnels water directly into the lake.

In sharp contrast, a photo of another long, sloping property right next door showed a "filtered view" with trees and other plantings in addition to open areas of lawn, and a winding drive that allows at least some storm-water to run off into planted areas. "You want to have a nice, solid buffer," Sean told us, including mature trees.

Sean's next series of photos demonstrated the use of rain gardens as part of a low-impact development project. In a rain garden, or "bioretention structure," plants are placed in an area that has been slightly hollowed out to a depth of 6 inches to 1 foot; sometimes a drain is included in the area as well. Although some rain gardens are

made with rock only and no plants, Sean told us that you need living organisms to really clean the water. A rain garden filled with plants, preferably native ones, creates a very effective "zone of magic" to capture and treat run-off; it can also be both beautifying and good for the environment in other ways-using flowering plants that attract butterflies, for instance, or benefit other wildlife.

One of these photos showed us yet another long, sloping property on a lakeshore. This site had both run-off and erosion problems before the homeowner had a low-impact development design created. This design made use of rain gardens and other diversions such as slight imperceptible mounds of earth so that run-off water could settle into the soil and be filtered (a similar technique not used in this case, but shown in another photo, is to create a "weep wall" behind which is a slight depression that catches water), as well as "no mow" areas filled with ferns and other naturally-occurring plants. The "no mow" zone (which is mowed just once a year, outside of bird-breeding areas) included one curving grassy path leading to the lake. This property, Sean told us, is now "invisible" to the lake, with no adverse effects whatsoever on water quality.

Sean's final two photos were examples of larger municipal projects. The first showed an infiltration trench leading to a sediment basin that captures run-off from a roadway before it reaches a nearby stream; naturally-occurring wetland plants had grown up in the trench, creating a more aesthetic as well as effective solution. The second photo was of a demonstration project in Torrington near the Naugatuck River, where a parking lot constructed of porous pavers creates a giant filter capable of handling 900 inches of rain per hour (far more than would ever fall). While porous pavers are more expensive than asphalt, no conveyance measures such as pipes or drains are required.

In conclusion, Sean told us that we now know what pollutants are generated by structures such as roads, rooftops, and driveways, and how to clean them up using low-impact development techniques. These techniques are usually a cheaper alternative as well as a more aesthetic one, and they are extremely effective in water quality protection. Sean's goal in his own work, he said, is to create an example of every low-impact development structure in the "universe" of options in the Northwest corner, and then to have these structures and techniques incorporated into land use regulations in the region.

In the absence of further questions or comments, Paul Frank adjourned the meeting.

Respectfully submitted,

Heather Allen, Recording Secretary