

## **Winnisquam Watershed Network 2022 Annual Meeting Minutes**

The Annual Meeting was held on July 23, 2022 at the Belmont Town Beach. The meeting began at approximately 10 am with approximately 30 people in attendance. Lisa Eggleston, President, welcomed people to the meeting, made introductions and briefly recounted the 5 year history of WWN. She related the success of the organization to our members and people spreading the word about the efforts of WWN.

**Cyanobacteria** – The northern end of Lake Winnisquam has had reports of cyanobacteria outbreaks over the last few weeks. The lake has not had cyanobacteria reports since 2008. The causes of the cyanobacteria outbreaks could be due to several factors including: calm winds not mixing lake waters, elevated temperatures and nutrients in the lakes. NHDES sampled the waters of the outbreak and did not identify high concentrations of cyanobacteria so while alerts were issued an official health advisory was not.

Lisa described what cyanobacteria looks like on the surface of the water. If these conditions are observed, stay out of the water in the vicinity of the cyanobacteria and definitely keep pets out of the water. Also, take photos, note location and alert NHDES and WWN of the conditions.

**Wildlife Monitoring** - Wildlife monitoring on the lake focuses on eagles and loons. Last week, the Loon Preservation Commission (LPC)'s annual loon census counted seven adults and one chick on the lake. One of the adult males has been breeding at the north end of the lake annually since 2012. LPC has documented that nesting area in the northern part of the lake may be one of the most productive in the state.

It is unclear if the nest near Three Islands has viable eggs as they should have normally hatched by this time. If the eggs do not hatch, LPC will recover the eggs and test them. Ed Stephenson assists LPC with building nesting platforms and put one out at Three Islands and one in Effraims Cove. The platforms were not used this year but it sometimes takes the loons a couple of years to get used to them.

The eagle population on the lake is healthy and two chicks have fledged recently in the nest near Three Islands. The nest by Wildwood Beach had one chick which has fledged.

**Invasive Species Management and Prevention Program** - The WWN program for managing invasive aquatic species has three prongs. One prong is the management of invasive variable milfoil. Lisa stated that due to the WWN's consistent management efforts the amount of milfoil in the lake has been significantly reduced and can be managed by hand pulling of the vegetation and its roots by licensed divers. The milfoil is disposed of outside the watershed. Aqualogic has logged 40 hours of milfoil removal so far this summer in Jay's Marina, Mallard's Landing, Winnisquam Marine and the no-wake zone at the north end of the lake. They will be returning later in the summer to remove some in Ephraim's Cove and Sunray Shores, plus any additional areas where milfoil regrowth occurs. Up to 20 days of diving have been budgeted to

treat these areas. Lisa noted that the WWN gets a grant from NHDES plus contributions from each of the five municipalities on the lake to support our milfoil management program.

The second prong is our weed watcher program which consists of volunteers monitoring their assigned areas of the lake in watercrafts. The volunteers observe the waters to identify milfoil and any other potentially invasive plants. When such a plant is observed, NHDES is notified and samples are collected.

The third prong is prevention of aquatic invasives through our Lake Host program at the NH Fish and Game ramp on Water Street in Laconia. As explained by Dean Anson, Lake Host coordinator, this is the only public ramp on Lake Winnisquam and the WWN has made the commitment to staff the ramp every day during the summer. The two paid Lake Hosts at the ramp inspect the boats that are launched and removed from the lake. Boats and their trailers are inspected for plant and animal material suspected of being invasive. When such material is observed, it is collected and submitted to NHDES for identification. So far this year, 1,760 boats have been inspected by our Lake Hosts and invasive water chestnut seeds have been removed from boats and/or trailers, thus preventing spreading these invasives to our lake. The majority of the Lake Host program is paid for by WWN through the support of its members and the five municipalities on the lake. The WWN also receives a payroll grant to support the Lake Host program from NH LAKES, and they administer the payroll for us. Dean and Lisa commented that the WWN is very fortunate to have two experienced Lake Hosts who are friendly and do a great job.

**Water Quality Monitoring Programs** - The volunteer lake assessment program (VLAP) has been performed on the lake monthly for decades. Each month during the summer WWN volunteers sample and conduct measurements at three deep spot locations in the lake, one near Three Islands, one near Pot Island, and one south of Mohawk Island. Near shore samples are also collected at two stations that have been monitored through the UNH Lay Lakes program for decades. The two programs are coordinated and samples are analyzed at NHDES who produce annual assessment reports.

Ten tributaries of the lake are monitored on a monthly basis during the summer and early fall through the VRAP program. Handheld meters are used during the monitoring of pH, conductivity, temperature, specific conductivity and turbidity. Water samples are collected from each tributary and submitted to NHDES for analysis of chloride and phosphorous.

**Watershed Management Planning** - Three years ago, WWN began an effort to prepare a watershed management plan for Lake Winnisquam, which began by having conversations with NHDES. The combination of water quality monitoring and other data gathering formed the basis for seeking grants to fund the plan. A little over a year ago, WWN requested monies from the US Environmental Protection Agency (EPA) to fund the preparation of the watershed management plan. The EPA agreed to fund WWN's plan and selected two nationally recognized environmental firms to create our plan.

The study was recently completed and the final Lake Winnisquam Watershed Based Plan (WBP) will be issued this week. The report identified that while Winnisquam currently has excellent water quality it does face its challenges, specifically related to localized turbidity (particularly following rain storms), cyanobacteria blooms, increasing chloride levels, and aquatic invasives. Right now the lake is close to the maximum amount of phosphorus we want as more would act as a fertilizer for algae such as cyanobacteria. The deep spot at Pot Island occasionally exceeds the max level (7.2 mg/L) desired.

The WBP included developing a water quality model of the lake and assessing the impacts of a future “no action” scenario. A buildout analysis of the watershed, accounting for existing development, conserved land, water, wetlands, soils, steep slopes and current zoning indicated that about 45% of the Winnisquam watershed could be developed within the next 20-25 years. Meredith and Sanbornton have most developable amount of land available. Full buildout (a worst case scenario) was projected to increase the phosphorus loading to the lake by approximately 54% and would result in severely reduced water clarity and regular algae blooms, including potentially toxic cyanobacteria.

The goal of the WBP is to protect and improve the water quality of Lake Winnisquam to eliminate the occurrences of high turbidity and cyanobacterial blooms and maintain the clarity and health of the lake. To do this we need to reduce the phosphorus loading from existing development by 4 percent and prevent or offset the additional phosphorus loading from future development. We also need to address individual sources of turbidity, e.g. in Hueber Brook.

As part of the WBP the consultants conducted a watershed survey and identified more than 100 sites that are sources of nonpoint pollution (in stormwater runoff) to the lake. They identified 24 of these sites as high priority for the implementation of structural best management practices (BMPs). Unpaved road and ditch erosion was identified as the biggest contributing source of sediment and nutrient (phosphorus) loading to Lake Winnisquam. (Phosphorus adsorbs to sediment particles)

The WBP also included a shoreline survey of the lake performed by WWN volunteers and further analyzed by the consultants. Based on that analysis it was determined that about 42 percent of the waterfront properties on the lake have erosion/runoff issues that should be addressed. Residents in the watershed (not just waterfront) should be encouraged to participate in the Lake Smart program to learn how they can make their property more lake friendly.

The WWN will be working with the towns on ordinances and development review to mitigate impacts of future development and municipal road maintenance practices. We will also be pursuing land conservation to reduce future development impacts.

WWN Program Manager Cindy O’Connell announced that the WWN has already lined up a \$125k grant under the Clean Water Act to begin addressing some of the priority nonpoint source sites identified in the WBP. Three sites were selected for the engineering and

construction of best management practices to eliminate erosion and sediment/phosphorus loading to the lake. These sites are the Deer Park Association beach in Meredith, a portion of Kaulback Road in Sanbornton and the small park at the end of Gale Avenue in Laconia. The WWN will partner with the Deer Park Association, the City of Laconia and the Town of Sanbornton to provide the 40 percent match required by the grant. The state is finalizing the paperwork for the grant and the hope is to issue a request for qualifications for engineering services next month and complete construction in 2023.

**Lake Smart** – The WWN is participating in the NH Lakes Lake Smart program for homeowners in the watershed. The assessment is performed in three phases, the first being a self-assessment using an online questionnaire (see link on WWN website). Upon completion and submission of the questionnaire to NH Lakes, NH Lakes trained personnel will meet with the property owner, if requested by the owner. This property assessment will further review the conditions on the property. The final phase is recommendations that can be undertaken to reduce the impact of the property on the lake with NH Lakes assisting in the identification of contractors and/or nurseries that the property owner can utilize if the owner so chooses. Several board members have participated in the process and attested to the fact that it is non-judgmental, and just provides constructive input. The Lake Smart process does not report findings to any outside agency or regulatory body. Properties that complete the process and are determined to be lake friendly can earn a Lake Smart award, with signs to post. Six homeowners in the Winnisquam Watershed have participated in the Lake Smart process and one, Peter Nagle, has earned the Lake Smart award.

**August Summer Social** - On August 6<sup>th</sup>, WWN will hold a Summer Social including: live band music, silent auction, cash bar, etc. This fundraiser will be held at the Lochmere Country Club, Route 3 in Tilton, and should be lots of fun and a great opportunity to meet others on the lake.

### **Business Meeting:**

Ed Stephenson, WWN Treasurer presented the financial reports summarizing the 2021 Budget to Actual, the 2022 Budget to Actual as of July 2022, and the proposed budget for 2023. A vote was taken to approve the proposed budget and it passed unanimously.

Dean Anson, WWN 2021-2022 Vice President presented the nominations for 2022-2023 Directors and Officers. WWN currently has 12 Directors which are elected for two-year terms. Six of the Directors are elected each year so as to provide continuity to the Board. The six Directors whose terms were up and who agreed to be nominated for re-election are Dick Tracy, Jim Chapman, Tony Carita, Chuck Mitchell, Kath Keen, and Dean Anson. Dean then asked for additional nominations for the Board from the floor. Seeing no additional nominations, a vote was taken and the six Directors were re-elected.

The six Directors whose terms go to 2023 are: Bob Day, Dawn Dupak, Judy Hughes, Ed Stephenson, Tom Camp, and Lisa Eggleston.

Dean then presented the nominations for Officers of the WWN:

Lisa Eggleston, President,  
Kath Keen, Vice President  
Ed Stephenson, Treasurer  
Dick Tracy, Secretary

A vote to elect the nominees was taken and passed unanimously.

The meeting was adjourned at approximately 12:00 pm.