

Annual Report Lakes and Stewardship Committee

CASPIAN LAKE GREETER PROGRAM. Another year of success of keeping Caspian Lake free of milfoil and other invasive aquatic species. We greeted 1099 boats in 2023 with kayaks being the top entry and non-motorized making up 60%. Our greeters are at the boat launch 10hrs each weekday and 12hrs on most weekends. A grant application for a decontamination station has been submitted, awaiting response.

CASPIAN LAKE WATER QUALITY MONITORING. We sample the lake for water clarity, total phosphorus, and chlorophyll. Our 2022 water clarity (or how far down we can see) had a summer average of 8.8 meters or almost 29ft. Last 5 years have been above the 7.7m 40 year average. Our early 2023 clarity readings got a record 15m or 49ft. A week after this recent flood of 2023, the clarity reading was 8.5m, still above historic average. Our 2022 total phosphorus is trending slightly down for past 4 years from historic high of 13.6µg/l, trending even to 8 years ago, and some what higher over past 30 years with 2022 summer average at about 10µg/l. Historic average is 9.3µg/l. Our chlorophyll has fluctuated between 1.2µg/l - 3.6µg/l over the past 40 years. The 2022 chlorophyll averaged at 1.3µg/l, so very good.

CASPIAN LAKE WATERSHED TRIBUTARY MONITORING. We are in our fifth year of sampling 5 tributaries - Cemetery Brook, Tate Brook, Porter Brook, Trib 6 - N of Blacks Point, & Trib 10 - S of Blacks Point. Data analysis shows Trib 10 consistently delivers phosphorus reading in the 20-30µg/l during low flow, 30-50µg/l during medium flow, and 50-200µg/l during high flow events. The good news is that this tributary contributes the lowest amount of water into Caspian. The other tributaries produce single digit phosphorus during low flows, low teens for medium flows, and low 20s for high flows. These numbers are not alarming. Some higher numbers can be correlated to manure spreading in each of these stream's watershed. This data is going to be part of the Caspian Lake Watershed Action Plan.

CASPIAN LAKE WATERSHED ACTION PLAN. We continued to work with the contractor who is doing the work for the Lake Watershed Action Plan over the past year. We contacted over 90 landowners to ask permission for access to their properties for on ground inspections and to collect data for analyses. We worked with Orleans County Conservation District to coordinate and collect additional Lake Wise assessments and provided boat transport to do a reconnaissance of lake properties looking in from the lake. We have also met with the contractor and Orleans County to discuss preliminary results and plans for action.

LAKE RECLASSIFICATION. We worked diligently throughout the legislative session to help pass legislation that would replace the 1,000 gal per day septic discharge language in A1 watersheds with anti-degradation rules. The group was successful in passing a bill in the Senate, but fell short in the House. The group will try again in the 2023-24 session to pass this bill. Reclassification has been delayed since 2022 pending this change.

BEACH KIOSK. A grant for \$ 8,000 was submitted to the Greensboro ARPA committee for funds to erect an informational and educational kiosk at the beach. We have the kiosk and are working on six panels that will have information on the Lake and current water quality, loons, aquatic invasive species, Lake Wise, Stream Wise and flora and fauna of the Lake.

WEB SITE. We have developed new information for the GA web site and have met with Meaghan to devise a plan to implement this information into the web site. We may need to hire outside help to get this done.

LAKE WISE. In 2021, 17 Lake Wise assessments were performed with one property getting an award for meeting a 4 out of 4 in the criteria review. Criteria reviewed are Driveways and parking; Structures and septic; Lawns and recreation; and Shoreline. In 2022, 14 Lake Wise assessments were performed with two getting the award. So far, in 2023, 7 Lake Wise assessments have been performed with 2 getting awards. The areas that could generate more awards are aging septic and additional shoreline buffer between lawns and lakeshore (more vegetation).

STREAM WISE. We submitted a grant request to initiate a pilot Stream Wise program on the upper Lamoille River (through Greensboro Bend and East Hardwick). We were not successful in receiving grant money, but were allowed to have three Stewards members be trained in the assessment protocol. We sent out over 800 information flyers to Greensboro Bend and East Hardwick residents with an invitation to attend an informational meeting that was held in the Bend in mid-June. We had about 5 members of the community participate and also went out to look at a property along the Lamoille River in the Bend. We need to do more direct land owner outreach. Additional Stream Wise assessments have been done in the Caspian watershed via the Lake Water Action Plan.

LEGISLATION WORK. We wrote background information for Representative Sims on the need for additional funding for aquatic invasive species control. With help from other northeast kingdom lakes, an additional 500,000 was secured for this important work.

WAKE BOATS. We have spent a lot of time on this issue over the past year. During summer of 2022, we testified in support of the new ruling proposed by DEC on wake boat use in Vermont. In the fall, we joined seven NEK lakes to strategize the best path forward for our lakes in light of the proposed ruling. We then testified at the public hearing that was held in Greensboro in February 2023. This sparked a group of about 20 Greensboro residents to maintain focus on this issue.

Our committee leaders met with VT-DEC personnel on several occasions to discuss our concerns about wake boat use on Caspian and a strategy to ask VT-DEC for a ban (like was done for jet skis). We are part of the Greensboro strategic group that is currently writing a petition to DEC that would prohibit wake boats on Caspian. This led to a petition signing effort that has to date gathered over 1200 signatures to support a ban of wakeboats on Caspian. In meantime, we worked with Hardwick Electric to convince them to prohibit wakeboats from using the boat launch on Caspian. This has been successful in preventing wakeboats from entering our lake as recent as July 31st.

We have appeared on NEK public tv to speak about wakeboats as we continue working with Responsible Wakes for Vermont Lakes (RWVL) to promote and support the 1,000 ft from shore distance in the new DEC ruling (DEC is proposing a 500 ft safety zone). We spoke at a rally organized by RWVL prior to the public hearing on August 1 in Richmond, VT. Still time before August 10th for anyone and everyone to write a letter of support for the regulatory petition with the 1000ft shoreline buffer as well as support for a total ban petition for Caspian Lake.

SEPTIC SOCIAL: We invited the community to the new design septic system on the beach road (the former ice cream place) to look at the system. We heard from a septic designer and septic contractor on how this system operates and what people can do to check the working condition of their system. Another septic social is planned for this August 16th at 4:30pm.

LOONS. In 2022, 2 chicks were hatched on our raft off Aspenhurst. One chick was lost at 1 1/2 months old (possible Eagle victim). One chick became juvenile and left lake in October. This year 2 chicks hatched on June 30th and have been seen as recent as Mon, July 31st. This is our 5th successful nesting / hatch in past 6 years.