

Everyone- I spent more than 3 hours talking to Cole about this and many other topics the other night but wanted to share this information and especially the links at the end so that others can be on the same page when it comes to water testing and milfoil especially with regard to past history.

This email is related to the topic of continuing with participation in CSLAP for 2023- originally dated November 11 or so. Cole had questions about continuing and we have not heard from ED or Chris on continuing, unless I missed an email. Cole, are you now informed enough to make a decision? Ed and Chris, what are your thoughts for continuing?

Cole and others, Cole you bring up some excellent questions on the topic of continuing with CSLAP. There are a host of reasons to continue with the CSLAP testing. The answer to this is not just a yes or no option as there is a back story and my dialogue below while lengthy hopefully will explain some of this for now and going into the future. I will have this posted to the website under the CSLAP testing information so that others in the future can reference it .

Our interest in starting with this program came some 20 years ago as a result of New York State DEC and the APA requiring water test data with regards to our interest in controlling aquatic invasives. The concern was that nutrients in the water were feeding the growth of the milfoil. All of our testing posts this time have proven that there are no excessive nutrients in EL. In the last few years since we are no longer chasing the milfoil to the extent that we were prior, the results from our yearly testing are not necessarily forefront for what we need. However if we choose to continue with milfoil control in the future we will most likely be required to have some data, historical and current, to support a Lake Management plan which will also be required of any project going forward. Also, New York State and the federal government also require or better said strongly recommend, as we are not forced at this point, to take/make any, some minimum water testing of all lakes. Additional details for this can be found in the attached Waterworks magazine on page 1 and 4. This information is from the latest issue of the Water Works which is the New York State Federation of lakes quarterly magazine. The Federation of lakes are the ones that are the overseers of the CSLAP program and make all the arrangements with New York State.

While I am in agreement with Cole with regards to water Clarity and temperature profiles being able to be done in-house without any expense, the analytical testing is what we are most interested in. To do this in-house and or by a private contractor could be expensive, maybe even impossible as there are no private testing Labs available, and possibly more confusing than it is to do it through a Statewide program. Also if done in house we then would be required to do the reporting and the recording of this. We however might want to, going forward, switch to the "new" CSLAP/ NYS recommended, 4 per season testing schedule and supplement this with our own in-house testing for temperature profiles and secchi clarity in the early and late season, with recording this to our own database. Further dialog needs to take place on this.

Also see more details of this below..

Related to this topic, our first year of testing was actually done as a courtesy from the DEC directly as there was no New York State Federation of Lake involvement at that time. This test was done as a specific request of mine so that we could quickly get involved in the that time proposed milfoil control project. Also at this time, year 2000, we did a lake wide septic system dye test to prove that it was not septic effluent related nutrients that were causing the milfoil to grow as quickly as it was. Funding for this was under a Department of State Grant and cooperation of the Towns of TI and CP building inspectors. Prior to this residents on the lake were also interested in failed septic systems and had started independent as well as a little bit of a joint ELPOI effort of doing the fecal testing. Fecal test results are available back into the 70s on a sporadic basis. All reports from that time that we have had access to are posted to the website, they have typically been negative or very very low traces of fecal, most likely attributed to sampling methodologies and or aquatic waterfowl having been in that area prior. Resident Bob Stevens of Crown Point at that time also did a private Lake sampling for all analyticals also to find that there was nothing specifically contributing to the milfoil and that the water at that time had nothing in it of any concern as far as using it for his personal drinking and recreational uses. Just some history here.

Continuing the CSLAP testing as well as fecal testing going forward while the data may not be important at the moment. Will give us the opportunity to compare current results with those that are historical and verify that there are no changes to the Environmental and recreational quality of our Lake. Some of our biggest concerns with water quality going forward should be directly related to the road runoff from route 74. Examples being road salts, tire/ rubber wear from trucks and cars as well as any fluids that may drop off or drip from a vehicle as it travels along route 74. Many years ago the ditches on the up water side of route 74 we're redone with raised drainage basins so that some of the runoff might be captured in the dirt prior to it getting direct access into the lake should you look at any of the drainage ditches and the swales that are on the Lake Road. By what I say here it should be apparent that many people have been concerned about the Environmental Quality and hopefully protecting it in little ways over the past decades of my involvement with the association and what I have been able to glean from their comments and actions.

I have some additional thoughts that go along with this information that may shed some light on some of the historical testing that was done. With regards to water temperature and clarity, prior to being involved in CSLAP, I along with a few other elpoi officers, as well as Cole, at the time undertook the task of doing much more extensive temperature profile measurements as well as water Clarity measurements. The purpose of these were to show when the lake turned over and or set up its thermal cline in the early spring and late fall, as well as to see what Clarity of water there was for regards to the milfoil growing as well as it did. The timing for the setup of the thermocline was important with regards to using an herbicide and whether it would penetrate the thermocline to treat any plants below that point or not or whether treating when the water had turned over would be a better time . Another reason at that time of doing water clarity was that zebra mussels had just recently been discovered as invasive within the Adirondack Park and if they were present in Eagle Lake. There was testing to see this early on, there has been none recently, probably should be, an increase in water clarity would possibly be an indicator of a filter

feeder being in the lake that was not there prior. Water clarity is also directly related to shoreline erosion if the lake is allowed to get excessively above its "normal" water level extensive shoreline erosion can take place which will cause silting of the lake.

With respect to Cole's question or comment about plant growth, and the recreational appeal of the lake with regards to aquatic plants. The determination of plant growth is most predominantly based upon the amount of milfoil not so much Native aquatic vegetation. This past summer there were a number of folks that were making comments about how bad the milfoil was. Very early in the discussions about milfoil some 30-plus years ago the APA and the DEC, asked what is the spread or the extent of the problem. My son and I in 2003 did a GPS map of the milfoil in the lake. This was at the time difficult because non-commercial use of GPS was in its infancy and at a time prior to the federal government taking the security features off of GPS. So marking was not very accurate, but still yielded a total of many acres of milfoil being present. Along with the GPS mapping at the time some photographs of the milfoil in the lake were taken, most notably the "poster child" picture of Jim Davis and his children sitting in the center Island patch surrounded by milfoil. These two items proved to be very beneficial in our fight and getting funding for our milfoil project. In an Ideal World going forward we would continue doing yearly GPS marking of all the entire lake or at a minimum select patches to see if they grow or shrink and also to see if the milfoil shows up in new locations. Underwater photography of these patches as well as surface photography if the patches are visible will/would also be very beneficial. Michael has over the past few years brought his drone up to the lake and has photographed some of the milfoil patches up close along with visual cues of their size ie. a boat sitting in the milfoil patch to give a size reference. He and I have also done some underwater photography using a GoPro camera on the end of a stick to get a sense of what the condition of the milfoil is. Prior to being able to use a drone or a GoPro for underwater photography we relied on early Google Earth images to capture where some of the bigger patches of milfoil were.

These are just some thoughts related to the water testing topic

Please review the links below to get a better sense for what lake management has been completed

See the following

- 2003 GPS milfoil survey

http://eaglelake1.org/html/documents/gps/2003_gps_survey.shtml

- Waterworks October issue -file attached to the newsletter review email- to be posted shortly

- Mifoil 1970 to 2005

http://www.eaglelake1.org/archives/funding/2007_Invasive_Species_Eradication_Grant/

[2007.Grant.sections/09%20History%20of%20milfoil%20late%2070%20to%202006/History%20of%20milfoil%20late%2070s%20-%202005.pdf](http://www.eaglelake1.org/archives/funding/2007_Invasive_Species_Eradication_Grant/2007_Grant.sections/09%20History%20of%20milfoil%20late%2070%20to%202006/History%20of%20milfoil%20late%2070s%20-%202005.pdf)

- Milfoil 2005-2007

[http://www.eaglelake1.org/archives/funding/2007_Invasive_Species_Eradication_Grant/2007.Grant.sections/10%20Supplement%20to%20History%205%20to%20present/History%20of%20milfoil%202005-2007%20addendum.pdf](http://www.eaglelake1.org/archives/funding/2007_Invasive_Species_Eradication_Grant/2007_Grant.sections/10%20Supplement%20to%20History%205%20to%20present/History%20of%20milfoil%202005-2007%20addendum.pdf)

- Final report for ISG grant 2010 as submitted by me to the DEC

http://www.eaglelake1.org/archives/funding/2007_Invasive_Species_Eradication_Grant/reimbursement/Compiled%20Final%20ISG%20Report%202011.pdf

- The full text for the 2007 ISG grant application

<http://www.eaglelake1.org/html/funding/grant2007.shtml>

- A comprehensive list of all lake plant studies

Cornel herbivory

Army corps study

2003 GPS survey

Etc

http://www.eaglelake1.org/html/documents/el_plant_surveys.shtml

- All water testing data and reason for participation

http://www.eaglelake1.org/html/documents/water_quality.shtml