

**CHAZY LAKE
ENVIRONMENTAL COMMITTEE AND
WATERSHED INITIATIVE
MEETING MINUTES**

DATE: June 30, 2019

ATTENDEES:

- Ruby Ann Aiken (RA)
- Steve Aiken (SA)
- Tom Azar (TA)
- Mary Azar (MA)
- Christine Bigelow (CB)
- Richard Brown (RB)
- Mark Denicore (MD)
- Christopher Dunkley (CD)
- Rosalyn Dunkley (RD)
- David Goslin (DG1)
- Deborah Goslin (DG2)
- Lisa Kosanovic (LK)
- Judy LaPoint (JL)
- Barbara Martin (BM)
- Lisa McGinn (LM)
- Judy Quay (JQ)
- Tom Quay (TQ)
- Bea Valdez (BV)
- Art Whitbeck (AW)
- Jillian Zajac (JZ)

A. OLD BUSINESS

1. Results of 2018 Water Quality Testing

Water samples are gathered three times a year at three locations in the Lake for a total of nine water samples/year. The 2018 water quality results were not dramatically different than the 2017 results. We are, however, continuing to see a decrease in visibility in the Lake.

JL shared a news article regarding high levels of sodium in Mirror Lake. She mentioned that high levels of salt inhibit the annual “turnover” of a lake.

Similar to Mirror Lake, we are seeing higher salinity levels in Chazy Lake. We have been monitoring the water entering at the Lake’s inlets. The highest salt levels in the Lake are being found in the inlets located along Route 374.

LK asked about rising salinity levels in the Lake. JQ stated that you need to obtain records housed at the Department of Transportation (DOT). All of the snowplow drivers are required to maintain logs of how much salt they use every time they plow snow. JQ suggested obtaining the DOT records to document and make a petition to NY State not to use as much salt on Route 374.

Paul Smith's College (PSC) recommended that we construct a wetland along Route 374 to help filter out the salt before it reaches the Lake. LM will look for grants to construct a wetland.

2. Status of Decontamination Station

MD summarized the events from last year and this year regarding the design and construction of a decontamination station at the State Boat Launch.

The Town purchased a hot water pressure washer last year. This summer, the Town is working on site grading, the electrical supply, and the water supply. JL reported that the electrical pole has been installed and that electrical power is available. The drainage pad is being currently installed.

3. Grants

For the second year in a row, CLWI received two grants from the Lake Champlain Basin Program (LCBP). CLWI received an Organizational Grant for \$3,200 and an Aquatic Invasive Species Grant for \$15,000.

Last year's organizational grant is still open, as we are waiting for the grant writing course to be finished and the website to be completed.

Over the winter, Bill Donahue, on behalf of the Town of Dannemora, prepared a grant for \$95,000 for the DEC, which was unfortunately rejected. Big kudos to Bill Donahue for his efforts!

4. Watershed Management Plan

The Lake Champlain/Lake George Regional Planning Board (LCLGRP) received a grant to develop a watershed management plan for the Great Chazy River. Since Chazy Lake is the headwaters for this river, MD asked LCLGRP to include Chazy Lake in its Watershed Management Plan.

The LCLGRP representative agreed to do so and asked our group to provide a list of problems and proposed solutions. Having a Watershed Management Plan is critical because many grants, like the NY State grants, require a Watershed Management Plan to be in place.

5. Milfoil Buoys

JQ is working on obtaining a permit from the DEC to position milfoil buoys around Chazy Lake to encourage motorboaters to stay out of areas of high-density milfoil. The buoys are for informational purposes only and apparently cannot be used to tell boaters to slow down.

6. Chazy Lake Protection Fund

The group discussed the creation of a Chazy Lake Protection Fund as a means of raising funds to protect the Lake from invasive species. To establish the Fund, a petition would have to be circulated among the property owners on the Lake to determine the level of interest in establishing the Fund.

We can obtain a list of Lake property owners from the Clinton County Real Property Office.

7. Biotic Survey

The DEC has recommended that we conduct a biotic survey of the Lake on a periodic basis. A biotic survey would evaluate the status of the animal life in the Lake. The estimated cost of a biotic survey is \$12,000.

This past winter, Bill Donahue, on behalf of the Town of Dannemora, applied for a grant, which included a biotic survey. Unfortunately, the DEC did not award the grant to the Town.

It was suggested that we should conduct a biotic survey before and after the drawdown of the Lake. The funds to conduct such a survey, however, are not available at this time.

8. Bathymetric Survey

The DEC has recommended that we prepare a bathymetric survey of the Lake so we have a better understanding of the quantity of milfoil in the Lake. The estimated cost to conduct this survey is \$3,000. The funds to conduct such a survey, however, are not available at this time.

9. Historical Survey

This past winter, Curt Stager of PSC and his students conducted a historic survey of Chazy Lake. Curt prepared a report of their findings, which is attached to these minutes. Curt's report indicates that the Lake is becoming more "productive" (i.e., more plant growth due to excessive nutrients, such as fertilizer and septic waste, entering the Lake), which is not a good development.

10. Contact Database

CLWI maintains a database of people living within the watershed for communication purposes. A suggestion was made to include visitors and renters in the database. Send any new contact information to MD.

11. Website

Sophie Denicore has prepared a draft website for CLWI. The website will include all of the reports, bank statements, and many other things. The website will be finalized and made available to the general public this summer.

12. Adirondack Gives Campaign 2018

Last year, CLWI raised \$9,000 through its Adirondack Gives campaign. The collected funds are earmarked to convert our donated pontoon boat into a DASH unit called the "Eradicator." TQ stored the pontoon boat at the American Legion over the winter.

13. The Eradicator

Discussions re: the design and construction of the "Eradicator" are underway. The APA has limited design criteria for DASH units. Craig Mann circulated some design information last summer re: DASH units. Tim Haley of Haley Lumber offered to donate marine plywood to replace the deck of the "Eradicator." Bob Hall offered to donate some of the DASH equipment.

The plan is to design and construct the Eradicator this summer and have it available for DASH activities next summer.

It was suggested that we take photos of the "Eradicator" under construction to let donors know how their money is being spent.

A suggestion was made that volunteers may be willing to dive to remove the milfoil once the "Eradicator" is launched, as you don't need diver certification for DASH.

14. Pump House

The Pump House is slated for demolition by the State, which is no longer interested in maintaining it. AARCH contacted Bill Chase about the Pump House, but did not receive a response. AARCH started the process of listing the Pump House as a National Historic Landmark. Such a listing will restrict the State's ability to demolish the building.

15. Loon Nests

The Turneaus have a loon nest adjacent to the island in front of their camp. The loons are sitting on the nest with three eggs. The loon on DeJordys nest had babies. The Brewers have a nest with two eggs that may not have been fertilized, as no loons are sitting on the nest. The fourth nest, which requires repair, is located at Gary Germain's. LM volunteered to repair the fourth nest for future

use.

16. High-Speed Internet Service

JQ spoke with Bill Chase re: high-speed internet service at the Lake. Bill stated that he has communicated with SLIC Network Solutions and that SLIC will be installing a high-speed internet service in the Lake area soon.

B. NEW BUSINESS

1. 2019 Water Quality Testing

Keith Trombly gathered the water samples for June and dropped them off at PSC for testing. The next collection date is scheduled for late July. Let MD know if you're interested in participating in the water collection activities.

2. Inlet Testing

CB will ask the Town to include funds for the inlet testing in the Town's 2020 budget.

3. State Boat Launch

At the beginning of the summer, PSC told MD that there were not enough people to staff the State Boat Launch on weekdays this summer, and, as a result, the Launch would only be staffed on the weekends.

LM told JZ that a friend of hers was trying to apply for a boat steward position and was told by PSC that they were all set. JL's grandson-in-law, Jason Favro, was also interested in the position. There has been some miscommunication. JZ offered to check on the status of hiring additional boat stewards.

A suggestion was made that volunteers may be willing to staff the State Boat Launch and be trained to operate the decontamination unit.

4. Aqualogic

Similar to 2018, CLWI received a \$15,000 grant from the LCBP for DASH activities this year.

CLWI entered into a contract with Aqualogic to provide DASH services this summer. Aqualogic charges \$1,000/day for DASH, thus the \$15,000 grant will pay for 15 days of DASH. Last year, Aqualogic concentrated its work on two high-density milfoil locations and pulled 4,965 gallons of milfoil out of the Lake.

LM is to provide the milfoil buoys to MD for placement in the Lake. Aqualogic is expected to arrive either the second or third week of July to begin 15 days of DASH.

It was suggested that we should be collecting and disposing of any milfoil floating on the Lake. JZ suggested that we use a cell phone application called “imapinvasives” to identify the location of invasive plants in the Lake.

TQ suggested that we offer the “Eradicator” to Aqualogic to help unload the milfoil during this year’s DASH operations. This would save Aqualogic a great deal of time driving back to the State Boat Launch to unload harvested milfoil.

MD agreed to prepare a press release re: this year’s DASH activities.

5. Next Drawdown

The next 2-1/2-foot drawdown of Chazy Lake is scheduled for the winter of 2020/21. As required by the DEC, it is anticipated that the drawdown will begin in mid-September 2020, with a goal of having the Lake back to its normal level before April 1, 2021. A discussion ensued about the DEC’s objection to deeper drawdowns.

6. Finances

CLWI has approximately \$16,000 in the bank. This includes all the money from past donations and past Adirondack Gives campaigns. The majority of these funds will be spent to convert the donated pontoon boat into the “Eradicator.”

This year, CLWI may be required to advance funds for grant-related projects and then seek reimbursement from the LCBP. This new procedure will strain CLWI’s finances.

7. 2019 Adirondack Gives Campaign

The meeting attendees agreed that CLWI will prepare another Adirondack Gives campaign to raise funds to operate the Eradicator during the summer of 2020.

8. New Grant Opportunities

LM will look for new grants, especially grants that could be used to construct a wetland area for managing the amount of salt seeping into the Lake from Route 374.

9. Fundraising

This year's fundraising activities will include another Adirondack Gives campaign and t-shirt sales. BV will contact Don Loreman re: t-shirts and other fundraising ideas.

10. ALA Symposium

The annual Adirondack Lake Alliance (ALA) symposium will be held on Thursday, August 1st, at 8am. BV requested information re: the Symposium.

11. Well Water Testing

PSC is offering free well water tests. PSC is primarily looking for the presence of salt and other inorganic elements. Wells located near Route 374 have a higher likelihood of higher-than-recommended amounts of salt.

12. Septic Replacement Program

The County's Health Department is considering expanding the Septic Replacement Program to Chazy Lake. As currently configured, the program is a 50/50 matching grant, which reimburses homeowners up to \$10,000 in costs. The Program is currently only available to camps on Chateaugay Lake.

13. Annual Public Meeting

The Annual Public Meeting will be held on Sunday, August 4, 2019, at 11am at the Town of Dannemora Government Building. JL and CB will reserve the meeting room. BM will be asked to post the notice of the meeting on the prison marquee. MD will investigate how to use the Town of Dannemora's projection system. In the meeting notice, we will ask people to bring their own chairs.

14. Other Regular Meetings

The second regular CLEC/CLWI meeting will be held on Monday, July 29, at 6pm at Gary Germain's camp (808 Wilfred King Road).

The third and final regular CLEC/CLWI meeting will be held on Friday, August 30, at 6pm at Gary Germain's camp.

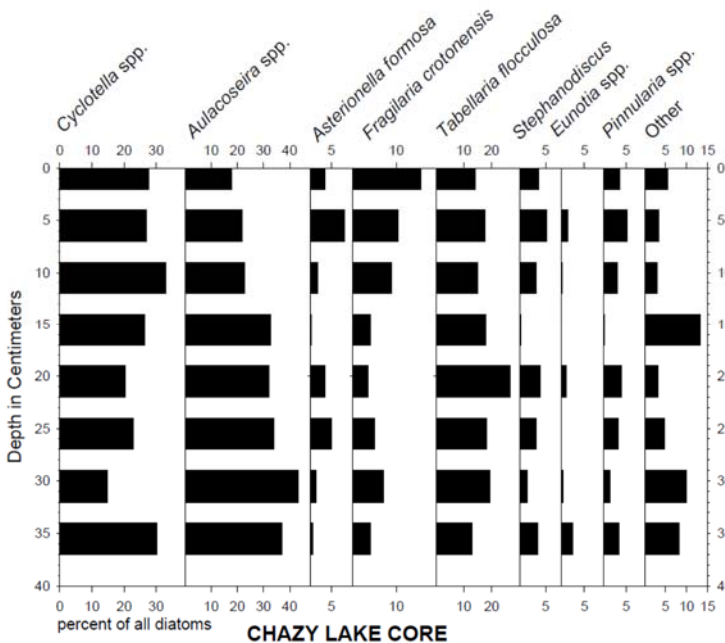
Respectfully submitted,
Lisa McGinn

OVERVIEW: Chazy Lake sediment core study

Curt Stager, Natural Sciences, Paul Smith's College

June 28, 2019

Students in the Paleoecology course at Paul Smith's College collected a sediment core from a mid-lake site on Chazy Lake during the winter of 2019 and analyzed the microscopic fossils of diatom algae in the core for their class project. By using the known ecology of diatom "indicator" species found in different layers of the core, the student made basic inferences regarding the condition of the lake during the last century or so. No radiometric dates were obtained for the core due to cost limitations, so the timing of changes in the diatom community was estimated on the basis of dated cores from other Adirondack lakes. A chart of the results is included below, with percentages of each diatom species plotted against depth (vertical axis, with youngest layers on top and oldest on the bottom):



Two of the species are used as indicators of nutrient enrichment in Adirondack lakes: *Asterionella formosa* and *Fragilaria crotonensis*. Slight increases in their percentages in the upper (younger) section of the core suggest that some form of nutrient enrichment has been occurring in Chazy Lake in recent decades. Warming of the lake surface due to the well-documented climatic warming trend in the region can also cause similar changes by increasing summer stratification which, in turn, can reduce dissolved oxygen supplies in the deeper waters and thereby release nutrients from the sediments on the lake bed.

The small magnitude of the increase suggests that water clarity remains good for now, but the change does indicate a trend toward decreasing water quality that could eventually become more problematic.

Fluctuations in the percentages of bottom-dwelling diatoms (mainly *Pinnularia* and "other") might be related to fluctuations in water level associated with the dam, which can wash shallow-water species such as these into the main lake when the shoreline erodes or is exposed when lake levels rise or fall. The lack of dates for the core, however, prevents us from confirming this relationship.

CONCLUSIONS: The diatom record indicates that a slight trend of decreasing water clarity may be occurring in Chazy Lake due to nutrient enrichment, warming, or a combination of the two. Residents are encouraged to identify and control possible sources of nutrient enrichment (lawn fertilizer, shoreline erosion, septic systems, etc.) and to monitor water clarity and oxygen profiles regularly. Warming in future could also amplify the effects of nutrient enrichment going forward, making it advisable to address such nutrient sources pro-actively before they become more of a problem.