St. Lawrence County Environmental Management Council
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MEETING MINUTES

Wednesday January 19, 2022 at 6:00 PM
Via ZOOM

Action items in bold italics / Motions underlined

1. **Call to Order:** At the request from Chair Catherine Bennettt (who was calling in to the meeting), Vice-Chair Rau called the meeting to order at 6:03 pm.

2. **Land Acknowledgement**: Rau read a Land Acknowledgement:

   "As we meet today, let us first give thanks and acknowledge that the land upon which we are gathered is part of traditional indigenous territories, including the Rotinonshionni (Low-dee-no-SHOO-nee), the People of the Longhouse, also known as the Iroquois Confederacy; and the Kanienkehaka (Ga-nyun-geh-HA-gah), the People of the Land of Flint, also known as the Mohawk Nation." Used with permission from Tony David, Director of the Environment Division, St. Regis Mohawk Tribe.

3. **Roll Call, Determination of Quorum:** ***A quorum was present***.
   Members present: Catherine Bennettt, Chair; Dustin Bowman; Herb Bullock; Lucas Hanss; Richard Marshall; Sue Rau, Vice Chair; Lance Rudiger; Tiernan Smith; Nicole Terminelli (BOL Liaison); Gerard Tozzi; Brian Washburn.
   Guests: Brad Baldwin, SLU; Emily Fell, DEC.
   Staff: Dakota Casserly and John Tenbusch.

4. **Acceptance of Order of Business, Items for New Business, Items for Unfinished Business**
   The Order of Business was accepted by consensus.

5. **Approval of the Minutes of the September October, November 2021 EMC Meetings**
   The 2021 September, October, and November minutes were unanimously approved (Rudiger/Hanss).

6. **Comments from the Public / Speaker**: ***There were no comments from the Public***.

   Tenbusch introduced the speaker, Dr. Brad Baldwin, Professor of Biology at St. Lawrence University. He talked about his work on Black Lake, past and present, and future considerations.

   Baldwin, a marine biologist and freshwater ecologist, has studied Black Lake (BL) since the mid-1990s and he continues to bring students to this outdoor classroom multiple times every year. He is very familiar with BL and his past work on Oneida Lake, with a group from Cornell, lends to a deeper knowledge of shallow and productive lakes.

Currently, Baldwin is working on a project that compares Adirondack lakes to St. Lawrence River Valley lakes. He is concerned with the overall health of BL, which he cautioned could be on the edge of being a dead zone, however he remains committed to collaborating on solutions to improve BL.

Baldwin stressed that Black Lake is a biological wonderland/playground for freshwater ecology. It is filled with life, i.e., fish, weed bed plants, zebra mussels, algae blooms, cormorants, and many other lake related species. The variety of underwater environmental conditions are impressive because of its large size and at one location there will be an abundance of O2 production and at another location, the exact opposite. The prevailing wind on BL, Baldwin refers to it as an "insurance policy," is a key factor in "turn over," shifting O2 from the top of the Lake to the bottom.

Another highlight is the people who frequent BL, whether they are landowners or recreational visitors, Baldwin continues to lean on them as citizen scientists to gather BL information. He feels the relationships he has with BL people works to help with community building. Ultimately, a community working together on BL will help to address its challenges.

Baldwin said that BL can be a "riot of life" and almost too much of a good thing. The Lake has a high level of fertility and the excess, and its source(s) (septic/watershed), is part of the problem. Also, too much life in the lake leads to an increase in decomposition at the lake bottom which consumes O2. He talked about Sylvia Lake as an example of a lake surrounded by camps, with septic systems, and they have been successful with controlling fertility. One fix for BL would be to cut off the excess fertility. He expressed caution with management measures to do this because potential impacts to the fishery need to be accounted for. However, there is a fertility balance that can be reached.

Baldwin transitioned to talking about near- and long-term solutions. A productive first step is to rally the troops; the human capital (DEC, FWS, academics, citizen scientists) in the area need a coordinated effort for BL. Funding can be used to attract this talent, although the source(s) of funds have to be determined/found.

A citizen science core would be very helpful and a stewardship angle should be used to promote a program like this. An organization to "oversee" this project could act as a central repository for data, water testing infrastructure, and they could coordinate a biological inventory of the Lake to develop baseline processes. Also, controlling invasive weed beds is an important short-term solution. Considerations for long-term solutions are: continued nutrient control via septic replacement/repair, watershed management, soil and water agriculture programs that aid in preventing runoff, a DEC nutrient load study for BL that is forthcoming; and ecosystem restoration programs that extract nutrients from the lake near inlet rivers using biological aqua farms (hanging plants from rafts) and then increase the scale if they prove successful. Byproducts from these aqua farms could be recycled for agriculture use.

Discussion

- Tenbusch talked about nutrient extraction from recent milfoil harvesting and how it was used by a farmer as fertilizer. Rau added that the extracted product could be used for cow feed to reduce methane.

- Bullock asked about how BL work could be applied to other lakes. Baldwin replied that other lake associations are monitoring lakes with more attention to lake conditions.
- Washburn talked about BLA's membership to NYSFLOA and no other County lake associations are members, and do not actively participate in CSLAP. Also, he references this as a metric on his rubric to assess need.
- Bennettt asked if the BL ecosystem has positive spillover impacts to other ecosystems. Baldwin does have concerns with: cormorants, upstream impacts from the Indian River Lakes, and then downstream to the St. Lawrence River at the confluence with the Oswegatchie. Tenbusch noted the boat wash/steward station at the one public BL boat launch. However, there are many private boat launches that are challenging to monitor.
- Bullock talked about recent EMC fish ladder work on the dam in Ogdensburg and impact(s) to the Oswegatchie River. Baldwin replied that exotic salmon exist in our waters and they would get in to the upstream rivers via a ladder. He's guarded about exotics, however they are well established here. Maybe fish passage doesn't matter because there are already non-natives in the rivers and wildlife will repair itself if we get out of the way.
- Bennettt asked about citizen scientists around BL, are they making the needed changes in their personal lives to improve the health of BL. Baldwin wasn't completely sure, however those he interacts with have made changes.
- Tenbusch talked about the recent BL meeting with interested scientists (see attached report). Terminelli liked the attendance, recovery of BL was a common goal, and there was varied experience to make this happen. A clearinghouse (overview group) of data/resources is needed for this project. Washburn liked the focus on data.
- Rick Marshall asked about zebra mussels and clarity in BL. Baldwin shared that he was wrong about his past thinking that they wouldn't get to BL, however, they are widespread. Also, zebra mussels haven't proven to impact fisheries like originally thought, and weed growth may have increased due to clearer waters.

7:20-7:25pm, the Council recessed.

7. **Report by the Representative of the Board of Legislators.** Nicole Terminelli talked about:
   - The BOL's economic development, environment and energy committee is accepting "proposal for resolution" until 1/31/22. The resolution(s) would be used for lobbying at the State level for change.
   - The County's ARPA funds committee has asked for stakeholder input on how to spend the money. She expressed to this committee that some funds be used for environmental purposes annually for the next five years.
   - Northside Energy is currently working with the DEC and EPA on wetlands issues for the project.
   - Senate Bill 4378A, pollution justice act of 2021. Walter Relling spoke at the last BOL Operations' meeting in regards to this Bill and its potential impacts to peaker plants (operate during peak electricity demand, these are usually fossil fuel powered) in the County. She does not interpret the Bill in the same way as Relling.
     - Washburn said that there were just two co-generation power plants in the County: Ogdensburg (Psych Center) and Massena. He said the Ogdensburg plant ceased operation in 1967 and the Massena plant, with an 80 MW capacity, has only produced 7 MW (annually). He thinks the economic impact would be minimal.

- Washburn said the Town of Canton is looking to provide their planning board with additional training to review solar projects. Casserly responded that the Town is using the assistance of paid consultants for project review, however their planning board is all volunteer. He continued that the County Planning Board Staff provide an additional layer of review for smaller solar projects.
- Bennett asked about the Town of Depeyster Solar Law. Casserly replied that the County Planning Board recently reviewed it and she should contact the municipal office for further information. Smith found it ironic that the Town was working on a solar law with a predominant Amish population who will most likely not know of a public session to discuss.

8. **Report of the Committees**

In lieu of January committee work/reports, Staff contacted EMC members and asked them a series of questions about their thoughts on the EMC. Tenbusch provided the following summary.

i. Are you comfortable with your involvement with the EMC?
    1. A common response was to be more active and involved.

ii. What committee(s) do you work with and comfort level?
    1. CRC members expressed that the balance is off because Black Lake is all consuming
    2. E+E members were satisfied with their work.
    3. ISP members would like to transition to the comprehensive invasive species plan for Black Lake.
    4. Tenbusch emphasized that members can switch committee(s) at any time.

iii. What ideas do you have to make the EMC work the way you'd like it to work?
    1. Several members said that they would like to see more volunteer work by members. Also, more follow-up and action are needed.
    2. Terminelli's support and work for the EMC were greatly appreciated.

iv. Time and day for the EMC and committee meetings was discussed and members support the current schedule, however, Tenbusch emphasized our flexibility to change, if needed. There was some critique of the Zoom meeting format and others support the return to in-person meetings.

v. Washburn asked about EMC vacancies and Tenbusch replied that Staff has publicized recruitment and he encouraged EMC members to participate in recruitment. Terminelli expressed that a social media presence would be helpful and Hanss is willing to assist. Casserly said he would coordinate with Hanss.

vi. Tozzi talked about his support for committee meetings occurring before the monthly EMC. He praised Baldwin for his presentation. Also, he questioned the status of the DEC Deer Management Program (Joe Lydon) presentation and Tenbusch replied that it is postponed until we return to meeting in person.

vii. The full report summary was shared with EMC members. See attached.

9. **Report of the Staff**
    a. Tenbusch reported:
        i. Steve Manders had resigned. There currently are four vacancies on the EMC
        ii. The Planning Office was awarded another round of CDBG funding ($615,000) for housing rehabilitation.
        iii. We had received correspondence about the EMC offering comments on the New York State Climate Act Scoping Plan and comments are due 5/1/2022. The Council agreed by consensus that the CRC should draft the comments and then share for review.
    b. Casserly said that he will share a brief County Planning Board action summary at future EMC meetings.

10. **Unfinished Business:** None.

11. **New Business**
    a. Terminelli shared that the DEC's Freshwater Fishing Regulation Simplification and Clean-up Proposal is up for public comment through 2/6/2022.
    b. Washburn asked about a letter for Pat Whalen. Tenbusch replied that he is drafting resolutions to recognize EMC service for Pat Whalen and Don O'Shea (1999-2021).
    c. Rudiger talked about a past EMC burn barrel ban project that the BOL funded ($20,000) for promotion.
    d. Bullock asked about finalizing Black Lake work. Tenbusch replied that this project is ongoing.

12. **Announcements**
        a. Tenbusch shared that Cat Bennett was selected to NNY Business 20 Under 40 list. The council expressed their collective congratulations.

13. **Message to Board of Legislators**
    a. Rau asked for a list showing which Legislators represent EMC members. Tenbusch replied that Staff will share a list.
    b. Rau would like to share that the EMC is continuing to make progress with the Black Lake project and that the latest meeting report be shared with the BOL.
    c. Fell highlighted funds for environmental projects in that the State budget and encouraged the EMC to consider projects that could use these funds. Tenbusch thanked Fell for her continued presence at EMC meetings.
        i. Governor Hochul Announces Highlights of FY 2023 Budget

14. **Adjournment:** The meeting adjourned at 8pm by consensus.

Minutes drafted by Dakota Casserly

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EMC Black Lake Project
Report of the Meeting, 1/17/2022
Via ZOOM

The meeting started shortly after 10:00 AM.

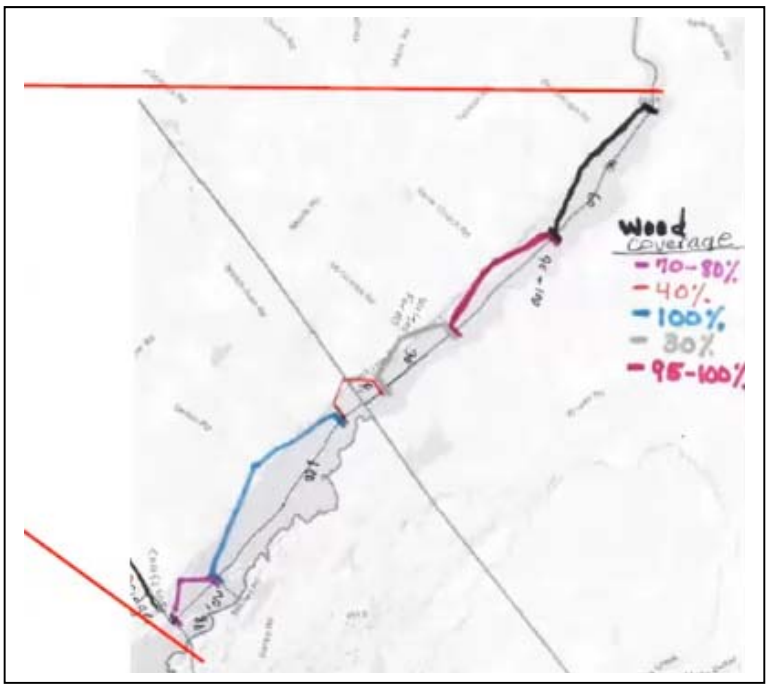
Attending were: Brad Baldwin, SLU; Bill Dashnaw, Black Lake Chamber of Commerce; Luke Gervase, GEI Consultants; Lee Harper, Riveredge Environmental Inc.; William Kirkey, RATES; Damon Oscarson, GEI Consultants; Sue Rau, EMC; Lauren Townley, DEC; John Tenbusch, SLC Planning; Nicole Terminelli, SLC BOL; Brian Washburn, EMC.

All present introduced themselves, stated their institutional affiliations, and reported on past activities at Black Lake. Tenbusch then asked those who have ongoing or proposed research to describe their activities:

- Brad Baldwin is looking to pilot test approaches to absorbing nutrients coming into Black Lake from Indian River and Black Creek.
- Lauren Townley reported that DEC will conduct a Total Maximum Daily Load (TMDL) study on Black Lake. She indicated that TMDL studies usually take 3-4 years. She noted that Black Lake has been considered impaired for more than 20 years, and is on NYS 303-D Priority list.
- Lee Harper has no immediate plans to work on Black Lake. He has worked on milfoil issues nearby on Goose Bay and on Mud Lake.
- Bill Kirkey has monitoring equipment on Black Lake and on the Indian River in Rossie. He has a small grant to do monitoring on Black Lake in 2022. He has spoken with Gervase, and may change his grant to monitor sites indicated by Gervase.
  - Baldwin asked if Kirkey's equipment can monitor phosphate. Kirkey replied, not at this point.
- Luke Gervase reported that he is looking at aquatic vegetation on the Lake. His firm did two weeks of on-site monitoring on Black Lake during 2021. He offered to share data, observation photos, etc.
  - Gervase also reported that he has worked with SLELO-PRISM. He noted that water chestnut has been observed near the Lake.

Tenbusch provided a brief review of the presentation that he made to the County's BOL in September 2021; this presentation described the EMC's involvement in Black Lake milfoil issues. He reported that the economic impact of Black Lake, as measured by DEC in 2017, totaled more than $17 million. He reviewed a number of previous studies that had been done on Black Lake; he reviewed the work done in

2021 by the Black Lake Association (BLA), to cut a channel through the northern end of the Lake.



Tenbusch showed a map, where the person who had cut milfoil in 2021 estimated the amount of milfoil coverage in various parts for the northern end of the Lake. Gervase reported that his own research from 2021 indicated similar rates of infestation.

Tenbusch reported that the EMC wanted to hold meetings with stakeholders in the region; three meetings have been held, in October, November and December. Coordination with other subwatershed efforts, especially in the Indian River area, is important. The EMC hopes to develop a watershed management plan; Brian Washburn of the EMC has completed an early draft framework for such a plan.

There was discussion about the Draft Watershed Management Plan, prepared by Brian Washburn. See attached. Washburn had followed an outline taken from "Diet for a Small Lake", developed by NYS Federation of Lake Associations (NYSFOLA). This was significant, because it is designed to be accessible to/for citizens, not limited to professional researchers.

- Washburn reported that another Watershed Management Plan, for Lake Chautauqua, had followed the same outline; he felt that they had done an exceptional job.
- Gervase reported that NYSFOLA will hold an annual meeting in Lake George in April 29-30, 2022. He intends to present results of his work on Black Lake at that Conference.
- Washburn's Draft Plan included vintage DEC data from 1972-73 regarding Phosphorus (P) loading.
- The Draft Plan also calls for development of a committee structure to address invasives.

Baldwin asked if we intend to develop a Plan before hearing about research findings from Gervase or others. Tenbusch responded that he believes that the EMC and Planning staff can/will be working to develop social capital/coordination among various municipalities, organizations, and other stakeholders in the area. Gervase indicated that his lake management plan would also call for development of such a group to manage those tasks recommended in his plan.

There was discussion about the relationship between management plans and funding sources; it was generally agreed that coordination among stakeholders is essential to the development and funding of management strategies.

Bill Dashnaw reported that local groups, including the Black Lake Association, Black Lake Chamber of Commerce, and Black Lake Fish & Game Club, are working together better than they had in the past. He emphasized the need to coordinate among stakeholders to ensure desired future development.

Washburn noted there was no one common platform where people can get information from multiple sources about Black Lake; Rau concurred. Gervase suggested the development of a working group that would include representation from all local groups, municipalities, etc. This group could meet periodically to share information.

Tenbusch asked about involvement/interference with research work.

- Gervase reported that his fieldwork is completed; he will publish a draft plan (March 2022?) and seek community input. He also intends to present his work at the NYSFOLA Conference in April.
- Baldwin agreed that coordination is key to achieving success. He suggested that one result of current activity might be to create a list of future research needs; this could enable local colleges to select various research projects on Black Lake.
- Washburn suggested that the Associated Colleges of the St. Lawrence Valley might help to recruit research activity from all four local colleges.

Tenbusch reported that there seem to be two immediate tasks to work on:

1. Re-work the Draft Watershed Management Plan with research partners, possibly including Baldwin, Gervase, Harper, Kirkey, Tenbusch, Townley, Washburn. Other groups might include SLELO PRISM, Indian River Lakes Conservancy, Adk. Watershed Institute, etc.
2. Work to develop coordination among stakeholders, involving Dashnaw, Michelle Gallagher, Terminelli, Rau, Tenbusch, and others. He reported that each municipality around Black Lake have been asked to assign/recruit one or more persons to represent the town.

He suggested that each sub-group might meet within the next month.

Baldwin noted that there are many citizen-scientists around Black Lake. We have a huge opportunity to involve these persons, to their benefit and the benefit of their communities.

Washburn reported that there have been several ideas suggested to build an interpretive center somewhere on the Lake.

Dashnaw reported that the Chamber of Commerce has preliminary plans to establish an interpretive center in Edwardsville, on a parcel owned by the County; he offered to share conceptual plans.

The meeting adjourned at approximately 11:30 AM.

Meeting report drafted by John Tenbusch.

Draft Outline for the Development of the Black Lake Watershed Management Plan

Brian Washburn

SLC Environmental Management Council

The following outline follows the Outline of a Typical Watershed Management Plan found on page 273 of the Diet for a Small Lake. Questions and data are also contained.

I. Executive Summary
II. Introduction
    a. Organizational structure (how will this be determined and by whom?)
    b. Public participation efforts and results (surveys and by whom?)
    c. History of efforts to address environmental issues within the Black Lake watershed including the Indian River watershed.
    d. Discussion of the recommendations and cost estimates for the control of Eurasian watermilfoil contained in the 2008 Eurasian Milfoil Management Plan (EMMP))
III. Watershed description
    a. Physical and natural features (EMMP)
        i. Should include shoreline gradients and specific shoreline geology. Is there sufficient soil depth for private waste water systems, do percolation tests results indicate sufficient land area for effective waste water treatment, and if soil depth is sufficient is there a significant groundwater flow gradient towards the lake?
    b. Land use and land cover (requires a new assessment and comparison to the EMMP)
    c. A description of the Indian River watershed upstream from Black Lake (might be informative)
    d. Demographic characteristics (requires a new assessment and comparison to the EMMP)
        i. Population statistics
        ii. Number of shoreline property owners
        iii. Number of shoreline residential property owners
        iv. Percentage of residential property owners that are seasonal
        v. Number and identity type of commercial enterprises primarily along the shoreline and on both sides of County Route 6.
        vi. Economic impact - Suggest developed independent of any organization within the watershed. This effort would likely improve external funding efforts.
        vii. Organizations with documented history of interest in the health of the watershed. Is there documentation of their efforts?
    e. Watershed Conditions
        i. Latest CSLAP summary with emphasis on the historical trends
        ii. NYSDEC WI/PWI report (lake should be due for a new assessment)
        iii. Eurasian Watermilfoil density map (The EMMP did a density determination on at least a portion of the lake. Based on interviews the perception is the condition has worsened. A current assessment of milfoil density is needed.
        iv. Additional water quality assessments
    f. Water quality standards

i. NYSDEC WI/PWI standards including the classification of the lake and its principle tributaries.

IV. Pollutant source assessment

a. Point sources to include:
   i. all municipal waste water treatment in the Indian River watershed
   ii. Any MS4's within the watershed
   iii. Any CAFO's with in the watershed
   iv. Evaluation of the above with respect to required compliance

b. Non-point sources to include:
   i. Private waste water systems
      1. How many?
      2. Percentage constructed predating current NYSDOH criteria
      3. Percentage with updated waste water systems
      4. Number of participants in SLC waste water system grant program
      5. Any data evaluating waste water system effluent entering the lake. SLC SWCD?

c. Principle environmental issues primarily deal with invasive flora and fauna and the conditions attributing to their expansion within the watershed
   i. Eurasian watermilfoil (present)
   ii. Dresienna species (present) (what is the distribution?)
   iii. HAB's (present)
   iv. Other invasive flora and fauna (potential)
   v. Due to the topography/morphology of the lake the potential for submergent invasive flora expansion is heightened. Historic phosphorus and nitrogen loading is suggested as significant contributors to invasive flora expansion.

V. Pollution loads

a. TP, TDP, TN, TDN levels have been historically reported in CSLAP reports during the reporting time periods. TP levels are required components of all MWTS SERQ reporting.

b. There has not been any reported annual TP, TDP, TN, TDN loading determinations since the National Eutrophication Survey (NES) in 1972 as part of the initial stage of the implementation of the Clean Water Act of 1972. From 1972-1973 members of the NES team along with NYSDEC and the New York National Guard conducted the survey. The working paper No 148 is titled Report on Black Lake, St. Lawrence County, NY and can be found at http://nepis.epa.gov. With the survey being 49 years old it would be expected changes may have occurred with respect nutrient loading. The report did not identify any point sources of pollution. Since the survey numerous villages in the Indian River watershed possess MWTS facilities. The village of Hammond MWTS using Black Creek as a discharge point violated its discharge permit and had to take corrective actions to meet its discharge permit. The report's focus was on the influx of phosphorus and nitrogen via the three largest tributaries to Black Lake; the Indian River, Black Creek, and Fish Creek and did not address direct runoff from agriculture or private waste water systems. Some useful data is still available in the report as seen in the following tables:

Tributary	Annual P loading	% of the total
Indian River	76,640 lbs./year	64.1
Black Creek	11,450	9.6
Fish Creek	21,640	18.1
Minor Tributaries	8480	7.1
Direct Precipitation	1,300	1.1
Output	91,720	
Net P Accumulation	27,790	

A logical conclusion derived from the above table is the overwhelming majority of phosphorus is entering Black Lake from the Indian River watershed.

Tributary	Annual N loading	% of the total
Indian River	1,413,820 lbs./year	66.6
Black Creek	172,530	8.1
Fish Creek	327,890	15.5
Minor Tributaries	128,030	6.0
Direct Precipitation	80,460	3.8
Output	2,046,510	
Net N Accumulation	76,220	

A logical conclusion derived from the above table is the overwhelming majority of the nitrogen is entering Black Lake from the Indian River Watershed. Another useful data is the relative inflow of water to the lake by the three tributaries evaluated.

c. Total annual loading for phosphorus derived from both actual measurement and modelling was reported in the Journal of Environmental Engineering, volume 114, no. 2 (1988) in a submission by Anthony Collins and Thomas Young of Clarkson University. The abstract of the submission indicates the most significant fraction of annual phosphorus loading is not annual anthropogenic sources including agricultural runoff and private wastewater systems but rather resuspension and distribution of benthic phosphorus accumulated for decades. The conclusion was based on the low hydraulic retention time of approximately 36 days and virtually aerobic benthic conditions through out the lake. The latter is supported by the 2018 CSLAP Report Site Visit Profile indicating dissolved oxygen levels exceeding 7 parts per million at a depth of 4 meters. Additionally with a mean depth of 8 feet, Black Lake likely will not temperature stratify during the summer months and will likely not stratify based on light penetration (no delineated limnetic or profundal zonation. The majority of the lake will likely be totally littoral.
d. Phosphorus levels reportedly have been evaluated for a period of time in the vicinity of the Indian River inlet and the Black Lake discharge to the Oswegatchie River by Robert Kirkey of Clarkson University. Comparison to the input and outflow may support the results of the 1972 NES. No journal articles by Dr. Kirkey have been located on the research. Where is the data and its evaluation?

VI. Watershed goals
a. Revitalization of the Black Lake Association to include committee structure to address invasives
b. Preparation of a biannual State of the Lake Report

c. Reduction in Eurasian watermilfoil density to _____% to facilitate increased recreational use of the lake
d. Address sediment buildup on the southern side of the two causeways separating the lake. NYSDOT is responsible for the causeways.
e. Surveillance efforts to detect the presence of other invasive flora and fauna species
    i. Invasive flora and fauna identification fact sheets prepared and distributed.
    ii. NYSDEC presumptive testing for the presence of HAB's.
f. Continued water quality monitoring through CSLAP or the efforts of organizations or educational institutions.
    i. The CSLAP reporting program evaluates the water quality at two-week intervals throughout the late spring to early fall months. The Black Lake Association as the participant in the CSLAP program should possess the equipment necessary to continue the non-chemical analysis portion of the CSLAP program as well as the water sample collection equipment. Review of the historic CSLAP reports indicates changes is phosphorus and nitrogen parameter levels from late spring to approximately mid-July to early fall. If CSLAP funding is not available, limited sampling in the late spring, mid-July and early fall may suffice in evaluating nutrient levels. Determination of nutrient levels, conductivity, pH could be determined by relatively inexpensive available testing kits or instrumentation. Agreements could be reached with local analytical laboratories to perform nutrient level determinations. CSLAP also determined algal conditions on the lake. Once a year temperature, dissolved oxygen, pH, and conductivity profiles were determined.
    ii. Temperature, pH, and conductivity profiling is easily determined while dissolved oxygen is not. Continued monitoring of water temperature, pH, and conductivity can be monitored inexpensively.
    iii. An effort should be made to develop research relationships with the Associated Colleges of the St. Lawrence Valley.
g. Increase political action activities
h. Educational activities within the watershed to reduce nutrient loading and activities contributing to the introduction and spread of invasive flora and fauna species.
i. Expansion of public access to the lake. Currently there is only one public access in the southern portion of the lake operated by the Thousand Island Park Commission. Additional access and recreational development may have a positive effect on the economic impact of the watershed.

VII. Identification of management strategies
a. Existing management strategies
    i. Currently there does not exist a watershed wide set of management strategies. The Black Lake Association has historically been the sole organization with established management strategies for the lake. The Black Lake Association as a member of NYSFOLA participated in CSLAP water monitoring program from 1988 until 2018. The results of the CSLAP reports led to the 2008 Eurasian Watermilfoil Management Plan requested by the Invasive Aquatic Plant Committee of the Association and funded by St. Lawrence County. None of the

recommendations of the plan were implemented and no further mechanical harvesting took place until 2019. In 2019 the Association secured funding for a limited two-mile mechanical harvesting of the main channel in the northern portion of the lake. In 2021 the Association secured $2,500 from towns bordering the lake and $27,500 from St. Lawrence County to mechanical harvest an eight mile stretch of the main channel in the northern portion of the lake.

b. Additional strategies needed
    i. The 2008 EMMP estimated elimination of milfoil by various methods would cost in excess of 26 million dollars. The possibility of ridding the lake of the milfoil is unlikely leaving management as the only alternative. Once the desired milfoil density percentage goals are established and a 10-year action plan is created a funding strategy must be created and should include:
        1. External funding from grants either regionally or nationally to assist in the action plan. One organization would need to have this responsibility with the assistance of the St. Lawrence County Planning Department. Additionally, the watershed plan should coordinate with any research activities at colleges and universities.
        2. Defined annual minimum budgetary allocations from the six townships bordering the lake. Several factors may influence the respective allocations including shoreline property assessments and economic activity within each township. Could unspent monies from the towns be escrowed for future activities or is the allocations to be on a need basis only?
        3. Annual contributions from organizations, businesses directly benefiting from expanded lake usage, and shoreline property owners.
        4. With NYSDEC either taking over the operation of the existing boat launch or the creation of the possible second boat launch at the northern end of the lake an agreement to support the action plan is needed.
        5. Annual contributions from non-residents who utilize the lake.
        6. An agreement with St. Lawrence County to provide funds to complete the action plan if other resources do not cover the cost.
        7. The development of a marketing plan for the lake to include a number of revenue-generating activities to support the action plan. Fishing tournaments both during the summer and winter months are one possibility. What has the Black Lake Chamber of Commerce done?

Are you comforatable with your involvement with the EMC? Yes/No; explain	Is the day/time of EMC meetings workable for you? Would another day/time work better?	What Committee(s) do you work with? Are you comfortable with your Committee assignment(s)?
Yes, but not feeling satisfied with personal contribution, trying to figure the his place in the Council and committees, fairly new, highlights were: trash pickup and hazardous waste. His interests are not really the focus and therefore losing some interest.	Day and time do work. Available after 4pm during the work week.	Conservation of Resources. Feels like the balance is off, Black Lake is consuming lots of time.
Ok for the most part, he likes it when things get done. May need more follow-up. Taking a position. Politics should not interfere with EMC interests.	Wednesday's are good.	E+E, he's comfortable with this assignment.
Yes, he is comfortable.	All good here.	Conservation of natural resources and invasive speicies, and is comfortable.
Yes, mostly, wishes he was more active.	For the most part, yes, but does have a meeting conflict on Wednesdays.	Not sure, but would like to be involved with E+E.
He feels he is comfortable with his involvement. The group is advisory not action orientated. Would like more to be done.	No preference, Wednesdays do work, but is open to other options. Zoom format can be challenging for deeper discussion. He would like to see the full EMC meetings moved back to in-person	E+E, comfortable with current assignment. Has no time for another committee.
Yes and all good.	All good. In-person perferred rather than Zoom.	E+E, he likes it.
Didn't attend much in 2021 due to personal issues. Expects to be more involved in 2021.	Yes, works out well.	Comfortable on CRC
No; I am not able to participate as much as I would like. ZOOM makes it easier to attend mtgs.	Date/time generally work well.	Yes.
Yeah, I like it. I think the EMC is doing work	Day/time works	Yes, I'm comfortablewith my committee assignments. However, as the Black Lake project gains momentum, I'd like to see the Invasive Species Committee begin to work on the comprehensive plan to deal with invasive species, as e have been asked by the BOL to do.
Yes	Current day/times are fine. 6:00pm start times can conflict with dinner.	Interested in watershed management for a long time. Good mental exercise.

Are you comfortable with day/time of your committee mtg(s)? If not, when are you most often available for committee mtgs?	What ideas do you have to make the EMC work the way you'd like it to work?
Day and time do work, after 4pm, available. Appreciate the phone call option for committee meeting.	More volunteer work for members to be out in the field. Diversify membership. Orgainzation is largely hidden, more of a public place. More focus on climate related change that the County can implement. EMC skill set is underutilized. Could be more inclusive. A lot of talk, but need more action. Can planning actions be shared with EMC topics. Would like to see us become an example for long range sustainability (recruitment).
Ok with committee meeting, can do another time if needed.	Still new, would like to see more follow-up and completed actions.
All good here.	He liked the picnic event, he feels something in-person is needed for the Council (outside, socially distanced).
Yes, E+E timing works.	Conversational run on, time limit on this, really enjoys the presentations.
He would rather this meeting be held via Zoom. It's more versatile than the phone call. Mondays, 5-6pm, still works. Would like a calendar invite for this meeting.	Weekend orientated volunteer opportunities for members who work during the week.
Day and time do work.	He thinks the EMC is doing what it is advertized to do. He likes the relationship between the economy and evironment. He'd like to continue to focus on improving the economy while protecting the environment.
CRC at 5 PM would be better	Looking for a system to prompt follow-through on projects and ideas
WMC mtg day/time work OK	Would like to consider for a bit. Please send a reminder.
Mid-day is often hard for me. Later in the day would be better.	Need more participation by members. I like to way that Nicole communicates with BOL. It may be why BOL has asked the EMC to be involved in issues.
Comfortable with day/times of committee meetings	Like to promote greater participation by members in EMC projects