New York Citizens Advisory Committee (NYCAC) on Lake Champlain's Future

Monday, April 25th, 2022 1:00 pm – 3:30 pm

APPROVED MEETING SUMMARY

Committee Members Present: Vic Putman (Chair), Jackie Bowen, James C. Dawson, Steve Kramer, Ricky Laurin, Walt Lender, Tom Metz, Hannah Neilly, Charlotte Staats, Fred Woodward

Committee Members Absent: Jane Gregware, Bill Wellman

LCBP Staff: Katie Darr, Lauren Jenness, Erin Vennie-Vollrath (NYS DEC)

Presenters: Kevin Rose, Peter McIntyre, Stephanie Facchine, Sarah Trumbull

Public Guests: Corrina Aldrich, Allison Gaddy, Haley Gallo, David Miller, Mark Naud, Blake Neumann

Meeting summary by Katie Darr, Lake Champlain Basin Program (LCBP)

1:00 - 1:15 pm

1. Welcome and Introductions – Vic Putman

Jackie made a motion to move into the first presentation. Motion carried.

1:15 - 2:00 pm

2. Survey of Climate Change and Adirondack Lake Ecosystems (SCALE) – Dr. Kevin Rose and Dr. Peter McIntyre

Kevin Rose and Pete McIntyre introduced the upcoming Survey of Climate Change and Adirondack Lake Ecosystems (SCALE) to collect data on climate change effects from Adirondack lakes and ponds. The presentation is summarized below, more information is available here. Please contact Kevin Rose (rosek4@rpi.edu) and Peter McIntyre (pbm3@cornell.edu) with questions.

This study will build off of the Adirondack Lake Survey conducted in the 1980s and other recent initiatives. The 1980s study took place at the height of acid rain and surveyed 1,469 lakes to map where lake vulnerability to acidification and the consequences for lake biota. About 80% of the lakes were accessed by helicopter. It was an intensive effort that would cost \$11 million today, excluding the cost of helicopters. There is a great deal of momentum to conduct an updated study via a consortium approach. There is a need for a new round of surveys to monitor climate impacts across the gradient of the 4,000+ lakes in the Adirondacks. There is concern about the combined impacts of temperature change and oxygen depletion.

NYSERDA supported a workshop in July 2021 which identified 4 key themes as priorities for the updated Adirondack Lake Survey:

- (1) How fast are temperatures warming and oxygen levels dropping?
- (2) How are the lake biota responding to these changes?
- (3) Are lakes becoming greater sinks or sources for carbon?
 - The Climate Action Council's Plan includes carbon accounting and quantifying lakes' carbon cycling characteristics is an important approach to carbon accounting for the state and region.

(4) Are harmful algal blooms (HABs) becoming more prevalent?

Each theme has multiple components to tackle. They envision this study to be a consortium effort, which will allow them to draw on experts across the region, leverage innovative methods, and conduct a broad assessment. They are looking to strike a balance between replicating the Adirondack Lake Survey Corporation methods and integrating new technology including environmental DNA (eDNA), remote sensing, and high-frequency sensors. The goal is to sample a healthy, modest subset of lakes.

Next steps include finishing a report to NYSERDA, mining datasets to help prioritize lakes, choosing focal metrics, and refining protocols. Efforts to fund this study are ongoing. The FY23 NYS budget allocates \$500,000 to the Adirondack Lake Survey Corporation to kickstart SCALE.

- Tom asked why the Adirondack Effects Assessment Program (AEAP) data drops off in 2005-2006.
 Kevin clarified that some lakes only had funding to survey through 2006. Additional funding came to monitor some lakes through 2012. The most recent lake monitoring took place in 2012.
 The goal is to go back and revisit these 28 lakes.
- Jim asked whether they will be able to separate the influences of climate change versus changes in phosphorus content. Kevin noted that total phosphorus trends in the monitored lakes have been fairly stable, but temperatures have been increasing. Phosphorus can increase from land use changes, wastewater, and increases in precipitation. The Adirondacks are seeing increases in precipitation related to climate change. They plan to look across land use and climate gradients in the updated study with a mix of land use-impacted lakes and minimally impacted lakes to figure out the likely drivers of patterns across the lakes.
- Fred asked if any of this work will be done in larger bodies of water. Kevin shared that the past survey intentionally excluded very large lakes which historically have their own long-term monitoring plans.
- Jackie thanked Peter and Kevin for the great information and exciting work ahead.
- Steve mentioned that he was involved in studies at Woods Lake in the 1990s, which had been limed twice. Pete thought there was a good chance that Woods Lake would fit into the updated study.
- Erin asked if local stakeholder input would be incorporated into lake prioritizations or if that would be based on predetermined ranking criteria. Kevin did not have a firm answer for the lake prioritization approach yet. They want science to lead and for the study to be as statistically robust as possible which will mean targeting lakes with good background data.
- Tom suggested employing a latitude and longitude grid and selecting lakes within ¼ degree of the chosen lines for an understandable, unbiased approach to lake selection. Pete agreed that they will want to cover a spectrum of key lake, landscape, and geographic barriers. The number of lakes selected will depend on funding and timing.
- Jim commented on the true color map with showed a high number of lakes in the Western part
 of the Adirondacks. Kevin clarified that the map is from the 1984-87 survey where they were
 focused on measuring smaller lakes. Pete added that they are going to try to build upon that
 coverage in the upcoming SCALE project.

2:00 - 2:40 pm

3. Drinking Water Source Protection Program (DWSP2)— Stephanie Facchine

Stephanie Facchine with the NYS Department of Health's Source Water Assessment & protection Program provided an overview of the state-run technical assistance program to assist municipalities with proactively protecting drinking water sources. Her presentation is posted with the meeting materials.

The Drinking Water Source Protection Program (DWSP2) is a partnership between NYS Department of Environmental Conservation, NYS Department of Health, NYS Department of Agriculture and Markets, NYS Department of State, NY Rural Water Association, and other environmental organizations. The program has developed a framework to help communities make protection plans for their public water systems. Communities who participate in this program receive free technical assistance, a new or updated DWSP2 map, a complete inventory of potential contaminant sources and land use, a thorough list of implementation actions, and improved likelihood of receiving certain types of state funding. Stephanie and Haley Gallo at the NYS DOH and Allison Gaddy from the Lake Champlain Lake George Regional Planning Board are technical assistants for the program. In the Lake Champlain Basin, they are working on a joint plan with Port Kent, Willsboro, and Essex as they all have intakes in Lake Champlain. Preliminary meetings with water operators and town supervisors have taken place and larger stakeholder meetings are starting soon. To learn more about the program visit https://www.dec.ny.gov/chemical/115250.html.

- Erin asked if the program has previously dealt with other drinking water sources the size of Lake Champlain. This is the largest water body Stephanie has worked on, but others working in the Finger Lakes Region have had similar experiences and the Lake Champlain team can collaborate with them.
- Tom suggested reaching out to the City of Plattsburgh. The Town of Plattsburgh uses wells, but the city has a reservoir.
- David asked whether communities are being proactively targeted, St. Armand and other small
 communities do not have the resources to reach out first. Stephanie confirmed they are actively
 doing outreach to communities, they have had mixed results. They are working on updating a
 prioritization process for communities. Allison added that all of their outreach has been
 proactive over the past two years.
- Walt asked how participation in DWSP2 can help with grant applications. how can participation
 help with grant applications? Stephanie shared that some programs, like the Water Quality
 Improvement Program (WQIP) offer bonus points if the applicant has a source water protection
 plan. Climate Smart Communities offers 6 bonus points if the community is implementing the
 plan. Staff and technical service providers are aware of ways to connect communities to funding
 resources and are able to leverage programs and partnerships.
- Vic asked if there are funding resources available for smaller water districts to pay for PFOA and
 other emerging contaminant testing. Stephanie has heard this concern from many communities.
 She is not aware of anything specific for funding resources for testing, but the Bureau is aware
 of the concern and there are many internal conversations taking place. DWSP2 can try to
 mitigate these contaminants. New maximum contaminant loads went into effect last year. If a
 system has 2 quarters of non-detect, they shift to a yearly monitoring schedule. If contaminants
 are detected, they have to stay on a quarterly system.
- Vic noted that Lake Champlain is a water source for more Vermonters than New Yorkers. There
 are many contaminants potentially entering the lake, including agricultural chemicals, that are
 not necessarily tested for but should probably be in a source water protection plan.
 - Mark added that the USGS has results forthcoming from a preliminary study that tested surface waters for glyphosate and atrazine along the shores of Shelburne Bay and the Main Lake. The LCBP approved a comprehensive analysis of agricultural chemicals within the basin.
- Mark asked whether summer testing for cyanotoxins was taking place along the shore in NY as it has been in Vermont for ~5-6 years. Stephanie was not sure, the Stakeholder Group will be pulling existing data together.

- Mark shared that in Vermont, there are transient community water systems that are required to have a source water protection plan, but they do not have much regulatory power for effective implementation unless they can make the landowners change behavior or buy the land. There have been increasing concerns with agricultural chemical loading as cover cropping increases.
- Erin noted that some of the funding for HABs and toxins in Vermont comes through the LCBP and she would be curious to hear if NY needs funding assistance to do this kind of monitoring. She also shared that LCBP funded high-resolution landcover mapping and the Division of Water completed an implementation plan for the Total Maximum Daily Load which looked at different assessments of watersheds and phosphorus loading which might be helpful for the contaminant source inventory.

2:40 - 2:45 pm

4. Public Comments

No public comments were made.

5. ACTION ITEM: Review and vote on Draft March 28th NYCAC Meeting Summary

• Motion to approve the meeting summary by: James C. Dawson

• Seconded by: Walt Lender

Vote: All in favorAbstentions: None

2:45 - 3:10

6. Updates - Vic Putman, Katie Darr, and Erin Vennie-Vollrath

Round Goby

Katie submitted the NYCAC's introduction letter and round goby resolution to Governor Hochul; NYS Canal Corporation; Lt. Governor Brian Benjamin; Assemblyman Carl Heastie, Speaker; Sen. Andrea Stewart-Cousins, President Pro Tem; Sen. Daniel G. Stec; Assemblyman Billy Jones; Assemblyman Matthew Simpson; Senate Environmental Conservation Committee; House Environmental Conservation Committee; DEC Commissioner Basil Seggos; and DEC Region 5 Director Joseph Zalewski.

Erin shared that partners continue to work closely on an integrated management approach to round goby. USGS has started environmental DNA (eDNA) and trawl sampling ub strategic locations along the canal, mostly focused on the Southern end of the canal system. These results will hopefully indicate where the leading edge of round goby is. Similar eDNA surveys are taking place in the Richelieu River. The rapid response plan will have different thresholds and actions based on what the data says about the location of round goby. Through the March 24th press release, DEC and Canal Corp discussed potential actions that may be implemented including double draining certain locks, scheduled locking, and delaying the opening of certain locks. They are also exploring different mid-term strategies including electric, bubble, and sound barriers. They are watching other systems carefully to see how effective these strategies are. There is a lot of coordinated public outreach work going on. LCBP has been interviewing candidates for a full-time position out of the Warrensburg DEC office to conduct outreach along the canal, mostly focusing on bait bucket transfers. There is also talk about potential boat stewards at locations around the canal, but funding has not been confirmed. Other education and outreach efforts include signage at access points, informational pamphlets, and watch cards. They are working with iMapInvasives to develop a simple way for anglers to report if they think they found round goby. The canal is currently scheduled to open May 20th.

- Allison asked if there has been any input from the canal communities. Erin shared there has not been many conversations with the canal communities yet. Once the AIS Coordinator is on board, they will spend time reaching out to communities and municipalities and discuss the advised option for a permanent AIS barrier in the canal. Round goby is our current concern, but the canal is a pathway for many other AIS.
- Jackie asked if the Champlain Hudson Power Express line will be sited through the canal. Erin believed the line goes over land in the canal area.
- Tom suggested posting the round goby posters and outreach materials in marinas. Erin agreed and shared that one of the main points of the poster will cover how to identify and report round goby and not move them around.
- Tom asked whether round goby lay eggs on the bottom or if they glue their eggs to things when
 they spawn. Round goby lay adhesive eggs on stones, shells and aquatic plants. They have a very
 small, free floating larval form that can get moved around through intakes, bait buckets, etc.
 Many invasive species have small, free floating larval stages that can get transferred in small
 amounts of water. Clean, drain, dry is effective prevention for the majority of AIS.
- Vic noted that Quebec prohibits fishing with bait. Erin added that Vermont did not allow live bait for a while due to viral hemorrhagic septicemia (VHS) concerns. Recently, Vermont has started allowing baits in certain zones.
- Ricky shared that someone will be speaking to his Lions Club about this topic, and they have
 invited the Rod and Gun Club. He suggested speaking to groups that recreate on the lake and
 tributaries to get the word out about round goby and aquatic invasive species. Erin shared that
 they are working closely with staff from the Partnerships for Regional Invasive Species
 Management (PRISM) to spread the word.
- Vic shared he has been asked to speak to an Upper Hudson fishing group who likes the round goby and cannot see the issue they pose. They believe it is great bait that sportfish love, but they do not recognize the long-term impacts. A female can breed every 20 days between June-September. Males aggressively protect the eggs and fry. In Oneida Lake, 100 gobies/ square meter were measured. Erin added that this is a conversation they are having a lot. Bass eat round goby and get larger in the short term, but there is poor recruitment for bass where round goby are present. Ohio has had to change its bass fishing regulations because when male bass are removed from the nest, round goby quickly move in and eat the bass eggs.

Natural Resources Conservation Service (NRCS)

Sarah Trumbull, NRCS District Conservationist, provided an update. They are in the middle of 2022 funding applications. They received ~\$25 million in applications and have ~\$14 million in funding. They are funding a lot of water quality projects, there has been a noticeable increase in people applying to do cover crop work. They are working towards a new program which will be a mixture of an equipment program and conservation stewardship program. Normally, three years of payment are given for cover cropping. This new program would continue payments for a 5 or 10 year contract. Farmers could potentially get payments to cover crop for 10 years.

- Erin asked how NRCS prioritizes which areas to cover crop? NRCS has a ranking process with
 points assigned based on proximity to water supplies and wetlands, if the applicant has never
 cover cropped before, and if there is a water source below them. Each criterion has a certain
 amount of points associated. New York is going to have an Assistant State Conservationist of
 Programs which will help with outreach and getting partners on board.
- Vic asked if NRCS received any funding from the Infrastructure Bill. Sarah noted that the USDA
 received most of that money for payments for commodity crops. NRCS did not get a lot of
 funding through that.

- Vic asked if there are other priorities beyond cover cropping? Sarah shared that Cover Cropping is a big priority nationwide. Locally, NRCS is focused a lot on wildlife. They are trying to move away from large farm operations projects like waste management.
- Vic asked if there are any monitoring projects. Sarah confirmed they have 2 edge of field monitoring projects, drainage monitoring and limited till monitoring, both with Miner Farm.

Lake Champlain Basin Program

The public comment period for the LCBP management plan Opportunities for Action is open from April 15, 2022 – May 16, 2022. Two public meetings to provide additional opportunity for public feedback will be held on May 3 from 2:30PM – 4:30PM and on May 10 from 5:00PM – 7:00PM. Public comment form and registration links available here.

3:10 - 3:30

7. NYCAC Discussion "Where Do We Go from Here?" – Vic Putman, Katie Darr, and Erin Vennie-Vollrath

Governance discussion

The vice-chair position is open. The vice-chair would help with agenda and priority setting for the committee. Members were asked to consider this position over the next few months, perhaps aiming for a September election. The NYCAC has two open seats. In early June, the CAC chairs will be meeting with LCBP's DEI consultant to discuss strategies for membership recruitment.

May and June meeting date and topics

The NYCAC's regularly scheduled meeting would fall on a holiday and the Monday prior is the Lake Champlain Research Conference in Burlington (register here). There is not a great time to reschedule. Vic and Katie are exploring opportunities for a potential joint meeting with the Champlain Watershed Improvement Coalition of New York (CWICNY) on May 19th potentially with a presentation on the Stream Wise Award Program and a discussion about the CWICNY coordinator. If the joint meeting does not happen, the NYCAC will meet next on Monday, June 27th at the Miner Institute. Future virtual meetings will be held via Zoom.