

Vermont Citizens Advisory Committee (VTCAC) on Lake Champlain's Future

June 13th, 2024

5:00 – 7:00 pm

Approved Meeting Summary

Committee Members Present: Denise Smith (Chair), Karina Dailey (Vice-Chair), Sen. Randy Brock, Breck Bowden, Wayne Elliot, Bob Fischer, Lori Fisher, Rep. Carol Ode

Committee Members Absent: Eric Clifford, Rep. Kari Dolan, Sen. Martine Laroque Gulick, Mark Naud, Hilary Solomon

LCBP Staff in Attendance: Sarah Coleman (VTANR), Katie Darr, Eric Howe, Viv Shields

Presenters: Lauren Hierl (VCV), Hannah Grall (ADK Action), Scott Jamieson (NYSDEC), Eric Howe (LCBP), Meg Modley (LCBP), Matt Vaughan (LCBP)

Public Guests: Andrew Milliken, Alison Spasyk

Meeting summary prepared by Katie Darr, Lake Champlain Basin Program

1. Arrival, Networking

2. Welcome and Introductions

Denise Smith led the committee through a plus/delta exercise to review what went well over the last year and opportunities for improvement.

Plus	Delta
<ul style="list-style-type: none">• Public Action Plan release meeting in the fall at the Sailing Center including collaboration with partners to promote and as a committee recruitment tool• In-person legislative meetings to present the action plan• Connecting meeting content to the action plan• In-person meeting opportunities	<ul style="list-style-type: none">• Timing is critical to influence the legislature, need to finalize priorities no later than November 1st• Utilize existing connections in the legislature and the key committees of jurisdiction to share priorities early• Opportunity to align the CAC action plan with the state climate action plan• Quarterly in person meeting potentially in changing locations throughout the watershed

Lori shared that the Lake Champlain Committee is planning to hold an information session about Lake Champlain for legislators and would be happy to co-sponsor that with the CAC. LCC will be approaching

this from an advocacy perspective. Part of the session would be informational to ground new legislators and give them a background on Lake Champlain.

3. Public Comments

No public comments were made

4. Legislative Session Wrap Up Discussion – Lauren Hierl, Executive Director - Vermont Conservation Voters

Lauren walked the CAC through this session's high profile environmental bills including S.213 The Flood Safety Act (became law without Governor's signature on May 30th), S.259 Establishing A Climate Superfund to Make Big Oil Pay (became law without Governor's signature on May 30th), H.289 A Modernized Renewable Energy Standard (Governor's veto overridden), H.687 Supporting Well-Planned Housing and Natural Resource Protection Through Land Use Reform (Governor's veto overridden), H.706 Protecting Our Pollinators from Harmful Pesticides (Governor's veto overridden), S.25 Banning PFAS to Protect Vermonters from Toxic Chemicals (signed by Governor on May 30th). More details about these bills available [here](#). She also shared that the chloride pollution bill that was introduced this year did not move but anticipates it will be brought up again next year. There is an administrative process underway to look at Aquatic Invasive Species control management and expects a bill might come back up for the legislature to consider in the next session.

Discussion

S.213: Karina noted there will be a lot of work related to rulemaking, education, and outreach. This may be an area the CAC can help support, particularly with education and outreach. Wayne added there will be serious staffing challenges associated with that as well with the 10 funded positions and 15 authorized positions to implement this bill.

S.259: Denise asked if other states have done anything like this. Lauren shared Vermont is the first jurisdiction to take this approach. Since it has passed, the NY legislature has passed a similar act that is sitting on Governor Hochul's desk. Maryland and California are actively looking at similar policies.

- Alison asked how the disasters are being attributed to climate change as the science is so complex and asked if the treasurer has the capacity to do this attribution science. Lauren noted that the science has advanced in recent years. She added that the treasurer has some resources to bring in consultants to work on the attribution science and provide that expertise to survey damages and costs in Vermont, the types of infrastructure upgrades required due to climate change.

H.706: Denise noted that NY has legislation that they will ban neonicotinoids by 2029, are other states doing this? Lauren noted that NY is the only state that has enacted this so far, but places outside of the US have banned neonicotinoids.

- Lori added that neonicotinoids not only impact pollinators but also aquatic invertebrates.
- Sen. Brock noted that the legislature has received conflicting testimony on this topic. There is data that the bee population in Vermont has not fallen and there is controversy about whether or not the ban in Quebec has been successful. He added that in cases where Vermont is “first in the nation” like in the case of S.259 it is often extremely costly. In the past when there has been controversial legislation, the legislation may be passed, but held until other states who have the resources to pay for legal defense join. The legislature needs to consider both sides of the issue.
- Andrew noted that if the protecting pollinators act passes, all three jurisdictions in the Lake Champlain Basin will have passed some sort of pollinator protection legislation. There is an opportunity to look regionally at how these policies impact pollinator diversity in the watershed and track relative impacts downstream to rivers and lakes. Denise noted this could be a great recommendation for a TAC research priority.

Chloride Reduction Act: Lori added that LCC and others will push more for the Chloride Reduction Act next year which would require best management practices for when salt should be used, additional water quality monitoring in priority areas with high salinity levels, and all salt storage facilities to be covered to prevent runoff.

Karina asked if there were any updates on the EPA de-delegation petition. Lori noted that there are active discussions with the EPA and the Agency of Natural Resources but she can't provide more details at this time.

5. Break

6. State of the Lake: Clean Water & Healthy Ecosystems – Matt Vaughan, Chief Scientist; Meg Modley, Aquatic Invasive Species Management Coordinator; Eric Howe, Director – Lake Champlain Basin Program
Matt Vaughan, LCBP Chief Scientist walked through the Clean Water section of the new [2024 State of the Lake report](#).

Discussion

- Bob commented on the ecosystem indicators scorecard and noted that if you remove wastewater improvements, there's only one thumbs up. Matt noted one of the issues with the scorecard is it doesn't tell the whole story.

- Lori asked if the graphics include 2024. Matt noted with the exception of Lake Champlain freeze over, the data goes to the end of the 2023 field season. Lori requested the methods used to generate the scorecard.
- Wayne suggested presenting lake freeze over by lake region to track climate impacts. Matt agreed that would be great to do, but the data is not available.
- Denise asked if all water intakes test for 80+ contaminants. Matt noted that EPA requires testing for 86 contaminants and Quebec and the states have some additional testing requirements.
- Wayne commented that the beach closure data might not be representative of the last two years due to the extended closures from the floods.
- Alison asked about the annual load estimates from 2001-2010. Matt noted the load estimates are from the modeling that was done to complete the phosphorus TMDL for Vermont. The 2001-2010 period is the base period that the TMDL is compared to and provides a broad brush, big picture idea. There is not an updated model.
- Bob asked about the 6% contribution of wastewater treatment plants, noting the Tetrattech study showed 3%. Matt clarified the 6% contribution is watershed wide, it is lower in Vermont.
- Wayne noted Missisquoi Bay appears to be trending in the right direction.
- Lori provided positive feedback on the legacy phosphorus graphic.

Meg Modley, LCBP Aquatic Invasive Species Management Coordinator provided an overview of the Healthy Ecosystems section.

Discussion

- Andrew asked if there is anything included about eDNA results or the ability to track things through that method. Meg noted that the report does refer to eDNA especially related to canal management. Eric added that initial results are just coming in now, those were not available to include in the 2024 report.
- Denise commented that it was good to see sea lamprey wounding go down.
- Karina asked why sturgeon isn't included in the report, noting salmon and lake trout are included. Meg noted it is mentioned, but there are not long-term datasets available to share a poignant message about sturgeon. There is a lot of support going towards sturgeon research.
 - Bob added there is a trend to focus on gamefish nationwide.
 - Andrew noted there is an interesting story about sturgeon that would be good to have a presentation on. They are going through a listing process, though the Lake Champlain population may not rise to the level of needing to be listed.

Eric Howe, Director of LCBP, walked through the Thriving Communities and Informed and Involved Public sections of the report. He shared there are plans to create some more focused, topical flyers from the report that can be distributed at events in order to make the report more accessible to a broader audience.

- Lori noted that the public survey reinforced brochures are a more preferred method for the public to receive information.
- Denise added it would be nice to have those additional materials translated as well.
- Denise was surprised to not see more mention of DEI efforts included in these sections. Eric noted that there has been education and training for staff in house related to DEI and externally there are several projects LCBP is supporting to advance DEI including the fishing workshops.
 - Lori noted that as LCBP goes through DEI trainings and work with staff, there may be an opportunity for LCBP to direct funds to support training for watershed groups and partners more broadly.

7. ADK AIS Inspection Certification – Scott Jamieson, Statewide WISP Coordinator Invasive Species – NYSDEC
Scott provided an overview of the NYSDEC's Watercraft Inspection Stewardship Program and the mandatory inspection certification within the Adirondack Park and 10 miles of the park boundary. His presentation is available [here](#). Boaters with motorized craft are required to either receive a certification card from a steward after inspection and, if needed, decontamination at one of the 39 stations covered by the Adirondack Watershed Institute/NYSDEC or self-certify at home and bring the self-certification document to the launch. Is the certification card making a difference? Data shows that boater spread prevention has increased since the amendment to part 576 was introduced. The program can be replicated anywhere and the department is willing to share all information with partners who might be interested in a similar program. One of the big challenges is getting 100 stewards onboarded and trained. WISP is a voluntary program, the stewards can't stop people from entering the water. Scott provided details on the exit 18 welcome center and associated costs. It cost \$700,000 to install the turning lane, construct 2 buildings, a catchment basin, and install water and electrical. There is an \$85,000 annual maintenance and operation cost. Typical decontamination station comes in at \$15,000 and costs include:

- \$2,900 Shed for the decontamination unit
- \$7,500 for Landa pressure washing unit
- \$1,200 for 550gal water tank with valve and hose when well/city water is not available
- \$500 for tools, attachments, PPE, cones, fire extinguisher
- \$1,500 - \$4,000 for site work, landscaping fabric, and crushed stone

NYSDEC is piloting on demand units that cost ~\$10,000. Stewards like how user friendly they are, they are quieter, safer, and hold water temperature at 140.

Discussion

- Denise asked how the stewards are funded and when their season starts and ends. Scott shared their season runs from memorial day to labor day and many of the launches are covered 7 days/week from 7am – 4pm. High priority launches may have multiple stewards. Funding comes through a line item in the NYS budget. NYSDEC contracts with partners like PRISM partners, Adirondack Watershed Institute, and Universities to run the decontamination stations and programs.
- Karina asked for clarification that WISP is a statewide program, but the certification is only required in the Adirondack Park. Scott confirmed that the certification is only required in the Adirondack Park and within 10 miles of the blue line.

8. Clean Water Safe Roads: Overview of ADKAction’s road salt reduction work – Hannah Grall, Project Manager – ADKAction

Hannah provided an overview of ADKAction’s road salt reduction work in the Adirondacks. Her presentation is available [here](#).

Discussion

- Wayne shared his thoughts about the different kinds of winters we have seen in recent years due to climate change. The freeze/thaw cycles may be causing increased use of salt. Even if better practices are implemented, we might not see the gains we want. Hannah confirmed that the Town of Peru has seen a lot more freeze/thaw cycles and freezing rain. Thermal sensors are helpful to track air and road temperatures and monitor road conditions. They have found that using brine to prevent freezing on roads has been critical. Using technology and upgrades in road salt management is helping even with more events that require the use of salt.
- Lori asked whether the workshops have discussed liability as that is a big concern in discussions with municipalities, particularly with freeze/thaw events. Hannah noted that liability does come up. The program focuses on making sure roads are as safe as they can be and using more advanced methods and technologies does achieve a better level of service. If too much salt is added to the road, it can create freezing conditions. ADKAction has not explicitly called out the safety of roads in their outreach materials but may include it as the campaign grows.
- Denise asked if there are efforts to expand this work to Vermont. Lori added that is what the chloride reduction bill is aiming to do. Lake Champlain Sea Grant is doing a lot of work with education and

training around chloride reduction. Hannah shared that ADKAction's resources have been shared with Kris Stepenuck at Sea Grant and they have had conversations about WIT Advisors doing some work in Vermont.

- Wayne noted this seems like a great program and commented on the staffing challenges around the state. People who have been doing things a certain way for a long time may be resistant to change. Hannah shared it just takes one champion in the highway department to help lead the change.

9. CAC Action Plan and Vermont Climate Plan Alignment Opportunities – Andrew Milliken, Agriculture and Ecosystems subcommittee – Vermont Climate Council

Both Andrew and Breck have recently been appointed to subcommittees of the Vermont Climate Action Council. Andrew put together a document outlining the potential areas of alignment between the CAC and Climate Action Plan available [here](#). The Climate Action Council plans to finalize recommendations through the spring and summer and lead a public engagement process by the end of the year. There may be opportunities for the CAC to engage either through the subcommittees or the public engagement process and to find alignment between the CAC Action Plan and the Vermont Climate Plan. There are some pieces missing from the EPA model being used by the Climate Council that are important to Vermont including livestock and tourism. EPA acknowledges these pieces are missing, but the data is not available right now.

- Alison shared that Dr. Carol Adair is doing research on livestock and water quality and suggested following her work.

10. Aquatic Invasive Species Update – Meg Modley, Aquatic Invasive Species Management Coordinator – Lake Champlain Basin Program

Meg provided an update on the status of AIS in the basin with a focus on the canal barrier study and round goby. Her presentation is available [here](#). The contract for Phase 2 of the Champlain Canal Barrier Feasibility Study is close to being executed. The workgroups have started background work. This will be concurrent with the ongoing work to install the Champlain Hudson Power Express powerline. Phase 2 will last at least two years and will further evaluate the selected alternatives: (1) a physical berm between locks c8 & c9 and stoppage of commercial traffic through the canal and (2) a boat lift at lock c9 with commercial traffic at low-risk times.

Round goby is present below lock c1. LCBP continues to support monitoring through the rapid response fund via eDNA, electrofishing, and trawling. There is a detailed response plan that outlines actions that should be taken depending on where round goby is detected (either via eDNA or physical sample). To the north, goby has been

detected above the Saint Ours Dam. Quebec is conducting sampling at 90 sites along the Richelieu River and into Missisquoi Bay. USFWS is conducting eDNA with metabarcoding at 70 sites in Lake Champlain. Last summer two grass carp were found in the fish viewfinder of the Saint Ours Dam. Vermont and Quebec don't allow for the stocking of grass carp, New York allows for the stocking of triploid grass carp that can't reproduce. The spawning grounds of the native copper red horse prevent Quebec from taking more extreme measures against grass carp and round goby.

Following on Scott Jamieson's presentation, the self-certification is challenging to enforce and implementation can be confusing to the public particularly since LCBP's NY stewards are beyond 10 miles from the blue line. There is a public misperception that if a boater self-certifies they do not need to be inspected by a steward. There is no additional funding for enforcement or monitoring the efficacy of the program. Vermont has 4 decontamination stations and Meg is working with Fish and Wildlife and others in the State to explore expansion of the decontamination program. There are just a few years of data from the greeter program, more work needs to be done to identify where along 89 and/or 91 decontamination stations should go. There are some federal programs that might help with cost share including funds from the Army Corps of Engineers.

- Andrew asked about the status of conversations with Quebec around the Chambly Canal. Meg shared that at this time, they are in a learning and partnership building phase with the various entities connected to the canal including the Department of Fisheries and Oceans Canada, regional departments of Quebec Waterways, Parks Canada, and the Ministry of the Environment. It is challenging to parse out who has regulatory authority, enforcement authority, and who would do the actual work on the ground. The Lake Champlain fish tech committee prioritized Champlain Hudson Power Express funding including an interim measure for an electrical barrier on lock c8 and an assessment on the Chambly to identify which solutions might be implemented there. Not sure of the timeline there.
- Lori asked about the total for the Champlain Hudson Power Express Funding. Meg shared it will be over \$50 million, but it comes in slugs every 3-5 years. She did not know what portion of that funding would be allocated to Lake Champlain projects.

11. Lunch

12. 2025 Lake Champlain Action Plan Priorities, Production Process, and Timeline – Denise Smith, VTCAC Chair

Timeline

Sen. Brock suggested that ideally legislation and sponsors should be ready to go by the start of the legislative session. The drafting process for legislation is very busy in December. The CAC will work over the coming months to draft the Action Plan with the goal of meeting with the agency secretaries in September, finalizing the Action Plan content in October, and having it prepared for distribution in November.

Content

The committee discussed whether to focus on high level themes or specific bills, noting that the high level themes could apply to a number of different bills. The CAC does not have the capacity to follow bills through the process. Sen. Brock suggested involving legislators who can draft bills related to the work the CAC wants to get done. Lori commented on the difficulties of advancing a particular piece of legislation as a volunteer body and was supportive of the thematic approach. There's an opportunity to hit those high themes in the Action Plan and at the legislature note which aspects of various bills the CAC supports.

The committee discussed opportunities for alignment with the Climate Action Plan and the Vermont resilience implementation strategy which is targeted for July 2025. Given this timeline, Wayne suggested focusing on alignment for the 2026 action plan once these State plans and implementation strategies are complete.

Denise asked the committee what their top priorities for Lake Champlain are:

- Alison shared that she is interested in floodplains and their impact on water quality and resilience. There is lots of energy and enthusiasm around restoring floodplains and trying to restore rivers back to their natural state
- Breck commented on the balancing act between housing and water quality impacts. How much higher is the delivery of nutrients from developed areas compared to agriculture? What are the impacts of the Act 250 reform?
- Karina's high-level priority is the intersection of climate resilience, clean water, biodiversity.
- Andrew echoed Breck's comment. It is timely for the CAC to help ensure efforts to address resilience, mitigation, adaptation for climate change aligned with addressing the most important issues in the Lake Champlain Basin water quality, biodiversity, and working lands. How can the CAC play a complementary role in pushing these pieces forward?
- Lori agreed with the earlier comments, reinforcing Karina's priority about the intersection of climate resilience, clean water, and biodiversity.
- Carol was also supportive of focusing on resilience, biodiversity, and clean water.
- Wayne agreed with the flood resiliency priority and noted chloride is up and coming. Related to chloride he suggested starting with an education and outreach initiative to work with municipalities on better management first before instituting TMDLs and regulatory approaches. Related to emerging contaminants, PFAS will continue to be on the CAC's radar from a water quality perspective. If the CAC is focused on water quality, there are issues with the speed of things like the 3 Acre Permit. Developed lands contribute twice as many nutrients per square mile. That is an area where we can have big impact over the next few years. Funding and adequate staffing is needed.
 - Breck added that no one has been able to adequately explain why per acre yield of phosphorus is higher for developed land. In other places, it's been demonstrated that exfiltration of

nutrients from sewer systems is part of this. He endorsed looking at the intersection of infrastructure and nutrients.

- Andrew agreed this sounds like a good research question.
- Sen. Brock's Lake Champlain priority is the blue green algae problem on Missisquoi Bay. This should be a high priority as it's affecting the people who live there a lot and affecting our tourism.
- Bob shared his priority is climate change which can undo the changes we've made to benefit water quality. PFAS, Septic, and Cyanobacteria are other areas of concern.

Other Discussion

- Andrew asked what role the CAC plays in influencing implementation? Denise shared the CAC doesn't specifically have a role once the legislation is passed.
- Karina suggested aligning some of the CAC priorities with LCBP research priorities.
- Karina suggested that when we hear from guest speakers and learn what the gaps are, the CAC can push for budget adjustments, more education and outreach, etc.
- Rep. Ode suggested meeting directly with the Chair and Vice Chairs of House Ag, Senate Ag, House Natural Resources, and Senate Natural Resources. She also shared that UVM has a new water resource center that might be able to help us accomplish things. She added that the question of wake boats and what they are doing to water quality is bubbling up in the legislature. Currently the restriction is only for lakes of a certain size. She asked about airplanes landing on water, where do you want them/not want them and the impact of moorings on water quality and biodiversity.
- Sen. Brock noted the CAC needs to think about balance, what is achievable, and involving the right people in the decision. One group of people the CAC hasn't talked about is the federal partners. Issues with cyanobacteria blooms are increasingly being seen in other states. In some ways that is beneficial because it offers an opportunity to get federal folks involved, should be working on that. He agreed with Rep. Ode about the importance of ensuring the Chairs of the relevant committees of jurisdiction are attuned to the CAC's priorities and what affects the lake.

13. Discussion of LCBP FY25 Research Priorities – Mae Kate Campbell, Associate Scientist – Lake Champlain Basin Program

This agenda item was moved to the next meeting.

14. Membership & Governance

ACTION ITEM: Vote on Chair and Vice Chair

Motion to nominate Denise Smith as Chair and Karina Dailey as Vice Chair by: Wayne Elliot

Second by: Bob Fischer

Discussion: None

Abstentions: None

Vote: All in favor

Action Item: Vote on May 15th Meeting Summary

Motion to approve the meeting summary by: Senator Brock

Second by: Bob Fischer

Discussion: None

Abstentions: None

Vote: All in favor

Action Item: Vote to partner with Lake Champlain Committee on their Lake Champlain information session for legislators

Motion to approve the VTCAC's involvement in LCC's legislative information session by: Karina Dailey

Second by: Wayne Elliot

Discussion:

- Wayne and Breck commented on the importance of making sure the VTCAC and LCC are aligned on positions and the educational information that will be shared with the legislators.
- Denise asked if the CAC would be part of the planning team. Lori noted that LCC would take the lead on planning the event.
- Andrew asked for confirmation that this would complement, not substitute, the CAC's legislative outreach. Lori confirmed that LCC is inviting the CAC to be involved in the legislative event as an opportunity to collaborate and co-educate legislators. It will provide a helpful platform for the CAC's action plan, it would not replace the CAC's legislative outreach.

Abstentions: None

Vote: All in favor

15. Meeting Wrap-Up Discussion – Denise Smith, VTCAC Chair

The VTCAC discussed the upcoming meeting schedule and possible core themes for the year including:

Chloride

- Wayne was supportive of the idea to start a pilot program in Vermont, possibly with Vermont Rural Roads.
- Denise mentioned the applicator rule that was passed for manure and thought there could be a similar program or requirement for salt application.
- Andrew commented on the work ADKAction is doing and their work through a pilot town, could work through LCBP to include that in an RFP to replicate the work taking place in the Adirondacks in Vermont.

Microplastics

- Alison suggested microplastics as a topic area. Lori noted that there is a study underway between SUNY Plattsburgh and Lake Champlain Sea Grant.

Climate Change

- Andrew suggested a presentation from Jane Lazorchack, Climate Action Office Director. The committee was interested in this.

JDEI

- Karina suggested a presentation from Shalini Suryanarayana with the State's Office of Racial Equity and VT ANR's DEI committee to learn what they are doing related to DEI and how the CAC might be able to align with and amplify that work.
- Denise mentioned the Vermont Abenaki/Odanak discussions.
- Breck commented on the need for diverse voices on the committee and focusing on different lived experiences rather than a specific community.

Other

- Karina suggested an update on Act 76 and the Clean Water Service Providers to learn how that has been going, what is working, and what needs improvement.
- Denise shared moving forward, there will be a 5-minute agenda item to share updates from the Lake Champlain Steering and Executive Committee meetings.
- Lori suggested having presenters answer the question of how the CAC can best engage and suggested, drafting a brief write up to share to give them context on the committee as well as some questions for them to consider as they present to the CAC. She also suggested exploring utilizing other members as designees to represent the CAC (i.e. to the TAC or other committees) to make sure we can participate more meaningfully, capitalize on their knowledge and credibility.