

**Lake Champlain Basin Program  
Technical Advisory Committee meeting  
Held remotely due to COVID-19  
Wednesday, November 3, 2021, 8:45 AM – 12:00 PM**

**Approved TAC meeting summary**

**TAC Members:** Bill Ardren, Jennifer Callahan, Ryan Cunningham, Laura DiPietro, Bryan Dore, Neil Kamman, Steve Kramer, Bridget O'Brien, Mario Paula, Oliver Pierson, Jamie Shanley, Lauren Townley, Ryan Waldron

**LCBP Staff:** Mae Kate Campbell, Eric Howe, Lauren Jenness, Elizabeth Lee, Meg Modley, Matthew Vaughan, Sarah Coleman, Katie Darr, Erin Vennie-Vollrath, Peter Isles

**Guests:** Lori Fisher, Danielle Owczarski, Kris Stepenuck, Brenda Gale Bergman, Tom Berry, Breck Bowden, Ben Copans

**1. Updates/announcements**

- Oliver: Announcements from the State of Vermont. In West Haven, there are hearings underway to classify their wetland as a class 1 wetland. In Addison, there was a washout on Rt. 125 near the Lake Champlain bridge. That road will be closed as VTrans figures out how to fix it. Last week, the Department of Environmental Conservation (DEC) held hearings about the Coventry Landfill pretreatment operation. Effluent from the treated leachate ends up in Lake Champlain. Casella may be required to install an innovative way to treat leachate to remove contaminants of concern on site, whereas now the leachate is trucked to Montpelier and/or Plattsburgh and treated there. With regards to the Agency of Agriculture study on gauging Carmi tributaries to calculate external loading, there were some blooms in mid-October. There's lots going on in VT with reclassification of surface waters. The Ripton stream petition is moving forward, and we have 3 petitions in for lakes (Lake Caspian is the only one in the Lake Champlain basin). To qualify as an A1 water, there's a prohibition on new septic systems greater than 1,000 gallons/day. This prohibition is creating challenges with reclassification petitions outside of the basin. Also outside of the basin, there's been some hearings about the future of the Morrisville dam that creates the Green River reservoir. In other news, there's a fledgling effort to work with the legislature to create a boat sticker program. This would require non-VT-residents launching their boats in Vermont waters to purchase a sticker, that revenue would go to fund aquatic invasive species (AIS) efforts. Demand for AIS grant funds is increasing, but funding is dropping off. Amy Picotte is retiring at the end of this year.
- Jamie: For the USGS glyphosate project – we were hoping for a storm in October. We got some higher flows on the Rock River and in Stevens Brook. Jewett Brook was still dry. Data are starting to trickle in, will report back on results.

- Neil: The Clean Water Board is holding hearings on the FY23 budget. Record-breaking budget year; almost \$26 million available, \$11 million of capital funds, \$10 for American Rescue Plan Act (ARPA) funds. We will be running slightly different grant programs to meet Act 76 requirements.
- Tom: The Senate is proceeding on FY22 appropriations; the continuing resolution expires in early December. There's \$20 million for LCBP in the FY22 appropriations bill, \$750K for monitoring on Lake Champlain to go through LCBP, \$5 million for the VT Army Corps 542 program. There is a lot of discussion on the Infrastructure bill and the Build Back Better bill – it seems like they have a good chance of advancing. The infrastructure would include an additional significant appropriation for LCBP (\$40 million over 5 years). The Build Back Better bill has lots of funding for conservation work if passed in its current form. Lots of opportunity to do good work going forward.
  - Neil: It looks like the continuing resolution may continue?
  - Tom: The Senate did post their appropriations bill for interior; those are the numbers I'm reporting. Ultimately, those bills have to pass. I'm not optimistic about the Republicans having interest in passing a new FY22 appropriations bill at this point. There are some incentives to adopt appropriations bills each year, but this year we could be looking at a continuing resolution for the full year.
- Matt: The Clean Water and Healthy Ecosystems request for proposals (RFP) just closed. The Technical request for pre-proposals (RFPP) will close next week. TAC members will review and score pre-proposals in advance of the December meeting. I am working on the tributary loading analysis, which will include new data from tributaries and new analyses. I'm hoping to present results soon. We've reached out to a few potential new TAC members -- please let me know if you have suggestions for additional members who could add to TAC's expertise.
- Mae Kate: The Lake Champlain Research Conference has been postponed until the week of May 23. We are working with NEIWPC to find a new venue, and should have a decision in the next couple of weeks. We will re-open the call for abstracts in mid-January.
  - Bill: now that the date has extended, are there opportunities to contribute new breakout sessions or topical areas?
  - Mae Kate: The committee was planning on keeping the same session list, but feel free to provide ideas.
  - Eric: I was asked to give a talk at the Green Mountain Water Environment Association conference, it was nice to do an in-person meeting. That helped me with hesitations about postponing conference.
- Meg: Following-up on round goby detection, the task force will meet tomorrow to review a proposal for eDNA and trawling at the southern end of the Champlain Canal.

*Review and approve summary of previous TAC meeting*

- Motion to approve: Jamie
- Second: Jenn
- Discussion:

- Jamie: The MJW3 gauge is actually a well, it was the lowest September reading of that gauge.
- Matt: TAC members can suggest changes on online version, can review at next meeting.
- Bridget: Clarify about microcystin detection – was in Alburgh Village, was only in raw water (not finished water).
- Vote: All in favor.

## 2. Discussion and feedback: 2022 Opportunities for Action

Matt provided an overview of *Opportunities for Action* (OFA), the management plan for the Lake Champlain Basin Program. The last version was approved in 2017. Following the June Summit with the Steering Committee where we invited all committee members to participate in generating ideas, the Steering Committee voted and ranked ideas for themes to include in an update to OFA. Over the past few weeks, staff have been looking at incorporating ideas generated during the Summit into the existing OFA and have reviewed the 2017 content for possible revisions. Today, we'll go through what we've generated and see what TAC thinks overall. There are 4 layers to this framework: goals, objectives, strategies, and task area. Task areas are basis of our discussions.

### *Review revised strategy and task tables for Clean Water section*

Matt noted that one revision staff suggested was re-organizing the content in terms of research/study and implementation. He reviewed potential revisions to the task table.

#### Objective 1

- Oliver: For the benthic point, do we feel there is a good enough link to use best management practices (BMP) implementation and changes in benthic health? My mind jumped to benthic cyanobacteria, but others may have had other things in mind. Do you feel like there is a clear enough link?
  - Matt: I don't know what the author had in mind; we are interpreting to our best ability. I'm guessing that it would imply macroinvertebrate studies.
  - Laura: Sometimes it's hard to make connections between these factors, so I'd caution against making it a goal.
  - Matt: if someone would want to propose this type of project, it may already fall into this task.
- Jamie: Since you've made an effort to distinguish between research and doing, where does monitoring fall? We haven't had enough interpretation of monitoring being done; do you see need to separate?
  - Matt: We tried to make this distinction, but all environmental science includes monitoring. We could try to organize the strategy a bit better.
- Neil: I'd add vote of support for groundwater studies/interaction. For the benthic piece: did that flow from the conversation about pesticide monitoring? This feels like it is too specific to include at this level.
  - Matt: I am hearing that this work is already implied to be included in this section and that we could take this specific language out.

## Objective 2

- Neil: With respect to the “maker space” idea, is there opportunity there?
  - Matt: staff had doubts as well, but we didn’t want to dismiss altogether.
- Oliver: The last piece about fund and promote programs around contaminants of emerging concern is duplicative of first three that include PFAS, microplastics, and road salt. I’m also wondering, do we have any broader concerns about OFA getting too long? There might be an opportunity to refine this list and have the details come out in another format.
  - Matt: That is a concern. We do want to include everything LCBP should be focusing on and funding, but we could work on making the document less of a catch-all.
- Ryan C: For programs for promoting reduction of chemicals, does it make sense to have a proper planning, targeting, instead of broad ‘reduction’, for efficiencies of use? For instance, ‘Programs that increase efficiency of use’?
  - Matt: The strategy is to reduce, but the task, is to promote increased efficiency.
- Jenn: I would suggest changing "road de-icing salts" to just "de-icing salts" unless we only want to target roads.

## Objective 3

- Neil: Bank stability can be code for putting a lot of rock in the riverbank under the guise of nutrient reduction when not necessary; easement is still about reconnection, equilibrium. VT would say equilibrium, but this is a multi-jurisdictional plan. I’m also curious about calling out a specific tool to identify BMP installation areas.
  - Laura: FarmPrep is valuable, and we are investing in it, but it’s not necessarily ready for prime time in this space. There’s a \$7M grant to develop uses to pay for p reduction, but good portion of that grant is going to put upgrades into FarmPrep. There’s always need for support for additional resources to keep these efforts up to date, that isn’t a bad space for partners to apply to be in. I do want to make the connection between this work to conservation practices and climate change. Through total maximum daily load (TMDL) funding LCBP provides, we are always outpaced for requests. This is an area that could be expanded.
  - Matt: We are planning to bring up climate change at the end of this review, considering if should be own objective, sprinkled in, or both.
- Neil: For wastewater treatment facilities assets, this is a valuable area for planning. In VT the drinking water community is ahead of wastewater community. This priority should live in OFA only if VT, NY, and QC agree that it continues to be of value. I do know that the program continues to support optimization, but asset management is different. For precision of wording, these are two separate things, and should be split.
  - Lauren T: We had started a pilot program for asset management and are looking to have a statewide program but are still promoting and prioritizing. I don’t know the status of statewide program; this might be premature, but NY likely would support.

- Sarah: in terms of optimization on the VT side, we've hit saturation at some level. It would be useful to check in with the project manager. Wastewater projects have evolved to asset management, but there are still opportunities.
- Neil: VT is also thinking about adding asset management in as requirement to receive additional subsidies.
- Matt: There are lots of programs that are doing this. Leaving it in as two different tasks would allow LCBP to have as much as possible for OFA/grant funding.
- Neil: I wonder if this should be phrased more as promote than fund. We are talking about municipally owned and operated equipment; I don't know if we want to lock LCBP dollars into this.
- Oliver: In VT the greatest residential density is within lakes, developed lands isn't in cities/urban it's along lake shorelands. I think it deserves mention.
  - Matt: if you could think of appropriate tasks, nutrients, sediment, rather than habitat, happy to hear.
- Neil: I like the idea of highlighting the Missisquoi bay task force, and learning from the mass balance modeling, because it was the headline recommendation of the IJC. The strategy might read; 'adapt, adopt, implement recommendations. 'Fund and promote' is premature. It makes sense to stand alone as its own strategy.

#### Climate Change

- Neil: Both states and QC have climate action plans.
  - Laura: We are not fully invested in current work, but I don't think there is a budget discussion coming from that. In terms of the timing and outcome of how the budget roles out, there should be space saved for opportunities where local partners can implement pieces of the plan.
- Neil: is the objective that we support research or local action?
  - Oliver: It could be both. As we develop a new surface water strategy in DEC, we are having this same debate. My preference, while LCBP can't solve climate change in the region, it's enough of a pervasive issue that supporting research and projects should be called out specifically. I like the idea of creating a new objective. This should tie in with the climate action plans. We are past the point of sprinkling.
  - Peter Isles: I agree with Oliver. It's important to address specifically, especially from a research perspective.
  - Matt: I am thinking that staff will play with this and try a new objective and or as ensuring every strategy has a task.

### **3. Workplan review: Cyanobacteria monitoring 2022 season (Lori Fisher, Lake Champlain Committee)**

- Matt: The cyanobacteria monitoring season has been extending earlier and later each year, which is why we are getting a jump on this workplan. Much of this content will be familiar, Lori will highlight changes.

- Lori: I appreciate the opportunity to present to you early. We begin recruiting and planning for the season in January; monitoring rolls out in June and can run into November.
- Lori provided an overview of the workplan for the 2022 cyanobacteria monitoring program. The workplan is divided into 4 primary tasks – planning the season, implementation, assessment and review post-season, and reporting. In 2022, the program will be expanding monitoring sites and identifying site gaps. This season, LCC will also be expanding outreach and advertising, and working to better reach underserved communities.
- Matt: On the budget issue, that's something we can work on offline. We are looking for TAC feedback on tasks, and the technical aspects of the project.
- Neil: You mentioned buying mailing lists in order to expand reach, how does that work?
  - Lori: We are going to experiment with email lists too. We worked with UVM on a public survey project, and that involved purchasing email mailing lists. We hope the email lists will help us reach a different audience. Physical mailing lists you can get from town clerk's offices, but they need tweaking to be functional. We also would like to expand outreach to populations that use the lake but whose primary language might not be English.

**Motion: To approve the workplan as presented**

By: Ryan Cunningham

Second: Bill Ardren

Vote: All in favor

**4. Presentation on Vermont Tactical Basin Planning (Danielle Owczarski, VTDEC)**

- Neil: I've had the pleasure of working with Danielle for a number of years. We often make mention of tactical basin plans, and it occurred to me that TAC hasn't had a deep dive into what they are and what they do. It's helpful to have Danielle join us and teach about basin planning.
- Danielle: First I will discuss how to access this information, then I'll share details about the tactical basin planning process, then take questions and feedback about what you might be interested in learning more about. Danielle reviewed the VT Watershed Planning website: <https://dec.vermont.gov/water-investme/watershed-planning>. She showed a story map that was created for the Lamoille Tactical Basin Plan: <https://arcg.is/1GCWem>. She reviewed the 5-year process and how the plans lead to the identification of funding priorities.
- Neil: The story map has benthic monitoring data included, correct?
  - Danielle pulled up the story map and described the water quality monitoring work that has taken place.
- Matt: You mentioned that you have been impressed by comments, happy to hear, how many comments do you typically receive and what is a typical comment like?
  - Danielle: The comment content ranges. For the survey itself, normally in the past we haven't had many comments. This year was the first year we were putting out larger surveys; we received ~140 responses, the majority from private

landowners. Comments did range, some folks say protect all waters, not just impaired waters. It felt good to hear that from people. Some people focused on particular topics like the Green River Reservoir or lampricide treatment, while others just wanted to see more work in the watershed and to learn about projects.

- Oliver: Can you talk about the relationship between tactical basin project identification and the Watershed Projects Database (WPD), and how those fit together over the course of the 5-year plan?
  - Danielle: The WPD hosts discrete actions, around 63 strategies identified in the plan and actions are in the WPD. If you have a project that you think would meet the strategy, you could reach out to the watershed planner to add that into the database. The database gets state funding via block grant funding. The database has info on all projects identified, whether they are in progress, funded, or complete. They can be found via the clean water portal.
- Jamie: great presentation. I have a question about how closely you coordinate with watershed groups. When watershed group thinks of project, is your plan the first they look at? Do you work with them to steer projects?
  - Danielle: In the past, we've had to coordinate closely and look at the plan, because we have contracts with watershed groups regional planning commissions and conservation districts. They get funding to work with us to work on strategies. In general, we are in step with them because we have regional coordination meetings consistently throughout the year. If there are watershed groups not making contact, they should.

##### **5. Presentation on Lake Champlain Sea Grant Institute research projects and outreach activities (Dr. Kris Stepenuck, UVM)**

- Matt: We asked Kris and Breck to provide an overview of what Lake Champlain Sea Grant (LCSG) has proposed in their workplan for the next 2 years. We want to make sure LCBP and LCSG are doing complementary work and that we continue to be well-coordinated.
- Breck: Pleasure to talk with the TAC.

Breck provided an overview of LCSG's mission, approach, and partners they work with to achieve their goals. He reviewed recently funded research projects and ongoing scholarship/fellowship programs. Kris provided an overview of the Lake Champlain Grant workplan for the next 2-years.

- Matt: In the future, it would be great to get more in-depth updates on a few of the focus areas outlined in the 2-year workplan.

