

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

Monday, January 10th, 2021

4:00 pm – 6:45 pm

APPROVED MEETING SUMMARY

Committee Members Present: Denise Smith (Vice-chair), Eric Clifford, Karina Dailey, Rep. Kari Dolan, Wayne Elliott, Bob Fischer, Lori Fisher, Rep. Carole Ode, Hilary Solomon, Jeff Wennberg

Committee Members Absent: Mark Naud (Chair), Sen. Chris Bray, Sen. Randy Brock

LCBP Staff in Attendance: Mae Kate Campbell, Sarah Coleman (VTANR), Katie Darr, Colleen Hickey, Eric Howe, Lauren Jenness, Elizabeth Lee, Ryan Mitchell

Speakers: Deborah Lee, Curt Gervich, Bill Richmond

IJC Study Members: Celine Desjardins, Madeleine Papineau, Adam Greeley, Christina Chiasson, Mark Leiva, Andre Champoux, Daniel Leblanc, Kris Stepenuck, Christopher Wilkie, Adam Greeley, Emma Spett, Jesse Feyen, Paul Allen, Richard Turcotte, Serge Lepage, Bill Werick, Jean-François Cantin, Hadar Pepperstone, Serge Villeneuve

Public Guests: Andrej Barwicz, Jared Carpenter, John Davis, James Dawson, Jon Groveman, Don Jaquish, Brendan Kaplan, Sylvia Knight, Ricky Laurin, Pierre Leduc, Crea Lintilhac, David Mears, Tom Metz, Margaret Murphy, Hannah Neilly Andy O'Brien, J.M O'Brien, Vic Putman, John Roberts, Caroline Rosetti, Dylan Smith, Charlotte Staats, Fred Woodward

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

4:00 – 5:45 pm

Welcome and Introductions

Mark Naud welcomed attendees and introduced recently appointed VTCAC member, Karina Dailey.

Public Comments

No public comments were made.

ACTION ITEM: Review and vote on draft September 13th, October 18th, and November 8th VTCAC Meeting Summaries

Sen. Brock moved to accept all of the meeting summaries; Rep. Ode seconded. The motion was approved unanimously, motion carried.

5:15 – 6:00 pm

Lake Champlain-Richelieu River Flood Study Discussion – Debbie Lee, Curt Gervich, Bill Richmond

Debbie Lee, the US Co-Chair of the International Joint Commission Lake Champlain-Richelieu River Flood Study, provided an overview of the draft study recommendations. Dr. Curt Gervich, the US co-lead for the Social, Political, Economic (SPE) Analysis Group, facilitated a discussion to gauge the acceptability, feasibility, and

obstacles to implementation of the proposed recommendations. The Study Board will use the feedback from this discussion to refine the final study recommendations which will be presented to the US and Canadian governments for consideration of and future action. The presentation is included with the meeting materials, a summary of the discussion for each recommendation is included below. Additional public meetings will be held on February 8th from 10am - 12pm ([Register Here](#)) and 7pm - 9pm ([Register Here](#)) in addition to a formal public comment period.

Discussion Related to the Draft Recommendation on Theme 1: Structural Solutions

The Study Board recommends the IJC advise governments that a modest level of flood and drought relief can be achieved by returning the Saint-Jean- sur-Richelieu shoal and the hydraulic regime to a more naturalized state, through the removal of some flow-impeding human artifacts and the installation of a submerged weir (Alternative 1). Additional flood relief can be gained through combining this with a modest diversion through the Chambly Canal (Alternative 3). The Study Board has determined that both these alternatives present a viable, moderate structural solution.

- The positive impact of the recommended solutions needs to be put in the context of the 2011 flood so the public clearly understands the benefits.
- **Q:** What were the assumptions of the Cost/Benefit analysis?
 - **A:** Bill Werick clarified that costs are well known and occur as soon as the structure is built, with some additional costs for maintenance. The benefits are more speculative and are calculated based on the average likelihood of flood occurrence and potential damages. If we were to have a flood like the 2011 flood in the year after we built the project, the benefits in that one flood would pay for the project. There would still be damages, but they would be substantially reduced.
- **Q:** How will the project be funded?
 - **A:** Debbie Lee shared that the project would be funded from the US, Vermont, New York, and Canada. The breakdown of funding would be determined by the governments.
- **Q:** Did the study look at the effects of the structure on native fish?
 - **A:** Debbie Lee clarified that the study did look at a limited range of performance indicators for a variety of fish, but if the governments decide to proceed with the structural solution a more thorough environmental impact assessment would be required to move the project forward.
- **Q:** How was the flood level evaluated?
 - **A:** Bill Werick noted that in the shoulder seasons, the water level is slightly higher and more natural, as discharge is increased. The reshaping of the channel allows greater flow. Alternative 1 will lower water levels whenever they are high, this is intrinsic in the system and has been tested with many simulations for large and small floods.
- A primary challenge will be securing funding for projects.
- Several participants echoed the importance of targeted outreach to environmental organizations in New York and Vermont.
- Bill Richmond clarified that once the study is complete and recommendations are submitted, it does not mean the governments will implement the recommendations and begin constructing the project. For a project to be built, it needs to be initiated by the governments. During the governmental review, they may change details and decide to take on further testing.

Discussion Related to the Draft Recommendation on Theme 2: Watershed Storage

The Study Board recommends that the IJC encourage the governments to continue protection of existing wetlands as they provide some level of flood relief at the basin scale.

- Several attendees voiced concern that the Study left out critical areas for potential storage. The Study used the National Wetlands Database which is incomplete and primarily looked at agricultural lands which may set up conflicts with farmers. There are wetlands in other types of land that were not factored in. The report underestimates the scale of wetland benefits. The study results need to discuss the tremendous wetland loss that we are suffering from and its effect on the capacity of the lake to weather floods.
 - Debbie Lee clarified that the Study did recognize value wetlands and key wetlands. The Study needs to be careful of the messages conveyed. There is great value in preserving wetlands and rehabilitating wetlands, however the challenge with this Study is it is mandated to look at reducing water levels on Lake Champlain. Under the mandate of the Study, they are not able to address how additional wetlands would help with localized flooding. The Study will be careful with this messaging. Wetlands are helpful at basin scale for small to moderate flooding, but with major floods, watershed storage is consumed, and it would be difficult to have enough storage just with wetlands.
 - Bill Werick added that the Study did a lot of work to look at the extent of both wetlands and floodplains through modeling. They looked at The Nature Conservancy paper published about the Otter creek wetlands which had a huge effect during Hurricane Irene. Water stored in riparian areas flowed back to Otter Creek. However, this study is focused on Lake Champlain and tributary storage isn't an effective strategy to decrease lake levels.
- An issue in promoting the preservation and remediation of wetlands is increased pressure to develop waterfront properties.

Discussion Related to the Draft Recommendation on Theme 3: Flood Response

The Study Board recommends that the IJC advise the governments that:

- *Work to improve the functionality and implementation of coherent risk assessment systems will need to be supported after the Study in both countries.*
- *State-of-the-art modelling tools (such as the Integrated, Social, Economic and Environmental system TM) developed for the Lake Champlain-Richelieu River basin can greatly aid flood response planning and should be maintained.*
- **Q:** Were the new bathymetry models available for shallow waters utilized by the Study?
 - **A:** Jesse Feyen affirmed that they worked closely with Tom Manley to incorporate his bathymetric data into the hydrodynamic model in combination with additional survey work.

Discussion Related to the Draft Recommendation on Theme 3: Climate Change & Flood Response

The Study Board recommends that the IJC advise the governments that the variety of climate modeling approaches applied by the Study all indicated the potential for larger, more damaging floods than 2011. This information should be shared with communities and its consideration in their floodplain management and emergency plans should be encouraged.

- **Q:** Did the Study quantify the risk of flooding greater than the 2011 flood?
 - **A:** Debbie Lee noted that it is not possible to assign exact probabilities. The Study modeled thousands of scenarios. We cannot predict what the future climate will be, it depends on

emissions reduction and other factors. The ISEE model is a powerful tool for municipalities and planners.

- Multiple attendees noted that the local level is not equipped to fund this, funding would be required from the state, provincial, and federal governments.
- In addition to large flood event modeling, it would be helpful to see data on future average lake levels included in the Study.

Discussion Related to the Draft Recommendation on Theme 4: Floodplain Management

The Study Board recommends that the IJC encourage the governments to work with the jurisdictions, private sector and communities to explore the ideas and analytical modelling approaches presented in the Study's Integrated Flood Risk Management Strategy for the Lake Champlain -Richelieu River basin (flood mapping, flood risk communication, management of floodplain occupancy, flood insurance).

- Obstacles to this recommendation may include wealthy people who are connected to politicians and influence floodplain management.
- Local governments will need to be deeply involved in floodplain occupancy and management.
- Floodplain mapping can also be an opportunity to look at possible wetland expansion.
- Insurance policies should discourage building and development in floodplain areas.
 - Bill Werick clarified that it is generally widely agreed that insurance should not encourage development. The flood insurance program would be for homes and buildings that have already been built. Although we've had flood insurance for over 50 years in the US, its effectiveness is limited. Most people do not buy it. The ISEE model is a useful tool that can help determine at a particular location if it makes more financial sense to insure a particular building or relocate it. Better, more granular data can help improve flood insurance programs.

Lori Fisher made a motion for the VTCAC to make a formal request to the Lake Champlain-Richelieu River Study Board that they hold an additional stakeholder meeting with environmental groups in New York and Vermont. Bob Fischer seconded.

- The motion was approved unanimously.

5:45 – 6:45 pm

Public Comments

No public comments were made.

2022 VTCAC Action Plan Discussion – Denise Smith

Denise walked through the latest draft of the 2022 VTCAC Action Plan and led the CAC through a discussion on the edits and outstanding comments since the last meeting. The Action Plan Work Group will reconvene on Friday, January 21st to discuss and incorporate the suggested changes. Summary of comments and suggested edits below:

- Add descriptions of the required workforce and business developments to the talking point.
- Talking points for Aquatic Invasive Species Prevention should include:
 - The bill introduced by Rep. Dolan that supports dedicated funding for AIS prevention and management
 - Data on the loss of AIS staff at VTANR

- More background on the current grant programs available, including state programs which are limited to municipalities and only provide one-third of the project cost
- Commodity agriculture is driven by the marketplace, not the legislature. Many farmers are trying to be sustainable. Fully funding current assistance programs and providing resources for small farms to help them adopt new practices, technology, and equipment could help support the farming sector's transition.
- Consolidate Water Quality Enforcement comments
 - Hilary shared that from an on-the-ground perspective, this would create issues.
 - John Roberts shared that farmers want consistency and the ability to talk to regulators. In the last 4-5 years, VTAAFM has dramatically increased regulation. There is an assumption that DEC is better at enforcement. Farmers do get frustrated by responding to two different agencies on occasion. There needs to be more respect between agencies and consistency about what they do and how they do it. Not sure consolidating enforcement would actually achieve results.
 - Eric shared that he had a conversation about this with DEC and ANR, they were not opposed to consolidation, but it would take at least 5 years to do that. They said clarity would help the most. There are too many gray areas between the agencies to operate effectively. The Dairy Community is going to ask the legislature for clarity. If the CAC could make a recommendation to ask for clarity of these gray areas, this would help both agencies work better together, help farmers, and help the public understand how the two agencies work together.
 - Jeff was not opposed to Eric and John's points. The notion that DEC represents the gold standard of clear, consistent, timely enforcement, is not there yet. In the past, he has supported this in the Action Plan, but it hasn't been implemented. Backing up and trying a stepwise measure might be more prudent. The CAC needs to say something about enforcement, but this isn't the right thing. If there is consensus to retract to a plea for greater consistency and efficiency, as opposed to the reorganization of authority, would support that. If folks feel more comfortable as is, that is okay.

Meeting Wrap-Up Discussion

The next meeting is scheduled for **Monday, February 14th from 5:00-7:00 pm**. The agenda will include work on the Action Plan and feedback on the LCBP's Opportunities for Action.