Meeting Summary (Approved)

Committee members present: Eric Clifford, Bob Fischer, Lori Fisher (Chair), Sen. Ginny Lyons, David Mears, Rep. Carol Ode, Denise Smith (Vice Chair)

Committee members absent: Rep. Steve Beyor, Sen. Carolyn Branagan, James Ehlers, Wayne Elliott, Alex MacDonald, Mark Naud, Jeff Wennberg

Others present: David Borthwick-Leslie, Pastor Nancy Wright, Ellen Kujawa (LCBP), Crea Lintilhac

Meeting summary by Bethany Sargent (Vermont Department of Environmental Conservation – DEC).

1. Welcome and Introductions

2. Public Comments
   No public comments.


   Keith Robinson, study Co-Chair, gave a summary of the five-year study, which has three primary objectives: (1) recommend measures to mitigate future flooding, (2) develop a real-time flood forecasting and flood mapping system, and (3) assess public opinion on the flood mitigation measures. The study workplan, to be completed over five years, is currently under review by the Commissioners.


   Below are questions and answers during the presentation.

Q [Sen. Ginny Lyons]: Is there a checking account yet?

A [Keith Robinson]: There is in Canada, but the U.S. is getting annual appropriations through the State Department budget (~$500,000 annually); $1,000,000 is needed in the next year, so they are preparing priorities for work based on the funding total.

Q [Lori Fisher]: Is it easy for you to differentiate flood forecasting systems now compared to the Great Lakes?

A [Keith Robinson]: Differences are very big. The National Weather Service (NWS) has a simplified approach for making predictions and characterizing the lake. The current model tracks
the volume of water in the lake and relates it to lake levels. This works for Rouse's Point, but in the Great Lakes, they have a 3-D model, which looks at water coming in, wind, and waves, as well as the circulatory pattern. It’s a much more sophisticated model.

Keith Robinson recommended the VTCAC stay engaged on the study through the Public Advisory Group.

Q [Lori Fisher]: Are you looking at natural infrastructure?

A [Keith Robinson]: We are assessing the benefits of floodplains.

Q [Ginny Lyons]: What was in Option C that’s not here? Were there mitigation steps to be taken?

A [Keith Robinson]: It was more inclusive, more things to do. There was more work looking at natural resources, looking at sedimentation; even the most expensive option did not implement anything. The decision support tool will allow those that are making the decision to better understand impacts of their decision. It’s designed to synthesize a lot of information, utilizing the data that would come from the first six steps of Option B.

Q [Ginny Lyons]: What’s the result?

A [Keith Robinson]: A series of recommendations to the US and Canadian Governments. Based on the technical work we’ve done, and the input from decision makers, the public, government agencies, here are the top five steps to minimize flooding in the basin, for example.

Q [Ginny Lyons]: Will part of it be a governance structure for making these decisions?

A [Keith Robinson]: The study will develop a stage damage curve relationship, which tracks damage associated with increased water level. For example, we may want to target a particular stage because of the damage that will result and manage water levels above this stage. The IJC would determine how much water to release, but it didn’t work as well as they wanted because they had more flooding than they were prepared to handle.

Q [Bob Fischer]: When it’s all done, will the flood forecasting model still be used?

A [Keith Robinson]: The National Weather Service will end up with the model. One of our recommendations is for an operational forecasting system.

Q [Rep. Carol Ode]: What kind of funding stream do they have in the Great Lakes and is it stable?

A [Keith Robinson]: I’m not sure, but it’s stable.

Q [Sen. Ginny Lyons]: Will the actual work be done by members of the various groups or will there be a Request for Proposals (RFP)?

A [Keith Robinson]: Work will primarily be done by members of the various groups, but there will also probably be some RFPs that go out. That decision will be made by the study board.

Q [Sen. Ginny Lyons]: Will wetland analyses be only in the basin? To the headwaters?

A [Keith Robinson]: We have to factor in the entire watershed. The level of detail will be determined by what we have to work with.
Q [Bob Fischer]: Are they looking at conveyance structures?

A [Keith Robinson]: No dams on the Richelieu river, so yes, they are focused on conveyance, changing channel to allow more water to flow.

Q [Lori Fisher]: Are you looking at past studies, particularly from the 1980s?

A [Keith Robinson]: We have and are looking at all those studies and their recommendations. Now we have the opportunity to do some of that work. It’s up to the group to decide how best to use the funds available.

There were a series of public meetings in July 2017 (one in Burlington and one in Plattsburgh) – the input we received during those drove the revised workplan. We will have one or more public meetings a year over the course of the study.

Lesley Ann Dupigny-Giroux of the University of Vermont is leading the Public Advisory Group (PAG) in the U.S. They are also planning a meeting with all the mayors on the U.S. side.

Q [Sen. Ginny Lyons]: Local decisions about development in the watershed become extremely important. What type of model is being done with respect to land use? Reaching out to those who make land use decisions is really important. People need to understand the impacts of flooding.

A [Keith Robinson]: I don’t see us doing build-out analysis, but we will use it if it’s available, and wetland maps, which ones are connected, which ones are not. If we opened up these wetlands during flood events, how much water can the assimilate?

Crea Lintihlac commented on Lake Champlain Sea Grant’s outreach to realtors on floodplain mapping, which she thought was very clever and effective.

David Mears mentioned that holding a public meeting won’t be enough to draw out the full mix of people. Those who experienced flood damage would be more likely to come out, but may not represent the broader collective of interests. He suggested a sector approach may be less antagonistic and adversarial.

Denise Smith suggested that getting on select board calendars is the most effective way to engage towns.

Still working on communications, public engagement plan. IJC just brought in a new coordinator;

Q [Rep. Carol Ode]: Will you have price tags with work that needs to be done?

A [Keith Robinson]: Yes.

Q [Pastor Nancy Wright]: How does one value the different sectors? Damage to wetlands versus damage to a city?

A [Keith Robinson]: This is where you find your metrics, so you can characterize damage. For example, if the state wildlife program is trying to manage for certain species, that’s an important indicator for the State of Vermont. An economic indicator could be damage estimates of a 1-foot increase in the lake level.

David Mears commented that one of the trickiest things us to identify where future development should or shouldn’t happen, where there are opportunities for buy-outs. The challenge is that
some of the most expensive homes are in the worst spots. This report isn’t going to answer those tough questions.

Keith Robinson asked the VTCAC members to provide feedback on how you want to be involved and what outreach they feel is important.

**Q [Bob Fischer]:** Where are we at with funding for river gauges?

**A [Keith Robinson]:** Things have stabilized. There is a broader base of support across the State of Vermont – a combination of state funding and cooperative matching dollars.

**Q [Crea]:** How much are we learning from Harvey? Are we changing some of our practices?

**A [Keith Robinson]:** The province of Quebec is getting their feet wet in more flood management and regulation than they have in the past.

### 4. Lake Champlain Action Plan Discussion

Denise Smith, Action Plan Working Group co-chair, recapped the last working group meeting.

**Flood Mitigation**

Given the flood mitigation study is still in its preliminary stages, it does not make sense to incorporate it into this year’s action plan.


Bethany Sargent will keep a running list of issues/topics of concern.

**Toxics/Next Generation Pollutants**

Crea Lintilhac mentioned the need to stay focused on toxics from cyanobacteria and her interest in the results of a recent NASA study.

Sen. Ginny Lyons mentioned the need for more robust water testing.

Lori Fisher replied that we do have testing for cyanotoxins in drinking water.

Rep. Carol Ode asked how many different pesticides do we test in our waters?

David Mears described the scope of this topic, which includes next generation pollutants, different sources of pesticides and herbicides, urban and suburban runoff because of yard products, agricultural applications, what’s coming out of wastewater plants, including pharmaceuticals, microplastics. He mentioned that drinking water is a different category. Each of these could be its own action item. He suggested the committee consider priority actions for the upcoming year.

A focus could be on glyphosate and atrazine. Is Round-Up showing up in our surface waters? What is the Agency of Agriculture, Food, and Markets role. What do we know of recent studies and analysis?

Lori Fisher mentioned that we need more specificity. For example, there is mixed information on glyphosate.
Sen. Ginny Lyons suggested next generation pollutants becomes a Department of Health issue, and that they should test for chemicals (e.g., endocrine disruptors). She highlighted that the last study found elevated levels of caffeine, acetaminophen, and chemicals from perfumes.

David Mears suggested a report be published on the ecological and public health impacts of Round-Up and Atrazine.

Suggested speakers include: Sarah Voss, Vermont Department of Health; Agency of Agriculture (pesticides); Christine Vatovec, University of Vermont (pharmaceuticals); Jon Groveman, Vermont Natural Resources Council.

Public Access

David Mears suggested keeping public access on the action plan, with a request to the Department of Fish and Wildlife to identify a prioritized set of actions to increase access to Lake Champlain, specifically in southern portion of the Lake Champlain Basin.

Sen. Ginny Lyons suggested there could be a program to stimulate local communities to participate in this, that there are various conservation organizations that support access. Could we add incentive language?

Lori Fisher reiterated that the action plan needs to be very specific with a deliverable identified for each ask.

Sen. Ginny Lyons mentioned that DEC needs additional staff to accomplish clean water work. She also suggested the Agency of Natural Resources be asked to explore a non-motorized recreation pass, which could potentially be listed under aquatic invasive species (AIS).

Rep. Carol Ode suggested that we could have a Vermont water stewards program, similar to a voluntary recognition program she learned about in Kentucky called the Kentucky Colonels.

Clean Water Funding

Sen. Ginny Lyons suggested the committee keep the Clean Water Fund Board composition as an action plan priority.

David Mears suggested the committee focus on identifying a dedicated, long-term funding source.

Eric Clifford highlighted the need for more engineers to do clean water projects on farms.

David Mears responded that if we had a long-term funding source, we would have consultants coming to fill the void, and we can’t fund things consistently through the Capital Fund.

Eric Clifford also mentioned his concern that there may not be funding in the next Farm Bill, 300 or 400 small farms are reliant on Natural Resource Conservation Service engineers.

Ability to Enforce the Law

Will be discussed next month.
5. Review and Vote on August 14th and September 11th Draft Meeting Summaries

A quorum was not present, so these will be added to the November agenda.

6. Other Business

There has been low committee attendance at the last several meetings. Committee attendance will be added to the November agenda. Bethany Sargent will prepare a report on attendance over the last several years.