



**International Lake Champlain -
Richelieu River Study Board**

**Groupe d'étude international
du lac Champlain et de la rivière Richelieu**

**Public Advisory Group (PAG)
Meeting minutes**

Date: December 14th, 2017, 13:00-15:00

Location: La Cache du lac Champlain, Salle Champlain B, 325 avenue Venise Ouest, Venise-en-Québec, J0J 2K0, <http://cachelacchamplain.com>

Participants:

Canada - Members

- Teresa Gagnon, Association des citoyens de la plaine inondable, Sabrevois
- Josée Julien, Tourisme Montérégie (on the phone)
- Pierre Leduc, Organisme de bassin versant de la baie Missisquoi (OBVBM)
- Madeleine Papineau, Canadian Co-Chair of the Public Advisory Group (PAG)
- Julie Robert (for Jérémie Letellier), Fédération de l'Union des producteurs agricoles de la Montérégie
- Renée Rouleau, Mayor of Saint-Georges-de-Clarenceville, MRC Haut-Richelieu
- Harm Sloterdijk, Comité de concertation et de valorisation du bassin versant de la rivière Richelieu (COVABAR)

Canada – Others

- Jean-François Cantin, Canadian Co-Chair, Environment and Climate Change Canada
- Pierre-Yves Caux, International Joint Commission (IJC) – Liaison
- Frédéric Chouinard, Canadian Secretariat, OBVBM
- Randi Morry, IJC - Communications Advisor
- Maryse Sohier, Canadian Study Manager, IJC (on the phone)
- Isabelle Thomas, Member Social, Political, Economic Analysis Group, Université de Montréal, (with 2 students: Nathalie Frances, Daniel Chérubin)
- Ted Yuzyk, Canadian Co-lead Flood Management and Mitigation Measures TWG

United-States – Members

- Lesley-Ann Dupigny-Giroux, U.S. Co-Chair of the PAG, University of Vermont
- Marla Emery, USDA Forest Service
- Eric Howe, Lake Champlain Basin Program, US Secretariat
- Mark Malchoff, Lake Champlain Sea Grant
- Philip von Barga, Town of Plattsburgh (retired)

United-States – Others

- Robert Flynn, U.S. Study Manager, U.S. Geological Survey (on the phone)
- Michael Laitta, IJC – Liaison
- Bill Werick, U.S. Co-lead Flood Management and Mitigation Measures TWG

Absentee:

- Jérémie Letellier (represented by Julie Robert)

Meeting started at 13:20

1. Welcome, presentation of participants and opening remarks - PAG Co-Chairs

2. Session 1 - Initial discussions with co-leads FMMM Ted Yuzyk and Bill Werick about flood management and mitigation measures

The goal of the Flood Management and Mitigation Measures (FMMM) technical working group (TWG) is to identify mitigation measures that are appropriate for Lake Champlain and the Richelieu River basin. In the course of this study, a binational flood forecasting system will be developed. A Powerpoint presentation was used to present the study goals and various potential mitigation measures they are looking at.

PAG members were asked to answer three main questions:

- Are there other potential alternatives that the FMMM TWG should consider to reduce flooding impacts?
- Who are the key stakeholders that the FMMM TWG needs to talk to?
- What would this group consider as a successful study?

A PAG member mentioned that water quantity and quality are linked and solutions can be beneficial to both. For example, a non structural approach could help retain water, reduce nutrient loads and improve quality at the same time. He felt that the list of opportunities presented seemed appropriate. He pointed out that there are a series of pumps installed in the MRC Haut-Richelieu to pump flood waters out of farmland around Missisquoi Bay and the rivière du Sud. This should be factored into the modeling effort.

Another PAG member asked if there could be a better control of water levels on the US side to help reduce flood levels downstream.

It was also suggested by a PAG member to use an integrated watershed approach. A lot of small solutions could contribute to obtaining a big solution. He asked if methods used at the Red River to reduce floods were looked at. He also wondered if potential impacts to rare and threatened species will be considered giving the Copper Redhorse as one example. He asked if the FMMM group had thought about storage basins and bypass zones to redirect floodwaters.

A PAG member mentioned documenting the impacts on the environment for each option, looking at measures to get water out faster, and looking at the Richelieu River shoal. She mentioned that the application of by laws concerning flood plains by municipalities is problematic in Quebec. She would like decision makers to look at water flow increases when new developments are planned and deforestation occurs (for example new ski areas or large new developments that impact runoff from large spaces). She also mentioned that seasonal occupants don't consider flooding as a major problem because affected buildings are not their main home, which is why it is important to adapt by having houses on stilts for example. Farmers pay for pumps and dikes, these farmers pay a lot of money for this service, so they would suffer a financial impact if we stop this system to store water. Elected officials would prefer practical

solutions, not just studies. She also observed that roads often act as barriers to the water floods and suggested looking at their impact.

A PAG member wanted to make sure that indigenous peoples are appropriately represented in this study. In Vermont, there are 6 Abenaki tribes who are state, but not federally recognized. New York has Iroquois and Mohawk tribes. In the Québec portion, there are no federal reserve lands, but there are First Nation people who recognize this area as ancestral territory. There are extensive archaeological and spiritual sites throughout the study area. The Richelieu River is an extremely important heritage corridor. Both the US PAG Co-chair and herself spent an evening with the Chief of the Nulhegan tribe, who shared their origin story with them. Lake Champlain is the birthplace of their people in this story. How would one judge success? At a minimum, success would be no legal action (nobody gets sued). Optimally, success is defined by this: to engage in an exemplary consultation process that results in mutual trust and serves as a model for both sides of the border.

Another PAG member noted that the current hydrologic regime for Lake Champlain includes important wetland spawning locations for species like muskellunge and northern pike. When he hears things about controlling lake levels and changing hydrological regimes, he gets nervous since spawning in these two species would be disrupted. Also, when new waterways are built, invasive species move around that much more easily. He also is concerned about who would control the potential inflatable bladder to adjust the water level in the Richelieu River.

Another PAG member has noticed the effects of wind on shoreline stabilization and erosion. He also shared the concerns about roads, and thinks it is important to communicate with highway department managers. The CP rail line runs for a long distance along Lake Champlain in several locations in New York. There are several places along these tracks with severe erosion. They also have to be involved in this study. Also there is a need to update the flood management maps with a forecast to potential lake levels 30 years from now. For example, 30 years from now the flood level may be higher than we are experiencing now due to increased development (the goal should be no development in flood prone areas).

A PAG member thinks that the study is an opportunity to look at water quality and flooding at the same time, such as flood prone farmlands, high water levels that cause streambank erosion and he indicated that it is important to slow down water. He also suggested that tile drainage may have a big impact on both water levels and quality. One measure of success would be that we recommend areas where people should not build so we do not put them in flood zones and in harm's way. Actions are needed to increase resilience and it is important to establish a line beyond which people are safe if they follow recommendations. We should not forget that taxpayers are paying a lot of the costs. There is a big cost for flood relief by governments, for example in recent spring floods in Quebec in 2017 where people are still in desperate situations. We should forever avoid this. He talked about the idea of using the Champlain Canal towards the Hudson River to deviate water and mitigate flooding.

Another PAG member suggested it would be important to give examples of where any of the proposed techniques have been successful – or made the flooding worse.

Another participant underlined the economic importance of flood plain land for the farming community which is looking for solutions that maintain access to their lands, that reduce the loss of revenue and that decrease stress. She mentioned there are over 1000 farmers in the watershed. Concerning the system of dikes and pumps that were installed by the MAPAQ (Quebec Agriculture Department) between 1950 and 1980, she suggested talking to them.

A PAG member mentioned that she met with federal Members of Parliament about flooding. She asked if it would be possible to open the Chambly Canal to mitigate floods and that this could lower the water level by a foot. She also thinks that the high water line is erroneous. She reminded us that the MRC Haut-Richelieu (Pierre Dupuis) would like to be implicated and that her group may have information to share. She spoke of the serious erosion her land suffered losing 2 feet a year because of erosion and also losing trees. She also reminded us of the health and monetary impacts of the 2011 floods that were enormous (home loses, suicide, etc.). She suggested that success would be that everyone is happy with the outcome of the study.

3. Session 2 – Looking into the ways to get local peoples’ and communities’ stories out about recent flood impacts such as with mapping tools

Isabelle Thomas spoke about mapping social and infrastructure vulnerability and the possibility of linking maps with scenarios. She talked of determining options and costs and identifying built infrastructure improvements. She is also interested in adaptation measures, improving risk perception and no regret measures.

This was followed by a presentation by Michael Laitta on ArcGIS Online available with the IJC and he demonstrated how other Study Boards have used these tools. He asked the PAG members to think about what kinds of stories, narratives, or data that they felt would be useful to have on a page like this for the LCRR study. He also put together a crowdsourcing application for Lake Champlain photos. He offered his help to build and maintain such a website for the PAG. In his experience, once a community is engaged in a mapping application like this, it empowers the community and helps them feel more attached to the project.

The US PAG Co-Chair commented that using this crowdsourcing tool for the LCRR study would be a useful way to build up stakeholder-level data to inform the study (pins that tell stories of experiences and concerns). The Canadian Study Co-Chair mentioned that such an interactive map is an important tool product that should be developed and fed.

4. Other items

4.1 Communication update (Randi Morry)

Randi Morry is the LCRR communication advisor and she oversees the Communications Working Group, which coordinates public communications for the whole study. She presented to the group how the IJC involves the public in studies, what she does and how to learn more on communications for this study. She also invited members to sign up to the IJC Water Matters newsletter. She would like to know what PAG members see as possible contact information on the PAG page of the LCRR web site.

4.2 Lake Champlain Research Conference Jan 8-9, 2018

Participants were informed that this research conference will be held in Burlington, VT at the University of Vermont. The LCRR session is on Monday afternoon. Registration costs are \$25 to cover meals for both days. Registration closes January 5. For more information go to: www.lcbp.org/lcrc

4.3 Next meeting

There was some discussion about the timing of the next round of public meetings. The group agreed that the TWGs need to have some time to develop some products for the public to respond to. This likely will be late next summer or early fall 2018. A PAG meeting will be scheduled closer to that point (possibly in late May, early June in the United States).

Closing remarks

- The Canadian Study Co-Chair commented that this group is very valuable, and it is important that this group provide feedback on solutions that they think will work for everyone.
- The Canadian IJC Liaison noted that the system has changed tremendously; we will not get the trees, or the ecosystem services, back. But you can think about what we can do to recreate those ecosystem services to meet our flood study goals.
- The Canadian PAG Co-Chair suggested that we can still take some time after the meeting ends to talk to each other and participate in a dialogue that we were not able to have during the meeting.
- A PAG member noted that as a PAG we are the interface between solutions that could be proposed and what should actually be implemented. There will be challenges to get the people from Quebec and the people from New York and Vermont on the same page with respect to solutions.
- The US PAG Co-Chair commented that it would be wonderful to get people from communities in all three jurisdictions together at one point then we can really start to move this project forward.

5. Summary of decisions and action items

Action items

- Pierre-Yves Caux, Marla Emery, Eric Howe and Frédéric Chouinard will work on a draft approach to working with indigenous people in the basin.
- The FMMM presentation will be sent out to participants as well as Isabelle Thomas' bio.
- PAG members are invited to talk to people, learn their interests and their thoughts on the study and mandate
- Michael Laitta will find 1 or 2 people in the PAG to work with for the interactive map website
- Randi Morry will inquire on what level of contact information PAG members want to see on the PAG page of the IJC website
- The next PAG meeting will be in the US but the place and date have yet to be determined by PAG Co-Chairs and the Secretaries. The suggestion about discussing important places in the basin should be one of the items for the next PAG meeting. The Resource Response TWG (Glenn Bennoy and Perry Thomas) will be contacted about their possible participation in the next meeting.

- Two PAG members will send information to the Canadian Study Co-Chairs: some key documents from the ACPI and information on dikes and pumping capacity on Quebec farm land.

Meeting adjourned at 15:30

Minutes approved by PAG Co-Chair, January 16th, 2018 and by PAG members with one update on May 29th, 2018.