



International Lake Champlain - Richelieu River Study Board

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

Public Advisory Group (PAG) – Minutes from April 28th, 2021

Attendees

Study Members:

Deborah Lee (US Study Board Co-Chair), Jean-François Cantin (CA Study Board Co-Chair), Mae Kate Campbell (US Study Manager), John Brodt (for Bill Richmond, US Outreach coordinator), Serge Lepage (CA Study Manager), Pierre-Yves Caux (CA International Joint Commission - IJC Liaison), Michael Laitta (US IJC Liaison), Celine Desjardins (IJC), Christina Chiasson (Communication Advisor), Bill Werick (Flood Management and Mitigation Measures - FMMM US Co-Lead).

PAG Members:

Madeleine Papineau (CA PAG Co-Chair), Kris Stepenuck (US PAG Co-Chair), Eric Howe, Mark Malchoff, Phil Von Bargen, Teresa Gagnon, Jérémie Letellier, Lori Fisher, Renée Rouleau, Steve Peters, Frédéric Chouinard. Also Marion Melloul and Cynthia Gagnon. Regrets: Marla Emery, Harm Sloterdijk

Key action items

- PAG members can send any further comments or modifications to the Communicating Flood Risk White Paper to the US Study manager, and she will forward them to the technical writers.
- PAG members have requested more information on the new structural measure being considered by FMMM (Theme 1), for example, through a technical webinar or a written document (in both French and English) to better understand the technical information presented today.
- Over the next few months, the group needs to find a way and a process to have dynamic exchanges and to get effective feedback to the Study Board on preliminary Study recommendations. This may require more frequent meetings, but there should not be too many.
- PAG Co-Chairs will keep sending emails frequently to PAG members to keep them informed about products and progress.

1. Welcome, list of participants and how the meeting will work (PAG Co-Chairs)

After a round of presentations of the PAG and study members, the Canadian PAG Co-Chair welcomed the attendees. She indicated that a lot of study products will be coming out over the next few months and that this will be a good opportunity for the PAG to provide input, to share their reactions with the Study Board to help them shape future recommendations.

2. Approval of minutes from the August 26, 2020, PAG meeting

There were no modifications, so the minutes were approved as presented.

3. Overarching principles for the development of recommendations (advice received from SPE), considerations (provided by the IJC) and Board Study Criteria

The Canadian PAG Co-Chair reminded the attendees that the Board decision criteria were presented during the public meetings last Fall and are in the video on structural solutions. The IJC is asking that, in addition to recommendations being framed by the Board decision criteria (included in the scope of the study, achievable and feasible, technically viable, economically viable, fair and equitable, environmentally acceptable and climate change resilient):

- all recommendations be S.M.A.R.T. (Specific, Measurable, Achievable, Relevant and Time-

bounded)

- and consider climate change as well as social, political, and economic (SPE) acceptability.

The SPE Analysis Group has indicated that it is important to work in an integrative manner. Adaptive management is becoming a reflex in management and land planning. Study members must understand how people think and include the social aspect. Equity is important for example between upstream and downstream residents. These elements will probably resonate with PAG members.

A PAG member recommended that we come back regularly to this guideline document as the study is moving forward, and that we look at it as a map throughout the process. Another PAG member commented that it will be necessary to tackle technical elements together and not as separate elements within the study. It should be a package. Other PAG members also found the document helpful.

4. White Paper on Communicating Flood Risk

A summary of the White Paper, the English version of the complete White Paper and a link to the video of Dr Henstra's presentation to the Study Board were sent to PAG members before the meeting. The US PAG Co-Chair apologized for not noticing that a part of the video was corrupted. The Canadian PAG Co-Chair then shared some of the thinking during the Study Board discussion:

- A possible recommendation could be crafted around the identification of resources and organizations that can assist municipalities in flood risk communications. Municipalities do not always have the capacity to do things from scratch and there is value in grouping efforts on flood risk communication, but this will need financial support and the capacity to build a coherent message.
- There is a variety of technological solutions, most of them could be used to push the information out to residents. What was heard in prior meetings is that a lot of communities lack technologies (e.g., reliable cell phone service), which requires them to be very savvy to communicate during emergencies. Using cell phones might not work. For example, in some communities in New York, firemen need to knock on doors to alert people about emergencies. It is critically important that *multiple* communication methods be implemented to ensure the population is reached during an emergency, as certain options (e.g., cell service, internet) might fail or be unreliable during extreme events.

The US PAG Co-Chair asked PAG members for their thoughts on the White Paper. For example, what do the PAG members believe would be a good balance: how much effort should we put on grass root solutions versus technological solutions?

Discussion on the White Paper

- A PAG member enjoyed the video. The communication structure was well put and they suggested that the Study Board consider: 1) **Precisely targeting their audience**, who will need information and who won't. They shared the idea of using more of a micro communication structure, when most of the community is well above flood stage they won't need to be informed, whereas communities much closer to the floodplain would be very interested. 2) **Equity**: It is not just about the sender but also the receiver of the message. Social economic status is potentially different within the floodplain. They gave the example of the 2011 flood in Plattsburgh, where a substantial amount of people did not own a cell phone, did not have internet access and were impacted by the flood. They concluded that informing law enforcement and rescue services, by knocking door to door, might be the way to go.
- A PAG member commented that you must target the audience. It depends on whether they have a technical background or not, if they are first responders or homeowners. The Study Board will need to identify how to get messages out to them. Communications should be to a series of audiences.
- A PAG member asked if it was possible to suggest modifications to the document since the file indicated that it was 'final'. The US Study manager answered that there are still some steps before the White Paper is released and suggested that PAG members send her their comments and modifications. She will send them to the technical writers.
- A PAG member suggested changing 'extension agents' to 'outreach staff' or 'outreach specialist'. A

correction should also be made on page 17 from ‘a sea grant’ to ‘*Sea Grant Funding*’.

- Another PAG member, formerly on the Sabrevois Town council, found that towns have different ways of functioning. Some municipalities are more efficient than others; some will wait longer before intervening. They suggested reaching out to the MRC (that includes the mayors of 14 municipalities in the Richelieu basin) who together would identify the tasks needing to be addressed. This information would be passed from these mayors to their councils and from there to the citizens. The MRC could then verify, perhaps once a year, that the municipalities at higher risk of flooding are initiating prevention and making sure that they have a program in place to help their citizens in case of flooding. These are the people who know who has internet or not, who needs to be informed – and how – in their community.
- The US PAG Co-Chair asked what would be the recommendation to provide to the leaders and municipalities so they can proactively use the community based social marketing?
 - The PAG member suggested to reach out to the Director General, who is there for several years compared to the council that may change every four years, so the information can still be transmitted even though the council changes.
 - The US PAG Co-Chair agreed that overturn is a challenge and re-training would be necessary every time responders leave the MRC, so an ongoing training like videos or other documents could be useful.
- A PAG member mentioned that the document was very interesting and suggested that to reach people going from door to door was very important. Some people have specific needs. There may be an opportunity as the fire department goes from door to door every two years for regular work. The public has confidence in them and municipalities don’t do much prevention except with firemen. They would have to learn about flood maps but they could then inform people that they are in a flood zone, and learn if their lawn only or their house could be flooded.
 - Another PAG member was not sure using regular Fire Department visits would be efficient as they had only one visit from the firemen in 14 years. They added that sometimes, one fire department is shared between several municipalities and adding communication on flood risks would give them additional tasks which would be time consuming, very complicated and costly. It seems easier to add the task to the work plan of the MRC.
- The same PAG member indicated that it was important to know what message the Study wants to share with the people (this is not mentioned in the White Paper) because municipalities will invest money in communications, but it has to be productive, and not only be a paper that is distributed. The MRC is a good means to bring this subject up with mayors because when there is no emergency, nobody is interested in the subject.
- On page 14, a PAG member commented on the part ‘all of the experts (...) prolonged dialogue oriented toward a shared vision’ that they understood that to mean it was treated as a ‘part time job’ and added that for someone with this task, a full-time job was necessary. Also, in some cases, the fire department could be happy with this assignment, but it would need to be a formal task. Developing a trusting relationship with the public takes time.
- The US PAG Co-Chair concluded that the ability could vary from community to community so it will be important to give recommendations that will include funding to support efforts, whether it will be MRC, firemen or someone else.
- A PAG member mentioned that prevention should be included in emergency plans.
- The US PAG Co-Chair was still unclear on how MRCs work and if it was feasible to add new tasks to their responsibilities regarding the creation of a small group at the MRC level without taking something ‘off their plates’.
 - A participant working in a MRC replied that it could be done. There has to be a political interest and willingness, and the financial aspect is always a challenge. They concluded that the PAG could make this suggestion but that adding new prevention tasks to MRCs’ emergency management plans must come from the government of Quebec.

- Another PAG member agreed and added that a protocol would be needed to avoid misinterpretation.
- The US PAG Co-Chair asked if there was a comparison to do this in the US.
 - A US PAG member replied with the example of how emergency management services interacted in NY with county level, down to the local township organizations with varied responsibilities.
 - The US PAG Co-Chair replied it did not apply in Vermont because there is no county level. Though another PAG member noted the presence of Regional Planning Commissions (RPCs) that might serve in a similar role.
 - The PAG member added that they have never seen emergency management services having an educational role. They concluded that since emergency management services (EMS) are responsible for emergency response plans, EMS may be a key starting point.
- Since a lot of the discussion today has been about targeting specific messages for specific people in various areas, the Canadian PAG Co-Chair wondered if it would be possible to bring an international aspect to the recommendation on communicating flood risk in the LCRR basin. A Study Board member, Daniel Leblanc, mentioned the example of a good international communication initiative regarding invasive species that is conducted in collaboration with New York, Vermont, and Quebec.
 - A PAG member who directs the Lake Champlain Basin Program (LCBP) provided details on the campaign run by the LCBP and explained that this international campaign on invasive species involves the Watershed organization for the Missisquoi Bay (OBVBM). LCBP works closely with them and they produce informative documents in both French and English. He indicated that it has been a successful program, running for 15 years and that they have documented changes in behavior of boaters partly thanks to the campaigns. The keys were consistent messaging, different ways to communicate with different people and constant training.
 - Another PAG member shared a similar story about the model used for the invasive species education program between New York, Vermont, Quebec, New-Brunswick and Ontario. A Great Lakes panel was an interesting consultative group that helped to coordinate and ensure consistency in messaging.
- A PAG member commented that the White Paper seemed generic and was not very specific for mitigation flood. The Canadian PAG Co-Chair concurred.
- A PAG member restated that the message itself is important (and not in the White Paper). It may not be the same in all areas. Some of the solutions would be the same in some area. Be positive. People tend to do what their neighbors do (raising houses, insurance).
- A PAG member mentioned that it was important to be specific about terms. They said they learned the term ‘seiche’ in 2011, when Clinton County was bearing the weight of the flood but also the substantial winds that were increasing the water levels higher than what the flood levels were. They witnessed some people being shocked to learn that they were above the flood line but were being flooded because of the wind. This might not always be easy to communicate simply in some cases.
- A PAG member wondered where the study was going regarding communication messages. How we present to the public is important (using evocative images, simple explanations, building relationships over time). How are we fine tuning the messages? They shared their concerns that there were a lot of words, with tiny visuals and insisted that it was very important to present well documents to the public, to make them colorblind sensitive, to start using the same brand image in every presentation and to make sure that the study is using the best practices to get the message out. The PAG member concluded that they would like to see the study get things out earlier.
 - The US PAG Co-Chair replied that this last concern was often expressed to the Study Board.
- A PAG member brought up the topic of flood insurance, about sharing the risk with the Quebec government. They explained that there was no flood insurance in Quebec and that it would be astronomical in price to implement in high-risk areas. Part of the flooding in the Richelieu River basin was due to the government interventions in the past, and land use regulations do not allow people to correct the situation, for example with backfill. They added the obligation to apply for flood insurance

to cover damages would make the citizen responsible when the government is largely responsible through their different projects implemented in the Richelieu river throughout the years, without helping with incentives for those who cannot afford flood insurance and are at risk. They concluded that flood insurance is not a good solution and that the government should correct what already exists in the flood plain and not allow more construction.

- The Canadian PAG Co-Chair mentioned that there will be a White Paper on flood insurance and suggested that the PAG look at it when it is available (possibly in June).

5. Recent work on a lower cost alternative to the Chambly Canal diversion (Bill Werick)

The FMMM US Co-Lead presented the new developments and preliminary results under Theme 1 Structural alternatives to reduce high water levels. The work includes excavation of man-made remnants near the St-Jean shoal, construction of a submerged Crump weir at the location of a previous natural control point and a limited temporary diversion of water through the Chambly Canal.

Comments and questions:

- A PAG member mentioned that the cost of construction materials has gone up recently and wondered if this was taken into account for the estimation of costs and damages. They appreciate the solutions that were presented. The FMMM Co-Lead replied that they tried to use current numbers as much as possible and that construction costs were in current Canadian dollars. Cost estimates were very preliminary but promising.
- Another PAG member liked the weir idea which seemed the most promising Theme 1 solution and asked at what low lake level do we start to see the impact of the weir in moderating drought conditions for the lake. The FMMM Co-Lead replied that for now, they only looked at the 1964 low levels but in a near future, they will be able to have profiles for every year with ISEE. He concluded that the climate studies suggest that there will be concerns about drought and lower water levels in the future.
- A PAG member asked if the Crump weir and the Crump weir with diversion could be built in phases or if one solution would be chosen over another. The FMMM Co-Lead replied that they were separable and could be built in phases, over several years.
- A PAG member asked if a French summary document of the presentation could be produced, to help the French speaking member better understand the technical points presented today. The Canadian PAG Co-Chair mentioned that it could be possible to have a technical webinar like the ones presented last fall, in both languages once the analysis of this option is completed.
- The same PAG member's next question was if there would be a comparison with the other solutions. The FMMM Co-Lead replied that it could be done and added that this is the first structural project with chances to be really implemented. Social acceptability can be difficult for structural projects built in water, but this solution looks very promising and it can be seen as a return to a more natural state of the River.
- Another PAG member asked if there was a written document about this proposal to help the PAG review it more thoroughly, both in French and English. The FMMM Co-Lead replied that there will be a report available later on. The intent today was to present this new information as soon as possible to the PAG, but more analysis needs to be done.
- A participant asked about the reduction in water levels in centimeters with the weir solution. The FMMM Co-Lead replied that the water would be lower by 15 cm in Saint-Jean-sur-Richelieu compared to the 2011 levels.
- Another PAG member asked if an inflatable weir would be more expensive. The FMMM Co-Lead replied that it would be much more expensive; it would serve as a natural channel until you open the gates to allow greater flows. It was a reasonable solution to consider engineering wise but that it died early because of the costs and certain questions regarding its reliability.
- A PAG member asked how reducing the cost of damages by 50% than what was experienced in 2011

would translate into number of people and homes affected. The FMMM Co-Lead replied that ISEE will allow them to look at reduction of flood damages, to see how many homes would be flood-free, which houses would be less flooded than in 2011, streets accessibility, etc.

6. Study Timeline, Recommendations and PAG Roles

The US Study Board Co-Chair shared the perspective of the Study Board on the PAG roles regarding recommendations and the study timeline. The process is as follows:

- Technical Working Groups (TWGs) have been asked to provide inputs on initial findings and an early round of initial recommendations.
- The Study Board will be meeting regularly in the following months to look at each series of early recommendations and to have in depth discussions on the recommendations with the experts. This will result in a series of preliminary recommendations and a list of any additional information that is still needed and that could influence the recommendations.
- The Integrated Social, Economic and Environmental tool (ISEE) analysis and the cost ratio analysis are still required.
- Critical input from the PAG and from the SPE Analysis Group on public, political and social acceptability is still needed.
- A lot of recommendations cannot stand alone but will need to be integrated in other themes and they will need to be revisited as we work through them.
- PAG discussions like during this meeting, and within future meetings, can help inform the Study Board on their recommendations. PAG members' 'local knowledge' can really help inform SMART recommendations.

The Canadian Study Board Co-Chair underlined that the recommendations are the outcome of an iterative process and are refined as the study advances. Keeping the PAG in tune with the advancements of the study, for example with technical meetings, is a way to collectively gain intel on the acceptability of proposed mitigation measures. A compendium of potential measures could be available by mid-summer for an in-depth review by the PAG.

Questions and comments

- A PAG member agreed that the PAG will need to be engaged with information coming to us. They said we need to find an effective way to integrate thoughts to finalize the study. The PAG has a role to play in getting the information to the public and consulting the public.
- The US PAG Co-Chair asked about the most effective way to get study information to PAG members. A PAG member suggested having more frequent PAG meetings. We also need to make sure to communicate back to the Study Board. The Canadian Study Board Co-Chair replied that it was a 'Chicken and the egg' situation because to obtain good final recommendations, it takes time to produce good draft recommendations (good level of certainty) that can be sent to the PAG to test them but if we wait too long, there is less time to consider PAG input. He suggested sending potential recommendations not finalized to be tested within the PAG network of contacts earlier than later.
- A PAG member replied that they appreciated receiving emails that provide the PAG with information, since it is hard to have meetings with everyone and suggested having meetings a bit more often. Another PAG member concurred.

7. Other items

- Serge Lepage is acting as the Canadian Study Manager while Serge Villeneuve is away.
- **Update on Communication items:** The Study Board is working on releasing several major reports, covering the different themes of the study. To support communication to the public, short summaries (3-4 pages) are being produced for key reports. The Watershed Storage report will probably be the next to be released. Work on the video series is continuing. In summer 2020, videos on Themes 1 and 2 were produced, and now we are working on Theme 3 (Emergency response) and Theme 4

(Floodplain management) as well as a final video summarizing study recommendations. A final series of public meetings will take place before the end of the study although the COVID pandemic may influence the planning.

- The study is trying to be more proactive by sending materials to the PAG in a timely fashion.

8. Closing remarks

A PAG member thanked the Study Board Co-Chairs, and everyone involved in the study for their hard and good work. The Canadian Study Board Co-Chair thanked the PAG for their valuable input and their willingness to have a dynamic and two-way conversation in the following months, at this critical moment in the Study.

Approved by Public Advisory Group members on November 8th 2021.