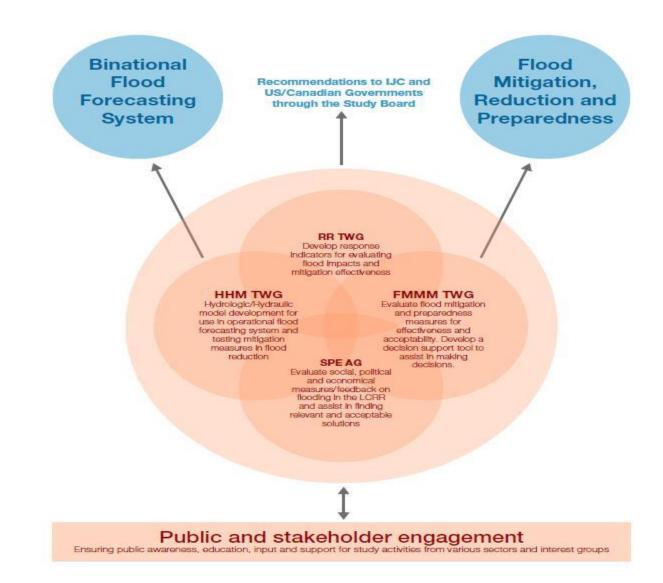


Welcome to the July 2018 newsletter of the Lake Champlain Richelieu River flooding study! The <u>Public Advisory Group</u> publishes this bimonthly update to keep you informed of the various activities of the <u>Study Board</u>, including the technical working groups (TWGs) and SPE Advisory Group, as it works to deliver on its <u>mandate</u> in 2021. The following diagram shows how the Study will achieve its objectives. Detailed information on specific tasks can be found in the <u>Work Plan</u>.



Flood Management & Mitigation Measures (FMMM) Technical Working Group

Evaluates effectiveness and acceptability of various flood mitigation and preparedness measures, and develops a support tool to assist in making flood response decisions.

- Finalized an initial framework with four groups of activities to mitigate flooding. Two of these would reduce water levels through moderate structural solutions; the other two propose non-structural solutions to reduce vulnerability to high water and build flood resiliency to flooding.
- Presented the framework to the Quebec provincial committee for flood management on June 8 and to a group of regional county municipalities in Quebec on June 13.
- Began assessing political desirability of potential solutions, including moderate structural alternatives to reduce water levels.
- Contributed to the development of the performance indicators—tools that evaluate impacts of flooding and effectiveness of solutions to mitigate flooding from economic and environmental perspectives, among others.
- Began writing sections of the report on the causes and impacts of the 2011 floods.
- > Provided comments on a study proposal on flood forecasting in the basin.
- > Finalized a paper summarizing issues around the widening of the Chambly Canal.
- Began preparing a report on structural options for the Richelieu River, as well as a literature review of non-structural options.
- Began reviewing political science literature on multilevel governance and emergency management in Canadian cities, as well as published papers and government reports on the impacts of the 2011 flood.
- Planning a binational expert workshop in fall 2018 to assess and provide recommendations on non-structural solutions in the basin.

Hydrology, Hydraulics & Mapping (HHM) Technical Working Group

Develops models for forecasting floods and for testing mitigation measures in reducing flooding.

- The Cooperative Institute for Great Lakes Research (CIGLR) ran calibration tests of the weather forecasting hydrological model of the basin by simulating multiple versions of the 2011 season and testing different precipitation forcing. An updated version of the modelling system was run with a more advanced channel routing routine.
- CIGRL continued testing of the Lake Champlain hydrodynamic model showing water movement using 13 river inflows and outflows along with the stage on the Richelieu River.
- Continued to collect hydrographic surveys of Lake Champlain by the National Oceanic and Atmospheric Administration (NOAA), and provided guidance on priority survey locations near the narrow inlets in the causeways around the Restricted Arm of the lake. The survey team was on the lake in May and is now processing the data.
- > Participated in study's watershed storage workshop in June.
- Began writing a section of the report on the causes and impacts of the 2011 floods.

Resource Response (RR) Technical Working Group

Develops response indicators to evaluate flood impacts and mitigation effectiveness.

- Assembling binational data for the performance indicators that will evaluate the impacts of flood mitigation solutions in economic, agricultural, recreational, and environmental sectors.
- In June, hosted a workshop on watershed storage for technical working groups and regional experts, which will result in further recommendations to the Study Board.
- Work continues on the report on the causes and impacts of the 2011 floods, to be released in late 2018 or early 2019.
- Collaborating with members of other technical working groups to develop stories describing the impacts of flooding on people and communities, as part of the report.

Creating a database of key databases as well an extensive set of research reports for use by other members of the study.

Social, Political & Economic (SPE) Analysis Group Evaluates and assists in finding relevant and acceptable solutions to flooding by considering social, political, and economic impacts of measures.

- > Continuing work on the historical and media analyses of flooding in the basin.
- Began an analysis on the vulnerability and resilience of local communities to floods.
- Gathering economic data for a cost-benefit analysis of flooding solutions. This should help determine which potential solutions are economically and socially viable.
- Completed the press review of past flooding events, and developing a media review story map and data analysis.
- > Finalized the Lake Champlain-Richelieu River Outreach Plan.

Stay connected and be involved.

Public participation is an important consideration of the Study. Here's how you can learn more and be involved.

- Visit our <u>Study webpage</u> and view our <u>calendar of activities</u>.
- Got a question or a comment? Send us an email at <u>lcrr@ijc.org</u>