

The Current October 2020

In 2016, as a result of catastrophic flooding along Lake Champlain and the Richelieu River in spring 2011, the governments of Canada and the United States instructed the International Joint Commission (IJC) to “fully explore the causes, impacts, risks and solutions to flooding in the Lake Champlain-Richelieu River basin.” The IJC established a Study Board to oversee the Study and to provide recommendations. The IJC also established a Public Advisory Group to assist the Study Board with engaging the public over the course of the Study. The Public Advisory Group publishes this bimonthly newsletter to help keep the public informed about the Lake Champlain Richelieu River (LCRR) flooding study.

Letter from the Public Advisory Group Co-Chairs

We are pleased to have been able to share study updates with you through the recent [public meetings](#) and through [four new videos](#) released just in advance of those meetings. As we move into the late fall and winter months, study scientists will provide a series of more detailed presentations about various aspects of their research to inform the study (see schedule of upcoming webinars below). We welcome you to participate in those to hone your knowledge, and to better understand the intricacies of the various aspects of the research that is underway to identify the most reasonable and effective flood mitigation solutions for the Lake Champlain-Richelieu River Basin.

We also wish to recognize the recent Canadian Thanksgiving and American Indigenous People’s Day celebrations, and we extend our best wishes for your continued safety.

Kristine Stepenuck

Madeleine Papineau

US Co-Chair

Canadian Co-Chair



Fisk Point on Isla La Motte, Vermont, during the 2011 flood. Credit: Lake Champlain Basin Program

LCRR Short Videos

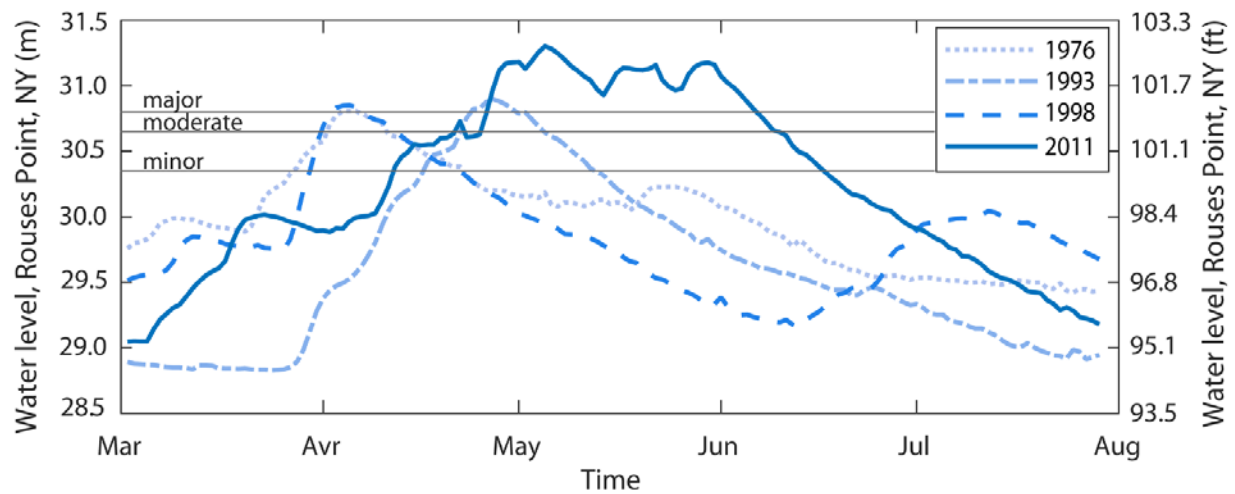
In advance of the public meetings, four short videos covering various study themes were released to help further the public's knowledge on the study. The themes of these videos are: "[Causes and Impacts](#)", "[Flooding Myths](#)", "[Storing Flood Waters](#)" and "[Structural Mitigation Measures in the Richelieu River](#)". They are also available on the Lake Champlain-Richelieu River Study Board [homepage](#) under "Feature Videos".

September Virtual Public Meetings

As a result of the global pandemic, the Study Board was forced to cancel its planned public meetings in spring 2020. In place of these in-person meetings, the Board opted to hold four virtual public meetings on September 29th and 30th. The meetings, held on the video-communication platform MS Teams, were well attended with between 140-150 participants across the four sessions. The meetings consisted of a 30-minute presentation from the Study Board co-chairs, followed by a question and answer period, and a chance for the public to participate in a poll to indicate their interest for topics to be discussed during an upcoming series of technical webinars.

The presentation provided an overview of the Study's progress to date. The Study co-chairs noted that flooding is likely to be a recurring issue in the future and discussed the two main objectives of the study — to identify and recommend mitigation measures to

reduce high water levels, and to reduce flood vulnerability. A PDF version of the presentation provided during the public meetings is available [here](#).



A graph depicting four major floods in the basin at Rouses Point, New York, located on the border with Quebec. Credit: Lake Champlain-Richelieu River Study Board

Highlights of the presentation include:

- The Study co-chairs provided updates about four categories of possible flood mitigation solutions being assessed: structural solutions in the Richelieu River; upland storage solutions such as enhanced wetland areas; improved flood responses and forecasting tools; and floodplain management.
- Six structural options considered to mitigate flooding were evaluated in terms of their feasibility, financial and technical viability, fairness and equitability to upstream and downstream interests, environmental acceptability, and resiliency to climate change. Modifying the Chambly Canal to receive floodwaters is being studied further based on this assessment.
- While there are limited opportunities to add additional wetlands within the basin to meaningfully increase upland storage, study research found that water storage of existing wetlands plays a crucial role in minimizing future flooding. A report detailing the study's look at wetlands and floodplains is expected in 2021.
- A model was described that will aid study scientists in assessing potential impacts of these mitigation measures on the environment, communities, and economies.
- Results of studies to assess the social acceptability of various flood mitigation measures were shared.

- The timeline of projected release dates for major reports and final study recommendations was shared; the final study report is expected in March 2022.

Input from the public varied across the four meetings, with interested expressed to understand which causes of flooding are being investigated, how various mitigation measures might impact specific locations in the basin and how knowledge gained through the Study is being shared with communities. Curiosity was voiced about what personal actions might mitigate future flood damage, and concern conveyed about the lengthy timeline to anticipated implementation of recommendations, among other input. For instance, study members confirmed that the effects of climate change on the risk of future floods are being explored. It was noted that climate change is a contributing factor to the heavier, more frequent storms in the basin, as well as changes to the duration and magnitude of the spring snowmelt.

In response to a question on what individual property owners could do to protect themselves and assist in flood mitigation, it was recommended that they stay informed on local floodplain management policies and emergency response measures and consider implementing green infrastructure, such as vegetative buffers along the shoreline (which are preferable to hard structures such as sea walls).

In all, 61 people completed the poll on the technical webinars and the interest for the 3 top topics was over 70%.

Upcoming Study Events

Series of Fall Technical Webinars

The Study Board is organizing a series of technical webinars for this fall, to provide more details on various elements of the study. Some of the topics include: an overview of Performance Indicators; the Chambly Canal diversion; use of wetlands and temporary flooding of farmland for flood mitigation; how climate change is being assessed in the study; improvements to flood forecasting; and floodplain management considerations.

Learn more details about each of these webinars and register to participate on the LCRR [website](#).

Schedule for technical webinars. One hour webinars will be held on Wednesdays at 10:00 (EN) and 14:00 (FR) unless otherwise stated.

Week	Title
November 5 (Thurs) 10:00 (EN); 14:00 (FR)	Watershed Storage: use of wetlands and the temporary flooding of farmlands to reduce flooding

November 12 10:00 (EN); 14:00 (FR)	Overview of Performance Indicators
November 18 10:00 (EN); 14:00 (FR)	Improvements in forecasting (includes information on actual flood forecasting systems)
November 24 10:00 (EN); 15:00 (FR)	Development of a performance indicator for damages to residential buildings and its use in economic analysis
December 2 10:00 (EN); 14:00 (FR)	How the LCRR study is assessing Climate Change
December 9 10:00 (EN); 14:00 (FR)	Chambly Canal diversion
December 16 10:00 (EN); 14:00 (FR)	Floodplain management considerations
2021	
January 11-15 (TBD)	Risk perception surveys, vulnerability and other social science studies

Stay updated on the Study Board's work by signing up to receive electronic updates via our email distribution. Click on our home page (<https://www.ijc.org/en/lcrr>) and scroll to the bottom to join.