

The International Lake Champlain-Richelieu River Study Board will recommend to the International Joint Commission flood mitigation measures as well as tools for flood forecasting and preparedness. The Study Board's final report is expected in 2021.

## STUDY OBJECTIVES



Develop and recommend the implementation of a binational, real-time flood forecasting and flood inundation mapping system to prepare for and mitigate the impacts of floods.



Recommend structural and non-structural measures to mitigate flooding and the impact of flooding throughout the basin.



Determine public, community and stakeholder desirability of the proposed measures.

Rivers and lakes flood, by their very nature, and no measure can completely eliminate flooding. The Study will recommend measures to reduce the impact of flooding. These may include structural modifications, such as storm water retention, weirs and channel enhancements, as well as non-structural approaches, such as land use regulations and enhanced management of floodplains and wetlands.

Public participation and stakeholder engagement is an essential and ongoing component of the Study. Scientific data combined with public participation will foster a shared understanding of the relationship between basin communities and their environment in the context of flooding.

# THE WORK PLAN

### The Formal Request

In 2016, the US and Canadian governments requested that the International Joint Commission (IJC) conduct a study into the causes, impacts, risks, and solutions to flooding in the Lake Champlain-Richelieu River basin. The Study activities are outlined in Option B of the Commission's 2013 Plan of Study for the Identification of Measures to Mitigate Flooding and the Impacts of Flooding of Lake Champlain and Richelieu River. These include:

Understanding the causes and impacts of past floods;

Examining best management practices and adaptation strategies in the floodplain; Advancing a binational real-time flood forecasting and mapping system;

Identifying the most promising non-structural and structural mitigation measures;

Understanding the social and political perceptions of proposed structural and other mitigation measures; and Creating a collaborative decision-making tool to better understand the impact of flood management and mitigation measures on ecosystems, humans, infrastructure, and the local economy.

## THE STUDY

In 2017, the IJC appointed the Lake Champlain-Richelieu River Study Board to oversee the Study and provide recommendations to the Commission in 2021. The Study Board is made up of 10 members with an equal number from the United States and Canada.

### **Study Activities**

Several binational working groups will carry out the technical, analytical, communications, outreach and information management tasks. An independent review group will be called upon as required.

New decision support tools are an important outcome of this Study. A real-time flood forecasting and flood inundation mapping system could be used to forecast future lake and river water levels, and help in issuing flood watches and warnings on both sides of the border. A collaborative decision support tool will take advantage of

modelling efforts to evaluate potential flood management and mitigation measures. The tool will also determine how varying water levels influence critical water uses, ecological resources, and the built environment.

The Study will analyze flood management practices, methods and structures, and seek stakeholders' views on the desirability of various non-structural and structural flood mitigation measures.

In addition, it will evaluate the effectiveness and impacts of proposed mitigation measures and structures with new hydraulic and hydrologic models being developed.

Identifying important physical, ecological and societal resource indicators and using them in a decision support tool will ensure that these are taken into account when deciding on management options for flooding.

### THE STUDY

The Study will seek to understand social, political and economic drivers for flood management, mitigation and forecasting so that final options and solutions will reflect the broadest public exposure and support for potential implementation.

Opportunities for feedback and public participation will occur throughout the Study.

Strong communications and effective public outreach is an important part of the Study. Several reports, products and tools will be made publicly available over the course of the Study to help basin communities and stakeholders better understand the issues and activities of the Study Board, take action and stay engaged.

Collectively, these activities are intended to improve information, data and decision support tools to help managers determine the best actions to mitigate flooding in the basin.



## THE PUBLIC **ADVISORY GROUP**

## LEARN MORE, PARTICIPATE AND STAY CONNECTED

The binational Public Advisory Group (PAG) represents various areas of interest and regions across the Lake Champlain-Richelieu River basin. Its members draw on their knowledge, contacts and experience to provide advice and to encourage public participation in the study by:

- Advising the Study Board on public consultation, involvement and information exchange:
- Serving as a conduit for public input to the study process and sharing study outcomes;
- · Reviewing and providing feedback on approaches. reports, products, findings and conclusions of the Study Board: and:
- Recommending to the Study Board how to effectively meet the concerns of the public and stakeholders.



Visit us online at ijc.org/en/LCRR for information on the Board's activities, including public meetings, or to learn about water management in the basin communities.

Join a webinar or attend a public meeting. Dates will be shared on the Study web page and through local media.

Email us at LCRR@ottawa.ijc.org

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