



July 31, 2014

125 Sussex Drive  
Ottawa, Ontario  
K1A 0G2

Ms. Camille Mageau  
Secretary, Canadian Section  
International Joint Commission  
234 Laurier Avenue West, 22<sup>nd</sup> Floor  
Ottawa, Ontario  
K1P 6K6

*Lake Champlain and Richelieu River Reference*

Dear Ms. Mageau:

The Governments of Canada and the United States thank the International Joint Commission (IJC) for its July 2013 Plan of Study: “The Identification of Measures to Mitigate Flooding and the Impacts of Flooding of Lake Champlain and Richelieu River” which the IJC undertook in response to our governments’ request in a March 19, 2012, letter to investigate flood mitigation solutions following devastating floods in that region in the spring of 2011.

We particularly appreciate the IJC’s presentation of individually scalable options for study implementation. We understand that the IJC recommends Option C at \$14 million (to be funded jointly by Canada and the United States) as the best option for a thorough understanding of the causes and solutions for flood mitigation through a long-term study. Our governments are not at this time, however, able to commit to such a large scale, long-term undertaking, and thus cannot make a reference including that option now.

Instead, in accordance with Article IX of the Boundary Waters Treaty, the Governments of Canada and the United States request that the International Joint Commission assist our governments in the implementation, with existing 2014 funding, of two scalable components in the study. These components will provide valuable information to assist affected communities in floodplains in a practical and immediate fashion and also provide a basis for a future real-time flood forecasting and inundation mapping system.

.../2

This reference is limited to initiating and completing work on the following, which will be organized and implemented by a small technical working group, to be convened by the IJC:

1. Addressing and closing data gaps through data collection and harmonization of topographic, bathymetric, aquatic vegetation, soil texture, Light Detection and Ranging (LiDAR) and observed climate and hydrometric data collection (per Section 3.1, page 34 of the July 2013 Plan of Study) as are necessary as a basis for the earliest possible initiation of a real-time flood forecasting and inundation mapping system. This system would consist of the development of new real-time Lake Champlain and Richelieu River hydrologic and hydraulic models for predicting lake and river levels, and a precise Digital Elevation Model of the flood plain to delineate the contours of corresponding inundated areas.
2. Creation of static flood inundation maps using a combination of existing and new data and modeling to provide practical information to communities. These maps would show which areas would be affected if Lake Champlain and Richelieu River water levels hit different heights.

Subject to each government's national appropriations process, Canada and the United States may consider a subsequent reference on other components of the 2013 Plan of Study, including using data from this work to produce a real time flood forecasting and inundation mapping system.

In examining and collecting data, the IJC-assembled working group should build on the technical data gap analysis outlined in the IJC July 2013 plan of study and decide early on which government agency will take leadership on the different elements. The study should incorporate and take advantage of existing systems and government mechanisms already in place on both sides of the border. These include the bilateral agreement that the NOAA has with Environment Canada, the Canada-Quebec St. Lawrence Action Plan, and a Vermont river management/river easement program that deals with river stability and other elements. The group should also assess and use data from the U.S. national initiative to promote better soil health through management to increase water infiltration and water holding capacity on a landscape basis and wetland restoration, among other things. The working group should also take into account and build on work done at the state and provincial levels.

Although the political-social study component identified in the 2013 Plan of Study cannot be undertaken at this time, the workgroup should be sensitive throughout this process to

local stakeholders' concerns as expressed during the previous plan of study.

The Commission is requested to pursue its activities expeditiously and to report periodically to the Governments. This should include an initial work plan by August 2014 and interim briefings at the October 2014 and April 2015 semi-annual meetings. The final report should be completed by September 2015.

The United States and Canada underscore their joint commitment to the principle of parity, including funding, under the Boundary Waters Treaty. To undertake the work described above, the United States Government commits \$487,000 of appropriated 2014 fiscal year funds. The Government of Canada commits a minimum of \$150,000 of existing Canadian Section IJC funds and in-kind contributions (the dollar value of which shall be mutually agreed by the Governments), with the understanding that ultimate funding of all references relating to this matter will, in cumulative total, be funded by the two Governments on a basis of parity.

Canada's total contribution of resources over the course of this and any future references will equal those of the United States, subject to national appropriations.

The governments of Canada and the United States welcome the opportunity to collaborate and assist the Commission in its work. An identical letter is being sent to the Secretary of the United States Section of the Commission by the U.S. Department of State.

Sincerely,

A handwritten signature in dark ink, appearing to read "C. Wilkie", with a long horizontal flourish extending to the right.

Christopher Wilkie  
Director  
U.S. Transboundary Affairs Division