



A Toronto GO Train sits stranded in the downpour that flooded the city on July 8, 2013. The Insurance Bureau of Canada reported the damage of the storm topped \$859 million, setting a new record for the province. Since then, the City of Toronto has increased its spending on programs meant to compensate for extreme weather, including \$3.1 billion over 10 years to improve wastewater and storm water collection systems.

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# Safety Net

## Canada coordinates its efforts to managing flood risk.

BY SARAH BOON

**FLOODING IS A SERIOUS CHALLENGE** in Canada. In the 1980s, Canadian insurers spent approximately \$400 million on weather-related insurance payments and, over the last ten years, those numbers have risen to in excess of \$1 billion. In 2017 alone, overland flooding resulted in over \$590 million in insured damage across Canada, with spring flooding striking B.C.’s Thompson-Okanagan region and heavy rains causing flooding in Saskatchewan, Ontario, Quebec, and Atlantic Canada.

Because flooding is a transboundary issue, and provinces and territories have jurisdiction over different areas of water management in Canada, flooding is difficult challenge to manage and requires the involvement of many stakeholders.

As a first step towards developing a national strategy to manage flood risk, Public Safety and Emergency Preparedness Minister Ralph Goodale hosted a National Roundtable on Flood Risk in Regina in November of 2017. In the Capital Ballroom at the DoubleTree by Hilton, Public Safety Canada (PSC)

staff, the Insurance Bureau of Canada (IBC), and representatives from the Canadian Water Resources Association (CWRA), Canadian Water and Wastewater Association (CWWA), Federation of Sovereign Indigenous Nations (FSIN), International Institute for Sustainable Development (IISD), Federation of Canadian Municipalities (FCM), and federal and provincial/territorial government leaders met to discuss the many considerations for such a strategy.

Minister Goodale also requested that the IBC chair a working group on financial risk and consumer awareness, with a mandate to provide options to the federal/provincial/territorial ministers of Public Safety on May 25, 2018. The working group, which included all major Canadian insurance companies, underwriters, realtors, banks, and mortgage lenders, met at the end of March. Their task was to begin construction of a roadmap for creating the necessary conditions to transfer affordable/insurability risk to the private

sector prioritizing increased consumer awareness options for restructuring Disaster Financial Arrangements to address residual residential/commercial risk and public infrastructure in a financially sustainable manner.

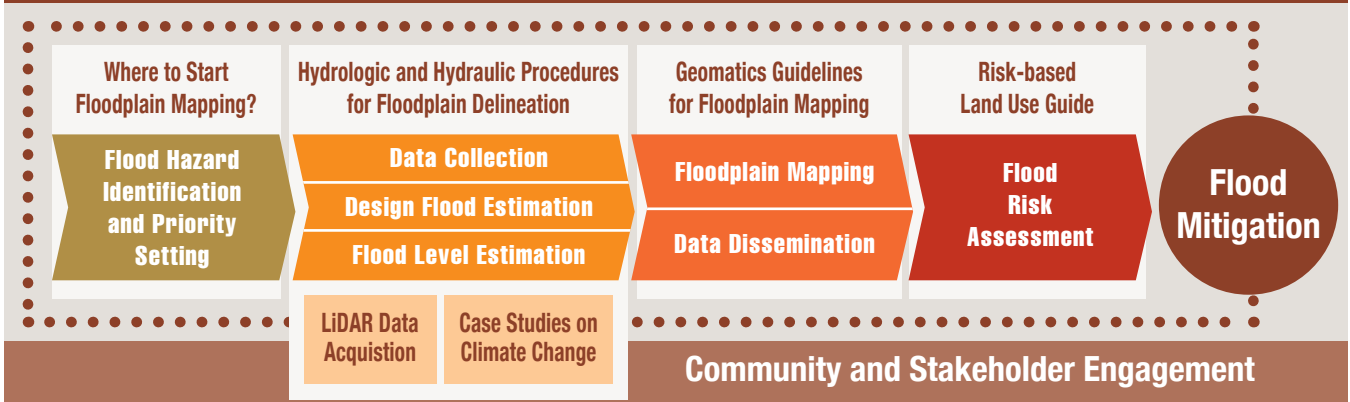
### Integrated approach

Canada is a signatory to the UN’s Sendai Framework for Disaster Risk Reduction, which is a voluntary, non-binding agreement adopted by UN member states in 2015 that recognizes that “the State has the primary role to reduce disaster risk [and] that responsibility should be shared with other stakeholders including local government [and] the private sector.” To ensure that Canada is flood-ready and meets its obligations under the Framework, the federal government established a National Disaster Mitigation Program (NDMP) in 2014 to address rising flood risks and costs and a Technical Working Group on Flood Mapping (TWGFM) in 2015. In 2017, they also released a Federal



Heavy rains, combined with melted snow, engulfed homes and business in eastern Ontario, western Québec, and parts of New Brunswick in May 2017. This photo was taken on Rue Cousineau, in the Cartierville neighborhood of Montreal, May 8, 2017. For the first time since the ice storms of 1988, the city of Montreal declared a state of emergency due to flooding.

## FLOODPLAN MAPPING FRAMEWORK



Floodplain Mapping Framework under the leadership of the Flood Mapping Committee, a partnership between PSC, Natural Resources Canada, National Research Council of Canada, Defence Research and Development Canada, and Indigenous and Northern Affairs Canada. Drawing on the government’s geospatial and national mapping expertise, the goal is to develop a National Flood Information Portal for all Canadians.

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— Donald Forgeron, president and CEO, Insurance Bureau of Canada

CWWA executive director Robert Haller participated in both the IBC and the TWGFM meetings. Haller said that CWWA wanted to ensure that Canadian municipal utilities’ interests were represented, and that all three types of flooding—fluvial

from river overflow, pluvial from extreme rain events, and coastal from sea level and waves—were included. He noted that, in addition to better flood plain maps, Canadians also need maps of municipal stormwater capacity, and we need faster forecasting ability, particularly for extreme rain events.

CWRA president Sean Douglas’s organization has also been heavily involved in flood risk management, including hosting a flood workshop in 2016 and undertaking a review of the TWGFM’s guidance document last fall. Douglas’ main takeaway from the roundtable was that there is an “urgent need for Canada to establish national flood mapping standards supported by [...] training and communication to [...] help Canadians understand and prepare for [...] flood risk.”

Douglas recommended that the NDMP continue to be funded to support cross-

country, multi-sectoral work around threats, costs, and risks associated with flooding. He said that accurate flood mapping is critical for making risk assessments, particularly since appropriate infrastructure upgrades and development plans can’t be made in the absence of such maps. “[The maps] will foster innovative technology solutions and mitigation measures to help protect existing and new developments from potential flood damage,” Douglas said.

### Public-private partnerships

At an interview with Water Canada at the GLOBE Forum, Donald Forgeron, president and CEO of IBC, said, “Canadians should not face financial ruin as the result of a severe flood.” IBC supports a “whole of society” approach to reducing flood risk, which means incorporating all levels of government and stakeholders, the private sector, and the Canadian public.

Historically, Canadian home insurance policies haven’t covered loss or damage caused by overland flooding. However, through IBC’s leadership, some Canadian

insurers have begun to offer overland flood coverage for policyholders. The challenge now is getting Canadians to access it. Increasing consumer awareness was also a key outcome of the November roundtable and will be part of the ongoing working group effort.

As a nation, we need to move beyond the status quo of government bailouts for climate risks, given that they are becoming more predictable and manageable as new floodplain maps are created.

Forgeron added, “There is a need to ‘up the game’ of other private sector actors as we try to drive this message deeper into communities [...] Without a level of knowledge increase, all the things that governments want to do and behaviours that people want to change—none of that will move forward.” Private sector actors,

like real estate agents and bank lenders, play an important role in ensuring their clients have the appropriate information regarding their exposure to climate risk, which will enable them to manage or avoid that risk as they see fit. In light of these risks, property owners and investors need to assume greater responsibility for their investment decisions. As a nation, we need to move beyond the status quo of government bailouts for climate risks, given that they are becoming more predictable and manageable, as new floodplain maps are created.

**Looking to the future**

The expanded FMC held their first meeting on April 5, 2018 and are exploring ways to share up-to-date flood data and interactive flood maps so that existing and future risks can be

identified. The idea is to build on existing emergency management initiatives, including the NDMP. The expanded Flood Mapping Committee and the private-sector IBC committees are to report to Public Safety Minister Goodale at a meeting of provincial and territorial public safety ministers on May 25, 2018. Future plans and priorities will be defined based on the recommendations of the working groups and those of an overarching advisory council to review their comments.

“Collectively, we simply need to do a better job to face this risk head on. We can start by working together to educate and empower consumers,” said IBC’s Forgeron. WC



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