

#### BUILDING A SAFE AND RESILIENT CANADA



### Flood Risk Management

Presentation for Geographic Information Systems (GIS) Day – Statistics Canada

November 13, 2019



#### **Purpose**



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• To provide an overview of Public Safety Canada's work relating to flooding, and to provide an overview of ongoing intergovernmental coordination to advance flood initiatives.

## **Context: Disaster Financial Assistance Arrangements**



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- The current Terms and Conditions of the DFAA were set to expire on December 31, 2019, but were extended until December 31, 2021.
  - Extension provides an opportunity to pursue discussions with PTs in the context of the ongoing review of the DFAA.
- Public Safety has been examining the current state of the DFAA, and consulting key stakeholders. We've identified key considerations:
  - The DFAA is largely positioned to address large-scale disasters that exceed PT capacity/jurisdiction.
  - Federal disaster mitigation investments rising but gaps remain.
  - There has been increasing insurance coverage for residential overland flooding since 2015.
  - Need for better management of program data.
  - The federal government remains exposed to a substantial contingent liability.

# **Current status: Emergency Management Strategy for Canada**



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In January 2019, FPT Ministers Responsible for EM endorsed "**Towards a Disaster Resilient 2030: An EM Strategy for Canada"**, a new joint strategy which seeks to build a disaster resilient society by 2030.

The EM Strategy seeks to guide FPT governments, and their respective EM partners, in carrying out priorities aimed at strengthening Canada's ability to assess risk and to prevent/mitigate, prepare for, respond to, and recover from disasters.

A flagship initiative is the whole-of-government National Risk Profile, which will provide decision-makers with an integrated, clear, evidence-based assessment of risks across multiple domains, including climate risks and, will be expanded to include all hazards, including human induced, in the future.

#### **Building Canada's National Risk Profile**



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PS is leading the development of a **National Risk Profile** (NRP), a strategic-level risk assessment that will integrate scientific data and stakeholder input to develop a national picture of risks and capability gaps.

- This work is supported by NRCan and ECCC and their work on floods, wildfires, and earthquakes.
- The NRP will build on the findings and lessons learned from the pilot project (co-led with DRDC).
- A DG Coordinating Committee consisting of nearly a dozen Departments and Agencies was established to provide leadership on the initiative, and will report to ADM EMC for endorsement.
- DG-led Interdepartmental Risk Tables will develop evidence-based input on three natural hazards that will be the focus of the first NRP report (wildfire, floods, earthquakes).
- A federal workshop will be held to prepare for NRP workshops in 2020-2021 using updated All-Hazards Risk Assessment (AHRA) methodology.



## Ongoing work: DG Interdepartmental Risk Table on Flooding



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DG Interdepartmental Risk Table on Flooding (IRTFL), chaired by PS, was launched on October 23, 2019.

The purpose is to coordinate and lead federal policy development to improve collective understanding of flood risk and flood risk reduction in Canada in order to inform future decisions and federal investments in both the short and medium-to-long term.

#### Four track approach:

- Develop a flood risk hazard information tool/portal to improve communication on authoritative flood risk to Canadians.
- Develop an integrated National Flood Strategy.
- 3. Support Government Operations Centre's cyclical planning on flooding.
- 4. Support the National Risk Profile.



### Ongoing work: Advisory Council on Flooding



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The Advisory Council on Flooding (ACF) was created further to the National Risk Roundtable held in November 2017; the ACF and its subworking groups are operating under the **common vision of a whole-of-society approach** to flood resilience that includes the following key elements:

- Data and mapping of flood risk are foundational to all other efforts.
- **Communication** of flood risk across Canada is needed to empower risk mitigation and inform decision-making at all levels.
- Whole-of-society approach should be nationally-cohesive, inclusive of Canada's Indigenous Peoples, and regionally flexible.
- Financial risks of flooding need to be managed more sustainably across society.

### **Ongoing Work: Flood Mapping**



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- NRCan is currently compiling a digital inventory of existing flood maps from across Canada to build a more complete national picture of flood risk, and to better understand remaining gaps.
- NRCan is leading the development of the Flood Mapping Guidelines
  to help standardize and improve flood mapping in Canada, as well as
  leading research projects with key partners.
- PS and NRCan are collaborating with PTM governments, Indigenous organizations, academia, the private sector, and NGOs to build a public flood risk information tool/portal that will help inform Canadians of their personal flood risk and what actions they can take to mitigate it.
- A flood mapping symposium is being planned for Winter 2020 to further define a multi-stakeholder way forward for high quality flood maps as well as public risk communication.



## Ongoing work: Addressing the Financial Risks of Flooding



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Through the public-private Working Group on the Financial Management of Flood Risk, the Insurance Bureau of Canada published a paper that defines options for managing the cost of insurance for Canada's highest risk residential properties.

Three options were presented along a spectrum of possible policy solutions, from lower to higher levels of intervention:



- Risk borne mainly by homeowners with little government support (except for vulnerable populations)
- Risk borne by homeowners and governments, with a higher focus on relocating highest risk homes
- Risk borne by customized insurance pool, designed to transition to from capped premiums to risk based-pricing over a period of time.

### Way forward



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- A new government is about to be sworn in, though we have no further details, we can look to the Liberal Party election platform commitments for potential investments to come:
  - Roll out a residential flood insurance program to be administered by CMHC,
  - Provide \$150M over 3 years to complete all flood maps in Canada, and
  - Launch a national strategy on strategic relocations to be administered by CMHC.
- PS will continue to work with government partners, and the whole of society, to support improved understanding of flood hazard risk and increasing the resiliency of our communities.

