
Canada's National Disaster Mitigation Strategy

Foreword

This Strategy is based on the recognition by federal, provincial, and territorial governments that mitigation is an important part of a robust emergency management framework, and that all stakeholders are committed to working together to support disaster mitigation in Canada.

The purposes of this document are:

1. To set out a common vision for disaster mitigation activities in Canada.
2. To promote mitigation through a transparent National Strategy that integrates disaster mitigation into Canada's evolving emergency management framework.
3. To identify primary actions that will be undertaken by Federal, Provincial and Territorial partners to support implementation of the National Strategy. It is recognized that full implementation of the National Strategy will require a long-term effort.

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1.0 Overview

1.1 Context

Nationally and internationally, the frequency of natural disasters is increasing. The cumulative effect of these disasters produces a significant personal, material and economic strain on individuals, communities and the fiscal capacity of all levels of governments.

Prevention/mitigation¹ (herein after referred to as 'mitigation') strategies can reduce or prevent disasters, losses and emergency response and recovery costs that would otherwise be incurred. Mitigation is a key element of emergency management which to date has received relatively little emphasis in spite of increasing disaster costs. Through the implementation of this national disaster mitigation strategy, disaster risk reduction benefits can be achieved, to the benefit of individuals, communities and infrastructure.

Mitigation actions provide significant return on investment. Benefit-cost ratios for flood prevention measures in Australia, the United States and the United Kingdom are 3:1, 4:1 and 5:1, respectively. In Canada, \$63.2 million invested in the Manitoba Red River Floodway in 1960 has saved an estimated \$8 billion in potential damage and recovery costs. By emphasizing mitigation, Canada's built environment (e.g. public utilities, transportation systems, telecommunications, housing, hospitals and schools) can be designed to withstand the impacts of extreme natural forces.

In support of the federal *Emergency Management Act* and similar Provincial/Territorial (PT) legislation, this document outlines the components of the National Disaster Mitigation Strategy (NDMS) as a collaborative effort to develop sustainable, disaster-resilient communities across Canada.

This Strategy, developed collaboratively by the federal, provincial and territorial governments, sets out a comprehensive, multi-dimensional approach that anticipates joint contributions, community-based partnerships, and national-level initiatives.

1.2 Scope

FPT governments have worked together to develop this National Disaster Mitigation Strategy for Canada. Responding directly to national consultation findings, the NDMS supports all-hazards emergency management, with an initial focus on reducing risk posed by natural hazards, an area that stakeholders agree requires urgent attention.

While the Strategy does not replace existing enterprise risk management programs at all government levels, the incorporation of NDMS principles into Federal/Provincial/Territorial (FPT) initiatives will benefit the management of internal government risks.

Mitigation actions include all structural and non-structural risk treatments appropriate to hazards, and leverage or incorporate new, existing and developing disaster risk reduction programs.

Finally, the Strategy acknowledges that disaster mitigation includes measures enacted at the local government level, which are critical to creating safe, secure and prosperous communities across Canada.

¹ Disaster prevention/mitigation measures are those that eliminate or reduce the impacts and risks of hazards through proactive measures taken before an emergency or disaster occurs. Measures may be structural (e.g. flood dikes) or non-structural (e.g. land use zoning and building codes). Mitigation activities should incorporate the measurement and assessment of the evolving risk environment and may include the creation of comprehensive, pro-active instruments that enable the prioritization of risk reduction investments. Mitigation provides a critical foundation for emergency management in Canada.

1.3 Goal and Guiding Principles

In January 2005, the FPT Ministers Responsible for Emergency Management approved the following goals and principles for disaster mitigation.

The **goal** of the National Disaster Mitigation Strategy is:

To protect lives and maintain resilient, sustainable communities by fostering disaster risk reduction as a way of life.

The **principles** reflect the essence of what the National Disaster Mitigation Strategy aims to achieve and how it should be developed. The principles are:

- **Preserve Life** – Protect lives through prevention.
- **Safeguard Communities** – Enhance economic and social viability by reducing disaster impacts.
- **Fairness** – Consider equity and consistency in implementation.
- **Sustainable** – Balance long-term economic, social and environmental considerations.
- **Flexible** – Be responsive to regional, local, national and international perspectives.
- **Shared** – Ensure shared ownership and accountability through partnership and collaboration.

2.0 Program Elements

The proposed Strategy will establish ongoing national disaster mitigation program activity areas. Implementation of program activities will be structured around four key elements:

- **Leadership and Coordination**
- **Public Awareness, Education and Outreach**
- **Knowledge and Research**
- **FPT Cost-Shared Mitigation Investments**

2.1 Leadership and Coordination

Leadership is essential in the coordination of a national strategy, and in successfully gaining the benefits of mitigation investments.

1 – FPT Senior Officials Responsible for Emergency Management will work collaboratively with all stakeholders to promote and facilitate disaster mitigation initiatives within their own jurisdictions.

The FPT Ministers agree to:

- Provide leadership in promoting disaster mitigation in Canada.
- Facilitate incorporation of disaster risk reduction principles into federal and PT initiatives (e.g. infrastructure programs).
- Engage municipalities and other stakeholders to encourage mainstreaming of disaster mitigation considerations into existing programs/activities (e.g. urban planning, public health, community social programming).

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- Recognize the contribution of collaborative critical infrastructure protection initiatives in reducing risk and promoting resiliency in the public and private sector.

2.2 Public Awareness, Education and Outreach

Disaster mitigation is most effective when activities engage the community. Therefore, public awareness and education initiatives should be a priority.

2 – Through the NDMS, FPT partners will work with multiple stakeholders to enhance public awareness of risks and mitigation opportunities.

The FPT Ministers agree to:

- Promote a culture of mitigation in Canada. FPT Emergency Management officials will work collaboratively to promote and facilitate disaster mitigation initiatives within their own jurisdictions, and in cooperation with other stakeholders, to affirm disaster risk reduction as a way of life for all Canadians.
- Work with non-governmental organizations and other stakeholders (including the private sector) to create public engagement, education, and outreach activities focused on disaster mitigation.

2.3 Knowledge and Research

The NDMS recognises that sustainable Canadian mitigation activities must draw from and build upon domestic and international mitigation research initiatives, scientific developments, best practices, and lessons learned from disaster events.

The NDMS will support new and ongoing research efforts that build a knowledge base for mitigation decisions. Research is essential to the program.

3 – Apply and promote scientific and engineering best practices in order to build a knowledge base for sustainable, cost-effective mitigation decisions that contribute to community resiliency.

The FPT Ministers agree to:

- Support the identification, development, promotion of scientific and engineering best practices.
- Promote and work to enable timely access to standardized data to support hazard identification and risk assessment across Canada in order to inform disaster mitigation priority setting and decision-making.
- Monitor, and where possible contribute to, mitigation research initiatives, scientific developments, best practices, and lessons learned from disaster events.

2.4 FPT Mitigation Investments

A successful mitigation strategy depends on contributions at all levels of government.

The NDMS should leverage, acknowledge and encourage new, developing and existing mitigation activities (e.g. climate change adaptation, seismic safety, dam safety, transportation and storage of dangerous goods).

4 – Develop and leverage new and existing mitigation strategies and initiatives.

The FPT Ministers agree to:

- Develop and leverage new and existing opportunities for FPT cost-shared programs, strategies and initiatives to support the implementation of the NDMS.

3.0 Governance

3.1 Governance Requirements

A governing structure is needed that addresses the current piecemeal approach to mitigation by concentrating informed decision-making in an effective framework.

A governance structure that engages and enhances local-level responsibility is more effective than a top-down approach, especially considering the many opportunities for partnering in local mitigation projects.

The selected governance structure should include opportunities to seek advice from a broad range of stakeholders on an ongoing basis.

3.2 Governance Model

Strategy activities will be implemented within a shared FPT governance structure, with stakeholders working together with through appropriate channels to ensure the NDMS contributes to the development of sustainable and resilient communities. Activities under the Strategy will be implemented over time on an incremental, step-by-step basis, building on good practices and results achieved.

The illustration in Figure 1 summarizes the proposed governance structure for the NDMS.

This governance model requires participation and commitment of resources at all levels of government.

**National Disaster Mitigation Strategy
– Governance Model –**

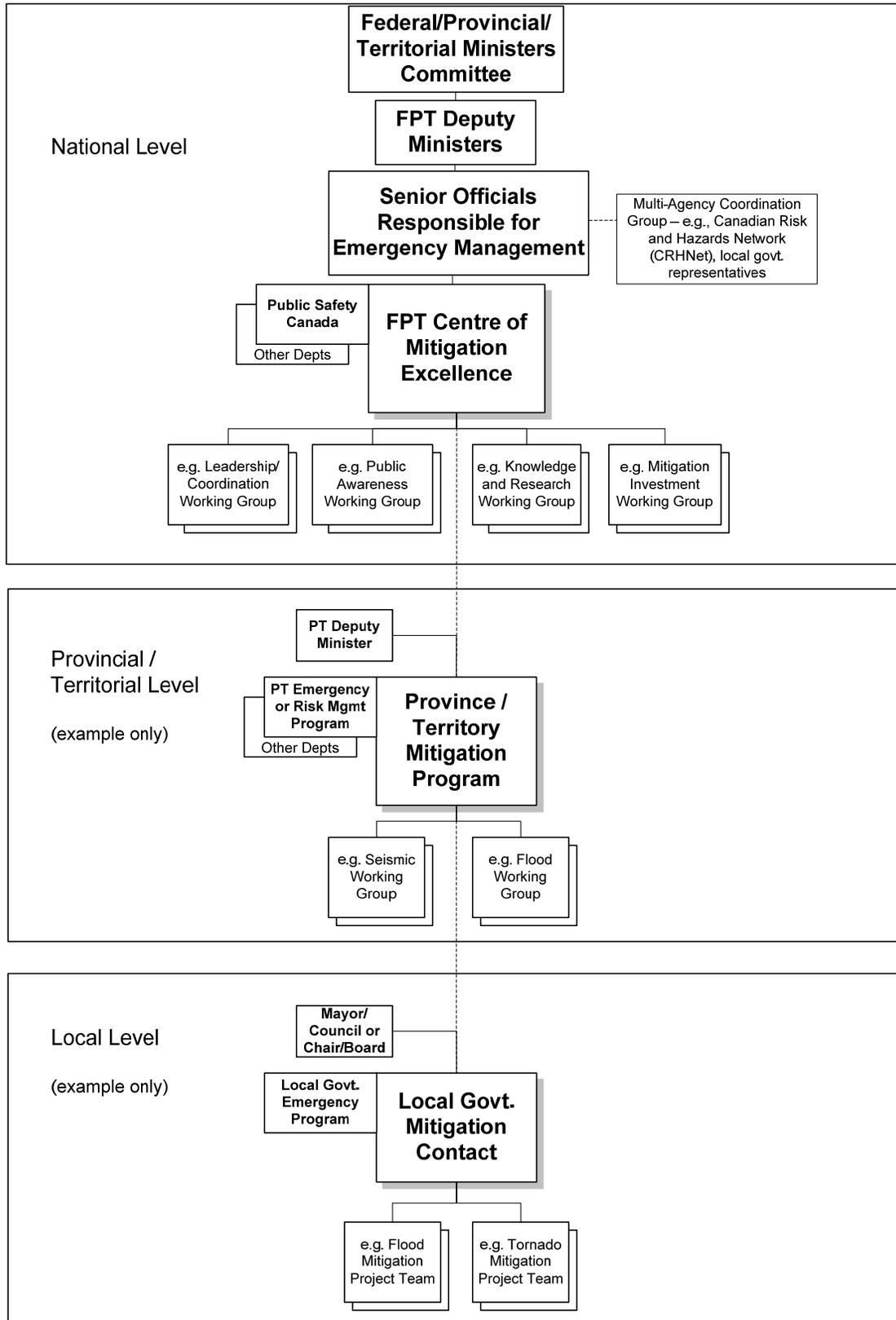


Figure 1: Governance Structure for the NDMS.

National Level – Roles

FPT Ministers – Roles

- FPT Ministers Responsible for Emergency Management are ultimately responsible for approving the NDMS, and for committing to implementation of the NDMS in their respective jurisdictions.
- FPT Ministers are responsible for reviewing and approving a cost-sharing framework that actively supports long-term implementation of the NDMS.
- The Ministers commit to oversight of the NDMS to enhance accountability.

Deputy Ministers – Roles

- Deputy Ministers Responsible for Emergency Management have oversight and implementation responsibility for the NDMS.
- Deputy Ministers are responsible for periodic review of the NDMS and for providing strategic direction for the NDMS.
- Deputy Ministers identify and refer issues that require Ministerial direction to the FPT Ministers, with recommended courses of action.

SOREM – Roles

- The Senior Officials Responsible for Emergency Management (SOREM), serving as a steering committee, set out the overall policies and strategic parameters of the NDMS.
- SOREM sets the priorities for activities undertaken by the FPT Prevention/Mitigation Working Group and the Centre for Mitigation Excellence in an annual work plan, and provides the single point of coordination among the national players.
- Overall, SOREM is responsible for monitoring the success of the program and recommending improvements to the FPT Deputy Ministers for approval.
- SOREM will review and monitor overall funding and implementation of the NDMS.

FPT Centre for Mitigation Excellence – Roles

- A FPT 'Centre of Mitigation Excellence' will be formed, and will have responsibility for facilitating and implementing the aspects of NDMS with common interest and benefit nationally.
- Public Safety Canada will co-chair this standing Centre, with a Provincial or Territorial representative, elected by the PT representatives. Members will be nominated by federal departments, provinces and territories.
- The Centre will engage with other stakeholders (e.g. other government departments, private sector, non-governmental organisations) to ensure the NDMS stays relevant and continues to reflect the principles approved by Ministers.

Ad-hoc Working Groups – Roles

- To support implementation of the Strategy, Working Groups will be established as required by SOREM, to undertake issue-specific tasks, such as research, planning, and program development.

Provincial / Territorial Level – Roles

- PTs will lead disaster mitigation activities in their respective jurisdictions.
- PTs will develop their mitigation programs/activities based on principles and guidelines that are consistent with national standards, and in consultation with relevant stakeholders.
- A PT organization should serve as a single point of contact for local governments, business-owners, and residents on all issues regarding mitigation.
- Each PT will apply knowledge of risks and vulnerabilities in their jurisdiction to set priorities for mitigation, and to help local government project teams achieve objectives for risk reduction.

Local Government Level – Roles

- Local governments should lead disaster mitigation activities in their respective jurisdictions, with the support of PTs.
- Depending on local/regional priorities, local governments should lead the coordination of multi-stakeholder projects within their specific jurisdiction, where applicable, including mechanisms for innovative funding, to enact risk-reduction measures.

3.3 Accountability

Accountability means adherence to national guidelines, regular reporting, and audit or review by the next highest oversight organization.

Citizens expect their governments to work together collaboratively, and to be accountable for public spending and the results achieved through public investments.

To ensure accountability under the NDMS:

- FPT Ministers will set annual priorities and performance expectations for NDMS implementation; and
- SOREM will monitor and report back to Deputy Heads and Ministers on results achieved.

Individual projects funded through the NDMS may also be reviewed and audited to identify best practices and provide Ministers with assurance of results achieved.

4.0 Priority Actions for Implementation

The NDMS is premised on an incremental approach to implementation, based on the four program elements and a collaborative FPT approach to governance. Program elements and the governance model for the NDMS are flexible and scalable, allowing investments to be adjusted to reflect changes in priorities and to take advantage of new opportunities as they arise.

Leadership and Coordination

- Create a 'Centre for Mitigation Excellence' to facilitate information exchange and activities and serve as a focal point for national dialogues on mitigation.
- Develop and agree on actions to be taken to advance non-structural mitigation program elements.

Public Awareness, Education and Outreach

- Oversee national awareness activities aimed at influencing public attitudes pertaining to risk reduction.

Knowledge and Research

- Promote social and physical science disaster mitigation research programs, in collaboration other government departments/agencies and with research councils such as the Social Sciences and Humanities Research Council and the Natural Sciences and Engineering Research Council.
- Facilitate development and sharing of community/regional hazard identification and risk assessment models in order to support risk reduction decision-making (including prioritizing structural investments).

FPT Cost-Shared Mitigation Investments

- Utilize the *Building Canada Fund* to support the National Disaster Mitigation Strategy and structural disaster mitigation priorities.
- Leverage a portion of the *Building Canada Fund* distributed funding in each province/territory for mitigation research, knowledge and feasibility and other studies as part of the FPT Framework Agreements.
- Invest in post-disaster structural mitigation enhancements through the revised Disaster Financial Assistance Arrangements (DFAA) Terms and Conditions.
- Continue to support local authority community risk assessments through the Joint Emergency Preparedness Program (JEPP).