



Building Resiliency Together

Emergency Management Strategy for Canada



Toward a Resilient 2030

  Federal/Provincial/Territorial
Emergency Management Partners



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Context



Disasters in Canada are increasing in frequency and severity across the country¹. Recent disasters, including: Hurricane Igor in Newfoundland in 2010, the 2011 Prairie floods, the 2011 Slave Lake fire, the 2013 Lac-Mégantic rail disaster, the 2013 Southern Alberta floods, the 2013 Toronto urban flood, the 2014 Saskatchewan and Manitoba flooding, the 2016 Fort McMurray wildfire, the 2017 Atlantic Canada telecommunications outage, and the 2017 British Columbia flood and wildfire seasons are but a few examples of the more than 195 major disasters identified in the Canadian Disaster Database that struck Canada between 2008 and 2018. Combined, these disasters have cost tens of billions of dollars in damages and displaced hundreds of thousands of people.

Disaster losses are likely to increase into the foreseeable future as a result of drivers of change, including: climate change; critical infrastructure interdependence; and shifting demographics in Canada. The impacts of climate change are already being felt across Canada increasing the frequency and intensity of hazards such as floods, wildfires, drought, extreme heat, tropical storms, melting permafrost, coastal erosion, and, in Northern Canada, damage to seasonal ice roads. These hazards pose significant risks to communities, individual health and well-being, the economy, and the natural environment. Moreover, many Indigenous communities are among the most vulnerable to climate change due to their remote and coastal locations, lack of

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¹ <http://cdd.publicsafety.gc.ca/srchpg-eng.aspx>

The EM Framework describes the sharing of EM responsibilities among FPT governments themselves, as well as with their respective EM partners (including but not limited to: Indigenous peoples, municipalities, communities, volunteer and non-governmental organizations, the private sector, critical infrastructure owners and operators, academia, and volunteers).

access to Emergency Management (EM) services, and reliance on natural ecosystems.

Since 2007, Federal, Provincial and Territorial (FPT) collaboration in EM has been guided by *An Emergency Management Framework for Canada (EM Framework)*, which was last updated in 2017. The *EM Framework* describes the sharing of EM responsibilities among FPT governments themselves, as well as with their respective EM partners (including but not limited to: Indigenous peoples, municipalities, communities, volunteer and non-governmental organizations, the private sector, critical infrastructure owners and operators, academia, and volunteers). Provincial and territorial governments have responsibility for emergency management within their respective jurisdictions. The federal government exercises leadership at the national and international levels relating to emergency management responsibilities in its exclusive fields of jurisdictions and on lands and properties under federal responsibility. For these partnerships to be effective, all EM partners must work collaboratively with their respective governments.

In an emergency, the first response is almost always by the local authorities or at the provincial or territorial level because disasters occur most often locally. Should a provincial or territorial government require resources beyond their capacity to cope in an emergency or disaster, the federal government responds rapidly to any request for assistance by a provincial or territorial government. This document must therefore be understood within the jurisdiction of each government, and nothing herein should be interpreted in a way that undermines these authorities.

The *EM Framework* further articulates core concepts that guide FPT governments, and their respective EM partners, in their work to save lives, protect property and the economy, and preserve the environment. This work is accomplished through four interdependent components

of EM: prevention/mitigation, preparedness, response and recovery. These components may be undertaken sequentially or concurrently, but they are not independent of each other. Traditionally, EM has been primarily concerned with preparedness and response activities, but the current risk environment requires a shift in focus toward proactive prevention/mitigation efforts and forward-looking recovery measures. Greater investment in mitigation can help prevent disasters or significantly reduce the social, economic, cultural heritage and environmental costs when events do occur. Forward looking recovery measures allow communities not only to recover from disasters, but also to build back better in order to reduce vulnerability to eventual hazards.

This evolution in EM is consistent with the international concept of Disaster Risk Reduction (DRR); which is defined by the United Nations (UN) as “systematic efforts to analyze and reduce the causal factors of disasters. Reducing exposure to hazards, lessening vulnerability of people and property, wise management of land and the environment, and improving preparedness and early warning for adverse events are examples of DRR”². It is important to consider that the impacts of disasters are not uniform across society, and that different variables can intersect and contribute to the level of risk facing vulnerable populations (e.g., gender, age, disability, socioeconomic conditions).

Building on past international efforts, an important milestone in aligning the concepts of EM and DRR came in 2015, when Canada joined 187 countries at the UN General Assembly in adopting the *UN Sendai Framework for Disaster Risk Reduction (2015-2030)* (*Sendai Framework*). The *Sendai Framework* is a non-binding international agreement that establishes international priorities for DRR, and further creates direct linkages with UN climate change and sustainable development efforts. One of the key

SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION (DRR) 2015-2030

The United Nations International Strategy for Disaster Reduction (UNISDR) coordinates international efforts in disaster risk reduction, and guides, monitors and reports on the progress of the implementation of the Sendai Framework for Disaster Risk Reduction (DRR). Canada is a signatory to the global framework, which Public Safety Canada is leading as federal department responsible for the domestic implementation of the Sendai Framework.

In October of 2018, British Columbia announced it would adopt the Sendai Framework to align and improve its approach to all phases of emergency management. See page 12 in the recently released action plan in response to recommendations from an external strategic emergency management review.

Québec has adopted the 2014-2024 Québec Emergency Management Policy as well as a National Action Plan, which was directly inspired by the priority actions of the Hyogo Framework, the predecessor of the Sendai Framework.

2 UNISDR, <https://www.unisdr.org/who-we-are/what-is-drr>

elements within the *Sendai Framework* is the importance of adopting a whole of society approach, which seeks to leverage existing knowledge, experience and capabilities within EM partners in order to strengthen the resilience of all. The *EM Strategy* helps fulfill the Government of Canada's commitment under the *Sendai Framework* for a pan-Canadian DRR Strategy and aligns with the *Sendai Framework's* 2030 timeline.

Purpose



The *Emergency Management Strategy for Canada (EM Strategy)* builds on the foundational principles articulated in the *EM Framework* and the *Sendai Framework* in order to establish FPT priorities to strengthen the resilience of Canadian society by 2030. This Strategy also supports the roles and responsibilities outlined in the *EM Framework*, and seeks to guide FPT governments, and their respective EM partners, in carrying out priorities aimed at strengthening Canada's ability to assess risks and to prevent/mitigate, prepare for, respond to, and recover from disasters. This is all supported by strong leadership from FPT governments with their respective EM partners, in relation to their roles and responsibilities.

What Do Resilient Communities Look Like?

The concept of Resilience is defined in the *EM Framework* as “the capacity of a system, community or society to adapt to disturbances resulting from hazards by persevering, recuperating or changing to reach and maintain an acceptable level of functioning.

Resilient capacity is built through a process of empowering citizens, responders, organizations, communities, governments, systems and society to share the responsibility to keep hazards from becoming disasters. Resilience minimizes vulnerability or susceptibility by

creating or strengthening social and physical capacity in the human and built environment to cope with, adapt to, respond to, and recover and learn from disasters.” There are two key facets to this definition. First, resilience refers to the dynamic quality of a system, the whole system, rather than the sum of its individual parts. Second, resilience is a *strengths-based* construct, focusing on capacities, assets, capabilities and aptitudes, and how these can be proactively mobilized and/or enhanced in order to reduce vulnerability and risk.

Community resilience is an attribute of the community as a complex integrated system, describing the ability of its members to draw upon their own inherent strengths and capabilities to absorb the impact of a disruption, to reorganize, change, and learn from the disruption, and to adapt to emergent shocks. While the concept of community resilience can seem abstract, tangible examples from international research^{3 4 5} that describe what resilient communities actually look like can be clarifying, for example:

- Members of resilient communities are empowered to use their existing skills, knowledge and resources to prevent/mitigate, prepare for, respond to and recover from disasters. They are able to adapt their everyday skills and use them in extraordinary circumstances.
- Members of resilient communities are educated on the risks that may affect them. They understand the links between risks assessed at FPT levels and those that exist in their communities; and how this might affect their lives, businesses and the local environment.
- Members of resilient communities are engaged in all aspects of community life, adopting a long-

³ Edwards, C. (2009). *Resilient Nation*. London. Demos, 80.

⁴ Federal Emergency Management Agency. (2011). *A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action*. Washington, DC: Federal Emergency Management Agency.

⁵ Cabinet Office. (2011). *Strategic National Framework on Community Resilience*. London. Government of the United Kingdom.

term, holistic and community reflective perspective, influencing and making decisions that address the needs of their whole community. They take proactive steps today to help reduce risks tomorrow.

- Resilient communities encourage trusted champions to communicate the benefits of resilience to the wider community and influence others to get, or stay, involved. These champions help strengthen the relationships and bonds already working well in the community.

In order to promote and build resilience within their respective jurisdictions, and across Canada, FPT governments recognize that all Canadians are involved in EM and are working to build partnerships based on effective collaboration, coordination, and communication with, and among, respective EM partners. These partnerships are built and maintained by FPT governments. As such, it is important to acknowledge and be aware of the different needs, resources, capacities, and vulnerabilities of individuals, groups, and communities that can intersect to exacerbate risks or strengthen resilience. This may include consideration of factors such as gender, socio-economic conditions, local community conditions and traditional Indigenous knowledge.

Priority Areas of Activity



In order to fulfill its purpose in an increasingly complex and rapidly evolving risk environment, the *EM Strategy* seeks to align the efforts of all Canadians as well as to strengthen overall resilience through five priority areas of activity. These priority areas of activity were approved by FPT Ministers Responsible for EM in May 2017:

1. Enhance whole-of-society collaboration and governance to strengthen resilience;
2. Improve understanding of disaster risks in all sectors of society;
3. Increase focus on whole-of-society disaster prevention and mitigation activities;
4. Enhance disaster response capacity and coordination and foster the development of new capabilities; and
5. Strengthen recovery efforts by building back better to minimize the impacts of future disasters.

Each priority area is accompanied by foundational objectives and FPT priority outcomes to set specific direction and desired medium term goals. These priorities provide FPT jurisdictions with the flexibility needed to advance the objectives of the *EM Strategy* in a variety of ways and in a manner that reflects their priorities. To help illustrate each objective, examples of best practices used by FPT governments are outlined in the 'Resilience in Motion' text boxes. Priority 1: Enhance whole-of-society collaboration and governance to strengthen resilience

Priority 1

Enhance whole-of-society collaboration and governance to strengthen resilience

All orders of government and sectors of society have essential roles to play in EM. As such, it is important to recognize EM partners in our collaboration and governance systems, and to define and understand their roles and responsibilities. While still respecting authorities of FPT governments, it is possible to include more diverse voices at the operational-level and in decision-making processes. This process has the dual benefits of both increasing the awareness and engagement of these partners, while simultaneously improving the quality of our EM and DRR efforts, through the integration of their unique perspectives, experiences and capabilities.

Foundational objectives for enhanced collaboration and governance could include:

- FPT governments engage with and strengthen the role of their respective partners in EM and DRR;
- FPT governments empower their respective partners to develop and promote approaches across EM and DRR;
- FPT governments empower EM partners to leverage existing partnerships, networks and/or frameworks to strengthen collaboration on EM and DRR; and
- FPT governments encourage the consideration and inclusion of elements related to resilience and climate change adaptation in policy development by EM partners.

FPT Priority Outcomes

- FPT governments will establish dialogue with Indigenous peoples regarding the EM needs of their communities; and
- FPT governments will consider the complex and evolving environment, including climate change adaptation, the importance of building resilience, and the value of respective EM partnerships, whenever new and updated FPT EM initiatives are developed.

Resilience in Motion **EM Policy (Quebec)**

In December 2013, the Government of Quebec adopted its 2014–2024 EM policy, which was developed by the Ministry of Public Safety in Quebec. The policy was launched in February 2014 and its purpose is to make Quebec society more resilient to disasters. The policy lays out the foundations, directions and objectives that Quebec has established to ensure better risk and disaster management and to deal with an increase in this area. The policy sets out a common action framework for all partners and is the basis from which various EM measures will be deployed for the next ten years. It seeks to promote the consolidation, optimization and strengthening of the EM efforts and resources of citizens, businesses, civil society organizations, local and regional municipalities, and government departments and agencies. An action plan developed in 2014 by the Organisation de la sécurité civile du Québec (OSCQ) ensures its implementation.

Resilience in Motion

Diversifying Voices

FPT governments agreed to hold dedicated meetings with Indigenous representatives to discuss emergency management in Indigenous communities. Indigenous engagement on EM is taking place in a culturally sensitive, strengths-based, and inclusive manner.

In May 2017, FPT Ministers Responsible for Emergency Management agreed to work collaboratively with Indigenous representative organizations and communities to develop an Inventory of EM capability in Indigenous communities across Canada.

Since, Public Safety Canada in partnership with the Assembly of First Nations (AFN) and other Indigenous representatives has been co-developing the inventory of EM capabilities. The inventory will enable risk-informed decision-making by improving our understanding of existing EM challenges and resources in Indigenous communities.

The inventory development, based on increased engagement, has been undertaken with the key principles of co-developing solutions to Indigenous emergency management that are sustainable, inclusive, and culturally sensitive.

Priority 2

Improve understanding of disaster risks in all sectors of society

Access to accurate risk information, through an open and inclusive dialogue, is critical to informed decision-making. Information-sharing is essential to keep the population safe and enhance resilience. Robust, scientific risk assessments that incorporate the impacts of climate change and that take into consideration data on hazards, vulnerabilities, exposures, cultural differences, impacts and resilience factors, are crucial. The partnership between the Federal Government and Indigenous peoples on the collection of scientific data in relation to Indigenous communities that takes into account traditional Indigenous and local knowledge will be key to understanding local contexts and existing or potential future risks. This focus on transparent discussions of disaster risks with partners and citizens is critical because, although hazards cannot be completely prevented, we can help prevent the likelihood of these hazards becoming disasters through risk appropriate measures. But, Canadians cannot undertake these risk appropriate measures if they do not know and/or understand their risks. It is essential that provinces and territories support communities in developing their own risk and vulnerability profiles in the long-term in order to increase resilience.

Foundational objectives to improve the understanding and awareness of disaster risks could include:

- FPT governments exchange information and best practices regarding the risks across the country in order to encourage evidence-based decision making and to facilitate the FPT prioritization of risks;

- FPT governments develop awareness strategies to educate communities regarding disaster risks in order to help reduce the impacts of disasters;
- FPT governments engage new partners to strengthen public awareness related to disaster risks; and
- FPT governments, within their areas of responsibilities, empower communities and Indigenous Peoples with the ability to integrate traditional knowledge, awareness and education programs into broader EM and DRR.

FPT Priority Outcomes

- FPT governments work to implement all-hazards public awareness methods for the public in order to engage EM partners. Each government will be responsible for choosing the public awareness method they deem appropriate based on the needs of their partners.
- FPT governments support and promote residents' access to information on disaster risks in their communities and the associated hazards, while respecting privacy, confidentiality, and security considerations.

Resilience in Motion

Hazard Risk Assessments (Prince Edward Island)

In 2011, Prince Edward Island (PEI) Emergency Measures Organization (EMO) partnered with the Chemical Biological, Radiological and Explosives Technology Initiative (CRTI), now known as the Canadian Safety and Security Program (CSSP), to conduct a Hazard Risk Assessment (HRA) for the entire province of PEI. The assessment engaged 33 key partners from public and private sectors across PEI and reviewed 146 different hazard scenarios over a two day session. The primary goal of the assessment was to assist all participating organizations to determine their respective risks so that they could better plan to prevent and mitigate the impacts of the identified hazards. Additionally, the session was used to educate participants about the HRA process. A validated HRA process will produce information that empowers those who are tasked with emergency and risk management to assess risk, prioritize funding needs, and efficiently allocate resources. On the heels of the provincial assessment, PEI EMO reviewed the HRA methodology used with views to modify for other disciplines and orders of government. Over the following two years PEI EMO conducted HRAs in each of the 44 publically operated health facilities in the province. These assessments offered facilities the ability to understand capacities and vulnerabilities, and to assist them as they enhanced emergency plans and worked for response alignment across all the program areas in Health. Finally, in 2016, PEI EMO modified the risk assessment methodology one final time for use at the municipal level.

Resilience in Motion

Canadian Disaster Database (federal)

The Canadian Disaster Database (CDD), managed by Public Safety Canada, is a publically accessible web-based repository of historical information on disasters that have directly affected Canadians, at home and abroad, since 1900. It contains detailed disaster information on over 1000 disasters, including those triggered by natural hazards, technological hazards or conflict (not including war). The database describes where and when a disaster occurred, who was affected, and provides a rough estimate of the costs. These costs might include various FPT government relief and recovery payments, municipal costs, insurance claims, and cost of supplies and assistance provided by non-governmental organizations. The database also provides information on the number of injuries, evacuations, and deaths associated with a particular disaster.

The goal of the CDD is to bring historical data on Canadian disasters to residents and FPT governments to better understand, assess, and manage risks. This information can help assist individuals and communities understand the risks posed by hazards and explore actions to mitigate them. It is also used to support research, academic activities and decision-making across a breadth of subjects and can be leveraged to support many EM program deliverables.

Priority 3

Increase focus on whole-of-society disaster prevention and mitigation activities

The most effective EM activities are proactive prevention/mitigation measures that are used to eliminate, reduce or adapt to risks. These activities include structural mitigation measures (e.g. construction of floodways and dykes) and non-structural mitigation measures (e.g. building codes, land-use planning, and insurance incentives). The return-on-investment for these activities, while dependent on hazard type and location, would generate savings of \$6 for every \$1 invested in prevention.⁶ These activities also support opportunities to build more resilient infrastructure while integrating environmental protection and sustainable development concepts. Prevention/mitigation can also include enhancements to disaster prediction capabilities. Knowledge of risks allows for better preparation and more timely notification to the public. This can contribute to our efforts to save lives and reduce the associated social, economic, and health impacts of disasters. Because of the often localized nature of hazards, FPT governments, in keeping with their respective roles and responsibilities, must work with their respective EM partners to adapt their efforts and ensure that prevention/mitigation actions and measures take into consideration the community and their specific needs.

Foundational objectives to increase the focus on disaster prevention and mitigation activities among all EM partners could include:

- FPT governments encourage non-structural mitigation activities to address all-hazards, and incentivizing investment in structural mitigation projects;

⁶ Multihazard Mitigation Council. (2017). *Natural Hazard Mitigation Saves 2017 Interim Report: An Independent Study*. Principal. National Institute of Building Sciences, Washington.

The return-on-investment for these activities, while dependent on hazard type and location, would generate savings of \$6 for every \$1 invested in prevention.

- FPT governments educate respective partners on linkages between DRR and other disciplines, like climate adaptation, to keep pace with the interconnected evolving risk landscape;
- FPT governments engage the private sector to develop an affordable private flood insurance model for the entire population, including clear incentives for mitigation of flood risks.
- FPT governments, based on their respective roles and responsibilities, empower communities to conduct evidence-based mitigation planning measures, and to implement projects to assess and proactively reduce risks.

FPT Priority Outcomes

- FPT governments work together to share information on best practices to ensure the complementarity of their programs in order to fund structural and non-structural mitigation projects that benefit FPT Governments and their respective partners.
- FPT governments assist in the development of options for sharing the financial risk of disasters.

Resilience in Motion

Prohibiting Reverse Slope Driveways (Ontario)

In August 2005, a major storm in Markham, Ontario caused significant flooding resulting in millions of dollars in property damage including damage from flooded basements. Following this event, the City received comments from some residents concerning the continued development of reverse slope driveways. Restricting the future development of reverse slope driveways would not affect the current condition; however, it would prevent further exacerbation of the problem. A reverse slope driveway refers to a driveway that leads downward from a public street to a parking area (garage) fully or partially below ground-level, or in the lower level of a building. For several years, there were no provisions in any of the City's zoning by-laws that would prevent the construction of a reverse slope driveway or basement garage. A proposal to restrict reverse slope driveways associated with residential properties was initiated. In 2011, a report was created with a proposal to amend the current by-law regarding reverse slope driveways. The report also requested authorization to hold a public meeting regarding the matter. After various consultations and research initiatives, a conclusion was reached. Reverse slope driveways have been identified as contributing to urban flooding, as it creates additional flow paths for water to enter a building. The proposed amendment to the by-law on prohibiting the development of reverse slope driveways was enacted in April 2012.

Priority 4

Enhance disaster response capacity and coordination and foster the development of new capabilities

Ensuring that FPT governments are prepared for emergencies is imperative to the safety of the population, and also facilitates more effective response and recovery efforts. To improve preparedness, we first need to focus our actions on improving EM partner training and fostering more educated and engaged citizens, followed by a focus on planning. EM exercises, implemented by the responsible FPT government(s), contribute to the testing of all-hazards plans, and validate their effectiveness. Furthermore, exercises reinforce collaboration between the various EM partners. Communicating with the population contributes not only to preparedness, but to the personal resilience necessary to cope with emergency situations. Even with the best preparedness measures in place, it is critical that the response accountabilities and capabilities of EM partners are coordinated, which cannot be undertaken in isolation. Their effectiveness is dependent upon supporting prevention, mitigation, preparedness, validation through exercising, and ultimately recovery efforts. The actions of all EM partners during the various phases of an event should be coordinated, complementary and supported by modern emergency communication systems.

Foundational objectives to increase the focus on disaster prevention and mitigation activities among all EM partners could include:

- FPT governments encourage the development of preparedness and response capabilities with their respective partners;

- FPT governments engage their respective partners to establish fully interoperable EM systems, for example: interoperability of incident management across jurisdictions, communications across different sectors and national wireless public alerting;
- FPT governments inform their respective partner on appropriate opportunities to participate in exercises; and
- FPT governments foster the development of capabilities through innovation, science and technology.

FPT Priority Outcomes

- FPT governments work with their respective EM partners to develop interoperable public safety communication systems.
- FPT governments organize and plan exercises to test and validate EM plans by encouraging the participation from EM partners.
- FPT governments encourage the development of common guidelines for public alerting and public safety communications.

Resilience in Motion

Public Safety Governance Committees (Alberta)

In 2011, the then unprecedented size, speed, scope and impact of the Slave Lake Wildfires demanded a rapid, agile, and coordinated provincial response, supported by a significant and sustained resource commitment. To address this need, the Government of Alberta's (GoA) Deputy Ministers and Assistant Deputy Ministers' Public Safety Committees ("the Committees") were established. Since 2011, the Committees duties have evolved to include:

- Assisting the province in its coordinated responses to, and recovery from, specific hazards or emergencies as required;
- Reviewing, vetting and providing a standing consultation forum for GoA public safety strategic policy and program development initiatives;
- Enhancing collaboration and strategic coordination in the development of EM and public safety policies, programs and supports in Alberta and nationally;
- Improving existing public safety governance through clarification of the roles, authorities and accountabilities of internal and external organizations;
- Ensuring information on public safety incidents is received in a timely manner by the appropriate decision-makers and officials;
- Providing expert advice and facilitating consistent messaging on time sensitive public safety concerns, including GoA employee safety;
- Ensuring business continuity planning is in place, and supporting the Cross Government Coordination Team in the event of invocation of GoA's Business Continuity Plan; and
- Increasing internal and external awareness of Alberta's public safety system.

Since their formation, the Committees and the departments that support them, have been critical in coordinating the successful responses to three of the largest natural disasters in the province's history.

Priority 5

Strengthen recovery efforts by building back better to minimize the impacts of future disasters

The concept of building back better is a forward-looking and planned recovery approach that allows communities not only to recover physically from disaster events, but also to address underlying socio-economic issues in order to enhance overall community resilience after a disaster. Recovery is often a complex undertaking involving diverse partners and competing priorities. Thoughtful and deliberate recovery, which takes into account past experiences and best practices, allows for opportunities to learn from and adapt to an evolving risk-landscape.

Building back better is a key principle of the *Sendai Framework* and identifies the reconstruction phase of disaster recovery as a critical opportunity to rebuild communities with an overall goal of reducing the vulnerability to future hazards. Following disasters, there is an opportunity to build back better by incorporating new and innovative measures to strengthen existing physical infrastructure and invest in new infrastructure projects where deficiencies exist. This can be facilitated by collaborative partnerships that support communities to recover more quickly in the immediate term, while also becoming more resilient in the longer-term. The concept of building back better is not limited to physical infrastructure, and can also be integrated into enhancements and innovations to: legislation, policies, plans, procedures, and programs related to EM and DRR. Building back better can also be associated with improving the overall well-being and resiliency of communities and individuals to better withstand future stresses and disruptions of any kind. People affected by disaster should be part of the decision-making. To facilitate inclusion and participation, it is necessary to understand the existing

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social systems and local power structures. To enable people to make informed choices, it is important to promote information sharing and community-based learning.

Foundational objectives to strengthen recovery and building back better efforts could include:

- FPT governments engage their respective EM partners and other sectors of society to identify pre and post-disaster vulnerabilities, to define opportunities to improve the availability of post-disaster assistance;
- FPT governments encourage their respective partners to create linkages between recovery and mitigation efforts to foster the establishment of mechanisms to emphasize innovation and building back better;
- FPT governments reflect on best practices and past experiences through post-event reviews, and exchange knowledge with their respective EM partners in order to incorporate these findings into comprehensive EM plans.

FPT Priority Outcomes

- FPT governments will work to implement terms for sustainable, timely, and accessible post-disaster financial assistance for their residents.
- FPT governments will examine opportunities to develop a platform to share disaster teachings and EM exercises to educate EM partners and develop best practices across Canada.
- FPT governments, and their respective roles and responsibilities, will strive to develop more robust recovery supports and programs beyond financial assistance.

Resilience in Motion

Provincial Disaster Recovery Branch (British Columbia)

The magnitude of British Columbia's (BC) 2017 flood and wildfire seasons highlighted the need for a new approach to recovery due to the number of impacted communities, the widespread nature of threats and impacts, and the need for long-term financial support beyond the scope of Disaster Financial Assistance-based infrastructure recovery. The Provincial Disaster Recovery Branch (PDRB) was established during the response phase of BC's 2017 wildfire season to provide coordinated community recovery guidance to individuals, businesses and sectors.

Four working groups were identified to understand the scope of recovery:

- **People and Communities**, encompassing requirements for individual and community mental health support, unique community needs and underlying social vulnerabilities;
- **Economy**, focusing on support to small businesses and tourism operators by reinvigorating existing initiatives and acknowledging the economic needs of rural communities;
- **Environment**, including impacts to wildlife and land, recognizing that land-based recovery is expected to take years, while wildlife impacts remain largely unknown; and
- **Infrastructure and Reconstruction**, characterised by the Disaster Financial Assistance program (responsible for uninsurable private losses, and for structural losses of municipal buildings), but also including damage to roads, bridges, and rangeland fencing.

PDRB's objective is to support municipal governments and Indigenous community-led recovery by identifying funding sources and by providing recovery tools and advice. Critical services have proven to be:

- The management of donated funds, goods, and services from local and international non-profits;
- The identification, coordination, and documentation of cross-Ministry activities; and
- Liaising between multiple orders of government.

The PDRB works closely with the Canadian Red Cross and Indigenous Services Canada to deliver recovery support.

Resilience in Motion

2011 Manitoba Flood and the 2011 Individual Flood Protection Initiative

In 2011, Manitoba endured a flood never before experienced in recorded history. High soil moisture at freeze-up, above normal winter snow, additional snow and rain during the spring, heavy summer rains and several severe wind events all combined to form the “perfect storm”. The impacts of the 2011 Flood were far reaching with costs associated with flood preparation, flood fighting, repair to infrastructure and disaster payments reaching over \$1.2 billion. Over the years, there has been an appreciation for building back better as rebuilding communities to pre-disaster standards only recreates the vulnerabilities that existed earlier and exposes them to continuing devastation from future disasters. With that in mind, Manitoba introduced the 2011 Individual Flood Protection Initiative. The 2011 Individual Flood Protection Initiative provides financial assistance to owners of flood prone homes, farms, businesses and cottages throughout Manitoba to flood protect their buildings and structures by raising, moving or diking. For approved applicants of the program, the Manitoba government would fund 86 percent of the costs to flood protect their property, with the remaining 14 percent to be paid by the applicant. This initiative has proven to be popular with over 2000 applications. This example of a build back better initiative shows how government can work together with those impacted by a major event to help protect their property from future events, thus increasing resiliency.

Implementation



The EM Strategy sets a roadmap for strengthened FPT collaboration and sustained engagement with respective EM partners. In order to implement the EM Strategy, FPT Senior Officials Responsible for Emergency Management are tasked with the development of an FPT Action Plan that describes in detail how each FPT government, and their respective roles and responsibilities, intend to advance each of the EM Strategy Priority Areas of Activity. Further, FPT Senior Officials for Emergency Management will annually review the EM Strategy and Action Plan to monitor progress and share lessons learned, and update them as required. In addition, the EM Strategy will be formally updated every five years to ensure it remains relevant in the dynamic context of changing disaster risks in Canada.

Conclusion: Toward a Resilient 2030



The EM Strategy supports the FPT governments' vision to strengthen Canada's EM capabilities to prevent/mitigate, prepare for, respond to, and recover from disasters, in order to reduce disaster risk and increase the resiliency of all individuals and communities in Canada. To reach this goal, the EM Strategy adopts a whole of society approach to EM and DRR in Canada. In articulating the five FPT Priority Areas of Activity, and describing a variety of approaches to engage, empower, encourage, and educate EM partners, the EM Strategy outlines a path toward a more resilient future for Canada by 2030.

Bibliography



Cabinet Office. (2011). *Strategic National Framework on Community Resilience*. London. Government of the United Kingdom.

Edwards, C. (2009). *Resilient Nation*. London. Demos, 80.

Federal Emergency Management Agency. (2011). *A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action*. Washington, DC: Federal Emergency Management Agency.

Multihazard Mitigation Council (2017). *Natural Hazard Mitigation Saves 2017 Interim Report: An Independent Study*. Principal. National Institute of Building Sciences, Washington, 2017.

Public Safety Canada. (2013, September 12). *Canadian Disaster Database*. Retrieved from <http://cdd.publicsafety.gc.ca/srchpg-eng.aspx>

Public Safety Canada. (2017, June 21). *An Emergency Management Framework for Canada - Third Edition*. Retrieved from <https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/2017-mrgnc-mngmnt-frmwrk/index-en.aspx>

Public Safety Canada. (2018, October 22). *Sendai Framework for Disaster Risk Reduction (DRR) 2015-2030*. Retrieved from <https://www.publicsafety.gc.ca/cnt/mrgnc-mngmnt/dsstr-prvntn-mtgn/plfrm-dsstr-rsk-rdctn/snd-frmwrk-en.aspx>

UNISDR. (n.d.). *United Nations International Strategy for Disaster Risk Reduction*. Retrieved from <http://www.unsceb.org/content/unisdr>

UNISDR. (2015). *Sendai Framework for Disaster Risk Reduction*. Retrieved from <https://www.unisdr.org/we/inform/publications/43291>

