



BRITISH  
COLUMBIA

## Government's Action Plan: Responding to Wildfire and Flood Risks

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### October 31, 2019 Update

Emergency Management British Columbia

Ministry of Forests, Lands, Natural Resource  
Operations and Rural Development

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## Introduction

Following the devastating wildfire and flood seasons of 2017, the Province commissioned a comprehensive, independent review of these events. Led by Chief Maureen Chapman and George Abbott, the review resulted in the April 2018 report, *Addressing the New Normal: 21<sup>st</sup> Century Disaster Management in British Columbia*, (the Abbott/Chapman Report). This report provided 108 recommendations, primarily for the provincial government, and continues to serve as a call to action for making positive changes in our emergency management system.

In October 2018, the Province released “Government’s Action Plan: Responding to Flood and Wildfire Risk” (October 2018 Action Plan), in which government committed to regular updates on addressing the Abbott/Chapman Report’s 108 recommendations.

Six months later, “Government’s Action Plan: Responding to Flood and Wildfire Risk – April 30, 2019 Update” (April 2019 Action Plan Update) was released, which provided updated information on:

- Partner engagement;
- Emergency management enhancements for 2019; and,
- Work underway on each of the 108 Abbott/Chapman recommendations.

This further update, “Government’s Action Plan: Responding to Flood and Wildfire Risk – October 31, 2019 Update” (October 2019 Action Plan Update) provides updated information similar to that provided in the April 2019 Action Plan Update. This document also describes how the Province is using the United Nation’s Sendai Framework for Disaster Risk Reduction (the Sendai Framework) to structure its emergency management improvement efforts.

This update begins with a background section, which provides information regarding previous After Action Reviews, as well as a summary of the Sendai Framework and the *Emergency Program Act* modernization initiative. The remainder of the document is broken into four sections, one for each of the priorities under the Sendai Framework. Under each priority, key emergency management enhancements are highlighted.

As with previous updates, a detailed table is also attached, showing the status, actions taken, and next steps for each of the 108 Abbott/Chapman recommendations.

## Background

### After Action Reviews

The devastating 2017 and 2018 flood and wildfire seasons provided hard-won lessons for all emergency management partners involved. In many cases, these valuable lessons have been documented as part of formal After Action Review processes. In addition to the Abbott/Chapman Report, After Action Reviews were completed by various communities and agencies based on their experience with, and involvement in, these events.

Added lessons will also emerge from 2019. British Columbia floods and wildfires during 2019 were damaging for those areas and individuals impacted. However, this year's events were not as damaging in total as the events of the previous two years, and required less activation of local and provincial emergency response and recovery structures. Planned After Action Review activities for 2019 events will primarily be contained to standard practice internal agency reviews and targeted reviews in those communities most affected. As in prior years, new lessons learned will be incorporated into emergency management improvement efforts.

Consistent with the principle of continuous improvement, the Province constantly strives to enhance emergency management practices in British Columbia in partnership with First Nations, Local Authorities, and other emergency management actors. As such, Emergency Management BC and the BC Wildfire Service have been working together along with the support and leadership of Ministries and the aforementioned partners to ensure that there is a collaborative approach on the actions that have been identified throughout this report. In addition, the emergency management enhancement priorities implemented over the last two years, and those currently being pursued, are driven by the dedicated attention to the contents of After Action Reviews and the recommendations of partners.

### Sendai Framework for Disaster Risk Reduction

The lessons of 2017 and 2018 have highlighted that we need to do emergency management differently, and have reinforced that emergency management needs to be a shared responsibility. The Province and the Government of Canada have now adopted the Sendai Framework as a key element of cross-government emergency management improvement.

The primary goal of the Sendai Framework is to strengthen each pillar of emergency management, through all-of-society efforts. Numerous recommendations that emerged from 2017 and 2018 called for a strategic, structured, and shared responsibility approach to emergency management, and for additional efforts in the areas of prevention and mitigation. The United Nations' Sendai Framework is the global standard for jurisdictions to do just that.

Further aligning emergency management activities in British Columbia to the priorities of the Sendai Framework will help address many of the recommendations which have emerged over the past several seasons, and will increase resiliency in British Columbia.

The Sendai Framework advocates for action within and across sectors at all levels of government in the following four priority areas:

1. Understanding disaster risk.
2. Strengthening disaster risk governance to manage disaster risk.
3. Investing in disaster risk reduction for resilience.
4. Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

Each of these priority areas is further elaborated on in Appendix 2, and provincial actions associated with each area are provided in the subsequent sections of this document (Sections #1-4).

### **Emergency Program Act Modernization**

The Province of British Columbia is modernizing its *Emergency Program Act* (EPA). The EPA is the primary piece of provincial legislation governing emergency management in B.C. The current Act is outdated, remaining largely unchanged since it came into effect more than two decades ago. Recent emergency events, such as unprecedented wildfires and extreme flooding, have underlined the need to adapt and strengthen our legislative approach to include mitigation, preparedness, response and recovery.

The Abbott/Chapman Report and the Sendai Framework both note the need for an all-of-society approach to disaster risk, and one that focusses on all pillars of emergency management. While the current Act focuses primarily on preparedness and response, the intent of the new Act is to broadly address the management and reduction of risk, reflecting lessons learned from the 2017 and 2018 wildfire and freshet seasons. There is also a recognized need to use new tools and partnerships to more strategically and proactively address emergencies.

In 2016, the Province undertook a review of the EPA in response to external recommendations focussed on helping B.C. become better prepared for a catastrophic earthquake. A discussion paper on the legislative framework for emergency management in British Columbia was released at that time and British Columbians were invited to provide input into the future of the EPA through an online public engagement website. Key stakeholders were also invited to make

formal submissions. While significant amendments to the EPA did not ultimately take place in 2016, input received during that process has been considered as part of the current review, which contemplates more extensive changes to the Act.

Early consultation on a new EPA has already begun, and a discussion paper, outlining anticipated changes to the EPA, and seeking input, was released in late October 2019. This discussion paper signals a number of policy directions anticipated to be reflected in a modernized Act:

- Emphasizing risk assessment and mitigation activities, including adapting to a changing climate;
- Providing a legislative foundation for recovery activities;
- Updating the definitions for key emergency management terminology to reflect current best practices;
- Increasing the powers for Local Authorities and First Nations to enter into agreements to support one another during emergencies;
- Setting minimum requirements for emergency management planning and information sharing, for provincial agencies, Local Authorities, and critical infrastructure asset owners;
- Recognizing First Nations’ role in emergency management;
- Increasing the provincial agency sharing of hazard information; and,
- Improving the organization and protection of volunteers.

The final policy direction to be included in the modernized EPA will be informed by feedback from emergency management partners and the public. The Province intends to introduce a modernized Act in the Fall 2020 legislative session. Key engagement and Act modernization timing milestones are shown in the table below.

Milestones:	Dates:
Act Modernization – Release of the Discussion Paper	October 28, 2019
Consultation Period – Open for feedback	November 2019 – January 31, 2020
Modernized Act – Introduced in the legislature	Fall 2020
Modernized Act – In force	Spring 2021
Act provisions and regulations – Phased implementation	Spring 2021 and subsequent years

Once the modernized Act is in place, EMBC will provide training and guidance materials and will ensure that significant changes are introduced through a phased approach. This will allow partners to understand, prepare for, and work through implementation.

The Province also recognizes that not all of the financial elements required to support the modernization of the emergency management system will be enabled through changes to legislation. Signalling a commitment to a modernized emergency management system will require new investment with the objective of ensuring all four pillars are supported by stable, responsive and transparent funding mechanisms while meeting the Province's fiscal mandate and maintaining the flexibility to invest year-end funds when available.

The resourcing implications for provincial government bodies, local governments, First Nations, other emergency management partners and stakeholders required to deliver on any new emergency management obligations will be considered as legislation is developed, recognizing the importance of supporting their capacity to deliver. The capacity of partners to deliver will also inform the phasing-in of any new obligations.

## Sendai Priority Action #1: Understanding Disaster Risk

### Overview

The Sendai Framework Priority Action #1 is to assess, understand, and communicate disaster risk. Only when all emergency partners (including the public) have an adequate and shared understanding of the hazards that threaten them, can informed preparations take place (A detailed description for each Sendai Framework Priority Action is provided in Appendix 2).

Understanding disaster risk has always been foundational to the practice of emergency management in B.C. Numerous programs and tools are in use to help the public, practitioners, and decision makers to assess and understand risk. However, we can do better, and several initiatives and changes are geared towards improving our shared understanding of disaster risk.

Provincial initiatives on this priority include, but are not limited to, modernization of the EPA, work led by the Climate Action Secretariat on understanding and communicating climate-based risks, the incorporation of traditional knowledge into emergency management activities, the development of relevant tools and products, and the adoption of Gender-Based Analysis Plus (GBA+) techniques. Summaries of several initiatives, and how they contribute to understanding disaster risk, are provided below.

### Emergency Program Act Modernization

The release of the “Modernizing BC’s Emergency Management Legislation” discussion paper signals significant shifts relating to understanding risk. Consistent with B.C.’s adoption of the Sendai Framework, the discussion paper outlines recommendations to establish requirements for:

- Local Authorities to give greater consideration of current and future risk for new development approvals in hazardous areas;
- Ministries to have and share more robust planning documentation that references more thorough risk assessments;
- Critical infrastructure owners and operators to develop and share specific elements of emergency management planning documentation;
- The Province to centrally house and provide transparent data on hazard, risk and vulnerability assessments, and mitigation planning documents which are conducted or prepared by other bodies; and,
- Local Authorities to consult with neighbouring First Nations when preparing emergency management plans and then provide these plans to neighbouring jurisdictions (Local Authorities and First Nations), the Province, and stakeholders such as critical infrastructure

operators, school districts, and health authorities and consider any feedback in relation to the consultation.

## **Provincial Climate Preparedness and Adaptation Strategy**

The Abbott/Chapman Report identifies climate change as a key factor driving the increasing severity of emergency events in British Columbia. The report indicates climate change can be expected to influence severe weather-related events into the future. Two recent reports, the B.C. Auditor General's February 2018 report, [\*Managing Climate Change Risks: An Independent Audit\*](#), and the Global Commission on Adaptation's September 2019 report, [\*Adapt Now: A Global Call for Leadership on Climate Resilience\*](#), emphasize that jurisdictions must prepare for more frequent and severe floods and wildfires, as well as other hazards (including both extreme events and slow-onset changes), due to the impacts of climate change.

British Columbia's climate is changing and will continue to do so. These changes need to be incorporated into our approach to disaster risk reduction using data on recent trends and future climate scenarios. The process of planning for the future climate and adjusting to the impacts of climate change is referred to as adaptation or climate preparedness. This can include the development of upgraded infrastructure (e.g. hospitals, roads, dikes), new plans (e.g. flood and drought plans, resource management plans), research into future climate conditions, cascading impacts, and more.

Preparing for the changing climate is an important part of CleanBC, B.C.'s climate change plan, along with reducing greenhouse gas emissions. Action to address the recommendations of the Abbott/Chapman Report will be closely linked to the Province's work on climate preparedness, led by the Ministry of Environment and Climate Change Strategy (ENV).

### ***Working Towards a Provincial Climate Preparedness and Adaptation Strategy***

The Province is taking important steps to understand and prepare for climate-related risks.

These include:

- [\*\*\*Preliminary Strategic Climate Risk Assessment for BC\*\*\*](#): Led by the Climate Action Secretariat (CAS) in ENV, this report released in July 2019 includes a climate risk assessment framework, and an assessment of 15 provincially significant climate-related risks, including wildfire and flood events. This is the first step toward better understanding climate-related risks in B.C. Government will use assessment results to inform responses to priority risks and development of a provincial climate preparedness and adaptation strategy. The next step includes engaging with Indigenous Peoples and others to better understand and incorporate Indigenous perspectives on climate risk, and customizing the climate risk assessment framework for use at a regional level.

- **Provincial Climate Preparedness and Adaptation Strategy:** The CleanBC plan commits government to develop a provincial climate preparedness and adaptation strategy for release in late 2020. The strategy will be informed by the Preliminary Strategic Climate Risk Assessment and will be developed in collaboration with Indigenous Peoples. Engagement on the strategy began June 2019 with 10 regional Indigenous engagement workshops. Broad citizen engagement and additional Indigenous engagement will commence in fall 2019. Policy proposals are expected to be released in early 2020.
- CAS has established cross-government working groups and an Executive Director Steering Committee to assist with developing this strategy and to align existing initiatives across government and sectors that are currently making progress toward understanding and addressing climate risks.
- **Climate Change Accountability Act:** This Act requires the Province to report publicly on how it is preparing for climate change. Starting in 2020, the Province will report on climate risks likely to affect BC and plans, actions and progress towards managing those risks.

These actions complement work underway within specific ministries, at other agencies such as local health authorities and school districts, and in local governments and Indigenous communities. Such work includes strategies to reduce climate risk and address gaps in climate data, resources and tools.

For other adaptation initiatives led by CAS as well as other Ministries, please refer to the April 2019 Action Plan Update and [gov.bc.ca/bc-adapts](http://gov.bc.ca/bc-adapts).

## Traditional Knowledge

The Province continues to build cultural competency, safety and humility into the practice of emergency management and the skills of emergency management professionals. The inclusion of Indigenous Knowledge into emergency management, leading to a more holistic understanding of disaster risk throughout British Columbia, is also being promoted. A primary example of this is the provincially-funded Indigenous Knowledge Gathering on Emergency Management that is scheduled for November, 2019. This event, coordinated by the First Nations' Emergency Services Society, has been organized with the objective of co-developing strategies for the incorporation of traditional knowledge across the four-pillars of emergency management. This session will be informed by a braided approach to integrating Indigenous and non-Indigenous ways of knowing.

A key objective of this session is to strengthen partnerships and identify strategic and tangible actions that will enhance our shared understanding of risk, and inform options to reduce risk for Indigenous and non-Indigenous communities in B.C. Further work on the incorporation of

Indigenous Knowledge into emergency management will build upon the results of this initial gathering.

## **Tools and Resources**

### ***Hazard Risk and Vulnerability Analysis Tool***

Emergency Management BC (EMBC) has recently updated and launched a self-guided tool to support communities in conducting a Hazard, Risk, and Vulnerability Analysis (HRVA). An HRVA is the foundation for any community or regional emergency management program, as it informs risk reduction strategies, emergency response and recovery plans, and other elements of emergency programs. To prepare for emergencies at the community level, it is important to know what to plan and prepare for. A HRVA report helps communities answer the following questions:

- What hazards are likely to occur in my community/region?
- How severe will the impact of hazards be on our population, infrastructure, property, environment and other values?
- How resilient is my community to the identified hazards?
- What risk reduction strategies can be implemented?
- What emergency plan(s) does my community need?

The Province's HRVA tool is a free online resource for Local Authorities and First Nations to conduct this analysis. Communities can input information (such as hazards, vulnerabilities, risk reduction strategies, and more) that may exist within or around a community. This produces a report that compiles a community's assessment of the risks and recommendations for action, as a foundation for emergency management planning and programs.

### ***EmergencyMapBC***

To provide the public with additional information on risks and emergency events, EmergencyInfoBC and GeoBC developed the [EmergencyMapBC](#) which was released in the spring of 2019, and serves as a general reference for current public safety conditions during emergencies. This platform contains information on wildfires, flood watches and warnings, recent earthquakes, and all-hazards Evacuation Alerts and Orders. The Province will continue to invest in data sets and tools to further enhance the public's awareness of disaster risk.

### ***PreparedBC***

EMBC's PreparedBC program has developed a series of guides to support public preparedness for emergencies, including:

- Core guides for developing a household emergency plan;
- Hazard-specific guides for wildfires, floods, landslides, earthquakes and tsunamis;

- Circumstance-specific guides on topics including apartments and condos, pets, small business, tourism operators, disabilities, and neighbourhood preparedness; and
- The newly revised youth education program: Master of Disaster, which is a free, pre-packaged program designed to help young people learn about emergency preparedness.

The *Wildfire Preparedness Guide* was released in 2019, and was created in partnership with BC FireSmart and the Office of the Fire Commissioner. The new guide encapsulates the complete disaster cycle (Mitigation, Preparedness, Response and Recovery) to ensure the public knows exactly what to do before, during and after a wildfire. The guide also incorporates the results of a Local Authority survey that identified gaps in educational content following the 2017 and 2018 wildfire seasons. New subjects covered include coping with wildfire smoke, coping with wildfire stress and understanding the evacuation stages used in B.C.

In response to the emergency events of 2017 and 2018, and the resulting significant mental health impacts, the Ministry of Health is currently assessing funding sources and opportunities to further refine and build upon the Ministry of Health and Health Emergency Management BC's Mental Health and Wellness Disaster Recovery Guide. This guide was established in July 2019, in response to recommendations from the Abbott/Chapman Report and is in line with BC's mental health strategy *A Pathway to Hope: A roadmap for making mental health and addictions care better for people in British Columbia*

## **Innovation**

In 2019/20, the BC Wildfire Service (BCWS) is investing \$1.2 million in research and innovation, including \$950,000 directed to the Canadian Partnership for Wildland Fire Science to advance research in fuel treatment efficacy, presumptive diseases, and other research priorities, and \$250,000 to FPInnovations for field equipment testing. For subsequent years, the BCWS will invest up to \$1 million annually. The BCWS is also engaging with academic institutions to conduct practical research. Involved institutions include the University of Northern BC, University of British Columbia, University of Alberta and the Bulkley Valley Research Centre.

The BCWS continues to enhance the technology used by staff, and explore opportunities for continuous improvement. New technologies were presented at the Innovation Symposium in March 2019, and the BCWS is currently evaluating these technologies and other emerging products for use. Technologies under evaluation include: hand-held ignition devices; various satellite imagery software products; remote connectivity devices, advanced pump intake filters; night flying trials; smart phone infrared scanners for crews; enhanced drone stability technology for scanning; real-time educational videos for grade school classrooms; asset

tracking technology; newer surfactants; respiratory masks; and modernized structural protection equipment.

## **Sendai Priority Action #2: Strengthening Disaster Risk Governance**

### **Overview**

The Sendai Framework’s Priority Action #2 is “Strengthening Disaster Risk Governance.” This priority refers to ensuring that laws, regulations, and policies promote an all-of-society/ shared responsibility approach to emergency management as well as effective mechanisms to deliver emergency management (A detailed description for each Sendai Framework Priority Action is provided in Appendix 2).

Provincial actions on this priority include, but are not limited to, modernization of the EPA, the development of the Interim Provincial Disaster Recovery Framework, work being done to establish and build upon emergency management partnerships, response to the Big Bar landslide event, and the development of relevant guidance documents to provide additional information on emergency management roles and responsibilities.

### **Emergency Program Act Modernization**

The recent release of the “Modernizing BC’s Emergency Management Legislation” discussion paper signals significant shifts toward strengthening disaster risk governance such as recommendations to:

- Clarify the powers of the Province and Local Authorities across the four pillars of emergency management – mitigation, preparedness, response and recovery;
- Establish a legislative foundation for all partners’ respective roles in recovery, as per the Interim Provincial Disaster Recovery Framework;
- Recognize and support First Nations’ role in emergency management for their communities; and,
- Establish clear and specific accountabilities for provincial ministries, Crown corporations, agencies, Local Authorities, and critical infrastructure owners/operators.

### **Interim Provincial Disaster Recovery Framework**

In August, 2019, the Province released the [Interim Provincial Disaster Recovery Framework](#) (Recovery Framework), which was based on the recovery lessons of 2017 and 2018. This Recovery Framework was developed through engagement with a number of First Nations, Local Authorities, provincial ministries, Crown agencies, and other provincial and federal government partners. It enhances disaster risk governance significantly by setting out the central coordination, accountability, and oversight mechanism for integrated disaster recovery and

establishes scalable, flexible, and adaptable coordinating platforms that align key roles and responsibilities.

The Recovery Framework leverages the models outlined in the Sendai Framework, and advocates for an inclusive, intersectional model of shared responsibility that acknowledges the social constructs of disasters.

The Recovery Framework will be further enhanced once the EPA is modernized to include a more robust legislative basis for community recovery activities in B.C.

## **Emergency Management Partnerships**

Consistent with the findings of numerous After Action Reviews, and the Sendai Framework's focus on an all-of-society approach, the Province has continued to encourage partnerships as a key mechanism to improving emergency management. Several partnerships are highlighted below, and it is expected that further partnerships will be formed in the coming years.

### **Tripartite Partnerships**

#### Tripartite Memorandum of Understanding

In April 2019, a tripartite agreement was signed by Canada, B.C., and the First Nations Leadership Council to establish a formal relationship to hold collaborative, constructive and regular dialogue on emergency management issues. The tripartite approach to emergency management recognizes First Nations as partners in the governance and operations of emergency management.

The Memorandum of Understanding illustrates progress on commitments made by Canada and B.C. to address gaps in emergency management services for First Nations communities identified during 2017 and 2018 floods and wildfires.

#### Collaborative Emergency Management Agreement

In February 2018, the Tsilhqot'in National Government, Canada and B.C. entered into a Collaborative Emergency Management Agreement (CEMA). The CEMA provides funding, resources and staff supports for the Tsilhqot'in Nation to build emergency management capacity and programs in its six communities. The CEMA is not specific to the declared title lands set out in the 2014 Supreme Court of Canada Decision.

As a result of the CEMA, the Tsilhqot'in Nation was provided with a structural protection unit and associated training in 2018 to protect critical infrastructure in its communities from the

impacts of potential future wildfires. The CEMA includes funding for a feasibility study regarding an emergency centre, for emergency program coordination staffing, and for training.

### **Mutual Support and Service Agreements**

#### *Tofino-Ahousaht Protocol Agreement*

In 2018, the District of Tofino and Ahousaht First Nation entered into a protocol agreement to support areas of mutual interest, including infrastructure, health and emergency planning.

#### *Central Okanagan Regional Emergency Plan*

The Kelowna Fire Department administers the Central Okanagan Regional Emergency Plan. The program supports all local governments including Kelowna, Lake Country, Peachland, West Kelowna, Westbank First Nation and the Regional District of the Central Okanagan (RDCO). The plan is designed to:

- Assist emergency personnel in responding quickly and effectively to potential disasters such as wildfires, landslides, major storms, chemical spills, floods, plane crashes, or earthquakes;
- Provide a concentrated assessment and decision-making body that is best able to utilize all available resources within RDCO, and if necessary, from the provincial and/or federal governments; and
- Provide guidelines for recovery after an emergency.

Representatives from each local government as well as fire, police, health care, public works, transportation, media liaison, communications and emergency social services meet regularly to fine-tune and practice the plan, which includes activating the Emergency Operations Centre.

### **Regional Partnerships**

#### *Central Coast Regional Emergency Management Partnership*

On December 17, 2018 the Central Coast Regional Emergency Management Partnership MOU was signed between the Nuxalk Nation, Central Coast Regional District (CCRD) and EMBC. The partnership will address emergency management (mitigation, preparedness, response, and recovery) gaps and will provide oversight on emergency management issues for the region. It is currently focused in the Bella Coola Valley and will expand to the remaining areas of the Region.

- The purpose of this partnership is to formalize a process to address capacity challenges and coordinate regional emergency management initiatives within the central coast area. The MOU will serve as a model framework for future regional partnerships that include local governments, First Nations and the Province.

- The partnership is equally funded through \$33,000 annually over three years from the CCRD, Province of B.C. and Indigenous Services Canada (ISC) (on behalf of Nuxalk Nation).

### Interior Nations Region

EMBC, ISC and the Interior Region Nations Executive (representing seven Nation groups and 54 First Nations) are working to develop a tripartite agreement on emergency management services. This will create a platform to advance Nation-based approaches to emergency management in the Interior Region, including training and capacity building. Through the new capacity funding, there is for the first time an opportunity to support some new First Nations Emergency Preparedness Coordinator positions at aggregate levels. ISC is working with the Interior Nations Region Executive and British Columbia to support positions among the seven Interior Nation groups.

### **Big Bar Landslide**

In late July 2019, a significant landslide was discovered on the Fraser River near Lillooet that prevented the safe upstream passage of many spawning salmon. This incident, known as the “Big Bar Landslide”, was and continues to be a government-to-government-to-government response led by First Nations, provincial, and federal governments through a Unified Command structure which was implemented to assist fish passage. Traditional knowledge was invaluable in identifying a number of operational approaches. First Nation fishing methods were employed to minimize the distress on salmon being captured and fish were moved by helicopter or by road beyond the blockage.

As such, the Big Bar Landslide response has set a precedent for future cooperation and for how to ensure that information flows as efficiently as possible throughout communities and organizations across the Province. Many lessons are being learned from this incident that will shape future approaches to managing emergencies in partnership with First Nations, and an after action review of the event is expected to further inform how the Province and Canada can work with First Nations to manage incidents.

### **Guidance Documents**

A key requirement for effective governance in emergency management is for every partner to understand their roles and responsibilities. British Columbia emergency management practice benefits from the widely-used British Columbia Emergency Management System (BCEMS), that establishes, at a high level, emergency management roles, responsibilities, terminology, and procedures. Provincial agencies such as EMBC also provide ongoing province-wide support and consistency for the practice of emergency management.

Building on an existing foundation of the BCEMS system and related documents, the Province has continued to enhance governance and roles and responsibilities clarity through updates and additions to [provincial emergency plans](#) and the [existing suite of documents](#) providing guidance to local emergency programs. These updates and additions are based on feedback and input from emergency management partners. This includes the recently published [Quick Reference: Emergency Management in British Columbia](#) which is designed to be read and understood quickly by those who need to exercise responsibilities in the areas of emergency management and public safety, whether in the public or private sectors, but who may not have time for extensive training. The [Provincial Flood Emergency Plan](#) was also recently updated and released in May, 2019. This key plan provides a wealth of information including details on roles and responsibilities, provincial coordination procedures, a consolidation of relevant legislation and regulations, and risk-based resources.

## Sendai Priority Action #3: Investing in Disaster Risk Reduction

### Overview

The Sendai Framework priority of “Investing in Disaster Risk Reduction” focusses on structural and non-structural mitigation, such as mapping, forest fuel management, construction of dikes, etc. Like the Sendai Framework, numerous After Action Reports, particularly the Abbott/Chapman Report, have pointed to the importance of mitigation. The Province has long invested in mitigation measures, and will increasingly be aligning emergency management to this priority (A detailed description for each Sendai Framework Priority Action is provided in Appendix 2).

Provincial actions on this priority include, but are not limited to, the recommendations put forward for the modernization of the EPA, the Community Emergency Preparedness Fund, the Community Resiliency Investment program, activities related to the Forest Enhancement Society of B.C., Grand Forks recovery actions, the Forest Worker Support Program, and prescribed fire activities.

### Emergency Program Act Modernization

The release of the “Modernizing B.C.’s Emergency Management Legislation” discussion paper signals shifts relating to investing in disaster risk reduction such as recommendations to:

- Require Local Authorities to give greater consideration of current and future risk when approving development in hazardous areas;
- Expanding the scope of the modernized EPA beyond a focus on preparedness and response and establishing a legislative foundation for mitigation activities; and,
- Requiring the Province to centrally house and provide transparent data on hazard, risk and vulnerability assessments, as well as mitigation planning documents which are conducted or prepared by other bodies.

### Community Emergency Preparedness Fund

The Community Emergency Preparedness Fund (CEPF) is a suite of funding streams intended to enhance the resiliency of local governments and First Nations. Funding is provided by the Province and is administered by the Union of BC Municipalities, and as of 2019, all First Nations are eligible for the CEPF funding streams.

In May, 2019, the Province allocated an additional \$36 million which would be provided to the CEPF for local governments and First Nations (which brought the total program funding to \$69.5 million). This additional \$36 million includes:

- \$30 million to help eligible applicants in local government and First Nations communities build resiliency through structural flood mitigation projects, flood risk assessments, mapping and mitigation planning, evacuation route planning, and emergency operations centre and emergency support services training and equipment;
- \$1 million for Indigenous Cultural Safety and Cultural Humility Training, which will support eligible applicants to provide emergency management personnel with training to more effectively partner with and assist Indigenous communities during times of emergency; and,
- \$5 million for volunteer and composite fire departments across B.C. for equipment and training.

### **Community Resiliency Investment Program**

In 2018 the B.C. Government introduced the Community Resiliency Investment program. The program has two categories with specific funding and criteria for each:

- The B.C. government has committed \$60 million to the Community Resiliency Investment program's FireSmart Community Funding and Supports category to assist regional districts, municipalities and First Nations mitigate wildfire threats in their communities. This category is administered by the Union of B.C. Municipalities.
- As part of a more comprehensive risk reduction effort, the B.C. government has committed up to \$25 million per year for the next three years under the Crown Land Wildfire Risk Reduction category. This category is administered by the Ministry of Forests, Lands, Natural Resource Operations, and Rural Development (FLNRORD).

As of mid-September, the Community Resiliency Investment program has 128 approved applications for approved funding of \$9.82 million. This includes approved applications from 52 First Nations and 76 local governments.

### **Forest Enhancement Society of B.C.**

The Forest Enhancement Society of B.C. (FESBC), a Government Reporting Entity, was established in 2016 to advance environmental and resource stewardship of the province's forests by:

- preventing and mitigating the impact of wildfires;
- improving damaged or low-value forests;
- improving habitat for wildlife;
- supporting the use of fibre from damaged and low-value forests; and,
- treating forests to improve the management of greenhouse gases.

In May, 2019, the Province announced a round of FESBC project approvals for 40 wildfire risk reduction projects valued at \$19 million in B.C. communities. Thirty-six of the 40 approved projects are for fuel management projects that will directly reduce wildfire risk within two kilometres of a community.

To date, the B.C. government has invested \$235 million in FESBC, who in turn has allocated over \$56 million to 126 projects to date for wildfire risk reduction, supported the Community Resilience Investment program, and raised awareness of the FireSmart program.

### **Forest Worker Support**

In September 2019, the B.C. government created the Forest Worker Support Program which includes \$15 million to establish a short-term employment program on fire prevention and community resiliency projects. This program is administered by FLNRORD.

### **Grand Forks**

The Province has been supporting the City of Grand Forks throughout the response and recovery efforts relating to the flooding of the Kettle and Granby Rivers in May 2018. To support community-led efforts, the Province established a cross-agency team, led by EMBC to coordinate the efforts of provincial agencies with the City of Grand Forks, the federal government, and other partners. Over \$19 million in Provincial funding has been provided to the City and Regional District of Kootenay Boundary to support recovery priorities such as the following: immediate housing, economic and business support, disaster financial assistance, mitigation support, health and wellness, and recovery operations. In addition, in June 2019, the Province approved \$31.6 million for the City of Grand Forks to support project work under the federal Disaster Mitigation and Adaptation Fund (DMAF) as well as mitigation infrastructure work in the downtown core. Canada has also contributed \$19.9 million towards DMAF project work. The next phase of work will occur over the next five years and will involve significant infrastructure work including returning some residential areas back to natural flood plain. The Province is also working with the City to help identify in-kind solutions to assist residents in identifying their own long term solutions.

### **Prescribed Fire**

In 2019/20, funding was increased to provide for the development of a multi-year prescribed fire program. FLNRORD is developing a comprehensive prescribed fire program, including a curriculum and training component to build capacity and increase knowledge regarding prescribed fire. This includes working with the First Nations' Emergency Services Society to develop modules on utilizing First Nations traditional knowledge. The BCWS staff are working with a number of partners and stakeholders to conduct prescribed burns. Over 1,000 hectares

were treated with prescribed fire in the spring of 2019 and additional burns are being conducted this fall.

## **Sendai Priority Action #4: Enhancing Disaster Preparedness**

### **Overview**

The Sendai Framework recognizes that effective emergency management also depends upon investments of time and resources in preparedness, response, and recovery (including “Building Back Better” in recovery). Further, the priority of “Enhancing Disaster Preparedness” also identifies that emergency management must adequately address the needs of vulnerable populations (A detailed description for each Sendai Framework Priority Action is provided in Appendix 2).

Provincial actions on this priority include, but are not limited to, the recommendations put forward for the modernization of the EPA, work completed in partnership with First Nations, enhancements made by the BCWS, actions related to catastrophic risks, development of supporting guidance documents, and partner engagement activities. In addition, the Province continues to use the policy assessment tool [Gender Based-Analysis Plus](#) (GBA+) as a guiding practice within emergency management and across government and to ensure impacts on vulnerable populations are accounted for.

### **Emergency Program Act Modernization**

The release of the EPA modernization discussion paper signals shifts relating to investing in enhancing disaster preparedness such as recommendations for:

- Establishing more robust planning requirements for the Province, Crown corporations, other provincial agencies, Local Authorities, and critical infrastructure owners and operators;
- Expanding the scope of the modernized EPA beyond a focus on preparedness and response by establishing a foundation for recovery activities;
- Including additional Local Authority powers to assist with emergency response and recovery activities;
- Enhancing collaborative planning and partnerships by recommending that Local Authorities be required to provide plans to neighbouring jurisdictions, including First Nations and other Local Authorities; and,
- Providing clear authority for the Minister and for Local Authorities to enter into emergency management agreements with First Nations. Agreements could address issues such as collaborative hazard and risk assessment and/or planning; delivery of emergency management services or programs; and/or joint recovery activities.

## First Nations

First Nations have been disproportionately impacted by the emergency events of 2017 and 2018. Significant work has been done, in partnership with First Nations leadership and communities, as well as ISC, to improve emergency management for First Nations communities, many of which are particularly vulnerable to events such as floods and wildfires. These improvements are outlined in the October 2018 Action Plan, the April 2019 Action Plan Update, and in Appendix 1 of this document, (e.g. Recommendation #1). More remains to be done, and work continues on this priority through a variety of avenues such as formal agreements, cultural humility training, and the incorporating of Traditional Knowledge into emergency management plans and practice.

## BCWS Enhancements

The B.C. government has allocated \$101 million for Direct Fire costs in the 2019-20 wildfire season, representing a 58% increase over the previous year's firefighting budget. This is helping the BCWS improve its fire response capabilities by adding more crews, enhancing aircraft capacity and spending more on fire prevention activities. See the April 2019 Action Plan Update for additional information on enhancements undertaken by the BCWS leading into the 2019 wildfire season.

## Catastrophic Risks

The Province has initiated projects to expand on existing business continuity practices by identifying the Catastrophic Response Actions that each provincial Ministry must take within the first seven days following a major earthquake on Vancouver Island or the lower mainland.

This project has also assessed the necessary technological and physical requirements to ensure that these Catastrophic Response Actions can actually be performed during catastrophic events. The project, and related work to follow, will continue to enhance the resilience of the Province and those that rely on provincial services following a major event.

## Guidance Documents

In addition to updating documents providing guidance related to disaster risk governance (See section 3), products have also recently been developed and updated to enhance disaster preparedness across British Columbia. A primary example is the recently updated [Evacuation Operational Guidelines](#) and the companion guideline for [Managing Access to Areas Under Evacuation Order](#). These products serve to support First Nations, Local Authorities and other emergency management partners in the development and implementation of evacuation strategies in order to mitigate the effects of emergencies. These products were updated and

developed as a direct result of the feedback received during the 2017 and 2018 flooding and wildfire events.

To support First Nations and Local Authorities with information management and media engagements during emergency events, EMBC and Government Communications and Public Engagement also prepared and distributed a Local Government Emergency Operations Centre Communications Toolkit in 2019.

## **Partner Engagement**

As emphasized in the [April 30, 2019 Update](#), partner engagement has been a priority throughout the emergency management improvement process which has reflected the lessons of 2017 and 2018, and continues to be supported as part of regular business. EMBC continues to lead annual seasonal readiness meetings in every region of the province with participation from the BCWS and numerous other provincial agencies, Local Authorities, First Nations, Non-Governmental Organizations and other partners.

As part of the commitment to further engagement and to support preparedness activities for the 2019 fire season, the BCWS scheduled over 250 dedicated engagement sessions with a broad range of partners including First Nations, Local Authorities, contract crews, agricultural industry representatives, forest industry representatives and others. These engagements encompassed activities related to prevention, training, contract services, and readiness. This pre-season engagement will be an annual occurrence and part of the BCWS work plan each year.

EMBC also continues to organize First Nations Emergency Management Partnership Tables across B.C. to provide venues for First Nations and provincial emergency managers to discuss and partner on emergency management issues and initiatives at a practitioner level.

Recognizing the need for an all-of-society approach to emergency management, engagement is a year-round, ever-present, and constantly evolving activity the EMBC and the BCWS will continue to prioritize.

## Summary

The 2017 and 2018 flood and wildfire events, the Abbott/Chapman Report, as well as other After Action Reports, have significantly influenced the shape of emergency management in B.C. The October 2018 Action Plan, the April 2019 Action Plan Update, and this October 2019 Action Plan Update document numerous specific improvements to partner engagement, resourcing, documentation, and procedures.

The Province continues to address specific issues and needs that have been documented in After Action Reports, such as those issues addressed in the Abbott/Chapman Report's 108 recommendations. The Province is also adopting a complementary broad, strategic approach to emergency management enhancement, as evidenced by initiatives such as the adoption of the Sendai Framework for Disaster Risk Reduction, the initiation of the EPA modernization initiative, and other strategic initiatives highlighted in this October 2019 Action Plan update.

To effectively address major hazards such as floods and wildfires requires an all-of-society approach to emergency management, and an approach based on shared responsibility. All governments (e.g. First Nations, federal, provincial, local), the private sector, Non-Governmental Organizations, and the public, must all take part. There is also broad agreement, both here in British Columbia, nationally, and internationally, that emergency management must include additional focus on prevention and mitigation.

To meet these requirements, the Province will continue to implement the Sendai Framework for Disaster Risk Reduction, and continue to align efforts towards an all-of-government and all-of-society approach to emergency management improvement. Significant improvements have been made to British Columbia's emergency management system over the last two years. But more remains to be done and no one emergency management partner can do it alone.

## Timeline/Next Steps

- **October 31, 2018:** Release of the October 2018 Action Plan. **Complete.**
- **November 2018 to February 2019:** Conduct After Action Reviews for 2018 events. **Complete.**
- **November to December 2018:** Establish and initiate partner engagement processes. **Complete and ongoing.**
- **April 30, 2019:** April 2019 Action Plan Update. **Complete.**
- **October 31, 2019:** October 2019 Action Plan Update. **Complete.**
- **2020:** *Emergency Program Act* – Modernized emergency management legislation introduced into the Legislature.
- **2020:** Provincial Climate Preparedness and Adaptation Strategy.

## Appendix 1: Actions Broken Down By Recommendation

### Status of recommendations:

- Complete = 49 recommendations
- Substantial Improvement = 31 recommendations
- Underway = 19 recommendations
- Further Analysis/Discussion Required = 4 recommendations
- Alternate Approach Used = 5

### Legend:

Blue highlight: primary responsibility – the Province

Orange highlight: primary responsibility – the Province and Canada

Green highlight: primary responsibility – Canada

Yellow highlight: primary responsibility – First Nations and local government

BCWS = BC Wildfire Service

CEMA = Collaborative Emergency Management Agreement

CEPF = Community Emergency Preparedness Fund

COP = Common Operating Picture

CRI = Community Resiliency Investment

EMBC = Emergency Management BC

ENV = Ministry of Environment and Climate Change Strategy

EPA = Emergency Program Act

ESS = Emergency Support Services

FESBC = Forest Enhancement Society of BC

FLNRORD = Ministry of Forests, Lands, Natural Resource

Operations and Rural Development

FNESS = First Nations' Emergency Services Society

FNHA = First Nations Health Authority

HEMBC = Health Emergency Management BC

HRVA = Hazard Risk and Vulnerability Analysis

ISC = Indigenous Services Canada

MOU = Memorandum of Understanding

OFC = Office of the Fire Commissioner

OGC = Oil & Gas Commission

PECC = Provincial Emergency Coordination Centre

PREOC = Provincial Regional Emergency Operations Centre

PSC = Public Safety Canada

RCMP = Royal Canadian Mounted Police

UBCM = Union of BC Municipalities

Type 2 Crews = Contract firefighting crews that are often called on to assist with wildfires that have lower intensity and present a lower risk to firefighter safety

Type 3 Crews = Contingency resources, containing firefighters that are typically trained and called to action when other firefighting resources are running short

\* = requires collaboration among levels of government and external parties

\*\* = A "Strategic Shift" recommendation per the Abbott-Chapman Report

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
1.	Establish Indigenous Peoples as true partners and leaders in emergency management by including First Nations from the beginning and at all levels of planning, decision making and implementation.	Substantial Improvement	<p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government's recognition of First Nations as emergency management partners in the modernized EPA. EMBC is engaging First Nations in the EPA modernization process. On September 10<sup>th</sup>, 2019 EMBC representatives presented to the First Nations Leadership Council on proposed measures to ensure First Nations are reflected as partners in the modernized EPA. On September 11<sup>th</sup>, 2019 EMBC held a workshop session with First Nations emergency management champions to better understanding the gaps and challenges of the current legislation for First Nations communities. EMBC has since released a discussion paper on the proposed EPA improvements to all First Nations communities in B.C. This will be followed up with regional engagement sessions that will occur across the province from November 2019 to January 2020.</p> <p>EMBC continues to successfully implement the Emergency Management Services Agreement (bilateral agreement between EMBC and Indigenous Services Canada signed on April 1, 2017) which provides support for First Nations communities in all phases of emergency management (planning/preparedness, mitigation response and recovery). EMBC, ISC and the Interior Region Nations Executive (representing seven Nation groups and 54 First Nations) are working to develop a tripartite agreement on emergency management services. This will create a platform to advance Nation-based approaches to emergency management in the Interior</p>	<p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p> <p>The Province continues to work with First Nations and leadership under the bilateral service agreement between EMBC and ISC. EMBC will continue to work with First Nations and leadership through all phases of emergency management, including work at the Partnership Tables.</p> <p>The Province and Canada will continue to work with partners to advance Nation-based approaches to emergency management, such as the T̓silhqot̓'in Collaborative Emergency Management Agreement and the Interior Region approach.</p> <p>The MOU working group will be developing a work plan with actions to support First Nations in Emergency Management. This includes planning and hosting an Emergency Forum for First Nations.</p> <p>Additional partnerships between Local Authorities and First Nations are also being explored, with EMBC support.</p> <p>EMBC's Deputy Minister and the Chief Executive Officer for the First Nations Health Authority meet on a monthly basis to improve emergency management services and supports for First Nations communities. An action plan to</p>

	Recommendation	Status	Action to date	Next steps
			<p>Region.</p> <p>Starting in June 2018, First Nations and EMBC representatives initiated regional partnership tables on emergency management. The Emergency Management Partnership Tables are co-developed by First Nations communities and EMBC and have identified values, vision and mission statements. The meetings and governance of each partnership table are community driven with agenda topics chosen by First Nations. Discussions at the Partnership Table meetings provide a space for better understanding of the roles and responsibilities for all emergency management partners. The Partnership Tables meet twice per year and the next round of meetings will be held in October and November 2019.</p> <p>On February 19, 2018 the Province and Indigenous Services Canada entered into a Collaborative Emergency Management Agreement (CEMA) with the T̓silhqot̓'in National Government, and funding has been provided to advance activities under this agreement. Under the Agreement, the federal, provincial and T̓silhqot̓'in Nation governments work together to identify best practices and build on the capacity of the T̓silhqot̓'in communities in emergency management. The foundation for this work is the lessons-learned during the unprecedented 2017 wildfire season in British Columbia. The goal of this Agreement is to build trust, relationships, strong lines of communication, improved processes between all partners, and to deliver emergency services in the most efficient and effective way for all</p>	<p>guide implementation of the partnership has been developed.</p> <p>The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.</p>

	Recommendation	Status	Action to date	Next steps
			<p>British Columbians in the region.</p> <p>On April 27<sup>th</sup>, 2019 the Province signed a tripartite Memorandum of Understanding (MOU) with the First Nations Leadership Council and Indigenous Services Canada to improve emergency management services for B.C. First Nations. This MOU leads the way to enhanced partnerships and emergency capacity that will benefit First Nations peoples and all British Columbians. The MOU commits all parties to establish a formal relationship to hold collaborative, constructive and regular dialogue on emergency management issues. All parties will work in partnership to better support First Nations' capacity and ensure that their role in both the governance and operations of emergency management is acknowledged. The MOU shows progress in commitments made by Canada and B.C. to address gaps in services identified during unprecedented natural disasters in 2017 and 2018 that adversely affected First Nations communities.</p> <p>EMBC has been assisting with the development of partnerships between Local Authorities and First Nations. A Central Coast Regional Emergency Management Partnership was established on December 17, 2018, through a Memorandum of Understanding (MOU) between Nuxalk Nation, Central Coast Regional District (CCRD), and EMBC to enhance and lead regional emergency management in preparedness, response, recovery and mitigation to support a disaster resilient region. The Partnership formalizes a process to address</p>	

	Recommendation	Status	Action to date	Next steps
			<p>capacity challenges, better address emergency gaps that are cross-jurisdictional or have impacts beyond one’s jurisdiction and will provide oversight on regional emergency management issues for the region. The MOU will serve as a model framework for future regional partnerships that include local government, First Nations and the Province. The Steering Committee, which is equally represented by the CCRD, Nuxalk Nation and EMBC, has developed a Terms of Reference to guide the implementation of the MOU for the Partnership. The Steering Committee has convened three meetings to discuss regional emergency management priorities for the region, which comprises of updating the regional emergency plan, coordinating regional training and exercises, and developing regional public education materials.</p> <p>On May 29, 2019 the First Nations Health Authority and EMBC signed a letter of understanding and Declaration of Commitment to Cultural Safety and Humility in Emergency Management Services for First Nations People in B.C. The declaration recognizes that emergency management can have a lasting impact on First Nations health and wellness and that embedding cultural safety and humility in these services is a means to deliver improved coordination and quality of emergency services to First Nations individuals, families, and communities in British Columbia. The Declaration of Commitment to Cultural Safety and Humility in Emergency Management Services outlines a plan to embed cultural safety and humility in the training, orientation,</p>	

	Recommendation	Status	Action to date	Next steps
			<p>policies and practices of EMBC, including the development of strategies and work plans to track, report, and evaluate progress.</p> <p>Community Emergency Preparedness Fund funding streams are now available for all First Nations in B.C. This includes support to evacuation route planning, Emergency Operations Center training and Emergency Support Services. The Province has also worked with Indigenous Service Canada to resolve barriers that prevented First Nations communities from participating in training and exercises.</p> <p>In order to ensure Indigenous Peoples receive cultural appropriate emergency management supports, the Province has developed a stream of CEPF for local governments to access training in this area. The intent of this funding stream is to support eligible applicants to provide emergency management personnel with cultural safety and humility training in order to more effectively partner with and provide assistance to Indigenous communities during times of emergency. This includes increasing opportunities to educate emergency management personnel, those training to become emergency management professionals, and others working in the emergency management system on the history of Indigenous Peoples, as well as the concepts of cultural safety, cultural humility and the relevance to Indigenous Peoples.</p>	
2.	Provide support to First Nations governments and	Substantial Improvement	EMBC has published the Emergency Management Planning Toolkit for Local	EMBC Regional Managers will continue to engage with First Nations on a regular basis

	Recommendation	Status	Action to date	Next steps
	<p>communities to enhance their role and capacity through the development and, where necessary, adaptation of emergency plans which consider the impacts of potential changes in their internal governments.</p>		<p>Authorities and First Nations. This is a self-guided toolkit to support communities who are creating or updating their all-hazard emergency management plans.</p> <p>EMBC participates in and contributes to community-level Hazard, Risk and Vulnerability Analysis (HRVA) processes. EMBC provides a HRVA tool to communities to assess their risks. A preliminary version of the updated tool is currently being piloted with interested First Nations and Local Authorities, and the final version will be shared broadly once completed. Local Authorities and First Nations can contact their EMBC Regional Office to request access to the pilot version of the tool.</p> <p>The Province of B.C. funds the Community Emergency Preparedness Fund (CEPF), a suite of funding programs administered by the Union of BC Municipalities (UBCM). The CEPF is intended to enhance the resiliency of local governments, First Nations and communities in responding to emergencies. The funding streams and deadlines are as follows:</p> <ul style="list-style-type: none"> <li>• Structural Flood Mitigation – Deadline: October 25, 2019</li> <li>• Volunteer &amp; Composite Fire Departments Equipment &amp; Training – Deadline: November 15, 2019</li> <li>• Indigenous Cultural Safety &amp; Cultural Humility Training – Deadline: December 13, 2019</li> <li>• Flood Risk Assessment, Flood Mapping &amp; Flood Mitigation Planning – Deadline: January 24, 2020</li> </ul>	<p>regarding their emergency management plans.</p> <p>The Province will continue to work with First Nations and Local Authorities on the development and release of the HRVA tool.</p> <p>The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.</p>

	Recommendation	Status	Action to date	Next steps
			<ul style="list-style-type: none"> <li>• Emergency Support Services – Deadline: February 14, 2020</li> <li>• Emergency Operations Centres &amp; Training – Deadline: March 13, 2020</li> <li>• Evacuation Route Planning – Deadline: April 17, 2020</li> </ul> <p>The federal Budget 2019 included new funding for capacity, non-structural mitigation, preparedness and FireSmart. ISC is working with First Nations, their representative organizations and British Columbia to deploy these resources.</p> <p>Through the new capacity funding in Budget 2019, there is for the first time an opportunity to support some new First Nations Emergency Preparedness Coordinator positions at aggregate levels. ISC is working with the Interior Nations Region Executive and British Columbia to support positions among the seven Interior Nation groups.</p>	
3.	Ensure emergency services available to First Nations are provided in a way that is comparable to other communities of similar size and location.	Substantial Improvement	<p>EMBC continues to successfully implement the Emergency Management Services Agreement (bilateral agreement between EMBC and Indigenous Services Canada signed on April 1, 2017) which provides support for First Nations communities in all phases of emergency management (mitigation, preparedness, response, and recovery).</p> <p>EMBC has published the Emergency Management Planning Toolkit for Local Authorities and First Nations, which is a self-guided toolkit to support communities who are creating or updating their all-hazard emergency</p>	<p>The Province continues to work with First Nations and leadership under the bilateral service agreement between EMBC and ISC.</p> <p>The Tripartite MOU working group will be developing a work plan with actions to support First Nations in Emergency Management. This includes planning and hosting an Emergency Forum for First Nations.</p>

	Recommendation	Status	Action to date	Next steps
			<p>management plan.</p> <p>The funding agreement between ISC and BCWS supports BCWS in fire response in First Nations communities and ensures consistent emergency services for all British Columbians.</p> <p>The BCWS directly communicates with First Nations to keep them informed on topics such as: fire incidents, pre-season forecasts; fire season debriefings; contract opportunities, the use of heavy equipment; and firefighting equipment caches in remote communities.</p> <p>On April 27<sup>th</sup>, 2019 the Province signed a tripartite Memorandum of Understanding (MOU) with the First Nations Leadership Council and Indigenous Services Canada to improve emergency management services for B.C. First Nations. This MOU leads the way to enhanced partnerships and emergency capacity that will benefit First Nations peoples and all British Columbians. The MOU commits all parties to establish a formal relationship to hold collaborative, constructive and regular dialogue on emergency management issues. All parties will work in partnership to better support First Nations' capacity and ensure that their role in both the governance and operations of emergency management is acknowledged. The MOU shows progress in commitments made by Canada and B.C. to address gaps in services identified during unprecedented natural disasters in 2017 and 2018 that adversely affected First Nations communities.</p>	

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
4.	Governments recognize First Nations jurisdiction in their traditional territories and support capacity development through training and accreditation.	Substantial Improvement	<p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals recognition of First Nations as emergency management partners in the modernized EPA.</p> <p>EMBC continues to successfully implement the Emergency Management Services Agreement (bilateral agreement between EMBC and Indigenous Services Canada signed on April 1, 2017) which provides support for First Nations communities in all phases of emergency management (planning/preparedness, mitigation response and recovery). On February 19, 2018 the Province and Indigenous Services Canada entered into a Collaborative Emergency Management Agreement (CEMA) with the T̓silhqot̓in National Government, and funding has been provided to advance activities under this agreement. Under the Agreement, the federal, provincial and T̓silhqot̓in Nation governments work together to identify best practices and build on the capacity of the T̓silhqot̓in communities in emergency management. The foundation for this work is the lessons-learned during the unprecedented 2017 wildfire season in British Columbia. The goal of this Agreement is to build trust, relationships, strong lines of communication, improved processes between all partners, and to deliver emergency services in the most efficient and effective way for all British Columbians in the region.</p> <p>EMBC, ISC and the Interior Region Nations Executive (representing seven Nation groups and 54 First Nations) are working to develop a</p>	<p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p> <p>The Province continues to work with First Nations and leadership under the bilateral service agreement between EMBC and ISC.</p> <p>The Province and Canada will continue to work with partners to advance Nation-based approaches to emergency management, such as the T̓silhqot̓in Collaborative Emergency Management Agreement and the Interior Region approach.</p> <p>The Communications Toolkit will be updated based on feedback from partners.</p> <p>FNESS, BCWS, and ISC will coordinate the delivery of additional training sessions in the spring of 2020.</p> <p>The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.</p>

	Recommendation	Status	Action to date	Next steps
			<p>tripartite agreement on emergency management services. This will create a platform to advance Nation-based approaches to emergency management in the Interior Region, including training and capacity building.</p> <p>EMBC and GCPE have prepared a Local Government Emergency Operations Centre Communications Toolkit to support First Nations and Local Authorities with information management and media engagements during emergency events.</p> <p>The BCWS has partnered with FNESS and ISC on a strategy to deliver training required for Type 2 and Type 3 firefighting crews. FNESS organized the delivery of four training sessions in March / April of 2019, supported by \$150,000 from the BCWS and \$95,000 from ISC. The training sessions were four days long and covered the required training for Type III fire crews. Through this partnership, FNESS is also building an inventory of First Nations communities to understand what communities have trained crews, where the gaps are, and where to focus future training sessions.</p> <p>Enhanced communication to Local Authorities, provincial agencies, and other emergency management partners has also taken place, to confirm and clarify First Nations jurisdiction (e.g. with respect to evacuation orders and Band Council Resolutions).</p> <p>In May 2019 the Province announced the Community Emergency Preparedness Fund (CEPF) which provides support for the</p>	

	Recommendation	Status	Action to date	Next steps
			development of First Nations emergency management programs. First Nations communities can access funding from all CEPF streams which range from structural flood mitigation supports to emergency operations centre training and evacuation route planning. In order to ensure Indigenous Peoples receive cultural appropriate emergency management supports, the Province has developed a stream of CEPF for local governments to access training in this area. The intent of this funding stream is to support eligible applicants to provide emergency management personnel with cultural safety and humility training in order to more effectively partner with and provide assistance to Indigenous communities during times of emergency. This includes increasing opportunities to educate emergency management personnel, those training to become emergency management professionals, and others working in the emergency management system on the history of Indigenous Peoples, as well as the concepts of cultural safety, cultural humility and the relevance to Indigenous Peoples.	
5.	Renegotiate existing Canada-B.C. bilateral agreements, including the 10-year Canada-B.C. Emergency Management Services Funding Agreement, to ensure inclusion of seamless and integrated support for First Nations communities, and determine a suitable timeframe to transition to a tri-partite agreement, including	Further Analysis / Discussion Required	EMBC is engaging directly with communities to assess their experience under the bilateral agreement in order to explore additional opportunities to support First Nations governments and communities.  A modernized Emergency Program Act is expected to be introduced into the legislature in fall 2020. Following its implementation, Canada, the Province, and First Nations may need to assess whether the Canada/B.C.	The Province will consider input from First Nations and leadership regarding their experience under the bilateral agreement, and explore opportunities for more trilateral partnership and governance with respect to emergency management.  The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
	provisions for communities to self-determine how they will establish Emergency Operations Centres.		<p>bilateral agreement must be renegotiated.</p> <p>The Province of B.C. funds the Community Emergency Preparedness Fund (CEPF), a suite of funding programs administered by the Union of BC Municipalities (UBCM). The CEPF is intended to enhance the resiliency of local governments, First Nations and communities in responding to emergencies.</p>	modernized EPA is expected to be introduced into the legislature in Fall 2020. The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.
6.	Governments should commit the time and resources to finalizing and exercising the provisions of the Canada-B.C. Emergency Management Services Funding Agreement by spending the time required, with communities in their communities, to develop and sustain relationships.	Substantial Improvement	<p>EMBC continues to support the development and strengthening of partnerships through the EMBC Regional First Nations Emergency Management Partnership Tables (see Recommendation #1).</p> <p>In addition, EMBC and BCWS regional staff will continue to regularly liaise with local First Nations to develop and sustain relationships. This includes outreach visits before, during and after emergency events, as well as assistance with emergency preparedness activities, such as planning and exercises.</p> <p>EMBC has developed a community profile database that will assist communities by identifying and addressing gaps in their emergency planning, and will capture interactions with communities that will assist in fostering and maintaining these important relationships. EMBC Regional Office staff are working with First Nations communities to populate and update the database.</p>	<p>EMBC and First Nations will continue to pursue a partnership approach to emergency management through the EMBC Regional First Nations Emergency Management Partnership Tables.</p> <p>Additional partnerships between Local Authorities and First Nations are being explored.</p> <p>The Regional Emergency Management Partnership (REMP), a partnership between the Province and the Capital Regional District (on behalf of its member jurisdictions) in the Capital Region are extending a formal invitation to all nine First Nation communities to participate as ex-officio member of the REMP Steering Committee. REMP continues to look for opportunities to include First Nations to provide input on regional emergency management planning initiatives.</p>
7.	Develop an emergency management First Nations youth leadership program to foster leadership skills in	Alternate Approach Used	The BCWS has been reaching out to First Nations through face-to-face meetings to explain the application process for seasonal firefighter positions and to answer questions	The Province will continue to work with partners on opportunities to integrate First Nations youth into emergency management.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
	emergency management for First Nations youth.		<p>posed by potential recruits as well as employment coordinators and youth workers.</p> <p>In January 2018, EMBC began to update the Master of Disaster youth education program to ensure that it is flexible and culturally inclusive. The projected launch of the improved Master of Disaster program will occur in fall 2019.</p>	EMBC and First Nations communities are considering a recommendation to integrate First Nations youth into the EMBC Regional First Nations Emergency Management Partnership Tables (see Recommendation #1).
8.	Establish a First Nations Health Authority senior executive role at the Health Emergency Management BC (HEMBC) table to ensure First Nations interests are represented.	Complete	FNHA is a member of HEMBC's Executive Steering Committee, ensuring that First Nations interests are represented at the decision-making level of health system emergency management in B.C.	Enhanced linkages between First Nations Health Authority and regional Health Authorities are helping to ensure strong operational linkages at the local and regional levels. The success of the health sector in addressing First Nations interests during emergency events will be assessed on an ongoing basis and with a view to continual improvement.
9.	Governments build cultural sensitivity training and awareness of racism and discrimination into emergency management plans.	Substantial Improvement	<p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals recognition of First Nations as emergency management partners in the modernized EPA.</p> <p>All BCWS staff members are working now to implement FLNRORD's Learning for Reconciliation strategy. In spring 2019, zone Wildfire Officers contacted local First Nations to set up cross-cultural training provided by an Indigenous service provider.</p> <p>EMBC has also begun to implement the Learning for Reconciliation strategy within the organization to improve cultural sensitivity training and awareness.</p> <p>Cultural sensitivity and Indigenous reconciliation training is accessible to all</p>	<p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p> <p>The Province will continue to pursue enhanced cultural sensitivity among employees, volunteers, and other partners through training and education.</p> <p>EMBC staff are continuing to work through the Learning for Reconciliation strategy training and are planning local training sessions.</p> <p>ISC and members of the BC Federal Council continue to work with Indigenous Knowledge keepers and service providers to offer learning that supports cultural safety and humility.</p>

	Recommendation	Status	Action to date	Next steps
			<p>provincial government staff.</p> <p>The Province continues to use the policy assessment tool <a href="#">Gender Based-Analysis Plus</a> (GBA+) as a guiding practice within emergency management and across government and to ensure impacts on vulnerable populations are accounted for. This tool requires specific assessment of cultural sensitivity for all new policy proposals.</p> <p>The BCWS will be using GBA+ to assess FireSmart materials, and into firefighter recruitment efforts.</p> <p>ISC has contracted Cultural Safety Workshops for all staff and executives in BC Region. Additionally, the BC Federal Council (comprised of senior federal officials), the federal Indigenous Interests and Issues Committee (IIIC) and the Canada School of Public Service are collaborating to deliver a range of training and learning opportunities to enhance cultural competence and safety.</p> <p>In order to ensure Indigenous Peoples receive culturally appropriate emergency management supports, the Province has developed a stream of CEPF for local governments to access training in this area. The intent of this funding stream is to support eligible applicants to provide emergency management personnel with cultural safety and humility training in order to more effectively partner with and provide assistance to Indigenous communities during times of emergency. This includes increasing opportunities to educate emergency</p>	<p>The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.</p>

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
			management personnel, those training to become emergency management professionals, and others working in the emergency management system on the history of Indigenous Peoples, as well working on the concepts of cultural safety, cultural humility and the relevance to Indigenous Peoples.	
10.	Develop an online system with text and audio of names of all First Nations communities in BC, both in English and Indigenous languages.	Complete	A phonetic pronunciation guide has been produced and is available to employees.	The creation of a repository of audio and text files for use by provincial staff, partners, and the public is being assessed.
11.	Develop a toolkit for Indigenous communities and rural and remote communities to assist during emergencies.	Complete	EMBC developed and delivered a toolkit regarding First Nations emergency management in July 2017. The toolkit has since been updated and is being delivered to First Nations.	The toolkit will continue to be updated and distributed to First Nations on an ongoing basis.
12.	All Indigenous and non-Indigenous governments should ensure they have common understanding of roles, responsibilities and procedures in the event of an emergency.	Substantial Improvement	Starting in June 2018, First Nations in B.C. were invited to attend and participate in Partnership Table meetings located in their respective EMBC region. Each of these First Nations Emergency Management Partnership Tables has identified values, vision and mission statements. The meetings and governance of each partnership are community driven with agenda topics chosen by First Nations. Discussions at the partnership meetings provide a space of better understanding of the roles and responsibilities of all emergency management partners. Partnership Tables in each of the six EMBC regions are complete for spring 2019. The next round of First Nations Regional Partnership Tables are taking place during October and November 2019.  The recently released discussion paper on the	EMBC will continue to encourage partnerships between Local Authorities and First Nations.  EMBC and First Nations will continue to pursue a partnership approach to emergency management through the EMBC Regional First Nations Emergency Management Partnership Tables.  The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.  OGC will continue to work with partners on training priorities and opportunities.

	Recommendation	Status	Action to date	Next steps
			<p>modernization of the Emergency Program Act (EPA) signals government's intent to enhance collaborative planning and partnerships by recommending that Local Authorities be required to provide plans to neighbouring jurisdictions, including First Nations and other Local Authorities.</p> <p>ISC has also developed a publication entitled <i>Emergency Management Assistance Program (EMAP) in British Columbia</i> which has been sent to all First Nations and is being shared in meetings and online (<a href="http://www.aadnc-aandc.gc.ca/DAm/DAm-INTER-BC/staging/texte-text/emapbc_1565370095064_eng.pdf">http://www.aadnc-aandc.gc.ca/DAm/DAm-INTER-BC/staging/texte-text/emapbc_1565370095064_eng.pdf</a>).</p> <p>EMBC and the BC Oil and Gas Commission have worked together to develop and facilitate cross-sector First Nations Emergency Management Training sessions in 2018 and 2019. The format includes a one day classroom introduction to Emergency Management (the Core), and a second day series of tabletop/scenario-based exercises facilitated by a First Nations emergency management expert. All sessions have a First Nations focus.</p> <p>Two days of Incident Command System and emergency management basics training, including a tabletop exercise, were facilitated for five First Nations and the City of Merritt on August 21-22, 2019 by the EMBC, BCWS, OGC and the Thompson Nicola Regional District. This approach was well received and may serve as a template for future training events.</p>	<p>The MOU working group will be developing a work plan with actions to support First Nations in Emergency Management. This includes planning and hosting an Emergency Forum for First Nations.</p> <p>The Communications Toolkit will be updated based on feedback from partners.</p> <p>Additional partnerships between Local Authorities and First Nations are also being explored, with EMBC support. EMBC distributed the updated Evacuation Operational Guide in spring 2019. EMBC will continue to engage with emergency management partners to gather feedback on the updated Evacuation Operational Guide, and continue to update them where appropriate.</p>

	Recommendation	Status	Action to date	Next steps
			<p>A tripartite emergency management MOU between B.C., ISC, and the First Nations Leadership Council/FNESS has been signed that recognizes First Nations as partners in both the governance and operations of emergency management.</p> <p>EMBC and GCPE have prepared a Local Government Emergency Operations Centre Communications Toolkit to support First Nations and Local Authorities with information management and media engagements during emergency events.</p> <p>A Central Coast Regional Emergency Management Partnership was established on December 17, 2018 between the Province, Nuxalk Nation and Central Coast Regional District.</p> <p>EMBC continues to support the development of a Regional Concept of Operations, a process for First Nations, local and provincial government from the Capital region, to collectively collaborate during emergency response that requires joint decision making on regional emergency management issues. A Memorandum of Understanding (MOU) was developed to formalize commitment by individual First Nations, municipality, regional district and EMBC, to further enhanced the model by conducting annual exercises. To date, 12 municipalities, the regional district and three First Nations have signed the MOU.</p> <p>The revised Evacuation Operational Guide, developed in consultation with First Nations</p>	

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			communities and agencies, provides a Roles and Responsibilities appendix where the roles of government agencies during evacuations are summarized. EMBC promulgated a short guidance document in July 2019 to act as a quick reference guide for Local Authorities and First Nations to better understand roles, responsibilities and processes for all four pillars of emergency management. The intention is to incorporate input from communities and provincial, federal and partner agencies to further enhance the information that is available in the guide.	
13.	Strengthen and support the mandate of the First Nations' Emergency Services Society (FNESS) to advise and guide provincial emergency services policy and delivery.	Substantial Improvement	<p>FNESS is engaged in working with, advising and guiding emergency services work for many First Nations. EMBC and the BCWS work closely with FNESS.</p> <p>The BCWS has partnered with FNESS and ISC on a strategy to deliver training required for Type 2 and Type 3 firefighting crews. FNESS organized the delivery of four training sessions in March / April of 2019, supported by \$150,000 from the BCWS and \$95,000 from ISC. The training sessions were four days long and covered the required training for Type III fire crews. Through this partnership, FNESS is also building an inventory of First Nations communities to understand what communities have trained crews, where the gaps are, and where to focus future training sessions.</p> <p>FNESS provided firefighting training in four communities with ISC funding this year.</p> <p>BCWS is working with FNESS to gather</p>	<p>Provincial agencies will continue to work closely with FNESS.</p> <p>FNESS, BCWS, and ISC will coordinate the delivery of additional training sessions in the spring of 2020.</p> <p>The BCWS will continue to work with FNESS to support planning with First Nations through the CRI program.</p> <p>Community wildfire resiliency planning processes are currently being developed in consultation with First Nations communities. New and existing community and fuel management planning processes will work to incorporate local Indigenous Knowledge when identifying opportunities for prescribed fire and other fuel management activities in consideration of values at risk on the landscape.</p> <p>As part of the BCWS prescribed fire program, training and curriculum development is</p>

	Recommendation	Status	Action to date	Next steps
			<p>traditional knowledge around prescribed fire and the use of fire to integrate traditional knowledge into fire management.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government’s intent to enhance collaborative planning and partnerships by recommending that Local Authorities and provincial entities have a requirement to consider Indigenous and traditional knowledge in the development of hazard risk and vulnerability assessments.</p> <p>FNESS is a member of the Community Resiliency Investment program management team and facilitates engagement with First Nations.</p> <p>FLNRORD has contracted with FNESS and is working in partnership with EMBC to deliver a dialogue session in late 2019 to initiate the process of braiding Indigenous and non-Indigenous ways of knowing in relation to emergency management.</p> <p>ISC provides funding to First Nations for Fire Mitigation Fuel Treatment on IR lands. This funding is administered through FNESS, and FNESS can work with First Nations on applications.</p>	<p>underway, with FNESS providing two curriculum pieces on utilizing traditional knowledge for prescribed burns. The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p>
14.	First Nations Health Authority and regional health authorities work collaboratively towards a seamless emergency response system that defines roles,	Complete	HEMBC partnered with all B.C. regional Health Authorities and FNHA following the 2017 wildfire season to develop the BC Health System Wildfire Response Plan. This plan defines roles, responsibilities, and procedures	The BC Health System Wildfire Response Plan will be updated as required based on emerging lessons-learned, including those resulting from the BC Health System Wildfire 2018 After Action Report.

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	responsibilities and procedures.		for coordinating emergency response efforts across the health system and was activated during the 2018 B.C. wildfire season.	
15.	Create a volunteer training requirement, as part of Emergency Social Services, to participate in cultural awareness.	Underway	<p>Emergency Support Services (ESS) Mobile Support Teams (MSTs) completed basic Cultural Safety training at the MST conference in Chilliwack in the fall of 2018. EMBC is currently exploring opportunities to provide MSTs and additional Public Safety Lifeline Volunteers more in-depth cultural safety training that is specific to ESS.</p> <p>The Province is providing funding through UBCM CEPF to support cultural agility/cultural safety training for emergency management practitioners and volunteers.</p> <p>Under its 2018 Building Back Better Strategy Guide (<a href="http://www.sac-isc.gc.ca/eng/1534954506773/1535121720820">http://www.sac-isc.gc.ca/eng/1534954506773/1535121720820</a>), ISC can now fund additional social and cultural supports during times of evacuation. This information is being shared with First Nations as well as Emergency Support Services partners to better support cultural safety during times of evacuation.</p>	<p>EMBC will continue to pursue opportunities to integrate cultural safety training into MST and ESS training programs.</p> <p>The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.</p>
16.	Review and assess the decision-making process related to the establishment of evacuation alerts and orders. Ensure the process considers whether highway corridors should be exempt from the order, has provisions to recognize ranching or farming operations located within an	Complete	EMBC and the BCWS worked with provincial ministries, FNHA, FNESS, RCMP, ISC, Ministry of Transportation and Infrastructure, HEMBC, and PSC; as well as with First Nations and Local Authorities to update the provincial Evacuation Operational Guide.	EMBC distributed the updated Evacuation Operational Guide in spring 2019. EMBC will continue to engage with emergency management partners to gather feedback on the updated Evacuation Operational Guide, and continue to update them where appropriate.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
	evacuation area, and other local considerations as required.			
17.	Review and assess the decision-making process related to lifting evacuation orders. Ensure the process includes coordination with the First Nations Health Authority (FNHA), regional health authorities, Ministry of Transportation and Infrastructure, and the RCMP.	Complete	EMBC and the BCWS worked with provincial ministries, FNHA, FNESS, RCMP, ISC, Ministry of Transportation and Infrastructure, HEMBC, and PSC; as well as with First Nations and Local Authorities to update the provincial Evacuation Operational Guide.	EMBC distributed updated Evacuation Operational Guide in spring 2019. EMBC will continue to engage with emergency management partners to gather feedback on the updated Evacuation Operational Guide, and continue to update them where appropriate.
18.	Develop strategic partnerships and operational agreements with key community members, forest professionals, First Nations, tenure holders (forest, range, guide outfitters and others), as suitable to provide increased response capacity and promote resilience across the land base. As part of this arrangement, B.C. should consider training and registering partners.**	Substantial Improvement	<p>The BCWS has partnered with FNESS and ISC on a strategy to deliver training required for Type 2 and Type 3 firefighting crews. FNESS organized the delivery of four training sessions in March / April of 2019, supported by \$150,000 from the BCWS and \$95,000 from ISC. The training sessions were four days long and covered the required training for Type III fire crews. Through this partnership, FNESS is also building an inventory of First Nations communities to understand what communities have trained crews, where the gaps are, and where to focus future training sessions.</p> <p>The OFC and the BCWS have established a training program for structural firefighters who respond to wildfire incidents, and the BCWS held over 50 sessions in 2019 training structural fire departments and staff in how to respond to wildfire incidents. Sessions were delivered throughout B.C. and were led by Structural Protection Specialists.</p>	The BCWS will continue to formalize mechanisms and standardize agreements to increase partnership opportunities. FNESS, BCWS, and ISC will coordinate the delivery of additional training sessions in the spring of 2020. The OFC and the BCWS will continue to work with partners to deliver training for structural firefighters.

	Recommendation	Status	Action to date	Next steps
			<p>The BCWS is establishing an agreement with the B.C. Community Forest Association and the Federation of B.C. Woodlot Associations that outlines how these organizations will work together in the 4 phases of emergency management and promotes resilient forest stands. Transition to establishing this agreement is now in place.</p> <p>Substantial progress was made with key stakeholders in advance of 2018 fire season that raised response capacity and coordination. The BCWS has continued to build on work begun in 2018. For example, the BCWS has developed standardized protocols and procedures for engaging industry to provide equipment and resources to assist with firefighting as needs dictate. The process was developed and tested in the Cariboo Fire Centre and is being rolled out to all other Fire Centres over the next two years.</p> <p>In partnership with the Fraser Basin Council, the BCWS is holding community wildfire roundtables in communities facing a high wildfire risk. This \$300,000 program will be delivered over the next two years.</p> <p>The BCWS is providing \$400,000 to the Association of BC Forest Professionals to develop fire-related professional development sessions, which will provide guidance on the use of fire and management of fire risk when planning forestry operations.</p>	
19.	Provide support to local and First Nations governments in	Underway	EMBC has published the Emergency Management Planning Toolkit for Local	The Province will work with First Nations, FNESS, the First Nations Leadership Council and

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	<p>self-assessing their emergency plans (for completeness and effectiveness) and each community's ability to implement those plans fully and effectively.</p>		<p>Authorities and First Nations, a self-guided toolkit to support communities who are creating or updating their all-hazard emergency management plan.</p> <p>EMBC participates in and contributes to community-level Hazard, Risk and Vulnerability Analysis (HRVA) processes. EMBC provides a HRVA tool to communities to assess their risks. This tool is currently being updated with the support of a working group which includes representatives from Local Authorities and First Nations.</p> <p>EMBC has developed a community profile database that will assist communities by identifying and addressing gaps in their emergency planning, and will capture interactions with communities that will assist in fostering and maintaining these important relationships.</p> <p>EMBC Regional Managers support local and First Nations governments on a regular basis regarding assessment of their emergency management plans. The federal Budget 2019 included new funding for non-structural mitigation and preparedness, and this can support emergency preparedness and planning activities. This is currently on an application basis, but ISC will work with partners through the tripartite process and Nation-based approaches to develop alternate funding models/approaches.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act</p>	<p>ISC towards continuous improvement in planning and developing increased capacity.</p> <p>The Province will continue to work with First Nations and Local Authorities on the development and release of the HRVA tool.</p> <p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p>

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			(EPA) signals government's intent to enhance the quality assurance of emergency management plans by enabling EMBC to audit emergency management plans of provincial ministries, Crown corporations and agencies, Local Authorities, and critical infrastructure owners/operators.	
20.	B.C., First Nations, local governments and emergency responders develop jurisdictional protocols, agreements and undertake annual tabletop exercises to ensure roles and procedures are fully understood.	Underway	<p>Through the bilateral agreement, First Nations have been further included in Local Authority and provincial emergency management exercises.</p> <p>A tripartite emergency management MOU between B.C., ISC, and the First Nations Leadership Council/FNESS has been signed that recognizes First Nations as partners in both the governance and operations of emergency management.</p> <p>A Central Coast Regional Emergency Management Partnership was established on December 17, 2018 between the Province, Nuxalk Nation and Central Coast Regional District.</p> <p>B.C. and Canada have also entered into a Collaborative Emergency Management Agreement (CEMA) with the T̓silhqot̓in National Government, and funding has been provided to advance activities under this agreement.</p> <p>EMBC, ISC and the Interior Region Nations Executive (representing seven Nation groups and 54 First Nations) are working to develop a tripartite agreement on emergency</p>	<p>The Province will continue to work with First Nations and local governments to ensure that roles and responsibilities are fully understood.</p> <p>The Province continues to work with First Nations and leadership under the bilateral service agreement between EMBC and ISC.</p> <p>The MOU working group will be developing a work plan with actions to support First Nations in Emergency Management. This includes planning and hosting an Emergency Forum for First Nations.</p> <p>The Province and Canada will continue to work with partners to advance Nation-based approaches to emergency management, such as the T̓silhqot̓in Collaborative Emergency Management Agreement and the Interior Region approach.</p> <p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p> <p>OGC will continue to work with partners on</p>

	Recommendation	Status	Action to date	Next steps
			<p>management services. This will create a platform to advance Nation-based approaches to emergency management in the Interior Region.</p> <p>Budget 2019 also included additional funding for non-structural mitigation which could contribute to costs associated with tabletop exercises.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government's intent to enhance collaborative planning and partnerships by recommending that Local Authorities be required to provide plans to neighbouring jurisdictions, including First Nations and other Local Authorities.</p> <p>EMBC and the BC Oil and Gas Commission have worked together to develop and facilitate cross-sector First Nations Emergency Management Training sessions in 2018 and 2019. The format includes a one day classroom introduction to Emergency Management (the Core), and a second day series of tabletop/scenario-based exercises facilitated by a First Nations emergency management expert. All sessions have a First Nations focus. Templates for First Nations led training events such as tabletop exercises and workshops are being developed, and EMBC's Regional Offices have assisted with the delivery of exercises directly with First Nations.</p>	training priorities and opportunities.
21.	B.C. Wildfire Service designs a preferred contractor	Complete	The BCWS's policy is to exhaust all qualified B.C. personnel first prior to securing external	Improved procurement processes were put in place for the 2019 wildfire season. Evaluation of

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
	procurement model to be offered as an option to standing offer participants.		<p>resources. Selection of qualified suppliers is made based on operational requirements, including geographic proximity, availability, certification, and safety requirements and in consideration of forecasted need over several operational periods.</p> <p>The BCWS has improved the existing procurement processes to increase the potential use of local or B.C. resources. Improvements include: standardizing and modernizing contract language, developing new Standing Offers, engaging with stakeholders and providers to raise awareness of contracting opportunities and procedures, expanding the use of BC Bid and streamlining the process to submit qualifications to be considered for inclusion on qualified suppliers/bidders lists. The intent of these changes was to increase the number and depth of qualified suppliers throughout the province prior to need.</p> <p>In partnership with the Western Forestry Contractors' Association, the BCWS formed a contract advisory committee to cooperate on procurement processes and work more effectively with the contracting community.</p>	outcomes is underway and a process to incorporate improvements has been solidified.
22.	Develop a partners' program where, prior to wildfires, local resources are assigned to containment line teams consisting of heavy equipment, forest professionals, technicians and workers who use their local knowledge and	Complete	The BCWS's policy is to exhaust all qualified B.C. personnel first prior to securing external resources. Selection of qualified suppliers is made based on operational requirements, including geographic proximity, availability, certification, and safety requirements and in consideration of forecasted need over several operational periods.	Improved procurement processes were put in place for the 2019 wildfire season. Evaluation of outcomes is underway and a process to incorporate improvements has been solidified.

	Recommendation	Status	Action to date	Next steps
	<p>expertise to establish containment lines as part of tactical operations.</p>		<p>The BCWS has improved the existing procurement processes to increase the potential use of local or B.C. resources. Improvements include: standardizing and modernizing contract language, developing new Standing Offers, engaging with stakeholders and providers to raise awareness of contracting opportunities and procedures, expanding the use of BC Bid and streamlining the process to submit qualifications to be considered for inclusion on qualified suppliers/bidders lists. The intent of these changes was to increase the number and depth of qualified suppliers throughout the province prior to need.</p> <p>In 2019, the BCWS held multiple Industry Engagement Workshops in preparation for the 2019 wildfire season in every Fire Centre across the province. One objective of these workshops was to further increase the effectiveness of containment teams through industry contribution to firefighting efforts. Building on the success of the 2019 Industry Engagement Workshops, the BCWS has confirmed calendarized, sustained engagement with partners, and will continue to utilize this approach.</p> <p>The Joint Forest Industry BCWS Working Group, established in Spring 2019, provides for a stable forum to identify partnership opportunities and address mutual concerns to increase contracting efficiency, strike team models and incorporating local knowledge into fire suppression operations.</p>	

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
23.	<p>Create a roles and responsibility framework with the flexibility to adapt to each unique emergency situation. The framework must clearly define the primary, secondary and tertiary responsibilities for each organization in the event of disaster and be immediately operational. Encourage the integration of local and First Nations knowledge in the framework, and support the opportunity for communities to contribute to fire suppression operations.</p>	<p>Substantial Improvement</p>	<p>The Province’s approach to emergency management is guided by the BC Emergency Management System, and the structure used to manage emergencies is provided within Comprehensive Emergency Management Plan (CEMP). The base plan is the BC All Hazard Plan, which outlines the provincial concept of operations as well as the roles and responsibilities that are applicable in all emergencies or disasters. Support annexes are hazard specific documents that detail functional aspects of emergency management. More analysis of hazard specific roles and responsibilities is required. The CEMP and support annexes are living documents. A provincial initiative is currently under development which will develop policies, with First Nations involvement, regarding use of traditional knowledge in the natural resources sector.</p> <p>In late July 2019, a significant landslide was discovered on the Fraser River near Lillooet that prevented the safe upstream passage of many spawning salmon. The Unified Command structure that was implemented to assist fish passage included a partnership with First Nations. Traditional knowledge was invaluable in identifying a number of operational approaches. First Nation fishing methods were employed to minimize the distress on salmon being captured and fish were moved by helicopter or by road beyond the blockage. Many lessons are being learned from this incident to shape future approaches in managing emergencies with First Nations and other federal and provincial agencies.</p>	<p>EMBC and the BCWS will be assessing how Indigenous knowledge can best be incorporated into emergency management processes in a manner that is respectful and advances reconciliation. Work under the Tripartite MOU with the First Nations Leadership Council will comprise part of this effort.</p> <p>EMBC is developing procedural response reference guides for each hazard in collaboration with the applicable lead ministry and supporting ministries. These guides will describe the information flow and the interaction between all parties to effectively manage an incident from first reporting through to the termination of response actions and the transition to recovery.</p> <p>The BCWS uses First Nations liaison contractors and community liaisons in Fire Centers and on incident management teams to provide communication linkages, advice and traditional knowledge. In addition, the BCWS employs local foresters for line location advice and local area knowledge, as well as to help train and employ local Community Fire Fighter Crews.</p> <p>An after action review of the Big Bar landslide on the Fraser River is expected to better inform how the Province can coordinate activities between all necessary Ministries and agencies while working with federal agencies and First Nations to manage an incident.</p> <p>As part of the BCWS prescribed fire program, training and curriculum development is underway, with FNESS providing two curriculum</p>

	Recommendation	Status	Action to date	Next steps
			<p>BCWS is working with FNESS to gather traditional knowledge around prescribed fire and the use of fire to integrate traditional knowledge into fire management.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government's intent to enhance collaborative planning and partnerships by recommending that Local Authorities and provincial entities have a requirement to consider Indigenous and traditional knowledge in the development of hazard risk and vulnerability assessments.</p>	<p>pieces on utilizing traditional knowledge for prescribed burns. The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p>
24.	Establish emergency centres of excellence in Interior locations to support largescale disaster response.**	Alternate Approach Used	<p>Individual communities may also wish to assess specific local needs in cooperation with the Province. For example, under the Rural Dividend Program, Nadleh Whut'en First Nation has been provided funding to conduct a feasibility study and initial planning for an emergency centre of excellence.</p> <p>Under the CEMA, the T̓silhqot'in National Government has also been provided with funding to conduct a feasibility study for an emergency centre of excellence.</p>	<p>The T̓silhqot'in National Government's report on the 2017 wildfires – <i>The Fires Awakened Us</i> – includes additional details into what may be required to establish an emergency centre of excellence. The Province will continue to review this and other reports that provide similar insights into what communities may require to support largescale disaster response.</p> <p>Tk'emlups First Nation is a pilot community for a digital registration system as part of the Emergency Support Services Modernization project. First Nations participation in shaping the ESS modernization is important to properly reflect the specific needs of Indigenous Peoples and provides a possible opportunity to identify a model to support large-scale First Nations evacuations, noting the significant contribution the Tk'emlups First Nation made to support other First Nations as a host community in 2017.</p>

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25.	B.C. establish annual, intergovernmental preparedness workshops with First Nations and local governments to support consistent understanding of emergency operations, roles and responsibilities. • Ensure workshops are held in local communities • Consider and plan for the impact of multijurisdictional emergency events • Provide consistent training • Ensure egress (evacuation) routes are established and that the status of alternate roads is known.	Provincial Action Complete	<p>Community Emergency Preparedness Funding (CEPF) streams are available to all local governments and First Nations in BC. This includes support to evacuation route planning, Emergency Operations Center training and Emergency Support Services. The Province has also worked with Indigenous Service Canada to resolve barriers that prevented First Nations communities from participating in training and exercises. In 2019, 60 communities were provided up to \$25,000 in funding for evacuation route planning as part of the UBCM CEPF applications.</p> <p>EMBC and ministry partners host seasonal workshops to bring the partners together and touch on some of these issues. Workshops are being restructured to provide more interaction and ability to interact one-on-one with experts.</p> <p>As noted in Recommendation #1, First Nations in B.C. were invited to attend and participate in Partnership Table meetings located in their respective EMBC region. Each of these First Nations Emergency Management Partnership Tables has identified values, vision and mission statements, while also providing an opportunity to discuss emergency operations as well as roles and responsibilities between a number of emergency management partners.</p> <p>As part of the commitment to further engagement and to support preparedness activities for the 2019 fire season, the BCWS scheduled over 250 dedicated engagement sessions with a broad range of partners including First Nations, Local Authorities,</p>	<p>The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.</p> <p>EMBC will continue to work with the BCWS and across government on an annual basis to plan and improve the delivery and content of seasonal preparedness workshops and pre-season engagement sessions. EMBC will continue to work with First Nations and leadership through all phases of emergency management, including work at the Partnership Tables.</p> <p>BCWS will continue with robust pre-season engagement activities in future years.</p>

	Recommendation	Status	Action to date	Next steps
			<p>contract crews, agricultural industry representatives, forest industry representatives and others. These engagements encompassed activities related to prevention, training, contract services, and readiness. This pre-season engagement will be an annual occurrence and part of the BCWS work plan each year.</p> <p>In partnership with the Fraser Basin Council, the BCWS is holding community wildfire roundtables in communities facing a high wildfire risk. This \$300,000 program will be delivered over the next two years.</p>	
26.	<p>Deliver annual emergency management forums that:</p> <ul style="list-style-type: none"> <li>• Bring together BC, First Nations and local governments and partners</li> <li>• Identify provincial operational and policy gaps</li> <li>• Promote shared information and learning, through best practices and success stories</li> <li>• Evaluate progress against the B.C. Flood and Wildfire Review final report, Addressing the New Normal: 21st Century Disaster Management in British Columbia.</li> </ul>	Substantial Improvement	<p>After Action Reviews are conducted after each significant event.</p> <p>Following the 2018 events, EMBC issued a survey to B.C. Local Authority and First Nations Emergency Operations Centres (EOCs) to gather feedback on a variety of topics, including: education/training; preparedness; communication, information &amp; collaboration; deployment processes and procedures; recovery; and overall assessments. While the participation rate was not high (42 of 393 potential EOCs responded), the results have informed and contributed to the prioritization and development of new items for improvement.</p> <p>Seasonal workshops bring emergency management partners together and touch on some of these activities. These workshops have provided a forum for communities to share information, best practices, successes and</p>	B.C. continues to support a culture of continuous improvement based on a regular dialogue with all emergency management practitioners to share lessons learned from each significant emergency event.

	Recommendation	Status	Action to date	Next steps
			<p>areas of improvement.</p> <p>EMBC continues to identify and address areas of improvement and has implemented significant improvements in 2018 from the lessons of 2017.</p>	
27.	Ensure compensation mechanisms exist for residents who support evacuees by providing shelter for people and/or livestock.	Complete	<p>Guidelines are in place for billeting and clear policy direction has been established for hosting evacuees from other communities.</p> <p>Compensation is available, and was provided in 2018, for individuals and organizations providing shelter and feed for evacuated livestock.</p>	
28.	Indigenous and non-Indigenous communities establish mutual aid agreements to optimize resource-sharing in the areas of operational response and volunteer capacity.	Substantial Improvement	<p>Local Authorities and First Nations are empowered to enter into agreements with their neighboring jurisdictions.</p> <p>The T̓silhqot̓in National Government (TNG) has signed an Emergency Response Protocol with the Province and the Cariboo Regional District (CRD) governing how all will work together on the TNG title lands. The benefits of the dialogue were evident in the level of cooperation and information sharing between the TNG and CRD in response to the major flooding of the Chilcotin area in July 2019.</p> <p>UBCM has made available a new round of funding for the Regional Community to Community Forum program for events in 2019 and 2020. This program pays up to 50% of meeting costs for Local Authorities and First Nations elected officials and/or senior staff to meet and discuss any topic they decide on.</p>	<p>Under EMBC leadership, additional partnerships between Local Authorities and First Nations continue to be explored. These partnerships may include mutual aid agreements.</p> <p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020).</p> <p>A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p>

	Recommendation	Status	Action to date	Next steps
			<p>A Central Coast Regional Emergency Management Partnership was established on December 17, 2018 between the Province, Nuxalk Nation and Central Coast Regional District.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government's intent to enhance collaboration and coordination through non-regulatory or regulatory incentives to further enhance regional collaboration.</p>	
29.	<p>B.C. enhance integration across government and among governments, particularly in the natural resource sector and within Emergency Management BC, to:</p> <ul style="list-style-type: none"> <li>• Foster better collaboration among land-based decision makers</li> <li>• Promote joint forest/grassland management and wildfire preparedness.</li> </ul>	Substantial Improvement	<p>In 2018, FLNRORD implemented new integration mechanisms. All Hazards Incident Management Teams deal with integration at the site level and the Joint Hazard Management Teams integrate management of hazards across ministry and provincial natural resource sector agencies. New engagement standard operating procedures have been established for enhanced collaboration with stakeholders, First Nations, local communities, and other partners.</p> <p>The BCWS provided \$400,000 to the Association of BC Forest Professionals to develop fire management-related professional development sessions and tools, which will provide guidance on the use of fire and management of fire risk when planning forestry operations.</p> <p>EMBC promulgated a short guidance document in July 2019 to act as a quick reference guide for Local Authorities and First Nations to better understand roles, responsibilities and processes for all four pillars of emergency management.</p>	<p>Provincial agencies will continue to enhance integration, and will be responsive to outcomes of future After Action Reviews.</p> <p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p>

	Recommendation	Status	Action to date	Next steps
			<p>The intention is to incorporate input from communities and provincial, federal and partner agencies to further enhance the information that is available in the guide.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government's intent to enhance collaborative planning and partnerships by recommending that Local Authorities be required to provide plans to neighbouring jurisdictions, including First Nations and other Local Authorities.</p>	
30.	The Ministry of Health, in partnership with the First Nations Health Authority and regional health authorities, create a provincial primary health care response team that works in crisis zones and evacuation areas.	Substantial Improvement	The health system has developed procedures for providing primary care to evacuees outside of evacuation order areas (e.g. at Reception Centres and Group Lodging). In addition HEMBC is developing the concept for a health "task force" to support impacted health authorities, outside of evacuation order areas.	Work will continue on developing the health task force concept.
31.	Establish pathways for collaboration with First Nations to enable the integration of traditional ecological knowledge with Western science. Ensure risk modelling is built upon a greater understanding of the land base, values and practices of First Nations.	Underway	<p>A provincial initiative is currently under development which will develop policies, with First Nations involvement, regarding use of traditional knowledge in the natural resources sector.</p> <p>Planning with First Nation communities through the Community Resiliency Investment program, Community Wildfire Protection Plans and FLNRORD fuel management plans will work to incorporate local Indigenous Knowledge when identifying opportunities for prescribed fire and other fuel management activities in consideration of values at risk on the landscape.</p>	<p>The BCWS uses First Nations liaison contractors and community liaisons in Fire Centers and on incident management teams to provide communication linkages, advice and traditional knowledge. In addition, the BCWS employs local foresters for line location advice and local area knowledge, as well as to help train and employ local Community Fire Fighter Crews.</p> <p>The BCWS will continue to work with FNESS to support planning with First Nations through the CRI program. Community Wildfire Protection Plans and FLNRORD fuel management plans will work to incorporate local Indigenous Knowledge when identifying opportunities for</p>

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			<p>BCWS is working with First Nations to increase the use of prescribed fire, including several burns that took place on Crown land that were led by local First Nations as part of their traditional territory.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government's intent to enhance collaborative planning and partnerships by recommending that Local Authorities and provincial entities have a requirement to consider Indigenous and traditional knowledge in the development of hazard risk and vulnerability assessments.</p>	<p>prescribed fire and other fuel management activities in consideration of values at risk on the landscape.</p> <p>As part of the BCWS prescribed fire program, training and curriculum development is underway, with FNESS providing two curriculum pieces on utilizing traditional knowledge for prescribed burns.</p> <p>BCWS will continue to work with First Nations and Indigenous Communities to increase the instance of prescribed burns undertaken in partnership with First Nations.</p> <p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p>
32.	Canada and/or B.C. equip First Nations communities and rural and remote communities so they can respond to wildfires through training and development of equipment caches.	Substantial Improvement	<p>The BCWS has partnered with FNESS and ISC on a strategy to deliver training required for Type 2 and Type 3 firefighting crews. FNESS organized the delivery of four training sessions in March / April of 2019, supported by \$150,000 from the BCWS and \$95,000 from ISC. The training sessions were four days long and covered the required training for Type III fire crews. Through this partnership, FNESS is also building an inventory of First Nations communities to understand what communities have trained crews, where the gaps are, and where to focus future training sessions.</p> <p>FNESS provided firefighting training in four</p>	<p>The Province will continue to work with Canada, First Nations, and rural/remote communities to identify opportunities to enhance local capacity.</p> <p>The BCWS will continue to meet regularly with Indigenous communities to discuss communications, firefighter recruitment opportunities and contract opportunities.</p> <p>FNESS, BCWS, and ISC will coordinate the delivery of additional training sessions in the spring of 2020.</p> <p>The OFC and the BCWS will continue to work with partners to deliver training for structural</p>

	Recommendation	Status	Action to date	Next steps
			<p>communities with ISC funding this year.</p> <p>The OFC and the BCWS have established a training program for structural firefighters who respond to wildfire incidents, and the BCWS held over 50 sessions in 2019 training structural fire departments and staff in how to respond to wildfire incidents. Sessions were delivered throughout B.C. and were led by Structural Protection Specialists.</p> <p>The Fire Chiefs Association of BC is currently helping to administer \$5 million in residual grant funding to assist Local Authority fire departments. This is being done in 2019 in two phases: Phase 1 will be provided to fire departments in communities that were affected by the wildfires in 2017. Phase two will see any remaining funds from this program made available to other departments across BC.</p> <p>The federal Budget 2019 included additional funding for FireSmart. These funds will support fuel mitigation, as well as other activities to reduce wildfire risk and build related capacity.</p> <p>Also, on May 10 of this year, the Province provided \$5 million to the UBCM Community Emergency Preparedness Fund (CEPF) to provide funding to volunteer and composite fire departments from across B.C. to facilitate the delivery of firefighter training and to purchase new or replacement equipment (<a href="https://www.ubcm.ca/EN/main/funding/lgps/community-emergency-preparedness-fund/volunteer-composite-fire-department-">https://www.ubcm.ca/EN/main/funding/lgps/community-emergency-preparedness-fund/volunteer-composite-fire-department-</a></p>	<p>firefighters.</p> <p>The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.</p>

	Recommendation	Status	Action to date	Next steps
			<a href="#">training-equipment.html</a> ).	
33.	Through B.C. Bid, B.C. leverage economies of scale to provide a lower-cost opportunity for residents and communities to purchase external sprinkler systems for their homes.	Alternate Approach Used	<p>BC Bid is used to address the procurement needs of public sector entities.</p> <p>Through the 100% funded Community Resiliency Investment program initiative, applications may be considered for communities to purchase additional sprinklers as treatment options.</p>	<p>FLNRORD and the OFC will continue to work with communities on appropriate options to enhance structure protection for interface fire events.</p> <p>The BC FireSmart Committee, with support and participation from FLNRORD will work with Fire Smart Committees to educate and prepare residents in the manners that are best suited to their communities and needs.</p>
34.	Canada provide ongoing funding to on-reserve volunteer fire departments to cover annual operating costs associated with the purchase and maintenance of capital infrastructure and equipment. Canada to establish an ongoing program to fund administration and training for volunteer fire departments to assist with wildland urban interface response.	Substantial Improvement	<p>In addition to investments to support increased resiliency and emergency management on-reserve, the federal Budget 2019 announced the intention to expand the FireSmart program on-reserve as well as the establishment of an Indigenous Fire Marshal Office (<a href="https://www.ifmo.ca/">https://www.ifmo.ca/</a>). This will be a First Nations-led institution that will promote fire safety and prevention, establish standards, support training, provide subject matter expertise, undertake public education, and establish programs and services including Wildland Urban Interface response.</p> <p>The OFC is working with the Aboriginal Fire-Fighters Association of Canada to explore the possibility of First Nations reserves adopting use of the B.C. fire reporting system. If this system is adopted, it will be supported with training and guidance from B.C.</p> <p>The Fire Chiefs Association of BC is currently helping to administer \$5 million in residual grant funding to assist Local Authority fire departments. This is being done in 2019 in two</p>	<p>The OFC will continue to work with partners on these initiatives.</p> <p>The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.</p>

	Recommendation	Status	Action to date	Next steps
			<p>phases: Phase 1 will be provided to fire departments in communities that were affected by the wildfires in 2017. Phase two will see any remaining funds from this program made available to other departments across B.C.</p> <p>Also, on May 10 of this year, the Province provided \$5 million to the UBCM Community Emergency Preparedness Fund (CEPF) to provide funding to volunteer and composite fire departments from across B.C. to facilitate the delivery of firefighter training and to purchase new or replacement equipment:  <a href="https://www.ubcm.ca/EN/main/funding/lgps/community-emergency-preparedness-fund/volunteer-composite-fire-department-training-equipment.html">https://www.ubcm.ca/EN/main/funding/lgps/community-emergency-preparedness-fund/volunteer-composite-fire-department-training-equipment.html</a></p>	
35.	B.C. provide ongoing funding to volunteer fire departments to assist with wildland urban interface response. Funding provided to cover annual operating costs associated with the purchase and maintenance of capital infrastructure and equipment, as well as training for that purpose. B.C. to consider the Insurance Premium Tax as a funding source.	Substantial Improvement	<p>Funding for local structural fire protection is a local responsibility. No plans are currently in place to fund local structure protection through the Insurance Premium Tax. The OFC and the BCWS are committed to supporting the Structure Protection Program and ensuring that personnel and equipment are deployed, trained and led as needed to best protect residents and structures from wildfire.</p> <p>On May 10 of this year, the Province provided \$5 million to the UBCM Community Emergency Preparedness Fund (CEPF) to provide funding to volunteer and composite fire departments from across B.C. to facilitate the delivery of firefighter training and to purchase new or replacement equipment:  <a href="https://www.ubcm.ca/EN/main/funding/lgps/c">https://www.ubcm.ca/EN/main/funding/lgps/c</a></p>	<p>The Structure Protection Program will continue to be refined, funded and run for future wildfire seasons with improvements being made every year based on the lessons learned from previous seasons.</p> <p>The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.</p> <p>The OFC and the BCWS will continue to work with partners to deliver training for structural firefighters.</p>

	Recommendation	Status	Action to date	Next steps
			<p><a href="#">community-emergency-preparedness-fund/volunteer-composite-fire-department-training-equipment.html</a></p> <p>The OFC and the BCWS have established a training program for structural firefighters who respond to wildfire incidents, and the BCWS held over 50 sessions in 2019 training structural fire departments and staff in how to respond to wildfire incidents. Sessions were delivered throughout B.C. and were led by Structural Protection Specialists.</p>	
36.	B.C. review and clarify roles and responsibilities for flood management, specifically the transfer of responsibility from provincial to local governments, including through the amendment of the Emergency Program Act, The B.C. Flood Response Plan, and other applicable statutes and regulations.**	Underway	<p>In May 2018, the BC Flood Response Plan was updated internally to reflect 2017 freshet experiences and lessons. A further update to reflect lessons from 2018 was released in May 2019.</p> <p>In 2019, the Province provided a significant grant to the Fraser Basin Council to conduct province-wide investigations that will help inform a subsequent provincial flood strategy. These investigations will address a wide range of issues such as governance, forecasting, hazard assessment, partnerships, response and recovery, as well as resourcing considerations.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government's intent to improve hazard &amp; risk identification activities by recommending legislative and regulatory requirements for Local Authorities, provincial ministries, Crown corporations and agencies to identify, understand and assess hazards, risks, and vulnerabilities, and establish associated</p>	<p>The BC Flood Risk Strategy, currently under development, will review roles and responsibilities, and will examine the current governance model.</p> <p>The Fraser Basin Council will use the funding to fully explore a broad range of issues that affect flood management activities in British Columbia. This will include looking at opportunities to strengthen partnerships and collaboration among all levels of government and stakeholders.</p> <p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p>

	Recommendation	Status	Action to date	Next steps
			mitigation plans for risks and consequences. The discussion paper also recommends that sustainable long-term mitigation measures be required when building and development is approved in hazardous areas.	
37.	Review operating plans for the Okanagan Lake Regulation System and Nicola Lake, and any other provincially owned and managed water management infrastructure, and adapt these plans to explicitly include consideration of uncertainty in streamflow forecasts.	Complete	The River Forecast Centre continues to improve the calibration of the Okanagan inflow forecast model for better estimation of seasonal runoff volume. This is an ongoing process that is revisited annually.	
38.	Re-evaluate all 200-year return-period flood elevations in BC, as well as all associated flood construction levels and horizontal setbacks.	Substantial Improvement	<p>20 B.C. communities are currently in the process of re-evaluating flood elevations. The outcomes of these evaluations will feed into future province-wide evaluations.</p> <p>The Province is also in the process of assessing climate change as it applies to natural hazards such as flooding.</p> <p>Through the National Disaster Mitigation Program, Community Emergency Preparedness Fund, and other EMBC funds, the Province has funded many flood mapping studies that help communities gain a better understanding of their 200-yr flood elevations. The Province of B.C. funds the Community Emergency Preparedness Fund (CEPF), a suite of funding programs administered by the Union of BC Municipalities (UBCM). The CEPF is intended to enhance the resiliency of local governments, First Nations and communities in responding to</p>	<p>The Province will continue work on a BC Flood Risk Strategy, and will continue to work with communities to identify funding opportunities for flood elevation assessment work.</p> <p>Public engagement on climate change adaptation and risks (including flooding) is planned for 2019. A provincial climate preparedness and adaptation strategy is planned for 2020.</p> <p>The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.</p>

	Recommendation	Status	Action to date	Next steps
			<p>emergencies. Mitigation funding-specific streams and deadlines are as follows:</p> <ul style="list-style-type: none"> <li>• Structural Flood Mitigation – Deadline: October 25, 2019</li> <li>• Flood Risk Assessment, Flood Mapping &amp; Flood Mitigation Planning – Deadline: January 24, 2020</li> </ul>	
39.	<p>Ensure streamflow forecast data provide sufficient accuracy and precision to manage flooding in BC. Assess and evaluate the adequacy of data networks, including snow, weather, streamflow, groundwater level and lake level, used to provide information to run provincial streamflow forecasting models.</p>	Underway	<p>The River Forecast Centre has evaluated streamflow forecast accuracy and has initiated projects to improve streamflow forecast accuracy and communications.</p> <p>The River Forecast Centre has ongoing partnerships with the provincial snow monitoring program and Environment and Climate Change Canada to identify snow monitoring and weather forecast needs for flood forecasting, and optimize the use of current resources. Provincial Snow Operations Committee was established between ENV and FLNRORD to collaborate on snow monitoring issues.</p> <p>RFC is working with ENV to quality control historic snow weather station data to provide a clean data archive for forecasting and analysis. This work progressed in summer 2019 and continues into fall 2019.</p>	<p>The Province will assess opportunities to further invest in snow monitoring network expansions.</p> <p>The Province will complete historic snow data archive for forecasting. This work is currently planned for 2020.</p> <p>The Province, led by ENV, is undertaking a data network analysis to identify gaps. This work progressed in summer 2019 and continues into fall 2019.</p> <p>The River Forecast Centre will continue to coordinate with partners to identify areas where new gauges may be installed.</p>
40.	<p>Evaluate and upgrade the models used by the B.C. River Forecast Centre for forecasting streamflow and flooding:</p> <ul style="list-style-type: none"> <li>• Develop backup models for use when any of the required model input data is missing</li> <li>• Increase the frequency at</li> </ul>	Substantial Improvement	<p>The River Forecast Centre is updating the methods used to calculate snow basin indices, which includes incorporating more snow information and changing the algorithms related to the location of the snow to produce more accurate results.</p>	<p>The River Forecast Centre will continue to assess opportunities to improve these models, and will continue to coordinate with partners to identify areas where new gauges may be installed.</p>

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
	<ul style="list-style-type: none"> <li>which models are run</li> <li>Investigate the utility of including weather forecasts in models</li> <li>Regularly review and update models.</li> </ul>			
41.	Build and provide sustained funding for a coordinated environmental data hub that organizes and disseminates information from the many data networks currently operating in BC. Provide equal access to information for Indigenous and non-Indigenous communities.	Complete/ continuous improvement	<p>The short term need for consolidated data sets for use by emergency managers has now been met. B.C. government is engaged in process of continuous improvement which includes assessment of feedback regarding the Common Operating Picture (COP), and desired additional data sets. More broadly, government continues to assess land-based data sets that can be integrated and made accessible for a broad range of uses including emergency management.</p> <p>The vision for the COP is to create resiliency in the Province through the use of common data, information, and tools for emergency management as part of this vision, the goal is to have one common portal to support situational awareness and decision making. The COP is accessible to all provincial agencies and external EMBC partner agencies that include First Nations, Local Authorities, critical infrastructure owners/operators, federal departments and non-government organizations.</p> <p>From April to July, 2019, 12 training webinars were offered by GeoBC to EMBC and partner agencies, including First Nations and local governments, to provide an opportunity for training and orientation on the COP. These sessions were attended by about 600</p>	<p>Provincial agencies will continue to improve the accessibility of environmental data for use by emergency management partners.</p> <p>EMBC and GeoBC developed an engagement survey to gather additional feedback. This survey was sent to all stakeholders in October 2019 and feedback will help in developing road map for additional improvements prior to the 2020 flood and wildfire Season.</p> <p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p>

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			<p>participants from various agencies. In addition, a system to gather regular feedback has been established for continuous improvement.</p> <p>EMBC, FLNRORD, and GeoBC have developed a public-facing emergency management portal, <a href="#">EmergencyMapBC</a>, to provide a more interactive platform of information that consolidates provincial data sources relevant to flooding and wildfire events. This product was released in summer 2019.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government’s intent to increase transparency around risk, and coordination and consolidation of risks assessments and hazards across the province by establishing a legislative requirement for the Province to centrally house and provide transparent data on hazard, risk and vulnerability assessments, or mitigation planning documents which are conducted or prepared by other bodies (provincial ministries, Crown corporations and agencies; Local Authorities; and critical infrastructure operators).</p>	
42.	<p>Develop values and risk modelling tools to support decision making and advance planning: • Invest in generating quality data to support modelling, through the use of LiDAR, inclusion of Indigenous knowledge and recognition of cumulative effects • Invest in ongoing training for users •</p>	Substantial Improvement	<p>Since 2018, the Common Operating Picture (COP) has consolidated information on freshet and wildfire incidents from a number of sources and was available to all provincial agencies and external EMBC partner agencies that include First Nations, Local Authorities, critical infrastructure owners/operators, federal departments, and non-government organizations.</p>	<p>Provincial agencies will continue to improve data access and the accessibility of decision support tools for use by emergency management partners.</p> <p>EMBC and the BCWS will be assessing how Indigenous Knowledge can best be incorporated into emergency management planning processes in a manner that is respectful and advances reconciliation.</p>

	Recommendation	Status	Action to date	Next steps
	<p>Ensure common data collection and provide access to the system for all users • Effective monitoring of snowpack.</p>		<p>Training was provided to flood assessors and observers on the COP.</p> <p>The Province has increased surveillance of the snowpack with additional flights, and captured orthoimagery of the high water levels to better inform flood planning.</p> <p>The Knowledge Management Branch within the Ministry of Environment and Climate Change Strategy has been developing a number of data visualization and data sharing tools using open data and corporate tools to make network information freely available to all users.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government’s intent to enhance collaborative planning and partnerships by recommending that Local Authorities and provincial entities have a requirement to consider Indigenous and traditional knowledge in the development of hazard risk and vulnerability assessments.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government’s intent to increase transparency around risk, and coordination and consolidation of risks assessments and hazards across the province by establishing a legislative requirement for the Province to centrally house and provide transparent data on hazard, risk and vulnerability assessments, or mitigation planning documents which are conducted or prepared by other bodies (provincial ministries, Crown corporations and agencies; Local</p>	<p>GeoBC supports EMBC’s continued engagement with small rural communities (First Nations and Local Authorities) to provide advice on various mapping/database solutions to develop Local Emergency Preparedness Plans.</p> <p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p>

	Recommendation	Status	Action to date	Next steps
			<p>Authorities; and critical infrastructure operators).</p> <p>The BCWS publicly released the Provincial Strategic Threat Analysis (PSTA) in the Summer, 2019. This information provides a multitude of variables related to fire threat (e.g. fuel type, topography, past fire behaviour) to determine broad based classes of fire threat to better inform decisions on fire prevention investments and activities.</p> <p>BCWS established a new Predictive Services Unit (PSU) to improve situational awareness and modelling of potential fire behaviour and threat. In addition to enhancing the seasonal outlook and reporting tools, the PSU developed new tools such as the Field Fuels Survey mobile app to record fuel types across the province.</p> <p>As part of the National Disaster Mitigation Program funding, several geohazard risk modelling and prioritization projects are underway utilizing LiDAR data. EMBC and GeoBC are working on a pilot project which will visualize the results of these risk modelling studies that include Thompson River Watershed and the Regional District of Kootenay. This work is intended to support future mitigation activities.</p> <p>EMBC and GeoBC will take a coordinated approach in collaboration with other levels of government to store, share and visualize hazards and risks to support planning and mitigation phases of emergency management.</p>	

	Recommendation	Status	Action to date	Next steps
			GeoBC and Regional Geospatial Services developed a Local Emergency Preparedness Plan App and Database for the Nazko Community. This solution enables small rural communities (First Nations and Local Authorities) to create a repository of information (structures, household) for all properties and have it readily available during an emergency event.	
43.	Identify and assess new equipment, machinery and their configurations that might strengthen ongoing land-based resource management, including emergency planning, prevention, response and recovery.	Underway	<p>The BCWS is currently evaluating new technologies presented at the Innovation Symposium in March, 2019 and is at various stages (some complete, some still underway) of testing the following: hand held ignition devices; various satellite imagery software products; remote connectivity devices, advanced pump intake filters; night flying trials; smart phone infrared scanners for crews; enhanced drone stability technology for scanning; real-time educational videos for grade school classrooms; asset tracking technology; newer surfactants; respiratory masks; and some newer structural protection equipment.</p> <p>The BCWS piloted the use of night vision goggles to use in early detection and prioritization of response in the 2019 season. This technology is beneficial following lightning events in interface areas to assist with earlier detection and response.</p> <p>BCWS established a new Predictive Services Unit (PSU) to improve situational awareness and modelling of potential fire behaviour and</p>	<p>The BCWS staff was provided with increased access to technology, including tablet computers/iPads in the field and unmanned aerial vehicles (drones) to assist with fire mapping and infrared scanning. Field testing conducted during 2019 of these new tools will be evaluated and positive attributes incorporated into standard business lines.</p> <p>The BCWS has developed an ‘innovation platform’ that allows staff, and eventually vendors and the public to submit projects, proposals and ideas for BCWS to improve its business processes, products and technologies.</p>

	Recommendation	Status	Action to date	Next steps
			threat. In addition to enhancing the seasonal outlook and reporting tools, the PSU developed new tools such as the Field Fuels Survey mobile app to record fuel types across the province. The BCWS tested mass water delivery systems and drone technologies in 2018 and they will continue to be utilized where appropriate.	
44.	Evaluate the capacity of provincially owned water management infrastructure to pass flows and modify the infrastructure as needed to keep it functioning as intended.	Complete	Capacity evaluations are part of ongoing work.  The Okanagan Lake Regulatory system is owned by the Province and operated by FLNRORD.  FLNRORD maintains and operates it to maximize efficiency, and closely monitors its operation.	The Province will continue to evaluate flows to optimize the system and reduce flood risk.
45.	Governments at all levels annually review and monitor drainage infrastructure to ensure its adequacy in an extreme weather event, such as high-intensity rain.	Complete (Ongoing)	FLNRORD monitors forest road infrastructure and the Ministry of Transportation and Infrastructure monitors highway infrastructure as part of their regular operations. Information is shared between the entities when necessary.	This is ongoing and crosses multiple jurisdictions and responsibility areas.
46.	Strengthen public understanding of the risks and personal responsibilities associated with living in a fire-dependent ecosystem. Provide a summary of incentives to encourage public participation in emergency preparedness behaviour and provide information on government responses during emergency situations.	Substantial Improvement	A new BC FireSmart website has been launched that includes information for the public on how to better participate in wildfire risk identification and reduction.  PreparedBC has released a new <i>Wildfire Preparedness Guide</i> created in partnership with BC FireSmart and the Office of the Fire Commissioner. The new guide encapsulates the complete disaster cycle (Mitigation, Preparedness, Response and Recovery) to ensure the public knows exactly what to do before, during and after a wildfire. The guide also incorporates the results of a Local	The members of the BC FireSmart Committee will continue to explore long term approaches to enhancing incentives for safe behavior and improving resiliency.  Provincial agencies will continue to mature public education initiatives related to emergency management.  Provincial agencies will continue to work together to gather data and information that can be made available to support efforts to identify hazard risks

	Recommendation	Status	Action to date	Next steps
			<p>Authority survey that identified gaps in educational content following the 2016/2017 wildfire seasons. New subjects covered include coping with wildfire smoke, coping with wildfire stress and understanding the evacuation stages used in BC.</p> <p>Prepared BC has revised the Master of Disaster school program (grades 4 to 8) to ensure the material is inclusive and accessible to all B.C. youth. The revision incorporates feedback from public school teachers and the Indigenous Partnerships Project, which worked directly with 10 Indigenous communities across BC.</p> <p>The BCWS has released the FireSmart BC Education Package to be used in schools from K-12. This package complements the existing Master of Disaster curriculum materials developed by EMBC and the Ministry of Education. BCWS also provided two live streamed elementary school video “classes” featuring wildfire staff to educate on FireSmart and wildfire science.</p> <p>BCWS implemented new communications processes during fire events to provide more comprehensive information to the public. In addition to fire information, the public heard from Incident Commanders regarding the type, behavior and response tactics being utilized.</p> <p>FLNRORD continues to support the development of research and information on hazard risk through the efforts of the Climate Change Secretariat and in relation to the Climate Change Audit.</p>	<p>The BCWS is assessing new public communications and education strategies for 2019 and beyond.</p> <p>Public engagement on climate change adaptation and risks (including wildfire) is planned for 2019. A provincial climate preparedness and adaptation strategy is planned for 2020.</p> <p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p>

	Recommendation	Status	Action to date	Next steps
			<p>EMBC launched the PreparedBC Facebook page in April, 2019.</p> <p>The BCWS publicly released the Provincial Strategic Threat Analysis (PSTA) in the Summer, 2019. This information provides a multitude of variables related to fire threat (e.g. fuel type, topography, past fire behaviour) to determine broad based classes of fire threat to better inform decisions on fire prevention investments and activities.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government’s intent to increase transparency around risk, and coordination and consolidation of risks assessments and hazards across the province by establishing a legislative requirement for the Province to centrally house and provide transparent data on hazard, risk and vulnerability assessments, or mitigation planning documents which are conducted or prepared by other bodies (provincial ministries, Crown corporations and agencies; Local Authorities; and critical infrastructure operators).</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government’s intent to improve hazard &amp; risk identification activities by recommending legislative and regulatory requirements for Local Authorities, provincial ministries, Crown corporations and agencies to identify, understand and assess hazards, risks, and vulnerabilities, and establish associated</p>	

	Recommendation	Status	Action to date	Next steps
			mitigation plans for risks and consequences. The discussion paper also recommends that sustainable long-term mitigation measures be required when building and development is approved in hazardous areas.	
47.	Build a central hub or 'one stop shop' emergency communications website to provide the public with reliable, responsive, adaptive, real-time and customer-focused information. This hub should collect information from provincial departments and agencies, First Nations and local governments and relevant stakeholder agencies, including media. It should also provide emergency updates for evacuees and include citizen information on how to assist, volunteer or donate.**	Complete	<p>The Emergency Info BC blog has been updated to serve as a hub for disaster information, from evacuation alerts and orders to response and recovery resources. New information/features include: a mobile-optimized interactive map of evacuation alerts and orders (<a href="#">EmergencyMapBC</a>); location/hours of ESS reception centres; travel/visitor information; safety and preparedness tips; information on how to donate; and advice for returning home. The @emergencyinfobc Twitter feed (144K+ followers) is used to amplify and direct the public to information updates.</p> <p>EMBC, FLNRORD, and GeoBC have developed a public-facing emergency management portal, <a href="#">EmergencyMapBC</a>, to provide a more interactive platform of information that consolidates provincial data sources relevant to flooding and wildfire events. This product was released in summer 2019.</p> <p>The Province has also engaged the tourism industry to ensure that emergency communications and strategies adequately account for tourism and visitor considerations.</p>	<p>The Province will continue to invest in the provision of timely, consolidated emergency information for the public and emergency managers.</p> <p>The Province will continue to work with the tourism sector on emergency management initiatives.</p>
48.	Create a communicators' toolkit for use during emergencies with specific resources such as wording for alerts and orders, and clarity	Complete	EMBC and the BCWS worked with provincial ministries, FNHA, FNESS, RCMP, ISC, Ministry of Transportation and Infrastructure, HEMBC, and PSC; as well as with First Nations and Local Authorities to update the provincial Evacuation	EMBC distributed updated Evacuation Operational Guidelines in spring 2019. EMBC will continue to engage with emergency management partners to gather feedback on the updated Evacuation Operational Guidelines,

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
	for the roles and responsibilities of communication leads.		Operational Guide.  EMBC and GCPE have prepared a Local Government Emergency Operations Centre Communications Toolkit to support First Nations and Local Authorities with information management and media engagements during emergency events.	and continue to update them where appropriate.  The Communications Toolkit will be updated based on feedback from partners.
49.	B.C., First Nations and local governments, either individually or jointly, host readiness and post freshet (flood) and wildfire season open houses to share information, knowledge and experiences, as well as develop best practices.	Substantial Improvement	Provincial funding is available for post-emergency community meetings and for After Action Reviews.  EMBC hosted twelve seasonal readiness workshops across B.C. in 2019 which bring partners together to prepare for seasonal risks.	Provincial agencies will continue to work closely with local and First Nations governments, as well as ISC and other partners to share information and continuously improve.
50.	Improve succession planning within emergency response organizations by developing a knowledge management system that includes formal and experiential training provided by subject matter specialists, including individuals from within and outside government.	Complete (Ongoing)	The BCWS has made progress and implemented changes such as: reinvigorating internal training and mentorship opportunities; adopting the “Finish Strong” program, which allows soon to be retirees an opportunity to train the individual that will be taking over their role; and reviewing certification requirements and processes while establishing a new people practices position to implement a comprehensive people practices strategy.  EMBC is assessing a number of products and initiatives relevant to succession planning, including an approach for EMBC leadership development, an “EMBC Knowledge Transfer Toolkit”, and a “PECC and PREOC Staff Position and Qualification Matrix.” EMBC also continues to implement existing succession plans.	EMBC and the BCWS will continue to pursue succession planning initiatives.

	Recommendation	Status	Action to date	Next steps
			EMBC and the BCWS are also assessing how to strengthen succession planning and overall capacity through the Temporary Emergency Assignment Management System which provides surge capacity staffing from across government.	
51.	Expand the provision of prescribed fire training and extend the provincial certification program to non-agency personnel: • Training and certification must include all support positions within agencies • Evaluate the applicability of Parks Canada burn planning course and the US RX-310 Fire Effects course.	Underway	<p>In 2019/20, funding was increased to provide for the development of a multi-year prescribed fire program. FLNRORD is developing a comprehensive prescribed fire program, including a curriculum and training component to build capacity and increase knowledge regarding prescribed fire. This includes working with FNESS to develop modules on utilizing First Nations traditional knowledge.</p> <p>The BCWS staff are working with a number of partners and stakeholders to conduct prescribed burns. Over 1,000 hectares were treated with prescribed fire in the spring of 2019 and additional burns are being planned for this fall and subsequent years.</p> <p>The FESBC also funds prescribed burning projects to reduce wildfire risk on provincial Crown land.</p>	Development of the new prescribed fire program will continue through 2019.
52.	Increase the number of basic firefighters by providing open access to S-100 training for all natural resource sector staff, industry, First Nations, communities, ranchers and other tenure holders.	Alternate Approach Used	Preliminary analysis indicates that training is widely available and not a barrier.	The BCWS is focusing efforts on building industry and stakeholder partnerships and mechanisms to encourage joint response opportunities.
53.	Increase the competency and effectiveness of containment teams by creating a training	Substantial Improvement	The BCWS is working with local stakeholders and industry to identify equipment inventories, roles and responsibilities, and options for	The BCWS held Industry Engagement Workshops in every Fire Zone in 2019, which were hailed as very successful. This process will

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
	<p>course, mentoring program and assessment system that emphasizes the role of professional forestry, the need for fire behaviour knowledge and the value and capacity of heavy equipment teams. Ensure courses are available to equipment operators, line locators, strike team leads and others involved in fire containment and fireguard construction.</p>		<p>assisting with containment and fire suppression.</p> <p>The use of the industry equipment strike team model will be expanded throughout the Province to support initial attack efforts. These strike teams are a combination of heavy equipment, operators and line locator personnel that can be quickly deployed in response situations.</p> <p>In 2019, the BCWS held multiple Industry Engagement Workshops in preparation for the 2019 wildfire season in every Fire Centre across the province. One objective of these workshops was to further increase the effectiveness of containment teams through industry contribution to firefighting efforts.</p> <p>The Joint Forest Industry BCWS Working Group, established in Spring 2019, provides for a stable forum to identify partnership opportunities and address mutual concerns to increase contracting efficiency, strike team models and incorporating local knowledge into fire suppression operations.</p>	<p>be utilized every year.</p> <p>The BCWS will confirm new stakeholder processes and mechanisms for registration and participation in containment with the BCWS.</p> <p>Building on the success of the 2019 Industry Engagement Workshops, the BCWS has confirmed calendarized, sustained engagement with partners, and will continue to utilize this approach.</p>
54.	<p>Mandate the insurance industry to create an incentive program to encourage a proactive approach to emergency preparedness, such as insurance-saving for building structures with fire resistant materials.</p>	<p>Complete (Ongoing)</p>	<p>The Insurance Bureau of Canada has now been made an ex-officio member of the BC FireSmart Committee, in order to more effectively incorporate insurance industry considerations (such as the use of incentives) into FireSmart planning.</p> <p>Many insurance providers already incorporate FireSmart principles into insurance rating structures.</p>	<p>The members of the BC FireSmart Committee will continue to explore long term approaches to enhancing incentives for safe behavior and improving resiliency.</p> <p>BCWS and OFC continue to work with the IBC to inform citizens of the existing benefits of utilizing fire resistant materials.</p>

	Recommendation	Status	Action to date	Next steps
			The existing legislative framework currently precludes the Province from “mandating” any action by insurance provider in terms of providing incentives.	
55.	Increase and sustain funding for wildland fire research and applied research in the fields of ecology, fire science, social science and economics to provide up-to-date, BC-focused information as the basis for land management decisions and strategies.	Complete (Ongoing)	<p>The National Blueprint for Wildland Fire Science has been published and B.C. is continuing to work with federal, provincial and territorial partners to implement science projects of mutual significance. The BCWS recently joined the Canadian Partnership – a research consortium that will help to advance the implementation of the Blueprint for Wildland Fire Science in Canada (2019-2029).</p> <p>The BCWS is either leading or partnering on research and innovation projects to advance wildfire understanding and efforts. The BCWS participated in fifteen pilots and trials in 2019, including drones, detection, scanning, mapping and connectivity.</p> <p>The Emergency Management Technology Cluster is working with the BCWS Predictive Services Unit to enhance real-time decision making tools.</p> <p>The BCWS is working with ENV’s Climate Action Secretariat and FLNRORD’s Climate Change Branch on climate change adaptation science research projects to advance understanding of natural hazards such as wildfire.</p> <p>In 2019/20, the BCWS is investing \$1.2 million in research and innovation, including \$950,000 to the Canadian Partnership for Wildland Fire</p>	<p>The Province will continue to support the implementation of priority initiatives to support the Blueprint for Wildland Fire Science Strategic Plans.</p> <p>The BCWS continues to prioritize research priorities for 2019/20 and beyond, where initial signs are pointing to focused efforts in presumption diseases (smoke inhalation), fuel treatment efficacy, health and safety, and other key areas.</p> <p>Public engagement on climate change adaptation and risks (including wildfire) is planned for 2019. A provincial climate preparedness and adaptation strategy is planned for 2020. This provincial initiative is being led by ENV’s Climate Action Secretariat.</p>

	Recommendation	Status	Action to date	Next steps
			<p>Science to advance research in fuel treatment efficacy, presumptive diseases, and other research priorities, and \$250,000 to FPInnovations for field equipment testing. For subsequent years, the BCWS will invest up to \$1 million annually. The BCWS is engaging with academic institutions to conduct practical research. Institutions include the University of Northern BC, University of British Columbia, University of Alberta and the Bulkley Valley Research Centre.</p> <p>The BCWS is an FPInnovations voting member for 2019/20. FPInnovations is assisting in equipment/innovation testing as it pertains to BCWS priorities.</p> <p>In March 2019, the BCWS held a Research and Innovation Symposium to guide future Research and Innovation priorities. BCWS intends to continue this practice.</p> <p>The BCWS added 20 additional staffing resources to manage priority projects and initiatives, such as research. A new Project Management Office was developed to provide oversight and rigour, while five new research technicians were added to coordinate research and innovation projects.</p>	
56.	Canada is encouraged, during its 2019 review of gas tax criteria, to permit the use of gas taxes for fire service infrastructure and equipment.	Complete (Provincial Action Complete)	<p>In late 2018, Infrastructure Canada circulated a second call to provinces for amendments to be considered during a federal government mid-point review of the Gas Tax Agreement.</p> <p>The Province formally requested in May 2019 that fire services infrastructure be added as a</p>	The Province will continue to advocate for the inclusion of fire services infrastructure as an eligible item under the Gas Tax Agreement within the Disaster Mitigation category.

	Recommendation	Status	Action to date	Next steps
			new eligible expense item, within the Disaster Mitigation category. Infrastructure Canada advised that it was not prepared to consider the proposal at this time. The next scheduled opportunity to consider this proposal is in 2024, when the current Gas Tax Fund agreements conclude.	
57.	B.C. and Indigenous governments review traditional First Nations burning practices for their applicability and suitability for future forest and fuel management.	Underway	<p>In 2019/20, funding was increased to provide for the development of a multi-year prescribed fire program. FLNRORD is developing a comprehensive prescribed fire program, including a curriculum and training component to build capacity and increase knowledge regarding prescribed fire. This includes working with FNESS to develop modules on utilizing First Nations traditional knowledge.</p> <p>The BCWS staff are working with a number of partners and stakeholders to conduct prescribed burns. Over 1,000 hectares were treated with prescribed fire in the spring of 2019 and additional burns are being planned for this fall and subsequent years.</p> <p>The FESBC also funds prescribed burning projects as a way to reduce wildfire risk on provincial Crown land.</p>	<p>The BCWS will continue to work with FNESS to support planning with First Nations through the CRI program. Community wildfire resiliency planning processes are currently being developed in consultation with First Nations communities. New and existing community and fuel management planning processes will work to incorporate local Indigenous Knowledge when identifying opportunities for prescribed fire and other fuel management activities in consideration of values at risk on the landscape.</p> <p>Development of the new prescribed fire program will continue through 2019.</p>
58.	Canada, B.C. and Indigenous governments collaborate to ensure reserve lands qualify for funding for forest fuel management and flood mitigation activities. Ensure a shared understanding of opportunities is built among eligible communities.	Complete	<p>The Community Resiliency Investment program provides funding to local governments and First Nations to engage in wildfire risk reduction and FireSmart activities in and around communities. This is a \$60 million dollar program with an annual intake. 2019 CRI intake (as of October, 2019) by the numbers:</p> <ul style="list-style-type: none"> <li>• Total approved applications: 128</li> <li>• Total approved funding: \$9,820,758.15</li> </ul>	<p>The Province will continue to invest in the CRI program, which includes First Nations land.</p> <p>The Province will continue to work with the Government of Canada to assess opportunities for infrastructure funding for flood mitigation, including on First Nations land.</p> <p>ISC will continue to work with First Nations,</p>

	Recommendation	Status	Action to date	Next steps
			<ul style="list-style-type: none"> <li>• Total First Nations approved: 52</li> <li>• Total local governments approved: 76</li> </ul> <p>FNESS is a member of the Community Resiliency Investment program management team and facilitates engagement with First Nations.</p> <p>In September 2019, the B.C. government created the Forest Worker Support Program which in part allocated \$15 million to establish a short-term employment program on fire prevention and community resiliency projects. This program is administered by FLNRORD.</p> <p>The federal Budget 2019 included new funding to support emergency management and resilience on-reserve. Under non-structural mitigation, ISC can support flood risk, geotechnical and other assessments to inform local planning and emergency preparedness. Budget 2019 also included additional funding for FireSmart. These funds will support fuel mitigation, as well as other activities to reduce wildfire risk and build related capacity.</p> <p>The Province of B.C. funds the Community Emergency Preparedness Fund (CEPF), a suite of funding programs administered by the Union of BC Municipalities (UBCM). The CEPF is intended to enhance the resiliency of local governments, First Nations and communities in responding to emergencies. Flood mitigation funding-specific streams and deadlines are as follows:</p> <ul style="list-style-type: none"> <li>• Structural Flood Mitigation – Deadline:</li> </ul>	<p>their representative organizations and the Province to foster a shared understanding of funding and other opportunities to support emergency management and resilience on-reserve.</p> <p>The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.</p>

	Recommendation	Status	Action to date	Next steps
			<p>October 25, 2019</p> <ul style="list-style-type: none"> <li>Flood Risk Assessment, Flood Mapping &amp; Flood Mitigation Planning – Deadline: January 24, 2020</li> </ul>	
59.	<p>As part of the broader shift to a more coordinated, portfolio approach to risk reduction, identify the Forest Enhancement Society of BC (FESCB) as the primary public agency for the delivery of publicly subsidized fuel management initiatives and, through Union of BC Municipalities’ representation on the FESBC board, draw on Strategic Wildfire Prevention Initiative experience.</p>	Complete (Ongoing)	<p>The Community Resiliency Investment (CRI) program allows for a more coordinated, portfolio approach to wildfire risk reduction for communities. The CRI program is intended to provide a streamlined funding intake for communities in partnership with UBCM, FNESS, and the FESBC to provide an alignment of wildfire mitigation activities on the land base.</p> <p>CRI is a \$60 million dollar program with an annual intake. 2019 CRI intake (as of October, 2019) by the numbers:</p> <ul style="list-style-type: none"> <li>Total approved applications: 128</li> <li>Total approved funding: \$9,820,758.15</li> <li>Total First Nations approved: 52</li> <li>Total local governments approved: 76</li> </ul> <p>As part of a more comprehensive risk reduction effort, the B.C. government has committed up to \$25 million per year for the next three years under the Crown Land Wildfire Risk Reduction category. This category is administered by FLNRORD.</p> <p>In September 2019, the B.C. government created the Forest Worker Support Program which in part allocated \$15 million to establish a short-term employment program on fire prevention and community resiliency projects. This program is administered by FLNRORD.</p> <p>The BC FireSmart Committee will provide</p>	<p>The first CRI application intake closed on December 7, 2018. The most recent application intake closed October 18, 2019.</p> <p>The Province will continue to support wildfire mitigation initiatives.</p>

	Recommendation	Status	Action to date	Next steps
			guidance and project prioritization advice for which applications are eligible for funding.	
60.	Canada, B.C., and First Nations and local governments collaborate to reduce vulnerability and incentivize the building of more resilient structures by adjusting building codes, regulations, bylaws and development permit requirements to encourage the use of fire-resistant building materials.	Further Analysis / Discussion Required	<p>Local governments have the authority to establish technical recommendations for the exterior design and finish of buildings within a Development Permit Area established for the objective of wildfire hazard management. Under these authorities, local governments have the ability to implement the technical recommendations found in the BC Edition of the Homeowners' FireSmart Manual.</p> <p>The Province is actively working on measures that would provide local governments more flexibility to determine their own building requirements for floodplains and Development Permit Areas for other types of hazards (e.g. landslides).</p> <p>Under the 2018 Building Back Better Strategy Guide (<a href="http://www.sac-isc.gc.ca/eng/1534954506773/1535121720820">http://www.sac-isc.gc.ca/eng/1534954506773/1535121720820</a>), ISC can now contribute to mitigative enhancements in the recovery process so that infrastructure is more resilient to future emergency events.</p> <p>The federal Budget 2019 provided resources to establish an Indigenous Fire Marshal Office (<a href="https://www.ifmo.ca/">https://www.ifmo.ca/</a>). This will be a First Nations-led institution that will promote fire safety and prevention, establish standards, support training, provide subject matter expertise, undertake public education, and establish programs and services including Wildland Urban Interface response.</p>	<p>The Province will work with other levels of government, including First Nations governments, to identify opportunities to reduce wildfire vulnerability.</p> <p>As part of the <i>Emergency Program Act</i> modernization, the Province is proposing policy direction that Local Authorities give greater consideration of current and future risk and mitigation requirements in high hazard zones. It expected that this proposal will result in further discussions with local government on potential measures to reduce the risk and improve resiliency of developments wildland interface zones.</p> <p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p>

	Recommendation	Status	Action to date	Next steps
			<p>The OFC can provide guidance with respect to writing and putting into practice bylaws to support Fire Codes.</p> <p>The Province, through EMBC and BCWS, continues to work with the federal government to identify opportunities to better integrate efforts to provide a whole of government/ society approach to increasing hazard resilience in Canada.</p>	
61.	The Ministry of Forests, Lands, Natural Resource Operations and Rural Development, Ministry of Environment and Climate Change, Ministry of Health and other applicable ministries reconcile existing statutes limiting more extensive use of traditional and prescribed burning.	Underway	<p>In 2019/20, funding was increased to provide for the development of a multi-year prescribed fire program. FLNRORD is developing a comprehensive prescribed fire program, including a curriculum and training component to build capacity and increase knowledge regarding prescribed fire. This includes working with FNESS to develop modules on utilizing First Nations traditional knowledge.</p> <p>The BCWS staff are working with a number of partners and stakeholders to conduct prescribed burns. Over 1,000 hectares were treated with prescribed fire in the spring of 2019 and additional burns are being planned for this fall and subsequent years.</p> <p>The FESBC also funds prescribed burning projects as a way to reduce wildfire risk on provincial Crown land.</p>	Development of the new prescribed fire program will continue through 2019.
62.	B.C. Wildfire Service eliminates the rotation of Incident Management Teams (IMTs) to various fires prior to containment. Support IMTs by	Complete	New protocols established for days of rest. Rotation eliminated to the degree operationally possible.	

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
	creating specialized respite teams to transition and backfill IMTs or develop an alternate respite strategy.			
63.	B.C. Wildfire Service (BCWS) to be operationally reintegrated into regional operations of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD). Ensure land management in the areas of prevention and preparedness are achieved by maximizing the collective focus on initiatives and results.	Complete	An Associate Deputy Minister was appointed to oversee FLNRORD Operations and the BCWS.	Program level integration efforts continue.
64.	Undertake a portfolio approach to prevention where all possible partners are identified, collaborate to reduce risk, and assess performance and success at the portfolio level, including: <ul style="list-style-type: none"> <li>• Forest licensees</li> <li>• Partnerships between B.C. Wildfire Service and First Nations communities</li> <li>• Private land owners</li> <li>• Federal, First Nations and local governments</li> <li>• Ministry of Environment and Climate Change, including B.C. Parks</li> <li>• Ministry of Forests, Lands, Natural Resource Operations and Rural Development</li> <li>• Funding partners (current examples include: Forest</li> </ul>	Underway	<p>Specialists and Land Managers (including BC Parks) are contributing to integrated investment plans that encompass all Crown land priorities for fuel mitigation treatments. These planning initiatives will also be linked to community and First Nations wildfire mitigation plans and will support the FESBC and the Community Resiliency Investment (CRI) program funding initiatives.</p> <p>The CRI program provides funding to local governments and First Nations to engage in wildfire risk reduction and FireSmart activities in and around communities. This is a \$60 million dollar program with an annual intake. 2019 CRI intake (as of October, 2019) by the numbers:</p> <ul style="list-style-type: none"> <li>• Total approved applications: 128</li> <li>• Total approved funding: \$9,820,758.15</li> <li>• Total First Nations approved: 52</li> </ul>	<p>The BCWS will continue to move the prevention initiatives noted forward.</p> <p>The first Community Resiliency Investment program application intake closed on December 7, 2018. The most recent application intake closed October 18, 2019. FLNRORD and partners continue to evaluate CRI program for opportunities to improve. The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p>

	Recommendation	Status	Action to date	Next steps
	Enhancement Society of B.C. and Strategic Wildfire Prevention Initiative).**		<ul style="list-style-type: none"> <li>Total local governments approved: 76</li> </ul> <p>The new CRI program funding program enables enhanced coordination among landholders for wildfire prevention.</p> <p>The BCWS is providing \$400,000 to the Association of BC Forest Professionals to develop fire-related professional development sessions, which provide guidance on the use of fire and management of fire risk when planning forestry operations.</p> <p>A FLNRORD/ENV government Prescribed Fire Steering Committee has been established.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government’s intent to enhance collaborative planning and partnerships by recommending that Local Authorities be required to provide plans to neighbouring jurisdictions, including First Nations and other Local Authorities.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government’s intent to improve hazard &amp; risk identification activities by recommending legislative and regulatory requirements for Local Authorities to identify, understand and assess hazards, risks, and vulnerabilities, and establish associated mitigation plans for risks and consequences. The discussion paper also recommends that sustainable long-term mitigation measures be</p>	

	Recommendation	Status	Action to date	Next steps
			<p>required when building and development is approved in hazardous areas.</p> <p>The recently released discussion paper on the modernization of the Emergency Program Act (EPA) signals government's intent to enhance the standardization of emergency management programs and plans by establishing a comprehensive list of requirements, including hazard, risk and vulnerability assessments, mitigation plans, response, recovery, business continuity plans, training, exercising, and a review cycle.</p>	
65.	Encourage the establishment of area-based tenures adjacent to Indigenous reserves and non-Indigenous communities, where not already established as community forests, woodlots, tree farm licenses, or First Nation woodland licenses.**	Underway	The BC Community Forest Association has been exploring the feasibility of expanding small area-based tenures in proximity to communities and has produced a report for FLNRORD's review.	FLNRORD and the BC Community Forest Association are now jointly exploring the feasibility of expanding some existing Community Forests based on specified criteria and/or local opportunities.
66.	Fire be established as a management objective in the Forest and Range Practices Act and other applicable legislation and regulation to encourage fire as a part of land management.**	Underway	FLNRORD is reviewing the Forest and Range Practices Act and regulations to assess and consider an alternative forest planning framework to improve the Province's ability to manage landscape-scale disturbances such as wildfire.	<p>FLNRORD will assess and consider a new forest planning framework to improve the management of landscape-scale disturbances such as wildfire.</p> <p>FLNRORD will propose amendments to the Forest Range Practices Act this fall to establish a new planning regime better equipped to manage large scale disturbance such as wildfire.</p> <p>Further amendments will enable interim</p>

	Recommendation	Status	Action to date	Next steps
				improvements including establishing the authority to create a new wildfire objective and new rules in the forest-community interface to reduce fire hazard and prioritize community safety.
67.	Create mechanisms to encourage fire prevention activities such as thinning, biomass utilization, targeted grazing and alternate species and densities.	Complete (Ongoing)	<p>The Community Resiliency Investment program provides funding to local governments and First Nations to engage in wildfire risk reduction and FireSmart activities in and around communities. This is a \$60 million dollar program with an annual intake. 2019 CRI intake (as of October, 2019) by the numbers:</p> <ul style="list-style-type: none"> <li>• Total approved applications: 128</li> <li>• Total approved funding: \$9,820,758.15</li> <li>• Total First Nations approved: 52</li> <li>• Total local governments approved: 76</li> </ul> <p>The Chief Forester released Fire Management Stocking Standard Guidance in 2016 to encourage reduced stocking within the Wildland/Urban Interface.</p> <p>In addition to the above, the FESBC is funding a number of biomass utilization projects.  <a href="https://news.gov.bc.ca/releases/2019FLNR0017-000178">https://news.gov.bc.ca/releases/2019FLNR0017-000178</a></p> <p>On August 6, 2019, FESBC issued an invitation for project proposals for Carbon Emission Reduction – Fibre Utilization projects:  <a href="https://www.fesbc.ca/applying-for-funding.html">https://www.fesbc.ca/applying-for-funding.html</a></p> <p>The Coast Forest Sector Revitalization Initiative, announced in 2019, will be implemented through a series of legislative, regulatory and</p>	<p>The first Community Resiliency Investment program application intake closed on December 7, 2018. The most recent application intake closed October 18, 2019. FLNRORD and partners continue to evaluate CRI program for opportunities to improve.</p> <p>As part of CleanBC, the Province will support the production of 650 million litres of renewable fuels per year by 2030 and make industrial natural gas consumption cleaner by putting in place a minimum requirement of 15% to come from renewable gas. These measures are expected to support increased biomass utilization over the medium term.</p>

	Recommendation	Status	Action to date	Next steps
			policy changes over the next two years. Changes are inclusive of waste policy and supporting CleanBC's renewed bioenergy strategy. <a href="https://news.gov.bc.ca/releases/2019PREM0003-000046">https://news.gov.bc.ca/releases/2019PREM0003-000046</a>	
68.	Expand FireSmart community objectives to become broad-based objectives for all of British Columbia. Establish a governance structure to support implementation, monitoring and continuous improvement of FireSmart objectives.**	Complete	The BC FireSmart Committee continues to expand its activities and impact. 2018/19 outcomes included expanded workshops and training, as well as a social media awareness campaign that includes a new public website and promotional videos.  The Insurance Bureau of Canada has now been made an ex-officio member of the BC FireSmart Committee, in order to more effectively incorporate insurance industry considerations (such as the use of incentives) into FireSmart planning.	The BC FireSmart Committee will continue to promote FireSmart objectives to reduce wildfire risk.  The members of the BC FireSmart Committee will continue to explore long term approaches to enhancing incentives for safe behavior and improving resiliency.
69.	Review existing land use plans to ensure that the location of Old Growth Management Areas, ungulate winter ranges, visual corridors and other land-use designations does not preclude the reduction of wildfire risk adjacent to communities.	Underway	Land use objectives are reviewed post-wildfire for the need for revision. FLNRORD updates Fire Management Plans for each natural resource district each year.	The Province will incorporate wildfire risk reduction in updating fire management plans. FLNRORD will propose amendments to the Forest Range Practices Act this fall to establish a new planning regime better equipped to manage large scale disturbance such as wildfire.  Further amendments will enable interim improvements including establishing the authority to create a new wildfire objective and new rules in the forest-community interface to reduce fire hazard and prioritize community safety.
70.	B.C. review the effectiveness and utility of existing fire management plans and adjust	Underway	FLNRORD staff are developing more comprehensive Fire Management Plans to provide more specific information needed for	The Province will continue to pursue these initiatives to improve prevention and the effectiveness of fire management plans that are

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	accordingly to meet the needs for use during emergencies.		<p>Incident Management Teams. These plans now provide information on priority values, fire effects, suppression considerations and constraints and any known hazards threatening first responder safety.</p> <p>FLNRORD is moving toward Fire Management Plans that are risk-based, focusing efforts in terms of suppression considerations and pre-wildfire mitigation.</p> <p>Land planning staff work closely with BCWS Fire Centres to ensure quality and effectiveness of Fire Management Plans.</p>	more risk based focused.
71.	Encourage existing licensees to participate in risk reduction and treatment of interface areas by addressing existing disincentives and creating opportunities through statute, regulation or other mechanisms.	Further Analysis / Discussion Required		FLNRORD will continue to assess opportunities to further encourage wildfire risk reduction activities in addition to those offered through Community Resiliency Investment program and the FESBC.
72.	Support Ministry of Forests, Lands, Natural Resource Operations and Rural Development initiatives related to bioenergy. Encourage and accelerate their implementation with a strong consideration to promoting fuel management.	Underway	As part of the Coast Forest Sector Revitalization Initiative, FLNRORD has established Fibre Recovery Zones on the Coast and is able to establish such zones in the Interior where there is a demand for lower quality residual fibre. In these zones, new tools are available to improve fibre utilization including: do not burn orders and new residual fibre tenures for secondary users.	FLNRORD is considering how fibre can be used for purposes such as bioenergy as part of the Province's CleanBC strategy.
73.	B.C. expeditiously determine the condition, vulnerability and effectiveness of the Province's 500 kilometers of dikes through use of leading edge	Substantial Improvement	The Province is undertaking a dike crest and alignment survey of all dikes in the province (1,100 km) and an orphan dike assessment (100 in the province) both of which are anticipated to be complete in 2019/2020.	The Province will continue to assess B.C.'s dikes and will actively pursue infrastructure funding to address diking needs.

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	technologies and expertise. In collaboration with Indigenous governments, Canada and B.C. assess and reconcile the absence of dikes in First Nations communities.		<p>The Province is undertaking a dike consequence classification for all dikes, amongst other projects.</p> <p>The Province has also funded several projects to determine and improve the condition of diking infrastructure across the province, including several projects with First Nations regarding dikes in their communities.</p> <p>Through the National Disaster Mitigation Program, the Community Emergency Preparedness Fund, and other EMBC funds, the Province has funded many flood mapping studies that help communities gain a better understanding of their 200-yr flood elevations.</p> <p>The responsibility for dikes rests with Local Authorities. First Nations will need to work with ISC to identify diking locations, construct diking infrastructure, and determine operation and maintenance responsibilities and scheduling.</p>	
74.	As part of overall emergency management, B.C. undertake hazard risk mapping exercises and educational campaigns in communities vulnerable to crisis situations along major transport routes, such as pipelines, railways and highways.	Substantial Improvement	<p>EMBC participates in and contributes to community-level Hazard, Risk and Vulnerability Analysis (HRVA) processes. EMBC provides a HRVA tool to communities to assess their risks. A preliminary version of the updated tool is currently being piloted with interested First Nations and Local Authorities, and the final version will be shared broadly once completed. Local Authorities and First Nations can contact their EMBC Regional Office to request access to the pilot version of the tool.</p> <p>Local communities work with critical</p>	<p>EMBC and other provincial agencies will continue to support Local Authorities in their hazard assessment and exercising activities.</p> <p>The Province will continue to work with First Nations and Local Authorities on the development and release of the HRVA tool.</p> <p>The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.</p>

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			<p>infrastructure owners on assessments and exercises specific to a given area or route.</p> <p>The Province of B.C. funds the Community Emergency Preparedness Fund (CEPF), a suite of funding programs administered by the Union of BC Municipalities (UBCM). The CEPF is intended to enhance the resiliency of local governments, First Nations and communities in responding to emergencies. Mitigation funding-specific streams and deadlines are as follows:</p> <ul style="list-style-type: none"> <li>• Structural Flood Mitigation – Deadline: October 25, 2019</li> <li>• Flood Risk Assessment, Flood Mapping &amp; Flood Mitigation Planning – Deadline: January 24, 2020</li> </ul>	
75.	<p>B.C. increase the use of traditional and prescribed burning as a tool to reduce the risk associated with landscape and local-level hazards, and to regenerate ecosystems. B.C. expand the window for traditional and prescribed burns by modifying how the venting index determines burn windows, including recognizing the difference between burns following timber harvest and burns as part of a wildfire risk-reduction prescription.**</p>	Underway	<p>In 2019/20, funding was increased to provide for the development of a multi-year prescribed fire program. FLNRORD is developing a comprehensive prescribed fire program, including a curriculum and training component to build capacity and increase knowledge regarding prescribed fire. This includes working with FNESS to develop modules on utilizing First Nations traditional knowledge.</p> <p>The Ministry of Environment and Climate Change Strategy (ENV) finalized its proposed revisions to the <i>Open Burning Smoke Control Regulation</i> (OBSCR). Information on the proposed changes can be found <a href="#">here</a>. Implementation of the revisions has begun as of September 15, 2019.</p> <p>The BCWS staff are working with a number of partners and stakeholders to conduct</p>	<p>Development of the new prescribed fire program will continue through 2019. The updated OBSCR provides additional flexibility to allow for community wildfire risk reduction activities in both the high and medium smoke sensitivity zones.</p>

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			<p>prescribed burns. Over 1,000 hectares were treated with prescribed fire in the spring of 2019 and additional burns are being planned for this fall and subsequent years.</p> <p>The FESBC, Provincial Ecosystem Restoration program, and Habitat Conservation Trust, also fund prescribed burning projects as a way to reduce wildfire risk on provincial Crown land while achieving habitat and other land management objectives.</p>	
76.	B.C. investigate and assess the possibility of a prescribed burn statute that would offer protection for responsible and permitted burners.	Complete	<p>In 2019/20, funding was increased to provide for the development of a multi-year prescribed fire program. FLNRORD is developing a comprehensive prescribed fire program, including a curriculum and training component to build capacity and increase knowledge regarding prescribed fire. This includes working with FNESS to develop modules on utilizing First Nations traditional knowledge.</p> <p>The BCWS staff are working with a number of partners and stakeholders to conduct prescribed burns. Over 1,000 hectares were treated with prescribed fire in the spring of 2019 and additional burns are being planned for this fall and subsequent years.</p>	The BCWS will work with partners on the prescribed and managed wildfire projects. Any required legislative or regulatory implication requirements will be considered as part of this work.
77.	B.C. re-evaluate the position of carbon-loading counts, specifically the exemption of carbon released by wildfires and the inclusion of carbon released from prescribed burning.	Alternate Approach Used	The Province believes it is important to follow international guidelines on carbon accounting. Canada, through the Canadian Forest Service, is involved in developing and revising these guidelines and consults with the provinces, through the National Forest Sinks Committee when changes are contemplated.	
78.	B.C. Ministry of Transportation and Infrastructure incorporate	Complete	Messaging on digital highway signs is updated as needed.	

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	additional fire prevention messaging into digital message signage, particularly during times of extreme fire danger.			
79.	Increase disaster awareness among British Columbians by leveraging existing resources, such as PreparedBC and expanding its reach to be more prominent, interactive and dynamic.	Complete (Ongoing)	<p>EMBC launched the PreparedBC Facebook page in April, 2019, which joined the @PreparedBC Twitter feed as a place for the public to engage on the subject of readiness.</p> <p>The BC FireSmart Committee continues to expand its activities and impact. 2018/19 outcomes included expanded workshops and training, as well as a social media awareness campaign that includes a new public website and promotional videos. The BCWS will also be using Gender-Based Analysis Plus (GBA+) assessments on FireSmart materials.</p> <p>The PreparedBC website has undergone a content and user design update, making preparedness information and resources more accessible to British Columbians.</p> <p>PreparedBC is in the process of updating its complete guide library to reflect the findings of the PreparedBC survey of Local Authorities. Other changes include:</p> <ul style="list-style-type: none"> <li>• Incorporating the principles of mitigation, preparedness, response and recovery to give a complete picture of the disaster cycle and the role of citizens at each stage;</li> <li>• Incorporating feedback from the PreparedBC Local Authority survey;</li> <li>• Improving inclusivity by using more graphics to overcome literacy barriers;</li> <li>• Completing a GBA+ analysis of all content;</li> </ul>	EMBC and the BCWS will undertake ongoing review and assessment of program changes to ensure they're effective. The members of the BC FireSmart Committee will continue to explore long term approaches to enhancing incentives for safe behavior and improving resiliency.

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			<p>and,</p> <ul style="list-style-type: none"> <li>Incorporating relevant feedback collected as part of the Master of Disaster Indigenous Partnerships Project.</li> </ul> <p>PreparedBC has revised the Master of Disaster school program (grades 4 to 8) to ensure the material is inclusive and accessible to all B.C. youth. The revision incorporates feedback from public school teachers and the Indigenous Partnerships Project, which worked directly with 10 Indigenous communities across BC.</p> <p>PreparedBC continues to promote and grow the Partners in Preparedness retail program aimed at making it easier for British Columbians to build household emergency kits and grab-and-go bags. BCWS has expanded the use of social media to include public awareness information such as response tactics, fire risk, preparedness, prevention and prescribed fire.</p>	
80.	To increase the resiliency of B.C.'s ecosystems and communities against climate change, B.C. establish a predictable and stable revenue stream to provide enhanced investment in prevention and preparedness. B.C. consider a new carbon tax revenue stream as a source of funds.**	Further Analysis / Discussion Required	<p>In December 2018 government released the CleanBC plan including a commitment to develop a provincial climate preparedness and adaptation strategy for release in 2020.</p> <p>Climate Action Secretariat released the Preliminary Strategic Climate Risk Assessment for BC in July 2019 to inform development of the strategy. ENV conducted 10 regional engagement workshops on strategy development with Indigenous Peoples in June 2019. Strategy development process and governance established.</p>	<p>Additional Indigenous engagement and broad citizen, stakeholder and local government engagement is planned to launch in fall 2019 and continue through early January 2020. A "what we heard" report is planned for release in January 2020 followed by a policy intentions paper in late February 2020. Engagement on the policy intentions paper is planned to continue through spring 2020, followed by release of the strategy in late fall.</p> <p>Any potential expenditure or revenue implications of cross-government climate change adaptation activities will be considered as planning progresses.</p>

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81.	B.C. develop integrated wildfire risk management strategies to guide and prioritize the expenditure of funds through a single source and ensure that expenditures reflect community risk rather than a community's ability to participate financially.	Complete	<p>The Community Resiliency Investment program provides funding to local governments and First Nations to engage in wildfire risk reduction and FireSmart activities in and around communities. This is a \$60 million dollar program with an annual intake. 2019 CRI intake (as of October, 2019) by the numbers:</p> <ul style="list-style-type: none"> <li>• Total approved applications: 128</li> <li>• Total approved funding: \$9,820,758.15</li> <li>• Total First Nations approved: 52</li> <li>• Total local governments approved: 76</li> </ul> <p>The BCWS publicly released the Provincial Strategic Threat Analysis (PSTA) in the Summer, 2019. This information provides a multitude of variables related to fire threat (e.g. fuel type, topography, past fire behaviour) to determine broad based classes of fire threat to better inform decisions on fire prevention investments and activities.</p>	The first Community Resiliency Investment program application intake closed on December 7, 2018. The most recent application intake closed October 18, 2019. FLNRORD and partners continue to evaluate CRI program for opportunities to improve.
82.	Collaborate with local Indigenous and non-Indigenous communities in response efforts. Local support could include additional capacity of forest professionals on containment teams, local knowledge liaisons, equipment operators and firefighters.	Complete (Ongoing)	<p>The BCWS has partnered with FNESS and ISC on a strategy to deliver training required for Type 2 and Type 3 firefighting crews. FNESS organized the delivery of four training sessions in March / April of 2019, supported by \$150,000 from the BCWS and \$95,000 from ISC. The training sessions were four days long and covered the required training for Type III fire crews. Through this partnership, FNESS is also building an inventory of First Nations communities to understand what communities have trained crews, where the gaps are, and where to focus future training sessions.</p> <p>Guidance is being provided to interested Indigenous communities to respond to master</p>	The BCWS will continue to meet regularly with Indigenous communities to discuss communications, firefighter recruitment opportunities and contract opportunities. FNESS, BCWS, and ISC will coordinate the delivery of additional training sessions in the spring of 2020.

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			<p>standing offer requests to supply Type 3 firefighting crews. The BCWS is also providing advice to Indigenous communities interested in upgrading their existing Type 3 crews to Type 2 crews.</p> <p>Based on a pilot project in Alexis Creek in Winter 2018/19, the BCWS is continuing to develop a First Nations firefighter recruitment strategy to implement throughout B.C. These efforts will continue throughout winter 2019/20 as BCWS recruits for the 2020 wildfire season.</p> <p>The BCWS held joint training workshops with forest industry crews to better assist in wildfire response throughout the province in spring 2019.</p>	
83.	When circumstances allow, emergency managers and responders should consider having First Nations stay in their traditional territories, or with nearby Indigenous communities that can provide culturally appropriate assistance and support, with specific attention paid to Elders and those with special needs.	Complete	<p>The Evacuation Operational Guide, released in spring 2019, reinforces the recommendations for communities to evacuate their residents to communities that are similar to their own. This is facilitated by fostering proactive relationships with neighbouring communities to make sure they are there to receive and care for another community's evacuees when the time comes. The Evacuation Operational Guide also provides recommendations on how communities can support their evacuees through provision of Community Navigators, proactive planning, and supporting the applicable host community through all phases of an evacuation.</p> <p>In an evacuation, this is within the scope of the First Nation evacuation plans. A clear policy on</p>	EMBC distributed the updated Evacuation Operational Guide in spring 2019. EMBC will continue to engage with emergency management partners to gather feedback on the updated Evacuation Operational Guide, and continue to update them where appropriate.

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			reimbursement to host a neighbouring community has been developed.	
84.	The Office of the Fire Commissioner, in conjunction with the B.C. Wildfire Service, be encouraged to develop a strategy that supports First Nations communities and rural and remote communities that lack capacity for fully resourced fire departments but seek emergency training and response capacity.	Underway	<p>The federal Budget 2019 included new funding to support emergency management and resilience on-reserve capacity, non-structural mitigation and preparedness. Under non-structural mitigation, ISC can support flood risk, geotechnical and other assessments to inform local planning and emergency preparedness. Budget 2019 also included additional funding for FireSmart. These funds will support fuel mitigation, as well as other activities to reduce wildfire risk and build related capacity.</p> <p>Under the 2018 Building Back Better Strategy Guide (<a href="http://www.sac-isc.gc.ca/eng/1534954506773/1535121720820">http://www.sac-isc.gc.ca/eng/1534954506773/1535121720820</a>), ISC can now contribute to mitigative enhancements in the recovery process so that infrastructure is more resilient to future emergency events.</p> <p>The OFC and the BCWS have established a training program for structural firefighters who respond to wildfire incidents, and the BCWS held over 50 sessions in 2019 training structural fire departments and staff in how to respond to wildfire incidents. Sessions were delivered throughout B.C. and were led by Structural Protection Specialists.</p> <p>On May 10 of this year, the Province provided \$5 million to the UBCM Community Emergency Preparedness Fund (CEPF) to provide funding to volunteer and composite fire departments from across B.C. to facilitate the delivery of</p>	<p>The OFC will continue to work with ISC and the Indigenous Fire Marshal Office project team to support First Nations.</p> <p>The OFC and the BCWS are committed to supporting the Structural Protection Program and ensuring that personnel and equipment are deployed, trained and led as needed to best protect residents and structures from wildfire.</p> <p>The OFC and the BCWS will continue to work with partners to deliver training for structural firefighters. The Province, working with UBCM, will continue to monitor CEPF to inform future funding priorities.</p>

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			firefighter training and to purchase new or replacement equipment: <a href="https://www.ubcm.ca/EN/main/funding/lgps/community-emergency-preparedness-fund/volunteer-composite-fire-department-training-equipment.html">https://www.ubcm.ca/EN/main/funding/lgps/community-emergency-preparedness-fund/volunteer-composite-fire-department-training-equipment.html</a>	
85.	B.C. improve interagency operations by developing a single, integrated system for identification and access permits at roadblocks. Ensure corridor routes during states of emergency remain open for as long as possible and reopen as quickly as possible following emergency events.**	Complete	EMBC and the BCWS have worked with provincial ministries, FNHA, FNESS, RCMP, ISC, and PSC; and First Nations and Local Authorities to develop a Managing Access into Areas Under Evacuation Order guide. This guide provides clear acknowledgement to the need for non-response related temporary access into evacuated areas, and provides First Nations and Local Authorities, as the authorizing agent for their jurisdictions, a permit template for managing such access.	EMBC will continue to engage with emergency management partners to gather feedback on the new Managing Access into Areas Under Evacuation Order guide, and continue to update them where appropriate.
86.	B.C. assess and evaluate the provincial Flood Response Plan for its use during emergencies. Assess and plan for gaps, with specific attention paid to supporting Plan implementation during floods.	Complete	In May 2018, the BC Flood Response Plan was updated internally, to reflect 2017 freshet experiences and lessons. A further update to reflect lessons from 2018 was released in May 2019 (see Recommendation #36).  The BC Flood Risk Strategy, under development, will review roles and responsibilities, and examine the current governance model.	The Province will continue work on a BC Flood Risk Strategy.
87.	B.C. Wildfire Service adjust policies and procedures to enable the earliest possible commencement of fire suppression activities without compromising worker safety.	Complete	The BCWS continually reviews and adjusts policies and standard operating procedures/guidelines to effectively and efficiently suppress fire through the BCWS resource centre and continual training.  In 2018, the BCWS included more night shifts on fires that safely allowed for this and also had firefighters start their day earlier to take	

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			advantage of more favourable weather conditions.	
88.	B.C. Wildfire Service, in partnership with other ministries, create a stronger linkage during emergencies between Incident Management Teams and local sector agency managers to support the transfer of local information to the Incident Commander.	Substantial Improvement	FLNRORD has established Joint Hazard Management Teams – a mechanism and process for bringing together land managers, emergency management and response functions together to strengthen collaboration and integrated management of natural hazards.  In 2019, new communication processes were put in place to increase collaboration between Incident Commanders and Local Authorities and Indigenous communities.	This process was tested in Kamloops Fire Centre in 2018, and is being expanded to all BCWS Fire Centres by 2020.
89.	Support a 'B.C. first' model for employment during emergencies where, as additional resources are required, qualified Indigenous and non-Indigenous companies, contractors and consultants from B.C. are selected first. Resources from other provinces and countries to be deployed after readily available B.C. employees have been deployed.**	Complete	The BCWS's policy is to exhaust all qualified B.C. personnel first prior to securing external resources. Selection of qualified suppliers is made based on operational requirements, including geographic proximity, availability, certification, and safety requirements and in consideration of forecasted need over several operational periods (see Recommendation #21).	The Province will continue to assess opportunities to make further use of local resources during response. Ministries will continue discussions with Indigenous and local companies and businesses to explore opportunities for availability and ideas that would support future business opportunities for Indigenous companies.
90.	Increase use of technology by frontline workers during response by incorporating the use of drones, real-time mapping and synchronization and the use of LiDAR technology to assess and assist with planning in all phases of emergency management.	Complete (Ongoing)	BCWS staff has been provided with increased access to technology, including tablet computers/iPads in the field and unmanned aerial vehicles (drones) to assist with fire mapping and infrared scanning.  Provincial agencies made increased use of technology in 2018 and 2019 including drones and Orthoimagery to increase the understanding of risks to communities.	Provincial agencies will continue to assess new technologies.  GeoBC will continue to collaborate and engage with First Nations and Local Authorities and provide access and training/orientation in use of the Rapid Damage Assessment app.

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			<p>In consultation with EMBC, GeoBC and Regional Geospatial Services has developed Flood Assessment and Rapid Damage Assessments (RDA) apps. The flood assessment app is used by FLNRORD for site level technical advice and investigation and making this information available in real time to decision makers in the PECC, PREOCs, and Emergency Operations Centres. These apps are available to Local Authorities and First Nations for both training and operational use. The RDA app is available to communities that need to conduct assessments following flooding, wildfires, and earthquakes.</p> <p>Two mobile apps were developed jointly by EMBC, GeoBC and Regional Geospatial Services to support reconnaissance and damage assessment in real time: “Aerial Damage Assessment” for Provincial Emergency Program (PEP) Air; and the “Map My Hazard App” for EMBC partner agencies.</p> <p>The Common Operating Picture platform continues to be enhanced, reflecting the input of users and contributors. It is available to emergency managers in communities.</p> <p>GeoBC has established a corporate program for Remote Piloted Aircraft Systems (RPAS) also known as drones. RPAS technology promises significant benefits to government in the collection and use of high quality data, with increased safety, less cost and less environmental impact.</p>	

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			<p>The Chilcotin area within the Cariboo Regional District experienced heavy flooding in early July, 2019. It is estimated that about 120 structures and several farm lands experienced water damage. As part of the post-disaster recovery efforts, the Cariboo Regional District requested EMBC and GeoBC to undertake a drone mission to assess damage to support post-disaster recovery process. The Ministry of Agriculture supported this process and continues to be engaged in recovery activities. The focus of this drone mission was to assess impacts to agriculture land/productivity and get more accurate estimates of weather-related crop damage.</p> <p>A representative from T̓silhqot'in National Government was invited to participate in the drone mission to learn about drone deployment and knowledge transfer for future joint missions. The BCWS piloted the use of night vision goggles to use in early detection and prioritization of response in the 2019 season. This technology is beneficial following lightning events in interface areas to assist with earlier detection and response.</p>	
91.	Develop a basic disaster response financing fund for communities to immediately access once an Emergency Operations Centre has been activated.	Complete (Ongoing)	<p>The Province provides reimbursement for response actions.</p> <p>EMBC continues to focus on increasing efficiencies to provide more timely payments for Local Authority response claims. EMBC and ISC are assessing opportunities within existing federal programs, such as the Emergency Management Assistance Program (EMAP), to fund First Nations</p>	<p>EMBC is working with Indigenous Services Canada (ISC) to identify opportunities to provide First Nations with the funding required to undertake emergency/disaster response actions.</p> <p>EMBC continues to engage with communities via seasonal readiness sessions and through direct outreach to local government and First Nations to help them understand financial</p>

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			emergency/disaster response actions.	reimbursement criteria and processes more fully.
92.	B.C. Ministry of Health, in collaboration with regional health authorities and the First Nations Health Authority, develop stable and sustainable mental health recovery programs that acknowledge cultural linkages to the land and the compounding challenge of historical trauma.	Complete	The Ministry of Health has completed a Mental Health and Wellness Disaster Recovery Guide. This work was informed by a January 2019 workshop attended by mental health and wellness partners, including FNHA, to assess opportunities to streamline and systematize roles, responsibilities and funding for mental health recovery.	The Ministry of Health will continue to develop a Mental Health and Wellness Disaster Recovery Toolkit.
93.	In partnership with First Nations and local governments, B.C. review the legislative framework supporting recovery, identify gaps and ensure they are addressed.	Substantial Improvement	The Province is working with communities impacted by 2018 floods and wildfires, to identify challenges with recovery programs and funding. The Interim Disaster Recovery Framework outlines the decision-making process for establishing the need for a recovery manager at the community level. The framework also outlines the need for regionally based recovery resources within EMBC.	EMBC is undertaking a comprehensive review of the Emergency Program Act, including its ability to adequately support recovery activities. Further consultation on the disaster recovery framework as well as continued experience in disaster recovery will further inform the Province on approaches to recovery management both at a community and provincial level.
94.	Canada, BC, regional health authorities, First Nations Health Authority and other agencies collaborate to identify and implement mental health resources and support for residents both during and after disasters.	Complete	The Ministry of Health has completed a Mental Health and Wellness Disaster Recovery Guide. This work was informed by a January 2019 workshop attended by mental health and wellness partners, including FNHA, to assess opportunities to streamline and systematize roles, responsibilities and funding for mental health recovery.	The Ministry of Health will continue to develop a Mental Health and Wellness Disaster Recovery Toolkit.
95.	B.C. host post-emergency debriefing exercises at local, regional and provincial levels to support proactive planning and recovery.	Substantial Improvement	Debriefing processes take place after each significant emergency event.  The Province provides funding for post-emergency debriefs at the community level, and provides opportunities for input into regional and provincial scale After Action	EMBC and other provincial agencies will continue to engage partners in debriefing processes for significant events, and pursue continuous improvement for these processes with input from involved partners.

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			<p>Reviews.</p> <p>The 2018 wildfire debrief for the Northwest Region, which was conducted in a culturally sensitive fashion, and involved both non-Indigenous and First Nations through a phased process, provides one example of how debriefing processes can be adapted to meet local community needs.</p>	
96.	<p>B.C., through Emergency Management BC, Indigenous Services Canada, the First Nations' Emergency Services Society, and First Nations and local governments develop an online system for registration of evacuees, and for the management and reimbursement of appropriate expenses incurred through emergency response and recovery.</p>	Substantial Improvement	<p>EMBC is working to improve the Provincial Emergency Support Services (ESS) program through a project aimed at digitizing and modernizing ESS delivery. This project will streamline processes so evacuated individuals can access services more easily and efficiently.</p> <p>The proof of concept of the digital ESS System is being piloted in four communities from April, 2019 to March, 2020. Pilot communities are: Kamloops, Tk'emlups te Secwepemc, Regional District of Central Okanagan and Prince George. The ESS System can also be deployed and available for any community not involved in the pilot project that is unexpectedly asked to host large numbers of evacuees.</p> <p>This pilot includes evacuee registration with a self-serve registration option as well. The goal of the pilot is to reduce wait times for evacuees and reduce processing time for volunteers. The intent is to trial the system in a real-time ESS environment. To ensure continuity of service, current ESS systems and forms will be maintained as a backup should the new system encounter difficulties. The ESS teams piloting the system will provide feedback on the proof</p>	<p>EMBC will continue to work extensively with partners on this initiative, and will build upon the April 2019 to March 2020 pilot to develop the final digital system which will be rolled out provincially in a phased approach.</p> <p>The Province is providing funding through UBCM CEPF to support communities with transitioning to a digital platform for administering ESS. Funding is available through the Emergency Support Services Stream (Next Deadline: February 14, 2020), and may be available to support a wide range of initiatives ranging from basic computer courses to procurement of IT hardware.</p>

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			of concept system and work with the Province to inform requirements for the final system development.	
97.	B.C. provide a clear point of contact for evacuees and those facing relocation during recovery, restoration or rebuilding of homes or other infrastructure within Indigenous and non-Indigenous communities.	Provincial Action Complete	<p>The establishment of a resiliency centre by a local or First Nations government for evacuees and those facing relocation during recovery, restoration or rebuilding of homes is an authorized expense.</p> <p>The Interim Disaster Recovery Framework outlines the decision-making process for establishing the need for a recovery manager at the community level. The framework also outlines the need for regionally based recovery resources within EMBC. The Province also provides funding for a recovery manager for communities undertaking significant recovery efforts.</p>	<p>EMBC will continue to encourage impacted communities to establish a resiliency centre and will assist them to do so.</p> <p>Further consultation on the disaster recovery framework as well as continued experience in disaster recovery will further inform the Province on approaches to recovery management both at a community and provincial level.</p>
98.	Salvage fire-damaged timber in a manner that maximizes economic, ecological and other values, and is well-coordinated and communicated with licensed resource users on the land base.	Complete	Fire-damaged timber is being salvaged primarily by existing forest tenure holders, in accordance with guidelines developed by the Chief Forester.	
99.	B.C. remove disincentives for property owners to remove burned timber from their properties and support efforts to reduce the risk of reburn.	Underway	<p>The new Community Resiliency Investment (CRI) program is now funding increased FireSmart activities on private lands.</p> <p>The Community Resiliency Investment program provides funding to local governments and First Nations to engage in wildfire risk reduction and FireSmart activities in and around communities. This is a \$60 million dollar program with an annual intake. 2019 CRI intake (as of October, 2019) by the numbers:</p>	FLNRORD, with partners, will monitor the CRI program, and assess its effectiveness with respect to Recommendation #99.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
			<ul style="list-style-type: none"> <li>• Total approved applications: 128</li> <li>• Total approved funding: \$9,820,758.15</li> <li>• Total First Nations approved: 52</li> <li>• Total local governments approved: 76</li> </ul>	
100.	B.C. develop a protocol following wildfires to monitor negative impacts on natural regeneration of trees, native plant species and traditional food sources.	Complete (Ongoing)	This is part of the Post Wildfire Natural Hazard Assessment process and recovery works.	FLNRORD will continue to monitor for such impacts.
101.	B.C. develop and apply innovative post-fire management strategies for ecosystems in the driest climates (such as Ponderosa Pine and Interior Douglas Fir bio-geoclimatic zones) where contemporary and future climate, combined with fire damage to soils, may render sites unable to support coniferous trees.	Complete (Ongoing)	<p>Post fire season research and adaptive management now targets recovery of fire damaged ecosystems.</p> <p>FLNRORD, with partners, is engaged in and funding research into appropriate treatments for such areas, including appropriate species selection.</p>	<p>FLNRORD will actively look at adaptive strategies for changing post-wildfire circumstance.</p> <p>FLNRORD is initiating an operational trial with Forests for Tomorrow to look at strategies to address issues with post-wildfire regeneration and climate change adaptation in the regions where the Elephant Hill, Gaspard, and Hanceville Riske Creek fires occurred.</p>
102.	B.C. develop and apply post-fire replanting strategies for dry forests that enhance resilience rather than optimize timber production, for example, adjust preferred species and reduce stocking standards.	Complete (Ongoing)	<p>Multiple strategies are being evaluated.</p> <p>Work is underway on a number of initiatives which can contribute to this recommendation, such as the Forest Carbon Initiative and Forests For Tomorrow. Work on integrating these initiatives is underway.</p>	<p>FLNRORD will assess opportunities to further integrate multiple strategies in support of forest resilience.</p> <p>Work has continued on the Climate Change Informed Species Selection (CCISS) decision aid to model the ‘ecological suitability’ of tree species to enable users to apply different management lenses as a separate step in tree species selection and the development of climate adapted stocking standards.</p>
103.	B.C. co-develop timber salvage harvest plans with all forest tenure holders, including the	Complete (Ongoing)	Where multiple tenure holders operate in an area, salvage and retention plans are being co-developed.	FLNRORD will continue to work with partners to co-develop plans.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
	joint planning and allocation of available timber for harvest.**			
104.	Following wildfire events, promptly undertake timber supply reviews to enable industry response and adaptation to a new annual allowable cut, and to allow B.C. to better understand and respond to impacts on habitat, fibre availability and community stability.**	Complete (Ongoing)	This is an immediate priority after wildfire events and is FLNRORD's practice. Most fire events will not trigger the need to reset the allowable annual cut for a management unit.	FLNRORD will continue to undertake such post-wildfire reviews as a priority.
105.	Consistent with the Sendai principle of Build Back Better, the Disaster Financial Assistance (DFA) and Disaster Financial Assistance Arrangements (DFAA) programs provide greater flexibility to restore damaged sites in ways that reduce the likelihood of repeat events. B.C. create a fund for the acquisition of lands and properties which, while legally created and/or constructed, are no longer viable given disaster or climate-related events.	Substantial Improvement	<p>The Province has recently developed a disaster recovery framework to promote coordination and consistency during community recovery.</p> <p>This recovery framework is informed by 2017 and 2018 flood and wildfire recovery efforts to date.</p> <p>As part of the EPA modernization project, EMBC will be assessing potential required amendments to the Compensation and Disaster Financial Assistance Regulation.</p> <p>On Grand Forks flood recovery, the Province contributed \$31.6 million towards mitigation and adaptation projects. These funds are above and beyond the over \$19 million already contributed to recovery (health and wellness, business and economic, environmental and infrastructure).The DFAA allows for mitigation measures and innovative recovery solutions which are both designed to reduce vulnerability to future emergencies.</p>	<p>The Province will be actively working with partners to implement the disaster recovery framework.</p> <p>The Province has now formally adopted the Sendai Framework.</p> <p>EMBC also anticipates a review of the Compensation and Disaster Financial Assistance Regulation to provide greater clarity regarding roles and responsibilities.</p> <p>The public and emergency management partners can provide feedback on the EPA discussion paper during the consultation period (November 2019 to January 2020). A modernized EPA is expected to be introduced into the legislature in Fall 2020.</p> <p>The next phase of work in Grand Forks will occur over the next five years and will involve significant infrastructure work including returning some residential areas back to natural flood plain. The Province is also working with</p>

	Recommendation	Status	Action to date	Next steps
			Under the 2018 Building Back Better Strategy Guide ( <a href="http://www.sac-isc.gc.ca/eng/1534954506773/1535121720820">http://www.sac-isc.gc.ca/eng/1534954506773/1535121720820</a> ), ISC can now contribute to mitigative enhancements in the recovery process so that infrastructure is more resilient to future emergency events.	the City to help identify in-kind solutions to assist residents in identifying their own long term solutions.
106.	Following an evacuation, provide support and resources to Indigenous and non-Indigenous communities to host meetings to discuss the evacuation as part of the recovery and healing process.	Complete	Support is provided / available for communities to host gatherings after an evacuation.	
107.	Provide an open source training opportunity for Indigenous and non-Indigenous communities to learn how to navigate the financial recovery system.	Complete / Continuous Improvement	As part of seasonal readiness overview and training sessions provided to Indigenous and non-Indigenous communities throughout B.C., EMBC delivers training materials specific to the emergency response claim submission process. The materials provide an overview of the financial recovery system, guidance/education, and best practices with the intent to support communities to maximize their potential recovery, and to minimize EMBC review and processing times.  EMBC completed 12 seasonal readiness sessions in the spring and 7 more are scheduled for the fall in October. EMBC has also held dedicated financial training sessions for communities that have requested it. As an example, finance informational sessions were held in for Sparwood, Elkford, Fernie and Tobacco Plains Indian Band on May 16th and for Nelson and Castlegar on June 12th.	EMBC is continuing to assess existing materials and will where appropriate transfer to open source or develop new training materials aligned with open source requirements.
108.	Create a bridging program to	Substantial	ISC has a Building Back Better policy which	The Province will continue to consider this

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
	aid people during recovery in meeting their needs from the land, such as traditional food gathering, haying and grazing for livestock, and access to guiding areas while restoration is underway.	Improvement	<p>supplies transition food replacement to impacted First Nations.</p> <p>The Province has provided funding to the Canadian Red Cross for programming that supports First Nations cultural needs, including traditional foods.</p> <p>With respect to livestock, the Standard Operating Guideline developed and released by the BCWS and the Range Program in 2018 outlines how range issues will be addressed in wildfire planning and response, including review of requests for range access for evacuated livestock.</p> <p>Support for the emergency provision of hay (and other animal feeds) can be provided for during the response and recovery phases through an EMBC Task Number provided to a Local Authority or First Nation for the event.</p>	recommendation with respect to the implementation of the interim disaster recovery framework.

## Appendix 2: Sendai Framework Priorities for Action

Priority Actions	Description
<p><b>Priority Action # 1:</b> Understanding Disaster Risk</p>	<p>Disaster risk management needs to be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment.</p>
<p><b>Priority Action #2:</b> Strengthening disaster risk governance to manage disaster risk</p>	<p>Disaster risk governance at the national, regional and global levels is vital to the management of disaster risk reduction in all sectors and ensuring the coherence of national and local frameworks of laws, regulations and public policies that, by defining roles and responsibilities, guide, encourage and incentivize the public and private sectors to take action and address disaster risk.</p>
<p><b>Priority Action #3:</b> Investing in disaster risk reduction for resilience</p>	<p>Public and private investment in disaster risk prevention and reduction through structural and non-structural measures are essential to enhance the economic, social, health and cultural resilience of persons, communities, countries and their assets, as well as the environment. These can be drivers of innovation, growth and job creation. Such measures are cost-effective and instrumental to save lives, prevent and reduce losses and ensure effective recovery and rehabilitation.</p>
<p><b>Priority Action #4:</b> Enhancing disaster preparedness for effective response, and to «Build Back Better» in recovery, rehabilitation and reconstruction</p>	<p>Experience indicates that disaster preparedness needs to be strengthened for more effective response and ensure capacities are in place for effective recovery. Disasters have also demonstrated that the recovery, rehabilitation and reconstruction phase, which needs to be prepared ahead of the disaster, is an opportunity to «Build Back Better» through integrating disaster risk reduction measures. Women and persons with disabilities should publicly lead and promote gender-equitable and universally accessible approaches during the response and reconstruction phases.</p>