



BRITISH  
COLUMBIA

## Government's Action Plan: Responding to wildfire and flood risks

---

October 31, 2018

Emergency Management British Columbia

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

## Table of Contents

<b>Introduction .....</b>	<b>3</b>
<b>Background .....</b>	<b>3</b>
<b>2017 and 2018 Floods and Wildfires.....</b>	<b>3</b>
<b>After-Action Reporting: 2017 Floods and Wildfires .....</b>	<b>4</b>
<b>Relevant Reports.....</b>	<b>4</b>
<b>Action to Date .....</b>	<b>5</b>
<b>2018 Emergency Management Improvements .....</b>	<b>5</b>
Integration and Collaboration.....	6
First Nations Emergency Management.....	6
Stakeholder and Partner Engagement.....	7
Knowledge and Tools.....	7
Operations .....	8
Communication and Public Education .....	8
Emergency Social Services (ESS) .....	8
Recovery.....	9
<b>Work on Specific Recommendations .....</b>	<b>9</b>
<b>Next Steps.....</b>	<b>9</b>
<b>Key Priorities and Principles .....</b>	<b>9</b>
<b>2018 After-Action Reviews (AARs) .....</b>	<b>10</b>
<b>Partner Engagement.....</b>	<b>10</b>
<b>Sendai Framework for Disaster Risk Reduction.....</b>	<b>12</b>
<b>Climate Change Adaptation .....</b>	<b>13</b>
B.C. Actions to Prepare for Climate Change .....	13
<b>Integrated Disaster Recovery Framework.....</b>	<b>14</b>
<b>Timeline .....</b>	<b>14</b>
<b>Appendix 1: Actions Broken Down By Recommendation .....</b>	<b>16</b>

## Introduction

In 2017 and 2018, unprecedented floods and wildfires wreaked havoc in the province and resulted in severe consequences for many affected British Columbians. For some, the mental, physical, social and economic impacts persist. Today the difficult work of recovery remains underway and continues to be a focus for the provincial government, local and First Nations governments, and all those living in affected areas.

Even as recovery continues, governments and individuals need to actively plan in order to prevent, prepare for, respond to and recover from future events. To support this goal and ensure continuous improvement in emergency management, the Province commissioned a comprehensive, independent review of the 2017 wildfire and flood seasons. Led by Chief Maureen Chapman and George Abbott, the review resulted in the May 2018 report, [\*Addressing the New Normal: 21<sup>st</sup> Century Disaster Management in British Columbia\*](#), (the *Abbott/Chapman Report*), which serves as a call to action for making positive changes in our emergency management system and provides 108 specific recommendations.

This action plan responds to the Abbott-Chapman recommendations, acknowledging work to date and identifying priorities and next steps. In addition, the plan takes into account other recent, relevant reports, including a report issued by the Auditor General of British Columbia in February 2018, [\*Managing Climate Change Risks: An Independent Audit\*](#), and a House of Commons committee report released in June 2018, [\*From the Ashes: Reimagining Fire Safety and Emergency Management in Indigenous Communities\*](#). Implementing the action plan is expected to take place in alignment with ongoing work, which includes developing new or amended legislation, securing funding approvals, and receiving decisions from other levels of government. The intention is to support the development of comprehensive, integrated disaster management systems in British Columbia in order to reduce disaster risk and increase community resilience over time.

## Background

### 2017 and 2018 Floods and Wildfires

The 2017 and 2018 flood and wildfire seasons in British Columbia had a profound impact on affected local and Indigenous communities.

In 2017, flooding began in early May and resulted in the evacuation of approximately 2,500 British Columbians, including a large number of Okanagan residents. Immediately following the demanding spring flooding, British Columbia saw an active beginning to its wildfire season with

190 wildfires starting within 48 hours, the majority in the Cariboo region. A provincial state of emergency was declared on July 7, 2017, lasting 70 days – the longest in B.C. history. Over the course of the summer, 65,000 individuals were displaced and 1.2 million hectares burned. The cost for wildfire suppression alone reached \$568 million.

In 2018, armed with the benefit of experience gained from the 2017 floods, the Province was somewhat better prepared – although floods were still devastating, resulting in the evacuation of about 5,000 residents and resulting in catastrophic impacts to the community of Grand Forks. Then, in summer 2018, wildfires broke out in all regions of the province burning 1.3 million hectares – a new record. A provincial state of emergency was declared on August 15, 2018 and lasted 24 days. Although fewer British Columbians faced evacuation orders in 2018, the small and remote nature of many affected communities meant the impact was significant.

### After-Action Reporting: 2017 Floods and Wildfires

During and following the 2017 floods and wildfires, provincial agencies conducted After-Action Reviews (AARs) to gather lessons learned as part of a process of continuous improvement. The AARs included four tiers of investigation:

- Tiers 1 and 2: Internal operational and technical reviews
- Tier 3: Emergency management community external partner reviews
- Tier 4: Independent province-wide review with public input commissioned by the provincial government

Chief Maureen Chapman and George Abbott conducted the Tier 4 review between January and March 2018, resulting in the May 2018 *Abbott/Chapman Report*. The report contains 108 recommendations primarily directed to the provincial government and involving local, federal and First Nations governments as well as other agencies in some cases. The recommendations encompass all phases of emergency management – from prevention and mitigation to preparedness and planning and response and recovery – and are organized under four themes: investment; partnerships and participation; knowledge and tools; and communication and awareness.

### Relevant Reports

The Province considered two additional 2018 reports when developing the action plan and its overall approach to emergency management.

The Auditor General of British Columbia's February 2018 report on climate change risk, [\*Managing Climate Related Risks: An Independent Audit\*](#), reinforces and expands on a central message of the *Abbott/Chapman Report* that intense flood and wildfire seasons will become

increasingly common as climate changes. According to Abbott and Chapman, when developing plans for prevention, preparedness, response and recovery, emergency managers must consider both the long-term, growing impacts of climate change and the associated increasingly severe weather events. Read more about the provincial government's approach to climate change adaptation in the "Climate Change Adaptation" section below.

The House of Commons Standing Committee on Indigenous and Northern Affairs' June 2018 report, [\*From the Ashes: Reimagining Fire Safety and Emergency Management in Indigenous Communities\*](#), deals with fire safety and emergency management in Indigenous communities across Canada. In October 2018, the federal government accepted the report's 11 recommendations. The report is pertinent with regard to First Nations emergency management in British Columbia and supports and reinforces a number of *Abbott/Chapman Report* recommendations.

## Action to Date

In the wake of the 2017 flood and wildfire seasons, governments recognized the need to take immediate action to address gaps identified in the *Abbott/Chapman Report* and other post-event reviews. Provincial agencies and emergency management partners such as local authorities and First Nations undertook significant work through late 2017 and early 2018 to prepare for the next flood and wildfire seasons and assess emergency management systems. These efforts continued to evolve throughout the 2018 flooding and wildfire events and the release of the *Abbott/Chapman Report* in May 2018, provided an additional driver for improvement efforts.

## 2018 Emergency Management Improvements

Lessons learned from the 2017 events have resulted in significant emergency management investments and improvements. For example, the B.C. government committed \$72 million over three years for wildfire recovery and to enhance communities' resilience to wildfires. Funding includes:

- \$50 million over the next three years under the new Community Resiliency Investment Program to reduce wildfire risk around First Nations and other communities. Program elements include:
  - a holistic approach to wildfire risk reduction and fuel management treatments;
  - inclusion of fire prevention activities on provincial Crown land and private land — in addition to local government and reserve land; and
  - 100 percent funding for approved projects.

- \$22 million over the next three years to assist with land-based recovery in the most heavily impacted areas to:
  - access management for fire access roads;
  - improve/recover water storage facilities and dams;
  - rehabilitate rangelands; and
  - undertake reforestation.

The B.C. government with support from the Canadian Red Cross has also introduced a new program to help residents impacted by flooding in the community of Grand Forks and within the Kootenay Boundary Regional District. The Household Emergency Assistance Program (HEAP) begins when Emergency Social Services (ESS) conclude, providing additional support for those people who haven't been able to return home. The program offers financial assistance for 30 days, with potential support for up to 90 days. The program is open to households that are primary residences and have been deemed uninhabitable by the local government.

Emergency management improvements have also been implemented in numerous other areas.

### Integration and Collaboration

In 2018 provincial agencies such as the BC Wildfire Service implemented new mechanisms to increase integration within and between ministries and with external partners. Examples include:

- Activating, for 2018, regional Joint Hazard Management Teams to support integrated, effective decision-making and protect key values such as critical infrastructure and land base uses.
- The creation, for 2018, of the All Hazard Incident Management team – including subject matter experts and stakeholders with local knowledge – to help prioritize response activities for specific wildfires.
- Taking initial steps to develop a new provincial disaster recovery framework and establish a more integrated, coordinated approach that facilitates timely government responses and recognizes the important roles of First Nations, local authorities, and a variety of stakeholders.

### First Nations Emergency Management

There has also been a specific focus on improving emergency management support to, and collaboration with, First Nations communities. Examples include:

- New dedicated First Nations coordination operational staff.
- Daily First Nations coordination calls during an emergency.

- Production and distribution of a First Nation-specific tool kit.
- Development of First Nations Emergency Management Regional Partnership Tables to provide a venue for First Nations and provincial agency emergency managers to confer and partner on emergency management issues and initiatives.
- Enhanced training and public education resources to better support the needs of First Nation communities.
- Use of local and traditional knowledge to help guide operations and operational priorities.

### Stakeholder and Partner Engagement

Provincial government agencies increased stakeholder and partner engagement before and during the 2018 flood and wildfire seasons. Examples include:

- Early stakeholder engagement sessions – before wildfire season – hosted by the BC Wildfire Service and EMBC.
- Weekly meetings, during response operations, with key stakeholders, such as the B.C. Cattlemen’s Association, the Guide Outfitters Association of B.C., BC Parks, local governments and industry groups to incorporate local knowledge and inform decision-making.
- Working with local health authorities, the Canadian Mental Health Association and a range of Non-Governmental Organizations (NGOs) to implement a campaign to raise awareness of the mental health impacts of wildfire and encourage British Columbians to seek support.
- Initiating the development of strategic partnerships and operational agreements with First Nations, community members, forest professionals, tenure holders, and a range of stakeholders in B.C. in order to increase local response capacity and coordination.
- Engaging early with forest industry operators to plan jointly for utilization of industry equipment, personnel, and expertise during response operations.

### Knowledge and Tools

Lessons learned in 2017 include improved knowledge and tools, such as:

- A new web-based, interactive map that displays wildfire locations and evacuation alert boundaries for provincial agencies, local governments and First Nations.
- Increased surveillance of snowpack with additional flights and resources to support measurement activities.
- Use of remote-sensing technology to collect imagery and data on water levels and better inform flood planning.
- Delivery of additional training for services such as ESS.
- Facility improvements for the Provincial Emergency Coordination Centre (PECC) and Provincial Regional Emergency Coordination Centres (PREOCs).

- Training and cross-training with community fire departments and First Nations.
- Incorporating local, traditional knowledge.

## Operations

Enhanced response operations include:

- Increased use of drones for investigation and imagery.
- Increased use of subject matter experts in PECC and PREOCs such as Flood Assessment Units.
- New light imaging (LiDAR) mapping to assess flooding and landslide impacts.
- Changes to Incident Management Team (IMT) rotation procedures to allow IMTs to return after a rest period to geographic areas and specific wildfires they had become familiar with.

## Communication and Public Education

The 2017 flood and fire seasons highlighted the need for increased public education and communication. Enhancements include:

- A refreshed EmergencyInfoBC web site to serve as a hub for disaster information from evacuation alerts and orders to response and recovery efforts.
- Improved @EmergencyInfoBC Twitter feed content to provide more value-added and themed information.
- Additional communications specialists assigned to IMTs.
- More real-time information on BC Wildfire Service social media platforms.
- An enhanced interactive wildfire map for public audiences.
- Community open houses and public information sessions on new and existing recovery resources and supports.

## Emergency Social Services (ESS)

ESS improvements in 2018 include:

- An updated policy framework for hosting displaced citizens, including a new reimbursement structure for host communities.
- Additional staffing for peak need periods.
- Support for community gatherings after evacuation.
- A modernization project to significantly improve ESS functions and outcomes through electronic registration has also been initiated.

## Recovery

Lessons from 2017 influenced the recovery phase of emergency management in 2018.

Improvements include:

- A new, dedicated provincial recovery branch at EMBC and FLNRORD.
- Local authorities making greater use of Community Recovery Plans.
- Expanded Emergency Program Act to provide increased financial support for recovery.

## Work on Specific Recommendations

A number of notable emergency management improvements have been introduced over the past year. Many of these improvements represent substantial progress on a range of specific recommendations in the *Abbott/Chapman Report*. In order to fully address some recommendations in the report, considerable additional work is required, including:

- detailed research and assessment;
- prioritization, assessment, and planning work with partners, such as First Nations leadership and communities, the Government of Canada, local authorities, and others;
- legislative amendments;
- funding authorizations; and
- technology improvements.

There are also several recommendations requiring coordination with and/or approvals from other levels of government. Appendix 1 below details action to date in response to each of the 108 recommendations contained in the *Abbott/Chapman Report*.

## Next Steps

### Key Priorities and Principles

The Province is applying the following principles to guide implementation of *Abbott/Chapman Report* recommendations.

1. Planning must include partners and must contribute to reconciliation with First Nations.
2. Implementation must be integrated with all partners and across all program areas and must contribute to reconciliation with First Nations.
3. Action must support and strengthen the principle of shared responsibility for preparedness and emergency management.
4. Implementation should capitalize on existing mechanisms where practical.

5. Action must take a holistic view and balance multiple values, such as environmental, economic (e.g. tourism), cultural (e.g. First Nations values), and risk mitigation.
6. Local and traditional knowledge must be respected and utilized.
7. While all phases of emergency management are essential (planning, mitigation, response, and recovery), particular attention must be paid to improvements in mitigation and recovery.
8. Emergency management approaches must meet the needs not only of British Columbians, but visitors to B.C. Impacts on visitors, and the tourism industry are a key consideration.
9. A long-term approach should be taken to the consideration of costs and benefits.
10. Governments and partners need to focus on action while continuing to learn from each emergency event.

### 2018 After-Action Reviews (AARs)

As noted earlier, an extensive AAR process was completed for the 2017 floods and wildfires. AARs are also underway for 2018 floods and wildfires consistent with sound emergency management practices and continuous improvement. Given the breadth and scope of the 2017 review by Chief Maureen Chapman and George Abbott, another independent review is not being contemplated for 2018 events.

### Partner Engagement

Emergency management in B.C. is a shared responsibility among partners, including individuals, local authorities, the provincial government, the federal government, First Nations, allied agencies, NGOs and industry. Except in cases of minor or purely technical improvements, implementing recommendations involves engaging and partnering with First Nations and other levels of government. The approach in dealing with each of the partners is necessarily different.

#### First Nations

First Nations must have input and involvement on all aspects of emergency management affecting their communities and the land base on which they live and derive livelihood. The *Abbott/Chapman Report* contains many recommendations regarding First Nations emergency management. In addressing the recommendations, the Province is committed to engaging with First Nations partners at the earliest stages and continuing to engage throughout the process of implementation, including prioritizing recommendations, identifying solutions, planning and tracking progress.

The Province is seeking input from First Nations leadership and communities on the most productive mechanisms to pursue this work. Given the responsibilities of the federal

government with respect to First Nations emergency management, these discussions should involve Indigenous Services Canada (ISC), whose officials indicate a willingness to participate.

Avenues for discussion on the *Abbott/Chapman Report* recommendations include:

- **First Nations Leadership Gathering (November 29-30):** EMBC, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, and the Ministry of Indigenous Relations and Reconciliation have offered meetings prior to the First Nations Leadership Gathering for First Nations community leaders wishing to discuss the 2017 and 2018 floods and wildfires and/or the *Abbott/Chapman Report* recommendations.
- **First Nations Leadership Council (FNLC):** The Province is seeking FNLC input regarding how the Province and First Nations leadership can best engage on this issue and what the best mechanism may be for detailed staff level discussions between ministry staff and representatives of member organizations of the FNLC (i.e. Union of BC Indian Chiefs, First Nations Summit, and Assembly of First Nations).
- **EMBC First Nations Emergency Management Partnership Tables:** Regional partnership tables are in place to provide a venue for First Nations and provincial agency emergency managers to discuss and partner on emergency management issues and initiatives.
- **First Nations Emergency Services Society (FNESS):** FNESS has a mandate to assist First Nations in developing and sustaining safer and healthier communities through delivery of programs and services that include training, capacity development and emergency response services, and to support the FNLC mandate.

The Province will also take into account, and discuss with First Nations partners, various First Nations after-action review documents related to 2017 and 2018 events.

### Local Authorities

In most cases, local authorities and First Nations governments represent the front lines of emergency management service delivery. It is therefore essential to obtain their input to guide emergency management improvements. During the 2018 Union of British Columbia Municipalities (UBCM) Convention in September 2018, senior EMBC and FLNRORD staff held 44 meetings with local authority and First Nations delegates to collect input and observations on the 2017 and 2018 floods and wildfires. The meetings yielded significant observations and recommendations, which are being incorporated into 2018 after-action reporting and influence this Action Plan. Provincial government staff will continue to engage with UBCM representatives into 2019.

In addition, the Province has reached out to local government area associations in B.C. to determine their interest in having separate opportunities for discussion and input. The five associations are:

- Association of Kootenay and Boundary Local Governments
- Association of Vancouver Island and Coastal Communities
- Lower Mainland Local Government Association
- North Central Local Government Association
- Southern Interior Local Government Association

### Other Partners

The Province will also actively engage with other partners, including industry, various federal government departments outside of ISC, a range of NGOs, the Canadian Red Cross, and local associations and groups.

### **Sendai Framework for Disaster Risk Reduction**

The devastating impacts of the 2017 and 2018 floods and wildfires demonstrated the need to review and improve our approach to emergency management in B.C. The *Abbott/Chapman Report* points to the United Nations Sendai Framework for Disaster Risk Reduction as a key source document to help guide future changes to emergency management in the province.

“... we also considered international thinking on disaster management found in the Sendai Framework for Disaster Risk Reduction 2015–2030, a publication of the United Nations. Developed in the aftermath of the devastating earthquake and subsequent tsunami that took place in Japan in 2011, the publication includes a series of valuable insights that can and should inform any resulting changes the Province should make going forward following in the aftermath of the 2017 flood and wildfire season.”

*- Addressing the New Normal: 21<sup>st</sup> Century Disaster Management in British Columbia*

The UN framework is the global standard by which risk is understood. It outlines how governance can be strengthened to address risk, emphasizes the importance of investing in risk reduction, and encourages “building back better” during the recovery phase. The framework sets out a shared responsibility model with a comprehensive “all-of-society” approach that acknowledges the need for inclusivity to strengthen the emergency management structure and enhance resilience across all communities. Canada is already a signatory to the framework and the Province will now also adopt the framework to align and improve our approach to all phases of emergency.

## Climate Change Adaptation

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. As noted above, the B.C. Auditor General's February 2018 report, [\*Managing Climate Related Risks: An Independent Audit\*](#), emphasizes British Columbians must prepare for more frequent and severe floods and wildfires, as well as other hazards, due to the impacts of climate change.

The process of adjusting to the impacts of climate change, such as through the development of upgraded infrastructure (e.g. dikes), new plans (e.g. drought plans), research into climate adaptive species, and so on, is referred to as 'adaptation'. Climate change adaptation is an important part of B.C.'s climate change plan along with carbon emissions reductions and mitigation. Action to address the recommendations of the *Abbott/Chapman Report* will be closely linked to the Province's work on climate change adaptation, led by the Ministry of Environment and Climate Change Strategy.

### B.C. Actions to Prepare for Climate Change

The Province is taking important steps to manage the risks of climate change. Critically, the Province aims to first fully understand climate change hazards in order to create an effective legislative foundation for predictable and consistent provincial action. The results of these first steps will inform the provincial climate change adaptation strategy in 2020. Steps include:

- **Strategic Provincial Climate Risk Assessment:** The provincial climate risk assessment will result in a framework for provincially significant climate-related risks that can be used to prioritize adaptation responses across ministries. The assessment will enable government to compare different climate-related risks, and compare those with other risks, to develop appropriate responses to priority risks and to identify potential situations where current response capacity may be exceeded.
- **Climate Change Accountability Act:** In May 2018, the Province approved amendments to the *Climate Change Accountability Act* (formerly the *Greenhouse Gas Reduction Target Act*). One of the amendments requires the Province to report publicly on how it is preparing for climate change. Starting in 2020, the Province will report every even year on the current and projected climate risks to B.C., plans for minimizing those risks, associated actions, and progress towards minimizing risk.
- **Provincial Adaptation Strategy:** The Government will release a new, comprehensive climate change adaptation strategy in 2020. The strategy will be a collaborative effort from across government and will be informed by the results of the provincial climate risk assessment.

Engagement with stakeholders, including Indigenous and non-Indigenous communities, is anticipated in 2019, and public Adaptation Intention Papers are expected to be released by summer 2019.

This action complements work underway within specific ministries and at other agencies such as local health authorities and school districts. It includes strategies to mitigate climate risk and address gaps in climate data, resources and tools.

### Integrated Disaster Recovery Framework

The wildfire and flooding events of 2017 and 2018 brought to light challenges in province-wide disaster recovery support and coordination. While improvements are in development within various provincial agencies, a formal mandate and provincial framework for managing recovery and supporting communities has not yet been established. As a result, agencies are developing a comprehensive, integrated provincial disaster recovery framework to coordinate recovery activity across provincial government agencies and reflect the important roles of First Nations and other recovery partners.

The new framework will be informed by 2017 and 2018 flood and wildfire experiences as well as existing international and regional disaster management models. Critically, many of these models include recovery strategies anticipating future disaster risk reduction and ‘building back better’ requirements, including infrastructure, land-based, and socio-economic or community-based elements. The new framework is intended to build on community recovery resources and supports in place and address gaps in policy and resources.

The provincial disaster recovery framework is expected to address a range of issues, including but not limited to: legislation; funding; governance and structure; recovery principles; and relationships between the Province and First Nations, other levels of government, allied agencies, and NGOs. The framework will be developed with input from all relevant ministries and recovery partners.

### Timeline

- **October 31, 2018:** Release of *Action Plan*.
- **November 2018 to February 2019:** Conduct AARs for 2018 events.
- **November to December 2018:** Establish and initiate partner engagement processes.
- **April 30, 2019:** *Action Plan* – Provide progress update.

- **March to September 2019:** Review additional organizational learnings (depending upon severity of the flooding and wildfire seasons) and assess against post-2017 emergency management improvements.
- **October 31, 2019:** *Action Plan* – Provide progress update.
- **February 2020:** Provincial budget: Demonstrate the Province and individual ministries have accounted for longer-term recommendations.
- **2020:** *Emergency Program Act* – Update the *Act* accordingly.
- **April 30, 2020:** *Action Plan* – Provide progress update.
- **October 31, 2020:** *Action Plan* – Final progress update.

## Appendix 1: Actions Broken Down By Recommendation

### Status of recommendations:

- Complete = 19 recommendations
- Underway = 73 recommendations
- Further analysis/discussion required = 16

### 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

ENV = Ministry of Environment and Climate Change Strategy

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

BCWS = BC Wildfire Service

CMHA = Canadian Mental Health Association

CRI = Community Resiliency Investment

EPA – Emergency Program Act

FCI = Forest Carbon Initiative

FFT = Forest for Tomorrow

FNHA = First Nations Health Authority

HEMBC = Health Emergency Management BC

IFMO = Indigenous Fire Marshal Office

JIBC = Justice Institute of BC

SOP = Standard Operating Procedure

WUI = Wildland Urban Interface

EMBC = Emergency Management BC

MOTI = Ministry of Transportation and Infrastructure

CEMP = Comprehensive Emergency Management Plan

COP = Common Opportunity Picture

CWPP = Community Wildfire Protection Plan

FESBC = Forest Enhancement Society of BC

FNESS = First Nations Emergency Services Society

FNLC = First Nations Leadership Council

HRVA = Hazard Risk and Vulnerability Analysis

ISC = Indigenous Services Canada

OFC = Office of the Fire Commissioner

UBCM = Union of BC Municipalities

\* = 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.	Underway	Under the 2017 Emergency Management Services Agreement with ISC, EMBC is working with First Nations communities on all phases of emergency management.	EMBC and First Nations communities will continue to pursue a partnership approach to emergency management through the Regional First Nations/EMBC partnership tables. Partnerships between local authorities and First Nations communities are also being explored, with EMBC leadership. B.C. wants to partner with First Nations (leadership and communities) on how the spirit and intent of the Chapman/Abbott recommendations can best be met.
2.	Provide support to First Nations governments and 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.	Underway	Canada provides funding for First Nations communities through the Emergency Management Assistance Program to develop, update and exercise their emergency management plans.	B.C. will discuss with Canada, and with First Nations communities and leadership, what additional federal funding may be required to provide increased support. EMBC Regional Managers will continue to engage with First Nations communities on a regular basis regarding their emergency management plans. B.C. wants to partner with First Nations (leadership and communities) on how the spirit and intent of the Chapman/Abbott recommendations can best be met.
3.	Ensure emergency services available to First Nations are provided in a way that is comparable to other communities of similar size and location.	Underway	The bi-lateral service agreement between EMBC and ISC ensures that First Nations communities receive the same level and support as local governments.	EMBC is working with FNLC and FNESS to negotiate a tri-lateral MOU that commits the parties to regular dialogue on First Nations emergency management. B.C. wants to partner with First Nations (leadership and communities) on how the spirit and intent of the Chapman/Abbott recommendations can best be met.
4.	Governments recognize First Nations jurisdiction in their traditional territories and support capacity development through training and accreditation.	Underway	Support for First Nations communities under the bi-lateral service agreement between EMBC and ISC includes provision for training and accreditation.	B.C. wants to partner with First Nations (leadership and communities) on how the spirit and intent of the Chapman/Abbott recommendations can best be met.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
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 provisions for communities to self-determine how they will establish Emergency Operations Centres.	Further analysis / discussion required		EMBC will continue working with FNLC and FNESS to negotiate a tri-lateral MOU that commits the parties to regular dialogue on First Nations emergency management.
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.	Underway	FNESS is involved in community outreach and works with regional EMBC offices. EMBC and BCWS regional staff regularly liaise with local First Nations to develop and sustain relationships.	EMBC and First Nations communities will continue to pursue a partnership approach to emergency management through the Regional First Nations/EMBC partnership tables. Partnerships between local authorities and First Nations communities are being explored with EMBC leadership. B.C. wants to partner with First Nations (leadership and communities) on how the spirit and intent of the Chapman/Abbott recommendations can best be met.
7.	Develop an emergency management First Nations youth leadership program to foster leadership skills in emergency management for First Nations youth.	Further analysis / discussion required		B.C. wants to partner with First Nations (leadership and communities) on how the spirit and intent of the Chapman/Abbott recommendations can best be met.
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	HEMBC's Executive Steering Committee includes FNHA representation.	

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
9.	Governments build cultural sensitivity training and awareness of racism and discrimination into emergency management plans.	Underway	The B.C. government has recently introduced a new cultural/diversity analysis framework. Cultural sensitivity training is being accessed by a number of government programs. A new respectful workplace policy is in place at FLNRORD / BCWS.	Provincial government agencies will increasingly be providing cultural sensitivity and indigenous competency training to staff. EMBC will also be working to build training on indigenous competencies specific to disaster management. BCWS will continue to look at training opportunities/frameworks to build cultural sensitivity and awareness of racism and discrimination into emergency plans. There will be new diversity and inclusion training for all provincial government employees.
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 community emergency management in July 2017. The toolkit has since been revised and is being delivered to First Nations communities.	The toolkit will continue to be updated and distributed to First Nations communities 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.	Underway	Regional emergency management and FLNRORD staff are working directly with First Nations communities to build their understanding of roles and responsibilities during emergencies. First Nations communities are receiving training through JIBC.	EMBC and First Nations communities will continue to pursue a partnership approach to emergency management through the Regional First Nations/EMBC partnership tables. EMBC is encouraging partnerships between local authorities and First Nations communities.
13.	Strengthen and support the mandate of the First Nations' Emergency Services Society (FNESS) to advise and guide provincial emergency services policy and delivery.	Underway	FNESS is engaged in working with, advising and guiding emergency services work for many First Nations. EMBC works closely with FNESS and has contracted FNESS to facilitate the regional First Nations emergency management partnership tables.	EMBC and First Nations communities will continue to pursue and evolve a partnership approach to emergency management through the Regional First Nations/EMBC partnership tables. EMBC will also continue regular dialogue with FNESS regarding emerging opportunities. B.C. wants to partner with First Nations (leadership and communities) on how the spirit and intent of the Chapman/Abbott recommendations can best be met.

	Recommendation	Status	Action to date	Next steps
14.	First Nations Health Authority and regional health authorities work collaboratively towards a seamless emergency response system that defines roles, responsibilities and procedures.	Underway	HEMBC partnered with FNHA and regional health authorities on the development of a Wildfire Response Plan for the Health System, which defines roles, responsibilities, and procedures for coordinating emergency response efforts across the health system. The newly developed BC Health System Wildfire Response Plan was activated in response to the 2018 declaration of provincial state of emergency.	The Wildfire Response Plan for the Health System will be updated as required based on emerging lessons-learned.
15.	Create a volunteer training requirement, as part of Emergency Social Services, to participate in cultural awareness.	Underway	Cultural awareness training has been delivered to Mobile Support Teams (provincial ESS volunteers who deploy to communities to provide ESS mentorship and just-in-time training).	EMBC will discuss with JIBC how best to incorporate cultural sensitivity training into ESS core training.
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 evacuation area, and other local considerations as required.	Complete	Greater clarity was achieved on these issues in 2018 compared to 2017 through focused communication (e.g. First Nations band authorities with respect to alerts and orders) but more work is required.	EMBC is in the process of planning for a multi-agency working group which will address recommendations #16, #17 and #85.
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	Greater clarity was achieved on these issues in 2018 compared to 2017 through focused communication (e.g. First Nations band authorities with respect to alerts and orders) but more work is required.	EMBC is planning a multi-agency working group which will address recommendations #16, #17 and #85.
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.**	Underway	Substantial progress was made with key stakeholders in advance of 2018 fire season that raised response capacity and coordination.	Partnership opportunities are being categorized by involvement and type of opportunity. BCWS will continue to formalize mechanisms and standardize agreements to increase partnership opportunities.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
19.	Provide support to local and First Nations governments in self-assessing their emergency plans (for completeness and effectiveness) and each community's ability to implement those plans fully and effectively.	Underway	EMBC Regional Managers will continue to engage with local and First Nations communities on a regular basis regarding assessment of their emergency management plans. Some First Nations have utilized FNESS to provide assistance with plan review. The funding for First Nations for developing, implementing and exercising emergency management plans comes from ISC's Emergency Management Assistant Program.	B.C. will work with First Nations, FNESS, and ISC towards continuous improvement in planning and developing increased capacity. B.C. will also discuss with ISC whether additional resources can be made available, and whether there may be additional opportunities to capitalize on FNESS to assist with this work.
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	Work is ongoing on protocols and agreements, developing template plan tools and resources, EPA review and review of EMBC operational policy. EMBC has also worked with Metro Vancouver and Capital Regional District to develop interjurisdictional agreements between local authorities and First Nations.	EMBC will work with local and First Nations governments to pursue additional regional partnerships. This work will be ongoing.
21.	B.C. Wildfire Service designs a preferred contractor procurement model to be offered as an option to standing offer participants.	Underway	The BCWS is working to expand the use of Master Standing Offers.	BCWS will continue to assess opportunities to improve procurement, including the expansion of the Master Standing Offers' process.
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 expertise to establish containment lines as part of tactical operations.	Further analysis / discussion required		BCWS will review procurement procedures to ensure that local resources are effectively utilized. Also see Recommendation #18

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
23.	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.	Underway	CEMP is EMBC's emergency planning structure. The base plan is the B.C. All Hazard Plan. The B.C. All Hazard Plan 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.	EMBC and 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. BCWS will continue to use First Nations liaison contractors in fire centres to provide advice and traditional knowledge, employ local foresters for line location and local area knowledge, as well as train and employ First Nations emergency fire fighter crews.
24.	Establish emergency centres of excellence in Interior locations to support largescale disaster response.**	Further analysis / discussion required		B.C. wants to partner with First Nations (leadership and communities) on how the spirit and intent of the Chapman/Abbott recommendations can best be met.
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.	Underway	B.C. and EMBC host seasonal workshops to bring the partners together and touch on some of these issues. Continued development and improvement are needed.	EMBC and BCWS will continue to work directly with local and First Nations governments on these issues.

	Recommendation	Status	Action to date	Next steps
26.	Deliver annual emergency management forums that: <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>	Underway	Seasonal workshops bring the partners together and touch on some of these activities. After Action Reviews are conducted after each significant event.	B.C. will be working with partners to assess, implement, and track recommendations from the Addressing the New Normal: 21st Century Disaster Management in British Columbia report.
27.	Ensure compensation mechanisms exist for residents who support evacuees by providing shelter for people and/or livestock.	Complete	Guidelines are in place for billeting and clear policy direction has been established for hosting evacuees from other communities. Compensation is available, and was provided in 2018, for individuals and organizations providing shelter and feed for evacuated livestock.	
28.	Indigenous and non-Indigenous communities establish mutual aid agreements to optimize resource-sharing in the areas of operational response and volunteer capacity.	Underway	Local governments and First Nations are empowered to enter into agreements with their neighboring jurisdictions.	Under EMBC leadership, partnerships between local authorities and First Nations communities are being explored. These partnerships may include mutual aid agreements.
29.	B.C. enhance integration across government and among governments, particularly in the natural resource sector and within Emergency Management BC, to: <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>	Underway	FLNRORD has implemented new 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 SOPs have been established for enhanced collaboration with stakeholders, First Nations, local communities, and other partners.	Provincial agencies will continue to enhance integration, and will be responsive to outcomes of After Action Reviews for the 2018 flood and wildfire seasons.
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.	Further analysis / discussion required		Additional policy and procedures regarding primary care in evacuation areas to be developed in consultation with health partners.

	Recommendation	Status	Action to date	Next steps
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	This is an ongoing function in EMBC and FLNRORD. Through the Canadian Blueprint for Wildfire Fire Science, the integration of traditional ecological knowledge with Western Science is a key theme/strategy within the Plan. Provinces/Territories will use this theme and driver to build strategies to integrate this knowledge into BCWS practices. BCWS prevention research plan has identified <i>understanding aboriginal burning practices and associated fire effects</i> as a priority for further consideration.	Planning with First Nation communities through CRI 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.
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.	Underway	First Nations and local government are increasingly working together with government agencies in response efforts. Engagement in government-led response efforts involves health and safety risks to local support resources.	B.C. will work with local authorities, First Nations, and ISC to assess this issue.
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.	Further analysis / discussion required	Requires further scoping and analysis. Through the 100% funded CRI program initiative, applications may be considered for communities to purchase additional sprinklers as treatment options.	OFC and FLNRORD will assess opportunities and options to address this recommendation.
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.	Further analysis / discussion required *		B.C. will encourage ISC to consider this this matter in collaboration with First Nations communities.

	Recommendation	Status	Action to date	Next steps
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.	Further analysis / discussion required	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.	Alternative funding sources to support rural fire departments are being evaluated.
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	In May 2018, the B.C. Flood Response Plan was updated internally to reflect 2017 freshet experiences and lessons. A further update to reflect lessons from 2018 is planned for Fall 2018. (Also see #86)	The B.C. Flood Risk Strategy, currently under development, will review roles and responsibilities, and will examine the current governance model.
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.	Underway	An independent expert reviewed operation of Okanagan Lake regulation system and Nicola dam following the 2017 freshet. River Forecast Centre is improving calibration of the Okanagan inflow forecast model for better estimation of seasonal runoff volume.	Staff evaluating the recommendations of the independent review will prepare recommendations or change practices as appropriate.
38.	Re-evaluate all 200-year return-period flood elevations in BC, as well as all associated flood construction levels and horizontal setbacks.	Underway	The B.C. Flood Risk Strategy, currently under development, will examine this issue.	B.C. will continue work on a B.C. Flood Risk Strategy.
39.	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.	Underway	River Forecast Centre has evaluated streamflow forecast accuracy and has initiated projects to improve streamflow forecast accuracy and communications. 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 use of current resources.	B.C. will assess opportunities to further invest in snow monitoring network expansions.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
40.	Evaluate and upgrade the models used by the B.C. River Forecast Centre for forecasting streamflow and flooding: <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 which models are run</li> <li>• Investigate the utility of including weather forecasts in models</li> <li>• Regularly review and update models.</li> </ul>	Underway	River Forecast Centre has initiated projects to improve forecasting, including ongoing projects with snow and hydrometric operators to identify monitoring needs to support forecasting. River Forecast Centre regularly evaluates accuracy of operational flood forecast models and has initiated projects to reduce and better communicate uncertainty in model results. Flood forecast model accuracy is high when weather forecast and snow information is accurate. Opportunities to improve the models are regularly assessed.	The River Forecast Centre will continue to assess opportunities to improve these models.
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.	Underway	The Common Operating Picture this year consolidated information on freshet from a number of sources and was available to local governments and First Nations. The same process is underway with wildfire with the intention to extend to an all hazards approach. Opportunities to improve the accuracy and availability of snow and hydrometric monitoring data are also constantly being assessed by the Knowledge Management Branch, ENV and Climate Change Strategy.	Provincial agencies will continue to improve the accessibility of environmental data for use by emergency management partners.
42.	Develop values and risk modelling tools to support decision making and advance planning: <ul style="list-style-type: none"> <li>• Invest in generating quality data to support modelling, through the use of LiDAR, inclusion of Indigenous knowledge and recognition of cumulative effects</li> <li>• Invest in ongoing training for users</li> <li>• Ensure common data collection and provide access to the system for all users</li> <li>• Effective monitoring of snowpack.</li> </ul>	Underway	The Common Operating Picture this year consolidated information on freshet from a number of sources and was available to local government and First Nations. Ministries also increased surveillance of the snowpack with additional flights, and captured orthoimagery of the high water levels to better inform flood planning. Training was provided to flood assessors and observers on the COP. Knowledge Management Branch, ENV 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.	Provincial agencies will continue to improve data access and the accessibility of decision support tools for use by emergency management partners.
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	FLNRORD tested new technologies and equipment as part of the 2018 wildfire season.	The BCWS is also creating/developing a business line dedicated to research and innovation, focused on testing new technologies and integrating opportunities with universities/colleges, government agencies, and contractors.

	Recommendation	Status	Action to date	Next steps
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.	B.C. 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.	Underway	FLNRORD monitors forest road infrastructure and MOTI monitors highway infrastructure as part of their regular operations. Information is shared between the entities when necessary.	This is ongoing program work; 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.	Underway	The Emergency Info B.C. blog has been updated to serve as a hub for disaster information, including preparedness information and links to FireSmart information. The @emergencyinfobc Twitter feed has also been enhanced with more value-added and themed information. The new Community Resiliency Investment Program can also be expected to enhance community awareness of FireSmart.	Provincial agencies will continue to work with partners to strengthen public understanding of wildfire risks.
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	The Emergency Info B.C. 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: interactive maps of evacuation alerts and orders; 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 has also been freed up to provide more value-added and themed information.	B.C. will continue to invest in the provision of timely, consolidated emergency information for the public and emergency managers. B.C. will also engage the tourism industry to ensure that emergency communications and strategies adequately account for tourism and visitor considerations.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
48.	Create a communicators' toolkit for use during emergencies with specific resources such as wording for alerts and orders, and clarity for the roles and responsibilities of communication leads.	Underway		The BCWS, in collaboration with EMBC will be developing a roles and responsibilities matrix to clarify accountabilities internally for alerts and orders. Wording for orders and alerts should be shared to the public through multiple communication channels/hubs. Also see #47.
49.	BC, 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.	Underway	Provincial funding is available for post-emergency community meetings and for After Action Reviews. Seasonal workshops bring the partners together to prepare for seasonal risks. EMBC and BCWS will both be leading after action reviews regarding the 2018 floods and wildfires.	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.	Underway		A succession framework is in development for certain roles and functions within emergency management agencies. Also, BCWS is currently reviewing the Incident Management Team program, structure, and training strategies to ensure a robust succession framework is in place.
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	Further analysis / discussion required		BCWS is initiating a multi-year prescribed and managed wildfire project that will include assessing the current status of prescribed fire training in B.C. and focus on developing improved educational and training components to increase capacity both internal and external to government.
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.	Further analysis / discussion required		BCWS will assess opportunities to train additional stakeholders and First Nations through S-100, beginning with an assessment of who already has this training and what options exist to deliver this training more widely.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
53.	Increase the competency and effectiveness of containment teams by creating a training 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.	Underway	BCWS is working with local stakeholders and industry to identify equipment inventories, roles and responsibilities, and options for assisting with containment and fire suppression.	Identify new stakeholder processes and mechanisms for registration and participation in containment with BCWS.
54.	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.	Further analysis / discussion required	Currently, FireSmart and provincial government representatives are discussing the value of such incentives with the Insurance Bureau of Canada. Insurance providers are also assessing this issue and at least one insurance provider in B.C. currently has a pilot project underway to assess how such incentives can be applied.	B.C. will work with industry, FireSmart representatives, and Canada on long term approaches to enhancing incentives for safe behavior and improving resiliency. The 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.	Underway	Through the development of the ‘Blueprint for Wildland Fire Science’ Strategic Plan; B.C. along with Canada and other provinces and territories will be developing strategies on how to ensure that Wildland Fire Services meet future needs. The Blueprint for Wildland Fire Science’ Strategic Plan will also integrate traditional ecological knowledge with Western Science.	B.C. will continue to support the development of the Blueprint for Wildland Fire Science’ Strategic Plan
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.	Further analysis / discussion required *	Note: Canada has no planned review of gas tax criteria in 2019. A review was completed in March 2018.	
57.	B.C. and Indigenous governments review traditional First Nations burning practices for their applicability and suitability for future forest and fuel management.	Underway	FLNRORD is working on a new prescribed fire standard operating procedure that includes traditional knowledge. BCWS has identified understanding aboriginal burning practices and associated fire effects as a priority for further consideration.	Planning with First Nation communities through CRI program, CWPPs 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.

	Recommendation	Status	Action to date	Next steps
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.	Underway	New Community Resiliency Investment Program, which supports forest fuel management, includes First Nations land. FNESS will provide support to communities in preparing applications and project proposals. Flood mitigation funding programs are in development with EMBC under the Green Infrastructure Fund of the Investing in Canada Infrastructure Program. “The Rural and Northern Communities (RNC) Program, a component of the wider Investing in Canada Infrastructure Program (ICIP), supports infrastructure projects in communities, including First Nations, across the province that have populations of 25,000 or less. Other flood mitigation funding programs are in development with EMBC under the Green Infrastructure Fund of the Investing in Canada Infrastructure Program.”	B.C. will continue to invest in the new CRI program, which includes First Nations land. B.C. will continue to pursue federal infrastructure funding for flood mitigation, including on First Nations land. B.C. will also continue to encourage ISC to invest in mitigation activities on reserve lands.
59.	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.	Underway	CRI program allows for a more coordinated, portfolio approach to wildfire risk reduction for communities. CRI program is intended to provide a streamlined funding intake for communities in partnership with UBCM, FNESS, and FESBC to provide an alignment of wildfire mitigation activities on the land base. The B.C. FireSmart Committee will provide guidance and project prioritization advice for which applications are eligible for funding.	BCWS will assess the recently-announced CRI program, in consultation with partners, and make adjustments as necessary.
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 *		B.C. will work with other levels of government, including First Nations governments, to identify opportunities to reduce wildfire vulnerability.

	Recommendation	Status	Action to date	Next steps
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	Prescribed burns are exempt from the <i>Open Burning Smoke Control Regulation</i> . For non-prescribed fires (e.g. fuel management, piles), new provisions are being considered as part of the 2018 update to the regulation. These include enabling more open burning specifically for community wildfire risk reduction.	As part of the proposed multi-year prescribed fire program, BCWS will review the <i>Wildfire Act</i> components related to prescribe burning, in consultation with partners.
62.	B.C. Wildfire Service eliminates the rotation of Incident Management Teams (IMTs) to various fires prior to containment. Support IMTs by creating specialized respite teams to transition and backfill IMTs or develop an alternate respite strategy.	Complete	New protocols established for days of rest. Rotation eliminated to the degree operationally possible.	
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.

	Recommendation	Status	Action to date	Next steps
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: • Forest licensees • Partnerships between B.C. Wildfire Service and First Nations communities • Private land owners • Federal, First Nations and local governments • Ministry of Environment and Climate Change, including B.C. Parks • Ministry of Forests, Lands, Natural Resource Operations and Rural Development • Funding partners (current examples include: Forest Enhancement Society of B.C. and Strategic Wildfire Prevention Initiative).**	Underway	Specialists and Land Managers (including B.C. Parks) are developing 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 FESBC and CRI program funding initiatives. The new CRI program funding program enables enhanced coordination among landholders for wildfire prevention. Further analysis and work needed for enhancements involving broader partners' engagement. BCWS has also initiated two effectiveness review projects for hazard abatement and fuel treatment efficacy analysis to provide information that will guide future policy and practices based on science and results on the ground.	BCWS will continue to move the prevention initiatives noted forward.
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	FLNRORD and the B.C. Community Forest Association are finalizing a report which explores the feasibility of expanding small area-based tenures in proximity to rural communities.	Once finalized, FLNRORD will review the report and work with partners on options.
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.	FLNRORD will actively assess and pursue legislative or regulatory amendments as appropriate to encourage wildfire prevention.
67.	Create mechanisms to encourage fire prevention activities such as thinning, bio-mass utilization, targeted grazing and alternate species and densities.	Underway	The new CRI program, launched September 2018, provides \$50 million over three years for wildfire risk reduction and fire prevention activities. The Chief Forester released <i>Fire Management Stocking Standard Guidance</i> in 2016 to encourage reduced stocking within the Wildland/Urban Interface.	B.C. will continue to examine new and existing funding mechanisms for prevention and forest management.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
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 B.C. FireSmart Committee has been established and includes membership from BCWS, OFC, UBCM, B.C. Fire Chiefs Association, EMBC, FESBC and FNESS. The BCWS wildfire prevention program is based on the seven disciplines of FireSmart.	B.C. will continue to promote FireSmart objectives for all of BC.
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.	B.C. will incorporate wildfire risk reduction in updating fire management plans and land use plans.
70.	B.C. review the effectiveness and utility of existing fire management plans and adjust accordingly to meet the needs for use during emergencies.	Underway	FLNRORD staff are developing more comprehensive Fire Management Plans to provide more specific information needed for Incident Management Teams. These plans now provide information on priority values, fire effects, suppression considerations and constraints and any values threatening first responder safety. FLNRORD is moving toward Fire Management Plans that are risk-based, focusing efforts in terms of suppression considerations and pre-wildfire mitigation. Land planning staff are embedded in Fire Centres to ensure quality and effectiveness of Fire Management Plans.	B.C. will continue to pursue these initiatives to improve prevention and the effectiveness of fire management plans.
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 CRI program and 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	FLNRORD is identifying impacts and options for establishing Fibre Recovery Zones in areas where there is a demand for lower quality residual fibre. In these zones, new tools would be used to improve fibre utilization including: do not burn orders and new residual fibre tenures for secondary users.	FLNRORD will actively pursue establishing Fibre Recovery Zones where practical.

	Recommendation	Status	Action to date	Next steps
73.	B.C. expeditiously determine the condition, vulnerability and effectiveness of the Province's 500 kilometres of dikes through use of leading edge technologies and expertise. In collaboration with Indigenous governments, Canada and B.C. assess and reconcile the absence of dikes in First Nations communities.	Underway	<p>The Province is undertaking: a) a dike crest and alignment survey of all dikes in the province (1,100 km), b) an orphan dike assessment (100 in the province), c) a dike consequence classification for all dikes, amongst other projects.</p> <p>B.C. 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>The responsibility for dikes rests with local authorities. First Nations will need to work with Indigenous Services Canada to identify diking locations, construct diking infrastructure, and determine operation and maintenance responsibilities and scheduling.</p>	B.C. will continue to assess BC's dikes and will actively pursue infrastructure funding to address diking needs.
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.	Underway	EMBC provides local and First Nations governments with tools and advice with respect to HRVA. Local communities work with critical infrastructure owners on assessments and exercises specific to a given area or route.	EMBC and other provincial agencies will continue to support local authorities in their hazard assessment and exercising activities.
75.	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.**	Underway	FLNRORD supports prescribed burning. Public opposition to smoke from prescribed burns is a challenge. As part of the 2018 update to the <i>Open Burning Smoke Control Regulation</i> , provisions are being considered to expand venting indices, proximity to communities, and other tools to increase the use of traditional and prescribed fires.	The <i>Open Burning Smoke Control Regulation</i> will be updated and will consider new tools for wildfire risk reduction burning.
76.	B.C. investigate and assess the possibility of a prescribed burn statute that would offer protection for responsible and permitted burners.	Complete	BCWS is initiating a multiyear prescribed and managed wildfire project that will result in the increased use of these tools under the right circumstances. This initiative will assess further protection for permitted burners.	BCWS will work with partners on the prescribed and managed wildfire project.

	Recommendation	Status	Action to date	Next steps
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.	Underway	B.C. 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.	B.C. will discuss with Canada, but B.C. would not unilaterally adopt an approach that is inconsistent with global practice.
78.	B.C. Ministry of Transportation and Infrastructure incorporate additional fire prevention messaging into digital message signage, particularly during times of extreme fire danger.	Complete	Messaging on digital highway signs are updated as needed.	
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.	Underway	EMBC has pursued multiple public education enhancements recently, including: -Growth of the Master of Disaster grade 6 program -Partners in Preparedness retail initiative. -Update/rework of the core PreparedBC resources -Updating PreparedBC's social media strategy	EMBC will continue to work with partners to continue to improve disaster awareness.
80.	To increase the resiliency of BC'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		Further to the OAG Report titled "Managing Climate Change Risk: An Independent Audit," government is developing a plan on climate change adaptation to be released in 2020. Intentions Papers are expected to be released for public consideration by Summer 2019.
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.	Underway	The new CRI program streamlines funding mechanisms for wildfire management. This program is 100% funded, which ensures that a community's ability to pay is not a barrier to their participation in wildfire risk management strategies.	B.C. will continue to invest in CRI program and will continue to work with partners on prevention initiatives.

	Recommendation	Status	Action to date	Next steps
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.	Underway	First Nations and local government are increasingly working together with government agencies in response efforts. However, people involved in response efforts need to know how to do so safely. FLNRORD employs First Nations liaison contractors at fire centres to provide advice and traditional knowledge, local foresters for line location and local area knowledge, and has trained and employed several First Nations emergency fire fighter crews.	BCWS will conduct additional analysis on a number of issues such as training.
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	In an evacuation, this is within the scope of the First Nation evacuation plans. A clear policy on reimbursement to host a neighbouring community has been developed. The value of remaining within the traditional territory is recognized.	EMBC is undertaking formal policy work on evacuations which will strengthen recognition of cultural considerations.
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	Some initial training for First Nations emergency and response capacity was provided during the 2018 wildfire season. The mandate of the new, federal IFMO will include the types of issues raised in this recommendation. The provincial government supports the development of the IFMO through the B.C. OFC devoting 80 percent of the BC Fire Commissioner's time to this project.	B.C. will actively encourage Canada to formally create and resource the IMFO as quickly as possible to support action on this issue.
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.**	Underway	Greater clarity was achieved on these issues in 20178 compared to 2017 through focused communication (e.g. with RCMP) but more work is required.	EMBC is planning a multi-agency working group which will address recommendations #16, #17 and #85.

	Recommendation	Status	Action to date	Next steps
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 B.C. Flood Response Plan was updated internally, to reflect 2017 freshet experiences and lessons. A further update to reflect lessons from 2018 is planned for Fall 2018. (See#36) The B.C. Flood Risk Strategy, under development, will review roles and responsibilities, and examine the current governance model.	B.C. will update the B.C. Flood Response Plan and undertake work on a B.C. 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.	Underway	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, BCWS included more night shifts on fires that safely allowed for this and also had fire fighters start their day earlier to take advantage of more favourable weather conditions.	BCWS will continue to assess operational practices to enable the earliest possible commencement of fire suppression activities.
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.	Underway	In 2018, the BCWS, in collaboration with EMBC added additional protocols and procedures which provided EMBC and local emergency managers with more information regarding incidents. In 2018, the BCWS also substantially increased public meetings with communities and stakeholders (led through ICs/Incident Management Teams where applicable) to create strong linkages and information sharing.	BCWS and EMBC will continue to work with local partners to strengthen linkages.
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	Several emergency fire fighter crews were trained during the wildfires in 2018. These crews were employed on the spot. In response operations, the priority is to meet the needs of the requesting community. Often a local supplier is both the fastest and cheapest supplier and is utilized. Outside of response to an ongoing emergency, procurement and hiring remains guided by open and competitive procurement policy. 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.	B.C. will continue to assess opportunities to make further use of local resources during response.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
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.	Underway	Provincial agencies made increased use of technology in 2018 including drones and Orthoimagery to increase the understanding of risks to communities.	Provincial agencies will continue to assess and adopt new technologies to aid in response operations.
91.	Develop a basic disaster response financing fund for communities to immediately access once an Emergency Operations Centre has been activated.	Complete	B.C. provides reimbursement for response actions. Some First Nations require upfront funds to pay for response actions while awaiting reimbursement. EMBC has been flexible in identifying alternate payment options in these circumstances.	EMBC will continue to work with local and First Nations governments to understand their needs.
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.	Underway	Ministries are working together to coordinate response and funding sources for mental health recovery.	B.C. will develop a coordinated mental health recovery program framework with FNHA with the involvement of ministries that provide mental wellness supports.
93.	In partnership with First Nations and local governments, B.C. review the legislative framework supporting recovery, identify gaps and ensure they are addressed.	Underway	B.C. is working with communities impacted by 2018 floods and wildfires, to identify challenges with recovery programs and funding.	EMBC is planning a review of the Emergency Program Act with respect to its ability to adequately support recovery activities. B.C. will also develop an integrated recovery framework to improve overall coordination between all recovery delivery agents and to facilitate timely government responses.
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.	Underway	2017 Wildfire Mental Health and Wellness funding plan developed with partners and implemented, including Talk In Tough Times telehealth program, CMHA communication plan and United Way 2017 Wildfire Anniversary events. Mental Health and Wellness Working Groups were established in Williams Lake, Quesnel, 100 Mile House and Ashcroft.	B.C. will develop a formal coordinated mental health recovery program framework.
95.	B.C. host post-emergency debriefing exercises at local, regional and provincial levels to support proactive planning and recovery.	Underway	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 Reviews.	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.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
96.	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.	Underway	EMBC is actively exploring options for modernizing ESS (ESS Modernization Project) and will be working extensively with partners on this initiative.	EMBC will continue to work extensively with partners on this initiative.
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.	Underway	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.	EMBC will continue to encourage impacted communities to establish a resiliency centre and will assist them to do so.
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	The new CRI program is now funding increased FireSmart activities on private lands.	FLNRORD, with partners, will monitor the CRI program, and assess its effectiveness with respect to recommendation #99.
100.	B.C. develop a protocol following wildfires to monitor negative impacts on natural regeneration of trees, native plant species and traditional food sources.	Underway	This is part of the Post Wildfire Natural Hazard Assessment process and recovery works.	FLNRORD will continue to monitor for such impacts.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
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.	Underway	Post 2017 fire season research and adaptive management now targets recovery of fire damaged ecosystems. FLNRORD, with partners, is engaged in and funding research into appropriate treatments for such areas, including appropriate species selection.	FLNRORD will actively look at adaptive strategies for changing post-wildfire circumstance.
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.	Underway	Multiple strategies are being evaluated. Work is underway on a number of initiatives which can contribute to this recommendation, such as the FCI and FFT. However, further integration between multiple initiatives may be warranted.	FLNRORD will assess opportunities to further integrate multiple strategies in support of forest resilience.
103.	B.C. co-develop timber salvage harvest plans with all forest tenure holders, including the joint planning and allocation of available timber for harvest.**	Underway	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.
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.**	Underway	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.

	<b>Recommendation</b>	<b>Status</b>	<b>Action to date</b>	<b>Next steps</b>
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.	Further analysis / discussion required		EMBC is planning a review of the Emergency Program Act with respect to its ability to adequately support recovery activities. B.C. will also develop an integrated recovery framework to clarify recovery policy needs and priorities.
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.	Underway	Training materials are in development.	B.C. will develop and deliver training materials to meet this need. Existing guidance documents regarding financial recovery will be capitalized upon.
108.	Create a bridging program to 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.	Underway	ISC has a Build Back Better policy which supplies transition food replacement to impacted First Nations communities. With respect to livestock, in July 2018 a new Standard Operating Guideline was finalized between BCWS and the Range Program. This Standard Operating Guideline outlines how range issues will be addressed in wildfire planning and response, including review of requests for range access for evacuated livestock.	B.C. will work with partners to assess additional issues identified in this recommendation.