

Emergency Management BC

Annual Report
Fiscal Year 2015-16



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<http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery>

EMBC 2014 – 2017 Strategic Plan:

http://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/provincial-emergency-planning/embc_2014-17_strategic_plan.pdf

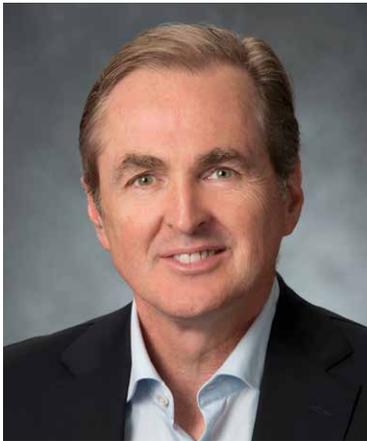
EMBC 2015 – 2016 Annual Report:

<http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/emergency-management-bc>

Contents

- 2 Assistant Deputy Minister’s Message**
- 3 Overview**
- 3 Legislation**
- 3 Vision**
- 4 Mission**
- 4 Organization**
 - 4 Integrated Public Safety (IPS)
 - 4 Logistics
 - 5 Plans and Mitigation
 - 5 Operations & Recovery Transition
 - 5 Organizational Learning and Public Education
 - 5 Office of the Fire Commissioner (OFC)
- 5 Finances**
- 6 2014-15 – 2016-17 EMBC Strategic Plan**
 - 6 Strategic Plan Progress
 - 15 OFC – Office of the Fire Commissioner
 - 15 Partnership Support
- 18 2015-2016 Emergency Response Events**
 - 20 Key Statistics
- 21 Appendix A: EMBC Strategic Plan**
- 21 Appendix B: Contact Information and Hyperlinks**

Assistant Deputy Minister's Message



I am very pleased to have recently taken the helm at EMBC. The responsibility to support British Columbia in preparing for, responding to, recovering from, and mitigating emergencies is a sobering one. Along with the staff at EMBC, we endeavor to not only deliver the programs and services we are legislated to provide, but to support other authorities within their areas of jurisdiction while we strive to improve and modernize our program wherever possible.

With the transfer of emergency management to the Ministry of Transportation and Infrastructure (MOTI) in 2015, this second **Annual Report** includes a summary of related accomplishments and areas of significant progress for EMBC in 2015-16. While the organization has progressed significantly over the past year, it is important to not only highlight the successes but also to examine areas where we can improve.

To ensure B.C.'s legislation meets modern needs, EMBC engaged in the development of Bill 4, the new **Fire Safety Act**, which was passed on Feb. 15, 2016, and is awaiting implementation. It also launched the **Emergency Program Act** consultation, in order to develop recommendations for critical improvements to the Act.

In 2015-16, EMBC prepared extensively in leading the development of Exercise Coastal Response, a full-scale major earthquake and tsunami response exercise that took place after this reporting period in June 2016.

I look forward to leading EMBC into the delivery of the final phase of the existing strategic plan and to defining the way ahead in order to continually improve the delivery of emergency management services in British Columbia.

A handwritten signature in black ink, appearing to read 'R. Turner', written in a cursive style.

Robert Turner
Assistant Deputy Minister
EMBC, Ministry of Transportation and Infrastructure

Overview

Emergency Management BC (EMBC), a branch within the Ministry of Transportation and Infrastructure (MOTI), was formed to be the lead co-ordinating agency in the provincial government for all emergency management activities. EMBC provides executive co-ordination, multi-agency facilitation, and strives to develop effective working relationships in an increasingly complex emergency management environment.

EMBC works with local governments, First Nations, federal departments, industry, non-governmental organizations, and volunteers to support the emergency management phases of mitigation and prevention, preparedness, response, and recovery. Additionally, EMBC engages provincial, national and international partners to enhance collective emergency preparedness.

This year, EMBC employed a total of 110 employees and provided leadership and support to stakeholders through two main programs:

- ▶ *Emergency Management*
- ▶ *Office of the Fire Commissioner*

EMBC and the Office of the Fire Commissioner (OFC) were transferred with the realignment of emergency management from the Ministry of Justice to MOTI. The BC Coroners Service (BCCS) remained with the Ministry of Justice, which accounts for the reduction in the number of employees from 2014-15.

Legislation

The **Emergency Program Act (EPA)** requires local authorities, ministries, Crown corporations, and government agencies to develop plans and programs to prepare and respond to emergencies and disasters in the province. It also provides local authorities, the Minister responsible for the Act, and the Lieutenant Governor in Council with the ability to declare a state of emergency in order to access the extraordinary powers required to co-ordinate and effectively respond to emergencies.

In early 2016, EMBC initiated a review of the EPA that carries over into the next reporting period. The engagement and feedback can be found at: <https://engage.gov.bc.ca/emergencyprogramact/>

Recommendations based on stakeholder feedback are under review will require further consideration. The comprehensive review of the detailed responses will require some time in order to fully respect the significant stakeholder effort in the responses.

The **Fire Services Act (FSA)** provides the OFC with its mandate and responsibility to deal with fire safety through prevention, investigation and inspection processes. The regulations stipulate that the OFC has responsibility for enforcement of the Fire Code, which is accomplished through a system of Local Assistants to the Fire Commissioner (LAFCS). The OFC also provides advice and guidance to fire departments on a variety of issues.

New legislation that will repeal and replace the current Fire Services Act was passed by government in the spring of 2016. The new **Fire Safety Act** will modernize the legislation and provide for effective enforcement of the Fire Code through the use of administrative monetary penalties. The new Act is expected to come into force by regulation once the necessary regulations and policies are finalized, along with the necessary public education components.

Vision

EMBC will be the premier organization in Canada for the management of emergencies and disasters at the provincial level. Our leadership will solidify a co-operative and effective approach to emergency management in British

Columbia. As a result, the Province will be resilient, adaptive and confident in its abilities when challenged by known and emergent threats to public safety.

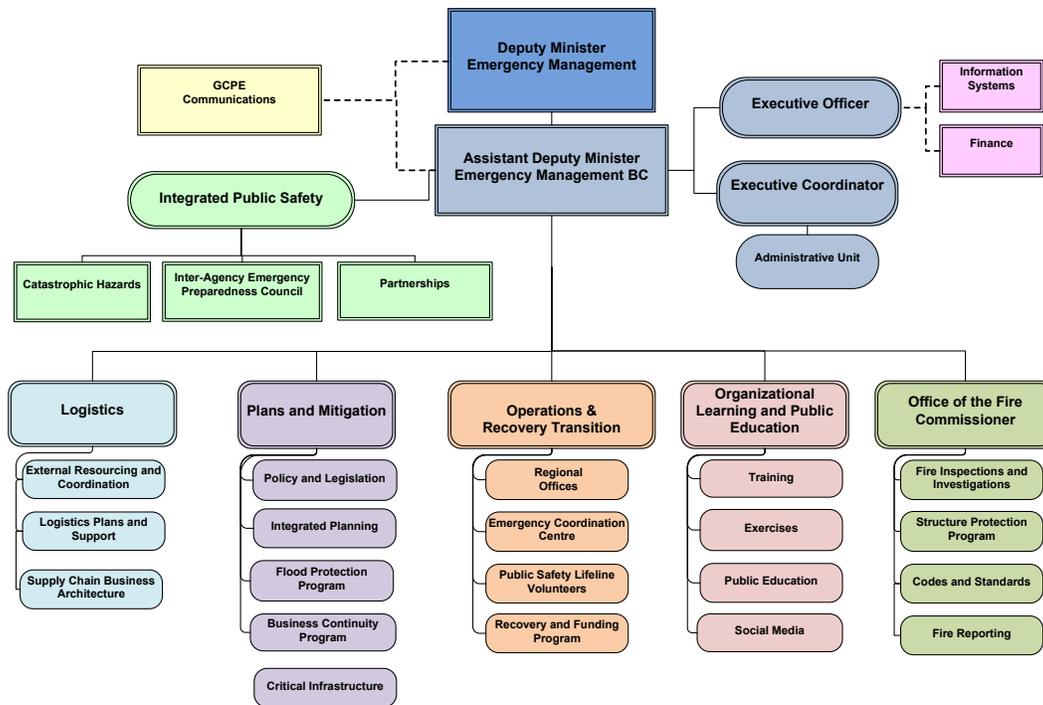
Mission

EMBC is responsible to British Columbians for leading the management of provincial level emergencies and disasters and supporting other authorities within their areas of jurisdiction.

Organization

EMBC operates its headquarters, the Provincial Emergency Co-ordination Centre (PECC), and its 24/7 Emergency Co-ordination Centre (ECC) in Victoria. Six regional offices are located in Terrace, Prince George, Kamloops, Nelson, and Surrey, with the Vancouver Island regional office co-located at the headquarters facility in Victoria. Each regional office houses a Provincial Regional Emergency Operations Centre (PREOC).

EMBC delivers its programs through the following core business areas:



Integrated Public Safety (IPS)

IPS provides integration of public safety programs on behalf of the Province to prepare for, respond to, and recover from all-hazard emergencies and disasters. Integration occurs through strategic provincial leadership for catastrophic emergency planning (current focus is on earthquakes and tsunamis), regional emergency and stakeholder agency partnerships, agreements with cross-border organizations, and internal emergency management co-ordination and collaboration.

Logistics

Logistics partners with multiple government and non-governmental agencies and organizations across jurisdictions to provide the overall logistics and transportation co-ordination and direction in the event of a large scale event, with a primary focus on earthquake preparedness in B.C.

Plans and Mitigation

Plans and Mitigation provides a critical role leading strategic policy and planning in support of the entire suite of EMBC's programs and services. It enhances the capacity of communities and partners to reduce the potential impacts of emergencies or disasters. This group also administers the Province's Flood Protection Program which will evolve into the BC Disaster Mitigation Program and Business Continuity Program, and provides cross-government leadership for significant and complex planning and post-event recovery activities.

Operations & Recovery Transition

Operations and Recovery Transition co-ordinates the provincial response to emergencies and disasters. It co-ordinates the delivery of Disaster Financial Assistance (DFA) to support individuals and communities recovering from a DFA-designated disaster, and co-ordinates the Province's engagement with the federal Disaster Financial Assistance Arrangements (DFAA) cost-sharing program that generates significant cost recoveries to the Province following large-scale disasters. Operations and Recovery Transition also co-ordinates support to Public Safety Lifeline Volunteers (PSLVs) who provide an array of critical, front-line emergency services including: Air and Ground Search and Rescue (SAR), Road Rescue, Emergency Social Services (ESS), and Emergency Radio Communications (ERC).

Organizational Learning and Public Education

Organizational Learning and Public Education supports and enhances effective disaster management through training and exercises, and promotes a culture of preparedness through public education, stakeholder engagement and online communications.

Office of the Fire Commissioner (OFC)

The OFC is the senior fire authority in the province with respect to fire safety and prevention. Services include administration and enforcement of fire safety legislation, training of local assistants to the Fire Commissioner, fire loss statistics collection, fire investigation, fire inspection, response to major fire emergencies, advice to local governments on delivery of fire protection services, public fire safety education, and firefighter certification.

For information on the specific programs and services of EMBC, please visit our website at: <http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery>

Finances

EMBC's yearly finances are accounted for through two streams:

- ▶ Annual Operations Budget = \$14.437 million

For the fiscal year 2015-16 EMBC's total annual operations budget was \$14.437 million. The EMBC operations funds were used to undertake provincial emergency planning, preparedness, and mitigation efforts relating to flood, fire, and other hazards. These funds allow for promotion of emergency management capacity within British Columbia communities, business continuity and integrated public safety planning.

- ▶ Emergency Program Act (EPA) = \$14.478 million

Under Section 16 of the EPA, EMBC can access Consolidated Revenue Funds (CRF) to provide the funding considered necessary to implement a provincial emergency plan or provincial emergency measure. For the fiscal year 2015-16 funding was also provided to EMBC through the EPA voted funding allocation totaled \$14.478 million. These funds provided for ministry programs and operations described in the EPA, and accounted for costs associated for response through to recovery from emergencies, disasters, and for hazard mitigation initiatives.

2014-15 – 2016-17 EMBC Strategic Plan

In formulating its strategic plan in 2014, EMBC originally sought alignment with the Ministry of Justice’s reform goals and developed five key goals that reflect EMBC’s unique role in supporting safety and resiliency for British Columbia’s communities. To date, these goals have remained and are in keeping with the MOTI service planning cycle. The 2014-15 – 2016-17 EMBC Strategic Plan reflected an ongoing commitment to these key goals:

- 1 EMBC is a learning organization with a culture of continuous improvement.
- 2 EMBC is expert in leading the management of catastrophic disasters of provincial significance and impact.
- 3 EMBC is effective in supporting other responsible authorities in their mandate to mitigate and manage emergencies and disasters.
- 4 EMBC excels in the provision of the Office of the Fire Commissioner’s unique services. (The BC Coroners Service was moved from EMBC’s mandate in 2015)
- 5 EMBC empowers and strengthens volunteer organizations.

In support of the five key goals, EMBC has prioritized its work activities for the 2014-2017 timeframe under six strategic lines of effort, these include:

- 6 Organizational Capacity
- 7 Catastrophic Earthquake Preparedness
- 8 Training and Exercises
- 9 Partnerships
- 10 Public Education
- 11 Business Practices and Governance

Strategic Plan Progress

The majority of the work outlined in the Strategic Plan is either complete or near completion, and those few projects not yet complete are in development, scheduled or contingent on availability of funding.

LINE OF EFFORT #1: ORGANIZATIONAL CAPACITY

Activity/Project	Description & Value	Current Status & Next Steps
Develop key capacity in strategic areas	New positions provide EMBC with enhanced capacity and capabilities with 24/7 operational coverage, decision making, planning and co-ordinating emergency logistics, and, developing integrated training and exercise opportunities.	<p>100% Complete – Hiring of new staff positions.</p> <p>New Staffing Plan continued with the following new priority hires becoming fully trained and integrated into EMBC:</p> <ul style="list-style-type: none"> • Provincial Duty Managers (PDMs) x 6 • Executive Director for Logistics • Assistant Director Logistics • Logistics Deployment and Planning Manager • Supply Chain Architect • Training & Exercise Coordinator • Exercise Specialist <p>EMBC will explore other potential staffing options to enhance surge capacity needs; this will be ongoing.</p>

Activity/Project	Description & Value	Current Status & Next Steps
Provincial Co-ordination Capacity	<p>Provincial Co-ordination Team (PCT) provides additional capacity during major events for the purpose of:</p> <ul style="list-style-type: none"> • Enhanced situational awareness • Support to EMBC operations centres • Support to Local Authorities 	100% Complete – Development of PCT concept, feasibility, scoping and initial implementation.

LINE OF EFFORT #2: CATASTROPHIC EARTHQUAKE PREPAREDNESS

Activity/Project	Description & Value	Current Status & Next Steps
Multi-year Earthquake Planning Roadmap	A roadmap that outlines the deliverables required for EMBC in leading earthquake preparedness in B.C.	<p>100% Complete – Initial earthquake planning roadmap.</p> <p>Extend the roadmap beyond the immediate response phase to address deliverables for sustained response planning.</p>
BC Earthquake Plans	<p>The Earthquake Immediate Response Plan (IRP) addresses initial provincial actions to a catastrophic earthquake. The IRP identifies roles and responsibilities of provincial ministries and stakeholders in the immediate response phase of an earthquake and summarizes the key activities and integrated actions required.</p>	<p>100% Complete – BC Earthquake Immediate Response Plan.</p> <p>Conducting stakeholder consultation sessions on the IRP with provincial ministries, federal government, critical infrastructure stakeholders and local authorities.</p> <p>Initiate planning for sustained response phase; development of sustained response plan has begun.</p>
Consultation with Stakeholders on the subject of earthquake preparedness	<p>Undertook extensive consultation with British Columbia stakeholders regarding issues, priorities, and opportunities in the area of catastrophic earthquake preparedness.</p> <p>The consultation and subsequent report outlines a number of sensible, long-term steps to achieve a highly prepared British Columbia.</p>	<p>100% Complete – Earthquake Consultation Report. Final report approved and published on March 26, 2015, and posted to EMBC website.</p> <p>EMBC has received and reviewed the report, and is now using the recommendations as input towards updating its annual strategic plan.</p>
Enhance Business Continuity	Enhancing business continuity capabilities will ensure that critical government business and cross government co-ordination will continue with as little disruption as possible during catastrophic events.	<p>100% Complete – Refresh of Provincial Mission Critical Services list.</p> <p>100% Complete – Alternate facility from which the Emergency Co-ordination Centre (ECC) and Provincial Emergency Co-ordination Centre (PECC) can operate.</p> <p>EMBC has successfully established and exercised an alternate operations facility.</p> <p>Further testing and exercises will be incorporated into EMBC exercise plans.</p>

Activity/Project	Description & Value	Current Status & Next Steps
Enhance Business Continuity (con't.)	Implement approved Government Services Branch Plan.	<p>60% Complete – Draft Business Continuity Plan for Government Services Branch (GSB) scope expanded during 2015-16 to include a comprehensive review of processes and procedures between GSB, Operations Section of the Provincial Emergency Co-ordination Centre (PECC), Logistics Resource Requests Co-ordination and Tracking Branch and the Ministry of Technology, Innovation and Citizens' Services (MTICS) during catastrophic events.</p> <p>The GSB Plan will be finalized in 2016-17 with implementation of support strategies, recruitment of Temporary Emergency Assignment Management System (TEAMS) members and the development of training.</p>
Enhance Provincial Emergency Notification System (PENS)	<p>Enhancements designed to decrease time to issue alerts, ensure right people are notified and ensure reliability of system.</p> <p>Explore the use of PENS and emergent technologies for additional warnings beyond tsunami notification.</p>	<p>100% Complete – Enhancements to the PENS system. Ongoing stakeholder communication and testing, as well as ongoing process and enhancements to the system with a commitment to continuous improvement.</p> <p>EMBC is actively exploring next generation alerting tools to further enhance key stakeholder and public alerting.</p> <p>Capital funding secured for development of future public alerting program.</p>
Enhance the communication ability of Senior Officials	Provide alternate communications for senior and elected officials to ensure backup communications are available to key decision makers during emergencies and disasters.	<p>100% Complete – Satellite phones distributed and training provided as part of senior officials/cabinet workshop held June 3, 2015.</p> <p>Senior officials and deputy ministers participated in an exercise to validate this training and future exercises are being planned.</p>
Integrated Information Systems	EMBC has undertaken high-level project scoping, budgeting, scheduling, and planning for interdependencies between its information systems projects, and has integrated its high-level plans into broader MOTI information technology planning.	10% Complete – Further work is contingent upon available funding.

Activity/Project	Description & Value	Current Status & Next Steps
Critical Infrastructure (CI) Program	<p>The protection and restoration of critical infrastructure assets is essential for recovery after a catastrophic event. Key elements of the critical infrastructure (CI) program include working with a broad range of critical infrastructure owners and stakeholders to identify a provincial list of critical assets and priority restoration requirements.</p> <p>Develop a list of provincial critical infrastructure assets.</p>	<p>95% Complete – New CI Assessment Tool for Local Authorities.</p> <p>EMBC collaborated with Defence Research Development Canada and Justice Institute of BC, to develop a new CI Assessment tool and education materials for Local Authorities, designed to identify, prioritize and analyze vulnerabilities to local CI assets.</p> <p>Tool developed and into implementation stage. Developing a communications strategy to support dissemination of the CI tool.</p> <p>10% Complete – Research conducted on: existing resources; formats to communicate the information; and the anticipated uses of the asset list relative to planning and operations to determine the scope of the content included.</p>
Logistics Management System	<p>The development of a provincial emergency management Logistics Management System (LMS) based on the BC Earthquake Immediate Response Plan related to earthquake preparedness is a critical enabler to support catastrophic earthquake and/or large-scale response to events affecting the Province.</p>	<p>10% Complete – EMBC Logistics Section is fully staffed and has commenced work on designing critical supply chain strategies (water, fuel, medical and food) relative to the immediate and sustained response phases of a seismic event. Collaborative work with the establishment of a governance team for the water supply chain strategy fosters local authorities' engagement in the strategy design in order to meet their communities' needs.</p>

LINE OF EFFORT #3: TRAINING AND EXERCISES

Activity/Project	Description and Value	Current Status and Next Steps
Training:		
Develop and deliver operational training for the PECC and PREOCs	<p>EMBC is developing function specific training to ensure that staff in the PECC and PREOCs are adequately trained to fulfill operational roles.</p>	<p>100% Complete – Delivery of operational training including Core and E-Team information management courses.</p> <p>Development complete for modules in activation, resource management, situational awareness and demobilization. Course pilot sessions delivered at EMBC Victoria office, facilitator training completed for regional staff. Online version also complete and available to staff.</p> <p>Development of planning module underway.</p>
Develop and deliver training to Provincial Government Senior Officials	<p>Senior Provincial Officials will be better prepared to carry out their roles and responsibilities during emergencies and disasters.</p>	<p>100% Complete – Senior Provincial Officials Workshop.</p> <p>Workshop was delivered in June 2015 and included presentation on new decision making tools.</p>

Activity/Project	Description and Value	Current Status and Next Steps
Training (con't):		
Develop and deliver Elected Officials workshop for Local Authorities	Local Authority Elected Officials will be better prepared to carry out their roles and responsibilities during emergencies and disasters.	100% Complete – Local Authority Elected Officials training materials and accompanying presentation. Twenty individual sessions delivered across B.C. regions to support Local Authorities.
Deliver Emergency Management (EM) training and Emergency Social Services (ESS) Training to Local Authorities and Public Safety Lifeline Volunteers	Local Authorities and volunteers will be better prepared and trained to carry out their respective roles and responsibilities during emergencies and disasters.	100% Complete – EM Training delivered: <ul style="list-style-type: none"> • 65 EM classroom courses (1,185 participants) • 6 EM webinars (476 participants) • Online EM training (49 participants) 100% Complete – ESS Training delivered: <ul style="list-style-type: none"> • 102 Courses • 2,572 Students trained New fiscal year courses are being scheduled and posted to EMBC website.
Exercises:		
Conducting Exercise Coastal Response, in June 2016	A full-scale catastrophic earthquake and tsunami response exercise to validate specific elements of the 2015 BC Earthquake Immediate Response Plan.	100% Complete on Design and Development – 65 organizations expected to participate in the \$1.2 million exercise, including provincial ministries/agencies, federal departments, local authorities, First Nations, not-for-profit response providers and corporate stakeholders. Details include: <ul style="list-style-type: none"> • PECC, VIR, SWE PREOCs to fully activate for four days, with 600 EM and first responders and more than 300 volunteer roleplayers expected.

LINE OF EFFORT #4: PARTNERSHIPS

Activity/Project	Description and Value	Current Status and Next Steps
Support to Local Authority Emergency Management Programs	EMBC has developed, and will implement, a strategy to advance engagement, support and communications with local governments in British Columbia. EMBC will provide a number of tools and services through the EMBC website and regional offices located throughout the province.	100% Complete – Strategy developed to improve communications and support for Local Authority Emergency Programs.

Activity/Project	Description and Value	Current Status and Next Steps
Support to Local Authority Emergency Management Programs (con't.)	Complete the deliverables outlined in the strategy. Establish a review process for EMBC support to local government.	<p>75% Complete (for 2015-16) – Ongoing follow-up with EMBC program staff and Local Authorities through meetings, working groups and program development.</p> <p>Full Local Government Strategy program details available at: http://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/local-government/embc_strategy_to_advance_la_emergency_programs_-_oct_2015_final.pdf</p>
Expand network of regional emergency management partnerships	<p>Regional emergency management partnerships can enhance all phases of emergency management and foster greater integration and collaboration by addressing regional gaps/issues, and prioritizing development of joint projects that will benefit multiple jurisdictions and stakeholders.</p> <p>Expand the framework of regional emergency management partnerships, beyond Metro Vancouver's IPREM, to other jurisdictions across British Columbia.</p>	<p>100% Complete – Strategy for establishing regional emergency management partnerships within the province.</p> <p>100% Complete – EMBC formalized a regional emergency management partnership with the Capital Regional District on behalf of its communities in 2016. One new EMBC staff position has been hired to support the Regional Emergency Management Partnership (REMP), and Strategic Planning for the new partnership is underway.</p>
Partnerships with Existing Emergency Management Organizations	<p>Ensuring the Province's ability to expedite requests for federal assistance and secure additional support, as needed, from other provinces and cross-border alliances during a disaster.</p> <p>Participate in the development of the operational guidelines for the Canadian Council of Emergency Management Organizations (CCEMO) Emergency Management Mutual Aid Agreement.</p>	<p>80% Complete – Draft protocol and process for requesting federal assistance.</p> <p>Review and adaptation to a common process document, followed by implementation into the provincial emergency management structure.</p> <p>100% Complete – Responsibility for Executive Chair of the Pacific Northwest Emergency Management Arrangement (PNEMA) shifted to Washington State. Support to PNEMA is ongoing.</p>
Public Safety Lifeline Volunteers (PSLV)	EMBC will provide ongoing support and recognition to PSLV groups in various forms to ensure service provision across B.C.	<p>100% Complete – Formal recognition program developed to support PSL Volunteers.</p> <p>A recognition ceremony will be held each year at the Legislature.</p>

Activity/Project	Description and Value	Current Status and Next Steps
<p>Public Safety Lifeline Volunteers (PSLV) (con't.)</p>	<p>EMBC provided \$10m to BC Search and Rescue Association (BCSARA) in support of search and rescue activities.</p> <p>2014-17: Review and update volunteer policies to support operational readiness and responder safety.</p>	<p>Ongoing – Review and updating of volunteer policies to support operational readiness and responder safety, including:</p> <ul style="list-style-type: none"> • Swift Water Operating Guidelines • Code of Conduct and Policy for all PSLV • Road and Medical Rescue Policy <p>Work with BCSARA to research new strategies for funding support. Interim funding (\$10 m) provided for the next two years.</p> <p>EMBC will develop a comprehensive needs analysis to evaluate how the volunteer system in B.C. should evolve to ensure a robust, sustainable program.</p> <p>90% Complete – EMBC policy update working group has reviewed and updated these policies. Awaiting executive approval, as of the end of the reporting period.</p>
<p>National Disaster Mitigation Program (NDMP)</p>	<p>EMBC will develop a natural hazard mitigation approach to protect the province's strategic interests and to support local governments with the accurate identification of risks, construction of permanent mitigation structures and implementation of non-structural works to improve community resiliency.</p> <p>Complete consultation with the federal government on the structure and feasibility of a new NDMP.</p>	<p>75% Complete – Province working with federal government on an approved list of initial key NDMP projects.</p> <p>Initial focus is on risk assessments and flood mapping, but not precluding other activities.</p> <p>EMBC is working in partnership with provincial ministries and stakeholders to determine potential priorities for this mitigation funding.</p> <p>80% Complete – EMBC is prepared to undertake a new BC Disaster Mitigation Program in the next reporting period.</p>

LINE OF EFFORT #5: PUBLIC EDUCATION

Activity/Project	Description and Value	Current Status and Next Steps
Public education needs assessment	Provide the foundation for a comprehensive public education program.	100% Complete – Public education needs assessment report.
New hazard-specific education materials	Implement the findings from the public education needs assessment. Review and update hazard specific materials in support of operational and seasonal readiness.	<p>100% Complete – Creation of the PreparedBC program, which provides a one-stop, authoritative resource for emergency readiness information.</p> <p>Materials are available in print and also delivered via the PreparedBC website and social media channels. New education materials include:</p> <ul style="list-style-type: none"> • Earthquake and Tsunami Smart Manual (Revised) • Basic Emergency Kit card • Household Preparedness Guide • Household Emergency Plan • Neighbourhood Preparedness Guide • Pet Preparedness Insert • Preparedness Guide for Apartments, Condos and Townhomes • Preparedness Resources for People with Disabilities
Tsunami public education campaign	Create a Tsunami Preparedness Week campaign to be used as a yearly public education platform.	<p>100% Complete – Tsunami Preparedness Week (TPW) is now recognized during the second full week of every April. In 2016, PreparedBC also supported the first-ever community-led High Ground Hike, which was held in Tofino. Template event packages have been created to encourage more coastal communities to run their own event during TPW.</p> <p>PreparedBC also runs an annual TsunamiSmart social media campaign during TPW.</p>
Learning Resources for B.C. schools	Develop emergency preparedness learning resources aimed at educating students about B.C.'s disaster risks and how to prepare for them.	<p>80% Complete – Master of Disaster Learning Resources for Grade 6 students.</p> <p>The program was developed in collaboration with a working group of teachers and emergency managers from across B.C. Pilot launched in Spring 2016 for province-wide rollout in October 2016 coinciding with ShakeOut.</p>

LINE OF EFFORT #6: BUSINESS PRACTICES AND GOVERNANCE

Activity/Project	Description and Value	Current Status and Next Steps
Business/Financial Practices and Governance Review	<p>EMBC conducted a review of all financial processes and governance, and approved several procedure enhancements as part of a renewed management framework to clarify accountabilities and improve efficiencies.</p> <p>Implement new financial procedures and supporting policy if necessary.</p>	<p>100% Complete – Enhanced EMBC business and operational practices.</p> <p>100% Complete – During 2015-16 enhancements focused on full implementation of new business processes, continuous improvement, additional training where required, and targeted policy clarifications.</p>
Annual Reporting Process	<p>EMBC’s Annual Report provides a high-level snapshot of strategic activities and projects accomplished during the fiscal year, and insight into EMBC’s state of preparedness.</p>	<p>100% Complete – Framework and process established for compiling an EMBC Annual Report.</p>
Review of Emergency Program Act (EPA) and Associated Regulations	<p>The Emergency Program Act (EPA) may benefit from amendments in order to ensure the Province is in a position to best lead the management of provincial emergencies and disasters while also empowering other authorities within their areas of jurisdiction.</p>	<p>100% Complete – Review of legislation completed. Public consultation with internal and external stakeholders conducted – results available at: https://engage.gov.bc.ca/emergencyprogramact/</p>
After Action Reporting	<p>After action reporting provides a forum to summarize positive response activity as well as issues that require further attention and planning. Recommendations are identified and incorporated into plans and programs, in order to enhance future emergency response activity.</p>	<p>75% Complete – Detailed after action reporting guide and supporting documents.</p> <p>Post-event operational debriefs are now routinely conducted by EMBC and after action reports compiled.</p> <p>EMBC is working towards consistency across all six of its regions to conduct internal post-event debriefs and after action reports.</p> <p>Debrief processes and after action reporting will also be expanded across provincial ministries, ensuring a structured, scalable and collaborative approach.</p>

OFC – Office of the Fire Commissioner

As part of the overall EMBC Strategic Plan, the OFC has created a separate three-year Strategic Plan that can be found at this link: <http://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/fire-safety/ofc-strategic-plan.pdf>

Partnership Support

INTER-AGENCY EMERGENCY PREPAREDNESS COUNCIL (IEPC)

The Inter-Agency Emergency Preparedness Council (IEPC) is comprised of senior decision makers from provincial ministries, crown corporations and key emergency management stakeholders. As referenced in the Emergency Program Act (EPA), the IEPC is responsible for recommending to greater government, co-ordinated emergency prevention and mitigation, preparedness, response and recovery measures for the Province of British Columbia. The IEPC is led and supported by EMBC, and is tasked with developing and promoting policies and procedures for a government-wide integrated emergency management system. The IEPC oversees development, maintenance, training and exercising of comprehensive government plans and procedures to deal with any emergency or disaster, including security issues where appropriate, and promotes integration and consistency between the Province's emergency management system and those of other governments and organizations.

IEPC's priorities for 2015-2016, included:

- ▶ Review and endorsement of the new BC Immediate Response Plan for earthquakes (IRP) and supporting annex Transportation Immediate Response Plan (TIRP).
- ▶ Support to EMBC with the design, development, co-ordinated conduct and evaluation of the full-scale Coastal Response earthquake exercise. The exercise focused on an earthquake impacting Vancouver Island and generating a tsunami, testing elements of the IRP, activation of the provincial emergency management structure (EOCs, PREOCs, PECC) and deployment of specialized resources (HUSAR, and PCT).
- ▶ After Action reporting on wildfires, flooding, drought and integrated exercise activity.

INTEGRATED PARTNERSHIP FOR REGIONAL EMERGENCY MANAGEMENT (IPREM)

In 2009, EMBC partnered with the Greater Vancouver Regional District (Metro Vancouver) to form IPREM (the Integrated Partnership for Regional Emergency Management), with each partner contributing 50% of the required budget. Recognizing emergency management as a shared responsibility, IPREM is a mechanism for co-ordinating a collaborative, inclusive approach to regional emergency management planning for the Metro Vancouver region.

IPREM's priority projects for 2015-2016, included:

- ▶ Completed the 2016-2020 IPREM Strategic Plan through a 'bottom-up' approach that incorporated stakeholder consultation to identify IPREM's priorities for the next five years across the Metro Vancouver region. The Plan is designed to address regional gaps in emergency management.
- ▶ Hired the new senior project manager for IPREM to conduct regional projects and enhance communications and engagement with stakeholders.
- ▶ Collaborated with the Metro Vancouver Engineering Advisory Committee to develop a new disaster debris management operational plan template for local authorities.
- ▶ Validated the All Hazard Integrated Regional Concept of Operations through a series of tabletop exercises. This model was approved by Metro Vancouver Chief Administrative Officers and EMBC to be implemented and used in a real-time emergency event.

REGIONAL EMERGENCY MANAGEMENT PARTNERSHIP (REMP)

The Memorandum of Understanding (MOU) for the new Regional Emergency Management Partnership (REMP) was signed between the Province and the Capital Regional District (CRD) on southern Vancouver Island on behalf of the Local Authorities, Electoral Areas and First Nation members of the Capital Region.

SEASONAL HAZARD PREPAREDNESS

EMBC hosts annual forums in each region to provide opportunities for representatives from Local Governments and First Nations to be briefed and collectively discuss relevant seasonal hazards, such as flooding and wildfires.

STRATEGY TO ADVANCE SUPPORT FOR LOCAL GOVERNMENT ENGAGEMENT

In October 2015, a three-year strategy was published in order to support EMBC's goal to ensure "EMBC is effective in supporting other responsible authorities in their mandate to mitigate and manage emergencies and disasters," as outlined in EMBC's strategic plan.

The four goals of the strategy are:

- ▶ To apply a flexible approach to tool development that recognizes the difference between local authority emergency programs.
- ▶ To provide EMBC staff the tools, resources and training to ensure effective program delivery to local authorities.
- ▶ To create more opportunities for meaningful dialogue and communications between EMBC and local authorities.
- ▶ To promote leadership and provide governance through collaboration and shared learning.

The deliverables of the strategy are diverse and extend to all EMBC sections. Current activities underway include:

- ▶ The development of an emergency planning toolkit for local authorities.
- ▶ Updating the Hazard, Risk, and Vulnerability Analysis Tool (online).
- ▶ Updating the Financial Assistance for Emergency Response and Recovery Guidelines.
- ▶ Hosting of facilitated provincial discussions (through the Webinar series).
- ▶ Participation in events such as the Emergency Preparedness and Business Continuity Conference and Union of BC Municipalities annual convention.

BRITISH COLUMBIA EMERGENCY MANAGEMENT SYSTEM (BCEMS)

Developed in 2000 under the authority set out in the provincial *Emergency Program Act* and the Emergency Program Management Regulation, BCERMS (BC Emergency Response Management System) provided a comprehensive framework for a standardized approach to developing, co-ordinating and implementing emergency management programs across the province. To reflect the evolution of experience and best practices, BC's IEPC directed EMBC to lead the BCERMS Refresh Project in 2013.

Extensive consultation with over 250 emergency management stakeholders from all levels of government, non-governmental organizations, volunteers, and private and public sector agencies led to a four-phase emergency management system, covering Mitigation, Preparedness, Response, and Recovery. Reframed as BCEMS (BC Emergency Management System), the modified structure provides a more integrated approach for those who are responsible for emergency management and public safety. A new BCEMS Guide includes a self-assessment tool, and together these enable emergency managers to assess, develop and strengthen their emergency management programs.

The new BCEMS guide is available on the EMBC website at: <http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery>

SEISMIC SAFETY PROGRAM

The Province contributed \$5 million to Ocean Networks Canada (ONC) to support the development of an earthquake early warning system for the Cascadia Subduction Zone. EMBC monitored ONC's initial progress towards the installation of system sensors offshore and on Vancouver Island. Once complete, the system will be part of a number of earthquake early warning systems in B.C.

EMBC released the BC Earthquake Immediate Response Plan (IRP), the first component of a comprehensive provincial earthquake plan that details how the Province will lead and co-ordinate during the immediate response phase following a catastrophic seismic event. It articulates the roles, responsibilities and integration of the various stakeholders who will be involved in a provincial-level response effort.

EMBC continued to lead and co-ordinate meetings of the BC Integrated Earthquake Planning Team and BC Seismic Safety Council. These groups (composed of emergency management professionals from all levels of government, critical infrastructure owners, NGOs and academic experts) recommend goals and priorities for province-wide strategies that address seismic threat through mitigation, preparedness, response, and recovery activities.

SHAKEOUTBC EARTHQUAKE DRILL/CAMPAIGN

The Great British Columbia ShakeOut was held on Oct. 15, 2015, with a then record-setting 776,881 participants.

Broken down by EMBC region the participation was as follows:

- ▶ Central: 18,390
- ▶ Northeast: 6,606
- ▶ Northwest: 10,975
- ▶ Southwest: 497,381
- ▶ Southeast: 5,622
- ▶ Vancouver Island: 209,971
- ▶ Other (participants registered via organizations with province-wide operations): 27,936

Of note, the provincial government registration increased by 10%.

2015-2016 Emergency Response Events

EMBC led and/or provided co-ordination support to a number of emergency response events that occurred between April 1, 2015 and March 31, 2016.

Event	Event Description	Observations and Learning
Bulkley River and Kicking Horse River Ice Jams	Ice jams on a section of the Bulkley River near Terrace and on the Kicking Horse River in downtown Golden caused localized winter flooding.	<ul style="list-style-type: none"> • Annual hazard event. Consideration for mitigation funding where appropriate.
Vancouver Artesian Well	A company contracted to install a geothermal pump struck an artesian well (aquifer containing groundwater under positive pressure). Unable to contain the flow or an expanding sinkhole, the City of Vancouver worked with the province to consider containment and repair options as well as evacuation orders to nearby residents.	<ul style="list-style-type: none"> • Water survey, management and stewardship is complex and crosses local and provincial responsibilities
Wildfire Season	Over 1,800 wildfires burned over 300,000 hectares of the province's forests. The wildfire season for B.C. began in early May with an interface fire near Norman Lake, south-west of Prince George. Wildfires challenged almost every region from that time forward until the end of August. All EMBC regions provided co-ordination and direct support to local authorities and stakeholders. All Provincial Regional Emergency Operations Centres (PREOCs), with the exception of the Northwest, were active for extended periods from May to September. The Provincial Emergency Co-ordination Centre (PECC) was activated for a significant period to provide provincial co-ordination and situational awareness.	<ul style="list-style-type: none"> • Multiple activations for extended periods • Close co-ordination between adjoining local authorities and with Critical Infrastructure providers was required • Local authorities were proactive to ensure evacuation alerts and orders were issued • Structural protection units were instrumental in limiting the damage to buildings
Cache Creek Flash Flood	A sudden downpour overwhelmed streams and municipal drainage systems leading to significant damage to the village of Cache Creek infrastructure. Disaster Financial Assistance (DFA) was declared for this event.	<ul style="list-style-type: none"> • Province provided expertise and assistance to the community to manage this unpredicted event
Spring/Fall Flooding	Spring flooding was largely concentrated in the Vanderhoof area. Heavy rains resulted in multiple landslides and flooding in the Sea-to-Sky corridor in September and localized flooding on Vancouver Island in early December. Heavy rains caused additional flooding in these areas in January. Regional and provincial support was provided to assist local authorities and First Nations efforts to mitigate the rising waters, respond to flooding and to set the conditions necessary for recovery. DFA was declared for all areas affected by these flooding events.	<ul style="list-style-type: none"> • Province provides mitigation support to communities to assess areas known to be prone to flooding. • Province provides support with geo-technical assessments to assess areas with heavy rain and rising waters to have caused erosion or landslides.

Event	Event Description	Observations and Learning
Lower Mainland and Vancouver Island Storm Events	A significant storm passed over Vancouver Island and onto the Lower Mainland at the end of August. The storm resulted in widespread, extended power outages and downed trees that impacted the transportation network. A powerful storm moved across Vancouver Island, the Lower Mainland and the Sunshine Coast in early March causing over 100,000 customers to lose power.	<ul style="list-style-type: none"> • DFA was declared for the Lower Mainland August event.
Boat Sinking	Six persons lost their lives when the sight-seeing vessel, Leviathan II, sank near Tofino. Local authorities were provided support to establish temporary shelter to survivors and Disaster Psycho-Social Counselling for responders.	<ul style="list-style-type: none"> • Local, provincial and federal authorities all involved in supporting this event.
Significant Spill Responses	EMBC monitored and supported numerous spill incidents, particularly those created by marine, rail and road accidents, that resulted in diesel fuel and other deleterious fluids being released that presented a threat to the environment.	<ul style="list-style-type: none"> • All regions assisted in monitoring, assessment and coordinating stakeholder discussions where necessary to mitigate the potential impacts to the environment and to public safety.
Drought	Low winter snow levels in combination with a dry spring and summer caused low water storage levels in the southern portion of the province. Level 4 restrictions were implemented in many areas of the south coast, Vancouver Island and Okanagan. EMBC took an active role working with other provincial ministries and local authorities to develop contingency plans, conservation strategies and possible longer term solutions.	<ul style="list-style-type: none"> • Drought planning is a yearround activity • EMBC supported FLNRO's lead on drought planning, to address water shortages, mitigation, and response measures.
Felt Earthquakes	A 4.0M earthquake was felt in Haida Gwaii and a larger 4.3M earthquake was felt in the Capital Regional District. While there was no damage reported or tsunami generated, the events created public concern and media attention.	<ul style="list-style-type: none"> • Current procedures focused on providing timely tsunami alerting • EMBC website includes public education materials and status reports on seismic planning activities.

Key Statistics

VOLUNTEER SUPPORT:

Number of PREOC/PECC Multi-Ministry/Agency TEAMS members deployed: 65

Number of Mobile Support Team members deployed: 11

Number of Mobile Support Team members: 37

Number of ESS Teams: 114

Number of Ground Search & Rescue Groups: 80

Number of Road Rescue Service Providers:

- ▶ Search and Rescue Groups: 5
- ▶ Road Rescue Societies: 8
- ▶ Fire Departments: 119

EMERGENCY RESPONSE ACTIVITY:

Number of ESS Task Events: 347

People assisted by ESS: 2,445

Number of Ground Search and Rescue Task Events: 1,518

Number of PEP Air/Civil Air Search and Rescue Association (CASARA) Task Events: 24

DISASTER FINANCIAL ASSISTANCE (DFA):

Number of provincial disasters for which DFA was authorized: 4

Disaster recovery funding provided:

- ▶ DFA applicants (Public Sector)
 - 15 Local Government Bodies and 2 First Nations
 - \$4.2M funded in Fiscal Year 2015-16 for DFA events dating back to 2013
- ▶ DFA applicants (Private Sector)
- ▶ 132 applicants
 - \$1.4M in DFA payments
- ▶ Federal Disaster Financial Assistance Arrangements (DFAA) Interim Payments Received = \$45.4M
 - \$12M 2010 Sept Flood
 - \$23M 2011 June Flood
 - \$3M 2011 Sept Flood
 - \$5.9M 2012 Flood
 - \$1.5M 2013 June Flood

TRAINING:

Number of Participants completed Emergency Management Training: 1,710

Number of Participants completed Emergency Social Services Training: 2,572

Number of Participants completed Search and Rescue Training: 574

OFC: FOR FURTHER SOURCE DATA, PLEASE REFER TO OFC WEBSITE AT:

<http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/fire-safety/fire-reporting>

Number of Fire Reporting Departments: 388

Number of Fires Reported: 7,216

Cost of Losses: \$322,742,091

Number of Injuries: 201

Number of Fatalities: 25

Appendix A: EMBC Strategic Plan

http://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/provincial-emergency-planning/embc_2014-17_strategic_plan.pdf

Appendix B: Contact Information and Hyperlinks

EMERGENCY MANAGEMENT BC: 250-952-4913

EMERGENCY MANAGEMENT BC

- ▶ Emergency Management: <http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery>
- ▶ Office of the Fire Commissioner: <http://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/fire-safety>

