

**MINISTRY OF PUBLIC SAFETY AND SOLICITOR GENERAL
EMERGENCY MANAGEMENT BC
BRIEFING NOTE FOR INFORMATION**

TO: Tara Richards, Deputy Minister, Emergency Management BC

ISSUE: After-action review for the 2021 atmospheric river

BACKGROUND:

- The atmospheric river event of November 2021 was the most expensive natural disaster in BC's history to date with catastrophic impacts to communities, the economy, and critical infrastructure – all requiring multi-year recovery.
- The event's flooding and mudslides contributed to loss of life, income, severe damage to highway infrastructure, power outages, agricultural devastation, natural gas interruption, and supply chain impacts due to road, rail, and port interruptions and closures.
- First Nations and local authorities issued evacuation orders affecting more than 6,750 properties and 13,500 persons.
- On November 17, 2021, a Provincial State of Emergency was declared to mitigate impacts on transportation networks, facilitate movement of essential goods and supplies, and to support the provincial response and recovery from the widespread damage caused by severe flooding and landslides.
- Due to the unprecedented nature of this disaster and catastrophic impacts to be learned from, government demonstration of due diligence through an after-action review (AAR) is recommended.

DISCUSSION:

- **After action reviews:** AARs following an emergency event provide critical information and best practice for future events by engaging partners to identify what worked well and areas to focus improvement – enhancing preparedness for future success. See Appendix A for examples of AAR's conducted recently in Canada.
- **Scope:**
 - **In scope** considerations include a review of government's ^{s.13} preparedness, and response, including policies, operations, processes, coordination, and communication. Additional, refined in scope considerations could include government's ^{s.13} preparedness, and response related to emergency management, the agriculture sector, critical infrastructure, and supply chain.
 - **Out of scope** considerations include recovery due to the multi-year nature of recovery activities.

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- **Resources:** An AAR that is led by a previous senior executive of government supported by an independent consulting firm with minimal provincial government resource support (2 FTE) could meet the scope of the AAR and expedite the process ^{s.13} Depending on scope, the 2 FTE may be sourced from the government-staffed secretariat supporting the Covid-19 Lessons Learned review.

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- **Deliverable:** report on findings presented to government to reduce future risk to and residual risk from catastrophic disasters. Follow on commitments could include development of an action plan by government for ministries to best determine how to incorporate lessons learned to enhance mitigation, preparedness, and response and reduce residual and future risk.

- **Timeline:** The deliverable should be completed ^{s.13}
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Planning, engagement and deliverable are to be completed ^{s.13}
Therefore, project start would be ^{s.13}
- **Risks:** In addition to partner engagement fatigue, dependent on severity, the 2022 flood and wildfire season could further impact partner engagement and subsequent timelines should the review need to be extended. Excluding wildfire as part of the review also presents a risk to criticism and messaging pointing to previous wildfire reviews and reasons for exclusion would be needed to support project launch.

Other Considerations

- **Covid-19 Lessons Learned Review:** The Covid-19 Lessons Learned Review is currently underway with extensive partner engagement ^{s.13}
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- **Work to leverage:**
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 - **Recovery and Resiliency Secretariat:** Outcomes from this BC government secretariat established post-atmospheric river event could also contribute to lessons learned and demonstration of due diligence.
 - **EMBC internal AAR:** EMBC has conducted internal reviews related to the atmospheric river event, including with the Senior Executive Team and Regional Operations. Some of the recommendations are being implemented, while others require associated action plans. Categories include governance; plans, policy, procedures (e.g. warning and indicators); communication, and; resourcing. These AARs could also be leveraged to support a broader AAR,
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INDIGENOUS PEOPLES CONSIDERATIONS:

- Indigenous organizations and First Nations are experiencing engagement fatigue. The desire to participate in engagement and provide feedback is challenged by a lack of capacity.

OTHER MINISTRIES IMPACTED/CONSULTED:

- Ministry of Transportation and Infrastructure

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REVIEWED BY:

	Initials	Date
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Attachments:

Appendix A: Examples of After-Action Reviews for Comparable Events

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	2022 BC COVID-19 Lessons Learned Report (in progress)	2018 Abbot-Chapman Report	2017 New Brunswick Ice Storm Review	2016 Wood Buffalo, Alberta Wildfire Post-Incident Assessment Report	2013 Southern Alberta Floods
Description and Approach	An independent review of the provincial governments' response to the COVID-19 pandemic, led by senior external consultants, and supported by a government-staffed secretariat.	High profile, independent review of the provincial government's response to the 2017 flood and wildfire events, led by renowned consultants and supported by a government-staffed secretariat.	Review conducted by the Clerk of the Executive Council and Secretary to Cabinet and head of the New Brunswick Public Service, supported through AARs and reports undertaken by responsible provincial agencies.	Independent review of the provincial government's response to the 2016 Wood Buffalo wildfire and recovery activities, conducted by an independent consulting firm (KPMG), which included integration of reports and studies by provincial ministries/agencies.	Independent review of the provincial governments' response and recovery from the 2013 flood event, including an efficiency and effectiveness assessment. Recovery was included in the scope which led to criticism that the process was not timely.
Engagement	Engagement with external partners, Indigenous organizations, First Nations, provincial ministries/agencies and the public. Provincial ministries will be required to conduct and provide the consultants with an internal assessment of their response.	Extensive engagement conducted via interviews, workshops, open houses, and technical forums with internal and external partners, including impacted First Nations.	Internal and external engagement was undertaken through interviews and townhall meetings.	Extensive four-month interview-based engagement process with internal and external partners, including impacted First Nations; public surveys and focus groups were also used to support community engagement.	Extensive internal and external engagement with multiple partners, including impacted First Nations, modeled on interviews and surveys.
Timeline	Six months	Four months	Six months	Twelve months	Eighteen months
Outcome	Final report on findings.	Final report with 108 recommendations, resulting in the development of a government action plan to address the recommendations.	Final report on findings.	Final report with findings and recommendations.	Final report with recommendations.