BC FLOOD AND WILDFIRE REVIEW ASSESSMENT

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The BC Government asked Mr. George Abbott and Chief Maureen Chapman to Co-Chair an independent strategic review of the Government responses to the flood and wildfire events of the 2017 season (https://tinyurl.com/y7krvrgj). A public consultation was conducted within communities affected by the events to obtain the views of people involved and effected by the events. Analysis of this input resulted in 108 recommendations (https://tinyurl.com/y9frwdmt).

Summary Assessment

The following is a review of the recommendations from a long-term strategic perspective.

Governments frequently respond to catastrophic events with three (3) overall component actions. The first are to identify the impacts and create short-term mitigation actions. The third component, adaptation actions, is frequently forgotten or identified and then not implemented as they are long-term and require persistence which is difficult to fit into a political environment. However, in situations such as responding to climate change where we can expect re-occurrence of large events, the adaptation actions are critical. It would be prudent to modify our natural resource planning and practices in an attempt to reduce the impacts over time of these events. This does not mean the short-term mitigation actions are not important but for the long-term they will be inadequate, if not accompanied by adaptation actions.

The following is an assessment of the 108 recommendations arising out of the independent review as to whether they have a focus on mitigation or adaptation.

The majority (98) of the recommendations are directed toward actions to mitigate impacts through responses to future events. Some might argue creating better reaction mechanisms to events is a means of adaptation. However, for the most part these recommendations are mitigation actions.

Only 10 recommendations (<10%) can be considered adaptation actions to reduce the impact of future wildfires and flood events arising from climate change. Nine of these are directed to wildfire events and only one to floods. This is very disappointing given wildfire and climate change ecologists have been outspoken about the need to change forest management to adapt to the current and future conditions affecting the severity of the expected more frequent event occurrences. This may be because the questions for the consultation were focused on direct exchanges with communities and the people in the communities. Consequently, this review is only a part of the response picture. We can only hope, Government will give a priority to the long-term adaptation requirements.

The nine (9) wildfire adaptation related recommendations focused on reducing wildfire risk by:

1) Addressing land management infrastructure issues through actions to reduce high fire hazard fibre by:
   a) **Increasing area-based tenures** (e.g., Community Forest Agreements, First Nations Woodland Licenses) adjacent to communities so the management of the area can focus on community needs versus industrial logging,
   b) **Increasing the importance of fire management** as part of land management by making it a land management objective in legislation and regulation, and
   c) **Encouraging 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.
2) Adjusting silviculture practices to reduce high fire hazard fibre by:
   a) **Creating mechanisms to encourage fire prevention activities**, such as stand thinning, bio-mass utilization, targeted grazing and alternate species and densities, and
   b) **Reviewing existing land use plans** to ensure the location of reserve areas (e.g., Old Growth Management Areas, ungulate winter ranges, visual corridors and other land-use designations) do not preclude the reduction of wildfire risk adjacent to communities.
3) Increasing the use of traditional and prescribed burning to:
   a) **Reduce the risk associated with landscape and local-level hazards** and regenerate ecosystems, and
   b) **Investigate and assess the possibility of a prescribed burn statute** that would offer protection for responsible and permitted slash burning managers.
4) Increasing the economic value of utilizing high fire risk fibre by:
   a) **Supporting Government initiatives related to bio-energy** that will encourage and accelerate their implementation with a strong consideration to promoting fuel management, and
   b) **Re-evaluating the position of carbon-loading counts**, specifically the exemption of carbon released by wildfires and the inclusion of carbon released from prescribed burning to encourage the burning practice.

The one (1) flood adaptation related recommendation focused on:

1) Ensuring protection of communities by:
   a) **Expeditiously determining the condition, vulnerability and effectiveness of the Province's 500 kilometres of dikes** through use of leading edge technologies and expertise, and
   b) **Reconciling the absence of dikes in First Nations communities** through collaboration with Indigenous governments, Canada and BC assess.

Wildfire Adaptation Actions

The following are the adaptation related wildfire recommendations:

- **Recommendation #65**. (Strategic Shift #6)
  - 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 licences, or First Nations Woodland Licenses.
  - **Rationale** — This recommendation encourages an expansion in the number of community forest tenures in areas adjacent to communities.
- **Recommendation #66**. (Strategic Shift #7)
  - 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.
  - **Rationale** — In areas sensitive to community safety, a fire objective rather than a timber objective should drive restocking requirements on those areas where fuel mitigation has taken place.
- **Recommendation #67**.
  - Create mechanisms to encourage fire prevention activities such as thinning, bio-mass utilization, targeted grazing and alternate species and densities.
  - **Rationale** — The experience of communities like Logan Lake suggests that a multi-pronged approach to interface fuel management is a promising model for other BC communities.
- **Recommendation #**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.
  - **Rationale** — In some land use plans, spatially designated areas have experienced high mortality from insects and disease. Particularly when located adjacent to communities, such areas can pose a serious risk to community safety.
- **Recommendation #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.
  - **Rationale** — Some current statutory and regulatory requirements inadvertently discourage licensee participation in interface treatments. For example, silviculture treatments make sense at the landscape level, but may make no sense adjacent to communities.

- **Recommendation #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.
  - **Rationale** — Greater use of all remaining residual fibre (wood waste) following harvest could help improve fuel mitigation on the land base.
- **Recommendation #75**. (Strategic Shift #9)
  - BC 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. BC 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.
  - **Rationale** — Many respondents supported the expanded use of traditional and prescribed burning as effective means of mitigating potential large-scale wildfires.
- **Recommendation #76**.
  - BC investigate and assess the possibility of a prescribed burn statute that would offer protection for responsible and permitted burners.
  - **Rationale** — The model adopted by the State of Florida, the Prescribed Burning Act, provides an initial reference point.
- **Recommendation #77**.
  - BC 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.
  - **Rationale** — We believe there are limitations to the current way of counting carbon, which includes prescribed burning, but does consider the impact of wildfires. In 2017, wildfires emitted approximately 190 million tonnes of carbon into the environment, six times the total from all other sources

Flood Adaptation Action

- **Recommendation #73**.
  - BC 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 BC assess and reconcile the absence of dikes in First Nations communities.
  - **Rationale** — As noted in and consistent with the BC Auditor General's 2018 report and recommendations, tools such as LiDAR could be used to identify vulnerabilities within BC's diking system.