

The post-disaster window: The 2021 British Columbia atmospheric rivers phenomenon as a focusing event for policy change

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Introduction:

British Columbia experienced a series of severe atmospheric river events in mid-November 2021, resulting in catastrophic flooding and debris flows, substantial economic losses and supply chain disruptions, extensive displacement, and significant damages to properties and critical infrastructure. This event has been characterized as one of Canada's most severe and costly disasters, and was the final of three major climate-related disasters experienced by the province within the span of six months, following an unprecedented summer where a heat dome and wildfire season led to tragic outcomes for many British Columbians. This research utilized 'windows of opportunity' theory and examined the atmospheric river events within a multiple streams research framework (Kingdon, 2003/1984) which suggests that major disasters can act as a policy 'focusing events,' allowing for political action, policymaking, and public support to converge. Situating a case study of Sumas Prairie, Abbotsford within the broader regional (Lower Mainland, Fraser Valley) and provincial contexts, this research examines the influence of the atmospheric river event on climate change adaptation and disaster risk reduction policies, funding, and governance. While there have been 'missed opportunities' for transformative changes at the local level, our preliminary research results indicate that the November 2021 event has acted overall as a significant focusing event for advancing flood and climate adaptation policies at the regional and provincial scales. As communities continue to experience more frequent and severe extreme weather events, it is important that decision-makers collaboratively and proactively engage in new and complementary methods of flood risk reduction—in other words, 'building back better' rather than defaulting to the 'status quo' during post-disaster reconstruction.

Primary Research Question:

To what extent did the November 2021 extreme rainfall event and flooding experienced in Sumas Prairie open up a window of opportunity to advance climate change adaptation and holistic methods of flood risk reduction?

Sub-questions:

1. Is this disaster prompting decision-makers to explore alternative approaches to disaster risk reduction and climate change adaptation, such as managed retreat and nature-based solutions?
2. How did this disaster influence the public's perception of the "new normal" of climate change and how has this factored into policy decision-making?

3. How can municipalities use this historic event to help shift from a reactive to a proactive state of hazard resilience amidst the community's immediate recovery needs?
4. In what ways has the November 2021 atmospheric river event acted as a catalyst in institutional or policy changes?
5. What enabling factors or barriers have influenced the extent to which the policy window has been able to be leveraged by governance actors to pursue transformative change?

Methods

Due to the scale of flooding experienced by Abbotsford's Sumas Prairie community, as well as the area's complex, colonial flood management history, this community was chosen as a primary case study situated within the broader regional context. Using a mixed methods approach, we conducted research in two phases. Phase 1 involved documentation research, archival, literature, and policy review, and a review of ongoing municipal meetings and media coverage. Phase 2 involved 27 semi-structured interviews with key informants, as well as field observations focused on the community's post-disaster recovery and adaptation efforts. Field observations included site visits to flood-affected locations within Sumas Prairie as well as attendance to events, such a public engagement session on the City of Abbotsford's Long-term Flood Mitigation Plan, a museum exhibition on Sumas Lake, and the regional Build Back Better Together Forum. Key informants were selected using a purposeful sampling method and involved staff from organizations that have decision-making power, community influence, or subject matter expertise pertaining to flood adaptation, climate change action, or disaster risk reduction. Interviews were transcribed and member checked to allow participants to review the data before being coded into themes.

Preliminary Results:

Preliminary research findings show that the November 2021 atmospheric rivers have acted as a significant focusing event in amplifying the public and political pressure to address BC's current policy shortcomings. Furthermore, the disaster has prompted a renewed momentum to engage in collaborative regional and transboundary governance. Our findings suggest that while the November event was significant in itself, the post-disaster policy landscape has additionally been informed by the series of climate disasters experienced by the province in 2021, the ongoing policy learning from previous flood events (e.g., Grand Forks, 2018; Okanagan 2017, 2018), and the changing institutional landscape of the provincial and federal governments (e.g., climate change action, Sendai Framework, reconciliation commitments).

Several initial themes have been identified as either a contributing factor to the extent of the policy window or a direct outcome of the event. Firstly, the geographic and temporal scale of the disaster, the unprecedented nature of the extreme weather event, and British Columbia's recent history of climate-related disasters have created the ideal set of conditions for a policy window to open. Secondly, the compounding and cascading disasters experienced not only in 2021, but within the past five years in BC, have contributed to heightened flood risk awareness and an extended disaster memory for both the public and politicians, allowing for the November event to build on the momentum and policy learning from previous events. Finally, this disaster has created new opportunities for capacity-building, collaboration, and a critical rethinking of current funding mechanisms.

***A more detailed explanation of these research findings and conclusions can be found in the extended version of this report.**