

WATERSHED FUTURES INITIATIVE



EMERGING CUMULATIVE EFFECTS ASSESSMENT APPROACHES FOR SALMON WATERSHEDS

EVENT OVERVIEW

The [Watershed Futures Initiative](#), led by Jonathan Moore and team at Simon Fraser University under the guidance of an [Advisory Panel](#), aims to improve the science and management of cumulative effects in salmon watersheds through collaborative research and networking events.

The Watershed Futures Initiative's first online event, "Emerging Cumulative Effects Assessment Approaches for Salmon Watersheds," was held on Nov 18, 2020. The event had three main objectives: 1) Provide a brief introduction of the Watershed Futures Initiative; 2) Spotlight some approaches and methods for cumulative effects assessment; and 3) Facilitate connections and conversations among the diverse group of experts working on cumulative effects. This represents the first of several events planned over the next several years of this multi-year initiative.

The event gathered 73 participants from academic, eNGO, First Nations, Federal and Provincial groups who represented a remarkable range and depth of expertise and experiences. The event was co-hosted by Jonathan Moore and Bob Chamberlin, former Vice President of the Union of BC Indian Chiefs and Advisory Panel member of the Watershed Futures Initiative; facilitated by Julian Griggs; and co-organized by Tash Prokop and Sean Naman of SFU.

SPEAKERS

The event featured six expert speakers and showcased some of the current assessment tools for cumulative effects in BC and beyond. These talks provided brief overviews of some of these methods and approaches, and represent only a snapshot of the many tools and initiatives that are being implemented across the region. Recordings of these presentations, PDFs of the presentation slides and other supplementary materials are available on the [Watershed Futures Initiative](#) website.

1. **Watershed Assessment and the BC Cumulative Effects Framework**—Felice Griffiths and Chelsea Enslow—BC Ministry of Forests, Lands and Natural Resource Operations and Rural Development. [PDF of presentation slides.](#)

2. **Prioritizing Threat Management Action for Salmon Recovery**—Tara Martin—Conservation Decisions Lab, UBC. [PDF of presentation slides.](#)
3. **Tsleil-Waututh Nation's Cumulative Effects Management Initiative in Burrard Inlet**—Spencer Taft—Tsleil-Waututh Nation. [PDF of presentation slides.](#)
4. **What is Killing Our Fish? Cumulative Effects Modelling to Help Alberta's Fishes**—Michael Sullivan—Alberta Environment and Parks; University of Alberta. [PDF of presentation slides.](#)
5. **Introduction to the Risk Assessment Method for Salmon**—Isobel Pearsall—Pacific Salmon Foundation. [PDF of presentation slides.](#)

BREAK-OUT GROUP DISCUSSIONS

The event supported online break-out groups to facilitate initial networking and conversations. The groups were asked a few focal questions. For each discussion question, some of the key themes, comments, and questions from participants are highlighted below.

Key questions related to cumulative effects in BC or elsewhere:

- Mechanisms of change:
 - Where is the leverage to enact change? Law? Where is the accountability?
 - How do we translate science to decision-making? Do we need 'complete' data to make decisions?
 - Timely decisions are needed, but we often get stuck finger-pointing or at impasses.
 - In whose interest are these decisions being made? What about First Nations? Can we build capacity for First Nations projects?
- Overlapping jurisdictions:
 - Cumulative effects span across jurisdictions. For example, freshwater, marine; First Nations, Federal, Provincial, local authorities (e.g. ports); trans-boundary watersheds.
 - How do we identify shared interests and develop partnerships across jurisdictions? A shared language? A unifying model, framework, or benchmarks?
- Model development and implementation:
 - What models are being used?
 - How do we reconstruct the past (whose past? E.g. Traditional Ecology Knowledge)?
 - How do we look to the future with climate change?
 - What scale should we be working at? Broad, local, salmon management units?
 - We need to integrate low flows, thermal effects, threats and limiting factors; population status
 - We need to think about integrating social science research

Main challenges for improving the management of cumulative effects in BC's salmon-bearing watersheds:

- Implementation and action:
 - We need legal/regulatory processes with 'teeth'

- How do we get policy makers and industry to act and be accountable?
 - Economics (cost-benefits of action to compensate for loss of forestry dollars) could help drive political action
- Need a common language, common framework, consistent goals
 - Priorities across jurisdictions may not be aligned
 - We need to build stronger networks
- Science:
 - Coordination: Who's working on what?
 - Can we develop a consistent framework/tools/model? At what spatial scale?
 - How can we integrate climate change?
 - How can we communicate the science? How can we communicate the wins?
 - Do we need to involve the managers earlier in process? Not just handing off data at the end?

Participant suggestions for the most important contributions the Watershed Futures Initiative could make:

- Facilitate networking and collaborations
- Facilitate better communication (science to decision-makers)
- Build consistent understanding and consistent assessment frameworks
- Make tools accessible to cumulative effects practitioners
- Identify greatest concerns (e.g. jurisdictional challenges)
- Identify past successes
- Identify who is able to act on cumulative effects implementation

EVENT FEEDBACK

We solicited feedback on the event via a follow-up survey ($n=14$ responses). Evaluations were predominantly positive; on average, participants rated the event 4.2 out of a maximum of 5 (an 'Excellent' rating). We also received valuable feedback and constructive suggestions from these evaluations, which will guide future events. Full responses can be viewed [here](#).

OVERALL SUMMARY

This was an exciting first event for the Initiative. Participants highlighted some of the issues associated with cumulative effects that continue to be major challenges, and also revealed exciting opportunities to improve the science and management of cumulative effects. The feedback and suggestions were greatly appreciated and the Watershed Futures Initiative team will take these into consideration as we plan future events and activities. We also hope that the event facilitated some connections and conversations that will be of value. Thank you to all of the participants, speakers, and organizers who made this event possible.