



BRITISH
COLUMBIA

CEF Cumulative
Effects
Framework

WATERSHED ASSESSMENT & THE BC CUMULATIVE EFFECTS FRAMEWORK

**EMERGING CUMULATIVE EFFECTS ASSESSMENT
APPROACHES FOR SALMON WATERSHEDS**

NOVEMBER 18, 2020

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BC Cumulative Effects Framework



WHAT IS THE BC CEF?

A set of policy, procedures, governance and decision tools to support CE assessment and management in British Columbia.

- CEF Policy released early 2017

WHAT ARE THE GOALS?

- Improve ability to manage values and achieve desired conditions
- Support consideration of Indigenous rights and interests
- Support efficient, streamlined decision-making
- Support durable, transparent decisions

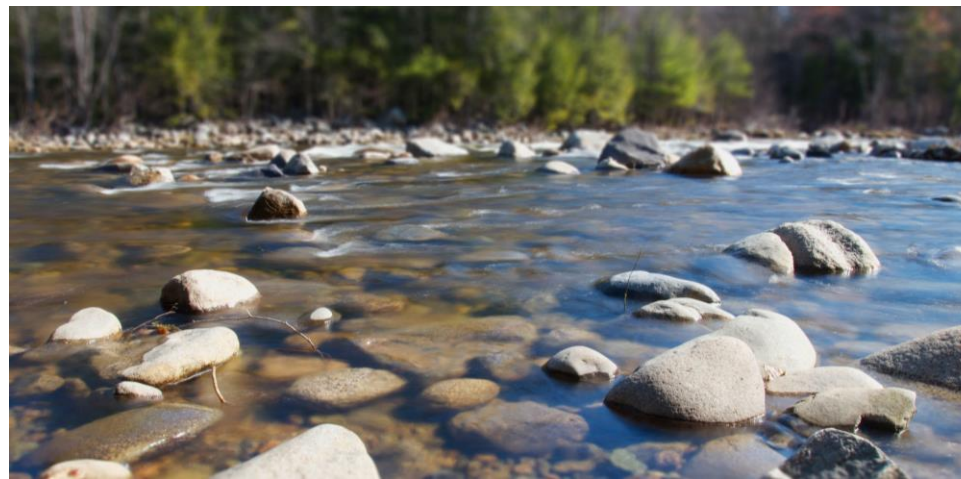
CEF Values

PROVINCIAL VALUES

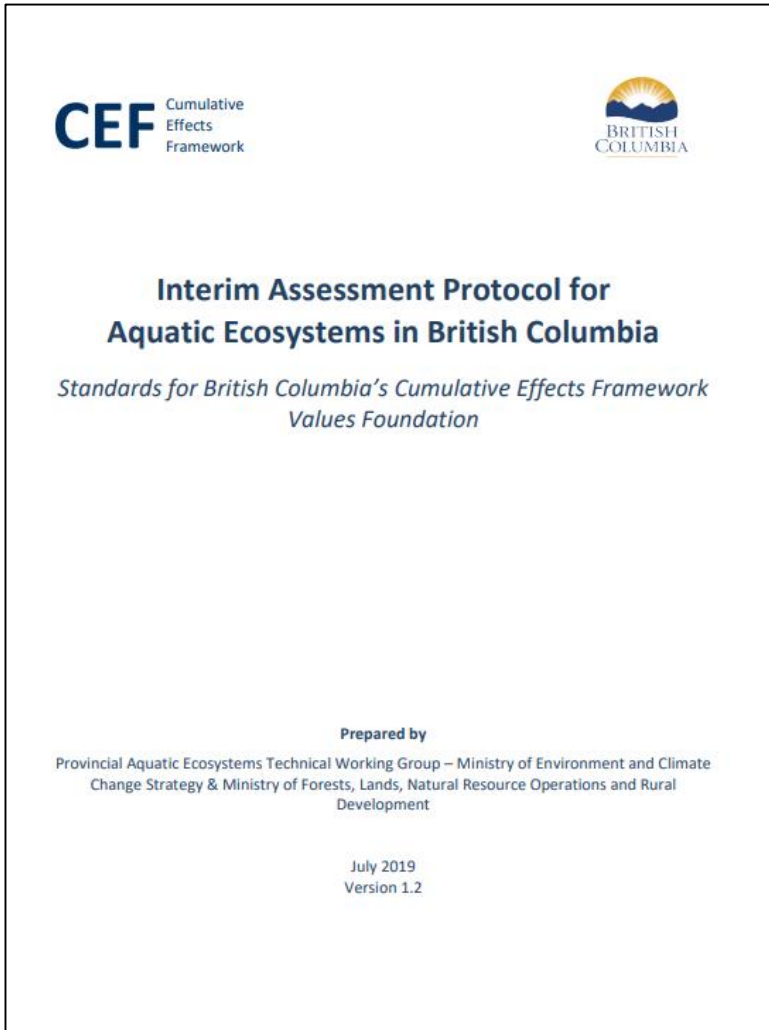
- Grizzly Bear
- Aquatic Ecosystems
- Old Growth
- Moose
- Forest Biodiversity

REGIONAL VALUES


- Fish & Fish Habitat
- Salmon
- Visual Quality
- Marbled Murrelet



Provincial Protocol



CEF Cumulative
Effects
Framework




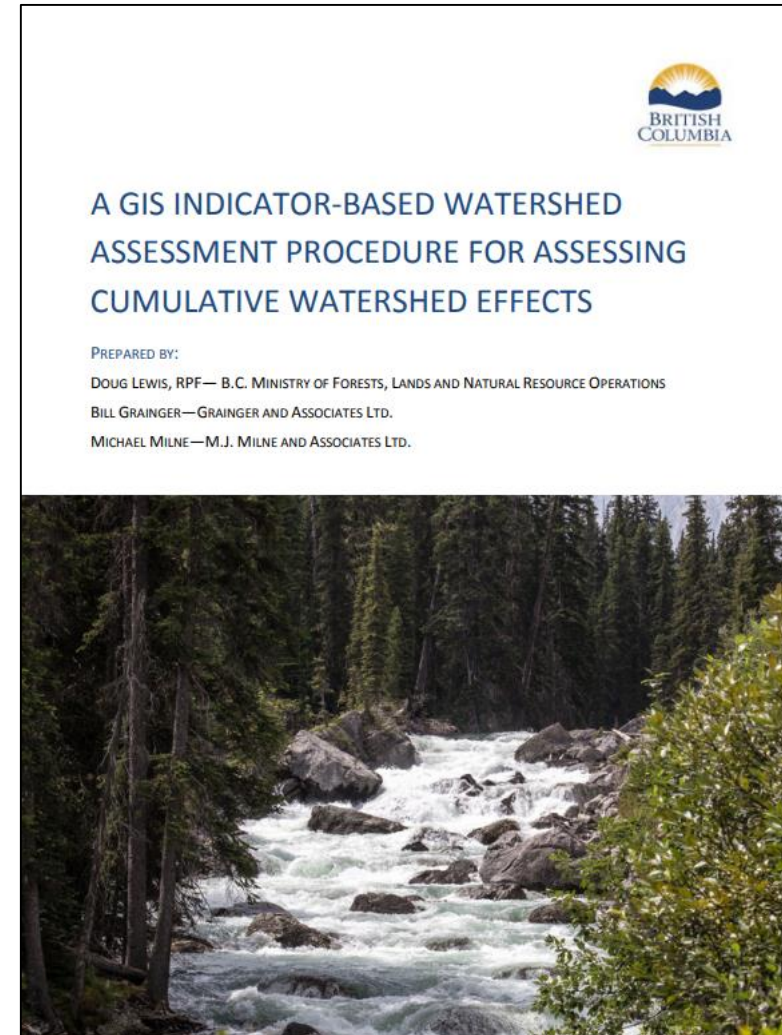
**Interim Assessment Protocol for
Aquatic Ecosystems in British Columbia**

*Standards for British Columbia's Cumulative Effects Framework
Values Foundation*

Prepared by
Provincial Aquatic Ecosystems Technical Working Group – Ministry of Environment and Climate
Change Strategy & Ministry of Forests, Lands, Natural Resource Operations and Rural
Development


July 2019
Version 1.2

Regional Modification



**A GIS INDICATOR-BASED WATERSHED
ASSESSMENT PROCEDURE FOR ASSESSING
CUMULATIVE WATERSHED EFFECTS**

PREPARED BY:
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<https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/cumulative-effects-framework>

CEF in the Thompson Okanagan



Evaluate: are we meeting objectives for values?

Compliment the work of FLNRORD & MOE

Support planning, decision making & resource management

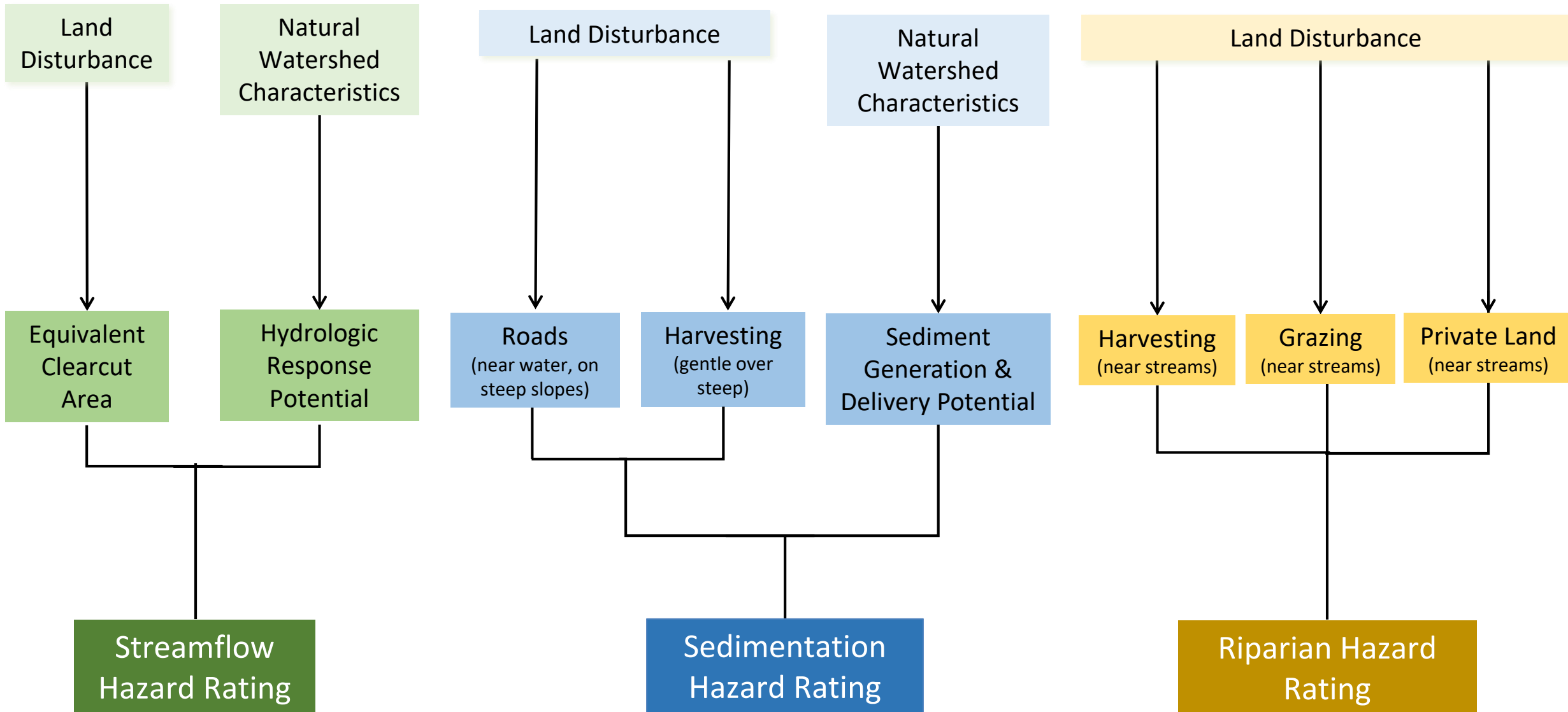


Watersheds



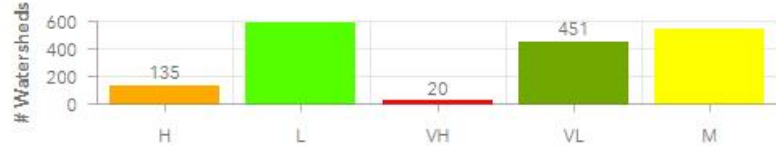
- Evaluate if objectives are being met:
 - Sustain water quality, sustain water quantity, and sustain hydrological and aquatic ecosystem functions and processes
- Three types of watershed hazard are estimated
 - Streamflow
 - Sedimentation
 - Riparian
- “Roll-up”: Combined risk to fish
- Coarse scale, region wide assessment
 - Meant to highlight areas for management attention and further investigation

TOR Watershed Model – Simplified



Example Output

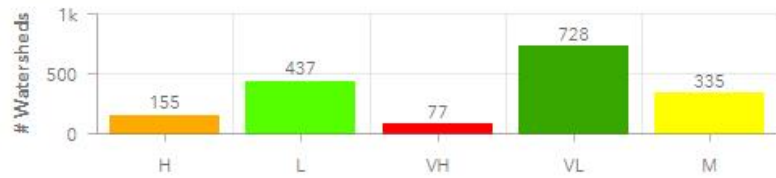
Riparian Hazard Rating



Riparian Hazard Rating

Last update: a minute ago

Streamflow Hazard Rating



Streamflow Hazard Rating

Last update: a minute ago

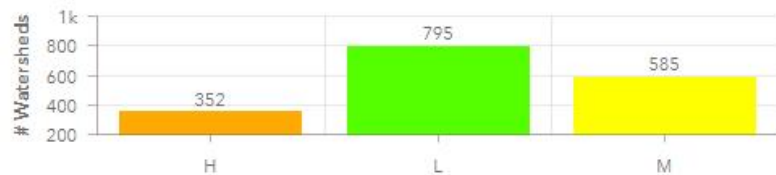
Sediment Hazard Rating



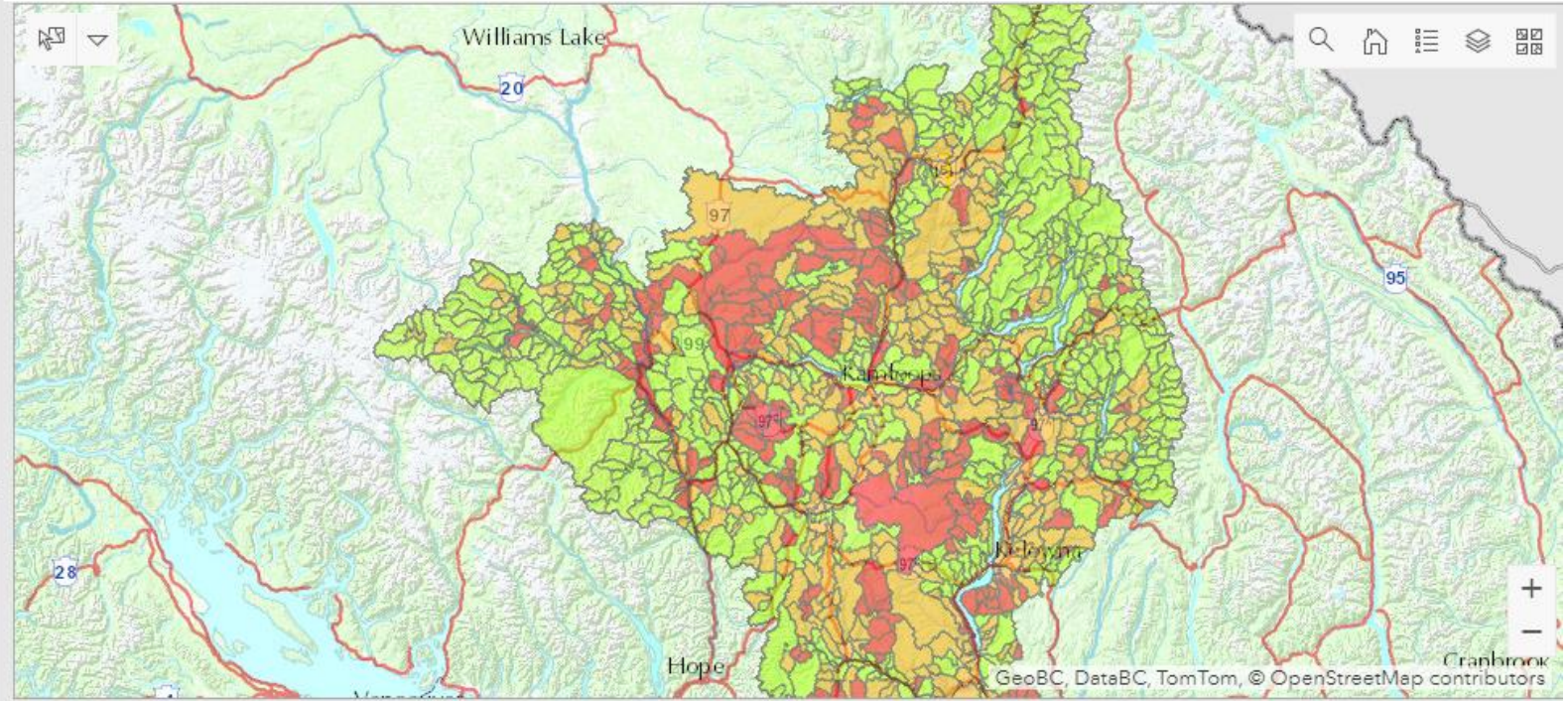
Sediment Hazard Rating

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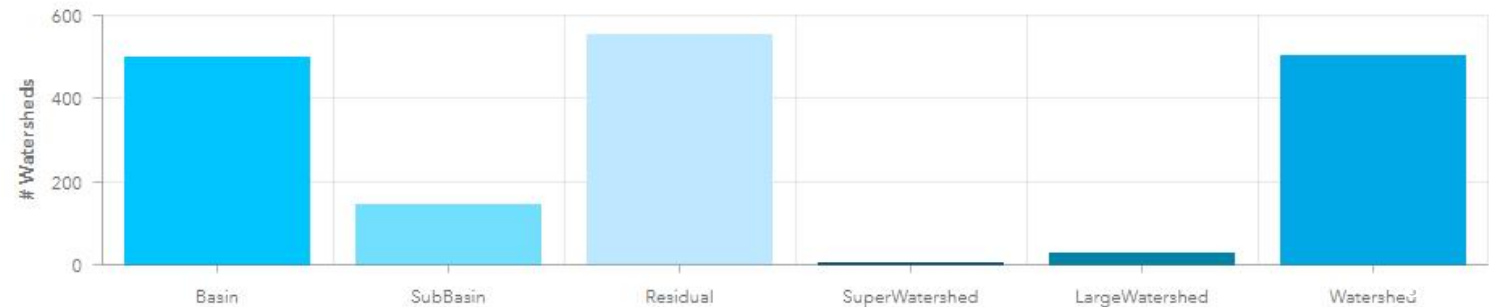
Combined Risk to Fish



Combined Risk to Fish

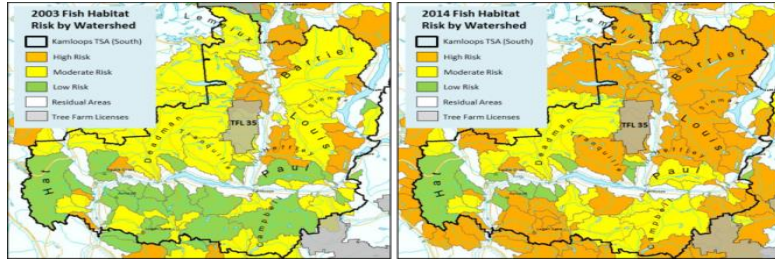


Watershed Type



Watershed Type

Applications to Decision Making & Resource Management in TOR



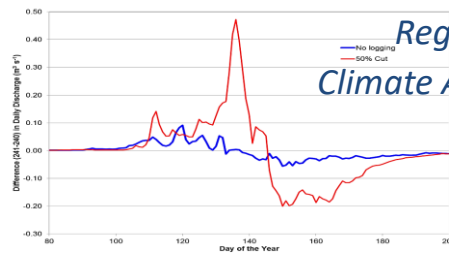
Support AAC Decisions
e.g. Kamloops, Merritt, Quesnel, Lillooet



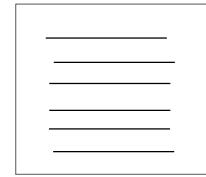
Support Shared Decision Making
e.g. Elephant Hill



Lands Act
Support
for Project
Proposals



Connections to
Regional
Climate Action Plan



District

Letters of Expectation
FSP review & support



Example
Resource Values



Validation of CE Information
T-O Integrated Monitoring Team



Secwepemc Training – Riparian Protocol

Validation of
CE Information
Training and
Co-Monitoring with
FN partners



G2G Objective
Setting

Support G2G Thompson
Steelhead Recovery
Planning



Thank you!



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