

**Floods! Droughts!  
Watershed Security!  
Working Together Towards  
Resilient Communities**

An aerial photograph of a dense forest with a river winding through it. The trees are in various shades of green and yellow, suggesting autumn. The river is dark blue and flows from the top center towards the bottom right. The text is overlaid on the image in white, bold, sans-serif font.

**Floods! Droughts! Watershed  
Security!**

**Working Together Towards Resilient  
Communities**



Fraser Valley, November 2021



Alouette Lake, Summer 2023



Donnie Creek, Prince George, Summer 2023



Neekas Cove, Heiltsuk territory, Summer 2022

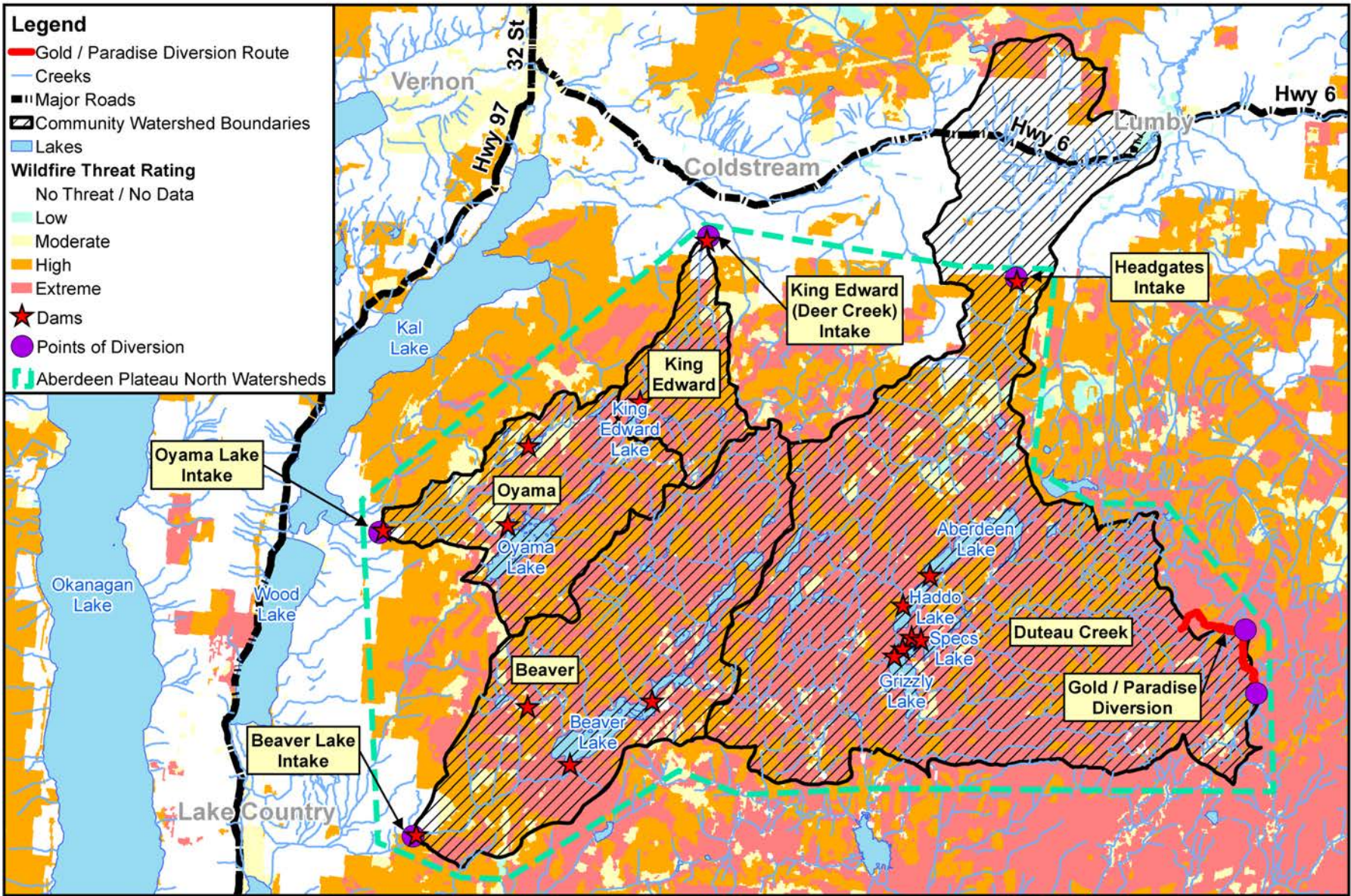


Riparian restoration on a blueberry farm, Pitt Meadows

# Lake Country



Photo credit: <https://livelakecountry.com/safety-and-emergency-information/>



- Legend**
- Gold / Paradise Diversion Route
  - Creeks
  - Major Roads
  - Community Watershed Boundaries
  - Lakes
- Wildfire Threat Rating**
- No Threat / No Data
  - Low
  - Moderate
  - High
  - Extreme
- ★ Dams
  - Points of Diversion
  - Aberdeen Plateau North Watersheds

This map was compiled by RDNO, using data believed to be accurate; however, a margin of error is inherent in all maps. This product is distributed without warranties of any kind, either express or implied, including but not limited to warranties of sustainability or particular purpose or use.

### Aberdeen Plateau North Watersheds - Wildfire Threats

Plot Date: Jan 10, 2024

Scale: 1:175,000  
 Plot Size: 11" x 8.5" 0 2 4 8 Kilometers

REGIONAL DISTRICT NORTH OKANAGAN  
RDNO

# Flood Risk in BC

- Pre-colonization, flood risk managed with variety of practices and techniques
- Past 100+ years => emphasis on 'flood control'
- Now, BC Flood Strategy: integrated flood management (the whole toolbox) & commitment to UNDRIP



# Collaborating for Resilience in the Lower Fraser

- Regional & subregional dialogues: First Nations & local governments
- Critical infrastructure & local essential services - understanding risk
- Catalyzing flood risk reduction projects: design with nature



## Flood Recovery, Resilience and Reconciliation in the Lower Fraser

REPORTING BACK: BUILD BACK BETTER, TOGETHER – JULY 14 2022 FORUM



## Lower Fraser Floodplains Dialogue for Regional Action

REPORTING BACK: COASTAL RIVER-TIDAL GATHERING – MARCH 12 2024



## Lower Fraser Floodplains Forum 2023 Dialogue on Regional Action

HOSTED AT: THE'Í:TSELÍYA - S.A.Y. HEALTH & COMMUNITY CENTRE • JUNE 9, 2023



## Lower Fraser Floodplains Dialogue for Regional Action

REPORTING BACK: MID & UP RIVER GATHERING – MARCH 13 2024





# Lower Fraser Floodplains Coalition

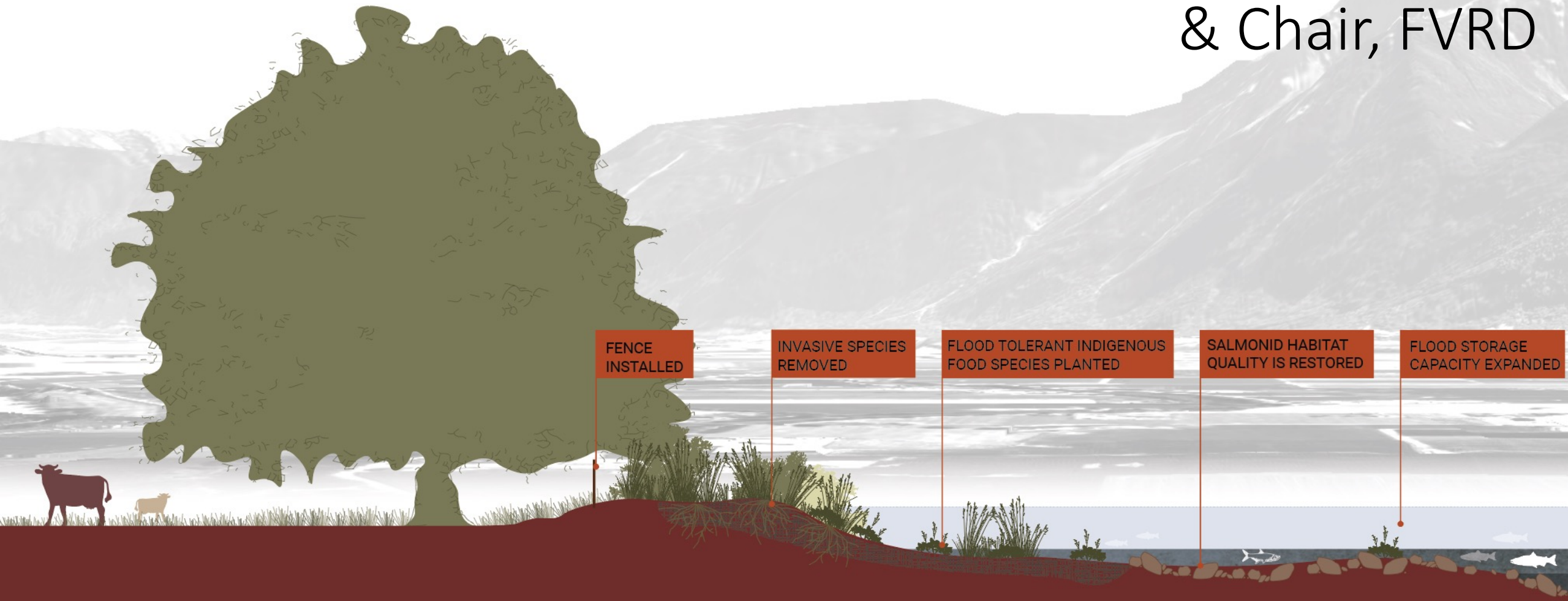


- Reducing risk and adapting to climate change;
- Advancing reconciliation;
- Ensuring that salmon are thriving;
- Having everyone part of the solution;
- Supporting sustainable economies and resilient communities for the long term

# 5 Principles for Working Together

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# Jason Lum, Councillor, Chilliwack & Chair, FVRD





COWICHAN WATERSHED BOARD

# THE FOUNDING OF THE COWICHAN WATERSHED BOARD



01

Catalyst for collaborative action was the drought of 2003 & the need to truck fish up the river.

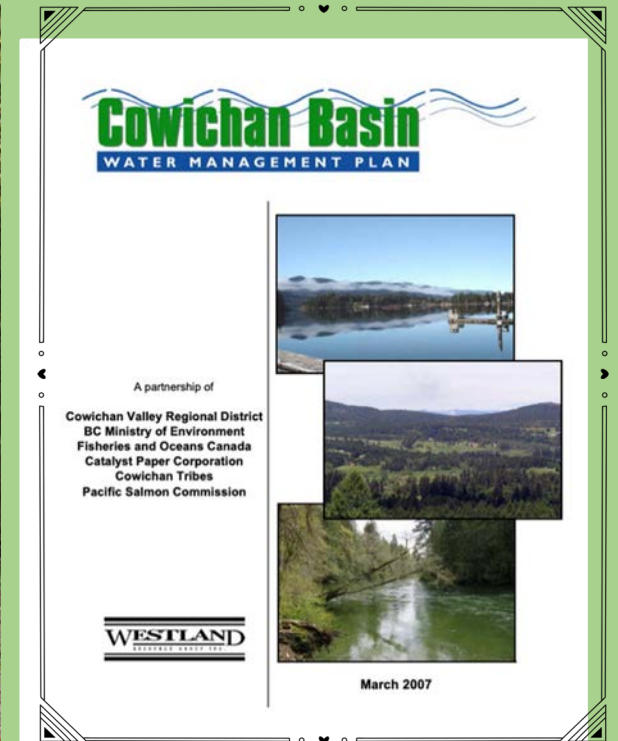
02

The Cowichan Basin Water Management Plan was created (2004-2007). Emphasizes:

- a whole of watershed approach
- need to raise the weir
- requires new form of governance to implement the plan

03

In 2010, the Cowichan Watershed Board is born through the leadership of the Chief of Cowichan Tribes and the Chair of the CVRD Board of Directors.





## GUIDING PRINCIPLES

### 1. NUTSAMAT KWS YAAY'US TU QA'.

We come together as a whole to work together to be stronger as partners for the watershed.

2. Partnership
3. Representation
4. Watershed Emphasis
5. Transparency



# WHAT HAS BEEN ACHIEVED THROUGH NUTSAMAT?

- Secured funding to raise the Cowichan (Quw'utsun) Weir
- Xwulqw'selu (Koksilah) Watershed Planning Agreement, and
- much more over the years alongside community and government partners.



|  |   |   |
|--|---|---|
| <p><b>Xwulqw'selu</b><br/>Watershed Planning Agreement</p> <p><b>S-xats-thut tst.</b><br/>We agree.</p> <p>~~~~~</p> <p><i>Nuts'amat kws yaay'u s'utu qa'.</i></p> <p>We come together as a whole to work together to be stronger as partners for the watershed.</p> <p>~~~~~</p> <p><i>Hwialasmut tu Tumuhw.</i><br/>Take care of the Earth.</p> <p>~~~~~</p> <p><i>Mukw' stem 'i' 'utunu Tumuhw, 'o' hullitun tst, Mukw' stem 'i' 'utunu Tumuhw 'o' shihlhukw'tul'.</i></p> <p>Everything on this Earth is what sustains us; everything on this Earth is connected together.</p> | <p><i>Stl'atl'um stuhw tun kwunmun.</i></p> <p>Take only what you need.</p> <p>~~~~~</p> <p><i>Stsielhstuhw tu mukw stem ('i' 'u tuna Tumuhw).</i></p> <p>Respect for all things; Respect for all beings; Respect for what is around you.</p> <p>~~~~~</p> <p><i>'Uw-wu ha'kwush 'uhw, 'i' 'o' shtes ch 'ul'.</i></p> <p>Leave it the way we found it.</p> <p>~~~~~</p> <p><i>Hullitun tst tu qa'.</i><br/>Water is life.</p> <p>~~~~~</p> <p><i>Stsielh stum tu Sqwutsun'a'lh sh-saay 'i' 'u sniw's kwa 'e' 'luhwutss.</i><br/>Cowichan rights and laws are respected.</p> | <p><i>Yaay'usme't kws mukwe' stem 'itunnu Tumuhw 'o' sul'iq'tul, 'Uw-wute'kw'u suhlim.</i></p> <p>Work to bring everything in our environment into balance.</p> <p>~~~~~</p> <p><i>Hliye'yutul tst'u to' Mukw' stem 'i' 'u tun'a Tumuhw 'i' tu qa'.</i></p> <p>Everything in the natural world is connected as part of our family; we are all relatives.</p> <p>~~~~~</p> <p><i>Ts'i'tsuwatul', eluhwut tu Xwulqw'selu qa' Tumuhw, 'i' Mukw'stem 'ukw'o' yath.</i></p> <p>Work together for the health and well-being of the Xwulqw'selu Watershed from generation to generation.</p>  |
|--|---|---|

# Breakout Discussions

1. How is your community currently addressing the impacts of drought, wildfires, or floods?
2. What local opportunities do you see for improving watershed management and governance to help or mitigate water challenges in your region?
3. What provincial actions or policy changes are needed to support your community to enhance watershed planning, management and climate resilience efforts?



# Water Boards Potential in BC - Towards Better Governance

UBCM Workshop  
By Oliver M Brandes (UVIC- POLIS)

The public/communities intuitively understands that protecting water and watersheds has something to do with...

- Expertise / Science + Traditional Knowledge
- Rules / Enforcement
- Communities and Local Control (including Planning)



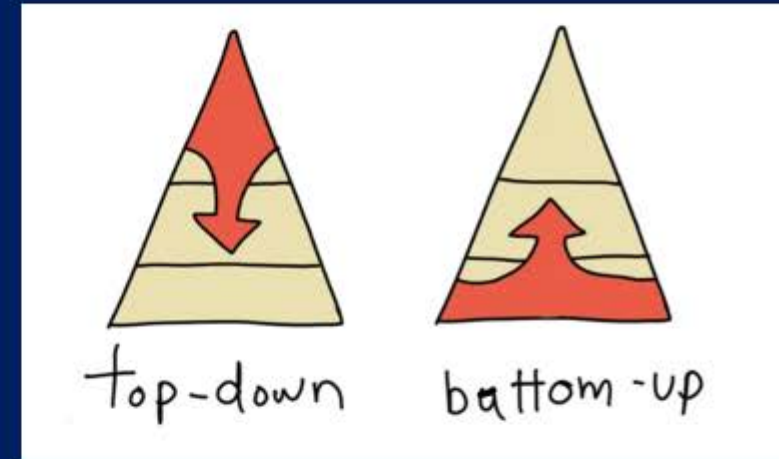
# Watershed Governance

Etymology: circa... 2005

1. **A helpfully open-ended concept**, by nature ambitious, with space for communities to define in their own ways
2. **Generally...decision making that is:**
  - Place-based- aligned w ecological boundaries
  - locally adapted
  - based on co-governance
  - informed by local capacity and expertise

**Keywords:** co-governance, local control, whole of watershed, form-follows-function  
- **it's an evolution**

**Sr. gov enabling function -  
functioning legal framework,  
bringing policy tools, resources,  
rules**



**Local leadership and  
capacity for  
co-governance**



**FORM** *follows* **FUNCTION**

- ✓ BUT structure and context matter  
– snowflake vs template?



# Winning on Water with Watershed Boards

01

**FROM:** division/conflict over water

**TO:** collaborative solutions & social cohesion

02

**FROM:** reacting to a cycle of crises (instability)

**TO:** government has a plan to keep BC safe & get ahead of crisis

03

**FROM:** people feeling despair (overwhelmed by threats)

**TO:** local watershed projects across BC that collectively demonstrate a story of 'hope' for the future

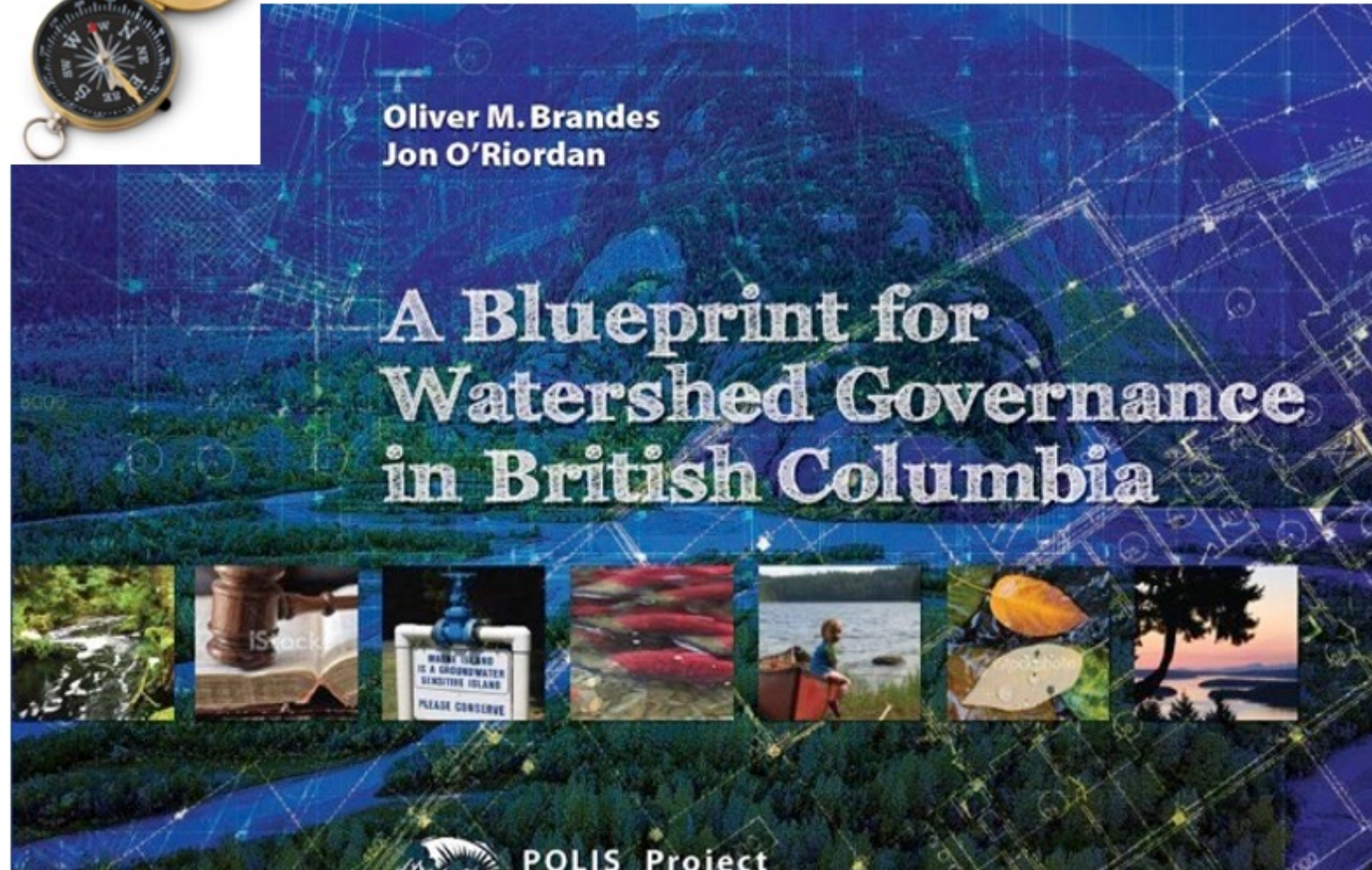


- Hub for Local Economic Development
- Strengthen community defences: Drought, Fire and Floods (reduce costs)
- Boards ensure a good use of resources

## 9 Winning Conditions

Understanding and creating the conditions for the shift towards watershed governance.

1. Governance enabling powers in legislation (or agreements)
2. **Co-governance**
3. Local government partnerships
4. Sustainable long-term funding
5. **Functioning legal framework**
6. Data/monitoring/knowledge
7. Independent oversight
8. **Attention to cumulative impacts**
9. Peer-to-peer learning & capacity-building



# Watershed Board Activities

*\*\*Subject to co-governance and UNDRIP principles (DRIPA alignment,*

| Primary Activities  | Additional possible shared powers  |
|---|--|
| <p><b><i>Visioning &amp; Planning</i></b></p> <ul style="list-style-type: none"> <li>-Flood and drought planning</li> <li>-Watershed planning</li> </ul>  | <ul style="list-style-type: none"> <li>Water Allocations/Reallocations</li> <li>-<u>eFlows</u> protection and thresholds</li> </ul>                                  |
| <p><b><i>State of the Watershed Reporting</i></b></p> <ul style="list-style-type: none"> <li>-information and watershed health assessments (community based monitoring)</li> <li>-increase h2o IQ</li> <li>-community based monitoring</li> </ul> | <ul style="list-style-type: none"> <li>Setting Environmental Water Quality Requirements</li> <li>-cumulative impacts</li> </ul>                                      |
| <p><b><i>Drinking Water Source Protection</i></b></p> <ul style="list-style-type: none"> <li>-awareness raising</li> <li>-conservation and restoration programs</li> </ul>  | <ul style="list-style-type: none"> <li>Green Infrastructure Development</li> <li>Restoration priorities</li> <li>Maintain/sustain Natural <u>Defences</u></li> </ul> |
| <p><b><i>Formal Input into Land-Use Decision-Making</i></b></p> <ul style="list-style-type: none"> <li>-water-land connections</li> <li>-conflict resolution</li> </ul>   | <ul style="list-style-type: none"> <li>Monitoring and Reporting</li> </ul>   |

## **BIG QUESTIONS**

How to Fund?

How to Get Started?

Legislated v Policy?



### Watershed Entities in Other Provinces

|                 |                                |
|-----------------|--------------------------------|
| <b>Quebec</b>   | 40 Watershed agencies (OBV)    |
| <b>Ontario</b>  | 36 Conservation authorities    |
| <b>Manitoba</b> | 14 Watershed districts         |
| <b>Alberta</b>  | 11 Watershed Planning Councils |

### Key Characteristics

| Watershed Board    | VS | Community Table  |
|--------------------|----|------------------|
| shared authority   |    | no authority     |
| long-term          |    | temporary        |
| legal entity       |    | informal         |
| dedicated staffing |    | low capacity     |
| base funding       |    | short-term funds |

# Water Boards & Current Provincial Commitments of Interest

How Water Boards help drive Watershed Security and Mandates

1. *Reduce local conflict through planning, and build social cohesion* local partners to support modernized land use planning (WLRS delivers on core function)
2. *Local capacity* to help Protect clean water: Deliver effective Watershed Security Strategy & Fund
3. *Vehicle for Reconciliation* and DRIPA: shared decision making; from transactional to long-term agreements and relationships
4. *Build capability for Drought* response/resilience Help deliver water storage investments (weir and 80m drought investments) ...Climate adaptation and preparedness
5. *Targeted restoration/natural defences (salmon mandate)* to revitalize and protect wild salmon & protect fish habitat





Implementing a water focused Land Use plan



Gitanyow Territory

Water Objectives and Indigenous Protected Areas



Skeena Watershed

Wedzin-kwah Watershed

Yinka Dene 'Uza'hné  
Surface Water  
Management Policy

T̓silhqot'in Nation

LHDAQOX DECHEN TS'EDILHTAN

("ʔEsdilagh Sturgeon River Law")

# XENI GWET'IN WATERSHED PLAN



Gitanyow Wilp Wii Litsxw Meziadin named  
Indigenous Protected Area

Implementing indigenous water laws  
& policies



Nechacko Watershed

Co-governance + water sustainability Plans



Cowichan & Koksilah Watersheds

Implementing an urban watershed plan

Crown-Indigenous (G2G)  
Watershed Governance Pilot



Nicola Watershed

ks kəʔqayx<sup>w</sup>ntim iʔ siwʔk<sup>w</sup>

WE WILL PROTECT THE WATER



Okanagan Nation Alliance

# Big Brothers Big Sisters of Canada

In appreciation of our speakers today and with thanks for your contribution, UBCM has made a donation to the Big Brothers Big Sisters of Canada. Big Brothers Big Sisters of Canada has been championing the health and wellbeing of youth. They provide direct service to children by matching volunteers with youths in quality mentoring relationships to overcome adversities, helping them to do better in life.