

## Pooling Shared Information and Knowledge Governance

### WHAT

A variety of models for managing and supporting local water and watershed information exist in B.C. They are examples of how Crown and Indigenous governments, local communities, and industry are collaborating to “pool” and integrate various forms of water and watershed data. These initiatives recognize a critical point: that for effective watershed planning, policy/regulation, programs, and decision-making, there needs to be agreement on how a shared foundation of credible information and knowledge is effectively being built and managed.

### GROWING CONCERNS POINT TO NEED FOR NEW APPROACH

The absence of an integrated, provincewide approach to watershed monitoring in B.C. is a growing concern, emphasizing the urgent need for collaboration and enhanced data integration in both regional initiatives and across the province. Concerns include:

- **Poor information management.** Information is not consolidated in a central repository and is difficult to access across disparate organizations, reports, websites, or databases.
- **Inconsistency impedes data integration.** Data collection methods are inconsistent (and not verified) and thus data sets cannot be easily integrated into a broader, integrated and verifiable information network that can be shared and used across sectors and decision-makers. Concerns also exist about the reliability and quality of citizen-generated data, and how to address the proprietary nature of industry data.
- **Data and knowledge gaps.** Many gaps exist in B.C.’s data on water. This impedes the ability to develop baselines, understand the condition and overall “state of” water and watersheds, monitor trends, and make sound decisions now and into the future.

*Knowledge governance is generally understood as the decision-making arrangements and structures that set out how data is collected, pooled, shared, stored, and used in watershed planning, management, and decision-making.*

### WHY

Increasingly, government-to-government forums (like the Nicola watershed governance pilot, Collaborative Stewardship Forums, and modernized land use planning) are adopting monitoring and planning approaches that draw on Indigenous knowledge and Western science. Local governments, collaborative watershed entities, and community-based monitoring groups are also engaging in watershed programs that involve data collection, storage, and use.

For any initiative, whether it is a government-to-government stewardship initiative or a multi-stakeholder planning table, building early agreement on how data are being collected, shared, and used is critical to building trust and a shared foundation on which to proceed. Establishing protocols is particularly important with regard to respecting, protecting, and meaningfully applying Indigenous knowledge. A co-developed framework of knowledge governance challenges the partners to confront and reconcile the values and assumptions that influence their different knowledge systems and sources of information.

Attention to knowledge governance can guard against “information wars,” wasted resources going towards duplications in data collection, conflicts over competing data, or lack of trust in data credibility/validity. In short: *having trusted, shared information from the outset provides the basis for trusted processes, informed decisions, and ultimately better outcomes for the watershed.*

### Characteristics of Effective Knowledge Governance Approaches

- Independent/neutral entity (for example a knowledge trust) with accountability and oversight by key partners to build credibility and confidence in the information.
- Clear process to develop, collect, store, and use information between different knowledge holders
- Agreements and Memorandums of Understanding to ensure understanding on Indigenous knowledge protocols
- Co-leadership or clear role for affected Indigenous nations
- Separating information and ‘dueling science’ from the planning and decision-making realm.
- Clear ‘entry points’ for information to feed into planning and decision-making.
- Ability to integrate multiple types of data and specify when it can or cannot be shared and used (for example if proprietary or sensitive cultural information).

## WHERE IT IS HAPPENING

Three places in particular demonstrate the characteristics of effective knowledge creation and sharing in action.

	<b>Columbia Basin Water Monitoring Collaborative</b>	<b>Skeena Knowledge Trust (SKT)</b>	<b>Coast Information Team (CIT)</b>
<b>Purpose</b>	To strategically coordinate data collection—among the 31 water monitoring groups in the Columbia Basin, plus monitoring by Crown and First Nations governments—to <b>facilitate improved watershed decision-making.</b>	To gather information on wild Pacific salmon in the Skeena watershed (including water quality, habitat, and population data) and to <b>become the comprehensive information source for the watershed.</b>	To bring together the best available scientific, traditional, and local knowledge; environmental expertise; and community experience and analysis to <b>support Ecosystem-Based Management (EBM) and provincial and First Nations strategic land use planning processes.</b>
<b>Key Initiatives</b>	<b>Open access Data Hub</b> intended to be a “one stop” digital access point to store previously disparate sources of Columbia Basin water data in a way that is accessible to decision-makers. Main interests and priorities are to support and develop local water budgets in the context of climate change, including water allocation/ aquifer mapping.	<b>Skeena Salmon Data Centre</b> (general data archive with publicly accessible, online data warehouse); information management support; promoting data sharing and integration; building connections between organizations to communicate data/information; Skeena Maps Portal	Data acquisition and analysis to create <b>regional-scale analyses and EBM guidebooks</b> to help inform land use decision making and achieve a consistent approach to planning, management, and conservation at the subregional, landscape, watershed, and site levels.
<b>Partners/ Governance</b>	<b>Facilitated by Living Lakes Canada, with an advisory committee of 50 cross-sector members</b> from government, industry, academic, and community groups. There is also a science sub-committee and an IT sub-committee. The initiative is currently in the process of completing MoUs with three First Nations. Ultimately, the vision is for the Monitoring Collaborative to become a standalone entity with a governance body and attached trust to support the monitoring required to assist government decision-making.	The Skeena Knowledge Trust is a <b>“purpose trust.”</b> <sup>1</sup> It was established following a multi-year collaboration between the Bulkley Valley Research Centre, Wet’suwet’en Treaty Office Society, SkeenaWild Conservation Trust, and the Pacific Salmon Foundation. It is comprised of five independent trustees from across the key partners, four full-time technical staff, and a legal advisor.	<b>Independent, multidisciplinary information body</b> established and supported by the provincial government, First Nations governments, the forest industry, environmental groups, communities, and, later, the federal government. The CIT was co-chaired by the provincial government and First Nations, and consisted of independent scientists, practitioners, and traditional and local experts. It was overseen by a management committee, supported by a secretariat.

<sup>1</sup>A purpose trust “is a legal device that imposes a set of rules on the ownership of property. The original owner draws up the rules, and hands the property over to a trustee who is duty-bound to follow those rules...In this case, the trust is not for the benefit of individual beneficiaries, but for a named purpose that would benefit the broader community. Such trusts must have a purpose that the law considers to be charitable... The trustees’ duties are enforceable through the courts.” (Overstall 2008). Purpose trusts are unique because the board is committed to a principle and trustees are bound to the purpose of the trust. The trust governance structure insulates information from political influence. Trustees sit as independent individuals; they do not represent the organisations that they work for and cannot bring their own personal agenda to the board.

This dispatch draws on a longer, unpublished research report, Collaborative frameworks for watershed information management & knowledge governance (2019), prepared for the BC Water Funders Collaborative Working Group on Water Monitoring by Dr. Gemma Dunn (Principal, Uisce (Ishka) Consulting).

## LEARN MORE

Columbia Monitoring Collaborative  
[livinglakescanada.ca/projects/columbia-basin-water-data-hub-and-framework](http://livinglakescanada.ca/projects/columbia-basin-water-data-hub-and-framework)

Skeena Knowledge Trust  
[skeenatrust.ca](http://skeenatrust.ca)

Coast Information Team  
[www.for.gov.bc.ca/tasb/slrp/citbc/abo.html](http://www.for.gov.bc.ca/tasb/slrp/citbc/abo.html)

Webinar: What's Beneath the Surface? Insights into Collaborative Water Monitoring Data and Decision-Making (2019)  
[vimeo.com/323804032](https://vimeo.com/323804032)

Report: *Water Monitoring in British Columbia: Scanning the Data Landscape Public Report* (2018)  
[obwb.ca/bc\\_water\\_monitoring\\_scan](http://obwb.ca/bc_water_monitoring_scan)

The POLIS Water Sustainability Project (WSP) is an action-based research group at the University of Victoria's Centre for Global Studies. It recognizes water scarcity is a social dilemma that cannot be addressed by technical solutions alone. The project focuses on four themes crucial to a sustainable water future:

- Water Conservation and the Water Soft Path
- The Water-Energy Nexus
- Watershed Governance
- Water Law and Policy.

The WSP works with industry, government, civil society, environmental not-for-profits, and individuals to develop and embed water conservation strategies that benefit the economy, communities, and the environment. The WSP is an initiative of the POLIS Project on Ecological Governance.

[poliswaterproject.org](http://poliswaterproject.org)



**University of Victoria**

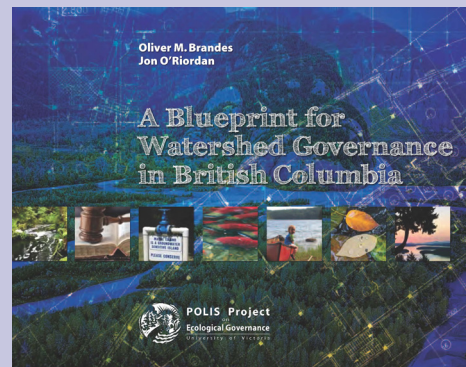
Centre for Global Studies



POLIS Project on Ecological Governance

**watersustainabilityproject**

## A Blueprint for Watershed Governance in British Columbia



This 2014 report focuses on current water governance issues in British Columbia and offers a path forward for how the Province could transform its current approaches to decision-making to ensure a more sustainable and resilient future. It sets out a strategic 10-year program and proposes nine winning conditions to ensure success.

Drawing in part on conclusions from *A Blueprint for Watershed Governance in British Columbia*, the complementary *Decision-Makers' Brief: A Blueprint for Watershed Governance in B.C.* (Aug 2014) offers what is arguably *the* strategic path forward to ensure British Columbia's *Water Sustainability Act* is implemented to its fullest potential.

[poliswaterproject.org/polis-research-publication/decision-makers-brief-blueprint-watershed-governance-b-c](http://poliswaterproject.org/polis-research-publication/decision-makers-brief-blueprint-watershed-governance-b-c)