



Advancing Watershed Health and Sustainability in BC

April 15, 2015 | Year 2 Advancing Watershed Sustainability Workshop Report

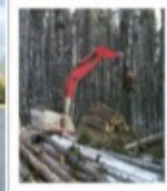


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Acknowledgements

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1.0 Introduction

The Year 2 Advancing Watershed Sustainability Workshop on April 15, 2015 was successful in facilitating discussion and eliciting feedback in two areas of work:

- The three projects that were a focus in year 2 of the Advancing Watershed Sustainability project, and,
- Key policy initiatives relevant to watershed sustainability such as the Water Sustainability Act, Cumulative Effects, and Managing for Water Shortages.

The discussions and participants' comments affirmed the direction of work being undertaken in year 2 as well as provided insight on how some of the research can be put into practice.

Each topic area was presented in plenary in either the morning and afternoon followed by a panel of experts with various perspectives. These expert panels were then followed by breakout sessions where participants had the opportunity to discuss one of the presentation topics in greater depth. The topic areas included:

- Collaborative Watershed Governance Keys to Success and Case Studies in BC
- Financial Mechanisms and Models for Collaborative Watershed Governance
- Natural Resource Practices Board
- BC's Water Sustainability Act
- Assessing and Managing Cumulative Effects
- Managing for Water Shortages

This report outlines and summarizes the key points gleaned from these discussions at the workshop. In each breakout group, participants were asked to focus on three questions:

- What is needed within each of the themes to advance watershed sustainability?
- Where do you see opportunities or leverage points?
- What are you/your organizations interested in collaborating on?

While some groups answered all questions, some had more in-depth discussions on one or two of the questions. This report summarizes points made in each discussion group.

2.0 Collaborative Watershed Governance Keys to Success and Case Studies in BC

In light of the challenges related to the fragmentation of jurisdictions associated with water, there was recognition that collaborative watershed governance could provide an opportunity to coordinate responsibilities and activities as well as recognize First Nations rights and title to water through co-governance.

What is needed to advance watershed sustainability?

The governance keys to success identified by participants fell within five interconnected themes of political commitment and accountability; a clear vision to guide strategic priorities; capacity to undertake collaborative governance (e.g. time, effort, skills and capacity) and availability of baseline data to undertake 'state of the watershed' reporting and an engaged public.

Participants emphasized the importance of implementation of government commitments related to enabling alternative governance initiatives and being accountable to those commitments. In the absence of accountability, participants mentioned the importance of partnerships for advocacy and the effectiveness that coalitions and collaborative initiatives can have.

Given the fragmentation of water related responsibilities and jurisdictions within and among governments and among sectors, collaborative governance was seen as an opportunity to coordinate in watersheds. Participants mentioned the importance of an adaptive vision for these initiatives to drive strategic priorities within watersheds. Collaborative groups must also have the capacity, skills, time and motivation to operate effectively. This included access to baseline data and other watershed assessment tools to undertake 'state of the watershed' reporting. It was stressed that this information needs to be reported out to the public to build education and awareness of watershed issues that affect them which in turn, would (hopefully) drive their engagement on these issues.

Approaches to keys to success to advance watershed sustainability

Participants discussed that in order to understand where governance initiatives need to go, they need to first look at what isn't working and what historically hasn't worked. From here standards and opportunities for success can be set. This includes robust analysis of potential impacts of decisions from a variety of different perspectives as well as an understanding of ecological limits that advance and ensure watershed health. Economic development in a watershed should fall within these ecological limits and monitoring and reporting mechanisms should be in place to encourage compliance.

Clearly defined and coordinated roles and responsibilities of different jurisdictions are also necessary for collaborative watershed governance to be effective. An analysis of current legislation and regulation would advance this understanding to ensure that goals and objectives set in a watershed don't fall on the 'nice to do' list. The issue of jurisdiction is

especially relevant in First Nations communities where reserve lands lie within federal jurisdiction but waters lie within provincial jurisdiction.

Opportunities and leverage points

Participants emphasized that co-governance or co-stewardship approaches need to recognize Aboriginal rights and title and incorporate Indigenous traditional knowledge. This involves meaningful engagement and consultation with First Nations in the Water Sustainability Act regulation development as well as transparency of how feedback is used.

The importance of a centralized 'water inventory' was also stressed where citizens could access reports on the state of watersheds, water related data as well as best practices related to watershed governance. A need was also expressed for First Nations communities to have access as well as build their capacity to collect and store watershed data to do their own watershed reporting.

Participants also emphasized the importance of industry being a part of collaborative watershed governance initiatives given their impact and role within watersheds. The National Roundtable on Wetlands was provided as an example of a policy developed with industry.

3.0 Financial Mechanisms and Models for Collaborative Watershed Governance

In order for collaborative watershed governance initiatives to fulfill any mandates delegated by the Province, they must have access to adequate and sustainable funding from a variety of sources. This group discussed several ideas related to funding mechanisms, provincial and local considerations with respect to fund allocation, the importance of demonstrating efficiency and effectiveness and opportunities to collaborate.

What is needed to advance watershed sustainability?

In order for watershed councils/groups to fulfill their mandates, they need access to adequate, sustainable funding sources. These funds are needed to start up, for ongoing core funding and for project funding. Participants stressed that funding also needs to come from multiple sources to manage the risk of one funding source becoming unavailable. The need for funds that decouple from the political process was also emphasized due to the increased risk of loss due to shifting mandates and priorities. It was acknowledged that with multiple sources of funding, timing of cash flow and reporting requirements would be important for watershed groups to consider.

Participants discussed several examples of possible financial mechanisms to fund watershed governance activities. These included both local fees as well as user-pay type fees. One example offered was the use of recreation fees to transfer some of the costs to watershed users (e.g. like the hotel tax) and to contribute to watershed governance organizations and related sustainability initiatives. A condition for large water licensees to

participate in watershed governance and/or planning was also suggested. Two examples of local fees were local surcharges to reinvest in the local area based on provincial water rentals and region-approved parcel taxes/fees to support a watershed council/group. However, it was mentioned that there might be push back from agriculture and municipal users for 'tax grabs' so a clear benefit to users must be demonstrated before proposing a parcel tax or fee. This willingness to pay can also be achieved by doing full-cost accounting for the benefits of sustainable watershed and the costs of inaction. This user-pay system could also be extended to resource industries to offset costs of large-scale use or impact on watersheds.

Buy-in to fund collaborative watershed governance

For the Province to allocate funding to watershed groups, participants discussed the summary of criteria and guidelines the Treasury Board uses to identify financial priorities. These included cost savings, cost avoidance, revenue enhancement, revenue protection, asset protection and asset enhancements. Other considerations include priorities like health and safety, legal precedents and mandates as well as policy 'flavours of the day'. Therefore, watershed groups need to demonstrate effectiveness and efficiency and frame their accomplishments within these priorities to attract provincial investment. Political will is also driven by buy-in from the public. This stresses the need for unlikely coalitions in support of collaborative watershed governance. Fraser Basin Council was identified as an organization well suited to developing these broad coalitions of support.

At the local level, buy-in for watershed governance should be framed as a way to do things better and as a delegated or decentralized solution to the top-down approaches to water management. To that end, some mandates and responsibilities should still remain within provincial and federal jurisdiction such as setting standards, overall policy frameworks, research, monitoring, compliance, enforcement and hosting and maintaining databases. This leads to better effectiveness and efficiency with local initiatives.

Opportunities and leverage points

Several opportunities identified included working with the Freshwater Fisheries Society, Habitat Conservation Trust Fund and Pacific Salmon Foundation to get them involved in funding broader watershed sustainability work beyond restocking and habitat restoration. The Pacific Salmon Foundation was mentioned regarding the potential for watershed perspectives to be incorporated into their work on governance, fish allocation and funding in the Skeena watershed. Participants also discussed the value of mapping out strategic institutional opportunities organized across space. This has been used by the Maori communities in New Zealand and could identify potential convergence in watershed regions in BC.

With the Water Sustainability Act regulation development still ongoing, participants also emphasized the importance of engaging on the conversation relating to water licensing rates in BC. Reports, op-eds and letters to the editor can be used to demonstrate the social license for this issue.

4.0 Natural Resource Practices Board

This group focused much of its discussion on the linkages between watershed sustainability and a proposed Natural Resource Practices Board (NRPB), upcoming points of leverage for an NRPB and potential opportunities to collaborate.

Connection between the proposed NRPB and watershed sustainability

Participants considered the NRPB scope to be broad and that it could benefit from a watershed boundary focus. By taking a watershed-level approach, one of the goals of the NRPB would be to ensure that the multiple values of the watershed are not compromised. Water quality and quantity could be a part of this assessment as well as other systematic and technical approaches within appropriate timeframes to assess impacts of resource development. This would combine both scientific and traditional ecological knowledge. The NRPB could also review regulatory requirements to assess whether these frameworks are effective.

One of the benefits of the NRPB, as proven with the Forest Practices Board, is that it helps establish social license. However, it has to be a credible, independent body that is able to fully report on the performance and compliance of the natural resource sectors.

Opportunities or leverage points

The creation of the Ministry of Forests, Lands and Natural Resource Operations brought several ministries together and broke down silos. There is an opportunity to apply a similar approach to a NRPB. Gaining political support could also be strategically timed in light of the upcoming provincial election in 2017.

Gaining public confidence is also timely given the tensions with the growth of LNG development. An NRPB would provide assurance that an independent watchdog is responsible for auditing industry and that the public has an entity to report complaints to. However, the NRPB would have to have the credibility to gain public trust.

Actions and interest in collaboration

This diverse group identified the following actions or activities they could collaborate on:

- Local government – defined watershed management areas within the province under a NRPB or watershed practices board. Could be taken up with Union of BC Municipalities.
- Fraser Basin Council – host an event or clinic at the Union of BC Municipalities or other mechanisms of engaging with local government to move this issue
- Community Mapping Network – advisory capacity
- Forest Practices Board – providing clarity, drawing on past experience and intellectual capacity/experience. Possibly identifying a need for landscape level or land use planning.
- BC Wildlife Federation – advocacy
- Professional associations – supportive, be engaged

5.0 BC's Water Sustainability Act

With the Royal Assent and implementation of the Water Sustainability Act, there were a number of questions and issues identified by this group that related to how watershed sustainability would be advanced moving forward.

Range of regulations governing watersheds

The management of watersheds and landscapes are governed by a diversity of Acts and regulations. This presents the challenge of harmonizing all of these Acts and identifying who does what. Do some Acts trump others (Oil and Gas Activities Act, Drinking Water Protection Act, etc.)? Are there gaps in the policies/laws aimed at protecting watersheds? How do we best bridge these gaps in the harmonization process? The tensions that are involved in this discussion were recognized as the 'elephant in the room' and need to be addressed further.

First Nations consultation and collaboration

Meaningful engagement with First Nations was one of the biggest challenges identified in relation to the implementation of the Water Sustainability Act. This was acknowledged as a very complex process since there is no 'one stop shop' to reach First Nations communities. Not all communities are part of tribal councils or engage with the First Nations Leadership Council and its partnering entities. And not all First Nations have agreements with the Province. However, there needs to be real collaboration or there could be conflict. The stewardship community also recognized the importance of this engagement. A survey undertaken by the Freshwater Alliance showed that 75% of respondents recognized the importance of engagement with First Nations and saw it as a priority of stewardship.

Challenges with setting water objectives

It was emphasized that the current tools available don't clearly achieve targets that are required to advance watershed sustainability and there is no systematic information database to take stock of what's happening in different regions. Therefore, there needs to be an assessment of what tools are necessary to take stock of issues and conflicts across the Province. How will water objectives be set? How can groups be engaged? Can a tool be developed to list strategies and plans that work? The Marine Planning Partnership was suggested as an initiative to consider as it has successfully engaged various interests in setting its objectives.

Public engagement

It was noted that urban populations have a lesser awareness and understanding about the Water Sustainability Act and how it impacts them. The Province will be working on an engagement strategy and objectives to achieve over the next 2 to 3 years. This constituency would need to be taken into account.

6.0 Assessing and Managing Cumulative Effects

The Province is currently developing a cumulative effects framework that aims to assess the cumulative impacts of historic and current natural resource development. The framework, its approaches and tools present an opportunity to better uphold social, cultural, economic and ecological resource values which are key to advancing watershed sustainability and articulating objectives for a future vision. It is a policy-based framework that aims to be the foundation of resource planning combining various values to inform those objectives. Currently, the Province has nearly completed its assessment of current conditions using multiple indicators (e.g. riparian buffers). However, this preliminary work still needs peer review and better incorporation of other values identified by the public. It was acknowledged that this discussion was therefore very timely.

Opportunities and challenges with data, information and information management

One of the core activities in the development of the cumulative effects framework is information and data gathering and information management. There was a rich discussion relating to these activities identifying several opportunities and challenges. How do we ensure that impact assessments are without bias? How can they be buffered from political and other interests? What information, data and base of knowledge are being privileged in the assessments? What are the opportunities to share the data and knowledge being gathered? How can water objectives be connected with cumulative effects values?

Data and information management is key in establishing benchmark or baseline conditions of ecosystems. They are necessary to avoid 'shifting baselines' and help provide the foundation for objectives and risk assessments. This will help trigger management regimes of various intensities and related actions. Therefore, the group acknowledged the importance of including various forms of knowledge (e.g. traditional ecological knowledge, local knowledge, citizen science, etc.) in order to represent different values (i.e. social, cultural, economic, ecological). This can be challenging due to the lack of expertise in MFLRNO looking at social values. Collaboration with other ministries will be key to ensure these are incorporated.

There are numerous opportunities to enhance information exchange that are part of existing government initiatives such as open government, open data and data sharing platforms. For example, the Natural Resource Permitting Process and the Natural Resource Road Act were mentioned.

Inclusion of First Nations values and Traditional Ecological Knowledge

In order to incorporate First Nations their cultural values and perspectives, it was stressed that they need to be involved in the framework development from the outset. First Nations communities have a lot of knowledge to contribute especially with respect to cumulative impacts and baselines. Since they have lived on the land for centuries and have formed an intimate relationship with the land, they are aware of changes and impacts

ecosystems have undergone. This is especially relevant to their traditional practices such as gathering of food and medicines from the lands and waters.

Approaches and challenges of cumulative effects

It was acknowledged that there have been numerous approaches to gathering and representing resource data over time. Therefore, the relevancy of these approaches must be assessed in light of the goals of the cumulative effects framework. For example, biophysical approaches are much more conducive to adding social values versus biogeoclimatic zone approaches (which were used in the 80s). These kinds of multi-functional and multi-beneficial approaches across a number of different values were discussed as an important area to explore.

Values may also be inter-jurisdictional which presents some challenges. For example, SARA –listed species especially those with recovery plans have multiple threats facing them and are under federal legislation and regulations. Would a provincially based framework be able to address these aspects?

7.0 Managing for Water Shortages

Projected climate change impacts in certain parts of BC forecast longer dry periods and periods of low flows and water shortage. This has implications on the hierarchy of water allocations and uses in those areas. This group focused much of their discussion on how we can be proactive with respect to water shortages, how water prices could play a role and how multiple stakeholders need to be engaged.

Data and public engagement to advance watershed sustainability

In order to have a baseline understanding of water use, better measurements and data collection of allocation is needed especially with respect to domestic water. Household use is not currently metered in the province. It was thought that metering would give better insight into how to engage homeowners with respect to water use and its implications on watershed sustainability. Coordination and data sharing could also be initiated between regions.

Allocation challenges in times of water shortage

The group posed a variety of questions related to allocation such as how is water currently allocated in times of shortage? What approaches outside of FITFIR can be applied? What are the opportunities to develop Water Sustainability Plans that address water allocations in times of shortage? It was acknowledged that there currently are effective conservation policies that work and could be explored further to address some of these questions. It was also acknowledged that water shortages are times of crisis and collaborative governance doesn't necessarily work in crisis situations. Therefore it is necessary to create a more proactive plan that addresses these issues before a crisis happens. Demonstrating the cost of inaction would provide a compelling case for an unlikely coalition of water users and

water interests needed to roll out a plan. This was also seen as a way to drive political will and emphasize the need to increase the price of water.

Opportunities and points of leverage

The water crisis in California was discussed as an example to demonstrate the importance of proactive planning as well as the role of water prices in water use. BC has a unique opportunity to build on this conversation through the Province's approach to Water Sustainability Plans. The WSPs would have to take climate change projections and scenarios into account and consider projected population growth in drier regions.

Participants discussed their willingness to continue research, education and outreach initiatives as well as holding leaders to account. In addition, they emphasized the importance of involving industrial water licence holders such as agriculture in 'safe table' discussions.

Conclusion

The Year 2 Advancing Watershed Sustainability in BC Workshop on April 15, 2015 affirmed the importance of the areas of research undertaken in this second phase of the Advancing Watershed Sustainability project. These areas of research were also seen as timely given the development of provincial initiatives such as Water Sustainability Act and Cumulative Effects and the workshop provided a forum for experts and practitioners to provide updates, exchange ideas and explore potential next steps. Many helpful questions, comments and suggestions emerged from the presentations, panel discussions and break out groups. These will provide further insight into the direction of the next phase of work for FBC and BCWF.

Appendix A: Workshop Agenda

WORKSHOP – ADVANCING WATERSHED SUSTAINABILITY

April 15, 2015 (9:00am – 4:00pm with registration at 8:30am)

Simon Fraser University – Harbour Centre, Room 1400
515 West Hastings Street, Vancouver, BC

Workshop Objectives:

- To present and discuss key findings from three projects on watershed governance, financial mechanisms and independent oversight.
- To present and discuss updates on key policy initiatives relevant to watershed sustainability.
- To share feedback, knowledge and perspectives on watershed projects and policy initiatives.
- To explore interest and opportunities to collaborate on advancing watershed sustainability.
- To facilitate opportunities for networking among watershed practitioners from across BC.

AGENDA

8:30 am On-Site Registration, Refreshments and Networking

9:00 am Welcome, Opening Remarks & Workshop Overview

- David Marshall, Fraser Basin Council
- Chief Ian Campbell, Squamish First Nation
- Alan Martin, BC Wildlife Federation
- Steve Litke, Fraser Basin Council

9:15 am Project Presentations and Panel Discussion

A. Collaborative Watershed Governance Keys to Success and Case Studies in BC

- Presenter: Theresa Fresco, Fraser Basin Council

B. Financial Mechanisms and Models for Collaborative Watershed Governance

- Presenter: Steve Litke, Fraser Basin Council

C. Natural Resource Practices Board

- Presenter: Al Martin, BC Wildlife Federation

Panel Discussion on Watershed Governance, Financing and Independent Oversight

Panelists: Ernie Crey, Sto:lo Tribal Council
Reg Whiten, InterraPlan Consulting

10:45 am Refreshment Break

- 11:00 am Breakout Groups – How do we move forward? (Round One)**
- What is needed to advance watershed sustainability?
 - Where do you see opportunities or leverage points?
 - What are you / your organization most interested in collaborating on?
- Select one of the following breakout groups:
- Collaborative Watershed Governance Keys to Success and Case Studies in BC
 - Financial Mechanisms and Models for Collaborative Watershed Governance
 - Natural Resource Practices Board
- 12:00 noon Lunch**
- 12:45 pm Watershed-Relevant Policies**
- A. BC's Water Sustainability Act
- BC Ministry of Environment – Ted White
- B. Assessing and Managing Cumulative Effects
- BC Ministry of Forests, Lands and Natural Resource Operations – Jennifer Psyllakis
- C. Managing for Water Shortages
- UBC Okanagan – Dr. John Janmaat
- D. Panel Discussion on Watershed-Relevant Policies
- Panelists:** Oliver Brandes, POLIS
Rodger Hunter, Cowichan Watershed Board
Leon Louis, Okanagan Nation
- 2:15 pm Refreshment Break**
- 2:30 pm Breakout Groups – How do we move forward?**
- The focus of discussion would be something like:
- What is needed within each of the themes to advance watershed sustainability?
 - Where do you see opportunities or leverage points?
 - What are you / your organization interested in collaborating on?
- Select one of the following for discussion in breakout groups:
- BC's Water Sustainability Act
 - Assessing and Managing Cumulative Effects
 - Managing for Water Shortages
- 3:30 pm Highlights from Breakout Groups**
- 3:50 pm Concluding Remarks & Wrap-Up**
- 4:00 pm Adjourn**

Appendix B: Participant List

First Name	Last Name	Organization or Affiliation
Al	Martin	BCWF
Andrea	Glickman	UBCIC
Ashleigh	Yakemchuk	Fraser Basin Council Youth Sustainability Committee
Bob	Purdy	Fraser Basin Council
Brian	Wilkes	water professional
Christina	Toth	FBC
Cora	McIntosh	Saik'us First Nation
Dalton	Silver	Sumas First Nation
Dana	McDonald	Evergreen
David	Marshall	FBC
DG	Blair	Stewardship Centre for BC
Eileen	Jones	Pacific Salmon Foundation
Erik	Karlsen	n.a.
Erin	Vieira	FBC
Ernie	Crey	Cheam First Nation
Ivan	Thompson	Gordon and Betty Moore Foundation
James	Casey	WWF
Jenna	Cook	UBC SCARP
Jennifer	Psyllakis	Provincial Cumulative Effects Manager, FLNRO
Jennifer	Archer	BC Water Funders Collaborative
Jody	Watson	Capital Regional District
John	Pennington	Forest Practices Board
John	Janmaat	University of BC, Okanagan
Jordi	Honey-Rosés	School of Community and Regional Planning - UBC
Ken	Zielke	BC Forest Practices Board
Kiely	McFarlane	University of British Columbia Columbia Shuswap Regional District AND Shuswap Watershed Council
Larry	Morgan	Council
Leon	Louis	Okanagan nation
Marc	Tadaki	UBC
Maximilian	Kniewasser	Pembina Institute
Michael	Wealick	Tzeachten First Nation
Mike	Simpson	Fraser Basin Council
Mike	Donnelly	Regional District of Nanaimo
Neil	Fletcher	Wetlands Education Program, BCWF
Oliver	Brandes	POLIS Project on Ecological Governance
Pamela	Zevit	South Coast Conservation Program
Paul	Demenok	Chair, Shuswap Watershed Council

Rebecca	Seifert	SFU/FBC
Reg	Whiten	InterraPlan Inc.
Rick	Simpson	Inland Fisheries Committee, REgion 8, BC Wildlife Federation
Rob	Knight	Community Mapping Network
Rodger	Hunter	Cowichan Watershed Board
Saskia	Nowicki	SRK Consulting
Steve	Litke	FBC
Susi	Porter-Bopp	Canadian Freshwater Alliance
Taylor	Wilkes	independent
Ted	White	Ministry of Environment
Terry	Teegee	Carrier Sekani Tribal Council
Theresa	Fresco	FBC