

The Stakeholder Workshop Series

Water/Climate Change/Salmon

Connect with others. Synthesize knowledge. Solidify relationships.

Discussion Document

How did the Stakeholder Workshop Series begin?

How can individuals from different organisations (e.g. academic, management, policy, stewardship), come together to explore, build, and maintain links among sustainability issues associated with landscapes and watersheds, including: fisheries, forestry, mining, agriculture and urbanisation? This question was the spark that first ignited the Stakeholder Workshop Series. The purpose of this three-part workshop series is to examine current understanding of how interconnected land and water use relate to human well-being and the health of landscapes and watersheds. All three workshops will create a space for collective thinking between researchers, policy makers, and resource managers in order to explore the different ways that land and water use is understood by these groups. Due to the cultural differences between people, these workshops aim to address aspects of natural resource management while uncovering *how* different stakeholders understand the same information in different ways. Fostering awareness and recognising that people process information using a variety of methods will help to build relationships based on layers of understanding. For the purpose of this discussion, stakeholders are defined as people within society that share specific concerns (recognising that individuals may belong to several stakeholder groups).

What is the aim of the Stakeholder Workshop Series?

The three-part workshop series will create a safe space to exchange knowledge about local land and water management, local policy development, and local research needs. The workshop themes: 1) *Water*, 2) *Climate Change*, and 3) *Salmon* are not mutually exclusive; each workshop theme will overlap, with previous discussions lending insight to the next. All stakeholders will benefit from learning about how others understand patterns of ecological, social, and economic processes. Furthermore, participants will work to identify barriers to collaboration and knowledge exchange, and consider innovative ways to overcome these barriers.

Although we will be building bridges between different ways of understanding the world, this workshop series does not aim to create a *new* committee. Rather we will work to synthesise existing information and to synthesise connections between people. Synthesis is the fusion of separate elements into a new whole; our work will help to collectively address the challenges pertaining to natural resource management and watershed stewardship. We live in the age where access to information is vast and, consequently, the time to deal with this access to information is continually compressed. By fostering relationships, and weaving a fabric of alliances between groups, it is hoped that the facilitation of current and future projects will be made easier.

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What is the purpose of this discussion document?

As a workshop participant, you are being asked to review this discussion document prior to the event on July 21. The following four sections (Responses from survey questions 1-4) contain all of the information from the pre-workshop survey in bold text (modified to remove identifying information). All of the survey responses are contained in the following four sections except for responses that could be tied to specific individuals or organisations. To put the information into paragraph form, the survey responses have been collated along with other responses of similar tone and content. The pre-workshop survey was sent to the non-UNBC participants. Nine people out of 13 people who were surveyed responded. Some participants provided more than one answer for each of the four questions, while some questions were not answered by every individual, and some responses have been omitted due to their identifying nature. This explains why there are varying numbers of responses for each question.

The purpose of the survey was to “set the stage” for *Workshop 1 – Water* by asking participants: 1) what pressing issues concerning water their organisations are facing, 2) what barriers to policy implementation they are experiencing, 3) what is needed to foster better relationships with other stakeholders, and finally, 4) what research needs have been identified. Employing a participatory method during the pre-workshop phase has allowed for the identification of **knowledges** within and between stakeholder groups. Instead of classifying what we know into specialised areas of knowledge, we can collaborate and apply the strengths from our different ways of knowing; recognising that the value of our collective experience lies at the intersection of our differences.

Responses from survey question 1 – *What is the most pressing issue for your organization with regards to water?*

One of the project partners has identified “**the most pressing issue with regards to water is to coordinate all organizations with an interest in water to achieve sustainable, long term outcomes that meet all needs.**” To address the need for sustainable, long term outcomes stakeholders will need to “**think across boundaries**” and synthesise the different ways of understanding factors surrounding water.

Water is the natural resource where we can clearly see the interconnectedness of systems, but our treatment of water is often compartmentalised. Because of the sheer abundance of water in Canada, the invaluable resource it is often taken for granted. However, during the pre-workshop survey, individuals working at the front-lines of water management talked about “**confirmed evidence of a declining aquifer with the continued use of pure aquifer water stocks for**

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industrial use.” Dealing with this same idea of clean water as a limited resource, one individual discussed how **“a 10 year drought affecting the available ground water supplies, in specific areas, notably 108 Mile.”**

Changes to the land base that in turn, affect water were identified as **“hydrology issues from increased harvesting due mostly to Pine beetle (some Spruce beetle) salvaging.”** Another response identified the challenge of **“maintaining fish-bearing streams when harvesting trees.”** Other pressing issues with regards to water are **“water quality, quantity, and temperature; all factors that affect salmon and salmon habitat.”** Another participant identified the most pressing issue with regards to water as **“water flows and water quality are being negatively affected by anthropogenic influences and resulting in poor conditions for migrating and residual salmonid stocks.”**

Responses from survey question 2 – *What barriers are you facing implementing policies regarding water?*

Many of the survey responses that dealt with issues relating to policy focused on the capacity of government to manage water. One respondent stated a barrier that their organisation is facing regarding implementing water policies is the **“capacity of government to deal with water conservation. They are so understaffed and poorly funded that in some cases getting them to come out to look at things is problematic.”** Another response pointed to **“a lack of appreciation of the cumulative impacts of government policies (pertaining to both forestry and range, placer mining) as they relate to water quality.”** The theme of governmental capacity was continued with **“the most significant barrier to implementing policies regarding water is the reluctance of elected officials to do what is necessary to provide water security. If policies are seen as ‘endangering jobs’ they are not pursued. A second barrier is the tendency to adopt an optimistic or complacent approach to troublesome questions.”**

All of the preceding quotes highlight the challenge of, **“balancing social, economic, and environmental impacts”** and dealing with **“competing government objectives [such as] maximizing revenue from resources while minimizing environmental impacts.”** Another comment relating to the perception of natural resource management and government is **“my biggest concern about natural resource management, including water, is the decision of the provincial government to get out of the business of governing. They have turned it over to corporations and individual professionals.”** The last comment from the surveys that relates to government policy is: **“related policy seems to be influenced by short term economic influences presented by the corporate world.”**

Some barriers that the individuals who were surveyed are facing in their organisation with regards to water policy are: **“a lack of funding, and structural barriers as a result of the silo effect. Even though collaboration has improved, we’re still in silos.”** Furthermore, **“misclassification of streams is an issue. I sometimes come to streams that are classified as**

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‘fish bearing’ and I get there and there is no water.” One project participant stated how **“a better understanding of surface water and groundwater interaction in relation to surface water levels is needed.”** Another person stated **“current provincial surface water licensing policies may not adequately reflect new realities associated with climate change”.**

Responses from survey question 3 – *What do you need to foster better relationships with other stakeholder groups and first nations?*

Several respondents highlighted the need for more opportunities to collaborate as a collective. One participant highlighted the need to **“address the barriers with regards to structural barriers as a result of the silo effect, and we need more time available to allow people in organizations to explore the bigger picture related to water issues, rather than the individual small details. More networking opportunities to see the inter-connectedness.”** Another person stated that more **“information exchange forums and multiple opportunities to interact and cooperate”** are needed. Furthermore, **“more open communication is needed”** and **“more engagement through organizations and meetings to find common ground and purpose to present concerns to government.”**

Two survey responses highlighted the challenges of dealing with different stakeholders in certain circumstances. One respondent pointed to the fact that **“more streamlined procedure [for dealing with] provincial and first nation governments”** in certain land use contexts is needed. The other disruption in cooperation which was highlighted was a perception of **“forest companies have been resistant to participating. In particular, they were not very forthcoming in providing information about effective clear-cut area of sub-basins in the watershed.”**

Responses from survey question 4 – *What is your number one research need?*

These are listed below:

- **potential research questions resulting from an on-going project looking at whether the Horsefly Watershed is a 'fisheries sensitive watershed';**
- **restoration techniques;**
- **broad scale questions that pertain to landscape level issues;**
- **information on water stocks (aquifer and groundwater);**
- **information on the use of municipal waste water for industrial use;**
- **the impact of single use plastic water containers;**

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- **documenting scenarios where collaborative watershed governance has worked around the world, what the factors for success have been, and how can we replicate successes;**
- **how effective clear-cut area and peak flow index affect water quality (suspended sediment), water quantity, and timing in smaller watersheds in the interior of BC (especially those areas affected by MPB).**
- **sustainable yield plots and climate change plots;**
- **neutral third party hydro-geological assessments need to be performed so that all users can make informed decisions from one data base;**
- **funding for ongoing research and monitoring of salmon streams.**

Conclusion

It is impossible to separate our land and water use practices from the watersheds and landscapes in which they take place. Mining, logging, agriculture and other land use practices cannot be hemmed into confined areas. Essentially, every action is upstream or downstream from somewhere else. This same interconnected way of thinking about water is useful for thinking about how knowledge flows from one facet of society to another. The Stakeholder Workshop Series will strive to provide a venue where participants can work from their disparate knowledge bases while recognising reality is a set of interconnected parts. Instead of reducing issues into their component parts and focusing on one aspect at a time, it will be advantageous to “think across boundaries” and look at the issues in a way that connects different ways of understanding and sheds light onto the whole.

“The combination of the information revolution and unregulated globalised flows of resources are changing the world. Taking advantage of the opportunities that we have to change it in a positive direction requires a vision of where we could be going, rather than being driven by the dread of what we need to escape” (Valerie A Brown *Leonardo’s Vision*).