The State of the Water Movement in British Columbia:

A Waterscape Scan & Needs Assessment of B.C. Watershed-Based Groups

By Tim Morris and Oliver M. Brandes
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About the Authors

Tim Morris LLB, LLM is a consultant who specializes in strategic and policy advice related to freshwater protection. Over the last decade, Tim has worked to protect Canada's lakes and rivers as an academic, advocate, and grantmaker. For five years, Tim managed the freshwater program at the Walter and Duncan Gordon Foundation, a national independent foundation dedicated to the development of sound and innovative public policy. He has a Masters of Laws focused on water law and policy, and has authored numerous articles and reports on water policy. Tim has also served on the advisory committee to the former water program of the National Roundtable on the Environment and Economy and as a member of the Board of the Canadian Environmental Grantmakers' Network. Tim was recognized as one of Water's Next: Best and Brightest in Water 2011 by Water Canada magazine.

Oliver M. Brandes BA(H), DipRNS, MEcon, JD is co-director at the University of Victoria's POLIS Project in Ecological Governance. He has spent over a decade building and leading the POLIS Water Sustainability Project. In that time, he has established himself as one of the country's leading experts on watershed governance, water law, and sustainability. Oliver is connected to an extensive network of experts and thought leaders from British Columbia, across Canada, and internationally. He often provides strategic advice to governments, NGOs, and foundations in B.C. and nationally concerning the application of watershed governance concepts and innovative water law and institution reforms. He currently serves on the Council of the Federation Water Partner Advisory Committee and on the Province of British Columbia's *Water Act* Modernization Technical Advisory Committee, as well as on numerous initiatives of local government and national NGOs.

About the Report Sponsors

The Real Estate Foundation of British Columbia provides funding and information to non-profit organizations working to enable positive change in B.C. communities. By supporting progressive solutions, the Foundation's work contributes to resilient, healthy communities and natural environments.

The POLIS Project on Ecological Governance is an action-based research organization concerned with the development and application of ecological governance based at the University of Victoria's Centre for Global Studies.

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Executive Summary

There are more than 230 non-profit, non-governmental organizations across British Columbia working to protect the magnificent rivers, lakes, and aquifers of the province. This report is the first attempt in B.C. to collate the perspectives of this large non-profit, NGO community to better understand its collective vision and needs. The four orders of government—local, First Nations, provincial, and federal—were not directly surveyed for this report. Neither were professional or industry user groups or associations.

Responses to an online survey from a representative sample of these groups, as well as telephone interviews with 11 water leaders, reveals a diverse "ecosystem" of organizations and a burgeoning freshwater movement. The movement is diverse in terms of geography, the issues that groups are working on, and the approaches they are taking to address those issues. Many of these groups are based in their local watersheds, are volunteer-driven, and work with their communities to protect their local home waters. A number of groups also work at a regional or basin-wide scale, while a smaller number—typically larger, professional organizations—work either provincially or nationally.

According to these water leaders, British Columbia has the potential to become a global leader in freshwater protection by establishing a new approach to governance that emphasizes watersheds and builds on the strengths of local leadership, community capacity, and a stewardship culture for fresh water. This could best be achieved through a combination of locally tailored watershed boards co-managed with First Nations and strong provincial oversight, support, and enforcement.

The findings of this study suggest there are substantial challenges facing the attainment of this vision, including regional variations in knowledge and capacity for local watershed governance, the need to identify models for sustainable funding for new watershed institutions, and a provincial government that has lost significant capacity for freshwater protection in recent years.

The next five years are a critical time for setting B.C. on a path to meet this vision. The provincial government has committed to modernizing the century-old B.C. *Water Act*. The cumulative threats to fresh water are growing, including the impacts of large industrial projects, urbanization, and the mounting pressures of climate change. Meanwhile, in places such as the Cowichan watershed on Vancouver Island, communities are experimenting with new models for place-based governance to respond to these threats, and First Nations are asserting their rights to be stewards of water and developing watershed plans for their territories.

This is a dynamic and potentially exciting time for water protection in B.C. Progress over the next five years will likely depend greatly on the strength, capacity, and cohesion of this emerging B.C. water movement.

Key needs identified by the groups that comprise this movement include:

- support and training to more effectively inform decision-makers;
- the capacity to better engage and educate local communities; and
- opportunities to learn from peers and build stronger networks and collaborations.

Finding the funds to ensure they can apply these skills and opportunities was also identified as a critical need.

Addressing these needs in a meaningful way will require infrastructure to support overloaded organizations and make it easy for them to connect, and to develop and implement new capacities. This report recommends a number of key elements of that infrastructure, including:

- a coordinating body or other mechanisms to help facilitate connections and shared learning;
- an annual gathering of water-focused groups, regional workshops, and online peer-to-peer learning forums;
- the development of local pilot projects in watershed governance with an emphasis on genuine and meaningful First Nations participation and their shared role in decision-making at all levels;
- specific training and resources for community engagement; and
- the development of a grassroots-driven province-wide water campaign.

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Introduction

In March 2013 a series of key informant interviews with 11 British Columbia water leaders was conducted. At the same time, an online survey was distributed to over 230 water groups across B.C. The goals of this process were to better understand the breadth and depth of the freshwater NGO community

in B.C. and identify some of the key needs for building the necessary leadership and capacity for freshwater protection in the province. It should be noted that the surveys and interviews on which this report is based were directed to the non-profit, non-governmental sector and not to local, First Nations, provincial, or federal governments or to professional associations, such as the BC Water and Wastewater Association. Although these are all critical players in the broader B.C. water community, these were beyond the scope of this project.

The results of this waterscape scan and needs assessment are presented in this report. This effort was designed not only to inform the priorities and activities of the sponsors of the report, but also to help inform and support the broader freshwater community in B.C. This research and analysis will also be used to inform a national water forum in January 2014, "Building Capacity for Success: Towards Watershed Governance in British Columbia and Beyond," which will be focused on building capacity for watershed governance (see Sidebar 1).

In effect, this report represents a snapshot of the current state of the freshwater movement in British Columbia. As revealed in this report, this movement is still very much in its infancy. However, the foundations of a broad and powerful social movement are certainly in place (see Sidebar 2). With appropriate capacity, support, and opportunities for groups to connect and coordinate, this movement could evolve from a loose network of organizations into a strong and united voice for change—a genuine and robust constituency for freshwater stewardship and innovative governance.

SIDEBAR 1:

WHAT IS WATERSHED GOVERNANCE?

In this report, "watershed governance" is defined as an institutional shift towards ecologically based water allocation, innovative place-based planning, managing water use with conservation and efficiency as top priorities, and ecosystem-based management and decision-making at the watershed scale. The overarching goal is to provide alternatives to current systems of governance and planning that focus too narrowly on individual sectors, thereby isolating the resource from its broader interactions across sectors and within ecosystems. Watershed governance is emerging as a viable approach to achieving long-term sustainability, and a key factor for its success is improved collaboration and connections between citizens and decisionmakers at the appropriate scale. It recognizes that local people and institutions are best situated to monitor environmental feedback and respond with tailored solutions to the context—both ecologically and socially. To be viable,, local powers must be "nested" within various higher-level institutions that hold them accountable, coordinate with other institutions across scales, and participate in broader collective actions for the public good. Source: Brandes, O.M., Ferguson, K., M'Gonigle, M., & Sandborn, C. (2005, May). At a Watershed: Ecological Governance and Sustainable Water Management in Canada. POLIS Project on Ecological Governance at the University of Victoria. Retrieved from http://poliswaterproject.org/publication/24

CONTEXT AND GENESIS OF THIS REPORT

This report builds on earlier projects that have sought to increase the knowledge and capacity of the water community.

In January 2012, a province-wide water gathering called "Collaborative Watershed Governance in BC and Beyond: A Solutions Forum" was co-hosted by a number of key change agents, including the B.C.

Ministry of Environment, Fraser Basin Council, Living Lakes Canada, Okanagan Basin Water Board, the Summit Institute, Pacific Business and Law Institute, and the University of Victoria's POLIS Project on Ecological Governance.¹ The first of its kind, this forum initiated a critical and necessary dialogue about watershed governance and worked to build capacity in B.C. It brought together over 100 individuals from all sectors of the water field, including all four orders of government—local, First Nations, provincial, and federal;, research organizations; consulting firms;

SIDEBAR 2: WHAT IS A SOCIAL MOVEMENT?

For the purposes of this report, a "social movement" is defined as a loosely organized but sustained campaign in support of a social goal, typically either the implementation or the prevention of a change in society's structure or values. Although social movements differ in size, they are all essentially collective. That is, they result from the more or less spontaneous coming together of people whose relationships are not defined by rules and procedures but who merely share some values and a common outlook on society. When sustained association takes the place of situational groupings of people, the result is a social movement.

Source: Killian, L.M., Smelser, N.J., & Turner, R.H. social movement (Encyclopedia Britannica). Retrieved from http://www.britannica.com/EBchecked/topic/551335/social-movement

lawyers; and watershed-based non-governmental organizations, who engaged in an interactive dialogue about the concept of, and issues and opportunities related to, collaborative watershed governance.

In March 2013, the POLIS Project on Ecological Governance released a focused research survey summary that presented an inventory of watershed organizations and gauged their interest in participating in a capacity-building event and in new forms of watershed governance. ² This initial survey project began to determine the role these groups can play in more formalized decision-making going forward, and laid the foundation for the creation of this more broad and detailed waterscape scan.

In addition, the Canadian Freshwater Alliance has been gathering insights on the needs of local grassroots organizations throughout British Columbia and across Canada, and has made initial contact and outreach with First Nation organizations in B.C. In combination with the POLIS Project's inventory, the Alliance's list of grassroots groups and First Nations organizations formed the basis for the survey distribution list for this project. As well, the methodology for this report was based on an approach developed for similar needs assessments undertaken by the Alliance, including *The Canadian Waterscape: assessing the needs of*

¹ Conference Release available at http://poliswaterproject.org/story/448

² See Wilkes, B., Collier, J., & Brandes, O.M. (2013, March). *Inventory and Research Survey Summary: Needs and Priorities of Watershed-Based Groups in British Columbia*. Victoria, Canada: POLIS Project on Ecological Governance at the University of Victoria. Retrieved from http://poliswaterproject.org/publication/535

Canada's water leaders³ and The Great Lakes Waterscape: assessing the needs of the Ontario water community.⁴

Another important impetus for this project came from the interest of the Real Estate Foundation of British Columbia in undertaking a comprehensive scoping exercise to help inform its own grant-making priorities in the area of freshwater sustainability and the priorities of other water funders. A separate report has been compiled that presents recommendations to the B.C. water funding community based on the information collected through this project.

REPORT ORGANIZATION

The report is organized according to the following key sections:

- **1. Highlights** This section outlines, in brief, the top 10 observations from the report and includes a summary table of the key recommendations.
- **2. Methodology** This section describes the process used for collecting the information for this report.
- **3.** The Water Census: What Does B.C.'s Water Community Look Like? This section presents a picture of the size and diversity of the B.C. water community, including the diversity of issues that groups are working on, the scale of work (from local to international), the diversity in geographic location, and diversity in desired influence. A coarse typology of water groups is presented in an effort to articulate a kind of "ecosystem" of groups working on water in B.C. This categorization is a challenging endeavour, since many aspects, activities, and priorities overlap and often change over time (sometimes rapidly). At best, this is a exercise to test the notion of some commonalities, and only represents a snapshot of this moment in time.
- **4. Hot Button Issues: What Are the Major Water Issues Right Now?** Based on the key informant interviews, this section identifies a number of common themes for major water issues facing B.C. at this time, including the B.C. *Water Act* modernization process, First Nations water rights and shared decision-making, and the impacts of climate change.
- **5.** The Way Forward: How Should We Govern Water in the 21st Century? Based on results from both interviews and the survey, this section presents insights on how we should be governing water in British Columbia. Some common threads point to a new approach to watershed governance in the province that would capitalize on the strengths of local communities supported by provincial oversight, monitoring, and enforcement.
- **6. Conditions for Success: What are the Needs of the B.C. Water Community?** Based on the identification of needs from respondents to the survey and in the interviews, this section outlines areas

³ Telfer, L., & Droitsch, D. (2011, August). *The Canadian Waterscape: assessing the needs of Canada's water leaders*. Walter & Duncan Gordon Foundation. Retrieved from http://gordonfoundation.ca/publication/395

 $^{^4}$ Cooper, W. (2012, June). The Great Lakes Waterscape: assessing the needs of the Ontario water community. Canadian Freshwater Alliance/Freshwater Future. Retrieved from

http://freshwaterfuture.org/userfiles/The%20Great%20Lakes%20Waterscape%20Report.pdf

where additional capacity is required, and what collaborative and peer-to-peer learning opportunities would be most valuable to B.C.'s water community.

7. Enabling the Vision: Recommendations for Strengthening the B.C. Water Movement The final section presents a series of recommendations for addressing key needs and gaps in the B.C. water community and for strengthening the collective water movement.

1. Highlights

- ❖ British Columbia has a large and diverse freshwater community. There are more than 230 organizations in this community that share the desire and pursuit of clean, healthy, and functioning watersheds. It is a dynamic "ecosystem" of organizations working at different scales and geographies, and taking different approaches to the variety of issues concerning their watersheds.
- ❖ The majority of respondents seek to improve water protection by *influencing* decision-making at the local, regional, and/or provincial level. However, there is a subset of water organizations that has an interest in taking a more direct role in governance by developing watershed plans and drawing down some decision-making power from senior levels of government. There is also a subset of water organizations that focuses purely on restoration and education, preferring not to be involved in the governance aspects of water.
- ❖ At a provincial level, the major water issues at this time are *Water Act* modernization, First Nations water rights and shared decision-making, and climate change. Other significant issues include liquefied natural gas (LNG) development and hydraulic fracturing (fracking), urbanization, water for the environment, drinking water source protection, and the cumulative effects of multiple resource extracting pressures on B.C.'s watersheds.
- **❖** There is a strong appetite within the B.C. water community for greater local involvement in decision-making with appropriate provincial oversight and support.
- One key element of local control is the establishment of local watershed boards and authorities that are democratically accountable and guided by those that have a long-term interest in the sustainability of the watershed and the communities that depend on them. Watershed boards or authorities should be built on a shared decision-making model and with a full and substantial role for First Nations, such as a co-chair role (but this should not affect First Nations rights and title). A number of powers could be delegated to these boards/authorities including watershed planning, monitoring, compliance, influencing land-use planning, and even administrative permit allocations that impact water(shed) resources.
- ❖ Even with more local control, there is still a need for a strong provincial role in providing oversight and support for watershed governance. The Province should set province-wide objectives, ensure there are strict minimum standards in place, maintain an inventory of watershed health, ensure rules are enforced, and participate in local governance processes.
- Challenges to be overcome in making progress towards a new approach for water(shed)-based governance in B.C. include the lack of senior government capacity and changing roles across all orders of government; a firmly entrenched "siloed" approach to resource management; fragmentation of authority, including knowledge and information about watersheds; and a critical need to identify and implement workable sustainable funding models.
- ❖ Survey respondents identified their priority needs as having greater influence with local and provincial governments and doing more to engage communities and the grassroots. Securing funds and other resources was also a commonly identified need. A subset of groups also identified taking on more decision-making power as their priority need.
- ❖ Networks between water groups are strongest between groups working at the same scale. There is limited networking and collaboration occurring between organizations operating at a provincial scale and community/grassroots groups.

❖ There is strong interest in participating in capacity building and networking opportunities, such as an annual gathering of water(shed)-focused groups, regional workshops, and online forums. However, local groups typically require financial support to attend and participate.

SUMMARY OF RECOMMENDATIONS

1	Establish a Coordinating Body/Mechanisms	To help facilitate information sharing throughout the B.C. water community, create opportunities for peer-to-peer learning, and support networking and collaboration amongst groups with shared priorities.
2	Create Peer-to-Peer Learning Opportunities	 Through a mix of in-person and online forums, such as: An Annual Gathering of Water(shed)-Focused Groups—to provide an opportunity for groups across the province to come together and engage in a practical learning environment. Regional Workshops—workshops in specific regions related to specific issues and concerns of those regions. Online Exchange—through online conversations, such as webinars, listservs, and web forums.
3	Develop and Implement Watershed Governance Pilots	Formalizing new watershed governance pilot projects with the necessary capacity to be successful and with genuine and meaningful First Nations participation and shared roles in decision-making at all levels would help provide direction and experience to bring B.C. into the 21st century.
4	Provide Community Engagement Training and Resources	The development of specific training opportunities around engagement and the sharing of resources, including success stories, would help address the need for more effective engagement of communities and the grassroots.
5	Catalyze a Province- wide Water Policy Campaign	The survey revealed an interest in a more coordinated province-wide campaign with active participation from the grassroots. Such a campaign would need to demonstrate benefits for local organizations and First Nations, which may be possible with a focus on enabling local watershed governance.

2. Methodology

ASSUMPTIONS

All surveys of this type have in-built assumptions that guide the framework of the survey and the types of questions asked. Below are some of the key assumptions that we sought to test through this process:

- There is a broad range of organizations working on water and watersheds in B.C. These organizations fulfill different roles and work at different geographies and scales.
- There is a need for greater coordination, peer-to-peer learning, and alignment of interests amongst water organizations and other organizations that have an interest in fresh water.
- There is a need for greater citizen and political awareness and engagement in water issues. However, a nascent appetite for citizens to be more meaningfully engaged does exist.
- There is a need for new forms of delegated watershed governance to move key aspects of decision-making around water to more local watershed scales to ensure better protection of critical natural capital.
- There is an opportunity in B.C. to advance provincial water policy (and law reform) that could enable new forms of watershed governance.
- Government has an essential role in watershed protection and must be a key player in working with civil society to foster watershed governance.

KEY INFORMANT INTERVIEWS

Ten key informant interviews (with 11 water leaders) were conducted over the phone for one hour each. Interviewees were selected based on a number of key criteria. In particular, we wanted to ensure we were accessing a broad range of knowledge and expertise related to freshwater issues and governance. Box 1 outlines the knowledge and expertise we sought to capture with the combination of perspectives from all the interviews.

BOX 1: KNOWLEDGE/EXPERTISE CRITERIA FOR INTERVIEWS		
Experience working in and with government	Experience with watershed governance	
First Nations perspectives	Grassroots campaign experience	
Water policy expertise	Political strategy experience	
Experience working at the watershed scale	Ecological and science-based knowledge	
Direct experience on a watershed board	Experience with collaborative processes	
Network builders and innovators	Geographic diversity	

In order to access these multiple perspectives, we identified individuals that themselves had a mix of skills and experiences and that could cover off more than one area of interest in our criteria table. These individuals are outlined in Table 1.

Table 1: List of Interviewees

KEY INFORMANTS	POSITION/ORGANIZATION
Al Martin	Director of Strategic Initiatives, BC Wildlife Federation
Anna Warwick Sears	Executive Director, Okanagan Basin Water Board
Bruce Fraser	Cowichan Valley Regional District (CVRD), Director-Shawnigan Lake
Craig Orr	Executive Director, Watershed Watch Salmon Society
David Marshall	Executive Director, Fraser Basin Council
Deana Machin & Sherry Boudreau	Strategic Development Manager, First Nations Fisheries Council Program Manager, Water, First Nations Fisheries Council
Jon O'Riordan	Advisor, SFU-ACT & POLIS Project on Ecological Governance, and former Deputy Minister, B.C. Government
Kat Hartwig	Executive Director, Living Lakes Canada & Program Director, Wildsight
Lana Lowe	Director, Fort Nelson First Nation Lands Department
Rodger Hunter	Coordinator, Cowichan Watershed Board

ONLINE SURVEY

In addition to telephone interviews, an online survey was sent to 239 potential respondents and 61 (26%) respondents completed the survey. The list was compiled from multiple sources, including lists of water organizations maintained by the Canadian Freshwater Alliance and the University of Victoria's POLIS Project on Ecological Governance. The survey was also sent to an additional set of groups based on the recommendations of groups that had already completed the survey, which helped to expand its reach. The survey was sent to groups throughout the province, large and small, with the goal of eliciting responses from a representative sample of the diverse range of organizations working on water in B.C.

Generally speaking, we believe we did receive a representative set of responses from a diverse range of water groups. One area where we could have had stronger representation is with First Nations organizations. This suggests the potential value in a specific needs assessment for First Nations working on water. At the time of writing, we understand that the First Nations Fisheries Council is undertaking a process to better understand the specific needs and gaps for First Nations governments and organizations with respect to water protection. This is an important project that will help raise the level of knowledge in this critical area.

The survey was designed to elicit both quantitative and qualitative responses and was divided into four key sections:

1) Tell Us About Your Organization and Your Biggest Needs

This section asked about each group's geographic focus, what activities they undertook, and their biggest needs and priorities.

2) Decision-Making, Power, and How Your Organization Influences

This section was designed to reveal perspectives on how decisions on water really happen, who is actually making decisions, and what role water groups play in the decision-making process.

3) Public and Political Awareness

This section specifically asked groups to rate their level of experience and capacity with communicating to the public and with elected representatives.

4) Networking and Communication in B.C.'s Water Community

This section was designed to illuminate if B.C. water groups are well connected, the best opportunities for peer-to-peer learning and capacity building, and ways to build a stronger water movement in British Columbia.

A NOTE ON GOVERNMENT

Governments—local, First Nations, provincial, and federal—have a critical role to play in water protection in British Columbia. However, this project primarily focused on the needs of the diverse non-governmental organizations and the capacity of civil society to support and strengthen the protection of fresh water in the province. As such, no formal government departments were surveyed or interviewed for this project. Based on the perspectives shared through the survey and the key informant interviews, it would appear that all orders of government are also having capacity challenges and have specific needs pertaining to freshwater protection in B.C. This would likely be worthy of a separate detailed study.

A NOTE ON PROFESSIONAL AND INDUSTRY GROUPS/ASSOCIATIONS

Other key sectors of the broader B.C. water community include associations of water professionals, such as the BC Water and Wastewater Association, water suppliers, and industry user groups and associations, such irrigation districts, BC Hydro, Clean Energy BC, and the Canadian Association of Petroleum Producers. While groups like these and the professionals and individual businesses they represent are critical players in the water community, surveying these organizations was beyond the scope of this project.

3. The Water Census

What Does B.C.'s Water Community Look Like?

A DYNAMIC "ECOSYSTEM" OF ORGANIZATIONS

B.C.'s water community is far from homogenous. In fact, it is a dynamic "ecosystem" of organizations working at different scales with diverse approaches and objectives. Below is a coarse typology of water groups in B.C. that helps to unpack some of these differences, while recognizing that the roles and priorities of these groups are constantly in motion, since water(shed) governance in Canada—and indeed globally—is in a period of flux. The diversity of these organizations is elaborated on throughout the rest of this section of the report.

1) Watershed Groups

These are groups that work at the local watershed scale and tend to be comprised of community members from that watershed (and may include representation from local, First Nations, provincial, and federal governments). Within this category, there is a range of types of organizations, roughly categorized as:

- Organizations that focus on restoration efforts, general education, and/or children's programs. An example of this type of organization would be the many Streamkeeper groups that exist across B.C.
- Watershed groups that seek to influence decision-making (through, for example, advocacy or participating in planning or decision-making processes) but *do not* want to take on decision-making powers themselves. An example of this type of organization is One Cowichan, a group on Vancouver Island that formed to call for local watershed governance, but is not seeking those powers itself. At a basin scale, the Fraser Basin Council would be another example.
- Watershed groups that seek to influence decision-making and would be interested in having a more direct role in decision-making for their local watershed. The Cowichan Watershed Board is an example of an organization seeking greater decision-making power for its watershed. The Lake Windermere Ambassadors is another potential example of such an organization that is exploring what local watershed governance could look like in their region.
- Organizations that play some type of decision-making role for their local watershed. At this time, there are very few organizations playing a more formal decision-making role for their local watershed. The Okanagan Basin Water Board and the Columbia Basin Trust have certain powers that are akin to decision-making, although this might be considered more "soft" power as they rely primarily on incentive powers (through infrastructure or program funding), their ability to undertake watershed-level research or studies, and their role in informing and guiding local governments or acting as a conduit between local interests and senior governments.

2) Water Leaders

There are a number of organizations not directly connected with a specific watershed that play a leadership role in freshwater protection. These can be further delineated into the following categories. These categories and examples are by no means exhaustive and are intended to represent an overview of the range of organizations and individuals engaged.

- National, provincial, or regional groups that have a *core mandate* related to freshwater protection and are permanently active around water issues. Examples of these types of groups include the Watershed Watch Salmon Society, the Pacific Salmon Foundation, Living Lakes Canada, and the Canadian Freshwater Alliance. This category can be further divided according to function with some groups seeking to influence decision-making, such as Watershed Watch Salmon Society; others supporting restoration efforts, such as the Pacific Salmon Foundation; and others providing capacity and training support to other groups, as is the case with Living Lakes Canada for community-based monitoring and the Canadian Freshwater Alliance for community engagement.
- National, provincial or regional groups that have ongoing programmatic interests in fresh water in B.C. and are recognized as having specific expertise and a sustained role in support of freshwater protection, research, or community mobilization. Examples of organizations with strong, ongoing water programs include the University of Victoria's POLIS Project on Ecological Governance, WWF-Canada, Wildsight, West Coast Environmental Law, Convening for Action on Vancouver Island (CAVI), Council of Canadians, and Ecojustice. Functions, advocacy emphasis, and expertise vary significantly between these groups.
- Individuals that do not work exclusively for water leader organizations but are individually regarded as water leaders, often through their work at academic, expertise-based, or technical institutions.

3) First Nations Groups/Associations

In addition to First Nations governments, there are a number of First Nations organizations and associations that have a core interest in freshwater protection, including the recognition of indigenous water rights. As well, there are many specific First Nation community initiatives related to water. Examples include initiatives undertaken by the Okanagan Nation Alliance, the First Nations Fisheries Council, Cowichan Tribes, and the Taku River Tlingit First Nation.

4) Other Groups with a Strategic Interest in Water

These are groups that do not necessarily maintain a longstanding or core programmatic interest in water protection, but which currently have or have had past strategic interest in water. Examples of these organizations include the BC Wildlife Federation, Sierra Club BC, Organizing for Change, the British Columbia Real Estate Association, and the BC Cattlemen's Association.

BRITISH COLUMBIA'S WATERSCAPE

The map shows the location of the groups that received the survey (blue markers) and those that completed the survey (red markers) (Fig. 1). This map shows the geographic diversity of the B.C. water community and that, in large part, the survey responses received reflect this geographic diversity. It is worth noting that comments received on the survey indicated that the majority of the resources for water

protection are directed to major urban centres. Assessing the geographic distribution of funding resources for freshwater groups was beyond the scope of this report. However, it is clear from this map that there is significant activity taking place in less urban and rural regions of B.C. and that the freshwater movement reaches far beyond the metropolitan areas of Vancouver and Victoria.

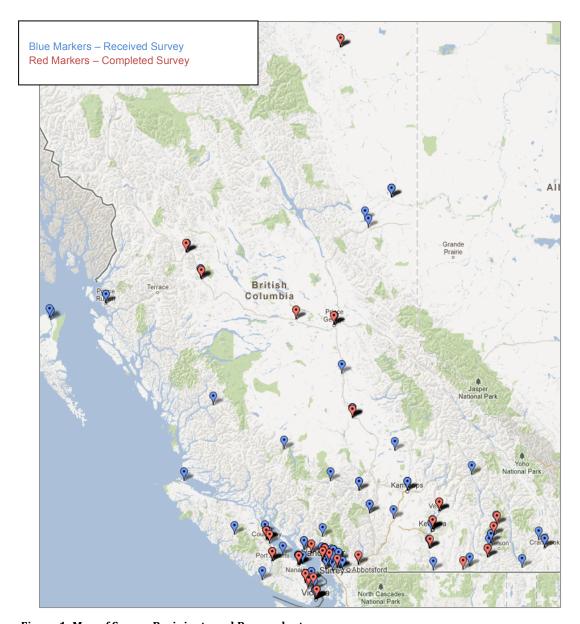


Figure 1: Map of Survey Recipients and Respondents

THE SCALE PYRAMID

The pyramid diagram (Fig. 2) represents the scale of the work being undertaken by the groups that responded to the survey. Respondents were asked "What is the scope of your organization's efforts?" and given the choice of different scales from community/grassroots to international. Groups were able to select more than one so that those working at multiple scales could indicate this.

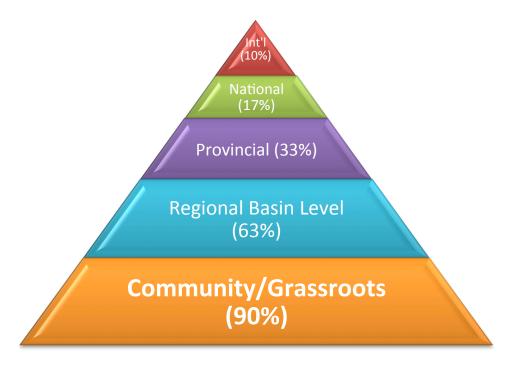


Figure 2: Scale of Work Undertaken by Survey Respondents

From the sample of groups that completed the survey, the vast majority of them (90%) are doing work at the community or grassroots scale. A high percentage of respondents (nearly two-thirds) indicated that their organization works at a regional or basin level scale. A smaller percentage of respondents (one-third) said they work at the provincial scale, while only a handful of organizations that completed the survey worked at either a national or international scale. This suggests there is a large base of community-oriented or grassroots activity being undertaken by water groups, and a healthy cross-section of organizations working at different scales. Since freshwater protection is a complex and multi-scale issue that requires solutions ranging from the local to the global, it is encouraging to see this diversity.

SPECTRUM OF GOVERNANCE ROLES

Figure 3 shows where organizations would like to see themselves on the decision-making spectrum. Most organizations see themselves as influencers of decisions, as opposed to decision-makers themselves. A significant proportion (22%) of organizations were interested in going beyond exercising influence and actually having some power to make watershed plans. Two organizations identified an interest in making decisions and having some power to enforce those decisions. No organizations identified a desire to influence decisions federally around water. This may indicate a lack of knowledge of the federal role in freshwater protection, or perhaps is a reflection on current federal capacity for freshwater management and the perception around the presence and relevance of federal actors in B.C. watersheds. In comments, survey respondents did indicate familiarity with the Department of Fisheries and Oceans, including expressing disappointment in staff reductions and its ability to implement federal laws relevant to fresh water, such as the federal *Fisheries Act*.

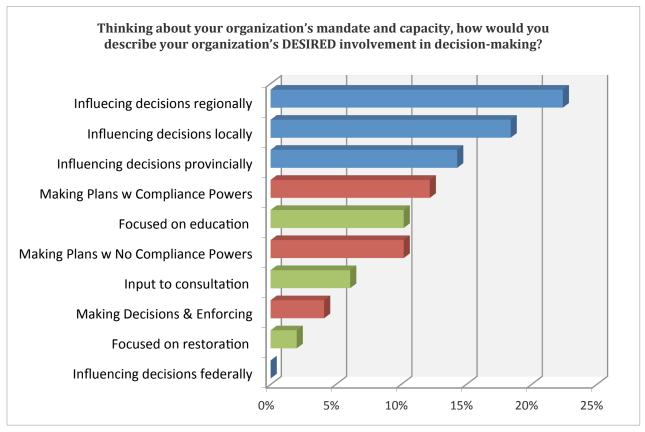


Figure 3: Desired Involvement in Decision-making for Freshwater Protection (Blue = Influencing Decisions; Red = Planning or Decision-Making Responsibility; Green = Input, Education, or Restoration)

WHAT ARE WATER GROUPS DOING?

There is a wide array of activities being undertaken by water groups in B.C. (Fig. 4). Reflecting the myriad of issues affecting water in different regions of the province, it is no surprise that beyond education and awareness building—which 97% of groups say they focus on—there is no single focus area that stands out. Over 75% of groups focus on water quality issues; this is a greater focus than water quantity (53%). Influencing government decisions (73%) rates more highly than other activities, such as information gathering (58%), policy initiatives (53%), restoration (44%), and conservation (7%).

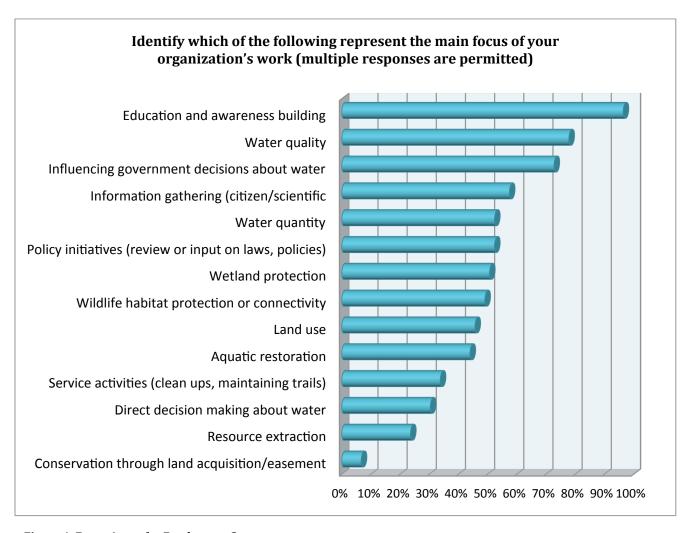


Figure 4: Focus Areas for Freshwater Groups

4. Hot Button Issues

What Are the Major Water Issues Right Now?

In the interviews with key informants, it was possible to delve a little deeper into the hot button water issues at the provincial level. Three clear themes emerged through the interview process as key issues at this time: *Water Act* modernization, First Nations rights and shared decision-making, and climate change. Several other issues were also noted by more than one interviewee as particularly salient, and are presented later in this section.

1) WATER ACT MODERNIZATION

Water Act modernization is clearly an issue that is top of mind for water leaders. Each interviewee mentioned the importance of this legislative opportunity and it was the first issue mentioned by many of the interviewees.

"Well, I guess I need to start off with legislative reform. *Water Act* [modernization] is long overdue. A lot of work has been done over the last three or four years and we're still not there yet. So that's probably the number one issue." **David Marshall, Fraser Basin Council**

Key elements of the legislation that came up during the interviews included groundwater regulation, ensuring environmental flows, making better allocation decisions, and enabling watershed governance. A number of interviewees expressed nervousness that a new Act would not be that different from the existing legislative framework and that it is critical that such an Act be implemented effectively.

"We need a *Water Act* with teeth that addresses groundwater regulations and environmental flows." **Craig Orr, Watershed Watch Salmon Societ**y

"Well, there's a lot of stuff needed around B.C. *Water Act* modernization. Getting it finished, and also getting it implemented in some way that's not totally watered down. So, having some kind of meaningful legislation." **Anna Warwick Sears, Okanagan Basin Water Board**

It was indicated by a number of interviewees that a critical aspect of the process for developing a new *Water Act* is the need to meet constitutional requirements of consultation and accommodation with First Nations. Earlier processes were criticized for not meeting this requirement.

"This is a significant piece of legislation in the province and I think [the provincial government] dropped the ball and they missed the mark on how they were engaging in consultations to begin with... [T]hey did a lot of it through really indirect consultation on the website. They didn't do a lot of direct face-to-face in-person consultation, even with the average British Columbian." **Deana Machin, First Nations Fisheries Council**

2) FIRST NATIONS RIGHTS & SHARED DECISION-MAKING

In addition to the importance of First Nations consultation in the development of a new *Water Act*, the overarching importance of First Nations rights and shared decision-making was a common theme in the interviews.

"[P]robably the biggest issue in B.C. is the fact that First Nations rights and title have not been resolved." **Anna Warwick Sears, Okanagan Basin Water Board**

"We have the legal and constitutional frameworks in place through Aboriginal Title and Rights and Treaty Rights to have a say in what's going on. The problem is the willingness of the B.C. Government to recognize that stream of authority that we have. They keep fighting us on the principles of it rather than looking at how the authority that we all share over the land can be used to our benefit and the benefit of the land." Lana Lowe, Fort Nelson First Nation

"First Nations should be at the forefront. They have the rights; they have an important role to play. In our area, the Cowichan, the watershed is in the heartland of the [Cowichan Tribes] territory and we should all be working together and sharing influence over our watershed. For me, [First Nations] should be a full partner, and there should be a cooperative and collaborative enterprise." **Rodger Hunter, Cowichan Watershed Board**

"I think that the Cowichan is an example of good collaboration on decision-making for a particular watercourse. I think that it says, 'Here's how we collaboratively can try and negotiate things and get some agreement so that we can be involved with industry and be partners there." **Sherry Boudreau, First Nations Fisheries Council**

It was clear from the interviews that there is both a need *and* an opportunity to have First Nations officially recognized in formal decision-making structures around water. The experience of the Cowichan Watershed Board, which is co-chaired by the Cowichan Valley Regional District and Cowichan Tribes, was identified as a positive example of a shared decision-making forum that respects the ongoing rights and title of First Nations in the region. While not directly replicable throughout the province (many watersheds have multiple and sometimes overlapping First Nations territories), the approach of formalizing shared authority between First Nations and non-First Nations is one that can be emulated.

3) **CLIMATE CHANGE**

The impacts of climate change on fresh water came up in more than half of the interviews, especially in the context of issues that will become increasingly critical in the future. A number of interviewees commented that we are just beginning to feel the effects of climate change on water and water-dependent ecosystems (such as fish habitat, and therefore fish species), and need to do much more to prepare for changes to water availability and extreme events, such as floods and droughts.

"I think climate change is the biggest threat with regard to water and current ecosystem health. However, from an NGO perspective, most global citizens still seem unable to connect the dots and even when we do, action taken on an individual level often seems futile given the overwhelming nature of pending impacts. In the Columbia Basin, climate reports have indicated that we will move to a semi-arid ecosystem while the

Okanagan will move from semi-arid to arid. Glaciers providing significant flow to rivers and communities on the east side of the Rockies will be gone within two decades. Pressure for water demand is expected to intensify in the Columbia Basin according to a climate study commissioned by the Columbia Basin Trust in 2007." **Kat Hartwig, Living Lakes & Wildsight**

"You have to add climate change into that because there's significant climate change impacts on these Vancouver Island east coast water systems." **Bruce Fraser, CVRD-Shawnigan Lake**

"Well, I'm hoping that we can make improvements on each of [the issues] because climate change is coming at us like a runaway freight train." **Rodger Hunter, Cowichan Watershed Board**

The uncertainty raised by the current and impending impacts of climate change would suggest the need for a more flexible system for allocating priorities of water use, as well as improved monitoring and assessment of our water systems, to enable effective responses to these changes. This flexibility does not currently exist in the allocation regime in British Columbia, which relies on the "first in time, first in right" principle, which supersedes more collaborative approaches to water licensing.

"There is a desire by the communities to husband water in a sustainable fashion, but the current rules-based water licensing that basically gives priority rights is in conflict with the more collaborative approach that has been developed in communities." **Al Martin, B.C. Wildlife Federation**

OTHER KEY ISSUES

A number of other key issues were raised during interviews:

1) Liquefied Natural Gas (LNG) Development & Hydraulic Fracturing (Fracking)

The issue of hydraulic fracturing (fracking) was mentioned in four interviews, especially as an issue that is going to grow in significance over the next five years.

"Fracturing is a major issue, especially with the interests in shale gas developments and the huge deposits in the northeast of British Columbia, and the idea around LNG facilities. [And] the whole interaction between surface water and groundwater, the chemicals used in the fracturing process, and not only just the types of chemicals but how they interact. I guess, there could be up to 45 different chemicals that could be used in the fracturing process." **David Marshall, Fraser Basin Council**

"The chemicals that are used in fracking have known carcinogens and hydrochloric acid... So we're worried about spills, and leaks, and leaching. All these deep hydrocarbons affecting the water quality of the water we drink, and the water the animals we eat drink. And we're concerned about water loss. Because fracking requires huge volumes of fresh water. We're talking billions of litres of fresh water per frack per well." Lana Lowe, Fort Nelson First Nation

2) Water for Salmon, Fish and Ecosystems

Four interviewees raised the need to better understand and prioritize the needs of fish and the environment in a new allocations framework, as well as determining the federal role in supporting environmental flow protection through the *Fisheries Act*. The maintenance of healthy watersheds for

productive salmon habitat was raised as being particularly critical to the well-being of First Nation communities.

"We definitely need a much better handle on how much water the environment needs." **Anna Warwick Sears, Okanagan Basin Water Board**

"It will be important to work with the federal Department of Fisheries and Oceans (DFO) to define the details on how effectively the new *Fisheries Act* could be used to protect fish habitat, including groundwater and flows. The recent DFO science advice paper describes important thresholds that must not be crossed in order to protect river integrity. I think this may dovetail with the provisioning of environmental flows as promised under *Water Act* modernization." **Craig Orr, Watershed Watch Salmon Society**

"First Nations have a wide range of interests and concerns related to water management and water uses, and they are very concerned with having a good supply and good quality water to support fisheries and aquatic ecosystems. We are salmon people - having healthy waterways is critical to supporting the salmon cycles on which our communities depend." **Deana Machin, First Nations Fisheries Council**

3) Drinking Water Source Protection

Source water protection was also raised as an important issue in three interviews.

"I think that source water protection is probably the key factor in the drinking water issue. And again, your local interests probably have a much better understanding of the challenges in the particular water source, which is the basin." **David Marshall, Fraser Basin Council**

4) Cumulative Effects

The cumulative impacts of the many different developments occurring in B.C. were also mentioned as a major issue in three interviews.

"Cumulative effects continue to enter into discussions. Nobody really knows how to address them, but with the proliferation of activity and energy development proposals, pipelines, refineries, coast developments in B.C., cumulative effects are going to continue to be very, very important." **David Marshall, Fraser Basin Council**

"So, all that water is being removed from the water cycle, it's being removed from the environment and we have concerns about the cumulative and long-term effects of that." Lana Lowe, Fort Nelson First Nation

5. The Way Forward

How Should We Govern Water in the 21st Century?

Both the survey and interviews revealed a number of important insights about how British Columbia should be managing water in the $21^{\rm st}$ century. In short, these insights showed that there is both an appetite and a desire within the water community for more local involvement in decision-making that is complemented by provincial oversight that involves strong minimum standards, active monitoring of water resources, and meaningful enforcement.

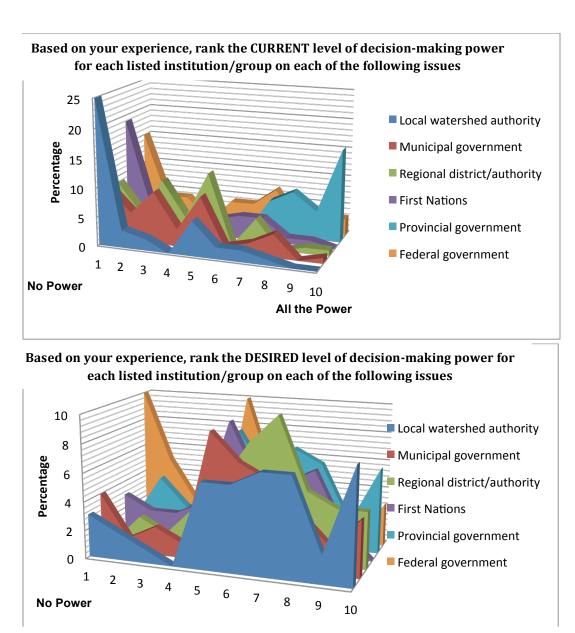
WHO DECIDES?

Figure 5 is based on survey results that asked respondents where they believe decision-making power currently rests with respect to different water decisions, and Figure 6 shows where respondents believe decision-making power *should* rest. (These graphs relate to perspectives for water quantity decisions. The results were analogous for the issues of drinking water quality, resource development, and land-use decisions.)

The responses clearly show that most respondents believe current decision-making power is centred in the provincial government with minimal power in the hands of local watershed authorities, First Nations, and the federal government, and only a little more power at the municipal and regional district level. In terms of desired decision-making (Fig. 6), respondents indicated a preference for much greater equality of decision-making between the different actors with somewhat less power in the hands of the provincial government and more power in the hands of local watershed authorities.

Comments by respondents reinforced the fact that the specific balance of power and influence will vary depending on location, scale, and type of decision; some respondents expressed the difficulty of ranking decision-making power given this complexity. In some cases, the categories did not represent all of the various decision-makers. For example, one comment indicated that the headwaters of their watershed were entirely within private land managed by a forestry company and so there was limited decision-making power with the provincial or local authorities. Another comment noted the importance of the Health Authority when it comes to drinking water.

However, the trends in both the quantitative and qualitative responses indicate that respondents perceive current decision-making structures as too top-down and that there is a need for greater local decision-making power, including through institutions such as watershed boards that can bring together various actors within a watershed.



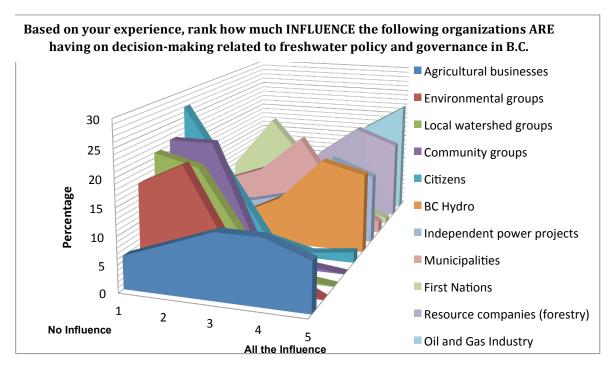
Figures 5 & 6: Perceptions of Current vs. Desired Decision-making Power of Governments/Institutions

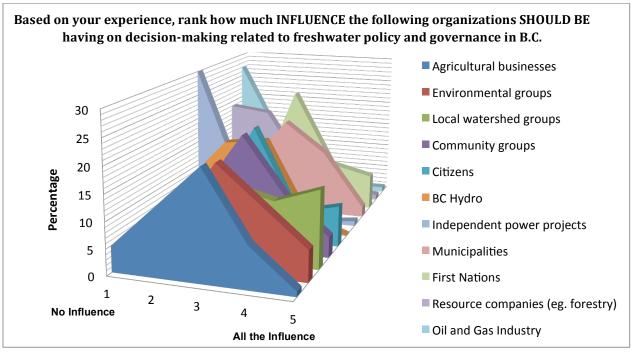
WHO HAS THE MOST INFLUENCE?

In terms of which groups are deemed to currently have more influence on decision-making for water, the oil and gas industry, other resource companies, BC Hydro, independent power projects, and agricultural businesses were all ranked as exercising the greatest influence on decisions (Fig. 7). In comparison, local watershed groups, First Nations and their supporting organizations, environmental groups, community groups, and local citizens were all considered to exercise limited to no influence on decision-making (Fig. 7). Interestingly, when asked which groups should have the most influence on water management decisions, only local watershed groups were ranked ahead of other groups. Most other groups were ranked in the middle of the influence scale, perhaps indicating a desire for more of a balance of power amongst other actors (Fig. 8).

This was also reflected in comments made by anonymous survey respondents, for example:

• I'm hoping that you will be considering partnership amongst the various interests noted—a serious process of involving all those affected will enable long-term considerations in water planning. And, there is a need to integrate policy, and of course to legislate a B.C. Water Act so that undue influence, and ad hoc piecemeal decision-making, is replaced by a fair and just, and a larger province-wide, approach.





Figures 7 & 8: Perceptions of Current vs. Desired Influence of Different Groups on Water Management

These charts can be interpreted to demonstrate that in the opinion of most respondents, large industrial interests (such as oil and gas, independent power projects, and other resource companies) should be having considerably less influence than they are currently perceived as having and that more local interests should have a more explicit role in decisions that impact watersheds.

A FIVE-YEAR VISION FOR B.C. WATER LEADERSHIP

During the ten key informant interviews, each interviewee was asked where British Columbia needs to be in five years to be considered a leader in freshwater management. Below are some of the responses that were given:

"I think that education and understanding is the first thing... to get everybody to understand how unifying a vision for watershed sustainability is at a provincial, regional, local level. And that our economic and ecological well-being, irrespective of what community you live in, is dependent on that. Second, I think that having functioning and healthy watersheds and [being clear] on what they look like is really important, and setting the goal posts around that. And then thirdly, I think that the only way that you are going to have sustainable water management is to implement it at a local level where everybody has got an interest in that and that you're able to leverage financial, technical, and community support for healthy watershed management." Al Martin, B.C. Wildlife Federation

"For the Cowichan, I think the [Watershed] Board would have a lot more authority. We would have addressed the flow issue in the river. We would be getting close to being able to eat shellfish from Cowichan Bay. That's important. I'm hoping that we begin to see benefits in our salmon and trout populations and endangered species. The people in our community would have high watershed IQs and part of that would be every kid in grade four or five having a tour of the watershed every year. And Cowichan Tribes would have much more control over fisheries, water, and fisheries-related issues in the watershed." **Rodger Hunter,**Cowichan Watershed Board

"What's needed, ultimately, is a basin authority that has the legal responsibility to ensure the integrity of the watershed, to decide on land-use patterns and management of the physical landscape in such a way that the maintenance of water quantity and quality is the primary objective." **Bruce Fraser, CVRD Director-Shawnigan Lake**

"We have about five years to plan and to do the right thing when it comes to water use and fracking. While they build their pipelines and roads, we should be building our water management plans and thresholds and baseline studies. We've already taken the initiative as a community to begin a water management strategy for our territory, which includes the three shale gas basins in the province. While we're developing it, we're really pushing the industry and government to get on board with water management planning and strategizing, and we expect to be at the table as an equal partner in that. So, we're doing it ourselves." Lana Lowe, Fort Nelson First Nation

"In terms of my five-year vision, one of the things that I would see is that we would have shifted the focus from a limited conversation around water allocations to one where we consider the interconnectedness within a watershed system and that we are considering all of our cumulative impacts on it." **Deana Machin, First Nations Fisheries Council**

"If we, in five years, realize how much aboriginal rights can actually protect local environmental decisions and be engaged in those local environmental decisions as part of an opportunity, I think that would be a success in terms of five years." **Sherry Boudreau, First Nations Fisheries Council**

Based on the interviews, the following common themes would be important indicators of whether B.C. has become a water leader in five years:

- **Thinking like a watershed**—decision-making is being integrated at a watershed scale and is considering the cumulative impacts of decisions on that watershed; healthy, functioning watersheds are considered essential to economic well-being and healthy communities.
- **Local control**—local decision-making through watershed authorities, and new forms of institutions, is established and these authorities have a meaningful role in both water(shed) management and governance.
- **First Nations co-leadership**—First Nations are equal partners in decision-making and new watershed institutions reflect a shared governance approach.
- **Informed communities**—citizen awareness and engagement in decision-making processes is increased and enabled through local watershed boards.

CHALLENGES TO OVERCOME

Achieving this five-year vision will not be an easy task. Interviewees identified three core challenges:

1) Retreating Government

Perhaps the most significant challenge facing a more sustainable freshwater future is the lack of capacity within senior government, which is undermining its ability to manage water in an effective way. Moving some of the decision-making to a local level was identified as a way to counteract the loss of centralized capacity. However, to guard against downloading, complementary resources or accesses to funding would be required to ensure sufficient capacity exists to take on new roles and responsibilities. Enabling local watershed governance still requires a strong provincial role and capacity to support local institutions, and concerns were raised as to whether the Province even has this capacity at this time.

"The provincial government no longer has the capacity to fulfill all its mandated functions as it has set a higher priority on achieving an overall balanced budget." **Jon O'Riordan, SFU-ACT & POLIS Project**

"What people need to realize is that we don't have the capacity anymore, financial or managerial capacity in government, to centralize everything or to centralize in large-scale ministries. The only way the work's going to be done is at the local level by turning the responsibility and accountability over to local people."

Bruce Fraser, CVRD Director-Shawnigan Lake

"I think, in general, it's a considerable problem: the shrinking of government and the fact that there's less staff, particularly less professional staff that are experienced and are able to provide that central organizing lead at a provincial level." **Anna Warwick Sears, Okanagan Basin Water Board**

2) Fragmentation

Two types of fragmentation were mentioned during interviews. The first is a fragmented landscape across the province with respect to water management; some communities have or are pursuing local watershed governance while other communities are not even aware what this approach means. The lack of a provincial vision and framework for watershed governance was one of the reasons given for this current ad hoc approach. The other type of fragmentation is the discordance between different types of decision-making, such as land-use decisions, water allocation decisions, and resource development decisions. Currently, different provincial government ministries and departments make these decisions and there seems to be little ability to effectively integrate them. It was suggested that one way to better resolve these fragmentations is by delegating more power to the local level, where the effects of these decisions are more directly felt and understood, and more easily integrated and addressed.

"It seems that there is a lack of general vision and oversight from a holistic perspective regarding watershed based governance. Some communities are interested in and are developing watershed governance boards, while for other communities it remains only a daunting concept." **Kat Hartwig, Living Lakes & Wildsight**

"[The Province] should be resolving some of these fragmentations by giving local citizens, watershed boards, or committees more power to make decisions on behalf of those citizens and not rely only on the federal or provincial governments." **Jon O'Riordan, SFU-ACT & POLIS Project**

3) Sustainable Funding

The need to find sustainable funding mechanisms that can support the necessary and ongoing capacity of watershed-based authorities was identified as a key challenge. This is especially the case given the current era of reduced government capacity and to guard against downloading by senior governments.

"Well, there are two gaps at a local level. The first gap is if these watershed groups come up with a collaborative solution, the gap is the province's inability to accept those recommendations or provide authority to implement them. Second thing is there needs to be adequate funding of these groups. Not saying complete funding because I think that when people invest in something and they have an interest in the long-term sustainability, that becomes a much more consistent model than a flash in the pan both administered through a provincial or federal government. In fact, there needs to be some stable funding models." Al Martin, B.C. Wildlife Federation

"One thing with governance that is underplayed is the whole question of sustainable funding. [Provincial] government has very little money to put into funding. There are very few matching funds from government that can leverage support." **Jon O'Riordan, SFU-ACT & POLIS Project**

GOVERNANCE FRAMEWORKS AND MODELS

From a governance perspective, there was strong support from interviewees for greater local involvement in decision-making with appropriate provincial oversight.

"You need to involve communities of people living in specific watersheds. That's where the future is. You can establish the framework provincially, but you have to deliver locally, on a watershed or landscape level." **Al Martin, B.C. Wildlife Federation**

"What should happen is that governments at the senior level should recognize that they are in fact retreating from governance. And they need to delegate it and create the kind of administrative and legal framework that would allow local organizations to take over the integrated governance management. And that doesn't mean they abandon the various legal frameworks that they have through various resource ministries. But there is nothing now which can deal with the comprehensive cumulative impacts on the basin." **Bruce Fraser, CVRD-Director, Shawnigan Lake**

Interviewees elaborated on some of the elements of this governance approach, including what local control actually looks like and what an effective provincial role should entail.

1. What does local control look like?

Greater local control over decision-making does not mean absolute power at the local level. Instead it means appropriate institutional frameworks being established at the watershed scale and guided by provincial policy.

"The defining features of local watershed governance are that, within a set of boundaries, those watershed councils or watershed governance entities have an interest in maintaining some key attributes that are outcomes of stated provincial policy." **Al Martin, B.C. Wildlife Federation**

In terms of who is guiding the decisions of local watershed authorities, there was a caution expressed around the idea of utilizing broad stakeholder-based processes as the sole basis for decision-making as they can lead to decisions based on the lowest common denominator.

"There are many levels of engagement, but stakeholder processes have some notorious difficulties. Usually, what happens amongst stakeholder-based processes is they work their way down to the lowest common denominator. And usually, the stakeholder-based processes are consensus-based. As a result, you don't necessarily get effective decisions. You only get ones that people are willing to live with at a minimum and that drives, usually, a decreased level of effectiveness. A more useful model is for stakeholders to work in close cooperation with sector professionals, with the public objectives derived from consultation and the means to achieve them developed by partners with expertise." **Bruce Fraser, CVRD-Director, Shawnigan Lake**

Another suggestion to overcome the "lowest common denominator" challenge was to ensure that those guiding the decisions of local watershed boards represent the long-term interests of the watershed.

"So, what you need to do and you need to ask is, who are the people within this watershed that have those long-term interests in sustainability that need to be at the table in order to make this work? This is not a laundry list... And, of course, it will vary from area to area." **Al Martin, B.C. Wildlife Federation**

This approach would not automatically include each and every water user since some water users may only have a short-term interest driven by an economic imperative and intend to be in the watershed for a limited time period. On the other hand, there will be some industries and businesses that plan to stay in the watershed for a long time and will identify the long-term health of the watershed and its communities as concordant with their own interests.

In addition to having long-term community interests guiding decision-making of local watershed boards, two interviewees identified the importance of having democratic accountability built into the composition of watershed boards. At the local level, the most appropriate representation was identified as local or regional government.

"I feel that it's really important to have watershed governance strongly connected to the democratic process. So, our board is appointed from the local government. So, they're not directly elected. I think either way, whether they're directly elected or appointed from an elected office, is fine. Either way there is accountability back to the taxpayer." **Anna Warwick Sears, Okanagan Basin Water Board**

"[T]he people that are making the decisions need to be held accountable in some manner. So, if you base it on elected people, then I think that offers a greater opportunity to hold people accountable." **Rodger Hunter, Cowichan Watershed Board**

Equally important is the need to create joint management frameworks and protocols with First Nations. First Nations cannot be regarded as stakeholders. They are genuine decision-makers with legally recognized rights and title.

"[T]he lens that we look at everything is through recognition of aboriginal rights and title, so that certainly has to be at the forefront. And then engagement of First Nations through joint management principles and joint management implementation." **Sherry Boudreau**, **First Nations Fisheries Council**

In terms of powers, local watershed authorities can take on responsibilities for compliance (defined as monitoring and educating watershed actors to ensure they are aware of and complying with rules), and potentially also water licensing.

"Some aspects of planning can be delegated and aspects of monitoring can be delegated. It's possible to delegate some functions around permits, but you'd have to have some capacity and training to do that because it can be tricky to manage." **Jon O'Riordan, SFU-ACT & POLIS Project**

Examples of delegated administrative powers included those given to fish and wildlife officers and parks officers. Another example given was the role played by catchment ambassadors in the United Kingdom. While these ambassadors have no enforcement powers, they are given the responsibility and resources to

encourage compliance through education, such as providing advice before landowners start clearing their lands in a way that may impact watersheds. They are also able to mediate solutions between conflicting interests.

What does provincial oversight look like?

It was clear from the interviews that there is a critical role for the provincial government to play even when powers have been delegated to the local level. These include the setting of provincial standards and objectives to provide a regulatory backstop and also support for monitoring the health of watersheds.

"The province still needs to be a player in setting standards, which should be province-wide, and in providing the inventory and monitoring, and some sort of strong regulatory backstop in order to insure against some rogue local authority." **Rodger Hunter, Cowichan Watershed Board**

The enforcement of standards and regulations was also considered a critical function of the provincial government. While *compliance* powers can be delegated to watershed authorities, it was asserted that *enforcement* powers have to remain with the provincial government, and it should allocate the resources required to do perform this role effectively.

"It's a question of how much you delegate to compliance and enforcement. Compliance is the first step in enforcement. Making sure they are demonstrating that they are coming back on side. [This means using] a non-legal set of measures to encourage compliance before going to legal measures of issuing a charge or administrative fee and going to court. [Governments] can delegate compliance to watershed groups but can't delegate enforcement. They can't delegate that accountability. However, government has to have sufficient resources to do the legal enforcement." Jon O'Riordan, SFU-ACT & POLIS Project

Another function of provincial oversight in this new approach to watershed governance would be assessing the readiness of local watershed boards to take on more powers and then monitoring their performance against provincial standards and objectives.

"I don't see the provincial government ever delegating full authority to a local watershed board or group because they still have, at the end of the day, overall responsibility for the integrity of fresh water in the province. So, there's got to be some sort of protocol or agreements between local bodies and provincial governments. It doesn't have to be a 'one size fits all' but I think the government is definitely going to make that sort of judgment in readiness, capacity, and capability of the various local groups. Maybe a segment could be delegated to them or some sort of a protocol setup where they would be evaluated on an annual basis. So, there's pressure built in for them to meet certain targets or objectives that the provincial government is setting, or set within new legislation." **David Marshall, Fraser Basin Council**

Another key provincial responsibility, and one that was described as being a challenge in recent times, is the Province being visible as supporting these efforts.

"For volunteers it is essential to know that there is provincial support for [local] initiatives. There are very few volunteers in general and the people that do step up often get burnt out. Without government support, there is the risk of developing further apathy from people who already feel that they are doing work, such as

water quality monitoring, that in essence should be done by all levels of government." **Kat Hartwig, Living Lakes & Wildsight**

Provincial support for local watershed governance would include establishing a provincial framework that formally enables watershed boards and provides them with authority under appropriate circumstance. It would also mean having enough capacity to send provincial staff to these communities, so that they can attend meetings, and contribute to locally driven solutions.

"There's a lot of volunteer work and field capacity out there to do this. But it's not being tapped because it's not formalized. So, it's done on peoples' good nature. And so, people begin to lose faith when they don't feel they are going to get any payback at all. So, by putting it into legislation and enabling these groups to have a defined role..." Jon O'Riordan, SFU-ACT & POLIS Project

"[You need] the willingness of the people who hold statutory authority to actually show up. I think a good example, when we started our roundtable, we had one session where we invited all of the various 14 or so authorities to the table with about two months' notice, and we ended up with two, which gives you an idea. Everybody had an excuse." **Bruce Fraser, CVRD-Director, Shawnigan Lake**

By enabling local watershed governance, the Province has a big opportunity to leverage considerable community capacity, including knowledge and expertise within the community; volunteer support for monitoring and restoration; local government capacity; First Nations knowledge, expertise, and stewardship tradition; and community funding.

BOX 2: POTENTIAL MODELS FOR B.C. WATERSHED GOVERNANCE

During the course of the interviews, a number of examples of watershed governance were mentioned. This is merely a subset of possible examples and does not represent an exhaustive list of potential models or examples to learn from. Moreover, it was emphasized during interviews that there is not a one-size-fits-all approach to watershed governance and each region in B.C. will have specific needs and nuances, whereby some elements of these examples will be better suited than others.

British Columbia

Cowichan Watershed Board: http://www.cowichanwatershedboard.ca/

Okanagan Basin Water Board: http://www.obwb.ca/

Coquitlam River Watershed Roundtable: http://www.coquitlamriverwatershed.ca/roundtable

Rest of Canada

Ontario's Conservation Authorities: http://conservation-ontario.on.ca/

Northwest Territories Water Strategy "Northern Voices, Northern Waters":

http://www.enr.gov.nt.ca/_live/documents/content/NWT_Water_Stewardship_Strategy.pdf

Yukon River Intertribal Watershed Council: http://www.yritwc.org/

United States

Nisqually River Council: http://nisquallyriver.org/

European Union

E.U. Water Framework Directive: http://ec.europa.eu/environment/water/water-framework/

6. Conditions for Success

What are the Needs of the B.C. Water Community?

The previous section identified a path forward for B.C. water(shed) governance based on more local control in managing our watersheds with strong provincial oversight. This section considers the needs of B.C.'s water community and what capacity is required to ensure organizations are able to effectively support decision-making and solutions for freshwater protection.

IN WHICH AREAS WOULD CAPACITY SUPPORT BE MOST VALUABLE?

In the electronic survey, water groups were asked to rank their capacity needs. Based on the rating average of twelve choices, Table 2 identifies which needs were ranked from 1 to 12, with 1 being the greatest need and twelve being the least. Having influence with local governments was ranked as the top need on average. This was followed by doing more to engage communities and the grassroots. A somewhat related need—communicating our message more effectively—ranked third, with influencing senior governments (provincial and federal) as fourth. Fundraising needs were six and seven.

Table 2: Most Valuable Capacity Support by Average Ranking (Ranked from 1 to 12)

	In which of the following areas would capacity support be most valuable to your organization?
1	Having influence with local governments concerning land use or water decisions
2	Doing more to engage communities and the grassroots
3	Communicating our message more effectively (including use of media/social media)
4	Having influence with senior governments concerning decisions
5	Effective strategies for grassroots fund-raising (individual donors/members)
6	Strategies for effective fund-raising from other sources (foundations, sponsorships etc.)
7	Building (and maintaining) a stable of volunteers
8	Improving our knowledge of issues and science (water quality, quantity, function)
9	Taking on more formal decision making responsibilities for our watershed
10	Building (and maintaining) a supporter list and database
11	Building relationships with First Nations
12	Better organizational capacity (accounting, legal advice, Board management, HR etc.)

Table 3 shows another way of analyzing this data. This table is not based on averages. Instead, it shows the five needs that were placed in the top 3 the most times. In this table, having influence over senior governments ranked ahead of influence over local governments. Most interestingly, "taking on formal decision-making responsibilities for our watershed" ranked third as compared to ninth in the averages table. Seven organizations ranked it as the most valuable capacity support for their organizations. Four ranked it second, and seven ranked it third. This suggests there is a specific subset of water groups in B.C.'s water community that are keenly interested in taking on a stronger role in local decision-making for water. While this is not a widely held desire by all the groups surveyed, it would appear to be a significant

priority for these particular organizations and may indicate a grouping that is "ready" to take on more responsibility and organizations that may have structured themselves to take on more of a governing role.

Table 3: Most Valuable Capacity Support Based on Ranking in the Top ${\bf 3}$

			Ranking		
		In which of the following areas would capacity support be most valuable to your organization?	1st	2nd	3rd
	1	Having influence with senior governments concerning decisions	13	5	3
	2	Doing more to engage communities and the grassroots	11	8	3
	3	Taking on more formal decision making responsibilities for our watershed	7	4	7
	4	Having influence with local governments concerning land use or water decisions	5	13	7
	5	Communicating our message more effectively (including use of media/social media)	5	3	10

NETWORKS AND COLLABORATION

When it comes to the connections between organizations in B.C.'s emerging water movement, it is clear from Figures 9 and 10, as well as related comments, that there is room for improvement. From a general networking perspective, groups are better connected horizontally than vertically. For example, community groups are better networked with other community groups or regional groups (Fig. 9). They are poorly networked with groups working at a provincial scale. However, even at the local level, there would seem to be room for improvement with more respondents disagreeing that groups are well networked than agreeing (Fig. 9).

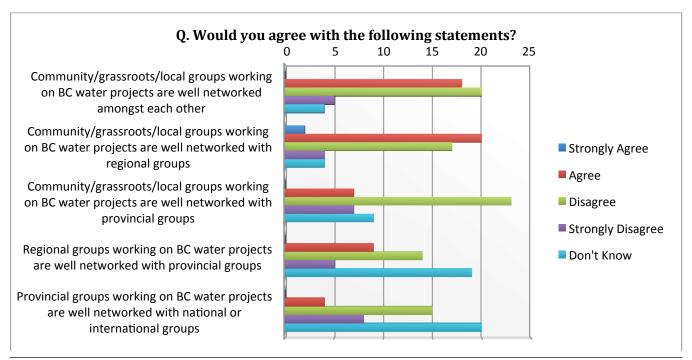


Figure 9: Strength of Networks between Water Groups (by Scale of Work)

When groups were asked how well they collaborate with other organizations (based on a scale of 1 to 5 with 1 being poorly and 5 being expert), similar results emerged (Fig. 10). The most positive results came from collaboration with community groups, followed by regional groups. Many respondents indicated poor collaboration at the provincial scale and very poor collaboration with national or international groups. Again, this suggests that groups find it easier to collaborate "horizontally" with other groups working at a similar scale as opposed to collaborating "vertically" with groups working at a different scale. These results reveal a networking and collaboration gap between the groups working on provincial and national issues and those working at a more regional or local scale.

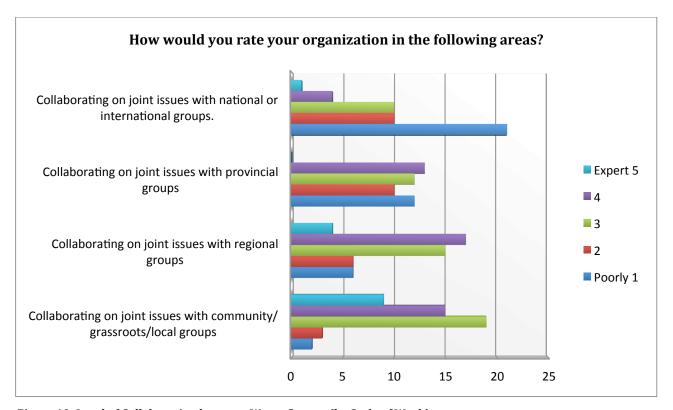


Figure 10: Level of Collaboration between Water Groups (by Scale of Work)

The following comments taken from survey responses reinforce the observations from Figures 9 and 10. They also identify that one of the main challenges to improving networking and collaboration is the capacity for groups to undertake this effort, especially with smaller local and volunteer-based organizations. A couple of the comments indicate that this effort could be reduced if it was easier to know what other groups are doing.

Survey Comments:

- I think one of the weaknesses is the lack of a strong provincial network that includes all community groups under one provincial organization, and one organization which includes all provincial organizations. There is strength in numbers.
- The network is available. Local groups are open to networking. Sadly, this takes a great deal of time (even if it may save time in the long run), so often, with volunteer groups without a paid coordinator, more networking, which is important, falls by the wayside.

- There are few resources to help facilitate such networking. Those individuals/groups that can make the effort quickly become over-loaded with all the immediate issues and substantive challenges that are setting precedents and further contributing to major cross-over environmental and sustainability problems. These are usually well funded corporate and government development plans and proposals designed to avoid public process and environmental scrutiny or adherence. The result is that there is little time, or concerted effort being directed to build the public awareness and support that could lead to understanding, cooperation and across-the-board solutions.
- I am often surprised to hear of an initiative being done elsewhere that would or could have reduced some work for our region if we had known about it. I sense a real lack, even reluctance, to work together better.
- There is no comprehensive list of groups that are working on the issues. This would be most helpful to begin with! There appears to be everyone doing for themselves kinds of attitudes instead of pooling resources and ideas.
- So many of these groups are running primarily on volunteers and part-time staff, so networking amongst ourselves is the first priority (which sometimes even doesn't get met).

PEER-TO-PEER LEARNING/SHARING

When asked what groups would like to learn or share with others as part of peer-to-peer networking, more than 50% of survey respondents identified successful watershed governance models as their top choice (Fig. 11).

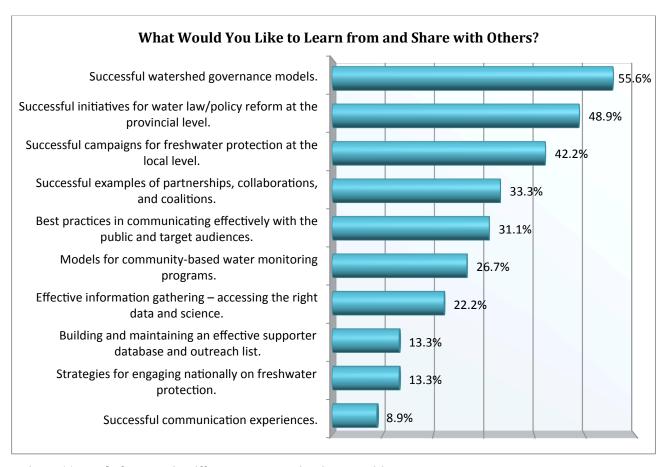


Figure 11: Level of Interest in Different Peer Learning Opportunities

Close to 50% of respondents were interested in successful water law/policy reform initiatives, followed by successful freshwater campaigns at the local level. Learning about successful collaborations and coalitions and best practices for communicating with the public and target audiences were of interest to close to one-third of respondents. A relatively small percentage of groups were interested in strategies for engaging nationally on fresh water (Fig. 11). These results line up fairly well with the capacity needs identified in Tables 2 and 3 where groups ranked having influence with local and senior governments as priority needs along with doing more to engage communities.

Survey respondents were also asked about their interest level in some specific capacity building opportunities (Fig. 12). A majority of respondents were very interested in participating in an annual gathering of B.C. water leaders. There was also strong interest in other training, peer-to-peer learning, and capacity building opportunities, such as webinars and workshops. Many respondents also thought it would be useful to have one or more organizations with a specific mandate to help facilitate connections between groups. As well, there was strong interest in identifying shared priorities for B.C. freshwater protection and/or participation in a coordinated province-wide effort.

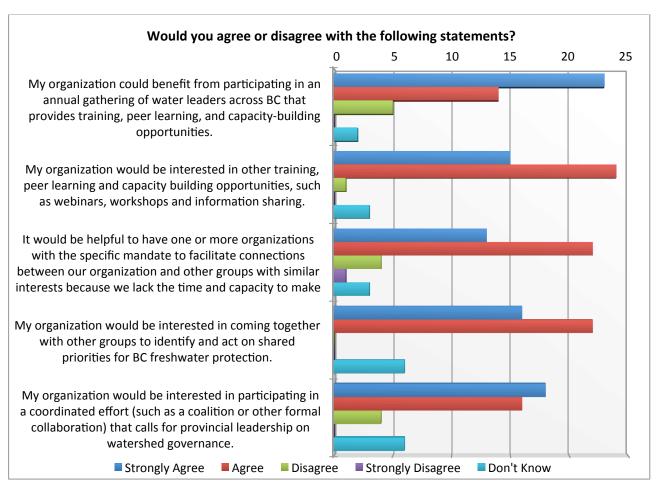


Figure 12: Level of Interest in Specific Capacity-Building/Networking Opportunities

Clearly, there is an appetite and willingness in the B.C. water movement to come together and learn from one another. The comments related to this section were helpful in revealing some of the impediments to this happening. In particular, the travel, attendance, and time costs of attending gatherings were mentioned by a number of respondents. Having some of these costs covered was mentioned as one solution to this problem. Another was to have travelling workshops so that groups could attend events in their region and not need to travel as far. A further suggestion was to have an organization or a web resource maintain a list of what organizations are working on and facilitate information sharing between organizations.

Survey Comments

- Going to a meeting elsewhere is difficult because of the expense to travel and stay in hotels. If these costs were covered, especially accommodations, we would be more likely to participate.
- It seems though that when these gatherings happen the price point only allows some to attend. Connections are typically made where needed. My organization would be interested in coming together with other groups to identify and act on shared priorities for B.C. freshwater protection.
- Have a list of organizations and what they do, so that we can make linkages we need when we need them.
- An independent, non-vested body that served to post information on a website, and to manage a listserv that would keep all interests informed about research, articles, events, and opportunities... would be an asset. Similarly, distribution and access to funds across all regions and interests would be preferred to a top-down approach. Respect for the experience and insight, that those who are in small communities and working for the public good bring to the table, and to new and innovative means to embrace our common future, would also be nice.
- Any event where I can get information and inspiration/ideas would be hugely beneficial as I work by myself in Fort Nelson and I find this daunting at times.
- A travelling workshop, possibly regionally based so groups within the region have minimal travel. If the facilitator covers the provincial/federal scene, they could share what successes/challenges are going on in the various areas.
- A recent Canadian Freshwater Alliance training session with representatives from watersheds all over the province was a wonderful exposure to others working on the same kinds of issues. These experiences are very helpful for relationship-building and information sharing among organizations.

ADDITIONAL INSIGHTS FROM KEY INFORMANT INTERVIEWS

Participants in the key informant interviewees were also asked about key capacity needs for the water community and shared a number of important insights. There was strong alignment with the survey responses regarding the importance of engaging communities, as well as strengthening networking and collaboration opportunities.

"I think that water literacy must increase with the general public and is essential to further engage citizens. In order to develop community-based water governance boards or advisories to an officially sanctioned and funded process, people need to be educated about watershed protection, ecosystem allocation and intact ecosystem services, etc. Once people are somewhat water literate and recruited they will have the opportunity to learn more, which is what we've seen that with the [Lake Windermere] Ambassadors. We have seen the development of some amazing, dedicated water champions who are committed and much more emotionally engaged because they've invested a lot of time." **Kat Hartwig, Wildsight & Living Lakes**

"I would say that the whole water environment is pretty scattered and disconnected in B.C. and it's that issue that we keep coming back to about the groups not really fully understanding what each other are

doing, and the issues are quite different in different areas." **Anna Warwick Sears, Okanagan Basin Water Board**

"[W]ater management in B.C. is changing, and I think we're at a turning point in how water is used and managed... [T]he future of water management is collaborative. It has to be. It can't be done in Victoria. It has to be done involving local communities and all stakeholders in some way. So, having something like that where people get together at a convenient place, to talk about the ideas, to talk about the concerns, to talk about the work that's being done. It needs to happen. Otherwise, people in Victoria are going to continue to make bad decisions based on limited information and knowledge." Lana Lowe, Fort Nelson First Nation

"If you want people to come to [gatherings and workshops] then you need to time them so that they're not interfering with other things. You have to have them in the right place. And you really need to do a sensational job because if all you feel is that you're contributing and not gaining any benefit, then why would you attend again?" **Rodger Hunter, Cowichan Watershed Board**

Other needs that were highlighted included pilot projects for local watershed governance authorities to develop some models or templates for a broader provincial framework; support for relationship-building between First Nations, municipal governments, and other groups; knowledge of and access to expertise; and also effective performance tracking and impact measurement.

"[Water Act modernization] could help formalize it by bringing in enabling legislation that recognizes watershed groups to engage in watershed governance issues from planning to monitoring and in some cases making certain decisions. It would have to be formalized in a regulatory framework, which may take five years to develop. In the meantime, I would recommend pilots to develop templates for how it might work, such as the Cowichan Watershed Board and Okanagan Basin Water Board." Jon O'Riordan, SFU-ACT & POLIS Project

"If there is support at a local scale that would enable local, municipal, or regional district managers—even provincial agency staff—to do communications and outreach with First Nations, which is actually an objective of building relationships before you even start talking about water, I think that would really go a long way to helping those conversations along as well." **Deana Machin, First Nations Fisheries Council**

"A consultant pool would be useful so that you would know which consultants to go to. Also, the ability to work with those that have good access to government. Most of us don't have time to build the relationships we need with key government decision-makers so it would be great to be able to work with folks that do." **Craig Orr, Watershed Watch Salmon Society**

"It's not just financial resources for us, it's not only money, but also access to expertise" **Lana Lowe, Fort Nelson First Nation**

"As with most of these initiatives, they are poorly monitored. Not only is nobody taking the pulse, but nobody is looking at vital signs over a period of time. So, one of things that you might want to think about is what kind of monitoring and evaluation procedures are needed to see whether there's a trajectory of positive development happening or not. Or whether it's just wheel spinning... Are they taking hold and are they having an impact and is that changing things on the ground?" **Bruce Fraser, CVRD-Shawnigan Lake**

7. Enabling the Vision

Recommendations for Strengthening the B.C. Water Movement

Based on the findings outlined in this report, there are a number of actions that could be undertaken to strengthen the B.C. water movement. These actions would enhance the connectedness of groups within this movement and build capacity to increase the effectiveness of organizational efforts. These recommendations are by no means exhaustive but are intended to stimulate thinking and dialogue on the necessary building blocks for a vibrant and dynamic B.C. movement. Operationalizing these recommendations will require leadership and support from a variety of actors. Therefore, under each recommendation is a suggestion for which types of organizations are best placed to help make that specific recommendation happen.

1) Establish a Coordinating Body/Coordinating Mechanisms

There would be benefit in having a coordinating body or coordinating mechanisms that could help facilitate information sharing throughout the B.C. water community, create opportunities for peer-to-peer learning, and support networking and collaboration amongst groups with shared priorities. One of the explicit goals of this coordinating effort would be to ensure improved communication and connections between the different organizations across scales and especially across grassroots or community groups, which currently appears to be a major gap.

Who can make this happen? Ideally, a coordinating body would be independent of government but have both public sector and civil society buy-in and support, including financial resources. Philanthropic resources from foundations with a freshwater interest could be leveraged with provincial government funding and endorsement to create such a coordinating body. Alternatively, or in addition to the creation of this body, a number of existing organizations could work together to provide coordinating mechanisms, such as the Fraser Basin Council, the University of Victoria's POLIS Project on Ecological Governance, Canadian Freshwater Alliance, and Living Lakes Canada.

2) Create Peer-to-Peer Learning Opportunities

Irrespective of whether a specific coordinating body is established, it is critical that opportunities are created to bring the B.C. water community together for shared learning and to stimulate collaborative activities. The following learning opportunities all received very positive responses in the online survey and interviews:

Annual Gathering of Water(shed)-Focused Groups—once a year, this would provide an
opportunity for groups across the province to come together and to engage in a practical learning
environment. To be successful, such a gathering would need to have financial support available for
smaller organizations to offset travel and attendance costs, as well as their time away from the
community.

- **Regional Workshops**—workshops in specific regions related to the specific issues and concerns of those regions would offer opportunities for local groups within those regions to come together, learn, and explore collaborative opportunities in their specific contexts.
- **Online Exchange**—by far the cheapest and most convenient option for peer-to-peer learning is through online conversations, such as webinars, listservs and web forums. Since online exchange tends to be more impersonal in nature, a hybrid of in-person and online learning and networking opportunities is probably the ideal mix.

Who can make this happen? The POLIS Project on Ecological Governance is working with a number of other partners to host a national watershed governance forum in January 2014, "Building Capacity for Success: Towards Watershed Governance in British Columbia and Beyond." This event will build on the Collaborative Watershed Governance forum that took place in Vancouver in January 2012. This will be one opportunity for groups from across B.C. and the rest of Canada to come together to share and learn from one another, and might offer an opportunity to catalyze something that is ongoing. In addition to this forum, B.C.-based water organizations could seek to find regular sponsorships to host an annual B.C. water gathering and to create a travel bursary fund to ensure organizations from across the province, and those with smaller budgets, can attend.

3) Develop and Implement Watershed Governance Pilots

British Columbia has an exciting opportunity to leapfrog many other jurisdictions in the way it manages fresh water. At this time, it is not locked into any particular path or framework for watershed governance (in comparison to Ontario, for example, with its Conservation Authorities, or Alberta with its Watershed Planning and Advisory Councils). However, the threats to water in B.C. are growing and the current legislative approach is severely outdated. This is an excellent time to be developing new approaches to watershed governance that can be tailored to local needs, reflect the rights of First Nations, and inform a broader provincial framework. Formalizing new watershed governance pilot projects, such as the Cowichan Watershed Board, would help provide direction and experience to bring B.C. into the 21st century of watershed protection; to be successful these pilots would require necessary capacity and genuine First Nations participation with shared roles in decision-making.

Who can make this happen? Existing organizations that are interested in taking on more governance powers, such as the Cowichan Watershed Board, and First Nations with existing capacity, are the obvious candidates for pilot projects. As per recommendation one, a coordinating body or organizations providing coordinating mechanisms could then assist these organizations with sharing their successes and failures with other organizations that are not quite as far along the road. These governance pilots could be resourced through public sector-philanthropic partnerships that would bring together provincial government and foundation resources. To be effective and long-term, they would need endorsement and support from senior levels of government, as well as strong foundational engagement with local First Nations, especially as it pertains to traditional territories.

4) Provide Community Engagement Training and Resources

There is an identified need for more effective engagement of communities and the grassroots. The development of specific training opportunities and the sharing of resources, including success stories, would help to address this need. Often, local organizations are best placed to engage the public, since they are embedded in their communities, have the greatest level of knowledge about that community, and can capitalize on existing networks of influence, such as with local media or local thought leaders. Empowering these groups with effective tools and trainings for public engagement could greatly enhance the water literacy of these communities and the B.C. public as a whole. Community engagement should also go hand-in-hand with volunteer recruitment and grassroots fundraising, which can help to support the capacity and sustainability of local organizations.

Who can make this happen? Groups acting province-wide (and also nationally), such as the Canadian Freshwater Alliance and Living Lakes Canada, have designed specific programs around community engagement, grassroots fundraising, and community-based monitoring. Both of these organizations are relatively new and will hopefully develop the capacity to bring trainings, peer-to-peer learning, and other resources to a broad range of B.C. water groups. Professional associations and networks continue to be critical players in ensuring education and capacity-building; these efforts can be leveraged for additional impacts. At a regional scale, organizations such as Wildsight and the Skeena Watershed Conservation Coalition have been very effective at supporting local groups in increasing the effectiveness of their community engagement activities. There would be benefit in finding opportunities for these groups to share their successes with regional and local organizations in other regions of B.C.

5) Catalyze a Province-Wide Water Campaign

The online survey revealed an apparent interest from many groups in being part of a more coordinated province-wide water campaign. Clearly, many community and local groups face capacity challenges to be part of something broader than the region in which they operate. However, if this appetite exists, it would be worth exploring if a united campaign at the provincial level could build on the strength and numbers of the grassroots. In order for such a grassroots campaign to be feasible, it would need to demonstrate benefits for local organizations and First Nations communities. One of these benefits could be a focus on enabling more local control and watershed governance more generally, which would provide a stronger community-level focus.

Who can make this happen? As outlined above, such a campaign would require leadership from a broad range of organizations including B.C.-based NGOs, First Nations communities and leaders, and regional and local groups. The development of such a campaign would likely require additional funding support, which could be sought from philanthropic sources, such as foundations or individual donations.

Conclusion

To date, there has been no visible or publicly acknowledged freshwater movement in British Columbia. While it may be nascent and loosely connected, this study reveals that such a movement does exist. This movement is grounded in communities across the province and driven predominantly by local and regional concerns.

There are common threads that connect the groups within this movement: a desire for more local control over decisions that affect fresh water; a more supportive and accountable role of the provincial government (and senior government more generally); a need for greater capacity to engage and educate decision-makers and the public; and strong interest in building networks and strengthening collective efforts.

However, it is also important to acknowledge the realities for many of these groups. Across scales, and especially at the local level, the water community is facing stretched budgets, limited time, volunteer burnout, and increasing demands. These day-to-day realities make it challenging for organizations to allocate resources to build capacities in new areas and strengthen connections with other groups or even contemplate new powers or roles in decision-making.

The insights from this study indicate the need for the development of various elements of movement "infrastructure." This infrastructure should be designed to make it as easy as possible for organizations, especially those working locally or regionally to come together, learn from one another, implement new capacities, and collaborate around collective priorities.

This is a critical time for freshwater management in British Columbia. In many ways, we are *at a watershed*. We have the promise of a new B.C. *Water Act*, and mounting pressures on the health of our rivers, lakes, and aquifers from a wide range of threats. The importance of a vibrant, connected, and assertive freshwater movement has never been greater.

APPENDIX: LIST OF ORGANIZATIONS THAT COMPLETED ONLINE SURVEY

- Arrowsmith Watersheds Coalition Society
- Baker Creek Enhancement Society
- BC Lake Stewardship Society
- BC Nature
- BC Wildlife Federation
- BC Federation of Fly Fishers
- Bertand Creek Enhancement Society
- Cariboo Chilcotin Conservation Society
- Christina Lake Stewardship Society
- · Citizens' Stewardship Coalition
- Comox Valley Project Watershed Society
- · Cowichan Land Trust
- Cowichan Stewardship Roundtable
- District of Lantzville Council
- Elk River Alliance
- False Creek Watershed Society
- Fraser Basin Council
- Fraser Valley Watersheds Coalition
- Friends of Lac des Roches and Birch Lake
- Friends of the Stikine Society
- Friends of Tod Creek Watershed
- Georgia Strait Alliance
- Gun Lake Ratepayers Association
- Kamloops Area Preservation Association
- Lake Windermere Ambassadors
- Mid Island Sustainability & Stewardship Initiative
- Morrison Creek Streamkeepers
- NEAT (Northern Environmental Action Team)
- Nechako Environment and Water Stewardship Society
- Nicola Watershed Community Round Table
- Oceola Fish & Game Club; BCWF Region 8; BCWF IFC
- Okanagan Basin Water Board
- Okanagan Simillkameen Conservation Alliance
- One Cowichan
- Pacific Streamkeepers Federation
- Partnership for Water Sustainability in BC
- Peace Valley Environment Association
- Quamichan Watershed Stewardship Society
- Rivershed Society of BC
- Salmon River Enhancement Society
- Salt Spring Island Water Council
- Salt Spring Island Water Preservation Society
- Save our Valley Alliance
- Seymour Salmonid Society
- Sierra Club BC

- Skeena Watershed Conservation Coalition
- Slocan Lake Stewardship Society
- Society For the Protection of Kalamalka Lake
- Sunshine Coast Conservation Association
- Trout Unlimited Canada
- Tsolum River Restoration Society
- Vancouver Island Water Watch Coalition
- · Watershed Watch Salmon Society
- Wildsight
- Winlaw Watershed Society
- WWF-Canada

