



Water Governance Workshop Report

**A summary of four regional conversations: Langley,
Prince George, Nanaimo and Kelowna**

August 2008

The BC Water Governance Project Team gratefully acknowledges the contribution that all participants, citizens, community groups, academics and researchers, government agencies and First Nations, provided to the Water Governance workshops.

This project has been designed to initiate a dialogue on Water Governance that will contribute to regulatory changes, improve relationships among stakeholders in the water community and identify opportunities for advancing water governance. The successful delivery of this project would not have been possible without the passion for water, and its future, that all participants brought to the workshops.

We thank you again for your willingness to share knowledge and experience and look forward to continuing this dialogue on water governance.

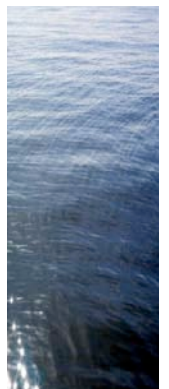


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Executive Summary

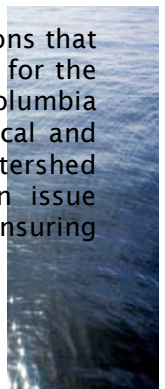
Over the past five years, issues related to water quantity, access and quality have become more prevalent in British Columbia, leading to questions about how decisions related to water are made and, consequently, advanced sustainable water governance as a key priority. As part of the *B.C. Water Governance Project*, the BC Ministry of Environment, the Fraser Basin Council, Georgia Basin-Vancouver Island Living Rivers, and Fisheries and Oceans Canada hosted a series of 4 regional conversations across the province in early 2008. These workshops engaged and gathered input from a wide range of people, including federal, provincial, local government and First Nations, industry, agriculture, and stewardship sector representatives.

The purpose of the workshops – held in Langley, Prince George, Nanaimo and Kelowna - was to share information and explore opportunities for advancing water governance in British Columbia. The focus was on stimulating productive dialogue on challenges and solutions. On the ground experiences of those who deal with water-related decision-making were explored against the backdrop of current academic knowledge on water governance. Over the course of the day, workshop participants worked in plenary and in small groups to discuss what was currently working with respect to water governance in the province, governance challenges that they face in their work or organization, changes required to respond to those challenges and critical factors for ensuring that these governance changes are successful. An important and resounding message articulated in all four of the sessions was to build on what is already working.

Participants identified key challenges, a number of which were common across regions, including the notion that water is largely undervalued in our society, the myths of abundance and entitlement, fragmentation of the water governance system, insufficient resources and the need for more local involvement in watershed planning, the particular need for First Nations involvement and the lack of groundwater legislation. There were also a number of issues and nuances on the above challenges that emerged on a region-specific basis.

Participants also discussed what changes they would like to see to enhance the existing system of water governance and identified what they felt were critical success factors in implementing the changes. The proposed changes to water governance were aligned along a number of themes: vision and leadership; coordination and harmonization; local involvement and control; the involvement of First Nations; planning; education; monitoring and enforcement; and conservation. Reflecting those areas of the water governance system requiring change, the most commonly cited success factors were leadership, accountability, authority and sustained commitment, political will; sufficient funding and human resources to support broad based local participation in decision making and follow through, alignment between water allocation decisions and other related governance processes (e.g. land use planning); and a collaborative approach that includes communities, First Nations, industry, property owners and government working together and taking responsibility.

Roles and responsibilities in the system were discussed in relation to the different functions that exist within a system of water governance. There was broad consensus about the need for the Province to take a stronger role in establishing vision for water governance in British Columbia and guidelines for planning. There was also agreement about the need for greater local and First Nations involvement in the development and monitoring of standards and in watershed planning processes. The establishment of local water boards or authorities was an issue discussed in a number of the workshops. Participants underscored the importance of ensuring



that those responsible had the adequate resources to fulfill their responsibilities. Three specific capacity issues for the implementation of regional water governance solutions were discussed: funding, people and information.

A sense of urgency and readiness for change was prevalent in all four of the workshops. Participants had clear ideas about components of water governance system that needed to be addressed and improved. In all four sessions, participants felt as though more consultation was necessary. Many recommended the creation of a provincial water task force with a mandate to engage stakeholders in a process of water governance renewal. The need to dedicate sufficient resources to the initiative, the issue of water governance more generally and any future governance structure were also highlighted.

Results of the four workshops are summarized in the following report.



Background

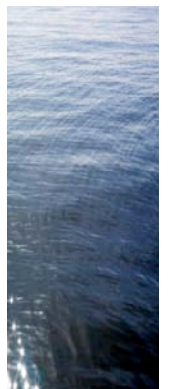
Water is a vital resource and source of life that is fundamental to our environments and livelihoods - but it can also be the basis for vulnerability, inequity and risk. In British Columbia, we are fortunate to have access to water that is generally clean and suitable for our needs. However, as a resource, it is under increasing demand and strain by a growing number of competing interests.

The range of political, organizational and administrative processes through which these interests are articulated and managed is what comprises our system of water governance. Water governance encompasses the manner and degree that different interests participate in decision making around water. It also frames how decisions related to water are made and how decision makers are held accountable.

Over the past five years, issues related to water quantity, access and quality have become more prevalent in British Columbia. These issues have led to questions about how decisions related to water are made and, consequently, advanced sustainable water governance as a key priority. Recognizing this, in the spring of 2007, the BC Ministry of Environment, the Fraser Basin Council, Georgia Basin-Vancouver Island Living Rivers, and Fisheries and Oceans Canada came together to establish the *B.C. Water Governance Project*.

The *B.C. Water Governance Project* commissioned Linda Nowlan and Karen Bakker of the UBC Centre for Water Governance to produce a research paper analyzing key issues in water governance and exploring the strengths and weaknesses of different models for delegated water governance. The paper is now available online at www.watergovernance.ca and www.fraserbasin.bc.ca. The partners also hosted a series of regional conversations across the province. These workshops engaged and gathered input from a wide range of people, including federal, provincial, local government and First Nations, industry, agriculture, and stewardship sector representatives.

The purpose of the workshops - held in Langley, Prince George, Nanaimo and Kelowna - was to share information and explore opportunities for advancing water governance in British Columbia. The focus was on stimulating productive dialogue on challenges and solutions. On the ground experiences of those who deal with water-related decision-making were explored against the backdrop of current academic knowledge on water governance. The results of these discussions are summarized in this report.



Why Water ‘Governance’?

Governance: the process through which decision-makers are chosen, stakeholders articulate their interests, decisions are made, and decision-makers are held accountable.

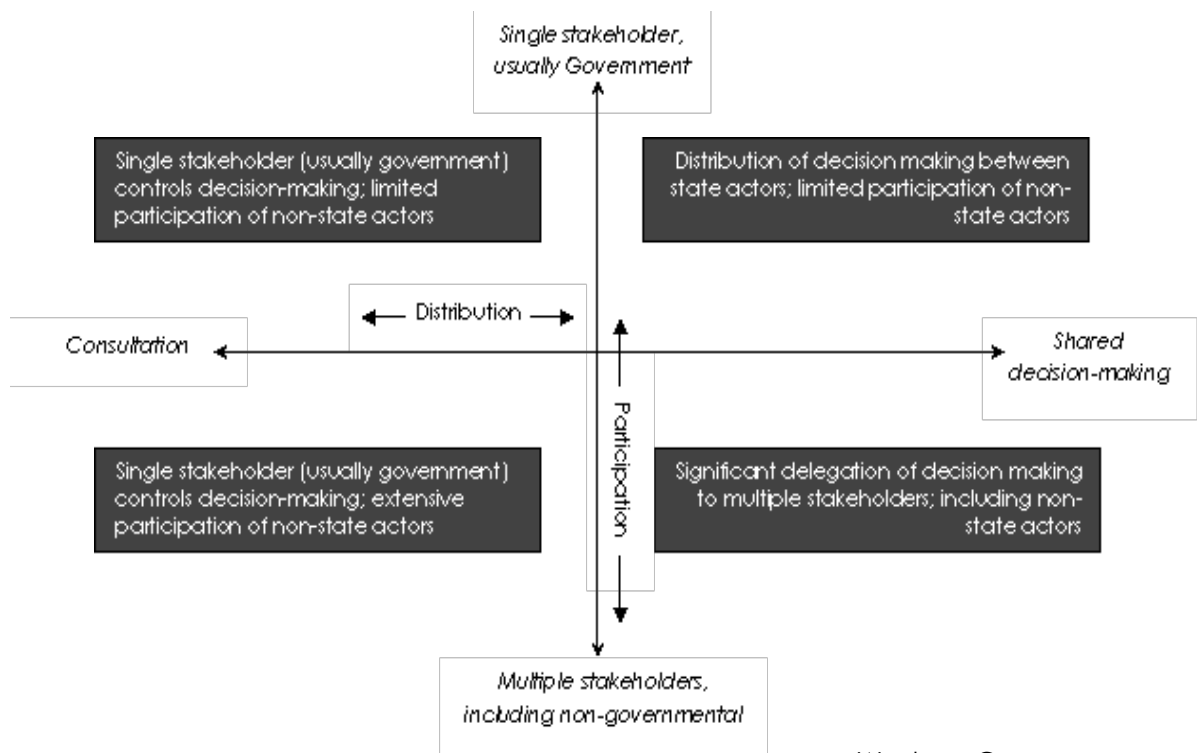
Within British Columbia we have seen a patchwork of water governance approaches evolve. This is the result of responses to local issues. It is time to systematically review water governance in British Columbia and seek effective solutions. This need to examine water governance stems not only from the inefficiencies that the patchwork create, but also that fact that we are seeing a number of pressures on the water resource, government’s role is transforming, and there are new expectations respecting public and First Nations participation. In response to these drivers, the B.C. Water Governance Project commissioned a research paper to examine issues and opportunities for water governance within this new landscape. This research paper, written by Linda Nowlan and Karen Bakker from the University of British Columbia, focuses specifically on ‘delegated’ (also known as ‘devolved’, ‘shared’ or ‘distributed’) water governance. It was structured around the three following questions:

Management: the operational, on-the-ground activities related to regulating water and conditions of its use.

- What are the barriers to delegating water governance?
- Do the potential advantages of delegating water governance to lower scales outweigh the disadvantages?
- Which issues/aspects of decisions about water should be delegated, and which should not?

The results of this study provide much of the basis for discussion at these regional workshops.

The governance matrix from the paper, outlined below, was also used as a means of characterizing different governance models and discussing the degree to which governance can be-and should be-shared or distributed, how and among whom.



Participants were also asked for their input on the following list of 'principles for water governance' that were outlined in the Nowlan & Bakker paper.

- ❖ Effective leadership
- ❖ Interpersonal trust
- ❖ Committed participants
- ❖ Sufficient scientific information
- ❖ Sufficient funding
- ❖ Manageable scope of activities
- ❖ Policy feed-back

Feedback on the principles highlighted the following additional elements:

- ❖ The ecological concept of sustainability.
- ❖ The communication of information and information needs.
- ❖ The capacity to be flexible and adaptive to local situations and changes.
- ❖ The need for a clear line of accountability between the public and government.
- ❖ Support and respect for volunteer participation.
- ❖ Enforceability of regulation.
- ❖ Respect for the law, including customary law.
- ❖ Accountability and transparency are critical.
- ❖ Equitable participation and shared decision-making, recognizing that there are different equities and that equitable participation requires adequate resources and support.
- ❖ *Access* to data and funding.
- ❖ Financial sustainability.
- ❖ Sufficient time for the process and for implementation.
- ❖ The need for a vision.
- ❖ Performance measures that are achievable, doable and aimed at achieving the "best result".
- ❖ The importance of conservation and the precautionary principle as a component of system health.
- ❖ The sense of urgency that surrounds the need for changing/improving water governance at this time.
- ❖ The need for incorporating and respecting traditional ecological knowledge.
- ❖ The importance of First Nations involvement, and respect for aboriginal title and rights.



Regional Perspectives

Workshop participants worked in small groups to discuss what was currently working with respect to water governance in the province, governance challenges that they face in their work or organization, changes required to respond to those challenges and critical factors for ensuring that these governance changes are successful.

Discussions focused mainly on the challenges. However, an important and resounding message articulated in all four of the sessions was to build on what is already working.

What's Working With Respect to Water Governance?

While there are clearly ways in which the system of water governance in the province could be improved, there are a number of effective sub-systems of governance within the existing system that are working. Examples provided included:

- ❖ The Okanagan Water Board, which has been engaging with partners to facilitate issues of water governance and collaborative management in the Okanagan since 1969.
- ❖ The Nicola Water Use Management Plan, which is a community based initiative with involvement from government, community and First Nations and a mandate to establish a water use management plan for the region.
- ❖ The Cowichan Water Management Plan has brought agencies, industry and interest groups together to find solutions to long-term water management issues on the Cowichan River.
- ❖ The water management planning process in Langley, which involved extensive public engagement including door-to-door consultations on water conservation and the metering of private wells.
- ❖ A number of lobby groups and grassroots governance models such as the Stave River Enhancement Society which is now trying to purchase land or solicit land donations for protection and the Silvermere wetlands user group management committee which operates on a consensus model with the developer providing final ruling in those issues where consensus is not reached.
- ❖ The West Coast Vancouver Island Aquatic Management Board.
- ❖ The Water Wise Program, which operates in the Cariboo-Chilcotin working to change water use behaviours by providing education in the schools, working with partners and raising awareness among individuals, business and industry about simple practical measures they can take to conserve water.

The BC Hydro Water Use Planning Framework was highlighted in a number of workshops as being an effective consensus-based model that was successful because it was inclusive, stakeholders invested their resources (especially time), and there was an obvious authority figure and clear lines of accountability. The framework's flexibility to allow for local issues to be considered was seen as another key element of the BC Hydro model.



Water metering, as has been established in the Okanagan and other parts of the province, was an element of the system seen to be working in establishing fairness and equity as well as capturing valuable information and raising awareness about water use.

The level of volunteerism and the fact that people are willing to come to the table and get involved in stewardship activities, was seen as a key asset of the current system. It was recognized that, in many areas, communities/local government are already taking initiative on water management plans. However, the need to support and reward volunteerism so as to prevent burn out was flagged as a key priority.

The high level of public awareness and understanding of the interconnectedness of issues regarding water governance was also seen as a strength of the existing system. Participants acknowledged the growing public interest in water and concern about sustainability as opportunities. They also referenced the positive steps being made from within the private sector with respect to recognizing the potential advantages of water use plans and integrating principles of conservation into business as usual operations.

The framework for regional planning was seen to be setting the background for sustainability and water governance. The environmental appeal process - particularly that provided for under the Water Act - was also seen to be effective and easily accessible.

Common Challenges Related to Water Governance

Participants emphasized the importance of building on aspects of the system, such as those outlined above that are working well. They also identified a number of key challenges.

A number of the challenges identified were common across regions. For example, participants in all four of the workshops discussed the notion that water is largely undervalued in our society and that action with respect to water governance was impeded by widespread misperceptions about the state of the resource. The myths of abundance and entitlement were seen as key obstacles that need to be addressed in order for change to take place at the level necessary.

Fragmentation of the water governance system was another key theme that emerged from all four workshops. Participants saw the present system as characterized by a patchwork of legislation and conflicting responsibilities without a common vision and leadership. Decision-making was seen as siloed and disjointed, even within and among Ministries. Participants also felt that there is a general lack of understanding about the governance system for water - and a lack of clarity about who is responsible for what.

Insufficient resources were identified in all of the workshops as a key challenge that needs to be addressed to advance water governance in British Columbia. Participants discussed resource challenges in relation to both the supply of funding and human resources. Resource limitations were seen as a key barrier to the planning process for water, the availability of good information, the provision of education, adequate enforcement of regulations, and system wide coordination.

The existing planning process for water was seen as another key component of the system requiring change. Participants felt that the time horizon for planning was too short and there was a lack of information to support longer-term plans. Participants in



all four workshops supported the need for more local involvement in watershed planning, many highlighting the particular need for First Nations involvement. The lack of follow through and implementation of plans was also identified as a central weakness. A corresponding flaw that was identified, related to shortcomings in the planning process, was that the current system is reactive instead of proactive.

The lack of groundwater legislation was another more specific challenge that was highlighted in all four workshops and seen to be fundamental to managing and planning for water.

Regional Challenges Related to Water Governance

There were also a number of issues and nuances on the above challenges that emerged on a region-specific basis. These are outlined below.

Langley

- ❖ True consultation is limited.
- ❖ Economic development decisions need to consider environmental values to a greater extent.
- ❖ Most of the plans being developed lack teeth and enforcement is therefore difficult.
- ❖ Tools for water governance exist, but access to these tools or knowledge of them is limited.
- ❖ The length of processes can often lead to frustration and participant burnout: government commitment wanes and group energy is lost; it takes time to rebuild trust.
- ❖ There are challenges and uncertainty with respect to the implementation of plans and decisions, due to a lack of developer incentives and cost impacts.
- ❖ There are conflicting policies regarding resource management.
- ❖ The capacity of participants varies.
- ❖ There is a failure to recognize wastewater as water; integrated storm water also missing.
- ❖ Liquid Waste Management Plans present challenges in the long term: are they licences to pollute? Are standards too low?
- ❖ There is a lack of transparency around the criteria for licensing as well as final use.
- ❖ While there is a lot of education and outreach activities, it remains challenging to get “uptake”.

Prince George

- ❖ There is a lack of political will with respect to making decisions about water governance and acting on community recommendations.
- ❖ First Nations are not adequately involved in decisions that impact the water systems that they depend upon for their livelihood.
- ❖ We lack current information about the number and range of water users and their relative impact on the water systems.
- ❖ There needs to be more management of upstream impacts of development and industry – dispersed sources of pollution.

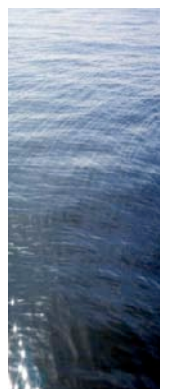


Kelowna

- ❖ Carrying capacity of the watershed is not given adequate consideration when planning land use and development.
- ❖ The net cumulative effect of water licences has us “maxed out”: current allocations exceed known capacity.
- ❖ There is a critical disconnect between higher-level decisions, governance and local development.
- ❖ Drinking water standards should be adopted and enforced.
- ❖ There is lack of stability within government and the absence of long-term vision that extends beyond the political cycle.
- ❖ Local government activities and jurisdictions have a range of impacts on the watershed but more clarity on decision-making roles is necessary.
- ❖ There is a lack of financial resources and direction in regards to the reconciliation of rights and title in legislation: we must work to assign water rights associated with land negotiations and we must reserve some resources for future negotiations.
- ❖ There needs to be an acceptance and integration of traditional methods of water management.
- ❖ There is a lack of incentive/motivation to support innovative approaches.
- ❖ The present framework does not account for/consider climate change.

Nanaimo

- ❖ Our water system is under increasing pressure from external markets and corporate investment; important that we prioritize local interests and maintain control over our resources.
- ❖ The system must recognize Aboriginal Rights and First Nations as a level of government.
- ❖ There is no single authority charged with responsibility for water planning and growth management.
- ❖ There is a lack of accountability among private landowners.
- ❖ There is a need for more inclusive decision-making processes (particularly within Ministry of Agriculture & Lands).
- ❖ There is a need for action around water conservation.
- ❖ The licensing regime outdated.
- ❖ Trans-boundary watersheds pose a challenge: without a clear single authority and coordinated planning occurring, leading to patchwork of development.
- ❖ Experts are pitted against one another with no process to resolve conflicts.



Looking Ahead

Following from a discussion of challenges, workshop participants redirected their attention onto solutions. Working in small groups, participants discussed what changes they would like to see to enhance the existing system of water governance. They also identified what they felt were critical success factors in implementing the changes.

Proposed Changes to Water Governance

The proposed changes to water governance were aligned along a number of themes: vision and leadership; coordination and harmonization; local involvement and control; the involvement of First Nations; planning; education; monitoring and enforcement; and conservation. These themes wove through the discussions of all four workshops. The challenges within each area are fleshed out in more detail below.

❖ **Vision and leadership**

- Establish a, provincial overarching and long term vision for the water system that considers the full water cycle/ecosystem.
- Move to a proactive governance model from a reactive one.
- Enhance accountability to ensure follow through and implementation of plans.
- Bring water users together to discuss their respective goals and values so as develop a collective vision for our water systems and area-based limits of acceptable change.
- Enhance leadership at the federal/cross-jurisdictional level.
- Establish leaders that are willing to take risks and implement local watershed plans.
- Establish a provincial working group to represent communities: Aboriginal and non-Aboriginal.
- Convene a regional leadership summit on water governance with government and other stakeholders.
- Ensure adequate resources are available to fund the system.
- Enable a dynamic governance framework with the flexibility to allow for changes in management and political leadership.

❖ **Coordination and harmonization**

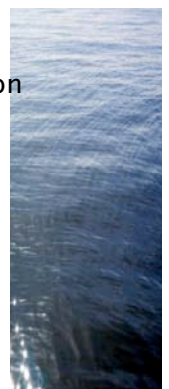
- Promote increased collaboration and cooperation within and between government agencies (including FN) and non-governmental organizations active on the ground.
- Coordinate between various interests and authorities.
- Reconcile the mandates of different government ministries and agencies – as they relate to water.

❖ **Local involvement and control**

- Have the Province establish the framework for watershed governance and delegate authority to Community Water Boards for the development of watershed management plans.
- Establish local/community-based watershed planning processes with decision-making power; decision-making should not be purely political.
- Enable stakeholders to have more direct influence over private managed forestlands.



- Create more opportunities for local governments, communities and First Nations to be involved in decision-making.
- ❖ **Involvement of First Nations**
 - Ensure that First Nations are meaningfully involved in process design and implementation, in addition to being appropriately consulted on decisions that stand to impact their watersheds. While referrals may meet fiduciary responsibilities, they are not necessarily efficient or effective means of engagement in decision-making.
 - Follow through to ensure time invested by participants is well spent. The workshops presented an opportunity to continue to build trust and relationships.
 - Build solutions carefully, recognizing that time, capacity and commitment are necessary elements of meaningful implementation of the New Relationship.
 - Think about future generations and long-term solutions, recognizing that many values are shared among all participants.
 - Respect traditional values and incorporate Traditional Ecological Knowledge (TEK) into planning.
 - Establish a mechanism to allow First Nations to devolve authority to the Province if desired (e.g. reserve/ on reserve & how to cooperate in face of differences).
- ❖ **Planning**
 - Establish water as a priority and a foundation in planning for land use and different sectors/interests, e.g. forestry.
 - Mandate long term water management plans and support their implementation.
 - Use the watershed as the basic unit for planning.
- ❖ **Public education**
 - Shift perception of water as a community resource – with value, but not necessarily commoditized.
 - Dedicate resources to raising public awareness about the value of water and the importance of conservation through targeted and ongoing education.
- ❖ **Information**
 - Establish clear independent and professional standards for science.
 - More scientific research and long term impact analysis before decisions are made.
 - Establish an inventory of water issues and a set of indicators to monitor trends and impacts.
- ❖ **Monitoring & Enforcement**
 - More regulation and environmental management.
 - Establish limits based on carrying capacity.
 - Establish solid local land use controls.
 - Revert back to more of a prescriptive model where the outcome/professional-based model not working.
 - Implementation and accountability with respect to drinking water standards.
 - Establish a watchdog committee to monitor the entire watershed and report on changes and trends.
- ❖ **Conservation**
 - Mandate water conservation.



- Establish incentives for conservation.

Critical Success Factors

Reflecting those areas of the water governance system requiring change, the most commonly cited success factors were:

- ❖ Leadership – accountability, authority and sustained commitment: political will.
- ❖ Sufficient funding and human resources to support broad based local participation in decision making and follow through.
- ❖ Alignment between water allocation decisions and other related governance processes (e.g. land use planning).
- ❖ A collaborative approach that includes communities, First Nations, industry, property owners and government working together and taking responsibility.

Other critical success factors noted included:

- ❖ Education and awareness about how we as individuals and communities impact on the water system.
- ❖ Timely and accurate science to inform decision-making.
- ❖ Fully resourced participation of First Nations in all levels and stages of planning and decision-making.
- ❖ Adequate feedback loops to ensure that we are building on successes and lessons learned.
- ❖ Proper incentives.
- ❖ A sense of urgency.
- ❖ Clear delineation of roles and responsibilities.
- ❖ Common rules of engagement for decision-making and the acceptance of these rules (recognizing that the rules may vary regionally).
- ❖ Comprehensiveness and the integration of different values as well as the full hydrologic cycle: both surface and groundwater.
- ❖ A proactive orientation with a long-term view.
- ❖ Watershed based boundaries for planning.
- ❖ Trust and transparency: especially with regards to funding, political vision, and public access to meetings, interagency and institutional, good faith negotiations.
- ❖ Timeliness and efficiency in decision-making.

Roles and Responsibilities

Roles and responsibilities in the system were discussed in relation to the different functions that exist within a system of water governance. There was broad consensus about the need for the Province to take a stronger role in establishing vision for water governance in British Columbia and guidelines for planning. There was also agreement about the need for greater local and First Nations involvement in the development and monitoring of standards and in watershed planning processes.

The establishment of local water boards or authorities was an issue discussed in a number of the workshops. Participants underscored the importance of ensuring that those responsible had the adequate resources to fulfill their responsibilities. The alignment of accountabilities with what parties have control over was another recurrent theme.



Other general recommendations discussed with respect to changed or additional roles and responsibilities were as follows:

- ❖ Establish an oversight group with representation from all levels of government.
- ❖ Create a water ombudsperson.
- ❖ Establish a mechanism for dealing with trans-boundary issues and multi-species considerations – with involvement of both provincial and federal governments.
- ❖ Delegate authorities in a manner that considers watershed boundaries and allows for conflict resolution on a watershed basis.
- ❖ Enable First Nations to have the authority/ability to make decisions over water within traditional territories.
- ❖ Strengthen/create groundwater legislation.
- ❖ Be cautious of regulation overload.

Roles and responsibilities related to science & information gathering:

Participants were in general agreement about the need for a role to facilitate the centralized coordination of data and common data standards. Other suggestions included:

- ❖ Data should be coordinated by the Province.
- ❖ There should be a single information repository to prevent loss and duplication.
- ❖ Scientists, stewardship groups and communities should contribute information and establish quality standards.
- ❖ Academia/experts should verify data.

Roles and responsibilities related to standards and targets:

Workshop participants differed in their opinions of who should be responsible for establishing standards and targets. While some thought that this was the role of the provincial or federal government, others thought that it was important that they be established on a regional, watershed or sub-basin level to ensure local buy-in. A common position was that the standards should be the responsibility of the Province, established with input from local communities, First Nations and experts. Many groups felt that the role of establishing standards would vary depending on the type of standard in question. There was broad agreement that they should be based on “good science”.

Some of the more specific recommendations related to roles and responsibilities in this function area were as follows:

- ❖ Criteria for standards and targets should be established by scientists and local governments, stewardship groups and First Nations should define the values.
- ❖ The Province should ensure consistent standards; the federal government should coordinate process.
- ❖ Local/regional governments should be able to determine how standards are met and should enforce the standards.
- ❖ Results-based regulations require a strong set of guiding principles.
- ❖ The Province should either set the standards or establish process by which the standards are set.
- ❖ Expand accountabilities of licensees: add metering and report on use, add efficiency and conservation targets.



Roles and responsibilities related to planning:

There was broad consensus on the point that water plans should be developed at the local level with support and/or guidance from the Province. Many participants discussed the role of watershed management boards in the planning process with representation of all interested parties and sectors. Other ideas are as follows:

- ❖ Province should provide the budget, framework and tools for local-level planning – ensure that we are building on past research and lessons learned.
- ❖ There should be feedback loops between different levels.
- ❖ The Province should take responsibility for groundwater and surface water protection.
- ❖ Provincial responsibility to integrate water uses and priorities with those of the different industry sectors, i.e. forestry, agriculture, etc.
- ❖ Federal government should have responsibility for the science.
- ❖ Processes need to be linked and aligned at the broader and local levels.

Roles and responsibilities related to allocation and permitting:

Again there was broad support for the Province maintaining some responsibility for establishing and implementing guidelines for fair distribution of water but with mechanisms to enable local involvement in regards to allocation and permitting decisions and dispensing. Many felt that responsibilities could vary depending on the nature of allocation. Additional recommendations included:

- ❖ Local watershed committees (with representation from industry, First Nations, local government, community) should make recommendations to the Province.
- ❖ Responsibilities should include reviewing licences and establishing a term and reworking rights when they are no longer being used beneficially.
- ❖ Province should establish goals, priorities and rules for allocation but local purveyors could be involved in ensuring that goals are met.
- ❖ Regional/basin/sub-basin allocation with equal playing field for different jurisdictions.
- ❖ Province provides baseline info and local (watershed) suppliers dispense permits.
- ❖ Province gives licences but local authorities set allocation/conservation targets.

Roles and responsibilities related to monitoring and reporting:

Most workshop participants felt that a broad cross section of players should be involved in monitoring and report but that support and funding should be provided by the Province. A summary of recommendations are as follows:

- ❖ Local groups should do monitoring and stewardship.
- ❖ Monitoring must include First Nations – cannot be based solely on western science.
- ❖ Academia/experts have a key role to play in monitoring, but with standards for monitoring established by an authority.



Roles and responsibilities related to regulation, compliance and enforcement:

There was broad consensus about the need for the Province, local governments and First Nations to work together on regulation. Most participants also indicated that all levels of government had roles to play in enforcing regulations and ensuring compliance. Additional proposals were as follows:

- ❖ Regulatory framework should be established by high level of government with local authorities carrying it out.
- ❖ Local purveyors must be involved.
- ❖ Encourage compliance through education and the engagement of all types of water users.
- ❖ Organizations/associations need to take responsibility for self-policing.
- ❖ Responsibility should rest with whoever is closest, i.e. local authorities.
- ❖ Responsibilities may differ between water quality and quantity.

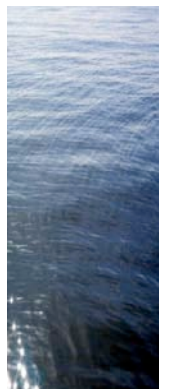
Innovative Solutions

An important objective of the workshops was to discuss capacity for the implementation of regional water governance solutions. Three specific capacity issues were discussed: funding, people and information. A summary of ideas put forward in these sessions is outlined below.

Financial capacity - access and allocation

Ideas for generating funds to support water governance included:

- ❖ Establish user-pay systems by establishing taxes and metering for domestic and industrial water use - with cascading unit pricing.
- ❖ Allocate revenue from water license fees to local governments and the investment of water programs.
- ❖ Work towards the pricing and true valuation of water.
- ❖ Raise licensing fees.
- ❖ Apply a tax on bottled water.
- ❖ Tax activities, i.e. boating, that impact the resource.
- ❖ Charge landowners for source water protection, i.e. forestry, tourism, ranching.
- ❖ Create incentives for innovation among government and among users, i.e. the use of new technologies.
- ❖ Direct revenues from with water fines directed back into water governance.
- ❖ Establish a water cost charge for developers.
- ❖ Explore the establishment of water credits (like carbon credits).
- ❖ Develop partnerships for First Nations traditional use studies and land plans.
- ❖ Establish groundwater charges.



Recognizing existing resource limitations, funding priorities were also discussed. The following are highlights of participant recommendations:

- ❖ Provide funding for education and social marketing around water use and conservation.
- ❖ Ensure adequate funding for the governance system: cost out what new governance initiatives/framework will cost and establish mechanisms/processes to fund them.
- ❖ Increase funding for objective research, monitoring and data collection (to support planning processes), i.e. including hydrometrics, mapping, groundwater inventories.
- ❖ Establish funding for watershed planning processes.
- ❖ Increase funding for enforcement and regulation.
- ❖ Provide more funding for education, stewardship and communications to support conservation and recovery programs.
- ❖ Create funding for land purchasing of high-risk areas.
- ❖ Fund infrastructure, i.e. treatment plants.

People capacity

A key issue discussed in relation to people capacity was volunteers. The value and importance of volunteers within regional approaches to water governance was underscored repeatedly in all four workshops. Specific ideas with respect to recognizing, maintaining, and growing the role that volunteers play in the system were as follows:

- ❖ Recruit volunteers from major corporations.
- ❖ Provide stipends/tax rebates to volunteers.
- ❖ Create infrastructure to support/cope with burnout issues.
- ❖ Ensure that people's time spent volunteering is well spent.
- ❖ Compensate people for their time and travel costs.
- ❖ Reward involvement.

Supporting capacity development and facilitating regional engagement were also key themes that emerged from these discussions, as follows:

- ❖ Establish Provincial consultants to help mobilize grassroots activists to steward water use in their area on a one-to-one basis.
- ❖ Expand Provincial staffing – and second government resources to start up water authorities.
- ❖ Develop a province-wide support system for those involved in water governance that would help to sustain initiatives and/or create access to new processes.
- ❖ Establish provincial funding to support First Nations involvement in water planning.
- ❖ Determine HR requirements for water management, just as we do other areas, i.e. healthcare.
- ❖ Provide interagency training on water governance.
- ❖ Provide training of First Nations through the New Relationship Trust.

Education was seen as key to building people's capacity for engagement in water governance. Ideas related to this theme included:

- ❖ Build water governance into school curriculum: "water immersion" - enhance sense of responsibility for the resource.
- ❖ Share information about the watershed with the public.



- ❖ Establish means of communicating back to people how much they use.
- ❖ Provide education about opportunities for involvement that already exist.
- ❖ Build greater understanding with respect to carrying capacity and the land base.
- ❖ Provide more training to First Nations.

Additional ideas included:

- ❖ Build partnerships with institutions of higher learning as well as professional organizations – for training and research.
- ❖ Celebrate successes.
- ❖ Make public engagement a requirement of government programs and provide necessary support.
- ❖ Commit to a long-term process of change.
- ❖ Invite participation and be transparent: be clear of the process.
- ❖ Demonstrate how input is being used or be clear why it isn't being used.
- ❖ Encourage people to become involved, emphasize the importance of being involved and ensure that their participation is meaningful.

Information capacity

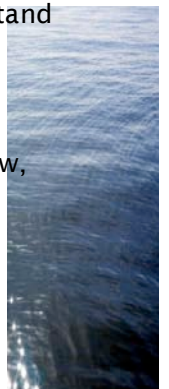
Participant ideas related to information capacity highlighted a critical need to facilitate better access existing data, rather than a need for more information. The importance of ensuring that data collection reflected the local information needs was highlighted. Other ideas related to increasing public information, strengthening information resources in a number of key areas and establishing robust systems for managing data to support watershed planning decisions.

As outlined in the previous section, participants felt that information targeted to the public about the value of water and their role in sustaining the resource was critical. Specific ideas were as follows:

- ❖ Implement a BC-wide water awareness media campaign – emphasizing the value of water, and providing information about the watershed, where our water comes from, and how everyday behaviours affect the water supply.
- ❖ Devise new approaches to deliver the messages to people.
- ❖ Employ youth savvy communications, i.e. new media.
- ❖ Combat the myths of abundance and entitlement through public information.
- ❖ Consider the timing and source of messaging to the public as this will largely determine its impact.
- ❖ Report out to water users (like new Provincial energy meters) and require water users to report use.
- ❖ Establish ways for people to understand their water footprint – and to understand the broader impacts of their individual behaviours.

Ideas related to additional types of information required included:

- ❖ Increase monitoring, collection and maintenance of data related to stream flow, ground water and water quality as well as fish, watershed and health risks associated with water.



- ❖ Collect data to support a greater understanding of climate change impacts and adaptation measures at the local level.
- ❖ Support ongoing monitoring and longitudinal information.
- ❖ Gather information on the impacts of different industries, source water protection and the impacts of land use.
- ❖ Collect basic information to make up a “water budget” – showing how much we have, the rate of usage, the rate of recharge – water account information.
- ❖ Maintain information about what is going on in the watershed: who is doing what.
- ❖ Refine data on watershed atlas – with smaller watersheds delineated.
- ❖ Incorporate demographic projections.
- ❖ Strengthen connections with academic institutions.
- ❖ Connect with First Nations to obtain traditional knowledge.
- ❖ Allow partners to voice their information needs – shows grass roots support & reduces risk to political interests if information needs supported.

Suggestions concerning data management were as follows:

- ❖ Create an accessible data mapping storage and retrieval system.
- ❖ Establish data standards and ensure consistent and comprehensive application.
- ❖ Create a common system to feed information into.
- ❖ Maintain longitudinal data – that is continued despite changes in government.
- ❖ Issue regular reports and publishing the data in a widely accessible manner.
- ❖ Establish resource people to provide advice on what information exists and how to find it.
- ❖ Prioritize information needs – focusing on key knowledge gaps.
- ❖ Establish a role for information coordination.



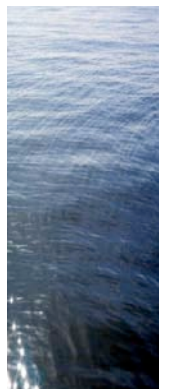
Recommendations & Next Steps

A sense of urgency and readiness for change was prevalent in all four of the workshops. Participants had clear ideas about components of water governance system that needed to be addressed and improved. There was therefore some anxiousness and eagerness about next steps.

Each of the workshops closed with a discussion of next steps in the process. In all four sessions, participants felt as though more consultation was necessary. Many recommended the creation of a provincial water task force with a mandate to engage stakeholders in a process of water governance renewal. The need to dedicate sufficient resources to the initiative, the issue of water governance more generally and any future governance structure were seen as absolutely imperative.

Following the conclusion of the workshop series the province released *Living Water Smart: British Columbia's Water Plan*. Through more than 40 actions and targets, the plan outlines the Province's vision for keeping water healthy and secure for the future (livingwatersmart.ca). Of specific interest to the dialogue on water governance is one of *Living Water Smart's* cornerstones that states by 2012 water laws will improve the protection of ecological values, provide for more community involvement, and provide incentives to be water efficient. A key project in meeting this commitment will be the *Water Act* Modernization project (WAM). Input received through the workshops will be considered as the stakeholder and public engagement process for WAM is developed. This will provide opportunities to continue the dialogue on advancing water governance in British Columbia.

In the shorter term, the water governance project team will work with selected local water initiatives to investigate opportunities for enhancing water governance in BC in the context of the input from the workshops and the Nowlan and Bakker discussion paper.



Workshop participants

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Kwantlen First Nation
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