

Background

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 sessions 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. This report summarizes the presentations and discussions from the fourth regional workshop, held in Kelowna on May 21, 2008.

Why Water Governance? Presentation by Lynn Kriwoken, Ministry of Environment

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

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

In the context of water, governance relates to the processes by which decisions are made and different interests are articulated in matters concerning access to water resources, the delivery of water services, the protection and conservation of water and aquatic ecosystems including their associated riparian area, and land use issues as they impact water. The system of water governance provides the framework by which our water systems are managed. The distinction between governance and management is important. The focus of this initiative is specifically on governance.

Within British Columbia a patchwork of water governance approaches has evolved in response 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:

- ❖ 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.

Why Water Governance – Questions & Comments

- The treaty process is not the only mechanism by which First Nations are seeking to have interests and input in the water governance process; some First Nations, such as the Shuswap, are not engaged in the treaty process and will be looking for other means by which to be involved in water governance.
- The Province is approving independent power projects, while the water governance consultations are going on; adding to the complexity and potentially precluding future decisions and options.
- There are significant challenges related to the lack of coordination between Ministries; projects are going on from within one Ministry in isolation of projects going on in other areas.
- Local government development is being pursued without an eye to water supply issues and entitlement and rights.
- There is a critical difference between what the water governance system looks like on paper and how it works on the ground.

WATER GOVERNANCE ON THE GROUND

Four local participants provided insights on the water governance challenges that they face in their work and experience living in the Okanagan and governance-related solutions. This helped to set the stage for the day's discussions.

➤ **Anna Warwick Sears, Okanagan Basin Water Board**

Anna Warwick Sears is responsible for the day-to-day operations of the Okanagan Basin Water Board including the new coordinated water management initiative, water quality improvement programs and aquatic weed management. Anna has a background in population biology and watershed planning, and was previously the Research Director for an environmental organization in Sonoma County, CA.

Highlights of Anna's presentation:

The Okanagan Basin Water Board (OBWB) was established by the Province in 1969 in response to local concerns. The Board's jurisdiction was based on water shed boundaries; this was thought to be cutting edge in 1969 and still is today. The Board was established to facilitate issues of water governance and collaborative

management and have explored water governance issues more in recent years. Findings from this work include:

- Partnerships are key – between different levels of government and jurisdiction
- Local level is the most appropriate for setting priorities; it is the responsibility of local governments and the Province to respect those rights.
- Province should give local level a voice in decisions that impact watersheds.
- Longitudinal, solid information and science is key for making decisions – working to create a baseline of water information and establishing a governance structure for long term updating and monitoring.
- Information is critical for responding to water shortages and other challenges (i.e. climate change) and development pressures.
- Senior government has a key role to play in the protection of minimum stream flows and lake levels – and allocation processes needs to consider these limits.
- Delegation of authority from the province can have a positive effect of empowering local communities, but can not abrogate responsibility without adequate funding and resources.
- Must also retain responsibility for standards.
- Must also not place full burden on local tax base.

Gwen Bridge, Okanagan Nation Alliance

Gwen has been working with the Okanagan Nation Alliance as the Natural Resource Land Use Team Coordinator since July 2006. She has a Masters of Science in Forest Biology Management from the University of Alberta and a Bachelor of Arts in Environmental Studies and Geography at the University of Victoria. She is also the Co-chair of the Okanagan Nation Forestry Working Group. She has previously worked as a habitat restoration ecologist with the Makah Tribe in Washington State and a hydrologist for the Mescalero Apache Tribe in New Mexico.

Highlights of Gwen's presentation:

The Okanagan system is almost completely within the Okanagan Nation's traditional territory. The Okanagan First Nation sees water as absolutely fundamental to life and rights and title over water is seen as key to the future economic, social, spiritual sustainability of the Okanagan First Nation.

- Rights to water were never ceded from the Okanagan FN and therefore still rest with the FN.
- Work is underway in the FN to define those rights and title to water.
- Validity of existing legislation is being questioned in light of water.
- Changes in the Water Act must involve full consultation and involvement of Okanagan FN – it is the obligation of the Province to consult with the FN.
- There is a lack of resources for Aboriginal water research.
- Best to plan ahead in a cooperative manner, rather than having to revisit process that is not inclusive of all interested parties and interests.
- The Washington Water Governance Process provides a good model of governance that integrated First Nations.
 - The process was mandated by Governor of State of Washington.
 - Involved government and First Nations.
 - Put forward recommendations for water planning – stream flow, fish, etc.

- Included negotiations for securing FN rights and title to the fish, and by extension, the habitat and other supporting water resources.
- The process established a model that FN felt comfortable with – allowed FN to negotiated rights and title without going to the courts.

➤ **Elizabeth Solomon-de-Friedburg, Nicola Water Use Management Plan**

Elizabeth is an eighteen year resident of Merritt and is self-employed as a consultant specializing in community economic development, strategic planning, market analyses and project management. Elizabeth has been actively involved with the Nicola Watershed Community Round Table since 1994. She is currently employed by the Nicola Watershed Community Round Table to provide administrative support and project management for the Nicola Water Use Management Plan.

Highlights of Elizabeth's presentation:

The Nicola Water Use Management Plan (NWUMP) is a community-based initiative with the goal of establishing a water use management plan – with involvement from government, community, and FN groups.

- Challenges identified at the start included: a lack of local control, consultation and opportunities to be involved, regional gaps – specifically around ground water, a lack of an integrated approach to water issues – particularly surface and ground water, lack of recognition of water issues with respect to development.
- The Board has not devoted much time to water governance issues due to a lack of clear direction from the Province about what models of governance they would support and what they would be willing to devolve; lack of info about governance review goals.
- There is also a lack of a longer term strategy for water management.
- Lack of involvement of Ministry staff in local planning processes – too few resources to deal with water management and governance issues
- Changes are necessary to address shortcomings in Nicola Valley, including:
 - Issues not being addressed in a timely manner.
 - Decisions are not being made with consideration of all due interests and issues.
 - Not equipped to deal with new issues and challenges associated with climate change.
 - Greater citizen participation in the governance of water is critical – more opportunities to take part in policy and initiatives related to water and water use planning
 - Enhanced communications and education is key.
- We need a well thought out implementation plan for carrying out the changes.

➤ **Lee Hesketh, Farm Riparian Interface Stewardship Program**

Lee has resided on Silver Hills Ranch, where he was raised, for more than 45 years. Lee has been an environmental rehabilitation consultant for the past 20 years and a rancher for over 35. Through work with BC Cattlemen's Association, Lee coordinates the Farmland-Riparian Interface Stewardship Program [FRISP]. This program assists the agriculture sector in meeting the challenges of reaching environmental and economic

sustainability, by providing ranchers with free technical advice including joint planning of habitat restoration and farmland activities between landowners, resource management agencies and community groups, mediation services between landowners and regulatory agencies in regards to riparian damage resulting from agricultural practices.

Highlights of Lee's presentation:

Our society has become gradually and considerably more dependent on water. Yet, consciousness of water is still not part of our everyday life.

- It is important to find a common interest between landowners – often brought about through crisis – in order to engage in a meaningful discussion about use of water.
- Economics of industry and agriculture need to be supported by purchasing habits and demands of society.
- We should showcase those producers that are making a special effort to be more sustainability in their practices.

Panel Questions and Discussions

How are First Nations rights and title to water determined, given that there is really just one source of water in the Okanagan – and it goes past FN?

- All water that flows through/adjacent a FN reserves is considered FN water (based on American example)
- 'Beneficial use' as criteria for determining FN rights and title has not been explicitly defined legally – but the basis for determining cultural use, economic, etc.
- Future use needs to be quantified through science and through negotiation between different interests.
- Difficult to discuss water delegation from the Province, when the First Nations have not yet finished the conversation about water rights and entitlement that were traditionally supposed to be 50-50.

Concluding question for all panellists:

“ If you could make one change, what would it be?”

- Changes to the legislation to allow for co-decisions between governments and FN.
- Economics to support the value of water and the need for management– and having resources flow to technical assistance, education, etc.
- A comprehensive strategy for ground water.
- An ongoing commitment to the process and commitments at all levels to continue to come to the together – send their staff, and work together over the long term.

DISCUSSION ON WATER MANAGEMENT PRINCIPLES

- Performance measures achievable and doable – aimed to attain the “best result”.
- Must be doable.
- Respect for Customary Law.
- Articulation of the BC vision for water.
- Equity – recognizing that there are different equities, that resources need to be available, that access is important and that equitable representation is key.
- Effective delivery.
- Conservation: precautionary principle – as a component of system health.
- No stated urgency within the principles.

- Traditional ecological knowledge.
- Nothing with respect to First Nations involvement, title and rights - and recognition as FN a legitimate level of government.
- Fish/wildlife interface with water.

PARTICIPANT PERSPECTIVES

Workshop participants worked in small groups to discuss 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. Key points from these discussions are summarized below.

➤ **Water Governance Challenges**

- Lack of regulation and a lack of enforcement of existing regulations.
- Inadequate staff resources for enforcement and management.
- Net cumulative of water licenses has us "maxed out".
- Fragmentation among agencies: provincial, federal and local.
 - Allocating departments operate in silos without considering all uses: current and future – we are making decisions that preclude decisions in the future.
 - Disconnect between higher level decisions, governance and local development.
 - Lack of a common vision/cohesive direction.
 - Multiple jurisdictions involved with overlapping responsibilities.
 - Lack of leadership, focus and accountability.
 - Short term priority setting.
- Lack of stability within government and a long term vision that extends beyond the political cycle.
- Local government impacts on the watershed but does not have decision making power
- Lack of follow through on planning.
- Carrying capacity of the watershed is not given adequate consideration when planning land use and development.
- 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.
- Groundwater legislation.
- Acceptance and integration of traditional methods of water management.
- Lack of incentive/motivation to support innovative approaches.
- Current legislation and regulations are reactive, not proactive.
- Present framework does not account for/consider climate change.

➤ **Proposed Changes to Water Governance**

- Water centric land use planning processes.
- Intergovernmental collaboration, collective prioritization of water issues and a clear direction that this based on what is good for all, not just one particular area/interest.
- Long term water management plans – with a process for their implementation.
- Explore programs (external) that have integrating Aboriginal-nonAboriginal decision making processes/frameworks.
- Use the watershed as the unit for planning – align administrative boundaries with those of the watershed.

- More regulation and environmental management.
- Establish limits based on carrying capacity.
- Good local land use controls.
- Increased staff resources.
- More scientific research and long term impact analysis before decisions are made.
- Different style of governance that involves more regulation in some places; more enforcement in others.
 - Revert back to more of a prescriptive model where the outcome/professional-based model not working.
- Public education about the importance of water conservation and the costs/implications of overuse.
- Reconcile the mandates of different government ministries and agencies – as they relate to water.
- Create more opportunities for local governments to be involved in decision making.
- Implementation and accountability with respect to drinking water standards.

➤ **Critical Success Factors in Implementing Governance Changes**

- Public acceptance of the need for some level of government to be involved - education to communicate the benefits of government.
- Adequate representation of local government/local involvement
 - Adequate representation of all users and interests.
- Involvement of First Nations from the beginning.
 - Fully resourced participation of First Nations in the development of regulations.
- Monitored referrals to First Nations – and resources for referrals.
- Leadership and champions.
- Linkage between water allocation decisions and land use development.
- Financial sustainability and support for science.
- Build on successes.
- Proper incentives.
- A sense of urgency.
- Better science with respect to the water system, ecological needs and capacities.
- Clear delineation of roles and responsibilities.
- Sufficient resources for compliance and enforcement.

FUNCTIONS AND RESPONSIBILITIES OF WATER GOVERNANCE

Participants worked in small groups to discuss the governance roles and responsibilities that would exist in an ideal system and contemplated the implications of recommended changes to governance.

➤ **Planning**

- First Nations Tribal Councils.
- Watershed management boards – which include all interested parties in the watershed.
- Local governments/communities – important for buy-in.
- Overall guidance, principles and vision provided by the Province with local governments/community groups/stewardship groups doing the planning.
- Provincial 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.
 - Delegated authority for land use planning to local governments and First Nations.
 - More resources required.
 - More responsive to local needs.
- **Standards & Target Setting**
- Province should either set the standards or establish process by which the standards are set
 - Federal/provincial/FN governments should establish standards for fish, birds, environment; local level should establish those related to bylaws, use and conservation.
 - Province should establish minimum standards for drinking water, minimum flows, irrigation of crops, wastewater.
 - Province should set – but with input from a broad range of stakeholders.
- **Allocation & Permitting**
- Should be consensus-based with all interests included.
 - Could vary based on type of allocation – and could be tied to standards.
 - Level of responsibility should be commensurate to the scale and degree of impact.
 - Whoever makes the decisions must also be accountable for the decisions.
 - Responsibilities should include reviewing licenses and establishing a term and taking away rights where no longer appropriate.
 - Should be driven by good science.
 - Province to establish goals, priorities and rules for allocation but local purveyors involved in ensuring 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 licenses but local authorities set allocation/conservation targets.
- **Regulation**
- Collaborative effort on the part of the Province local governments and First Nations.
 - Framework established by high level of government with local authorities carrying it out.
 - Local purveyors must be involved.
 - Regulations should be directed by the standards and led by the Province.
 - Established by the Province, but driven by the basin.
- **Compliance & Enforcement**
- Responsibility should rest with whoever is closest, i.e. local authorities.
 - If delegated, delegation should come with resources.
 - Provincial and federal governments.
 - All levels should assume some responsibility.
 - Responsibilities may differ between water quality and quantity.
- **Research & Monitoring**
- Must include First Nations – can not be based solely on western science.

- Academia/experts - but with standards for monitoring established by an authority.
- Federal and provincial governments.

➤ **Reporting, Outreach & Education**

- A broad cross section of players needs to be involved.
- Province should create education as integrated into curriculum; local education should be directed by local needs.
- Local governments and water use “boards”.
- Conducted and delivered at the local level – but with some broadly established rules.

INNOVATIVE SOLUTIONS TO GOVERNANCE CHALLENGES

➤ **Access to Funding**

- Watershed planning processes – and plan implementation
- Science and data collection (to support planning processes), i.e. including hydrometrics, mapping, groundwater inventories
- Enforcement and regulation
- Management network/governing body
- Monitoring
- Water science – for supply and demand
- Education, stewardship and communications
- Conservation
- Land purchasing of high risk areas
- Recovery programs
- Infrastructure, i.e. treatment plants.

➤ **Prioritizing & Sourcing of Funds**

- Establish user-pay systems
- Use licensing and revenues specifically for administration of governance – link back into the system instead of into general revenues.
- Establish criteria for allocating funding.
- Establish proper, full cost pricing.
- Raise licensing fees.
- Apply a tax on bottled water.
- Tax activities, i.e. boating, that impact the resource.
- Charge large new developments
- Graduated pricing and metering.
- Charge fees for use based on volumetric/property values/taxation
- Charge land owners for source water protection, i.e. forestry, tourism, ranching.
- Determine funding priorities.

➤ **People Capacity**

- Need to determine HR requirements for water management, just as we do other areas, i.e. healthcare.
- Increase public awareness and involvement starting at a young age– enhance sense of responsibility for the resource.
 - Share information about the watershed with the public.
- Create incentives/rewards and penalties to support water conservation behaviours.

- Impose requirements for new developments, i.e. rain barrels, ground cover, etc.
- Ensure that people's time spent volunteering is well spent.
- Remunerate volunteers.
- Governments and other institutions could do more to connect the dots between water quality issues and water source issues.
- Establish means of communicating back to people how much they use.
- Establish a price for water that is more realistic.
- Show leadership.
- Combat the myths of abundance and entitlement.
- Timing and source of messaging to the public is important.

➤ **Information Needs**

- Baseline, hydrometric data.
- Demographics.
- Greater understanding of climate change impacts and adaptation measures at the local level.
- Better understanding of public perceptions of water and how to change them
- Watershed risk assets.
- Health risks associated with water.
- Ongoing monitoring – longitudinal information.
- Ways for people to understand their water footprint – and to understand the broader impacts of their individual behaviours.
- Impacts of different industries.
- Funding for information collection.
- A common system to feed information into.
- Resources to manage the information.
- Obligations for industry and other users to contribute to the knowledge base.
- Source water protection and impacts of land use.
- Drought studies.
- Fish needs.

PRIORITY ISSUES AND RECOMMENDED NEXT STEPS

- Need for clear provincial direction
- Commitment.
- Clarify priority for water among other government priorities.
- Need to live up to the words – water management.
- Local govt really does have a say...
- Recognize FN values in water planning and allocation.
- Break down provincial silos.
- Communicate.
- Province should step up to responsibility.
- Regulate groundwater use.
- Basin-wide and sub-basin planning.
- Consider any delegation very carefully.
- Don't leave us holding the bag – no delegation without responsibility.
- Process needs to be adequately resourced.
- No one size fits all.
- Need a realistic time frame.
- Responsibility for planning depends on the scale of planning.
- Role for the feds...
- Conservation needs to be paramount – conservation before allocation.

Kelowna workshop May 21, 2008 participants

Al COTSWORTH	Regional District of North Okanagan
Al LILL	Living Rivers- Georgia Basin
Alison MACNAUGHTON	Fraser Basin Council
Andrew PETERSON	BC Min Agriculture & Lands Resource Mgmt
Anna WARWICK-SEARS	Okanagan Basin Water Board
Art ANTHONY	Neskonlith Band, Lands & Resources Dept
Barry ROSENBERGER	Fisheries & Oceans Canada
Brian SYMONS	BC Ministry of Environment
Carrie TERBASKET	Lower Similkameen Indian Band
Chief Nelson LEON	Adams Lake Indian Band
Clare MOCHRIE	Fraser Basin Council
Conrad PRYCE	BC Min. Environment, Water Stewardship Div.
Coola LOUIS	Okanagan Nation Alliance
Danielle LUKOVICH	BC Min. Community Services
Darwin HORNING	UBC Okanagan Sustainability Institute
David MARSHALL	Fraser Basin Council
Des ANDERSON	BC Min. Environment, Water Stewardship Div
Doug DYMOND	Columbia Shuswap Regional District
Elizabeth Salomon-de Friedberg	Nicola Watershed Community Round Table
Elizabeth SIGALET	Interior Health
Erin VIEIRA	Fraser Basin Council
George SADDLEMAN	Okanagan Nation Alliance
Gwen BRIDGE	Okanagan Nation Alliance
Herman HALVERSON	Regional District of North Okanagan (Area "F")
Jason HWANG	Fisheries & Oceans Canada
Jeff GUERIN	Fisheries & Oceans Canada
Jocelyne FOLEY	Golder Associates Ltd.
John DRESSLER	Williams Lake Chapter, Council of Canadians
John SLATER	Town of Osoyoos
Karen ROTHE	BC Min. Community Services
Ken CUNNINGHAM	BC Min. Environment, Water Stewardship Div.
Ken GORSLINE	BC Min. Environment, Water Stewardship Div.
Kevin REID	District of Peachland
Kevin REYNOLDS	Rutland Waterworks
Krista DERRICKSON	Westbank First Nation
Lee HESKETH	BC Cattlemens Association
Lillian ROSE	Regional District of Kootenay
Lorraine BENNEST	Okanagan Basin Water Board
Lynn KRIWOKEN	BC Min. Environment, Water Stewardship Div
Marcel PACHCINSKI	Columbia Shuswap Regional District
Meggin MESSENGER	BC Min. Community Services
Michael CROWE	DFO
Nelson JATEL	Okanagan Basin Water Board
Peter PRESTON	Rutland Waterworks
Phil HALLINAN	Fraser Basin Council
Remi ALLARD	Golder Associates Ltd.
Rick FAIRBAIRN	Regional District of North Okanagan (Area "D")

Robert FINLEY
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