

The Future of Water Workshop Series 2008 Engaging Youth on Water Issues

*Whole City-Whole System Change - A Watercentric View of Sustainability
Residential Workshop July 4th –6th, 2008 in Victoria British Columbia*

OUTPUT REPORT

The July 4th-6th workshop *Whole System-Whole City Change: A Watercentric View of Sustainability* focused specifically on urban water issues in Victoria. Land use decisions determine water use and watershed health now and in the future and have cumulative effects that complicate policy making. To meet increasing water demands, water managers are forced to find new water sources or increase demand on increasing sources. This in turn contributes to the cycle of over-built infrastructure for water delivery, wastewater treatment and stormwater management. Participants had the opportunity to explore the effect of municipal development decisions on local watersheds through site visits and presentations. Key questions included: How can we promote water sensitive design? How can we work towards requiring that all land use decisions be assessed for watershed impacts?



Victoria Waterlution Participants on the shores of the Sooke Basin

This workshop was the first of three Future of Water Workshops to be held in British Columbia in 2008.

Highlights

- 18 workshop participants with representation from the University of Victoria, University of New Brunswick, University of Waterloo, BC Ministries of Community Development and Environment – Water Stewardship Division, BC Agricultural Land Commission, EPCOR, Stantec, Westland Resource Group, Aquatex Consulting and the Fraser Basin Council
- Dialogue on key water issues facing urban settings, including integrated land use and water planning, governance, local action and leadership, and whole system change
- 10 site visits throughout the Gorge Waterway and freshwater aquatic habitats in and around Victoria
- 10 speakers with representation from private, academic, government sectors and community groups
- Facilitated discussion and debate on workshop themes throughout the weekend
- Follow-up discussion for further water dialogue through “Blue Drinks” session in Victoria on August 13th, 2008

Day 1 – Friday, July 4th

The workshop began on Friday evening (July 4th) at Glenairley Centre for Earth and Spirit just outside of Sooke on Vancouver Island. Glenairley began as a family-run farm in the early twentieth century and became a recreational and retreat property in the 1950's.



Participants getting to know one another at Glenairley

After snacks and some informal socializing, the group convened at the main lodge at Glenairley. Susanne kicked off the weekend by outlining the goals of the workshop:

- To learn about the factors involved in initiating whole system change
- To explore the importance of intergenerational learning – we need more than one generation to solve today's problems
- To learn from our peers working in the water sector– It's important to recognize the value of diversity of perspective among colleagues

The workshop had a truly water-centric theme in that Saturday's agenda was organized entirely around the tides because of the importance of getting through "the chute" on the afternoon dragon boat trip down the Gorge Waterway.

Susanne introduced the workshop co-planners and co-hosts, including:

- The workshop's "resident mentor" **Eric Bonham**, who has over 45 years experience in the water resource field both in the public and private sector, as well as involvement in community related stewardship initiatives. This was Eric's first Waterlution workshop and his wisdom and energy were integral to the success of the workshop;
- **Oliver M Brandes**, Associate Director at the POLIS Project on Ecological Governance and Water Sustainability Project Leader at POLIS;
- **Karen Kun**, director of Waterlution- A Water Learning Experience.

The Participants

The group settled into the opening circle and Susanne asked participants to explain who they are, why they were motivated to attend the workshop and to describe their favourite body of water.

Allyson Amster

Allyson grew up in southern New Jersey and has degrees in urban studies and environmental policy. Allyson has worked on urban environmental issues in New York City and Philadelphia, transboundary air and water projects in Israel, and researched the mining industry in India. She is currently on leave from law school and works as a Research Assistant at the POLIS Project.

Favourite H2O: Hudson River

Sarah Buchanan

Sarah is a graduate of Environmental Life Sciences and currently works with (POLIS/Waterlution special guests!) Patrick Lucey and Cori Barraclough of Aqua-Tex Scientific Consulting. She is interested in learning about urban water issues as she feels that water is often overlooked in urban centres despite water being a life-giving entity.

Favourite H2O: Witty's Lagoon

Oliver M Brandes

Oliver is Associate Director at the POLIS Project on Ecological Governance and Project Leader at the Water Sustainability Project at POLIS. Oliver admitted that he is “an addict and addicted to water.”

Favourite H2O: Upka Lake in Germany

Christina Burns

Christina’s interest in sustainability and community led her to the Fraser Basin Council where she is currently a research assistant and a member of its Youth Committee. Christina is particularly interested in building social networks in communities to help facilitate change.

Favourite H2O: Pacific Ocean

Donna Caddie

Donna works at the BC Ministry of Environment’s Water Stewardship Division. Donna is a new recruit to Canada and is a born and bred Kiwi (New Zealander). She has a Masters Degree in Environmental Policy (Planning) and an undergraduate degree in Linguistics and Education. After a career switch from teaching to environmental management, Donna has worked at the New Zealand and B.C. Ministry of Environment. She has significant experience in public consultation and participatory policy development as New Zealand has a devolved environmental management and governance framework.



Favourite H2O: Pacific Ocean

Jennifer Carson

Jennifer recently explored the challenge of reducing water consumption both within employment with the Sunshine Coast Regional District (SCRD) as a Water Conservation Assistant and academically within her undergrad thesis where she explored “Local Perceptions of Water and Water Conservation on the Sunshine Coast”.



The view and cabins at Glenairley Centre for Earth and Spirit

She has since moved on to become a land use planner with the Agricultural Land Commission - a job that she recognizes, as many jobs are, as intricately interwoven with water issues.

Favourite H2O: Pacific Ocean

Simon Ham

Simon is a biologist and an environmental educator living in Banff. Under contract to Parks Canada, Simon monitors wildlife corridors in winter and human use in the summer. He has worked on several wildlife projects in Banff in the last 10 years (Elk, Cougars, Wildlife Corridors) and spent spring and fall seasons at Riverwatch in Calgary. Simon is also a Waterlution Associate and organized a Future of Water Workshop in Banff in June 2008.

Favourite H2O: Pacific Ocean

Liz Hendriks

Liz recently completed a Master's in Environment Studies at the University of Waterloo which was sustained with a Water Policy Fellowship from the Walter and Duncan Gordon Foundation. Her professional experience has ranged from international, national and local work in capacity building for sustainability and water management issues. She has worked with the Alliance for Global Sustainability on sustainable leadership curriculum development, worked on community environmental education programs. She also partook in a two-year research project on the Water Soft Path concept in Canada. She is currently conducting research on the role of residential homebuilders in the uptake of water efficiency innovation. She is also the facilitator for the Canadian Water and Resource Association Mentorship Program.

Favourite H2O: Six Mile Lake

Ian Holl

Ian holds a Masters degree (York University) in Environmental Studies (Planning), and is a proponent of taking a holistic approach in developing sustainable planning and management practices, recognizing that human beings and ecological systems are inherently linked. He has broad interests in critical sustainability issues such as water, renewable energy, and food among others. Ian is currently a representative of the public-at-large on the CRD Water Advisory Committee, and recently worked in an auxiliary position with the BC Ministry of Environment in the Water Stewardship division.

Favourite H2O: Pacific Ocean near Maui

Brenlay Irwin

Brenlay is a recent graduate from UBC's International Relations program. Her multidisciplinary background allowed her to get involved in several different disciplines and helped to foster my interest in water issues. She has spent some time volunteering at Eco-lodge and Environmental Education Center in Costa Rica and has also worked as an Agricultural Worker in Bundaberg, Australia.

Favourite H2O: Georgian Bay

Sarah Jackson

Sarah joined POLIS in May 2008 as a governance research assistant focused on water governance and legislation. Sarah is currently studying law at UVic, with interests in environmental justice, sustainable development, dispute resolution and immigration law. She has an interdisciplinary background, with a Bachelor of Science in Global Resource Systems from UBC. She participated in an exchange and field studies in Australia, and worked as a researcher in Uruguay on a pilot project to evaluate water rights and distribution. She has work and volunteer experience in environmental education, and volunteers with the Victoria Intercultural Association. She is also a research collaborator with the law faculty as part of the ArcticNet project on climate change.

Favourite H2O: Rio Cuarem, Uruguay

Karen Kun

Karen is director and founder of Waterlution – A Water Learning Experience. Her other hat is the editor for Corporate Knights. She has three passions: water, communication and facilitation.

Favourite H2O: Lake Ontario

Gyn-Gyn Lee

Gyn-Gyn has worked for over 8 years with EPCOR in Edmonton, and currently oversees day-to-day operations and plant optimization at Rosedale Water Treatment Plant. She was Young Professional (YP) Committee Chair of the Western Canadian Section of the AWWA in 2007 – and joins us all the way from Edmonton!

Favourite H2O: Agasi Farm

Tara Lindsay

Tara is an Assistant Environmental Planner at Westland Resource Group in Victoria where she is currently working on a number of projects that involve planning and water issues. Westland Resource Group produced the Cowichan Basin Water Management Plan, which recently won a planning award from the Planning Institute of British Columbia. She is working with the local government and the community to start implementing the plan in the Cowichan Basin to try and address winter flooding and summer water shortages in the valley.

Favourite H2O: Pacific Ocean

Susanne Porter-Bopp

Susanne is the Community Water Coordinator at the POLIS Project on Ecological Governance where she works with local governments to develop innovative long-term and integrated water conservation plans. She is also a Waterlution Associate.

Favourite H2O: Lake Ontario in winter

Mark Randall

Mark is a Geological Engineering student at the University of New Brunswick in Fredericton. Last year he was involved in the Engineers Without Borders outreach program at UNB. His team of volunteers traveled around to different elementary schools giving presentations about water quality and quantity issues in the Third World. He is planning to continue my studies with a graduate program in water resources or hydrology.

Favourite H2O: Atlantic Ocean

Mark Sinclair

Mark works on water conservation tools at the BC Ministry of Community Development Mark is thinking about taking environmental education at Royal Roads.

Favourite H2O: Candle Lake, Saskatchewan.

Gregory Smythe

Greg's interests in urban sustainability, and water being an integral part of that system, stems from his academic training in sociology and has been propelled through his practical experiences in community development, sustainability education and sustainable earthen masonry (cob/permaculture). He holds a sincere enthusiasm for the opportunities that community level problem solving offers us, and believes in participatory approaches to education and that education is a process of dialogue and exchange.

Favourite H2O: Okanagan Lake

Celine Steinfeld

Celine is a visiting researcher from Australia. She is interested in building smarter, water-wise cities. Celine was a volunteer and staff member for over 5 years at a local government urban sustainability resource center in Sydney, Australia where she facilitated workshops on waste, water and ecological footprints to members of the community, and coordinated an outreach project focused on waste education.

Favourite H2O: Jervis Bay.

Lise Townsend

Lise is an ecological consultant with a background in environmental science, and is currently completing a Master's degree at the University of Victoria, entailing a watershed-scale assessment of urban ecosystem function. The study consists of a variety of field indicators related to hydrology and vegetation, Proper Functioning Condition assessments, historical research and mapping. Lise works with Aqua-Tex Scientific Consulting Ltd., one of the authors of the recently released Integrated

Resource Management plan outlining options for sewage treatment and energy production at the neighbourhood scale.

Favourite H2O: Kootenay Lake

Kerri Trace

Kerri currently works at Stantec Consulting Ltd. where her work focuses on erosion and sediment plans and reports, site inspections, municipal water design and LEED projects that allow her to work with “green” building technology. Her educational background is civil engineering (Camosun) and environmental science (Royal Roads). She currently volunteers with the Applied Science Technicians and Technologists of British Columbia for its TechGreen initiative.

Favourite H2O: Buttle Lake

Jennifer Wong

Jen joined the POLIS project in May 2008 as an intern with the Water Sustainability Project after completing an undergraduate in Political Science that focused on the politics of freshwater at the University of Victoria. Jen has worked as the WaterSmart coordinator at the Regional District of Nanaimo and assisted as a summer student on the Capital Regional District's Waterwise program. She has a passion for putting theory to work on the ground and researching innovative

Favourite H2O: Sombrio Beach

Eric Bonham

Eric came to Ontario from Scotland in '66 after earning a degree in Civil Engineering – from the University of Paisley Scotland. Eric later moved to British Columbia, where he worked in a range of fields including Federal (hydrology), moved into MOE and into floodplain work. Eric is a member of the Institute of Civil Engineers of Great Britain (MICE). He earned a BA Political Science at the University of Victoria 1986 and is a Professional Engineer of BC (P.Eng).

Favourite H2O: Fork Lake

Evening Discussion: Grassroots Leadership

Resident mentor Eric Bonham closed out the evening by leading a discussion on grassroots leadership and the story of Gowlland Tod Park. The process of establishing the park was interesting in that a successful outcome was reached in a somewhat unorthodox manner. Eric noted that the power of having a very clear vision of the goal combined with the strength of collaboration demonstrated that success can occur even in the most unlikely of situations.

Eric also shared Rick Searle's short film “Climate Change Lower Mainland”. The film depicts the projected effect of climate change on Vancouver and the lower mainland and captures the complexity of climate change. Eric suggested that climate change could be doing us a favour by presenting us with an opportunity to change. A discussion on the extent to which we need to rethink how we plan and build our cities followed, including:

- When and how to manage buildings
- Looking at international best practices (ex. Holland in regards to managing floodplains)

“There is not one mentor in the room. It's a true circle”.

- Resident mentor Eric Bonham

~ Take Home Message ~

- The power of collaboration in working towards a common vision.
- The ability to create partnerships and embrace diverse viewpoints is essential when addressing the complexity of issues such as water sustainability and climate change.

- The public palatability of alternative planning and how changes in planning require fundamental changes and a revisioning of decision making process
- Funding for alternative building and availability of resources

Day 2 – Saturday, July 5th

Oliver Brandes on “Ecological Governance” and Whole System Thinking

Oliver opened the day at 7:45AM with an overview of the University of Victoria’s POLIS Project and of the concept of ecological governance.

The POLIS Project on Ecological Governance is a centre for transdisciplinary research that investigates and promotes sustainability. POLIS was established in 2000 by the Eco-Research Chair of Environmental Law and Policy at the University of Victoria and fills a unique niche on campus as a place where academic and policy research meets community action. POLIS researchers work together with a diversity of people in different ways – urban and rural communities, First Nations, Aboriginal organizations, businesses, co-operatives, public officials and the non-profit sector -- to foster healthy and sustainable communities. The POLIS mission is to cultivate ecological governance through innovative research, policy analysis and strategic advocacy, law reform, education and community action.



Early morning breakfast at the main lodge at Glenairley

Oliver encouraged participants to think about ecological governance throughout the weekend as a robust concept that underpins a lot of what we will be exploring together. “Governance” is jargon to most people but it is in fact a distinct concept. *Ecological* governance means embedding the environment in all levels of decision-making and action – from the personal to the global. It means thinking about our cities and communities, our forests and watersheds, our economic and political life within a new paradigm that treats the environment not as an add-on or afterthought, but as all-encompassing and all pervasive. Ecological governance is thus about democracy and community. It is also about the natural world within which our communities exist and interact, and which sustains us.

~ Take Home Message ~

- *Ecological governance* means embedding environment into the decisions we make NOT simply tacking “environment on.”
- Underlying assumptions of ecological governance: economy is subset of ecosystems rather than the other way around; it moves from optimization to resilience; it recognizes the limits of the biophysical system; accepts complexity and uncertainty and the need to take prevention and precaution seriously

**Walking Tour of Innovative Aquatic Habitat Restoration Sites
with Patrick Lucey and Cori Barraclough of Aqua-Tex Consulting Ltd.**

After Oliver's early morning talk the group boarded a chartered bus at Glenairley and headed off to meet Patrick Lucey and Cori Barraclough of Aqua-Tex Scientific Consulting Ltd. Aqua-Tex is a mission-based consulting firm that works with developers, small businesses and local governments to restore and manage



The group (and a keen onlooker) meets Patrick and Cori of Aquatex on the Lochside Trail

urban freshwater and drinking water supplies. Patrick and Cori's work is guided by the belief that by linking stream and watershed function with development and using techniques that mimic nature's natural ability to store water and clean pollutants, developments can be built for less money, with more stable and cost effective drainage systems, while also creating attractive green spaces, restoring water flows, rebuilding habitat, and significant municipal infrastructure costs.

Our first two stops of the tour were along Blenkinsop Creek. The Creek is the major tributary to Swan

"For 6000 years we as a species have figured out how to get water off the land. For 350 billion years nature has figured out how to keep water on the land. In 100 years we'll have to figure out how to keep water on the ground."

-Aqua-Tex's Patrick Lucey

Lake, an urban lake surrounded by a nature sanctuary in the middle of the Municipality of Saanich. Blenkinsop Creek has been severely channelized by agriculture and urban development throughout the watershed and is the receiving water for urban storm drainage. The first phase of this project restored approximately 700m of Upper Blenkinsop Creek by relocating and restructuring the channel, replanting native riparian vegetation and allowing the creek to access its natural floodplain. This project rejoined two fields that were previously divided by a ditch. This allowed Galev Bros. Farms to use a single irrigation system (instead of two separate systems) and to use one access road instead of two, which in turn increased the area of land under cultivation by approximately 13%. By moving the creek alongside Lochside trail, the project was able to take advantage of an



Patrick shows the group how Aqua-Tex was able to reconcile urban and agricultural development on the Galev Bros. Farm in Saanich.

existing vegetation buffer and create viewpoints from the trail. This project discussion even caught the attention of passerby's who stopped to listen in on the discussion.

After Blenkinsop Creek the group headed to Willowdale. This site is an urban in-fill development on former agricultural land. This site was within the 200-year floodplain for Swan Creek and two developers had approached the municipality with traditional engineered solutions to stormwater management and flood control; however, this approach was not supported by the community. An innovative approach to stormwater management that would alleviate liability concerns for flooding and provide protection for Swan Creek was required. By choosing to develop the property in conjunction with the restoration and stormwater treatment, the developer was able to obtain approvals and start construction in a very short period of time (63 days for all approvals). The property was subdivided to provide 31 single-family homes, with 17% of the property dedicated to Saanich as parkland. This project has won several environmental awards.



Workshop participant Lise Townsend shares her graduate work on habitat restoration in Swan Lake

Patrick and Cori left the group with three questions:

1. How do we value natural capital?
2. What does it mean to design by nature?
3. If designing with nature is going to be our future, how do we need to change the governance structure (i.e. the ways we currently manage water) to reflect the changes needed on the ground?

~ Take Home Message ~

- Streams are indicators of the health of landscape
- "It's just about the money. Money is the only thing on the table. But money is just a currency to make change to occur." The currency that nature uses is ATP (energy)
- Everything has to be integrated – it's a matter of design, you can make more money on a better designed and ecologically restored property
- We have to rethink managing land from a zoning approach to how we can develop our homes and land differently

Lunch – Gorge Waterway Discovery Centre in Esquimalt Gorge Park

The group gathered for lunch at the new Gorge Waterway Discovery Centre in Esquimalt Gorge Park. At the Centre we were met by a number of community group representatives who had set up an array of displays for the group to peruse over lunch, including Cathy Carolsfeld of Westwind, Sara Stollard and Julian Crown of the Gorge Waterway Initiative, and Angus Stewart



Checking out the new Gorge Waterway Discovery Centre in Esquimalt Gorge Park

of Seaquaria in Schools. We also met up with our afternoon hosts (and workshop co-planners) Liam Edwards and Michael Zbarsky of the BC Ministry of Community Development.

Liam discussed the importance of community stewardship groups in water sustainability and highlighted the story of Cecelia Creek in which a local group took the initiative to rehabilitate the Creek. After lunch, Township of Esquimalt Arborist Jeff Rietkerk led the group on a walking tour of Cecelia Creek and highlighted some of the aspects of the Creek rehabilitation.



Exploring ocean critters in Seaquaria's touch tanks



Oliver Brandes and Eric Bonham take in the Gorge Waterway Discovery Centre



"Weather making" with Angus Stewart's awesome Victoria watershed model

Dragon Boat Tour Down the Gorge Waterway

As we made our way over to the Victoria Canoe and Kayak Club for our dragon boat activity, Liam picked up on Patrick Lucey's earlier question to the group and asked us to consider the complexity of jurisdictional issues related to the governance of the waterway and to think about the ways we can change the way we govern water to make the positive change we need. For example, the



Getting ready for take-off at the Victoria Canoe and Kayak Club...



restoration of Esquimalt Creek began with an individual vision but took participation of all government jurisdictions to be successful.

After settling into a 22-seater boat (with guides Stephen Lee and Tony of the Victoria Canoe and Kayak Club) Liam and Mike led us on 2-hour trip down the Gorge to look at land use impacts on aquatic environments and explore mitigation measures. We began by looking at the pros and cons **hardened vs. natural shorelines** and also took a water-eyed view of the **Cecilia Creek restoration efforts**.



Budget Steel

Next we paddled to **Budget Steel**. Established in 1981, Budget Steel specializes in the collection and processing of scrap steel and iron, as well as nonferrous metals such as copper, aluminum, stainless steel, brass and lead. Budget Steel ships recovered metals to North American and foreign steel mills to be used in the re-manufacturing of new products. Fittingly, Budget Steel now sits adjacent to land owned by Peter O'Reilly in the late 1800's, the colony's first gold collector. Liam and Mike noted that while the site has significant negative environmental effects through leaching and sediment loading, its central location on the Waterway means that there is reduced truck traffic and it also provides an increased tax base for the CRD.



Liam Edwards readies the group for the trip down the Gorge

Our next stop was **Rock Bay** to look at intensive contaminated site remediation. The site has

hosted industrial activity since the mid-1800s, including a coal fired gasification plant for 90 years until 1950. Fractured and overlapping governance and areas of jurisdiction, and decades of runoff and pollution dumping from nearby gravel operations and former mills has earned Rock Bay the title of the most polluted harbour in Canada after Halifax Harbour. With the recent trend in urban living movements (more people moving into the downtown core), Rock Bay is one of the few areas remaining in Victoria that lends itself to high development potential. In 2004, public pressure eventually forced the federal government (Ministries of Transport, Fisheries and Oceans, and Environment) and BC Hydro and Power Authority to lead an extensive and costly (\$32.1 million) clean up of the area.



Rock Bay

Our final stop was **Dockside Green** as an example of brownfield sustainable development. Dockside is a 1.3 million square foot mixed-use community built according to LEED ND (Neighbourhood Design) certification standards. The project aims to restore industrial land in downtown Victoria that over the past one hundred and fifty years has been used for shipbuilding, CN Rail, freight and storage buildings, a cedar shingle mill, a propane operation, iron and metal trading operation and an asphalt plant.



The City of Victoria sold the land to Windmill Developments for a mere \$1 million on the condition that the company would be responsible for site remediation. The development will feature on-site liquid waste management and re-use, rainwater capture and use, and onsite power generation through gasification wood pellets. Dockside Green's innovative approach to conserving and reusing water will save approximately 70 million gallons per year; the same amount used in the Greater Victoria area on the year's driest day. One hundred percent of Dockside Green's sewage will be treated on-site and reused primarily for toilets and irrigation, reducing the demand for potable water. Residual treated water will recharge the waterway that flows across the site.



Under cloudy skies the group paddled straight back up the Gorge to the VCKC where we said goodbye to Liam and Mike (and our caller and steersman Stephen and Tony) and hopped back on the bus to Glenairley for dinner and the evening session.

Evening Discussion: Bob Sandford and Jim Mattison on Government Leadership

Bob Sandford is Chair of the UN Water for Life Decade Initiative and has been a partner with Waterlution's Future of Water Workshop Series since 2006. Bob flew directly from a conference in Spain to provide an inspiring talk about the good work being done on freshwater management in Canada,



Bob Sandford addresses the group on Saturday night

the great work that needs to be done and the leadership and direction from our generation that is needed to make it happen.

He touched on the following points:

- Importance of institutional history
- How the problems used to be framed, why and how they were addressed
- The promise of our informed and passionate generation

Current challenges:

- Self perception and failure of adaptable government
- Myth of water abundance -> dangerous and hardest to overcome
- Myth of management and success -> we believe our own self promotion; sustainability has turned into what suits us and not what suits nature
- We have NOT addressed water in our own country even though we like to think we have (problems of sanitation, from an international perspective we are slow to do what we say we're going to do)

Bob had invited Assistant Deputy Minister at the BC Ministry of Environment Jim Mattison as a guest to the Saturday evening presentation. With some prompting from Bob, Jim rose to the occasion and provided an impromptu talk to the group on the recent release of his Ministry's *Living Water Smart: British Columbia's Water Plan*. Bob pointed to a real opportunity for change with the release *Living Water Smart*. Jim provided honest answers to participants' questions and was aware of the difficulties of implementing these sorts of plans. Bob noted that implementation in general is widely underestimated, and that real reform requires changes in bureaucratic mechanisms and human behaviour. Jim encouraged participants to get in touch with his office if we had specific ideas for implementation.

Discussion points included:

- Most exciting time to be in water -> new innovative ideas but problems still being created faster than they are being solved
- Can't separate water and food production and cities and food; Jim noted that "We eat more water than we drink" through virtual water in food production;
- Cities are the most taxing ecological demands we put on our planet - urban centres must recognize the role of natural resources in the wealth of cities
- "Difficulties of implementation grossly underestimated" i.e scale of changes are difficult (reallocation, regs, licensing, political will; imp. Of sense of place and culture – no 1 size fits all) - Major reforms stall out at adoption and implementation
- Does BC government have the will to push human behaviour?
- BC water strategy is a door opener but it needs public support, leadership - Must be inspired but must framed to get public support Must be inspired but must framed to get public support

Day 3: Sunday, July 6th

After breakfast, Bob briefly sat down with the group and challenged us to take a leadership role in addressing these problems. He also re-emphasized the opportunity that BC's new water plan presents and encouraged us to rediscover the importance of public servants.

Eric then shared the experience of Convening for Action on Vancouver Island (CAVI) as a positive example of collaborative grassroots action and on-the-ground success. CAVI brings together local government and the development community and provides leadership, coordination, research and education. The group's activities are grounded in a "design with nature" way of thinking that encourages water-centric planning. Eric

suggested that the collaborative nature of CAVI and its integrated mission have the potential to become the new “business as usual”, an arrangement that will enable lasting stewardship even with government turnover.

Facilitated Discussion with Karen Kun

The Open Space session sought to have the group identify what they saw where the biggest issues to discuss.

Karen reminded the group of the main elements of Open Space:

- Whoever comes are the right people
- Whatever happens is the only thing that could've
- When it starts is the right time and when it's over it's over.



Is There Something We're Forgetting?

(Hosted by Celine)

Questions:

Is there something we're forgetting?

Condoms, population, carrying capacity and growth

We still let population and growth control everything

Topics Discussed:

- Population growth needs to be capped
- Conserved water should go to rivers, not people. Otherwise we stimulate growth
- Scarcity is a human problem, not an environmental problem
- How? Condoms and education. Relatively inexpensive compared to a military budget
- Population cap must be flexible and assessed

Managing People Not Watersheds (Hosted by Jen Wong)

Questions:

What are some strategies and steps we can take to create long-term comprehensive demand side management water programs for municipal managers?



Topics Discussed:

- Need capacity, information, awareness and initiatives
- Think about best management practices of wastewater, multiple use and quantify supply
- Capacity and stewardship mapping

Food Security, Land use and water (hosted by Jennifer Carson)

Topics Discussed:

Urban agriculture – growth for food for personal use

- People are disconnected from food
- Need to make it more accessible. For example, create a Science World exhibit for food/agriculture that explains monocrops, organic farming and what these do to land/water/health
- Make it easier for people to find out how they can make better decisions For example, food currently has nutritional labeling – put on carbon labels and promote the idea that all food is not equal.

Organizing Governance Around the Watershed (hosted by Sarah Jackson)

Questions:

How can we organize at the watershed level?

How can we make ecological governance work?

- work towards collaboration
- balance leadership and action with participation
- go back to phone calls! – email tends to slow down the process

Examples: Fraser Basin Council facilitates communication – it does not make decision but brings decision makers together

- Barriers are complicated geography and political boundaries

Nested governance strategy in Alberta

- structure is in place, people are there
- may take time to make groups effective

Balancing collaboration with structure

- get people to work together then define the structure
- connections – build networks and social capital with people who are ready to take on issues
- strong leadership and participatory approach – what does government do?
- Use peer leverage – in many ways peers can motivate change



Different ways of thinking: East meets West (hosted by Lise Townsend)

Questions:

How can we combine different forms of knowledge and inquiry (ex. intuition and rationalism, arts and science, indigenous and western knowledge)

Topics Discussed:

- Western approach dominates thinking
- Buddhism practices self-awareness as well as outward action
- We need to admit our position/limitations and ask if we are all “on the same page”
- How do we get more openness beyond an overly-structured world view/intuition can still play into scientific inquiry
- Science and eastern approaches are now converging – ex. quantum physics
- It’s important to play! Ex. alternative office setups

If it's all about the money, how do we "sell" environmental protection and put words into action? (Hosted by Donna Caddie)

Topics Discussed:

- Realistic, manageable pieces
- Bring the people who are damaging on board
- Develop trust between different players
- Do we really need to share goals and beliefs? Show benefits – and what people can get out of environmental protection
- Demonstration projects where clear values are achieved
- Simplify messages and make visual; make info relate to people and their activities and interests
- Leverage higher fuel costs and people's care for water understand that other people's priorities are not the same as yours
- Make environmental protection the path of least resistance
- Make it available to all partners who join
- Tell me what to do and I'll do it

How to re-establish connection with nature in our urban centres? (hosted by Sarah Buchanan)

Topics Discussed:

- Different perspectives – which direction are you looking? How do you know what to look for?
- Recreate meaning
- Interaction with plants and animals is important
- Sense of identity is built around environment you are in
- Ecological literacy – building a connection with the land
- How to get children interested and involved in nature? Use labels to show the lifecycle of the product you're purchasing
- Remove boundaries between urban areas and green spaces
- Creation of a new narrative – the memories that stick with us.

Closing

Participants were given time to reflect on the weekend, what they learned and where this workshop could take them.

"The cross sectoral and intergenerational dynamic provides longevity to the ideas and networks produced."



Closing circle

"This weekend helped re-establish, for myself, the importance of consensus building and reaching common ground with stakeholders. It has left me with a new sense of optimism that political, economic, social, and environmental hurdles can be overcome with effective communication."

“Having speakers who have been in some capacity involved with water issues in their career was informative. It’s nice to know that there are other resources we can tap into for knowledge gathering. As well, it’s inspiring to know that our generation is valued.”



Victoria Waterlution Participants on the shores of the Sooke Basin

~THANK YOU ~

A BIG thanks to Liz Hendriks for taking notes, Sarah Jackson for the fantastic photos, and Jen Wong for assistance throughout the workshop.

And many thanks to all of our speakers, planning team, supporters and sponsors who made this event a success!