

## The Future of Water Workshop Series 2009 Engaging Youth on Water Issues OUTPUT REPORT



Watershed Planning and Community Engagement  
Residential Workshop April 24<sup>th</sup>-26<sup>th</sup> 2009, Comox Valley, British Columbia

### Workshop Highlights

- 24 participants from the University of Victoria, Simon Fraser University, University of British Columbia, University of Waterloo, BC Ministries of Community Development, Environment – Water Stewardship Division and Healthy Living and Sport, Environment Canada, Department of Indian and Northern Affairs, City of Vernon, Town of Whistler, Metro Vancouver, Sunshine Coast Regional District, Nuu-Chah-Nulth Uu-a-thluk Fisheries, Comox Valley Project Watershed, Aquatex Scientific Consulting, EcoFish Research Ltd., Urban Strategies Inc., Wedler Engineering Associates, and Westland Resource Group.
- Dialogue on key water issues facing the Comox Valley watershed, including land use and water planning, governance, and local action and leadership.
- 7 speakers/mentors from Comox Valley Land Trust, Tsolum River Restoration Society, Cumberland Community Forest Society, Comox Valley Regional District, POLIS Project on Ecological Governance, Vancouver Island Health Authority, Department of Fisheries and Oceans, and BC Hydro
- 5 site visits throughout the Comox Valley including the Puntledge Hatchery, BC Hydro generation station, Comox Valley Regional District water treatment plant and reservoir, and the Cumberland Community Forest.

## Purpose of the Programme

Located on the eastern edge of Vancouver Island under snow-capped mountains, the Comox Valley is home to nearly 70,000 British Columbians as well as the K'ómoks First Nation. The *Community Engagement in Watershed Planning* residential workshop aimed to engage Canadian youth in dialogue surrounding current water issues in the Comox Valley watershed. This workshop was the third Future of Water Workshop series to be held in British Columbia since 2008.

The region is one of the fastest growing in British Columbia and the local government, the Comox Valley Regional District, is currently developing a suite of critical water-related plans to address this growth, including a regional water strategy with Comox Lake as the main source to address the region's heavy growth. Participants explored how various community stakeholders, including a strong network of environmental organizations, local and provincial levels of government and industry, are working together to address a wide range of issues and priority areas in the Comox Valley through field tours, presentations, and facilitated discussions.

## Friday, April 24<sup>th</sup> – Introduction and Big Picture Thinking

The workshop began on Friday evening at the historic Riding Fool Hostel in Cumberland, approximately 200 kilometers north of Victoria on Vancouver Island.

After snacks and some informal socializing, the group convened in the living room at Riding Fool. Waterlution Associate and POLIS Project Community Water Coordinator Susanne Porter-Bopp kicked off the weekend by outlining the goals of the workshop:

- To learn about what planning at the watershed level looks like from a water centric perspective.
- 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 world – it's important to recognize the value of diversity of perspective among colleagues working across sectors

## Opening Circle

The group settled into the opening circle and each participant was asked to explain who they are, why they were motivated to attend the workshop and to describe their favourite water-related expression.

The group was also introduced to the workshop's co-planners and co-hosts, including:

- **Michael Zbarsky**, Engineering Analyst at the Comox Valley Regional District and creative and logistical spark of the workshop
- Weekend "resident mentor" **Jack Minard**, Executive Director of the Comox Valley Land Trust and of the Tsolum River Society
- **Oliver M Brandes**, Associate Director and Water Sustainability Project Leader, POLIS Project on Ecological Governance

See pages 9 to 15 for Participant, Mentor and Waterlution Associate Biographies

## Presentation #1: "The Big Picture"

**Jack Minard, Executive Director, Comox Valley Land Trust and Executive Director, Tsolum River Restoration Society**

Jack drew from his varied background of logging, sawmills, commercial fishing, theatre, sailing and community activism to talk about the importance of balancing growth and ecology on Vancouver

*"Ultimately water will eventually determine growth limits in the Comox Valley."*

- *Resident mentor Jack Minard*

Island. Beginning from a global perspective, Jack offered a critique of the classical economics approach to “resource” management that operates without connection to the biosphere. One way to reverse this dominant economic paradigm is through restorative economics, which requires a regional approach to planning. Jack emphasized the great strength of collaboration and partnership in working towards regional sustainability so that everyone has a strong sense of responsibility and commitment. The Comox Valley Land Trust has taken some important steps towards a community-based ecosystem approach to planning by building trust and garnering community support for initiatives such as the “Development Scorecard.” The Scorecard has been a success with different levels of government yet local developers are becoming more active than local governments in helping to move “green agenda” along.



Jack’s session ended with an animated group discussion of the role of government and how it interacts with the public and the ways in which these interfaces can be improved. Jack’s discussion helped participants get thinking about the idea of “government” and “governance”, which POLIS Project Associate Director Oliver Brandes expanded on in his talk on Saturday morning.

## Saturday, April 25<sup>th</sup> – Morning Presentations

### **Presentation #2: “What Is Ecological Governance and Why Is It Important?”**

#### **Oliver M Brandes, Associate Director and Water Sustainability Project Leader, POLIS Project on Ecological Governance**

Oliver opened the day at 8:30AM with an overview of the University of Victoria’s POLIS Project and a “shallow romp through the deep pond” of ecological governance. How we deal with the allocation and management of resources is a governance issue and we need our government mechanisms to be flexible and allow for innovation. As a society we are entering the “era of responsibility” and that means that government, stewardship groups and individuals need to take responsibility for what happens to our ecological systems. Ultimately, how do we communicate the changing role of government and maintain capacity?

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.

### **Presentation #3: “Planning in a Watershed vs. Watershed Planning”**

#### **Michael Zbarsky, Engineering Analyst, Comox Valley Regional District**

Mike opened by providing an overview of the region and how it’s currently facing a 7.1% “growing pain” over the past five years. This rapid growth has put extreme pressure on services such as water and wastewater and has intensified competing uses over land and water resources. The CVRD is working to make sense of it all and work with all stakeholders despite limited finances and human resource capacity. Mike asked the group to consider whether a growth strategy should come *in advance of* assessing the region’s ecological needs through sustainability and particularly water-related strategies.

In this case, the CVRD is pursuing a Regional Growth Strategy first, with other strategies such as the Sustainability Strategy and Water Supply Strategy feeding into the RGS. The Regional Growth Strategy is proceeding at full speed and other initiatives are proceeding with the knowledge and hopeful integration with the RGS. The CVRD is aiming to adopt the RGS before the end of 2010, after which each local government in the Comox Valley must adopt a regional context statement within their Official Community Plans within two years. In the meantime the region also faces water quality and quantity issues which the CVRD is working to address through other planning strategies such as a water efficiency plan. While metering is included in this plan, it may be left out of the initial phase of implementation in order to gain better public understanding and support as well as for CVRD to better determine the cost/benefit of this measure.

These complex and overlapping planning processes raise a number of important questions: How can these various plans/strategies be best integrated? What role will water play in growth management? The discussion following Mike's presentation touched on the question of how the concept of ecological governance can be reconciled with the reality of these strategies. In sum, this session helped illustrate the on-the-ground challenges for local governments in sustainability planning and was a great contrast from Oliver's talk on ecological governance.



#### **Presentation #4: A Global Spin on Watershed Planning and Management**

**Donna Caddie**

Sustainable water management depends on the interplay of three things: allocations, governance, and planning. We need to make sure that the system we promulgate considers and clarifies the needs and the requirements for all three factors to be successful. There is a real need to integrate (land and water, surface water and groundwater and quality and quantity) and provide clarity around roles, expectations, accountability and security of supply. Additionally, planning mechanisms need to be attractive (process, cost, resulting statutory ability) in order to gain wider uptake.

Donna outlined three kinds of management frameworks:

1. A *prescriptive framework* says clearly what you can and can't do. Benefits include clear understanding but negatives include that it is rigid, there is no room for community involvement and often the legislation can't respond to new activities which means new laws may be written and added to on an ad hoc basis causing fragmentation. It doesn't have room for innovative solutions. It may also mean that the activities are regulated but the desired results are not achieved.



2. A *results-based framework* sets out results you want to achieve and then manages activities for the results. There are benefits to this including you have your eye on the prize rather than the activity and you can focus attention on action that are hindering the achievement of the result. You need to make sure your result is measurable and the activities can indeed be managed to prevent non-compliance. The results you choose to manage for need to be holistic and integrated.
3. An *effects-based framework* is similar. A basis premise is you can do anything you want as long as you can manage or avoid the effects of that activity – it doesn't control the activity. This puts onus on the user to make sure they do not have an impact on the environment. This works really well for activities that have clear cause and effect relationships but may not work as well on cumulative effects or where effects are or have unintended consequences. An effects based system also needs clear guidance for monitoring.

All models have the capacity to put ecological sustainability as a priority outcome.

We need to think about all three: Where do we need to be prescriptive, what results do we need to aim for and what effect need to be closely managed so we achieve our results. Where and how can the user get involved? Need to clarify and share roles and responsibilities between users, community and First Nations and other levels of government.

When thinking about changes to governance we need to learn from other processes. Donna pointed to the example of New Zealand which underwent a massive effort to rationalize its environment legal framework and local government structure. An extensive stakeholder consultation effort led to an unprecedented alignment among business, government, and the public interest community in support of the reforms.

Finally, Donna shed some light on the “black box” of how policy and legislation move through government in Canada:

1. Identify problem, research solutions, consult, revise
2. Propose solution, get accepted, prepare request for legislation
3. Cabinet, treasury and natural resources committee review
4. Draft legislation, cabinet review.
5. Present and read, 1, 2, 3 times
6. Get Royal assent, Bill becomes law.

### Afternoon Tour

After the morning's presentations the group hopped on a bus to have a brown bag lunch at Simms Park in Courtenay. On the way the bus stopped briefly to have a look at the watershed's source, the Comox Glacier. At Simms Park participants spent some time perusing a number of displays that had been set up by community groups in recognition of Earth Day, including an awesome 3-D model of the Comox Valley watershed that had been put together by local group Comox Valley WaterWatch.



After lunch the group headed to the Comox Valley Regional District's water supply intake which is adjacent to a BC Hydro dam on Comox Lake. Since 1967 Comox Lake has been the primary drinking water supply for 38,000 people – over half of the 60,000 who live in the Comox Valley. Alternate large water supplies have been sought for four decades but none have been found.

Anne Davey, Maintenance & Operations Manager for BC Hydro – Vancouver Island Generation talked about the role that BC Hydro plays in water conservation and aquatic habitat stewardship. Given that BC Hydro and the Department of Fisheries and Oceans hold the two biggest licenses for Comox Lake, their actions have the potential to significantly impact the drinking water supply for the Comox Valley.

The group then took a jaunt around beautiful Comox Lake where we considered the varied uses of the area and in turn how vulnerable the drinking water supply is. After the hike we ended up at the Department of Fisheries and Oceans' Puntledge Hatchery where we met Brian Munro for a tour of the site. Next we met with Kerry Mayo, Manager of Water Services Comox Valley Regional District. Kerry took us through the CVRD's chlorination station and then to the reservoir.



The group ended the afternoon field tour with a guided hike through the Cumberland Community Forest (CCF) with CCF Society founding chair and president Andrew Nicoll. The CCF is a great example of community stewardship in action wherein 150 acres of forest that would have otherwise been slated for development was purchased for \$1-million by a public group and then held in public trust with a strict covenant on it prohibiting future development.



### Dinner and Evening Session

After a delicious dinner of BBQ'd salmon and potato salad back at the hostel (and some cake to celebrate Andrew and David's birthdays!), the group settled into the evening's session with Dr. Charmaine Enns, Medical Health Officer with the Vancouver Island Health Authority.

### Presentation #5: From A Drinking Watershed Risk Assessment...To Action Dr. Charmaine Enns, Medical Health Officer, Vancouver Island Health Authority

Dr. Enns outlined the unique process in which VIHA is currently involved get from a Watershed Risk Assessment to a Drinking Water Protection Plan request. The DWO can request the Provincial Health Officer to make a recommendation to the Minister to designate an area for a DWPP. In this case (the only one of its kind in British Columbia), all other practicable measures under the Act have been explored, and so a DWPP recommendation has been requested. If/when a Ministerial order is received, the planning begins. The completed plan must go before Cabinet and if approved becomes regulation.



The Drinking Water Protection Act provides flexibility in how an order can be crafted. If the Minister decides to further investigate the potential role of a DWP Plan, it's expected the Regional District would be engaged in that process.

Dr. Enns concluded by asking participants to consider an acceptable level of risk. She emphasized the importance of involving the public in decision-making, and pointed to some of the findings of Justice O'Connor's Walkerton Inquiry. In particular, "Tying the risk assessment and management processes to the safety of drinking water and to public acceptance requires that those who make decisions affecting drinking water...must involve those who bear the risks (the public) in the decision making process." A lively discussion followed the conclusion of Dr. Enns' presentation, and she was kind enough to stick around and chat with participants late into the night.

## Sunday, April 26<sup>th</sup> – Morning Session

### **Presentation #6: Effective Stakeholder Engagement Amelia Loye**

After a relaxing breakfast at the hostel, Amelia kicked off the final day of the workshop with a session on effective stakeholder engagement. She began by asking participants to think of themselves as sustainable change agents. The most effective change agents maximize their niches, must be self-sustaining and need to stay positive.

Amelia also shared her experiences working as a water policy advisor in Queensland, Australia. When making the water supply plan in response to the major drought in that area, the local government worked hard to cultivate the concept of social responsibility and goodwill. The campaign was eventually met with message fatigue and engagement fatigue, and so Amelia advised participants to think broadly when thinking about engagement - there are lots of ways to do it and lots of forms where it is needed. The International Association for Public Participation (iap2) was pointed to as a good resource for engagement.

### **Departing Thoughts from Jack Minard and Oliver Brandes**

Before moving into the self-facilitated discussion sessions, Jack and Oliver shared a few parting words on the value of social capital with the group. Jack emphasized the importance of listening and communicating without going out with your own agenda, and that it is important to limit your inner talk and when you are listening to make sure you are hearing people correctly. It's also important to know *why you want to engage people*. Oliver observed that we always think somewhere else is interesting but there are a lot of themes that are similar across scales and the local is valuable too.



### **Open Space**

The Open Space session was an opportunity for participants to set the agenda themselves, and allow them to continue dialogue on issues most important to them or to bring up issues that had not yet come up. Participants proposed their questions, formed their own groups and picked their discussion locations in the hostel.

Susanne 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

Discussion Sessions:

### **What is Living Water Smart? (Hosted by Naomi)**

- Grand vision document released by the Premier's office
- Implementation missing – where is the “how”?
- Online tool to better understand water governance would be beneficial (provided by the Provincial government).
- The fact that LWS is no longer an active file is a disappointment – needs teeth NOW as we're wasting time investing in the wrong infrastructure.
- What tools are available for assisting communities?
- Does it have value?

### **How Do We Deal With Climate Change In Water Planning And Governance?**

- Climate change mitigation vs. adaptation
- Linking water with energy conservation is important. POLIS recently released a report examining the impact of water efficiency measures of greenhouse gas emissions.
- How can we leverage existing processes?
- Risk, resiliency, vulnerability



### **Community Engagement**

- What is the role of stakeholders? Terms of reference are important to making this process work – need a starting block. We need to rethink how we are communicating and use outreach to go to the people
- Use your peers to establish networks
- Submit a position paper to the CVRD to develop comprehensive public engagement
- Engaging internally as well to make sure other departments etc. are also inside
- Think about the function required – what value will look like in effect/form
- How do we get representative stakeholder input especially in urban areas

### **Career Development in Water**

- Passion and education/training.
- Maintaining a life-work balance.
- Mentorship an important component

### **What Can We Do in an Urban Watershed?**

- An urban watershed can be ecologically viable, especially when all levels of government involved are managing with the same principles
- Strategies for working with developers, engaging municipal staff

## **Closing Circle**

At the conclusion of the weekend, we headed to a nearby park to gather in a closing circle. Participants' closing thoughts included:

- *“Box people at your own peril – think beyond silos!”*
- *“I really liked witnessing the practical aspects of water treatment – there’s nothing like hearing the roar of diesel engines to see how policy really does involve people.”*
- *“I appreciated learning more about local initiatives and what’s happening at the grassroots level.”*
- *“My Master’s degree was very focused – it was nice to come back to the bigger picture and look at what people are at the table and what that table looks like.”*
- *“We’re in good hands – we ARE good hands!”*

## **Who Are We?**

### **Participant Biographies**

#### **Sarah Buchanan**

##### **Associate, Aqua-Tex Scientific Consulting**

Sarah holds a B Sc. Environmental Life Sciences and is currently working at Aqua-Tex Scientific Consulting. She is preparing to begin a Master’s thesis at the University of Victoria in Fall 2009 to explore connection between landscape health and human health on all scales particularly at the community level.

#### **Beth Brooks**

##### **Sunshine Coast Regional District**

Beth works as an Environmental Technician with the Sunshine Coast Regional District where she has gained a perspective on changes in water use during the year, peak demand management, peak week management, as well as the workings of the water supply and distribution system. One of her tasks is to monitor the water level of Chapman Creek (the main water supply on the Coast serving 90% of customers) to ensure that flows are maintained for a downstream fish hatchery for returns of adult salmon for spawning. Beth also provide information to the senior water staff in regards to annual use, seasonal use and impacts of our water conservation programs in regards to water flow and is involved in water conservation initiatives at the SCRD.

#### **Derek Brzoza**

##### **Environment Canada**

Derek’s formal education was in Water Resources through Saskatchewan Institute of Applied Science and Technology. He is currently employed with Water Survey of Canada (Environment Canada) as a Hydrometric Field Technologist. Derek has seven plus years of experience within the field of Hydrology from work with his current employer and with Alberta's River Forecast Centre. His interests are with water sustainability, our local economies and building strong communities.

#### **Conway Carruthers**

Conway works as an electrical engineer with a company building a series of run-of-the-river hydro projects in BC. Conway has been closely following environmental issues over the last 10 years and has attended several demonstrations regarding water-related issues, such as the sewage-dumping situation in Victoria, and the cutting down of the Lannon forest in Comox.

**Naomi Devine****Resort Municipality of Whistler**

Naomi Devine recently left the office of Campus Planning and Sustainability at the University of Victoria where she helped create the university's first sustainability policy and action plan to accept a position as the 2020 Sustainability Coordinator for the Resort Municipality of Whistler. In November 2007, Naomi was appointed to British Columbia's Climate Action Team, which offers the Cabinet Committee on Climate Action policy advice on measures to achieve its legislated greenhouse gas reductions of 33% below 2007 levels by 2020, as well as setting interim targets for 2012 and 2016. In 2006 she represented Canadian youth as a member of the Canadian Youth Delegation to the United Nations Framework Convention on Climate Change Conference in Nairobi, Kenya. Naomi is a climate change and sustainability policy advisor and co-founding chair for the BCSEA and is also a co-founder of Common Energy at the University of Victoria an organization that works to move the university 'beyond climate-neutral'.

**Heather English****BC Ministry of Healthy Living and Sport**

Heather has a B.Sc. in Biology and Environmental Studies and a diploma in Ecosystem restoration. A POLIS alumnus, she recently joined the Ministry of Healthy Living and Sport and is working with numerous jurisdictions involved in drinking water protection to develop systems for communication, policy and local empowerment.

**Tom-Pierre Frappé-Sénéclauze**

Tom is currently in a professional transition, moving from teaching and academic research in glaciology, and heading towards water issues and community planning.

**Holly Goulding**

Holly focused on the design side related to water and wastewater treatment, and on the research side learning watershed modeling techniques among other aspects of hydrology during her undergraduate degree in Environmental Engineering. Her co-op work terms took her to Mali, among other places, with Engineers Without Borders to work with WaterAid-Mali on water, sanitation and hygiene promotion projects in rural and peri-urban communities. An interest in climate change and northern hydrology saw her researching in the Mackenzie Delta for her master's thesis, an M.Sc in Geography that I recently completed at the University of Victoria in December, where she was studying the hydroclimatic drivers of ice-induced flooding in the delta with the ultimate goal of spring flood prediction. Holly is dedicated to working on water issues in Canada, particularly in small communities and in the north, and has recently started her search for a job in this sector.

**Andrew Gower****Wedler Associates, LLP**

Andrew is a consulting engineer and partner and branch manager for Wedler Engineering LLP in Courtenay. Andrew is interested in fully understanding watershed issues and how recreation opportunities, environmental and ecosystem values and the realities of the North Island's resource based economy mesh and collide within our watershed. He is also involved with the United Riders of Cumberland (UROC), forming Comox Valley Outdoor Recreation Association and is on the infrastructure working group for the Comox Valley "Shape The Future" Sustainability Strategy

**Sabrina Halvorsen****Nuu-Chah-Nulth Uu-a-thluk Fisheries**

Sabrina works as an associate biologist for the Nuu-Chah-Nulth Uu-a-thluk Fisheries in Port Alberni after completing her B.Sc. in Fisheries and Aquaculture at Vancouver Island University. Before finishing her degree, Sabrina worked on the Uchucklesaht Tribe's shellfish lease located in the Useless Inlet.

**Elizabeth Hendriks**  
**University of Waterloo**

Liz recently completed a Master 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 builders in the uptake of water efficiency innovation as part of UW's Blue Builders Project. She is also the facilitator for the Canadian Water and Resource Association Mentorship Program.

**Meaghan Hennessy**

Meaghan is a recent graduate of the Resource and Environmental Management (REM) program at Simon Fraser University where her thesis work explored barriers to small-scale greywater reuse systems in Metro Vancouver as perceived by key stakeholders involved in the implementation, development, regulation and use of these systems.

**Caila Holbrook**  
**Comox Valley Project Watershed**

Caila is working with the Comox Valley Project Watershed which encourages community stewardship of Comox Valley watersheds through education, information and action. One of the projects Caila is involved in as business manager of the newly created Project Watershed's Mapping Centre is a policy gap analysis as part of the Comox Valley Conservation Strategy.

**Sarah Jackson**  
**University of Victoria Law**

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. Sarah worked at POLIS from May 2008-April 2009 as a governance research assistant focused on water governance and legislation.

**David Leung**  
**Indian and Northern Affairs Canada**

David is an Environmental Specialist at Indian Northern Affairs Canada. He has previously worked with Metro Vancouver (formally GVRD) and BC Hydro addressing water and resource management concerns with the public. In the last year, he also worked in the federal public sector with the Canadian Environmental Assessment Agency and has also been involved locally in Vancouver in stewardship programs for the past four years as a natural history interpreter for the Stanley Park Ecological Society.

**Tara Lindsay**  
**Westland Resource Group Ltd**

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. In the fall of last year Tara started working with the Bowker Creek Initiative to create a detailed watershed implementation plan for the Bowker Creek watershed, an urban watershed in Victoria. For the past two years, Tara has also been working with the CRD to find potential sites for wastewater treatment facilities, a project that has involved considerable analysis of current and future land use in the region, trying to find sites that balance social, environmental, and economic considerations.

**Melanie Mamoser**  
**BC Ministry of Environment**

Melanie is currently working in the Ground Water Protection Section of the BC Ministry of Environment and is also completing her Master's thesis on ecosystem-based management of coastal environments through the Geography department at the University of Victoria. She is also involved in the Gabriola Ground Water Management Society, an ENGO which focuses on opportunities for community-based management of the groundwater resources through a program of water conservation, public education and responsible public best practices.

**Cedar Morton**  
**School of Resource and Environmental Management, Simon Fraser University**

Cedar is at the tail end of his Masters thesis project is called *Evaluating Collaborative Planning: A Case Study of the Morice Land and Resource Management Planning Process*. Cedar has been researching multi-stakeholder planning processes and intersectoral dialogue for the last 3 years and has also participated in various simulations for planning and conflict transformation.

**John Quattrociocchi**  
**Metro Vancouver**

Recently moved to BC from Ontario, John works for Metro Vancouver as a Water Treatment Operator. He currently works at Seymour Capilano Filtration Plant (SCFP) which will be Canada's biggest water filtration plant (by capacity) once complete. John is interested in exploring best management practices and knowledge concerning watershed protection, enhancement and sustainability.

**Jess Rayner**  
**City of Vernon**

Jess is an Environmental Planner with the City of Vernon. She is frequently involved in public outreach activities, and has a strong interest in strategic planning, facilitating interdisciplinary communication, and developing comprehensive inventories to provide important synopses of existing programs, opportunities, and ideas. She has experience in land use planning, natural resource management, event planning, research and marketing, and to some extent project management.

**Jennifer Wilson**  
**Environment Canada**

Jennifer is Program Coordinator with Environment Canada's Ecosystem Coordination Office (formerly the Georgia Basin Coordination Office) where she contributes to Environment Canada's Priority Ecosystem and Hotspot planning process for the Pacific and Yukon region. As a federal civil servant, Jennifer finds watershed planning's intersectoral nature appealing as there are opportunities for government, industry, the public, and First Nations to contribute to environmental decision making

**Andrea Winkler**  
**Urban Planner, Urban Strategies Inc.**

A graduate of York University's MES programme, Andrea is currently working on the regional growth strategy for the CVRD. Given the many different interests and pressures on water use in Comox Valley, Andrea believes intersectoral dialogue can help create a common understanding of watershed issues and long-term management planning.

**Jennifer Wong**  
**POLIS Project on Ecological Governance**

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 strategies for water sustainability.

## **Mentors and Speakers**

### **Jack Minard (Resident Mentor)**

**Executive Director, Comox Valley Land Trust**

**Executive Director, Tsolum River Restoration Society**

I come from a varied background of logging, sawmills, commercial fishing, theatre, television and yachts (selling, delivering, teaching, captaining etc.)

After almost five years in the Caribbean living and working on St. Thomas US Virgin Islands I returned home in 1988 to a changed economy and found work difficult to find. I fell back on my experience with fishing and went out on several commercial forays (squid, sockeye, spring and pink fishing) and found there was no money in it cause there were no fish to catch... In my life I have slain a great number of fish both as a sports and commercial fisherman so I began to look at ways to give back.

I then took a course designed by our local Little River Enhancement Society under the Fisheries Renewal/HRDC. As an ex-fisherman I qualified for the training and I was trained as a Fisheries Technician.

I took on the job as Coordinator with the Tsolum River Restoration Society in 1998 and have been growing into and learning this role ever since. As the abandoned mine site nears a source solution our efforts turn to the remaining limiting factors to aquatic health and abundance.

In 2003 I joined the Board of the Comox Valley Land Trust having come to the realization that my work with the Tsolum really was about how we live on and treat the land. To save the river meant a change in land use planning. That year saw the beginning of the development of the Comox Valley Conservation Strategy. Nature Without Borders was published in 2008 and the Conservation Strategy Community Partnership was developed. I have taken on the role as Chair of the Local Government Implementation Team with this Partnership.

I am currently the executive director for both the Tsolum River Restoration Society and the Comox Valley Land Trust. I sit as Vice-Chair on the Salmon Enhancement and Habitat Advisory Board and remain involved with CVRD Area "C" community advisory committee and the Comox Valley Environmental Council.

### **Michael Zbarsky**

**Engineering Analyst**

**Comox Valley Regional District**

Graduated with a Bachelor of Science Honours degree from UVIC specializing in hydrology and watershed management. Professional designation as an Applied Science Technologist. Previously employed at Ministry of Community Development working with infrastructure grant programs for water, wastewater, stormwater and alternative energy projects. Now employed with Comox Valley Regional District as their Engineering Analyst. Mostly focusing on water and wastewater systems including project development, public consultation, system and capital planning, and demand management. *Workshop Sessions: Planning in a Watershed Versus Watershed Planning; From Source to Tap in the Comox Valley*

### **Oliver M Brandes**

**Associate Director and Water Sustainability Project Leader**

**POLIS Project on Ecological Governance**

Oliver is a political ecologist and joined The POLIS Project in 2003 to lead the Water Sustainability Project. He holds a Master's in Economics from Queens University and a Law Degree from the

University of Victoria, and studied ecological restoration through the Restoration of Natural Systems program at UVic. Oliver studied international relations in Europe and was involved in various environmental and development projects in Costa Rica and Ecuador, including a tropical reforestation initiative, water treatment facility construction and a sea-turtle restoration project. Oliver has also worked in Canada's North for the territorial judges at the Nunavut Court of Justice. His work at POLIS focuses on sound resource management and ecological based legal and institutional reform. As WSP project leader, Oliver provides strategic water policy advice to NGOs and all levels of government and has authored several major reports.

*Workshop Sessions: What is Ecological Governance and why is it Important?*

### **Amelia Loye**

Amelia is a social scientist and community and stakeholder engagement specialist with 6 years experience in the Australian water industry. She has worked at Federal and State and Regional Government levels with policy writers, environmental scientists, ministers, senators, and communication teams engaging stakeholders and the community for the development, assessment and implementation of policy, demand management programs and water infrastructure.

*Workshop session: Lessons Learned: Effective Public Stakeholder Engagement in Water Planning*

### **Dr. Charmaine Enns Medical Health Officer**

#### **Vancouver Island Health Authority**

Charmaine was initially trained as a family physician, using these skills in Kenya East Africa and in rural/remote communities throughout Vancouver Island. Subsequently, she successfully qualified as a Community Medicine specialist with the Royal College of Physicians and Surgeons of Canada.

Charmaine is currently the Medical Health Officer for North Vancouver Island and has been in that position since the summer of 2003. She has also enjoyed the role of Medical Director for Aboriginal Health in VIHA since 2005.

*Workshop Session: From A Drinking Watershed Risk Assessment... To Action*

### **Donna Caddie**

#### **Project Manager, Living Water Smart BC Ministry of Environment**

Donna Caddie is the Living Water Smart Project Manager at the BC Ministry of Environment. She has a Masters Degree in Environmental Policy (with Planning Accreditation) 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. Ministries of Environment and has been in BC almost 2 years. She has experience in local government liaison, strategic planning and water management as well as writing public communications and outreach. She has organised several national public consultation rounds as well as developed policy (National Regulations) in a participatory group context while in NZ. She's passionate about water and is very pleased to be working on Living Water Smart: B.C.'s water plan.

*Workshop session: A Global Spin on Watershed Planning and Management*

### **Andrew Nicoll Founding Chair Cumberland Community Forests Society**

### **Brian Munro Operations Manager, Puntledge Hatchery Department of Fisheries and Oceans**

Puntledge Hatchery has been involved with BC Hydro for many years in cooperatively managing water flows in the Puntledge River for the benefit of migrating salmon. There is a Water Use Plan in place between DFO and BC Hydro and both parties communicate on a regular basis.

*Workshop Session: From Source to Tap in the Comox Valley*

**Anne Davey**  
**BC Hydro, Maintenance and Operations Manager**

Anne spent 15 years in the military right after high school as a Communication/Radar Systems technician working on aircraft (F-18's and Search and Rescue). She started working at BC Hydro in the early '90's. At the beginning of her career with Hydro she took an apprenticeship and became an electrician. In 2007 went into management as a Maintenance and Operations Manager with Vancouver Island Generation

*Workshop Session: From Source to Tap in the Comox Valley*

**Kerry Mayo**  
**Manager Water Utilities & Services**  
**Comox Valley Regional District**

**Susanne Porter-Bopp**  
**POLIS Project on Ecological Governance**  
**water@polisproject.org**

Susanne is the Community Water Coordinator at the POLIS Project on Ecological Governance at the University of Victoria. Her work with the Water Sustainability Project at POLIS focuses on enhancing water conservation capacity in various communities across Canada through several water soft path planning pilot projects and the development of a number of practical tools for local governments, including *Get Water Smart: A Seven Step "How To" Guidebook to Water Conservation Planning for Canadian Communities*. As a current associate with *Waterlution: A Water Learning Experience*, Susanne also coordinates and facilitates workshops on local water issues for youth and young professionals across British Columbia.

Please note that this is the fourth year of the Future of Water Workshop Series. For more information on previous workshops and outcome documents, visit [www.waterlution.org](http://www.waterlution.org).

**Thank You**

A special thank you to all of our guests and presenters over the weekend, especially Jack Minard and Michael Zbarsky who joined the group for nearly the entire weekend. We are grateful to all of our guest speakers and presenters over the weekend: Donna Caddie, Anne Davey, Charmaine Enns, Brian Munro, Kerry Mayo, Andrew Nicoll and Amelia Loye. Thanks to our cook for the weekend, Jen Freeman (with Jen Wong).

Thanks to Elizabeth Hendriks and Sarah Jackson for their assistance in preparing this report.

Thank you to our sponsor whose support made this workshop possible:

