Cutting Edge Freshwater Management and Emerging Issues: Southern Vancouver Island

A POLIS Water Sustainability Project

Field Trip and Speakers Series

9:00 – 17:30
June 17th, 2013
University of Victoria and the CRD Region

Water Sustainability Project
POLIS Project on Ecological Governance

Centre for Global Studies

In preparation for participants to begin discussing current pressing issues around freshwater ecosystems, and as a precursor to the Aquatic Ecosystem Health and Management Society (AEHMS) conference from June 18-20th, 2013, the University of Victoria is organizing a pre-conference field trip and speakers series for June 17th, 2013.

The event will involve a combination of presentations from leading researchers focused on the complex challenges currently faced in managing freshwater ecosystem health with a small group field trip throughout the CRD on Vancouver Island.

Following different aspects of the urban water cycle, the field trip will engage the topic of healthy freshwater ecosystems by exploring the Bowker Creek initiative and its efforts to restore a highly developed urban watershed. The trip will continue on to the CRD's highly protected drinking water source to better understand what a cutting-edge source protection program looks like in practice, before concluding with a stop at Fisherman's Wharf in Victoria, where the very notion of "stormwater management" is being transformed towards a more holistic rainwater approach. At each of these stops on the tour, we will explore aspects of freshwater governance and new and changing planning and institutional approaches to managing people, communities and industries within a watershed.

The intention is to offer ideas and practical examples for agencies and scientists interested in new ways of operating to build towards healthy freshwater ecosystems.

Registration is open to all AEHMS members and conference participants, as well as interested community members, but maximum capacity is 40 people. However, we do require a minimum of 15 participants to attend the field trip. We reserve the right to cancel if the minimum numbers of participants do not sign up.

The afternoon speaker's series is free to attend, and no RSVP is required.

To cover incremental transportation and catering costs for the field trip, participants are required to pay a $25 registration fee. Please RSVP your attendance to Jesse by **June 10th**, at: water@polisproject.org

We look forward to welcoming you to this exciting event!

Oliver M. Brandes
Water Sustainability Lead
POLIS Co-Director
University of Victoria

Rod Dobell
Professor Emeritus
Centre for Global Studies
University of Victoria

AEHMS Pre-Conference Field Trip and Speakers Series Outline – June 17th, 2013

Time	Topic	Location	Lead
9:00 – 9:15	Introductions	David Strong Bldg, C103	Rod Dobell, Centre for Global Studies
9:15 – 9:45	Guest Speaker: Climate change and hydrological impacts	David Strong Bldg, C103	Tom Pedersen, Pacific Institute for Climate Solutions
9:45 – 10:00	Q&A	David Strong Bldg, C103	All
10:00 – 10:10	Field Trip: Introductions and Activity Outline	UVic Law School Parking Lot	Oliver M. Brandes, POLIS Project on Ecological Governance
10:10 – 10:40	Bowker Creek: Watershed management in an urban context	UVic Law School Parking Lot	Ian Graeme, Bowker Creek Initiative
10:40 – 11:00 Driving to Next Location – Brief talk by Oliver M. Brandes on water governance in British Columbia			
11:00 – 13:30	Cutting edge watershed management: CRD Water Source Protection	Goldstream water supply area and UV Filtration Plant	Joel Ussery, CRD
13:30 – 14:00 Driving to Next Location			
14:00 – 14:30	Green infrastructure and innovative design: stormwater management	Fisherman's Wharf, James Bay	Scott Murdoch, Murdoch de Greeff Inc Landscape Architects
14:30 – 15:00 Return to UVic			
15:30 – 16:00	Ecosystem health indicators in international watersheds	David Strong Bldg, C103	David Rapport, EcoHealth Consulting
16:00 – 16:30	Water Security: The Case of St. Mary Lake	David Strong Bldg, C103	Rick Nordin, UVic

16:30 – 17:00	Municipal Authority and Water Management	David Strong Bldg, C103	Linda Sheehan, Earth Law Centre
17:00 – 17:30	Discussion	David Strong Bldg, C103	All

Field Trip Outline

BOWKER HEADWATERS - Ian Graeme, Bowker Creek Initiative
Location: University of Victoria Law School Parking Lot (parking lot 8 by interpretive sign)
Theme: Community based watershed planning (urban watershed scale restoration)
Resources:

- Bowker Creek Home Page - http://www.bowkercreekinitiative.ca
- Bowker Creek Blueprint (100 year plan) - http://www.bowkercreekinitiative.ca/plans-strategies/stormwatermanagement.htm

Outline of Key Points
Challenges of dealing with restoration of this kind of urban watershed
Origin of the initiative
Blueprint process/highlights key vision items
Likely next steps/priorities (implications of Living Water Smart - Provincial Water Strategy and Water Act Modernization)

Background
Bowker Creek Initiative is a collaboration between local governments, community groups, post-secondary institutions and private citizens to improve the health of Bowker Creek and its watershed. The Initiative was established because of concerns about flooding, pollution, and the degraded condition of Bowker Creek. A 100-year blueprint was in turn developed to provide member municipalities, the CRD, the community and other land stewards with information and guidance to manage and restore the watershed and creek corridor over the long term. The vision is to manage the varied human uses and natural areas in the watershed to minimize runoff and pollution, making Bowker Creek a healthy creek that supports habitat for native vegetation and wildlife, and provides a community greenway to connect neighbourhoods.

Flooding, water pollution and habitat loss are significant concerns for Bowker Creek. Despite the degradation it has suffered, Bowker Creek offers connections with the natural environment to the 30,000 residents in the watershed, and provides an opportunity to restore islands of nature within the urban environment.

2. CRD UV FILTRATION PLANT, WATERSHED SOURCE PROTECTION – Joel Ussery, Capital Regional District
Location: end of Sooke Lake Rd (major landmark - past Ma Miller's Pub - 2903 Sooke Lake Road)
Theme: Drinking Water protection and source water protection
Resources:

- CRD Water Services Home Page - http://www.crd.bc.ca/water/
- Overview of water supply system -http://www.crd.bc.ca/water/documents/2013overview-watersystem.pdf
- Facts and Figures - http://www.crd.bc.ca/water/documents/2013facts-figures.pdf

Outline of Key Points
History of CRD water services
Multi-barrier approach
Regional district role in water management and drinking water provision

Drinking water management and operations in the CRD (at Japan Gulch Disinfection Facility)
Source water protection (and drinking water watershed management)
Water conservation and demand management in the CRD

Background
Capital Regional District (CRD) Integrated Water Service is the bulk water supplier to the 340,000 consumers in the Greater Victoria Drinking Water System – the third largest municipal drinking water system in British Columbia - and the retail water supplier in two other communities in the CRD region. The CRD Integrated Water Service also provides system wide water conservation, water quality and cross connection control services.

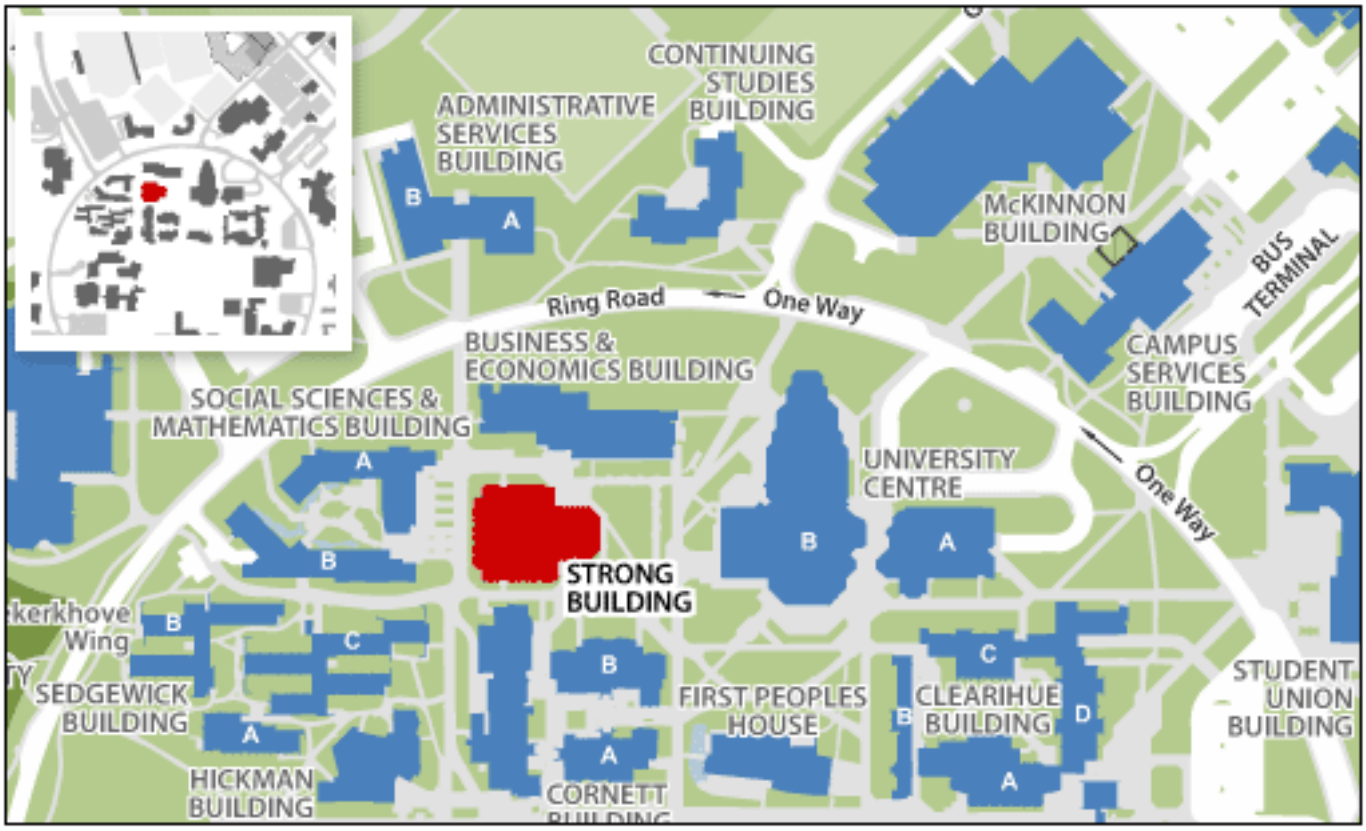
3. FISHERMEN's WHARF PARK (Rain Garden) - Scott Murdoch, Murdoch de Greeff Inc. Landscape Architects
Location: Fishermen's Warf (James Bay)
Theme: Stormwater Management
Resources: City of Victoria, Fisherman's Wharf
http://www.victoria.ca/EN/main/departments/parks-rec-culture/parks/improvements/fishermans-wharf-park.html
Summary of "Peeling Back the Pavement "
(POLIS report) http://poliswaterproject.org/news/502

Outline of Key Points
Urban storm water management
Green infrastructure and innovative design to managing rainwater pollution from municipal streets
Victoria's proposed Stormwater utility

Background

The Fisherman's Wharf rain garden is an environmentally friendly way to manage storm water, by filtering runoff from hard surfaces such as roofs and driveways before it reaches the ocean, as well as reducing the overall amount of runoff entering Victoria's storm drain system. Fisherman's Wharf rain garden is a 352 square metre new development in Victoria's historical James Bay, featuring a retaining 'seawall' that outlines the Inner Harbour's original shoreline. The plants used are drought resistant in the summer and can survive in standing water during the winter months. The rain garden is the largest in Victoria, and collects runoff from 14,250 square metres of hard and paved surfaces in the James Bay neighbourhood.

The David Strong Building, University of Victoria



We will start the field trip by meeting in the parking lot just north of the Fraser Building. We will walk over as a group from the David Strong Building following the morning guest speaker and discussion.

How to get to the University of Victoria from Downtown

Bus routes from Downtown
4 Uvic/Downtown
11 Tillicum Mall/UVic
14 Vic General/UVic
15 UVic Express/Downtown Express
33 UVic via Richmond

More information on public transportation in Victoria can be found here: http://www.transitbc.com/regions/vic/

Victoria Taxi Companies
Victoria Taxi – 250-383-7111
Westwind Taxi – 250-474-4747
Yellow Cab – 250-381-2222