

**Beyond the Guidebook Seminar
November 2007**

**Integration of Rainwater Management &
Green Infrastructure in British Columbia:
The Province's Perspective**



**A Presentation
By
Chris Jensen, Ministry of Community Services**

Integration of Rainwater Management & Green Infrastructure in British Columbia: The Province's Perspective

Today's Expectations are the Standards of Tomorrow

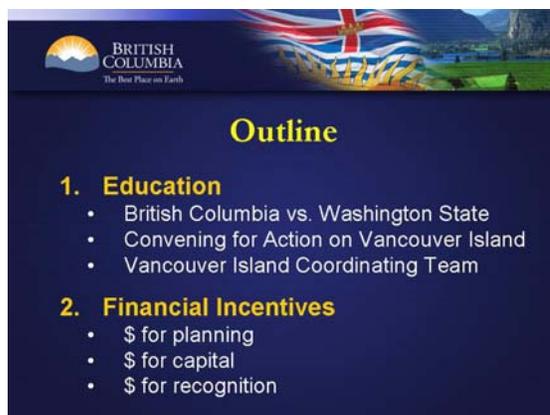
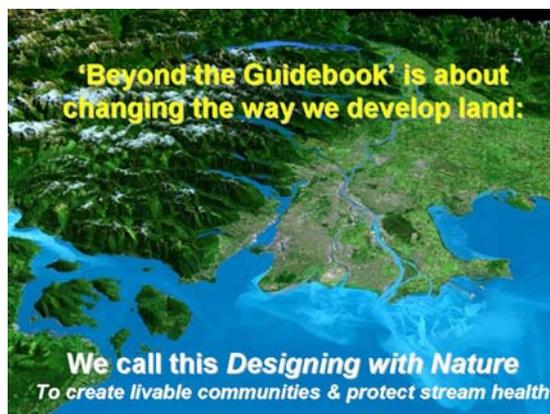
Beyond the Guidebook Seminar

Under the umbrella of the [Water Sustainability Action Plan for British Columbia](#)¹, the [Green Infrastructure Partnership](#)² rolled out **Beyond the Guidebook** at a Vancouver seminar in November 2007³.

Because the [Ministry of Community Services](#)⁴ and [Fisheries and Oceans Canada](#)⁵ are on the Steering Committee for the Green Infrastructure Partnership, the **Beyond the Guidebook Seminar** provided a timely opportunity to inform local government and land use practitioners regarding the emerging policy framework and senior government expectations for applying a [Beyond the Guidebook](#)⁶ approach to land development and watershed management.

Released in June 2007, [Beyond the Guidebook](#) refers to a [runoff-based approach](#)⁷ to drainage modeling that connects the dots between source control evaluation and stream health assessment. In a nutshell, it means this is 'where science meets analysis' because [runoff volume management is directly linked to stream erosion and water quality](#)⁸.

Chris Jensen, Ministry of Community Services, explained the regulatory and legal framework in a presentation titled [Integration of Rainwater Management and Green Infrastructure: The Province's Perspective](#)⁹. His presentation was structured in two parts: Education; Financial Incentives.



¹ <http://www.waterbucket.ca/cfa/index.asp?sid=4&id=125&type=single>

² <http://www.waterbucket.ca/gi/index.asp?sid=55&id=13&type=single>

³ <http://www.waterbucket.ca/gi/index.asp?sid=49&id=319&type=single>

⁴ <http://www.gov.bc.ca/cserv/>

⁵ http://www.dfo-mpo.gc.ca/home-accueil_e.htm

⁶ <http://www.waterbucket.ca/rm/sites/wbcrm/documents/media/37.pdf>

⁷ <http://www.waterbucket.ca/rm/index.asp?sid=44&id=330&type=single>

⁸ <http://www.waterbucket.ca/gi/index.asp?sid=23&id=96&type=single>

⁹ <http://www.waterbucket.ca/gi/sites/wbcgi/documents/media/175.pdf>

‘Made in BC’ Educational Approach is Working

For the purposes of establishing a relevant frame of reference for rainwater management and green infrastructure, **Chris Jensen** opened his presentation by providing a contrast with Washington State. A decade ago, British Columbia and Washington State had the same science and a common understanding of what it meant. [The two jurisdictions had the same point of departure. A decade later, the two are on diverging paths](#)¹⁰.



According to Chris Jensen, “In BC, we have come to the realization that prescriptive approaches stifle innovation. By telling people how far they must go, that’s as far as they go. They don’t go much beyond what is required for an approval. This is the story that we are hearing from people in Washington State.”

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1. EDUCATION

The Approach: BC vs. Washington State

British Columbia : **Education & Incentives**

Washington State: **Regulatory & Prescriptive**

What have we learned?

“It will take public education to instil a culture change for us to have any hope that we can protect aquatic resources in the urban environment.”

Ed O'Brien, Department of Ecology

“In BC, the approach that we are taking is to set the goal. As a result, we are seeing people in local governments leapfrogging each other to see how close they can get to the goal,” continued Jensen, “Our observation is that people are not stopping at the numbers on the page and saying ‘well, we have met that criterion’. Rather, they are often going above and beyond what is required.”

Jensen added that the Province made a conscious decision to create change through practitioner education, and after a decade this approach is now paying dividends.

CAVI - Convening for Action on Vancouver Island

Building on the educational theme that is proving so successful, Chris Jensen then introduced [CAVI - Convening for Action on Vancouver Island](#)¹¹. CAVI is a grassroots, collective partnership committed to achieving [settlement in balance with ecology](#)¹², beginning with [water-centric planning](#)¹³.

CAVI is a regional pilot that is also being implemented under the umbrella of the Water Sustainability Action Plan for British Columbia. The CAVI vision is that by 2010, [Vancouver Island will be well on its way to achieving water sustainability](#)¹⁴.

Convening for Action on Vancouver Island
Leadership in Water Sustainability



¹⁰ <http://www.waterbucket.ca/gi/index.asp?sid=6&id=275&type=single>

¹¹ <http://www.waterbucket.ca/cfa/index.asp?sid=27&id=144&type=single>

¹² <http://www.waterbucket.ca/cfa/index.asp?sid=18&id=113&type=single>

¹³ <http://www.waterbucket.ca/rm/index.asp?sid=45&id=284&type=single>

¹⁴ <http://www.waterbucket.ca/cfa/sites/wbccfa/documents/media/89.pdf>

Vancouver Island Coordinating Team:

Jensen reported that a sub-set of CAVI is the [Water Balance Model Vancouver Island Coordinating Team](#)¹⁵ (VICT). He is the Co-Chair. While the mandate of CAVI is to look at all aspects of the water cycle, the specific focus of VICT is the rainwater management component.



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Vancouver Island Coordinating Team

- **Mission:** To facilitate a consistent, science-based approach to rainwater management on Vancouver Island.
- **Objective:** Align efforts to advance the state-of-the-practice in rainwater management
- Implementation is keyed to use of the [Water Balance Model](#)
- Team includes representatives from:
 - Ministry of Environment,
 - Ministry of Agriculture & Lands
 - Ministry of Community Services
 - Department of Fisheries and Oceans
 - First Nations
 - Local Government

“We are building relationships with local governments, and we believe we are fostering a competitive environment,” stated Jensen, “We talk to local governments about how they can advance integration of rainwater management with green infrastructure.”

“The goal of an integrated approach is to develop integrated solutions that protect stream health and enhance community liveability,” Jensen told his audience.

According to Jensen, “One of the things that VICT does is to share information on who is doing what; and in doing this, we are facilitators for a Vancouver Island network of practitioners. This builds confidence.”

Green Mandate of the Ministry of Community Services

There may be a question in the minds of some people as to why the Ministry of Community Services is the lead Ministry for rainwater management and green infrastructure, rather than the Ministry of Environment. The answer provided by Chris Jensen lies in the fact that the Ministry of Community Services has responsibility for the Local Government Act and Community Charter.

According to Chris Jensen, “The Ministry of Community Services has an increasing role in ensuring that local governments are advancing and changing the ways they plan and design their communities for the better.”

“The mandate of the Ministry has changed somewhat in recent years. Our mission is to promote sustainable, liveable communities,” continued Jensen, “And rainwater management is a key element of green solutions.”



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Ministry of Community Services

RAINwater Management: WHY MCS?

- **Mandate:** To promote **sustainable, livable communities**.
- **Implement by:** Providing advice and resources to local governments for sustainable development and address issues related to communities' social, economic and **environmental** well-being
- **Local Government Department:**
 - Infrastructure Funding
 - Community Planning
 - Local Government Act
 - Community Charter

from Stormwater Management to RAINwater Management

From TRADITIONAL to	INTEGRATED:
■ Drainage Systems	■ Ecosystems
■ Reactive (Solve Problems)	■ Proactive (Prevent Problems)
■ Engineer-Driven	■ Interdisciplinary Team-Driven
■ Protect Property	■ Protect Property <i>and</i> Habitat
■ Pipe and Convey	■ Mimic Natural Processes
■ Limited Consultation	■ Extensive Consultation
■ Local Government Ownership	■ Partnerships with Others
■ Extreme Storm Focus	■ Rainwater Integrated with Land Use
■ Peak Flow Thinking!	■ Volume-Based Thinking!

¹⁵ <http://www.waterbucket.ca/gi/index.asp?sid=16&id=78&type=single>

Financial Incentives for Rainwater Management

Chris Jensen elaborated on the array of grant programs administered by his Ministry under the umbrella of the Green Communities Project. He emphasized that rainwater management is an integral part of the evaluation criteria for grant applications.

2. FINANCIAL INCENTIVES

PLANNING: Infrastructure Planning Grants

CONSTRUCTION: Capital Grant Programs

- Towns for Tomorrow
- Gas Tax Agreement
- Building Canada Fund

RECOGNITION: Green City Awards

“What is more motivating than green,” Jensen asked rhetorically, “The Ministry offers green in order to get green. It makes sense. Money talks.”

“In the applications that come across our desks, we have increasingly seen the influence of the Stormwater Planning Guidebook in changing the way that local governments are approaching rainwater management,” added Jensen.

A Road Map for Leveraging Change

After providing the audience with the highlights and examples for each grant program, Chris Jensen then described how the Ministry is using the Green Communities Project to advance green infrastructure province-wide.

Leveraging Change

TODAY: Program guides “provide direction”. Ranking criteria supports green projects

TOMORROW: Grant conditions used to bring some recipients up to a certain “green” standard

DOWN THE ROAD: Meeting a “green” standard will be a requirement for grant eligibility

“We are slowly raising the bar for local government,” stated Jensen, “For example, we are saying show us what you are doing to protect stream health.”

He then provided a number of representative examples to illustrate the expectations of the Ministry when reviewing capital grant applications: “Let’s take the case of a water treatment plant. We will be asking the question: What are you doing to manage rainwater on site?”

Jensen also emphasized that the Ministry is providing cash awards to recognize the efforts of local governments in achieving [design with nature outcomes](#)¹⁶.

¹⁶ <http://www.waterbucket.ca/gi/index.asp?sid=5&id=15&type=single>

Tomorrow's Standards:

In closing, Chris Jensen made it clear to his audience that: "In terms of providing you with a road map, today's expectations are the standards of tomorrow. At the Ministry of Community Services, we believe that change for the better will be created through the combination of education and financial incentives."



"Today's expectations are the standards of tomorrow"

