

# Beyond the Guidebook: The New Business As Usual Create Liveable Communities & Protect Stream Health

## 2008 Comox Valley Learning Lunch Seminar Series

Organized by:

Convening for Action on Vancouver Island  
Leadership in Water Sustainability



In partnership with:



And in collaboration with:



An initiative under the umbrella of the Water Sustainability Action Plan for British Columbia

# Beyond the Guidebook: The New Business As Usual

## Change the Way We Develop Land to Create Liveable Communities & Protect Stream Health

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### Learning Lunch Seminar Series: Pilot for Local Government Capacity-Building

**CONTEXT:** Vancouver Island is the pilot region for rollout of *Beyond the Guidebook: The New Business As Usual* through an innovative and precedent-setting approach to practitioner continuing education, namely the Learning Lunch Seminar Series. This provincial initiative builds on the foundation provided by *Stormwater Planning: A Guidebook for British Columbia*, published in 2002, and incorporates lessons learned over the past six years.

Beyond the Guidebook advances a performance target methodology for correlating green infrastructure effectiveness in protecting stream health. To support Beyond the Guidebook, the Province has funded integration of the *Water Balance Model* with a hydrologic engine known as *QUALHYMO*. The web-based *Water Balance Model powered by QUALHYMO* is unique, bridges engineering and planning, links the site to the stream and watershed, and enables local governments to establish watershed targets.

Session	Theme	Scope
1	Today's Expectation are Tomorrow's Standards  <b>EVOLUTION</b>	<p>Session #1 will trace the evolution of rainwater/stormwater management policies and practices over the past two decades. This will provide a frame-of-reference and a common understanding for subsequent sessions.</p> <p>The <i>2002 Stormwater Guidebook</i> and the <i>Water Balance Model</i> will be introduced so that participants have an understanding of the purpose and application of performance targets.</p> <p>A desired outcome is that participants will understand <b>why</b> drainage practice comprises a continuum of paradigms, and communities progress at different rates along the continuum.</p>
2	Legal and Policy Strategies to Support Green Infrastructure  <b>TOOLS</b>	<p>Session #2 will introduce the extensive and very specific tools available under the Local Government Act so that they can proactively manage the complete spectrum of rainfall events: from light showers to heavy rain to extreme storms.</p> <p>The <i>Green Infrastructure Guide</i> will be explained so that participants will know how to use it effectively as a resource.</p> <p>A desired outcome is that participants will understand <b>what</b> bylaw and policy tools enable incorporation and retrofitting of engineered green infrastructure into development plans.</p>
3	Nature Knows No Boundaries  <b>TARGETS</b>	<p>Session #3 will elaborate on a performance target approach to land development that makes sense, meets multiple objectives, is affordable, and results in net environmental benefits at a watershed and/or regional scale.</p> <p>A framework for 'bringing it all together' will be introduced so that participants can explore a regional team approach that ensures a common understanding and consistency at the front counter.</p> <p>A desired outcome is that participants will understand <b>how</b> a Design with Nature approach to rainwater management (i.e. using infiltration and trees) will influence the greening of the built environment and protect stream health.</p>

Members of APEGBC and PIBC who participate can count the seminar series towards their Professional Development credits.

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### Seminar #1 Agenda

Theme - Today's Expectation are Tomorrow's Standards	
<b>Segment #1</b>	<p><b>The introductory morning segment will 'Set the Scene' by tracing the evolution of rainwater/stormwater management policies and practices over the past two decades. This will provide a frame-of-reference and a common understanding for subsequent sessions.</b></p>
1100 - 1235	<ol style="list-style-type: none"> <li>1. Call to Order, Welcome and Opening Remarks</li> <li>2. Creating Our Future: The New Business As Usual (Kim Stephens)               <ul style="list-style-type: none"> <li>- Introduces the New Business As Usual</li> <li>- Explains the 'Shifting Paradigms of Stormwater Management'</li> <li>- Asks the question: what is your role in implementing the New Business As Usual?</li> </ul> </li> <li>3. The Story of East Courtenay (Ian Whitehead)               <ul style="list-style-type: none"> <li>- Sets the stage for the walkabout</li> <li>- Illustrates how drainage practices have evolved over 20 years</li> </ul> </li> <li>4. Provincial Context (Catriona Weidman)               <ul style="list-style-type: none"> <li>- A key message: change is here</li> </ul> </li> </ol>
<b>Segment #2</b>	<p><b>East Courtenay will serve as a local example to illustrate how drainage practices have evolved from fields and forest to an urban area.</b></p>
1235 – 1430	<p>Grab lunch and hop on the bus. Glacier View Pond walkabout Return to the seminar venue</p>
<b>Segment #3</b>	<p><b>The 2002 Stormwater Guidebook, Performance Targets and the Water Balance Model will be introduced so that participants will have a basic understanding of core concepts and their application.</b></p>
1430 - 1500	<ol style="list-style-type: none"> <li>1. Stormwater Guidebook, Performance Targets and the Water Balance Model (Kim Stephens)               <ul style="list-style-type: none"> <li>- Introduces the Guidebook</li> <li>- Reviews the water balance fundamentals</li> <li>- Explains that the WBM is an extension of the Guidebook</li> </ul> </li> <li>2. Cowichan Valley Water Balance Model Forum (Kim Stephens &amp; Kate Miller)               <ul style="list-style-type: none"> <li>- Illustrates how to building capacity to implement the New Business As Usual</li> </ul> </li> </ol> <p><b>Homework Assignment:</b> Participants are asked to:</p> <ul style="list-style-type: none"> <li>- Review the Stormwater Guidebook Table of Contents</li> <li>- Identify what aspects are relevant to your specific work areas</li> <li>- Report back at Session #2 on implementation challenges from your perspective</li> <li>- Return an index card with your conclusions</li> </ul> <p><b>Suggestion:</b> Read the 8-page <i>Rainwater Management: An Introduction to the Guidebook for British Columbia</i>. To download a copy, go to <a href="http://www.bc.waterbalance.ca">www.bc.waterbalance.ca</a> &gt; Resources &gt; Guidance Documents. This document is designed to provide the reader with a broad-brush picture of the Guidebook. The emphasis is on core concepts.</p> <p><b>Web Resources:</b> To download a PDF so that you can copy and paste links, start with this: <a href="http://bc.waterbalance.ca/sites/wbm-canada-template/documents/media/57.pdf">http://bc.waterbalance.ca/sites/wbm-canada-template/documents/media/57.pdf</a></p>

# Beyond the Guidebook: The New Business As Usual

## Change the Way We Develop Land to Create Liveable Communities & Protect Stream Health

### Learning Lunch Seminar Series: Pilot for Local Government Capacity-Building

<b>Themes:</b>	<ul style="list-style-type: none"> <li>▪ “We can create our future”</li> <li>▪ “What happens on the land matters”</li> <li>▪ “To get to the big picture, start with the smallest pieces”</li> </ul>
<b>Purposes:</b>	<ul style="list-style-type: none"> <li>▪ Provide an inter-departmental learning opportunity for collaborative exploration</li> <li>▪ Enable local government practitioners to obtain professional development credits</li> <li>▪ Rollout <i>Beyond the Guidebook: The New Business As Usual</i></li> </ul>
<b>Structure:</b>	<ul style="list-style-type: none"> <li>▪ Organize three 3½ -hour teaching sessions held at four-week intervals</li> <li>▪ Conduct the series as a cumulative process, from philosophy to tools</li> <li>▪ Provide information in an interactive way that triggers reflection, strategizing and action</li> <li>▪ Incorporate roundtable segments and provide a challenge for subsequent sessions</li> </ul>
<b>Context:</b>	<ul style="list-style-type: none"> <li>▪ The Vancouver Island landscape is being transformed by settlement and economic growth.</li> <li>▪ While the island has been experiencing a development boom, mitigation of environmental impacts has provided a driver for a ‘Design with Nature’ movement that is founded on a natural systems approach to rainwater management and green infrastructure.</li> <li>▪ The desired outcome is human settlement in balance with ecology.</li> </ul>
<b>Guidebook Vision:</b>	<div style="display: flex; align-items: flex-start;"> <div style="flex: 1;"> <ul style="list-style-type: none"> <li>▪ Create Liveable Communities and Protect Stream Health</li> </ul> </div> <div style="flex: 1; padding-left: 20px;"> <p><b>A ‘Design with Nature’ approach to community design means...</b></p> <ul style="list-style-type: none"> <li>▪ Develop compact, complete communities</li> <li>▪ Increase transportation options</li> <li>▪ Reduce the loads on water, waste and energy systems</li> <li>▪ Protect and restore urban ‘green’ space</li> <li>▪ Strive for a lighter ‘hydrologic footprint’</li> <li>▪ Achieve higher levels of stream, wetland and lake protection</li> </ul> </div> </div> <div style="text-align: center; margin: 10px 0;">  </div>
<b>Goal:</b>	<ul style="list-style-type: none"> <li>▪ Help practitioners make informed land development decisions that meet multiple objectives, result in Green Value, and add up to <i>A Positive Settlement Strategy for VI</i>.</li> </ul>
<b>Objectives:</b>	<ul style="list-style-type: none"> <li>▪ Local government practitioners will have a common and consistent understanding of:             <ol style="list-style-type: none"> <li>1. watershed performance targets and how they can establish them;</li> <li>2. how they can integrate good planning and innovative engineering designs; and</li> <li>3. the importance and maintenance of green infrastructure watershed performance targets (as they relate to land use and rainwater/stormwater management)</li> </ol> </li> </ul>
<b>Resources:</b>	<ul style="list-style-type: none"> <li>▪ <i>Stormwater Planning: A Guidebook for British Columbia</i>, published by the Province in 2002</li> <li>▪ <i>Develop with Care: Environmental Guidelines for Urban and Rural Land Development in British Columbia</i>, published by the Ministry of Environment in March 2006</li> <li>▪ <i>The Green Infrastructure Guide: Issues, Implementation Strategies and Success Stories</i>, published by West Coast Environmental Law in 2007</li> <li>▪ <i>Beyond the Guidebook: Context for Rainwater Management and Green Infrastructure in British Columbia</i>, jointly released by the Green Infrastructure Partnership and Inter-Governmental Partnership in June 2007</li> </ul>
<b>Tools:</b>	<ul style="list-style-type: none"> <li>▪ <i>Water Balance Model powered by QUALHYMO</i>, an online decision tool at <a href="http://www.waterbalance.ca">www.waterbalance.ca</a></li> </ul>

# Beyond the Guidebook: The New Business As Usual

## Change the Way We Develop Land to Create Liveable Communities & Protect Stream Health

### GUIDANCE DOCUMENTS

1. Living Water Smart: British Columbia's Water Plan, published in 2008
2. Stormwater Planning: A Guidebook for British Columbia, published 2002
3. Rainwater Management: An Introduction to the Guidebook for British Columbia, published in 2008
4. Beyond the Guidebook: Context for Rainwater Management and Green Infrastructure in British Columbia, published 2007
5. Beyond the Guidebook: Establish Watershed-Specific Runoff Targets, published in 2008
6. Develop with Care: Environmental Guidelines for Urban and Rural Land Development in British Columbia, published 2006
7. The Green Infrastructure Guide: Issues, Implementation Strategies and Success Stories, published 2007
8. Metro Vancouver Stormwater Source Controls Design Guidelines, published in 2005
1. <http://bc.waterbalance.ca/index.asp?type=single&section=Guidance%20Documents&sid=14&id=95>
2. <http://bc.waterbalance.ca/index.asp?type=single&section=Guidance%20Documents&sid=14&id=16>
3. <http://bc.waterbalance.ca/index.asp?type=single&section=Guidance%20Documents&sid=14&id=18>
4. <http://bc.waterbalance.ca/index.asp?type=single&section=Guidance%20Documents&sid=14&id=34>
5. <http://bc.waterbalance.ca/index.asp?type=single&section=Guidance%20Documents&sid=14&id=35>
6. [http://www.env.gov.bc.ca/wld/documents/bmp/devwithcare2006/develop\\_with\\_care\\_intro.html](http://www.env.gov.bc.ca/wld/documents/bmp/devwithcare2006/develop_with_care_intro.html)
7. <http://www.waterbucket.ca/gi/index.asp?sid=14&id=106&type=single>
8. <http://www.waterbucket.ca/rm/index.asp?sid=18&id=236&type=single>

### WEB SITES

9. Water Bucket Website
  - Rainwater Management Community-of-Interest
  - Green Infrastructure Community-of-Interest
  - Convening for Action Community-of-Interest
10. Water Balance Model powered by QUALHYMO
9. [www.waterbucket.ca](http://www.waterbucket.ca)
  - [www.rainwater-management.ca](http://www.rainwater-management.ca)
  - [www.greeninfrastructure.ca](http://www.greeninfrastructure.ca)
  - [www.conveningforaction.ca](http://www.conveningforaction.ca)
10. [www.waterbalance.ca](http://www.waterbalance.ca)

### WEB DOCUMENTS

11. 2008 Cowichan Valley Learning Lunch Series
12. Integration of Rainwater Management & Green Infrastructure in British Columbia: The Province's Perspective, 2007
13. Moving from Stormwater Management to RAINwater Management: Federal Fisheries Perspective, 2007
14. Commentary on Effective Municipal Rainwater/Stormwater Management & Green Infrastructure to Achieve Watershed Health, 2008
15. Rainwater Management on Diverging Paths in British Columbia and Washington State?, 2007
16. Green infrastructure resonates with BC engineers
17. Rainwater Management in the Georgia Basin: CRD workshop celebrates on-the-ground success
11. <http://www.waterbucket.ca/cfa/index.asp?sid=19&id=208&type=single>
12. <http://bc.waterbalance.ca/index.asp?type=single&section=Regulatory%20Context&sid=13&id=15>
13. <http://bc.waterbalance.ca/index.asp?type=single&section=Regulatory%20Context&sid=13&id=21>
14. <http://www.waterbucket.ca/cfa/sites/wbccfa/documents/media/118.pdf>
15. <http://www.waterbucket.ca/gi/index.asp?sid=6&id=275&type=single>
16. <http://www.waterbucket.ca/gi/index.asp?sid=49&id=319&type=single>
17. <http://www.waterbucket.ca/gi/index.asp?sid=49&id=329&type=single>

### MAGAZINE ARTICLES

18. Create Liveable Communities & Protect Stream Health: Water Balance Model powered by QUALHYMO integrates site with the watershed and the stream, April 2008
19. Stormwater Management: A Discipline in Transition, September/October 2006
20. Sustainable Community Design: A New Approach to Rainwater Management, June 2004
21. Rainwater/Stormwater Management: Build a vision, create a legacy is the "Tenth Paradigm", February 2002
22. Stormwater Paradigms: How our ideas on stormwater have changed, July/August 2001
18. <http://bc.waterbalance.ca/sites/wbm-canada-template/documents/media/19.pdf>
19. <http://www.waterbucket.ca/gi/index.asp?sid=96&id=348&type=single>
20. <http://www.waterbucket.ca/cfa/sites/wbccfa/documents/media/116.pdf>
21. <http://www.waterbucket.ca/rm/index.asp?sid=44&id=431&type=single>
22. <http://www.waterbucket.ca/rm/index.asp?sid=44&id=451&type=single>

### ANNOUNCEMENTS

23. Province announces launch of 'new Water Balance Model' at Gaining Ground Summit, 2008
24. Living Water Smart: A Plan for Water Sustainability in British Columbia, 2008
23. <http://bc.waterbalance.ca/index.asp?type=single&section=Announcements&sid=29&id=84>
24. <http://bc.waterbalance.ca/index.asp?type=single&section=Announcements&sid=29&id=86>

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