



**the partnership
for water sustainability in bc**

Convening for Action in British Columbia

Partnership for Water Sustainability aligns efforts with Ministry of Environment to advance the “Beyond the Guidebook” initiative

Integrating the Site with the Watershed and the Stream



September 2012

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Preface

The Partnership for Water Sustainability in British Columbia is helping the Province implement the Living Water Smart and Green Communities initiatives in the local government setting. Launched in 2008, these initiatives comprise plans, strategies, targets, actions and tools to reduce the ‘water footprint’ of BC communities. The Partnership is incorporated as a not-for-profit society.

The following article comprises two stand-alone yet interconnected parts. The first part is an announcement about Partnership collaboration with the Ministry of Environment. The second part traces the history of the “Beyond the Guidebook” initiative which the Partnership is leading.

Moving forward, the vision for alignment of Ministry-Partnership efforts is that the Beyond the Guidebook initiative will demonstrate how to integrate regulatory compliance and collaboration.

Links for downloading guidance documents are provided at the end of this article.



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1. Move from Awareness to Action

“The Partnership vision is that water sustainability will be achieved through implementation of green infrastructure policies and practices. The Partnership is the hub for a ‘convening for action’ network. As the hub, we provide support for practitioners who are managing and/or leading change in a local government setting. Through sharing of experience and application of science-based understanding, our goal is to help communities move from awareness to action on the ground,” states Tim Pringle, President.



“The Partnership has primary responsibility for evolution and delivery of program elements developed under the umbrella of the *Water Sustainability Action Plan for British Columbia*, released in February 2004. A flagship initiative is branded as “Beyond the Guidebook” because it is building on the technical foundation created a decade ago when **Stormwater Planning: A Guidebook for British Columbia** was jointly released by the Province and Environment Canada in June 2002,” adds Peter Law, Chair (2000-2002) of the inter-governmental Guidebook Steering Committee (2000-2002). Formerly with the Ministry of Environment, Peter Law is a founding Director of the Partnership.



The Mission: Demonstrate How to Integrate Regulatory Compliance and Collaboration

“The Ministry recognizes and appreciates that, commencing with release of the *Water Sustainability Action Plan for BC* in 2004, the Partnership is doing what government views as important work,” states Cairine MacDonald, Deputy Minister, BC Ministry of Environment.

“The Ministry values what the Partnership has accomplished since 2007 under the umbrella of *CAVI-Convening for Action on Vancouver Island*. In particular, the Ministry celebrates the Partnership’s latest success in bringing together four regional districts through an **Inter-Regional Education Initiative**. Inter-regional collaboration is the pathway to a consistent approach to water sustainability and green infrastructure policies and practices up and down the east coast of Vancouver Island.”



“The Ministry looks forward to aligning efforts with the Partnership in three regions — Vancouver Island, Lower Mainland and the Okanagan — to further advance implementation of the “**Beyond the Guidebook**” initiative; and provide communities with the tools and knowledge to protect and/or restore watershed health. The Ministry’s renewed emphasis on the rainwater management component of Liquid Waste Management Plans has created an opportunity to demonstrate how to integrate regulatory compliance and collaboration.”

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Collaboration Starts with Shared Responsibility

“Looking back at the past decade, and in terms of the water sustainability goal, BC experience has demonstrated the benefits of a sustained provincial commitment to a collaborative and educational approach. This commitment is founded on the notion of ‘shared responsibility’. This holds the long-term key to achieving success. Yet, shared responsibility has its limitations,” continues Kim Stephens, Partnership Executive Director.



“Yes, local governments have the tools and experience to ‘get it right’. Their challenge, however, is to capitalize on rather miss opportunities. This is why they need a regulatory driver to help them knuckle down and ensure comprehensive and consistent implementation of green infrastructure policies and practices.”

“At the heart of a **‘compliance + collaboration’** philosophy is an understanding and recognition of how local government demonstration projects have informed the Living Water Smart and Green Communities. On-the-ground applications provide assurance that the policy framework is technically sound, and that full-scale implementation will be affordable and effective.”

“At the end of the day, however, someone has to say ‘this is what you will do; just get on with it’. As the regulator, that is the role of the Ministry of Environment. This is the situation in Metro Vancouver, for example, where the Minister has connected the dots between land use planning and watershed health, and has imposed conditions that commit municipalities to action pursuant to the regulatory requirements spelled out in the region’s *Integrated Liquid Waste & Resource Management Plan*,” concludes Kim Stephens.

Living Water Smart Actions and Targets

“Living Water Smart presents government’s vision for sustainable land and water stewardship. The 45 actions and targets in Living Water Smart establish expectations about how land will be developed (or redeveloped) and water will be used. The Green Communities Initiative complements Living Water Smart, and provides enabling tools for local government,” reports Ted van der Gulik, the Senior Engineer in the Ministry of Agriculture, and Chair of the Water Balance Model Partnership.



“To make it possible to achieve Living Water Smart targets and actions, the Province has led development of a suite of web-based tools through partnerships with local government. Tools include the waterbucket.ca website, Water Balance Model, and Water Conservation Calculator. These three tools reside within the Partnership and support new approaches to water management.”



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2. Beyond the Guidebook: Implementing a New Culture for Urban Watershed Protection and Restoration in British Columbia

“In 2002, *Stormwater Planning: A Guidebook for British Columbia* advanced this provocative premise: land development and watershed protection can be compatible. This radical shift in practitioner thinking resulted from recognition of HOW a science-based understanding could bridge the gap between high-level policy objectives and site design practices. The Guidebook formalized the Water Balance Methodology for rainfall capture and runoff control. And it set the stage for defining water sustainability as an outcome of green infrastructure policies and practices,” recalls Peter Law.

Green Infrastructure and Stream Health

“Over the next five years, British Columbia practitioners became comfortable with what ‘rainfall capture’ meant in practice. By 2007, it was time to focus attention on how to truly protect and/or restore stream health in urban watersheds. The evolution in watershed thinking was captured in *Beyond the Guidebook: Context for Rainwater Management and Green Infrastructure in British Columbia*, released in June 2007,” continues Kim Stephens.

“Beyond the Guidebook addressed the relationship between volume control (rainfall capture) and resulting flow rates in streams; and correlated stream health with stream erosion. On February 10, 2009 the Ministry of Community Development sent out a circular that brought the Beyond the Guidebook initiative to the attention of all Municipal and Regional District Chief Administrative Officers, Engineers and Planners.”

Beyond the Guidebook 2007: “Beyond the Guidebook was released in June 2007 as a guidance document... (and) supports and/or complements other provincial initiatives, notably:



Living Water Smart, the Green Communities Project and A Guide to Green Choices. Collectively, these initiatives establish expectations that, in turn, will influence the form and function of the built environment in general and green infrastructure on the ground in particular,” wrote Glen Brown, Executive Director.

The Ministry Circular is reproduced herein as an attachment.

How Change is Being Implemented

“Third in the series of guidance documents was *Beyond the Guidebook 2010: Implementing a New Culture for Urban Watershed Protection and Restoration in British Columbia*. Released in June 2010, *Beyond the Guidebook 2010* describes how a ‘convening for action’ philosophy has taken root in British Columbia. The formal rollout commenced in September 2010 at the Annual Convention of the Union of BC Municipalities with a co-presentation by Glen Brown and Raymond Fung (Chair, Green Infrastructure Partnership). They represented the provincial and local government perspectives, respectively,” reports Kim Stephens.

“People learn through stories. *Beyond the Guidebook 2010* is the ‘telling of the stories’ of how change is being implemented on the ground in British Columbia. These stories demonstrate that the practitioner and community culture is changing as an outcome of collaboration, partnerships and alignment. Case study experience presented in *Beyond the Guidebook 2010* clearly shows that a new land ethic is taking root in British Columbia. Changing the culture requires a process. This takes time to complete. There is no short-cut.”

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Collaboration, Partnerships and Alignment

“The Province of British Columbia has provided a ‘design with nature’ policy framework that enables local governments to build and/or rebuild communities in balance with ecology. A key message in Beyond the Guidebook 2010 is that the future desired by all will be created through alignment of federal, provincial and local policies and actions,” states Kim Stephens.

Regional Team Approach: “A decade ago, we made a conscious decision to follow an educational rather than prescriptive path in BC. We realized that changing the way we develop land depends on establishing higher expectations and challenging practitioners to embrace shared responsibility,” stated Glen Brown when he elaborated on the ‘regional team approach’ at the rollout of Beyond the Guidebook 2010 at the UBCM Annual Convention.

“The philosophy behind the Water Sustainability Action Plan is quite simple: bring local and regional stakeholders together where there is a desire and energy to make some form of change.”

“As we move forward with the Action Plan, it is making sure that we provide the people on the ground with the tools and resources that they need to help support action at the local level.”

“A top-down approach does not work. It is all about being bottom-up... that is to say, the regional team approach. When a community shows interest or a desire to move something forward, that is when we mobilize. The Action Plan purpose is to engage, listen, understand and support the local interests in moving forward. That is where we have been successful,” concluded Glen Brown.

Building on the Guidebook Foundation

“The Guidebook is timeless because it is fundamentally sound. So, our strategy is to build on it while at the same time we evolve our understanding of how to be effective in applying the science,” emphasizes Peter Law.

“A decade ago, looking at rainfall differently led the Province to initiate a paradigm-shift in the way rainwater is managed. The Guidebook formalized the **Water Balance Methodology** in order to establish performance targets. The Guidebook did not go on the shelf. Ten years later, we are still here, and we are still moving the initiative forward. We are providing tools and training to protect stream health.”

“A key goal is to improve the technical basis for local government decisions. Hence, the Partnership is working with local government planning and engineering staff to help them “use” the tools, rather than wait for “expert” reports. We strive to make these materials easy to use in answering some basic land use questions concerning how water influences the site and watershed.”

“At the core of the Guidebook is a ‘learn by doing’ philosophy. The Water Balance Methodology is dynamic; and it is being enhanced over time to incorporate fresh insights resulting from science-based understanding.”

“Between November 2011 and April 2012, the Partnership released three Primers that build on the Guidebook foundation. These guidance documents contribute to the core curriculum for the Inter-Regional Education Initiative that is now underway on Vancouver Island. Next, we will bring Metro Vancouver into the mix so that the approach will be truly Georgia Basin in scope. And after that, we will bring the Okanagan into the picture,” concludes Peter Law.

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2010 UBCM Annual Convention
“Forging Gold Medal Standards”

**Beyond the Guidebook 2010:
Implementing A New Culture for
Urban Watershed Protection & Restoration
in British Columbia**

An Integrated Presentation by
Glen Brown & Raymond Fung
September 27, 2010

Water Sustainability Action Plan for BC

- Products & Tools
- Networking & Outreach
- Capacity Building
- Education & Training

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Data SIO, NOAA, U.S. Navy, NGA, GEBCO
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The image shows a satellite map of British Columbia with a yellow outline of the province. A circular diagram in the top right corner contains four overlapping circles labeled 'Products & Tools', 'Networking & Outreach', 'Capacity Building', and 'Education & Training', all under the heading 'Water Sustainability Action Plan for BC'. Text on the map includes the title 'Beyond the Guidebook 2010: Implementing A New Culture for Urban Watershed Protection & Restoration in British Columbia' and the presenter information 'An Integrated Presentation by Glen Brown & Raymond Fung, September 27, 2010'. A reference to the '2010 UBCM Annual Convention "Forging Gold Medal Standards"' is also present.

‘Design with Nature’

*“Water Sustainability will be achieved by implementing
Green Infrastructure policies and practices.
How we get there relies on a change in mind-set.
The Partnership role is to facilitate that change.”*

Tim Pringle, President
Partnership for Water Sustainability
In British Columbia

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Data SIO, NOAA, U.S. Navy, NGA, GEBCO
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The image shows a satellite map of British Columbia with a yellow outline of the province. A quote is centered on the map: “Water Sustainability will be achieved by implementing Green Infrastructure policies and practices. How we get there relies on a change in mind-set. The Partnership role is to facilitate that change.” Below the quote is a small photo of Tim Pringle, President of the Partnership for Water Sustainability in British Columbia. The title “Design with Nature” is at the top. Copyright information for Europa Technologies and Google is at the bottom.

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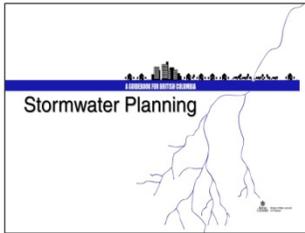
Attachments

Links to Guidance Documents

2009 Ministry Circular

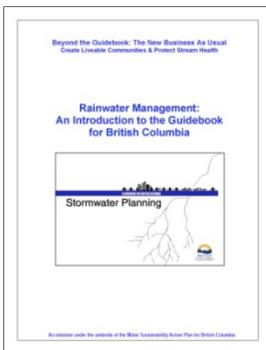
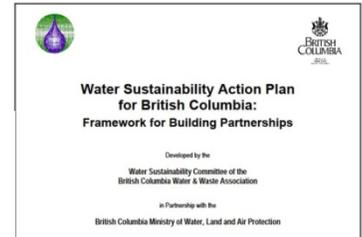
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Guidance Documents



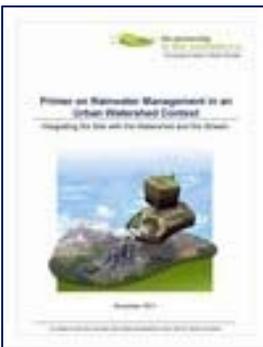
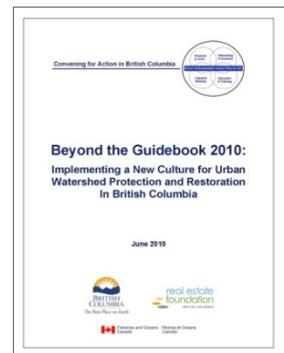
Stormwater Planning: A Guidebook for British Columbia (2002) --- *Catalyst for action to establish performance targets for watershed protection and restoration*
<http://www.env.gov.bc.ca/epd/mun-waste/waste-liquid/stormwater/index.htm>

Water Sustainability Action Plan for British Columbia: Framework for Building Partnerships (2004) --- *Goal: encourage province-wide implementation of fully integrated water sustainability policies, plans and programs*
<http://www.waterbucket.ca/cfa/sites/wbccfa/documents/media/81.pdf>



Rainwater Management: An Introduction to the Guidebook for British Columbia (2008) --- *Provides a broad-brush picture of what is in the Guidebook; written for expert and non-expert audiences*
<http://www.waterbucket.ca/gi/sites/wbcgi/documents/media/197.pdf>

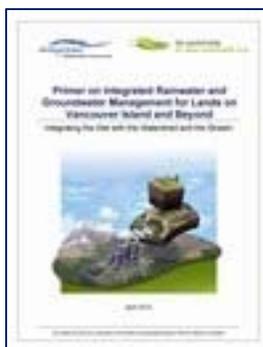
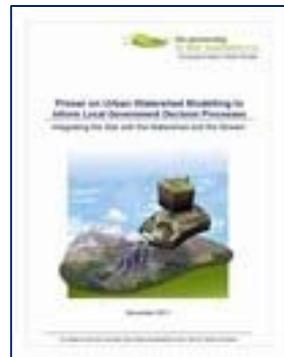
Beyond the Guidebook 2010: Implementing a New Culture for Urban Watershed Protection and Restoration in British Columbia (2010) --- *Provides guidance for aligning local actions with provincial and regional goals to 'design with nature'*
<http://www.waterbucket.ca/cfa/sites/wbccfa/documents/media/403.pdf>



Primer on Rainwater Management in an Urban Watershed Context (2011) --*Provides engineers and non-engineers with a common understanding of how a science-based approach to rainwater management has evolved since the mid-1990s.*
http://bc.waterbalance.ca/files/2011/12/1_Primer-on-Rainwater-Management-in-Urban-Watershed-Context_November2011.pdf

Primer on Urban Watershed Modelling to Inform Local Government Decision Processes (2011) --- *Provides engineers and non-engineers with guidance in three areas: setting performance targets, defining levels-of-service, and application of screening / scenario tools.*

http://bc.waterbalance.ca/files/2012/05/2_Primer-on-Urban-Watershed-Modelling-to-Inform-Decision-Process_November2011.pdf



Primer on Integrated Rainwater and Groundwater Management for Lands on Vancouver Island and Beyond (2012) --- *Supports implementation of Living Water Smart principles in the local government setting; and introduces the notion of viewing a watershed through a 'Sustainable Service Delivery' lens.*

http://waterbucket.ca/wp-content/uploads/2012/05/3_Primer-on-Integrated-Rainwater-Groundwater-Management-for-Lands-on-Vancouver-Island_April-2012.pdf

Circular No. 09:03
ARCS File #: 195-20

February 10, 2009

To: All Municipal and Regional District Chief Administrative Officers,
Engineers and Planners

Re: **Beyond the Guidebook - Context for Rainwater Management and
Green Infrastructure in British Columbia**

Beyond the Guidebook reflects a 'design with nature' approach to climate change adaptation. *Beyond the Guidebook* was released in June 2007 as a guidance document to introduce a methodology for correlating green infrastructure effectiveness in protecting stream health through using a pragmatic approach to achieve performance targets based upon rain water balance.

The ongoing *Beyond the Guidebook* provincial initiative builds on the guidance provided in the original [Stormwater Planning: A Guidebook for British Columbia](#). In 2008, Vancouver Island was home of the pilot region for a regional team approach to rainwater management and green infrastructure implementation. Partnerships and the [Vancouver Island Learning Lunch Seminar Series](#) enabled capacity building for stakeholders, local municipal staff, developers and consultants.

The Water Balance Model for British Columbia is a web-based decision support tool that provides easy access to the *Beyond the Guidebook* approach and is available at <http://bc.waterbalance.ca/>. This tool bridges engineering and planning and links the site to the stream and watershed. The Ministry of Community Development is a member of the inter-governmental partnership that develops and maintains the Water Balance Model. The Guidebook and supplementary guidance documents are downloadable from the website.

Over time, sustained application of the water balance methodology can help local governments protect and/or restore stream health.

Beyond the Guidebook supports and/or complements other provincial initiatives, notably: [Living Water Smart](#), the [Green Communities](#) Project and [A Guide to Green Choices](#). Collectively, these initiatives establish expectations that, in turn, will influence the form and function of the built environment in general and green infrastructure on the ground in particular.

For more information regarding the *Beyond the Guidebook* initiative and infrastructure grant programs, please contact the Local Government Infrastructure and Finance Division at 250 387-4060.

Glen Brown
Executive Director
Local Government Infrastructure and Finance