



Water Balance Model Partners are charter members of the 'Partnership for Water Sustainability'

Local Governments in Four Regions of BC are Water Balance Model Partners

Convening for Action in BC:
Visualize What We Want Our Regions to Look Like in 50 years

**Create a Legacy:
Settlement Change in Balance with Ecology**

1. *Influence choices by individuals and organizations*
2. *Use the term "sustainability" as a lens for considering approaches that influence choices*

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Preface

*Incorporated as a non-profit society in November 2010, the **Partnership for Water Sustainability in British Columbia** had its genesis in the Water Sustainability Committee of the BC Water & Waste Association. From 2003 until 2010, the committee was the hub for a 'convening for action' network. The Partnership is now that hub.*

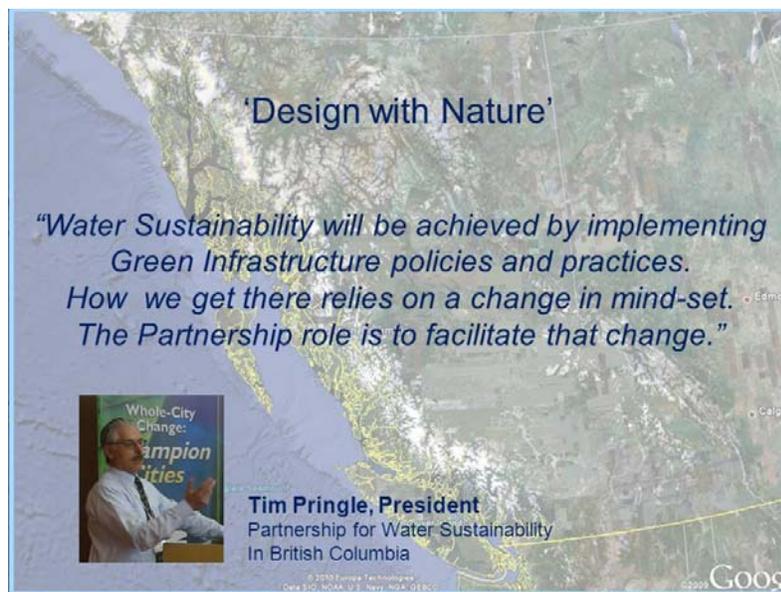
The Partnership primarily works in the local government context, with a focus on community and regional planning systems, to influence uptake of strategies that will integrate decisions about use and conservation of land with water sustainability outcomes. The guiding philosophy is 'design with nature'.

Early support and sustaining financial support by champion local governments that are Water Balance Model Partners was a foundation block in a building process that has culminated in formation of the Partnership as a legal entity.

The following article weaves a storyline that connects the dots between the Province's 'design with nature' policy framework, the Water Sustainability Action Plan, the Convening for Action in British Columbia initiative, the 2002 Stormwater Planning Guidebook, the Water Balance Model, champions in local government, Beyond the Guidebook 2010, and the Partnership.



*Kim A. Stephens, MEng, PEng, Executive Director
Partnership for Water Sustainability in British Columbia
March 2011*



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Water Sustainability Action Plan for British Columbia

Since 2003, the Real Estate Foundation and the Province of British Columbia have jointly funded development and implementation of the *Water Sustainability Action Plan for British Columbia*. Under this umbrella, a partnership network has been successfully 'convening for action' to help implement *Living Water Smart*, *BC's Water Plan* and the *Green Communities Initiative* on the ground.

Action Plan Foundation

Now, the *Partnership for Water Sustainability in British Columbia* provides a legal entity for building on the existing Action Plan foundation and creating a lasting legacy through these Action Plan elements:

- *Water Balance Model* and *Water Bucket Website*, the 'twin engines' of the Action Plan outreach and education program; and
- the *Convening for Action in British Columbia* initiative.

The Partnership vision is that water sustainability will be achieved through implementation of green infrastructure policies and practices. The Partnership is collaborating with local governments and supporting their interests so that they are informed about how to align regional and local actions with provincial goals.

Convening for Action in BC

"CONVENING FOR ACTION is a framework that brings stakeholders together, supported by the province, but led by local government. Collaboration and integration: it is a true bottom-up approach that identifies the issue and then seeks to address it through the alignment of all stakeholders, with emphasis on local government needs. Vancouver Island is the demonstration region for 'convening for action', and is a success story", states Glen Brown, Executive Director with the BC Ministry of Community, Sport and Cultural Development.



"The reality of increasingly stiffer competition for available funding means there is a greater incentive for local governments to demonstrate how their innovation and integration will be effective in meeting the program goals of both the Green Communities Initiative and Living Water Smart. Given this context, a key message when 'convening for action' in the local government setting is this: *water sustainability is more likely to be achieved when land use planning and climate change adaptation are integrated with infrastructure asset management.*"



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Our 'Land Ethic' and Water Sustainability

"It is our land ethic that ultimately will determine whether we achieve water sustainability. Respect for the land, that is so key, especially in those urban and suburban areas where BC's population is concentrated," states Tim Pringle, Partnership President. Formerly the Executive Director of the Real Estate Foundation from 1988 through 2008, he was the first winner of British Columbia's *Land Champion Award* in 2010.



"If we make it a priority to respect the land, and if we 'design with nature', then over time BC's communities will reduce their 'water footprint' in two ways. In dry weather periods, they will use less water to irrigate lawns and gardens, and water supplies will be conserved. During wet weather periods, less water will run off the land and stream health will be protected."

"The Water Balance Model is a web-based tool that helps communities make informed decisions about their water footprint," concludes Tim Pringle.



About the Water Balance Model

The Water Balance Model is a tool to assess green infrastructure effectiveness. The user can correlate runoff volume management strategies with stream erosion and water quality outcomes. This process allows the delivery of watershed-specific and outcome-oriented plans that are specifically applicable to the municipality, watershed and stream.

Understanding the Historical Context

UniverCity, the sustainable urban community for 10,000 people on Burnaby Mountain, within walking distance of Simon Fraser University, was the genesis for the Water Balance Model (WBM). Translating high expectations for this "green" development into practical design guidelines meant revisiting accepted drainage engineering practice; this need for innovation led directly to development of the original WBM tool.

Following release of *Stormwater Planning: A Guidebook for British Columbia* in June 2002, an Inter-Governmental Partnership was formed to evolve the original WBM into a web-based scenario modelling and decision support tool. A goal in developing the web-based tool was to provide information to multiple users with wide range of technical backgrounds; ranging from little technical knowledge to hydrologic experts.

A year later, in September 2003, the WBM was launched with high level political endorsement at the annual convention of the Union of British Columbia Municipalities.

In February 2009, the WBM received a *Premier's Award for Innovation and Excellence* because it bridges engineering and planning, links development sites to the stream and watershed, and enables science-based runoff performance targets to be established.

The Water Balance Model resides within the Partnership for Water Sustainability in British Columbia, and the Partnership is the legal owner.

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Recognition of Local Government Partners

"In 2001 the Stormwater Interagency Liaison Group (SILG), a technical committee of the Greater Vancouver Regional District, recognized the value of the water balance approach and funded the development of a working model to assess the affordability and feasibility of site design solutions for achieving performance targets," recalls Robert Hicks, Senior Engineer in the Policy & Planning Division at Metro Vancouver.



"The Inter-Governmental Partnership began as a subgroup of SILG and quickly expanded to become a provincial group with municipal representation from four regions: Greater Vancouver, the Fraser Valley, Vancouver Island and the Okanagan Valley."

"These champion local governments have made a sustaining financial commitment to ensure the success of the Water Balance Model," continues Ted van der Gulik, Chair of the Water Balance Model Partnership. "In addition to a \$5000 partnership fee upon joining the partnership, local governments pay an annual \$1000 fee to help maintain the website and implement ongoing improvements. Since 2002, we have been able to leverage grants and in-kind contributions totalling almost \$2 million. The sustained commitment of many champions in local government has brought us to a tipping point. Implementation of a new culture for urban watershed protection and restoration is within our grasp."



"In recognition of their vision and sustaining commitment, the *Partnership for Water Sustainability* is honouring 20 champion local governments by deeming them to be charter members of the Partnership. With the advantage of hindsight, it is clear that their early support was a foundation block in a building process that has culminated in formation of the *Partnership for Water Sustainability* as a non-profit society."

Implementing a New Culture

"Now that the Partnership is a legal entity, we can take a longer term view to ensure the sustainability and longevity of the WBM and the entire 'convening for action' initiative. In the coming months, we will be collaborating with local government champions to implement the 'next generation' of an outreach and continuing education program," foreshadows Kim Stephens, Executive Director of the Partnership.



"This program will leverage *Beyond the Guidebook 2010: Implementing a New Culture for Watershed Protection and Restoration in British Columbia*, released in June 2010. Beyond the Guidebook 2010 tells the stories of what the champions in local government have achieved, on the ground, over the past decade. Beyond the Guidebook 2010 also provides guidance for developing outcome-oriented urban watershed plans."

"The 'Convening for Action' initiative addresses water sustainability in BC and it engages practitioners whose careers, professions, employment and volunteer roles impact the land. Land and water are inextricably linked and strategies to achieve water sustainability require collaboration and a shared approach among practitioners."

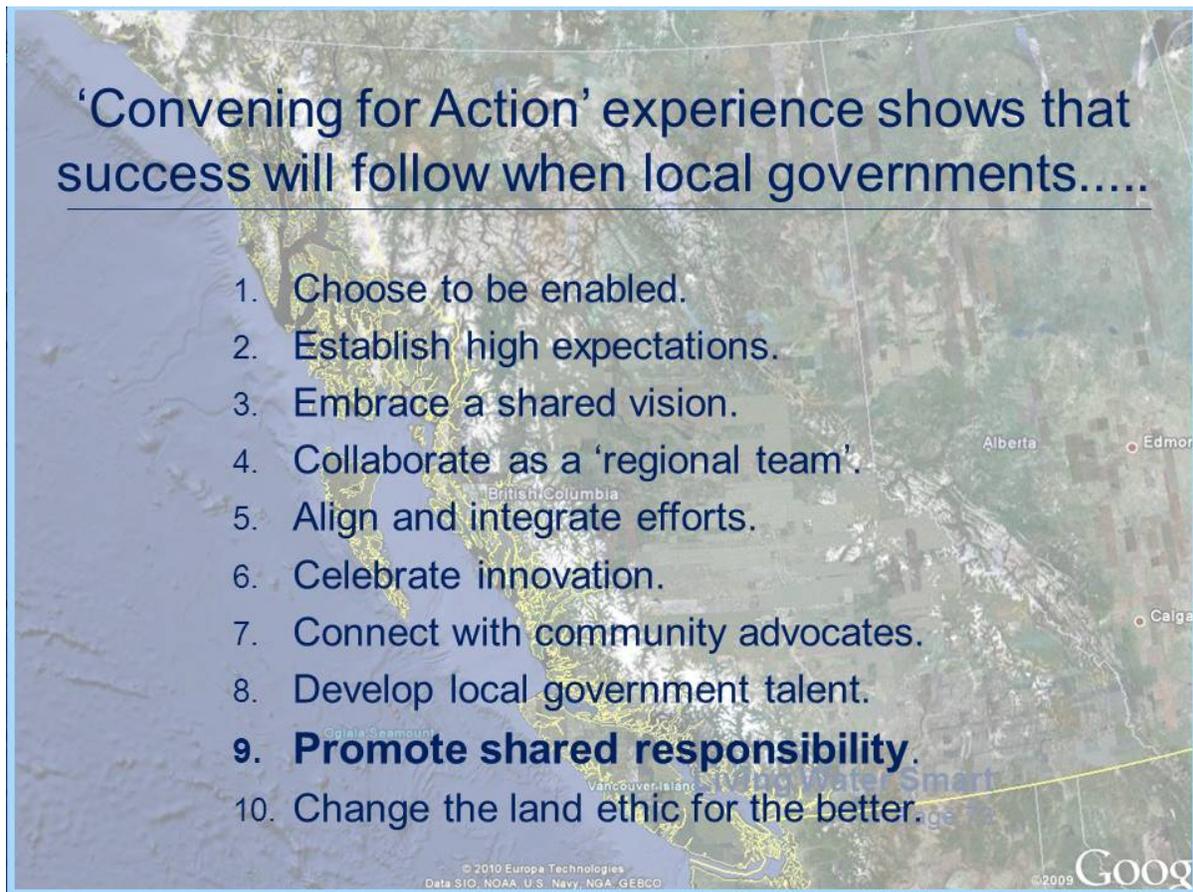
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To Learn More:

Released in 2002, **Stormwater Planning: A Guidebook for British Columbia** was a catalyst for action to implement a 'design with nature' approach to rainwater management and green infrastructure. The Guidebook applied a science-based understanding, developed the water balance methodology to establish performance targets for rainfall capture, and demonstrated that urban watershed restoration could be accomplished over a 50-year timeframe as and when communities redevelop.

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; however, lessons learned by those who have done it can help those who want to move to a design with nature strategy. To access the 'homepage' for *Beyond the Guidebook 2010*, follow this link:

<http://www.waterbucket.ca/cfa/?type=summary§ion=BeyondtheGuidebook2010&sid=100>



'Convening for Action' experience shows that success will follow when local governments.....

1. Choose to be enabled.
2. Establish high expectations.
3. Embrace a shared vision.
4. Collaborate as a 'regional team'.
5. Align and integrate efforts.
6. Celebrate innovation.
7. Connect with community advocates.
8. Develop local government talent.
- 9. Promote shared responsibility.**
10. Change the land ethic for the better.

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