

# Water Sustainability

## BCWWA partners with the province to deliver the Water Sustainability Action Plan.

BY KIM STEPHENS

**THE WATER** Sustainability Action Plan for British Columbia provides a partnership umbrella for an array of on-the-ground initiatives that promote a ‘water-centric’ approach to community planning. (Water-centric means planning with a view to water — whether for a single site or the entire province.) The Action Plan comprises inter-connected program elements that give local governments and practitioners the tools and experience to do things differently. The over-arching goal is to advance a water balance way-of-thinking and acting.

To achieve the goal, a water-centric approach puts water stewardship and sustainability front and centre on the agenda of comprehensive land use, development or resource planning initiatives. Water-centric planning considers the amount of water available, the amount of water needed, innovative efficiency strategies, the quality of water leaving an area, how rain and snow water are managed, and the impact on the natural environment. Implementation of integrated strategies and solutions ultimately requires integration of missions, mandates and accountabilities of participating agencies.

Through a partnership with the Ministry of Environment, program delivery for the Water Sustainability Action Plan is being carried out by the Water Sustainability Committee (WSC) of the British Columbia Water & Waste Association (BCWWA). The WSC is providing the leadership, facilitation and organizational services necessary for successful program implementation. According to Raymond Fung, WSC chair, “The Water Sustainability Action Plan is aimed at building capacity by improving awareness about effective approaches to the sustainable use of water resources and demonstrating how to integrate these approaches into land and resource planning, development and management decisions at the regional, community through to site levels.”

The Action Plan builds on the foundation provided by A Water Conservation Strategy for British Columbia, also developed and implemented by the province in partnership with BCWWA from 1997 to 2001.

Within the BCWWA framework, WSC is a broadly based roundtable of organizations that have a specific interest or mission in implementing the Action Plan. The roundtable encompasses government organizations, non-government associations, the private sector, and universities. “By drawing its members from a diverse range of disciplines and organizations, the WSC functions across the boundaries and beyond the historical limits or constraints of the mandates, knowledge and expertise found in specific organizations. One of the criteria for membership is that individuals will feed back the WSC outcomes into their organizations,” says Fung.

The Water Balance Model for British Columbia was the first of the six elements to be implemented. This web-based decision support and scenario modeling tool quantifies the benefits — in terms of reducing rainwater runoff volume — of installing source controls such as green roofs, rain gardens and infiltration facilities under different combinations of land use, soil and climate conditions. The outreach and continuing education program for the Water Balance Model was launched at the 2003 Annual Conference of the Union of British Columbia Municipalities with

Implementing a natural systems approach to rainwater management means capture rain where it falls and minimize surface runoff volumes. Detention storage volume is being provided under a parking lot in the Township of Langley.



a session for elected officials. Key partners for delivery of hands-on training workshops for practitioners are the Real Estate Foundation of B.C., the UDI, and the Association of Professional Engineers & Geoscientists of BC. Training workshops in computer lab settings have been hosted by UBC, University of Victoria, BCIT, North Island College in Courtenay, and the University of British Columbia Okanagan.

“The early success of the Water Balance Model in British Columbia generated interest in expanding the focus of the tool to reach a national audience. This led to the decision in 2004



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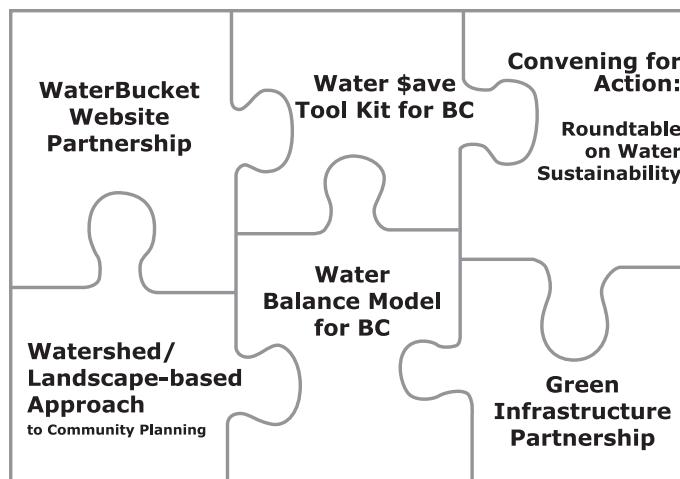
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by Environment Canada, Canada Mortgage & Housing Corporation, and the Province of British Columbia to join forces to create a truly national Water Balance Model for Canada at [www.waterbalance.ca](http://www.waterbalance.ca) and foster the formation of inter-provincial partnerships as a means to pool resources”, reports Ted van der Gulik, chair of the Inter-Governmental Partnership that is responsible for model development.

“The success of the Water Balance Model website helped create momentum for development of the WaterBucket website at [www.waterbucket.ca](http://www.waterbucket.ca)”, adds Michael Tanner, WaterBucket chair. “Launched in 2005, the WaterBucket is the primary communication vehicle for the Action Plan. Our vision is to provide a resource-rich, highly interactive ‘destination location’ for timely and provocative information about water sustainability in British Columbia.”

Over the past year, WaterBucket has expanded from one to six communities-of-interest, namely: Water-Centric Planning; Water Use and Conservation; Rainwater Management; Green Infrastructure; Agriculture and Water; and Convening for Action.

The Water Balance Model and the WaterBucket are stand-alone initiatives under the Action Plan umbrella, yet are fully integrated with the Green Infrastructure Partnership. Formed in 2003, the mission of the Green Infrastructure Partnership is to provide leadership and encourage others to implement ‘green infrastructure’ design practices and regulation province-wide. According to Paul Ham, chair of the Partnership, “Consultation workshops in May 2004 and May 2005 resulted in successive reconfigurations of our work plan, with the emphasis now on educating stakeholders regarding the benefits of a design with nature approach to community planning and land development, and facilitating adoption of this approach. This means build



and/or rebuild communities in harmony with the natural environment. Water-centric green infrastructure and ‘water balance management’ can be viewed as one and the same, in that both start at the site level and both revolve around how we develop the landscape.”

In 2006, the WSC is playing a leadership role in implementing the Convening for Action initiative through regional partnerships, with an initial emphasis on the South Okanagan. Through an outreach and continuing education program that is outcome-oriented, this key element of the Water Sustainability Action Plan is promoting water stewardship provincially by demonstrating what the water balance way-thinking and acting means on-the-ground.

According to Erik Karlsen, co-lead for the Convening for Action initiative, “We are building on the successful precedent that the former Ministry of Water, Land & Air Protection established in 2002 when the Ministry published *Stormwater Planning: A Guidebook for British Columbia*. The guidebook set in motion a chain of outcomes that has resulted in British Columbia being recognized internationally as a leader in implementing a natural systems approach to rainwater management in the urban environment. The Convening for Action initiative creates an opportunity to move beyond rainwater management to embrace all components of the water cycle through integrated water management. It will turn ideas into action.”

The Convening for Action initiative is designed to ‘turn ideas into action’ through a three-step process that builds capacity by:

- Challenging practitioners and others to step back from their existing paradigms (e.g. big pipe solutions, whether for water supply or drainage conveyance);
- Informing them regarding alternatives (e.g. rainwater harvesting to augment water supply and/or reduce rainwater runoff volume); and
- Giving them the tools and the experience to do things differently (e.g. the Water Balance Model).

The Minister of Environment, Barry Penner, recently said: “I am pleased with the continuing success of the ministry’s partnership with the BCWWA’s Water Sustainability Committee in providing program delivery for the Water Sustainability Action Plan... I value the important role this partnership is playing in promoting awareness and supporting communities to integrate water management practices with local land use planning and development programs. The ministry continues to provide core funding to support implementation of this Action Plan.” **CB**

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