Pathway to urban water sustainability in British Columbia

By Kim A. Stephens

he Province of British Columbia has put in place a policy framework that enables local governments to commit to doing business differently. The program goals for *Living Water Smart, BC's Water Plan*, and the companion *Green Communities Initiative*, constitute a 'call to action' on the part of British Columbians to manage settlement in balance with ecology.

Tim Pringle, Director of Special Programs for the Real Estate Foundation of British Columbia, says that "Living Water Smart presents the vision, and the Green Communities Initiative provides enabling tools to achieve the vision. The solutions and commitments go beyond what government does. Living Water Smart supports planning that is as much about land as water."

Living Water Smart contains a key message – green development makes sense. Fostering new thinking about development leads to more green spaces, more water and fish in streams, improved community vitality, reduced demand for water, and reduced expenditure on infrastructure.

Implementation

Implementation of Living Water Smart and the Green Communities Initiative is being advanced through partnerships, in particular the *Water Sustainability Action Plan for British Columbia*.

Co-sponsored by the Province and the Real Estate Foundation of British Columbia, and delivered through the British Columbia Water & Waste Association (BCWWA), the Water Sustainability Action Plan serves as a partnership umbrella for aligning actions at three levels: provincial, regional, and local.

One vehicle for program delivery is *Convening for Action on Vancouver Island* (CAVI). On Vancouver Island, the CAVI team is playing a key delivery role in two of the five Living Water Smart theme areas: community planning and development; and efficiency, outreach and public awareness.



Kim Stephens



Lynn Kriwoken





Glen Brown

Tim Pringle

Shared responsibility

Water issues are complex and best solved collaboratively, which includes using strategies and solutions that fall outside government control. While legislative reform is a foundation piece, collaboration takes place in the world of practitioners.

"At the end of the day, planners and engineers and other disciplines must come together to determine the issues and solutions. No statute will help them do that," says Lynn Kriwoken, of the BC Ministry of Environment.

Provincial funding

"A mandate of the BC Ministry of Community & Rural Development is to foster partnerships, collaboration, innovation, and integration through the program elements that comprise the Green Communities Initiative. The goal is to build capacity that will result in sustainable, healthy and vibrant communities," continues Glen Brown, Executive Director of the Local Government Infrastructure & Finance Division of the Ministry. He is also Chair of the BC Water Sustainability Committee.

Ultimately it is the Ministry's grant programs that provide the incentives that enable the Province to influence local government behaviour, and to reward those who meet program objectives for doing business differently 'on the ground'. The Green Communities Initiative encompasses a number of plans and strategies that directly complement and/or support Living Water Smart policies.

The reality of an increasing local government infrastructure deficit means that there will be even stiffer competition for available funding. As a result, there is a greater incentive for local governments to demonstrate how their innovation and integration will be effective

in meeting the goals of both the Green Communities Initiative and Living Water Smart

Rewarding innovation and integration

According to Mr. Brown, infrastructure grant programs have evolved over the past decade in British Columbia. In the past, those local governments which had poorly managed their infrastructure systems were essentially rewarded with grants to rectify problems resulting from a lack of planning. Now, those local governments which are proactive and showing leadership are the ones which are being rewarded.

In urban settings, measures that 'green' (and improve) the built environment can also protect or help restore the natural environment. How communities choose to develop or redevelop individual sites has ripple effects at the watershed scale. By designing with nature, this means actions on the ground can add up and result in cumulative benefits over time.

Green vocabulary defined

To help advance a new way of thinking about land development in British Columbia, the Water Sustainability Action Plan has developed and is promoting a 'green' vocabulary:

- Green Value means that land use strategies will accommodate settlement needs in practical ways, while protecting the ecological resources upon which communities depend.
- Design with Nature is one approach to achieve Green Value, and is supportive of community goals that relate to building social capacity as well as protecting ecological assets.
- Green Infrastructure is the on-theground application of Design with Nature standards and practices.
 - · Water Sustainability is achieved

through Green Infrastructure practices that reflect a full and proper understanding of the relationship between land and water. Desired water sustainability outcomes are less irrigation water use, and reduced rainwater runoff. These are complementary outcomes.

Regional team approach

In general, the enabling approach means the onus is on local government to take the initiative, because the Province recognizes that communities are in the best position to develop solutions which meet their own unique needs and local conditions.

A 'regional team approach' is founded on partnerships and collaboration, and seeks to align local actions with provincial and regional goals. Vancouver Island is demonstrating the regional team approach.

CAVI has brought together those who plan and regulate land use (local government), those who build (developers), those who provide the legislative framework (the Province), those who advocate conservation of resources (stewardship sector), and those who provide research

(university and college). They will also be reaching out to those who grow food (agricultural sector).

Communication

The Water Bucket Website (www.waterbucket.ca) is one of the web-based tools that is helping to effect changes in water and land development practices in British Columbia. It is designed to pro-

Looking ahead

"Over the past three years, we have engaged in a process to create a picture of what a shared vision for Vancouver Island could look like. We have also drawn attention to the need to balance settlement change in harmony with ecology. Although ecology can exist without habitation by humans, human

The experience gained through this process has demonstrated the valuable role that www.waterbucket.ca plays in delivering information and sharing lessons learned.

vide the complete story on integrated land and water management, the why, what, where, and how.

Vancouver Island has been the Action Plan pilot region for a bottom-up approach to informing and educating municipal planners, engineers and others. The experience gained through this process has demonstrated the valuable role that www.waterbucket.ca plays in delivering information and sharing lessons learned.

habitation cannot exist without ecology," states Eric Bonham, a founding member of the CAVI leadership Team, and formerly a Director in both the BC Ministry of Environment and BC Ministry of Community Services.

Kim A. Stephens is Program Coordinator, Water Sustainability Action Plan for British Columbia. E-mail: kstephens@watersustainabilitybc.ca



With locations in British Columbia, Alberta, and Ontario, our teams are ready to provide local experience in projects including:

- · Water resource characterization, development, and management
- Mining and oilfield water management and geochemical characterization
- · Groundwater monitoring and information management solutions
- Advanced geophysical logging and interpretation

©Schlumberger * Mark of Schlumberger



www.water.slb.com

www.esemag.com January 2010 | 49