

Convening for Action in British Columbia



Creating Our Future: Today's Expectations are Tomorrow's Standards for Living Water Smart

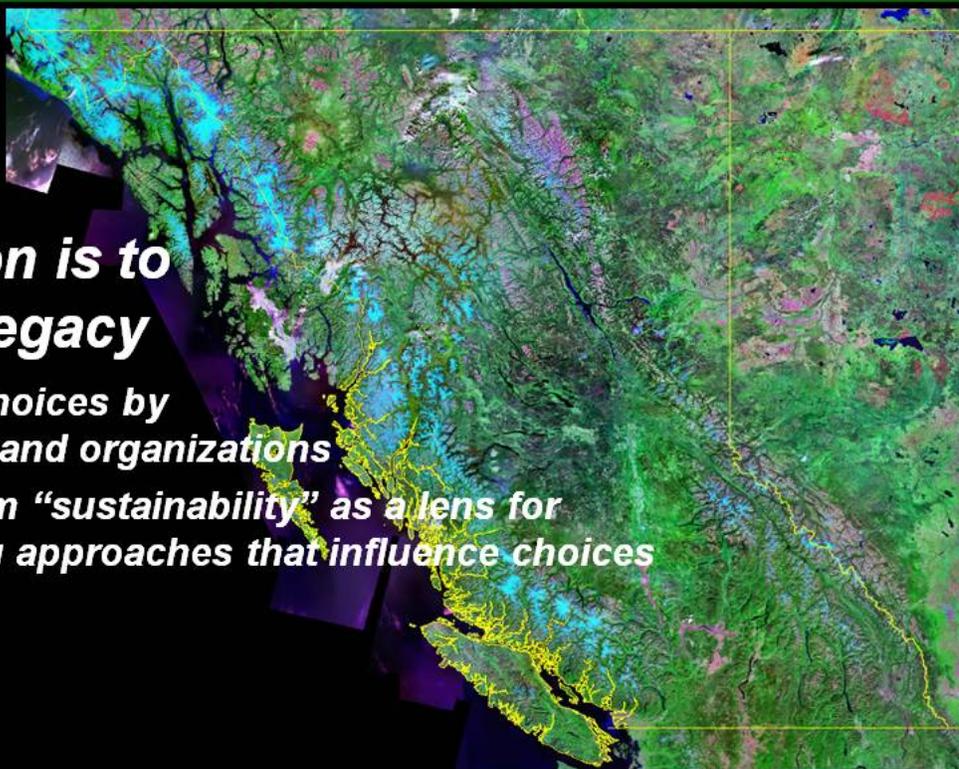
Penticton Forum showcases regional team approach on April 29, 2009

The New Business As Usual:

Visualize What We Want British Columbia to Look Like in 50 years

The Mission is to Create a Legacy

- 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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Building Bridges and Breaking Barriers - Teamwork for a WaterSmart World

Water Bucket Web Story #5 about the Penticton Forum posted April 2009

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How do we align our efforts at three scales – provincial, regional and local – to do business differently, prepare communities for change, and choose to be water smart?

“This is the fifth in a weekly series of stories leading up to the Penticton Forum on April 29,” states **Kim Stephens**, Program Coordinator for the **Water Sustainability Action Plan for British Columbia**. “Their purpose is to progressively connect the dots and foreshadow what participants from the Okanagan, Metro Vancouver, Vancouver Island and elsewhere can expect when they convene for action.”



“This Story #5 provides an overview of the provincial policy framework that enables local governments to design their communities in harmony with water.”

The Forum is an adjunct to the annual conference of the BC Water & Waste Association (BCWWA); and is co-hosted by three provincial Ministries (Environment, Community Development, and Agriculture & Lands), the Okanagan Basin Water Board, and the BCWWA Water Sustainability Committee.



1. Forum Program – An Overview

“The Province’s **Living Water Smart** and **Green Communities** initiatives provide a framework and direction for **convening for action** in the Okanagan, on Vancouver Island and in Metro Vancouver,” states **Glen Brown**. He is an Executive Director with the Ministry of Community



Development; and is Chair of the Water Sustainability Committee. “Each regional initiative is developing a vision and road map for doing business differently in order to change the way that land is developed and water is used.”

Vision for Living Water Smart

“The forum program is organized as four modules, and is built around approaches and tools for achieving truly green development. While each module is stand-alone, they are linked,”

“Our vision is that the Penticton Forum will be a transformational event that inspires people to do better. We are showcasing how **partnerships, collaboration, innovation** and **integration** are helping local governments in three regions make the best choices for living water smart.”

Smart Planning & Living Water Smart: Approaches and Tools for Doing Business Differently in BC

- A. Creating Our Future:
What Do We Want British Columbia to Look Like?
- B. Doing Business Differently:
Convening for Action in the Okanagan
- C. Doing Business Differently:
Convening for Action in the Georgia Basin
- D. Creating Our Future:
The Natural City Vision

Organized under the umbrella of the Water Sustainability Action Plan for British Columbia

By the BCWWA Water Sustainability Committee in collaboration with the Okanagan Basin Water Board, Ministry of Agriculture & Lands, Ministry of Community Development, and Ministry of Environment

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2. Living Water Smart, BC's Water Plan

"A provincial policy framework is now in place that enables municipalities to 'do business differently' in order to design their communities to live in harmony with water," states

Lynn Kriwoken, Director, Innovation and Planning in the Water Stewardship Division of the Ministry of Environment, and the Province's lead person for delivery of **Living Water Smart, BC's Water Plan.**



LIVING WATER SMART



B.C.'s Plan to protect and preserve water resources through planning, regulatory change, education, and incentives such as economic instruments and rewards.

Climate Change Adaptation

"By living water smart, communities will be more prepared for climate change and their quality of life will be enhanced. If we can show how to get the water part right, then other parts are more likely to follow."

The 'design with nature' paradigm captures the essence of climate change adaptation. "Adaptation is about responding to the changes that will inevitably occur. Adaptation is at the community level and is therefore about collaboration."

Making Green Choices

"A key message in Living Water Smart is that green development makes sense," emphasizes **Lynn Kriwoken.** "New thinking about development leads to new benefits. These include more green spaces, more water and fish in the streams, improved community vitality, reduced demand for water, and reduced expenditure on infrastructure."

Provincial Plans & Strategies:

"Living Water Smart is a provincial strategy; we must look at it as a shared responsibility," adds **Glen Brown.** "Actually, it is not one strategy; the



Province has a number of strategies, including the **Green Communities Project** and the **Climate Action Plan.** These are the visionary documents that shape the

Ministry of Community Development's grant programs; they provide us with direction as to where the Province wants to go."

"The Province is looking at raising the bar as far as what we are trying to accomplish with standards, provincial legislation and infrastructure grant programs."



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3. Expectations & Tools for Living Water Smart

More than 40 actions and/or targets are identified in Living Water Smart. Seven are particularly relevant to the Penticton Forum and the desired transformational outcome. These are listed below and are cross-referenced to the three subject areas in the Living Water Smart vision document:

- **Doing Business Differently:** By 2012, all land and water managers will know what makes a stream healthy, and therefore be able to help land and water users factor in new approaches to securing stream health and the full range of stream benefits (page 43)
- **Doing Business Differently:** By 2020, overall water use in British Columbia will be 33% more efficient (page 53)
- **Doing Business Differently:** By 2012, government will require all large water users to measure and report their water use (page 53)
- **Preparing Communities for Change:** By 2012, new approaches to water management will address the impacts from a changing water cycle, increased drought and risk, and other impacts on water caused by climate change (page 61)
- **Preparing Communities for Change:** Adapting to climate change and reducing our impact on the environment will be a condition for receiving provincial infrastructure funding (page 63)
- **Choosing To Be Water Smart:** By 2020, 50% of new municipal water needs will be acquired through conservation (page 75)
- **Choosing To Be Water Smart:** By 2010, government will mandate purple pipes in new construction for water collection and re-use (page 77)

These actions and targets serve to establish expectations vis-à-vis how land will be developed (or redeveloped) and water will be used.

Tools that Help Achieve Targets

A number of provincial tools have either been developed or are under development to facilitate doing business differently and preparing communities for change, including:

- Water Bucket Website
- Water Balance Model
- Okanagan Irrigation Management Tool
- Irrigation Water Demand Model
- Irrigation Scheduling Calculator
- Water Conservation Calculator

“All tools except the Water Conservation Calculator were profiled in the second and third stories of this series. These tools support new approaches to water management, and will collectively facilitate informed decision-making with respect to climate change adaptation,” observes **Kim Stephens** in commenting on how they can be applied on-the-ground by land and water practitioners.

Water Conservation Calculator will be Launched at Penticton Forum

“The Penticton Forum will be the venue for the formal launch of the web-based **Water Conservation Calculator**,” announces Glen Brown. “This tool has been developed by the Ministry of Community Development to support the infrastructure grant application process. The Water Conservation Calculator, the Irrigation Scheduling Calculator, and the Water Balance Model are all based on the same web-interface platform.”



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About the Water Conservation Calculator

"The Water Conservation Calculator is a decision support tool for water purveyors and small local governments. The web-based calculator can assist in presenting a conservation case to Council and other decision makers," states **Liam Edwards, A/Director** in the Infrastructure and Engineering Division at the Ministry of Community Development. "The calculator has evolved from a spreadsheet-tool that the Ministry first pilot-tested with a number of local governments in 2006."



According to Liam Edwards, the key functions the calculator will provide are:

- assistance in decision making around new infrastructure (can illustrate the possibility of capital deferment);
- assistance in more accurately targeting conservation efforts, thereby increasing the cost effectiveness of conservation campaigns;
- providing useful information about the current state of the water service provider's system;
- offering a 'snap shot' of future demands and the positive impacts of conservation on those demands; and
- providing tools and capacity to take positive conservation action.

"Water conservation should be seen as alternative or supplemental to planned infrastructure projects. Conservation is a resource in its own right. It provides safe, clean water that is less costly, and less impactful on the environment than traditional development or upgrade projects. A properly designed conservation program has the ability to extend the life of infrastructure, reduce repair, treatment and power costs, reduce power expenses, and defer or eliminate the need for major capital costs," concludes Liam Edwards.

A Look Beyond

"The vision of the Inter-Governmental Partnership that developed the **Water Balance Model** is that one day it will be integrated with the **Water Conservation Calculator**. This would then provide local governments with a web-based, public domain tool that would link the water use and rainwater runoff sides of the water balance equation to land use," predicts **Kim Stephens**.

"The inspiration for this vision occurred in 2006 when Liam Edwards demonstrated his original spreadsheet-tool at a meeting with the Town of Oliver. To provide a focus, **Tom Szalay**, the Town Administrator, had created a simple spreadsheet to compare total water supply need as a function of development form and density."



"Tom's spreadsheet gave us the idea for adding a front-end land use capability. This would give local governments additional options in assessing how to meet the Living Water Smart targets, in particular the goal that 50% of new municipal water needs will be acquired through conservation, re-use and increased efficiency."

"The point of integration between the Water Balance Model and the Water Conservation Calculator is outdoor water use, which is largely a function of soil type and depth."



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4. Expectations & Programs for Green Communities

The **Green Communities Project** encompasses a number of plans and strategies that complement and/or support Living Water Smart. Examples include **Smart Planning for Communities** and **A Guide to Green Choices**. Conceptually, the Green Communities Project comprises four areas of activity as shown below:



Smart Planning for Communities

"*Smart Planning for Communities* is a new BC-wide collaborative initiative to assist local and First Nations governments in addressing their long-term sustainability challenges," reports **Susanne Theurer**, Sustainability Facilitator and a former local government planner. "The program recognizes that a flexible approach is needed — an approach that allows communities to build on, enhance and integrate existing planning processes while also exploring innovative tools and frameworks."



"Rather than following a single-agency approach, *Smart Planning for Communities* calls for collaboration among organizations and teams of people working together to develop and implement integrated strategies for a sustainable future. The program helps to build mutually beneficial partnerships and develop an information-sharing and resource network. The result will be stronger, more vibrant and sustainable communities."

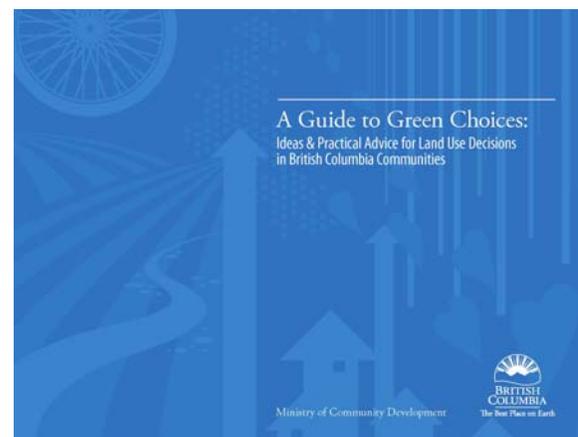
A Guide to Green Choices

"The Ministry of Community Development is about innovation and integration, and making it real. The other piece of importance to the Ministry is providing communities with the tools to ensure the right development in the right place at the right time," states **Karen Rothe**, the Ministry's Manager for Metro Vancouver and Fraser Valley Growth Strategies.



"To help local governments continue the extensive work they are already doing in fostering green communities, the Ministry has developed **A Guide to Green Choices** to provide practical advice and ideas in making land use decisions."

"Released in September 2008, this Guide is expected to work in tandem with many other provincial programs and projects already underway, including **Living Water Smart**, the **BC Climate Action Plan**, **Smart Planning**, and the **Water Sustainability Action Plan**. The Guide helps to establish expectations as to what communities can or should look like," concludes Karen Rothe.



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Fostering Innovation and Integration

The mandate of the Ministry of Community Development is to foster partnerships, collaboration, innovation and integration through the program elements that comprise the Green Communities Project. The goal is to build capacity that will result in sustainable, healthy and vibrant communities. The continuous process for improvement is illustrated by the graphic below

“Ultimately it is the Ministry’s grant programs that provide the incentives that enable the Province to influence behaviour; and reward those who meet program objectives for doing business differently on-the-ground,” states **Glen Brown**.



Leveraging Change through Grants

“Integration of legislative goals and strategies with grant programs is achieved through the combination of **Eligibility Requirements, Evaluation Criteria, and Conditionality of Contracts,**” explains Glen Brown. “These three items provide the road-map for transitioning from today’s expectations to tomorrow’s standards. Over time, we are incrementally raising the bar.”

“Conditionality of Contracts refers to what we ask local governments to do if they are successful in meeting the Eligibility Requirements and Evaluation Criteria. This is where we establish the clear link to program goals and objectives.”

Leveraging Change through Infrastructure Grants

TODAY: Eligibility: Open to all projects
Assessment Criteria: The greener the better
Conditions: e.g. Water Conservation Plan

TOMORROW: Eligibility: All projects must meet a green standard
Assessment Criteria: Strong support for green projects
Conditions: e.g. Watershed Management Plan

Today's Expectations are Tomorrow's Standards

The New Business As Usual:

“We are using the slogan **The New Business As Usual** to convey the message that, for change to really occur, practices that until now have been viewed as the exception must become the norm moving forward. We have to build regulatory models and develop models of practice and expertise to support *The New Business As Usual,*” stated **Dale Wall, Deputy Minister** when he announced the launch of the new Water Balance Model at the Gaining Ground Summit in May 2008.



Program Goals and Objectives

- Based on the principles of sustainability
- Integrated, holistic approaches to resolve issues
- Sustainable infrastructure does not mean building your way out of problems
- Engineering rules and approaches are changing
- Manage the resources

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5. Creating Our Future

“The Penticton Forum is an important milestone in advancing a regional team approach that will align local actions with provincial goals,” states **Kim Stephens**.



“In addition to providing British Columbians with a vision and a framework for action, Living Water Smart sets a clear direction. Thus, our purpose in convening for action province-wide is to establish consistent expectations on-the-ground: *This is what we want to achieve, and this is how we will get there.*”

Shared Responsibility

“Our immediate objective in convening the Penticton Forum is to encourage ‘green choices’ that will ripple through time, and will be cumulative in creating liveable communities, reducing wasteful water use, and protecting stream health. We are NOT saying that every community must follow the same formula; what we are saying is that everyone needs to agree on expectations and how all the players....regulators, developers, designers, etc....will work together, and after that each community can reach its goals in its own way.”

“We are in the process of framing a **Responsibility Matrix** that will serve as a decision support tool in effecting change on the ground through the use of policy and legal tools, approved standards. Our focus is on linkages – that is, how people interact and collaborate to achieve community development sustainability goals.

Goal	Party	Tool
<ul style="list-style-type: none"> - Objectives - Situations - Responsibilities 	<ul style="list-style-type: none"> - Regional Staff or Politicians - Municipal Staff or Politicians - Private Actors 	<ul style="list-style-type: none"> - Law - Bylaw - Policy - Procedure - Incentive - Penalty - Security

Creating A Legacy

“To get to the big picture, it starts with the smallest pieces. Thus, the ultimate goal of the Living Water Smart and Green Communities initiatives is to establish expectations that, in turn, will influence the form and function of the built environment.”

“Improving the built environment can protect or help restore the natural environment. How we develop or redevelop individual sites has ripple effects at the watershed scale. By designing with nature, this means actions on the ground can result in cumulative benefits over time,” concludes Kim Stephens.

Building a Vision & Creating a Legacy

- **Issue:** How We Manage Population Growth
- **Impact:** Growth Resulting in Urban Densification (Land Constraints; Smaller Lots)
- **Sustainability:** *Means Design with Nature*
- **Built Environment:** We Can Improve It
- **Natural Environment:** We Can Protect It
- **Cumulative Benefits:** Accrue Over Time
- **Outcome:** Sustain Community Livability