

## Convening for Action in British Columbia



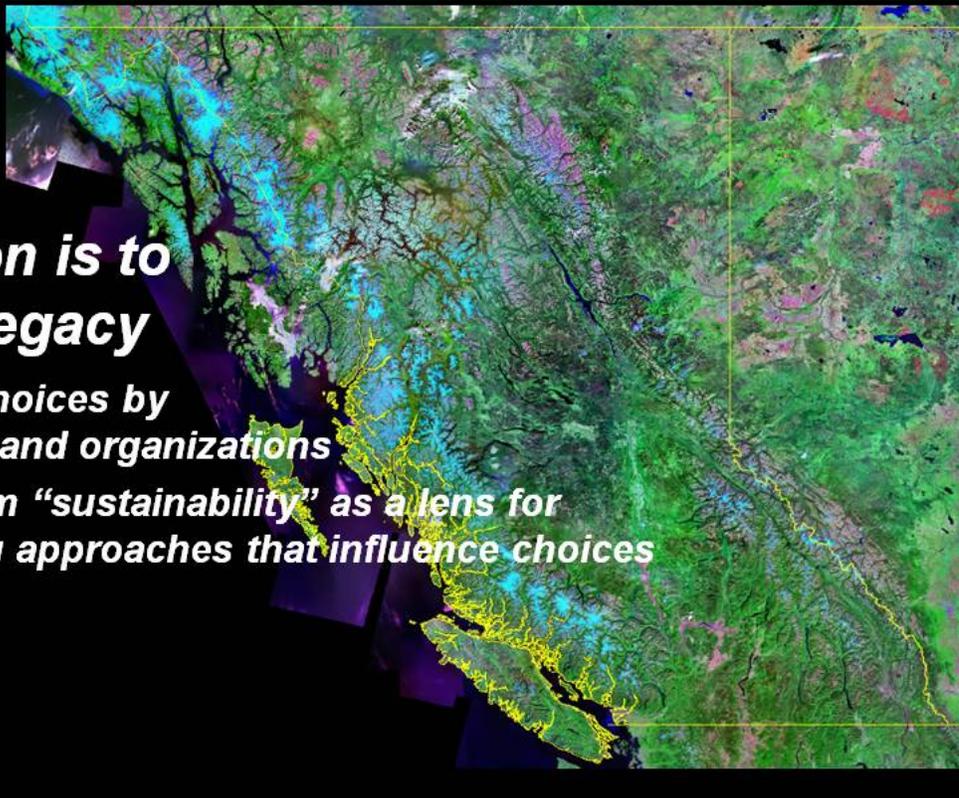
# Doing Business Differently: Convening for Action in the Okanagan

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 #3 about the Penticton Forum posted March 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?*

Three provincial Ministries (Environment, Community Development, and Agriculture & Lands), the Okanagan Basin Water Board, and the Water Sustainability Committee of the BC Water & Waste Association (BCWWA) are hosting a forum in Penticton on April 29 as an adjunct to the BCWWA Annual Conference.



### Regional Initiatives

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. 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.

## 1. Forum Program – An Overview

"This is the third in a series of stories leading up to the Forum, explains **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 can expect on April 29<sup>th</sup>."



"This Story #3 explains what it means to have a clear vision, what is possible when the vision is shared, and how 'convening for action' is taking place in the Okanagan."

### New Approaches and Tools

"The forum program is organized as four modules, and is built around two themes that are intertwined, namely: 'creating our future' and 'doing business differently'. While each module is stand-alone, they are linked," states **Glen Brown**. He is an Executive Director with the Ministry of Community Development; and is Chair of the Water Sustainability Committee.



"First, we will define the challenge. Then we will tell the stories of what is already taking place on-the-ground in the Okanagan and Georgia basins. We will conclude by presenting a blueprint for action."

"Regional leaders will elaborate on new approaches and tools that are changing the way land is developed so that we can achieve water sustainability."

**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

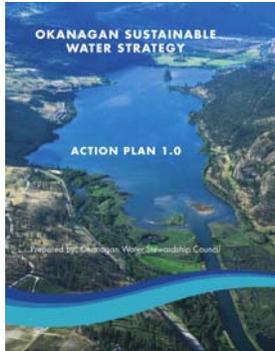
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## 2. Doing Business Differently in the Okanagan

Completed in late 2008, the **Okanagan Sustainable Water Strategy** seeks to ensure water resources are managed in a broader sustainability framework – working towards a future for the Okanagan where water quality or quantity does not compromise human health and well-being, the environment, or the economy.



“The Sustainable Water Strategy is designed to build on the **1974 Okanagan Basin Study**, a joint Federal/Provincial initiative to develop a comprehensive plan for the development and management of water resources in the Basin. The 1974 study is the only Basin-wide study completed to date for the Okanagan,” states **Anna Warwick Sears, Executive Director** of the **Okanagan Basin Water Board**.

### Framework for Grounded Action

“A subsequent Basin-wide study of surface water and groundwater resources – the **Okanagan Water Supply and Demand Project** – was initiated in 2004 and is expected to be completed in late 2009. Once complete, it will be complementary to the Sustainable Water Strategy. The Strategy articulates the vision and provides direction whereas the Supply and Demand Project provides the data needed to develop and implement strong water management practices.”



“The Sustainable Water Strategy is grounded in action. Twelve high-level **Guiding Principles** for water management and policy provide a framework for the Strategy. The key action items in the Strategy were developed respecting these Guiding Principles.”

### Convening for Action

In Module B, Anna Warwick Sears and Ted van der Gulik will tell the story of *Convening for Action in the Okanagan* and thereby set the scene for a town hall sharing session: *What does ‘Living Water Smart’ Now Mean to You?*

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*

**Anna Warwick Sears** will start by providing an Okanagan context for implementing **Living Water Smart, BCs Water Plan**. She will connect the dots between Living Water Smart and the Okanagan Sustainable Water Strategy.

Then **Ted van der Gulik, Senior Engineer** with the Ministry of Agricultural & Lands, will demonstrate two online tools that are intended to influence behaviour at the individual property level: **Irrigation Water Demand Model** and **Irrigation Scheduling Calculator**.

### 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.

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## 3. Convening for Action Explained

"The Penticton Forum is organized under the umbrella of the Water Sustainability Action Plan. This is a partnership umbrella for an array of on-the-ground initiatives that promote a 'water-centric' approach to community planning and development," explains **Kim Stephens**. "The Action Plan program elements that give local governments and practitioners the tools and experience that will enable them to better manage land and water resources."

### A Made in BC Approach

"The BCWWA Water Sustainability Committee is the managing partner and is responsible for Action Plan program delivery," states **Raymond Fung, Past-Chair**. "Convening for Action is our mantra.



When we gather, it is for a purpose. There must be an action item or an outcome. Our aim is to move from talk to action by developing tools, building capacity, and providing training."

"Since 2004, **Convening for Action in British Columbia** has evolved into a 'made in BC' approach and process for moving from awareness to action. The Convening for Action vision is that water sustainability in British Columbia will be achieved through implementation of green infrastructure policies, practices and standards."

#### When 'convening for action', we create a picture of the future that we want:

- **Vision:** What British Columbia will look like in 50 years  
~WHAT~
- **Goal:** Implement the *New Business As Usual*  
~SO WHAT~
- **Strategy:** What we are going to do better or differently to get from here to there  
~NOW WHAT~

### Okanagan Genesis

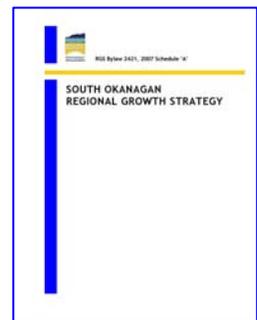
"**Convening for Action in British Columbia** was formally launched at the **Okanagan Conference on the Future for Water**, held in Kelowna in February 2005. Our participation in this regional event provided the first opportunity to publicly unveil the **What-SoWhat-NowWhat** mind-map. It also enabled us to present the vision for **Water OUT = Water IN**," reports Kim Stephens.

"The Kelowna Conference was followed by the **Penticton Water OUT = Water IN Workshop** in April 2005, the first event to be organized under the Convening for Action banner. The workshop was an important first step in changing the way practitioners approach water supply planning. We introduced a number of key concepts that we continue to build upon."



### It Started in the South Okanagan:

"Commencing in October 2005, the Action Plan partnered with the Regional District of Okanagan-Similkameen to undertake the first Convening for Action pilot at a sub-regional scale. The **South Okanagan Regional Growth Strategy** established a provincial precedent in that the strategy is water-centric. The innovation is the toolkit that follows policy, and which leads to benchmarking and monitoring / measuring what matters."



"Commencing in September 2006, we then applied the experience gained and the lessons learned in the South Okanagan to successfully implement **Convening for Action on Vancouver Island**. Branded as CAVI, this 3-year pilot program is facilitating change at a regional scale."

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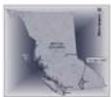
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### 4. What 'Convening for Action in the Okanagan' Means

"In the Okanagan, we are 'convening for action' at four levels to facilitate valley-wide change," states **Anna Warwick Sears**. She identifies these levels as follows:

1. Inter-jurisdictional elected officials convening as Okanagan Basin Water Board (OBWB) directors
2. Key partner positions that have been added to the Board
3. The Okanagan Water Stewardship Council
4. The way the OBWB does business

"The Convening for Action concept can be expanded to encompass all our activities," continues Anna Warwick Sears.



"The Okanagan Basin Water Board is the hub for people to convene around when the topic is water. Our mandate is to communicate and coordinate. In the process, we are tapping into a huge reservoir of volunteers. This is what creates the energy, the will and the momentum to do business differently in the valley."

"The OBWB does not have regulatory authority, but has taxation powers to support its activities, the only example of its kind in the province. Because everyone in the watershed contributes, we focus on projects where *everybody benefits*."

### Okanagan Basin Water Board

The Okanagan Basin Water Board (OBWB) was established in 1969 to provide leadership for defining and solving water resource problems in the valley.

"The OBWB is a unique form of inter-regional government," explains Anna Warwick Sears. "The OBWB was designated to implement the recommendations of the **1974 Okanagan Basin Study**, and to take on a range of responsibilities for Basin water management."



"Our jurisdiction is defined by the geographic borders of the Okanagan Basin rather than political boundaries. In 2006, the OBWB took on a **Water Management Initiative** and a more active leadership role in the valley. This brought the OBWB closer to its original 1969 mandate."

### Board of Directors:

Nine of the twelve Directors are elected officials appointed by the three Okanagan regional districts, and (since 2006) the Okanagan Nation Alliance, the Water Supply Association of BC, and the Okanagan Water Stewardship Council each appoint an additional Director.

"From the 'convening for action' perspective, the OBWB provides a forum for the member local governments to address regional service delivery matters and issues; and to collaborate with key stakeholders in determining how best to do business differently in order to create our future."



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### Okanagan Water Stewardship Council

"The Okanagan Water Stewardship Council was established in 2006 as part of the Water Management Initiative, but authority to convene an advisory Liaison Committee dates back to the 1970s," states the **Hon. Tom Siddon, Chair**. "The goal of forming the Council was to capitalize on local water expertise and improve long-term decision making. The Council is a broad-based body of water stakeholder groups and technical experts that provides independent advice and policy recommendations to support sustainable water management."



"The Council's Vision is that the Basin will have clean and healthy water in sufficient abundance to support the Okanagan's natural ecosystems, agricultural lands and high quality of life for perpetuity," adds **Ted van der Gulik, Vice-Chair**. "Accurate, up-to-date water information and scientific knowledge will support community and regional planning. Water will be managed in a spirit of cooperation, and a valley-wide ethic of conservation will create a lasting legacy of sustainable water resources for future generations."



### Okanagan Sustainable Water Strategy:

The Okanagan Sustainable Water Strategy was developed by the Council. "This document sets out a long range vision and twelve Guiding Principles to manage water, in both quantity and quality, for decades to come," continues **Dr. Tom Siddon**. "The Council has devoted several thousands of hours over the past thirty months in preparation of this important work. Our findings, conclusions, and recommended Actions are based on a remarkable degree of consensus among all participants."

### Guiding Values when Convening for Action:

Five guiding values provide a framework within which the Okanagan Water Stewardship Council evaluates specific water management policies or proposals, and when convening for action:

#### Okanagan Water Stewardship Council Guiding Values

1. Think Regionally and Think Long-Term
2. Protect Nature for the Benefit of All
3. Anticipate Change – Plan Accordingly
4. Balance Multiple Priorities
5. Practice Clear and Open Communication

"The Council, comprised of more than two dozen water management experts, representatives of user groups, and concerned community leaders, has tendrils that extend throughout the Okanagan Valley community," observes **Anna Warwick Sears**. "Council products include a shared understanding of issues and concerns. This understanding is then fed back to the Water Board."

### Collaborative Governance

"When you think about it, the story of *Convening for Action in the Okanagan* is really about putting collaborative governance to work. At all levels of convening, we are actively and proactively undertaking collaboration for action," reflects Anna Warwick Sears. "In short, 'convening for action' equals the synergy that results when the whole is greater than the sum of the parts."



"The shared problems in the Okanagan are not radical. They are fundamental things that everyone agrees on, in particular protecting quality of life. The way the OBWB does business is collaborative. Through our grant programs, we are able to maximize partnerships; and in turn increase the convening of the community by bringing together the resources to make things happen."

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### 5. Shift from Supply-Side to Demand-Side Management

"I was raised in the Okanagan on an orchard and as a youngster I remember the summers being very hot and dry. As a young boy my job was to change the sprinklers every evening and I remember marvelling how irrigation could convert the dry landscape into lush green orchards," recalls **Ted van der Gulik**. "The valley was very rural and except for a few small cities it seemed that orchards, vineyards and the lakes defined the valley, much like what citizens want to define the valley as today. The world seemed a much simpler place then, where climate change was a storm passing through and competition for water was getting your favourite spot on the beach."



"But times change and the burgeoning development taking place in the valley, both for urban growth and agricultural production requires that we assess how we are going to manage water. A water strategy needs to take into account ecological, domestic and agricultural needs and consider the impacts of a changing climate on the region's hydrology. The **Okanagan Sustainable Water Strategy** starts the process and has been developed with input from many water professionals. To achieve fruition, the plan will need a coordinated effort from law makers and practitioners and buy in from residents to ensure that changes are made on the ground."

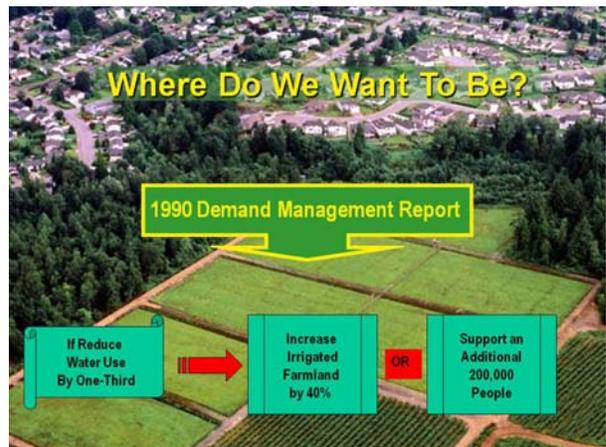
"It is important to remember that the Okanagan Valley is a headwater region and all we have to work with is the moisture that falls from the sky, which makes this strategy imperative. We cannot get water from anywhere else."

### Legacy of the 1987 Drought

"In 1987, a drought resulted in an unprecedented province-wide test of the capacities of water supply sources to provide for existing regional populations. This raised concerns regarding the possible consequences of continued growth in the Okanagan, Greater Vancouver and elsewhere," continues **Ted van der Gulik**. "The 1987 drought followed a relatively benign period of almost half a century, and is one of the most extreme on record."

**"The legacy of the 1987 drought was to trigger two landmark water resource studies** in 1988, one for Greater Vancouver and the other for the Okanagan. These focused attention on the need for a water conservation strategy for British Columbia. The urgency of this need was further underscored by the severity of conditions in 1992."

"In 1988, my Ministry and the Association of BC Irrigation Districts commissioned a comprehensive study that assessed the potential for water conservation in the Okanagan Valley. The study was finalized in early 1990, with the objective that it would be the catalyst for moving from a supply-side to demand-side management way of doing business. For the last two decades we have been systematically building on that foundation to change the way we supply and use water."



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### Okanagan Agricultural Strategy

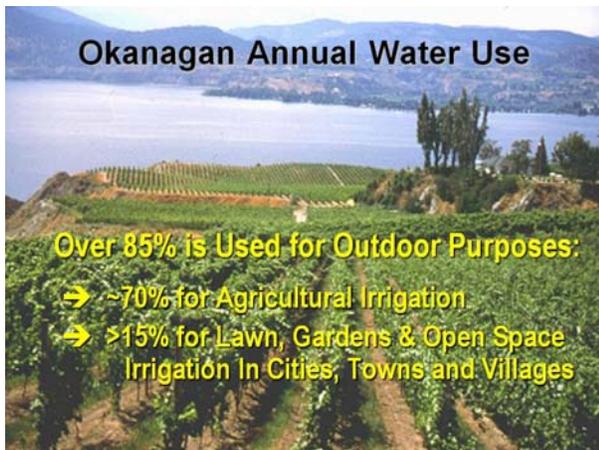
"The 1990 report was the genesis for development of an **Okanagan Agricultural Strategy** that took shape over the following 15 years," explains Ted van der Gulik. "Over 85% of the total Okanagan water supply is used for outdoor purposes in the urban and agricultural sectors. Because agricultural irrigation accounts for more than 70% of total water use, it holds the key to a water balance strategy which revolves around how water is applied to the land."



"Over the years, two questions have shaped my thinking and my Ministry's approach to developing practical tools. First, how will we preserve water for agriculture while meeting other needs; and secondly, how can agriculture become more water efficient? To answer these questions, we need to be able to monitor water use and report out."

### Universal Metering of Water Use:

"The 1990 study led to the *Okanagan Valley Meter Demonstration Program*. This helped to create early momentum for universal water metering and a change in Okanagan water use practices. By 2004, the **National Water Supply Expansion Program for Agriculture** provided a source of funding for implementation of universal agricultural metering with willing Okanagan municipalities and irrigation districts."



### Water Requirements Reporting:

The Ministry of Agriculture has collaborated with Okanagan communities to implement a GIS-based land-use information system:

- The strategy is founded on a water balance way-of-thinking.
- The outcome is a database that covers the entire Okanagan Basin.
- The goal is to know what is happening on the ground, property-by-property.
- The system means farmers can make informed decisions on how to manage their irrigation systems properly to save water.
- The result is a planning tool that benefits both the agricultural and urban sectors.

"The pilot for this program was the Southeast Kelowna Irrigation District (SEKID), the first Okanagan jurisdiction to implement universal agricultural metering after experiencing repeated water shortages during the period 1987 though 1992," continues **Ted van der Gulik**.

"The combination of universal metering plus a land use database means a comprehensive *Water Requirements Report* can be generated for each property. This compares property-specific needs with actual metered use and water use on other properties that have the same soil conditions, crop types and irrigation systems."



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### 6. Online Tools Facilitate Efficient Water Use

At the Penticton Forum in April 2009, the unifying theme for the presentation by Ted van der Gulik will be *“this is how we can and will use web-based tools to generate answers that will help us influence behaviour on the ground.”* The desired outcome is agricultural water use efficiency.

#### Irrigation Scheduling Calculator

“The first web-based tool that we developed to change the way we apply water to the land was the **Landscape Irrigation Scheduling Calculator**,” states **Ted van der Gulik**. “The first-generation version was completed in 2005. This tool helps turf designers and managers determine when and how much to irrigate. The Calculator is integrated with climate information. It can also be used by residential homeowners to achieve more efficient outdoor water use.”



“The calculator will provide the irrigator with the number of days to water, the irrigation run time for each day and the maximum run time per cycle.”

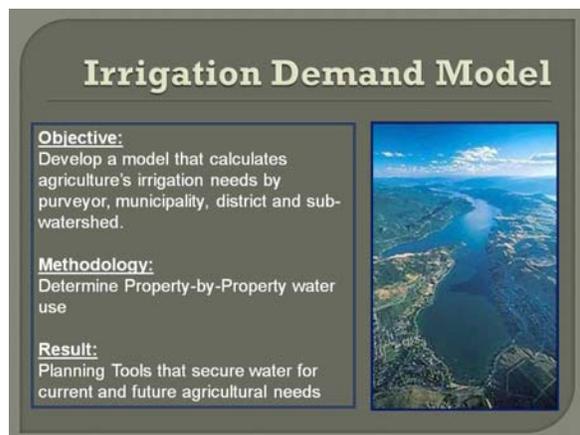
“The Calculator has undergone a major upgrade, and now has the same type of web interface as the **Water Balance Model**. It has both landscape and agricultural applications. At the Penticton Forum, I will be doing a live online demonstration.”



#### Irrigation Water Demand Model

“A key message is that the Okanagan does not have as much water as in the past, and this is happening more often than not,” states **Ted van der Gulik**. “Warming trends means there is less snowpack in the uplands to re-fill water storage reservoirs; at the same time, the annual rainfall is decreasing. Another key message is that the combination of uncertainty and risk due to climate change is driving the need to use water more wisely and efficiently.”

“Yet agriculture will need more water in future, mainly because of a longer growing season due to a warmer climate. It was for this reason that in 2005 the Ministry launched its water balance approach to the Agricultural Component of the **Okanagan Water Supply and Demand Project**.”



“The **Irrigation Demand Model** utilizes GIS and a 500 m x 500 m climate grid – 32,000 grid cells in total. The model calculates daily water use on a polygon basis and adds up polygons to determine water demand for each property. Climate Change scenarios enable the model to calculate present and future water demands in each grid.”

“The **Okanagan Irrigation Management Tool** links the Demand Model and meter information to provide farmers with an online tool that they can access to compare actual versus theoretical water use. This provides them with an informed basis for improving their water management practices.”

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### 7. Moving Forward

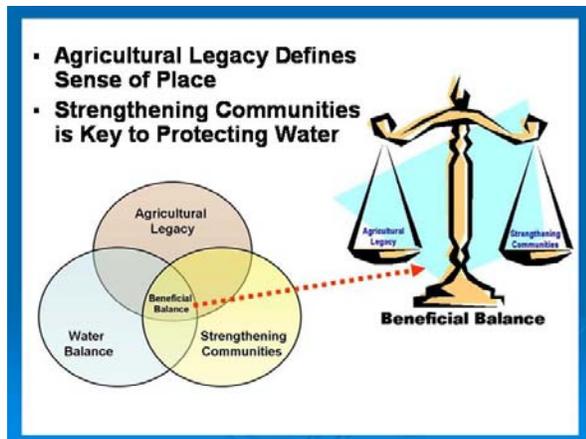
“Looking back, the lasting significance of our Convening for Action presentation at the 2005 Kelowna Conference is that it crystallized two core principles that represented a major evolution in thinking:

- Improve water use efficiency in the agricultural sector to adapt to climate variability and/or expand irrigated farmland.
- Improve water use efficiency in the non-agricultural sector to support population growth in the urban centres.

“Until 2005, it was widely assumed that agricultural water savings could simply be used to support population growth. But what was the incentive for the farmer to reduce water use? There is a strong reluctance in the agricultural sector to conserve if the water savings are to be allocated to other water users. By reaching consensus on the two core principles, this has provided a pathway forward. These principles were subsequently adapted and incorporated in the **South Okanagan Regional Growth Strategy**,” reports **Ted van der Gulik**.

#### Achieving the ‘Beneficial Balance’

The South Okanagan pilot produced the graphic below to help Okanagan communities visualize how to address challenging priorities for land and water. The three circles represent core concepts that emerged from the discussion of settlement, economic growth and water supply pressures.



#### One-on-One with the Premier

Ted van der Gulik is also Chair of the Inter-Governmental Partnership that developed and maintains the Water Balance Model. In February 2009, this web-based tool received the *Premier's Award for Innovation and Excellence*. At the conclusion of the awards ceremony, the Premier and Ted van der Gulik had a lengthy conversation.

#### Living Water Smart:

"As we talked, it became clear to me that WATER is high on the Premier's agenda. He has a strong grasp of water-related issues and the long-term implications if we do not start doing business differently in BC. In a nutshell, he gets it."

"The Premier clearly understands that the Okanagan is the 'canary in the coal mine' from a water resource management perspective. The



Okanagan is the region of BC most likely to be impacted by climate change. This is due to the changing hydrology, from snowpack-based to rainfall-based.

"The Premier expressed his personal commitment to making a difference because we have an obligation and a

responsibility to act on behalf of our children and our grand-children so that we achieve the *beneficial balance* and leave them with a legacy."

"On the matter of the **Living Water Smart** initiative, I came away from our conversation with a strong conviction that Premier Campbell means what he says about the province-wide importance of implementing BC's Water Plan," concludes **Ted van der Gulik**.

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## imagine our farms and ranches



Have enough water to irrigate their crops and only use efficient irrigation methods

Grow crops suited to our soils and climate

Preserve the top soil to absorb and retain water and, where possible, use reclaimed water

Have healthy streams flowing through them with their valuable stream banks (riparian zones) restored with the help of the local community

Keep farm animals out of waterways

Use fertilizers, pesticides, and compost properly to take care of our soils and water

Capture and clean the run off from farmyards before it reaches the creek

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- reproduced from **Living Water Smart**, page 29