

# Feast AND Famine! – Solutions and Tools in Response to a Changing Climate in BC

Floods AND Droughts – What Happened to the Balance?  
*What We Can Do to Build Water-Resilient Communities*



the partnership  
for water sustainability in bc



Opala Seamount

Vancouver Island



A group of people are seated around a large table covered with a white tablecloth in a meeting room. They appear to be in a collaborative discussion. There are papers, mugs, and other items on the table. The room has a whiteboard on the left and a framed picture on the wall in the background.

**“Through sharing & learning,  
ensure that where we are going is  
indeed the right way”**

Jody Watson  
Capital Regional District  
June 2013

# Workshop Road Map

- A. Resilient Communities & Water –  
What Happens on the Land Matters
- B. How Local Governments are  
Responding to a Changing Climate
- C. Will There be Sufficient Fresh Water  
for Agriculture in the Future?
- D. Sustainable Service Delivery for  
Watershed Systems

## In this workshop you will learn .....

1. **WHY** accepting risk opens the door to creativity and results in innovation
2. **HOW** local governments can restore the absorbency of the urban landscape
3. **HOW** food security will drive a major shift in the way water and agricultural lands are managed
4. **HOW** the efficiency of landscape irrigation can be improved through use of state-of-the-art tools



## The climate in BC is changing:

*wetter, warmer winters; longer, drier summers*

We can sustain water supply in dry weather  
and limit drainage impacts in wet weather.

Alignment of mandates, roles and responsibilities is  
necessary to successfully **‘Design with Nature’** and  
**‘restore Water Balance integrity’** in urban regions

# INTRODUCING THE NEW PARADIGM – “Watersheds as Infrastructure Assets”

## The 3 pathways are:

- *over the land surface*
- *shallow horizontal (interflow)*
- *deep vertical to groundwater*



A watershed is an **integrated system**.

The **three pathways** by which rainfall reaches streams are ‘infrastructure assets’.

The three pathways provide ‘**water balance services**’.

## SHIFTING BASELINE & RESTORATIVE DEVELOPMENT:

*Apply an understanding of watershed systems as infrastructure assets to...*

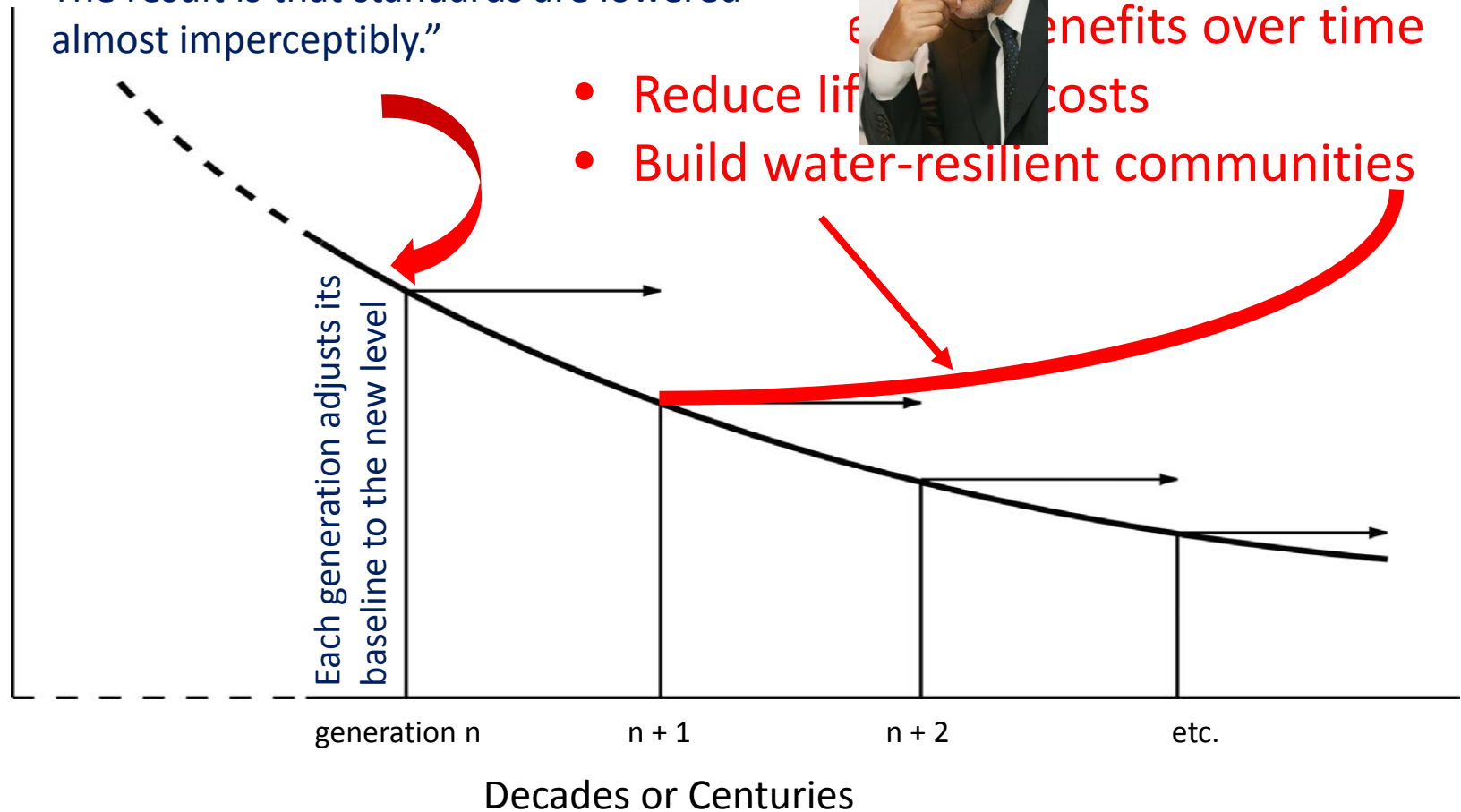
“With each new generation, the expectation of various ecological conditions shifts. The result is that standards are lowered almost imperceptibly.”



“...back”  
...social and  
...benefits over time

- Reduce life cycle costs
- Build water-resilient communities

Some Good Thing = Driver for Action  
(Aquatic Habitat, Salmon, Clean Water or...)



# CONTEXT -

*It has taken more than a decade to implement a policy, program and regulatory framework that makes possible 'Water-Resilient Communities*

AN OVER-ARCHING THEME:

*What happens on the land matters!*

2003 – The Teachable Year

2008 – Call to Action

2014 – Game-Changers Enable Action

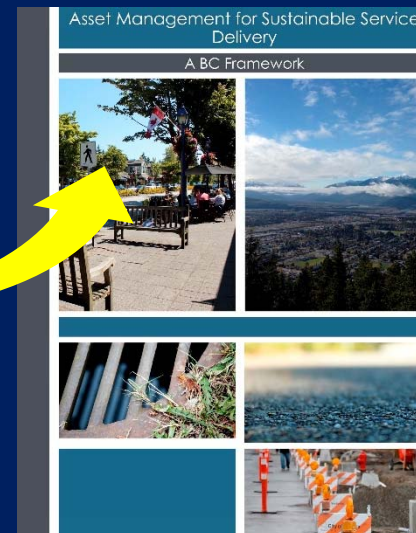
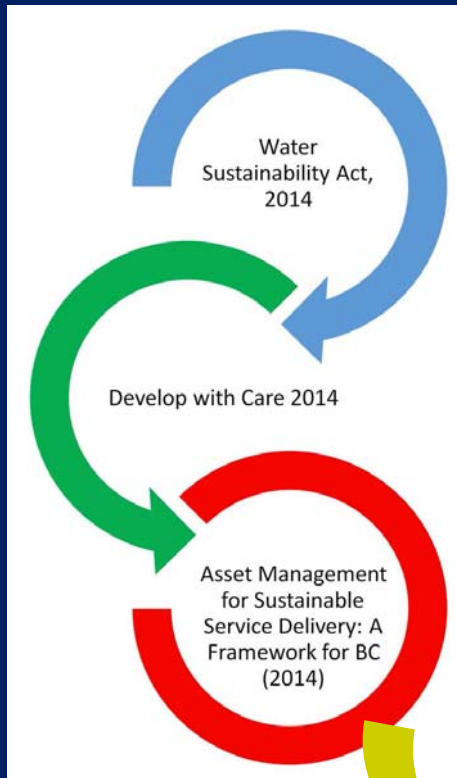


# CONTEXT -

## What Happens on the Land Matters:

Of the three drivers for action, the **BC Framework** is the lynch-pin because....

...it provides local government with the financial incentive for integration of watershed systems thinking into asset management



# INTENT -

*Five regional districts are partners in the Georgia Basin Inter-Regional Educational Initiative (IREI)...*

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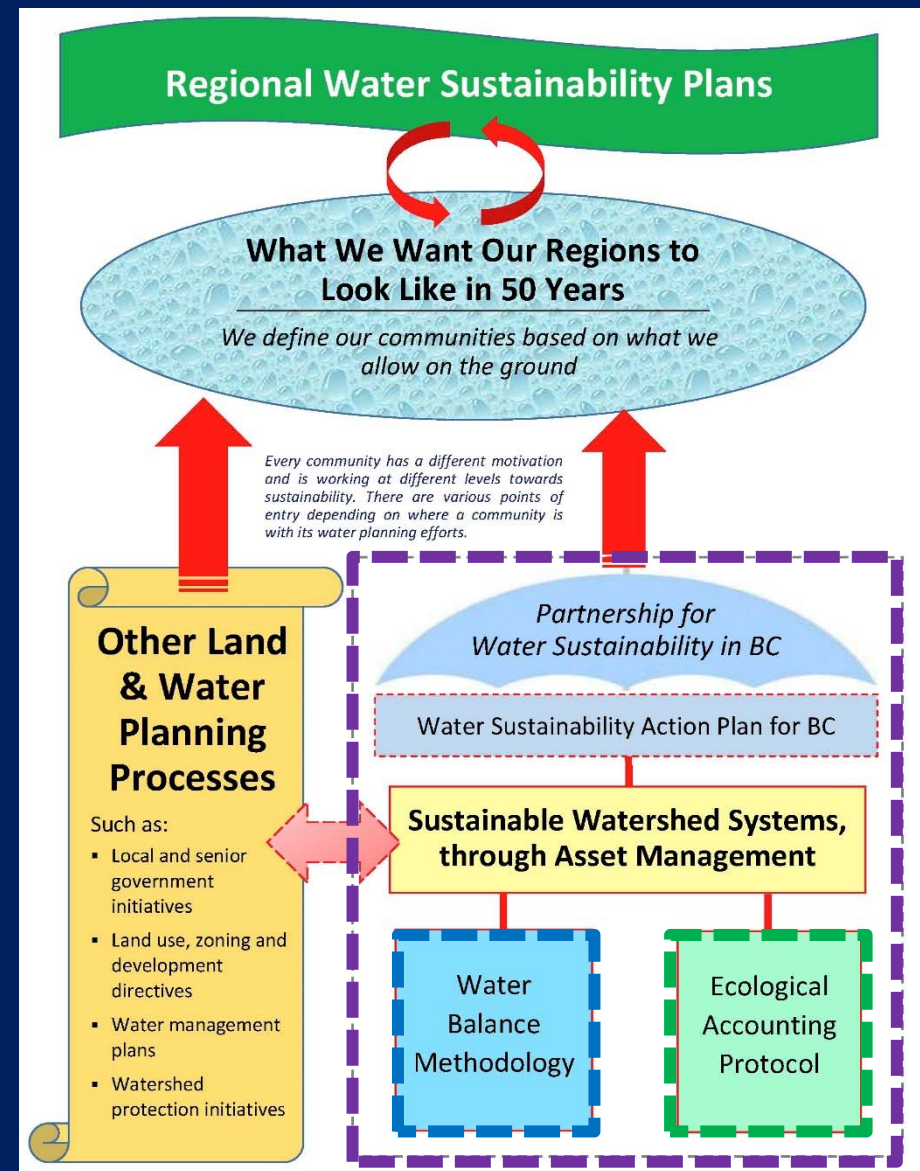


*Metro Vancouver, Capital Region,  
Cowichan Region, Nanaimo Region  
and Comox Valley*

- Launched in 2012
- The Partnership is the secretariat
- In April 2015, the five Regional Boards recommitted through 2017 to work as a team
- **By 2017**, a program goal is that all local governments would understand how to achieve 'Sustainable Watershed Systems, through Asset Management'

# INTENT -

Over the next two years, the IREI program will add to the BC Framework by showing how to integrate *watershed systems thinking*, including adaptation to a changing climate, into asset management



## RESULTS -

*Everyone needs to agree on expectations and how all the players will work together, and after that each community can reach its goals in its own way*

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Glen Brown  
General Manager (Victoria Operations)  
Union of BC Municipalities

*“The ‘regional team approach’ is founded on partnerships and collaboration; and seeks to align actions at three scales – provincial, regional and local.”*

***Next, over to Bob Sandford,  
water champion and author,  
who recently said....***

***“We had no idea until recently  
how much we rely on the  
stability of the hydrological  
cycle in our day to day lives”***

