

Presentation to Regional Services Committee
Cowichan Valley Regional District
November 2015

***Beyond the Guidebook 2015:
Moving Towards “Sustainable Watershed
Systems, through Asset Management”***

*How to align regional and local actions with the
provincial policy, program and regulatory framework... to protect, restore
the hydrologic integrity of impacted urban watersheds over decades*

Kim A Stephens, M.Eng., P.Eng., Executive Director



INTRODUCING THE NEW PARADIGM –

*“Functional watersheds are
(your most important) 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’**.

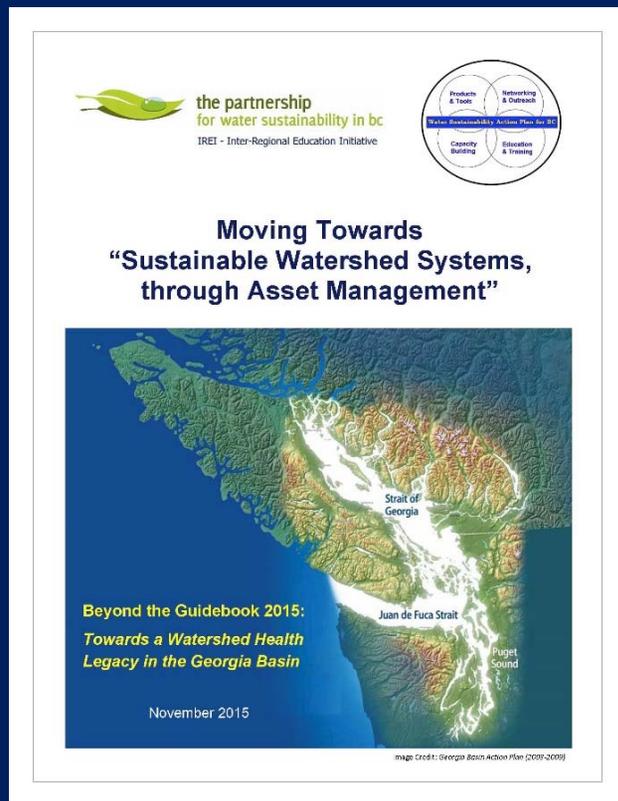
CVRD is a partner in the team approach to implementing the Georgia Basin Inter-Regional Educational Initiative (IREI)...



- Launched in 2012 with support from five Regional Districts, including Cowichan Valley
- 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***’

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

‘Beyond the Guidebook 2015’ is the third in a series, celebrates work by local government champions, and...



DEFINES three “cascading objectives” for watershed-based action

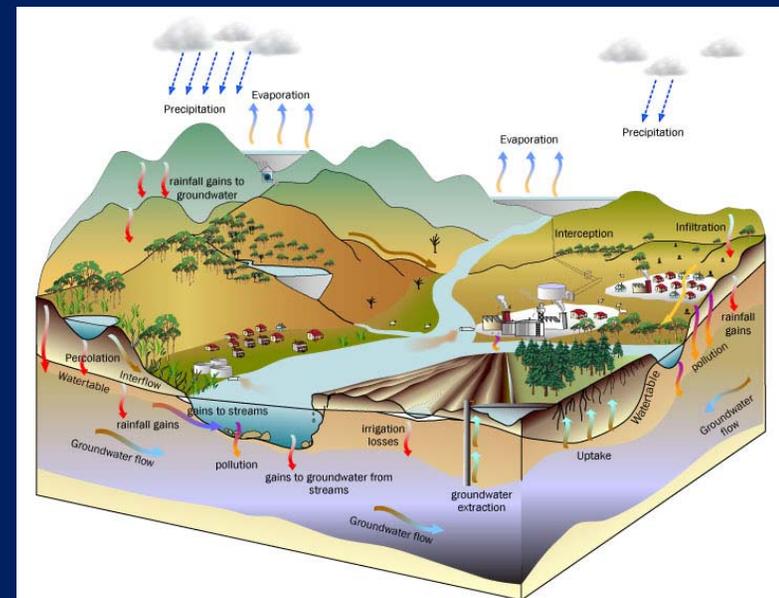
EXPLAINS three provincial “game-changers” that enable action

SHOWCASES five “regional stories” as told in the words of the local champions

PREVIEWS the program for integrating the water balance services provided by soil, water and trees into asset management

The Cowichan Region is an incubator for “watershed systems thinking” and application of Water Balance tools

Science-based principles as applied in BC (since 2007) for restoring Water Balance integrity are now required in Washington State (2012) and in California (2015)



This outcome is now possible under BC's new Water Sustainability Act

*Looking ahead, another IREI deliverable will be
“Water Balance Methodology Accreditation” to.....*



- Bridge an existing gap in practitioner education and professional development
- Create a pool of trained and qualified practitioners of the Water Balance Methodology
- Provide assurance that analyses using the Water Balance Methodology are being completed correctly

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!

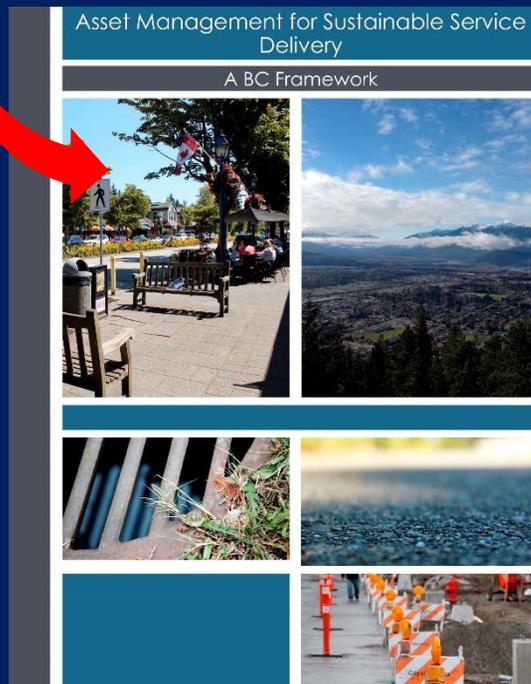
2003 – The Teachable Year

2008 – Call to Action

2014 – Game-Changers Enable Action



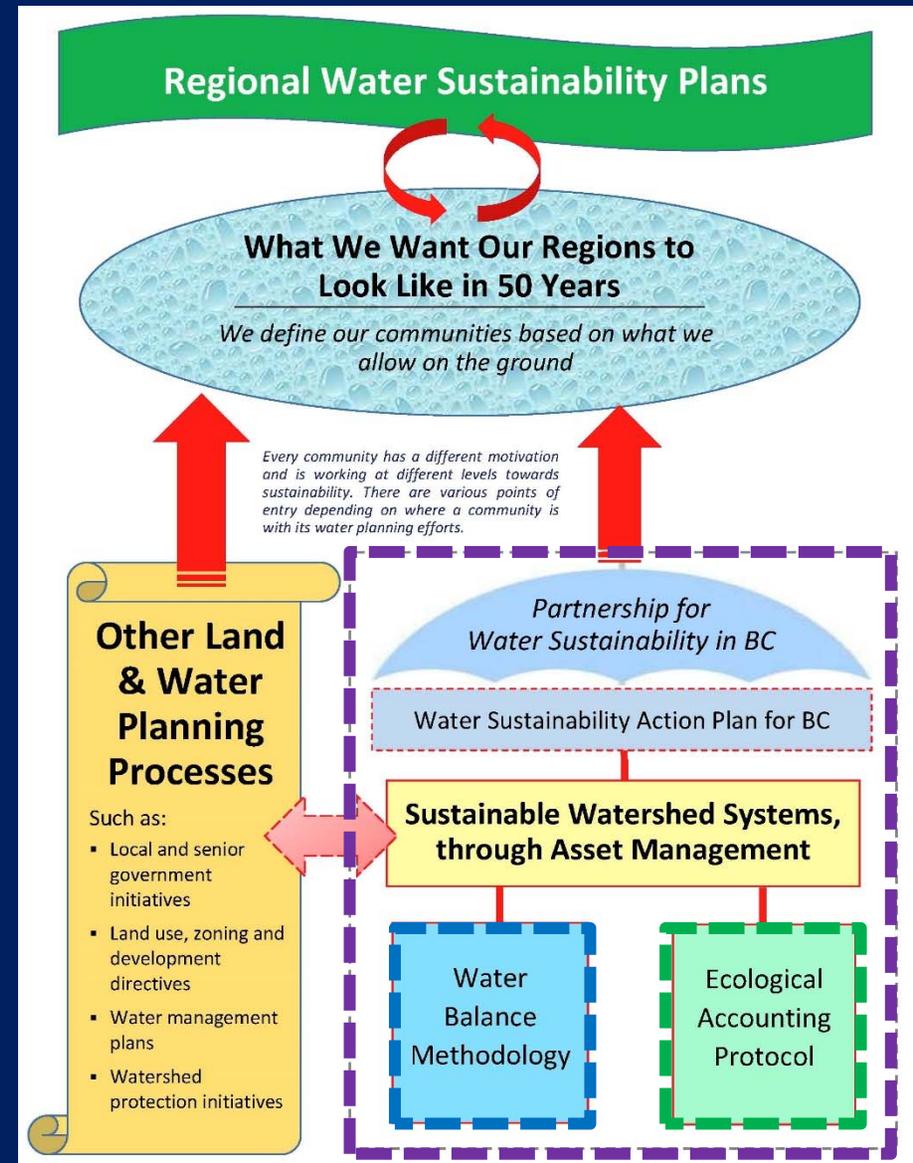
*The **BC Framework** makes the link between local government services, the infrastructure that supports the delivery of those services, and watershed health:*



In April, CVRD and the Partnership submitted an integrated grant application to UBCM. We would add to the BC Framework by showing how to integrate “watershed systems thinking” - including adaptation to a changing climate - into asset management

Over the next 2 years, inter-regional collaboration will be guided by this mind map. Sustainable Service Delivery makes the link between:

- local government services,
- the infrastructure that supports the delivery of those services, and
- watershed health





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 urbanizing regions

And in conclusion, the Partnership invites you to attend...

***“Feast AND Famine! – Flood AND Drought!
– What Happened to the Balance?”***



“We had no idea until recently how much influence the hydrological cycle has on our day to day lives”

Bob Sandford
Author & Water Champion

Keynote Presenter for
“Feast AND Famine Workshop”
on December 1 in Richmond