Parksville 2019: Second Annual Vancouver Island Symposium on Water Stewardship in a Changing Climate

Improving Where We Live through Restorative Development

An Invitation

Join delegates from the east coast of Vancouver Island and beyond, and attend a 'watershed moment' in Parksville. At the **Parksville 2019 Symposium**, you will learn why and how local government partnerships with stewardship groups can be transformational and 'make where we live better' to respond better to a changing climate.

Parksville 2019 is a collaborative effort of the Partnership for Water Sustainability in BC, Nanaimo & Area Land Trust, and Mid Vancouver Island Habitat Enhancement Society. We have joined forces to host a field day on April 2, followed by a 2-day symposium on **Water Stewardship in a Changing Climate** on April 3rd and 4th. The daily symposium themes are *Sustainable Stream Restoration* and *Restorative Land Development*, respectively.

TO LEARN MORE AND REGISTER, VISIT https://www.civicinfo.bc.ca/event/2019/P arksville-Water-Stewardship-Symposium

Context for Local Government Action

The 'worth' of a creekshed (i.e. small watershed) is defined in terms of a *package of ecological services* made possible by the hydrology. More specifically, hydrology means the three pathways by which rain reaches the stream and ecological services refers to the benefits that streams provide to us. This includes flood and erosion regulation, nutrient cycling, habitat, groundwater recharge, etc. The way we have historically developed and drained land has disconnected hydrology from ecology.

The consequences of this disconnect are more erosion and flooding, loss of baseflow and aquatic habitat, and an unfunded infrastructure liability for stream stabilization. Communities have for the most part failed to properly address root causes of 'changes of hydrology', as well as subsequent impacts of those changes on natural creekshed function.

The bottom-line is that decades of in-stream enhancement work will not be enduring if hydrological function is not restored. Thus, a goal of **restorative land development** would be to restore the integrity of the natural water balance. If this work is done right, it should be possible to: first, halt ecosystem decline; and after that, bend the trend-line in an upwards direction.

At Parksville 2019, delegates will learn how communities can apply science-based understanding to increase their **restorative footprint** and at the same time decrease their **destructive footprint**. Delegates will also learn about local government initiatives that are 'getting it right' and are moving along pathways that lead to restorative land development. Follow these leaders!

Reconnect Hydrology and Ecology

We experience climate change primarily though water – intense rainfall, floods, droughts and so on. The major driver of economic growth in the twentyfirst century will be responding to climate change, redeveloping our nations, revitalizing our cities and towns, and rehabilitating and expanding our ecosystems. This is not some wistful vision of the future: it's already happening.

"Restoration comprises the largest new economic growth cycle since the beginning of the industrial revolution. Development has arrived at the ends of the Earth. Progress has nowhere to turn, except to revisit and restore what we've already wrought," states Storm Cunningham, author and global thought leader.

Storm Cunningham is one of three prominent headline speakers from the United States who are part of the Parksville 2019 presentation team. Along with Dr. Chris May and Dave Derrick, he connect us with a larger body of experience.

The working definition for restorative development, as crafted by Storm Cunningham, follows:

"A mode of economic activity that returns property, structures, or objects to an earlier condition, transforms them into a healthier and/or more functional condition, or replaces an unsalvageable structure without consuming more land."

Guided by a whole-system, water balance approach, restorative land development would reconnect hydrology and ecology, and this would: reduce stream erosion, flooding and the associated infrastructure liability; increase the dry weather baseflow in streams; and stem the loss of aquatic habitat and fish. Connecting dots, then, a key message is that restorative land development results in sustainable stream restoration.

How will communities 'get it right' as land develops and redevelops?

The Parksville 2019 Symposium is a milestone event on a multi-year 'convening for action' journey that commenced in 2004 with release of the Water Sustainability Action Plan. Parksville 2019 builds on the 2018 Vancouver Island Symposium on Water Stewardship in a Changing Climate, held in the City of Nanaimo.

Nanaimo 2018 was a 'call to action'. The theme? Build on the good outcomes that flow from local government and stewardship sector collaboration! Nanaimo 2018 introduced a vision for 'restorative land development' that would re-establish creekshed function. And it energized the audience with this challenge: *How will communities 'get it right' through collaboration as land develops and redevelops?*

A decade of effort on Vancouver Island, by partnerships of local governments and community stewards, is demonstrating success on the ground where it matters. They are on a pathway to reconnect hydrology and ecology. Parksville 2019 will celebrate success stories that are characterized by three attributes: commitment, collaboration and the 'hard work of hope'.

The Bowker Creek and Brooklyn Creek restoration stories are provincially significant precedents. Each has a long history. Each demonstrates how local government partnerships with stewardship groups can be transformational and 'make where we live better'. These precedents represent a range of situations: Bowker in the urban heart of the Capital Region; Brooklyn in the suburban Comox Valley.

A takeaway for Parksville 2019 is that the essential ingredients for restorative development encompass: vision, strategy to deliver the vision, and commitment to implement an ongoing program. Vancouver Island success stories are beacons of hope. They demonstrate how a **good strategy** is the path to success.

Water Stewardship in a Changing Climate

On April 3, the theme is 'Sustainable Stream Restoration'

KEY MESSAGE: **Reconnect hydrology and ecology – what happens on the land in the creekshed matters to streams!** *Development reduces the capacity of the landscape to absorb and hold water. When it rains, there is more flow volume and streams erode; in a drought, there is little or no flow as the surrounding land dries out.*

Module	Theme & Description of Scope
A	"Getting It Right": The Whole-System Approach
1 ½ hrs	ABSTRACT: Dr. Chris May will set the tone for the symposium. He will tell the story of how his research correlated the relationship between land use and stream health; and how Kitsap County is a living laboratory for implementing a hydrology-based approach at multiple scales (to build resilience). TAKEAWAY: Participants understand that hydrology is the engine that powers ecological services.
В	Panel & Town-Hall Session: Watershed Health and You
1 ½ hrs	ABSTRACT: The Englishman River 'big picture' story (endangered river, regional water source, Shelly Creek restoration) provides the backdrop for developing a shared understanding of what a whole-system approach looks like, and what it would mean to reconnect hydrology and ecology. The spotlight is on citizen science . A 5-person team will prime the audience with 5-minute vignettes. TAKEAWAY: Participants would be engaged, energized and inspired to make a difference.
С	Make Better Decisions: First, Understand How Rain Reaches a Stream
1 ¾ hrs	ABSTRACT: THIS SESSION WILL BE CONDUCTED AS "A MINI-WORKSHOP WITHIN THE SYMPOSIUM" Understanding the complex interactions of <i>whole-system, water balance</i> processes that lead to water availability in and on the ground, and all the values that depend on it, is critical to effective water resource allocation. The provincial government leads the way with collection, storage and dissemination of surface and groundwater data. However, there is a gap at the local level. A provincial government initiative on Vancouver Island is mobilizing stewardship groups and community volunteers to collect such data. This contribution would create understanding that would enhance the effectiveness of the stewardship sector as champions for reconnecting hydrology and ecology. TAKEAWAY: Streamkeepers would understand the value of their contribution in being part of a provincial initiative to fill a data collection gap at the local level.
D	Back to the Future: Reconnect Hydrology & Ecology
¾ hr	ABSTRACT: This segment is the book-end for the Chris May opening. Decades of in-stream restoration work have not been sustainable because communities have not addressed the root cause of 'changes of hydrology', even though we have known what we need to do. The closing for Day 1 is a 'call to action', and the bridge to Storm Cunningham's evening lecture and the theme for the Day 2 program. TAKEAWAY: Participants would be primed for Day 2 on <i>restorative land development</i> .

A program deliverable for "Sustainable Watershed Systems, through Asset Management", Implemented under the umbrella of the Georgia Basin Inter-Regional Education Initiative Page

Water Stewardship in a Changing Climate

On April 4, the theme is 'Restorative Land Development'

KEY MESSAGE: **Yes, we can decrease our destructive footprint while at the same time increasing our restorative footprint!** *Celebrate Vancouver Island success stories. These are inspirational in nature, creekshed in scale, and precedent-setting in scope and outcome. "Get it right" and proceed along a restorative development pathway.*

Module	Theme & Description of Scope
А	"Getting It Right": Make Better Land Use Decisions
1 ¼ hrs	ABSTRACT: The story of how a strong foundation of public outreach and science was built over the first decade (2009-2018) of the Regional District of Nanaimo's Drinking Water & Watershed Protection Program (DWWP) will lead into a lively discussion on opportunities and emphasis for the next 10 years of water sustainability initiatives. It is the successful cultivation of awareness and data that will inform policy and planning in order to make better land and water decisions and tackle regional water issues in the next decade.
	TAKEAWAY: Participants would contribute to the visioning of the next decade of Drinking Water and Watershed Protection in the region.
В	Panel & Town-Hall Session: Make Where We Live Better
1 ½ hrs	ABSTRACT: A 5-person team will prime the audience with vignettes about long-term and emerging initiatives in communities on Vancouver Island. These success stories demonstrate what is achievable when there is a restoration imperative. The panel will build on Module A's "actionable vision" theme.
	TAKEAWAY: Participants would be engaged, energized and inspired by stories of collaboration.
С	Moving Towards Restorative Development
2 hrs	ABSTRACT: The Bowker Creek and Brooklyn Creek restoration success stories are beacons of hope. Each has a long history. Inspirational and provincially significant precedents, each demonstrates how local government partnerships with stewardship groups can be transformational and <i>'make where we live better'</i> . These precedents represent a range of situations: Bowker in the urban heart of the Capital Region; Brooklyn in the suburban Comox Valley. They are beacons of hope.
	The Bowker Creek Urban Watershed Renewal Initiative serves as a 'how-to-guide' for a 'top-down and bottom-up' approach that connects with the community and gets the <i>vision and strategy</i> right.
	Brooklyn Creek is a working example of how to apply the Ecological Accounting Process (EAP) to value the <i>worth</i> of a creekshed, its hydrology, and ecological systems.
	TAKEAWAY: Participants would be inspired by the 'top-down and bottom-up' approach.
D	We Can Create the Future We Want
¾ hr	ABSTRACT: Storm Cunningham will conclude the symposium with an inspirational message. The goal of making the world 'less worse' does not go far enough, he will state. Rather, we have it within our power to undo previous damage and make the world better. The essential ingredients for restorative land development encompass a vision, strategy to deliver the vision, and commitment to implement. TAKEAWAY: Participants would understand the essential ingredients for restorative development.

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