REPONAL DISTRI

CORPORATE AND ADMINISTRATIVE SERVICES COMMITTEE

Thursday, February 28, 2019 SCRD Boardroom, 1975 Field Road, Sechelt, B.C.

AMENDED AGENDA

CALL TO ORDER 9:30 a.m.

AGENDA

1. Adoption of Agenda

PRESENTATIONS AND DELEGATIONS

1. Ian MacDonald, Dave Mitchell & Associates Ltd. Regarding: Emergency Program Review

REPORTS

Chief Administrative Officer Code of Conduct – SCRD Board (Voting – All Directors)	Annex A Pages 1-25
General Manager, Corporate Services / Chief Financial Officer Sechelt Library Apportionment Options (Voting – A, B, D, Sechelt, SIGD)	Annex B pp. 26-71
General Manager, Corporate Services / Chief Financial Officer 2019 Refuse Collection Rate Updates (Voting – B, D, E, F)	<mark>INSERT</mark> pp. 72-74
⇒ADD Executive Assistant 2019 BC Council of Forest Industries (COFI) Convention (Voting – All Directors)	pp. 75-82
⇒ADD Executive Assistant Symposium on Water Stewardship in a Changing Climate (Voting – All Directors)	pp. 83-93
	Code of Conduct – SCRD Board (Voting – All Directors) General Manager, Corporate Services / Chief Financial Officer Sechelt Library Apportionment Options (Voting – A, B, D, Sechelt, SIGD) General Manager, Corporate Services / Chief Financial Officer 2019 Refuse Collection Rate Updates (Voting – B, D, E, F) ⇒ADD Executive Assistant 2019 BC Council of Forest Industries (COFI) Convention (Voting – All Directors) ⇒ADD Executive Assistant Symposium on Water Stewardship in a Changing Climate

COMMUNICATIONS

NEW BUSINESS

IN CAMERA

That the public be excluded from attendance at the meeting in accordance with Section 90 (1) (a), (b) and (k) of the *Community Charter* – "personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality", "personal information about an identifiable individual who is being considered for a municipal award or honour, or who has offered to provide a gift to the municipality on condition of anonymity", and "negotiations and related discussion respecting the proposed provision of a municipal service that are at their preliminary stages and that, in the view of the council, could reasonably be expected to harm the interests of the municipality if they were held in public".

ADJOURNMENT

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Corporate & Administrative Services Committee- February 28, 2019

AUTHOR: Tina Perreault, General Manager Corporate Service/Chief Financial Officer

SUBJECT: 2019 REFUSE COLLECTION [355] FEE REVIEW

RECOMMENDATION(S)

THAT the report titled 2019 Refuse Collection [355] Fee Review be received;

AND THAT the Refuse Collection [355] base budget be increased by \$65,000, effective March 1, 2019, to fund increased collection contract costs;

AND THAT Schedule A of Bylaw 431 be amended to increase annual refuse collection fees by 5% for 2019;

AND FURTHER THAT the 2019-2023 Financial Plan be amended accordingly.

BACKGROUND

At the February 21, 2019 Regular Board Meeting, the following motion was passed, excerpt below:

Recommendation No. 9 Rural Area Curbside Collection Services Award Report – Next Steps

THAT the report titled Rural Area Curbside Collection Services Award Report – Next Steps be received;

AND THAT RFP 18 334 garbage, manual collection services be awarded to Waste Management;

AND THAT staff be authorized to negotiate both weekly and bi-weekly services to ensure business continuity of the service and report back the costs and terms;

AND FURTHER THAT a Special Infrastructure Service Committee meeting be scheduled in February 2019 to discuss policy decisions and service levels with respect to solid waste services.

The purpose of this report is to report back to the Committee on the cost implications for the new curbside garbage collection for weekly service and make recommendations for the 2019 refuse collection fee and charges.

DISCUSSION

Financial Implications - Refuse Collection User Fees

Refuse collection fees were increased by a 1% in 2018. This increase was to fund collection contract costs and increased disposal costs resulting from landfill tipping fees.

Waste Management has provided a cost for weekly manual garbage collection. The revised estimated contract value for this service is \$463,298 and the previously budgeted cost was \$398,298, which requires an additional \$65,000 worth of funding to maintain the service.

Based on a March 1 start date, the pro-rated increase for 2019 would be \$55,000.

Base budget revenues have been increased by \$5,500 to align with 2018 actuals. A rate increase of 5% would result in an additional \$42,000 in annual revenue to offset the increased contract costs.

Table 1 below is a summary of past rate increases and includes the recommended rate increase for 2019.

Table 1: Refuse Collection Rates 2014-2019*						
	2014	2015	2016	2017	2018	2019*
Residential Single Family Dwell	ing					
Annual Collection Fee	133.16	139.82	144.01	145.45	146.90	154.25
\$ Increase over Prior Year	6.34	6.66	4.19	1.44	1.45	7.35
% Increase over Prior Year	5%	5%	3%	1%	1%	5%
Mobile Home in a Mobile Home	Park					
Annual Collection Fee	112.26	117.87	121.41	122.62	123.85	130.04
\$ Increase over Prior Year	5.35	5.61	3.54	1.21	1.23	6.19
% Increase over Prior Year	5%	5%	3%	1%	1%	5%
*2019 rates are based on the recommended increase and are subject to Bylaw amendment						

Financial Implications - Rate Stabilization Operating Reserve

Including the pending transfer of the 2018 surplus, the rate stabilization operating reserve will have a year-end balance of \$164,498. Due to pending policy and program decisions for organics and recycling, Staff are recommending these funds not be used to offset this increase.

The contract increase and recommended rate increase of 5% will result in a projected reserve funding requirement of \$3,500 in 2019 in order to balance the budget. This will increase to approximately \$15,000 in 2020 barring any future rate increases.

Timeline for next steps or estimated completion date

In order to meet the annual April 15th billing distribute for curbside collection services, the fees and charges portion of Bylaw 431 need to be amended. The Bylaw will be forwarded to the March 14, 2019 Board meeting for three readings and adoption.

Communications Strategy

The increase to the user fees will be communicated through the SCRD website, budget documentation and presentations, as well as a memo included in the invoice itself.

STRATEGIC PLAN AND RELATED POLICIES

Consistent with Section 4.22 of the Financial Sustainability Policy:

4.2.2. Policy: Fees and charges will be reviewed annually and adjusted where appropriate. Reviews will include an analysis of the Regional District's costs of providing the service, as well as a comparison to other similar local governments.

CONCLUSION

Based on revised contract values from Waste Management for weekly manual garbage collection, it is recommended to increase the refuse collection fee by 5% for 2019.

The Refuse Collection operating Reserve has an estimated year-end balance of \$164,498. Due to pending policy and program decisions related to curbside organics or recycling, Staff do not recommend using these funds to offset the garbage collection service.

In order to meet the annual April 15th billing distribute for curbside collection services, the fees and charges portion of Bylaw 431 need to be amended. The Bylaw will be forwarded to the March 14, 2019 Board meeting for three readings and adoption.

Reviewed	by:		
Manager		Finance	
GM		Legislative	
CAO	X – J. Loveys	Other	

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SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Corporate and Administrative Services Committee – February 28, 2019

AUTHOR: Tracey Hincks, Executive Assistant

SUBJECT: 2019 BC COUNCIL OF FOREST INDUSTRIES (COFI) CONVENTION

RECOMMENDATION(S)

THAT the report titled 2019 BC Council of Forest Industries (COFI) Convention be received;

AND THAT the following Director(s)______ be approved to attend the 2019 BC Council of Forest Industries (COFI) Convention;

AND THAT approved Director(s) who attend the 2019 BC Council of Forest Industries (COFI) Convention be paid stipend and expenses;

AND FURTHER THAT this recommendation be forwarded to the February 28, 2019 Regular Board meeting.

BACKGROUND

There has been interest expressed in attending the 2019 BC Council of Forest Industries (COFI) Convention. The event takes place Vancouver from Wednesday, April 3 to Friday, April 5 (invitation and preliminary program is attached). Every year the BC Council of Forest Industries holds an annual convention which is the largest gathering of the forest sector in Western Canada. One complimentary registration and one-night hotel stay is extended to the Regional District Chair or their designate. Additional delegates are welcome at the full convention cost of \$500/person.

DISCUSSION

As per Remuneration Bylaw No. 636 expenses and stipend are paid for conferences such as Union of British Columbia Municipalities (UBCM) or Association of Vancouver Island and Coastal Communities (AVICC), the UBCM Annual Electoral Area Directors Forum or Local Government Leadership Academy Conference.

Attendance at any other conference or forum where expenses are incurred or compensation is received, requires Board support in the form of a motion.

STRATEGIC PLAN AND RELATED POLICIES

This report is aligned with the strategic priority to Enhance Board structure and processes, as well as with the value of Transparency.

CONCLUSION

Where conference and forum attendance is approved by the SCRD Board, the Directors are eligible for paid expenses and stipend.

Reviewed by:			
Manager		Finance	
GM		Legislative	X – A. Legault
CAO	X – J. Loveys	Other	

Tracey Hincks

From:

Tracey Hincks

Sent:

Tuesday, February 26, 2019 12:09 PM

To:

Tracey Hincks

Subject:

Reminder - 2019 COFI Convention - Complimentary Registration - RSVP Required

From: Gillrie, Diana [mailto:Gillrie@cofi.org]

Sent: February 22, 2019 1:01 PM

Subject: Reminder - 2019 COFI Convention - Complimentary Registration - RSVP Required

TO:

Mayors

Regional District Chairs

President and Executive Director of AVICC

Re: COFI ANNUAL CONVENTION - April 3-5, 2019 in Vancouver, BC

The 2019 COFI Convention is quickly approaching. We'd be delighted to have you join us from April 3-5 in Vancouver at the Parq Vancouver Hotel & Conference Centre.

Every year, the BC Council of Forest Industries extends special invitations to community leaders through our Community Leaders Program. The 2019 program has been expanded to include island and coastal participants with the merger of the Coast Forest Products Association into COFI in 2018.

As you may have seen in our email sent on January 30, this invitation includes a complimentary registration and onenight hotel stay to facilitate your overnight travel to Vancouver.

The convention is a great opportunity for elected officials – newly elected or returning – to learn more about forestry in British Columbia, network with industry representatives, meet provincial and federal government officials, connect with indigenous leaders, and participate in an engaging conference program.

To date, 40 mayors and chairs (or their designates) from across British Columbia have registered to join us this April, and they will be joined by hundreds of other delegates and special guests.

You can find a preview of our 2019 convention program online <u>here</u>; a full schedule will be available on our website before the end of February.

Will you be able to participate? Your RSVP is kindly requested at your earliest convenience. To ensure the availability of hotel rooms to accommodate your stay, we request your response by March 3, 2019. Please complete the attached form and submit it to eillrie@cofi.org to confirm your participation.

We hope to see you soon!

From: Gillrie, Diana

Sent: Wednesday, January 30, 2019 4:25 PM

Subject: 2019 COFI Convention - Complimentary Registration - RSVP Required

TO: Mayors

Regional District Chairs

President and Executive Director of AVICC

Re: COFI ANNUAL CONVENTION - April 3-5, 2019 in Vancouver, BC

I am pleased to invite you to attend the 2019 Convention of the BC Council of Forest Industries to be held from April 3 - 5, 2019 at the JW Marriott Parq Vancouver Hotel and Conference Centre in downtown Vancouver.

The BC Council of Forest Industries is the voice of the BC forest industry in the province. Forestry creates one in every 17 jobs, or more than 140,000 jobs in British Columbia. The industry is adapting, evolving and innovating, and continues to be one of the most significant economic drivers in the province.

COFI and the Coast Forest Products Association joined together in 2018 and we are proud to now count island and coastal forestry companies among our COFI membership. For those of you who may not be familiar with our annual event, COFI's convention is the largest gathering of the forest sector in Western Canada. Our speakers and delegates are key influencers from the forest industry, government, communities, and First Nations.

The community leaders program is a key part of our Convention program. We are pleased to offer you one complimentary registration package to attend the convention. As our guest, we will provide a complimentary convention registration, as well as one night's accommodation at the Parq Vancouver's hotels.

We look forward to you joining us. If you are unable to attend, your community's CAO or a designated councillor/director are welcome to attend and utilize the complimentary registration. We also encourage other councillors and staff to attend and are pleased to extend the COFI member rate to them (\$400 if they register before March 1). You can contact Diana Gillrie to get the member promotional code to register any additional local government representatives online.

To confirm your participation at the COFI Convention as your community's local government representative, please complete the enclosed registration form and return it to Diana Gillrie at gillrie@cofi.org by February 7, 2019. Kindly do not register online, as Diana will arrange for your participation as part of the community leaders program.

COFI will pay for one night's accommodation at the Parq Vancouver, at the JW Marriott or the Douglas, both attached to the conference venue. Any additional nights will be at your own expense. To book your room please indicate your plans on the attached registration form.

I look forward to seeing you at the Convention in April 2019 in Vancouver, BC. If you have any questions about registration, please contact Diana Gillrie at 778.760.1166 or via email at or gillrie@cofi.org.

Warm regards,

Susan Yurkovich President & CEO

Council of Forest Industries











The upcoming 2019 Convention in Vancouver will feature:

- Keynote luncheon address on Thursday, April 4 by Canada's Ambassador to the United States, David MacNaughton
- Keynote address by Robert Johnston, Executive Advisor and Managing Director, Global Energy & Natural Resources, Eurasia Group based in Washington, DC
- The importance of reconciliation with Indigenous groups, and the role of the forest industry

Privacy - Terms

- Economic outlook by Jock Finlayson, Executive Vice President and Chief Policy Officer of the BC Business Council of British Columbia
- A discussion with Deputies with John Allan, Deputy Minister of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development and Beth MacNeil, Assistant Deputy Minister, Canadian Forest Service

Plus, delegates will hear from notable speakers on:

- · Perspectives from forest industry CEOs,
- A panel of our future forestry leaders, and
- · How technology is shaping the practice of forestry

Stay tuned for a complete convention program to be posted by late February.

Presenting sponsor



Platinum sponsors

Privacy - Terms









2019 COFI Convention

April 3 – 5, 2019

JW Marriott Parq Vancouver Hotel & Conference Centre

Vancouver, BC



From April 3-5, 2019, the BC Council of Forest Industries will hold its annual convention, the largest gathering of the forest sector in Western Canada. Each year this event attracts industry CEOs and executives from continental North America and overseas companies, senior representatives from customers, suppliers, financial institutions, law firms, as well as local, provincial, federal government and First Nations leaders.

This year the COFI Convention will take place in Vancouver, at one of the city's most beautiful locations – JW Marriott Parq Vancouver Hotel and Conference Centre.

The convention will run from 6:00 pm on Wednesday, April 3 to 1:45 pm on Friday, April 5. A full program will be posted soon.

For information about becoming a sponsor or exhibitor, please contact Diana Gillrie at 778-760-1166.

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Corporate and Administrative Services Committee – February 28, 2019

AUTHOR: Tracey Hincks, Executive Assistant

SUBJECT: Symposium on Water Stewardship in a Changing Climate

RECOMMENDATION(S)

THAT the report titled Symposium on Water Stewardship in a Changing Climate be received;

AND THAT the following Director(s) ______ be approved to attend the Symposium on Water Stewardship in a Changing Climate;

AND THAT approved Directors who attend the Symposium on Water Stewardship in a Changing Climate be paid stipend and expenses;

AND FURTHER THAT this recommendation be forwarded to the February 28, 2019 Regular Board meeting.

BACKGROUND

There has been interest expressed in attending the Symposium on Water Stewardship in a Changing Climate. The event takes place in Parksville at the City's Community and Conference Centre on April 2 - 4 (program is attached).

Registration costs for the Symposium are as follows:

Early Bird Registration (until March 1, 2019)			
	April 2 only	April 3 & 4	
	Dave Derrick Workshop	Attend the Full 2-day Symposium	
Registration	\$175	\$225	
After March 1, 2019			
Registration	\$250	\$275	

For April 2, "day in the field", bring appropriate clothing and footwear. A catered lunch is part of the package on each day of the symposium.

DISCUSSION

As per Remuneration Bylaw No. 636 expenses and stipend are paid for conferences such as Union of British Columbia Municipalities (UBCM) or Association of Vancouver Island and Coastal Communities (AVICC), the UBCM Annual Electoral Area Directors Forum or Local Government Leadership Academy Conference.

Attendance at any other conference or forum where costs are incurred or compensation is received, requires Board support in the form of a motion.

STRATEGIC PLAN AND RELATED POLICIES

This report is aligned with the strategic priority to Enhance Board structure and processes, as well as with the value of Transparency.

CONCLUSION

Where conference and forum attendance is approved by the SCRD Board, the Directors are eligible for paid expenses and stipend.

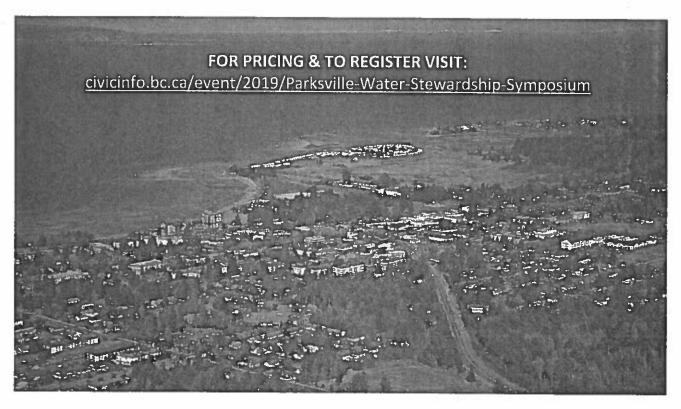
Reviewed by:			
Manager		Finance	
GM		Legislative	X – A. Legault
CAO	X – J. Loveys	Other	

Parksville 2019: Second Annual Vancouver Island

Symposium on Water Stewardship in a Changing Climate

THEME: Improving Where We Live Through Restorative Land Development

In 2019, join us in Parksville at the City's Community and Conference Centre (132 E. Jensen Avenue) for a field day on April 2, followed by a 2-day symposium on April 3-4



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Fisheries and Oceans Canada

Pêches et Océans Canada

Water Stewardship in a Changing Climate

Improving Where We Live: Symposia Overview

CONTEXT: The rhythms of water are changing – warmer and wetter winters; longer and drier summers. Adapting to this 'new normal' requires transformation in how we value nature and service land, and how we reconnect hydrology and ecology.

The goal of the 'whole-system' approach is to re-establish creekshed function!

Nanaimo 2018 Symposium

Held in April 2018, Water Symposium #1 was a 'call to action'. The theme? Build on the good outcomes that flow from local government and stewardship sector collaboration!

Symposium #1 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?

Parksville 2019 Symposium

Water Symposium #2 will celebrate local government initiatives on Vancouver Island that are 'getting it right'. These success stories are characterized by 3 attributes: commitment, collaboration and the 'hard work of hope'.

A decade of effort, 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. Follow the leaders!



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

2nd Annual Symposium on Water Stewardship in a Changing Climate

Parksville 2019: Program at a Glance

For pricing, location and registration, VISIT: civicinfo.bc.ca/event/2019/Parksville-Water-Stewardship-Symposium

Tuesday, April 2nd

"In the Field"

Wednesday, April 3rd Theme: "Sustainable Stream Restoration"

Thursday, April 4th Theme: "Restorative Land Development"

OPTION 1 (FREE)

Join us on a tour of the soon to be commissioned Englishman River Water Service treatment plant serving Parksville and Nanoose Bay Peninsula.

OPTION 2

(40 registrants maximum)

Learn from Dave Derrick.
First, a classroom session.
Then, an in-stream lecture at Shelly Creek, which is an emerging demonstration application for sustainable stream stabilization.

Reconnect hydrology and ecology – what happens on the land in the creekshed matters to streams!

In the 1990s, Dr. Chris May's seminal research defined the relationship between land use change and stream impacts. To protect stream ecology, communities must address the root causes of 'changes in hydrology' (water quantity).

FREE PUBLIC LECTURE:

An evening lecture on April 3rd by Storm Cunningham is the bridge between the two days.

Yes, we can decrease our destructive footprint while at the same time increasing our restorative footprint!

Storm Cunningham is a global thought leader. In The Restoration Economy, 2002, he showed how "restorative development" would drive economies in the 21st century.

Sustainable is attainable. Make where we live better. Create an "actionable vision". Chart a new course to a sustainable water future. Celebrate Vancouver Island success stories. Follow the leaders!

Cross-border collaboration expands our horizons and connects us with a larger body of experience!



Dave Derrick
Stream Restoration Innovator
(Alabama)



Dr. Chris May Environmental Scientist-Engineer (Washington State)

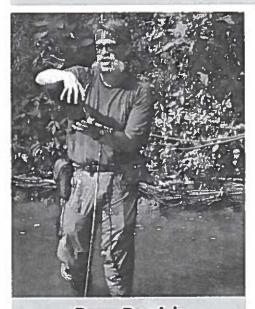


Storm Cunningham Author – Motivator – Publisher (Virginia)

Sage

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

Dave Derrick & Sustainable Stream Restoration



Dave Derrick
Stream Restoration Innovator

Dave Derrick had a 35-year career with the US Army Corps of Engineers where he held the position of Research Hydraulic Engineer in the Coastal and Hydraulics Lab.

Dave has had the opportunity to model ideas in the lab and then implement solutions in the field. He developed and refined dozens of cost-effective streambank protection techniques, including different types of Bendway Weirs.

He enjoys working with community-based groups. His focus is on "using nature's materials". Through 150-plus workshops over the past decade, he has taught over 8,000 individuals.

A true innovator in *Potomology* (the study of the behaviour of rivers), his wealth of hands-on experience encompasses over 10,000 hydraulic structures in rivers and streams, in every American state, and under every possible situation.

Over the course of his career he has been an educator, facilitator, designer, reviewer, and constructor of almost every type of stabilization/restoration project imaginable.

On April 2, an Introduction to Stream Investigation & Stabilization

MORNING: Classroom Lecture

Improving Stream Function

Dave Derrick was a co-developer and coinstructor in the first American Society of Civil Engineers stream class, titled *An Introduction* to *Stream Investigation*, *Stabilization*, and Restoration.

The morning lecture is a streamlined version of this course. Dave Derrick will cover the philosophy of restoration, channel dynamics and evolution, and bioengineering methods. Shelly Creek is the case study for improving instream hydraulic and environmental functions in fish-bearing streams along the east coast of Vancouver Island.

Space is Limited / Maximum 40 Registrants

AFTERNOON: On-Site at Shelly Creek

Human Impact on Shelly Creek

Shelly Creek is an outdoor classroom for Dave Derrick to demonstrate how to assess stream stability problems and develop sustainable solutions in a 'whole-system' context.

When the Englishman River was declared to be the most endangered river in BC, the 'call to action' resulted in a Watershed Recovery Plan. Survival of Coho salmon depends on a healthy Shelly Creek, the key tributary.

Hydrology hits first and hardest. As a result, channel erosion and sedimentation caused by 'changes in hydrology' are threats to aquatic habitat and fish survival in Shelly Creek.

Water Stewardship in a Changing Climate

Improving Where We Live: Shelly Creek Relevance

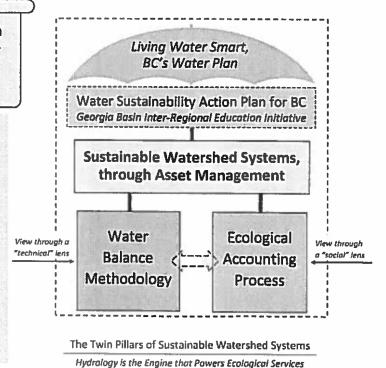
Shelly Creek is a provincial demonstration application for the Whole-System, Water Balance Approach and the Ecological Accounting Process (EAP) Initiative

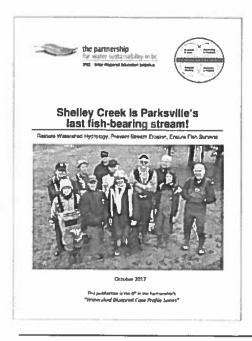
The Water Balance Methodology applies science-based understanding to establish creekshed-based performance targets and downscale those targets to the site level.

Taking action depends on what a community thinks a creekshed is worth. The EAP methodology quantifies 'worth'.

Success in solving 'in your face' problems caused by land use changes would mean:

- 1. Less flooding
- 2. Less stream erosion
- 3. More streamflow when needed most





Connecting People to Their Landscape

The Shelly Creek experience demonstrates how an informed stream stewardship sector can expand its involvement and influence beyond the stream channel; and be a catalyst for changes in planning and engineering practice that would restore the water balance over time.

'Getting it right', both on the landscape and in the stream channel, depends on a 'top-down & bottom-up' approach that is founded on partnerships and collaboration.

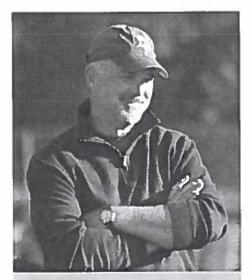
The restoration challenge: align efforts in order to move from *stop-gap remediation* of in-stream problems to *long-term restoration* of a properly functioning creekshed.

DOWNLOAD: http://waterbucket.ca/rm/files/2017/10/Shelly-creek-Water-Balance-Demonstration Oct2017.pdf

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

Dr. Chris May & the 'Whole-System' Approach



Dr. Chris May
Environmental Scientist-Engineer

In the 1990s, the pioneer work of Dr. Chris May and Dr. Richard Horner at the University of Washington was transformational. Their findings resulted in a hydrology-based framework for protecting watershed health.

Their seminal 1996 paper synthesized a decade of research. They identified and ranked the four factors limiting stream health. #1 is 'changes in hydrology'; #4 is water quality.

Twenty years later, Chris May is Surface & Stormwater Division Director with Kitsap County Public Works in Washington State. His local government work has allowed him to put theory into practice. Under his leadership, Kitsap County has applied the Whole-System Approach to develop its strategy for watershed retrofit and rehabilitation.

Horner and May's research findings influenced and are integrated into the methodology that is the foundation for **Stormwater Planning: A Guidebook for British Columbia**.

On April 3, the theme is Sustainable Stream Restoration

Mimic the Water Balance to Reduce Flooding, Erosion & Loss of Baseflow

So many studies manipulate a single variable out of context with the whole and its many additional variables. Horner and May, on the other hand, investigated whole systems in place, tying together measures of the landscape, stream habitat, and aquatic life.

The key to the Whole-System Approach is understanding how rainfall reaches a stream via three flow paths in a watershed: surface runoff, lateral interflow in shallow soils, and deep groundwater. Chris May provides this perspective on stream restoration that lasts:

"Unlock that key and we can successfully implement appropriate measures to mimic the natural water balance."

Action Required at Multiple Scales to Restore Natural Flow Regimes

Chris May has learned through experience that it is necessary to do everything:

"Working at multiple scales and multiple levels is really key. But, so many people in local government are just too busy these days to even contemplate what needs to be done to repair and restore at multiple scales and levels. As a result, in the big urban cities it is just too difficult for local government staff to work concurrently at multiple scales.

"Kitsap is at a manageable scale. The County is big enough to effect change and make things better. That is our goal — have a positive impact on the community."

 $^{\rm age}$

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		
1¾ hrs	ABSTRACT: THIS SESSION WILL BE CONDUCTED AS "A MINI-WORKSHOP WITHIN THE SYMPOSIUM" Understanding the complex interactions of whole-system, water balance 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 restorative land development.		

Storm Cunningham & Restorative Development



Storm Cunningham
Author – Motivator - Publisher

Everywhere one turns these days, some form of the words "renewal", "restoration" or "regeneration" appear. Storm Cunningham was the catalyst of that global "re" trend when his first book, The Restoration Economy, was published in 2002. This was followed by reWealth in 2008. Coming soon is RECONOMICS: The Rise of Resilient Prosperity. Storm is founder of REVITALIZATION.org and the hands-on publisher of the global news journal REVITALIZATION².

He has been called "the world's thought leader on community revitalization and natural resource restoration". His message: "When collaboration goes beyond the watershed restoration 'silo', it can yield partnerships with local and regional revitalization efforts. This, in turn, can yield new funding and political support for restoration."

To learn more, watch Storm Cunningham's TEDx Talk at https://www.youtube.com/watch?v=fpokEthuW2U

1 https://revitalization.org

On April 4, the theme is Restorative Land Development

On the evening of April 3: A Free Public Lecture Doors open 6:30pm, welcome at 7pm

Nature Is Regenerative: We should be too

"In my experience, the civil engineering profession has trouble adopting the restorative mind-set. The main problem is that engineering is all about control and certainty. Urban planners have a similar problem. But living systems---like watersheds and cities---resist control, and exhibit surprising behavior when they are healthy.

This is why 80% of the revitalizing work done by urban planners and civil engineers in the 21st century will undo 80% of the work their predecessors did to cities and nature in the 20th century. We don't fully understand complex systems, so humility and adaptive management are needed to restore nature, and to revitalize cities."

—Storm Cunningham, Sept 2018

On April 4 at the Symposium: Concluding Reflections

We Can Create the Future We Want

Storm Cunningham will reflect on what he heard throughout the 2-day symposium. He will connect dots when he relates Vancouver Island initiatives to this perspective:

"Visionaries, designers, planners, policy makers, and project managers abound.
Strategists are rare. As a result, resilience and revitalization efforts often fail due to
1) bad strategy, and 2) no strategy. Since strategies are our path to success, they become our primary interface with our world. Thus, what we restore, restores us. What we revitalize, revitalizes us."

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
A	"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.
c	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 '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. 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 worth 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.