



REGIONAL SERVICES COMMITTEE

WEDNESDAY, MARCH 28, 2012
IMMEDIATELY FOLLOWING SPECIAL BOARD MEETING
CVRD BOARD ROOM – 175 INGRAM STREET

	AGENDA	PAGES
1.	<u>APPROVAL OF AGENDA:</u>	1-2
2.	<u>ADOPTION OF MINUTES:</u>	
	M1 Adoption of Minutes of Regular Meeting of Regional Services Committee held February 22, 2012	3-10
3.	<u>BUSINESS ARISING FROM THE MINUTES:</u>	
4.	<u>DELEGATIONS:</u>	
	D1 Brian Roberts Executive Director, Cowichan Energy Alternatives Society Re: Progress Report for the Cowichan BioFuel Facility and Update Low Carbon Economy Initiatives of Cowichan Energy Alternatives	11
	D2 Kim Stephens, P. Eng., Executive Director, Partnership for Water Sustainability in BC Re: An "Inter-Regional Education Initiative" for "Rainwater Management in a Watershed Sustainability Context"	12
	D3 Earle Plain, Air Quality Meteorologist, Ministry of Environment Dr. Paul Hasselback, Medical Health Officer for Central Vancouver Island Re: Air Quality, Effects of Open Burning on Human Health	13
	D4 Dr. Paul Hasselback, Medical Health Officer for Central Vancouver Island Re: Introduction as new Medical Health Officer with PowerPoint Presentation on the Role of the Medical Health Officer and Building Relationships Within the Central Vancouver Island Area	14
	D5 Rodger Hunter, Resident of Electoral Area B (Shawnigan Lake) Re: Sustainability Planning Perspectives Presentation for Information	15
5.	<u>CORRESPONDENCE:</u>	

6. **STAFF REPORTS:**

SR1	Staff Report from Business Development Officer, Economic Development Re: Islands Agriculture Show	16-18
SR2	Staff Report from General Manager, Planning and Development Re: CVRD Integrated Regional Sustainability Plan	19-33
SR3	Staff Report from General Manager, Planning and Development Re: CVRD Climate Action Plan	34-40
SR4	Staff Report from Chief Administrative Officer Re: Inter-Regional Rainwater Management Education Initiative	41-68

7. **NEW BUSINESS:**

8. **QUESTION PERIOD:**

- a) Press
- b) Public

9. **ADJOURNMENT:**

The next regular Regional Services Committee meeting is scheduled for Wednesday, April 25, 2012, at 6:00 pm in the Board Room, 175 Ingram Street, Duncan BC.

REGIONAL SERVICES COMMITTEE:

Director J. Lefebure, Chair
Director L. Iannidinardo, Vice-Chair
Director M. Walker
Director B. Fraser
Director G. Giles
Director L. Duncan
Director I. Morrison
Director M. Dorey

Director M. Marcotte
Director P. Weaver
Director R. Hartmann
Director B. Lines
Director R. Hutchins
Director P. Kent
Director T. McGonigle

Cowichan Valley Regional District
Warren Jones, Administrator
Joe Barry, Corporate Secretary
Mark Kueber, General Manager, Corporate Services

Minutes of the Regular meeting of the Regional Services Committee held in the Board Room, 175 Ingram Street, Duncan BC, on Wednesday, February 22, 2012 at 6:01 pm.

PRESENT: Chair J. Lefebure
Directors M. Dorey, L. Duncan, B. Fraser, G. Giles,
R. Hartmann, R. Hutchins, L. Iannidinardo, P. Kent,
B. Lines, T. McGonigle, I. Morrison, P. Weaver, M. Walker,
and Alternate Director R. Waters

ABSENT: Director M. Marcotte

ALSO

PRESENT: Warren Jones, Chief Administrative Officer
Joe Barry, Corporate Secretary
Mark Kueber, General Manager, Corporate Services
Ron Austen, General Manager,
Arts, Recreation and Culture
Brian Dennison, General Manager,
Engineering and Environmental Services
Tom Anderson, General Manager,
Planning and Development
Sybille Sanderson, A/General Manager, Public Safety
Jacob Ellis, Manager, Corporate Planning
Sharon Moss, Manager, Finance Division
Geoff Millar, Manager, Economic Development Division
Brian Farquhar, Manager, Parks and Trails Division
Bob McDonald, Manager,
Recycling and Waste Management Division
Kate Miller, Manager, Regional Environmental Policy Division
Steve Hurcombe, Budget Coordinator, Finance Division
Jason Adair, Superintendent, Solid Waste Facilities Division
Tara Daly, Recording Secretary

**APPROVAL OF
AGENDA**

It was moved and seconded that the agenda be approved.

MOTION CARRIED

**ADOPTION OF
MINUTES**

M1

It was moved and seconded that the minutes of the Regular meeting of Regional Services Committee, held January 25, 2012, be adopted.

MOTION CARRIED

DELEGATION

D1

Item D1 was deferred until later in the Agenda.

CORRESPONDENCE

- C1** The correspondence from BDO Canada LLP, dated January 26, 2012, re: Audit of the Financial Statements of the Cowichan Valley Regional District for the year ended December 31, 2011 was received for information.

STAFF REPORTS

- SR1** The Staff Report from the General Manager, Corporate Services Department dated January 30, 2012, re: Draft 2012 Regional Budgets was received for information.

- SR2** The Staff Report from the General Manager, Corporate Services Department dated February 13, 2012, re: General Government Draft 2012 Budget was considered.

It was moved and seconded that the General Government Budget be amended by transferring \$55,000 into the General Government Operating Reserve.

MOTION CARRIED

It was moved and seconded that Item D1 be considered at this time.

MOTION CARRIED

DELEGATION

- D1** Brandy Gallagher, Cowichan Region Affordable Housing Affiliate Project (O.U.R. ECOVILLAGE)
Re: Presentation for Proposal Related to "Grant-in-Aid" for the Cowichan Region Affordable Housing Affiliate Project.

Brandy Gallagher provided an overview of the Affordable Housing Affiliate Project, its charitable sponsorship by Volunteer Cowichan, and its association with several local entities. Ms. Gallagher explained that the Regional Grant-in-Aid being considered by the Committee would allow for the development of an "on the ground pilot project", the first home in the Demonstration Pilot Project, to lock up stage by late spring 2012.

STAFF REPORTS

- SR3** The Staff Report from the A/General Manager, Public Safety dated February 14, 2012, re: Emergency 9-1-1 (109) Budget was considered.

It was moved and seconded that the 2012 Requisition for Emergency 9-1-1 (Budget 109) be increased by \$59,272 to cover increased contract costs for required maintenance to the CVRD's portion of the Central Island 9-1-1 network system to keep the system functioning.

MOTION CARRIED

The Chief Administrative Officer advised that he would report back with an update of the status of discussions between Telus and Nanaimo Regional District regarding the collection of fees for Emergency 9-1-1 on telephone bills.

SR4 The Staff Report from the Manager, Economic Development Division dated February 14, 2012, re: 2012 Budget Report – Economic Development and Tourism was received for information.

SR5 The Staff Report from the Manager, Regional Environmental Policy Division dated February 13, 2012, re: 131 Budget – Regional Environmental Policy Draft Budget was considered.

It was moved and seconded that Budget 131 be modified to include Gas Tax funding of \$900,000 for flood works.

MOTION CARRIED

SR6 The Staff Report from the A/General Manager, Public Safety dated February 14, 2012, re: Emergency Planning (205) Budget was considered.

It was moved and seconded to adjust Budget 205 so there is no reduction in requisition and that the \$23,746 proposed decrease be put into Operating Reserve for the Emergency Planning (205) Budget.

MOTION CARRIED

SR7 The Staff Report from the Manager, Parks & Trails Division dated February 10, 2012, re: Regional Parks and Trails Program 2012 Draft Budget,(Function 280) was considered.

It was moved and seconded that the draft Regional Parks and Trails Function 280 core budget be amended to reflect an additional \$57,377 in Grant funds on the Revenue side and both an additional \$50,000 to Consultants under Operating and \$7,377 to Capital – Lease Improvements, on the Expense side.

MOTION CARRIED

The Regional Parks and Trails Program 2012 Draft Budgets for Function 283 – Kinsol Trestle Operations and Maintenance, and Function 285 – Regional Parkland Acquisition were received for information.

SR8 The Staff Report from the Manager, Recycling & Waste Management dated February 14, 2012, re: 2012 Solid Waste Budget 520 was considered.

It was moved and seconded that the 2012 Solid Waste Budget 520 Requisition be increased by \$160,000 for planned expenditures on legal and consulting costs, as well as fulfilling a switch to the use of biodiesel for all solid waste equipment.

MOTION CARRIED

**RECESS
8:10 pm**

It was the consensus of the Committee to take a five minute recess. The meeting recessed at 8:10 pm.

**MEETING
RECONVENED
8:20 pm**

The Regional Services Committee meeting reconvened at 8:20 pm.

SR9

The Staff Report from the Chief Administrative Officer dated February 14, 2012, re: 2012 Supplemental Budget Requests was considered.

Tier 1 Supplemental Requests:

Regional Compost Facility Study

It was moved and seconded that the supplemental budget request for a Regional Compost Facility Study be added to the 2012 Budget with an increase in Requisition of \$17,514 and the remainder taken from the Regional Feasibility Reserve Fund for a total of \$70,000.

MOTION CARRIED

Cultural Mapping Project

It was moved and seconded that the supplemental request for the Cultural Mapping Project be referred to Cowichan Valley Arts Council.

MOTION WITHDRAWN

It was moved and seconded that the supplemental budget request in the amount of \$20,000 for the Cultural Mapping Project be funded.

MOTION CARRIED

Communications Office

It was moved and seconded that the supplemental request in the amount of \$130,000 for the Communications Office be funded.

MOTION DEFEATED

It was moved and seconded that supplemental request be named "Communications" and that \$50,000 be budgeted to respond to recommendations coming out of the report from Mickelson Consulting.

MOTION CARRIED

Sire Records Management Software

It was moved and seconded that the supplemental request for funding in the amount of \$92,550 for Sire Records Management Software be included in the 2012 budget.

MOTION CARRIED

Meade Creek Ashfill Remediation – \$3 per tonne tipping fee

It was moved and seconded that the supplemental request for funding (\$3 per tonne tipping fee increase) for Meade Creek Ashfill Remediation be included in the 2012 budget.

MOTION CARRIED

Tier 2 Supplemental Requests:*Green Team Budget*

It was moved and seconded that the supplemental request in the amount of \$10,000 for the Green Team Budget be included in the 2012 budget.

MOTION CARRIED

Implementation of Cowichan Region Area Agriculture Plan

It was moved and seconded that the supplemental request for Implementation of Cowichan Region Area Agriculture Plan in the amount of \$20,000 be included in the 2012 budget.

MOTION CARRIED

Bylaw Enforcement Officer

It was moved and seconded that the supplemental request for funding in the amount of \$94,814 for a Bylaw Enforcement Officer (cost shared by Solid Waste and Regional Parks functions) be included in the 2012 budget.

MOTION CARRIED

Other Supplemental Requests

The following Supplemental Requests have been reviewed by other Committees and Commissions: Bus Stop Benches (107), 24 Passenger Bus for the Shawnigan Lake Community Centre (464), Deloume Park Infrastructure and Undefined Minor Capital for Community Parks Electoral Area A (231), Cowichan Place Signage for Island Savings Centre (420), and Cowichan Place Signage for Island Savings Centre Theatre (426).

Function 520 – Solid Waste

It was moved and seconded that funding of \$60,000 for Function 520 – Solid Waste, expansion of hours at Meade Creek be included in the 2012 budget.

MOTION DEFEATED

It was moved and seconded that funding of \$20,000 for Function 520 – Solid Waste, expansion of hours at Meade Creek be included in the 2012 budget.

MOTION CARRIED

**RECESS
10:05 pm**

It was the consensus of the Committee to take a five minute recess. The Regional Services Committee meeting recessed at 10:05 pm.

**MEETING
RECONVENED
10:14 pm**

The Regional Services Committee meeting reconvened at 10:14 pm.

Function 100 – General Government

The Supplemental Request by General Government for Regional Culture – Local Arts Councils has been withdrawn.

The Supplemental Requests for Replacing Refrigeration Compressors, Installing Acoustic Material in Arena/Rink, and Purchase of Maintenance Truck at Cowichan Lake Sports Arena (all 405); Curling Ice Shaver at Kerry Park Recreation Centre Curling (413), and Tandem Dump Trailer at Kerry Park Recreation Centre Sports Field (416) will be reviewed at individual Commission meetings.

Function 131 - Environment

It was moved and seconded that Function 131 – Environment including Regional Watershed Management Strategies, Regional Energy Plan, and Regional Flood Education be included in the 2012 budget.

MOTION DEFEATED

It was moved and seconded that Function 131 – Environment, Regional Watershed Management Strategies be included in the 2012 budget.

MOTION DEFEATED

It was moved and seconded that Function 131 – Environment, Regional Energy Plan be included in the 2012 budget.

MOTION DEFEATED

SR10

The Staff Report from the General Manager, Corporate Services Department dated February 7, 2012, re: 2012 Regional Grant in Aid was considered.

Bike to Work Cowichan

The Regional Grant-in-Aid request for Bike to Work Cowichan was previously considered.

BC Forest Discovery Centre

It was moved and seconded that funding of \$50,000 for a Regional Grant-in-Aid for the BC Forest Discovery Centre be added to the 2012 budget.

MOTION CARRIED

10:40 pm

Director Iannidinardo declared a potential conflict of interest due to employment with the Cowichan Green Community Society and left the meeting at 10:40 pm.

Cowichan Green Community Society

It was moved and seconded that funding of \$20,000 for a Regional Grant-in-Aid for the Cowichan Green Community Society be added to the 2012 budget.

MOTION CARRIED

10:41 pm

Director Iannidinardo returned to the meeting at 10:41 pm.

Cowichan Sportsplex

It was moved and seconded that funding of \$110,000 for a Regional Grant-in-Aid for the Cowichan Sportsplex be added to the 2012 budget.

MOTION DEFEATED

It was moved and seconded that funding of \$80,000 for a Regional Grant-in-Aid for the Cowichan Sportsplex be added to the 2012 budget.

MOTION DEFEATED

It was moved and seconded that funding of \$100,000 for a Regional Grant-in-Aid for the Cowichan Sportsplex be added to the 2012 budget.

MOTION CARRIED

Earlier Staff Reports concerning the Sportsplex will be recirculated to the Directors. The Chief Administrative Officer advised that, at the direction of the Board, the Sportsplex will be included in discussions surrounding Regional Recreation.

Cowichan Valley Arts Council

It was moved and seconded that funding of \$22,000 for a Regional Grant-in-Aid for the Cowichan Valley Arts Council be added to the 2012 budget.

MOTION CARRIED

Cowichan Valley Hospice

It was moved and seconded that funding of \$3,000 for a Regional Grant-in-Aid for the Cowichan Valley Hospice be added to the 2012 budget.

MOTION CARRIED

Garden House Foundation

The request for a Regional Grant-in-Aid was not considered.

O.U.R. Ecovillage/O.U.R. Community Association

It was moved and seconded to deny the Regional Grant-in-Aid request from O.U.R. Ecovillage/O.U.R. Community Association.

MOTION CARRIED

Cowichan Therapeutic Riding Association

It was moved and seconded that funding of \$10,000 for a Regional Grant-in-Aid for Cowichan Therapeutic Riding Association be added to the 2012 budget.

MOTION DEFEATED

SR11

The Staff Report from the General Manager, Corporate Services Department dated February 13, 2012, re: Proposed 2012 Hospital Budget was considered.

It was moved and seconded that the Cowichan Valley Regional Hospital District 2012 Budget as presented be forwarded to the Hospital Board for consideration.

MOTION CARRIED

Cowichan Valley Arts Council

It was moved and seconded that additional funding of \$3,000 be added to the \$22,000 previously moved for a Regional Grant-in-Aid for the Cowichan Valley Arts Council, bringing the total to \$25,000 to be added to the 2012 budget.

MOTION CARRIED

The Committee discussed Regional Grants-in-Aid, specifically procedure and whether there should be a policy.

ADJOURNMENT
11:11 pm

It was moved and seconded that the meeting be adjourned.

MOTION CARRIED

The meeting adjourned at 11:11 pm.

Chairperson

Recording Secretary

Dated: _____

Request to Appear as a Delegation**D1****Meeting Information**

Request to Address:

☒ CVRD Board☐ Committee

If Committee, specify the Committee here:

Meeting Date: 03/14/2012Meeting Time: 6PM*to RSC March 28/12 LF***Applicant Information**

Applicant Name:

Brian Roberts

Representing:

Cowichan Energy Alternatives Society

(Name of organization if applicable)

As:

Executive Director

(Capacity / Office)

Number Attending:

1**Applicant Contact Information**

Applicant Mailing Address:

#1 - 55 Station St.

Applicant City:

Duncan

Applicant Telephone:

250-597-1491

Applicant Fax:

250-597-1492

Applicant Email:

brian@cowichanenergy.org**Presentation Topic and Nature of Request:**

To provide a report on progress at the Cowichan BioFuel Facility (CBF) - located at the Bings Creek Solid Waste Management Complex - which officially became operational in August 2011 with support from the CVRD. Cowichan Energy Alternatives also wishes to provide a brief update to the CVRD Board on our other low carbon economy initiatives, such as the non-profit Community Carbon Marketplace, which aim to help achieve community energy resilience while reducing greenhouse gas emissions.

Request to Appear as a Delegation**D2****Meeting Information**

Request to Address:

☐ CVRD Board☒ Committee

If Committee, specify the Committee here:

Regional Services Committee ²⁸

Meeting Date:

03/28
02/15/2012

Meeting Time:

6pm

Applicant Information

Applicant Name:

Mr. Kim A Stephens, P.Eng.

Representing:

Partnership for Water Sustainability in BC

(Name of organization if applicable)

As:

Executive Director

(Capacity / Office)

Number Attending:

1

Applicant Contact Information

Applicant Mailing Address:

1010 Cowan Point Drive

Applicant City:

Bowen Island

Applicant Telephone:

604-817-4657

Applicant Fax:

Applicant Email:

kstephens@watersustainabilitybc.ca

Presentation Topic and Nature of Request:

TOPIC: An "Inter-Regional Education Initiative" for "Rainwater Management in a Watershed Sustainability Context" is being implemented under the umbrella of "CAVI-Convening for Action on Vancouver Island". The initiative supports watershed-based strategies and programs in four regional districts: Cowichan Valley, Comox Valley, Nanaimo Region, and Capital Region. Collaboration, alignment and consistency up and down the east coast of Vancouver Island will create opportunities so that everyone can go farther, more efficiently and effectively.

REQUEST: The Partnership is asking the four regions to endorse the Inter-Regional Education Initiative and support a grant application by the Partnership

RECEIVED

MAR 12 2012



D3

Administrative Services **REQUEST TO APPEAR AS A DELEGATION**

Meeting Information

Request to Address:*

☐ CVRD Board

☒ Committee

If Committee, specify the Committee here:*

Regional Services Committee

Meeting Date:*

28th March, 2012

Meeting Time:*

6pm

2nd presenter

Applicant Information

Applicant Name:*

contact ↓

Earle Plain

(Paul Hasselback)

Representing:*

Ministry of Environment / (VIHA)

(Name of Organization if applicable)

As:*

Air Quality Meteorologist

(Capacity/Office)

(Medical Health officer)

Number Attending:*

2

Applicant Contact Information

Applicant Mailing Address:*

2080^A Labieux Rd., Nanaimo, BC, V9T 6J9

Applicant City: *

Nanaimo

Applicant Telephone:*

250-751-3171

Applicant Fax:*

250-751-3103

Applicant Email:*

Earle.Plain@gov.bc.ca

Presentation Topic and Nature of Request:*

Air Quality: Effects of open burning on human health.

*Indicates required fields

Cowichan Valley Regional District
175 Ingram Street, Duncan BC V9L 1N8

Please address inquiries to the Legislative Services Division at 250.746.2508.

July 2010

D4**Request to Appear as a Delegation****Meeting Information**

Request to Address:

☐ CVRD Board☒ Committee

If Committee, specify the Committee here:

Regional Services CommitteeMeeting Date: 28 03/21/2012

Meeting Time: 6:00 PM

Applicant Information

Applicant Name:

Dr Paul Hasselback

Representing:

Vancouver Island Health Authority

(Name of organization if applicable)

As:

Medical Health Officer for Central Vancouver Island

(Capacity / Office)

Number Attending:

1**Applicant Contact Information**

Applicant Mailing Address:

3rd Floor 6475 Metral Drive

Applicant City:

Nanaimo

Applicant Telephone:

250-739-6304

Applicant Fax:

250-755-3372

Applicant Email:

Paul.Hasselback@viha.ca**Presentation Topic and Nature of Request:**

Introduction as new Medical Health Officer for Central Vancouver Island and short presentation to open dialogue on the role of the Medical Health Officer and building relationships within the Central Vancouver Island area regarding common concerns.

* Note: Please contact Administrative Assistant Michelle Whyte at Michelle.Whyte@viha.ca with questions and confirmation.
250-739-6304

Request to Appear as a Delegation**D5****Meeting Information**

Request to Address:

☐ CVRD Board☒ Committee

If Committee, specify the Committee here:

Regional Services Committee

Meeting Date: 12/2/22

Meeting Time: 1800 hr

Applicant Information

Applicant Name: Rodger Hunter

Representing: (Name of organization if applicable)

As: (Capacity / Office)

Number Attending: 1

Applicant Contact Information

Applicant Mailing Address: 3961 Riverside Road

Applicant City: Duncan

Applicant Telephone: 250-701-0143

Applicant Fax:

Applicant Email: visavis@uniservere.com

Presentation Topic and Nature of Request:

Sustainability Planning Perspectives

Presented for information.



SR1

STAFF REPORT

REGIONAL SERVICES COMMITTEE
OF MARCH 28, 2012

DATE: March 9, 2012 FILE NO:
FROM: Kathy Lachman, Business Development Officer, BYLAW No:
Economic Development Division
SUBJECT: Islands Agriculture Show

Recommendation/Action: For information only

Relation to the Corporate Strategic Plan: The Islands Agriculture Show is one of the action items in the Cowichan Region Area Agriculture Plan and the plan is a strategic action in the CVRD Corporate Strategic Plan under Viable Economy.

Financial Impact: (Reviewed by Finance Division: _____) None

Background: The Cowichan Region Area Agriculture Plan identifies 6 goals and 78 action items designed to improve the agriculture capacity and food self-sufficiency in the Cowichan Region. Goal #3 states: "Improve the capacity and profitability in the local agriculture industry." More specifically, action item 3(c) #1 states: "Organize, or partner in the organization of, a Vancouver Island Agricultural Show which provides a venue for a major trade show, promotion of island products and short courses/mini workshops."

In early 2011, Economic Development Cowichan brought together a Steering Committee to oversee the development of an agriculture show for Vancouver Island. Committee members included:

Jill Hatfield, Ministry of Agriculture
Barry Wood, Island Forage Committee
Jamie Eldstrom, Comox Valley Economic Development
Patrick Deakin, Port Alberni Economic Development
Peter van Dongen, MNP
Ben Vanderhorst, MNP
George Seymour, Ruth Hartmann, Jennifer Woike, District of North Cowichan
Pat Durose, Farm Credit Canada

The committee obtained a core funding grant from the Investment Agriculture Foundation to develop a pilot project for an islands agriculture show. The Steering Committee also contributed funds to provide matching dollars for the grant. The Steering Committee set the date of February 3-4, 2012 at the Cowichan Exhibition Grounds and worked to develop the various

components of the show. This date was chosen as it is the week following the Pacific Agriculture Show in Abbotsford, BC.

The Islands Agriculture Show consisted of opening ceremonies, reception, trade show, conference, outside displays, and a Young Farmers Day.

Opening Ceremonies

Opening Ceremonies took place Friday, February 3rd at 9:00 a.m. On hand to open the show was BC Minister of Agriculture Don McRae, CVRD Chair Rob Hutchins and North Cowichan Mayor Jon Lefebure.

Conference

The Islands Agriculture Show featured 14 conference sessions and included topics such as how to grow better berries, succession planning for farmers, getting more for your produce, starting an agricultural business, incubator farms, renewable energy options for farmers, evaluating hay for the horse market, climate change impacts for farmers, selling to retailers, pest problems and government and industry programs. More than 148 delegates took part in the conference sessions which far exceeded our expectations. The conference also allowed farmers to network and share experiences between existing and new farmers.

Reception

A reception was held on Friday February 3rd from 4:30 - 6:30 pm and was attended by delegates, exhibitors and invited guests. Providing comments were Peter Donkers from the Investment Agriculture Foundation, CVRD Chair Rob Hutchins and Mayor Jon Lefebure. Local beer, cider and wine were available for purchase and local appetizers were served.

Trade Show

The trade show was organized based on attracting companies and services that are important to the agriculture industry. With 63 booth spaces available, the trade show attracted 55 exhibitors who took all 63 spaces. In recognition of the steering committee's financial contribution, each organization was given one booth space. When booth spaces ran out, Economic Development Cowichan gave up their booth to accommodate additional exhibitors. More than 830 people came through the trade show over the two days.

Outside Displays

The show featured an outdoor equipment display ranging from antique tractors to the latest harvesting equipment.

Young Farmers Day

Friday was Young Farmers Day at the Islands Agriculture Show and more than 400 children attended throughout the day. Farmer Vicky and Daisy the Cow lead the children in a sing-a-long. The Poultry in Motion display was popular in showing the children the different stages of a chicken's lifecycle. The children planted seeds and saw a loom demonstration.

Economic Impact

The Cowichan Region saw a substantial economic impact from the Islands Agriculture Show. According to Oceanfront Suites, they saw an increase in room occupation of 40% over the same time last year. Almost 50% of the conference attendees came from outside the Cowichan Region which contributed to the local retail, food and accommodation sectors. The show itself

rented the Cowichan Exhibition Park, used a local restaurant, caterer, sign shop, stationary from two local businesses and a security company. The show also created two part time jobs for six months. The restaurant and caterer purchased local ingredients for the show events including local wine, beer and cider.

Exhibitors also experienced economic benefits from the show. One tractor dealer had four tractor sales. Other exhibitors experienced a high volume of traffic at their booths. For example, TD Canada Trust did not schedule enough staff to handle the number of inquiries at their booth. Farm Credit Canada experienced a similar issue in that they had a steady number of people at their booth from the opening of the show to the closing of the show. According to a survey handed out at the show, 100% of the respondents who answered the question are interested in attending next year. 77% of the respondents rated show attendance as excellent. In addition, four companies that did not exhibit this year have approached EDC to be exhibitors at next year's show. The economic impact is not always measured in dollars. Many of the farm organizations who had booths at the show signed up new members and found the public to be interested and engaged.

Financial Impact


The Investment Agriculture Foundation's contribution was \$25,145. Funding partners contributed a total of \$14,000. A requirement of the Investment Agriculture Foundation was that the show had to demonstrate that it could be self-sustaining. The Steering Committee leveraged the existing funding in the form of sponsorship, conference registration fees, exhibitor fees and trade show admissions for total revenue of \$100,721. EDC is still receiving invoices and finalizing the financials for the show. We anticipate a net profit of \$25,000 which will go towards next year's show.

Next Steps

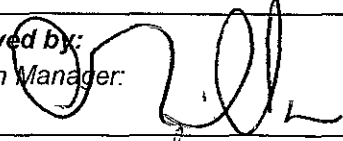
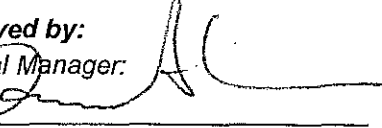
The Steering Committee will be meeting in March to start the process of developing next year's show. We anticipate a net profit from 2012 that will be applied to future shows. The committee is considering the creation of a non-profit society to better share the workload of organizing the show.

The committee will also develop a report for the Investment Agriculture Foundation and a best practices guide that can be used by any community wanting to develop a similar type of event.

Submitted by,



Kathy Lachman, Business Development Officer
CVRD Economic Development Division

Reviewed by: Division Manager:	
Approved by: General Manager:	



SR2

STAFF REPORT

REGIONAL SERVICES COMMITTEE MEETING OF MARCH 28, 2012

DATE: March 20, 2012
FROM: Tom R. Anderson, General Manager
SUBJECT: CVRD Integrated Regional Sustainability Plan

Recommendation/Action:

That the Regional Services Committee recommend that the CVRD Integrated Regional Sustainability Plan Terms of Reference be forwarded to the Environment, Economic Development and Agricultural Commissions, District of North Cowichan, City of Duncan, Town of Ladysmith, Town of Lake Cowichan and First Nations for comment and support.

Relation to the Corporate Strategic Plan:

The Corporate Strategic Plan lists that we will "develop and implement an Integrated Regional Sustainability Plan as one of its top Strategic Actions.

CVRD Environmental Lens Initiative:

The Environmental Lens Initiative was developed in 2010 to provide guidance on how the CVRD, as an organization, could weave sustainability principles into all decision making processes. The Purpose of the Lens is to influence all aspects of decisions made by the CVRD in the delivery of all its services to the residents and businesses of the Region. The Integrated Regional Sustainability Plan was identified as a Phase 1 Project.

Financial Impact: *(Reviewed by Finance Division: [Signature])*

The Gas Tax Agreement (GTA) Regionally Significant Projects Fund will pay 100 percent of the estimated \$300,000 cost of this study.

Background:

Under the Gas Tax Agreement, all local governments receiving Gas Tax funding must undertake Integrated Community Sustainability (ICS) Planning as part of a regional strategy. In the context of Gas Tax funding, ICS Planning is defined as "long term planning, in consultation with community members, that provides direction for the community to realize sustainability objectives it has for the environment, cultural, social and economic dimensions of its identity." The CVRD Integrated Regional Sustainability Plan is proposed to achieve those objectives.

Attached to this report is a Draft Terms of Reference which provides a general outline of the Objectives, Desired Outcomes, Approach and Deliverables. In addition, two Appendices are attached. One provides further detail on the Guiding Principles, Stakeholder Engagement and Project Phases. The second, attempts to provide further insight into the discussion on Sustainability and Approaches to Assessing Sustainability.

In giving considerable thought to the development of the sustainability plan there would appear to be a number of challenges and wise practices that should be considered when developing an approach for integrated sustainability planning within the CVRD.

CHALLENGES

1. Building a common understanding of sustainability

It is generally accepted that sustainability is the ability to meet the needs of the present without compromising the ability of future generations to meet their needs. There is a tendency for the public and even planners to think that sustainability will 'happen' if we pollute less and use fewer resources while continuing to grow the economy. However, fundamental to sustainability is the principle of carrying capacity. Regions have a limited capacity to provide resources and services and when that capacity is exceeded ecological and social systems begin to breakdown. Unlimited growth is not an option. Sustainability rests on living within the limits of:

- Ecosystems' capacity to continue providing food, clean air and water and other essential goods and services, and
- The capacity of social and economic systems' to provide adequate and equitable healthcare, education, employment, cultural opportunities and other services.

Fully understanding, adopting and working with this concept requires a collective shift in thinking.

2. Complexity of integration

Aside from the challenge of understanding sustainability, it is challenging to integrate the various system components and address carrying capacity. A water sustainability plan, for example, is complicated enough without considering the implications for habitat, biodiversity, public health, tourism and culture. However, without integration the result will be an amalgamation of various lists of "to dos" without a sense of the key linkages and limiting factors to sustainability within the watershed.

3. Meaningful community engagement

Community input is critical if a plan is to be accepted, supported and implemented. However, it is challenging to include all the segments of the community. Innovative methods, resources and time are required to capture valid, representative input. Younger people, who are considered to have the largest stake in sustainability planning, are often the most challenging to involve because of busy lives and competing interests. Maintaining sufficient interest and involvement is also difficult given the plethora of planning processes and the general perception that planning interferes with getting things done.

4. Implementation

Plan implementation is typically challenging because it depends on:

- successfully overcoming the above challenges,
- ensuring adequate dedicated resources to follow through,
- ensuring clear accountabilities and processes/data to track progress, and
- ongoing commitment and support for the plan from partners and other levels of government.

WISE PRACTICES

1. **Committed Champions** – Strong visible commitment by elected officials and other opinion leaders is important for building staff and community buy-in and communicating key messages.

2. **Coordination** – Dedicated resources to coordinate and manage the development of the plan and its implementation helps ensure timely, consistent progress and institutionalization of the plan.
3. **Cross Sector Teams** – Bringing people from diverse backgrounds to work together on project teams help to build bridges across departments, jurisdictions, and sectors/disciplines, and challenges “siloed” thinking.
4. **Partnerships** – Local governments cannot achieve sustainability on their own. Community partnerships are essential. Identifying shared benefits and focusing on openness, inclusiveness and respectful interactions from the beginning of the planning process should help build those partnerships in a timely way.
5. **Community Input/Buy-in** – An inclusive, engaging and transparent planning process promotes legitimacy and community support.
6. **Research and Analysis** – Best available data and appropriate analysis must underpin the strategies, indicators and targets in order for the plan to be credible.
7. **Clear Goals** – Well-crafted, measureable goals that resonate with the public are key to establishing and inspiring vision and a workable framework for the plan.
8. **Follow Through** - Implementation plans with clear responsibilities and targets and ongoing monitoring and reporting of progress help to institutionalize the plan. Ongoing reporting also helps to maintain community engagement.

PROJECT GROUPS

Given recent discussions regarding the Environment Commission requesting to have a member(s) of their Commission on the Plan Steering Committee, it was felt that a brief outline should be provided which gives a general overview of key stakeholders expected to participate in the Plan process. Obviously, a broad group of stakeholders are affected by and /or influence regional sustainability planning. They include elected officials from the CVRD, North Cowichan, Duncan, Lake Cowichan, Ladysmith, First Nations, local government staff, federal and provincial governments, members of CVRD commissions and advisory bodies, businesses, non-governmental organizations, and various sectors of the general public. It should be cautioned that the eventual structure of such Plan Committees may also be influenced by any recommendations provided by the successful Consulting Team and ultimately the CVRD Chair and Regional Board. In the absence of that at this point, the following structure and roles will ensure broad and effective participation of CVRD stakeholders:

1. **Cowichan Valley Regional District Board and Local Government Partners** – Decision making.
The CVRD is leading the integrated regional sustainability planning process in cooperation and consultation with municipal councils and First Nations. The CVRD Board will make final decisions regarding the plan and other local governments may also wish to be active decision making partners. All will receive regular progress reports.
2. **Sustainability Steering Committee** - Project oversight, guidance and decision making.
 - Appointed CVRD Board members and municipal leaders as well as chairs of key CVRD advisory bodies, First Nations representation and possibly other opinion leaders are recommended.
3. **Sustainability Advisory Group** –Advisors to the Steering Committee
The intention is to bring together staff and community members with special expertise and interests in sustainability planning. During the process the Advisory Group will break into working groups when it is necessary to focus on the technical aspects of specific topics. This will be an important opportunity to bring others with relevant backgrounds into the process to aid buy-in, capacity building and collaboration. The core Advisory Group will be composed of:

- Planning Department staff reps: CVRD, Duncan, Ladysmith, Lake Cowichan and North Cowichan, possibly CAOs; CVRD managers of Parks, Recreation, Arts and Culture, Engineering; Environment, First Nation reps. etc.
4. **Regional Focus Group** – A local working group comprised of opinion leaders from across the Regional District to meet regularly and provide informal advice and serve as a sounding board.
 5. **Public** –Input and ideas at key points in the planning process.
 6. **Project Team** – Coordinate and implement project
In keeping with the notion of knowledge retention and capacity building within the community, the project team will be composed primarily of local people and will feature an internship opportunity for youth leaders interested in developing community consultation skills. The youth interns will be trained as facilitators and organizers and will help develop the public consultation strategy to ensure effective targeting of youth.
 - CVRD Project Manager
 - Consultant Team Leader
 - Community process facilitators
 - Graphic design and communications
 - Research and Analysis
 - Specialized Sustainability Expertise
 - Other key staff/collaborators

LET'S GET STARTED!

Previous commitments have been made to be as inclusive as possible at this initial stage in the development of the Terms of Reference and general approach to be taken. Accordingly, it is proposed that subsequent to the Regional Services Committee review and comment, reports/delegation will also be forwarded to the Environment Commission, Economic Development Commission and Agricultural Commission for input. In addition, input will also be sought from the District of North Cowichan, City of Duncan, Town of Ladysmith, Town of Lake Cowichan and First Nations.

Once this input has been received and Terms of Reference adjusted accordingly, it is critical that we obtain a strong public commitment by the CVRD Board and local government/First Nations partners to the development and implementation of the Integrated Regional Sustainability Plan. In that regard it is proposed that we hold a large Board/Council launch ceremony.

Submitted by,



Tom R. Anderson,
General Manager
Planning and Development Department

TRA/ca



CVRD Integrated Regional Sustainability Plan

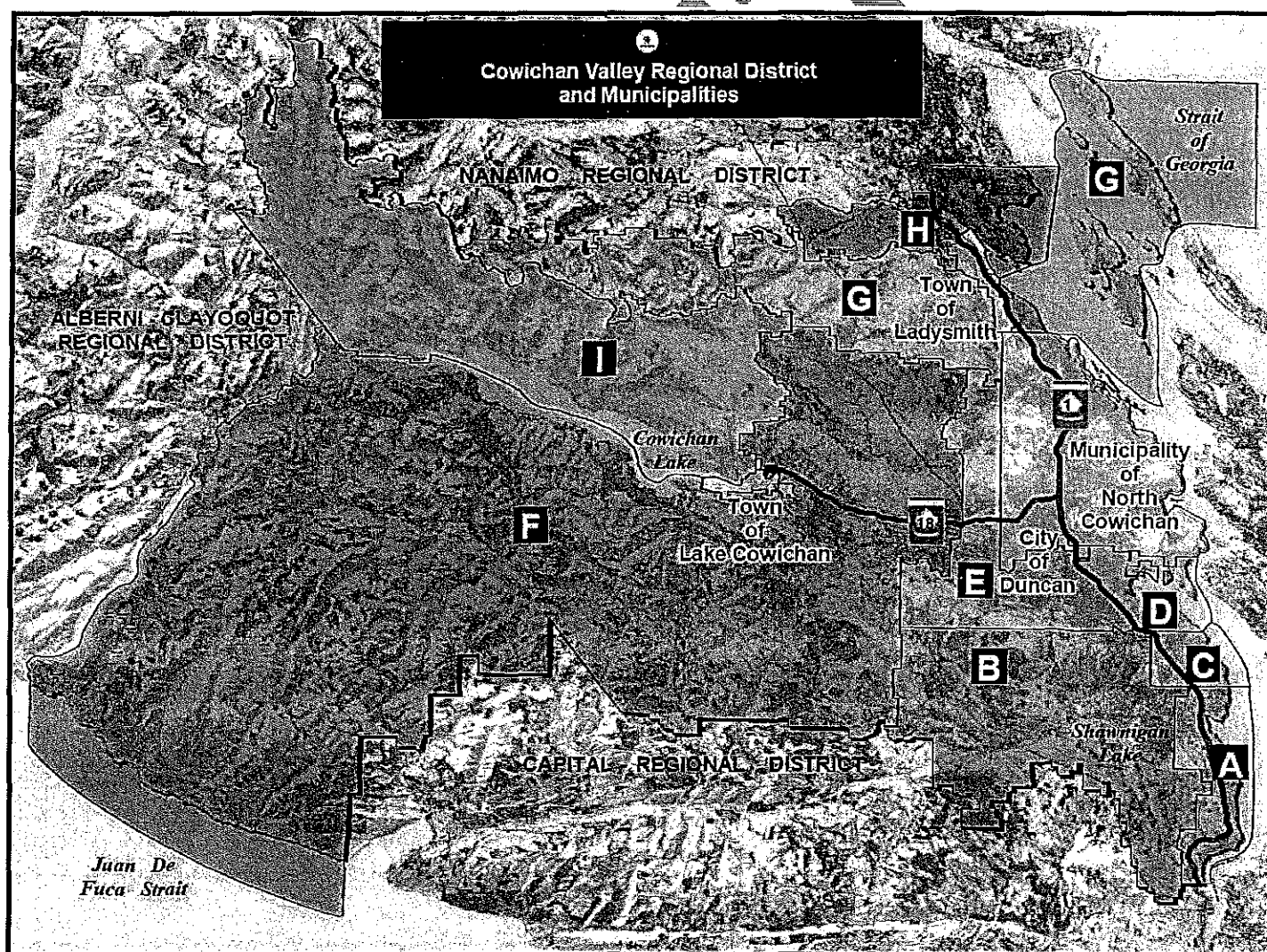
Terms of Reference

March 2012

DRAFT

Introduction

The Cowichan Valley Regional District (CVRD) is located on Southern Vancouver Island, generally between the cities of Nanaimo and Victoria. The CVRD, incorporated in 1967, is home to more than 80,000 people, living in the region's four municipalities, nine electoral areas (A through I) or First Nations reserves, as shown on the map below. The region as a whole is notably heterogeneous – each community and electoral area within the region has its own unique socio-cultural, economic and environmental context. All of the electoral areas and municipalities have official community plans and land use regulations in place.



The CVRD intends to develop an Integrated Regional Sustainability Plan (IRSP) that will provide a compelling long-term (30 year) vision and strategy to achieve a sustainable future for the region's population. This will be a multi-faced plan addressing land use, servicing, environmental, cultural, social and economic issues that are unique to the region. The IRSP will build on previous region-wide and sub-regional studies and plans which include, but are not exclusive of the:

- State of the Environment Report
- Sustainable Economic Development Strategy
- Area Agricultural Plans
- Solid Waste Management Plan
- Liquid Waste Management Plans
- Cowichan Region Affordable Housing Strategy
- Regional Environmental Strategic Plan
- Cowichan Basin Water Management Plan
- Regional Parks & Trails Master Plan
- Regional Energy Plan
- CVRD Community Surveys
- South Cowichan Official Community Plan

The IRSP will also address current regional planning deficiencies with respect to population forecasting, transportation, recreation, and arts, culture and heritage, in addition to other deficiencies that may be identified through the IRSP process. Furthermore, the IRSP will acknowledge sub-regional differences while acknowledging that an all-encompassing and holistic policy framework is needed to help achieve integrated regional sustainability.

Objectives

Key objectives of the IRSP project are as follows:

- To seek to **engage all stakeholders**, including all local governments, First Nations, and community members, within the region in dialogue to build awareness and develop a common understanding of sustainability;
- To **assess the CVRD's capacity** to achieve sustainability, examining key challenges and opportunities based on dialogue with stakeholders, analysis of existing plans, studies, strategies, land use plans, servicing, environmental, economic, social, and demographic data, and identification of gaps, inconsistencies and shortcomings of existing plans and strategies;
- To **identify strategic actions** respecting land use, servicing, environmental, cultural, economic and social elements to approach regional sustainability; and
- To **develop a system for measuring progress** towards achieving sustainability, including a set of indicators and associated targets that are appropriate for the Cowichan Region.

Desired Outcomes

The Integrated Regional Sustainability Plan is intended to guide the CVRD toward a sustainable future. This involves beginning a conversation among stakeholders and working toward a common vision and definition of sustainability for the region. The process of developing the IRSP should help to build the capacity of the CVRD to achieve sustainability. It should also build capacity among community members who will collectively, through individual and shared actions, determine to what extent the region is sustainable in the future. The IRSP will provide a framework for decision-making with respect to planning, land use management, infrastructure development and servicing within the region that will be

CVRD Integrated Regional Sustainability Plan

useful for not only the CVRD but for other local decision makers. Furthermore, its success will be measurable through the establishment and monitoring of appropriate sustainability indicators and targets.

A successful sustainability plan will:

- Demonstrate a commitment to a broad, long term and integrated approach to community resilience and sustainability;
- Provide a forum for collaboration on regional issues among local governments, First Nations and other agencies;
- Ensure the integration of existing regional and sub-regional studies and plans;
- Encourage local governments and community members to commit to sustainability and implement the required actions;
- Increase public confidence in local government;
- Create greater certainty for community members and investors; and
- Enhance the quality of life of community members.

The success of the Integrated Regional Sustainability Plan will also depend on how well-tailored the plan is to the Cowichan Valley, the degree to which local citizens, local government staff and elected officials, and other stakeholders “buy-in” and are committed to the Plan’s implementation, and how completely the Plan is implemented over time.

Approach

The Consultant Team selected to guide the IRSP process will be responsible for outlining a suitable approach, having regard for the ideas entrained within the proposed approach (Appendix A) and sustainability discussion (Appendix B), that will include:

- An inclusive and transparent stakeholder engagement process with a variety of opportunities for community members to provide input and become engaged in the process;
- Opportunities for community learning and capacity building among stakeholders including local government representatives, elected officials, and community members;
- A commitment to completing the IRSP within a two-year time frame; and
- A sound planning process designed to achieve the stated objectives (above).

Deliverables

The IRSP project will involve completion of the following, at a minimum:

- A literature review of the current best sustainable planning practices, methodologies and tools;
- An assessment of the CVRD’s key challenges and opportunities as we move towards integrated regional sustainability planning;
- A definition of sustainability as it applies in the context of the CVRD, developed through extensive and careful stakeholder consultation;

CVRD Integrated Regional Sustainability Plan

- Strategic directions to achieve integrated sustainability across the CVRD (i.e. specific directions for servicing, Official Community Plans, corporate plans and policies, and regulatory bylaws); and
- Establishment of sustainability criteria, indicators and targets for the purpose of monitoring the implementation of the IRSP through time.

Budget

The budget for the development of the Integrated Regional Sustainability Plan is \$300,000 exclusive of HST.

DRAFT

Appendix A – Proposed Approach to Developing an IRSP for the Cowichan Valley Regional District

GUIDING PRINCIPLES

The approach to developing the IRSP should be guided through a set of underlying principles, including at a minimum, the following:

- **Inclusivity** – the approach will seek to involve a broad cross section of community members, representing the diverse demography of the region using a variety of engagement methods;
- **Collaboration** – the approach must be collaborative, seeking consensus among all stakeholders particularly in the development of a definition and vision of sustainability; and
- **Shared Responsibility** – acknowledging that all stakeholders have a role to play in creating a sustainable future and that both individual and collective actions will determine whether or not sustainability is achieved.

STAKEHOLDER ENGAGEMENT

A broad group of stakeholders are affected by and/or influence regional sustainability planning. They include elected officials from the CVRD, North Cowichan, Duncan, Lake Cowichan, Ladysmith, First Nations, local government staff, federal and provincial government agencies, members of local government commissions and advisory bodies, businesses, nongovernmental organizations, and the general public.

The approach to developing the IRSP must seek to engage all stakeholders and involve a variety of engagement and communications methods to ensure that all stakeholders have an opportunity to contribute. Additionally, all stakeholders should be allowed to contribute in a manner in which they feel comfortable and in a manner in which their input will be valued. The final form or content of the IRSP must not be premeditated or preconceived given that stakeholder input will be responsible for shaping the Plan.

PROJECT PHASES

Phase 1 – Organization & Commitment (3 months)

Before launching into the project it is critical to secure commitment to carry out the planning process from the CVRD Board, other local governments and First Nations. The project and proposed approach will be discussed and confirmed with key committees, commissions, local government staff, Councils and the Board.

A Consultant Team will be retained to guide the project and will confirm the approach, including a detailed community engagement process, in collaboration with the CVRD Project Manager/Project Team. The Consultant Team will work with the CVRD Project Manager/Project Team, key CVRD staff, elected officials and community opinion leaders/members to ensure a shared understanding of the integrated sustainability planning project.

The Consultant Team will undertake and complete the following:

- Confirm the approach, including a detailed community engagement process and work plan, to developing the IRSP, in consultation with the CVRD Project Manager/Project Team (the work plan shall identify participants, responsibilities, timelines for each phase of the project, and project milestones and timing for deliverables); and
- Prepare project overview communications materials including participants and involvement structure with terms of reference for the steering and advisory committees for formal approval by CVRD Board & Elected Officials.

Phase 2 – Project Scoping/Background Research (6 months)

This phase will involve significant background research and analysis and community consultation to assess the capacity of the CVRD to undertake sustainability planning, to build an understanding of sustainability concepts among stakeholders, and to assess the opportunities and challenges to sustainable development in the region and the implication of current policies, regulations, practices, behaviors, and development trends on future sustainability.

The Consultant Team will undertake and complete the following:

- Literature review of sustainability best practices and identification of measures which may be appropriate for the CVRD;
- Synthesis and assessment of regional reports, plans, strategies and assessment of gaps, shortcomings;
- Background information studies including trend analysis of demographics, transportation, housing stock, etc.;
- Initial stakeholder engagement to begin dialogue about sustainability in the context of the region and local communities;
- Continuous communications using a variety of methods (i.e. newspapers, newsletters, social media); and
- Regular reports to project teams/steering committee/CVRD Board & Elected Officials.

Phase 3 – Establishing a Regional Vision & Measures to Achieve Sustainability (6 months)

This phase involves working with key stakeholders to reach a common understanding of sustainability for the Cowichan. It is anticipated that a series of workshops will be held to engage stakeholders in a discussion about sustainability, to identify sustainability opportunities and challenges, to develop a common vision for a sustainable region and to identify the measures needed to achieve sustainability.

The Consultant Team will undertake and complete the following:

- Broad-based stakeholder engagement throughout the region;
- Development of a regional sustainability vision statement;
- Identification of sustainability opportunities and challenges;
- Identification of potential sustainability indicators and targets;
- Continuous communications using a variety of methods (i.e. newspapers, newsletters, social media); and
- Regular reports to project teams/steering committee/CVRD Board & Elected Officials.

Phase 4 – Developing the Draft Integrated Regional Sustainability Plan (6 months)

This phase will involve synthesizing the background information collected during Phase 2 and community and stakeholder input during Phase 3 to create a defined action plan to achieve sustainability. Specific actions will be identified to address land use, servicing, environmental, cultural, social and economic challenges and opportunities. The draft Plan will also include a framework for measuring sustainability using a set of sustainability indicators and targets that are tailored and appropriate for the region.

The Consultant Team will undertake and complete the following:

- Stakeholder engagement to confirm the proposed action plan;
- A detailed sustainability action/implementation plan;
- A sustainability measurement framework with appropriate indicators and targets;
- Continuous communications using a variety of methods (i.e. newspapers, newsletters, social media); and
- Regular reports to project teams/steering committee/CVRD Board & Elected Officials.

Phase 5 – Confirming the Integrated Regional Sustainability Plan (3 months)

During this final phase of the project the draft Integrated Regional Sustainability Plan should be made available for stakeholder review and comment. At the completion of the review/comment period, the Consultant Team shall make the appropriate final revisions to the draft IRSP for endorsement/adoption by CVRD Board members and representatives of partner jurisdictions and agencies.

Appendix B – Sustainability and Approaches to Assessing Sustainability

In the 1980's growing concern about the rapidly deteriorating state of the environment and the consequences for economic and social development led to the United Nation's World Commission on Environment and Development – the Brundtland Commission. The Brundtland Report, released in 1987, provides the most widely accepted definition of sustainability: *Sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future.* (<http://www.un-documents.net/ocf-01.htm>). There are several principles underpinning this definition:

- **Carrying Capacity** – Nature provides life sustaining goods (e.g., food, timber, water) and services such as maintaining hydrologic cycles and supporting ecosystems) http://ohioline.osu.edu/paradigm/table_1.html. The Brundtland Report notes that *nature is bountiful, fragile and finely balanced. There are thresholds that cannot be crossed without endangering the basic integrity of the system.* The concept of carrying capacity refers to those thresholds - the amount of change or stress an ecosystem can support before its capacity to provide goods and services is compromised. Natural resources are limited.
- **Interconnectedness** – Ecological, economic and social systems are linked through society's dependence and impact on nature's goods and services. The Brundtland Report calls for a new approach to policy and decision making that *integrates production with resource conservation and enhancement, and that links both to the provision for all of an adequate livelihood base and equitable access to resources.* In other words, we need to integrate the natural environment into our economic and social decision making framework.
- **An Ongoing Process** – Sustainability is a journey whereby humans must continually adjust to meet their social, economic and cultural needs while protecting the environment's ability to support them. The Brundtland Report refers to it as *sustainable human progress* or *sustainable development*. The term *development* as used in the Brundtland Report should not be confused with *growth* which traditionally means economic development. Unlimited growth is not sustainable.

In 1989 Karl Henrik Robert, founder of The Natural Step, described four sustainability conditions as the minimum criteria for sustainability (<http://thenaturalstep.org/the-system-conditions>), including:

- Nature is **not** subject to the progressive build up of substances from the earth's crust (e.g., fossil fuels and metals).
- Nature is **not** subject to the progressive build up of substances produced by society (e.g., waste, dioxins, PCBs, etc).
- Nature and natural processes are **not** subject to progressive physical degradation and destruction (e.g., overharvesting fisheries, eroding the soil etc).
- People are **not** subject to conditions that systematically undermine their capacities to meet their needs (e.g., resources are used fairly and efficiently to meet basic human needs globally).

Robert's sustainability conditions are based on fundamental scientific principles and are accepted as valid by the scientific community. The sustainability conditions are stated in the negative because it is impossible to identify precisely how a sustainable society would look in the future.

DRAFT

More recently the concept of **resilience** has come to the fore. Resilient systems have an inherent capacity to withstand, recover from, or adapt to stress and changing conditions. Managing for resilient ecological and social systems is therefore viewed as being an essential condition of sustainability. http://www.sou.gov.se/mvb/pdf/206497_Resilienc.pdf
http://www.mpiweb.org/CMS/uploadedFiles/About_MPI/Restless%20Communities%20to%20Sustainable%20Places.pdf.

The concept of sustainability and the need for communities to set a more sustainable course has taken root. However, planning for sustainability, which is inherently a complex concept, remains challenging. A number of approaches to developing a sustainability plan have been devised including:

- The Natural Step ABCD process <http://thenaturalstep.org/en/abcd-process>;
- The ICLEI sustainability planning toolkit <http://www.iclei.org/sustainability/sustainabilitytoolkit>; and
- BC Smart Planning for Communities Initiative http://www.cscd.gov.bc.ca/lqd/intergov_relations/smart_planning.htm).

The most common approach to assessing sustainability at a local level relies on identifying unsustainable environmental, social and economic trends and issues and then basing actions on influencing those trends and issues. There are several sets of sustainability-related principles or themes that are often used to guide assessments. Some communities, including Whistler BC, have used The Natural Step's four sustainability conditions. Others, including Sooke and Dawson Creek) have adopted variations of the 8 Pillars Framework (IB-tanarc). The United States Government Partnership for Sustainable Communities initiative advocates six livability principles, which are similar to the Smart Growth BC 10 smart growth principles.

The Ecological Footprint is another well recognized sustainability assessment framework. It is a method for assessing how fast natural resources are consumed and waste generated by a population and compares the land area required to support this level of activity to the land area the population actually occupies. The Ecological Footprint is considered a useful indicator of sustainability and ecological footprints of a number of Canadian municipalities have been calculated <http://www.amelski.com/Documents/EFA%20Report%20FINAL%20Feb%202.pdf>. Unfortunately, the usefulness of this approach for local planning is limited because it requires large data sets, complex calculations and, at a local scale, the data required is often not available.

Recent experiences with regional sustainability planning in Australia have resulted in the development of a regional sustainability assessment framework that holds promise as a relatively simple way of assessing regional carrying capacity and as such will allow communities to develop 'real' sustainability plans. The method focuses on assessing the pressure placed on a region's ecosystems caused by human activities against known or assumed thresholds for those pressures to determine if they have exceeded the human carrying capacity threshold (Graymore, Sipe and Rickson 2010¹)

¹ Graymore, M.L.M., N.G.Sipe, and R.E Rickson. 2010. Sustaining human carrying capacity: A tool for regional sustainability assessment. *Ecological Economics*. 69: 459-468.



SR3

STAFF REPORT

**REGIONAL SERVICES COMMITTEE MEETING
OF MARCH 28, 2012**

DATE: March 20, 2012

FILE NO:

FROM: Tom R. Anderson, General Manager

BYLAW NO:

SUBJECT: CVRD Climate Action Plan

Recommendation/Action:

That the Regional Services Committee recommend that the CVRD Climate Action Plan Terms of Reference be forwarded to the Environment, Economic Development and Agricultural Commissions for comment and support. And further, that the CVRD Climate Action Plan be undertaken as a part of the more comprehensive Integrated Regional Sustainability Plan.

Relation to the Corporate Strategic Plan:

The Corporate Strategic Plan lists that we will "Develop a community climate change action plan to meet or beat provincial green house gas emission targets."

CVRD Environmental Lens Initiative:

The Environmental Lens Initiative was developed in 2010 to provide guidance on how the CVRD, as an organization, could weave sustainability principles into all decision making processes. The Purpose of the Lens is to influence all aspects of decisions made by the CVRD in the delivery of all its services to the residents and businesses of the Region. The Lens states that we are to "Develop a plan to ensure the CVRD complies with the BC Climate Action Charter by 2012," and that this be prioritized as a Phase 1 Project.

Financial Impact: *(Reviewed by Finance Division: [Signature])*

The Gas Tax Agreement (GTA) Regionally Significant Projects Fund will pay 100 percent of the estimated \$75,000 cost of the study.

Background:

Attached to this report is a Draft Terms of Reference (ToR) for the Climate Action Plan (CAP) which provides a general outline of the Project Description, Objectives, Project Details and Process, and Budget.

Beyond the detail provided in the ToR, most significant is that this study be undertaken concurrently with the CVRD Integrated Regional Sustainability Plan (IRSP). The Background Research, Action Strategies, key indicators and Targets which will evolve from this Plan will become key component parts of the IRSP. For that reason, it is proposed that the two Plans be tendered as a package for consultants to submit on and that the same consultant be awarded both projects.

In the same manner as the IRSP, it is proposed that subsequent to the Regional Services Committee review and comment, that this report and ToR be forwarded to the Environment Commission, Economic Development Commission and Agricultural Commission for input.

Submitted by,

A handwritten signature in black ink, appearing to be 'Tom R. Anderson', with a long horizontal line extending to the right.

Tom R. Anderson
General Manager
Planning and Development Department

TRA/ca



CVRD Climate Action Plan

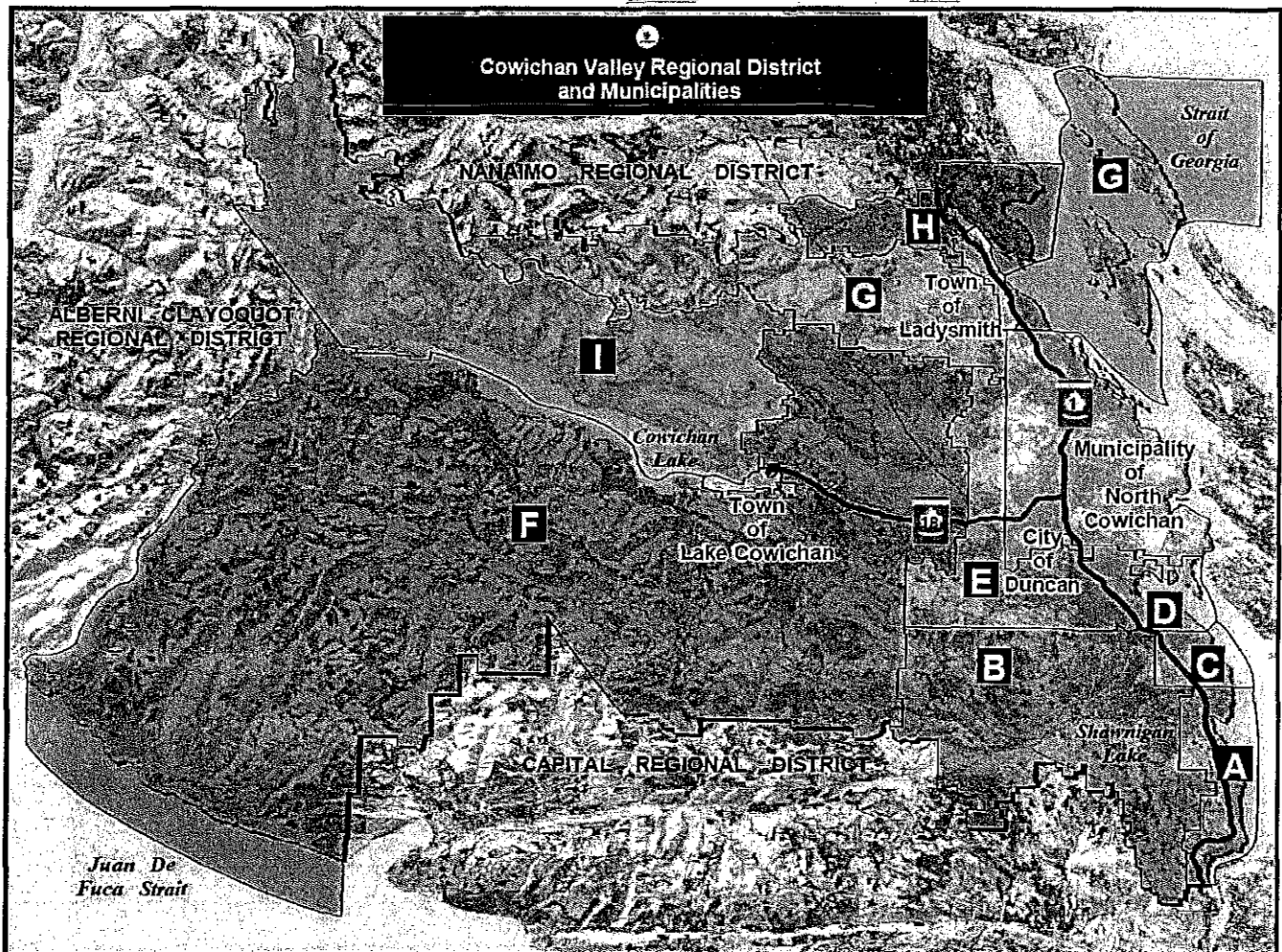
Terms of Reference

March 2012

DRAFT

Introduction

The Cowichan Valley Regional District (CVRD) is located on Southern Vancouver Island, generally between the cities of Nanaimo and Victoria. The CVRD, incorporated in 1967, is home to more than 80,000 people, living in the region's four municipalities, nine electoral areas (A through I) or First Nations reserves, as shown on the map below. The region as a whole is notably heterogeneous – each community and electoral area within the region has its own unique socio-cultural, economic and environmental context. All of the electoral areas and municipalities have official community plans and land use regulations in place and some of the municipalities have Climate Action Plans started or adopted. The Cowichan Tribes is just initiating a Climate Action Planning process.



Context

The Cowichan Valley Regional District intends to develop a Regional Climate Action Plan in parallel with the Integrated Regional Sustainability Plan. The inherent relationship between climate change and sustainability provides an opportunity to achieve administrative and financial efficiencies by integrating the development of these plans.

Project Description/Abstract

A Regional Climate Action Plan (CAP) is needed to address the complex nature of climate change in the context of the Cowichan Region. The CAP will identify regionally significant knowledge, tools, networks and policies to effectively prepare the region for the impacts of climate change. The focus will be on mitigation strategies to reduce the sources or enhance the sinks of greenhouse gases, and adaptation strategies to moderate potential damage, to take advantage of opportunities, or to cope with the consequences of climate change. These may include, but are not limited to, strategies addressing land use planning, infrastructure and servicing, transportation planning, energy planning, and government and community capacity building. The CAP will also consider the climate action plans being developed by the region's member municipalities and incorporate major findings and directions into a comprehensive regional plan. It is critical that the CAP address the regional context, opportunities for synergies among multiple jurisdictions, and strategies for mitigation and adaptation across the region. The CAP should also endeavor to engage all stakeholders within the region in order to develop understanding and support for a Regional Climate Action Plan. As such a comprehensive communications and consultation strategy will be an integral part of the CAP process.

Objectives

- To develop a regionally-responsive and comprehensive climate action plan with clear mitigation and adaptation strategies, designed to achieve the targets established by Bill 27.
- To provide a clear implementation schedule which identifies priorities, required resources, responsibilities, and timing for implementation of strategic actions;
- To provide a plan for ongoing monitoring and evaluation of specific climate change indicators in order to measure the progress of the CAP;
- To engage all stakeholders including members of the public, government agencies, and others in the process of developing the CAP in order to build understanding and support for climate change mitigation and adaptation initiatives; and
- To ensure clear and continuous communications among stakeholders throughout the CAP process.

Project Details & Process

The CAP process will involve gathering, analyzing and synthesizing information into a comprehensive plan, which will provide a framework for long term, strategic planning, capital program development, program development and or refinement, focused investments, and public communication concerning climate change. Development of the CAP should involve the following elements.

A. Project Scoping & Background Research

Prior to developing the plan, it is important to have a clear understanding of both present (baseline) and future (anticipated) conditions (data, policies, and activities) which will influence the development of the CAP. This component of the work should include:

- Reviewing and summarizing climate change projections and potential impacts for the Cowichan Region, based on up to date information;
- Reviewing, summarizing, and (if necessary) recommending updates for proposed CVRD GHG reduction targets;
- Reviewing and summarizing the present regional energy profile (including corporate and community energy emissions and consumption data (from CEEI and TaNDM);
- Determining the anticipated future regional energy profile (based on population growth projections);
- Analyzing existing climate change policies and regulatory frameworks (within existing Corporate Strategic Plans, Official Community Plans, zoning and subdivision bylaws, and other regional plans and strategies) and directions of the Cowichan Valley Energy Mapping and Modelling Project, and identifying opportunities to improve policy and regulatory frameworks;
- Reviewing and summarizing existing activities underway;
- Conducting a regional climate change vulnerability assessment for communities, infrastructure, and CVRD capital assets within the region including an assessment of policies, regulations, strategies, activities, and existing activities; and
- Community consultation and focused technical discussion with key stakeholder.

B. Development of Climate Action (Mitigation & Adaptation) Strategies

The International Panel on Climate Change (IPCC) defines mitigation as: *"An anthropogenic intervention to reduce the sources or enhance the sinks of greenhouse gases"* and adaptation as *"adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities."* The CAP must include climate action strategies for both mitigation and adaptation.

The mitigation analysis, planning process and target setting will consider strategies and policies to reduce community emissions with a focus on:

- Initiation of a Regional Action Plan Steering Committee and technical committee;
- Reducing community based GHG emissions based on targets outlined in the OCP's and municipal plans;

- Identifying carbon sequestration opportunities; and
- Educating and engaging the public.

The adaptation analysis and pathways to increased community resilience to forecasted changes will involve:

- Research of areas known knowledge gaps and lack of adaptive strategies (gap analysis);
- Identification of regional climate change impacts;
- Assessment of reliability, function and durability of built infrastructure;
- Analysis of risk based on identified impacts - Including but not limited to impacts to: human and community health, areas of importance including drought, flooding, increased risk coastal impacts, slope instability, impacts of external economic issues;
- Public and stakeholder consultation processes;
- Development of communication strategies; and
- Development of adaptation measures and recommendations for community and public bodies.

C. Development of an Implementation Strategy

The CAP will include a detailed implementation strategy which will enable the region to work toward the targets established by Bill 27. The implementation strategy should include:

- Strategic actions to address climate change;
- Priorities and timeline for implementation (i.e. short-term, medium-term, and long-term);
- Resources required for implementation (i.e. subsequent research, staff resources, costs, etc.);
- Anticipated benefit and payback period; and
- Roles and responsibilities for implementation (i.e. staff, stakeholders, community members).

D. Development of a Monitoring & Evaluation Strategy

The CAP will include a monitoring and evaluation strategy, including key indicators and targets, in order to measure the progress of CAP implementation.

Budget

The budget for the development of the Regional Climate Action Plan is \$75,000 exclusive of HST.

**STAFF REPORT****REGULAR REGIONAL SERVICES COMMITTEE MEETING
OF MARCH 28, 2012**

DATE: February 27, 2012 **FILE NO:**
FROM: Chief Administrative Officer **BYLAW NO:**
SUBJECT: Inter-Regional Rainwater Management Education Initiative

Recommendation/Action:

That the Board endorse the Inter-Regional Education Initiative on rainwater management and support the associated Comox Valley Regional District Gas Tax Capacity Building Grant Application to fund related inter-regional education and learning activities in the Capital Regional District, Cowichan Valley Regional District, Regional District of Nanaimo and Comox Valley Regional District.

Relation to the Corporate Strategic Plan:

Participation in the Inter-Regional Education Initiative would support the Corporate Strategic Plan Goals to (1) Develop an environmental education plan with a focus on water, biodiversity and climate change; and (2) Develop water planning policies to guide community planning and development practices.

Financial Impact: *(Reviewed by Finance Division: [Signature])*

There are no direct costs associated with participation in this inter-regional initiative; however it is proposed that some staff will attend the education sessions. The Partnership for Water Sustainability in BC in association with Comox Valley is applying for Gas Tax funding to fund the initiative and educational programs.

Background:

Attached for the Committee's consideration is a proposal by the Partnership for Water Sustainability in BC to initiate an Inter-Regional Education Initiative on Vancouver Island. Staff from the Capital Regional District, Comox Valley Regional District, Regional District of Nanaimo and Cowichan Valley Regional District is very supportive of this initiative to educate, collaborate and share ideas on water sustainability and rainwater management best practices.

The primary objectives of the initiative include:

- Advancing watershed sustainability and green infrastructure practiced Vancouver Island wide
- Linking activities in and between the four (4) regions so that everyone can benefit from lessons learned
- Enhancing collaboration and increasing alignment of efforts across boundaries
- Reducing workloads through sharing and cross-fertilization of experiences

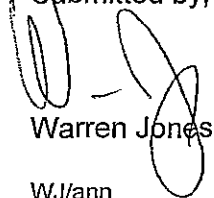
.../2

-
- Improving existing and introducing new tools so that local governments and the development community will have a common understanding of how to integrate the site with the watershed and stream
 - Increasing effectiveness of decisions about the use and conservation of land and water assets

The education initiative is proposed to be funded by Gas Tax, therefore the Committee is being requested to endorse the Comox Valley Capacity Building Gas Tax Application, which if approved will fund the education initiative. Staff from the four partnering regional districts will be recommending endorsement of the initiative to their respective Boards.

The conservation and protection of water in the Cowichan Valley is a high priority and this inter-regional initiative is one more opportunity to assist local governments in better understanding and managing this precious resource.

Submitted by,



Warren Jones

WJ/ann

File: ADMINISTRATOR/Reports/Staff Reports/2011-2013/to RSC March 28 Inter-Regional Education Initiative

Partnership for Water Sustainability in British Columbia

(Incorporated under the Society Act of British Columbia)

151 - 32500 South Fraser Way, Suite #126, Abbotsford, BC, V2T 4W1

March 21, 2011

Chair & Directors
Cowichan Valley Regional District

sent via email

Re: **Cowichan Valley Regional District is a charter member of the
Partnership for Water Sustainability in British Columbia**

Through your leadership role in *Convening for Action on Vancouver Island (CAVI)* dating back to 2007, the CVRD has also contributed to the provincial success of the Water Balance Model initiative. In 2008, for example, you hosted both the *Cowichan Valley Learning Lunch Seminar Series* and *Cowichan Valley WBM Forum*. The synergies resulting from these Vancouver Island successes then informed the 2009 Metro Vancouver WBM Forum; and ultimately had an influence on the rainwater management component of Metro Vancouver's Integrated Liquid Waste and Resource Management Plan.

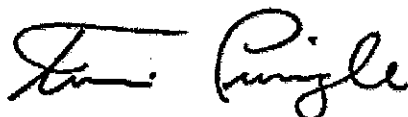
The Water Balance Model is a web-based tool that helps communities make informed decisions about their 'water footprint'. It is a core element of the Water Sustainability Action Plan for British Columbia, released in February 2004. Furthermore, it is one of the 'twin engines' driving an outreach and continuing education program that is building leadership capacity in the local government setting. The other 'twin engine' is the Water Bucket website.

Looking back, it is clear that the CVRD's support and strong commitment as a Water Balance Model champion has been a foundation block in a building process that culminated in formation of the *Partnership for Water Sustainability in British Columbia* (i.e. "the Partnership") as a non-profit society in November 2010. The Water Balance Model now resides within the Partnership. The Partnership mandate is to build on the existing Action Plan foundation.

In recognition of the CVRD's long-term commitment as a CAVI / Water Balance Model champion, we are pleased to announce that the Directors of the Partnership have deemed the CVRD to be a charter member of the Partnership. This means the CVRD is a voting member of the society. To learn more about the Partnership and Water Balance Model, we refer you to the accompanying copy of an article published on the Water Bucket Website.

In closing, we take this opportunity to emphasize that the Partnership is collaborating with local governments and supporting their interests so that they are informed about how to align regional and local actions with provincial goals. We look forward to your continuing support as a member of the Partnership.

On Behalf of the Directors:



Tim Pringle, President
Partnership for Water Sustainability in BC
pringle@watersustainabilitybc.ca



Ted van der Gulik, Chair
Water Balance Model Partnership
Ted.vanderGulik@gov.bc.ca

Cc Kate Miller, Manager, Regional Environmental Policy Division
CVRD Environment Commission



February 14, 2012

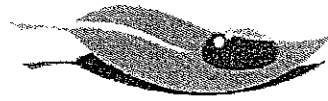
Dear CVRD Board Chair and Directors

I am writing this letter on behalf of the Somenos Management Committee who, at our February 8th Somenos Management Committee meeting, passed a motion requesting that the CVRD and their Integrated Flood Management Plan partners host a forum on flooding and the infrastructure improvements planned to eliminate the risk of flooding damage for the stakeholders who have been affected by past flooding and who will be affected by the future infrastructure work. We also request that this forum take place in the near future before this year's Tier 2 flood infrastructure works program commences.

Thank you

Paul Fletcher, SMC Chair

Cc
City of Duncan
Municipality of North Cowichan
Cowichan Tribes
CVRD Environment Committee
Cowichan Water Board



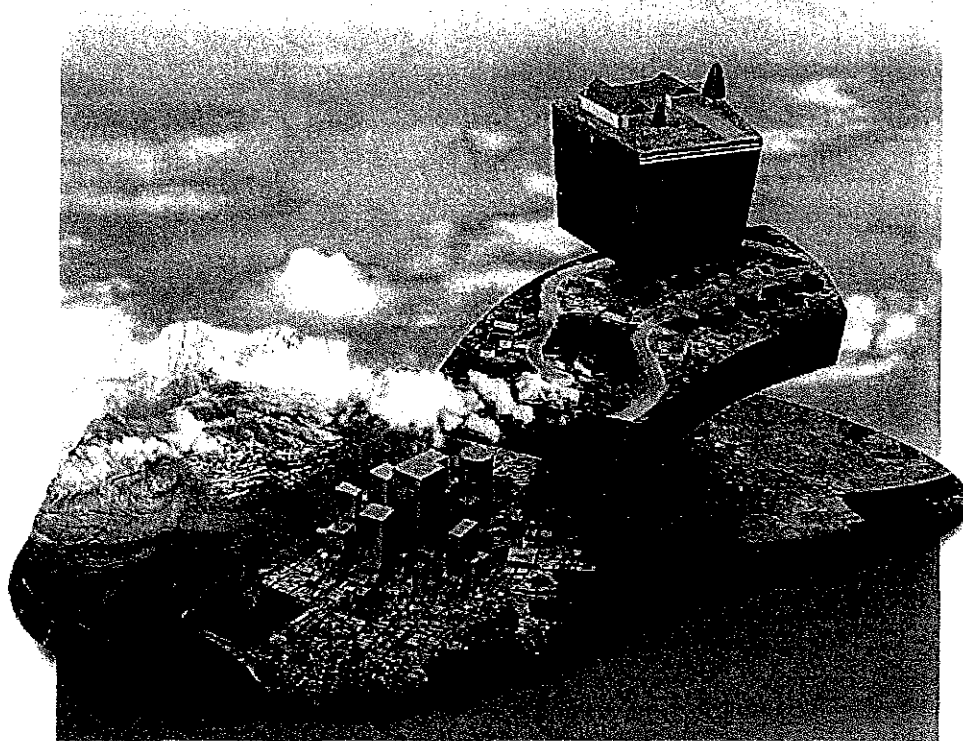
the partnership
for water sustainability in bc

CAVI-Convening for Action on Vancouver Island

**WORKING
DRAFT**

Rainwater Management In a Watershed Sustainability Context

Integrating the Site with the Watershed and the Stream:
Briefing Document for an Inter-Regional Education Initiative
On Vancouver Island



January 30, 2012

Rainwater Management in a Watershed Sustainability Context

Briefing Document for an Inter-Regional Education Initiative on Vancouver Island

Executive Summary

Vancouver Island is a hot-bed of progressive ideas and provincially significant initiatives. Regional districts are advancing watershed-based strategies and programs for integrating the site with the watershed and stream. These initiatives all recognize the importance of instilling a land ethic that respects water.

An opportunity exists for inter-regional information sharing / transfer so that together everyone can go farther, more efficiently and effectively. To achieve that goal, this briefing document introduces an education-based initiative for collaboration. Table 1 opposite is a synopsis of the document.

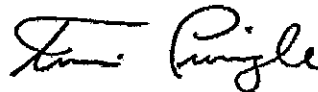
*The focus of this **Inter-Regional Education Initiative** is on the 'how-to' details of implementation and integration, recognizing that each region has already established its 'vision and goals' through a community consultation process. Initiative objectives include:*

- 1. advance watershed sustainability and green infrastructure practices Vancouver Island-wide;*
- 2. link activities in and between four regions so that everyone can benefit from lessons learned;*
- 3. enhance collaboration and increase alignment of efforts across boundaries;*
- 4. reduce workloads through sharing and cross-fertilizing of experiences;*
- 5. improve existing and introduce new tools so that local governments and the development community will have a common understanding of how to integrate the site with the watershed and stream; and*
- 6. increase effectiveness of decisions about the use and conservation of land and water assets.*

*The **Inter-Regional Education Initiative** will support implementation of watershed-based processes in four regional districts, namely: Comox Valley, Nanaimo, Cowichan Valley and Capital Region.*

The initiative partners are the four regional districts, the Partnership for Water Sustainability in BC (PWSBC) and CAVI-Convening for Action on Vancouver Island. CAVI involves various collaborators.

The Comox Valley regional team approach in the north and the Bowker Creek Blueprint (Capital Region) in the south are lynchpins for this inter-regional initiative. Collaboration, alignment and consistency up and down the east coast of Vancouver Island will create opportunities for everyone to be more effective; and to implement water and watershed sustainability goals in the context of existing budgets.



Tim Pringle
President
Partnership for Water Sustainability
January 2012

Rainwater Management in a Watershed Sustainability Context

Briefing Document for an Inter-Regional Education Initiative on Vancouver Island

Table 1 – Synopsis of Briefing Document

<p>This lynch-pin position statement on page 43 of "Living Water Smart, British Columbia's Water Plan" provides context for the educational initiative:</p> <p><i>"By 2012, all land and water managers will know what makes a stream healthy, and therefore be able to help land and water users factor in new approaches to securing stream health and the full range of stream benefits."</i></p>		
	Section Title	Section Theme
1	Background / Context	The education initiative aligns with regional district plans, priorities and workloads; and has a focus on actions related to land use and watershed health on Vancouver Island.
2	Integrated Watershed Approach to Rainwater	The initiative is founded on the notion of "shared responsibility" and the guiding principle that "water is a form maker" because today's landscapes are the product of the hydrological cycle.
3	Inter-Regional Education Initiative	The program elements build on local government experience; are knowledge and science-based; and can be readily adapted to incorporate local case profile content.
4	Alignment of Regional Approaches and Plans	The educational approach can help each region with its "next step", that is: implementation and integration, with emphasis on what integration looks like. NOTE: Table 4 summarizes funded activities in each region; these can leverage matching grants to fund the educational initiative.
	Appendix A	Water Sustainability: Visions, Goals / Objectives in the Regional Plans of Four Vancouver Island Regional Districts
	Appendix B	Details of Program Elements

Rainwater Management in a Watershed Sustainability Context

Briefing Document for an Inter-Regional Education Initiative on Vancouver Island

1. Background / Context

Four Vancouver Island regional districts and their member municipalities have been taking steps to plan for water sustainability and put in place implementation strategies. As shown on Figure 1, the four are:

- Comox Valley Regional District
- Regional District of Nanaimo
- Cowichan Valley Regional District
- Capital Regional District

Each region has developed a provincially significant plan or approach to achieve water and watershed sustainability. All are striving to implement a consistent regional approach that protects and/or restores natural watershed function over time.

Appendix A is a compilation of statements from each regional plan. It is organized in three parts: vision / ethic; goals; and implementation. Appendix A provides a point of departure for the *Inter-Regional Education Initiative*.

Inter-regional sharing, collaboration, alignment and consistency will accelerate effective implementation of watershed protection objectives within each regional district. The regions are linked by common interests, but are not dependent on each other.

Regional Team Approach

Through the **CAVI-Convening for Action on Vancouver Island** initiative, and commencing in 2007, the *Partnership for Water Sustainability in British Columbia (PWSBC)* has collaborated with each regional district to deliver elements of an information-sharing and educational program. This approach has helped build relationships; and it has also helped develop local government talent.

The experience and insights yielded by the CAVI program to date are described in *Beyond the Guidebook 2010: Implementing a New Culture for Protecting and Restoring Urban Watersheds in British Columbia*. This provincial guidance document presents the framework for a 'regional team approach' to water and watershed sustainability.

Inter-Regional Collaboration

Now, PWSBC is implementing the next evolution of the CAVI educational program. Over a two-year period, the program goal for the inter-regional initiative is to enhance collaboration and increase alignment of efforts across boundaries.

Framework for Collaboration: This approach is shaped by these five considerations:

- all four regional districts have overarching plans and/or initiatives in place;
- all four have funded activities that they are planning to do in 2012 and beyond;
- those activities can leverage matching funding to be used to implement the CAVI program;
- the CAVI educational program will align with regional district priorities and workloads; and
- the CAVI program will link activities in the four regions so that everyone can share experiences and benefit from lessons learned.

The *Inter-Regional Education Initiative* will focus on actions related to land use and watershed health on Vancouver Island.

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



"The 'regional team approach' is founded on partnerships and collaboration; and seeks to align actions at three scales – provincial, regional and local."

Glen Brown, Executive Director
BC Ministry of Community, Sport & Cultural Development
& Deputy Inspector of Municipalities

September 2009

Rainwater Management in a Watershed Sustainability Context

Briefing Document for an Inter-Regional Education Initiative on Vancouver Island

Mission Possible: Implementing a New Culture for Urban Watershed Protection and Restoration in the Georgia Basin

Georgia Basin Initiatives:

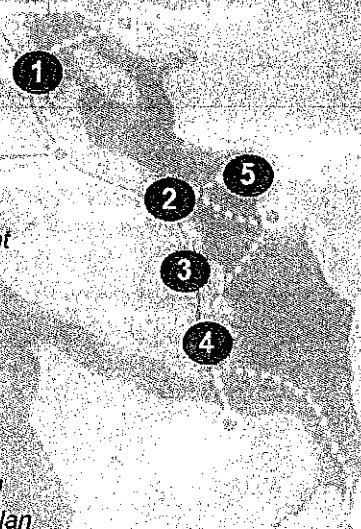
- 
- ① Comox Valley: *An Integrated Watershed Approach to Settlement*
 - ② Nanaimo Region: *Drinking Water & Watershed Protection Plan*
 - ③ Cowichan Valley: *Cowichan Basin Water Management Plan*
 - ④ Capital Region: *Bowker Creek Blueprint*
 - ⑤ Metro Vancouver: *Integrated Liquid Waste & Resource Management Plan*

Figure 1

Explanatory Notes – Provincial Significance

The Province intervened in the Comox Valley to both create a new regional district and mandate regional plans. The *Comox Valley Sustainability Strategy* and *Comox Valley Regional Growth Strategy* provide the planning framework for implementing **An Integrated Watershed Approach to Settlement**.

The Nanaimo Region's **Drinking Water & Watershed Protection Plan** created a drinking water and watershed protection service area with taxation authority in the region's electoral areas. Because the scope has been expanded to include the member municipalities, this means the plan has more of a regional function.

The **Cowichan Basin Water Management Plan** is a provincial case study for watershed governance changes being contemplated as part of *Water Act Modernization*.

The **Bowker Creek Blueprint** reflects community values. This outcome has been achieved because the Bowker Creek Initiative is a partnership that has enabled community groups and municipal staffs to coalesce around a shared vision: *What do we want this watershed to look like in 100 years, and what steps will we take to get there?*

The **Integrated Liquid Waste & Resource Management Plan** established the framework for moving beyond regulatory compliance to transitioning Metro Vancouver to an approach where management of liquid discharges and rainwater resources is planned and implemented within a broader, sustainability framework.

Rainwater Management in a Watershed Sustainability Context

Briefing Document for an Inter-Regional Education Initiative on Vancouver Island

2. Integrated Watershed Approach to Rainwater

On August 31, 2011 the Comox Valley Regional Board passed a series of resolutions pertaining to an integrated watershed approach to rainwater management. These resolutions highlighted the need for province-wide action related to how drainage is regulated by the Ministry of Transportation and Infrastructure.

These common interests provided PWSBC with the opportunity to bring together the four regions. The CAVI educational program will introduce tools and share experience so that local governments benefit from a common understanding of how to integrate the site with the watershed and stream.

Alignment with Provincial Programs

A knowledge and science-based approach to educating those involved in land development about rainwater management science and on-the-ground solutions will:

- Facilitate inter-regional alignment with program goals for the Province's Living Water Smart and Green Communities initiatives.
- Help local governments fulfil commitments they have made pursuant to the Climate Action Charter.
- Enhance the drainage component of Liquid Waste Management Plans (LWMP).

Released in 2002, *Stormwater Planning: A Guidebook for British Columbia* provides the technical foundation for the current "Beyond the Guidebook" initiative, which the Partnership is leading and supports the initiatives listed above.

Shared Responsibility Matrix: Figure 2 is reproduced from *Beyond the Guidebook 2010*. The matrix is structured in two parts. The focus is on the linkages between outcome, players and tools. Collaboration is founded on the notion of shared responsibility: "If all the players know their role in relation to the goal, then together we can create the future that we all want." In this case, the GOAL is to capture rain where it falls, limit surface runoff, and protect stream and watershed health.

Water is a Form Maker

"The basin we see today is the product of the working of the hydrological cycle over thousands of years of geologic and climate processes, and several centuries of human activities" (reference: extracted from the "Context Statement" of the *Cowichan Basin Water Management Plan 2007*). As this and other plans recognize, watersheds are defining landscapes that serve the needs of human settlements and provide natural habitats and their integral ecological systems.

Water features include coastlines, river fronts, lakes, riparian areas, aquifers and other elements that contribute to the values of land for habitat, agriculture, recreation and real estate. In numerous ways, the built environment has to adapt to watershed features and water movements to maintain viable settlements.

Infrastructure Implications: "Canada's built environment (roads, bridges, buildings, water mains, wastewater systems, offshore structures, dams, etc.) represents a major investment for both governments and taxpayers." (reference: National Research Council Canada - <http://www.nrc-cnrc.gc.ca/eng/lbp/lrc/sbe/life-cycle.html>). Infrastructure related to water is extensive in any Vancouver Island community.

While attendant life-cycle costs are unavoidable, there are options to reduce the current and future financial burden. This is the focus of 'designing with nature to achieve water sustainability'. For example:

- Drainage systems for subdivisions and developments can be designed to handle rainwater on the surface, maintain hydrology in the reach of the watershed; and, thereby reduce initial and life-cycle costs. Parcels approved for development ought not impede aquifer recharge, dry out wetlands or result in increased runoff volumes or erosive flows. Instead, designing for water sustainability can add value to real development and community amenities, including preservation of natural habitat.

The built environment can naturalize settlement works to the features of the watershed and its land and waterscapes. This designing with nature approach is fundamental to achieving water sustainability from any perspective.

Rainwater Management in a Watershed Sustainability Context

Briefing Document for an Inter-Regional Education Initiative on Vancouver Island

Responsibility Matrix		
Goal	Party	Tool
<ul style="list-style-type: none"> Objectives Situations Responsibilities 	<ul style="list-style-type: none"> Regional staff and elected representatives Municipal staff and elected representatives Private actors (developers, builders, homeowners, stewardship groups, universities and colleges, etc.) 	<ul style="list-style-type: none"> Law Bylaw Policy Procedure Incentive Penalty Security Budget
Desired or Required Outcomes	Relevant Staff or Other Actors	Instruments for Action

Application of Responsibility Matrix		
Desired Outcome	Relevant Actors	Instruments for Action
Onsite Rainwater Management	1. Regional Government	1. Living Water Smart policy direction; Regional liquid resource management plan
	2. Municipal Government	2. Regional targets translated to site level action using Water Balance Mode tool and Land Use Planning, site standards; linkage made between watershed plan and development practices/neighbourhood plan; Official Community Plan direction; visible political leadership on issue
	3. Developer	3. Bylaws require a) onsite rainwater management facilities b) security for performance c) regular inspection and reporting re: maintenance (e.g. on business license renewal); departments charged and funded to inspect
	4. Builder	4. Communication, contractual provisions, occupancy permit

Figure 2 – Shared Responsibility Matrix

Explanatory Notes

The Matrix was developed as a communication tool to support the Beyond the Guidebook initiative. Between 2007 and the end of 2009, the Matrix evolved from a set of generic “what would we like to do” questions that were framed through the eyes of those in local government. The purpose of the Matrix is to encourage players with different perspectives to talk candidly with each other about implementation of green infrastructure or other sustainability goals. There are solutions to be found if all parties simply talk to each other about how they could all work together more effectively, using law reform or other process changes as tools.

Rainwater Management in a Watershed Sustainability Context

Briefing Document for an Inter-Regional Education Initiative on Vancouver Island

3. Inter-Regional Education Initiative

Since 2003, the Partnership has been delivering an Outreach and Continuing Education Program (OCEP) that is outcome-oriented. The ultimate objective is framed by this policy statement in Living Water Smart:

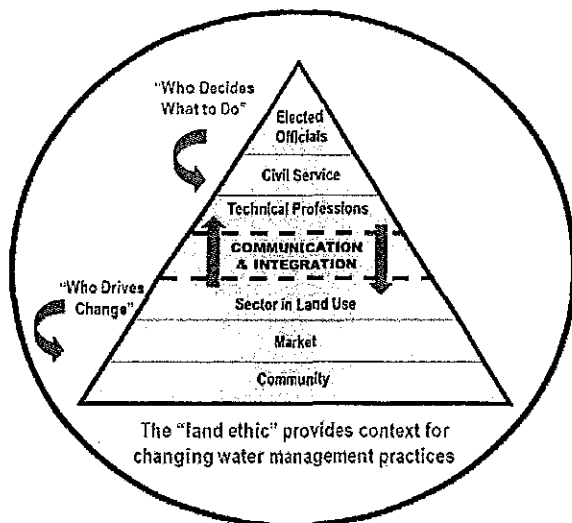
By 2012, all land and water managers will know what makes a stream healthy, and therefore be able to help land and water users factor in new approaches to securing stream health and the full range of stream benefits. — page 43

Founded on local government experience, OCEP is knowledge-based and connects the dots between the site, watershed and stream.

Mission Possible: Protect Stream Health and Adapt to Climate Change

OCEP is multi-layered and crosses boundaries as illustrated in the graphic below. The goal is to inform, educate and provide useful tools. A key message is that water sustainability at a watershed scale can be achieved through implementation of green infrastructure policies and practices at the neighbourhood scale.

The desired outcome is that there will be a common understanding of core concepts; and those involved in land use and/or water use will utilize those core concepts to protect stream health and adapt to climate change. This is "mission possible".



Program Elements

Over the next two years, the Inter-Regional Education Initiative will help advance implementation of each regional district plan. The centrepiece of the program is the web-based Water Balance Model (WBM). Program elements will initially comprise:

- ☐ Water Balance Model Training Workshops
- ☐ A Course on Watershed Blueprints
- ☐ Learning Lunch Seminars & Series
- ☐ Watershed Blueprint Case Profiles

These provide a consistent framework. There is flexibility to adapt it to incorporate local content.

About the Water Balance Model: The WBM is a unique scenario comparison tool. It bridges planning and engineering, links development sites to the stream and watershed, and helps define science-based performance targets for reducing the 'water footprint'.

About the Course on Watershed Blueprints: Refer to Table 2 in Appendix B for a curriculum overview. The 2-day course comprises eight modules. It guides land use and infrastructure professionals through the stages and steps in developing a 'watershed blueprint' that is balanced, landscape-based and financially sustainable. Each module can be expanded into either a half-day or full-day stand-alone seminar.

About Learning Lunch Seminars and Series: Since 2007, these have been the mainstay of the CAVI program. To date, they have provided neutral forums for building relationships that provide the foundation for the *regional team approach*. The next evolution is to design them as working sessions that result in regional action.

About Watershed Blueprint Case Profiles: Refer to Table 3 in Appendix B for scope outline. "Case Profiles" would complement a CAVI agricultural initiative in collaboration with the Ministry of Agriculture and Vancouver Island Economic Alliance (VIEA). The Ministry is implementing a Vancouver Island Water Demand Model. The land use inventory could also be utilized for WBM purposes.

Rainwater Management in a Watershed Sustainability Context

Briefing Document for an Inter-Regional Education Initiative on Vancouver Island

4. Alignment of Regional Approaches and Plans

Starting in 2007, CAVI has drawn attention to the need for a shared vision for Vancouver Island communities; and for a consistent Island-wide approach to green infrastructure policies and practices.

In February 2010, the Bowker Creek Forum drew attention to five watershed-based initiatives in five regional districts (refer to Figure 2), including Metro Vancouver. All five are keyed to integration of water and land planning. All reflect a 'design with nature' guiding philosophy.

The 'design with nature' phrase is borrowed from the title of a seminal book by Ian McHarg. He pioneered the concept of ecological planning. McHarg advocated this principle: *"that the shaping of land for human use ought to be based on an understanding of natural process."*

"What It Would Look Like"

The matrix in Appendix A complements Figure 2. It extracts key statements from each of the regional plans. These statements set the stage for implementation AND integration within each regional district. Context for integration of water and land planning is captured as follows:

One can have "implementation" without "integration"; but implementation will likely be ineffective without integration.

Integration means a holistic approach to use and conservation of land and water. It encompasses physical infrastructure, the built environment (land use, development and building design) and the ecosystems within which we work and recreate. And it includes all practitioners whose profession, work, volunteer role or responsibility as a landowners affects land and water sustainability.

The purpose of the *Inter-Regional Education Initiative* is to learn and apply what 'designing with nature' looks like in practice. The process involves drilling down from the vision and goals of a regional plan, and exploring the 'how-to' details of **implementation and integration**.

Why the Bowker Blueprint is Important: The significance of the Blueprint is that the Bowker process has demonstrated how a community can move from 'vision and goals' to 'implementation and integration' ("what it would look like").

The Blueprint was preceded by a Stormwater Management Plan. While that plan gave strategic direction, it did not provide municipal planners with the level of detail they need to effectively review individual development applications. The Blueprint provides the details for implementation.

Implementation and Integration

PWSBC recognizes the leadership shown by each regional district in developing provincially significant plans. It also recognizes that the community-at-large within each region has been involved in creating that leadership.

Through the *Inter-Regional Education Initiative*, PWSBC can help each region with the "next step", that is: implementation and integration, with emphasis on what integration looks like.

Integration is about tools and education. The Water Balance Model and Agricultural Water Demand Model are example of tools that facilitate integration through education. They also provide a focus for aligning efforts, both within a region and inter-regionally. While the two models are not linked, the land use data inventory undertaken for the Water Demand Model is also useful for the Water Balance Model in the context of watershed planning.

Budget for Educational Program: All four regions have funded activities that they are planning to do in 2012 and beyond. Those activities can leverage matching funding that can then be used by PWSBC / CAVI to implement the *Inter-Regional Education Initiative*.

Table 4 has two parts: CAVI provisional budget for program delivery; and total value of related work by CAVI partners. Through leveraging, the PWSBC objective is to secure a minimum of \$150,000 per year from various funding sources. Table 3 will provide a strong supporting case when PWSBC submits grant applications to external funders.

Rainwater Management in a Watershed Sustainability Context

Table 4 – Funding Overview

PROVISIONAL BUDGET FOR IMPLEMENTATION OF CAVI EDUCATIONAL PROGRAM			
PROGRAM ELEMENT	2012	2013	TOTAL
Course on Watershed Blueprints (2)	\$ 15,000	\$ 15,000	\$ 30,000
Water Balance Model Training Workshops (6)	\$ 30,000	\$ 30,000	\$ 60,000
Learning Lunch Seminars & Series (4)	\$ 25,000	\$ 25,000	\$ 50,000
Watershed Blueprint Case Profiles (2)	\$ 20,000	\$ 20,000	\$ 40,000
Beyond the Guidebook Update	\$ 10,000	\$ 10,000	\$ 20,000
Water Bucket Articles	\$ 10,000	\$ 10,000	\$ 20,000
Plus Travel Expenses	\$ 20,000	\$ 20,000	\$ 40,000
Plus Program Management / Administration	\$ 4,000	\$ 4,000	\$ 8,000
SUB-TOTALS	\$134,000	\$134,000	\$268,000
Plus HST (12%)	\$ 16,000	\$ 16,000	\$ 32,000
GRAND TOTALS (i.e. basis for grant applications)	\$150,000	\$150,000	\$300,000

SUMMARY OF INTER-REGIONAL COMMITMENTS TO WATERSHED-BASED INITIATIVES							
<i>(Note: the table below is a work-in-progress; consultation is continuing with partners to confirm items and/or fill in blanks)</i>							
ORGANIZATION	BUDGET LINE ITEMS			IN-KIND CONTRIBUTIONS			
	2012	2013	TOTAL	2012	2013	TOTAL	TOTAL
Comox Valley Regional District							
▪ Agricultural Water Demand Model	\$20,000	---	\$20,000	TBD	---	TBD	\$20,000
▪ Integrated Watershed Approach	\$60,000	---	\$60,000	TBD	TBD	TBD	\$60,000
▪ CAVI Program	\$2,500	\$2,500	\$5,000	\$10,000	\$10,000	\$20,000	\$25,000
City of Courtenay	\$4,000	\$4,000	\$8,000	\$10,000	\$10,000	\$20,000	\$28,000
Town of Comox	\$4,000	\$4,000	\$8,000	\$10,000	\$10,000	\$20,000	\$28,000
Village of Cumberland	\$ 500	\$ 500	\$1,000	\$ 5,000	\$ 5,000	\$10,000	\$11,000
Comox Valley Land Trust	---	---	---	\$ 5,000	\$ 5,000	\$10,000	\$10,000
Nanaimo Regional District							
▪ Agricultural Water Demand Model	\$ 25,000	---	\$ 25,000	TBD	---	TBD	\$ 25,000
▪ Drinking Water & WP Plan	\$270,000	\$270,000	\$540,000	---	---	---	\$540,000
▪ Rainwater Collection Manual	\$ 20,000	---	\$ 20,000	---	---	---	\$ 20,000
City of Parksville	TBD	TBD	TBD	\$10,000	\$10,000	\$20,000	\$ 20,000
City of Nanaimo	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Town of Qualicum Beach	TBD	TBD	TBD	TBD	TBD	TBD	TBD
District of Lantzville	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Cowichan Valley Regional District							
▪ Cowichan Basin Plan	\$50,000	\$50,000	\$100,000	---	---	---	\$100,000
▪ Agricultural Water Demand Model	\$30,000	---	\$ 30,000	TBD	---	TBD	\$ 30,000
▪ Water Balance Model	\$10,000	\$ 5,000	\$ 15,000	\$ 5,000	\$ 5,000	\$10,000	\$ 25,000
▪ South Cowichan Water Study	\$75,000	TBD	\$ 75,000	---	---	---	\$ 75,000
▪ CAVI Program	---	---	---	\$10,000	\$10,000	\$20,000	\$20,000
District of North Cowichan	TBD	TBD	TBD	\$10,000	\$10,000	\$20,000	\$20,000
City of Duncan	TBD	TBD	TBD	\$10,000	\$10,000	\$20,000	\$20,000
Town of Lake Cowichan	TBD	TBD	TBD	\$10,000	\$10,000	\$20,000	\$20,000
Town of Ladysmith	TBD	TBD	TBD	\$10,000	\$10,000	\$20,000	\$20,000
Cowichan Tribes	TBD	TBD	TBD	\$10,000	\$10,000	\$20,000	\$20,000
Capital Regional District							
▪ Integrated Watershed Planning	TBD	TBD	TBD	\$10,000	\$10,000	\$20,000	\$380,000
Member Municipalities	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Ministry of Agriculture	---	---	---	\$5,000	\$5,000	\$10,000	\$10,000
▪ Agricultural Water Demand Model	\$98,000	TBD	\$98,000	---	---	---	\$98,000
Ministry of Environment	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Living Rivers Trust	\$25,000	---	\$25,000	\$10,000	\$10,000	\$20,000	\$45,000
▪ Agricultural Water Demand Model	\$ 8,000	---	\$ 8,000	---	---	---	\$ 8,000
Van Island Economic Alliance	TBD	TBD	TBD	TBD	TBD	TBD	TBD
TimberWest	TBD	TBD	TBD	TBD	TBD	TBD	TBD
PWSBC	\$90,000	\$40,000	\$130,000	\$75,000	\$75,000	\$150,000	\$280,000
GRAND TOTALS	792,000	\$376,000	\$1,168M	\$215,000	\$215,000	\$430,000	\$1,598M

Rainwater Management in a Watershed Sustainability Context

Briefing Document for an Inter-Regional Education Initiative on Vancouver Island

APPENDIX A

Water Sustainability: Visions, Goals/Objectives in the Regional Plans of Four Vancouver Island Regional Districts

Rainwater Management in a Watershed Sustainability Context

Briefing Document for an Inter-Regional Education Initiative on Vancouver Island

This page left intentionally blank

NOTE: This table is a work-in-progress because the review of all the regional plans is not yet complete

WATER SUSTAINABILITY: VISIONS, GOALS / OBJECTIVES IN THE REGIONAL PLANS OF FOUR VANCOUVER ISLAND REGIONAL DISTRICTS

PART ONE: E: WATER AND WATERSHED SUSTAINABILITY VISION / ETHICS

Regional Governmer	Plan Element	Statement	Source Document
Comox Valley Regional District	Vision Statement	"Development is integrated with the natural environment and decision-making is driven by the shared goals of conserving land, water and energy resources."	From the Vision Statement of the <i>Comox Valley Sustainability Strategy. 2011</i>
	Vision Statement	"We provide long-term, reliable water supply to the entire Comox Valley while protecting ecosystems and the environment."	<i>CVRD Regional Water Supply Strategy. 2011</i>
	Vision Statement	"The Comox Valley will continue to evolve as a region of distinct, well-connected and well-designed urban and rural communities. As Stewards of the environment, local governments, K'ómoks First Nation, public agencies, residents, business and community and non-governmental will work collectively to conserve and enhance land, water and energy resources and ensure a vibrant local economy and a productive working landscape."	<i>Comox Valley Regional Growth Strategy. 2011 (page 20)</i>
	Vision Statement	Could not success on-line	<i>Comox Valley Regional Sewer Stratgey</i>
	Land Ethic	...The Comox Valley will continue to experience population growth..."Development must be directed in a manner that creates a sustainable long-term development pattern that uses both land and infrastructure in the most efficient manner."	<i>From CVS Reginal Growth Strategy... Introduction: "Major trends informing goals."</i>
Cowichan Valley Regional District	Vision Statement	"The Cowichan Basin Community Conserves and Manages water to ensure reliable supplies for human use, thriving ecosystems, and a healthy economy."	From the Vision Statement of the <i>Cowichan Basin Watershed Management Plan. 2007</i>

"Improving sustainability and our quality of life requires that we recognize the interrelationships in our society, environment and economy, and that we harmonize our approaches to these areas in order to achieve long-term sustainability for all beings."

From *Recommendations for a Sustainable Future* (RDN) 2007

Mount Arrowsmith Biosphere Reserve (38% of the RDN area) was created in 2000 by UNESCO (United Nations Education, Science and Cultural Organization). The MABR includes the watersheds of Vancouver Island's Mt. Arrowsmith and adjacent marine areas.

"...sustainability recognizes that our economy exists, within society, that society exists within the environment, and that the environment surrounds and supports society."

Regional District of Nanaimo Regional Growth Strategy, 2011, p. 14.

"The region will be recognized for an outstanding quality of urban and rural life that is grounded in a strong commitment to protecting the natural environment and minimizing harm to life-sustaining ecological systems."

RDN Regional Growth Strategy, 2011

The RDN and its member municipalities will achieve "high standards of environmental protection that preserve habitat, enhance ecological diversity, and maintain air and water quality."

RDN Regional Growth Strategy, 2011

PART TWO: WATER AND WATERSHED SUSTAINABILITY GOALS

The Comox Valley Water Goals by 2050 are:
...Reduce non-agricultural water use by 50% per capita
...All waste water treatment will be to tertiary or reuse level
...All new development and 50% of existing development will capture rain water runoff through source control methods
...ecosystems will be closely connected to
...environmentally sensitive areas protected, and
...70% of degraded areas restored.

Comox Valley Regional Sustainability Strategy, 2011

Goal	Official Community Plans will contain development permit area guidelines for (but not limited to) ...environmentally sensitive areas ...form and character of developemnt, and ...energy and water conservation	<i>Comox Valley Regional Sustainability Strategy, 2011</i>
------	--	--

Cowichan Valley Regional District	Goal	Maximize Efficiency of Water Use	<i>Status of Cowichan Basin Water Management Plan and Recommended Actions: 2010</i>
	Goal	Educate, Engage and Empower Citizens in Water	
	Goal	Manage Water Supply to Meet Humand Needs and	

Goal	Develop long range plans for sustainability	Comox Valley Regional District Corporate Strategic Plan, 2010 (CVRD-CSP)
------	---	---

Objectives to support above goal	>Initiate a Regional Sustainability Planning Process in 2010. >Review the feasibility of implementning a regional growth management strategy following completion of the Regional Sustainability Planning process.	CVRD-CSP (p.7)
----------------------------------	---	----------------

59

Regional District of Nanaimo	Goals Related to Water	<p>Protect the Ennvironment....prtotect and enhance the environment and avoid ecological damage related to human activity</p> <p>Enhance Rural Integrity....protect and strengthen the region's rural economy and lifestyle</p> <p>Enhance cooperation among jurisdictions....facilitate and understanding of and commitment to the goals of growth management among all levels of governemnt, the public, and key private and voluntary sector partners.</p>	<i>RDN Regional Growth Strtagey, 2011</i>
-------------------------------------	------------------------	--	---

PART THREE: IMPLEMENTATION OF WATER AND WATERSHED SUSTAINABILITY GOALS

Comox Valley Region Supporting policy District

Local governments should individually or jointly adopt regionally consistent terminology, as set out above, to create policy framework to support protection of conservation, environmental features and watersheds in OCPs.

Comox Valley Regional Growth Strategy. 2011 (P. 350 (CVRGS)

Supporting policy

Local governments should work together to adopt consistent actions and policies for environmental and natural resource protection, through OCPs, zoning and other mechanisms, that promote the principles of precaution, connectivity and restoration.

CVRGS (p. 37)

Supporting policy

Support increased water availability from agriculture while ensuring natural systems remain healthy and functioning

CVRGS

Objective with targets

Promote water conservation and efficiency throughout the Comox Valley

CVRGS (p. 53)

MEASURES

BASELINE

TARGET

Data sources from Water Services

Baseline	2008	Short-term 2015	Medium-Term 2020	Long-Term 203
----------	------	--------------------	---------------------	------------------

Daily total water consumption per capita	500-600 CVRD litres	20% reduction	30% reduction	40% reduction
--	---------------------	---------------	---------------	---------------

Supporting policies to above objective

- >The majority of growth should be focused in Core Settlement Areas where appropriate publicly owned water services already exist
- >For existing developments outside of Core Settlement Areas, where there are demonstrated onsite health related issues, publicly operated water should be made available.
- >Encourage smaller lot development and higher density development in Core Settlement Areas, in order to make efficient use of water servicing infrastructure.
- >In order to provide an incentive to reduce water use, a program and accompanying water rate structure based on the user pay principle should be implemented throughout the Comox Valley as part of the agreed upon water efficiency plan.
- >Investigate policies to permit grey water plumbing in new construction and retrofits.

CVRGS (p. 53-54)

- >All local governments work towards preparing development permit guidelines for low water usage, xeriscaping in multi-family, commercial and industrial areas, and encourage low water usage landscaping in single family residential areas.
- >Encourage local governments and farmers to work together to reduce use of potable water for irrigation of farmland.
- >Over the long term, encourage all local governments to work towards finding a permanent alternative to the use of potable water for irrigation purposes.
- >Discourage the commercial use of groundwater for export purposes.

Objective	Protect the quality of water sources	CVGRS (p:54)
Supporting policies to the above objective	<ul style="list-style-type: none"> >Manage development on the basis of precautionary principles within watershed of water supply lakes. This will require development proposals to include reports by appropriate professionals to study potential impacts on water quality and quantity, including a peer review of professional findings and recommendations. >Support the development of plans that protect drinking water for the Comox Valley. >Work with other stakeholders and agencies to identify areas for aquifer protection and develop OCP guidelines for their protection. >Where development is proposed in a watershed of a water supply lake that is controlled politically by one jurisdiction, but where the lake provides a water source to other jurisdiction(s), the jurisdiction responsible for approving development within the watershed will formally consult with the jurisdiction receiving water from the watershed. >Require an aquifer protection development permit for electoral areas at time of subdivision, which would require groundwater quantification, vulnerability and protection measures prepared by a qualified professional, and ensure that there are no other impacts on adjacent wells. 	CVGRS (ppgs 54-55)
Objective	Stormwater is managed to preserve ecosystem and watershed health	
Supporting policies to above objective	<ul style="list-style-type: none"> >Local OCPs should include policies that encourage permeable surfaces within design of new developments and public spaces. >In watersheds of water supply lakes, local governments and the Ministry of Transportation and Infrastructure (MOTI) should work cooperatively towards a target of less than 10% impermeable surfaces. >In Rural Areas the regional district should work with the MOTI to develop guidelines for Integrated Stormwater Management to be used in the sub- 	

division approval process.

>In order to ensure a sustainable aquaculture industry, local OCPs should include policies that require the cleansing of any stormwater draining into Baynes Aound.

Supporting Policy	Promote water conservation and efficiency both to reduce water and energy use and to prepare for adapting to impacts of climate change (such as erratic availability of water and energy due to floods and droughts)	CVRCS (p. 77)
-------------------	--	---------------

Cowichan Valley
Regional District

Objective	Maximize Efficiency of Water Use a) Objective 1: Initiate improvements to water infrastructure b) Objective 2: Improve management of water demand in all sectors c) Objective 3: Ensure that local government and institutions are leaders in water conservation	<i>Status of Cowichan Basin Water Management Plan and Recommended Actions: 2010</i>
Objective	Educate, Engage and Empower Citizens in Water Management a) Objective 1: Conduct regular monitoring and publish the results b) Objective 2: Conduct research	
Objective	Manage Water Supply to Meet Human Needs and Minimize Impacts of Low Water Levels a) Objective: Sufficient storage of spring runoff b) Objective: Consider the effects of climate change on storage	

Objective	Protect the Environment from Harm	Cowichan Valley Corporate Strategic Plan (CVRD-CSP) 2010
-----------	-----------------------------------	--

Actions to support above objective	>Develop a community climate change mitigation plan to meet or beat provincial greenhouse gas emissions targets >Develop regional watershed management strategies. >Develop water planning policies to guide community planning and development decisions. >Identify and map areas of high conservation value and develop policies and guidelines to protect sensitive areas. >Develop a community climate change adaptation strategy to help cope changing regional conditions.	CVRD-CSP (p. 9)
------------------------------------	--	-----------------

Objective	Establish sustainable communities
-----------	-----------------------------------

Action to support
above objective

>Develop an environmental education plan with a focus on water,
biodiversity and climate change.

Objective	Community infrastructure planned for current and future generations
-----------	---

Actions to support
above objective

>Develop a rainwater management plan and green infrastructure policy
to support "natural" infrastructure such as natural drainage systems like
wetlands versus pipes and concrete ponds.
>Develop a lifecycle program for all infrastructure assets together with
preventative maintenance programs to extend the lifecycle.

This page left intentionally blank

Rainwater Management in a Watershed Sustainability Context

Briefing Document for an Inter-Regional Education Initiative on Vancouver Island

APPENDIX B

Details of Program Elements

Rainwater Management in a Watershed Sustainability Context

Briefing Document for an Inter-Regional Education Initiative on Vancouver Island

This page left intentionally blank

Rainwater Management in a Watershed Sustainability Context

Table 2 – Curriculum Overview for “A Course on How to Develop a Watershed Blueprint”

Time	Stage No. & Scope	Module & Theme	Learning Outcomes
DAY 1 – BUILD THE VISION			
0830 - 1000	“Sustainable Service Delivery”	A Integrate Watershed-Based Planning, Ecological Health and ‘Infrastructure Liability’	Participants will understand the genesis and regulatory context for ISMPs; and why integration of land use planning and infrastructure asset management is necessary and enabled.
1030 - 1200	1 “What Do We Have?” (Information and Data Collection)	B Frame Watershed Problems and Opportunities	Participants will understand why it is important to ask the right questions, go on a watershed walkabout, frame the issues, tap into local knowledge, and focus on what is most relevant.
1300 - 1500	2 “What Do We Want?” (Vision for Future Development)	C Focus on Stream Health and Watershed Outcomes	Participants will understand the science driving the paradigm-shift from <i>STORMwater</i> to <i>RAINwater management</i> ; and how application of 10 guiding principles will lead to success.
1530 - 1630		D Capitalize on Green Infrastructure Opportunities to ‘Design with Nature’	Participants will understand why ‘designing with nature’ is key to climate change adaptation, and how to make a difference at multiple scales: “What I can do for the watershed”.
DAY 2 – CREATE THE LEGACY			
0830 - 1000	3 “How Do We Put This Into Action?” (Implementation Plan, Funding and Enforcement Strategies)	E Apply a Knowledge-Based Approach to Focus on Solutions and Outcomes	Participants will understand what <i>Shared Responsibility</i> means; and how to bring people together, learn from each other, and align efforts to implement effective green infrastructure. (Case profiles offer examples of “what it looks like on the ground.”)
1030 - 1230		F Move to a Levels-of-Protection Approach to Sustainable Service Delivery	Participants will understand when and how to apply models and screening tools; and how to establish watershed-specific targets and then implement at the development scale.
1330 - 1500		G Create a Blueprint to Implement the Watershed Vision	Participants will understand how to integrate drainage, land use, environment and social information; and how to create bite-size pieces that facilitate incremental implementation.
1530 - 1630	4 “How Do We Stay on Target?” (Monitoring and Assessment Plan)	H Define Adaptive Management Rules, Roles and Responsibilities	Participants will understand the role of effectiveness monitoring, and why Adaptive Management means “we change direction when the science leads us to a better way”.

Note: Refer to “Stormwater Planning: A Guidebook for British Columbia” vis-à-vis the genesis of *Integrated Stormwater Management Plans* (ISMPs) a decade ago; and to “Beyond the Guidebook 2010” for the basis for the current “ISMP Course Correction”

Rainwater Management in a Watershed Sustainability Context

Table 3 – Scope of Watershed Blueprint Case Profiles

Overview and Strategy		
Project Overview	Current regional district initiatives involve collaborations of stakeholders. Each initiative has adopted a strategy to achieve the water sustainability goals endorsed by the community. In addition to the communications, education of the public and practitioners, as well as research that each initiative has pursued, there remains a need to more successfully align decisions about use and conservation of land with water sustainability priorities. The <i>Course on Watershed Blueprints</i> will provide two case study profiles to illustrate how this multi-jurisdictional challenge may be met through an integrated approach.	
Project Strategy	<p>The case profiles will examine in each watershed an area (a number of polygons based on parcel boundaries) that has characteristics important for water sustainability goals. The areas will include environmentally sensitive assets critical for surface water retention, ground water infiltration, aquifer recharge, and flow regulation.</p> <p>This examination will illustrate how strategies of conservation and development of land (including design guidelines), managed by use of available local government tools (regulatory and other) can avoid disturbance of critical natural assets (knowing what and where they are) and reduce impacts of settlement change by maintaining the hydrology of the area (a number of parcels).</p>	
Objective	Tasks	Description
1 Collaborators	Letter invitations and personal conversations/meetings	Collaborators are organizations that share objectives about water sustainability, some of which have information that the case study profiles need.
2 Communications	Provide collaborators with updates and progress reports	Collaborators will be able to help with communications about the project and, perhaps publish its final report to their audiences.
3 Research – General	Assemble existing reports and analysis; support working relationships with collaborators that supply data.	The case profiles will draw on the information (data) and strategies (planning, demand management, infrastructure concerns, potential climate change impacts, etc.) already developed by others
4 Research – Specific	Produce work plan and manage tasks; Monitor student tasks	Work with the Agricultural Water Demand Model project to share research efforts where the case profile areas overlap with the agricultural areas. Work closely with local governments to obtain data and produce mapping that can be used in their CAD systems and in compatible formats for use by staff and the public
5 Analysis	Co-ordinate with Ministry of Agriculture; Student research	Locate critical watershed features in the case profile areas; overlay these sites with existing land use designations and the current status of conservation, development, or potential development. Provide a summary of existing and potential development by land use typology for the profile areas.
6 Design with Nature	Review and describe the local government tools that may be applied; provide examples supported by data.	Discuss and show the application of tools that local governments have within their power to influence potential use and conservation of parcels to avoid harm to the environmentally sensitive areas and support watershed sustainability. The local government tools include zoning and rezoning, development permit areas (for water sustainability), design guidelines, covenants, easements, memoranda of understanding, land swaps, and more
7 Assessment & Demonstration	Apply scientific tools	Apply analytical (scientific) tools to quantify optimum hydrology characteristics of the case profile areas based on environmental sensitivity of specific assets.
8 Educational Values	Insert case profile summaries and analysis into Watershed Blueprint Course	Use the data produced for the case profile areas as cases for presentation in professional education workshops for the Water Balance Model and Agricultural Water Demand Model.
9 Report	Summarize findings	Produce an empirical report