

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE

WEDNESDAY, FEBRUARY 24, 2010 - 3:30 P.M.

CVRD BOARDROOM, 175 INGRAM STREET

		AGENDA	PAGES				
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1.	APPF	ROVAL OF AGENDA:	1 – 2				
2.	ADO M1	PTION OF MINUTES: Minutes of the January 27, 2010 Engineering and Environmental Services Committee meeting	3 – 6				
3.	BUSI	NESS ARISING FROM THE MINUTES:					
4.	DELI	EGATIONS: No delegations					
5.	REPO R1	ORTS Cowichan Bay Sewer System petition for service.	7				
	R2	CVRD Bylaw No. 3359 – Environmental Initiatives Establishment Bylaw, 2010.	8 – 11				
	R3	2010 Budget Discussion (Water and sewer 2010 budget book included with agenda package)	12				
	R4	Busy Place Creek Pilot Function	13 – 15				
	R5	Municipal Green Building Leaders	16 – 25				
6.	NEW	BUSINESS:					
7.	<u>CLOSED SESSION</u> TO COMMENCE AT 4:30 PM – ALL CVRD DIRECTORS INVITED TO ATTEND. Motion that the meeting be closed to the public in accordance with the Community Charter Part 4, Division 3, Section 90, subsection {(1) (e)}.						
	SIN1 Land acquisition – {Sub (1) (e)} Consultant Presenta						

8. NEXT MEETING: March 24, 2010

9. ADJOURNMENT:

Distribution:

Director Cossey, Chair

Director Kuhn, Vice-Chair

Director Dorey

Director Duncan

Director Giles

Director Harrison

Director Haywood

Director Iannidinardo

Director Kent

Director Marcotte

Director Morrison

As Well As:

Warren Jones, CAO

Brian Dennison, General Manager, Engineering & Environmental Services

Bob McDonald, Manager, Recycling & Waste Diversion

Dave Leitch, AScT., Manager, Water Management

Kate Miller, Manager, Regional Environmental Policy

Mark Kueber, Manager, Corporate Services

Agenda Cover Only:

Directors Hutchins, McGonigle, Seymour, Walker Tom Anderson, General Manager, Planning & Development

Joe Barry, Corporate Secretary

The Full Agenda Package is available on-line at:

http://bc-cowichanvalley.civicplus.com/Archive.aspx?AMID=50

M1

Minutes of the regular meeting of the Engineering & Environmental Services Committee held in the CVRD Boardroom, 175 Ingram Street, Duncan, on January 27, 2010 at 3:35 p.m.

PRESENT:

Director Kuhn, Acting Chair

Directors Dorey, Duncan, Giles, Harrison, Haywood, Iannidinardo, Kent, Marcotte, Morrison, and Alternate

Director Gutensohn

ABSENT:

Director Cossey, Chair

ALSO

Warren Jones, CAO

PRESENT:

B. Dennison, P. Eng., General Manager, E & E

D. Leitch, AScT., Manager, Water Management

B. McDonald, Manager, Recycling & Waste Management

K. Miller, Manager, Regional Environmental Policy

J. Bath, Recording Secretary

APPROVAL OF AGENDA

Item R-6 was removed from the agenda as the petition for inclusion in the Cowichan Bay Sewer System Service Area was withdrawn.

New Business items NB1 and NB2, as well as a delegation to present in the Closed Session of the meeting under Sub $\{(1) (e) - \text{land acquisition}, \text{were added to the Agenda.} \}$

It was moved and seconded that the agenda be approved as amended.

MOTION CARRIED

ADOPTION OF MINUTES

It was moved and seconded that the minutes of the December 9, 2009 regular Engineering & Environmental Services Committee meeting be adopted.

MOTION CARRIED

BUSINESS ARISING OUT OF MINUTES No business arising

CORRESPONDENCE

C1

From the Ministry of Community and Rural Development regarding responsibility for the maintenance of sidewalks in Regional Districts.

It was moved and seconded that the correspondence be received and filed.

MOTION CARRIED

RESOLVE INTO CLOSED SESSION 3:45 p.m.

It was moved and seconded that the meeting be closed to the public in accordance with the Community Charter, Part 4, Division 3, Sections 90 {(1) (e) and (k)}.

MOTION CARRIED

RISE FROM CLOSED SESSION 4:36 p.m.

It was moved and seconded that the Committee raise without report.

MOTION CARRIED

STAFF REPORTS

R1

Arbutus Ridge Drainage System Management Amendment Bylaw to add Schedule B – 2010 Flat Rate Charge.

It was moved and seconded that it be recommended that "CVRD Bylaw No. 3351 – Arbutus Ridge Drainage System Management Amendment Bylaw, 2010" be forwarded to the Board for three readings and adoption.

MOTION CARRIED

R2

Dogwood Ridge Water Management Amendment Bylaw to add Schedule H - -2010 Flat Rate Charge.

It was moved and seconded that it be recommended that "CVRD Bylaw No. 3352 – Dogwood Ridge Water System Management Amendment Bylaw, 2010" be forwarded to the Board for three readings and adoption.

MOTION CARRIED

R3

Lambourn Estates Water and Sewer Systems – release of "No Build" covenants.

It was moved and seconded that it be recommended that the Board approve the removal, at the developers' expense, of "no-build" covenants on six of thirty lots within the Lambourn Estates Sewer and Water Systems Service Area; two in the Hiles development and four in the Royal Island development. All of the remaining 24 lots in the two developments will retain their "no-build" covenants.

MOTION CARRIED

R4

Brulette Place Sewer System Management, Capital Expenditure and Parcel Tax Bylaws in preparation of CVRD takeover of the sewer system.

It was moved and seconded that:

- 1. The Board accept the Utility Transfer Agreement between the CVRD and James and Karen Taggert for CVRD takeover of the Brulette Place sewer system in Electoral Area A, and further that the Chair and Corporate Secretary be authorized to sign the Utility Transfer Agreement.
- 2. The following bylaws be forwarded to the Board for consideration of three readings and adoption:
 - .1 CVRD Bylaw No. 3340 Brulette Place Sewer System Management Bylaw, 2010
 - .2 CVRD Bylaw No. 3341 Brulette Place Sewer Capital Reserve Bylaw, 2010
 - .3 CVRD Bylaw No. 3342 Brulette Place Sewer Parcel Tax Bylaw, 2010

MOTION CARRIED

R5

Funding for three Regional Environmental Initiatives: Toilet Rebate Program; Wood stove Rebate Program and subsidized Rain Barrel sales.

It was moved and seconded that it be recommended:

- 1. That that Budget 520 be increased by \$15,000 to accommodate a regionally funded woodstove rebate program for 2010 only.
- 2. That staff proceed with the steps to establish a regional environmental initiatives function with sufficient flexibility for a variety of environmental initiatives; and further that this function include the costs currently attributable to the Environmental Policy Division.

MOTION CARRIED

NEW BUSINESS

NB₁

Shawnigan Lake North Water System service area extension.

It was moved and seconded that it be recommended to the Board:

- 1. That the Certificate of Sufficiency, confirming that a sufficient petition, requesting inclusion into the Shawnigan Lake North Water System Service Area, be received.
- 2. That the boundaries of the Shawnigan Lake North Water System Service Area be amended to include:

"PID 009-481-079, District Lot 16, Shawnigan District"

"PID 009-255-702, Lot 1, Blk. 33 Shawnigan Suburban Lots, Shawnigan District Plan 218A"

"PID 009-255-753, Lot 2, Blk. 33 Shawnigan Suburban Lots, Shawnigan District Plan 218A".

3. That "CVRD Bylaw No. 1911 – Shawnigan Lake North Water System Establishment Bylaw, 1999", be amended to include PID 009-481-079, District Lot 16, Shawnigan District, PID 009-255-702, Lot 1, Blk. 33 Shawnigan Suburban Lots, Shawnigan District Plan 218A,PID 009-255-753,Lot 2, Blk. 33 Shawnigan Suburban Lots, Shawnigan District Plan 218A", and that the amended bylaw be forwarded to the Board for consideration of three readings and adoption.

MOTION CARRIED

NB₂

It was moved and seconded:

- 1. That "CVRD Bylaw No. 3344 Shawnigan Creek Drainage System Service Establishment Bylaw, 2010", be forwarded to the Board for consideration of three readings and, following provincial approval, be adopted.
- 2. That it be recommended to the Board that voter approval for the adoption of "CVRD Bylaw No. 3344- Shawnigan Creek Drainage System Service Establishment Bylaw, 2010", be obtained through an Alternative Approval Process.

MOTION CARRIED

ADJOURNMENT

It was moved and seconded that the meeting be adjourned.

MOTION CARRIED

The meeting adjourned at 5	:20 p.m.
Chair	Recording Secretary
	Dated:

STAFF REPORT

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF FEBRUARY 24, 2010

DATE:

February 15, 2010

FILE NO:

Brian Dennison, General Manager,

Engineering and Environmental Services

5600-30-CBS/09

FROM:

Louise Knodel-Joy, Senior Engineering Technologist

SUBJECT:

Cowichan Bay Sewer System - Petition for Service

Recommendation:

That it be recommended to the Board:

1. That the Certificate of Sufficiency, confirming that a sufficient petition requesting inclusion into the Cowichan Bay Sewer System Service Area be received.

2. That the boundaries of the Cowichan Bay Sewer System Service Area NOT be amended to include "Lot A, Section 8, Range 2, Plan 22974, Cowichan District".

Purpose:

To discuss request for extension to the boundaries of the Cowichan Bay Sewer System Service Area to include one additional property.

Financial Implications: Not applicable.

Interdepartmental/Agency Implications: Not applicable.

Background:

The owners of this property requested inclusion into the Cowichan Bay Sewer System due to failure of their septic system. However, further to submitting a Petition for Services, they have withdrawn their request, due to the high connection costs.

Submitted by

Louise Knodel-Joy

Senior Engineering Technologist

LKJ:jlb

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R2

STAFF REPORT

ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING **OF FEBRUARY 24, 2010**

DATE:

February 16, 2010

FILE NO:

Bylaw No. 3359

FROM:

Kate Miller, Manager, Regional Environmental Policy

SUBJECT: Environmental Initiatives Establishment Bylaw

Recommendation:

1. That CVRD Bylaw No. 3359 -Environmental Initiatives Service Establishment Bylaw, 2010 be forwarded to the Board for consideration of three readings, and following provincial and voter approval, be adopted.

An Alternate Approval Process be carried out to obtain consent of the voters for 2. establishment of the Environmental Initiatives Service function.

Purpose: To present Bylaw No. 3359 – Environmental Initiatives Service Establishment Bylaw, 2010 to establish a Regional Environmental Initiatives function.

Financial Implications: The annual cost of providing this service is to be recovered through property value taxes to be requisitioned and collected on the basis of the net taxable value of land and improvements within the proposed service area. The maximum amount of money that may be requisitioned annually in support of this service shall be the greater of \$590,000 or an amount equal to the amount that could be raised by a property value tax of \$.04715 per \$1,000 of net taxable value of land and improvements within the service area. It is important to note that this includes all lands including industrial, commercial and non residential properties within the CVRD and does not directly correlate to a calculation on home values directly. A calculation per \$100,000 valuation on a home equates to \$3.98 of which currently \$2.28 is included in general government costs.

This service establishment would result in an overall reduction of the current CVRD administrative budget which currently includes these activities. The overall budget is based on supplemental items the Board has requested for air quality and water conservation initiatives (woodstoves and rain barrels \$40,000), supplemental request of Environment commission activities (\$20,000), supplemental for additional staff costs to support environmental programming (\$90,000) and limited programming budget resulting in an overall net increase to the existing environmental budget currently in Administration of \$252,340.

Interdepartmental/Agency Implications: Before an establishment bylaw can be adopted, the Inspector of Municipalities and service area electors must give their approval. This bylaw is currently being reviewed for compliance with applicable Provincial Statues by the Ministry of Community and Rural Development. Once pre-approval has been received, CVRD staff will include Ministry recommendations, if any, and forward the bylaw to the Board for consideration.

Background:

The following resolution was ratified by the Board at its regular meeting of February 10, 2010:

"That staff proceed with the steps to establish a regional environmental initiatives function with sufficient flexibility for a variety of environmental initiatives; and further that this function include the costs currently attributable to the Environmental Policy Division."

This bylaw will establish a service for the purpose of developing and maintaining environmental initiatives and programs that restore, rehabilitate and enhance the natural environment, encourage economic and social development compatible with environmental stewardship, protect the environment from harm and support the work of delivering the initiatives and programs for the whole of the Cowichan Valley Regional District.

Approved to

Brian Dennison, General Manager,

Engineering and Environmental Services

Submitted by,

Kate Miller, Manager

Regional Environmental Policy

:jlb

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COWICHAN VALLEY REGIONAL DISTRICT

BYLAW NO. 3359

A Bylaw to Establish and Operate a Service for Environmental Initiatives and Programs for the Whole of the Cowichan Valley Regional District.

WHEREAS pursuant to Sections 796 and 800 of the Local Government Act, a regional district may, by bylaw, establish and operate any service that the Board considers necessary or desirable for all or part of the regional district;

AND WHEREAS the Board of the Cowichan Valley Regional District wishes to establish a service for the purpose of developing, operating and maintaining environmental initiatives and programs that restore, rehabilitate and enhance the natural environment, encourage economic and social development compatible with environmental stewardship, protect the environment from harm and support the work of delivering the initiatives and programs for the whole of the Cowichan Valley Regional District;

AND WHEREAS the Board of the Cowichan Valley Regional District has obtained the approval of the service area electors in accordance with the *Local Government Act* and the *Community Charter*;

NOW THEREFORE the Board of Directors of the Cowichan Valley Regional District enacts as follows:

1. CITATION

This bylaw may be cited for all purposes as "CVRD Bylaw No. 3359 – Environmental Initiatives Service Establishment Bylaw, 2010".

2. SERVICE BEING ESTABLISHED

The service being established under the authority of this bylaw is a service for the purpose of developing, operating, maintaining and delivering environmental initiatives and programs for the whole of the Cowichan Valley Regional District. The service shall be known as the "Environmental Initiatives Service".

3. SERVICE AREA BOUNDARIES

The boundaries of the service area are the boundaries of the whole of the Cowichan Valley Regional District.

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4. PARTICIPATING AREA

The participating area for this service is the whole of the Cowichan Valley Regional District comprised of the: City of Duncan; District of North Cowichan, Town of Lake Cowichan; Town of Ladysmith; and Electoral Areas A – Mill Bay/Malahat; B – Shawnigan Lake; C – Cobble Hill; D – Cowichan Bay; E – Sahtlam/Glenora/Cowichan Station; F – Cowichan Lake South/Skutz Falls; G – Saltair/Gulf Islands; H – North Oyster/Diamond; and I – Youbou/Meade Creek.

5. METHOD OF COST RECOVERY

The annual cost of providing this service shall be recovered by property value taxes requisitioned and collected on the basis of the net taxable value of land and improvements within the service area.

6. MAXIMUM REQUISITION

The maximum amount of money that may be requisitioned annually in support of this service shall be the greater of \$590,000. or an amount equal to the amount that could be raised by a property value tax of \$.04715 per \$1,000. of net taxable value of land and improvements within the service area.

READ A FIRST TIME this		day of		, 2010.	
READ A SECOND TIME this		day of		, 2010.	
READ A THIRD TIME this		day of		, 2010.	
I hereby certify this to be a true a Reading on the day			w No. 3359	9 as given	Third
Corporate Secretary		Date			
APPROVED BY THE INSPECTOR		NICIPALITIES	this		_ day
ADOPTED this d	ay of _		, 20	10.	
Chairperson		Corporate Sec	cretary		



STAFF REPORT

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF FEBRUARY 24, 2010

DATE:

February 18, 2010

FILE NO:

2010 Budgets

FROM:

Brian Dennison, General Manager, Engineering and Environmental Services

SUBJECT: Draft 2010 Sewer and Water System Budgets

Recommendation:

That the Sewer, Water, Drainage, Street Lighting, Curbside Collection, South Cowichan Water Study, and Engineering Control budgets be approved and included in the Five Year Financial Plan Bylaw, including the following revisions:

- 601 Satellite Park Water System Plus \$50,000 Community Works funding
- 650 Shawnigan Lake North Water System + \$467,000 Community Works funding
- 840 Shawnigan Beach Estates Sewer System + \$183,000 Community Works funding
- 660 Honeymoon Bay Water System + \$133,000 Community Works funding
- 613 Dogwood Ridge Water System + \$100,000 Community Works funding
- 604 Lambourn Estates Water System + User Fee increase to correct operating deficit

Purpose: To review sewer and water 2010 budget submissions.

Financial Implications: As noted in each budget.

Submitted by,

Brian Dennison, P. Eng., General Manager, Engineering and Environmental Services

:ilb

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STAFF REPORT

R4

ENGINEERING AND ENVIRONMENTAL SERVICES COMMITTEE MEETING OF FEBRUARY 24, 2010

DATE:

February 16, 2010

FILE NO:

5225-03/BUSY

FROM:

Kate Miller, Manager, Regional Environmental Policy

SUBJECT: Busy Place (Sh-hwuykwselu) Creek Integrated Pilot Function

Recommendation:

That it be recommended that staff proceed with steps to establish a new function based on the Busy Place (Sh-hwuykwselu) Creek Drainage area that would provide the following services:

- 1. Operations and Maintenance of drainage and water management works.
- 2. Accumulation of reserves for eventual replacement /upgrade of works.
- 3. Monitoring of water quality and drainage function.
- 4. Provide input for planning activities and development proposals within the drainage area.
- 5. Ongoing education and outreach.
- 6. Continue development of partnership with other interested organizations and agencies;

and further that upon successful assent of the electorate for this function that \$100,00 of the Community works fund be made available, together with funding from other partners for the necessary drainage works; and that up to \$10,000 be made available from Function 130 – Electoral Feasibility Studies for public consultation to establish the service area.

<u>Purpose:</u> To discuss the Busy Place (Sh-hwuykwselu) Creek watershed as a pilot for the development of low impact development standards and green infrastructure.

Financial Implications: As discussed below.

Interdepartmental/Agency Implications: This pilot has a number of interagency partners who are interested in working with the CVRD to develop more refined tools and mechanisms to support low impact development and water centric planning objectives. A number of other agencies have indicated a willingness to assist in the funding and building of the integrated works, most notably the Ministry of Transportation and Highways. The Ministry of Environment has indicated that they would approve a modified RAR approach should the watershed be dealt with in an integrated way.

<u>Sustainability Implications:</u> This proposed pilot function provides for exploration and integration of social, economic, environmental and cultural objectives utilizing an adaptive management approach. Findings and performance measures that are identified in this watershed will be useful to other planning and green infrastructure efforts.

Background: The Cowichan Basin Water Management Plan, the provincial Living Water Smart and other community initiatives such as the South Cowichan Water Management Plan have indicated a need to develop alternative development strategies to support natural hydrologic cycles. Many of the plans call for low impact development, the protection of riparian areas and native biodiversity as well as maintaining aquifer recharge opportunities. This integrated stormwater design process aims to preserve watershed health as a whole, but is flexible enough to meet community needs and allow development and redevelopment to occur. It allows for tradeoffs so that environmental losses in one area offset are by gains in another thereby meeting the regulatory policy objectives of "no net loss."

This pilot drainage function will explore what low impact development and green infrastructure could mean and how it might best be undertaken throughout the region in a way that meets the specific needs of various landholders. The watershed proposed is ideal for a number of reasons:

- A great deal of information for the watershed is currently available, including LIDAR as a high quality base and a Watershed Drainage technical study provided by MOT to support the project (\$30,000).
- The watershed includes an unused Area E park in the lower area that can be converted to a stormwater attenuation pond and interpretive area as a key component in the green infrastructure "chain" of detention ponds, ditches and detention swales from the top of the watershed to the lower end.
- It is relatively small and includes a broad range of land use types including aggregate extraction, airport, agricultural, residential (R1, R2, R3), industrial and public utilities. The watershed also includes 3 parks and two schools.
- Broad community ENGO support including the support of Cowichan Tribes, the Cowichan Stewardship Roundtable, the Cowichan Valley Naturalists and expertise from a wide range of other's.
- Some indication of other funding and volunteer and in kind support from other partners including DFO Living Rivers, and the Land Conservancy (approximately \$100,000 to date).

The proposed function will include investigation and consideration of integrated stormwater management processes, which could inform current CVRD planning to facilitate development while protecting the environment. These processes could integrate land use planning with stormwater engineering, flood and erosion protection, and environmental protection, balancing the expectations of local citizens, local government, and regulatory agencies. A possible outcome could be an Integrated Stormwater Management Plan.

Submitted by,

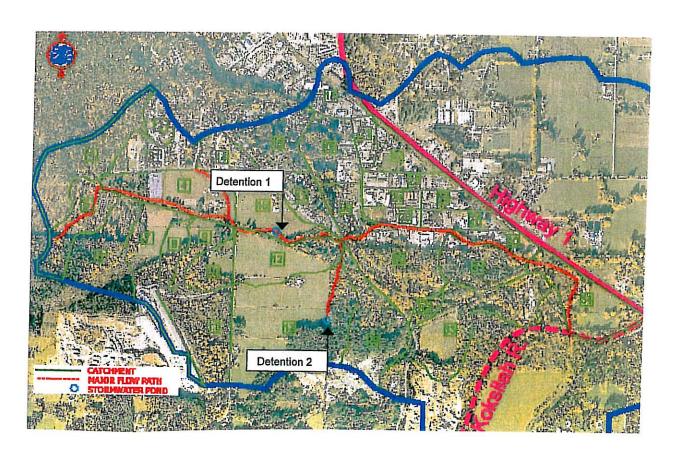
Kate Miller, Manager

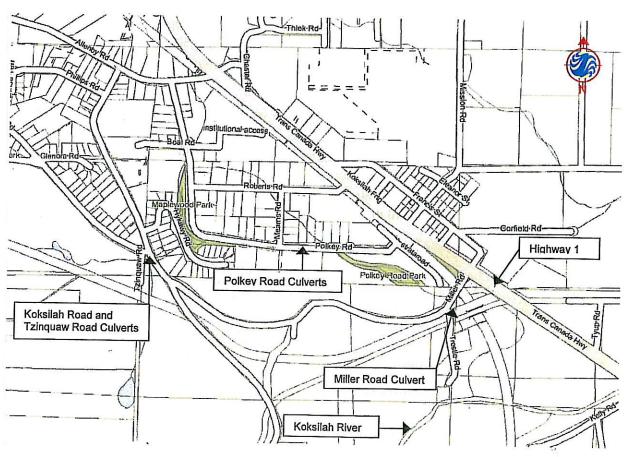
Regional Environmental Policy

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Brian Dennison, General Manager, Engineering and Environmental Services

oved by:







STAFF REPORT

R5

ENGINEERING & ENVIRONMENTAL SERVICES COMMITTEE MEETING OF FEBRUARY 24, 2010

DATE:

February 16, 2010

FILE NO:

5280-06

FROM:

Rachelle Moreau, Environmental Analyst

SUBJECT: Municipal Green Building Leaders

Recommendation:

That the CVRD partner with the Pembina Institute and other local governments in the Municipal Green Building Leaders program.

Purpose: To inform the committee about a green building research and policy development initiative, and request that the CVRD partner in the program.

Financial Implications: None, participation in the program may result in some savings as a result of the significant research and policy development background work that the Pembina Institute is conducting.

Interdepartmental/Agency Implications: Collaboration between the Planning and Development Department and the Engineering and Environmental Services Department will be required. In addition, partnership with the Pembina Institute and other partnering agencies will occur.

Background:

As committee members are aware, the CVRD is currently working on a Regional Energy Plan for the Cowichan region. This project was initiated to analyze energy usage within the region. identify areas of high potential for renewable energy systems, and develop policies that will result in a more energy diverse and resilient community.

One component of the plan project is to research and develop policies that will result in higher efficiency buildings, and to investigate the possible use of renewable energy to provide a portion of the region's energy requirement. There are many benefits to increasing the energy efficiency of buildings and development, as well as diversifying our energy portfolio to include renewable energy. However, as with any new initiative, there are some unknowns.

It has recently come to our attention that the Pembina Institute is partnering with many BC local governments, developers, home owners, real estate agents, contractors, utilities, environmental organizations and the provincial government to collaboratively design and implement new green building policies. Specifically, they are researching and developing policies around increasing the energy performance of buildings and renewable energy for new homes and buildings.

.../2

Local governments, who partner in the program, have the opportunity to provide direction and input into the policy development, as well as to implement new green building initiatives. Types of input required include submitting data regarding the number and types of construction or renovations occurring each year and direction on research to ensure local government questions are being answered.

The CVRD was already embarking on similar work, and now the opportunity has arisen to partner with an organization that has access to a wide network of local governments, other stakeholders, and the provincial government. Deborah Curran and Company, a firm providing legal strategies for smart growth and sustainability, is also engaged in the project to provide legal support to local governments. The Pembina Institute has been involved with many projects focused on policy research and leadership on climate change and energy issues, and they are in a good position to provide leading edge data and information as well as to quantify results in reduced energy costs for buildings and reductions in greenhouse gas emissions.

This seems like an excellent opportunity for the CVRD to partner with the Pembina Institute, other local governments and organizations, and to take advantage of the research and knowledge that is being acquired through the project. Participation in this program will result in the CVRD not duplicating work that is already underway elsewhere in the province.

For the Committee's reference, please find attached an overview of the program prepared by Pembina, as well as selected slides from a recent presentation to the partners regarding the project timeline and components (currently online at www.greenbuildingleaders.ca).

Brian Dennison, General Manager

Engineering and Environmental Services

Submitted by,

Rachelle Moreau

Environmental Analyst

Regional Environmental Policy Division

RM:jlb

Bath: Z:\ESMemos2010\Municipal green building-Feb24-10.doc

Leading the Way to Greener Buildings

British Columbia's municipalities and the provincial government have taken positive steps to encourage the development of green homes and buildings. However, buildings still account for about 12% of the province's total greenhouse gas emissions.

The Municipal Green Building Leaders Project will bring together municipalities, developers, home owners, real estate agents, contractors, utilities, environmental organizations, and the provincial government to work collaboratively on the design and implementation of new green building policies.

The project is an opportunity for leading municipalities to adopt progressive green building regulations that will help their communities reduce emissions while setting the stage for broader change in the province.

Part of the Climate Change Solution

British Columbia has made a bold commitment to fight global warming. Reducing emissions from homes and buildings is an important component of the province's overall climate strategy. Improved energy efficiency and increased use of renewable energy could significantly reduce greenhouse gas emissions from homes and buildings. British Columbia municipalities, which have a history of taking action on climate and energy issues, have an opportunity to lead the province in the development and implementation of new green building initiatives.

New Tools for Greener Buildings

Historically, federal, provincial and municipal governments have mostly used grants and incentives to encourage greener buildings. While grants and incentives are important tools in the toolbox, new tools are needed to ensure that our homes and buildings meet or exceed the province's commitment to reduce greenhouse gas emissions. Local governments that participate in this project will work to design and implement:

- 1. Energy performance standards for homes and buildings that are for sale or undergoing major renovations.
- 2. Renewable energy requirements for new homes and buildings.
- 3. Higher energy performance standards for new homes and buildings.

Project Partners

Municipal project partners include Dawson Creek, Prince George, Whistler, Delta, Terrace, and Smithers. The Pembina Institute is seeking additional municipalities to participate in the project.

Deborah Curran & Company, Lighthouse Sustainable Building Centre, and the Whistler Centre for Sustainability will be working with the Pembina Institute to provide support to the municipalities.

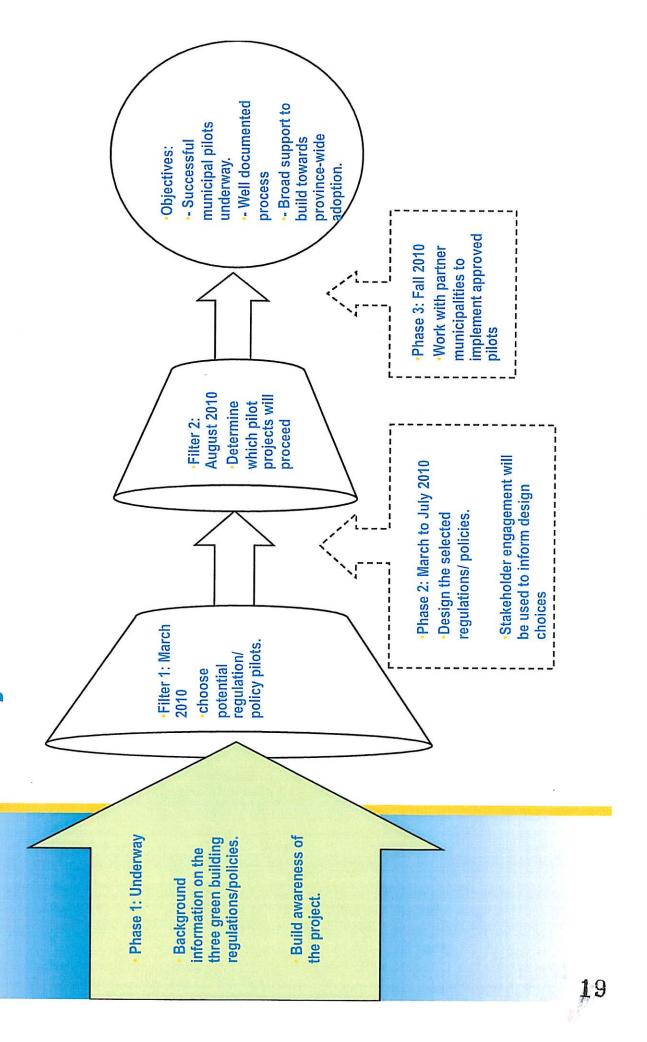
Find Out More and Get Involved

More information about the Municipal Green Building Leaders Project can be found at http://bc.pembina.org.

If you would like to learn more or get involved in the project, please contact Matt Horne at matth@pembina.org, 604 874 8558, ext 223 or Alison Bailie at alisonb@pembina.org, ext 222.

August 14, 2009 Page 1

Project Timeline



Green Building Leaders Municipalities Municipal Partners:

- Dawson Creek
- City of North Vancouver
- Prince George
- Terrace
- Delta
- District of West Vancouver
- Resort Municipality of Whistler
- Smithers



Green Building Leaders Municipalities

Observers:

- Abbotsford
- District of North Vancouver
- New Westminster
- Salmon Arm
- Surrey





Green Building Policy Papers

The green building policies include:

- requirements for existing homes and buildings Energy labelling and energy performance (key example - Berkeley, CA).
- Renewable energy requirements for new homes and buildings (key example - Merton, UK).
- Higher energy performance standards for new homes and buildings.

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Green Building Policy Modelling

Preliminary results for CO₂ reduction

Estimation from regional averages

Example: BC-wide Merton Rule



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Green Building Policy Modelling

Next Steps:

- Add Municipal Data to get results specific to each municipality
- Types and Number of Buildings
- **Energy Consumption Data**
- Sales, and Renovations

Economic Modelling



Next Steps

- Collect short term feedback on policy papers
- Discuss funding opportunities Infrastructure grant
- Collect municipality-specific information for modelling (Pembina to provide template)
- February 9th Partner municipalities provided with building code policy paper, draft of municipality-specific modelling results, and the draft of the legal paper.
- Schedule group meeting for modelling results (Feb 15th)
- Schedule group meeting for discussion on legal paper (Feb
- One-on-one discussions of policy papers and modelling results $(March 15^{th} - 26^{th})$
- Next Partners' meeting week of March 29th

Green Building Leaders Municipal Partners Meeting #2