

REGIONAL DISTRICT OF NANAIMO
SUSTAINABILITY SELECT COMMITTEE
WEDNESDAY, MARCH 12, 2014
1:30 PM

(RDN Committee Room)

A G E N D A

PAGES

CALL TO ORDER

MINUTES

2 - 3 Minutes of the Sustainability Select Committee meeting held on Tuesday October 8, 2013.

BUSINESS ARISING FROM THE MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

REPORTS

4 - 8 Carbon Neutral Operations -2013.

9 - 12 Green Building Incentives Program 2014.

 Green Building Outreach Program (Presentation).

13 - 17 Inter-Regional Education Initiative Progress Report.

18 - 21 Community Watershed Monitoring Network Update.

ADDENDUM

BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS

NEW BUSINESS

ADJOURNMENT

IN CAMERA

Distribution: J. Stanhope (Chair), A. McPherson, H. Houle, M. Young, B. Veenhof, J. de Jong, J. Kipp, D. Brennan, M. Lefebvre, D. Willie, P. Thorkelsson, G. Garbutt, C. Midgley, T. Pan, M. Donnelly, D. Keim, N. Hewitt

J. Fell

For information only: G. Holme, J. Ruttan, B. Bestwick, D. Johnstone, T. Greves, G. Anderson, M. Brown, T. Graff, F. Manson, J. Hill, C. Golding, Matt O'Halloran, R. Graves

REGIONAL DISTRICT OF NANAIMO
MINUTES OF THE SUSTAINABILITY SELECT COMMITTEE
MEETING HELD ON TUESDAY, OCTOBER 8, 2013 AT 2:00 PM
IN THE RDN COMMITTEE ROOM

Present:

Director J. Stanhope	Chairperson
Director A. McPherson	Electoral Area A
Director H. Houle	Electoral Area B
Director M. Young	Electoral Area C
Director B. Veenhof	Electoral Area H
Director D. Brennan	City of Nanaimo
Director J. Kipp	City of Nanaimo
Director M. Lefebvre	City of Parksville
Director B. Dempsey	District of Lantzville
Director D. Willie	Town of Qualicum Beach

Also in Attendance:

Director J. Fell	Electoral Area F
P. Thorkelsson	Chief Administrative Officer
G. Garbutt	General Manager, Strategic & Community Development
R. Alexander	General Manager, Regional & Community Utilities
C. Midgley	Manager, Energy & Sustainability
M. Donnelly	Manager, Water Services
D. Keim	Drinking Water & Watershed Protection Coordinator
N. Hewitt	Recording Secretary

CALL TO ORDER

The meeting was called to order at 2:00 p.m. by the Chair.

MINUTES

MOVED Director Lefebvre, SECONDED Director McPherson, that the minutes of the Sustainability Select Committee meeting held on Tuesday July 9, 2013 be adopted.

CARRIED

REPORTS

2013 Green Building Speaker Series.

MOVED Director Veenhof, SECONDED Director Willie, that the report be received.

CARRIED

Quarterly Update – RDN Incentive Program – Visual Presentation.

MOVED Director Lefebvre SECONDED Director Houle, that the verbal report be received.

CARRIED

Rural Water Quality Incentive Program.

MOVED Director Veenhof, SECONDED Director Willie, that the Board direct staff to implement the Rural Water Quality Incentive Program.

CARRIED

MOVED Director Veenhof, SECONDED Director Willie, that the Board direct staff to include the Rural Water Quality Incentive Program in the 2014 budget for Board consideration.

CARRIED

Water Conservation Plan.

MOVED Director Willie, SECONDED Director Brennan, that the Board receive the RDN Water Conservation Plan.

CARRIED

MOVED Director Willie, SECONDED Director Brennan, that the Board receive the RDN Water Conservation Plan and direct staff to include any new costs in the 2014 budget for Board consideration.

CARRIED

NEW BUSINESS

Integrated Resource Plan, BC Hydro – Wind Turbine.

MOVED Director Lefebvre, SECONDED Director Brennan, that correspondence be sent by the Regional District of Nanaimo to BC Hydro indicating that support for renewable energy sources be included in the Integrated Resource Plan.

CARRIED

ADJOURNMENT

MOVED Director Houle, SECONDED Director Veenhof, that this meeting be adjourned.

CARRIED

Time 4:15 pm

CHAIRPERSON



RDN REPORT		###
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MEMORANDUM

TO: Geoff Garbutt
GM, Strategic and Community Development

DATE: March 4, 2014

FROM: Chris Midgley
Manager, Energy and Sustainability

FILE: 6430-05-CNOP

SUBJECT: Carbon Neutral Operations - 2013

PURPOSE

To update the Sustainability Select Committee on progress toward carbon neutral operations for the Regional District of Nanaimo (RDN) for 2013.

BACKGROUND

In 2008, the RDN and member municipalities signed the Climate Action Charter, thereby committing to develop strategies and take actions to achieve carbon neutral operations by 2012. In February 2013, the RDN confirmed that the jurisdictions participating in the RDN Solid Waste service achieved carbon neutral operations for the 2012 emission inventory year.

Through the organic diversion program, the Solid Waste service diverts compostable organic matter from the Cedar Road Landfill to a local composting facility. For every tonne of diverted organic waste, a measurable quantity of emissions is avoided. This is due to the fact that properly composted organic matter produces less methane than organic waste decomposing in the anaerobic conditions of a landfill.

For 2012, carbon neutral operations were achieved because two full years of organic diversion (2011 and 2012) were counted against one annual corporate emission inventory (2012). In fact, the two years of organic diversion yielded more reductions than necessary for each jurisdiction, resulting in a surplus of reductions to count against 2013 emissions.

For 2013, only organic waste diverted in 2013 is available to be counted against the 2013 corporate emission inventory year. In 2013, a total of 2,896 tonnes of organic waste was diverted through the RDN Green Bin program, resulting in 1,413 tonnes of reductions. These reductions are shared across participating jurisdictions in proportion to the number of households receiving the service. Table 1 outlines the number of participating households, and resulting reductions apportioned to each jurisdiction participating in the RDN Solid Waste service in 2013.

Table 1: Share of Emission Reductions for Communities Participating in RDN Organic Diversion (2013)

Jurisdiction	Number of Households	Share of 1,413 Tonnes of Reductions
RDN	16,785	880 t
City of Parksville	4,900	257 t
Town of Qualicum Beach	3,850	202 t
District of Lantzville	1,406	74 t

This still results in more than the necessary reductions for the District of Lantzville to achieve carbon neutral operation. Combined with the prior year's surplus of reductions, the City of Parksville also has more than the necessary tonnes of reductions to achieve carbon neutrality for 2013. For the RDN however, corporate emissions in 2013 amount to 1,236 tonnes CO₂e, while organic diversion generated 880 tonnes of reductions. As such, the RDN faces a shortfall of 356 tonnes for the 2013 inventory year (the Town of Qualicum Beach will have an estimated shortfall of 130 tonnes). Appendix 1 provides a summary of the RDN's 2013 corporate emission inventory.

As noted above, participation in organic diversion in 2013 has generated more reductions than necessary to achieve carbon neutral operations for the District of Lantzville and the City of Parksville. Specifically, after accounting for corporate emissions and reductions from organic diversion in 2013, the District of Lantzville has a surplus of approximately 170 tonnes of reductions and the City of Parksville has a surplus of 195 tonnes.

The approach to emission management has generally been a collaborative regional effort with the RDN taking a lead role in supporting the member municipalities to develop corporate emission inventories and access tools that simplify calculating emissions and reductions. In consideration of this, the RDN has made a preliminary request that the District of Lantzville consider transferring 161 of its 170 tonne surplus back to the RDN and the City of Parksville consider transferring all 195 tonnes of its surplus emissions back to the RDN.

Taken together, this covers the 356 tonnes remaining in the RDN corporate emission inventory after accounting for 2013 organic diversion reductions. The result of this sharing of reductions is that the RDN achieves corporate carbon neutrality for the 2013 emission inventory year, along with the District of Lantzville and the City of Parksville. This does not address the 130 tonne gap between corporate emissions and organic diversion for the Town of Qualicum Beach.

This approach represents a shift from the strategy initially envisioned for the RDN for 2013. Initially, staff estimated that corporate emissions for 2013 would total 1,240 tonnes, and that reductions from organic diversion would be close to 900 tonnes, therefore insufficient to achieve carbon neutral operations. Rather than counting 2013 reductions from organic diversion against 2013 corporate emissions, staff intended to report no reductions, and carry all 2013 reductions forward to count against 2014 emissions. Under this approach, the RDN would report 'making progress' toward carbon neutral operations in 2013, then achieve carbon neutral operations in 2014. This remains a viable alternative, with the sole implication being the reputational implication of not achieving carbon neutral operations.

ALTERNATIVES

1. That the RDN enter discussion to formalize a transfer of 161 tonnes of emission reductions from the District of Lantzville to the RDN, 195 tonnes from the City of Parksville to the RDN, and report that carbon neutral operations has been achieved for the 2013 corporate emission inventory year.
2. That no tonnes be transferred between jurisdictions, and that the RDN reports making progress toward carbon neutral operations.
3. That alternate direction be provided.

FINANCIAL IMPLICATIONS

Firstly, it is important to note that the emission reductions arising from participation in the organic diversion program have no market value. They can neither be bought nor sold. They can be freely shared between organizations that make a voluntary commitment to achieve carbon neutral operations, but not with organizations legislated to achieve carbon neutral operations.

They do have a financial value to the RDN and member municipalities insofar as the RDN and each member municipality have agreed to set aside funds in an amount equal to \$25 multiplied by each jurisdiction's respective corporate inventory after accounting for reductions. These funds are intended to be used to implement regional emission reduction projects. Based on the \$25 per tonne value, a 356 tonne emission inventory would require placing \$8,900 in reserve, and a 1,240 tonne inventory would require placing \$31,000 in reserve.

For Alternative 1, the RDN would achieve carbon neutral operations for the 2013 inventory year, and would not be required to place any funds in reserve. The impact to the City of Parksville is the loss of its surplus emissions to count against future corporate inventories. However, the RDN and the City of Parksville agreed that the RDN would complete the City's corporate emission inventory for 2013 on a fee for service basis – work that has already been completed. In lieu of charging the City of Parksville a fee, the RDN would consider the transfer of 195 tonnes of reductions as payment for the service rendered, thereby eliminating an actual financial cost to the City of Parksville for 2013. The transfer of 195 tonnes of surplus reductions from Parksville to the RDN may present a challenge for the City in terms of achieving carbon neutral operations for the 2014 inventory year.

There is no financial impact to the District of Lantzville for transferring 161 tonnes of surplus reductions to the RDN. As described, the reductions arising from organic diversion have no market value, therefore cannot be a source of revenue for the municipality. On an annual basis, participation in organic diversion produces approximately 50% more reductions than what is needed to neutralize emissions from local government operations in Lantzville. Therefore the transfer of 161 tonnes of reductions to the RDN poses very little risk against achieving corporate carbon neutrality in future years.

For Alternative 2, the City of Parksville would be charged a fee for the emission inventory service provided by RDN staff. The amount has yet to be determined, but will be based on the time RDN staff spent completing the City of Parksville corporate emission inventory. There are no financial implications for the District of Lantzville associated with Alternative 2.

For the RDN, Alternative 2 presents two options, each with distinct financial implications. The first is for the RDN to count all available reductions from organic diversion against the 2013 inventory year, and transfer \$8,900 into reserve to account for the 356 remaining tonnes of emissions. A second option is to not count any reductions from 2013 organic diversion against the RDN's 2013 corporate inventory, and transfer \$31,000 into reserve to account for the approximately 1,240 tonnes of carbon dioxide equivalent that comprise the 2013 corporate emission inventory. This cost was anticipated prior to considering sharing reductions regionally, and has already been accounted for on a service by service basis in the 2014 budget. These funds, if placed in reserve provide a source of revenue to invest in regional emission reduction projects that provide a direct, tangible benefit to local residents. For this second option, all 2013 reductions will be counted toward 2014 reductions. The outcome of this approach is for the RDN to report that progress has been made toward carbon neutral operations in 2013, and that carbon neutral operations will be achieved in 2014. A second outcome is to pursue regional emission projects over the course of 2014 with the funds placed in reserve.

Alternatives that involve purchasing offsets have not been contemplated due to the fact that such an approach would involve investing local tax dollars outside of the community, with no direct benefit to RDN residents.

STRATEGIC PLAN IMPLICATIONS

Taking a cooperative approach to achieving carbon neutral operations by sharing expertise, effort and the beneficial outcomes of participation in the regional organic diversion program is an exemplary application of Regional Collaboration – the Board Strategic Priority that aims to ensure that benefits are shared as broadly as possible across the Region.

Working together toward the common goal of carbon neutral operations has strengthened relationships between the RDN and member municipalities, has helped establish a consistent approach to monitoring and reporting corporate emissions, and has created the unique opportunity to share emission reductions regionally in a manner that respects the public’s expectation that local governments deliver results while demonstrating fiscal restraint.

SUMMARY/CONCLUSIONS

As a signatory to the Climate Action Charter, the Regional District of Nanaimo committed to develop strategies and take actions to achieve carbon neutral operations in 2012. This goal was achieved as a result of the RDN Green Bin program operated by the Solid Waste service that diverts organic waste from the Cedar Road Landfill to a local composting facility. However for 2012, two years of diversion were counted against a single emission inventory year. This is not the case for 2013. As a result, while organic diversion will still yield carbon neutral operations for the City of Parksville and the District of Lantzville and in fact has resulted in a surplus of reductions for those jurisdictions, the RDN and the Town of Qualicum Beach face a shortfall of 356 and 130 tonnes respectively.

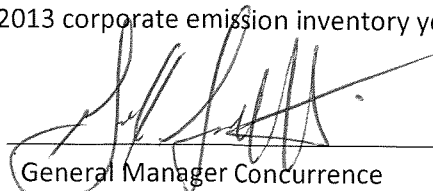
Considering the assistance the RDN has provided to Lantzville and Parksville in completing corporate emission inventories and accessing the tools to simplify calculating emissions and reductions, the RDN has informally requested the District of Lantzville to transfer 161 tonnes of its surplus reductions to the RDN, and the City of Parksville to transfer all 195 tonnes of its surplus reductions to the RDN. Though this does not address the shortfall in reductions faced by the Town of Qualicum Beach, this collaborative approach would enable the RDN, along with the District of Lantzville and the City of Parksville to report that carbon neutral operations were achieved for 2013.

RECOMMENDATION

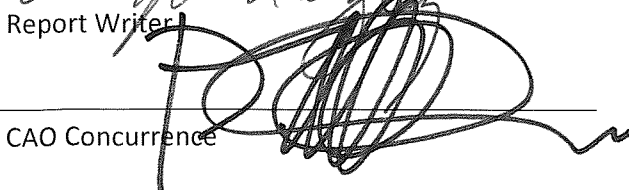
That the RDN enter discussion to formalize a transfer of 161 tonnes of emission reductions from the District of Lantzville to the RDN, 195 tonnes from the City of Parksville to the RDN, and report that carbon neutral operations have been achieved for the 2013 corporate emission inventory year.



Report Writer



General Manager Concurrence



CAO Concurrence

Appendix 1: Regional District of Nanaimo Corporate Emission Inventory
(2013)

Emission Source	Total Consumption	Emission Factor	Emissions (t CO₂e)
Electricity	11,731,844 kwh	14 grams / kwh	164.25
Natural Gas	13,353 GJ	50.16 kg/ GJ	669.79
Gasoline (fossil)	69,339 litres	2.36 kg / litre	163.63
Gasoline (bio – 4% ethanol)	2,889 litres	0.185 kg / litre	0.53
Diesel (fossil)	23,038 litres	2.63 kg/ litre	60.49
Diesel (bio – 5% BD)	1,213 litres	0.070 kg / litre	0.084
Propane	14,063 litres	1.53 kg / litre	21.55
Contracted Diesel (fossil)	241,089 litres	2.61 kg / litre	628.06
Contracted Diesel (bio – 5% BD)	12,689 litres	0.049	0.625
Total Emissions (2013)			1,709 t CO₂e
Less 191 tonnes from Correction for 2012 Electricity Emission Factor			(191)
Sub-Total			1,518
Less 282 tonnes of Surplus Reductions from 2011-2012 Organic Diversion			(282)
Sub-Total			1,236
Less 880 tonnes of Reductions from 2013 Organic Diversion			(880)
Total Reported Emissions from 2013			356 t CO₂e



RDN REPORT		[Handwritten Signature]
CAO APPROVAL		
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MEMORANDUM

TO: Chris Midgley
 Manager, Energy and Sustainability

DATE: March 4, 2014

FROM: Ting Pan
 Sustainability Coordinator

FILE: 6430-05-GBIP

SUBJECT: Green Building Incentives 2014

PURPOSE

To propose a Green Building Incentive Program design for 2014.

BACKGROUND

The Green Building Incentive Program (the Program) has been offered to the residents in the Regional District of Nanaimo's (RDN) Electoral Areas and the District of Lantzville since 2011, and 2013 was the most successful year so far. Following the changes made to the Program in 2013, the Sustainable Development Checklist and Renewable Energy Incentives received increased interest and applications. Table 1 below summarizes how the program budget was distributed since its inception in 2011.

Table 1: 2011-2013 Green Building Incentive Summary

Incentive	Distribution of Incentives		
	2011	2012	2013
Home Energy Assessment	\$2,220	\$7,450	\$8,670
Woodstove Exchange	\$10,750	\$33,750*	\$38,500*
Site-cut Timber		\$95	\$488
Renewable Energy Systems			\$1,000
EV Charging Station			\$250
Checklist Meeting**		\$150	\$50
Checklist Score			\$4,000
Total	\$12,970	\$41,445	\$52,958

*Includes rebates provided through grants from the BC Lung Association in 2012 and 2013

** Discontinued in 2013

For 2014, changes at the provincial and federal levels will have a direct impact on the Program. Provincial grants from the BC Lung Association for the RDN Woodstove Exchange Program (\$12,000 in 2012; \$14,500 in 2013) will not be available in 2014. The LiveSmart BC program that contributes \$150 to each completed Home Energy Assessment, as well as additional incentives for completing renovations is winding down with no indication of continuation beyond March 31, 2014. At the federal level, the EnerGuide rating system for homes is being overhauled by Natural Resources Canada and the revised rating system is expected to be released sometime in 2014.

Program Implications

In response to these external changes, it is proposed that the 2014 incentive program incorporate the following changes:

1. Offer \$250 Woodstove Exchange rebates between October and March. Deactivate for summer.

Without grants from the Province, the Program budget is insufficient to sustain Woodstove Exchange Program at the levels seen in previous years. The busiest time of the year for woodstove exchanges is the period between October and March. Scheduling the RDN program to begin when residents plan their exchanges for the winter season and as retailers begin marketing and offering their own incentives will build on retailers' efforts and provide residents with greater certainty on the availability of rebates.

2. Increase the initial Home Energy Assessment rebate to 50% of the assessment cost, up to \$150.

The actual cost of an initial Home Energy Assessment is \$300. Since 2008, the Province has contributed \$150 to that cost, and since 2010 the RDN has offered an additional \$60. For many homeowners, the real incentive for a Home Energy Assessment is the resulting access to additional incentives for subsequent renovations. In March 2013, the Province dramatically reduced incentives available for renovations. Since that time, participation in the RDN Home Energy Assessment Incentive has gradually declined and is now essentially inactive. In April 2014, the provincial incentives for Home Energy Assessments are also expected to disappear.

Regardless of the availability of further incentives, the initial home energy assessment is a valuable tool for homeowners to learn about the most cost-effective energy efficiency measures they can take. Ensuring the RDN rebate covers 50% of the cost of an initial assessment, up to \$150, sends a strong signal to RDN residents that home energy efficiency is worthwhile to understand and that investing in energy efficiency, renovations and retrofits benefits the homeowner while making an important contribution to the local economy.

3. Incorporate the next generation of EnerGuide rating in Home Energy Assessment and Sustainable Development Checklist Incentives, once the new EnerGuide is launched.

The EnerGuide rating system has gained significant recognition nation-wide since its introduction in 1998. The next generation of the EnerGuide rating system is expected to be released in April 2014, assuming no delays. The RDN's Home Energy Assessment and Sustainable Development Checklist Incentives both reference the EnerGuide rating system. Since the current rating will be phased out this year, it will be necessary to incorporate the new EnerGuide system into how these incentives are provided. No changes are proposed to the dollar value of the incentives offered by the RDN, but the structure of both incentives will be revised to accommodate the new system.

All other incentives will remain unchanged. If approved, the revised Green Building Program will become effective April 1, 2014.

ALTERNATIVES

1. That the 2014 Green Building Incentive Program be approved.
2. That the 2014 Green Building Incentive Program be unchanged from 2013.
3. That alternate direction be given to staff.

FINANCIAL IMPLICATIONS

Alternatives 1 and 2 have no distinct implications for revenue requirements for the Green Building Incentive Program. Under both Alternatives, the Program will be funded with \$20,000 from the Building Inspection service. Unlike 2012 and 2013, no senior government funding has been identified.

The proposed changes for the 2014 Green Building Incentive Program reflect the elimination of provincial funding for Woodstove Exchange Programs and the reduction in support for home energy assessments and renovations. For 2014, RDN incentives for woodstove exchanges will be reduced from \$38,500 in 2013, to approximately \$10,000, or from 154 rebates to 40 rebates. For Alternative 1, the concentrated period for which woodstove exchange rebates are available is intended to result in a more targeted effort, increase certainty around the availability of incentives and reduce staff time processing applications.

Also under Alternative 1, an increased dollar value for initial home energy assessment rebates is intended to ensure that residents of the region continue to undertake these valuable tests. Of the \$8,670 disbursed for all Home Energy Assessments in 2013, \$3,900 supported 65 initial Home Energy Assessments. Without senior government support, it is anticipated that fewer homeowners will invest in Home Energy Assessments in 2014. Reserving approximately \$6,500 of the \$20,000 in Program funding will provide \$150 to 43 initial Home Energy Assessments, or two-thirds the number supported in 2013.

For Alternative 2, homeowners who invest in Home Energy Assessments will be eligible to receive \$60, however a \$60 rebate is not expected induce residents to do the work. At that value, staff believe that incentives would only be provided to homeowners who would have completed the assessment in the absence of the rebate. To actually encourage residents to undertake the assessment, the higher dollar value rebate is recommended.

As noted, the Alternatives presented will not change the total amount of funding allocated to the Program. For Alternative 1, the proposed changes are likely to cause more funds to be distributed to Home Energy Assessments and shift the disbursement of funds to woodstove exchange rebates to the October – December period. For Alternative 2, funds will likely be disbursed slowly throughout the year with virtually all funds supporting woodstove exchanges.

STRATEGIC PLAN IMPLICATIONS

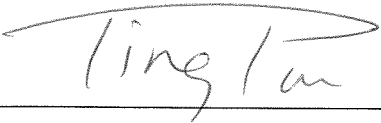
The Green Building Incentive Program supports residents' commitment to building a sustainable and resilient future, and generates local investment in energy efficiency and the development sector. Conversations with interested residents show that the interest in alternative energy systems and high performance buildings is strong, and represents opportunities to build local capacity and create economic benefits to the region.

SUMMARY/CONCLUSIONS

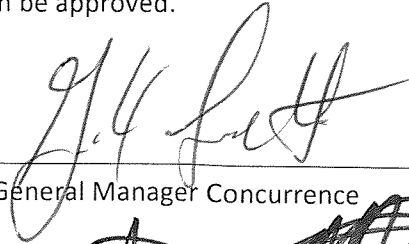
The Green Building Incentive Program was extremely successful in 2013, with participation in all incentive types and all allocated funds fully utilized by October. Moving forward, several adjustments to the program are necessary in response to changes at provincial and federal governments. These include postponing the start of the Woodstove Exchange rebate until October, increasing the initial energy assessment rebate from \$60 to \$150, and incorporating the new EnerGuide rating to the Home Energy Assessment and Sustainable Development Checklist Incentives.

RECOMMENDATION

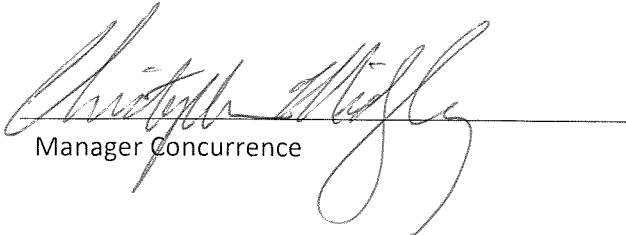
That the proposed 2014 Green Building Incentive Program be approved.



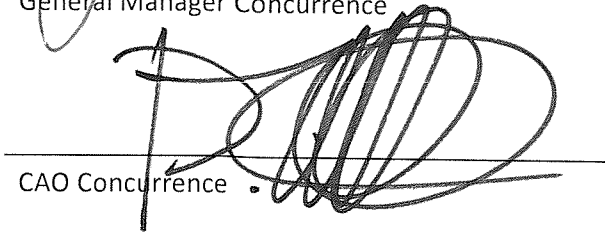
Report Writer



General Manager Concurrence



Manager Concurrence



CAO Concurrence

TO: Randy Alexander
General Manager, Regional and Community Utilities

DATE: March 4th, 2014

FROM: Mike Donnelly
Manager of Water & Utility Services

FILE: 5600-00

SUBJECT: Inter-Regional Education Initiative – Progress Report

PURPOSE

To update the Board on the progress of the Inter- Regional Education Initiative partnership activities.

BACKGROUND

In March of 2012, the Board endorsed the “Rainwater Management & Water Sustainability Inter-Regional Education Initiative promoted by the Partnership for Water Sustainability in BC (PWSBC). PWSBC is a non-profit society, incorporated in 2010, that is helping the province implement the province’s Living Water Smart and Green Communities initiatives.

The partnership between the PWSBC and Regional Districts along the east coast of Vancouver Island focuses on education, collaboration and sharing of ideas and experiences on water sustainability and rainwater management best practices. The Capital, Cowichan Valley, Comox Valley Regional District and, since the inception of this program, Metro Vancouver Regional District have all joined the partnership.

The main objectives of the partnership include;

- Advancing watershed sustainability and green infrastructure practices Vancouver Island wide.
- Linking activities among the regions so all areas can benefit from lessons learned.
- Increasing collaboration and alignment of efforts across boundaries.
- Sharing information and experiences.
- Promoting tools and opportunities for local governments and the development community to gain an understanding of why and how to integrate the site with the watershed and stream.
- Increasing effectiveness of decisions about the use and conservation of water assets.

The attached “Progress Report to Partners” provided by the PWSBC provides an overview of the activities to date under this program. The Regional District of Nanaimo has been involved in the development of the educational program and has benefitted from a presentation made by Metro Vancouver Regional District on the development of their Integrated Watershed Management plans.

There are five collaborative educational initiatives in the series with our region providing a session on April 29th of this year. This session will be focused on the development of partnerships as part of a collective approach to attaining goals and objectives.

The Initiative is beneficial in that it provides an opportunity to more fully understand the activities each region is undertaking to achieve watershed sustainability. It provides a forum for discussion and the development of concepts through discussion and participation. The initial session held in January and presented by Metro Vancouver was attended by staff members from Water & Utility Services, Waste Water Services and Current Planning.

ALTERNATIVES

1. Receive this report for information.
2. Do not receive this report.
3. Provide alternate direction to staff.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this partnership outside of staff time for presentations and to attend educational sessions and associated travel time.

INTER-DEPARTMENTAL IMPLICATIONS

The development of watershed sustainability initiatives in our region will require the collaboration of a number of departments all of which will benefit from the educational and participatory activities under this program.

STRATEGIC PLAN IMPLICATIONS

The Board's Strategic Plan emphasizes the need for collaboration with other regional districts and levels of government for the effective management of water resources. Working together with Vancouver Island Regional Districts and the Metro Vancouver regional district on this educational initiative addresses that important goal.

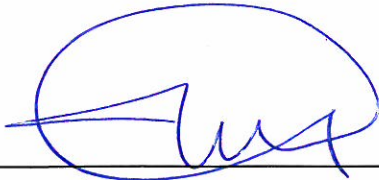
SUMMARY/CONCLUSIONS

The Inter-Regional Education Initiative introduced in 2012 has progressed as originally intended with educational initiatives being developed and delivered. The program provides for 5 inter-regional collaborative sessions one of which has already been held. The Regional District of Nanaimo will host the third session in the series on April 29th of this year which will focus on the importance of partnerships in attaining goals and objectives.

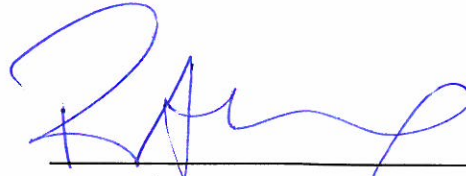
This initiative is very effective in providing current information on approaches to watershed sustainability. The forums provide a valuable inter departmental learning experience for staff that will assist in future development of initiatives and policy.

RECOMMENDATIONS

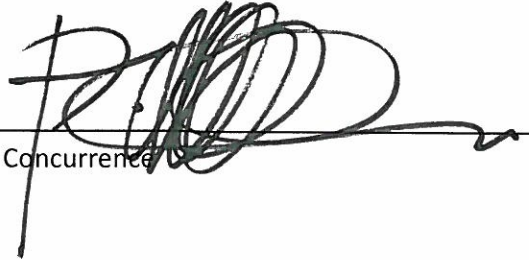
1. That Inter-Regional Education Initiative Partnership Progress Report be received for information.



Report Writer



General Manager Concurrence



CAO Concurrence



PROGRESS REPORT TO PARTNERS	
DATE:	February 2014
TO:	Regional District of Nanaimo
FROM:	Kim A Stephens, M.Eng., P.Eng., Executive Director
RE:	INTER-REGIONAL COLLABORATION FOR WATERSHED SUSTAINABILITY

SCOPE:

The *Inter-Regional Education Initiative* supports implementation of integrated and watershed-based community planning processes on the east coast of Vancouver Island and in the Lower Mainland. A desired outcome of inter-regional collaboration is accelerated implementation of affordable and effective watershed sustainability and green infrastructure practices. The purpose of this progress report is to:

1. thank the Regional District of Nanaimo for its support of inter-regional collaboration;
2. inform the Regional District of Nanaimo about the scope of the 2014 Work Plan; and
3. foreshadow the 2014 deliverable and its anticipated application in the years ahead.

BACKGROUND:

In 2012, the Partnership for Water Sustainability in British Columbia asked the Boards of five regional districts – namely Capital, Cowichan Valley, Nanaimo, Comox Valley and Metro Vancouver – to endorse local government collaboration under the umbrella of the *Inter-Regional Education Initiative (IREI)*; and furthermore, to support a grant application to UBCM for a “Gas Tax Fund Capacity-Building Grant”.

The grant application was not successful. Nevertheless, the partners carried on and are now in Year 3 of inter-regional collaboration. The Province has provided funding for the Partnership’s facilitating role.

IMPLEMENTATION:

A goal of inter-regional collaboration is to help everyone go farther, more efficiently and effectively.

In 2012, each region hosted a ‘sharing and learning’ event to initiate the IREI program. Year 1 constituted the ‘proof-of-approach’ for aligning efforts and leveraging more with the same resources.

In 2013, a group of local government champions representing the five geographic regions convened as an inter-regional leadership team and committed to working together to achieve this goal: **Restore and/or protect stream and watershed health**. Alignment with provincial policies is a critical success factor.

In 2014, the partner regions are hosting a series of Inter-Regional Collaboration Sessions. This process aligns with each region’s priorities and individual work plans. Regions will be sharing and learning from each other. The deliverable is a workbook that may be used by local governments as a guidance document to adjust actions, inform watershed planning, and create a legacy (i.e. healthy watersheds and streams). To learn more, refer to ATTACHMENT #1 for details of the 2014 Work Plan.

Inter-Regional Collaboration in the Georgia Basin

Attachment #1 - Overview of 2014 Work Plan & Collaboration Deliverable

WHY	<ul style="list-style-type: none"> ▶ Watershed/stream health and rainwater/stormwater management are priorities for communities on the east coast of Vancouver Island and in the Lower Mainland region ▶ Communities have been struggling with the question of how best to move forward on the Watershed Health issue, particularly in light of a changing climate and financial drivers to provide higher levels-of-service at reduced levels-of-cost ▶ Inter-regional collaboration is helping each region understand what the other regions are doing, what works and what does not ▶ Collaboration will help everyone better deliver on regulatory requirements, especially for the watershed/rainwater component of Liquid Waste Management Plans (LWMPs)
WHAT	<ul style="list-style-type: none"> ▶ The collaborating regions view the Watershed Health issue through complementary lenses that together form a complete picture ▶ Each region has something unique to contribute to the mix: <ol style="list-style-type: none"> 1. Metro Vancouver – <i>watershed plan effectiveness</i> 2. Capital Region – <i>water quality assessment</i> 3. Nanaimo Region – <i>partnerships</i> 4. Cowichan Valley – <i>climate change adaptation</i> 5. Comox Valley – <i>sustainable service delivery</i> ▶ The inter-regional deliverable is a workbook on application of performance monitoring approaches that are affordable, effective and adaptive
SO WHAT	<ul style="list-style-type: none"> ▶ The vision is that collaboration would result in implementation of standards of practice that are affordable and effective in maintaining healthy watersheds and streams ▶ The mantra for inter-regional collaboration is framed in these terms: <i>Through sharing and learning, ensure that where we are going is indeed the right way</i>
NOW WHAT	<ul style="list-style-type: none"> ▶ Organize a series of Inter-Regional Collaboration Sessions: <ul style="list-style-type: none"> □ Springboard Session – January 23 (hosted by the Province in Victoria) □ Capital Region – March 28 (in Victoria) □ Nanaimo Region – April 29 (in Nanaimo) □ Cowichan Valley – May 27 (in Duncan) □ Comox Valley – week of June 23 (in Courtenay) ▶ At each regional session, inform and educate the local audience about necessary actions to fulfil regulatory objectives, commitments and requirements in the host region ▶ Compile the set of session outcomes in a workbook that provides guidance ▶ Report out in early 2015
THEN WHAT	<ul style="list-style-type: none"> ▶ The workbook would inform anyone involved in a watershed health monitoring process ▶ The workbook would be the starting point for sharing, learning and adapting over time ▶ The workbook may be used by local governments to adjust actions, inform community and watershed planning, and create a legacy (i.e. healthy watersheds & streams)

TO: Mike Donnelly
Manager of Water & Utility Services

DATE: February 28, 2014

FROM: Julie Pisani
Drinking Water & Watershed Protection Coordinator

FILE: 5600-07

SUBJECT: Update on the Community Watershed Monitoring Network

PURPOSE

To provide an update report on the Community Watershed Monitoring Network initiative under the Drinking Water and Watershed Protection program.

BACKGROUND

The Community Watershed Monitoring Network (CWMN) is a partnership between local volunteer stewardship groups, BC Ministry of Environment (MOE) and the RDN Drinking Water and Watershed Protection (DWWP) program. These groups came together starting in 2011 under the common goal of tracking water quality in the creeks, rivers and streams in our communities. Prior to this initiative, MOE had been performing surface water quality sampling on a limited basis within our region. This partnership has allowed data to be gathered from more watersheds and subwatersheds over a greater geographic range within our region than before. The data collected will allow the RDN to identify trends in water resources, conserve resources and support better land use decision making.

The partnership works as follows:

- The MOE provides training on how to use the monitoring equipment and how take the samples according to provincial standard, analysis and reporting on the data, and entry into provincial EMS database;
- The RDN DWWP provides and maintains the monitoring equipment (acquired with grant money in 2011), and is the lead on the administration / organization of the program;
- The stewardship groups (10 in total) volunteer their time to collect data from their local streams once per week for 5 weeks in the summer low-flow period (Aug – Sept) and one per week for 5 weeks during the fall-flush period (Oct-Nov);
- Island Timberlands contributed to this program by providing access to their land for certain monitoring sites, providing personal protective equipment for the volunteers and by covering the costs of the Quality Assurance / Quality Control lab analysis.

As of 2013, 51 sites in 17 watersheds within our region were monitored as a part of this program (see Appendix 1). Of the 10 volunteer stewardship groups that now participate in the program, 5 groups have been monitoring since 2011 and now have three years of data for their sample sites. This translates into 26 sites in 8 watersheds that have three years of data.

According to the MOE, trend analysis can only begin after a minimum of three-years of data has been collected. Analyzing trends over a three-year sample period, a) provides a consistent set of baseline

water quality data; b) identifies which streams exceeded water quality guidelines for any of the parameters measured – temperature, dissolved oxygen or turbidity – within the three year sample period; and c) points to where to direct more in-depth water monitoring and where to prioritize further studies and Integrated Watershed Management Plans.

The volunteer stewardship groups and the public were presented the data analysis by Rosie Barlak of the MOE on Thursday Feb. 13th, 2014 at the Parkville Community and Conference Centre. It was reported that 7 sites in 4 watersheds over the three-year period displayed multiple exceedances concerning temperature, turbidity and dissolved oxygen. This is qualified by the fact that many of the exceedances were slight and just marginally above guidelines. What these findings offer is direction on where to expand/ prioritize monitoring efforts. Actions that may come out of these results include:

- potential to include new monitoring point(s) upstream of the sites that displayed exceedances in turbidity an attempt to identify point of contamination;
- use the data and trends analysis to support application for grant funding for stream surveys, vegetation surveys, flow monitoring, to place the water quality data in the context of the stream environment;
- selectively choose to perform more detailed water quality analysis where both turbidity and dissolved oxygen are not meeting guidelines, as funding allows (i.e. full spectrum testing for metals, nitrates, coliforms etc.)

For the waterways that appear consistently healthy and did not display exceedances, maintaining ongoing monitoring is still very helpful to track water quality over time. However, in these waterways the number of sample sites could be reduced to achieve efficiency of resources if needed.

There are 25 sites that require at least another year of monitoring to reach the three year minimum.

ALTERNATIVES

1. Receive this report for information.
2. Do not receive this report.
3. Provide alternate direction to staff.

FINANCIAL IMPLICATIONS

Funding for this initiative in 2013 totaled approx. \$4,500 plus staff time. The 2014 budgeted costs will total approx. \$7,000 plus staff time. The increase in budgeted costs reflects the provision for repair/replacement of equipment which was not budgeted for previously, and additionally includes QA/QC costs should Island Timberlands be unable to continue to financially support it this year (estimated at approx. \$2,000). The costs of this program are funded out of the current 2014 budget forecast.

The budgeted costs include:

- Provision for equipment repair/replacement
- Calibration solution
- QA/QC lab analysis costs
- Volunteer support (stipend for gas; venue & refreshment costs at training and results meetings; etc.)

STRATEGIC PLAN IMPLICATIONS

The Community Watershed Monitoring Network directly works towards goals under the RDN Board Strategic Plan:

- Help protect and enhance the biodiversity and overall health of the region's ecosystems – by collecting data to direct and enable actions that protect the quality of our freshwater ecosystems and resources.
- Encourage regional collaboration and dialogue on topics affecting all residents – by collaborating with community stewardship groups and the provincial government to raise awareness about stream health.
- Ensure that human development and environmental systems are brought together in mutually supportive ways – by monitoring and reporting on whether our streams meet provincial water quality guidelines.
- Support volunteer opportunities for residents.

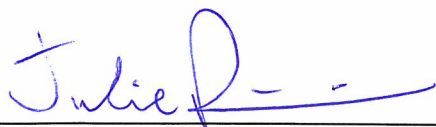
Monitoring water quality is highly important as it is one of the primary indicators of stream health. This data collection initiative helps to inform actions in our watersheds to further our understanding of local surface water bodies and prioritize efforts for their management. The data collected directly supports more effective land use decision making in the RDN.

SUMMARY/CONCLUSIONS

Ongoing data collection is essential to provide long term information on stream health. Continued monitoring of water quality helps direct efforts for stream enhancement/ watershed management and provides a baseline to assess future changes against. The Community Watershed Monitoring Network fosters collaboration amongst community stewardship groups, the provincial Ministry of Environment and the Regional District of Nanaimo, resulting in strong working relationships for the mutual benefit of all involved.

RECOMMENDATIONS

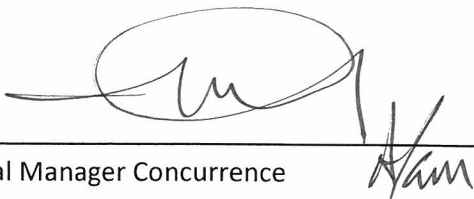
That the Board receives this report for information.



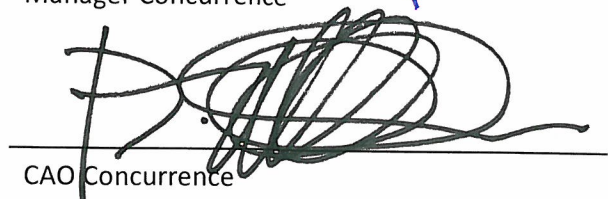
Report Writer



Manager Concurrence



General Manager Concurrence



CAO Concurrence

