

**REGIONAL DISTRICT OF NANAIMO**  
**SUSTAINABILITY SELECT COMMITTEE**  
**TUESDAY, JULY 9, 2013**  
**2:00 PM**

*(RDN Committee Room)*

**A G E N D A**

**PAGES**

**CALL TO ORDER**

**MINUTES**

- 3 - 6 Minutes of the Regular Meeting of the Drinking Water and Watershed Protection Technical Advisory Committee held on Wednesday June 19, 2013.
- 7 - 9 Minutes of the Sustainability Select Committee meeting held on Tuesday April 16, 2013.

**BUSINESS ARISING FROM THE MINUTES**

**COMMUNICATIONS/CORRESPONDENCE**

**UNFINISHED BUSINESS**

**REPORTS**

- 10 - 12 Water Budget Reports – Phase One, Gabriola, DeCourcey, & Mudge Islands and Vancouver Island Portion of the Regional District.
- 13 - 15 LEED Certification - RDN Administration and Transit Administration Expansion Project.
- 16 - 18 Release of Corporate Climate Action Reserve Funds – 2013.
- 19 - 22 Green Building Incentive Program Extension – 2013.
- 23 - 24 Green Building Incentive Program - Quarterly Update.
- Green Building Speaker Series 2013 (verbal).
- Draft Residential Renewable Energy Guidebook (verbal).

Distribution: J. Stanhope (Chair), A. McPherson, H. Houle, M. Young, B. Veenhof, B. Dempsey, J. Kipp, D. Brennan, M. Lefebvre, D. Willie, P. Thorkelsson, G. Garbutt, P. Thompson, 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

**ADDENDUM**

**BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS**

**NEW BUSINESS**

**ADJOURNMENT**

**IN CAMERA**



**MINUTES OF THE REGULAR MEETING OF THE  
DRINKING WATER AND WATERSHED PROTECTION  
TECHNICAL ADVISORY COMMITTEE  
HELD ON WEDNESDAY, JUNE 19, 2013 AT 12:30 PM**

**Present:**

Randy Alexander, CHAIR .....	General Manager, Regional & Community Utilities, RDN
Gord Buckingham .....	General Public Representative (North)
Gilles Wendling .....	General Public Representative (South)
Pat Lapcevic.....	Ministry of Forests, Lands and Natural Resource Operations
Faye Smith .....	Environment Community Representative
Ken Epps.....	Forest Industry Representative
Alan Gilchrist .....	Academic Community Representative (VIU)
Mike Squire .....	Manager of Utilities, City of Parksville / Program Manager, AWS
Bill Sims .....	Manager, Water Resources, City of Nanaimo
Rosie Barlak.....	Registered Professional Biologist Representative
Bob Weir .....	Director of Engineering & Utilities, Town of Qualicum Beach
Brad Rodway .....	Forest Industry Representative
Steve Lorimer .....	TimberWest Representative
Shelley Bayne .....	Hydrogeology Representative

**Regrets:**

Lynne Magee.....	Vancouver Island Health Authority
Leon Cake.....	Water Purveyors' Representative
Mike Donnelly, .....	Manager, Water Services, RDN
Courtenay Simpson .....	Islands Trust Representative
Debbie O'Brien .....	Ministry of Transportation & Infrastructure
Fred Spears .....	Director of Public Works, District of Lantzville
Domenico Iannidinardo.....	Forest Industry Representative
Oliver Brandes.....	Academic Community Representative
Kate Miller.....	Cowichan Valley Regional District

**Also In Attendance:**

Dawn Keim .....	Drinking Water and Watershed Protection Coordinator, RDN
Julie Pisani .....	Special Projects Assistant, RDN
Lauren Fegan.....	Special Projects Assistant, RDN
Rebecca Graves.....	Recording Secretary, RDN
Chris Burger.....	Mayor, City of Parksville
Julian Fell.....	Director, RDN, Area 'F'

**CALL TO ORDER**

R. Alexander called the meeting to order at 12:35 pm.

**MINUTES**

Minutes from the regular meeting of the Drinking Water and Watershed Protection Advisory Committee held December 13, 2012 were adopted.

**REPORTS****Gabriola, Mudge & Decourcey Islands Water Budget Project (Phase One) Report**

R. Alexander (Report for Submission)

**RDN Vancouver Island Water Budget Project (Phase One) Report**

R. Alexander (Report for Submission)

Randy Alexander noted that these reports are being submitted as final reports and that these reports are now going forward to the RDN Sustainability Select Committee and the Board for their consideration and internal discussion. After that process the reports will become public. TAC members are asked to send their feedback and comments by July 31st.

**Water Conservation Plan Report - R. Alexander (Report for Comment)**

Randy Alexander noted that this report is being submitting to the members of the committee for their comments. It has been in the works for over a year and there has been some public consultation so this has produced this version. This report was very recently submitted so now it is available electronically on the RDN FTP site.

**Municipal Updates - B. Weir, M. Squire, B. Sims (Overview)**

Bob Weir commented that there is now a flow monitoring station in Qualicum Beach on the Little Qualicum River. He noted that the Town has successfully in negotiated access to with Island Timberlands lands. Three new test holes were drilled on the site for well head protection, replacement and well exploration. Bob Weir noted that they currently have a Water Conservation student who is currently preparing data sets. He has taken the water consumption for the town lots and turned those lots into a useful neighbourhood map which identifies possible leaks. The website is not yet public yet but used only as an internal tool.

Mike Squire gave an overview for the City of Parksville noting they are underway with the preliminary design of the intake on the Englishman River and with testing of the Aquifer storage and recovery system. He noted that the ASR well is in final completion and that they are 2 weeks away from injecting water into that well and that 5 test wells were installed within the vicinity. He also noted the RDN and City of Parksville have extended their water use agreement for supply to Nanoose.

Bill Sims reported that the City of Nanaimo is moving forward with the water filtration plant and have successfully completed the five pipelines to that plant over the last eight months. Bill Sims noted that the treatment plant is at excavation stage and that they expect construction for the next year and a half. Target date for completion is March 2015. Recently Council approved water supply to the District of Lantzville for 225 connections.

**Public Awareness and Involvement - Watershed Tours - J. Pisani (Presentation)**

Julie Pisani provided an overview of Team Watersmart public awareness programs and improvements to school education programs. Julie Pisani commented on the Drinking Water Week presentations that were given to Kindergarten to grade 9 classes focused on where their tap water comes from. The classes were encouraged to create a poster on what they learned from the presentation for a chance to win a Helicopter tour of our region's watersheds. This grand prize was donated by SunWest Helicopters of Qualicum Beach.

Julie Pisani noted that they are looking at how to improve the school education program. She presented the idea of taking students out of the classroom on a field trip to discover their watersheds through experiential learning. Julie commented that Metro Vancouver had consultants develop a watershed field trip program that directly ties into grade 4 and 5 curriculum and that they are willing to share that program design and activity guide with the RDN.

**Water Use Management -Water Use Reporting Tool - D. Keim (Presentation)**

Dawn Keim gave a presentation on the BC Water Use Reporting Centre and it's free online water-use tracking and reporting system for all medium to large water users (licensed or unlicensed, public or private, surface or groundwater). Water use data is either entered manually or uploaded (XML or CSV) by water users and is securely stored within the web-based tool. Integration with automated real-time data reporting and collection tools is possible. Dawn Keim mentioned that once a user profile is created within the system the MoE Annual Water System Return Report can be automatically generated. The tool is intended to make reporting water use easier for water purveyors, facilitate more frequent reporting and improve the accuracy and timeliness of water usage reports. The stored water use information reported can be used for long-term water management planning in a time of change, infrastructure planning, reconciling water use with license volumes, reviewing water allocations, and tracking efficiency.

**Fall 2013 Public Information Sessions - D. Keim (Announcement)**

Dawn Keim briefly discussed how there will be weekly public information sessions this coming October. Details of the sessions were provided in the recent DWWP Newsletter. Dawn noted that the idea is to give an overview of the program and achievements to date and share some results of the water budget.

**NEW BUSINESS**

Julie asked Brad Rodway if Island Timberlands would be interested in the school education program watershed field trips, as Island Timberlands owns land within both Nanaimo and Parksville’s drinking watersheds and would be a necessary partner. Brad was interested to explore this idea and also mentioned a career day with Parksville high school students. Steve Lorimer, from Timberwest commented that they would support the watershed field trip program in principle. If Forestry practice codes were followed it would be compatible. Bill Sims noted his concern on how to balance the restricted access into the watershed, with the need for improved education initiatives.

**ADJOURNMENT**

The meeting was adjourned at 3:30 pm.

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Randy Alexander, Chair

**REGIONAL DISTRICT OF NANAIMO**

**MINUTES OF THE SUSTAINABILITY SELECT COMMITTEE  
MEETING HELD ON TUESDAY, APRIL 16, 2013 AT 2:30 PM  
IN THE RDN BOARD CHAMBERS**

**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 B. Dempsey	District of Lantzville
Director M. Lefebvre	City of Parksville
Director D. Willie	Town of Qualicum Beach

**Also in Attendance:**

Director J. Fell	Electoral Area F
P. Thorkelsson	Chief Administrative Officer
T. Armet	A/ General Manager of Strategic & Community Development
C. Midgley	Manager, Energy & Sustainability
P. Thompson	Manager, Long Range Planning
J. Holm	Manager, Current Planning
T. Pan	Sustainability Coordinator
L. Bhopalsingh	Senior Planner
A. Mercer	Communications Coordinator
B. Miller	Information Technician
N. Hewitt	Recording Secretary

**CALL TO ORDER**

The Chairperson called the meeting to order at 2:33pm.

**DELEGATIONS**

**Jim Crawford & Cynthia Hildebrand, Baynes Sound Investments Ltd., re Proposed Rezoning Application for Lands in Area 'H'.**

Mr. Crawford and Ms. Hildebrand of Baynes Sound Investments Ltd. presented a visual and verbal overview of their proposed development.

**Dianne Eddy, re Proposed Rezoning Application for Lands in Area 'H'.**

Ms. Eddy spoke in opposition of the application and provided a visual and verbal overview of the statistical analysis of aquifer levels in Electoral Area 'H'.

**LATE DELEGATE**

MOVED Director Young, SECONDED Director Veenhof, that the following delegation be permitted to address the Committee.

CARRIED

**Ian MacDonell, re OCP Amendment Application No. PL2011-060 – Baynes Sound Investments – Electoral Area 'H'.**

Mr. MacDonell spoke in opposition of the application.

**MINUTES**

MOVED Director Lefebvre, SECONDED Director Willie, that the minutes of the Sustainability Select Committee meeting held on Wednesday January 16, 2013 be adopted.

CARRIED

**REPORTS**

**Reconsideration of RGS and OCP Amendment Application No. PL2011-060 – Baynes Sound Investments.**

MOVED Director Veenhof, SECONDED Director Kipp, that the Board support a review of the application of the Baynes Sound Investments for a new Rural Village Centre at Deep Bay and that the application proceed through the process to amend the Electoral Area 'H' Official Community Plan and the Regional Growth Strategy.

CARRIED

Director Lefebvre left the meeting.

**Community Energy and Emissions Plan.**

MOVED Director Brennan, SECONDED Director Young, that the Community Energy and Emissions Plan be referred back to staff and come back to the following Sustainability Select Committee.

DEFEATED

MOVED Director Willie, SECONDED Director Kipp, that the Community Energy and Emissions Plan be approved as presented.

CARRIED



**Climate and Energy Action Plan.**

MOVED Director Willie, SECONDED Director Young, that the proposed Climate and Energy Action Plan be approved as proposed.

CARRIED

**Green Building Incentive Program 2013.**

MOVED Director Willie, SECONDED Director Veenhof, that the proposed 2013 Green Building Incentive Program be approved.

CARRIED

**ADJOURNMENT**

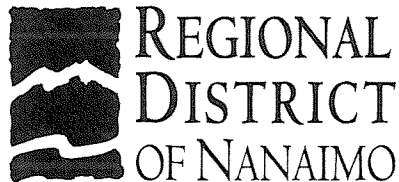
MOVED Director Kipp, SECONDED Director Dempsey, that pursuant to Section 90(1) (j) of the Community Charter the Committee proceed to an In Camera Committee meeting to consider items related to third-party interests.

CARRIED

Time 4:35 pm

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CHAIRPERSON



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# MEMORANDUM

**TO:** Randy Alexander  
General Manager, Regional & Community Utilities

**DATE:** June 27, 2013

**FROM:** Mike Donnelly  
Manager of Water & Utility Services

**FILE:** 5500-22-01

**SUBJECT: Water Budget Reports – Phase One**

- Gabriola, DeCourcey & Mudge Islands
- Vancouver Island Portion of the Regional District

## PURPOSE

To bring forward the Water Budget Reports (Phase One) for Gabriola, Decourcey & Mudge Islands and for the Vancouver Island portion of the regional district for the Board’s information.

## BACKGROUND

The Drinking Water and Watershed Protection program identifies the need to improve the understanding of water resources as they relate to land use planning and development. The development of Water Budgets (included as separate enclosures) for the region is a significant step forward in achieving that goal.

Support for the Water Budget studies can be found in the Drinking Water and Watershed Protection Plan and the Watershed Snapshot Report (2010). The Watershed Snapshot Report assists in guiding the implementation of the DWWP program by identifying key issues and concerns regarding water resources in the Regional District of Nanaimo and providing a set of key recommendations to address these concerns. The report identifies that a key priority for community members and technical experts is to better understand local water resources in order to ensure that there is enough clean water for human, environmental, and economic needs both today and in the future. To address this priority, it was recommended that a Water Budget be developed for each of the region’s major water regions.

Water Budgets look at water entering a watershed, how it is stored (soils, aquifers, streams, lakes, recharge areas), how water moves through these elements and how water leaves the watershed. They look at both natural systems and human (anthropegenic) impacts to assess water supply and demand which in turn provides information for the enhancement of water sensitive land use planning approaches.

Water budgets can be used to:

- assist with long term, region-wide water supply master planning;
- evaluate the cumulative effects of land and water uses within watersheds;
- provide a watershed scale framework for site scale studies (e.g. evaluation of a sewage & water system plan at a subdivision scale);
- improve our understanding of how to protect the ecological health of the region;
- help make informed decisions regarding the design of monitoring programs; and
- assist in setting targets for water conservation.

The approach used for the two Water Budgets was developed with the assistance and direction of local technical experts, provincial representatives, academics and community representatives included in the Drinking Water and Watershed Protection Technical Advisory Committee. The approach includes the development of a conceptual water balance that provides a basic understanding of the watershed systems based on known information. Data gaps and areas where further study is required were identified through this process.

Two separate studies were conducted under the umbrella of the Water Budget project. One includes all of the watersheds located within the Vancouver Island portion of the RDN (Electoral Areas A, C, E, F, G and H, and the municipal jurisdictions of Nanaimo, Lantzville, Parksville and Qualicum Beach); this is referred to as the Vancouver Island Water Budget study area. The second Water Budget study area is Gabriola, Decourcey & Mudge Islands. This approach allowed two consultant teams to focus separately on the specifics of each of those areas with respect to geological, land use and jurisdictional differences and was aligned to provide input for the Islands Trust Official Community Plan for Gabriola, Decourcey & Mudge Islands.

The Water Budgets are conceptual and represent a water balance based on available information. The studies have highlighted the need for additional information, which can be added in the future. The information used to develop the budgets was provided by various water purveyors, provincial ministries, federal departments and various records, studies and information from water professionals working in the region.

While the information contained in the budgets is considerable the picture is not yet complete. An important goal of the Water Budgets (Phase One) is to provide an early assessment of the water resource and then to build upon it. To identify where to focus efforts, the conceptual stress assessments have been provided which may help prioritize and guide future data acquisition and assessment efforts.

Staff will review the studies and begin to develop a course of action with respect to what has been learned and which priority issues need to be addressed. The outcome of the review will be an action plan focusing on the findings of the water budget reports identification of additional data gathering and assessment work and will be presented as part of the 2014 budget deliberations.

## **ALTERNATIVES**

1. That the Sustainability Select Committee receive the Water Budget Reports.
2. That the Sustainability Select Committee provide alternate direction.

## **FINANCIAL IMPLICATIONS**

The Board approved a budget of \$210,000 in total for the studies. The Vancouver Island study was allocated \$180,000 and the Gabriola and the Islands study allocated \$30,000. Those funds have now been expended.

**SUSTAINABILITY IMPLICATIONS**

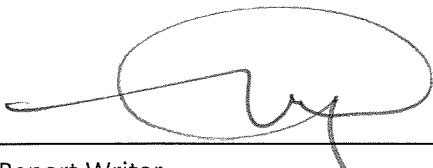
The Water Budgets provide the most comprehensive collation of information on the region’s water resources that has been made available to date. This information will be augmented with new information in the future and will become an important knowledge resource for the region.

**SUMMARY/CONCLUSIONS**

The Water Budget (Phase One) studies have now been completed. These studies provide a comprehensive collation of information and recommendations on the region’s water resource and are a significant contributor to the Drinking Water and Watershed Protection goals as laid out in the Action Plan. Information in the reports will assist RDN staff, water professionals and the public in understanding the issues and challenges that face the region with respect to the protection of a sustainable resource.

**RECOMMENDATIONS**

1. That the Vancouver Island and Gabriola, Decourcey & Mudge Islands Water Budget Project (Phase One) reports be received.
2. That staff be directed to develop an implementation plan based on the findings of the reports as part of the 2014 budget deliberations.
3. That staff be directed to provide a presentation to Board members on both Water Budget reports.



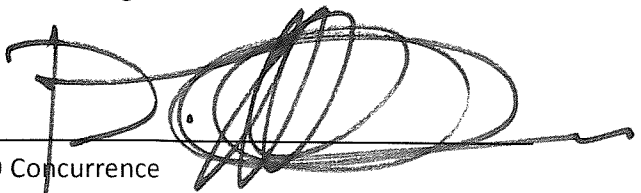
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Report Writer



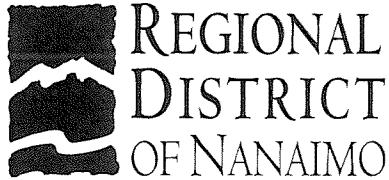
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General Manager Concurrence



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CAO Concurrence



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MEMORANDUM

**TO:** Geoff Garbutt  
General Manager,  
Strategic and Community Development

**FROM:** Chris Midgley  
Manager, Energy and Sustainability

**SUBJECT:** LEED Certification – RDN Administration and Transit Administration Expansion Project

**DATE:** June 28, 2013

**FILE:** 0810-04-ADMIN/TRANS

**PURPOSE**

To consider whether to ensure Leadership in Energy and Environmental Design (LEED) Silver designation through the final stages of the LEED certification process for the RDN Administration and Transit Administration buildings.

**BACKGROUND**

At the Regular Board meeting held February 26, 2008, after approving completion of the design and construction documents for the RDN Administration and Transit Administration Expansion Project (the Project), the RDN Board carried the following motion:

*“That the Board direct staff to hire sustainability and commissioning consultants for LEED certification for the administration and transit building expansion project for \$95,000.”*

LEED certification has four designations: LEED Certified, LEED Silver, LEED Gold and LEED Platinum. LEED Certified is the lowest level designation and LEED Platinum is the highest. Each designation is determined by the number of points achieved on a standard LEED checklist. The final score is determined by a Canada Green Building Council (CaGBC) review panel.

No formal commitment was made to achieve a specific LEED designation for the Project, though the lead architect was instructed to facilitate an integrated design process with a goal to achieve LEED Silver, or 33 – 38 points on the LEED Checklist.

As we enter the final stage of the LEED review process, it is clear that the Project is very close to achieving the LEED Silver designation, but it is not assured. Presently, the Project has 35 points on the LEED checklist. As part of the third and final review, random points are selected for audit. This requires providing detailed support documentation for the audited point.

The point currently selected for audit is one that requires a mechanical engineer to provide heating load calculations for the two buildings, and recommend locations within the buildings for humidity monitors. The monitors must then be purchased and installed. The cost to complete this work is estimated at \$10,000 (\$7,000 for the heating load calculations, and \$3,000 to purchase and install humidity monitors). If the work is undertaken, achieving the LEED Silver designation is probable.

If the point is withdrawn, another point will be audited, and the maximum achievable score falls to 34. Points will continue to be audited until one is satisfied. Considering 33 points represents the threshold between LEED Silver and LEED Certified, it is possible to withdraw up to two audited points and still achieve the LEED Silver designation.

It is also possible to withdraw audited points until one is satisfied at no cost. The risk in doing so is that the Project falls below the threshold for LEED Silver, and attains the designation of LEED Certified instead.

## **ALTERNATIVES**

1. Approve the release of up to \$10,000 from the Corporate Climate Action Reserve Fund toward LEED Silver certification for the RDN Administration and Transit Administration buildings.
2. Do not approve the release of additional funding toward LEED Silver certification for the RDN Administration and Transit Administration buildings.

## **FINANCIAL IMPLICATIONS**

For Alternative 1, an estimated \$10,000 is necessary to satisfy the LEED Checklist thermal comfort (humidity) point currently subject to audit. Going forward with this alternative would ensure a very high likelihood of achieving LEED Silver.

Under Alternative 1, it is also possible to withdraw the thermal comfort point currently subject to audit, and dedicate the resources toward compiling support documentation for whatever point is audited next. The cost of meeting audit requirements of other points has not been determined, but could be as little as zero dollars. Alternative 1 effectively caps that cost at \$10,000.

The Regional District of Nanaimo has established a Corporate Climate Action Reserve Fund to provide funding to improve corporate energy efficiency and emissions reductions. Verifying that the RDN Administration and Transit Administration buildings meet the standards of the LEED Green Building Rating System can be considered an eligible use of those funds.

Presently, approximately \$187,000 in unallocated funds are available in the Corporate Climate Action Reserve Fund.

For Alternative 2, no additional funds will be allocated toward achieving the LEED Silver designation, and the point currently subject to audit will be withdrawn. It is possible that the LEED Silver designation will still be achieved, depending on subsequent points for audit, however that is entirely up to chance. Of the 34 remaining points the RDN has claimed, as many as five may require additional resources to satisfy if audited. If no additional resources are available, and two of those five points are selected for audit, the RDN will withdraw those points, and the Project will achieve the LEED Certified designation.

## **POLICY IMPLICATIONS**

The Regional District of Nanaimo has a Green Building Policy for RDN Facilities, adopted in May of 2008. The Green Building policy requires all facilities designed and constructed by the RDN to follow an integrated design process. Performance targets for energy consumption are recommended, but not required in the policy. Green Building certification is not required.

For the RDN Administration and Transit Administration Expansion, the lead architect was directed to pursue LEED Silver certification and did facilitate an integrated design process in keeping with the Green Building Policy for RDN Facilities. With respect to LEED certification, a goal through the integrated design process was to achieve LEED certification, but no level of designation was specified. The Project, therefore, adheres to the Green Building Policy for RDN Facilities whether the LEED Silver or LEED Certified designations are achieved.

For the Board Strategic Plan, there are no direct implications associated with achieving one level of LEED certification or another. Directors did emphasize the importance of fiscal restraint in decision making as a Board Value. While \$10,000 is a relatively small sum, and a tiny fraction of the total Project budget (less than 0.25%), satisfying audited points at this stage will not contribute to enhanced performance of the facilities, as such there is no real return on the investment. This is not consistent with the Board Value to show fiscal restraint.

### SUMMARY/CONCLUSIONS

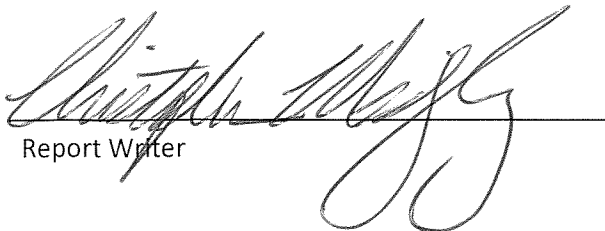
At the February 26, 2008 Board Meeting, the RDN Board directed staff to hire sustainability and commissioning consultants for LEED certification of the RDN Administration and Transit Administration Expansion Project. No formal commitment was made to achieve a specific LEED designation, though the lead architect was instructed to design the facilities to achieve the LEED Silver designation.

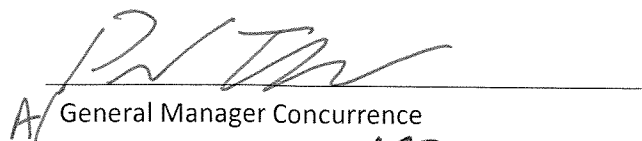
For the final review, the RDN has submitted a certification package to the Canada Green Building Council that includes a LEED Checklist score of 35, exceeding the threshold for Silver by two points. Auditing points is part of the final review process, and the CaGBC has selected a point for audit that requires additional work to satisfy. It is estimated that the additional work will cost approximately \$10,000.

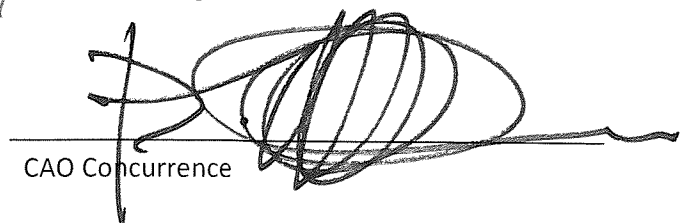
Dedicating the resources to satisfying this audited point will likely result in achieving LEED Silver. Withdrawing the audited point puts the LEED Silver designation in jeopardy, though the lower LEED Certified designation will still be achieved. Regardless of the level of LEED certification achieved, the Project will have conformed to the Green Building Policy for RDN Facilities.

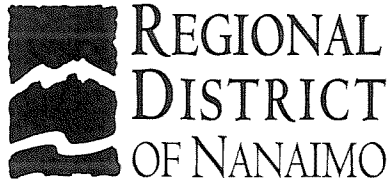
### RECOMMENDATION

That the Committee not approve the release of additional funding toward LEED Silver certification for the RDN Administration and Transit Administration buildings.

  
Report Writer

  
General Manager Concurrence

  
CAO Concurrence



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**MEMORANDUM**

**TO:** Geoff Garbutt  
General Manager,  
Strategic and Community Development

**DATE:** June 28, 2013

**FROM:** Chris Midgley  
Manager, Energy and Sustainability

**FILE:** 6430-05-CCAR

**SUBJECT:** Release of Corporate Climate Action Reserve Funds – July 2013

**PURPOSE**

To request that funds up to \$90,000 be released from the Corporate Climate Action Reserve Fund for investment in three projects that contribute to corporate energy conservation and emissions reductions.

**BACKGROUND**

The Corporate Climate Action Reserve Fund was established by bylaw at the Regular Board Meeting held November 22, 2011. The fund is intended to support capital investment in vehicles, equipment, infrastructure and initiatives that result in corporate energy conservation and emissions reductions.

The source of revenue for the Corporate Climate Action Reserve Fund is the Provincial Climate Action Revenue Incentive Program (CARIP), which provides an annual grant to the RDN in an amount equal to that paid by the RDN in the Carbon Tax. In 2012, the CARIP grant was \$99,836 which brings the total currently available for projects to approximately \$190,000.

To select projects, managers and general managers identify projects from their 5-year capital plan for review by the Corporate Planning Committee. Successful projects are confirmed by the Corporate Planning Committee and recommended to the Board for funding.

For 2013, three capital projects have been identified that will reduce corporate energy use and emissions if investment totaling \$90,000 in high efficiency, higher initial cost equipment is enabled by the Corporate Climate Action Fund:

- **LED Lighting – Oceanside Place Arena (\$45,000)**
  - Equals the incremental additional cost of LED lighting compared to induction lighting;
  - Annual Electricity Savings (est.): Over 300,000 kwh per year, or approximately 15-20% of current annual use.
  
- **Condensing Boilers – Ravensong Aquatic Centre (\$25,000)**
  - Equals the incremental additional installed cost of two high efficiency boilers compared to the conventional alternative;
  - Annual savings to be determined upon completion of efficiency analysis, but condensing boilers typically achieve greater than 90% thermal efficiency, compared to 70-80% efficiency for conventional boilers.



- **Building Renovation – Kennedy Hall at Moorecroft Regional Park (up to \$20,000)**
  - Estimated cost for investing in a high efficiency heating, cooling and ventilation system, low e-value windows, added insulation and weather stripping throughout a renovated park facility.

## **ALTERNATIVES**

1. Approve the release of up to \$90,000 from the Corporate Climate Action Reserve Fund for investment in LED lighting at Oceanside Place Arena, two condensing boilers at Ravensong Aquatic Centre, and efficiency related upgrades for Kennedy Hall at Moorecroft Regional Park.
2. Do not approve the release of funds.

## **FINANCIAL IMPLICATIONS**

The CARIP grant is provided to the RDN by the Province on an annual basis for signing the Climate Action Charter. The grant amount equals the yearly amount paid in Carbon Tax, as reported by the RDN. In 2012, the rebate equaled \$99,836, and approximately \$190,000 is currently available in reserve.

If the funds are released as recommended, Oceanside Place Arena is expected to save up to 304,000 kwh per year in electricity costs and Ravensong Aquatic Centre is expected to reduce natural gas consumption by 10-20%. Historic consumption records are not available for Kennedy Hall at Moorecroft Regional Park.

It is anticipated that these investments will result in long term operational savings at RDN recreational facilities, among the highest energy users and emission sources in the RDN portfolio of buildings. For Kennedy Hall, the proposed improvements are intended to result in a comfortable, more efficient park facility, which could increase revenues from facility rentals and minimize expenditures on energy at the site.

## **STRATEGIC PLAN IMPLICATIONS**

Investing \$90,000 in Corporate Climate Action Reserve Funds in three projects that offer energy conservation and emissions reduction opportunities, represent investment in projects that increase the economic viability of the RDN's recreational facilities and park amenities, while reducing corporate greenhouse gas emissions.

The use of the Corporate Climate Action Reserve Fund to achieve this minimizes the immediate impact of the taxpayer for investing in efficient infrastructure, and generates ongoing savings over the life of the new equipment.

## **SUMMARY/CONCLUSIONS**

At the November 2, 2011 Board Meeting, the Regional District of Nanaimo Board of Directors established by bylaw the Corporate Climate Action Reserve Fund. Revenues into the Reserve Fund come from the Provincial CARIP grant, which is accessible to the RDN for signing on to the Climate Action Charter. The Provincial grant is provided annually in the amount equal to what the RDN pays in the

Carbon Tax, as reported to the Province. For 2012, the CARIP grant was \$99,836, and the total available in reserve is approximately \$190,000.

Three projects have been identified as suitable for investment from the Corporate Climate Action Reserve Fund for 2013:

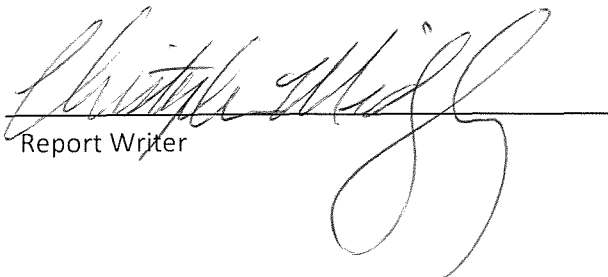
- LED lighting at Oceanside Place Arena (\$45,000)
- Two condensing boilers at Ravensong Aquatic Centre (\$25,000)
- Efficiency related upgrades for the renovation of Kennedy Hall at Moorecroft Regional Park (\$20,000).

For the recreational facilities, the proposed value equals the incremental additional cost of the higher efficiency infrastructure compared to a lower cost, less efficient, more conventional alternative. For Kennedy Hall, the value is an estimate for the efficiency related upgrades associated with the building renovation.

The projects will result in energy conservation, emissions reductions and reduced operating costs at each of the facilities. This enhances the economic viability of the facilities while achieving significant environmental objectives.

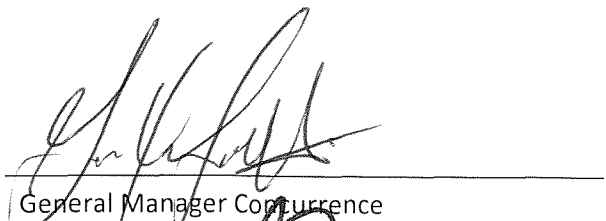
#### RECOMMENDATIONS

1. That the Board approve the release of \$45,000 from the Corporate Climate Action Reserve Fund for investment in high efficiency LED lighting for the Oceanside Place Arena.
2. That the Board approve the release of \$25,000 from the Corporate Climate Action Reserve Fund for investment in two high efficiency condensing boilers or the Ravensong Aquatic Centre.
3. That the Board approve the release of \$20,000 from the Corporate Climate Action Reserve Fund for investment in efficiency related upgrades to Kennedy Hall at Moorecroft Regional Park.



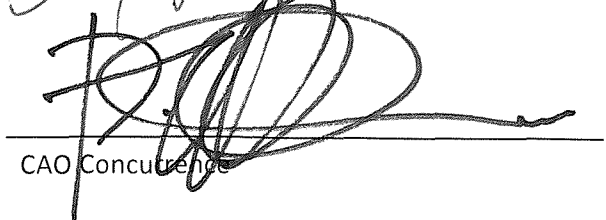
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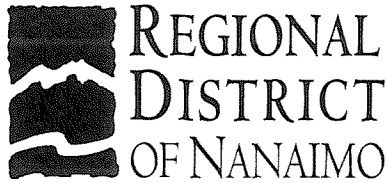
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General Manager Concurrence



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CAO Concurrence



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**MEMORANDUM**

**TO:** Geoff Garbutt  
General Manager, Strategic and Community Development

**DATE:** July 2, 2013

**FROM:** Chris Midgley  
Manager, Energy and Sustainability

**FILE:** 6430-05-GBIP

**SUBJECT:** Green Building Incentive Program Extension - 2013

**PURPOSE**

To request that funds up to \$15,000 be released from the Regional Sustainability Initiatives Reserve Fund to extend the Green Building Incentive Program for the duration of 2013.

**BACKGROUND**

The Regional Sustainability Initiatives Reserve Fund was established in 2010 out of a contribution from the Provincial Strategic Investment Fund to implement regional sustainability initiatives that support local economic development. The total amount placed in reserve at that time was \$94,700, and is intended to provide project support to the Energy and Sustainability Department as approved by the Board.

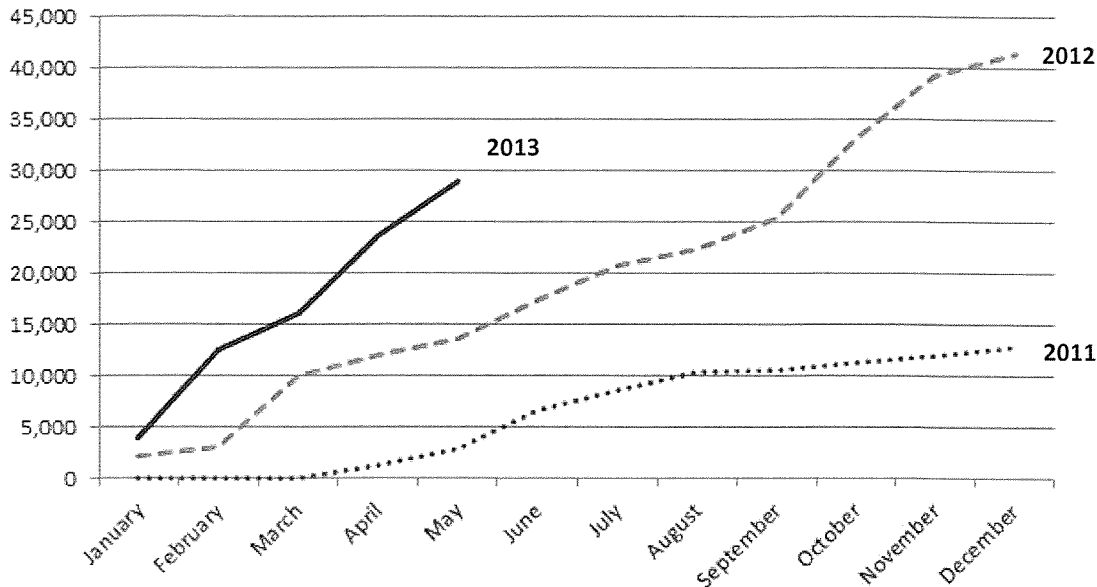
At the Regular Board Meeting held April 24, 2012 the Board approved the release of \$6,025 to cover 50% of the cost of a feasibility study for a district energy system at the Qualicum Beach Civic Centre and Ravensong Aquatic Centre. As of today, that release represents the sole release of funds from the Regional Sustainability Initiatives Fund.

In April 2011, the Regional District of Nanaimo introduced a Green Building Incentive Program. The program is funded from \$20,000 from the Building Inspection Service, and complemented by Provincial grant programs, notably the Provincial Woodstove Exchange Program. Each successive year of the Green Building Incentive Program has proven more popular than the previous, and year to date in 2013 has seen a more than doubling of the rate of uptake in incentives compared to 2012. Figure 1 illustrates the cumulative monthly dollar value of green building incentives provided by the RDN over the life of the program.

The solid line represents 2013, dashed represents 2012, and dotted is 2011. By the end of May, 2013 over \$28,000 in incentives had been disbursed. By contrast, over the same period in 2012, \$13,560 had been disbursed. In 2012, the program also benefitted from a sizeable carry-over from 2011 which is not available in 2013.

For all practical purposes the budget for the Green Building Incentive Program is exhausted. Approximately \$2,000 remains available for new incentives, which may maintain the program through the month of July.

**Figure 1:** Cumulative Monthly Green Building Incentive Disbursements (April, 2011-Present)



The benefits of the Green Building Incentive Program are significant. Homeowners in the region's Electoral Areas and Lantzville are eligible for incentives that support investment in:

- Home Energy Assessments;
- Woodstove Exchanges;
- Site-cut Timber;
- Residential Scale Renewable Energy Systems;
- Home Electric Vehicle Charging Stations; and
- Sustainable Builder Checklist incentives.

Each incentive represents a twofold benefit to the local community. Firstly, the incentives provide a direct contribution toward the improvement of existing residential housing stock, the use of renewable resources and energy, and investment in high efficiency, low emission systems, resulting in reduced greenhouse gas emissions and particulate matter pollution. In addition, the resources that support the program ultimately go to local businesses that sell the systems and services encouraged through the program, generating economic spin-off benefits to the local economy.

#### ALTERNATIVES

1. Approve the release of up to \$15,000 from the Regional Sustainability Initiatives Reserve Fund to extend the Green Building Incentive Program for 2013.
2. Do not approve the release of the funds, or provide alternate direction to staff.

#### FINANCIAL IMPLICATIONS

If Alternative 1 is approved, providing an additional \$15,000 will extend the Green Building Incentive Program through much of the remainder of 2013, ensuring that the benefits of the program continue to flow to regional residents and the local economies that they support.

With that amount, the total value of green building incentives available over 2013 will be approximately \$48,000 (including \$9,000 provided through the Provincial Woodstove Exchange Program), or roughly \$6,000 more than was available for the whole of 2012. If the current pace of incentive applications continues, the additional funding is anticipated to extend the program through to October 2013. If the pace slows significantly over the duration of 2013, and the full \$15,000 is not necessary, only the amount needed will be withdrawn from reserve.

Presently, the funds held in the Regional Sustainability Initiatives reserve amount to \$88,675, originally provided through the provincial Strategic Community Investment Fund. Allocating funds from this reserve will meet the needs of the Green Building Incentive Program with no impact on regional taxpayers. If approved, the Regional Sustainability Initiatives reserve will be reduced to \$73,675.

### **STRATEGIC PLAN IMPLICATIONS**

The Board Strategic Plan emphasizes regional resilience and self-sufficiency, as well as economic viability. The Green Building Incentive Program assists homeowners in the region's Electoral Areas and Lantzville invest in home improvements and equipment that reduces home energy use and encourages investment in renewable energy and resource use. The incentives provided typically go toward the purchase of equipment or services provided by local businesses, building regional momentum around green economic development. As such, extending the Green Building Incentive Program over much of the duration of 2013 continues to advance the strategic priorities for the region supported by the Board.

### **SUMMARY/CONCLUSIONS**

In April 2011, the Regional District of Nanaimo introduced a Green Building Incentive Program intended to assist homeowners invest in a range of technologies and services that would result in more efficient homes that consume less energy, and produce fewer greenhouse gas emissions and other forms of pollution.

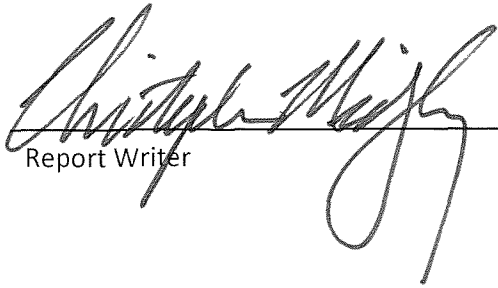
Each year of the program has increased in popularity among residents, with incentives in 2013 doubling 2012 over the first half of the year. As a result of this unanticipated rate of uptake, approximately \$2,000 remains available to the Green Building Incentive Program for the duration of 2013. To ensure that the program extends over much of the duration of the year, additional funds are required.

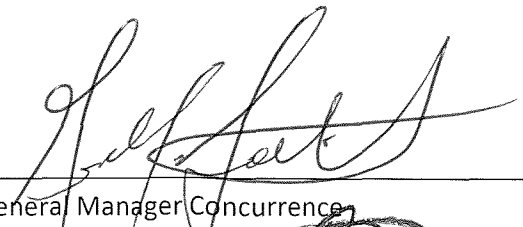
In April 2010, the RDN Board of Directors established the Regional Sustainability Reserve fund out of a provincial contribution from the Strategic Community Investment Fund. A total of \$94,700 was placed in reserve, with \$6,025 withdrawn to date.

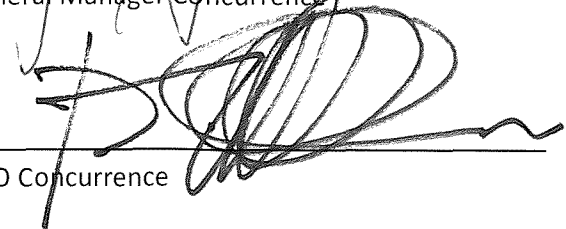
The intent of the Regional Sustainability Reserve Fund is to implement regional sustainability initiatives that also support local economic development. Local investment in green building systems and services achieves both ends, and continuing the program for much of 2013 will ensure ongoing community and economic benefits that result from the program.

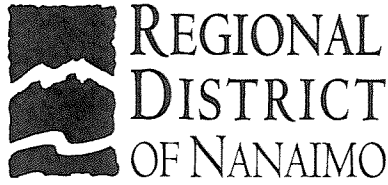
### **RECOMMENDATION**

That the Board approve the release of up to \$15,000 from the Regional Sustainability Initiatives Reserve Fund to extend the Green Building Incentive Program for 2013.

  
Report Writer

  
General Manager Concurrence

  
CAO Concurrence



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## MEMORANDUM

**TO:** Chris Midgley  
Manager, Energy and Sustainability

**DATE:** June 26, 2013

**FROM:** Ting Pan  
Sustainability Coordinator

**FILE:** 6430-05-GBIP

**SUBJECT:** 2013 Green Building Incentive Program Quarterly Update

### PURPOSE

To provide the Committee with a quarterly update on 2013 Green Building Incentive Program.

### BACKGROUND

The Green Building Incentive Program (the Program) was established in April 2011 as a pilot program for residents in the region's Electoral Areas and the District of Lantzville. In May 2012 and May 2013 the program was refined to increase residents' awareness and uptake. Since the implementation of the Program, the number of applications has been steadily increasing.

Information collected for the first half of the year 2013 indicates that participation rate is on the rise for most incentives. **Table 1** below summarizes how incentives were distributed as of June 26<sup>th</sup>, 2013.

**Table 1: 2013 Green Building Incentive Program Summary (January 1 - June 26, 2013)**

Incentive	Completed Rebates	Funds Disbursed or Committed
Home Energy Assessment	109	\$ 7,670.00
Woodstove Exchange*	31	\$ 9,750.00
Site-cut Timber	1	\$ 238.00
Renewable Energy System	0	\$ 250
EV Charging Station	0	\$ 0
Checklist Meeting	1	\$ 50.00
Checklist Score	1	\$ 4,000.00
<b>Total Disbursed to Date (2013)</b>		<b>\$ 21,958.00</b>
<b>Total Program Funding (2013)</b>		<b>\$ 24,014.80</b>
<b>Total Remaining (06/26/2013)</b>		<b>\$ 2,056.80</b>

\*The BC Lung Association provided external funding to support an additional 36 woodstove exchange rebates to the Electoral Areas and Lantzville residents. Of those, 29 have been awarded as of June 2013.

Due to higher than anticipated interest, funds allocated for 2013 will not be sufficient to support the Program through to the end of the year. Based on 2011 and 2012 trends, the two most popular incentives (The Home Energy Assessment and Woodstove Exchange Rebates) are anticipated to attract more applications later this year when heating season begins. Three new home projects in the region are eligible to receive the highest level Checklist incentive (\$1,000) by the end of this year. One is also eligible to receive the \$250 Renewable Energy System rebate.

**ALTERNATIVES**

1. That the 2013 Green Building Incentive Program Update is received.
2. That alternate direction be given to staff.

**FINANCIAL IMPLICATIONS**

For 2013, the Program was funded with \$20,000 from the Building Inspection service. With \$4,014.80 carried over from 2012, the total funds available in 2013 are \$24,014.80. With rebates committed and distributed to date, \$2,056.80 remains for the rest of the 2013.

**STRATEGIC PLAN IMPLICATIONS**

Since beginning the Program, over 160 homes in the Electoral Areas and Lantzville obtained an EnerGuide Rating. Close to 100 homes incorporated energy efficiency measures, resulting in an average increase in EnerGuide rating by 10 points. About 380 inefficient woodstoves were replaced with more efficient, less polluting EPA certified woodstoves across the region. New homes eligible to receive the Checklist Incentive have been built to the highest industry standard such as BuiltGreen Platinum certification level, have achieved high EnerGuide ratings or have incorporated sizable renewable energy and rainwater harvesting systems. All of these actions yielded tangible benefits to the individual homeowners as well as to the community at large through reduced greenhouse gas emissions and pollution, and improved households' self-sufficiency and resilience. Most of these improvements require the involvement of local trades and professionals and continue to help build a stronger and more knowledge-based regional economy.


The region-wide Woodstove Exchange Incentive Program that was successful in securing the provincial funding and delivered to all residents in the region two years in a row demonstrated the effectiveness of a collaborative regional approach and could be a model for other programs in the future. The experience and knowledge gained through administering the Program is a valuable resource to be shared with all member municipalities.

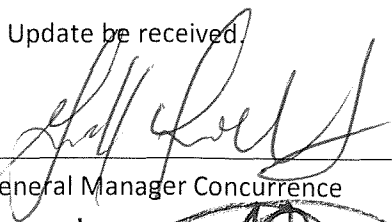
**SUMMARY/CONCLUSIONS**

The 2013 Green Building Incentive Program has been successful in encouraging residents to take actions on improving home energy efficiency, reducing air pollution, incorporating renewable energy and building high performance houses. The very high level of uptake in 2013 indicates that the Program has grown in popularity relative to 2012. But the consequence of this popularity is that the current funding level will not sustain the Program through the duration of 2013.

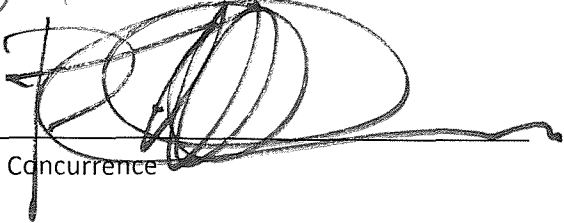
**RECOMMENDATION**

That the 2013 Green Building Incentive Program Quarterly Update be received.

  
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Report Writer

  
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General Manager Concurrence

  
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