REGIONAL DISTRICT OF NANAIMO

SUSTAINABILITY SELECT COMMITTEE
TUESDAY, APRIL 16, 2013
2:30 PM

(RDN Board Chambers)

A G E N D A

PAGES

CALL TO ORDER

DELEGATIONS

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

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

MINUTES

3 - 4 Minutes of the Sustainability Select Committee meeting held on Wednesday January 16, 2013.

BUSINESS ARISING FROM THE MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

REPORTS

5 - 30 Reconsideration of RGS and OCP Amendment Application No. PL2011-060 – Baynes Sound Investments.

31 - 40 Community Energy and Emissions Plan.

41 - 46 Climate and Energy Action Plan.

47 - 53 Green Building Incentive Program 2013.

Drinking Water and Watershed Protection Program Update (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, P. Thompson, C. Midgley, T. Pan, M. Donnelly, 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, N. Tonn, L. Burgoyne, Matt O'Halloran

ADDENDUM

BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS

NEW BUSINESS

ADJOURNMENT

IN CAMERA

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.

REGIONAL DISTRICT OF NANAIMO

MINUTES OF THE SUSTAINABILITY SELECT COMMITTEE
MEETING HELD ON WEDNESDAY, JANUARY 16, 2013 AT 2:00 PM
IN THE RDN COMMITTEE ROOM

Present:

Director J. Stanhope	Chairperson
Director A. McPherson	Electoral Area A
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
G. Rudischer	Gabriola Island Trustee
P. Thorkelsson	Chief Administrative Officer
C. Midgley	Manager, Energy & Sustainability
T. Pan	Sustainability Coordinator
M. Donnelly	Manager, Water Services
N. Hewitt	Recording Secretary

CALL TO ORDER

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

MINUTES

MOVED Director Veenhof, SECONDED Director Lefebvre, that the minutes of the Sustainability Select Committee meeting held on Wednesday October 17, 2012 be adopted.

CARRIED

REPORTS

Annual Review 2012: Green Building Incentive Program (Verbal).

MOVED Director Veenhof, SECONDED Director Kipp, that the verbal report be received.

CARRIED

Community Charging Infrastructure Planning Project Review and Update.

MOVED Director Dempsey, SECONDED Director Lefebvre, that the report be received.

CARRIED

Community Energy Association – Honourable Mention for MOA (Verbal).

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

CARRIED

Carbon Neutral Operations - 2012.

MOVED Director Lefebvre, SECONDED Director Kipp, that staff incorporate reductions associated with curbside organic collection and diversion in annual carbon neutral reporting to the Province.

CARRIED

MOVED Director Lefebvre, SECONDED Director Kipp, that staff issue letters to each of the member municipalities identifying total emission reductions for each jurisdiction based on participation in the regional curbside organic collection and diversion program.

CARRIED

Green Building Speaker Series and Open House Tours (Verbal).

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

CARRIED

NEW BUSINESS

Federation of Canadian Municipalities, 2013 Sustainable Communities Conference and Trade Show.

Director Willie stated that he would be attending the conference from February 13-15, 2013 and will bring forward any new ideas or concepts.

Vancouver Island University – Conference.

Director Veenhof requested that representatives from the Regional District of Nanaimo participate in the Institute for Coastal Research's 'State of Baynes Sound' conference scheduled for late spring 2013.

ADJOURNMENT

MOVED Director Lefebvre, SECONDED Director Kipp, that this meeting be adjourned.

CARRIED

Time 3:35 pm

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CHAIRPERSON

REGIONAL DISTRICT OF NANAIMO

MEMORANDUM

TO:	Paul Thompson Manager of Long Range Planning	**DATE:**	March 27, 2013
FROM:	Lisa Bhopalsingh Senior Planner	**FILES:**	PL2011-060
SUBJECT:	**Reconsideration of RGS and OCP Amendment Application No. PL2011-060 – Baynes Sound Investments** **Lot A, District Lots 1 and 86, Newcastle District, Plan 48840; Lots B, District Lots 1 and 86, Plan 38643; Lot C, District Lot 86, Plan 38643** **Electoral Area 'H'**		

PURPOSE

To re-consider an application to amend the Regional Growth Strategy (RGS) and the Electoral Area 'H' Official Community Plan (OCP) to include a new Rural Village Centre (RVC) within the Growth Containment Boundary (GCB) for a proposed development in Deep Bay.

BACKGROUND

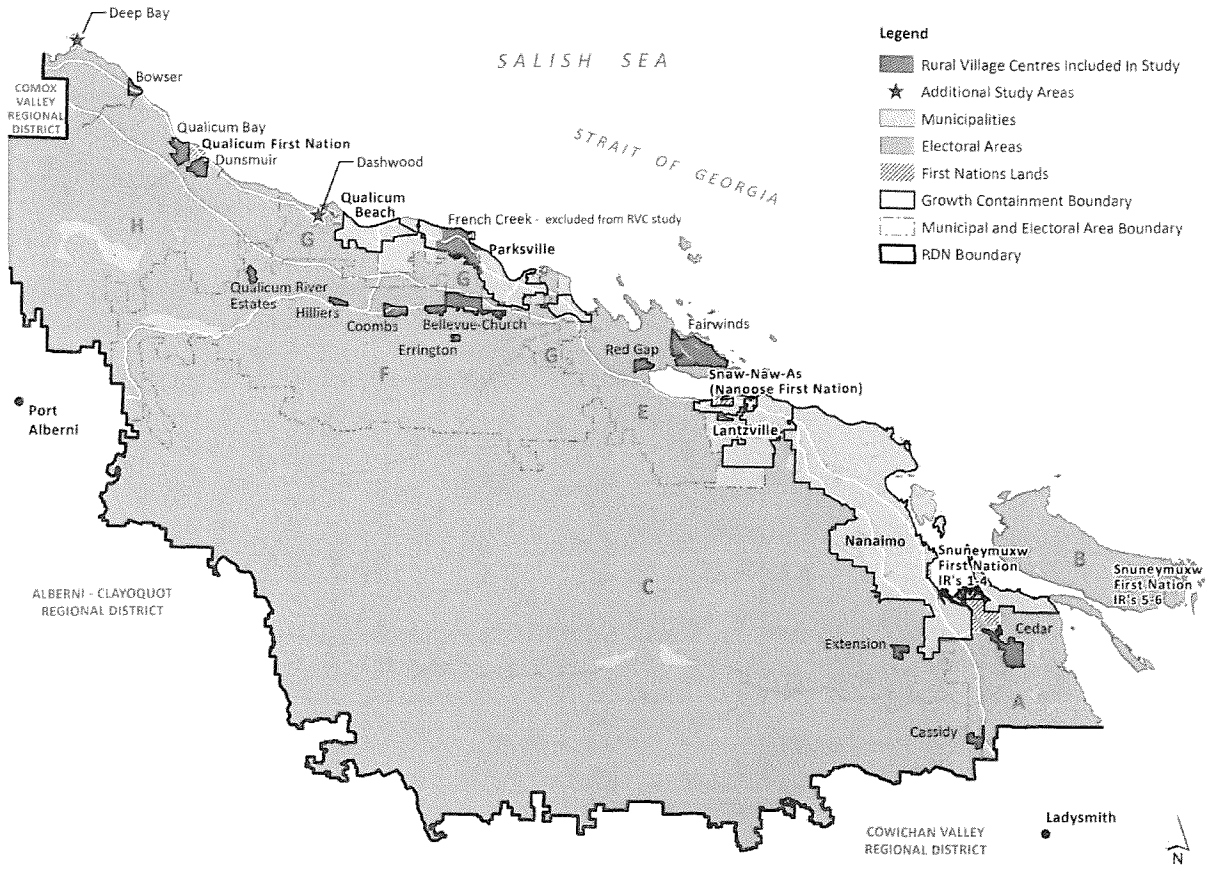
On October 4, 2011 the RDN Board considered an application for a development (see attachment 1 for subject property map) that requires amendments to the Area 'H' OCP and RGS to allow a new Rural Village Centre in Deep Bay. The designation of a new Rural Village Centre is necessary to support the density of development proposed for a resort community involving 76 ha of land. This includes a mix of 386 single and multi-family residential units, 6,975 m^2 of commercial land and 292 recreational vehicle spaces (see attachment 2 for concept plan). The RDN Board directed staff to include the proposal for a new Rural Village Centre in Deep Bay in a region-wide study of Rural Village Centres and put the application on hold pending completion of the study.

The Rural Village Centre study fulfills direction in the Regional Growth Strategy (Policy 4.11) by investigating concerns that some RVCs may never reach their intended function as mixed-use, compact, complete communities. This work will aid the Board and respective communities in prioritizing the investment needed to provide community water and sewer, and transit.

Including Deep Bay in the study allowed for the area to be considered objectively as part of a technical evaluation in order to show how it performs relative to existing RVCs in the study and within a larger regional growth management context. The study also provides potential implications of designating an additional RVC in Deep Bay upon neighbouring RVCs in Electoral Area 'H'. The Rural Village Centre Study was received by the RDN Board on March 26, 2013. Now that the study has been completed, the RDN Board can reconsider the application for a new RVC at Deep Bay within the context of the information provided by the study.

The RVC study included 13 of the 14 existing Rural Village Centres (see Map 1) in the Regional Growth Strategy[1]. Deep Bay was included as an additional Study Area (SA) along with Dashwood in Electoral Area 'G'. In order for the study to determine what is required for each RVC and SA to grow from where it is now to the ideal mixed-use centre as envisioned in the RGS, the study established a baseline for the evaluation based on existing conditions. As well, projections for future growth were based on existing OCP policies. As such it did not take into account any future development proposals for any of the RVCs or SAs including the application under discussion.

Map 1 – Existing Rural Village Centres



The RVC study shows how close/far each of the included RVCs and study areas are from becoming complete, compact, mixed-use communities based on the established criteria. By doing so it highlights each area's strengths and weaknesses. While the study looked at certain characteristics based on current conditions it also provides a projection of future retail demand by analyzing development and market viability based on projections for each RVC as well as anticipated growth and distribution of population throughout the region. The study gives a clear indication of what it would take for each RVC to reach optimum levels of performance.

[1] French Creek RVC was excluded because it is considered to be a mostly developed, mixed-use community with transit service and large areas served by community water and sewer.

The RVC study ranked the Deep Bay study area (which includes the land that forms part of the Bayne Sound Investment Ltd. application) amongst one of the mid to lower performing areas based on the study criteria with a ranking of 5 on a scale of 1-6 (with 1 being the best and six the lowest) along with Dashwood, Dunsmuir, Extension and Hilliers (see attachment 3). The RVC study provides an indication of what would need to happen at Deep Bay in order for it to perform better as a future RVC that would benefit Area 'H' and the region as a whole.

This report provides a discussion of the implications of considering the application which requires the creation of a new RVC at Deep Bay. The results of the RVC study are used to provide context for the application including the need for additions to the Growth Containment Boundary in the Region. Further details on the RVC Study are included in the staff report received by the RDN Committee of the Whole (COW) on March 12, 2013.

ALTERNATIVES

1. That the Electoral Area Planning Committee supports a review of the application by Bayne Sound Investments (BSI) for a new RVC in Deep Bay and that the application proceed through the process to amend the Electoral Area 'H' Official Community Plan and the Regional Growth Strategy.

2. That the Electoral Area Planning Committee recommends that the application be held in abeyance until the completion of the next Electoral Area 'H' Official Community Plan review.

3. That the Electoral Area Planning Committee does not support a review of the application by BSI for a new RVC in Deep Bay and that the application be denied.

4. That the Electoral Area Planning Committee provide an alternate recommendation for the application by BSI for a new RVC in Deep Bay.

FINANCIAL IMPLICATIONS

The financial implications for the RDN, regional communities and Electoral Area 'H' residents vary greatly depending on RDN Board direction. This section of the report addresses financial implications for the RDN. A discussion of longer term economic impacts is included under the section addressing the RGS economic goal.

The staff report received by the Board in October 2011 indicates that if the RDN Board supports amending the RGS and OCP to allow a new RVC at Deep Bay, the potential subdivision that could result would not result in *"any direct short term infrastructure costs for the RDN"*. The report further states that *"the capital cost for the development of local road improvements and community services would be borne by the applicant. The applicant proposes to construct an advanced wastewater treatment system that will be owned and maintained by the strata corporation".* However it was noted that there would be financial implications if the RDN was asked to take over a wastewater treatment system in the future.

The application includes a preliminary study indicating that the Deep Bay Improvement District (DBID) aquifer has sufficient water to supply the development. The feasibility study specifies that upgrades to water storage capacity and the DBID piping network will be needed to service the proposed

development. The recovery of any capital costs related to supplying water to the proposed development would be the responsibility of DBID to negotiate with the developer.

In the long term there are a variety of unknown potential long term costs, liabilities and risk for the RDN associated with future maintenance of infrastructure such as wastewater treatment, water, sidewalks, parks and rainwater management/stormwater infrastructure.

In terms of staff time and impacts on other ongoing projects, the financial implications of the different alternatives presented in this report are outlined below. Some of these financial implications are the same for the alternatives presented in the staff report to the EAPC on September 2, 2011 and to the RDN Board on October 4, 2011:

Alternative 1 has the greatest immediate impact. Processing an application to amend the RGS requires a significant amount of staff time that would normally be spent on other projects. The RGS establishes criteria under which proposed amendments can follow one of two processes depending upon whether or not the amendment is deemed minor[2]. Based on these criteria, if the RDN Board supports the Baynes Sound Investments Ltd. application proceeding as an amendment application, it would not be considered a minor amendment. The application would have to follow the regular RGS amendment process for land in an electoral area as outlined in Attachment 4. This process reflects steps required under the *Local Government Act* to amend a Regional Growth Strategy.

By supporting the application to amend the RGS, the Electoral Area Planning Committee (EAPC) effectively becomes a sponsor of the application and as such, the RDN incurs all costs associated with a bylaw amendment not covered by application fees. At the time that the application was submitted the only fees applicable were for amending an OCP as there were no provisions to recoup costs specific to amending the RGS[3]. As a result, for this application, the RDN will have to absorb the additional costs of processing the RGS amendment application beyond the $800 OCP amendment fee collected in April 2011. As well, staff time spent on this application means that work on other projects in the 2013 Work Plan may have to be deferred.

Alternative 2 would have the greatest financial impact in the near to medium future. An OCP review requires an extensive amount of staff time and other resources. A project of this scale must be included in the yearly budgeting and work plan process and could cost upwards of $200,000. Depending on the scope of the OCP review there will be costs associated with resources for staff time, studies by professional consultants, committees and public consultation. An OCP review can be expected to take a minimum of one year, however more recent experience suggests OCP reviews take much longer to complete (over 2 years). An OCP review for Electoral Area 'H' has not been included in the 2013 departmental work plan.

Alternative 3 would have the least financial impact as no additional staff time would be required for this application. Costs related to **Alternative 4** are unknown and would depend on the nature of the direction provided to RDN staff.

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[2] Regional Growth Strategy, Bylaw No. 1615, November 22, 2011 Page 4.

[3] Amendments to RDN Bylaw No. 1259 (A Bylaw to Establish Fees for Planning Related Products and Services) in November 2011 now require applicants to pay for an RGS amendment in addition to the application fee for the OCP amendment.

LAND USE IMPLICATIONS

Growth Management Implications

The application involves proposed amendments to the Electoral Area 'H' OCP as well as the RGS to add a new Rural Village Centre in Deep Bay. The previous staff report to the Board (received on October 4, 2011) states that growth management implications "*must be considered at the regional level as well as the site level. At the site level the main considerations are design and layout, providing for a mix of uses, efficient servicing and the measures taken to protect environmentally sensitive areas.*"

The previous staff report on the application refers to the 2003 RGS that was in place at the time. This has since been replaced by an updated RGS adopted by the Board in November 2011. The updated RGS carries forward much of the same growth management direction from the 2003 RGS with additional emphasis and new goals addressing climate change and energy consumption, affordable housing, economic resiliency, and food security. The application is discussed below in relation to the goals of the 2011 RGS.

The application includes an extensive amount of information justifying the development. This information is available upon request. An additional submission titled *Deep Bay; A Rural Village Centre* summarizes the applicant's perspective on why the application should be supported (see Attachment No. 6).

At the site level, the development concept put forward in the application demonstrates many of the desirable characteristics specified by the RGS for Rural Village Centres to be compact, complete communities with efficient servicing. This includes a mix of uses, range of housing types and a compact arrangement that supports walking. The application also shows consistency with other RGS Goals to protect environmentally and archaeologically sensitive areas through dedication of green space and strategies to mitigate the impacts of the development on surface water (including the ocean) and groundwater.

Regional level considerations are discussed below with reference to the updated RGS goals and the technical results of the RVC Study. The RGS provides direction on what must be considered when considering changes to the Growth Containment Boundary. *At the regional level the main considerations are:*

1. Have they demonstrated that there is a need for a new village centre;
2. What are the impacts on other established village centres; and
3. Does it contribute to regional goals for urban containment, transportation, GHG emission reductions, affordable housing, agriculture, the economy and protection of rural and resource lands.

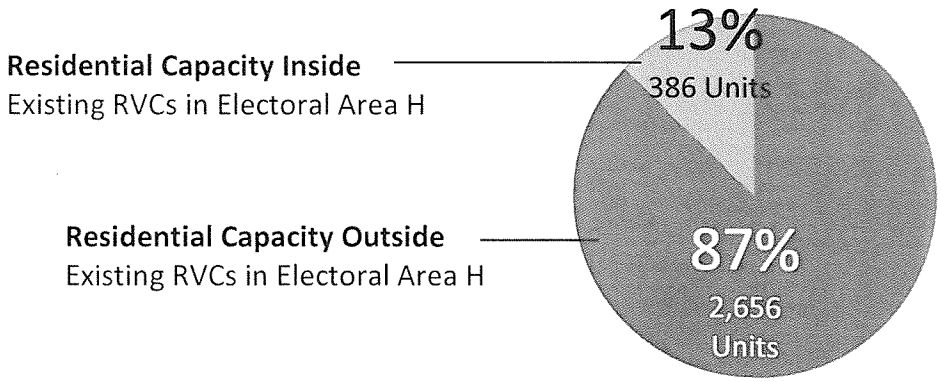
1. Demonstrated need for a new village centre

The RVC study and staff report received by the Board is a resource to help the Board evaluate the 'bigger picture' regional growth management implications of proposals for changes to the GCB in electoral areas including this application that requires a new RVC at Deep Bay.

The results of the RVC study combined with details of the 2011 Census results and the RDN's 2007 Land Inventory and Capacity analysis show that from a housing needs perspective there is ample land to accommodate anticipated growth in the region for the next 30 years. This includes ample capacity to accommodate growth in existing RVCs in Area 'H' as well as in the RGS Rural Residential Land use designation outside of RVCs.

The 2011 Census count for Electoral Area 'H' was 3,509 people. This reflected an increase of 1% or 35 people for the five years between 2006 and 2011 Census. With the exception of Electoral Area B, Electoral Area H had the slowest growth of all the RDN's electoral areas. This fact reinforces the findings of the RDN's 2007 Land Inventory and Capacity Analysis that, subject to some dramatic change in current and projected growth, there is adequate land to accommodate future demand for residential growth in Electoral Area 'H' until 2036 if not beyond.

The RDN's 2007 Land Inventory and Capacity Analysis calculated capacity for an additional 3,042 residential units in Electoral Area 'H' based on OCP land use[4]. With an average Census household size of 2.1 this means that there is the potential to accommodate an additional 6,388 people based on existing land use policies. While some of this residential capacity (13%) is within existing Rural Village Centres the majority (87%) of the residential growth potential is outside RVCs and mostly on lands designated Rural Residential.



The significant growth potential outside of the existing RVCs in Electoral Area 'H' is an important consideration in evaluating the need for another RVC in Electoral Area 'H', particularly when the existing RVCs continue to struggle to maximize their potential due in part to the ample development potential outside their boundaries.

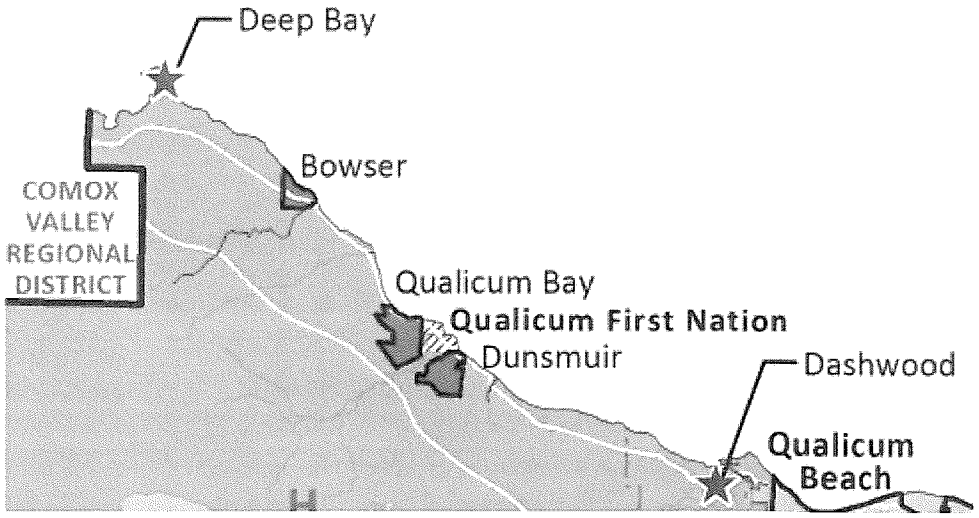
Based on future demand for housing, there is currently no demonstrated need at either the local or regional level for a new RVC at Deep Bay. The proposal mentions a planned expansion of oyster production for a specific company within the shellfish industry and the role of an adjacent Centre for Shellfish Research in drawing *"a large number of people to the community for various programmed events"*. However, no details are given about what this means in terms of an increased demand for housing and commercial space and how the proposed development would accommodate these needs.

[4] This calculation for the 3 Area 'H' RVCs was based on existing levels of servicing and prior to the completion of the Bowser Rural Village Centre Plan. With wastewater treatment systems in place there would be greater residential capacity within the existing RVCs.

Since the RDN Board put the application on hold, changes to the RGS now allow OCPs to include policies that allow more flexible density based rural residential development rather than the standard parcel size based form of development. The 2011 RGS now allows for OCPs to include policies that support "Alternative Forms of Development" on lands designated Rural Residential. A suite of potential options for communities to consider in their OCPS are outlined in the study received by the Board. The intent of these options is to provide creative solutions to mitigate the environmental impacts of ongoing fragmentation of rural lands currently allowed through the traditional subdivision process. This would allow for clustering of development (without any increase in allowed density) in order to preserve environmentally and archaeologically sensitive areas as well as hazardous lands. Alternative forms of rural development also promote opportunities to service land more efficiently with roads, water and wastewater systems.

2. Impacts on other established village centres

Electoral Area 'H' has three designated RVC's - Bowser, Qualicum Bay and Dunsmuir. Bowser, the closest RVC to the proposed development, is recognized as the commercial centre in Electoral Area 'H' with the greatest variety of commercial services and amenities. In contrast to the mostly residential land uses in Dunsmuir, Qualicum Bay has a greater mix of uses and distinct character with its established tourism focus and location of key community amenities serving Area 'H' (including the Lighthouse Community Hall, Ambulance and Fire Station).



Bowser performs well in the RVC study evaluation categories both regionally and compared to the other areas included in the study for Area 'H' (see Attachment 3). Region-wide Bowser performs the second best in all the evaluation categories behind Cedar RVC which is ranked the highest overall. Qualicum Bay, Dunsmuir and the Deep Bay study area ranked mid to low in all the evaluation categories with Qualicum Bay ranking fourth place and Dunsmuir and the Deep Bay study area ranking fifth. Arguably, if Deep Bay were developed according to the concept included in the application it would score higher based on having a more walkable, compact design and wastewater services.

The RVC study indicates that commercial development at Deep Bay "*would likely negatively impact some sales from Bowser*" noting that "*Bowser could be expected to continue to capitalize on tourist*

spending, and spending from the Deep Bay area if the development at Deep Bay does not proceed" (RVC Study pages 61, 63 and 67). The study does not speak to negative impacts of the proposed Deep Bay development on Qualicum Bay and Dunsmuir. That being said, the RV Park included in the proposed development at Deep Bay is likely to have an impact on similar tourist accommodation businesses like the RV parks in the Qualicum Bay area as well as the smaller resorts in Bowser.

3. Does it contribute to Regional Goals?

At the site level, the layout and design of the proposed new village centre at Deep Bay as shown in the concept plan has many of the desirable characteristic the RGS outlines for compact, complete communities. This includes a mix of uses, range of housing types, and community gathering spaces organized to create a compact and walkable community. The proposed layout aims to protect the environment by setting aside 41 ha of the development as dedicated parkland in order to protect significant ecological sites and provide community amenities (including trails, parks and community gardens).

With respect to the specific goals of the RGS, the following discussion outlines how the proposed application contributes to the goals of the 2011 RGS:

1. Prepare for Climate Change and Reduce Energy Consumption

From an energy perspective the applicant indicates that they support the use of LEED principles and promote the use of Alternative Development Standards that use building design, landscaping and site design to reduce infrastructure costs and reduce energy consumption. Onsite rainwater management techniques, walking trails, bike paths, recycling and waste reduction measures are all cited as ways of reducing greenhouse gas emissions.

In terms of including adaptive measures to prepare for the impacts of climate change, the proponents indicate that design elements will be used to help mitigate the impacts of the urban heat island. The proposal indicates that an integrated water management plan will be developed that includes onsite rainwater management and technologies to reduce and re-use water. Furthermore, the intent to retain green space and set back any development from coastal waterfront can also be viewed as an adaptive measure given the increased risks of erosion and landslide associated with more extreme weather events and sea level rise that is anticipated as a result of climate change.

The biggest challenge for the proposed application, from an energy reduction standpoint, is that although the development concept includes a compact, well connected layout that supports walking and cycling and reducing energy consumption, the densities are not high enough to support a truly walkable and transit supported community. The application does not clearly show how it will help reduce energy consumption given that the proposed residential and employment densities are not close to what is needed to support transit or walkability (in terms of going beyond recreational needs to meeting daily employment, retail, educational and other service needs).

2. Protect the Environment

According to studies submitted with the application, the site has been heavily disturbed through logging activities resulting in damage to watercourses. The proponents commit over 50% of the

development site area to park and open space with areas set aside for conservation and rehabilitation. The proposed development concept includes day lighting streams and habitat enhancement to encourage restoration of fish habitat.

The proposal indicates that best practices will be used to conserve, reduce and re-use water as well as for treating wastewater (although it does not say specifically how this will be done). Water for the proposed development would be supplied by the Deep Bay Improvement District (DBID) which uses groundwater supplies. Preliminary studies provided by DBID indicate that there is sufficient capacity to provide water to the Development. The developers indicate that a variety of alternative development standards would be used to reduce the amount of impermeable surfaces.

The impacts of the proposed development versus what would be allowed under current regulations on groundwater re-charge and the marine environment are at this stage unclear. On the one hand there are indications that higher levels of groundwater vulnerability and negative impacts on the marine water quality tend to coincide with the location of development and intensity of human activity. However, there appears to be limited research on which types of human activity are most damaging because it is very difficult to identify the source point of contamination.

The proposed development would require a community wastewater treatment system. Benefits to the shellfish industry are mentioned several times in relation to providing a community wastewater treatment system that could be eventually extended to existing neighbourhoods. If a community wastewater treatment system is built and local residents are willing to invest in infrastructure to access community wastewater treatment then this could potentially address issues of ageing and failing septic systems. More study is required to determine the feasibility of this and understand the financial implications for the RDN and local residents.

Details about the method of wastewater treatment are not fully defined. There are preliminary indications that land based disposal would be considered with potentially some spray irrigation for agricultural use and re-use of treated water to enhance stream flows. Additional detailed information is required to fully determine potential impacts arising from this proposal.

Concerns about the impacts of the currently allowed type and level of development upon shellfish aquaculture have been cited as a rationale for supporting the higher levels of development serviced by a wastewater treatment system as proposed in the application. The RDN's recently completed Agricultural Area Plan (AAP) notes the potential conflicts between aquaculture and agriculture as well as the impacts of urban development on both forms of land use. The AAP supports a variety of actions that resolve these conflicts.

There is no demonstrated evidence that more intensive urban development of 386 residential units, 292 RV units, commercial and recreational buildings along with roads and paved recreation areas (tennis courts, basketball courts) serviced by a community sewage treatment system would be any better than the scale of development that is currently allowed. More details on the proposed wastewater treatment system and disposal options are needed to ascertain the environmental impacts of higher density development on a community wastewater treatment system versus lower density development using modern individual or package treatment systems.

3. Coordinate Land Use and Mobility

The proposed development is compact, fitting well into a 5-10 minute walking radius (200-400 metre distance) with the majority of residential use within close walking distance of the proposed commercial/retail centre and a variety of recreational opportunities.

At the site level the proposed development concept effectively links land use to inter-connected trails and road networks. This includes separate biking and walking paths, and traffic calming that promotes a range of transportation choices including walking, cycling, rail and car use.

The developer indicates that once the development is *"fully realized there is an economic potential for a shuttle bus service to be developed for residents and visitors"*. Deep Bay currently has bus transit service one day a week. This service has not been well used in Electoral Area 'H' since it was introduced in March 2012. Although the development if fully built out would result in a significant increase in current residential density, both the residential and employment densities proposed by the development are too low to support a regular transit system that is economically viable.

A preliminary road transportation study provided by the developer indicates that the development will not have a major impact on existing road networks though there will be a need for improvements to allow for a new highway access to the development site. An additional positive aspect of the proposal is that it would provide road access to the Deep Bay Marine Station that currently does not have dedicated highway access.

4. Concentrate Housing and Jobs in Rural Village and Urban Growth Centres

The proposed development aims to concentrate housing and jobs through the creation of a new Rural Village Centre. As a new RVC the development proposal if realized would provide opportunities for a variety of housing types, recreation opportunities and some potential longer term employment through the commercial/retail space.

The number of permanent jobs that the proposed development is anticipated to support at build out is quite low (27 direct Full Time Equivalent (FTE) and 5 indirect FTEs) in contrast to the potential number of residents (approximately 926) that could live in the development at build out. While it is arguable that potential residents might have a home based business, the lack of major growth in local employment suggests that the main market for the development would be retirees or those commuting to workplaces outside the area.

Despite the proposal's design concept and expressed intentions to follow a variety of sustainability concepts, including Smart Growth Principles, its green field location outside of the existing GCB remains contrary to the intent of the RGS to concentrate growth within existing mixed use centres within the GCB.

In recognition of the significance of considering changes to the GCB, the RGS (Policy 4.3) requires several criteria to support proposed expansion of GCBs. These criteria and the extent to which they are addressed through the proposal received by the RDN Board are discussed in the Summary/Conclusion.

5. Enhance Rural Integrity – Protect and Strengthen the Region's Rural Economy and Lifestyle.

The proposed development is primarily on lands designated Rural Residential in the Electoral Area 'H' OCP. The RGS recognizes that one of the challenges to increasing the proportion of growth within GCBs is the extensive potential for large lot development in rural areas particularly on land designated Rural Residential. Residential development outside of the GCB continues to fragment ecosystems and lands valued for groundwater recharge and aquifer protection as well as resource uses (agriculture, aquaculture, and forestry).

To address this issue the RGS does not support the designation of more Rural Residential land and provides policies intended to minimize the impacts of development that is currently allowed. The RGS also allows for OCPs to be amended to include alternative forms of development on Rural Residential land that would allow smaller minimum parcel sizes outside the GCB providing there is no overall increase in density or the potential number of new lots (RGS Policy 5.13). This is intended to reduce the fragmentation of land and allow for more land to be conserved in order to mitigate the ecological and economic impacts of residential development of rural lands.

The RDN Board received a study on November 27, 2012 that presented a range of options to minimize the impacts of development of Rural Residential lands. This study of Alternative Forms of Rural Development provides a suite of options that can be considered by communities as amendments to their Official Community Plans.

Should the RDN Board decide not to proceed with considering the application to amend the RGS there would be an opportunity for the applicant to request that the Area 'H' OCP be amended to include options for alternative forms of development that would better meet RGS goals to protect the environment and rural areas while supporting community appropriate levels of development.

6. Facilitate the Provision of Affordable Housing

The development proposal includes: 84 single family attached units, 136 single family detached units, 120 multi-family residential units and, 46 seniors housing units. A range of housing types caters to a variety of life stages from singles, to families to seniors. The proposal indicates that the developer will work with the RDN to explore options including *"the provision of secondary suites and live/work studios and apartments above the commercial space"*. Rental suites can help make housing more attainable for owners and renters. Well designed and adaptable suites can also support the ability of housing to adapt to changing needs of individuals and families.

The application states that a range of price points and tenure types will be available but does not specify what these will be. The application also notes that through the development of comprehensive zoning *"the opportunity is provided to increase densities that allows for the negotiation of public amenities including affordable housing"*. Future negotiated agreements will be required to guarantee that the development will meet the thresholds for affordability that make housing attainable for a range of income levels.

Reliance on owning a private automobile is another factor for housing affordability particularly in more rural areas. The development lacks the densities needed to support an efficient transit service. This means that housing costs will be compounded by transportation costs associated with the need to own a private vehicle to access jobs, schools, retail, medical and other daily needs.

Given the significance of the proposed change, should the Board decided to proceed with considering the application then it would be wise to consider OCP policies to ensure that a proportion of the proposed units in the development meets the intent of RGS Goal 6 and structure agreements so that the provision of affordable housing units are secured and tied to the land irrespective of future changes in ownership.

7. Enhance Economic Resiliency

One of the challenges for local governments is evaluating the full costs of development by weighing anticipated economic benefits with the long term costs of providing services and amenities to low density populations. This level of analysis is rarely undertaken given the complexity of factors involved and the way costs are distributed amongst different levels of government. In rural areas of the RDN this includes ongoing servicing and maintenance of rural roads and storm water infrastructure that are paid for through provincial taxes.

Another challenge is the role of local government in considering the market viability of proposed developments and the financial stability of developers to undertake projects. There are many examples of projects both within the RDN and neighbouring regional districts that have been approved at the OCP level and that have stalled or been scaled back due to lack of market demand or inadequate funds to follow through on the development.

Some may argue that market viability and financial stability of proposals should not be a consideration for local governments in making substantial changes to land use bylaws to accommodate growth. However, a failure to consider market conditions may see local governments undertake processes that are resource intensive and require a high level of community engagement only to be left with lands that remain undeveloped or underdeveloped due to lack of demand for many years. In such cases the lands may change hands multiple times over many years before being fully developed. The result is any anticipated benefits to the community of accepting significant land use changes may not be realized.

Should the Board support the development proceeding, the applicant's economic study[5] estimates that from project start-up to build out "total government revenue from the project is expected to be $14.3 million by 2025" of which $8.4 million would be generated by regional property tax and $1.66 million from RDN permits and fees. The RDN is estimated to benefit from over $925,000 in anticipated annual tax revenues once the project is fully build out.

The applicant puts forward estimates for employment generated during the construction phase and resulting from the commercial development after build out is completed. Forecasts for retail expenditures by residents of the proposed development are also provided with estimates of $25 million being generated by build out. This is based on an anticipated 60% average occupancy rate of the RV

[5] Deep Bay Benefits Analysis, G.P. Rollo & Associates, Land Economists Ltd, January 2010, Section 8, page 13, Deep Bay Development Concept.

park. The commercial space if built out is estimated to create 27 FTE direct jobs plus and an additional 5 FTE indirect jobs.

The RGS supports the provision of new tourism facilities and developments that attract new tourists and increase length of stay (Policy 7.11). In keeping with this policy, the proposal includes RV Resort Units with 292 spaces and a range of amenities intended to attract longer term visits. Increased tourism would benefit local businesses including the proposed retail on the site. Like retail, employment in service industry jobs related to tourism are typically not high paying. Nevertheless there would be spin-off opportunities for small business to capitalize on tourism traffic.

It is not currently known whether or not there is demand for an RV park of this scale and to what extent a new RV park in this location would impact business for existing RV parks in electoral Area 'H' and other tourist accommodations like bed and breakfasts, motels or resorts. Although not intended, the RV park may also potentially be used as a form permanent housing. This is difficult to regulate and occurs in other areas of the region where RV parks are allowed.

8. Enhance Food Security

The RDN Board adopted the region's first Agricultural Area Plan (AAP) on October 23, 2012. The AAP was created with the input of a diversity of stakeholders including agricultural and aquaculture producers, processors, retailers and consumers.

One of the AAP's Goals is to "Support Agriculture and Aquaculture in Land Use Regulations and Policies". A specific action identified under this goal is to "continue to work with member municipalities to encourage the efficient use of existing urban and future urban lands as identified in the RDN's Regional Growth Strategy" (7.1E page 53 AAP).

Both the RGS and AAP support aquaculture and agriculture. The AAP recognizes the potential sources of conflict between agriculture and aquaculture, in particular citing *"issues of water use and the potential effects of runoff from agricultural and urban land uses into aquaculture sites"* (AAP page 2). This includes coordinated actions to address surface water issues and concerns (4.2B) such as strengthening the RDN's development approval process to consider the water-related impacts of new development on both aquaculture and agriculture (7.1D).

In keeping with RGS policies, the majority of the ALR lands on Lot C within the development proposal are not identified for subdivision or development aside from a portion identified for commercial along Highway 19A. The ALR lands on Lot C are identified as being potentially suitable for wastewater disposal using spray irrigation.

9. Celebrate Pride of Place

The proposed development includes a variety of initiatives that support Goal 9 of the RGS. This includes:

- Protection of the waterfront areas that include archeological and environmentally sensitive sites.
- Public access to the waterfront and recreational areas through parks and trails.
- Extensive areas set aside to preserve ecologically sensitive areas.
- A community centre and amenities that are intended to be accessible to the wider community beyond the development.

The proposed development site is in an area of great historic and cultural significance to First Nations particularly Qualicum and K'ómoks First Nation. The application includes a summary of Archaeological Studies, Future Requirements and Opportunities for the site that states *"the archaeological site on the property may be one of the most significant in British Columbia"*. The summary references an Archaeological Impact Assessment (AIA) that was finalized in 2007 (also included in the application) that clearly maps out a site on the northwest coastal boundary of the site which shows signs of *"long-term prehistoric human occupation"*. The summary notes that if this site (identified as DiSe 13) can be avoided then no further archaeological studies will be required.

It should be noted that the AIA was done using an early development concept that is not part of the current application. In keeping with the RGS policies to protect important historic and cultural resources and cultural sites (Policy 9.1), the proposed development concept appears to dedicate the majority of this DiSe 13 area as "natural open space" however, there appears to be proposed trails and possibly residential development either within or close to the DiSe 13 boundary. If the Board allows the application to proceed then the AIA mapping should be updated to show how the proposed development concept will affect the archaeological areas identified.

10. Provide Services Efficiently – Provide Efficient, Cost-Effective Services and Infrastructure.

The RGS does not support the provision of *"new community water and/or sewer services to land designated as Rural Residential"* with the possibility of exceptions *"in situations where there is a threat to public health or the environment due to the domestic water supply or wastewater management method being used"* (Policy 10.2).

The RGS also supports new community water and wastewater systems that are publically owned (Policy 10.3). The proposed development would tie into the water services provided by the Deep Bay Improvement District (DBID). The proposal includes a preliminary servicing report that indicates that the DBID aquifer has enough water to supply the development (along with existing development). However, the water system does not have sufficient capacity (water storage volume and piping network) to provide the flows needed for water consumption and fire protection.

As there is no nearby community wastewater treatment system, the proposed development requires a new system. Based on RGS policies this would have to be publically owned. The servicing report indicates that the *"entire wastewater system will be privately owned, operated and maintained by the strata corporations set up during the development"*. Should the application proceed, further

information regarding the provision of wastewater treatment and ownership would need to be resolved.

The RGS also includes a policy (10.7) about not rezoning lands to implement OCP policies for higher density development until community water and sewer services can be provided. Given the significance of water and wastewater treatment on the ability to develop to the densities proposed, if the Board supports the development application to proceed then proof of water and wastewater treatment will be required as part of the RGS and OCP amendment process.

Consistent with the RGS (Policy 10.10) the application indicates that the developer will work with the RDN to develop a system for three streams of onsite solid waste recycling. This includes providing facilities for recycling, composting and a section for re-use of household goods.

11. Enhance Cooperation Among Jurisdictions

The decision about whether or not to proceed with reviewing this development application has implications for relationships with the development industry and private land owners with regard for supporting the growth management goals of the RGS. Considering an application of this magnitude sets a precedent that other applications to consider major changes to the GCB will be considered in rural electoral areas. If the RGS is continually challenged and amended, this will compromise attempts to get support for a coordinated approach to growth management and 'buy in' to the RGS.

Allowing the application for proposed development in Deep Bay to proceed does not necessarily mean the RDN Board will approve the development. It does however establish an expectation for considering future applications for developments that require significant amendments to the Growth Containment Boundary to create new RVCs.

Official Community Plan Implications

Lots A and B are currently designated Rural Lands in the OCP with a minimum parcel size of 4.0 ha (10 acres). Lot C is within the ALR and designated in the OCP as Resource with a minimum parcel size of 8.0 ha (20 acres). A small portion of Lot C, located to the north of Highway 19A, is proposed for commercial development. To allow the proposal as currently expressed, the rural designated properties would need to be amended to the village centre designation. The portion on the northeast corner of Lot C would also need to be included in the new village centre designation as the OCP requires (Policy 2, Section 5.5 – Village Centres) that *"commercial sites shall only be located in areas designated as village centres"*. This proposed commercial area would also need to be removed from the ALR.

OCPs are created for and by the community. They are policy documents that reflect community expectations regarding future land use and development for a defined area. Significant changes to OCP policies require comprehensive public consultation with the community. The public consultation section of the proposal outlines a lengthy list of meetings and discussions with consultants, local individuals, groups, commercial interests, RDN staff and other stakeholders undertaken in the development of this proposal. Although there appear to be a few Open Houses providing information to the community, as a whole the Electoral Area 'H' community (and the RDN Board) has not had the opportunity to fully discuss, debate and understand the implications of a new rural village centre. Furthermore, as the

designation of a new rural village centre has region-wide implications there have also been no opportunities for the regional community to provide input.

The Board will recall the lengthy and comprehensive process to develop the Bowser Village Centre Plan involving the Electoral Area 'H' community. A similar process for the Cedar Village Centre in Electoral Area 'A' was initiated in 2011 and is still underway (Cedar Main Street Project). These planning processes provide community members with an opportunity to 'flesh out' the detail of community expectations for development in rural village centres that already exist and that are recognized within an electoral area OCP and the RGS. Given the significant changes expected and required by the creation of a new rural village centre, from an OCP perspective, consideration of such a proposal would benefit from a full community consultation process along the lines of the periodic full OCP review.

Sustainability Implications

As with the growth management implications, the sustainability implications must also be considered at the site level and the regional level. At the site level, the applicant is proposing to take several measures to make the development more sustainable. Among the measures focused at the site level: a compact walkable community, a mix of housing, local shops and services, green buildings, preservation of greenspace, the potential for local food production, narrower streets, on-site rainwater management and servicing.

At the regional level however, the proposal requires that a new rural village centre be created in a location that is not currently intended as a developed area. RVCs are intended to accommodate smaller amounts of growth in keeping with their rural settings. To date there is no information that supports a demonstrated need for a new RVC in this location particularly when adjacent RVCs and surrounding rural areas have ample land for future residential growth.

There are aspects of the proposed development at Deep Bay (including the full servicing of development) that set it apart from many of the existing RVCs that continue to struggle with implementation. The benefits of a fully serviced development could possibly be extended to existing development in Deep Bay. However, more information is needed to fully understand the implications to the RDN and community members if the RDN is asked to be responsible for the wastewater treatment system in this area.

Public Consultation Implications

The RGS and 2013-2015 Board Strategic Plan both support transparency in decision making and involving community members in decisions that affect them. The *Local Government Act* requires opportunities for public consultation regarding amendments to Official Community Plans and the Regional Growth Strategy.

To date, the Area 'H' Community and the wider RDN regional community have not had an opportunity to fully discuss and understand the implications of the proposed changes put forward in the application. As per the statutory requirements, the Board must approve a public consultation plan for RGS amendments considered under both regular and minor amendment processes. The plan will identify meaningful opportunities for the public to speak to the amendment in relation to the regional sustainability goals of the RGS.

Considering the scale of the amendment and the provisions in the OCP for comprehensive consultation with the community, it would be necessary to consider a more extensive process than undertaken for previous RGS amendment applications. As outlined in the Financial Implications of this report, this consultation process is both yet to be fully outlined and is not part of the departmental work plan established in the 2013 Business Planning and Budgeting process.

Inter-governmental Implications

A decision to alter the Growth Containment Boundary would be of interest to member municipalities who have jurisdiction over lands intended to receive the majority of the Region's future growth along with adjacent regional districts and their member municipalities as well as First Nation governments.

Should the EAPC support bringing the application forward and the Board agree to consider it as an amendment to the RGS then it will proceed as a 'regular' amendment to the RGS and follow a legislated process as outlined in the *Local Government Act* (see Attachment 4). If the addition of a new RVC at Deep Bay is approved through a full Electoral Area 'H' OCP review process then it can be considered as a 'minor amendment' to the RGS. This means that it can proceed through a relatively less onerous RGS amendment process. *Attachment 5* shows the steps involved in a minor amendment process.

As outlined in the 'regular' and 'minor' RGS amendment process (Attachment 4 and 5), consideration of the application will require referrals to each member municipality and adjacent Regional District. Referrals will also be provided to provincial and federal agencies and First Nations. Section 857 of the *Local Government Act* requires that before an RGS amendment can be adopted by the Board, it must be accepted by each member Municipal Council and adjacent Regional Board during an established referral period. If one or more local governments do not accept the amendment, then the Minister of Community, Sport and Cultural Development will establish a dispute resolution process between the affected parties.

SUMMARY/CONCLUSIONS

Following the completion of a region-wide study of Rural Village Centres, the EAPC can now re-consider an application to create a new Rural Village Centre at Deep Bay in Electoral Area 'H'. An amendment to the RGS is required to support the proposed development which involves including an area of 76 ha inside the GCB .

The development proposal must be examined from both the site level and the regional level. At the site level, the proposal is to create a master planned resort community based on compact residential neighbourhoods that are walkable to a central commercial area that includes small retail, a community building and public gathering spaces. The applicant proposes 51% of the land be designated for park land and open space, being used for trails to connect the community and for conservation of the undisturbed natural areas of the site. The proposal also envisions development that is fully serviced by the local water district and a strata operated sewage collection and treatment system. While it does have a mix of uses and range of housing types, the proposed densities are low for a newly designated village centre.

From a regional growth management perspective, the proposal does not fit with the RDN's established growth management strategy which is aimed at containing growth within existing designated urban areas and village centres. Indeed, the proposal presents significant competition to existing RVCs that are not yet fully realized or able to reach their own potential as desired under the RGS and respective OCP.

While the proposal provides for positive action on a number of goals established in the Regional Growth Strategy it does not address in a comprehensive way the established RGS policy requirements for a GCB expansion.

Requirement for GCB Expansions (RGS Policy 4.3)	**How well requirements are addressed by the application**
• A land inventory demand and supply analysis that assesses the need for additional land to be included within the GCB and the impact the proposed expansion would have on the development of land inside GCBs located elsewhere in the region;	The application does not show a demand for the proposed residential or tourist development. Nor does it provide an evaluation of the impacts upon other developable land inside the GCB located elsewhere in the region. The last region-wide residential land inventory demand and supply analysis done in 2007 showed that there was ample land in the region and in Area 'H' to accommodate anticipated growth. Since then the 2011 Census showed that growth was slower than anticipated and predominantly occurring within the GCB in Urban Centres like the City of Nanaimo. There has also been a significant increase in land included in the GCB. The RVC study reinforces findings that there is ample development capacity in existing RVCs and discusses the impacts of the proposed RVC in Deep Bay upon Bowser. An updated land inventory would be useful to verify information that strongly suggests that there is no need for additional land to be included in the GCB.
• A land use concept plan;	The application includes a well-developed land use concept plan.
• An environmental impact assessment that identifies environmentally sensitive areas;	The application includes an "Ecology and Wildlife Assessment" that identifies environmentally sensitive areas including wetlands, riparian areas along with nesting and perch trees. It is noted that this assessment was used to guide the development of the land use concept.
• A surface water or hydro-geological study that assesses the availability and quality of water to service the proposed development with a community water system, and the potential impacts of development on watershed function, including recharge capacities and surface runoff, as well as, on long term water supply to existing development and undeveloped lands located within GCBs;	The application includes a "Ground Water Feasibility Study". The study provides information about the long term capacity of aquifers in the Deep Bay Improvement District to supply water to the development in addition to existing development. Also included is an "Aquatic Resource Environmental Assessment Report" which provides a list of objectives that it is recommended that the development meet. More detail is needed about the measures that will be taken and the potential impacts of the development on watershed function including recharge capacities and surface runoff.

Requirement for GCB Expansions (RGS Policy 4.3)	How well requirements are addressed by the application
	Further study that includes the use of a water balance model would help understand the impacts of the proposed development concept on rainwater management and the watershed as a whole.
• A study that identifies how wastewater disposal will be addressed and what the impacts will be on the capacities of existing treatment facilities;	The application includes a "Wastewater Treatment and Disposal Considerations Feasibility Report" that discusses potential options but does not specify how wastewater treatment and disposal will be addressed. This is a preliminary report that indicates the need for a proper Environmental Impact Summary to be done to establish the impacts of the selected option for wastewater treatment and disposal. This information is needed to evaluate the environmental impacts of the proposed development. There are no nearby treatment facilities for the proposed development to connect to or have an impact upon so this information is not needed.
• An evaluation of the impacts on community vulnerability to disasters and impacts upon the provision of emergency services;	The application includes a 2005 Geotechnical Report that recommends the suitability of the site for residential use provided appropriate setbacks (10-5 meters) are used for waterfront and riparian channel slopes that have a higher risk of failure due to seismic events or erosion. This report does not include an evaluation of the proposed developments impact on community vulnerability to disasters and the impacts upon the provision of emergency services (police, fire, ambulance). Further study would be required should the application proceed.
• An inventory of aggregate deposits within the proposed boundaries of the GCB;	There is no inventory of aggregate deposits provided with the application. This would be required should the application proceed.

Requirement for GCB Expansions (RGS Policy 4.3)	How well requirements are addressed by the application
• A transportation study that identifies: • Existing road traffic conditions; • Downstream impacts of additional traffic resulting from the proposed development;, and • Demand for transit service.	The proposal includes a "Traffic Impact Assessment" conducted in January 2011 that focuses on vehicular traffic by looking at existing conditions and forecasting anticipated changes based on the build out of the development. The traffic assessment indicates that the developer should provide a new intersection for an access road to the development from Highway 19A. The assessment concludes that such an intersection would be able to accommodate the anticipated peak traffic flows post build out with a stop control until 2020. The study concludes that additional traffic resulting from the development will have little impact on the adjacent roads and the intersection of Gainsberg Road/Highway 19A. The traffic impact assessment does not discuss the anticipated demand for transit although the application mentions the possibility of a shuttle bus service and working with the RDN to provide transit. This information would be required should the application proceed.

From an OCP perspective a proposal of this scale and scope necessitates a broad and comprehensive community review, such as that typically undertaken during the review of an Electoral Area OCP. At this time a review of the Electoral Area 'H' OCP is not included in approved departmental work plans nor is such a review expected to be considered in the near term.

Considering the housing and RVC needs of Electoral Area 'H' and the region as a whole there is no demonstrated need to designate a new Rural Village Centre given the following factors:

- Adequate undeveloped land in the RDN's existing RVC's and Rural Residential designated lands to accommodate future growth;
- Existing capacity to absorb future population growth in the region's Urban Centres including large proposed developments in Nanaimo;
- Potential impact from proposed developments in the adjacent Comox Valley Regional District including a large development in Union Bay which may affect the successful implementation of the proposed development plan;
- Potential negative impacts on the Bowser RVC if there is additional retail growth in Deep Bay to compete for the same pool of residents;
- Potential negative impacts on small resorts, tourist accommodation and RV Parks in Bowser and Qualicum Bay as the proposal will provide significant competition to existing operators; and
- Likely negative impacts on the residential growth in Bowser due to competing development potential.

There is currently no demonstrable evidence that a development of this scale with wastewater treatment will have less impact on the environment (including marine ecosystems) than the level of

development currently allowed. Particularly given the existence of a variety of policies and legislation to ensure that currently allowed land uses adhere to measures to mitigate impacts on the environment including water quality. This includes the opportunity to amend the Area 'H' OCP to accommodate Alternative Forms of Development.

Should the EAPC and RDN Board support the application proceeding staff recommend that the applicant be required to provide further information to fulfill the requirements for proposed RGS amendments and better demonstrate the need for a change of this magnitude to the Area 'H' OCP and RGS.

In light of the information presented in this report Staff recommends the Board consider Alternative 3.

RECOMMENDATIONS

1. That the Electoral Area Planning Committee not support the Deep Bay development application by recommending that the Board deny the application.

2. That staff be directed to discuss potential options with the applicant about developing the site consistent with RGS and OCP direction.

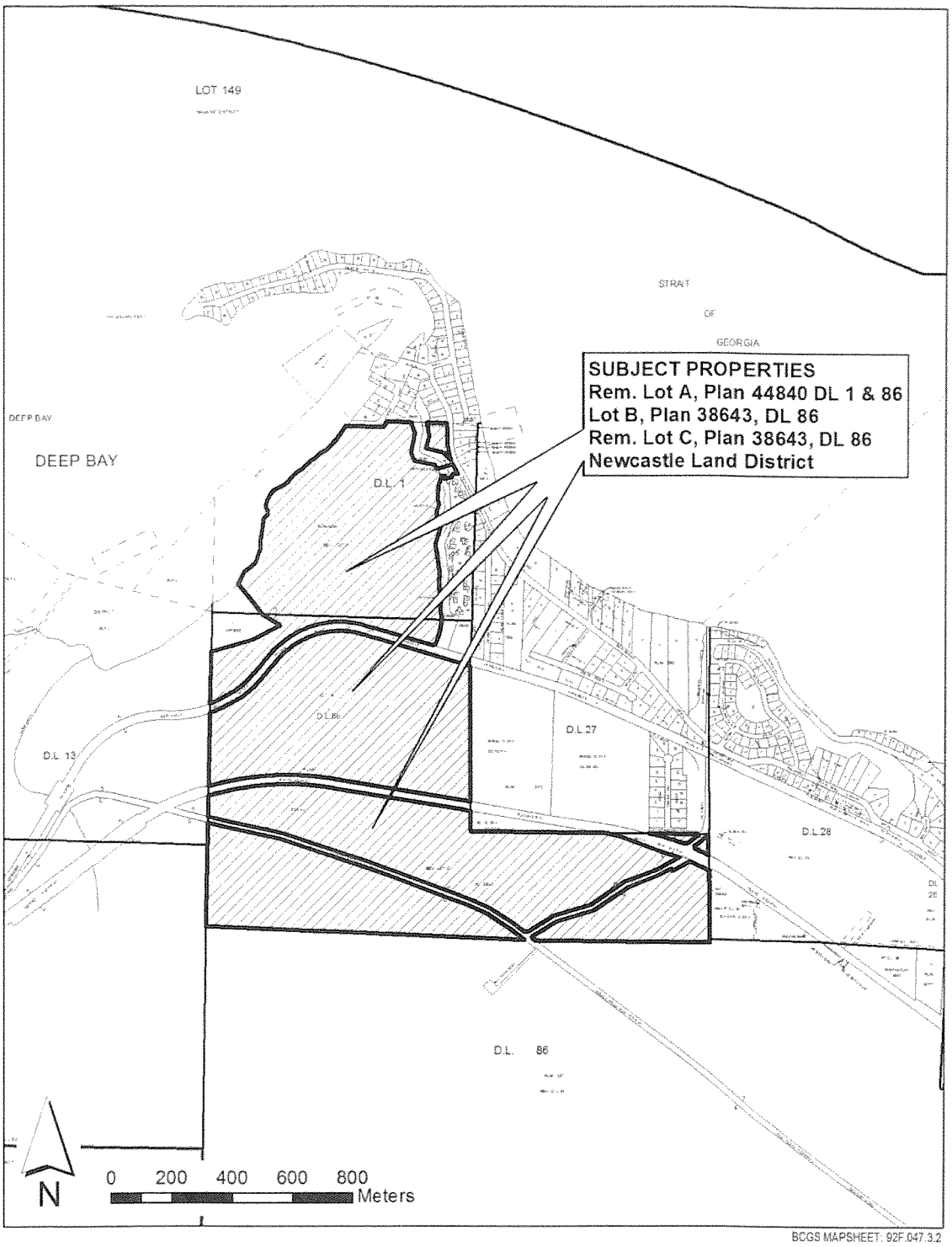
Report Writer

General Manager Concurrence

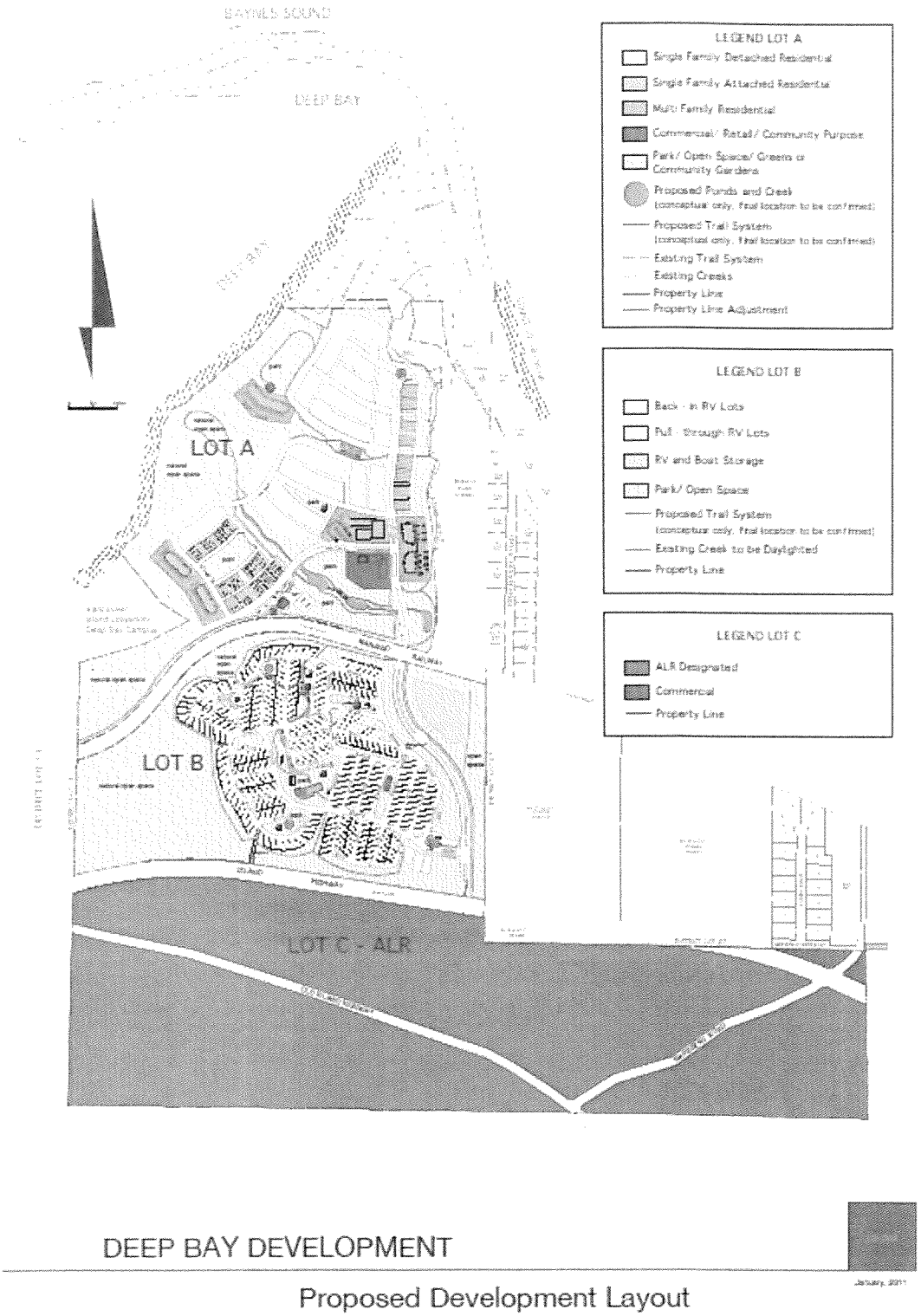
Manager Concurrence

CAO Concurrence

Attachment 1
Location of Subject Properties in Deep Bay Development Proposal



Attachment 2
Concept Plan



DEEP BAY DEVELOPMENT

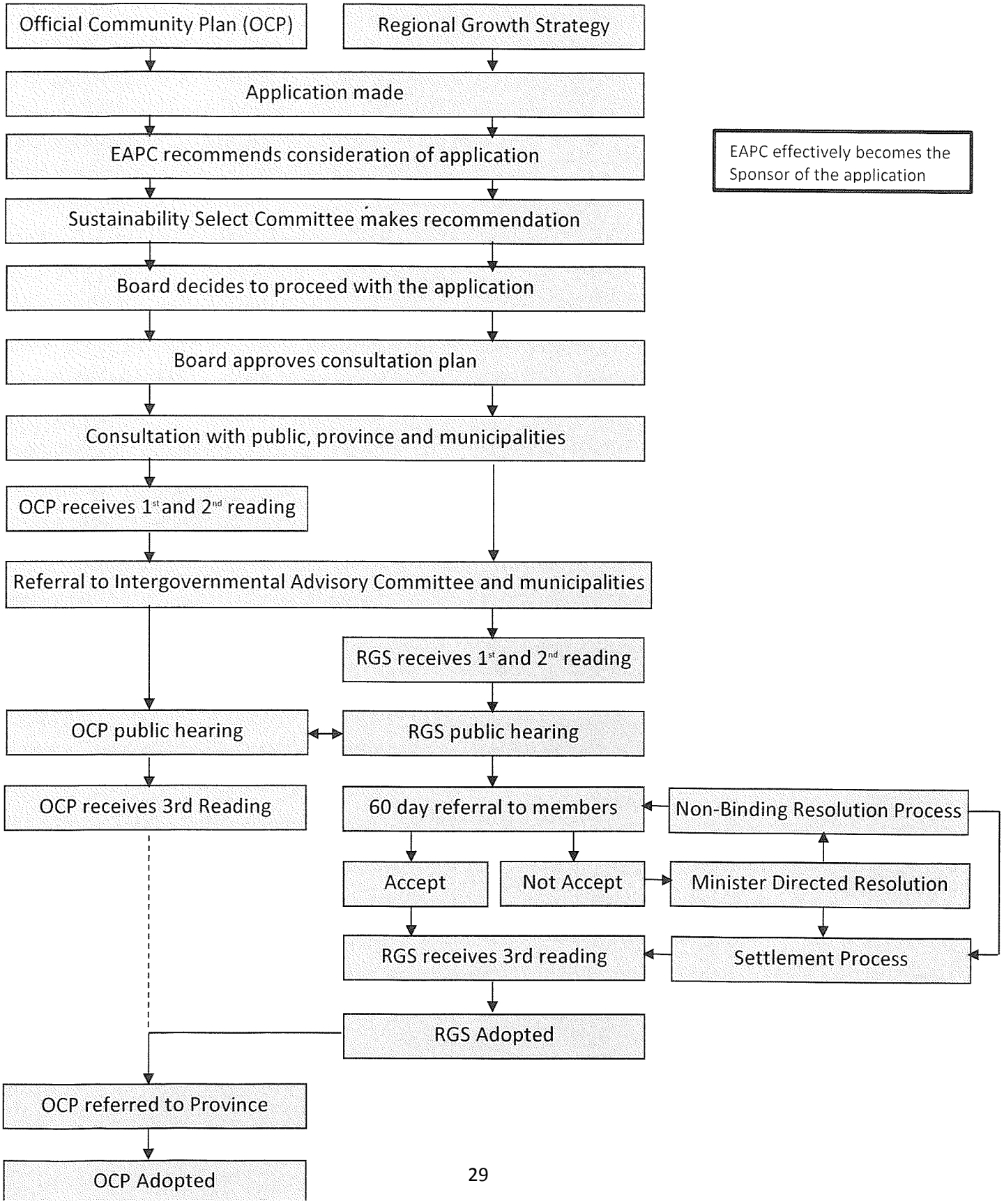
Proposed Development Layout

Attachment 3

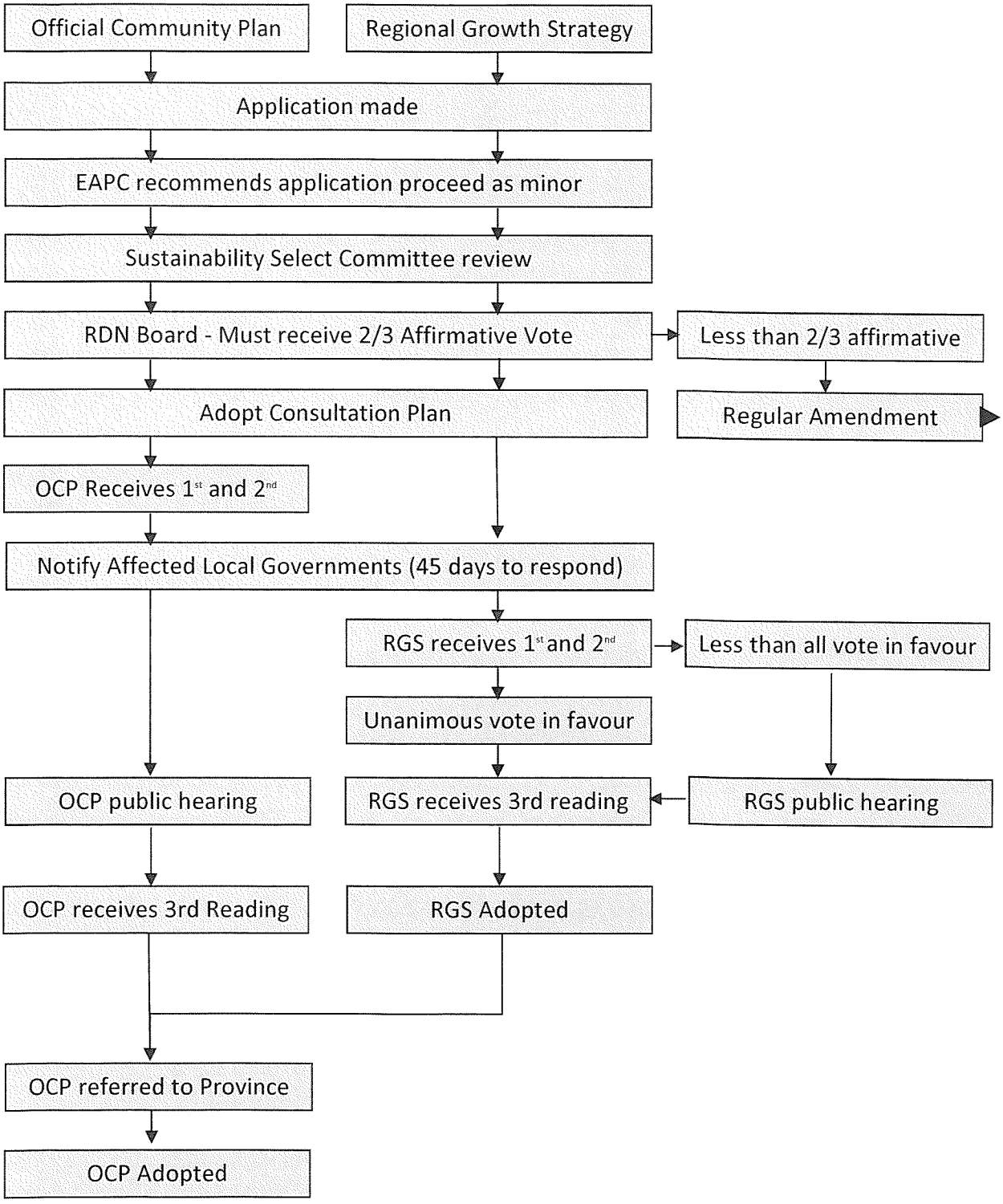
The table below shows how the RVC's are ranked relative to each other for each evaluation category and for all three categories combined.

OVERALL EVALUATION SUMMARY WITH RVC'S RANKED					
Electoral Area	**RVC/SA**	**Community Structure & Land Use**	**Development & Market Viability**	**Water & Wastewater Infrastructure**	**RANKING (lowest is best)**
A	Cedar	1	1	1	1
H *	Bowser	1	1	2	2
E	Red Gap	1	1	2	2
F	Coombs	1	1	3	3
E	Fairwinds	3	1	1	3
F	Bellevue – Church Road	3	1	2	4
A	Cassidy	3	1	2	4
F	Errington	1	2	3	4
H *	Qualicum Bay	2	2	2	4
G	Dashwood SA	2	3	2	5
H *	Deep Bay SA	3	2	2	5
H *	Dunsmuir	2	3	2	5
C	Extension	2	3	2	5
F	Hilliers	2	2	3	5
F	Qualicum River Estates	3	3	3	6

Attachment No. 4
Regular Amendment Process for the Regional Growth Strategy – Electoral Area



Attachment 5
RGS Minor Amendment Process Triggered by OCP Amendment Application in Electoral Area



REGIONAL DISTRICT OF NANAIMO

MEMORANDUM

TO:	Tom Armet, Acting General Manager Strategic and Community Development	**DATE:**	April 8, 2013
FROM:	Chris Midgley Manager, Energy and Sustainability	**FILE:**	
SUBJECT:	**RDN Community Energy and Emissions Plan**		

PURPOSE

To provide a completed draft of the Regional District of Nanaimo *Community Energy and Emissions Plan* (CEEP) for Committee consideration. The CEEP is provided under separate cover.

BACKGROUND

The development of the RDN CEEP has been underway to a greater or lesser extent for several years. In 2007, the RDN received funding from the Federal Government through its Partners for Climate Protection program, administered by the Federation of Canadian Municipalities. The push to complete the CEEP now relates to requests for a final draft of the plan from the FCM.

The RDN CEEP follows a five milestone framework developed by the federal Partners for Climate Protection program. The five milestones are:

1. Emission Inventory and Forecast;
2. Emission Reduction Target;
3. Local Action Plan;
4. Implementation Plan; and
5. Monitoring and Reporting

Of these, the CEEP includes milestones 1-3, with milestones 4 and 5 to follow separately.

RDN Energy and Emission Inventory

In 2010, the Government of British Columbia issued energy use and emission inventories for every jurisdiction in the Province, based on data available for the year 2007. These Community Energy and Emission Inventory (CEEI) reports are appended to the CEEP, and provide the emission inventories for the RDN as a whole, for member municipalities and for the region's unincorporated areas. The reports also establish 2007 as the base year against which future reductions or increases will be measured. The Province has signaled that CEEI reports will continue to be issued in the future, with 2010 inventories anticipated for this year.

The inventories outline energy use and resulting emissions from several sectors and sources in the RDN. Table 1 lists the sectors and sources for energy use and emissions in the CEEI reports.

Table 1: Emission Sectors and Sources in Provincial CEEI Reports

Sector	Source
On-Road Transportation (includes energy use and emissions for 8 categories of vehicles)	Gasoline
	Diesel
	Other Fuel
Buildings (includes residential, commercial and a small subset of industrial buildings)	Electricity
	Natural Gas
	Heating Oil
	Propane
	Wood
Solid Waste	Tonnes of Solid Waste Deposited in Landfill
Land Use Change and Agriculture (includes deforestation from settlement and agriculture, and emissions from enteric fermentation).	Area of land converted (ha)
	Methane

While an extremely valuable resource, one limitation is that the CEEI reports provide an aggregated emission inventory for unincorporated areas in regional districts. To make the data more locally relevant, the RDN distilled this aggregated inventory into energy use and emission inventories for each of the RDN's electoral areas (EA 'B' is excluded as planning authority for Gabriola and surrounding islands rests with the Islands Trust).

Excerpted from the CEEP, Appendix 1 outlines emissions by jurisdiction, Appendix 2 shows emissions by Electoral Area in the RDN, and Appendix 3 reveals energy use and emissions by sector and source in the RDN. In sum, emission for the RDN totaled 913,414 tonnes of carbon dioxide equivalent in 2007, with 63% of those emissions coming from on-road transportation, 24% coming from buildings, >2% coming from annual solid waste generation, and 11% coming from land use change and agriculture.

In addition to total community energy use and emissions by source and sector, these tables make several other points very clear. First and most obviously, the total emissions in a community are a reflection of the total population in a community – as population increases, the number of emission sources (namely buildings and vehicles) increase as well.

Secondly, it is equally clear that transportation related emissions occupy the largest share of emissions in all communities in the RDN. Not surprisingly, transportation emissions are more dominant in the Region's electoral areas compared to member municipalities. This is due to the fact that in electoral areas, residents tend to be further removed from local services and amenities, and transit services inevitably reach fewer people. However, the Region's urban centres are also auto oriented, with low density communities structured around a linear transportation network.

Also evident in the energy use and emission inventories is the emission intensity of different energy sources. This is most clearly demonstrated in a comparison between the energy consumed as electricity in buildings versus gasoline used in vehicles. In the RDN, we use approximately 8% more energy in the form of gasoline than electricity, measured in gigajoules, but in so doing produce more than ten times the emissions as electricity in our buildings.

Business-as-Usual Energy and Emissions Forecast

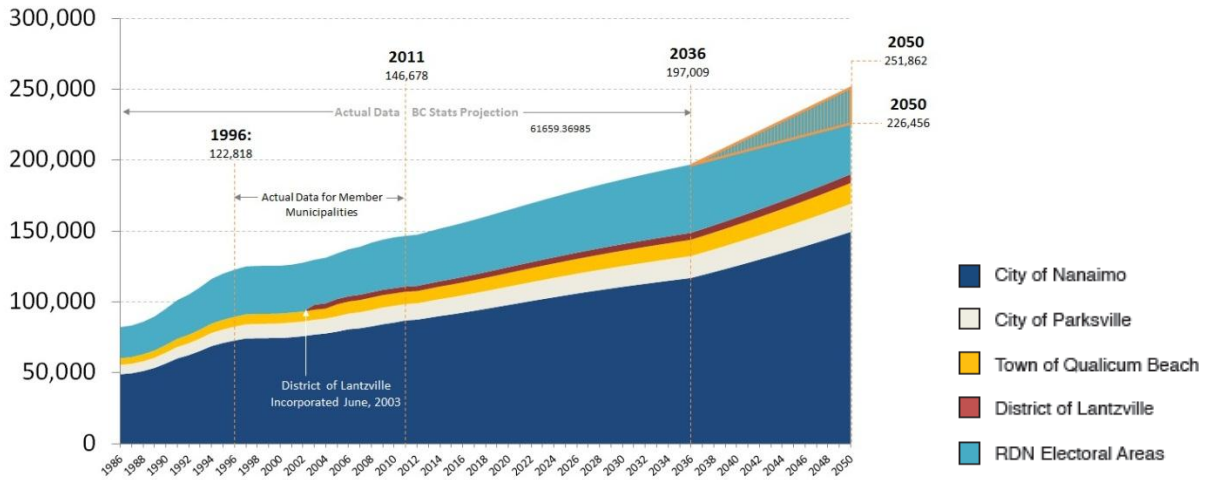
With a baseline emission inventory for 2007, it is possible to estimate emissions into the future. Such a forecast is a coarse estimate as a result of a variety of uncertainties surrounding population growth, energy price fluctuations, technological advances or regulatory changes over time. Nevertheless, building a forecast around a range of assumptions provides an illustration of what is reasonable to expect if business-as-usual today persists into the future.

The forecast included in the CEEP projects community energy use and emissions out to the year 2050. This year was selected because of its prominence in the literature as a mid-to long-term date by which significant reductions must be achieved to confidently avoid temperature increases beyond two degrees Celsius and sea level rise over 1.2 metres by the end of the century.

As noted above, population has the greatest impact on future emissions. Unfortunately, population change is very difficult to predict. All population statistics used in the CEEP were taken from data readily available through BC Statistics, which includes population forecasts out to 2036. The CEEP contemplates energy use and emissions to the year 2050, therefore two population scenarios were considered for the period between 2036 and 2050. The first scenario predicts population to grow at 1% per year after 2036, continuing the trend anticipated from the present to 2036. At that pace, the RDN population reaches 226,456 people in 2050.

The second scenario predicts population to grow more aggressively, at 1.77% per year for the period between 2036 and 2050. At that rate, the population predicted for 2036 (197,009) increases to 251,862 by 2050. This more aggressive scenario has been used as the basis for the emission scenario as it presents the most challenging business-as-usual scenario to address, amounting to a worst case scenario for emissions. Figure 1, taken from the CEEP, shows population growth by jurisdiction to 2050.

Figure 1: RDN Population by Jurisdiction – 1986-2050



It should be noted that since the section of the CEEP that describes population change was drafted, projected growth rates have been revised downwards by BC Stats, so the population forecast in the CEEP is very likely higher than reality. These population numbers, and the overall emission forecast can be adjusted as necessary as better information regarding population becomes available.

In addition to population change, the business-as-usual forecast also relies on anticipating technological improvements and regulatory change over time. Regarding technological improvements, the forecast assumes that the historical trend of efficiency improvements continues into the future. Household appliances, heating systems, and vehicles are all expected improve gradually, incrementally over time.

With respect to regulatory change, the business-as-usual forecast relies on known regulatory changes, primarily changes to the BC Building Code, and mandated vehicle efficiency requirements. Changes to local government policy are explicitly excluded from the business as usual forecast. Figure 2, shows how these gradual incremental changes result in reduced emissions per capita from 5.9 tonnes in 2007, to 4.86 tonnes in 2050, while Figure 3 shows total emissions rising to over 1.2 million tonnes by 2050. The key message from Figures 2 and 3 is that how modest gains in efficiency are easily overwhelmed by population growth over time.

Figure 2: Per Capita Emissions by Sector – 2006-2050

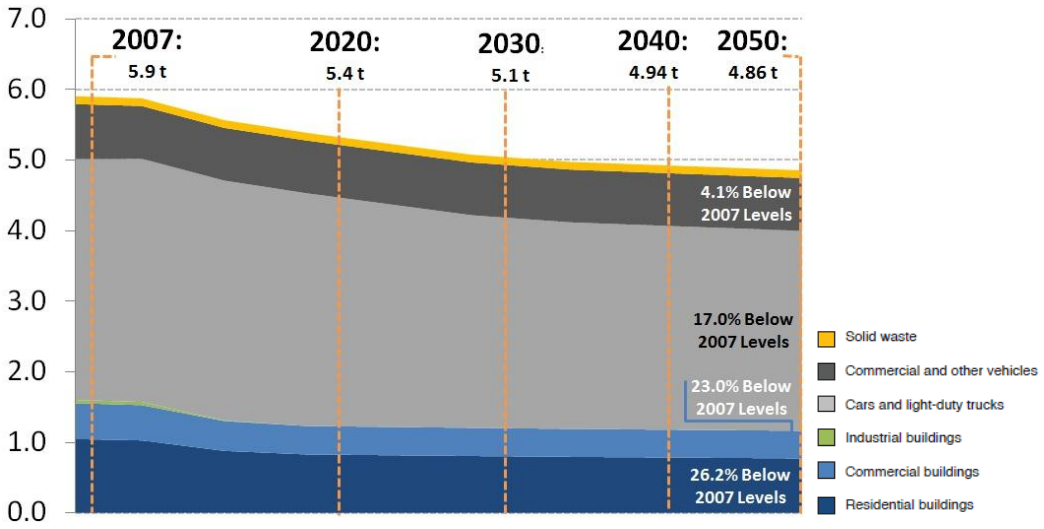
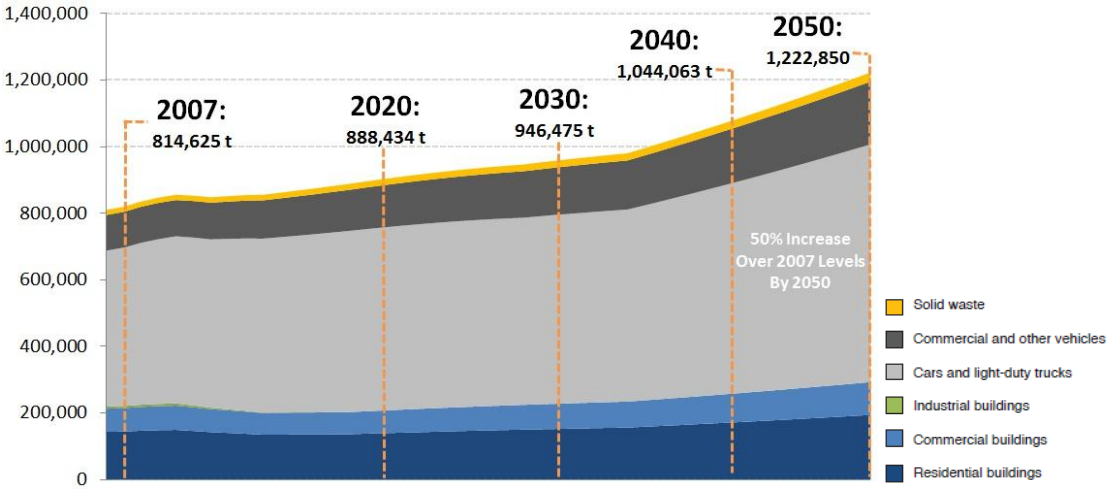


Figure 3: Total Emissions by Sector – 2006-2050



Reduction Target

The target included in the CEEP is the same target that has been incorporated into the Regional Growth Strategy and electoral area OCPs, as well as the Provincial Climate Action Plan and Greenhouse Gas Reduction Targets Act: an 80% reduction below 2007 levels by 2050. The origin of this target lies in the research that suggests atmospheric CO_2 should be held to 500 ± 50 parts per million (ppm), or less than double the pre-industrial level of 280 ppm. This is regarded as the threshold likely to limit average global temperature increase to two degrees Celsius, and sea level rise to less than 1.2 metres, by the year 2100.

It is fully recognized that this is an aspirational target that will not be achieved by the RDN acting in isolation. The purpose adopting the aspirational 80% target is that doing so opens the door to envisioning the full range of measures necessary to achieve such a dramatic reduction. The result in the CEEP is a comprehensive suite of measures for elected officials to prioritize and consider for implementation over time.

The measures necessary to achieve an 80% reduction on emissions found in the CEEP are shown in Table 2 below:

Table 2: Emission Reduction Measure to Achieve an 80 % Reduction by 2050

Residential Buildings

- 50% of all existing residential homes built prior to 2030 have been retrofitted to achieve an EnerGuide rating of 80 or better
- 90% of all new residential construction achieves an EnerGuide rating of 85 or better
- 50% of all new residential construction takes the form of multi-family development
- 50% of all residential dwellings are supplied with renewable, non-fossil fuel energy to meet home energy demand

Commercial and Industrial Buildings

- 50% of all existing commercial and industrial buildings built prior to 2030 are retrofitted to meet the ASHRAE 90.1 (2010) Standard
- 90% of new commercial and industrial buildings meet the ASHRAE 90.1 (2010) Standard

Land Use and Transportation

- 75% of residents in the region choose to live in more compact communities, resulting in a reduction in annual vehicle kilometres travelled per household
- 90% of all drivers stop unnecessary idling
- 50% of all commutes occur in alternatives to the single-passenger vehicle (carpooling, transit, walking, or cycling)
- 50% of drivers use low- or zero-emission vehicles (electric vehicles)

Solid Waste

- 90% of organic waste is diverted from the landfill
- 65% of landfill gas is captured and flared or used for alternative energy

Land Use Change and Agriculture

- 80% of land on rural residential parcels is protected from deforestation in perpetuity
- Carbon sequestration and emission reduction projects are implemented on agricultural land

The CEEP describes four ways in which these measures can be achieved: through outreach and communication; through non-financial incentives (such as expedited permitting); direct financial incentives; and through regulation. Each of these four implementation tools has differing impacts, with outreach resulting in an estimated uptake rate of 5%, and regulation resulting in 90% uptake.

Local Action Plan

The Local Action Plan portion of the CEEP describes a series of actions that are underway, under consideration, or necessary to implement the 80% reduction target. This section of the CEEP is revealing in that it is clear that the RDN is doing a great deal of good work that meets residents' needs and expectations while also reducing emissions, but also describes barriers to actions that have not been implemented, particularly challenges associated with changing land uses in a way that concentrates development within growth containment boundaries, and the general tendency to opt for a softer approach that emphasizes outreach and incentives over regulation.

Implementation, Monitoring and Reporting

Implementation of the Local Action Plan will mirror the RDNs largely successful efforts to promote green building in the region. The Green Building Action Plan outlines a general approach to increasing the number of green buildings in the region. Similarly, a Climate and Energy Action Plan will provide general guidance to staff and elected officials on a range of activities designed to foster a gradual transition to alternative, renewable energy supplies in the region, while also encouraging adaptation to inevitable climate change in our communities. The Climate and Energy Action Plan will come forward for consideration to the Sustainability Select Committee as a separate report.

Monitoring and reporting on energy use, emissions will proceed in conjunction with the Regional Growth Strategy Monitoring project currently in development.

ALTERNATIVES

1. Approve the Community Energy and Emissions Plan as presented.

2. Approve the Community Energy and Emissions Plan with amendments or provide alternate direction.

FINANCIAL IMPLICATIONS

There are no financial implications associated with approving the RDN Community Energy and Emission Plan. Additional work associated with outreach and communications fall within the roles and responsibilities of departmental staff, and will be offered in conjunction with public events already planned for 2013, most notably the Green Building Speaker Series.

Future work that connects the Local Action Plan presented within the CEEP with actual implementation will be proposed under the guidance of a Climate and Energy Action Plan developed in the spirit of the Green Building Action Plan. Proposed projects will be brought forward in future work plans and budgets.

STRATEGIC PLAN IMPLICATIONS

The overarching theme of the Board strategic plan is to build community resilience through self-sufficiency and regional collaboration. While the focus on the CEEP is on emission reduction over time, many of the reduction measures contained in the plan emphasize a transition to alternative, renewable energy systems. If implemented, these measures will increase residents' self-sufficiency, reducing reliance on centralized utilities while increasing local expertise and economic development in a sector poised to grow significantly over the coming decades.

SUMMARY/CONCLUSIONS

After several iterations and refinements, and in fulfillment of long standing direction, the RDN Community Energy and Emission Plan has been completed. The CEEP follows a five milestone framework developed by the federal Partners for Climate Protection, which includes an emission inventory that totals 913,414 tonnes of carbon dioxide equivalent for the RDN in 2007; a business-as-usual emission forecast that reaches over 1.2 million tonnes in 2050, based largely on projected population growth; an emission reduction target of 80% below 2007 levels by 2050, consistent with Provincial targets and widely held views on the reductions necessary to avoid the worst predicted effects of climate change; and a local action plan comprised of the measures necessary to reach that dramatic reduction target over the next 37 years.

While the target is aspirational in nature, the resulting range of reduction measures are informative and broad reaching, offering a suite of measures that elected officials can prioritize for implementation over time. Generally, the measures outlined in the plan offer a wide range of co-benefits beyond emission reductions, including increasing local self-sufficiency for energy, and creating opportunities for economic development in a sector likely to increase in importance over the coming decade.

It is important to note that in and of itself, the plan has no regulatory force and effect. It is an information tool that is designed to encourage action, while also highlighting the magnitude of the task that achieving significant reductions in emissions entails.

Implementation of the reduction measures identified in the CEEP will be guided by a Climate and Energy Action Plan to be provided separately.

RECOMMENDATION

That the Community Energy and Emissions Plan be approved the as presented.

Report Writer

General Manager Concurrence

CAO Concurrence

Appendix 1: Emissions by Jurisdiction in the RDN

Jurisdiction	Population Estimate (2007)*	Proportion of Total RDN Emissions	Emissions (tCO_2e)
City of Nanaimo	81,459 (59.3%)	 53%	480,421
City of Parksville	11,314 (8.2%)	 7%	65,760
Town of Qualicum Beach	8,618 (6.3%)	 5%	47,334
District Municipality of Lantzville	3,721 (2.7%)	 2%	19,986
Electoral Areas**	32,294 (23.5%)	 22%	198,645
Entire Region: Land Use Change and Agriculture	-	 11%	101,628
Total	**137,406**		**913,414*** **

* All population statistics from BC Stats 2006 Census Data.
** Does not include Electoral Area B. The Electoral Areas population is 2006 census data for Electoral Areas A, C, E, F, G and H, provided by BC Stats, with a growth factor of 1.24%.
*** The aggregated 2007 inventory for each jurisdiction does not match inventory for the region as a whole mainly due to a discrepancy in building-related energy use and emissions. The resulting difference equals 6,486 tonnes, or less than 1% of the total emissions for 2007.

Appendix 2: Emissions by Electoral Area in the RDN

Jurisdiction**	Population Estimate (2007)	Proportion of Electoral Area Emissions	Emissions (tCO_2e)
Electoral Area A: Cedar, Cassidy, South Wellington, Yellowpoint	6,835		42,042
Electoral Area C: Extension, Nanaimo Lakes, East Wellington, Pleasant Valley	2,539		15,619
Electoral Area E: Nanoose Bay	5,530		34,015
Electoral Area F: Coombs, Hilliers, Errington, Whiskey Creek, Meadowood	6,763		41,600
Electoral Area G: French Creek, San Pareil, Little Qualicum	7,110		43,700
Electoral Area H: Bowser, Qualicum Bay, Deep Bay	3,517		21,634
Total	**32,294**		**198,610*** **

* Data provided by the Sheltair Group (now Stantec).
** Does not include Electoral Area B.
*** The aggregated 2007 inventory for the Electoral Areas here differs from those provided in the provincial CEEI reports by 35 tonnes, an insignificant difference.

Appendix 3: Energy Use by Sector and Source in the RDN

Sector	Source	Energy Use (GJ)	Emissions (tCO_2e)	Proportion of Total RDN Emissions	Emissions (tCO_2e)
On-Road Transportation	Gasoline	6,634,465	453,006	 63%	581,097
	Diesel	1,792,039	126,321		
	Other Fuel	44,258	1,770		
Buildings	Electricity	6,153,738	42,165	 24%	222,158
	Natural Gas	2,219,149	113,177		
	Propane	141,464	8,631		
	Heating Oil	820,187	57,815		
	Wood	999,861	370		
Solid Waste	Community Solid Waste	-	15,377	 <2%	15,377
Land Use Change and Agriculture	Deforestation - Settlement	-	83,158	 11%	101,268
	Deforestation - Agriculture	-	12,482		
	Enteric Fermentation	-	5,628		
Total		**18,805,161 GJ**			**919,000 tCO_2e**

* Data provided by the Province of BC's Community Energy and Emissions Inventory (CEEI).

REGIONAL DISTRICT OF NANAIMO

MEMORANDUM

TO:	Chris Midgley Manager, Energy and Sustainability	**DATE:**	April 5, 2013
FROM:	Ting Pan Sustainability Coordinator	**FILE:**	6430-05-CEAP
SUBJECT:	**Climate and Energy Action Plan**		

PURPOSE

To propose a *Climate and Energy Action Plan* to guide efforts to address risks associated with climate change, reduce emissions and enhance local self-sufficiency and community resilience.

BACKGROUND

The Regional District of Nanaimo has recently completed a draft *Community Energy and Emissions Plan (*CEEP*)*. The CEEP provides an energy use and emission inventory for the RDN and member municipalities for the year 2007, a forecast for emissions to the year 2050, establishes an aspirational emission reduction target of 80% below 2007 levels by 2050; and outlines the range of reduction measures necessary to achieve that target.

The CEEP is intended as an information tool rather than a regulatory tool. It indicates the actions that would result in significant emission reductions, but does not impose a set of actions or decisions upon the Board, nor constrain future decision making.

In addition, the CEEP by necessity ignores specific dimensions of climate action that the RDN can and should undertake, namely assessing and addressing the risks and vulnerabilities of RDN assets to increased frequency and intensity of precipitations events, more dramatic storm surges, longer and hotter periods of drought, and other predicted effects of a warming climate.

To provide an implementation framework to advance actions that result in reduced emissions, facilitate a transition to renewable, alternative energy sources in the community, and mitigate risks and vulnerabilities to RDN infrastructure, staff have developed a *Climate and Energy Action Plan,* provided as Appendix 1 to this report. The Plan is modeled after the Green Building Action Plan, which has been a useful tool in guiding an incremental approach to increasing the number of green buildings in the region.

The goal of the *Climate and Energy Action Plan* is "to reduce the risks associated with climate change, and enhance local self-sufficiency and community resilience."

The six areas of action identified in the Plan are:

1. Build Partnerships and Participate in Complementary Initiatives
2. Develop and Improve Policies and Guidelines
3. Undertake Outreach and Educational Activities
4. Conduct Research and Develop Tools
5. Reduce Regulatory Barriers
6. Monitor and Report Progress

For each year beginning in 2014, one or more projects from the *Climate and Energy Action Plan* will be incorporated into the Energy and Sustainability departmental work plan, subject to Board approval. For 2013, relevant projects have already been approved, and will back reference the Climate and Energy Action Plan, as necessary.

ALTERNATIVES

1. That the *Climate and Energy Action Plan* be approved as proposed.

2. That the *Climate and Energy Action Plan* be amended or alternate direction be given to staff.

FINANCIAL IMPLICATIONS

The estimated cost to complete projects arising from the Climate and Energy Action Plan will range from minimal cost to up to $20,000. Staff will recommend implementation priorities through the annual budgeting process emphasizing projects that most effectively advance the Board's strategic priorities. This will begin for the year of 2014.

STRATEGIC PLAN IMPLICATIONS

The *Climate and Energy Action Plan* offers a set of actions that will contribute directly to building local self-sufficiency by supporting conservation measures and alternative and renewable energy sources. Building community resilience, managing risks related to a changing climate, and reducing vulnerability of RDN facilities and infrastructure represent responsible management but are also essential in maintaining critical services that support economic activities in the region. A collaborative approach across departments and among jurisdictions is necessary to mitigate risks and adapting to climate related impacts. Ongoing monitoring and reporting will provide the critical feedback needed to make adjustments and measure progress towards meeting the goal of the Plan.

SUMMARY/CONCLUSIONS

A *Climate and Energy Action Plan* is proposed as an implementation framework for the recently completed RDN *Community Energy and Emissions Plan*. Modeled after the *Green Building Acton Plan,* the *Climate and Energy Action Plan* provides six areas of action in support of the goal to reduce the risks associated with climate change and enhance local self-sufficiency and community resilience. Projects that advance the *Climate and Energy Action Plan* will be proposed on an annual basis through the development of departmental work plans and budgets, both subject to Board Approval.

RECOMMENDATION

That the proposed *Community Energy and Climate Action Plan* be approved as proposed.

Report Writer

A/ General Manager Concurrence

Manager Concurrence

CAO Concurrence

REGIONAL DISTRICT OF NANAIMO

Climate and Energy Action Plan 2013

Goal

To reduce the risks associated with climate change, and enhance local self-sufficiency and community resilience.

Objectives

The objectives are:

- ☑ to maintain and enhance RDN staff and elected official awareness and knowledge about the risk associated with climate change and the opportunities on energy conservation, alternative and renewable energy sources, emission reduction and adaptation measures;
- ☑ to improve performance of RDN facilities
- ☑ to reduce vulnerability of RDN facilities to climate related impacts
- ☑ to develop tools and policies that build resilience in the community, facilitate a transition to alternative and renewable energy sources, encourage efficient urban and rural communities, and result in emission reductions;
- ☑ to build partnerships to advance best practices in the region;
- ☑ to inform residents about options to improve their homes and build local self-sufficiency;
- ☑ to provide research to support alternative and renewable energy sources and emission reduction measures in the region.

Actions

1. Build Partnerships and Participate in Complementary Initiatives

a) The RDN will continue to participate in the Federation of Canadian Municipalities Partners for Climate Protection Program.

b) The RDN will fulfill its commitment to the Provincial Climate Action Charter by:

- Being carbon neutral in respect to its operations from 2012 and for the years that follow;
- Measuring and reporting on the region's GHG emissions;
- Creating complete, compact, more energy efficient rural and urban communities.

c) The RDN will collaborate with municipalities, regional governments and other organizations to share information, and develop tools, policies and other materials that facilitate the development of regional climate change strategies.

d) The RDN will partner with member municipalities to promote the use of renewable energy in the region.

2. Develop and Improve Policies and Guidelines

a) The RDN will develop guidelines for optimizing the performance of existing facilities and guiding the decisions on future retrofits.

b) RDN staff will review current development guidelines and bylaws, and develop strategies to adapt to climate related impacts such as sea level rise, rising temperature and related risks.

3. Undertake Outreach and Educational Activities

a) The RDN will continue outreach and educational activities about energy efficiency, climate related impacts and adaptation for residents. The purpose of these activities is to inspire residents to take actions, and to provide information on the available options to improve self-sufficiency and resilience of their homes and communities.

b) The RDN will provide information and practical assistance to interested residents about:

- Incentives and rebates
- Specific strategies to address issues relevant to local and regional sustainability priorities
- Local resources and contact information

4. Conduct Research and Develop Tools

a) The RDN will consider developing an online tool that maps climate related impacts to the communities in the region based on available GIS information. Areas at greater risk of water shortages, floods, landslides, forest fires, storm surges, coastal erosion, stormwater runoff will be assessed and identified within the existing RDN Map interface. This will offer insights on how planning decisions increase or decrease vulnerability to climate related impacts, and inform strategies to avoid these risks.

b) The RDN will consider studies to assess RDN facilities and infrastructure's vulnerability to climate related impacts such as sea level rise, storm surges, coastal erosions, drought and stormwater runoff.

5. Reduce Regulatory Barriers

a) RDN staff will review RDN existing building bylaws and planning regulations, and adapt best practices from elsewhere to streamline the development process and reduce regulatory barriers to practices relating to emission reduction and climate adaptation in the region.

b) The RDN will take an incremental approach to developing incentives that facilitate projects that result in emission reductions such as district energy systems, low impact development, and carbon sequestration. Incentives could include expedited permitting, adjusted fees and charges and density bonuses.

6. Monitor and Report Progress

a) RDN staff will evaluate the effectiveness of the implemented policy instruments on an ongoing basis.

b) The RDN will continue to report on progress in meeting emission reduction targets and renewable energy production.

Budget

The RDN Board will consider the allocation of funds to implement selected components of the Action Plan as a part of the budget approval process for each year.

The estimated range of cost for each action item ranges between minimal cost and up to $20,000.

Timeline

The RDN Board will consider undertaking one or more action items on an annual basis, as a part of the budgetary process for each year.

REGIONAL DISTRICT OF NANAIMO

MEMORANDUM

TO:	Chris Midgley Manager, Energy and Sustainability	**DATE:**	April 5, 2013
FROM:	Ting Pan Sustainability Coordinator	**FILE:**	6430-05-GBIP
SUBJECT:	**Green Building Incentive Program 2013**		

PURPOSE

To propose changes to the Green Building Incentive Program for 2013 that simplifies the Sustainable Development Checklist application process and supports a larger range of residential scale renewable energy systems.

BACKGROUND

The Green Building Incentive Program (the Program) was first established in 2011 as a pilot program for residents in the Electoral Areas and the District of Lantzville. In 2012 the program was refined to increase residents' awareness and uptake. It is intended that the program continue to be evaluated on an annual basis.

Of the five Action Specific Incentive types, both the Home Energy Assessment and Woodstove Exchange Rebates remain very popular with residents. Two Graded Site-Cut Timber rebates have been delivered, while the Solar Hot Water System and Residential Electric Vehicle Charging Station rebates have received minimal interest.

After the introduction of the $50 Sustainable Development Checklist Meeting incentive in 2012, five project applicants met with the Sustainability Coordinator and completed the Checklist. However, to date most of these applicants have not completed the construction of their projects; therefore they have not claimed any Checklist incentives. Table 1 below summarizes how incentives were distributed in 2012.

Table 1: 2012 Green Building Incentive Program Summary

Incentive	Rebates Awarded	Total Funds	Funds Awarded	Funds Remaining
Home Energy Assessment	112	$ 8,100.00	$ 7,450.00	$ 650.00
Woodstove Exchange	84	$ 25,000.00	$ 21,000.00	$ 4,000.00
Site-cut Timber	1	$ 500.00	$ 95.20	$ 404.80
Solar Hot Water		$ 750.00		$ 750.00
EV Charging Station		$ 500.00		$ 500.00
Checklist Meeting	3	$ 500.00	$ 150.00	$ 350.00
Checklist Score		$ 1,000.00		$ 1,000.00
Total		**$36,350.00**	**$28,695.20**	**$7,654.80**

It is proposed that the 2013 incentive program incorporate the following changes:

1. Simplify the Sustainable Development Checklist and Eliminate the Incentive for Meeting with Sustainability Coordinator

The intent of this change is to streamline the Checklist incentive application process and encourage more homeowners to build homes that result in energy savings and independence, emission reductions, greater self-sufficiency and improved comfort.

A simplified application form reduces the effort and time to complete the application while maintaining high performance requirements. To qualify for the Checklist incentive, applicants are encouraged to build compact houses and achieve high EnerGuide Ratings. To increase the Checklist Score, applicants have the option to pursue bonus points from a section that includes items such as proximity to amenities and renewable energy systems. The proposed Checklist Incentive Application Form is presented in Appendix 1.

The new form is much easier for applicants to complete independently thus eliminating the need for staff assistance. Applicants who pursue bonus points would still be offered the opportunity to meet with the Sustainability Coordinator to review their applications; however they would no longer be offered the $50 incentive.

2. Replace the Existing Solar Hot Water System Incentive with a Renewable Energy System Incentive

A more general Renewable Energy System Incentive will include photovoltaic and ground or water source geoexchange systems, in addition to solar hot water systems. An incentive of $250 will be offered for each eligible renewable energy system installed.

All other incentives will remain unchanged.

If approved, the revised Green Building Incentive Program will become effective May 1, 2013.

ALTERNATIVES

1. That the 2013 Green Building Incentive Program be approved as proposed.
2. That the 2013 Green Building Incentive Program be unchanged from 2012.
3. That alternate direction be given to staff.

FINANCIAL IMPLICATIONS

The Program is funded with $20,000 from the Building Inspection service; $8,154.80 was carried over from the program in 2012. In addition, the RDN and the City of Nanaimo received $17,969 from BC Lung Association for the region wide 2013 Woodstove Exchange Program.

The alternatives presented will not change the total amount of funding allocated to the program. For Alternative 1, the proposed change may cause more of the available funds to be distributed towards the Checklist incentive. The simplified application process for the Checklist incentive is anticipated to reduce the demand for the Sustainability Coordinator's time by approximately 5%.

For Alternative 2, the distribution of the funds will likely be similar to previous years with the majority going towards the Woodstove Exchange and Home Energy Assessment programs, with few if any incentives supporting renewable energy systems, or new high performance construction projects.

STRATEGIC PLAN IMPLICATIONS

The Green Building Incentives continue to be an effective tool to encourage residents to implement efficiency measures that reduce water and energy consumption, and develop clean and renewable energy supplies. The Incentive Program also provides opportunities to build local expertise in green building, renewable energy technologies, electric vehicle infrastructure, and materials and processes. The program's track record offers valuable insights on civic engagement and behavior change that can be transferred and shared among all member municipalities and, with ongoing monitoring and reporting, provides the basis for continuous improvement.

SUMMARY/CONCLUSIONS

The Green Building Incentive Program will continue to support Action Specific Incentives as well as the Sustainable Development Checklist Incentive. A simplified Checklist will streamline the application process, making incentives easier to access and encouraging applicants to build more compact and energy-efficient homes. A Renewable Energy System Incentive will replace the existing Solar Hot Water Incentive and recognize photovoltaic, geoexchange and solar hot water systems as eligible renewable energy systems.

RECOMMENDATION

That the proposed 2013 Green Building Incentive Program be approved.

Report Writer

A/ General Manager Concurrence

Manager Concurrence

CAO Concurrence

REGIONAL DISTRICT OF NANAIMO

RDN Sustainable Development Checklist

File Number: _____

New Construction and Renovation of Residential Development

Updated April 2013

First Name: _____ Last Name: _____

Subject Property Address: _____

_____

Telephone: _____ Email: _____

Total Area of Living Space (ft^2) _____ Total Number of Bedrooms _____

(Check **Home Size Table** on Page 4 to see the home size number that applies to your project.)

EnergGuide Rating _____

Is the first page of the energy assessment report attached? Yes ☐ No ☐

Are bonus points from the Sustainable Development Checklist pursued? Yes ☐ No ☐

(Check **Incentive Table** on page 4 to see if you need bonus points to qualify for the Checklist Incentive.)

If so, are the completed Sustainable Development Checklist and supporting documents attached? Yes ☐ No ☐ Not applicable ☐

EXPIRY DATE: Six months after occupancy or final date on file.
Incentives are limited and will be provided on a first come first served basis until rebate funds run out. If you have any questions about the program, call 250-390-6510 or email sustainability@rdn.bc.ca.

BONUS POINTS (optional): Complete either Option A or Option B below to pursue bonus points.

Option A: Shortcut

Point	Is the project certified to Leadership in Energy and Environmental Design (LEED) or Built Green and achieved the following certification levels?		
10	Platinum	Yes ☐	No ☐
7	Gold	Yes ☐	No ☐
5	Silver	Yes ☐	No ☐

Option B: Step-by-step

Point	Category		
1	**Location**		
	Is the project located on lands within the Growth Containment Boundary?	Yes ☐	No ☐
	OR		
	Does the project involve the reuse of an existing building?	Yes ☐	No ☐
	OR		
	Is the project located within 3 kilometres (10-minute bike ride) of 5 of the listed destinations?	Yes ☐	No ☐
	☐ Community/social centre ☐ Recreational facility ☐ School ☐ Transit stop ☐ Health care ☐ Coffee shop ☐ Financial institution ☐ Shop/market ☐ Restaurant ☐ Childcare facility ☐ Park		
	OR	Yes ☐	No ☐
	Is the project located within 400 metres of a transit stop?		
3	**Renewable Energy Systems**		
	Are any of the following systems installed as part of the project by a qualified technician? *	Yes ☐	No ☐
	Solar hot water	Yes ☐	No ☐
	Photovoltaic	Yes ☐	No ☐
	Geoexchange		
2	**Rainwater Management**		
	Is rainwater harvested in a cistern with a minimum capacity of 4,546 liters (1,000 gallons) for toilet flushing, irrigation or other uses?*	Yes ☐	No ☐

1	**Site**		
	Are all existing mature trees (the trunk diameter is greater than 20 cm, measured 1.5 m above the ground) on site either retained or replaced with new trees?	Yes ☐	No ☐
	OR		
	Is a rain garden incorporated to encourage natural infiltration of rainwater?	Yes ☐	No ☐
	OR		
	When clearing land, is downed wood or debris left in buffer areas or grinded rather than being burned as 'waste'?	Yes ☐	No ☐
	OR		
	Is less than 20% of the property covered in impervious surface such as roofs and pavements (including building footprint, driveway, patio and footpath)?	Yes ☐	No ☐
2	**Greywater Reuse**		
	Is there any greywater system in place for toilet flushing, irrigation or other non-potable uses?	Yes ☐	No ☐
2	**Building Materials**		
	Is site-cut timber used for structural components in this project? *	Yes ☐	No ☐
	OR		
	Are materials with low embodied energy used as structural or envelope components in this project? E.g. clay, straw bale, stone.	Yes ☐	No ☐
2	**Vegetated Roof**		
	Does the building include a vegetated roof system on 50% of the roof area (not including roof area of a garage or other accessory buildings)?	Yes ☐	No ☐
1	**Electric Vehicle Charging Station**		
	Is a Level 2 Electric Vehicle Charging Station installed in this project? *	Yes ☐	No ☐
1	**Public Education**		
	Does this project provide any green building education opportunities?	Yes ☐	No ☐

Total Bonus Points

*Note: Additional incentives may be available for these specific items. Please check www.rdnrebates.ca for eligibility criteria and application details.

File Number: _____

RDN Office Use Only

Look up the **Home Size Table** below and circle the size that applies to this project.

Home Size Table

Maximum home size (ft2) by number of bedrooms	Home Size	Size 0 or smaller	Size 1	Size 2	Size 3	Size 4	Size 5	Size 6	Size 7	Size 8	Size 9	Size 10
	≤1 Bedroom	1050	1090	1135	1180	1225	1275	1325	1375	1430	1485	1545
	2 Bedrooms	1600	1665	1730	1795	1865	1940	2015	2095	2180	2265	2350
	3 Bedrooms	2200	2285	2375	2470	2565	2670	2770	2880	2995	3110	3235
	4 Bedrooms	3000	3120	3240	3370	3500	3640	3780	3930	4080	4245	4410
	5 Bedrooms	3300	3430	3565	3705	3850	4000	4160	4320	4490	4670	4850

The **Incentive Table** shows the minimum score needed to qualify for the incentive.

Incentive Table

Incentive	Size 0 or smaller	Size 1	Size 2	Size 3	Size 4	Size 5	Size 6	Size 7	Size 8	Size 9	Size 10
$1,000	85	86	87	88	89	90	91	92	93	94	95
$750	82	83	84	85	86	87	88	89	90	91	92
$500	77	78	79	80	81	82	83	84	85	86	87

Is the application form completed? Yes ☐ No ☐ Are supporting documents submitted? Yes ☐ No ☐

EnerGuide Rating _____ + Bonus Points _____ = Total Score _____

The applicant is eligible to receive $_____

Reviewed and approved by _____ Date _____