

REGIONAL DISTRICT OF NANAIMO
SUSTAINABILITY SELECT COMMITTEE
TUESDAY, MARCH 28, 2017
5:30 PM

(RDN Committee Room)

A G E N D A

PAGES

CALL TO ORDER

MINUTES

3 - 5 Minutes of the Sustainability Select Committee meeting held on Tuesday, February 16, 2016

BUSINESS ARISING FROM THE MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

REPORTS

2017 Green Building Series – Step Code – Verbal Report from RDN staff

Update on Nanaimo Aboriginal Centre Passive House – Verbal Report from RDN staff

Realtor Energy Efficiency Program (REEP) Collaboration – Verbal Report from RDN staff

6 - 10 Overview of the Green Building Incentive Program

11 - 16 Regional District of Nanaimo State of Sustainability

WATER AND WATERSHED PROTECTION TECHNICAL ADVISORY COMMITTEE

17 - 20 Minutes of the Drinking Water and Watershed Protection Technical Advisory Committee held on Thursday November 10, 2016

21 - 23 Minutes of the Drinking Water and Watershed Protection Technical Advisory Committee held on Thursday July 7, 2016

24 -27 Minutes of the Drinking Water and Watershed Protection Technical Advisory Committee held on Wednesday April 13, 2016

Drinking Water and Watershed Protection Program Overview and 2017 Projects
– Verbal Report from RDN staff

BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS

NEW BUSINESS

ADJOURNMENT

Distribution: M. Lefebvre (Chair), A. McPherson, H. Houle, M. Young, J. Fell, B. Veenhof, B. Colclough, J. Kipp, W. Pratt, T. Westbroek, P. Carlyle, G. Garbutt, R. Alexander, C. Midgley, P. Thompson, J. Pisani, S. Horsburgh, P. Sherman

For information only: B. McRae, T. Samra, D. Sailland, D. Comis, T. Coates, B. Ritter

REGIONAL DISTRICT OF NANAIMO

**MINUTES OF THE SUSTAINABILITY SELECT COMMITTEE
MEETING HELD ON TUESDAY 16th FEBRUARY, 2016 at 2.30pm
IN THE RDN COMMITTEE ROOM**

Present:

Director C. Haime	Chairperson
Director A. McPherson	Electoral Area A
Director H. Houle	Electoral Area B
Director M. Young	Electoral Area C
Director J. McLean Alternate	Electoral Area F
Director B. Veenhof	Electoral Area H
Director W. Pratt	City of Nanaimo
Director M. Lefebvre	City of Parksville
Director T. Westbroek	Town of Qualicum Beach

Regrets:

Director J. Kipp

Also in Attendance:

Director B. Rogers	Electoral Area E
D. Trudeau	Interim Chief Administrative Officer
R. Alexander	Gen. Mgr. Regional & Community Utilities & Solid Waste
J. Holm	Gen. Mgr. Strategic & Community Development (Acting)
C. Midgley	Mgr. Energy & Sustainability
P. Thompson	Mgr. Long Range Planning
J. Pisani	Drinking Water & Watershed Protection Coordinator, Environmental Services
T. Pan	Sustainability Coordinator, Planning
B. Ritter	Recording Secretary

CALL TO ORDER

The Chairperson called the meeting to order.

MINUTES

MOVED Director Veenhof, SECONDED Director Houle that the minutes of the Sustainability Select Committee meeting held on Tuesday September 15, 2015, be adopted.

CARRIED

REPORTS

Amendment to Regional Growth Strategy Bylaw No. 1615

MOVED Director Westbrook, SECONDED Director Houle, that the Committee support the proposed amendments to the Regional Growth Strategy (RGS) that are intended to clarify the types of amendments that may be considered through the minor amendment process.

CARRIED

Nanaimo Aboriginal Centre Passive House

MOVED Director Veenhof, SECONDED Director Young, that the Committee release \$15,000 from the Regional Sustainability Initiatives Reserve Fund to make a one-time contribution to the development of the Nanaimo Passive House.

MOVED Director McPherson, SECONDED Director Westbrook, that the Board amend the main motion by adding the words "to be constructed at 1406 Bowen Road".

CARRIED

The vote was taken on the main motion as amended:

That the Committee release \$15,000 from the Regional Sustainability Initiatives Reserve Fund to make a one-time contribution to the development of the Nanaimo Passive House to be constructed at 1406 Bowen Road.

CARRIED

MOVED Director Veenhof, SECONDED Director Young, that staff be directed to draft and execute a Contribution Agreement between the RDN and the Nanaimo Aboriginal Centre (NAC) for a one-time \$15,000 contribution toward the Project.

CARRIED

BC Hydro Efficient Clothes Washer Rebate Partnership

MOVED Director Veenhof, SECONDED Director Westbrook, that the Committee approve the expenditure of Drinking Water and Watershed Protection (DWWP) funds up to \$3000 in support of the BC Hydro Clothes Washer joint rebate partnership.

CARRIED

ADVISORY COMMITTEE MEETING

MOVED Director Houle, SECONDED Director Veenhof that the minutes of the Drinking Water and Watershed Protection Technical Advisory Committee held on Thursday November 19, 2015, be adopted.

CARRIED

ADJOURNMENT

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

CARRIED

Time: 2.55 pm

CHAIRPERSON

TO: Sustainability Select Committee **MEETING:** March 28, 2017

FROM: Sharon Horsburgh
Sustainability Coordinator **FILE:** 6430-05-GBIP

SUBJECT: Overview of the Green Building Incentive Program

RECOMMENDATION

That the existing Regional District of Nanaimo Green Building Incentive Program be maintained for 2017.

SUMMARY

The aim of the Green Building Incentive Program is to encourage homeowners to be more environmentally friendly by reducing energy and water use and by reducing emissions from the burning of fossil fuels. A number of rebates are offered through the Regional District of Nanaimo (RDN) Green Building Incentive Program with the Woodstove Exchange Program being the most popular.

The Regional District of Nanaimo recently received \$22,500 from BC Hydro's Sustainable Communities Funding Program for activities related to promotion of energy conservation. These funds are intended for Green Building education and awareness and will be utilized as part of the RDN's Green Building Series. A requirement of the BC Hydro funding is that it be used to raise awareness of Green Building technologies and provide education on the Province's proposed BC Energy Step Code Program that will be starting in December 2017. There is an opportunity to make stronger ties between the Green Building Incentives Program and the Green Building Series Program by highlighting the link between the incentives and the education.

While some of the incentive programs have not been that popular in recent years, the increases in the Provincial electric vehicle incentives and the introduction of the BC Energy Step Code should result in increased participation in the RDN's incentives to promote renewable energy and energy efficiency.

BACKGROUND

The Green Building Incentive Program (the Program) has been offered to residents in the RDN's Electoral Areas and the District of Lantzville since 2011. The participation and awareness in the Program has grown significantly as the RDN has offered rebates to incentivize energy conservation, to build local resiliency and to mitigate climate change. Due to the popularity of the Green Building Incentive Program there has been continued interest through 2016. There are six Green Building Incentive Programs administered by the RDN and these are outlined below:

1. Woodstove Exchange Program - \$250

Many homes in the RDN have traditionally used wood as a heating source and this is why the Woodstove Exchange Program is the RDN's most popular Green Building Incentive Program. This rebate program encourages investment in renewable energy systems while supporting local businesses across the region. For 2017, the RDN received \$19,750 in funding from the BC Lung Association for the Woodstove Exchange Program and \$7,500 of this grant funding was transferred to the City of Nanaimo so they can offer a similar program to their residents.

2. Home Energy Assessment - \$150 - \$200

The Home Energy Assessment is our next most popular program and with upcoming changes in the building code in December 2017 we anticipate the popularity will increase as the BC Energy Step Code will require new homeowners wishing to achieve Step 1 or higher to obtain a home energy assessment. Through this program, homeowners will have access to additional incentives after the initial Home Energy Assessment.

With changes in the BC Building Code we see the popularity of this program increasing. This is a valuable tool for homeowners to learn about the most cost-effective energy efficiency measures they can take. The RDN rebate covers roughly 50% of the cost of an initial assessment, up to \$150, and sends a strong signal to RDN residents that home energy efficiency is worthwhile to understand and that investing in energy efficiency, renovations and retrofits benefits the homeowner while making an important contribution to the local economy.

3. Oil to Heat Pump Rebate - \$250

The busiest time for the Oil to Heat Pump Incentive Program is the fall. This is a relatively new program and it is beginning to gain momentum. The home energy assessments provide residents with information on RDN and Provincial rebates to encourage homeowners in RDN Electoral Areas and the District of Lantzville to transition from oil heating to heat pumps. The rebate is an additional incentive from the RDN for those who complete the upgrade from oil to heat pump and are eligible for the Provincial Oil to Heat Pump Incentive Program administered by City Green Solutions.

4. Graded Site-Cut Timber - \$250

The Graded Site-Cut Timber rebate is not very popular as only those homeowners with access to marketable timber on their property come forward to inquire about this particular rebate. Homeowners can access a rebate of up to \$250 when using graded site-cut timber for structural use in renovations and new construction requiring a building permit. Homeowners in RDN Electoral Areas and the District of Lantzville who harvest and use timber on the same site can take advantage of this rebate.

5. Sustainable Development Checklist - \$500 - \$1,000

The Sustainable Development Checklist is intended to help homeowners and builders in RDN Electoral Areas and the District of Lantzville develop high-performance building projects. Homeowners who achieve a high score on the completed checklist may qualify for incentives valued between \$500 and \$1,000.

The RDN's Home Energy Assessment and Sustainable Development Checklist Incentives both reference the EnerGuide rating system. Homeowners and owner-builders can earn incentives for

achieving a high checklist score. The dollar value of the incentives offered by the RDN is from \$500 - \$1,000.

With BC Hydro funding related to promoting energy efficient homes we will be participating in a program to educate developers and homeowners about the Sustainability Checklist. By linking the education to the BC Energy Step Code we anticipate more projects coming forward to take advantage of this particular rebate program. We receive many enquiries about the Sustainability Checklist. However, as the checklist is voluntary most homeowners do not follow through on pursuing this rebate. With the proposed changes in the BC Building Code we anticipate new home builders may wish to pursue an application for the Sustainable Development Checklist rebate and this can be initiated at the pre-application meeting.

6. Residential Electric Vehicle Charging Station - \$250

While we did not receive any applications for a rebate in 2016, we have received much interest in the Residential Electric Vehicle Charging Station rebate program. With the upcoming increases in Provincial rebates to incentivize purchases of Electric Vehicles we are poised to respond to the potential increased demand for residential EV charging stations that will be required. This program enables residents to install a residential Level 2 Electric Vehicle Charging Station, providing immediate emission reductions and encouraging clean energy vehicle deployment in a residential setting in the RDN’s Electoral Areas and the District of Lantzville.

To provide an overview of the Green Building Incentive Program, Table 1 below summarizes the funds distributed to residents since its inception in 2011:

Incentive	Distribution of Incentives					
	2011	2012	2013	2014	2015	2016
Home Energy Assessment	\$2,220	\$7,450	\$ 8,670	\$930	\$1,500	\$3,270
Woodstove Exchange	\$10,750	\$33,750	\$38,500	\$15,000	\$43,500	\$40,750
Site-cut Timber		\$95	\$488	\$200		\$700
Renewable Energy Systems			\$1,000	\$750	\$2,000	\$500
Oil to Heat Pump						\$1,250
EV Charging Station			\$250			
Checklist Meeting		\$150	\$50	\$500		
Checklist Score			\$4,000	\$1,000		
Total	\$12,970	\$41,445	\$52,958	\$18,380	\$47,000	\$46,470¹

¹ There are a small number of unclaimed rebates from 2016.

ALTERNATIVES

1. Maintain the existing Green Building Incentive Program.
2. Focus RDN Green Building Incentives education and communications efforts on energy efficiency literacy around the Green Building incentives in conjunction with new Provincial incentives such as BC Energy Step Code and Provincial Electric Vehicle rebates.
3. Eliminate those Green building incentives that have not been used in 2016.

FINANCIAL IMPLICATIONS

The RDN has been approved for a \$22,500 grant from the BC Hydro Sustainable Communities fund to develop an energy efficiency literacy program with respect to the upcoming BC Energy Step Code that will complement the RDN's Green Building incentives and Green Building Series programs.

STRATEGIC PLAN IMPLICATIONS

The Green Building Incentive Program supports the Board's 2016 – 2020 Strategic Plan's sustainability objectives. The Program is consistent with a number of the Board's strategic priorities to enhance collaboration and cooperation between municipalities and electoral areas, and is aligned with the strategic priority to use a collaborative regional model for providing services.

The Green Building Incentive Program has been developed by the RDN to support residents' commitment to building a sustainable and resilient future. This program generates local investment in energy efficiency and in the development of the green business sector. Conversations with interested residents show that the interest in alternative energy systems and high performance buildings is strong, and represents opportunities to build local capacity and create economic benefits to the region.

SUMMARY/CONCLUSIONS

Many neighbouring jurisdictions look to the RDN as it has a history of providing strong leadership in developing sustainable policies to achieve the goals set out in the Strategic Plan. The Green Building Incentive Program is an extremely successful program and its success is continuing into 2017 with interest in all our green building incentive types.

In 2016, \$46,470 was distributed in rebates to residents and the most popular program is the Woodstove Exchange Program. Funding for this program is provided through Building Inspection and the Carbon Neutral Initiatives Reserve Fund that was established to support sustainability initiatives that contribute to local economic development.

While some of the incentive programs have not been that popular in recent years, the increases in the Provincial electric vehicle incentives and the introduction of the BC Energy Step code should result in increased participation in the RDN's incentives to promote renewable energy and energy efficiency. The 2017 approved funds from BC Hydro's Sustainable Communities fund will be used to highlight the RDN's Green Building Incentive program.



Sharon Horsburgh
shorsburgh@rdn.bc.ca
March 10, 2017

Reviewed by:

- P. Thompson, Manager of Long Range Planning
- G. Garbutt, General Manager, Strategic & Community Development
- P. Carlyle, Chief Administrative Officer

TO: Regional District of Nanaimo
Sustainability Select Committee

MEETING: March 28, 2017

FROM: Jamai Schile
Senior Planner

FILE: 6780 30 - MA

SUBJECT: Regional District of Nanaimo State of Sustainability

RECOMMENDATIONS

That the Committee receive the staff report “Regional District of Nanaimo State of Sustainability”, for consideration.

SUMMARY

The State of Sustainability (SOS) Project was a resource intensive project spanning nearly four years (2003 - 2007) that acknowledged the Regional District of Nanaimo’s (RDN) responsibility to advance sustainability in the region. The project compiled technical data to provide a snapshot of the state of sustainability in 2006. It also identifies characteristics of a sustainable region and established 41 indicators to measure the region’s sustainability status against the expressed targets.

In 2014, the Board directed staff to undertake a review of the 41 indicators, which resulted in an update that is the current Regional Growth Strategy (RGS) Monitoring Program. The updated program was designed to incorporate the work of the SOS project, to create stronger linkages with the RGS and to be more accessible to different audiences. This comprehensive monitoring and evaluation program remains central to measuring the effectiveness of RGS policies in working towards the goals and vision of the current RGS.

Given this information, the level of on-going reporting and information sharing regarding the RGS Monitoring Program is consistent with the RDN’s commitment to openness and clarity in reporting.

BACKGROUND

At the January 24, 2017 regular meeting of the RDN Board, the Board directed that correspondence received from Ross Peterson regarding RDN State of Sustainability be referred to the Sustainability Select Committee for their consideration (see Attachment 1 - Ross Peterson Letter - RDN State of Sustainability).

The State of Sustainability Project was initiated by the RDN in 2004 and was successfully completed in 2007. The main purpose of the project was to assess the region’s progress towards sustainability, to engage residents on sustainability issues, and to provide information to help inform future RGS initiatives. During the project period, it was guided by a committee consisting of community members and elected officials known as the “Regional Growth Monitoring Advisory Committee”.

The project involved in-depth collection of data and resulted in two main products, “2006 State of Sustainability (SOS) Report”, and a subsequent final report in 2007. The SOS Report is a detailed

technical document that provides a snapshot of the region in 2006. It also attempted to measure sustainability of the region more broadly by determining 22 characteristics of a sustainable region and an associated 41 indicators. This work resulted in a final report in 2007, “Prospering Today, Protecting Tomorrow”, which provided specific recommendations for changes to the RGS to incorporate sustainability.

Response to Concerns Raised in Correspondence

State of Sustainability Project & Regional Growth Strategy

The history of the RGS Monitoring Program is one of fact-based, participatory monitoring and evaluation methods. Starting in 1997 with the original “Growth Management Plan”, which included a list of broadly defined performance benchmarks for each goal and policy of the Plan. In 2001, the measures were further refined to create for the first time 32 indicators to monitor progress. However, these indicators were never used to monitor the 2003 RGS.

This created an opportunity for the RDN to initiate the 2003 – 2007 SOS Project. The SOS Project was a one-time process to deepen the understanding of sustainability of the region and to highlight the needed changes. The technical data and local knowledge that was collected was an important building block that has been used to advance the sustainability objections in the region. This is evident by the fact that the results of the SOS Project were specifically considered as part of the process to update the RGS in 2011.

Targets and Indicators Project

In January 2014, the RDN Board directed that a new set of indicators be developed that focussed on monitoring the RGS goals and on areas that can be influenced by the RDN. This project was entitled the “Targets and Indicators Project”. The impetus for the review was due to the unforeseen challenge with RGS monitoring in terms of lack of consistency over indicators measured and the style of reporting, which makes it difficult to track trends over time.

The project began with a review of the relevant literature and an examination of other comparable regions’ monitoring programs across BC. This allowed the project team to learn from the experience of other regions to improve the RGS monitoring process and quality of indicators. Some of the key lessons learned were to select fewer and higher quality indicators, to select indicators that can be a measure for the expressed goals of the RGS, and tangible targets should be included where possible. In addition to updating the design, it was important to consider the SOS Project’s indicators and to build on them in the new program. The review also considered the previous grading system; through the consultation process, it was determined that it was not accessible to different audiences. As such, the grading system has been replaced with the recommended goals, indicators and targets design and where the indicators have been updated they reflect the previous work undertaken. In this way, the RDN monitoring program is more robust and community-focused, while still satisfying the statutory requirements under the *Local Government Act* for RGS.

Transparency in Reporting and Information Sharing

As a strategic priority, the RDN Board is committed to openness and clarity in reporting and decision-making.

Throughout the SOS Project’s lifecycle the general information, technical reports and project updates were made publicly available through public events, media releases and a dedicated RDN webpage. This

webpage is still active and hosts the SOS Report and the subsequent final report as well as all background reports, such as the “Groundwater Indicator Research Project Report”, referenced in Ross Peterson’s letter. Similarly, detailed information relating to the review of the indicators and results known as the “Targets and Indicators Project” remain publicly available on the RDN website.

There have been eleven RGS annual reports documenting the progress towards the RGS goals since the RGS was first adopted in 1997. The RDN continues to produce an annual progress report on the RGS each year. The 2016 report is currently being compiled in collaboration with member municipalities and will be available for Board and public consideration in the coming months.

Given this information, the level of on-going reporting and information sharing regarding the RGS Monitoring Program is considered to be adequate and consistent with the RDN’s commitment to openness and clarity in reporting.

ALTERNATIVES

1. Receive the staff report “Regional District of Nanaimo State of Sustainability”, for consideration.
2. To take alternative action as directed by the Board.

FINANCIAL IMPLICATIONS

Staff have reviewed the correspondence and note that the proposal has no implications related to the Board 2016 —2020 Financial Plan.

STRATEGIC PLAN IMPLICATIONS

Staff have reviewed the correspondence and note that the proposal has no implications for the 2016 — 2020 Board Strategic Plan.



Jamai Schile
jschile@rdn.bc.ca
February 28, 2017

Reviewed by:

- P. Thompson, Long Range Planning
- J. Holm, Current Planning
- G. Garbutt, General Manager, Strategic & Community Development
- P. Carlyle, Chief Administrative Officer

Attachments

1. Ross Peterson: RDN State of Sustainability (Dated December 4, 2016, Pages: 3)

Attachment 1
Ross Peterson Letter: RDN State of Sustainability
(Dated December 4, 2016, Pages: 3)

1482 Madrona Drive
NanOOSE Bay, B.C. V9P 9C9

Dec. 4, 2016

Mr. Bob Rogers
Area E Director
Regional District of Nanaimo
6300 Hammond Bay Rd.
Nanaimo, B.C. V9T 6N2



Dear Bob;

Re: RDN State of Sustainability.

I am concerned that major elements of the work done by the RDN Sustainability Committee (technically, the Regional Growth Management Advisory Committee) of 2004 – 2006 seem to have been lost, ignored or at least not reported to the public.

There were two documents produced by this advisory committee.

1. A technical 300+ page report dated Sept. 2006 containing the rationale for 22 sustainability characteristics and their indicators. Each indicator was described according the following:
 - What does this indicator tell us?
 - Why is this indicator important to RDN sustainability?
 - Where do we want to go? (target achievement)
 - Where are we right now?

Finally, each indicator was given a grade and trend towards meeting the target

The report also identified a number of indicators for future consideration.

This report also included as an addendum a EBA consultants report titled:

“Groundwater Indicator Research Project” that was commissioned by the RGMAC to address questions on water supply.

2. A final report titled: *“Prospering Today, Protecting Tomorrow, Recommendations for a Sustainable Future”* dated Dec. 2007. This report summarized the main technical report (above) and takes the 22 indicators further by recommending specific actions that RDN can take or influence others to take towards achieving the sustainability goals. These recommendations are key to the achievability of the goals as the indicator grades and trends won’t just improve on their own – there must be directed actions taken towards improvements, such as those identified in the RGMAC recommendations.

- What has happened to these recommendations? They seem to have disappeared, at least from public view.
- Can you tell me which of these recommendations have been taken, and what the status is of the remaining ones?
- Also, can you tell me what has happened to the "Tier 4 Indicators" identified by the RGMAC as considerations for the future?

RDN staff followed up the 2 reports of the RGMAC by preparing a document titled: *"Regional Growth Strategy Review 2007-2008. Implications of the State of Sustainability Report for the Regional Growth Strategy Review"* in which it summarizes the 22 indicators and their grades and trends, but omits any mention of the many recommendations of the RGMAC that were made to achieve sustainability goals.

- Can you tell me why?

Also of concern, there seems to be a winnowing over the years of the sustainability indicators. For example, in the 2015 Regional Growth Strategy, there are only 2 indicators identified for Goal 2 Protect the Environment: Total water consumption, and Amount of land in protected areas. These on their own are not suitable proxies for protecting the environment. They have little relevance to the original Sustainability Characteristic *"Important ecosystems and ecological features are protected, healthy and protected"*.

The RGMAC identified 14 actions that the RDN can take and a further 3 that the RDN can influence others to take to better ensure environmental protection of the kind envisioned in the original work.

- Again, what has happened to these specific recommendations?

The RGMAC was adamant that the RDN should not cherry pick those elements easiest to measure, but this appears to have been done. For example, the amount of land in protected areas is easy to measure, but does not mean much ecologically, especially if there is no definition of the term "protection". In several other RDN documents such as OCPs and Park Planning documents, the RDN has used the term "protection of ecosystem function", which is a far more meaningful term than simple "protect the environment". Protecting ecosystem function requires much more than establishing and increasing the area "protected". It requires an understanding of what is going on in these areas, and how surrounding activities affect these functions.

- What has happened to those indicators not carried through to the RDN Regional Growth Strategy stage, especially for Goal 2 Protect the environment?
- What rationale was used to amend the original list?

Finally, a significant portion of the RGMAC's efforts from 2004-2006 was devoted to the issue of a periodic public disclosure of sustainability work; particularly the indicator grades and trends, and the recommended actions so that progress or otherwise towards achieving sustainability goals could be identified and reported in a transparent way. This has not been done in the way envisioned by the RGMAC, despite several requests made by me over the years, and I regard this to be a significant failure on behalf of the RDN.

The reporting of some of the indicators that does exist on the RDN website under Regional Growth Strategy is hard to find and does not include all of the indicators the program started with, and does not include the grades and trends.

- Perhaps we can meet and discuss a better means of public reporting?

Respectfully,



Ross Peterson (Former member of the RDN Sustainability Advisory Committee or RGMAC)



**MINUTES OF THE REGULAR MEETING OF THE
DRINKING WATER AND WATERSHED PROTECTION
TECHNICAL ADVISORY COMMITTEE
HELD ON THURSDAY, NOVEMBER 10, 2016 AT 12:30 PM
RDN BOARD CHAMBERS**

Present:

Chris Midgley, CHAIR.....	Manager, Water Services & Asset Mgmt, RDN
Anne Fiddick.....	Environment Community Representative
Kate Miller.....	Manager, Environmental Initiatives, CVRD
Bill Sims.....	Manager, Water Resources, City of Nanaimo
Ken Epps.....	Forest Industry Representative, Island Timberlands
Alan Gilchrist.....	Academic Community Representative, VIU
Gilles Wendling.....	Hydrogeologist Representative
Peter Law.....	General Public Representative (North)
Bob Weir.....	Director of Engineering, Town of Qualicum Beach
Harriet Rueggeberg.....	General Public Representative (South)
Leon Cake.....	Water Purveyors' Representative
Mike Squire.....	Operations Manager, City of Parksville
Chris Cole.....	Forest Industry Representative, TimberWest
Gary Anderson.....	Island Health Representative (for Lynne Magee)
David Vincent.....	Hydrologist Representative
Pat Lapcevic.....	Ministry of Forests, Lands and Natural Resource Operations

Regrets:

Sonja Zupanec.....	Islands Trust Representative
Fred Spears.....	Director of Public Works, District of Lantzville Islands Trust
Ryan Evanoff.....	Ministry of Transportation and Infrastructure Representative
Deb Epps.....	Ministry of Environment Representative
Oliver Brandes.....	Academic Community Representative
Nick Leone.....	Department of Fisheries and Oceans Canada Representative
Lynn Magee.....	Island Health Representative
Pam Shaw.....	Mt Arrowsmith Biosphere Region Research Institute

Also In attendance:

Julie Pisani.....	Drinking Water & Watershed Protection Program Coordinator, RDN
Gerald St. Pierre.....	Project Engineer, RDN
Randy Alexander.....	General Manager, RDN
Joe McCallum.....	Special Projects Assistant, RDN
Glenn Gibson.....	Island Health
Rebecca Graves.....	Recording Secretary, RDN

CALL TO ORDER

The Chairperson called the meeting to order at 12:39 PM and respectfully acknowledged the Coast Salish First Nations on whose traditional territory the meeting took place.

MINUTES

MOVED H. Rueggeberg, SECONDED B. Sims, that the minutes from the regular meeting of the Drinking Water and Watershed Protection Advisory Committee held July 7, 2016 be adopted.

CARRIED

BUSINESS ARISING FROM MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

MUNICIPAL UPDATES

Updates were given by City of Parksville, City of Nanaimo, Regional District of Nanaimo and Partners on projects, current water levels, and update on various water systems.

PRESENTATIONS/DISCUSSION

REPORTS

USHP Stream Assessments – Holden Creek, Millstone River. (Julie Pisani)

J. Pisani gave a brief presentation summarizing reports for the stream assessments on Holden Creek and Millstone River that took place this June. The focus now is looking at recommended actions for water quality and habitat improvement, and identifying partners and priorities to move forward with.

Area 'H' OCP Update Hydrogeology Review Report. (Bernadette Lyons, Waterline)

B. Lyons gave an overview of Waterline's report on aquifers in Electoral Area 'H' which updated hydrostratigraphy from the GSC study, reviewed data gaps and inconsistencies in Provincial data, discussed recharge mechanisms and areas, and offered conclusions and recommendations.

Area 'E' Draft Water Monitoring Plan. (Mark Bolton, Golder)

M. Bolton presented the draft plan. The objective is to identify where more data is needed on water resources in Area 'E' and work collaboratively with partners to develop a monitoring program that will support detailed analysis i.e. numerical water budget models to assess supply and demand, which will provide the technical basis to guide land use decisions in the area and support the development of a Water Sustainability Plan.

Phase 2 Water Budget Scoping for French Creek, Cedar-Yellowpoint. (Arnd Burgert, Piteau)

A. Burgert presented Piteau's draft scoping of the Phase 2 Water Budget for the French Creek and Cedar-Yellowpoint areas, which included required data and proposed collection methods. The next draft will include prioritization of each of the proposed elements for data collection and will assist the RDN in implementing further monitoring where required for the French Creek and Cedar-Yellowpoint areas.

UPDATE PRESENTATIONS / DISCUSSION**VIU Wetland Research Update.** (Kayla Harris and Ashley Van Acken, Vancouver Island University)

A brief update on the wetland mapping and monitoring project was provided by student researchers. Predictive mapping was completed in the first steps of this project, to predict where wetlands are present across our region based on remote sensing data. Now researchers are "field truthing" to ascertain if the predictive mapping was accurate and to collect more on-the-ground data using an adapted version BC Wildlife Federation data sheet. Considerations at this stage include private property accessibility, site evaluation and interpretation of connection to groundwater. So far, a total of 10 wetland sites have been ground-truthed and mapped across four water regions with the majority of sites residing in the Little Qualicum water region.

Gabriola Groundwater Modelling. (Ryan Burgess, Simon Fraser University)

R. Burgess gave a brief summary on the model he has developed, estimating groundwater recharge on Gabriola Island. This model is applicable to similar bedrock aquifers in the region.

"What would you like to see from the DWWP program in 2017?" (Group Discussion)

- Integrate water quality into different region models and translate to the public
- Keep working at ground-truthing, collecting high quality data to input into numerical models understand/predict water resource availability i.e. well level monitoring program, stream flow monitoring, surface water quality data
- Identify aquifers, surface water link studies, missing interflow, more focus on aquatic health of small streams
- Look at developing tools that land owners can use and understand how to manage water on their property
- Outreach and reporting out – how information is used for land use decisions
- Have a planner present how info gets into OCP
- Surface water flow monitoring
- More First Nations engagement and participation
- Concerned with coastal areas and interchange between fresh and salt water,
- More focus on decisions that go into OCP's
- Smaller wetlands should be mapped too

ADDENDUM**NEW BUSINESS****BUSINESS ARISING FROM COMMUNICATIONS**

ADJOURNMENT

Meeting is adjourned.

Time: 3:40

Chairperson



**MINUTES OF THE REGULAR MEETING OF THE
DRINKING WATER AND WATERSHED PROTECTION
TECHNICAL ADVISORY COMMITTEE
HELD ON THURSDAY, JULY 7, 2016 AT 12:30 PM
RDN BOARD CHAMBERS**

Present:

Chris Midgley, CHAIR..... Manager, Water Services & Asset Mgmt, RDN
Sylvia Borroso..... Ministry of Forests, Lands & Natural Resource Operations (for Pat Lapcevic)
Anne Fiddick..... Environment Community Representative
Kate Miller..... Manager, Environmental Initiatives, CVRD
Sonja Zupanec..... Islands Trust
Bill Sims..... Manager, Water Resources, City of Nanaimo
Ken Epps..... Forest Industry Representative, Island Timberlands
Alan Gilchrist..... Academic Community Representative (VIU)
Gilles Wendling..... Hydrogeologist Representative
Fred Spears..... Director of Public Works, District of Lantzville
Peter Law..... General Public Representative (North)
Bob Weir..... Director of Engineering, Town of Qualicum Beach
Harriet Rueggeberg..... General Public Representative (South)
Rosie Simms..... Academic Community Representative (for Oliver Brandes, POLIS)
Mike Squire..... Operations Manager, City of Parksville
Chris Cole..... Forest Industry Representative, TimberWest

Regrets:

Ryan Evanoff..... Ministry of Transportation and Infrastructure Representative
Deb Epps..... Ministry of Environment Representative
Oliver Brandes..... Academic Community Representative
Nick Leone..... Department of Fisheries and Oceans
Leon Cake..... Water Purveyors' Representative
Lynn Magee..... Island Health Representative
Pam Shaw..... Mt Arrowsmith Biosphere Region
David Vincent..... Hydrologist Representative
Pat Lapcevic..... Ministry of Forests, Lands and Natural Resource Operations

Also In attendance:

Julie Pisani..... RDN Drinking Water & Watershed Protection Program Coordinator
Gerald St. Pierre..... Project Engineer, RDN
Randy Alexander..... General Manager, RDN
Dave Clough..... Registered Professional Fisheries Biologist

CALL TO ORDER

The Chairperson called the meeting to order at 12:33 PM and respectfully acknowledged the Coast Salish First Nations on whose traditional territory the meeting took place.

MINUTES

MOVED A. Fiddick, SECONDED B. Sims, that the minutes from the regular meeting of the Drinking Water and Watershed Protection Advisory Committee held April 23, 2016 be adopted.

CARRIED

BUSINESS ARISING FROM MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

MUNICIPAL UPDATES

Updates were given from City of Parksville, District of Lantzville, City of Nanaimo and Regional District of Nanaimo on current water levels, watering restrictions and drought conditions.

MOVED B. Sims, SECONDED S. Barroso, that the verbal municipal updates be received for information.

CARRIED

PRESENTATIONS/DISCUSSION

REPORTS

USHP Stream Assessments – Holden Creek, Millstone River (D. Clough)

D. Clough gave a presentation in regards to stream assessments for Holden Creek and Millstone River. Final reports are forthcoming with recommendations for actions to improve the physical attributes of the streams to improve water quality. Volunteers from NALT and Island Waters Fly Fishers helped in the assessments and the Urban Salmon Habit Program methodology was used.

User Survey Report – BC Water Use Reporting Centre (J. Pisani)

J. Pisani reported on the User Survey which provided feedback from current users of the tool. Results indicated the need to keep the BC Water Use Reporting Centre simple, ensure successful execution of reporting, give flexibility for data entry and data reporting, minimize redundant data entry and recognized the value of regional water management. This information will be utilized by the Okanagan Basin Water Board who is re-developing the tool based on this feedback, with the long term goal of handing it over to the Province.

UPDATE PRESENTATIONS / DISCUSSION

J. Pisani gave verbal updates on the following topics:

- Hydrometric and Climate Monitoring
- 'Area E' Water Monitoring
- Outreach & Rebate Programs
- Water Quality Monitoring (Community Watershed Monitoring Network)
- AVICC Resolution – Rainwater as a Potable Water Source
- Watersheds 2016 – conference in Vancouver this September
- VIU Partnership – Wetland Mapping Monitoring

ADDENDUM

NEW BUSINESS

BUSINESS ARISING FROM COMMUNICATIONS

ADJOURNMENT

MOVED F. Spears, SECONDED B. Sims, that this meeting be adjourned.

Chairperson



**MINUTES OF THE REGULAR MEETING OF THE
DRINKING WATER AND WATERSHED PROTECTION
TECHNICAL ADVISORY COMMITTEE**

HELD ON WEDNESDAY, APRIL 13, 2016 AT 10:30 AM @ NANAIMO NORTH LIBRARY

Present:

Mike Donnelly, CHAIR	Manager, Water & Utility Services, RDN
Pat Lapcevic.....	Ministry of Forests, Lands and Natural Resource Operations
Anne Fiddick.....	Environment Community Representative
Chris Cole	Forest Industry Representative, TimberWest
Kate Miller	Manager, Environmental Initiatives, CVRD
Lynne Magee.....	Island Health Representative
Bill Sims	Manager, Water Resources, City of Nanaimo
Morgan Kennah.....	Forest Industry Representative, Island Timberlands (for Ken Epps)
Alan Gilchrist	Academic Community Representative (VIU)
Sonja Zupanec	Islands Trust Representative
Gilles Wendling	Hydrogeologist Representative
Fred Spears.....	Director of Public Works, District of Lantzville
Peter Law	General Public Representative (North)
Nick Leone	Forest Industry Representative, TimberWest
Leon Cake	Water Purveyors' Representative
Bob Weir.....	Director of Engineering, Town of Qualicum Beach
Harriet Rueggeberg.....	General Public Representative (South)
David Vincent	Hydrologist Representative
Rosie Simms	Academic Community Representative (for Oliver Brandes, POLIS)
Sarah Lumley	Mt Arrowsmith Biosphere Region (for Pam Shaw)
Julie Pisani	RDN Drinking Water & Watershed Protection Program Coordinator

Regrets:

Ryan Evanoff	Ministry of Transportation and Infrastructure Representative
Deb Epps	Ministry of Environment Representative
Oliver Brandes.....	Academic Community Representative
Mike Squire	Operations Manager, City of Parksville

Also In attendance:

Mark Bolton	Golder Associates Ltd.
Lauren Fegan.....	Special Projects Assistant, RDN
Deanna McGillivray	Special Projects Assistant, RDN
Nelson Lovestrom.....	VIU GIS Advanced Diploma Student ; Mt Arrowsmith Biosphere
Gerald St. Pierre	Project Engineer, RDN

CALL TO ORDER

M. Donnelly called the meeting to order at 10:33 am, at the Nanaimo North Library meeting room.

Welcomed new members: Anne Fiddick (Environment Community Rep), Harriet Rueggeberg (General Public - District 68 Rep), Sonja Zupanec (Gabriola Islands Trust Staff Rep), Nick Leone (DFO Rep).

MINUTES

MOVED Lynne Magee, SECONDED Bill Sims, that the minutes from the regular meeting of the Drinking Water and Watershed Protection Advisory Committee held November 19, 2015 be adopted.

CARRIED

BUSINESS ARISING FROM MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

For the information of the committee, a revised Terms of Reference (ToR) was presented, to officially note the following members having joined the committee since 2012:

- District of Lantzville – Fred Spears
- Hydrologist – Dave Vincent
- Mt Arrowsmith Biosphere Region – Pam Shaw
- Cowichan Valley Regional District (Inter Regional Education Initiative) – Kate Miller

The original ToR permits membership to change and other organizations to be called on where partnerships are identified that would be of mutual benefit.

PRESENTATIONS/DISCUSSION

VIU Wetlands Mapping (N. Lovestrom)

Nelson Lovestrom (VIU student) presented the mapping work done as phase one of the wetland monitoring project partnership with VIU and RDN. One map displayed all wetland areas from several key datasets including Ducks Unlimited Canada, Freshwater Atlas and the Sensitive Ecosystem Inventory. The other maps were using satellite remote sensing to predict where wetland areas were occurring. There were separate maps based on 2010, 2014 and 2015 imagery. The 2014 map was seen to have the best level of accuracy due to the conditions in which the images were captured.

Ground-truthing, field study and devising evaluation methods will be the next steps once a focal water region is selected. Ultimately, the multi-year project will strive to identify key wetlands in the region that are associated with groundwater recharge, to guide land use planning in a manner that protects these crucial features.

Climate Change & Agricultural Water Requirements (A. Gilchrist)

Alan Gilchrist presented his research on agricultural water requirements for crops on Vancouver Island under different climate change scenarios. All modelled scenarios showed a projected increase in crop irrigation needs. The worst case that was described in the model was that in the future 100% more water would be required for irrigation in the growing season, due to increased temperatures and decreased rainfall. The amount of increase will ultimately depend upon future climate change. This consideration of irrigation needs is essential to the viability of agriculture on Vancouver Island over the long term; water sustainability for agriculture, communities and habitat must all strike a balance. There is room for more investigation to be done on farming methods and crop type(s) for the greatest water efficiency.

New Groundwater Regulations (P. Lapcevic)

Pat Lapcevic presented the new groundwater regulations that have come into force under the Water Sustainability Act as of Feb. 29, 2016.

The committee had several questions that will be compiled and sent directly to Water Allocations Branch Section for response. There will likely be a separate session organized with the Province, as a workshop to address these questions.

Water Day 2016 Events (L. Fegan)

Lauren Fegan gave a recap of the two Water Day events that RDN Team WaterSmart hosted this spring. Overall, this format was well received and resulted in more overall participation in workshops than in 2015. Feedback from partners and attendees will be taken into account to shape these now-annual events.

Nanose Water Monitoring – Phase 2 Water Budget (M. Bolton, Golder Associates Ltd.)

Mark Bolton presented the background, key questions, and preliminary scope for the work initiated in 2016 with regards to monitoring water resources in Electoral Area E. Feedback from the committee emphasised the need for robust public consultation and input-gathering. June 9th will be the first public / stakeholder meeting for input on the project scope.

Region-wide Watering Restrictions Framework and Website (J. Pisani)

Julie Pisani presented the new region-wide framework for watering restrictions that has recently been adopted by major water purveyors in the region. This initiative came out of Board direction in September 2015, to streamline watering restrictions communications across the region. The new framework provides consistent definitions for the Stages of watering restrictions, while allowing water purveyors to select what Stage at what time for their service area. The one-window map-based website (accessed via www.teamwatersmart.ca) was presented as the public interface for learning where they get their water from and what restrictions may be in effect in their area.

Support for Stewardship Groups (J. Pisani) – *deferred to next meeting***5 year plan – Englishman River Watershed – MVIHES (P. Law) – *deferred to next meeting***

MUNICIPAL UPDATES

These were deferred to next meeting due to time constraints.

REPORTS

No reports were brought forward at this meeting.

ADDENDUM

NEW BUSINESS

BUSINESS ARISING FROM COMMUNICATIONS

ADJOURNMENT

The meeting was adjourned at 12:32 pm.

Mike Donnelly, Chair