#### **REGIONAL DISTRICT OF NANAIMO**

#### REGULAR BOARD MEETING TUESDAY, JULY 28, 2015 7:00 PM

#### (RDN Board Chambers)

#### AGENDA

#### PAGES

- 1. CALL TO ORDER
- 2. DELEGATIONS
- 10 **Chief David Bob, Snaw-Naw-As,** re Agreement in Principle for the Te'Mexw Treaty.

#### 3. BOARD MINUTES

11-26 Minutes of the Regular Board meeting held Tuesday, June 23, 2015 (All Directors – One Vote).

#### 4. BUSINESS ARISING FROM THE MINUTES

#### 5. COMMUNICATIONS/CORRESPONDENCE

(All Directors – One Vote)

- 27 **Danyta Welch, UBCM,** re 2015/16 (Spring) Regional Community to Community Forum – Approval in Principle – Snuneymuxw First Nation.
- 28 **Danyta Welch, UBCM,** re 2015/16 (Spring) Regional Community to Community Forum – Approval in Principle – Snaw-Naw-As First Nation.
- 29 Janet Thony, Coombs Farmers' Institute, re Farmers Feed Families Project.
- 30-31 Ben T. Williams, Island Health, re Change in Closure Time for Urgent Care at the Oceanside Health Centre.

#### 6. UNFINISHED BUSINESS

### 7. STANDING COMMITTEE, SELECT COMMITTEE AND COMMISSION MINUTES AND RECOMMENDATIONS

#### 7.1 ELECTORAL AREA PLANNING STANDING COMMITTEE

32-35 Minutes of the Electoral Area Planning Committee meeting held Tuesday, July 14, 2015 (For Information) (All Directors – One Vote).

#### DEVELOPMENT PERMIT

**Development Permit Application No. PL2015-070 – 5481 Deep Bay Drive, Electoral Area 'H'** (Electoral Area Directors, except EA 'B' – One Vote).

That Development Permit Application No. PL2015-070 to permit the construction of an addition to a dwelling unit within the Hazard Lands Development Permit Area be approved subject to the conditions outlined in Attachments 2 to 4.

#### DEVELOPMENT PERMIT WITH VARIANCE

**Development Permit with Variance Application No. PL2015-078 – 3718 Jingle Pot Road, Electoral Area 'C'** (Electoral Area Directors, except EA 'B' – One Vote).

Delegations wishing to speak to Development Permit with Variance Application No. PL2015-078.

That Development Permit with Variance Application No. PL2015-078 to permit the construction of an addition to a dwelling unit and garage, construction of a driveway, construction of a landscape berm and construction of a concrete patio be approved subject to the conditions outlined in Attachments 2 to 4.

**Development Permit with Variance and Frontage Relaxation Application No. PL2015-032 – 1497 Mason Trail, Electoral Area 'G'** (Electoral Area Directors, except EA 'B' – One Vote).

### Delegations wishing to speak to Development Permit with Variance and Frontage Relaxation Application No. PL2015-032.

- 1. That Development Permit with Variance Application No. PL2015-032 to increase the permitted parcel depth of both proposed lots and to reduce the side yard setback for an existing deck be approved subject to the conditions outlined in Attachments 2 and 3.
- 2. That the request to relax the minimum 10% frontage requirement for both proposed lots be approved.

**Development Permit with Variance Application No. PL2015-071 – 1318 Lanyon Drive, Electoral Area 'G'** (Electoral Area Directors, except EA 'B' – One Vote).

Delegations wishing to speak to Development Permit with Variance Application No. PL2015-071.

That Development Permit with Variance Application No. PL2015-071 to permit the construction of an accessory building be approved subject to the conditions outlined in Attachments 2 and 3.

**Development Permit with Variance Application No. PL2015-079 – Electoral Area 'G'** (Electoral Area Directors, except EA 'B' – One Vote).

Delegations wishing to speak to Development Permit with Variance Application No. PL2015-079.

That Development Permit with Variance Application No. PL2015-079 to permit the construction of a dwelling unit be approved subject to the conditions outlined in Attachments 2 to 4.

**Development Permit with Variance Application No. PL2015-090 – 2930 Trans-Canada Highway, Electoral Area 'A'** (Electoral Area Directors, except EA 'B' – One Vote).

Delegations wishing to speak to Development Permit with Variance Application No. PL2015-090.

That Development Permit with Variance Application No. PL2015-090 to permit the phased development of the subject property be approved subject to the conditions outlined in Attachments 2 to 5.

#### OTHER

36-39 Zoning Amendment Application No. PL2013-113 – 4320 Garrod Road, Electoral Area 'H' – Amendment Bylaw 500.395 – 1st and 2nd reading (Electoral Area Directors, except EA 'B' – One Vote).

- 1. That the Summary of the Public Information Meeting held on September 3, 2014, be received.
- 2. That the Summary of the Public Information Meeting held on June 2, 2015, be received.
- 3. That the conditions set out in Attachment 2 of the staff report be completed prior to Amendment Bylaw No. 500.395 being considered for adoption.
- 4. That "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.395, 2015" be introduced and read two times.
- 5. That the Public Hearing on "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.395, 2015" be chaired by Director Veenhof or his alternate.

Request for Relaxation of the Minimum 10% Perimeter Frontage Requirement in Relation to Subdivision Application No. PL2014-116 – 242, 246, and 250 Hilliers Road North, Electoral Area 'G' (Electoral Area Directors, except EA 'B' – One Vote).

That the request to relax the minimum 10% perimeter frontage requirement for Lot B be approved.

#### 7.2 COMMITTEE OF THE WHOLE STANDING COMMITTEE

40-45 Minutes of the Committee of the Whole meeting held Tuesday, July 14, 2015 (For Information) (All Directors – One Vote).

#### **COMMUNICATION/CORRESPONDENCE**

(All Directors – One Vote)

#### Robert Meyer, re Funding request for playground at Rollo/McClay Park.

That the correspondence received from Robert Meyer regarding a funding request for playground at Rollo/McClay Park be received.

#### Sav Dhaliwal, UBCM, re 2015 Resolutions.

That the correspondence received from Sav Dhaliwal, Union of BC Municipalities, regarding 2015 Resolutions be received.

#### Neil & Lillian Varcoe, re Stone Quarry on Valdes Island.

That the correspondence received from Neil & Lillian Varcoe regarding the Stone Quarry on Valdes Island be received.

### Bruce Jolliffe, Chair, Comox Valley Regional District, re Support – British Columbia Conservation Tax Incentive Program Proposal.

That the correspondence received from Bruce Jolliffe, Chair, Comox Valley Regional District, regarding support for the British Columbia Conservation Tax Incentive Program proposal be received.

#### STRATEGIC AND COMMUNITY DEVELOPMENT

**Oceanside Health and Wellness Network Coordinator Contract** (All Directors – Weighted Vote).

That staff proceed with hiring a contract coordinator for the Oceanside Health and Wellness Network using funds provided by Island Health.

Amendment to Regional Growth Strategy Bylaw No. 1615 (All Directors – Weighted Vote).

That the following recommendations be referred back to staff, and that the items be included for discussion at a Director's Seminar, or within a strategic planning session:

- 1. That a review of the Regional Growth Strategy be initiated that considers the criteria for a minor amendment.
- 2. That the consultation plan provided as Attachment 4 to the staff report be adopted.

#### **REGIONAL AND COMMUNITY UTILITIES**

To appoint the Deputy Sewage Control Manager (All Directors – One Vote).

That the Board appoint the "Acting Manager of Wastewater Services" as the "Deputy Sewage Control Manager".

Subject Matter Expert for Secondary Treatment Design at the Greater Nanaimo Pollution Control Centre (All Directors – Weighted Vote).

That the Board approve extending the Subject Matter Expert contract for Secondary Treatment Design at the Greater Nanaimo Pollution Control Center (GNPCC) to BRC Consulting.

#### 46-49 **Regional District of Nanaimo Bylaw Enforcement Ticket Regulation Bylaw No. 1418** (All Directors – One Vote / 2/3)

- 1. That "Regional District of Nanaimo Bylaw Enforcement Ticket Regulation Amendment Bylaw No. 1418.03, 2015" be introduced and read three times.
- 2. That "Regional District of Nanaimo Bylaw Enforcement Ticket Regulation Amendment Bylaw No. 1418.03, 2015" be adopted.

#### TRANSPORTATION AND SOLID WASTE

**Regional Landfill Security Services Contract Award** (All Directors – Weighted Vote).

That the Board award the contract for security services at the Regional Landfill to Securiguard for a period of three years commencing August 1, 2015 at a total cost of \$275,777.20.

#### ADVISORY AND SELECT COMMITTEE, AND COMMISSION

**Electoral Area 'H' Parks and Open Space Advisory Committee** (All Directors – One Vote).

That the minutes of the Electoral Area 'H' Parks and Open Space Advisory Committee meeting held Wednesday, May 20, 2015, be received for information.

Electoral Area 'E' Parks and Open Space Advisory Committee (All Directors – One Vote).

That the minutes of the Electoral Area 'E' Parks and Open Space Advisory Committee meeting held Wednesday, May 27, 2015, be received for information.

**Electoral Area 'B' Parks and Open Space Advisory Committee** (All Directors – One Vote).

That the minutes of the Electoral Area 'B' Parks and Open Space Advisory Committee meeting held Monday, June 2, 2015, be received for information.

**Cox Community Park Signage** (All Directors – One Vote).

That the Regional District of Nanaimo proceed with the Cox Community Park internal directional signage proposed by Gabriola Land and Trails Trust funded through the 2015 Electoral Area 'B' Community Park budget for Cox Community Park and to allocate funding in the 2016 Budget for the 'Welcome' sign and two benches for the park. Davidson Bay Parking Lot Upgrade (All Directors - One Vote).

That the Regional District of Nanaimo not proceed with the Davidson Bay Parking Lot upgrade project.

**Electoral Area 'A' Parks, Recreation, and Culture Commission** (All Directors – One Vote).

That the minutes of the Electoral Area 'A' Parks, Recreation, and Culture Commission meeting held Wednesday, June 17, 2015, be received for information.

Cedar Plaza Kiosk Update (All Directors – One Vote).

That staff proceed with the tipple/headframe concept and design for the Cedar Plaza Kiosk project.

Water Access Priority Development Sites Update (All Directors – One Vote).

- 1. That staff be directed to commence in 2015 the concept, design and permitting of the A-20 beach access in Electoral Area 'A' and allocate the project's costs in the 2016 budget.
- 2. That the property boundaries at A-18 beach access at Headland Road be verified.

Lease and Site Licence Agreement with Cedar School & Community Enhancement Society (All Directors – Weighted Vote).

That staff be directed to approach the Cedar School and Community Enhancement Society and extend the current Lease and Site Licence Agreement between the Regional District of Nanaimo and the Cedar School and Community Enhancement Society which is due to expire December 31, 2015, for a one-year term to December 31, 2016.

Arts and Culture Review (All Directors – One Vote).

That staff be directed to investigate and report on what synergies could be brought together between Recreation and Arts in Electoral Area 'A'.

**District 69 Recreation Commission** (All Directors – One Vote).

That the minutes of the District 69 Recreation Commission meeting held Thursday, June 18, 2015, be received for information.

Hockey Canada VITSC Bid 2016 U18 Women's Hockey Championship Report – June 2015 (Parksville, Qualicum Beach, Electoral Areas 'E', 'F', 'G', 'H' – Weighted Vote).

That the Regional District of Nanaimo no longer pursue hosting the 2016 National Women's U18 Ice Hockey Championships.

#### Agricultural Advisory Committee (All Directors – One Vote).

That the minutes of the Agricultural Advisory Committee meeting held Friday, July 3, 2015, be received for information.

#### BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS

**Funding request for playground at Rollo/McClay Park** (All Directors – Weighted Vote).

That staff be directed to enter into an agreement with the Gabriola Softball Association for matched funding of \$12,000 from the Area 'B' Community Works fund for the purchase and installation of playground equipment totaling \$24,000 at Rollo McClay Community Park.

#### 8. SCHEDULED STANDING, ADVISORY, AND SELECT COMMITTEES

#### **Fire Services Advisory Committee**

50-51 Minutes of the Fire Services Advisory Committee meeting held Thursday, May 14, 2015 (For Information) (All Directors – One Vote).

#### Liquid Waste Management Plan Monitoring Committee

52-55 Minutes of the Liquid Waste Management Plan Monitoring Committee meeting held Monday, June 1, 2015 (For Information) (All Directors – One Vote).

#### Sustainability Select Committee

- 56-57 Minutes of the Sustainability Select Committee meeting held Thursday, July 16, 2015 (For Information) (All Directors One Vote).
- 58-63 **Declarations Respecting Rights to a Healthy Environment** (All Directors One Vote).

That delegates to the Union of British Columbia Municipalities Convention and Annual General Meeting from the Regional District of Nanaimo Board of Directors consider supporting resolutions regarding the declaration of the right to a healthy environment at the 2015 Convention. 64-66 **Natural Gas Fireplace Rebate** (Lantzville, Electoral Area Directors – Weighted Vote).

That the Regional District of Nanaimo not create a new Green Building Incentive Program rebate for natural gas inserts.

#### 9. ADMINISTRATOR'S REPORTS

- 67-71 Ashcroft Road Watermain Replacement Construction Tender Award (All Directors Weighted Vote).
- 72-74 **Bylaw No. 1733 Alberni-Clayoquot Regional District Permissive Tax Exemption** (All Directors – One Vote – 2/3).
- 75-133 Whiskey Creek Water Service Security Issuing Bylaw No. 1702 (All Directors Weighted Vote / 2/3 Weighted).
- 134-138 District 69 Search and Rescue Service Establishment (All Directors One Vote).
- 139-145 Short and Long Term Investment Policy (All Directors One Vote).

#### 10. ADDENDUM

- 11. BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS
- 12. NEW BUSINESS

#### 13. IN CAMERA

That pursuant to Sections 90 (1) (a) and (e) of the Community Charter the Board proceed to an In Camera Meeting for discussions related to Board appointments and land acquisition.

#### 14. ADJOURNMENT

#### Re: Agreement in Principle for the Te'Mexw Treaty

From: Rogers, Bob Sent: Thursday, July 02, 2015 8:52 PM To: Stanhope, Joe; Joe Stanhope; Colin Haime; Thorkelsson, Paul; Harrison, Joan; Hill, Jacquie Subject: Treaty Agreement in Principle

Joe,

You will remember that I had invited Chief Bob to appear at one of our Regular RDN Board meetings following the signing ceremony in Victoria of the Agreement in Principle for the Te'Mexw Treaty. Chief Bob regretted that he was not well enough at that time to attend. I met with Chief Bob on June 29th on other matters and re-extended the invitation to attend and address the Board at the start of our July 28th Regular meeting. Chief Bob will be pleased to make a presentation regarding the Treaty. He is pleased that there have been three meetings of the full table since the signing of the AIP.

Accordingly, please schedule Chief Bob to make his presentation and have the treaty progress recognized at the start of the July 28th meeting.

Thank you,

Bob

Bob Rogers Director, Area E, Nanoose Bay

#### **REGIONAL DISTRICT OF NANAIMO**

#### MINUTES OF THE REGULAR BOARD MEETING OF THE REGIONAL DISTRICT OF NANAIMO HELD ON TUESDAY, JUNE 23, 2015 AT 7:00 PM IN THE RDN BOARD CHAMBERS

#### In Attendance:

Director J. Stanhope Director C. Haime Director A. McPherson Director H. Houle Director M. Young Director B. Rogers Director J. Fell Director B. Veenhof Director B. McKay **Director B. Bestwick Director J. Hong** Director J. Kipp Director W. Pratt **Director I. Thorpe** Director B. Yoachim Director M. Lefebvre Director T. Westbroek

Chairperson **Deputy Chairperson Electoral Area A Electoral Area B** Electoral Area C **Electoral Area E** Electoral Area F Electoral Area H City of Nanaimo City of Parksville Town of Qualicum Beach

Also in Attendance:

P. Thorkelsson J. Harrison W. Idema R. Alexander G. Garbutt T. Osborne D. Trudeau J. Hill C. Golding Chief Administrative Officer Director of Corporate Services Director of Finance Gen. Mgr. Regional & Community Utilities Gen. Mgr. Strategic & Community Development Gen. Mgr. Recreation & Parks Gen. Mgr. Transportation & Solid Waste Mgr. Administrative Services Recording Secretary

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#### CALL TO ORDER

The Chairperson called the meeting to order and respectfully acknowledged the Coast Salish Nations on whose traditional territory the meeting took place.

#### **BOARD MINUTES**

#### Minutes of the Regular Board meeting held Tuesday, May 26, 2015.

15-443 MOVED Director Rogers, SECONDED Director Haime, that the minutes of the Regular Board meeting held Tuesday, May 26, 2015, be adopted.

CARRIED

#### COMMUNICATION/CORRESPONDENCE

#### Catherine Mackay, Island Health, re RDN Request for Increase in Supported Housing Funding.

15-444 MOVED Director Veenhof, SECONDED Director Lefebvre, that the correspondence received from Catherine Mackay, Island Health, regarding Regional District of Nanaimo request for increase in supported housing funding be received.

CARRIED

#### Michael Smith, re E & N Rail.

15-445 MOVED Director Veenhof, SECONDED Director Lefebvre, that the correspondence received from Michael Smith regarding the E & N Rail be received.

CARRIED

#### Brad Scott, Greyhound Canada, re Application for Elimination of Bus Routes.

15-446 MOVED Director Veenhof, SECONDED Director Lefebvre, that the correspondence received from Brad Scott, Greyhound Canada, regarding an application for elimination of bus routes be received.

CARRIED

#### Dylan Green, Tofino Bus Services Inc., re Application for New Inter-City Bus Licence.

15-447 MOVED Director Veenhof, SECONDED Director Lefebvre, that the correspondence received from Dylan Green, Tofino Bus Services Inc., regarding an application for a new inter-city bus licence be received.

CARRIED

### Bernice and Ole Lind, K. and T. Hooper, and Douglas Heslop, re Development Variance Permit Application No. PL2014-119 – 3560 Allsop Road, Electoral Area 'C'.

15-448 MOVED Director Veenhof, SECONDED Director Lefebvre, that the correspondence received from Bernice and Ole Lind, K. and T. Hooper, and Douglas Heslop regarding Development Variance Permit Application No. PL2014-119 – 3560 Allsop Road, Electoral Area 'C', be received.

CARRIED

Douglas Heslop, re Development Variance Permit Application No. PL2014-119 – 3560 Allsop Road, Electoral Area 'C'.

15-449 MOVED Director Veenhof, SECONDED Director Lefebvre, that the correspondence received from Douglas Heslop regarding Development Variance Permit Application No. PL2014-119 – 3560 Allsop Road, Electoral Area 'C', be received.

### Peter Luckham, Chair, Islands Trust Council, re Islands Trust Council Request for 25% Reduction in Minor Route Ferry Fares.

15-450 MOVED Director Veenhof, SECONDED Director Lefebvre, that the correspondence received from Peter Luckham, Chair, Islands Trust Council, regarding Islands Trust Council request for 25% reduction in minor route ferry fares be received.

CARRIED

#### STANDING COMMITTEE, SELECT COMMITTEE AND COMMISSION MINUTES & RECOMMENDATIONS

#### ELECTORAL AREA PLANNING STANDING COMMITTEE

#### Minutes of the Electoral Area Planning Committee meeting held, Tuesday, June 9, 2015.

15-451 MOVED Director Veenhof, SECONDED Director Young, that the minutes of the Electoral Area Planning Committee meeting held, Tuesday, June 9, 2015, be received for information.

CARRIED

#### DEVELOPMENT VARIANCE PERMIT APPLICATION

#### Development Variance Permit Application No. PL2014-119 – 3560 Allsop Road, Electoral Area 'C'.

15-452 MOVED Director Young, SECONDED Director Veenhof, that Development Variance Permit No. PL2014-119 be approved to reduce the required lot line setback of 8.0 metres to 6.9 metres for an existing rabbit hutch, to 7.4 metres for an existing pump house, to 3.1 metres for an existing garden shed, to 0.0 metres for an existing train trestle, to 5.5 metres for an existing block retaining wall and to 2.7 metres for an existing wood retaining wall subject to the conditions outlined in Attachments 2 to 4.

CARRIED

Doug Carroll – Spoke in favour of the application Bernice Lind – Spoke in opposition to the application Helen Sims – Spoke in favour of the application

#### DEVELOPMENT PERMIT WITH VARIANCE APPLICATIONS

Development Permit with Variance Application No. PL2015-061 – 646268 BC Ltd. – Harold and Balsam Road, Electoral Area 'A'.

15-453 MOVED Director McPherson, SECONDED Director Veenhof, that Development Permit with Variance No. PL2015-061 to permit the construction of an industrial building be approved subject to the conditions outlined in Attachments 2 to 6.

CARRIED

### Development Permit with Variance Application No. PL2015-058 – 2930 Trans Canada Highway, Electoral Area 'A'.

15-454 MOVED Director McPherson, SECONDED Director Young, that Development Permit with Variance Application No. PL2015-058 to permit redevelopment of the Cassidy Country Kitchen Restaurant be approved subject to the conditions outlined in Attachments 2 to 5.

#### OTHER

Request for Relaxation of the Minimum 10% Perimeter Frontage Requirement Subdivision Application No. PL2015-019 – 2610 Harold Road, Electoral Area 'E'.

15-455 MOVED Director Rogers, SECONDED Director Young, that the request to relax the minimum 10% perimeter frontage requirements for proposed Lots 1 and 3 in relation to Subdivision Application No. PL2015-019 be approved.

CARRIED

#### Minutes of the Special Electoral Area Planning Committee meeting held Tuesday, June 9, 2015.

15-456 MOVED Director Veenhof, SECONDED Director Lefebvre, that the minutes of the Special Electoral Area Planning Committee meeting held Tuesday, June 9, 2015, be received for information.

CARRIED

#### REPORTS

#### Bylaw and Policy Updates Project – Draft Agricultural Zoning and OCP Amendments.

- 15-457 MOVED Director Veenhof, SECONDED Director Rogers, that staff proceed with the community engagement plan on the draft zoning and Official Community Plan amendments identified in Attachments 1 and 2 of the staff report with the following updates:
  - 1. Proposed Definitions: Add a reference to the Agricultural Land Reserve, Use, Subdivision and Procedure Regulation within the definition of "production of Biological Integrated Pest Management Products".
  - 2. Specify a 0.0 m setback for outdoor riding rings.
  - 3. Amend materials to allow transparent vertical additions to a solid fence.
  - 4. Add 'or a temporary use area' to the end of the definition of Confined Livestock Area.
  - 5. Change the provision in Bylaw 1285 in the A-1 Zone to allow 1 dwelling unit per ha to a maximum of 2 per lot.
  - 6. Where definitions or setbacks are proposed reference applicable legislation or guideline.
  - 7. Remove 'and outdoor' from 1) vii agricultural building setbacks.
  - 8. Change the definition of agriculture to prohibit mushroom farm (intensive agriculture generally) on all non-ALR land.
  - 9. Amend the proposed consultation plan schedule to change the consultation period from July to November and ensure consultation is at times to accommodate farmers.

CARRIED

#### Minutes of the Electoral Area Planning Committee meeting held, Tuesday, June 23, 2015.

15-458 MOVED Director Veenhof, SECONDED Director Lefebvre, that the minutes of the Electoral Area Planning Committee meeting held, Tuesday, June 23, 2015, be received for information.

#### REPORTS

Proposed Telecommunication Antenna System Application No. PL2013-086 – 891 Drew Road, Electoral Area 'G'.

15-459 MOVED Director Veenhof, SECONDED Director Young, that Regional District of Nanaimo staff be instructed to advise ROGERS COMMUNICATION Inc. and Industry Canada that the Regional District of Nanaimo does not concur with the proposal submitted by ROGERS COMMUNICATION Inc. to construct a single-provider freestanding telecommunication antenna system at 891 Drew Road at this time.

CARRIED

15-460 MOVED Director Veenhof, SECONDED Director Houle, that Regional District of Nanaimo staff be instructed to advise ROGERS COMMUNICATION Inc. that it is the Regional District of Nanaimo's expectation that telecommunication industry proponents will work together to maximize co-location opportunities; coordinate the placement of telecommunication infrastructure in the region; and where co-location is not possible, provide detailed information to the Regional District of Nanaimo as to why co-location is not possible.

#### CARRIED

15-461 MOVED Director Veenhof, SECONDED Director Young, that Regional District of Nanaimo staff be instructed to advise TM Mobile Inc. (TELUS) that it is the Regional District of Nanaimo's expectation that telecommunication industry proponents will work together to maximize co-location opportunities; coordinate the placement of telecommunication infrastructure in the region; and where co-location is not possible, provide detailed information to the Regional District of Nanaimo as to why co-location is not possible.

#### CARRIED

15-462 MOVED Director Veenhof, SECONDED Director Young, that Regional District of Nanaimo staff be instructed to advise TM Mobile Inc. (TELUS) that it is the Regional District of Nanaimo's expectation that TELUS will provide a detailed assessment outlining why neither co-location nor co-build opportunities are possible prior to requesting siting concurrence for the proposed telecommunications facility at 885, 891 and 897 Island Highway West.

#### CARRIED

15-463 MOVED Director Veenhof, SECONDED Director Lefebvre, that given the complexity of siting of telecommunication antenna systems in the District 69 area, Regional District of Nanaimo staff be instructed to contact Industry Canada, TM Mobile Inc. (TELUS), ROGERS COMMUNICATION Inc. to arrange a meeting between representatives of the Regional District of Nanaimo, City of Parksville and Town of Qualicum Beach to discuss the coordination of siting applications and co-location opportunities in order to address telecommunication gaps that exist in the District 69 area.

#### CARRIED

15-464 MOVED Director Veenhof, SECONDED Director Young, that Regional District of Nanaimo staff be instructed to advise Industry Canada and TM Mobile Inc. (TELUS) that based on new information provided by the public, that the Regional District of Nanaimo recommends that Industry Canada withhold approval of the proposal submitted by TM Mobile Inc. (TELUS) to construct a single-provider freestanding telecommunication antenna system at 1421 Sunrise Drive until such time as property owners within 500 metres of the proposed site have been given notice of the proposal and an opportunity to provide input on the proposal.

#### COMMITTEE OF THE WHOLE STANDING COMMITTEE

Sav Dhaliwal, UBCM President, re 2014 Resolutions.

#### Minutes of the Committee of the Whole meeting held Tuesday, June 9, 2015.

15-465 MOVED Director Lefebvre, SECONDED Director Thorpe, that the minutes of the Committee of the Whole meeting held Tuesday, June 9, 2015, be received for information.

CARRIED

#### COMMUNICATIONS/CORRESPONDENCE

15-467

#### Christy Clark, BC Premier, re Meetings at 2015 UBCM Convention.

15-466 MOVED Director Westbroek, SECONDED Director Veenhof, that the correspondence received from Christy Clark, BC Premier, regarding meetings at the 2015 Union of BC Municipalities Convention be received.

CARRIED

### MOVED Director Westbroek, SECONDED Director Veenhof, that the correspondence received from Sav

CARRIED

#### Kelly Olson, re Proposed Cell Tower at 1421 Sunrise Drive, Electoral Area 'G'.

15-468 MOVED Director Westbroek, SECONDED Director Veenhof, that the correspondence received from Kelly Olson, regarding the proposed cell tower at 1421 Sunrise Drive, Electoral Area 'G be received.

Dhaliwal, Union of BC Municipalities President, regarding 2014 Resolutions be received.

CARRIED

# Rollie Koop, School District 69, re Three Lots (20, 21 and 22) – Former Errington Elementary School Site on Grafton Avenue.

15-469 MOVED Director Westbroek, SECONDED Director Veenhof, that the correspondence received from Rollie Koop, School District 69, regarding three lots (20, 21, and 22) – former Errington Elementary School site on Grafton Avenue be received.

CARRIED

#### **REGIONAL AND COMMUNITY UTILITIES**

Engineering Services – Bowser Village Centre Wastewater Service: Collection, Treatment, and Disposal Project.

15-470 MOVED Director Veenhof, SECONDED Director Houle, that the Board award the engineering for detailed design services for the Bowser Village Centre Wastewater Service: Collection, Treatment and Disposal Project to Stantec Consulting Ltd. for \$299,561.

CARRIED

### Water System Transfer Agreement Amendments – Maz-Can Investments Ltd. – Lot 3, District Lot 67, Nanoose District, Plan 29941.

15-471 MOVED Director Rogers, SECONDED Director McPherson, that the Board authorize amendments to the Water System Transfer Agreement with Maz-Can Investments Ltd. for Lot 3, District Lot 67, Nanoose District, Plan 29941.

#### **FINANCE**

15-473

Report on the Use of Development Cost Charges in 2014 and to Authorize the Expenditure of Development Cost Charge Funds in 2015 - Bylaws 1727 and 1728.

MOVED Director Haime, SECONDED Director Rogers, that the report on Development Cost Charges used 15-472 in 2014 provided under Section 937.01 of the Local Government Act be received for information.

MOVED Director Rogers, SECONDED Director Haime, that "Nanoose Bay Bulk Water Service Area Development Cost Charge Reserve Fund Expenditure Bylaw No. 1727, 2015" be introduced and read three times.

15-474 MOVED Director Rogers, SECONDED Director Haime, that "Nanoose Bay Bulk Water Service Area Development Cost Charge Reserve Fund Expenditure Bylaw No. 1727, 2015" be adopted.

15-475 MOVED Director Haime, SECONDED Director Kipp, that "Southern Community Sewer Service Area Development Cost Charge Reserve Fund Expenditure Bylaw No. 1728, 2015" be introduced and read three times.

MOVED Director Haime, SECONDED Director Kipp, that "Southern Community Sewer Service Area 15-476 Development Cost Charge Reserve Fund Expenditure Bylaw No. 1728, 2015" be adopted.

#### CARRIED

CARRIED

#### Operating Results for the Period ending March 31, 2015.

15-477 MOVED Director Lefebvre, SECONDED Director Westbroek, that the summary report of financial results from operations to March 31, 2015 be received for information.

CARRIED

#### 2014 Annual Financial Report (Audited Financial Statements), Board and Committee Member Remuneration / Expenses and Statement of Financial Information.

MOVED Director Lefebvre, SECONDED Director Houle, that the 2014 Annual Financial Report, Statement 15-478 of Board and Committee Members Expenses and Remuneration and the Statement of Financial Information be received and approved as presented.

CARRIED

#### **RDN Support Structure for Fire Service Areas.**

15-479 MOVED Director Rogers, SECONDED Director Veenhof, that staff be directed to engage a consultant with Playbook and rural fire service experience to work directly with fire departments and the Regional District of Nanaimo to review the Regional District of Nanaimo's support structure for fire services; to develop a process to ensure compliance with the Structure Firefighters Competency and Training Playbook and to provide recommendations to the Regional District of Nanaimo Board to meet its statutory requirements for the effective delivery of fire services in the Regional District.

CARRIED

CARRIED

CARRIED

CARRIED

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15-480 MOVED Director Rogers, SECONDED Director Veenhof, that staff be directed to fund the work of the fire services consultant from the Electoral Areas Feasibility Reserve and from the Provincial Basic Grant up to \$52,000 in 2015 with additional funding to be provided through the 2016 -2020 Financial Plan process.

#### TRANSPORTATION AND SOLID WASTE

#### TRANSIT

#### Route 15A VIU Connector (Jingle Pot) Service Review.

15-481 MOVED Director Young, SECONDED Director Veenhof, that staff be directed to remove all Route 15A transit stops on Jingle Pot Road in Electoral Area 'C' by September 2015.

CARRIED

15-482 MOVED Director Hong, SECONDED Director Veenhof, that staff look at eliminating Route 15A all together and that this matter be referred to the Transit Select Committee for a report.

### CARRIED

#### ADVISORY AND SELECT COMMITTEE, AND COMMISSION

Electoral Area 'F' Parks and Open Space Advisory Committee.

Minutes of the Electoral Area 'F' Parks and Open Space Advisory Committee meeting held, Wednesday, March 11, 2015.

15-483 MOVED Director Fell, SECONDED Director Haime, that the minutes of the Electoral Area 'F' Parks and Open Space Advisory Committee meeting held Wednesday, March 11, 2015, be received for information.

#### Grants-in-Aid Advisory Committee.

#### Minutes of the Grants-in-Aid Advisory Committee meeting held Wednesday, May 20, 2015.

15-484 MOVED Director Young, SECONDED Director Houle, that the minutes of the Grants-in-Aid Advisory Committee meeting held Wednesday, May 20, 2015, be received for information.

CARRIED

CARRIED

#### District 68 Grant Approvals.

15-485 MOVED Director Young, SECONDED Director Houle, that the Grants-in-Aid funds for District 68 be awarded as follows:

#### Organization

Gabriola Arts Council – 7th Annual Gabriola Theatre Festival lighting rental	\$900.00
People for a Healthy Community on Gabriola Society – Transportation assistance	\$800.00
Gabriola Land & Trails Trust – Purchase of bobcat loader and trailer	\$0.00
Gabriola Softball Association – Towards the purchase of a fiber base for a playground at Rollo McClay Park	\$1,250.00
Scouts Canada 1st Gabriola Scouts Group – Planning library books for Beavers and Cubs	\$741.30
Tozan Cultural Society – Construction of wood-fired kiln, repairs to firing chamber of the Tozan kiln, and building an extension on the kiln shed	0.00
Total	\$3,691.30

15-486 MOVED Director Young, SECONDED Director Houle, that the remaining District 68 funds in the amount of \$1417.03 be carried forward to the 2015 Fall Grants-in-Aid budget.

#### CARRIED

#### District 69 Grant Approvals.

15-487 MOVED Director Young, SECONDED Director Lefebvre, that the Grants-in-Aid funds for District 69 be awarded as follows:

#### Organization

Communities to Protect Our Coast – Subsidy for 10 tables for exhibitors at Flourishing in a Green Economy Tradeshow	\$0.00
Corcan-Meadowood Residents Association – Purchase of two sets of two Motorola waterproof GMRS 56 km radios	\$313.57
Errington Preschool Parents Society – Purchase of children's songbooks, small percussion instruments, nutritional guides for early childhood, and books for the yearly workshop	\$845.00
Lighthouse Community Centre Society – Highway sign production	\$2,999.11
Oceanside Building Learning Together Society – Motion lights and security cameras for Storybook Village	\$1,724.00
Qualicum Bay Lions Club – Roof repairs	\$5,000.00
Total	\$10,881.68
	CARRIED

15-488 MOVED Director Young, SECONDED Director Lefebvre, that the remaining District 69 funds in the amount of \$2,071.19, be carried forward to the 2015 Fall Grants-in-Aid budget.

CARRIED

#### Transit Select Committee.

#### Minutes of the Transit Select Committee meeting held Thursday, May 21, 2015.

15-489 MOVED Director Westbroek, SECONDED Director Lefebvre, that the minutes of the Transit Select Committee meeting held Thursday, May 21, 2015, be received for information.

CARRIED

### 2015-2016 Conventional and Custom Annual Operating Agreement – Regional District of Nanaimo / BC Transit.

15-490 MOVED Director Westbroek, SECONDED Director Lefebvre, that the 2015-2016 Conventional and Custom Annual Operating Agreement (AOA) with BC Transit be approved.

CARRIED

#### **District 69 Recreation Commission.**

#### Minutes of the District 69 Recreation Commission meeting held Thursday, May 21, 2015.

15-491 MOVED Director Veenhof, SECONDED Director Lefebvre, that the minutes of the District 69 Recreation Commission meeting held Thursday, May 21, 2015, be received for information.

#### Grant Approvals.

15-492 MOVED Director Veenhof, SECONDED Director Fell, that the following District 69 Youth Recreation Grant applications be approved:

#### **Youth Organization**

Arrowsmith Community Recreation Association – Youth sports program	\$1,500.00
Bard to Broadway – Performing Arts Education Series	\$2,225.00
Bard to Broadway – Summer Youth Theatre Workshop	\$955.00
Kwalikum Secondary School - Dry Grad	\$1,200.00
District 69 Family Resource Association – Youth drop-in swim passes	\$1,673.00
District 69 Family Resource Association – 4-days summer camp activity	\$422.00
Parksville and District Rock and Gem Club – Equipment	\$1,500.00
Ravensong Breakers Aquatic Club- Equipment	\$2,500.00
Oceanside BMX – Starting gate repairs	\$2,500.00
Total	\$14,495.00

CARRIED

15-493 MOVED Director Veenhof, SECONDED Director Fell, that the following District 69 Community Recreation Grant applications be approved:

Community Organization	
Bow Horne Bay Community Club - Fall Fair children's activity	\$2,500.00
Errington Cooperative Preschool – Equipment	\$2,500.00
Family Resource Association - Special Needs Family Retreat	\$1,500.00
Oceanside Building Learning Together Society - Equipment, supplies for expansion	\$1,500.00
Oceanside Community Arts Council - Program supplies	\$2,000.00
Parksville Curling Club - Light tube replacement	\$2,200.00
Qualicum and District Curling Club - Ice scraper replacement	\$2,500.00
Vancouver Island Opera – facility rental; print cost	\$2,000.00
Total	\$16,700.00

CARRIED

#### Rubberized Track Surface at Ballenas Secondary School.

15-494 MOVED Director Veenhof, SECONDED Director Lefebvre, that as part of the 2016 District 69 Recreation Services Master Plan development, a needs assessment for an outdoor multi-sport complex be conducted prior to further development of a track complex.

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#### **Business Arising From Delegations or Communications.**

#### Outdoor Multi-Sports Complex in District 69.

15-495 MOVED Director Veenhof, SECONDED Director Lefebvre, that in 2015, staff explore partnerships with the Town of Qualicum Beach, City of Parksville, School District 69, local sports associations, community service organizations and businesses to determine the interest level in funding and operating an outdoor multi-sports complex in District 69.

CARRIED

#### EXTERNAL BOARDS

#### Arrowsmith Water Service Management Board.

#### Minutes of the Arrowsmith Water Service Management Board meeting held Thursday, May 7, 2015.

15-496 MOVED Director Rogers, SECONDED Director Lefebvre, that the minutes of the Arrowsmith Water Service Management Board meeting held Thursday, May 7, 2015, be received for information.

CARRIED

#### Arrowsmith Water Service 2015 – 2019 Financial Plan.

15-497 MOVED Director Rogers, SECONDED Director Lefebvre, that the Arrowsmith Water Service 2015 – 2019 Financial plan be adopted.

CARRIED

### Minutes of the Englishman River Water Service Management Board meeting held Thursday, May 7, 2015.

15-498 MOVED Director Lefebvre, SECONDED Director Rogers, that the minutes of the Englishman River Water Service Management Board meeting held Thursday, May 7, 2015, be received for information.

#### Englishman River Water Service 2015 – 2019 Financial Plan.

15-499 MOVED Director Rogers, SECONDED Director Lefebvre, that the Englishman River Water Service 2015 – 2019 Financial plan be adopted.

CARRIED

CARRIED

#### BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS

#### Provision of Coordination and Development Services for the Oceanside Health and Wellness Network.

15-500 MOVED Director Westbroek, SECONDED Director Veenhof, that the Board request staff to meet with the Oceanside Health and Wellness Network and Island Health to explore becoming the host for the contracting of a coordinator position.

#### NEW BUSINESS

#### Island Corridor Foundation.

15-501 MOVED Director Fell, SECONDED Director Veenhof, that the Island Corridor Foundation be requested to provide to the Regional District of Nanaimo, the text of the pending agreement between the Island Corridor Foundation and Southern Railway of Vancouver Island so that the Regional District of Nanaimo may ensure that there are no unacceptable entanglements, conditions, commitments or liabilities that might descend to the Regional District of Nanaimo should the member-owners of the Island Corridor Foundation decide to change the structure, status or mission of the Island Corridor Foundation.

CARRIED

#### Electoral Area 'B' Transit Service.

15-502 MOVED Director Houle, SECONDED Director Veenhof, that the Board direct staff to investigate options for transit service (outside of the Regional District of Nanaimo's and BC Transit's Annual Operating Agreement) to be implemented in Electoral Area 'B'.

CARRIED

#### SCHEDULED STANDING, ADVISORY, AND SELECT COMMITTEES

#### **Regional Parks and Trails Select Committee.**

#### Minutes of the Regional Parks and Trails Select Committee meeting held Tuesday, June 16, 2015.

15-503 MOVED Director Thorpe, SECONDED Director Lefebvre, that the minutes of the Regional Parks and Trails Select Committee meeting held Tuesday, June 16, 2015, be received for information.

CARRIED

#### Morden Colliery Historic Provincial Park Land Tenure Review.

15-504 MOVED Director Thorpe, SECONDED Director Haime, that the Morden Colliery Historic Provincial Park Land Tenure Review report be received for information and that no additional resources be provided to the restoration project at this time.

CARRIED

15-505 MOVED Director Thorpe, SECONDED Director Haime, that staff provide the Friends of Morden Mine information from the Morden Colliery Historic Provincial Park Land Tenure Review report.

CARRIED

#### **Regional Park Dedication Bylaw 1726.**

15-506 MOVED Director Haime, SECONDED Director Rogers, that the "Regional District Parkland Dedication Bylaw 1726, 2015" be introduced and read three times.

CARRIED

15-507 MOVED Director Haime, SECONDED Director Pratt, that the "Regional District Parkland Dedication Bylaw 1726, 2015" be adopted.

#### **RDN Board Minutes** June 23, 2015 Page 13

CARRIED

#### E&N Rail Trail Costing and Phasing Options.

and significant actions be approved.

15-508

Mount Benson Regional Park Management Plan – Five Year Review.

MOVED Director Fell, SECONDED Director Haime, that the Regional District proceed to tender for the 15-509 E&N Rail Trail Project for the Coombs to Church Road section, with a tender upgrade option for the construction of the Church Road to Springwood Park trailhead section, should sufficient Community Works Funds and Regional Parks Capital Funds be available.

MOVED Director Young, SECONDED Director Thorpe, that the Five Year Review for the Mount Benson Regional Park Management Plan be received and that any revisions to the Management Plan policies

15-510 MOVED Director Fell, SECONDED Director Haime, that construction of the section of E&N Rail Trail from Springwood Park to Lowry's Road, along the Victoria Line, be completed in a later phase once additional funding is secured.

#### Fairwinds Regional Park Management Plan.

- 15-511 MOVED Director Rogers, SECONDED Director Haime, that the Regional District Park Management Plan for the Fairwinds Lakes District be approved in principal.
- 15-512 MOVED Director Rogers, SECONDED Director Haime, that the name "Qwiyulass Regional Park" be approved for the future Regional Park within the Fairwinds Lake District.

CARRIED

#### **Executive Committee.**

#### Minutes of the Executive Committee meeting held Tuesday, June 16, 2015.

MOVED Director Pratt, SECONDED Director Westbroek, that the minutes of the Executive Committee 15-513 meeting held Tuesday, June 16, 2015, be received for information.

CARRIED

#### Vancouver Island University Re: Graffiti Incidents in Nanaimo.

15-514 MOVED Director Kipp, SECONDED Director Lefebvre, that the Regional District of Nanaimo participate as a community partner with Vancouver Island University in their statement in response to the recent graffiti incidents in Nanaimo.

CARRIED

#### **ADMINISTRATOR'S REPORTS**

Zoning Amendment Application No. PL2015-021 – 2790/2800 Benson View Road, Electoral Area 'C' – Amendment Bylaw 500.399 – Third Reading.

15-515 MOVED Director Young, SECONDED Director Veenhof, that the report of the Public Hearing held on May 28, 2015 for "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.399, 2015" be received.

CARRIED

#### CARRIED

CARRIED

15-516 MOVED Director Young, SECONDED Director Veenhof, that "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.399, 2015" be read a third time.

CARRIED

#### Acquisition of Landfill Compactor.

15-517 MOVED Director McKay, SECONDED Director Kipp, that the Board approve borrowing of \$313,700 for the outstanding amount owing on the existing landfill compactor using the Municipal Finance Authority (MFA) short term equipment financing program.

CARRIED

#### Amendment to Gabriola Island Taxi Saver Service Establishment Bylaw No. 1725.

15-518 MOVED Director Houle, SECONDED Director Veenhof, that third reading of "Gabriola Island Taxi Saver Service Establishment Bylaw No. 1725, 2015" be rescinded.

CARRIED

- 15-519 MOVED Director Houle, SECONDED Director McPherson, that "Gabriola Island Taxi Saver Service Establishment Bylaw No. 1725, 2015" be amended as follows:
  - By deleting "Taxi Saver Service" throughout the bylaw and replacing it with "Taxi Saver Contribution Service";
  - By deleting Section 2 and replacing it with the following:
    - "2. Service
      - (1) A Taxi Saver Contribution Service is hereby established for the purpose of providing a contribution toward the operation of a Taxi Saver Program on Gabriola Island to provide assistance to residents of Gabriola Island who are persons with disabilities or seniors with low incomes (the "Service").
      - (2) For the purpose of this bylaw a "low income senior" means a person 65 years of age or older who is enrolled in the MSP Regular Premium Assistance Program or qualifies for another provincial or federal income assistance program on the basis of financial need."

CARRIED

15-520 MOVED Director Houle, SECONDED Director Veenhof, that "Gabriola Island Taxi Saver Contribution Service Establishment Bylaw No. 1725, 2015" be read a third time as amended.

CARRIED

15-521 MOVED Director Houle, SECONDED Director Veenhof, that the Board approve the revised Elector Response Form as provided in Attachment 2.

#### BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS

Peter Luckham, Chair, Islands Trust Council, re Islands Trust Council Request for 25% Reduction in Minor Route Ferry Fares.

15-522 MOVED Director Houle, SECONDED Director Veenhof, that staff prepare a letter for the signature of the Chair in support of Islands Trust Council's request that the Province fund a reduction in ferry fares on BC Ferries' minor routes by 25 per cent.

CARRIED

#### **NEW BUSINESS**

#### First Nations Art Installation Project.

15-523 MOVED Director Houle, SECONDED Director Kipp, that staff be directed to investigate the opportunity for the development of a collaborative art installation project at the Regional District of Nanaimo involving Vancouver Island University, Snuneymuxw First Nation, Snaw-Naw-as First Nation and Qualicum First Nation to commemorate the 150th Birthday of Canada, the 50th Birthday of the Regional District of Nanaimo and the important relationship between the Regional District of Nanaimo, Vancouver Island University and the First Nations of this Region; and

That the Regional District of Nanaimo Board support an application under the Canada 150 Fund for matching Federal funds to the \$30,000 allocated by the Board in the 2016 Regional District of Nanaimo Budget for the First Nations Art Installation Project for this initiative.

#### Truth and Reconciliation Commission Calls to Action.

15-524 MOVED Director Houle, SECONDED Director Kipp, that the Regional District of Nanaimo support in principle all 94 Calls to Action of the Truth and Reconciliation Commission.

CARRIED

#### IN CAMERA

15-525 MOVED Director Veenhof, SECONDED Director Young, that pursuant to Sections 90(1) (a), (e), (g), (i), and (k) of the *Community Charter* the Board proceed to an In Camera Meeting for discussions related to Board appointments, land acquisition, litigation, solicitor-client privilege, and the proposed provision of municipal services.

CARRIED

TIME: 8:15 PM

#### **RISE AND REPORT**

#### Central Island Public Safety Answering Point 9-1-1 Service Delivery Options.

15-526 MOVED Director Veenhof, SECONDED Director Lefebvre, that staff be directed to work with the City of Nanaimo and Cowichan Valley Regional District through the Central Island 9-1-1 Partnership to complete an agreement with EComm 9-1-1 for the provision of Public Safety Answering Point 9-1-1 service to the Partnership and to transition the Public Safety Answering Point 9-1-1 service from the RCMP to EComm to coincide with the closure of the RCMP's Nanaimo Operational Communications Centre in November 2015.

#### Legal Services Contracts.

15-527 MOVED Director Veenhof, SECONDED Director Haime, that the Board renew its legal services agreements with Stewart McDannold Stuart in the area of local government law and Harris & Co. in the area of labour law for a three year term expiring July 2018.

CARRIED

#### Electoral Area 'E' Alternate Director Attendance at In Camera Meeting.

15-528 MOVED Director Rogers, SECONDED Director Veenhof, that the Board permit the Electoral Area 'E' Alternate Director to attend the July In Camera meeting.

CARRIED

#### **NEW BUSINESS**

#### Alternate Director Attendance at In Camera Meetings.

15-529 MOVED Director Westbroek, SECONDED Director Fell, that Alternate Directors be permitted to attend In Camera meetings.

A recorded vote was requested.

The motion was CARRIED with Directors Bestwick, Fell, Hong, Kipp, McKay, Pratt, Rogers, Thorpe, Westbroek, Yoachim and Young voting in the affirmative, and Directors Haime, Houle, Lefebvre, McPherson, Stanhope and Veenhof voting in the negative.

Recorded Vote: In Favour – 11, Opposed - 6

#### ADJOURNMENT

MOVED Director McKay, SECONDED Director Young, that this meeting be adjourned.

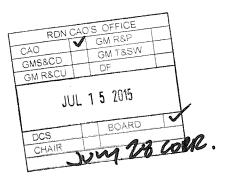
CARRIED

TIME: 8:42 PM

**CHAIRPERSON** 

CORPORATE OFFICER





July 8, 2015

Paul Thorkelsson, CAO Regional District of Nanaimo 6300 Hammond Bay Road Nanaimo, BC, V9T 6N2

#### RE: 2015/16 (Spring) Regional Community to Community Forum – Approval in Principle

Dear Mr. Thorkelsson,

Thank you for submitting an application for the 2015/16 (Spring) Community to Community (C2C) forum program. We have reviewed your submission and are pleased to advise you that your request has been <u>approved in principle</u> pending receipt of outstanding items.

To date, the date(s) of the event(s) proposed for meeting with the Snuneymuxw First Nation have not been forwarded to UBCM.

Upon satisfactory receipt of these outstanding items your application will be eligible for final approval and 50% of the grant will be released. The remainder of the grant will be available after the event is completed and a final report and financial summary has been received.

I would like to congratulate you for responding to this opportunity to build relations with neighbouring First Nations and/or local governments and encourage you to complete your application as soon as possible.

If you have any questions, please feel free to contact Local Government Program Services at (250) 356-2947 or lgps@ubcm.ca.

Sincerely,

0 ()

Danyta Welch Policy & Programs Officer





FIRST NATIONS SUMMIT

#### Regional Community to Community Forum

Administration provided by UBCM and First Nations Summit

Funding provided by the Ministry of Community, Sport & Cultural Development

Please direct all correspondence to:

Local Government House 525 Government Street Victoria, BC, V8V 0A8

E-mail: lgps@ubcm.ca Phone: (250) 356-2947

# UBCM



FIRST NATIONS SUMMIT

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Please direct all correspondence to:

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E-mail: lgps@ubcm.ca Phone: (250) 356-2947



July 8, 2015 Paul Thorkelsson, CAO Regional District of Nanaimo 6300 Hammond Bay Road Nanaimo, BC, V9T 6N2



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Dear Mr. Thorkelsson,

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To date, the date(s) of the event(s) proposed for meeting with the Snaw-Naw-As First Nation have not been forwarded to UBCM.

Upon satisfactory receipt of these outstanding items your application will be eligible for final approval and 50% of the grant will be released. The remainder of the grant will be available after the event is completed and a final report and financial summary has been received.

I would like to congratulate you for responding to this opportunity to build relations with neighbouring First Nations and/or local governments and encourage you to complete your application as soon as possible.

If you have any questions, please feel free to contact Local Government Program Services at (250) 356-2947 or lgps@ubcm.ca.

Sincerely,

2001

Danyta Welch Policy & Programs Officer

#### COOMBS FARMERS' INSTITUTE ESTABLISHED 1914



July 4, 2015

Chris Midgley, Manager, Energy and Sustainability Regional District of Nanaimo

Re: Farmers Feed Families Project

Dear Chris,

Coombs Farmers' Institute, and our partners, would like to thank the Regional District of Nanaimo staff and elected officials for their generous support and assistance during our recent successful application for a portion of the NCED funding.

You clearly share our belief in a vision of strong communities built around vibrant, diversified and sustainable food systems. This assurance makes it possible for us to go forward, building on the initiatives that the grant money makes possible.

We, and our partners, will continue to work with local governments and media outlets to help our community stay engaged in this exciting process. We also are continually reaching out and forming links with like-minded businesses, individuals and organizations.

Do not hesitate to contact our Farmers' Institute, if you feel that we may be of any assistance.

Yours trad

Janet Thony, President

c.c. Partners- Salish Sea Culinary Guild Qualicum Beach Community Education and Wellness Society Qualicum Beach Farmers' Market

Janet Thony, President, Coombs Farmers' Institute 267 Buller Road, Qualicum Beach, B.C. V9K 2B3

250 738 0888 crocker1@telus.net www.coombsfarmersinstitute.ca Excellent health and care, for everyone, everywhere, every time.



July 16, 2015

Good morning,

I am writing to let you know about a change in closure time for Urgent Care at the Oceanside Health Centre. Starting on August 1, 2015, Urgent Care will close one hour earlier, at 9:30 pm from the current 10:30 pm closure time. Urgent Care will continue to open at 7:30 am.

The reason for the change in closure time to 9:30 pm from 10:30 pm is to improve waiting times for patients and to enhance physician recruitment for Urgent Care.

Currently, Urgent Care averages 69 patient presentations daily with the majority of these patients presenting between 8 am and 4 pm, at a rate of four to six new patients per hour. The fewest patients present between 9 pm and 1030 pm, with an average of 1.5 new patient presentations during this time frame.

A review of data collected for the first 18-months of operations indicates that Urgent Care is performing well in terms of meeting the four-hour triage to discharge target almost 90 per cent of the time for patients presenting with more urgent needs, therefore needing more clinical intervention. However, Urgent Care's goal to meet a triage to discharge target of two hours 75 per cent of the time for patients presenting with less urgent conditions is being met only 65 per cent of the time.

Closing one hour earlier will allow us more flexibility with respect to start and end times for nursing shifts to ensure we have adequate nursing resources at the right times throughout the day, including during daytime hours – 8 am to 4 pm, when demand for service is at its peak. We anticipate this will result in improving triage to discharge targets, resulting in decreased waiting times for patients, particularly in the evening hours.

As you may be aware, physician recruitment is a challenge faced by communities across BC and North America and Oceanside is no exception. The majority of physicians who work in Urgent Care also work in private practice or in hospital settings. While physician and nurse shifts are scheduled to end at 11 pm, with the current closure time of 10:30 pm, patient discharges are not completed until midnight or later, on many evenings. The late hour of shift completion has been an ongoing barrier to recruiting physicians to work evenings in Urgent Care.

We anticipate the new hours for Urgent Care will result in completion of patient discharges by 11 pm on most evenings, which in turn, will assist us in recruiting physicians for evening shifts in Urgent Care.

In closing, I want assure you that Island Health is committed to offering a consistent service to the Oceanside community. Please do not hesitate to contact me at 250-951-9549 if you would like to discuss this further.

Yours sincerely,

Ben William

Ben T. Williams, MD, CCFP Medical Lead, Oceanside Health Services Ben.Williams@viha.ca

#### **REGIONAL DISTRICT OF NANAIMO**

#### MINUTES OF THE ELECTORAL AREA PLANNING COMMITTEE MEETING OF THE REGIONAL DISTRICT OF NANAIMO HELD ON TUESDAY, JULY 14, 2015 AT 6:30 PM IN THE **RDN BOARD CHAMBERS**

#### In Attendance:

	Director B. Veenhof Director A. McPherson Director M. Young Director B. Rogers Alternate Director J. McLean Director J. Stanhope	Chairperson Electoral Area A Electoral Area C Electoral Area E Electoral Area F Electoral Area G
Regrets:		
	Director J. Fell	Electoral Area F
Also in Attendance:		
	P. Thorkelsson J. Harrison G. Garbutt D. Trudeau P. Thompson M. O'Halloran C. Golding	Chief Administrative Officer Director of Corporate Services Gen. Mgr. Strategic & Community Development Gen. Mgr. Transportation & Solid Waste Mgr. Long Range Planning A/Mgr. Administrative Services Recording Secretary

#### **CALL TO ORDER**

The Chairperson called the meeting to order and respectfully acknowledged the Coast Salish Nations on whose traditional territory the meeting took place.

The Chairperson welcomed Alternate Director McLean to the meeting, and welcomed Alternate Director Lowe in the audience.

#### ELECTORAL AREA PLANNING COMMITTEE MINUTES

#### Minutes of the Regular Electoral Area Planning Committee meeting held Tuesday, June 9, 2015.

MOVED Director Rogers, SECONDED Director Young, that the minutes of the Regular Electoral Area Planning Committee meeting held Tuesday, June 9, 2015, be adopted.

#### Minutes of the Special Electoral Area Planning Committee meeting held Tuesday, June 9, 2015.

MOVED Director Young, SECONDED Director Stanhope, that the minutes of the Special Electoral Area Planning Committee meeting held Tuesday, June 9, 2015, be adopted.

CARRIED

#### Minutes of the Special Electoral Area Planning Committee meeting held Tuesday, June 23, 2015.

MOVED Director Rogers, SECONDED Director Young, that the minutes of the Special Electoral Area Planning Committee meeting held Tuesday, June 23, 2015, be adopted.

CARRIED

#### **DEVELOPMENT PERMIT**

#### Development Permit Application No. PL2015-070 – 5481 Deep Bay Drive, Electoral Area 'H'.

MOVED Director Stanhope, SECONDED Director Young, that Development Permit Application No. PL2015-070 to permit the construction of an addition to a dwelling unit within the Hazard Lands Development Permit Area be approved subject to the conditions outlined in Attachments 2 to 4.

CARRIED

#### DEVELOPMENT PERMIT WITH VARIANCE

#### Development Permit with Variance Application No. PL2015-078 – 3718 Jingle Pot Road, Electoral Area 'C'.

MOVED Director Young, SECONDED Director McPherson, that staff be directed to complete the required notification.

CARRIED

MOVED Director Young, SECONDED Director McPherson, that Development Permit with Variance Application No. PL2015-078 to permit the construction of an addition to a dwelling unit and garage, construction of a driveway, construction of a landscape berm and construction of a concrete patio be approved subject to the conditions outlined in Attachments 2 to 4.

CARRIED

#### Development Permit with Variance and Frontage Relaxation Application No. PL2015-032 - 1497 Mason Trail, Electoral Area 'G'.

MOVED Director Stanhope, SECONDED Director McPherson, that staff be directed to complete the required notification.

#### CARRIED

MOVED Director Stanhope, SECONDED Director McPherson, that Development Permit with Variance Application No. PL2015-032 to increase the permitted parcel depth of both proposed lots and to reduce the side yard setback for an existing deck be approved subject to the conditions outlined in Attachments 2 and 3.

CARRIED

MOVED Director Stanhope, SECONDED Director McPherson, that the request to relax the minimum 10% frontage requirement for both proposed lots be approved.

#### Development Permit with Variance Application No. PL2015-071 – 1318 Lanyon Drive, Electoral Area 'G'.

MOVED Director Stanhope, SECONDED Director Rogers, that staff be directed to complete the required notification.

MOVED Director Stanhope, SECONDED Director Rogers, that Development Permit with Variance Application No. PL2015-071 to permit the construction of an accessory building be approved subject to the conditions outlined in Attachments 2 and 3.

CARRIED

CARRIED

#### Development Permit with Variance Application No. PL2015-079 – Electoral Area 'G'.

MOVED Director Stanhope, SECONDED Director McPherson, that staff be directed to complete the required notification.

CARRIED

MOVED Director Stanhope, SECONDED Director McPherson, that Development Permit with Variance Application No. PL2015-079 to permit the construction of a dwelling unit be approved subject to the conditions outlined in Attachments 2 to 4.

CARRIED

Development Permit with Variance Application No. PL2015-090 – 2930 Trans-Canada Highway, Electoral Area 'A'.

MOVED Director McPherson, SECONDED Director Young, that staff be directed to complete the required notification.

CARRIED

MOVED Director McPherson, SECONDED Director Young, that Development Permit with Variance Application No. PL2015-090 to permit the phased development of the subject property be approved subject to the conditions outlined in Attachments 2 to 5.

CARRIED

#### OTHER

Zoning Amendment Application No. PL2013-113 – 4320 Garrod Road, Electoral Area 'H' – Amendment Bylaw 500.395 – 1st and 2nd reading.

MOVED Director Stanhope, SECONDED Director McPherson, that the Summary of the Public Information Meeting held on September 3, 2014, be received.

CARRIED

MOVED Director Stanhope, SECONDED Director McPherson, that the Summary of the Public Information Meeting held on June 2, 2015, be received.

CARRIED

MOVED Director Stanhope, SECONDED Director McPherson, that the conditions set out in Attachment 2 of the staff report be completed prior to Amendment Bylaw No. 500.395 being considered for adoption.

CARRIED

MOVED Director Stanhope, SECONDED Director McPherson, that "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.395, 2015" be introduced and read two times.

MOVED Director Stanhope, SECONDED Director McPherson, that the Public Hearing on "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.395, 2015" be chaired by Director Veenhof or his alternate.

CARRIED

# Request for Relaxation of the Minimum 10% Perimeter Frontage Requirement in Relation to Subdivision Application No. PL2014-116 – 242, 246, and 250 Hilliers Road North, Electoral Area 'G'.

MOVED Director Stanhope, SECONDED Director Young, that the request to relax the minimum 10% perimeter frontage requirement for Lot B be approved.

CARRIED

#### ADJOURNMENT

MOVED Director Stanhope, SECONDED Director Young, that this meeting be adjourned.

CARRIED

TIME: 6:42 PM

CHAIRPERSON

CORPORATE OFFICER

#### Attachment 6 Proposed Amendment Bylaw No. 500.395, 2015

#### REGIONAL DISTRICT OF NANAIMO BYLAW NO. 500.395

#### A Bylaw to Amend Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987

The Board of the Regional District of Nanaimo, in open meeting assembled, enacts as follows:

- A. This Bylaw may be cited as "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.395, 2015".
- B. "Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987", is hereby amended as follows:
  - 1. Under **PART 3 LAND USE REGULATIONS**, Section 3.1 Zones by adding the following zoning classification and corresponding short title after Residential 2.1 Zone:

Residential 2.2 Zone RS2.2

2. Under **PART 3 LAND USE REGULATIONS, Section 3.4**, after Section 3.4.62.1 add Section3.4.62.2 Residential 2.2 Zone

as shown on Schedule '1' which is attached to and forms part of this Bylaw.

3. By rezoning the lands shown on the attached Schedule '2' and legally described as:

Strata Lots 1-10, District Lot 36 and Part of the Bed of Strait of Georgia, Newcastle District, Strata Plan VIS5953 Together with an Interest in the Common Property in Proportion to the Unit Entitlement of the Strata Lot as Shown on Form V

from Commercial 5 (CM5), Subdivision District 'M' to Residential 2.2, Subdivision District 'F'

Introduced and read two times this \_\_\_\_ day of \_\_\_\_\_ 20\_\_\_.

Public Hearing held this \_\_\_\_ day of \_\_\_\_\_ 20\_\_\_.

Read a third time this \_\_\_\_ day of \_\_\_\_\_ 20\_\_\_.

Approved by the Minister of Transportation and Infrastructure pursuant to the *Transportation Act* this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_.

Adopted this \_\_\_\_ day of \_\_\_\_\_ 20\_\_.

Chairperson

Corporate Officer

Schedule '1' to accompany "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.395, 2015".

RS2.2

Chairperson

Corporate Officer

## Schedule '1'

Section 3.4.62.2

## RESIDENTIAL 2.2

Permitted Uses and Minimum Site Area

#### Required Site Area with:

Permitted Uses	Community Water & Sewer System	Community Water System	No Community Services
a) Home Based Business	n/a	n/a	n/a
b) Residential Use	500 m <sup>2</sup>	1000 m <sup>2</sup>	1.0 ha
<ul><li>per dwelling unit</li><li>c) Duplex</li></ul>	1000 m <sup>2</sup>	2000 m <sup>2</sup>	2.0 ha

#### Maximum Number and Size of Buildings and Structures

Floor area ratio	- 0.60
Height	- 8.0 m
Parcel coverage	- 40%

#### Minimum Setback Requirements

Front lot line	- 8.0 m
Interior side lot line	- 1.5 m
Rear lot line	- 2.0 m
Other lot line	- 5.0 m

#### except where:

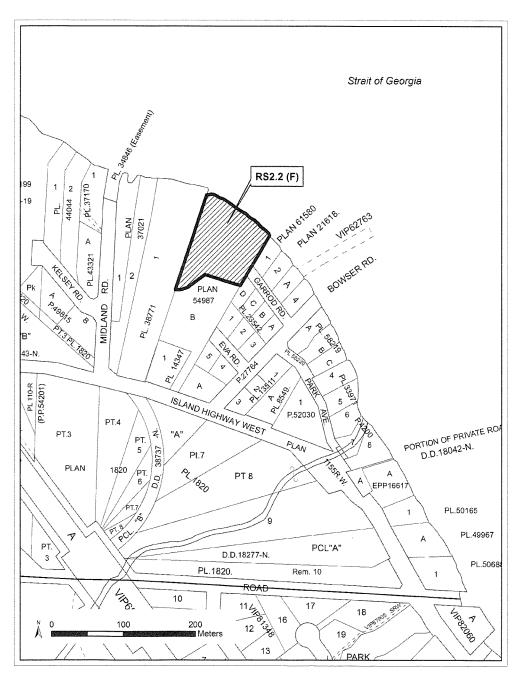
- a) an accessory building for individual use is permitted, no setback from an interior lot line shall be required for one accessory building with a maximum height of 2.0 m and a floor area of 9.0 m<sup>2</sup>;
- b) any part of a parcel is adjacent to or contains a watercourse then the regulations in Section 3.3.8 shall apply.

Schedule '2' to accompany "Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.395, 2015"

Chairperson

Corporate Officer





### **REGIONAL DISTRICT OF NANAIMO**

## MINUTES OF THE REGULAR COMMITTEE OF THE WHOLE MEETING OF THE REGIONAL DISTRICT OF NANAIMO HELD ON TUESDAY JULY 14, 2015 AT 7:00 PM IN THE **RDN BOARD CHAMBERS**

## In Attendance:

	Director J. Stanhope	Chairperson
	Director A. McPherson	Electoral Area A
	Director H. Houle	Electoral Area B
	Director M. Young	Electoral Area C
	Director B. Rogers	Electoral Area E
	Alternate	
	Director J. McLean	Electoral Area F
	Director B. Veenhof	Electoral Area H
	Director B. McKay	City of Nanaimo
	Alternate	
	Director G. Fuller	City of Nanaimo
	Director J. Hong	City of Nanaimo
	Alternate	
	Director D. Brennan	City of Nanaimo
	Director W. Pratt	City of Nanaimo
	Director I. Thorpe	City of Nanaimo
	Director M. Lefebvre	City of Parksville
	Director T. Westbroek	Town of Qualicum Beach
Regrets:		
	Director J. Fell	Electoral Area F
	Director C. Haime	District of Lantzville
	Director B. Bestwick	City of Nanaimo
	Director J. Kipp	City of Nanaimo
	Director B. Yoachim	City of Nanaimo
Also in Attendance:		
	P. Thorkelsson	Chief Administrative Officer
	J. Harrison	Director of Corporate Service

P. Thorkelsson	Chief Administrative Officer
J. Harrison	Director of Corporate Services
W. Idema	Director of Finance
M. Donnelly	A/Gen. Mgr. Regional & Community Utilities
G. Garbutt	Gen. Mgr. Strategic & Community Development
W. Marshall	A/Gen. Mgr. Recreation & Parks
D. Trudeau	Gen. Mgr. Transportation & Solid Waste
M. O'Halloran	A/Mgr. Administrative Services
C. Golding	Recording Secretary

# CALL TO ORDER

The Chairperson called the meeting to order and welcomed Alternate Directors McLean, Brennan and Fuller to the meeting.

# DELEGATIONS

# Megan Olsen, re New Developments for the Huge Mess on Little Mountain.

Megan Olsen and Doug Wortley provided a visual presentation on illegal dumping of garbage at Little Mountain sharing their concerns for public safety, environmental contamination, and asked the Board to work together with other governing bodies to eliminate the dumping site and return it to its natural state.

## MINUTES

# Minutes of the Regular Committee of the Whole meeting held Tuesday, June 9, 2015.

MOVED Director Lefebvre, SECONDED Director Westbroek, that the minutes of the Regular Committee of the Whole meeting held Tuesday, June 9, 2015, be adopted.

CARRIED

## COMMUNICATION/CORRESPONDENCE

# Robert Meyer, re Funding request for playground at Rollo/McClay Park.

MOVED Director Veenhof, SECONDED Director Houle, that the correspondence received from Robert Meyer regarding a funding request for playground at Rollo/McClay Park be received.

Sav Dhaliwal, UBCM, re 2015 Resolutions.

MOVED Director Veenhof, SECONDED Director Houle, that the correspondence received from Sav Dhaliwal, Union of BC Municipalities, regarding 2015 Resolutions be received.

CARRIED

CARRIED

# Neil & Lillian Varcoe, re Stone Quarry on Valdes Island.

MOVED Director Veenhof, SECONDED Director Houle, that the correspondence received from Neil & Lillian Varcoe regarding the Stone Quarry on Valdes Island be received.

CARRIED

# Bruce Jolliffe, Chair, Comox Valley Regional District, re Support – British Columbia Conservation Tax Incentive Program Proposal.

MOVED Director Veenhof, SECONDED Director Houle, that the correspondence received from Bruce Jolliffe, Chair, Comox Valley Regional District, regarding support for the British Columbia Conservation Tax Incentive Program proposal be received.

CARRIED

## STRATEGIC AND COMMUNITY DEVELOPMENT

## Oceanside Health and Wellness Network Coordinator Contract.

MOVED Director Veenhof, SECONDED Director Lefebvre, that staff proceed with hiring a contract coordinator for the Oceanside Health and Wellness Network using funds provided by Island Health.

## Amendment to Regional Growth Strategy Bylaw No. 1615.

MOVED Director Westbroek, SECONDED Director McLean, that staff do not initiate the Regional Growth Strategy amendment process to amend the criteria for minor amendments nor approve the consultation plan, and refer it to a future review of the Regional Growth Strategy.

MOVED Director Veenhof, SECONDED Director Young, that the following recommendations be referred back to staff, and that the items be included for discussion at a Director's Seminar, or within a strategic planning session:

That a review of the Regional Growth Strategy be initiated that considers the criteria for a minor amendment.

That the consultation plan provided as Attachment 4 to the staff report be adopted.

CARRIED

DEFEATED

#### **REGIONAL AND COMMUNITY UTILITIES**

#### To appoint the Deputy Sewage Control Manager.

MOVED Director Rogers, SECONDED Director Thorpe, that the Board appoint the "Acting Manager of Wastewater Services" as the "Deputy Sewage Control Manager".

CARRIED

# Subject Matter Expert for Secondary Treatment Design at the Greater Nanaimo Pollution Control Centre.

MOVED Director Veenhof, SECONDED Director Lefebvre, that the Board approve extending the Subject Matter Expert contract for Secondary Treatment Design at the Greater Nanaimo Pollution Control Center (GNPCC) to BRC Consulting.

CARRIED

#### Regional District of Nanaimo Bylaw Enforcement Ticket Regulation Bylaw No. 1418.

MOVED Director Veenhof, SECONDED Director Thorpe, that "Regional District of Nanaimo Bylaw Enforcement Ticket Regulation Amendment Bylaw No. 1418.03, 2015" be introduced and read three times.

CARRIED

MOVED Director Veenhof, SECONDED Director Thorpe, that "Regional District of Nanaimo Bylaw Enforcement Ticket Regulation Amendment Bylaw No. 1418.03, 2015" be adopted.

CARRIED

#### TRANSPORTATION AND SOLID WASTE

#### SOLID WASTE

#### Regional Landfill Security Services Contract Award.

MOVED Director Brennan, SECONDED Director Veenhof, that the Board award the contract for security services at the Regional Landfill to Securiguard for a period of three years commencing August 1, 2015 at a total cost of \$275,777.20.

## ADVISORY AND SELECT COMMITTEE, AND COMMISSION

Electoral Area 'H' Parks and Open Space Advisory Committee.

Minutes of the Electoral Area 'H' Parks and Open Space Advisory Committee meeting held Wednesday, May 20, 2015.

MOVED Director Veenhof, SECONDED Director Rogers, that the minutes of the Electoral Area 'H' Parks and Open Space Advisory Committee meeting held Wednesday, May 20, 2015, be received for information.

CARRIED

## Electoral Area 'E' Parks and Open Space Advisory Committee.

Minutes of the Electoral Area 'E' Parks and Open Space Advisory Committee meeting held Wednesday, May 27, 2015.

MOVED Director Rogers, SECONDED Director Lefebvre, that the minutes of the Electoral Area 'E' Parks and Open Space Advisory Committee meeting held Wednesday, May 27, 2015, be received for information.

## Electoral Area 'B' Parks and Open Space Advisory Committee.

Minutes of the Electoral Area 'B' Parks and Open Space Advisory Committee meeting held Monday, June 2, 2015.

MOVED Director Houle, SECONDED Director Young, that the minutes of the Electoral Area 'B' Parks and Open Space Advisory Committee meeting held Monday, June 2, 2015, be received for information.

CARRIED

CARRIED

## Cox Community Park Signage.

MOVED Director Houle, SECONDED Director Veenhof, that the Regional District of Nanaimo proceed with the Cox Community Park internal directional signage proposed by Gabriola Land and Trails Trust funded through the 2015 Electoral Area 'B' Community Park budget for Cox Community Park and to allocate funding in the 2016 Budget for the 'Welcome' sign and two benches for the park.

CARRIED

## Davidson Bay Parking Lot Upgrade.

MOVED Director Houle, SECONDED Director Veenhof, that the Regional District of Nanaimo not proceed with the Davidson Bay Parking Lot upgrade project.

CARRIED

## Electoral Area 'A' Parks, Recreation, and Culture Commission.

Minutes of the Electoral Area 'A' Parks, Recreation, and Culture Commission meeting held Wednesday, June 17, 2015.

MOVED Director McPherson, SECONDED Director Veenhof, that the minutes of the Electoral Area 'A' Parks, Recreation, and Culture Commission meeting held Wednesday, June 17, 2015, be received for information.

CARRIED

CARRIED

CARRIED

## Lease and Site Licence Agreement with Cedar School & Community Enhancement Society.

MOVED Director McPherson, SECONDED Director Young, that staff be directed to approach the Cedar School and Community Enhancement Society and extend the current Lease and Site Licence Agreement between the Regional District of Nanaimo and the Cedar School and Community Enhancement Society which is due to expire December 31, 2015, for a one-year term to December 31, 2016.

MOVED Director McPherson, SECONDED Director Young, that staff be directed to investigate and report

on what synergies could be brought together between Recreation and Arts in Electoral Area 'A'.

CARRIED

## CARRIED

#### District 69 Recreation Commission.

## Minutes of the District 69 Recreation Commission meeting held Thursday, June 18, 2015.

MOVED Director Veenhof, SECONDED Director Pratt, that the minutes of the District 69 Recreation Commission meeting held Thursday, June 18, 2015, be received for information.

CARRIED

## Hockey Canada VITSC Bid 2016 U18 Women's Hockey Championship Report – June 2015.

MOVED Director Veenhof, SECONDED Director Thorpe, that the Regional District of Nanaimo no longer pursue hosting the 2016 National Women's U18 Ice Hockey Championships.

CARRIED

#### Agricultural Advisory Committee.

## Minutes of the Agricultural Advisory Committee meeting held Friday, July 3, 2015.

MOVED Director Houle, SECONDED Director Brennan, that the minutes of the Agricultural Advisory Committee meeting held Friday, July 3, 2015, be received for information.

CARRIED

#### Cedar Plaza Kiosk Update.

costs in the 2016 budget.

Arts and Culture Review.

access at Headland Road be verified.

Water Access Priority Development Sites Update.

MOVED Director McPherson, SECONDED Director Young, that staff proceed with the tipple/headframe concept and design for the Cedar Plaza Kiosk project.

MOVED Director McPherson, SECONDED Director Young, that staff be directed to commence in 2015 the concept, design and permitting of the A-20 beach access in Electoral Area 'A' and allocate the project's

MOVED Director McPherson, SECONDED Director Young, that the property boundaries at A-18 beach

## BUSINESS ARISING FROM DELEGATIONS OR COMMUNICATIONS

## Funding request for playground at Rollo/McClay Park.

MOVED Director Houle, SECONDED Director Brennan, that staff be directed to enter into an agreement with the Gabriola Softball Association for matched funding of \$12,000 from the Area 'B' Community Works fund for the purchase and installation of playground equipment totaling \$24,000 at Rollo McClay Community Park.

CARRIED

## **NEW BUSINESS**

## Coombs Fire Response.

Alternate Director McLean expressed his gratitude on behalf of the residents of Area 'F' to all fire departments that assisted in containing the wildfire in Coombs on July 9, 2015. He noted that the fire could have been a threat to both residences and industrial sites in the area, and that fire personnel did a tremendous job in getting it under control. He asked that his comments be passed on to the fire departments.

## IN CAMERA

MOVED Director Veenhof, SECONDED Director Lefebvre, that pursuant to Sections 90(1) (e) of the *Community Charter* the Committee proceed to an In Camera Meeting for discussions related to land acquisition.

CARRIED

TIME: 7:35 PM

## ADJOURNMENT

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

CARRIED

TIME: 7:40 PM

CHAIRPERSON

CORPORATE OFFICER

## **REGIONAL DISTRICT OF NANAIMO**

#### BYLAW NO. 1418.03

## A BYLAW TO AMEND REGIONAL DISTRICT OF NANAIMO BYLAW ENFORCEMENT TICKET REGULATION BYLAW NO. 1418, 2005

WHEREAS the Board enacted "Regional District of Nanaimo Bylaw Enforcement Ticket Regulation Bylaw No. 1418, 2005";

AND WHEREAS the Board wishes to amend the bylaw to include the authority to issue tickets under Regional District of Nanaimo Water Use Regulation Bylaw No. 1654, and to remove references to water use bylaws that have been repealed;

NOW THEREFORE, the Board of the Regional District of Nanaimo, in open meeting assembled, enacts as follows:

## 1. Citation

This Bylaw may be cited as "Regional District of Nanaimo Bylaw Enforcement Ticket Regulation Amendment Bylaw No. 1418.03, 2015".

## 2. Amendments

"Regional District of Nanaimo Bylaw Enforcement Ticket Regulation Bylaw No. 1418, 2005" is amended as follows:

- (1) By deleting Schedule 1 and replacing it with Schedule 1 attached to and forming part of this bylaw.
- (2) By deleting Schedules 15 through 26 and replacing them with a new Schedule 15 as shown on Schedule 2 attached to and forming part of this bylaw, and by renumbering subsequent Schedules of the bylaw accordingly.
- (3) By deleting the words "Schedules 2-32" in Sections 4 and 5 and replacing them with "Schedules 2-21".
- (4) By deleting the words "Schedules 1-32" in Section 6 and replacing them with "Schedules 1-21".

Introduced and read three times this day of , 2015.

Adopted this day of , 2015.

CHAIRPERSON

Schedule '1' to accompany "Regional District of Nanaimo Bylaw Enforcement Ticket Regulation Amendment Bylaw No. 1418.03, 2015."

Chairperson

Corporate Officer

## REGIONAL DISTRICT OF NANAIMO BYLAW ENFORCEMENT TICKET REGULATION BYLAW NO. 1418, 2005

## SCHEDULE 1

## Column I

## Column II

## **Designated Bylaws**

- 1. Regional District of Nanaimo Building Regulations & Fees Bylaw No. 1250, 2001
- 2. Regional District of Nanaimo Land Use and Subdivision Bylaw No. 500, 1987
- 3. Regional District of Nanaimo Special Events Regulatory Bylaw No. 1010, 1996
- Regional District of Nanaimo Gabriola Island Noise Control Regulatory Bylaw No. 1082, 1998
- Regional District of Nanaimo Electoral Area 'C' Noise Control Regulatory Bylaw No. 1103, 1998
- Regional District of Nanaimo Electoral Area 'A' Noise Control Regulatory Bylaw No. 1046, 1996
- 7. Animal Control and Licensing Bylaw No. 939, 1994
- Animal Control Regulatory Bylaw No. 1066, 1996
- 9. Regional District of Nanaimo Sign Bylaw No. 993, 1995

## Designated Bylaw Enforcement Officers

Manager of Inspection & Enforcement Building Inspectors Bylaw Enforcement Officers

Manager of Inspection & Enforcement Bylaw Enforcement Officers

Members of the Royal Canadian Mounted Police

Bylaw Enforcement Officers

Members of the Royal Canadian Mounted Police

Bylaw Enforcement Officers

Members of the Royal Canadian Mounted Police Bylaw Enforcement Officers

Members of the Royal Canadian Mounted Police Bylaw Enforcement Officers

Animal Control Officer Bylaw Enforcement Officers

Animal Control Officer Bylaw Enforcement Officers

Bylaw Enforcement Officers

Column I	Column II
Designated Bylaws	Designated Bylaw Enforcement Officers
10. Regional District of Nanaimo French Creek Fire Protection Local Service Area Outdoor Burning Bylaw No. 920, 1994	Bylaw Enforcement Officers
<ol> <li>Regional District of Nanaimo Extension</li> <li>Fire Protection Specified Area Outdoor</li> <li>Burning Bylaw No. 1028, 1996</li> </ol>	Bylaw Enforcement Officers
12. Animal Control Bylaw No. 941, 1994	Animal Control Officer Bylaw Enforcement Officers
<ol> <li>Regional District of Nanaimo Electoral Area 'E' Noise Control Regulatory Bylaw No. 1054, 1996</li> </ol>	Member of the Royal Canadian Mounted Police Bylaw Enforcement Officers
<ol> <li>Regional District of Nanaimo Water Use Regulation Bylaw No. 1654, 2012</li> </ol>	Bylaw Enforcement Officers
15. Regional District of Nanaimo (Errington) Fire Services Regulatory Bylaw No. 1006, 1995	Bylaw Enforcement Officers
<ol> <li>Regional District of Nanaimo Parksville (Local) Fire Protection Service Area Outdoor Burning Bylaw No. 922, 1994</li> </ol>	Bylaw Enforcement Officers
17. Regional District of Nanaimo (Dashwood) Fire Services Regulatory Bylaw No. 1390, 2004	Bylaw Enforcement Officers
<ol> <li>Regional District of Nanaimo Park Use Regulations Bylaw No. 1399, 2004</li> </ol>	Bylaw Enforcement Officers Park Operator and Park Staff
19. Regional District of Nanaimo Electoral Area F Zoning and Subdivision Bylaw No. 1285, 2002	Manager of Inspection & Enforcement Bylaw Enforcement Officers
20. Regional District of Nanaimo Waste Stream Management Licensing Bylaw No. 1386, 2004	Zero Waste Compliance Officer Bylaw Enforcement Officers

Schedule '2' to accompany "Regional District of Nanaimo Bylaw Enforcement Ticket Regulation Amendment Bylaw No. 1418.03, 2015."

Chairperson

Corporate Officer

## REGIONAL DISTRICT OF NANAIMO BYLAW ENFORCEMENT TICKET REGULATION BYLAW NO. 1418, 2005

## SCHEDULE 15

	Column I	Column II	Column III	Column IV	Column V
Wa	gional District of Nanaimo ater Use Regulation Bylaw 9. 1654, 2012	Section No. of Bylaw 1654	Amount of Fine	Amount of Fine	Amount of Fine
			1 <sup>st</sup> Offence	2 <sup>nd</sup> Offence	3 <sup>rd</sup> Offence
1.	Divert water from the system other than permitted at the time of approval	6(1)	\$50.00	\$150.00	\$300.00
2.	Damage/allow appliance deterioration leading to water waste	6(4)	\$50.00	\$150.00	\$300.00
3.	Owner/occupier water use contrary to restrictions	6(5)	\$50.00	\$150.00	\$300.00
4.	Excessive use/water waste	6(7)	\$50.00	\$150.00	\$300.00

#### **REGIONAL DISTRICT OF NANAIMO**

## MINUTES OF THE FIRE SERVICES ADVISORY COMMITTEE MEETING HELD ON THURSDAY, MAY 14, 2015 AT 7:00 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. Rogers	Electoral Area E
Director J. Fell	Electoral Area F
Director B. Veenhof	Electoral Area H
Charles Pinker	Trustee, Mountain Fire Protection District
Aaron Poirier	Fire Chief, Coombs-Hillier Volunteer Fire Department
Bill March	Dashwood Fire Department
Greg Howard	Dashwood Fire Department
Geoff MacIntosh	Bow Horn Bay Fire Department
Lesley Brown	Trustee, Bow Horn Bay Fire Department
Kevin Young	Fire Chief, Extension Volunteer Fire Department
Cheryl Teller	Director, Extension Volunteer Fire Department
Stephen Stahley	Director, Coombs-Hillier Volunteer Fire Department
David Neden	Director, Coombs-Hillier Volunteer Fire Department
Doug Penny	Fire Chief, Nanoose Volunteer Fire Department

#### Also in Attendance:

Chief Administrative Officer
Director of Finance
General Manager, Strategic & Community Development
Manager, Building, Bylaw Enforcement & Emergency
Planning
Recording Secretary

## CALL TO ORDER

The meeting was called to order at 7:00 pm and the attendees provided introductions.

Terms of reference was provided for information in the agenda, for new Board members and attendees.

#### MINUTES

The minutes of the Fire Services Advisory Committee meeting held on November 28, 2012 were received by the Committee.

#### TERMS OF REFERENCE

Terms of Reference were received by the Committee.

#### COMMUNICATIONS/CORRESPONDENCE

# Office of the Fire Commissioner Playbook & FCABC Playbook - Questions and Answers – for discussion - impacts on Fire Departments, training requirements, Fire Services Agreements and Bylaws.

W. Idema provided a brief overview of the Fire Commissioner Playbook from a local government point of view. There was round table discussion on how the Playbook will impact local Fire Departments, Fire Service Agreements and Bylaws.

W. Idema to obtain a legal opinion on Authority Having Jurisdiction definition in Playbook and impacts to RDN fire services.

#### REPORTS

#### Regulatory Bylaw Template.

W. Idema provided an update on the regulatory bylaw to assist Fire Departments, she requested that Fire Departments provide any feedback to her.

#### **NEW BUSINESS**

#### Superior Tanker Shuttle - Chief Poirier, Coombs - Hilliers.

The Committee has general discussion around interest for Fire Departments to share in a superior tanker shuttle process.

#### Regional District of Nanaimo Support Model for Regional Fire Services/Departments.

Per Playbook discussion, Wendy Idema to prepare a RDN Board report based on Playbook requirements and tonight's feedback for a consultant review. Will continue with Fire Services Advisory Committee meetings held in the evenings.

W. Idema reminder to the group, the RDN has an Energy and Sustainability coordinator, with access to funding for energy efficiency upgrades for halls. If interested, please contact the RDN.

#### ADJOURNMENT

The Chair thanked all in attendance advising that the next meeting will be at the call of the Chair.

MOVED Director Rogers, SECONDED Director Young, that this meeting terminate.

CARRIED

TIME: 8:31 PM

CHAIRPERSON

#### REGIONAL DISTRICT OF NANAIMO LIQUID WASTE MANAGEMENT PLAN MONITORING COMMITTEE MEETING HELD ON MONDAY, JUNE 1, 2015 COMMITTEE ROOM

#### Present:

Bob Rogers	Chair, Director Electoral Area E	John Elliot	City of Nanaimo
Alec McPherson	Director Electoral Area A	Fred Spears	District of Lantzville
lan Thorpe	Director (Nanaimo)	Daniel Hooper	Public (District 68)
Marc Lefebvre	Director (Parksville)	Frank Van Eynde	Public (District 69)
Vaughn Figueira	City of Parksville	Blake Medlar	Business Community (District 68)
Bob Weir	Town of Qualicum Beach	Ted Malyk	Business Community (District 69)

#### Also in Attendance:

Randy Alexander	GM, Regional and Community Utilities, RDN
Rebecca Graves	Recording Secretary, RDN
Sean De Pol	Manager Wastewater Services, RDN
Shelley Norum	Wastewater Program Coordinator, RDN
Julie Pisani	Drinking Water and Watershed Protection Coordinator, RDN
Maureen Young	Director Electoral Area C

#### **Regrets:**

Doug Muir	Snuneymuxw First Nation
For Information Only:	Regional Board Members; CAO's.' Paul Thorkelsson (RDN), Jim Dias (District of Lantzville), Daniel Sailland (Town of Qualicum); Ted Swabey (City of Nanaimo); Fred Manson (City of Parksville); Chief & Council (Qualicum First Nation); Chief & Council (Nanoose First Nation); Kirsten White (Ministry of Environment); James Arnott (Environment Canada)

## CALL TO ORDER

Chairperson B. Rogers called the meeting to order at 12:30 PM.

R. Alexander welcomed the new committee and provided opening remarks in regards to the Liquid Waste Management Plan (LWMP). An introductory exercise occurred to familiarize the group.

#### DELEGATES

MINUTES

**BUSINESS ARISING FROM THE MINUTES** 

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

#### REPORTS

#### Review of LWMPMC Terms of Reference (B. Rogers)

B. Rogers introduced the LWMP Monitoring Committee (LWMPMC) and explained that all minutes will be forwarded to the RDN Board for consideration and acceptance. The Terms of Reference says that committee membership will be open to a number of different agencies and organizations. Agencies and organizations who have not responded to the membership invitation include Snaw-naw-as First Nation, Qualicum First Nation, Ministry of Transportation, Fisheries and Oceans, Environment Canada, Island Health, and Georgia Strait Alliance. Agencies and organizations who have not responded will be copied on the committee information unless otherwise requested. Agendas and minutes will be posted to <u>www.rdnLWMP.ca</u>.

S. Norum reviewed the committee Terms of Reference. The committee fulfils the Ministry of Environment requirement for a LWMP monitoring committee. The committee will oversee and evaluate implementation of the RDN's LWMP by:

- Reviewing reports presented by RDN staff and their consultants relating to LWMP programs
- Reviewing progress of the public education programs, e.g. SepticSmart
- Reviewing progress of plans and reports which fall under the LWMP programs
- Providing recommendations to RDN staff regarding the implementation of programs and policies relating to the LWMP and wastewater management
- Reviewing annual status reports documenting LWMP implementation
- Recommending refinements to the LWMP program actions to keep implementation on track with the overall objectives and targets
- Assisting RDN staff in developing strategies to increase the effectiveness of the LWMP
- Recommending amendments to the plan, as necessary.

The LWMP Monitoring Committee will meet at least twice a year with a provision for workshops or other presentations at the committee's discretion.

#### Wastewater Services and LWMP Presentation (S. Norum)

S. Norum presented the Committee with a backgrounder on wastewater basics and an introduction to RDN Wastewater Services, the LWMP, and LWMP program implementation and monitoring.

S. Norum presented a timeline of LWMP milestones:

- 1999: Original LWMP was approved by the Minister of Environment; implementation and monitoring began shortly thereafter
- 2008-2013: LWMP review and amendment process underway with the Liquid Waste Advisory Committee; plan implementation continues
- January 2014: RDN Submitted LWMP Amendment to Minister of Environment LWMP amendment proposed secondary treatment upgrades to GNPCC by 2018 and NBPCC by 2023; plan implementation continues
- October 2014: Minister of Environment approves RDN's LWMP Amendment with 2 conditions
  - 1. Within 30 days of receipt of this letter, provide terms of reference, plan and schedule for completion of Stages 1 & 2 of an Environmental Impact Study for each of the GNPCC, NBPCC and French Creek Pollution Control Centre (FCPCC) sewage treatment and disposal facilities

- 2. By January 31, 2015, provide the Environmental Impact Study for the marine portion of the GNPCC outfall replacement project
- November 25, 2014: RDN meets Condition 1 with a letter to the MOE
- January 30, 2015: RDN meets Condition 2 with a letter to the MOE
- March 31, 2015: RDN submits 2014 annual report to the Ministry of Environment.

An annual monitoring report, submitted to the Ministry of Environment, is due June 30 of each year. An external audit is required every five years starting in 2019.

The LWMP consists of 10 programs. Programs include: Public Wastewater Systems, Private Onsite Systems, Pollution Control Centres, Odour Control, Source Control, Volume Reduction, Inflow and Infiltration, Rainwater Management – Drinking Water & Watershed Protection, Biosolids, and Integrated Resource Recovery. S. Norum provided some examples of program implementation which include:

- Bowser Village and Cedar Village Sewer Servicing Studies
- Source Control Bylaw Review
- Trucked Liquid Waste Bylaw Review
- SepticSmart / Septic Maintenance Rebate
- Biosolids Program
- Capital Projects.

S. Norum introduced the W3C: Wastewater and Water Collaborative Meeting. The W3C is a biannual meeting of staff from RDN and member municipalities. The W3C was created to achieve the commitments within the LWMP and advance regional programs and policies. Topics addressed by the W3C include:

- source control and pollution prevention
- water conservation and volume reduction
- inflow and infiltration
- rainwater management and watershed protection
- climate change
- public education.

The next LWMPMC Agenda will include a report on the W3C Meeting.

#### **Capital Projects Update (S. De Pol)**

S. De Pol discussed the major capital projects associated with the LWMP. Projects include the GNPCC Outfall Replacement, GNPCC and NBPCC secondary treatment upgrade and expansion, French Creek expansion, and Greater Nanaimo forcemain for a total estimated cost of \$134 million over the next 8-10 years. The projects are being completed to increase capacity to meet growth demand, replace aging infrastructure, and meet legal requirements.

#### Rainwater Management/Drinking Water and Watershed Protection Program (J. Pisani)

J. Pisani gave a verbal overview on the Rainwater Management and Drinking Water Watershed Protection (DWWP) program, which is Program 5 under the LWMP. The program's objectives are to protect the quality of water, use rain as a resource and promote the maintenance of hydrologic function. The DWWP program is continuing to implement seven programs detailed in the DWWP Action Plan, several of which link to the LWMP. Actions are currently in place to monitor water quality in streams, and to promote water conservation through incentive programs and educational resources. In the coming year, work will be initiated to develop a regional strategy on rainwater management.

MOVED F. Van Eynde, SECONDED A. McPherson, that the reports presented be received.

CARRIED

#### **Treatment Plant Tours (S. Norum)**

The Committee discussed participating in a tour of the treatment facilities and the biosolids application area. The tour could be customized for those that have already viewed any facilities but would like to join the tour throughout the day.

#### Future Meetings of the LWMPMC (S. Norum)

S. Norum indicated that the next LWMPMC meeting could take place late September or early October. It was mentioned that some of the Committee who are also on the RDN Board and are not available September 21-25 due to another meeting.

#### ADDENDUM

#### NEW BUSINESS

#### ADJOURNMENT

MOVED F. Spears, SECONDED M. Lefebvre that this meeting be adjourned.

TIME: 3:00 PM

CHAIRPERSON

## **REGIONAL DISTRICT OF NANAIMO**

## MINUTES OF THE SUSTAINABILITY SELECT COMMITTEE MEETING HELD ON THURSDAY, JULY 16, 2015 AT 2:00 PM IN THE RDN COMMITTEE ROOM

## Present:

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

## Also in Attendance:

Director B. Rogers	Electoral Area E
P. Thorkelsson	Chief Administrative Officer
G. Garbutt	General Manager, Strategic & Community Development
C. Midgley	Manager, Energy & Sustainability
M. Donnelly	Manager, Water & Utility Services
P. Thompson	Manager, Long Range Planning
C. Simpson	Senior Planner, Long Range Planning
N. Hewitt	Recording Secretary

## **Regrets:**

Director B. Veenhof	Electoral Area H
Director C. Haime	District of Lantzville
Director J. Kipp	City of Nanaimo
R. Alexander	General Manager, Regional & Community Utilities
T. Pan	Sustainability Coordinator
J. Pisani	Drinking Water & Watershed Protection Coordinator

## CALL TO ORDER

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

#### MINUTES

MOVED Director Westbroek, SECONDED Director Lefebvre, that the minutes of the Sustainability Select Committee meeting held on Tuesday March 17, 2015, be adopted.

## Drinking Water and Watershed Protection Technical Advisory Committee.

# MOVED Director Lefebvre, SECONDED Director Westbroek, that the minutes of the Drinking Water and

# Declarations Respecting Rights to a Healthy Environment.

That delegates to the Union of British Columbia Municipalities Convention and Annual General Meeting from the Regional District of Nanaimo Board of Directors consider supporting resolutions regarding the declaration of the right to a healthy environment at the 2015 Convention.

Watershed Protection Technical Advisory Committee held on Tuesday April 14, 2015, be received.

## Natural Gas Fireplace Rebate.

REPORTS

MOVED Director Lefebvre, SECONDED Director Houle, that the Regional District of Nanaimo not create a new Green Building Incentive Program rebate for natural gas inserts.

## 2015 Green Building Series.

MOVED Director Lefebvre, SECONDED Director Houle, that the presentation be received for information.

## Regional Growth and Long Range Planning Program Overview.

MOVED Director Lefebvre, SECONDED Director McPherson, that the presentation be received for information.

## Regional Hydrometric and Climate Monitoring Scoping Study.

MOVED Director Lefebvre, SECONDED Director McPherson, that the Sustainability Select Committee receive this report for information.

#### ADJOURNMENT

MOVED Director McPherson, SECONDED Director Pratt, that this meeting be adjourned.

Time 3:37 p.m.

CHAIRPERSON

CARRIED

CARRIED

CARRIED

CARRIED

CARRIED

# CARRIED

			REPORT		
	REGIONAL	JUL	1 ū 2015		
	<b>DISTRICT</b> DF NANAIMO	RHD BOARD			STAFF REPORT
TO:	Geoff Garbutt General Manager, S Community Develo	-		DATE:	July 8, 2015
FROM:	Chris Midgley			MEETING	: SSC – July 16, 2015
	Manager, Energy ar	nd Sustainabili	ty	FILE:	5280 01 RHE
SUBJECT:	Declaration of the R	ight to a Healt	hy Enviro	nment	

#### RECOMMENDATION

That the Regional District of Nanaimo Board of Directors consider supporting a declaration of the right to a healthy environment at the 2015 Union of British Columbia Municipalities Convention.

#### PURPOSE

To report on existing Regional District of Nanaimo (RDN) accomplishments relating to promoting a healthy environment in the region, and to outline the implications to future planning, sustainability and the economy for making a formal Declaration of the right to a healthy environment.

#### BACKGROUND

At the Regular Board Meeting held April 28, 2015, Mr. Paul Manly and Captain Trevor Greene appeared as a delegation to express the importance of people's right to live in a healthy environment, and to urge the Board to make a formal Declaration respecting people's right to live in a healthy environment. As a result, the following motion was carried:

That the Blue Dot Declaration be referred to the SSC to review and report on the existing accomplishments and impacts of the Declaration on future planning, sustainability and economy.

A draft Declaration respecting people's right to a healthy environment is provided as Appendix A, however there are five key features of the declaration worth summarizing here:

- 1. All people have the right to live in a healthy environment, including the right to know about pollutants and contaminants released into the local environment;
- 2. The Regional District of Nanaimo has the responsibility to respect, protect, fulfill and promote these rights;

- 3. The Regional District of Nanaimo shall apply the precautionary principle;
- 4. The Regional District of Nanaimo shall apply full cost accounting; and
- 5. By December 31<sup>st</sup>, 2015 the Regional District of Nanaimo shall specify objectives, targets, and timelines and actions the RDN will take to fulfill residents' right to a healthy environment.

The appended Declaration is based on the Suzuki Foundation's Blue Dot Initiative, which has as its ultimate goal to amend the Canadian Charter of Rights and Freedoms to include the right to a healthy environment for all Canadians. To achieve this objective, the Suzuki Foundation is encouraging individuals to call upon their local communities to pass municipal declarations respecting people's right to live in a healthy environment. Local governments are then urged to make a call for action at the Provincial level; and when seven out of ten provinces, representing more than half the population of Canada support the initiative, an amendment to the Canadian Charter of Rights and Freedoms can be considered at the Federal level.

Over the past year, the Suzuki Foundation has conducted an outreach campaign to encourage citizens to become 'blue dot supporters' and to highlight communities that have made the Declaration. At the time of writing, there are 837 individual Blue Dot Supporters in the Regional District of Nanaimo as follows:

- Bowser: 17 supporters
- Qualicum Beach: 101 supporters
- Coombs/ Errington: 23 supporters
- Parksville: 87 supporters
- Nanoose Bay: 30 supporters
- Lantzville: 18 supporters
- Nanaimo: 472 supporters
- Gabriola Island: 89 supporters

None of the member municipalities in the region have made a formal Declaration respecting people's right to a healthy environment. The City of Nanaimo has brought forward a modified version of the Declaration to its Advisory Committee on the Environment and Sustainability, and pending committee support, will consider endorsing the Declaration at a future date. The Town of Qualicum Beach has received correspondence from Mr. Paul Manly and Captain Trevor Greene requesting support for a regional level declaration, and the District of Lantzville has received correspondence from the City of Port Moody requesting support for a declaration respecting the right to a healthy environment at the Union of BC Municipalities Convention to be held in September, 2015.

It is also worth noting that in April of this year, a resolution was presented to the Association of Vancouver Island Coastal Communities (AVICC) by the Districts of Saanich and Central Saanich endorsing the Declaration respecting people's right to a healthy environment. That resolution was supported at the 66<sup>th</sup> Annual AVICC Meeting, and will be placed on the Agenda for consideration at the 2015 Union of British Columbia Municipalities (UBCM) Conference.

#### ALTERNATIVES

- 1. That the Board of Directors endorse the Declaration of the right to a healthy environment at the Union of BC Municipalities Convention to be held in September, 2015.
- 2. That that Board of Directors endorse a Regional District of Nanaimo Declaration of the right to a healthy environment as presented or amended.
- 3. That the Board of Directors do not endorse the right to a healthy environment.
- 4. That alternate direction be given to staff.

#### FINANCIAL IMPLICATIONS

For alternative 1, there are no immediate financial implications for the Regional District of Nanaimo. If a UBCM resolution is supported and results in Provincial action, then any financial implications for the RDN will also be incurred by other BC jurisdictions.

For alternative 2, if the Board endorses the Declaration as drafted or amended, there are unknown but potentially significant financial implications. If amendments are requested, then staff will be required to spend the time necessary to develop a draft declaration that the Board of Directors can support. This work is not currently on any departmental work plan, but could be achieved by the end of 2015 at the expense of other tasks if deemed a sufficiently high priority by the Board.

If the Board endorses the declaration without amendments, then there will be potential financial implications relating to the right to know about pollutants and contaminants released into the local environment; as well as the provision that by December 31<sup>st</sup> 2015, the Regional District of Nanaimo shall specify objectives, targets, and timelines and actions the Regional District of Nanaimo will take, within its jurisdiction, to fulfill residents' right to a healthy environment; review the objectives, targets, targets, and evaluate progress toward fulfilling this declaration; and consult with residents as a part of this process.

Regarding people's right to know about pollutants and contaminants released into the local environment, the RDN is already required to operate within federally and provincially mandated limits for discharges into the environment and to report on compliance, particularly for solid and liquid waste facilities. However this reporting is not detailed in nature, and the declaration as written could justify inquiries into the range and quantity of specific materials legally discharged to the environment. Responding to such inquiries would require staff and potentially professional resources and could call attention to substances discharged while performing permitted activities. This may not be a negative outcome, but it may be costly, and would be more equitable if enhanced reporting was required across the Province as a whole rather than on a piecemeal basis according to who has or has not made this Declaration.

The final provision relating to targets, objectives, timelines, and actions encompasses a considerable amount of work to undertake by the end of the year, work that is not in any departmental work plan. Adding a new process to establish targets, objectives, timelines and actions, and consulting the public on this process is not achievable without reallocating staff resources from current projects.

#### STRATEGIC PLAN IMPLICATIONS

The content of the Declaration respecting the right to a healthy environment is closely aligned to the Mission, Vision and Values, as well as Strategic Priorities and departmental Strategic Goals and Actions expressed in the RDN Board Strategic Plan. Not surprisingly, a great deal of the activities undertaken by the RDN already aim to ensure clean air and water for residents; access to nature; support for a strong, local agricultural community, and participation in decision making.

Evidence for this is most effectively provided in the annual report on departmental activities, and accomplishments circulated to the Board each year. Appendix 'B' provides the 2014 report on departmental activities and accomplishments and demonstrates how the RDN promotes and protects a healthy environment in the region.

The formality of making a declaration supporting the right to a healthy environment would therefore seem like an easy step to take, however the potential for additional work relating to target setting, monitoring and reporting and related activities will take staff time away from delivering on Board priorities without in fact contributing to actual on-the-ground benefits to residents of the region.

#### SUMMARY/CONCLUSIONS

The objective of the Blue Dot initiative, led by the Suzuki Foundation, is to amend the Canadian Charter of Rights and Freedoms to include the right to a healthy environment. To achieve this objective, the Suzuki Foundation has urged individuals to encourage their local communities to make a Declaration respecting the right to a healthy environment, and for local communities to encourage action at the provincial level. When seven of ten provinces representing more than half of Canada's population support an amendment to the Charter, it is possible to move forward with an amendment.

The Association of Vancouver Island Coastal Communities has already endorsed the Declaration, ensuring it will be the subject of a resolution at the UBCM convention to be held in September, 2015. Therefore the opportunity for the Province of BC to also endorse the declaration will be available later this year. If the UBCM resolution is successful, this successfully advances the goal of Blue Dot initiative to amend the Canadian Charter of Rights and Freedoms. If the resolution fails at the UBCM, then it will be more relevant for the Regional District of Nanaimo to consider making a declaration respecting the right to a healthy environment. In that case, the work plans of the departments affected can incorporate the additional tasks relating to establishing targets, objectives, timelines and actions; as well as consultation, monitoring and reporting through the annual budgeting process for 2016.

Manager Concur/ence General Manager Con C.A.O. Concurrence

Appendix A

# Regional District of Nanaimo Declaration The Right To A Healthy Environment

Whereas the Regional District of Nanaimo understands that people are part of the environment, and that a healthy environment is inextricably linked to the well-being of our community;

The Regional District of Nanaimo finds and declares that:

1. All people have the right to live in a healthy environment, including:

The right to breathe clean air

The right to drink clean water.

The right to consume safe food.

The right to access nature

The right to know about pollutants and contaminants released into the local environment.

The right to participate in decision-making that will affect the environment

- 2. The Regional District of Nanaimo has the responsibility, within its jurisdiction, to respect, protect, fulfill and promote these rights.
- 3. The Regional District of Nanaimo shall apply the precautionary principle: where threats of serious or irreversible damage to human health or the environment exist, the Regional District of Nanaimo shall take cost effective measures to prevent the degradation of the environment and protect the health of its citizens. Lack of full scientific certainty shall not be viewed as sufficient reason for the Regional District of Nanaimo to postpone such measures
- 4. The Regional District of Nanaimo shall apply full cost accounting: when evaluating reasonably foreseeable costs of proposed actions and alternatives, the Regional District of Nanaimo will consider costs to human health and the environment.
- 5. By Dec 31rst 2015, the **Regional District of Nanaimo** shall specify objectives, targets and timelines and actions the **Regional District of Nanaimo** will take, within its jurisdiction, to fulfill residents' right to a healthy environment, including priority actions to:
  - a. Ensure equitable distribution of environmental benefits and burdens within the municipality, preventing the development of pollution "hot spots";
  - Ensure infrastructure and development projects protect the environment, including air quality;

- c. Address climate change by reducing greenhouse gas emissions and implementing adaptation measures;
- d. Responsibly increase density;
- e. Prioritize walking, cycling and public transit as preferred modes of transportation;
- f. Ensure adequate infrastructure for the provision of safe and accessible drinking water;
- g. Promote the availability of safe foods;
- h. Reduce solid waste and promote recycling and composting;
- i. Establish and maintain accessible green spaces in all residential neighbourhoods.

The Regional District of Nanaimo shall review the objectives, targets, timelines and actions every five (5) years, and evaluate progress towards fulfilling this declaration.

The Regional District of Nanaimo shall consult with residents as part of this process.

	REGIONAL DISTRICT DF NANAIMO	EAP	CAO	REPORT PPPROVAL		STAFF REPORT
		RHD				
TO:	Chris Midgley Manager, Energy and Sustai	nability		DATE:	June 26, 2	2015
FROM:	Ting Pan			MEETING:	SSC July 1	6, 2015
	Sustainability Coordinator			FILE:	6430-05-G	BIP
SUBJECT:	Natural Gas Fireplace Rebat	e Feasib	ility			

#### RECOMMENDATION

That the Regional District of Nanaimo (RDN) not create a new Green Building Incentive Program rebate for natural gas inserts.

#### PURPOSE

To investigate the feasibility and financial implications of introducing a rebate for natural gas inserts into the RDN Green Building Incentive Program.

## BACKGROUND

At the Sustainable Select Committee meeting held on March 17, 2015, the following motion was carried:

"That staff investigate the feasibility and financial implications of incorporating a Fortis BC rebate program for natural gas inserts into the RDN Green Building Incentive Program."

Currently, Fortis BC has an EnerChoice Fireplace Program that offers a \$300 rebate for an eligible fireplace. The EnerChoice label indicates the product is the most efficient of gas hearth products available. While the woodstove exchange program does offer \$250 for residents to upgrade their woodstove to a gas stove or insert if it is a primary heating appliance in the house, the RDN does not offer a rebate for the purchase of a natural gas fireplace on its own.

Creating an additional rebate as part of the RDN Green Building Incentive Program for natural gas inserts could easily be accomplished, however the rebate would not be widely available in the region, and it would not be an effective tool to reduce energy consumption or emissions.

Firstly, a new natural gas rebate will not be applicable to most residents in the Electoral Areas. *Appendix A: Gas Distribution Map* shows the distribution of natural gas service in the region. As shown, the service is only available in a portion of residential areas in French Creek (Electoral Area 'G'), Nanoose Bay (Electoral Area 'E') and Cedar (Electoral Area 'A').

Secondly, natural gas fireplaces do not provide significant energy savings or Greenhouse Gas emissions reduction. A 2011 study titled *The Impact of Gas Fireplace Operation on Winter Energy Consumption and House Temperatures* conducted by the Canadian Centre for Housing Technology found that fireplace operation had a significant impact on increasing total house heating energy consumption compared to

new gas furnaces and electric heating systems. This is due to the lower efficiency of gas fireplaces. EnerChoice fireplace inserts have efficiencies ranging from 61% to 90% whereas the fuel efficiency of new gas furnaces and electric heating systems is above 90%.

Since the RDN Green Building Incentive Program is intended to encourage impactful actions that are widely applicable to residents across the region, a new rebate for natural gas inserts is not recommended. Instead, the RDN will continue to provide residents with information about rebate programs offered by major utilities, as is the case with the Fortis BC EnerChoice Fireplace Program, but to provide additional resources only when the benefits are significant and shared widely across the region.

#### ALTERNATIVES

- 1. That the RDN does not create a new rebate for natural gas inserts.
- 2. That alternate direction be given to staff.

## FINANCIAL IMPLICATIONS

If a new rebate for natural gas inserts is introduced as a part of the RDN Green Building Incentive Program, the cost will be covered by \$20,000 allocated to the program. Although a new rebate will not change the total amount of program funding, it will potentially reduce the funds available for existing rebates or future high-impact programs, such as an oil furnace replacement program.

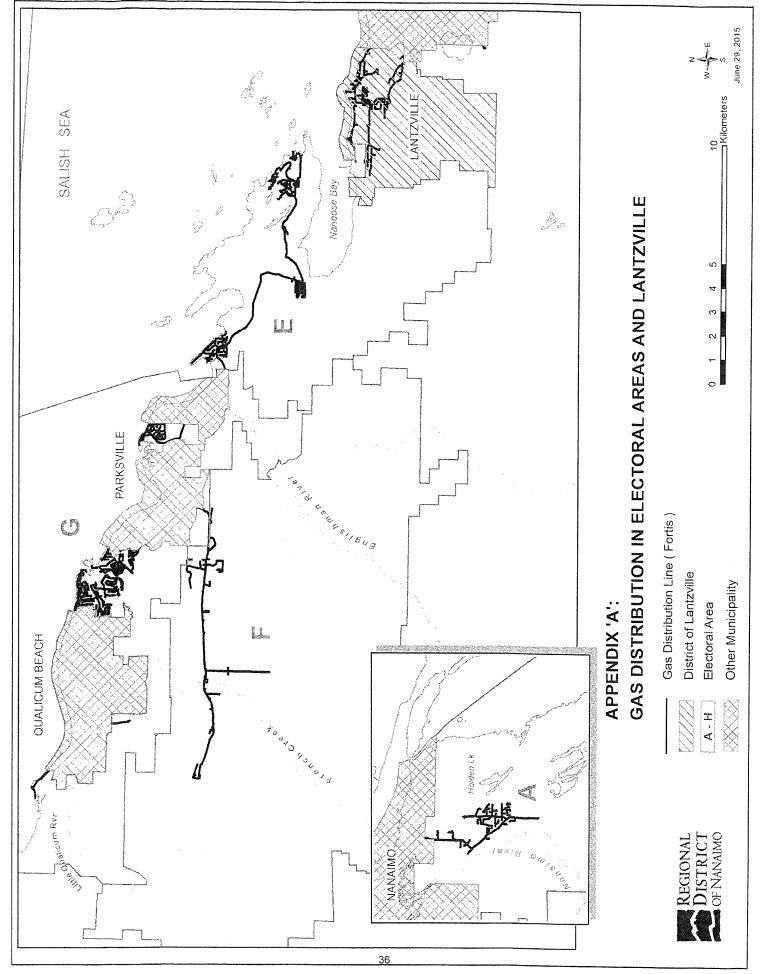
## STRATEGIC PLAN IMPLICATIONS

The Green Building Incentive Program is intended to support residents' investment in energy and resource efficiency. The limited applicability and potential consequence of increasing total heating energy consumption make a natural gas insert rebate unlikely to improve energy efficiency across the region.

#### SUMMARY/CONCLUSIONS

Staff has investigated the feasibility and financial implications of incorporating a rebate program for natural gas inserts into the RDN Green Building Incentive Program. It is found that natural gas service is very limited in Electoral Areas, restricting the application of such a rebate. Furthermore, gas fireplaces are likely to increase total heating energy consumption and do not provide significant energy efficiency benefits to the community. A new rebate for natural gas inserts is not compatible with the intention of the RDN Green Building Incentive Program and therefore is not recommended.

FOR TING PAN Report Writer General Manager Concurrence Manager Concurrence C.A.O. Concurrence 35



	<b>Regional</b> District of Nanaimo	CAO APPRO CAO APPRO EAP COW JUL 14 2 RHD BOARD		STAFF REPORT
то:	Mike Donnelly, AScT Manager, Water & Utilit	v Services	DATE:	July 14 <sup>th</sup> , 2015
FROM:	Gerald St. Pierre, P.Eng., Project Engineer, Water	, PMP	MEETING: FILE:	Board, July 28, 2015 5500-20-NBP-0001
SUBJECT:	Ashcraft Road Waterma	in Replacement – Co	onstruction 7	Fender Award

#### RECOMMENDATION

1. That the Board approve the award of the construction of the Ashcraft Road Watermain Replacement project to Copcan Civil Ltd. for the Tender price of \$279,402.00 (excluding GST).

## PURPOSE

To consider the award of the construction contract for the Ashcraft Road Watermain project.

#### BACKGROUND

The existing watermain servicing properties along Ashcraft Road in Nanoose Bay Peninsula has reached the end of its expected service life. As such, the replacement of this watermain was identified as a 2015 project in the Nanoose Bay Peninsula Water Service Area Referendum that passed in November of 2014.

Detailed Design of the watermain replacement was completed by Timberlake-Jones Engineering and the construction portion of the project was put out to Tender on June 19, 2015. On July 8, 2015 the Tender closed and Tenders were received from 4 Tenderers.

The lowest compliant Tender price was submitted by Copcan Civil Ltd. for \$279,402.00 (excluding GST).

The Consultant, Timberlake-Jones Engineering, has reviewed the Tenders for compliance and recommends awarding the contract to Copcan Civil Ltd.

#### ALTERNATIVES

- 1. Award the Tender for the Ashcraft Road Watermain construction to Copcan Civil Ltd. for \$279,402.00 (excluding GST).
- 2. Do not award the tender and re-tender the project.
- 3. Provide alternate direction to RDN Staff regarding the project.

#### FINANCIAL IMPLICATIONS

Under Alternative 1, the project can proceed as planned. The referendum and Loan Authorization Bylaw 1714, 2014 authorized the expenditure of up to \$2,600,000 for capital improvements, including \$125,329 in contingency for a number of projects that will be completed from 2015-2019. Also, the Harlequin/Sea Lion Loop capital project planned for 2015 was cancelled, freeing up an additional \$237,500 for borrowing.

The original budget for the Ashcraft Road Watermain Replacement project allowed for \$120,000 to replace approx. 190 lineal meters of AC main. Staff are recommending that funds now available as a result of the cancelled project be combined with the original project budget in order to allow for the replacement of the entire 570 lineal meters of Ashcraft Road watermain. The total budget requirement of \$340,000 includes approximately 12% as a construction contingency.

Engineering/Contract Management	\$28,300.00
Construction	\$279,402.00
Contingency	\$32,298.00
Total	\$340,000.00

#### STRATEGIC PLAN IMPLICATIONS

This project is one of many that were included in the Nanoose Bay Peninsula Water Service Area Referendum that passed in November of 2014. The existing 150mm diameter AC watermain is near the end of its expected lifespan. As such, the replacement of this watermain helps to ensure that residents have a safe and sufficient supply of drinking water and fire protection water, while also mitigating the potential for watermain leaks. This project helps to protect both the quality and quantity of drinking water resources.

#### SUMMARY/CONCLUSIONS

Detailed Design of the sewer extension was completed by Timberlake-Jones Engineering with the construction portion put out to Tender on June 19, 2015. On July 8, 2015 the Tender closed with 4 Tenders received. The lowest Tender price was received from Copcan Civil Ltd. for \$279,402.00 (excluding GST) and the Consultant has recommended awarding the project to this vendor.

Report Writer

Ching A/am

General Manager Concurrence

Manager Concurrence CAO Concurrence

Ph: 250.248.2001 Fax: 250.248.2553 Email: info@tjeng.ca

Weldon Professional Centre #201-177 Weld Street PO Box 89 Parksville, BC V9P 2G3

July 9, 2015 File: 0164

e

via email: GSt.Pierre@rdn.bc.ca

Regional District of Nanaimo 6300 Hammond Bay Road Nanaimo, BC V9T 6N2

Attention: Gerald St. Pierre, P.Eng., PMP Project Engineer

**Timberlake-Jones** 

ngineering

Dear Gerald;

## RE: Nanoose Bay Peninsula Water Local Service Area Ashcraft Road Watermain Replacement RDN File: 5500-22-NPB-01

**TENDER REVIEW & RECOMMENDATION** 

Tenders were received for the replacement of approximately 570 lineal metres of AC watermain with PVC watermain under the above noted file on July 8, 2015. We have now completed a review of the Tenders submitted.

There were four (4) tender packages received and all were deemed to be complete and valid. One tender package was received after the submission time and was returned unopened. The attached spreadsheet details the tenders received and are ordered from low to high for your review.

Copcan Civil Ltd. was the low bidder with a bid of \$279,728.75 (+GST). Copcan Civil provided several references for similar works and has successfully completed project of this nature in the past and are considered qualified to carry out the works.

The anticipated costs for completing this project are summarized as follows:

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	<u>.</u> .	~	

Low Bid Received (Copcan Civil Ltd.)\$279,402.00Professional Services<br/>Timberlake-Jones Engineering28,300.00TOTAL COSTS\$307,702.00Recommendation:We recommend that the tender be awarded to Copcan Civil Ltd. in the amount of \$279,400.00 (+GST).

If you have any questions or wish to discuss this further please contact our office.

Yours truly, Timberlake-Jones Engineering

 $\bigcirc$ ATTANG.

Michelle Jones, P.Eng.

S:\MS Office\0276-RDN Hawthorne\276-RDN-Tender Recc.Jan31.2014.doc

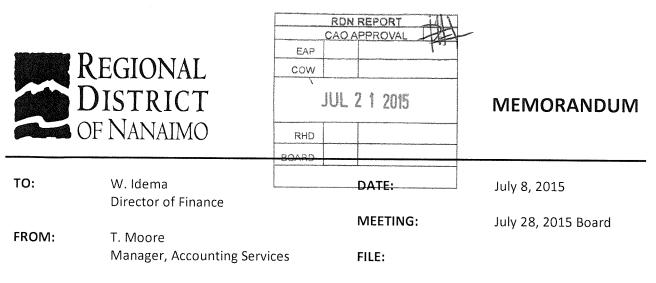
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Regional District of Nanaimo Nanoose Bay Peninsula Water Local Service Area

Ashcraft Road Watermain Replacement

**RDN File: 5500-22-NBP-01** 

	1	2.2	Bid	Surety	<sup>₹</sup>	per	dice	s	Appendices Tender				
Company Name	Addendum	Addendum Compltn. Security Concent	Security	Concent	7	2	4	S	1 2 3 4 5 signed	Tender Price	GST (5%)	Total	Comments
Copcan Civil Ltd.	×	8 weeks	×	×	×	×	××××	×	×	\$279,402.00	\$13,970.10	\$293,372.10	
David Stalker Excavating	×	10 wks	×	×	×	×	×××	×	×	\$287,728.75	\$14,386.44	\$302,115.19	
Knappett Industries (2006) Ltd.	×	10/31/15	×	×	×	×	×××	×	×	\$295,264.00	\$14,763.20	\$310,027.20	
IWC Excavation	×	45 days (9wks)	×	×	×	×××	×	×	×	\$337,686.60	\$16,884.33	\$354,570.93	
71													



## SUBJECT: Bylaw No.1733 – Alberni-Clayoquot Regional District – 2016 Permissive Tax Exemption

## RECOMMENDATION

- 1. That "Property Tax Exemption (Alberni-Clayoquot Mt. Arrowsmith Regional Park) Bylaw No. 1733, 2015" be introduced and read three times.
- 2. That "Property Tax Exemption (Alberni-Clayoquot Mt. Arrowsmith Regional Park) Bylaw No. 1733, 2015" be adopted.

#### PURPOSE

To introduce for adoption "Property Tax Exemption (Alberni-Clayoquot Mt. Arrowsmith Regional Park) Bylaw No.1733, 2015".

#### BACKGROUND

Where a Regional District is the owner of property outside of its boundaries, it is no longer automatically exempt from property taxes. The Alberni-Clayoquot Regional District is the owner of the Alberni-Clayoquot Mt. Arrowsmith Regional Park, which is located within Electoral Area 'C' of the Regional District of Nanaimo. The Board has adopted bylaws annually since 2004 to provide a permissive tax exemption for this property. Permissive tax exemption bylaws must be adopted annually or, with the assent of the electors, may cover a period not exceeding 10 years. Nanaimo and Alberni-Clayoquot Regional District staff have agreed that it is administratively easier to adopt a permissive tax exemption bylaw annually, and Bylaw 1733 covering the 2016 tax year is presented with this report.

## ALTERNATIVES

- 1. Introduce and adopt "Property Tax Exemption (Alberni-Clayoquot Mt. Arrowsmith Regional Park) Bylaw No. 1733, 2015" for the 2016 taxation year as presented.
- 2. Do not grant a permissive tax exemption for the 2016 taxation year for the Alberni-Clayoquot Regional District Mt. Arrowsmith Regional Park properties.

#### FINANCIAL IMPLICATIONS

The 2015 assessed values for the two properties in question (folios 768 002268.420 and 768 002268.416) total \$1,757,000. Had the exemption not been in place for the 2015 taxation year, the properties would have been assessed Regional District taxes of approximately \$2,740. However, if the properties were no longer to be statutorily exempt, the assessment value could increase and the property taxes payable would also be higher. Despite this implication, there is an intent and expectation that local governments will be exempt on any land they own directly. These properties represent the only permissive tax exemption provided by the Regional District of Nanaimo.

#### SUMMARY/CONCLUSIONS

The bylaw introduced with this report continues the Nanaimo Regional District's acknowledgement that the Alberni Clayoquot Regional District's Mt. Arrowsmith Regional Park should be a tax exempt property. The park is located within the boundaries of the Regional District of Nanaimo but is owned by the Alberni Clayoquot Regional District. Permissive tax exemption bylaws must be adopted annually. Staff recommend the bylaw as presented.

Report Writer

**Director Concurrence** 

C.A.O. Condurrence

#### **REGIONAL DISTRICT OF NANAIMO**

#### **BYLAW NO. 1733**

#### A BYLAW TO AUTHORIZE A PROPERTY TAX EXEMPTION FOR THE YEAR 2016

WHEREAS a Board may, by bylaw adopted by at least 2/3 of the votes cast, exempt property from property taxes under Section 809(3), in accordance with Section 809(4) of the *Local Government Act*;

AND WHEREAS the Alberni-Clayoquot Regional District is the owner of properties located within the boundaries of the Regional District of Nanaimo and the properties are used as a public park;

NOW THEREFORE the Board of the Regional District of Nanaimo, in open meeting assembled, enacts as follows:

- 1. The properties described as:
  - a) District Lot 2000, Cameron Land District
  - b) Lot 1, Block 1324, Plan 28909, Cameron Land District

which are owned by the Alberni-Clayoquot Regional District and are used for public park purposes, are authorized to be exempt from property taxes in accordance with Section 809(4)(g) of the *Local Government Act* for the year 2016.

2. This bylaw may be cited as the "Property Tax Exemption (Alberni-Clayoquot Mt. Arrowsmith Regional Park) Bylaw No. 1733, 2015".

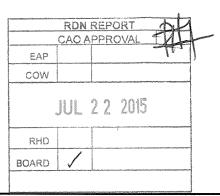
Introduced and read three times this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

Adopted this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

CHAIRPERSON

CORPORATE OFFICER





**STAFF REPORT** 

то:	Mike Donnelly Manager, Water & Utility Services	DATE:	July 14, 2015	
FROM:	Gerald St. Pierre	MEETING:	Board, July 28, 2015	
FROM:	Project Engineer, Water & Utility Services	FILE:	5500-22-WC-0001	
SUBJECT:	ECT: Whiskey Creek Water Service Security Issuing Bylaw No. 1702			

#### RECOMMENDATIONS

- 1. That "Whiskey Creek Water Service Security Issuing Bylaw No. 1702, 2015" be introduced and read three times.
- 2. That "Whiskey Creek Water Service Security Issuing Bylaw No. 1702, 2015" be adopted.

#### PURPOSE

To consider a Security Issuing Bylaw for the Whiskey Creek Water Service.

#### BACKGROUND

In September 2010, the Board approved the acquisition of the Whiskey Creek Water Service and gave three readings to the Whiskey Creek Water System Establishment Bylaw No. 1605, 2010 and the Whiskey Creek Water System Loan Authorization Bylaw No. 1606, 2010. These bylaws were then approved by the Inspector of Municipalities and adopted. At this time a Security Issuing Bylaw is required in order to be able to proceed to long term borrowing through the Municipal Finance Authority (MFA).

Loan Authorization Bylaw No. 1606 (Attachment A) allowed for the borrowing of up to \$205,000 for the purpose of acquiring, constructing or otherwise obtaining and improving land, buildings, vehicles and equipment for the Whiskey Creek Water Service. Using this borrowing authority, works have been completed in the past five years including installation of new water meters, communication and alarm system upgrades, pumpstation upgrades, improvements to the infiltration gallery, and new fuel storage for the genset at the reservoir. As a result, the remaining amount that can be used is approximately \$163,000.

Currently, the Whiskey Creek Water Service Area (WCWSA) is supplied via surface water extraction from Crocker Creek. This water source is prone to high turbidity and colour spikes during spring run-off and significant rainfall events. A Surface Water Treatment Options report, completed by Koers & Associates Engineering Ltd. in 2014 (Attachment B), has determined that substantial treatment costs will need to be incurred in order to meet the Island Health 4-3-2-1 Drinking Water Treatment for Surface Water Policy.

As such, the Regional District of Nanaimo (RDN) is investigating whether groundwater supply is a feasible option for the WCWSA. This option should result in lower capital and operating costs, and has the potential to be a more reliable supply. A Groundwater Supply Assessment was completed by GW Solutions Inc. in 2012 (Attachment C), but a more detailed investigation is warranted now that the cost of treating the existing surface water supply is better understood. A groundwater feasibility study is currently underway and the final report is scheduled to be completed by July 31, 2015. This corresponds with the plan developed with Island Health included as Condition 7 of our Permit to Operate (Attachment D).

As per Condition 7 of the Permit, if a groundwater supply is not feasible, the RDN is required to proceed with Option 2 and complete testing, design, construction and commissioning of a surface water treatment system. The costs associated with this option are substantial, and use of the remaining authorized borrowing amount from Bylaw No. 1606 will be required, along with other sources of funding. A grant application has been submitted as part of the New Building Canada Fund – Small Communities Fund.

If a groundwater supply is feasible the RDN can proceed with Option 1, which may include drilling test wells and production wells, land acquisition, pump station and transmission main design, and construction and commissioning of a groundwater source system. Again, the costs associated with this option will be substantial, and use of the remaining authorized borrowing amount from Bylaw No. 1606 will be required, along with other funding sources.

#### ALTERNATIVES

- 1. Give three readings to Security Issuing Bylaw No. 1702 and adopt the bylaw as presented.
- 2. Provide alternate direction to staff.

#### FINANCIAL IMPLICATIONS

The Security Issuing Bylaw does not have any financial implications to the RDN. Payment of the principal and interest of the loan will be borne by the property owners within the Whiskey Creek Water Service. These costs were communicated to service area residents during public information activities and included in the successful service area establishment petition in 2010.

It is forecast that each owners annual parcel tax will be increased by \$115 to service the \$205,000 debt for the next 20 years.

#### STRATEGIC PLAN IMPLICATIONS

Upgrading the Whiskey Creek water system to ensure the continuation of a safe and reliable drinking water source adheres to the strategic plan to provide a resilient future to area residents.

#### SUMMARY/CONCLUSIONS

The total borrowing amount authorized in the Whiskey Creek Water Service Loan Authorization Bylaw No. 1606 was \$205,000. Of this amount, approximately \$42,000 has been spent to date on system upgrades. The remaining \$163,000 is anticipated to be used for either surface water treatment or groundwater supply projects within the next couple of years. As such, it is recommended that the Security Issuing Bylaw be considered for the Whiskey Creek Water Service in order to be able to proceed to long term borrowing through the MFA.

Report Writer lim

General Manager Concurrence

Manager Concurrence CAO Concurrence

#### **REGIONAL DISTRICT OF NANAIMO**

#### **BYLAW NO. 1702**

#### A BYLAW TO AUTHORIZE THE ENTERING INTO OF AN AGREEMENT RESPECTING FINANCING BETWEEN THE REGIONAL DISTRICT OF NANAIMO (THE "REGIONAL DISTRICT") AND THE MUNICIPAL FINANCE AUTHORITY OF BRITISH COLUMBIA (THE "AUTHORITY")

WHEREAS the Authority may provide financing of capital requirements for regional districts and for their member municipalities by the issue of debentures, or other evidence of indebtedness of the Authority and lending the proceeds therefrom to the Regional District on whose request the financing is undertaken;

AND WHEREAS, pursuant to the provisions of Section 825 of the *Local Government Act*, the amount of borrowing authorized by the following Loan Authorization Bylaw, the amount already borrowed under the authority thereof, the amount of authorization to borrow remaining thereunder and the amount being issued under the authority thereof by this bylaw is as follows:

Regional District	L/A Bylaw No.	Purpose	Amount Borrowing Authorized	Amount Already Borrowed	Borrowing Authority Remaining	Term of Issue (Yrs.)	Amount of Issue
Nanaimo	1606	Whiskey Creek Water Service	\$205,000	Nil	\$205,000	20	\$205,000

Total Financing pursuant to Section 825

\$205,000

AND WHEREAS the Regional Board, by this bylaw, hereby requests that such financing shall be undertaken through the Authority;

NOW THEREFORE, the Regional Board of the Regional District of Nanaimo, in open meeting assembled, enacts as follows:

- 1. The Authority is hereby requested and authorized to finance from time to time the aforesaid undertakings at the sole cost and on behalf of the Regional District and its member municipalities hereinbefore referred to, in Canadian Dollars or in such other currency or currencies as the Authority shall determine so that the amount realized does not exceed Two Hundred and Five Thousand Dollars (\$205,000) in Canadian Dollars and/or the equivalent thereto and at such interest and with such discounts or premiums and expenses as the Authority may deem consistent with the suitability of the money market for sale of securities of the Authority.
- 2. Upon completion by the Authority of financing undertaken pursuant hereto, the Chairperson and Director of Finance of the Regional District, on behalf of the Regional District and under its seal shall, at such time or times as the Trustees of the Authority may request, enter into and deliver to the Authority one or more agreements which said agreement or agreements shall be substantially in the form annexed hereto as Schedule 'A' and made part of this bylaw (such agreement or agreements as may be entered into, delivered or substituted hereinafter referred to as the "Agreement") providing for payment by the Regional District to the Authority of the amounts required to meet the obligations of the Authority with respect to its borrowings undertaken pursuant hereto, which Agreement shall rank as debenture debt of the Regional District.
- 3. The Agreement in the form of Schedule 'A' shall be dated and payable in the principal amount or amounts of money in Canadian Dollars or as the Authority shall determine and subject to the *Local Government Act*, in such other currency or currencies as shall be borrowed by the Authority pursuant to Section 1 and shall set out the schedule of repayment of the principal amount together with interest on unpaid amounts as shall be determined by the Treasurer of the Authority.
- 4. The obligations incurred under the said Agreement shall bear interest from a date specified therein, which date shall be determined by the Treasurer of the Authority and shall bear interest at a rate to be determined by the Treasurer of the Authority.
- 5. The Agreement shall be sealed with the seal of the Regional District and shall bear the signatures of the Chairperson and Director of Finance.
- 6. The obligations incurred under the said Agreement as to both principal and interest shall be payable at the Head Office of the Authority in Victoria and at such time or times as shall be determined by the Treasurer of the Authority.
- 7. If during the currency of the obligations incurred under the said Agreement to secure borrowings in respect of Whiskey Creek Water Service Loan Authorization Bylaw No. 1606, the anticipated revenues accruing to the Regional District from the operation of the said Whiskey Creek Water Service are at any time insufficient to meet the annual payment of interest and the repayment of principal in any year, there shall be requisitioned an amount sufficient to meet such insufficiency.

- 8. The Regional District shall provide and pay over to the Authority such sums as are required to discharge its obligations in accordance with the terms of the Agreement, provided however that if the sums provided for in the Agreement are not sufficient to meet the obligations of the Authority, and deficiency in meeting such obligations shall be a liability of the Regional District to the Authority and the Regional District shall make provision to discharge such liability.
- 9. At the request of the Treasurer of the Authority and pursuant to Section 15 of the *Municipal Finance Authority Act*, the Regional District shall pay over to the Authority such sums and execute and deliver such promissory notes as are required pursuant to said Section 15 of the *Municipal Finance Authority of British Columbia Act*, to form part of the Debt Reserve Fund established by the Authority in connection with the financing undertaken by the Authority on behalf of the Regional District pursuant to the Agreement.
- 10. This bylaw may be cited as "Whiskey Creek Water Service Security Issuing Bylaw No. 1702, 2015".

Introduced and read three times this day of , 2015.

Adopted this day of , 2015.

CHAIRPERSON

CORPORATE OFFICER

#### **REGIONAL DISTRICT OF NANAIMO**

#### **BYLAW NO. 1606**

#### A BYLAW TO AUTHORIZE BORROWING FOR THE PURPOSE OF ACQUIRING, CONSTRUCTING AND UPGRADING LAND, BUILDINGS, VEHICLES AND EQUIPMENT FOR THE WHISKEY CREEK WATER SERVICE

WHEREAS Regional District of Nanaimo Bylaw No.1605 established the Whiskey Creek Water Service (the Service);

AND WHEREAS the Board has obtained the consent of the electors in the Service area by way of a sufficient petition in accordance with Section 823.1 of the Local Government Act, to borrow in order to acquire, construct and improve land, buildings, vehicles and equipment for the Service;

AND WHEREAS the estimated cost of acquiring, constructing or otherwise obtaining and improving land, buildings, vehicles and equipment for the Services is the sum of \$205,000;

AND WHEREAS the financing of this capital program is to be undertaken by the Municipal Finance Authority of British Columbia pursuant to proposed agreements between the Authority and the Regional District of Nanaimo;

NOW THEREFORE, the Board of the Regional District of Nanaimo, in open meeting assembled, enacts as follows:

- 1. The Board is hereby empowered and authorized to acquire all such real and personal property, rights or authorities as may be requisite or desirable for, or in connection with, the foregoing capital program, and all related ancillary works and equipment deemed necessary by the Board for the management of the service authorized under "Whiskey Creek Water Service Establishment Bylaw No. 1605, 2010".
- 2. To borrow upon the credit of the Regional District a net sum not exceeding \$205,000.
- 3. The maximum term for which debentures may be issued to secure the debt intended to be created by this bylaw is 20 years.
- 4. This bylaw may be cited for all purposes as "Whiskey Creek Water Service Loan Authorization Bylaw No. 1606, 2010".

Introduced and read three times this 21<sup>st</sup> day of September, 2010.

Received the approval of the Inspector of Municipalities this 20<sup>th</sup> day of October, 2010.

Adopted this 14<sup>th</sup> day of December, 2010.

CHAIRPERSON

SR. MGR., CORPORATE ADMINISTRATION



## WHISKEY CREEK WATER SERVICE AREA



# WATER TREATMENT OPTIONS

SEPTEMBER 2014



KOERS & ASSOCIATES ENGINEERING LTD. Consulting Engineers

Parksville, BC



**KOERS** & ASSOCIATES ENGINEERING LTD. **Consulting Engineers** 

P.O. BOX 790 **194 MEMORIAL AVENUE** PARKSVILLE, B.C. V9P 2G8 Phone: (250) 248-3151 Fax: (250) 248-5362 kael@koers-eng.com www.koers-eng.com

September 10, 2014

Regional District of Nanaimo 6300 Hammond Bay Road Nanaimo, BC V9T 6N2

#### Gerald St. Pierre, P.Eng., PMP Attention: **Project Engineer - Water and Utility Services**

#### Re: **Regional District of Nanaimo** Whiskey Creek Water Service Area – Water Treatment Options

Koers & Associates is pleased to submit three (3) hard copies and one (1) electronic copy of our final report entitled, "Whiskey Creek Water Service Area -Water Treatment Options". Comments provided by the RDN have been incorporated into this report.

The report provides recommendation on future water treatment processes and how to implement them, while adhering to Island Health's 4-3-2-1 Surface Water Treatment Objectives. The report entailed a detailed review of the available water quality analysis reports and conceptual water treatment processes.

Should you have any questions regarding our report, please do not hesitate to contact us.

Yours truly,

KOERS & ASSOCIATES ENGINEERING LTD.





Ken Doll, PEng Project Engineer



Enclosures

Celbc

A Member of Consulting Engineers of British Columbia and Association of Canadian Engineering Companies

Principal





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## WHISKEY CREEK WATER SERVICE AREA WATER TREATMENT OPTIONS

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#### APPENDICES

Appendix A Preliminary Construction Cost Estimates

#### **1.0 INTRODUCTION**

#### 1.1 AUTHORIZATION

On June the 16<sup>th</sup>, 2014, the Regional District of Nanaimo authorized Koers & Associates Engineering Ltd. to review the Whiskey Creek's surface water supply and to assess viable water treatment processes that would enable the Whiskey Creek to achieve compliance under Island Health's 4-3-2-1 surface water treatment objectives.

#### **1.2** SCOPE OF WORK

The scope of work is to include:

- Review the existing infiltration collection and treatment system and comment on any potential upgrades/changes.
- Collect required raw water data for high turbidity and colour events, analyze, and provide options and recommendations for treatment processes.
- Investigate and recommend options for detailed design and construction methodologies in order to bring the recommended treatment option online as quickly as possible. This should include investigation of both packaged treatment and stick-built building options.
- Ensure treatment options meet the Island Health 4-3-2-1 Drinking Water Treatment for Surface Water Policy.
- Consult with Island Health to confirm the acceptance of the recommended treatment solutions.
- Ensure recommended building, distribution, and treatment solutions meet the latest MMCD standards.
- Provide Class C Engineering, Construction, and Lifecycle cost estimates for the recommended option(s), including power usage, operations and maintenance requirements, land use considerations, and any storage/distribution system upgrades required.
- Provide a complete report that includes of all the above items as a final deliverable.

### 2.0 BACKGROUND

#### 2.1 HISTORY AND OWNERSHIP

The Regional District of Nanaimo took over ownership and operation of the Whiskey Creek water system in 2012 in response to the request from the majority of the owners of properties that the water system services. It was developed in the 1970's and was initially operated by the subdivision developer, Westerlea Estates Ltd. It presently has 123 connections, all residential properties, with an estimated service population of approximately 300 people.

#### **2.2 SURFACE WATER SOURCE**

Crocker Creek is subject to high turbidity and colour spikes following significant rainfall events and during the spring when creek flows are higher. While the current water treatment system (polymer addition followed by sand filtration) is able to reduce the turbidity and colour, there have been times when the acceptable limits are exceeded and a water quality advisory is issued. Also, historic water quality testing performed by the RDN at Crocker Creek has indicated elevated iron and manganese, which on occasion exceeded the aesthetic objective limit in the Guidelines for Canadian Drinking Water Quality.

#### 2.3 WATER SYSTEM OPERATING CONDITIONS

The RDN's 2014 operating permit issued by Island Health includes four conditions.

Condition 1 requires the water system owner to provide a residual level of disinfectant within the water distribution system. It is recommended that the level of residual disinfectant measured at any point within the distribution system be at least 0.2 mg/L, measure as free chlorine. The maximum residual disinfectant concentration, shall not exceed 4.0 mg/L, or as combined chlorine shall not exceed 3.0 mg/L anywhere in the distribution system. This does not apply in situations where watermains are being super chlorinated during their installation, repair or routine maintenance.

Condition 2 requires that trihalomethance (THM) testing be conducted in a quarterly basis at the point in the distribution system with the highest potential THM levels. The maximum acceptable concentration (MAC) for THMs in drinking water is 0.100 mg/L based on a locational running annual average of a minimum of quarterly samples.

Condition 3 requires the water system owner to ensure the persons operating the water system are certified to operate, maintain or repair the drinking water system

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at the level of system classification, as classified by the Environmental Operators Certificate Program (EOCP).

Condition 4 requires the water system owner provides a finished water quality using technology that will achieve the following performance standard:

- 4-log removal/inactivation of viruses,
- 3-log removal/inactivation of Giardia cysts and Cryptosporidium oocysts,
- provide two treatment processes and
- produce finished water with less than 1 NTU turbidity.

#### 2.4 WATER LICENCES AND DAILY CONSUMPTION

Water is withdrawn from Crocker Creek under two water licences issued by the provincial government as listed in Table 1. There are a total of eight water licences issued on Crocker Creek.

Licence No.	Priority Date	Daily Withdrawal Limit		
		m <sup>3</sup> /day	(lps)	
C039791	Nov 16, 1970	95	(1.1)	
C045726	Feb 22, 1973	198	(2.3)	
	Combined Total:	293	(3.4)	

Table 1 – RDN Crocker Creek Water Withdrawal Licences

It is reported in the Whiskey Creek Water Service Area Annual Report 2012 that the system water demand varied from approximately 0.34 m<sup>3</sup> per day per household (42 m<sup>3</sup>/day total system demand) in the fall and winter months to 0.59 m<sup>3</sup>/day per household (72 m<sup>3</sup>/day total system demand) in the summer. The peak flow through the existing water treatment plant is reported to be 210 m<sup>3</sup>/day (2.43 lps).

#### 2.5 EXISTING WATER SUPPLY SYSTEM

The water system is supplied by Cocker Creek through an infiltration gallery consisting of two 150 mm diameter 6 m long perforated pvc pipes, underneath 1.05 m ( $3\frac{1}{2}$  ft) of graded sand layers. The pipes are connected to a concrete clear well. The water is withdrawn from the clear well by one of two pumps and then dosed with a polymer and passed through a pressurized sand filter for turbidity and colour reduction before being chlorinated and discharged into the 160 m<sup>3</sup> (35,000 igal) concrete storage reservoir. The infiltration gallery and water treatment building are located at 3475 Hebert Way, while the water storage reservoir is located at 979 Poplar Way. A booster pump station at the reservoir site, pumps water out of the reservoir and into the distribution system.

Since 2012, the RDN has undertaken a number of system upgrades including installing alarms at the treatment building and the reservoir site, and carrying out upgrades to the diversion berm and weirs for the infiltration gallery impoundment area. The existing media filtration system and associated piping are nearing the end of their useful life and are not considered salvageable.

#### 2.6 **KEY CHALLENGES**

Similar to other small water systems, the Whiskey Creek Water Service Area has a number of challenges to overcome in order to meet Island Health's 4-3-2-1 Surface Water Treatment Objectives. The challenges identified during the preparation of this study are identified below:

- Whiskey Creek relies solely on a surface water source for its drinking water. The quality of surface water in Crocker Creek typically fluctuates up and down depending on the severity of rainfall events in the watershed. Elevated turbidity, colour and organic carbon levels tend to spike on many Vancouver Island surface water sources and removal of these parameters usually requires complex treatment processes.
- There is no existing sewage collection system at the location of the proposed water treatment facility. Complex treatment processes that reduce colour and organics in drinking water produce a waste sludge that needs to be discharged or treated on site.
- Similar to other small communities on Vancouver Island, Whiskey Creek has a limited tax base and finds it very difficult to take on capital projects without funding assistance from higher levels of government.

#### 3.1 CROCKER CREEK WATER QUALITY

The Regional District of Nanaimo has carried out water quality testing on the Crocker Creek water source. The analysis results have indicated elevated colour and turbidity at certain times, likely after rainfall events.

#### 3.1.1 Turbidity

Insoluble particles of soil, organics, microorganisms, and other materials impede the passage of light through water by scattering and absorbing rays. This interference of light passage is referred to as turbidity. Turbidity is measured in Nephelometric Turbidity Units (NTU), where low NTU is associated with low levels of scattering and absorption of light, and therefore low amounts of particles in the water. Elevated turbidity can decrease the effectiveness of disinfection, allowing pathogens to enter the distribution system.

Turbidity is important to control in water supplies for both health and aesthetic reasons. Suspended matter can harbour microorganisms, such as cryptosporidium and giardia, protecting them from disinfection processes. These microorganisms can cause outbreaks of illness. Turbidity levels in daily raw water samples taken between January, 2012 and April, 2014 regularly exceed 1 NTU. It is likely that these daily grab samples did not capture the most extreme turbidity event. An online turbidity analyzer that is calibrated regularly and capable of storing continuous turbidity data would provide the information necessary to determine the severity of these events and assist with the design of the treatment process.

Turbidity data can be seen on the following page. Figure 1 presents a plot of the turbidity in the raw and treated water from February 2012 to April 2014.

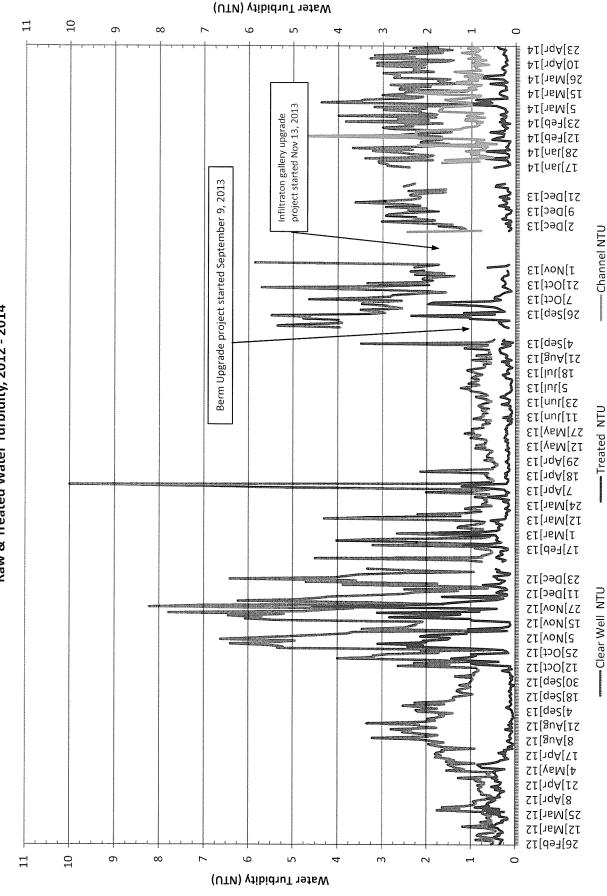
#### 3.1.2 Colour

Hues in water may result from natural minerals and vegetation origins, such as humus material and tannins or coloured wastes from a variety of industries such as logging and mining. Colour in water is reported as true colour and apparent colour. True colour is usually due to colloidal organic compounds only and apparent colour is due to a combination of coloured suspended matter and colloidal organic compounds.

Daily apparent colour testing conducted by the RDN between 2012 and 2014 has indicated elevated levels. Since the completion of the berm upgrades all samples results for apparent colour have exceeded the Aesthetic Objective of 15 CU.



Figure 1: Whiskey Creek Water Service Area Crocker Creek Raw & Treated Water Turbidity, 2012 - 2014



Based on the photos provided by the RDN the berm upgrades included the placement of a fine sand layer directly above a layer of pea gravel and clear well intake. Following the placement of this sand, the turbidity temporarily increased due to fine silt and clay particles migrating into the pea gravel layer, through the intake and eventually fouling the media. Following replacement of the media the turbidity has normalized at a higher concentration than previously measured at the creek. This is likely due to the berm upgrades, which included the installation of a geotextile liner below the infiltration gallery intake and repair of the existing clearwell preventing potential ground water infiltration. These improvements may have reduced the groundwater recharge in the impoundment area and clear well, potentially increasing the ratio of surface water to groundwater and resulting in an increased concentration of colour and turbidity.

Apparent colour data can be seen on the following page. Figure 2 presents a plot of the colour in the raw and treated water from March 2013 to April 2014.

#### **3.2 DISINFECTION BY-PRODUCT FORMATION**

Elevated colour can be an indication of high organic content which can react with chlorine and create disinfection by-products (DBPs) such as trihalomethanes (THMs), which are suspected carcinogens.

#### 3.2.1 Trihalomethanes (THM)

THMs are a group of compounds that can form when water is treated with chlorine and the chlorine reacts with naturally occurring organic matter that is present in the raw water. The four most common THMs found in drinking water are chloroform, bromodichloromethane, dibromochloromethane, and bromoform, with chloroform being the most common.

THM formation potential is generally higher in surface water, like Crocker Creek, compared to groundwater, because of higher organic content in surface water. The rate of formation of THM is a function of temperature, with higher water temperatures increasing the formation rate. As a result, higher THM concentrations can occur during the summer months as surface water temperatures increase.

#### **3.2.2** Total Organic Carbon (TOC)

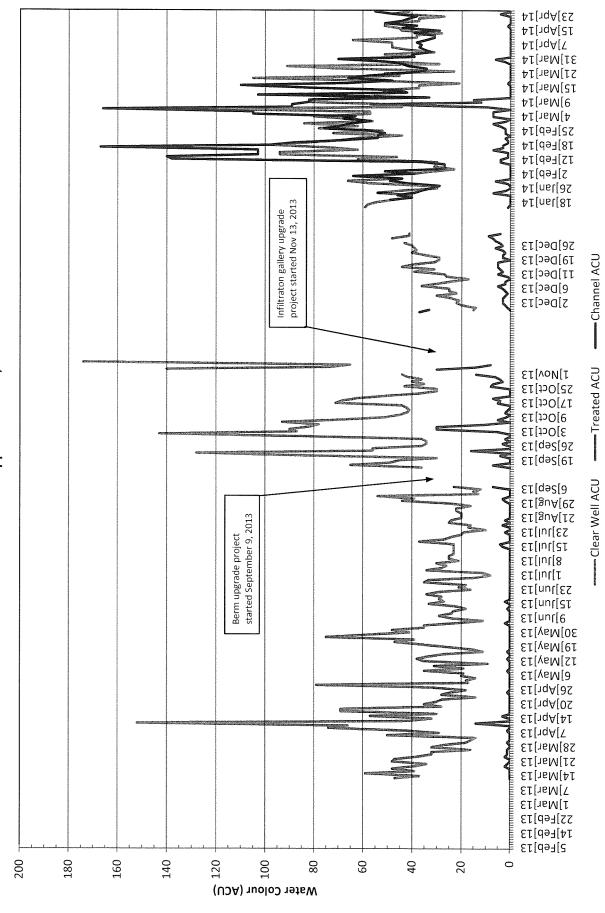
TOC is in a wide variety of organic compounds found in runoff containing decaying vegetation. TOC is used as a surrogate measure of the capacity of the drinking water to form disinfection by-products. Dissolved Organic Carbon (DOC) is the dissolved fraction of TOC.

Total and dissolved organic carbon (TOC / DOC) are good indicators of the potential for the formation of THMs and can be tested at a much lower cost than

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# Figure 2 : Whiskey Creek Water Service Area Crocker Creek Raw & Treated Water Apparent Colour, 2013 - 2014



THMs. In general, it is desirable to reduce TOC concentrations in the treated water to less than 2 mg/L, in order to reduce the precursors associated with disinfection by-product formation.

#### **3.3 FUTURE WATER QUALITY TESTING**

Additional raw water testing data is recommended to assess the range and rate of change in water quality that the treatment process will experience. Samples should be collected after heavy rainfall events. Each analysis should be performed on raw water and at a minimum include; TOC, DOC, turbidity, true and apparent colour, UVT (unfiltered), pH and alkalinity, total and dissolved metals. The test results would be used to assess or confirm potential treatment processes which would be tested by setting up small-scale pilot plants. A pilot testing program would confirm which treatment process will be most effective at treating the raw water supply.

### 4.0 WATER TREATMENT ASSESSMENT

#### 4.1 TURBIDITY REDUCTION METHODS

Turbidity is reduced by physically removing particles by passing the raw water through a porous medium. The most common types of filtration systems used for reducing turbidity are chemically assisted filtration, gravity granular media filtration, and membrane filtration.

Filtration systems should be designed and operated to reduce turbidity levels as low as reasonably achievable and strive to achieve a treated water turbidity target of less than 0.1 NTU (Guidelines for Canadian Drinking Water Quality).

A surface water source may be permitted to operate without filtration if the source water and treatment processes can meet certain criteria mandated by the local health authority. Island Health's current policy states that, under the following conditions a water supply system may be permitted to operate without filtration:

- Average daily source water turbidity levels measured at equal intervals (at least every 4 hours) 1 NTU or less (95% of days) and not above 5 NTU on more than 2 days in a 12 month period.
- Escherichia coli 20/100ml or less in 90% of source water samples.
- Two primary disinfectants are provided, which together achieve a 4-log removal/inactivation of viruses and 3-log reduction in Giardia and Cryptosporidium.

Historic turbidity data collected between 2012 and 2014 by the RDN indicated turbidity levels were > 1 NTU on numerous occasions. Therefore, we do not believe Island Health would issue a filtration deferral for Crocker Creek.

#### 4.2 COLOUR REDUCTION METHODS

For municipal systems, there are two general methods for reducing colour, TOC, and DOC. These include removal of the naturally occurring organics from the source water using treatment or switching to an alternate water source.

There is no simple method of reducing naturally occurring organics from a potable water supply. Treatment processes that use an oxidizing agent and/or activated carbon may provide satisfactory removal. However, based on our experience a more complex treatment process is typically required to remove the organics from surface waters on Vancouver Island. These processes typically consist of conventional treatment or nanofiltration. Once a potential process has been identified, pilot testing is needed to determine treatment effectiveness.

Since dissolved organics can pass through granular media filtration systems, we do not anticipate that the upgrades to the river bank filtration system, infiltration gallery, berm or construction of a shallow well using natural filtration will remove the dissolved organics in the raw water. Should the colour and turbidity return to their original (pre-berm) concentration, the outcome of the treatment process selection would remain the same. Therefore, we do not recommend that funds be allocated to these upgrades.

The review of alternate water sources is outside the scope of this study; however the Regional District may want to consider the feasibility of constructing a new well on the existing water treatment building site. For preliminary discussion purposes, the cost to engage a hydrogeologist and install a test well would be approximately \$50,000. A high quality groundwater source not under the influence of surface water may delay the need for additional treatment or result in a simplified dual disinfection treatment system and not filtration, resulting in lower treatment costs. The exploration process would begin with the review of available existing well information in the Whiskey Creek area, including existing well capacity and quality, land features, topography, geology, soils, terrain and aquifer mapping.

#### 4.3 WATER SYSTEM DEMANDS

Water treatment equipment is typically sized to service future max day demands based on projected population growth. Based on discussions with the RDN, the Whiskey Creek Service Area is completely built out with the exception of two lots.

The 2013 maximum day demand data presented below in Table 2 was derived from daily meter records provided by the Regional District of Nanaimo. In general, the highest water usage occurs in the summer.

Table 2 also shows the amount of water that Whiskey Creek can divert from Crocker Creek. Whiskey Creek has two water licences on this source which allow an overall maximum withdrawal of 107,026  $m^3$ /year (3.4 lps).

Date	Consumer	Maximum Day Demand		Estimated Peak Hour	
		m <sup>3</sup> /day	lps	lps	
Feb 26, 2013	Whiskey Creek	241	2.8	5.6	
	Licenced Withdrawal	293	3.4		

#### Table 2 – 2013 Water Demands

The 2013 daily meter records provided by the Regional District of Nanaimo indicate a maximum day demand of 241 m<sup>3</sup> occurring on February 26, 2013 (including backwash consumption). Backwash consumption has been estimated by multiplying the number backwashes that occurred on that day by the specified backwash volume of  $1.42 \text{ m}^3$  (375 USgals). This equates to an estimated backwash volume of  $15 \text{ m}^3$ . Therefore, the estimated water consumption for Whiskey Creek service area has been approximated by taking the max day consumption and subtracting the estimated backwash water to waste. This equates to an estimated design flow of 2.6 lps (226 m<sup>3</sup>/day). This number will be used for the purpose of estimating treatment equipment costs and should be confirmed prior to procurement or detailed design.

The Whiskey Creek service area currently consists of 123 residential lots and the service area is almost completely built-out for the exception of two empty lots. Also, there are no plans to expand the water service area. Assuming a density of 2.4 capita per dwelling unit, the max day water use equates to 765 lpcd. In general, higher per capita demands can be expected with smaller populations. However, Whiskey Creek's per capita consumption is similar to larger communities on the Island. For example, the max day demand for Nanaimo (2013) and Port Alberni (2013) was 870 lpcd and 1072 lpcd respectively.

The peak hour demand is estimated by multiplying the maximum day demand by 2.0. Storage reservoirs provide peak hour balancing and emergency storage required during power outages and for fighting fires. Water system modelling was not part of this assignment.

#### 4.4 WATER TREATMENT PLANT CAPACITY

Based on the information provided by the RDN the water treatment plant design capacity of 2.6 lps (226  $m^3/day$ ) has been used to estimate the cost of the proposed water treatment facility. The plant capacity is based on the most recent metering data that is currently available for Whiskey Creek and should be confirmed prior to equipment procurement or detailed design. If population growth or additional water demands are anticipated, then additional treatment plant capacity would be required. During design, the building and piping could be configured to accommodate future expansion of each treatment process.

#### 5.1 WATER TREATMENT PROCESS OPTIONS

Understanding the capabilities of the various treatment processes to effectively deal with water quality issues, it is possible to conceptualize potential treatment processes prior to completing pilot testing. The following processes are considered viable options.

#### 5.1.1 Conventional Treatment

For municipal systems, the conventional treatment process for reducing turbidity and naturally occurring organic matter is coagulation, flocculation and sedimentation (floatation) followed by filtration. A chemical agent (coagulant) is added to the water to encourage suspended solids to bind together to form larger particles (flocculation). These larger particles are then removed after they sink (sedimentation). For low density particles, the process of Dissolved Air Floatation (DAF) can be used in place of sedimentation. DAF introduces a cloud of very fine air bubbles which attach to the floc particles causing them to rise to the surface where they are skimmed off. Following either of these two processes the water is typically filtered to remove the remaining particulate matter. Pilot studies are required to assess the effectiveness of various treatment processes. Jar tests can be performed to determine coagulant types, dosages and optimum pH for floc formation. Alkalies are added to water to adjust the pH for optimum coagulation. If the water does not contain sufficient alkalinity to react with the coagulant, then lime, sodium hydroxide or soda ash is fed to provide the necessary alkalinity.

The treatment processes associated with the removal of organics all generate significant waste streams that need to be discharged into a municipal sewer or an onsite disposal system. The existing municipal sewage collection system does not currently extend anywhere near the proposed water treatment plant site. Therefore a holding tank from which filtered sludge or solids can be pumped and hauled to a landfill will be required.

#### 5.1.2 Ozone Disinfection

Ozone is a strong oxidizing gas that reacts with most organic and many inorganic molecules. It is more reactive than chlorine. The reaction is rapid in inactivating microorganisms and oxidizing metals such as iron and manganese. Unlike chlorine, it does not leave a residual after being added to the water. Since ozone does not produce a disinfecting residual, chlorine is normally added afterwards to provide a protective residual throughout the distribution system.

#### 5.1.3 Ultraviolet Disinfection

Ultraviolet Disinfection works by inactivating microorganisms. The UV light penetrates the DNA of a microorganism altering it such that the microorganism is unable to reproduce. Interest in using UV light to disinfect drinking water is growing among public water systems due to its ability to inactivate pathogenic microorganisms without forming disinfection byproducts (DBPs). UV is capable of providing disinfection without the addition of chemicals, avoiding the potential of generating DBPs such as THMs. UV is most effective against cysts such as Cryptosporidium and Giardia. However, UV does not maintain a residual within the distribution system and some double stranded viruses may be able to withstand doses of 40 mJ/cm<sup>2</sup>. Also, UV treatment on its own can be ineffective when turbidity spikes and/or high colour events occur in the raw water supply.

#### 5.1.4 Gravity Filtration (GF)

Water enters a gravity filtration system above the media and passes downward through the granular media and supporting gravel bed. A typical filter bed is placed in a concrete box. Filters are cleaned by backwashing upward through the bed with wash troughs suspended above the filter to collect the backwash water for disposal. Gravity filters can be used effectively for source water with lower turbidity levels. Pilot testing is required to confirm the treatment effectiveness of gravity filters during high turbidity events.

#### 5.1.5 Membrane Filtration (MF)

Membrane filtration involves passing water through microscopic pores causing the suspended and/or dissolved solids to be physically strained out of the water. There are different types of membranes, which are classified by pore size. From largest to smallest, they are; microfiltration (10 to 0.1 um), ultrafiltration (0.1 to 0.01um), nanofiltration (0.01 to 0.001 um), and reverse osmosis with pour sizes as small as 0.001 um. Micro and ultrafiltration membranes have limited ability to remove dissolved organics and the addition of a coagulant may be necessary. Inappropriate use of a coagulant can shorten the life of membranes. Pilot testing is typically required to verify whether or not particle removal can be improved with coagulant addition.

Membrane treatment systems have a smaller footprint compared to gravity filtration systems, but are more technically complex, have higher energy consumption and operation and maintenance costs.

Prior to pilot testing it is important to select a couple of viable treatment processes that are currently available from reputable suppliers.

#### 5.1.6 Reverse Osmosis (RO)

Filtration by the process of RO involves using water pressure to force water through a semi-permeable membrane, leaving dissolved and suspended contaminants behind. A waste stream is created during backwashing when the accumulated contaminants are flushed off the surface of the membrane. RO units are very effective at removing very fine particulate and most dissolved material. However, elevated turbidity and organic loadings can reduce membrane capacity (flux) requiring excessive backwashing and waste generation. RO can also cause low alkalinity water to become deficient in alkalinity, requiring pH adjustment following treatment. Also, these units can have high capital costs, high volume of waste, and can require an elevated level of operator training.

A high pressure pump is typically required to push the water through the membrane, resulting in higher energy consumption. The adequacy of the existing single phase electrical service and RO pumping requirements will need to be reviewed in detail once a membrane has been selected.

#### 5.1.7 Cartridge and Bag Filtration

The most common method of filtration for smaller water systems are cartridge and bag filters. The particle size of the impurity present in the raw water typically dictates the type of filter media. Typically a NSF 53 filter cartridge for cyst reduction is required. Additionally, different types of adsorptive filter media are available, such as activated carbon. Carbon's particles have a large surface area with high adsorptive qualities. Activated carbon can be used to reduce dissolved organic carbon compounds that are generated by decaying vegetation in the watershed, which is the main cause of high colour events. These cartridges are relatively simple to install and maintain and offer a lower initial capital cost. However, disposable cartridge and bag filters may have higher maintenance costs for water high in turbidity and organics. Extreme turbidity events may require filters to be replaced immediately. Pilot testing is recommended to determine replacement frequency.

#### 5.2 PACKAGED WATER TREATMENT PLANT

Packaged water treatment plants typically consist of a modular building enclosure or trailer unit that houses multiple treatment processes (typically filters) which are pre-assembled and then set-up onsite in a cost effective manner as compared to constructing a conventional treatment facility. A packaged treatment plant will still require an adequate power supply, inlet/outlet piping connections to the downstream treated water reservoir to help supply peak demands, and a method of disposing of the waste products that are backwashed from the filters. Therefore, we don't feel that a modular building enclosure will provide significant installation advantages over a traditional wood frame building addition. These plants can be an attractive option for small water system purveyors in remote locations that find it difficult to construction a conventional treatment facility. As with any water treatment process, a package plant must be designed to meet the Island Health's 4-3-2-1 surface water treatment objectives. Based on the water quality data that is currently available, the most challenging aspect of treating the Whiskey Creek's surface water supply will likely be removal of the organics following rainfall events. It will be the responsibility of the water purveyor to demonstrate to the Island Health that the packaged system can effectively treat the source water to the desired quality.

For Whiskey Creek, the cost difference between a prefabricated modular building enclosure and traditional wood frame building addition is negligible.

#### 5.3 TREATED WATER EFFLUENT DISPOSAL

There is no existing sewage collection system at the location of the proposed water treatment facility. Complex treatment processes that reduce colour and organics in drinking water produce a waste sludge that needs to be treated on site or stored and hauled to a landfill.

Discharges from drinking water treatment plant processes are not listed in the Waste Discharge Regulation; therefore they do not require authorization under the Environmental Management Act (EMA). However, EMA 6(4) does apply, which indicates that waste must not be in introduced into the environment in such a manner or quantity as to cause pollution.

Upgrades to the existing disposal/collection system will be required. The type of waste being generated will determine the complexity and cost of the disposal/collection system. A variety of methods are employed for disposing of drinking water treatment sludge, including lagoons, landfills and sewer systems. For example, the installation of a below grade tank that decants into a rock pit may be acceptable for wastes with low risk of pollution. Higher risk wastes or sludge will need to be disposed offsite to a landfill. Conventional treatment processes can consist of both high and low risk effluent discharges.

#### 5.4 TREATMENT PROCESS OPTIONS

The selection of treatment processes and equipment depend on an evaluation of the nature and quality of the particular water to be treated, seasonal variations and the desired quality of finished water. A number of the treatment processes identified can be too costly and complicated for use at small water systems. For example, ozone disinfection typically requires a biological filtration process which is complex and can be challenging to operate.

Two readily available and proven treatment processes which are considered viable options are conventional treatment (DAF) and reverse osmosis (RO). These

treatment process options are recommended based on proven effectiveness, availability and relative operational complexity.

Table 3 below shows treatment process options and their theoretical treatment effectiveness.

	C	<b>Conceptual Treatment Effectiveness</b>				
	Giardia	Giardia Viruses Colour Turbidity Residu			Residual	
	Crypto			-		
Option 1:						
Coagulation	√**	-	$\checkmark$	-	-	
Gravity Filtration	-	-	-	√*	-	
UV (tbd)	✓	-	-	-	-	
Chlorination	-	$\checkmark$	-	-	$\checkmark$	
Option 2:						
Cartridge/Media	-	-	-	✓	-	
RO	<b>√</b> ***	-	✓	$\checkmark$	-	
UV (tbd)	✓	-	-	-	-	
Chlorination	-	$\checkmark$	-	-	<ul> <li>✓</li> </ul>	

# Table 3 - Summary of Treatment Effectiveness for Conceptual Process Options

\*limited turbidity reduction on its own

\*\*depending on (oo)cyst level in source water - UV disinfection may be required \*\*\*removal efficiency demonstrated through challenge testing and verified by direct integrity testing (GCDWQ)

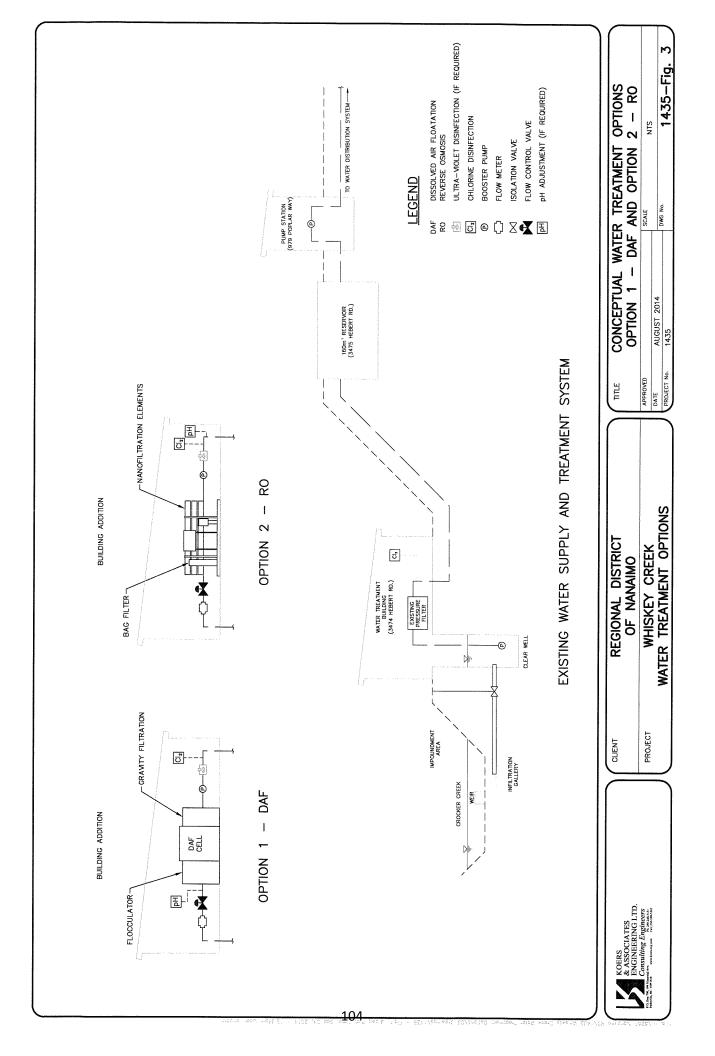
It is important to note that both treatment processes will create a waste sludge that will need to be treated onsite or delivered to a treatment facility. The volume of waste that is generated from each treatment process can be assessed during pilot testing.

The following minimum level of treatment for microbiological contaminants will have to be provided as stated in the Guidelines for Canadian Drinking Water Quality (GCDWQ).

Target Pathogens	Removal/Inactivation		
Cryptosporidium	3 log (99.9%)		
Giardia	3 log (99.9%)		
Viruses	4 log (99.99%)		
Bacteria	100%		

Therefore, depending on the type of equipment installed it may be necessary to include a UV disinfection system to satisfy the Cryptosporidium and Giardia

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inactivation requirements noted above. The local Health Authority should be notified once the treatment process and equipment has been selected to discuss overall Cryptosporidium and Giardia removal credits.

#### 5.5 **PILOT TESTING**

Pilot testing is a very important first step in the process of selecting a treatment technology. Small scale pilot plants are used to prove out the treatment technology and make sure it can achieve the desired results before proceeding with a costly full scale treatment plant. The information collected during pilot testing is typically used to:

- Compare alternative treatment processes.
- Investigate new treatment processes if selected processes are unsuccessful.
- Demonstrate confidence in recommended treatment processes.
- Establish design criteria for the full scale plant.

Pilot testing should be conducted for an adequate period of time to enable analysis of treatment effectiveness and conducted during a time of year when significant rainfall events normally take place in the watershed and water quality issues (turbidity and colour spikes) are most likely to occur. Pilot plants are typically setup to treat a small flow. These small scale plants need to be sourced and then rented for the duration of testing. The pilot plant will require its own power supply, raw water feed, and drain to waste, so it can operate while the existing system is online and operating. They are typically set-up in a trailer unit or temporary enclosure that is heated, secure, and has adequate space to house all the testing equipment.

Pilot testing is of limited use without a detailed testing protocol. Water quality parameters to be tested and the frequency of monitoring during pilot testing need to be established. The drinking water officer and local health authority may have some testing requirements that need to be considered during pilot testing. All monitoring data and process adjustments made to the pilot plant have to be recorded during its operation. To minimize piloting costs, a staff member will have to be trained in the operation of the pilot plant for routine inspection, data logging, taking water samples and reporting. The amount (recovery) and type of waste generated from pilot testing should also be documented.

Following pilot testing, all water quality data and information associated with treatment process operation needs to be reviewed and interpreted. The data should be analyzed and used to support conclusions as to why a particular treatment process would be chosen or eliminated. It is possible that additional follow-up pilot testing may be required prior to selecting the final treatment process. Once satisfactory pilot testing results are obtained, detailed design of the ultimate treatment facility can commence.

#### 5.6 **OPERATIONS & MAINTENANCE**

Following the installation of the treatment plant water quality testing and ongoing maintenance will be required. Water quality monitoring frequency will need to be established and should be based on discussions with the drinking water officer and local health authority.

As part of the equipment installation project it is recommended that the clear well be cleaned and checked for leaks. The water quality data has indicated a higher concentration of turbidity in the clear well than in the channel. This may be due to the settlement of suspended particles in the clear well. The colour test results are more consistent and indicate the dissolved elements are similar in each sample. Therefore, the increased turbidity is likely due to the migration of suspended particles in the clear well.

#### 5.7 OPERATOR TRAINING AND CERTIFICATION

Operator training and certification may be required for the new treatment plant. As a condition on the operating permit, the water system owner must ensure the persons operating the water system are certified to operate, maintain or repair the drinking water system at the level of system classification, as classified by the Environmental Operators Certificate Program (EOCP). British Columbia Water and Waste Association (BCWWA) offer courses to water operators. Allowances for training and operator certification have not been included in the cost estimates.

#### 5.8 PRELIMINARY COST ESTIMATES

The summary table below presents the preliminary Class C cost estimates ( $\pm 40\%$ ) for the conceptual water treatment equipment and building addition. Based on the information collected to-date, the following Table summarizes the estimated capital costs for the water treatment options.

	<b>Option 1 - DAF</b>	Option 2 - RO
Total Estimated Capital Costs (±40%)	\$555,000	\$450,000
Estimated Annual O&M Costs (±40%)	\$22,000	\$30,000
Evaluation based on Estimated Capital and 20 year Life Cycle Costs	\$995,000	\$1,050,000

#### Table 5 – Preliminary Class C Estimated Cost Comparison

The Total Estimated Capital Costs include estimated costs for treatment equipment purchase, installation and treatment facility upgrades including waste tanks, but does not include engineering, public education costs, operator training, initial year water quality monitoring, pilot testing, land acquisition costs, inflation or UV disinfection. An estimated allowance of \$25,000.00 should be added if UV Disinfection equipment is required. Breakdown of the preliminary construction cost estimates are included in Appendix A.

The Estimated Annual O&M Costs include allowances for sodium hypochlorite, coagulants, acids & alkalies, media & membrane replacement, pump & haul, electricity and miscellaneous part replacements.

### 6.0 PHASING OF WORK

#### 6.1 CONCEPTUAL PHASING OPPORTUNITIES

The conceptual treatment processes were developed using water quality information available at the time of this report. Two reputable water treatment equipment suppliers were engaged to provide typical equipment installation details.

Due to the size of the difficult water quality there are limited phasing opportunities for the proposed treatment equipment. The conceptual treatment processes work as a single system and have limited effectiveness on their own.

Pilot testing is a very important first step in the process of selecting a treatment technology. Small scale pilot plants are used to prove out the treatment technology and make sure it can achieve the desired results before proceeding with a costly full scale treatment plant.

Following pilot testing, all water quality data and information associated with treatment process operation needs to be reviewed and interpreted. The data should be analyzed and used to support conclusions as to why a particular treatment process would be chosen or eliminated. Once satisfactory pilot testing results are obtained, detailed design, tendering and construction of the ultimate treatment facility can commence.

An expansion to the building footprint would be required for the addition of any future water treatment equipment. To minimise the time the system is offline the new building addition should be constructed large enough to house the treatment equipment, while the existing filtration and chlorination continues to operate. The installation of new treatment equipment would reduce turbidity, colour and the potential for microorganisms, such as cryptosporidium and giardia, to enter the distribution system.

#### 6.1.1 Option 1 – DAF, GF & Chlorination

Option 1 is based on the assumption that pilot testing proves that Dissolved Air Floatation and Media Filtration (followed by chlorination) is an effective treatment process.

The work would include the piping, building addition, foundation preparation, chlorine disinfection equipment, waste disposal system, electrical, instrumentation, controls, commissioning and Dissolved Air Floatation (DAF) equipment consisting of coagulation, flocculation and floatation (sedimentation) basins and gravity media filtration system.

Option 1 doesn't allow for any phasing opportunities.

### 6.1.2 Option 2 – RO & Chlorination

Option 2 is based on the assumption that pilot testing proves that Reverse Osmosis with adequate pre-treatment (followed by chlorination) is an effective treatment process.

Phase 1 would include the piping, building addition, foundation preparation, chlorine disinfection equipment, provision for future chemical (coagulant) injection, waste disposal system, electrical, instrumentation, controls, commissioning and Reverse Osmosis equipment including pre-filtration equipment necessary to improve membrane run times and increase the life span of the membranes.

Phase 2 would consist of coagulation, flocculation and mixing equipment, if during regular operation it was determined that fouling on the membranes was causing premature failure.

### 6.1.3 Additional Treatment Processes – UV & Cartridge Filtration

Ultra-violet disinfection may be required for Option 1 and 2 for Giardia and Cryptosporidium inactivation, if the principle treatment process cannot provide the full 3 log reduction/inactivation.

As an interim measure, there may be opportunities to install cartridge filters following the existing pressure filters system prior to constructing a new treatment facility. These filters offer a lower initial capital cost but would require significant space within the existing building to install. A bank of filter cartridges pre-configured and installed inside individual housings units would be required at a cost of approximately \$2,500, not including installation. Replacement cartridges wold cost approximately \$850. These disposable cartridge filters will have high replacement frequencies during elevated turbidity events. Pilot testing is required to determine actual replacement frequency. Extreme turbidity events may require filters to be replaced immediately by staff. Therefore we do not feel that operational efficiencies will be gained by installing the cartridge filters prior to constructing a new treatment plant.

### 7.1 SUMMARY AND RECOMMENATIONS

The following comments may be drawn from the work presented in this report:

- The existing filtration system and associated piping are nearing the end of their useful life and are not considered salvageable.
- Since dissolved organics can pass through granular media filtration systems, we do not think upgrades to the river bank filtration system, infiltration gallery, berm or construction of a shallow well using natural filtration will remove the dissolved organics in the raw water. Even if the colour and turbidity returned to their original (pre-berm) concentration wouldn't change the outcome of the treatment process selection. Therefore, we do not recommend that funds be allocated to these upgrades.
- The Regional District may want to consider the feasibility of constructing a new well on the existing water treatment building site. A high quality groundwater source not under the influence of surface water may delay the need for additional treatment or result in a simplified dual disinfection treatment system instead of filtration, resulting in lower treatment costs.
- Dissolved Air Floatation followed by filtration is a proven technology and treatment process. There are several local installations treating water with similar challenges as those in the Crocker Creek drinking water source.
- Treatment processes using coagulants for the removal of organics can generate significant effluent waste discharges that will need to be stored and/or treated onsite. Pilot testing can assist in the evaluation of effluent generation.
- Reverse osmosis can be effective in removing some of the smallest target parameters in drinking water without the use of a coagulant. However, excessive turbidity and colour can foul the membranes causing excessive backwashing and potentially premature replacement of the membrane elements.
- The colour and turbidity concentration appear to have increased, following the completion of the berm upgrades. The increased turbidity and colour concentration will likely impact the treatment process. The elevated colour and turbidity may cause significant membrane fouling and increase the

backwash frequency, resulting in a lower recovery rate and the potential for early replacement.

- Jar tests can be performed to determine coagulant types, dosages and optimum pH for floc formation. Alkalies are added to water to adjust the pH for optimum coagulation. If the water does not contain sufficient alkalinity to react with the coagulant, then lime, sodium hydroxide or soda ash is fed to provide the necessary alkalinity.
- Pilot testing is an important first step in evaluating any treatment processes. In particular for reverse osmosis to determine if pre-filtration alone is adequate to improve filters runs and minimise back washing frequencies. It may be determined during piloting that a coagulation/flocculation system is necessary to improve recovery and minimise membrane fouling.
- Ultra-violet disinfection may be required for Giardia and Cryptosporidium inactivation, if the principle treatment process cannot provide the full 3 log reduction/inactivation.
- It is recommended that water quality testing continue into the fall to assess the seasonal variations in water quality. Appropriate sampling conditions were not present during the preparation of this report.
- Preassembled package treatment plants require a similar power supply, inlet/outlet piping connections to the downstream treated water reservoir to help supply peak demands, and a method of disposing of the waste products that are backwashed from the filters. Therefore, a modular building enclosure will not provide significant installation advantages over a traditional wood frame building.

Based on the availability of funds we recommend that the RDN proceed with piloting both Option 1 and 2 to verify the more effective treatment process. However, if the RDN chooses to pilot only one process then we would suggest the DAF system. DAF followed by filtration is a proven technology for removing colour and turbidity.

The DAF supplier (Corix) has offered to perform basic jar testing services at no cost. We suggest the RDN take advantage of this offer and send a raw water sample to Corix. Preferably the sample should be taken during a time when colour and turbidity are elevated. These tests can assist with determining the effectiveness of chemical coagulation on the raw water. Since other factors such as temperature, alkalinity, and pH influence coagulation, we recommend that the jar tests be run to evaluate these parameters. Corix will offer the basic service free of charge, however there may be some additional minor laboratory costs depending on the final testing protocol. Following jar testing we recommend a

pilot testing program be developed and implemented. Pilot testing is of limited use without a detailed testing protocol. Water quality parameters to be tested and the frequency of monitoring during pilot testing need to be established.

The pilot testing program should be conducted for an adequate period of time to enable analysis of treatment effectiveness and conducted during a time of year when significant rainfall events normally take place in the watershed and water quality issues (turbidity and colour spikes) are most likely to occur.

Once pilot testing confirms the proposed treatment processes (Option 1 and/or Option 2) will successfully treat the water from Crocker Creek during heavy rainfall events, the Regional District of Nanaimo can proceed with detailed design. A construction permit issued by Island Health will have to be obtained following detailed design and prior to commencing with tendering and construction.

This report can be submitted to Island Health for the purpose of obtaining preliminary approval and an extension to the Whiskey Creek's Water System Operating Permit.

### APPENDIX A

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### PRELIMINARY CONSTRUCTION COST ESTIMATES

### PRELIMINARY CLASS C (+/- 25-40%) CONSTRUCTION COST ESTIMATE



OPTION 1 - Dissolved Air Floatation (DAF) & Gravity Filtration (GF) Project: Client:

ENGINEERING LTD.

Whiskey Creek WTP Regional District of Nanaimo Date:

10-Sep-14

**Consulting Engineers** 

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	EXTENSIO
PROPOSED WATER TREATMENT FACILITY (PH 1)				
SILT CONTROL & SITE DEWATERING	ls	1	\$2,500	\$2,50
SITE GRADING, DRIVEWAY & DRAINAGE	ls	1	\$5,000	\$5,00
BUILDING STRUCTURE ADDITION	ls	1	\$40,000	\$40,00
FOUNDATION PREPARATION FOR BUILDING	ls	1	\$5,000	\$5,00
PROCESS PIPING INSIDE WTP	ls	1	\$20,000	\$20,00
BOOSTER PUMPS	ls	1	\$15,000	\$15,00
METER & CONTROL VALVE	ls	1	\$10,000	\$10,00
MISC. WATER PIPING & VALVES OUTSIDE WTP	lm	25	\$500	\$12,50
ELECTRICAL	ls	1	\$10,000	\$10,00
HVAC & PLUMBING	ls	1	\$5,000	\$5,00
DAF, GF & CHEMICAL INJECTION EQUIPMENT	ls	1	\$275,000	\$275,00
ULTRAVIOLET DISINFECTION EQUIPMENT (TBD)	ls	1	\$0	\$
NEW CHLORINATION EQUIPMENT	ls	1	\$25,000	\$25,00
INSTRUMENTATION & CONTROLS	ls	1	\$35,000	\$35,00
SCADA UPGRADES & INTEGRATION	ls	1	\$30,000	\$30,00
CONTROL PANEL (TBD)	ls	1	\$0	Ś
COMMISSIONING	ls	1	\$15,000	\$15,00
SOURCE WATER TIE-INS & PIPING/VALVES	ls	1	\$10,000	\$10.00
WASTE HOLDING TANK AND DISPOSAL SYSTEM	ls	1	\$40,000	\$40,00
			SUB-TOTAL	\$555,00
	ENG	INEERING & CON	FINGENCY (40%)	\$222,00
			TOTAL	\$777,00
PILOT TESTING FOR 2-3 WEEKS				
EQUIPMENT MOBILIZATION & DEMOB	ls	1	\$5,000	\$5,00
INITIAL SET-UP & TAKE DOWN	ls	1	\$5,000	\$5,00
EQUIPMENT RENTAL	wks	3	\$1,500	\$4,50
PLANT OPERATOR & EXPENSES	days	12	\$1,000	\$12,00
MISCELLANEOUS CHEMICALS & MEDIA	ls	1	\$500	\$50
OFF-SITE ANALYTICAL LABORATORY CHARGES	ls	1	\$1,000	\$1,00
ADDITIONAL TREATMENT PROCESS BY SAME SUPPLIER	ls	1	\$14,000	\$14,00
			SUB-TOTAL	\$42.00
	ENG	INEERING & CON		\$16,80
			TOTAL	\$10,00

### PRELIMINARY CLASS C (+/- 25-40%) CONSTRUCTION COST ESTIMATE OPTION 2 - Reverse Osmosis (RO)



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> KOERS ENGINEERING LTD.

**Project:** 

**Client:** 

PROPOSED WATER TREATMENT FACILITY

Whiskey Creek WTP Regional District of Nanaimo 10-Sep-14

\_Date:

**ENGINEERING & CONTINGENCY (40%)** 

**ENGINEERING & CONTINGENCY (40%)** 

\$13,000

\$45,500

\$450,000

\$180,000

\$630,000

TOTAL

TOTAL

SUB-TOTAL

Consulting Engineers

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	EXTENSION
PROPOSED WATER TREATMENT FACILITY (PH 1)				
SILT CONTROL & SITE DEWATERING	ls	1	\$2,500	\$2,500
SITE GRADING, DRIVEWAY & DRAINAGE	ls	1	\$5,000	\$5,000
BUILDING STRUCTURE ADDITION	ls	1	\$40,000	\$40,000
FOUNDATION PREPARATION FOR BUILDING	ls	1	\$5,000	\$5.000
PROCESS PIPING INSIDE WTP	ls	1	\$20,000	\$20,000
REPLACEMENT OF EXISTING SUBMERSIBLE PUMPS	ls	1	\$15.000	\$15,000
METER & CONTROL VALVE	ls	1	\$10,000	\$10,000
MISC. WATER PIPING & VALVES OUTSIDE WTP	lm	25	\$500	\$12,500
ELECTRICAL	Is	1	\$12,500	\$12,500
HVAC & PLUMBING	ls	1	\$5,000	\$5,000
REVERSE OSMOSIS EQUIPMENT C/W PRE-TREATMENT	ls	1	\$125,000	\$125,000
ULTRAVIOLET DISINFECTION EQUIPMENT (TBD)	ls	1	\$0	\$0
NEW CHLORINATION EQUIPMENT	ls	1	\$20,000	\$20,000
INSTRUMENTATION & CONTROLS	ls	1	\$35,000	\$35,000
SCADA UPGRADES & INTEGRATION	ls	1	\$30,000	\$30,000
CONTROL PANEL (TBD)	ls	1	\$0	\$0
COMMISSIONING	ls	1	\$15,000	\$15,000
VARIABLE FREQUENCY DRIVE	ls	1	\$15,000	\$15,000
SOURCE WATER TIE-INS & PIPING/VALVES	ls	1	\$10,000	\$10,000
WASTE HOLDING TANK AND DISPOSAL SYSTEM	ls	1	\$40,000	\$40,000
			SUB-TOTAL	\$417,500
	ENG	<b>INEERING &amp; CON</b>	FINGENCY (40%)	\$167,000
			TOTAL	\$584,500
PROPOSED WATER TREATMENT FACILITY (PH 2)				
COAGULANT / pH INJECTION EQUIPMENT	ls	1	\$20,000	\$20,000
NSTRUMENTATION & CONTROLS	ls	1	\$5,000	\$5,000
SCADA UPGRADES & INTEGRATION	ls	1	\$5,000	\$5,000
COMMISSIONING	ls	1	\$2,500	\$2,500
			SUB-TOTAL	\$32,500

Solutions	

GW Solutions Inc. 3591 Ranch Point Road Nanaimo, BC V9R 6W9 phone: (250) 756-4538 cell: (250) 713-4538 email: gwsolutions@shaw.ca

August 2012

**Groundwater Supply Assessment** 

Whiskey Creek

Regional District of Nanaimo 6300 Hammond Bay Road Nanaimo, B.C. V9T 6N2

(Via email)

Attention: Wayne Morman

# Re: Whiskey Creek – Groundwater Supply Assessment

assessment in the area of the Whiskey Creek water service area near Qualicum Beach, BC. As requested by the Regional District of Nanaimo, GW Solutions Inc. (GW Solutions) has performed a groundwater supply

### Introduction

existing Whiskey Creek water service area. Water for the service area is currently taken from Crocker Creek under two water total of 4867 cubic meters taken from Crocker Creek, or an average of approximately 30 USgpm. licences and delivered to approximately 120 residential lots. The highest monthly system water demand in 2011 was in July, with a GW Solutions understands that the Regional District of Nanaimo (RDN) wants to assess the viability of groundwater supply for the

## Work Completed

viability of groundwater supply for Whiskey Creek. GW Solutions has completed a review of information available on the aquifers in the vicinity of Whiskey Creek. This report presents the information collected during the study, an assessment of the data, and recommendations for next steps to take in assessing the



## **Data Review and Assessment**

Beach on the south side of the Alberni Highway (Figure 1). GW Solutions reviewed the information available on aquifers and groundwater in the study area through geological maps and well logs within a radius of approximately 2 km of the water service area. Whiskey Creek is located southwest of the Town of Qualicum

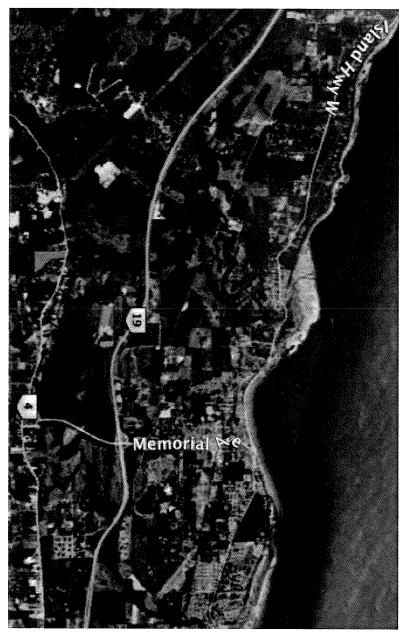


Figure 1: Location of Whiskey Creek (shown in pink)

overlay sedimentary bedrock, featuring alternating layers of conglomerate, sandstone and shale (Figure 3). Whiskey Creek is situated in an area of marine and glaciomarine sediments, featuring layers of fine and coarse deposits, and bordered on the south and west by glaciofluvial sediments which feature coarser aquifer material (Figure 2). The deposits in this area



RDN – Whiskey Creek Groundwater Supply

page 4 of 14

August 2012

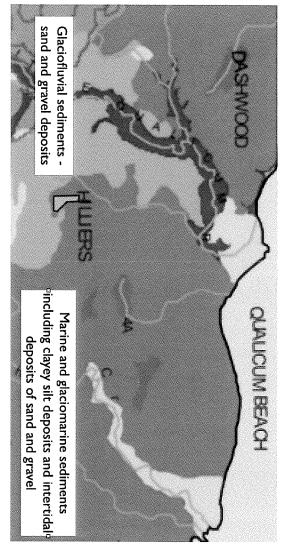


Figure 2: Surficial geology (location of Whiskey Creek shown in pink)

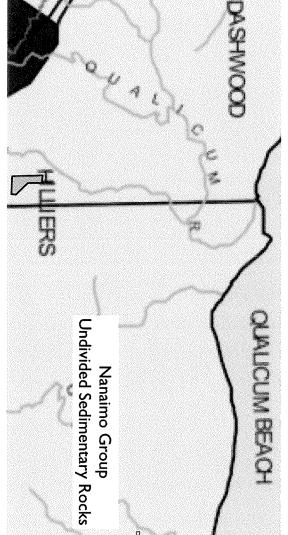


Figure 3: Bedrock geology (location of Whiskey Creek shown in pink)

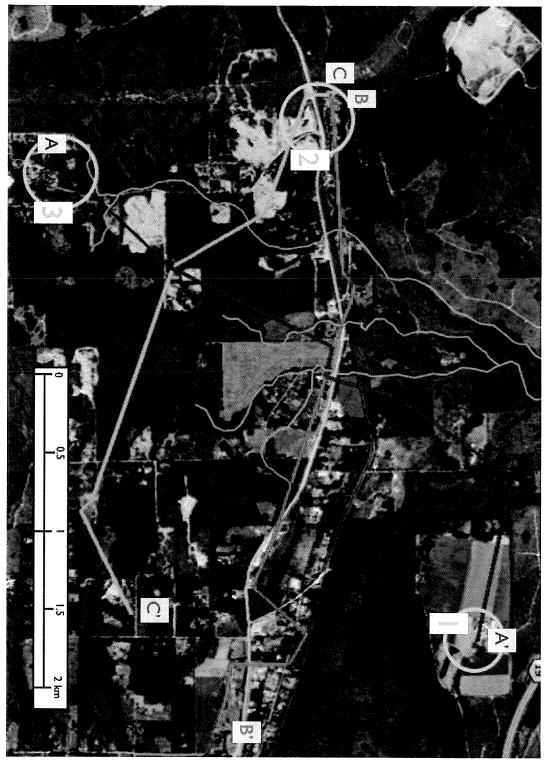
following: locations of high yielding wells in the area (Figures 4 – 7). The information available from previously completed wells suggested the Information from the well logs was used to draw three cross-sections describing the soil horizons, the bedrock, and identifying the

- Bedrock is encountered at depths between 6 m and 23 m across the study area, and is predominantly a crumbly shale, with a deeper sandstone identified in some locations
- and layers of permeable material (sand and gravel). The overburden consists of layers of low permeability material (clays), layers of medium permeability material (silts and till),
- . over relatively short distances The overburden is highly variable within the study area, with the thickness and composition of layers changing significantly
- . water service area in 3 locations (Figure 4): The most productive wells in the area are completed in overburden and located 1.5 to 2 km away from the Whiskey Creek
- 0 To the northeast of Whiskey Creek, one well with an estimated yield of 100 USgpm (WTN 86906);
- 0 Ņ To the west of Whiskey Creek, two wells with estimated yields of 60 (WTN 60285) and 30 USgpm (WTN 100291);
- 0 ω To the southwest of Whiskey Creek, one well with an estimated yield of 30 USgpm (WTN 50610)
- . estimated yield of 15 USgpm (WTN 27360), located to the west of Whiskey Creek and shown in cross-section B-B' (Figure 6). Wells completed in bedrock have reported relatively low estimated yields, with the exception of one well reporting an

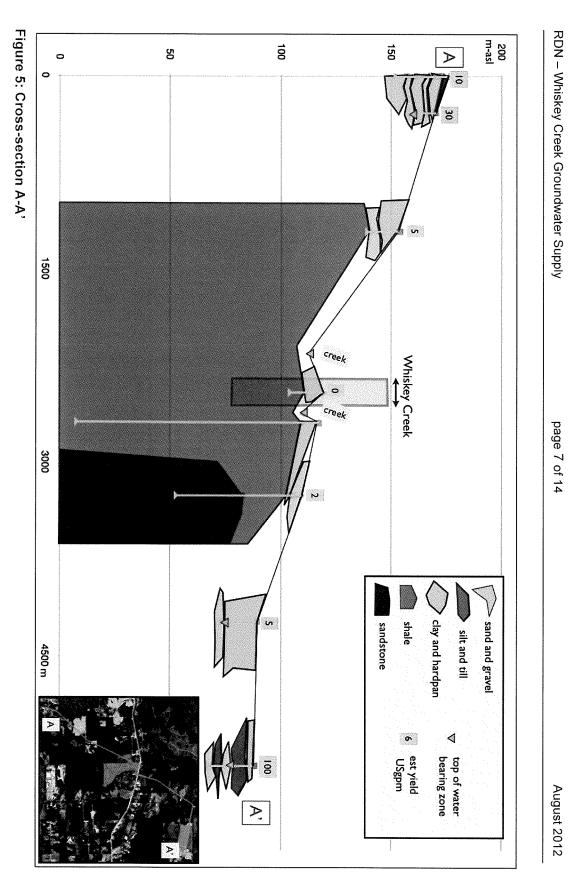




Figure 4: Cross-section locations (purple, red, and green lines) and locations of high yielding wells (yellow circles) (location of Whiskey Creek shown in pink)

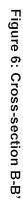


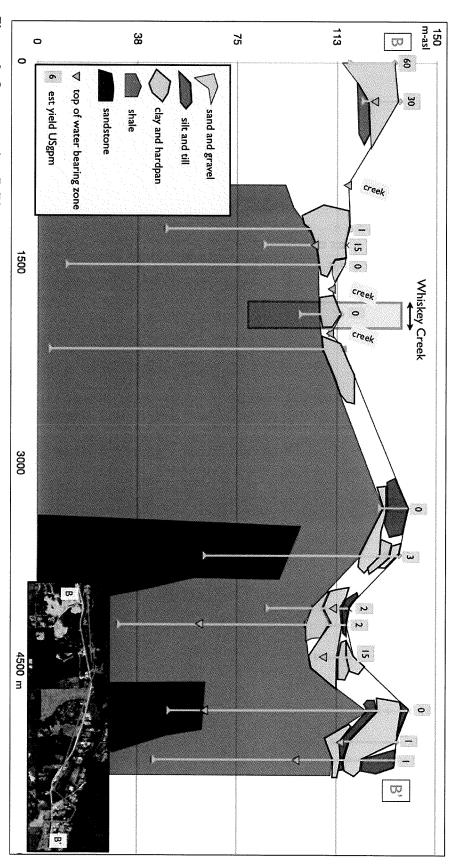




August 2012



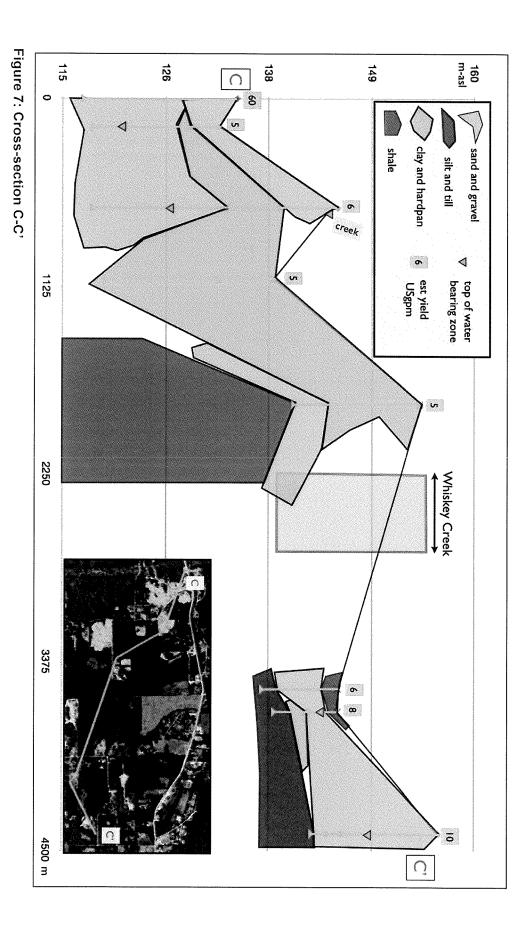




RDN – Whiskey Creek Groundwater Supply

August 2012





RDN – Whiskey Creek Groundwater Supply

### Conclusions

The investigation completed to date has provided the following information:

- The highest yielding wells in the area are completed in overburden aquifers at distances of approximately 1.5 to 2 km from the Whiskey Creek water service area
- < expected. The productivity of the aquifer will be a function of its size (areal extent) and of its recharge wells have been completed. where a number of wells have encountered a productive brown sand and gravel aquifer that is at least 6 – 20 m thick where The thickest aquifer identified in the area is to the west of Whiskey Creek along the Alberni Highway (area 2 in Figure 4) This area is also identified as having glaciofluvial deposits, where coarser aquifer material is
- ۲ Wells in the immediate vicinity of Whiskey Creek (within 1 km) have not reported estimated yields above 5 USgpm, whether completed in overburden or bedrock, with the exception of one bedrock well reporting an estimated yield of 15 USgpm.

## Recommendations

next phase of the water supply study in a cost effective way: GW Solutions makes the following recommendations, based on the information available to date, and with the objective to plan the

- ✓ Overburden aquifers should be targeted.
- < A well completed in the identified sand and gravel aquifers could potentially yield in the order of 50 lgpm.
- ۲ The likelihood of reaching such a yield will increase if the development of the well is optimized, combining several methods of development.



### Closure

Engineering judgment has been applied in producing this letter-report. carried out in accordance with generally accepted engineering practice. No other warranty is made, either expressed or implied. Conclusions and recommendations presented herein are based on available information at the time of the study. The work has been

Solutions Inc. General Conditions and Limitations', attached in Appendix 1 which forms a part of this report. This report was prepared by personnel with professional experience in hydrogeology. Reference should be made to the 'GW

GW Solutions was pleased to produce this document. If you have any questions, please do not hesitate to contact me

Yours truly,

GW Solutions Inc.



Gilles Wendling, Ph.D., P.Eng President

Appendices

Appendix 1 – GW Solutions General Conditions and Limitations



# Appendix 1: GW Solutions General Conditions and Limitations

## **1.0 USE OF REPORT**

of the report, if required, may be obtained upon request. subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of GW SOLUTIONS. Additional copies or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than GW SOLUTIONS's necessitate a supplementary investigation and assessment. This report and the assessments and recommendations contained in it are intended nor should it be relied upon for types of development other than those to which it refers. Any variation from the site or proposed development would client unless otherwise authorized in writing by GW SOLUTIONS. Any unauthorized use of the report is at the sole risk of the user. This report is for the sole use of GW SOLUTIONS's client. GW SOLUTIONS does not accept any responsibility for the accuracy of any of the data, the analysis This report pertains to a specific area, a specific site, a specific development, and a specific scope of work. It is not applicable to any other sites,

## 2.0 LIMITATIONS OF REPORT

conditions may vary across the site which, in turn, could affect the conclusions and recommendations made. This report is based solely on the conditions that existed within the study area or on site at the time of GW SOLUTIONS's investigation. The client, and any other parties using this report with the express written consent of the client and GW SOLUTIONS, acknowledge that conditions affecting property, the decisions on which are the sole responsibility of the client. SOLUTIONS is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the that the conclusions and recommendations set out in this report are based on limited observations and testing on the area or subject site and that sensitive. The client, and any other party using this report with the express written consent of the client and GW SOLUTIONS, also acknowledge the environmental assessment of the site can vary with time and that the conclusions and recommendations set out in this report are time The client acknowledges that GW

## 2.1 Information Provided to GW SOLUTIONS by Others

SOLUTIONS accepts no responsibility for the accuracy or the reliability of such information which may affect the report. than the client. While GW SOLUTIONS endeavours to verify the accuracy of such information when instructed to do so by the client, GW During the performance of the work and the preparation of this report, GW SOLUTIONS may have relied on information provided by persons other

## 3.0 LIMITATION OF LIABILITY

client agrees that GW SOLUTIONS's liability to the client, with respect to any issues relating to contaminants or other hazardous wastes located on of the presence of those materials. In consideration of these risks, and in consideration of GW SOLUTIONS providing the services requested, the the subject site shall be limited as follows: The client recognizes that property containing contaminants and hazardous wastes creates a high risk of claims brought by third parties arising out

shall be limited to the amount of fees paid by the client to GW SOLUTIONS under this Agreement, whether the action is based on breach of contract or tort; (1) With respect to any claims brought against GW SOLUTIONS by the client arising out of the provision or failure to provide services hereunder



arise either in whole or part out of services provided by GW SOLUTIONS, whether the claim be brought against GW SOLUTIONS for breach of damages, penalties, fines, losses, costs and expenses of every nature and kind whatsoever, including solicitor-client costs, arising or alleged to agrees to indemnify, defend and hold harmless GW SOLUTIONS from and against any and all claim or claims, action or actions, demands contract or tort. (2) With respect to claims brought by third parties arising out of the presence of contaminants or hazardous wastes on the subject site, the client

## 4.0 JOB SITE SAFETY

persons on site from their responsibility for job site safety. persons whatsoever. The presence of GW SOLUTIONS personnel on site shall not be construed in any way to relieve the client or any other GW SOLUTIONS is only responsible for the activities of its employees on the job site and is not responsible for the supervision of any other

## 5.0 DISCLOSURE OF INFORMATION BY CLIENT

proposed conditions on the site, including historical information respecting the use of the site. The client acknowledges that in order for GW SOLUTIONS to properly provide the service, GW SOLUTIONS is relying upon the full disclosure and accuracy of any such information. The client agrees to fully cooperate with GW SOLUTIONS with respect to the provision of all available information on the past, present, and

## 6.0 STANDARD OF CARE

members of the profession currently practicing under similar conditions in the jurisdiction in which the services are provided. Engineering implied, is made concerning the test results, comments, recommendations, or any other portion of this report. judgement has been applied in developing the conclusions and/or recommendations provided in this report. No warranty or guarantee, express or Services performed by GW SOLUTIONS for this report have been conducted in a manner consistent with the level of skill ordinarily exercised by

## 7.0 EMERGENCY PROCEDURES

spent by GW SOLUTIONS to deal with the consequences of such discoveries expenses incurred as a result of such discoveries and to compensate GW SOLUTIONS through payment of additional fees and expenses for time procedures may involve additional costs outside of any budgets previously agreed upon. The client agrees to pay GW SOLUTIONS for any result in the necessity to undertake emergency procedures to protect GW SOLUTIONS employees, other persons and the environment. These recognizes that the activities of GW SOLUTIONS may uncover previously unknown hazardous materials or conditions and that such discovery may The client undertakes to inform GW SOLUTIONS of all hazardous conditions, or possible hazardous conditions which are known to it. The client



## **8.0 NOTIFICATION OF AUTHORITIES**

agencies and other persons be informed and the client agrees that notification to such bodies or persons as required may be done by GW SOLUTIONS in its reasonably exercised discretion. The client acknowledges that in certain instances the discovery of hazardous substances or conditions and materials may require that regulatory

## 9.0 OWNERSHIP OF INSTRUMENTS OF SERVICE

prepared by GW SOLUTIONS are considered its professional work product and shall remain the copyright property of GW SOLUTIONS The client acknowledges that all reports, plans, and data generated by GW SOLUTIONS during the performance of the work and other documents

## **10.0 ALTERNATE REPORT FORMAT**

SOLUTIONS. The Client warrants that GW SOLUTIONS's instruments of professional service will be used only and exactly as submitted by GW SOLUTIONS. The Client recognizes and agrees that electronic files submitted by GW SOLUTIONS have been prepared and submitted using or future software and hardware system specific software and hardware systems. GW SOLUTIONS makes no representation about the compatibility of these files with the Client's current deliverables (collectively termed GW SOLUTIONS's instruments of professional service), the Client agrees that only the signed and sealed hard instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party except GW be deemed to be the overall original for the Project. The Client agrees that both electronic file and hard copy versions of GW SOLUTIONS's Furthermore, the Client agrees and waives all future right of dispute that the original hard copy signed version archived by GW SOLUTIONS shall copy versions shall be considered final and legally binding. The hard copy versions submitted by GW SOLUTIONS shall be the original documents for record and working purposes, and, in the event of a dispute or discrepancies, the hard copy versions shall govern over the electronic versions Where GW SOLUTIONS submits both electronic file and hard copy versions of reports, drawings and other project-related documents and

End of Document



Excellent health and care for everyone, everywhere, everytime.



REGIONAL DISTRICT

RECEIVED

MAR 17 2015

March 9, 2015

Mike Donnelly - Manager of Water & Utility Services Gerald St.Pierre - Project Engineer, Water & Utility Services 6300 Hammond Bay Road, Nanaimo, BC, V9T 6N2

Dear Mr. Donnelly and Mr. St. Pierre,

### RE: Operating Permit for Whiskey Creek Water Service Area

Please find enclosed an operating permit issued under section 8 of the Drinking Water Protection Act (the "Act").

Please note this operating permit is issued with terms and conditions, and that, according to section 8(1)(b) of the Act, the water supply system must be operated in accordance with these terms and conditions. Please respond in writing within 30 days of receiving this notice if you have any concerns with the conditions set out in the permit.

Please also note that water suppliers have various responsibilities under the Act and the Drinking Water Protection Regulation (The "Regulation"), beyond those set out as terms and conditions of the operating permit. It is your responsibility to familiarize yourself with the Act and Regulations. See section 2.2 of Part A of the Drinking Water Officers' Guide for a summary of responsibilities and references to some of the relevant provisions of the Act and Regulation. This is intended for basic information purposes only and it is important that you read the Act and Regulation in their entirety.

If you have any questions about this operating permit, please do not hesitate to contact me at (250) 947 8222 or by email at <u>elizabeth.thomson@viha.ca</u>

Yours truly.

Elizabeth Thomson, C.P.H.I.(C) Environmental Health Officer

Health Protection and Environmental Services 489 Alberni Highway, Parksville, BC V9P 1J9

Phone: 250-947-8222 Fax: 250-951-9576



island health

### HEALTH PROTECTION

### **PERMIT** to OPERATE

### A WATER SUPPLY SYSTEM

Water System Name: Premises Number: WHISKEY CREEK WATER SERVICE AREA BFOR-8ESNFX

Premises Address:

Lot #128, Hebert Road Qualicum Beach, BC V9K 1V9

Water System Owner:

**Regional District of Nanaimo** 

Regional District of Nanaimo is hereby permitted to operate the above potable water supply system and is required to operate this system in accordance with the Drinking Water Protection Act and in accordance with the conditions set out in this operating permit and conditions established as part of any construction permit.

The water supply system for which this operating permit applies is generally described as:

Service Delivery Area: Source Water: Water Treatment methods are: Water Disinfection methods are:

Number of Connections

Qualicum Beach Area Crocker Creek Infiltration gallery, Sand Filter, Polymer additive Chlorination

15-300 Connections - DWC

Operating conditions specific to this water supply system are in Appendix A.

Date: March 24, 2011

Issued By:

Environmental Health Officer

THIS PERMIT MUST BE DISPLAYED IN A CONSPICUOUS PLACE AND IS NOT TRANSFERABLE



### **APPENDIX A**

### WATER SYSTEM OPERATING CONDITIONS FOR

### WHISKEY CREEK WATER SERVICE AREA 979 Poplar Way Qualicum Beach, BC, V9K 1V9

- 1. Adhere to monitoring requirements to ensure the efficacy of disinfection throughout the distribution system according to industry standards or as directed by the Drinking Water Officer. It is recommended that the level of residual disinfectant measured at any point within the distribution system be at least 0.2 mg/L, measured as *free* chlorine.
- 2. Measure for disinfection byproducts Trihalomethanes (THM's) and/or Haloacetic Acids (HAAs) quarterly taken at a point in the distribution system with the highest potential levels. The average of these results must comply with the Guidelines for Canadian Drinking Water Quality. Exceeded parameters are to be reported to the Drinking Water Officer.
- 3. Conduct general chemical testing through a Provincial Health Officer approved laboratory at a frequency of no less than once every 3 years. Sampling parameters shall comply with the Guidelines for Canadian Drinking Water Quality. Parameters to be sampled shall include the list specified in the VIHA Guidelines for Approval of a Waterworks System or as directed by the Drinking Water Officer. Maintain records of all monitoring conducted.
- 4. The owner of the water system shall ensure the persons operating the water system are certified to operate, maintain or repair the drinking water system at the level of system classification, as classified by the Environmental Operators Certificate Program (EOCP).
- 5. Document all customer complaints and deviations from standard operating procedures.
- 6. In accordance with Island Health's policy 3.3 and the BC Drinking Water Treatment Objectives (Microbiological) for Surface Water Supplies, provide finished water quality using technology that will achieve the following performance standard; a 4-log removal/inactivation of viruses, a 3-log removal/inactivation of Giardia cysts and Cryptospordium oocysts, provide two treatment processes and produce finished water with less that 1 NTU turbidity.

7. In order to meet Condition 6 above the water supplier must achieve the following milestones.

Option 1- Groundwater Source

- 1) On or before July 31, 2015 complete a hydrogeological groundwater assessment of the area to determine if a groundwater source is feasible.
- 2) If groundwater is not feasible, proceed with Option 2. If groundwater is feasible: Complete any and all works necessary to prove an adequate ground water supply in both quality and quality. This should include drilling test wells, drilling production wells, designing a pump house, water storage tanks and any other associated works. Submit to the HPES Public Health Engineer, in a form acceptable and with sufficient information so that the Public Health Engineer can reasonably evaluate the submission for the purposes of issuing a construction permit for planned works. Submit to the EHO sufficient information to complete and obtain well source approval, both applications to be received on or before Feb 29, 2016
- 3) On or before September 30, 2016 complete construction and commissioning of all works in accordance with the construction permit or permit waiver in order to meet the objectives established in HPES Policy 3.3 Surface Water Treatment Objectives.

Option 2 - Surface Water Treatment, if groundwater is not feasible

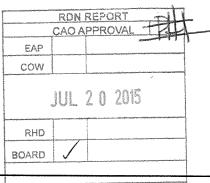
- 1) On or before December 31, 2015 complete any and all water quality and water source assessments, tests and evaluations necessary to characterize water quality for the purposes of identifying acceptable treatment and disinfection options.
- 2) On or before July 29, 2016 submit to the HPES Public Health Engineer, in a form acceptable and with sufficient information, a component diagram of the proposed water system revisions necessary for the water supply system to provide potable water in compliance with the HPES Policy 3.3 Surface Water Treatment Objectives.
- 3) On or before March 31, 2017 complete construction and commissioning of all works in accordance with the construction permit or permit waiver in order to meet the objectives established in HPES Policy 3.3 Surface Water Treatment Objectives.

Date: March 10/1.5.

Thomson

**Environmental Health Officer** 





**STAFF REPORT** 

			ngaan aa aa ahaa ahaa ahaa ahaa ahaa aha
то:	Paul Thorkelsson Chief Administrative Officer	DATE:	July 17, 2015
FROM:	Wendy Idema	MEETING:	July 28, 2015 Board
	Director of Finance	FILE:	

### SUBJECT: District 69 Search & Rescue Service Establishment

### RECOMMENDATIONS

- 1. That staff be directed to proceed with establishment of a new District 69 Search and Rescue Service through an alternative approval process, and
- 2. That staff be directed to establish the District 69 Search and Rescue Service on the basis of population with ongoing annual operational funding equivalent to that provided in District 68 to the Nanaimo Search and Rescue Society (\$2,625).

### PURPOSE

To consider establishment of a District 69 search and rescue contribution service, and to provide for advancing the bylaw to elector approval in conjunction with the 2016 budget schedule.

### BACKGROUND

The Board adopted the following resolution at its regular meeting held August 26, 2014:

That staff be directed to investigate the opportunities, costs and funding options to provide on-going funding support to the Arrowsmith Search and Rescue in School District 69 and report back to the Board in time for consideration of funding through the 2015 Regional District of Nanaimo Budget process.

As well in February 2015, representatives of the Arrowsmith Search & Rescue (ASAR) group presented to the Board on their activities and requested funding support. As a result of that presentation, the following motion was passed at the February 24, 2015 Board meeting.

That the Board grant \$5,000 to Arrowsmith Search and Rescue for a one-time funding bequest for 2015; and that staff provide the Board with options to create a District 69 Search and Rescue Service Area for 2016 and onwards.

The RDN funds both land and marine search and rescue in the District 68 area, and a new marine search and rescue funding contribution was established for Area H in 2014 to fund the Lighthouse Country Marine Rescue Society for \$5,000 annually. There has been some funding to the ASAR through the grants-in-aid program over the years, but not on a consistent annual basis. As well, ASAR built an addition to the Coombs-Hilliers fire hall in 2003 for their training headquarters and for storage of their equipment and vehicles. There is a long term agreement with them at no charge for use of this RDN property.

The ASAR annual operating budget is attached for information which indicates approximately \$17,850 in budgeted expenses for their March 2015 to February 2016 year.

### ALTERNATIVES

- 1. Direct staff to proceed with establishment of a new District 69 Search and Rescue Service through an alternative approval process with ongoing annual funding equivalent to that provided in District 68 to the Nanaimo Search and Rescue Society.
- 2. Direct staff to proceed with establishment of a new District 69 Search and Rescue Service through an alternative approval process with a different annual funding amount.
- 3. Provide alternate direction to staff.

### FINANCIAL IMPLICATIONS

### <u>Alternative 1</u>

The Nanaimo Search and Rescue Society is provided with two amounts annually. The RDN remits \$24,000 annually to the City of Nanaimo for their rental of space from the City, and an operating grant is provided directly to the Society for \$5,975 annually. The requisition for this service is allocated based on population and the operating grant amount is equivalent to \$0.0587 per capita in D68 including Nanaimo, Lantzville and Electoral Areas A, B & C.

Providing an equivalent operating amount to ASAR based on the population of Parksville, Qualicum Beach and Electoral Area E, F, G & H would result in an amount of \$2,625 in annual funding (44,712 population X \$0.0587). This equates to an amount per \$100,000 of between \$0.02 and \$0.04 as follows:

	Allocation to raise \$2,625	Cost per \$100,000
Parksville	\$703	\$0.03
Qualicum Beach	\$510	\$0.03
Electoral Area E	\$345	\$0.02
Electoral Area F	\$436	\$0.04
Electoral Area G	\$420	\$0.03
Electoral Area H	\$211	\$0.02

This calculation excludes the portion of funds raised in D68 for space rental as the ASAR does not pay any amount to the Coombs-Hilliers Fire Service for having their building on the fire hall land.

There would also be a requisition in the first year to complete an elector approval process which is estimated at \$3,000 for an alternative approval process; or if the Board wishes to do a full referendum, costs are estimated at upwards of \$100,000.

### <u>Alternative 2</u>

If the Board wishes to proceed with an alternate amount of funding or to include an amount in the requisition for payment to the Coombs-Hilliers Fire Service for use of the fire hall property, the cost implications would depend on the amount to be raised. For example, raising a total of \$5,000 based on population results in a cost per capita of \$0.11 and the following cost impacts by area.

	Allocation to raise \$5,000	Cost per \$100,000
Parksville	\$1,340	\$0.06
Qualicum Beach	\$971	\$0.05
Electoral Area E	\$657	\$0.04
Electoral Area F	\$830	\$0.08
Electoral Area G	\$800	\$0.05
Electoral Area H	\$402	\$0.04

There would also be a requisition in the first year to complete an elector approval process which is estimated at \$3,000 for an alternative approval process; or if the Board wishes to do a full referendum, costs are estimated at upwards of \$100,000.

### Alternative 3

The financial implications of alternative 3 are unknown at this time and would depend on what alternate direction was provided.

### STRATEGIC PLAN IMPLICATIONS

Provision of funding to the Arrowsmith Search and Rescue is supported by the Strategic Plan under the Regional Federation Goals and Actions:

- Enhance the reputation of the RDN as a valuable and effective level of government for delivering services, exploring regional issues, and creating opportunities for dialogue with residents by:
  - o Supporting volunteer opportunities for residents, and

### SUMMARY/CONCLUSIONS

The RDN funds both land and marine search and rescue in the District 68 area, and a new marine search and rescue funding contribution was established for Area H in 2014 to fund the Lighthouse Country Marine Rescue Society for \$5,000 annually. There has been some funding to the ASAR through the grants-in-aid program over the years, but not on a consistent annual basis. As well, ASAR built an addition to the Coombs-Hilliers fire hall in 2003 for their training headquarters and for storage of their equipment and vehicles. There is a long term agreement with them at no charge for use of this RDN property.

The cost to provide funding for this service if it is allocated based on population as is done for the District 68 service will be dependent on the amount of funding. Providing an amount equivalent to what is provided to the Nanaimo Search and Rescue Society (\$0.0587 per capita) for operating costs would

raise \$2,625 with a cost per \$100,000 of assessed value of between \$0.02 and \$0.05. There would also be costs in the first year for an elector approval process which are estimated at upwards of \$100,000 for a full referendum versus \$3,000 for an alternative approval process.

**Report Writer** 

C.A.O. Concurre

# ASAR - Fixed Overhead Costs

Fiscal year	Administration & Radio Licenses	Vehicle Insurance, Maintenance, & Training Fuel	Equipment Insurance & Maintenance		Building Insurance & Maintenance	Total
2015 – 2016 (Budget)	\$1,650.00	\$5,400.00	\$4,200.00	\$4,800.00	\$1,800.00	\$17,850.00
2014 – 2015 (est.)	\$1,647.25	\$3,682.74	\$4, 187, 33	<b>5</b> 4,962 (6)	\$1,419.34	\$15,898,66
2013 - 2014	\$918.63	\$4,144,0°	\$4,250.92	9991 V V	\$1,316.04	\$15.046.73
2012 - 2013	\$2,396,80	\$7.623.66	S 545.57	\$5,778,88	\$2,069.53	\$19,514.74
2011 - 2012	\$3,524,68	\$2,424.60	\$1,757,66	\$3,868.73	11.00	\$14.746.84
2010 - 2011	\$1,898.15	\$3,749.92	\$1,341.00	S3,982.1	51,223,11	\$12,194.29
Average	\$2,054.06	\$4,485.67	\$2,248.86	\$4,511.59	\$1,944.96	\$15,480.25

	Regional District	EAP	REPORT PPROVAL	STAFF REPORT
	OF NANAIMO	RHD BOARD		
то:	Paul Thorkelsson Chief Administrative Office	er	DATE:	July 20, 2015
FROM:	Wendy Idema		MEETING:	July 28, 2015 Board
now.	Director of Finance		FILE:	

### RECOMMENDATION

1. That Policy A2.20 for short and long-term investments be approved.

Short and Long Term Investment Policy

### PURPOSE

SUBJECT:

To consider establishment of an investment management policy for the Regional District of Nanaimo.

### BACKGROUND

The Regional District of Nanaimo (RDN) has traditionally held the bulk of its reserve funds in longer term investments such as with the Municipal Finance Authority (MFA) with shorter term funds held within our bank. Over the last few years, the need for the ability to maximize short-term investments has arisen partially as a result of the declining interest rates which have made it difficult to obtain better returns on long-term investments. Also, the significant capital program being undertaken in wastewater and water in the next couple of years will increase our cash flow need in the shorter term. As a result, it would be beneficial to be able to seek out competitive rates through the various banks and credit unions allowed under section 183 of the *Community Charter* referenced by the *Local Government Act* section 814(3) which states:

**183** Money held by a municipality that is not immediately required may only be invested or reinvested in one or more of the following:

- (a) securities of the Municipal Finance Authority;
- (b) pooled investment funds under section 16 of the *Municipal Finance Authority Act*;
- (c) securities of Canada or of a province;
- (d) securities guaranteed for principal and interest by Canada or by a province;
- (e) securities of a municipality, regional district or greater board;
- (f) investments guaranteed by a chartered bank;
- (g) deposits in a savings institution, or non-equity or membership shares of a credit union;
- (h) other investments specifically authorized under this or another Act.

The RDN Draft Investment Policy A2.20, attached, uses industry best practices, and incorporates recommendations pursuant to the Government Finance Officers Association around investment policies. The attached is a model policy format widely used by other organizations for investment policies.

The RDN investment policy would apply to the investment activities for all funds maintained by the RDN including Operating Funds, Capital Funds and Reserve Funds. The overarching principle is to ensure diversification of investments and to invest public funds in a prudent manner within prescribed limits while providing the highest possible investment return. The portfolio percentage limits by institution and the credit rating standards recommended are intended to ensure the risk is reduced in the event that a particular institution is unable to repay the amount invested.

Under the *Community Charter*, local governments in BC are allowed to invest with credit unions as well as banks and the MFA. Credit Unions do not generally obtain credit ratings; however under the *Financial Institutions Act* (Section 266(2), the Credit Union Deposit Insurance Corporation of British Columbia guarantees all deposits of BC Credit Unions. BC Credit Unions are regulated by the Financial Institutions Commission ("FICOM") in accordance with the *Financial Institutions Act*. This legislation requires BC Credit Unions to operate in a safe and sound manner and provides FICOM the authority to ensure financial stability and prudent operations. Similar legislation and deposit insurance guarantees are in place across Canada for credit unions in other provinces.

In light of the declining interest rates more and more local governments are now looking at a variety of options for investment including investing with credit unions as they have been able to offer very competitive rates for investment.

### ALTERNATIVES

- 1. That Policy A2.20 for short and long-term investments be approved.
- 2. Provide alternative direction to staff.

### FINANCIAL IMPLICATIONS

### Alternative 1

In 2014, the RDN earned a total of \$1,188,036 on investments equivalent to approximately 1.5% on the year end investments and cash balances. Balances held with the bank earn prime less 1.725% which given the recent interest rate drops in January and July is now equal to 0.975%. As of the date of writing, competitive rates from banks and credit unions are between 1.25% and 1.35% on a one-year term deposit and the MFA is indicating an annual return at June 30, 2015 of 1.04% on their short term Money Market fund.

Currently the RDN holds approximately \$36.5 million with the MFA in their long-term investments and approximately \$35 million in short-term bank investments. Use of the Investment Policy attached and use of competitive bidding with banks and credit unions for quotes on funds held in reserve may provide for better returns on the approximately \$70 million held in short and long term funds at this time.

### Alternative 2

The financial implications of alternative 2 are unknown at this time and would depend on what alternative direction was provided.

### STRATEGIC PLAN IMPLICATIONS

Approval of the attached Investment Management Policy will directly reflect the Board's requirement for fiscal responsibility within current economic conditions. It allows for diversification of the portfolio and opportunities to maximize returns within the *Community Charter* legislated guidelines and given the current restrictive interest environment.

### SUMMARY/CONCLUSIONS

The Investment Policy recommended for the Regional District of Nanaimo meets the statutory requirements under the *Local Government Act* and provides criteria to ensure the RDN's capital is preserved and rate of return maximized while maintaining sufficient liquidity. The new policy template is in line with the Government Finance Officers Association (GFOA) standards and best practices used by other jurisdictions.

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Report Writer

C.A.O. Concurrence

### **REGIONAL DISTRICT OF NANAIMO**

### POLICY

SUBJECT:	Short and Long-Term Investments	POLICY NO .:	A2.20
		CROSS REF.:	
EFFECTIVE D	ATE: August 1, 2015	APPROVED BY:	Board
REVISION DA	TES:	PAGE:	1 of 4

### PURPOSE

The purpose of the investment policy of the Regional District of Nanaimo (RDN) is to provide the framework for investment portfolio management. It is the policy of the RDN to invest RDN funds in a manner that will provide the optimal blend of investment security and return while meeting the short and long term cash flow demands and complying with the statutory requirements of the *Local Government Act*.

### POLICY

### 1. Scope

The investment policy applies to all cash operating funds, capital funds and reserve funds.

### 2. Objectives

The investment of funds must reflect a conservative management philosophy based on three fundamental objectives, in the following order of priority:

### 2.1 Safety of Principal

Investments shall be made to ensure preservation of principal within the portfolio. Preservation of principal is accomplished through placement of funds with creditworthy institutions and through portfolio diversification. Diversification is required to minimize potential losses on individual securities and to maximize the yield from a blend of financial products.

### 2.2 Liquidity

The investment portfolio shall remain sufficiently liquid to meet all reasonably anticipated operating requirements.

### 2.3 Return on Investment

The investment portfolio shall be designed with the objective of maximizing market rate of return subject to the investment risk constraints and liquidity requirements of the RDN.

### 3. Standard of Care

### 3.1 Prudence

Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs. Investments will not be made for speculation. Foremost will be consideration for the safety of capital. Staff must be aware of reasonably foreseeable risks, trends and fluctuations in the market, and be able to recognize unreasonable risks whilst ensuring the liquidity of the investment portfolio.

### 3.2 Ethics and Conflict of Interest

Staff responsible for investing shall refrain from personal business activity that could conflict with proper execution of the investment program, or which could impair the ability to make impartial investment decisions.

### 3.3 Delegation of Authority

Authority to manage the RDN investment program is granted to the Director of Finance and to the Manager of Accounting Services and is derived from Section 199 of the *Local Government Act* as follows:

Section 199: One of the officer positions established under section 196 must be assigned the responsibility of financial administration, which includes the following powers, duties and functions investing funds, until required, in investments referred to in section 183 of the Community Charter (investment of municipal funds).

The Director of Finance and Manager of Accounting Services acting in accordance with the investment management policy and exercising due diligence, shall be relieved of personal responsibility for any individual securities credit risk or market price change, provided deviations from expectations are reported in accordance with the investment management policy and the portfolio strategy is reviewed to control adverse developments

### 4. Credit Risk Monitoring

In addition to in-house monitoring, the RDN may make use of the credit analysis of the Dominion Bond Rating Service. It must be recognized that the use of any credit analysis is an assessment and not a guarantee for safety of principal.

### 5. Authorized and Suitable Investments

Money held by the Regional District of Nanaimo may be invested or reinvested according to section 183 of the *Community Charter* subject to the following conditions:

- 5.1 Investments in securities of a chartered bank or savings institution or any province must:
  - i) Have a Dominion Bond Rating Service (DBRS) rating of R-1 mid or higher for Short term debt and a rating of AA for Long-term debt or Bonds or comparable ratings of another rating organization, indicating superior credit quality (See Appendix 1 of the policy).
  - ii) Be purchased directly from the chartered bank, savings institution or province or from an investment dealer who is a member of the Investment Industry Regulatory Organization of Canada who will act as an agent for the institutions with the approved DBRS rating.
- **5.2** Investments in credit union deposits must be covered by unlimited deposit insurance protection such as the *Financial Institution Act* of the Province of British Columbia which provides insurance on all deposits in British Columbia credit unions.
- 5.3 Investments shall be held in the name of the RDN by approved institutions.
- 5.4 Investments in any one security issue shall not exceed 10% of that security issue.
- **5.5** Investments with any one financial institution shall not exceed 20% of the RDN's maximum annual investment portfolio other than cash held with the RDN's designated bank for short term use.
- **5.6** The percentage limits specified in items 5.4 and 5.5 do not apply to investments made in securities of Canada, the Province, the Municipal Finance Authority of British Columbia (MFA) or pooled investments funds under section 16 of the *Municipal Finance Authority Act*.

### 6. Investment Parameters

### 6.1 Diversification

The RDN will diversify its cash reserve investments by security type and institution, taking into consideration the impact on return on investment.

### 6.2 Maturity

To the extent possible the RDN shall attempt to match its investments with anticipated cash flow requirements. However, because of inherent difficulties in accurately forecasting cash flow requirements, a portion of the portfolio shall be continuously invested in readily available funds to meet ongoing obligations. Long term investments may be acquired if the maturity is related to a specific program, and is made to coincide as nearly as practicable with the expected use of the funds attached to that program.

### 7. Competitive Bids

The RDN shall solicit competitive verbal quotations for the purchase and sale of securities when it is prudent to do so. This policy recognizes that, from time to time, offerings of value may require immediate action. Under such circumstances competitive bids may not be sought provided that value can be substantiated by market data information services.

### 8. Safekeeping and Custody

All security transactions entered into by the RDN shall be conducted on a delivery versus payment basis. The Director of Finance must be satisfied that physical possession of the security is in possession or held by a custodial service.

### 9. Application of Interest Earned

The RDN shall distribute proportionately the total annual interest earned on the investment portfolio to each reserve fund based on the 'actual' average monthly balance held in the reserve fund for the year. 'Actual' refers to the physical cash on hand in each reserve fund each month and does not consider accounting entries where funds have not been physically transferred to or from the fund.

### 10. Policy Review

This policy shall be reviewed periodically by the Director of Finance to ensure congruence with changing activities of the RDN, market conditions, technology, evolving regulatory standards and private industry best practices. In addition, to insure periodic review, this policy will be reconsidered each time the RDN tenders its banking services.

### 11. Reporting

The Director of Finance must report to the Board annually in conjunction with the annual audited financial statement reporting. The report must identify investment holdings and any deviations from policy.

### Appendix 1

Commercial Paper & Short Term Debt	Commercial Paper & Short Term Debt	Bond & Long Term Debt	Bond & Long Term Debt
DBRS Symbol	Credit Quality	DBRS Symbol	Credit Quality
R-1 (high)	Highest	ААА	Highest
R-1 (mid)	Superior	AA	Superior
R-1 (low)	Good	A	Good
R-2 (high)	Adequate	BBB (high)	Adequate
R-2 (mid)	Adequate	BBB	Adequate
R-2 (low)/R-3	Adequate	BBB (low)	Adequate
R-4	Speculative	BB	Speculative
R-5	Highly Speculative	В	Highly Speculative
R-5	Highly Speculative	CCC/CC/C	Highly Speculative
D	In Arrears	D	In Arrears
NR	Not Rated		

### Dominion Bond Rating Service (DBRS) ratings on credit quality