

WILDERNESS MOUNTAIN WATER SERVICE COMMISSION Notice of Meeting on Thursday, December 14, 2017 at 10 a.m. Main Conference Room, 479 Island Highway, Victoria, BC

Rob Hancock (Chair) Director Mike Hicks Chuck Taylor

AGENDA

- 1. Approval of Agenda
- 2. Adoption of Minutes of October 28, 2016
- 3. Island Health Discussion
- 4. 2018 Operating and Capital Budget

(staff report)

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- 5. Correspondence
- 6. New Business
- 7. Adjournment



Minutes of a Meeting of the Wilderness Mountain Water Service Commission Held October 28, 2016 in the Main Conference Room, 479 Island Highway, Victoria, BC

PRESENT: Committee Members: R. Hancock (C), C. Taylor, S. Williamson

Staff: I. Jesney, Senior Manager, Infrastructure Engineering, M. McCrank, Senior Manager, Infrastructure Operations, S. Mason, Manager, Water Engineering and Planning, T. Scaber, Manager, Water System Operations, C. Moch, Manager, Water Quality Operations, V. Deane, Manager, Water Treatment Operations, S. Irg, Project Engineer, Kyu-Chang Jo, Financial Analyst, L. Siemens (recorder)

ABSENT: Director M. Hicks

The meeting was called to order at 10 a.m.

1. Approval of Agenda

The following item was added to the agenda under New Business:

Annual General Meeting – discussion on proposed process.

MOVED by C. Taylor, **SECONDED** by S. Williamson, That the agenda be approved as amended.

CARRIED

2. Adoption of Minutes of March 29, 2016

MOVED by R. Hancock, **SECONDED** by S. Williamson, That the minutes of March 29, 2016 be adopted as previously distributed.

CARRIED

3. Wilderness Mountain Water Service Water Quality and System Improvements

M. McCrank provided a verbal summary of the call-outs for the Wilderness Mountain waster service over the summer months to address water quality issues.

I. Jesney presented a written report.

MOVED by R. Hancock, **SECONDED** by C. Taylor, That the Wilderness Mountain Water Service Commission direct staff to:

- Complete Items 1 and 3 for an estimated cost of \$25,000 to be funded from the Capital Reserve Fund (CRF); and
- 2. Include Items 4 and 5 in a future update to the Wilderness Mountain Strategic Asset Management Plan.

CARRIED

IWSS-928280410-4975

4. 2017 Operating and Capital Budget

I. Jesney presented a written report and the 2017 Operating and Capital Budget documents.

MOVED by C. Taylor, SECONDED by S. Williamson,

That the fixed consumption revenue be increased by \$1,920 (flat rate of \$20 per month), that the parcel tax be reduced by \$12,130 and the user charge be increased by \$12,130 (50% split).

CARRIED

MOVED by C. Taylor, SECONDED by S. Williamson,

That the Wilderness Mountain Water Service Commission recommend that the Capital Regional District Board:

- 1. Approve the 2017 operating and capital budget for the Wilderness Mountain water system as amended;
- 2. Approve the 2017 Parcel Tax rate of \$715.44; User Charge of \$748.59, and fixed consumption charge of \$240 for the Wilderness Mountain water system; and
- 3. Balance the 2016 estimated actual expense and revenue on the 2016 amount carried forward to 2017 and the 2017 contingency.

CARRIED

MOVED by C. Taylor, SECONDED by S. Williamson,

That CRD staff proceed immediately with the Tank Safety Improvements for \$20,000 and that it be funded from the capital reserve fund.

CARRIED

5. New Business

Annual General Meeting

I. Jesney discussed the content of the AGM with the commission.

Emergency Mass Notification

M. McCrank introduced the mass notification procedure that CRD Emergency Services are bringing forward to the electoral areas. It was discussed that this procedure would be another communication tool that can be called upon for the service in the event of an emergency such as a Boil Water Advisory.

6. Adjournment

MOVED by R. Hancock, **SECONDED** by C. Taylor, That the meeting be adjourned at 11:20 a.m.

CARRIED



REPORT TO WILDERNESS MOUNTAIN WATER SERVICES COMMISSION MEETING OF THURSDAY, DECEMBER 14, 2017

SUBJECT 2018 OPERATING AND CAPITAL BUDGET

ISSUE

To present the 2018 operating and capital budget. In accordance with Bylaw No 3511, "Wilderness Mountain Water Service Commission Bylaw No. 1, 2008" the committee's approval of the annual budget is required.

BACKGROUND

The Capital Regional District (CRD) is required by legislation under the *Local Government Act* (LGA) to prepare an annual operating and capital budget and a 5-year financial plan including Operating Budgets and Capital Expenditure Plans annually. CRD staff have prepared the financial plan shown in Appendix A to this report for the Wilderness Mountain Water Service.

The Operating Budget includes the regular annual costs to operate the service. The Capital Expenditure Plan shows the anticipated expenditures for capital additions. These may include purchases of new assets or infrastructure as well as upgrades or improvements to existing assets.

In preparing the Operating Budget, CRD staff took into account:

- 1. Actual expenditures incurred between 2015 and 2017
- 2. Anticipated changes in level of service (if any)
- 3. Maximum allowable tax requisition
- 4. Annual Cost per taxpayer and per SFE

Factors taken into consideration in the preparation of the Capital Expenditure Plan included:

- Available funds on hand
- 2. Projects already in progress
- 3. Condition of existing assets and infrastructure
- 4. Regulatory, environmental, and health and safety factors.

The proposed Operating and Capital budget for the Service will be presented to the Electoral Area Services Committee and to the CRD Board in the fall of 2017. Adjustments for surpluses or deficits from 2017 may be made in January 2018. The CRD Board will give final approval to the budget and financial plan in March 2018.

The Financial Plan for the years 2019 – 2022 may be changed in future years.

IWSS-928280410-5311 4

BUDGET OVERVIEW

Operating Budget

It is anticipated that operating expenses in 2017 will be approximately \$23,310 over budget due to response to a watermain leak and a service line leak, upgrades to the Wilfred Reservoir Dam to permit safe access, upgrades to one of the water treatment plant roofs, as well as water treatment components (e.g. filters, UV lamps). In order to reduce the projected deficit, CRD staff recommend that the costs for the following upgrades be recovered through the Capital Reserve Fund:

- Urgent capital upgrades were required to one of the Wilfred Reservoir Dams to permit safe operation and maintenance of the dam. The upgrades to the Dam included hand rails on the dam crest, access improvements, and upgrades to the lower level outlet valve assembly. These upgrades totaled \$12,660.
- Emergency capital upgrades to the filter building roof involved upgrading the electrical power mast, and upgrading a 10 by 15 foot section of roof that had been impacted by carpenter ants and was leaking. The plywood, insulation and shingles were replaced. These upgrades totaled \$5,975.

Recovering these costs through the Capital Reserve Fund reduces the deficit to approximately \$4,625 which is proposed to be carried forward as a deficit to be recovered in 2018. In order to minimize the impact to the user fees and taxes, it is proposed that the \$5,000 contingency be reduced by \$4,625 in 2018.

The 2018 operating budget has been increased by 7% to account for inflation as well as an increase in supplies and labour primarily associated with operation and maintenance of the filters.

Municipal Finance Authority (MFA) Debt

MFA debt servicing costs are incurred on debt of \$281,000 issued in 2012 at 3.4% interest. The annual debt servicing cost of \$23,580 will remain unchanged in 2018.

Contingency

The Operating Reserve is to be used for the purchase of equipment and supplies that are typically not replaced annually such as filter media, ultraviolet lamps and sensors. Additionally, the reserve could be used for unplanned significant repairs. There is no Operating Reserve Fund for this Service so it is recommended that a contingency of \$5,000 be included in 2018. In order to minimize the impact to the user fees and taxes, it is proposed that the \$5,000 contingency be reduced by the projected 2017 deficit of \$4,625 in 2018.

Capital Reserve Fund

The Capital Reserve Fund is to be used to pay for capital expenditures that are not funded by other sources such as grants, operating budget or debt. The transfer to the Capital Fund is proposed to increase by \$18,635 in 2017 to pay for the Dam Safety Upgrades and Roof Upgrades as described above in the Operating Budget section. The balance at the end of 2017 is projected to be \$41,739.

Capital Expenditure Plan

The 5-year plan includes \$1,212,500 of expenditures to be funded by a combination of the Service's Capital Reserve Fund and debt.

The large portion of these expenditures is to address the requirements to achieve the *Drinking Water Treatment Objectives (microbiological)* for *Surface Water Supplies in British Columbia* (SWTO). It is proposed that in 2018 an options and feasibility study be completed which will inform a decision by the Commission and the community through a public engagement and referendum as to what upgrades to complete to meet the SWTO. In the years 2019-2021 a project budget of \$1,100,000 has been allocated to complete the approved upgrades from the options study. The final budget for the upgrades will be determined once the actual scope of the upgrades has been established.

Capital Funds on Hand

As specific capital projects are approved, the funding revenues for them are transferred into this Capital Project Fund. Whenever possible, any funds remaining upon completion of a project are transferred back to the Capital Reserve Fund for use on future capital projects. There is a planned transfer of \$32,928 from the Capital Projects Fund to the Capital Reserve Fund in 2017.

User Charge and Parcel Tax

The user charge and parcel tax fund the service. Typically the user charge funds the operational costs and the parcel tax funds the debt and Capital Reserve Fund contributions. Properties connected to the water system pay the annual user charge and all properties within the local service area are responsible for the parcel tax. The proposed 2018 user charge of \$849.72 and parcel tax of \$774.36 are both increases from 2017. The fixed consumption charge of \$20.00 will remain at the 2017 rates. Historical user charge and parcel tax rates are included for information.

RECOMMENDATION

That the Wilderness Mountain Water Services Commission:

- 1. Approve the 2018 operating and capital budget as presented, and recommend that the 2017 actual deficit be balanced on the 2017 transfer from Capital Reserve Fund (estimated to be \$18,635) and the remaining deficit be brought forward as an expense in the 2018 budget; and
- 2. Recommend that the Electoral Area Services Committee recommend that the CRD Board approve the 2018 Operating and Capital Budget and the five year Financial Plan for the Wilderness Mountain Water Service as presented.

Submitted by	Matthew McCrank, MSc., P.Eng., Senior Manager, Infrastructure Operations
Submitted by	lan Jesney, P.Eng. Senior Manager, Infrastructure Engineering
Submitted by	Rianna Lachance, BCom, CPA, CA, Senior Manager, Financial Services
Concurrence	Ted Robbins, B.Sc., C.Tech., General Manager, Integrated Water Services
Concurrence	Robert Lapham, MCIP, RPP, Chief Administrative Office

MMc/IJ/RL:Is Attachment: 1

2018WMWBUDGET Nov 10 2017

CAPITAL REGIONAL DISTRICT

2018 Budget

Wilderness Mountain Water Service

Commission Review

Compiled and Presented by CRD Finance

Service: 2.691 Wilderness Mountain Water Service

DEFINITION:

To finance, operate and maintain the supply, conveyance, treatment, storage and distribution of water to the Wilderness Mountain Local Service area that is within the JDF Electoral Area. The service was established by Bylaw No. 3503, adopted on May 14, 2008.

PARTICIPATION:

Wilderness Mountain Local Service Area

MAXIMUM LEVY:

Greater of \$130,000 or \$3.27/ \$1,000 of actual assessed value of land and improvements to a maximum of \$141,190

MAXIMUM CAPITAL DEBT:

\$281,000 (MFA Bylaw No.3504, Wilderness Mountain Water Service adopted on May 14, 2008) \$281,000 (MFA Bylaw No.3504, Wilderness Mountain Water Service) Maximum Authorized: Borrowed:

COMMISSION:

Wilderness Mountain Water Service Commission established by Bylaw No. 3511 (July 9, 2008).

FUNDING:

Consumption Charge:

Water Consumption charge will be collected from each Single Family Equivalent connected to the water system based on the rates defined in Bylaw No. 4170.

User Charge:

Collected as a fixed user fee charged quarterly to each Single Family Equivalent connected to the system

Parcel Tax:

Charged to each taxable parcel in the service area whether connected or not.

RESERVE FUND # 1075:

Approved by Bylaw No. 3535 adopted on November 12, 2008.

		E		BUDGET REQUEST	REQUEST			FUTURE PROJECTIONS	JECTIONS	
Wilderness Mountain Water Service	2017 BOARD	ESTIMATED	900	2018	89					
	BUDGET	ACTUAL	BUDGET	ONGOING	ONE-TIME	TOTAL	2019	2020	2021	2022
OPERATING COSTS:										
Contract for Services	1,010	10,168	1,000	54	n#s	1,000	1,020	1,040	1,060	1.080
Allocations Electricity	14,040	14,040	14,470	84 4	(d)	14,470	14,760	15,060	15,370	15,680
Supplies	3,760	15,000	11,220			11 220	6,120	6,240	6,360	6,490
Labour Charges	006'09	64,642	65,000	. 10		65,000	990	67,630	008,17	70,350
Cortaingency Other Operating Expenses	12,430	16,360	375 11,480	#2#A	86 83	375 11,480	5,100	5,200	5,300	5,410
TOTAL OPERATING COSTS	102,400	125,710	109,545	ä	(t.	109,545	116,430	118,730	121,080	123,490
*Percentage Increase over prior year						2.0%	6.3%	2.0%	2.0%	2.0%
<u>DEBT/CAPITAL</u> Transfor to Canital Resenue Fund	\	2	(
MFA Debt Principal MFA Debt interest	14,030	14,030	14,030	9 (9)	(* 201) * - 1	14,030	14,030	68,970	71,470	71,470
	5	200	OGC 's	•	•	000'6	18,720	64,970	64,970	67,050
TOTAL CAPITAL / RESERVES	23,580	23,580	23,580	*	*	23,580	32,750	133,940	136,440	138,520
TOTAL COSTS	125,980	149,290	133,125	•		133,125	149,180	252,670	257,520	262,010
FUNDING SOURCES (REVENUE)										
Estimated Deficit off from 2017 to 2018	*	(4,625)	4,625	3	19	4,625		E.	10	37
Surplus / Deficit carried forward from 2016 to 2017	2007	* 6		Ĭ.	00		(4	7.	(4)	-
Sale - Water Sale - Water Transfers from Capital Reserve Fund	(17,040)	(17,040) (18,635)	(17,040)	10	305(00)	(60,330)	(17,040)	(117,790) (17,040)	(120,215) (17,040)	(122,460) (17,040)
Other Income	(20)	(100)	(20)	9)	X	(20)	(20)	(20)	(09)	(20)
TOTAL REVENUE	(70,240)	(93,550)	(72,795)	()	5.0	(72,795)	(83,135)	(134,880)	(137,305)	(139,550)
REQUISITION - PARCEL TAX	(55,740)	(55,740)	(60,330)	8 8	7.€	(60,330)	(66,045)	(117,790)	(120,215)	(122,460)
*Percentage increase over prior year requisition						8.2%	9.5%	78.3%	2 1%	1 9%

Reserve Schedule

Reserve Fund: 2.691 Wilderness Mountain Water Capital Reserve Fund (Bylaw No.: 3535)

Fund: 1075 Fund Center: 101994	Estimated			Budget		
	2017	2018	2019	2020	2021	2022
Beginning Balance	96,877	41,739	16,739	6,739	6,739	6,739
Transfer to Cap Fund (Based on Capital Plan)	(88,635)	(25,000)	(10,000)	•	Ĭ	¥
Transfer from Operating Budget	şi.	2	ı	•)	٠	1
Transfer from Cap Fund	32,928	1	ā	ũ	1	•
Interest Income*	569	•	1.	ï	i ii	9
Ending Balance \$	41,739	16,739	6,739	6,739	6,739	6,739

Assumptions/Background:

Transfer as much as operating budget will allow

^{*} Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

CAPITAL REGIONAL DISTRICT CAPITAL PLAN

2018 & Forecast 2019 to 2022 CAPITAL BUDGET FORM

Service #: Service Name:

2.691 Wilderness Mountain Water Service

year the project was in the capital The first two digits represent first Project No. plan.

New Construction/ Project: Expenditure for new asset only Capital Expenditure Type

Renewal: Expenditure replaces an existing asset and extends the service ability or enhances technology in delivering that service Replacement: Expenditure replaces an existing asset

						1000						
Proj.			Total Project Asset Funding	Asset	Funding	Forward						× × ×
Š.	Capital Exp. Type	Capital Project Description	Budget	Class	Source	from 2017	2018	2019	2020	2021	2022	Total
16-05 New	New	William Brook Reservoir - Transfer Agreement	\$2,500		Cap	\$2,500	\$2,500	\$0	\$0	\$0	O\$	2,500
17-01 New	New	Source Water Vulnerability Study	\$25,000	S	Grant	\$0		\$0	80	08	\$25,000	25,000
18-01 New	New	Water Service Options Analysis	\$25,000	S	Res	\$0	\$25,000	80	80	\$0	\$0.00	25,000
19-01 New	New	Public Engagement & Referendum	\$10,000	S	Res	80		\$10,000				10.000
19-02 New	New	Treatment / Supply Improvements	\$1,100,000	S	Debt			\$100.000	\$500,000	\$500 000		1 100 000
20-01	20-01 Renewal	Pipeline Pigging Upgrades	\$50,000	S	Debt	\$0			\$50,000			50,000
												i
		Total	1,212,500			2,500	27,500	110,000	550,000	900,000	25,000	25,000 1,212,500

- Engineering Structure - Buildings - Vehicles - Equipment - Land Asset Class SB>H

= Capital Funds on Hand= Donations / Third Party Funding= Reserve Fund= Short Term Loans

 Debenture Debt (new debt only) = Equipment Replacement Fund = Grants (Federal, Provincial)

Funding Source Codes

ERF Grant

Other

Cap Res Wilderness Mountain Water Service Service: 2.691 Proj. No. 16-05

Capital Project Description Funding required for legal fees to transfer of the William Brook Reservoir. Corporate Priority Area Drinking Water Capital Project Title William Brook Reservoir - Transfer Agr Board Priority Area Other Asset Class Land

Project Rationale The William Brook reservoir was determined to be surplus to the needs of the water servoe and it is the ownership and operation of the dam and reservoir to another party. Funds are required for CRD staff and legal effort for the proposed transfer.

Study to detrnine the vulnerability of the Capital Project Description source water and its viability as a water Capital Project Title Source Water Vulnerability Study Proj. No. 17-01

Board Priority Area Other

Asset Class Engineered Structures

Project Rationale Study to determien the medium to long term vulnerability of the source water (Wiltred Reservoir) and its viability as a water source (quantity and quality) for the WMWS system in light of pressures such as projected demand changes and climate change, in addition, in light of the degradation of the source water that occurred in April - August 2016, determine if there are upgrades required to the Water Treatment Process to account for the raw water quality. This is a requirement of the operating permit and is being deferred to 2022.

Corporate Priority Area Drinking Water

Capital Project Description Prepare report recommending future water service options for the service. Capital Project Title Water Service Options Analysis Proj. No. 18-01

Board Priority Area Other

Asset Class Engineered Structures

Project Rationale To meet Island Health requirements, an options analysis is required to determine the best way to deliver potable water to the service. The two prime options are enhanced treatment or service from the Juan de Fuca Water services. Funds are required to underfake an options analysis resulting in report with recommendation for future servicing.

Corporate Priority Area Drinking Water

Wilderness Mountain Water Service Service: 2.691

Capital Project Description Public engagement and a referendum is required for funding future projects. Capital Project Title Public Engagement & Referendum Proj. No. 19-01

Project Rationale A loan will be required to fund the dedicated storage tank supply line, pipeline cleaning, treatment/supply improvements and any other capital work which will not be included under the capital reserve fund. The proposed loan will required public engagement and a referendum. Corporate Priority Area Drinking Water Board Priority Area Other Asset Class Engineered Structures

Based upon the Water Service Options Capital Project Description Analysis work on the chosen option will be carried out. Capital Project Title Treatment / Supply Improvements Proj. No. 19-02

Project Rationale Based upon the outcome of the Water Service Options Analysis and Public Engagement & Referendum, treatment and/or supply improvements will be designed and implemented. Improvements will be based upon feedback from the public engagement. Funds are required to carry out detailed design and construction.

Board Priority Area Other

Asset Class Engineered Structures

Corporate Priority Area Drinking Water

Capital Project Description Cleaning of the water mains through a use of a "pig". Capital Project Title Pipeline Pigging Upgrades Proj. No. 20-01

Board Priority Area Other

Asset Class Engineered Structures

Project Rationale Due to the water quality issues in April - August 2016, it is proposed to clean the water mains with a pigging process. Funds are required to retain services to pig the water mains and construct facilities to allow for the water main cleaning.

Corporate Priority Area Drinking Water

Wilderness Mountain Water Service

Capital Projects Fund

ear/Project#	Status	Capital Project Description	Total Budget	Expenditure Actuals	Remaining Funds	Funding Source- CRF*	Funding Source- CWF**	Return Surplus to CRF*	Return Surplus to CWF**
2015/CE.443	CLOSED	CLOSED Wilfred Reservoir Upgrade	10,000	(9.693)	307	10 000		207	
2016/CE.484	CLOSED	CLOSED Pump Upgrade	4,500	(3,821)	629	4 500		900	
2016/CE.515	OPEN	William Brook Reservoir	2,500		2.500	2 500		5	
2017/CE.587	OPEN	Pre Filtration	20,000	(17.596)	2 404	20,000			
2017/CE.588	CLOSED	CLOSED End of Line Flush	5,000		553	2,000		552	
:017/CE.589	CLOSED	CLOSED Ambience Tank handrail Installation	20,000)	6.389	20,000		380	
2017/CE.616	CLOSED	Vulnerability Study	25,000		25,000	25,000		25.000	
		Totals	87,000	(49,169)	37,831	87,000		0 32.928	

* CRF (Capital Reserve Fund)

^{**} CWF (Community Works Fund)

Assessments \$(000's)	47,206	43,643	46,751	42,680	43,178	49,803
Bylaw	3823	3892	3924	3987	4074	4170
Tax & Charges	\$1,497.20	\$1,587.00	\$1,612.23	\$1,701.37	\$1,738.44	\$1,724.03 \$1,884.08
Fixed Consumption	\$18.00	\$18.00	\$18.00	\$18.00	\$20.29	\$20.00 \$20.00
User Charge	\$558.81	\$570.59	\$566.50	\$613.43	\$759.29	\$748.59 \$849.72
Water Rate	\$216.00	\$216.00	\$216.00	\$216.00	\$243.43	\$240.00 \$240.00
SFE's	69	69	70	70	20	71
Parcel Tax	\$704.39	\$782.41	\$811.73	\$853.94	\$715.44	\$715.44 \$774.36
Taxable <u>Folios</u>	82	82	82	82	82	82
Year	2012	2013	2014	2015	2016	2017 2018



Integrated Water Services 479 Island Highway Victoria, BC, Canada V9B 1H7

T: 250.474.9600 F: 250.474.4012 www.crd.bc.ca

November 15, 2017

File: 5240-20 Wilderness Mountain - Water

Mr. Kazuhiro Takeuchi, BSc, BTech, CPHI(C) Environmental Health Officer Island Health, Gateway Village Health Unit Suite 201 – 771 Vernon Avenue Victoria, BC V8X 5A7

Dear Mr. Takeuchi,

RE: WILDERNESS MOUNTAIN WATER SYSTEM (CAPITAL REGIONAL DISTRICT), 706 CAINS WAY, SOOKE, BC

Thank-you for your letter of July 19, 2017 and our follow-up meeting on October 10, 2017 to discuss the content of the letter and the Wilderness Mountain Water System operation. At the meeting, it was agreed that the Wilderness Mountain Water System Operating Permit conditions require updating to reflect the current disinfection system operation and any other conditions that Island Health deem appropriate. Since the current operating permit was issued in 2013, the Capital Regional District (CRD) has operated the system in compliance with the permit and as discussed, is in the process of completing the drinking water source protection plan for the Wilfred Reservoir.

For background, Wilderness Mountain water disinfection improvements were constructed in 2012 under an Island Health construction permit (Permit No. W-S-14212 – Wilderness Mountain). The improvements included 25 micron and 5 micron cartridge filtration (two trains with one duty train), followed by ultraviolet disinfection (with a dosage rate at 40mJ/cm2 and NSF 55A certified ultraviolet equipment), then chloramination with pre-ammonia (30% aqua-ammonia) injection followed by 12% sodium hypochlorite injection. In July 2017, additional 50 micron and 20 micron cartridge filters were added ahead of the 25 micron and 5 micron cartridge filters. The disinfection equipment operation and maintenance procedures currently include site visits twice per week during which the 40mJ/cm2 ultraviolet dosage rate is confirmed and the filters are cleaned.

Prior to undertaking these improvements, in 2011 the CRD sought and received a deferral of the requirement for filtration of surface water and the 4 log inactivation of viruses set out in the Island Health 4-3-2-1 Policy. The deferral was based on a number of considerations with respect to source water protection, source water quality and proposed disinfection improvements. It is acknowledged that although the cartridge filters are providing operational benefits and improving the effectiveness of the current disinfection process, they are not providing health benefits in terms of pathogen removal and are therefore not considered a treatment step in this case.



Based on our October 10 meeting, we understand that Island Health is seeking confirmation of a plan for the Wilderness Mountain water system to achieve the *Drinking Water Treatment Objectives (microbiological) for Surface Water Supplies in British Columbia* (SWTO). We understand that this requirement comes as a result of increasing concerns with the variability of the source water quality, particularly with respect to turbidity levels and potential algal toxin risks. For Wilderness Mountain, this primarily means establishing a strategy to remove the filtration deferral and further improve the treatment methods. Alternatively, the CRD could explore the feasibility of connecting the Wilderness Mountain water system to the CRD Juan de Fuca Water Distribution thereby eliminating the need for on-site source water and treatment.

Therefore, the CRD proposes the following plan and timeline to achieve the SWTO with the Wilderness Mountain water system:

- 1. Options and feasibility study (April 2018 October 2018)
- 2. Consultation with Wilderness Mountain Water Service Commission and service area customers (November 2018 December 2018)
- 3. Referendum to borrow funds to design and construct improvements (January 2019 March 2019)
- 4. Design, construction and commissioning of improvements (April 2019 June 2020)

Note that the proposed plan and timeline is subject to funding availability and approval by the CRD Board.

Please confirm Island Health's acceptance of this plan. We trust that an updated operating permit will be forthcoming. Should you wish to discuss this plan or the operating permit, or if you have any questions or require additional information, please contact me at trobbins@crd.bc.ca or 250.360.3061.

Yours truly,

Ted Robbins, B.Sc., C.Tech.

General Manager, Integrated Water Services



December 6, 2017

Ted Robbins General Manager, Integrated Water Services Capital Regional District 479 Island Highway Victoria, BC V9B 1H7

Dear Mr. Robbins,

Re: Wilderness Mountain Water System (Capital Regional District), 706 Cains Way, Sooke, BC, V9Z 1C5

Further to the letter dated November 15, 2017 submitted to this office, the filtration deferral will remain in place provided the following operating permit conditions are accepted:

- 1. A minimum UV dosage of 40 mJ/cm² and a residual of no less than 0.5 mg/L chloramines are to be maintained throughout the water supply to ensure adequate levels of disinfection are being achieved.
- 2. The water supplier is required to develop and implement a drinking water source (watershed) protection plan for the Wilfred Reservoir.

The suggested alternative to condition No. 2 noted above is the feasibility study of the current source versus connection to the CRD municipal system, which has been accepted by this office. Moreover, the CRD shall provide updates to this office on the progress of the suggested completion timelines listed in your November 15, 2017 letter.

Section 8(4) of the Drinking Water Protection Act states:

The drinking water officer or an issuing official may change the terms and conditions of an operating permit if the officer or issuing official considers this advisable, but must first consult with the water supplier respecting the proposed changes and must consider any comments of the water supplier in response.

As an issuing official, I have proposed the aforementioned operating permit conditions to update Wilderness Mountain Water System Operating Permit (No.: 64006902).

Please respond in writing within 30 days of receiving this notice if you wish to comment on the proposed changes to your permit. Your comments will be considered before a final decision is made.

Be advised that, short of judicial review, this is your only opportunity to influence the outcome of this process. Changes to the terms and conditions of an operating permit are not subject to reconsideration or review under Section 39.1 of the *Drinking Water Protection Act*.

Note that compliance with dates in the timeline is required regardless of funding availability. Moreover,

It is expected that this office is provided with any updates towards completion of each of the Activity required on the permit's Terms and Conditions.

If you have any questions, please contact the undersigned.

Kazuhiro Takeuchi, B.Sc., B.Tech., CPHI(C) Environmental Health Officer

c.c.: Dr. Richard S. Stanwick, M.D., M.Sc., F.R.C.P.C., F.A.A.P. – Chief Medical Health Officer, Fort Royal Medical Centre

Dr. Murray Fyfe, M.D., M.Sc., F.R.C.P.C. – Medical Health Officer, Fort Royal Medical Centre Christoph Moch – CRD Manager Water Quality Operations, 479 Island Highway, Victoria, BC Craig Nowakowski, BTech (EnvH), CPHI(C) – Supervisor,

Health Protection and Environmental Services, Gateway Office Rory Beise, BSc, BTech (EnvH), CPHI(C) – Drinking Water/Land Use Consultant, Gateway Office Joanne Lum, BTech, BSc, CPHI(C) – Senior Environmental Health Officer, Gateway Office

KT/jj