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## LYALL HARBOUR BOOT COVE WATER LOCAL SERVICE COMMITTEE

Notice of Meeting on **Tuesday, October 29, 2019 at 2:00 p.m.**

Capital Regional District Headquarters

625 Fisgard Street, Room 488

Jeanne Crerar  
Michael Fry  
Director Dave Howe

John Money  
Ian Rowe  
Jill Sabre-Makofka

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### AGENDA

1. Election of Chair
2. Approval of Agenda
3. Adoption of Minutes of November 8, 2018  
***Recommendation:** That the Lyall Harbour Boot Cove Water Local Service Committee adopt the minutes of the November 8, 2018 meeting.*
4. 2020 Operating and Capital Budget (Report #LHBC19-02)  
***Recommendation:** That the Lyall Harbour Boot Cove Water Local Service Committee:*
  1. *Approve the 2020 operating and capital budget, and recommend that the actual surplus or deficit be carried forward to 2020 and balanced against the 2020 User Charge; and,*
  2. *Recommend that the Electoral Area Services Committee recommend that the CRD Board approve the 2020 operating and capital budget and the five year Financial Plan for the Lyall Harbour Boot Cove Water Service as presented.*
5. Motion to close the meeting  
**In accordance with the Community Charter, Part 4, Division 3, 90(1)(e)** the acquisition, disposition or expropriation of land or improvements.
6. New Business
7. Adjournment

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To ensure quorum, advise Sharon Orr 250.474.9622 or [sorr@crd.bc.ca](mailto:sorr@crd.bc.ca) if you are unable to attend.



Making a difference...together

**Minutes of the of the Lyall Harbour Boot Cove Water Local Service Committee  
Held November 8, 2018 in Room 488, CRD Headquarters 625 Fisgard Street, Victoria BC**

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**PRESENT:** **Committee Members:** D. Thachuk (Chair), I Rowe, J. Sabre-Makofka, J. Money  
M. Fry

**Staff:** M. McCrank, Senior Manager, Infrastructure Operations; I. Jesney, Senior Manager, Infrastructure Engineering; C. Moch, Manager, Water Quality Operations; D. Robson, Manager, Saanich Peninsula and Gulf Islands Operations; T. Clease, Financial Analyst; S. Orr (recorder)

**ABSENT:** D. Howe, Southern Gulf Islands Regional Director

The meeting was called to order at 1:34 p.m.

**1. Approval of Agenda**

There were three additions to the agenda:

- Item 2 – Election of Officers
- Item 5 - Motion to Close the Meeting
- Item 6 – New Business, Questions about funding

**MOVED** by M. Fry, **SECONDED** by J. Money,

That the Lyall Harbour Boot Cove Water Local Service Committee approve the agenda as amended.

CARRIED

**2. ELECTION OF OFFICERS**

Nominations were called for committee member of Lyall Harbour Boot Cove Water Local Service Committee for a 2 year term.

- I. Rowe nominated D. Thachuk.
- D. Thachuk agreed to stand.
- Nominations were called for two additional times, and hearing none, D. Thachuk was elected.

Nominations were called for Chair of the Lyall Harbour Boot Cove Water Local Service Committee for a one-year term.

- I. Rowe nominated D. Thachuk.
- D. Thachuk agreed to stand.
- Nominations were called for two additional times, and hearing none, D. Thachuk was elected as Chair.

The Chair stated that the acceptance of the nomination is on the understanding that the term may not extend through all of 2019.

### **3. ADOPTION OF MINUTES OF NOVEMBER 9, 2017**

The Chair stated that hard copies of the agenda packages should be mailed to committee members that don't have access to email.

**MOVED** by I. Rowe, **SECONDED** by J. Money,

That the minutes of the Annual General Meeting of November 9, 2017 be adopted.

**CARRIED**

Staff stated that committee members can request hard copies instead of electronic versions.

### **4. 2019 OPERATING AND CAPITAL BUDGET**

I. Jesney introduced the 2019 Operating and Capital Budget report and provided an overview of the key factors influencing the budget.

Discussion took place about capital projects, 2018 operational activities and boil water advisories. Staff answered questions from the committee.

The Chair requested that staff inform the committee of the response from Island Health regarding the boil water advisory as soon as its available.

**MOVED** by I. Rowe, **SECONDED** by J. Money,

That the Lyall Harbour Boot Cove Water Local Service Committee:

1. Approve the 2019 operating and capital budget as amended, and recommend that the actual surplus or deficit be carried forward to 2019 and balanced against the 2019 User Charge; and,
2. Recommend that the Electoral Area Services Committee recommend that the CRD Board approve the 2019 operating and capital budget and the five year Financial Plan for the Lyall Harbour Boot Cove Water Service as amended.

**CARRIED**

The Chair requested that staff follow up with a memo to the committee regarding the increased amounts.

### **5. MOTION TO CLOSE THE MEETING**

**MOVED** by D. Thachuk and **SECONDED** by M. Fry,

That the Lyall Harbour Boot Cove Water Local Service Committee close the meeting in accordance with the Community Charter, Part 4, s. 90(1) (e) the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality.

The meeting reconvened at 3:47 pm.

### **6. NEW BUSINESS**

J. Sabre-Makofka stated that the committee would be interested in exploring what grants would be available to maintain the water services.

The Chair thanked staff and committee members for their work.

**7. ADJOURNMENT**

The meeting was adjourned at 3:50 pm.



**REPORT TO LYALL HARBOUR BOOT COVE WATER LOCAL SERVICE COMMITTEE  
MEETING OF TUESDAY, OCTOBER 29, 2019**

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**SUBJECT     2020 OPERATING AND CAPITAL BUDGET**

**ISSUE**

To present the 2020 operating and capital budget. In accordance with Bylaw No. 1875, "Lyll Harbour Boot Cove Water Local Services Committee Bylaw 1, 1990" 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 a 5-year financial plan including Operating Budgets and Capital Expenditure Plans annually. CRD staff have therefore prepared the financial plan shown in Appendix A to this report for the Lyall Harbour Boot Cove Water Local 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, upgrades or improvements to existing assets or asset review and study work that could potentially lead to future capital improvements.

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

1. Actual expenditures incurred between 2017 and 2019
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:

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

Adjustments for surpluses or deficits from 2019 will be made in January 2020. The CRD Board will give final approval to the budget and financial plan in March 2020.

The Financial Plan for the years 2021 – 2024 may be changed in future years.

**BUDGET OVERVIEW**

*Operating Budget*

It is anticipated that the 2019 operating expenses will be approximately \$62,725 over budget. This is primarily the result of emergency filtration system improvements, filter media replacement,

**Lyall Harbour Boot Cove Water Local Service Committee – October 29, 2019**  
**2020 OPERATING AND CAPITAL BUDGET**

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filtration mechanical repairs, leak detection efforts and emergency response to water quality turbidity issues, while under a boil water advisory.

It is anticipated that the 2019 operating revenue will be approximately \$8,170 more than budget primarily due to higher user charge revenue as a result of additional water service connections.

This results in an operating deficit of \$54,555. In order to reduce the deficit, it is proposed that the 2019 Capital Reserve Fund transfer in the amount of \$3,430 not be made. As a result, the operating deficit is estimated to be \$51,125. Through Community Works Fund support of \$30,000, the operating deficit is further reduced and is projected to be \$21,125. It is proposed to carry forward the operating deficit to 2020.

The 2020 operating budget has been increased by 3.4% over the 2020 budget. The increase is primarily the result of inflation.

*Municipal Finance Authority (MFA) Debt*

MFA debt servicing costs are incurred on debt of \$250,000 issued in 2009 at 4.13% interest and \$180,000 issued in 2010 at 4.50% interest. Refinanced at 2.25% for 2009 borrowings will reduce interest costs by \$4,705, bringing total debt servicing costs to \$35,200 for 2020, down from \$39,900 in 2019.

*Operating Reserve Fund*

The Operating Reserve Fund is used to undertake maintenance activities that typically do not occur on an annual basis. Typical maintenance activities include hydrant/standpipe maintenance, reservoir cleaning and water treatment filter media servicing. The operating reserve also funds the procurement of equipment and supplies that are not purchased on an annual basis. Additionally, the operating reserve could be used for emergency unplanned repairs should there be sufficient funds available.

It is proposed that transfers to the operating reserve be reinstated and set at \$7,500 for 2020 and future years to ensure future maintenance activities are fully funded and an optimum minimum balance in the reserve fund be maintained. There is \$30,000 of planned maintenance to be funded by the Operating Reserve over the next five years.

The Operating Reserve Fund balance at the end of 2019 is projected to be zero.

*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.

It is proposed that the budgeted transfer to the Capital Reserve Fund be set at \$10,000 in 2020 and 25,000 annually in future years to build up the reserve balance to fund future capital programs combining with other funding sources as debt and potential grants.

The capital reserve balance at the end of 2019 is projected to be \$6,164.

**Lyall Harbour Boot Cove Water Local Service Committee – October 29, 2019**  
**2020 OPERATING AND CAPITAL BUDGET**

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*Capital Expenditure Plan*

The 5-year plan includes \$513,000 of expenditures, for the period 2020 to 2024, to be funded by a combination of the service's Capital Reserve Fund and new debt following a public engagement and referendum process planned in 2021.

In 2020 there are no planned capital projects to be funded through the capital reserve.

*Capital Project Fund*

As specific capital projects are approved, the funding revenues for them are transferred into the 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 are no capital projects to be closed.

*User Charge and Parcel Tax*

The user charge and parcel tax fund the service. 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 2020 user charge is \$638.74 per single family equivalent (SFE), is an increase of \$13.90 (2.2%) over the 2019 rate. The proposed 2020 parcel tax is \$720.90, unchanged from the 2019 rate. The combined tax and user charge increase is 1.0% over 2019. Historical user charge and parcel tax rates are included for information.

**RECOMMENDATION**

That the Lyall Harbour Boot Cove Water Local Service Committee:

1. Approve the 2020 operating and capital budget, and recommend that the actual surplus or deficit be carried forward to 2020 and balanced against the 2020 User Charge; and,
2. Recommend that the Electoral Area Services Committee recommend that the CRD Board approve the 2020 operating and capital budget and the five year Financial Plan for the Lyall Harbour Boot Cove Water Service as presented.

Submitted by	Matthew McCrank, M.Sc., P.Eng., Senior Manager, Infrastructure Operations
Submitted by	Ian 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 Officer

MMc/IJ/RL:so

Attachment: Appendix A: 2020 Lyall Harbour Boot Cove Budget

# **CAPITAL REGIONAL DISTRICT**

## **2020 Budget**

### **Lyall Harbour Boot Cove Water (Saturna)**

#### **Committee Review**



**Service:** 2.640 Lyall Harbour Boot Cove Water (Saturna)

**Committee:** Electoral Area Services

**DEFINITION:**

To provide and operate and maintain a domestic water supply and distribution system for the Saturna Island Water Supply and Distribution System Specified Area in the Lyall Harbour/Boot Cove district on Saturna Island. Bylaw No. 513 (November 22, 1978).

**PARTICIPATION:**

Specified Area #14 - G(764)

**MAXIMUM LEVY:** Greater of \$150,000 or \$6.90 / \$1,000 of actual assessed value of land and improvements, to a maximum of \$406,509

**MAXIMUM CAPITAL DEBT:**

AUTHORIZED:	LA Bylaw No. 3587 (Jan 14, 2009)	\$430,000
BORROWED:	SI Bylaw 3634 (Aug 12, 2009)	\$250,000
BORROWED:	SI Bylaw 3677 (Feb 10, 2010)	\$180,000
REMAINING:		\$0

**COMMITTEE:**

Lyall Harbour/Boot Cove Water Committee established by Resolution - September 29, 1982  
 Lyall Harbour/Boot Cove Water Local Services Committee established by Bylaw No. 1875 (December 12, 1990)

**FUNDING:**

Any deficiencies after user charge and/or frontage tax or parcel tax to be levied on taxable school assessments, excluding property that is taxable for school purposes by Special Act.

**User Charge:** Annual charge per single family equivalency unit connected to the system.  
**Parcel Tax:** Annual charge levied only on properties capable of being connected to the system.  
**Connection Charges:** Actual Cost + 15% Admin Fee (Minimum Connection \$400 Bylaw No. 2137, April 28, 1993).

**RESERVE FUND:**

Bylaw No. 1785 (February 14, 1990)

Lyall Harbour Boot Cove Water (Saturna)	2019		BUDGET REQUEST				FUTURE PROJECTIONS			
	BOARD BUDGET	ESTIMATED ACTUAL	CORE BUDGET	2020 ONGOING	ONE-TIME	TOTAL	2021	2022	2023	2024
<u>OPERATING COSTS:</u>										
Repairs & Maintenance	5,010	17,150	5,110	-	-	5,110	5,220	5,340	15,460	25,810
Allocations	11,520	11,520	11,623	-	-	11,623	11,629	11,600	11,811	12,028
Water Testing	7,980	7,980	8,140	-	-	8,140	8,320	8,500	8,690	8,880
Electricity	4,000	4,420	4,160	-	-	4,160	4,250	4,340	4,440	4,540
Supplies	2,860	4,090	2,640	-	-	2,640	2,700	2,760	2,820	2,880
Labour Charges	104,710	150,000	108,375	-	-	108,375	110,759	113,196	115,686	118,231
Other Operating Expenses	9,270	12,915	10,260	-	-	10,260	10,490	10,720	10,950	11,180
<b>TOTAL OPERATING COSTS</b>	<b>145,350</b>	<b>208,075</b>	<b>150,308</b>	<b>-</b>	<b>-</b>	<b>150,308</b>	<b>153,368</b>	<b>156,456</b>	<b>169,857</b>	<b>183,549</b>
*Percentage Increase over prior year						3.4%	2.0%	2.0%	8.6%	8.1%
Transfer from Operating Reserve Fund	-	-	-	-	-	-	-	-	(10,000)	(20,000)
<b>NET OPERATING COSTS</b>	<b>145,350</b>	<b>208,075</b>	<b>150,308</b>	<b>-</b>	<b>-</b>	<b>150,308</b>	<b>153,368</b>	<b>156,456</b>	<b>159,857</b>	<b>163,549</b>
*Percentage Increase over prior year						3.4%	2.0%	2.0%	2.2%	2.3%
<u>DEBT/RESERVES</u>										
Transfer to Operating Reserve Fund	-	-	7,500	-	-	7,500	7,500	7,500	7,500	7,500
Transfer to Capital Reserve Fund	3,430	-	10,000	-	-	10,000	25,000	25,000	25,000	25,000
MFA Debt Reserve Fund	-	-	120	-	-	120	620	1,630	2,770	320
MFA Debt Principal	21,470	21,470	21,475	-	-	21,475	21,475	24,163	32,282	39,550
MFA Debt Interest	18,430	18,430	13,725	-	-	13,725	13,981	16,033	17,541	17,642
<b>TOTAL DEBT / RESERVES</b>	<b>43,330</b>	<b>39,900</b>	<b>52,820</b>	<b>-</b>	<b>-</b>	<b>52,820</b>	<b>68,575</b>	<b>74,326</b>	<b>85,092</b>	<b>90,012</b>
<b>TOTAL COSTS</b>	<b>188,680</b>	<b>247,975</b>	<b>203,128</b>	<b>-</b>	<b>-</b>	<b>203,128</b>	<b>221,943</b>	<b>230,782</b>	<b>244,949</b>	<b>253,561</b>
<u>FUNDING SOURCES (REVENUE)</u>										
Estimated Balance c/fwd from 2019 to 2020	-	(21,125)	21,125	-	-	21,125	-	-	-	-
Balance c/fwd from 2018 to 2019	23,070	23,070	-	-	-	-	-	-	-	-
Community Works Fund Grant	-	(30,000)	-	-	-	-	-	-	-	-
User Charges	(91,730)	(100,000)	(104,753)	-	-	(104,753)	(116,355)	(137,653)	(167,037)	(170,729)
Other Revenue	(840)	(740)	(320)	-	-	(320)	(320)	(320)	(320)	(320)
<b>TOTAL REVENUE</b>	<b>(69,500)</b>	<b>(128,795)</b>	<b>(83,948)</b>	<b>-</b>	<b>-</b>	<b>(83,948)</b>	<b>(116,675)</b>	<b>(137,973)</b>	<b>(167,357)</b>	<b>(171,049)</b>
<b>REQUISITION - PARCEL TAX</b>	<b>(119,180)</b>	<b>(119,180)</b>	<b>(119,180)</b>	<b>-</b>	<b>-</b>	<b>(119,180)</b>	<b>(105,268)</b>	<b>(92,808)</b>	<b>(77,592)</b>	<b>(82,512)</b>

**Lyll Harbour/Boot Cove Reserves  
Summary Schedule  
2020 - 2024 Financial Plan**

**Reserve/Fund Summary**

	2019	Budget				
		2020	2021	2022	2023	2024
Maintenance Reserve	-	7,500	15,000	22,500	20,000	7,500
Capital Reserve Fund	6,164	16,164	21,164	39,164	64,164	89,164
<b>Total</b>	<b>6,164</b>	<b>23,664</b>	<b>36,164</b>	<b>61,664</b>	<b>84,164</b>	<b>96,664</b>

**Reserve Schedule**

**Reserve Fund:** 2.640 Lyall Harbour Boot Cove Water (Saturna) Capital Reserve Fund - Bylaw 1785

**Reserve Cash Flow**

Fund: 1025 Fund Center: 101369	Estimated	Budget				
	2019	2020	2021	2022	2023	2024
<b>Beginning Balance</b>	6,024	6,164	16,164	21,164	39,164	64,164
<b>Transfer to Cap Fund</b>	-	-	(20,000)	(7,000)	-	-
<b>Unanticipated R&amp;M</b>	-	-	-	-	-	-
<b>Transfer from Operating Budget</b>	-	10,000	25,000	25,000	25,000	25,000
<b>Transfer from Cap Fund</b>	-	-	-	-	-	-
<b>Interest Income*</b>	140	-	-	-	-	-
<b>Ending Balance \$</b>	<b>6,164</b>	<b>16,164</b>	<b>21,164</b>	<b>39,164</b>	<b>64,164</b>	<b>89,164</b>

**Assumptions/Background:**

To fully fund capital expenditure plan

**Reserve Schedule**

**Reserve Fund: 2.640 Lyall Harbour Water Operating Reserve Fund (Bylaw No: 4144)**

Reserve fund used for: unforeseen operational repairs and maintenance; infrequent maintenance activities such as reservoir cleaning and inspection, filter media replacement etc. Optimum minimum balance of \$13,000 (approximately 10%) of the annual operating budget.

**Reserve Cash Flow**

Fund: 1500 Fund Center: 105213	Budget					
	2019	2020	2021	2022	2023	2024
<b>Beginning Balance</b>	-	-	7,500	15,000	22,500	20,000
<b>Transfer from Operating Budget</b>	-	7,500	7,500	7,500	7,500	7,500
<b>Transfer to Operating Budget</b>	-				(10,000) Reservoir Cleaning and inspection	(20,000) Replace filtration Media
<b>Interest Income</b>	-	-	-	-	-	-
<b>Ending Balance \$</b>	-	<b>7,500</b>	<b>15,000</b>	<b>22,500</b>	<b>20,000</b>	<b>7,500</b>

Set level of transfers in order to avoid spikes in requisition resulting from unforeseen breakdowns in water infrastructure

CAPITAL REGIONAL DISTRICT CAPITAL PLAN

Service #: 2.640

Service Name: Lyall Harbour Boot Cove Water (Saturna)

CAPITAL BUDGET FORM  
2020 & Forecast 2021 to 2024

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

**Capital Exp. Type**  
**Study** - Expenditure for feasibility and business case report.  
**New** - Expenditure for new asset only  
**Renewal** - Expenditure upgrades an existing asset and extends the service ability or enhances technology in delivering that service  
**Replacement** - Expenditure replaces an existing asset

**Funding Source Codes**  
 Debt = Debenture Debt (new debt only)  
 ERF = Equipment Replacement Fund  
 Grant = Grants (Federal, Provincial)  
 Cap = Capital Funds on Hand  
 Other = Donations / Third Party Funding

**Funding Source Codes (cont)**  
 Res = Reserve Fund  
 STLoan = Short Term Loans  
 WU = Water Utility

**Asset Class**  
 L - Land  
 S - Engineering Structure  
 B - Buildings  
 V - Vehicles  
 E - Equipment

**Capital Project Title**  
 Input Title of Project. For example "Asset Name - Roof Replacement", "Main Water Pipe Replacement".

**Capital Project Description**  
 Briefly describe project scope and service benefits.  
 For example: "Full Roof Replacement of a 40 year old roof above the swimming pool area; The new roofing system is built current energy standards, designed to minimize maintenance and have an expected service life of 35 years".

**Total Project Budget**  
 This column represents the total project budget not only within the 5-year window.

FIVE YEAR FINANCIAL PLAN

Proj. No.	Capital Exp.Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carry Forward from 2019	2020	2021	2022	2023	2024	5 - Year Total
18-06	Renewal	Infrastructure Renewal	Renewal of infrastructure based upon the SAMP recommendations	\$60,000	S	Debt	\$0	\$0	\$0	\$20,000	\$20,000	\$20,000	\$60,000
19-01	Replacement	Air Valve Replacement - Ph 2	Replace aging air valves that are a safety concern.	\$20,000	E	Debt	\$0	\$0	\$0	\$20,000	\$0	\$0	\$20,000
19-02	Replacement	PRV Bypass Assembly Replacement	Construct bypasses on the East Point, Narvaez and Boot Cove PRV stations to maintain system operation while the PRV's undergo maintenance.	\$8,000	E	Debt	\$0	\$0	\$0	\$8,000	\$0	\$0	\$8,000
19-03	Replacement	Standpipe and Valve Replacement	Replace the standpipe valves at 119 and 155 East Point Road that are seized and inoperable	\$8,000	E	Debt	\$0	\$0	\$0	\$8,000	\$0	\$0	\$8,000
19-04	New	Public Consultation & Referendum	Conduct public consultation to inform strategies for a referendum to borrow necessary future capital funds.	\$20,000	S	Res	\$0	\$0	\$20,000	\$0	\$0	\$0	\$20,000
19-05	New	Autoflush Installation	Install 3 autoflushes within the water distribution system to maintain distribution water quality.	\$10,000	E	Debt	\$0	\$0	\$0	\$10,000	\$0	\$0	\$10,000
19-06	New	Seepage Pit Construction	Construct a new seepage pit to increase ground filtered water production.	\$45,000	E	Debt	\$0	\$0	\$0	\$0	\$45,000	\$0	\$45,000
20-01	Replacement	Chlorine Injection Pump	Install an additional chlorine injection pump to address dosing requirements related to fluctuating water demands.	\$7,000	E	Res	\$0	\$0	\$0	\$7,000	\$0	\$0	\$7,000
20-02	New	Raw Water Turbidity Meter	Supply and install a new turbidity meter in the raw water line to aid in operation of the WTP.	\$10,000	E	Debt	\$0	\$0	\$0	\$10,000	\$0	\$0	\$10,000
21-02	Renewal	Dam Safety Review	Conduct an audit type dam safety review.	\$50,000	S	Debt	\$0	\$0	\$50,000	\$0	\$0	\$0	\$50,000
22-01	New	Install Rechlorination Station at Tank	Construct a rechlorination station at tank and modify tank piping.	\$75,000	S	Debt	\$0	\$0	\$0	\$75,000	\$0	\$0	\$75,000
22-02	Renewal	Money Lake Dam Seismic Upgrade	Seismic reinforcement of Money Lake Dam based upon the 2016 Dam Safety Review.	\$200,000	S	Debt	\$0	\$0	\$0	\$0	\$200,000	\$0	\$200,000
<b>GRAND TOTAL</b>				<b>\$513,000</b>			<b>\$0</b>	<b>\$0</b>	<b>\$70,000</b>	<b>\$158,000</b>	<b>\$265,000</b>	<b>\$20,000</b>	<b>\$513,000</b>

**Service:** 2.640                      **Lyall Harbour Boot Cove Water (Saturna)**

<b>Proj. No.</b> 18-06	<b>Capital Project Title</b> Infrastructure Renewal	<b>Capital Project Description</b> Renewal of infrastructure based upon the SAMP recommendations
<b>Asset Class</b> Equipment	<b>Board Priority Area</b> Other	<b>Corporate Priority Area</b> Drinking Water
<b>Project Rationale</b> <i>A draft Strategic Asset Management Plan was prepared in 2017. Recommendations for infrastructure renewal, replacement and upgrades were made. Funding is required to carry out some of the recommended infrastructure renewals. Project has been deferred to 2022.</i>		
<b>Proj. No.</b> 19-01	<b>Capital Project Title</b> Air Valve Replacement - Ph 2	<b>Capital Project Description</b> Replace aging air valves that are a safety concern.
<b>Asset Class</b> Equipment	<b>Board Priority Area</b> Other	<b>Corporate Priority Area</b> Drinking Water
<b>Project Rationale</b> <i>The air valves are 35 years old and are corroded, giving rise to safety concerns. Project has been deferred to 2022.</i>		
<b>Proj. No.</b> 19-02	<b>Capital Project Title</b> PRV Bypass Assembly Replacement	<b>Capital Project Description</b> Construct bypasses on the East Point, Narvaez and Boot Cove PRV stations to maintain system operation while the PRV's undergo maintenance.
<b>Asset Class</b> Equipment	<b>Board Priority Area</b> Other	<b>Corporate Priority Area</b> Drinking Water
<b>Project Rationale</b> <i>The inlet and outlet piping at the East Point, Narvaez and Boot Cove PRV stations are very corroded and there is no way to isolate the stations to replace or maintain the pressure reducing valves. It is proposed that new inlet and outlet piping be installed with 100mm gate valves and bypass piping so that customers are not without water when PRV's are being serviced. Project has been deferred to 2022.</i>		
<b>Proj. No.</b> 19-03	<b>Capital Project Title</b> Standpipe and Valve Replacement	<b>Capital Project Description</b> Replace the standpipe valves at 119 and 155 East Point Road that are seized and inoperable
<b>Asset Class</b> Equipment	<b>Board Priority Area</b> Other	<b>Corporate Priority Area</b> Drinking Water
<b>Project Rationale</b> <i>The standpipe valves at 119 and 155 East Point Road are seized and inoperable. Therefore, the operators cannot use them for flushing or draining of the mains. It is proposed the valves and corroded 50mm supply line to the standpipe be replaced. The scope of work and material pricing was re-evaluated in 2016. It was determined that the budget needed to be increased from \$5,000 to \$8,000 to accommodate the required works. Project has been deferred to 2022.</i>		

**Service:** 2.640      **Lyall Harbour Boot Cove Water (Saturna)**

<b>Proj. No.</b> 19-04	<b>Capital Project Title</b> Public Consultation & Referendum	<b>Capital Project Description</b> Conduct public consultation to inform strategies for a referendum to borrow necessary future capital funds.
<b>Asset Class</b> Engineered Structures	<b>Board Priority Area</b> Other	<b>Corporate Priority Area</b> Drinking Water
<b>Project Rationale</b> <i>Future required projects to maintain public safety and level of service require funding in excess of current projected reserve balance. Future funding will be for improvements the Water Treatment Plant to increase reliability and optimize for improved operations, conducting a regulatory requirement for a dam safety review and construct a larger supply line to the storage tank. Funding is required to undertake public consultation to inform borrow strategies and conduct a referendum.</i>		
<b>Proj. No.</b> 19-05	<b>Capital Project Title</b> Autoflush Installation	<b>Capital Project Description</b> Install 3 autoflushes within the water distribution system to maintain distribution water quality.
<b>Asset Class</b> Engineered Structures	<b>Board Priority Area</b> Other	<b>Corporate Priority Area</b> Drinking Water
<b>Project Rationale</b> <i>Three water mains require frequent flushing to maintain disinfectant residuals and water quality. Flushing requires operator time which can be utilized conducting other maintenance tasks. Funds are required to construct 3 autoflushes. Project has been deferred to 2022.</i>		
<b>Proj. No.</b> 19-06	<b>Capital Project Title</b> Seepage Pit Construction	<b>Capital Project Description</b> Construct a new seepage pit to increase ground filtered water production.
<b>Asset Class</b> Engineered Structures	<b>Board Priority Area</b> Other	<b>Corporate Priority Area</b> Drinking Water
<b>Project Rationale</b> <i>There have been water quality issues at times when the turbidity in Money Lake increases and water is being directly drawn from the lake. The seepage pit downstream doesn't encounter the same water quality issues. To reduce water quality issues funds are required to construct another seepage pit. Project has been deferred to 2023</i>		
<b>Proj. No.</b> 20-01	<b>Capital Project Title</b> Chlorine Injection Pump	<b>Capital Project Description</b> Install an additional chlorine injection pump to address dosing requirements related to fluctuating water demands.
<b>Asset Class</b> Equipment	<b>Board Priority Area</b> Other	<b>Corporate Priority Area</b> Drinking Water
<b>Project Rationale</b> <i>Install an additional chlorine injection pump to address dosing requirements related to fluctuating water demands. Project has been deferred to 2021.</i>		



**Service: 2.640**                      **Lyall Harbour Boot Cove Water (Saturna)**

<b>Proj. No.</b> 20-02	<b>Capital Project Title</b> Raw Water Turbidity Meter	<b>Capital Project Description</b> Supply and install a new turbidity meter in the raw water line to aid in operation of the WTP.
<b>Asset Class</b> Equipment	<b>Board Priority Area</b> Other	<b>Corporate Priority Area</b> Drinking Water
<b>Project Rationale</b> <i>Install a new turbidity meter in the raw water line to aid in operation of the WTP.</i>		
<b>Proj. No.</b> 21-02	<b>Capital Project Title</b> Dam Safety Review	<b>Capital Project Description</b> Conduct an audit type dam safety review.
<b>Asset Class</b> Engineered Structures	<b>Board Priority Area</b> Other	<b>Corporate Priority Area</b> Drinking Water
<b>Project Rationale</b> <i>The Dam Safety Regulation (Water Sustainability Act) requires that dams with a "HIGH" failure consequence rating undergo a Dam Safety Review (DSR) at a frequency of every ten years. The previous DSR was conducted in 2011 and the proposed type for the 2021 DSR is a simpler "audit" type.</i>		
<b>Proj. No.</b> 22-01	<b>Capital Project Title</b> Install Rechlorination Station at Tank	<b>Capital Project Description</b> Construct a rechlorination station at tank and modify tank piping.
<b>Asset Class</b> Engineered Structures	<b>Board Priority Area</b> Other	<b>Corporate Priority Area</b> Drinking Water
<b>Project Rationale</b> <i>Chlorine levels are low at certain times of the year due to water not turning over in the tank. Funding is required to remediate the situation.</i>		
<b>Proj. No.</b> 22-02	<b>Capital Project Title</b> Money Lake Dam Seismic Upgrade	<b>Capital Project Description</b> Seismic reinforcement of Money Lake Dam based upon the 2016 Dam Safety Review.
<b>Asset Class</b> Engineered Structures	<b>Board Priority Area</b> Other	<b>Corporate Priority Area</b> Drinking Water
<b>Project Rationale</b> <i>This is a continuation of project 18-03, where seismic reinforcement of the Money Lake Dam will commence. Funds are required to retain a contractor to undertake the works. Project deferred to 2023.</i>		

**CAPITAL REGIONAL DISTRICT**  
**FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2020 to 2024**

**SCHEDULE B**

<b>Service No.</b>	<b>2.640</b>							
		<b>Carry Forward from 2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>TOTAL</b>

**EXPENDITURE**

Buildings	B	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	E	\$0	\$0	\$0	\$63,000	\$45,000	\$0	\$108,000
Land	L	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Engineered Structures	S	\$0	\$0	\$70,000	\$95,000	\$220,000	\$20,000	\$405,000
Vehicles	V	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		<b>\$0</b>	<b>\$0</b>	<b>\$70,000</b>	<b>\$158,000</b>	<b>\$265,000</b>	<b>\$20,000</b>	<b>\$513,000</b>

**SOURCE OF FUNDS**

Capital Funds on Hand	Cap	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debenture Debt ( New Debt Only)	Debt	\$0	\$0	\$50,000	\$151,000	\$265,000	\$20,000	\$486,000
Equipment Replacement Fund	ERF	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grants (Federal, Provincial)	Grant	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Donations / Third Party Funding	Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserve Fund	Res	\$0	\$0	\$20,000	\$7,000	\$0	\$0	\$27,000
		<b>\$0</b>	<b>\$0</b>	<b>\$70,000</b>	<b>\$158,000</b>	<b>\$265,000</b>	<b>\$20,000</b>	<b>\$513,000</b>

<b>Lyall Harbour/Boot Cove</b>
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**Capital Projects Fund**

Year/Project#	Status	Capital Project Description	Total Budget	Expenditure Actuals	Remaining Funds	Funding Source-CRF*	Funding Source-CWF**	Return to CRF*	Return to CWF**
2017/CE.584	OPEN	Dam Safety Improvements - Toe Berm	65,000	29,161	35,839	65,000	-	-	-
2018/CE.668	OPEN	Lyall Harb Seismic Design	40,000	13,474	23,241	7,616	32,384	-	-
		Totals	105,000	42,635	59,080	72,616	32,384	-	-

\* CRF (Capital Reserve Fund)

\*\* CWF (Community Works Fund)

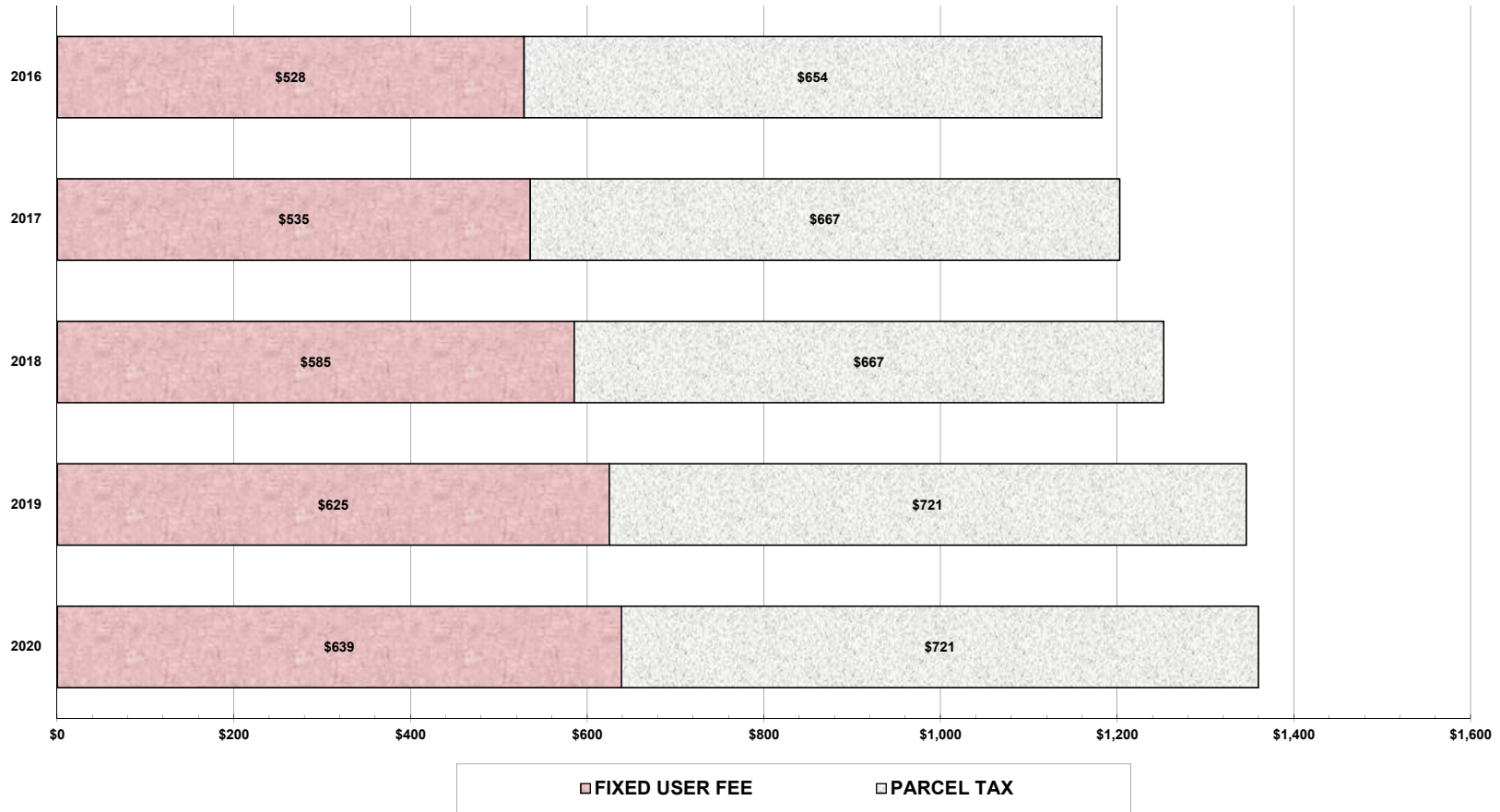
Service: 2.640

Lyll Harbour Boot Cove Water (Saturna)

Committee: Electoral Area Services

<u>Year</u>	<u>Taxable Folios</u>	<u>Parcel Tax</u>	<u>SFE's</u>	<u>User Charge</u>	<u>Tax &amp; Charges</u>	<u>Bylaw</u>	<u>Assessments \$(000's)</u>
2011	170	\$560.00	158	\$325.00	\$885.00	3799	57,270
2012	171	\$560.00	159	\$375.00	\$935.00	3823	56,059
2013	171	\$560.00	159	\$390.31	\$950.31	3892	55,690
2014	171	\$600.00	159	\$461.14	\$1,061.14	3924	50,582
2015	171	\$611.11	159	\$472.48	\$1,083.59	3987	48,842
2016	174	\$654.18	159	\$528.24	\$1,182.42	4074	48,842
2017	174	\$667.25	160	\$535.34	\$1,202.59	4170	53,211
2018	174	\$667.25	160	\$585.06	\$1,252.31	4233	56,853
2019	174	\$720.90	161	\$624.84	\$1,345.74	4274	58,914
2020	174	\$720.90	164	\$638.74	\$1,359.64		

### CAPITAL REGIONAL DISTRICT LYALL HARBOUR / BOOT COVE (SATURNA) WATER FUNDING ANALYSIS 2016-2020



Actual Costs 2015-2018, Projected 2019, 2020  
Prepared by CRD Finance  
10/18/2019