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**REPORT TO LYALL HARBOUR / BOOT COVE WATER LOCAL SERVICE COMMITTEE
MEETING OF FRIDAY, SEPTEMBER 25, 2015**

SUBJECT 2016 OPERATING AND CAPITAL BUDGET

ISSUE

This report provides a synopsis of the 2016 operating and capital budget, highlighting significant proposed changes related to operational expenditures, debt charges, any capital expenditures and revenue for the Lyall Harbour/Boot Cove Water Service.

In accordance with the establishment Bylaw No. 1875, the Lyall Harbour / Boot Cove Water Local Services Committee shall: *"Upon its establishment, and on or before December of each year, the Committee shall approve an annual budget for the services provided in the local service area which shall include estimates for the administrative, development, maintenance, operational and other expenses, including debt charges, and shall submit such expenditure estimates, together with estimates for expected revenue, to the Treasurer of the Regional Board for the approval of the Regional Board and for inclusion in the Regional Board's provisional and annual budgets."*

BACKGROUND

2015 Estimated Actual Revenue and Expense

The estimated actual operating cost is projected to be **\$5,380** over budget as a result of:

- Lower than budgeted expenditures for:
 - repairs and maintenance (\$2,100).
 - water testing (\$120).
 - operating supplies (\$610).
 - other operating expenses (\$1,180).
- Higher than budgeted expenditures for:
 - Allocations (\$650)
 - labour charges (\$9,340).
- Unspent contingency (\$600)

The estimated actual revenue is project to be **\$160** under budget as a result of:

- Lower than budgeted other (interest income) revenue .

This results in a projected year-end deficit of \$5,540. However, during the year, \$3,450 was transferred from the service's maintenance reserve fund to pay for the replacement of UV lamps and maintenance of ozone equipment. This effectively reduced the deficit to \$2,090. Therefore, it is proposed that the planned transfer of \$5,610 to the Capital Reserve Fund in 2015 be reduced to \$3,520 in order to balance the budget.

Capital Projects

2016 Operating Expense

An increase in the 2016 operating cost of \$ **12,610** (10.5%) is proposed.

This is the result of:

- Increase in:
 - Allocations (\$660)
 - Water Testing (\$120)
 - Electricity (\$260)
 - Labour Charges (\$11,170)
 - Other Operating Expenses (\$590)

- Decrease in:
 - Supplies (\$190)
 - Contingency (\$600)

Of the \$11,170 increase in CRD labour charges, \$10,140 is included in the proposed budget as a continuous supplementary expense required to fund an additional 150 auxiliary operator hours per year. The reason for the auxiliary operator increase is to provide coverage for the regular operator when he is not available and to respond to additional call outs and emergency responses. The use of an on-island auxiliary operator is less expensive and more responsive than sending an off-island back-up operator to respond to emergencies.

The implication to the user charge and parcel tax in accordance with the existing revenue strategy (shared equally between user charge and parcel tax), would be \$31.89 per SFE (based on the \$5,070 / 159 SFE's) and \$30.67 per taxable folio (based on the \$5,070 / 174 SFE's plus the 5.25% surveyors fee).

2016 Debt/Reserves

Maintenance Reserves:

It is proposed that transfers to the maintenance reserve of \$1,500 remain at the 2015 level. The maintenance 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 and ozone system maintenance activities. The maintenance reserve balance at the end of 2015 is projected to be \$3,050.

Capital Reserve Fund:

It is proposed that \$18,510 be transferred to the Capital Reserve Fund in order to prepare for anticipated future capital replacement projects.

The capital reserve fund balance at the end of 2015 is projected to be \$16,441.

MFA Debt

Debt servicing costs are incurred on debt of \$250,000 issued in 2009 at 4.13% and \$180,000 issued in 2010 at 4.50%. The annual debt serving cost of \$39,900 will remain unchanged in 2016.

2016 Revenue (User Charge and Parcel Tax)

It is proposed that:

- The user charge be increased from \$75,130 to \$83,990; based on 159 single family equivalents (SFE) this equates to \$528.24/SFE or \$55.76 over the 2015 amount.
- Other revenue be reduced by \$150.
- The parcel tax increase from \$91,350 to \$108,150; based on 174 taxable folios (up 3 folios from 2015) and including the 5.25% surveyors tax fee, this equates to \$654.18/taxable folio, an increase of \$43.07 per parcel.

2016 Capital Plan

The following capital work is planned for 2016 totaling \$48,000 (refer to the budget documents for additional detail). With exception of item 3 below, the “NEW” items from 2016 to 2020 below are in response to matters that were discussed at the July 29, 2015 committee meeting. The new items pertain to upgrading existing infrastructure in the vicinity of the Money Lake Dam including: relocating the shed, painting and covering portions of the recirculation pipe, and general clean-up of the area. Staff were requested to prepare and include these new items in the 5-year capital plan in a way that minimizes parcel tax and user charge increases.

1. **Dam Safety Improvements (\$40,000):**
Soil investigation and simple seismic stability assessment. The proposed capital improvements included dam safety improvements including a soils investigation and simple seismic stability assessment as recommended in the latest Dam Safety Review prepared by EBA Consulting in April 2012. Future work includes the installation of a gravel toe berm on the downstream side of the dam to maintain dam integrity. This work is proposed to be completed in the years 2017 and 2018.
2. **Equipment Infrastructure Replacement (\$5,000):**
Phase 1 air valve replacement - The air valves are 35 years old and are corroded, giving rise to safety concerns.
3. **NEW – Safety Equipment (\$2,000):**
The CRD's safety advisor has undertaken a review of the treatment facility in conjunction with the WorkSafe BC Officer and determined that additional eye wash safety equipment and drench hose is required.
4. **NEW - Relocate Shed to Upper Plant (\$1,000):**
The existing shed located at the toe of Money Lake Dam is currently on private property and must be relocated to the upper treatment building.

Forecast 2017-2020

The majority of the proposed capital improvements were identified during the 2015 budget approval process, although three new items are proposed as noted in years 2017, 2018 and 2020 below.

2017 Capital Budget (Totaling \$47,000)

1. Dam Safety Improvements (\$45,000):
Phase 1 installation of gravel toe berm on downstream side of the dam.

2. NEW – Paint Recirculation Pipe and Ancillary Work (\$2,000):
The existing recirculation pipe and ancillary structures located on private property must be revised to blend in with the natural environment. This includes painting of the exposed sections of the recirculation pipe, revising marker stakes and valve coverings and protection of an existing culvert.

2018 Capital Budget (totaling \$47,000)

1. Dam Safety Improvements (\$45,000):
Phase 2 installation of gravel toe berm on downstream side of the dam.

2. NEW – Cover Recirculation Pipe (\$2,000):
Cover sections of the existing recirculation pipe that are not painted to provide UV protection from the sun. It is proposed to undertake the work in conjunction with 2017/2018 dam safety work (placement of surplus material excavated from the toe drain installation project).

2019 Capital Budget (totaling \$33,000)

1. Equipment Infrastructure Replacement (\$33,000):
 - i). Phase 2 - Air valve replacement - The air valves are 35 years old and are corroded, giving rise to safety concerns (\$20,000).
 - ii). Phase 2 - Isolation Valve/Bypasses for PRV Stations (\$8,000).
 - iii). Standpipe & valve replacement (\$5,000).

2020 Capital Budget (totaling \$3,000)

1. NEW – Chlorine Injection Pump (\$3,000)
Install an additional chlorine injection pump to address dosing requirements related to fluctuating water demands.

In 2012 funding to complete a Strategic Asset Management Plan (SAMP) for \$20,000 was approved. The SAMP is in progress and its findings will identify future capital projects to ensure the reliability of the water system by completing system improvements as the existing infrastructure reaches its life expectancy. The SAMP will provide an estimate of the annual budget that would be required to replace assets at the end of their service lives, and to provide the level of preventive maintenance required to sustain an acceptable level of service and maximize the service lives of system components. Until the SAMP is completed, it is proposed to continue with the current capital expenditure plan.

RECOMMENDATION

That the Lyall Harbour / Boot Cove Water Local Service Committee recommend that the Capital Regional District Board:

1. Approve the 2016 operating and capital budget for the Lyall Harbour / Boot Cove Water Service as presented;
2. Approve the 2016 Parcel Tax of \$654.18 and User Charge of \$528.24 for the Lyall Harbour / Boot Cove Water Service; and
3. Balance the 2015 actual revenue and expense on the 2015 transfer to capital reserve fund.

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Attachment: 1

CAPITAL REGIONAL DISTRICT

2016 Budget

Lyall Harbour Boot Cove Water (Saturna)

Committee Review

Compiled and Presented by CRD Finance

Sep 2015

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 \$337,010.

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:		<u> </u>
		\$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)

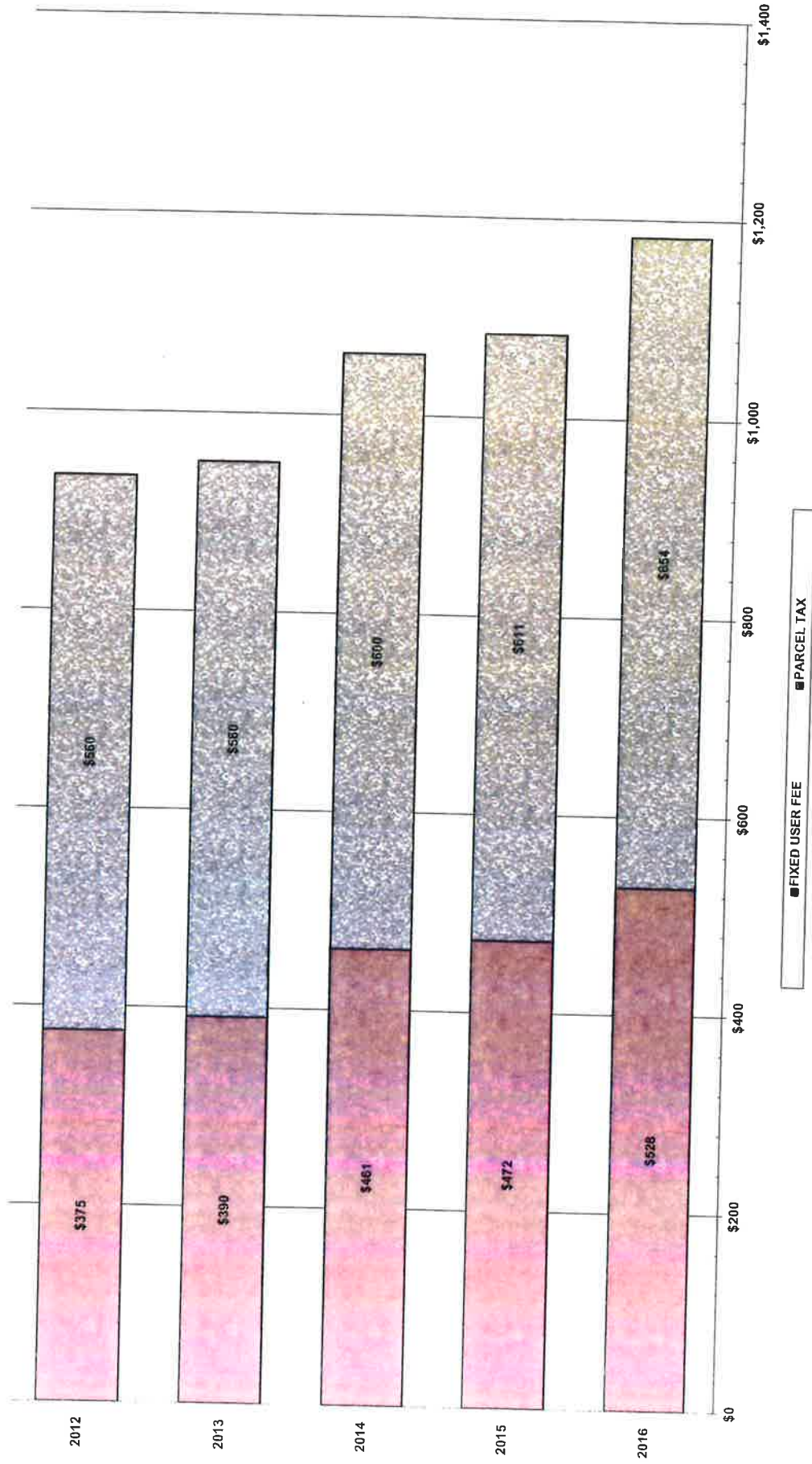
Service: 2.640

Lyall 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 & Charges</u>	<u>Bylaw</u>	<u>Assessments \$(000's)</u>
2010	171	\$560.00	157	\$325.00	\$885.00		56,374
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		48,842
2016 Budget	174	\$654.18	159	\$528.24	\$1,182.42		48,842

CAPITAL REGIONAL DISTRICT LYALL HARBOUR / BOOT COVE (SATURNA) WATER FUNDING ANALYSIS 2012-2016



CAPITAL REGIONAL DISTRICT - SCHEDULE G

CAPITAL BUDGET FORM 2016 & Forecast 2017 to 2020

Service #: **2.640**

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

Note: ↓ indicates a drop down menu is available for selection - Type Code (2); Funding Source (4); Participants (8)

Year (1)	Type Code (2)* ↓	Specific Project Description (3)	Capital Expense	Funding		Grant Program Sponsor (6)	Loan Authorization # (7)	Participants (8) ↓	%
				Source (4)** ↓	Amount Total (5)				
2016	S	Dam Safety Improvements	40,000	R	20,000				
				G	20,000				
2016	E	Equipment/Infrastructure Replacement	5,000	R	2,500				
				G	2,500				
2016	E	Safety Equipment	2,000	R	2,000				
2016	E	Relocate Shed to Upper Plant	1,000	R	1,000				
2017	S	Dam Safety Improvements	45,000	R	22,500				
				G	22,500				
2017	E	Paint Recirculation Pipe and Ancillary Work	2,000	R	2,000				
2018	S	Dam Safety Improvements	45,000	R	22,500				
				G	22,500				
2018	E	Cover Recirculation Pipe	2,000	R	2,000				
2019	E	Equipment/Infrastructure Replacement	33,000	R	16,500				
				G	16,500				
2020	E	Chlorine Injection Pump	3,000	R	3,000				
TOTAL			178,000		178,000				

Type Codes (2) *

- L = Land
- S = Engineering Structures
- B = Buildings
- V = Vehicles
- E = Equipment

Funding Source Codes (4) **

- D = Debenture Debt (new debt only)
- E = Equipment Replacement Fund
- G = Grants (Federal, Provincial)
- O = Donations / Third Party Funding

- C = Capital Funds on Hand
- R = Reserve Fund
- S = Short Term Loans
- L = Lands Sales

#1, 5 & 7

Dam Safety Improvements (\$40,000 in 2016, \$45,000 in 2017, \$45,000 in 2018)

The 2012 Dam Safety Review recommended a number of improvements, which have been spread out over years 2015-18.

- (a) 2016 - Soil investigation and simple seismic stability assessment (\$40,000)
- (b) 2017 - Phase 1 of installation of gravel toe berm on downstream side of dam (\$45,000)
- (c) 2018 - Phase 2 of installation of gravel toe berm on downstream side of dam (\$45,000)

#2, & 9

Equipment Infrastructure Replacement (\$5,000 in 2016, \$33,000 in 2019)

- (a) 2016 - Phase 1 Air valve replacement (\$5,000). The air valves are 35 years old and are corroded, giving rise to safety concerns.
- (b) 2019 - Phase 2 Air valve replacement (\$20,000). The air valves are 35 years old and are corroded, giving rise to safety concerns.
- (c) 2019 - Isolation Valve/Bypasses for PRV Stations (\$8,000). Phase 2. The inlet and outlet piping at the East Point, Narvaez and Boot Cove PRV stations is 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.
- (d) 2019 - Standpipe & valve replacement (\$5,000). 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 that the valves and the corroded 50mm supply line to the standpipe be replaced.

#3

Safety Equipment (\$2,000 in 2016)

The CRD's safety advisor has undertaken a review of the treatment facility in consultation with the WorkSafe BC Officer and determined that additional eyewash safety equipment and drench hose is required.

#4

Relocate Shed to Upper Plant (\$1,000 in 2016)

The existing shed located at the toe of Money Lake Dam is currently on private property and must be relocated to the upper treatment building.

#6

Paint Recirculation Pipe and Ancillary Work (\$2,000 in 2017)

The existing recirculation pipe and ancillary structures located on private property must be revised to blend in with the natural environment. This includes painting of the exposed sections of the recirculation pipe, revising marker stakes and valve coverings and protection of an existing culvert.

#8

Cover Recirculation Pipe (\$2,000 in 2018)

Cover sections of the existing recirculation pipe that are not painted to provide UV protection from the sun. It is proposed to undertake work in conjunction with 2017/2018 dam safety work (placement of surplus material excavated from toe drain installation project).

#10

Chlorine Injection Pump (\$3,000 in 2020)

Install an additional chlorine injection pump to address dosing requirements related to fluctuating water demands.

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

	Estimate 2015	Budget				
		2016	2017	2018	2019	2020
Beginning Balance	12,027	16,441	9,451	4,631	1,001	6,581
Transfer to Cap Fund	(17,250)	(25,500)	(24,500)	(24,500)	(16,500)	(3,000)
Transfer from Operating Budget	3,520	18,510	19,680	20,870	22,080	23,330
Transfer from Cap Fund	18,064	-	-	-	-	-
Interest Income*	80	-	-	-	-	-
Ending Balance \$	16,441	9,451	4,631	1,001	6,581	26,911

Assumptions/Background:

To fully fund capital expenditure plan

* 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.