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## **FULFORD WATER SERVICE COMMISSION**

Notice of Meeting on **MONDAY, September 12, 2016 at 10:00 AM**  
Portlock Park Meeting Room, 145 Vesuvius Bay Rd, Salt Spring Island, BC

Wayne McIntyre

Carol Eyles

Gord Singbell

Alan Martin

Anthony Maude

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### **AGENDA**

#### **1. Approval of Agenda**

#### **2. Adoption of Minutes of September 14, 2015**

#### **3. Chair and Director Reports**

#### **4. Reports**

##### **4.1 Operating and Capital Budget**

That the Fulford Water Service Commission recommends that the Capital Regional District Board:

1. Approve the 2017 operating and capital budget for the Fulford Water Service as presented;
2. Authorize the 2017 parcel tax of \$771.73, user charge of \$1,251.05 and consumption charge rate of \$3.27 per cubic meter (minimum charge of \$312.75 per billing period); and
3. Balance the 2016 actual revenue and expenditures on the 2016 transfer to capital reserve fund.

#### **5. New Business**

##### **5.1 Water Allocation to Proposed Lots at 277 Morningside Road**

That the Fulford Water Local Service Commission advises Islands Trust that the Fulford Water Service may supply water to the proposed seven lot subdivision at 277 Morningside subject to the following:

1. An allocation of up to 2,270 lpd per connection up to 7 connections subject to the right of the utility to reallocate volumes in the future and,
2. Require that the developer install a single meter at the property line.

#### **6. Outstanding Business**

#### **7. Adjournment**

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*To ensure quorum, advise Tracey Shaver 250 537 4448 if you cannot attend.*



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**Minutes of the Regular Meeting of the Fulford Water Service Commission**  
**Held September 14, 2015, in the Salt Spring Island Public Library, 129 McPhillips Avenue,**  
**Salt Spring Island, BC**

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**DRAFT**

**Present:** **CRD Director:** Wayne McIntyre  
**Commission Members:** Carole Eyles (Chair); Alan Martin; Gord Singbeil  
**Staff:** Keith Wahlstrom, Manager Engineering Salt Spring Electoral Area; Dan Robson, IWS Operations Manager; Peggy Dayton, CRD Finance; Erin Jory, Recording Secretary;  
**Absent:** Anthony Maude

The Chair called the meeting to order at 11:05 am.

**1. Approval of Agenda**

**MOVED** by Commissioner Singbeil, **SECONDED** by Commissioner Martin,  
That the Fulford Water Service Commission agenda of September 14, 2015 be amended  
and approved by renumbering the agenda to include a Director's report as item 3.

**CARRIED**

**2. Adoption of Minutes of October 20, 2014**

**MOVED** by Commissioner Singbeil, **SECONDED** by Commissioner Martin,  
That the Fulford Water Service Commission minutes of October 20, 2014 be approved.

**CARRIED**

**3. Director's Report**

- Ganges Sewer's grant application was not successful.
- Canada 150 Grant application made for proposed Seawalk project on Salt Spring.
- Salt Spring Island Governance Study:
  - costing study to be completed and delivered by September 30, 2015;
  - community engagement arranged;
  - final report submitted by March 31, 2016.
  - all meetings are public,
  - website is [www.ssiincorporationstudy.com](http://www.ssiincorporationstudy.com).

**4. 2016 Operating and Capital Budget Report**

- Staff presented the 2016 Operating and Capital Budget Report.
- Commission requested call-out costs (\$50 for user and \$100 for Commission) need to be addressed.

**MOVED** by Commissioner Singbeil, **SECONDED** by Commissioner Martin,  
That the Fulford Water Service Commission recommends that the Capital Regional  
District Board:

1. Approve the 2016 operating and capital budget for the Fulford Water Service as amended by changing \$5000 to \$7000 on page seven of the budget package to match the funding amounts presented on the Schedule G;
2. Authorize the 2016 parcel tax of \$771.68, user charge of \$1,251.00 and consumption charge rate of \$3.27 per cubic meter (minimum charge of \$312.75 per billing period); and
3. Balance the 2015 actual revenue and expenditures on the 2015 transfer to capital reserve fund.

**CARRIED**

Commissioner Singbeil left the meeting at 11:44 am and returned at 11:46 am.

**5. New Business**

No items presented.

**6. Outstanding Business**

No items presented.

**7. Adjournment**

**MOVED** by Commissioner Singbeil, **SECONDED** by Commissioner Martin,  
That the Fulford Water Service Commission regular meeting be adjourned at 12:16 pm.

**CARRIED**

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**CHAIR**

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**SENIOR MANAGER**



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## REPORT TO FULFORD WATER SERVICE COMMISSION MEETING OF MONDAY, SEPTEMBER 12, 2016

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### **SUBJECT**     2017 OPERATING AND CAPITAL BUDGET

### **ISSUE**

This report provides a synopsis of the 2017 operating and capital budget, highlighting significant proposed changes related to operational expenditures, debt charges, capital expenditures and revenues for the Fulford Water Service.

In accordance with Bylaw No. 3693, "Fulford Water Service Commission Establishment Bylaw states, *"Before the end of November of each year, the Commission shall be presented with a five year operating and capital budgets for the services provided in the 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, in a form approved by the Financial Officer of the CRD for the approval of the Regional Board and for inclusion in the Regional Board's preliminary and annual budgets."*

### **BACKGROUND**

#### 2016 Estimated Revenue and Operating Expenditures

The estimated actual operating costs are projected to be **\$12,060** (9.0%) under budget as a result of the following:

1. Lower than budgeted expenditures for:
  - a. Operations contract (\$2,870)
  - b. Grit and waste sludge disposal( \$1,350)
  - c. Repairs and maintenance (\$2,020)
  - d. Supplies (\$1,690)
  - e. Labour charges (\$2,060)
  - f. Contingency (\$2,250) unspent
  - g. Other operating expenses (\$820)
2. Higher than budgeted expenditures for:
  - a. Electricity (\$1,000)

The estimated actual operating revenue is projected to be approximately **\$100** over budget due to several factors including:

1. Lower than budgeted revenue for:
  - a. Sale - Water (\$100)
2. Higher than budgeted revenue for:
  - a. Miscellaneous, interest (\$200)

This results in a projected year-end surplus of **\$12,160**.

It is proposed that the projected year-end surplus be allocated as follows:

- increase the 2016 transfer to maintenance reserve account from \$2,400 to \$5,000
- increase the 2016 transfer to capital reserve fund from \$19,780 to \$29,340.

### **2017 OPERATING BUDGET**

A decrease of 0.4% in the operating budget is proposed. The decrease is mainly the result of eliminating the operating contingency. Given that the service now has a maintenance reserve established, unforeseen operating expenses can be supported by the operating maintenance reserve. Distribution of operating expense adjustments for 2017 are as follows:

1. Increase in expenditures for:
  - a. Operations contract (\$680)
  - b. Grit and waste sludge disposal (\$100)
  - c. Repairs and maintenance (\$110)
  - d. Water testing (\$80)
  - e. Electricity (\$1,380)
  - f. Supplies (\$140)
  - g. Labour charges (\$290)
2. Decrease in expenditures for:
  - a. Allocations (\$1,040)
  - b. Contingency (\$2,250)
  - c. Other operating expenses (\$80)

### **2017 DEBT AND RESERVES FUNDS**

#### **Maintenance Reserve:**

Maintenance reserves are 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 in some instances system maintenance activities such as reservoir cleaning and raw water intake inspections that occur less frequently than annually.

A maintenance reserve fund was established for the service as part of the 2015 budget process. There are no maintenance reserve expenditures anticipated in 2016. A \$2,440 contribution to the maintenance reserve is proposed in 2017. The 2016 year-end balance of the maintenance reserve is projected to be \$7,400 should the recommended transfer of the year-end surplus be approved.

#### **Capital Reserve Fund:**

It is proposed that the transfer to the capital reserve fund decrease slightly from the 2016 planned transfer of **\$19,780** (actual transfer in 2016 anticipated to be **\$27,130** due to projected surplus) to **\$18,320** in order to prepare for anticipated future capital replacement projects.

The capital reserve fund balance at the end of 2016 is projected to be \$72,957.

In addition there are 2 capital project funds (WLA3758 and WSV185146) created for the purpose of accounting for funding and expenditures on capital projects in progress:

Fulford Water Capital Projects in Progress								
	Year	Budget	Funding			Spent	Remaining	
			Cap Res Fund	Debt	Cmty Works Funds		Funds	Budget
Water System BL3758	2011	136,000	6,232	164,720	-	(134,232)	36,720	1,768
SAMP	2013	7,500	3,034	-	5,000	(8,034)	-	-
Electrical Equipment	2014	5,280	-	5,280	-	(4,612)	668	668
Interest Income		-	-	-	-	-	1,659	-
<b>Sub-total WLA3758</b>		<b>148,780</b>	<b>9,266</b>	<b>170,000</b>	<b>5,000</b>	<b>(146,878)</b>	<b>39,047</b>	<b>2,436</b>
Survey & SRW	2015	5,000	5,000	-	-	(1,705)	3,295	3,295
Safety Equipment	2016	10,000	10,000	-	-	(2,689)	7,311	7,311
Weston Creek Watermain	2016	7,000	7,000	-	-	-	7,000	7,000
2901 Fulford Road	2016	7,500	7,500	-	-	-	7,500	7,500
<b>Sub-total WSV185146</b>		<b>29,500</b>	<b>29,500</b>	<b>-</b>	<b>-</b>	<b>(4,394)</b>	<b>25,106</b>	<b>25,106</b>

### MFA Debt

The annual debt servicing cost will increase from \$53,010 to \$55,220 as a result of a recent adjustment by MFA in interest rates.

### 2017 REVENUE (User Charge and Parcel Tax)

It is proposed that:

- all annual expenditures be funded through revenue generated in that year and the practice of carrying forward year-end surplus amounts as revenue not be utilized.
- water sales remain budgeted at \$15,000. This amount is calculated based on the water rate of \$3.27 per cubic meter with a minimum consumption charge per three month billing period of \$312.75 for those customers with a metered connection. These rates remain at 2016 level.
- the user charges remain at \$118,850; based on 95 SFE's equals \$1,251.05, unchanged from 2016.
- the parcel tax remain at 2016 level set at \$74,790; based on 102 taxable folios and including the 5.25% surveyors tax fee equates to \$771.73.



### **2017 – 2021 FIVE YEAR CAPITAL PLAN**

There is one carry forward project and one new project planned for 2017.

- 1) Design and approvals to replace Water Main on Morningside Road at Weston Creek (\$7,000). It is expected to start this project in 2016, however, it may not be completed prior to 2017, and therefore it has been included for information
- 2) Construction of replacement water main on Morningside Road at Weston Creek (\$30,000)

Additional projects anticipated for Fulford are outlined in the attached budget and include:

- 2018 Strategic Asset Management Plan (SAMP) (\$5,390)
- 2020 Initial Phase of upgrades identified in the SAMP (\$ 50,000)
- 2021 Sunnyside Pressure Control Station rebuild and water meter (\$ 6,000)

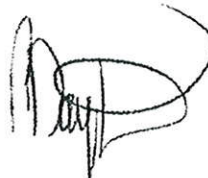
### **RECOMMENDATION**

That the Fulford Water Service Commission recommends that the Capital Regional District Board:

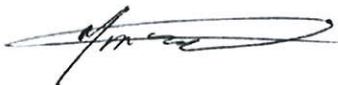
1. Approve the 2017 operating and capital budget for the Fulford Water Service as presented;
2. Authorize the 2017 parcel tax of \$771.73, user charge of \$1,251.05 and consumption charge rate of \$3.27 per cubic meter (minimum charge of \$312.75 per billing period); and
3. Balance the 2016 actual revenue and expenditures on the 2016 transfer to capital reserve fund.



Karla Campbell, Senior Manager  
Salt Spring Island Electoral Area



Peggy Dayton, BCom, CPA  
Senior Financial Advisor  
Finance and Technology  
Concurrence



Matt McCrank, M.Sc., P.Eng.  
Senior Manager, Infrastructure Operations  
Integrated Water Services  
Concurrence

KW:ts  
Attachment: 2017 Budget

# **CAPITAL REGIONAL DISTRICT**

## **2017 Budget**

### **Fulford Water (SSI)**

#### **Committee Review**

Compiled and Presented by CRD Finance

Sep-16

Page 1



**Service:** 2.626 Fulford Water (SSI)

**Committee:** Electoral Area Services

**DEFINITION:**

To provide, operate and maintain water supply and distribution facilities for the Fulford Water Local Service Area on Salt Spring Island.  
Bylaw No. 3202 (November 24, 2004).

**PARTICIPATION:**

Order In Council No 177, Feb 24, 2005.

**MAXIMUM LEVY:**

Greater of \$156,000 or \$5.46 / \$1,000 of actual assessed value of land and improvements, to a maximum of \$258,202.

**MAXIMUM CAPITAL DEBT:**

<b>AUTHORIZED:</b>	LA Bylaw No. 3203 (November 24, 2004)	\$573,000
<b>BORROWED:</b>	SI Bylaw No. 3291 (August 10, 2005) - 4.17%	(\$573,000)
<b>AUTHORIZED:</b>	LA Bylaw No. 3758 (Oct 8, 2011)	\$225,000
<b>BORROWED:</b>	SI Bylaw No. 3817 (May 2012) - 3.4%	(\$145,000)
<b>BORROWED:</b>	SI Bylaw No. 3850 (Oct 2012) - 2.9%	(\$25,000)
<b>REMAINING:</b>		<u>\$55,000</u>

**COMMITTEE:**

Fulford Water Service committee established by Bylaw No 3248 (Dec 15, 2004).

**FUNDING:**

Any deficiencies after user charge and/or parcel tax to be levied on taxable hospital assessments.

**User Charge:** Fixed user charge + metered commercial properties.

**Parcel Tax:** Annual, levied only on properties capable of being connected to the system, starting 2006.  
Parcel charge in lieu of parcel tax in 2005 only.

**Connection Charge:** The connection charge for a service shall be the actual cost for the connection.

**MAXIMUM OPERATING EXPENDITURE:**

RESERVE FUND BYLAW:

Fund 1070, established by Bylaw #3275 (April 27, 2005)

	2016 BOARD BUDGET	2016 ESTIMATED ACTUAL	BUDGET REQUEST			FUTURE PROJECTIONS				
			2017 CORE BUDGET	2017 SUPPLEMENTARY	2017 TOTAL	2018	2019	2020	2021	
<b>Fulford Water (SSI)</b>										
<u>OPERATING COSTS:</u>										
Operations Contract	46,000	43,130	46,680	-	46,680	47,610	48,560	49,540	50,530	
Grit & Waste Sludge Disposal	7,000	5,650	7,100	-	7,100	7,240	7,380	7,530	7,680	
Repairs & Maintenance	7,520	5,500	7,630	-	7,630	7,780	7,930	8,090	8,250	
Allocations	11,260	11,260	10,220	-	10,220	10,420	10,620	10,830	11,040	
Water Testing	5,270	5,270	5,350	-	5,350	5,460	5,570	5,680	5,790	
Electricity	8,440	9,440	9,820	-	9,820	10,020	10,220	10,420	10,630	
Supplies	9,530	7,840	9,670	-	9,670	9,860	10,050	10,250	10,450	
Labour Charges	17,060	15,000	17,350	-	17,350	17,700	18,050	18,410	18,780	
Contingency	2,250	-	-	-	-	-	-	-	-	
Other Operating Expenses	19,520	18,700	19,440	-	19,440	19,810	20,190	20,590	21,000	
<b>TOTAL OPERATING COSTS</b>	<b>133,850</b>	<b>121,790</b>	<b>133,260</b>	<b>-</b>	<b>133,260</b>	<b>135,900</b>	<b>138,570</b>	<b>141,340</b>	<b>144,150</b>	
*Percentage Increase over prior year					-0.4%	2.0%	2.0%	2.0%	2.0%	
<u>DEBT/RESERVES</u>										
Transfer to Maintenance Reserve Account	2,400	5,000	2,440	-	2,440	2,490	2,540	2,590	2,640	
Transfer to Capital Reserve Fund	19,780	27,130	18,320	-	18,320	15,630	12,910	10,090	48,300	
MFA Debt Reserve Fund	-	-	-	-	-	-	-	-	-	
MFA Debt Principal	38,190	39,250	39,250	-	39,250	39,250	39,250	39,250	8,490	
MFA Debt Interest	14,820	15,970	15,970	-	15,970	15,970	15,970	15,970	5,660	
<b>TOTAL DEBT / RESERVES</b>	<b>75,190</b>	<b>87,350</b>	<b>75,980</b>	<b>-</b>	<b>75,980</b>	<b>73,340</b>	<b>70,670</b>	<b>67,900</b>	<b>65,090</b>	
<b>TOTAL COSTS</b>	<b>209,040</b>	<b>209,140</b>	<b>209,240</b>	<b>-</b>	<b>209,240</b>	<b>209,240</b>	<b>209,240</b>	<b>209,240</b>	<b>209,240</b>	
<u>FUNDING SOURCES (REVENUE)</u>										
Est balance C/F from 2016 to 2017	-	-	-	-	-	-	-	-	-	
Sales - Water	(15,000)	(14,900)	(15,000)	-	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	
User Charges	(118,850)	(118,850)	(118,850)	-	(118,850)	(118,850)	(118,850)	(118,850)	(118,850)	
Other Revenue	(400)	(600)	(600)	-	(600)	(600)	(600)	(600)	(600)	
<b>TOTAL REVENUE</b>	<b>(134,250)</b>	<b>(134,350)</b>	<b>(134,450)</b>	<b>-</b>	<b>(134,450)</b>	<b>(134,450)</b>	<b>(134,450)</b>	<b>(134,450)</b>	<b>(134,450)</b>	
<b>REQUISITION - PARCEL TAX</b>	<b>(74,790)</b>	<b>(74,790)</b>	<b>(74,790)</b>	<b>-</b>	<b>(74,790)</b>	<b>(74,790)</b>	<b>(74,790)</b>	<b>(74,790)</b>	<b>(74,790)</b>	
*Percentage increase over last year						0.0%	0.0%	0.0%	0.0%	
User Charges					0.0%	0.0%	0.0%	0.0%	0.0%	
Requisition					0.0%	0.0%	0.0%	0.0%	0.0%	
Combined					0.0%	0.0%	0.0%	0.00%	0.00%	

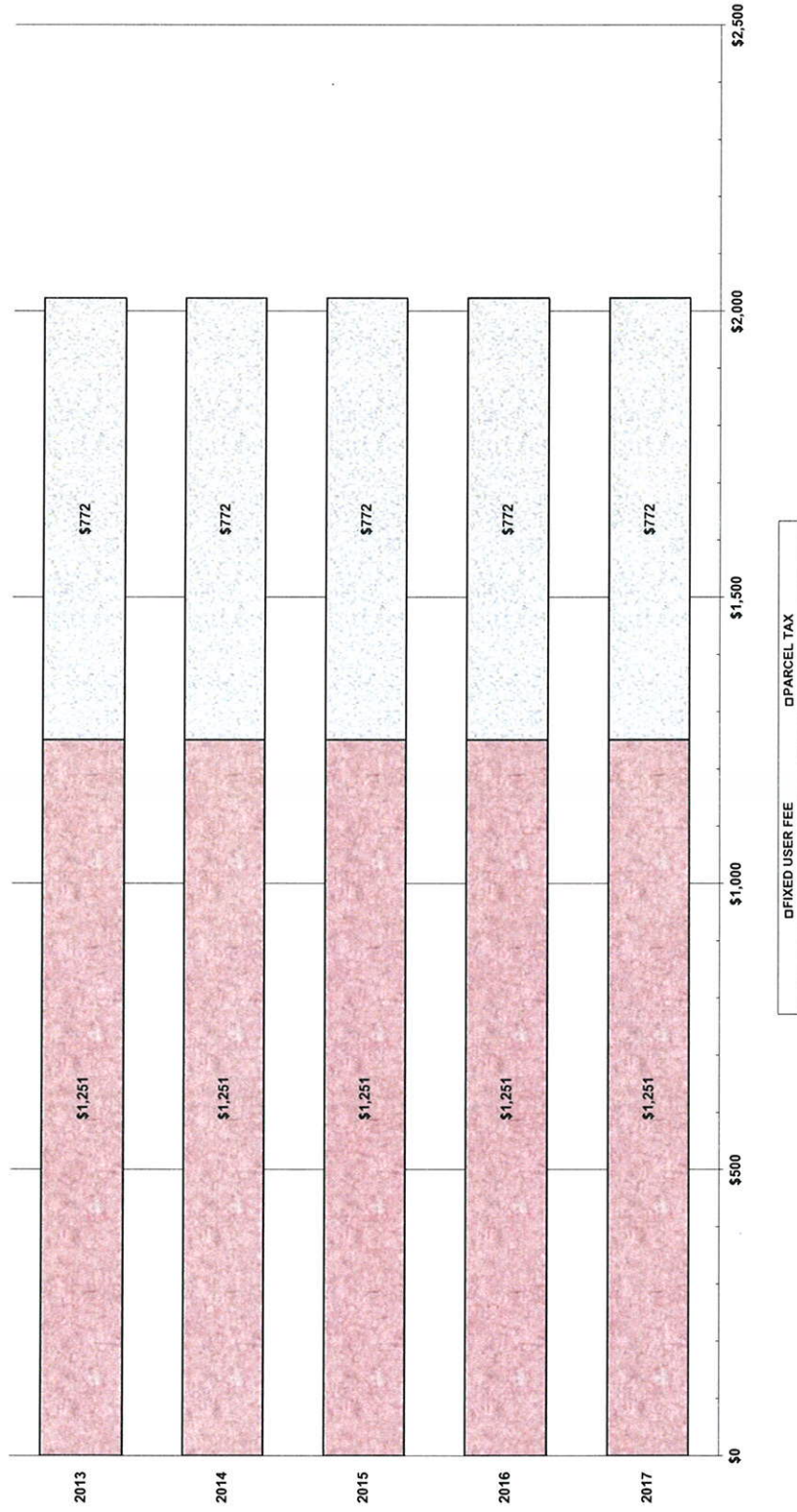
Service:

2.626 Fulford Water (SSI)

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>
2010	101	\$631.68	95	\$850.00	\$1,481.68	3688	52,301
2011	101	\$631.68	96	\$1,222.00	\$1,853.68	3777	51,858
2012	102	\$631.68	96	\$1,391.00	\$2,022.68	3822	51,089
2013	102	\$771.68	96	\$1,251.00	\$2,022.68	3891	52,453
2014	102	\$771.68	94	\$1,251.00	\$2,022.68	3891	49,770
2015	102	\$771.73	95	\$1,251.00	\$2,022.73	3993	47,221
2016	102	\$771.73	95	\$1,251.05	\$2,022.78	4073	47,290
2017	102	\$771.73	95	\$1,251.05	\$2,022.78		

# CAPITAL REGIONAL DISTRICT FULFORD WATER (SSI) FUNDING ANALYSIS 2013-2017



Actual Costs 2013-2016, Projected 2017  
Prepared by CRD Finance  
30/08/2016

# CAPITAL REGIONAL DISTRICT CAPITAL PLAN

CAPITAL BUDGET FORM  
2017 & Forecast 2018 to 2021

Service #: 2.626  
Service Name: Fulford Water (SSI)

No.	Capital Exp. Type	Capital Project Description	Asset Class	Funding Source	Total Project Budget	Carry Forward	2017	2018	2019	2020	2021	5 - Year Total
16-01	Renewal	Design and Approvals to replace Water Main on Morningside Road At Weston Creek (2016)	S	Res		7,000	-					0
21-01		Sunnyside PCS Rebuild and Water Meter	S	Res		-	-	-	-	-	6,000	6,000
17-01		Construction of Replacement Water Main on Morningside Road At Weston Creek	S	Res		-	30,000					30,000
20-01		Initial Improvement s Identified in Strategic Asset Management Plan	S	Res				0	0	50,000	0	50,000
		<b>Sub-total</b>	S		93,000	7,000	30,000	0	0	50,000	6,000	86,000
	Replacement		E	ERF	0	0						0
		<b>Sub-total</b>	S		0	0	0	0	0	0	0	86,000
18-01	New	Strategic Asset Management Plan - SAMP (2018)		Grant		0	0	5,390	0	0	0	5,390
				Res			0	0	0	0	0	0
				Debt			0	0	0	0	0	0
			L			0	0	0	0	0	0	0
						0	0	0	0	0	0	0
						0	0	0	0	0	0	0
		<b>Sub-total</b>			5,390	0	0	5,390	0	0	0	5,390
		<b>Total</b>										
		<b>Total</b>			98,390	7,000	30,000	5,390	-	50,000	6,000	91,390

Funding Source Codes	Asset Class
Debt = Debenture Debt (new debt only)	L - Land
ERF = Equipment Replacement Fund	S - Engineering Structure
Grant = Grants (Federal, Provincial)	B - Buildings
Cap = Capital Funds on Hand	V - Vehicles
Other = Donations / Third Party Funding	E - Equipment
Res = Reserve Fund	
STLoan = Short Term Loans	

Capital Expenditure Type	Asset Class
New Expenditure for new asset only	L - Land
Renewal Expenditure replaces an existing asset and extends the service ability or enhances technology in delivering that service	S - Engineering Structure
Replacement Expenditure replaces an existing asset	B - Buildings
	V - Vehicles
	E - Equipment

Service: 2.626 Fulford Water (SSI)		Committee: Electoral Area Services
16-01	<b>Design and Approvals to replace Water Main on Morningside Road At Weston Creek (2016)</b>  The water main along Morningside Road is exposed and spans Weston Creek making it susceptible to damage by people, vehicles, rocks or stream debris. There has been one failure at this site. The duration for design and approvals will most likely exceed the working windows for stream works, therefore this portion is to have the project ready for 2017	\$7,000
17-01	<b>Construction of Replacement Water Main on Morningside Road At Weston Creek (2017)</b>  Actual construction of the water main replacement.	\$30,000
18-01	<b>Strategic Asset Management Plan - SAMP (2018)</b>  The Strategic Asset Management Plan will, within the budget available, recommend a prioritized list of infrastructure replacements which will serve as the basis for future capital spending.	\$5,390
20-01	<b>Initial Improvement s Identified in Strategic Asset Management Plan (2020)</b>  A Strategic Asset Management Plan (SAMP) would have identified specific upgrades and improvements. This line item helps hold funds for some initial items that will be identified in the proposed 2020 SAMP. Ultimately funding for the SAMP work will not be known until the SAMP is complete.	\$50,000
21-01	<b>Sunnyside PCS Rebuild and Water Meter (2021)</b>  The Sunnyside Pressure Constrol Station piping is starting to show signs of deterioration and will require replacement to avoid failures. With the replacement it would be advantageous to install a water meter to help identify potential problems locations if there is a leak or otherer usually high flows.	\$6,000



<b>Reserve Schedule</b>
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<b>Reserve Fund: 2.626 Fulford Water Capital Reserve Fund - Bylaw 3275</b>
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<b>Reserve Cash Flow</b>
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	Estimate	Budget				
		2016	2017	2018	2019	2020
<b>Fund: 1070 Fund Center: 101897</b>						
Beginning Balance	69,827	72,957	61,277	76,907	89,817	49,907
Transfer to Cap Fund (Based on Capital Plan)	(24,500)	(30,000)	-	-	(50,000)	(6,000)
Transfer from Operating Budget	27,130	18,320	15,630	12,910	10,090	48,300
Interest Income*	500	-	-	-	-	-
<b>Ending Balance \$</b>	<b>72,957</b>	<b>61,277</b>	<b>76,907</b>	<b>89,817</b>	<b>49,907</b>	<b>92,207</b>

<b>Assumptions/Background:</b> Transfer as much as operating budget will allow
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\* 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.

**REPORT TO FULFORD WATER LOCAL SERVICE COMMISSION  
SPECIAL MEETING OF MONDAY, SEPTEMBER 12, 2016**

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**SUBJECT     WATER ALLOCATION TO PROPOSED LOTS AT 277 MORNINGSIDE ROAD**

**ISSUE**

To present the Fulford Water Local Service Commission (Commission) a recommendation of response to the Islands Trust relative to a request for confirmation of potable water availability per connection for a proposed subdivision at 277 Morningside Road.

**BACKGROUND**

The Fulford water utility was constructed in the 1968 with a new water treatment plant and storage reservoir being commissioned in 2010.

The water treatment plant was designed for a flow rate of 4.5 l/s (59.4 igpm) or 388,800 l/d (85,540 igpd):

Currently the treatment plant produces approximately 2.7 l/s (35.6 igpm) or 233,280 l/d (51,330 igpd). This reduced capacity is a result of pump impellers being modified (shaved) at the initial time of construction in order to allow direct pumping into the system until the full upgrades (reservoir and pressure control station) were completed. The lower flow rate mitigates the number of starts and stops of the treatment plant, which in turns provides better treatment performance.

These pumps have continued to perform well and they have generally been able to meet all demands (occasionally stressed when water leaks exist in the system), therefore the impellers have not been replaced to match the original design. When the impellers wear out or the demand increases to a level that additional treatment capacity is needed, the pump impellers can be replaced with ones that match the design, provided the higher flow rate is required.

The plant design was based on providing 2,270 lpd (500 igal) of water per connection. A total of 129 connections were assumed based on the service area and the zoning of the day.

The utility has two water licences on Weston Lake (C120382 and C120292 totaling 116,153 m<sup>3</sup> per year or (318 m<sup>3</sup> per day). Based on the water licence of 318,000 l/d and 2,270 lpdpc, 140 connections could be serviced. If the water allocated per connection was increased to 2,500 lpd, only 127 SFE could be accommodated.

The 2014 and 2015 average yearly use per connection was approximately 230 m<sup>3</sup> (50,600 igal) which equates to a daily average use of 630 l (139 igal) per connection.

It should be noted that the average yearly use for the Fulford area has been significantly higher and in particular it was 383 m<sup>3</sup> (1050 l/d) in 2011. This volume is still well below the stipulated design volume.

There are approximately 102 connections on the Fulford water system.

The subdivision at 277 Morningside Road will have a total of 7 lots, 5 more than currently exists.

The original design of the water treatment plant had anticipate a total of 7 lots here.

The developer has been working on this subdivision since 2006 and there have been referral to

the CRD from Ministry of Transportation and Infrastructure in 2012 and a revised plan in 2014. The developer's engineer has been corresponding with IWS Engineering over the past few years trying to ascertain the infrastructure extension requirements.

A condition of subdivision from the Islands Trust is that the water provider must confirm the volume of water available to each proposed lot. Islands Trust also provided a stated daily water volume to each lot and if the water purveyor is not able to provide that volume, then the developer is required to have a restrictive covenant between them and Islands Trust placed on the properties limiting the development to match the available water. The covenant would be up to the Islands Trust to manage and enforce.

Residential customers are currently not metered.

In this development, the Islands Trust has stated the required daily volume per lot is 2,500 l.

## **ALTERNATIVES**

### **Alternative 1**

That the Fulford Water Local Service Commission advises Islands Trust that the Fulford Water Service may supply water to the proposed seven lot subdivision at 277 Morningside subject to the following:

1. An allocation of up to 2,270 lpd per connection up to 7 connections subject to the right of the utility to reallocate volumes in the future and,
2. Require that the developer install a single meter at the property line.

### **Alternative 2**

That the Fulford Water Local Service Commission advises Islands Trust that the Fulford Water Service may supply water to the proposed seven lot subdivision at 277 Morningside subject to the following:

1. An allocation of up to 2,500 lpd per connection up to 7 connections subject to the right of the utility to reallocate volumes in the future and,
2. Require that the developer install a single meter at the property line.

## **IMPLICATIONS**

Alternative 1 – Assigning the design volume to these lots will maintain a consistent application of the water allocation to users. Should allocations become based on zoning or standards set by Islands Trust, it will be very difficult to monitor use as well as deciding which lots may be eligible for different allocations. Further, should the Commission wish to decrease the allocation per lot to accommodate other uses or changes in water supply conditions (climate change or drought), there may be difficulties if there are specific volumes assigned to each connection.

The single water meter would assist the operations group if there are leaks. The ability to determine if this particular development is using excessive amounts of water is much easier with a water meter. The meter could be used for billing purposes if the Commission chose to implement a consumption based fee. The meter could also assist in developing criteria of how much water new homes use.

Alternative 2 – Assigning a higher volume to these lots will create a management issue as well as potential inequities with current and future users. Further, should the Commission wish to decrease the allocation per lot to accommodate other uses or changes in water supply conditions (climate change or drought), there may be difficulties or legal challenges if there are specific volumes assigned to each connection.

The single water meter would assist the operations group if there are leaks. The ability to determine if this particular development is using excessive amounts of water is much easier with a water meter. The meter could be used for billing purposes if the Commission chose to implement a consumption based fee. The meter could also assist in developing criteria of how much water new homes use.

### **CONCLUSION**

Assigning specific volumes to individual lots may jeopardize the utilities ability to modify volumes and allocations. Changes in allocations may result from climate change, water conservation initiatives, or other circumstances and the utility needs to maintain the right to make those allocation changes.

The utility is not responsible for zoning or monitoring use based on zoning and should not get into the business of doing so.

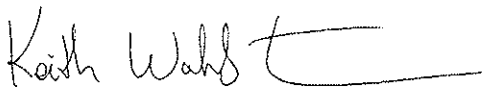
Requiring the developer to install water meters for each property (or a single water meter for the entire strata development) can be used to monitor use, develop criteria of how much water new homes use and support metered billing practices should that be implemented at some time. The monitoring of such meter(s) would not be the utility responsibility.

The developer should also consider alternate water sources such as grey water reuse or rainwater catchment to supplement the required daily volume to meet the Islands Trust requirements. The mechanism as to how this would work would be between the developer and Islands Trust.

### **RECOMMENDATION(S)**

That the Fulford Water Local Service Commission advises Islands Trust that the Fulford Water Service may supply water to the proposed seven lot subdivision at 277 Morningside subject to the following:

1. An allocation of up to 2,270 lpd per connection up to 7 connections subject to the right of the utility to reallocate volumes in the future and,
2. Require that the developer install a single meter at the property line.



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