



Making a difference...together

FULFORD WATER SERVICE COMMISSION ANNUAL GENERAL MEETING

Notice of Meeting on Monday, November 27, 2017 at 10:00 AM
Creekside Meeting Room, Suite 108 121 McPhillips Ave, Salt Spring Island, BC

Wayne McIntyre

Carol Eyles

Gord Singbell

Alan Martin

Anthony Maude

Purpose of the Annual General Meeting

The agenda for the Annual General Meeting (AGM) is approved by the members of the Commission. The purposes (and hence the agenda items) of the meeting are:

- To have the last year's AGM minutes approved (by Commission members), and to present reports on the work of the Commission on the past year's operation, maintenance, capital upgrades and financial information of the service to the service residents and owners,
- To nominate members for appointment to the Commission, and
- To enable the public to share comments on subjects which relate to the work of the Commission. The Commission can identify (under "new business") issues on which it wants feedback at the meeting. Motions raised by the public at the AGM will be considered by the commission at a subsequent regular meeting.

The Annual General Meeting is for the 2016 fiscal year.

AGENDA

1. **Call to Order**
2. **Approval of Agenda**
3. **Adoption of Minutes of the 2015 Annual General Meeting held on June 16, 2016**
4. **Chair's Report**
5. **Annual Report for 2016 Fiscal Year**
6. **Election of Officers**
7. **New Business**
8. **Adjournment**

there was no quorum established for this meeting. therefore no minutes

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

EXEC-1295039085-1438



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**Minutes of the Annual General Meeting of the Fulford Water Service Commission
Held June 16, 2016 in the Portlock Park Meeting Room, 145 Vesuvius Bay Road, Salt Spring
Island, BC**

DRAFT

Present: **CRD Director:** Wayne McIntyre
Commission Members: Carole Eyles (Chair), Alan Martin, Gord Singbeil, Anthony Maude
Staff: Karla Campbell, Senior Manager SSI Electoral Area; Keith Wahlstrom, Manager, Engineering SSI Electoral Area; Dan Robson, Manager, Saanich Peninsula and Gulf Islands Operations; Peggy Dayton, Senior Financial Analyst; Kyu-Chang Jo, Financial Analyst 2; Tracey Shaver, Recording Secretary

1. Call to Order

The Chair called the meeting to order at 1:05 pm.

2. Approval of Agenda

MOVED by Commissioner Maude, **SECONDED** by Commissioner Martin,
That the Fulford Water Service Commission Annual General Meeting agenda of June 16, 2016 be approved.

CARRIED

3. Adoption of Minutes of the 2014 Annual General Meeting held on September 14, 2015

MOVED by Commissioner Singbeil, **SECONDED** by Commissioner Maude,
That the Fulford Water Service Commission Annual General Meeting minutes for the fiscal year of 2014 held on September 14, 2015 be approved.

CARRIED

4. Chair's Report

The Chair provided a written report.

- Transient Voltage Surge Suppression installed
- Hit and run damage to fire hydrant repair paid for by utility
- Subscribers watching for leaks and emergencies

5. Operations Report

- Staff presented the 2015 Annual Operations Report.
- Water extraction from Weston Lake is under licence amount
- Community water use has dropped
- Leak in system increases plant flow which is then investigated
- An easement across School District property is needed for maintenance; otherwise the right of way agreement is proceeding.
- First stage of SAMP was mapping system lines

6. Election of Officers

Staff called for nominations. Commissioners Singbeil and Martin agree to stand for additional two year term. Staff asked twice more for nominations, and hearing none, Commissioner Singbeil and Martin were elected by acclamation.

7. New Business

No items presented.

8. Adjournment

MOVED by Commissioner Maude, **SECONDED** by Commissioner Singbeil,
That the Fulford Water Service Commission Annual General be adjourned at 2:00 pm.

CARRIED

CHAIR

SENIOR MANAGER



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FULFORD WATER SERVICE 2016 ANNUAL REPORT Monday, November 27, 2017

Introduction

This report provides a summary of the Fulford Water Service for 2016. It includes a description of the service, summary of the water supply, demand and production, drinking water quality, operations highlights, capital project updates and financial report.

Service Description

The Fulford Water Utility is a semi-rural residential community located on Salt Spring Island. It services the Fulford Elementary School and a small commercial component; including the BC Ferries Terminal. The service was created in 1968 as the Fulford Water Improvement District and became a CRD service in 2004. The Fulford Water Utility (Figure 1) is comprised of 102 parcels of land with 91 of those parcels connected. Within those 91 parcels, there are 95 single family equivalents (SFE) as the use on some parcels represent more than one house.

The utility obtains its drinking water from Lake Weston, a small lake that lies within an uncontrolled multi-use watershed outside and northeast of the service area. The Capital Regional District (CRD) holds two licenses to divert a total of up to 291.6 cubic metres per day and store up to 49,339 cubic metres. Lake Weston is estimated to have a total volume of 1,090,000 cubic metres. Lake Weston is subject to seasonal water quality changes and is affected by periodic algae blooms.

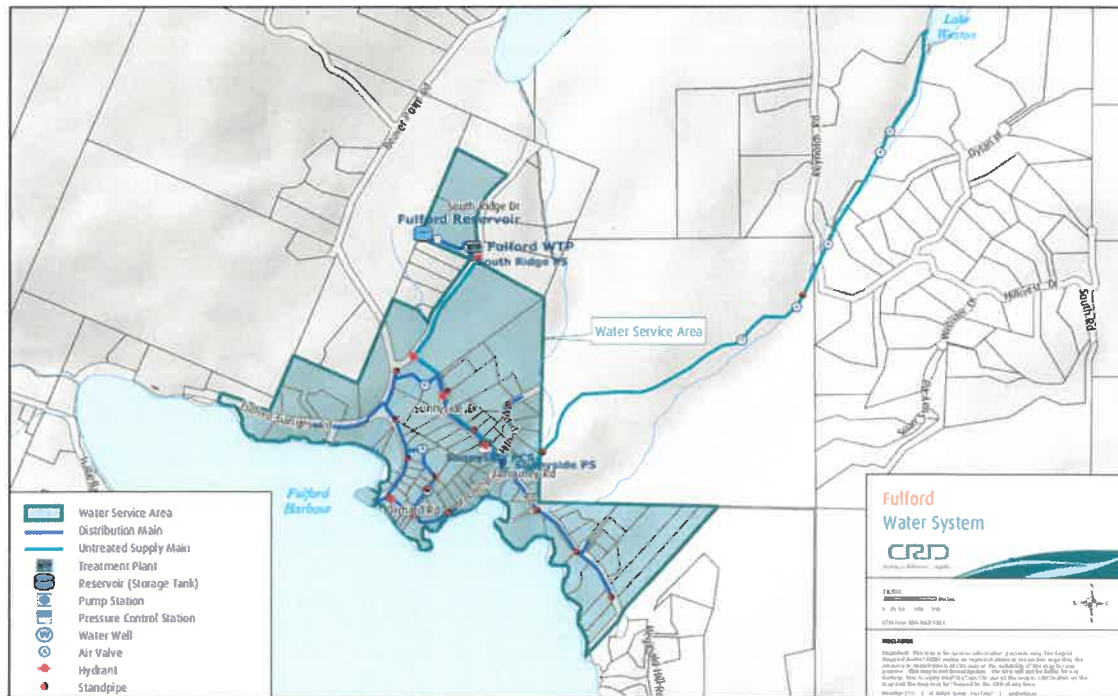


Figure 1: Fulford Water Service

The Fulford water system is primarily comprised of:

- a water treatment plant (WTP) that draws water from Lake Westin and treats it at a location on South Ridge Drive, adjacent to the Fulford Elementary School. The water is treated using a rapid mix system, flocculation, dissolved air floatation (DAF) and filters, ultraviolet disinfection, then chlorination prior to being pumped, via the distribution system to a reservoir. The water treatment plant (WTP) design flow is rate is 4.5 litres/sec (60 lpm);
- one raw water pump station on Sunnyside Drive near Hilltop Road (flow rate of two pumps running is 2.3 litres/sec (30 lpm);
- approximately 4,500 m of water distribution pipe;
- 1 water reservoir – 360 m³ (80,000 l);
- fire hydrants, standpipes, and gate valves;
- water service connections complete with water meters;
- 1 pressure reducing valve station on Sunnyside Drive near Hilltop Road.

Water Production and Demand

Annual water production since 2011 is shown in Figure 2. A total of 27,809 m³ of water was abstracted from Lake Weston Lake in 2016. This is 5.1% decrease from 2015, and 21.7% less than the average production since 2011 (35,498 m³).

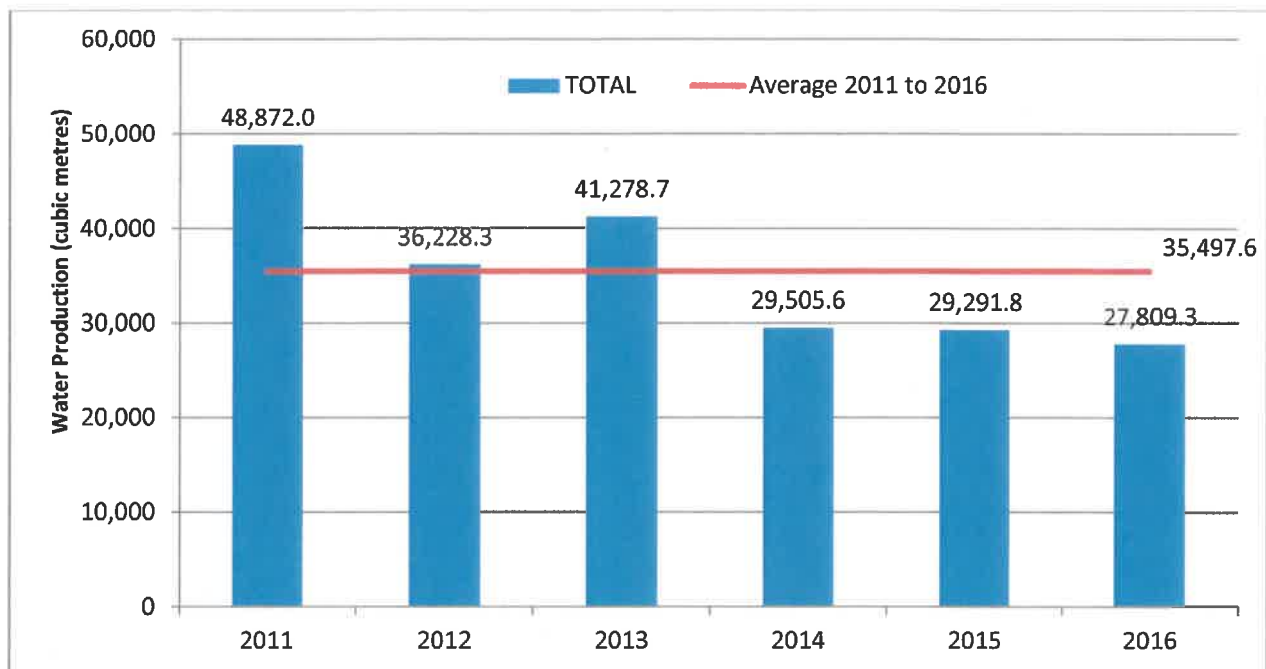


Figure 2: Total Annual Water Production 2011 to 2016

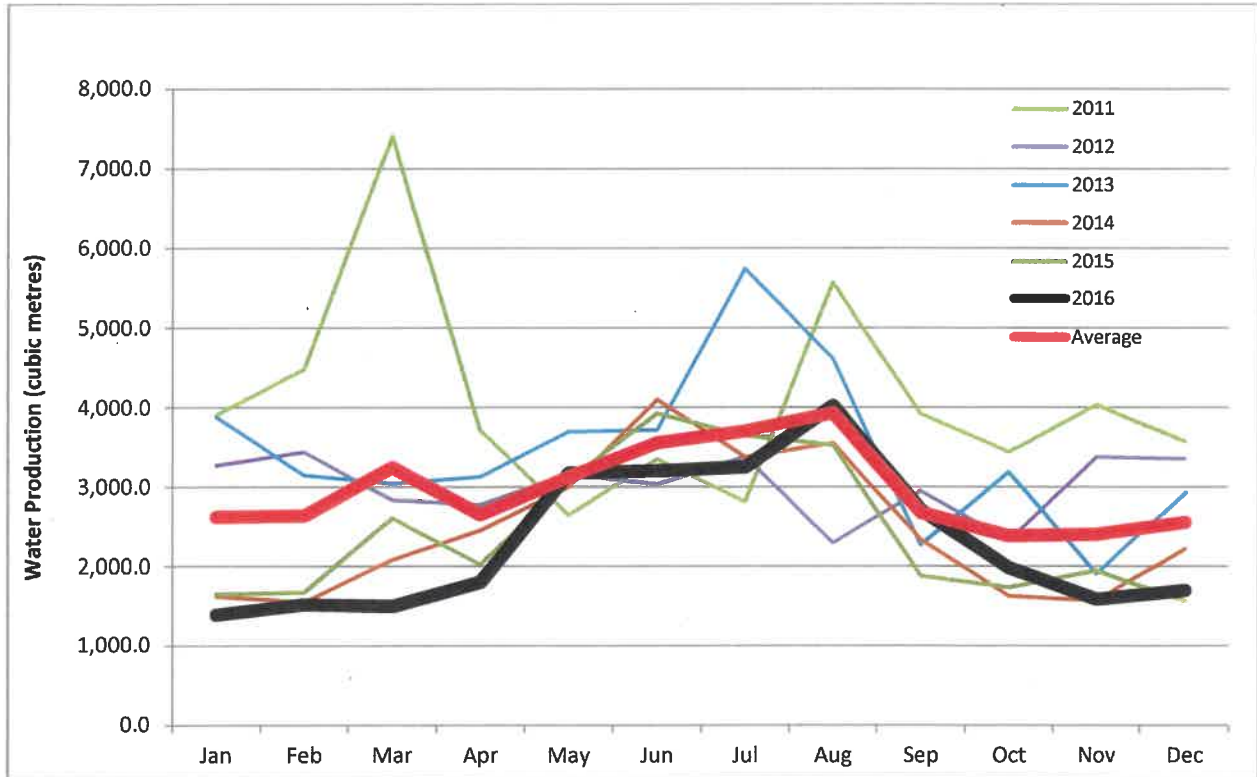


Figure 3: Water Production by Month 2011 to 2016

The Fulford Water System does not have residential water meters and therefore the average per single family equivalent (SFE) is simply a calculated value. Utilizing 102 SFE and deducting an allowance of 20% for non-revenue water such as distribution leaks, fire hydrant usage, distribution system maintenance and process water for the treatment plant, the average SFE is 218m³ per year for 2016 compared to 230m³ per year in 2015.

An average water demand by residential service connection for water service areas operated by the CRD on Salt Spring Island is shown in **Figure 4**. This comparison shows that Fulford customers, on average, use much more water than other service area customers.

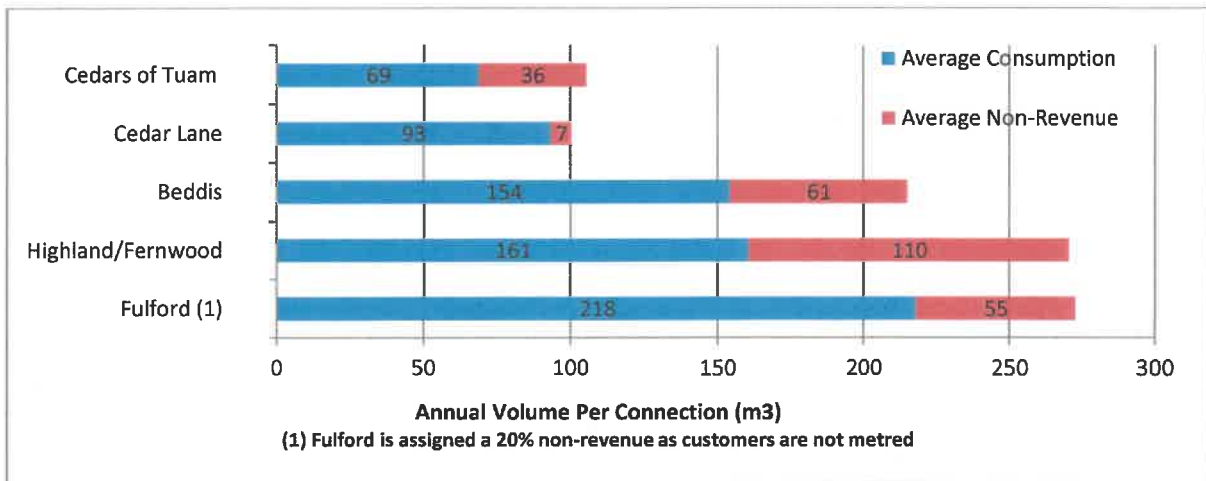


Figure 4: 2016 Average Annual Consumption and Non-Revenue Volumes Per Customer/Connection - CRD Salt Spring Water Systems

Water Quality

In general, the Fulford Drinking Water System has been reliably providing good quality drinking water to its customers in 2016. A number of samples for a variety of water quality relevant parameters were collected and analysed throughout the year and confirmed that the DAF and disinfection treatment stages were effective in treating raw water from Lake Weston.

Typical Fulford drinking water quality characteristics for 2016 are summarized as follows:

- Lake Weston exhibited low concentrations of total coliform (TC) and *E. coli* bacteria throughout most parts of the year with some higher TC spikes during the summer months.
- No parasitic cysts and oocysts (*Giardia* and *Cryptosporidium*) were detected in the raw source water from the lake.
- Raw water from the lake was slightly hard (~35.9 mg/L CaCO₃).
- A total organic carbon (TOC) concentration range from 4.76 to 7.00 mg/L indicates a mesotrophic (semi-productive) lake status.
- Two metal test results showed low iron and manganese concentrations in the raw water. These metals in exceedance of the *Guidelines for Canadian Drinking Water Quality* (GCDWQ) limits can cause, if untreated, aesthetic issues such as water discoloration.
- Treated water was bacteriologically safe to drink.
- Treated water turbidity (cloudiness) was well below the *Guidelines for Canadian Drinking Water Quality* (GCDWQ) limit of 1 nephelometric turbidity units (NTU);
- TOC (median 2.90 mg/L) in the treated water was slightly higher than in 2015. As TOC is a precursor for disinfection by-products, concentrations consistently higher than 2 mg/L can lead to exceedances with these substances.
- Disinfection by-products such as trihalomethanes (THM) did only exceed the GCDWQ limit of 100 µg/L on one occasion with 101 µg/L. The annual median concentration for THM was close but below the limit (87.2 µg/L) and requires close monitoring and potentially fine tuning of the treatment process to achieve a higher TOC removal rate. Haloacetic acids (HAA) remained well below the GCDWQ limit of 80 µg/L.

Water Quality data collected from this drinking water system can be reviewed on the CRD website: <https://www.crd.bc.ca/about/data/drinking-water-quality-reports/salt-spring-island-water-quality-reports/fulford-water-quality-reports>

OPERATIONS

Weekly operations of the Fulford water system is provided by an on-island contract operator under agreement with the Capital Regional District (CRD). The contract operator performs routine scheduled activities such as system checks, water sampling for laboratory analysis and minor preventative maintenance activities all under the direction of the CRD as detailed in the operations agreement. The contractor also performs more significant preventative and corrective maintenance activities at the request of the CRD. These types of activities may include; water system flushing, leak detection and water leak repairs.

In addition to operation and maintenance activities, the on-island contractor also provides stand-by and emergency callout response duties.

Additional operational support and guidance is provided by CRD personnel who typically perform more preventative or corrective maintenance in relation to the electrical and communication

electronic equipment. Other operational support provided by the CRD include emergency response and remote water system monitoring and control using the CRD's Supervisory Control and Data Acquisition (SCADA) equipment. The SCADA system is used to alert the on-island contactor and if necessary CRD standby operations staff of a potential water system fault (e.g. reservoir low water level).

The on-island contract operator attended to regular weekly, monthly and annual operational duties as detailed in the Fulford water system operating agreement. The contactor however also performed additional services related to either emergency response, additional maintenance activities or capital improvement work.

Table 1 below details the additional work performed by the on-island contractor.

Table 1: Additional work completed by contract operator at request of CRD.

TASK	NOTES
Clean DAF chambers	Bi-annual preventative maintenance performed on the dissolved air floatation (DAF) chambers to ensure peak performance of the water treatment process.
Cleaned intake screen and system flushing	Raw water system operational maintenance performed to ensure peak performance
Pump repairs	Backwash pumps at the water treatment plant were removed from service and sent out for repairs. A temporary pump system was installed while the repair work was completed.
Replace turbidity analyzer	Electronic turbidity analyzer for filter number 1 in the water treatment plant failed. After investigation it was concluded that the analyzer required replacement and could not be repaired.
Water system flushing	Annual water system flushing conducted as part of a water distribution system preventative maintenance program.
Leak repairs	Water system service line leak repair at: <ul style="list-style-type: none"> • 140 Hilltop • 2921 Ganges/Fulford Rd • 2901 Ganges/Fulford Rd
Automatic control valve replacement	An electronic controlled valve at the water treatment plant failed. It was determined that the electronic control board failed and not repairable.
Danger tree removal	Dangerous trees were identified and removed from around the Reynolds Road filter building for occupational health and safety requirements. Recent winter storms resulted in number of branches, trees and debris being dropped along the path from Reynolds Road to the filter building. The filter building was damaged by tree fall debris this past winter.

CAPITAL IMPROVEMENTS

The following three capital projects were planned for 2016:

1. Design and Approvals to replace Water Main on Morningside Road at Weston Creek (\$7,000 allocated, \$3,911 spent). 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 design was initiated in 2016, however, not completed. Further, the allocated budget will be exceeded (estimated total cost \$8,500 to \$9,000) due to the need for new ground survey and the overall design costs.

2. Safety Equipment (\$10,000 allocated, \$7,442 spent). Work included purchasing equipment and completion installations so potassium permanganate can be added to the water to reduce precipitate in the system. The project is complete.
3. 2901 Fulford Road Water Service Replacement (\$7,500 allocated, \$5,838 spent). The water service to 2901 Fulford has failed several times. The work was delayed until it was known whether BC Ferries would be upgrading the road, however the BC Ferries project did not proceed. The project is complete.

There was one capital project from 2015 that was carried forward into 2016:

4. Register statutory right of way on school property for treatment plant, reservoir and piping well (\$5,000 allocated, \$1,886 spent – not final). The work to secure the right of way started in 2015 and has progressed to having drafts of the agreement reviewed by the CRD and the school district. An additional requirement (and somewhat complicating) was the need for an easement through the school grounds so workers and equipment can physically access the reservoir and pipeline. This issue became apparent while reviewing how we actually achieved our maintenance. There were still minor outstanding clauses at the end of 2016, however all issues have now been resolved and the SRW is registered.

2016 FINANCIAL REPORT

Please refer to the attached [Statement of Operations](#). Revenue includes parcel taxes (Transfers from Government), fixed user fees (User Charges), consumption based revenue (*Water Sales*), interest on savings (Interest Earnings), a transfer from the maintenance reserve account, and miscellaneous revenue such as late payment charges (Other Revenue).

Expenses includes all costs of providing the service. General Government Services includes budget preparation, financial management, utility billing and risk management services. CRD Labor and Operating Costs includes CRD staff time as well as the costs of equipment, tools and vehicles. Debt servicing costs are interest and principal payments on long term debt. Other Expenses includes all other costs to administer and operate the water system, including insurance, supplies, water testing and electricity.

The difference between Revenue and Expenses is reported as Net Revenue (expenses). Any transfers to or from capital or reserve accounts for the service (Transfers to Own Funds) are deducted from this amount and it is then added to any surplus or deficit carry forward from the prior year, yielding an Accumulated Surplus (or deficit) that is carried forward to the following year.

2016 User Fee charges were \$1,251.05 per Single Family Equivalent (SFE) and 2016 Parcel Tax charges were \$771.73 per Taxable Parcel.

The balances in the Fulford Water service capital funds and reserve accounts at December 31, 2016 were:

Description	Balance
Maintenance Reserve Account	\$7,400
Capital Reserve Fund (1070 101897)	\$79,433
Funds remaining to spend on projects in progress (WLA3758)	\$39,653
Funds remaining to spend on projects in progress (WSV185146)	\$10,734

Water System Problems - Who to Call:

To report any event or to leave a message regarding the Fulford water system, call either:

CRD water system emergency call centre:	1-855-822-4426 (toll free)
CRD water system emergency call centre:	1-250-474-9630 (toll)
North Salt Spring Waterworks District (contract operator):	250 537-9902
CRD local operator (Ganges Wastewater Treatment Plant):	250-537-4314
CRD water system general enquiries (toll free):	1-800-663-4425

When phoning with respect to an emergency, please specify to the operator, the service area in which the emergency has occurred.

The toll free number for reporting emergencies was piloted in 2016. Its use was monitored and evaluated during the year and it has been decided to continue using it. Periodic reviews will be undertaken, but there is presently no plan to terminate its use.

Submitted by:	Matt McCrank, M.Sc., Peng., Senior Manager, Infrastructure Operations
	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
	Rianna Lachance, BCom, CPA, CA, Senior Manager Financial Services
	Karla Campbell, Senior Manager, Salt Spring Island Electoral Area

KW:ts

CAPITAL REGIONAL DISTRICT

FULFORD WATER

Statement of Operations (Unaudited)

For the Year Ended December 31, 2016

	2016	2015
Revenue		
Transfers from government	74,790	74,790
User Charges	118,845	118,845
Sale - Water	17,600	14,097
Other revenue from own sources:		
Interest earnings	211	600
Other revenue	691	8,679
Transfer from Operating Reserve Account		
Total revenue	212,137	217,011
Expenses		
General government services	9,551	8,320
Contract for Services	57,067	65,641
CRD Labour and Operating costs	14,824	5,723
Debt Servicing Costs	55,503	63,970
Other expenses	36,867	37,307
Total expenses	173,812	180,961
Net revenue (expenses)	38,325	36,050
Transfers to own funds:		
Capital Reserve Fund	33,325	64,054
Operating Reserve Account	5,000	2,400
Annual surplus (deficit)	-	(30,404)
Accumulated surplus, beginning of year		30,404
Accumulated surplus, end of year	\$ -	-

CAPITAL REGIONAL DISTRICT

FULFORD WATER Statement of Reserve Balances (Unaudited) For the Year Ended December 31, 2016

	Capital Reserve	
	2016	2015
Beginning Balance	69,828	13,600
Transfer from Operating Budget	33,325	64,054
Transfers from completed capital projects		
Interest Income	780	208
Transfer to Capital Project	(24,500)	(8,034)
Ending Balance	<u>79,433</u>	<u>69,828</u>

	Operating Reserve	
	2016	2015
Beginning Balance	2,400	-
Transfer from/(to) Operating Budget	5,000	2,400
Ending Balance	<u>7,400</u>	<u>2,400</u>