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**FULFORD WATER SERVICE COMMISSION  
ANNUAL GENERAL MEETING**

Notice of Meeting on Thursday, June 16, 2016 at 1:00 PM  
Portlock Park Meeting Room, 145 Vesuvius Bay Road, Salt Spring Island, BC

Wayne McIntyre

Carol Eyles

Gord Singbell

Alan Martin

Anthony Maude

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**AGENDA**

- 1. Call to Order**
- 2. Approval of Agenda**
- 3. Adoption of Minutes of the 2014 Annual General Meeting held on September 14, 2015**
- 4. Chair's Report**
- 5. Operations Report**
  - 5.1 Annual Report for 2015 Fiscal Year**
- 6. Election of Officers**
- 7. New Business**
- 8. 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 Annual General 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

**1. Call to Order**

The Chair called the meeting to order at 10:04 am.

**2. Approval of Agenda**

**MOVED** by Commissioner Singbeil, **SECONDED** by Commissioner Martin,  
That the Fulford Water Service Commission Annual General Meeting agenda of  
September 14, 2015 be approved.

**CARRIED**

**3. Adoption of Minutes of the 2014 Annual General Meeting held on October 20, 2014**

**MOVED** by Commissioner Martin, **SECONDED** by Commissioner Singbeil,  
That the Fulford Water Service Commission Annual General Meeting minutes of October  
20, 2014 be amended in Item 5 to replace "acclimation" with "acclamation", and approved.

**CARRIED**

**4. Chair's Report**

The Chair provided a written report.

- Request for earlier AGM meetings
- Two instances of vehicle damage to the system
- 2016 will have lower interest rates on borrowing
- Timely communication with subscribers for leaks and emergencies

**5. Operations Report**

- Staff presented the 2015 Annual Operations Report.
- The issue of recycled water was discussed and staff advised that water extracted from Weston Lake is considered usage as non-revenue water but still production. Water taken from lakes/wells is measured against how much is sold, which provides non-revenue totals. Water used for analyser is accounted for.

**6. Election of Officers**

Staff called for nominations for Chair. Commissioner Martin nominated Commissioner Eyles, who agreed to stand as chair. Staff asked twice more for nominations, and hearing none, Commissioner Eyles was elected by acclamation.

Chair advised that Commissioner Maude agrees for an additional two-year term. No further nominations were heard, and elections closed.

**7. New Business**

No items presented.

**8. Adjournment**

**MOVED** by Commissioner Martin, **SECONDED** by Commissioner Singbeil,  
That the Fulford Water Service Commission Annual General be adjourned at 10:59 am.

**CARRIED**

\_\_\_\_\_  
**CHAIR**

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**SENIOR MANAGER**



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**FULFORD WATER SERVICE  
2016 ANNUAL REPORT  
Thursday, JUNE 16, 2016**

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### **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 2015 fiscal year.

### **DRINKING WATER SYSTEM**

#### **Water Production and Demand**

The Fulford Water System provides drinking water to 102 taxable folios. Service is provided to the Fulford School, BC Ferry terminal and businesses in the village.

#### **Source Water – Lake Weston**

The Fulford water system 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.

#### **Water Treatment Process**

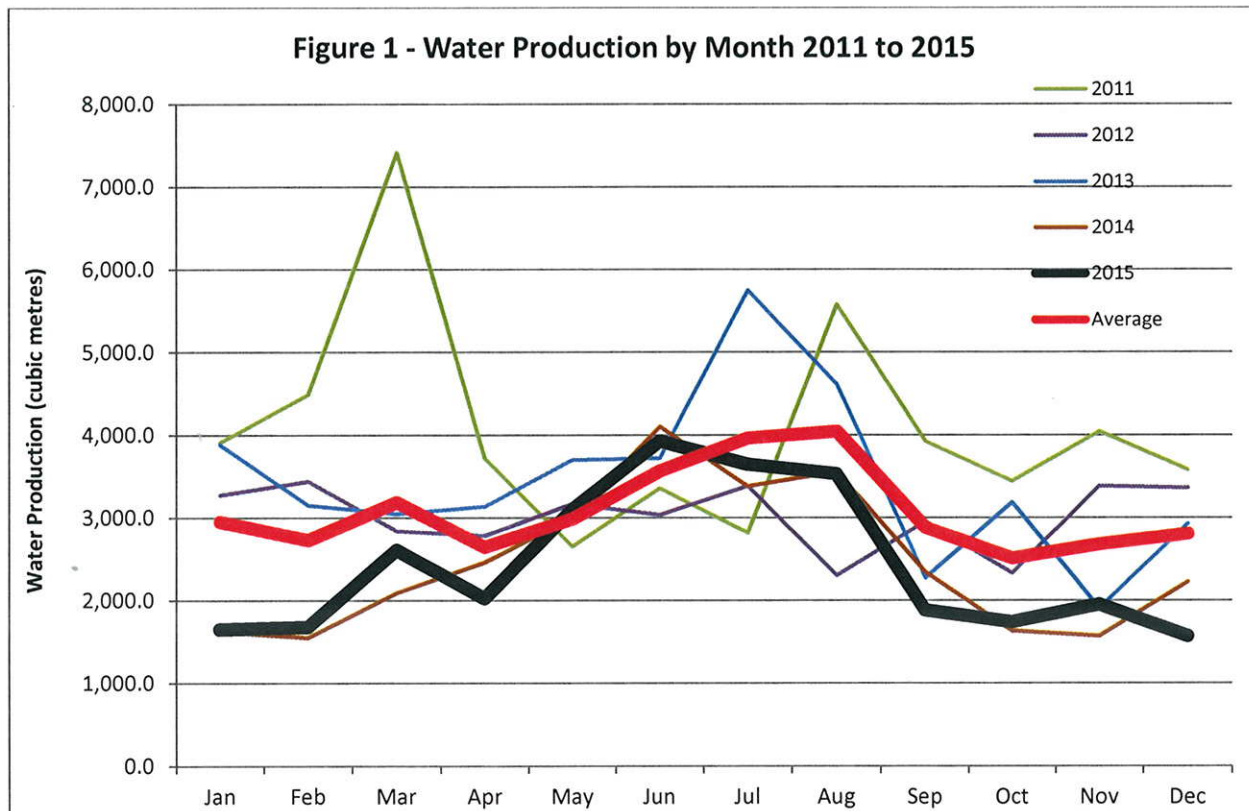
Water from Lake Weston flows by gravity to Hilltop Road where it is then pumped to the Fulford Water Treatment Plant located on South Ridge Drive. The water treatment process consists of dissolved air flotation, filtration, disinfection with ultraviolet light and chlorine using sodium hypochlorite.

#### **Distribution System**

Treated water is pumped from the plant to a 360 cubic metre steel storage reservoir located behind the Fulford School. Water then flows from the reservoir into the distribution system – a network of mainly 100 mm – 150 mm diameter pipes, many of which are original to the system (constructed in 1968). The distribution system operates on two pressure zones, regulated by the Sunnyside PRV. The commercial customers are metered.

A total of 29,292 cubic metres (m<sup>3</sup>) of water was abstracted from Lake Weston in 2015, less than 1% different than 2014. Overall, community water use has dropped and monitoring over the upcoming years will show if this is a new normal or an anomaly.

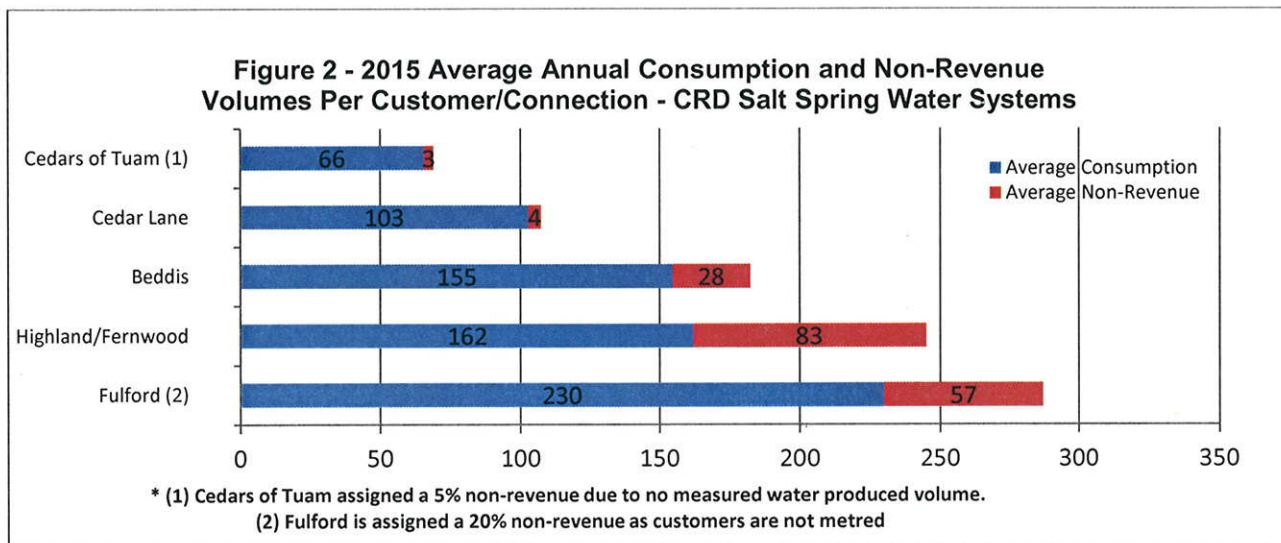
A summary of the monthly water production volumes (in cubic metres) at the treatment plant is depicted in **Figure 1**.



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 230m<sup>3</sup> per year for 2015 compared to 231m<sup>3</sup> per year in 2014.

An average water demand by residential service connection for water service areas operated by the CRD on Salt Spring Island is shown in **Figure 2**. This comparison shows that Fulford customers, on average, use much more water than other service area customers.





## Water Quality

In general, the Fulford Drinking Water System has been reliably providing good quality drinking water to its customers in 2015. 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 2015 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 (~40.4 mg/L CaCO<sub>3</sub>).
- A total organic carbon (TOC) concentration range from 3.92 to 6.60 mg/L indicates a mesotrophic (semi-productive) lake status.
- Two metal test results showed moderate but unproblematic 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. One positive TC result on February 18, 2015 was not confirmed by an immediate resample.
- Treated water turbidity (cloudiness) was well below the *Guidelines for Canadian Drinking Water Quality* (GCDWQ) limit of 1 nephelometric turbidity units (NTU);
- TOC (median 2.36 mg/L) in the treated water was higher than in 2014. 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) or haloacetic acids (HAA) did not exceed the GCDWQ limit of 100 µg/L or 80 µg/L respectively. The mean annual concentration for THM was, however, close to the limit (90.5 µg/L) and requires close monitoring and potentially fine tuning of the treatment process to achieve a higher TOC removal rate.

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 contractor 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 contractor 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	DATE	REASON
Clean DAF chambers	January 2015	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	February 2015	Raw water system operational maintenance performed to ensure peak performance
Cleaning of backwash tank	February 2015	Cleaning maintenance performed when sludge buildup is observed that may impact plant performance.
Leak investigation	March 2015	Observations of a significant increase in water treatment plant production volumes prompted a leak investigation. Leak(s) were not found at the time.
Water system flushing	April 2015	Annual water system flushing conducted as part of a water distribution system preventative maintenance program.
Leak repair	May 2015	A possible water system leak was reported near 135 Hilltop. Leak was confirmed and subsequently repaired.
Leak investigation	June 2015	Observations of a significant increase in water treatment plant production volumes prompted a leak investigation. Leak(s) were not found at the time.  Leak(s) was identified on private property. The homeowner completed the necessary repairs at their expense.
Standpipe repairs	June 2015	Standpipe on Beaver Point Road was damaged as a result of a motor vehicle accident. Significant repairs were completed. All costs were recovered from an insurance claim.

TASK	DATE	REASON
Call-out	July 2015	Call out for low chlorine residuals at the water treatment plant. The chlorine chemical feed pump failed as a result repairs were completed.
Clean DAF chambers	August 2015	Bi-annual preventative maintenance performed on the dissolved air floatation (DAF) chambers to ensure peak performance of the water treatment process.
Fire hydrant repairs	September 2015	Fire hydrant at 2915 Fulford Ganges Road was damaged as a result of being hit presumably by a vehicle. Significant repairs were completed and the hydrant placed back into service.
Leak investigation	November 2015	Leak reported near 124 Orchard Drive. Leak determined to be on private property. Property owner notified who immediately completed the necessary repairs.

### Capital Improvements

The following two capital projects were planned for 2015:

1. Extend phase 1 of the Strategic Asset Management Plan (SAMP) to develop the technical portion of the SAMP. This work was not undertaken in 2015 due to limited staff resources. Once again it will be moved forward to the 2016 budget.
2. Register statutory right of way on school property for treatment plant, reservoir and piping well (\$5,000 allocated, \$1,705 spent). 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) is 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 are still outstanding clauses that need finalized prior to presenting it to the committee.

### 2015 FINANCIAL REPORT

*Revenue* includes parcel taxes (*Transfers from government*), fixed user fees (*User Charges*), consumption based fees (*Water sales*), *Interest earnings* and miscellaneous revenue such as connection charges and late payment charges (*Other revenue*).

*Expenses* include all costs of providing the service. *General government services* include budget preparation, financial management, utility billing, and risk management services. *Contract for services* includes payments to North Salt Spring Waterworks and Gulf Island Septic Company. *CRD Labour 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 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 the result 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.



The Fulford Water Utility 2015 revenue of \$217,011 consisted of:

- \$74,790 - *Transfers from government*
- \$118,845 - *User charges*
- \$14,097 - *Water sales*
- \$600 - *Interest earnings, and*
- \$8,679 - *Other revenue.*

The total expenditures for 2015 were \$180,962, comprised of:

- \$8,320 - *General government services*
- \$54,505 - *Contract for services*
- \$9,075 - *Waste sludge disposal*
- \$20,464 - *CRD labour and operating costs*
- \$63,970 - *Debt servicing costs, and*
- \$24,628 - *Other expenses.*

The difference between revenue and expenditures at 2015 year end amounted to a net surplus of \$36,049. This was added to the surplus of \$30,404 carried forward from 2014. \$64,054 was transferred to the capital reserve at year end and \$2,400 was transferred to the maintenance reserve account, leaving no surplus at the end of 2015.

2015 User Fee charges were \$1,251.00 per Single Family Equivalent (SFE) and 2015 Parcel Tax charges were \$771.73 per Taxable Parcel.

The balances in the Fulford Water service capital funds and reserve accounts at December 31, 2015 were:

<b>Description</b>	<b>Balance</b>
Maintenance Reserve Account	\$2,400
Capital Reserve Fund (1070 101897)	\$69,827
Funds remaining to spend on projects in progress (WLA3758)	\$39,048
Funds remaining to spend on projects in progress (WSV185146)	\$5,000

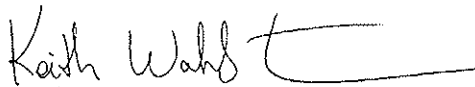
**Water System Problems - Who to Call:**

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

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

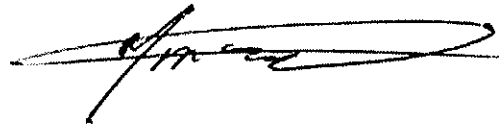
When phoning with respect to an emergency, please specify to the operator, the service area in which the emergency has occurred.

The new toll free number for reporting emergencies is being pilot-tested and will be evaluated at the end of 2016 to assess the use and need going forward.



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Keith Wahlstrom, PEng  
**For**  
Karla Campbell, Senior Manager  
Salt Spring Island Electoral Area



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Matthew McCrank, MSc, PEng  
Senior Manager, Infrastructure Operations  
Concurrence



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Rajat Sharma, B.Eng, MBA, CPA, CMA  
Acting Chief Financial Officer  
Concurrence

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Glenn Harris, Ph.D., R.P.Bio  
Senior Manager, Environmental Protection  
Concurrence

KW:ts