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**GANGES SEWER LOCAL SERVICES COMMISSION  
ANNUAL GENERAL MEETING**

Notice of Meeting on Thursday, April 18, 2019 10:00 AM  
Creekside Meeting Room, Suite 108 121 McPhillips Ave, Salt Spring Island, BC

Gary Holman

Gary Utter

Rod Scotvold

David Toynbee

Mike de Carle  
(via telephone)

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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 2018 fiscal year.

1. **Call to Order**
2. **Approval of Agenda**
3. **Adoption of Minutes of the 2017 Annual General Meeting held on June 7, 2018**
4. **Chair's Report**
5. **Report**
  - 5.1 **Annual Report for 2018 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.*

EXEC-1295039085-1944



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**Minutes of the 2017 Fiscal Year Annual General Meeting  
of the Ganges Sewer Local Service Commission  
Held June 7, 2018 at 108 121 McPhillips Ave, Salt Spring Island, BC**

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**DRAFT**

**PRESENT:** **Director:** Wayne McIntyre  
**Commission Members:** Gary Utter, David Toynbee, Mike de Carle, Rod Scotvold.  
**Staff:** Dan Robson, Manager, Saanich Peninsula and Gulf Islands Operations; Chris Davidson, Manager Engineering; Kyu-Chang Jo, Financial Analyst 2; Dan Ovington, Manager Parks and Recreation; Tracey Shaver, Recording Secretary  
**Absent:** Karla Campbell, Senior Manager SSI Electoral Area;

**1. Call to Order**

Gary Utter called the meeting to order at 10:00 am.

**2. Approval of Agenda**

**MOVED** by Commissioner Scotvold, **SECONDED** by Commissioner Toynbee, That the Ganges Sewer Local Service Commission agenda for the 2017 fiscal year Annual General Meeting held on June 7, 2018 be approved.

**CARRIED**

**3. Adoption of Minutes of the 2016 Annual General Meeting held on November 20, 2017**

**MOVED** by Commissioner de Carle, **SECONDED** by Commissioner Toynbee, That the Ganges Sewer Local Service Commission meeting minutes of the 2016 Annual General Meeting held on November 20, 2017 be approved as submitted.

**CARRIED**

**4. Chair's Report-no report**

**5. Report**

**5.1 Annual Report for 2017 Fiscal Year**

Staff reviewed the various section of the report dealing with regulatory compliance, operations activities, capital projects and finances.

- Request for further breakdown annually on the operating costs and general government services.
- Genset generator was paid for out of reserve funds and installed under capital funding projects

**6. Election of Officers**

Nominations were called for from the floor. Both Gary Utter and Rod Scotvold agreed to additional term. Additional nominations were called for three times. Both Gary Utter and Rod Scotvold agreed to stay on the commission for another two year term beginning in January 2019.

**7. New Business (Delegation items added by agreement of the Commission)**

**7.1 Salt Spring Island Transportation Chair- Robin Williams**

Provided suggestion for coordination of capital infrastructure work

- 2 large subdivision projects proposed for the Drake Road Area
- Drake Road in poor shape; Ministry of Transportation and Infrastructure (MoTI) targeted area for upgrades in 2020
- Consider coordination of road and sewer works along Drake Road; potential use of mixed funding sources from MoTI, Community Works funds and CRD.

**7.2 Croftonbrook Affordable Housing- Kisa Peterson**

Provided updated information on affordable housing project

- Working on a short time line to obtain approvals and move project forward without losing significant grant funds.
- Sewer capacity recently confirmed by CRD staff
- Next step is obtaining second reading by Islands Trust

**7.3 Eric Booth- Park Drive 33 unit development in process**

Mr. Booth presented concerns over Ganges Sewer capacity limitations

- Requesting confirmation of sufficient sewer capacity for current build out within the service area.
- Need existing buildout numbers in addition to available rezoning for all properties in the parcel tax area
- 2013 rezoning application in process to increase density
- No policy or bylaw in place that addresses how to prioritize rezoning applications within the service area.
- Current rezoning applications receiving approval and moving ahead without any process in place to assure all property owners paying parcel taxes and who are eligible to rezone will be treated fairly in the future.
- CRD Sewer capacity study completed; under review and will be released in the near future.

**7.4 Additional Items discussed**

- Recent bypass event at treatment plant; review of standard procedures identified a gap in the alarm system. Has been fixed.
- Consider addition of a Sani Dump station on island for RV/Campers.
- SD64 sent letter to CRD to request consideration of using treated waste water for school fields

**8. Adjournment**

**MOVED** by Commissioner Utter, **SECONDED** by Director McIntyre,  
That the meeting be adjourned at 11:05 am.

**CARRIED**

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CHAIR

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SENIOR MANAGER



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# GANGES SEWER SERVICE 2018 ANNUAL REPORT APRIL 18, 2019

## Introduction

This report provides a summary of the Ganges Sewer Service for 2018. It includes a description of the service, summary of the treatment plant performance, volume of sewage treated, operations highlights, capital project updates and financial report.

The service is administered by the Ganges Sewer Local Services Commission.

## Service Description

The Ganges Sewer Service was established in 1985. Ganges is the island's core area providing the majority of commercial services as well as several residential pockets. In addition to the commercial and residential customers, other customers include the hospital, three schools, Art Spring, community library, swimming pool and several senior and affordable housing sites. The system is owned and operated by the Capital Regional District (CRD) and services the Ganges Sewer Service Area, shown in Figure 1.

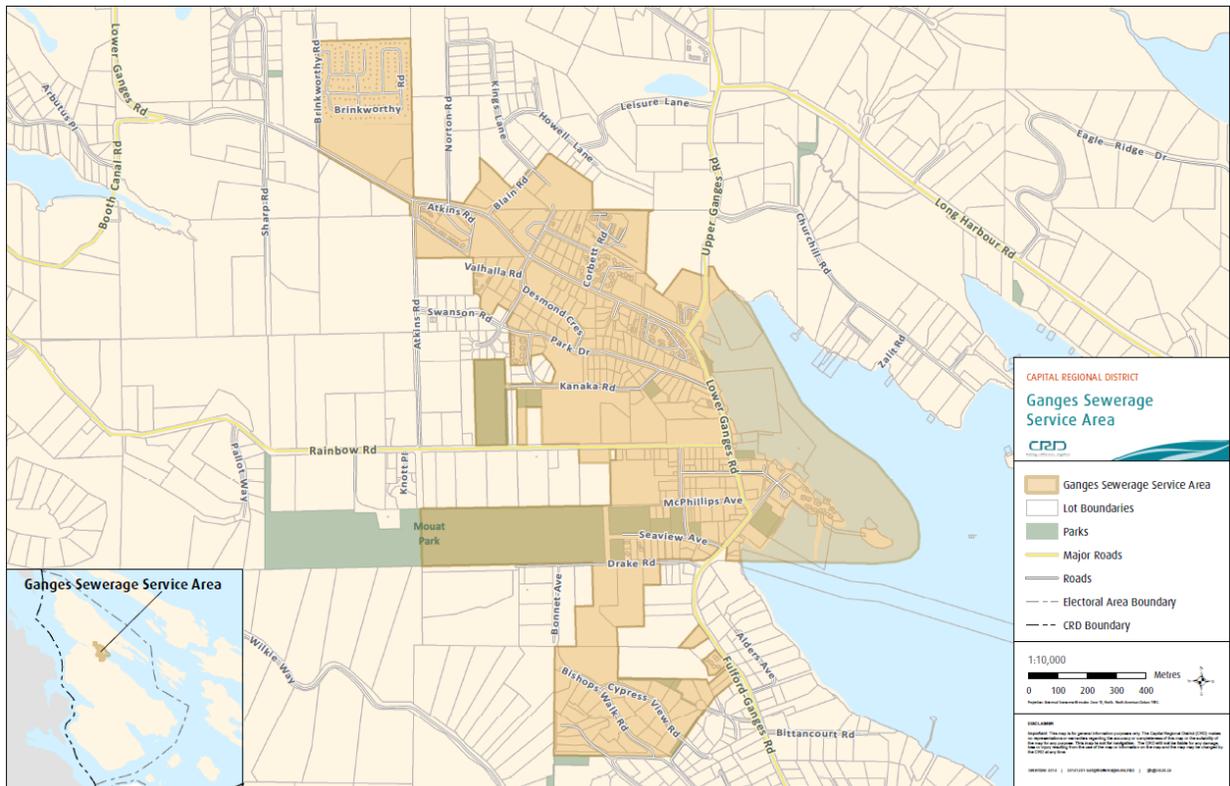


Figure 1: Ganges Sewer Service Area

The majority of the sewer system was built over a period between 1982 and 1988. Collecting and treating sewage began in 1985. There have been three significant upgrades to-date on the wastewater treatment plant including:

- Converting the treatment process from a rotating biological contactor (RBC) to a membrane bioreactor (MBR) which resulted in an increase in capacity from 400 m<sup>3</sup>/day to 800 m<sup>3</sup>/day and utilizing membrane plates for sludge thickening (1998);
- replacing the MBR with ones of higher capacity to increase from 800 m<sup>3</sup>/day to 1,000 m<sup>3</sup>/day (2005);
- adding ultra violet light disinfection (2011).

More recent upgrades (2018) include:

- replacement of the membrane bioreactors
- replacement of the sludge thickening equipment
- replacement of effluent pumps and filtrate pumps
- increasing influent storage capacity.
- replacement of standby power generator and electrical ancillary equipment.
- Electrical upgrades that included the conversion of a motor control center from 208 volt to 600 volt.
- Mechanical and electrical upgrades for both collection system pumping stations.

Other minor upgrades and replacements occurred, however, the rehabilitation of several major components was identified beginning in 2011 and is now in the implementation phase.

The wastewater system consists of:

- 8,000 m of 150 mm to 250 mm gravity sewer collection main pipes;
- 140 m of 75 mm pressure main pipe;
- 2 collection system pump stations;
- Manholes;
- 5,200 m of 200 mm polyvinyl chloride (PVC) and polyethylene (PE) outfall pipe;
- 1,090 m<sup>3</sup>/day Membrane Bioreactor (MBR) secondary wastewater treatment plant.

The system discharges treated effluent into the Ganges Harbour in Swanson Channel under authorization of the Municipal Wastewater Regulation.

## **SEWER SYSTEM**

### **Ganges Sewer Regulatory Compliance – Wastewater**

Wastewater influent and effluent were analyzed for a list of conventional and priority substances, as well as for acute and chronic toxicity. None of the daily effluent flows from the Ganges Harbour WWTP exceeded the allowable maximums in 2018. Effluent quality met

provincial and federal regulatory requirements for all parameters, including total suspended solids (TSS), carbonaceous biochemical oxygen demand (CBOD), un-ionized ammonia, and fecal coliform bacteria.

Of the 201 priority substances analyzed, 68 were detected at standard detection limits in effluent. The number of substances analyzed were fewer in 2018, as high-resolution analyses were discontinued. However the numbers of parameters that were detected remained consistent with previous years (77 in 2017) as the high-resolution parameters were rarely detected. Substances detected in 2018 included metals, total phenols, phenanthrene, diethyl phthalate, di-n-butyl phthalate, and dimethyl ketone.

Similar to previous years, most priority substances in the effluent were below the BC Water Quality Guidelines before application of the predicted minimum near surface initial environmental dilution of 419:1. Only 4 substances exceeded BC WQG in undiluted effluent: WAD cyanide, sulfide, copper and zinc. These substances, and all others, were well below the BC WQG after the minimum initial dilution factor was applied. Minimum near surface dilution represents the predicted concentration of effluent in the marine water column at a distance of 100 m away from the outfall.

### **Toxicity Testing**

The effluent sample from June 2018 passed the 96-hour trout acute toxicity test with 100% survival. The sample also passed the 48-hour Daphnia acute toxicity test with 100% survival. These results are consistent with 2011-2017.

### **Sludge (Mixed Liquor)**

Ganges Harbour WWTP sludge (mixed liquor) met the criteria for BC Organic Matter Recycling Regulations (OMRR) Class A Biosolids in 2018. None of the metals measured, including mercury which has exceeded limits in the past, exceeded applicable OMRR Class A Biosolids limits. This monitoring is undertaken to inform the CRD Regional Source Control Program.

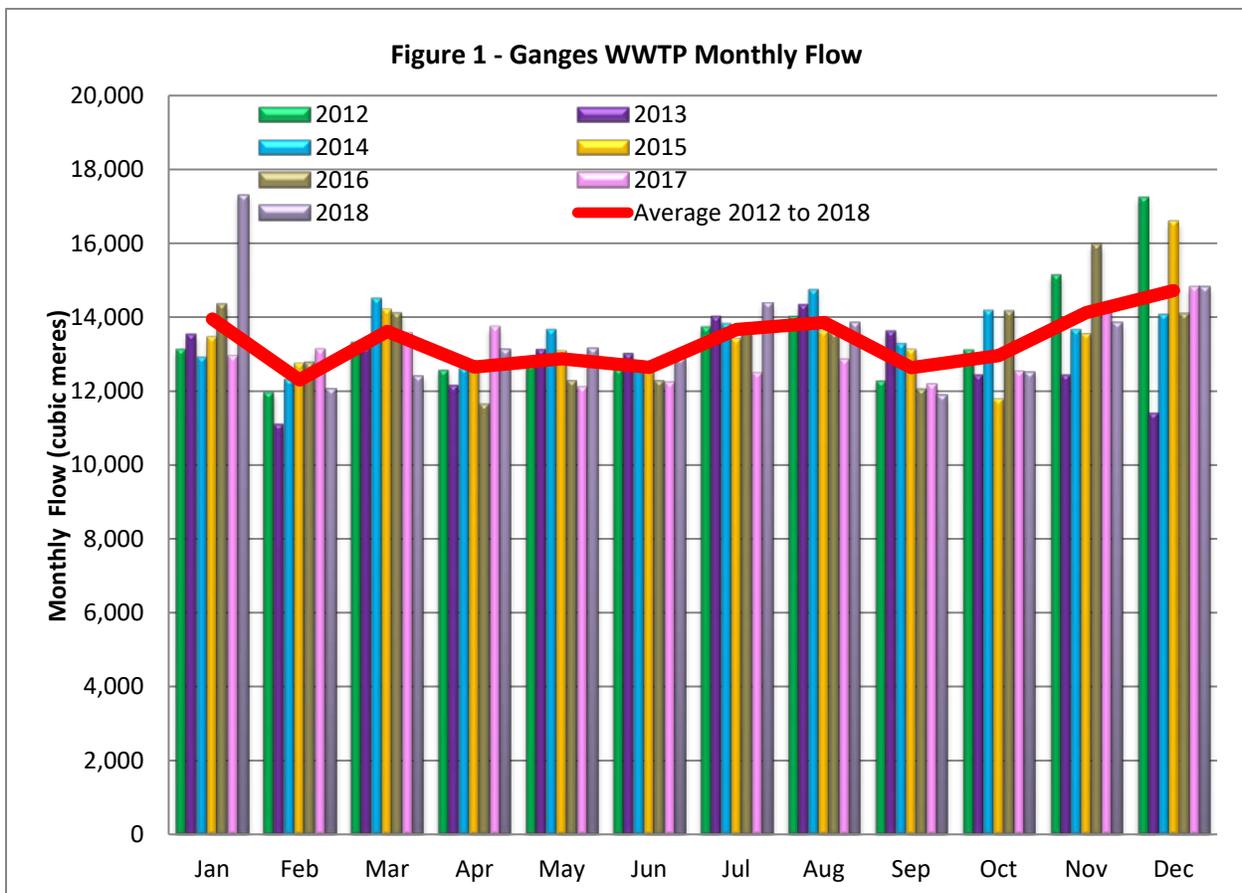
### **Receiving Water**

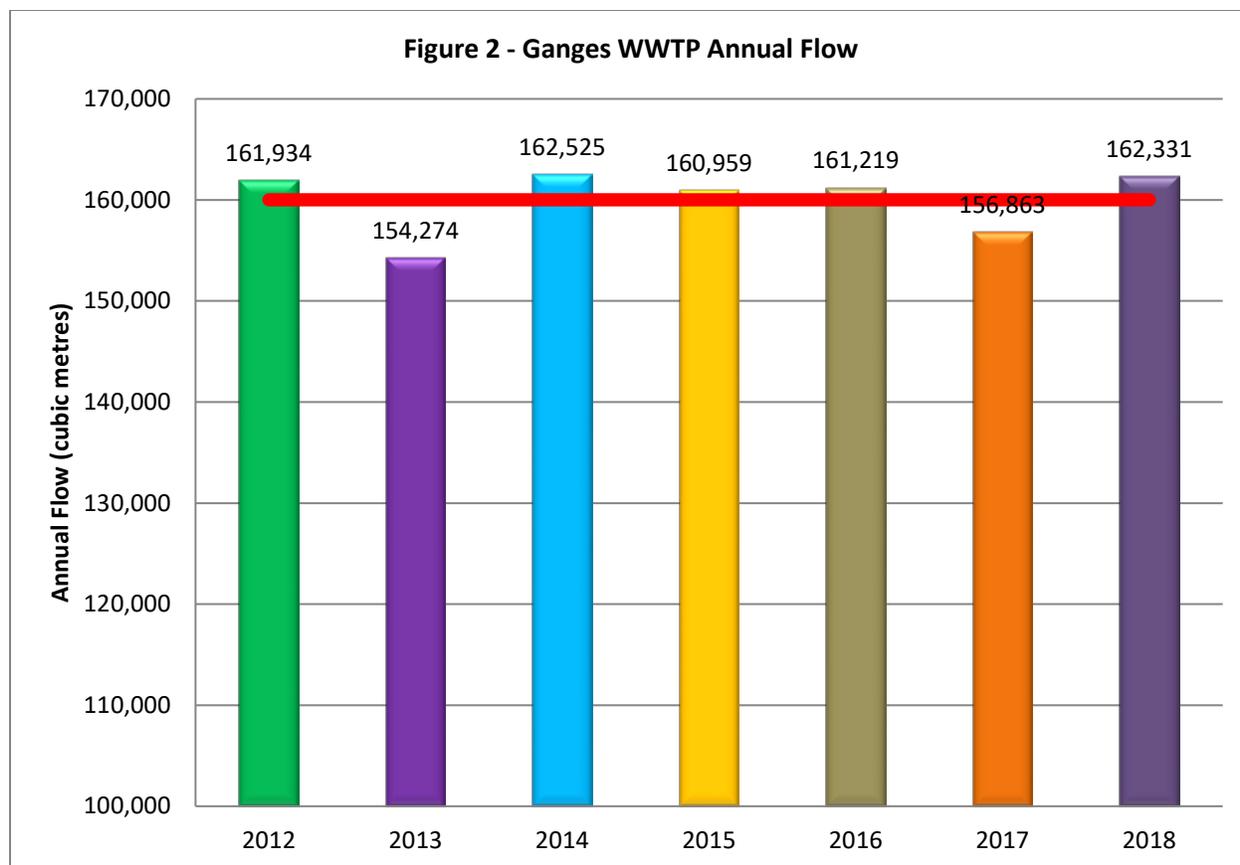
Routine receiving water monitoring was not required at the Ganges Harbour WWTP in 2018. This monitoring is only required every 4 years unless there are planned bypasses, plant failures/overflows, or wet weather overflows that exceed 3 days duration in the winter or 1 day duration in the summer. A planned bypass did take place at the Ganges Harbour WWTP in August 2018, to allow for treatment works repair and upgrades. Receiving water sampling was conducted before, during, and after the bypass, with all bacterial results well below human health protective guidelines. The routine sampling last took place in 2016 and is next required in 2020.

**Annual Flow**

The monthly flows and the total annual flow over the past 7 years are shown in Figures 1 and 2 below. The graphs indicate that the 2018 wastewater flows were about 1.0% higher than the 7-year average. The monthly flows show the seasonal variations due to peak tourist times (in the summer) and inflow and infiltration (in the winter), but generally the average monthly flow is fairly stable and inflow and infiltration appears to be reasonable.

The Municipal Sewage Regulation (MSR) contains requirements for the treatment, reuse and discharge of municipal wastewater effluent. The regulation includes a requirement that sewer flows reaching treatment plants should not exceed 2.0 times “average dry weather flow” during storm events with less than a 5-year return period. Based on the measured flow rates, the Ganges sewer system meets that requirement.





### Operational Highlights

- There was significant operational involvement and support for the capital improvement project that included backing from the electrical, automation and mechanical operational sections. Operations worked very closely with the contractor with the wastewater treatment plant upgrades to ensure the treatment process continued in order to meet all regulatory requirements while the work progressed . This involved extended operating hours and emergency response during the implementation and commissioning phases of the project.
- December 20<sup>th</sup> wind storm response

### CAPITAL IMPROVEMENTS

The Capital Projects that were in progress in 2018 included:

1. Ganges Infrastructure Renewal Project (\$3,900,000 allocated, \$3,001,171 spent) . The work includes civil, mechanical and electrical upgrades at Ganges WWTP, Harbour House and Manson pump stations, and an inflow and infiltration assessment.
2. Replacement of Standby Generator (genset) and Automatic Transfer Switch (\$165,000 allocated, \$105,088 spent). The standby generator and automatic transfer switch had reached its end of usable life. Detailed design were completed and the genset unit was pre-purchased. The installation of the new genset is part of the other electrical upgrades at Ganges WWTP.

Figure 3 – Ganges Sewer Project Costs as of Dec. 31, 2018

| Ganges Sewer System Rehabilitation                  | Budget           | Actuals          | Remaining      |
|---|------------------|------------------|----------------|
| <b>Ganges WWTP, Outfall, Pump Station Upgrade</b>   | <b>3,602,000</b> | <b>2,849,131</b> | <b>752,869</b> |
| Project Management                                  | 220,000          | 212,112          | 7,888          |
| Construction  | 1,715,000        | 1,223,594        | 491,406        |
| Commission/Ops                                      | 100,000          | 190,990          | -90,990        |
| Contingency   | 302,000          | 1,731            | 300,269        |
| Design  | 340,000          | 349,031          | -9,031         |
| Env/Arch Support                                    | 25,000           | 25,919           | -919           |
| Equipment Supply                                    | 900,000          | 845,754          | 54,246         |
| <b>Inflow and Infiltration Analysis Remediation</b> | <b>298,000</b>   | <b>152,040</b>   | <b>145,960</b> |
| Project Management                                  | 27,000           | 16,936           | 10,065         |
| Contingency   | 16,000           |                  | 16,000         |
| Design  | 0                | 3,359            | -3,359         |
| Flow Monitoring & Reporting                         | 30,000           | 7,218            | 22,782         |
| Modelling   | 25,000           | 21,834           | 3,166          |
| CCTV & MH Inspect                                   | 120,000          | 102,695          | 17,305         |
| Repairs   | 80,000           |                  | 80,000         |
| <b>Grand Total</b>                                  | <b>3,900,000</b> | <b>3,001,171</b> | <b>898,829</b> |

## 2018 FINANCIAL REPORT

Please refer to the attached [Statement of Operations](#). Revenue includes parcel taxes (Transfers from Government), fixed user fees (User Charges), flow-based user fees (*Sewer Use – 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 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 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.

2018 User Fee charges were \$625.88 per Single Family Equivalent (SFE) and 2018 Parcel Tax charges were \$136.62 per Taxable Parcel.

The Ganges Sewer Service has several reserve funds. They are listed below:

| Description  | Balance as of the end of 2018 |
|--|-------------------------------|
| Maintenance Reserve Fund                                     | \$68,138                      |
| Capital Reserve Fund (1056 101836)                           | \$751,077                     |
| Capital Reserve Fund (1056 101900)                           | \$76,289                      |
| Funds remaining to spend on projects in progress (SLA4007)   | \$937,139                     |
| Funds remaining to spend on projects in progress (SSV185117) | \$74,400                      |

**Wastewater System Problems – Who to Call:**

To report any event or to leave a message regarding the Ganges Wastewater System, call either:

**CRD wastewater system emergency call centre: 1-855-822-4426 (toll free)**  
**CRD wastewater system emergency call centre: 1-250-474-9630 (toll)**  
**CRD local operator (Ganges Wastewater Treatment Plant): 250-537-4314**  
**CRD wastewater 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.

|               |   |
|---------------|---|
| Submitted by: | Matt McCrank, M.Sc., P.Eng., 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       |

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Attachment: Statement of Operations

## CAPITAL REGIONAL DISTRICT

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### GANGES SEWER Statement of Operations (Unaudited) For the Year Ended December 31, 2018

|   | 2018           | 2017           |
|---|----------------|----------------|
| <b>Revenue</b>                          |                |                |
| Transfers from government               | 54,130         | 54,130         |
| User Charges                            | 868,740        | 820,444        |
| Other revenue from own sources:         |                |                |
| Interest earnings                       | 4,038          | 2,338          |
| Other revenue                           | 769            | 1,386          |
| Transfer from Operating Reserve Account |                |                |
| Total revenue                           | <u>927,677</u> | <u>878,298</u> |
| <br>                                    |                |                |
| <b>Expenses</b>                         |                |                |
| General government services             | 27,630         | 26,040         |
| Contract for Services                   | 41,962         | 25,558         |
| CRD Labour and Operating costs          | 282,043        | 252,664        |
| Debt Servicing Costs                    | 143,665        | 46,938         |
| Other expenses                          | 250,506        | 215,091        |
| Total expenses                          | <u>745,807</u> | <u>566,292</u> |
| <br>                                    |                |                |
| <b>Net revenue (expenses)</b>           | 181,870        | 312,007        |
| Transfers to own funds:                 |                |                |
| Capital Reserve Fund                    | 155,240        | 290,507        |
| Operating Reserve Account               | 26,630         | 21,500         |
| <br>                                    |                |                |
| <b>Annual surplus (deficit)</b>         | -              | -              |
| Accumulated surplus, beginning of year  |                | -              |
| <b>Accumulated surplus, end of year</b> | <u>\$ -</u>    | <u>-</u>       |

## CAPITAL REGIONAL DISTRICT

### GANGES SEWER Statement of Reserve Balances (Unaudited) For the Year Ended December 31, 2018

|   | Capital Reserve |                |
|---|-----------------|----------------|
|   | 2018            | 2017           |
| <b>Beginning Balance</b>                  | 662,295         | 347,120        |
| Transfer from Operating Budget            | 155,240         | 290,507        |
| Transfers from completed capital projects | (5,819)         | 19,482         |
| Interest Income                           | 15,651          | 5,186          |
| Transfer to Capital Project               | -               | -              |
| <b>Ending Balance</b>                     | <u>827,367</u>  | <u>662,295</u> |

|                                      | Operating Reserve |               |
|--------------------------------------|-------------------|---------------|
|                                      | 2018              | 2017          |
| <b>Beginning Balance</b>             | 38,600            | 25,181        |
| Transfer from/(to) Operating Budget  | 26,630            | 21,500        |
| Transfer from IWS                    | 1,600             | 1,200         |
| Interest Income                      | 1,308             | 719           |
| Transfer to Outfall Inspection Costs | -                 | (10,000)      |
| <b>Ending Balance</b>                | <u>68,138</u>     | <u>38,600</u> |