



Making a difference...together

GANGES SEWER LOCAL SERVICES COMMISSION ANNUAL GENERAL MEETING

Notice of Meeting on Monday, November 20, 2017 1:00 PM
Creekside Meeting Room, Suite 108 121 McPhillips Ave, Salt Spring Island, BC

Wayne McIntyre Gary Utter Rod Scotvold David Toynbee Mike de Carle

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 June 14, 2016**
- 4. Chair's Report**
- 5. Annual Report for 2016 Fiscal Year**
- 6. Election of Officers**
- 7. New Business**
- 8. Adjournment**



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**Minutes of the Annual General Meeting of the Ganges Sewer Local Service Commission
Held June 14, 2016 at the Portlock Park Meeting Room, 145 Vesuvius Bay Road, Salt Spring
Island, BC**

DRAFT

PRESENT: **Director:** Wayne McIntyre
 Commission Members: Gary Utter, Rod Scotvold, David Toynbee, Mike de Carle
 Staff: Karla Campbell, Senior Manager SSI Electoral Area; Keith Wahlstrom, Manager, Engineering SSI Electoral Area; Matthew McCrank, Senior Manager, Infrastructure Operations; 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

Chair Utter called the meeting to order at 10:05 am.

2. Approval of Agenda

MOVED by Commissioner Toynbee, **SECONDED** by Commissioner de Carle,
That the Ganges Sewer Local Service Commission Annual General meeting agenda for the fiscal year of 2015 held on June 14, 2016 be approved.

CARRIED

3. Approval of Minutes of the Annual General Meeting for Fiscal Year 2014 held on September 10, 2015

MOVED by Commissioner Scotvold, **SECONDED** by Commissioner Toynbee,
That the Ganges Sewer Local Service Commission Annual General meeting minutes for the fiscal year of 2014 held on September 10, 2015 be approved.

CARRIED

4. Chair and Director Reports

No reports presented.

5. Annual Report for the 2015 Fiscal Year

Staff reviewed the various portions of the Annual Report highlighting the following:

- Purpose for the Annual General meeting
- Structure of the Ganges Sewer Local Services Commission
- Review of regulatory compliance
- Operational activities
- Capital Improvements
- Financial Report
- New toll free phone numbers introduced

Questions of note:

Q-Is the reduction in waste sludge disposal cost sustainable?

A-Local staff identified and implemented some improvements to the liquid waste processing which resulted in reducing the need for sludge hauling from three trucks per week down to two.

Q-Could the liquid waste be hauled directly off island and effectively bypass the Burgoyne Bay Facility?

A-Our bylaws require all liquid waste to be hauled to the Burgoyne Bay facility where it is stored and then hauled off island in large volumes providing the most cost effective solution. Hauling directly from Ganges would probably not result in significant savings (if any) as the number of truck loads would greatly increase due to the small volumes. The hauling of liquid waste from Burgoyne has been a temporary solution and the goal is to process it on island

The Ganges Sewer Local Service Commission received the annual report for information.

6. Election of Officers

Commissioners Utter and Scotvold are holding terms which expire at the end of 2016.

Staff called for nominations from the floor and Commissioners Utter and Scotvold agreed to reappointment. Staff called for nominations two more times and hearing none, elections closed.

Staff will forward the nominees to the CRD Board for formal approval of a term which begins in 2017.

7. New Business

No items

8. Outstanding Business

No items.

9. Adjournment

MOVED by Director McIntyre, **SECONDED** by Commissioner de Carle,
That the meeting be adjourned at 11:25 am.

CARRIED

CHAIR

SENIOR MANAGER



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GANGES SEWER SERVICE 2016 ANNUAL REPORT Monday November 20, 2017

Introduction

This report provides a summary of the Ganges Sewer Service for 2016. 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.

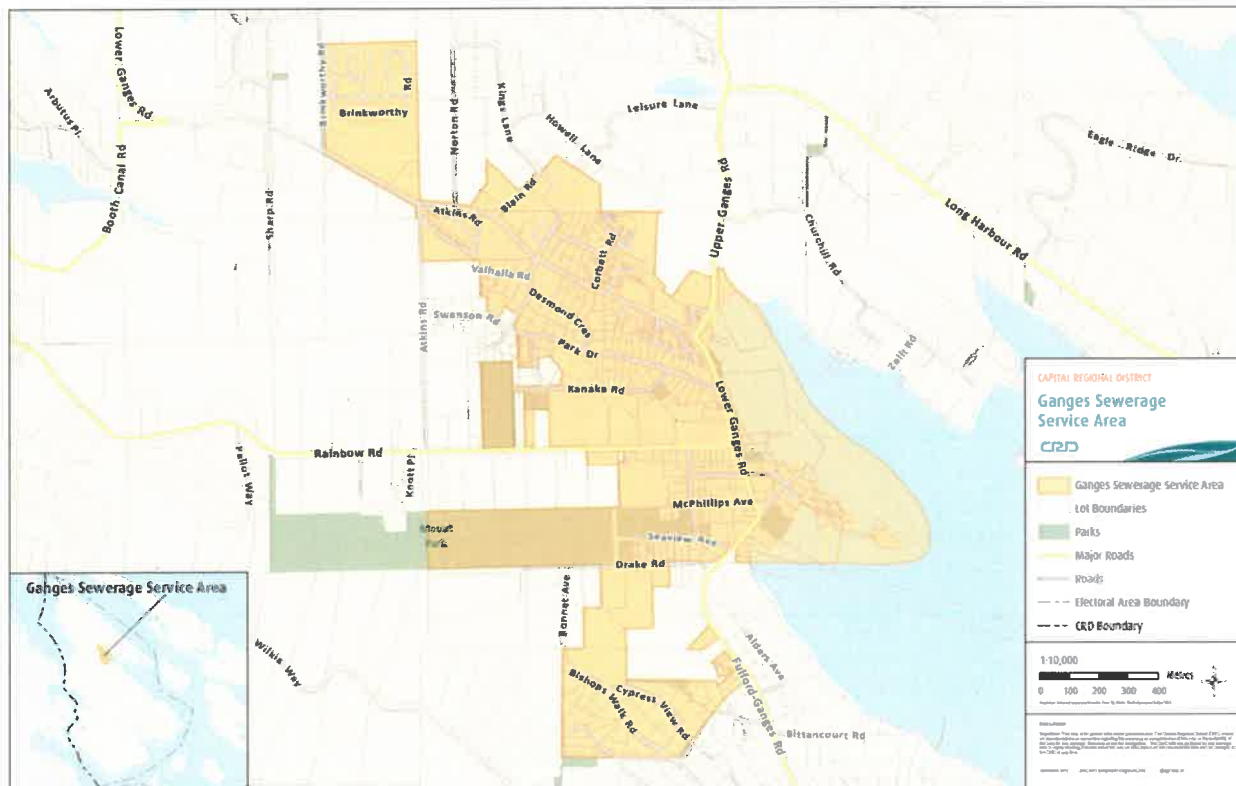


Figure 1: Ganges Sewer Service Area

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:

- Converting the treatment process from a rotating biological contactor (RBC) to a membrane bioreactor (MBR) which resulted in an increase in capacity from 400 m³/day to 800 m³/day and utilizing membrane plates for sludge thickening (1998);
- replacing the MBR with ones of higher capacity to increase from 800 m³/day to 1,000 m³/day (2005);
- adding ultra violet light disinfection (2011).

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;
- 1,000 m³/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 maximum in 2016. 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. Ammonia concentrations remained below regulatory limits for all of 2016, after elevated levels were observed for parts of 2007, 2009 and 2010.

Of the 530 priority substances analyzed, 64 were detected at standard detection limits in effluent, similar to previous years. Those detected included metals, polycyclic aromatic hydrocarbons, total phenols, and trichloromethane; these parameters have also been detected in previous years.

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 six substances exceeded BC WQG in undiluted effluent: weak acid dissociable cyanide, sulfide, copper, zinc, total PCBs and chrysene. These substances, and all others, were well below the BC WQG after the minimum 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 July 2016 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 2011–2015.

Sludge (Mixed Liquor)

Ganges Harbour WWTP sludge (mixed liquor) met the criteria for BC Organic Matter Recycling Regulations (OMRR) Class A Biosolids in 2016. 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 conducted at the Ganges WWTP in 2016. All stations had a geometric mean less than provincial and federal guidelines for enterococci and fecal coliforms indicating that the waters surrounding the outfall are safe for recreation.

Annual Flow

The monthly flows and the total annual flow over the past 6 years are shown in Figures 2 and 3. The graphs indicate there has been an overall decrease in annual flow, but the annual volumes as are still quite variable. This indicates that inflow and infiltration does make a significant difference to the monthly and annual flow rate.

The approved capital infrastructure replacement and system improvements does include a program to help identify/quantify the Inflow and Infiltration (I & I) and some funds to repair identified problems. The intent of this is to regain hydraulic capacity lost to the extraneous flow and ultimately to defer upgrades to the treatment as growth occurs.

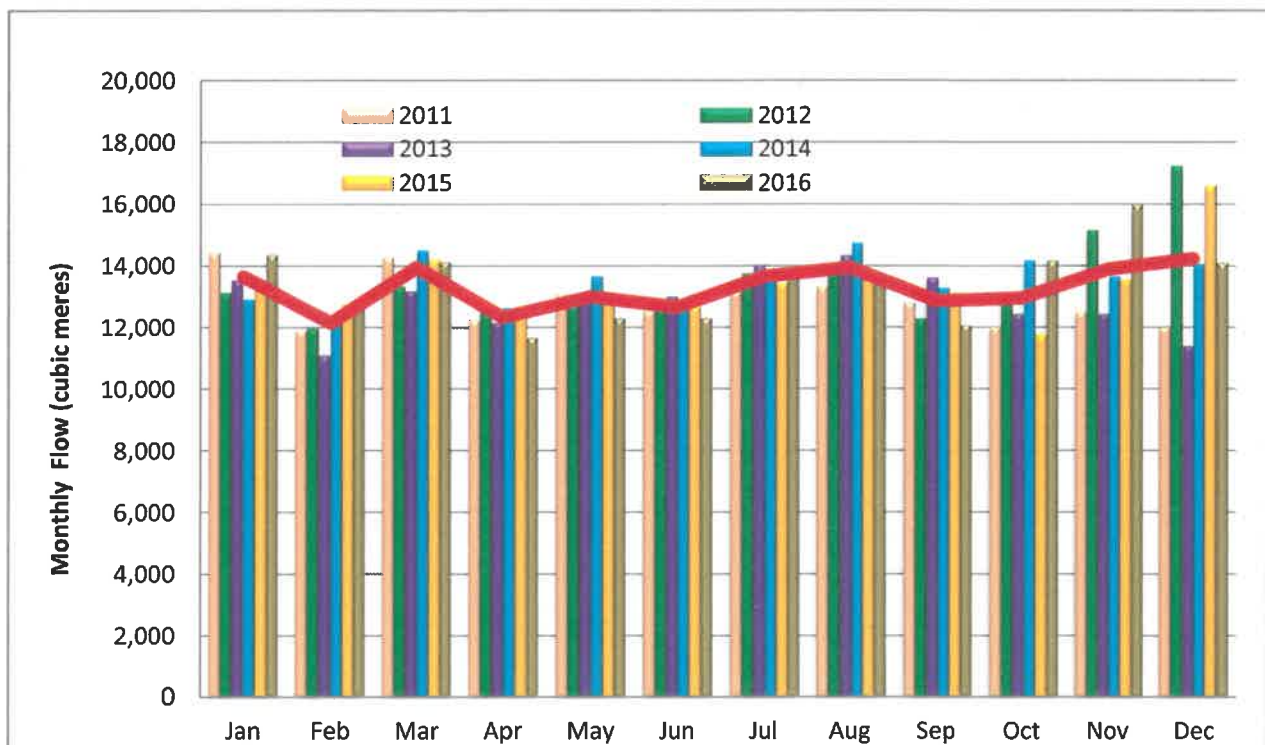


Figure 2: Ganges WWTP Monthly Sewer Flows

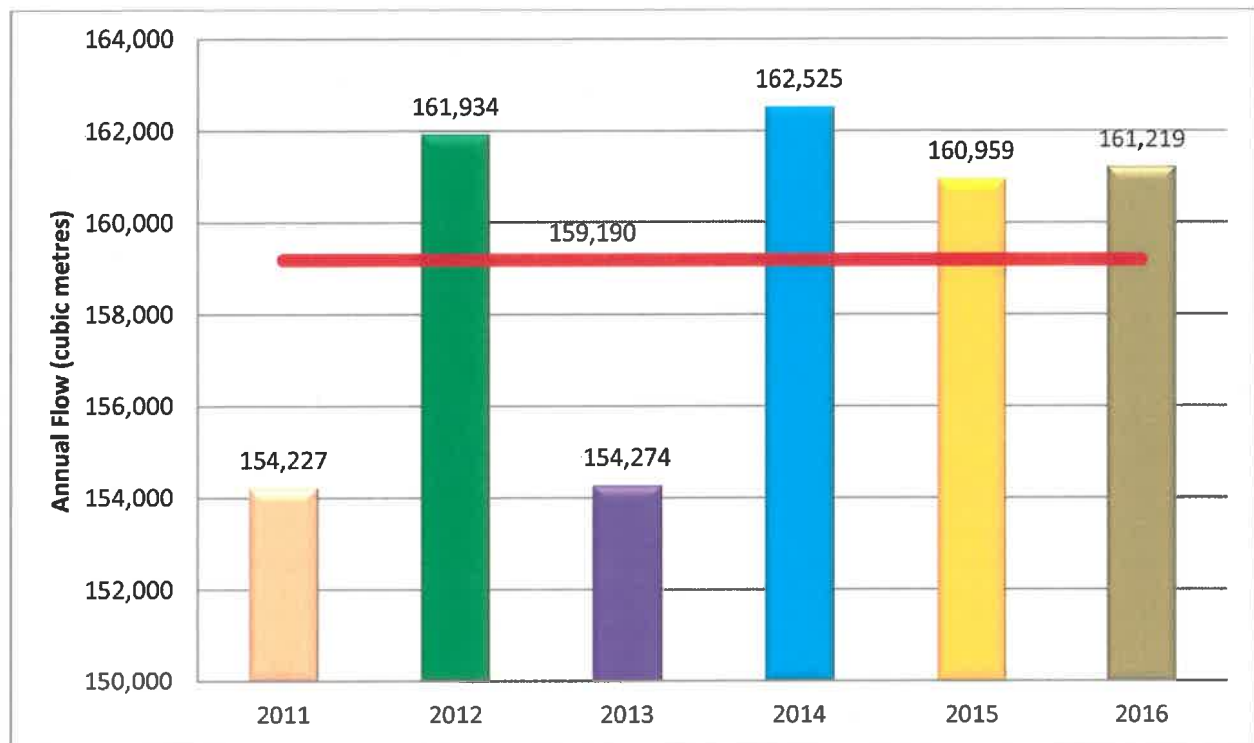


Figure 3: Ganges WWTP Annual Sewer Flows

Ganges Sewer Operations

CRD's Integrated Water Services, Saanich Peninsula and Gulf Island Operations, are responsible for the day to day operations of the wastewater system. Salt Spring Island based operations staff perform regular weekly routine operational work to ensure the wastewater system is functioning properly. Additional support is provided by Peninsula Operations staff including the dedicated electrical and mechanical maintenance groups as required.

For the most part during 2016, the wastewater system operated reliably. However during the year there were events that required emergency response. Table 1 below highlights some of the significant operational activities undertaken during the year.

Table 1- Operational Activities

TASK	NOTES
Replacement of Uninterrupted Power Supply (UPS)	The UPS for the electronic equipment at the Ganges Wastewater Treatment Plant was showing signs of failure. Service life for this type of the equipment is typically 5 to 8 years.
Electric Hoist Repairs	The electric hoist used to remove the wastewater treatment membrane bioreactor filters from the treatment process for annual maintenance, stopped functioning. The hoist was sent for significant electrical repairs and placed back into service.

TASK	NOTES
Installation of cooling equipment	Through the annual preventative maintenance program, overheating of electronic equipment was observed in the motor control center (MCC) within the electrical room. In order to reduce the risk of further premature electronic equipment failures, cooling fans were installed.
Fine screen gear box replacement	The gear reducing box on the influent fine screen failed and required replacement. Because a spare gear box was available the system was offline for a short period only. Another gear box was ordered and placed into inventory.
PLC card replacement	A programmable logic controller (PLC) card, which is a part of an electronic device that controls the process at the wastewater treatment plant was likely damaged as a result of overheating. The card was replaced and the facility was placed into full operation in short order.

CAPITAL IMPROVEMENTS

The following capital project was planned for 2016:

1. Sewer System Rehabilitation (\$2,700,420 allocated) – these funds are to begin the rehabilitation of the sewer system components identified in the referendum. Work completed in 2016 was the selection of a consulting engineering company to complete the design and replacement of works associated with the sewage treatment plant site itself. Subsequent projects (2017 and 2018) will include collection system pump station replacements, inflow and infiltration assessment and mitigation, and several miscellaneous smaller work items.

Subsequent to the approved budgets, there was one additional capital projects added late in the year:

1. Replacement of standby generator (genset) and automatic transfer switch (\$165,000 allocated). The standby generator has experiencing several breakdowns and on a detailed analysis, it was found that replacement parts were no longer available and customer built replacement components would be needed and/or significant modifications. The transfer switch was also failing (would not always transfer automatically) and required replacement. At the completion of the analysis, it was noted the genset had reached its end of usable life and needed replacement. The capital replacement fund had sufficient money in it for this project to proceed.

2016 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.

2016 User Fee charges were \$512.81 per Single Family Equivalent (SFE) and 2016 Parcel Tax charges were \$135.97 per Taxable Parcel.

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

Description	Balance as of the end of 2016
Maintenance Reserve Fund	\$25,180
Capital Reserve Fund (1056 101836)	\$273,611
Capital Reserve Fund (1056 101900)	\$73,509
Funds remaining to spend on projects in progress (SLA491)	\$13,516
Funds remaining to spend on projects in progress (SLA4007)	\$251,850
Funds remaining to spend on projects in progress (SSV185117)	\$165,677

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.

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., 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

KW/DR/KC:ts

Attachment: Statement of Operations

CAPITAL REGIONAL DISTRICT

GANGES SEWER

Statement of Operations (Unaudited) For the Year Ended December 31, 2016

	2016	2015
Revenue		
Transfers from government	54,131	54,170
User Charges	710,960	555,199
Other revenue from own sources:		
Interest earnings	1,468	1,367
Other revenue	440	657
Transfer from Operating Reserve Account		
Total revenue	766,999	611,393
Expenses		
General government services	23,231	25,920
Contract for Services	35,323	24,186
CRD Labour and Operating costs	247,478	252,091
Debt Servicing Costs	5,282	-
Other expenses	224,361	203,447
Total expenses	535,675	505,644
Net revenue (expenses)	231,324	105,749
Transfers to own funds:		
Capital Reserve Fund	209,824	150,387
Operating Reserve Account	21,500	1,500
Annual surplus (deficit)	-	(46,138)
Accumulated surplus, beginning of year		46,138
Accumulated surplus, end of year	\$ -	-

CAPITAL REGIONAL DISTRICT

GANGES SEWER

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

	Capital Reserve	
	2016	2015
Beginning Balance	297,668	159,333
Transfer from Operating Budget	209,824	150,387
Transfers from completed capital projects		
Interest Income	4,628	2,448
Transfer to Capital Project	(165,000)	(14,500)
Ending Balance	<u>347,120</u>	<u>297,668</u>

	Operating Reserve	
	2016	2015
Beginning Balance	3,542	2,000
Transfer from/(to) Operating Budget	21,500	1,500
Interest Income	138	42
Ending Balance	<u>25,180</u>	<u>3,542</u>