



## Notice of Meeting and Meeting Agenda Ganges Sewer Local Service Commission

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Tuesday, June 10, 2025

10:00 AM

SIMS Boardroom  
124 Rainbow Road  
Salt Spring Island BC

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### Annual General Meeting

MS Teams Link: [Click here](#)

M. de Carle, G. Holman, D. Toynbee, C. Whyte

The Capital Regional District strives to be a place where inclusion is paramount and all people are treated with dignity. We pledge to make our meetings a place where all feel welcome and respected.

### 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 2024 fiscal year.*

### 1. Territorial Acknowledgment

### 2. Election of Chair

### 3. Approval of Agenda

### 4. Adoption of Minutes

- 4.1. [25-0691](#) Minutes of November 7, 2024 the Ganges Sewer Local Service Commission

**Recommendation:** That the minutes of the November 7, 2024 meeting be adopted as circulated.

**Attachments:** [Minutes: November 7, 2024](#)

**5. Director and Chair's Report**

**6. Report**

**6.1.**      [25-0595](#)      Ganges Sewer Local Service 2024 Annual Report

**Recommendation:**      There is no recommendation. This report is for information only.

**Attachments:**              [Ganges Sewer Local Service Annual Report 2024](#)  
   [Appendix A: 2024 Statement of Operations and Reserve Balances](#)

**7. Election of Commissioner**

*2 Positions*

**8. New Business**

**8.1.**      [25-0663](#)      Request Additional Funds to Complete the Detailed Design for the  
   Ganges Wastewater Treatment Plant Aeration System Upgrade Design

**Recommendation:**      That the Ganges Sewer Local Services Commission recommends to the Capital  
   Regional District Board that the Ganges Sewer Utility Service 2025 Capital Plan be  
   amended to increase the budget for project (21-06), the Aeration System improvement  
   design, by the amount of \$14,248 from \$130,000 to \$144,248, to be funded from  
   Capital Reserve Fund.

**Attachments:**              [Staff Report: Request Additional Funds to Complete the Detailed Design for the](#)

**9. Outstanding Business**

*None*

**10. Adjournment**

**Next Meeting:**

*TBA*

## Meeting Minutes - Draft

### Ganges Sewer Local Service Commission

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Thursday, November 7, 2024

10:00 AM

SIMS Boardroom  
124 Rainbow Road  
Salt Spring Island BC

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#### Annual General Meeting

#### PRESENT:

COMMISSION MEMBERS: G. Holman, M. de Carle (EP), D. Toynbee, C. Whyte (EP)

STAFF: D. Ovington, Senior Manager, SSI Administration, V. Somosan, Senior Manager, Financial Services/ Deputy CFO, J. Bilodeau, Manager, Local Services Water and Wastewater Ops., D. Olafson, Manager SSI Engineering, D. Robson, Manager Saanich Peninsula Gulf Island Ops, L. Xu, Manager, Finance Services, K. Vincent, Senior Financial Advisor, Finance Services (EP), A. Elliyon Financial Analyst, Finance Services (EP), and M. Williamson, Committee Clerk, (Recorder)

Electronic Participation- (EP)

These minutes follow the order of the agenda although the sequence may have varied.

The meeting was called to order at 10:18 am.

**MOVED By Commissioner Toynbee, SECONDED by Director Holman,  
That Director Holman serve as Acting in the absence of Chair de Carle in person  
for the November 7, 2024 Annual General Meeting and the November , 2024  
Budget meeting of the Ganges Local Sewer Service Commission.  
CARRIED**

#### 1. Territorial Acknowledgment

D. Ovington provided a Territorial Acknowledgement.

#### 2. Approval of Agenda

**MOVED By Commissioner de Carle, SECONDED by Commissioner Toynbee,  
That agenda for the November 07, 2024, Annual General Meeting of the Ganges  
Sewer Local Services Commission be approved as presented.  
CARRIED**

#### 3. Adoption of Minutes

**3.1.** Minutes of June 15, 2023 - June 27, 2024 Ganges Local Sewer Service Commission

**MOVED By Commissioner Toynbee, SECONDED by Commissioner de Carle,  
That the minutes of the following meetings be adopted as presented:**

**-June 15, 2023 Annual General Meeting (AGM)**

**-April 29, 2024 Special Meeting**

**-June 27, 2024 Special Meeting**

**CARRIED**

**MOVED By Commissioner de Carle, SECONDED by Commissioner Toynbee,,  
That the minutes of the special meeting June 15, 2023 Special Meeting be  
adopted with the amendment of replacing the words "Edwards" with "de Carle"  
after the word "Commissioner" and before the words "called the meeting to  
order at..."**

**CARRIED**

**4. Director and Chair's Report**

Nothing to report.

**5. Report**

**5.1.** Ganges Sewer Local Service 2023 Annual Report

D. Robson presented the report.

This report was received for information.

- Corrective maintenance on level monitor in Drinking Water Reservoir
- Water delivery in October and November of 2023

**6. Election of Commissioner**

Request for volunteers was advertised as per the requirements and staff confirmed no new nominations were received.

**7. New Business**

D. Robson provided an introduction for J. Bilodeau in the new role of Manager, Local Services Water and Wastewater Ops.

**8. Outstanding Buiness**

Discussion regarding sewer line extension to 101 Bittencourt road.

**9. Adjournment**

**MOVED By Commissioner Toynbee, SECONDED by Director Holman,  
That the Fernwood and Highland Water Service Commission adjourn the  
meeting at 10:59am.**

**CARRIED**

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CHAIR

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SENIOR MANAGER

# Ganges Sewer Service

## 2024 Annual Report



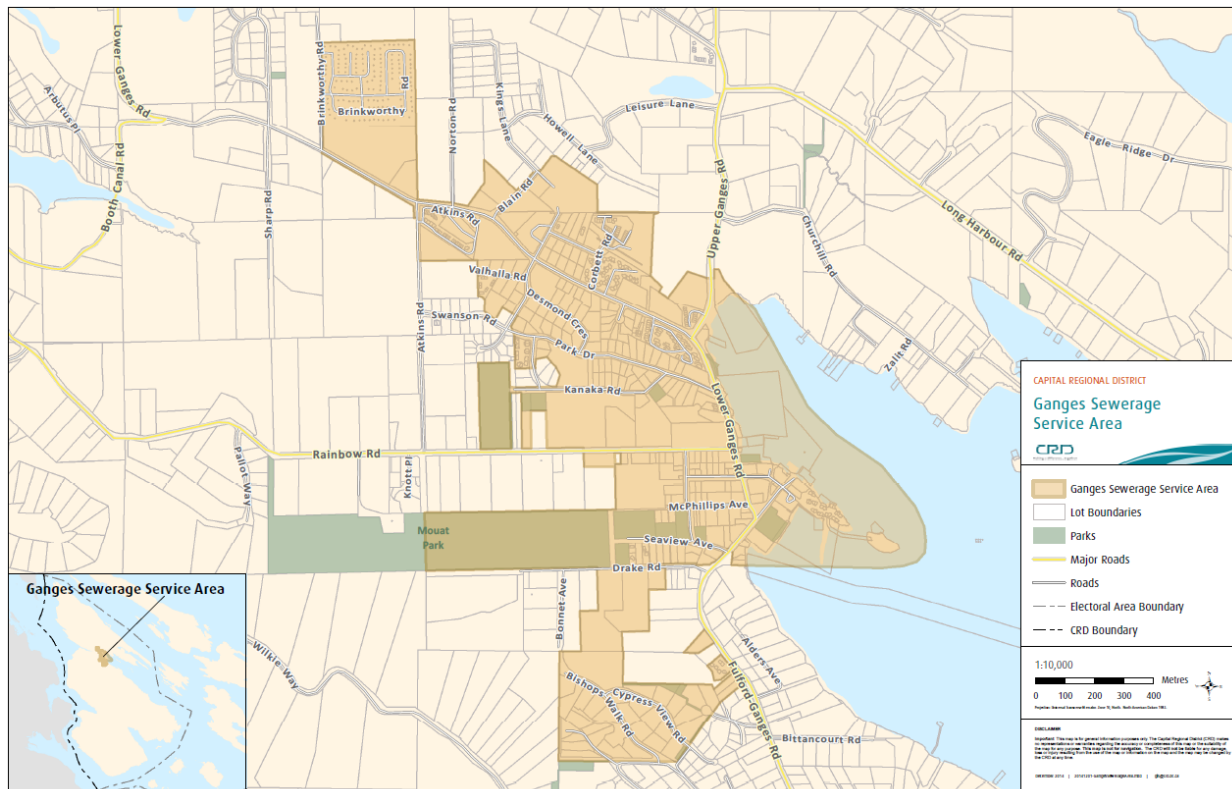
### INTRODUCTION

This report provides a summary of the Ganges Sewer Service for 2024. 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, 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. Since 1998 there have been significant upgrades to the wastewater treatment plant.

The wastewater system consists of:

- 8,000 m of 150 mm to 250 mm gravity sewer collection main pipes and manholes
- 140 m of 75 mm pressure main pipe
- 2 collection system pump stations
- 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 the authorization of the *Municipal Wastewater Regulation (MWR)*.

## **SEWER SYSTEM**

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

The Ganges wastewater treatment plant is regulated by both the provincial and federal governments based on flow and effluent quality limits. Daily effluent flows were all below the allowable provincial maximums in 2024. Effluent quality met provincial and federal regulatory requirements for all compliance parameters, including total suspended solids (TSS), carbonaceous biochemical oxygen demand (CBOD), and un-ionized ammonia, except for one exceedance for fecal coliform bacteria.

Wastewater influent and effluent were also analyzed for a list of conventional and priority substances to assess risk to human health and the environment. In 2024, of the 197 priority substances analyzed, 82 were detected at standard detection limits in effluent. Substances detected in 2024 included conventionals, nutrients, metals, diethyl phthalate, isophorone, phenanthrene, total phenols, and cyanide. These parameters have been detected at similar concentrations in previous years.

As in previous years, most priority substances in the effluent were below the *BC Water Quality Guidelines (BC WQG)* before application of the predicted minimum near surface initial environmental dilution of 419:1. Only cyanide WAD, cadmium, copper, lead (long-term criteria only) and zinc exceeded *BC WQG* in undiluted effluent. 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**

Effluent was also tested for acute toxicity to assess risk to organisms living around the outfall. The effluent sample from July was toxic to fish during the 96-hour Rainbow trout acute toxicity test. The test was rerun with both the standard and the ammonia stabilized methods, demonstrating that it failed due to ammonia accumulation. The stabilized method will be used going forward. The sample also passed the 48-hour Daphnia acute toxicity test with 100% survival, consistent with 2011-2023.

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

Ganges Harbour WWTP sludge (mixed liquor) is monitored to inform the CRD Regional Source Control Program (RSCP). All 2024 monthly sample results met the criteria for BC Organic Matter Recycling Regulations (OMRR) Class A Biosolids.

## Receiving Water

Routine receiving water monitoring is required every four years at the Ganges Harbour WWTP, with 2024 being a sampling year. This sampling involves collecting 5 samples in a 30-day period for comparison to provincial guidelines set to protect people who are recreating in the vicinity of the marine outfall. The 2024 receiving water sampling results were all well below water quality guidelines. The next scheduled receiving water sampling year will be 2028.

Receiving water sampling is also required if 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. There was no emergency/non-routine sampling required in 2024.

## Annual Flow

The monthly flows and the total annual flow over the past 12 years are shown in Figures 2 and 3 below. The graphs indicate that the 2024 wastewater flows were about 6% higher than the 12-year average. The monthly flows show 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 appear to be reasonable.

The *MWR* 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 the “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.

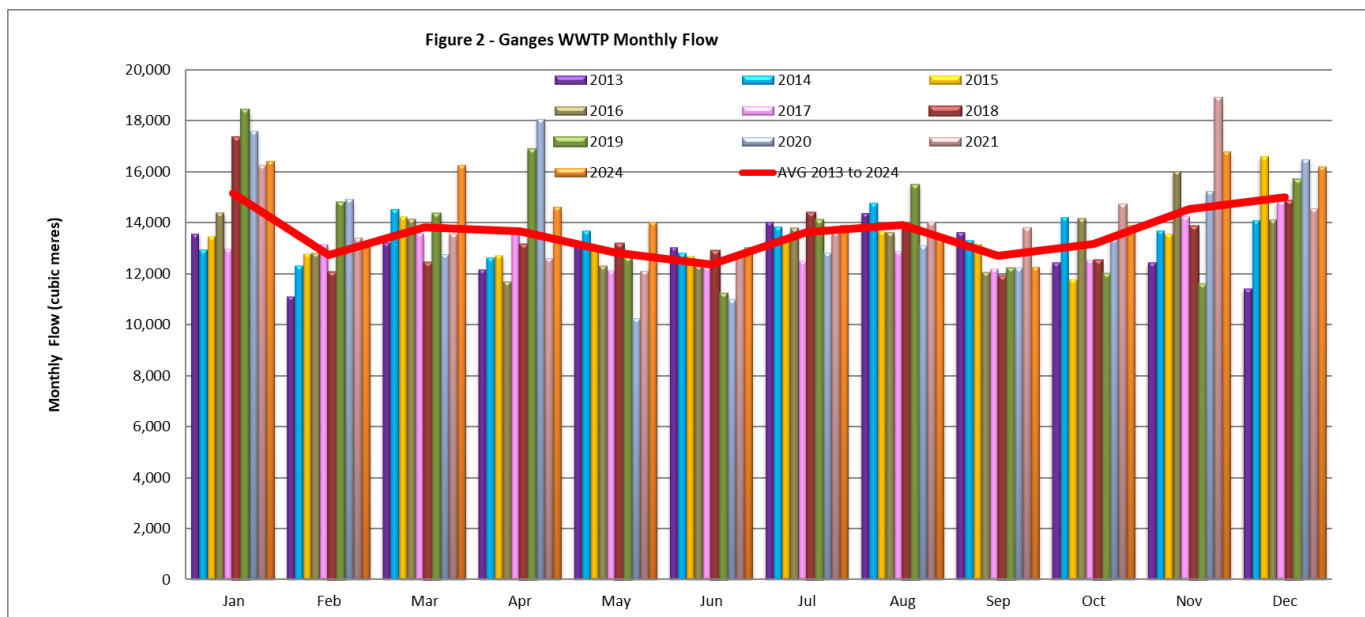
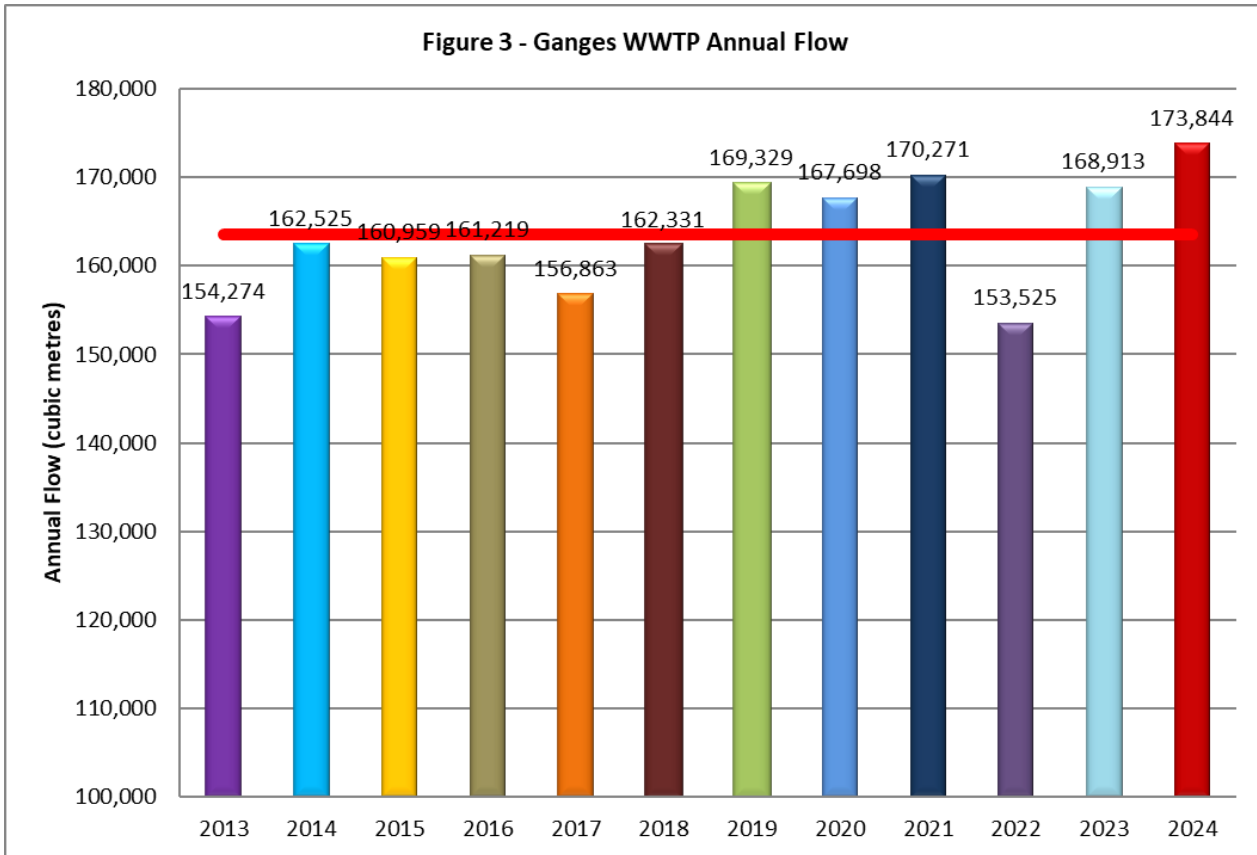




Figure 3 - Ganges WWTP Annual Flow



## OPERATIONAL HIGHLIGHTS

The following is a summary of the major operational issues that were addressed during the 2024 operating period:

- Wastewater Treatment Plant
  - Operational response to faults related to the membrane permeate pump drive and PLC
  - Overhead crane hoist was replaced
  - EV charging station installed
  - MBR permeate hose replacement
  - WWTP wet well grit pump out
  - Return activated sludge pump repair
  - UV reactor maintenance
- Wastewater Collection System
  - Sink hole repair on Drake Rd
  - Jackson Ave sewer connection
- Compliance data is reported to provincial regulators on a monthly basis, with individual environmental incident reports (EIR) issued if there was an incident at the plant that requires an emergency response. There were 3 EIR's issued for Ganges in 2024.
  - Grease build up in manhole on Lower Ganges Rd causing spill to surface
  - 2 x Effluent Quality Exceedance
    - Toxicity - July
    - Fecal - May

## CAPITAL IMPROVEMENTS

The following is a summary of the major capital improvements, including year-end spending for 2024.

Aeration System – Ganges WWTP (CE.798.8301): Design of a new aeration system to improve process performance for the Ganges WWTP.

Project	Spending
Budget	\$130,000
Project Management	(\$34,438)
Contract	(\$35,820)
<b>Remaining Balance</b>	<b>\$59,742</b>

VFD Installation for EQ Tanks (CE.800.8301): Procurement and installation of VFDs for the EQ tanks to improve process control and performance. This project is associated with the Aeration project above.

Project	Spending
Budget	\$50,000
Project Management	(\$25)
Contract	(\$0)
<b>Remaining Balance</b>	<b>\$49,975</b>

Reclaimed Water Study (CE.801.8001): Study to determine the feasibility of reclaiming water from the effluent discharged from the Ganges WWTP.

Project	Spending
Budget	\$57,500
Project Management	(\$1,316)
Contract	(\$0)
<b>Remaining Balance</b>	<b>\$56,184</b>

Lifting Brackets Ganges WWTP (CE.822.8001): New lifting brackets are required for the MBR membranes in the WWTP. This project is complete and closed in 2024 and surplus funds returned to the source.

Project	Spending
Budget	\$65,000
Project Management	(\$2,483)
Equipment (Supply and Install)	(\$46,802)
<b>Remaining Balance</b>	<b>\$15,715</b>

Generator Trailer (CE.755.1604): Portable generator trailer for emergency power for pump stations etc.

Project	Spending
Budget	\$82,000
Project Management	(\$7,208)
Equipment	(\$0)
Design	(\$18,607)
<b>Remaining Balance</b>	<b>\$56,185</b>

Sludge thickener membrane replacement (CE.755.1602): Membranes in sludge thickener unit need periodic replacement.

Project	Spending
Budget	\$27,000
Project Management	(\$162)
Contingency	(\$0)
Equipment	(\$0)
Construction	(\$0)
<b>Remaining Balance</b>	<b>\$26,838</b>

Ganges WWTP Performance Improvement Study (CE.857.4501): Study to perform holistic review of WWTP to determine present and future capacity and identify areas for process improvement and debottlenecking; 75% funded through the Growing Communities Fund.

Project	Spending
Budget	\$115,000
Project Management	(\$2,338)
Study	(\$0)
<b>Remaining Balance</b>	<b>\$112,662</b>

Network Modelling (CE.857.7501): Study to model sewer conveyance piping to determine present and future capacity and areas needing upgrading; 75% funded through the Growing Communities Fund.

Project	Spending
Budget	\$57,500
Project Management	(\$7,681)
Study	(\$23,090)
<b>Remaining Balance</b>	<b>\$26,729</b>

Ganges WWTP E & I Replacement Design and Installation (CE.857.8301): Project to replace failing and outdated E & I equipment and components; 75% funded through the Growing Communities Fund.

Project	Spending
Budget	\$575,000
Project Management	(\$2,834)
Equipment	(\$11,687)
Installation	(\$251)
<b>Remaining Balance</b>	<b>\$560,228</b>

## 2024 FINANCIAL REPORT

Please refer to the attached 2024 Statement of Operations and Reserve Balances.

Revenue includes parcel taxes (Transfers from Government), fixed user fees (User Charges), interest on savings (Interest earnings), transfers from the Operating Reserve Fund, and miscellaneous revenue such as 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. CRD Labour and Operating Costs include 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 include all other costs to administer and operate the sewer system, including insurance, waste sludge disposal, and electricity.

The difference between Revenue and Expenses is reported as Net revenue (expenses). Any transfers to or from capital or reserve funds for the service (Transfers to own funds) are deducted from this amount, and it is then added to any surplus or deficit carried forward from the prior year, yielding an Accumulated Surplus (or deficit). In alignment with *Local Government Act* Section 374 (11), any deficit must be carried forward and included in the next year's financial plan.

## 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)**

**1-250-474-9630 (toll)**

**CRD wastewater system *general enquiries* (toll-free):** **1-800-663-4425**

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

Submitted by:	Jason Dales, Senior Manager B.Sc, WD IV, Infrastructure Operations
	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
	Dan Ovington, BBA , Senior Manager, Salt Spring Island Electoral Area
	Varinia Somosan, CPA, CGA, Sr. Mgr., Financial Services / Deputy CFO
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

Appendix A: [2024 Statement of Operations and Reserve Balances](#)

For questions related to this Annual Report please email [saltspring@crd.bc.ca](mailto:saltspring@crd.bc.ca)

**CAPITAL REGIONAL DISTRICT****GANGES SEWER****Statement of Operations (Unaudited)****For the Year Ended December 31, 2024**

	<b>2024</b>	<b>2023</b>
<b>Revenue</b>		
Transfers from government	62,134	59,891
User Charges	1,120,290	1,038,630
Other revenue from own sources:		
Interest earnings	547	3,535
Transfer from Operating Reserve	80,000	40,957
Other revenue	2,557	2,495
<b>Total Revenue</b>	<b>1,265,528</b>	<b>1,145,508</b>
<b>Expenses</b>		
General government services	40,993	35,969
Contract for Services	61,492	60,737
CRD Labour and Operating costs	457,287	372,065
Debt Servicing Costs	247,359	247,151
Capital purchases	42,378	40,237
Supplies	41,197	19,465
Other expenses	346,600	319,884
<b>Total Expenses</b>	<b>1,237,306</b>	<b>1,095,508</b>
<b>Net revenue (expenses)</b>	<b>28,222</b>	<b>50,000</b>
Transfers to own funds:		
Capital Reserve Fund	8,222	-
Operating Reserve Fund	20,000	-
Equipment Replacement Fund	-	50,000
<b>Annual surplus/(deficit)</b>	<b>-</b>	<b>-</b>
Accumulated surplus/(deficit), beginning of year	-	-
<b>Accumulated surplus/(deficit), end of year</b>	<b>\$ -</b>	<b>-</b>

## CAPITAL REGIONAL DISTRICT

### GANGES SEWER

#### Statement of Reserve Balances (Unaudited)

For the Year Ended December 31, 2024

	Capital Reserves	
	2024	2023
<b>Beginning Balance</b>	571,220	593,041
Transfer from Operating Budget	8,222	-
Transfer from Completed Capital Projects	7,517	-
Transfer to Capital Project	(234,375)	(50,274)
Cash in Lieu	14,989	-
Interest Income	21,729	28,454
<b>Ending Balance</b>	389,302	571,220

	Operating Reserve	
	2024	2023
<b>Beginning Balance</b>	60,660	96,008
Transfer from Operating Budget	20,000	-
Transfer to Operating Budget	(80,000)	(40,957)
Interest Income	2,615	5,609
<b>Ending Balance</b>	3,275	60,660

	Equipment Replacement Fund	
	2024	2023
<b>Beginning Balance</b>	151,214	100,200
Transfer from Operating Budget	-	50,000
Transfer from Capital Reserve	-	-
Interest Income	821	1,014
<b>Ending Balance</b>	152,035	151,214

**REPORT TO GANGES SEWER UTILITY COMMISSION  
MEETING OF Tuesday, June 10, 2025**

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**SUBJECT**     **Request Additional Funds to Complete the Detailed Design for the Ganges Wastewater Treatment Plant Aeration System Upgrade Design**

**ISSUE**

Additional funds are required to continue with CRD Project Management and design for the Ganges Wastewater Treatment Plant (WWTP) aeration system upgrade design.

**BACKGROUND**

The Ganges WWTP was built in 1983 to service the Ganges community on Salt Spring Island. The original plant employed a rotating biological contactor (RBC) process, which was converted to a membrane bioreactor (MBR) process in 1998. In the most recent upgrade undertaken in 2018, many equipment components were replaced, and some process modifications were made.

The Ganges WWTP has been experiencing low dissolved oxygen (DO) concentrations in the aeration tank. The plant achieves biochemical oxygen demand (BOD) reduction but has not been able to achieve full and stable nitrification in the summer, which has led to high concentrations of ammonia in the effluent.

A system assessment and a preliminary design report were presented to the CRD in 2020. The preliminary design report presented blower options, sizing and location options, and proposed upgrades to header sizing and diffuser layout modifications.

A request for proposals for detailed design was posted in August 2022, and the CRD received three proposal submissions. The consultant is partway through the design of the aeration system.

The contract has been extended several times to accommodate satisfactory completion of design. This extended duration of the work has also resulted in additional instruction and meetings with the designer and stakeholders.

An additional \$14,248 in funding from Capital Reserve Fund is required to complete project management and design. A delay in the approval of the additional funds will result in the end of CRD project management efforts and, in turn, the halting of the project near completion.

**ALTERNATIVES**

That the Ganges Sewer Local Services Commission recommends to the Capital Regional District Board:

*Alternative 1*

That the Ganges Sewer Utility Service 2025 Capital Plan be amended to increase the budget for project (21-06), the Aeration System Upgrade design, by the amount of \$14,248 from \$130,000 to \$144,248, to be funded from Capital Reserve Fund.

*Alternative 2*

That this report be referred back to staff for additional information.

## **IMPLICATIONS**

### **Financial Implications**

The table below details the project costs, the costs to complete, and the additional funds required.

<b>Ganges WWTP Aeration System Upgrade Design</b>	
<b>Total Approved Project Budget</b>	<b>\$130,000</b>
Project Management (PM)	\$33,000
Design	\$72,000
Geo Study and Site survey	\$16,000
Contingency	\$9,000
<b>Spending to Date</b>	<b>(\$139,248)</b>
Project Management (PM)	(\$48,035)
Design	(\$91,213)
<b>Additional Costs to Complete</b>	<b>(\$5,000)</b>
Project Management (PM)	(\$5,000)
<b>Additional Funding Required - Amendment</b>	<b>(\$14,248)</b>
<b>Funding Source</b>	
Capital Reserve Fund (CRF)	<b>\$14,248</b>

The current estimated balance in Capital Reserve fund Funds balance for the Ganges Sewer Service at the end of 2025 for the Ganges Sewer Service is approximately \$356,172. It is sufficient to fund the additional project budget of \$14,248.

## **CONCLUSION**

The estimated balance in the Capital Reserve Funds at the end of 2025 has sufficient funds available (\$356,172) to fund additional CRD project management for the Aeration System Upgrade for the Ganges Sewer service and avoid schedule delays and the potential for the plant to run with less than efficient denitrification.

## **RECOMMENDATION**

That the Ganges Sewer Local Services Commission recommends to the Capital Regional District Board that the Ganges Sewer Utility Service 2025 Capital Plan be amended to increase the budget for project (21-06), the Aeration System improvement design, by the amount of \$14,248 from \$130,000 to \$144,248, to be funded from Capital Reserve Fund.

Submitted by:	Carolyn Hopp, P.Eng., Manager Engineering, Salt Spring Electoral Area
Concurrence:	Dan Ovington, BBA, Senior Manager of SSI Administration
Concurrence:	Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer, GM Finance & IT
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer