



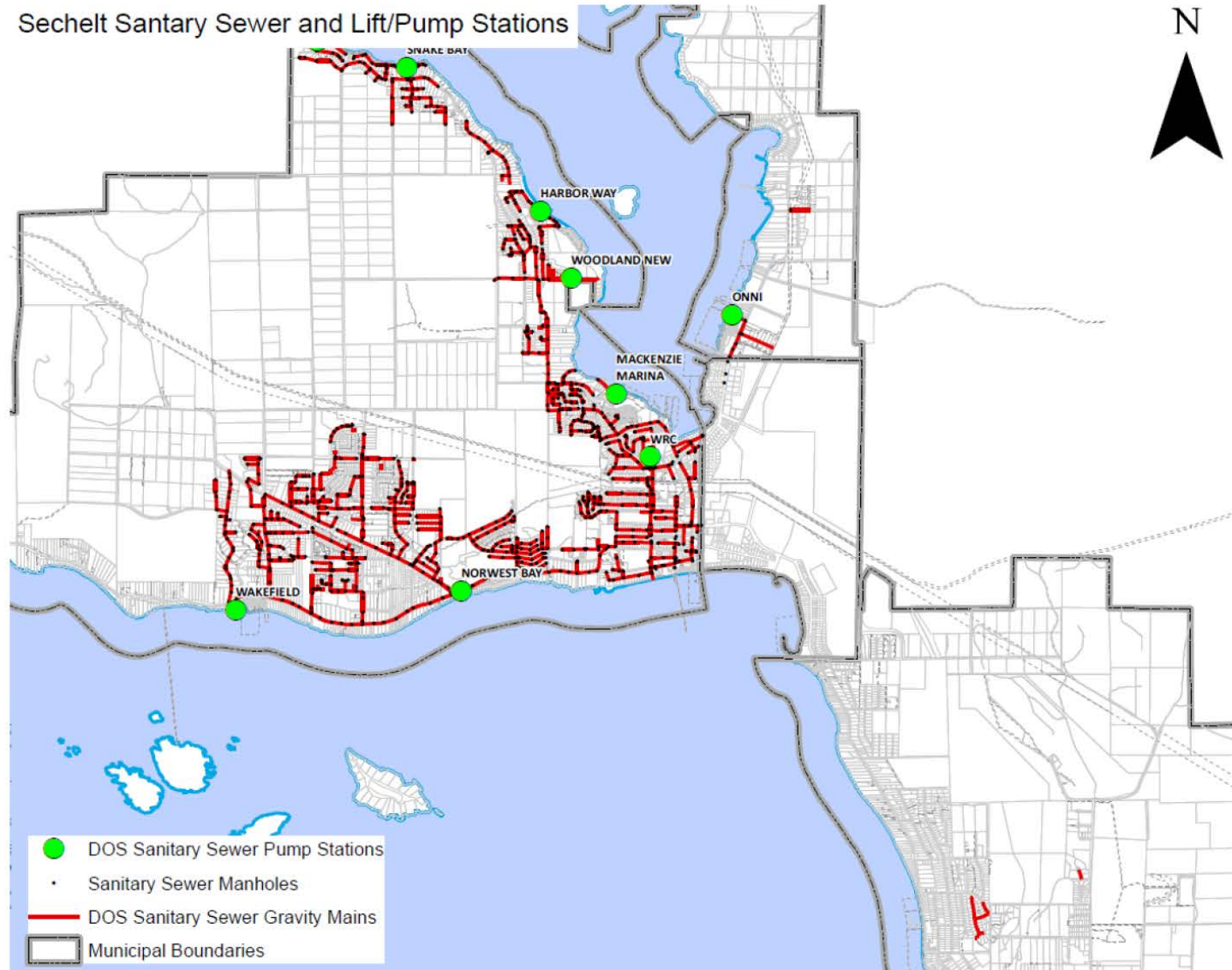
*District of*  
**SECHLT**

# **2021 Sewer Operating and Capital**

David Douglas, Director of Financial Services

# Collection System Overview

Sechelt Sanitary Sewer and Lift/Pump Stations



# What do we own?

## Summary of assets

- Dusty Road Pre-treatment Plant (Septage)
- Entire sewer collection system, which includes 50 kilometers of underground sanitary sewer piping systems
- Nine (9) lift stations
- One sanitary outfall (on-land portion of outfall was upgraded to 300mm, ocean section to be upgraded for future growth)
- 1,007 Maintenance Holes (formerly called Manholes)
- Water Resource Centre

# Sewer System

- Capacity currently exists for expanded flows (The average daily flow is 2,200 m<sup>3</sup>/day, the maximum average daily flow capacity is 4,000 m<sup>3</sup>/day)
- More users needed (2,917 properties connected to the sewer system out of 5,627 eligible properties)

Discussing expansion of the collection area

- Proactive (grants, User fees, frontage charges)
- Expansion in existing neighborhoods: Grant applied for West Sechelt and West Porpoise Bay expansion in 2018, grant was denied in 2019.
- Expansion by development: Ongoing, developer driven.

# Water Resource Center

- More than five years old
- Annual & bi-annual maintenance planning
- Some of the operating equipment needs replacement or requires major maintenance
- Overall maintenance level needs to be elevated
- Under-staffed
- Must remain in compliance with our permit requirements
- Asset Management - Funds need to be set aside for major maintenance and replacement

# Lift Stations

## Lift stations needing to be replaced

- Wakefield lift station (estimated at \$ 870,550, waiting to hear about ongoing grant application)
- Norwest Bay Lift station(estimated at \$600,000)
- McKenzie lift station (estimated at \$1,000,000)
- The above lift stations are budgeted to be replaced within the current five-year capital plan

## 2021 Sewer system new Ongoing Costs

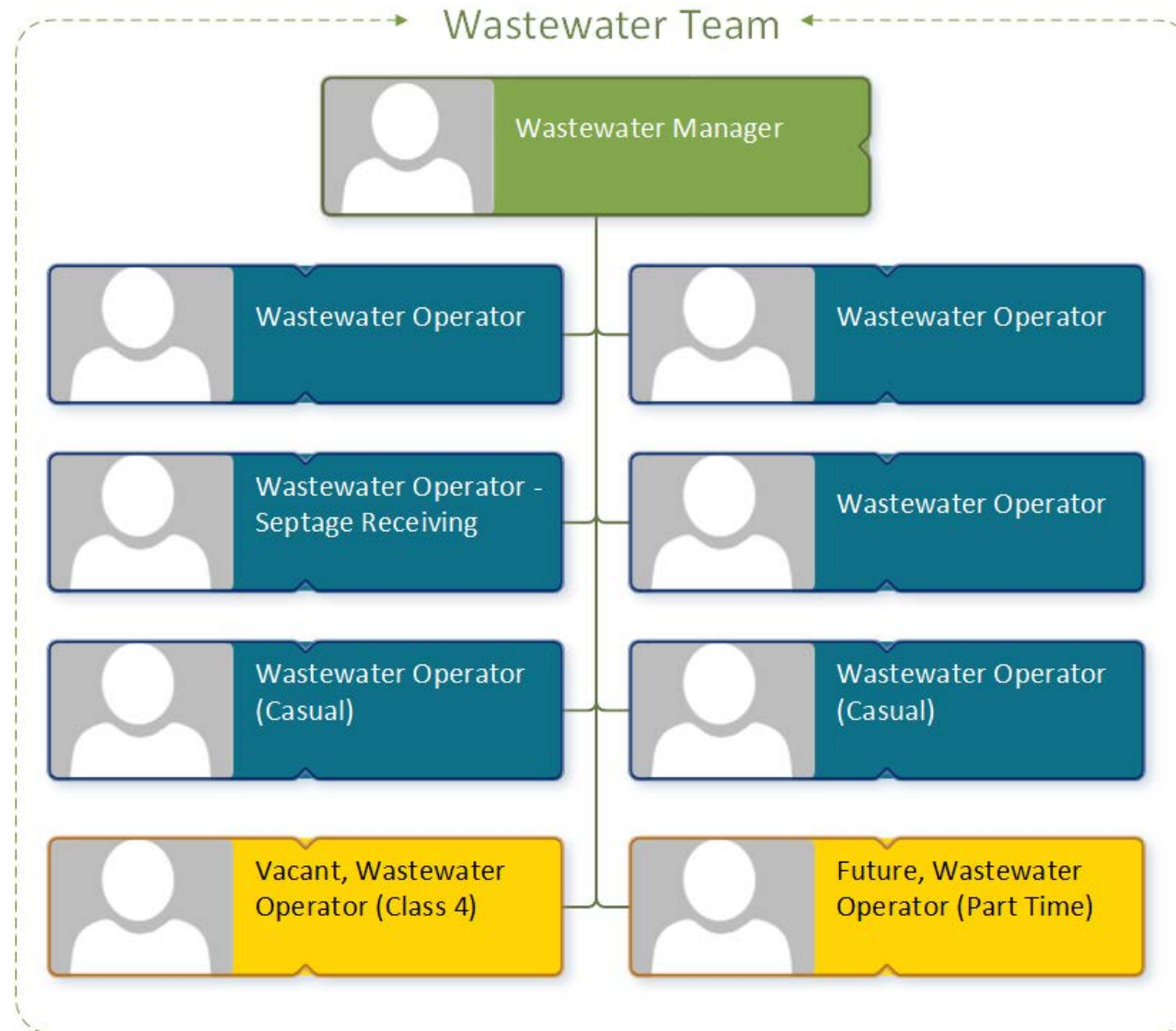
Project	Department	2021 Budget Request	Status	Total Budget for 2022	Total Budget for 2023	Total Budget for 2024	Total Budget for 2025	Funding
HVAC Annual Maintenance	Sewer Treatment	10,000	Ongoing	10,000	10,000	10,000	10,000	User Fees
Boiler, Pressure Vessel & Multi Stack Servicing	Sewer Treatment	9,000	Ongoing	9,000	9,000	9,000	9,000	User Fees
Casual WW Operator	all 3 areas	40,000	Ongoing	40,800	41,616	42,448	43,297	User Fees
Communication Radios	all 3 areas	8,000	Ongoing	300	300	300	300	User Fees
Emergency Contingency WRC, Collect & Dusty	Sewer Admin	35,000	Ongoing	10,000	10,000	15,000	10,000	User Fees
Backup Generator Fuel Scrubbing	1500 WRC, rest = collections	6,000	Ongoing	6,000	6,000	6,000	6,000	User Fees
PH Probes Replacement	Sewer Treatment	8,000	Ongoing	1,600	1,600	1,600	1,600	User Fees
Receiving Environment Monitoring	Sewer Treatment	17,000	Ongoing	17,000	17,000	17,000	17,000	User Fees
Replace Safety Harnesses - Fall Protection Equipment	all 3 areas	3,800	Ongoing	300	300	300	300	User Fees
Replacement Carbon for Odour Control	Sewer Treatment	12,800	Ongoing	12,800	12,800	12,800	12,800	User Fees
UV Bulb Replacement	Sewer Treatment	18,000	Ongoing	16,000	16,000	12,000	12,000	User Fees
Veolia Service Contract Renewal	Sewer Treatment	18,000	Ongoing	18,000	18,000	18,000	18,000	User Fees
Asset Management Schedule for WW Department	Sewer Treatment and Collections	50,000	Ongoing	50,000	50,000			User Fees
Servicing of Odour Control System	Sewer Treatment	14,000	Ongoing	14,000	14,000	14,000	14,000	User Fees
<b>Sewer system total</b>		<b>249,600</b>						

# 2021 Sewer System new one-time costs

Project	Department	2021 Budget Request	Status	Total Budget for 2022	Total Budget for 2023	Total Budget for 2024	Total Budget for 2025	Funding
<b>Structural Support for Increased Lifting Capacity for Centrifuge Service</b>	Sewer Treatment	<b>15,000</b>	One Time					User Fees
<b>Replacement of Multitask Compressor Unit</b>	Sewer Treatment	<b>20,000</b>	One Time					User Fees
<b>Replace Curtains in Greenhouse</b>	Sewer Treatment	<b>0</b>	One Time		10,000			User Fees
<b>New Controller for Crane on Truck 55</b>	Fleet	<b>2,000</b>	One Time					User Fees
<b>Roof Repair Influent Wet Well Building</b>	Sewer Collections	<b>8,000</b>	One Time					User Fees
<b>Safety Support Tripod - Davit Hoist System</b>	all 3 areas	<b>6,000</b>	One Time					User Fees
<b>Turbidity Probe Secondary Treatment</b>	Sewer Treatment	<b>5,000</b>	One Time					User Fees
		<b>56,000</b>						



# Organizational Chart



2021 Capital Projects - Sewer

Project	Manager	Project Total	Funding Source	2021 Budget	Comments
<b>Sewer Collection &amp; Treatment</b>					
Camera Inspect Sanitary Mains	Wastewater Supervisor	66,462	Sewer Capital Reserve	66,462	CFWD
Wakefield Lift Station	Engineering Services Manager	870,550	Grants & Contributions	638,520	CFWD
			Development Cost Charges - Sewer	229,710	
			Sewer Capital Reserve	2,320	
Trail Ave Forcemain upgrade - Upgrade to Ebbtide	Engineering Services Manager	197,495	Development Cost Charges - Sewer	195,520	CFWD
Effluent Forcemain			Sewer Capital Reserve	1,975	
Additional Membrane Filters	Wastewater Supervisor	96,000	Sewer User Fees	96,000	
			Sewer Capital Reserve	96,000	CFWD \$96,000
Roof Replacement - Dusty Rd Building	Wastewater Supervisor	28,000	Sewer Capital Reserve	28,000	CFWD \$12,000
Water Resource Centre Chemical Storage Facility	Wastewater Supervisor	350,000	MFA Financing	350,000	
Ultrafiltration Unit Replacement	Wastewater Supervisor	250,000	Sewer User Fees	250,000	
Septage Solids Disposal	Wastewater Supervisor	500,000	Septage Reserve	500,000	
Spare VFD (Influent Wet Well Pumps)	Wastewater Supervisor	10,000	Sewer User Fees	10,000	
Septage Closure Plan	Wastewater Supervisor	150,000	Septage Reserve	150,000	
Lift Station Telemetry (SCADA)	Wastewater Supervisor	61,000	Sewer User Fees	61,000	
Manhole Replacements	Wastewater Supervisor	150,000	Sewer User Fees	150,000	
Sewer Outfall Consultation & Design	Wastewater Supervisor	20,000	Sewer User Fees	20,000	
				<b>2,845,507</b>	

<b>2021 Funding Summary</b>	
Development Cost Charges - Sewer	425,230
Grants & Contributions	638,520
MFA Financing	350,000
Septage Reserve	650,000
Sewer Capital Reserve	194,757
Sewer User Fees	587,000
	<b>2,845,507</b>

# Sewer System Operating Budget

Water Resource Center, collection system and lift stations

Revenues	\$ 4,354,162*
Expenses	- 3,900,453
Other non operating budget items	- 354,938
New debt	350,000
Capital 2021	- 2,195,507
<u>Amortization (add back)</u>	<u>1,303,730</u>
Surplus (deficit)	\$(443,007)

\*revenue based on 2020 fees, plus new connections.

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Water resource Center, collection system and Lift stations

Revenues	\$ 4,830,580*
Expenses	- 3,900,453
Other non operating budget items	- 354,938
New debt	350,000
Capital 2021	- 2,195,507
<u>Amortization (add back)</u>	<u>1,303,730</u>
Surplus (deficit)	\$ 33,412

\*includes revenues of \$476,428, a 23% increase over 2020 rates.

# Dusty Road Septage Receiving Facility

- Solids disposal (estimated \$500,000 in 2021 & 2023)
- Continuance at current site, lease expires in 2031
- Land swap, construct new facility (\$3m to \$5m+/-)
- Site cleanup(\$?)
- Extend lease?
- Current service level adjustment?
- Discontinue service?

# 2021 Septage New Ongoing Costs

Project	Department	2021 Budget Request	Status	Total Budget for 2022	Total Budget for 2023	Total Budget for 2024	Total Budget for 2025	Funding
Part time Operator - Septage Receiving/Dusty Rd	Septage Receiving / Dusty	15,700	Ongoing	16,014	16,334	16,661	16,994	Septage Revenues
Grinder Re-build Septage Receiving	Septage Receiving / Dusty	18,000	Ongoing	9,000	9,000	9,000	9,000	Septage Revenues
Emergency Contingency WRC, Collect & Dusty	Septage Receiving / Dusty	15,000	Ongoing	5,000	-	5,000	5,000	Septage Revenues
<b>Septage treatment Total</b>		<b>48,700</b>		<b>30,014</b>	<b>25,334</b>	<b>30,661</b>	<b>30,994</b>	

# Septage Receiving Operating Budget

Dusty road treatment facility

**2021**

Revenues	\$710,000
Septage receiving Expenses	- 258,745
new Ongoing Costs	- 48,700
Other non operating budget items (Transfer to from Reserve)	- 411,055
<u>Amortization (add back)</u>	<u>8,500</u>
Surplus (Deficit)	\$ 0

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	<b>2,845,507</b>



# Septage Receiving Operating Budget

Dusty road treatment facility

**2021**

Revenues	\$710,000
Septage receiving Expenses	- 307,445
Other non operating budget items (Transfer to from Reserve net)	238,945
Capital 2021	-650,000
Amortization (add back)	8,500
Surplus (Deficit)	\$ 0

# Sewer Operations 2021

The District will need to increase fees for new one time, new ongoing costs and Capital in an amount estimated of \$476,428. A 10% increase to sewer user fees equals \$207,100.

	2020 fees	Increase	2021 Proposed Fees
Residential User Fee	\$ 494	\$113	\$ 607
Senior Citizen's Apartment Rate	\$ 304	\$ 70	\$ 374
Commercial Rate	\$ 1,041	\$239	\$1,280

Parcel taxes remain at \$ 274

# Reserves (January 1, 2021 Estimated)

## Reserves, Surplus & DCC's

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Previous Years' Sewer Surplus	\$185,301
Sewer Capital Reserve	\$133,116
Septage Reserve	\$363,151
Sewer DCC's	\$2,313,181
Gas Tax Reserve	\$351,658

# Conclusion

The Sewer System is under funded from a revenue perspective no additional funds being transferred to reserve.

Necessary work needs to be completed in 2021.

Proposed to increase of 23% Sewer User fees to pay for necessary work.

2.8 Million of capital planned for 2021.

The addition of 2 part-time staff proposed in the budget.