2022-2026 Water, Sewer and Solid Waste Budget and User Rates

Financial Plan Highlights



PRESENTED BY CITY OF COURTENAY STAFF

COURTENAY

December 3, 2021

Water and Sewer Financial Plan Overview

Water and Sewer services are self funded utilities and are not assisted with funding from general taxation.

Two major sources of revenue:

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1. Utility fees: to cover operational expenses

Such as bulk water purchase, CVRD sewer requisition and operation, monitoring and maintenance expenses

2. Frontage taxes: to cover capital expenses

Such as asset renewal or expansion, depreciation, repairs that extend the life of an asset and contribution to reserves

Water and Sewer Financial Plan Overview

City Utility Fees impacted by:

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- Regional long-term capital investment leading to increased CVRD bulk water rate & sewer requisition
- Increased permit and regulatory requirements in City operations
- Financial Plans developed based on Asset Management for sustainable service delivery
 - Emphasis on preventative maintenance to extend the life of the City's assets
 - As per Council's Asset Management Bylaw No. 2981, 2019

Water and Sewer Financial Plan Overview

- Water and Sewer Financial Plan is a collaborative effort involving: Public Works – Engineering – Finance
- The Community Charter requires a municipality to have a five year financial plan adopted annually before May 15th
- Now seeking approval of proposed financial plans and to implement proposed utility fees to cover the anticipated costs of the services
- Next steps:
 - Amend Fees and Charges Bylaw with proposed rate increase for 2022

- Incorporate Water and Sewer Financial Plan into the City's Consolidated Financial Plan



Utility Services to a Single Residential Home



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2022 Water Budget Highlights





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Water Fund Overview

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- Regional and municipal components each play a vital role in providing water services to City of Courtenay residents
- Comox Valley regional planned capital upgrades and expansion of water infrastructure, including the recently commissioned water treatment facility, resulting in increased bulk water rates
- City operates and maintains a Class 3 water distribution system and must comply with Health Authority permit requirements and the statutory Drinking Water Protection Act

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2022 Water Operating Budget Overview

- Operating Expenses increase by 359k or 4.8% from 2021 to 2022 Budget due to:
 - Increased budget for meter replacement +100k (funded by reserve)
 - A portion of the Asset Management team now allocated to the Water and Sewer Fund +62k
 - General increase in costs allocated from General Government Services and Public Works expenses +125.6k
 - CVRD bulk water purchase +44.4k

Actual and projected rate : 2020 - \$0.83 / m3

2021 - \$0.81 / m3

2022 - \$0.83 / m3

2023 - \$0.96 / m3



2022 Water Fund Operating Expenses

				-		
Activity	Operating Activity	2021 BUDGET	2021 YTD Actual as at Nov.3, 2021 (Unaudited)	2022 BUDGET	Budget increase (decrease)	Variance %
Water Admin & Training		368,600	337,122	514,400	145,800	
Water Operations	Water Main	200,000	48,757	170,800	(29,200)	
	Water Service	390,300	321,096	376,100	(14,200)	
	Water Distribution Valve	47,400	49,068	91,000	43,600	
	Water Hydrant/Blowoff	194,000	155,298	201,500	7,500	
	Water Meter	138,300	46,825	241,700	103,400	
	Water Pump Stations	77,500	64,534	99,200	21,700	
	Quality & Cross Connection Control	80,000	25,840	83,100	3,100	
	Water Conservation Programs	167,000	34,532	71,800	(95,200)	
Water Admin & Operation	s Total	1,663,100	1,083,072	1,849,600	186,500	
CVRD Water Purchase		4,433,500	3,182,101	4,477,900	44,400	
Water Fleet		56,600	42,541	58,100	1,500	
Water Engineering Services		78,000	4,203	79,000	1,000	
Water Work in Progress		100,000	73,384	100,000	-	
Interfund Allocation		1,094,900	692,313	1,220,500	125,600	
Water Operating Expenses	Total	7,426,100	5,077,615	7,785,100	359,000	4.8%

2022 Water Fund Operating Expenses

2022 BUDGET: \$7,785,100



2022 Water Fund Proposed Budget Change Details

Water Services	Budget Increase	Service	Contractual /	Other
Budget Change	(Decrease)	Level	СРІ	Variances
Water Meter replacement program (funded by	reserve)	100,000		
SCADA to maintain service level		5,000		
KFN servicing agreement		5,000		
CVRD Water Requisition			44,400	
Interfund Allocation			125,600	
Contractual/CPI increases - wages, insurance, f	fleet, electricity		121,800	
Grand Total	359,000	110,000	291,800	(42,800)
% Change	4.8%	1.5%	3.9%	-0.6%



Water Operations

 In BC, drinking water quality is controlled through provincial and federal regulations administered by the Local Health Authority

Under these regulations, we are required to provide potable water considered to be safe

- The City owns and operates a Class 3 (III) water distribution system
- The City's permit to operate has a number of mandated programs: Uni-Directional Flushing (UDF)

Leak Detection / Loss Prevention

Cross-Connection-Control Program (CCC)

Water Quality Testing

Staff Education & Certification



Water System Assets 2021

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	173.4 km of Water Main 8,847 Water Service Connections	Water Assets Inherited via Development	
*	2,702 Water Meter Setters	2018	1.6%
*	805 Fire Hydrants	2010	1 50/
*	146 Blow off valves	2019	1.5%
*	1,908 Mainline valves	2020	0.7%
*	92 Air valves	2021	0.5%
*	5 Pressure Zones (138, 120, 110, 97 & 87 HDL)	2021	0.570
*	7 Pressure reducing stations	Total Increase	4.3%
*	1 Booster station (4 duty pumps & 1 fire)		



Water Smart Action Plan

- Recommended projects/programs incorporated in 2022-2026 Financial Plan:
 - Transmission/Distribution District Zone Metering
 - Cross Connection Control
 - Source Control (looping)
 - District Zone Development
 - New Development Irrigation Requirements (Draft)
 - Incentive program for Smart Control irrigation timers (CVRD)
 - Water & Sewer Rates Review (underway)
 - Leak Detection Survey

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- Pressure Zone 120
- Parks Water Conservation
 - Splash Park Consumption Reduction ~ 25-30%
 - Irrigation Controller Upgrade Consumption Reduction TBD (est. ~15%)
 - Operational Change Irrigation Strategy (drought tolerant planting/irrigation zone balance)

2022 Water Capital Projects

Project description	2022 Proposed Budget	2022 General Revenues	Funding 2022 Reserve for Future Expenditures	2022 Reserves
Water Smart Initiatives - District Meter Zone	350,000	150,000		200,000
Water - South Courtenay Secondary Transmission	250,000	250,000		
Water - Sandwick Area Fireflow Upgrade	125,000	125,000		
Water - Highway 19A Loop - Christie Parkway	50,000		50,000	
Braidwood Road - Road & Utility - Water Component	9,400		9,400	
Grand Total	784,400	525,000	59,400	200,000



2022 Water Revenue Requirements

Recommended 2.0% increase to water user fee; no change to frontage fee

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- Remaining total revenue requirements from realized and anticipated increased growth
- ◆ Impact for a Single Residential Home is +\$10.12; 47% for CVRD water purchase :



 Water Master Plan and Water Rates Review to be completed in 2022 will inform the water revenue requirements for future years

2022 Water Operating Budget Overview

Transfers, Contributions & Surplus	2022 Budget	2021 Budget
Transfer of revenue to fund Water capital projects	\$525,000	\$350,000
Contribution to Asset Management Water Reserve	\$300,000	\$300,000
Contributions to other Water Reserves (less 5.5k Carbon Tax to GHG reserve)	\$90,900	\$94,200
Surplus / (Use of Surplus)	Surplus \$86,100	Surplus \$251,600



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Water Fund Surplus and Reserves

WATER Surplus, Reserves and DCC Summary	Estimated	Budget
Estimated Closing Balances	2021	2022
Water Fund Surplus		
Prior Year Surplus (unallocated)	3,801,100	3,887,200
Surplus Reserve for Future Expenditures		
(Unspent Capital 2021)	59,400	-
	3,860,500	3,887,200
Water Capital Reserves		
Water Reserve	1,725,700	1,555,700
Asset Management Reserve	1,037,000	1,237,000
Water Machinery and Equipment	311,400	341,400
	3,074,100	3,134,100
Total Water Surplus and Reserves	6,934,600	7,021,300
Total Water DCC Bylaw #2426/2755	376,400	376,400

Minimum balance recommended for Water Surplus equivalent to 2 months of operating expenses: about \$1.3M



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2022 Water Budget Highlights

Questions?



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2022 Sewer Budget Highlights





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Sewer Fund Overview

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- Regional and municipal components each play a vital role in providing sewer services to City of Courtenay residents
- ✤ Regional sewer service infrastructure includes:

Pumping stations, sewer force mains, wastewater treatment plant with outfall treated effluent

- City of Courtenay sewer collection infrastructure includes: Lift stations, sewer trunk mains, collection system and connections within our boundaries
- City owns and operates a Class 3 sewer collection system

2022 Sewer Operating Budget Overview

- Operating Expenses increase by 525.5k or 7.8% from 2021 to 2022 budget due to:
 - CVRD regional sewer service requisition +227.5k
 - Represents almost 70% of Sewer Operating Expenses
 - A portion of the Asset Management team now allocated to the Water and Sewer Fund +62k
 - General increase in costs allocated from General Government Services and Public Works expenses +101.5k



2022 Sewer Fund Operating Expenses

			-			
Activity	Operating Activity	2021 BUDGET	2021 YTD Actual as at Nov.3, 2021 (Unaudited)	2022 BUDGET	Budget increase (decrease)	Variance %
Sewer Admin & Training		280,500	264,100	410,300	129,800	
Sewer Operations	Sewer Main	183,800	83,425	182,900	(900)	
	Sewer Service	93,100	91,418	98,600	5,500	
	Sewer Manhole/Chamber	6,300	12,409	22,300	16,000	
	Sewer Valve	13,100	-	13,800	700	
	Sewer Forcemain	13,200	648	13,900	700	
	Sewer Lift Station	260,700	179,206	270,600	9,900	
	Sewer Inflow & Infiltration	76,000	38,846	77,800	1,800	
Sewer Admin & Operations T	otal	926,700	670,052	1,090,200	163,500	
CVRD Sewer Requisition		4,717,200	4,630,120	4,994,700	277,500	
Sewer Fleet		53,200	28,284	49,700	(3,500)	
Sewer Engineering Services		86,500	10,132	73,000	(13,500)	
Sewer Work in Progress		40,000	21,565	40,000	-	
Interfund Allocation		893,200	562,954	994,700	101,500	
Sewer Operating Expenses To	tal	6,716,800	5,923,107	7,242,300	525,500	7.8%

2022 Sewer Fund Operating Expenses

2022 BUDGET: \$7,242,300



2022 Sewer Fund Proposed Budget Change Details

Sewer Services	Budget Increase	Service	Contractual	Other
Budget Change	(Decrease)	Level	/ CPI	Variances
Manhole/Chamber additional inspections		15,500		
CVRD Sewer Requisition			277,500	
Interfund Allocation			101,500	
Contractual/CPI increases - wages, insurance,	fleet, electricity		83,800	
Grand Total	525,500	15,500	462,800	47,200
% Change	7.8%	0.2%	6.9%	0.7%



Sewer (Wastewater) Operations

 In BC, municipal wastewater is managed through provincial Environmental Management Act under the municipal wastewater regulation.

Under these regulations, we are required to safeguard public health by providing safe the reliable conveyance of wastewater through to a treatment facility or ownership transfer location.

- The City owns and operates a Class 3 (III) wastewater collection system
- Our systems are monitored by a Supervisory Control and Data Acquisition (SCADA) 24/7/365
- Operational activities mandated by the Ministry of Health in combination with industry best practises and engineering standards:

proper operation, maintenance and monitoring of the wastewater facility, including lift stations;

staff education and certification;

contingency plans

Sewer System Assets 2021

- 159.8 km of Sewer Gravity Mains
- ✤ 6.2 km of Sewer Force Mains
- 8010 Sewer Connections
- 2,056 Manholes
- 11 Lift Stations (20 pumps)

Sewer Assets Inherited via Development					
2018	2.4%				
2019	1.5%				
2020	0.4%				
2021	0.6%				
Total Increase	4.9%				



2022 Sewer Capital Projects

		Funding		
Project description	2022 Proposed Budget	2022 General Revenues	2022 Reserve for Future Expenditures	2022 Reserves
Sewer - Mansfield Drive Forcemain	1,504,000	504,000		1,000,000
Sewer - Greenwood Trunk Construction	1,360,000		711,100	648,900
Puntledge Sanitary Catchment Replacement	415,000	415,000		
Sewer - 1st Street Lift Station Replacement	332,000	332,000		
South Courtenay Sewer System	65,000	15,000	50,000	
Braidwood Road - Road & Utility - Sewer Component	9,400		9,400	
Grand Total	3,685,400	1,266,000	770,500	1,648,900



2022 Sewer Revenue Requirements

Recommended 7.5% increase to user fees; no change to frontage fee

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- Remaining total revenue requirements from realized and anticipated increased growth
- ◆ Impact for a Single Residential Home +\$26.37; 48.5% for CVRD Sewer Requisition:



 Sewer Master Plan and Sewer Rates Review to be completed in 2022 will inform the sewer revenue requirements for future years

2022 Sewer Operating Budget Overview

Transfers, Contributions & Surplus	2022 Budget	2021 Budget (amended)
Transfer of revenue to fund Sewer capital projects	\$1,266,000	\$682,600
Contribution to Asset Management Sewer Reserve	\$300,000	\$300,000
Contributions to other Sewer Reserves (less 5.5k Carbon Tax to GHG reserve)	\$75,500	\$81,000
Surplus / (Use of Surplus)	(\$880,900)	(\$404,700)



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Sewer Fund Surplus and Reserves

SEWER	Estimated	Budget
Surplus, Reserves and DCC Summary	Actual	
Estimated Closing Balance	2021	2022
Sewer Fund Surplus		
Prior Year Surplus (unallocated)	1,949,500	1,068,600
Surplus Reserve For Future Expenditure		
(Unspent Capital 2021)	770,500	-
	2,720,000	1,068,600
Sewer Capital Reserves		
Sewer Reserve	566,700	566,700
Asset Management Reserve	2,097,900	749,000
Sewer Machinery and Equipment	721,200	796,200
	3,385,800	2,111,900
Total Sewer Surplus and Reserves	6,105,800	3,180,500
Sewer Development Cost Charges (DCC)		
Sewer DCC Bylaw #1638/2755	3,500	3,500
Sewer DCC Bylaw #2426/2755	801,400	801,400
Total Sewer DCC	804,900	804,900

Minimum balance recommended for Sewer Surplus equivalent to 2 months of operating expenses: about \$1.2M



2022-2026 Water, Sewer and Solid Waste Financial Plan Highlights Slide 31 of 38

2022 Sewer Budget Highlights

Questions?



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- Solid Waste service is self funded and not assisted with funding from general taxation
- 2022-2026 Solid Waste Budget based on current service levels
- Includes diversion of the yard waste in Q4-2022 and organic waste in Q3-2023
- Any changes to existing service levels approved by Council will be included in the 2023 financial plan





2022 BUDGET \$4,076,600



Solid Waste	Budget Increase	Service	Contractual /
			Contractual /
Budget Change	(Decrease)	Level	CPI
2 year term Solid Waste Coordinator		100,000	
Support RFP process		60,000	
Educational brochures		8,500	
Solid Waste contract			170,100
CVRD tipping fees			96,500
Contractual/CPI increases - wages, advertising	g, other		59,200
Grand Total	494,300	168,500	325,800
% Change	13.6%	4.6%	9.0%



- Residential and multi-residential curbside service:
 Decommond 5% increase to user fees
 - Recommend **5%** increase to user fees

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- Annual flat levy fee for single residential increases from \$182.42 to 191.54 (+\$9.12)
- Residential multi-residential, apartment and strata's (excluding yard waste) increases from \$160.26 to \$168.27 per unit (+ \$8.01)
- Additional service fee charges for extra yard waste pickup increases from \$21.57 to \$22.65 (+\$1.08)
- ICI and multi-residential apartment and condo (complexes only) non curbside service: Recommend increase of 15% to help offset the deficit identified in the costs of service review
- DCBIA members: recommended 5% increase on flat levy, from \$349.10 to \$366.56 (+ \$17.46)

2022 Combined Utility Rates

- For 2022, the total proposed increase for a single residential dwelling is \$45.61
- 33% of the 2022 combined utility rates is used to cover CVRD expenses

Utility rates for Single Family	2021	2022	Increase	Increase %
Sewer	351.60	377.97	26.37	7.5%
Water	506.05	516.17	10.12	2.0%
Solid Waste	182.42	191.54	9.12	5.0%
Total	\$1,040.07	\$1,085.68	\$ 45.61	4.4%





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Questions?



2022-2026 Water, Sewer and Solid Waste Financial Plan Highlights Slide 38 of 38