

2019-2023 Water and Sewer Financial Plan Highlights



PRESENTED BY
CITY OF COURTENAY STAFF

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Water and Sewer Financial Plan Overview

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

Major Sources of Revenue:

- **Utility Fees – operational expenses (bulk water purchase, electrical power, chemicals, flushing, monitoring, general payroll, general maintenance)**
- **Frontage Taxes – capital (replacement or expansion, depreciation, repairs that extend the life of an asset, contributions to reserves)**

Water and Sewer Financial Plan Overview

- **Regional long-term capital impacts on City utility fees**
– CVRD increasing bulk water rates, sewer requisition.
- **Recognize permit and regulatory requirements in City operations**
- **Focus on Asset Management for sustainable service delivery – as per Council’s Asset Management Policy**
- **Emphasis on preventative maintenance to extend the life of the City’s assets**

Water and Sewer Financial Plan Overview

- **Financial Plan is a collaborative effort by Engineering, Public Works, and Finance Departments**
- **The *Community Charter* requires a municipality to have a five year financial plan adopted annually before May 15th**
- **Proposed financial plans and seeking approval to implement proposed utility fees to cover the anticipated costs of the services.**
- **Next steps – adopt user fee bylaws and incorporate into consolidated financial plan for the City**

Utility Services to a Single Family Home



2019 Water Budget Highlights



Water Fund Overview

- **Regional and Municipal components each play a vital role in providing water services to City Courtenay residents**
- **Comox Valley Regional planned capital upgrades and expansion of water infrastructure, including a new water treatment facility resulting in increased bulk water rates**
- **City operates and maintains Class IV water distribution system and must comply with VIHA regulatory standards and permit requirements**

2019 Water Operating Budget Overview

- **Overall Operating Expenses increasing by 4%**
- **Main Cost Driver – Bulk Water Purchases (CVRD Bulk water rates going up 6.7% in 2019), 62% of Water Operating Expenses:**
 - 2018 - \$0.75/m³**
 - 2019 - \$0.80/m³**
 - 2020 - \$0.83/m³**
 - 2021 - \$0.85/m³**
- **Increased labour costs related to Island Health mandated programs, CUPE wage increases, New Employer Health Tax**

2019 Water Operating Budget Overview

- **Overall transfer of 2019 Revenue to Water Capital to fund 2019 projects and debt = \$1,136,300 (2018 = \$974,300)**
- **2019 Transfer to Reserves = \$276,000 (2018 = \$173,300)**
- **Using \$221,900 Prior Year Surplus to help cover the increase in operating and capital costs in 2019.**
- **Detailed Budget development – includes finding efficiencies wherever possible and analyzing all costs**

2019 Water Fund Operating Expenses

Water Operating Fund	Budget 2018	Budget 2019	Variance \$	Variance %
Operating Expenses				
General Administration	\$ 1,627,300	\$ 1,541,100	-\$ 86,200	-5.3%
CVRD - Supply	4,022,600	4,275,800	253,200	6.3%
Transmission and Distribution	1,014,900	1,123,300	108,400	10.7%
Amortization	300,000	300,000	-	0.0%
Total Operating Expenses	6,964,800	7,240,200	275,400	4.0%
Transfers to Other Funds				
Water Capital Fund - 2019 Revenues	974,300	1,136,300	162,000	16.6%
Water Capital Fund - 2018 Revenues	20,500	456,700	436,200	2127.8%
	994,800	1,593,000	598,200	60.1%
Transfers to Reserves and Surplus				
Asset Management	100,000	200,000	100,000	100.0%
Water Utility	37,700	40,400	2,700	7.2%
Water Machinery & Equip	30,000	30,000	-	0.0%
MFA	100	100	-	0.0%
Carbon Offsets	5,500	5,500	-	0.0%
	173,300	276,000	102,700	59.3%
Transfer to Appropriated Surplus				
Transfer to Surplus	14,900	-	(14,900)	-100.0%
Total Transfers	188,200	276,000	87,800	46.7%
Total Expenses	\$ 8,147,800	\$ 9,109,200	\$ 961,400	11.8%

2019 Water Operations

- In BC, drinking water quality is controlled through provincial and federal regulations which are administered by the Local Health Authority. Under these regulations we are required to provide potable water, which is considered to be safe from disease causing micro-organisms.
- The City owns and operates a Class IV water distribution system.
- The City's permit to operate has a number of mandated programs requiring additional resources:
 1. Uni-Directional flushing
 2. Leak detection
 3. Cross-Connection Control
 4. Industrial, Commercial and Institutional metering (ICI) programs

Water System Assets 2019

- **178km of water main**
- **11,400 water service connections**
- **1200 ICI water service connections**
- **750 ICI water service connections meters**
- **740 Fire Hydrants**
- **2250 water main valves**
- **90 Air valves**
- **3 Pressure reducing stations**
- **1 Booster station**

Asset Management's role in Operations

- **Inventory and condition assessments completed in 2018.**
- **Risk analysis completed in 2018 resulting in identification of areas of concern (either pipe material or flow concerns)**
- **Master Plan to be completed early spring 2019 – result will be a 25 year capital plan.**
- **Preventative maintenance plan in place and completed for 2018.**
- **PMP extend the life of assets by 10-15% saving significant capital expenditures in future years**

2019 Water Capital Projects

		2019 Funding			
Category	Project description	Values			
		2019 Budget	2019 General Revenues	2019 New Works Reserve	2019 Reserve for Future Expenditures
New	Sandwich Conversion	1,450,000	634,500	791,600	23,900
	Sandwich Conversion - CICC	325,000	325,000		
	South Courtenay Secondary Transmission	100,000	100,000		
	New Total	1,875,000	1,059,500	791,600	23,900
Renewal	Willemar Ave -17 St to 21 St - Watermain Replacement	177,000			177,000
	Connector 19A Fire Chamber Removal	116,500			116,500
	Buckstone Water Booster Pump Station - Improvements	103,500			103,500
	Sandpiper / Millard updgrade	40,000	40,000		
	Braidwood Rd - Road & Utility Reconstruction - Water	35,800			35,800
Renewal Total		472,800	40,000		432,800
Grand Total		2,347,800	1,099,500	791,600	456,700

2019 Water Revenue Requirements

- **Recommended 6.5% increase to User Fees to cover costs in the Water Fund.**
- **Recommended 0% increase to frontage fees in 2019**
- **Following is impact on Single Family Home:**

Annual	Water User Fee			Water Frontage Fee		
	One-time	Change	Change %	per meter	Change	Change %
2014	\$348.38			\$3.74		
2015	\$358.83	\$10.45	3.0%	\$3.74		
2016	\$369.59	\$10.76	3.0%	\$3.74		
2017	\$425.03	\$55.44	15.0%	\$4.68	\$0.94	25.1%
2018	\$467.53	\$42.50	10.0%	\$5.84	\$1.16	24.8%
2019	\$497.92	\$30.39	6.5%	\$5.84	\$0.00	0.0%

Water Fund Surplus and Reserves

WATER	Unaudited	Budget	Proposed Budget			
Surplus, Reserves and DCC Summary	Actual					
Estimated Closing Balances	2018	2019	2020	2021	2022	2023
Water Fund Surplus						
Prior Year Surplus (unallocated)	\$1,329,200	\$1,107,300	\$571,300	\$571,300	\$571,300	\$507,900
Surplus Reserve for Future Expenditures (Unspent Capital 2018)	456,700	-	-	-	-	-
	1,785,900	1,107,300	571,300	571,300	571,300	507,900
Water Capital Reserves						
Water Reserve	1,578,500	1,619,900	1,661,100	1,703,100	1,746,000	1,788,900
Asset Management Reserve	932,700	341,100	41,100	241,100	441,100	141,100
Water Machinery and Equipment	318,600	186,100	216,100	246,100	276,100	306,100
	2,829,800	2,147,100	1,918,300	2,190,300	2,463,200	2,236,100
Total Water Surplus and Reserves	\$4,615,700	\$3,254,400	\$2,489,600	\$2,761,600	\$3,034,500	\$2,744,000
Total Water DCC Bylaw #2426/2755	\$489,700	\$489,700	\$489,700	\$489,700	\$489,700	\$489,700

Questions?

2019 Sewer Budget Highlights



Sewer Fund Overview

- **Regional and Municipal components each play a vital role in providing Sewer Services**
- **Regional Sewer Service Infrastructure = pumping stations, sewer force mains, wastewater treatment plant with outfall treated effluent.**
- **City of Courtenay Sewer Collection Infrastructure = lift stations, sewer trunk mains, collection system and connections within our boundaries.**
- **City owns and operates Class 3 Sewer Collection system**

2019 Sewer Operating Budget Overview

- **Overall Operating Expenses increasing by 7.5%**
- **Main Cost Driver – CVRD regional sewer service requisition, 69% of Sewer Operating Expenses (6% increase over 2018):**

Comox Valley Sewer Service Requisition Courtenay share	\$	% increase
2016 Actual	3,484,685	
2017 Actual	3,670,687	5.3%
2018 Actual	3,890,928	6.0%
2019 Proposed budget	4,124,383	6.0%
2020 Proposed budget	4,371,846	6.0%
2021 Proposed budget	4,371,846	0.0%
2022 Proposed budget	4,924,080	12.6%
2023 Proposed budget	4,924,080	0.0%

2019 Sewer Operating Budget Overview

- **Increased labour costs related to increased preventative maintenance, CUPE wage increases, New Employer Health Tax**
- **Internal Allocations – Includes portion of General Gov't, Public works, Fleet, and Engineering costs.**
- **Overall transfer of 2019 Revenue to Sewer Capital to fund 2019 projects and debt = \$745,500 (2018 = \$941,800)**
- **2019 Transfer to Reserves = \$381,100 (2018 = \$381,200)**

2019 Sewer Fund Operating Expenses

Sewer Operating Fund	Budget 2018	Budget 2019	Variance \$	Variance %
Operating Expenses				
General Administration	\$ 1,118,800	\$ 1,165,000	\$ 46,200	4.1%
CVRD	3,890,900	4,124,400	233,500	6.0%
Collection	531,000	677,000	146,000	27.5%
Amortization	125,000	125,000	-	0.0%
Total Operating Expenses	5,665,700	6,091,400	425,700	7.5%
Transfers to Other Funds				
Water Capital Fund - 2019 Revenues	941,800	745,500	- 196,300	-20.8%
Water Capital Fund - 2018 Revenues	307,600	611,700	304,100	98.9%
	1,249,400	1,357,200	107,800	8.6%
Transfers to Reserves and Surplus				
Asset Management Reserve	300,000	300,000	-	0.0%
Machinery/Equip Reserve	75,000	75,000	-	0.0%
MFA Reserve Fund	700	600	- 100	-14.3%
Carbon Offsets Reserve	5,500	5,500	-	0.0%
Total Transfers	381,200	381,100	- 100	0.0%
Transfer to Appropriated Surplus				
Surplus contingency	3,600	12,800	9,200	255.6%
Total Transfers	384,800	393,900	9,100	2.4%
Total Expenses	\$ 7,299,900	\$ 7,842,500	\$ 542,600	7.4%

2019 Sewer Operations

- **The City owns and operates a Class 3 Sewer Collection System.**
- **SCADA system fully operational**
- **Operational Activities mandated by combination of Industry best practise and Engineering guidelines**
- **Flushing Program completed for 2018**
- **Grease and root removal Program completed for 2018**
- **Smoke Testing Program (I and I) completed for 2018**

Sewer System Assets 2019

- **160 km of sewer main**
- **7 km of sewer force main**
- **2100 manholes**
- **11 lift stations**
- **2 flow meter chambers**

Asset Management's role in Operations

- **CCTV camera program – 80% system condition assessments completed in 2018.**
- **Risk analysis completed in 2018 resulting in identification of areas of concern (either pipe material or flow concerns)**
- **Master Plan to be completed early spring 2019 – result will be a 25 year capital plan.**
- **Preventative maintenance plan in place and completed for 2018.**

Asset Management's role in Operations cont'd

- **These activities will extend the life of in-service assets therefore reducing annual capital replacement expenditures.**
- **PMP extend the life of assets by 10-15% saving significant capital expenditures in future years**

2019 Sewer Capital Projects

		Values	2019 Funding			
Category	Project description		2019 General Revenues	2019 New Works Reserve	2019 Reserve for Future Expenditures	2019 DCC Reserve
New	20 St & Riverside Lane - Chamber	300,000	120,700		179,300	
	Greenwood Trunk Connection - Design 2019	151,800	3,300		35,800	112,700
New Total		451,800	124,000		215,100	112,700
Renewal	Riverside Sanitary Trunk - 8 St to 19 St - Trunk Main Upgrade	1,500,000	170,100	1,200,000	129,900	
	1 St Lift Station Replacement - Design 2019	350,000	217,500		132,500	
	Comox Rd, Lewis Park, River Crossing - Sanitary Main Repl. Design 2019	200,000	102,100		97,900	
	Braidwood Rd - Road & Utility Reconstruction - Sanitary - Design 2019	36,300			36,300	
Renewal Total		2,086,300	489,700	1,200,000	396,600	
Grand Total		2,538,100	613,700	1,200,000	611,700	112,700

2019 Sewer Capital – Long Term Borrowing

Long Term Borrowing planned for 2020 to fund:

- **Greenwood Trunk Connection**
- **1st Street Lift Station Replacement**

Lengthy Statutory Process can take up to 8 months

Recommended to start process shortly after final adoption of the Financial Plan to ensure funds available when needed

2019 Sewer Revenue Requirements

- **Recommended 5% increase to User Fees to cover costs in the Sewer Fund.**
- **Recommended 0% increase to frontage fees in 2019**
- **Following is impact on Single Family Home:**

Annual	Sewer User Fee			Sewer Frontage Fee	
	One-time	Change	Change %	per meter	Change
2014	\$217.94			\$10.24	\$ -
2015	\$243.55	\$25.61	11.8%	\$10.24	\$ -
2016	\$267.91	\$24.36	10.0%	\$10.24	\$ -
2017	\$294.70	\$26.79	10.0%	\$10.24	\$ -
2018	\$324.17	\$29.47	10.0%	\$10.24	\$ -
2019	\$340.38	\$16.21	5.0%	\$10.24	\$ -

Sewer Fund Surplus and Reserves

SEWER Surplus, Reserves and DCC Summary	Unaudited Actual	Budget	Proposed Budget			
Estimated Closing Balance	2018	2019	2020	2021	2022	2023
Sewer Fund Surplus						
Prior Year Surplus (unallocated)	\$ 916,200	\$ 929,000	\$ 515,600	\$ 304,300	\$ 200,800	\$ 181,800
Surplus Reserve For Future Expenditure (Unspent Capital 2018)	611,700	-	-	-	-	-
	1,527,900	929,000	515,600	304,300	200,800	181,800
Sewer Capital Reserves						
Sewer Reserve	505,600	505,600	505,600	505,600	505,600	505,600
Asset Management Reserve	2,771,800	1,871,800	271,800	571,800	371,800	171,800
Sewer Machinery and Equipment	791,400	378,900	453,900	528,900	603,900	678,900
	4,068,800	2,756,300	1,231,300	1,606,300	1,481,300	1,356,300
Total Sewer Surplus and Reserves	\$ 5,596,700	\$ 3,685,300	\$ 1,746,900	\$ 1,910,600	\$ 1,682,100	\$ 1,538,100
Sewer Development Cost Charges (DCC)						
Sewer DCC Bylaw #1638/2755	34,300	34,300	34,300	34,300	34,300	34,300
Sewer DCC Bylaw #2426/2755	619,800	507,100	57,100	57,100	57,100	57,100
Total Sewer DCC	\$ 654,100	\$ 541,400	\$ 91,400	\$ 91,400	\$ 91,400	\$ 91,400

Questions?