

2023-2027 Water, Sewer and Solid Waste Budget and User Rates

Financial Plan Highlights



CITY OF
COURTENAY

PRESENTED BY
CITY OF COURTENAY STAFF

January 30, 2023

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:

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:
 - 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 2023
 - Incorporate Water and Sewer Financial Plan into the City's Consolidated Financial Plan

Utility Services to a Single Residential Home



2023 Water Budget Highlights



Water Fund Overview

- ❖ 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

2023 Water Operating Budget Overview

❖ Water Operating Expenses increase by \$1,147,800 or 14.7% from 2022 Budget due to:

- CVRD bulk water purchase +\$976.8k

Actual and projected rate : 2021 - \$0.81 / m3

2022 - \$0.80 / m3

2023 - \$0.96 / m3

20% rate
increase

+\$895.6k due to rate increase

+\$81.2k due to projected increase in consumption

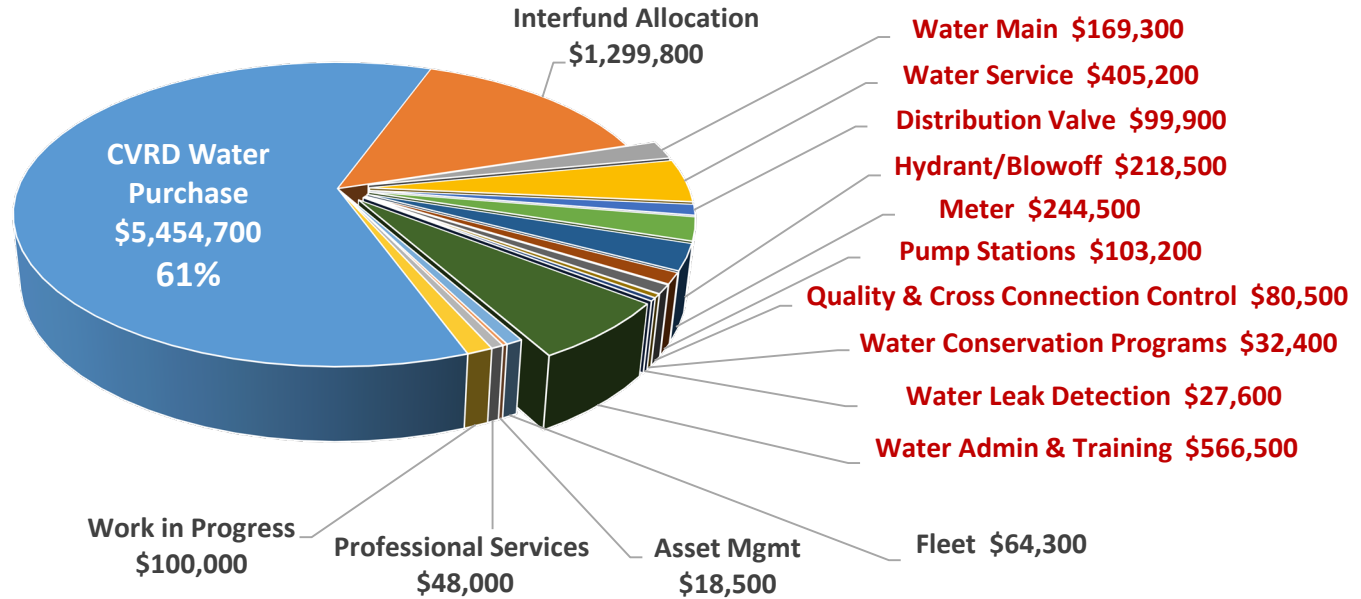
- General increase in costs allocated from General Government Services and Public Works expenses +\$79.3k
- New Asset Management condition assessment studies for water assets +\$13.5k

2023 Water Fund Operating Expenses

Water Activity	Operating Activity	2022 BUDGET	2023 BUDGET	Budget increase (decrease)	Variance %
CVRD Water Purchase		4,477,900	5,454,700	976,800	
Water Admin - Salaries/Wages		420,300	466,900	46,600	
Water Administration		50,800	54,900	4,100	
Water Admin - Training		37,900	38,800	900	
Water Engineering Services		74,000	48,000	(26,000)	
Water Asset Mgmt		5,000	18,500	13,500	
Water Admin - BC One Call		5,400	5,900	500	
Water Operations	Water Main	170,800	169,300	(1,500)	
	Water Service	376,100	405,200	29,100	
	Water Distribution Valve	91,000	99,900	8,900	
	Water Hydrant/Blowoff	201,500	218,500	17,000	
	Water Meter	241,700	244,500	2,800	
	Water Pump Stations	99,200	103,200	4,000	
	Water Quality & Cross Connection Control	83,100	80,500	(2,600)	
	Water Conservation Programs	71,800	60,000	(11,800)	
Water Operations Total		1,335,200	1,381,100	45,900	
Water Fleet		58,100	64,300	6,200	
Water Work in Progress		100,000	100,000	-	
Interfund Allocation		1,220,500	1,299,800	79,300	
Grand Total		7,785,100	8,932,900	1,147,800	14.7%

2023 Water Fund Operating Expenses

2023 BUDGET: \$8,932,900



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 (CEU's)

Water System Assets 2022

- ❖ 173.4 km of Water Main
- ❖ 8,902 Water Service Connections
- ❖ 2,768 Water Meter Setters
- ❖ 806 Fire Hydrants
- ❖ 146 Blow off valves
- ❖ 1,920 Mainline valves
- ❖ 94 Air valves
- ❖ 5 Pressure Zones (138, 120, 110, 97 & 87 HDL)
- ❖ 7 Pressure reducing stations
- ❖ 1 Booster station (4 duty pumps & 1 fire)

Water Assets Inherited via Development	
2018	1.6%
2019	1.5%
2020	0.7%
2021	0.5%
2022	0.2%
Total Increase	4.5%

Water Smart Action Plan

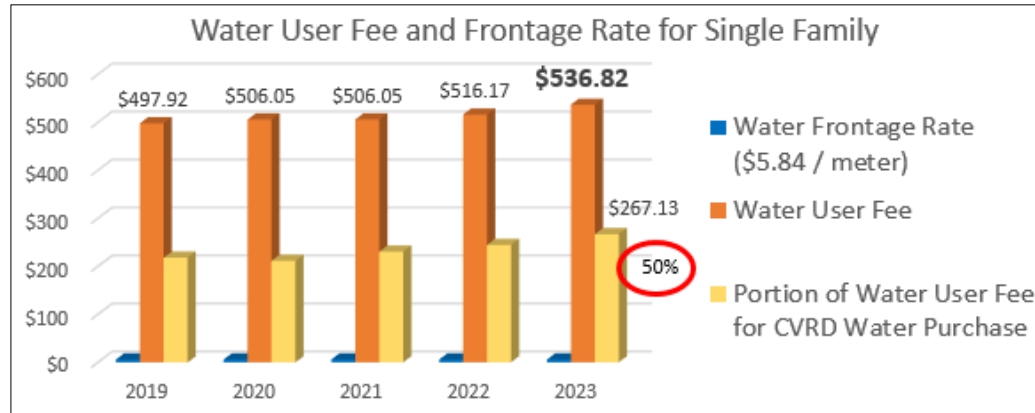
- ❖ Recommended projects/programs incorporated in 2023-2027 Financial Plan:
 - Transmission/Distribution - District Zone Metering – Capital Item
 - WSAP Update & Outcomes - Universal Water Meter Study (update)
 - Water & Sewer Rates Review
 - Phase 4 of 4 – Rate Structure Development
 - Leak Detection Survey 2023
 - Survey completed by UDF Area – 2023 program includes; 5, 4 & 1
 - Water Conservation
 - Splash Park - Consumption Reduction ~ 15-20%
 - Parks Irrigation Controller Upgrade - Consumption Reduction TBD (est. ~15%)
 - Operational Change – Irrigation Strategy (drought tolerant planting/irrigation zone balance)
 - Irrigation Design Standards – New Development Requirements - SDS Bylaw (Draft)
 - CVRD Incentive Program - Smart Irrigation Controller/Timers

2023 Water Capital Projects

Project description	Funding					
	2022 Budget	2022 Forecast	2023 Proposed Budget	2023 Taxation - User Fees	2023 Reserve for Future Expenditures	2023 Reserves
Water - Sandwich Area Fireflow Upgrade	125,000	51,000	1,376,500	152,500	74,000	1,150,000
Water - South Courtenay Secondary Transmission	250,000	22,000	601,000	373,000	228,000	
Water Smart Initiatives - District Meter Zone	350,000	66,000	359,000	42,000	117,000	200,000
Sandpiper / Millard Water Main Upgrade	107,200	28,000	79,200		79,200	
WATER - Cousins Ave - 20th to Willemar	-	-	15,000	15,000		
Grand Total	832,200	167,000	2,430,700	582,500	498,200	1,350,000

2023 Water Revenue Requirements

- ❖ Recommended 4.0% increase to water user fee; no change to frontage fee
- ❖ Remaining total revenue requirements from realized and anticipated increased growth and prior year surplus
- ❖ Impact for a Single Residential Home is +\$20.65



- ❖ Water Master Plan and Water Rates Review to be completed early 2023 will inform the water revenue requirements for future years

2023 Water Operating Budget Overview

Transfers, Contributions & Surplus	2023 Budget	2022 Budget
Transfer of revenue to fund Water capital projects	\$582,500	\$525,000
Contribution to Asset Management Water Reserve	\$300,000	\$300,000
Contributions to other Water Reserves (Utility, M&E, MFA)	\$93,600	\$90,900
Surplus / (Use of Surplus)	Use of surplus (\$450,800)	Surplus \$86,100

Water Fund Surplus and Reserves

WATER	Estimated	Budget
Surplus, Reserves and DCC Summary		
Estimated Closing Balances	2022	2023
Water Fund Surplus		
Prior Year Operating Surplus (unallocated)	4,738,600	4,059,800
Surplus Reserve for Future Expenditures (Unspent Capital 2022)	270,200	-
	<u>5,008,800</u>	<u>4,059,800</u>
Water Capital Fund Surplus (unexpended debt)	108,900	108,900
Water Capital Reserves		
Water Utility Reserve	1,782,900	1,730,600
Asset Management Reserve	1,327,800	377,800
Water Machinery and Equipment	347,800	377,800
	<u>3,458,500</u>	<u>2,486,200</u>
Total Water Surplus and Reserves	<u>8,576,200</u>	<u>6,654,900</u>
Total Water DCC Bylaw #2426/2755	<u>724,200</u>	<u>724,200</u>

Minimum balance recommended for Water Surplus equivalent to 2 -3 months of operating expenses: about \$1.3M – \$2.2 M

2023 Water Budget Highlights

Questions?

2023 Sewer Budget Highlights



Sewer Fund Overview

- ❖ 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

2023 Sewer Operating Budget Overview

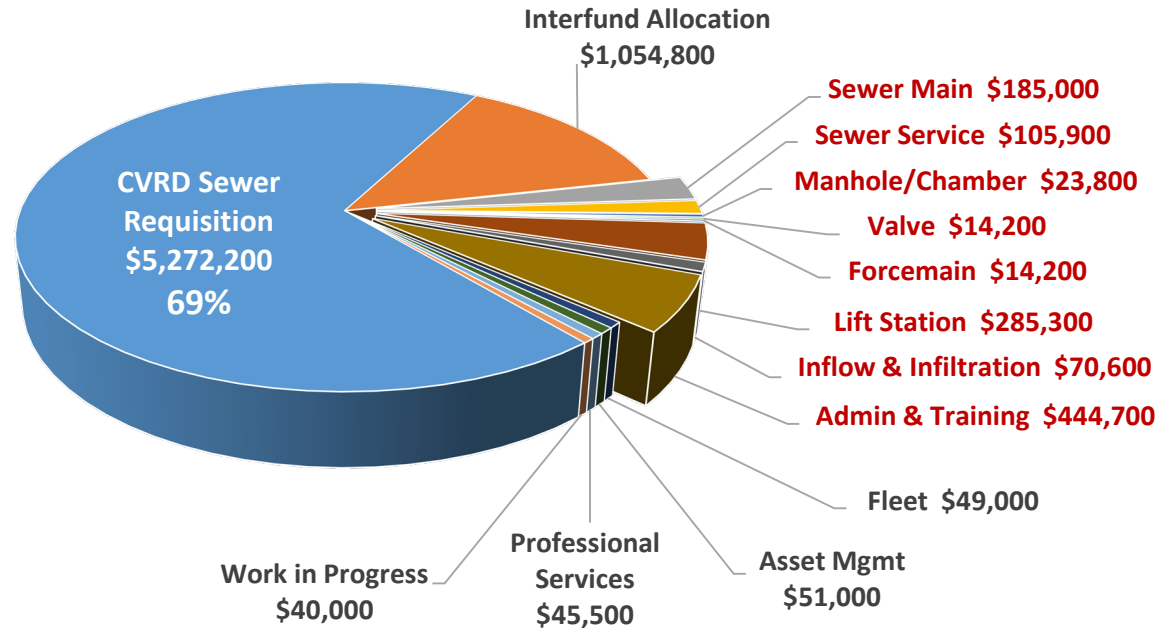
- ❖ Operating Expenses increase by \$413.9k or 5.7% from 2022 budget due to:
 - CVRD regional sewer service requisition +\$277.5k
 - Represents 69% of Sewer Operating Expenses
 - General increase in costs allocated from General Government Services and Public Works expenses +\$60.1k
 - New Asset Management condition assessment studies for sewer assets +\$46k

2023 Sewer Fund Operating Expenses

Sewer Activity	Operating Activity	2022 BUDGET	2023 BUDGET	Budget increase (decrease)	Variance %
CVRD Sewer Requisition		4,994,700	5,272,200	277,500	
Sewer ADMIN - Salaries/Wages		366,300	386,900	20,600	
Sewer Administration		33,000	40,300	7,300	
Sewer ADMIN - Training		11,000	17,500	6,500	
Sewer Engineering Services		68,000	45,500	(22,500)	
Sewer Asset Mgmt		5,000	51,000	46,000	
Sewer Operations	Sewer Main	182,900	185,000	2,100	
	Sewer Service	98,600	105,900	7,300	
	Sewer Manhole/Chamber	22,300	23,800	1,500	
	Sewer Valve	13,800	14,200	400	
	Sewer Forcemain	13,900	14,200	300	
	Sewer Lift Station	270,600	285,300	14,700	
	Sewer Inflow & Infiltration	77,800	70,600	(7,200)	
Sewer Operations Total		679,900	699,000	19,100	
Sewer Fleet		49,700	49,000	(700)	
Sewer Work in Progress		40,000	40,000	-	
Interfund Allocation		994,700	1,054,800	60,100	
Total Sewer Operating Expense		7,242,300	7,656,200	413,900	5.7%

2023 Sewer Fund Operating Expenses

2023 BUDGET: \$7,656,200



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 2022

- ❖ 161.5 km of Sewer Gravity Mains
- ❖ 7.9 km of Sewer Force Mains
- ❖ 8,129 Sewer Connections
- ❖ 2,085 Manholes
- ❖ 12 Lift Stations (22 pumps)

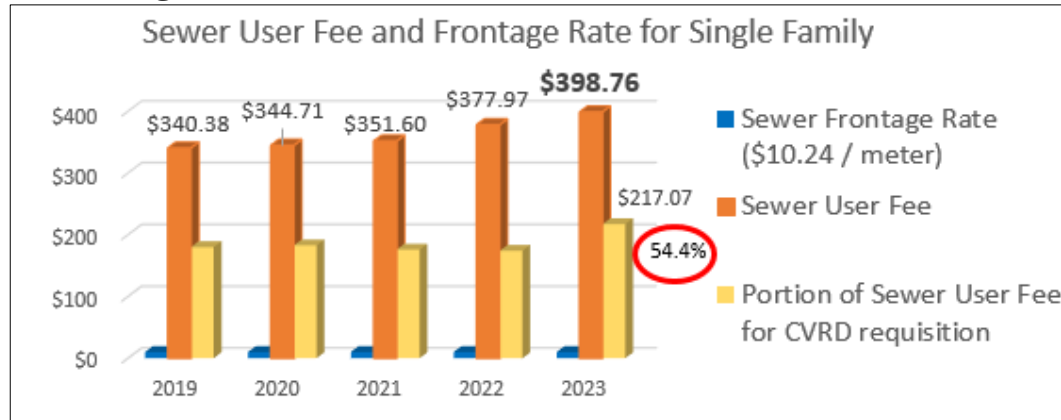
Sewer Assets Inherited via Development	
2018	2.4%
2019	1.5%
2020	0.4%
2021	0.6%
2022	0.1%
Total Increase	5.0%

2023 Sewer Capital Projects

Project description	2022 Budget	2022 Forecast	2023 Proposed Budget	Funding			
				2023 Taxation - User Fees	2023 Reserve for Future Expenditures	2023 Reserves	2023 Debt
Sewer - 1st Street Lift Station Replacement	332,000	107,600	3,095,600	71,200	224,400	300,000	2,500,000
Puntledge Sanitary Catchment Replacement (Comox Rd)	429,300	101,800	327,500		327,500		
South Courtenay Sewer System	86,400	43,900	224,000	181,500	42,500		
Sewer - Cousins Ave - 20th to Willemar		-	15,000	15,000			
Grand Total	847,700	253,300	3,662,100	267,700	594,400	300,000	2,500,000

2023 Sewer Revenue Requirements

- ❖ Recommended 5.5% increase to user fees; no change to frontage fee
- ❖ Remaining total revenue requirements from realized and anticipated increased growth
- ❖ Impact for a Single Residential Home +\$20.79



- ❖ Sewer Master Plan and Sewer Rates Review to be completed early 2023 will inform the sewer revenue requirements for future years

2023 Sewer Operating Budget Overview

Transfers, Contributions & Surplus	2023 Budget	2022 Budget
Transfer of revenue to fund Sewer capital projects	\$267,700	\$1,266,000
Contribution to Asset Management Sewer Reserve	\$300,000	\$300,000
Contributions to other Sewer Reserves	\$75,500	\$75,500
Surplus / (Use of Surplus)	Surplus \$106,500	Use of Surplus (\$880,900)

Sewer Fund Surplus and Reserves

SEWER Surplus, Reserves and DCC Summary	Estimated 2022	Budget 2023
Sewer Fund Surplus		
Prior Year Operating Surplus (unallocated)	1,450,600	1,557,100
Surplus Reserve For Future Expenditure (Unspent Capital 2022)	594,400	-
	2,045,000	1,557,100
Sewer Capital Fund Surplus	21,700	21,700
Sewer Capital Reserves		
Sewer Reserve	1,091,500	1,091,500
Asset Management Reserve	1,793,100	1,793,100
Sewer Machinery and Equipment	810,900	885,900
	3,695,500	3,770,500
Total Sewer Surplus and Reserves	5,762,200	5,349,300
Sewer Development Cost Charges (DCC)		
Sewer DCC Bylaw #1638/2755	35,700	35,700
Sewer DCC Bylaw #2426/2755	1,415,800	1,415,800
Total Sewer DCC	1,451,500	1,451,500

Minimum balance recommended for Sewer Surplus equivalent to 2 -3 months of operating expenses: about \$1.3M - \$2.0M

2023 Sewer Budget Highlights

Questions?

2023 Solid Waste, Recyclables & Organic Waste Collection Budget Highlights

- Solid Waste service is self funded and not assisted with funding from general taxation
- 2023-2027 Solid Waste Budget based on single residential and multi-residential curbside servicing
- Includes diversion of the yard & organic waste commencing in Q1 of 2023
- Fully Automated Collection Services commencing in Q1 of 2024



2023 Solid Waste, Recyclables & Organic Waste Collection Budget Highlights

The 2023 Solid Waste budget includes a recommended **24%** increase to the residential user fee, from \$191.54 to \$237.50 representing a \$45.96 increase.

This increase is required in order to maintain a self funding service and cover those significant increases:

- Collection contract compounded increase of 13.9% from 2022 to 2023
- \$110 / mt tipping fees for yard waste and organics, previously disposed at no costs

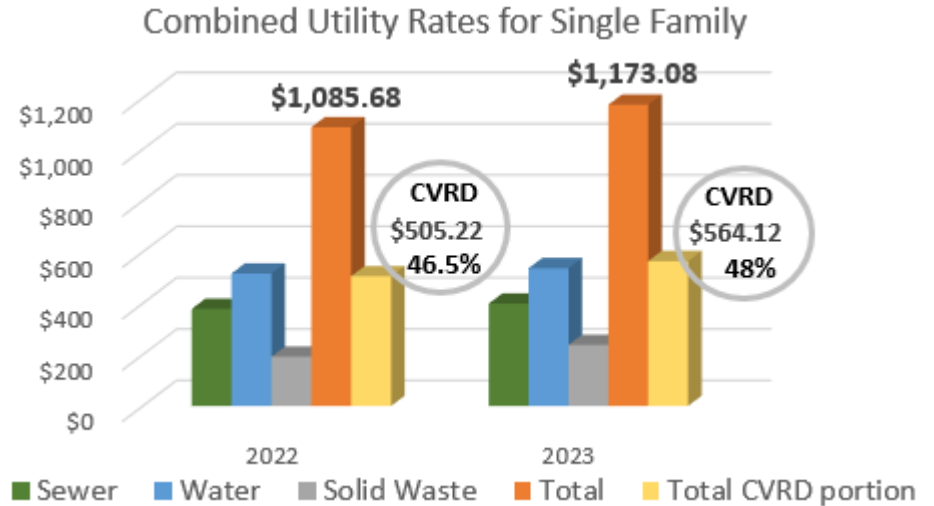
2023 Solid Waste, Recyclables & Organic Waste Collection Budget Highlights


Solid Waste Expenses	2022 Budget Estimated for Residential			2023 Budget			Increase
	Units	\$/unit	Total \$	Units	\$/unit	Total \$	Total \$
Collection Costs (fixed)							
<i>Rate increase</i>					13.9%		
Garbage Fixed Costs	9,735	51.55	501,805	9,735	58.70	571,500	69,695
Recycling Fixed Costs	9,735	21.74	211,636	9,735	24.76	241,000	29,364
Organics Fixed Costs	9,735	61.94	602,964	9,735	70.53	686,700	83,736
Total Collection Costs (Emterra)	9,735	135.22	1,316,406	9,735	154.00	1,499,200	182,794
Tippling Fees Costs (variable)	Tonnage	\$/mt	Total \$	Tonnage	\$/mt	Total \$	
Garbage Variable Costs	4,129.47	140.00	578,126	4,232.71	145.00	613,700	35,574
Yard Waste / Organics Variable Costs	680.35	110.00	74,839	2,804.96	110.00	308,500	233,661
Total Tippling Fees Costs (variable)	4,809.82	135.76	652,964	7,037.66	131.04	922,200	269,236
Administration Costs							
Other Programs - Litter Baskets by PWS			144,200	now included with Public Works Services			(144,200)
Administration Costs			306,900			319,000	12,100
Total Curbside Costs			\$ 2,420,470			\$ 2,740,400	319,930

2023 Combined Utility Rates

For 2023, the total proposed increase for a single residential dwelling is \$87.40
 48% of the 2023 combined utility rates is used to cover CVRD expenses

Utility rates for Single Family	2021	2022	2023	Increase	Increase %
Sewer	351.60	377.97	\$398.76	\$ 20.79	5.5%
Water	506.05	516.17	\$536.82	\$ 20.65	4.0%
Solid Waste	182.42	191.54	\$237.50	\$ 45.96	24.0%
Total	\$1,040.07	\$1,085.68	\$1,173.08	\$ 87.40	8.1%





2023-2027 Water, Sewer and Solid Waste Budget and User Rates

Financial Plan Highlights