

CORPORATION
OF THE TOWN OF COCHRANE



DRINKING WATER QUALITY MANAGEMENT
SYSTEM

FINANCIAL PLAN

DWWP NUMBER: 207-201

O.REG. 453/07

[Approved by Town of Cochrane Council Resolution 35-2021](#)

INTRODUCTION

Purpose

Corporation of the Town of Cochrane staff prepared the Water Financial Plan as part of the five elements the Ministry requires to issue a municipal drinking water license as per the Safe Drinking Water Act, 2002. These elements include:

1. **A drinking water works permit (DWWP):** A permit to establish or alter a drinking water system
2. **An acceptable operational plan:** The Drinking Water Quality Management Standard (DWQMS) will be the standard upon which operational plans will be based. The plan will document an operating authority's quality management system (QMS).
3. **An accredited operating authority:** A third-party audit of an operating authority's QMS will be the basis for accreditation.
4. **A Financial Plan:** This must be prepared in accordance with the prescribed requirement in the Financial Plans Regulation, including an indication that the drinking water system is viable.
5. **A permit to take water (PTTW):** Requirements as outlined in the Ontario Water Resources Act.

The Town encloses its Financial Plan herein. It is prepared in accordance with the Ministry of the Environment Financial Plans Regulation (O. Reg. 453/07).

Financial Plan Requirements

The O.Reg. 453/07 provides details with regards to the Financial Plans for existing water systems. The requirements for existing systems are summarized as follows:

- Must indicate financial viability of the system
- Must be approved by resolution of Council (or governing body)
- Must apply to a period of at least six years (commencing the year of license expiry)
- Details of the proposed or projected financial position
- Details of the proposed or projected financial operations
- Details of the proposed or projected gross cash receipts and gross cash payments
- Financial plans applicable to two or more solely-owned drinking water systems can be prepared as if they are for one drinking water system
- Financial plans are to be made available to the public upon request and at no charge
- Made available to the public through publication on the internet
- Notice of availability to be given to the public
- Submitted to the Ministry of Municipal Affairs and Housing

Town of Cochrane Drinking Water System Background

The Corporation of the Town of Cochrane is the owner and operating authority of the drinking water system which services approximately 4,500 residents, including industrial, commercial and institutional establishments.

The drinking water system is comprised of a treatment facility (Lime softening Treatment Plant) and distribution system. The distribution system is comprised of approximately:

- }> 45 km of distribution watermain
- }> 207 fire hydrants
- }> 434 valves (not including the service valves or hydrant valves)
- }> One elevated water storage tank

The 45 km of distribution watermain is constructed with a combination of PVC, cast iron and ductile iron.

WATER CONSUMPTION, RATES AND REVENUES - HISTORY

Water Consumption:

The following chart outlines the Treated Water Flows for the Town of Cochrane. The Town's current permit to take water (PTTW) from the Three Wells is for 11,784.96 m³/day.

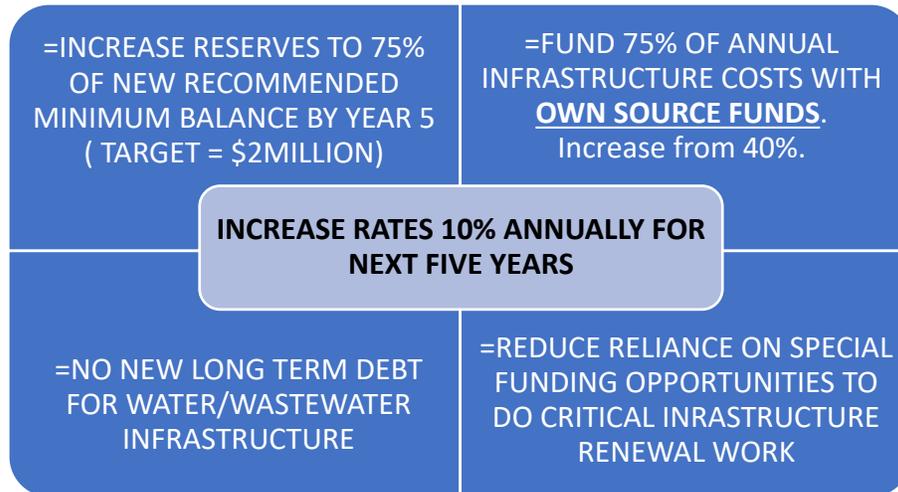
TREATED WATER FLOWS				
	Year	Daily Monthly Average (m³)	Daily Maximum (l/s)	Yearly Total (m³)
	2014	2,735		1,005,856
	2015	2,336	79.1	851,348
	2016	1,777	81.5	647,352
	2017	1,561	77.8	570,011
	2018	1,453	81.4	524,541
	2019	1,414	82.4	515,901
	2020	1,342	80.4	491,161

Water Rates and Revenues

Since the last financial plan was filed in 2015 the Town has seen significant changes to its water consumption, revenues and rates. These changes are summarized as follows:

- A significant water user closed its operations in mid 2015. This resulted in an annual reduction to water consumption of 297,000 m³, and represented 23% of annual water revenues.
- In 2015/2016 The municipality installed water meters to all residential premises and what was thought to be "Revenue Neutral" rates were established and implemented. As residential consumption was monitored, it became evident that the per household usage used to develop rates was higher than what was actually being used, putting additional downward pressure on revenues.
- In 2016/2017 – a rate adjustment/increase was implemented to re-set the new metered residential rates to generate same level of residential revenues as pre-metered scenario.

- 2017/2018/2019 – the municipality continued to monitor the impact of residential meters and other operational changes affecting the water financial results. In order to mitigate rate increases from the financial pressures of the loss of gross profit from the 2015 closure of the large user, the municipality altered its financial strategy and used long term debt as a means of paying for some of its water infrastructure renewal needs.
- 2020 – The 2020 Budget to Council was highlighted with a recommendation that it is time to “reset” the financial plan for **both water and wastewater services**. The recommendation is essentially recapped as follows:



This Water Financial Plan largely follows the recommendations made in the 2020 budget. It includes:

- ✓ Reach 100% of Recommended Target Minimum Reserve by 2026
- ✓ No new Long Term Debt by 2026
- ✓ 100% of Capital Funding needs from OWN SOURCE Funds – by 2026
- ✓ No reliance on special funding opportunities
- ✓ 10% annual increase to rates

SUSTAINABLE FINANCIAL PLAN

FINANCIAL PLAN RECAP

Schedule 1 – Projected Statement of Operations – REVENUES AND EXPENSES

Schedule 2 – Projected Statement of Cash Flow

Schedule 3- Projected Statement of Financial Position

Schedule 4 – Projected Tangible Capital Asset Schedule

Schedule 5 – Projected Rates

As required, these statements are in accordance with the new Public Sector Accounting Standards. Actual results will vary from the projections herein and the differences may be material.

KEY INPUTS

This section discussed the key inputs and documents used to develop the financial plan consistent with governing legislation. The costs, revenues and assumptions used in preparing the financial projections are based on the Town's data such as the 2020 approved and 2021 draft operating budget and capital plan, year end reserve continuity schedules and other relevant information provided by staff. The five key financial inputs below drive the prescribed statements in this plan.

1. Expenditure and Revenue Forecast

The expenditure and revenue forecast is based on information obtained from the Town's 2020 operating budget. Some main assumptions used to derive the operating and revenues projections are as follows:

- Expenditures will increase annually as follows:
 - Salaries, Wages and Benefits – 2.5% per annum
 - Operating and Maintenance Costs – 2.5% per annum
 - Interest on long term debt – in accordance with existing or forecast financing needs and rates
- Revenues – see section 5. RATES

2. Capital Expenditure and Funding

The Town's capital budget forecast used in preparing the financial plan is outlined in the attached schedules. The schedule identifies the cumulative cost for capital infrastructure renewal projects over the planning period and identifies the annual funding sources as outlined by Town staff and Council. This schedule does not include any growth related projects as none have been identified as part of the multi year capital plan as provided by staff.

Asset Management – The asset inventory that has been compile includes asset original. The Town is actively reviewing its water inventory and facilities assessments with the goal to determine the appropriate level of detail for the facility assets, as well as compile the level of detail for the assets including asset conditions, life expectations, risk assessments and replacement costs. The Town has

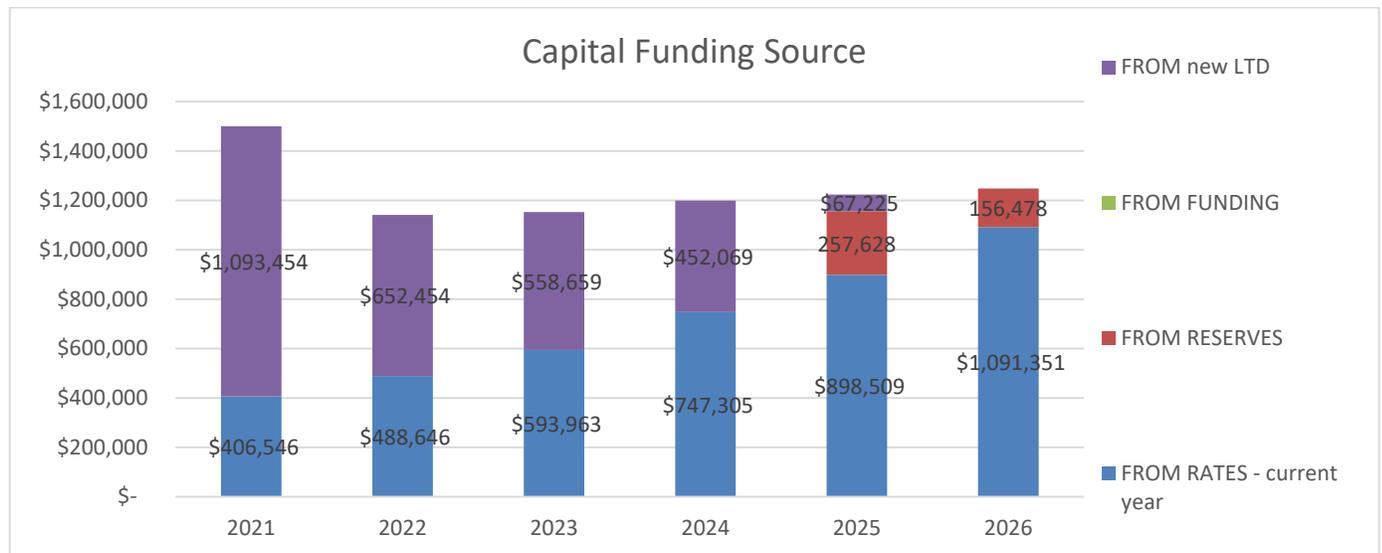
implemented an asset management system to track and analyse the data and assist with long term life cycle planning.

The capital cost projections built into this financial plan have been provided by the department based on the information it has to date.

It should be noted that the **capital funding plan** includes the following strategy.

- Generate 100% of Capital Funding needs through own source revenues by year 2026.
- Reduce and eliminate need for new long term debt by the year 2026
- Forecast includes 0% of annual capital infrastructure renewal needs to come from Special Funding opportunities from other levels of government (Federal and Provincial)

The following chart shows the capital funding composition built into this financial plan. As we move from 2021 to 2026, we see the reduction in the need for long term debt and increase in ability to fund from own source revenues (current revenues and reserves in excess of minimum target balance).



3. Water Reserve Fund

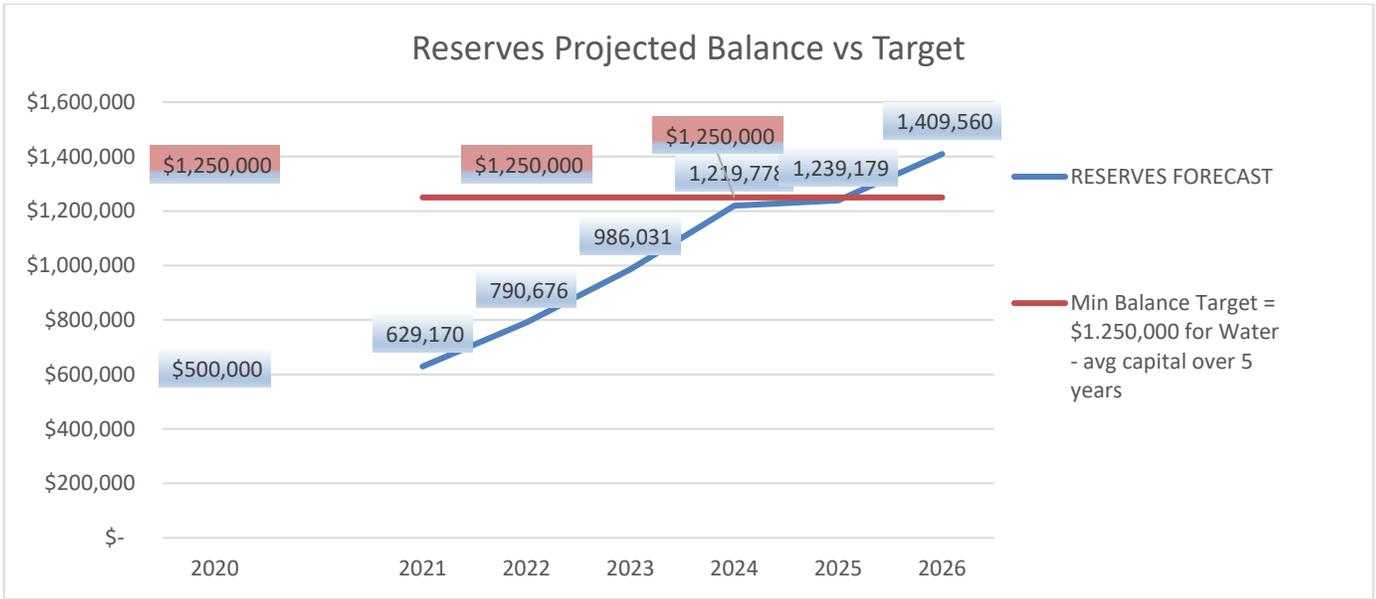
The results of the projected transfers to and from the Water Reserve Fund are outlined in the Schedule. The reserve activity includes the following strategy:

- Target Minimum Reserve Balance equivalent to average 5 year capital infrastructure needs + average 5 year Special Funding Source Forecast

Reserve Target Component	\$
Average 5 year capital infrastructure needs	\$1,250,000
RECOMMENDED TARGET MINIMUM RESERVE BALANCE	\$1,250,000

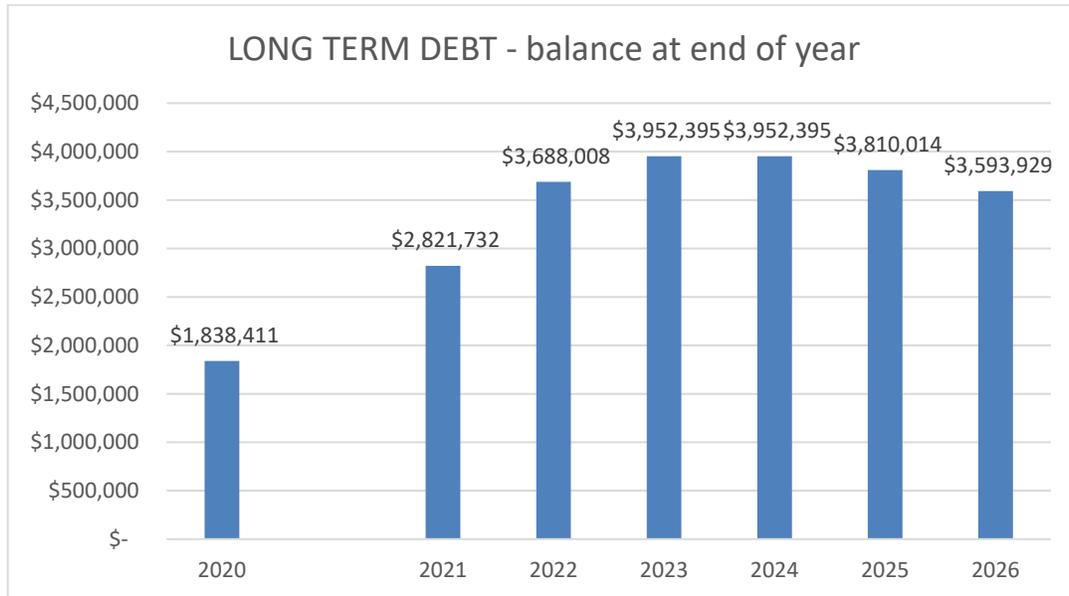
- 20% of Annual Cash Based Surplus from Operations to be transferred to Reserve until Recommended Minimum Reserve Balance Target is achieved.

The following chart demonstrates the changes to reserves built into this financial plan. This financial plan projects the municipality will reach its Minimum Reserve Balance Target in 2026.



4. Long Term Debt

As of December 31, 2020, the Town had outstanding long term debt related to Water services of \$1,838,211. The forecasts include the need to borrow for capital renewal needs until 2025, at which time the Town is expected to fully fund capital renewal costs from own source funds (100%)

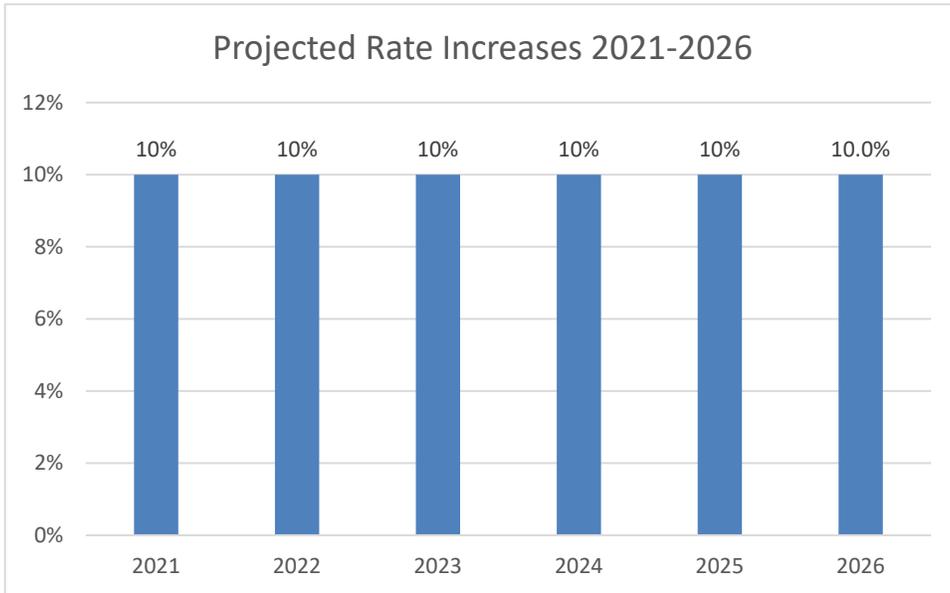


5. Rates

In order for the municipality to:

- 1) meet its infrastructure renewal needs
- 2) reduce/eliminate reliance on long term debt
- 3) eliminate reliance on funding from other levels of government
- 4) establish adequate reserve levels

Significant rate increases are recommended and built into this financial plan, as follows:



TOWN OF COCHRANE

WATER OPERATIONS

Schedule 1

PROJECTED STATEMENT OF OPERATIONS						
	2021	2022	2023	2024	2025	2026
REVENUES						
Water Rates	\$1,909,765	\$2,100,742	\$2,310,816	\$2,541,897	\$2,796,087	\$3,075,696
TOTAL						
EXPENSES						
Operating Expenses	\$1,207,591	\$1,237,781	\$1,268,726	\$1,300,444	\$1,332,955	\$1,366,279
Amortization Expense	\$546,002	\$574,530	\$603,345	\$633,329	\$663,913	\$695,109
Interest Expense	\$56,326	\$55,430	\$65,313	\$72,719	\$77,989	\$75,121
TOTAL	\$1,809,919	\$1,867,740	\$1,937,383	\$2,006,492	\$2,074,857	\$2,136,509
EXCESS REVENUES OVER EXPENSES BEFORE OTHER	\$99,846	\$233,001	\$373,432	\$535,405	\$721,230	\$939,186
OTHER						
Government Transfers related to Capital (Funding)	\$0	\$0	\$0	\$0	\$0	\$0
EXCESS REVENUES OVER EXPENSES	\$99,846	\$233,001	\$373,432	\$535,405	\$721,230	\$939,186

TOWN OF COCHRANE

WATER OPERATIONS

Schedule 2

PROJECTED STATEMENT OF CASH FLOW						
	2021	2022	2023	2024	2025	2026
PROJECTED EXCESS REVENUES OVER EXPENSES	\$99,846	\$233,001	\$373,432	\$535,405	\$721,230	\$939,186
Add back Amortization	\$546,002	\$574,530	\$603,345	\$633,329	\$663,913	\$695,109
CASH PROVIDED BY OPERATIONS	\$645,848	\$807,531	\$976,777	\$1,168,734	\$1,385,143	\$1,634,295
CAPITAL TRANSACTIONS						
Acquisition of Tangible Capital Assets	-\$1,500,000	-\$1,141,100	-\$1,152,622	-\$1,199,374	-\$1,223,362	-\$1,247,829
FINANCIAL TRANSACTIONS						
Proceeds from new debt	\$1,093,454	\$652,454	\$558,659	\$452,069	\$67,225	\$0
Debt Repayment	-\$110,132	-\$157,379	-\$187,459	-\$187,682	-\$209,606	-\$216,085
TOTAL Financing Transactions	\$983,322	\$495,075	\$371,200	\$264,387	-\$142,381	-\$216,085
Increase(Decrease) in Cash Equivalents	\$129,170	\$161,506	\$195,355	\$233,747	\$19,401	\$170,381
Cash Equivalents (Reserve Fund) beginnning of period	\$500,000	\$629,170	\$790,676	\$986,031	\$1,219,778	\$1,239,179
Cash Equivalents (Reserve Fund) end of period	\$629,170	\$790,676	\$986,031	\$1,219,778	\$1,239,179	\$1,409,560

TOWN OF COCHRANE

WATER OPERATIONS

Schedule 3

PROJECTED STATEMENT OF FINANCIAL POSITION						
	2021	2022	2023	2024	2025	2026
FINANCIAL ASSETS						
Cash and cash equivalents	\$629,170	\$790,676	\$986,031	\$1,219,778	\$1,239,179	\$1,409,560
Long Term Debt	-\$2,821,732	-\$3,688,008	-\$3,952,395	-\$3,952,395	-\$3,810,014	-\$3,593,929
Net Financial Assets (Liabilities)	-\$2,192,563	-\$2,897,332	-\$2,966,364	-\$2,732,617	-\$2,570,835	-\$2,184,369
NON FINANCIAL ASSETS						
Tangible Capital Assets	\$10,397,535	\$10,964,106	\$11,513,382	\$12,079,427	\$12,638,876	\$13,191,596
ACCUMULATED SURPLUS	\$8,204,972	\$8,066,773	\$8,547,019	\$9,346,811	\$10,068,040	\$11,007,227
<u>The ACCUMULATED SURPLUS IS COMPRISED OF:</u>						
Surplus Invested in tangible capital assets	\$10,397,535	\$10,964,106	\$11,513,382	\$12,079,427	\$12,638,876	\$13,191,596
TCA Debt	-\$2,821,732	-\$3,688,008	-\$3,952,395	-\$3,952,395	-\$3,810,014	-\$3,593,929
Reserves set aside by Council	\$629,170	\$790,676	\$986,031	\$1,219,778	\$1,239,179	\$1,409,560
	\$8,204,972	\$8,066,773	\$8,547,019	\$9,346,811	\$10,068,040	\$11,007,227

TOWN OF COCHRANE

WATER OPERATIONS

Schedule 4

Tangible Capital Asset Schedule						
2021-2026 FINANCIAL PLAN						
	2021	2022	2023	2024	2025	2026
Tangible Capital Assets - COST						
Opening Balance	\$ 23,361,457	\$ 24,861,457	\$ 26,002,557	\$ 27,155,179	\$ 28,354,553	\$ 29,577,915
Additions	\$ 1,500,000	\$ 1,141,100	\$ 1,152,622	\$ 1,199,374	\$ 1,223,362	\$ 1,247,829
Closing Balance	\$ 24,861,457	\$ 26,002,557	\$ 27,155,179	\$ 28,354,553	\$ 29,577,915	\$ 30,825,745
Tangible Capital Assets - ACCUMULATED DEPRECIATION						
Opening Balance	\$ 13,917,920	\$ 14,463,922	\$ 15,038,452	\$ 15,641,797	\$ 16,275,126	\$ 16,939,039
Additions	\$ 546,002	\$ 574,530	\$ 603,345	\$ 633,329	\$ 663,913	\$ 695,109
Closing Balance	\$ 14,463,922	\$ 15,038,452	\$ 15,641,797	\$ 16,275,126	\$ 16,939,039	\$ 17,634,149
NET BOOK VALUE	\$ 10,397,535	\$ 10,964,106	\$ 11,513,382	\$ 12,079,427	\$ 12,638,876	\$ 13,191,596
<i>Change in net book value</i>	\$ 953,998	\$ 566,571	\$ 549,277	\$ 566,045	\$ 559,448	\$ 552,720

TOWN OF COCHRANE

WATER OPERATIONS

Schedule 5	WATER RATES						
	Current	2021-2026 FINANCIAL PLAN					
	2020	2021	2022	2023	2024	2025	2026
Rate Increase % from prior>>>	10%	10%	10%	10%	10%	10%	10.0%
METERED SERVICES							
Water Rates (water line size)	Fixed Monthly Charge						
.75" (3/4)	\$ 39.88	\$ 43.87	\$ 48.26	\$ 53.08	\$ 58.39	\$ 64.23	\$ 70.65
1.00"	\$ 55.82	\$ 61.41	\$ 67.55	\$ 74.30	\$ 81.73	\$ 89.90	\$ 98.89
1.5"	\$ 71.78	\$ 78.95	\$ 86.85	\$ 95.53	\$ 105.09	\$ 115.60	\$ 127.15
2.0"	\$ 115.60	\$ 127.16	\$ 139.88	\$ 153.86	\$ 169.25	\$ 186.17	\$ 204.79
3.0"	\$ 438.63	\$ 482.49	\$ 530.74	\$ 583.82	\$ 642.20	\$ 706.42	\$ 777.06
4.0"	\$ 558.26	\$ 614.09	\$ 675.50	\$ 743.05	\$ 817.35	\$ 899.09	\$ 989.00
Sprinkler Systems	\$ 94.56	\$ 104.02	\$ 114.42	\$ 125.86	\$ 138.45	\$ 152.29	\$ 167.52
Unit Hydrant Rental	\$ 51.26	\$ 56.38	\$ 62.02	\$ 68.22	\$ 75.05	\$ 82.55	\$ 90.80
	Volume charge per cubic meter						
Any metered service	\$ 2.43	\$ 2.67	\$ 2.94	\$ 3.23	\$ 3.55	\$ 3.91	\$ 4.30
NON-METERED SERVICES							
Water Rates	Fixed Monthly Charge						
Residential - Water	\$ 71.83	\$ 79.02	\$ 86.92	\$ 95.61	\$ 105.17	\$ 115.69	\$ 127.26
Commercial - Water	\$ 74.55	\$ 82.01	\$ 90.21	\$ 99.23	\$ 109.15	\$ 120.07	\$ 132.07

TOWN OF COCHRANE

WATER OPERATIONS

Operating % of rates based on budget

Capital % of rates based on budget (includes debt repayment)

ORIGINAL SPLIT
66%
34%
100%

METERED SERVICES - OPERATING COMPONENT

	2020	2021	2022	2023	2024	2025	2026
Water Rates (water line size)	Fixed Monthly Charge						
.75" (3/4)	\$ 26.32	\$ 27.14	\$ 27.82	\$ 28.75	\$ 29.65	\$ 30.52	\$ 31.22
1.00"	\$ 36.84	\$ 37.99	\$ 38.94	\$ 40.25	\$ 41.51	\$ 42.72	\$ 43.70
1.5"	\$ 47.37	\$ 48.85	\$ 50.06	\$ 51.75	\$ 53.37	\$ 54.93	\$ 56.19
2.0"	\$ 76.30	\$ 78.68	\$ 80.63	\$ 83.35	\$ 85.95	\$ 88.47	\$ 90.50
3.0"	\$ 289.50	\$ 298.53	\$ 305.94	\$ 316.25	\$ 326.14	\$ 335.68	\$ 343.38
4.0"	\$ 368.45	\$ 379.96	\$ 389.38	\$ 402.51	\$ 415.09	\$ 427.24	\$ 437.03
Sprinkler Systems	\$ 62.41	\$ 64.36	\$ 65.95	\$ 68.18	\$ 70.31	\$ 72.37	\$ 74.03
Unit Hydrant Rental	\$ 33.83	\$ 34.89	\$ 35.75	\$ 36.96	\$ 38.11	\$ 39.23	\$ 40.13
	Volume charge per cubic meter						
Any metered service	\$ 1.60	\$ 1.65	\$ 1.69	\$ 1.75	\$ 1.80	\$ 1.86	\$ 1.90

METERED SERVICES - CAPITAL COMPONENT

	2020	2021	2022	2023	2024	2025	2026
Water Rates (water line size)	Fixed Monthly Charge						
.75" (3/4)	\$ 13.56	\$ 16.73	\$ 20.44	\$ 24.33	\$ 28.74	\$ 33.71	\$ 39.43
1.00"	\$ 18.98	\$ 23.41	\$ 28.61	\$ 34.05	\$ 40.22	\$ 47.18	\$ 55.19
1.5"	\$ 24.40	\$ 30.10	\$ 36.79	\$ 43.78	\$ 51.72	\$ 60.67	\$ 70.97
2.0"	\$ 39.30	\$ 48.48	\$ 59.25	\$ 70.52	\$ 83.30	\$ 97.71	\$ 114.30
3.0"	\$ 149.13	\$ 183.96	\$ 224.81	\$ 267.57	\$ 316.06	\$ 370.74	\$ 433.68
4.0"	\$ 189.81	\$ 234.13	\$ 286.12	\$ 340.54	\$ 402.27	\$ 471.85	\$ 551.97
Sprinkler Systems	\$ 32.15	\$ 39.66	\$ 48.46	\$ 57.68	\$ 68.14	\$ 79.92	\$ 93.49
Unit Hydrant Rental	\$ 17.43	\$ 21.50	\$ 26.27	\$ 31.27	\$ 36.93	\$ 43.32	\$ 50.68
	Volume charge per cubic meter						
Any metered service	\$ 0.82	\$ 1.02	\$ 1.24	\$ 1.48	\$ 1.75	\$ 2.05	\$ 2.40

TOWN OF COCHRANE

WATER OPERATIONS

Schedule 5

EXAMPLE of Average Residential Customer (12m3/month)

WATER SERVICES ONLY

OPERATING COMPONENT

	2020	2021	2022	2023	2024	2025	2026
Fixed service charge	\$ 26.32	\$ 27.14	\$ 27.82	\$ 28.75	\$ 29.65	\$ 30.52	\$ 31.22
Variable charge	\$ 19.21	\$ 19.81	\$ 20.30	\$ 20.99	\$ 21.64	\$ 22.28	\$ 22.79
TOTAL OPERATING COMPONENT	\$ 45.53	\$ 46.96	\$ 48.12	\$ 49.74	\$ 51.30	\$ 52.80	\$ 54.01

CAPITAL COMPONENT

Fixed service charge	\$ 13.56	\$ 16.73	\$ 20.44	\$ 24.33	\$ 28.74	\$ 33.71	\$ 39.43
Variable charge	\$ 9.90	\$ 12.21	\$ 14.92	\$ 17.76	\$ 20.98	\$ 24.60	\$ 28.78
TOTAL CAPITAL COMPONENT	\$ 23.46	\$ 28.93	\$ 35.36	\$ 42.08	\$ 49.71	\$ 58.31	\$ 68.21

TOTAL WATER SERVICES BILL FOR THE MONTH

\$ 68.99	\$ 75.89	\$ 83.48	\$ 91.83	\$ 101.01	\$ 111.11	\$ 122.22
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