



# 2019–2022 Business Plan

## Environmental Utilities

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Medicine Hat  
The Gas City

# Environmental Utilities

Department Head: Brian Murphy, P.Eng.  
Title: General Manager  
Phone: 403-502-8707  
E-mail: [brimur@medicinehat.ca](mailto:brimur@medicinehat.ca)

Water | Sewer | Solid Waste | Engineering | Customer Service

## DEPARTMENT OVERVIEW

The Environmental Utilities Department (EU) mission is to provide safe, reliable and cost effective water, sewer, solid waste and recyclables handling and associated services to our customers in a fiscal and environmentally responsible manner, while providing an appropriate financial return to the City. This aligns with the City of Medicine Hat’s mission statement in that the department provides valued essential services to the community in a safe, timely, and affordable manner.



## CORE SERVICES PROVIDED BY THE DEPARTMENT INCLUDE:

**Water Utility:** Raw water treatment and potable water distribution.

**Sewer Utility:** Wastewater collection and treatment.

**Solid Waste Utility:** Commercial and residential solid waste collection, diversion, and/or disposal; management of the Waste Management Facility; administration of residential recycling program.

**Source Control:** Potable water cross connection control and wastewater source control programs.

**Engineering:** Strategic and technical support, analysis of municipal growth, development and asset rehabilitation proposals.

**Administration and Technical Support:** Administrative support to EU staff and customer support to EU customers.

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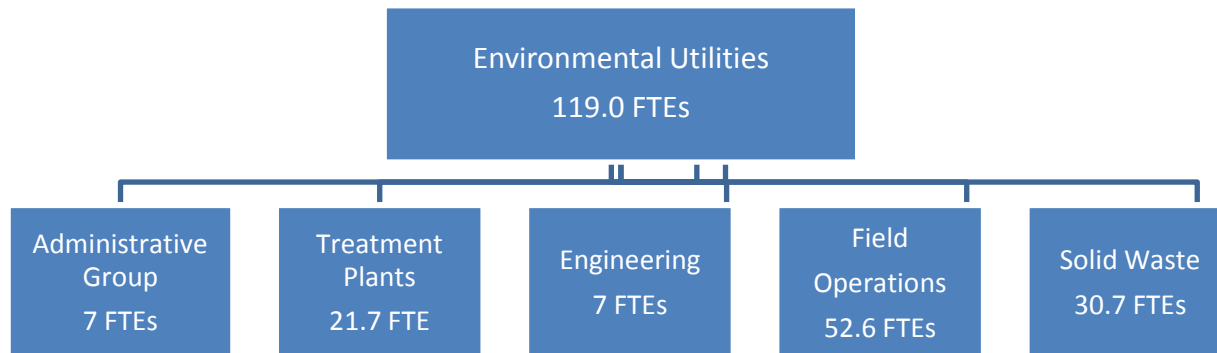
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## Department Overview

### Corporate Mission Statement

**“Deliver value through exceptional public service.”**

### Department Organizational Chart



Personnel Forecast					
	2018	2019	2020	2021	2022
<b>FTEs</b>	117.9	119.0	119.0	119.0	119.0
<b>PEPs</b>	106	106	106	106	106

### Core Services/Programs, Primary Customers, and Key Performance Indicators (KPIs)

Core Services/Programs	Primary Customer’s Name	Key Performance Indicators (KPIs)
Water Utility: Treatment and distribution of potable water.	<ul style="list-style-type: none"> <li>• Medicine Hat residents, businesses and institutions</li> <li>• Cypress County (Dunmore, Veinerville, Desert Blume, Seven Persons, Walsh)</li> <li>• Greenvalley and Roytal Water Associations</li> </ul>	Meet the rigid safety, quality, monitoring, recording, and reporting requirements in accordance with federal and provincial regulations, as well as industry and local standards.
Water Utility: Planning and implementing infrastructure expansions and upgrades.	<ul style="list-style-type: none"> <li>• Medicine Hat residents, businesses and Institutions</li> <li>• Cypress County (Dunmore, Veinerville, Desert Blume, Seven Persons, Walsh)</li> <li>• Greenvalley and Roytal Water Associations</li> </ul>	Meet the needs of our customers as well as support local development objectives.



Sewer Utility: Collection and treatment of sanitary wastewater.	<ul style="list-style-type: none"> <li>• Medicine Hat residents, businesses and Institutions.</li> <li>• Cypress County (Veinerville, Desert Blume).</li> <li>• The Town of Redcliff.</li> </ul>	Meet the rigid safety, quality, monitoring, recording, and reporting requirements in accordance with federal and provincial regulations, as well as industry and local standards.
Sewer Utility: Planning and implementing infrastructure expansions and upgrades.	<ul style="list-style-type: none"> <li>• Medicine Hat residents, businesses and Institutions</li> <li>• Cypress County (Veinerville, Desert Blume)</li> <li>• The Town of Redcliff</li> </ul>	Meet the needs of our customers as well as support local development objectives.
Solid Waste Utility: Collection, diversion, and/or disposal of solid waste.	<ul style="list-style-type: none"> <li>• Medicine Hat residents, businesses and Institutions</li> <li>• City of Medicine Hat Sewer Utility (Wastewater Treatment Plant biosolids)</li> <li>• Regional non-hazardous industrial waste generators</li> </ul>	All disposal and diversion operations meet the rigid safety, environmental, monitoring, recording, and reporting requirements in accordance with federal, provincial, industry, and local standards.
Solid Waste Utility: Planning and execution of waste diversion programs.	<ul style="list-style-type: none"> <li>• Medicine Hat residents, businesses and Institutions</li> <li>• City of Medicine Hat Sewer Utility (Wastewater Treatment Plant biosolids)</li> <li>• Regional non-hazardous industrial waste generators</li> </ul>	Adherence to the plans within Solid Waste Utility 2012 to 2022 Waste Management Strategy.

### Prior Year Service/Program Highlights and Achievements

Council Priority	Key Result	Highlights/Achievements
Health and Safety	4.1, 4.5, 6.2	<ul style="list-style-type: none"> <li>• Regular Health and Safety Meetings, safety inspections at job-sites and facilities, and safety audits.</li> <li>• Drinking Water Safety Plan and EU Risk Register updated annually.</li> <li>• Mitigated potential contamination of potable water through a robust and fiscally sustainable cross connection control program in the interest of public health.</li> <li>• Customers received safe, high quality water in reasonable supply at all times in accordance with all regulatory requirements.</li> <li>• Maintained and enhanced a culture of safe work environment.</li> </ul>
Environmental Sustainability	6.4	<ul style="list-style-type: none"> <li>• Collected and disposed of customers' sanitary waste water and solid waste in an environmentally responsible manner at all times in accordance with all regulatory requirements.</li> <li>• Reduced solid waste entering the City of Medicine</li> </ul>

		<p>Hat Waste Management Facility through a robust and fiscally sustainable waste diversion program.</p> <ul style="list-style-type: none"> <li>• Met or exceeded all regulatory requirements within the Water, Sewer, and Solid Waste Utilities.</li> <li>• Mitigated potential hazardous releases into the Sewer Collection System through a robust and fiscally sustainable Source Control Program and monitoring network in the interests of public and environmental safety.</li> </ul>
Infrastructure	3.1	<ul style="list-style-type: none"> <li>• Supported economic development through the application of water, sewer, and solid waste services including timely infrastructure upgrades in alignment with the approved Municipal Development Plan growth strategies.</li> <li>• Supported downtown re-development through the renewal of water and sewer infrastructure in alignment with the approved Downtown Redevelopment Strategy.</li> <li>• Supported sustainable water and sewer infrastructure management in alignment with the Corporate Aging Infrastructure Policy.</li> </ul>

### Significant Risks and Trends

Significant Risks/Trends	Description	Mitigation Plan
Regulatory compliance	The requirements of increasingly stringent regulations are placing greater pressure on budgets and resources.	<ul style="list-style-type: none"> <li>• Monitor, forecast, and prepare for regulatory changes.</li> <li>• Maintain a collaborative working relationship with the regulatory agencies.</li> </ul>
Contractor Management	Risk of contractors being assigned tasks they are not qualified to complete (i.e. insufficient contract management, competency requirements, training requirements for contractors, etc.), or failure of contractors to complete projects, or failure to follow EU contract specifications, can lead to interruption of service, process upset, injury to workers, damage to property, damage to the environment, cost overruns, etc.	<ul style="list-style-type: none"> <li>• Bid evaluation process used to award tenders to best qualified bidder.</li> <li>• Contractors' work inspected by EU Compliance Technicians and Engineering Consultant Site Inspectors.</li> <li>• Ensuring contractors adhere to the requirements stipulated in HS&amp;E contract management document.</li> </ul>
Aging infrastructure	Aging infrastructure poses risks such as; potential failure leading to service disruption, high energy consumption, potable water contamination and quality deterioration, and environmental contamination.	<ul style="list-style-type: none"> <li>• Asset management program to replace aging infrastructure.</li> <li>• Inspections, ongoing maintenance programs.</li> <li>• Leak monitoring system.</li> </ul>

Severe Weather Conditions	Severe weather patterns (e.g. rain, flooding, wind, cold, snow build up, drought, etc.) can lead to situations such as; interruption of services, process upset, injury to workers, and damage to property.	<ul style="list-style-type: none"> <li>• Emergency response plan.</li> <li>• Flood mitigation plan.</li> <li>• Standard operating procedures.</li> <li>• Drought management plan.</li> </ul>
Construction Defects	Risk of a damage or failure incident caused by construction defects in the pipe (e.g. gouge, coating damage, dent, overbending, wrinkle, cross bores, not following procedures, etc.) can lead to interruption of service, process upset, injury to worker, damage to property, damage to the environment, cost overruns, etc.	<ul style="list-style-type: none"> <li>• Bid evaluation process used to award tenders to best qualified bidder.</li> <li>• Defects assessments.</li> <li>• Contractors' work inspected by EU Compliance Technicians and Engineering Consultant Site Inspectors.</li> <li>• Leak monitoring system.</li> </ul>
Insufficient financial resources	Inadequate financial resources can prevent the department from effectively meeting its service level targets and from completing maintenance requirements that are needed to support ongoing operational needs and to implement long term plans.	<ul style="list-style-type: none"> <li>• Funding model as approved by Council</li> <li>• Working collaboratively within the department, with the City, and under Council priorities to achieve common goals, the efficient use of resources and innovative solutions to challenges.</li> </ul>

## Department Plans

### Strategic Objectives, Rationale, Indicators of Success, Action Plans

**Strategic Objective A:** Maintain a strong commitment to the Health and Safety of our employees

**Rationale:**

1. To protect the health, safety, and welfare of our employees.
2. To meet legislative and Occupational Health and Safety regulatory requirements.
3. Efficient health and safety programs promote operational efficiency and lead to a reduction of costs associated with workplace incidents and injuries.

**Indicators of Success:**

1. All employees have received up to date and relevant health and safety training.
2. All employees have the tools and/or equipment they need to complete their work safely.
3. No Lost Time Injuries (LTI's) and meeting all Occupational Health and Safety regulatory requirements.

**Action Plan:**

1. Annual employee training program.
2. Providing the proper tools and resources for completing job tasks.
3. Formal inspections of job-sites and facilities.

## **Strategic Objective B:** Regulatory Compliance and Environmental Best Practices

### **Rationale:**

1. Safety and quality of potable water supply, in accordance with regulatory requirements, is of paramount importance to EU.
2. Sustainable and environmentally responsible treatment and disposal of sanitary wastewater and water treatment process wastes will reduce environmental impact of the effluents discharged into the river and ensure regulatory compliance.
3. Sustainable environmental practices can lead to the identification of potential processes and equipment optimization, which can reduce the cost of operation and minimize the need for costly capital investments.

### **Indicator of Success:**

1. Meet all current regulatory requirements and respond to changing regulations in a timely manner.
2. Meet regulatory requirements for quality of effluent discharged into the river.
3. Maintain productivity and cost control.

### **Action Plan:**

1. Sustainable environmental best practices in the disposal of water treatment process waste: Regulatory approval for the water treatment master plan and initiate design for a water treatment process waste facility in accordance and as required by regulatory requirements.
2. Sustainable environmental best practices in the treatment of sanitary wastewater: initiate the development of a wastewater treatment master plan focusing on future anticipated regulatory requirements and anticipated demand growth.
3. Where possible, identify potential processes and equipment optimization, which can reduce consumption of resources and defer the need for costly capital investments.

## **Strategic Objective C:** Asset Management Program

### **Rationale:**

1. Continue to make prudent capital investments in infrastructure replacements and upgrades in alignment with the approved redevelopment strategies, in order to enhance resiliency of the infrastructure at risk during high water events, to achieve expanded system capacity, and mitigate risk of unplanned failures.
2. To ensure infrastructure service levels are aligned with municipal service standards, and continue to make sewer and water system replacements for aging infrastructure, in order to maintain safe, reliable, and resilient operations.
3. Evaluate, prioritize, and make determinations of the annual capital investment programs in order to ensure resources are allocated based on the degree of criticality of the assets.



**Indicator of Success:**

1. Overall system reliability and achieving expected asset life cycles.
2. Pragmatic decisions regarding asset upgrades, repair and replacement.
3. Reducing overall costs of operations over time and unplanned capital expenditures in response to system failures.

**Action Plan:**

1. Regular updates on the long-term asset management and renewal plans based on infrastructure quality and performance measures.
2. Capital project planning, review, and execution strategy.
3. Complete the downtown re-development project: upgrade water, sanitary sewer, storm sewer, and roads (multi departmental project) in accordance with Council approved re-development strategy and timeline.

**Strategic Objective D:** Solid Waste Utility Waste Management Strategies, 2012 – 2022**Rationale:**

1. Solid waste diversion, reduction and recycling will facilitate the achievement of sustainable waste management.
2. Sustainable waste management strategies will facilitate the reduction of raw material usage, conservation of finite landfill resources and promote environmental sustainability.
3. Strategies from the Solid Waste Utility Waste Management Strategies, 2012 – 2022 will play an important role towards sustainable development.

**Indicator of Success:**

1. An increase in the number of residents and companies participating in recycling and reduction in the amounts of recyclable materials delivered to the landfill.
2. A reduction in landfill airspace usage and capital expenditures for expansion.
3. Sustainability of the residential recycling program and the contracted services involved.

**Action Plan:**

1. Update and issue new Solid Waste Utility Waste Management Strategy for 2023 - 2033.
2. Evaluate the potential of an organics collections program.
3. Evaluate construction and demolition waste diversion projects that may encourage additional waste reduction, diversion and recycling.

## **Strategic Objective E:** Fiscal Management

### **Rationale:**

1. Overall financial performance and reporting to Council and the City.
2. Sound Fiscal management will enable the department to achieve its operational and financial objectives
3. Sound Fiscal management will enable identification of specific trends and forecasting to enhance the development of both short-term and long-term business strategies. It will also assist in the identification of areas of risk and steps that can be taken to mitigate issues.

### **Indicator of Success:**

1. Preparation of financial reports in conjunction with City processes
2. An environment where cost-benefit outcomes are reviewed and improved continuously.
3. Providing safe, reliable and cost effective services at justifiable rates, while providing an appropriate financial return to the City.

### **Action Plan:**

1. 2019-2022 Environmental Utilities Business Plan, Capital and Operating Budgets as approved by Council.
2. Regular financial reporting and variance explanations.
3. Prepare for long term financial sustainability (rates review).

<b>SUMMARY OF STRATEGIC OBJECTIVES</b>					
<b>Objective Name</b>	<b>Council's Strategic Priority (SP)</b>	<b>Key Result (KR)</b>	<b>Action Plan</b>	<b>Assigned To (Subdepartment)</b>	<b>Timeline</b>
Maintain a strong commitment to the Health and Safety of our employees	6. City Government	6.2	Annual employee training program.	All Managers; HS&E	December 2022
			Providing the proper tools and resources for completing job tasks.	All Managers	December 2022
			Formal inspections of job-sites and facilities.	All Managers and Supervisors; HS&E	December 2022
Regulatory Compliance and Environmental Best Practices	6. City Government	6.4	Sustainable environmental best practices in the disposal of water treatment process waste: Regulatory approval for the water treatment master plan and initiate design for a water treatment process waste facility in accordance and as required by regulatory requirements.	Treatment Plants Manager; WTP	December 2020
			Sustainable environmental best practices in the treatment of sanitary wastewater: initiate the development of a wastewater treatment master plan focusing on future anticipated regulatory requirements and anticipated demand growth.	Treatment Plants Manager; WWTP	December 2021
			Where possible, identify potential processes and equipment optimization, which can reduce consumption of resources and defer the need for costly capital investments.	All Managers; General Manager	December 2022
Asset Management Program	3. Infrastructure Renewal	3.1	Regular updates on the long-term asset management and renewal plans based on infrastructure quality and performance measures.	Engineering / General Manger	December 2022
			Capital project planning, review, and execution strategy.	Engineering / Field Operations	December 2022

			Complete the downtown re-development project: upgrade water, sanitary sewer, storm sewer, and roads (multi departmental project) in accordance with council approved re-development strategy and timeline.	Engineering / Field Operations	December 2022
Solid Waste Utility Waste Management Strategy, 2012 – 2022	1. Fiscal Responsibility 6. City Government	1.6, 6.4	Update and issue new Solid Waste Utility Waste Management Strategy for 2023 – 2033.	Solid Waste Manager; General Manager	December 2022
			Evaluate the potential of an organics collections program.	Solid Waste Manager; General Manager	April 2021
			Evaluate construction and demolition waste diversion projects that may encourage additional waste reduction, diversion and recycling.	Solid Waste Manager	December 2022
Fiscal Management	1. Fiscal Responsibility	1.1	2019-2022 Environmental Utilities Business Plan, Capital and Operating Budgets as approved by Council.	General Manger	December 2022
			Regular financial reporting and variance explanations.	General Manger	December 2022
			Prepare for long term financial sustainability (rates review).	UBDS; General Manger	December 2020

## Financial Plan Summary & Highlights - Water Utility

### Financial Summary (in thousands of dollars)

	Prior Year Actuals 2017	Current Year Budget 2018	Budget Request 2019	Budget Request 2020	Budget Request 2021	Budget Request 2022	Change 2018 - 2022 Increase / (Decrease)	Ref No.
<b>Revenue</b>								
Property Taxes & Other Taxes	113	114	114	114	114	114	-	
Sale of Goods & Services	21,401	20,911	21,766	22,764	23,810	24,816	3,905	
Other	211	212	72	72	72	72	(140)	1
Internal Recovery	4,198	4,670	4,756	4,876	4,952	5,066	396	2
<b>Total Revenues</b>	<b>25,923</b>	<b>25,907</b>	<b>26,708</b>	<b>27,826</b>	<b>28,948</b>	<b>30,068</b>	<b>4,161</b>	
<b>Expenses</b>								
Salaries, Wages & Benefits	5,007	5,613	5,422	5,530	5,641	5,753	140	3
Contracted Services	981	817	1,051	858	858	858	41	
Materials, Goods & Supplies	1,676	1,600	1,447	1,447	1,447	1,447	(153)	4
Interest & Debt	2,869	3,161	2,931	3,515	4,099	4,229	1,068	5
Amortization	3,769	4,244	4,448	5,088	5,468	5,857	1,613	6
Other	-12	37	37	37	37	37	-	
Interdepartmental Charges	5,779	6,810	7,113	7,301	7,431	7,614	804	7
<b>Total Expenses</b>	<b>20,069</b>	<b>22,282</b>	<b>22,449</b>	<b>23,776</b>	<b>24,981</b>	<b>25,795</b>	<b>3,513</b>	
<b>Net Earnings/(Loss)</b>	<b>5,854</b>	<b>3,625</b>	<b>4,259</b>	<b>4,050</b>	<b>3,967</b>	<b>4,273</b>	<b>648</b>	
<b>Dividend Contribution</b>	<b>994</b>	<b>1,024</b>	<b>1,044</b>	<b>1,065</b>	<b>1,086</b>	<b>1,108</b>	<b>84</b>	



Incremental annual increases or decreases in the current operating budget requests are primarily due to the following factors:  
*(in thousands of dollars)*

<b>Financial Plan Summary Ref. No.</b>	<b>Reason</b>	<b>2019 \$</b>	<b>2020 \$</b>	<b>2021 \$</b>	<b>2022 \$</b>
1	Reduced expectations for third party rechargeable work	(140)	-	-	-
2	Internal recovery partially offsets increasing costs from interdepartmental charges. Also includes revenue from Parks irrigation usage.	86	120	76	114
3	Re-allocation of personnel to Sewer Utility in 2019. Inflationary increases 2020 to 2022.	(191)	108	111	112
4	Cost containment initiatives	(153)	-	-	-
5	New capital funding (interest)	(230)	584	584	130
6	Amortization increase for new capital	204	640	380	389
7	Increase in interdepartmental charges	303	188	130	183

## Financial Plan Summary & Highlights – Sewer Utility

### Financial Summary (in thousands of dollars)

	Prior Year Actuals 2017	Current Year Budget 2018	Budget Request 2019	Budget Request 2020	Budget Request 2021	Budget Request 2022	Change 2018 - 2022 Increase / (Decrease)	Ref No.
<b>Revenue</b>								
Property Taxes & Other Taxes	113	114	113	113	113	113	(1)	
Sale of Goods & Services	16,131	17,729	19,519	21,392	23,442	25,700	7,971	
Other	19	6	42	17	17	17	11	
<b>Total Revenues</b>	<b>16,263</b>	<b>17,849</b>	<b>19,674</b>	<b>21,522</b>	<b>23,572</b>	<b>25,830</b>	<b>7,981</b>	
<b>Expenses</b>								
Salaries, Wages & Benefits	4,415	4,509	4,688	4,781	4,877	4,987	478	1
Contracted Services	1,024	442	509	494	484	484	42	
Materials, Goods & Supplies	1,397	1,494	1,252	1,252	1,252	1,252	(242)	2
Interest & Debt	2,465	2,968	2,861	3,609	4,070	3,960	992	3
Amortization	3,343	2,687	4,138	4,763	5,037	5,211	2,524	4
Other	33	39	37	38	37	37	(2)	
Interdepartmental Charges	3,248	4,385	4,485	4,593	4,690	4,798	413	5
<b>Total Expenses</b>	<b>15,925</b>	<b>16,524</b>	<b>17,970</b>	<b>19,530</b>	<b>20,447</b>	<b>20,729</b>	<b>4,205</b>	
<b>Net Earnings/(Loss)</b>	<b>338</b>	<b>1,325</b>	<b>1,704</b>	<b>1,992</b>	<b>3,125</b>	<b>5,101</b>	<b>3,776</b>	
<b>Dividend Contribution</b>	<b>765</b>	<b>788</b>	<b>804</b>	<b>820</b>	<b>836</b>	<b>853</b>	<b>65</b>	

Incremental annual increases or decreases in the current operating budget requests are primarily due to the following factors:  
*(in thousands of dollars)*

<b>Financial Plan Summary Ref. No.</b>	<b>Reason</b>	<b>2019 \$</b>	<b>2020 \$</b>	<b>2021 \$</b>	<b>2022 \$</b>
1	Personnel re-allocated from Water Utility in 2019. Inflationary increases 2020 to 2022.	179	93	96	110
2	Cost containment initiatives	(242)	-	-	-
3	New capital funding (interest)	(107)	748	461	(110)
4	Amortization increase for new capital invested	1,451	625	274	174
5	Increase in interdepartmental charges	100	108	97	108

## Financial Plan Summary & Highlights – Solid Waste Utility

### *Financial Summary (in thousands of dollars)*

Revenue	Prior Year Actuals 2017	Current Year Budget 2018	Budget Request 2019	Budget Request 2020	Budget Request 2021	Budget Request 2022	Change 2018 - 2022 Increase / (Decrease)	Ref No.
Sale of Goods & Services	9,502	9,028	10,735	11,124	11,523	11,936	2,908	
Other	47	27	1,953	666	21	21	(6)	1
Internal Recovery	1,905	1,621	2,122	2,280	2,444	2,615	994	2
<b>Total Revenues</b>	<b>11,454</b>	<b>10,676</b>	<b>14,810</b>	<b>14,070</b>	<b>13,988</b>	<b>14,572</b>	<b>3,896</b>	
<b>Expenses</b>								
Salaries, Wages & Benefits	2,655	2,235	2,883	2,941	3,000	3,059	824	3
Contracted Services	1,827	1,593	2,505	2,545	2,586	2,628	1,035	4
Materials, Goods & Supplies	539	114	106	106	106	106	(8)	
Interest & Debt	101	156	67	54	44	97	(59)	
Amortization	359	682	643	852	1,104	1,418	736	5
Other	76	227	219	218	218	218	(9)	
Interdepartmental Charges	4,297	4,818	5,253	5,438	5,619	5,804	986	6
<b>Total Expenses</b>	<b>9,854</b>	<b>9,825</b>	<b>11,676</b>	<b>12,154</b>	<b>12,677</b>	<b>13,330</b>	<b>3,505</b>	
<b>Net Earnings/(Loss)</b>	<b>1,600</b>	<b>851</b>	<b>3,134</b>	<b>1,916</b>	<b>1,311</b>	<b>1,242</b>	<b>391</b>	
<b>Dividend Contribution</b>	<b>393</b>	<b>405</b>	<b>413</b>	<b>421</b>	<b>429</b>	<b>438</b>	<b>33</b>	

Incremental annual increases or decreases in the current operating budget requests are primarily due to the following factors:

*(in thousands of dollars)*

<b>Financial Plan Summary Ref. No.</b>	<b>Reason</b>	<b>2019 \$</b>	<b>2020 \$</b>	<b>2021 \$</b>	<b>2022 \$</b>
1	Carbon credits program	1,926	(1,287)	(645)	-
2	Internal recovery primarily from internal Waste Management Facility (Landfill) charges.	501	158	164	171
3	Increase in budget allocated to this category in 2019. No increase in personnel. Inflationary increases 2020 to 2022.	648	58	59	59
4	Addition of contract for Residential Recycling starting in 2019	912	40	41	42
5	Amortization increase for new capital invested	(39)	209	252	314
6	Increase in interdepartmental charges including Waste Management Facility (Landfill) charges and Fleet expenses.	435	185	181	185

## Capital Plan Summaries

The major capital projects for the current Business Plan Years are listed in summary format in the tables below.

Refer to Section II Corporate Multi-Year Capital Plan for a detailed listing of the proposed capital projects and the related funding plans.



## TCA Decision Package Summary - Water Utility

Refer to the Corporate Multi-Year Capital Plan for detailed information on each decision package.

PAGE	PROJECT DESCRIPTION	BUDGET REQUEST				BUDGET FORECAST						10 YEAR TOTAL
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
	WTP - Sustaining Capital (2019)	100	150	100	150	100	150	100	150	100	150	1,250
	WTP - Filter Media Rehab Program	-	-	-	-	-	-	-	-	300	350	650
	WTP - Boiler Heaters (2021)	-	-	250	-	-	-	-	-	-	-	250
	WTP - Critical Spares (2019)	125	125	125	325	-	65	-	-	150	150	1,065
	WTP - Valve Upgrades (2019)	250	375	350	300	-	-	-	-	-	-	1,275
	WTP - Carbon System Upgrade (2019)	750	-	-	-	-	-	-	-	-	-	750
	WTP - LED Lighting Upgrade	-	-	-	-	500	-	-	-	-	-	500
	WTP - Raw Water Optimization	-	-	-	-	-	500	4,500	-	-	-	5,000
	WTP - Raw Water Intake and Pumphouse	-	-	-	-	-	-	-	2,000	38,000	-	40,000
	WTP - Capacity Expansion	-	-	-	-	-	-	-	-	2,000	38,000	40,000
	WTP - Master Plan	-	-	-	-	-	1,000	-	-	-	-	1,000
	WTP - Waste Solids Handling Facility (2019)	-	5,000	10,000	11,500	-	-	-	-	-	-	26,500
	Miscellaneous Water Distribution Upgrades (2019)	250	250	250	250	350	350	350	350	350	350	3,100
	Water Meters (2019)	200	200	200	200	200	200	200	200	200	200	2,000
	Water Valves Program	-	-	-	-	300	-	-	-	300	-	600
	Water Mains Replacement - Asset Management Program (2019)	6,350	5,150	5,000	5,000	6,000	6,000	6,000	7,000	7,000	7,000	60,500
	Water Mains Replacement - Downtown Rehabilitation (2019)	500	2,250	500	2,250	-	-	-	-	-	-	5,500
	Water Systems Reinforcement Program (2019)	50	500	-	1,000	5,500	3,500	1,000	500	3,500	-	15,550
	Oxford Ave Valve Chamber Upgrade	-	-	-	-	200	800	-	-	-	-	1,000
	Anthes Redwater Program (2019)	-	2,000	-	-	-	2,000	-	2,000	-	-	6,000
	Air Release Chamber (2022)	-	-	-	800	-	-	-	-	-	-	800
	Booster Station Electrical Upgrades (2019)	150	-	-	-	200	-	-	200	-	-	550
	Water System Development Growth (2022)	-	-	-	800	-	-	400	6,000	-	800	8,000
	Deep Well Anode Beds	-	-	-	-	300	-	-	-	-	-	300
	<b>DEPARTMENTAL TOTAL</b>	<b>\$ 8,725</b>	<b>\$ 16,000</b>	<b>\$ 16,775</b>	<b>\$ 22,575</b>	<b>\$ 13,650</b>	<b>\$ 14,565</b>	<b>\$ 12,550</b>	<b>\$ 18,400</b>	<b>\$ 51,900</b>	<b>\$ 47,000</b>	<b>\$ 222,140</b>
	<b>FUNDING SOURCES</b>											
	GG) Government Grants	-	2,000	4,000	4,600	-	-	-	-	-	-	10,600
	DEB) Debenture	6,350	12,400	11,500	15,150	12,000	12,800	11,500	17,500	50,500	45,800	195,500
	OP) Operating / Working Capital	2,375	1,600	1,275	2,825	1,650	1,765	1,050	900	1,400	1,200	16,040
	INT) Internal Loans	-	-	-	-	-	-	-	-	-	-	-
	EXT) Other External Sources (Third Party / Trade-in)	-	-	-	-	-	-	-	-	-	-	-
	OFF) Offsites	-	-	-	-	-	-	-	-	-	-	-
	RES) Reserves	-	-	-	-	-	-	-	-	-	-	-
	<b>FINANCING TOTAL</b>	<b>\$ 8,725</b>	<b>\$ 16,000</b>	<b>\$ 16,775</b>	<b>\$ 22,575</b>	<b>\$ 13,650</b>	<b>\$ 14,565</b>	<b>\$ 12,550</b>	<b>\$ 18,400</b>	<b>\$ 51,900</b>	<b>\$ 47,000</b>	<b>\$ 222,140</b>
	<b>EFFECT ON OPERATIONS WHEN FULLY OPERATIONAL</b>											
	Loan Interest	-	204	606	973	1,441	1,801	2,178	2,479	2,962	4,472	
	Operating / Maintenance	-	-	-	-	-	-	-	-	-	-	
	Amortization	82	308	629	1,031	1,370	1,634	1,920	2,206	3,116	4,327	
	<b>TOTAL NET OPERATING EFFECT:</b>	<b>\$ 82</b>	<b>\$ 512</b>	<b>\$ 1,235</b>	<b>\$ 2,004</b>	<b>\$ 2,811</b>	<b>\$ 3,435</b>	<b>\$ 4,098</b>	<b>\$ 4,685</b>	<b>\$ 6,078</b>	<b>\$ 8,799</b>	
	Loan Principal	-	168	500	816	1,251	1,739	2,199	2,853	3,471	4,975	
	<b>FTEs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

## TCA Decision Package Summary – Sewer Utility

Refer to the Corporate Multi-Year Capital Plan for detailed information on each decision package.

PAGE	PROJECT DESCRIPTION	BUDGET REQUEST				BUDGET FORECAST						10 YEAR
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
	Miscellaneous Collection System Upgrade (2019)	250	250	250	250	350	350	350	350	350	350	3,100
	Sewer Mains Asset Management Program (2019)	3,500	3,000	3,000	3,000	6,000	6,000	6,000	7,000	7,000	7,000	51,500
	Sewer Mains Replacement - Downtown Rehabilitation (2019)	500	2,250	500	2,250	-	-	-	-	-	-	5,500
	Brier Park Gravity ByPass (2019)	-	4,200	400	5,400	5,700	7,300	1,600	-	-	-	24,600
	Sanitary Trunk Sewer Rehab (2022)	-	-	-	500	2,000	-	-	-	-	-	2,500
	Lift Station Facility Upgrade (2019)	500	1,800	-	1,000	2,500	-	-	-	-	-	5,800
	Sewer Effluent Monitoring Station	-	-	-	-	-	100	-	-	-	-	100
	Anthes Redwater Program (2019)	-	2,000	-	-	-	2,000	-	2,000	-	-	6,000
	Lift Stations Electrical / Mechanical Upgrades (2019)	150	-	-	-	200	-	-	-	-	-	350
	Sanitary System Development Growth	-	-	-	-	-	1,500	-	-	-	750	2,250
	WWTP - Sustaining Capital (2019)	150	100	150	100	150	100	150	100	150	100	1,250
	WWTP - Trickling Filters Rehab (2020)	-	1,500	-	-	-	1,200	-	-	-	-	2,700
	WWTP - Bank Armoring	-	-	-	-	3,000	2,000	-	-	-	-	5,000
	WWTP - Process Equipment (2019)	300	250	250	250	-	-	-	-	-	-	1,050
	WWTP - Primary Clarifier (2021)	-	-	250	-	-	-	1,500	-	-	-	1,750
	WWTP - Pumpwell Expansion	-	-	-	-	-	3,000	-	-	-	-	3,000
	WWTP - Replacement Project	-	-	-	-	-	-	-	-	5,000	60,000	65,000
	WWTP - Master Plan (2019)	850	150	-	-	-	1,000	-	-	-	-	2,000
	WWTP - Secondary Clarifier Rehab (2021)	-	-	400	400	-	-	-	-	-	-	800
	WWTP - LED Lighting Upgrade	-	-	-	-	500	-	-	-	-	-	500
<b>DEPARTMENTAL TOTAL</b>		<b>\$ 6,200</b>	<b>\$ 15,500</b>	<b>\$ 5,200</b>	<b>\$ 13,150</b>	<b>\$ 20,400</b>	<b>\$ 24,550</b>	<b>\$ 9,600</b>	<b>\$ 9,450</b>	<b>\$ 12,500</b>	<b>\$ 68,200</b>	<b>\$ 184,750</b>
<b>FUNDING SOURCES</b>												
GG)	Government Grants	-	-	-	-	-	-	-	-	-	-	-
DEB)	Debenture	4,850	12,950	5,200	12,150	20,400	23,550	9,600	9,450	12,500	68,200	178,850
OP)	Operating / Working Capital	1,350	2,550	-	1,000	-	1,000	-	-	-	-	5,900
INT)	Internal Loans	-	-	-	-	-	-	-	-	-	-	-
EXT)	Other External Sources (Third Party / Trade-in)	-	-	-	-	-	-	-	-	-	-	-
OFF)	Offsites	-	-	-	-	-	-	-	-	-	-	-
RES)	Reserves	-	-	-	-	-	-	-	-	-	-	-
<b>FINANCING TOTAL</b>		<b>\$ 6,200</b>	<b>\$ 15,500</b>	<b>\$ 5,200</b>	<b>\$ 13,150</b>	<b>\$ 20,400</b>	<b>\$ 24,550</b>	<b>\$ 9,600</b>	<b>\$ 9,450</b>	<b>\$ 12,500</b>	<b>\$ 68,200</b>	<b>\$ 184,750</b>
<b>EFFECT ON OPERATIONS WHEN FULLY OPERATIONAL</b>												
	Loan Interest	-	151	553	689	1,050	1,650	2,318	2,521	2,710	2,985	
	Operating / Maintenance	-	-	-	-	-	-	-	-	-	-	
	Amortization	99	373	606	779	1,096	1,589	1,990	2,164	2,317	2,805	
<b>TOTAL NET OPERATING EFFECT:</b>		<b>\$ 99</b>	<b>\$ 524</b>	<b>\$ 1,159</b>	<b>\$ 1,468</b>	<b>\$ 2,146</b>	<b>\$ 3,239</b>	<b>\$ 4,308</b>	<b>\$ 4,685</b>	<b>\$ 5,027</b>	<b>\$ 5,790</b>	
	Loan Principal	-	266	709	1,056	1,417	2,179	3,065	3,587	3,795	4,328	
	FTEs	0	0	0	0	0	0	0	0	0	0	

## TCA Decision Package Summary – Solid Waste Utility

Refer to the Corporate Multi-Year Capital Plan for detailed information on each decision package.

PAGE	PROJECT DESCRIPTION	BUDGET REQUEST				BUDGET FORECAST						10 YEAR
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	TOTAL
												-
	SWC - Collection Carts & Bin Program (2019)	50	65	50	65	70	85	70	85	70	85	695
	SWC - Garage Building Projects (2019)	150	-	-	100	150	200	-	-	-	-	600
	SWC - Organics Collection Program (2019)	-	100	2,350	3,000	2,000	-	-	-	-	-	7,450
	SWC - Collection Customer Services	-	-	-	-	200	-	-	-	-	-	200
	SWL - Landfill & Compost Program (2020)	-	200	100	100	100	100	100	100	100	100	1,000
	SWL - Landfill Airspace Expansion (2022)	-	-	-	-	1,000	3,000	3,800	-	1,000	5,900	14,700
	SWL - Landfill Customer Improvements (2020)	-	200	600	-	-	-	-	-	-	-	800
	SWL - Landfill Building Services Projects (2019)	150	-	-	250	-	-	-	-	-	-	400
	SWL - Range Road 52 Access to Landfill (2020)	-	1,500	-	-	-	-	-	-	-	-	1,500
	<b>DEPARTMENTAL TOTAL</b>	<b>\$ 350</b>	<b>\$ 2,065</b>	<b>\$ 3,100</b>	<b>\$ 3,515</b>	<b>\$ 3,520</b>	<b>\$ 3,385</b>	<b>\$ 3,970</b>	<b>\$ 185</b>	<b>\$ 1,170</b>	<b>\$ 6,085</b>	<b>\$ 27,345</b>
	<b>FUNDING SOURCES</b>											
	GG) Government Grants	-	-	-	-	-	-	-	-	-	-	-
	DEB) Debenture	-	-	2,350	3,000	3,000	3,000	3,800	-	1,000	5,900	22,050
	OP) Operating / Working Capital	350	2,065	750	515	520	385	170	185	170	185	5,295
	INT) Internal Loans	-	-	-	-	-	-	-	-	-	-	-
	EXT) Other External Sources (Third Party / Trade-in)	-	-	-	-	-	-	-	-	-	-	-
	OFF) Offsites	-	-	-	-	-	-	-	-	-	-	-
	RES) Reserves	-	-	-	-	-	-	-	-	-	-	-
	<b>FINANCING TOTAL</b>	<b>\$ 350</b>	<b>\$ 2,065</b>	<b>\$ 3,100</b>	<b>\$ 3,515</b>	<b>\$ 3,520</b>	<b>\$ 3,385</b>	<b>\$ 3,970</b>	<b>\$ 185</b>	<b>\$ 1,170</b>	<b>\$ 6,085</b>	<b>\$ 27,345</b>
	<b>EFFECT ON OPERATIONS WHEN FULLY OPERATIONAL</b>											
	Loan Interest	-	-	-	58	121	175	231	307	262	229	
	Operating / Maintenance	-	-	-	-	-	-	-	-	-	-	
	Amortization	8	118	374	692	1,010	1,276	1,521	1,663	1,711	1,957	
	<b>TOTAL NET OPERATING EFFECT:</b>	<b>\$ (000's)</b>	<b>\$ 8</b>	<b>\$ 118</b>	<b>\$ 374</b>	<b>\$ 750</b>	<b>\$ 1,131</b>	<b>\$ 1,451</b>	<b>\$ 1,752</b>	<b>\$ 1,970</b>	<b>\$ 1,973</b>	<b>\$ 2,186</b>
	Loan Principal	-	-	-	446	1,027	1,470	1,618	1,800	1,341	730	
	FTEs	0	0	0	0	0	0	0	0	0	0	

## Appendix A - Council's Strategic Priorities (SP) and Key Results (KR) Coding

Code	Key Results
<b>SP 1</b>	<b>Council Strategic Priority 1 – Fiscal Responsibility</b>
KR 1.1	Using the Financially Fit for the Future framework, reduce the City's reliance on annual energy dividend subsidies to the municipal operating budget by a further target of \$12 million during the 2019-2022 budget term.
KR 1.2	Establish and review service level standards for core municipal services, including but not limited to emergency services, transit, parks and roads, with a view to reducing future operational costs.
KR 1.3	Where more efficient or effective, explore alternative models for delivery of internal and external City services, including but not limited to not-for-profit and contracted service delivery.
KR 1.4	Review reliance of partner agencies and organizations on City funding. Encourage agencies to embrace innovation and develop partnerships in order to become increasingly self-sustaining.
KR 1.5	Reduce the City's facility costs through sale or demolition of surplus or derelict buildings, and seeking cost-effective, increasingly flexible, higher intensity office space solutions.
KR 1.6	Following adoption of the Municipal Development Plan, update the Municipal Servicing Standards Manual with a view to reducing future asset/infrastructure capital and maintenance costs.
KR 1.7	Optimize NGPR's asset portfolio in order to ensure that current asset retirement obligations are completely funded either by dedicated reserves or projected surplus cash from operations.
<b>SP 2</b>	<b>Council Strategic Priority 2 – Economic Vitality</b>
KR 2.1	Update and implement a coordinated framework for economic development to define the roles and responsibilities of all stakeholders.
KR 2.2	Implement systematic approaches to be "investment-ready" and "open for business" including more effective internal City processes and practices.
KR 2.3	Land bank and assemble properties to facilitate private sector redevelopment within prioritized areas, specifically downtown and the river valley.
KR 2.4	Seek to sell land inventory that is not part of the City's land development strategy nor required for municipal purposes, with a focus on intensification and private development.
KR 2.5	Develop portions of Airport Commercial, Brier Run Commercial & Industrial and NW Industrial.
KR 2.6	Develop a future state plan for the Historic Clay District.
KR 2.7	Evaluate and recommend solutions to expand campground capacity.
KR 2.8	Conduct a high-level viability assessment of a river footbridge connecting Strathcona and Police Point Parks to increase trail connectivity within the City's trail system.
<b>SP 3</b>	<b>Council Strategic Priority 3 – Infrastructure Renewal</b>
KR 3.1	Implement a comprehensive risk-based asset management policy and operational plan across all asset classes with a view to balancing capital investment with operational efficiency and costs.
KR 3.2	Following completion of the Municipal Development Plan, update the City's Offsite Levy Bylaw and development incentive program to facilitate strategic investment attraction to areas identified for development.
KR 3.3	Implement policy, incentive programs, and operational plans prioritizing new development opportunities that will maximize the use of existing infrastructure and support intensification.

<b>SP 4</b>	<b>Council Strategic Priority 4 – Community Safety and Vibrancy</b>
KR 4.1	Update the City's Municipal Development Plan, putting in place the vision and principles to help create a more prosperous, livable and sustainable city over a 30-year horizon.
KR 4.2	Enhance community safety and vibrancy through intentional urban design in parks, streets, residential and commercial areas.
KR 4.3	Prioritize mature neighbourhoods including continued focus on the Downtown by supporting renewed investment, infill development, and a variety of housing and commercial options.
KR 4.4	Improve the efficacy of the community's social safety net by reviewing the City's facilitation, funding and direct service provision of social services, including the distribution of Family and Community Support Services funds.
KR 4.5	Maintain community safety, developing policies, standards, partnerships, programs and services to meet emerging issues including cannabis legalization and ride share services.
KR 4.6	Completion of the Flood Mitigation Plan and on-going resiliency to river/creek overland flooding.
<b>SP 5</b>	<b>Council Strategic Priority 5 – Sunshine Hospitality</b>
KR 5.1	Develop a comprehensive plan for development of the downtown river corridor, specifically from City Hall to Athletic Field, which looks to capitalize on the synergies between recreational and economic development assets and opportunities.
KR 5.2	Enrich the City's arts and culture scene by continuing to showcase a diverse range of talent, offer a variety of programs and services, and celebrate and preserve local history.
KR 5.3	Develop future state plan for Echo Dale Regional Park to guide lifecycle renewal investments over next 10 years. Identify and develop a plan for future development opportunities for the park.
KR 5.4	Develop and implement a Medicine Hat ambassador program to support residents to increasingly be positive ambassadors for Medicine Hat.
KR 5.5	Work collaboratively with the tourism industry to increase visits and stays in Medicine Hat by 10 to 20 percent from 2017 levels by the end of 2022.
<b>SP 6</b>	<b>Council Strategic Priority 6 – City Government</b>
KR 6.1	Promote public participation and transparency by providing increased information on significant issues, developing a public participation policy and creating new opportunities for the public to provide input and feedback.
KR 6.2	Maintain focus on workplace safety, engagement and wellness through demonstrated leadership, policy oversight, employee training and development, and wellness programs.
KR 6.3	Ensure the organization is resilient and positioned to carry out Council's direction through development of succession plans for priority positions, leadership training, and individual learning and development plans.
KR 6.4	Identify, and communicate the City's environmental principles and goals, ensuring environmental as well as financial stewardship.