



Information Only

Decision

To: City of Chestermere Council

From: Leigh-Anne Palter, CEO

Date: December 1, 2016

Re: 2017 Utility Rates

SECTION 1 – REQUEST

Council provide CUI with the required approvals to implement the Rates described in **Table 1** effective January 1, 2017.

1.1 – BACKGROUND

In 2015 a new management team at CUI reviewed the Corporation's rate making approach and determined that it was not consistent with utility best practice as it was not ensuring that rates were recovering the full-cost of providing services to the existing customer base. Furthermore, it was evident that proceeds from the Lifecycle Fund ("LCF"), Offsite Levies ("OSL") and Developer Contributed Assets ("DCA") were inadvertently being considered as revenue available to support rate base operations. More simply stated, the developer contributed assets (pipes in the ground) are required to be recorded as "revenue" in the year that they are received, but are not "cash" and therefore not available to support the day to day operational expenses related to serving our existing customers. As a result, CUI determined that a significant rate increase was necessary to comply with the principles of full cost recovery and to ensure that the proceeds collected through the LCF and OSL were preserved for their intended purpose; that is the future replacement of existing assets in the case of LCF and the building of new water mains and sewer lines in the case of OSLs. In determining the level of rate increase requested, CUI endeavored to balance four key principles;

- 1) Designing, building, and operating the systems in compliance with all government regulations,
- 2) Minimizing rate shock for customers,
- 3) Ensuring rates recover the cost of providing service to customers, and
- 4) Starting the journey to becoming financially sustainable.

On January 11, 2016 CUI submitted a request to City Council to increase its water, sanitary, storm and solid waste rates by 25%. It is important to highlight that CUI requested a general 25% rate increase because it was cognizant that confusion among key stakeholders would be likely, given the nature and magnitude of the rate increase in



contrast to prior public statements from the Corporation regarding its financial performance. Recognizing that the 2016 rates application was just the first step in its path to financial sustainability, CUI made the decision to keep the rate filing as simple as possible and did not consider rate increases for each line of business.

As part of the 2016 rate request, CUI noted that it expected to incur operating losses in 2016 and estimated future results were speculative at best as they relied on the accuracy of future growth projections and assumed no major unexpected changes.

Council rendered its decision on February 18, 2016 and approved increases of 15% for water and sanitary rates and 25% for storm and solid waste rates. These rates were applied effective March 1, 2016.

In the intervening period, there have been a number of significant changes which have informed this rate request. First, CUI and the City have collaboratively developed CUI's Mandate and Regulatory Framework (the "Mandate") documents as approved by Council on November 21, 2016. The result of this work is two fundamental changes to CUI's 2017 rate making methodology from 2016. Those are: (i) the exclusion of amortization and return on equity for contributed assets from the rate base revenue requirement, in keeping with the Alberta Utility Commission's ("AUC") standard regulatory practices, and (ii) the inclusion of a moderate return on equity (RoE) (of 1.8%) on CUI's non-contributed assets in order to work towards achieving financial stability for CUI. Accordingly, for 2017 amortization included in rate base totals \$1.7 million and the ROE included in the rate base is \$1.3 million. For ease of reference, in 2016 approved rates included amortization which represented an expense to the rate base of approximately \$3.2 million (of which \$1.8 million was related to contributed assets) and the RoE on all utility assets was 0.0%.

Second, CUI Management has learned of significant operational deficiencies in the sanitary and storm systems which must be remedied to ensure their continued safe and reliable operation. The total cost of addressing these deficiencies (described in detail in **Appendix 1 – Sections 3 and 4** of these materials) is approximately \$21 million with 46.6% or \$9.8 million to be charged to the existing customer base and are reflected in this rate request. In 2017, completion of this work results in increased costs to the sanitary rate base of \$366,122: \$211,015 in financing costs and \$155,107 in amortization charges, and \$81,620 in increased costs to the storm rate base: \$30,860 in financing costs and \$50,760 in amortization charges.

The 2017 – 2019 business plan and corresponding 2017 rate request reflect the impact of beginning the process to achieve the Financial Sustainability measures in the Mandate. CUI is requesting rates which will recover the cost of providing service to each group of customers. Also, CUI is requesting approval for a Recycle Centre fee to be charged to all residential customers. CUI is not requesting a change to its other fees and charges as part of this request.



Finally, CUI is proposing new rates which limit the total bill impact for the average residential customer to an increase of 15% in 2017 in order to avoid undue rate shock for our customers

In summary, the following are the major factors which underpin CUI's requested change in rates:

- \$1,300,000 RoE (1.8%),
- \$261,000 increase in financing of costs for capital projects required to support the safe and reliable operation of the system,
- \$263,000 increase in amortization expense related to the aforementioned projects, and
- \$248,000 increase in contracted services, \$234,000 of which is related to the implementation of a new preventative maintenance and repair program for the stormwater system.

1.3 – RECOMMENDATION

Council approve CUI's requested rate changes as outlined in **Table 1.1**.



Table 1.1: 2017 Proposed Rates

		2016	2017		2018		2019	
			Rate	% Change	Rate	% Change	Rate	% Change
Water								
Residential Fixed	\$ / Month	22.26	29.93	34%	32.68	9%	36.42	11%
Residential Variable - Tier I	\$ / m ³	1.06	1.43	34%	1.56	9%	1.73	11%
Residential Variable - Tier II	\$ / m ³	2.13	2.86	34%	3.13	9%	3.48	11%
Non-residential Fixed	\$ / Month	62.30	83.77	34%	91.47	9%	101.93	11%
Non-residential Variable - Tier I	\$ / m ³	1.33	1.79	34%	1.95	9%	2.18	11%
Non-residential Variable - Tier II	\$ / m ³	2.13	2.86	34%	3.13	9%	3.48	11%
Bulk Fixed (minimum 3 days)	\$ / day	5.10	6.83	34%	7.45	9%	8.27	11%
Bulk Variable	\$ / m ³	2.08	2.79	34%	3.04	9%	3.37	11%
Flushing	\$ / m ³	1.90	2.55	34%	2.78	9%	3.08	11%
Sanitary								
Residential Fixed	\$ / Month	40.89	43.00	5%	47.17	10%	50.82	8%
Residential Variable - Tier I	\$ / m ³	1.25	1.31	5%	1.44	10%	1.55	8%
Residential Variable - Tier II	\$ / m ³	1.77	1.86	5%	2.04	10%	2.20	8%
Lifecycle Fund	\$ / Month	3.56	3.56		3.56		3.56	
Non-residential Fixed	\$ / Month	106.67	112.17	5%	123.06	10%	132.59	8%
Non-residential Variable - Tier I	\$ / m ³	1.52	1.60	5%	1.75	10%	1.89	8%
Non-residential Variable - Tier II	\$ / m ³	2.32	2.44	5%	2.68	10%	2.88	8%
Lifecycle Fund	\$ / Month	7.18	7.18		7.18		7.18	
Storm								
Residential Fixed	\$ / Month	12.38	19.68	59%	23.38	19%	27.10	16%
Non-residential Fixed	\$ / Month	20.83	33.11	59%	39.34	19%	45.60	16%
Solid Waste Collection								
Residential Fixed	\$ / Month	29.87	23.03	-9%	24.70	5%	26.98	7%
Recycle Centre								
Residential Fixed	\$ / Month	-	4.09		3.89		3.69	
Average Customer Bill (18 m³/ month)		150.54	172.60		189.35		207.76	
% total bill increase			15%		10%		10%	

Notes:

- CUI is not seeking approval of 2018 and 2019 rates at this time. They are presented for information only as they are necessary inputs to create the 2018 – 2019 financial statements.



Section 2 – Financial Statements

CHESTERMERE UTILITIES INC.

Statement of Operations and Comprehensive Income Budget
2015 - 2019
(\$000's)

	<u>2015</u> <u>Actual</u>	<u>2016</u> <u>Forecast</u>	<u>2017</u> <u>Budget</u>	<u>2018</u> <u>Budget</u>	<u>2019</u> <u>Budget</u>
Revenue					
Sale of goods and services ^{1, 2, 3}	9,568	11,238	13,864	15,760	17,831
Development and offsite levies ⁴	6,185	7,259	411	287	295
Penalties and interest income ⁵	256	224	243	266	292
	<u>16,009</u>	<u>18,721</u>	<u>14,519</u>	<u>16,313</u>	<u>18,418</u>
Expenses					
Water supply and waste management charges ⁶	3,906	3,765	4,008	4,148	4,368
Contracted services ^{7, 12}	3,647	2,562	2,810	2,861	2,913
Amortization ⁸	1,752	1,790	2,537	2,877	3,080
Salaries, wages, and benefits ⁹	1,501	1,823	2,105	2,309	2,353
Financing costs ^{10, 11}	2,283	2,141	1,626	2,457	2,803
Materials, goods and supplies ¹²	668	990	852	787	801
General and administrative expenses ¹²	500	535	603	601	598
Other ¹³	101	34	97	148	176
	<u>14,357</u>	<u>13,639</u>	<u>14,637</u>	<u>16,187</u>	<u>17,092</u>
Net income (loss) for the year	1,652	5,081	-119	125	1,326
Item that may be reclassified to profit or loss					
Unrealized gain (loss) on investments	-11	0	0	0	0
Total comprehensive income ¹⁴	1,641	5,081	-119	125	1,326

Notes:

Details regarding the assumptions relied upon and explanations of material year over year changes will be provided in the Rate Base Line of Business analysis which can be found in **Section 3** of these materials.

- 1) Rate increases effective January 1, 2017.
- 2) Growth: 2017 – 85 residential, 8 commercial; 2018 – 209 residential, 11 commercial; and 2019 – 166 residential, 15 commercial.
- 3) Return on Equity on non-contributed assets (rate base) of \$58 million year ending December 31, 2016 at 1.8% in 2017, 3.2% in 2018 and 5.3% in 2019 against asset values presented in **Table 2.1** below.
- 4) Only includes revenue from signed development agreements, no new agreements.
- 5) Interest on investments and bank account - based on average of actuals received from 2014-2016 YTD.
- 6) City of Calgary agreement continues in force, no change to published rates.



- 7) EPCOR Operations and Maintenance (O&M) agreement continues in force.
- 8) Amortization charged on all CUI assets consistent with its policies. Asset value at December 31, 2016 of \$93 million. Forecast additions / retirements are detailed in Table 2.1 below.
- 9) Three new FTE's added for 2017 and creation of a pool for merit based salary increases at 2.4% consistent with the City of Chestermere 2017 budget.
- 10) Financing for new capital projects is assumed to begin at July 1 of each year. EPCOR projects (water and sanitary) have an assumed interest rate of 6% and all other projects have an assumed interest rate of 3.1%.

Over time, CUI is seeking to achieve a debt to equity ratio of 60:40. In order to manage cash to appropriate levels, financing for the plan period has assumed the following; Sanitary projects in 2017 are 100% financed and 80% in subsequent years. All other projects assume an 80% financing requirement.
- 11) Assumes Preferred Shares converted to Common Shares effective December 30, 2016.
- 12) Costs escalated using an inflation rate 1.71% (5-year average of Consumer Price Index) where price escalators are unknown.
- 13) New allowance for customer bad debt more fully described in **Section 2.1**.
- 14) The net (loss) in 2017 is due mainly to the amortization of contributed assets which are not included in the rate base revenue requirement, but which must be amortized for accounting purposes to be compliant with IFRS.

Table 2.1 (\$000s)

		Contributed vs Non-Contributed Asset Reconciliation											
Useful Life (Years)		2017 - Forecast				2018 - Forecast				2019 - Forecast			
		Additions		Retirements		Additions		Retirements		Additions		Retirements	
		RB	Non-RB	RB	Non-RB	RB	Non-RB	RB	Non-RB	RB	Non-RB	RB	Non-RB
Land	Indefinite	0	0	0	0	0	0	0	0	0	0	0	0
Land Improvements	19-25	0	0	0	0	0	50	0	0	0	0	0	0
Buildings	1-50	1,158	1,390	0	0	0	0	0	0	0	0	0	0
Engineered Structures	1-50	12,804	17,538	0	0	3,075	9,800	0	0	0	5,000	0	0
Machinery & Equipment	1-12	610	0	0	0	847	0	0	0	517	0	0	0
Vehicles	3-12	0	0	0	0	300	0	-49	0	300	0	-75	0
CIP	N/A	0	0	0	-10,919	0	0	0	0	0	0	0	0
Total in year changes		14,572	18,928	0	-10,919	4,222	9,850	-49	0	817	5,000	-75	0
Total year end asset value		72,082	43,729	0	0	76,255	53,579	0	0	76,997	58,579	0	0

Notes:

- RB = Rate Base
- Non-RB = Non-Rate Base



CHESTERMERE UTILITIES INC.
Statement of Financial Position Budget
2015 - 2019
(\$000's)

	<u>2015</u> <u>Actual</u>	<u>Q3 2016</u> <u>Actual ¹</u>	<u>2017</u> <u>Budget</u>	<u>2018</u> <u>Budget</u>	<u>2019</u> <u>Budget</u>
Assets					
Current Assets					
Cash and cash equivalents	3,236	2,370	2,981	1,142	2,733
Investments	1,343	1,409	1,453	1,453	1,453
Accounts receivable	1,668	1,567	1,584	1,910	2,154
Allowance for doubtful accounts	0	0	-64	-64	-64
Inventory	72	82	72	72	72
Goods and services tax receivable	94	406	102	102	102
Prepaid expenses	35	0	35	35	35
	<u>6,447</u>	<u>5,836</u>	<u>6,163</u>	<u>4,649</u>	<u>6,483</u>
Property and equipment	<u>78,543</u>	<u>80,499</u>	<u>106,043</u>	<u>117,190</u>	<u>119,852</u>
	<u>84,990</u>	<u>86,335</u>	<u>112,206</u>	<u>121,839</u>	<u>126,335</u>
Liabilities					
Current Liabilities					
Accounts payable and accrued liabilities	7,237	8,440	1,870	1,870	1,870
Current portion of long-term debt	332	324	482	482	482
Due to related party	242	0	250	250	250
	<u>7,811</u>	<u>8,764</u>	<u>2,602</u>	<u>2,602</u>	<u>2,602</u>
Deferred revenue	1,707	955	1,287	1,287	1,287
Long-term debt	8,277	8,065	35,850	45,358	48,529
Preferred shares	47,760	48,925	0	0	0
	<u>65,555</u>	<u>66,708</u>	<u>39,739</u>	<u>49,247</u>	<u>52,418</u>
Shareholder's Equity					
Share capital	0	0	49,314	49,314	49,314
Contributed surplus	13,252	13,252	13,252	13,252	13,252
Retained earnings	6,183	6,308	9,813	9,938	11,264
Accumulated other comprehensive income	0	66	88	88	88
	<u>19,435</u>	<u>19,626</u>	<u>72,466</u>	<u>72,592</u>	<u>73,917</u>
	<u>84,990</u>	<u>86,335</u>	<u>112,206</u>	<u>121,839</u>	<u>126,335</u>

Notes:

- 1) CUI's budget and forecasting model currently lacks the ability to generate an accurate Financial Position forecast at year end. Therefore, we have used 2016 Q3 Actual (unaudited) as a reasonable proxy for the purposes of creating this statement.



CHESTERMERE UTILITIES INC.
Statement of Cash Flows Budget
2015 - 2019
(\$000's)

	2015 Actual	Q3 2016 Actual ¹	2017 Budget	2018 Budget	2019 Budget
Cash provided by (used in)					
Operating Activities					
Net income for the year	1,652	125	-119	125	1,326
Items not affecting cash					
Amortization of property and equipment	1,752	1,309	2,537	2,877	3,080
Finance costs	2,283	1,566	1,626	2,457	2,803
Contributed assets	-5,313	0	0	0	0
Loss on sale of asset	0	0	0	49	75
	<u>374</u>	<u>3,001</u>	<u>4,044</u>	<u>5,508</u>	<u>7,283</u>
Change in non-cash working capital					
Accounts receivable	-176	101	-176	-325	-244
Due to/from related party	401	0	0	0	0
Inventory	0	-10	0	0	0
Accounts payable and accrued liabilities	-647	-1,462	0	0	0
Prepaid expenses	-20	34	0	0	0
Goods and services tax receivable	73	-313	-3	0	0
Deferred revenue	589	-752	332	0	0
	<u>220</u>	<u>-2,402</u>	<u>154</u>	<u>-325</u>	<u>-244</u>
	<u>593</u>	<u>599</u>	<u>4,198</u>	<u>5,182</u>	<u>7,039</u>
Investing Activities					
Purchase of property and equipment	-1,302	-842	-22,581	-14,072	-5,817
Sales of property and equipment	-13	0	0	0	0
Investment purchases	-7	0	0	0	0
	<u>-1,321</u>	<u>-842</u>	<u>-22,581</u>	<u>-14,072</u>	<u>-5,817</u>
Financing Activities					
Interest paid	-581	-401	-1,626	-2,457	-2,803
Long-term debt ²	0	0	37,824	27,257	20,654
Repayment of long-term debt ²	-334	-221	-17,268	-17,749	-17,483
	<u>-915</u>	<u>-622</u>	<u>18,930</u>	<u>7,051</u>	<u>368</u>
Decrease in cash and cash equivalents	-1,643	-865	546	-1,839	1,590
Cash and cash equivalents - Beginning of year	4,879	3,236	2,435	2,981	1,142
Cash and cash equivalents - End of year	<u>3,236</u>	<u>2,370</u>	<u>2,981</u>	<u>1,142</u>	<u>2,733</u>

Notes:

- 1) CUI's budget and forecasting model currently lacks the ability to generate an accurate cash flow forecast to year end. Therefore, we have used 2016 Q3 Actual (unaudited) as a reasonable proxy for the purposes of creating this statement.
- 2) Financing of the EPCOR letter of credit as described in **Section 3.2** of these materials. Limitations in CUI's budget and forecasting model require that the financial instrument is shown being opened and closed each year.



Section 3 – Rate Base Line of Business Analysis

As noted in **Section 1** of these materials, in 2015 CUI Management determined that CUI was not requesting rates supported by accounting practices which were consistent with industry best practice. In making this determination, CUI referenced, among other sources, a March 2008 Alberta Environment (“AE”) report which recommended a full cost accounting framework for utility system owners as part of its Water for Life strategy. Of interest, AE’s recommendation that system owners utilize a utility approach considered the findings following the devastating Walkerton, ON and North Battleford, SK water contamination incidents.

Full cost accounting for utility services (the “utility approach”) ensures that CUI receives sufficient funds to: properly operate and maintain the systems which serve the City’s residents and businesses, maintain and ultimately replace the infrastructure required to provide safe and reliable service, and maintains the financial integrity of the corporation. It is widely accepted that a utility approach to setting rates generally results in greater rate stability as funding requirements are not immediately affected by major capital expenditures and is therefore the approach recommended by AE for use by all utility system owners in the Province.

The utility approach specifies the inclusion of: operations & maintenance expenses (salaries, wages, benefits, lower, chemicals, purchased services, rent, materials & supplies, billing costs, administrative costs and the like), amortization (the loss in value of capital assets which occur as they are used), cost of financing and return on equity as determinants for establishing appropriate rates.

The following (unaudited) statements reflect CUI’s accounting for each of its service lines in compliance with the principles established by AE, the AUC, the American Water & Wastewater Association and the parameters established in the Mandate. Of note, in March, 2015 the AUC issued its Generic Cost of Capital decision establishing a generic RoE for Alberta’s major utilities of 8.3% and CUI’s 2017 rates include a RoE of 1.8%.



CHESTERMERE UTILITIES INC.
 Consolidated Statement of Rate Base Operations & Comprehensive Income
 2015 - 2019
 (\$000's)

	<u>2015</u> <u>Actual</u>	<u>2016</u> <u>Forecast</u>	<u>2017</u> <u>Budget</u>	<u>2018</u> <u>Budget</u>	<u>2019</u> <u>Budget</u>
Revenue					
Sale of goods and services	9,568	11,238	13,864	15,760	17,831
Development and offsite levies	798	273	277	287	295
Penalties and interest income	160	159	153	174	198
	<u>10,526</u>	<u>11,670</u>	<u>14,294</u>	<u>16,221</u>	<u>18,324</u>
Expenses					
Water supply and waste management charges	3,906	3,765	4,008	4,148	4,368
Contracted Services	3,342	2,373	2,382	2,424	2,468
Amortization	1,748	1,766	1,657	1,784	1,876
Salaries, wages and benefits	768	993	932	951	970
Financing costs	0	0	435	759	835
Materials, goods and supplies	644	942	832	767	780
General and administrative expenses	225	265	275	266	257
Other expenses	74	9	0	0	0
	<u>10,707</u>	<u>10,114</u>	<u>10,520</u>	<u>11,098</u>	<u>11,553</u>
Admin and board expenses	1,247	1,321	1,988	2,189	2,230
Rate base net income (loss) for the year	<u>-1,428</u>	<u>236</u>	<u>1,787</u>	<u>2,933</u>	<u>4,541</u>
Contributed assets	5,313	6,894	0	-49	-75
Contributed asset amortization	0	0	850	1,062	1,174
Offsite levy revenue	50	92	135	0	0
Offsite levy expense	581	587	1,190	1,697	1,966
Accretion of preferred shares	1,702	1,554	0	0	0
Net income (loss) for the year	<u>1,652</u>	<u>5,081</u>	<u>-119</u>	<u>125</u>	<u>1,326</u>

3.1 Administration and Board Operations & Capital

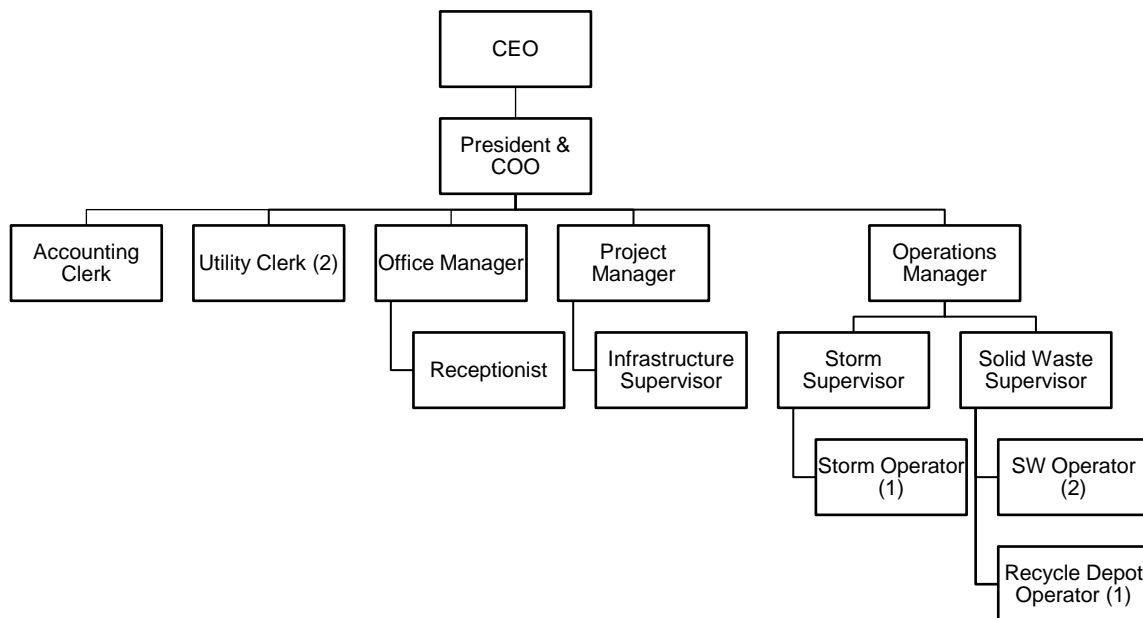
In order to safely and efficiently meet the diverse needs of its various stakeholders; the Shareholder, regulatory authorities, contractors, customers and staff and to deliver on its strategic plan, CUI has made some changes to its team over the last 16 months.

Services which support each of CUI's rate base lines of business are provided as an allocation to each line of business on the basis of revenue. These services include, governance, strategic & business planning, regulatory



& financial reporting, accounting, customer service & billing, and environment, health & safety. Also, included in this business unit are the lease and operating expenses related to the Corporation's head office.

2015 Organization



Changes since the 2016 Rates Filing

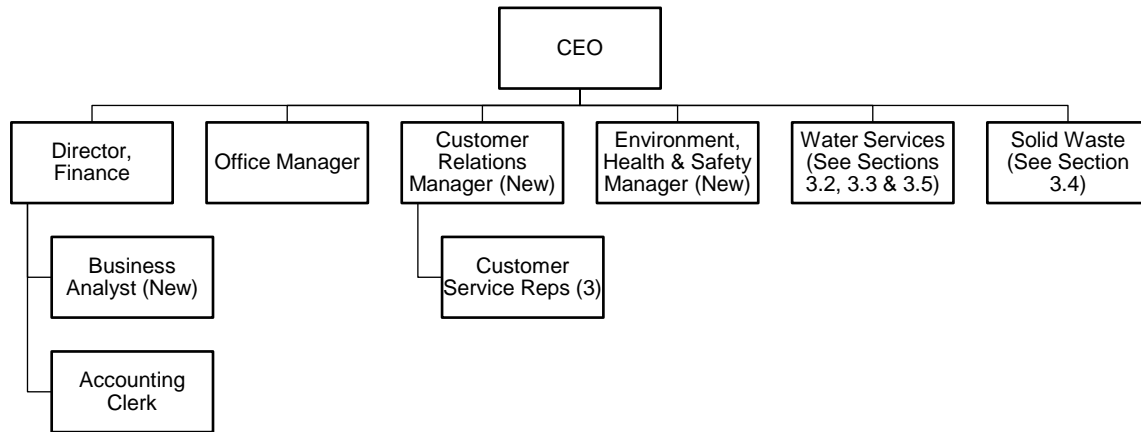
In the summer of 2016 CUI added an Environment Health & Safety Manager position whose mandate is to support CUI's strategic goals related to the safety of our people (community and employees) and our operations.

Also in the summer of 2016, we added a dedicated Customer Relations Manager with the goal of improving CUI's customer facing processes and improving overall customer satisfaction.

In the fall of 2016 CUI implemented changes to proactively manage the default risk associated with an increasing number of CUI customers who are in arrears for more than 60 days. In order to limit the nonpayment exposure associated with these customers, CUI has implemented a rigorous, multi-step collection processes and instituted a security deposit protocol for customers without a satisfactory payment history.



2017 Organization



The CUI website will see an update in late 2016, early 2017 to improve the level of service and create more options for customers to engage with us. We will also be launching efforts to encourage customer to select lower cost billing and payment options like eBilling and pre-authorized payment plans. Finally, we will also be instituting a customer satisfaction survey protocol the results of which will help guide future customer service improvements.

2017 will see the addition of a Business Analyst position to the Finance team to strengthen financial reporting, analysis, and controls.



CHESTERMERE UTILITIES INC.
Admin & Board Statement of Operations & Comprehensive Income
2015 - 2019
(\$000's)

	<u>2015</u> <u>Actual</u>	<u>2016</u> <u>Forecast</u>	<u>2017</u> <u>Budget</u>	<u>2018</u> <u>Budget</u>	<u>2019</u> <u>Budget</u>
Revenue					
Sale of goods and services	0	0	0	0	0
Other revenue	24	0	0	0	0
Penalties and interest income ¹	96	65	90	92	94
	<u>120</u>	<u>65</u>	<u>90</u>	<u>92</u>	<u>94</u>
Expenses					
Water supply and waste management charges	0	0	0	0	0
Contracted services ²	304	189	428	437	445
Amortization ³	4	24	30	30	30
Salaries, wages and benefits ⁴	733	830	1,173	1,358	1,383
Financing costs	0	0	0	1	1
Materials, goods and supplies ⁵	25	49	20	20	21
General and administrative ⁶	275	269	328	335	342
Other expenses ⁷	27	25	97	99	101
	<u>1,367</u>	<u>1,386</u>	<u>2,078</u>	<u>2,281</u>	<u>2,324</u>
Rate base net income (loss)	<u>-1,247</u>	<u>-1,321</u>	<u>-1,988</u>	<u>-2,189</u>	<u>-2,230</u>
Contributed assets	0	0	0	0	0
Contributed asset amortization	0	0	0	0	0
Offsite levy revenue	0	0	0	0	0
Offsite levy expense	0	0	0	0	0
Accretion of preferred shares ⁸	1,702	1,554	0	0	0
Net income (loss) for the year	<u>-2,949</u>	<u>-2,874</u>	<u>-1,988</u>	<u>-2,189</u>	<u>-2,230</u>

Notes:

- 1) Interest on investments and bank account - based on average of actuals received from 2014-2016 YTD.
- 2) Director of Finance services are being provided on a contract basis for 2017 where in prior years these costs were included in salaries, wages, and benefits. Also, includes contracted advisory services to support the Audit, IT, Risk Management, Customer Relations, and Human Resources functions.
- 3) Amortization expense related to the installation of a new security system and other renovations at the Corporation's main office expected to be completed in 2016.



- 4) As described in **Section 3.1**, in prior years Customer Relations (billing) staff and related expenses were charged directly to lines of business on the basis of revenue.

This category also includes the full year impact of new Customer Relations and Environment, Health and Safety Manager positions which were added midyear in 2016 and the addition of a Business Analyst position to the Finance team in 2017.

The 2017 Admin & Board budget reflects the consolidation of these expenses in this cost centre which is then allocated to the various service lines on the basis of % of revenue.

- 5) Further to the organizational changes described in **Note 4** (above), billing expenses including stationery, printing, postage are now budgeted in Administration and allocated to the various service lines of the basis of % of revenue.
- 6) As described in **Section 3.1**, CUI has begun estimating bad debt expense which will be allocated back to each of the various service lines on the basis of % of revenue.
- 7) Assumes Preferred Shares converted to Common Shares effective December 30, 2016.

3.2 Water Operations & Capital

CUI serves approximately 6,127 residential and 185 commercial water customers. These customers receive water supplied by the City of Calgary under the terms of a 20-year Master Servicing Agreement (“MSA”) and is distributed throughout the City via a 75 KM network of water mains.

CUI is charged by the City of Calgary for water provided through a combination of fixed and variable rates which are approved by the City of Calgary Council. The following rate table is currently in effect:

	2015	2016	2017	2018
Fixed Component (\$ per contracted max day m ³)	\$90.4873	\$93.2466	\$96.0901	\$99.0203
Variable Component (\$ per m ³ water use)	\$0.3883	\$0.4120	\$0.4371	\$0.4638

CUI’s contracted maximum day rate is 13.4 Mega Litres per day (“ML/d”) until 2018 increasing to 18.4 ML/d from 2019 – 2022. CUI’s forecasts 1,669,102 m³ in water purchases from the City of Calgary for 2016 including an allowance for water losses of approximately 20%.

Historically, CUI’s residential customers use an average of 211 m³ per year (total 1,293,554 m³ 2016 Forecast) and commercial customers an average of 526 m³ per year (total 97,364 m³ per 2016 Forecast), customer additions in each class are assumed to consume at the same average rate. As reported at year end 2015, CUI



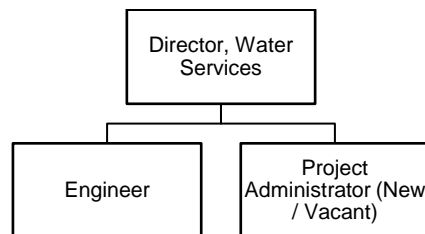
recorded total water losses of 22%. CUI has established a target of reducing system water losses to 10% by 2020. Accordingly, CUI's forecast of water purchases includes an adjustment for water losses of 19% in 2017, 16% in 2018 and 13% in 2019 to adjust for system water losses.

Total residential customer consumption is assumed to be billed 75% in the first consumption tier (18 m³ per month or less) and 25% in the second tier (over 18 m³ per month). Total commercial consumption is assumed to be billed 60% in the first consumption tier (less than 100 m³ per month) and 40% in the second tier (over 100 m³ per month).

Subject to the terms and conditions of a 20 year O&M Agreement (the "Agreement") executed in 2007, EPCOR ensures the safe and reliable operations of the water distribution system. The Agreement also affords EPCOR the right to manage and finance all of the City's water capital projects over \$50,000 for a term of 20 years following the completion of each project.

When it was formed in 2012 CUI was delegated the authority to manage the Agreement on the City's behalf. It was intended that CUI would act in this capacity on an interim basis while the parties arranged for the formal assignment of the Agreement from the City to CUI. As the assignment is expected to take place by the end of 2016, the 2017 – 2019 water budget includes the costs related to providing EPCOR with a letter of credit to secure the assignment of the Agreement to CUI.

The contractual relationships between the City of Calgary / EPCOR and CUI and the planning for life cycle maintenance, replacement and expansion for growth are supported by the following positions within CUI's organization. The costs for these roles is apportioned equally between the water, sanitary and stormwater lines of business.





CHESTERMERE UTILITIES INC.
Water Statement of Operations & Comprehensive Income
2015 - 2019
(\$000's)

	<u>2015</u> <u>Actual</u>	<u>2016</u> <u>Forecast</u>	<u>2017</u> <u>Budget</u>	<u>2018</u> <u>Budget</u>	<u>2019</u> <u>Budget</u>
Revenue					
Sale of goods and services ¹	3,165	3,569	5,019	5,696	6,512
Other revenue ²	264	0	0	0	0
Penalties and interest income ³	160	159	153	174	198
	<u>3,589</u>	<u>3,729</u>	<u>5,172</u>	<u>5,870</u>	<u>6,710</u>
Expenses					
Water supply charges ⁴	1,856	1,967	2,012	2,087	2,179
Contracted Services ⁵	989	958	942	958	975
Amortization ⁶	657	663	569	640	653
Salaries, wages and benefits ⁷	122	163	85	87	88
Financing costs ⁸	0	0	11	99	185
Materials, goods and supplies ⁹	358	232	178	181	185
General and administrative expenses	58	73	72	73	75
Other expenses	55	9	0	0	0
	<u>4,095</u>	<u>4,065</u>	<u>3,869</u>	<u>4,126</u>	<u>4,341</u>
Admin and board expenses allocation ¹⁰	425	426	719	792	817
Rate base net income (loss) for the year	<u>-931</u>	<u>-762</u>	<u>584</u>	<u>952</u>	<u>1,553</u>
Contributed assets ¹¹	1,342	2,333	0	0	0
Contributed asset amortization ¹²	0	0	112	112	134
Offsite levy revenue ¹³	42	39	57	0	0
Offsite levy expense	500	419	434	390	392
Accretion of preferred shares	0	0	0	0	0
Net income (loss) for the year	<u>-47</u>	<u>1,190</u>	<u>96</u>	<u>450</u>	<u>1,026</u>

Notes:

- 1) Forecast 6,127 residential and 185 commercial customers at December 31, 2016 and a January 1 water rate increases of 34% in 2017, 9% in 2018 and 11% in 2019.
- 2) Other revenue related to the collection of "Growth Fees" which were previously levied by the Town of Chestermere and distributed to CUI. This fee has been discontinued and no additional revenue is expected for the planning period.



- 3) Due to a financial system limitation, revenue is only attributed to a single general ledger (“GL”) account. CUI records all account related penalties and interest in the water GL even though revenues are more appropriately shared among the four lines of business.
- 4) City of Calgary rates for water are increasing per the approved rate schedule and estimated at 3% for subsequent years where increases are not yet known. Purchases include an allowance for water losses of 19% in 2017, 16% in 2018 and 13% in 2019.
- 5) Forecast increase in EPCOR services contract partially offset in 2017 by reduction in costs related to the completion of the Utility Master Plan (“UMP”) work.
- 6) In prior years, amortization expense for all asset types was included in the rate base revenue requirement. Consistent with CUI’s recently adopted Mandate, future years only include amortization expense related to non-contributed assets in the rate base revenue requirement.

Year ending, water, non-contributed asset balances are as follows:

2016 - \$22.3 million	2017 - \$23.3 million
2018 - \$26.7 million	2019 - \$27.2 million

- 7) One new full time position is being added in 2017 to support water services, this increase is offset by the reorganization of resources described in **Section 3.1** of these materials.
- 8) Financing costs related to the new projects described in **Table 3.2.1** below assuming an 80% debt / 20% equity ratio.
- 9) In prior years, residential meter replacements were done on an ad hoc basis and were included as an O&M expense. A meter replacement program (described more fully in **Appendix 1, Section 2.1**) is planned for 2017 – 2019 resulting in a decrease to this expense category.
- 10) 36% allocation as described in **Section 3.1** of these materials.
- 11) The value of DCAs is determined by the City of Chestermere as projects are completed. Given that this revenue is excluded from the rate base revenue requirement Management has set the forecast for future years to zero. Quarterly financing reports will see this value updated as information is provided.
- 12) In prior years, amortization expense for all asset types was included in the rate base revenue requirement. Consistent with CUI’s recently adopted Mandate, future years only include amortization expense related to non-contributed assets in the rate base revenue requirement.

Year ending, water, contributed asset balances are as follows:

2016 - \$5.6 million	2017 - \$5.6 million
2018 - \$5.6 million	2019 - \$6.6 million.

- 13) Includes revenue from existing (signed) development agreements.

**Table 3.2.1 Water Capital Plan 2017 - 2021 (\$ 000s)**

Project	Project Type	Q4 2016 Forecast	2017	2018	2019	2020	2021	Total Project Cost
Water								
District Metering	S	0	0	363	0	0	0	363
Copper Service Replacement Program	S	0	0	2,500	0	0	0	2,500
Meter Replacements	S	0	460	484	517	552	589	2,602
Reservoir Refurbishment	S	0	0	0	0	412	0	412
Water Transfer Station Security System	S	0	20	0	0	0	0	20
NW Reservoir	G	0	0	0	1,000	0	655	1,655
		0	480	3,347	1,517	964	1,244	7,552

Notes: Project Type S = Sustaining, G = Growth

Please see **Appendix 1 - Section 2** for a more complete explanation of the 2017 water capital projects.

3.3 Sanitary Operations & Capital

CUI serves approximately 6,100 residential and 163 commercial wastewater customers. CUI operates a wastewater system comprised on a 74 KM network of gravity sewer, more than 15 KM of forcemain and 13 lift stations. Wastewater treatment services are provided by the City of Calgary under the terms of a 20-year MSA.

CUI is charged by the City of Calgary for sanitary services through a combination of fixed and variable rates which are approved by the City of Calgary Council. The following rate table is currently in effect:

	2015	2016	2017	2018
Fixed Component (\$ per contracted max day m ³)	\$0.4473	\$0.4391	\$0.4311	\$0.4232
Variable Component (\$ per m ³ water use)	\$0.4106	\$0.4480	\$0.4489	\$0.5336

CUI's contracted maximum day rate is 14.4 ML/d until 2018 increasing to 19.8ML/d from 2019 – 2022. CUI forecasts 1,502,192 m³ in sanitary service purchases from the City of Calgary for 2016. Historically, sanitary service purchases from the City of Calgary have averaged 90% of the total water purchases. CUI's customers are billed for sanitary services on the same basis as water customers, described in **Section 3.2** of these materials.

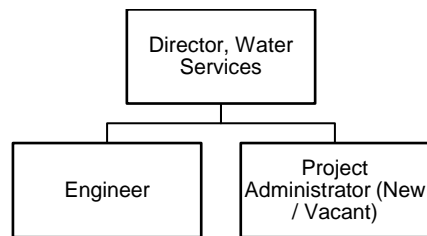
Subject to the terms and conditions of the O&M Agreement, EPCOR ensures the safe and reliable operations of the wastewater system. Services provided under this agreement include: ensuring that lift stations and backup generators are tested for operational readiness, conducting preventative maintenance on the collection system



and ensuring that effluent discharged to the City of Calgary meets their effluent standards. The Agreement also affords EPCOR the right to manage and finance all of the City's sanitary capital projects over \$50,000 for a term of 20 years following the completion of each project.

When it was formed in 2012 CUI was delegated the authority to manage the Agreement on the City's behalf. It was intended that CUI would act in this capacity on an interim basis while the parties arranged for the formal assignment of the Agreement from the City to CUI. As the assignment is expected to take place by the end of 2016, the 2017 – 2019 sanitary budget include the costs related to providing EPCOR with a letter of credit to secure the assignment of the Agreement to CUI.

The contractual relationships between the City of Calgary / EPCOR and CUI and the planning for life cycle maintenance, replacement and expansion for growth are supported the following positions within CUI's organization. The costs for these roles is apportioned equally between the water, sanitary and storm service lines.



Over the last 16 months CUI has determined that the wastewater system serving Chestermere's customers is severely compromised. Seven of CUI's lift stations do not meet AE standards for pumping capacity and there are four sections of the collection system which are over capacity. The resulting risk of failure, property damage and environmental contamination is very high.

CUI has included ten major sanitary capital projects for 2017: nine of which will address the system deficiencies described above and one efficiency project. These projects are described in more detail in **Appendix 1 – Section 3** of these materials.



CHESTERMERE UTILITIES INC.
Sanitary Statement of Operations & Comprehensive Income
2015 - 2019
(\$000's)

	<u>2015</u> <u>Actual</u>	<u>2016</u> <u>Forecast</u>	<u>2017</u> <u>Budget</u>	<u>2018</u> <u>Budget</u>	<u>2019</u> <u>Budget</u>
Revenue					
Sale of goods and services ¹	4,169	4,869	5,464	6,164	6,855
Lifecycle fund ²	522	273	277	287	295
Penalties and interest income ³	0	0	0	0	0
	<u>4,692</u>	<u>5,141</u>	<u>5,741</u>	<u>6,451</u>	<u>7,150</u>
Expenses					
Waste water charges ⁴	1,676	1,490	1,598	1,640	1,744
Contracted Services ⁵	1,345	991	919	935	951
Amortization ⁶	660	662	670	683	683
Salaries, wages and benefits ⁷	121	169	95	97	99
Financing costs ⁸	0	0	386	582	567
Materials, goods and supplies ⁹	189	559	413	339	344
General and administrative expenses	54	66	71	73	74
Other expenses	0	0	0	0	0
	<u>4,045</u>	<u>3,937</u>	<u>4,152</u>	<u>4,348</u>	<u>4,462</u>
Admin and board expenses allocation ¹⁰	556	585	798	871	870
Rate base net income (loss) for the year	<u><u>91</u></u>	<u><u>619</u></u>	<u><u>791</u></u>	<u><u>1,233</u></u>	<u><u>1,819</u></u>
Contributed assets ¹¹	1,096	2,275	0	0	0
Contributed asset amortization ¹²	0	0	609	781	870
Offsite levy revenue ¹³	8	53	77	0	0
Offsite levy expense	81	168	756	1,283	1,527
Accretion of preferred shares	0	0	0	0	0
Net income (loss) for the year	<u><u>1,114</u></u>	<u><u>2,778</u></u>	<u><u>-497</u></u>	<u><u>-832</u></u>	<u><u>-578</u></u>

Notes:

- 1) Forecasting 6,100 residential and 163 commercial customers at December 31, 2016 and a January 1 sanitary rate increase of 5% in 2017, 9% in 2018 and 7% in 2019.
- 2) Lifecycle revenue, forecast to be collected from 6,100 residential and 163 commercial customers at December 31, 2016.



- 3) Due to a financial system limitation, revenue is only attributed to a single GL account. CUI records all amounts related to penalties and interest in the water GL even though revenues are more appropriately shared among the four lines of business.
- 4) City of Calgary rates for sanitary services are increasing per the approved rate schedule and estimated at 3% for subsequent years where increases are not yet known.
- 5) In 2015, the Company erroneously recorded sanitary system repairs as an O&M expense rather than as a capitalized asset. Forecast increase in EPCOR services contract costs for 2017 partially offset by reduction in costs related to the completion of the UMP work.
- 6) In prior years, amortization expense for all asset types was included in the rate base revenue requirement. Consistent with CUI's recently adopted Mandate, future years only include amortization expense related to non-contributed assets in the rate base revenue requirement.

Year ending, sanitary, non-contributed asset balances are as follows:

2016 - \$18.4 million	2017 - \$29.1 million
2018 - \$29.7 million	2019 - \$29.7 million

- 7) One new full time position is being added in 2017 to support water services, this increase is offset by the reorganization of resources described **Section 3.1** of these materials.
- 8) Financing costs related to the new projects described in **Table 3.3.1** below assuming an 100% financing in 2017 and an 80% financing requirement in subsequent years.
- 9) 50% reduction in chemical costs forecast for 2017 and further reductions of an additional 25% in 2018 and 2019 related to the H2S Mitigation project described more fully in **Appendix 1 – Section 3.10** of these materials.
- 10) 40% allocation as described in **Section 3.1** of these materials.
- 11) The value of DCAs is determined by the City of Chestermere as projects are completed. Given that this revenue is excluded from the rate base revenue requirement Management has set the forecast for future years to zero. Quarterly financing reports will see this value updated as information is provided.
- 12) In prior years, amortization expense for all asset types was included in the rate base revenue requirement. Consistent with CUI's recently adopted Mandate, future years only include amortization expense related to non-contributed assets in the rate base revenue requirement.

Year ending, sanitary, contributed asset balances are as follows:

2016 - \$12.8 million	2017 - \$31.7 million
2018 - \$39.5 million	2019 - \$43.5 million

- 13) Includes revenue from existing (signed) development agreements.

**Table 3.3.1 Sanitary Capital Plan 2017 – 2021 (\$000s)**

Project	Project Type	2017	2018	2019	2020	2021	Total Project Cost
Sanitary							
<i>Lift Station 13 Forcemain</i>	<i>S/G</i>	<i>8,106</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>8,400</i>
<i>Rainbow Road Gravity Sanitary Trunk Phase 1</i>	<i>S/G</i>	<i>3,749</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>4,200</i>
Rainbow Road Gravity Sanitary Trunk Phase 2	G	100	4,000	4,000	0	0	8,100
Lift Station 2 & 3 Upgrade	S	1,711	0	0	0	0	1,875
<i>Lift Station 5 FM Diversion</i>	<i>S</i>	<i>486</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>486</i>
Lift Station 1 Refurbishment	S	0	291	0	0	0	291
Lift Station 5 Refurbishment	S	0	0	0	0	232	232
Lift Station 6 Refurbishment	S	0	284	0	0	0	284
<i>Lift Station 7 Refurbishment & WCD Sewer Upgrade</i>	<i>S</i>	<i>969</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>969</i>
<i>Lift Station 8 FM Diversion</i>	<i>S</i>	<i>314</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>314</i>
Lift Station 8 Refurbishment	S	334	0	0	0	0	334
<i>Lift Station 9 Upgrade</i>	<i>S</i>	<i>631</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>631</i>
<i>Sandpiper Dr. Gravity Upgrade</i>	<i>S</i>	<i>450</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>450</i>
H2S Mitigation Project	S	954	0	0	0	0	954
Lift Station 14	G	330	2,200	0	0	0	2,530
Lift Station 14 Forcemain	G	240	1,600	0	0	0	1,840
Lift Station 10 Security System	S	20	0	0	0	0	20
Lift Station 13 Security System	S	20	0	0	0	0	20
		18,413	8,424	4,000	0	232	31,979

Notes: Project Type S = Sustaining, G = Growth

Projects noted in green italics have been identified by the latest draft of the UMP as being required “**Immediately**” to bring the system into compliance with Alberta Environment standards

Please see **Appendix 1 - Section 3.0** of these materials for a more complete explanation of the 2017 capital projects listed above.

3.4 Solid Waste Operations & Capital

CUI provides approximately 5,466 residential customers with curbside collection services and operates the community recycle depot (the “Depot”) seven days a week, 365 days per year with 71 operating hours per week.

In service of the City of Chestermere’s Strategic Plan, Principle # 4, Environmental Sustainability; in the summer of 2015 CUI implemented curbside garbage, organics and recycling collection for its residential customers. Weekly collection of recycling and waste materials is provided year-round with weekly collection of organic materials May 1 thru October 31 each year and bi-weekly collection for the balance of the year. No change is contemplated to this level of service in the 2017 – 2019 planning period.

CUI’s goal is to divert 70% of the solid waste stream from landfill in 2016, and 80% by the end of 2017.



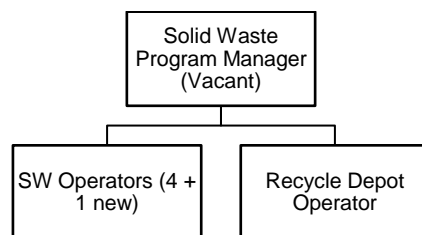
2017 represents the final year of a fee for service arrangement which sees CUI providing weekly curbside collection of lake weeds to Chestermere’s lakefront property owners from July to October. CUI agreed to provide this service for a period of three years beginning in 2015 having received funds from the City to purchase the carts which support the recycling and organics collection program. The cost of providing this service is currently recovered through the solid waste collection rate. No changes are contemplated to this level of service in 2017. CUI will work with City Administration to determine the best path forward for future years.

Changes since the 2016 Rates Filing

Persistent contractor performance issues resulted in CUI terminating the service contracts with its curbside collection services providers in 2015 and 2016 in accordance with the terms of the applicable contracts. CUI insourced collection services of recycling, garbage and organics and has been able to perform the services on a much more cost effective basis. Partial year savings in 2016 are estimated at \$360,000 versus 2016 Budget converting a forecast, 2016 rate base net income (loss) of (\$15,000) to a forecast net income of \$304,000.

To provide these services, CUI operates five refuse collection vehicles and currently utilizes a leased garage to store and service the trucks. Safe and reliable operations of refuse trucks with air systems (brakes and other hydraulic equipment) requires that trucks be stored indoors. Over the summer of 2016 Management undertook a market analysis of available leased space and looked at the option of constructing an owned facility at an existing CUI location suitable for the storage and maintenance of the solid waste fleet. It was determined that building a facility at the location of the water transfer station on Rainbow Road and Merganser Drive best met CUI’s operational requirements in the most cost effective manner. Accordingly, a competitive request for proposal was undertaken resulting in Board approval of a \$755,000 capital project beginning in Q4 2016 for completion in Q2 2017.

CUI is currently recruiting for a new Solid Waste Program Manager. As a result, the 2016 capital project to automate fleet management has been to deferred to 2017.



2017 will see the addition of one Solid Waste Operator position to ensure appropriate coverage for daily collection services. The solid waste operators are also cross trained to support stormwater operations in the event of severe weather.



As noted in **Section 1** of these materials CUI is recommending the introduction of a new solid waste rate, the Recycle Centre fee. In the 2016 Budget the costs of operating the Recycle Depot (the “Depot”) were recovered through the single solid waste collection rate of \$23.89. As highlighted in CUI’s 2015 report to the community, we continue to see utilization of the Depot increase, even as curbside recycling is available to most our residential customers. Clearly, the safe and efficient operation of the Depot benefits all of Chestermere’s residents. As such CUI sees the implementation of this new rate and its application to all residential customers as consistent with principles set out in the Mandate and is aligned with the City’s Strategic Plan, Principle # 2, User Pay.

Even with the introduction of a newly proposed Recycle Centre Fee in 2017 and the 1.8% RoE, the efficiencies created allow CUI to request an overall 9% decrease in solid waste collection rates for 2017.



CHESTERMERE UTILITIES INC.

Solid Waste Statement of Operations & Comprehensive Income
2015 - 2019
(\$000's)

	<u>2015 Actual</u>	<u>2016 Forecast</u>	<u>2017 Budget</u>	<u>2018 Budget</u>	<u>2019 Budget</u>
Revenue					
Sale of goods and services ¹	1,511	1,889	1,852	2,020	2,223
Other revenue ²	12	0	0	0	0
Penalties and interest income ³	0	0	0	0	0
	<u>1,522</u>	<u>1,889</u>	<u>1,852</u>	<u>2,020</u>	<u>2,223</u>
Expenses					
Garbage, recycling and organics disposal fees ⁴	374	308	398	421	445
Contracted Services ⁵	658	229	92	94	96
Amortization ⁶	80	108	125	168	247
Salaries, wages and benefits ⁷	339	481	523	533	544
Financing costs ⁸	0	0	7	18	24
Materials, goods and supplies ⁹	82	140	225	230	234
General and administrative expenses	96	109	112	100	88
Other expenses	20	0	0	0	0
	<u>1,648</u>	<u>1,376</u>	<u>1,482</u>	<u>1,564</u>	<u>1,678</u>
Admin and board expenses allocation ¹⁰	180	209	258	273	270
Rate base net income (loss) for the year	<u>-306</u>	<u>304</u>	<u>113</u>	<u>184</u>	<u>274</u>
Contributed assets ¹¹	0	0	0	-49	-75
Contributed asset amortization	0	0	0	0	0
Offsite levy revenue	0	0	0	0	0
Offsite levy expense	0	0	0	0	0
Accretion of preferred shares	0	0	0	0	0
Net income (loss) for the year	<u>-306</u>	<u>304</u>	<u>113</u>	<u>135</u>	<u>199</u>

Notes:

- Forecast 5,466 collection customers and 6,127 Recycle Centre fee eligible customers at December 31, 2016. January 1 solid waste rate decrease of 9% in 2017, and an increase of 5% in 2018 and 7% in 2019.
- 2015 other revenue is related to performance penalties charged to one of the outsourced collection providers.



- 3) Due to a financial system limitation, revenue is only attributed to a single GL account. CUI records all amounts related to penalties and interest in the water GL even though revenues are more appropriately shared among the four lines of business.
- 4) Waste disposal fees increasing by 3% at the City of Calgary Landfill in 2017 and 7% at the organics disposal facility. Increased costs at the recycling disposal facility are expected to be offset by decreased contamination costs.
- 5) Decreased costs due to insourcing of curbside collection programs.
- 6) In prior years, amortization expense for all asset types was included in the rate base revenue requirement. Consistent with CUI's recently adopted Mandate, future years only include amortization expense related to non-contributed assets in the rate base revenue requirement.

Year ending, non-contributed asset balances are as follows.

2016 - \$949,000	2017 - \$1.7 million
2018 - \$1.9 million	2019 - \$2.2 million

- 7) One new full time operator position is being added in 2017 to support curbside collection. This increase is offset by the reorganization of resources described in **Section 3.1** of these materials.
- 8) Financing costs related to the new projects described in **Table 3.4.1** below assuming an 80% debt / 20% equity ratio.
- 9) Increased costs the result of budgeting for collection vehicle fuel and maintenance costs
- 10) Reorganization to move Customer Relations (billing) staff and related charges in Administration budget as described in **Section 3.1** of these materials.
- 11) Loss on sale of non-contributed assets (non-rate base/non-cash item)

Table 3.4.1 Solid Waste 2017 – 2021 Capital Plan (\$000s)

Project	Project Type	2017	2018	2019	2020	2021	Total Project Cost
Solid Waste							
Tracking Equipment	S	90	0	0	0	0	90
Truck Acquisition & Replacements	S	0	300	300	100	300	1,150
Truck Storage & Maintenance Facility	S	620	0	0	0	0	745
		710	300	300	100	300	1,985

Notes: Project Type S = Sustaining, G = Growth



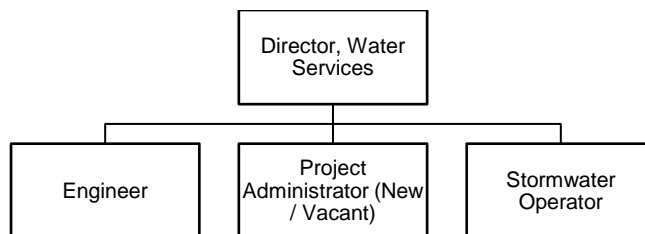
3.5 Stormwater Operations & Capital

CUI serves approximately 6,108 residential and 184 commercial stormwater customers. CUI directly operates its stormwater system which is comprised of a 61 KM network of storm gravity sewers, 1 KM of a storm forcemain, 950 catch basins, 13 storm sceptors, six vortechs and seven other chambers. In 2017 CUI expects to add 85 residential and 8 commercial customers. CUI's three-year business plan assumes 209 residential and 11 commercial customer additions in 2018 and a further 166 residential and 15 commercial customers in 2019.

The stormwater system information as it currently exists in the GIS database needs a significant update so that it more effectively supports the planning, operations and maintenance activities and enhances our ability to respond to customer calls in the event of severe weather events. In order to complete the required update, a physical inventory of the underground stormwater (and wastewater) networks must be undertaken.

Over the past summer, CUI hired summer students to assist in the physical surveying of the existing stormwater manholes (in the older parts of the system) and the entry of pertinent data into the GIS system. As portions of the system are inspected priorities can be established for repairs and preventative maintenance. As a result of the work completed to date CUI has forecast an annual spend of approximately 2% of the total asset value in repair and maintenance work.

The operations, planning for life cycle maintenance, replacement and expansion for growth are supported by the following positions within CUI's organization. The costs for these roles is apportioned equally between the water and sanitary service lines with the stormwater operator position fully allocated to the stormwater service line.



As described in **Section 3.4** of these materials, stormwater emergency operations are supported through the cross training of CUI's solid waste operators. As the requirement for such support has been minimal there is no cost sharing of these resources between the business units.



Storm Statement of Operations & Comprehensive Income
2015 - 2019
(\$000's)

	<u>2015 Actual</u>	<u>2016 Forecast</u>	<u>2017 Budget</u>	<u>2018 Budget</u>	<u>2019 Budget</u>
Revenue					
Sale of goods and services ¹	723	911	1,528	1,879	2,241
Other revenue	0	0	0	0	0
Penalties and interest income ²	0	0	0	0	0
	<u>723</u>	<u>911</u>	<u>1,528</u>	<u>1,879</u>	<u>2,241</u>
Expenses					
Water supply and waste management charges	0	0	0	0	0
Contracted Services ³	350	195	429	437	446
Amortization ⁴	351	333	292	292	292
Salaries, wages and benefits ⁵	185	180	229	234	239
Financing costs ⁶	0	0	31	60	59
Materials, goods and supplies	15	10	16	17	17
General and administrative expenses	17	17	19	19	20
Other expenses	0	0	0	0	0
	<u>919</u>	<u>735</u>	<u>1,017</u>	<u>1,061</u>	<u>1,073</u>
Admin and board expenses allocation ⁷	86	100	212	254	273
Rate base net income (loss) for the year	<u>-282</u>	<u>75</u>	<u>298</u>	<u>565</u>	<u>895</u>
Contributed assets ⁸	2,875	2,287	0	0	0
Contributed asset amortization ⁹	0	0	129	169	169
Offsite levy revenue ¹⁰	0	0	0	0	0
Offsite levy expense ¹¹	0	0	0	24	48
Accretion of preferred shares	0	0	0	0	0
Net income (loss) for the year	<u>2,593</u>	<u>2,362</u>	<u>169</u>	<u>372</u>	<u>678</u>

Notes:

- 1) Forecast 6,108 residential and 184 commercial customers December 31, 2016 and a January 1 stormwater rate increase of 59% in 2017, 19% in 2018 and 16% in 2019
- 2) 2015 Actuals included costs related to the flood recovery efforts.

As described in Section 3.5, costs for the 2017 through 2019 planning period reflect the implementation of a systematic approach to preventative maintenance and repair.



- 3) Due to a financial system limitation, revenue is only attributed to a single GL account. CUI records all amounts related to penalties and interest in the water GL even though revenues are more appropriately shared among the four lines of business.
- 4) In prior years, amortization expense for all asset types was included in the rate base revenue requirement. Consistent with CUI's recently adopted Mandate, future years only include amortization expense related to non-contributed assets in the rate base revenue requirement.

Year ending, non-contributed stormwater asset balances are as follows.

2016 - \$15.2 million	2017 - \$17.7 million
2018 - \$17.7 million	2019 - \$17.7 million

- 5) Includes one new full time position to support water services and a larger allocation of Director / Engineering time to storm operations than in prior years.
- 6) Financing costs related to the new projects described in **Table 3.5.1** below assuming an 80% debt / 20% equity ratio.
- 7) Reorganization to move Customer Relations (billing) staff and related charges in Administration budget as described in **Section 3.1** of these materials.
- 8) The value of DCAs is determined by the City of Chestermere as projects are completed. Given that this revenue is excluded from the rate base revenue requirement Management has set the forecast for future years to zero. Quarterly financing reports will see this value updated as information is provided.
- 9) In prior years, amortization expense for all asset types was included in the rate base revenue requirement. Consistent with CUI's recently adopted Mandate, future years only include amortization expense related to non-contributed assets in the rate base revenue requirement.

Year ending, stormwater, contributed asset balances are as follows.

2016 - \$6.5 million	2017 - \$6.5 million
2018 - \$8.5 million	2019 - \$8.5 million

- 10) There are currently no signed development agreements which include stormwater OSLs.
- 11) CUI's first OSL funded storm project is expected to occur in 2018 as illustrated in **Table 3.5.1** below.

**Table 3.5.1 Storm Capital Plan 2017-2021 (\$000s)**

Project	Project Type	2017	2018	2019	2020	2021	Total Project Cost
Storm							
Westmere Pond Upgrade	S	2,538	0	0	0	0	2,538
CSMI Phase 1	G	0	2,000	0	0	0	2,000
		2,538	2,000	0	0	0	4,538

Notes: Project Type S = Sustaining, G = Growth

Please see **Appendix 1 - Section 4.0** for a more complete explanation of the 2017 capital projects listed above.