



**108 Myrtle Road
Beaver Dam, WI 53916**

November 27, 2018

TO: Alderpersons & Mayor

RE: 2018 Wastewater Utility Rate Study

As you may be aware the Wastewater Utility authorized a rate study to evaluate the sufficiency of the existing sewer rates looking toward 2019 and beyond. Some of this data has been included in the 2019 budget summary of which you have reviewed and approved. The rate study recommends that the sewer rates be increased as indicated on the attached sewer rate schedule. This amounts to an overall increase of 35%. This will be discussed in more detail by the accounting firm that we utilize, but the following are the primary reasons for the necessity of this increase at this time.

1. Due to production efficiencies and ownership uncertainties, industrial revenue has decreased.
2. Our current rate structure is heavily weighted to usage, which can lead to fluctuating revenue. This rate study recommendation begins to shift more costs to fixed charges which are more stable.
3. As explained in the 2019 budget summary, additional funds need to be allocated to the sanitary infrastructure. Our televising program that we implemented beginning in 2017 has revealed that we have a substantial amount of sanitary work that needs to be done. This will be the beginning of a multi-year approach to replace and rehab sewer lines

An ordinance amendment to adopt the sewer user rates recommended in the rate study will be on the December 3, 2018 Operations Committee agenda. I have attached several supporting documents for you review. If you have any questions before next Monday or anytime for that matter, feel free to contact myself or John Somers.

Sincerely,

Rob Minnema

Director of Utilities

rminnema@cityofbeaverdam.com

(920) 887-4625

CC: John Somers, Director of Administration
Jeremy Klug, Utilities Foreman

Beaver Dam Sewer Utility
 Comparison of Present and Proposed Rates
 Test Year 2018

	Present	Proposed
Monthly Fixed Charges:		
<u>Meter Size:</u>		
5/8"	\$ 16.10	\$ 27.00
3/4"	\$ 16.10	\$ 27.00
1"	\$ 27.50	\$ 41.00
1-1/4"	\$ 36.30	\$ 64.00
1-1/2"	\$ 46.10	\$ 92.00
2"	\$ 68.50	\$ 158.00
3"	\$ 120.80	\$ 251.00
4"	\$ 195.60	\$ 484.00
6"	\$ 382.70	\$ 764.00
Volume Charge:		
Per 100 cubic feet	\$ 1.86	\$ 2.58
High Strength Surcharges:		
BOD per lb in excess of 220 mg/l	\$ 0.39	\$ 0.49
SS per lb in excess of 240 mg/l	\$ 0.33	\$ 0.40
High Strength Whey/gallon	\$ 0.04	\$ 0.025

Please refer to Accountant's Compilation Report and Summary of Significant Accounting Policies and Significant Assumptions.

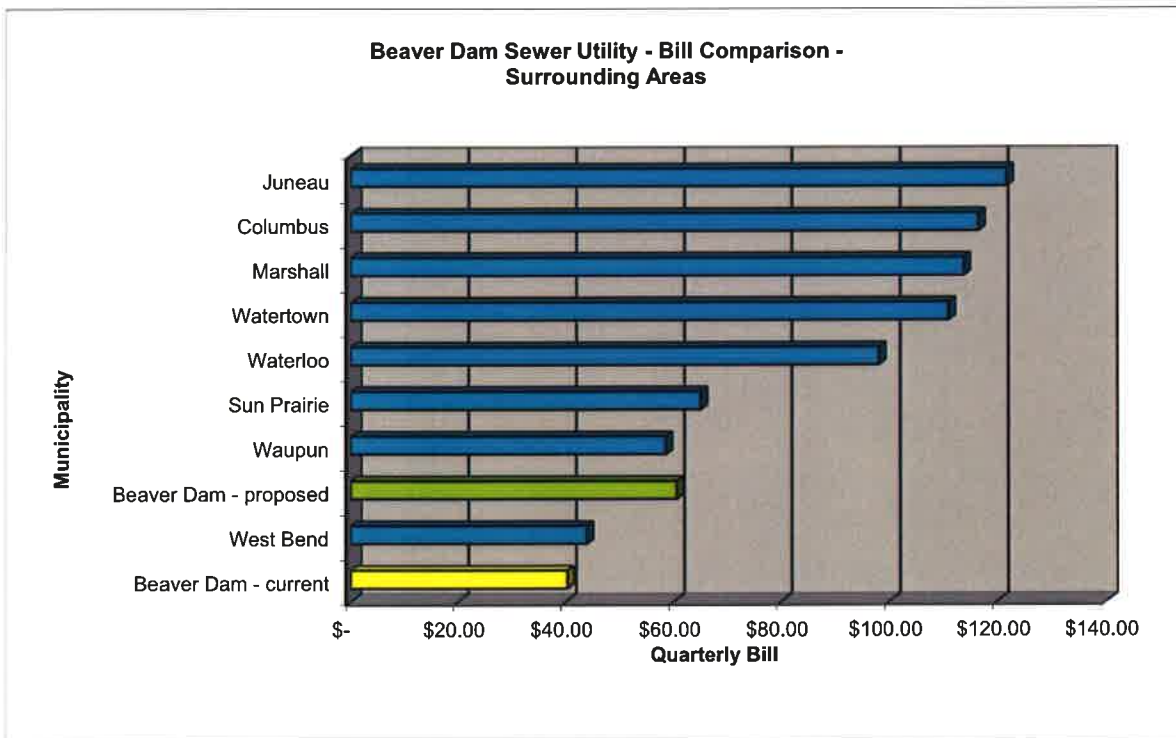
Beaver Dam Sewer Utility
Quarterly Bill Comparison
Test Year 2018

Customer	Meter Size	Quarterly Volume (00 cubic feet)	Quarterly Bill			
			Present	Proposed	\$ Change	% Change
Residential - average	5/8"	13	\$ 40.28	\$ 60.54	\$ 20.26	50.30%
Residential	5/8"	20	\$ 53.30	\$ 78.60	\$ 25.30	47.47%
Multifamily Residential - average	1"	240	\$ 473.90	\$ 660.20	\$ 186.30	39.31%
Multifamily Residential	2"	300	\$ 626.50	\$ 932.00	\$ 305.50	48.76%
Commercial - average	5/8"	55	\$ 118.40	\$ 168.90	\$ 50.50	42.65%
Commercial	1-1/2"	80	\$ 194.90	\$ 298.40	\$ 103.50	53.10%
Industrial	1"	500	\$ 957.50	\$ 1,331.00	\$ 373.50	39.01%
Industrial - largest customer (A)	2"	138	\$ 353,650.68	\$ 405,289.47	\$ 51,638.79	14.60%
Public Authority - average	1"	99	\$ 211.64	\$ 296.42	\$ 84.78	40.06%

Please refer to Accountant's Compilation Report and Summary of Significant Accounting Policies and Significant Assumptions.

Beaver Dam Sewer Utility
 Bill Comparison - Surrounding Communities
 Test Year 2018

Municipality	Quarterly Charges Residential Bill - 13 CCF
Beaver Dam - current	\$ 40.28
West Bend	\$ 43.90
Beaver Dam - proposed	\$ 60.54
Waupun	\$ 58.56
Sun Prairie	\$ 65.00
Waterloo	\$ 98.08
Watertown	\$ 110.97
Marshall	\$ 113.77
Columbus	\$ 116.48
Juneau	\$ 121.65



Please refer to Accountant's Compilation Report and Summary of Significant Accounting Policies and Significant Assumptions.

SEWER RATE HISTORY...1985 - PRESENT

SEWER USE RATES - Residential Customer-5/8 inch meter

Average use of 13 units/quarter

(1 unit is 100 ft³ or 748 gallons)

	Fixed Charge	Volume Charge	Average Use	Sewer Cost-Quarterly	
1985	\$ 16.33	\$ 1.34	13	\$ 33.75	
1986	\$ 16.33	\$ 1.34	13	\$ 33.75	
1987	\$ 16.33	\$ 1.34	13	\$ 33.75	
1988	\$ 16.33	\$ 1.34	13	\$ 33.75	
1989	\$ 16.33	\$ 1.34	13	\$ 33.75	
1990	\$ 16.33	\$ 1.34	13	\$ 33.75	
1991	\$ 16.33	\$ 1.34	13	\$ 33.75	
1992	\$ 16.33	\$ 1.34	13	\$ 33.75	
1993	\$ 16.33	\$ 1.34	13	\$ 33.75	
1994	\$ 16.33	\$ 1.34	13	\$ 33.75	
1995	\$ 16.33	\$ 1.34	13	\$ 33.75	
1996	\$ 16.33	\$ 1.34	13	\$ 33.75	
1997	\$ 14.20	\$ 1.22	13	\$ 30.06	-10.93%
1998	\$ 14.20	\$ 1.22	13	\$ 30.06	
1999	\$ 14.20	\$ 1.22	13	\$ 30.06	
2000	\$ 14.20	\$ 1.22	13	\$ 30.06	
2001	\$ 14.20	\$ 1.22	13	\$ 30.06	
2002	\$ 14.20	\$ 1.22	13	\$ 30.06	
2003	\$ 14.20	\$ 1.22	13	\$ 30.06	
2004	\$ 14.20	\$ 1.22	13	\$ 30.06	
2005	\$ 14.20	\$ 1.22	13	\$ 30.06	
2006	\$ 14.20	\$ 1.22	13	\$ 30.06	
2007	\$ 14.20	\$ 1.22	13	\$ 30.06	
2008	\$ 14.20	\$ 1.22	13	\$ 30.06	
2009	\$ 15.20	\$ 1.31	13	\$ 32.23	7.22%
2010	\$ 15.20	\$ 1.31	13	\$ 32.23	
2011	\$ 15.20	\$ 1.31	13	\$ 32.23	
2012	\$ 15.20	\$ 1.31	13	\$ 32.23	
2013	\$ 15.20	\$ 1.31	13	\$ 32.23	
2014	\$ 15.20	\$ 1.31	13	\$ 32.23	
2015	\$ 16.10	\$ 1.86	13	\$ 40.28	24.98% (Overall 38% increase)
2016	\$ 16.10	\$ 1.86	13	\$ 40.28	
2017	\$ 16.10	\$ 1.86	13	\$ 40.28	
2018	\$ 16.10	\$ 1.86	13	\$ 40.28	
2019	\$ 27.00	\$ 2.58	13	\$ 60.54	50.30% (Overall 35% increase)

Total Percent Increase from 1985 to 2015	19.35%
Annual Percent Increase from 1985 to 2015	0.62%

Total Percent Increase from 1985 to 2019	79.38%
Annual Percent Increase from 1985 to 2019	2.27%

WATER BILLING - RATE COMPARISON

Average Residential User (13 CCF)

	<u>Beaver Dam</u>	<u>Fond du Lac</u>	<u>Sun Prairie</u>	<u>Watertown</u>	<u>Waupun</u>	<u>Columbus</u>	<u>Horicon</u>	<u>Juneau</u>
Public FP Charge-Quarterly	\$ 16.50	\$ 19.20	\$ 14.31	\$ 25.80	\$ 47.37	\$ 30.90	\$ 18.75	\$ 42.60
Meter Service Charge-Quarterly	\$ 18.00	\$ 44.00	\$ 17.40	\$ 25.20	\$ 41.46	\$ 40.50	\$ 27.00	\$ 24.60
Rate Charge per/100 ft3	\$ 3.19	\$ 4.74	\$ 1.66	\$ 3.80	\$ 5.34	\$ 3.50	\$ 3.11	\$ 3.50

Average Residential Use-13 (100 ft3)	\$ 41.47	\$ 61.62	\$ 21.58	\$ 49.40	\$ 69.42	\$ 45.50	\$ 40.43	\$ 45.50
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Quarterly Cost-Avg Residential User	\$ 75.97	\$ 124.82	\$ 53.29	\$ 100.40	\$ 158.25	\$ 116.90	\$ 86.18	\$ 112.70
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SEWER BILLING - RATE COMPARISON

	<u>Beaver Dam-Current</u>	<u>Beaver Dam-Proposed</u>	<u>Fond du Lac</u>	<u>Sun Prairie</u>	<u>Watertown</u>	<u>Waupun</u>	<u>Columbus</u>	<u>Horicon</u>	<u>Juneau</u>
Meter Service Charge-Quarterly	\$ 16.10	\$ 27.00	\$ 37.50	\$ 27.69	\$ 65.34	\$ 18.39	\$ 47.10	\$ 19.80	\$ 56.40
Rate Charge per/100 ft3	\$ 1.86	\$ 2.58	\$ 3.91	\$ 2.87	\$ 3.51	\$ 3.09	\$ 5.65	\$ 6.66	\$ 5.03

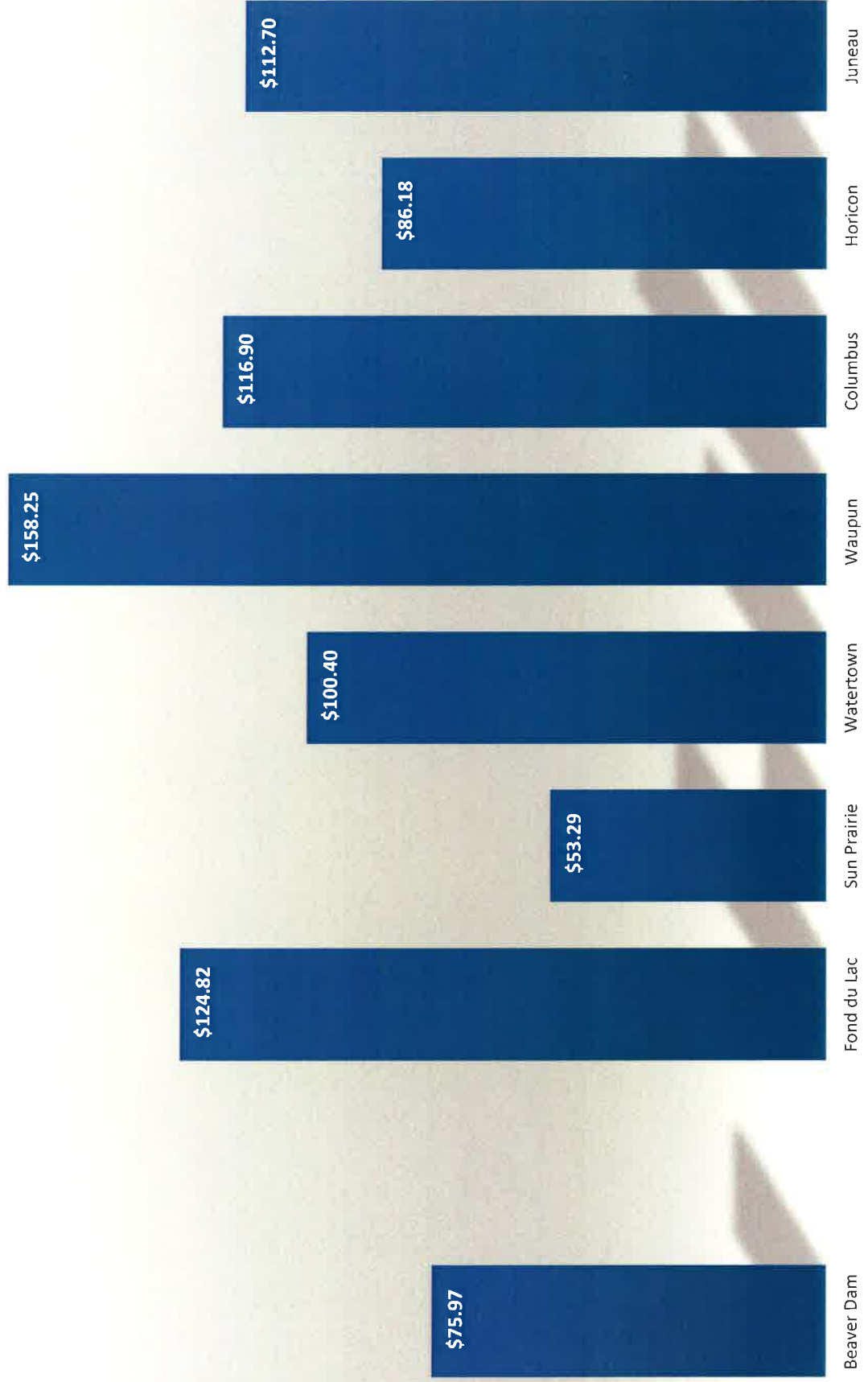
Average Residential Use-13 (100 ft3)	\$ 24.18	\$ 33.54	\$ 50.83	\$ 37.31	\$ 45.63	\$ 40.17	\$ 73.45	\$ 86.58	\$ 65.39
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Quarterly Cost-Avg Residential User	\$ 40.28	\$ 60.54	\$ 88.33	\$ 65.00	\$ 110.97	\$ 58.56	\$ 120.55	\$ 106.38	\$ 121.79
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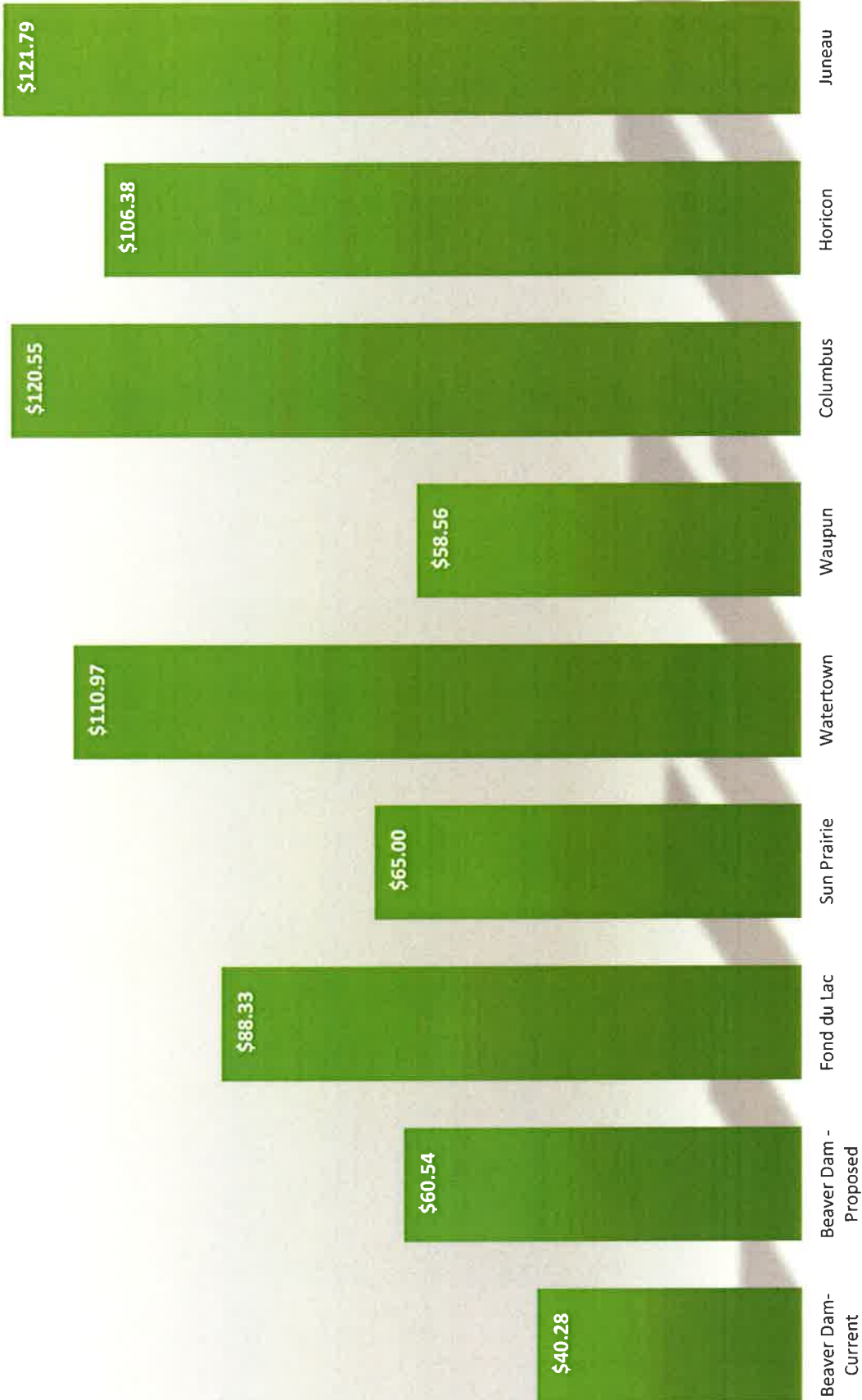
COMBINED WATER & SEWER - RATE COMPARISON

	<u>Beaver Dam-Current</u>	<u>Beaver Dam-Proposed</u>	<u>Fond du Lac</u>	<u>Sun Prairie</u>	<u>Watertown</u>	<u>Waupun</u>	<u>Columbus</u>	<u>Horicon</u>	<u>Juneau</u>
Total Costs - Quarterly	\$ 116.25	\$ 136.51	\$ 213.15	\$ 118.29	\$ 211.37	\$ 216.81	\$ 237.45	\$ 192.56	\$ 234.49

Average Residential User-Water Rate Comparison (Quarterly Charges)



Average Residential User-Sewer Rate Comparison (Quarterly Charges)



Average Residential User-Water/Sewer Rates Combined (Quarterly)

