

**VILLAGE OF WESTON, MARATHON COUNTY, WISCONSIN
5500 SCHOFIELD AVENUE, WESTON, WI 54476
REQUEST FOR CONSIDERATION**

PUBLIC MTG/DATE:	BOARD OF TRUSTEES – 7/16/2018
DESCRIPTION:	RECOMMEND IMPLEMENTING A SEWER RATE INCREASE IN 2018.
FROM:	KEITH DONNER, DIRECTOR OF PUBLIC WORKS JESSICA TRAUTMAN, FINANCE DIRECTOR
QUESTION:	SHOULD THE VILLAGE IMPLEMENT A SEWER RATE INCREASE IN 2018, AS RECOMMENDED BY THE DIRECTOR OF PUBLIC WORKS, DIRECTOR OF FINANCE, AND THE VILLAGE’S CONSULTANT?

BACKGROUND

The Village retained MSA Professional Services in 2016 to update the sewer use ordinance and review the Village’s user rates. Based on assumptions that the Village would be increasing its level of sewer system maintenance and with anticipated capital projects, a 16.7% increase in volume charges and 14% increase in base charges was recommended by MSA. The Board of Trustees concurred with the recommendations and, also, with the recommendation to implement the increase concurrently with a water rate increase, expected to be implemented later in 2017. The water rate increase was delayed in filing and has now reached the stage of rate recommendation for a public hearing on August 1, 2018. It is now expected that the water rates would be made effective September 1, 2018, assuming the PSC’s rate order following the public hearing is received prior to September 1, 2018. With the delay in the water rate increase and no new capital projects by the sewer utility no increase has yet been implemented. MSA was asked to review the rate recommendations in May 2018. The assumptions in the Village’s rate needs include a generally higher level of maintenance (approximately \$100,000 higher than historical levels) for main and manhole rehabilitation as well as capital projects in 2019 and beyond. A new piece of information was the impacts of treatment facility upgrades by the Rib Mountain Metropolitan Sewerage District (RMMSD). Plant upgrades have been anticipated for some time but, are now a reality with the estimated rate increase from RMMSD of between 16 and 17%. This translates to approximately \$113,000 for Weston or approximately a 5% increase in operating expense. MSA has updated their review to include this increase in 2019. The recommendation is to increase base and volume charges for Weston sewer utility customers by 15% to 16% in 2018 and hold the rates through 2019. The next expected increase will be in 2020.

COMMITTEE ACTION:	BOARD OF TRUSTEES APPROVED PROCESS ON 2/20/2017 FINANCE COMMITTEE APPROVED UPDATED PROPOSAL, 7/02/2018
--------------------------	---

Are there additional reference documents which have been attached to this report?

VILLAGE OF WESTON, MARATHON COUNTY, WISCONSIN
5500 SCHOFIELD AVENUE, WESTON, WI 54476
REQUEST FOR CONSIDERATION

FISCAL IMPACT: OVERALL 15.3% INCREASE IN CHARGES FOR A TYPICAL RESIDENTIAL CUSTOMER USING 12,000 GALLONS OF WATER PER QUARTER. UTILITY REVENUE IS PROJECTED TO INCREASE BY APPROXIMATELY 5% (\pm \$100,000) IN 2018 IF THE RATES ARE IMPLEMENTED EFFECTIVE SEPTEMBER 1. INCREASE IN TOTAL REVENUE FOR 2019, WILL BE AN ADDITIONAL 10% (\pm \$200,000) OVER 2018. SEE ATTACHED AND LINKED INFORMATION.

RECOMMENDATION: DIRECTORS RECOMMEND APPROVAL OF THE PROPOSED 15% INCREASE IN RATES FOR THE SEWER UTILITY EFFECTIVE SEPTEMBER 1, 2018.

RECOMMENDED LANGUAGE FOR OFFICIAL ACTION

I MOVE TO APPROVE THE 15% INCREASE IN RATES FOR THE SEWER UTILITY EFFECTIVE SEPTEMBER 1, 2018, AS RECOMMENDED BY THE DIRECTOR OF PUBLIC WORKS & UTILITIES, FINANCE DIRECTOR, THE VILLAGE'S CONSULTANT, AND THE FINANCE COMMITTEE.

Additional action: Consent approval by Public Works Committee.

Additional documents:

Resolution 2018-039

Updated documents from MSA Sewer Rate Evaluation

E-mail string from Eric Donaldson (RMMSD), et. al. re: Estimated rate increase from RMMSD

Rate model calculations (spreadsheet)

Additional materials in Dropbox folder at following link

<https://www.dropbox.com/sh/z7b6z4ib0pxnz22/AACbjqrfdUOOBGFFtetelofta?dl=0>

Are there additional reference documents which have been attached to this report?



VILLAGE OF WESTON, MARATHON COUNTY, WISCONSIN

RESOLUTION NO. 2018-039

**A RESOLUTION TO
INCREASE RATES FOR SANITARY SEWER UTILITY SERVICE**

WHEREAS, Section 86.4.112 of the Village of Weston Ordinances provides that the Village Board shall set municipal sewer rates from time to time; and

WHEREAS, it has been determined that in order to obtain sufficient revenues for the purposes enumerated in said ordinance, an increase in the 2018 sewer rate is necessary.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Trustees of the Village of Weston,

THAT, the minimum quarterly charges for all customer classifications shall be based on meter size(s) as follows:

<u>Meter Size</u>	<u>Quarterly Sewer Base Rate</u>
5/8" or 3/4"	\$ 33.00
1"	\$ 98.50
1-1/2"	\$ 197.00
2"	\$ 328.00
3"	\$ 754.00
4"	\$1,344.00
6"	\$3,016.00

THAT, the Unmetered sewer service flat fee shall now be \$ 92.50 per quarter; and

THAT, the user volume charges shall be \$3.45 per 1,000 gallons; and

THAT, the effective date of these rate changes shall be September 1, 2018, or the effective date of a pending water rate increase, whichever is later; and

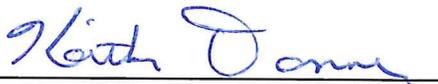
THAT, charges for those customers receiving a quarterly bill which includes consumption prior to the effective date and after the effective date shall be pro-rated rates based on the number of days in the billing period prior to the effective date and at the new rates based on the number of days in the billing period following the effective date of the new rates.

**PASSED BY THE BOARD OF TRUSTEES OF THE VILLAGE OF WESTON, at
a regular meeting thereof, this 16th day of the month of July 2018.**

VILLAGE OF WESTON, a Municipal Corporation of the State of Wisconsin.

By: 
BARBARA ERMELING, President

ATTEST

By: 
KEITH DONNER, Director of Public Works

FILED:
By: 
SHERRY WEINKAUF, Clerk

TABLE 1 - REVENUE AND EXPENSE SUMMARY

5/8" Meter \$	28.50 \$	30.64 \$	32.78 \$	34.42 \$	35.80 \$	36.87 \$	37.98 \$	39.12
1,000 gal \$	3.00 \$	3.23 \$	3.45 \$	3.62 \$	3.76 \$	3.87 \$	3.99 \$	4.11

ITEM	2015	2016	2017	2018 (est., revised)	2019 (Financial Plan)	2020	2021	2022	2023	2024	
	<i>Updated 6/2018 from tb</i>	<i>Updated 6/2018 from tb</i>	<i>Updated 5/2018</i>	<i>Updated 6/2018 from tb</i>	<i>Updated 6/2018 from tb</i>	<i>MSA Projections >>>>></i>					
				<i>With half-year rate increase of 15%</i>	<i>Increase (enter as decimal):</i>	<i>5.0%</i>	<i>4.0%</i>	<i>3.0%</i>	<i>3.0%</i>	<i>3.0%</i>	
REVENUES, as provided by Weston (no rate increase, until 2nd half of 2018 est)											
Metered Sales	1,971,261	1,955,521	\$ 1,983,700	2,132,477	2,281,255	2,395,318	2,491,130	2,565,864	2,642,840	2,722,126	
All other Sources	230,441	108,017	\$ 325,420	153,649	153,649	153,649	153,649	153,649	153,649	153,649	
TOTAL REVENUES	2,201,702	2,063,538	\$ 2,309,120	2,286,126	2,434,904	2,548,967	2,644,779	2,719,513	2,796,489	2,875,775	
EXPENSES											
	Cost % Adjustments, 2018 +					<i>MSA Projections >>>>></i>					
Operation and Maintenance	2.0%	372,960	241,753	396,256	336,970	411,970	420,209	428,614	437,186	445,930	454,848
Administration	2.5%	166,480	225,417	204,614	359,421	279,421	286,407	293,567	300,906	308,429	316,139
Payment in Lieu of Taxes	1.5%	7,778	8,676	9,581	9,000	9,000	9,135	9,272	9,411	9,552	9,696
Depreciation (Incl Prin Pmts)	N/A	656,409	661,972	671,822	675,000	675,000	741,374	777,184	800,184	823,184	846,184
2.00% RMMSD O & M Expenses	2.2%	605,086	768,371	680,610	707,133	823,810	840,286	857,092	874,234	891,718	909,553
RMMSD Debt Expenses	N/A	-	-	-	-	-	-	-	-	-	-
1.50% Schofield (Wausau) Treatment Charges	11.9%	109,893	111,120	111,237	120,882	120,882	122,695	124,536	126,404	128,300	130,224
Existing Debt Service Expenses (Int)	N/A	119,680	106,703	93,168	73,570	57,070	43,670	11,048	-	-	-
CIP Debt Service Expenses (Int only, Prin in deprec)		-	-	-	-	15,725	82,809	120,466	145,500	169,293	191,810
TOTAL EXPENSES <i>(This goes to Options page, Sewer Rate Summary and Projections Table 2)</i>		2,038,287	2,124,011	2,167,288	2,281,976	2,392,878	2,546,586	2,621,778	2,693,824	2,776,406	2,858,454

TABLE 2 - WESTON SEWER RATE SUMMARY AND PROJECTIONS

YEAR	2017	2018	2019	2020	2021	2022	2023	2024
Actual or Projected Total Expenses (1)	\$ 2,167,288	\$ 2,281,976	\$ 2,392,878	\$ 2,546,586	\$ 2,621,778	\$ 2,693,824	\$ 2,776,406	\$ 2,858,454
Projected Non-operating (Other) Income =	\$ 325,420	\$ 153,649	\$ 153,649	\$ 153,649	\$ 153,649	\$ 153,649	\$ 153,649	\$ 153,649
Required Operating Revenue from metered sales =	\$ 1,971,261	\$ 2,128,327	\$ 2,263,351	\$ 2,392,937	\$ 2,468,129	\$ 2,540,175	\$ 2,622,757	\$ 2,704,805
Base Charge, Quarterly, 5/8" Meter =	\$ 28.50	\$ 30.64	\$ 32.78	\$ 34.42	\$ 35.80	\$ 36.87	\$ 37.98	\$ 39.12
Estimated Revenue from Base Charges =	\$ 751,614	\$ 808,051	\$ 864,488	\$ 907,739	\$ 944,133	\$ 972,351	\$ 1,001,625	\$ 1,031,689
Required Revenue from Volume Charges =	\$ 1,219,647	\$ 1,320,276	\$ 1,398,863	\$ 1,485,198	\$ 1,523,996	\$ 1,567,824	\$ 1,621,132	\$ 1,673,116
Volume Charge Per 1,000 =	\$ 3.00	\$ 3.23	\$ 3.45	\$ 3.62	\$ 3.76	\$ 3.87	\$ 3.99	\$ 4.11
Volume ('000, Based on 2017 actual and 2018 estimated flow) =	410,750	406,844	406,844	406,844	406,844	406,844	406,844	406,844
Estimated Revenue from Volume Charges =	\$ 1,232,250	\$ 1,314,105	\$ 1,403,611	\$ 1,472,774	\$ 1,529,732	\$ 1,574,485	\$ 1,623,306	\$ 1,672,127
Revenue Excess (Shortfall) from Metered Sales =	\$ 141,996.25	\$ (6,170.97)	\$ 28,869.62	\$ (12,423.96)	\$ 5,735.93	\$ 6,661.07	\$ 2,173.91	\$ (988.06)
Rate Increase Overall Per Year =	0%	Net = 15% between 2018 & 19		5.0%	4.0%	3.0%	3.0%	3.0%
Est. Dollar Increase each year =		\$ 138,292	\$ 145,943	\$ 112,414	\$ 93,352	\$ 72,971	\$ 78,095	\$ 78,886
		Dollar increase if rates had been implemented for full year in 2018:		\$ 284,235				
Est. Revenue for Debt Calculation	\$ 2,309,284	\$ 2,275,805	\$ 2,421,748	\$ 2,534,162	\$ 2,627,514	\$ 2,700,485	\$ 2,778,580	\$ 2,857,466
Est. Expenses minus Depreciation & Debt Service (I-pmts, debt costs) (2)	\$ 1,402,298	\$ 1,533,406	\$ 1,645,083	\$ 1,678,732	\$ 1,713,080	\$ 1,748,140	\$ 1,783,929	\$ 1,820,460
Net Revenue minus Adjusted Expenses	\$ 906,986	\$ 742,399	\$ 776,665	\$ 855,429	\$ 914,434	\$ 952,345	\$ 994,651	\$ 1,037,006
Debt P&I = Old Debt plus new debt for CIP (3)	\$ 546,060	\$ 551,560	\$ 400,409	\$ 580,719	\$ 686,480	\$ 386,316	\$ 453,531	\$ 520,747
Debt Coverage (must be at least 125%) (4)	166%	135%	194%	147%	133%	247%	219%	199%

1: Revised CIP 2018 has construction in 2019, 20, 21 of 0.6M, 2.9M, and 1.8M then 1M assumed each year after. COLA projections by line are between 1.5% and 3%.

2: Additional Loans - Principal included in depreciation, Interest in debt service expenses. Therefore Depreciation must be funded.

3: All CIP costs are assumed to be financed except as noted. Upon evaluation of needs, some of the CIP costs could possibly be paid directly from the Capital and Replacement Fund.

4: Check on debt coverage: Old Loan requires 125% cover.

TABLE 5 – WESTON PROPOSED RATE SCHEDULE

YEAR	2017	2018	2019	2020	2021	2022	2023	2024
Base Charge, Quarterly, 5/8" Meter =	\$ 28.50	\$ 30.64	\$ 32.78	\$ 34.42	\$ 35.80	\$ 36.87	\$ 37.98	\$ 39.12
Volume Charge Per 1,000 =	\$ 3.00	\$ 3.23	\$ 3.45	\$ 3.62	\$ 3.76	\$ 3.87	\$ 3.99	\$ 4.11
Rate Increase Overall =	0%	Net = 15% between 2018 & 19		5%	4%	3%	3%	3%

TABLE 6 - IMPACT ON A RESIDENTIAL USER AT 55,000 GALLON PER YEAR USAGE

YEAR:	2017	2018	2019	2020	2021	2022	2023	2024
Assumed Rate Increases	0%	Net = 15% between 2018 & 19		5.0%	4.0%	3.0%	3.0%	3.0%
Average Residential User, Quarterly Billing								
Assumed Average Residential Volume: 55,000 gallons per year								
Fixed:	\$ 28.50	\$ 30.64	\$ 32.78	\$ 34.42	\$ 35.80	\$ 36.87	\$ 37.98	\$ 39.12
Volume:	\$ 41.25	\$ 44.41	\$ 47.44	\$ 49.78	\$ 51.70	\$ 53.21	\$ 54.86	\$ 56.51
Total Quarterly Bill:	\$ 69.75	\$ 75.05	\$ 80.22	\$ 84.20	\$ 87.50	\$ 90.08	\$ 92.84	\$ 95.63
Total Quarterly Difference from Previous Year:		\$ 5.30	\$ 5.17	\$ 3.98	\$ 3.30	\$ 2.58	\$ 2.76	\$ 2.79
Total Annual Sewer Bill:	\$ 279.00	\$ 300.20	\$ 320.88	\$ 336.80	\$ 350.00	\$ 360.32	\$ 371.36	\$ 382.52
Total Annual Difference from Previous Year:		\$ 21.20	\$ 20.68	\$ 15.92	\$ 13.20	\$ 10.32	\$ 11.04	\$ 11.16

TABLE 7 - CHARGE TYPES VERSUS TOTAL REVENUE

YEAR:	2017	2018	2019	2020	2021	2022	2023	2024
Total Revenue Required	\$ 2,167,288	\$ 2,281,976	\$ 2,392,878	\$ 2,546,586	\$ 2,621,778	\$ 2,693,824	\$ 2,776,406	\$ 2,858,454
Base Charge	\$ 751,614	\$ 808,051	\$ 864,488	\$ 907,739	\$ 944,133	\$ 972,351	\$ 1,001,625	\$ 1,031,689
Proportion: Base Charge to Total Revenue Required:	34.7%	35.4%	36.1%	35.6%	36.0%	36.1%	36.1%	36.1%
Volume Charge	\$ 1,232,250	\$ 1,314,105	\$ 1,403,611	\$ 1,472,774	\$ 1,529,732	\$ 1,574,485	\$ 1,623,306	\$ 1,672,127
Proportion: Volume Charge to Total Revenue Required:	56.9%	57.6%	58.7%	57.8%	58.3%	58.4%	58.5%	58.5%
Non-Operating Income	\$ 325,420	\$ 153,649	\$ 153,649	\$ 153,649	\$ 153,649	\$ 153,649	\$ 153,649	\$ 153,649
Proportion: Non-Operating Income to Total Revenue Required:	15.0%	6.7%	6.4%	6.0%	5.9%	5.7%	5.5%	5.4%
Typical Fixed Costs:								
Debt Costs (P&I)	\$ 546,060	\$ 551,560	\$ 400,409	\$ 580,719	\$ 686,480	\$ 386,316	\$ 453,531	\$ 520,747
Fixed Costs (O&M) (Admin + PILOT) (1)	\$ 214,195	\$ 368,421	\$ 288,421	\$ 295,542	\$ 302,839	\$ 310,317	\$ 317,981	\$ 325,835
Sum "Fixed" Costs	\$ 760,255	\$ 919,981	\$ 688,830	\$ 876,260	\$ 989,319	\$ 696,633	\$ 771,512	\$ 846,582
Proportion: "Fixed" Costs to Total Revenue Required:	35.1%	40.3%	28.8%	34.4%	37.7%	25.9%	27.8%	29.6%
Compare: Does Base charge cover 'Fixed' costs?	NO	NO	YES	YES	NO	YES	YES	YES
Difference: Surplus (Deficit)	\$ (8,641)	\$ (111,930)	\$ 175,658	\$ 31,478	\$ (45,186)	\$ 275,719	\$ 230,112	\$ 185,107
1: Note that this comparison does not include a detailed analysis of true fixed versus flow components in the O&M budget but only utilizes the Administrative and PILOT costs in the budget. Some Admin Costs would be reduced and some additional O&M costs would be included in a detailed analysis. If there are fixed responsibilities for Schofield or RMMSD those are not included here either.								

From: [Keith Donner](#)
To: [Community Development Authority](#); [Public Works Committee](#)
Cc: [Daniel Guild](#); [Department Directors](#)
Subject: FW: RMMSD Treatment Facility Capacity
Date: Wednesday, May 16, 2018 2:01:00 PM

FYI

Following discussion at last night's CDA meeting and relative to our sewerage system and sewer rates, some information below about the Rib Mountain Metropolitan Sewerage District (regional) wastewater treatment facility which we are tributary to. The rates Eric Donaldson lists below compare to 2018 rates as follows:

Wastewater Loading	Units	2018 rate	Estimated 2019 Rate	% increase from 2018
Flow	\$/1,000 gallons	0.543	0.6305	16.1%
Biochemical Oxygen Demand (BOD)	\$/pound	0.201	0.2329	15.9%
Suspended Solids (SS)	\$/pound	0.135	0.1574	16.6%

This increase is not currently factored into the pending rate increase we have proposed for the sewer utility of approximately 16% overall. An additional 16% increase from RMMSD would add approximately \$113,000 of expense and require overall rate increase of 5% to cover (RMMSD Debt Service). This excludes any additional O&M charges from RMMSD in 2019 also.

I had asked MSA to re-look at the sewer rate increase in a follow-up to their rate study in 2017.

Keith

From: Eric <eric.rmmsd@frontier.com>
Sent: Wednesday, May 16, 2018 1:25 PM
To: Keith Donner <kdonner@westonwi.gov>
Subject: RE: RMMSD Treatment Facility Capacity

Keith-

Thanks for the email.

Yes, we are under construction. They should be done by late summer, early fall. Yes, the design flow did go up slightly, from 4.27 mgd to 4.4 mgd.

Also correct on the average flow is about 3.0 mgd. We have no indication of any new dischargers at this time. So we will continue to operate at about 68% of capacity (3.0/4.4) unless someone wants to connect.

As for Phosphorus TMDL, the short answer to your question is 'no'. The DNR has published TMDL limits based on both current criteria and site specific criteria, but it is not clear as to which limit will ultimately apply. The cost to comply with those limits differs by perhaps 3 orders of magnitude (10s of thousands of dollars versus 10s of millions).

RMMSD borrowed money from Wisconsin's Clean Water Fund to pay for the project. I will include the rate increase for this debt payment with the draft budget this Fall. I have included here estimates of the rate increase to pay for the project, but keep in mind these numbers will change once I have final numbers after the project is done:

0.0875 \$/1000 gal for flow

0.0319 \$/ pound BOD

0.0224 \$/pound TSS

Let me know if you have any further questions. I'm glad to help.

Later-

Eric.

From: Keith Donner <kdonner@westonwi.gov>

Sent: Tuesday, May 15, 2018 7:19 PM

To: Eric <eric.rmmsd@frontier.com>

Subject: RMMSD Treatment Facility Capacity

Hi Eric:

We are discussing planning issues and the topic of the RMMSD Plant Capacity has come up. I see in a draft of the Wausau Urban Area Sewer Service Plan that the planned improvements at the plant are supposed to increase your hydraulic capacity to 4.4 MGD or thereabouts? I also see that your projected hydraulic loading in your 2018 budget is slightly over 1 billion gallons per year or about 3.0 MGD. Can you confirm what the current hydraulic capacity is and your take on percentage of capacity used? Also that the future hydraulic capacity is not appreciably higher?

Do we know the implications of the Phosphorous TMDL to your facility and to RMMSD customers? Will those change any projections?

I gather you are in the midst of capital improvements at the facility on the basis of the Sewer Service Plan draft? Will there be debt service payments passed on to customers beginning in 2019 or if not when would you project those to be included in your rate calculations?

Probably could be more articulate. Any help is appreciated. Thanks!

[Keith Donner, P.E.](#)

Weston Sewer Utility
2018 Financial Projections

06/28/18

Weston Sewer Utility
2018/2019 Financial Projections

06/28/18

2018 Estimate (June 2018)

2019 Estimate (September 2018) Full year increase

Actual Total Expenses for 2017	\$ 2,161,003
Non-operating (Other) Income	\$ 325,310
Operating Revenue from metered sales =	\$ 1,983,700
Revenue from Base Charges	\$ 798,278
Revenue Required from Volume Charges =	\$ 1,185,422

Projected Total Expenses for 2018	\$ 2,281,976
Projected Non-operating (Other) Income	\$ 153,649
Required Operating Revenue from metered sales =	\$ 2,128,327
Estimated Revenue from Base Charges	\$ 845,868
Required Revenue from Volume Charges =	\$ 1,282,459

Projected Total Expenses for 2019	\$ 2,392,878
Projected Non-operating (Other) Income	\$ 153,649
Required Operating Revenue from metered sales =	\$ 2,239,229
Estimated Revenue from Base Charges	\$ 929,732
Required Revenue from Volume Charges =	\$ 1,309,497

Revenue from Volume Charges based on billed volume = \$ 1,284,357
Units Billed in (1000's of gallons) = 428,119.0 @ \$3.00

Estimated Revenue from Volume Charges Before September 1 = \$ 849,201
2/3 of 424,600 @ \$3.00
Total \$\$ from Metered Sales(Volume) \$ 1,337,490

Estimated Revenue from Volume Charges After September 1 = \$ 488,289
2/3 of 424,600 @ \$3.45
141,533 @ \$3.45

Estimated Revenue from Volume Charges = \$ 1,464,870
424,600.0 @ \$3.45

Revenue Excess (Shortfall) from metered sales =	98,935.0 actual excess	Revenue Excess (Shortfall) from metered sales =	55,030.9 Excess	Revenue Excess (Shortfall) from metered sales =	155,373.0 Excess
---	------------------------	---	-----------------	---	------------------

Meter Size	2017 Base Charge Revenues Meter Count = same as 2017 PSC Report (12/31/17)					Estimated 2018 Base Charge Revenues, Through September 1 Base charges unchanged until September 1, 2018, 2018 Customer count as of 12/31/17					Estimated 2018 Base Charge Revenues, After September 1 Base charges increased 15% on September 1, 2018. Customer count as of 10/15/16					Estimated 2017/2018 Base Charge Revenues with \$0.50/1000 Increase Base charges unchanged Customer count as of 10/31/14				
	Rate/Qtr.	Base Charge Ratio (multiple of 5/8")	Number of Meters	Equivalent Meters	Total Annual Charges	Rate/Qtr.	Base Charge Ratio (multiple of 5/8")	Number of Meters	Equivalent Meters	Total Annual Charges	Rate/Qtr.	Base Charge Ratio (multiple of 5/8")	Number of Meters	Equivalent Meters	Total Annual Charges	Rate/Qtr.	Base Charge Ratio (multiple of 5/8")	Number of Meters	Equivalent Meters	Total Annual Charges
5/8" / 3/4"	\$28.50	1.0	5,002	5,002.0	\$ 570,228	\$28.50	1.0	5,002	5,002.0	\$ 570,228	\$33.00	1.0	5,002	5,002.0	\$ 660,264	\$33.00	1.0	5,002	5,002.0	\$ 660,264
1"	\$85.50	3.0	122	366.0	\$ 41,724	\$85.50	3.0	122	366.0	\$ 41,724	\$98.50	3.0	122	366.0	\$ 48,068	\$98.50	3.0	122	366.0	\$ 48,068
1 1/2"	\$171.00	6.0	132	792.0	\$ 90,288	\$171.00	6.0	132	792.0	\$ 90,288	\$197.00	6.0	132	792.0	\$ 104,016	\$197.00	6.0	132	792.0	\$ 104,016
2"	\$284.00	10.0	34	338.8	\$ 38,624	\$284.00	10.0	34	338.8	\$ 38,624	\$328.00	9.9	34	336.6	\$ 44,608	\$328.00	9.9	34	336.6	\$ 44,608
3"	\$654.00	22.9	13	298.3	\$ 34,008	\$654.00	22.9	13	298.3	\$ 34,008	\$754.00	22.8	13	296.4	\$ 39,208	\$754.00	22.8	13	296.4	\$ 39,208
4"	\$1,164.00	40.8	4	163.4	\$ 18,624	\$1,164.00	40.8	4	163.4	\$ 18,624	\$1,344.00	40.7	4	162.8	\$ 21,504	\$1,344.00	40.7	4	162.8	\$ 21,504
6"	\$2,610.00	91.6	1	91.6	\$ 10,440	\$2,610.00	91.6	1	91.6	\$ 10,440	\$3,016.00	91.4	1	91.4	\$ 12,064	\$3,016.00	91.4	1	91.4	\$ 12,064
Totals			5,308.0	7,052.1	\$ 803,936			5,308.0	7,052.1	\$ 803,936			5,308.0	7,047.2	\$ 929,732			5,308.0	7,047.2	\$ 929,732
				Net Actual Base Charges	\$ 798,278				Estimated Base Charges	\$ 535,957				Estimated Base Charges	\$ 309,911					\$ 929,732
Revenue Excess/(Shortfall)					\$ 98,935										\$ 55,031					\$ 155,373
Increase in Base Rate Needed (%)					-12.31%										-5.92%					NA
Increase in total equivalent meters needed					(868)										(417)					NA
Increase in volume charges to meet total revenue target					-8.35%										-4.29%					NA
Average Quarterly Residential Bill (48,000 gallons per year)																				
				Base Charge	\$ 28.50				Base Charge	\$ 28.50				\$ 33.00						\$ 33.00
				Volume Charge	\$ 36.00				Volume Charge	\$ 36.00				\$ 41.40						\$ 41.40
				Total	\$ 64.50				Total	\$ 64.50				\$ 74.40						\$ 74.40
														% increase	15.3%					0.0%