

1309150

**City of Merrill  
Water & Sewage Disposal Committee  
Wednesday, August 28, 2013 at 5:00 P.M.  
Basement Conference Room, City Hall, 1004 East First Street**

Members Present (2 of 3): Alderwoman Kandy Peterson and Alderman Rob Norton. Alderman John Burgener (Chairperson) had an excused absence.

Others Present: Mayor Bill Bialecki, City Administrator Dave Johnson, Utility Superintendent Kim Kriewald, Finance Director Kathy Unertl, John Mayer, Alderman Dave Sukow and City Clerk Bill Heideman. A student was in attendance to videotape the meeting for the Cable Access Channel.

**Call to order**

In the absence of Alderman Burgener, Alderman Norton called the meeting to order at 5:00 P.M.

**Vouchers**

The vouchers were in the meeting packet.

Motion (Peterson/Norton) to approve the vouchers as presented. Carried.

**Consider water rate increase proposal prepared by John Mayer**

Information was in the meeting packet.

Utility Rate Consultant John Mayer gave a presentation on a water rate increase proposal that he has prepared. If the rate increase is approved, it is estimated it would provide the utility with an estimated additional \$120,858, which represents a 9.45% increase in revenues. This would allow the cash flow to pay for normal water main replacement and other capital expenditures without the need to borrow. It would also be a large step in maintaining the excellent financial health the utility has enjoyed over the past several decades.

Mr. Mayer explained that, since it takes some time for the Public Service Commission to review and make decisions on applications, he is seeking authorization to submit the proposal as soon as possible. He noted that, if the Common Council does not approve the proposed increase, the application could always be withdrawn later.

Motion (Norton/Peterson) to authorize John Mayer to submit, as prepared, a water rate increase proposal to the Public Service Commission for their consideration. Carried.

**MERRILL WATER UTILITY**

**MERRILL, WISCONSIN**

**WATER RATE INCREASE PROPOSAL**

**EXECUTIVE SUMMARY**

**AUGUST 28, 2013**

*John A. Mayer  
Utility Rate Consultant  
Milwaukee, Wisconsin*

# MERRILL WATER UTILITY

## MERRILL, WISCONSIN

### \*\*\* ESTIMATED WATER RATES \*\*\*

#### Summary of Major Findings & Recommendations

1. The water utility's last full rate increase was granted by the Public Service Commission of Wisconsin (PSCW) in a Rate Order stamped with a mailing date of December 30, 2010. That rate order increased water revenues by \$158,951 per year and represented an overall increase of about 13.4%.
2. A "financially prudent" level of utility rates suggests that revenues need to be great enough for the utility to pay all operating expenses, pay debt service principal and interest, and enough cash remaining to pay for "ordinary and typical capital expenditures" for an average year. Ordinary and typical capital projects include such things as replacing water mains in conjunction with road rehabilitation, rebuilding wells / pumps, replacing meters, replacing utility trucks, etc. If the utility needs to spend \$xxx,xxx for capital projects each and every year for the foreseeable future, borrowing for that level of expenditure on an annual basis does not make a lot of financial sense.
3. This is why it does not make financial sense. If the utility needed \$250,000 each year for "normal capital construction" the utility could raise rates to generate \$250,000 to cash finance the construction, or it could borrow the \$500,000 and raise rates to only pay for debt service. Each year the utility would have to borrow another \$250,000 and raise rates to cover the additional debt service. Each year the total debt service would increase because each year another \$250,000 was borrowed. Given a historical "normal level" of interest rates, (not the artificially low current interest rates courtesy of the Federal Reserve), and a maturity schedule of 14 – 18 years, there is a point of equilibrium when the oldest debt issue is paid off but another new debt issue is added. At that point total debt service is approximately 150% of the original borrowing. Ultimately the utility will have raised rates \$375,000 to pay for debt service basically forever versus originally raising rates by \$250,000 to fund "normal capital construction" with cash.
4. Recent inflation adjusted capital expenditure averages are:
  - 10-year: \$239,100
  - 8-year: \$245,800
  - 6-year: \$269,900
  - 4-year: \$219,200

When the last rate study was performed in August 2010 the recommended level of rates was designed to generate an average cash flow of \$359,500 over the 5-year period 2011-2015.

5. The recent construction project to address the high manganese levels in Merrill's well water has caused the expenditure of approximately \$2.4 million. This has caused the water utility to incur two major increases in annual cash expenditures: 1) principal and interest payments of \$106,000 annually, and 2) an increase in the "tax equivalent" paid by the utility to the City of \$56,500. Total increase in cash expenditures by the utility of \$162,500. The utility implemented an across-the-board increase of 3.2% effective August 1, 2012 which increase revenues by \$40,700. This rate increase will increase

revenues by an estimated \$120,900. Grand total of both increases is \$161,600. **This recommended increase is simply the 2<sup>nd</sup> step in increasing revenues to pay for the manganese removal project.** The level of recommended rates will generate an average of \$333,700 for capital expenditures during the 5-year period 2014-2018 which is slightly lower than the 5-year average of \$359,500 anticipated at the time of the 2010 rate study.

6. As is the case with most water and wastewater utilities in Wisconsin, usage continues to decrease. From the last rate increase request in 2010 until now, residential usage down 5.6%; commercial usage up 3.7%; industrial usage up 3.5%; public authority usage down 0.4%; combined total usage down 2.1%. On a longer term perspective, total water sales are down 15.7% from calendar 2003.
7. It is recommended that the City authorize the filing of a rate increase request with the PSCW for an increase of \$120,858 which represents a **9.45% increase** in revenues from water utility customers.
8. If this increase is approved by the PSCW, the bill for general water service [GWS] including public fire protection for the typical residential customer with a 5/8" or 3/4" meter who uses 12,000 gallons (12 Kgals) would increase from \$55.36 to \$61.12 under the estimated future rates. This is an increase of \$5.76 per quarter, or \$1.92 per month. Refer to Schedule 1 for details of the present and estimated new rates. Schedule 2 compares bills for GWS at various levels of usage under the present and proposed rates.
9. Schedule 3 shows a comparison of the Utility's present and proposed water bills with those of a number of communities. The proposed rates are lower than the average of the barometer group of neighboring communities and lower than the average of all Class "C" water utilities.
10. Figure 1 is a pie chart indicating the expense components needed to be paid for from water revenues. Schedule 4A, 4B and Figure 2 show the revenue raised by each customer class under the proposed rates.
11. A "cash flow" coverage ratio is the number of times that the sum of net income and depreciation can pay both principal and interest in a given year. The coverage computation for the 2014 Test Year follows.

	<u>Before Increase</u>	<u>Including Increase</u>
<b>Sources of Cash:</b>		
Operating Revenues	\$1,385,564	\$1,506,422
Less: Oper. Expense (Excl. Depr.)	(1,017,321)	(1,017,321)
Plus: Interest Income	<u>6,900</u>	<u>6,900</u>
Total "Cash Available"	\$ 375,143	\$ 496,001
<b>Uses of Cash:</b>		
Principal	\$ 98,382	\$ 98,382
Interest	35,687	35,687
Less: TIF Rev. / Special Assessment	<u>-0-</u>	<u>-0-</u>
Total "Cash Required"	\$ 134,069	\$ 134,069
<b>Margin Of Safety or "Cushion"</b>	\$ 241,074	\$ 361,932
<b>Cash Flow Coverage Ratio</b>	2.798 x	3.700 x

The projected net cash flow of \$361,932 should permit the utility to fund a typical level of capital replacements without additional borrowing.

12. Recommend that the City authorize the filing of the above water rate increase request with the Public Service Commission of Wisconsin (PSCW).

Periodic rate adjustments are, unfortunately, required in order to keep most utilities in good financial shape. The PSCW's ***Simplified Rate Case (SRC)*** procedure helps in this task. Small, periodic rate increases are far more acceptable to customers and more financially beneficial to the utility, than larger infrequent increases. It is strongly recommended that the utility take advantage of a SRC in March 2015 if it meets all the PSCW's criteria.

#### **Regulation: Public Service Commission of Wisconsin**

The process of obtaining a rate increase from the PSCW follows a specific procedure. The utility submits the filing requirements electronically to the PSCW. The PSCW takes rate cases on a first come first served basis, so typically there is some brief period of inactivity. Once the PSCW begins their review, the first staff member to review the application concentrates on the *Revenue Requirement*. Generally they make changes, some to increase items and some to decrease items. They will then put together their recommendations in the form of an exhibit, which is called the *Staff Revenue Requirement Exhibit*. The utility reviews whatever changes they made, and can make suggestions and/or provide additional information. Ultimately the utility needs to either accept or reject the Staff's recommendation. Typically the utility and the staff reach a compromise agreement.

The *Revenue Requirement Exhibit* is then given to another PSCW Staff member who designs water rates to produce the level of revenue identified in the revenue requirement. The utility's rate consultant typically prepares and submits a rate design to the PSCW in order to indicate the utility's desires to the PSCW. The PSCW may accept the utility's rates, or may present their own rates. Once the utility and the PSCW reach agreement or acceptance, a *Staff Rate Design Exhibit* is prepared, and a telephonic hearing is scheduled.

On the day of the hearing, a 3-way telephone conversation between the PSCW, the utility, and the rate consultant is initiated by the PSCW. Witnesses are sworn in. Exhibits are identified. Generally the utility agrees that it will accept (or at least not object to) the rates as recommended by the PSCW Staff. Public comments are also accepted at this time. About 7 days after the hearing, the official ***Rate Order*** is issued by the PSCW, and the utility is authorized to implement the new rates. The PSCW's web site states that a ***Rate Order*** will likely take 120-150 days from the day the application is filed with them.

#### **Summary**

This increase will provide the utility with a 5-year estimated cash flow of \$333,700 to pay for normal water main replacement and other capital expenditures without the need to borrow. Utilities with the lowest rates are generally those with the least debt. Making the difficult decision to increase rates now will be a large step in maintaining the excellent financial health the utility has enjoyed over the past several decades.

**PRESENT & ESTIMATED RATES**  
RATE STUDY USING UTILITY REVENUE REQUIREMENT AS ORIGINALLY FILED

**General Water Service - Metered**

<b>Meter Size</b>	<b>Quarterly Customer Charge</b>	
	<b>Present</b>	<b>Estimated</b>
5/8"	\$17.80	\$20.50
3/4"	17.80	20.50
1"	27.86	31.00
1½	46.44	51.00
2"	71.21	81.00
3"	114.55	129.00
4"	160.99	184.00
6"	281.74	322.00
8"	430.34	489.00
10"	622.30	708.00
12"	817.34	930.00

<b>Usage In CCF</b>		<b>Present Charge \$/CCF</b>	<b>Estimated Charge \$/CCF</b>
First	40	\$2.15	\$2.41
Next	960	\$1.72	\$1.98
Over	1,000	\$1.28	\$1.54

**General Water Service - Unmetered**

		<b>Quarterly Customer Charge</b>	
		<b>Present</b>	<b>Estimated</b>
<b>Unmetered Water Customers</b>		\$46.37	\$51.83
est. @	14.0 CCF per period for "Present" rates		
est. @	13.0 CCF per period for "Estimated" rates		

**Private Fire Protection**

<b>Size of Connection</b>	<b>Quarterly Customer Charge</b>	
	<b>Present</b>	<b>Estimated</b>
2	\$13.50	\$13.50
3	25.50	25.50
4	43.50	43.50
6	87.00	87.00
8	135.00	135.00
10	210.00	210.00
12	300.00	300.00

**PRESENT & ESTIMATED RATES**

RATE STUDY USING UTILITY REVENUE REQUIREMENT AS ORIGINALLY FILED

**Public Fire Protection**

	<u>Present</u>	<u>Estimated</u>
<b>Annual Charge To Municipality</b>	\$114,540	\$114,540

<b>Meter Size</b>	<b>Quarterly Customer Charge</b>	
	<u>Present</u>	<u>Estimated</u>
5/8"	\$11.76	\$11.70
3/4"	11.76	11.70
1"	29.72	29.40
1½"	58.82	60.00
2"	95.98	93.00
3"	179.57	177.00
4"	297.22	294.00
6"	594.43	588.00
8"	953.57	942.00
10"	1,430.35	1,413.00
12"	1,904.04	1,884.00

**WATER BILL COMPARISON**  
**INCLUDING FIRE PROTECTION DIRECT CHARGE**  
**RATE STUDY USING UTILITY REVENUE REQUIREMENT AS ORIGINALLY FILED**

Qtrly Usage CCF	0.75 " METER				1 " METER				2 " METER			
	Present	Estimated	\$ Chg	% Chg	Present	Estimated	\$ Chg	% Chg	Present	Estimated	\$ Chg	% Chg
0	29.56	32.20	2.64	8.9%								
1	31.71	34.61	2.90	9.1%								
2	33.86	37.02	3.16	9.3%								
3	36.01	39.43	3.42	9.5%								
4	38.16	41.84	3.68	9.6%								
5	40.31	44.25	3.94	9.8%								
6	42.46	46.66	4.20	9.9%								
7	44.61	49.07	4.46	10.0%								
8	46.76	51.48	4.72	10.1%								
9	48.91	53.89	4.98	10.2%								
10	51.06	56.30	5.24	10.3%	79.08	84.50	5.42	6.9%				
11	53.21	58.71	5.50	10.3%	81.23	86.91	5.68	7.0%				
12	55.36	61.12	5.76	10.4%	83.38	89.32	5.94	7.1%				
13	57.51	63.53	6.02	10.5%	85.53	91.73	6.20	7.2%				
14	59.66	65.94	6.28	10.5%	87.68	94.14	6.46	7.4%				
15	61.81	68.35	6.54	10.6%	89.83	96.55	6.72	7.5%				
16	63.96	70.76	6.80	10.6%	91.98	98.96	6.98	7.6%				
17	66.11	73.17	7.06	10.7%	94.13	101.37	7.24	7.7%				
18	68.26	75.58	7.32	10.7%	96.28	103.78	7.50	7.8%				
19	70.41	77.99	7.58	10.8%	98.43	106.19	7.76	7.9%				
20	72.56	80.40	7.84	10.8%	100.58	108.60	8.02	8.0%				
24	81.16	90.04	8.88	10.9%	109.18	118.24	9.06	8.3%				
25	83.31	92.45	9.14	11.0%	111.33	120.65	9.32	8.4%	220.94	234.25	13.31	6.0%
30	94.06	104.50	10.44	11.1%	122.08	132.70	10.62	8.7%	231.69	246.30	14.61	6.3%
35	104.81	116.55	11.74	11.2%	132.83	144.75	11.92	9.0%	242.44	258.35	15.91	6.6%
40	115.56	128.60	13.04	11.3%	143.58	156.80	13.22	9.2%	253.19	270.40	17.21	6.8%
45	124.16	138.50	14.34	11.5%	152.18	166.70	14.52	9.5%	261.79	280.30	18.51	7.1%
50	132.76	148.40	15.64	11.8%	160.78	176.60	15.82	9.8%	270.39	290.20	19.81	7.3%
60	149.96	168.20	18.24	12.2%	177.98	196.40	18.42	10.3%	287.59	310.00	22.41	7.8%
70	167.16	188.00	20.84	12.5%	195.18	216.20	21.02	10.8%	304.79	329.80	25.01	8.2%
80	184.36	207.80	23.44	12.7%	212.38	236.00	23.62	11.1%	321.99	349.60	27.61	8.6%
90	201.56	227.60	26.04	12.9%	229.58	255.80	26.22	11.4%	339.19	369.40	30.21	8.9%
100	218.76	247.40	28.64	13.1%	246.78	275.60	28.82	11.7%	356.39	389.20	32.81	9.2%
150	304.76	346.40	41.64	13.7%	332.78	374.60	41.82	12.6%	442.39	488.20	45.81	10.4%
200	390.76	445.40	54.64	14.0%	418.78	473.60	54.82	13.1%	528.39	587.20	58.81	11.1%
300	562.76	643.40	80.64	14.3%	590.78	671.60	80.82	13.7%	700.39	785.20	84.81	12.1%
400	734.76	841.40	106.64	14.5%	762.78	869.60	106.82	14.0%	872.39	983.20	110.81	12.7%
500	906.76	1,039.40	132.64	14.6%	934.78	1,067.60	132.82	14.2%	1,044.39	1,181.20	136.81	13.1%
750	1,336.76	1,534.40	197.64	14.8%	1,364.78	1,562.60	197.82	14.5%	1,474.39	1,676.20	201.81	13.7%
1000	1,766.76	2,029.40	262.64	14.9%	1,794.78	2,057.60	262.82	14.6%	1,904.39	2,171.20	266.81	14.0%
2000	3,046.76	3,569.40	522.64	17.2%	3,074.78	3,597.60	522.82	17.0%	3,184.39	3,711.20	526.81	16.5%
3000	4,326.76	5,109.40	782.64	18.1%	4,354.78	5,137.60	782.82	18.0%	4,464.39	5,251.20	786.81	17.6%

Avg. Resid. = 12.9 Units/Quarter  
 Typical Resid. = 12.0 Units/Quarter  
 Typical % of Avg. = 93.0%

**WATER BILL COMPARISON**  
**INCLUDING FIRE PROTECTION DIRECT CHARGE**  
**RATE STUDY USING UTILITY REVENUE REQUIREMENT AS ORIGINALLY FILED**

Meter Size (in.)	Customer Type	CCF Used	Quarterly Bill @			
			Present	Proposed	\$ Change	% Change
			\$	\$	\$	%
0.750	Small Residential	6	42.46	46.66	4.20	9.9%
0.750	Typical Residential	12	55.36	61.12	5.76	10.4%
0.750	Large Residential	24	81.16	90.04	8.88	10.9%
0.750	Small Commercial	23	79.01	87.63	8.62	10.9%
1.000	Typical Commercial	46	153.90	168.68	14.78	9.6%
1.500	Large Commercial	138	359.82	401.44	41.62	11.6%
2.000	Very Large Commercial	500	1,044.39	1,181.20	136.81	13.1%
0.750	Industrial	4,000	5,606.76	6,649.40	1,042.64	18.6%
2.000	Very Large Industrial	15,000	19,824.39	23,731.20	3,906.81	19.7%
1.500	Public Authority	62	229.10	250.96	21.86	9.5%
2.000	P/A - School	3,000	4,464.39	5,251.20	786.81	17.6%

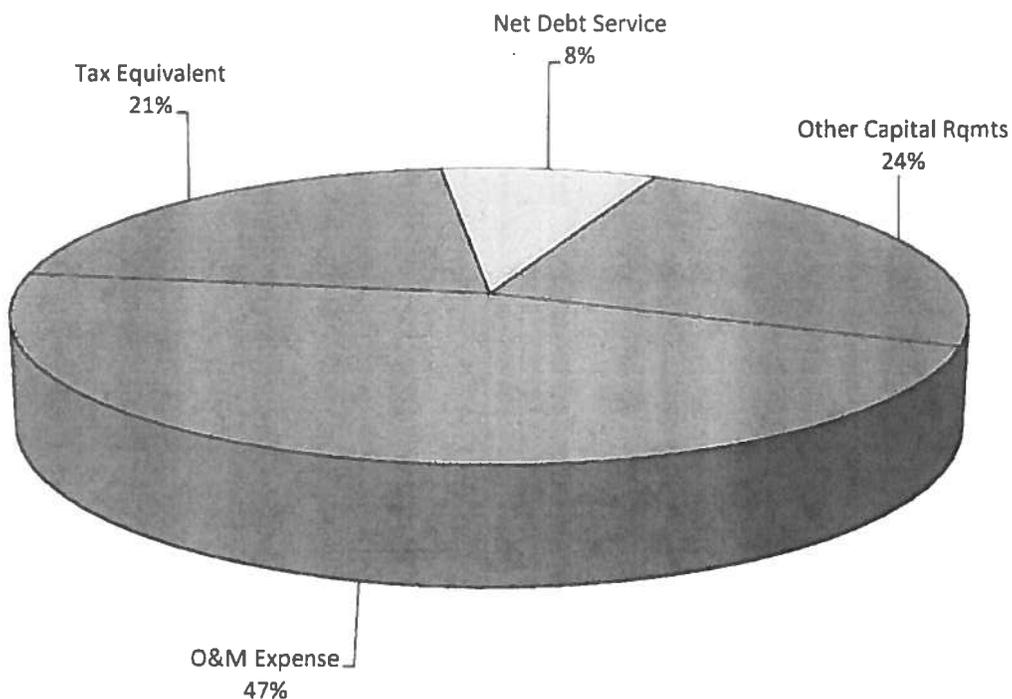
**COMPARISON WITH OTHER WATER RATES**  
RATE STUDY USING UTILITY REVENUE REQUIREMENT AS ORIGINALLY FILED

**QUARTERLY BILLS**  
**5/8" or 3/4" Meter**

Municipality:	Class	Date of Last Rate Order	Bill @ Usage of					
			Minimum	5 CCF	10 CCF	25 CCF	60 CCF	100 CCF
Hurley	D	05/01/2012	33.00	64.88	96.75	<b>192.38</b>	409.50	652.50
Menasha	AB	03/01/2012	33.00	57.00	81.00	<b>153.00</b>	321.00	511.50
Cornell	D	10/20/2012	25.50	48.00	70.50	<b>138.00</b>	285.00	444.00
Ashland	C	05/08/2013	35.40	55.30	75.20	<b>134.90</b>	274.20	433.40
Neenah	AB	01/01/2011	21.00	42.79	64.58	<b>129.94</b>	282.45	456.75
Park Falls	C	09/17/2013	25.18	45.02	64.86	<b>124.37</b>	259.28	394.28
Thorp	D	12/31/2004	42.00	57.86	73.73	<b>121.31</b>	214.35	314.25
Black River Falls	C	09/25/2012	27.87	43.62	59.37	<b>106.62</b>	208.41	315.61
Wisconsin Rapids	AB	06/04/2012	18.00	34.75	51.50	<b>101.75</b>	219.00	353.00
Stanley	D	06/01/2012	19.67	35.05	50.42	<b>96.55</b>	204.17	317.67
Antigo	AB	07/05/2012	26.40	40.40	54.40	<b>96.40</b>	194.40	298.40
Marshfield	AB	01/01/2012	20.40	34.65	48.90	<b>91.65</b>	191.40	305.40
Medford	C	12/10/2012	24.60	36.98	49.35	<b>86.48</b>	169.35	260.85
Prentice	D	01/01/2013	18.59	31.64	44.69	<b>83.84</b>	171.79	255.79
Cadott	D	09/19/2007	14.25	27.71	41.18	<b>81.56</b>	167.55	258.75
<b>Merrill</b>	<b>C</b>	<b>Estimated</b>	24.46	43.73	63.00	<b>80.75</b>	251.86	382.82
Ladysmith	C	05/29/2013	16.20	28.61	41.03	<b>78.26</b>	165.15	251.70
<b>Merrill</b>	<b>C</b>	<b>01/01/2014</b>	17.80	28.55	39.30	<b>71.55</b>	138.20	207.00
Mellen	D	12/16/2011	17.51	27.64	37.76	<b>68.14</b>	128.51	188.51
Eagle River	D	07/30/2004	16.47	26.72	36.97	<b>67.72</b>	139.47	213.07
Tomahawk	C	12/30/2011	15.60	25.60	35.60	<b>65.60</b>	127.60	191.60
Stevens Point	AB	05/01/2012	25.50	33.40	41.30	<b>65.00</b>	120.30	183.50
Durand	D	03/09/2009	20.40	28.73	37.05	<b>62.03</b>	106.05	155.55
Waupaca	C	07/15/2011	15.90	25.05	34.20	<b>61.65</b>	116.88	177.48
Shawano	AB	01/01/2009	21.00	28.90	36.80	<b>60.50</b>	108.90	159.90
Weston	AB	03/18/2009	18.00	25.50	33.00	<b>60.31</b>	135.50	228.50
Rhineland	C	11/21/2008	24.00	31.01	38.03	<b>59.06</b>	107.70	161.10
Phillips	D	12/01/2012	13.55	22.45	31.35	<b>58.05</b>	116.95	174.55
Wausau	AB	07/01/2010	15.45	23.90	32.35	<b>57.70</b>	116.85	178.05
Lakeland SD	C	06/01/2005	13.50	21.23	28.95	<b>52.13</b>	103.10	146.30
Chippewa Falls	AB	12/01/2009	18.69	25.09	31.49	<b>50.69</b>	90.99	136.19
Menomonie	AB	12/01/2002	12.33	19.18	26.03	<b>46.58</b>	84.33	125.53
<b>Average w/o Merrill</b>			<b>\$21.63</b>	<b>\$34.95</b>	<b>\$48.28</b>	<b>\$88.40</b>	<b>\$178.00</b>	<b>\$274.79</b>
<b>Merrill</b>	<b>C</b>	<b>01/01/2014</b>	17.80	28.55	39.30	71.55	138.20	207.00
<b>Merrill</b>	<b>C</b>	<b>Estimated</b>	20.50	32.55	44.60	80.75	156.50	235.70
Mean of All Class C Utilities -		07/03/2013	\$23.07	\$34.48	\$46.05	\$80.90	\$159.21	\$243.31
Mean of All Classes -		07/03/2013	\$25.28	\$37.73	\$50.33	\$88.31	\$172.51	\$263.24
Present Rates +/- Selected Communities			-17.71%	-18.32%	-18.59%	-19.07%	-22.36%	-24.67%
Present Rates +/- Mean Class "C"			-22.83%	-17.21%	-14.65%	-11.55%	-13.20%	-14.92%
Present Rates +/- Mean All Classes			-29.60%	-24.33%	-21.91%	-18.98%	-19.89%	-21.36%
Estimated Rates +/- Selected Communities			-5.23%	-6.88%	-7.62%	-8.66%	-12.08%	-14.23%
Estimated Rates +/- Mean Class "C"			-11.13%	-5.61%	-3.14%	-0.18%	-1.70%	-3.13%
Estimated Rates +/- Mean All Classes			-18.92%	-13.73%	-11.38%	-8.56%	-9.28%	-10.46%

RATE STUDY USING UTILITY REVENUE REQUIREMENT AS ORIGINALLY FILED

EXPENSE COMPONENTS



EXPENSE COMPONENTS	% of Total	
	\$	Expense
O&M Expense	700,730	46.5%
Tax Equivalent	316,591	21.0%
Net Debt Service	127,169	8.4%
Other Capital Rqmts	361,932	24.0%
<b>Total Revenue Needed</b>	<b>\$1,506,422</b>	<b>100.00%</b>
<b>REVENUE NEEDED FROM RATES</b>	<b>\$1,506,422</b>	

**SUMMARY - PRESENT & ESTIMATED REVENUES**  
**RATE STUDY USING UTILITY REVENUE REQUIREMENT AS ORIGINALLY FILED**

	Revenues Under		Dollar Change	Percent Change
	Present	Estimated		
	Rates	Rates		
	\$	\$	\$	%
Residential	595,536	675,525	79,989	13.4%
Commercial	192,611	219,184	26,573	13.8%
Industrial	60,364	69,822	9,459	15.7%
Public Auth.	53,922	61,833	7,910	14.7%
Public Fire Prot. - Ad Valorem	114,540	114,540	0	0.0%
Public Fire Prot. - Direct Charge	229,322	227,491	(1,831)	-0.8%
Private Fire Prot.	31,470	31,470	0	0.0%
Misc. Revenues	107,800	107,800	0	0.0%
<b>Total Revenues</b>	<b>1,385,564</b>	<b>1,507,664</b>	<b>122,100</b>	<b>8.8%</b>
<b><u>Revenues from Water Customers</u></b>				
R, C, I, P/A, & Direct Charge PFP	1,131,754	1,253,854	122,100	10.8%

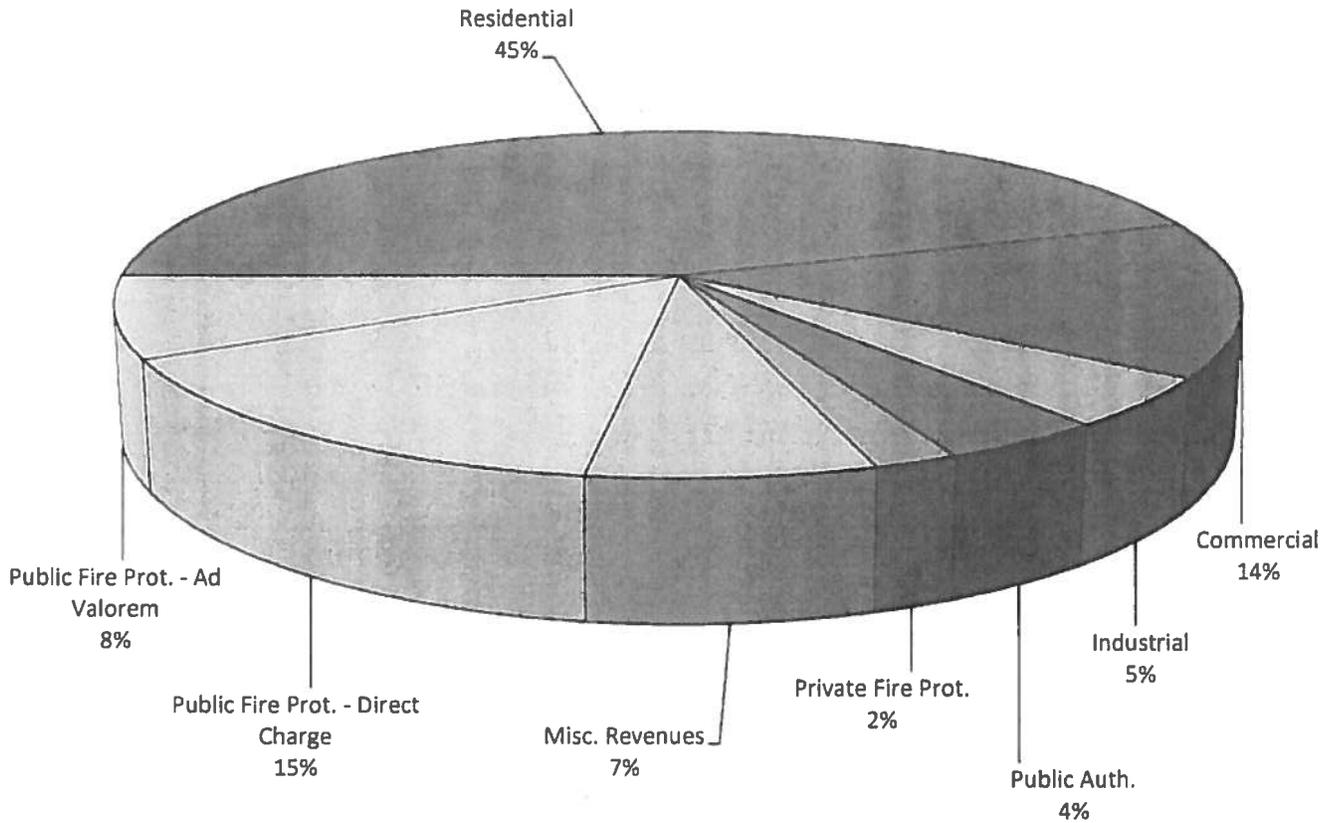
**SUMMARY - PRESENT & ESTIMATED REVENUES**  
 RATE STUDY USING UTILITY REVENUE REQUIREMENT AS ORIGINALLY FILED

	Revenue Under Present Rates	Adj. Cost of Service	Revenue Under Estimated Rates	Dollar Increase Over Present Rates	Cost of Service Increase Indicated	Achieved Increase Over Present Rates	% Over/ (Under) Cost of Service	Direct Charge PFP Revenues	Total Combined Revenues	Total Combined Increase
	\$	\$	\$	\$	%	%	%	\$	\$	%
Residential	595,536	670,127	675,525	79,989	12.5%	13.4%	0.8%	155,104	830,628	10.5%
Commercial	192,611	222,188	219,184	26,573	15.4%	13.8%	-1.4%	46,782	265,966	10.8%
Industrial	60,364	69,910	69,822	9,459	15.8%	15.7%	-0.1%	8,213	78,035	13.6%
Public Auth.	53,922	61,788	61,833	7,910	14.6%	14.7%	0.1%	17,393	79,225	10.6%
Public Fire Prot - Ad Valorem	114,540	114,540	114,540	0	0.0%	0.0%	0.0%		114,540	
Public Fire Prot. - Direct Charge	229,322	228,598	227,491	(1,831)	-0.3%	-0.8%	-0.5%			
Public Fire Prot Direct - Residential	155,908	155,104	155,104	(805)	-0.5%	-0.5%	0.0%			
Public Fire Prot Direct - Commercial	47,376	46,782	46,782	(594)	-1.3%	-1.3%	0.0%			
Public Fire Prot. Direct - Industrial	8,331	8,213	8,213	(119)	-1.4%	-1.4%	0.0%			
Public Fire Prot. Direct - Public Auth.	17,707	17,393	17,393	(314)	-1.8%	-1.8%	0.0%			
Private Fire Prot	31,470	31,470	31,470	0	0.0%	0.0%	0.0%		31,470	
Misc. Revenues	107,800	107,800	107,800	0	0.0%	0.0%	0.0%		107,800	
<b>Total Revenues</b>	<b>1,385,564</b>	<b>1,506,422</b>	<b>1,507,664</b>	<b>122,100</b>	<b>8.7%</b>	<b>8.8%</b>	<b>0.1%</b>	<b>227,491</b>	<b>1,507,664</b>	<b>8.8%</b>
Less: Private Fire Prot.	(31,470)	(31,470)	(31,470)	-					(31,470)	0.0%
Less: Misc. Revenues	(107,800)	(107,800)	(107,800)						(107,800)	0.0%
Less: PFP - Ad Valorem	(114,540)	(114,540)	(114,540)						(114,540)	0.0%
<b>Net Revenues from Utility Customers</b>	<b>1,131,754</b>	<b>1,252,612</b>	<b>1,253,854</b>	<b>122,100</b>	<b>10.7%</b>	<b>10.8%</b>	<b>0.1%</b>	<b>227,491</b>	<b>1,253,854</b>	<b>10.8%</b>
<b>Net Cash Flow for Construction</b>	<b>363,174</b>		<b>Whsle Rate:</b>	<b>\$0.00</b>						

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RATE STUDY USING UTILITY REVENUE REQUIREMENT AS ORIGINALLY FILED

REVENUE UNDER PROPOSED RATES



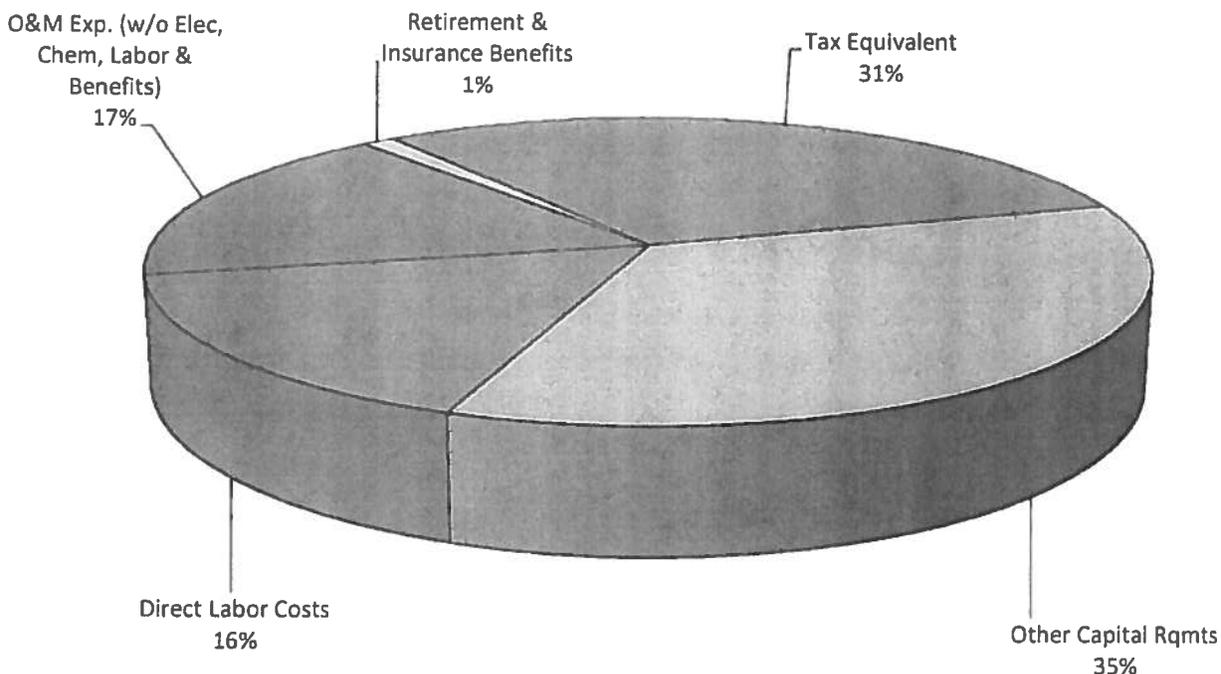
<u>REVENUE UNDER PROPOSED RATES</u>	<u>\$</u>	<u>% of Total Revenues</u>
Residential	675,525	44.8%
Commercial	219,184	14.5%
Industrial	69,822	4.6%
Public Auth.	61,833	4.1%
Private Fire Prot.	31,470	2.1%
Misc. Revenues	107,800	7.2%
Public Fire Prot. - Direct Charge	227,491	15.1%
Public Fire Prot. - Ad Valorem	114,540	7.6%
<b>USER CHARGE REVENUE</b>	<b>\$1,507,664</b>	<b>100.0%</b>

**REASONS FOR THE CHANGE IN WATER RATES**  
RATE STUDY USING UTILITY REVENUE REQUIREMENT AS ORIGINALLY FILED

	Basis For Present Rates	Present Revenues & Expenses	Increase/ (Decrease)	% Increase/ (Decrease)	
	\$	\$	\$	%	
<b>REVENUES:</b>					
Residential	595,856	595,536	(320)	-0.05%	
Commercial	181,728	192,611	10,883	5.99%	
Industrial	56,861	60,364	3,502	6.16%	
Public Auth.	52,852	53,922	1,070	2.03%	
Unmetered	1,300	1,200	(100)	-7.69%	
<b>TOTAL WATER SERVICE</b>	<b>888,597</b>	<b>903,632</b>	<b>15,035</b>	<b>1.69%</b>	
Private Fire Protection	32,760	31,470	(1,290)	-3.94%	
Public Fire Protection (Ad Valorem)	193,488	114,540	(78,948)	-40.80%	
Public Fire Protection (Direct Charge)	139,705	229,322	89,617	64.15%	
Late Payment Charge	3,700	6,000	2,300	62.16%	
Misc. Revenues	70,500	84,900	14,400	20.43%	
Other Water Revenues	15,000	15,700	700	4.67%	
<b>TOTAL OPERATING REVENUES</b>	<b>1,343,750</b>	<b>1,385,564</b>	<b>41,815</b>	<b>3.11%</b>	
<b>OPERATING EXPENSES:</b>					
					Annualized % Chg.
Direct Labor Costs	144,450	184,050	39,600	27.41%	7.16%
Retirement & Insurance Benefits	142,300	145,100	2,800	1.97%	0.56%
Electric Power	50,200	47,400	(2,800)	-5.58%	-1.63%
Chemicals	30,900	30,900	0	0.00%	0.00%
All Other Costs	251,550	293,280	41,730	16.59%	4.48%
<b>Total O&amp;M Expense (Incl. FICA)</b>	<b>619,400</b>	<b>700,730</b>	<b>81,330</b>	<b>13.13%</b>	<b>3.59%</b>
<b>Tax Equivalent</b>	<b>241,873</b>	<b>316,591</b>	<b>74,718</b>	<b>30.89%</b>	<b>7.99%</b>
<b>CASH OPERATING EXPENSES</b>	<b>861,273</b>	<b>1,017,321</b>	<b>156,048</b>	<b>18.12%</b>	<b>4.87%</b>
<b>CAPITAL COSTS:</b>					
Principal & Interest on Debt	210,191	134,069	(76,122)	-36.22%	-12.05%
Less: Interest Income / TIF / Spec. Assess.	(3,600)	(6,900)	(3,300)	91.67%	20.42%
Cash Contingency	275,886	361,932	86,046	31.19%	8.06%
<b>TOTAL CAPITAL REQUIREMENTS</b>	<b>482,477</b>	<b>489,101</b>	<b>6,624</b>	<b>1.37%</b>	<b>0.39%</b>
<b>TOTAL OPERATING &amp; CAPITAL EXPENSES</b>	<b>\$1,343,750</b>	<b>\$1,506,422</b>	<b>\$162,672</b>	<b>12.11%</b>	<b>3.32%</b>
<b>TOTAL CHANGE IN REVENUES REQUIRED</b>	<b>\$0</b>	<b>\$120,858</b>	<b>\$120,858</b>	<b>8.72%</b>	<b>2.42%</b>

**RATE STUDY USING UTILITY REVENUE REQUIREMENT AS ORIGINALLY FILED**

**REASONS FOR THE CHANGE**



<b>REASONS FOR THE CHANGE</b>	<b>\$</b>	<b>%</b>	<b>Rate Incr. Required</b>
Direct Labor Costs	39,600	16.2%	2.9%
O&M Exp. (w/o Elec, Chem, Labor & Benefits)	41,730	17.0%	3.0%
Retirement & Insurance Benefits	2,800	1.1%	0.2%
Tax Equivalent	74,718	30.5%	5.4%
Other Capital Rqmts	86,046	35.1%	6.2%
<b>Sub-total</b>	<b>\$244,894</b>	<b>100.0%</b>	
Less: Increase in Revenue	(41,815)		-3.0%
Electric Pwr & Chem.	(2,800)		-0.2%
Debt Service (Net of Interest Income)	(79,422)		-5.7%
<b>NET CHANGE REQUIRED</b>	<b>\$120,858</b>		<b>8.7%</b>