

COLUMBUS SEWER UTILITY

Columbus, Wisconsin

FORECASTED 2016
SEWER RATE STUDY

Prepared as of February 29, 2016

COLUMBUS SEWER UTILITY

TABLE OF CONTENTS

Accountants' Compilation Report	1
Management Information	2 – 4
Summary of Significant Assumptions	5
Summary of Significant Accounting Policies	6
Schedules	
1 Revenue Requirement Summary	7
2A Sales Forecast	8
2B Consumer Analysis – Last 12 Months Ending 10/31/15	9
2C Revenue Analysis – Forecasted 2016	10
3 Detailed Operation and Maintenance Expenses	11 – 12
4 Detail of Costs Allocated to the City of Columbus	13
5 Calculation of Columbus Volume Charge – Forecasted 2016	14
6 Calculation of Columbus Monthly Fixed Charges – Forecasted 2016	15
7 Revenue Analysis – Proposed Rates	16
8 Debt Repayment Schedules	17
9 Allocation of Detailed Operation and Maintenance Expenses	18 – 19
10 Allocation of Plant	20
11A Costs Allocated to Elba	21
11B Costs Allocated to Fall River	22
12 Plant Additions and Retirements	23
13 Plant in Service	24
14 Pump Replacement Account	25 – 26
15 Treatment Plant Replacement Account	27 – 28
16 Collection System Replacement Account	29 – 30
17 Monthly Bill Comparison – Forecasted 2016	31
18 Calculation of Septic Charge – Forecasted 2016	32 – 33
19 Rate Comparison with Other Utilities	34
20 Debt Service Coverage – Forecasted 2016	35
21 Revenue Analysis – Elba	36
22 Revenue Analysis – Fall River	37
23 Summary of O&M Costs – Fall River – Forecasted 2016 Compared to IGA	38



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Columbus Sewer Utility
Columbus, Wisconsin

We have compiled the accompanying forecasted Schedules 1 through 23, as identified in the table of contents of Columbus Sewer Utility, an enterprise fund of the City of Columbus for the years ended December 31, 2015 and 2016 in accordance with attestation standards established by the American Institute of Certified Public Accountants.

A compilation is limited to presenting, in the form of a forecast, information that is the representation of management and does not include evaluation of the assumptions underlying the forecast. We have not examined the forecast and, accordingly, do not express an opinion or any other form of assurance on the accompanying attachments or assumptions. Furthermore, there will usually be differences between the forecasted and actual results since some events and circumstances frequently do not occur as expected, and those differences may be material. We have no responsibility to update this report for events and circumstances occurring after the date of this report, although we are available to do so.

The accompanying schedules present, to the best of management's knowledge and belief, the results of operations of Columbus Sewer Utility for the forecast periods. It is not intended to be a forecast of financial position, changes in net position, or cash flows in accordance with Generally Accepted Accounting Principles. This report was prepared for the development of rates and should not be used for any other purposes.

As disclosed in the Summary of Significant Accounting Policies, these forecasted schedules include departures from generally accepted accounting principles as applied in the annual financial statements. The effect of those departures has not been determined.

We have also compiled the summarized historical financial information, presented with the forecast for comparative purposes, which is taken from the annual financial statements for the years ended December 31, 2012 through 2014. Schedules 1 through 23 contain financial data from the 2015 approved budget which is presented for comparative purposes. We do not express an opinion, or any other form of assurance on such information. This report also contains non-financial information for the purpose of supplementary analysis and, accordingly, we do not express an opinion or any other form of assurance on such information.

Baker Tilly Virchow Krause, LLP

Madison, Wisconsin
February 29, 2016

COLUMBUS SEWER UTILITY

MANAGEMENT INFORMATION

PURPOSE AND SCOPE

We have prepared this report to design rates that should provide for a self-sustaining utility. The process of developing rates in this report includes three steps:

1. Develop a cash basis revenue requirement to determine the amount of revenue needed to cover operating costs. This includes analyzing prior costs and forecasting the 2016 test year results.
2. Prepare a cost of service study to allocate the revenue requirement to customers based on the actual cost to serve them.
3. Design rates based on the cost of service study and/or other management objectives.

HISTORY OF PRESENT RATES

Present rates being charged by the Columbus Sewer Utility are set based on a study using a 2008 test year. Rates were reviewed in 2010 as part of the Fall River connection and again in 2013 but were not changed. The 2008 and 2016 revenue requirement is presented below:

	<u>2008</u>	<u>Test Year 2016</u>
Operation and maintenance expense	\$ 643,100	\$ 900,000
Treatment plant replacement fund	120,100	147,900
Collection system replacement fund	101,700	121,600
Pump replacement fund	16,900	24,700
Debt service	618,700	315,100
Less: Other revenues	<u>(138,000)</u>	<u>(64,700)</u>
Total Revenue Required from Rates	<u>\$ 1,362,500</u>	<u>\$ 1,444,600</u>

SUMMARY OF RESULTS

Based on the results presented in the following schedules, the utility would need to increase City rates by 1.8% to meet the forecasted 2016 revenue requirement. This is primarily due to an increase in operation and maintenance expenses and replacement funding requirements. It was also determined that the rates for Elba Sanitary District No. 2 could be decreased by 4.4% to \$2.71 per 1,000 gallons as shown in Schedule 11A. The primary reason for this decrease is an increase in volume allocated to Elba offset by a decrease in debt service as shown in Schedule 11A. Lastly the study shows that the rates for the Village of Fall River could be increased by 26.4% to \$2.39 per 1,000 gallons. This was due to an increase in operation and maintenance and administrative and general expenses allocated to Fall River based on volume treated and a 21% increase in O&M costs from when rates were determined as part of the intergovernmental agreement dated June 1, 2010.

COLUMBUS SEWER UTILITY

MANAGEMENT INFORMATION

SEWER REVENUE REQUIREMENT

The sewer rates for the City of Columbus are designed to meet the following requirements:

1. Cash requirements of the utility
2. Consistency with existing rate design structure
3. Compliance with debt service coverage
4. DNR rate design requirements

Cash Requirements

Cash flow methodology means that the rates are generally designed to meet the cash needs of the utility, as opposed to a regulated utility rate base revenue requirement. Costs include replacement of equipment over the useful life of that equipment rather than the actual cash outlay for capital projects projected. Utility rates must be adequate to allow the utility to pay operation and maintenance expenses, pay the utility debt service and allow for replacement funds. Schedule 1 shows the cash requirements.

Existing Rate Design Structure

The rate theory used in this study is essentially the same as that used in the prior study. The allocation percentages used for operation and maintenance expenses and replacement costs are essentially the same as those used in the previous study. By maintaining this continuity, no class of customers should see a change significantly different than any other class of customers.

Debt Service Coverage

This study designs rates sufficient to adhere to the revenue bond resolution requirements. The bond resolution requires "earnings" to be more than 110% of the annual revenue bond debt service requirement. General obligation debt is not included in this calculation. The current and proposed rates are expected to meet this requirement for 2016 as illustrated below:

	<u>Current Rates</u>	<u>Proposed Rates</u>
Operating revenues	\$ 1,391,200	\$ 1,442,000
Other income	64,700	64,700
Less: Operation and maintenance expenses	<u>(900,000)</u>	<u>(900,000)</u>
Net Funds for Debt Service	<u>\$ 555,900</u>	<u>\$ 606,700</u>
Revenue bond debt service including TIF share	\$ 226,600	\$ 226,600
Coverage factor	<u>110%</u>	<u>110%</u>
Required Earnings	<u>\$ 249,300</u>	<u>\$ 249,300</u>
Actual Coverage	<u>245%</u>	<u>268%</u>

COLUMBUS SEWER UTILITY

MANAGEMENT INFORMATION

SEWER REVENUE REQUIREMENT (cont.)

DNR Rate Design Requirements

The DNR, as a condition to issuing construction grants and loans, requires rates to be flow proportional for operation, maintenance and replacement fund costs. This means that charges reflect the relative customer volume and strength of wastewater and size of meter connections. The computed and existing rates are both designed to comply with these requirements.

COST OF SERVICE STUDY

The purpose of a cost of service study is to allocate costs among different parameters of service and provide the basis for designing rates.

This section includes a discussion of the procedures used in the cost of service study. A brief explanation of the various allocations follows:

1. Operation and maintenance expenses are generally allocated to volume, BOD, suspended solids, TKN, phosphorous, demand, and customer costs based on engineer estimates. Volume related operation and maintenance expenses were allocated to Elba Sanitary District No. 2, Columbus, and the Village of Fall River based on estimated volumes. The Fall River and Elba allocations are based on percentage of total wholesale volume compared to the total Columbus volume treated, not sold. The approximate 40 percent infiltration inflow shown on Schedule 3 will be allocated entirely to the City's operation and maintenance costs.
2. Allocations of equipment replacement costs are distributed using percentages derived from the allocation of the cost of the treatment plant.
3. Collection system replacement fund costs are distributed based on the collection system plant allocators. Allocations for replacement costs of the collection system and pumping equipment relate to city volume and customer costs only, as Elba Sanitary District No. 2 or the Village of Fall River do not share in the collection system.
4. The 2007 debt issuance is allocated to the City of Columbus since the additions relate to main projects in the city. The 2010 debt issue is allocated to the City of Columbus and Elba Sanitary District No. 2 because it was used for upgrades to the waste water treatment plant. Fall River is excluded from these debt issues since their connection fee recovers their share of debt.
5. Other revenues are allocated based on the weighted average of volume, BOD, SS, TKN, and phosphorous.
6. The City of Columbus presently has no high strength customers; therefore, no adjustment is needed in rates for high strength customers. Fall River is billed a minor amount of high strength which is shown as other revenue. Management does not anticipate any changes in this for 2016.
7. To maintain consistency in rates with prior studies \$180,000 was removed from volume charges and added to fixed charges in the cost of service schedule. This adjustment causes fixed charges to be artificially higher and volume charges to be artificially lower but minimizes rate shifts.

COLUMBUS SEWER UTILITY

SUMMARY OF SIGNIFICANT ASSUMPTIONS

SIGNIFICANT ASSUMPTIONS

The forecast is compiled based on utility management's assumptions and presents, to the best of management's knowledge and belief, the utility's expected results of operations, and required revenues for the forecasted period. It is based on management's assumptions as of February 29, 2016 reflecting conditions it expects to exist and the courses of action it is likely to take during the forecasted period. The assumptions disclosed herein are those that management believe are significant to the forecast and are not all-inclusive. There will usually be differences between forecasted and actual results because events and circumstances frequently do not occur as expected, and those differences may be material.

REVENUES

Revenue forecast, as shown on Schedule 2A is based on actual volume of wastewater and customer count trends from 2012 through 2014. Normal increases in customers are forecasted for 2015 and 2016. Miscellaneous service revenues and investment income are forecasted based on the utility's budget.

EXPENSES

Operation and maintenance expenses are forecasted in Schedule 3 based on the utility budget, historical trends, and discussions with utility management.

REPLACEMENT FUNDS

The basic amount to be funded for replacement of the treatment plant was determined in the previous study and revised for changes since then. The calculation and support for these amounts can be found on schedules 14, 15, and 16. The recommended funding for each account is as follows; pump replacement fund of \$24,700, treatment plant replacement fund \$147,900 and the collection system replacement fund \$121,600. There are various capital projects that will be taking place during 2016. The payment for these projects can be funded out of the various three replacement accounts, as shown on Schedule 12.

DEBT SERVICE

Debt service requirements outlined on Schedule 8 are based on the repayment schedule for the 2007 State of Wisconsin Clean Water Fund borrowing, and the 2007 general obligation bonds, and the 2010 State of Wisconsin Clean Water Fund borrowing.

COLUMBUS SEWER UTILITY

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

REVENUE RECOGNITION

Sewer revenues are recorded for service rendered based on water meter readings, with billings made to customers monthly. The utility does not accrue revenues for service delivered after the December meter reading date.

EXPENSES

Historical operation and maintenance expenses are reported on the accrual basis. Forecasted 2016 expenses are generally reported on the accrual basis with the exception of certain non-recurring major expenses which are normalized for rate-making purposes.

PLANT

Additions to and replacements of utility plant are recorded at original cost, which includes material, labor, overhead, and an allowance for the cost of funds used during construction when significant. The cost of renewals and betterments relating to retirement units is added to plant accounts. The cost of property replaced, retired or otherwise disposed of, is deducted from plant accounts and, generally, together with removal costs less salvage, is charged to accumulated depreciation.

DEPRECIATION

The revenue requirement reported on Schedule 1 does not include depreciation expense, as reported in the utility's audited financial statements. The revenue requirement does, however, include replacement funds to generate cash flow for plant replacement.

SCHEDULES

COLUMBUS SEWER UTILITY
Revenue Requirement Summary
Actual 2012 - Forecasted 2016

	Actual 2012	Actual 2013	Actual 2014	Budgeted 2015	Current Rates Forecasted 2016	Cost Based Rates Forecasted 2016
REVENUES						
Metered Sales						
Residential	\$ 870,820	\$ 852,173	\$ 838,247	\$ 851,800	\$ 857,600	\$ 869,200
Commercial	309,301	298,047	309,435	326,800	325,600	333,600
Industrial	39,077	30,267	31,181	28,600	30,000	30,800
Public Authority	23,044	24,647	26,173	25,700	26,800	28,100
Elba Sanitary District	22,250	31,300	12,255	10,900	15,700	9,000
Village of Fall River	75,345	113,025	115,297	127,200	135,500	171,300
Total Metered Sales	<u>1,339,837</u>	<u>1,349,459</u>	<u>1,332,588</u>	<u>1,371,000</u>	<u>1,391,200</u>	<u>1,442,000</u>
Other Revenues						
Miscellaneous service revenues	22,665	22,645	25,567	36,100	20,000	20,000
Connection charges - Impact Fees	9,000	15,000	58,000	35,000	500	500
Interest Subsidy - Build America Bonds	2,601	2,277	2,036	2,600	-	-
Investment income	13,468	14,651	19,754	24,400	20,000	20,000
Transfer from TIF #3	22,368	22,815	23,272	23,737	24,200	24,200
Total Other Revenues	<u>70,102</u>	<u>77,388</u>	<u>128,629</u>	<u>121,837</u>	<u>64,700</u>	<u>64,700</u>
Total Revenues	<u>1,409,939</u>	<u>1,426,847</u>	<u>1,461,217</u>	<u>1,492,837</u>	<u>1,455,900</u>	<u>1,506,700</u>
REVENUE REQUIRED						
Operation and maintenance expenses	702,965	730,989	724,630	825,500	900,000	900,000
Treatment plant replacement fund	138,700 (1)	138,700 (1)	139,800 (1)	139,800 (1)	147,900	147,900
Collection system replacement fund	122,300 (1)	122,300 (1)	104,100 (1)	104,100 (1)	121,600	121,600
Pump replacement fund	23,600 (1)	23,600 (1)	26,200 (1)	26,200 (1)	24,700	24,700
Debt service	321,983 (3)	321,983 (3)	321,983 (3)	256,732 (3)	315,100	315,100
Total Revenue Required	<u>1,309,548</u>	<u>1,337,572</u>	<u>1,316,713</u>	<u>1,352,332</u>	<u>1,509,300</u>	<u>1,509,300</u>
Revenue Excess (Deficiency)	<u>\$ 100,391</u>	<u>\$ 89,275</u>	<u>\$ 144,504</u>	<u>\$ 140,505</u>	<u>\$ (53,400)</u>	<u>\$ (2,600)</u>

(1) Based on recommended account funding from the prior rate study.

(2) Interest subsidy is not included in 2016 because the Build America Bonds were refinanced in fiscal year 2015.

(3) In 2015, the 2008 GO Bonds and 2010 Build America Bonds were paid off. Prior year debt service includes these balances

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY

Sales Forecast

Actual 2012 - Forecasted 2016

	Actual 2012	Actual 2013	Actual 2014	12 Months Ending Usage 10/31/2015	Forecasted 2016
Residential					
Average number of customers	1,899	1,888	1,889	1,944	1,959
Cubic feet billed (00's)	96,489	92,138	95,595	90,857	91,485
Average consumption per cust.	50.8	48.8	50.6	46.7	46.7
Percentage chg. in consumption		-4.51%	0.05%	-4.96%	0.69%
Percentage chg. in customers		-0.58%	0.05%	2.91%	0.77%
Commercial					
Average number of customers	244	221	224	249	249
Cubic feet billed (00's)	44,057	42,857	43,327	45,047	45,044
Average consumption per cust.	180.6	193.9	193.4	180.9	180.9
Percentage chg. in consumption		-2.72%	1.36%	3.97%	-0.01%
Percentage chg. in customers		-9.43%	1.36%	11.16%	0.00%
Industrial					
Average number of customers	12	8	8	9	9
Cubic feet billed (00's)	6,793	5,112	5,243	5,095	5,095
Average consumption per cust.	566.1	639.0	655.4	566.1	566.1
Percentage chg. in consumption		-24.75%	2.56%	-2.82%	-0.01%
Percentage chg. in customers		-33.33%	0.00%	12.50%	0.00%
Public Authority					
Average number of customers	19	20	21	26	26
Cubic feet billed (00's)	2,756	3,046	3,384	3,375	3,374
Average consumption per cust.	145.1	152.3	161.1	129.8	129.8
Percentage chg. in consumption		10.52%	11.10%	-0.27%	-0.04%
Percentage chg. in customers		5.26%	5.00%	23.81%	0.00%
Wholesale - Elba (1) (4)					
Gallons billed (000's)	3,145	4,474	3,981	6,512	3,900
Percentage chg. in consumption		42.26%	-11.02%	63.58%	-40.11%
Wholesale - Fall River (2) (3)					
Gallons billed (000's)	38,846	58,433	60,298	71,700	71,700
Percentage chg. in consumption		50.42%	3.19%	18.91%	0.00%
Totals					
Average number of customers	2,174	2,137	2,142	2,228	2,243
Cubic feet billed (00's)	150,095	143,153	147,549	144,374	144,998
Wholesale gallons billed (000's)	41,991	62,907	64,279	78,212	75,600

(1) Elba Revenue is forecasted on Schedule 21.

(2) Fall River Revenue is forecasted on Schedule 22.

(3) Fall River connected to the Columbus system in March 2012.

(4) Forecasted 2016 usage for Elba is based on a three year average due to fluctuations in usage.

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY
 Consumer Analysis
 Last 12 Months with Usage Ending 10/31/15

Volume Charge	Authorized Rates	Residential			Commercial			Industrial			Public Authority			Total		
		Units	Revenue		Units	Revenue		Units	Revenue		Units	Revenue		Units	Revenue	
	\$5.36 /100 ccf	90,857	\$ 486,994		45,047	\$ 241,450		5,095	\$ 27,311		3,375	\$ 18,090		144,374	\$ 773,844	
Meter Charge		Meters	Billings	Revenues	Meters	Billings	Revenues	Meters	Billings	Revenues	Meters	Billings	Revenues	Meters	Billings	Revenues
5/8 & 3/4	15.60 /Month	1,934	23,208	362,045	159	1,908	29,765	3	36	562	12	144	2,246	2,108	25,296	394,618
1	20.00 /Month	10	120	2,400	39	468	9,360	2	24	480	1	12	240	52	624	12,480
1-1/4	23.00 /Month	0	0	0	1	12	276	0	0	0	0	0	0	1	12	276
1-1/2	26.00 /Month	0	0	0	24	288	7,488	2	24	624	2	24	624	28	336	8,736
2	34.00 /Month	0	0	0	20	240	8,160	1	12	408	9	108	3,672	30	360	12,240
3	53.00 /Month	0	0	0	4	48	2,544	1	12	636	0	0	0	5	60	3,180
4	80.00 /Month	0	0	0	2	24	1,920	0	0	0	2	24	1,920	4	48	3,840
Master Units	7.25 /Unit	0	0	0	283	3,396	24,621	0	0	0	0	0	0	283	3,396	24,621
Sub-total		<u>1,944</u>	<u>23,328</u>	<u>364,445</u>	<u>532</u>	<u>6,384</u>	<u>84,134</u>	<u>9</u>	<u>108</u>	<u>2,710</u>	<u>26</u>	<u>312</u>	<u>8,702</u>	<u>2,511</u>	<u>30,132</u>	<u>459,991</u>
Total Revenues Per Analysis			\$ <u>851,439</u>			\$ <u>325,583</u>			\$ <u>30,021</u>			\$ <u>26,793</u>			\$ <u>1,233,835</u>	
Total Actual Revenues			\$ <u>840,426</u>			\$ <u>320,541</u>			\$ <u>30,179</u>			\$ <u>26,440</u>			\$ <u>1,217,586</u>	
Dollar Variance			\$ <u>11,013</u>			\$ <u>5,042</u>			\$ <u>(158)</u>			\$ <u>353</u>			\$ <u>16,250</u>	
Percent Variance			<u>1.29%</u>			<u>1.55%</u>			<u>-0.53%</u>			<u>1.32%</u>			<u>1.32%</u>	

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY

Revenue Analysis
Forecasted 2016

Volume Charge	Authorized Rates	Residential		Commercial		Industrial		Public Authority		Total						
		Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue					
	\$5.36 /100 ccf	91,485	\$ 490,361	45,044	\$ 241,436	5,095	\$ 27,309	3,374	\$ 18,084	144,998	\$ 777,190					
Meter Charge		Meters	Billings	Revenues	Meters	Billings	Revenues	Meters	Billings	Revenues	Meters	Billings	Revenues	Meters	Billings	Revenues
5/8 & 3/4	15.60 /Month	1,949	23,388	364,854	159	1,908	29,745	3	36	573	12	144	2,270	2,123	25,476	397,442
1	20.00 /Month	10	120	2,400	39	468	9,360	2	24	480	1	12	240	52	624	12,480
1-1/4	23.00 /Month	0	0	0	1	12	276	0	0	0	0	0	0	1	12	276
1-1/2	26.00 /Month	0	0	0	24	288	7,488	2	24	624	2	24	624	28	336	8,736
2	34.00 /Month	0	0	0	20	240	8,160	1	12	408	9	108	3,672	30	360	12,240
3	53.00 /Month	0	0	0	4	48	2,544	1	12	636	0	0	0	5	60	3,180
4	80.00 /Month	0	0	0	2	24	1,920	0	0	0	2	24	1,920	4	48	3,840
Master Units	7.25 /Unit	0	0	0	283	3,396	24,621	0	0	0	0	0	0	283	3,396	24,621
Sub-total		<u>1,959</u>	<u>23,508</u>	<u>367,254</u>	<u>532</u>	<u>6,384</u>	<u>84,114</u>	<u>9</u>	<u>108</u>	<u>2,721</u>	<u>26</u>	<u>312</u>	<u>8,726</u>	<u>2,526</u>	<u>30,312</u>	<u>462,815</u>
Total Revenues Per Analysis			\$ <u>857,615</u>			\$ <u>325,550</u>			\$ <u>30,030</u>			\$ <u>26,810</u>			\$ <u>1,240,005</u>	
Totals Rounded			\$ <u>857,600</u>			\$ <u>325,600</u>			\$ <u>30,000</u>			\$ <u>26,800</u>			\$ <u>1,240,000</u>	

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY
Detailed Operation and Maintenance Expenses
Actual 2012 - Budgeted 2016

	Actual 2012	Actual 2013	Actual 2014	Forecasted 2015	Budgeted 2016	Allocation		
						City of Columbus	Elba Sanitary District	Fall River
Operating Expenses								
Supervision and labor	\$ 51,899	\$ 39,261	55,648	\$ 52,265	\$ 68,250 (A)	\$ 51,827	\$ 726	\$ 15,697
Employee pensions & benefits	20,295	21,047	21,923	21,845	34,411 (A)	26,131	366	7,914
Power and fuel for pumping equipment	12,847	11,212	13,942	18,027	22,000 (A)	16,705	234	5,060
Power and fuel for aeration equipment	91,750	85,481	76,490	84,590	85,000 (A)	64,547	904	19,549
Chlorine	20,000	22,227	25,209	22,825	30,000 (A)	22,780	319	6,900
Transportations	-	5,780	6,088	5,620	6,000 (A)	4,556	64	1,380
Other operating supplies & expense	20,372	18,631	39,043	20,243	28,250 (A)	21,452	300	6,497
Total Operating Expenses	217,163	203,639	238,343	225,415	273,911	207,998	2,913	62,997
Sludge Processing								
Operation - labor	7,987	8,000	9,463	8,512	15,400 (A)	11,694	164	3,542
Employees pensions & benefits	3,002	3,421	3,563	3,553	7,784 (A)	5,911	83	1,790
Repairs and maintenance	454	13,638	2,495	6,060	6,800 (A)	5,164	72	1,564
Chemicals	6,853	4,455	4,976	4,975	6,000 (A)	4,556	64	1,380
Total Sludge Processing	18,296	29,514	20,497	23,100	35,984	27,325	383	8,276
Maintenance Expenses								
Maint. of sewage collection system								
Supervision and labor	21,746	17,510	22,977	21,607	18,800 (A)	18,800	-	-
Employees pensions & benefits	8,095	8,684	9,045	9,018	9,499 (A)	9,499	-	-
Other	24,613	88,073	6,998	148,416	98,000 (A)	98,000	-	-
Maint. Of Pumping Equipment								
Supervision and labor	6,243	5,035	7,271	6,540	5,200 (A)	5,200	-	-
Employees pensions & benefits	2,378	2,629	2,738	2,729	2,641 (A)	2,641	-	-
Other	15,804	7,869	11,851	10,306	16,650 (A)	16,650	-	-
Treatment and disposal equipment								
Supervision and labor	67,598	55,159	69,565	65,460	46,100 (A)	35,008	490	10,602
Employees pensions & benefits	25,286	26,311	27,513	27,321	23,225 (A)	17,638	247	5,341
Other	30,558	18,406	24,991	22,226	36,000 (A)	27,338	383	8,280
Buildings and Grounds								
Supervision and labor	9,622	9,236	10,923	9,826	17,100 (A)	12,985	182	3,933
Employees pensions & benefits	4,016	3,949	4,113	4,101	8,647 (A)	6,565	92	1,989
Other	16,273	12,117	13,489	12,185	25,000 (A)	18,984	266	5,750
Total Maintenance Expenses	232,232	254,978	211,474	339,735	306,862	269,308	1,660	35,895
Customer Accounts Expenses								
Billing, collecting and accounting	50,012	53,096	72,075	69,990	72,000 (A)	72,000	-	-
Total Customer Accounts Expenses	50,012	53,096	72,075	69,990	72,000	72,000	-	-
Total Operating Expenses before Administrative and General Expenses					\$ 688,757	\$ 576,631	\$ 4,956	\$ 107,168

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY
 Detailed Operation and Maintenance Expenses
 Actual 2012 - Budgeted 2016

	Actual 2012	Actual 2013	Actual 2014	Forecasted 2015	Budgeted 2016	Allocation		
						City of Columbus	Elba Sanitary District	Fall River
Administrative and general salaries	\$ 34,268	\$ 43,090	72,866	\$ 59,025	\$ 62,775 (A)	\$ 52,556	\$ 452	\$ 9,768
Office supplies and expenses	1,003	1,440	1,785	1,961	3,600 (A)	3,014	26	560
Outside services	99,307	90,593	56,102	57,168	94,850 (A)	79,409	682	14,758
Insurance expense	18,803	25,000	21,880	19,000	19,980 (A)	16,727	144	3,109
Miscellaneous	695	1,490	1,662	1,750	1,500 (A)	1,257	11	233
Economic development contribution	17,940	19,000	8,333	10,000	10,000 (A)	8,372	72	1,556
Pensions and benefits	13,246	9,149	19,613	18,332	18,570 (A)	15,548	134	2,889
Total Admin. and General Expenses	<u>185,262</u>	<u>189,762</u>	<u>182,241</u>	<u>167,236</u>	<u>211,275</u>	<u>176,883 (B)</u>	<u>1,521 (B)</u>	<u>32,873 (B)</u>
Total Operation and Maint. Expenses	\$ <u>702,965</u>	\$ <u>730,989</u>	<u>724,630</u>	\$ <u>825,476</u>	\$ <u>900,032</u>	\$ <u>753,514</u>	\$ <u>6,477</u>	\$ <u>140,041</u>
Volume Allocation Basis:	Annual Volume	O&M allocation %	A&G allocation %					
Forecasted 2016 - City (000 gallons) billed	107,992 (C)	34.65%	83.72%					
Forecasted 2016 City Infiltration inflow	128,685 (C)	41.29%						
Forecasted 2016 - Elba (000 gallons)	3,315 (F)	1.06% (E)	0.72%					
Forecasted 2016 - Fall River (000 gallons)	71,681 (C)	23.00% (D)	15.56%					
Forecasted 2016 - City (000 gallons) treated	311,673 (C)	100.00%						

- (A) O&M and A&G expense amounts used are per the 2015/2016 Budget
- (B) Administrative and general expenses are allocated based on the allocation of direct O&M expenses
- (C) Forecasted volumes used are per November 2014 - October 2015 actual usage.
- (D) O&M allocated to Fall River based on a percentage of gallons treated. Prior study percentage was 17%.
- (E) O&M allocated to Elba in prior study was 1.05%.
- (F) Elba forecasted volume is determined using a 3 year average from 2012 - 2014, reduced by 15% for city customers passing through Elba flow meter.

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY
 Summary of Cost of Service
 Costs Allocated to Columbus
 Test Year 2016

	Allocation Basis	Forecasted 2016 Costs	Volume	BOD	SS	TKN	Phosph	Demand	Customer Costs
Operation and maintenance expenses	Detailed schedule	\$ 753,500	\$ 286,505	\$ 111,820	\$ 87,347	\$ 21,441	\$ 16,331	\$ 67,272	\$ 162,821
Treatment plant replacement fund	Treatment plant	115,100	38,828	24,716	24,185	7,491	8,542	815	10,525
Collection system replacement fund	Collection system plant	121,600	103,360	-	248	-	-	17,496	496
Pump replacement fund	Pumping equipment plant	24,700	20,995	-	-	-	-	3,705	-
Debt Service									
2007 Clean Water Fund Loan	Collection System	143,500	121,975	-	293	-	-	20,647	586
2007 General Obligation bonds	Collection System	88,500	75,225	-	181	-	-	12,733	361
2010 Clean Water Fund Loan	Treatment Plant	82,200	27,729	17,651	17,272	5,350	6,100	582	7,517
Less other revenues	Above allocations	(64,700)	(32,839)	(7,506)	(6,305)	(1,669)	(1,508)	(6,000)	(8,875)
Fall River High Strength Adjustment	Historical charges	(2,800)	-	(1,600)	(1,200)	-	-	-	-
Rate Stabilization Adjustment	Existing Rate Structure (A)	-	(180,000)	-	-	-	-	-	180,000
Allocated costs		<u>\$ 1,261,600</u>	<u>\$ 461,778</u>	<u>\$ 145,081</u>	<u>\$ 122,020</u>	<u>\$ 32,613</u>	<u>\$ 29,465</u>	<u>\$ 117,250</u>	<u>\$ 353,430</u>

(A) To maintain consistency in overall rate design.

COLUMBUS SEWER UTILITY
Calculation of Columbus Volume Charge
Forecasted 2016

Estimated 2016 revenue requirement (from schedule 4)

Volume						\$	461,778
BOD							145,081
SS							122,020
TKN							32,613
Phosphorous							29,465
							<u>790,957</u>

Estimated 2016 loadings:

Total Volume	144,998	ccf	x	100	x	7.48	=	108,459	000/gal
BOD									
Domestic	108,459		x	0.00834	x	220 mg/l	=	199,000	Lbs
SS									
Domestic	108,459		x	0.00834	x	200 mg/l	=	180,909	Lbs
TKN									
Domestic	108,459		x	0.00834	x	75 mg/l	=	67,841	Lbs
Phosphorous									
Domestic	108,459		x	0.00834	x	13 mg/l	=	11,759	Lbs

Unit Costs:

Volume per 1000 gal			461,778	/	108,459	=	\$	4.258
BOD per pound			145,081	/	199,000	=	\$	0.729
SS per pound			122,020	/	180,909	=	\$	0.674
TKN per pound			32,613	/	67,841	=	\$	0.481
P per pound			29,465	/	11,759	=	\$	2.506

Calculated Domestic Strength Rates:

Volume						=	\$	4.26
BOD	220	mg/l	0.00834	x	0.729	=		1.34
SS	200	mg/l	0.00834	x	0.674483	=		1.13
TKN	75	mg/l	0.00834	x	0.480728	=		0.30
P	13	mg/l	0.00834	x	2.505723	=		0.27

COST BASED RATE PER 1000 GALLONS

\$ 7.30

COST BASED RATE PER 100 CUBIC FEET

7.30 x 0.748 = \$ 5.46

Calculated High Strength Rates (for amounts above domestic strength only)

BOD per lb	145,081	/	199,000	=	\$	0.729
SS per lb	122,020	/	180,909	=	\$	0.674
TKN per lb	32,613	/	67,841	=	\$	0.481
P per lb	29,465	/	11,759	=	\$	2.506

Please refer to Accountants' Report, Summary of Significant Assumptions,
and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY
 Calculation of Columbus Monthly Minimum Charge
 Forecasted 2016

Meter Size	Customers	Demand Ratio	Equivalent Meters	Demand Factor	Monthly Demand Charge	Monthly Customer Cost	Computed Monthly Charge	Proposed Monthly Charge	Annual Revenue
5/8" & 3/4"	2,123	1.0	2,123	\$ 39.52	\$ 3.29	\$ 12.44	\$ 15.74	\$ 15.70	\$ 399,973
1"	52	2.5	130	39.52	8.23	12.44	20.68	21.00	13,104
1 1/4"	1	3.7	4	39.52	12.19	12.44	24.63	25.00	300
1 1/2"	28	5.0	140	39.52	16.47	12.44	28.91	29.00	9,744
2"	30	8.0	240	39.52	26.35	12.44	38.79	39.00	14,040
3"	5	15.0	75	39.52	49.40	12.44	61.84	62.00	3,720
4"	4	25.0	100	39.52	82.33	12.44	94.78	95.00	4,560
6"	0	50.0	0	39.52	164.67	12.44	177.11	177.00	-
	<u>2,243</u>		<u>2,812</u>						<u>\$ 445,441</u>

Demand Related Costs:

Summary of Cost of Service Study

From Schedule 4

\$ 117,250

Less:

MasterUnits

(6,133)

Total Demand Costs

111,117 / 2,812 / 12 = 3.29

Customer Costs:

Summary of Cost of Service Study

From Schedule 4

353,430

Less:

MasterUnits

(18,488)

Total Customer Costs

334,942 / 2,243 / 12 = 12.44

Costs to be recovered from
 monthly minimum charge

\$ 446,059

Master Unit charges split proportionately between demand and customer.

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY
 Revenue Analysis - Cost Based Rates
 Forecasted 2016

Volume Charge	Authorized Rates	Residential		Commercial		Industrial		Public Authority		Total						
		Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue	Units	Revenue					
	\$ 5.46 /100 ccf	91,485	\$ 499,510	45,044	\$ 245,941	5,095	\$ 27,818	3,374	\$ 18,421	144,998	\$ 791,690					
Meter Charge		Meters	Billings	Revenues	Meters	Billings	Revenues	Meters	Billings	Revenues	Meters	Billings	Revenues	Meters	Billings	Revenues
5/8 & 3/4	\$15.70 /Month	1,949	23,388	\$ 367,192	159	1,908	\$ 29,956	3	36	\$ 565	12	144	\$ 2,261	2,123	25,476	\$ 399,973
1	21.00 /Month	10	120	2,520	39	468	9,828	2	24	504	1	12	252	52	624	13,104
1-1/4	25.00 /Month	0	0	0	1	12	300	0	0	0	0	0	0	1	12	300
1-1/2	29.00 /Month	0	0	0	24	288	8,352	2	24	696	2	24	696	28	336	9,744
2	39.00 /Month	0	0	0	20	240	9,360	1	12	468	9	108	4,212	30	360	14,040
3	62.00 /Month	0	0	0	4	48	2,976	1	12	744	0	0	0	5	60	3,720
4	95.00 /Month	0	0	0	2	24	2,280	0	0	0	2	24	2,280	4	48	4,560
6	177.00 /Month	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Master Units	7.25 /Unit	0	0	0	283	3,396	24,621	0	0	0	0	0	0	283	3,396	24,621
Sub-total		<u>1,959</u>	<u>23,508</u>	<u>369,712</u>	<u>532</u>	<u>6,384</u>	<u>87,673</u>	<u>9</u>	<u>108</u>	<u>2,977</u>	<u>26</u>	<u>312</u>	<u>9,701</u>	<u>2,526</u>	<u>30,312</u>	<u>470,062</u>
Total Revenues Per Analysis			\$ <u>869,221</u>			\$ <u>333,613</u>			\$ <u>30,795</u>			\$ <u>28,122</u>			\$ <u>1,261,752</u>	
Totals Rounded			\$ <u>869,200</u>			\$ <u>333,600</u>			\$ <u>30,800</u>			\$ <u>28,100</u>			\$ <u>1,261,800</u>	

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY

Repayment Schedules

	2007 Clean Water Fund Loan			2007 General Obligation bonds			2010 Clean Water Fund Loan			Total Debt Service		
	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total
2015	\$ 105,457	\$ 38,151	\$ 143,608	\$ -	\$ 30,000	\$ 30,000	\$ 55,992	\$ 27,132	\$ 83,124	\$ 161,449	\$ 95,283	\$ 256,732
2016	108,067	35,509	143,576	65,000	28,700	93,700	57,336	25,773	83,108	230,403	89,982	320,384
2017	110,741	32,801	143,542	65,000	26,100	91,100	58,712	24,380	83,092	234,453	83,281	317,734
2018	113,482	30,026	143,508	65,000	23,500	88,500	60,121	22,954	83,075	238,603	76,480	315,083
2019	116,290	27,183	143,473	65,000	20,900	85,900	61,564	21,494	83,057	242,854	69,577	312,430
2020	119,169	24,269	143,438	65,000	18,300	83,300	63,041	19,998	83,040	247,210	62,567	309,778
2021	122,119	21,283	143,402	65,000	15,700	80,700	64,554	18,467	83,022	251,673	55,450	307,124
2022	125,141	18,223	143,364	65,000	13,100	78,100	66,104	16,899	83,003	256,245	48,222	304,467
2023	128,239	15,088	143,327	65,000	10,500	75,500	67,690	15,294	82,984	260,929	40,882	301,811
2024	131,412	11,876	143,288	70,000	7,800	77,800	69,315	13,650	82,964	270,727	33,326	304,052
2025	134,665	8,583	143,248	75,000	4,900	79,900	70,978	11,966	82,945	280,643	25,449	306,093
2026	137,997	5,208	143,205	85,000	1,700	86,700	72,682	10,242	82,924	295,679	17,150	312,829
2027	141,415	1,750	143,165	-	-	-	74,426	8,477	82,903	215,841	10,227	226,068
2028	-	-	-	-	-	-	76,212	6,669	82,882	76,212	6,669	82,882
2029	-	-	-	-	-	-	78,041	4,818	82,860	78,041	4,818	82,860
2030	-	-	-	-	-	-	79,914	2,923	82,837	79,914	2,923	82,837
2031	-	-	-	-	-	-	81,832	982	82,814	81,832	982	82,814
Totals	<u>\$ 1,594,194</u>	<u>\$ 269,950</u>	<u>\$ 1,864,144</u>	<u>\$ 750,000</u>	<u>\$ 201,200</u>	<u>\$ 951,200</u>	<u>\$ 1,158,514</u>	<u>\$ 252,120</u>	<u>\$ 1,410,634</u>	<u>\$ 3,502,708</u>	<u>\$ 723,270</u>	<u>\$ 4,225,978</u>
5 Year Average	<u>\$ 113,550</u>	<u>\$ 29,958</u>	<u>\$ 143,507</u>	<u>\$ 65,000</u>	<u>\$ 23,500</u>	<u>\$ 88,500</u>	<u>\$ 60,155</u>	<u>\$ 22,920</u>	<u>\$ 83,074</u>	<u>\$ 238,704</u>	<u>\$ 76,377</u>	<u>\$ 315,082</u>

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY
 Allocation of Detailed Operation and Maintenance Expenses
 City of Columbus Share Only
 Forecasted 2016

	Forecasted 2016	Allocation Percentages							Allocated Costs						
		Vol	BOD	SS	TKN	Phosph	Demand	Cust. Costs	Vol	BOD	SS	TKN	Phosph	Demand	Cust. Costs
Operating Expenses															
Supervision and labor	\$ 51,827	21	21	14	7	7	15	15	\$ 10,883	\$ 10,884	\$ 7,256	\$ 3,628	\$ 3,628	\$ 7,774	\$ 7,774
Employee pensions & benefits	26,131	21	21	14	7	7	15	15	5,489	5,488	3,658	1,829	1,829	3,920	3,920
Power and fuel for aeration equipment	16,705	35	25	10	25	5	0	0	5,848	4,176	1,671	4,176	835	-	-
Power for pumping equipment	64,547	60	20	15	0	0	0	5	38,728	12,909	9,682	-	-	-	3,227
Chlorine	22,780	50	40	5	0	0	0	5	11,389	9,112	1,139	-	-	-	1,139
Transportation	4,556	36	27	18	4.5	4.5	0	10	1,640	1,230	820	205	205	-	456
Other operating supplies & expense	21,452	36	27	18	4.5	4.5	0	10	7,724	5,792	3,861	965	965	-	2,145
Total Operating Expenses	207,998								81,701	49,591	28,087	10,803	7,462	11,694	18,661
Sludge Processing															
Operation - labor	11,694	40	20	40	0	0	0	0	4,679	2,339	4,678	-	-	-	-
Employees pensions & benefits	5,911	40	20	40	0	0	0	0	2,365	1,182	2,364	-	-	-	-
Repairs and maintenance	5,164	40	20	40	0	0	0	0	2,065	1,033	2,066	-	-	-	-
Chemicals	4,556	40	20	40	0	0	0	0	1,822	911	1,822	-	-	-	-
Total Sludge Processing	27,325								10,931	5,465	10,930	-	-	-	-
Maintenance Expenses															
Maint. of sewage collection system															
Supervision and labor	18,800	50	0	5	0	0	20	25	9,400	-	940	-	-	3,760	4,700
Employees pensions & benefits	9,499	50	0	5	0	0	20	25	4,749	-	475	-	-	1,900	2,375
Other	98,000	50	0	5	0	0	20	25	49,000	-	4,900	-	-	19,600	24,500
Collection system pumping equipment															
Supervision and labor	5,200	85	0	5	0	0	0	10	4,420	-	260	-	-	-	520
Employees pensions & benefits	2,641	85	0	5	0	0	0	10	2,245	-	132	-	-	-	264
Other	16,650	85	0	5	0	0	0	10	14,152	-	833	-	-	-	1,665
Treatment and disposal equipment															
Supervision and labor	35,008	36	27	18	4.5	4.5	0	10	12,604	9,452	6,301	1,575	1,575	-	3,501
Employees pensions & benefits	17,638	36	27	18	4.5	4.5	0	10	6,350	4,762	3,175	794	794	-	1,764
Other	27,338	36	27	18	4.5	4.5	0	10	9,842	7,381	4,921	1,230	1,230	-	2,734
Structures and equipment															
Supervision and labor	12,985	36	27	18	4.5	4.5	0	10	4,675	3,506	2,337	584	584	-	1,299
Employees pensions & benefits	6,565	36	27	18	4.5	4.5	0	10	2,362	1,773	1,182	295	295	-	657
Other	18,984	36	27	18	4.5	4.5	0	10	6,833	5,126	3,417	854	854	-	1,898
Total Maintenance Expenses	269,308								126,632	32,000	28,873	5,332	5,332	25,260	45,877

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY
Allocation of Detailed Operation and Maintenance Expenses
City of Columbus Share Only
Forecasted 2016

	Forecasted 2016	Allocation Percentages						Cust. Costs	Allocated Costs						Cust. Costs	
		Vol	BOD	SS	TKN	Phosph	Demand		Vol	BOD	SS	TKN	Phosph	Demand		
Customer Accounts Expense																
Billing, collecting and accounting	\$ 72,000	0	0	0	0	0	20	80	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	14,400	\$ 57,600
Total Customer Accounts Expenses	<u>72,000</u>								<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>14,400</u>	<u>57,600</u>
Administrative and General Expenses																
Administrative and general salaries	52,556	38	14	11	3	2	9	23	19,970	7,358	5,781	1,577	1,051	4,730	12,088	
Office supplies and expenses	3,014	38	14	11	3	2	9	23	1,145	422	332	90	60	271	693	
Outside services	79,409	38	14	11	3	2	9	23	30,174	11,117	8,735	2,382	1,588	7,147	18,264	
Insurance expense	16,727	38	14	11	3	2	9	23	6,356	2,342	1,840	502	335	1,505	3,847	
Miscellaneous	1,257	38	14	11	3	2	9	23	479	176	138	38	25	113	289	
Economic development contribution	8,372	38	14	11	3	2	9	23	3,182	1,172	921	251	167	753	1,926	
Pensions and benefits	15,548	38	14	11	3	2	9	23	5,907	2,177	1,710	466	311	1,399	3,576	
Total Admin and General Expenses	<u>176,883</u>								<u>67,213</u>	<u>24,764</u>	<u>19,457</u>	<u>5,306</u>	<u>3,537</u>	<u>15,918</u>	<u>40,683</u>	
Total Operation and Maint Expenses	\$ <u>753,514</u>								\$ <u>286,477</u>	\$ <u>111,820</u>	\$ <u>87,347</u>	\$ <u>21,441</u>	\$ <u>16,331</u>	\$ <u>67,272</u>	\$ <u>162,821</u>	

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY

Allocation of Plant
Forecasted 2016

	Forecasted Plant 2016	Allocation percentages							Allocated Costs						Customer Costs
		V	BOD	SS	TKN	Phos	Dem	CC	Volume	BOD	SS	TKN	Phos	Demand	
Collection System Plant															
Collecting mains	\$ 7,925,740	85	0	0	0	0	15	0	\$ 6,736,879	\$ -	\$ -	\$ -	\$ -	1,188,861	\$ -
Interceptor mains	1,079,813	85	0	0	0	0	15	0	917,841	-	-	-	-	161,972	-
Other collecting system equipment	287,970	85	0	0	0	0	15	0	244,775	-	-	-	-	43,196	-
Total Collection System Plant	9,293,523								7,899,495	-	-	-	-	1,394,028	-
Collection System Pumping Plant															
Electric pumping equipment	688,513	85	0	0	0	0	15	0	585,236	-	-	-	-	103,277	-
Other power pumping equipment	14,414	85	0	5	0	0	0	10	12,252	-	721	-	-	-	1,441
Miscellaneous pumping equipment	14,876	85	0	5	0	0	0	10	12,645	-	744	-	-	-	1,488
Total Collection System Pumping Plant	717,803								610,133	-	1,465	-	-	103,277	2,929
									85.00%	0.00%	0.20%	0.00%	0.00%	14.39%	0.41%
Treatment and Disposal Plant															
Land and land rights	2,500	0	0	0	0	0	0	100	-	-	-	-	-	-	2,500
Structures and improvements	3,866,970	26	25	17	9	9	0	15	1,005,412	966,743	657,385	328,692	328,692	-	580,046
Preliminary sewage treatment equipment	1,899,376	45	10	40	0	0	0	5	854,719	189,938	759,750	-	-	-	94,969
Secondary treatment equipment	2,261,120	28	23	18	13	13	0	5	633,114	520,058	407,002	293,945	293,945	-	113,056
Advanced equipment	859,401	62	7	7	7	7	5	5	532,829	60,158	60,158	60,158	60,158	42,970	42,970
Sludge treatment & disposal equipment	1,114,428	3	48	33	1	10	0	5	33,433	534,926	367,761	11,144	111,443	-	55,721
Plant site piping	387,743	90	0	0	0	0	0	10	348,969	-	-	-	-	-	38,774
Flow metering and monitoring equipment	244,632	80	0	0	0	0	10	10	195,706	-	-	-	-	24,463	24,463
Other treatment and disposal equipment	343,364	29	25	16	6	6	3	15	99,575	85,841	54,938	20,602	20,602	10,301	51,505
Total Treatment and Disposal Plant	10,979,534								3,703,757	2,357,664	2,306,994	714,541	814,840	77,734	1,004,004
									33.73%	21.47%	21.01%	6.51%	7.42%	0.71%	9.14%
General Plant															
Transportation equipment	73,697	0	0	0	0	0	0	100	-	-	-	-	-	-	73,697
Office furniture and equipment	18,218	0	0	0	0	0	0	100	-	-	-	-	-	-	18,218
Other equipment	265,156	0	0	0	0	0	0	100	-	-	-	-	-	-	265,156
Total General Plant	357,071								-	-	-	-	-	-	357,071
Total Wastewater Plant	\$ 21,347,931								\$ 12,213,384	\$ 2,357,664	\$ 2,308,459	\$ 714,541	\$ 814,840	\$ 1,575,039	\$ 1,364,004
									57.21%	11.04%	10.81%	3.35%	3.82%	7.38%	6.39%

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY

Summary of Cost of Service
 Costs Allocated to Elba
 Forecasted 2016

	Forecasted 2016 Costs
	<u> </u>
Operation and maintenance expenses	\$ 6,500
Treatment plant replacement fund	1,600
Debt Service - 2010 CWFL	900
	<u> </u>
Allocated costs	\$ <u><u>9,000</u></u>
Forecasted 2016 gallons (000) (3,900 reduced for 15% City flow) (A)	<u><u>3,315</u></u>
Cost per 1,000 gallons:	\$ <u><u>2.71</u></u>

(A) Elba forecasted volume is determined from 3 year average from 2012 - 2014.

COLUMBUS SEWER UTILITY

Summary of Cost of Service

Fall River Rate Analysis

Forecasted 2016

This schedule provides an update for current forecasted costs to the analysis of the agreed upon rates as outlined in Exhibit C of the intergovernmental agreement with Fall River.

	Forecasted 2016 Costs
Operation and maintenance expenses	\$ 107,200
Administrative and general expenses	32,900
Treatment plant replacement fund	<u>31,200 (A)</u>
Allocated costs	<u>\$ 171,300</u>
Forecasted 2016 gallons (000)	<u>71,700</u>
Cost per 1,000 gallons:	<u>\$ 2.39</u>

(A) - Fall River's portion of the treatment plant replacement fund was allocated based on the method used in Exhibit C in the intergovernmental agreement.

COLUMBUS SEWER UTILITY
Plant Additions and Retirements
Forecasted 2015-2016

Account	Description	Financing	Additions	Retirements*	Year
2015 and 2016 Additions/Retirements					
183	James Street Sanitary Sewer Upgrades - Engineering	Collection System Replacement Fund	\$ 105,000	\$ -	2015
323	Hughes lift station replacement - Engineering	Collection System Replacement Fund	15,000	-	2015
332	Huber screen wash & press - Engineering	Equipment Replacement Fund	70,360	-	2015
335	Clarifier Drive, Collector Mechanism, controls & safety railing	Equipment Replacement Fund	114,900	32,192	2015
183	Phosphorus - Optimization Equipment, Engr Studies, & Trading Costs	Equipment Replacement Fund	36,772	-	2015
373	2003 GMC Sierra Truck	General Cash	27,303	24,754	2015
379	Lawnmower	General Cash	9,002	-	2015
183	James Street Sanitary Sewer Upgrades - Engineering	Collection System Replacement Fund	15,000	-	2016
323	Transit Lift Station - Access Road	Collection System Replacement Fund	25,000	-	2016
323	Kiwanis Lift Station - Pumps, Valves, Mixing, & Pumping	Collection System Replacement Fund	80,000	22,414	2016
332	Grit Pump	Pump Replacement Fund	20,000	5,603	2016
332	Backwash Replacement Pump	Pump Replacement Fund	5,000	1,401	2016
337	Decanting Mechanism - Solids Building	Equipment Replacement Fund	16,000	4,483	2016
334	Gates - Aeration Tank	Equipment Replacement Fund	9,000	2,522	2016
335	Clarifier Drive, Collector Mechanism, controls & safety railing	Equipment Replacement Fund	132,100	37,011	2016
337	Motor Control Centers - VFDS, Misc, & Control Panels	Equipment Replacement Fund	45,000	12,608	2016
183	Phosphorus - Optimization Equipment, Engr Studies, & Trading Costs	Equipment Replacement Fund	40,000	-	2016
337	Motor Control Center Upgrade - Phosphorus Removal Related	Equipment Replacement Fund	50,000	14,009	2016
337	Variable Frequency Drives - Filter Influent Pumps	Equipment Replacement Fund	30,000	8,405	2016
337	Level Controls - Filter Influent Pumps	Equipment Replacement Fund	50,000	14,009	2016
312	2016 Street projects - Laterals (Birdsey, Mill St, Prairie)	Collection System Replacement Fund	107,956	3,076	2016
313	2016 Street projects - Mains (Birdsey, Mill St, Prairie)	Collection System Replacement Fund	342,133	9,747	2016
312	2016 Street projects - Laterals (Charles St.)	Collection System Replacement Fund	38,172	5,166	2016
313	2016 Street projects - Mains (Charles St.)	Collection System Replacement Fund	120,614	16,322	2016
312	2016 Street projects - Laterals (Church)	Collection System Replacement Fund	8,814	3,114	2016
313	2016 Street projects - Mains (Church)	Collection System Replacement Fund	39,763	14,047	2016
Totals			<u>\$ 1,552,889</u>	<u>\$ 230,881</u>	

* - Retirement values were estimated based on a Handy Whittman Index.

Financing Sources

Collection System Replacement Fund	\$ 897,452
Pump Replacement Fund	25,000
Equipment Replacement Fund	594,132
Alternate Financing	<u>36,305</u>
Total Financing Sources	<u>\$ 1,552,889</u>

Please refer to Accountants' Report, Summary of Significant Assumptions,
and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY

Plant in Service
Forecasted 2015 - Forecasted 2016

		Plant 12/31/2014	2015 Estimated Additions	2015 Estimated Retirements	2016 Estimated Additions	2016 Estimated Retirements	Ending Balance
Collecting System Plant							
Collecting mains	313	\$ 7,463,348	\$ -	\$ -	\$ 502,509	\$ 40,117	\$ 7,925,740
Interceptor mains	312	936,226	-	-	154,943	11,355	1,079,813
Other collecting system equipment	316	287,970	-	-	-	-	287,970
Total General Plant		<u>8,687,544</u>	<u>-</u>	<u>-</u>	<u>657,452</u>	<u>51,472</u>	<u>9,293,524</u>
Collection System Pumping Plant							
Electric pumping equipment	323	590,927	15,000	-	105,000	22,414	688,513
Other power pumping equipment	324	14,414	-	-	-	-	14,414
Miscellaneous pumping equipment	325	14,876	-	-	-	-	14,876
Total Collection System Pumping Plant		<u>620,217</u>	<u>15,000</u>	<u>-</u>	<u>105,000</u>	<u>22,414</u>	<u>717,803</u>
Treatment and Disposal Plant							
Land and land rights	330	2,500	-	-	-	-	2,500
Structures and improvements	331	3,866,970	-	-	-	-	3,866,970
Preliminary sewage treatment equipment	332	1,811,020	70,360	-	25,000	7,004	1,899,376
Secondary treatment equipment	334	2,254,642	-	-	9,000	2,522	2,261,120
Advanced equipment	335	681,604	114,900	32,192	132,100	37,011	859,401
Sludge treatment & disposal equipment	337	976,941	-	-	191,000	53,513	1,114,428
Plant site piping	338	387,743	-	-	-	-	387,743
Flow metering and monitoring equipment	339	244,632	-	-	-	-	244,632
Other treatment and disposal equipment	341	343,364	-	-	-	-	343,364
Total Treatment and Disposal Plant		<u>10,569,416</u>	<u>185,260</u>	<u>32,192</u>	<u>357,100</u>	<u>100,050</u>	<u>10,979,535</u>
General Plant							
Furniture and fixtures	372	18,218	-	-	-	-	18,218
Transportation equipment	373	71,148	27,303	24,754	-	-	73,697
Other equipment	379	256,154	9,002	-	-	-	265,156
Total General Plant		<u>345,520</u>	<u>36,305</u>	<u>24,754</u>	<u>-</u>	<u>-</u>	<u>357,071</u>
Total Wastewater Plant		\$ <u>20,222,697</u>	\$ <u>236,565</u>	\$ <u>56,946</u>	\$ <u>1,119,552</u>	\$ <u>173,936</u>	\$ <u>21,347,933</u>

Collection System Replacement Calculations

	2015	2016
Average Balance	\$ <u>7,463,300</u>	\$ <u>7,925,700</u>

Additions based on historical totals.

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY
Pump Replacement Fund

Description	Year Installed	Original Cost	Account Code	Service Life
West Side Station	1950	\$ 50,000	323	50 years
	1996	47,191	323	20 years
	1998	11,121	323	50 years
	1998	<u>8,234</u>	323	20 years
sub-total		116,546		
Less: retired		<u>(8,300)</u>		
sub-total		108,246		
Hughes Station	1992	<u>33,449</u>	323	50 years
Birdsey Station	1950	1,640	323	50 years
	1985	22,312	323	20 years
	1989	<u>7,500</u>	323	20 years
	sub-total	31,452		
Mexico Station	1950	15,000	323	50 years
	1983	<u>18,235</u>	323	20 years
	sub-total	33,235		
Whitney Station	2000	<u>25,000</u>	323	20 years
Kiwonos Station	1979	66,800	323	50 years
	1986	<u>3,032</u>	323	20 years
	sub-total	69,832		
Waterloo Station	2000	25,000	323	20 years
	2005	<u>61,028</u>	323	20 years
	sub-total	86,028		
Less: retired		<u>(10,676)</u>		
sub-total		75,352		

Please refer to Accountants' Report, Summary of Significant Assumptions,
and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY
Pump Replacement Fund

Description	Year Installed	Original Cost	Account Code	Service Life
Industrial Park	1985	\$ 15,100	323	20 years
Less: retired	1999	19,572	323	20 years
sub-total		<u>(7,500)</u>		
		27,172		
Commercial	1986	21,484	323	50 years
sub-total	1999	<u>3,275</u>	323	20 years
		24,759		
Dix Street Project	2003	3,881	323	20 years
Whitney St. lift station installation & equipment	2001	21,395	323	20 years
Krestal Ridge 2 Lift Station/Force Main	2006	82,612	323	20 years
2007 Activity		0	323	n/a
2008 Activity		0	323	n/a
2009 Activity - Retirement of William St. Station		(42,500)	323	n/a
2010 Activity - Wondra Construction Lift Station Project	2010	51,615	323	20 years
2011 Activity		0	323	n/a
2012 Activity		0	323	n/a
2013 Activity		0	323	n/a
2014 Activity - Control Panel Upgrade	2014	66,133	323	20 years
Small Pump Project		4,760	323	20 years
Less: retired		<u>(25,466)</u>		
		45,427		
Estimated 2015 and 2016 Activity		25,000		
Less: retired		<u>(7,004)</u>		
sub-total		17,996	323	20 years
TOTAL		<u>\$ 608,923</u>		
Total 20 Year			\$ <u>417,729</u>	
Computed Annual Replacement Requirement 5.00%			\$ <u>20,886</u>	
Proposed Annual Replacement Requirement			\$ <u>20,900</u>	
Total 50 Year			\$ <u>191,194</u>	
Computed Annual Replacement Requirement 2.00%			\$ <u>3,824</u>	
Proposed Annual Replacement Requirement			\$ <u>3,800</u>	
Total Requested Replacement Requirement			\$ <u>24,700</u>	

Please refer to Accountants' Report, Summary of Significant Assumptions,
and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY
Wastewater Treatment Plant Replacement Costs

Description	Year in Service	Total Cost (\$)	Depreciation*	
			(%)	(\$)
Flushing water pumps	1984	\$ 7,400	0	\$ -
Flushing water pumps	2010	7,300	4.00	292
Aeration basin blowers	2013	150,000	4.00	6,000
Return sludge pumps	1984	30,320	0	-
Aeration Diffusers	2013	75,000	6.67	5,000
Scum pumps	1984	21,500	0	-
Clarifier equipment	1984	100,900	0	-
Sludge storage blowers	1984	64,500	0	-
Submersible pumps	1984	10,300	0	-
Air compressor	1984	18,706	0	-
Sludge haul vehicle	1984	77,000	3.33	2,567
Filter influent pumps	1984	63,200	0	-
Filter backwash pumps	1984	49,150	0	-
Backwash waste pumps	1984	20,000	0	-
Backwash waste pumps	2013	14,390	5.00	720
Filter blowers	1984	21,500	0	-
Post aeration equipment	1984	20,250	0	-
Equipment instrumentation - blending system	2011	50,000	6.67	3,333
Equipment instrumentation - aeration system	2013	90,000	6.67	6,000
Emergency generator	1984	33,454	0	-
Bar screen and compactor	1996	170,000	0	-
Influent flow meter (14" and 10")	2011	10,000	6.67	667
Belt filter press	1996	184,836	5.00	9,242
Chemical Feed Equipment	2011	20,000	6.67	1,333
Phosphorous removal	1996	35,000	0	-
Trailer mounted pump	1993	14,414	5.00	721
Trash pumps	1995	14,870	5.00	744
Sampler	1997	6,500	0	-
Sampler	2010	6,500	6.67	433
Generators	1999	14,000	4.00	560
Steamer	1999	5,381	5.00	269
Jet-Vac	2006	200,000	5.00	10,000
SCADA equipment and system	2000	187,000	6.67	12,467
SCADA equipment and system - blending system	2011	50,000	6.67	3,333
Step Screen	2009	220,000	6.67	14,667
RAS-WAS Flower Meter	2007	5,000	6.67	333
Influent pumps	2011	100,000	5.00	5,000
Belt filter press feed pumps	2010	38,000	5.00	1,900
Tertiary sand filter valves	2010	150,000	6.67	10,000

Please refer to Accountants' Report, Summary of Significant Assumptions,
and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY
Wastewater Treatment Plant Replacement Costs

Description	Year in Service	Total Cost (\$)	Depreciation	
			(%)	(\$)
Grit removal unit (Headcell)	2011	\$ 85,000	5.00	\$ 4,584
Grit removal unit (Teacup)	2011	85,000	5.00	4,250
Grit removal dewatering unit (Gritsnail)	2011	85,000	5.00	4,250
Plant Wide HVAC	1984	250,000	0	-
2012 Additions	2012	40,591	4.00	1,624
2013 Additions	2013	455,820	4.00	18,233
2014 Additions	2014	15,687	4.00	627
Estimated 2015 and 2016 Activity	2015/2016	594,132	4.00	23,765
Less: retired	2015/2016	(125,237)	4.00	(5,009)
Traditional Method Forecasted Test Year Funding		<u>\$ 3,842,364</u>		<u>\$ 147,900</u>

Alternative Method from DNR		2016
2016 Mechanical Equipment Assets		\$ 3,842,364
Percent Required for ERF		<u>40%</u>
Required Minimum ERF Balance		1,536,946
12/31/2014 Equipment Replacement Fund Balance		468,695
Year-to-date deposits (1)		125,000
Expected remaining 2015 deposits (1)		25,000
2016 deposits (1 @ 139,800)		139,800
Forecasted uses of ERF Funds		<u>(594,132)</u>
Forecasted 12/31/2016 Balance		164,363
Over / (Under) Funding		<u>(1,372,600)</u>
Proposed Alternative Method Forecasted Test Year Funding		<u>\$ 457,533</u>

(1) Year-to-date deposits per GL detail as of October 31, 2015. Management will deposit another \$25,000 before year end to exceed the minimum annual deposit amount of \$139,800.

*- Depreciation with a zero balance represents assets that are already fully depreciated.

COLUMBUS SEWER UTILITY
Collection System Replacement Fund

Description	Year Installed	Length	Original Cost	Account Code
4"	1984	550'	\$ 3,572	313
	1940's	530'	(3,180)	313
	1999	1950'	16,868	313
	2007	99'	<u>55,650</u>	313
sub-total			72,910	
6"	1982	201'	9,602	313
		Retired	(3,700)	
	1984	rehab	2,206	313
	1985	144'	5,665	313
	1990*	rehab	14,000	313
	1998	1570'	4,356	313
	2007	52'	107,026	313
	2008	539'	16,709	313
	2010	630'	<u>(12,600)</u>	313
sub-total			143,265	
8"	1935	68033'	241,789	313
	1940's	4578'	(27,468)	313
	1940's	7378'	(59,024)	313
		Retired	(175,942)	313
	1979	rehab	5,187	313
	retired in 08	538'	(12,760)	313
	1960	956'	(9,560)	313
	1980	rehab	27,548	313
	1982	8859'	301,206	313
	1983	650.5'	18,097	313
	1984	1501'	58,002	313
	1985	1812'	73,777	313
	1986	1110'	44,165	313
	1987	234'	16,024	313
	1988	361'	21,501	313
	1989	1043'	87,355	313
	1990*	rehab	60,375	313
	1991**	rehab	106,476	313
	1991	Waterloo St	50,523	313
	1992	258'	29,664	313
	1993	937'	36,658	313
	1994		33,798	313
	1995	968'	71,240	313
	1997	1186'	58,659	313
	1999	4082'	100,808	313
	2000	815'	61,508	313
	2002	rehab	3,985	313
	2003	647'	156,466	313
	2004	Akins/Dix St	163,502	313
	2005	517'	86,822	313
	2006	2515'	47,407	313
	2006	956'	19,120	313
	2006	1253'	73,292	313
2006	3213'	174,440	313	
2006	956'	49,402	313	
2007	4578'	155,652	313	
2007	7541'	212,922	313	
	Retired	(5,170)	313	
2008	637'	18,825	313	
2008	300'	30,429	313	
2008	238'	9,044	313	
2008	300'	107,881	313	
2008	238'	9,044	313	
2008	1222'	75,288	313	
2008	325'	<u>11,375</u>	313	
sub-total			2,619,332	

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY
Collection System Replacement Fund

Description	Year Installed	Length	Original Cost	Account Code
9"	1935	405'	\$ 2,081	313
10"	1935	12432'	77,964	313
	1940's	520	(3,120)	313
		Retired	(3,634)	
	1940's	1412'	(14,120)	313
	1979	rehab	29,386	313
	1980	rehab	9,935	313
	1982	1966'	78,130	313
	1983	337'	15,500	313
	1984	395'	9,671	313
	1985	564'	24,185	313
	1990*	rehab	26,100	313
	1998	1930'	128,830	313
	2006	1912'	146,182	313
	2007	1412	49,320	313
	2008	172'	27,868	313
	2008	1179'	<u>180,528</u>	313
sub-total			782,725	
12"	1935	10018'	71,495	313
	1940's	340'	(4,480)	313
	1979	rehab	17,496	313
	1980	rehab	19,859	313
	1982	349'	14,864	313
	2006	715'	45,750	313
	2006	625'	16,531	313
	2007	341'	<u>16,460</u>	313
sub-total			197,975	
15"	1935	2762'	21,868	313
	1980	rehab	2,235	313
	1982	638'	36,905	313
	2006	1641'	<u>91,619</u>	313
sub-total			152,627	
18"	1980	2033'	50,825	313
	1940's	352'	(8,382)	313
	1940's	18'	(288)	313
	1996	1967'	218,448	313
	2005	669'	192,919	313
	2007	352'	26,048	313
	2007	18'	2,070	313
		Retired	<u>(6,690)</u>	
			474,950	
21"	1974	2100'	<u>51,996</u>	313
27"	1996	1036'	<u>158,447</u>	313
2009 Activity		Additions	280,932	313
		Retirements	(14,397)	
2010 Activity		Additions	130,589	313
		Retirements	(4,650)	
2011 Activity		Additions	662,039	313
		Retirements	(5,740)	
2012 Activity		Additions	29,440	313
		Retirements	(14,720)	
2013 Activity		Additions	6,910	312
		Additions	203,991	313
		Retirements	-	
2014 Activity		Additions	-	
		Retirements	-	
Forecasted 2015 and 2016 activity		Additions	897,452	312
		Retirements	(73,886)	
TOTAL			<u>\$ 6,754,270</u>	
Computed Annual Replacement Requirement 1.80%	***		<u>\$ 121,577</u>	
Proposed Annual Replacement Requirement			<u>\$ 121,600</u>	

*** - Used 1.8% as used in previous study

Please refer to Accountants' Report, Summary of Significant Assumptions,
and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY

Monthly Bill Comparison
Forecasted 2016

Customer	Meter	Volume (CCF)	PRESENT CHARGE			COST BASED CHARGE			CHANGE CURRENT TO COST BASED	
			Volume	Fixed	Total	Volume	Fixed	Total	\$	%
Residential	5/8"	3	\$16.08	\$15.60	\$31.68	\$16.38	\$15.70	\$32.08	\$0.40	1.26%
Residential (Average)*	5/8"	4	21.44	15.60	37.04	\$21.84	15.70	37.54	\$0.50	1.35%
Residential	5/8"	7	37.52	15.60	53.12	\$38.22	15.70	53.92	\$0.80	1.51%
Commercial	5/8"	10	53.60	15.60	69.20	\$54.60	15.70	70.30	\$1.10	1.59%
Commercial (Average)*	5/8"	15	80.40	15.60	96.00	\$81.90	15.70	97.60	\$1.60	1.67%
Commercial	1-1/2"	30	160.80	26.00	186.80	\$163.80	29.00	192.80	\$6.00	3.21%
Industrial (Average)*	1-1/2"	47	251.92	26.00	277.92	\$256.62	29.00	285.62	\$7.70	2.77%
Public Authority (Average)*	2"	11	58.96	34.00	92.96	\$60.06	39.00	99.06	\$6.10	6.56%
High School	4"	107	573.52	80.00	653.52	\$584.22	95.00	679.22	\$25.70	3.93%

* - Average monthly volume amounts were obtained from Schedule 2A.

Please refer to Accountants' Report, Summary of Significant Assumptions, and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITY

Calculation of Septic Charges
Forecasted 2016

	With Collection System 2016	Without Collection System 2016
VOLUME	\$ 7.30	\$ 5.98
BOD		
(7,000 mg/l - 220 mg/l)	6,780	6,780
Rate x 8.34 conversion factor / 1000	<u>0.006091</u>	<u>0.006080</u>
Subtotal	<u>41.30</u>	<u>41.22</u>
SS		
(15,000 mg/l - 200 mg/l)	14,800	14,800
Rate x 8.34 conversion factor / 1000	<u>0.005650</u>	<u>0.005535</u>
Subtotal	<u>83.62</u>	<u>81.92</u>
TKN		
(1,500 mg/l - 75 mg/l)	1,425	1,425
Rate x 8.34 conversion factor / 1000	<u>0.004000</u>	<u>0.004009</u>
Subtotal	<u>5.70</u>	<u>5.71</u>
Phosphorus		
(250 mg/l - 13 mg/l)	237	237
Rate x 8.34 conversion factor / 1000	<u>0.020769</u>	<u>0.020898</u>
Subtotal	<u>4.92</u>	<u>4.95</u>
Total Rounded Septic Charge per 1000 Gallons	<u>\$ 143.00</u>	<u>\$ 140.00</u>
Present Rate	<u>\$ 162.00</u>	

Please refer to Accountants' Report, Summary of Significant Assumptions,
and Summary of Significant Accounting Policies.

COLUMBUS SEWER UTILITYCalculation of Septic Charges Without Collection System
Forecasted 2016

	2016 Est. Cost of Service	Less Collection System Costs	Applicable Est. Cost of Service	Estimated Loadings	Unit Cost
Volume (B)	\$ 641,778	\$ (321,377) (A)	\$ 320,401	108,459	\$ 2.954
BOD	145,081	0	145,081	199,000	0.729
SS	122,020	(1,946) (A)	120,073	180,909	0.664
TKN	32,613	0	32,613	67,841	0.481
Phosphorus	29,465	0	29,465	11,759	2.506
Total	<u>\$ 970,956</u>		<u>\$ 647,632</u>		

(A) - Costs removed include; debt associated with the collection system, funding of the collection system account and operations and maintenance costs allocated to the collection system.

(B) - Rate Stabilization adjustment of \$180,000 was added back to the volume charges on this schedule. As these are actual costs incurred by the utility.

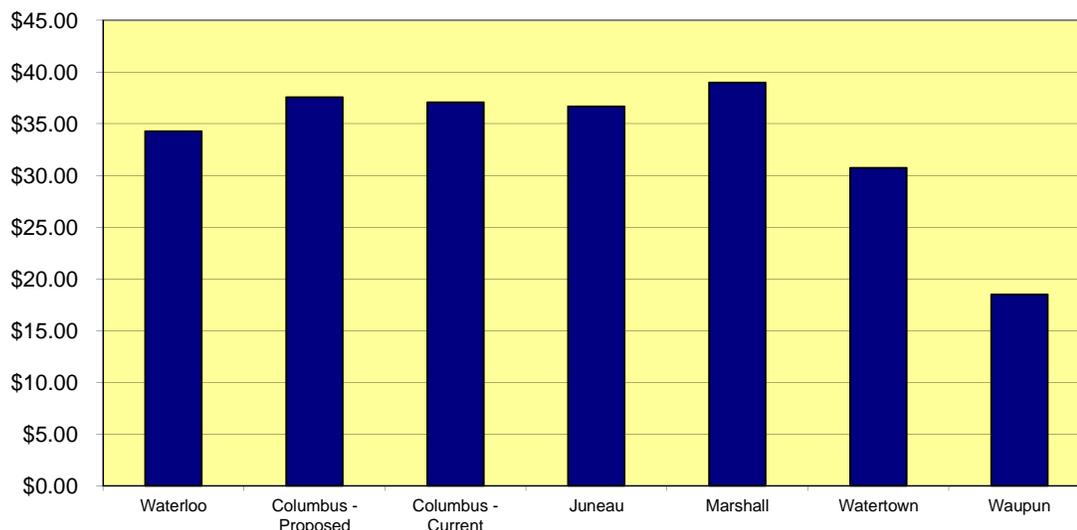
Calculated Domestic Strength Rates:

Volume			2.95	=	\$ 2.95
BOD	220 mg/l	0.00834 x	0.73	=	1.34
SS	200 mg/l	0.00834 x	0.66	=	1.11
TKN	75 mg/l	0.00834 x	0.48	=	0.30
P	13 mg/l	0.00834 x	2.51	=	<u>0.27</u>

Proposed Rate Domestic Strength Per 1,000 Gallons

\$ 5.98

COLUMBUS SEWER UTILITY
Average Residential Monthly Bill Comparison with Surrounding Communities



	Columbus		Sun Prairie	Waterloo	Marshall	Beaver Dam	Juneau	Waupun	Watertown
	Current Rate	Cost Based Rate 2016							
Volume per CCF	\$5.36	\$ 5.46	\$ 2.74	\$ 6.49	\$ 6.62	\$ 1.86	\$ 5.57	\$ 3.09	\$ 3.01
Monthly Customer Charge									
5/8" and 3/4"	15.60	15.70	8.83	8.30	12.48	16.10	14.37	6.13	18.67
1"	20.00	21.00	12.86	8.30	21.84	27.50	25.60	6.69	26.41
1-1/4"	23.00	25.00	-	8.30	29.12	36.30	34.56	-	-
1-1/2"	26.00	29.00	19.73	8.30	37.44	46.10	44.24	7.61	39.46
2"	34.00	39.00	27.82	8.30	55.12	68.50	66.59	8.72	55.20
3"	53.00	62.00	46.84	8.30	98.80	120.80	118.81	11.30	91.79
4"	80.00	95.00	73.91	8.30	-	195.60	193.38	14.99	196.43
6"	146.00	177.00	-	8.30	315.12	382.70	379.71	24.21	274.92
Average Monthly Resident (4 CCF)	\$ 37.04	\$ 37.54	\$ 19.79	\$ 34.26	\$ 38.96	\$ 23.54	\$ 36.65	\$ 18.49	\$ 30.71

Please refer to Accountants' Report and Summary of Significant Accounting Policies and Significant Assumptions.

COLUMBUS SEWER UTILITY

Debt Service Coverage
Forecasted 2016

	<u>Current Rates</u>	<u>Cost Based Rates</u>
Operating Revenues	\$ 1,391,200	\$ 1,442,000
Other income	64,700	64,700
Less: Operation and maintenance expenses	<u>(900,000)</u>	<u>(900,000)</u>
Net Funds for Debt Service	<u>\$ 555,900</u>	<u>\$ 606,700</u>
Revenue bond debt service only(1)(2)	\$ 226,600	\$ 226,600
Coverage factor	<u>110%</u>	<u>110%</u>
Required Earnings	<u>\$ 249,300</u>	<u>\$ 249,300</u>
Actual Coverage Factor	<u>2.45</u>	<u>2.68</u>

(1) - Based on 5 year average debt service as shown on Schedule 8.

(2) - Note this excludes G.O. debt

COLUMBUS SEWER UTILITY
 Revenue Analysis - Elba
 Actual 11/1/14-10/31/15 Usage - Forecasted 2016

Volume Charge	Actual 12 months 10/31/15		Forecasted 2016	
	Units	Revenue	Units	Revenue
Rate Per 1,000 Gallons	\$2.84		\$2.71	
Total Revenues Per Analysis	6,512	\$ 18,494	3,900 (A)	\$ 10,588
Credit (15% for City Customers Passing Through Elba Flow Meter)		(2,774)		(1,588)
Net Revenues		\$ 15,720		\$ 9,000

(A) Forecasted 2016 gallons were determined from a 3 year average from 2012 - 2014 due to the wide variance in usage year to year for Elba. See Schedule 2A for a summary of historical usage for Elba.

COLUMBUS SEWER UTILITY

Revenue Analysis - Fall River
 Forecasted 2016

Volume Charge	Actual 12 months 10/31/15		Forecasted 2016	
	Units	Revenue	Units	Revenue
Rate Per 1,000 Gallons		\$1.89		\$2.39
Total Revenues Per Analysis	<u>71,700</u>	<u>\$ 135,513</u>	<u>71,700 (A)</u>	<u>\$ 171,300</u>

(A) Usage was estimated to remain consistent with 2015 year to date usage due to the recent connection of Fall River. Fall River connected to the City of Columbus in March 2012, therefore limited annual trends available. Management does not foresee a change to current usage.

COLUMBUS SEWER UTILITY
 Summary of O&M Costs
 Forecasted 2016 Compared to Fall River IGA

	Forecasted 2016 Amount	Estimated 2010 Cost Per Fall River IGA
Operating Expenses		
Supervision and labor	68,250	68,265
Employee pensions & benefits	34,411	25,479
Power and fuel for pumping equipment	22,000	48,700
Power and fuel for aeration equipment	85,000	80,261
Chlorine	30,000	23,000
Transportations	6,000	22,200
Other operating supplies & expense	28,250	-
Total Operating Expenses	<u>273,911</u>	<u>267,905</u>
Sludge Processing		
Operation - labor	15,400	6,386
Employees pensions & benefits	7,784	2,513
Repairs and maintenance	6,800	2,000
Chemicals	6,000	16,100
Total Sludge Processing	<u>35,984</u>	<u>26,999</u>
Treatment and disposal equipment		
Supervision and labor	46,100	35,454
Employees pensions & benefits	23,225	20,687
Other	36,000	20,000
Buildings and Grounds		
Supervision and labor	17,100	7,500
Employees pensions & benefits	8,647	2,951
Other	25,000	12,000
Total Maintenance Expenses	<u>156,072</u>	<u>98,592</u>
Total Before Administrative & General Expenses	<u>465,967</u>	<u>393,496</u>
Administrative and general salaries	62,775	62,648
Office supplies and expenses	3,600	1,500
Outside services	94,850	15,000
Insurance expense	19,980	24,500
Vacation, holiday, and standby	-	48,047
Miscellaneous	1,500	2,000
Economic development contribution	10,000	-
Pensions and benefits	18,570	11,928
Total Admin. and General Expenses	<u>211,275</u>	<u>165,623</u>
Total Operation & Maintenance Expenses	<u>677,242</u>	<u>559,119</u>

Please refer to Accountants' Report, Summary of Significant Assumptions,
 and Summary of Significant Accounting Policies.