Executive Report

Allendale Charter Township, MI

Sewer Cost of Service and Rate Design Report

September 6, 2019

UFS

Utility Financial Solutions, LLC

Specializing in Cost of Service, Rate Design, and Financial Analysis

September 6, 2019

Chad E Doornbos
Superintendent of Public Utilities
Allendale Charter Township
6676 Lake Michigan Drive
Allendale, MI 49401

Dear Mr. Doornbos,

We are pleased to present this executive summary report for a cost of service, financial projection and rate design study completed for Allendale Charter Township sewer utility. This report was prepared to provide the utility with a comprehensive examination of its existing financials by an outside party.

The specific purposes of this long-term financial projection and rate study are:

1) Determine the water utility's revenue requirements for 2019
2) Recommend rate adjustments needed to meet targeted revenue requirements
3) Determine the cost to serve retail customers
4) Develop one-year of retail rates

This report includes results of the cost of service, financial projection and recommendations on future rate adjustments for the sewer operation. Specific recommendations included in this report are:

1) Rate adjustments that are based on the utility's ability to work toward three factors listed below:
    - Debt Coverage Ratio
    - Minimum Cash Reserves
    - Optimal Operating Income
2) Rate adjustments are designed to work toward cost of service results.
    - A comparison of current and proposed rates and the impact to rate payers is included

This report is intended for information and use by management and the Board of Directors for purposes stated above and is not intended to be used by anyone except the specified parties.

Sincerely,

Dawn Lund

Utility Financial Solutions, LLC
Dawn Lund, Vice-President

UTILITY REVENUE REQUIREMENTS FOR 2020-2025

The utility currently has combined financial statements for water and sewer. This report separates the sewer department as its own enterprise fund for rate determination purposes. To determine revenue requirements, the revenues and expenses for Fiscal Year 2018 and Budget 2019 were analyzed, with adjustments made to reflect projected operating characteristics. **The projected financial statements are for cost of service purposes only.**

Table 1 is the projected financial statement for the Sewer Operation from 2020-2025 without any rate changes. An operating loss for 2020 is projected at $(576,872) and increases throughout the projection period. The cash generated from operations decreases throughout the period to $(6.5 million) in 2025. The debt coverage ratio is also well below the recommended revenue bond requirement of 1.25.

Table 1 – Financial Projection Summary - With no rate adjustment

Fiscal Year	Projected Rate Adjustments	Projected Revenues	Projected Expenses	Adjusted Operating Income	Projected Cash Balances	Capital Improvements	Bond Draw Down	Debt Coverage Ratio
2020	0.0%	1,743,928	2,443,716	(576,872)	1,908,030	3,320,000	3,320,000	(0.09)
2021	0.0%	1,743,928	2,568,171	(701,327)	1,515,344	3,730,000	3,730,000	(0.19)
2022	0.0%	1,893,928	3,181,815	(1,164,970)	587,034	28,380,000	28,380,000	0.04
2023	0.0%	1,893,928	3,559,578	(1,542,734)	(1,515,939)	4,170,000	4,170,000	(0.01)
2024	0.0%	1,893,928	3,649,795	(1,632,950)	(3,898,181)	-	-	(0.03)
2025	0.0%	1,893,928	3,747,846	$ (1,731,002)	(6,498,004)	4,325,000	4,325,000	(0.05)
Recommended Target in 2020				**$ 873,141**				
Recommended Target in 2025				**$ 2,357,143**				
Minimum Target 2020					**$ 1,371,958**			**1.25/1.45**
Minimum Target 2025					**$ 2,227,084**			**1.25/1.45**

Projected Cash Flow

Table 2 is the projected cash flow for 2020-2025, including projections of capital improvements as provided by Allendale Charter Township. Changes in the capital improvement plan can greatly affect the cash balance and recommended minimum cash reserve target. Cash balances decrease and turn negative throughout the projection period and include $40 million in bond issuances over the next five years to help fund the capital improvement program.

Table 2 – Projected Cash Flows, No Rate Adjustment

Projected Cash Flows	Projected 2020	Projected 2021	Projected 2022	Projected 2023	Projected 2024	Projected 2025
Add Net Income	$ (771,944)	$ (1,019,053)	$ (2,042,772)	$ (2,988,318)	$ (3,204,237)	$ (3,348,341)
Add Back Depreciation Expense	676,080	750,680	1,318,280	1,643,780	1,685,480	1,728,730
Subtract Debt Principal	60,000	124,313	203,819	758,436	863,485	980,213
Add Bond Sale Proceeds	3,320,000	3,730,000	28,380,000	4,170,000	-	4,325,000
Cash Available from Operations	**$ 3,164,136**	**$ 3,337,314**	**$ 27,451,690**	**$ 2,067,026**	**$ (2,382,241)**	**$ 1,725,176**
Estimated Annual Capital Additions	3,320,000	3,730,000	28,380,000	4,170,000	-	4,325,000
Net Cash From Operations	**$ (155,864)**	**$ (392,686)**	**$ (928,310)**	**$ (2,102,974)**	**$ (2,382,241)**	**$ (2,599,824)**
Beginning Cash Balance	2,063,894	1,908,030	1,515,344	587,034	(1,515,939)	(3,898,181)
Ending Cash Balance	**$ 1,908,030**	**$ 1,515,344**	**$ 587,034**	**$ (1,515,939)**	**$ (3,898,181)**	**$ (6,498,004)**
Total Cash Available	**$ 1,908,030**	**$ 1,515,344**	**$ 587,034**	**$ (1,515,939)**	**$ (3,898,181)**	**$ (6,498,004)**
Recommended Minimum	**$ 882,322**	**$ 1,563,372**	**$ 2,970,594**	**$ 3,246,538**	**$ 3,415,287**	**$ 3,463,527**

DEVELOPMENT OF FINANCIAL TARGETS:

When evaluating rates to charge customers, three factors must be considered:

1. Debt Coverage Ratio
2. Minimum Cash Reserves
3. Optimal Net Income

Each of these factors is discussed below:

1) **Debt Coverage Ratio -** Debt coverage ratios are mandated by covenants in the revenue bond ordinance and must be maintained to ensure the utility maintains its bond rating and has the capacity to issue additional revenue bonds in the future. Allendale Charter Township does not meet the minimum target coverage ratios throughout the projection period.

Table 3 below contains projected debt coverage ratios from 2020-2025.

Table 3 - Current Debt Coverage Ratio – Without Rate Adjustment

Debt Coverage Ratio	Projected 2020	Projected 2021	Projected 2022	Projected 2023	Projected 2024	Projected 2025
Add Net Income	$ (771,944)	$ (1,019,053)	$ (2,042,772)	$ (2,988,318)	$ (3,204,237)	$ (3,348,341)
Add Depreciation Expense	676,080	750,680	1,318,280	1,643,780	1,685,480	1,728,730
Add Interest Expense	82,475	204,350	762,462	1,325,603	1,448,370	1,494,423
Cash Available for Debt Service	$ (13,389)	$ (64,023)	$ 37,970	$ (18,935)	$ (70,386)	$ (125,188)
Debt Principal and Interest	$ 142,475	$ 328,663	$ 966,280	$ 2,084,039	$ 2,311,855	$ 2,474,636
Projected Debt Coverage Ratio (Covenants)	(0.09)	(0.19)	0.04	(0.01)	(0.03)	(0.05)
Minimum Debt Coverage Ratio	**1.45**	**1.45**	**1.45**	**1.45**	**1.45**	**1.45**

Debt Coverage Ratio falls below the recommended minimum targets throughout the projection period.

2) **Minimum Cash Reserve Target** - To help ensure timely completion of capital improvements and enable the utility to meet requirements for large unexpected expenditures, a minimum cash reserve policy should be established. Minimum cash reserve attempts to quantify the minimum amount of cash the utility should keep in reserve, actual cash reserves may vary substantially above the minimum and is dependent on the life cycle of assets that are currently in service. The methodology used in this report is based on certain assumptions related to percent of operation and maintenance, rate base, capital improvements, and debt service. The establishment of minimum cash reserves should consider a number factors including:

- **Working Capital Lag** - Timing differences between when expenses are incurred and revenues received from customers. Establishing a minimum cash reserve helps to ensure cash exists to pay expenses in a timely manner.
- **Investment in assets** – Catastrophic events may occur that require substantial amounts of cash reserves to replace damaged assets. Some examples of catastrophic events include ice storms, earthquakes, wind storms, floods, or tornadoes. Many of these catastrophic events may allow the utility to recover the cost of damages from FEMA; however FEMA reimbursements can take between 6 months to 2 years to recover. The utility should ensure adequate cash reserves exist to replace the assets in a timely fashion. The minimum reserve levels are often combined with emergency funding from banks or bonding agencies.
- **Annual debt service** – Debt service payments do not occur evenly throughout the year and often occurs at periodic times typically every six months. The utility must ensure adequate cash reserves exist to fund the debt service payment when the payment is due.
- **Capital improvement program** – Some capital improvements are funded through bond issuances and some through cash reserves. The establishment of a minimum cash reserve level helps to ensure timely replacement or construction of assets.

The minimum recommended cash reserve is approximately $2.0 million; the projected cash balances fall below the minimum throughout the projections period. Table 4 provides the minimum cash reserve calculation.

Table 4 – Minimum Cash Reserves

	Percent Allocated	Projected 2020	Projected 2021	Projected 2022	Projected 2023	Projected 2024	Projected 2025
Operation & Maintenance Less Depreciation Expense	**12.3%**	$ 707,054	$ 223,551	$ 229,215	$ 235,643	$ 241,611	$ 248,351
Historical Rate Base	**1.0%**	336,240	373,540	657,340	699,040	699,040	742,290
Current Portion of Debt Service Reserve	**100.0%**	328,663	966,280	1,042,019	1,155,927	1,237,318	1,236,443
Five Year Capital Improvements - Net of bond proceeds	**20.0%**	-	-	-	-	-	-
Recommended Minimum Cash Reserve Levels		**$ 1,371,958**	**$ 1,563,372**	**$ 1,928,574**	**$ 2,090,611**	**$ 2,177,969**	**$ 2,227,084**
Projected Cash Reserves		**$ 1,908,030**	**$ 1,515,344**	**$ 587,034**	**$ (1,515,939)**	**$ (3,898,181)**	**$ (6,498,004)**

Cash reserves do not meet minimum targets including a total of $40 million bonds to help fund the capital improvement program.

Notes:

1. Rate base is historical investment in plant and equipment
2. Five-year capital includes budgeted capital improvements for the next six years and excludes capital improvements funded through debt issuances

3) **Optimal operating income targets** - The optimal target for setting rates is the establishment of a target operating income to help ensure the following:

1) Funding of Interest Expense on the outstanding principal on debt. Interest expense is below the operating income line and needs to be recouped through the operating income balance.
2) Funding of the inflationary increase on the assets invested in the system. The inflation on the replacement of assets invested in the utility should be recouped through the Operating Income
3) Adequate rate of return on investment to help ensure current customers are paying their fair share of the use of the infrastructure and not deferring the charge to future generations.

As improvements are made to the system, the optimal operating income target will increase unless annual depreciation expense is greater than yearly capital improvements. The target established is $873,141 in 2020; with a projected operating loss of $(576,872). The 2025 target is $2.4 million; increasing due to the interest expense on the projected bonds. Losses continue to grow throughout the projection period.

Table 5 - Optimal Operating Income Targets Compared to Projected

	Projected 2020	Projected 2021	Projected 2022	Projected 2023	Projected 2024	Projected 2025
Outstanding Principal on Debt	82,475	204,350	762,462	1,325,603	1,448,370	1,494,423
Contributed Capital Estimated	74,058	72,116	59,821	60,624	62,588	63,302
System Equity	716,608	666,787	507,314	650,903	636,650	799,418
Target Operating Income	**$ 873,141**	**$ 943,253**	**$ 1,329,597**	**$ 2,037,130**	**$ 2,147,608**	**$ 2,357,143**
Projected Adjusted Operating Inc	**$ (576,872)**	**$ (701,327)**	**$ (1,164,970)**	**$ (1,542,734)**	**$ (1,632,950)**	**$ (1,731,002)**
Rate of Return in %	**4.1%**	**3.9%**	**2.6%**	**3.8%**	**4.1%**	**4.3%**

Operating Income is not being met throughout the projection period.

REVENUE FORECAST:

Sales were projected and adjusted for known or anticipated changes in customer usage and a growth for the projection period. Table 6 and 7 below projects the billed units and number of customers in 2020.

TABLE 6 – PROJECTED BILLED UNITS

Meter Size	Projected 2020
All	351,326
Total	**351,326**

TABLE 7 – PROJECTED NUMBER OF CUSTOMERS

Meter Size	Projected 2020
5/8"	1,062
3/4"	1,003
1"	303
1.5"	187
2"	95
3"	18
4"	9
6"	5
8"	1
Total	**2,683**

SUMMARY OF FINANCIAL POSITION:

To work toward financial health and a healthy debt coverage ratio, a series of rate adjustments should be considered.

Table 8 is a financial projection without rate adjustments. An operating loss for 2020 is projected at $(576,872) and increases throughout the projection period. The cash generated from operations decreases throughout the period to $(6.5 million). The debt coverage ratio is also well below the recommended revenue bond requirement of 1.25.

Table 8 – Financials with No Rate Adjustments

Fiscal Year	Projected Rate Adjustments	Projected Revenues	Projected Expenses	Adjusted Operating Income	Projected Cash Balances	Capital Improvements	Bond Draw Down	Debt Coverage Ratio
2020	0.0%	1,743,928	2,443,716	(576,872)	1,908,030	3,320,000	3,320,000	(0.09)
2021	0.0%	1,743,928	2,568,171	(701,327)	1,515,344	3,730,000	3,730,000	(0.19)
2022	0.0%	1,893,928	3,181,815	(1,164,970)	587,034	28,380,000	28,380,000	0.04
2023	0.0%	1,893,928	3,559,578	(1,542,734)	(1,515,939)	4,170,000	4,170,000	(0.01)
2024	0.0%	1,893,928	3,649,795	(1,632,950)	(3,898,181)	-	-	(0.03)
2025	0.0%	1,893,928	3,747,846	$ (1,731,002)	(6,498,004)	4,325,000	4,325,000	(0.05)
Recommended Target in 2020				**$ 873,141**				
Recommended Target in 2025				**$ 2,357,143**				
Minimum Target 2020					**$ 882,322**			**1.25/1.45**
Minimum Target 2025					**$ 3,463,527**			**1.25/1.45**

Recommended financial targets are not being met throughout the projection period.

Recommended Rate Track

Increasing rates requires balancing the financial health of the utility with the financial impact on customers and cost of service results. Table 9 below is the financial projection with recommended rate increases of 17.9% in 2020-2025. The rate track was developed to move toward recommended minimum targets. Operating income and cash balances stabilize and work toward the minimum; the debt coverage ratio is under required targets, however, the utility is currently shown combined on the financial statements for water and sewer and the debt coverage ratio is met combined (See table 9B for the combined projection.) The rate track should be reviewed annually as changes in revenues, expenses and capital can impact the rate track.

Table 9 – Financials with Proposed Rates

Fiscal Year	Projected Rate Adjustments	Projected Revenues	Projected Expenses	Adjusted Operating Income	Projected Cash Balances	Capital Improvements	Bond Draw Down	Debt Coverage Ratio
2020	17.9%	2,007,747	2,443,716	(313,053)	2,171,849	3,320,000	3,320,000	1.76
2021	17.9%	2,318,790	2,568,171	(126,465)	2,355,344	3,730,000	3,730,000	1.56
2022	17.9%	2,835,509	3,181,815	(223,389)	2,372,815	28,380,000	28,380,000	1.02
2023	17.9%	3,267,871	3,559,578	(168,791)	1,652,713	4,170,000	4,170,000	0.65
2024	17.9%	3,777,626	3,649,795	250,748	1,162,433	-	-	0.79
2025	17.9%	4,378,626	3,747,846	$ 753,697	1,053,120	4,325,000	4,325,000	0.96
Recommended Target in 2020				**$ 873,141**				
Recommended Target in 2025				**$ 2,357,143**				
Minimum Target 2020					**$ 1,371,958**			**1.25/1.45**
Minimum Target 2025					**$ 2,227,084**			**1.25/1.45**

Recommended minimum cash balance is met in 2020 but falls below targeted by 2025. The debt coverage ratio target is not being met after 2020.

Table 9B – COMBINED Financials with Proposed Rates

Fiscal Year	Projected Rate Adjustments (Water)	Projected Rate Adjustments (Wastewater)	Projected Revenues	Projected Expenses	Adjusted Operating Income	Operating Cash Balance	Capital Improvements	Bond Draw Down	Debt Coverage Ratio
2020	3.5%	17.9%	$ 4,724,586	$ 4,986,823	$ (60,497)	$ 3,012,869	$ 4,560,000	$ 3,320,000	1.72
2021	3.5%	17.9%	5,177,954	5,185,774	193,920	3,658,985	3,730,000	3,730,000	2.13
2022	3.5%	17.9%	5,994,746	5,873,344	323,142	3,280,083	29,485,000	28,380,000	1.60
2023	3.5%	17.9%	6,588,357	6,326,550	463,547	3,370,163	4,170,000	4,170,000	1.04
2024	3.5%	17.9%	7,268,047	6,484,825	984,962	3,289,967	515,000	-	1.17
2025	3.5%	17.9%	8,048,148	6,678,365	1,571,524	2,516,501	6,030,000	4,325,000	1.34
Recommended Target 2020					**$ 1,481,375**	**$ 2,168,682**			**1.25/1.45**
Recommended Target 2025					**$ 3,026,937**	**$ 4,659,659**			**1.25/1.45**

Cost of Service Results

The purpose of a cost of service study is to allocate costs between flow (Commodity Costs) and customer service costs (Customer Costs). The cost of service study was based on recognized procedures from the American Public Works Association.

Commodity Costs are costs that tend to vary with the quantity of sewer treated, as well as costs associated with the collection system.

Customer Costs are costs associated with serving customers regardless of their usage or demand characteristics. Customer costs include the operation and maintenance expenses related to meters and services, meter reading costs, billing and collection costs. The customer costs were allocated based on the relative size of water meters and services and the number of customers.

Table 9 compares Allendale Charter Township's current quarterly customer charge and current commodity rate with results of the cost of service analysis.

Table 9 – Comparison of Current Customer Rates with Actual Cost of Service

Meter Size	COS Quarterly Customer Charge	Current Quarterly Customer Charge
5/8"	51.34	$ 14.28
3/4"	77.01	21.42
1"	128.35	35.70
1.5"	256.70	71.40
2"	410.71	114.24
3"	770.09	214.20
4"	1,283.48	357.00
6"	2,566.95	714.00
8"	4,107.12	714.00
Overall Commodity	$ 3.25	$ 4.91

These rates are not recommended in the first-year rate design, but could be worked toward over time. The results show that any increase in the future should be put on the fixed quarterly charge to the extent possible, while watching the impacts to customers by meter size.

SIGNIFICANT ASSUMPTIONS

This section outlines the procedures used to develop the cost of service and rate design for Allendale Sewer Utility and the related significant assumptions.

Forecasted Operating Expenses
Forecasted expenses were based on 2018 actual and Budget 2019 and adjusted for inflation.

Inflation
Inflation was assumed at 2.65% annually.

Growth
Growth on sales was projected at 2.0%

Depreciation Expense
Depreciation expense was projected based on historical capital additions and discussions with management on future capital additions.

Interest Income
Interest income was forecasted based on projected cash balances and an interest rate of 0.50%.

Capital Improvements and recommended bonds
The capital improvement projections were provided by Allendale Charter Township. Projections for 2020-2025 are listed below:

Fiscal Year	Capital Improvements	Bond Draw Down
2020	3,320,000	3,320,000
2021	3,730,000	3,730,000
2022	28,380,000	28,380,000
2023	4,170,000	4,170,000
2024	-	-
2025	4,325,000	4,325,000

SEWER OPERATION FINDINGS

1. For Allendale Charter Township to maintain long-term financial targets of the sewer utility, rate increases should be considered. Below is a summary of the six-year financial projection with proposed rate increases of 17.9% in 2020 - 2025. In addition, approximately $40 million in bonds will need to be issued over the five-year period to help fund the capital improvement program. The rate track was developed to move toward recommended minimum targets. Operating income and cash balances stabilize and work toward the minimum; the debt coverage ratio is under required targets, however, the utility is currently shown combined on the financial statements for water and sewer and the debt coverage ratio is met combined. The rate track should be reviewed annually as changes in revenues, expenses and capital can affect the rate track and bonding requirements.

Fiscal Year	Projected Rate Adjustments	Projected Revenues	Projected Expenses	Adjusted Operating Income	Projected Cash Balances	Capital Improvements	Bond Draw Down	Debt Coverage Ratio
2020	17.9%	2,007,747	2,443,716	(313,053)	2,171,849	3,320,000	3,320,000	1.76
2021	17.9%	2,318,790	2,568,171	(126,465)	2,355,344	3,730,000	3,730,000	1.56
2022	17.9%	2,835,509	3,181,815	(223,389)	2,372,815	28,380,000	28,380,000	1.02
2023	17.9%	3,267,871	3,559,578	(168,791)	1,652,713	4,170,000	4,170,000	0.65
2024	17.9%	3,777,626	3,649,795	250,748	1,162,433	-	-	0.79
2025	17.9%	4,378,626	3,747,846	$ 753,697	1,053,120	4,325,000	4,325,000	0.96
Recommended Target in 2020				**$ 873,141**				
Recommended Target in 2025				**$ 2,357,143**				
Minimum Target 2020					**$ 1,371,958**			**1.25/1.45**
Minimum Target 2025					**$ 2,227,084**			**1.25/1.45**

2. Any approved rate increase should be placed on the customer charge to the extent possible while watching the impacts to customers by meter size. It may take several years to move closer to cost of service and recover the relative fixed costs of the system. If the Board chooses a phase-in approach, it will be important to stay committed to the plan. The rate design should work towards cost of service, while phasing-in increases to customers.

3. The financial projection revenue, expenses and cash flow should be updated annually with the budget process to determine if the rate track is on target. Any changes in revenues, expenses and capital improvements can greatly affect the rate track and bonding requirements.

Projected Rate Design vs Current Rates – 17.9% Rate Increase

Summary Current vs Proposed Sewer Rates -

Meter Size	Total Current Customer Charge	Total Proposed Customer Charge
5/8"	$ 14.28	**$ 22.75**
3/4"	$ 21.42	**$ 32.75**
1"	$ 35.70	**$ 55.00**
1.5"	$ 71.40	**$ 105.00**
2"	$ 114.24	**$ 155.00**
3"	$ 214.20	**$ 285.00**
4"	$ 357.00	**$ 470.00**
6"	$ 714.00	**$ 875.00**
8"	$ 714.00	**$ 900.00**
Current Commodity Rate	$ 3.25	
Proposed Commodity Rate		**$ 3.55**
Overall Revenue Increase on Sewer Sales		**17.9%**

Proposed Rate Design and Impacts

5/8"	Current Rates	Proposed Rates
Customer Service Charge	$ 14.28	$ 22.75
Commodity Rate /1000 Gallons	3.25	3.55

Quarterly Usage Level in 1000 Gallons	Current Rates	Proposed Rates	Dollar Impact	Monthly Impact	Percent Change
15.00	$ 63.03	$ 76.00	$ 12.97	$ 4.32	20.58%
18.00	72.78	86.65	13.87	4.62	19.06%
24.00	92.28	107.95	15.67	5.22	16.98%
30.00	111.78	129.25	17.47	5.82	15.63%
36.00	131.28	150.55	19.27	6.42	14.68%

3/4"	Current Rates	Proposed Rates
Customer Service Charge	$ 21.42	$ 32.75
Commodity Rate /1000 Gallons	3.25	3.55

Quarterly Usage Level in 1000 Gallons	Current Rates	Proposed Rates	Dollar Impact	Monthly Impact	Percent Change
18.00	$ 79.92	$ 96.65	$ 16.73	$ 5.58	20.93%
24.00	99.42	117.95	18.53	6.18	18.64%
30.00	118.92	139.25	20.33	6.78	17.10%
36.00	138.42	160.55	22.13	7.38	15.99%
42.00	157.92	181.85	23.93	7.98	15.15%

1"	Current Rates	Proposed Rates
Customer Service Charge	$ 35.70	$ 55.00
Commodity Rate /1000 Gallons	3.25	3.55

Quarterly Usage Level in 1000 Gallons	Current Rates	Proposed Rates	Dollar Impact	Monthly Impact	Percent Change
24.00	$ 113.70	$ 140.20	$ 26.50	$ 8.83	23.31%
45.00	181.95	214.75	32.80	10.93	18.03%
60.00	230.70	268.00	37.30	12.43	16.17%
75.00	279.45	321.25	41.80	13.93	14.96%
90.00	328.20	374.50	46.30	15.43	14.11%

1.5"	Current Rates	Proposed Rates
Customer Service Charge	$ 71.40	$ 105.00
Commodity Rate /1000 Gallons	3.25	3.55

Quarterly Usage Level in 1000 Gallons	Current Rates	Proposed Rates	Dollar Impact	Monthly Impact	Percent Change
40.00	$ 201.40	$ 247.00	$ 45.60	$ 15.20	22.64%
60.00	266.40	318.00	51.60	17.20	19.37%
80.00	331.40	389.00	57.60	19.20	17.38%
100.00	396.40	460.00	63.60	21.20	16.04%
120.00	461.40	531.00	69.60	23.20	15.08%

Proposed Rate Design and Impacts

2"	Current Rates	Proposed Rates
Customer Service Charge	$ 114.24	$ 155.00
Commodity Rate /1000 Gallons	3.25	3.55

Quarterly Usage Level in 1000 Gallons	Current Rates	Proposed Rates	Dollar Impact	Monthly Impact	Percent Change
65.00	$ 325.49	$ 385.75	$ 60.26	$ 20.09	18.51%
85.00	390.49	456.75	66.26	22.09	16.97%
105.00	455.49	527.75	72.26	24.09	15.86%
125.00	520.49	598.75	78.26	26.09	15.04%
145.00	585.49	669.75	84.26	28.09	14.39%

3"	Current Rates	Proposed Rates
Customer Service Charge	$ 214.20	$ 285.00
Commodity Rate /1000 Gallons	3.25	3.55

Quarterly Usage Level in 1000 Gallons	Current Rates	Proposed Rates	Dollar Impact	Monthly Impact	Percent Change
95	$ 522.95	$ 622.25	$ 99.30	$ 33.10	18.99%
115	587.95	693.25	105.30	35.10	17.91%
135	652.95	764.25	111.30	37.10	17.05%
155	717.95	835.25	117.30	39.10	16.34%
175	782.95	906.25	123.30	41.10	15.75%

4"	Current Rates	Proposed Rates
Customer Service Charge	$ 357.00	$ 470.00
Commodity Rate /1000 Gallons	3.25	3.55

Quarterly Usage Level in 1000 Gallons	Current Rates	Proposed Rates	Dollar Impact	Monthly Impact	Percent Change
125	$ 763.25	$ 913.75	$ 150.50	$ 50.17	19.72%
125	$ 763.25	$ 913.75	150.50	50.17	19.72%
155	$ 860.75	$ 1,020.25	159.50	53.17	18.53%
200	$ 1,007.00	$ 1,180.00	173.00	57.67	17.18%
300	$ 1,332.00	$ 1,535.00	203.00	67.67	15.24%

6"	Current Rates	Proposed Rates
Customer Service Charge	$ 714.00	$ 875.00
Commodity Rate /1000 Gallons	3.25	3.55

Quarterly Usage Level in 1000 Gallons	Current Rates	Proposed Rates	Dollar Impact	Monthly Impact	Percent Change
145	$ 585.49	$ 669.75	$ 84.26	$ 28.09	14.39%
145	585.49	669.75	84.26	28.09	14.39%
175	682.99	776.25	93.26	31.09	13.65%
220	829.24	936.00	106.76	35.59	12.87%
320	1,154.24	1,291.00	136.76	45.59	11.85%

8"	Current Rates	Proposed Rates
Customer Service Charge	$ 714.00	$ 900.00
Commodity Rate /1000 Gallons	3.25	3.55

Quarterly Usage Level in 1000 Gallons	Current Rates	Proposed Rates	Dollar Impact	Monthly Impact	Percent Change
195	$ 1,347.75	$ 1,592.25	$ 244.50	$ 81.50	18.14%
195	$ 1,347.75	$ 1,592.25	$ 244.50	81.50	18.14%
225	$ 1,445.25	$ 1,698.75	$ 253.50	84.50	17.54%
270	$ 1,591.50	$ 1,858.50	$ 267.00	89.00	16.78%
370	$ 1,916.50	$ 2,213.50	$ 297.00	99.00	15.50%