



MINUTES
COMMITTEE #1
REVENUES, DISBURSEMENTS, WATER AND WASTEWATER
November 28, 2017

Committee #1 - Revenues, Disbursements, Water and Wastewater met on Tuesday, November 28, 2017 at 9:00 AM in the Council Chambers, City Hall, 30 West Central Street, Chippewa Falls, WI.

Committee Members present: Rob Kiefer, John Monarski, and Paul Nadreau

Mayor/Other Council Members present: Mayor Hoffman

Others present: Finance Manager/Treasurer Lynne Bauer, Police Chief Matthew Kelm, Director of Public Works/City Engineer/Utilities Manager Rick Rubenzer, Assistant City Engineer Bill McElroy, Utility Office Manager Connie Freagon, Wastewater Supervisor George Hobbs, Library Director Joe Niese, City Clerk Bridget Givens, Phil Severson of Strand Associates, and April Anderson of Clifton Larson Allen.

Call to Order: 9:00 am

Motion by Kiefer/Nadreau to move agenda items 2 and 3 before item 1. All present voting aye, motion carried

2. Discuss Wastewater Utility Rate Study. Possible recommendations to the Council.

Phil Severson of Strand Associates appeared to provide an overview of the 2017 Wastewater Rate Review including budgets and allocations for the 2018 and 2019 rate years. The study was predicated upon an industrial customer having malfunctioning equipment. As this customer was significantly overcharged, it became necessary to adjust their bill each month going forward and the impact of that adjustment is reflected in the rate study.

Mr. Severson then discussed the attached tables describing the proposed increases. It was noted that the Public Service Commission does not regulate wastewater rates. The rate increases will be delineated in a resolution to come before the Council in December.

Motion by Kiefer/Monarski to recommend Council adopt the proposed Wastewater Rate increases as presented. All present voting aye, motion carried.

3. Discuss Storm Water Utility Rate Study. Possible recommendations to the Council.

April Anderson of Clifton Larson Allen appeared to provide an overview of the Storm Water Utility Rate Study. It was noted that the storm water rates have not been adjusted since 2006. As such, the rate study became necessary as the revenues being generated will not cover future, anticipated expenditures. Mayor Hoffman indicated that when the rates were approved in 2006, it was discussed that the rates should be reviewed by the Committee every few years. The Committee agreed that this should be the protocol going forward. City Engineer Rubenzer stated that the rate increases will be delineated in a resolution to come before the Council in December.

Motion by Kiefer/Monarski to recommend Council adopt the proposed Storm Water Rate increases as presented. All present voting aye, except Nadreau who voted no, motion carried.

- 1. Review 2018 Budget data and issues affecting the budget including but not limited to proposed expenditures, revenues and personnel benefits. Possible recommendations to the Council.**

Finance Manager/Treasurer Bauer advised that the open enrollment information is currently being compiled to determine the final impact of health insurance changes. For budget purposes, the figures are based upon what is known currently for 2017.

The final numbers are being generated for the public hearing taking into account the levy limit and equalized and assessed value increases. Additionally, the State of Wisconsin has eliminated the State Forest Tax which is roughly \$130K-\$140K annually which will help the bottom line mill rate. The school district, county and technical college levies have been received and Bauer is finalizing the debt obligations with Ehler's. Bauer is of the opinion that the overall mill rate should be similar to last year.

No action taken.

- 4. Adjournment**

Motion by Monarski/Nadreau to adjourn at 9:47 am. All present voting aye, motion carried.

**Minutes submitted by,
Lynne Bauer, Finance Manager/Treasurer**



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November 20, 2017

Mr. Rick Rubenzer, P.E.
City of Chippewa Falls
30 West Central Street
Chippewa Falls, WI 54729

Re: 2017 Wastewater Rate Review

Dear Mr. Rubenzer:

This letter summarizes the review by Strand Associates, Inc.[®] of the City of Chippewa Falls' (City) wastewater utility user rates. The current rates charged by the wastewater utility are summarized in Table 1. These rates were fully adopted with an effective date of September 6, 2016. Following corrections by a large industrial user of its discharge flow measurement around August 2016, the billing volumes and surcharges decreased revenues. This rate review updates the rates based on the measured flows and surcharges from the large industrial user from October 2016 through September 2017. Additionally, the rate review updates the revenue requirements for 2018 and 2019 budgets.

Projected Rate Year (2018 and 2019) Budgets and Allocations

The projected revenue requirement for the City wastewater utility includes four expense categories: operation and maintenance (O&M), equipment replacement, debt service, and depreciation fund. Required annual revenue was determined from the sum of the above-mentioned expense categories. Specific amounts required for each expense category are discussed as follows.

1. O&M

The projected 2018 annual O&M budget of \$1,810,754 (Attachment 1), is based on the proposed 2018 O&M budget and by applying a 3 percent inflation factor to the wages line items from the 2017 O&M budget, which was provided by the City. The projected 2019 annual O&M budget is based on the projected 2018 O&M budget and applying a 3 percent inflation factor.

2. Equipment Replacement

The City currently makes an annual contribution to the equipment replacement fund. This fund is intended to help pay for the replacement of equipment that reaches the end of its service life, thereby allowing the overall treatment system function to be maintained. Equipment associated with the Screening, Dewatering, and Hauled Waste Receiving Improvements, the 2016 Capital Improvements, 2017 Capital Improvements, and 2018 Capital Improvements were added or removed accordingly to the 2016 annual replacement fund budget (Attachment 2), which is projected to be \$223,556, and the 2019 annual replacement fund budget, which is projected to be \$216,925.

Mr. Rick Rubenzer, P.E.
 City of Chippewa Falls
 Page 2
 November 20, 2017

3. Debt Service

Principal and interest (P&I) payments for the wastewater utility's current loans are shown in Attachment 3. The debt retirement allocations for the 2018 and 2019 total debt service are shown in Attachment 4.

The total annual P&I payment for 2018 is expected to be \$501,854.

It is our understanding the City's current debt obligations require a minimum 110 percent debt coverage ratio. Our evaluation of the debt coverage ratio is based on the following equation:

$$\frac{(\text{Net revenue before debt service} + \text{Replacement fund deposit})}{\text{Debt service payment}}$$

Based on this equation, the debt ratio coverage is projected to be approximately 250 percent for 2018 and 240 percent for 2019.

4. Depreciation Fund

The City has a depreciation fund for replacement of assets not included in the equipment replacement fund. The depreciation schedule, as provided by the City for the wastewater treatment plant (WWTP) and collection system assets, was used as a basis for allocating the depreciation fund contribution costs. Projected asset additions from the WWTP Screening, Dewatering, and Hauled Waste Receiving Improvements, 2016 Capital Improvements, and 2017 Capital Improvements were added to the 2018 and 2017 depreciation fund budget (Attachment 5). The annual equipment replacement fund contribution and allocations were subtracted from the annual depreciation. The City has decided to plan for a depreciation fund contribution of \$470,000 in 2018, and \$480,000 in 2019.

5. Summary

The projected other revenues including customers forfeited discount, land rental, waste disposal fees, and laboratory fees are deducted from the total revenue requirement to determine the revenue requirement from user rates. The projected 2018 and 2019 revenue requirements for the sewer utility are presented in Table 1 to determine the minimum rate increase. The revenue requirements serve as the basis for determining the rates necessary to fund the wastewater utility for the 2018 and 2019 budget years. The total revenue requirements are approximately \$3,006,000 and \$3,060,000 for 2018 and 2019, respectively.

Proposed Rates

Proposed rates were developed using the projected 2019 revenue requirements to meet projected revenue requirement for 2018 and 2019. All costs included in the revenue requirement were allocated to the user charge system parameters of fixed, volume, biochemical oxygen demand (BOD₅), total suspended solids (TSS), phosphorus, and copper. Unit costs for treatment of each billable parameter were determined using 2017 billing records data. The allocations of expenses to each billable parameter were reviewed. The allocations used in the previous rate study were maintained. Table 2 lists the proposed

Mr. Rick Rubenzer, P.E.
City of Chippewa Falls
Page 3
November 20, 2017

wastewater utility rate structure, current wastewater utility rate structure, and the percent increase relative to the proposed rates.

The projected typical residential user and large industrial user rate impacts for the recommended rates are shown in Table 3. The average increase for typical residential users would be approximately 2.4 percent above the current rates, which would be a monthly average increase of \$0.40 for a typical water use of 36,000 gallons per year.

Hauled Wastes

The City has rates for receiving holding tank waste, portable toilet waste, and septic tank waste. The existing rate structure included a charge for the first 1,000 gallons and a rate per 100 gallons over 1,000 gallons. Additionally, the holding tank waste had a minimum charge of \$20.00. To simplify administering the rates, this rate structure is changed. The proposed new rate structure includes a minimum charge of \$25.00 for all wastes and a rate per 100 gallons. The recommended rates for hauled wastes are shown in Table 3. The proposed hauled waste rates were increased from the existing rates to be more equitable to the rates for connected dischargers.

New Account Fee

The City currently does not charge for new account setup. We recommended a charge to cover the City's time and material costs for establishing a new account. From the City's review of its costs, a new account fee of \$20.00 is proposed.

Recommendations

We recommended the City adopt the proposed rates in Table 2 to be effective January 1, 2018. We recommend the City review the 2019 rates if debt service increases or if 2018 user revenues or other revenues decrease from the projections assumed in the rate review.

Sincerely,

STRAND ASSOCIATES, INC.®



Philip B. Severson, P.E.

Enclosures: Summary Tables 1 through 3
2018 and 2019 Rate Review Tables (Attachments 1 through 5)

c: George Hobbs, City of Chippewa Falls
Vernon Witthuhn, Strand Associates, Inc.®

Item	2018	2019
Operation & Maintenance	\$ 1,810,754	\$ 1,864,021
Debt Service	\$ 501,854	\$ 498,872
Equipment Replacement Fund	\$ 223,556	\$ 216,925
Depreciation Fund	\$ 470,000	\$ 480,000
Subtotal	\$ 3,006,164	\$ 3,059,819
Other Revenues		
Customers Forfeited Discount	\$ (23,000)	\$ (24,000)
Rent (farmland)	\$ (11,000)	\$ (11,000)
Rent (water department)	\$ (12,000)	\$ (12,000)
Liquid Waste Disposal	\$ (189,000)	\$ (189,000)
Lab Income	\$ (100)	\$ (100)
Other Non-Operating Income	\$ (45,000)	\$ (45,000)
Total Revenue Requirement from Rates	\$ 2,726,064	\$ 2,778,719

Table 1 2018 and 2019 Revenue Requirements

Component	Current Sewer User Charge	Proposed Rates
Fixed User Charge (\$/quarter)	\$ 17.01	\$ 17.01
Basic User Charge (\$/100 cf)	\$ 2.75	\$ 2.85
Surcharges (\$/lb)		
BOD (>250 mg/L)	\$ 0.31	\$ 0.36
TSS (>250 mg/L)	\$ 0.34	\$ 0.34
TP (>10 mg/L)	\$ 4.14	\$ 4.14
Cu (>150 µg/L)	\$ 17.77	\$ 17.77
Miscellaneous Wastes		
Minimum Charge (\$)	-	\$ 25.00
Holding Tank		
Minimum Charge (\$)	\$ 20.00	-
Volume Charge (\$/100 gal)	\$ 0.75	\$ 0.98
Portable Toilet Wastes		
Volume Charge (\$/100 gal)	\$ 5.46	\$ 5.87
Septic Tank Wastes		
Volume Charge (\$/100 gal)	\$ 6.68	\$ 7.18

Table 2 Existing and Proposed Rates

Estimated Typical Residential User (36,000 gallons/yr.)			
	Current	2018	% Increase
Quarterly Fixed Costs	\$ 17.01	\$ 17.01	0.0%
Annual Volumetric Costs	\$ 132.35	\$ 137.17	3.6%
Annual Total Costs	\$ 200.39	\$ 205.21	2.4%
Average Monthly Cost per user	\$ 16.70	\$ 17.10	2.4%
Large Industrial Customer—Estimated Impact			
	Current	2018	% Increase
Quarterly Fixed Costs	\$ 17.01	\$ 17.01	0.0%
Total Annual Volumetric Costs	\$ 130,882	\$ 135,642	3.6%
Total Annual BOD Costs	\$ 168,020	\$ 195,120	16.1%
Total Annual TSS Costs	\$ 40,460	\$ 40,460	0.0%
Total Annual TP Costs	\$ 9,108	\$ 9,108	0.0%
Total Annual Copper Costs	\$ -	\$ -	0.0%
Total Annual Costs	\$ 348,487	\$ 380,347	9.1%

Table 3 Typical Impact of Proposed Rates

Attachment 1
Allocation of Operation and Maintenance Expenses
Inflation Factor = 3.00%

Item	2016-2019				Allocations						2018-2019						2019-2020						
	2016 Cost	2017 Cost	2018 Cost	2019 Cost	Fixed %	Volume %	BOD %	SS %	Phosphorus %	Copper %	2018 Fixed \$	2018 Volume \$	2018 BOD \$	2018 SS \$	2018 Phosphorus \$	2018 Copper \$	2019 Fixed \$	2019 Volume \$	2019 BOD \$	2019 SS \$	2019 Phosphorus \$	2019 Copper \$	
General Expenses																							
Supervisor/Labor-Plant																							
Salaries Regular	\$ 81,715	\$ 82,532	\$ 85,008	\$ 87,558	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ 13,665	\$ 32,644	\$ 16,942	\$ 12,503	\$ 7,243	\$ 655	\$ 14,281	\$ 34,963	\$ 17,452	\$ 12,731	\$ 7,490	\$ 674	
Wages Regular	\$ 91,458	\$ 93,768	\$ 96,271	\$ 98,859	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ 14,071	\$ 34,448	\$ 17,184	\$ 12,644	\$ 7,550	\$ 664	\$ 14,493	\$ 35,481	\$ 17,710	\$ 12,920	\$ 7,571	\$ 684	
Wages Overtime	\$ 2,814	\$ 2,815	\$ 2,841	\$ 2,856	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ 389	\$ 952	\$ 478	\$ 347	\$ 203	\$ 18	\$ 401	\$ 981	\$ 489	\$ 357	\$ 209	\$ 19	
Sick Leave	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vacation	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Longevity	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Holiday	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
On Call	\$ 10,422	\$ 17,996	\$ 18,536	\$ 19,092	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ 3,023	\$ 7,491	\$ 3,694	\$ 2,695	\$ 1,539	\$ 143	\$ 3,114	\$ 7,622	\$ 3,805	\$ 2,726	\$ 1,627	\$ 142	
Insurance Opt Out	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Cell Phone Reimbursement	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Supervisor/Labor-Lab																							
Salaries Regular	\$ 50,706	\$ 52,772	\$ 54,355	\$ 55,956	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ 8,685	\$ 21,704	\$ 10,833	\$ 7,903	\$ 4,631	\$ 419	\$ 9,131	\$ 22,355	\$ 11,188	\$ 8,140	\$ 4,770	\$ 431	
Wages Regular	\$ 1,536	\$ 1,598	\$ 1,646	\$ 1,656	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ 268	\$ 657	\$ 326	\$ 236	\$ 140	\$ 13	\$ 277	\$ 671	\$ 338	\$ 246	\$ 144	\$ 13	
Wages Overtime	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sick Leave	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vacation	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Longevity	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Holiday	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Insurance Opt Out	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.62%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Supervisor/Labor-Farm																							
Salaries Regular	\$ 51,567	\$ 47,244	\$ 48,661	\$ 50,121	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ 973	\$ -	\$ 28,224	\$ 14,968	\$ 4,866	\$ -	\$ 1,002	\$ -	\$ 26,070	\$ 15,036	\$ 5,012	\$ -	
Wages Regular	\$ 310	\$ 293	\$ 293	\$ 271	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ 5	\$ -	\$ 152	\$ 78	\$ 26	\$ -	\$ 6	\$ -	\$ 157	\$ 81	\$ 27	\$ -	
Wages Overtime	\$ -	\$ -	\$ -	\$ -	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Power & Fuel-Pump																							
Electric	\$ 169,640	\$ 174,730	\$ 180,600	\$ 184,567	3.00%	63.00%	19.00%	10.00%	3.00%	2.00%	\$ 5,667	\$ 119,007	\$ 35,891	\$ 19,890	\$ 5,667	\$ 3,778	\$ 5,837	\$ 122,577	\$ 36,968	\$ 19,457	\$ 5,837	\$ 3,891	
Gas	\$ 55,840	\$ 55,840	\$ 55,840	\$ 57,615	3.00%	63.00%	19.00%	10.00%	3.00%	2.00%	\$ 1,675	\$ 35,178	\$ 10,610	\$ 5,884	\$ 1,675	\$ 1,117	\$ 1,725	\$ 36,235	\$ 10,928	\$ 5,762	\$ 1,725	\$ 1,150	
Power & Fuel-Aeration																							
Electric	\$ -	\$ -	\$ -	\$ -	3.00%	63.00%	19.00%	10.00%	3.00%	2.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Gas	\$ -	\$ -	\$ -	\$ -	3.00%	63.00%	19.00%	10.00%	3.00%	2.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Chemicals																							
Chlorine	\$ 5,742	\$ 5,742	\$ 2,742	\$ 2,824	5.00%	96.00%	0.00%	0.00%	0.00%	0.00%	\$ 137	\$ 2,605	\$ -	\$ -	\$ -	\$ -	\$ 141	\$ 2,683	\$ -	\$ -	\$ -	\$ -	
Sulfur Dioxide	\$ 3,200	\$ 3,200	\$ 3,200	\$ 3,296	5.00%	96.00%	0.00%	0.00%	0.00%	0.00%	\$ 100	\$ 3,040	\$ -	\$ -	\$ -	\$ -	\$ 105	\$ 3,131	\$ -	\$ -	\$ -	\$ -	
Ferrous Chloride	\$ 60,000	\$ 60,000	\$ 60,000	\$ 61,500	2.00%	38.00%	0.00%	60.00%	0.00%	0.00%	\$ 1,000	\$ 19,000	\$ -	\$ -	\$ 30,000	\$ -	\$ 1,030	\$ 19,570	\$ -	\$ -	\$ 30,900	\$ -	
Polymer - belt press	\$ 54,200	\$ 70,000	\$ 70,000	\$ 72,100	6.00%	0.00%	60.00%	60.00%	0.00%	0.00%	\$ -	\$ -	\$ 35,000	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ 36,050	\$ 36,050	\$ -	\$ -	
Odor Control	\$ 500	\$ -	\$ -	\$ -	35.00%	10.00%	40.00%	15.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 503	\$ -	\$ -	\$ -	\$ -	\$ -	
Polymer - WAS thickening	\$ 22,307	\$ 23,714	\$ 24,426	\$ 25,158	2.00%	9.00%	58.00%	40.00%	0.00%	0.00%	\$ 493	\$ -	\$ 14,187	\$ 9,770	\$ -	\$ -	\$ -	\$ -	\$ 14,591	\$ 10,063	\$ -	\$ -	
Supplies and Expenses - Plant																							
Water and Sewer	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	2.00%	41.00%	26.00%	20.00%	10.00%	1.00%	\$ 2,000	\$ 41,000	\$ 26,000	\$ 20,000	\$ 10,000	\$ 1,000	\$ 2,060	\$ 42,230	\$ 26,780	\$ 20,600	\$ 10,300	\$ 1,030	
Telephone	\$ 1,800	\$ 1,800	\$ 1,800	\$ 1,800	2.00%	41.00%	26.00%	20.00%	10.00%	1.00%	\$ 30	\$ 1,800	\$ 1,180	\$ 600	\$ 300	\$ 30	\$ 62	\$ 1,267	\$ 803	\$ 618	\$ 309	\$ 31	
Garbage Service	\$ 8,100	\$ 8,343	\$ 9,177	\$ 9,452	2.00%	41.00%	26.00%	20.00%	10.00%	1.00%	\$ 184	\$ 3,783	\$ 2,386	\$ 1,835	\$ 918	\$ 97	\$ 189	\$ 3,875	\$ 2,456	\$ 1,880	\$ 945	\$ 96	
Janitorial Supplies	\$ 2,500	\$ 2,576	\$ 2,652	\$ 2,737	2.00%	41.00%	26.00%	20.00%	10.00%	1.00%	\$ 53	\$ 1,087	\$ 690	\$ 530	\$ 265	\$ 27	\$ 59	\$ 1,120	\$ 710	\$ 548	\$ 273	\$ 27	
Uniforms	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,151	2.00%	41.00%	26.00%	20.00%	10.00%	1.00%	\$ 81	\$ 852	\$ 1,048	\$ 600	\$ 400	\$ 40	\$ 83	\$ 1,022	\$ 1,070	\$ 630	\$ 415	\$ 42	
Diesel Fuel-Generator	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,575	2.00%	41.00%	26.00%	20.00%	10.00%	1.00%	\$ 50	\$ 1,025	\$ 650	\$ 500	\$ 250	\$ 25	\$ 52	\$ 1,066	\$ 670	\$ 515	\$ 258	\$ 26	
Materials and Supplies	\$ 5,000	\$ 5,500	\$ 5,500	\$ 5,665	2.00%	41.00%	26.00%	20.00%	10.00%	1.00%	\$ 110	\$ 2,255	\$ 1,430	\$ 1,100	\$ 500	\$ 55	\$ 113	\$ 2,325	\$ 1,470	\$ 1,133	\$ 567	\$ 57	
Miscellaneous Supplies	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,060	2.00%	41.00%	26.00%	20.00%	10.00%	1.00%	\$ 40	\$ 820	\$ 520	\$ 400	\$ 200	\$ 20	\$ 41	\$ 845	\$ 530	\$ 412	\$ 208	\$ 21	
Supplies and Expenses - Lab																							
Outside Laboratory Service	\$ 5,100	\$ 5,675	\$ 6,050	\$ 6,232	2.00%	26.00%	22.00%	25.00%	25.00%	0.00%	\$ 121	\$ 1,570	\$ 1,331	\$ 1,515	\$ 1,515	\$ -	\$ 125	\$ 1,620	\$ 1,371	\$ 1,558	\$ 1,558	\$ -	
Certification Fee	\$ 1,818	\$ 1,872	\$ 1,110	\$ 1,142	2.00%	26.00%	22.00%	25.00%	25.00%	0.00%	\$ 22	\$ 285	\$ 244	\$ 278	\$ 278	\$ -	\$ 23	\$ 297	\$ 252	\$ 296	\$ 288	\$ -	
Chemicals	\$ 2,700	\$ 2,700	\$ 2,700	\$ 2,740	2.00%	26.00%	22.00%	25.00%	25.00%	0.00%	\$ 144	\$ 1,875	\$ 1,586	\$ 1,803	\$ 1,803	\$ -	\$ 149	\$ 1,931	\$ 1,634	\$ 1,857	\$ 1,857	\$ -	
Other Supplies	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	2.00%	26.00%	22.00%	25.00%	25.00%	0.00%	\$ 70	\$ 810	\$ 770	\$ 875	\$ 875	\$ -	\$ 72	\$ 937	\$ 793	\$ 901	\$ 901	\$ -	
Supplies and Expenses - Farm																							
Electric	\$ 1,300	\$ 1,300	\$ 1,340	\$ 1,380	2.00%	0.00%	68.00%	30.00%	10.00%	0.00%	\$ 27	\$ -	\$ 777	\$ 402	\$ 134	\$ -	\$ 28	\$ -	\$ 801	\$ 414	\$ 138	\$ -	
Outside Laboratory Service	\$ 2,200	\$ 2,200	\$ 2,200	\$ 2,286	2.00%	0.00%	68.00%	30.00%	10.00%	0.00%	\$ 44	\$ -	\$ 1,278	\$ 660	\$ 220	\$ -	\$ 45	\$ -	\$ 1,314	\$ 680	\$ 227	\$ -	
Lime	\$ -	\$ -	\$ -	\$ -	2.00%	0.00%	68.00%	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Materials and Supplies	\$ -	\$ -	\$ -	\$ -	2.00%	0.00%	68.00%	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

Attachment 1
Allocation of Operation and Maintenance Expenses
Inflation Factor = 1.00%

Item	2018 Cost				2019 Cost				Allocations				2018				2019						
	2018 Cost	2017 Cost	2018 Cost	2019 Cost	Fixed %	Volume %	BOD %	SS %	Phosphorus %	Copper %	Fixed \$	Volume \$	BOD \$	SS \$	Phosphorus \$	Copper \$	Fixed \$	Volume \$	BOD \$	SS \$	Phosphorus \$	Copper \$	
Transportation Expense																							
Wages Regular	\$ 795	\$ 728	\$ 750	\$ 772	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 15	\$ 307	\$ 202	\$ 150	\$ 75	\$ -	\$ 15	\$ 317	\$ 209	\$ 154	\$ 77	\$ -	
Wages Overtime	\$ -	\$ -	\$ -	\$ -	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Repair & Maint - Misc. Service	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,545	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 30	\$ 615	\$ 405	\$ 300	\$ 150	\$ -	\$ 31	\$ 630	\$ 417	\$ 309	\$ 155	\$ -	
Gas Diesel, Motor Oil, Grease	\$ 5,600	\$ 5,500	\$ 5,500	\$ 5,665	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 110	\$ 2,255	\$ 1,485	\$ 1,100	\$ 550	\$ -	\$ 113	\$ 2,323	\$ 1,530	\$ 1,133	\$ 567	\$ -	
Motor Vehicle parts	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,030	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 20	\$ 410	\$ 270	\$ 200	\$ 100	\$ -	\$ 21	\$ 423	\$ 276	\$ 200	\$ 103	\$ -	
Tire Repairs	\$ -	\$ -	\$ -	\$ -	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other Supplies and Expense	\$ 1	\$ 100	\$ 100	\$ 103	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 2	\$ 41	\$ 27	\$ 20	\$ 10	\$ -	\$ 2	\$ 42	\$ 28	\$ 21	\$ 10	\$ -	
Depreciation	\$ 14,430	\$ 14,430	\$ 8,865	\$ 9,235	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 179	\$ 3,676	\$ 2,421	\$ 1,793	\$ 897	\$ -	\$ 185	\$ 3,768	\$ 2,493	\$ 1,847	\$ 923	\$ -	
Transportation Sludge																							
Wages Regular	\$ 20,130	\$ 18,436	\$ 18,889	\$ 19,559	2.00%	0.00%	88.00%	30.00%	10.00%	0.00%	\$ 380	\$ -	\$ 11,014	\$ 6,697	\$ 1,896	\$ -	\$ 381	\$ -	\$ 11,344	\$ 6,868	\$ 1,956	\$ -	
Wages Overtime	\$ 3,690	\$ 2,548	\$ 2,622	\$ 2,701	2.00%	0.00%	88.00%	30.00%	10.00%	0.00%	\$ 52	\$ -	\$ 1,521	\$ 787	\$ 252	\$ -	\$ 54	\$ -	\$ 1,567	\$ 810	\$ 270	\$ -	
Sludge Disposal	\$ -	\$ -	\$ -	\$ -	2.00%	0.00%	88.00%	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Repair & Maintenance- Misc. Services	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,605	2.00%	0.00%	88.00%	30.00%	10.00%	0.00%	\$ 70	\$ -	\$ 2,030	\$ 1,050	\$ 350	\$ -	\$ 72	\$ -	\$ 2,091	\$ 1,082	\$ 381	\$ -	
Gas, Diesel, Motor Oil, Grease	\$ 10,000	\$ 10,000	\$ 6,000	\$ 6,180	2.00%	0.00%	88.00%	30.00%	10.00%	0.00%	\$ 100	\$ -	\$ 5,480	\$ 1,800	\$ 600	\$ -	\$ 104	\$ -	\$ 5,684	\$ 1,864	\$ 618	\$ -	
Motor Vehicle Parts	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,605	2.00%	0.00%	88.00%	30.00%	10.00%	0.00%	\$ 135	\$ -	\$ 3,770	\$ 1,950	\$ 650	\$ -	\$ 139	\$ -	\$ 3,883	\$ 2,009	\$ 670	\$ -	
Machinery and Equipment Parts	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,060	2.00%	0.00%	88.00%	30.00%	10.00%	0.00%	\$ 40	\$ -	\$ 1,160	\$ 600	\$ 200	\$ -	\$ 41	\$ -	\$ 1,195	\$ 618	\$ 209	\$ -	
Tire Repairs	\$ 250	\$ -	\$ -	\$ -	2.00%	0.00%	88.00%	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other Supplies and Expense	\$ 500	\$ 600	\$ 600	\$ 615	2.00%	0.00%	88.00%	30.00%	10.00%	0.00%	\$ 10	\$ -	\$ 290	\$ 150	\$ 50	\$ -	\$ 10	\$ -	\$ 299	\$ 155	\$ 52	\$ -	
Office Expenses	\$ -	\$ -	\$ -	\$ -	2.00%	0.00%	88.00%	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Depreciation	\$ -	\$ -	\$ 9,000	\$ 9,210	2.00%	0.00%	88.00%	30.00%	10.00%	0.00%	\$ 180	\$ -	\$ 5,220	\$ 2,700	\$ 900	\$ -	\$ 185	\$ -	\$ 5,377	\$ 2,781	\$ 927	\$ -	
Sanitary Collection Cleaning																							
Salaries Regular	\$ 26,781	\$ 24,627	\$ 26,263	\$ 26,921	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 505	\$ 24,768	\$ -	\$ -	\$ -	\$ -	\$ 500	\$ 25,000	\$ -	\$ -	\$ -	\$ -	
Wages Regular	\$ 1,273	\$ 1,052	\$ 1,084	\$ 1,116	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 22	\$ 1,002	\$ -	\$ -	\$ -	\$ -	\$ 22	\$ 1,094	\$ -	\$ -	\$ -	\$ -	
Wages Overtime	\$ -	\$ -	\$ -	\$ -	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Repair and Maint	\$ 600	\$ 500	\$ 5,000	\$ 5,150	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 100	\$ 4,900	\$ -	\$ -	\$ -	\$ -	\$ 100	\$ 5,047	\$ -	\$ -	\$ -	\$ -	
Gas Diesel, Motor Oil, Grease	\$ 600	\$ 600	\$ 600	\$ 618	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 12	\$ 588	\$ -	\$ -	\$ -	\$ -	\$ 12	\$ 606	\$ -	\$ -	\$ -	\$ -	
Motor Vehicle parts	\$ 200	\$ 200	\$ 200	\$ 206	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 4	\$ 196	\$ -	\$ -	\$ -	\$ -	\$ 4	\$ 202	\$ -	\$ -	\$ -	\$ -	
Machinery and Equipment Parts	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,575	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 50	\$ 2,450	\$ -	\$ -	\$ -	\$ -	\$ 50	\$ 2,524	\$ -	\$ -	\$ -	\$ -	
Other Supplies and Expense	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,120	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 80	\$ 3,920	\$ -	\$ -	\$ -	\$ -	\$ 80	\$ 4,038	\$ -	\$ -	\$ -	\$ -	
Depreciation	\$ -	\$ -	\$ -	\$ -	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Maintenance Collection System																							
Salaries Regular	\$ 1,118	\$ 1,023	\$ 1,054	\$ 1,085	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 21	\$ 1,033	\$ -	\$ -	\$ -	\$ -	\$ 22	\$ 1,064	\$ -	\$ -	\$ -	\$ -	
Wages Regular	\$ 37	\$ 31	\$ 32	\$ 33	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 1	\$ 31	\$ -	\$ -	\$ -	\$ -	\$ 1	\$ 32	\$ -	\$ -	\$ -	\$ -	
Wages Overtime	\$ -	\$ -	\$ -	\$ -	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Repair and Maint	\$ 1,300	\$ 1,300	\$ 1,300	\$ 1,339	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 26	\$ 1,274	\$ -	\$ -	\$ -	\$ -	\$ 27	\$ 1,312	\$ -	\$ -	\$ -	\$ -	
Other Supplies and Expense	\$ 4,700	\$ 4,700	\$ 4,700	\$ 4,841	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 84	\$ 4,608	\$ -	\$ -	\$ -	\$ -	\$ 87	\$ 4,744	\$ -	\$ -	\$ -	\$ -	
Wages - City Wages	\$ -	\$ -	\$ -	\$ -	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Collection System Pump EQ																							
Wages Regular	\$ 41,900	\$ 38,378	\$ 39,529	\$ 40,715	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 791	\$ 38,739	\$ -	\$ -	\$ -	\$ -	\$ 814	\$ 39,801	\$ -	\$ -	\$ -	\$ -	
Wages Overtime	\$ 1,843	\$ 1,350	\$ 1,381	\$ 1,423	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 28	\$ 1,303	\$ -	\$ -	\$ -	\$ -	\$ 29	\$ 1,404	\$ -	\$ -	\$ -	\$ -	
Waste and Sewer	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,596	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 64	\$ 2,436	\$ -	\$ -	\$ -	\$ -	\$ 66	\$ 2,520	\$ -	\$ -	\$ -	\$ -	
Repair and maint - motors	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,545	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 30	\$ 1,470	\$ -	\$ -	\$ -	\$ -	\$ 31	\$ 1,514	\$ -	\$ -	\$ -	\$ -	
Repair and maint - pumps	\$ 7,000	\$ 7,210	\$ 7,210	\$ 7,428	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 144	\$ 7,066	\$ -	\$ -	\$ -	\$ -	\$ 148	\$ 7,218	\$ -	\$ -	\$ -	\$ -	
Repair and maint - electrical	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,180	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 120	\$ 5,880	\$ -	\$ -	\$ -	\$ -	\$ 124	\$ 6,066	\$ -	\$ -	\$ -	\$ -	
Repair and maint - misc service	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,150	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 100	\$ 4,900	\$ -	\$ -	\$ -	\$ -	\$ 103	\$ 5,047	\$ -	\$ -	\$ -	\$ -	
Diesel fuel, generators	\$ 1,000	\$ 1,200	\$ 120	\$ 124	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 2	\$ 118	\$ -	\$ -	\$ -	\$ -	\$ 2	\$ 121	\$ -	\$ -	\$ -	\$ -	
Machinery and equipment parts	\$ 5,000	\$ 3,353	\$ 3,353	\$ 3,556	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 127	\$ 2,223	\$ -	\$ -	\$ -	\$ -	\$ 131	\$ 2,324	\$ -	\$ -	\$ -	\$ -	
Other supplies and expenses	\$ 15,000	\$ 15,500	\$ 15,500	\$ 15,965	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 310	\$ 15,190	\$ -	\$ -	\$ -	\$ -	\$ 319	\$ 15,646	\$ -	\$ -	\$ -	\$ -	
Disposal Plant Equipment																							
Wages Regular	\$ 45,588	\$ 42,664	\$ 43,844	\$ 45,262	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 879	\$ 18,017	\$ 11,865	\$ 8,789	\$ 4,394	\$ -	\$ 895	\$ 18,558	\$ 12,221	\$ 9,092	\$ 4,526	\$ -	
Wages Overtime	\$ 75	\$ 62	\$ 64	\$ 66	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 1	\$ 26	\$ 17	\$ 13	\$ 6	\$ -	\$ 1	\$ 27	\$ 16	\$ 13	\$ 7	\$ -	
Repair and maint - machinery/equip	\$ 21,000	\$ 21,000	\$ 21,000	\$ 21,630	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 420	\$ 8,610	\$ 5,670	\$ 4,200	\$ 2,100	\$ -	\$ 433	\$ 8,868	\$ 5,840	\$ 4,328	\$ 2,163	\$ -	
Repair and maint - motors	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,060	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 40	\$ 820	\$ 540	\$ 400	\$ 200	\$ -	\$ 41	\$ 845	\$ 550	\$ 413	\$ 206	\$ -	
Repair and maint - pumps	\$ 12,000	\$ 12,300	\$ 12,300	\$ 12,731	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 247	\$ 5,068	\$ 3,337	\$ 2,472	\$ 1,236	\$ -	\$ 255	\$ 5,220	\$ 3,437	\$ 2,546	\$ 1,273	\$ -	
Repair and maint - boiler equip	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,060	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 40	\$ 820	\$ 540	\$ 400	\$ 200	\$ -	\$ 41	\$ 845	\$ 550	\$ 413	\$ 206	\$ -	
Repair and maint - electrical	\$ 9,000	\$ 10,300	\$ 10,300	\$																			

Attachment 1
Allocation of Operation and Maintenance Expenses

Inflation Factor: 1.000%

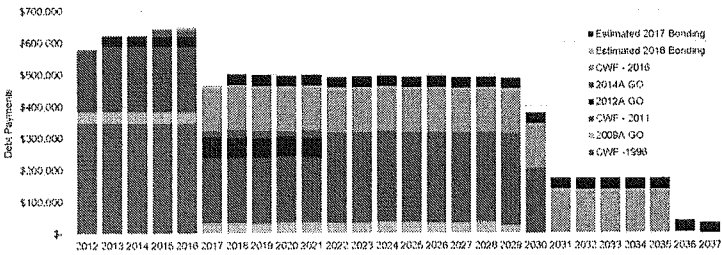
Item	2016		2017		2018		2019		2020		2021		2022		2023		2024		2025				
	Cost	Cost	Cost	Cost	Fixed %	Volume %	BOD %	SS %	Phosphorus %	Copper %	Fixed \$	Volume \$	BOD \$	SS \$	Phosphorus \$	Copper \$	Fixed \$	Volume \$	BOD \$	SS \$	Phosphorus \$	Copper \$	
Outside Services																							
Accounting and auditing	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,120	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 652	\$ 1,597	\$ 797	\$ 502	\$ 341	\$ 31	\$ 672	\$ 1,645	\$ 821	\$ 599	\$ 351	\$ 32	
Data processing	\$ 9,350	\$ 10,632	\$ 4,067	\$ 4,169	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 683	\$ 1,624	\$ 811	\$ 691	\$ 347	\$ 31	\$ 683	\$ 1,673	\$ 835	\$ 609	\$ 357	\$ 32	
Architecture and engineering	\$ 1,000	\$ 51,200	\$ 51,200	\$ 52,736	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 8,351	\$ 20,444	\$ 10,264	\$ 7,444	\$ 4,362	\$ 394	\$ 8,601	\$ 21,967	\$ 10,510	\$ 7,668	\$ 4,493	\$ 406	
Attorney fees	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Insurance Expense																							
Workers Compensation	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Insurance - Vehicles and Equipment	\$ 25,000	\$ 25,000	\$ 28,000	\$ 28,840	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 4,587	\$ 11,180	\$ 5,580	\$ 4,071	\$ 2,386	\$ 216	\$ 4,704	\$ 11,516	\$ 5,748	\$ 4,103	\$ 2,457	\$ 222	
Insurance - Public Liability	\$ 3,600	\$ 3,600	\$ 4,400	\$ 4,532	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 719	\$ 1,767	\$ 877	\$ 640	\$ 375	\$ 34	\$ 739	\$ 1,810	\$ 903	\$ 659	\$ 366	\$ 35	
Insurance - Boiler	\$ 3,600	\$ 3,600	\$ 3,600	\$ 3,605	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 571	\$ 1,398	\$ 698	\$ 500	\$ 295	\$ 27	\$ 588	\$ 1,435	\$ 718	\$ 524	\$ 307	\$ 28	
Pensions and Benefits																							
Wages regular	\$ 4,286	\$ 3,925	\$ 4,043	\$ 4,164	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 659	\$ 1,614	\$ 806	\$ 588	\$ 344	\$ 31	\$ 679	\$ 1,663	\$ 830	\$ 605	\$ 355	\$ 32	
Wages overtime	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Health insurance	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Unemployment compensation	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Dental insurance	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Safety shoes	\$ 700	\$ 700	\$ 700	\$ 721	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 114	\$ 290	\$ 140	\$ 102	\$ 60	\$ 5	\$ 116	\$ 288	\$ 144	\$ 105	\$ 61	\$ 6	
Employee physicals	\$ 1,000	\$ 1,200	\$ 1,200	\$ 1,236	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 196	\$ 478	\$ 239	\$ 174	\$ 102	\$ 9	\$ 202	\$ 494	\$ 246	\$ 180	\$ 105	\$ 10	
Drug and alcohol testing	\$ 500	\$ 600	\$ 600	\$ 615	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 82	\$ 200	\$ 100	\$ 73	\$ 43	\$ 4	\$ 84	\$ 206	\$ 103	\$ 75	\$ 44	\$ 4	
Suction 125 plan fees	\$ 300	\$ 300	\$ 400	\$ 412	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 85	\$ 160	\$ 80	\$ 58	\$ 34	\$ 3	\$ 87	\$ 165	\$ 82	\$ 60	\$ 35	\$ 3	
Misc expenses	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Misc General Expense																							
Groundwater fee - DNR	\$ 100	\$ 100	\$ 100	\$ 103	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 16	\$ 40	\$ 20	\$ 15	\$ 9	\$ 1	\$ 17	\$ 41	\$ 21	\$ 15	\$ 9	\$ 1	
Stormwater Fee - DNR	\$ 130	\$ 130	\$ 130	\$ 134	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 21	\$ 53	\$ 26	\$ 19	\$ 11	\$ 1	\$ 22	\$ 53	\$ 27	\$ 18	\$ 11	\$ 1	
NR101 Water Fee	\$ 15,000	\$ 12,500	\$ 10,000	\$ 10,300	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 1,631	\$ 3,993	\$ 1,993	\$ 1,454	\$ 857	\$ 77	\$ 1,680	\$ 4,113	\$ 2,053	\$ 1,498	\$ 878	\$ 78	
Publication of Legal Notices	\$ 150	\$ 150	\$ 150	\$ 155	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 24	\$ 60	\$ 30	\$ 22	\$ 13	\$ 1	\$ 25	\$ 62	\$ 31	\$ 22	\$ 13	\$ 1	
Membership Dues	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Misc Expenses	\$ 550	\$ 650	\$ 650	\$ 667	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 90	\$ 220	\$ 110	\$ 80	\$ 47	\$ 4	\$ 92	\$ 226	\$ 113	\$ 82	\$ 48	\$ 4	
Rent/Lease																							
Rent/Lease	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,236	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 196	\$ 478	\$ 239	\$ 174	\$ 102	\$ 9	\$ 202	\$ 494	\$ 246	\$ 180	\$ 105	\$ 10	
Employer Benefits																							
Social Security - utility share	\$ 39,840	\$ 36,329	\$ 37,419	\$ 38,541	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 6,103	\$ 14,941	\$ 7,458	\$ 5,441	\$ 3,168	\$ 288	\$ 6,288	\$ 15,390	\$ 7,681	\$ 5,604	\$ 3,284	\$ 297	
Retirement - utility share	\$ 34,458	\$ 32,297	\$ 33,281	\$ 34,269	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 5,425	\$ 13,281	\$ 6,620	\$ 4,836	\$ 2,834	\$ 256	\$ 5,588	\$ 13,679	\$ 6,878	\$ 4,981	\$ 2,819	\$ 264	
Retirement - employee share	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Health insurance	\$ 127,249	\$ 108,484	\$ 111,749	\$ 116,191	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 18,226	\$ 44,871	\$ 22,272	\$ 16,248	\$ 9,521	\$ 860	\$ 18,773	\$ 45,960	\$ 22,640	\$ 16,736	\$ 9,607	\$ 886	
Life insurance	\$ 145	\$ 142	\$ 145	\$ 151	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 24	\$ 58	\$ 29	\$ 21	\$ 12	\$ 1	\$ 26	\$ 60	\$ 30	\$ 22	\$ 13	\$ 1	
Workers compensation	\$ 23,209	\$ 20,916	\$ 21,543	\$ 22,180	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 3,514	\$ 8,602	\$ 4,284	\$ 3,152	\$ 1,836	\$ 166	\$ 3,619	\$ 8,860	\$ 4,422	\$ 3,226	\$ 1,891	\$ 171	
Income continuation ins	\$ 1,210	\$ 864	\$ 890	\$ 917	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 145	\$ 353	\$ 177	\$ 129	\$ 76	\$ 7	\$ 150	\$ 368	\$ 183	\$ 131	\$ 76	\$ 7	
Benefit charges and misc	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Misc pension and benefits	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
TOTAL	\$ 1,754,885	\$ 1,766,696	\$ 1,810,754	\$ 1,864,021	16.24%	41.23%	20.16%	14.19%	7.54%	0.62%	\$ 293,980	\$ 749,495	\$ 365,583	\$ 256,927	\$ 136,522	\$ 11,290	\$ 302,718	\$ 787,855	\$ 376,530	\$ 284,665	\$ 140,618	\$ 11,574	

Attachment 2
Allocation of Equipment Replacement Fund Costs

Item	Replacement Cost	Estimated Life	1/1/2018 Balance	2016 Allocation	1/1/2017 Balance	2016 Unfunded Balance	2017 Allocation	1/1/2018 Balance	2017 Unfunded Balance	2018 Allocation	1/1/2019 Balance	2018 Unfunded Balance	2019 Allocation	1/1/2020 Balance	2019 Unfunded Balance
1996 EQUIPMENT ADDITIONS															
Belt Thickener & Belt Press	\$ 250,000	20	\$ 232,292	\$ 12,500	\$ 244,792	\$ 17,708	\$ 5,208	\$ 250,000	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ 250,000	\$ -
1999 DIGESTER IMPROVEMENTS															
Digester Cover	\$ 135,000	20	\$ 110,250	\$ 9,750	\$ 117,000	\$ 24,750	\$ 6,750	\$ 123,750	\$ 11,250	\$ 6,750	\$ 130,500	\$ 4,500	\$ 4,500	\$ 135,000	\$ -
Mixing Equipment	\$ 109,000	15	\$ 109,000	\$ -	\$ 109,000	\$ (0)	\$ -	\$ 109,000	\$ (0)	\$ -	\$ 109,000	\$ (0)	\$ -	\$ 109,000	\$ (0)
Heating Equipment	\$ 34,900	15	\$ 34,900	\$ -	\$ 34,900	\$ (0)	\$ -	\$ 34,900	\$ (0)	\$ -	\$ 34,900	\$ (0)	\$ -	\$ 34,900	\$ (0)
Sub - Total	\$ 278,900														
2000 River Diffuser															
Effluent Pumps	\$ 75,000	15	\$ 60,000	\$ 5,000	\$ 65,000	\$ 15,000	\$ 5,000	\$ 70,000	\$ 5,000	\$ 5,000	\$ 75,000	\$ -	\$ -	\$ 75,000	\$ -
Diffusers	\$ 7,710	15	\$ 6,168	\$ 514	\$ 6,682	\$ 1,642	\$ 514	\$ 7,196	\$ 514	\$ 514	\$ 7,710	\$ -	\$ -	\$ 7,710	\$ -
Instrumentation	\$ 52,500	15	\$ 42,000	\$ 3,500	\$ 45,500	\$ 10,600	\$ 3,500	\$ 49,000	\$ 3,500	\$ 3,500	\$ 52,500	\$ -	\$ -	\$ 52,500	\$ -
Sub - Total	\$ 135,210														
2003-4 WTP Improvements															
New Wastewater Pump	\$ 294,000	20	\$ 178,400	\$ 14,700	\$ 191,100	\$ 117,600	\$ 14,700	\$ 205,800	\$ 88,200	\$ 14,700	\$ 220,500	\$ 73,500	\$ 14,700	\$ 235,200	\$ 68,800
Digester Recirculation Pumps	\$ 27,100	20	\$ 18,260	\$ 1,555	\$ 17,815	\$ 10,840	\$ 1,355	\$ 19,170	\$ 8,130	\$ 1,355	\$ 20,325	\$ 6,775	\$ 1,355	\$ 21,680	\$ 5,420
Grit Removal System	\$ 103,000	20	\$ 84,800	\$ 6,400	\$ 78,200	\$ 43,200	\$ 6,400	\$ 75,600	\$ 32,400	\$ 6,400	\$ 81,000	\$ 27,000	\$ 6,400	\$ 86,400	\$ 21,600
Belt Conveyor for Grit System	\$ 25,800	20	\$ 16,540	\$ 1,295	\$ 16,835	\$ 10,360	\$ 1,295	\$ 18,130	\$ 7,770	\$ 1,295	\$ 19,425	\$ 6,475	\$ 1,295	\$ 20,720	\$ 5,180
Blowers & Motors	\$ 380,000	20	\$ 220,000	\$ 19,000	\$ 247,000	\$ 152,000	\$ 19,000	\$ 266,000	\$ 114,000	\$ 19,000	\$ 285,000	\$ 95,000	\$ 19,000	\$ 304,000	\$ 76,000
Digester Heat Exchanger	\$ 33,300	20	\$ 19,980	\$ 1,665	\$ 21,645	\$ 13,320	\$ 1,665	\$ 23,310	\$ 9,990	\$ 1,665	\$ 25,075	\$ 8,325	\$ 1,665	\$ 26,840	\$ 6,860
Digester Sludge Mixer	\$ 110,000	20	\$ 68,000	\$ 5,500	\$ 71,500	\$ 44,000	\$ 5,500	\$ 77,000	\$ 33,000	\$ 5,500	\$ 82,500	\$ 27,500	\$ 5,500	\$ 88,000	\$ 22,000
Microturbine System	\$ 201,000	15	\$ 160,800	\$ 13,400	\$ 174,200	\$ 40,200	\$ 13,400	\$ 187,600	\$ 13,400	\$ 13,400	\$ 201,000	\$ -	\$ -	\$ 201,000	\$ -
Flow Meters	\$ 11,000	15	\$ 8,600	\$ 733	\$ 9,333	\$ 2,200	\$ 733	\$ 10,267	\$ 733	\$ 733	\$ 11,000	\$ -	\$ -	\$ 11,000	\$ -
Instrumentation & Control	\$ 127,158	10	\$ 127,158	\$ -	\$ 127,158	\$ -	\$ -	\$ 127,158	\$ -	\$ -	\$ 127,158	\$ -	\$ -	\$ 127,158	\$ -
Sub - Total	\$ 1,317,458														
2006 Digester Cover & Aeration piping															
Digester Tank Cover Material & Installation	\$ 456,621	20	\$ 228,311	\$ 22,831	\$ 251,142	\$ 228,311	\$ 22,831	\$ 273,973	\$ 182,648	\$ 22,831	\$ 296,804	\$ 169,817	\$ 22,831	\$ 319,635	\$ 138,866
Aeration Piping, Supports, Hangers & Installation	\$ 177,975	20	\$ 88,988	\$ 8,899	\$ 97,888	\$ 88,988	\$ 8,899	\$ 106,788	\$ 71,140	\$ 8,899	\$ 115,688	\$ 62,291	\$ 8,899	\$ 124,588	\$ 63,393
Sub - Total	\$ 634,596														
2011 WWTP Phase 1 Improvements															
Clarifier 1 & 2 equipment - 62.6334.1891	\$ 322,736	15	\$ 88,730	\$ 22,182	\$ 110,812	\$ 244,007	\$ 22,182	\$ 133,095	\$ 189,642	\$ 22,182	\$ 155,277	\$ 177,459	\$ 22,182	\$ 177,459	\$ 155,277
Chlorine Equipment - 62.8836.1835	\$ 98,218	15	\$ 26,182	\$ 6,548	\$ 32,730	\$ 72,027	\$ 6,548	\$ 39,287	\$ 58,831	\$ 6,548	\$ 45,835	\$ 52,383	\$ 6,548	\$ 52,383	\$ 45,835
Clarifier 3 equipment - 62.6334.1891	\$ 450,424	15	\$ 120,113	\$ 30,028	\$ 150,141	\$ 330,311	\$ 30,028	\$ 180,170	\$ 270,255	\$ 30,028	\$ 210,198	\$ 240,226	\$ 30,028	\$ 240,226	\$ 210,198
Sub - Total	\$ 871,378														
2016 Screening Dewatering and Hauled Waste Receiving Improvements															
High Strength Waste Mixer	\$ 27,000	15	\$ -	\$ -	\$ -	\$ 27,000	\$ 1,800	\$ 1,800	\$ 25,200	\$ 1,800	\$ 3,600	\$ 23,400	\$ 1,800	\$ 5,400	\$ 21,600
Progressing Crawly Pump	\$ 22,400	20	\$ -	\$ -	\$ -	\$ 22,400	\$ 1,120	\$ 1,120	\$ 21,280	\$ 1,120	\$ 2,240	\$ 20,160	\$ 1,120	\$ 3,360	\$ 19,040
High Strength Waste Pump	\$ 19,700	15	\$ -	\$ -	\$ -	\$ 19,700	\$ 1,313	\$ 1,313	\$ 18,387	\$ 1,313	\$ 2,027	\$ 17,073	\$ 1,313	\$ 3,940	\$ 15,760
Mechanical Fine Screen	\$ 128,500	20	\$ -	\$ -	\$ -	\$ 128,500	\$ 6,280	\$ 6,280	\$ 119,320	\$ 6,280	\$ 12,560	\$ 113,040	\$ 6,280	\$ 18,840	\$ 105,760
Screening Wash Press	\$ 73,300	20	\$ -	\$ -	\$ -	\$ 73,300	\$ 3,665	\$ 3,665	\$ 69,635	\$ 3,665	\$ 7,330	\$ 65,970	\$ 3,665	\$ 10,995	\$ 62,305
Polymer Feed System	\$ 35,000	15	\$ -	\$ -	\$ -	\$ 35,000	\$ 2,333	\$ 2,333	\$ 33,227	\$ 2,333	\$ 4,147	\$ 30,853	\$ 2,333	\$ 7,120	\$ 28,480
Dewatering Centrifuge Equipment	\$ 323,600	20	\$ -	\$ -	\$ -	\$ 323,600	\$ 16,180	\$ 16,180	\$ 307,420	\$ 16,180	\$ 32,360	\$ 281,240	\$ 16,180	\$ 48,540	\$ 275,060
Shallow Screw Conveyor	\$ 60,500	15	\$ -	\$ -	\$ -	\$ 60,500	\$ 4,033	\$ 4,033	\$ 56,467	\$ 4,033	\$ 8,067	\$ 52,433	\$ 4,033	\$ 12,100	\$ 48,400
Instrumentation	\$ 50,000	10	\$ -	\$ -	\$ -	\$ 50,000	\$ 5,000	\$ 5,000	\$ 45,000	\$ 5,000	\$ 10,000	\$ 40,000	\$ 5,000	\$ 15,000	\$ 35,000
Sub - Total	\$ 637,300														
2016 Capital Improvements															
Flame LS Pump	\$ 22,051	20	\$ -	\$ -	\$ -	\$ 22,051	\$ 1,103	\$ 1,103	\$ 20,948	\$ 1,103	\$ 2,206	\$ 19,846	\$ 1,103	\$ 3,308	\$ 16,743
Prairie View LS	\$ 5,100	20	\$ -	\$ -	\$ -	\$ 5,100	\$ 255	\$ 255	\$ 4,845	\$ 255	\$ 5,100	\$ 4,845	\$ 255	\$ 4,535	
Influent Pump No. 4	\$ 27,391	20	\$ -	\$ -	\$ -	\$ 27,391	\$ 1,370	\$ 1,370	\$ 26,021	\$ 1,370	\$ 27,391	\$ 24,651	\$ 1,370	\$ 4,109	\$ 23,282
Grit Pump	\$ 5,538	20	\$ -	\$ -	\$ -	\$ 5,538	\$ 277	\$ 277	\$ 5,260	\$ 277	\$ 5,538	\$ 5,260	\$ 277	\$ 5,260	
Primary Skimmer	\$ 53,931	20	\$ -	\$ -	\$ -	\$ 53,931	\$ 2,697	\$ 2,697	\$ 51,233	\$ 2,697	\$ 53,931	\$ 48,538	\$ 2,697	\$ 8,090	\$ 45,842
Primary Sludge Pump	\$ 16,290	20	\$ -	\$ -	\$ -	\$ 16,290	\$ 764	\$ 764	\$ 14,526	\$ 764	\$ 15,290	\$ 13,761	\$ 764	\$ 2,290	\$ 12,996
Primary electric hotel	\$ 1,893	15	\$ -	\$ -	\$ -	\$ 1,893	\$ 126	\$ 126	\$ 1,767	\$ 126	\$ 252	\$ 1,641	\$ 126	\$ 378	\$ 1,515
TWAS Pump	\$ 19,488	20	\$ -	\$ -	\$ -	\$ 19,488	\$ 974	\$ 974	\$ 18,513	\$ 974	\$ 19,488	\$ 17,538	\$ 974	\$ 2,923	\$ 16,564
Flowmeter	\$ 5,139	15	\$ -	\$ -	\$ -	\$ 5,139	\$ 343	\$ 343	\$ 4,796	\$ 343	\$ 5,139	\$ 4,454	\$ 343	\$ 1,028	\$ 4,111
Sub - Total	\$ 145,380														
2017 Capital Improvements															
Flame LS Control Panel	\$ 20,576	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,576	\$ 1,372	\$ 1,372	\$ 19,204	\$ 1,372	\$ 2,743	\$ 17,832
Sludge Belt Drive	\$ 23,879	20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,879	\$ 1,194	\$ 1,194	\$ 22,685	\$ 1,194	\$ 2,388	\$ 21,497
Secondary Clarifier Drive	\$ 17,702	20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,702	\$ 885	\$ 885	\$ 16,817	\$ 885	\$ 1,770	\$ 15,932
Aeration tank mixer	\$ 5,435	20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,435	\$ 272	\$ 272	\$ 5,163	\$ 272	\$ 5,435	
Biosolids conveyor	\$ 16,200	20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,200	\$ 810	\$ 810	\$ 15,390	\$ 810	\$ 1,620	\$ 14,880
Sub - Total	\$ 83,782														
2018 Capital Improvements															
Cashman LS Pump	\$ 19,000	15	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,267	\$ 1,267
Blowers	\$ 350,000	20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,500	\$ 17,500
Sub - Total	\$ 369,000													\$ 18,767	\$ 18,767
TOTAL															
			\$ 5,238,089	\$ 181,801	\$ 3,420,890	\$ 2,378,050	\$ 224,182	\$ 3,645,072	\$ 2,673,777	\$ 223,855	\$ 3,868,628	\$ 1,278,520	\$ 216,925	\$ 4,270,149	\$ 778,291

Attachment 3
Debt Schedule

Year	CWF - 1996			CWF - 2011			2009A GO			2012A GO			2014A GO			CWF - 2016			2016 GO Bonds			2017 GO Bonds			TOTAL
	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total	
2012	302,879	46,128	349,007	124,273	69,665	193,938	20,000	15,978	35,978	-	-	-	-	-	-	-	-	-	-	-	-	-	-	578,940	
2013	312,436	36,419	348,855	135,565	70,561	206,126	20,000	15,955	35,955	20,000	11,609	31,609	-	-	-	-	-	-	-	-	-	-	-	622,247	
2014	322,299	26,403	348,702	138,819	67,288	206,087	20,000	15,275	35,275	25,000	7,500	32,500	-	-	-	-	-	-	-	-	-	-	-	643,648	
2015	332,271	18,070	348,541	142,150	63,697	206,047	20,000	14,839	34,839	25,000	7,000	32,000	22,223	22,223	-	-	-	-	-	-	-	-	-	648,234	
2016	342,963	5,412	348,375	145,582	60,444	206,008	20,000	14,375	34,375	25,000	8,500	33,500	18,100	18,100	8,876	8,876	-	-	-	-	-	-	-	648,234	
2017	-	-	149,055	66,909	205,964	20,000	13,775	33,775	60,000	6,000	66,000	18,100	18,100	84,582	37,654	132,236	5,000	3,522	8,522	-	-	-	-	464,997	
2018	-	-	152,633	63,289	205,922	20,000	13,178	33,178	60,000	4,800	64,800	18,100	23,100	86,509	35,343	132,845	5,000	2,768	7,768	15,000	10,243	34,243	501,854		
2019	-	-	156,296	49,691	205,977	20,000	12,583	32,583	60,000	3,600	63,600	17,950	22,950	88,287	34,582	132,829	-	-	-	-	-	-	-	489,872	
2020	-	-	160,047	45,785	205,832	20,000	11,985	36,855	60,000	2,400	62,400	17,800	17,800	100,064	32,749	132,813	-	-	-	-	-	-	-	496,781	
2021	-	-	163,886	41,888	205,786	20,000	10,955	39,955	60,000	1,200	61,200	17,600	22,600	101,894	30,902	132,798	-	-	-	-	-	-	-	499,818	
2022	-	-	167,822	37,916	205,740	20,000	10,005	35,005	60,000	-	60,000	17,450	27,450	103,758	29,021	132,779	-	-	-	-	-	-	-	492,255	
2023	-	-	171,849	33,842	205,691	20,000	9,005	34,005	-	-	-	17,300	17,300	105,658	27,106	132,762	-	-	-	-	-	-	-	484,783	
2024	-	-	175,974	29,688	205,642	30,000	8,005	38,005	-	-	-	17,150	17,150	107,589	25,158	132,744	-	-	-	-	-	-	-	484,372	
2025	-	-	180,197	25,394	205,591	30,000	6,745	36,745	-	-	-	17,000	17,000	109,556	23,170	132,726	-	-	-	-	-	-	-	484,093	
2026	-	-	184,522	21,017	205,539	30,000	5,455	35,455	-	-	-	16,850	16,850	111,560	21,148	132,708	-	-	-	-	-	-	-	484,783	
2027	-	-	188,950	16,535	205,485	30,000	4,135	34,135	-	-	-	16,700	16,700	113,600	19,089	132,689	-	-	-	-	-	-	-	489,290	
2028	-	-	193,485	11,946	205,431	35,000	2,785	37,785	-	-	-	16,550	16,550	115,678	16,992	132,670	-	-	-	-	-	-	-	492,417	
2029	-	-	198,129	7,247	205,376	25,000	1,175	26,175	-	-	-	16,400	16,400	117,794	14,857	132,651	-	-	-	-	-	-	-	495,283	
2030	-	-	202,884	2,435	205,319	-	-	-	-	-	-	16,250	16,250	119,948	12,683	132,631	-	-	-	-	-	-	-	497,931	
2031	-	-	-	-	-	-	-	-	-	-	-	16,100	16,100	122,142	10,489	132,611	-	-	-	-	-	-	-	499,872	
2032	-	-	-	-	-	-	-	-	-	-	-	15,950	15,950	124,376	8,215	132,591	-	-	-	-	-	-	-	501,854	
2033	-	-	-	-	-	-	-	-	-	-	-	15,800	15,800	126,651	5,919	132,570	-	-	-	-	-	-	-	503,872	
2034	-	-	-	-	-	-	-	-	-	-	-	15,650	15,650	128,967	3,581	132,548	-	-	-	-	-	-	-	505,929	
2035	-	-	-	-	-	-	-	-	-	-	-	15,500	15,500	131,326	1,201	132,527	-	-	-	-	-	-	-	508,029	
2036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	510,164	
2037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	512,334	



Attachment 4
Allocation of Debt Service

Item	2018		Fixed %	Volume %	BOD %	SS %	Phosphorus %	Copper %	2018	2018	2018	2018	2018	2018	
	Capital Cost	Capital Cost							Fixed \$	Volume \$	BOD \$	SS \$	Phosphorus \$	Copper \$	
2010 WWTP Improvements															
Primary Clarifiers															
Architectural/Structural	\$ 283,519	\$ 283,519	0.00%	15.00%	35.00%	40.00%	10.00%	0.00%	\$ -	\$ 42,528	\$ 99,232	\$ 113,409	\$ 28,352	\$ -	\$ -
Secondary Clarifiers															
Architectural/Structural	\$ 69,607	\$ 69,607	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 10,441	\$ 27,843	\$ 24,362	\$ 6,961	\$ -	\$ -
Demolition	\$ 41,530	\$ 41,530	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 6,230	\$ 16,612	\$ 14,536	\$ 4,153	\$ -	\$ -
Equipment	\$ 421,952	\$ 421,952	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 63,293	\$ 168,781	\$ 147,683	\$ 42,195	\$ -	\$ -
Troughs, Weirs, & Baffles	\$ 6,000	\$ 6,000	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 900	\$ 2,400	\$ 2,100	\$ 600	\$ -	\$ -
Density Current Baffles	\$ 47,000	\$ 47,000	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 7,050	\$ 18,800	\$ 16,450	\$ 4,700	\$ -	\$ -
Yard Piping	\$ 32,391	\$ 32,391	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 4,859	\$ 12,958	\$ 11,337	\$ 3,239	\$ -	\$ -
Disinfection															
Architectural/Structural	\$ 138,573	\$ 138,573	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ 138,573	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment	\$ 68,299	\$ 68,299	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ 68,299	\$ -	\$ -	\$ -	\$ -	\$ -
Yard & Process Piping	\$ 50,000	\$ 50,000	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -
2010 Subtotal A	\$ 1,158,871	\$ 1,158,871	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 392,172	\$ 348,824	\$ 329,876	\$ 90,200	\$ -	\$ -
Civil Site Work	\$ 97,295	\$ 97,295	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 32,925	\$ 29,101	\$ 27,695	\$ 7,573	\$ -	\$ -
Electrical	\$ 136,941	\$ 136,941	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 46,342	\$ 40,960	\$ 38,981	\$ 10,659	\$ -	\$ -
HVAC	\$ 19,939	\$ 19,939	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 6,748	\$ 5,904	\$ 5,676	\$ 1,562	\$ -	\$ -
Plumbing	\$ 20,954	\$ 20,954	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 7,091	\$ 6,267	\$ 5,965	\$ 1,631	\$ -	\$ -
2010 Subtotal B	\$ 1,434,004	\$ 1,434,004	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 485,278	\$ 428,816	\$ 408,192	\$ 111,814	\$ -	\$ -
Contingencies	\$ 83,000	\$ 83,000	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 28,088	\$ 24,625	\$ 23,626	\$ 6,480	\$ -	\$ -
Engineering, Legal, Administration	\$ 211,000	\$ 211,000	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 71,404	\$ 63,111	\$ 60,062	\$ 16,423	\$ -	\$ -
2010 Subtotal C	\$ 1,728,000	\$ 1,728,000	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 584,770	\$ 516,853	\$ 491,880	\$ 134,498	\$ -	\$ -
2010 Sewer Improvements															
Sewer project - Wastewater Portion	\$ 1,600,000	\$ 1,600,000	30.00%	70.00%	0.00%	0.00%	0.00%	0.00%	\$ 480,000	\$ 1,120,000	\$ -	\$ -	\$ -	\$ -	\$ -
2010 Improvements Total	\$ 3,328,000	\$ 3,328,000	14.42%	51.23%	15.53%	14.78%	4.64%	0.00%	\$ 480,000	\$ 1,704,770	\$ 516,853	\$ 491,880	\$ 134,498	\$ -	\$ -
2016 CWF Project 1-2016															
Engineering Design	\$ 175,000	\$ 175,000	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 11,168	\$ 46,185	\$ 69,656	\$ 42,552	\$ 5,440	\$ -	\$ -
Engineering Construction	\$ 198,000	\$ 198,000	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 12,636	\$ 52,255	\$ 78,810	\$ 48,144	\$ 6,150	\$ -	\$ -
Construction															
GC's, miscellaneous	\$ 272,300	\$ 272,300	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 17,377	\$ 71,864	\$ 108,384	\$ 68,210	\$ 8,465	\$ -	\$ -
Site - Hauled Wastes, HSW	\$ 584,900	\$ 584,900	10.00%	20.00%	40.00%	25.00%	5.00%	0.00%	\$ 58,490	\$ 116,980	\$ 233,960	\$ 146,225	\$ 29,245	\$ -	\$ -
HSW Pump	\$ 285,400	\$ 285,400	0.00%	60.00%	40.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ 171,840	\$ 114,560	\$ -	\$ -	\$ -
Screening	\$ 543,500	\$ 543,500	15.00%	85.00%	0.00%	0.00%	0.00%	0.00%	\$ 81,570	\$ 462,230	\$ -	\$ -	\$ -	\$ -	\$ -
Dewatering	\$ 757,200	\$ 757,200	0.00%	0.00%	60.00%	35.00%	5.00%	0.00%	\$ -	\$ -	\$ 454,320	\$ 265,020	\$ 37,860	\$ -	\$ -
Progressing Cavity Pump	\$ 22,400	\$ 22,400	0.00%	0.00%	60.00%	35.00%	5.00%	0.00%	\$ -	\$ -	\$ 13,440	\$ 7,840	\$ 1,120	\$ -	\$ -
Contingency	\$ 123,350	\$ 123,350	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 7,872	\$ 32,654	\$ 49,097	\$ 29,993	\$ 3,634	\$ -	\$ -
Miscellaneous Costs	\$ 5,000	\$ 5,000	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 319	\$ 1,320	\$ 1,990	\$ 1,216	\$ 155	\$ -	\$ -
CWF Closing Costs	\$ 10,500	\$ 10,500	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 670	\$ 2,771	\$ 4,179	\$ 2,553	\$ 320	\$ -	\$ -
Total 2016 CWF Project 1-2016	\$ 2,978,850	\$ 2,978,850	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 190,102	\$ 786,167	\$ 1,185,676	\$ 724,312	\$ 92,601	\$ -	\$ -
2009 GO	\$ 480,000	\$ 480,000	30.00%	70.00%	0.00%	0.00%	0.00%	0.00%	\$ 144,000	\$ 336,000	\$ -	\$ -	\$ -	\$ -	\$ -
2012 GO	\$ 395,000	\$ 395,000	30.00%	70.00%	0.00%	0.00%	0.00%	0.00%	\$ 118,500	\$ 276,500	\$ -	\$ -	\$ -	\$ -	\$ -
2014A GO	\$ 560,000	\$ 560,000	30.00%	70.00%	0.00%	0.00%	0.00%	0.00%	\$ 168,000	\$ 392,000	\$ -	\$ -	\$ -	\$ -	\$ -
2016 Bonding	\$ 211,100	\$ 211,100	30.00%	70.00%	0.00%	0.00%	0.00%	0.00%	\$ 63,330	\$ 147,770	\$ -	\$ -	\$ -	\$ -	\$ -
2017 Bonding	\$ -	\$ -	30.00%	70.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capital Cost Financed Through Debt	\$ 7,952,950	\$ 7,952,950							\$ 1,163,932	\$ 3,643,197	\$ 1,702,529	\$ 1,216,192	\$ 227,099	\$ -	\$ -
Total Allocation Percent									14.64%	45.81%	21.41%	15.28%	2.86%	0.00%	0.00%
Annual Debt Service	\$ 501,854	\$ 498,872							\$ 73,447	\$ 229,896	\$ 107,435	\$ 78,745	\$ 14,331	\$ -	\$ -

Attachment 4
Allocation of Debt Service

Item	2018		2019							2019		2019		2019		2019	
	Capital Cost	Capital Cost	Fixed %	Volume %	BOD %	SS %	Phosphorus %	Copper %	Fixed \$	Volume \$	BOD \$	SS \$	Phosphorus \$	Copper \$			
2010 WWTP Improvements																	
Primary Clarifiers																	
Architectural/Structural	\$ 283,519	\$ 283,519	0.00%	15.00%	35.00%	40.00%	10.00%	0.00%	\$ -	\$ 42,528	\$ 99,232	\$ 113,408	\$ 28,352	\$ -			
Secondary Clarifiers																	
Architectural/Structural	\$ 69,607	\$ 69,607	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 10,441	\$ 27,843	\$ 24,362	\$ 6,961	\$ -			
Demolition	\$ 41,530	\$ 41,530	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 6,230	\$ 16,812	\$ 14,536	\$ 4,153	\$ -			
Equipment	\$ 421,952	\$ 421,952	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 63,293	\$ 168,781	\$ 147,653	\$ 42,195	\$ -			
Troughs, Weirs, & Baffles	\$ 6,000	\$ 6,000	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 900	\$ 2,400	\$ 2,100	\$ 600	\$ -			
Density Current Baffles	\$ 47,000	\$ 47,000	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 7,050	\$ 18,800	\$ 16,450	\$ 4,700	\$ -			
Yard Piping	\$ 32,391	\$ 32,391	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 4,859	\$ 12,956	\$ 11,337	\$ 3,239	\$ -			
Disinfection									\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Architectural/Structural	\$ 138,573	\$ 138,573	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ 138,573	\$ -	\$ -	\$ -	\$ -			
Equipment	\$ 68,299	\$ 68,299	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ 68,299	\$ -	\$ -	\$ -	\$ -			
Yard & Process Piping	\$ 50,000	\$ 50,000	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -			
2010 Subtotal A	\$ 1,158,871	\$ 1,158,871	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 392,172	\$ 346,624	\$ 329,876	\$ 90,200	\$ -			
Civil Site Work	\$ 97,295	\$ 97,295	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 32,925	\$ 29,101	\$ 27,695	\$ 7,573	\$ -			
Electrical	\$ 136,941	\$ 136,941	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 46,342	\$ 40,960	\$ 38,981	\$ 10,659	\$ -			
HVAC	\$ 19,939	\$ 19,939	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 6,748	\$ 5,964	\$ 5,676	\$ 1,552	\$ -			
Plumbing	\$ 20,954	\$ 20,954	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 7,091	\$ 6,267	\$ 5,965	\$ 1,631	\$ -			
2010 Subtotal B	\$ 1,434,000	\$ 1,434,000	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 485,278	\$ 428,916	\$ 408,192	\$ 111,614	\$ -			
Contingencies	\$ 83,000	\$ 83,000	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 28,088	\$ 24,826	\$ 23,626	\$ 6,460	\$ -			
Engineering, Legal, Administration	\$ 211,000	\$ 211,000	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 71,404	\$ 63,111	\$ 60,662	\$ 16,423	\$ -			
2010 Subtotal C	\$ 1,728,000	\$ 1,728,000	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 584,770	\$ 516,853	\$ 491,880	\$ 134,498	\$ -			
2010 Sewer Improvements																	
Sewer project - Wastewater Portion	\$ 1,600,000	\$ 1,600,000	30.00%	70.00%	0.00%	0.00%	0.00%	0.00%	\$ 480,000	\$ 1,120,000	\$ -	\$ -	\$ -	\$ -			
2010 Improvements Total	\$ 3,328,000	\$ 3,328,000	14.42%	51.23%	15.53%	14.78%	4.04%	0.00%	\$ 480,000	\$ 1,704,770	\$ 516,853	\$ 491,880	\$ 134,498	\$ -			
2016 GWF Project 1-2015																	
Engineering Design	\$ 175,000	\$ 175,000	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 11,188	\$ 46,185	\$ 69,656	\$ 42,552	\$ 5,440	\$ -			
Engineering Construction	\$ 198,000	\$ 198,000	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 12,636	\$ 52,255	\$ 78,810	\$ 48,144	\$ 6,155	\$ -			
Construction																	
GC's, miscellaneous	\$ 272,300	\$ 272,300	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 17,377	\$ 71,864	\$ 106,384	\$ 66,210	\$ 8,465	\$ -			
Site - Hauled Wastes, HSW	\$ 584,900	\$ 584,900	10.00%	20.00%	40.00%	25.00%	5.00%	0.00%	\$ 58,490	\$ 116,980	\$ 233,960	\$ 148,225	\$ 29,245	\$ -			
HSW Pump	\$ 286,400	\$ 286,400	0.00%	0.00%	60.00%	40.00%	0.00%	0.00%	\$ -	\$ -	\$ 171,840	\$ 114,660	\$ -	\$ -			
Screening	\$ 543,800	\$ 543,800	15.00%	85.00%	0.00%	0.00%	0.00%	0.00%	\$ 81,570	\$ 462,230	\$ -	\$ -	\$ -	\$ -			
Dewatering	\$ 757,200	\$ 757,200	0.00%	0.00%	60.00%	35.00%	5.00%	0.00%	\$ -	\$ -	\$ 454,320	\$ 285,020	\$ 37,860	\$ -			
Progressing Cavity Pump	\$ 22,400	\$ 22,400	0.00%	0.00%	60.00%	35.00%	5.00%	0.00%	\$ -	\$ -	\$ 13,440	\$ 7,840	\$ 1,120	\$ -			
Contingency	\$ 123,350	\$ 123,350	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 7,872	\$ 32,654	\$ 49,097	\$ 29,993	\$ 3,834	\$ -			
Miscellaneous Costs	\$ 5,000	\$ 5,000	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 319	\$ 1,320	\$ 1,990	\$ 1,216	\$ 155	\$ -			
GWF Closing Costs	\$ 10,500	\$ 10,500	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 670	\$ 2,771	\$ 4,179	\$ 2,553	\$ 326	\$ -			
Total 2016 GWF Project 1-2015	\$ 2,978,850	\$ 2,978,850	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 190,102	\$ 786,157	\$ 1,185,676	\$ 724,312	\$ 92,601	\$ -			
2009 GO	\$ 480,000	\$ 480,000	30.00%	70.00%	0.00%	0.00%	0.00%	0.00%	\$ 144,000	\$ 336,000	\$ -	\$ -	\$ -	\$ -			
2012 GO	\$ 395,000	\$ 395,000	30.00%	70.00%	0.00%	0.00%	0.00%	0.00%	\$ 118,500	\$ 276,500	\$ -	\$ -	\$ -	\$ -			
2014A GO	\$ 580,000	\$ 580,000	30.00%	70.00%	0.00%	0.00%	0.00%	0.00%	\$ 168,000	\$ 392,000	\$ -	\$ -	\$ -	\$ -			
2018 Bonding	\$ 211,100	\$ 211,100	30.00%	70.00%	0.00%	0.00%	0.00%	0.00%	\$ 63,330	\$ 147,770	\$ -	\$ -	\$ -	\$ -			
2017 Bonding	\$ -	\$ -	30.00%	70.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Total Capital Cost Financed Through Debt	\$ 7,952,950	\$ 7,952,950							\$ 1,163,932	\$ 3,643,197	\$ 1,702,529	\$ 1,216,192	\$ 227,099	\$ -			
Total Allocation Percent									14.64%	45.81%	21.41%	15.29%	2.86%	0.00%			
Annual Debt Service	\$ 501,854	\$ 498,872							\$ 73,011	\$ 228,530	\$ 106,796	\$ 78,289	\$ 14,245	\$ -			

Attachment 5
Allocation of Depreciation Fund Costs

Item	Projected 12/31/2017 Balance	Depreciation Rate	Accumulated Depreciation	Annual Depreciation	Fixed		Volume		BOD		SS		Phosphorus		Copper	
					%	\$	%	\$	%	\$	%	\$	%	\$	%	\$
Existing Plant																
Sludge Disposal Operations																
Land & Land Rights	\$ 164,747				0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Lagoon	\$ 132,275	2.50	\$ 110,113	\$ 3,307	0.00%	\$ -	0.00%	\$ -	50.00%	\$ 1,653	40.00%	\$ 1,323	10.00%	\$ 331	0.00%	\$ -
Structures & Improvements	\$ 412,626	2.50	\$ 232,283	\$ 10,313	0.00%	\$ -	0.00%	\$ -	50.00%	\$ 5,157	40.00%	\$ 4,125	10.00%	\$ 1,031	0.00%	\$ -
Piping at Lagoon	\$ 29,010	2.50	\$ 23,517	\$ 700	0.00%	\$ -	0.00%	\$ -	50.00%	\$ 350	40.00%	\$ 280	10.00%	\$ 70	0.00%	\$ -
Monitoring Wells	\$ 4,732	2.50	\$ 3,929	\$ 118	0.00%	\$ -	0.00%	\$ -	50.00%	\$ 59	40.00%	\$ 47	10.00%	\$ 12	0.00%	\$ -
Power operated Equipment	\$ 295,669		\$ 275,429	\$ -	0.00%	\$ -	0.00%	\$ -	50.00%	\$ -	40.00%	\$ -	10.00%	\$ -	0.00%	\$ -
Communication Equipment	\$ 2,900	10.00	\$ 2,900	\$ -	0.00%	\$ -	0.00%	\$ -	50.00%	\$ -	40.00%	\$ -	10.00%	\$ -	0.00%	\$ -
Treatment Plant																
Pump Station Equipment at Plant																
Pump Station Equipment at Plant	\$ 761,001	2.50	\$ 417,625	\$ 19,745	0.00%	\$ -	100.00%	\$ 19,745	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Land Improvements	\$ 284,422	2.50	\$ 96,704	\$ 7,111	0.00%	\$ -	100.00%	\$ 7,111	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Land & Land Rights	\$ 9,069				0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Buildings & Structures	\$ 8,167,139	2.50	\$ 3,576,926	\$ 213,113	5.00%	\$ 10,656	35.00%	\$ 74,589	30.00%	\$ 63,934	30.00%	\$ 63,934	0.00%	\$ -	0.00%	\$ -
Preliminary Treatment Equipment	\$ 283,232	3.33	\$ 36,670	\$ 8,468	0.00%	\$ -	50.00%	\$ 4,234	10.00%	\$ 847	40.00%	\$ 3,387	0.00%	\$ -	0.00%	\$ -
Primary Treatment Equipment	\$ 204,367	4.00	\$ 53,684	\$ 7,997	0.00%	\$ 284	36.00%	\$ 2,855	20.00%	\$ 1,419	40.00%	\$ 2,839	0.00%	\$ -	0.00%	\$ -
Secondary Treatment Equipment	\$ 2,330,815	4.00	\$ 1,197,023	\$ 91,931	0.00%	\$ -	30.00%	\$ 27,579	40.00%	\$ 36,772	30.00%	\$ 18,386	10.00%	\$ 9,193	0.00%	\$ -
Chlorination Equipment	\$ 88,218	6.67	\$ -	\$ -	0.00%	\$ -	100.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Sludge Treat. & Disposal Equip.	\$ 1,592,204	4.00	\$ 799,644	\$ 102,249	0.00%	\$ -	0.00%	\$ -	50.00%	\$ 51,124	40.00%	\$ 40,899	10.00%	\$ 10,225	0.00%	\$ -
Plant Site Piping	\$ 603,359	2.50	\$ 442,568	\$ 15,084	4.00%	\$ 603	36.00%	\$ 5,430	30.00%	\$ 4,525	20.00%	\$ 3,017	10.00%	\$ 1,508	0.00%	\$ -
Flow Metering & Monitoring Equip.	\$ 862,716	4.00	\$ 376,509	\$ 31,603	4.00%	\$ 1,264	36.00%	\$ 11,377	30.00%	\$ 9,481	20.00%	\$ 6,321	10.00%	\$ 3,160	0.00%	\$ -
Outfall Sewer/River Diffuser	\$ 275,216	2.50	\$ 120,331	\$ 8,880	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	100.00%	\$ 6,880
Other Plant Equipment	\$ 17,099	3.33	\$ 14,045	\$ 569	4.00%	\$ 23	36.00%	\$ 295	30.00%	\$ 171	30.00%	\$ 114	10.00%	\$ 57	0.00%	\$ -
Lab Equipment	\$ 89,948	10.00	\$ 95,916	\$ 6,950	50.00%	\$ 3,175	20.00%	\$ 1,270	10.00%	\$ 635	10.00%	\$ 635	10.00%	\$ 635	0.00%	\$ -
Collection System																
Service Connections and Traps																
Service Connections and Traps	\$ 12,135	1.00	\$ 384	\$ 121	2.00%	\$ 2	88.00%	\$ 119	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Collecting Sewers	\$ 1,701,306	1.00	\$ 86,079	\$ 17,018	2.00%	\$ 340	98.00%	\$ 16,675	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Land & Land Rights	\$ 3,575				0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Lift Stations	\$ 1,734,883	2.50	\$ 841,695	\$ 42,011	2.00%	\$ 840	98.00%	\$ 41,171	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
General Equipment & Plant																
Land Improvements																
Land Improvements	\$ 53,301	2.50	\$ 43,805	\$ 1,333	10.00%	\$ 133	30.00%	\$ 400	30.00%	\$ 400	20.00%	\$ 267	10.00%	\$ 133	0.00%	\$ -
Structures & Improvements	\$ 775,528	2.50	\$ 637,712	\$ 19,407	5.00%	\$ 970	35.00%	\$ 6,782	30.00%	\$ 5,622	20.00%	\$ 3,881	10.00%	\$ 1,941	0.00%	\$ -
Office Equipment	\$ 100,287	10.00	\$ 77,509	\$ 10,142	100.00%	\$ 10,142	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Customer Billing Equipment	\$ 18,010	14.29	\$ 19,019	\$ -	100.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Transportation Equipment	\$ 353,430		\$ 278,459	\$ 28,192	100.00%	\$ 28,192	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Miscellaneous Equipment	\$ 152,228	10.00	\$ 94,763	\$ -	5.00%	\$ -	35.00%	\$ -	30.00%	\$ -	20.00%	\$ -	10.00%	\$ -	0.00%	\$ -
Standby Power Equipment	\$ 207,090	3.33	\$ 109,667	\$ 6,896	0.00%	\$ -	100.00%	\$ 6,896	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Collection System Contributed																
Collection System Main	\$ 6,870,352	1.15	\$ 1,763,640	\$ 80,065	2.00%	\$ 1,601	88.00%	\$ 78,464	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Additions																
WWTP Screening, Dewatering, and Hauled Wastes Receiving Improvements																
Site - Hauled Wastes, HSW	\$ 793,690	2.50	\$ -	\$ 19,847	10.00%	\$ 1,985	20.00%	\$ 3,969	40.00%	\$ 7,939	20.00%	\$ 4,962	5.00%	\$ 992	0.00%	\$ -
HSW Pump	\$ 389,779	4.00	\$ -	\$ 15,549	0.00%	\$ -	0.00%	\$ -	80.00%	\$ 9,329	40.00%	\$ 6,220	0.00%	\$ -	0.00%	\$ -
Screening	\$ 738,096	3.33	\$ -	\$ 24,579	18.00%	\$ 3,687	85.00%	\$ 20,892	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -
Dewatering	\$ 1,027,742	5.00	\$ -	\$ 51,387	0.00%	\$ -	0.00%	\$ -	50.00%	\$ 25,694	40.00%	\$ 20,555	10.00%	\$ 5,139	0.00%	\$ -
Progressing Cavity Pump	\$ 30,403	4.00	\$ -	\$ 1,216	0.00%	\$ -	0.00%	\$ -	50.00%	\$ 608	40.00%	\$ 486	10.00%	\$ 122	0.00%	\$ -
Subtotal																
Deduction of Replacement Fund																
Total																
	\$ 31,690,660.98		\$ 11,694,568.18	\$ 615,842.00	10.02%	\$ 61,708	25.23%	\$ (66,403)	23.17%	\$ 142,655	20.07%	\$ 123,602	2.91%	\$ 17,929	-0.35%	\$ (2,134)

CITY OF CHIPPEWA FALLS, WISCONSIN
STORM WATER UTILITY RATE STUDY



City of Chippewa Falls
Chippewa Falls, Wisconsin

Per your request, we have recalculated service charge rates of the City of Chippewa Falls Storm Water Utility. Our recalculations are based on information provided by the City and estimates developed by us with Utility personnel assistance. Our recalculations have resulted in the following proposed changes to the Utility's current rates:

Customer/Land Use Type:	Current Rates*	Proposed Rates*	Change	
			\$	%
Residential	\$ 3.00	\$ 3.47	\$ 0.47	15.5%
Commercial	39.00	45.05	6.04	15.5%
Industrial	30.36	35.07	4.71	15.5%
Multi-family	25.08	28.97	3.89	15.5%
Institutional	39.00	45.05	6.04	15.5%

* Charge per acre/per month; residential = per household/per month

Rate Adjustment Impact:

Total Annual Revenue Generated by Rates	\$ 596,360	\$ 688,796
Additional Annual Revenue Generated		\$ 92,436
Net Revenue Increase Percentage		15.5%

The current fees generate approximately \$596,360 annually, while expenditures in 2017 are estimated to be \$602,698 and expected to increase to \$650,198 in 2018 and \$688,688 in 2019. When determining the estimated 2017-2019 cash requirements, the following key factors were considered:

- Number of users will stay consistent with fiscal year 2016
- Inflationary factor of 3% was used for 2018 and 2019 O&M expenditures
- Dredging expenditures of \$7,500 was added annually for the expected additional expense
- Expected projects to occur in 2018 and 2019 are anticipated to be financed through additional debt, structured similar to current outstanding debt
- Capital replacement fund goal of \$10,000 monthly

The above rate adjustments represent results based on current and estimated activity within the Storm Water Utility fund. Additional modification to the rates may be necessary if actual results differ significantly than estimated in the rate adjustment calculations.

2019 CASH REQUIREMENT

	Estimated 2019	Cash Requirement Costs				
		Base Year 2017	2016	2015	2014	2013
OPERATIONS						
Street Cleaning and Flushing	\$ 127,308	\$ 120,000	\$ 110,400	\$ 123,358	\$ 92,844	\$ 109,219
Snow Removal	42,436	40,000	34,544	27,496	62,399	64,580
Storm Sewer Maintenance	74,263	70,000	72,089	50,639	37,623	15,742
Storm Pond Maintenance	1,591	1,500	2,474	671	2,474	264
Yard Waste	18,444	15,500	12,777	16,739	19,899	12,135
Dredging	7,957	7,500	-	-	-	-
Total Operation	<u>269,999</u>	<u>254,500</u>	<u>232,284</u>	<u>218,903</u>	<u>215,239</u>	<u>201,940</u>
CUSTOMER ACCOUNT EXPENSE						
Billing and Collection	37,132	35,000	32,216	29,819	23,025	22,728
Uncollectible Accounts	122	115	115	42	77	214
Total Customer Account Expense	<u>37,254</u>	<u>35,115</u>	<u>32,331</u>	<u>29,861</u>	<u>23,102</u>	<u>22,942</u>
ADMINISTRATIVE AND GENERAL						
Administrative and General Salaries	137,917	130,000	149,860	113,549	127,882	119,209
Outside Services Employed	9,648	9,000	9,786	8,980	9,369	7,436
Educational Expenses	13,792	13,000	12,085	9,037	8,052	10,501
Total Administrative and General	<u>161,257</u>	<u>152,000</u>	<u>171,731</u>	<u>131,566</u>	<u>145,303</u>	<u>137,146</u>
Total O&M Expenses	468,509	441,615	<u>\$ 436,346</u>	<u>\$ 380,330</u>	<u>\$ 383,644</u>	<u>\$ 362,028</u>
OTHER CASH REQUIREMENTS:						
Debt Service:						
Principal Retirement						
2016A Bonds	5,000	5,000				
2009A Bonds	20,000	20,000				
2017 Bonds	20,000	20,000				
Future Borrowing for projects - estimated	20,000	20,000				
Interest Expense						
2016A Bonds	2,244	2,244				
2009A Bonds	11,935	11,935				
2017 Bonds	10,500	10,500				
Future Borrowing for projects - estimated	10,500	10,500				
Capital Replacement	120,000	120,000				
Total Cash Requirement	<u>688,688</u>	<u>\$ 681,794</u>				
Funding at Current Rates	<u>(596,360)</u>					
Rates (Over)/Under Funding Expenses	<u>\$ 92,328</u>					
Estimated with Adjusted Rates						
Total Cash Requirement	688,688					
Funding at Adjusted Rates	<u>(688,796)</u>					
Rates (Over)/Under Funding Expenses	<u>\$ (108)</u>					

2018 CASH REQUIREMENT

	Estimated 2018	Cash Requirement Costs				
		Base Year 2017	2016	2015	2014	2013
OPERATIONS						
Street Cleaning and Flushing	\$ 123,600	\$ 120,000	\$ 110,400	\$ 123,358	\$ 92,844	\$ 109,219
Snow Removal	41,200	40,000	34,544	27,496	62,399	64,580
Storm Sewer Maintenance	72,100	70,000	72,089	50,639	37,623	15,742
Storm Pond Maintenance	1,545	1,500	2,474	671	2,474	264
Yard Waste	15,985	15,500	12,777	16,739	19,899	12,135
Dredging	7,725	7,500	-	-	-	-
Total Operation	<u>262,135</u>	<u>264,500</u>	<u>232,284</u>	<u>218,903</u>	<u>215,239</u>	<u>201,940</u>
CUSTOMER ACCOUNT EXPENSE						
Billing and Collection	36,050	35,000	32,216	29,819	23,025	22,728
Uncollectible Accounts	118	115	115	42	77	214
Total Customer Account Expense	<u>36,168</u>	<u>35,115</u>	<u>32,331</u>	<u>29,861</u>	<u>23,102</u>	<u>22,942</u>
ADMINISTRATIVE AND GENERAL						
Administrative and General Salaries	133,900	130,000	149,880	113,549	127,882	119,209
Outside Services Employed	9,270	9,000	9,786	8,980	9,369	7,436
Educational Expenses	13,390	13,000	12,065	9,037	8,052	10,501
Total Administrative and General	<u>156,560</u>	<u>152,000</u>	<u>171,731</u>	<u>131,566</u>	<u>145,303</u>	<u>137,146</u>
Total O&M Expenses	454,863	441,615	<u>\$ 436,346</u>	<u>\$ 380,330</u>	<u>\$ 383,644</u>	<u>\$ 362,028</u>
OTHER CASH REQUIREMENTS:						
Debt Service:						
Principal Retirement						
2016A Bonds	5,000	5,000				
2009A Bonds	20,000	20,000				
2017 Bonds	20,000	20,000				
Interest Expense						
2016A Bonds	2,281	2,281				
2009A Bonds	12,575	12,575				
2017 Bonds	15,478	15,478				
Capital Replacement	120,000	120,000				
Total Cash Requirement	<u>650,198</u>	<u>\$ 636,949</u>				
Funding at Rate	(596,360)					
Rates (Over)/Under Funding Expenses	<u>\$ 53,837</u>					
Estimated with Adjusted Rates						
Total Cash Requirement	650,198					
Funding at Rate	(688,798)					
Rates (Over)/Under Funding Expenses	<u>\$ (38,598)</u>					

2017 CASH REQUIREMENT

	Estimated 2017	Cash Requirement Costs				
		Base Year 2017	2016	2015	2014	2013
OPERATIONS						
Street Cleaning and Flushing	\$ 120,000	\$ 120,000	\$ 110,400	\$ 123,358	\$ 92,844	\$ 109,219
Snow Removal	40,000	40,000	34,544	27,496	62,399	64,580
Storm Sewer Maintenance	70,000	70,000	72,089	50,639	37,623	15,742
Storm Pond Maintenance	1,500	1,500	2,474	671	2,474	264
Yard Waste	15,500	15,500	12,777	16,739	19,899	12,135
Dredging	7,500	7,500	-	-	-	-
Total Operation	<u>264,500</u>	<u>264,500</u>	<u>232,284</u>	<u>218,903</u>	<u>215,239</u>	<u>201,940</u>
CUSTOMER ACCOUNT EXPENSE						
Billing and Collection	35,000	35,000	32,216	29,819	23,025	22,728
Uncollectible Accounts	115	115	115	42	77	214
Total Customer Account Expense	<u>35,115</u>	<u>35,115</u>	<u>32,331</u>	<u>29,861</u>	<u>23,102</u>	<u>22,942</u>
ADMINISTRATIVE AND GENERAL						
Administrative and General Salaries	130,000	130,000	149,880	113,549	127,882	119,209
Outside Services Employed	9,000	9,000	9,786	8,980	9,369	7,436
Miscellaneous Expense	13,000	13,000	12,065	9,037	8,052	10,501
Total Administrative and General	<u>152,000</u>	<u>152,000</u>	<u>171,731</u>	<u>131,566</u>	<u>145,303</u>	<u>137,146</u>
Total O&M Expenses	441,615	441,615	\$ 436,346	\$ 380,330	\$ 383,644	\$ 362,028
OTHER CASH REQUIREMENTS:						
Debt Service:						
Principal Retirement						
2016A Bonds	5,000	5,000				
2009A Bonds	20,000	20,000				
Interest Expense						
2016A Bonds	2,908	2,908				
2009A Bonds	13,175	13,175				
Capital Replacement	<u>120,000</u>	<u>120,000</u>				
Total Cash Requirement	602,698	<u>\$ 602,698</u>				
Funding at Rate	<u>(596,360)</u>					
Rates (Over)/Under Funding Expenses	<u>\$ 6,338</u>					
Estimated with Adjusted Rates						
Total Cash Requirement	602,698					
Funding at Rate	<u>(688,796)</u>					
Rates (Over)/Under Funding Expenses	<u>\$ (86,098)</u>					