

CITY OF CHIPPEWA FALLS, WISCONSIN

**NOTICE OF PUBLIC MEETING**

In accordance with the provisions of the Wisconsin State Statutes, Sec. 19.84, notice is hereby given that a public meeting of the:

**Committee No. 1**  
**Revenues, Disbursements, Water and Wastewater**

Will be held on **Tuesday, November 28, 2017 at 9:00 AM, Council Chambers, City Hall, 30 West Central Street, Chippewa Falls, WI.**

Items of business to be discussed or acted upon at this meeting are shown on the attached agenda below:

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.
2. Discuss Wastewater Utility Rate Study. Possible recommendations to the Council.
3. Discuss Storm Water Utility Rate Study. Possible recommendations to the Council.
4. Adjournment

NOTICE IS HEREBY GIVEN THAT A MAJORITY OF THE CITY COUNCIL MAY BE PRESENT AT THIS MEETING TO GATHER INFORMATION ABOUT A SUBJECT OVER WHICH THEY HAVE DECISION MAKING RESPONSIBILITY.

NOTE: REASONABLE ACCOMMODATIONS FOR PARTICIPATION BY INDIVIDUALS WITH DISABILITIES WILL BE MADE UPON REQUEST. FOR ADDITIONAL INFORMATION OR TO REQUEST THIS SERVICE, CONTACT THE CITY CLERK AT 726-2719.

PLEASE NOTE THAT ATTACHMENTS TO THIS AGENDA MAY NOT BE FINAL AND ARE SUBJECT TO CHANGE.  
THIS AGENDA MAY BE AMENDED AS IT IS REVIEWED.

**CERTIFICATION OF OFFICIAL NEWSPAPER**

I hereby certify that a copy of this notice has been posted on the City Hall bulletin board and a copy has been given to the Chippewa Herald on November 22, 2017 at 3:40 pm by BNG.



Strand Associates, Inc.<sup>®</sup>  
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Madison, WI 53715  
(P) 608-251-4843  
(F) 608-251-8655

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.<sup>®</sup> 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.

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### 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 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 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 (BOD<sub>5</sub>), 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

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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.<sup>®</sup>



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.<sup>®</sup>

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**

<b>Estimated Typical Residential User (36,000 gallons/yr.)</b>			
	<b>Current</b>	<b>2018</b>	<b>% Increase</b>
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%
<b>Large Industrial Customer—Estimated Impact</b>			
	<b>Current</b>	<b>2018</b>	<b>% Increase</b>
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	Allocations				Allocations				Allocations				Allocations				Allocations					
	2016 Cost	2017 Cost	2018 Cost	2019 Cost	Fleet	Volume	BOD	SS	Phosphorus	Copper	Fleet	Volume	BOD	SS	Phosphorus	Copper	Fleet	Volume	BOD	SS	Phosphorus	Copper
	\$	\$	\$	\$	%	%	%	%	%	%	\$	\$	\$	%	%	%	\$	\$	\$	\$	\$	\$
<b>Operating Expense</b>																						
Supervisor/Labor-Plant																						
Salaries Regular	\$ 61,715	\$ 62,532	\$ 65,008	\$ 67,558	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ 13,865	\$ 33,944	\$ 16,842	\$ 12,360	\$ 7,243	\$ 655	\$ 14,281	\$ 34,962	\$ 17,450	\$ 12,731	\$ 7,460	\$ 674
Wages Regular	\$ 81,458	\$ 83,756	\$ 86,271	\$ 88,659	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ 14,071	\$ 34,446	\$ 17,194	\$ 12,544	\$ 7,350	\$ 664	\$ 14,493	\$ 35,481	\$ 17,710	\$ 12,920	\$ 7,571	\$ 664
Wages Overtime	\$ 2,614	\$ 2,317	\$ 2,384	\$ 2,456	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ 538	\$ 951	\$ 475	\$ 341	\$ 205	\$ 18	\$ 401	\$ 961	\$ 488	\$ 351	\$ 209	\$ 19
Sick Leave	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vacation	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Longevity	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Holiday	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell Call	\$ 10,422	\$ 17,995	\$ 19,538	\$ 19,092	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ 3,023	\$ 7,457	\$ 3,694	\$ 2,695	\$ 1,579	\$ 143	\$ 3,114	\$ 7,623	\$ 3,802	\$ 2,710	\$ 1,627	\$ 147
Insurance Opt Out	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cell Phone Reimbursement	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supervision/Labor-Lab																						
Wages Regular	\$ 50,706	\$ 52,772	\$ 54,355	\$ 55,946	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ 8,865	\$ 21,704	\$ 10,803	\$ 7,003	\$ 4,631	\$ 419	\$ 9,131	\$ 22,355	\$ 11,156	\$ 8,140	\$ 4,770	\$ 431
Wages Overtime	\$ 1,538	\$ 1,598	\$ 1,640	\$ 1,696	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ 268	\$ 657	\$ 328	\$ 239	\$ 140	\$ 13	\$ 277	\$ 673	\$ 336	\$ 248	\$ 144	\$ 13
Sick Leave	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vacation	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Longevity	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Holiday	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Insurance Opt Out	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	18.93%	14.64%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Supervision/Labor-Farm																						
Wages Regular	\$ 51,567	\$ 47,244	\$ 48,961	\$ 50,121	2.00%	0.00%	58,004	30.00%	10.00%	0.00%	\$ 973	\$ -	\$ 28,224	\$ 14,568	\$ 4,866	\$ -	\$ 1,002	\$ -	\$ 20,070	\$ 15,096	\$ 5,012	\$ -
Wages Overtime	\$ 310	\$ 255	\$ 265	\$ 271	2.00%	0.00%	58,004	30.00%	10.00%	0.00%	\$ 5	\$ 5	\$ 162	\$ 79	\$ 26	\$ 5	\$ 5	\$ 5	\$ 157	\$ 81	\$ 27	\$ -
Power & Fuel-Pump																						
Electric	\$ 169,640	\$ 174,730	\$ 168,900	\$ 194,667	3.00%	63.00%	19.00%	10.00%	3.00%	2.00%	\$ 5,667	\$ 119,007	\$ 35,891	\$ 18,890	\$ 6,667	\$ 3,778	\$ 5,837	\$ 122,577	\$ 36,968	\$ 19,457	\$ 5,837	\$ 3,691
Gas	\$ 55,840	\$ 65,640	\$ 55,940	\$ 57,515	3.00%	63.00%	19.00%	10.00%	3.00%	2.00%	\$ 1,675	\$ 35,179	\$ 10,610	\$ 5,584	\$ 1,675	\$ 1,117	\$ 1,725	\$ 36,233	\$ 10,928	\$ 5,752	\$ 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	\$ 6,742	\$ 2,742	\$ 2,824	5.00%	95.00%	0.00%	0.00%	0.00%	0.00%	\$ 137	\$ 2,606	\$ -	\$ -	\$ -	\$ -	\$ 141	\$ 2,683	\$ -	\$ -	\$ -	\$ -
Sulfur Dioxide	\$ 3,200	\$ 3,200	\$ 3,202	\$ 3,296	5.00%	95.00%	0.00%	0.00%	0.00%	0.00%	\$ 160	\$ 3,040	\$ -	\$ -	\$ -	\$ -	\$ 165	\$ 3,131	\$ -	\$ -	\$ -	\$ -
Ferric Chloride	\$ 60,000	\$ 60,000	\$ 50,000	\$ 51,500	2.00%	38.00%	0.00%	0.00%	60.00%	0.00%	\$ 1,000	\$ 19,000	\$ -	\$ -	\$ -	\$ -	\$ 1,030	\$ 19,570	\$ -	\$ -	\$ 30,900	\$ -
Polymer - bell press	\$ 54,200	\$ 70,000	\$ 70,000	\$ 72,100	0.00%	0.00%	50,000	50.00%	0.00%	0.00%	\$ -	\$ -	\$ 35,000	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36,050	\$ 36,050	\$ -
Odor Control	\$ 500	\$ 500	\$ 500	\$ -	35.00%	10.00%	40.00%	15.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 83	\$ 1,702	\$ 830	\$ 415	\$ 42	
Polymer - WAG thickening	\$ 22,367	\$ 23,714	\$ 24,426	\$ 25,158	2.00%	0.00%	58,004	40.00%	0.00%	0.00%	\$ 488	\$ 14,167	\$ 9,770	\$ -	\$ -	\$ -	\$ 503	\$ 14,591	\$ 10,063	\$ -	\$ -	\$ -
Supplies and Expenses - Plant																						
Water and Sewer	\$ 100,000	\$ 100,000	\$ 100,000	\$ 103,000	2.00%	41.00%	26,00%	20.00%	10.00%	1.00%	\$ 2,000	\$ 41,000	\$ 26,000	\$ 20,000	\$ 10,000	\$ 1,000	\$ 2,050	\$ 42,230	\$ 26,780	\$ 20,600	\$ 10,300	\$ 1,030
Telephone	\$ 1,600	\$ 3,000	\$ 3,000	\$ 3,099	2.00%	41.00%	26,00%	20.00%	10.00%	1.00%	\$ 60	\$ 1,230	\$ 782	\$ 600	\$ 300	\$ 30	\$ 62	\$ 1,267	\$ 803	\$ 616	\$ 309	\$ 31
Internet Service	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	2.00%	41.00%	26,00%	20.00%	10.00%	1.00%	\$ 60	\$ 1,230	\$ 782	\$ 600	\$ 300	\$ 30	\$ 62	\$ 1,267	\$ 803	\$ 616	\$ 309	\$ 31
Janitorial Supplies	\$ 2,500	\$ 2,575	\$ 2,629	\$ 2,732	2.00%	41.00%	26,00%	20.00%	10.00%	1.00%	\$ 53	\$ 1,047	\$ 650	\$ 530	\$ 265	\$ 27	\$ 55	\$ 1,120	\$ 710	\$ 540	\$ 273	\$ 27
Uniforms	\$ 4,030	\$ 4,030	\$ 4,030	\$ 4,151	2.00%	41.00%	26,00%	20.00%	10.00%	1.00%	\$ 81	\$ 1,652	\$ 1,048	\$ 806	\$ 403	\$ 40	\$ 83	\$ 1,702	\$ 1,079	\$ 830	\$ 415	\$ 42
Diesel Fuel-Generator	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,676	2.00%	41.00%	26,00%	20.00%	10.00%	1.00%	\$ 50	\$ 1,025	\$ 650	\$ 500	\$ 250	\$ 26	\$ 52	\$ 1,056	\$ 670	\$ 515	\$ 258	\$ 26
Materials and Supplies	\$ 5,000	\$ 5,600	\$ 5,600	\$ 5,665	2.00%	41.00%	26,00%	20.00%	10.00%	1.00%	\$ 110	\$ 2,255	\$ 1,430	\$ 1,100	\$ 550	\$ 59	\$ 113	\$ 2,323	\$ 1,473	\$ 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	\$ 500	\$ 400	\$ 200	\$ 20	\$ 41	\$ 845	\$ 536	\$ 412	\$ 206	\$ 21
Supplies and Expenses - Lab																						
Outside Laboratory Service	\$ 5,700	\$ 5,675	\$ 6,050	\$ 6,222	2.00%	26.00%	26,00%	25.00%	0.00%	0.00%	\$ 121	\$ 1,573	\$ 1,331	\$ 1,513	\$ -	\$ -	\$ 125	\$ 1,620	\$ 1,371	\$ 1,558	\$ 1,558	\$ -
Certification Fee	\$ 1,618	\$ 1,072	\$ 1,110	\$ 1,143	2.00%	26.00%	22,004	25.00%	25.00%	0.00%	\$ 22	\$ 289	\$ 244	\$ 218	\$ 216	\$ -	\$ 23	\$ 297	\$ 252	\$ 286	\$ 266	\$ -
Chemicals	\$ 7,210	\$ 7,210	\$ 7,210	\$ 7,429	2.00%	26.00%	22,004	25.00%	25.00%	0.00%	\$ 142	\$ 1,875	\$ 1,586	\$ 1,803	\$ 3	\$ -	\$ 149	\$ 1,931	\$ 1,634	\$ 1,857	\$ 1,857	\$ -
Other Supplies	\$ 3,600	\$ 3,600	\$ 3,600	\$ 3,665	2.00%	26.00%	22,004	25.00%	25.00%	0.00%	\$ 76	\$ 910	\$ 770	\$ 615	\$ 575	\$ -	\$ 72	\$ 937	\$ 793	\$ 601	\$ 501	\$ -
Supplies and Expenses - Farm																						
Electric	\$ 1,300	\$ 1,300	\$ 1,340	\$ 1,360	2.00%	0.00%	58,004	30.00%	10.00%	0.00%	\$ 27	\$ -	\$ 777	\$ 402	\$ 134	\$ -	\$ 28	\$ -	\$ 801	\$ 414	\$ 138	\$ -
Outside Laboratory Service	\$ 2,200	\$ 2,200	\$ 2,200	\$ 2,266	2.00%	0.00%	58,004	30.00%	10.00%	0.00%	\$ 44	\$ -	\$ 1,276	\$ 600	\$ 220	\$ -	\$ 45	\$ -	\$ 1,314	\$ 680	\$ 227	\$ -
Line	\$ -	\$ -	\$ -	\$ -	-	-	2,004	0.00%	58,004	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Materials and Supplies	\$ -	\$ -	\$ -	\$ -	-</																	

**Attachment 1**

### **Allocation of Operation and Maintenance Expenses**

## Maintenance Expenses

Item	Allocations												Allocations													
	2016 Cost	2017 Cost	2018 Cost	2019 Cost	Fixed %	Volumes %	BOO %	SS %	Phosphorous %	Copper %	Fixed \$	Volume \$	BOO \$	SS \$	Phosphorous \$	Copper \$	Fixed \$	Volume \$	BOO \$	SS \$	Phosphorous \$	Copper \$				
<b>Transportation Expense</b>																										
Wages Regular	\$ 795	\$ 728	\$ 750	\$ 772	2.00%	41.00%	21.00%	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	\$ 1,645	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 30	\$ 615	\$ 405	\$ 300	\$ 150	\$ 31	\$ 631	\$ 417	\$ 309	\$ 155	\$ -	\$ -	\$ -	\$ -	\$ -	
Gas Diesel, Motor Oil, Grease	\$ 5,500	\$ 6,500	\$ 5,500	\$ 6,665	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 110	\$ 2,255	\$ 1,465	\$ 1,100	\$ 650	\$ 113	\$ 2,323	\$ 1,530	\$ 1,132	\$ 667	\$ -	\$ -	\$ -	\$ -	\$ -	
Minor Vehicle parts	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,030	2.00%	41.00%	21.00%	24.00%	10.00%	0.00%	\$ 20	\$ 410	\$ 210	\$ 200	\$ 100	\$ 21	\$ 422	\$ 216	\$ 208	\$ 105	\$ -	\$ -	\$ -	\$ -	\$ -	
Tire Repairs	\$ -	\$ -	\$ -	\$ -	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other Supplies and Expense	\$ -	\$ -	\$ 100	\$ 100	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 2	\$ 41	\$ 27	\$ 20	\$ 10	\$ 2	\$ 42	\$ 28	\$ 21	\$ 10	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1	
Depreciation	\$ 14,439	\$ 14,439	\$ 6,966	\$ 9,235	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 179	\$ 3,676	\$ 2,421	\$ 1,793	\$ 897	\$ 165	\$ 3,786	\$ 2,493	\$ 1,847	\$ 923	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Transportation Studies</b>																										
Wages Regular	\$ 20,130	\$ 19,436	\$ 18,989	\$ 18,559	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ 380	\$ -	\$ 11,014	\$ 5,697	\$ 1,869	\$ 391	\$ -	\$ 13,344	\$ 7,050	\$ 1,850	\$ 1,096	\$ -	\$ -	\$ -	\$ -	\$ -
Wages Overtime	\$ 3,095	\$ 2,546	\$ 2,622	\$ 2,701	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ 52	\$ -	\$ 1,521	\$ 787	\$ 262	\$ 54	\$ -	\$ 1,567	\$ 810	\$ 270	\$ 125	\$ -	\$ -	\$ -	\$ -	\$ -
Sludge Disposal	\$ -	\$ -	\$ -	\$ -	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Repair & Maintenance- Misc. Services	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,605	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ 70	\$ -	\$ 2,030	\$ 1,050	\$ 350	\$ 72	\$ -	\$ 2,091	\$ 1,082	\$ 361	\$ 181	\$ -	\$ -	\$ -	\$ -	\$ -
Gas, Diesel, Motor Oil, Grease	\$ 10,000	\$ 10,000	\$ 6,000	\$ 6,150	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ 120	\$ -	\$ 3,400	\$ 1,600	\$ 600	\$ 134	\$ -	\$ 3,588	\$ 1,842	\$ 618	\$ 213	\$ -	\$ -	\$ -	\$ -	\$ -
Water Vehicle Parts	\$ 3,400	\$ 3,200	\$ 3,500	\$ 3,650	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ 130	\$ -	\$ 3,100	\$ 1,550	\$ 650	\$ 141	\$ -	\$ 3,153	\$ 1,595	\$ 610	\$ 201	\$ -	\$ -	\$ -	\$ -	\$ -
Machinery and Equipment Parts	\$ 2,500	\$ 2,000	\$ 2,000	\$ 2,060	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ 40	\$ -	\$ 1,160	\$ 600	\$ 200	\$ 12	\$ -	\$ 1,195	\$ 630	\$ 550	\$ 183	\$ -	\$ -	\$ -	\$ -	\$ -
Tire Repairs	\$ 250	\$ -	\$ -	\$ -	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other Supplies and Expense	\$ 500	\$ 500	\$ 500	\$ 515	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ 10	\$ -	\$ 290	\$ 150	\$ 60	\$ 10	\$ -	\$ 299	\$ 155	\$ 52	\$ 15	\$ -	\$ -	\$ -	\$ -	\$ -
Misc. Expenses	\$ -	\$ -	\$ -	\$ -	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Depreciation	\$ -	\$ -	\$ 9,000	\$ 9,270	2.00%	0.00%	58.00%	30.00%	10.00%	0.00%	\$ 180	\$ -	\$ 5,220	\$ 2,700	\$ 900	\$ 185	\$ -	\$ 5,377	\$ 2,781	\$ 927	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Sanitary Collection Cleaning</b>																										
Salaries Regular	\$ 26,781	\$ 24,627	\$ 25,263	\$ 26,021	2.00%	88.00%	0.00%	0.00%	0.00%	0.00%	\$ 505	\$ 24,756	\$ -	\$ -	\$ -	\$ 500	\$ 25,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wages Regular	\$ 1,779	\$ 1,052	\$ 1,064	\$ 1,116	2.00%	88.00%	0.00%	0.00%	0.00%	0.00%	\$ 22	\$ 1,052	\$ -	\$ -	\$ -	\$ 22	\$ 1,054	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wages Overtime	\$ 37	\$ 31	\$ 32	\$ 33	2.00%	88.00%	0.00%	0.00%	0.00%	0.00%	\$ 1	\$ 31	\$ -	\$ -	\$ -	\$ 1	\$ 32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Repair and Maint.	\$ 600	\$ 500	\$ 500	\$ 5,000	2.00%	88.00%	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%	88.00%	0.00%	0.00%	0.00%	0.00%	\$ 12	\$ 568	\$ -	\$ -	\$ -	\$ 12	\$ 606	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Motor Vehicle parts	\$ 200	\$ 200	\$ 200	\$ 206	2.00%	88.00%	0.00%	0.00%	0.00%	0.00%	\$ 4	\$ 196	\$ -	\$ -	\$ -	\$ 4	\$ 207	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Machinery and Equipment Parts	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,575	2.00%	88.00%	0.00%	0.00%	0.00%	0.00%	\$ 50	\$ 2,450	\$ -	\$ -	\$ -	\$ 52	\$ 2,524	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Supplies and Expense	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,120	2.00%	88.00%	0.00%	0.00%	0.00%	0.00%	\$ 60	\$ 3,920	\$ -	\$ -	\$ -	\$ 62	\$ 4,038	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Depreciation	\$ -	\$ -	\$ -	\$ -	2.00%	88.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Maintenance Collection System</b>																										
Salaries Regular	\$ 1,118	\$ 1,023	\$ 1,054	\$ 1,065	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 21	\$ 1,033	\$ -	\$ -	\$ -	\$ 22	\$ 1,054	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Repair and Maint - misc. service	\$ 4,700	\$ 4,700	\$ 4,700	\$ 4,841	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 94	\$ 4,605	\$ -	\$ -	\$ -	\$ 97	\$ 4,744	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wages - City Wages	\$ -	\$ -	\$ -	\$ -	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Collection System Pump EQ</b>																										
Wages Regular	\$ 41,906	\$ 38,318	\$ 38,529	\$ 40,715	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 781	\$ 38,739	\$ -	\$ -	\$ -	\$ 814	\$ 39,901	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wages Overtime	\$ 41,902	\$ 1,350	\$ 1,351	\$ 1,432	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 28	\$ 1,363	\$ -	\$ -	\$ -	\$ 29	\$ 1,404	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water and Sewer	\$ 2,500	\$ 2,500	\$ 3,200	\$ 3,296	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 64	\$ 3,193	\$ -	\$ -	\$ -	\$ 65	\$ 3,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Repair and Maint - motors	\$ 1,300	\$ 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	\$ 7,120	\$ 7,210	\$ 7,426	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 144	\$ 7,095	\$ -	\$ -	\$ -	\$ 145	\$ 7,205	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Repair and Maint - electrical	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,050	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 40	\$ 1,040	\$ -	\$ -	\$ -	\$ 41	\$ 1,080	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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%	\$ 101	\$ 4,900	\$ -	\$ -	\$ -	\$ 103	\$ 5,047	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Diesel fuel, generators	\$ 1,000	\$ 1,200	\$ 120	\$ 174	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 21	\$ 118	\$ -	\$ -	\$ -	\$ 22	\$ 121	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Machinery and equipment parts	\$ 6,000	\$ 6,365	\$ 6,365	\$ 6,556	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 127	\$ 6,238	\$ -	\$ -	\$ -	\$ 131	\$ 6,425	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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	\$ 15,645	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Disposal Plant Equipment</b>																										
Wages Regular	\$ 46,586	\$ 42,664	\$ 43,944	\$ 45,262	2.00%	41.00%	27.00%	20.00%	10.00%	0.00%	\$ 879	\$ 46,177	\$ 11,665	\$ 8,789	\$ 4,394	\$ -	\$ 905	\$ 49,901	\$ 18,658	\$ 12,221	\$ 9,052	\$ 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	\$ 18	\$ 13	\$ 7	\$ 6	\$ -	\$ -	\$ -</		

## **Attachment 1**

#### Allocation of Operation and Maintenance Expenses

#### **Maintenance Expenses**

Item	Allocations												Allocations													
	2016 Cost	2017 Cost	2018 Cost	2019 Cost	Fixed %	Volume %	R&D %	SG %	Phosphorus %	Copper %	Fixed \$	Volume \$	SG \$	Phosphorus \$	Copper \$	2018 Cost	2018 Cost	2018 Cost	2018 Cost	2018 Cost	2019 Cost	2019 Cost	2019 Cost	2019 Cost	2019 Cost	
<b>Buildings and Grounds - Plant</b>																										
Wages Regular	\$ 24,512	\$ 22,448	\$ 23,121	\$ 23,815	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 462	\$ 22,659	\$ 5	-	\$ -	\$ -	\$ 476	\$ 23,339	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Wages Overtime	\$ 128	\$ 106	\$ 105	\$ 112	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 2	\$ 107	\$ 5	-	\$ -	\$ -	\$ 2	\$ 110	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Repair and maint - HV Equip	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,180	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 120	\$ 5,860	\$ 5	-	\$ -	\$ -	\$ 124	\$ 6,000	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Repair and maint - Buildings	\$ 33,000	\$ 33,000	\$ 33,000	\$ 38,500	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 49	\$ 36,900	\$ 5	-	\$ -	\$ -	\$ 36,940	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Repair and maint - Electrical	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,050	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 1	\$ 1,950	\$ 5	-	\$ -	\$ -	\$ 41	\$ 2,019	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Maintenance of Grounds	\$ 1,200	\$ 1,200	\$ 1,000	\$ 1,030	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 1	\$ 20	\$ 850	\$ 5	-	\$ -	\$ -	\$ 21	\$ 1,009	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Machinery and equipment parts	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,645	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 30	\$ 1,470	\$ 5	-	\$ -	\$ -	\$ 31	\$ 1,514	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other supplies and expenses	\$ 3,700	\$ 3,800	\$ 3,800	\$ 3,914	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 76	\$ 3,724	\$ 5	-	\$ -	\$ -	\$ 78	\$ 3,856	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Buildings and Grounds - Farm</b>																										
Wages Regular	\$ 500	\$ 477	\$ 491	\$ 506	2.00%	98.00%	58.00%	30.00%	10.00%	0.00%	\$ 10	\$ 5	\$ 265	\$ 147	\$ 49	\$ -	\$ 10	\$ 5	\$ 294	\$ 152	\$ 51	\$ -	\$ -	\$ -	\$ -	\$ -
Wages Overtime	\$ -	\$ -	\$ -	\$ -	2.00%	98.00%	58.00%	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Repair and maint - Buildings	\$ -	\$ -	\$ -	\$ -	2.00%	98.00%	58.00%	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Repair and maint - electrical	\$ -	\$ -	\$ -	\$ -	2.00%	98.00%	58.00%	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Contract Maintenance	\$ -	\$ -	\$ -	\$ -	2.00%	98.00%	58.00%	30.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Misc. supplies	\$ 200	\$ 200	\$ 200	\$ 206	2.00%	98.00%	58.00%	30.00%	10.00%	0.00%	\$ 4	\$ 5	\$ 116	\$ 60	\$ 20	\$ 20	\$ 4	\$ 5	\$ 119	\$ 62	\$ 21	\$ -	\$ -	\$ -	\$ -	
<b>Buildings and Grounds - P.U.M.</b>																										
Wages Regular	\$ -	\$ -	\$ -	\$ -	2.00%	98.00%	27.00%	20.00%	10.00%	0.00%	\$ -	\$ -	\$ 5	\$ 5	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Repair and maint - HV Equip	\$ 1,500	\$ 1,500	\$ 1,000	\$ 1,630	2.00%	98.00%	27.00%	20.00%	10.00%	0.00%	\$ 20	\$ 410	\$ 270	\$ 200	\$ 100	\$ 5	\$ 21	\$ 422	\$ 278	\$ 206	\$ 103	\$ -	\$ -	\$ -	\$ -	
Repair and maint - Buildings	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,030	2.00%	98.00%	27.00%	20.00%	10.00%	0.00%	\$ 20	\$ 410	\$ 270	\$ 200	\$ 100	\$ 5	\$ 21	\$ 422	\$ 278	\$ 206	\$ 103	\$ -	\$ -	\$ -	\$ -	
Repair and maint - electrical	\$ 600	\$ 600	\$ 600	\$ 615	2.00%	98.00%	27.00%	20.00%	10.00%	0.00%	\$ 10	\$ 205	\$ 135	\$ 100	\$ 50	\$ 5	\$ 10	\$ 211	\$ 139	\$ 103	\$ 52	\$ -	\$ -	\$ -	\$ -	
Other supplies and expenses	\$ 500	\$ 500	\$ 500	\$ 615	2.00%	98.00%	27.00%	20.00%	10.00%	0.00%	\$ 10	\$ 205	\$ 135	\$ 100	\$ 50	\$ 5	\$ 10	\$ 211	\$ 139	\$ 103	\$ 52	\$ -	\$ -	\$ -	\$ -	
<b>Billing and Accounting</b>																										
Salaries regular	\$ 34,494	\$ 34,838	\$ 35,884	\$ 36,961	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 35,884	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 36,961	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Wages Regular	\$ 24,160	\$ 22,668	\$ 23,348	\$ 24,048	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 23,348	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 24,048	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Wages Overtime	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sick leave pay	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Vacation pay	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Unemployment	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Holiday pay	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Insurance opt out	\$ 5,000	\$ 15,000	\$ 5	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Cell phone reimbursement	\$ 144	\$ 144	\$ 145	\$ 147	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 143	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 147	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Copy machine maint contract	\$ 500	\$ 900	\$ 900	\$ 900	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 500	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 500	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Computer maint contract	\$ 1,600	\$ 1,600	\$ 600	\$ 614	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 500	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 6473	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Postage	\$ 4,500	\$ 5,000	\$ 5,000	\$ 5,150	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 5,000	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 5,150	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Printing	\$ 600	\$ 600	\$ 600	\$ 618	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 600	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 618	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Other supplies and expense	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
City wages	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Meter Read</b>																										
Wages Regular	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Meter maintenance	\$ 30,469	\$ 23,538	\$ 20,275	\$ 20,887	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 20,279	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 20,687	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Meter depreciation	\$ 30,000	\$ 36,963	\$ 37,311	\$ 38,430	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 37,311	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 36,430	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Tax equivalent	\$ 9,200	\$ 11,000	\$ 11,000	\$ 11,348	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 11,348	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 11,348	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Date of return	\$ 11,200	\$ 12,500	\$ 12,500	\$ 12,745	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 12,745	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 12,745	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Misc. premium and benefits	\$ 3,994	\$ 5,700	\$ 6,000	\$ 6,182	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 6,000	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 6,160	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Uncollectable Accounts</b>																										
Bankruptcy	\$ 500	\$ 1,000	\$ 1,000	\$ 1,630	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 1,000	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 1,050	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Salaries</b>																										
Salaries regular	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 16,311	\$ 39,936	\$ 19,936	\$ 14,549	\$ 8,529	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sick leave pay	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 16,311	\$ 39,936	\$ 19,936	\$ 14,549	\$ 8,529	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Vacation pay	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 16,311	\$ 39,936	\$ 19,936	\$ 14,549	\$ 8,529	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Holiday pay	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 16,311	\$ 39,936	\$ 19,936	\$ 14,549	\$ 8,529	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Salaries - city salaries	\$ 74,213	\$ 72,524	\$ 74,700	\$ 76,941	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 12,184	\$ 29,828	\$ 14,884	\$ 10,861	\$ 6,364	0.77%	\$ 72,524	\$ 15,334	\$ 11,187	\$ 6,585	\$ 592	\$ -	\$ -	\$ -		
<b>Office Supply and Expense</b>																										
Telephone	\$ 3,200	\$ 3,700	\$ 3,700	\$ 3,811	16.31%	93.69%	19.93%	14,549	8,529	0.77%	\$ 603	\$ 1,477	\$ 737	\$ 538	\$ 315	\$ 28	\$ 622	\$ 1,522	\$ 584	\$ 325	\$ 29	\$ -	\$ -	\$ -		
Printing	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,630	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 163	\$ 399	\$ 196	\$ 145	\$ 85	\$ 8	\$ 168	\$ 411	\$ 205	\$ 105	\$ 68	\$ 8	\$ -	\$ -		
Postage	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,031	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$ 1,000	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ 1,000	\$ 5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Bank Charges	\$ 1,500	\$ 1,800	\$ 3,400	\$ 3,592	18.31%	91.69%	14,549	8,529	0.77%	\$ 555	\$ 1,358	\$ 676	\$ 494	\$ 290</td												

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

Item	Allocations										Allocations										Allocations												
	2016 Cost	2017 Cost	2018 Cost	2019 Cost	Fixed %	Volume %	BOD %	SS %	Phosphorus %	Copper %	2018 Fixed	2018 Volume	BOD \$	SS \$	Phosphorus \$	Copper \$	2018 Fixed	2018 Volume	BOD \$	SS \$	Phosphorus \$	Copper \$	2019 Fixed	2019 Volume	BOD \$	SS \$	Phosphorus \$	Copper \$	2019 Fixed	2019 Volume	BOD \$	SS \$	Phosphorus \$
<b>Outside Services</b>																																	
Accounting and auditing	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,120	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 652	\$ 1,697	\$ 707	\$ 560	\$ 341	\$ 31	\$ 672	\$ 1,645	\$ 621	\$ 590	\$ 261	\$ 32											
Data processing	\$ 6,250	\$ 10,632	\$ 4,067	\$ 4,185	16.31%	36.93%	19.93%	14.54%	8.52%	0.77%	\$ 4,462	\$ 1,045	\$ 551	\$ 247	\$ 31	\$ 31	\$ 683	\$ 1,573	\$ 835	\$ 690	\$ 357	\$ 32											
Architecture and engineering	\$ 1,000	\$ 51,200	\$ 51,200	\$ 52,738	16.31%	36.93%	19.93%	14.54%	8.52%	0.77%	\$ 8,351	\$ 20,444	\$ 10,264	\$ 7,444	\$ 4,362	\$ 364	\$ 8,601	\$ 21,057	\$ 10,510	\$ 7,698	\$ 4,493	\$ 406											
Attorney fees	\$ -	\$ -	\$ -	\$ -	16.31%	36.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -											
<b>Insurance Expense</b>																																	
Workers Compensation	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -										
Insurance - Vehicles and Equipment	\$ 25,000	\$ 25,000	\$ 29,052	\$ 29,840	16.31%	36.93%	19.93%	14.54%	8.52%	0.77%	\$ 4,462	\$ 11,180	\$ 5,560	\$ 4,071	\$ 2,336	\$ 216	\$ 4,704	\$ 11,518	\$ 5,748	\$ 4,193	\$ 2,457	\$ 222											
Insurance - Public Liability	\$ 3,600	\$ 3,600	\$ 4,000	\$ 4,532	16.31%	36.93%	19.93%	14.54%	8.52%	0.77%	\$ 718	\$ 1,757	\$ 877	\$ 640	\$ 376	\$ 34	\$ 739	\$ 1,810	\$ 903	\$ 659	\$ 386	\$ 35											
Insurance - Boiler	\$ 3,600	\$ 3,500	\$ 3,600	\$ 3,605	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 571	\$ 1,398	\$ 698	\$ 509	\$ 298	\$ 27	\$ 588	\$ 1,439	\$ 718	\$ 524	\$ 307	\$ 26											
<b>Pensions and Benefits</b>																																	
Wages required	\$ 4,265	\$ 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											
Healthcare	\$ -	\$ -	\$ -	\$ -	16.31%	36.93%	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%	36.93%	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	\$ 100	\$ 100	16.31%	37.21	19.93%	14.54%	8.52%	0.77%	\$ 114	\$ 295	\$ 140	\$ 103	\$ 65	\$ 6	\$ 118	\$ 288	\$ 144	\$ 105	\$ 61	\$ 6											
Employee uniforms	\$ 1,000	\$ 1,000	\$ 1,225	\$ 1,225	16.31%	36.93%	19.93%	14.54%	8.52%	0.77%	\$ 196	\$ 478	\$ 295	\$ 174	\$ 102	\$ 9	\$ 202	\$ 494	\$ 246	\$ 180	\$ 105	\$ 10											
Drug and alcohol testing	\$ 500	\$ 500	\$ 500	\$ 515	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 82	\$ 200	\$ 100	\$ 73	\$ 43	\$ 4	\$ 84	\$ 206	\$ 103	\$ 75	\$ 44	\$ 4											
Section 125 plan fees	\$ 300	\$ 300	\$ 400	\$ 417	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 65	\$ 160	\$ 80	\$ 58	\$ 34	\$ 3	\$ 67	\$ 165	\$ 82	\$ 60	\$ 35	\$ 3											
Misc expense	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -											
<b>Misc. General expense</b>																																	
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											
Groundwater Fee - DNR	\$ 130	\$ 130	\$ 130	\$ 134	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 21	\$ 52	\$ 26	\$ 19	\$ 11	\$ 1	\$ 22	\$ 53	\$ 27	\$ 19	\$ 11	\$ 1											
NF101 Water Fee	\$ 15,000	\$ 12,500	\$ 10,000	\$ 10,300	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 1,931	\$ 3,993	\$ 1,993	\$ 1,454	\$ 852	\$ 77	\$ 1,680	\$ 4,113	\$ 2,053	\$ 1,489	\$ 875	\$ 79											
Publication of Legal Notices	\$ 150	\$ 150	\$ 150	\$ 155	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 24	\$ 60	\$ 30	\$ 22	\$ 12	\$ 1	\$ 25	\$ 67	\$ 33	\$ 23	\$ 13	\$ 1											
Membership Dues	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -											
Misc Expenses	\$ 550	\$ 550	\$ 550	\$ 567	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 90	\$ 220	\$ 110	\$ 80	\$ 47	\$ 4	\$ 92	\$ 226	\$ 113	\$ 82	\$ 48	\$ 4											
<b>Rents</b>																																	
Rent/Lease	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,236	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 195	\$ 479	\$ 259	\$ 174	\$ 102	\$ 9	\$ 202	\$ 494	\$ 245	\$ 180	\$ 105	\$ 10											
<b>Employee Benefits</b>																																	
Social Security - utility share	\$ 39,940	\$ 36,320	\$ 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	\$ 6,286	\$ 15,390	\$ 7,681	\$ 5,604	\$ 3,284	\$ 297											
Retirement - utility share	\$ 34,458	\$ 32,292	\$ 33,261	\$ 34,259	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 5,425	\$ 13,281	\$ 6,629	\$ 4,836	\$ 2,634	\$ 256	\$ 5,598	\$ 13,679	\$ 6,828	\$ 4,981	\$ 3,919	\$ 264											
Retirement - employee share	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -											
Health Insurance	\$ 127,248	\$ 106,684	\$ 111,720	\$ 115,101	16.31%	37.21	19.93%	14.54%	8.52%	0.77%	\$ 18,205	\$ 44,631	\$ 22,272	\$ 16,248	\$ 9,621	\$ 860	\$ 18,773	\$ 45,960	\$ 22,940	\$ 18,736	\$ 9,607	\$ 866											
Linen	\$ -	\$ -	\$ -	\$ -	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -											
Workers compensation	\$ 23,200	\$ 20,816	\$ 21,543	\$ 22,190	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 3,514	\$ 8,002	\$ 4,294	\$ 3,132	\$ 1,636	\$ 166	\$ 3,619	\$ 8,860	\$ 4,472	\$ 3,226	\$ 1,691	\$ 171											
Income continuation ins	\$ 1,210	\$ 854	\$ 890	\$ 917	16.31%	39.93%	19.93%	14.54%	8.52%	0.77%	\$ 145	\$ 355	\$ 177	\$ 129	\$ 76	\$ 7	\$ 150	\$ 366	\$ 183	\$ 133	\$ 78	\$ 7											
Benefits charges and receipts	\$ -	\$ -	\$ -	\$ -	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%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -											
	\$ 1,754,688	\$ 1,786,696	\$ 1,810,754	\$ 1,854,021	16,24%	41,27%	20,19%	14,19%	8.52%	0.77%	\$ 293,960	\$ 746,495	\$ 365,563	\$ 256,957	\$ 136,522	\$ 11,236	\$ 302,778	\$ 767,855	\$ 376,530	\$ 264,669	\$ 140,618	\$ 11,574											

**Attachment 2**  
**Allocation of Equipment Replacement Fund Costs**

Item	Replacement Cost	Estimated Life	1/1/2016 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	
<b>1996 EQUIPMENT ADDITIONS</b>																
Belt Thickener & Belt Press	\$ 250,000	20	\$ 232,292	\$ 12,500	\$ 244,792	\$ 17,708	\$ 5,208	\$ 250,000	\$ -	\$ 250,000	\$ -	\$ 250,000	\$ -	\$ 250,000	\$ -	
<b>1999 DIGESTER IMPROVEMENTS</b>																
Digester Cover	\$ 135,000	20	\$ 110,250	\$ 6,750	\$ 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															
<b>2000 River Diffuser</b>																
Effluent Pumps	\$ 75,000	15	\$ 60,000	\$ 5,000	\$ 65,000	\$ 15,000	\$ 5,000	\$ 70,000	\$ 6,000	\$ 6,000	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -
Diffusers	\$ 7,710	15	\$ 6,168	\$ 514	\$ 6,682	\$ 1,642	\$ 514	\$ 7,196	\$ 514	\$ 514	\$ 7,710	\$ -	\$ 7,710	\$ -	\$ 7,710	\$ -
Instrumentation	\$ 52,500	15	\$ 42,000	\$ 3,500	\$ 45,500	\$ 10,500	\$ 3,500	\$ 49,000	\$ 3,500	\$ 3,500	\$ 52,500	\$ -	\$ 52,500	\$ -	\$ 52,500	\$ -
Sub - Total	\$ 135,210															
<b>2003-4 WTF Improvements</b>																
Raw Wastewater Pump	\$ 294,000	20	\$ 176,400	\$ 14,700	\$ 191,100	\$ 117,600	\$ 14,700	\$ 205,800	\$ 88,200	\$ 14,700	\$ 220,500	\$ 73,500	\$ 14,700	\$ 235,200	\$ 58,800	
Digester Redistillation Pumps	\$ 27,100	20	\$ 16,250	\$ 1,350	\$ 17,815	\$ 10,840	\$ 1,350	\$ 17,970	\$ 5,150	\$ 1,350	\$ 18,120	\$ 1,350	\$ 1,350	\$ 18,120	\$ 5,150	
Oil Recovery System	\$ 10,000	20	\$ 4,000	\$ 6,000	\$ 10,000	\$ 5,400	\$ 4,000	\$ 10,200	\$ 6,000	\$ 4,000	\$ 10,400	\$ 6,000	\$ 4,000	\$ 10,600	\$ 6,000	
Belt Conveyor for Grit System	\$ 25,500	20	\$ 15,540	\$ 1,295	\$ 16,835	\$ 10,360	\$ 1,295	\$ 16,130	\$ 7,770	\$ 1,295	\$ 19,475	\$ 6,475	\$ 1,295	\$ 20,720	\$ 5,180	
Bowers & Motors	\$ 380,000	20	\$ 228,000	\$ 19,000	\$ 247,000	\$ 152,000	\$ 19,000	\$ 266,000	\$ 114,900	\$ 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	\$ 9,950	\$ 1,665	\$ 24,975	\$ 8,325	\$ 1,665	\$ 26,640	\$ 6,660	
Digester Sludge Mixer	\$ 110,000	20	\$ 66,000	\$ 5,600	\$ 71,600	\$ 44,000	\$ 5,600	\$ 77,000	\$ 5,500	\$ 5,500	\$ 82,500	\$ 27,500	\$ 5,500	\$ 88,000	\$ 22,000	
Microturbine System	\$ 201,000	15	\$ 160,000	\$ 13,400	\$ 174,200	\$ 30,200	\$ 13,400	\$ 187,600	\$ 33,400	\$ 13,400	\$ 201,000	\$ -	\$ 201,000	\$ -	\$ 201,000	\$ -
Flow Meters	\$ 11,000	15	\$ 8,800	\$ 733	\$ 9,633	\$ 2,200	\$ 733	\$ 10,283	\$ 733	\$ 733	\$ 11,000	\$ -	\$ 11,000	\$ -	\$ 11,000	\$ -
Instrumentation & Control	\$ 127,158	10	\$ 127,158	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 127,158	\$ -	\$ -	\$ -	\$ 127,158	\$ -
Sub - Total	\$ 1,317,458															
<b>2005 Digester Cover &amp; Aeration piping</b>																
Digester Tank Cover Material & Installation	\$ 486,621	20	\$ 228,311	\$ 22,831	\$ 251,142	\$ 228,311	\$ 22,831	\$ 272,973	\$ 182,648	\$ 22,831	\$ 289,604	\$ 159,817	\$ 22,831	\$ 319,635	\$ 138,886	
Aeration Piping, Supports, Hangers & Installation	\$ 177,975	20	\$ 88,988	\$ 8,988	\$ 97,888	\$ 88,988	\$ 8,988	\$ 106,785	\$ 71,190	\$ 8,988	\$ 115,884	\$ 61,201	\$ 8,988	\$ 124,843	\$ 53,303	
	\$ 634,596			\$ -	\$ -	\$ -	\$ -	\$ 634,596	\$ -	\$ -	\$ 634,596	\$ -	\$ -	\$ 634,596	\$ -	
<b>2011 WWTF Phase 1 Improvements</b>																
Clarifier 1&2 equipment - 62,633A,1891	\$ 332,736	15	\$ 88,730	\$ 22,182	\$ 110,912	\$ 244,007	\$ 22,182	\$ 133,095	\$ 189,642	\$ 22,182	\$ 165,277	\$ 177,459	\$ 22,182	\$ 177,459	\$ 165,277	
Chlorine Equipment - 62,883B,1635	\$ 96,218	15	\$ 26,192	\$ 5,548	\$ 32,739	\$ 27,277	\$ 5,548	\$ 35,267	\$ 58,000	\$ 5,548	\$ 45,835	\$ 62,380	\$ 6,246	\$ 52,380	\$ 45,835	
Clarifier 3 equipment - 62,632A,1891	\$ 450,424	15	\$ 120,113	\$ 30,028	\$ 150,141	\$ 30,028	\$ 150,141	\$ 210,170	\$ 210,170	\$ 30,028	\$ 210,198	\$ 240,226	\$ 30,028	\$ 240,226	\$ 210,188	
	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>2016 Screening Dewatering and Hauled Waste Receiving Improvements</b>																
High Strength Waste Mixer	\$ 27,000	15	\$ -	\$ -	\$ 27,000	\$ 1,600	\$ 1,600	\$ 25,200	\$ 1,600	\$ 1,600	\$ 30,000	\$ 23,400	\$ 1,600	\$ 34,400	\$ 21,800	
Protein Pump	\$ 25,200	20	\$ -	\$ -	\$ 25,200	\$ 1,120	\$ 1,120	\$ 25,200	\$ 1,120	\$ 1,120	\$ 25,200	\$ 1,120	\$ 1,120	\$ 25,200	\$ 1,120	
High Strength Waste Pump	\$ 15,700	15	\$ -	\$ -	\$ 15,700	\$ 1,313	\$ 1,313	\$ 15,847	\$ 1,313	\$ 1,313	\$ 2,037	\$ 1,7073	\$ 1,313	\$ 3,940	\$ 15,760	
Mechanical Fine Screen	\$ 125,600	20	\$ -	\$ -	\$ 125,600	\$ 6,280	\$ 6,280	\$ 119,320	\$ 6,280	\$ 6,280	\$ 12,560	\$ 113,040	\$ 6,280	\$ 18,840	\$ 106,760	
Screenings Wash Press	\$ 73,300	20	\$ -	\$ -	\$ -	\$ 73,300	\$ 3,665	\$ 3,665	\$ 69,635	\$ 3,665	\$ 3,665	\$ 7,330	\$ 65,970	\$ 3,665	\$ 10,999	\$ 62,305
Polymer Feed System	\$ 35,600	15	\$ -	\$ -	\$ -	\$ 35,600	\$ 2,373	\$ 2,373	\$ 33,227	\$ 2,373	\$ 2,373	\$ 4,747	\$ 30,858	\$ 2,373	\$ 7,120	\$ 28,480
Dewatering Centrifuge Equipment	\$ 323,600	20	\$ -	\$ -	\$ -	\$ 323,600	\$ 16,180	\$ 16,180	\$ 307,420	\$ 16,180	\$ 16,180	\$ 291,240	\$ 16,180	\$ 16,180	\$ 46,540	\$ 275,060
Shaftless Scrub Conveyor	\$ 60,500	15	\$ -	\$ -	\$ -	\$ 60,500	\$ 4,033	\$ 4,033	\$ 58,467	\$ 4,033	\$ 4,033	\$ 8,087	\$ 52,433	\$ 4,033	\$ 12,100	\$ 48,400
Instrumentation	\$ 50,000	10	\$ -	\$ -	\$ -	\$ 50,000	\$ 5,000	\$ 5,000	\$ 45,000	\$ 5,000	\$ 5,000	\$ 10,000	\$ 40,000	\$ 5,000	\$ 15,000	\$ 35,000
	\$ -															
<b>2016 Capital Improvements</b>																
Flame LS Pump	\$ 22,051	20	\$ -	\$ -	\$ -	\$ 22,051	\$ 1,103	\$ 1,103	\$ 20,948	\$ 1,103	\$ 1,103	\$ 2,205	\$ 19,84	\$ 1,103	\$ 3,308	\$ 18,743
Prairie View LS	\$ 5,100	20	\$ -	\$ -	\$ -	\$ 5,100	\$ 265	\$ 265	\$ 4,645	\$ 265	\$ 265	\$ 510	\$ 4,590	\$ 265	\$ 765	\$ 4,335
Influent Pump No. 4	\$ 27,391	20	\$ -	\$ -	\$ -	\$ 27,391	\$ 1,370	\$ 1,370	\$ 26,021	\$ 1,370	\$ 1,370	\$ 2,739	\$ 24,652	\$ 1,370	\$ 4,109	\$ 23,267
LS Pump	\$ 10,000	20	\$ -	\$ -	\$ -	\$ 10,000	\$ 2,700	\$ 2,700	\$ 2,697	\$ 2,700	\$ 2,697	\$ 3,200	\$ 2,697	\$ 2,700	\$ 4,700	\$ 2,697
Prairie Stimmer	\$ 6,031	20	\$ -	\$ -	\$ -	\$ 6,031	\$ 53,921	\$ 53,921	\$ 61,336	\$ 53,921	\$ 53,921	\$ 65,938	\$ 53,921	\$ 65,938	\$ 8,000	\$ 45,842
Primary Sludge Pump	\$ 15,290	20	\$ -	\$ -	\$ -	\$ 15,290	\$ 764	\$ 764	\$ 14,525	\$ 764	\$ 764	\$ 1,529	\$ 13,781	\$ 764	\$ 2,293	\$ 12,096
Primary electric hoist	\$ 1,893	15	\$ -	\$ -	\$ -	\$ 1,893	\$ 126	\$ 126	\$ 1,767	\$ 126	\$ 126	\$ 252	\$ 1,641	\$ 126	\$ 378	\$ 1,515
TVAS Pump	\$ 19,488	20	\$ -	\$ -	\$ -	\$ 19,488	\$ 974	\$ 974	\$ 18,513	\$ 974	\$ 974	\$ 1,949	\$ 17,539	\$ 974	\$ 2,923	\$ 16,564
Flowmeter	\$ 5,139	15	\$ -	\$ -	\$ -	\$ 5,139	\$ 343	\$ 343	\$ 4,790	\$ 343	\$ 343	\$ 685	\$ 4,454	\$ 343	\$ 1,028	\$ 4,111
	\$ 3,239,089		\$ 181,801	\$ 3,420,890	\$ 2,378,090	\$ 224,182	\$ 3,645,072	\$ 2,673,777	\$ 223,656	\$ 3,686,628	\$ 1,278,520	\$ 216,826	\$ 4,720,149	\$ 776,291		

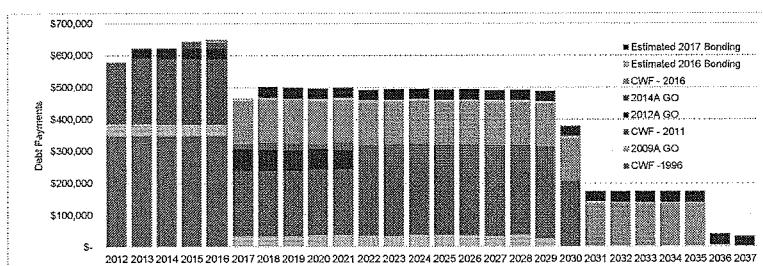
**Attachment 2**  
**Allocation of Equipment Replacement I**

Item	2018												2019														
	Fixed	Volume	BOD	SS	Phosphorus	Copper	Fixed	Volume	BOD	SS	Phosphorus	Copper	Fixed	Volume	BOD	SS	Phosphorus	Copper	Fixed	Volume	BOD	SS	Phosphorus	Copper			
%	%	%	%	%	%	%	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$			
<b>1996 EQUIPMENT ADDITIONS</b>																											
Belt Thickener & Bell Press	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
<b>1999 DIGESTER IMPROVEMENTS</b>																											
Digester Cover	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ 3,375	\$ 2,700	\$ 675	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,250	\$ 1,800	\$ 450	\$ -	\$ -	\$ -	\$ -	\$ -		
Mixing Equipment	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Heating Equipment	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
<b>Sub - Total</b>																											
2000 River Diffuser	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Effluent Pumps	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,142	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Diffusers	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Instrumentation	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Sub - Total</b>																											
<b>2003-4 WTF Improvements</b>																											
Raw Wastewater Pump	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ 14,700	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,700	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Digester Recirculation Pumps	0.00%	100.00%	50.00%	40.00%	0.00%	0.00%	\$ -	\$ -	\$ 678	\$ 542	\$ 136	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 678	\$ 542	\$ 136	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Gravel Removal System	0.00%	100.00%	30.00%	60.00%	0.00%	0.00%	\$ -	\$ -	\$ 540	\$ 1,620	\$ 3,240	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 540	\$ 1,620	\$ 3,240	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Bulk Compressed Grit System	0.00%	0.00%	40.00%	60.00%	0.00%	0.00%	\$ -	\$ -	\$ 518	\$ 777	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 518	\$ 777	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Blowers & Motors	0.00%	10.00%	60.00%	20.00%	10.00%	0.00%	\$ -	\$ 1,900	\$ 11,400	\$ 3,800	\$ 1,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,900	\$ 11,400	\$ 3,800	\$ 1,900	\$ -	\$ -	\$ -	\$ -	\$ -	
Digester Head Exchanger	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ 833	\$ 666	\$ 167	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 633	\$ 666	\$ 167	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Digester Sludge Mixer	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ 2,750	\$ 2,200	\$ 550	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,750	\$ 2,200	\$ 550	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Microturbine System	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ 6,700	\$ 5,360	\$ 1,340	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Flow Meters	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ 733	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Instrumentation & Control	0.00%	30.00%	40.00%	20.00%	10.00%	0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Sub - Total</b>																											
<b>2005 Digester Cover &amp; Aeration piping</b>																											
Digester Tank Cover Material & Installation	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ 11,416	\$ 9,132	\$ 2,283	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,416	\$ 9,132	\$ 2,283	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Aeration Piping, Supports, Hangers & Installation	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ 4,446	\$ 3,560	\$ 890	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,449	\$ 3,560	\$ 890	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>2011 WWTP Phase 1 Improvements</b>																											
Clarifier 1 & equipment - 62-6334,1891	0.00%	30.00%	40.00%	20.00%	10.00%	0.00%	\$ -	\$ 6,655	\$ 8,873	\$ 4,436	\$ 2,216	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,655	\$ 8,873	\$ 4,436	\$ 2,218	\$ -	\$ -	\$ -	\$ -	\$ -	
Chlorine Equipment - 62-8536,1835	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ 6,548	\$ 5,255	\$ 2,216	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,548	\$ 5,255	\$ 2,216	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Clarifier 3 equipment - 62-6334,1891	0.00%	30.00%	40.00%	20.00%	10.00%	0.00%	\$ -	\$ -	\$ 9,008	\$ 12,011	\$ 6,006	\$ 3,003	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,008	\$ 12,011	\$ 6,006	\$ 3,003	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>2016 Screening Dewatering and Hauled Waste</b>																											
High Strength Waste Mixer	0.00%	0.00%	60.00%	40.00%	0.00%	0.00%	\$ -	\$ -	\$ 1,080	\$ 720	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,080	\$ 720	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Progressing Cavity Pump	0.00%	50.00%	40.00%	10.00%	0.00%	0.00%	\$ -	\$ -	\$ 560	\$ 446	\$ 112	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 560	\$ 446	\$ 112	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
High Strength Waste Pump	0.00%	0.00%	60.00%	40.00%	0.00%	0.00%	\$ -	\$ -	\$ 786	\$ 525	\$ 136	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 786	\$ 525	\$ 136	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Mechanical Wire Screen	0.00%	0.00%	60.00%	40.00%	0.00%	0.00%	\$ -	\$ -	\$ 6,280	\$ 4,160	\$ 1,340	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,280	\$ 4,160	\$ 1,340	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Screening Valve Press	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ 3,665	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,665	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Screen Feed System	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ 1,187	\$ 949	\$ 237	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,187	\$ 949	\$ 237	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Dewatering Centrifuge Equipment	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ 8,090	\$ 6,472	\$ 1,618	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,090	\$ 6,472	\$ 1,618	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Shuttleless Screw Conveyor	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ 2,017	\$ 1,613	\$ 403	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,017	\$ 1,613	\$ 403	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Instrumentation	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ -	\$ 750	\$ 2,090	\$ 1,750	\$ 500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750	\$ 2,090	\$ 1,750	\$ 500	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>2016 Capital Improvements</b>																											
Flame LS Control Panel	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 27	\$ 1,344	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27	\$ 1,344	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Protein View LS	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 5	\$ 250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5	\$ 250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Inflated Pump No. 4	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 27	\$ 1,342	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27	\$ 1,342	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Grit Pump	0.00%	10.00%	30.00%	60.00%	0.00%	0.00%	\$ -	\$ 28	\$ 83	\$ 166	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28	\$ 83	\$ 166	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Primary Skimmer	4.00%	36.00%	20.00%	40.00%	0.00%	0.00%	\$ 108	\$ 971	\$ 539	\$ 1,079	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 108	\$ 971	\$ 539	\$ 1,079	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Primary Sludge Pump	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ 382	\$ 382	\$ 177	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 382	\$ 382	\$ 177	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Primary electric host	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ 405	\$ 324	\$ 81	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 405	\$ 324	\$ 81	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
WAS Pump	0.00%	0.00%	50.00%	40.00%	10.00%	0.00%	\$ -	\$ -	\$ 497	\$ 390	\$ 97	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 497	\$ 390	\$ 97	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Flowmeter	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	\$ -	\$ -	\$ 343	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 343	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>2017 Capital Improvements</b>																											
Flame LS Control Panel	2.00%	98.00%	0.00%	0.00%	0.00%	0.00%	\$ 180	\$ 56,403	\$ 85,254	\$ 58,075	\$ 16,620	\$ 9,014	\$ 215	\$ 88,661	\$ 85,329	\$ 58,075	\$ 16,605	\$ 1	\$ 1,750	\$ 10,500	\$ 3,500	\$ 1,750	\$ 1,750	\$			

S:\MAD\1300-1399\1331\017\Spr\2017 update\2018-2019WastewaterRateStudy\_20171110FINAL.xlsx\Replacement Alloc11/13/2017

**Attachment 3**  
**Debt Schedule**

	CWF -1996			CWF - 2011			2009A GO			2012A GO			2014A GO			CWF - 2016 <sup>1</sup>			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	193,958	20,000	15,975	35,975	-	-	-	-	-	-	-	-	-	-	-	-	-	-	576,940							
2013	312,438	36,419	348,857	135,965	70,561	206,126	20,000	15,655	35,655	20,000	11,609	31,609	-	-	-	-	-	-	-	-	-	-	-	-	622,247						
2014	322,299	26,403	348,702	138,819	67,268	206,087	20,000	15,275	35,275	25,000	7,500	32,500	-	-	-	-	-	-	-	-	-	-	-	-	622,564						
2015	332,471	16,070	348,541	142,150	63,897	206,047	20,000	14,635	34,835	25,000	7,000	32,000	22,223	22,223	-	-	-	-	-	-	-	-	-	-	-	643,646					
2016	342,963	5,412	348,375	145,362	60,444	206,006	20,000	14,375	34,375	25,000	6,500	31,500	14,100	14,100	31,100	9,978	9,978	-	-	-	-	-	-	-	464,587						
2017	-	-	-	145,362	5,412	348,375	20,000	14,375	34,375	25,000	6,500	31,500	14,100	14,100	31,100	84,683	37,654	132,336	5,000	3,623	8,622	19,243	34,243	501,854							
2018	-	-	-	152,633	53,269	205,922	20,000	13,175	33,175	50,000	4,800	54,800	5,000	18,100	23,100	96,502	136,343	139,846	5,000	2,769	7,769	15,000	19,243	34,243	501,854						
2019	-	-	-	156,296	49,591	205,877	20,000	12,635	32,635	60,000	3,600	63,600	5,000	17,950	22,950	98,267	34,562	132,829	7,731	-	-	-	33,350	496,872	-						
2020	-	-	-	160,047	45,789	205,832	25,000	11,855	36,855	60,000	2,400	62,400	-	17,800	17,800	100,064	32,749	132,813	7,731	-	-	-	33,350	496,761	-						
2021	-	-	-	163,888	41,899	205,766	25,000	10,955	35,955	60,000	1,200	61,200	5,000	17,800	22,600	101,894	30,902	132,796	7,731	-	-	-	33,350	495,616	-						
2022	-	-	-	167,822	37,918	205,749	25,000	10,005	35,005	-	-	60,000	17,650	77,650	29,021	132,779	7,731	-	-	-	-	-	-	-	33,350	494,255	-				
2023	-	-	-	171,863	33,938	205,732	25,000	9,055	34,055	-	-	63,000	16,565	80,565	25,794	132,764	7,731	-	-	-	-	-	-	-	33,350	494,149	-				
2024	-	-	-	175,974	29,668	205,642	30,000	8,005	38,005	-	-	65,000	13,900	78,900	107,583	25,156	132,744	7,731	-	-	-	-	-	-	-	33,350	496,372	-			
2025	-	-	-	180,197	25,394	205,591	30,000	6,745	36,745	-	-	65,000	11,950	76,950	109,558	23,170	132,726	7,731	-	-	-	-	-	-	-	33,350	493,093	-			
2026	-	-	-	184,522	21,017	205,538	30,000	5,455	35,455	-	-	70,000	10,000	80,000	111,580	21,148	132,708	7,731	-	-	-	-	-	-	-	33,350	494,763	-			
2027	-	-	-	188,950	16,535	205,485	30,000	4,135	34,135	-	-	70,000	7,900	77,900	113,600	19,088	132,684	7,731	-	-	-	-	-	-	-	33,350	491,290	-			
2028	-	-	-	193,485	11,946	205,431	35,000	2,785	37,785	-	-	70,000	5,450	75,450	116,674	15,992	132,670	7,731	-	-	-	-	-	-	-	33,350	492,417	-			
2029	-	-	-	198,129	7,247	205,376	25,000	1,175	26,175	-	-	60,000	3,000	63,000	119,948	14,141	132,657	7,731	-	-	-	-	-	-	-	33,350	496,023	-			
2030	-	-	-	202,864	2,435	205,319	-	-	-	-	-	-	-	-	119,948	12,683	132,631	122,142	10,469	132,611	7,731	-	-	-	-	-	-	-	33,350	379,031	-
2031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	124,376	8,215	132,591	126,651	5,919	132,570	7,731	-	-	-	-	-	-	-	33,350	175,692	-
2032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	128,067	3,581	132,548	131,326	1,201	132,527	7,731	-	-	-	-	-	-	-	33,350	173,672	-
2033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	131,326	-	-	131,326	-	-	7,731	-	-	-	-	-	-	-	33,350	173,651	-
2034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	131,326	-	-	131,326	-	-	7,731	-	-	-	-	-	-	-	33,350	173,629	-
2035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	131,326	-	-	131,326	-	-	7,731	-	-	-	-	-	-	-	33,350	173,608	-
2036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	131,326	-	-	131,326	-	-	7,731	-	-	-	-	-	-	-	33,350	173,581	-
2037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	131,326	-	-	131,326	-	-	7,731	-	-	-	-	-	-	-	33,350	173,556	-



**Attachment 4**  
**Allocation of Debt Service**

Item	2018 Capital Cost	2019 Capital Cost	2018						2018						2018						
			Fixed %	Volume %	BOD %	SS %	Phosphorus %	Copper %	Fixed \$	Volume \$	BOD \$	SS \$	Phosphorus \$	Copper \$	Fixed \$	Volume \$	BOD \$	SS \$	Phosphorus \$	Copper \$	
<b>2010 WWTP Improvements</b>																					
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	\$ 16,612	\$ 14,536	\$ 4,153	\$ -							
Equipment	\$ 421,952	\$ 421,952	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 63,293	\$ 168,761	\$ 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	\$ 12,956	\$ 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	\$ 1,158,671	\$ 1,158,671	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 392,172	\$ 346,024	\$ 329,876	\$ 90,200	\$ -							
Civil Site Work	\$ 97,295	\$ 97,295	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 32,928	\$ 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	\$ 10,859	\$ -							
HVAC	\$ 19,939	\$ 19,939	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 6,748	\$ 5,984	\$ 5,676	\$ 1,552	\$ -							
Plumbing	\$ 20,955	\$ 20,954	0.00%	33.84%	29.91%	28.47%	7.78%	0.00%	\$ -	\$ 7,091	\$ 6,267	\$ 5,985	\$ 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%	\$ -	\$ 26,085	\$ 24,920	\$ 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	\$ 491,660	\$ 134,498	\$ -							
<b>2010 Sewer Improvements</b>																					
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	\$ 491,660	\$ 134,498	\$ -							
<b>2016 CWF Project 1-2015</b>																					
Engineering Design	\$ 175,000	\$ 175,000	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 11,168	\$ 46,185	\$ 69,656	\$ 42,652	\$ 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	\$ 108,384	\$ 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	\$ 146,225	\$ 29,245	\$ -							
HSW Pump	\$ 286,400	\$ 286,400	0.00%	0.00%	60.00%	40.00%	0.00%	0.00%	\$ -	\$ 171,840	\$ 114,560	\$ -	\$ -	\$ -							
Screening	\$ 543,800	\$ 543,800	15.00%	85.00%	0.00%	0.00%	0.00%	0.00%	\$ 61,570	\$ 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	\$ 32,554	\$ 49,097	\$ 29,993	\$ 5,654	\$ -							
Miscellaneous Costs	\$ 5,000	\$ 5,000	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 1,149	\$ 1,324	\$ 1,990	\$ 1,216	\$ 155	\$ -							
CWF Closing Costs	\$ 10,500	\$ 10,500	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 2,711	\$ 4,178	\$ 2,653	\$ 326	\$ -								
Total 2016 CWF 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	\$ 724,812	\$ 92,801	\$ -							
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	\$ 660,000	\$ 660,000	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%	15.29%	2.86%	0.00%	
Annual Debt Service	\$ 501,854	\$ 498,872													\$ 73,447	\$ 229,896	\$ 107,435	\$ 76,745	\$ 14,331	\$ -	

**Attachment 4**  
**Allocation of Debt Service**

Item	2018 Capital Cost	2019 Capital Cost	Fixed		Volume		BOD	SS	Phosphorus	Copper	2019 Fixed	2019 Volume	2019 BOD	2019 SS	2019 Phosphorus	2019 Copper			
			%	%	%	%	%	%	%	%	\$	\$	\$	\$	\$	\$			
<b>2010 WWTP Improvements</b>																			
Primary Clarifiers	\$ 283,519	\$ 283,519	0.00%	15.00%	35.00%	40.00%	10.00%	0.00%	\$ -	\$ 42,528	\$ 99,232	\$ 113,408	\$ 28,352	\$ -	\$ -	\$ -			
Architectural/Structural	\$ 69,607	\$ 69,607	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 10,441	\$ 27,843	\$ 24,362	\$ 6,981	\$ -	\$ -	\$ -			
Secondary Clarifiers	\$ 41,530	\$ 41,530	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 6,230	\$ 16,612	\$ 14,536	\$ 4,153	\$ -	\$ -	\$ -			
Baffles	\$ 421,052	\$ 421,052	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 63,293	\$ 168,781	\$ 147,683	\$ 42,195	\$ -	\$ -	\$ -			
Equipment	\$ 6,000	\$ 6,000	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 900	\$ 2,400	\$ 2,100	\$ 600	\$ -	\$ -	\$ -			
Troughs, Weirs, & 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	\$ -	\$ -	\$ -			
Density Current Baffles	\$ 32,391	\$ 32,391	0.00%	15.00%	40.00%	35.00%	10.00%	0.00%	\$ -	\$ 4,859	\$ 12,956	\$ 11,337	\$ 3,239	\$ -	\$ -	\$ -			
Yard Piping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
<b>2010 Subtotal A</b>	<b>\$ 1,158,871</b>	<b>\$ 1,158,871</b>	<b>0.00%</b>	<b>33.84%</b>	<b>29.91%</b>	<b>28.47%</b>	<b>7.78%</b>	<b>0.00%</b>	<b>\$ -</b>	<b>\$ 392,172</b>	<b>\$ 346,524</b>	<b>\$ 329,876</b>	<b>\$ 90,260</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>			
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	\$ 19,039	\$ 19,039	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	\$ -	\$ -	\$ -			
<b>2010 Subtotal B</b>	<b>\$ 1,434,000</b>	<b>\$ 1,434,000</b>	<b>0.00%</b>	<b>33.84%</b>	<b>29.91%</b>	<b>28.47%</b>	<b>7.78%</b>	<b>0.00%</b>	<b>\$ -</b>	<b>\$ 485,278</b>	<b>\$ 428,916</b>	<b>\$ 408,192</b>	<b>\$ 111,614</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>			
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	\$ 60,062	\$ 16,423	\$ -	\$ -	\$ -			
<b>2010 Subtotal C</b>	<b>\$ 1,728,000</b>	<b>\$ 1,728,000</b>	<b>0.00%</b>	<b>33.84%</b>	<b>29.91%</b>	<b>28.47%</b>	<b>7.78%</b>	<b>0.00%</b>	<b>\$ -</b>	<b>\$ 584,770</b>	<b>\$ 516,853</b>	<b>\$ 491,860</b>	<b>\$ 134,498</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>			
<b>2010 Sewer Improvements</b>																			
Sewer project - Wastewater Portion	\$ 1,600,000	\$ 1,600,000	30.00%	70.00%	0.00%	0.00%	0.00%	0.00%	\$ 408,000	\$ 1,120,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
<b>2010 Improvements Total</b>	<b>\$ 3,328,000</b>	<b>\$ 3,328,000</b>	<b>14.42%</b>	<b>51.23%</b>	<b>15.53%</b>	<b>14.78%</b>	<b>4.04%</b>	<b>0.00%</b>	<b>\$ 480,000</b>	<b>\$ 1,704,770</b>	<b>\$ 516,853</b>	<b>\$ 491,860</b>	<b>\$ 134,498</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>			
<b>2016 CWF Project 1-2015</b>																			
Engineering Design	\$ 175,000	\$ 175,000	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 11,168	\$ 46,185	\$ 69,856	\$ 42,552	\$ 5,440	\$ -	\$ -	\$ -			
Engineering Construction	\$ 198,000	\$ 198,000	6.38%	26.39%	39.80%	24.32%	3.11%	0.00%	\$ 12,638	\$ 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	\$ 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	\$ 116,960	\$ 233,360	\$ 146,225	\$ 29,245	\$ -	\$ -	\$ -			
HSW Pump	\$ 286,400	\$ 286,400	0.00%	0.00%	60.00%	40.00%	0.00%	0.00%	\$ -	\$ -	\$ 171,840	\$ 114,560	\$ -	\$ -	\$ -	\$ -			
Screening	\$ 543,800	\$ 543,800	15.00%	85.00%	0.00%	0.00%	0.00%	0.00%	\$ 81,570	\$ 452,230	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
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	\$ 32,554	\$ 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	\$ -	\$ -	\$ -			
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	\$ 326	\$ -	\$ -	\$ -			
<b>Total 2016 CWF Project 1-2015</b>	<b>\$ 2,978,850</b>	<b>\$ 2,978,850</b>	<b>6.38%</b>	<b>26.39%</b>	<b>39.80%</b>	<b>24.32%</b>	<b>3.11%</b>	<b>0.00%</b>	<b>\$ 190,102</b>	<b>\$ 786,157</b>	<b>\$ 1,185,676</b>	<b>\$ 724,312</b>	<b>\$ 92,601</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>			
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%	\$ 116,500	\$ 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%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
<b>Total Capital Cost Financed Through Debt</b>	<b>\$ 7,952,950</b>	<b>\$ 7,952,950</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$ 1,163,932</b>	<b>\$ 3,643,197</b>	<b>\$ 1,702,528</b>	<b>\$ 1,216,192</b>	<b>\$ 227,098</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>			
<b>Total Allocation Percent</b>														14.64%	45.81%	21.41%	15.29%	2.86%	0.00%
<b>Annual Debt Service</b>	<b>\$ 501,854</b>	<b>\$ 498,872</b>								<b>\$ 73,011</b>	<b>\$ 228,530</b>	<b>\$ 106,798</b>	<b>\$ 76,289</b>	<b>\$ 14,245</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**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			
					%	\$	%	\$	%	\$	%	\$	%	\$	%	\$		
<b>Existing Plant</b>																		
Sludge Disposal Operations																		
Land & Land Rights	\$ 164,747	2.50	\$ 110,113	\$ 3,307	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -		
Lagoon	\$ 132,275	2.50	\$ 232,283	\$ 10,313	0.00%	\$ -	0.00%	\$ -	50.00%	\$ 1,653	40.00%	\$ 1,323	10.00%	\$ 331	0.00%	\$ -		
Structures & Improvements	\$ 412,326	2.50	\$ 28,010	\$ 700	0.00%	\$ -	0.00%	\$ -	50.00%	\$ 5,157	40.00%	\$ 4,125	10.00%	\$ 1,031	0.00%	\$ -		
Piping at Lagoon	\$ 28,010	2.50	\$ 3,939	\$ 118	0.00%	\$ -	0.00%	\$ -	50.00%	\$ 350	40.00%	\$ 280	10.00%	\$ 76	0.00%	\$ -		
Monitoring Wells	\$ 4,732	2.50	\$ -	\$ -	0.00%	\$ -	0.00%	\$ -	50.00%	\$ 59	40.00%	\$ 47	10.00%	\$ 12	0.00%	\$ -		
Power operated Equipment	\$ 295,669	3	\$ 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%	\$ -		
<b>Treatment Plant</b>																		
Pump Station Equipment at Plant	\$ 761,001	2.50	\$ 417,625	\$ 18,745	0.00%	\$ -	100.00%	\$ 18,745	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -		
Land Improvements	\$ 264,422	2.50	\$ 98,704	\$ 7,111	0.00%	\$ -	100.00%	\$ 7,111	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -		
Land & Land Rights	\$ 9,069																	
Buildings & Structures	\$ 8,167,139	2.50	\$ 3,578,926	\$ 213,113	5.00%	\$ 10,656	35.00%	\$ 74,589	30.00%	\$ 63,934	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -		
Preliminary Treatment Equipment	\$ 263,232	3.33	\$ 38,570	\$ 8,468	0.00%	\$ -	50.00%	\$ 4,234	10.00%	\$ 847	40.00%	\$ 3,387	0.00%	\$ -	0.00%	\$ -		
Primary Treatment Equipment	\$ 204,387	4.00	\$ 53,884	\$ 7,057	4.00%	\$ 284	36.00%	\$ 2,595	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	20.00%	\$ 18,386	10.00%	\$ 9,193	0.00%	\$ -		
Chlorination Equipment	\$ 38,218	6.00	\$ 6,303	\$ 1,000	0.00%	\$ -	100.00%	\$ 1,000	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -		
Solid Waste Disposal Equip.	\$ 1,590,000	4.00	\$ 799,644	\$ 102,248	0.00%	\$ -	0.00%	\$ -	50.00%	\$ 51,124	40.00%	\$ 40,899	10.00%	\$ 10,225	0.00%	\$ -		
Plant Site Piping	\$ 603,350	2.50	\$ 442,668	\$ 15,064	4.00%	\$ 603	36.00%	\$ 5,420	20.00%	\$ 4,525	20.00%	\$ 3,017	10.00%	\$ 1,598	0.00%	\$ -		
Flow Metering & Monitoring Equip.	\$ 862,716	4.00	\$ 376,809	\$ 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	\$ 275,218	2.50	\$ 120,331	\$ 6,880	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	100.00%	\$ 6,880		
Other Plant Equipment	\$ 17,099	3.33	\$ 14,645	\$ 569	4.00%	\$ 23	36.00%	\$ 205	30.00%	\$ 171	20.00%	\$ 114	10.00%	\$ 57	0.00%	\$ -		
Lab Equipment	\$ 69,948	10.00	\$ 55,315	\$ 6,350	50.00%	\$ 3,175	20.00%	\$ 1,270	10.00%	\$ 635	10.00%	\$ 635	10.00%	\$ 635	0.00%	\$ -		
<b>Collection System</b>																		
Service Connections and Traps	\$ 12,135	1.00	\$ 364	\$ 121	2.00%	\$ 2	98.00%	\$ 119	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -		
Collecting Sewers	\$ 1,701,306	1.00	\$ 88,079	\$ 17,016	2.00%	\$ 340	98.00%	\$ 16,675	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -		
Land & Land Rights	\$ 3,675																	
Lift Stations	\$ 1,734,883	2.50	\$ 641,935	\$ 42,011	2.00%	\$ 840	98.00%	\$ 41,171	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -		
<b>General Equipment &amp; Plant</b>																		
Land Improvements	\$ 53,301	2.50	\$ 43,505	\$ 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%	\$ 6,792	30.00%	\$ 5,822	20.00%	\$ 3,881	10.00%	\$ 1,941	0.00%	\$ -		
Office Equipment	\$ 100,267	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	\$ 18,610	\$ -	100.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -		
Transportation Equipment	\$ 363,430	3	\$ 278,459	\$ 26,192	100.00%	\$ 26,192	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -		
Miscellaneous Equipment	\$ 152,228	10.00	\$ 94,763	\$ -	5.00%	\$ -	35.00%	\$ -	30.00%	\$ -	30.00%	\$ -	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%	\$ -		
<b>Collection System Contributed</b>																		
Collection System Main	\$ 6,870,352	1.15	\$ 1,763,640	\$ 60,065	2.00%	\$ 1,601	98.00%	\$ 78,464	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -		
<b>Additions</b>																		
<b>WWTP Screening, Dewatering, and Hauled Wastes Receiving Improvements</b>																		
Site - Hauled Wastes, HSW	\$ 793,880	2.50	\$ -	\$ 19,847	10.00%	\$ 1,985	20.00%	\$ 3,969	40.00%	\$ 7,939	25.00%	\$ 4,962	5.00%	\$ 992	0.00%	\$ -		
HSW Pump	\$ 388,729	4.00	\$ -	\$ 15,549	0.00%	\$ -	0.00%	\$ -	60.00%	\$ 9,325	40.00%	\$ 6,220	0.00%	\$ -	0.00%	\$ -		
Screening	\$ 738,623	3.33	\$ -	\$ 24,579	0.00%	\$ -	63.81%	\$ 20,892	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -	0.00%	\$ -		
Dewatering	\$ 1,021,743	5.00	\$ -	\$ 51,571	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%	\$ -		
<b>Subtotal</b>																		
Deduction of Replacement Fund					\$ (223,656)	0.08%	\$ (190)	25.23%	\$ (56,403)	37.24%	\$ (83,254)	25.98%	\$ (58,075)	7.45%	\$ (16,620)	4.03%	\$ (9,014)	
Total	\$ 31,590,660.98				\$ 11,554,568.16	\$ 615,842.00	10.02%	\$ 61,708	44.18%	\$ 272,071	23.17%	\$ 142,665	20.07%	\$ 123,602	2.91%	\$ 17,928	-0.35%	\$ (2,134)

