FINAL

Wastewater Utility Financial Plan and Rates Study

Prepared for City of Fresno, California September 2018

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Date

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List of Abbreviations

ADA	Average Daily Attendance
AF	acre feet (equal to 325,851 gallons)
BOD	Biochemical Oxygen Demand
CAFR	Comprehensive Annual Financial Report
CIP	Capital Improvement Program
City	City of Fresno
DPU	Department of Public Utilities
DSC	debt service coverage
FY	Fiscal year (July 1 to June 30)
FY20	July 1, 2019 to June 30, 2020
GASB	Governmental Accounting Standards Board
gpd	gallons per day
HCF	Hundred Cubic Feet (equal to ~ 748.1 gallons)
mgd	million gallons per day
mg/L	milligrams per Liter
0&M	Operation and maintenance
PCWD	Pinedale County Water District
PPUD	Pinedale Public Utility District
RWRF	Regional Wastewater Reclamation Facility
SRF	State Revolving Fund
SSMP	Sewer System Management Plan
TSS	Total Suspended Solids
WACP	Water Affordability Credit Program
WDR	Waste Discharge Requirements



Executive Summary

The City of Fresno, in conjunction with Municipal Financial Services, has analyzed the adequacy of revenues to meet projected expenditures of the wastewater enterprise fund to determine whether revenues will be adequate to cover operating and maintenance costs as well as needed capital costs while supporting debt service obligations and meeting goals found in the Financial Management Plan and Guiding Principles (Financial Management Plan) for the City of Fresno's Department of Public Utilities (DPU). Rates and charges were developed for the five-year period Fiscal Year 2019 – 20 (FY20) through FY24.

Prior Rate Study and Current Rates and Charges

The previous rate study was in 2006 and resulted in three increases of 18.9% each on April 1, 2007, September 1, 2008, and September 1, 2009; and a 3.1% increase in September 1, 2010. Prior to 2007, the previous rate increases were during 1990 to 1997 and raised monthly bills from \$4.38 per month in 1990 to \$16.50 per month in 1997.

Current rates are the same as in 2010 and are summarized in the table below along with the number of accounts or dwelling units paying each rate as of June 2017.¹ Pages from the Master Fee Schedule (MFS) that list wastewater rates are included in Appendix A.

	Table	e ES-1. Cur	rent Rates		
	Approximate			Approximate	
	Number of			Number of	
Customer Class	Accts/Units	Rate	Customer Class	Accts/Units	Rate
Residential, \$ per month			Schools (ADA), \$/ADA/year		
Single Family account	105,053	\$25.75	K-garten/Elementary	17	\$15.957
Senior Citizen account	12,946	\$23.16	Middle	1	\$24.762
Multiple Family 1st Unit	7,236	\$25.75	Senior	4	\$29.866
Multiple Family Add 'I Units	63,216	\$17.29	Parochial	5	\$8.632
Commercial			College	2	\$10.646
Potable Water, \$/HCF			Industrial		
High: BOD or TSS >= 501 mg/L	710	\$3.514	High Potable Water	2	
Medium: BOD or TSS 201-500 mg/L	766	\$1.792	Volume, \$/HCF		\$0.507
Low: BOD or TSS 0-200 mg/L	6,204	\$1.077	BOD, \$/pound		\$0.261
Sewage Effluent, \$/HCF			TSS, \$/pound		\$0.296
High: BOD or TSS >= 501 mg/L	16	\$3.864	High Sewage Effluent	38	
Medium: BOD or TSS 201-500 mg/L	25	\$1.973	Volume, \$/HCF		\$0.559
Low: BOD or TSS 0-200 mg/L	140	\$1.184	BOD, \$/pound		\$0.261
All Commercial Users, \$/month (minimun	1)	\$25.75	TSS, \$/pound		\$0.296
			Low Potable Water, \$/HCF	128	\$1.077
			Low Sewage Effluent, \$/ HCF	36	\$1.185
			All Industrial Users, \$/ month (minimu	m)	\$25.75

Legend: ADA-Average Daily Attendance; BOD-Biochemical Oxygen Demand; HCF-hundred cubic feet; mg/L-milligrams per liter; TSS-Total Suspended Solids

¹ In the Master Fee Schedule, each rate consists of two components that are applicable only to Pinedale Public Utility District and Pinedale County Water District.

Projected Capital Improvement Program Expenditures and Funding

CIP expenditures for FY18 through FY24, by project category, are summarized in the pair of tables below. Expenditures for FY18 are actual values. Expenditures for FY19-23 are based on the adopted FY19-FY23 budget and updates from Wastewater Division capital improvement program planning documents. Expenditures for FY24 are from Wastewater Division long term capital improvement program projections.

Table ES-2. Projected CIP Expenditures, FY18 – FY24											
Project Costs in \$millions	Actual Budget Projected Total										
Project Category	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY20 -	FY24		
Treatment Plant Rehabilitation/Operation	\$3.9	\$30.0	\$11.8	\$7.4	\$7.2	\$6.7	\$9.4	\$42.5	24%		
Collection System/Lift Stations	9.7	8.3	4.0	8.2	6.7	6.7	6.7	\$32.3	18%		
Collection System Capacity	0.6	2.7	1.1	0.5	28.1	0.5	0.5	\$30.7	17%		
Discharge Permit/Regulatory Requirements	0.0	0.5	0.0	0.0	3.8	0.0	26.8	\$30.6	17%		
Treatment/Digester Capacity	0.0	0.0	0.0	0.0	0.0	21.7	0.0	\$21.7	12%		
Recycled Water Treatment & Distribution	13.1	48.1	2.0	4.1	3.1	3.6	4.1	\$16.9	10%		
DPU Administration & Maintenance Facility	0.0	4.0	3.7	0.5	0.0	0.0	0.0	\$4.2	2%		
Total Expenditures	\$27.3	\$93.6	\$22.6	\$20.7	\$48.9	\$39.2	\$47.5	\$178.9	100%		

Between FY20 and FY24 (five fiscal years), total projected CIP expenditures are approximately \$178.9 million. Approximately 70 percent of the CIP expenditures are projected to be funded with cash from wastewater rates and charges. The remainder of the expenditures will be funded from low interest State Revolving Fund (SRF) loans or revenue bonds that are repaid with rate revenues. CIP expenditures for FY20 through FY24 are summarized by funding source in the table below.

Table ES-3. Projected CIP Expenditures Funding Summary, FY20 – FY24											
Project Costs in \$millions											
Cash/Grant Funded Projects		Bond Funded Projects									
Treatment Facility Rehabilitation/Operation	\$42.5	Discharge Permit/Regulatory Requirements	\$26.8								
Collection System/Lift Stations	\$32.3	Treatment/Digester Capacity	\$21.7								
Collection System Capacity	\$30.7	Design Recycled Water/Reclamation in SE Fresno	<u>\$4.0</u>								
Recycled Water Treatment & Distribution	\$11.1	Total	\$52.5	29%							
Discharge Permit/Regulatory Requirements	\$3.8										
DPU Administration & Maintenance Facility	<u>\$4.2</u>	SRF Funded Projects									
Total	\$124.6 70%	SW Recycled Water Distribution System	\$1.8	1%							
CIP Total FY20 - FY24	\$178.9										



Revenue Required from Wastewater Rates

As shown in the table below, the approximate revenues required from rates (treatment charges) for the five-year period, FY20 through FY24, is \$382.2 million. Another \$42.8 million in revenues is projected from other sources. Expenditures during the same period are projected to be approximately \$413.1 million. The operating fund balance is projected to increase from approximately \$11.9 to \$15.1 million during the five-year period. The budgeted minimum reserve balance in FY24 is \$10.1 million.

Table ES-4. Projected FY18 - FY24 Cash Flow									
	Actual Budget Projected Five-Year Plan FY20 -								
All Cash Flow in \$millions	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY24	
REVENUES									
Treatment Charges	\$73.9	\$73.4	\$73.4	\$74.9	\$76.4	\$77.9	\$79.5	\$382.2	
Clovis Payments	4.3	3.8	3.8	3.9	4.0	4.1	4.2	20.0	
Pretreatment	0.4	0.4	0.4	0.4	0.4	0.4	0.4	2.1	
All Other	4.6	2.5	3.0	3.9	5.0	4.4	4.4	20.7	
Total Revenues	83.2	80.1	80.7	83.1	85.8	86.8	88.5	424.9	
EXPENDITURES									
Operating	\$38.7	\$43.5	\$44.9	\$46.2	\$47.6	\$49.0	\$50.5	\$238.2	
Debt Service	18.7	19.9	5.6	11.5	11.2	12.8	15.1	56.2	
Capital (cash); less Clovis portion	16.3	65.7	19.6	20.1	48.3	17.3	13.4	118.7	
Total Expenditures	73.6	129.1	70.0	77.8	107.0	79.1	79.0	413.1	
NET TRANSFERS	11.0	18.8	(5.9)	1.9	8.4	(5.9)	(5.9)	(7.5)	
Operating Fund Ending Balance	41.2	11.9	16.4	23.3	10.2	11.7	15.1		
Minimum Balance (75 Days O&M)	\$7.7	<i>\$8.7</i>	\$9.0	<i>\$9.2</i>	\$9.5	<i>\$9.8</i>	\$10.1		
Debt Service Coverage Ratio	<i>2.39x</i>	1.84x	<i>6.41x</i>	3.20x	<i>3.41x</i>	2.95x	2.52x		

Wastewater System Capital Asset Valuation

The City reports wastewater capital asset values according to Governmental Accounting Standards Board (GASB) accounting pronouncements. Capital assets values are reported in the City's Comprehensive Annual Financial Report (CAFR). Capital asset values are based on "book" values. The book value of an asset is its original purchase cost, adjusted for any subsequent changes, such as for impairment or depreciation. The replacement value of an asset is the cost of a new, comparable asset.

As of June 30, 2017, wastewater system capital assets had a book value of approximately \$923.5 million and accumulated depreciation of approximately \$265.0 million. Comparable wastewater systems in California have a replacement value to book value ratio of approximately $2.2 : 1.^2$ The replacement value of wastewater system capital assets is approximately \$2,032 million (\$923.5 x 2.2).

If wastewater system capital assets are assigned an average useful life of 50 years and a replacement value of approximately \$2,032 million, the average expense for replacement of the wastewater system capital assets would be approximately \$40.6 million per year. This calculation shows the projected CIP by the City is reasonable as compared to the estimated average annual replacement expense.

This annual expense for capital asset replacements supports evaluation of the Financial Management Plan goal to "provide adequate funds to construct, maintain, rehabilitate and replace assets and infrastructure as required."

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² Based on the best professional judgment of Municipal Financial Services, the replacement value to book value ratio for wastewater assets generally varies from 2:1 to 2.5:1.

Wastewater System Financial Management Plan Goals

The purpose of the Financial Management Plan is to outline the strategic financial management plan and guiding principles for the City of Fresno's water, wastewater and solid waste utility funds. The strategic financial management plan is intended to establish basic guidance for fiscal management. The goals of the fiscal management policies are categorized in the Financial Management Plan into the categories of general financial; asset management; debt management; rates, fees and charges; customer care; and annual budget process.

Measures of attainment of targets for each goal are listed in the table below. Years in which a target is not met show the measurement value in light red highlight.

Table ES-5. F	inancial Ma	nagemen	t Plan Goa	ls, FY18 –	FY24			
GENERAL FINANCIAL								
Operating Reserves	<u>Minimum</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Minimum Balance as a Percent of O&M	=>20%	106%	27%	36%	50%	21%	23%	29%
Minimum Balance as Days of O&M Expenditure	s 75	385	98	131	182	76	86	107
Minimum Balance		7,700	8,700	9,000	9,200	9,500	9,800	10,100
RATES, FEES AND CHARGES								
Operating Rate Stabilization Reserve	<u>Minimum</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Reserve as a Percent of Operating Revenues	=>5%	11%	6%	7%	7%	5%	7%	10%
Minimum Balance		4,200	4,000	4,000	4,200	4,300	4,300	4,400
ASSET MANAGEMENT POLICIES								
Capital Improvements Reserve	<u>Minimum</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Reserve as a Percent of Net Total Capital Asset	s =>2%	1%	1%	1%	1%	1%	2%	3%
Minimum Balance		13,300	14,700	14,600	14,600	15,100	15,400	15,900
DEBT MANAGEMENT								
Debt Service Coverage Ratio	<u>Minimum</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Coverage Ratio	1.60x	2.39x	1.84x	6.41x	3.20x	3.41x	2.95x	2.52x
Debt Service as a Percent of Revenue	<u>Minimum</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Debt Service as a Percent of Revenue	<=35%	22%	25%	7%	14%	13%	15%	17%
Cash Financing of Canital	Minimum	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Cash for Capital Projects	=>30%	<u>59%</u>	70%	91%	100%	100%	45%	35%
	_, 5070	5576	5070	51/0	100/0	10070	-1370	5570
Debt Burden to Asset Value	<u>Maximum</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Debt Burden to Asset Value Ratio	<=50%	11%	17%	17%	16%	15%	17%	20%

Non-reserve Funds and Reserve Funds Balances

Projected fiscal year ending balances for three non-reserve and three reserve funds are shown in the figure below. The three non-reserve funds are: 1) Operating; Wastewater Facility Fees; and Lateral, Oversize, House Branch and Connection. The three reserve funds are: 1) Capital Improvement, Operating Rate Stabilization and SRF Debt Service. The projected annual debt service coverage ratio is shown as a line with corresponding data labels.



Figure ES-1. Wastewater Fund Ending Balances and Debt Service Coverage, FY18 – FY24

Recommended Wastewater Rates

The current (FY19) and recommended rates for FY20 – FY24 are shown in the table below. The effective dates are July 1 of each fiscal year. Note that customer class descriptions include the terms "BOD" and "TSS". BOD is an acronym for Biochemical Oxygen Demand. TSS is an acronym for Total Suspended Solids. BOD and TSS are the two primary conventional pollutants removed during the treatment process.

Ta	able ES-6. C	urrent and	l Recomm	ended Fy	'20 - FY2	4 Wastev	vater Rat	es				
Number of Current Recommended Five-Year Rate Plan												
Customer Class	Accts/Units	FY19	FY20	FY21	FY22	FY23	FY24	FY20	FY21	FY22	FY23	FY24
Residential, \$ per month												
Single Family account	105,053	\$25.75	\$24.55	\$24.80	\$25.05	\$25.30	\$25.50	-5%	1%	1%	1%	1%
Senior Citizen account	12,946	\$23.16	\$24.55	\$24.80	\$25.05	\$25.30	\$25.50	6%	1%	1%	1%	1%
Multiple Family 1st Unit	7,236	\$25.75	\$16.70	\$17.10	\$17.55	\$17.95	\$18.40	-35%	2%	3%	2%	3%
Multiple Family Add'l Units	63,216	\$17.29	\$16.70	\$17.10	\$17.55	\$17.95	\$18.40	-3%	2%	3%	2%	3%
Commercial		-										
Potable Water, \$/HCF												
High: BOD or TSS >= 501 mg/L	710	\$3.514	\$3.40	\$3.49	\$3.58	\$3.68	\$3.77	-3%	3%	3%	3%	3%
Medium: BOD or TSS 201-500 mg/L	766	\$1.792	\$2.30	\$2.36	\$2.42	\$2.49	\$2.55	28%	3%	3%	3%	3%
Low: BOD or TSS 0-200 mg/L	6,204	\$1.077	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	67%	3%	3%	3%	3%
Sewage Effluent, \$/HCF												
High: BOD or TSS >= 501 mg/L	16	\$3.864	\$3.40	\$3.49	\$3.58	\$3.68	\$3.77	-12%	3%	3%	3%	3%
Medium: BOD or TSS 201-500 mg/L	25	\$1.973	\$2.30	\$2.36	\$2.42	\$2.49	\$2.55	16%	3%	3%	3%	3%
Low: BOD or TSS 0-200 mg/L	140	\$1.184	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	52%	3%	3%	3%	3%
Volumetric Rates, \$/HCF												
High: BOD or TSS >= 501 mg/L	726	na	\$3.40	\$3.49	\$3.58	\$3.68	\$3.77	na	3%	3%	3%	3%
Medium: BOD or TSS 201-500 mg/L	791	na	\$2.30	\$2.36	\$2.42	\$2.49	\$2.55	na	3%	3%	3%	3%
Low: BOD or TSS 0-200 mg/L	6,343	na	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	na	3%	3%	3%	3%
All Users, \$/month (minimum)		\$25.75										
All Users, \$/month (per account/u	unit)		\$4.98	\$5.07	\$5.16	\$5.26	\$5.35	na	2%	2%	2%	2%
Industrial												
High Potable Water	2											
Volume, \$/HCF		\$0.507	\$1.415	\$1.453	\$1.493	\$1.533	\$1.575	179%	3%	3%	3%	3%
BOD, \$/pound		\$0.261	\$0.187	\$0.192	\$0.197	\$0.202	\$0.207	-28%	3%	3%	3%	3%
TSS, \$/pound		\$0.296	\$0.215	\$0.221	\$0.227	\$0.233	\$0.239	-27%	3%	3%	3%	3%
High Sewage Effluent	38											
Volume, \$/HCF		\$0.559	\$1.415	\$1.453	\$1.493	\$1.533	\$1.575	153%	3%	3%	3%	3%
BOD, \$/pound		\$0.261	\$0.187	\$0.192	\$0.197	\$0.202	\$0.207	-28%	3%	3%	3%	3%
TSS, \$/pound		\$0.296	\$0.215	\$0.221	\$0.227	\$0.233	\$0.239	-27%	3%	3%	3%	3%
Low Potable Water, \$/HCF	128	\$1.077	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	67%	3%	3%	3%	3%
Low Sewage Effluent, \$/HCF	36	\$1.185	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	51%	3%	3%	3%	3%
All Users, \$/month (minimum)		\$25.75										
All Users, \$/month (per account/	unit)		\$4.98	\$5.07	\$5.16	\$5.26	\$5.35	na	2%	2%	2%	2%
Schools (ADA), \$/ADA/year												
K-garten/Elementary	17	\$15.96	\$9.60	\$9.85	\$10.15	\$10.40	\$10.70	-40%	3%	3%	2%	3%
Middle	1	\$24.76	\$9.60	\$9.85	\$10.15	\$10.40	\$10.70	-61%	3%	3%	2%	3%
Senior	4	\$29.87	\$16.80	\$17.25	\$17.70	\$18.20	\$18.65	-44%	3%	3%	3%	2%
Parochial	5	\$8.63	\$9.60	\$9.85	\$10.15	\$10.40	\$10.70	11%	3%	3%	2%	3%
College	2	\$10.65	\$16.80	\$17.25	\$17.70	\$18.20	\$18.65	58%	3%	3%	3%	2%
All Users, \$/month (per accoun	ıt/unit)	na	\$4.98	\$5.07	\$5.16	\$5.26	\$5.35	na	2%	2%	2%	2%

Legend: ADA-Average Daily Attendance; BOD-Biochemical Oxygen Demand; HCF-hundred cubic feet; mg/L-milligrams per liter; TSS-Total Suspended Solids

Section 1 Introduction

This section describes the organization of the report, rate-making objectives, the rate-setting process, and a general description of the wastewater system.

1.1 Organization of the Report

This report is divided into seven sections. This introduction provides an overview of the study objectives and description of the City's wastewater system.

Section 2 discusses the wastewater discharge characteristics of customers. The number and type of connections and wastewater flow and strength projected for FY18 – FY24 is developed in this section.

Section 3 summarizes the five-year Financial Plan for the wastewater enterprise and describes the development of revenue required from wastewater rates.

Section 4 describes the allocation of revenue requirements to defined billable parameters.

Section 5 describes the development of the wastewater rate structure and wastewater rates.

Section 6 describes the impact of recommended wastewater rates upon customer bills.

Section 7 describes the limitations of the study document.

1.2 Rate-Making Objectives

There are numerous rate-making objectives that must be considered when developing rates and rate structures.

Revenue sufficiency. Generate sufficient revenue to fund operating costs, capital costs, bonded debt, and adequate reserves.

Revenue stability. Recover revenue from rates that will cover fixed and variable costs.

Meet Fiscal Management Goals. Meet the goals of the policies that are in the City's Financial Management Plan.

Administrative ease and cost of implementation. Enable easy and cost efficient implementation and ongoing administration, including monitoring and updating.

Affordability. Be as affordable as possible while maintaining the utilities sound financial position and credit rating.

Customer acceptance. Be as simple as possible to facilitate customer understanding and acceptance.

Fairness. Provide for each customer class to pay its proportionate share of the required revenue in compliance with legal rate-making requirements.

1.3 Overview of Utility Rate Setting Process

Rate studies classically have three categories of technical analysis – the development of revenue required from rates, the allocation of costs among billable parameters (cost-of-service analysis) and the design of a rate structure. An overview of the rate-setting analytical steps is shown in Figure 1-1.



Figure 1-1. Overview of Rate Setting Analytical Steps

The revenue required from rates is net of non-rate revenues (for example interest earned on fund balances, loan disbursements, revenue from new connections to the wastewater system, lease and rental income, various reimbursements, other charges for services). The allocation of costs is structured so that the revenue required from rates is distributed proportionally for every level of service in a manner that allows the development of unit costs. The rate structure uses the unit costs as a basis for aggregating costs into rates that are applicable to the various customer classes.

Information and data for the development of rates and preparation of this report comes from many documents provided by the City. The list of documents, and the key information and data from each used in this study, are summarized below.

City of Fresno Fiscal Year 2018-2019 Adopted Budget (FY2019 Budget). The City of Fresno Annual Budget is the most important document the City produces. It outlines the City's spending plan and priorities for the fiscal year, which runs from July 1st to June 30th. Each year, the city's budget is developed in conjunction with the Mayor, City Manager and all city departments. The budget is then reviewed and approved by the City Council. The result is a budget that closely matches the community's highest priorities each fiscal year.

All revenue, expenditure and fund balance data used in the development of wastewater rates and charges in this study were provided by the City.

City of Fresno Fiscal Year 2017-2018 Comprehensive Annual Financial Report (FY18 CAFR). The City of Fresno *Comprehensive Annual Financial Report* shows the financial position and results of the City's operations as represented by the financial activity of its various funds.

Utility Billing System data. The City provided billing data from its Utility Billing system for connections.



1.4 Fresno Wastewater Utility

The Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF) serves the cities of Fresno and Clovis, the Pinedale County Water District (PCWD) and Pinedale Public Utilities District (PPUD) and some unincorporated areas of the County of Fresno. It is the 7th largest system in California.

The RWRF transports and treats wastewater from domestic, commercial and industrial sources. The collection system consists of over 1,500 miles of gravity sewers, 15 lift stations, 11 miles of associated force mains and 55 junction structures/flow diversions that collect and convey wastewater to the RWRF.

The collection system is under the State's General Order for Sanitary Sewer Systems that requires a Sewer System Management Plan (SSMP). The City's SSMP which was approved in 2009, and updated in 2014, includes plans for infrastructure assessment, operational procedures, capital improvement plan projections and a Fats, Oils and Grease program.

The treatment facility is located southwest of Fresno, on approximately 3,200 acres of land in which 1,700 of those acres are disposal ponds. The treatment facility is rated to treat 80 million gallons per day (mgd) of wastewater at a secondary treatment level.

The RWRF is under Waste Discharge Requirements (WDR) Order 5-01-254 issued by the California Regional Water Quality Control Board, Central Valley Region. The order was issued November 20, 2001 with specific discharge limitations and provisions to comply. Most recently, The City of Fresno submitted a Report of Waste Discharge for the issuance of an updated WDR (2015) that would rate the RWRF at 92 mgd achieved after an organic upgrade of existing facilities was completed and including the addition of the new tertiary treatment and disinfection train capable of processing up to 5 mgd of Title 22 disinfected tertiary treated wastewater that can be used for unrestricted irrigation of crops and urban landscape irrigation.

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Section 2 User Characteristics

The purpose of this section is to summarize use of the wastewater system by all customers, connected to the system. The data used in this section comes from the City's Utility Billing system, invoices for services provided by the Wastewater Management Division and data bases with customer discharge data and treatment plant operating data. Customer data is used for the allocation of costs, development of rates and analysis of the impact on customer bills.

2.1 Customer Class Flows and BOD/TSS Concentrations

Listed in the table below are flows and BOD/TSS concentrations for each customer class. Residential wastewater flow is based on metered winter water use records. Commercial wastewater flow is based on potable metered water use records. Water use records are from FY16 and FY17. Except for Industrial users, BOD/TSS values are based on estimates.

Table 2-1. Assigned Flows and BOD/TSS Concentrations									
	Approximate								
	Number of	Flow	BOD	TSS					
Customer Class	Accts/Units	gpd	mg/L	mg/L					
Residential									
Single Family account	105,053	220	290	320					
Senior Citizen account	12,946	220	290	320					
Multiple Family 1st Unit	7,236	132	290	320					
Multiple Family Add 'I Units	63,216	132	290	320					
Commercial									
Potable Water									
High: BOD or TSS >= 501 mg/L	710	based on water	1,000	600					
Medium: BOD or TSS 201-500 mg/L	766	ndseu un waler	350	350					
Low: BOD or TSS 0-200 mg/L	6,204	meter usage	140	160					
Sewage Effluent									
High: BOD or TSS >= 501 mg/L	16	bacad an offluant	1,000	600					
Medium: BOD or TSS 201-500 mg/L	25	notor usado	350	350					
Low: BOD or TSS 0-200 mg/L	140	meter usage	140	160					
Industrial									
High Potable Water	2	based on water m	neter usage and mea	asured BOD/TSS					
High Sewage Efflluent	38	based on FY17 meas	ured effluent meter	usage and BOD/TSS					
Low Potable Water	0	same as Com. Potable	140	160					
Low Sewage Effluent	0	same as Com. Effluent	140	160					
Schools (ADA Rates)		gpd/pupil-staff							
K-garten/Elementary	17	8	350	350					
Middle	1	15	350	350					
Senior	4	15	350	350					
Parochial	5	8	350	350					
College	2	15	350	350					

Legend: BOD-Biochemical Oxygen Demand; gpd-gallons per day; mg/L-milligrams per liter; TSS-Total Suspended Solids

The flows for Single Family and Senior Citizen accounts are projected to decrease by two percent per year (four gpd per year) from 220 gpd in FY20 to 204 gpd in FY24. The BOD and TSS concentrations increase in proportion inversely to flow so that the pounds of BOD and TSS remain near the current amounts.

2.2 Customer Class Volume and BOD/TSS Load

Flows and BOD/TSS concentrations shown in the previous section for the various customer classes are the basis for development of projected wastewater discharge volumes and BOD/TSS loads (in pounds). Wastewater discharge volumes and BOD/TSS loads for Clovis were provided by the City. Calculation of projected customer wastewater discharge volumes and BOD/TSS loads and number of Accounts – Dwelling Units for FY18 – FY24 are shown in Appendix B, Table B-1 (Wastewater Discharge Volume, Million Gallons per Day), Table B-2 (Wastewater Discharge BOD, Pounds per Day), Table B-3 (Wastewater Discharge TSS, Pounds per Day) and Table B-4 (Accounts – Dwelling Units (Includes PCWD and PPUD)).

The sum of the projected FY20 wastewater discharge volumes and BOD/TSS loads for the various customer classes and Clovis are compared to projected FY20 regional treatment plant influent flow in Figure 2-1.



Figure 2-1. Projected FY20 Volume, BOD and TSS Discharge by Customer Category



2.3 Inflow/Infiltration

Inflow and infiltration (I/I) adds clear water to sewer systems increasing the load on the systems. Infiltration is the seepage of ground water into the sewer system through defects in sewer piping or into loose sewer connections. Inflow is water or sewage draining directly into the sewer line through a sewer connection.³

State of California *Revenue Program Guidelines* state that, "The user charge system shall provide that costs of O. M. & R. [operation, maintenance, and replacement] for all infiltration and inflow (I/I) not directly attributable to users be distributed among all users based upon either of the following: a.) In the same manner that it distributes the costs for their actual use; or b.) Under a system which uses one or any combination of the following factors on a reasonable basis: (i) Flow volume of the users; (ii) Land area of the users; (iii) Number of hookups or discharges of the users; (iv) Property valuation of the users (if A/V [*ad valorem*] taxes are used)".⁴

The City's sewer system is not significantly impacted by I/I. The City takes daily flow measurements at the point where sewer flow enters the regional treatment plant (influent). Those measurements indicate that flow variation from the annual average influent flow was less than +/- one percent during FY17. In absolute terms, the three-month average for January, February and March was 1,721 mgd which is 0.6 percent less than the 12-month (fiscal year) average of 1,731 mgd. The three-month average for July, August and September was 1,749 mgd which is 1.0 percent more than the 12-month average.

Note that regional treatment plant influent flow peaks in the summer and fall months when I/I is typically at a minimum. Influent flow is lowest in the winter months when I/I typically is at a maximum. These phenomena demonstrate that discharge from industrial users may be the greatest source of flow fluctuation in the regional treatment plant influent and that I/I is not a meaningful source of flow load on the wastewater system.

Based on regional treatment plant influent flow patterns, no costs for "O. M. & R. [operation, maintenance, and replacement]" are directly attributable to I/I or "distributed among all users."

³ Clear water from Inflow and infiltration belongs in stormwater sewers or on the surface of the ground, and not in the sanitary sewers. A stormwater sewer is a pipe system designed to carry rainwater away.

⁴ See Section 1-4 - Allocation of Annual Revenue Requirements and Rate Determination from the *Revenue Program Guidelines* (Appendix G) March 1998 Edition from the Policy for Implementing The State Revolving Fund For Construction Of Wastewater Treatment Facilities.

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Section 3 Financial Plan and Revenue Requirements

Revenue from rates must be sufficient to meet the following financial planning criteria:

- 1. Provide funds for operating, capital and debt service expenditures;
- 2. Maintain annual fund balances that meet annual target fund balances;
- 3. Meet debt service coverage requirements;
- 4. Meet the goals of the policies that are in the City's Financial Management Plan;
- 5. Satisfy City Council rate increase goals; and
- 6. Meet legal requirements.

3.1 Capital Improvement Program Expenditures

As part of the FY 2020-2024 Rate Plan, capital improvements are proposed for the on-going capital budget to provide necessary rehabilitation and improvements to facilities and comply with regulatory mandates. Additional debt financing (revenue bonds, state loans, etc.) is anticipated.

The benefits of a proactive asset management program include:

- Prolonging asset life and improving decisions about asset rehabilitation, repair, and replacement
- · Meeting consumer demands with a focus on system sustainability
- · Setting rates based on sound operational and financial planning
- Budgeting focused on critical activities for sustained performance
- · Meeting customer service expectations and regulatory requirements
- Improving responses to emergencies
- Improving the security and safety of assets
- Reducing overall costs for both operations and capital expenditures

CIP expenditures for FY18 through FY24, by project category, are summarized in the pair of tables below. Expenditures for FY18 are actual values. Expenditures for FY19-23 are based on the adopted FY19-FY23 budget and updates from Wastewater Division capital improvement program planning documents. Expenditures for FY24 are from Wastewater Division long term capital improvement program projections.

Table 3-1. Projected CIP Expenditures, FY18 - FY24									
Project Costs in \$millions	Actual	Budget			Projected	ł		Tot	al
Project Category	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY20 -	FY24
Treatment Plant Rehabilitation/Operation	\$3.9	\$30.0	\$11.8	\$7.4	\$7.2	\$6.7	\$9.4	\$42.5	24%
Collection System/Lift Stations	9.7	8.3	4.0	8.2	6.7	6.7	6.7	\$32.3	18%
Collection System Capacity	0.6	2.7	1.1	0.5	28.1	0.5	0.5	\$30.7	17%
Discharge Permit/Regulatory Requirements	0.0	0.5	0.0	0.0	3.8	0.0	26.8	\$30.6	17%
Treatment/Digester Capacity	0.0	0.0	0.0	0.0	0.0	21.7	0.0	\$21.7	12%
Recycled Water Treatment & Distribution	13.1	48.1	2.0	4.1	3.1	3.6	4.1	\$16.9	10%
DPU Administration & Maintenance Facility	0.0	4.0	3.7	0.5	0.0	0.0	0.0	\$4.2	2%
Total Expenditures	\$27.3	\$93.6	\$22.6	\$20.7	\$48.9	\$39.2	\$47.5	\$178.9	100%

Between FY20 and FY24 (five fiscal years), total projected CIP expenditures are approximately \$178.9 million. Approximately 70 percent of the CIP expenditures are projected to be funded with cash from wastewater rates and charges. The remainder of the expenditures will be funded from low interest State Revolving Fund (SRF) loans or revenue bonds that are repaid with rate revenues. CIP expenditures for FY20 through FY24 are summarized by funding source in the table below.

Table 3-2 Project	ted CIP Expendit	ures Funding Summary, FY20 – FY24	rements \$26.8 \$21.7 <u>n in SE Fresno \$4.0</u> \$52.5 <i>29</i> tem \$1.8 <i>1</i>				
Project Costs in \$millions							
Cash/Grant Funded Projects		Bond Funded Projects					
Treatment Facility Rehabilitation/Operation	\$42.5	Discharge Permit/Regulatory Requirements	\$26.8				
Collection System/Lift Stations	\$32.3	Treatment/Digester Capacity	\$21.7				
Collection System Capacity	\$30.7	Design Recycled Water/Reclamation in SE Fresno	<u>\$4.0</u>				
Recycled Water Treatment & Distribution	\$11.1	Total	\$52.5	29%			
Discharge Permit/Regulatory Requirements	\$3.8						
DPU Administration & Maintenance Facility	<u>\$4.2</u>	SRF Funded Projects					
Total	\$124.6 70%	SW Recycled Water Distribution System	\$1.8	1%			
CIP Total FY20 - FY24	\$178.9						



3.2 Operation and Maintenance Expenditures

O&M expenditures include the cost of employee services, professional and other services, supplies, interdepartmental charges and recycled water.⁵ O&M expenditures also include the costs of providing technical services such as water quality testing services and other administrative costs of the wastewater system. These costs are a normal obligation of the system and are met from operating revenues as they are incurred. They enable the City to provide wastewater collection, treatment and disposal services that meets all current State and Federal quality mandates and satisfy wastewater discharge needs of residential, commercial, industrial, municipal, and institutional customers. Projected O&M expenditures for FY18 – FY24 are summarized in the table below and shown in detail in Table C-1 in Appendix C.

Interdepartmental charges consist of expenses provided by other DPU divisions or City departments for services such as utility billing and collection; fleet fuel, maintenance and acquisition; telephone and computer equipment, maintenance and support; and DPU and general City administrative services.

Table 3-3. Projec	cted Operating	g and Mainte	enance Expe	enditures, F	Y18 - FY24		
	Actual	Budget			Projected		
Category	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Operating							
Employee Services	\$13.5	\$16.3	\$16.8	\$17.3	\$17.9	\$18.4	\$19.0
Professional & Other Services	4.0	5.0	5.1	5.3	5.5	5.6	5.8
Utilities & Property Services	6.9	7.4	7.7	7.9	8.1	8.4	8.6
Supplies, Property & Other	6.2	6.4	6.6	6.8	7.0	7.2	7.4
Interdepartment charges	8.0	8.3	8.6	8.8	9.1	9.4	9.7
Recycled Water	<u>0.0</u>	0.1	0.1	0.1	0.1	<u>0.1</u>	<u>0.1</u>
Total Operating Costs	38.7	43.5	44.9	46.2	47.6	49.0	50.5
Total Debt Service	18.7	19.9	5.6	11.5	11.2	12.8	15.1
CIP (cash), less Clovis portion	16.3	65.7	19.6	20.1	48.3	17.3	13.4
Total Expenditures	73.6	129.1	70.0	77.8	107.0	79.1	79.0

⁵ FY18 values are from the accounting trail balance. FY19 values are from the City of Fresno Mayor's Adopted Fiscal Year 2019 Budget. Values for FY20 – FY24 are based on projections from FY19.

3.3 Revenue Required from Rates

The approximate amount of revenues required from rates (treatment charges) for the five-year period, FY20 through FY24, is \$382.2 million. Another \$42.8 million in revenues is projected from other sources. Expenditures during the same period are projected to be approximately \$413.1 million. The operating fund balance is projected to increase from approximately \$11.9 to \$15.1 million during the five-year period. The budgeted minimum reserve balance in FY24 is \$10.1 million.

Cash flow for FY19 includes a transfer of \$3.1 million to the General Fund as a short-term loan. The loan terms are 1.3489 percent interest and annual payments over five years beginning FY19. The interest rate is slightly higher than the interest rate for monies deposited in the City's pooled reserves. The loan is paid by FY24 and does not impact the rate increase recommendations. The Wastewater Fund earns interest of approximately \$127,000 for making the loan.

Projected revenue required from treatment charges for FY20 – FY24 are summarized in the table below. Revenues from treatment charges for FY18 and FY19 using the current rates are shown for comparison.

	Table 3-4.	Projected F	FY18 – FY24	Cash Flow				
	Actual	Budget		Project	ted Five-Year	Plan		FY20 -
All Cash Flow in \$millions	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY24
REVENUES								
Treatment Charges	\$73.9	\$73.4	\$73.4	\$74.9	\$76.4	\$77.9	\$79.5	\$382.2
Clovis Payments	4.3	3.8	3.8	3.9	4.0	4.1	4.2	20.0
Pretreatment	0.4	0.4	0.4	0.4	0.4	0.4	0.4	2.1
All Other	4.6	2.5	3.0	3.9	5.0	4.4	4.4	20.7
Total Revenues	83.2	80.1	80.7	83.1	85.8	86.8	88.5	424.9
EXPENDITURES								
Operating	\$38.7	\$43.5	\$44.9	\$46.2	\$47.6	\$49.0	\$50.5	\$238.2
Debt Service	18.7	19.9	5.6	11.5	11.2	12.8	15.1	56.2
Capital (cash); less Clovis portion	16.3	65.7	19.6	20.1	48.3	17.3	13.4	118.7
Total Expenditures	73.6	129.1	70.0	77.8	107.0	79.1	79.0	413.1
NET TRANSFERS	11.0	18.8	(5.9)	1.9	8.4	(5.9)	(5.9)	(7.5)
Operating Fund Ending Balance	41.2	11.9	16.4	23.3	10.2	11.7	15.1	
Minimum Balance (75 Days O&M)	\$7.7	<i>\$8.7</i>	\$9.0	<i>\$9.2</i>	\$9.5	\$9.8	\$10.1	
Debt Service Coverage Ratio	2.39x	1.84x	<i>6.41x</i>	<i>3.20x</i>	<i>3.41x</i>	2.95x	2.52x	

Detailed revenues, expenditures and transfers are shown in Table C-1 in Appendix C.



3.4 Enterprise Fund Minimum Balance

A minimum fund balance (reserves) was developed for the enterprise fund. The fund balance should provide for levels of working capital that will enable the City to adjust to unexpected changes in the timing of accounts receivable from ratepayers, payments for unexpected increases in 0&M expenses or other fluctuations in cash flow. The minimum fund balance developed by City staff is based on 75 days of annual operating expenditures. In FY20, 75 days of cash is estimated to equal approximately \$10.7 million. Cash flow for FY18 – FY24 is summarized in the figure below and shown in detail in Table C-1 in Appendix C.



Figure 3-2. Projected Operating and Capital (Cash) Expenditures and Debt Service, FY18 - FY24

3.5 Wastewater System Financial Management Plan Goals

The purpose of the Financial Management Plan is to outline the strategic financial management plan and guiding principles for the City of Fresno's water, wastewater and solid waste utility funds. The strategic financial management plan is intended to establish basic guidance for fiscal management. The goals of the fiscal management policies are categorized in the Financial Management Plan into the categories of general financial; asset management; debt management; rates, fees and charges; customer care; and annual budget process.

Measures of attainment of balances for each goal are listed in the table below for FY18 – FY24 and shown in detail in Table C-1 in Appendix C.

Table 3-5. F	inancial Ma	nagement	Plan Goal	ls, FY18 –	FY24			
GENERAL FINANCIAL								
Operating Reserves	<u>Minimum</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Minimum Balance as a Percent of O&M	=>20%	106%	27%	36%	50%	21%	23%	29%
Minimum Balance as Days of O&M Expenditure	s 75	385	98	131	182	76	86	107
Minimum Balance		7,700	8,700	9,000	9,200	9,500	9,800	10,100
RATES, FEES AND CHARGES								
Operating Rate Stabilization Reserve	<u>Minimum</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Reserve as a Percent of Operating Revenues	=>5%	11%	6%	7%	7%	5%	7%	10%
Minimum Balance		4,200	4,000	4,000	4,200	4,300	4,300	4,400
ASSET MANAGEMENT POLICIES								
Capital Improvements Reserve	<u>Minimum</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Reserve as a Percent of Net Total Capital Asset	s =>2%	1%	1%	1%	1%	1%	2%	3%
Minimum Balance		13,300	14,700	14,600	14,600	15,100	15,400	15,900
DEBT MANAGEMENT								
Debt Service Coverage Ratio	<u>Minimum</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Coverage Ratio	1.60x	2.39x	1.84x	6.41x	3.20x	3.41x	2.95x	2.52x
Debt Service as a Percent of Revenue	<u>Minimum</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Debt Service as a Percent of Revenue	<=35%	22%	25%	7%	14%	13%	15%	17%
Cash Financing of Capital	<u>Minimum</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Cash for Capital Projects	=>30%	59%	70%	91%	100%	100%	45%	35%
Debt Burden to Asset Value	<u>Maximum</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Debt Burden to Asset Value Ratio	<=50%	11%	17%	17%	16%	15%	17%	20%

Section 4 Cost of Service Analysis

The total amount of revenue required from rates is allocated between amounts to be recovered from the billable parameters of flow, BOD, TSS and accounts/units. Allocation is accomplished by the development of percentage allocations among the four parameters. The four parameters and the allocations are based on principles and methodology found in the State of California *Revenue Program Guidelines*. The use of these industry standard principles and methods ensures that revenue requirements are equitably recovered from classes of customers in proportion to the cost of serving those customers.

The general cost of service process includes the following steps:

- 1. Identification of annual revenue requirements;
- 2. Allocation of annual revenue requirements to billable parameters;
- 3. Development of unit costs of service for each billable parameter; and
- 4. Distribution of costs to customer classes.

Annual revenues required from rates were identified in Section 3. Development of unit costs of service and distribution of costs to customer classes is presented in this section.

4.1 Billable Parameters

The billable parameters are flow, BOD, TSS and accounts/units. Each of the billable parameters is described below.

Flow. Flow is the rate at which wastewater is discharged to the sanitary sewer. Units of measure include gallons per day (gpd), million gallons per day (mgd). Flow is often expressed in terms of volume. Volume units of measure include hundred cubic feet (HCF) and million gallons. The two terms are used interchangeably with their corresponding unit of measure. For example, average monthly wastewater discharge for a customer could be expressed as a volume of 9 HCF or a flow of 221 gpd.

BOD. BOD is an acronym for Biochemical Oxygen Demand. BOD is one of the two primary conventional pollutants removed during the treatment process.

TSS. TSS is an acronym for Total Suspended Solids. TSS is one of the two primary conventional pollutants removed during the treatment process.

Account/Dwelling Unit. The source of the wastewater discharge with a connection (direct or indirect) to the sanitary sewer. Dwelling units in multiple family dwellings are connected to the sanitary sewer through an account with a direct connection to the sanitary sewer. Account/Dwelling Unit charges are based on costs of serving every account regardless of the flow or strength (BOD and TSS levels) of wastewater discharge.

4.2 Allocation of Revenue Requirements to Billable Parameters

The allocation of FY18 O&M expenses, debt service, capital improvements (cash funded) and transfers to billable parameters is summarized in the table below. Allocations to billable parameters for FY18 total expenditures are used to allocate annual revenue requirements to billable parameters for rate development.

The allocation of revenue requirements to billable parameters for FY18 expenditures is summarized in the table below. Operating & Maintenance and Capital Improvements allocations are based on industry standard principles and methods.

Table	4-1. Alloc	ation of F	Y18 Expe	nditures	to Billable	Parameter	s		
						Bas	is of Alloca	tion [1, 2, 3	3]
					Account/				Account/
	FY18				Dwelling				Dwelling
	Total	Flow	BOD	TSS	Unit	Flow	BOD	TSS	Unit
Operating & Maintenance									
Employee svcs, treatment	10,857	3,909	2,931	2,931	1,086	36.0%	27.0%	27.0%	10.0%
Employee svcs, collection	2,686	2,417	0	0	269	90.0%	0.0%	0.0%	10.0%
Purchased professional svcs	3,783	530	397	397	2,459	14.0%	10.5%	10.5%	65.0%
Purchased property svcs, xUtilities	1,452				1,452				100.0%
Utilities	5,465	2,186	1,640	1,640		40.0%	30.0%	30.0%	
Other purchased services	218				218				100.0%
Supplies	5,315	1,913	1,435	1,435	532	36.0%	27.0%	27.0%	10.0%
Property	413	165	124	124		40.0%	30.0%	30.0%	
Other Objects	461				461				100.0%
Interdept charges, treatment	5,981				5,981				100.0%
Interdept charges, collection	2,063				2,063				100.0%
Recycled water treatment	0	0	0	0		40.0%	30.0%	30.0%	
Recycled water distribution	3	1	1	1		40.0%	30.0%	30.0%	
Debt Service	18 <i>,</i> 658	11,405	3,626	3,626		61.1%	19.4%	19.4%	
Capital Improvements, Cash									
CIP: treatment plant	5,992	2,397	1,798	1,798		40.0%	30.0%	30.0%	
CIP: collection system	10,297	10,297				100.0%			
Transfers (In)/Out	(12,673)	(3,642)	(2,138)	(2,138)	(4,755)	28.7%	16.9%	16.9%	37.5%
Total Expenditures	60,971	31,579	9,814	9,814	9,765	51.8%	16.1%	16.1%	16.0%

Notes

1 Operating & Maintenance and Capital Improvements allocations are based on industry standard principles and methods.

2 Debt service allocation is based on the composite allocation of treatment plant and collection system CIPs for FY20 - FY24.

				ŀ	Account/			/	Account/
				I	Dwelling				Dwelling
<u>Expenditure Category (\$x1000)</u>	<u>Total</u>	<u>Flow</u>	<u>BOD</u>	<u>TSS</u>	<u>Unit</u>	<u>Flow</u>	<u>BOD</u>	<u>TSS</u>	<u>Unit</u>
CIP: treatment plant	115,900	46,360	34,770	34,770		40.0%	30.0%	30.0%	
CIP: collection system	63,000	63,000				100.0%			
CIP: composite	178,900	109,360	34,770	34,770		61.1%	19.4%	19.4%	
3 The Transfers composite allocation	on is based	on the co	mposite o	of Operation	ng & Maint	enance expe	enditures.		
Operating & Maintenance	38 <i>,</i> 697	11,121	6,528	6,528	14,520	28.7%	16.9%	16.9%	37.5%

The allocation of annual revenue required from rates to billable parameters is summarized in the table below.

Table 4-2. Alloc	Table 4-2. Allocation of Annual Revenue Required from Rates to Billable Parameters									
Item		FY20	FY21	FY22	FY23	FY24				
Revenue Required										
From Rates (x\$1000)		73,430	74,900	76,400	77,930	79,490				
	fromTable 4-1									
Allocation	% of Total									
Flow	51.8%	38,031	38,793	39,570	40,362	41,170				
BOD	16.1%	11,819	12,056	12,297	12,544	12,795				
TSS	16.1%	11,819	12,056	12,297	12,544	12,795				
Accounts/Units	16.0%	11,760	11,995	12,236	12,481	12,731				

4.3 Billable Parameter Unit Costs

Unit costs for each billable parameter are calculated by dividing the annual revenue requirement for each parameter (listed in Table 4-2) by the annual amount of discharge for each parameter or the number of accounts/dwelling units (listed in Tables B-1 through B-4). The calculation of billable parameters unit costs for FY20 – FY24 is summarized in the table below.

Table 4-3. Billable Parameters Unit Costs								
Item		FY20	FY21	FY22	FY23	FY24		
Flow								
Revenue Required	see Table 4-2	\$38,031,327	\$38,792,679	\$39,569,568	\$40,361,995	\$41,169,960		
Flow, HCF	see Table B-1	26,879,124	26,693,928	26,508,146	26,321,779	26,134,826		
Unit Costs, \$/HCF	(round to \$0.01)	\$1.41	\$1.45	\$1.49	\$1.53	\$1.58		
BOD								
Revenue Required	see Table 4-2	\$11,819,347	\$12,055,959	\$12,297,400	\$12,543,670	\$12,794,769		
BOD, pounds	see Table B-2	63,050,495	62,719,452	62,387,346	62,054,175	61,719,941		
Unit Costs, \$/pound	(round to \$0.01)	\$0.19	\$0.19	\$0.20	\$0.20	\$0.21		
TSS								
Revenue Required	see Table 4-2	\$11,819,347	\$12,055,959	\$12,297,400	\$12,543,670	\$12,794,769		
TSS, pounds	see Table B-3	54,974,358	54,602,786	54,230,040	53,856,120	53,481,027		
Unit Costs, \$/pound	(round to \$0.01)	\$0.21	\$0.22	\$0.23	\$0.23	\$0.24		
Account/Dwelling Unit								
Revenue Required	see Table 4-2	\$11,759,979	\$11,995,403	\$12,235,632	\$12,480,664	\$12,730,502		
Accts/Dwelling Units	see Table B-4	196,962	197,253	197,544	197,835	198,126		
Unit Costs, \$/month	(round to \$0.01)	\$4.98	\$5.07	\$5.16	\$5.26	\$5.35		

The unit costs for each billable parameter listed in the table above are used to develop rates or monthly bills for every customer. Use of these unit costs to develop rates and monthly bills ensures that revenue requirements are equitably recovered from customers in proportion to the cost of serving those customers.

4.4 Distribution of Flow, BOD and TSS Revenue Requirements to Customer Classes

Annual flow, BOD and TSS revenue requirements for each customer class are developed by multiplying the unit costs for each billable parameter (listed in Table 4-3) by the annual amount of discharge for each customer class each parameter (listed in Tables B-1 through B-3). The calculation of annual revenue requirements for each customer class for FY20 – FY24 is summarized in the table below. Calculation of annual revenue requirements for each customer class are included in Appendix D, Table D-1 (flow), Table D-2 (BOD), Table D-3 (TSS) and Table D-4 (flow + BOD + TSS).

Table 4-4. Annual Flow	, BOD and TSS Rev	enue Requireme	ents for Each Cu	stomer Class	
Customer Category	FY20	FY21	FY22	FY23	FY24
Revenue Allocation (round to \$10,000)					
Residential	\$37,720,000	\$38,270,000	\$38,820,000	\$39,370,000	\$39,920,000
Schools (ADA rates)	\$250,000	\$260,000	\$270,000	\$280,000	\$280,000
Commercial	\$11,360,000	\$11,710,000	\$12,080,000	\$12,460,000	\$12,850,000
Industrial	\$12,340,000	\$12,660,000	\$13,000,000	\$13,350,000	\$13,700,000
Total	\$61,670,000	\$62,900,000	\$64,170,000	\$65,460,000	\$66,750,000
Percent of Total					
Residential	61%	61%	60%	60%	60%
Schools (ADA rates)	0.4%	0.4%	0.4%	0.4%	0.4%
Commercial	18%	19%	19%	19%	19%
Industrial	20%	20%	20%	20%	21%
Total	100%	100%	100%	100%	100%

4.5 Distribution of Account/Dwelling Unit Revenue Requirements to Customer Classes

Annual account/dwelling revenue requirements for each customer class are developed by multiplying the unit costs for accounts/dwelling units (listed in Table 4-3) by the number of accounts/dwelling units (listed in Table B-4). The calculation of annual revenue requirements for each customer class for FY20 – FY24 is shown in Appendix D, Table D-5 and summarized in the table below.

Table 4-5. Annual Acco	unt/Dwelling Unit R	evenue Require	ments for Each	Customer Class	
Customer Category	FY20	FY21	FY22	FY23	FY24
Revenue Allocation (round to \$10,000)					
Residential	\$11,280,000	\$11,510,000	\$11,740,000	\$11,970,000	\$12,210,000
Schools (ADA rates)	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Commercial	\$470,000	\$480,000	\$490,000	\$500,000	\$510,000
Industrial	\$2,000	\$2,000	\$2,000	\$3,000	\$3,000
Total	\$11,754,000	\$11,994,000	\$12,234,000	\$12,475,000	\$12,725,000
Percent of Total					
Residential	96%	96%	96%	96%	96%
Schools (ADA rates)	0.02%	0.02%	0.02%	0.02%	0.02%
Commercial	4%	4%	4%	4%	4%
Industrial	0.02%	0.02%	0.02%	0.02%	0.02%
Total	100%	100%	100%	100%	100%

Section 5 Rates and Monthly Bills

Distribution of costs to billable parameters and customer classes shown in the preceding section is followed by the calculation of rates and monthly bills in this section.

5.1 Recommended Changes to Rate Structure

The current wastewater rate structure has been in place for over 20 years. Current wastewater rates and the rate structure are listed in the Master Fee Schedule (MFS), pages 130 – 136, in Appendix A. The term "rate structure" refers to the selection of customer classes and corresponding Flow, BOD and TSS assignments and the type of rate applied to recover costs – volumetric (in units of \$/HCF, for example) or fixed (in units of \$/month, for example). Recommended changes to the rate structure are described below.

Replace the "Senior Citizen" reduced monthly charge with access to a DPU Affordability Credit Program (ACP). The current rate structure provides Senior Citizen customers a monthly charge that is 10 percent lower than for Single Family customers. It is recommended that the Senior Citizen customer category be eliminated and that Senior Citizens be given access to a DPU Affordability Credit Program applicable to wastewater. The Affordability Credit Program is funded with non-rate revenues.

Set the "Multi Family First Unit" monthly charge equal to the "Multi Family Each Additional Unit" monthly charge. The current rate structure recognizes two types of Multi Family customers - "Multi Family First Unit" and "Multi Family Each Additional Unit". Multi Family First Unit customers pay a monthly charge equal to that for Single Family customers. Multi Family Each Additional Unit customers pay a monthly charge that is 33 percent lower than for Single Family customers. All Multiple Family customers have the same flow, BOD and TSS wastewater discharge characteristics for each unit regardless of the number of units. Based on wastewater discharge characteristics described in Section 2, it is recommended that Multi Family First Unit monthly charge be set equal to the Multi Family Each Additional Unit monthly charge.

Replace the "Minimum Charge" with an "Account/Dwelling Unit Charge". Currently, there is a Minimum Charge applied to every account regardless of the flow or strength characteristics of the customer. The Minimum Charge is equal to the Single Family customers' monthly charge. It is recommended that an Account/Dwelling Unit Charge be applied to every account or dwelling unit. The Account/Dwelling Unit Charge would be in addition to any charges for Flow, BOD and TSS discharges.

Eliminate the Industrial and Commercial customer classes "potable" vs "effluent" rate difference. The current rate structure recognizes two classes of customers - "Potable water, metered" (potable) and "Sewage effluent, metered" (effluent). Rates for "potable" customer (wastewater flow based on metered water use) are lower than those for "effluent" customers (wastewater measured with a flow meter).

The difference represents an estimate of the average metered water use that is not discharged to the sanitary sewer (mainly outdoor irrigation) by "potable" customers. Note that not all 7,700 "potable" commercial customers have outdoor irrigation through their meter and not all irrigation use is the same for each user. It is recommended that the "potable" vs "effluent" rate distinction be eliminated. "Potable" customers with outdoor irrigation will be encouraged to establish a new irrigation meter connection to reduce potable metered water use and increase accuracy of wastewater flow estimation.

Eliminate the Industrial Low customer class. Currently, the "Industrial Low" and the "Commercial Low" classes have the same potable and effluent rates. "Industrial Low" is mostly used for industrial users that require a flow estimate of their sanitary discharge because of the use of an effluent meter measuring their process discharge only. It is recommended that the "Industrial Low" class/rate be eliminated and that "Commercial Low" class/rates be used instead.

5.2 Customer Class Rates for Account/Dwelling Unit

Rates are developed for each customer class that recover the revenue requirements for accounts/dwelling units. The rates are the same as the unit cost for accounts/dwelling units shown in Table 4-3. Account/Dwelling Unit charges are based on costs of serving every account regardless of the flow or strength (BOD and TSS levels) of wastewater discharge. The rates are expressed in \$/month and are shown in the table below.

5.3 Customer Class Rates for Flow-BOD-TSS

Rates are developed for each customer class that recover the revenue requirements for the flow, BOD and TSS billable parameters. The rates are developed by dividing the sum of the revenue requirements for the flow, BOD and TSS billable parameters (listed in Table 4-4) by the flow for each customer class (listed in Table B-1). The rates are in units of \$/HCF and are shown in the table below. The rates for each customer class vary depending on the assignments of BOD and TSS concentrations to each customer class (see Section 2).

Table 5-1. Customer Class Rates for Flow-BOD-TSS and Monthly Charges							
	FY20	FY21	FY22	FY23	FY24		
Rates for Flow-BOD-TSS							
Residential		all r	ates are in \$/	HCF			
Single Family	\$2.187	\$2.245	\$2.305	\$2.368	\$2.432		
Senior Citizen	\$2.187	\$2.245	\$2.305	\$2.368	\$2.432		
Multiple Family 1st	\$2.187	\$2.245	\$2.305	\$2.368	\$2.432		
Multiple Family Add'l Units	\$2.187	\$2.245	\$2.305	\$2.368	\$2.432		
Commercial/Industrial Low							
Potable Water		all r	ates are in \$/	HCF			
High	\$3.397	\$3.487	\$3.580	\$3.675	\$3.773		
Medium	\$2.297	\$2.359	\$2.422	\$2.487	\$2.554		
Low	\$1.795	\$1.843	\$1.893	\$1.944	\$1.997		
Sewage Effluent		all r	ates are in \$/	HCF			
High	\$3.397	\$3.487	\$3.580	\$3.675	\$3.773		
Medium	\$2.297	\$2.359	\$2.422	\$2.487	\$2.554		
Low	\$1.795	\$1.843	\$1.893	\$1.944	\$1.997		
Schools (ADA Rates)		all r	ates are in \$/	HCF			
K-garten/Elem	\$2.294	\$2.355	\$2.418	\$2.483	\$2.550		
Middle	\$2.294	\$2.355	\$2.418	\$2.483	\$2.550		
Senior	\$2.294	\$2.355	\$2.418	\$2.483	\$2.550		
Parochial	\$2.294	\$2.355	\$2.418	\$2.483	\$2.550		
College	\$2.294	\$2.355	\$2.418	\$2.483	\$2.550		
Industrial Low		all r	ates are in \$/	HCF			
Potable Water	\$1.795	\$1.843	\$1.893	\$1.944	\$1.997		
Sewage Effluent	\$1.795	\$1.843	\$1.893	\$1.944	\$1.997		
Monthly Charge per		all ra	tes are in \$/n	nonth			
Account/Dwelling Unit	\$4.98	\$5.07	\$5.16	\$5.26	\$5.35		

5.4 Single Family and Senior Citizen Monthly Charges

For Single Family and Senior Citizen customer classes, the monthly charge has two components - the customer class rate for flow, BOD and TSS billable parameters (listed in Table 5-1) and the account/dwelling unit rate (listed in Table 5-1). Development of the monthly charge for both customer classes is shown in the table below.

Charges for both customer classes will be the same because both customer classes are assigned the same flow, BOD and TSS wastewater discharge characteristics (see Table 2-1).

The current monthly charge for Single Family customers is \$25.75. The current monthly charge for Senior Citizen customers is \$23.16. The recommended monthly charge for Single Family and Senior Citizen customers for FY20 is \$24.55.

It is recommended to replace the "Senior Citizen" customer category with the Single Family rate and access to a DPU Affordability Credit Program applicable to wastewater.

Table 5-2. Single Family and Senior Citizen Monthly Charges						
Item	FY20	FY21	FY22	FY23	FY24	
Flow/BOD/TSS Component						
Flow/BOD/TSS \$/HCF	\$2.187	\$2.245	\$2.305	\$2.368	\$2.432	
Flow, HCF						
Single Family	11,298,464	11,103,577	10,908,299	10,712,631	10,516,573	
Senior Citizen	1,400,442	1,380,249	1,359,861	1,339,278	1,318,499	
Total	12,698,906	12,483,826	12,268,160	12,051,909	11,835,072	
Flow/BOD/TSS \$ Allocation						
Single Family	\$24,704,122	\$24,928,781	\$25,148,686	\$25,363,169	\$25,571,540	
Senior Citizen	\$3,062,070	\$3,098,814	\$3,135,110	\$3,170,867	\$3,205,993	
Total	\$27,766,192	\$28,027,595	\$28,283,796	\$28,534,036	\$28,777,532	
Accounts						
Single Family	105,253	105,353	105,453	105,553	105,653	
Senior Citizen	13,046	13,096	13,146	13,196	13,246	
Total	118,299	118,449	118,599	118,749	118,899	
Flow/BOD/TSS Charge	\$19.56	\$19.72	\$19.87	\$20.02	\$20.17	
Account Component						
Account, \$/month	\$4.98	\$5.07	\$5.16	\$5.26	\$5.35	
Total Monthly Charge	\$24.53	\$24.79	\$25.04	\$25.28	\$25.52	
(rounded to \$0.05)	\$24.55	\$24.80	\$25.05	\$25.30	\$25.50	

5.5 Multiple Family Monthly Charges

For the Multiple Family customer class, the monthly charge has two components - the customer class rate for flow, BOD and TSS billable parameters (listed in Table 5-1) and the account/dwelling unit rate (listed in Table 5-1).

Development of the monthly charge is shown in the table below. The current monthly charge for Multiple Family - 1st Unit customers is \$25.75. The current monthly charge for Multiple Family - Additional Unit customers is \$17.29.

It is recommended to replace both current Multiple Family charges – 1st Unit and Additional Units. Currently, Multiple Family - 1st Unit customers pay the same monthly charge as Single Family customers. Multiple Family - Additional Unit pay a monthly charge that is approximately 33 percent less than that for a Multiple Family - 1st Unit customer.

All Multiple Family customers have the same flow, BOD and TSS wastewater discharge characteristics for each unit regardless of the number of units. As shown in Table 2-1 and discussed in Section 2, all Multiple Family customers (whether 1st Unit or Additional Unit) will be assigned the same flow, BOD and TSS wastewater discharge characteristics and, therefore, will have the same monthly charge. Development of the monthly charge for all Multiple Family accounts and dwelling units is shown in the table below.

Table 5-3. Multiple Family Monthly Charges						
Item	FY20	FY21	FY22	FY23	FY24	
Flow/BOD/TSS Component						
Flow/BOD/TSS \$/HCF	\$2.187	\$2.245	\$2.305	\$2.368	\$2.432	
Flow, HCF						
Multiple Family 1st Unit	468,602	469,890	471,178	472,466	473,754	
Multiple Family Add'l Units	4,084,490	4,090,931	4,097,372	4,103,813	4,110,253	
Total	4,553,092	4,560,821	4,568,550	4,576,279	4,584,008	
Flow/BOD/TSS \$ Allocation						
Multiple Family 1st Unit	\$1,024,599	\$1,054,956	\$1,086,284	\$1,118,609	\$1,151,956	
Multiple Family Add'l Units	\$8,930,749	\$9,184,601	\$9,446,341	\$9,716,165	\$9,994,273	
Total	\$9,955,348	\$10,239,557	\$10,532,625	\$10,834,774	\$11,146,229	
Accounts						
Multiple Family 1st Unit	7,276	7,296	7,316	7,336	7,356	
Multiple Family Add'l Units	63,416	63,516	63,616	63,716	63,816	
Total	70,692	70,812	70,932	71,052	71,172	
Flow/BOD/TSS Charge	\$11.74	\$12.05	\$12.37	\$12.71	\$13.05	
Account Component						
Account, \$/month	\$4.98	\$5.07	\$5.16	\$5.26	\$5.35	
Total Monthly Charge	\$16.71	\$17.12	\$17.54	\$17.96	\$18.41	
(rounded to \$0.05)	\$16.70	\$17.10	\$17.55	\$17.95	\$18.40	



5.6 School (ADA) Monthly Charges

For the Schools (ADA) customer class, the monthly charge has two components - the customer class rate for flow, BOD and TSS billable parameters (listed in Table 5-1) and the account/dwelling unit rate (listed in Table 5-1).⁶ The customer class rate is in units of \$/ADA.

Development of the monthly charge is shown in the table below. The current monthly charge for Schools (ADA) is different for each of the five categories of schools. The five categories of schools are: Kindergarten-Elementary, Middle, Senior, College and Parochial.

The consultant recommended two changes: 1) update of the gallons per day assigned to each student in daily attendance; and 2) include staff (teachers, maintenance workers, administrators) in the count of daily attendance. Kindergarten-Elementary, Middle and Parochial categories share the same average wastewater flow characteristic which is different from the average wastewater flow characteristic for Senior and College categories.

As shown in Table 2-1 and discussed in Section 2, each of the five categories of schools is assigned one of two Flow, BOD and TSS wastewater discharge characteristics and, therefore, there will be two different monthly charges (instead of five for the current rates). Development of the monthly charge for all School (ADA) accounts is shown in the table below.

Item	FY20	FY21	FY22	FY23	FY24
K-garten-Elementary/Parochial					
Flow/BOD/TSS Component					
Flow/BOD/TSS, \$/HCF	\$2.294	\$2.355	\$2.418	\$2.483	\$2.550
Flow, HCF	50,113	50,113	50,113	50,113	50,113
Revenue Required	\$114,945	\$118,021	\$121,189	\$124,450	\$127,807
ADA/Year	11,961	11,961	11,961	11,961	11,961
Annual Charge, \$/ADA	\$9.61	\$9.87	\$10.13	\$10.41	\$10.69
(rounded to \$0.05)	\$9.60	\$9.85	\$10.15	\$10.40	\$10.70
Account Component, \$/month per Account	\$4.98	\$5.07	\$5.16	\$5.26	\$5.35
Middle/Senior/College					
Flow/BOD/TSS Component					
Flow/BOD/TSS \$/HCF	\$2.294	\$2.355	\$2.418	\$2.483	\$2.550
Flow, HCF	60,667	60,667	60,667	60,667	60,667
Revenue Required	\$139,152	\$142,877	\$146,712	\$150,659	\$154,723
ADA/Year	8,289	8,289	8,289	8,289	8,289
Annual Charge, \$/ADA	\$16.79	\$17.24	\$17.70	\$18.18	\$18.67
(rounded to \$0.05)	\$16.80	\$17.25	\$17.70	\$18.20	\$18.65
Account Component, \$/month per Account	\$4.98	\$5.07	\$5.16	\$5.26	\$5.35
Annual Wastewater Discharge and ADA					
Flow, HCF					
K-garten/Elementary	36,105	36,105	36,105	36,105	36,105
Middle	7,341	7,341	7,341	7,341	7,341
Senior	44,829	44,829	44,829	44,829	44,829
Parochial	6,667	6,667	6,667	6,667	6,667
College	15,838	15,838	15,838	15,838	15,838
Total	110,781	110,781	110,781	110,781	110,781
ADA/Year*					
K-garten/Elementary	9,250	9,250	9,250	9,250	9,250
Middle	1,003	1,003	1,003	1,003	1,003
Senior	6,125	6,125	6,125	6,125	6,125
Parochial	1,708	1,708	1,708	1,708	1,708
College	2,164	2,164	2,164	2,164	2,164
Total	20 250	20.250	20 250	20.250	20.250

⁶ Schools that are not billed using ADA-based rates are billed at appropriate Commercial customer class rates.

5.7 Commercial Rates and Monthly Charges

Rates are developed for each Commercial customer class that recover the revenue requirements for the flow, BOD and TSS billable parameters. The rates are developed by dividing the sum of the revenue requirements for the flow, BOD and TSS billable parameters (listed in Table 4-4) by the flow for each customer class (listed in Table B-1). The rates are in units of \$/HCF and are shown in the table below. The rates for each customer class vary depending on the assignments of BOD and TSS concentrations to each customer class (see Section 2). An account/dwelling unit rate (listed in Table 5-1) applies to each account.

Table 5-5. Commercial Rates and Monthly Charges						
	FY20	FY21	FY22	FY23	FY24	
Rates for Flow-BOD-TSS						
Potable Water						
High						
Flow/BOD/TSS \$ Allocation	\$2,094,118	\$2,152,587	\$2,212,836	\$2,274,909	\$2,338,848	
Flow, mgd	1.263	1.265	1.267	1.269	1.270	
Flow/BOD/TSS Rate, \$/HCF	\$3.40	\$3.49	\$3.58	\$3.68	\$3.77	
Medium						
Flow/BOD/TSS \$ Allocation	\$2,960,419	\$3,078,348	\$3,200,702	\$3,327,628	\$3,459,273	
Flow, mgd	2.641	2.675	2.708	2.742	2.775	
Flow/BOD/TSS Rate, \$/HCF	\$2.30	\$2.36	\$2.42	\$2.49	\$2.55	
Low						
Flow/BOD/TSS \$ Allocation	\$5,457,545	\$5,613,492	\$5,774,314	\$5,940,135	\$6,111,082	
Flow, mgd	6.232	6.242	6.252	6.262	6.272	
Flow/BOD/TSS Rate, \$/HCF	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	
Sewage Effluent						
High						
Flow/BOD/TSS \$ Allocation	\$26,653	\$27,359	\$28,085	\$28 <i>,</i> 832	\$29,601	
Flow, mgd	0.016	0.016	0.016	0.016	0.016	
Flow/BOD/TSS Rate, \$/HCF	\$3.40	\$3.49	\$3.58	\$3.68	\$3.77	
Medium						
Flow/BOD/TSS \$ Allocation	\$588,629	\$604,384	\$620,605	\$637,305	\$654,492	
Flow, mgd	0.525	0.525	0.525	0.525	0.525	
Flow/BOD/TSS Rate, \$/HCF	\$2.30	\$2.36	\$2.42	\$2.49	\$2.55	
Low						
Flow/BOD/TSS \$ Allocation	\$231,084	\$237,305	\$243,713	\$250,311	\$257,103	
Flow, mgd	0.264	0.264	0.264	0.264	0.264	
Flow/BOD/TSS Rate, \$/HCF	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	
Account/Dwelling Unit, \$ per month	\$4.98	\$5.07	\$5.16	\$5.26	\$5.35	


5.8 Industrial Rates and Monthly Charges

Industrial High strength customers are charged for Flow, BOD and TSS at unit costs for each of those parameters. There are currently 40 Industrial High strength customers.

Unit costs for each billable parameter are calculated by dividing the annual revenue requirement for each parameter (listed in Table 4-2) by the annual amount of discharge for each parameter or the number of accounts/dwelling units (listed in Tables B-1 through B-4). The calculation of billable parameters unit costs for FY18 – FY24 is summarized Table 4-3. The unit costs for each billable parameter listed in Table 4-3 are used to calculate monthly bills for each Industrial High strength customer.

5.9 Current and Recommended Rates and Charges Summary

Table below lists current and recommended rates and charges and the number of Accounts/Units for each of the existing customer classes.

Table 5-6.	Current a	nd Recom	mended \	Vastewa	ter Rates	and Cha	rges, FY	19 – FY	24			
	Number of	Current	Re	commende	d Five-Yea	r Rate Plan						
Customer Class	Accts/Units	FY19	FY20	FY21	FY22	FY23	FY24	FY20	FY21	FY22	FY23	FY24
Residential, \$ per month												
Single Family account	105,053	\$25.75	\$24.55	\$24.80	\$25.05	\$25.30	\$25.50	-5%	1%	1%	1%	1%
Senior Citizen account	12,946	\$23.16	\$24.55	\$24.80	\$25.05	\$25.30	\$25.50	6%	1%	1%	1%	1%
Multiple Family 1st Unit	7,236	\$25.75	\$16.70	\$17.10	\$17.55	\$17.95	\$18.40	-35%	2%	3%	2%	3%
Multiple Family Add'l Units	63.216	\$17.29	\$16.70	\$17.10	\$17.55	\$17.95	\$18.40	-3%	2%	3%	2%	3%
Commercial	, -	, -		,		,						
Potable Water, \$/HCF												
High: BOD or TSS >= 501 mg/L	710	\$3.514	\$3.40	\$3.49	\$3.58	\$3.68	\$3.77	-3%	3%	3%	3%	3%
Medium: BOD or TSS 201-500 mg/L	766	\$1.792	\$2.30	\$2.36	\$2.42	\$2.49	\$2.55	28%	3%	3%	3%	3%
Low: BOD or TSS 0-200 mg/L	6,204	\$1.077	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	67%	3%	3%	3%	3%
Sewage Effluent, \$/HCF			·									
High: BOD or TSS >= 501 mg/L	16	\$3.864	\$3.40	\$3.49	\$3.58	\$3.68	\$3.77	-12%	3%	3%	3%	3%
Medium: BOD or TSS 201-500 mg/L	25	\$1.973	\$2.30	\$2.36	\$2.42	\$2.49	\$2.55	16%	3%	3%	3%	3%
Low: BOD or TSS 0-200 mg/L	140	\$1.184	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	52%	3%	3%	3%	3%
Volumetric Rates, \$/HCF												
High: BOD or TSS >= 501 mg/L	726	na	\$3.40	\$3.49	\$3.58	\$3.68	\$3.77	na	3%	3%	3%	3%
Medium: BOD or TSS 201-500 mg/L	791	na	\$2.30	\$2.36	\$2.42	\$2.49	\$2.55	na	3%	3%	3%	3%
Low: BOD or TSS 0-200 mg/L	6,343	na	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	na	3%	3%	3%	3%
All Users, \$/month (minimum)	,	\$25.75										
All Users, \$/month (per account/un	iit)		\$4.98	\$5.07	\$5.16	\$5.26	\$5.35	na	2%	2%	2%	2%
Industrial	,											
High Potable Water	2											
Volume, \$/HCF		\$0.507	\$1.415	\$1.453	\$1.493	\$1.533	\$1.575	179%	3%	3%	3%	3%
BOD, \$/pound		\$0.261	\$0.187	\$0.192	\$0.197	\$0.202	\$0.207	-28%	3%	3%	3%	3%
TSS, \$/pound		\$0.296	\$0.215	\$0.221	\$0.227	\$0.233	\$0.239	-27%	3%	3%	3%	3%
High Sewage Effluent	38											
Volume, \$/HCF		\$0.559	\$1.415	\$1.453	\$1.493	\$1.533	\$1.575	153%	3%	3%	3%	3%
BOD, \$/pound		\$0.261	\$0.187	\$0.192	\$0.197	\$0.202	\$0.207	-28%	3%	3%	3%	3%
TSS, \$/pound		\$0.296	\$0.215	\$0.221	\$0.227	\$0.233	\$0.239	-27%	3%	3%	3%	3%
Low Potable Water, \$/HCF	128	\$1.077	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	67%	3%	3%	3%	3%
Low Sewage Effluent, \$/HCF	36	\$1.185	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	51%	3%	3%	3%	3%
All Users, \$/month (minimum)		\$25.75										
All Users, \$/month (per account/un	iit)		\$4.98	\$5.07	\$5.16	\$5.26	\$5.35	na	2%	2%	2%	2%
Schools (ADA), \$/ADA/year												
K-garten/Elementary	17	\$15.96	\$9.60	\$9.85	\$10.15	\$10.40	\$10.70	-40%	3%	3%	2%	3%
Middle	1	\$24.76	\$9.60	\$9.85	\$10.15	\$10.40	\$10.70	-61%	3%	3%	2%	3%
Senior	4	\$29.87	\$16.80	\$17.25	\$17.70	\$18.20	\$18.65	-44%	3%	3%	3%	2%
Parochial	5	\$8.63	\$9.60	\$9.85	\$10.15	\$10.40	\$10.70	11%	3%	3%	2%	3%
College	2	\$10.65	\$16.80	\$17.25	\$17.70	\$18.20	\$18.65	58%	3%	3%	3%	2%
All Users, \$/month (per account/	unit)	na	\$4.98	\$5.07	\$5.16	\$5.26	\$5.35	na	2%	2%	2%	2%

Section 6

Proposition 218 Notice and Impact of Rate Changes on Customer Bills

The impact on customers is summarized in terms of annual changes in revenue required from each customer class, annual changes in wastewater rates and charges, and annual changes in monthly bills.

6.1 Recommended Wastewater Rates and Charges

Recommended wastewater rates and charges and percent changes in rates and charges are shown in the table below.

The percent change in recommended FY20 rates versus current rates FY19 rates are not shown in this table because of consolidation of customer categories. Consolidation within the Commercial and Industrial customer categories results in different percent changes for those current categories that are combined. Table 5-6 lists percent changes in recommended FY20 rates versus current rates FY19 rates for all customer classes.

Table 6-1. Recommended Wastewater Rates and Charges, FY20 – FY24										
	Re	commende	ed Five-Yea	r Rate Plan						
Customer Class	FY20	FY21	FY22	FY23	FY24	FY20	FY21	FY22	FY23	FY24
Residential, \$ per month										
Single Family account	\$24.55	\$24.80	\$25.05	\$25.30	\$25.50	-5%	1%	1%	1%	1%
Multiple Family 1st Unit	\$16.70	\$17.10	\$17.55	\$17.95	\$18.40	-35%	2%	3%	2%	3%
Multiple Family Add'l Units	\$16.70	\$17.10	\$17.55	\$17.95	\$18.40	-3%	2%	3%	2%	3%
Commercial										
Volumetric Rates, \$/HCF										
High: BOD or TSS >= 501 mg/L	\$3.40	\$3.49	\$3.58	\$3.68	\$3.77	na	3%	3%	3%	3%
Medium: BOD or TSS 201-500 mg/L	\$2.30	\$2.36	\$2.42	\$2.49	\$2.55	na	3%	3%	3%	3%
Low: BOD or TSS 0-200 mg/L	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	na	3%	3%	3%	3%
All Users, \$/month (per account/unit)	\$4.98	\$5.07	\$5.16	\$5.26	\$5.35	na	2%	2%	2%	2%
Industrial										
High Potable Water/Effluent, \$/HCF										
Volume, \$/HCF	\$1.415	\$1.453	\$1.493	\$1.533	\$1.575	179%	3%	3%	3%	3%
BOD, \$/pound	\$0.187	\$0.192	\$0.197	\$0.202	\$0.207	-28%	3%	3%	3%	3%
TSS, \$/pound	\$0.215	\$0.221	\$0.227	\$0.233	\$0.239	-27%	3%	3%	3%	3%
Low Potable Water/Effluent, \$/HCF	\$1.79	\$1.84	\$1.89	\$1.94	\$2.00	67%	3%	3%	3%	3%
All Users, \$/month (per account/unit)	\$4.98	\$5.07	\$5.16	\$5.26	\$5.35	na	2%	2%	2%	2%
Schools (ADA), \$/ADA-Staff/year										
K-garten/Elementary	\$9.60	\$9.85	\$10.15	\$10.40	\$10.70	-40%	3%	3%	2%	3%
Middle	\$9.60	\$9.85	\$10.15	\$10.40	\$10.70	-61%	3%	3%	2%	3%
Senior	\$16.80	\$17.25	\$17.70	\$18.20	\$18.65	-44%	3%	3%	3%	2%
Parochial	\$9.60	\$9.85	\$10.15	\$10.40	\$10.70	11%	3%	3%	2%	3%
College	\$16.80	\$17.25	\$17.70	\$18.20	\$18.65	58%	3%	3%	3%	2%
All Users, \$/month (per account)	\$4.98	\$5.07	\$5.16	\$5.26	\$5.35	na	2%	2%	2%	2%

6.2 Impact on Residential Monthly Bills

The impact on residential bills varies depending on the customer class. The impact on Single Family, Senior Citizen, Multiple Family 1st Units and Multiple Family Each Additional Unit customer classes is shown in the table below.

Table 6-2. Residential Monthly Bills, Current vs Recommended FY20 – FY24												
	Number of	Current	Re	commende	ed Five-Yea	ir Rate Plan	1					
Customer Class	Accts/Units	FY19	FY20	FY21	FY22	FY23	FY24	FY20	FY21	FY22	FY23	FY24
Residential, \$ per month												
Single Family account	105,053	\$25.75	\$24.55	\$24.80	\$25.05	\$25.30	\$25.50	-5%	1%	1%	1%	1%
Senior Citizen account	12,946	\$23.16	\$24.55	\$24.80	\$25.05	\$25.30	\$25.50	6%	1%	1%	1%	1%
Multiple Family 1st Unit	7,236	\$25.75	\$16.70	\$17.10	\$17.55	\$17.95	\$18.40	-35%	2%	3%	2%	3%
Multiple Family Add'l Units	63,216	\$17.29	\$16.70	\$17.10	\$17.55	\$17.95	\$18.40	-3%	2%	3%	2%	3%

If the City Council updates the Affordability Credit Program (ACP) to include wastewater rates, Senior Citizens that qualify for the updated program could receive credits to their water, wastewater and solid waste bills that would reduce their charges

6.3 Impact on Commercial Rates and Monthly Bills

Development of Commercial Rates and Monthly Charges was shown in the previous section. The impact upon each of the six Commercial customer classes is summarized in the figure below. The figure shows the percent increase in a monthly bill at each unit of wastewater discharge (in units of HCF). Detailed data for the figure is included in Table E-1 in Appendix E. Labels for each of the customer classes show the number of accounts in each class in parenthesis.



Figure 6-1. Commercial Customer Class Monthly Bills

6.4 Impact on Industrial High Rates and Annual Charges

Development of Industrial Rates and Monthly Charges was shown in the previous section. The impact upon each of the 38 Industrial High customers is summarized in the table below. The table shows the units of wastewater discharge (in units of HCF and lbs) for each of the customers for FY17. Annual charges are calculated by multiplying the units of use times the current and recommended FY20 rates. The dollar and percent difference in annual charges is shown for each customer.

Annual charges for each customer would increase by approximately 3 percent per year during the next four years of the Five-Year Rate Plan, FY21 – FY24, given the same (FY17) wastewater discharge characteristics.

	Table 6-3. Industrial High Customer Class Annual Bills, Current vs Recommended Rates FY20												
					Current (F	Y19) Rates			FY20 C0)S Rates			
				Flow	BOD	TSS		Flow	BOD	TSS			
	FY17 Disc	harge Chara	cteristics	(\$/HCF)	(\$/lb)	(\$/lb)		(\$/HCF)	(\$/lb)	(\$/lb)		Ś	%
	Flow (HCF)	BOD (lbs)	TSS (lbs)	\$0.559	\$0.261	\$0.296	Total	\$1,415	\$0.187	\$0.215	Total	Diff.	Diff.
User 1	41.614	208.017	214.238	\$23,262	\$54,292	\$63,415	\$140.969	\$58,884	\$38,899	\$46.061	\$143.844	\$2.875	2%
User 2	73.414	64,708	42.052	\$41.038	\$16,889	\$12,447	\$70.375	\$103,881	\$12,100	\$9.041	\$125.022	\$54.648	78%
User 3	88.560	558,157	389.276	\$49,505	\$145.679	\$115,226	\$310.410	\$125.312	\$104.375	\$83,694	\$313.382	\$2.972	1%
User 4	319.832	311.074	1.323.211	\$178,786	\$81,190	\$391.670	\$651.647	\$452,562	\$58,171	\$284,490	\$795.223	\$143.577	22%
User 5	4,400	39.670	6.486	\$2,460	\$10,354	\$1,920	\$14,733	\$6.226	\$7,418	\$1,394	\$15.039	\$306	2%
User 6	385.822	1.441.690	528,550	\$215.674	\$376.281	\$156.451	\$748,406	\$545.938	\$269.596	\$113.638	\$929.172	\$180.766	24%
User 7	4,023	8,192	19,378	\$2,249	\$2,138	\$5,736	\$10,123	\$5,693	\$1,532	\$4,166	\$11,391	\$1,268	13%
User 8	74.545	940,640	627.774	\$41.671	\$245,507	\$185.821	\$472.999	\$105.481	\$175,900	\$134.971	\$416.352	-\$56.647	-12%
User 9	37,454	946,416	52,247	\$20,937	\$247,015	\$15,465	\$283,417	\$52,997	\$176,980	\$11,233	\$241,210	-\$42,206	-15%
User 10	1,878	98,918	3,599	\$1,050	\$25,818	\$1,065	\$27,933	\$2,657	\$18,498	\$774	\$21,929	-\$6,004	-21%
User 11	23,640	70,454	55,242	\$13,215	\$18,388	\$16,352	\$47,955	\$33,451	\$13,175	\$11,877	\$58,502	\$10,548	22%
User 12	862,071	4,171,700	2,084,584	\$481,898	\$1,088,814	\$617,037	\$2,187,748	\$1,219,830	\$780,108	\$448,186	\$2,448,124	\$260,376	12%
User 13	610,036	721,935	232,337	\$341,010	\$188,425	\$68,772	\$598,207	\$863,201	\$135,002	\$49,952	\$1,048,155	\$449,948	75%
User 14	1,558	827	1,816	\$871	\$216	\$537	\$1,624	\$2,205	\$155	\$390	\$2,750	\$1,125	69%
User 15	9,086	168,640	22,717	\$5,079	\$44,015	\$6,724	\$55,818	\$12,857	\$31,536	\$4,884	\$49,277	-\$6,542	-12%
User 16	405,539	1,105,249	2,925,663	\$226,696	\$288,470	\$865,996	\$1,381,162	\$573,838	\$206,681	\$629,017	\$1,409,537	\$28,374	2%
User 17	39,729	958,932	12,977	\$22,209	\$250,281	\$3,841	\$276,331	\$56,217	\$179,320	\$2,790	\$238,327	-\$38,004	-14%
User 18	11,231	169,796	158,014	\$6,278	\$44,317	\$46,772	\$97,367	\$15,892	\$31,752	\$33,973	\$81,617	-\$15,750	-16%
User 19	8,343	177,131	136,033	\$4,664	\$46,231	\$40,266	\$91,160	\$11,805	\$33,123	\$29,247	\$74,176	-\$16,985	-19%
User 20	183,159	781,679	399,880	\$102,386	\$204,018	\$118,365	\$424,769	\$259,170	\$146,174	\$85,974	\$491,318	\$66,550	16%
User 21	171,772	3,855,594	365,396	\$96,021	\$1,006,310	\$108,157	\$1,210,488	\$243,057	\$720,996	\$78,560	\$1,042,614	-\$167,874	-14%
User 22	34,035	186,772	93,719	\$19,026	\$48,747	\$27,741	\$95,514	\$48,160	\$34,926	\$20,150	\$103,235	\$7,722	8%
User 23	5,319	4,899	7,908	\$2,973	\$1,279	\$2,341	\$6,593	\$7,526	\$916	\$1,700	\$10,143	\$3,550	54%
User 24	54,028	442,066	158,353	\$30,202	\$115,379	\$46,873	\$192,453	\$76,450	\$82,666	\$34,046	\$193,162	\$709	0%
User 25	114,645	917,098	339,683	\$64,087	\$239,363	\$100,546	\$403,995	\$162,223	\$171,497	\$73,032	\$406,752	\$2,757	1%
User 26	55,081	824,894	132,826	\$30,790	\$215,297	\$39,316	\$285,404	\$77,940	\$154,255	\$28,558	\$260,752	-\$24,652	-9%
User 27	29,899	239,563	81,828	\$16,714	\$62,526	\$24,221	\$103,461	\$42,307	\$44,798	\$17,593	\$104,698	\$1,238	1%
User 28	15,176	32,872	33,352	\$8,483	\$8,579	\$9,872	\$26,935	\$21,474	\$6,147	\$7,171	\$34,792	\$7,857	29%
User 29	5,491	116,916	23,207	\$3,069	\$30,515	\$6,869	\$40,454	\$7,770	\$21,863	\$4,990	\$34,623	-\$5,831	-14%
User 30	24,773	443,957	38,024	\$13,848	\$115,873	\$11,255	\$140,976	\$35,054	\$83,020	\$8,175	\$126,249	-\$14,727	-10%
User 31	1,697	13,454	4,443	\$949	\$3,511	\$1,315	\$5,775	\$2,401	\$2,516	\$955	\$5,872	\$97	2%
User 32	28,903	49,360	67,295	\$16,157	\$12,883	\$19,919	\$48,959	\$40,898	\$9,230	\$14,468	\$64,597	\$15,637	32%
User 33	42,966	279,209	52,812	\$24,018	\$72,874	\$15,632	\$112,524	\$60,797	\$52,212	\$11,355	\$124,364	\$11,840	11%
User 34	6,931	275,391	25,015	\$3,874	\$71,877	\$7,404	\$83,156	\$9,807	\$51,498	\$5,378	\$66,684	-\$16,472	-20%
User 35	15,191	61,632	22,133	\$8,492	\$16,086	\$6,551	\$31,129	\$21,495	\$11,525	\$4,759	\$37,779	\$6,650	21%
User 36	83,676	117,558	75,892	\$46,775	\$30,683	\$22,464	\$99,922	\$118,402	\$21,983	\$16,317	\$156,702	\$56,780	57%
User 37	238,286	567,209	362,841	\$133,202	\$148,042	\$107,401	\$388,644	\$337,175	\$106,068	\$78,011	\$521,254	\$132,609	34%
Total	4,113,803	21,372,266	11,120,803	\$2,299,616	\$5,578,161	\$3,291,758	\$11,169,535	\$5,821,031	\$3,996,614	\$2,390,973	\$12,208,617	\$1,039,083	9%

Section 7 Limitations

This document was prepared solely for City of Fresno in accordance with professional standards at the time the services were performed and in accordance with the contract between City of Fresno and Municipal Financial Services dated June 27, 2016. This document is governed by the specific scope of work authorized by City of Fresno; it is not intended to be relied upon by any other party. We have relied on information or instructions provided by City of Fresno and, unless otherwise expressly indicated, have made no independent investigation as to the validity, completeness, or accuracy of such information.

Appendix A: Master Fee Schedule #539

PUBLIC UTILITIES DEPARTMENT

WASTEWATER RATES**

Each Wastewater rate below consists of two components, Capital and Operation and Maintenance (O&M). This breakdown is listed below each rate for your information.

Fee Description & Un	it/Time *	Current	<u>Amnd</u>
Sewer Service Charg	es, Industria	I Users (as defined in Section 6-302 of the FMC)	
High Industrial: Sewa Demand (BOD) greate 300 (mg/l). Total fee amount is bas Flow (in hundred cub	age effluent vo r than 265 mg sed on three o ic feet (HCF)	olume of 25,000 gallons in a single day, or Biochemical Oxyge g/liter (mg/l), or Total Suspended Solids (TSS) greater than components: or gallons), pounds of BOD, and pounds of TSS.	n
Potable water, metered Per HCF ¹	ł	0.507	Amend effective
Capital	0.173		9/1/2010
-+ BOD / pound	0.334	0.261	
Capital	0.089	0.201	
O&M	0.172		
=+ TSS / pound		0.296	
Capital	0.101		
O&M	0.195		
or			
Per 1,000 gallons ²		0.678	
Capital	0.231		
O&M	0.447		
=+BOD / pound		0.261	
Capital	0.089		
	0.172	0.206	
=+ 100 / pound	0 101	0.296	
O&M	0.101		
Cain	0.100		

¹There are 748 gallons in a hundred cubic feet.

²Rates per 1,000 gallons are approximate as they have been rounded to the 3rd decimal place.

* Rates are effective 9/1/10

PUBLIC UTILITIES DEPARTMENT

STEWATE	R RATES**				
Fee Desc	cription & U	nit/Time *		Current	Amnd
High Ind	ustrial (con	tinued)			Amend
Sewage e	effluent, met	ered			Effective
Per HC	F'			0.559	9/1/2010
	Capital	0.191			
	O&M	0.368			
=+ BOD /	/ pound			0.261	
	Capital	0.089			
	O&M	0.172			
=+ TSS /	pound			0.296	
	Capital	0.101			
or	O&M	0.195			
Dor 1 000	0 gallone ²			0 740	
	Canital	0.256		0.749	
	O&M	0.200			
		0.435		0 261	
_+ DOD /	Canital	0 080		0.201	
	O&M	0.000			
-+ TSS /	nound	0.172		0 296	
=11007	Canital	0 101		0.200	
	O&M	0.195			
Pounds E Pounds 7 Note: BO W=sewei	$BOD = (W \div TSS = (W \div D) ConcentrationFor the concentration of water flow$	1,000,000) * 1,000,000) * ation can be b w in gallons/o	3.345 * BOD concentration in mg/l 3.345 * TSS concentration in mg/l ased on the actual or estimated value ay		
Low Indu	ustrial:				
Potable v	vater, meter	ed			
HCF ¹	,			1.077	
	Capital	0.368			
	O&M	0.709			
1,000 G	Gallons ²			1.44	
	Capital	0.492			
	O&M	0.948			
Seware	offluent met	arad			
	cinacin, met			1 185	
	Capital	0 405		1.100	
	O&M	0 780			
1.000 @		0.700		1,583	
.,	Capital	0 541		1.000	
	O&M	1.042			
¹ Thoro ar	- 749 gollopo	in a hundrad a	ubia faat		

There are 748 gallons in a hundred cubic feet.

² Rates per 1,000 gallons are approximate as they have been rounded to the 3rd decimal place.

* Rates are effective 9/1/10

PUBLIC UTILITIES DEPARTMENT

TEWATER RATES*	•		
Fee Description & l	Jnit/Time *	Current	Amn
Minimum Charge Month Capital O&M	8.80 16.95	25.75	Amo Effec 9/1/20
Sewer Service Char concentration (mg/l) Solids (TSS) present	rges, Commercial Users - class of Biochemical Oxygen Demand in flow.	sification determined by I (BOD) or Total Suspended	
High: BOD or TSS g Portable water, meter	greater than or equal to 501 mg. red		
		3.514	
Capital	1.201		
O&M	2.313		
1,000 Gallons ²		4.698	
Capital	1.605		
O&M	3.093		
Or	to vo d		
Sewage effluent, me	tered	0 00 <i>1</i>	
HCF'	4 000	3.864	
Capital	1.320		
	2.544	- /	
1,000 Gallons ⁻	4 700	5.167	
Capital	1.766		
Ualvi	3.401		
Minimum Charge			
Month		25.75	
Capital	8.80		
O&M	16.95		
Medium: BOD or T	SS without a range of 201-500 m	ng/l	
Potable water, meter	ed	-	
		1.792	
Capital	0.612		
O&M	1.180		
1,000 Gallons ²		2.398	
Capital	0.819		
O.S.M	1 579		

¹ There are 748 gallons in a hundred cubic feet.

² Rates per 1,000 gallons are approximate as they have been rounded to the 3rd decimal place.

* Rates are effective 9/1/10

PUBLIC UTILITIES DEPARTMENT

Fee Description & U	nit/Time *	Current	Amn
Sewage effluent, met	ered		Ame
HCF'		1.973	Effect
Capital	0.674		9/1/20
O&M	1.299		
1,000 Gallons ²		2.637	
Capital	0.901		
O&M	1.736		
Minimum charge			
Month		25.75	
Capital	8.80		
O&M	16.95		
Low: BOD or TSS w	ithin the range of 0-200 mg/l		
Potable water, meter	ed		
		1.077	
Capital	0.368		
O&M	0.709		
1.000 Gallons ²		1.440	
Capital	0.492		
O&M	0.948		
or			
Sewage effluent, met	ered		
		1.184	
Capital	0.405		
O&M	0.779		
1.000 Gallons ²		1.583	
Capital	0.541		
O&M	1.042		
Minimum Charge			
Month		25 75	
Capital	8 80	20110	
O.M.	16 95		
	10.30 		
Sewer Service Char	ges, Residential Users		
Single Family:			
Unit per month	0.00	25.75	
Capital	8.80		
O&M	16.95		

² Rates per 1,000 gallons are approximate as they have been rounded to the 3rd decimal place.

* Rates effective 9/1/10

PUBLIC UTILITIES DEPARTMENT

Fee Description & L	Init/Time *	Current	٨٢
Senior Citizen (62 vo	are as older) meeting all the conditions listed		<u>AI</u>
Senior Citizen (62 ye below / per month: 1. Single-fam 2. Service mu 3. Occupants dependant 4. Benefitting	ars or older) meeting all the conditions listed ily residents only; ist be in name of senior citizen; of residence must be senior citizen or s of senior citizen (not to exceed senior citizen must notify the City when they no	23.16	A Eff 9/1
longer qua	ulty.		
First unit / nor mo	anth .	25 75	
Capital	8.80 16.95	23.75	
Each Additional u	nit / per month	17.29	
Capital	5.91	-	
O&M	11.38		
Sewer Service Char attendance): Kindergarten/elemer Student/Year Capital O&M	r ges, Schools (on the basis of average daily Itary 5.453 10.504	15.957	A Eff 9/1
Middle		04 700	
Student/Tear		24.762	
Capital O&M	8.462 16.300		
Capital O&M Senior high	8.462 16.300		
Capital O&M Senior high Student/Year	8.462 16.300	29.866	
Capital O&M Senior high Student/Year Capital O&M	8.462 16.300 10.206 19.660	29.866	
Capital O&M Senior high Student/Year Capital O&M Parochial	8.462 16.300 10.206 19.660	29.866	
Capital O&M Senior high Student/Year Capital O&M Parochial Student/Year Capital	8.462 16.300 10.206 19.660 2.950	29.866 8.632	
Capital O&M Senior high Student/Year Capital O&M Parochial Student/Year Capital O&M	8.462 16.300 10.206 19.660 2.950 5.682	29.866 8.632	
Capital O&M Senior high Student/Year Capital O&M Parochial Student/Year Capital O&M College	8.462 16.300 10.206 19.660 2.950 5.682	29.866 8.632	
Capital O&M Senior high Student/Year Capital O&M Parochial Student/Year Capital O&M College Student/Year	8.462 16.300 10.206 19.660 2.950 5.682	29.866 8.632 10.646	

* Rates are effective 9/1/10

PUBLIC UTILITIES DEPARTMENT

WASTEWATER RATES**

Fee Description & Unit/Time	<u>Current</u>	Amnd	
Hauled Waste Disposal Septage Waste 1,000 gallons ² Capital 13.496 O&M 56.316	69.812	464 In-lieu 06/05	
Non Domestic Waste - per gallon	0.03	489	
Hauled Waste disposal station badge: Replacement / per badge	25.00	464	
Pretreatment Surcharges (monthly charges) Category I - Individual permit* Category II - General permit** Category III - No permit required*** Category IV - All residential users	27.54 4.05 1.29 0.06		

* All industrial high-strength and categorically regulated users.

** All commercial establishments which may require pretreatment and monitoring activity (automotive repair, bakeries--retail, car washes, hotels/motels with dining facilities, laundromats, markets with garbage disposals, mortuaries, nursing homes, printers, restaurants, shopping centers).

***No discharge of process water (automotive--retail, business/services).

Special Charges and Penalties Television Inspection/Sewer		435
per hour (one hour minimum)	182.73	539
CCTV Standby	45 68	539
CCTV Inspection lateral tie-in (sewer mains less than 15" in diameter) per hour (one hour minimum)	116.88	539
Inspection cleaning for minor debris per hour (30 minutes minimum)	179.45	539
Video Inspection Sit-In per hour (one hour minimum)	114.63	539
Disconnection or reconnection inspection fee / per inspection	12.50	
Discharge flow dye test / per-hour	129.23	539
Combo Truck rate / per hour	204.40	539

¹ There are 748 gallons in a hundred cubic feet.

² Rates per 1,000 gallons are approximate as they have been rounded to the 3rd decimal place.

PUBLIC UTILITIES DEPARTMENT

VASTEWATER RATES**		
Fee Description & Unit/Time *	<u>Current</u>	<u>Amnd</u>
Dretro stroogt Administrative Develtion		464
Pretreatment Administrative Penalties	050.00	464
Notice of Non-compliance	250.00	480
Warning Notice	250.00	
Notice of Violation	500.00	
Consent Order	750.00	
Compliance Order	1,000.00	
Show Cause Order	1,000.00	
Administrative cost recovery charges for failure to meet		464
reporting deadlines:		
First day late	45.00	521
Each additional day late	22.50	
Pretreatment Administrative Penalties - continued		464
General inorganic and bacteriological analysis/per hour	50.00	
Composite Sampler Rental / per day	75.00	
Pretreatment enforcement charges/per hour	45.00	
Miscellaneous non-enforcement charges/per hour	45.00	

<u>v</u>

Appendix B: Customer Wastewater Discharge Characteristics Tables

Table B-1 Wastewater Discharge Volume, Million Gallons per Day

	Estimated				Proje	ected			
Customer Category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Residential [1]									
Single Family	23.07	23.09	23.11	23.13	23.16	22.76	22.36	21.96	21.55
Senior Citizen	2.83	2.84	2.85	2.86	2.87	2.83	2.79	2.74	2.70
Multiple Family 1st	0.95	0.95	0.96	0.96	0.96	0.96	0.97	0.97	0.97
Multiple Family Add'l Units	8.32	8.33	8.34	8.36	8.37	8.38	8.40	8.41	8.42
Total Residential	35.16	35.21	35.26	35.31	35.36	34.93	34.51	34.08	33.65
Commercial [2]									
Potable Water [3]									
High	1.15	1.26	1.26	1.26	1.26	1.27	1.27	1.27	1.27
Medium	2.30	2.54	2.57	2.61	2.64	2.67	2.71	2.74	2.78
Low	5.68	6.20	6.21	6.22	6.23	6.24	6.25	6.26	6.27
Total	9.13	10.00	10.05	10.09	10.14	10.18	10.23	10.27	10.32
Sewage Effluent									
High	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Medium	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
Low	0.35	0.26	0.55	0.26	0.55	0.55	0.26	0.35	0.55
Total	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Total Commercial	0.01	10.01	10.01	10.01	10.01	10.01	11 02	11.09	11 12
Schools (ADA Bates)	5.54	10.80	10.85	10.90	10.94	10.99	11.05	11.08	11.12
K garton /Elom	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Middlo	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Sonior	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Derechiel	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Callaga	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
College	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Total Schools (ADA Rates)	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Industriai [4]									
Potable Water	0.42	0.42	0.42	0.42	0.40	0.42	0.42	0.42	0.42
High	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
LOW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
lotal	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Sewage Effluent									
High	7.54	8.43	8.43	8.43	8.43	8.43	8.43	8.43	8.43
Low	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	7.54	8.43	8.43	8.43	8.43	8.43	8.43	8.43	8.43
Total Industrial	7.66	8.56	8.56	8.56	8.56	8.56	8.56	8.56	8.56
Summary									
Million Gallons per Day									
Residential	35.16	35.21	35.26	35.31	35.36	34.93	34.51	34.08	33.65
Schools (ADA rates)	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Commercial	9.94	10.80	10.85	10.90	10.94	10.99	11.03	11.08	11.12
Industrial	7.66	8.56	8.56	8.56	8.56	8.56	8.56	8.56	8.56
Total	52.99	54.80	54.90	54.99	55.09	54.71	54.33	53.95	53.56
WTP Influent >	55.91	56.75							
Hundred Cubic Feet (HCF)									
Residential	17,156,675	17,180,506	17,204,336	17,228,167	17,251,998	17,044,647	16,836,710	16,628,188	16,419,080
Schools (ADA rates)	110,781	110,781	110,781	110,781	110,781	110,781	110,781	110,781	110,781
Commercial	4,848,836	5,272,034	5,294,188	5,316,343	5,338,498	5,360,653	5,382,808	5,404,963	5,427,118
Industrial	3,738,431	4,177,847	4,177,847	4,177,847	4,177,847	4,177,847	4,177,847	4,177,847	4,177,847
Total	25,854,723	26,741,167	26,787,153	26,833,139	26,879,124	26,693,928	26,508,146	26,321,779	26,134,826
Percent of Total									
Residential	66%	64%	64%	64%	64%	64%	64%	63%	63%
Schools (ADA rates)	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
Commercial	19%	20%	20%	20%	20%	20%	20%	21%	21%
Industrial	14%	16%	16%	16%	16%	16%	16%	16%	16%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table B-1

Wastewater Discharge Volume, Million Gallons per Day

Notes:

1 Projected Residential flow is based on average metered water use during January and February 2017.

Projected Residential flow in gallons per day per unit is listed below. Volume is product of units listed in Table B-4 times flow in gallons per day.

i i ojecteu kesidenti	ai now in gallons p	er uay per ui	int is listed b		e is product t	Ji units iisteu		unies now in	i ganons per i	Jay.
		<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Single Family % ar	nnual reduction >		0.0%	0.0%	0.0%	0.0%	2.0%	2.0%	2.0%	2.0%
	Single Family	220	220	220	220	220	216	212	208	204
	Senior Citizen	220	220	220	220	220	216	212	208	204
M	ultiple Family 1st	132	132	132	132	132	132	132	132	132
Mult	tiple Family Add'l	132	132	132	132	132	132	132	132	132
2 Actual Commercial	flow is based on da	ata provided	by the City o	of Fresno, PC	WD and PPU	JD.				
Projected Commerce	cial flow for the Cit	y of Fresno is	based on th	ne percentage	e growth in a	ccounts time	the FY16 Ac	tual value.		
	Pot	able Water	FY17	<u>FY18</u>	FY19	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
		High	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
		Medium	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.2%	1.2%
		Low	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
	Sewa	ge Effluent								
		High	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		Medium	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		Low	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
3 Commercial account	its with wastewate	r flow based	on potable	metered wate	er use are ad	justed for rat	e-making pu	irposes as sho	own below:	
		<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Estimated Waste	water Flow									
	High	1.15	1.15	1.16	1.16	1.16	1.16	1.16	1.16	1.17
	Medium	2.30	2.33	2.36	2.39	2.42	2.45	2.48	2.52	2.55
	Low	5.68	5.69	5.70	5.71	5.72	5.73	5.74	5.74	5.75
	Total	9.13	9.17	9.22	9.26	9.30	9.34	9.38	9.42	9.47
Add Metered Wa	ater Reduction for	FY17 and ow	nard							
	High		9%	9%	9%	9%	9%	9%	9%	9%
	Medium		9%	9%	9%	9%	9%	9%	9%	9%
	Low		9%	9%	9%	9%	9%	9%	9%	9%
Potable Metered	Water Use									
	High	1.15	1.26	1.26	1.26	1.26	1.27	1.27	1.27	1.27
	Medium	2.30	2.54	2.57	2.61	2.64	2.67	2.71	2.74	2.78
	Low	5.68	6.20	6.21	6.22	6.23	6.24	6.25	6.26	6.27
	Total	9.13	10.00	10.05	10.09	10.14	10.18	10.23	10.27	10.32
4 Industrial accounts	with wastewater f	low based on	potable me	tered water	use are adjus	sted for rate-	making purp	oses as show	n below:	
		<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Estimated Waste	water Flow									
	High	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Add Metered Wa	ater Reduction for	FY17 and ow	nard							
	High		9%	9%	9%	9%	9%	9%	9%	9%
Potable Metered	l Water Use									
	High	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13

Table B-2 Wastewater Discharge BOD, Pounds per Day

	Estimated				Project	ed [1, 2]			
Customer Category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Residential									
Single Family	56,026	56,079	56,132	56,186	56,239	55,269	54,297	53,323	52,347
Senior Citizen	6,864	6,891	6,917	6,944	6,971	6,870	6,769	6,666	6,563
Multiple Family 1st	2,307	2,313	2,320	2,326	2,333	2,339	2,345	2,352	2,358
Multiple Family Add'l Units	20,203	20,235	20,267	20,299	20,331	20,363	20,395	20,427	20,459
Total Residential	85,399	85,518	85,636	85,755	85,874	84,842	83,807	82,769	81,728
Commercial	-		-	-	-	-	-	-	
Potable Water									
High	9.651	10.535	10.550	10.565	10.580	10.594	10.609	10.624	10.639
Medium	6.740	7,446	7,544	7.643	7.741	7.840	7,938	8.037	8.135
low	6,660	7,272	7,283	7,295	7,307	7,318	7,330	7,342	7,354
Total	23.052	25,252	25,377	25.502	25.628	25,753	25,878	26.003	26,128
Sewage Effluent	23,032	23,232	23,377	23,302	23,020	23,733	23,070	20,000	20,120
High	125	135	135	135	135	135	135	135	135
Modium	1 5 2 0	1 5 2 0	1 5 2 0	1 5 2 0	1 5 2 0	1 5 2 0	1 5 2 0	1 5 2 0	1 5 2 0
	200	200	200	200	200	200	200	200	200
Low	1 002	1 092	1 002	1 002	1 002	1 002	1 002	1 002	1 002
Total Commercial	1,983	1,963	1,983	1,983	1,983	1,983	1,983	1,983	1,983
	25,030	27,235	27,301	27,480	27,011	27,730	27,801	27,980	28,111
Schools (ADA Rates)		216		216					
K-garten/Elem	216	216	216	216	216	216	216	216	216
Middle	44	44	44	44	44	44	44	44	44
Senior	268	268	268	268	268	268	268	268	268
Parochial	40	40	40	40	40	40	40	40	40
College	95	95	95	95	95	95	95	95	95
Total Schools (ADA Rates)	663	663	663	663	663	663	663	663	663
Industrial									
Potable Water									
High	40	40	40	40	40	40	40	40	40
Low	0	0	0	0	0	0	0	0	0
Total	40	40	40	40	40	40	40	40	40
Sewage Effluent									
High	56,366	58,554	58,554	58,554	58,554	58,554	58,554	58,554	58,554
Low	0	0	0	0	0	0	0	0	0
Total	56,366	58,554	58,554	58,554	58,554	58,554	58,554	58,554	58,554
Total Industrial	56,406	58,594	58,594	58,594	58,594	58,594	58,594	58,594	58,594
Summary									
BOD Pounds per Day									
Residential	85,399	85,518	85,636	85,755	85,874	84,842	83,807	82,769	81,728
Schools	663	663	663	663	663	663	663	663	663
Commercial	25.036	27.235	27.361	27,486	27.611	27.736	27.861	27,986	28.111
Industrial	56,406	58.594	58,594	58.594	58,594	58.594	58,594	58.594	58,594
Total	167,503	172,010	172,254	172,497	172,741	171.834	170,924	170.011	169,096
WTP Influent lbs ner year>	66.67	62.37	1/1/201	1,1,1,1,0,7	_,_,,	1,1,00	1,0,01	1/0/011	200,000
BOD Pounds ner Vear	00.07	02.07							
Residential	31 170 700	31 213 007	31 257 203	31 300 589	31 3/3 886	30 967 165	30 589 380	30 210 531	29 830 618
Schools	2/1 207	2/1 207	2/1 207	2/1 207	2/1 207	2/1 207	241 807	2/1 207	23,830,018
Commorcial	0 1 2 7 0 6 7	0 040 012	0.096 501	10 022 260	10 077 047	10 122 625	10 160 204	10 214 092	10 260 660
Industrial	30 500 131	3,340,312	3,380,391	21 296 766	21 296 766	21 296 766	21 296 766	21 296 766	21 296 766
Total	20,366,131	21,380,700	21,580,700	21,380,700	21,580,700	21,580,700	21,380,700	21,580,700	21,380,700
I OLDI	01,138,095	02,783,571	02,872,540	02,901,520	03,050,495	02,719,452	02,387,340	02,054,175	61,719,941
Residential	51%	50%	50%	50%	50%	49%	49%	49%	48%
Schools	0%	0%	0%	0%	0%	0%	0%	0%	0%
Commercial	15%	16%	16%	16%	16%	16%	16%	16%	17%
Industrial	34%	34%	34%	34%	34%	34%	34%	34%	35%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table B-2

Wastewater Discharge BOD, Pounds per Day

Notes:

1 Projected Residential BOD in milligrams/Liter (mg/L) per unit is listed below.

Pounds per day is product of the volume listed in Table B-1 times BOD in mg/L times a constant for conversion of units

	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Single Family	290	290	290	290	290	290	290	290	290
Senior Citizen	290	290	290	290	290	290	290	290	290
Multiple Family 1st	290	290	290	290	290	290	290	290	290
Multiple Family Add'l	290	290	290	290	290	290	290	290	290

2 Projected Commercial BOD in milligrams/Liter (mg/L) per unit is listed below.

Pounds per day is product of the volume listed in Table B-1 times BOD in mg/L times a constant for conversion of units

				0	•					
	<u>Rate Ratio</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	FY24
Potable Water										
High	3.26	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Medium	1.66	350	350	350	350	350	350	350	350	350
Low	1.00	140	140	140	140	140	140	140	140	140
Sewage Effluent										
High	3.26	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Medium	1.67	350	350	350	350	350	350	350	350	350
Low	1.00	140	140	140	140	140	140	140	140	140

Table B-3 Wastewater Discharge TSS Pounds per Day

	Estimated				Project	ed [1, 2]			
Customer Category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Residential									
Single Family	61,821	61,880	61,939	61,998	62,057	60,987	59,914	58,839	57,763
Senior Citizen	7,574	7,604	7,633	7,662	7,692	7,581	7,469	7,356	7,242
Multiple Family 1st	2,546	2,553	2,560	2,567	2,574	2,581	2,588	2,595	2,602
Multiple Family Add'l Units	22,293	22,328	22,363	22,399	22,434	22,470	22,505	22,540	22,576
Total Residential	94,234	94,364	94,495	94,626	94,757	93,618	92,476	91,331	90,182
Commercial	-		-	-	-	-	-	-	
Potable Water									
High	5.791	6.321	6.330	6.339	6.348	6.357	6.366	6.374	6.383
Medium	6.740	7,446	7,544	7.643	7.741	7.840	7,938	8.037	8.135
low	7,612	8,310	8.324	8,337	8,351	8.364	8,377	8,391	8,404
Total	20,143	22.077	22,198	22,319	22,440	22,560	22,681	22,802	22,923
Sewage Effluent	20)210		22,250	22,020	,	22,000	22,001	,00_	
High	81	81	81	81	81	81	81	81	81
Modium	1 520	1 5 2 0	1 5 2 0	1 5 2 0	1 520	1 520	1 5 2 0	1 5 2 0	1 520
	1,555	1,555	1,555	1,555	1,555	1,555	1,555	1,339	1,555
Total	1 074	1 074	1 074	1 074	1 074	1 074	1 074	1 074	1 074
Total	1,974	1,974	1,974	1,974	1,974	1,974	1,974	1,974	1,974
Total Commercial	22,117	24,051	24,171	24,292	24,413	24,534	24,655	24,776	24,897
Schools (ADA Rates)				216					
K-garten/Elem	216	216	216	216	216	216	216	216	216
Middle	44	44	44	44	44	44	44	44	44
Senior	268	268	268	268	268	268	268	268	268
Parochial	40	40	40	40	40	40	40	40	40
College	95	95	95	95	95	95	95	95	95
Total Schools (ADA Rates)	663	663	663	663	663	663	663	663	663
Industrial									
Potable Water									
High	314	314	314	314	314	314	314	314	314
Low	0	0	0	0	0	0	0	0	0
Total	314	314	314	314	314	314	314	314	314
Sewage Effluent									
High	24,843	30,468	30,468	30,468	30,468	30,468	30,468	30,468	30,468
Low	0	0	0	0	0	0	0	0	0
Total	24,843	30,468	30,468	30,468	30,468	30,468	30,468	30,468	30,468
Total Industrial	25,157	30,782	30,782	30,782	30,782	30,782	30,782	30,782	30,782
Summary									
TSS Pounds per Day									
Residential	94,234	94,364	94,495	94,626	94,757	93,618	92,476	91,331	90,182
Schools	663	663	663	663	663	663	663	663	663
Commercial	22.117	24.051	24.171	24.292	24.413	24.534	24.655	24,776	24.897
Industrial	25,157	30,782	30,782	30,782	30,782	30,782	30,782	30,782	30,782
Total	142,170	149,859	150,111	150,363	150,615	149,597	148,575	147,551	146,523
WTP Influent lbs per year>	53.01	59.86	100)111	100,000	100,010	1 10,007	1 10,070	1.7,001	1.0,010
TSS Pounds per Day	55.01	55.00							
Residential	34 395 255	34 443 031	34 490 806	34 538 581	34 586 357	34 170 664	33 753 798	33 335 758	32 916 544
Schools	2/1 807	2/1 807	2/1 807	2/1 807	2/1 807	2/1 897	2/1 897	2/1 897	2/1 807
Commorcial	241,857	241,057	241,057	241,057	241,057	241,037	241,057	0 0/2 162	0 007 202
Loductrial	0,072,010	0,770,441	0,022,301	0,000,002	0,910,002	0,954,922	0,999,045	9,045,105	9,067,265
	9,182,372	11,235,303	11,235,303	11,235,303	11,235,303	11,235,303	11,235,303	11,235,303	11,235,303
lotal Develop (Total	51,892,142	54,698,671	54,790,566	54,882,462	54,974,358	54,602,786	54,230,040	53,856,120	53,481,027
		co/	co/	co/	co	co/			C2 -1
Residential	66%	63%	63%	63%	63%	63%	62%	62%	62%
Schools	0%	0%	0%	0%	0%	0%	0%	0%	0%
Commercial	16%	16%	16%	16%	16%	16%	17%	17%	17%
Industrial	18%	21%	21%	20%	20%	21%	21%	21%	21%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table B-3

Wastewater Discharge TSS Pounds per Day

Notes:

1 Projected Residential TSS in milligrams/Liter (mg/L) per unit is listed below.

Pounds per day is product of the volume listed in Table B-1 times TSS in mg/L times a constant for conversion of units

	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	FY24	
Single Family	320	320	320	320	320	320	320	320	320	
Senior Citizen	320	320	320	320	320	320	320	320	320	
Multiple Family 1st	320	320	320	320	320	320	320	320	320	
Multiple Family Add'l	320	320	320	320	320	320	320	320	320	
2 Projected Commercial TSS in milligram	s/Liter (mg/L	.) per unit is l	listed below.							
Pounds per day is product of the volume listed in Table B-1 times TSS in mg/L times a constant for conversion of units										

ius per day is produ	is per day is product of the volume listed in Table B-1 times TSS in fig/L times a constant for conversion of units										
	<u>Rate Ratio</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	FY24	
Potable Water											
High	3.26	600	600	600	600	600	600	600	600	600	
Medium	1.66	350	350	350	350	350	350	350	350	350	
Low	1.00	160	160	160	160	160	160	160	160	160	
Sewage Effluent											
High	3.26	600	600	600	600	600	600	600	600	600	
Medium	1.67	350	350	350	350	350	350	350	350	350	
Low	1.00	160	160	160	160	160	160	160	160	160	

Table B-4 Accounts - Units (Includes PCWD and PPUD)

	Estimated				Projected	[1, 2, 3]			
Customer Category	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Residential									
Single Family	104,853	104,953	105,053	105,153	105,253	105,353	105,453	105,553	105,653
Senior Citizen	12,846	12,896	12,946	12,996	13,046	13,096	13,146	13,196	13,246
Multiple Family 1st	7,196	7,216	7,236	7,256	7,276	7,296	7,316	7,336	7,356
Multiple Family Add'l Units	63,016	63,116	63,216	63,316	63,416	63,516	63,616	63,716	63,816
Total Residential	187,911	188,181	188,451	188,721	188,991	189,261	189,531	189,801	190,071
Commercial									
Potable Water									
High	708	709	710	711	712	713	714	715	716
Medium	746	756	766	776	786	796	806	816	826
Low	6,184	6,194	6,204	6,214	6,224	6,234	6,244	6,254	6,264
Total	7,637	7,658	7,679	7,700	7,721	7,742	7,763	7,784	7,805
Sewage Effluent									
High	16	16	16	16	16	16	16	16	16
Medium	25	25	25	25	25	25	25	25	25
Low	140	140	140	140	140	140	140	140	140
Total	181	181	181	181	181	181	181	181	181
Total Commercial	7,818	7,839	7,860	7,881	7,902	7,923	7,944	7,965	7,986
Schools (ADA)									
K-garten/Elem	17	17	17	17	17	17	17	17	17
Middle	1	1	1	1	1	1	1	1	1
Senior	4	4	4	4	4	4	4	4	4
Parochial	5	5	5	5	5	5	5	5	5
College	2	2	2	2	2	2	2	2	2
Total Schools (ADA Rates)	29	29	29	29	29	29	29	29	29
Industrial									
Potable Water									
High	2	2	2	2	2	2	2	2	2
Low	0	0	0	0	0	0	0	0	0
Total	2	2	2	2	2	2	2	2	2
Sewage Effluent									
High	38	38	38	38	38	38	38	38	38
Low	0	0	0	0	0	0	0	0	0
Total	38	38	38	38	38	38	38	38	38
Total Industrial	40	40	40	40	40	40	40	40	40
Summarv									
Accounts-Units-ADA									
Residential	187.911	188.181	188.451	188.721	188.991	189.261	189.531	189.801	190.071
Schools (ADA rates)	29	29	29	29	29	29	29	29	29
Commercial	7.818	7.839	7,860	7,881	7.902	7.923	7,944	7,965	7.986
Industrial	40	40	40	40	40	40	40	40	40
Total	195,798	196.089	196.380	196.671	196.962	197.253	197.544	197,835	198,126
Percent of Total	200,700	100,000	100,000	100,071	100,001	107)200	107,011	107,000	100,110
Residential	96%	96%	96%	96%	96%	96%	96%	96%	96%
Schools (ADA rates)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Commercial	0.076 A%	0.070 1%	0.070 A%	0.070 A%	0.070 1%	0.070 1%	0.070 1%	0.070 1%	0.0%
Industrial	470 0%	-+70 0%			-+70 0%	-+73 0%	-+70 0%	-+70 0%	+⁄0 ∩%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%
Total	100%	10070	100/0	100/0	10070	100/0	100/0	100/0	100%

Table B-4 Accounts - Units (Includes PCWD and PPUD)

Notes:

1 Projected new Residential units per year for the City of Fresno.

	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Single Family	100	100	100	100	100	100	100	100
Senior Citizen	50	50	50	50	50	50	50	50
Multiple Family 1st	20	20	20	20	20	20	20	20
Multiple Family Add'l	100	100	100	100	100	100	100	100
Projected new Commercial accounts per year for th	ne City of Fre	sno. PCWD a	nd PPUD are	projected wi	ith no increas	ses		
	<u>FY17</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	FY21	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Potable Water								
High	1	1	1	1	1	1	1	1
Medium	10	10	10	10	10	10	10	10
Low	10	10	10	10	10	10	10	10
Sewage Effluent								
High	0	0	0	0	0	0	0	0
Medium	0	0	0	0	0	0	0	0
Low	0	0	0	0	0	0	0	0

3 The projected number of new Schools (ADA) based and Industrial accounts is zero.

Appendix C: Cash Flow Table

Table C-1

Wastewater Funds Cash Flow and Financial Metrics

BEGINNING FUND BALANCES	<u>Fund</u>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>	
Operating Fund *	40501/40529/4053	1/40533/40536	20,635	42,084	11,634	16,148	23,052	9,937	11,490
Sewer Non-Domestic Waste Fee Fund	40530		134	272	6	239	472	705	939
Operating Rate Stabilization Reserve Fund	40512		10,074	8,786	4,888	5,913	5,942	4,372	6,394
Lateral, O'size, H'brch, Conn. Funds	40502/40595		12,837	11,741	8,082	8,423	8,764	9,105	9,446
Wastewater Facility Fees Funds	40502/40523/4051	9/40520/40521/4052	8,692	5,804	2,389	3,693	5,124	2,062	1,985
Capital Improvements Reserve Fund	40510		3,879	3,931	3,970	8,720	8,764	8,808	16,152
SRF Debt Service Reserve Fund	40534		0	1,303	1,316	3,477	3,494	3,512	3,529
Total Beginning Fund Balances			56,251	73,922	32,285	46,612	55,613	38,501	49,935
* The FY19 Beginning Fund Balance reflects carry	overs and any ad	ljustments from I	-Y18.						
REVENUES	ANI	NUAL RATE INCR	EASES >	0.0%	0.0%	2.0%	2.0%	2.0%	2.0%
	AN	NUAL INTEREST	RATES >	1.0%	0.5%	0.5%	0.5%	0.5%	0.5%
Operating Revenues	Fund	<u>Acct</u>	FY18	FY19	FY20	FY21	FY22	FY23	FY24
MiscOther Charges Svcs & Fac	40501	34115	245	151	151	151	151	151	151
Wastewater Treatment Charges	40501	34401	73,873	73,430	73,430	74,900	76,400	77,930	79,490
Clovis Share O & M	40501	34402	3,065	2,520	2,600	2,680	2,760	2,840	2,930
Sewer Pre-Treatment Surcharge	40501	34405	412	419	419	419	419	419	419
Plan Check (PW) - Sewer	40501	34554	86	60	60	60	60	60	60
Subdivision Inspection	40501	34555	1	0	0	0	0	0	0
Return Of Capital	40501	34852	1,243	901	977	558	629	140	133
Biomethane Generation Credit Sales	40536	36005		400	1,000	2,000	3,000	3,000	3,000
Interest (Fund 40501, 40531, 40533)	501/40531/405	36101	1,863	219	58	81	115	50	57
Loan Repay - Int/Ot. W/in City	40501	36104	25	25	25	25	25	25	25
Leases	40501	36304	424	424	424	424	424	424	424
RefundsCurrent Year	40501	39008	135	5	5	5	5	5	5
Loan Repayment-Oth Thn wi City	40501	39012	4	2	2	2	2	2	2
MiscellaneousOther Revenue	40501	39015	199	65	65	65	65	65	65
Sale of Obsolete Items	40501	39202	27	0	0	0	0	0	0
Sale of Scrap/Junk (Nontaxable)	40501	39203	22	10	10	10	10	10	10
Anaerobic Digester Material (Including Interest)	40530	34425/36101	308	233	233	233	233	233	233
Clovis bond payments	40531	33804	1,235	1,233	1,233	1,233	1,233	1,233	1,233
Interest (Fund 40512)	40512		133	102	24	30	30	22	32
Recycled Water User Charges (Including Interest)	40529	34226/36101	1	2	2	250	250	250	250
General Fund Loan Reimbursement				0	0	0	0	0	
Subtotal Operating Revenues			83,300	80,202	80,720	83,126	85,811	86,859	88,520
Capital Revenues	ANNUA	L GROWTH INCR	EASES >	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Wastewater facilities fees	40502	34119	1,676	1,600	1,610	1,620	1,630	1,640	1,650
STEP program receipts	523/40519/40	520/40521/405	1,463	1,413	1,413	1,413	1,413	1,413	1,413
Oversize/lateral/other charges	40502/40595		440	341	341	341	341	341	341
Interest, Wastewater facilities fees	40502/40595/	40523/40519/4	318	172	12	18	26	10	10
Interest, Capital Improvement Reserve Fund	40510		51	39	20	44	44	44	81
Interest, Debt Service Reserve Fund	40534		17	13	7	17	17	18	18
Subtotal Capital Revenues			3,965	3,577	3,402	3,453	3,470	3,465	3,512
TOTAL REVENUES			87,265	83,779	84,121	86,579	89,282	90,324	92,032

Table C-1

Wastewater Funds Cash Flow and Financial Metrics

EXPENSES			<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Annual Percent Changes	ANNUAL	EXPENSE IN	VCREASES >	3%	3%	3%	3%	3%	3%
Operating & Maintenance	Section (4140X)	<u>Acct</u>							
Employee svcs, treatment	04/06/07/09	51000	10,857	12,980	13,370	13,770	14,180	14,610	15,050
Employee svcs, collection	08	51000	2,686	3,369	3,470	3,570	3,680	3,790	3,900
Purchased professional svcs)4/06/07/08/09	53000	3,783	4,735	4,880	5,030	5,180	5,340	5,500
Purchased property svcs, xUtilities)4/06/07/08/09	54000	1,452	1,250	1,290	1,330	1,370	1,410	1,450
Utilities)4/06/07/08/09	54101	5,465	6,172	6,360	6,550	6,750	6,950	7,160
Other purchased services)4/06/07/08/09	55000	218	255	260	270	280	290	300
Supplies)4/06/07/08/09	56000	5,315	5,499	5,660	5,830	6,000	6,180	6,370
Property	04/06/08/09	57000	413	324	330	340	350	360	370
Other Objects)4/06/07/08/09	58000	461	540	560	580	600	620	640
Interdept charges, treatment	04/06/07/09	59000	5,981	6,122	6,310	6,500	6,700	6,900	7,110
Interdept charges, collection	08	59000	2,063	2,205	2,270	2,340	2,410	2,480	2,550
Recycled water distribution	from Water	Division	3	100	100	100	100	100	100
Subtotal Operating & Maintenance			38,697	43,550	44,860	46,210	47,600	49,030	50,500
Debt Service									
1993 Series A, Senior			10,704	10,690	373	6,233	40	905	0
2008 Series A, Subordinate			7,953	7,948	1,849	1,849	7,714	6,843	7,736
CWSRF Agreement #14-817-550			0	1,286	1,286	1,286	1,286	1,286	1,286
CWSRF Agreement #D15-01011					1,002	1,002	1,002	1,002	1,002
2019 SRF, Projected (CWSRF Agreement #D15-0)1011)			0	1,083	1,083	1,083	1,083	1,083
2020 SRF, Projected					0	69	69	69	69
2021 SRF, Projected					0	0	0	0	0
2022 SRF, Projected					0	0	0	0	0
2023 SRF, Projected					0	0	0	0	0
2024 SRF, Projected					0	0	0	0	0
2020 Bonds, Projected					0	0	0	0	0
2021 Bonds, Projected					0	0	0	0	0
2022 Bonds, Projected					0	0	0	0	0
2023 Bonds, Projected					0	0	0	1,616	1,616
2024 Bonds, Projected					0	0	0	0	2,299
Subtotal Debt Service			18,658	19,924	5,593	11,522	11,194	12,805	15,092
Capital Improvements, Pay As You Go									
CIP: treatment plant			5,992	54,640	15,759	11,999	14,128	10,295	9,520
CIP: collection system			10,297	11,022	4,809	8,655	34,751	7,150	7,150
Less Clovis CIP contribution			0	0	(977)	(558)	(629)	(140)	(3,251)
Subtotal Capital Improvements			16,289	65,662	19,591	20,096	48,250	17,305	13,419
TOTAL EXPENSES			73,644	129,136	70,044	77,828	107,044	79,140	79,011
Capital Improvements, Debt Funded									
CIP: treatment plant			11,099	27,951	1,778	0	0	21,668	30,820
CIP: collection system			0	0	338	20	0	0	0

Table C-1 Wastewater Funds Cash Flow and Financial Metrics

		<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
REVENUES LESS EXPENSES (EXCLUDING DEBT FUNDED CIP)		13,621	(45,357)	14,077	8,750	(17,762)	11,184	13,021
TRANSFERS								
Transfer from Op Rate Stabl Rsrv Fund to General Fund		-1,420	0					
Transfer from Op Fund to General Fund		-1,680	0					
Transfer from Non-Domestic Waste Fee Fund to Op Fund		170	500	0	0	0	0	0
Transfer from WW Facility Fees Funds to Op Fund		7,826	6,600	0	1,620	6,130	3,140	3,150
Transfer from Capital Reserve Fund to Op Fund		0	0	-3,000	0	0	-7,300	-7,300
Transfer from Lateral, O'size, H'brch, Conn. Funds to Op Fund		0	4,000	0	0	0	0	0
Transfer from Trunk Funds to Op Fund for Debt Svc		5,964	3,720	250	250	650	250	250
Transfer from Op Fund to Op Rate Stabl Rsrv Fund		0	4,000	-1,000		1,600	-2,000	-2,000
Transfer from Op Fund to SRF Debt Svc Rsrv		-1,286	0	-2,154	0	0	0	0
Transfer from WW Facility Fees Funds to Cap Imprv Rsrv Fund		0	0	1,730	0	0	0	0
ENDING FUND BALANCES								
Operating Fund		40,843	11,634	16,148	23,052	9,937	11,490	14,834
Sewer Non-Domestic Waste Fee Fund		273	6	239	472	705	939	1,172
Operating Rate Stabilization Reserve Fund		8,786	4,888	5,913	5,942	4,372	6,394	8,426
Lateral, O'size, H'brch, Conn. Funds		13,278	8,082	8,423	8,764	9,105	9,446	9,787
Wastewater Facility Fees Funds		4,323	2,389	3,693	5,124	2,062	1,985	1,907
Capital Improvements Reserve Fund		3,931	3,970	8,720	8,764	8,808	16,152	23,533
SRF Debt Service Reserve Fund		1,303	1,316	3,477	3,494	3,512	3,529	3,547
Total Ending Fund Balances		72,737	32,285	46,612	55,613	38,501	49,935	63,206
Operating Reserves		<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	FY21	<u>FY22</u>	<u>FY23</u>	FY24
Total Operating O&M		38,697	43,550	44,860	46,210	47,600	49,030	50,500
Operating Fund Ending Balance	<u>Minimum</u>	40,843	11,634	16,148	23,052	9,937	11,490	14,834
Minimum Balance as a Percent of O&M	=>20%	106%	27%	36%	50%	21%	23%	29%
Minimum Balance as Days of O&M Expenditures	75	385	98	131	182	76	86	107
Minimum Balance		7,700	8,700	9,000	9,200	9,500	9,800	10,100
Operating Rate Stabilization Reserve		<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Operating Rate Stabilization Reserve		8,786	4,888	5,913	5,942	4,372	6,394	8,426
Operating Revenues	<u>Minimum</u>	83,300	80,202	80,720	83,126	85,811	86,859	88,520
Reserve as a Percent of Operating Revenues	=>5%	11%	6%	7%	7%	5%	7%	10%
Minimum Balance		4,200	4,000	4,000	4,200	4,300	4,300	4,400
Capital Improvements Reserve		<u>FY18</u>	FY19	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Net Total Capital Assets		662,531	732,784	732,108	729,422	754,941	770,694	794,824
Capital Improvements Reserve	<u>Minimum</u>	3,931	3,970	8,720	8,764	8,808	16,152	23,533
Reserve as a Percent of Net Total Capital Assets	=>2%	1%	1%	1%	1%	1%	2%	3%
Minimum Balance		13,300	14,700	14,600	14,600	15,100	15,400	15,900

Table C-1 Wastewater Funds Cash Flow and Financial Metrics

Debt Service Coverage Ratio			<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Net Revenues									
Operating Revenues			83,300	80,202	80,720	83,126	85,811	86,859	88,520
Operating O&M			<u>38,697</u>	<u>43,550</u>	<u>44,860</u>	<u>46,210</u>	<u>47,600</u>	<u>49,030</u>	<u>50,500</u>
Net Revenues			44,603	36,652	35,860	36,916	38,211	37,829	38,020
Debt Service			18,658	19,924	5,593	11,522	11,194	12,805	15,092
Coverage Ratio									
Net Revenues			44,603	36,652	35,860	36,916	38,211	37,829	38,020
Debt Service		<u>Minimum</u>	18,658	19,924	5,593	11,522	11,194	12,805	15,092
Coverage Ratio		1.60x	2.39x	1.84x	6.41x	3.20x	3.41x	2.95x	2.52x
Debt Service as a Percent of Revenue			<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>FY23</u>	<u>FY24</u>
Debt Service			18,658	19,924	5,593	11,522	11,194	12,805	15,092
Operating Revenues		<u>Minimum</u>	83,300	80,202	80,720	83,126	85,811	86,859	88,520
Debt Service as a Percent of Revenue		<=35%	22%	25%	7%	14%	13%	15%	17%
Cash Financing of Capital			FY18	FY19	FY20	FY21	FY22	FY23	FY24
Capital Expenditures - Total	7-Year		27,388	93,613	22,684	20,674	48,879	39,113	47,490
Capital Expenditures - Cash Funded	\$ Weighted	Minimum	16,289	65,662	20,568	20,654	48,879	17,445	16,670
Cash Financing of Capital	69%	=>30%	59%	70%	91%	100%	100%	45%	35%
Debt Burden to Asset Value	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Principal Portion Outstanding									
1993A Revenue Bonds	35,752	25,752	15,752	5,752	0				
2008A Revenue Bonds	162,684	33,684	27,684	26,684	26,684	25,684	24,584	23,484	22,284
CWSRF Agreement #14-817-550	24,686	33,213	32,250	31,286	30,313	29,330	28,337	27,334	26,321
CWSRF Agreement #D15-01011	0	0	0	36,398	35,310	34,211	33,101	31,980	30,847
2019 SRF, Projected (CWSRF Agreement #	#D15-01011)			27,951	27,147	26,336	25,516	24,688	23,852
2020 SRF, Projected	,			0	1,778	1,727	1,675	1,623	1,570
2021 SRF, Projected				0	0	0	0	0	0
2022 SRF, Projected				0	0	0	0	0	0
2023 SRF, Projected				0	0	0	0	0	0
2024 SRF, Projected				0	0	0	0	0	0
2020 Bonds, Projected					0	0	0	0	0
2021 Bonds, Projected					0	0	0	0	0
2022 Bonds, Projected					0	0	0	0	0
2023 Bonds, Projected					0	0	0	23,618	23,292
2024 Bonds, Projected					0	0	0	0	33,594
Debt Burden	223,122	92,649	75,686	128,070	121,232	117,287	113,213	132,727	161,760
Total Capital Assets, Net *									
CAFR FY17									
Capital Assets, w/o CIP		829,213	923,545	950,933	1,044,546	1,067,230	1,087,904	1,136,783	1,175,896
Construction in Progress (CIP)		94,332	27,388	93,613	22,684	20,674	48,879	39,113	47,490
Accumulated Depreciation		(265,042)	(288,402)	(311,762)	(335,122)	(358,482)	(381,842)	(405,202)	(428,562)
Total Capital Assets, Net	<u>Maximum</u>	658,503	662,531	732,784	732,108	729,422	754,941	770,694	794,824
Debt Burden to Asset Value Ratio	<=50%	14%	11%	17%	17%	16%	15%	17%	20%

* "Total Capital Assets, Net" for FY17 are from the "Statement of Net Position Proprietary Funds"

on page 54 of the 2017 CAFR (Comprehensive Annual Financial Report).

Values for FY18 and onward are increased to account for construction in progress and accumulated depreciation.

Projected accumulated depreciation is based on annual depreciation from

the "Statement of Revenues, Expenses and Changes in Fund Net Position" on page 58 of the 2017 CAFR.

Appendix D: Flow, BOD and TSS Revenue Requirement by Customer Class Tables
Table D-1 Flow Revenue Allocation by Customer Class

Residential Filt Single Family \$15,986,219 \$16,136,160 \$16,283,171 \$16,426,822 \$2,053,657 \$2,073,656,666 Senior Citizen \$1,981,488 \$2,005,833 \$2,029,908 \$2,053,657 \$2,077,76 \$2,273,424,83 \$746,30 Multiple Family Addl Units \$5,775,154 \$5,975,164 \$5,176,162,80 \$6,292,814 \$6,472,484 \$6,472,484 \$6,472,484 \$746,30 Commercial \$24,409,886 \$24,769,959 \$25,132,702 \$22,617 \$5949,136 \$976,42 Medium \$1,823,255 \$1,896,496 \$1,972,520 \$2,051,420 \$2,133,292 Low \$4,302,296 \$4,425,970 \$4,553,542 \$4,685,110 \$4,820,77 Total \$6,997,661 \$7,719,464 \$7,487,728 \$7,685,666 \$7,930,49 Sewage Effluent \$11,100 \$11,401 \$11,710 \$12,029 \$12,235 Medium \$362,523 \$372,346 \$382,486 \$302,486 \$403,61 Low \$182,168 \$187,104 \$192,129 \$512,675 \$56,	Customer Category	FY20	FY21	FY22	FY23	FY24
Single Family S15,386,219 S16,136,160 S16,283,171 S16,242,822 S15,556,66 Senior Citizen S1,381,488 S2,005,833 S2,029,304 S2,077,02 Multiple Family 1xt S56,779,154 S5,945,104 S6,516,280 S723,443 S724,483 Total Residential S24,409,886 S24,769,959 S25,132,702 S25,497,776 S25,864,83 Commercial Potable Water High S872,109 S896,998 S922,667 S949,136 S976,42 Medium S1,823,255 S1,896,496 S1,972,502 S2,501,420 S2,133,29 Low S4,302,296 S4,425,797 S4,553,542 S4,685,710 S4,823,970 S4,532,542 S4,685,710 S512,029 S12,029 S12,325 Medium S1,821,005 S11,401 S11,710 S12,029 S12,325 S182,465 S329,465 S329,286 S403,61 Low S182,168 S187,104 S12,129 S12,729 S52,641 S60,314 S66,87 Total S55,5791 S570,851	Residential					
Smör Citizan \$1,981,488 \$2,005,833 \$2,029,908 \$2,035,657 \$2,077,02 Multiple Family 1st \$663,026 \$502,851,104 \$5(112,620 \$5,232,843 \$5746,30 Multiple Family AddT Units \$5,775,154 \$5,945,104 \$5,172,520 \$5,227,814 \$5,474,813 \$5746,30 Commercial \$24,409,886 \$24,769,959 \$25,132,702 \$25,697,776 \$25,864,83 Commercial \$872,109 \$896,998 \$922,667 \$949,136 \$976,42 Medium \$1,823,255 \$1,896,496 \$1,972,520 \$2,051,420 \$2,133,292 Low \$4,302,296 \$4,425,970 \$4,53,542 \$57,685,666 \$7,930,49 Sewage Effluent 11,100 \$11,210 \$12,029 \$12,35 Medium \$362,523 \$372,346 \$382,486 \$403,61 \$00,481 \$161,371 \$12,029 \$25,3452 \$27,790,315 \$58,643 \$503,386 \$502,341 \$512,673 \$512,673 \$52,473 \$52,488,007 \$8,549,29 Schools (ADA Rates) \$51,686 \$52	Single Family	\$15,986,219	\$16,136,160	\$16,283,171	\$16,426,822	\$16,566,664
Multiple Family 1st \$663,025 \$582,863 \$703,343 \$\$724,483 \$746,30 Multiple Family Add'l Units \$5,779,154 \$5,945,104 \$6,116,280 \$5,228,443,86 Commercial \$24,409,886 \$24,769,959 \$25,132,702 \$25,497,776 \$25,843,87 Potable Water High \$872,109 \$896,998 \$922,667 \$24,013,46 \$2,132,93 Low \$1,823,255 \$1,896,496 \$1,972,520 \$2,051,420 \$2,133,29 Low \$1,823,255 \$1,824,5970 \$4,553,542 \$4,685,110 \$2,930,49 Sewage Effluent \$11,100 \$11,101 \$11,710 \$12,029 \$12,323 Medium \$362,523 \$377,03,15 \$80,636 \$00,341 \$618,79 Total \$555,791 \$570,851 \$58,646 \$50,641 \$50,643 Low \$182,166 \$137,746 \$22,840 \$8,849,29 \$50,613 Schools (ADA Rates) \$51,066 \$52,470 \$53,896 \$59,55,564 \$56,873 K-garten/Elem<	Senior Citizen	\$1,981,488	\$2,005,833	\$2,029,908	\$2,053,657	\$2,077,020
Muktiple Family Add! Units \$5,779,154 \$5,5945,104 \$6,116,280 \$6,222,814 \$6,474,84 Total Residential \$25,327,02 \$25,32,707 \$25,864,83 Commercial ************************************	Multiple Family 1st	\$663,026	\$682,863	\$703,343	\$724,483	\$746,301
Total Residential \$24,409,886 \$24,769,959 \$25,132,702 \$25,497,776 \$25,864,83 Commercial Potable Water \$949,136 \$976,420 \$2,133,29 Medium \$1,823,255 \$1,896,496 \$1,972,520 \$2,051,420 \$2,133,29 Low \$3,4302,226 \$4,425,970 \$4,553,542 \$4,685,110 \$4,820,77 Total \$6,997,661 \$7,219,464 \$532,426 \$342,865 \$57,930,49 Sewage Effluent \$11,100 \$11,401 \$11,710 \$12,029 \$12,235 Medium \$362,523 \$372,346 \$382,465 \$302,881 \$640,841 Low \$182,168 \$187,104 \$112,129 \$197,426 \$202,81 Total Commercial \$7,553,452 \$7,790,315 \$8,035,092 \$8,549,29 Schools (ADA Rates) \$51,086 \$52,477 \$65,314 \$50,617 Middle \$103,37 \$10,668 \$109,958 \$11,257 \$11,56 Senior	Multiple Family Add'l Units	\$5,779,154	\$5,945,104	\$6,116,280	\$6,292,814	\$6,474,846
Commercial Potable Water High \$\$77,109 \$\$896,998 \$922,667 \$949,136 \$976,42 Medium \$\$1,823,255 \$\$1,896,496 \$\$1,972,520 \$\$2,051,420 \$\$2,133,290 Low \$\$4,302,296 \$\$4,452,250 \$\$4,553,542 \$\$4,685,110 \$\$4,802,77 Total \$\$6,997,661 \$7,219,464 \$\$7,448,728 \$\$7,685,666 \$\$7,930,49 Sewage Effluent High \$\$11,100 \$\$11,401 \$\$11,710 \$\$12,029 \$\$12,35 Medium \$\$362,523 \$\$372,346 \$\$382,465 \$\$392,886 \$\$403,611 Low \$\$182,168 \$\$187,104 \$\$19,746 \$\$202,81 \$\$66,2141 \$\$618,79 Total \$\$55,791 \$\$7,503,455 \$\$7,790,315 \$\$8,035,092 \$\$8,584,99 \$\$11,618 Schools (ADA Rates) \$\$10,387 \$\$10,668 \$\$10,958 \$\$11,257 \$\$11,56 Serior \$\$63,429 \$\$6,147 \$\$66,918 \$\$68,741 \$\$70,613 Parochial \$\$94,33 \$9,689	Total Residential	\$24,409,886	\$24,769,959	\$25,132,702	\$25,497,776	\$25,864,831
Potable Water V High \$872,109 \$896,998 \$592,667 \$949,136 \$976,42 Medium \$1,823,255 \$1,896,496 \$1,972,520 \$2,051,420 \$2,133,29 Low \$4,302,296 \$4,425,970 \$4,553,542 \$4,685,110 \$4,802,77 Total \$6,997,661 \$7,219,464 \$7,448,728 \$57,656,666 \$57,930,49 Sewage Effluent \$11,100 \$11,101 \$11,710 \$12,029 \$12,35 Medium \$362,523 \$377,346 \$382,465 \$392,886 \$403,61 Low \$182,168 \$187,104 \$192,189 \$197,426 \$202,81 Total \$555,791 \$570,851 \$586,364 \$602,341 \$618,79 Total Commercial \$7,53,452 \$7,790,315 \$58,803,502 \$81,257 \$11,55 Medium \$51,086 \$52,470 \$53,896 \$55,344 \$706,11 Parochial \$10,387 \$10,658 \$11,257 \$11,55 Senior \$52,470 \$52,	Commercial					
High \$872,109 \$896,998 \$922,667 \$949,136 \$976,42 Medium \$1,823,255 \$1,896,496 \$1,972,520 \$2,051,420 \$2,133,20 Low \$6,997,661 \$7,219,464 \$7,448,728 \$7,685,666 \$7,930,49 Sewage Effluent \$11,100 \$11,101 \$11,710 \$12,029 \$4,48,728 High \$11,00 \$11,401 \$11,710 \$12,029 \$12,35 Medium \$362,523 \$372,346 \$382,465 \$392,886 \$403,61 Low \$182,168 \$187,104 \$192,189 \$197,426 \$202,81 Total \$555,511 \$58,035,092 \$8,849,29 \$50,051 (ADA Rates) \$4,80,77 \$53,896 \$66,374 \$56,87 K-garten/Elem \$51,086 \$52,470 \$53,896 \$51,023 \$11,575 Senior \$63,429 \$65,147 \$66,518 \$56,87,14 \$70,611 Parochial \$9,433 \$9,689 \$9,952 \$10,223 \$11,557 Total \$90,227 <td>Potable Water</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Potable Water					
Medium \$1,823,255 \$1,896,496 \$1,972,520 \$2,051,420 \$2,133,207 Low \$4,302,296 \$4,425,970 \$4,553,542 \$4,685,110 \$4,820,77 Total \$5,997,661 \$7,219,464 \$7,448,728 \$7,685,666 \$5,793,049 Sewage Effluent \$11,100 \$11,101 \$11,710 \$12,029 \$12,35 Medium \$362,523 \$372,346 \$382,465 \$392,866 \$403,61 Low \$182,168 \$187,104 \$197,426 \$202,81 Total \$555,791 \$57,0851 \$586,534 \$602,341 \$618,79 Schools (ADA Rates) \$10,668 \$10,958 \$11,257 \$11,56 K-garten/Clem \$51,086 \$52,470 \$53,896 \$56,871 \$70,61 Parochial \$94,33 \$9,689 \$9,952 \$10,223 \$10,223 \$10,223 \$10,23 \$10,23 \$10,23 \$10,23 \$10,23 \$10,23 \$10,23 \$10,23 \$10,23 \$10,23 \$10,23 \$10,23 \$10,23 \$1	High	\$872,109	\$896,998	\$922,667	\$949,136	\$976,425
Low \$4,302,296 \$4,425,970 \$4,553,542 \$4,685,110 \$4,820,77 Total \$6,997,61 \$7,219,464 \$7,484,728 \$7,685,666 \$7,930,49 Sewage Effluent \$11,100 \$11,401 \$11,710 \$12,029 \$12,35 Medium \$362,523 \$372,346 \$382,465 \$392,886 \$403,61 Low \$182,168 \$187,104 \$112,129 \$12,35 \$27,753,452 \$7,70,851 \$586,364 \$602,341 \$618,79 Total Commercial \$7,553,452 \$7,700,315 \$580,350,992 \$8,288,007 \$8,549,29 Schools (ADA Rates) \$10,668 \$510,958 \$511,257 \$11,56 Senior \$63,429 \$65,147 \$66,918 \$68,741 \$70,613 Parchial \$9,433 \$9,689 \$9,952 \$10,223 \$10,50 College \$22,410 \$23,017 \$25,672 \$95,190 \$97,784 \$10,455 Low \$0 \$0 \$0 \$10 \$5 \$10,455 \$10,455	Medium	\$1,823,255	\$1,896,496	\$1,972,520	\$2,051,420	\$2,133,294
Total \$6,997,661 \$7,219,464 \$7,448,728 \$7,685,666 \$7,930,49 Sewage Effluent 511,100 \$11,401 \$11,710 \$12,22 \$12,35 Medium \$362,523 \$372,346 \$382,465 \$392,886 \$403,61 Low \$182,168 \$187,104 \$192,189 \$17,720 \$202,81 Total \$555,751 \$57,851 \$586,364 \$602,341 \$618,797 Total Commercial \$7,553,452 \$7,790,315 \$8,035,092 \$8,288,007 \$8,549,29 Schools (ADA Rates) \$51,086 \$52,470 \$53,886 \$553,345 \$553,345 Parochial \$9,433 \$9,689 \$9,952 \$10,223 \$10,505 College \$22,410 \$23,017 \$23,642 \$24,287 \$24,957 Total Schools (ADA Rates) \$156,744 \$160,991 \$165,366 \$169,872 \$10,451 Industrial \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 Low \$0 \$0 \$0 <td< td=""><td>Low</td><td>\$4,302,296</td><td>\$4,425,970</td><td>\$4,553,542</td><td>\$4,685,110</td><td>\$4,820,778</td></td<>	Low	\$4,302,296	\$4,425,970	\$4,553,542	\$4,685,110	\$4,820,778
Sewage Effluent S11,000 S11,010 S12,050 S403,611 Low \$182,168 \$187,104 \$192,189 \$197,426 \$202,81 Total \$555,791 \$570,851 \$58,035,092 \$8,288,007 \$8,59,292 Schools (ADA Rates) \$10,666 \$52,470 \$58,3896 \$555,361 \$56,877 Middle \$10,387 \$10,668 \$10,958 \$51,0223 \$10,505 Senior \$63,429 \$65,147 \$66,918 \$68,741 \$70,611 Parochial \$9,433 \$59,689 \$59,525 \$10,505 \$11,556 College \$22,410 \$23,017 \$23,3612 \$24,282 \$24,282 \$24,282 \$24,282 \$24,282 \$24,282 \$24,282 \$24,282 \$24,282 \$24,282 \$24,292 \$24,282 \$24,292 \$24,292 \$24,292 \$24,292 \$24,292 \$24,292	Total	\$6,997,661	\$7,219,464	\$7,448,728	\$7,685,666	\$7,930,497
High Medium \$11,100 \$11,401 \$11,710 \$12,029 \$12,353 Medium \$362,523 \$372,346 \$382,465 \$392,886 \$403,61. Low \$182,168 \$187,104 \$192,189 \$197,426 \$202,81. Total \$555,791 \$570,851 \$586,364 \$602,341 \$618,79 Schools (ADA Rates) K-garten/Elem \$51,086 \$52,470 \$53,896 \$55,364 \$56,871 Senior \$63,429 \$61,477 \$66,918 \$68,741 \$70,651 Parochial \$9,433 \$9,689 \$9,952 \$10,223 \$10,565 College \$22,410 \$23,017 \$23,642 \$24,287 \$24,955 Total Schools (ADA Rates) \$156,744 \$160,991 \$165,366 \$169,872 \$17,51 Industrial \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 Low \$0 \$0 \$0 \$0 \$0 \$50 \$50 \$6,480,877 Low \$5,821,017 <	Sewage Effluent					
Medium \$362,523 \$372,346 \$382,465 \$392,886 \$403,61 Low \$182,168 \$187,104 \$192,189 \$197,426 \$202,811 Total \$555,571 \$570,851 \$586,364 \$602,341 \$618,79 Total Commercial \$7,553,452 \$7,790,315 \$8,088,007 \$8,549,29 Schools (ADA Rates) \$510,086 \$510,978 \$511,257 \$11,56 K-garten/Elem \$51,086 \$52,470 \$53,896 \$51,253 \$11,55 Senior \$63,429 \$65,147 \$66,918 \$68,741 \$70,612 Parochial \$9,433 \$9,689 \$9,952 \$10,223 \$10,505 College \$22,410 \$23,017 \$23,642 \$24,287 \$24,95 Total Schools (ADA Rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,51 Industrial \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 Low \$0 \$0 \$0 \$0 \$50 \$50 \$64	High	\$11,100	\$11,401	\$11,710	\$12,029	\$12,358
Low \$182,168 \$187,104 \$192,189 \$197,426 \$202,81 Total \$555,791 \$570,851 \$586,364 \$602,341 \$618,79,29 Total \$7,553,452 \$7,790,315 \$580,350,92 \$8,288,007 \$8,549,29 Schools (ADA Rates) ************************************	Medium	\$362,523	\$372,346	\$382,465	\$392,886	\$403,618
Total \$555,791 \$570,851 \$586,364 \$602,341 \$618,79. Total Commercial \$7,553,452 \$7,790,315 \$8,035,092 \$8,288,007 \$8,549,29 Schools (ADA Rates) \$51,086 \$52,470 \$53,896 \$55,364 \$56,87 Middle \$10,387 \$10,668 \$10,958 \$11,257 \$11,56 Senior \$63,429 \$65,147 \$66,918 \$68,741 \$70,611 Parochial \$9,433 \$9,689 \$9,952 \$10,223 \$10,50 College \$22,410 \$23,017 \$23,642 \$24,287 \$24,951 Total Schools (ADA Rates) \$156,744 \$160,991 \$165,366 \$169,872 \$17,451 Industrial \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 Low \$0 \$0 \$0 \$0 \$5 \$6,480,87 Total \$5,821,017 \$5,978,742 \$6,141,217 \$6,308,555 \$6,480,87 Total \$5,821,1244 \$6,071,4	Low	\$182,168	\$187,104	\$192,189	\$197,426	\$202,818
Total Commercial \$7,553,452 \$7,790,315 \$8,035,092 \$8,288,007 \$8,549,29 Schools (ADA Rates)	Total	\$555,791	\$570,851	\$586,364	\$602,341	\$618,794
Schools (ADA Rates) K-garten/Elem \$51,086 \$52,470 \$53,896 \$55,364 \$56,877 Middle \$10,387 \$10,668 \$10,958 \$11,257 \$11,56 Senior \$63,429 \$65,147 \$66,918 \$68,741 \$70,611 Parochial \$9,433 \$9,689 \$9,952 \$10,223 \$10,50 College \$22,410 \$23,017 \$23,642 \$24,287 \$24,955 Total Schools (ADA Rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,511 Industrial \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 Low \$0 \$0 \$0 \$0 \$0 \$0 \$10,455 Low \$0 \$0 \$0 \$10 \$97,784 \$100,455 Low \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$57 Total \$5,821,017 \$5,978,742 \$6,141,217 \$6,308,555 \$6,480,877 \$10,453	Total Commercial	\$7,553,452	\$7,790,315	\$8,035,092	\$8,288,007	\$8,549,291
K-garten/Elem \$51,086 \$52,470 \$53,896 \$55,364 \$56,877 Middle \$10,387 \$10,668 \$10,958 \$11,257 \$11,56 Senior \$63,429 \$65,147 \$66,918 \$68,741 \$70,611 Parochial \$9,433 \$9,689 \$9,952 \$10,223 \$10,000 College \$22,410 \$23,017 \$23,642 \$24,287 \$24,951 Total Schools (ADA Rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,511 Industrial \$90,227 \$92,672 \$95,190 \$97,784 \$100,451 Low \$0 \$0 \$0 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$56,480,87 \$100,45 \$50 \$56,480,87 \$50 \$56,480,87 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$56,480,87 </td <td>Schools (ADA Rates)</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Schools (ADA Rates)					
Middle \$10,387 \$10,668 \$10,958 \$11,257 \$11,565 Senior \$63,429 \$65,147 \$66,918 \$68,741 \$70,611 Parochial \$9,933 \$9,689 \$9,952 \$10,223 \$10,50 College \$22,2410 \$23,017 \$23,642 \$24,287 \$24,955 Total Schools (ADA Rates) \$156,774 \$160,991 \$165,366 \$169,872 \$174,51 Industrial Potable Water \$10,9027 \$92,672 \$95,190 \$97,784 \$100,455 Low \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$10,455 Sewage Effluent \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 \$10,455 \$6,408,87 \$100,455 \$10,455 \$6,408,87 \$10,045 \$100,455 \$50 \$6,408,87 \$100,455 \$50 \$6,408,87 \$100,455 \$50 \$6,408,87 \$100,455 \$50 \$6,408,87 \$100,455 \$50 \$50 \$50	K-garten/Elem	\$51,086	\$52,470	\$53,896	\$55,364	\$56,876
Senior \$63,429 \$65,147 \$66,918 \$68,741 \$70,61 Parochial \$9,433 \$9,689 \$9,952 \$10,223 \$10,50 College \$22,410 \$23,017 \$23,642 \$24,287 \$24,95 Total Schools (ADA Rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,51 Industrial Potable Water \$90,227 \$92,672 \$95,190 \$97,784 \$100,45 Low \$0 \$0 \$0 \$0 \$0 \$5 \$100,45 Sewage Effluent \$90,227 \$92,672 \$95,190 \$97,784 \$100,45 Low \$0 \$0 \$0 \$0 \$5 \$100,45 Sewage Effluent \$5,821,017 \$5,978,742 \$6,141,217 \$6,308,555 \$6,480,87 Low \$0 \$0 \$0 \$0 \$0 \$5 \$5 Total \$5,821,017 \$5,978,742 \$6,141,217 \$6,308,555 \$6,480,87 Low	Middle	\$10,387	\$10,668	\$10,958	\$11,257	\$11,564
Parochial \$9,433 \$9,689 \$9,952 \$10,223 \$10,503 College \$22,410 \$23,017 \$23,642 \$24,287 \$24,955 Total Schools (ADA Rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,511 Industrial Potable Water \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 Low \$00 \$00 \$00 \$00 \$0 \$165,366 \$169,855 \$6,480,87 Low \$00 \$00 \$0 \$0 \$0 \$0 \$50	Senior	\$63,429	\$65,147	\$66,918	\$68,741	\$70,619
College \$22,410 \$23,017 \$23,642 \$24,287 \$24,955 Total Schools (ADA Rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,51 Industrial ************************************	Parochial	\$9,433	\$9,689	\$9,952	\$10,223	\$10,503
Total Schools (ADA Rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,51 Industrial Potable Water \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 Low \$0	College	\$22,410	\$23,017	\$23,642	\$24,287	\$24,950
Industrial Potable Water High \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 Low \$0 \$0 \$0 \$0 \$0 \$100,455 Low \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 Sewage Effluent \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 High \$5,821,017 \$5,978,742 \$6,141,217 \$6,308,555 \$6,480,87 Low \$0 \$0 \$0 \$0 \$0 \$0 \$10 \$5 Total \$5,821,017 \$5,978,742 \$6,141,217 \$6,308,555 \$6,480,87 Total \$5,821,017 \$5,978,742 \$6,141,217 \$6,308,555 \$6,480,87 Total Industrial \$5,911,244 \$6,071,414 \$6,236,408 \$6,406,339 \$6,581,32 Schools (ADA rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,51 Commercial \$7,553,452 \$7,790,315 \$8,035,092 \$8,288,007 \$8,549,2	Total Schools (ADA Rates)	\$156,744	\$160,991	\$165,366	\$169,872	\$174,512
Potable Water Potable Water High \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 Low \$0 \$0 \$0 \$0 \$100,455 Low \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 Total \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 Sewage Effluent ************************************	Industrial					
High\$90,227\$92,672\$95,190\$97,784\$100,455Low\$0\$0\$0\$0\$0\$0Total\$90,227\$92,672\$95,190\$97,784\$100,455Sewage Effluent\$90,227\$92,672\$95,190\$97,784\$100,455Low\$5,821,017\$5,978,742\$6,141,217\$6,308,555\$6,480,87Low\$0\$0\$0\$0\$0\$0Total\$5,821,017\$5,978,742\$6,141,217\$6,308,555\$6,480,87Total Industrial\$5,911,244\$6,071,414\$6,236,408\$6,406,339\$6,581,324Summary\$156,744\$160,991\$165,366\$169,872\$174,511Residential\$24,409,886\$24,769,959\$25,132,702\$25,497,776\$25,864,83Schools (ADA rates)\$156,744\$160,991\$165,366\$169,872\$174,511Commercial\$7,553,452\$7,790,315\$8,035,092\$8,288,007\$8,549,29Industrial\$5,911,244\$6,071,414\$6,236,408\$6,406,339\$6,581,327Total\$38,031,327\$38,792,679\$39,569,568\$40,361,995\$41,169,961Percent of Total64%64%63%63%Schools (ADA rates)0.4%0.4%0.4%0.4%0.4%Commercial64%64%64%63%63%Schools (ADA rates)0.4%0.4%0.4%0.4%0.4%Commercial64%	Potable Water					
Low \$0 \$0 \$0 \$0 \$1 Total \$90,227 \$92,672 \$95,190 \$97,784 \$100,453 Sewage Effluent \$5,821,017 \$5,978,742 \$6,141,217 \$6,308,555 \$6,480,87 Low \$0 \$0 \$0 \$0 \$0 \$0 \$5 Low \$50 \$0 \$0 \$0 \$5 \$6,480,87 Low \$50 \$0 \$0 \$0 \$5 \$5 Total \$5,821,017 \$5,978,742 \$6,141,217 \$6,308,555 \$6,480,87 Total Industrial \$5,821,017 \$5,978,742 \$6,141,217 \$6,308,555 \$6,480,87 Summary \$5,911,244 \$6,071,414 \$6,236,408 \$6,406,339 \$6,581,321 Schools (ADA rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,513 Commercial \$7,553,452 \$7,790,315 \$8,035,092 \$8,288,007 \$8,549,299 Industrial \$5,911,244	High	\$90,227	\$92,672	\$95,190	\$97,784	\$100,455
Total \$90,227 \$92,672 \$95,190 \$97,784 \$100,455 Sewage Effluent * <t< td=""><td>Low</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$0</td></t<>	Low	\$0	\$0	\$0	\$0	\$0
Sewage Effluent Sewage Effluent High \$5,821,017 \$5,978,742 \$6,141,217 \$6,308,555 \$6,480,87 Low \$0 \$0 \$0 \$0 \$5 Total \$5,821,017 \$5,978,742 \$6,141,217 \$6,308,555 \$6,480,87 Total Industrial \$5,911,244 \$6,071,414 \$6,236,408 \$6,406,339 \$6,581,321 Summary Revenue Allocation \$24,409,886 \$24,769,959 \$25,132,702 \$25,497,776 \$25,864,83 Schools (ADA rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,51 Commercial \$7,553,452 \$7,790,315 \$8,035,092 \$8,288,007 \$8,549,29 Industrial \$5,911,244 \$6,071,414 \$6,236,408 \$6,406,339 \$6,581,321 Total \$38,031,327 \$38,792,679 \$39,569,568 \$40,361,995 \$41,169,960 Percent of Total \$38,031,327 \$38,792,679 \$39,569,568 \$40,361,995 \$41,169,960 Percent of Total \$20 \$20%	Total	\$90,227	\$92,672	\$95,190	\$97,784	\$100,455
High\$5,821,017\$5,978,742\$6,141,217\$6,308,555\$6,480,87Low\$0\$0\$0\$0\$0\$0\$0Total\$5,821,017\$5,978,742\$6,141,217\$6,308,555\$6,480,87Total Industrial\$5,911,244\$6,071,414\$6,236,408\$6,406,339\$6,581,321SummaryRevenue Allocation\$24,409,886\$24,769,959\$25,132,702\$25,497,776\$25,864,833Schools (ADA rates)\$156,744\$160,991\$165,366\$169,872\$174,513Commercial\$7,553,452\$7,790,315\$8,035,092\$8,288,007\$8,549,299Industrial\$5,911,244\$6,071,414\$6,236,408\$6,406,339\$6,581,321Total\$38,031,327\$38,792,679\$39,569,568\$40,361,995\$41,169,961Percent of Total\$6,40664%64%63%63%Schools (ADA rates)0.4%0.4%0.4%0.4%0.4%Commercial64%64%64%63%63%Schools (ADA rates)0.4%0.4%0.4%0.4%0.4%Commercial20%20%20%21%21%Industrial16%16%16%16%16%Total100%100%100%100%100%100%	Sewage Effluent					
Low \$0	High	\$5,821,017	\$5,978,742	\$6,141,217	\$6,308,555	\$6,480,871
Total \$5,821,017 \$5,978,742 \$6,141,217 \$6,308,555 \$6,480,87 Total Industrial \$5,911,244 \$6,071,414 \$6,236,408 \$6,406,339 \$6,581,324 Summary Revenue Allocation \$24,409,886 \$24,769,959 \$25,132,702 \$25,497,776 \$25,864,833 Schools (ADA rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,513 Commercial \$7,553,452 \$7,790,315 \$8,035,092 \$8,288,007 \$8,549,29 Industrial \$5,911,244 \$6,071,414 \$6,236,408 \$6,406,339 \$6,581,324 Commercial \$7,553,452 \$7,790,315 \$8,035,092 \$8,288,007 \$8,549,29 Industrial \$5,911,244 \$6,071,414 \$6,236,408 \$6,406,339 \$6,581,324 Total \$38,031,327 \$38,792,679 \$39,569,568 \$40,361,995 \$41,169,964 Percent of Total 64% 64% 64% 63% 63% Schools (ADA rates) 0.4% 0.4%	Low	\$0	\$0	\$0	\$0	\$0
Total Industrial \$5,911,244 \$6,071,414 \$6,236,408 \$6,406,339 \$6,581,324 Summary Revenue Allocation Seximary Seximary <thseximary< th=""> Seximary Se</thseximary<>	Total	\$5,821,017	\$5,978,742	\$6,141,217	\$6,308,555	\$6,480,871
Summary Revenue Allocation Residential \$24,409,886 \$24,769,959 \$25,132,702 \$25,497,776 \$25,864,833 Schools (ADA rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,513 Commercial \$7,553,452 \$7,790,315 \$8,035,092 \$8,288,007 \$8,549,293 Industrial \$5,911,244 \$6,071,414 \$6,236,408 \$6,406,339 \$6,581,324 Total \$38,031,327 \$38,792,679 \$39,569,568 \$40,361,995 \$41,169,961 Percent of Total 64% 64% 63% 63% Schools (ADA rates) 0.4% 0.4% 0.4% 0.4% 0.4% 0.4% Commercial 20% 20% 20% 21% 21% Industrial 16% 16% 16% 16% 16% Total 100% 100% 100% 100% 100% 100%	Total Industrial	\$5,911,244	\$6,071,414	\$6,236,408	\$6,406,339	\$6,581,326
Revenue Allocation Residential \$24,409,886 \$24,769,959 \$25,132,702 \$25,497,776 \$25,864,83 Schools (ADA rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,51 Commercial \$7,553,452 \$7,790,315 \$8,035,092 \$8,288,007 \$8,549,29 Industrial \$5,911,244 \$6,071,414 \$6,236,408 \$6,406,339 \$6,581,324 Total \$38,031,327 \$38,792,679 \$39,569,568 \$40,361,995 \$41,169,961 Percent of Total 64% 64% 64% 63% 63% Schools (ADA rates) 0.4% 0.4% 0.4% 0.4% 0.4% 0.4% Commercial 20% 20% 20% 21% 21% Industrial 16% 16% 16% 16% 16% Total 100% 100% 100% 100% 100% 100%	Summary					
Residential\$24,409,886\$24,769,959\$25,132,702\$25,497,776\$25,864,83Schools (ADA rates)\$156,744\$160,991\$165,366\$169,872\$174,513Commercial\$7,553,452\$7,790,315\$8,035,092\$8,288,007\$8,549,29Industrial\$5,911,244\$6,071,414\$6,236,408\$6,406,339\$6,581,324Total\$38,031,327\$38,792,679\$39,569,568\$40,361,995\$41,169,961Percent of Total64%64%63%639Schools (ADA rates)0.4%0.4%0.4%0.4%0.4%Commercial20%20%20%21%219Industrial16%16%16%16%16%Total100%100%100%100%100%100%	Revenue Allocation					
Schools (ADA rates) \$156,744 \$160,991 \$165,366 \$169,872 \$174,51. Commercial \$7,553,452 \$7,790,315 \$8,035,092 \$8,288,007 \$8,549,29 Industrial \$5,911,244 \$6,071,414 \$6,236,408 \$6,406,339 \$6,581,324 Total \$38,031,327 \$38,792,679 \$39,569,568 \$40,361,995 \$41,169,964 Percent of Total 64% 64% 64% 63% 63% Schools (ADA rates) 0.4%	Residential	\$24,409,886	\$24,769,959	\$25,132,702	\$25,497,776	\$25,864,831
Commercial\$7,553,452\$7,790,315\$8,035,092\$8,288,007\$8,549,29Industrial\$5,911,244\$6,071,414\$6,236,408\$6,406,339\$6,581,324Total\$38,031,327\$38,792,679\$39,569,568\$40,361,995\$41,169,964Percent of Total64%64%64%63%63%Schools (ADA rates)0.4%0.4%0.4%0.4%0.4%0.4%0.4%Commercial20%20%20%21%21%21%Industrial16%16%16%16%16%100%Total100%100%100%100%100%100%100%	Schools (ADA rates)	\$156,744	\$160,991	\$165,366	\$169,872	\$174,512
Industrial \$5,911,244 \$6,071,414 \$6,236,408 \$6,406,339 \$6,581,327 Total \$38,031,327 \$38,792,679 \$39,569,568 \$40,361,995 \$41,169,967 Percent of Total 64% 64% 64% 63% 63% Schools (ADA rates) 0.4%	Commercial	\$7,553,452	\$7,790,315	\$8,035,092	\$8,288,007	\$8,549,291
Total \$38,031,327 \$38,792,679 \$39,569,568 \$40,361,995 \$41,169,960 Percent of Total </td <td>Industrial</td> <td>\$5,911,244</td> <td>\$6,071,414</td> <td>\$6,236,408</td> <td>\$6,406,339</td> <td>\$6,581,326</td>	Industrial	\$5,911,244	\$6,071,414	\$6,236,408	\$6,406,339	\$6,581,326
Percent of Total 64% 64% 64% 63% 63% Residential 64% 64% 64% 63% 63% Schools (ADA rates) 0.4% 0.4% 0.4% 0.4% 0.4% Commercial 20% 20% 20% 21% 21% Industrial 16% 16% 16% 16% 100%	Total	\$38,031,327	\$38,792,679	\$39,569,568	\$40,361,995	\$41,169,960
Residential 64% 64% 64% 63% <th< td=""><td>Percent of Total</td><td></td><td></td><td></td><td></td><td></td></th<>	Percent of Total					
Schools (ADA rates) 0.4% </td <td>Residential</td> <td>64%</td> <td>64%</td> <td>64%</td> <td>63%</td> <td>63%</td>	Residential	64%	64%	64%	63%	63%
Commercial20%20%20%21%219Industrial16%16%16%16%16%Total100%100%100%100%100%	Schools (ADA rates)	0.4%	0.4%	0.4%	0.4%	0.4%
Industrial16%16%16%16%16%Total100%100%100%100%100%	Commercial	20%	20%	20%	21%	21%
Total 100% 100% 100% 100% 100%	Industrial	16%	16%	16%	16%	16%
	Total	100%	100%	100%	100%	100%

Table D-2 BOD Revenue Allocation by Customer Class

Customer Category	FY20	FY21	FY22	FY23	FY24
Residential					
Single Family	\$3,848,024	\$3,877,715	\$3,906,495	\$3,934,261	\$3,960,907
Senior Citizen	\$476,962	\$482,026	\$486,995	\$491,856	\$496,593
Multiple Family 1st	\$159,596	\$164,100	\$168,739	\$173,515	\$178,432
Multiple Family Add'l Units	\$1,391,093	\$1,428,680	\$1,467,356	\$1,507,143	\$1,548,064
Total Residential	\$5,875,676	\$5,952,521	\$6,029,586	\$6,106,776	\$6,183,996
Commercial					
Potable Water					
High	\$723,877	\$743,308	\$763,300	\$783,863	\$805,009
Medium	\$529,675	\$550,044	\$571,136	\$592,972	\$615,574
Low	\$499,945	\$513 <i>,</i> 469	\$527,385	\$541,701	\$556,425
Total	\$1,753,497	\$1,806,822	\$1,861,821	\$1,918,536	\$1,977,008
Sewage Effluent					
High	\$9,213	\$9,447	\$9,688	\$9,935	\$10,189
Medium	\$105,317	\$107,992	\$110,741	\$113,566	\$116,466
Low	\$21,169	\$21,706	\$22,259	\$22,827	\$23,410
Total	\$135,699	\$139,146	\$142,688	\$146,327	\$150,064
Total Commercial	\$1,889,196	\$1,945,967	\$2,004,509	\$2,064,863	\$2,127,072
Schools (ADA Rates)					
K-garten/Elem	\$14,779	\$15.154	\$15.540	\$15.936	\$16.343
Middle	\$3,005	\$3,081	\$3,160	\$3,240	\$3,323
Senior	\$18.350	\$18.816	\$19.295	\$19.787	\$20.292
Parochial	\$2,729	\$2.798	\$2.870	\$2,943	\$3.018
College	\$6.483	\$6.648	\$6.817	\$6.991	\$7.169
Total Schools (ADA Rates)	\$45.346	\$46,497	\$47.681	\$48,897	\$50,146
Industrial	+	+ ,	+,	+ ,	+
Potable Water					
High	\$2,718	\$2,787	\$2,858	\$2,931	\$3,006
Low	\$0	\$0	\$0	\$0	\$0
Total	\$2.718	\$2.787	\$2.858	\$2.931	\$3.006
Sewage Effluent	+-/	<i>+_,</i>	+_,	+ _ / = = _	+-,
High	\$4,006,411	\$4,108,186	\$4,212,766	\$4,320,203	\$4,430,549
low	\$0	\$0	\$0	\$0	\$0
Total	\$4,006,411	\$4,108,186	\$4,212,766	\$4.320.203	\$4,430,549
Total Industrial	\$4,009,130	\$4,110,973	\$4,215,624	\$4,323,134	\$4,433,555
Summary	<i>ϕ</i> 1,000,200	<i>ų</i> (<u>1</u> 20)070	<i>\(\\)\</i>	¢ 1,020,201	<i>ų</i> 1, 100,000
Revenue Allocation					
Residential	\$5 875 676	\$5 952 521	\$6 029 586	\$6 106 776	\$6 183 996
Schools (ADA rates)	\$45 346	\$46 497	\$47 681	\$48 897	\$50,146
Commercial	\$1 889 196	\$1 945 967	\$2 004 509	\$2,064,863	\$2 127 072
Industrial	\$4,009,130	\$4 110 973	\$4,215,624	\$4 323 134	\$4 433 555
Total	\$11 819 347	\$12,055,959	\$12 297 400	\$12 543 670	\$12 794 769
Percent of Total	Ŷ11,010,517	<i>q</i> 12,000,000	<i><i><i>q</i>12,237,100</i></i>	<i>Q12,3 13,070</i>	<i>Q12,75</i> 1,705
Residential	50%	49%	49%	49%	48%
Schools (ADA rates)	0 /0/		4.0 M		+8% 0.4%
Commercial	16%	16%	16%	16%	17%
Industrial	2/0/	2/0/	2/0/	2/0/	250/
Total	%÷% /۵/۱۰	3470 1000/	3470 1000/	3470 100%	1000/
IUtal	100%	100%	100%	100%	100%

Table D-3 TSS Revenue Allocation by Customer Class

Customer Category	FY20	FY21	FY22	FY23	FY24
Residential					
Single Family	\$4,869,879	\$4,914,907	\$4,959,020	\$5,002,086	\$5,043,969
Senior Citizen	\$603,620	\$610,956	\$618,206	\$625,354	\$632,380
Multiple Family 1st	\$201,977	\$207,993	\$214,202	\$220,610	\$227,223
Multiple Family Add'l Units	\$1,760,502	\$1,810,817	\$1,862,705	\$1,916,207	\$1,971,364
Total Residential	\$7,435,979	\$7,544,672	\$7,654,134	\$7,764,257	\$7,874,934
Commercial					
Potable Water					
High	\$498,132	\$512,280	\$526,870	\$541,910	\$557,414
Medium	\$607,488	\$631,808	\$657,047	\$683,235	\$710,405
Low	\$655,304	\$674,052	\$693,388	\$713,325	\$733,879
Total	\$1,760,924	\$1,818,141	\$1,877,304	\$1,938,470	\$2,001,698
Sewage Effluent					
High	\$6,340	\$6,511	\$6,687	\$6,868	\$7,055
Medium	\$120,789	\$124,045	\$127,399	\$130,853	\$134,408
Low	\$27,747	\$28,495	\$29,265	\$30,059	\$30,876
Total	\$154,876	\$159,051	\$163,351	\$167,780	\$172,339
Total Commercial	\$1,915,800	\$1,977,192	\$2,040,655	\$2,106,250	\$2,174,036
Schools (ADA Rates)					
K-garten/Elem	\$16.950	\$17.407	\$17.878	\$18.362	\$18.861
Middle	\$3.446	\$3,539	\$3.635	\$3,733	\$3.835
Senior	\$21.045	\$21.613	\$22.197	\$22,799	\$23.418
Parochial	\$3.130	\$3.214	\$3.301	\$3.391	\$3.483
College	\$7.435	\$7.636	\$7.842	\$8.055	\$8.274
Total Schools (ADA Rates)	\$52.007	\$53,409	\$54.853	\$56.340	\$57.871
Industrial	<i>402,007</i>	<i>\$55,105</i>	<i>40 1,000</i>	<i>\$55,510</i>	<i>\$67,672</i>
Potable Water					
High	\$24,617	\$25,281	\$25,964	\$26,668	\$27,393
low	\$0	\$0	\$0	\$0	\$0
Total	\$24.617	\$25,281	\$25,964	\$26,668	\$27,393
Sewage Effluent	+	+,	+/	+,	+,
High	\$2,390,944	\$2,455,405	\$2,521,793	\$2,590,155	\$2,660,534
low	\$0	\$0	\$0	\$0	\$0
Total	\$2 390 944	\$2 455 405	\$2 521 793	\$2 590 155	\$2 660 534
Total Industrial	\$2,335,511	\$2,480,686	\$2,521,753	\$2,616,823	\$2,687,927
Summary	<i>\\\\\\\\\\\\\</i>	<i><i>v</i>₂, 100,000</i>	<i>q</i> = <i>j</i> 0 <i>mji</i> 00	<i><i><i>v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₂<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,<i>v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>, v₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>₁<i>,v</i>_{1,<i>v</i>₁<i>,vv</i>_{1,<i>v</i>₁<i>,vv</i>_{1,<i>v</i>₁<i>,vvnvvnvv</i>}}}</i></i></i></i>	<i>\\\\\\\\\\\\\</i>
Revenue Allocation					
Residential	\$7 435 979	\$7 544 672	\$7 654 134	\$7 764 257	\$7 874 934
Schools (ADA rates)	\$52,007	\$53 409	\$54 853	\$56 340	\$57 871
Commercial	\$1 915 800	\$1 977 192	\$2 040 655	\$2 106 250	\$2 174 036
Industrial	\$2,415,561	\$2,480,686	\$2,640,055	\$2,100,230	\$2,17,4,030
Total	\$11 819 347	\$12,055,050	\$12,297,400	\$12 543 670	\$12 794 769
Percent of Total	Ş11,013,517	<i>Q12,000,000</i>	<i>Q12,237,100</i>	<i>Q12,3 13,070</i>	<i>Q12,75</i> 1,705
Residential	63%	63%	62%	62%	62%
Schools (ADA rates)	0.7%	0.1%	02/0 0./%	02/0	02%
Commercial	16%	16%	17%	17%	17%
Industrial	20%	10 <i>%</i>	1770 71%	1770 01%	1776 010/
Total	20%	21/0 1000/	21/0 1000/	21/0 100%	1000/
IUtal	100%	100%	100%	100%	100%

Table D-4 Flow, BOD and TSS Revenue Allocation by Customer Class

Customer Category	FY20	FY21	FY22	FY23	FY24
Residential					
Single Family	\$24,704,122	\$24,928,781	\$25,148,686	\$25,363,169	\$25,571,540
Senior Citizen	\$3,062,070	\$3,098,814	\$3,135,110	\$3,170,867	\$3,205,993
Multiple Family 1st	\$1,024,599	\$1,054,956	\$1,086,284	\$1,118,609	\$1,151,956
Multiple Family Add'l Units	\$8,930,749	\$9,184,601	\$9,446,341	\$9,716,165	\$9,994,273
Total Residential	\$37,721,541	\$38,267,153	\$38,816,421	\$39,368,809	\$39,923,762
Commercial					
Potable Water					
High	\$2,094,118	\$2,152,587	\$2,212,836	\$2,274,909	\$2,338,848
Medium	\$2,960,419	\$3,078,348	\$3,200,702	\$3,327,628	\$3,459,273
Low	\$5,457,545	\$5,613,492	\$5,774,314	\$5,940,135	\$6,111,082
Total	\$10,512,082	\$10,844,426	\$11,187,853	\$11,542,672	\$11,909,202
Sewage Effluent					
High	\$26,653	\$27,359	\$28,085	\$28,832	\$29,601
Medium	\$588,629	\$604,384	\$620,605	\$637,305	\$654,492
Low	\$231,084	\$237,305	\$243,713	\$250,311	\$257,103
Total	\$846,366	\$869,048	\$892,403	\$916,448	\$941,197
Total Commercial	\$11,358,448	\$11,713,474	\$12,080,256	\$12,459,120	\$12,850,399
Schools (ADA Rates)					
K-garten/Elem	\$82,814	\$85,031	\$87,313	\$89,663	\$92,081
Middle	\$16,838	\$17,289	\$17,753	\$18,230	\$18,722
Senior	\$102,824	\$105,576	\$108,410	\$111,327	\$114,330
Parochial	\$15,292	\$15,702	\$16,123	\$16,557	\$17,004
College	\$36,328	\$37,301	\$38,302	\$39,333	\$40,393
Total Schools (ADA Rates)	\$254.097	\$260.898	\$267.901	\$275.110	\$282.529
Industrial	, - ,	,,	, - ,	, , ,	
Potable Water					
High	\$117.563	\$120.740	\$124.013	\$127.384	\$130.854
Low	\$0	\$0	\$0	\$0	\$0
Total	\$117.563	\$120.740	\$124.013	\$127.384	\$130.854
Sewage Effluent	, ,		, ,	, ,	
High	\$12,218,373	\$12,542,332	\$12.875.777	\$13,218,913	\$13.571.953
Low	\$0	\$0	\$0	\$0	\$0
Total	\$12,218,373	\$12.542.332	\$12.875.777	\$13,218,913	\$13.571.953
Total Industrial	\$12,335,935	\$12,663,073	\$12,999,790	\$13,346,297	\$13,702,807
Summary	<i>q</i> 12 ,000,000	<i>ų</i> 12,000,070	<i>q</i> 12,000,000	<i>q</i> 10)010 <u>1</u> 207	<i>\\</i> \ <i>\</i> \ <i>\\\</i> \ <i>\\\\\\\\\\\\\</i>
Revenue Allocation					
Residential	\$37 721 541	\$38 267 153	\$38 816 421	\$39 368 809	\$39 923 762
Schools (ADA rates)	\$254.097	\$260,898	\$267 901	\$275 110	\$282 529
Commercial	\$11,358,448	\$11,713,474	\$12,080,256	\$12,459,120	\$12,850,399
Industrial	\$12,335,935	\$12,663,073	\$12,999,790	\$13,346,297	\$13,702,807
Total	\$61,670,021	\$62,904,597	\$64,164,368	\$65,449,336	\$66,759,498
Percent of Total	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	<i>ç</i> o <u></u> 2,00 1,007	<i>ç</i> 0 1/20 1/000	<i>400)</i> 110,000	<i>çcc), cc</i> , isc
Residential	61%	61%	60%	60%	60%
Schools (ADA rates)	01%	0.4%	0.4%	0.4%	0.4%
Commercial	18%	19%	19%	19%	19%
Industrial	20%	20%	20%	20%	21%
Total	100%	100%	100%	100%	100%
iotal	10078	10076	100%	100%	10070

Table D-5

Units/Accounts Revenue Allocation by Customer Class

Customer Category	FY20	FY21	FY22	FY23	FY24
Residential					
Single Family	\$6,284,324	\$6,406,755	\$6,531,629	\$6,658,941	\$6,788,689
Senior Citizen	\$778,940	\$796,403	\$814,252	\$832,491	\$851,121
Multiple Family 1st	\$434,402	\$443,661	\$453,118	\$462,774	\$472,630
Multiple Family Add'l Units	\$3,786,394	\$3,862,578	\$3,940,322	\$4,019,629	\$4,100,497
Total Residential	\$11,284,061	\$11,509,397	\$11,739,321	\$11,973,835	\$12,212,937
Commercial					
Potable Water					
High	\$42,496	\$43,344	\$44,209	\$45,091	\$45,990
Medium	\$46,905	\$48,381	\$49,897	\$51,452	\$53,048
Low	\$371,595	\$379,083	\$386,725	\$394,520	\$402,469
Total	\$460,997	\$470,809	\$480,831	\$491,063	\$501,507
Sewage Effluent					
High	\$960	\$978	\$996	\$1.015	\$1.033
Medium	\$1.508	\$1.536	\$1.564	\$1.593	\$1.622
Low	\$8.334	\$8,488	\$8.646	\$8.806	\$8,969
Total	\$10,802	\$11,002	\$11,206	\$11,413	\$11,625
Total Commercial	\$471,799	\$481.811	\$492.036	\$502.477	\$513.132
Schools (ADA Bates)	<i>•</i> · · · · · · · · ·	+/	+)	<i>+)</i>	+
K-garten/Flem	\$1.015	\$1 034	\$1.053	\$1.072	\$1.092
Middle	\$60	\$61	\$62	\$63	\$64
Senior	\$239	\$243	\$248	\$252	\$257
Parochial	\$299	\$304	\$310	\$315	\$321
College	\$255	\$122	\$124	\$126	\$129
Total Schools (ADA Bates)	\$1.731 \$1.731	\$1.76 <i>1</i>	\$1 796	\$1.830	\$1.863
Industrial	J1,/J1	J1,704	Ş1,750	J1,030	Ş1,005
Potable Water					
High	\$110	\$122	\$17/	\$126	\$120
	1115 ۵۷	\$0	¢0	\$120	\$0
Total	ېن د 110	ېن ¢122	\$0 \$124	\$0 \$126	\$120
Sewage Effluent	ŢIJ	2122	Υ 12 4	Υ 120	Υ Ι Ζ <i>J</i>
High	¢2.260	¢2 211	¢2.2E4	¢2 207	¢2 112
High	\$2,209 ¢0	\$2,511 ¢0	ې2,554 دم	\$2,597 ¢0	۶2,442 ذ۵
Low	ېن د م مدر	ېر د 2 211	ېں دے 254	ې د م د د غ	نې د ۸ د ک
Total Inductrial	\$2,209 \$3,209	\$2,511 \$2,422	\$2,334 \$3,479	\$2,597 \$2,597	\$2,442 \$2,570
	<i>\$2,300</i>	<i>Ş</i> 2,432	ŞZ,470	ş2,525	\$2,570
Boyonuo Allocation					
Revenue Anocation	¢11 204 0C1	¢11 F00 207	611 720 221	¢11 072 925	612 212 027
	\$11,284,001	\$11,509,397	\$11,739,321	\$11,973,835	\$12,212,937
Schools (ADA rates)	\$1,731 ¢471,700	Ş1,704	\$1,790	\$1,830	\$1,803 ¢512,122
Commercial	\$471,799	\$481,811	\$492,030	\$502,477	\$513,132
Tatal	\$2,388 ¢11 750 070	\$2,432	\$2,478 612 225 622	\$2,523	\$2,570
	\$11,759,979	\$11,995,403	\$12,235,632	\$12,480,664	\$12,730,502
Percent of Total	0.53/	0.644	0.69/	0.00	0.644
	96%	96%	96%	96%	96%
Schools (ADA rates)	0.01%	0.01%	0.01%	0.01%	0.01%
Commercial	4%	4%	4%	4%	4%
Industrial	0.02%	0.02%	0.02%	0.02%	0.02%
Total	100%	100%	100%	100%	100%

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Appendix E: Commercial Customer Class Monthly Bills Table

MUNICIPAL FINANCIAL SERVICES

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Table E-1

Commercial Monthly Bills for Each Unit of Wastewater Discharge (HCF)

27% 85% Current High Potable-53.514 \$25.75 \$2 \$92.74 \$96.60 COS High Potable-53.40 \$4.38 \$11.78 \$15.18 \$18.58 \$21.98 \$25.38 \$32.78 \$32.18 \$35.58 \$38.98 \$42.38 \$45.78 \$49.18 \$52.58 \$55.98 \$52.38 \$66.18 \$69.58 \$72.98 \$76.38 \$79.78 \$83.18 \$86.58 \$39.98 \$8.38 \$11.78 \$15.18 \$18.58 \$21.98 \$25.38 \$32.18 \$35.58 \$38.98 \$42.38 \$49.18 \$52.58 \$55.98 \$52.98 \$52.78 \$66.18 \$66.18 \$69.58 \$72.98 \$72.98 \$72.78 \$83.18 \$86.58 \$99.98 2% -7% Current Medium Potable-\$1.792 \$25.75 Current Medium Effluent-\$1.973 \$25.75 57.28 59.58 511.88 514.18 516.48 518.78 521.08 523.38 525.68 527.98 530.28 532.58 534.88 537.18 539.48 541.78 544.08 546.38 550.98 553.28 555.58 557.88 560.18 562.48 59.58 511.88 514.18 516.48 518.78 521.08 523.38 525.68 527.98 530.28 532.58 534.88 537.18 539.48 541.78 544.08 546.38 545.98 555.58 557.58 557.88 560.18 562.48 39% Current Low Potable-\$1.077 \$25.75 \$25 Current Low Effluent-\$1.184 \$25.75 \$2 COS Low Potable-\$1.79 \$4.98 \$6.77 \$8.56 \$10.35 \$12.14 \$13.93 \$15.72 \$17.51 \$19.30 \$21.09 \$22.88 \$24.67 \$26.46 \$28.25 \$30.04 \$31.83 \$33.62 \$35.41 \$37.20 \$38.99 \$40.78 \$42.57 \$44.36 \$46.15 \$47.94 \$49.73 \$8.56 \$10.35 \$12.14 \$13.93 \$15.72 \$17.51 \$19.30 \$21.09 \$22.88 \$24.67 \$26.46 \$28.25 \$30.04 \$31.83 \$33.62 \$35.41 \$37.20 \$38.99 \$40.78 \$42.57 \$44.36 \$46.15 \$47.94 \$49.73 68% 615 25 25 25 27% -7% 3% 40% 85% 69% 590 24 24 24 28% -6% 3% 40% 79% %69 Current High Effluent-53.864 \$25.75 \$ 566 23 23 23 41% 28% -6% 72% 3% 70% 22 541 22 22 29% 42% 65% 3% -6% 65% 51621 21 21 4% -6% 42% 31% 31% 30% 29% 58% 58% 20 492 20 20 43% 51% 4% -5% 51% 19 467 19 19 44% 44% 44% 5% -5% 443 18 18 18 45% 37% 37% 5% -4% 418 17 17 17 32% 31% 31% 46% %9 -4% 16393 16 16 33% 24% -3% 47% 24% %9 15 369 15 15 35% 44% 17%17%-3% 7% 14 14 344 14 35% 35% 10%10% -2% 8% 13 13 320 13 27% 27% 3% -1% 3% %6 12 295 12 12 18%%0 18%-4% 10%-4% 271 11 11 11 11%1%%6 -11% %6 -18% -11% 10 246 10 10 -18% 12% 2% %0 %0 9 6 221 9 14%4% ~6--25% -25% ~6~ 197 ∞ ∞ ∞ %9 -18% -32% 12% -18% -32% 172 ~ ~ -1% -45% -36% -27% -39% -1% -27% -39% 148 9 9 9 -36% -46% -15% -15% -46% 123 S S Ś -28% -28% -45% -53% -53% 4 4 98 4 -41% -54% -60% -41% -54% -60% ŝ ŝ 3 74 -63% -67% -63% -54% -54% -67% 49 2 2 \$6.77 -67% \$7.28 -72% -72% -67% -74% -74% 25 1 Ч -81% COS Medium Potable-\$2.30 \$4.98 \$4.98 -81% -81% -81% \$4.98 -81% -81% COS High Effluent-\$3.40 \$4.98 0 0 0 0 COS Medium Effluent-\$2.30 COS Low Effluent-\$1.79 High Potable (711) High Effluent (16) Low Potable (6,214) Medium Effluent (25) Low Effluent (140) gallons per day > Units (HCF) of Discharge>> Medium Potable (776) Units (HCF) of Discharge>> Units (HCF) of Discharge>>



Commercial Monthly Bills Percentage Changes Using Current Rates v FY20 COS Rates

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