



City of Half Moon Bay



REVISED DRAFT

2020 Sewer Service Charges Study

Prepared for
City of Half Moon Bay, California
April 1, 2020
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MUNICIPAL FINANCIAL SERVICES

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List of Abbreviations

BOD	Biochemical Oxygen Demand
Ccf	Hundred Cubic Feet (equal to ~ 748.1 gallons)
CCWD	Coastside County Water District
CIP	Capital Improvement Program
City	City of Half Moon Bay
FY	Fiscal year (July 1 to June 30)
gpd	gallons per day
Granada	Granada Community Services District
IPS	Intertie Pipeline System
JPA	Joint Powers Authority
mgd	million gallons per day
Montara	Montara Water and Sanitary District
O&M	Operation and maintenance
TSS	Total Suspended Solids

Executive Summary

Municipal Financial Services has been retained by City of Half Moon Bay (City) to conduct a Sewer Service Charges Study (Study). This report describes in detail the assumptions, procedures, and results of the Study, including conclusions and recommendations in accordance with the provisions of California Proposition 218.

Background

The City of Half Moon Bay operates its collection system and pays its proportional share of treatment costs through its sewer enterprise fund. The sewer enterprise fund is supported by sewer service charges imposed upon users of the City's sewer system. Sewer Service Charges are intended to recover revenues sufficient to adequately fund sewer utility operations, maintenance, and capital replacement expenditures, while maintaining prudent levels of reserves. The City's Sewer Service charges address not only the operation and maintenance of the City collection system, but also the proportional costs of the Sewer Authority Mid-Coastside (SAM) operations of the treatment plant and intertie pipeline system.

Sewer rates have not been adjusted in the last six years (last adjusted in Fiscal Year 2013-14). This adjustment was part of an overall sewer rate study completed in 2011. The 2011 study increased the annual Residential Single Family charge – based on 10 hundred cubic feet (HCF) of wastewater discharged per two months (about 123 gallons per day) – from \$289 to \$672 (an increase of approximately 132 percent).

The Half Moon Bay Municipal Code establishes a minimum charge for all users for not less than 8 HCF per two months. The annual sewer service charge for Single Family accounts corresponding with minimum use is \$537.28 (\$33.58 per HCF per four months times 16 HCF per four months).

In 2017, the City filed for Declaratory Relief regarding language in the Joint Powers Authority (JPA) related to member agencies' respective obligations for paying for capital projects (notably the Influent Pump Station). The other JPA member agencies and City agreed to enter into mediation and have been actively engaged in settlement discussions.

This report evaluates adjustments in Sewer Service Charges for the time period Fiscal Year 2020 – 2021 (FY21) through FY25 (five years). This report reflects the preliminary settlement terms reached by the City, Granada and Montara. Should settlement not be finalized, the Cost of Service Charges will have to be re-evaluated.

Sewer System Description

The City of Half Moon Bay provides sewer collection services to residences, commercial and institutional uses from Frenchman's Creek on the north to Miramontes Point Road on the south. The City primarily serves the incorporated City boundary; however, the Moonridge Housing Development located in unincorporated San Mateo County is served by the City. Wastewater from residences, businesses, schools, restaurants and other structures is conveyed through sewer mains owned by the City of Half Moon Bay to the sewer treatment plant operated by Sewer Authority Mid-Coastside (SAM).¹ The City's collection system includes approximately 35 miles of gravity sewer lines, three (3) pump stations and three (3) force mains. While the City has endeavored to maintain the sewer collection system; portions of the system consist of 70 – 80-year-old clay pipes that will require additional maintenance or replacement in the coming years. The City is scheduled to complete replacement of the Ocean Colony Pump Station and Force Main in FY 2020-21. This approximate \$3.0 million project will replace pipes and equipment that have reached their useful life and pose a threat to sensitive habitat. The Ocean Colony project is funded and not factored into the proposed rate adjustment.

The City, Granada, and Montara form SAM via an exercise of Joint Powers Agreement (JPA). SAM facilities include a conventional wastewater treatment plant (1000 N. Cabrillo Highway, Half Moon Bay) and the Intertie Pipeline System (IPS), which conveys flows through pumping facilities, force mains, interceptor pipelines and a gravity main from Granada and Montara to the wastewater treatment plant. Under the current JPA and processes, the City is responsible for paying a proportional share of the calculated plant flow for operations, maintenance and capital costs of both the wastewater treatment plant and IPS. In FY 2019-20, the City's proportional share was set at 56-percent. Preliminary settlement terms would establish a non-flow-based fixed share of treatment related costs among all three agencies for a minimum of 5 years. IPS related capital costs would be set at a different non-flow-based proportion in perpetuity.

The wastewater treatment plant and IPS were originally constructed in the late 1970s, upon the formation of the JPA. The treatment plant was substantially upgraded in late 1999/2000s and has sufficient capacity to receive and treat anticipated dry and wet weather wastewater flows from the City. The treatment plant, due substantially to deferred maintenance, is in need of major maintenance and capital repair which have been estimated as being as much as \$40 million. This rate study includes funding for capital repair and replacement on either a financed or pay-as-you-go basis. The proposed rates include approximately \$2.4 million combined annual contribution of the City, Granada and Montara.

The IPS was constructed in the late 1970s and is, for the most part, comprised of original system components. In 2017, the Granada Force Main suffered a major break and resulted in a significant sanitary sewer overflow (spill) (SSO). Two smaller SSO events occurred on other sections of the Granada Force Main. As a result, SAM completed replacement of approximately 5,700 feet of the Granada Force Main at a cost of almost \$2.0 million. SAM recently commenced work on an additional 1,500 feet of the Granada Force Main. SAM was fined (and member agencies proportionately paid) approximately \$600,000 by the Regional Water Board for the 2017 SSO events. SAM was subsequently sued by the Ecological Resource Foundation (ERF). In addition to some cash considerations, the settlement of this suit included commitment to a series of replacements of the IPS over the next 5-years totaling almost an estimated \$9.0 million. Total IPS repair and replacement is estimated at between \$20 million and \$25 million.

¹ The Granada Community Services District provides sewer collection service within City limits from Frenchman's Creek north to Mirada Road.

At the request of the City, Municipal Financial Services modeled a “no adjustment” scenario. This scenario includes all known and anticipated fixed costs including those directly related to City operations and those of SAM. This scenario is shown below in Figure ES-1.



Figure ES-1. Fund 05 and Fund 06 Combined Cash Flow FY20 – FY25 At Current Rates

Projected Expenditures, Revenues and Cash Flow

Revenues, expenditures and ending balances for FY20– FY25 (six years) are summarized in the figure below. Values for FY20 are based on budget data; values for FY21 and onward are projected.

Expenditures for the five-year projected period, FY21 – FY25, are approximately \$35,300,000.

Revenues from the current level of Sewer Service Charges (approximately \$4,440,000 per year) would generate approximately \$22,190,000 over the five-year projected period. Revenues from Sewer Service Charges during the five-year projected period are calculated to increase by approximately \$6,700,000 from \$22,190,000 to \$28,89,000 based on the recommended increases in Sewer Service Charges. Expenditures include not only City sewer collection system related costs, but also the proportional costs of the SAM treatment plant and Intertie Pipeline System.

Expenditures not funded by revenues are funded by use of cash balance.

Annual projected expenditures are shown in the figure below as stacked columns. The fiscal year ending cash balance is shown as a black line and the target ending balance (75 days of operating cash) is shown as a purple line. The fiscal year amount of revenue from Sewer Service Charges is shown as a red line. The percent increase in Single Family sewer service charges is shown as a blue line with data labels indicating the annual percent increase.

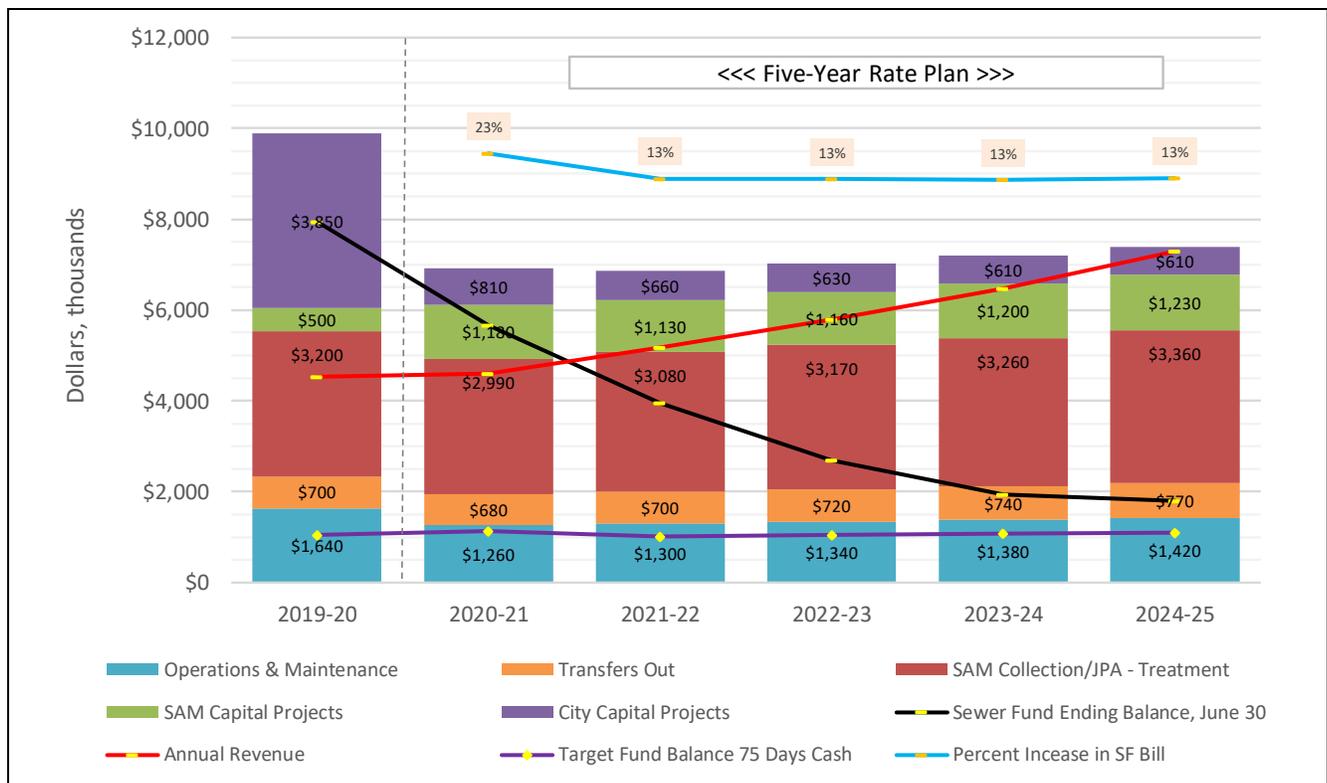


Figure ES-2. Fund 05 and Fund 06 Combined Cash Flow FY20 – FY25 With Rate Increases

Recommended Sewer Service Charges

The amount of revenue required from Sewer Service charges for each customer class is used to develop either a flat charge for Residential, Mobile Home, Senior Apartments (a new class added by the City) and Retirement classes or a flow-based charge plus the account/unit charge for all other classes. The account/unit charge is included in the flat charge for the Residential, Mobile Home, Senior Apartment (deed restricted), and Retirement classes. Calculations for each fiscal year and each unit of service are shown in Appendix A, Tables A-3a through A-3e. Recommended Sewer Service Charges are summarized in the table below.

Table ES-1. Recommended Sewer Service Charges								
Classes of Premises	Current 2019-20 Rate Structure			2020-21	2021-22	2022-23	2023-24	2024-25
Residential/Mobile Home/Retirement *	<u>Minimum</u>	<u>@ 60 HCF/year</u>	<u>Avg/year</u>			<u>Per Account or Unit Per Year</u>		
Residential Single Family	\$537	\$672	\$830	\$828	\$936	\$1,056	\$1,188	\$1,344
Residential Single Family w/ADU	<<< no current charges >>>			\$1,212	\$1,380	\$1,560	\$1,752	\$1,980
Residential Multiple Family	\$537	\$672	\$691	\$828	\$936	\$1,056	\$1,188	\$1,344
Mobile Home	\$537	na	\$535	\$504	\$576	\$648	\$732	\$828
Senior Apartments (New Class)				\$504	\$576	\$648	\$732	\$828
Nonresidential **	<u>Minimum</u>				<u>Per Account or Unit Per Year</u>			
Retirement Homes	\$537	na	\$538	\$504	\$576	\$648	\$732	\$828
Annual Account Charge	<u>Minimum</u>				<u>Per Account Per Year</u>			
All classes	varies by strength			\$183	\$208	\$235	\$264	\$298
Flow Rate, \$/HCF	<u>Strength Factor</u>	<u>Above Minimum</u>			<u>Annual Water Use</u>			
Office	60.00%	\$6.72		\$8.11	\$9.26	\$10.44	\$11.72	\$13.25
School	65.71%	\$7.36		\$8.11	\$9.26	\$10.44	\$11.72	\$13.25
Recreational	114.29%	\$12.79		\$13.03	\$14.88	\$16.77	\$18.83	\$21.28
Commercial	85.71%	\$9.59		\$9.35	\$10.68	\$12.04	\$13.52	\$15.28
Medical	100.00%	\$11.19		\$11.12	\$12.70	\$14.32	\$16.08	\$18.17
Motel	122.86%	\$13.75		\$13.74	\$15.70	\$17.69	\$19.87	\$22.45
Restaurant	180.00%	\$20.15		\$19.75	\$22.56	\$25.43	\$28.56	\$32.27
Not Classifiable Determined Individually	<u>Minimum</u>	<u>Above Minimum</u>						
Per Account Per Year	varies by strength			\$183	\$208	\$235	\$264	\$298
Individual premise		varies by strength						
Flow Rate, \$/kgal				\$8.54	\$9.76	\$10.99	\$12.35	\$13.95
BOD Rate, \$/pound				\$1.22	\$1.40	\$1.57	\$1.77	\$2.00
TSS Rate, \$/pound				\$1.15	\$1.31	\$1.48	\$1.66	\$1.88
<p>* The current Residential/Mobile Home/Retirement annual charge is for a minimum of 48 HCF per year at \$33.58 per HCF (Hundred Cubic Feet) per four months. Annual charges for use above 48 HCF increase in increments of \$33.58 for each additional HCF per four months.</p> <p>The annual charge for the new Single Family w/ADU (Accessory Dwelling Unit) category is calculated by adding the annual account charge plus flow charges for 92 HCF per year (1.6 times the average Single Family wastewater discharge volume of 58 HCF per year).</p> <p>** The current Nonresidential annual charge is for a minimum of 48 HCF per year at \$33.58 per HCF per four months times an adjustment for strength (BOD and TSS) of the discharge. Annual charges for use above 48 HCF increase in increments per additional 1 HCF plus an adjustment for the strength of the discharge.</p>								

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Section 1

Introduction

This report documents the results of an evaluation of Sewer Service Charges for the City of Half Moon Bay. The City's Sewer Service Charges are intended to recover revenues sufficient to adequately fund sewer utility operations, maintenance and capital replacement expenditures, while keeping rates as competitive as possible and maintaining a prudent level of reserves.

1.1 Background

The City of Half Moon Bay provides sewer collection services to residences, commercial and institutional uses from Frenchman's Creek on the north to Miramontes Point Road on the south. The City primarily serves the incorporated City boundary; however, the Moonridge Housing Development located in unincorporated San Mateo County is served by the City. Wastewater from residences, businesses, schools, restaurants and other structures is conveyed through sewer mains owned by the City of Half Moon Bay to the sewer treatment plant operated by Sewer Authority Mid-Coastside (SAM).¹ The City's collection system includes approximately 35 miles of gravity sewer lines, three (3) pump stations and three (3) force mains. While the City has endeavored to maintain the sewer collection system; portions of the system consist of 70 - 80-year-old clay pipes that will require additional maintenance or replacement in the coming years. The City is scheduled to complete replacement of the Ocean Colony Pump Station and Force Main in FY 2020-21. This approximate \$3.0 million project will replace pipes and equipment that have reached their useful life and pose a threat to sensitive habitat. The Ocean Colony project is funded and not factored into the proposed rate adjustment.

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The wastewater treatment plant and IPS were originally constructed in the late 1970s, upon the formation of the JPA. The treatment plant was substantially upgraded in late 1999/2000s and has sufficient capacity to receive and treat anticipated dry and wet weather wastewater flows from the City. The treatment plant, due substantially to deferred maintenance, is in need of major maintenance and capital repair which have been estimated as being as much as \$40 million. This rate study includes funding for capital repair and replacement on either a financed or pay-as-you-go basis. The proposed rates include approximately \$2.4 million combined annual contribution of the City, Granada and Montara.

The IPS was constructed in the late 1970s and is, for the most part, comprised of original system components. In 2017, the Granada Force Main suffered a major break and resulted in a significant

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sanitary sewer overflow (spill) (SSO). Two smaller SSO events occurred on other sections of the Granada Force Main. As a result, SAM completed replacement of approximately 5,700 feet of the Granada Force Main at a cost of almost \$2.0 million. SAM recently commenced work on an additional 1,500 feet of the Granada Force Main. SAM was fined (and member agencies proportionately paid) approximately \$600,000 by the Regional Water Board for the 2017 SSO events. SAM was subsequently sued by the Ecological Resource Foundation (ERF). In addition to some cash considerations, the settlement of this suit included commitment to a series of replacements of the IPS over the next 5-years totaling almost an estimated \$9.0 million. Total IPS repair and replacement is estimated at between \$20 million and \$25 million

1.2 Scope of Work

The scope of this Study is to prepare a multi-year financial plan, review the City's existing rate structure, and propose a 5-year rate program. The primary objectives of this Study are to:

- Develop a multi-year financial management plan that integrates the City's operational and capital project funding needs;
- Identify future rate adjustments to sewer rates to help ensure adequate revenues to meet the City's ongoing financial obligations;
- Determine the cost of providing sewer service to customer classes using industry-accepted methodologies; and
- Recommend specific modifications to the City's existing rate structures in order to ensure that the City is equitably recovering the cost of service and comporting with industry standards and California's legal requirements.

1.3 Rate-Making Objectives and Methodology

The scope of this Study is to prepare a multi-year financial plan, review the City's existing rate structure, and propose a 5-year rate program in accordance with California Proposition 218. The primary objectives of this Study are to maximize:

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

Revenue stability. Recover revenue from charges that will cover all costs regardless of fluctuations in the volume of discharges to the sanitary sewer or the timing or receipt of charges for service.

Administrative efficiency. Enable efficient implementation and ongoing administration, including monitoring and updating.

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

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.

Conservation signal. Reward customers for efficient indoor water use and discourage its waste.

Economic vitality. Consider rates in light of local and regional competitiveness.

Rate-making methodology has three categories of technical analysis – the development of revenue required from rates, the allocation of costs among functional cost categories (cost-of-service analysis) and the design of a rate structure. The revenue required from rates is net of non-rate revenues (for example interest earned on fund balances and loan disbursements) and other revenues not required from rates (such as revenue from meter turn on/off services). The allocation of costs is structured so that the revenue required from rates is distributed proportionally for each sewer service function in a

manner that allows the development of unit costs that are applicable to all customers. The rate structure uses the unit costs as a basis for aggregating costs into rates that are applicable to the various customer classes.

1.4 Current Sewer Service Charges

Sewer Service Charges are described in Section 13.36.075 of the Half Moon Bay Municipal Code. Subsections A – G from Section 13.36.075 are shown below in Table 1-1.

Table 1-1. Sewer Service Charges - HMB Municipal Code Chapter 13.36.075	
A	<p>Subsection and Title</p> <p>Premises Which Shall Be Charged</p> <p>Sewer service charges are prescribed for all premises connected to the sewerage system of the city.</p>
B	<p>Total Amount to Be Charged</p> <p>Total dollar amount of the service charge shall equal the projected annual cost of sewage treatment and administrative overhead plus any delinquent charge factor. This amount shall be adopted annually by the city council as part of the city sewer utility budget. Sewage treatment includes, but is not limited to, the costs of operation and maintenance, repairs, and capital improvements of the sewage treatment plant and sewage collection systems. The "delinquent charge factor" shall be determined by the city manager, and shall not exceed eighty percent of the annual cost of sewage treatment and administrative overhead. In the event that the amount actually collected by the city exceeds the amount to be charged for that fiscal year, the excess amount shall be applied to reduce the "total amount to be charged" for the following year.</p>
C	<p>Basis for Individual Charges</p> <p>Sewer service charges shall be imposed based upon the volume and strength of the wastewater discharged by individual premises.</p>
D	<p>Class of Premises</p> <p>The premises within each of the following classes are recognized as having similar sewage volume and sewage strength characteristics:</p> <p>Residential Classes: 1) Residential Single; 2) Residential Multiple; 3) Trailer Park; 4) Condominium hotel projects. Nonresidential Classes: 1) Retirement Home; 2) Restaurant; 3) Office; 4) Stores, general commercial; 5) Medical; 6) Hotel/motel; 7) Recreational; 8) School; 9) Not classifiable.</p>
E	<p>Wastewater Strength</p> <p>A wastewater strength factor for each individual premises shall be determined based upon the class of the premises. The wastewater strength factor for each class shall be expressed as a percentage of residential class strength. The strength factor for each class is as follows:</p> <p>Residential Classes: 1) Residential Single-100%; 2) Residential Multiple-100%; 3) Trailer Park-100%; 4) Condominium hotel projects-100%. Nonresidential Classes: 1) Retirement Home-100%; 2) Restaurant-180%; 3) Office-60%; 4) Stores, general commercial-85.71%; 5) Medical-100%; 6) Hotel/motel-122.86%; 7) Recreational-114.29%; 8) School-65.71%; 9) Not classifiable-Determined individually.</p>
F	<p>Wastewater Volume</p> <p>The volume of wastewater for each premises shall be determined through water consumption data supplied by the Coastside County Water District. The periods for which water consumption data shall be collected are: 1) Wet Weather (WW). The four-month period from November through February during which irrigation is at a minimum; 2) Twelve-Month (12 Month) Total. The twelve-month period from April through March.</p> <p>Residential Classes: 1) Residential Single-WW; 2) Residential Multiple-WW; 3) Trailer Park-WW; 4) Condominium hotel projects-WW. Nonresidential Classes: 1) Retirement Home-WW; 2) Restaurant-12 Month; 3) Office-WW; 4) Stores, general commercial-12 Month; 5) Medical-12 Month; 6) Hotel/motel-12 Month; 7) Recreational-WW; 8) School-WW; 9) Not classifiable-Determined individually.</p> <p>The wastewater volume for each individual parcel shall be calculated in hundreds of cubic feet (HCF) using the following formulae: 1) Premises Using Wet Weather Data Collection Period. The sum of water used from November through February, but not less than eight HCF for any two-month period. 2) Premises Using 12-Month Total Data Collection Period. The sum of water used the prior year, as reflected in water meter readings for the 12-Month period from April 1 through March 31, divided by three, but not less than eight HCF for any two-month period.</p>
G	<p>Calculation of Charge for Individual Premises</p> <p>The charge for each individual premises shall be calculated such that:</p> $\text{Charge} = (\text{Wastewater Volume}) \times (\text{Wastewater Strength}) \times (\text{Constant}) = \text{"Total Amount to be Charged"}$ <p>Where Charge is the charge imposed on each premises in the city.</p>

The current Sewer Service Charge is \$33.58 per 16 HCF for four months (hundred cubic feet; one HCF equals approximately 748 gallons). The minimum charge per individual premises is \$537.28 per year. The equivalent charge per HCF is approximately \$11.19 (\$537.28 divided by 48 HCF per year). The current annual average bill of all Single Family rate payers equals approximately \$830 or approximately \$69 per month.

Annual Sewer Service Charges for Residential Single Family customers for the past 32 years, from 1988-89 through 2019-20 (the current fiscal year), are shown in the figure below. Note that the annual charges shown are for a customer with discharge of 10 HCF per two-months (60 HCF per year) which is approximately the current average discharge for the Residential Single Family customer class.

Note that the charges increased by 132 percent (\$383) between 2008-09 (\$289) and 2013-14 (\$672).

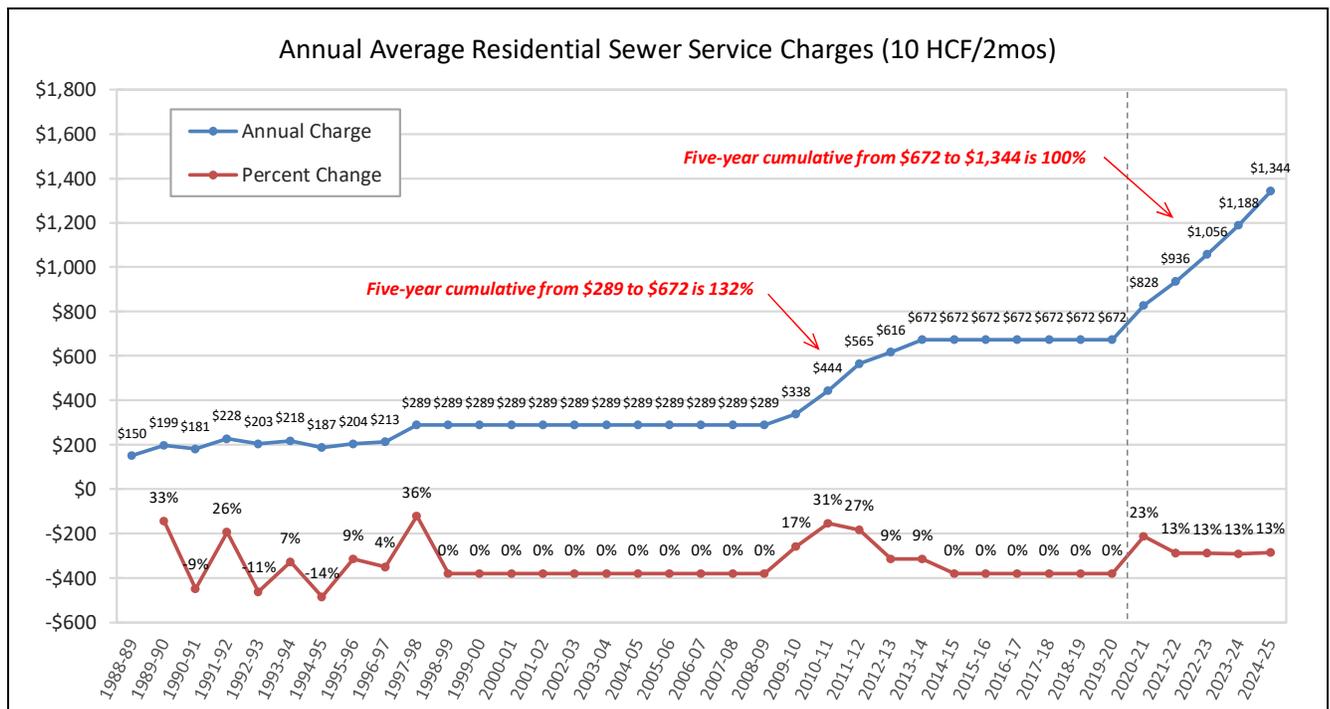


Figure 1-1. Historic Sewer Service Charges

Section 2

Customer Wastewater Discharge Characteristics

The purpose of this section is to summarize the number of residential and nonresidential users and their corresponding wastewater discharge characteristics.

2.1 City Municipal Code Regulations

Sewer Service Charges are described in Section 13.36.075 of the Half Moon Bay Municipal Code.³ Sewer service charges are imposed based upon the volume and strength of the wastewater discharged by individual premises (see Subsection C from Municipal Code Section 13.36.075). Individual charges are collected on the tax roll pursuant to Section 5473 of the Health and Safety Code. The city manager may collect an individual charge at his or her discretion without use or reference to the tax roll.

Subsection D (Classes of Premises), Subsection E (Wastewater Strength Factor) and Subsection F (Water Consumption Data Collection Period) from Section 13.36.075 of the Half Moon Bay Municipal Code are summarized in the table below.

Table 2-1. Current Municipal Code - Sewer Service Charges

<i>Subsection D</i> Classes of Premises	<i>Subsection E</i> Wastewater Strength Factor	<i>Subsection F</i> Water Consumption Data Collection Period
Residential		
Residential Single Family	100.00%	Wet-weather
Residential Multiple Family	100.00%	Wet-weather
Residential Assign	100.00%	Wet-weather
Mobile Home	100.00%	Wet-weather
Nonresidential		
Retirement	100.00%	Wet-weather
Restaurant	180.00%	12-month total
Office	60.00%	Wet-weather
Commercial	85.71%	12-month total
Medical	100.00%	12-month total
Hotel/Motel	122.86%	12-month total
Recreational	114.29%	Wet-weather
School	65.71%	Wet-weather
Not Classifiable	determined individually	

³ Single-family residential equivalents are established in Section 13.36.080 of the Half Moon Bay Municipal Code but are used for calculating connection charges (also known as development charges or capacity charges). Single-family residential equivalents are not used to calculate sewer service charges.

2.2 Customer Wastewater Discharge Volume Estimates

Sewer service charges are imposed based upon the volume and strength of the wastewater discharged by individual premises. Subsection F (Water Consumption Data Collection Period) states that, “The wastewater volume for each individual is calculated in hundreds of cubic feet (HCF) using the following formulas:

- 1) Premises Using Wet Weather Data Collection Period. The sum of water used from November through February, but not less than eight HCF for any two-month period.
- 2) Premises Using 12-Month Total Data Collection Period. The sum of water used the prior year, as reflected in water meter readings for the 12-Month period from April 1 through March 31, divided by three, but not less than eight HCF for any two-month period.”

Water use data is provided to the City by the Coastside County Water District (CCWD).

Water use data and estimated annual wastewater discharged by classes of premises are summarized in the table below. Water use is adjusted to account for mixed use on parcels and for irrigation where applicable.

Residential Single Family water use is also adjusted for accounts which have substantial outdoor water use during the wet weather period. The adjustment recognizes that winter water use above 50 HCF per four months (approximately 310 gallons per day) includes outdoor water use. The adjustment is made for 140 accounts and 26,226 HCF.

Table 2-2. Customer Wastewater Discharge Volume Estimates

UNLESS INDICATED ALL VALUES IN HCF	Water Use for 2-month periods beginning on the 15th						Wet Weather 4 Months Dec-Mar	Adjustment for Accts w/ >150 HCF per Yr/Acct	Estimated Annual Wastewater		
	2018 Dec-Jan	2019 Feb-Mar	2019 Apr-May	2018 Jun-Jul	2018 Aug-Sep	2018 Oct-Nov			HCF	mg	Accts
Residential Single Family	39,096	34,454	33,224	44,165	49,915	45,277	73,550	26,226	194,424	145	3,317
Residential Multiple Family	2,646	2,712	2,799	2,847	2,850	2,748	5,358		16,074	12	204
Mobile Home							5,742		17,225	12.9	5
Retirement Home							2,097		6,291	4.7	73
Office							777		2,331	1.7	49
School							1,106		3,318	2.5	12
Recreational							573		1,719	1.3	4
Commercial									29,154	22	170
Medical									1,580	1.2	23
Hotel/Motel									24,508	18	14
Restaurant									13,873	10	35
Totals									310,498	232	3,906

2.3 Customer Wastewater Strength Estimates

Wastewater discharge characteristics for users of a wastewater system are typically expressed in terms of average annual values for Flow (in gallons per day), BOD (in pounds per day) and TSS (in pounds per day). Characteristics are assigned to each class of premises or customer and are used to develop Sewer Service Charges that recover wastewater system costs in proportion to each user’s level of use.⁴

Development of wastewater characteristics (for any user) reflect that fact that the actual volume of wastewater discharged from a user, and the concentration (strength) of pollutants in the wastewater (BOD and TSS) are not measured directly. There are typically no flow meters on sewer service laterals to measure the volume and rate of wastewater flow, nor is the wastewater discharge through the laterals sampled and subject to laboratory analysis to determine the level of BOD and TSS in the wastewater.

Estimated wastewater strengths by classes of premises are summarized in the table below. Values for BOD and TSS are based on user strength characteristics developed by other, similar agencies with wastewater systems or values published in the State of California’s *Revenue Program Guidelines*.

Table 2-3. Customer Wastewater Strength Estimates

Classes of Premises	Accounts	Units	Annual HCF	Annual mg	Average Monthly Wastewater (not including I/I)			Concentration		Load	
					HCF	gpd	mgd	BOD mg/L	TSS mg/L	BOD pounds	TSS pounds
Residential Single Family	3,317	3,324	194,424	145	4.9	120	0.398	310	330	376,043	400,304
Residential Multiple Family	204	321	16,074	12	7	161	0.033	310	330	31,089	33,095
Mobile Home	5	538	17,225	13	287	7,061	0.035	310	330	33,315	35,464
Retirement Home	73	272	6,291	5	7	177	0.013	310	330	12,168	12,953
Office	49	0	2,331	2	4	98	0.005	150	80	2,182	1,164
School	12	0	3,318	2	23	567	0.007	150	80	3,105	1,656
Recreational	4	0	1,719	1	36	881	0.004	400	500	4,290	5,363
Commercial	170	1	29,154	22	14	351	0.060	200	200	36,379	36,379
Medical	23	0	1,580	1	6	141	0.003	310	330	3,056	3,254
Hotel/Motel	14	0	24,508	18	146	3,588	0.050	400	600	61,164	91,746
Restaurant	35	0	13,873	10	33	812	0.028	1000	800	86,557	69,246
Totals	3,906	4,456	310,498	232			0.636	335	356	649,349	690,623
								<i>pounds per day ></i>		1,779	1,892

2.4 Senior Apartments

The City seeks to create a new customer class for Senior Apartments. Currently, Senior Apartments are billed the Retirement Home customer class sewer service charges. There are currently no Retirement Homes in the City, but the City will retain the Retirement Homes customer class. The sewer service charges for the Senior Apartments customer class and the Retirement Homes customer class will be the same.

⁴ BOD and TSS are conventional pollutants that are removed from wastewater during the treatment process. BOD is an acronym for biochemical oxygen demand. TSS is an acronym for total suspended solids.

2.5 Accessory Dwelling Units

The City is required to comply with California State laws regarding the location and permitting requirements for Accessory Dwelling Units (ADUs). The City has experienced a significant increase in the number of property owners seeking to develop ADUs in response to the increases in housing related costs and the relaxation of permitting requirements. Based upon City development records and County Assessor records there are approximately fifty (50) City sewer accounts identified as a single-family residential account with two (2) dwelling units.

In light of the increase (and anticipated continued interest in ADU development), the City seeks to create a category for those Residential Single-Family premises with an ADU. ADU water usage data is not available since most ADUs are not separately metered by CCWD, therefore analysis of wastewater discharge based on winter water use is not possible.

Based upon the typical (and allowable) size of ADUs, the City is recommending establishing wastewater discharge for Residential Single Family premises with one or more ADUs at approximately 92 HCF per year (1.6 times the average Single Family wastewater discharge volume of approximately 53 HCF per year).

Section 3

Evaluation of Cash Flow and Sewer Service Charges

Revenue, expenditures, reserve levels, and Sewer Service Charges are summarized in this section. Expenditures, revenues and fund balances for FY19 are from the City's Sewer Fund budget. Projected cash flow for FY20 – FY25 were developed as part of this study.

3.1 Sewer Fund Revenues and Expenditures

Revenues. The City's Sewer Fund is considered an enterprise fund. An enterprise fund is a self-supporting government fund that provides a specialized service such as sewer services. For accounting purposes, the City's Sewer Enterprise Fund is shown in two internal funds – Fund 05, the Sewer Operating Fund, and Fund 06, the Sewer Capital Fund. For both funds in total, 99 percent of revenues are from Sewer Service Charges. Revenues for the current fiscal year, FY20, from sewer service charges are summarized by classes of premises in Table 3-1.

Table 3-1. Sewer Service Charges Revenues on Tax Roll FY 2019 - 2020

Classes of Premises	Applied on Tax Roll	Percent of Total
Residential Single Family	\$2,759,452	62.2%
Residential Multiple Family	\$221,964	5.0%
Mobile Home	\$287,646	6.5%
Retirement	\$146,375	3.3%
Office	\$21,653	0.5%
School	\$25,221	0.6%
Recreational	\$22,567	0.5%
Commercial	\$308,187	6.9%
Medical	\$21,556	0.5%
Hotel/Motel	\$340,519	7.7%
Restaurant	\$282,359	6.4%
Totals	\$4,437,499	100%

Expenditures. FY19 estimated expenditures, FY 20 budgeted expenditures, and projected expenditures for FY21 – FY25 for Fund 05 and Fund 06 are summarized in the table below. Total expenditures for FY21 – FY25 (five years) are approximately \$35,473,000. Approximately eight percent, \$9,300,000, of expenditures are for City and SAM capital projects.

Table 3-2. Expenditures FY19 – FY25							
All Values \$ thousand	Estimated	Budget	Projected				
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Sewer Operating Fund 05							
Operations & Maintenance							
Salaries & Benefits	281	323	335	345	355	366	377
Materials & Supplies	20	20	100	103	106	109	112
SAM Collection/JPA - Treatment	3,360	3,024	2,800	2,884	2,971	3,060	3,152
SAM Collection/JPA - Capital	0	0	0	0	0	0	0
Contract Services & Other	414	1,126	711	732	754	777	800
Office & Equipment	67	69	15	15	15	15	15
Total Operations & Maintenance	4,143	4,563	3,961	4,079	4,201	4,327	4,456
Other Financing Sources/(Uses)							
Transfer from Sewer Capital Fund	300	2,006	0	0	0	0	0
Transfer to Equipment/Risk	(197)	(208)	(208)	(215)	(221)	(228)	(235)
Transfer to General Fund	(461)	(472)	(472)	(486)	(501)	(516)	(531)
Total Other Financing	(358)	1,325	(681)	(701)	(722)	(744)	(766)
Total Expenditures + Transfers	4,501	3,237	4,642	4,780	4,923	5,071	5,222
Sewer Capital Fund 06							
Operations & Maintenance							
Loss on Investment in SAM	175	180	186	192	198	204	210
Depreciation	100	100	103	106	109	112	115
Total Operations & Maintenance	275	280	289	298	307	316	325
City Capital Projects	5,408	3,845	810	660	630	610	610
SAM Capital Projects	500	1,176	1,126	1,160	1,195	1,231	1,268
Other Financing Sources/(Uses)							
Transfer to Sewer Operating Fund	316	2,023	0	0	0	0	0
Total Other Financing	316	2,023	0	0	0	0	0
Total All Expenditures + Transfers	6,499	7,324	2,225	2,118	2,132	2,157	2,203

3.2 Sewer Fund Cash Flow

The combined cash flow for Fund 05 and Fund 06 is summarized in the table below for FY19 – FY25. Until FY25, the combined cash balance is decreasing as the balance is being used to fund expenditures. In FY25, revenues and expenditures are nearly matched. The ending balance for FY25 is approximately \$1,802,000.

Table 3-3. Fund Cash Flow FY19 – FY25									
All Values \$ thousand	Estimated	Budget	Projected					Total	
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	FY21-FY25	
Sewer Funds 05 and 06									
Beginning Balance, July 1	24,888	13,974	7,945	5,674	3,959	2,696	1,938		
Revenues									
Sewer Service Charges	4,352	4,437	4,437	5,069	5,713	6,416	7,250	28,885	98%
Interest	93	95	159	113	79	54	39	444	2%
Total Revenue	4,445	4,532	4,596	5,182	5,792	6,470	7,289	29,329	100%
Expenditures									
SAM Collection/JPA - Treatment	3,360	3,024	2,800	2,884	2,971	3,060	3,152	14,867	42%
SAM Capital Projects	500	1,176	1,126	1,160	1,195	1,231	1,268	5,980	17%
Loss on Investment in SAM	175	180	186	192	198	204	210	990	3%
City Capital Projects	5,408	3,845	810	660	630	610	610	3,320	9%
Contracts & Other	501	1,216	826	850	875	901	927	4,379	12%
Salaries & Benefits	281	323	335	345	355	366	377	1,778	5%
Transfers Out	674	697	681	701	722	744	766	3,614	10%
Depreciation	100	100	103	106	109	112	115	545	2%
Total Expenditures	11,000	10,561	6,867	6,898	7,055	7,228	7,425	35,473	100%
Excess Revenue Over / (Under)	(6,555)	(6,029)	(2,271)	(1,716)	(1,263)	(758)	(136)		
Ending Balance, June 30	18,334	7,945	5,674	3,959	2,696	1,938	1,802		

3.3 Sewer Fund Reserves

Two types of reserves are recommended for the Sewer Fund – an Operating Reserve and a Capital Improvements Reserve. Each reserve is described below.

Operating Reserve. The Operating Reserve shall be used in response to revenue shortfall or disruption conditions or unanticipated capital or operations expenses related to system failures or disruptions. The Operating Reserves will be relied upon to ensure the safe, uninterrupted operation and delivery of utility services at all times. The level of Operating Reserves shall be based on the funding required to sustain the utility for a specified number of days of operations in the event of a shortfall or disruption of revenues, or a significant and unanticipated system failure requiring expensive and timely corrective action. The budgeted minimum reserve balance shall be equal to 75 days (approximately 20.5%) of budgeted expenditures excluding capital, loss on investments and depreciation. Annually, this equals approximately \$700,000.

Capital Improvements Reserve. The Capital Improvement Reserve Fund is to be used to ensure sustainable funding for rehabilitation and replacement of infrastructure and capital equipment; cover major unplanned increases in capital project costs; fund capital needs due to unforeseen circumstances; fund improvements when the asset has a fairly short life expectancy and other financing is not cost effective or timely. The Capital Improvements Reserve Fund may be an unrestricted reserve that is a component of the utility’s fund balance and is subject to the guidelines of Proposition 218. The budgeted minimum reserve balance target may be up to 2% of Net Total Capital Assets. Annually, this represents approximately \$200,000; well below actual replacement costs of the system.

3.4 Cost of Service Allocation Percentages

Cost of service allocation percentages are developed based on allocation of the FY21 operating budget among functional cost categories of flow, BOD, TSS and account. The functional cost categories each represent a service provided to customers. Flow, BOD and TSS are treated and removed from wastewater discharges and each customer account shares equally administrative, management and other costs related to the wastewater enterprise.

Expense Category	Budget (\$000) 2020-21	Percentage Allocation				Dollar Allocation				
		Flow	BOD	SS	Account	Flow	BOD	SS	Account	
Operating										
SAM Authority	\$5,786	50%	20%	20%	10%	\$2,893	\$1,157	\$1,157	\$579	
Other	\$826	50%	20%	20%	10%	\$413	\$165	\$165	\$83	
Depreciation	\$103	0%	0%	0%	100%	\$0	\$0	\$0	\$103	
Transfers Out	\$681	0%	0%	0%	100%	\$0	\$0	\$0	\$681	
Total Operating	\$7,396					\$3,306	\$1,322	\$1,322	\$1,445	
						<i>allocation percentages ></i>	<i>45%</i>	<i>18%</i>	<i>18%</i>	<i>20%</i>

3.5 Unit Costs of Service

Unit costs of service are calculated for each fiscal year by dividing the revenue required from Sewer Service Charges shown in Table 3-3 by the number of units of service shown in Table 2-3. Calculations for each fiscal year and each unit of service are shown in Appendix A, Table A-1, and summarized in the table below. Unit costs of service are used to calculate the amount of revenue required from Sewer Service charges from each customer class.

Fiscal Year	Unit of Service >	\$/kgals	\$/pound	\$/pound	\$/acct-unit
2020-21		\$8.54	\$1.22	\$1.15	\$183
2021-22		\$9.76	\$1.40	\$1.31	\$208
2022-23		\$10.99	\$1.57	\$1.48	\$235
2023-24		\$12.35	\$1.77	\$1.66	\$264
2024-25		\$13.95	\$2.00	\$1.88	\$298

3.6 Revenue Required from Classes of Premises

Revenue required from Sewer Service Charges for each class of premises is shown in the table below. The amount of revenue is calculated by multiplying the unit costs of service shown in Table 3-5 by the number of units of service shown in Table 2-3. Calculations for each fiscal year and each unit of service are shown in Appendix A, Table A-2, and summarized in the table below.

Table 3-6. Revenue Required from Classes of Premises					
Classes of Premises	Revenue - Flow, BOD, TSS and Accounts/Units				
	2020-21	2021-22	2022-23	2023-24	2024-25
Residential Single Family	\$2,769,544	\$3,161,828	\$3,562,457	\$4,003,926	\$4,524,216
Residential Multiple Family	\$237,424	\$271,011	\$305,380	\$343,218	\$387,804
Mobile Home	\$289,927	\$330,769	\$372,837	\$419,010	\$473,384
Retirement	\$119,708	\$136,512	\$153,915	\$172,969	\$195,395
Office	\$27,862	\$31,794	\$35,831	\$40,270	\$45,485
School	\$29,087	\$33,239	\$37,426	\$42,069	\$47,527
Recreational	\$23,115	\$26,414	\$29,745	\$33,433	\$37,793
Commercial	\$303,587	\$346,814	\$390,600	\$439,015	\$496,062
Medical	\$21,775	\$24,863	\$28,011	\$31,483	\$35,575
Motel	\$339,268	\$387,675	\$436,599	\$490,687	\$554,751
Restaurant	\$280,271	\$320,467	\$360,664	\$405,570	\$458,508
Totals	\$4,441,569	\$5,071,388	\$5,713,466	\$6,421,651	\$7,256,500

3.7 Recommended Sewer Service Charges

The amount of revenue required from Sewer Service charges for each customer class is used to develop either a flat charge for Residential, Mobile Home, Senior Apartments (a new class added by the City) and Retirement classes or a flow-based charge plus the account/unit charge for all other classes. The account/unit charge is included in the flat charge for the Residential, Mobile Home, Senior Apartment, and Retirement classes. Calculations for each fiscal year and each unit of service are shown in Appendix A, Tables A-3a through A-3e. Recommended Sewer Service Charges are summarized in the table below.

Table 3-7. Recommended Sewer Service Charges								
Classes of Premises	Current 2019-20 Rate Structure			2020-21	2021-22	2022-23	2023-24	2024-25
Residential/Mobile Home/Retirement *	<i>Minimum</i>	<i>@ 60 HCF/year</i>	<i>Avg/year</i>			<i>Per Account or Unit Per Year</i>		
Residential Single Family	\$537	\$672	\$830	\$828	\$936	\$1,056	\$1,188	\$1,344
Residential Single Family w/ADU	<<< no current charges >>>			\$1,212	\$1,380	\$1,560	\$1,752	\$1,980
Residential Multiple Family	\$537	\$672	\$691	\$828	\$936	\$1,056	\$1,188	\$1,344
Mobile Home	\$537	na	\$535	\$504	\$576	\$648	\$732	\$828
Senior Apartments (New Class)				\$504	\$576	\$648	\$732	\$828
Nonresidential **	<i>Minimum</i>				<i>Per Account or Unit Per Year</i>			
Retirement Homes	\$537	na	\$538	\$504	\$576	\$648	\$732	\$828
Annual Account Charge	<i>Minimum</i>				<i>Per Account Per Year</i>			
All classes	varies by strength			\$183	\$208	\$235	\$264	\$298
Flow Rate, \$/HCF	<i>Strength Factor</i>	<i>Above Minimum</i>			<i>Annual Water Use</i>			
Office	60.00%	\$6.72		\$8.11	\$9.26	\$10.44	\$11.72	\$13.25
School	65.71%	\$7.36		\$8.11	\$9.26	\$10.44	\$11.72	\$13.25
Recreational	114.29%	\$12.79		\$13.03	\$14.88	\$16.77	\$18.83	\$21.28
Commercial	85.71%	\$9.59		\$9.35	\$10.68	\$12.04	\$13.52	\$15.28
Medical	100.00%	\$11.19		\$11.12	\$12.70	\$14.32	\$16.08	\$18.17
Motel	122.86%	\$13.75		\$13.74	\$15.70	\$17.69	\$19.87	\$22.45
Restaurant	180.00%	\$20.15		\$19.75	\$22.56	\$25.43	\$28.56	\$32.27
Not Classifiable Determined Individually	<i>Minimum</i>	<i>Above Minimum</i>						
Per Account Per Year	varies by strength			\$183	\$208	\$235	\$264	\$298
Individual premise	varies by strength							
Flow Rate, \$/kgal				\$8.54	\$9.76	\$10.99	\$12.35	\$13.95
BOD Rate, \$/pound				\$1.22	\$1.40	\$1.57	\$1.77	\$2.00
TSS Rate, \$/pound				\$1.15	\$1.31	\$1.48	\$1.66	\$1.88

* The current Residential/Mobile Home/Retirement annual charge is for a minimum of 48 HCF per year at \$33.58 per HCF (Hundred Cubic Feet) per four months. Annual charges for use above 48 HCF increase in increments of \$33.58 for each additional HCF per four months. The annual charge for the new Single Family w/ADU (Accessory Dwelling Unit) category is calculated by adding the annual account charge plus flow charges for 92 HCF per year (1.6 times the average Single Family wastewater discharge volume of 58 HCF per year).

** The current Nonresidential annual charge is for a minimum of 48 HCF per year at \$33.58 per HCF per four months times an adjustment for strength (BOD and TSS) of the discharge. Annual charges for use above 48 HCF increase in increments per additional 1 HCF plus an adjustment for the strength of the discharge.

3.8 Projected Expenditures, Revenues and Cash Flow

Revenues, expenditures and ending balances for FY20– FY25 (six years) are summarized in the figure below. Values for FY20 are based on budget data; values for FY21 and onward are projected.

Expenditures for the five-year projected period, FY21 – FY25, are approximately \$35,300,000.

Revenues from the current level of Sewer Service Charges (approximately \$4,440,000 per year) would generate approximately \$22,190,000 over the five-year projected period. Revenues from Sewer Service Charges during the five-year projected period are calculated to increase by approximately \$6,700,000 from \$22,190,000 to \$28,890,000 based on the recommended increases in Sewer Service Charges.

Expenditures not funded by revenues are funded by use of cash balance.

Annual projected expenditures are shown in the figure below as stacked columns. The fiscal year ending cash balance is shown as a black line and the target ending balance (75 days of operating cash) is shown as a purple line. The fiscal year amount of revenue from Sewer Service Charges is shown as a red line. The percent increase in Single Family sewer service charges is shown as a blue line with data labels indicating the annual percent increase.

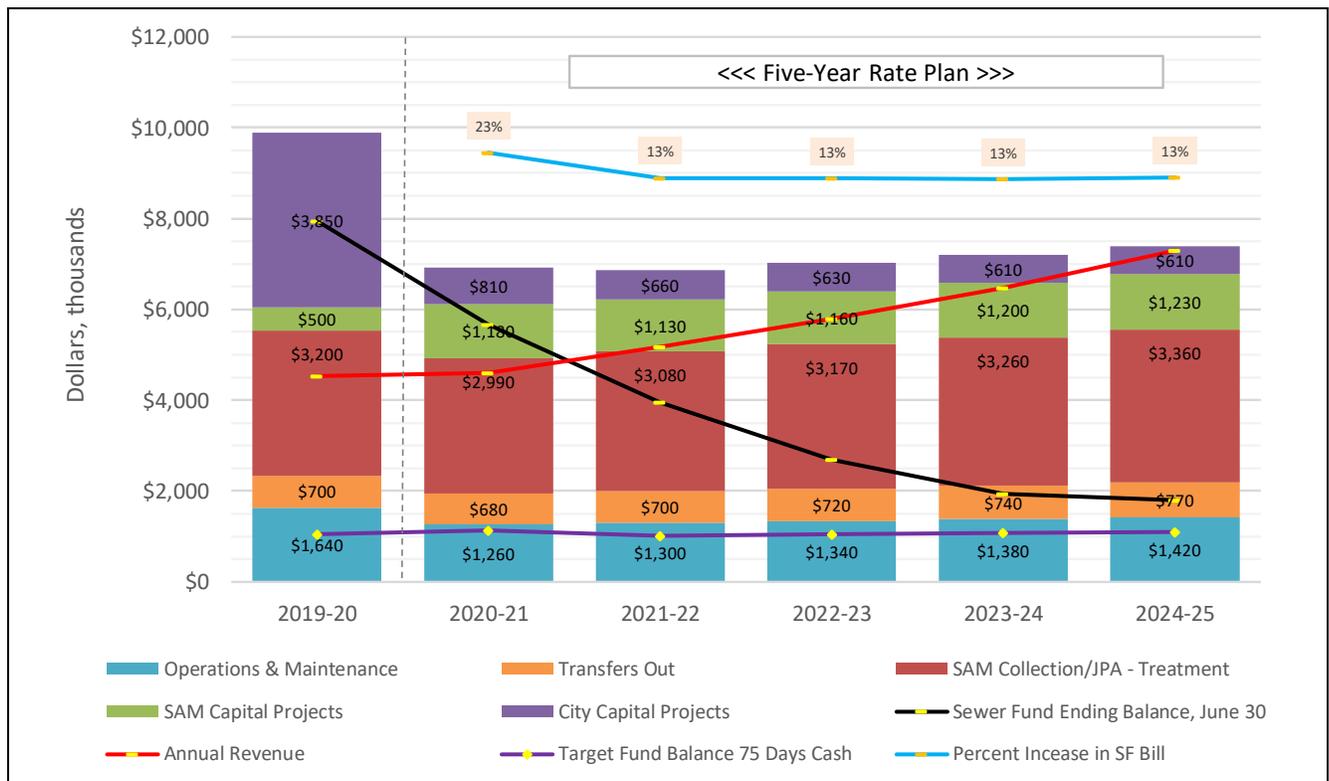


Figure 3-1. Projected Cash Flow and Sewer Service Charge Revenue Percent Increases

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Section 4

Findings and Recommendations

4.1 Findings

Based on our evaluation of the City's wastewater fund finances, charges and customer data we have developed the following findings:

- Expenditures for the five-year projected period, FY21 – FY25, are approximately \$35,300,000.
- Revenues from the current level of Sewer Service Charges (approximately \$4,440,000 per year) would generate approximately \$22,190,000 over the five-year projected period.
- Revenues from Sewer Service Charges during the five-year projected period are calculated to increase by approximately \$6,700,000 from \$22,190,000 to \$28,890,000 based on the recommended increases in Sewer Service Charges.
- Expenditures not funded by revenues are funded by use of the cash balance in Fund 06.

4.2 Recommendations

The following recommendations are offered regarding the City's wastewater enterprise:

Recommendation 1. Adopt the recommended Sewer Service Charges for FY21 – FY25.

Recommendation 2. Conduct an annual evaluation of the need for Sewer Service Charge increases.

Recommendation 3. Update the HMB Municipal Code as necessary to reflect changes in the wastewater rate structure and bill calculations.

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Section 5

Limitations

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

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Appendix A: Rate Development Tables

Table A-1	Unit Costs of Service
Table A-2	Revenue Requirements by Customer Class
Table A-3a	FY 2020-21 Revenue Allocation and Sewer Service Charges
Table A-3b	FY 2021-22 Revenue Allocation and Sewer Service Charges
Table A-3c	FY 2022-23 Revenue Allocation and Sewer Service Charges
Table A-3d	FY 2023-24 Revenue Allocation and Sewer Service Charges
Table A-3e	FY 2024-25 Revenue Allocation and Sewer Service Charges

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Table A-1
Unit Costs of Service

Item		Flow	BOD	SS	Account	Total
Revenue Requirement (x\$000)						
<i>Allocation</i>		<i>45%</i>	<i>18%</i>	<i>18%</i>	<i>20%</i>	<i>100%</i>
2020-21		\$1,983	\$793	\$793	\$867	\$4,437 < from Table 3-3
2021-22		\$2,266	\$906	\$906	\$990	\$5,069 < from Table 3-3
2022-23		\$2,554	\$1,022	\$1,022	\$1,116	\$5,713 < from Table 3-3
2023-24		\$2,868	\$1,147	\$1,147	\$1,253	\$6,416 < from Table 3-3
2024-25		\$3,241	\$1,296	\$1,296	\$1,416	\$7,250 < from Table 3-3
Unit Costs Summary						
Fiscal Year	<i>Unit of Service ></i>	<i>\$/kgals</i>	<i>\$/pound</i>	<i>\$/pound</i>	<i>\$/acct-unit</i>	
2020-21		\$8.54	\$1.22	\$1.15	\$183	
2021-22	<i>calculations</i>	\$9.76	\$1.40	\$1.31	\$208	
2022-23	<i>shown in</i>	\$10.99	\$1.57	\$1.48	\$235	
2023-24	<i>tables below</i>	\$12.35	\$1.77	\$1.66	\$264	
2024-25		\$13.95	\$2.00	\$1.88	\$298	
Unit Costs of Service						
		2020-21	2021-22	2022-23	2023-24	2024-25
Flow						
Dollar Allocation, x\$000	<i>from above ></i>	\$1,983	\$2,266	\$2,554	\$2,868	\$3,241
Flow, mg	<i>from Table 2-3 ></i>	232	232	232	232	232
Unit Cost, \$/1000 gallons		\$8.54	\$9.76	\$10.99	\$12.35	\$13.95
Unit Costs of Service						
		2020-21	2021-22	2022-23	2023-24	2024-25
BOD						
Dollar Allocation, x\$000	<i>from above ></i>	\$793	\$906	\$1,022	\$1,147	\$1,296
Load, 1000 pounds	<i>from Table 2-3 ></i>	649	649	649	649	649
Unit Cost, \$/pound		\$1.22	\$1.40	\$1.57	\$1.77	\$2.00
Unit Costs of Service						
		2020-21	2021-22	2022-23	2023-24	2024-25
TSS						
Dollar Allocation, x\$000	<i>from above ></i>	\$793	\$906	\$1,022	\$1,147	\$1,296
Load, 1000 pounds	<i>from Table 2-3 ></i>	691	691	691	691	691
Unit Cost, \$/pound		\$1.15	\$1.31	\$1.48	\$1.66	\$1.88
Unit Costs of Service						
		2020-21	2021-22	2022-23	2023-24	2024-25
Accounts-Units						
Dollar Allocation, x\$000	<i>from above ></i>	\$867	\$990	\$1,116	\$1,253	\$1,416
Accounts-Units	<i>from Table 2-3 ></i>	4,762	4,762	4,762	4,762	4,762
Unit Cost, \$/account-unit		\$183	\$208	\$235	\$264	\$298

Table A-2
Revenue Requirements by Customer Class

Classes of Premises	Flow mgd	<i>from Table A-1 ></i>	Flow Charges, \$/1000 gallons				
			2020-21	2021-22	2022-23	2023-24	2024-25
			\$8.54	\$9.76	\$10.99	\$12.35	\$13.95
Residential Single Family	0.398	< from Table 2-3	\$1,242,131	\$1,419,578	\$1,598,480	\$1,796,290	\$2,029,008
Residential Multiple Family	0.033	< from Table 2-3	\$102,693	\$117,364	\$132,154	\$148,508	\$167,748
Mobile Home	0.035	< from Table 2-3	\$110,045	\$125,766	\$141,615	\$159,140	\$179,757
Retirement	0.013	< from Table 2-3	\$40,192	\$45,933	\$51,722	\$58,123	\$65,653
Office	0.005	< from Table 2-3	\$14,895	\$17,023	\$19,168	\$21,540	\$24,331
School	0.007	< from Table 2-3	\$21,198	\$24,226	\$27,279	\$30,655	\$34,627
Recreational	0.004	< from Table 2-3	\$10,982	\$12,551	\$14,133	\$15,882	\$17,939
Commercial	0.060	< from Table 2-3	\$186,258	\$212,867	\$239,693	\$269,355	\$304,251
Medical	0.003	< from Table 2-3	\$10,096	\$11,538	\$12,992	\$14,600	\$16,491
Motel	0.050	< from Table 2-3	\$156,577	\$178,946	\$201,497	\$226,432	\$255,767
Restaurant	0.028	< from Table 2-3	\$88,633	\$101,295	\$114,061	\$128,175	\$144,781
Totals	0.636		\$1,983,701	\$2,267,087	\$2,552,795	\$2,868,701	\$3,240,354

Classes of Premises	BOD mg/L	<i>from Table A-1 ></i>	BOD Charges, \$/pound				
			2020-21	2021-22	2022-23	2023-24	2024-25
			\$1.22	\$1.40	\$1.57	\$1.77	\$2.00
Residential Single Family	310	< from Table 2-3	\$458,772	\$526,460	\$590,387	\$665,596	\$752,086
Residential Multiple Family	310	< from Table 2-3	\$37,929	\$43,525	\$48,810	\$55,028	\$62,179
Mobile Home	310	< from Table 2-3	\$40,644	\$46,641	\$52,305	\$58,968	\$66,630
Retirement	310	< from Table 2-3	\$14,845	\$17,035	\$19,103	\$21,537	\$24,335
Office	150	< from Table 2-3	\$2,662	\$3,055	\$3,426	\$3,862	\$4,364
School	150	< from Table 2-3	\$3,788	\$4,347	\$4,875	\$5,496	\$6,210
Recreational	400	< from Table 2-3	\$5,234	\$6,006	\$6,735	\$7,593	\$8,580
Commercial	200	< from Table 2-3	\$44,383	\$50,931	\$57,115	\$64,391	\$72,758
Medical	310	< from Table 2-3	\$3,729	\$4,279	\$4,799	\$5,410	\$6,113
Dollar Allocation, x\$000	400	< from Table 2-3	\$74,620	\$85,630	\$96,028	\$108,261	\$122,328
Restaurant	1000	< from Table 2-3	\$105,600	\$121,180	\$135,895	\$153,206	\$173,115
Totals			\$792,206	\$909,089	\$1,019,478	\$1,149,348	\$1,298,698

Classes of Premises	TSS mg/L	<i>from Table A-1 ></i>	TSS Charges, \$/pound				
			2020-21	2021-22	2022-23	2023-24	2024-25
			\$1.15	\$1.31	\$1.48	\$1.66	\$1.88
Residential Single Family	330	< from Table 2-3	\$460,349	\$524,398	\$592,449	\$664,504	\$752,571
Residential Multiple Family	330	< from Table 2-3	\$38,059	\$43,355	\$48,981	\$54,938	\$62,219
Mobile Home	330	< from Table 2-3	\$40,784	\$46,458	\$52,487	\$58,871	\$66,673
Retirement	330	< from Table 2-3	\$14,896	\$16,968	\$19,170	\$21,501	\$24,351
Office	80	< from Table 2-3	\$1,338	\$1,524	\$1,722	\$1,932	\$2,188
Dollar Allocation, x\$000	80	< from Table 2-3	\$1,905	\$2,170	\$2,451	\$2,749	\$3,114
Recreational	500	< from Table 2-3	\$6,167	\$7,025	\$7,937	\$8,902	\$10,082
Commercial	200	< from Table 2-3	\$41,836	\$47,657	\$53,841	\$60,390	\$68,393
Medical	330	< from Table 2-3	\$3,742	\$4,262	\$4,815	\$5,401	\$6,117
Motel	600	< from Table 2-3	\$105,508	\$120,188	\$135,784	\$152,299	\$172,483
Restaurant	800	< from Table 2-3	\$79,633	\$90,712	\$102,484	\$114,948	\$130,182
Totals			\$794,217	\$904,716	\$1,022,122	\$1,146,434	\$1,298,371

Table A-2
Revenue Requirements by Customer Class

Classes of Premises	Accounts/ Units	<i>from Table A-1 ></i>	Account Charges, \$/account-unit				
			2020-21 \$183	2021-22 \$208	2022-23 \$235	2023-24 \$264	2024-25 \$298
Residential Single Family	3,324	<i>< from Table 2-3</i>	\$608,292	\$691,392	\$781,140	\$877,536	\$990,552
Residential Multiple Family	321 units	<i>< from Table 2-3</i>	\$58,743	\$66,768	\$75,435	\$84,744	\$95,658
Mobile Home	538 units	<i>< from Table 2-3</i>	\$98,454	\$111,904	\$126,430	\$142,032	\$160,324
Retirement	272 units	<i>< from Table 2-3</i>	\$49,776	\$56,576	\$63,920	\$71,808	\$81,056
Office	49	<i>< from Table 2-3</i>	\$8,967	\$10,192	\$11,515	\$12,936	\$14,602
School	12	<i>< from Table 2-3</i>	\$2,196	\$2,496	\$2,820	\$3,168	\$3,576
Recreational	4	<i>< from Table 2-3</i>	\$732	\$832	\$940	\$1,056	\$1,192
Commercial	170	<i>< from Table 2-3</i>	\$31,110	\$35,360	\$39,950	\$44,880	\$50,660
Medical	23	<i>< from Table 2-3</i>	\$4,209	\$4,784	\$5,405	\$6,072	\$6,854
Motel	14	<i>< from Table 2-3</i>	\$2,562	\$2,912	\$3,290	\$3,696	\$4,172
Restaurant	35	<i>< from Table 2-3</i>	\$6,405	\$7,280	\$8,225	\$9,240	\$10,430
Totals	4,762		\$871,446	\$990,496	\$1,119,070	\$1,257,168	\$1,419,076

Classes of Premises	Revenue - Flow, BOD and TSS				
	2020-21	2021-22	2022-23	2023-24	2024-25
Residential Single Family	\$2,161,252	\$2,470,436	\$2,781,317	\$3,126,390	\$3,533,664
Residential Multiple Family	\$178,681	\$204,243	\$229,945	\$258,474	\$292,146
Mobile Home	\$191,473	\$218,865	\$246,407	\$276,978	\$313,060
Retirement	\$69,932	\$79,936	\$89,995	\$101,161	\$114,339
Office	\$18,895	\$21,602	\$24,316	\$27,334	\$30,883
School	\$26,891	\$30,743	\$34,606	\$38,901	\$43,951
Recreational	\$22,383	\$25,582	\$28,805	\$32,377	\$36,601
Commercial	\$272,477	\$311,454	\$350,650	\$394,135	\$445,402
Medical	\$17,566	\$20,079	\$22,606	\$25,411	\$28,721
Motel	\$336,706	\$384,763	\$433,309	\$486,991	\$550,579
Restaurant	\$273,866	\$313,187	\$352,439	\$396,330	\$448,078
Totals	\$3,570,123	\$4,080,892	\$4,594,396	\$5,164,483	\$5,837,424

Classes of Premises	Revenue - Flow, BOD, TSS and Accounts/Units				
	2020-21	2021-22	2022-23	2023-24	2024-25
Residential Single Family	\$2,769,544	\$3,161,828	\$3,562,457	\$4,003,926	\$4,524,216
Residential Multiple Family	\$237,424	\$271,011	\$305,380	\$343,218	\$387,804
Mobile Home	\$289,927	\$330,769	\$372,837	\$419,010	\$473,384
Retirement	\$119,708	\$136,512	\$153,915	\$172,969	\$195,395
Office	\$27,862	\$31,794	\$35,831	\$40,270	\$45,485
School	\$29,087	\$33,239	\$37,426	\$42,069	\$47,527
Recreational	\$23,115	\$26,414	\$29,745	\$33,433	\$37,793
Commercial	\$303,587	\$346,814	\$390,600	\$439,015	\$496,062
Medical	\$21,775	\$24,863	\$28,011	\$31,483	\$35,575
Motel	\$339,268	\$387,675	\$436,599	\$490,687	\$554,751
Restaurant	\$280,271	\$320,467	\$360,664	\$405,570	\$458,508
Totals	\$4,441,569	\$5,071,388	\$5,713,466	\$6,421,651	\$7,256,500

Table A-3a
 FY 2020-21 Revenue Allocation and Sewer Service Charges
 Values in italics are recommended rates

Classes of Premises	Revenue Requirement > \$4,437,000													Rate per												
														accts-units												
														Year												
														\$183												
													Allocation to accounts-units >	\$866,818	divided by	4,762	\$183									
													Allocation to flow/BOD/TSS >	\$1,983,435	\$793,374	\$793,374										
													Equivalent Dwelling Units			Flow	BOD	TSS	Rate per							
													Flow	BOD	TSS	Res.	per kgal	per lb	per lb	HCF						
													45%	18%	18%	Equiv.	\$8.54	\$1.22	\$1.15	HCF						
													BOD	TSS	Avg Monthly	Volume	BOD	TSS	Flow	BOD	TSS	Res.	Flow	BOD	TSS	Rate per
													mg/l	mg/l	HCF	mgd	klbs/yr	klbs/yr	45%	18%	18%	Equiv.	per kgal	per lb	per lb	HCF
Residential Single Family	310	330	4.9	120	0.398	376	400	0.45	0.18	0.18	1.00	\$1,241,964	\$459,448	\$459,861	\$11.12											
Residential Multiple Family	310	330	6.6	161	0.033	31	33	0.60	0.18	0.18	1.00	\$102,679	\$37,985	\$38,019	\$11.12											
Mobile Home	310	330	287	7,061	0.035	33	35	26.27	0.18	0.18	1.00	\$110,030	\$40,704	\$40,741	\$11.12											
Retirement	310	330	7.2	177	0.013	12	13	0.66	0.18	0.18	1.00	\$40,186	\$14,866	\$14,880	\$11.12											
Office	150	80	4	98	0.005	2	1	0.36	0.09	0.04	0.72	\$14,893	\$2,666	\$1,337	\$8.11											
School	150	80	23	567	0.007	3	2	2.11	0.09	0.04	0.72	\$21,195	\$3,794	\$1,903	\$8.11											
Recreational	400	500	36	881	0.004	4	5	3.28	0.23	0.27	1.18	\$10,981	\$5,242	\$6,160	\$13.03											
Commercial	200	200	14	351	0.060	36	36	1.31	0.12	0.11	0.83	\$186,233	\$44,448	\$41,792	\$9.35											
Medical	310	330	6	141	0.003	3	3	0.52	0.18	0.18	1.00	\$10,095	\$3,734	\$3,738	\$11.12											
Motel	400	600	146	3,588	0.050	61	92	13.35	0.23	0.33	1.25	\$156,556	\$74,730	\$105,396	\$13.74											
Restaurant	1,000	800	33	812	0.028	87	69	3.02	0.58	0.43	1.81	\$88,621	\$105,756	\$79,548	\$19.75											
Totals	335	356			0.636	649	691					\$1,983,435	\$793,374	\$793,374												
															<i>pounds per day > 1,779 1,892</i>											

Classes of Premises	Accts- Units	Rate/ Year	Revenue Accts-Units	Flow/BOD/TSS	Total	Flat Rate per Year
Residential Single Family	3,324	\$183	\$608,292	\$2,161,273	\$2,769,565	\$833.20
Residential Multiple Family	321	\$183	\$58,743	\$178,683	\$237,426	\$739.65
			<i>combine customer classes and round to nearest \$12 ></i>			<i>\$828.00</i>
Mobile Home	538	\$183	\$98,454	\$191,475	\$289,929	\$538.90
Retirement	272	\$183	\$49,776	\$69,933	\$119,709	\$440.11
			<i>combine customer classes and round to nearest \$12 ></i>			<i>\$504.00</i>

Table A-3b
 FY 2021-22 Revenue Allocation and Sewer Service Charges
 Values in italics are recommended rates

Classes of Premises	Revenue Requirement > \$5,069,000													<i>Rate per</i>						
														<i>accts-units</i>						
														<i>Year</i>						
														<i>\$208</i>						
													Allocation to accounts-units >	\$990,286	<i>divided by</i>	4,762				
													Allocation to flow/BOD/TSS >	\$2,265,952	\$906,381	\$906,381				
													<u>Equivalent Dwelling Units</u>			<i>Flow</i>	<i>BOD</i>	<i>TSS</i>		
													Flow	BOD	TSS	Res.	<i>per kgal</i>	<i>per lb</i>	<i>per lb</i>	<i>Rate per</i>
													45%	18%	18%	Equiv.	<i>\$9.76</i>	<i>\$1.40</i>	<i>\$1.31</i>	<i>HCF</i>
Residential Single Family	310	330	4.9	120	0.398	376	400	0.45	0.18	0.18	1.00	\$1,418,868	\$524,892	\$525,363	\$12.70					
Residential Multiple Family	310	330	6.6	161	0.033	31	33	0.60	0.18	0.18	1.00	\$117,305	\$43,395	\$43,434	\$12.70					
Mobile Home	310	330	287	7,061	0.035	33	35	26.27	0.18	0.18	1.00	\$125,703	\$46,502	\$46,544	\$12.70					
Retirement	310	330	7.2	177	0.013	12	13	0.66	0.18	0.18	1.00	\$45,910	\$16,984	\$16,999	\$12.70					
Office	150	80	4	98	0.005	2	1	0.36	0.09	0.04	0.72	\$17,014	\$3,046	\$1,527	<i>\$9.26</i>					
School	150	80	23	567	0.007	3	2	2.11	0.09	0.04	0.72	\$24,214	\$4,334	\$2,174	<i>\$9.26</i>					
Recreational	400	500	36	881	0.004	4	5	3.28	0.23	0.27	1.18	\$12,545	\$5,988	\$7,038	<i>\$14.88</i>					
Commercial	200	200	14	351	0.060	36	36	1.31	0.12	0.11	0.83	\$212,760	\$50,779	\$47,744	<i>\$10.68</i>					
Medical	310	330	6	141	0.003	3	3	0.52	0.18	0.18	1.00	\$11,532	\$4,266	\$4,270	<i>\$12.70</i>					
Motel	400	600	146	3,588	0.050	61	92	13.35	0.23	0.33	1.25	\$178,856	\$85,375	\$120,409	<i>\$15.70</i>					
Restaurant	1,000	800	33	812	0.028	87	69	3.02	0.58	0.43	1.81	\$101,244	\$120,819	\$90,879	<i>\$22.56</i>					
Totals	335	356			0.636	649	691					\$2,265,952	\$906,381	\$906,381						
						<i>pounds per day ></i>	<i>1,779</i>	<i>1,892</i>												

Classes of Premises	Accts- Units	Rate/ Year	Revenue Accts-Units	Flow/BOD/TSS	Total	<i>Flat Rate per Year</i>
Residential Single Family	3,324	\$208	\$691,392	\$2,469,122	\$3,160,514	\$950.82
Residential Multiple Family	321	\$208	\$66,768	\$204,135	\$270,903	\$843.93
			<i>combine customer classes and round to nearest \$12 ></i>			<i>\$936.00</i>
Mobile Home	538	\$208	\$111,904	\$218,749	\$330,653	\$614.60
Retirement	272	\$208	\$56,576	\$79,894	\$136,470	\$501.73
			<i>combine customer classes and round to nearest \$12 ></i>			<i>\$576.00</i>

Table A-3c
 FY 2022-23 Revenue Allocation and Sewer Service Charges
 Values in italics are recommended rates

Classes of Premises	Revenue Requirement > \$5,713,000													Rate per	
	Allocation to accounts-units > \$1,116,099 <i>divided by</i> 4,762													Year	
	Allocation to flow/BOD/TSS > \$2,553,834 \$1,021,534 \$1,021,534														
	Strength mg/l		Flow			Equivalent Dwelling Units			Flow		BOD		TSS		Rate per
BOD	TSS	Avg Monthly HCF	Volume gpd	BOD mgd	TSS klbs/yr	Flow 45%	BOD 18%	TSS 18%	Res. Equiv.	per kgal	per lb	per lb	HCF		
Residential Single Family	310	330	4.9	120	0.398	376	400	0.45	0.18	0.18	1.00	\$1,599,131	\$591,577	\$592,108	\$14.32
Residential Multiple Family	310	330	6.6	161	0.033	31	33	0.60	0.18	0.18	1.00	\$132,208	\$48,909	\$48,953	\$14.32
Mobile Home	310	330	287	7,061	0.035	33	35	26.27	0.18	0.18	1.00	\$141,673	\$52,410	\$52,457	\$14.32
Retirement	310	330	7.2	177	0.013	12	13	0.66	0.18	0.18	1.00	\$51,743	\$19,142	\$19,159	\$14.32
Office	150	80	4	98	0.005	2	1	0.36	0.09	0.04	0.72	\$19,176	\$3,433	\$1,721	\$10.44
School	150	80	23	567	0.007	3	2	2.11	0.09	0.04	0.72	\$27,290	\$4,885	\$2,450	\$10.44
Recreational	400	500	36	881	0.004	4	5	3.28	0.23	0.27	1.18	\$14,139	\$6,749	\$7,932	\$16.77
Commercial	200	200	14	351	0.060	36	36	1.31	0.12	0.11	0.83	\$239,790	\$57,231	\$53,810	\$12.04
Medical	310	330	6	141	0.003	3	3	0.52	0.18	0.18	1.00	\$12,998	\$4,808	\$4,813	\$14.32
Motel	400	600	146	3,588	0.050	61	92	13.35	0.23	0.33	1.25	\$201,579	\$96,221	\$135,706	\$17.69
Restaurant	1,000	800	33	812	0.028	87	69	3.02	0.58	0.43	1.81	\$114,107	\$136,169	\$102,425	\$25.43
Totals	335	356			0.636	649	691					\$2,553,834	\$1,021,534	\$1,021,534	

pounds per day > 1,779 1,892

Classes of Premises	Accts- Units	Rate/ Year	Revenue Accts-Units	Revenue Flow/BOD/TSS	Total	Flat Rate per Year
Residential Single Family	3,324	\$235	\$781,140	\$2,782,816	\$3,563,956	\$1,072.19
Residential Multiple Family	321	\$235	\$75,435	\$230,069	\$305,504	\$951.73
			<i>combine customer classes and round to nearest \$12 ></i>			<i>\$1,056.00</i>
Mobile Home	538	\$235	\$126,430	\$246,540	\$372,970	\$693.25
Retirement	272	\$235	\$63,920	\$90,044	\$153,964	\$566.04
			<i>combine customer classes and round to nearest \$12 ></i>			<i>\$648.00</i>

Table A-3d
 FY 2023-24 Revenue Allocation and Sewer Service Charges
 Values in italics are recommended rates

Classes of Premises	Revenue Requirement > \$6,416,000													Rate per	
	Allocation to accounts-units > \$1,253,438													<i>accts-units</i>	<i>Year</i>
	Allocation to flow/BOD/TSS > \$2,868,090													\$1,147,236	\$1,147,236
	Strength mg/l		Flow Avg Monthly		Volume	BOD	TSS	Equivalent Dwelling Units				Flow	BOD	TSS	Rate per
BOD	TSS	HCF	gpd	mgd	klbs/yr	klbs/yr	Flow 45%	BOD 18%	TSS 18%	Res. Equiv.	<i>per kgal</i> \$12.35	<i>per lb</i> \$1.77	<i>per lb</i> \$1.66	<i>HCF</i>	
Residential Single Family	310	330	4.9	120	0.398	376	400	0.45	0.18	0.18	1.00	\$1,795,908	\$664,373	\$664,969	\$16.08
Residential Multiple Family	310	330	6.6	161	0.033	31	33	0.60	0.18	0.18	1.00	\$148,477	\$54,927	\$54,976	\$16.08
Mobile Home	310	330	287	7,061	0.035	33	35	26.27	0.18	0.18	1.00	\$159,106	\$58,859	\$58,912	\$16.08
Retirement	310	330	7.2	177	0.013	12	13	0.66	0.18	0.18	1.00	\$58,110	\$21,497	\$21,516	\$16.08
Office	150	80	4	98	0.005	2	1	0.36	0.09	0.04	0.72	\$21,536	\$3,855	\$1,933	\$11.72
School	150	80	23	567	0.007	3	2	2.11	0.09	0.04	0.72	\$30,649	\$5,486	\$2,751	\$11.72
Recreational	400	500	36	881	0.004	4	5	3.28	0.23	0.27	1.18	\$15,879	\$7,579	\$8,908	\$18.83
Commercial	200	200	14	351	0.060	36	36	1.31	0.12	0.11	0.83	\$269,297	\$64,273	\$60,432	\$13.52
Medical	310	330	6	141	0.003	3	3	0.52	0.18	0.18	1.00	\$14,597	\$5,400	\$5,405	\$16.08
Motel	400	600	146	3,588	0.050	61	92	13.35	0.23	0.33	1.25	\$226,384	\$108,062	\$152,405	\$19.87
Restaurant	1,000	800	33	812	0.028	87	69	3.02	0.58	0.43	1.81	\$128,148	\$152,925	\$115,029	\$28.56
Totals	335	356			0.636	649	691					\$2,868,090	\$1,147,236	\$1,147,236	

pounds per day > 1,779 1,892

Classes of Premises	Accts- Units	Rate/ Year	Revenue Accts-Units	Revenue Flow/BOD/TSS	Total	Flat Rate per Year
Residential Single Family	3,324	\$264	\$877,536	\$3,125,249	\$4,002,785	\$1,204.21
Residential Multiple Family	321	\$264	\$84,744	\$258,380	\$343,124	\$1,068.92
			<i>combine customer classes and round to nearest \$12 ></i>			<i>\$1,188.00</i>
Mobile Home	538	\$264	\$142,032	\$276,877	\$418,909	\$778.64
Retirement	272	\$264	\$71,808	\$101,124	\$172,932	\$635.78
			<i>combine customer classes and round to nearest \$12 ></i>			<i>\$732.00</i>

Table A-3e
 FY 2024-25 Revenue Allocation and Sewer Service Charges
 Values in italics are recommended rates

Classes of Premises	Revenue Requirement > \$7,250,000													Rate per			
														accts-units			
														Year			
														\$298			
													Allocation to accounts-units >	\$1,416,369	divided by	4,762	
													Allocation to flow/BOD/TSS >	\$3,240,906	\$1,296,362	\$1,296,362	
													Equivalent Dwelling Units	Flow	BOD	TSS	Rate per
													Flow	per kgal	per lb	per lb	HCF
													45%	18%	18%	18%	
													Res.				
													Flow	BOD	TSS	Res.	Rate per
													45%	18%	18%	18%	HCF
													Flow	BOD	TSS	Res.	Rate per
													45%	18%	18%	18%	HCF
Residential Single Family	310	330	4.9	120	0.398	376	400	0.45	0.18	0.18	1.00	\$2,029,353	\$750,733	\$751,406	\$18.17		
Residential Multiple Family	310	330	6.6	161	0.033	31	33	0.60	0.18	0.18	1.00	\$167,777	\$62,067	\$62,123	\$18.17		
Mobile Home	310	330	287	7,061	0.035	33	35	26.27	0.18	0.18	1.00	\$179,788	\$66,510	\$66,570	\$18.17		
Retirement	310	330	7.2	177	0.013	12	13	0.66	0.18	0.18	1.00	\$65,664	\$24,292	\$24,313	\$18.17		
Office	150	80	4	98	0.005	2	1	0.36	0.09	0.04	0.72	\$24,335	\$4,356	\$2,184	\$13.25		
School	150	80	23	567	0.007	3	2	2.11	0.09	0.04	0.72	\$34,633	\$6,199	\$3,109	\$13.25		
Recreational	400	500	36	881	0.004	4	5	3.28	0.23	0.27	1.18	\$17,943	\$8,565	\$10,066	\$21.28		
Commercial	200	200	14	351	0.060	36	36	1.31	0.12	0.11	0.83	\$304,303	\$72,628	\$68,287	\$15.28		
Medical	310	330	6	141	0.003	3	3	0.52	0.18	0.18	1.00	\$16,494	\$6,102	\$6,107	\$18.17		
Motel	400	600	146	3,588	0.050	61	92	13.35	0.23	0.33	1.25	\$255,811	\$122,108	\$172,216	\$22.45		
Restaurant	1,000	800	33	812	0.028	87	69	3.02	0.58	0.43	1.81	\$144,806	\$172,803	\$129,981	\$32.27		
Totals	335	356			0.636	649	691					\$3,240,906	\$1,296,362	\$1,296,362			
															<i>pounds per day > 1,779 1,892</i>		

Classes of Premises	Accts- Units	Rate/ Year	Revenue Accts-Units	Flow/BOD/TSS	Total	Flat Rate per Year
Residential Single Family	3,324	\$298	\$990,552	\$3,531,493	\$4,522,045	\$1,360.42
Residential Multiple Family	321	\$298	\$95,658	\$291,966	\$387,624	\$1,207.55
			<i>combine customer classes and round to nearest \$12 ></i>			<i>\$1,344.00</i>
Mobile Home	538	\$298	\$160,324	\$312,868	\$473,192	\$879.54
Retirement	272	\$298	\$81,056	\$114,269	\$195,325	\$718.11
			<i>combine customer classes and round to nearest \$12 ></i>			<i>\$828.00</i>