

CAPE MAY COUNTY MUNICIPAL UTILITIES AUTHORITY



**CMCMUA USER CHARGE SYSTEM
RATE SETTING REPORT**

**WASTEWATER MANAGEMENT PROGRAM
USER CHARGES**

**EFFECTIVE JANUARY 1, 2022
(PROPOSED)**

CMCMUA USER CHARGE SYSTEM
RATE SETTING REPORT

	<u>TABLE OF CONTENTS</u>	PAGE NO.
SECTION I.	INTRODUCTION	I-1 - I-2
SECTION II.	BACKGROUND	II-1 - II-5
SECTION III.	FACTORS AFFECTING USER CHARGE SYSTEM	III-1 - III-5
SECTION IV.	THE REGIONAL RATE SETTING CONCEPT	IV-1
SECTION V.	METHODOLOGY FOR USER CHARGE COST DETERMINATIONS	V-1 - V-3
SECTION VI.	METHODOLOGY FOR DETERMINATION OF PROJECTED ANNUAL CHARGES BY PARTICIPANTS	VI-1
SECTION VII.	BASIS FOR PROPOSED USER CHARGES	VII-1 - VII-4
SECTION VIII.	FUTURE PROJECTIONS OF USER CHARGES	VIII-1

Section I. Introduction

I. Introduction

The primary purpose of this Rate Setting Report is to present information to Participants of the Cape May County Municipal Utilities Authority's (hereinafter referred to as Authority or CMCMUA) Wastewater Management Program and the general public regarding the user charges which are proposed to go into effect commencing on January 1, 2022, for Fiscal Year 2022 (i.e. calendar year 2022).

The charges for wastewater conveyance and treatment services in Ocean City will be billed to New Jersey American Water which provides local sewage collection service within the City of Ocean City. In turn, New Jersey American Water will pass these costs onto the individual users of the system, along with New Jersey American Water's own cost for the operation of the local sewage collection system.

The charges for wastewater conveyance and treatment services in the City of Cape May, Borough of West Cape May, Borough of Cape May Point, Borough of Stone Harbor, City of Sea Isle City, Borough of Avalon, Township of Middle (including areas in Cape May Court House, Mayville, Burleigh, Rio Grande, Avalon Manor, Stone Harbor Manor/Blvd. and Harbor Bay Center), City of North Wildwood, City of Wildwood, Borough of Wildwood Crest, Borough of West Wildwood, and the Shawcrest Area of the Township of Lower, will be billed by the CMCMUA directly to each Participant municipality or local sewerage agency, as appropriate. In turn, each Participant will pass the cost for regional service on to the individual users of the system, along with the Participant's own costs for the operation of the local sewage collection system.

The County of Cape May will be billed for the sewage received from the County Complex at Crest Haven. Likewise, the New Jersey Turnpike Authority will be billed for the sewage received from the Garden State Parkway's Ocean View Service Area and Swainton Maintenance Yard and Avalon State Police Barracks.

The CMCMUA has, historically, not received any high strength waste from its Participants, and the proposed Fiscal Year 2022 Budget does not anticipate receiving any additional revenue from such waste. However, in order to accommodate the receipt of any high strength wastes from any sources within any of the Service Regions, as in past

years, this Report also proposes rates for a surcharge on high strength wastes for Fiscal Year 2022.

Due to damages incurred by a fire in one of the two reactors at the County-Wide Sludge Composting Facility in November 2015, the County-Wide Sludge Composting Facility is not currently in operation. In 2021, the Authority decided not renew the operating permit for the County-Wide Sludge Composting Facility, deeming the facility permanently closed.

In addition, rates are proposed for the receipt and treatment of septage and landfill leachate at the Seven Mile Beach/Middle Regional Wastewater Treatment Facility during Fiscal Year 2022.

Rates are herein proposed for the conveyance and disposal of the treated effluent from the Lower Township Municipal Utilities Authority's Wastewater Treatment Facility. This rate has been calculated in accordance with the Service Agreement between the Authority and Lower Township Municipal Utilities Authority (LTMUA).

Section II. Background

II. Background

Created by resolution of the Cape May County Board of County Commissioners (formerly named the Board of Chosen Freeholders) in 1972, the Cape May County Municipal Utilities Authority ("CMCMUA" or the "Authority") was formed specifically for the purposes of planning, designing and implementing wastewater and solid waste management programs for the improvement, preservation, and protection of the natural and socio-economic environments of Cape May County.

A. Regional Service Areas

The CMCMUA, on November 16, 1977, officially adopted the "County-Wide Selected Plan" ("Plan"), which established regional wastewater planning areas throughout Cape May County. This Plan has been approved by the United States Environmental Protection Agency (USEPA) and New Jersey Department of Environmental Protection (NJDEP). The four (4) Regional Planning Areas delineated by this Plan, for which facilities have been provided during the initial planning phase, are: the Ocean City, Cape May, Seven Mile Beach/Middle and Wildwood/Lower Service Regions. The general area of each region has been identified geographically, as shown in Figure 1, while Figure 2 lists the Participants within each Service Region currently serviced by the Regional Wastewater System. The Service Regions delineated in Figure 1 represent the study areas which were evaluated during the facilities planning process. Therefore, it should be recognized that large portions of the study areas, particularly on the mainland, are not slated to receive regional wastewater treatment services.

Wastewater collection, transmission, treatment and disposal facilities have been separately provided for in each of the four (4) Service Areas.

All Service Areas are currently operational. Management and administration of these regional facilities are centralized under the coordinated control of the CMCMUA. Within each Service Area, or Region, staffing is provided as necessary to operate and maintain the Wastewater Treatment Facilities. In addition, a Sludge Transfer Facility, located adjacent to the Seven Mile Beach/Middle Region Wastewater Treatment Facility, receives the sludge which is generated at the four (4) Regional Wastewater Treatment Plants.

Descriptions of the CMCMUA's Wastewater and Sludge Treatment Facilities are briefly presented below:

Figure 1

**CMCMUA User Charge System
Location of Participants by Region**

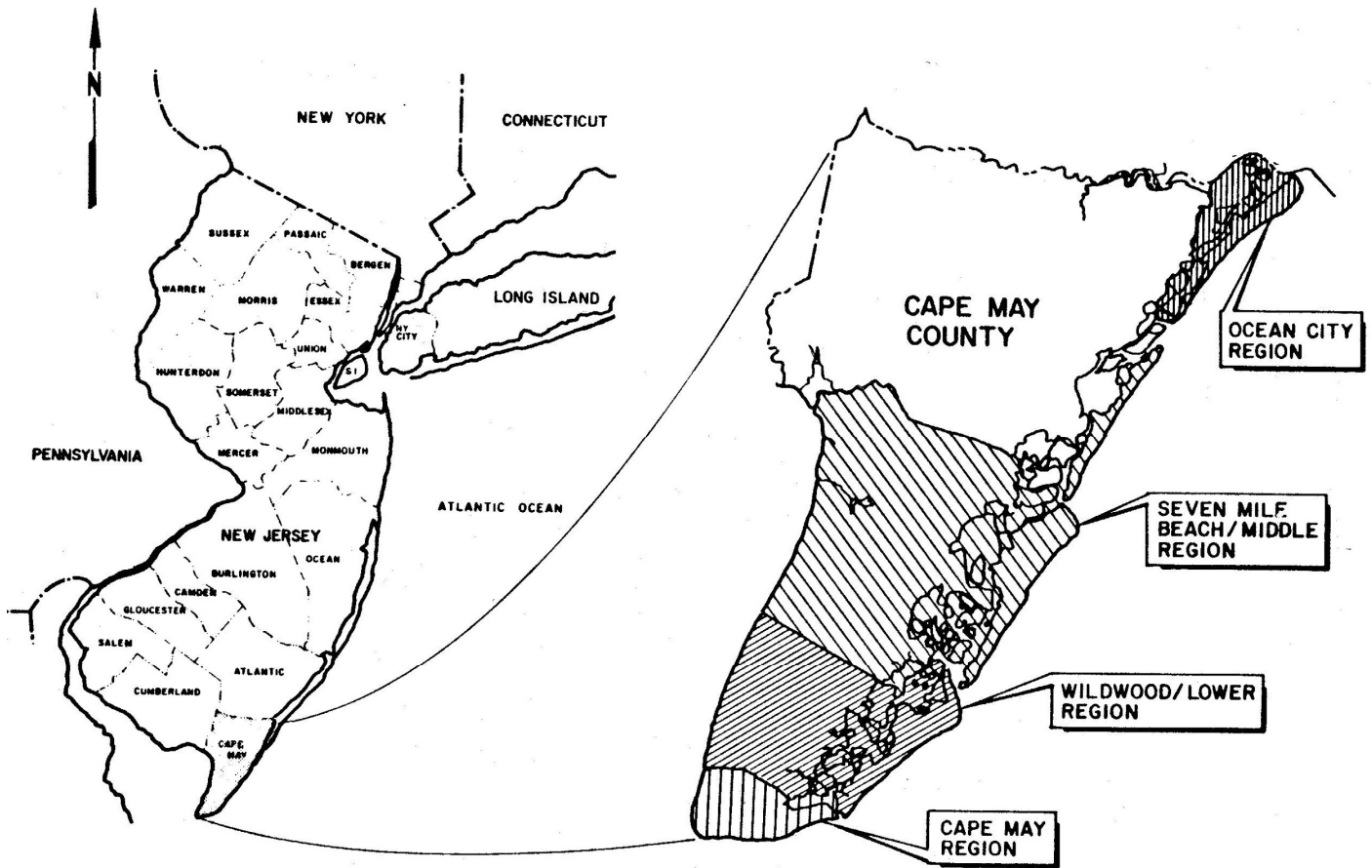


Figure 2
CMCMUA USER CHARGE SYSTEM
LIST OF PARTICIPANTS BY REGION

<u>Region</u>	<u>Participant</u>
Ocean City	<ul style="list-style-type: none"> - Ocean City - New Jersey-American Water Company
Cape May	<ul style="list-style-type: none"> - West Cape May - Cape May Point - Cape May City (Includes the U.S. Coast Guard Base)
Seven Mile Beach/Middle	<ul style="list-style-type: none"> - Stone Harbor - Sea Isle City - Avalon - Cape May County (Crest Haven Complex) - Middle Township - (Cape May Court House) - Middle Township - (Avalon Manor) - Middle Township - (Stone Harbor Manor/Stone Harbor Blvd.) - Middle Township - (Court House South) - Middle Township – (Harbor Bay Center) - New Jersey Turnpike Authority (Ocean View Service Area/Swainton Maintenance Yard and Avalon State Police Barracks)
Wildwood/Lower	<ul style="list-style-type: none"> - Wildwood - Wildwood Crest - West Wildwood - North Wildwood - Middle Township - (Rio Grande) - Lower Township Municipal Utilities Authority (Shawcrest)

1. Ocean City Region

A 6.3 million gallons per day (MGD) capacity Secondary Wastewater Treatment Facility for Ocean City has been in operation since February 1982. The facility was re-rated at 7.3 MGD by the NJDEP in the summer of 1994. Effective with the reissuance of the NJPDES permit renewal on April 1, 2001, the facility was again rerated by the NJDEP at 8.24 MGD. Transmission facilities consist of four (4) regional pumping stations and approximately 52,000 lineal feet of force mains. These Transmission Facilities terminate at the Regional Wastewater Treatment Facility located at the western end of 45th Street. Treated effluent is discharged through an outfall and diffuser system which extends approximately 6,000 lineal feet from the shoreline into the Atlantic Ocean, east of the treatment facility site.

2. Cape May Region

A 3.0 MGD capacity Secondary Wastewater Treatment Facility, located at the site of the former Cape May City Treatment Plant, began operation in February, 1984. Regional transmission facilities consist of three (3) pumping stations and approximately 20,000 lineal feet of force mains. The treated effluent is conveyed by force main to the Authority's Effluent Disposal Facility adjunct to the Lower Township Municipal Utilities Authority's Wastewater Treatment Facility, where it is combined with the effluent from the Lower Township Municipal Utilities Authority's Wastewater Treatment Facility and re-pumped to the effluent pumping station at the Wildwood/Lower Regional Wastewater Treatment Facility. The combined effluent from all three treatment plants is discharged into the Atlantic Ocean via the Wildwood/Lower Regional Ocean Outfall and diffuser system.

3. Seven Mile Beach/Middle Region

A 7.67 MGD capacity Secondary Wastewater Treatment Facility, located near the County Complex at Crest Haven in Middle Township, began operation in August, 1987. Transmission facilities include ten (10) pumping stations and approximately 84,000 lineal feet of force main pipelines. Treated effluent is discharged into the Atlantic Ocean through an outfall and diffuser system consisting of 30,000 lineal feet of land-based pipeline and 5,200 lineal feet of marine outfall line.

In addition, facilities have been provided at the Seven Mile Beach/Middle Regional Wastewater Treatment Facility to receive and treat all of the septage waste, leachates and liquid sludges generated in Cape May County.

4. Wildwood/Lower Region

A 14.2 MGD capacity Secondary Wastewater Treatment Facility located on Route 47 east of Rio Grande, began operation in April, 1988. Transmission facilities include seven (7) pumping stations and approximately 52,900 lineal feet of force mains. Effluent is discharged into the Atlantic Ocean through an ocean outfall and diffuser system.

The Wildwood/Lower's effluent disposal system also conveys the treated effluent from the Cape May Region and the Lower Township Municipal Utilities Authority Wastewater Treatment Facilities for discharge through the common ocean outfall and diffuser system into the Atlantic Ocean.

5. County-Wide Sludge Composting Facility / Sludge Transfer Facility

The Authority processed sludges generated by the four (4) Regional Wastewater Treatment Plants at the County-Wide Sludge Composting Facility, located adjacent to the Seven Mile Beach/Middle Wastewater Treatment Facility, from late 1985 through November 2015. Due to damages incurred by a fire in one of the two reactors of the County-Wide Sludge Composting Facility in November 2015, the facility was shut down. In 2021, the Authority decided not to renew the operating permit for the County-Wide Sludge Composting Facility, deeming the facility permanently closed. The Authority is evaluating its long-term sludge management options.

Currently, the sludges generated by the four (4) Regional Wastewater Treatment Plants are transported by the Authority to the Atlantic County Utilities Authority at a rate of 50 dry tons per week during non-peak months and 84 dry tons per week during peak months. During peak months, the Authority currently relies upon a contract with an outside contractor to transport and dispose approximately 56 dry tons per week of excess sludge generated by its four (4) Regional Wastewater Treatment Plants.

Section III. Factors Affecting User Charge System

III. Factors Affecting User Charge System

The terms of executed service agreements and bond covenants, as well as regulatory requirements and grant conditions, affect a user charge system. A discussion of each of these factors as they affect the CMCMUA user charge system is presented in the following subsections.

A. Service Agreement

A Service Agreement with the CMCMUA was entered into by Participant Cities, Boroughs, Townships, Sewerage Districts, and the New Jersey American Water (herein collectively referred to as "Participants") in order to identify applicable responsibilities and/or procedures regarding items such as:

1. The construction and operation of the Regional System
2. Connection to the Regional System
3. Charges and establishment of rates by the CMCMUA, and payments by Participants
4. Meters, records and local operations
5. Payment for abandoned Wastewater Treatment Facilities and their demolition

With respect to charges for wastewater treatment and disposal under Item 3, Section 401 of the Service Agreement states that the sum of annual charges to Participants "shall at all times be sufficient to pay or provide for the expenses of operation, repair and maintenance of the Regional System, including (without limitation of the foregoing) insurance, renewals and replacements, and the cost of all extensions and alterations of the Regional System not otherwise provided for, the principal of and interest on any and all bonds or other obligations of the Authority as the same become due, and to provide for any deficits of the Authority resulting from failure to receive sums payable to the Authority by any Participant or any other person, partnership, firm or corporation, or from any other cause, and to provide and maintain such reserves or sinking funds for any of the foregoing proposes as may be required by the terms of any contract or other obligation of the Authority."

In addition, Section 402 of the Service Agreement states that the annual charge "shall be computed and established by the Authority on the basis of the quantity, quality and other characteristics of the sewage so delivered as shown by the records of the Authority, at the rate or rates prescribed by the Authority in accordance with this Article ..."

B. CMCMUA Bond Covenants

Bond covenants associated with the CMCMUA's issuance of revenue bonds used to finance the construction of the Authority's Regional Wastewater Treatment Plants also affect the user charge system, as each of the following items are addressed: obligation for and payment of bonds, establishment and application of reserve funds, rate stabilization funds, investment of funds, the rate covenant, annual budget responsibilities, audits, insurance and arbitrage.

The CMCMUA user charge system's debt service for construction of facilities, beginning with the Ocean City Region, was set forth by the 1979 bond covenant, as contained in the "Official Statement Relating to \$17,000,000 CMCMUA County Agreement Sewer Revenue Bonds, Series 1979." These revenue bonds were structured to recover construction costs and the portion of the project development costs (i.e., regional planning, design and financing costs) attributable to these projects.

Similarly, additional financing for the Cape May Region, County-Wide Sludge Composting Facility, Seven Mile Beach/Middle Region, and Wildwood/Lower Region (with the exception of the Cape May Region/Lower Township Effluent Disposal System) was obtained through the issuance of additional Sewer Revenue Bonds.

Each series of sewer revenue bonds initially issued by the CMCMUA for the construction of the Authority's Regional Wastewater Treatment Plants was subsequently refunded by the Authority in order to take advantage of more favorable bond market conditions (i.e. lower interest rates).

In May 1999, through a competitive bidding process, the Authority sold its option to recall up to \$85,195,000 of the then currently outstanding Series 1992-A Sewer Revenue Refunding Bonds and to reissue/resell these bonds should lower interest rates become available at some point in the future. In return for surrendering the Authority's right to

recall the bonds for a two-year period, between the Fall of 2002 and the Fall of 2005, the Authority received an upfront payment of \$3,830,000 from Lehman Brothers, Inc. In accordance with the terms of this Forward Bond Sale, in November 2002, the CMCMUA Series 1992-A Bonds were recalled and reissued as the Authority's Series 2002-A Sewer Revenue Refunding Bonds at the same rates and terms as the Series 1992A Bonds.

The Authority has invested the \$3.83 Million in proceeds from the above noted Forward Bond Sale and has utilized the interest income and a portion of the proceeds over a multi-year period to offset its User Charges to Participants as part of a Rate Stabilization strategy. In an additional effort to stabilize User Rates, in October 2002, the Authority approved the refunding of the Series 1992 and 1993-B Sewer Revenue Refunding Bonds through the issuance of the Series 2002-B and Series 2002-C Sewer Revenue Refunding Bonds. This refinancing scheme took advantage of low interest rates and restructured the schedule for debt service payments.

The Authority's currently outstanding sewer revenue bond issues are described in detail in the following documents:

Official Statement: The Cape May County Municipal Utilities Authority, Sewer Revenue Refunding Bonds, Series 2011; dated November 3, 2011. These bonds retired the then-outstanding Sewer Revenue Refunding Bonds, Series, 2002-C, at a significant savings in interest costs.

Financing for portions of the CMCMUA's regional conveyance and treatment system was also provided through low interest loans obtained from the New Jersey Department of Environmental Protection acting on behalf of the State of New Jersey, and the New Jersey Wastewater Treatment Trust. The Cape May Region/Lower Township Effluent Disposal System was financed through this low interest loan program. Agreements setting forth the terms for this loan were finalized and executed in October, 1987.

During 1994, the New Jersey Wastewater Treatment Trust issued refunding bonds for the interest bearing loans. This refinancing provided significant short term savings during Fiscal Years 1994 and 1995 with stable annual debt payments thereafter.

Similarly, the Court House South Project, which consisted of the construction of two (2) pump stations and connecting force mains to extend wastewater treatment services

to the Burleigh and Mayville sections of Middle Township, was also funded through the NJDEP/NJ Wastewater Treatment Trust Loan Program. The interest bearing portion of this loan was refunded by the New Jersey Wastewater Treatment Trust in May of 2004.

In 2010, the Authority obtained low (2010 (A) Series) and (2010 (B) Series) interest loans from the New Jersey Environmental Infrastructure Trust (NJEIT) Loan Program. The proceeds from these loans financed the refurbishment of the Authority's force main in West Wildwood and other various projects.

Also, in 2010, the Authority obtained additional low interest and zero interest loans from the NJEIT (2010 (C) Series) for refurbishment of the force mains along Avalon Boulevard and other projects.

In 2012, the Authority obtained low (2012 (A-1) Series) and zero (2012 (A-2) Series) interest loans from the NJEIT Loan Program. The proceeds from these loans financed the purchase of replacement emergency generators, pumps, valving, control systems, property improvements, and heavy equipment.

In 2016, the Authority obtained a low (2016A) interest loan from the NJEIT Loan Program. The proceeds from this loan financed the construction of bypass pumping around the Authority's pumping stations for emergency pumping situations and for maintenance purposes.

C. Regulatory Requirements

All requirements of the USEPA and the NJDEP imposed as a result of grant conditions associated with the receipt of Federal and State grant funds for the construction of the CMCMUA's Regional Wastewater Program have been considered in design of the CMCMUA user charge system, including the adoption of a system of charges which ensures that each user (or class of users) pays its proportionate share of the Regional Facilities' construction, operation, maintenance and replacement costs. Proportionality encompasses such user characteristics as volume, strength and rate of flow. The concept of proportionality also includes all debt and administrative costs incurred by the CMCMUA as a result of the Cape May County regional planning, design and construction process. Additional regulatory requirements have been met with regards to potential customers subject to high strength wastewater surcharges and specific service charges.

Section IV. The Regional Rate Setting Concept

IV. The Regional Rate Setting Concept

In accordance with the requirements of N.J.S.A. 40:14B-22 and the terms of the Service Agreement with its Participants, the CMCMUA user charges will be uniform with respect to wastewater conveyance, treatment and disposal services.

The CMCMUA user charge system provides a rate structure and a methodology through which the actual rates can be adjusted periodically to ensure continued coverage of all wastewater, conveyance, treatment and disposal costs by revenue generated throughout the four (4) Regional Systems as each system or system extension is placed into operation.

It should be noted that the user charge system developed in this Report only addresses direct CMCMUA charges to the Participants. These projected annual charges, therefore, do not include any administrative, billing, or collection costs which will be incurred and passed along by the local Participants, as they distribute the cost for the Authority's regional wastewater conveyance and treatment services along with their own charges for the operation and maintenance of their local collection systems, to the individual customers receiving local sewage service.

Section V. Methodology for User Charge Cost Determinations

V. Methodology for User Charge Cost Determinations

Costs to be recovered from Participants through user charges include: debt service, operation, maintenance, replacement, and CMCMUA administrative cost. Each of these cost items is discussed in the following paragraphs.

The CMCMUA debt service costs are composed of several annual cost components. The major cost item is the debt service payments made on bonds issued for facilities' construction and refurbishing. The sale of these bonds provided the local share of the total capital requirement for planning, design, construction, and project financing activities. The term "local share" refers to the balance remaining after all Federal and State grants have been applied to the total capital cost.

Annual operation and maintenance (O & M) cost attributable to the conveyance systems, treatment facilities, solids handling facilities and effluent disposal systems maintained by the CMCMUA have been estimated for each Region. Upon examination, it has been found that many of these costs are essentially fixed in nature, in that they are not dependent on the total annual flow transmitted to the treatment plant. Examples of such costs include most of the wages and salaries of the permanent (i.e., year round) employees, heating costs, and general upkeep of the facility sites. These costs have been referred to as fixed O & M costs. The Authority's annual debt service obligations also represent a fixed cost.

Other costs, which vary with the actual volume of wastewater transported and treated, include electrical costs for pumping and aeration, chemical costs for flocculation and disinfection, and for various sludge handling, treatment and disposal costs. These costs have been referred to as variable O & M costs.

USEPA regulations require that the Grantee establish a provision for replacing large capital items whose service life falls short of the life expectancy of the treatment plant itself. An annual contribution to a replacement fund has been established to meet this requirement.

Annual costs associated with administration of the CMCMUA Regional Wastewater Treatment System have been incorporated into the rate projections.

The CMCMUA user charge rate structure consists of three (3) basic types of charges: A) specific service charges; B) high strength surcharges and; C) charges to Participants. Each of these charges is described as follows:

A. Specific Service Charges

These charges recover the costs which benefit a specific customer or class of customers (e.g. septage haulers). These specific services are charged directly to the customer(s) receiving the service in proportion to the estimated costs of providing these services.

For septage disposal, the projected service charge consists of the actual cost to treat the Biochemical Oxygen Demand (BOD) and Suspended Solids (SS) concentrations contained in the septage, based on sample test data acquired since 1982. To conform with the NJDEP's practice of categorizing septage tank pumpage as "sludge", the CMCMUA will apply the same charge for domestic septage, approved septage sludge, or raw wastewater originating from outside the Regional Wastewater Treatment System area in Cape May County. Likewise, specific service charges for landfill leachate disposal have also been calculated.

For the conveyance and disposal of the effluent from the LTMUA's Wastewater Treatment Facility, the Specific Service Charge is calculated in accordance with the existing Service Agreement between the two Authorities, utilizing the actual debt service and estimated operating and maintenance costs attributable to the Effluent Disposal System.

B. High-Strength Surcharges

High-strength surcharges, also referred to as specific surcharges, recover the costs for treatment of high-strength wastewaters. High-strength wastewaters are defined as discharges whose polluting characteristics; in terms of BOD and SS are greater than those associated with domestic wastewater from residential customers. The

concentration limits, beyond which surcharges will be assessed, have been set at 350 milligrams per liter (mg/l) BOD, and 300 milligrams per liter (mg/l) SS, as per the Service Agreement. No income revenue from high-strength surcharges is envisioned at this time and, therefore, no costs and/or incomes have been included in the projected User Rates.

C. Charges to Participants

The annual charge per Participant receiving wastewater treatment services recovers all costs for debt service, operations, maintenance and equipment replacement costs, and administrative services remaining after the collection of specific service charges, surcharges for high-strength wastes, grants, interest income and other revenues. Allocation of these costs among the Participants is based upon the projected volume and rate of flow from each Participant, expressed as a **percentage of the total flow** from all Participants. The costs which are fixed in nature (debt service plus fixed O&M costs) are allocated on the basis of the projected summer flow from each Participant. This methodology is used in an attempt to equitably distribute the fixed costs associated with the additional conveyance and treatment capacity necessitated by the increased flow rates resulting from the seasonal increase in population during the summer months in Cape May County.

The projected Fiscal Year 2022 annual charges per Participant developed herein do not include the recovery of any costs for wastewater collection and/or treatment services beyond the responsibility of the CMCMUA.

**Section VI. Methodology For Determination Of
Projected Annual Charges By Participants**

VI. Methodology for Determination of Projected Annual Charges by Participant

In order to determine the annual charges projected for each Participant, estimates for summer and non-summer flow rates were developed from actual CMCMUA flow measurements from each of the four (4) Regional Systems. As discussed previously, fixed charges (debt service plus fixed operating costs) were allocated based upon a proportioning of the total summer flow received from all Participants receiving regional sewerage service. Total summer flow is represented by the total flow received in the 90-day period from mid-June through mid-September.

The estimated "total summer flows" were tabulated with each Participant's contribution expressed as a percentage of the total of all of the "total summer flows" to be received from all Participant service areas during the Fiscal Year. The projected annual fixed charge for each Participant receiving service was then calculated by multiplying each Participant's percentage of the "total summer flow" by the total fixed costs to be recovered.

The determination of the projected annual charge to each Participant for the variable (or flow related) portion of the cost was based upon each Participant's percentage contribution to the total annual flow projected to be received from all Participants.

The total annual user charge, which will be billed to each Participant receiving service from the CMCMUA within any given fiscal year, combines the fixed and variable components of the user charge as described above. Table 1, contained in Section VII of this Report, presents the total annual user charge for each Participant projected to receive Regional wastewater conveyance, treatment, and disposal service during Fiscal Year 2022.

Section VII. Basis For Proposed Fiscal Year 2022 User Charges

VII. Basis for Proposed Fiscal Year 2022 User Charges

As noted earlier, the purpose of this Report is to present the proposed rates for wastewater conveyance, treatment, and disposal services in the CMCMUA's Ocean City, Cape May, Seven Mile Beach/Middle, and Wildwood/Lower Service Regions which will become effective for Fiscal Year 2022. A surcharge is also being proposed for the treatment of high-strength wastes at the Authority's Regional Wastewater Treatment Plants, and for the handling and treatment of septage and landfill leachate at these facilities during Fiscal Year 2022. In addition, a specific service charge for the Lower Township Municipal Utilities Authority's use of the Effluent Disposal System is proposed.

The rates adopted for Fiscal Year 2022, shall remain in effect until such time as the schedule of rates is proposed for further modification. Prior to any modification of the rates adopted by the CMCMUA for Fiscal Year 2022, the Authority will provide adequate public notice and conduct a public hearing for the purpose of receiving comments relative to any proposed modifications under consideration at that time.

Included within this section are the user charges proposed to go into effect in Fiscal Year 2022. They are presented in Table 1 of this section. Supplemental tables providing a further breakdown of the proposed user charges are also presented in this section of the Report. The Participants to be serviced in Fiscal Year 2022 will be billed in accordance with the executed Service Agreements.

The following factors were considered in the preparation of the projected user charges for Fiscal Year 2022:

- ° Projected year 2022 flow rates for most Participants are based on actual wastewater flows as measured by the Authority during the previous six (6) year period (with the exception of extreme storm flows or known groundwater pumping events).
- ° The actual flow from each Participant will be measured during calendar year 2022 and any adjustments to the fees collected from each Participant, based on these actual flow records, will be made as necessary after final audit of the Fiscal Year 2022 operating expenses.

- ° Data Entry and Review: Flow meter totalizer readings are read daily by facility staff and entered into the Authority's process database and reviewed by Authority supervisors. Monthly Data is tabulated and distributed to all municipal Participants.
- ° Billing Meter Certification: On three (3) separate occasions throughout the year, a qualified third party contractor reviews, calibrates, and certifies the operation of the Authority's billing flow meters.
- ° Meter Data and Estimates: On occasion, meter totalizer data cannot be obtained due to a malfunction or scheduled maintenance. When this occurs, notations are made on the corresponding monthly municipal flow report that is distributed to all Participants. Estimated flows are calculated during these periods using representative flow data which in the assessment of the Authority presents the most accurate estimate.
- ° O & M costs for the Regional Wastewater System and the proportioning of these costs into fixed or variable components were budgeted based upon actual experience in the four operating Service Regions.
- ° As presented in the Fiscal Year 2021 User Charges, all joint administrative costs are recorded in the Wastewater Management Program "Operations and Maintenance" expenditure category, with an associated "Management Fee" being charged to the Solid Waste Management Program for its proportionate share of joint administrative costs. The Operations & Maintenance Costs have increased 2.67% from Fiscal Year 2021. These increases are primarily attributable to increases in labor related costs.
- ° It is estimated that essentially all sludges generated by the four (4) Regional Wastewater Treatment Plants during calendar year 2022 will be processed at either the Atlantic County Utilities Authority or through a contract with a third party collection and disposal company.
- ° Allocation of projected costs to treatment parameters (i.e., flow, BOD and SS) are based upon actual past experience.
- ° For those funds not in long-term investments, projected interest income was estimated by the CMCMUA's Chief Financial Officer, based on an average

0.25% rate of return on investments. Total estimated interest income for Fiscal Year 2022 is \$100,000.

- ° All interest income anticipated for Fiscal Year 2022, including the interest income from the Wastewater Management Program's Construction Funds, will be used to offset debt service, operations and maintenance costs, and contribution to the Renewal and Replacement fund and is included in the above total.
- ° The specific service charge for the conveyance and disposal of the effluent from the LTMUA has been calculated in accordance with the existing Service Agreement between the LTMUA and CMCMUA utilizing the actual debt service and estimated operation and maintenance costs attributable to the CMCMUA's Effluent Disposal System. The proposed specific service charge for the LTMUA's use of the Effluent Disposal System in Fiscal year 2022 is in the amount of \$501,331.
- ° The projected volume of septage and landfill leachate for Fiscal Year 2022 is based on actual quantities received during the last several years.
- ° The quality of septage and leachate is based upon average values obtained from laboratory analyses for BOD and SS.
- ° The septage disposal charge is based upon an analysis of septage quality, the projected average cost to treat a pound of BOD, a pound of SS, and to handle 1,000 gallons of septage.
- ° Miscellaneous revenues in the amount of \$20,000 have been included in anticipation of insurance premium rebates and the sale of surplus equipment.
- ° The projected revenues from communication tower leases for Fiscal Year 2022 are \$105,000.

CAPE MAY COUNTY MUNICIPAL UTILITIES AUTHORITY
USER CHARGE SYSTEM -- RATE SETTING REPORT -- FISCAL YEAR 2022

TABLE 1 - USER CHARGES INCLUDING SPECIFIC SERVICE CHARGES

USER CHARGES BY PARTICIPANT:

	FIXED CHARGES:		VARIABLE CHARGES:		TOTAL:	
	PERCENT (1)	DOLLARS	PERCENT (1)	DOLLARS		
OCEAN CITY	26.74%	\$8,393,173	26.36%	\$1,319,208	\$9,712,381	NOTES: (1) From TABLE 7 (2) From TABLE 6 (3) From TABLE 5 (4) From TABLE 4
CITY OF CAPE MAY	6.85%	\$2,150,357	8.20%	\$410,152	\$2,560,509	
WEST CAPE MAY	1.15%	\$361,622	1.50%	\$74,872	\$436,494	
CAPE MAY POINT	0.60%	\$188,883	0.65%	\$32,505	\$221,388	
STONE HARBOR	4.90%	\$1,538,506	4.00%	\$200,146	\$1,738,652	
SEA ISLE CITY	11.10%	\$3,483,837	9.30%	\$465,302	\$3,949,139	
AVALON	10.70%	\$3,359,529	10.10%	\$505,477	\$3,865,007	
CREST HAVEN	0.50%	\$156,595	0.70%	\$35,062	\$191,657	
RIO GRANDE	2.20%	\$690,956	3.53%	\$176,771	\$867,727	
C. M. COURT HOUSE	2.60%	\$816,877	3.70%	\$185,171	\$1,002,049	
AVALON MANOR	0.23%	\$72,647	0.25%	\$12,418	\$85,065	
S. H. BOULEVARD	0.28%	\$87,177	0.29%	\$14,609	\$101,786	
COURT HOUSE SOUTH	1.22%	\$382,609	1.56%	\$78,159	\$460,768	
HARBOR BAY CENTER	0.01%	<u>\$3,229</u>	0.01%	<u>\$365</u>	<u>\$3,594</u>	
MIDDLE TWP. TOTAL		\$2,053,495		\$467,493	\$2,520,988	
NJ TURNPIKE AUTHORITY	0.02%	\$5,840	0.02%	\$1,096	\$6,936	
WILDWOOD	9.75%	\$3,060,869	9.00%	\$450,328	\$3,511,196	
WILDWOOD CREST	9.35%	\$2,934,947	8.70%	\$435,353	\$3,370,300	
WEST WILDWOOD	1.30%	\$408,439	1.64%	\$82,177	\$490,615	
NORTH WILDWOOD	10.00%	\$3,138,359	10.00%	\$500,364	\$3,638,723	
SHAWCREST (LTMUA)	0.50%	\$156,595	0.48%	\$24,105	\$180,700	
TOTALS (2):	100.00%	\$31,391,046	100.00%	\$5,003,639	\$36,394,685	

SPECIFIC SERVICE CHARGES:

L.T.M.U.A EFFLUENT DISPOSAL (3):	\$501,331
HIGH STRENGTH SURCHARGES (4):	
HIGH STRENGTH B.O.D. (\$/lb)	\$0.61
HIGH STRENGTH S.S. (\$/lb)	\$0.99
SEPTAGE/SLUDGE/RAW WASTE DISPOSAL (\$/1000 gallons) (3):	\$57.69
LANDFILL LEACHATE DISPOSAL (\$/1000 gallons) (3):	\$11.30

CAPE MAY COUNTY MUNICIPAL UTILITIES AUTHORITY
USER CHARGE SYSTEM -- RATE SETTING REPORT -- FISCAL YEAR 2022

TABLE 2 -- OPERATING EXPENSE BUDGET BY FACILITY

Sum of 2022 Proposed		Process Type		Fixed / Variable								Grand Total
Facility Name	Element Name	Conveyance System		Wastewater Treatment		Solids Handling		Effluent Disposal				
		Fixed	Variable	Fixed	Variable	Fixed	Variable	Fixed	Variable			
Cape May Region	Benefits and Taxes			\$369,943							\$369,943	
	Chemicals	\$0			\$23,000	\$0	\$15,000	\$0	\$68,000	\$106,000		
	Equipment	\$10,000		\$35,450		\$1,500		\$1,500		\$48,450		
	Fuels, Oils and Greases	\$7,500		\$36,850		\$0		\$0		\$44,350		
	Materials	\$0		\$500		\$0		\$0		\$500		
	Outside Services	\$10,000		\$25,500		\$500	\$62,500	\$500		\$99,000		
	Rents and Leases	\$22,000		\$1,500						\$23,500		
	Repair Parts	\$7,400		\$31,400		\$2,750		\$2,750		\$44,300		
	Salaries and Wages			\$767,000	\$26,000		\$0			\$793,000		
	Supplies	\$2,100		\$17,600						\$19,700		
	Travel			\$0						\$0		
Utilities	\$2,000	\$60,000	\$2,500	\$160,000		\$0			\$224,500			
Ocean City Region	Benefits and Taxes			\$523,078						\$523,078		
	Chemicals	\$0		\$0	\$137,000		\$50,000	\$0	\$308,000	\$495,000		
	Equipment	\$11,700		\$50,000		\$3,500		\$750		\$65,950		
	Fuels, Oils and Greases	\$10,250		\$52,100			\$1,000	\$0		\$63,350		
	Materials	\$0		\$0				\$0		\$0		
	Outside Services	\$14,600		\$50,500		\$0	\$32,000	\$500		\$97,600		
	Rents and Leases	\$30,000		\$1,500						\$31,500		
	Repair Parts	\$40,000		\$57,000		\$17,000		\$7,500		\$121,500		
	Salaries and Wages			\$1,093,500	\$28,000					\$1,121,500		
	Supplies	\$2,100		\$34,500						\$36,600		
	Travel			\$0						\$0		
Utilities	\$5,000	\$126,000	\$25,000	\$270,000					\$426,000			
Wildwood Lower Region	Benefits and Taxes			\$568,523						\$568,523		
	Chemicals	\$0		\$22,500			\$95,000	\$0	\$385,000	\$502,500		
	Equipment	\$27,500		\$59,800		\$17,500		\$9,600		\$114,400		
	Fuels, Oils and Greases	\$32,000		\$75,000		\$0	\$10,000	\$1,000		\$118,000		
	Materials	\$0		\$0		\$0		\$0		\$0		
	Outside Services	\$30,000		\$53,500		\$10,000	\$8,500	\$16,000		\$118,000		
	Rents and Leases	\$35,000		\$3,000						\$38,000		
	Repair Parts	\$39,000		\$54,500		\$26,500		\$17,900		\$137,900		
	Salaries and Wages			\$1,235,000	\$29,000					\$1,264,000		
	Supplies	\$2,500		\$31,900				\$1,000		\$35,400		
	Travel			\$0						\$0		
Utilities	\$6,000	\$190,000	\$9,000	\$515,000			\$1,000	\$56,000	\$777,000			
Seven Mile Middle Region	Benefits and Taxes			\$545,023						\$545,023		
	Chemicals	\$0	\$0		\$65,000		\$115,000	\$0	\$213,000	\$393,000		
	Equipment	\$22,500		\$61,000		\$5,000		\$7,000		\$95,500		
	Fuels, Oils and Greases	\$34,000		\$20,100		\$36,000	\$25,000	\$12,000		\$127,100		
	Materials	\$200		\$0		\$0		\$0		\$200		
	Outside Services	\$31,500		\$70,500		\$2,000	\$20,000			\$124,000		
	Rents and Leases	\$35,000		\$2,850						\$37,850		
	Repair Parts	\$37,000		\$75,000		\$9,500		\$5,000		\$126,500		
	Salaries and Wages			\$1,259,000	\$29,000					\$1,288,000		
	Supplies	\$2,000		\$42,000		\$0				\$44,000		
	Travel			\$0						\$0		
Utilities	\$12,000	\$200,000	\$20,000	\$500,000			\$0		\$732,000			
Project Crew	Benefits and Taxes			\$394,924						\$394,924		
	Equipment			\$56,500						\$56,500		
	Fuels, Oils and Greases			\$17,000						\$17,000		
	Materials			\$0						\$0		
	Outside Services	\$5,000		\$7,000						\$12,000		
	Rents and Leases			\$31,000						\$31,000		
	Repair Parts	\$11,000		\$14,200		\$0				\$25,200		
	Salaries and Wages			\$980,000	\$0					\$980,000		
	Supplies			\$27,500						\$27,500		
	Utilities			\$70,000						\$70,000		

Laboratory	Benefits and Taxes		\$77,354				\$77,354				
	Equipment		\$13,000				\$13,000				
	Materials		\$0				\$0				
	Outside Services		\$11,200				\$11,200				
	Rents and Leases		\$5,000				\$5,000				
	Repair Parts		\$2,000				\$2,000				
	Salaries and Wages		\$147,500	\$1,000			\$148,500				
	Supplies		\$18,200				\$18,200				
Sludge Transfer	Benefits and Taxes				\$182,135		\$182,135				
	Chemicals				\$0	\$0	\$0				
	Equipment				\$7,000		\$7,000				
	Fuels, Oils and Greases				\$13,500		\$13,500				
	Materials				\$3,000	\$0	\$3,000				
	Outside Services				\$63,500	\$1,540,000	\$1,603,500				
	Rents and Leases				\$6,500		\$6,500				
	Repair Parts				\$47,500		\$47,500				
	Salaries and Wages				\$304,500	\$21,500	\$326,000				
	Supplies				\$11,850		\$11,850				
	Travel				\$5,000		\$5,000				
	Utilities				\$0	\$0	\$0				
Wastewater Administration	Advertising and Publicity		\$1,200				\$1,200				
	Benefits and Taxes		\$242,135				\$242,135				
	Dues and Subscriptions		\$4,000				\$4,000				
	Education		\$50,500				\$50,500				
	Equipment		\$83,000				\$83,000				
	Financial Management		\$21,944				\$21,944				
	Insurance		\$397,758				\$397,758				
	Other Misc.		\$500				\$500				
	Outside Services		\$167,200				\$167,200				
	Permits and Fees		\$247,000				\$247,000				
	Professional Fees		\$93,500				\$93,500				
	Rents and Leases		\$11,000				\$11,000				
	Salaries and Wages		\$587,000				\$587,000				
	Supplies		\$3,350				\$3,350				
	Tower Shared Services		\$35,000				\$35,000				
	Travel		\$3,100				\$3,100				
	Utilities		\$50,000				\$50,000				
	Joint Administrative Costs		\$6,009,100				\$6,009,100				
	Grand Total		\$536,850	\$576,000	\$17,263,282	\$1,783,000	\$776,235	\$1,995,500	\$84,000	\$1,030,000	\$24,044,867

Total Fixed	\$18,660,367
Total Variable	\$5,384,500
Total	\$24,044,867

Total Conveyance	\$1,112,850
Total Wastewater Treatment	\$19,046,282
Total Solids Handling	\$2,771,735
Total Effluent Disposal	\$1,114,000
Total	\$24,044,867

Cape May Total	\$1,773,243
Ocean City Total	\$2,982,078
Wildwood Total	\$3,673,723
Seven Mile Total	\$3,513,173
Lab Total	\$275,254
Project Crew Total	\$1,614,124
Sludge Transfer Total	\$2,205,985
Wastewater Admin Total	\$8,007,287
Total	\$24,044,867

CAPE MAY COUNTY MUNICIPAL UTILITIES AUTHORITY
USER CHARGE SYSTEM -- RATE SETTING REPORT -- FISCAL YEAR 2022

TABLE 3 -- DEBT SERVICE REQUIREMENTS

	PRINCIPAL	INTEREST	TOTAL	ALLOCATION CMCMUA PORTION PERCENT (see calculation of percentages at bottom of page)	DOLLARS	LTMUA PORTION PERCENT	DOLLARS	
2010(A) SERIES (1)	\$11,931	\$1,081	\$13,012	100.00%	\$13,012	0.00%	\$0	NOTE (1) NJ Environmental Trust Financing Dated 2/22/2010
2010(B) SERIES (2)	\$31,557	\$10,210	\$41,767	99.93%	\$41,738	0.07%	\$29	NOTE (2) NJ Environmental Trust Financing Dated 12/2/2010
2010(C) SERIES (2)	\$451,113	\$106,248	\$557,361	100.00%	\$557,361	0.00%	\$0	NOTE (3) NJ Environmental Trust Financing Dated 5/3/2012
2012(A-1) SERIES (3)	\$40,489	\$7,244	\$47,733	100.00%	\$47,733	0.00%	\$0	NOTE (4) NJ Environmental Trust Financing Dated 5/26/2016
2012(A-2) SERIES (3)	\$40,417	\$3,738	\$44,155	100.00%	\$44,155	0.00%	\$0	
2016(A) SERIES (4)	\$156,500	\$18,921	\$175,421	100.00%	\$175,421	0.00%	\$0	
SUBTOTAL	\$732,007	\$147,442	\$879,449		\$879,420		\$29	
ABANDONED FACILITIES	\$0	\$0	\$0		\$0		\$0	
TOTALS	\$732,007	\$147,442	\$879,449	100.00%	\$879,420	0.00%	\$29	

Bond Issues 2010(B) include the cost of installing two 450 HP variable speed drives on the effluent pumps at the WW/L WTF, which is part of Subsystem 'C'. This part of the project represents \$32,000 / \$7,667,900 = 0.4% of the debt service.
LTMUA share of the use of Subsystem 'C' averages 15.8%
=15.8% X 0.4% = 0.07%

CAPE MAY COUNTY MUNICIPAL UTILITIES AUTHORITY
USER CHARGE SYSTEM -- RATE SETTING REPORT -- FISCAL YEAR 2022

TABLE 4 -- CALCULATION OF SPECIFIC COSTS

	PROJECTED FLOW (thousands of gallons)	AVERAGE STRENGTH (1)		TOTAL QUANTITY (2)	
		BOD (mg/l)	SS (mg/l)	BOD (lbs)	SS (lbs)
WASTEWATER FROM USERS	5,000,500	225	210	9,383,438	8,757,876
SEPTAGE	15,600	4,200	3,800	546,437	494,395
LANDFILL LEACHATE	12,800	600	400	64,051	42,701
TOTALS	5,028,900			9,993,926	9,294,972

NOTES:

(1) From Laboratory Data

(2) MG x mg/l x 8.34 lbs/gal

(3) Percent of construction cost
attributed to each component(4) Total Debt + Project RR Contribution
- Use of Bond Reserve"

(5) From Table 2

COSTS TO BE RECOVERED

DEBT SERVICE: (4)

TOTAL		VOLUME		BOD		SS	
	(3)						
CONVEYANCE	23.65% \$3,812,366	100.00%	\$3,812,366	0.00%	\$0	0.00%	\$0
WASTEWATER TREATMENT	24.89% \$4,011,694	60.00%	\$2,407,017	20.00%	\$802,339	20.00%	\$802,339
SOLIDS HANDLING	20.50% \$3,303,438	0.00%	\$0	25.00%	\$825,860	75.00%	\$2,477,579
EFFLUENT DISPOSAL	30.96% \$4,989,635	100.00%	\$4,989,635	0.00%	\$0	0.00%	\$0
TOTAL	100.00% \$16,117,132 (4)		\$11,209,018		\$1,628,199		\$3,279,918

OPERATING COSTS: (5)

CONVEYANCE	\$1,112,850	100.00%	\$1,112,850	0.00%	\$0	0.00%	\$0
WASTEWATER TREATMENT	\$19,046,282	60.00%	\$11,427,769	20.00%	\$3,809,256	20.00%	\$3,809,256
SOLIDS HANDLING	\$2,771,735	0.00%	\$0	25.00%	\$692,934	75.00%	\$2,078,801
EFFLUENT DISPOSAL	\$1,114,000	100.00%	\$1,114,000	0.00%	\$0	0.00%	\$0
	\$24,044,867		\$13,654,619		\$4,502,190		\$5,888,058
TOTALS:	\$40,161,999		\$24,863,637		\$6,130,389		\$9,167,975

COST PER 1000 GALLONS
COST PER POUND OF BOD
COST PER POUND OF SS

\$4.94 per 1000 gallons

0.61 per lb BOD

\$0.99 per lb SS

CAPE MAY COUNTY MUNICIPAL UTILITIES AUTHORITY
 USER CHARGE SYSTEM -- RATE SETTING REPORT -- FISCAL YEAR 2022

TABLE 5 -- CALCULATION OF SPECIFIC SERVICE CHARGES

WASTEWATER TREATMENT PARAMETER	(1) CHARACTERISTICS	UNITS PER 1000 GAL	UNIT COSTS	COST PER 1000 GAL
<u>SEPTAGE:</u>				
VOLUME	1,000 GALLONS	1.00	\$4.94	\$4.94
BOD	4,200 MG/L	35.03	\$0.61	\$21.49
SS	3,800 MG/L	31.69	\$0.99	\$31.26
PROPOSED SEPTAGE DISPOSAL FEE (\$/1000 GAL)				\$57.69

NOTES: (1) From Table 4
 (2) From Table 3
 (3) Calculated per
 Service Agreement

LANDFILL LEACHATE:

VOLUME	1,000 GALLONS	1.00	\$4.94	\$4.94
BOD	600 MG/L	5.00	\$0.61	\$3.07
SS	400 MG/L	3.34	\$0.99	\$3.29
PROPOSED LEACHATE DISPOSAL FEE (\$/1000 GALLONS)				\$11.30

LOWER TOWNSHIP M.U.A. EFFLUENT DISPOSAL CHARGE:

	TOTAL
DEBT SERVICE (2):	\$29
OPERATING COSTS (3):	\$501,302
TOTAL EFFLUENT DISPOSAL CHARGE:	\$501,331

CAPE MAY COUNTY MUNICIPAL UTILITIES AUTHORITY
USER CHARGE SYSTEM -- RATE SETTING REPORT -- FISCAL YEAR 2022

TABLE 6 -- DETERMINATION OF TOTAL USER CHARGES

	TOTAL	FIXED	VARIABLE	NOTES:
EXPENSES AND COSTS:				
TOTAL OPERATING COSTS (1)	\$24,044,867	\$18,660,367	\$5,384,500	
TOTAL DEBT SERVICE(2)	\$879,449	\$879,449	\$0	
RENEWAL AND REPLACEMENT CONTRIBUTION	\$15,377,500	15,000,585	376,915	
TOTAL EXPENSES AND COSTS	\$40,301,816	\$34,540,401	\$5,761,415	
REVENUES AND INCOMES:				
INTEREST ON INVESTMENTS AND DEPOSITS:	\$100,000	\$100,000	\$0	
MANAGEMENT FEE	\$2,080,800	\$1,623,024	\$457,776	
SEPTAGE DISPOSAL FEES:	\$600,000	\$500,000	\$100,000	
LANDFILL LEACHATE DISPOSAL FEES:	\$300,000	\$260,000	\$40,000	
COMPOST PRODUCT SALES:	\$0	\$0	\$0	
PROCESSING OF "OUTSIDE" SLUDGE	\$200,000	\$50,000	\$150,000	
LOWER TOWNSHIP M.U.A. EFFLUENT DISPOSAL FEE(3):	\$501,331	\$501,331	\$0	
TOWER RENTAL INCOME	\$105,000	\$105,000	\$0	
MISCELLANEOUS REVENUES (INSURANCE REBATE, ETC)	\$20,000	\$10,000	\$10,000	
TOTAL REVENUES AND INCOMES:	\$3,907,131	\$3,149,355	\$757,776	
AMOUNT TO BE COLLECTED FROM USERS: (EXPENSES LESS REVENUES)	\$36,394,685	\$31,391,046	\$5,003,639	

CAPE MAY COUNTY MUNICIPAL UTILITIES AUTHORITY
 USER CHARGE SYSTEM -- RATE SETTING REPORT -- FISCAL YEAR 2022

TABLE 7 -- ESTIMATED FLOWS (ON ANNUAL BASIS)

DAILY FLOWS:

	SUMMER TOTAL YEARLY (Million Gallons / Day)		TOTAL SUMMER FLOW (1): (Thousands of Gallons)		TOTAL NON-SUMMER FLOW: (Thousands of Gallons)		TOTAL YEARLY FLOW (2): (Thousands of Gallons)	
			gallons	% of Total Flow	gallons	% of Total Flow	gallons	% of Total Flow
OCEAN CITY	5.199	3.612	467,910	26.74%	850,470	26.16%	1,318,380	26.36%
CITY OF CAPE MAY	1.332	1.123	119,880	6.85%	290,015	8.92%	409,895	8.20%
WEST CAPE MAY	0.224	0.205	20,160	1.15%	54,665	1.68%	74,825	1.50%
CAPE MAY POINT	0.117	0.089	10,530	0.60%	21,955	0.68%	32,485	0.65%
STONE HARBOR	0.953	0.548	85,770	4.90%	114,250	3.51%	200,020	4.00%
SEA ISLE CITY	2.158	1.274	194,220	11.10%	270,790	8.33%	465,010	9.30%
AVALON	2.081	1.384	187,290	10.70%	317,870	9.78%	505,160	10.10%
CREST HAVEN	0.097	0.096	8,730	0.50%	26,310	0.81%	35,040	0.70%
RIO GRANDE	0.428	0.484	38,520	2.20%	138,140	4.25%	176,660	3.53%
C. M. COURT HOUSE	0.506	0.507	45,540	2.60%	139,515	4.29%	185,055	3.70%
AVALON MANOR	0.045	0.034	4,050	0.23%	8,360	0.26%	12,410	0.25%
S. H. BOULEVARD	0.054	0.040	4,860	0.28%	9,740	0.30%	14,600	0.29%
COURT HOUSE SOUTH	0.237	0.214	21,330	1.22%	56,780	1.75%	78,110	1.56%
HARBOR BAY CENTER	<u>0.002</u>	<u>0.001</u>	<u>180</u>	0.01%	<u>185</u>	0.01%	<u>365</u>	0.01%
TOTAL MIDDLE TWP.	1.272	1.280	114,480	6.54%	352,720	10.85%	467,200	9.34%
NJ TURNPIKE AUTHORITY	0.004	0.003	326	0.02%	769	0.02%	1,095	0.02%
WILDWOOD	1.896	1.233	170,640	9.75%	279,405	8.60%	450,045	9.00%
WILDWOOD CREST	1.818	1.192	163,620	9.35%	271,460	8.35%	435,080	8.70%
WEST WILDWOOD	0.253	0.225	22,770	1.30%	59,355	1.83%	82,125	1.64%
NORTH WILDWOOD	1.944	1.370	174,960	10.00%	325,090	10.00%	500,050	10.00%
SHAWCREST (LTMUA)	0.097	0.066	8,730	0.50%	15,360	0.47%	24,090	0.48%
TOTALS	19.445	13.700	1,750,016	100%	3,250,484	100%	5,000,500	100.00%

NOTES:

All flows projected from past actual data.

(1) Used for Fixed Charges

(2) Used for Variable Charges

Section VIII. Future Projections Of User Charges

VIII. Future Projections of User Charges

Previously, during the public hearings on Proposed User Rates, the CMCMUA was asked to forecast user rates further into the future.

The following table shows the previously adopted 2019 through 2021 Budgeted Expenses and Revenues, the Fiscal Year 2022 Proposed Expenses and Revenues, and estimated expenses and revenues from 2023 through 2025. The following assumptions were made:

- Debt service includes all principal and interest due under the various bond issues.
- The Renewal and Replacement Contribution will be escalated in future years to provide adequate funds for the replacement of equipment and infrastructure beyond its designed useful life.
- Operational, Maintenance and Administration Costs have been escalated at rates between 3.37% and 4.10% from 2023 through 2025. Revenues from Septage and Leachate Disposal are projected to be \$900,000 between 2023 and 2025.
- Interest Revenues remain constant. Short-term interest rates have been estimated at 0.25% for the period between 2023 and 2025. Anticipated income from fixed rate long-term investments have also been included.
- It should be pointed out that the projected increases are based upon an estimated total amount to be collected from all Participants. The actual User Rate billed to each individual Participant in each year will be based upon actual recorded sewage flow rates.

CAPE MAY COUNTY MUNICIPAL UTILITIES AUTHORITY
USER CHARGE SYSTEM -- RATE SETTING REPORT -- FISCAL YEAR 2022

COMPARISON - 2019 through 2025 USER RATES

	2019 BUDGET	2020 BUDGET	2021 BUDGET	2022 PROPOSED	2023 PROJECTED	2024 PROJECTED	2025 PROJECTED
EXPENSES							
Debt Service	\$3,877,399	\$3,862,252	\$883,132	\$879,449	\$882,962	\$880,794	\$869,963
Operations & Maintenance	\$18,882,148	\$23,265,411	\$23,420,297	\$24,044,867	\$24,855,179	\$25,787,248	\$26,844,525
INCREASE/DECREASE (O&M)	\$403,023	\$4,383,263	\$154,886	\$624,570	\$810,312	\$932,069	\$1,057,277
	2.18%	23.21%	0.67%	2.67%	3.37%	3.75%	4.10%
Renwal & Replacement Contribution	<u>\$13,855,000</u>	<u>\$15,539,000</u>	<u>\$15,234,000</u>	<u>\$15,377,500</u>	<u>\$15,524,000</u>	<u>\$15,673,000</u>	<u>\$15,830,000</u>
TOTAL EXPENSES	\$36,614,547	\$42,666,663	\$39,537,429	\$40,301,816	\$41,262,141	\$42,341,042	\$43,544,488
REVENUES							
Interest Income	\$400,000	\$700,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Management Fee		\$2,000,000	\$2,040,000	\$2,080,800	\$2,122,000	\$2,164,000	\$2,208,000
Septage/Leachate Disposal	\$880,000	\$925,000	\$900,000	\$900,000	\$900,000	\$900,000	\$900,000
Lower Twp. Effluent Disposal	\$473,584	\$483,056	\$491,501	\$501,331	\$511,358	\$521,585	\$532,016
Processing of "Outside" Sludge	\$100,000	\$125,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
Tower Rental	\$105,000	\$105,000	\$105,000	\$105,000	\$105,000	\$105,000	\$105,000
Miscellaneous	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Use of Bond Reserve	\$0	\$2,979,375	\$0	\$0	\$0	\$0	\$0
TOTAL REVENUES	\$1,978,584	\$7,337,431	\$3,856,501	\$3,907,131	\$3,958,358	\$4,010,585	\$4,065,016
NET FROM USERS	\$34,635,963	\$35,329,232	\$35,680,928	\$36,394,685	\$37,303,783	\$38,330,457	\$39,479,472
INCREASE/DECREASE	\$678,480	\$693,269	\$351,696	\$713,757	\$909,098	\$1,026,674	\$1,149,014
PERCENTAGE	2.00%	2.00%	1.00%	2.00%	2.50%	2.75%	3.00%