Greater New Haven Water Pollution Control Authority

260 East Street New Haven, CT 06511 203.466.5280 p 203 772.1564 f www.gnhwpca.com

Corrected as of 4/10/20

REGULAR MEETING OF THE GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY BOARD OF DIRECTORS TUESDAY, APRIL 14, 2020 6:00 P.M. 260 EAST STREET NEW HAVEN, CONNECTICUT

***In accordance with Section 2.10 of the Authority's Bylaws and Governor Lamont's Executive Orders concerning "Stay Safe, Stay Home" and the conduct of public meetings remotely, the meeting will be conducted via teleconference of the Board of Directors.

NO IN-PERSON PUBLIC ATTENDANCE WILL BE PERMITTED.

A recording or transcript of the meeting will be accessible to the public online after the meeting at the GNHWPCA website at gnhwpca.com.***

REVISED CALL-IN INFORMATION:
Dial: (929) 205-6099
Enter meeting ID number 805 698 107 and press #
Enter passcode 402272 and press #

AGENDA

- 1. Approval of minutes of March 10, 2020 Regular Meeting.
- 2. Public participation relating to agenda items.
- 3. Submission of Authority's Cost of Service Study; Annual Budget consisting of next fiscal year's projected expenditures and recommended user rates and charges and a proposed Annual Capital Budget for the next fiscal year; an annual update to the Five-Year Capital Improvement Plan; and the impact of the Annual Budget on the next fiscal year's projected expenditures and revenues and user rates and charges.
- 4. Consideration and approval of a resolution scheduling a public hearing for Tuesday, May 12, 2020 at 5:45 p.m. via teleconference, regarding the Authority's Annual Budget and recommended user rates and charges.

- 5. Consideration and approval of certain departmental Budget Transfer Requests.
- 6. Executive summary and department updates and presentations.
- 7. Consideration and approval, as necessary, of any other new business of the Authority.
- 8. Call to the public.
- 9. Adjournment.



Greater New Haven Water Pollution Control Authority

260 East Street New Haven, CT 06511 203.466.5280 p 203.772.1564 f www.gnhwpca.com

То:	Director o	Director of Finance and Administration									
From:	Gary Zrelal	ary Zrelak, Director of Operations									
Date:	03/30/20										
Re:											
Transfe	r Amount	Transfer From	Transfer To								
\$5,	585	02.0000.017.7572	02.0000.020.7610								
		Grit Collectors - Boulevard	Inlet Works DuctWork								
\$32	,632	02.0000.018.7579									
		Roof Railings - Various Bldgs									
\$38,217 Total											
Explanation		Actual Proposal was higher than estir	mate due to additional ductwork								
that was red	quired to be r	eplaced upon Field Inspection.									
Departme Approved	nt Signatur	e: MMey(In Gan tocat								
	,	Director of Fina	ance and Administration								
Approved	by:										
5.5	AT-00	Exec	utive Director								
Board Ap	proval:	April 14	2020 e of Meeting								
		But									

Notes:

All departmental budget transfers to and from Regular Wage (5010), Temporary & Part Time Wage (5011), and Overtime Wage (5015) Accounts shall be submitted to the Executive Director for review and approval.

All fund transfers between departmental budgets and cost centers less than \$10,000 shall be submitted by the Director of Finance and Administration to the Executive Director for review and approval.

All fund transfers between departmental budgets and cost centers equal to and greater than \$10,000 shall be approved by the Board of Directors.



Greater New Haven Water Pollution Control Authority

260 East Street New Haven, CT 06511 203 466.5280 p 203 772 1564 f www.gnhwpca.com

To:	Director of Finance and Administration										
From:	Gary Zrelak	Gary Zrelak, Director of Operations									
Date:	03/30/20	3/30/20									
Re:	Operation	s - Operating Fund Transfer Req	uest								
Transfe	r Amount	Transfer From	Transfer To								
\$4,	500	01.1450.000.5694	01.1450.000.5690								
		Maint - Other Contractual Svc	Maint - Capital Non-Recurring								
\$4,	500	Total									
Explanation	on:	Actual Proposal was higher than initia	al Estimate.								
4 4 5 5			to 1								
Departme	nt Signatur	e: m/M/h//	In Gung Trelate								
Approved	by:										
• •	•	Director of Fina	ance and Administration								
Approved	by:										
		Exec	utive Director								
Board Ap	proval:	April 14 Date	2020 re of Meeting								
		Dat	e of Meeting								

Notes:

All departmental budget transfers to and from Regular Wage (5010), Temporary & Part Time Wage (5011), and Overtime Wage (5015) Accounts shall be submitted to the Executive Director for review and approval.

All fund transfers between departmental budgets and cost centers less than \$10,000 shall be submitted by the Director of Finance and Administration to the Executive Director for review and approval.

All fund transfers between departmental budgets and cost centers equal to and greater than \$10,000 shall be approved by the Board of Directors.



Director of Finance and Administrative

To: **Director of Finance and Administration** From: **Executive Director** Date: 04/06/20 Re: **Departmental Budget Transfer Request Transfer Amount Transfer From** Transfer To \$19,500 01.1100.000.5350 01.1100.000.5694 Prof Dev & Training Other Contractual **Total** \$19,500

Explanation:	Transfer needed to process Standard & Poor's
	Rating Report Invoice March 2020
Department Signature:	
Approved by:	
Approved by:	Director of Finance and Administration
Board Approval:	Executive Director
	Date of Meeting

All departmental budget transfers to and from Regular Wage (5010), Temporary & Part Time Wage (5011), and Overtime Wage (5015) Accounts shall be submitted to the Executive Director for review and approval

All fund transfers between departmental budgets and cost centers less than \$10,000 shall be submitted by the Director of Finance and Administration to the Executive Director for review and approval.

All fund transfers between departmental budgets and cost centers equal to and greater than \$10,000 shall be approved by the Board of Directors

Notes:



Greater New Haven Water Pollution Control Authority

Cost of Service Study for Fiscal Year 2021

April 9, 2020

COST OF SERVICE STUDY FOR FISCAL YEAR 2021

Prepared for:

Greater New Haven Water Pollution Control Authority

260 East Street

New Haven, Connecticut 06511

Prepared by: Arcadis U.S., Inc. O'Neil Accounting & Consulting, LLC

Our Ref.:

05654066.0000

Date:

April 9, 2020

This document is intended only for the use of the individual or entity for which it was prepared and may contain information that is privileged, confidential and exempt from disclosure under applicable law. Any dissemination, distribution or copying of this document is strictly prohibited.

arcadis.com i

CONTENTS

1	Introd	luction		1-1
	1.1	Background		1-1
	1.2	Objective an	nd Scope	1-1
	1.3	Sewer Ordin	nance	1-2
		1.3.1 Asse	ssment of Benefits; Benefit Charge	1-2
		1.3.2 Rates	s Established	1-3
		1.3.3 Rates	s for Property Located Outside the GNHWPCA's Service Territory	1-3
		1.3.4 No R	educed Rates or Free Service Permitted	1-3
		1.3.5 Billing	g and Collection	1-3
		1.3.6 Cost	of Service Study; Proposed Rates	1-3
2	GNH\	NPCA System	n & Customers	2-1
	2.1	Regional Sy	stem Profile	2-1
	2.2	GNHWPCA	Customer Base	2-1
	2.3	Organization	n & Management	2-2
		2.3.1 Gove	ernance	2-2
		2.3.2 Mana	agement and Staff	2-4
		2.3.3 Cont	racted Services	2-5
		2.3.3.1	Maintenance Services Agreement	2-5
		2.3.3.2	Solids Handling Agreement	2-5
		2.3.4 Powe	ers of the GNHWPCA	2-6
		2.3.4.1	Cost Allocation	2-6
		2.3.4.2	Procedures for Establishing Rates and Charges	2-6
		2.3.4.3	Budget Approval	2-6
		2.3.5 Billing	g & Collection	2-7
		2.3.5.1	Billing Procedures	2-7
3	Finan	cial Managen	nent	3-1
	3.1	Introduction.		3-1
	3.2	Rate Covena	ants	3-1
	3.3	Reserve Acc	counts	3-3

COST OF SERVICE STUDY FOR FISCAL YEAR 2021

4	Deter	minatio	on of Rates	4-1
	4.1	Scope	e and Methodology	4-1
	4.2	Cost I	Projections and Determination of Revenue Requirement	4-1
		4.2.1	Operations and Maintenance Costs	4-1
		4.2.2	Debt Service	4-2
		4.2.3	Estimated Future Debt Service	4-2
		4.2.4	Miscellaneous Revenues	4-3
		4.2.5	Debt Service Coverage Requirement	4-3
		4.2.6	Use of Debt Service Reserve Funds	4-3
		4.2.7	Receivable Management Costs	4-3
	4.3	Devel	opment and Design of Rates and Charges	4-3
		4.3.1	Objectives	4-3
		4.3.2	Recommended Rate	4-4
		4.3.3	Flat Rates for Well Users	4-4
		4.3.4	Disclaimers	4-4
5	Exhib	its		5-1
			Revenue Requirement and Recommended User Rates	
			Recommended User Rates – Supporting Calculations	
			Sudgeted Operations & Maintenance Expenses by Department	
	Exhi	bit 4. S	Scheduled and Estimated Debt Service	5-5
	Exhi	bit 5. C	Capital Improvement Plan	5-6
	Exhi	bit 6. C	Organization Chart	5-8
T/	ABL	ES		
Tab	ole 2-1	. Sumn	nary of GNHWPCA Wastewater System	2-1
Tab	ole 2-2	. Const	ituent Municipality Customers Served	2-2
Tab	ole 2-3	. Curre	nt Board of Directors	2-3
Tab	ole 3-1	. Debt	Service Coverage Calculation	3-2
Tab	ole 4-1	. FY21	Recommended User Rate; FY22 through FY25 Projected Rates	4-4

iii

ACRONYMS AND ABBREVIATIONS

CCF One hundred cubic feet

CGS Connecticut General Statutes

CSO Combined sewer overflow

CWF Clean Water Fund

FYxx Fiscal year ended June 30, 20xx

GNHWPCA Greater New Haven Water Pollution Control Authority

IFO Interim Funding Obligation

MGD Million gallons per day (flow volume)

MGH Million gallons per hour (flow volume)

O&M Operation and maintenance

PLO Permanent Loan Obligation

RWA South Central Connecticut Regional Water Authority

arcadis.com iV

1 INTRODUCTION

1.1 Background

The Greater New Haven Water Pollution Control Authority ("GNHWPCA") was created in 2005 to provide sewage collection and treatment service to customers in the City of New Haven and the Towns of Hamden, East Haven and Woodbridge (the "Constituent Municipalities") and wholesale treatment service to the towns of North Haven and North Branford via interlocal agreements. Prior to creation of the GNHWPCA in 2005, the utility was owned and operated by the City of New Haven's Water Pollution Control Authority.

The GNHWPCA is organized in accordance with Connecticut General Statutes ("CGS") §§22a-500 to 519 inclusive (the "Act"). The purpose of the GNHWPCA is to further the environmental protection laws of the State of Connecticut and to gain efficiencies and economies of scale with respect to the planning, design, construction, management, operation and maintenance of the regional wastewater system. Since acquiring the utility, the GNHWPCA has been providing quality and affordable wastewater services to its customers.

The GNHWPCA was created to (a) operate the wastewater treatment plant and to (b) use, equip, reequip, repair, maintain, supervise, manage, operate and perform any act pertinent to the collection, transportation, treatment and disposal of sewage with respect to the Constituent Municipalities. Currently, the daily flow at the treatment plant is approximately 29 million gallons per day ("MGD"). The treatment plant has an average daily design flow capacity of 40 MGD and currently provides primary and secondary treatment for all wastewater influent up to 60 MGD. During high flow events, all flow receives primary treatment; however, flow exceeding 60 MGD bypasses secondary treatment but receives disinfection along with the secondary effluent prior to discharge. The treatment plant provides the following unit processes: screening and grit removal, raw waste pumping, three primary clarifiers, four aeration trains, eight secondary clarifiers, gravity thickeners and chlorine disinfection prior to discharge. Thickened sludge is delivered to the on-site sewage sludge incinerator for processing.

The maintenance of the treatment plant and collection system is performed under contract by New Haven Residuals, LP ("Synagro"). Synagro is also responsible (under a separate agreement) for sludge receipt and disposal including operation and maintenance of the sludge incinerator at the East Shore Treatment Plant.

1.2 Objective and Scope

In accordance with §42 of the GNHWPCA's ordinance (the "Sewer Ordinance") the Executive Director will ensure that a cost of service study is performed at least annually. The objective of the cost of service study is to produce a schedule of recommended user rates and charges for the customers of the GNHWPCA's system which will be sufficient to meet the anticipated costs of operating the sanitary sewer system for the upcoming fiscal year.

The Cost of Service Study shall include:

- A review and evaluation of the proposed expense budget for the upcoming fiscal year, and preparation of cost estimates for the succeeding four fiscal years based on the Executive Director's cost estimates.
- A review and evaluation of the proposed revenue budget for the upcoming fiscal year, and
 preparation of revenue estimates for the succeeding four fiscal years based on the Executive
 Director's revenue estimates.
- Determination of the projected revenue requirement from user rates for the upcoming fiscal year and the succeeding four fiscal years.
- Development of a schedule of recommended rates and charges sufficient to support the
 estimated annual revenue requirements from user rates for the upcoming fiscal year and the
 succeeding four fiscal years.
- Analysis of the GNHWPCA's historical collection rate, including the current fiscal year and the Executive Director's estimate of the collection rate for the upcoming fiscal year.
- Preparation of a report documenting recommendations, assumptions and methodology.
- Such other information as required by the Executive Director from time to time.

The Executive Director shall review the results and submit the cost of service study to the GNHWPCA Board of Directors on or before the third Monday in April.

1.3 Sewer Ordinance

The GNHWPCA's ordinance governs the operation, maintenance and expansion of the regional wastewater system. In order to guarantee consolidated operation, maintenance and expansion of the regional wastewater system by the GNHWPCA, the Sewer Ordinance also acted to repeal similar ordinances of the Constituent Municipalities which previously served to govern operation, maintenance and expansion of their individual wastewater systems. Material provisions of the Sewer Ordinance that affect this study are detailed in the sections which follow.

1.3.1 Assessment of Benefits; Benefit Charge

Pursuant to provisions contained in the Act, the GNHWPCA may levy and collect benefit assessments upon the lands and buildings within its jurisdiction, which, in its judgment, are especially benefited by a sanitary sewer, according to such rules as the GNHWPCA may adopt. No assessment shall be made until after a public hearing before the GNHWPCA, at which time the owner of the property to be assessed shall have an opportunity to be heard concerning the proposed assessment.

Assessments, including any installment thereof, are due and payable at such time as fixed by the GNHWPCA, provided no assessment shall become due until the work, or particular portion thereof for which such assessment was levied, has been completed. Any assessment of benefits, including any installment thereof, which is not paid within 30 days after the due date, is considered delinquent and will be subject to interest and will constitute a lien upon the property assessed and a charge upon the owner thereof.

1.3.2 Rates Established

Charges for sanitary sewer services furnished by the GNHWPCA for residential, commercial, industrial and institutional users are to be established and revised from time to time by the GNHWPCA. Sewer use charges are to reflect a proportional distribution of costs among all users in accordance with the Act, and Chapter 103 of the Connecticut General Statutes, as amended.

1.3.3 Rates for Property Located Outside the GNHWPCA's Service Territory

The charges to be made by the GNHWPCA for sewer service to property outside the limits of the GNHWPCA's service territory are to be established on the basis of a formal contract with the GNHWPCA, and billed directly to such customers.

1.3.4 No Reduced Rates or Free Service Permitted

All persons owning, renting, leasing or having management or control of property or premises that produce waste that is discharged into the regional wastewater system, including domestic waste, and subject to the provisions of the Sewer Ordinance, shall be charged the rates established by the GNHWPCA, and no reduced rates or free sanitary sewer services are to be furnished to any such person, property or premises.

1.3.5 Billing and Collection

Billing for sewer services is made to the GNHWPCA's customers monthly or quarterly. All sewer user charges are due and payable in full on receipt. Any charges not paid in full within 30 days of the billing date are considered delinquent and bear interest from the due date at the rate provided pursuant to CGS for delinquent property taxes.

1.3.6 Cost of Service Study; Proposed Rates

The Executive Director of the GNHWPCA is to ensure that a cost of service study is performed at least annually. The Executive Director reviews the results of the study and submits the study on or before the third Monday in April to the GNHWPCA Board of Directors for consideration and public hearing. If the Executive Director's recommendations as to the proposed rates and charges are not disapproved, or approved with modifications by the GNHWPCA Board of Directors by the first day of the next fiscal year, the Executive Director's recommended rates and charges will automatically become effective until such time as they are superseded by a renewal of the above procedure. Billings for services are to be rendered as the GNHWPCA determines. In the period intervening between cost of service studies, the GNHWPCA may amend user charges so long as such charges are based upon the anticipated cost of operating the system and such charges are presented to the general public at a public hearing in accordance with CGS.

2 GNHWPCA SYSTEM & CUSTOMERS

2.1 Regional System Profile

Wastewater treated by the GNHWPCA at the wastewater treatment plant is discharged into Long Island Sound and must meet both federal and state effluent quality standards. The GNHWPCA was organized to ensure the necessary professional technical and skilled personnel, specialized facilities and equipment, and financial resources are available to allow it to carry out its mission: "To provide reliable municipal wastewater services in compliance with applicable laws, in a cost efficient and effective method, and with the intent and desire to protect the environment and public health of the constituent municipalities." Furthermore, its operations are expected to be financially self-sufficient.

The wastewater systems of the Constituent Municipalities include any device, equipment, appurtenance, plant facility and method for receiving, collecting, transporting, reducing, treating, reclaiming, disposing, separating or discharging sewage or the residue from the treatment of sewage. The wastewater systems may also include the purchase and/or lease of real estate and improvements thereto deemed necessary or desirable by the GNHWPCA for the purpose of establishing and providing wastewater management and water pollution control services.

Table 2-1 presents a brief summary of the wastewater systems of the GNHWPCA.

Table 2-1. Summary of GNHWPCA Wastewater System

Service Area	53,000 acres
Treatment Plant Capacity	40 mgd
Average Daily Flow	29 mgd
Pump Stations	30
Siphons	8
Sewer Collection System	510 miles
Combined Sanitary/Storm Sewers	50 miles
Manholes	14,300

Source: GNHWPCA management.

2.2 GNHWPCA Customer Base

The total number of sewer service connections (customers) is approximately 47,900 based upon information from the GNHWPCA's customer billing system. According to 2018 Connecticut Department of Public Health data, the total population of the Constituent Municipalities was approximately 229,000. It is estimated that approximately 201,000 residents within the Constituent Municipalities currently receive

sewer service from the GNHWPCA. Through interlocal agreements between the GNHWPCA and the towns of North Branford and North Haven, an additional population of approximately 1,500 is served by the GNHWPCA. As illustrated in Table 2-2, the City of New Haven is the largest Constituent Municipality representing approximately 60 percent of the population served.

Table 2-2. Constituent Municipality Customers Served

	Population	/ Active Customer Accounts ¹							
Municipality	Served	Residential	Commercial	Industrial	Public Auth.	Total			
Name Harris	404.000	00.004	4.000	70	407	00.040			
New Haven	124,000	20,661	1,992	70	187	22,910			
Hamden	50,000	13,627	776	34	39	14,476			
East Haven	26,000	9,907	282	7	23	10,219			
Woodbridge	1,000	293	78		3	374			
Total	201,000	44,488	3,128	111	252	47,979			

⁽¹⁾ GNHWPCA Customer Information System (CIS) data as of December 2019.

The customer base served by the GNHWPCA consists of a diverse mix of residential and commercial customers. Customers are classified according to the nature of their use of water as well as their property ownership classification, since billing is conducted based on property ownership. Single and multifamily homes and apartment buildings are classified as "residential", manufacturing enterprises in which water is used as part of the manufacturing process are classified as "industrial", business and institutional enterprises other than those classified industrial are classified as "commercial" and municipal and other government agencies are classified as "public authority". It is important to note that in some instances there is a discrepancy between the nature of the water use and the property classification. For example, the New Haven Housing Authority is a public authority responsible for numerous residential households. The GNHWPCA classifies this customer as a public authority.

2.3 Organization & Management

2.3.1 Governance

The business of the GNHWPCA is managed by or under the direction of a Board of Directors, which may exercise all such powers of the GNHWPCA and perform all such lawful acts and activities as are allowed by the Connecticut General Statutes, as amended, and by its bylaws and ordinances.

According to provisions of the Sewer Ordinance and Section 2.2 of its bylaws, the GNHWPCA is to be governed by a qualified Board of Directors, comprised as follows:

The GNHWPCA has nine (9) Directors, each of whom shall have one vote. Four (4) Directors have been appointed from New Haven by the Mayor of New Haven, with the approval of the Board of Aldermen of New Haven. Two (2) Directors have been appointed from East Haven by the Mayor of East Haven, with the approval of the Town Council of East Haven. Two (2) Directors have been appointed from Hamden by the Mayor of Hamden, with the approval of the Town Council of

Hamden. One Director has been appointed from Woodbridge by the First Selectman of Woodbridge, with the approval of the Board of Selectmen of Woodbridge.

The Directors are appointed for three year staggered terms as outlined in detail in the bylaws and ordinance. In any single year, no more than four (4) Directors' terms are scheduled to expire at one time, thereby designed to institutionalize a continuity of governance.

All business of the GNHWPCA is managed and directed by the Board of Directors, as allowed by CGS and the GNHWPCA's bylaws.

The GNHWPCA's bylaws may be revised by the affirmative vote of no less than two-thirds of the Directors in accordance with CGS §22a-501(a) (1), as amended. However, the bylaws provide that any amendment to include new constituent municipalities shall require a unanimous affirmative vote of the Board of Directors.

The current membership of the Board is as follows:

Table 2-3. Current Board of Directors

Name/Title	Appointed By	Term Expires
Russell N. Cyr, Director	Hamden	12/31/20
Raymond Pompano, Sr., Director	East Haven	12/31/20
Robert Falcigno, Director	East Haven	12/31/21
Jeffrey D. Ginzberg, Director	Woodbridge	12/31/21
Michael Fimiani, Director	New Haven	12/31/21
Clayton Williams, Vice Chairman	New Haven	12/31/22
Joyce Alton, Director	New Haven	12/31/22
Salvatore DeCola, Director	New Haven	12/31/22
Stephen A. Mongillo, Chairman	Hamden	12/31/22

According to the bylaws, a majority vote of the Directors is required to approve all business transactions of the GNHWPCA. Certain matters, such as entering into an agreement with respect to the distribution of rights and properties of the GNHWPCA upon the termination of its corporate existence, entering into or approving any sludge agreement, entering into any inter-local agreement, entering into any agreement with respect to the sale or lease of assets of the GNHWPCA which would leave the GNHWPCA without a significant continuing business activity, removal of a Director, awarding of a contract by negotiation without public bidding; amending, modifying, restating or replacing the Sewer Ordinance, and increasing the permitted processing capacity of the GNHWPCA's treatment plant, each would require a 2/3rds vote of the Directors.

The Board establishes insurance, health care, retirement, and other employee benefits as it deems necessary and convenient for the effective administration of the GNHWPCA. Key management positions are designed in each functional area under the major divisions of Executive Director, Finance and Administration, Engineering and Operations to address the operation, maintenance and management of the regional wastewater system by the GNHWPCA.

2.3.2 Management and Staff

The GNHWPCA is headed by an Executive Director, who is responsible for all technical and administrative operations of the GNHWPCA and the implementation of programs, policies and procedures at the direction of the Board. Key management staff members are as follows:

Sidney Holbrook, Executive Director. Mr. Holbrook is the Executive Director of the GNHWPCA. He has more than 30 years of wastewater, environmental and public management experience. Mr. Holbrook has served as the Executive Director of the GNHWPCA since 2009. Prior to this position, he owned and operated the Monoflo Septic Tank Co., Inc. in Westbrook, Connecticut and was the principal of SJH Associates which provided Environmental Consulting Services. Mr. Holbrook also served as Governor John Rowland's Chief of Staff from 1997 to 2002, directly overseeing sixteen State agencies including the Department of Environmental Protection, Department of Transportation, Department of Public Health and Department of Social Services. Prior to his tenure as Chief of Staff, Mr. Holbrook served as the Commissioner of the Department of Environmental Protection. On May 10, 2011, Mr. Holbrook was recognized by the National Association of Clean Water Agencies in Washington, D.C. with a Public Service Award for his dedication to Environmental Stewardship. As Executive Director, his responsibilities include managing and directing all administrative, operational and financial activities and programs of the GNHWPCA.

Gabriel Varca, CPA, Treasurer/Director of Finance and Administration. Mr. Varca is the Treasurer and Director of Finance and Administration. For over 25 years, Mr. Varca has held various operations and management positions with the New Haven Water Pollution Control Authority ("NHWPCA") and the GNHWPCA. He assists the Executive Director in the creation of the operating budget and capital improvement plan budget and is responsible for the administrative and financial operations of the GNHWPCA, including accounting, finance, billing and collections. Mr. Varca has a Class III Wastewater Operators License from the Connecticut Department of Energy & Environmental Protection and he earned a B.S. in Accounting from Southern Connecticut State University.

Gary Zrelak, Director of Operations. Mr. Zrelak is the Director of Operations. He has over 30 years of experience in wastewater operations. His responsibilities include supervising and managing the performance of the GNHWPCA's contract operator for the water pollution control facilities, sanitary sewer collection systems and pumping stations within State and Federal regulations. Prior to his employment by the Authority, Mr. Zrelak was the Process Control Superintendent for the NHWPCA for more than seven years. Mr. Zrelak earned a B.S. in Agronomy from the University of Connecticut and a M.S. Degree in Environmental Science from the University of New Haven. He also holds a Class IV Wastewater Operators License from the Connecticut Department of Energy & Environmental Protection and a Class IV Collection Systems License from the New England Water Pollution Control Association.

Thomas Sgroi, P.E., Director of Engineering. Mr. Sgroi is the Director of Engineering for the GNHWPCA. Mr. Sgroi has over 25 years of engineering and construction management experience. His

responsibilities include completion of executive management work for the Authority's planning and engineering programs, which include design, construction, utility services, GIS, mapping, records management and capital improvement projects. Mr. Sgroi earned a B.S. in Civil Engineering from the University of Hartford. He is also a Licensed Professional Engineer in the State of Connecticut.

An organization chart is included as Exhibit 6.

2.3.3 Contracted Services

2.3.3.1 Maintenance Services Agreement

The GNHWPCA executed a 15 year Maintenance Services Agreement with New Haven Residuals, LP ("Synagro") dated September 30, 2013. The comprehensive agreement with Synagro provides for the maintenance of the East Shore Treatment Plant and pump stations. This agreement establishes performance and reporting requirements for the maintenance of the system, and requires the implementation of a maintenance management program to include preventive, predictive, and corrective maintenance for all components of the system.

The agreement provides for payment of a service fee to Synagro consisting of the following components:

- A fixed component of \$1,930,000 (2014 dollars, adjusted annually);
- Reimbursement for expenditures for maintenance, major repairs, capital projects and outside services up to a defined Project Expense Limit of \$1,100,000 (2014 dollars, adjusted annually).
 Amounts expended by Synagro in excess of the limit are paid by the GNHWPCA, subject to a markup; and
- 50% of the revenues collected by the GNHWPCA from the Fats, Oils and Greases (i.e., "FOG") facility.

The GNHWPCA is responsible for all utility costs except for natural gas for the maintenance building.

2.3.3.2 Solids Handling Agreement

The GNHWPCA currently also contracts with Synagro for sludge receipt and disposal, including operation and maintenance of the sludge incinerator at the East Shore Treatment Plant under the terms of an agreement that amends and restates the original August 17, 1995 agreement. The September 2014 agreement has an initial term of 10 years and includes two five-year renewal options. The agreement provides for GNHWPCA payment of a service fee to Synagro per dry ton of sludge processed. Synagro, is responsible for reimbursing the GNHWPCA for the cost of all utilities, except water, associated with the specified services. The service fee per dry ton was fixed at the outset of the agreement, and is subject to annual adjustments for inflation.

Under the agreement, Synagro is allowed to solicit sludge from other entities (outside sludge) to maximize the efficiency of the on-site incinerator. Synagro is required to pay a royalty of \$35 per dry ton of outside sludge processed, to a Sinking Fund. The GNHWPCA matches all such payments into the Sinking Fund with such combined contributions to be used for any capital projects that exceed a cost of \$20,000. Synagro maintains responsibility for all capital projects costing less than \$20,000. As of July 1,

2016 (first amendment), Synagro is responsible for any capital projects costing less than \$50,000, and the GNHWPCA is no longer required to contribute to the Sinking Fund. As of July 1, 2019 (second amendment), the service fee was renegotiated and will continue to be subject to annual adjustment. Additionally, the voluntary termination date was changed to September 14, 2024.

Individuals providing services under the maintenance and solids handling contracts are employees of Synagro, not the GNHWPCA. Synagro, maintains 25 staff positions, 13 of which are dedicated wastewater treatment maintenance staff. Currently the staff of the GNHWPCA consists of 67 full- and part-time employees. An organization chart is included as Exhibit 6.

2.3.4 Powers of the GNHWPCA

The GNHWPCA has the power to set rates, bill customers and take appropriate action for collection of delinquent accounts. The GNHWPCA is a regional water pollution control authority formed in accordance with CGS §§22a-500 to 519, which provides powers of municipalities to the GNHWPCA. CGS §22a-501 sets forth in greater detail the powers of a regional water pollution control authority to set rates.

2.3.4.1 Cost Allocation

The goal of the GNHWPCA is to maintain a uniform blended rate for all Constituent Municipalities. This study is being conducted to develop a schedule of recommended sewer user rates sufficient to support the estimated cost of service to all users in the regional wastewater system.

2.3.4.2 Procedures for Establishing Rates and Charges

The GNHWPCA is empowered to establish and impose just and equitable fees, rates, charges, and penalties and levy assessments of property benefited by the wastewater system for any services it performs. The Board of Directors is responsible for approval of all fees, rates, charges and penalties. Rates are based on metered water flow use and billed directly to the user on a quarterly basis unless otherwise specified.

Rates are determined based on the proposed budget and the annual cost of service study, to be considered by the GNHWPCA and the general public and noticed in accordance with state statutes and applicable ordinances and by-laws.

Such charges are to reflect a proportional distribution of costs among all users in accordance with CGS §7-255, as amended from time to time, §204(b) of 33 USC, Section 1284(b) and the Act. No reduced rates or free service are to be permitted. Prior to the establishment of a fee, rate, charge, penalty or assessment, the Board of Directors must hold a public hearing at which all users of the wastewater system will have had an opportunity to be heard concerning any such proposed fee, rate, charge, penalty or assessment.

2.3.4.3 Budget Approval

In accordance with CGS §§22a-500 to 519, and the Sewer Ordinance, the GNHWPCA must ensure a cost of service study is conducted at least annually. The study is to be reviewed by the Executive Director and submitted each year with a schedule of recommended rates and charges for the next fiscal

year. In the period intervening cost of service studies, the GNHWPCA is authorized to amend user charges provided such charges are based upon the anticipated cost of operating the system and are presented at a public hearing, properly noticed.

The annual budget of the next fiscal year's projected revenue and expenditures and recommended sewer user charges are to be submitted to the Board of Directors and filed with the City/Town Clerks in the City of New Haven and Towns of East Haven, Hamden, and Woodbridge by the Executive Director on or before the third Monday in April and, within ten calendar days after such submission, are to be published once in a daily newspaper having circulation in the City of New Haven and Towns of East Haven, Hamden, and Woodbridge. After such publication, but no earlier than ten calendar days after public notice thereof, the GNHWPCA is to hold a public hearing on such projected revenue and expenditures and recommended sewer user charges and consider and act on such projected revenues and expenditures and recommended sewer user charges on or before the first Monday in June.

The Executive Director is required to submit one copy of the annual operating budget of the GNHWPCA to the State of Connecticut Office of Policy and Management by July 1st of each year or within thirty calendar days after the adoption of the budget, whichever is later (CGS §22a-502.). The budget and sewer use charge, if said charge is revised by the GNHWPCA, shall be filed with the City/Town Clerks and published in a daily newspaper having circulation in the City of New Haven and Towns of East Haven, Hamden, and Woodbridge no later than five calendar days after their filing.

2.3.5 Billing & Collection

All billing and collection is coordinated through the Customer Service Department of the GNHWPCA. The costs associated with the GNHWPCA's billing and collection activities and certain of its administrative and accounting costs are recovered through an administrative charge applied to each bill. The GNHWPCA estimates it will produce approximately 194,700 bills in FY21.

2.3.5.1 Billing Procedures

Customers of the GNHWPCA are classified according to the nature of their water consumption. All homes, dormitories and apartment buildings are classified as residential, all manufacturing enterprises in which water is used as part of the manufacturing process are classified as industrial, and all business and institutional enterprises other than those classified industrial are classified as commercial. Municipal and other public entities are classified as public authority. The wastewater customers are billed for wastewater services based on their metered water consumption, as determined by the South Central Connecticut Regional Water Authority ("RWA").

In general, customers are billed on a quarterly basis. Approximately 370 (primarily large volume) customers are billed on a monthly basis. The quarterly billings to the approximately 23,000 customers in New Haven take place in July, October, January and April. The quarterly billings to the approximately 25,000 customers in East Haven, Hamden and Woodbridge take place in August, November, February and May.

Key provisions of the GNHWPCA's billing and collections policy include:

COST OF SERVICE STUDY FOR FISCAL YEAR 2021

- Bills not paid within 30 days from the billing date are subject to interest at a rate of 1.5 percent per month from the dated billed.
- A delinquent account is sent to a collection agency after the amount owed is \$90 or greater than 90 days old.
- When an account is sent for collection, the collection fee is added to the bill of the delinquent customer for reimbursement.
- Payments not received continue for further collection procedures under tax warrant or foreclosure proceedings.

The GNHWPCA implemented a new Customer Account Portal in January 2015. The portal gives customers who enroll the ability to view account information including billing history and transaction history, and to receive their bills electronically. The new system also enhances online bill payment options. Now customers have the ability to pay their accounts online or by phone using echeck, or credit/debit cards. Another feature is the ability for customers to enroll in the "Auto Pay" option whereby payment will automatically be drawn from the specified account on file on the due date of the bill.

Customers still have the choice of paying by mail, in person (check only) or by using Checkfree payment services from Fiserv, Inc., which allows customers to pay their bills at several retail chains throughout the service area.

3 FINANCIAL MANAGEMENT

3.1 Introduction

In accordance with CGS §§55b-111 to 112, the GNHWPCA operates as a municipality for the purpose of compliance with auditing and finance requirements. The GNHWPCA can establish eligibility to apply for financing from the Clean Water Fund under the provisions of CGS §§22a-477 to 483. Clean Water Fund notes and tax-exempt revenue bond issues serve as the primary capital funding mechanism for the GNHWPCA. The notes and bonds are issued to fund capital improvements periodically, depending on the GNHWPCA's capital requirements. The issuance of the bonds is in accordance with the requirements and provisions of CGS §22a-507.

The Board of Directors has adopted revised and updated financial management policies. These policies formalize and codify many policies developed and adopted since the inception of the GHNWPCA. The policies address the following areas:

- · Governance Philosophy;
- Budgeting and Capital Planning;
- Rate-Setting Policy;
- Financing Policies (Swaps, Term, Variable/Fixed, Useful Lives);
- Maintenance of Reserves;
- Debt Service Coverage and Pay-As-You-Go Capital Funding;
- Investment of Operating Funds and Cash Management; and
- Collection Practices

3.2 Rate Covenants

At its inception, the GNHWPCA issued \$91,290,000 in revenue bonds (Series 2005A) to purchase system assets, refund existing debt and fund reserves. The rate covenant entered into in conjunction with these bonds (and those issued subsequently), and the ability to raise rates are the primary factors that provide the GNHWPCA with credit strength. As is the case with most utility financing, the GNHWPCA has entered rate covenants requiring management to set rates for service that will generate net revenues sufficient to provide a defined minimum level of cash flow in excess of debt service requirements. The Indenture of Trust for the GNHWPCA's bonds (the "Indenture") requires debt service coverage of 115% (i.e., excess cash flows equal to 15% of debt service must be incorporated into sewer rates). In addition, rates must cover operating and maintenance expenses, and contributions to reserve funds for future system improvements, expansions, or replacements. Sufficient revenues, or reserves, should also be available for unexpected emergencies such as flood damage or sewer main breaks.

Pursuant to the Indenture, the GNHWPCA covenants that it will fix, charge and collect rates, charges, rents, fees and assessments, including but not limited to use and connection charges and benefit

assessments, which will produce revenues which shall be sufficient in each fiscal year to provide for the following:

- A debt service coverage ratio of at least 115% of the debt service cash requirements;
- Any amount necessary to restore any account within a debt service reserve fund to its required deposit level; and
- Any amount necessary to restore any debt service reserve fund for parity indebtedness to its required deposit level.

For purposes of calculating debt service coverage pursuant to the Indenture, it is also necessary to incorporate reimbursements from the City of New Haven for its share of principal payments on Clean Water Fund ("CWF") notes related to sewer-separation projects. The GNHWPCA has established a receivable for the total that will be reimbursed by the City.

Table 3-1 below details the debt service coverage provided for the years ended June 30, 2015 through 2019.

Table 3-1. Debt Service Coverage Calculation

	FY15	FY16	FY17	FY18	FY19
Cash Flows from User Charges					
Total operating revenues	\$ 39,793,629	\$ 39,696,664	\$ 41,670,398	\$ 44,858,688	\$ 44,849,754
Depreciation	5,353,000	5,554,392	9,303,442	9,347,992	9,693,951
Total operating expenses	(28,531,672)	(29,683,864)	(31,687,375)	(34,547,599)	(33,869,181)
Interest income	299,126	313,479	348,771	530,192	925,365
Reimbursement - New Haven CWF interest	196,035	179,337	163,265	148,137	133,073
Reimbursement - New Haven CWF principal	866,814	848,863	758,591	750,287	761,306
Net cash flows from user charges	17,976,932	16,908,871	20,557,092	21,087,697	22,494,268
Debt Service					
Principal payments on debt	7,003,463	5,711,464	5,426,462	7,259,249	7,960,803
Interest paid on debt	4,239,337	4,260,330	3,849,131	5,096,577	5,056,012
Total debt service payments	11,242,800	9,971,794	9,275,593	12,355,826	13,016,815
Debt service coverage ratio	1.60	1.70	2.22	1.71	1.73

Source: GNHWPCA audited financial statements.

The GNHWPCA has provided a covenant that each fiscal year, it will budget for rates, charges, rents, fees and assessments, including but not limited to use and connection charges and benefit assessments, which will produce revenues which, together with amounts capitalized from proceeds of bonds or otherwise made available and reserved and not already taken into account by reduction of the obligations which are to be paid from revenues and the amount to be withdrawn from a surplus fund other than to pay capital costs for such fiscal year, will be sufficient in each fiscal year to provide for an amount equal to 100% of the aggregate debt service for such fiscal year with respect to subordinated indebtedness. Currently there is no outstanding subordinate debt.

3.3 Reserve Accounts

A fully funded debt service reserve account provides an additional level of security for bondholders. When an unexpected budget shortfall occurs, the reserve fund will allow the GNHWPCA time to implement necessary adjustments before bondholders are adversely affected. The usual debt service reserve requirement is equal to the least of 125% of average annual debt service, 10% of aggregate bond debt service, or maximum annual debt service. A fully funded debt service reserve has an impact on the GNHWPCA's rating and may be essential for an investment grade rating. However, it is also understood that the debt service reserve is really a liquidity source and provides only limited additional security to bondholders.

Reserve accounts totaling approximately \$14.5 million were funded by the GNHWPCA's initial bond issuance. They included a General Fund (operating reserves and funds identified to meet debt service coverage requirements), Clean Water Fund Debt Service Reserves (50% of maximum aggregate annual debt service on CWF notes, now two months' debt service) and the Debt Service Reserve Fund (100% of maximum aggregate annual debt service on revenue bonds). For utilities that consistently maintain high operating reserves and sustain high debt service coverage levels, the debt service reserve fund may be less relevant.

The GNHWPCA has established a Dedicated Infrastructure Renewal Fund, which is used to accumulate reserves to fund ongoing capital projects in lieu of borrowing. This program is funded primarily from the annual cash flow generated by the debt service coverage requirement.

Consistent with prevailing credit rating criteria and its plan of operations, it is assumed that the GNHWPCA will consider the following factors when developing and managing its credit structure:

- System Size and Assessment Base. Since the GNHWPCA serves a diverse customer base already, it will seek expansion only when considered to be both operationally and financially appropriate.
- **Governance.** The GNHWPCA's operations are governed in accordance with its bylaws, which provides for the GNHWPCA to establish rates, manage staff, and approve capital improvements, among other responsibilities.
- Strategic Focus. The GNHWPCA considers multi-year capital improvement programs that
 include current and anticipated capital needs that cover asset maintenance, upgrades, and
 system expansions.
- Rates, Rate Structure, and Rate Making Flexibility. The GNHWPCA will evaluate whether
 rates and revenues cover all financial commitments, inclusive of reserves for emergencies, and
 whether they are reasonable and affordable, which could affect asset maintenance and
 expansion of the user base.
- Additional Considerations. The GNHWPCA is seeking to build reserve balances over time to
 establish reliable operating reserves and fund an appropriate share of the ongoing capital
 improvements from operating funds.

The GNHWPCA is intent on establishing the best credit rating it can attain in order to minimize the impact of borrowing costs. The GNHWPCA's most recent ratings/outlook are as follows:

COST OF SERVICE STUDY FOR FISCAL YEAR 2021

- Standard & Poor's AA+/Stable (2020)
- Moody's A1/None (2018)
- Fitch A+/Stable (2018)

4 DETERMINATION OF RATES

4.1 Scope and Methodology

In providing adequate wastewater treatment services to its customers, the GNHWPCA must receive sufficient total revenue to ensure the following objectives:

- Meet legal and contractual requirements, including the terms of the Indenture;
- Maintain current service levels:
- Meet new demands for service:
- Adequately maintain the existing collection and treatment systems; and
- Plan for future needs in an orderly manner.

Regulations established by the U.S. Environmental Protection Agency and Connecticut Department of Energy & Environmental Protection require user fee systems for pollution abatement facilities to produce revenues sufficient to support the operations, maintenance and replacement of facilities. This is the key element in the determination of the rates to be charged to users, since it is intended that the operation of such facilities should be self-supporting. The State and Federal governments have mandated that the viability of such operations should not be compromised. Accordingly, sewer user rates should be set at levels sufficient to recover all costs necessary to finance adequate wastewater treatment and disposal.

4.2 Cost Projections and Determination of Revenue Requirement

The first step to developing appropriate rates is to determine the costs associated with planned future operations. Based on these cost projections and any projected miscellaneous revenues (other than those that will be generated from rates), an annual revenue requirement is established. This represents the amount that must be generated from sewer user charges.

For purposes of this study, the total cost estimates used for FY21 through FY25 were based upon the proposed operating budget for FY21, historical and anticipated trends, and a review of individual budget line-items. The average annual growth rate of costs was developed by management based upon projected needs and historical experience. We also considered those developments in the current year that may affect cost estimates on a significant scale going forward.

This cost of service study incorporates the following cost components:

4.2.1 Operations and Maintenance Costs

Operations and maintenance costs include all costs necessary to deliver wastewater collection and treatment services. It includes not only the technical operation of the plant facilities and collection system, but also the administrative resources employed to ensure efficient operations as well as fixed administrative resources employed to administer the GNHWPCA.

4.2.2 Debt Service

In recognizing costs, cash outlay is the determinant used for cost recovery. Rather than using depreciation, the debt service requirement resulting from the acquisition and construction of assets is used. According to EPA guidelines on establishing cost recovery systems, this is an acceptable method for recognizing costs. Therefore, principal and interest payments are among the costs to be recovered by user fees. Exhibit 4 details the debt service costs for FY21 through FY25.

4.2.3 Estimated Future Debt Service

The cost estimates include a provision for estimated debt service associated with future bond issues to finance planned capital improvements. Based on the GNHWPCA's capital improvement plan for FY21 through FY25 (see Exhibit 5), we have estimated future debt service using the following assumptions:

- Management's assessment of the portion of costs to be financed by Clean Water Fund grants and notes.
- Management's assessment of the project costs that will be shared with the City of New Haven (i.e., 40% of each sewer separation project).
- Revenue bonds to be issued periodically, at a rate of 5% for 30 years, and amortization with level payments.
- Projects financed with Clean Water Fund notes are financed with an Interim Funding Obligation
 (IFO) until project completion. At completion, IFO's convert to Permanent Loan Obligations
 (PLO) with payment of 5% of principal outstanding and amortization of the remaining balance
 over 20 years at 2% with level payments. Interest accrued prior to conversion to PLO is assumed
 to be included in the amount borrowed under the IFO.
- For purposes of this study, based on management's capital improvement plan, we have assumed the timing and amount of future borrowings as follows:
 - No issuance of new revenue bonds.
 - CSO Projects Shared with the City of New Haven
 - Amortization of a PLO of \$6,500,000 in November 2020 (CWF Project 711-DC: Regulator Improvements/Green Infrastructure);
 - Amortization of a PLO of \$2,100,000 in December 2022 (Project 2017-1D: East Street Pump Station Design);
 - Amortization of a PLO of \$7,750,000 in June 2023 (Project 2012-4: Yale/Trumbull Phase 2B); and
 - Amortization of a PLO of \$3,250,000 in June 2023 (Project 2019-5: Orchard Street Sewer Separation).
 - Non-CSO Projects
 - Amortization of a PLO of \$7,700,000 in March 2023 (Project 2016-6: East Haven I/I Phase 3);

- Amortization of a PLO of \$6,320,000 in June 2024 (Project 2019-4C: Nitrogen Upgrades - Construction); and
- Amortization of a PLO of \$6,100,000 in December 2024 (Project 2019-02: Woodbridge I/I – Phase 3).

4.2.4 Miscellaneous Revenues

Miscellaneous revenues (i.e., revenues from all sources other than sewer user charges) are deducted from the total cost of services to determine the net revenue requirement. Miscellaneous revenues for FY21 are based on management's proposed budget. The average annual growth rate of revenues was determined by management based upon projected needs and historical experience.

4.2.5 Debt Service Coverage Requirement

As detailed in Section 3.2 of this report, the GNHWPCA is required under the Indenture of Trust for its revenue bonds to include a provision for additional revenues in its user charges equal to 15% of annual debt service. This provision does not apply, however, to the extent that management has identified and restricted existing reserves equal to all or part of this amount that are not otherwise restricted. Notwithstanding this exception, the GNHWPCA includes the full 15% requirement in its budget each year and provides for an offsetting use of reserves as applicable. For FY21, management has proposed user charges that provide additional revenues equal to 20% of annual debt service. We have followed the same approach for purposes of this study.

4.2.6 Use of Debt Service Reserve Funds

Maintenance of debt service reserve funds may increase or reduce the GNHWPCA's revenue requirement in any given year. Management has planned funding and use of reserves FY21 through FY25, which has been incorporated into this study.

4.2.7 Receivable Management Costs

Receivable management costs are the estimated portion of billings to customers each year that are not collected during the period. The GNHWPCA implemented a new customer information system in 2010. Management has been able to utilize the CIS system to monitor billing and collections data on a monthly basis. The GNHWPCA's one-year collection rate has been stable in recent years at approximately 89%. Write-offs are minimal due to GNHWPCA's ability to place liens on real property, and the long-term collection rate on receivables remains above 95%.

4.3 Development and Design of Rates and Charges

4.3.1 Objectives

The primary objective in the recommendation of rates is to establish rates that will generate sufficient revenues to meet the total revenue requirements. Billing is based on water consumption using data provided by the RWA stated in 100 cubic foot units ("CCF's"). For purposes of recommending a user rate

for FY21, we have assumed billable consumption of 8,050,000 CCF based on management's assessment of consumption trends.

4.3.2 Recommended Rate

As detailed further in Table 4-1, which follows, and in Exhibit 1, based upon our assessment of management's budgeted revenues and expenses for FY21 and other assumptions detailed herein, we recommend a quarterly administrative fee of \$16.00 and a CCF rate of \$4.80 for FY21.

The administrative fee was increased by \$1.00 to \$14.00 in 2017. Prior to that, the administrative fee had not been increased since the GNHWPCA was formed in 2005. As the fee is designed to add stability to rate revenues, and correlate to fixed costs, it is reasonable to increase this charge periodically. Accordingly, we recommend increasing the charge as detailed in Table 4-1 below.

Fiscal Year	Estimated Consumption	Admin Fee	CCF Rate	% Change in CCF Rate	Estimated Billings
FY21	8,050,000	\$ 16.00	\$ 4.80	2.3%	\$ 41,625,000
FY22	8,050,000	17.00	4.91	2.3%	42,776,000
FY23	8,050,000	18.00	5.05	2.9%	44,038,000
FY24	8,050,000	19.00	5.22	3.4%	45,591,000
FY25	8,050,000	20.00	5.39	3.3%	47,193,000

4.3.3 Flat Rates for Well Users

The GNHWPCA currently has sewer customers who are not customers of the RWA (i.e., customers whose water supply is from wells), and therefore have no basis for sewer billing. We recommend that customers of the GNHWPCA, who are not customers of the RWA, continue to be billed on the basis used in previous years. The default consumption for a single family residence that is a well user is 24 CCF per quarter. Non-single family residences and other well users who appeal the default consumption are required to complete a survey that collects information about their dwellings and the inhabitants. The customer is billed a flat amount each quarter based on the survey results. Presently, there are well users who are billed at 15, 20, 24, 48 and 96 CCF's. The current quarterly billing amount of \$127.56 (including the administrative fee) for a 24 CCF customer would increase to \$131.20 under the recommended rate structure for FY21.

4.3.4 Disclaimers

In preparation of this report and the conclusions contained herein, Arcadis and O'Neil Accounting and Consulting, LLC. have relied on assumptions and information provided by the GNHWPCA with respect to conditions which may exist or events which may occur in the future. We have not independently verified

COST OF SERVICE STUDY FOR FISCAL YEAR 2021

the accuracy of the information provided by the GNHWPCA and others. While we believe such sources are reliable and the information obtained to be accurate and appropriate for the analysis undertaken and the conclusions reached herein, as is often the case, there may be differences between actual and projected results, some of the estimates used in this report will not be realized, and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between the data and results projected in this report and actual results achieved, and those differences may be material.

In the completion of this cost of service study for the GNHWPCA, Arcadis and O'Neil Accounting and Consulting, LLC. are (a) not recommending any action regarding municipal financial products or the issuance of municipal securities; (b) are not acting as a registered municipal advisor to the GNHWPCA and does not owe a fiduciary duty to the GNHWPCA pursuant to Section 15B of the Securities Exchange Act of 1934, as amended by the Dodd-Frank Wall Street Reform and Consumer Protection Act, with respect to the information and material contained in this report. The GNHWPCA should discuss any information and material prepared in connection with this report with any and all internal or external registered municipal advisors that it deems appropriate before acting on this information and material.

5 EXHIBITS

Exhibits 1 through 6 are found on Pages 5-2 through 5-8.

Exhibit 1.Revenue Requirement and Recommended User Rates

For the Fiscal Year Ended June 30, 2021 With Estimated Revenue Requirements and User Rates for Fiscal Years 2022 through 2025

Interest 1,240,309 -9% 1,129,067 13% 1,276,058 4% 1,328,681 e% 1,406,092 1.406,0												
A OPERATIONS A MAINTENANCE												
Personnel	No.			FY21	% ch.	FY22	% ch.	FY23	% ch.	FY24	% ch.	FY25
Dalities			¢	0 463 423	E0/. \$	9 940 000	E0/ \$	10 447 000	E0/ (10 001 000	E0/ C	11 573 000
Pint Operations & Collection System			Ψ								-	
Contracted Ministreannee												
Contracted Sludge & Ash Disposal 3.27.387 3% 3.304-000 3% 3.400,000 3% 5.05		•										
6 Other Contracted Services	-											
Payments In-lived of Taxes (PILOT)	-	• •										
Equipment, Vehicles & Supplies												
Plant Repairs & Replacement		• • • • • • • • • • • • • • • • • • • •										
10 Contingency												
		·										
B. DEBT SERVICE Revenue Bonds:												
Revenue Bondis:				,,		,,		,,	-,-	,,		- ,,,,
Principal 3,561,667 5% 3,731,667 5% 3,911,667 0% 3,192,362 5% 3,000,000 4% 4,065,000												
Interest 3,700,399 -5% 3,530,251 -5% 3,352,040 -5% 3,192,362 -5% 3,024,956	10			2 561 667	E0/	2 721 667	E0/	2 011 667	00/	3 000 000	40/	4.065.000
Clean Water Fund Notes:		·										
Principal 5,174,721 3% 5,041,259 19% 6,014,079 -4% 5,795,254 0% 5,803,000 15 Interest 1,240,309 -4% 1,129,067 3% 1,275,067 -4% 14,553,844 -2% 14,216,277 1% 14,959,463 17 17 17 17 17 17 17 1	13			3,700,399	-5%	3,550,251	-5%	3,332,040	-5%	3,192,302	-5%	3,024,930
15												
Total Debt Service	14	Principal		5,174,721	-3%	5,041,259	19%	6,014,079	-4%	5,795,254	0%	5,803,006
TOTAL COST OF SERVICES \$ 44,310,208 2% \$ 45,059,243 5% \$ 47,218,844 2% \$ 47,973,277 3% \$ 49,201,463	15	Interest		1,240,309	-9%	1,129,067	13%	1,276,058	4%	1,328,661	6%	1,406,502
C. DEBT SERVICE COVERAGE 18	16	Total Debt Service	1	13,677,096	-2%	13,432,243	8%	14,553,844	-2%	14,216,277	1%	14,299,463
18	17	TOTAL COST OF SERVICES	\$ 4	14,310,208	2% \$	45,059,243	5% \$	47,218,844	2%	\$ 47,973,277	3% \$	49,201,463
18							-		_			
Debt Service Coverage Ratio 1.20				0.705.000		0.000.000		0.011.000		0.040.000		0.000.000
D. MISCELLANEOUS REVENUES D. MISCELLANEOUS REVENUES		<u> </u>			-2%		8%		-2%		1%	
Interest & Lien Fees	19	Debt Service Coverage Ratio		1.20		1.20		1.20		1.20		1.20
Aged Accounts Receivable		D. MISCELLANEOUS REVENUES										
Investment Income	20	Interest & Lien Fees		(1,255,000)	0%	(1,255,000)	0%	(1,255,000)	0%	(1,255,000)	0%	(1,255,000)
High Strength Surcharges (850,000) 0% (850,000) 0% (850,000) 0% (850,000) 0% (850,000) 0% (850,000) 0% (525,000)	21	Aged Accounts Receivable		(4,500,000)	0%	(4,500,000)	0%	(4,500,000)	0%	(4,500,000)	0%	(4,500,000)
Crease Disposal (525,000) 0% (52	22	Investment Income		(750,000)	0%	(750,000)	0%	(750,000)	0%	(750,000)	0%	(750,000)
Color Colo	23	High Strength Surcharges		(850,000)	0%	(850,000)	0%	(850,000)	0%	(850,000)	0%	(850,000)
Interlocal Fees	24	Grease Disposal		(525,000)	0%	(525,000)	0%	(525,000)	0%	(525,000)	0%	(525,000)
Interlocal Fees	25	Outside Sludge		(250,000)	0%	(250,000)	0%	(250,000)	0%	(250,000)	0%	(250,000)
27 Reimbursements - Synagro (650,000) 0% (650,000) 0% (650,000) 0% (650,000) 0% (650,000) 0% (650,000) 0% (650,000) 0% (650,000) 0% (650,000) 0% (650,000) 0% (690,000) 0% (690,000) 0% (690,000) 0% (690,000) 0% (690,000) 0% (690,000) 0% (9,630,000) 0% (10,614) 0%	26	Interlocal Fees		(160,000)	0%		0%	(160,000)	0%			(160,000)
Columbia Columbia		Reimbursements - Synagro			0%		0%					
Total Miscellaneous Revenues (9,630,000) 0% (1,081,166) -14% (9,27,600) -18% (763,846) 34 (156,646) 5% (164,213) -10% (147,756) 32 (147,756) 32 (147,756) 32 (147,756) 32 (147,756) 32 (147,756) 32 (147,756) 33 (147,756) 32 (147,756) 34 (147,756) 3		, ,										
CSO CWF Principal	29	Total Miscellaneous Revenues					0%					(9,630,000)
CSO CWF Principal		E CITY OF NEW HAVEN DEIMDURGEMENT										
CSO CWF Interest	30			(952 757)	-6%	(900 018)	20%	(1 081 166)	-14%	(927 600)	-18%	(763 846)
32 Total City of New Haven Reimbursement (1,100,822) -7% (1,025,906) 21% (1,237,812) -12% (1,091,813) -17% (911,602) F. TO/(FROM) DEBT SERVICE RESERVE SINKING FUND 33 To/(From) Debt Service Res. Sinking Fund 500,000 750,000 (300,000) 250,000 250,000 34 NET REVENUE REQUIREMENT \$ 36,814,386 3% \$ 37,839,337 3% \$ 38,962,032 4% \$ 40,344,464 4% \$ 41,769,862 35 G. RECEIVABLE MANAGEMENT COSTS 4,810,261 4,936,941 5,075,701 5,246,563 5,422,736 36 Estimated collection rate 89% 89% 89% 89% 89% 37 REVENUE REQUIREMENT \$ 41,624,647 3% \$ 42,776,278 3% \$ 44,037,733 4% \$ 45,591,027 4% \$ 47,192,598 H. RATE CALCULATION 38 Eiderly Credit \$ (93,000) \$ (99,200) \$ (105,400) \$ (111,600) \$ (117,800) 39 Consumption 8,050,000 8,050,000 8,												
33 To/(From) Debt Service Res. Sinking Fund 500,000 750,000 (300,000) 250,000 250,000 34 NET REVENUE REQUIREMENT \$ 36,814,386 3% \$ 37,839,337 3% \$ 38,962,032 4% \$ 40,344,464 4% \$ 41,769,862 35 G. RECEIVABLE MANAGEMENT COSTS 4,810,261 4,936,941 5,075,701 5,246,563 5,422,736 36 Estimated collection rate 89% 89% 89% 89% 89% 37 REVENUE REQUIREMENT \$ 41,624,647 3% \$ 42,776,278 3% \$ 44,037,733 4% \$ 45,591,027 4% \$ 47,192,598 H. RATE CALCULATION \$ (93,000) \$ (99,200) \$ (105,400) \$ (111,600) \$ (117,800) 39 Consumption 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 40 Number of bills 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 5,00 \$ 5,00 \$ 5,00 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>(911,602)</td></td<>												(911,602)
33 To/(From) Debt Service Res. Sinking Fund 500,000 750,000 (300,000) 250,000 250,000 34 NET REVENUE REQUIREMENT \$ 36,814,386 3% \$ 37,839,337 3% \$ 38,962,032 4% \$ 40,344,464 4% \$ 41,769,862 35 G. RECEIVABLE MANAGEMENT COSTS 4,810,261 4,936,941 5,075,701 5,246,563 5,422,736 36 Estimated collection rate 89% 89% 89% 89% 89% 37 REVENUE REQUIREMENT \$ 41,624,647 3% \$ 42,776,278 3% \$ 44,037,733 4% \$ 45,591,027 4% \$ 47,192,598 H. RATE CALCULATION \$ (93,000) \$ (99,200) \$ (105,400) \$ (111,600) \$ (117,800) 39 Consumption 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 40 Number of bills 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 5,00 \$ 5,00 \$ 5,00 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>												
34 NET REVENUE REQUIREMENT \$ 36,814,386 3% \$ 37,839,337 3% \$ 38,962,032 4% \$ 40,344,464 4% \$ 41,769,862 35 G. RECEIVABLE MANAGEMENT COSTS 4,810,261 4,936,941 5,075,701 5,246,563 5,422,736 36 Estimated collection rate 89% 89% 89% 89% 89% 37 REVENUE REQUIREMENT \$ 41,624,647 3% \$ 42,776,278 3% \$ 44,037,733 4% \$ 45,591,027 4% \$ 47,192,598 H. RATE CALCULATION 38 Elderly Credit \$ (93,000) \$ (99,200) \$ (105,400) \$ (111,600) \$ (117,800) 39 Consumption 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 40 Number of bills 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 5,000 \$ 20,000 \$ 20,000 \$ 20,000 \$ 5,000 \$ 5,000 \$ 5,000			IG FU			750,000		(200,000)		250,000		250,000
35 G. RECEIVABLE MANAGEMENT COSTS 4,810,261 4,936,941 5,075,701 5,246,563 5,422,736 36 Estimated collection rate 89% 89% 89% 89% 89% 89% 37 REVENUE REQUIREMENT \$ 41,624,647 3% \$ 42,776,278 3% \$ 44,037,733 4% \$ 45,591,027 4% \$ 47,192,598 H. RATE CALCULATION 38 Elderly Credit \$ (93,000) \$ (99,200) \$ (105,400) \$ (111,600) \$ (117,800) 39 Consumption 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,000 \$ 20.00	33	10/(F10ff) Debt Service Res. Sinking Fund		500,000		750,000		(300,000)		250,000		250,000
36 Estimated collection rate 89% 89% 89% 89% 89% 89% 37 REVENUE REQUIREMENT \$ 41,624,647 3% \$ 42,776,278 3% \$ 44,037,733 4% \$ 45,591,027 4% \$ 47,192,598 H. RATE CALCULATION 38 Elderly Credit \$ (93,000) \$ (99,200) \$ (105,400) \$ (111,600) \$ (117,800) 39 Consumption 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 190,00 \$ 20.00	34	NET REVENUE REQUIREMENT	\$ 3	36,814,386	3% \$	37,839,337	3% \$	38,962,032	4%	\$ 40,344,464	4% \$	41,769,862
36 Estimated collection rate 89% 89% 89% 89% 89% 89% 37 REVENUE REQUIREMENT \$ 41,624,647 3% \$ 42,776,278 3% \$ 44,037,733 4% \$ 45,591,027 4% \$ 47,192,598 H. RATE CALCULATION 38 Elderly Credit \$ (93,000) \$ (99,200) \$ (105,400) \$ (111,600) \$ (117,800) 39 Consumption 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 190,00 \$ 20.00	25	C DECEIVADI E MANACEMENT COSTS		4 940 264		4 026 044		E 07E 701		E 246 E62		E 400 706
37 REVENUE REQUIREMENT \$ 41,624,647 3% \$ 42,776,278 3% \$ 44,037,733 4% \$ 45,591,027 4% \$ 47,192,598 H. RATE CALCULATION 38 Elderly Credit \$ (93,000) \$ (99,200) \$ (105,400) \$ (111,600) \$ (117,800) 39 Consumption 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 40 Number of bills 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,000 \$ 20.00 41 Administrative fee \$ 16.00 \$ 17.00 \$ 18.00 \$ 19.00 \$ 20.00 42 CCF Rate \$ 4.80 \$ 4.91 \$ 5.05 \$ 5.22 \$ 5.39												
H. RATE CALCULATION 38 Elderly Credit \$ (93,000) \$ (99,200) \$ (105,400) \$ (111,600) \$ (117,800) 39 Consumption 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 194,700				0070		0070		3070		0070		0070
38 Elderly Credit \$ (93,000) \$ (99,200) \$ (105,400) \$ (111,600) \$ (117,800) 39 Consumption 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,000 \$ 20,000 \$ 20,000 \$ 20,000 \$ 20,000 \$ 5,05 \$ 5,22 \$ 5,39 \$ 5,39 \$ 5,05 \$ 5,22 \$ 5,39 \$ 5,39 \$ 5,05 \$ 5,22 \$ 5,39 \$ 5,000 \$ 5	37	REVENUE REQUIREMENT	\$ 4	11,624,647	3% \$	42,776,278	3% \$	44,037,733	4%	\$ 45,591,027	4% \$	47,192,598
38 Elderly Credit \$ (93,000) \$ (99,200) \$ (105,400) \$ (111,600) \$ (117,800) 39 Consumption 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,700 194,000 \$ 20,000 \$ 20,000 \$ 20,000 \$ 20,000 \$ 5,05 \$ 5,22 \$ 5,39 \$ 5,39 \$ 5,05 \$ 5,22 \$ 5,39 \$ 5,39 \$ 5,05 \$ 5,22 \$ 5,39 \$ 5,000 \$ 5		H. RATE CALCULATION										
39 Consumption 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 8,050,000 194,700 <t< td=""><td>38</td><td></td><td>\$</td><td>(93,000)</td><td>\$</td><td>(99,200)</td><td>\$</td><td>(105,400)</td><td>9</td><td>(111,600)</td><td>\$</td><td>(117,800)</td></t<>	38		\$	(93,000)	\$	(99,200)	\$	(105,400)	9	(111,600)	\$	(117,800)
40 Number of bills 194,700	39	· ·		,				8,050,000		8,050,000		8,050,000
41 Administrative fee \$ 16.00 \$ 17.00 \$ 18.00 \$ 19.00 \$ 20.00 42 CCF Rate \$ 4.80 \$ 4.91 \$ 5.05 \$ 5.22 \$ 5.39												194,700
42 CCF Rate \$ 4.80 \$ 4.91 \$ 5.05 \$ 5.22 \$ 5.39		Administrative fee	\$		\$		\$		9		\$	20.00
												5.39
												3.3%

Note - See Exhibit 2 for supporting calculations for Receivable Management Costs, Revenue Requirement and Debt Service Coverage amounts.

Exhibit 2.

Recommended User Rates - Supporting Calculations

For the Fiscal Year Ended June 30, 2021

1. RECEIVABLE MANAGEMENT CALCULATION

Net revenue requirement	\$ 36,814,386
Interest & lien fees	1,255,000
High strength surcharges	850,000
Customer revenue, net	\$ 38,919,386
Collection rate	89%
Customer revenue, gross	43,729,647
Receivable management cost	\$ 4,810,261

2. REVENUE REQUIREMENT

Total Cost of Services	\$ 44,310,208
Debt Service Coverage Requirement	2,735,000
Miscellaneous Revenues	(9,630,000)
New Haven Reimbursement	(1,100,822)
To/(From) DSR Sinking Fund	500,000
Receivable Management Cost	4,810,261
Revenue Requirement (from CCF Rate)	\$ 41,624,647

3. DEBT SERVICE COVERAGE CALCULATION

User fees	\$ 41,624,647
Miscellaneous Revenues	9,630,000
New Haven Reimbursement	1,100,822
(To)/From DSR Sinking Fund	(500,000)
Receivable management costs	(4,810,261)
Operations & Maintenance Costs	(30,633,112)
Net cash flow before debt service	\$ 16,412,096
Debt service	\$ 13,677,096
Coverage ratio	1.20

Exhibit 3.

Budgeted Operations & Maintenance Expenses by Department

For the Fiscal Year Ended June 30, 2021 With Estimated Expenses for Fiscal Years 2022 through 2025

Line			1	2		3	4		5	6		7	8		9
No.	Description	F	FY21	% ch.		FY22	% ch.		FY23	% ch.		FY24	% ch.		FY25
	EXECUTIVE DIRECTOR														
1	Personnel	\$	457,553	3%	\$	469,000	2%	\$	479,000	2%	\$	489,000	2%	\$	500,000
2	Other Contracted Services		782,900	3%		806,000	3%		831,000	3%		856,000	3%		883,000
3	Equipment, Vehicles & Supplies		83,300	3%		86,000	2%		88,000	3%		91,000	3%		94,000
4	Contingency		500,000	0%		500,000	0%	_	500,000	0%		500,000	0%		500,000
5	Total EXECUTIVE DIRECTOR		1,823,753	2%		1,861,000	2%		1,898,000	2%		1,936,000	2%		1,977,000
	FINANCE & ADMINISTRATION														
6	Personnel		964,786	3%		996,000	3%		1,028,000	3%		1,061,000	3%		1,095,000
7	Utilities		3,300	-9%		3,000	0%		3,000	0%		3,000	0%		3,000
8	Other Contracted Services		121,500	3%		125,000	3%		129,000	3%		133,000	3%		137,000
9	Equipment, Vehicles & Supplies		4,500	11%		5,000	0%		5,000	0%		5,000	0%		5,000
10	Total FINANCE & ADMINISTRATION		1,094,086	3%		1,129,000	3%		1,165,000	3%		1,202,000	3%		1,240,000
	CUSTOMER SERVICE														
11	Personnel		856,908	3%		885,000	3%		913,000	3%		943,000	3%		974,000
12	Other Contracted Services		637,835	3%		657,000	3%		677,000	3%		697,000	3%		717,000
13	Equipment, Vehicles & Supplies		10,000	0%		10,000	0%		10,000	0%		10,000	0%		10,000
14	Total CUSTOMER SERVICE		1,504,743	3%		1,552,000	3%		1,600,000	3%		1,650,000	3%		1,701,000
	EMPLOYEE BENEFITS														
15	Personnel		2,572,486	10%		2,829,000	10%		3,113,000	10%		3,424,000	10%		3,766,000
16	Other Contracted Services		62,000	3%		64,000	3%		66,000	3%		68,000	3%		70,000
17	Total EMPLOYEE BENEFITS		2,634,486	10%		2,893,000	10%		3,179,000	10%		3,492,000	10%		3,836,000
	ENGINEERING														
18	Personnel		1,051,402	3%		1,086,000	3%		1,121,000	3%		1,157,000	3%		1,194,000
19	Utilities		6,000	0%		6,000	0%		6,000	0%		6,000	0%		6,000
20	Other Contracted Services		1,044,500	1%		1,053,000	1%		1,062,000	1%		1,071,000	1%		1,080,000
21	Equipment, Vehicles & Supplies		4,000	0%		4,000	0%		4,000	0%		4,000	0%		4,000
22	Total ENGINEERING		2,105,902	2%		2,149,000	2%		2,193,000	2%		2,238,000	2%		2,284,000
	OPERATIONS														
23	Personnel		3,560,288	3%		3,675,000	3%		3,793,000	3%		3,917,000	3%		4,044,000
24	Utilities		4,605,400	2%		4,697,000	2%		4,791,000	2%		4,887,000	2%		4,985,000
25	Plant Operations & Collection System		1,125,000	2%		1,148,000	2%		1,171,000	2%		1,196,000	2%		1,221,000
26	Contracted Maintenance		2,156,012	3%		2,221,000	3%		2,288,000	3%		2,357,000	3%		2,428,000
27	Contracted Sludge & Ash Disposal		3,207,387	3%		3,304,000	3%		3,403,000	3%		3,505,000	3%		3,610,000
28	Other Contracted Services		2,431,285	3%		2,503,000	3%		2,576,000	3%		2,651,000	3%		2,731,000
29	Equipment, Vehicles & Supplies		934,200	3%		963,000	3%		993,000	3%		1,025,000	3%		1,057,000
30	Plant Repairs & Replacement		1,904,400	3%		1,962,000	3%	_	2,021,000	3%		2,082,000	3%		2,144,000
31	Total OPERATIONS	1:	9,923,972	3%		20,473,000	3%		21,036,000	3%		21,620,000	3%		22,220,000
	GENERAL SERVICES														
32	Utilities		67,200	3%		69,000	1%		70,000	1%		71,000	1%		72,000
33	Other Contracted Services		718,470	3%		740,000	3%		763,000	3%		787,000	3%		811,000
34	Payments In-lieu of Taxes (PILOT)		750,000	0%		750,000	0%		750,000	0%		750,000	0%		750,000
35 36	Equipment, Vehicles & Supplies Total GENERAL SERVICES		10,500 1,546,170	5% 2%		11,000 1,570,000	0% 2%		11,000 1,594,000	0% 2%		11,000 1,619,000	0% 2%		11,000 1,644,000
30	TOTAL GENERAL GENVIOLG		1,540,170	2 /0		1,570,000	270		1,034,000	270		1,013,000	270		1,044,000
	ALL DEPARTMENTS		0 400 400			0.040.000			40 447 000			40 004 000			44 570 000
37	Personnel		9,463,423	5%		9,940,000	5%		10,447,000 4,870,000	5%		10,991,000	5%		11,573,000
38	Utilities		4,681,900	2%		4,775,000	2%			2%		4,967,000	2%		5,066,000
39 40	Plant Operations & Collection System Contracted Maintenance		1,125,000 2,156,012	2%		1,148,000 2,221,000	2%		1,171,000 2,288,000	2% 3%		1,196,000 2,357,000	2% 3%		1,221,000
40 41	Contracted Maintenance Contracted Sludge & Ash Disposal		3,207,387	3% 3%		3,304,000	3% 3%		3,403,000	3% 3%		3,505,000	3% 3%		2,428,000 3,610,000
41	Other Contracted Services		5,798,490	3% 3%		5,948,000	3% 3%		6,104,000	3% 3%		6,263,000	3% 3%		6,429,000
43	Payments In-lieu of Taxes (PILOT)		750,000	0%		750,000	0%		750,000	0%		750,000	0%		750,000
44	Equipment, Vehicles & Supplies		1,046,500	3%		1,079,000	3%		1,111,000	3%		1,146,000	3%		1,181,000
45	Plant Repairs & Replacement		1,904,400	3%		1,962,000	3%		2,021,000	3%		2,082,000	3%		2,144,000
46	Contingency		500,000	0%		500,000	0%		500,000	0%		500,000	0%		500,000
47	Total ALL DEPARTMENTS	\$ 3	0,633,112	3%	\$	31,627,000	3%	\$	32,665,000	3%	\$	33,757,000	3%	\$	34,902,000
					_			_			_			_	•

Exhibit 4.

Scheduled and Estimated Debt Service

For the Fiscal Years Ended June 30, 2021 through 2025

Line No.	Description	1 FY21	2 % ch.	3 FY22	4 % ch.	5 FY23	6 % ch.	7 FY24	8 % ch.	9 FY25
140.	Revenue Bonds		/0 UII.	1 122	/0 CII.	1 123	/0 CII.	1 1 24	/0 CII.	1 123
	2005 Series A									
1	Principal	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -
2	Interest	16,250	0%	16,250	0%	16,250	0%	16,250	0%	16,250
3	2008 Series B/CREBs Principal	166,667	0%	166,667	0%	166,667	-100%	-	0%	-
4	Interest	3,542	-40%	2,125	-67%	708	-100%	-	0%	-
5	2012 Series B Principal	225.000	2%	230,000	2%	235,000	2%	240,000	4%	250,000
6	Interest	308,794	-2%	302,688	-2%	297,019	-2%	290,481	-3%	283,131
7	2014 Series B Principal	2,660,000	5%	2,795,000	5%	2,940,000	4%	3,065,000	4%	3,190,000
8	Interest	2,832,663	-5%	2,696,288	-5%	2,552,913	4% -5%	2,429,606	4% -5%	2,300,050
	2016 Series A									
9 10	Principal Interest	510,000 539,150	6% -5%	540,000 512,900	6% -5%	570,000 485,150	4% -6%	595,000 456,025	5% -7%	625,000 425,525
	Estimated Future Series			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
11	Principal	-	0%	-	0%	-	0%	-	0% 0%	-
12	Interest Total Revenue Bonds		0%	-	0%	-	0%	-	0%	-
13	Principal	3,561,667	5%	3,731,667	5%	3,911,667	0%	3,900,000	4%	4,065,000
14	Interest	3,700,399	-5%	3,530,251	-5%	3,352,040	-5%	3,192,362	-5%	3,024,956
15	Total Debt Service - Revenue Bonds	\$ 7,262,066	0%	\$ 7,261,917	0%	\$ 7,263,707	-2%	\$ 7,092,362	0%	\$ 7,089,956
	Clean Water Fund Notes									
	CSO Projects									
16 17	Principal Interest	1,979,490 255,129	2% -16%	2,019,445 215,175	-5% -19%	1,924,510 175,203	-13% -21%	1,668,998 137,998	-25% -20%	1,246,492 109,975
	Non-CSO Projects									
18 19	Principal Interest	2,792,827 870,149	0% -6%	2,791,215 814,347	0% -7%	2,802,365 758,421	0% -7%	2,813,740 702,270	0% -8%	2,825,344 645,889
19	Estimated Future Notes - CSO Projects	,	-0 /0	014,547	-1 /0	730,421	-1 /0	102,210	-0 /0	043,009
20	Principal	402,403	-43%	230,599	238%	778,404	-16%	650,002	2%	663,122
21	Interest	115,031	-13%	99,546	117%	216,414	26%	272,535	-5%	259,415
22	Estimated Future Notes - Non-CSO Pro Principal	jects -	0%	-	0%	508,801	30%	662,514	61%	1,068,048
23	Interest		0%	-	0%	126,021	71%	215,859	81%	391,222
24	Total Clean Water Fund Notes Principal	5,174,721	-3%	5,041,259	19%	6,014,079	-4%	5,795,254	0%	5,803,006
25	Interest	1,240,309	-9%	1,129,067	13%	1,276,058	4%	1,328,661	6%	1,406,502
26	Total Debt Service - CWF Notes	\$ 6,415,030	-4%	\$ 6,170,326	18%	\$ 7,290,137	-2%	\$ 7,123,915	1%	\$ 7,209,507
	City of New Haven Share of CSO	Proiects]							
	CSO Projects		ı							
27	Principal	(791,796)	2%	(807,778)	-5%	(769,804)	-13%	(667,599)	-25%	(498,597)
28	Interest Estimated Future Notes - CSO Projects	(102,052)	-16%	(86,070)	-19%	(70,081)	-21%	(55,199)	-20%	(43,990)
29	Principal	(160,961)	-43%	(92,240)	238%	(311,362)	-16%	(260,001)	2%	(265,249)
30	Interest	(46,012)	-13%	(39,818)	117%	(86,565)	26%	(109,014)	-5%	(103,766)
31	Total City Share of CSO Projects Principal	(952,757)	-6%	(900,018)	20%	(1,081,166)	-14%	(927,600)	-18%	(763,846)
32	Interest	(148,064)	-6% -15%	(125,888)	24%	(1,081,100)	-14% 5%	(164,213)	-10%	(147,756)
33	Total Debt Service - New Haven Share	\$ (1,100,822)	-7%	\$ (1,025,906)	21%	\$ (1,237,812)	-12%	\$ (1,091,813)	-17%	\$ (911,602)
	Total Net Debt Service	7								
34	Principal	7,783,630	1%	7,872,908	12%	8,844,580	-1%	8,767,654	4%	9,104,160
35	Interest	4,792,644	-5%	4,533,429	-1%	4,471,452	-3%	4,356,810	-2%	4,283,702
36	Total Net Debt Service	\$ 12,576,274	-1%	\$ 12,406,337	7%	\$ 13,316,032	-1%	\$ 13,124,464	2%	\$ 13,387,862

COST OF SERVICE STUDY FOR FISCAL YEAR 2021

Exhibit 5.

Capital Improvement Plan
For the Fiscal Years Ended June 30, 2021 through 2025

Line			1	2	က	4	5		9
No.	Description	"	FY21	FY22	FY23	FY24	FY25		Total
COME	COMBINED SEWER OVERFLOW LONG TERM CONTROL PLAN								
-	Yale Trumbull Phase 2B	\$	15,500,000 \$	٠	Ω	٠		s	15,500,000
2	Orchard Street Sewer Separation		6,500,000	1	•		,		6,500,000
ო	Long Term Control Plan Update		860,000						860,000
4	Total CSO Long Term Control Plan	2.	22,860,000 \$	\$ -	\$ -	•	•	₩.	22,860,000
EAST	SHORE WATER POLLUTION CONTROL FACILITY								
ì									
2	Nitrogen Upgrades	` \$	1,150,000 \$	\$ -	\$	\$ -	-	\$	1,150,000
9	Concrete Work - Chlorine Contact and Wall Repairs		500,000						500,000
7	East Shore Admin. Building HVAC		250,000						250,000
80	East Shore Primary Sludge Pumps		240,000						240,000
6	Roof Replacements - East Shore		150,000	150,000			•		300,000
10	Secondary Clarifier Drain Valves		160,000	160,000	160,000	1	•		480,000
7	Plant Inlet Works Main Gates		200,000	100,000	100,000		•		400,000
12	SCADA Improvements		ı	200,000					200,000
13	Laboratory Rehabilitation		ı	700,000			ı		700,000
4	Morris Cove Oil Tank		ı	125,000			ı		125,000
15	Primary Clarifier Drive and Screw Replacements		•	160,000			1		160,000
16	East Shore Odor Scrubber Maintenance		•	300,000			300,000		000,009
17	FOG Fuel System		ı	ı	200,000				500,000
18	Wetwell Covers				300,000				300,000
19	Primary Tank Major Maintenance		ı	ı		150,000	ı		150,000
20	East Shore TPS Pumps		ı	ı			300,000		300,000
21	FIS Upgrade		•				300,000		300,000
22	Total East Shore WPC Facility	\$	2,650,000 \$	1,895,000 \$	1,060,000 \$	150,000 \$	<i>000'006</i> \$	\$	6,655,000
COLL	COLLECTION SYSTEM, PUMP STATIONS & FORCE MAINS								
23	Design and Construction East Street Pump Station	\$	11,450,000 \$	\$	٠	٠		₩	11,450,000
24	Mill River Phase 2 SSES Hamden - Part 2		000,000						000,009
52	Riverside Interceptor	,	500,000	500,000	- 000	- 000	- 000		1,000,000
27	Emergency On-Call Services		300,000	300,000	300,000	300,000	300,000		1,500,000

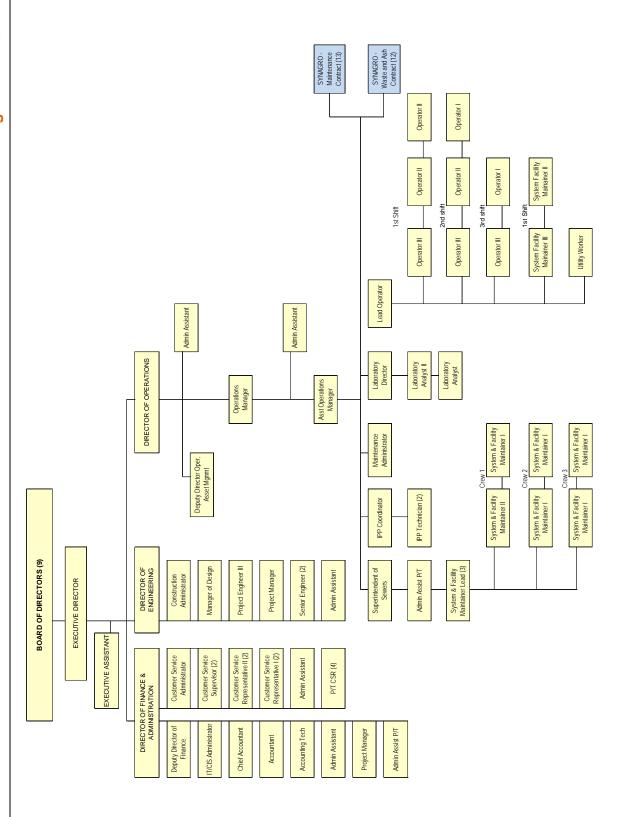
L	ດ
	٤
	COM
	Is.com
	arcadis.com

COST OF SERVICE STUDY FOR FISCAL YEAR 2021

Exhibit 5., continued Capital Improvement Plan For the Fiscal Years Ended June 30, 2021 through 20254

Line			-	2	က	4		2	9
Š.	Description		FY21	FY22	FY23	FY24		FY25	Total
COLL	COLLECTION SYSTEM, PUMP STATIONS & FORCE MAINS								
28	Pump Station Imp Design & Const.	s	\$ 000'09	500,000	\$ 50,000	\$ 500,000	\$ 00	\$ 000'09	1,150,000
29	Bypass Hose/Piping			100,000		•			100,000
30	150 kW Portable Generators			190,000		•			190,000
31	Main Sewerage Pumps - East Shore		•	140,000	•	•		140,000	280,000
32	Design and Construction Union Street Pump Station		•	2,000,000	18,100,000	•			20,100,000
33	Mill River Phase 3 I/I Rehab			200,000	4,000,000	•			4,500,000
34	New Combo Truck				380,000	•			380,000
35	Design and Construction Boulevard Pump Station				3,840,000	35,410,000	00		39,250,000
36					1,500,000	2,000,000	00		3,500,000
37	Foxon Park Interceptor					1,000,000	00	1,500,000	2,500,000
38	Manhole Rehabilitation Program					•		200,000	700,000
39	Morris Cove Bar Screens		•			1		700,000	700,000
40	Total Coll. System, Pump Stations & Force Mains	\$ 3	14,100,000 \$	5,230,000	\$ 29,170,000	\$ 40,210,000	\$ 00	4,390,000 \$	93, 100, 000
-	TOTAL CAPTAL IMPROVEMENT BLAN	e	30 610 000 &	7 125 000	\$ 30,230,000	000 036 010	÷	\$ 200,000 \$	122 615 000
Ŧ		€							
Sou	SOURCES OF FINANCING								
42	Clean Water Fund - Grants	S	17,188,000 \$	800,000	\$ 8,776,000	\$ 14,164,000	\$ 00	٠	40,928,000
43	Clean Water Fund - Notes		18,215,000	1,700,000	17,164,000	21,246,000	00	•	58,325,000
4	Total Clean Water Fund		35,403,000	2,500,000	25,940,000	35,410,000	00	•	99,253,000
45	FEMA Grants		ı	ı	ı	•			1
46	Dedicated Infrastructure Renewal Fund		4,207,000	4,625,000	4,290,000	4,950,000	\$ 00	5,290,000	23,362,000
47	Total Sources of Financing	\$	39,610,000 \$	7, 125, 000	\$ 30,230,000	\$ 40,360,000	\$ 00	5,290,000 \$	122,615,000

2-2 arcadis.com Exhibit 6. Organization Chart





Arcadis U.S., Inc.

44 South Broadway

15th Floor

Box 751

White Plains, New York 10602-0751

Tel 914 694 2100

Fax 914 694 9286

www.arcadis.com

2021 Proposed Operating Budget & Capital Improvement Program

Fiscal Year July 1, 2020 – June 30, 2021





TABLE OF CONTENTS

2020-2021 Proposed Budget	Page #
BUDGET APPROVAL PROCESS	1-2
PROPOSED SEWER USER CHARGE	3
PRINCIPAL OFFICERS	4
ORGANIZATIONAL CHART	5
BUDGET SUMMARY	6
REVENUE PIE CHART	7
EXPENDITURE PIE CHART	8
DEBT SERVICES SUMMARY	9
PERSONNEL & BENEFITS	10
SEWER USE RATE HISTORY	11
EXECUTIVE DIRECTOR	12
FINANCE AND ADMINISTRATION	13
CUSTOMER SERVICE	14
EMPLOYEE BENEFITS	15
ENGINEERING	16
OPERATIONS-ADMIN	. 17
OPERATIONS-PLANT	18
OPERATIONS-COLLECTIONS	19
OPERATIONS-LAB	20
OPERATIONS-IPP	21
OPERATIONS-MAINTENANCE	22
GENERAL SERVICES	23
DEBT SERVICE	24
ESTIMATED REVENUE REPORT	25
CAPITAL BUDGET SUMMARY	26

ANNUAL BUDGET PROCESS

The 2019 budget process begins with GNHWPCAS' priorities for the short-term. Some of the priorities for 2019 are:

- Provide dependable, high quality sewer service.
- Operate and maintain the system in a prudent and cost-efficient manner.
- Comply with all regulatory requirements.
- Provide sufficient funding to meet indenture requirements
- Ensure that our rates are fair and reasonable.

OPERATIONS AND MAINTENANCE BUDGET:

Cost of Service Study:

The Executive Director will ensure that a Cost of Service Study is performed at least annually. The objective of the Cost of Service Study is to produce a schedule of recommended user rates and charges for the customers of the GNHWPCA's system which will be sufficient to meet the anticipated costs of operating the Sanitary sewer system for the upcoming fiscal year.

The Cost of Service Study shall include:

- A review and evaluation of the proposed expense budget for the upcoming fiscal year, and prepare cost estimates for the succeeding four fiscal years based on the Executive Director's cost estimates.
- A review and evaluation of the proposed revenue budget for the upcoming fiscal year, and prepare cost estimates for the succeeding four fiscal years based on the Executive Director's revenue estimates.
- Determine the projected revenue requirement from user rates for the upcoming fiscal year and the succeeding four fiscal years.
- Develop a schedule of recommended rates and charges sufficient to support the estimated annual revenue requirements from user rates for the upcoming fiscal year and the succeeding four fiscal years.
- Analyze the GNHWPCA's historical collection rate, including the current fiscal year and the Executive Director's estimate of the collection rate for the upcoming year.
- Prepare a report documenting recommendations, assumptions and methodology.
- Such other information as required by the Executive Director from time to time.
- The Cost of Service Study shall be reviewed by the Executive Director and submitted to the GNHWPCA Board of Directors on or before the third Monday in April.

Annual Budget:

The Executive Director shall submit an Annual Budget consisting of the next fiscal year's projected expenditures and recommended user rates and charges and a proposed Annual Capital Budget for the upcoming fiscal year; an annual update to the Five Year Capital Improvement Plan; and the impact of the Annual Budget of the next fiscal year's projected expenditures and revenues and user rates and charges to the GNHWPCA Board of Directors and filed with the city/town clerk of each of the Constituent Municipalities by the Executive Director on or before the third Monday in April and within Ten (10) business days after such submission the Annual Budget which consists of the next fiscal year's projected expenditures and recommended user rates and charges and a proposed Annual Capital Budget for the upcoming fiscal year; an annual update to the Five Year Capital Improvement Plan; and the impact of the Annual Budget of the next fiscal year's projected expenditures and revenues and user rates and charges shall be published once in a newspaper having general circulation in each of the Constituent Municipalities. After such publication, but no earlier than Ten (10) business days after public notice therof, the GNHWPCA Board of Directors shall hold a public hearing on such Annual Budget of the next fiscal year's projected expenditures and revenues and recommended user rates and charges and consider and act on such Annual Budget of the next fiscal year's projected expenditures and revenues and recommended user rates and charges and recommended user rates and charges on or before the first Monday in June.

Within five (5) business days of adoption by the GNHWPCA Board of Directors, the Annual Budget of next fiscal year's projected expenditures and revenues and the approved user rates and charges shall be filed with the city/town clerk in each of the Constituent Municipalities and no later than five (5) business days after the filing shall be published once in a newspaper having general circulation in each of the Constituent Municipalities.

Each year the Annual Budget shall include a line item for unanticipated operating contingencies. The executive Director shall make specific requests to the GNHWPCA Board of Directors to expend funds from the contingency account from time to time subject to certification by the Treasurer as to the availability of funds.

The Executive Director shall submit one (1) copy of the adopted Annual Budget of the GNHWPCA to the State of Connecticut Office of Policy and Management by July first of each year or within thirty (30) calendar days after adoption of the budget, whichever is later pursuant to the act.

THE GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY PROPOSED SEWER USER CHARGE Effective July 1, 2020

There is hereby established in accordance with Section 7-255 of the Connecticut General Statutes a quarterly and monthly charge for sanitary sewer service furnished by the Greater New Haven Water Pollution Control Authority (GNHWPCA), based on potable water usage. The following sanitary sewer service charges shall apply only to water measured by the Company or any water meter serving a building within the 4 Constituent Municipalities.

-For Quarterly Billing:

Fifteen (15) CCF or less of water usage, \$72.00 minimum plus administration fee of \$16.00. For all water usage over fifteen (15) CCF, \$4.80 per CCF. A Credit of \$15.00 per quarter shall be granted to any premises, which has qualified for tax relief under the 'Elderly Homeowner Tax Relief Act'. For customers with public supplied water (metered) the annual consumption from the period (January 2019 to December 2019) will be used for the billing period of July 1, 2020 through June 30, 2021. Quarterly Residential customers who use Three Hundred (300) CCF or less in the above mentioned 12-month period will have their consumption adjusted for seasonal usage, this adjusted usage shall be used for billing commencing on July 1.

-For Monthly Billing:

Five (5) CCF or less of water usage, \$24.00 minimum plus administrative fee of \$16.00. For all water over five (5) CCF, \$4.80 per CCF.

Residential and commercial users of the Sewer System who have private source of water, whose public supply is not metered, or who receive water from a source other than the public water system shall be billed as follows for premises served within the 4 Constituent Municipalities:

- -Single Family residential, \$131.20 per quarter.
- -Duplex residence, \$246.40 per quarter.

Multiple dwelling units, \$131.20 per quarter for the first dwelling unit, plus \$115.20 per quarter for each additional dwelling unit, or at option of owner from metered water supply.

Commercial users shall be charged on the basis of an engineering study performed at the cost of said users to determine the quantity of sewage as established in GNHWPCA Sewer Ordinances, if said commercial users have a private source of water, whose public water supply is not metered or who receive water from a source other than the public water system.

The charges to be made by the GNHWPCA for sewer services to property located outside the limits of the 4 Constituent Municipalities shall be established on the basis of formal contract with the GNHWPCA, the charges shown in said contract to be not less than actual costs to the GNHWPCA and said contracts to be approved by the GNHWPCA in accordance with section 7-247 of the Connecticut Statutes.

The user charges to be determined for all permitted industrial users, except for dry industries, will be computed by the use of the following formula when either the total BOD or TSS exceeds two hundred fifty (250) mg/liter, but in no event will either be used as less than two hundred fifty (250) mg/l, or the total FOG (fats, oils and grease) exceeds one hundred (100) mg/l. In no case shall the BOD or TSS be lower than 250 mg/l if one component exceeds 250 mg/l.

UC equals V[X+Y(BOD) + Z(TSS)] + A (FOG-100)]

Definitions:

- UC User charge in dollars
- V Volume in CCF (1 CCF equals one hundred cubic feet or 748 gallons)
- X Cost per CCF of wastewater at \$4.092364
- Y Cost to remove one mg/l of BOD per CCF at \$0.0020516
- Z Cost to remove one mg/l of TSS per CCF at \$0.0016728
- A Cost to remove one mg/l of FOG per CCF at \$0.0010000

Septic disposal registration charge of \$50 per year per vehicle will be charged to companies wishing to dispose of waste at the East Shore facility. Such users will be charged \$0.065 per gallon for septage and \$0.100 per gallon for FOG and \$0.125 for approved over the road wastes based on total truck volume regardless of gallons being discharged.

A charge of \$25.00 will be applied to a customer's account for each payment returned by the bank for any reason.

Lien Fee effective July 01, 2020 is \$14.00 per lien.

All sewer user charges shall be due and payable in full upon receipt of the bill. Any sewer use charge not paid in full within thirty (30) calendar days of the date of the bill shall be delinquent and shall bear interest from the date of the bill, at the rate and in the manner provided by the General Statutes of the State of Connecticut for delinquent property taxes.

A copy of the sewer user charges was filed with the Town Clerks of the City of New Haven and the Towns of East Haven, Hamden and Woodbridge on _____, XX, 2020. In accordance with Section 7-255 of the Connecticut General Statutes. Revision of 1958, as amended, any appeals from such fees must be taken within twenty-one (21) days of the publication date of this notice.

Greater New Haven WPCA Board of Directors

Stephen A. Mongillo Chairman

Hamden New Haven

Clayton M. Williams Jr. Vice Chairman

New Haven

Joyce Alton

New Haven

Michael Fimiani

New Haven

Salvatore DeCola

New Haven

Russell N. Cyr

Hamden

Robert Falcigno

East Haven

Raymond Pompano

East Haven

Jeffrey D. Ginzberg Esq.

Woodbridge

Executive Director

Sidney J. Holbrook

Director of Finance and Administration

Gabriel Varca

Director of Engineering

Thomas Sgroi, P.E.

Director of Operations

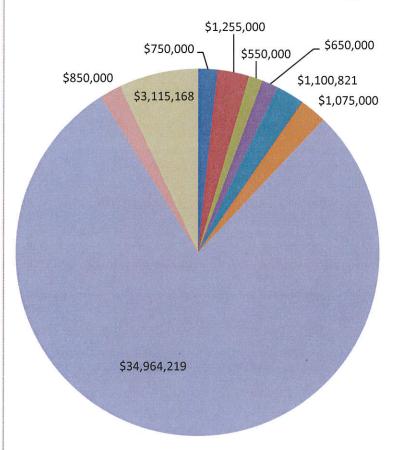
Gary Zrelak

Greater New Haven WPCA Budget Summary Revenue & Expenses FY 2021

Revenue:

Sewer Use Fees	\$	34,964,219
Administrative Fees	\$	3,115,168
Heavy Strength Surcharge	\$	850,000
Delinquent Interest Income	\$	1,125,000
Lien Fees	\$	130,000
Investment Income	\$	750,000
Outside Sludge	\$	250,000
New Connection & Permit Fees	\$	550,000
New Haven CWF Debt Service	\$	1,100,821
Electric, Gas, Water Reimbursements	\$	650,000
Grease Disposal	\$	525,000
Septage	\$ \$ \$	140,000
Interlocal Agreements	\$	160,000
Total Revenue	\$	44,310,208
Expenditures:		
Expenditures: Personnel (including benefits)	\$	9,463,423
	\$	9,463,423 4,681,900
Personnel (including benefits)		2796 and selection at 1500 and all
Personnel (including benefits) Utilities	\$ \$	4,681,900
Personnel (including benefits) Utilities Plant Repairs & Replacement	\$ \$ \$	4,681,900 1,904,400
Personnel (including benefits) Utilities Plant Repairs & Replacement Operations/Plant & Collection System Contracted Maintenance Contracted Sludge & Ash Disposal	\$ \$ \$ \$	4,681,900 1,904,400 1,125,000
Personnel (including benefits) Utilities Plant Repairs & Replacement Operations/Plant & Collection System Contracted Maintenance	\$ \$ \$ \$ \$ \$	4,681,900 1,904,400 1,125,000 2,156,012
Personnel (including benefits) Utilities Plant Repairs & Replacement Operations/Plant & Collection System Contracted Maintenance Contracted Sludge & Ash Disposal	\$ \$ \$ \$	4,681,900 1,904,400 1,125,000 2,156,012 3,207,387
Personnel (including benefits) Utilities Plant Repairs & Replacement Operations/Plant & Collection System Contracted Maintenance Contracted Sludge & Ash Disposal Other Contracted Services Payment in Lieu of Taxes (PILOT) Equipment, Vehicles & Supplies	\$ \$ \$ \$ \$ \$ \$ \$ \$	4,681,900 1,904,400 1,125,000 2,156,012 3,207,387 5,798,490
Personnel (including benefits) Utilities Plant Repairs & Replacement Operations/Plant & Collection System Contracted Maintenance Contracted Sludge & Ash Disposal Other Contracted Services Payment in Lieu of Taxes (PILOT) Equipment, Vehicles & Supplies Contingency	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	4,681,900 1,904,400 1,125,000 2,156,012 3,207,387 5,798,490 750,000
Personnel (including benefits) Utilities Plant Repairs & Replacement Operations/Plant & Collection System Contracted Maintenance Contracted Sludge & Ash Disposal Other Contracted Services Payment in Lieu of Taxes (PILOT) Equipment, Vehicles & Supplies	\$ \$ \$ \$ \$ \$ \$ \$ \$	4,681,900 1,904,400 1,125,000 2,156,012 3,207,387 5,798,490 750,000 1,046,500





■ Investment Income 1.7%

■ Delinquent Int Income & Lien Fees 2.8%

New Connections & Permit Fees 1.3%

■ Electric,Gas & Water Reimb 1.5%

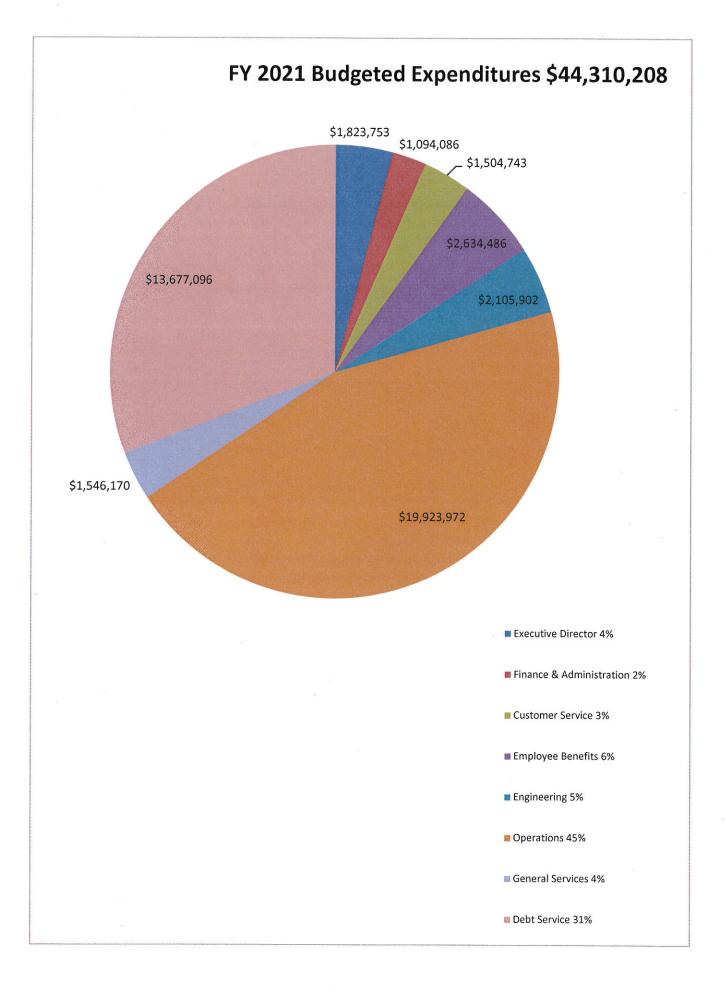
New Haven CWF Debt Ser 2.5%

Other Revenue 2.4%

Sewer Use Fees 78.9%

Heavy Strength Surcharge 1.9%

Administrative Fee 7.0%



	Debt Service Scheo	dule - FY 2021		
Description of Debt	Outstanding Principal as of 06/30/20	Maturity Date	Principal Payment FY 21	Interest Payment FY 21
Revenue Bonds Series 2005 A	325,000	8/15/2035	0	16,250
CWF 563 -DC	2,692,299	8/31/2025	499,628	49,283
CWF 2007 Series C	2,860,804	2/1/2024	841,298	49,492
CWF 463-CD1	317,497	11/30/2025	56,058	5,838
Revenue Bonds Series 2016 A	13,840,000	11/15/2037	510,000	539,150
Revenue Bonds (CREBS) Series 2008 B	499,997	12/15/2022	166,667	3,542
CWF 206-CSL	1,839,989	11/30/2028	202,762	34,948
CWF 581-C	3,484,259	12/31/2030	301,237	66,934
Revenue Bonds Series 2012 B	7,895,000	6/30/2043	225,000	308,794
CWF 627-C	431,055	10/31/2032	31,130	8,337
CWF 581-C2	4,318,139	6/30/2033	293,811	83,679
CWF 441-D	2,415,315	3/31/2033	168,000	46,772
Revenue Bonds Series 2014 B Refunding	62,105,000	8/15/2035	2,660,000	2,832,663
CWF 676-C	2,589,480	2/1/2036	139,576	50,515
CWF 441-C	37,500,187	3/31/2037	2,238,817	729,481
CWF 711-DC est	5,400,000	11/30/2039	402,403	115,031
Totals	148,514,020		8,736,387	4,940,707
	2	Rev CWF new CWF new Revenue Bonds _ -	3,561,667 5,174,720 - - 8,736,387	3,700,398 1,240,309 - - 4,940,707 13,677,095
		Total Revenue Bonds Total CWF Total Debt Service		7,262,065 6,415,030 13,677,095

20%

2,735,419

Persoi	nnel - FY	2021 Bu	dget	
Department	FTE'S	Wages (Incl. OT)	Fringe Benefits	Total
Executive Director	2	309,253	67,772	377,025
Finance & Administration	8.5	960,286	284,955	1,245,241
Customer Service	10.5	856,408	235,053	1,091,461
Engineering	8	1,046,402	353,363	1,399,765
Operations - Admin	2	250,367	95,378	345,745
Operations - Plant	15	1,426,250	581,971	2,008,221
Operations - Collections	10.5	964,135	422,818	1,386,953
Operations - Lab	3	284,275	100,093	384,368
Operations - IPP	3	275,861	119,186	395,047
Operations - Maint	2	276,200	100,805	377,005
Total	64.5	6,649,437	2,361,394	9,010,831

Benefits as a % of wages 36% Total Wages & Benefits as a % of Total Budget 20%

Sewer Rate Comparison FY 2021

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
CCF Rate	2.14	2.31	2.45	2.61	2.84	3.06	3.30	3.55	3.75	3.97	4.12	4.36	4.56	4.69	4.80
Admin Fee (Per Bill)	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	14.00	14.00	15.00	16.00

Annual Quarterly Residential Comparison (Including Admin Fee)

2021	352.00	544.00	88.00	136.00
2020	341.40	529.00	85.35	132.25
2019	329.60	512.00	82.40	128.00
2018	317.60	492.00	79.40	123.00
2017	299.20	464.00	74.80	116.00
2016	290.20	449.00	72.55	112.25
2015	277.00	427.00	69.25	106.75
2014	265.00	407.00	66.25	101.75
2013	250.00	382.00	62.5	95.5
2012	235.60	358.00	58.9	89.5
2011	222.40	336.00	55.6	84
2010	208.60	313.00	52.15	78.25
2009	199.00	297.00	49.75	74.25
2008	190.60	283.00 297.00	47.65	70.75
2007	180.40	266.00	45.1	66.5
	Minimum Charge	Average Charge (25 ccf)	per grter	per arter

Account	Description	Y 18-19 Actual	Y 19-20 Board dopted	E	FY 19-20 Exp as of 03/31/20	TY 20-21 Dept Request	Pi	Y 20-21 roposed Budget	FY 20-21 Board Adopted
1100-Executive		 креписи	uopteu		03/3 1/20	request		Duuget	Adopted
01.1100.000.5010	Regular Wages	\$ 289,933	\$ 289,833	\$	213,198	\$ 301,753	\$	301,753	
01.1100.000.5015	Overtime Wages	\$ 7,245	7,500	\$	5,564	\$ 7,500	\$	7,500	
01.1100.000.5111	Board Member Stipend	\$ 55,800	\$ 55,800	\$	27,900	\$ 55,800	\$	55,800	
01.1100.000.5310	Mileage Reimbursement	\$ 380	\$ 500		85	\$ 500	\$	500	
01.1100.000.5330	Business & Travel Exp	\$ 24,264	\$ 43,000		23,487	\$ 43,000	\$	43,000	
01.1100.000.5340	Meals	\$ 2,354	\$ 5.000	\$	1,454	\$ 4.000	\$	4,000	
01.1100.000.5350	Professional Development & Training	\$ 13,642	58,000	\$	8,859	\$ 45,000	\$	45,000	
01.1100.000.5420	IT Hardware and Software	\$ 142,946	\$ 109,750	\$	57,296	\$ 80,300	\$	80,300	
01.1100.000.5520	General Office Supplies	\$ 2,219	3,000	\$	1,077	\$ 3,000	\$	3,000	
01.1100.000.5610	Advertising	\$ 11,690	\$ 25,000	\$	4,432	\$ 20,000	\$	20,000	
01.1100.000.5646	Reg., Dues & Subscriptions	\$ 40,810	\$ 47,100	\$	39,974	\$ 50,000	\$	50,000	
01.1100.000.5655	Software Maintenance	\$ 43,793	\$ 49,575	\$	43,783	\$ 53,300	\$	53,800	
01.1100.000.5657	Data Processing Services	\$ 56,668	\$ 76,900	\$	44,860	\$ 109,100	\$	109,100	
01.1100.000.5668	Legal & Lawyer fees	\$ 108,326	\$ 450,000	\$	60,390	\$ 450,000	\$	450,000	
01.1100.000.5670	Public Relations	\$ 3,960	\$ 18,000	\$	1,000	\$ 15,000	\$	15,000	
01.1100.000.5671	Government Relations	\$ 49,000	\$ 49,000	\$	32,667	\$ 49,000	\$	49,000	
01.1100.000.5694	Other Contractual Services	\$ 1,876	\$ 45,500	\$	10,703	\$ 36,000	\$	36,000	
01.1100.000.5710	Contingency	\$ -	\$ 500,000	\$		\$ 500,000	\$	500,000	

Subtotal \$ 854,906 \$ 1,833,458 \$ 576,729 \$ 1,823,253 \$ 1,823,753

Account	Description	Y 18-19 Actual opended	FY 19-20 Board Adopted	E	Y 19-20 xp as of 3/31/20	TY 20-21 Dept Request	P	FY 20-21 Proposed Budget	FY 20-21 Board Adopted
1200-Finance 8	Administration								
01.1200.000.5010	Regular Wages	\$ 828,598	\$ 811,957	\$	598,721	\$ 922,346	\$	922,346	
01.1200.000.5011	Part-Time Wages	\$ 51,580	\$ 88,642	\$	67,175	\$ 37,940	\$	37,940	
01.1200.000.5015	Overtime Wages	\$ 155	\$ 1,500	\$	-	\$ 1,000	\$	1,000	
01.1200.000.5270	Telephone Utilities	\$ 2,902	\$ 3,300	\$	1,814	\$ 3,300	\$	3,300	
01.1200.000.5310	Mileage Reimbursement	\$ 163	\$ 500	\$	-	\$ 500	\$	500	
01.1200.000.5340	Meals	\$ 370	\$ 3,000	\$	828	\$ 3,000	\$	3,000	
01.1200.000.5520	General Office Supplies	\$ 4,225	\$ 4,500	\$	3,435	\$ 4,500	\$	4,500	
01.1200.000.5694	Other Contractual Services	\$ 56,254	\$ 59,000	\$	36,980	\$ 59,000	\$	59,000	
01.1200.000.5698	Auditing & Accounting Services	\$ 50,000	\$ 72,000	\$	35,300	\$ 62,500	\$	62,500	
	Subtotal	\$ 994,247	\$ 1,044,399	\$	744,253	\$ 1,094,086	\$	1,094,086	

13

Account	Description		Y 18-19 Actual opended	Y 19-20 Board dopted	E	TY 19-20 Exp as of 03/31/20	FY 20-21 Dept Request	P	Y 20-21 roposed Budget	FY 20-21 Board Adopted
1210-Customer	Service	1								
01.1210.000.5010	Regular Wages	\$	623,376	\$ 648,300	\$	484,950	\$ 667,748	\$	667,748	
01.1210.000.5011	Part-Time Wages	\$	131,934	\$ 159,422	\$	105,988	\$ 187,660	\$	187,660	
01.1210.000.5015	Overtime Wages			\$ 1,000	\$	-	\$ 1,000	\$	1,000	
01.1210.000.5310	Mileage Reimbursement	\$	169	\$ 500	\$	144	\$ 500	\$	500	
01.1210.000.5410	Office Equipment	\$	424	\$ 2,000	\$	399	\$ 2,000	\$	2,000	
01.1210.000.5520	General Office Supplies	\$	7,419	\$ 8,000	\$	5,487	\$ 8,000	\$	8,000	
01.1210.000.5615	Printing & Binding	\$	76,283	\$ 108,000	\$	69,863	\$ 100,680	\$	100,680	
01.1210.000.5643	Postage & Delivery	\$	100,000	\$ 113,000	\$	82,941	\$ 114,000	\$	114,000	
01.1210.000.5657	Data Processing Hardware/Software	\$	154,995	\$ 183,000	\$	149,357	\$ 191,655	\$	191,655	
01.1210.000.5658	Equipment Maintenance Services	\$	4,353	\$ 3,600	\$	1,512	\$ 3,500	\$	3,500	
01.1210.000.5687	Collection Services Fees	\$	138,284	\$ 135,000	\$	93,596	\$ 160,000	\$	160,000	
01.1210.000.5694	Other Contractual Services	\$	17,788	\$ 24,000	\$	10,527	\$ 23,000	\$	23,000	
01.1210.000.5698	Auditing & Accounting Services	\$	43,640	\$ 46,000	\$	33,200	\$ 45,000	\$	45,000	

Subtotal

\$ 1,298,665 \$ 1,431,822 \$ 1,037,964 \$ 1,504,743 \$ 1,504,743

Account	Description	Y 18-19 Actual opended	FY 19-20 Board Adopted	E	FY 19-20 Exp as of 03/31/20	FY 20-21 Dept Request	P	FY 20-21 Proposed Budget	FY 20-21 Board Adopted
1220-Employee	Benefits								
01.1220.000.5694	Other Contractual Services	\$ 54,636	\$ 62,000	\$	42,579	\$ 62,000	\$	62,000	
01.1220.000.5901	Medical Insurance Program	\$ 959,116	\$ 1,183,026	\$	740,662	\$ 1,179,525	\$	1,179,525	
01.1220.000.5904	Life Insurance Program	\$ 11,880	\$ 13,000	\$	9,446	\$ 14,000	\$	14,000	
01.1220.000.5910	Retirement Fund Contribution	\$ 601,561	\$ 982,550	\$	671,372	\$ 1,126,263	\$	1,126,263	
01.1220.000.5920	Social Security/Medicare	\$ 88,770	\$ 97,100	\$	67,496	\$ 100,698	\$	100,698	
01.1220.000.5925	Workers' Compensation	\$ 157,532	\$ 175,000	\$	139,706	\$ 150,000	\$	150,000	
01.1220.000.5965	Unemployment Compensation	\$ 2,512	1,000	\$	100,700	\$ 1,000	\$	1,000	
01.1220.000.5969	Labor Arbitration Expenses and Fees	\$ -	\$ 1,000	\$		\$ 1,000	\$	1,000	#8

Subtotal

^{\$ 1,876,007 \$ 2,514,676 \$ 1,671,261 \$ 2,634,486 \$ 2,634,486}

Account	Description		FY 18-19 Actual xpended	FY 19-20 Board Adopted	Ε	TY 19-20 xp as of 03/31/20	FY 20-21 Dept Request	P	FY 20-21 Proposed Budget	FY 20-21 Board Adopted
1300-Engineeri	ng	T								
01.1300.000.5010	Regular Wages	\$	1,002,424	\$ 1,007,186	\$	736,019	\$ 1,037,402	\$	1,037,402	
01.1300.000.5011	Part-Time Wages	\$	-	\$ 10,000	\$	-	\$ 10,000	\$	-	0:
01.1300.000.5015	Overtime Wages	\$	8,665	\$ 8,500	\$	6,893	\$ 9,000	\$	9,000	
01.1300.000.5270	Telephone Utilities	\$	5,878	\$ 6,000	\$	3,904	\$ 6,000	\$	6,000	
01.1300.000.5310	Mileage Reimbursement	\$	1,592	\$ 1,500	\$	327	\$ 1,500	\$	1,500	
01.1300.000.5340	Meals	\$	854	\$ 1,500	\$	272	\$ 1,500	\$	1,500	
01.1300.000.5458	Safety Equipment	\$	340	\$ 2,000	\$	-	\$ 2,000	\$	2,000	
01.1300.000.5520	General Office Supplies	\$	3,261	\$ 4,000	\$	698	\$ 4,000	\$	4,000	
01.1300.000.5647	Permits	\$	1,813	\$ 1,000	\$	248	\$ 1,000	\$	1,000	
01.1300.000.5685	Engineering, Surveying & Arch	\$	84,354	\$ 130,000	\$	71,279	\$ 135,000	\$	165,000	
01.1300.000.5689	On Call Services	\$	779,659	\$ 750,000	\$	285,304	\$ 750,000	\$	750,000	
01.1300.000.5690	Capital Non-Recurring	\$	54,829	\$ -	\$	-	\$ -	\$	=	
01.1300.000.5694	Other Contractual Services	\$	25,906	\$ 87,500	\$	3,877	\$ 147,500	\$	128,500	

\$ 1,969,575 \$ 2,009,186 \$ 1,108,821 \$ 2,104,902 \$ 2,105,902

Subtotal

Account	Description	Y 18-19 Actual kpended	Y 19-20 Board dopted	E	TY 19-20 xp as of 03/31/20	FY 20-21 Dept Request	P	FY 20-21 Proposed Budget	FY 20-21 Board Adopted
1400-Operation	s - Admin				12				
01.1400.000.5010	Regular Wages	\$ 238,963	\$ 242,104	\$	176,922	\$ 249,367	\$	249,367	
01.1400.000.5015	Overtime Wages	\$ -	\$ 2,000	\$	-	\$ 1,000	\$	1,000	
01.1400.000.5270	Telephone Utilities	\$ 19,437	\$ 22,500	\$	13,786	\$ 25,000	\$	25,000	
01.1400.000.5310	Mileage Reimbursement	\$ 1,742	\$ 3,000	\$	777	\$ 3,000	\$	2,500	
01.1400.000.5340	Meals	\$ 1,486	\$ 3,000	\$	594	\$ 3,000	\$	2,500	
01.1400.000.5460	Uniform Allowance	\$ 41,504	\$ 40,000	\$	32,212	\$ 50,500	\$	50,500	
01.1400.000.5520	General Office Supplies	\$ 7,753	\$ 8,000	\$	4,815	\$ 8,000	\$	8,000	
01.1400.000.5647	Permits	\$ 12,005	\$ 22,110	\$	2,380	\$ 27,260	\$	27,260	
01.1400.000.5661	Building Maintenance (293 East St)	\$ -	\$ 6,262	\$	1,204	\$ 6,300	\$	1,500	
01.1400.000.5662	Vehicle Maintenance	\$ 9,795	\$ 20,000	\$	8,252	\$ 20,000	\$	20,000	
01.1400.000.5690	Capital Non-Recurring	\$ 22,186	\$ 45,000	\$	39,274	\$ 45,000	\$	40,000	
01.1400.000.5694	Other Contractual Services	\$ 296,575	\$ 310,500	\$	139,833	\$ 351,500	\$	326,500	
01.1400.000.5980	Nitrogen Credit	\$ 198,186	\$ 150,000	\$		\$ 350,000	\$	350,000	
	Subtotal	\$ 849,632	\$ 874,476	\$	420,049	\$ 1,139,927	\$	1,104,127	

			FY 18-19 Actual		FY 19-20 Board	ı	FY 19-20 Exp as of	FY 20-21 Dept	G	FY 20-21 Proposed	FY 20-21 Board
Account	Description	E	xpended		Adopted		03/31/20	Request		Budget	Adopted
1410-Operation	s-Plant .	_		_		_					
01.1410.000.5010	Regular Wages	\$	1,153,097	\$	1,270,385	\$	866,043	\$ 1,317,750	\$	1,317,750	
01.1410.000.5015	Overtime Wages	\$	83,829	\$	105,000	\$	67,401	\$ 108,500	\$	108,500	
01.1410.000.5201	Electricity	\$	3,740,274	\$	3,935,800	\$	1,952,597	\$ 3,850,000	\$	3,850,000	
01.1410.000.5202	Water	\$	132,292	\$	170,000	\$	76,910	\$ 170,000	\$	170,000	
01.1410.000.5203	Natural Gas	\$	410,923	\$	550,000	\$	258,613	\$ 550,000	\$	525,000	
01.1410.000.5235	Heating fuel	\$	27,604	\$	29,500	\$	10,828	\$ 35,400	\$	35,400	
01.1410.000.5455	Tools & Equipment	\$	15,087	\$	12,000	\$	1,633	\$ 24,000	\$	21,000	
01.1410.000.5530	Gasoline & Diesel Fuel	\$	46,319	\$	52,000	\$	23,357	\$ 52,000	\$	52,000	
01.1410.000.5535	Chemicals	\$	496,761	\$	585,000	\$	344,235	\$ 597,000	\$	587,000	
01.1410.000.5658	Equipment Maint Services	\$	30,489	\$	38,300	\$	31,101	\$ 38,750	\$	38,750	
01.1410.000.5660	Security System	\$	4,056	\$	10,300	\$	786	\$ 5,000	\$	5,000	ø
01.1410.000.5661	Building Maintenance	\$	48,751	\$	47,000	\$	31,677	\$ 46,500	\$	46,500	
01.1410.000.5677	Waste Hauler	\$	231,725	\$	275,000	\$	115,673	\$ 275,000	\$	275,000	
01.1410.000.5690	Capital Non-Recurring	\$	44,743	\$	128,000	\$	-	\$ 28,000	\$	28,000	
01.1410.000.5694	Other Contractual Services	\$	1,364	\$	7,400	\$	3,934	\$ 7,400	\$	2,400	5

Subtotal \$ 6,467,314 \$ 7,215,685 \$ 3,784,788 \$ 7,105,300 \$ 7,062,300

Account	Description	Y 18-19 Actual xpended	Y 19-20 Board dopted	E	FY 19-20 FY 20-21 Exp as of Dept 03/31/20 Request			P	FY 20-21 Proposed Budget	FY 20-21 Board Adopted
1420-Operation	s-Collections			117						
01.1420.000.5010	Regular Wages	\$ 807,988	\$ 811,353	\$	593,306	\$	873,635	\$	873,635	
01.1420.000.5015	Overtime Wages	\$ 56,679	\$ 85,000	\$	35,893	\$	90,500	\$	90,500	
01.1420.000.5310	Mileage Reimbursement	\$ 217	\$ 400	\$	367	\$	500	\$	500	
01.1420.000.5340	Meals	\$ 119	\$ 250	\$	215	\$	400	\$	400	
01.1420.000.5455	Tools & Equipment	\$ 11,149	\$ 15,000	\$	4,236	\$	19,350	\$	19,350	
01.1420.000.5650	Call Before You Dig	\$ 12,731	\$ 3,175	\$	12,569	\$	14,425	\$	14,425	
01.1420.000.5662	Vehicle Maintenance	\$ 40,006	\$ 70,000	\$	19,148	\$	70,000	\$	60,000	
01.1420.000.5672	Traffic Control	\$ 298,465	\$ 375,000	\$	114,643	\$	375,000	\$	375,000	
01.1420.000.5688	Sewer Cleaning Contractual	\$ 365,570	\$ 500,000	\$	79,699	\$	500,000	\$	500,000	
01.1420.000.5690	Capital Non-Recurring	\$ 94,558	\$ 43,000	\$	-	\$	52,500	\$	42,000	
01.1420.000.5691	Emergency Repair &Cleanup serv	\$ 66,845	\$ 85,000	\$	41,275	\$	85,000	\$	85,000	
01.1420.000.5692	Repair Material Purchases	\$ 102,941	\$ 114,850	\$	45,108	\$	114,850	\$	114,850	
01.1420.000.5694	Other Contractual Services	\$ 369,816	\$ 372,500	\$	199,965	\$	412,500	\$	355,000	

Subtotal

\$ 2,227,084 \$ 2,475,528 \$ 1,146,424 \$ 2,608,660 \$ 2,530,660

Account	Description		Y 18-19 Actual opended	Y 19-20 Board dopted	E	Y 19-20 xp as of 03/31/20	Y 20-21 Dept Request	Pi	Y 20-21 roposed Budget	FY 20-21 Board Adopted
1430-Operation	s-Lab	_								
01.1430.000.5010	Regular Wages	\$	265,997	\$ 270,198	\$	197,721	\$ 278,275	\$	278,275	
01.1430.000.5015	Overtime Wages	\$	6,852	\$ 8,000	\$	2,371	\$ 8,000	\$	6,000	
01.1430.000.5310	Mileage Reimbursement	\$	112	\$ 250	\$	213	\$ 350	\$	350	
01.1430.000.5340	Meals	\$	48	\$ 250	\$	18	\$ 250	\$	250	
01.1430.000.5522	Lab Supplies	\$	37,415	\$ 48,000	\$	25,275	\$ 50,000	\$	48,000	
01.1430.000.5658	Equipment Maintenance Services	\$	651	\$ 2,200	\$	673	\$ 2,000	\$	2,000	
01.1430.000.5690	Capital Non-Recurring	\$	4,809	\$ 10,000	\$	8,681	\$ 5,000	\$	5,000	
01.1430.000.5694	Other Contractual Services	\$	19,215	\$ 35,000	\$	13,937	\$ 35,000	\$	35,000	
	Subtotal	\$	335,099	\$ 373,898	\$	248,889	\$ 378,875	\$	374,875	

Account	Description	Y 18-19 Actual cpended	Y 19-20 Board dopted	E	Y 19-20 xp as of 03/31/20	Y 20-21 Dept Request	Pi	Y 20-21 roposed Budget	FY 20-21 Board Adopted
1440-Operation	s-IPP								
01.1440.000.5010	Regular Wages	\$ 261,321	\$ 263,941	\$	192,429	\$ 271,861	\$	271,861	
01.1440.000.5015	Overtime Wages	\$ 335	\$ 2,000	\$	1,380	\$ 6,000	\$	4,000	
01.1440.000.5310	Mileage Reimbursement	\$ 335	\$ 400	\$	311	\$ 500	\$	500	
01.1440.000.5340	Meals	\$ 41	\$ 200	\$	113	\$ 300	\$	300	
01.1440.000.5455	Tools & Equipment	\$ 886	\$ 10,000	\$	5,249	\$ 4,000	\$	4,000	
01.1440.000.5458	Safety Equipment	\$ 16,566	\$ 19,000	\$	9,058	\$ 25,400	\$	25,400	
01.1440.000.5694	Other Contractual Services	\$ 10,478	\$ 41,950	\$	22,744	\$ 50,950	\$	47,950	
	Subtotal	\$ 289 962	\$ 337 491	\$	231 284	\$ 359 011	4	354 011	

Account	Description	FY 18-19 Actual xpended	FY 19-20 Board Adopted	E	FY 19-20 Exp as of 03/31/20	FY 20-21 Dept Request	F	FY 20-21 Proposed Budget	FY 20-21 Board Adopted
1450-Operation	s-Maintenance								
01.1450.000.5010	Regular Wages	\$ 263,381	\$ 268,156	\$	195,960	\$ 276,200	\$	276,200	
01.1450.000.5658	Equipment Maint Services	\$ 285,915	\$ 154,000	\$	3,780	\$ 187,000	\$	177,000	
01.1450.000.5675	O&M contractual	\$ 2,057,361	\$ 2,125,000	\$	1,529,863	\$ 2,156,012	\$	2,156,012	
01.1450.000.5676	Waste & Ash Disposal	\$ 2,843,852	\$ 3,329,255	\$	1,567,164	\$ 3,207,387	\$	3,207,387	
01.1450.000.5686	Grease Disposal - Synagro	\$ 230,360	\$ 240,000	\$	175,553	\$ 250,000	\$	250,000	
01.1450.000.5690	Capital Non-Recurring	\$ 165,346	\$ 88,000	\$	43,205	\$ 480,000	\$	480,000	
01.1450.000.5694	Other Contractual Services	\$ 19,740	\$ 300,800	\$	15,015	\$ 52,000	\$	47,000	
01.1450.000.5695	Plant Repairs & Replacement	\$ 2,024,054	\$ 1,915,800	\$	1,203,228	\$ 1,904,400	\$	1,904,400	
	Subtotal	\$ 7,890,009	\$ 8,421,011	\$	4,733,768	\$ 8,512,999	\$	8,497,999	

Account	Description	Y 18-19 Actual cpended	Y 19-20 Board dopted	E	FY 19-20 exp as of 03/31/20	Y 20-21 Dept Request	Pı	Y 20-21 oposed Budget	FY 20-21 Board Adopted
1600-General	Services	 	 						
01.1600.000.5270	Telephone Utilities	\$ 76,628	\$ 84,000	\$	45,600	\$ 67,200	\$	67,200	
01.1600.000.5410	Office Equipment	\$ 2,075	\$ 2,500	\$	-	\$ 2,000	\$	2,000	
01.1600.000.5520	General Office Supplies	\$ 3,239	\$ 5,000	\$	2,134	\$ 5,000	\$	5,000	
01.1600.000.5528	Printing & Data Processing Paper	\$ 2,713	\$ 4,000	\$	1,840	\$ 3,500	\$	3,500	
01.1600.000.5618	Printing & Binding	\$ 4,331	\$ 3,000	\$	2,580	\$ 4,000	\$	4,000	
01.1600.000.5643	Postage & Delivery	\$ 6,378	\$ 9,500	\$	5,675	\$ 10,000	\$	10,000	
01.1600.000.5661	Building Maintenance East St	\$ 70,637	\$ 96,000	\$	63,161	\$ 82,400	\$	82,400	
01.1600.000.5694	Other Contractual Services	\$ 25,956	\$ 20,200	\$	15,637	\$ 19,600	\$	19,600	
01.1600.000.5940	Property/Fire Insurance	\$ 481,199	\$ 506,516	\$	498,342	\$ 552,470	\$	552,470	
01.1600.000.5960	Damages & Settlements	\$ 7,755	\$ 50,000	\$	3,550	\$ 50,000	\$	50,000	
01.1600.000.5999	PILOT Payments	\$ 750,000	\$ 750,000	\$	375,000	\$ 750,000	\$	750,000	a

Subtotal

\$ 1,430,911 \$ 1,530,716 \$ 1,013,519 \$ 1,546,170 \$ 1,546,170

Account	Description	Ac	18-19 tual ended		FY 19-20 Board Adopted	E	FY 19-20 Exp as of 03/31/20	FY 20-21 Dept Request	F	FY 20-21 Proposed Budget	FY 20-21 Board Adopted
1700-Debt Serv	rice										
01.1700.501.5700	Interest 2005 Series A Bonds	\$	16,250	\$	16,250	\$	16,250	\$ 16,250	\$	16,250	
01.1700.505.5700	Interest Existing CWF Debt	\$ 6,0	030,672	\$	6,438,408	\$	3,970,769	\$ 6,415,030	\$	6,415,030	
01.1700.510.5700	Principal 2005 Series A Bonds	\$, -	\$	-	\$	-	\$ -	\$	-	
01.1700.520.5700	Principal 2008 Series A & B Bonds	\$ 1	166,667	\$	166,667	\$	166,667	\$ 166,667	\$	166,667	
01.1700.525.5700	Interest 2008 Series A & B Bonds	\$	6,316	\$	4,958	\$	3,896	\$ 3,542	\$	3,542	
01.1700.530.5700	Interest (New)	\$	-	\$	-	\$	-	\$ -	\$	-	
01.1700.535.5700	Interest 2012 Series B Bonds	\$ 3	318,769	\$	315,469	\$	315,469	\$ 308,794	\$	308,794	
01.1700.540.5700	Principal 2012 Series B Bonds	\$ 2	210,000	\$	220,000	\$	220,000	\$ 225,000	\$	225,000	
01.1700.545.5700	Interest 2014 Series B Refunding	\$ 3,0	13,163	\$	2,950,063	\$	2,950,063	\$ 2,832,663	\$	2,832,663	
01.1700.550.5700	Principal 2014 Series B Refunding	\$ 2,4	40,000	\$	2,545,000	\$	2,545,000	\$ 2,660,000	\$	2,660,000	
01.1700.555.5700	Interest 2016 Series A Refunding	\$ 5	83,125	\$	564,025	\$	288,075	\$ 539,150	\$	539,150	
01.1700.560.5700	Principal 2016 Series A Refunding	\$ 4	65,000	\$	485,000	\$	485,000	\$ 510,000	\$	510,000	
	Subtotal	\$ 13,2	49,962	\$	13,705,840	\$	10,961,189	\$ 13,677,096	\$	13,677,096	
								500 E	85	15.39 E	
								, 8			
and the second second	Grand Total	\$ 39,7	33,373	\$ 4	43,768,186	\$ 2	27,678,938	\$ 44,489,508	\$	44,310,208	

GREATER NEW HAVEN WPCA ESTIMATED REVENUE FISCAL YEAR 2020-2021

KOUTHANDES TO BE FOUND	TIOOAL TEAR 2020-2021	The same	HIRES TO THE RESIDENCE OF THE SECOND	100000		1	ATTENDED TO STATE OF THE STATE			Total Spring	
A									FY 19-20		
Account Number	Description		Actual 17-18	7	Actual 18-19		Budget 19-20	E	stimated Rev	20	-21 Estimates
01.0000.000.4400	Revenue Lien Fees	\$	136,920	\$	128,974	\$	140,000	\$	130,000	\$	120 000
		-	100,320	Ψ	120,574	Ψ	140,000	Ψ	130,000	Þ	130,000
01.0000.000.4410	Reveune Interest Income	\$	530,192	\$	925,365	\$	750,000	\$	975,000	\$	750,000
01.0000.000.4420	Revenue Delinquent Int Income	\$	1,144,068	\$	1,123,088	\$	1,150,000	\$	1,125,000	\$	1,125,000
01.0000.000.4430	Revenue Outside Sludge	\$	278,915	\$	288,441	\$	250,000	\$	250,000	\$	250,000
01.0000.000.4440	Revenue Grease Disposal	\$	406,320	\$	464,170	\$	480,000	\$	500,000	\$	525,000
01.0000.000.4460	Revenue Septage	\$	114,141	\$	104,486	\$	125,000	\$	140,000	\$	140,000
01.0000.000.4470	Revenue Interlocal Agreements	\$	76,406	\$	89,422	\$	85,000	\$	136,015	\$	160,000
01.0000.000.4480	Revenue Permit fees (repairs & Demo)	\$	250,783	\$	49,831	\$	75,000	\$	50,000	\$	50,000
01.0000.000.4481	Revenue New Connections	\$	365,484	\$	450,043	\$	500,000	\$	500,000	\$	500,000
01.0000.000.4482	Revenue Electric,Gas&Water	\$	767,193	\$	727,683	\$	735,000	\$	650,000	\$	650,000
01.0000.000.4485	Revenue New Haven CWF Debt Ser	\$	898,422	\$	923,419	\$	1,089,736	\$	1,089,000	\$	1,100,821
01.0000.000.4499	Other Revenue	\$	272,979	\$		\$		\$	50,000	\$	
01.0000.100.4000	Revenue -Sewer Use Fees	\$	40,437,998	\$	41,489,802	\$	34,517,980	\$	38,465,000	\$	34,964,219
01.0000.100.4300	Revenue Heavy Strength	i	ncluded above	i	ncluded above	\$	950,000	\$	900,000	\$	850,000
01.0000.000.4350	Administrative Fee	i	ncluded above	j	ncluded above	\$	2,920,470	\$	2,920,470	\$	3,115,168
TOTAL		\$	45,679,821	\$	46,764,724	\$	43,768,186	\$	47,880,485	\$	44,310,208

Greater New Haven Water Pollution Control Authority Five (5) Year Capital Improvement Plan FY 2021 - FY 2025 Proposed April 14, 2021	% S	, ≿	È	È	à	à	
2020 Project	Grant	2021	2022	2023	2024	2025	Totals
CSO LONG TERM CONTROL PLAN							
\$0 Yale Trumbull Study/Design/Construction (Phase 2A) \$0 Orchard Street Sewer Separation project	50% 50%	\$15,500,000	80	80	08	80	\$15,500,000 v
\$0 Long Term Control Plan Update	22.0%	\$860,000	80	80	80	20 %	\$860,000 4
\$55,500,000 Design and Construction East Street Pump Station \$0 State & Union Pump Station CSO	50.0% 50.0%	\$11,450,000	\$2,000,000	\$18.100.000	800	0\$	\$11,450,000 v
\$0 Design and Construction Boulevard Pump Station EAST SHORE WPCE	20.0%	\$0	80	\$3,840,000	\$35,410,000	\$00	\$39,250,000 v
	30%	\$1,150,000	80	\$0	80	0\$	\$1.150.000 v
COLLECTION SYSTEM, PUMP STATIONS & FORCE MAINS \$5,725,000 Collection System // Rehabilitation Program Section	%0	G	6	é			
\$0 Mill River Phase 2 Part 1 & Part 2 & Part 3	%0	800	\$500,000	\$4,000,000	08	09.	\$0.000.000
\$0 Mill River Phase 2 Part 1 & Part 2 & Part 3 \$46 525 000 TOTAL CWE	%99	\$600,000	80	\$0	80	80	\$600,000 v
		930,000,000	\$2,500,000	\$25,940,000	\$35,410,000	0\$	\$99,910,000
COLLECTION SYSTEM, PUMP STATIONS & FORCE MAINS, GENERAL							
51,200,000 Sanitary Sewer Infrastructure Renewal Program	%0	\$1,200,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,200,000 v
	%0	000,000	\$500,000	\$50,000	\$500,000	\$50,000	\$1,150,000 v
\$100,000 Bypass hose/piping	%0	9 %	\$100,000	08	OS S	0.09	\$100.000
\$120,000 Thickener Primary Pump	%0	\$0	80	\$0	SO	\$0	80
\$150,000 illiet works Ductwork \$0 Concrete Work - Chlorine Confact and Wall Repair	%0	80	0\$	80	80	80	80
\$0 Secondary Clarifier Drain Valves	%0	\$160.000	\$160,000	\$160,000	08	80	\$500,000 v
\$200,000 Polymer Tank Additions/Twas Tank Rehab	%0	0\$	80	\$0	09	9 4	v 000,000¢
\$0 Primary Clarifier Drive and Screw Replacements	%0	\$0	\$160,000	\$0	80	80	\$160,000 v
\$90,000 Scum Line Valve	%0	80	\$0	\$0	0\$	80	80
\$0 Manhole Rehab Program	%0	0.5 F	0,5	08	08	800 000	80
\$0 Wet Well Covers	%0	0\$	80	\$300,000	08	000,000	\$300.000 v
\$0 Morris Cove Oil Tank	%0	\$0	\$125,000	\$0	\$0	\$0	\$125,000 v
\$0 Plant Repairs Unidentified \$20 Plant Station Improvements VED'S	%0	80	80	0\$	80	80	× 0\$
	% %	08	09	0\$	\$0	80	> 08
\$120,000 Compactors & Conveyors Boulevard	%0	80	08	08	08		08
\$0 Morris Cove Bar Screens	%0	80	80	\$0	\$0	\$700,000	\$700,000 v
\$300,000 Concrete Work - Misc Repairs	%0	80	80	\$0	\$0		80
\$100,000 mm.c. Seam Sewerage Pumps - East Shore	% %	0.0	\$140,000	0\$	80	6140 000	0\$
\$50,000 Lab Rehabilitation	%0	80	\$700,000	08	0\$	\$ 140,000	\$280,000 v
\$150,000 Roof Replacements	%0	\$150,000	\$150,000	80	80	\$0	\$300,000 v
\$100,000 Tide Gates Replacements	%0	\$0	80	\$0	\$0		80
\$1,020,021 Town town to the control of the control	%%	09	08	08	\$0		\$0
\$300,000 CIS Upgrade V 4	%0	80	80	0\$	80		000,000
\$150,000 Camera Truck	%0	80	0\$	80	80		80
\$300,000 Emergency Sewer Kepair and Keplacement \$0 Riverside Interceptor	%0	\$300,000	\$300,000	\$300,000	\$300,000	\$300,000	\$1,500,000 v
S0 Central Interceptor	%0	\$0	000,0000	\$1,500,000	\$2.000.000	09	\$3.500.000 v
S0 Foxon park Interceptor	%0	\$0	80	80	\$1,000,000	\$1,500,000	\$2,500,000 v
SO FIS Upgrade SO Plant Inlet Works Main Gates	%%	\$00,000	\$0	80	80	\$300,000	\$300,000 v
\$0 Transmit works Walli Gates \$0 150 KW Portable Generators (2)	%0	\$200,000	\$100,000	\$100,000	09 99	0.00	\$190,000
\$0 East Shore Primary Sludge Pumps	%0	\$240,000	\$0	80	80	80	\$240,000
\$0 East Shore Odor Scrubber	%0	80	\$300,000	\$0	\$0	\$300,000	\$600,000
SO East Shore HVAC Admin	%%	\$250,000	0\$	09	0\$	\$300,000	\$300,000
\$0 New Combo Truck	%%	000,0024	04	\$380.000	0.9	0.9	\$250,000
\$0 FOG Fuel Sys	%0	80	\$0	\$500,000	\$0	80	\$500,000
\$0 SCADA Improvements \$7 405.521 TOTAL Infractructure Renewal Fund	%0	\$0\$	\$200,000	\$0	\$0	\$0	\$200,000
\$53,930,521 GRAND TOTAL		\$39,610,000	\$4,625,000	\$30,230,000	\$40,360,000	\$5,290,000	\$22,705,000
\$15,570,000 CWF Grant \$30,955,000 2 % Loan		\$17,188,000	\$800,000	\$8,776,000	\$14,164,000	09	\$40,928,000
\$1,219,141 FEMA Grant \$6,186,300 Dedicated Infrastructure Renewal Fund		\$0 \$4,207,000	\$4,625,000	\$0	\$4,950,000	\$0	\$23,362,000
\$33,930,441 TOTAL		\$39,610,000	\$7,125,000	\$30,230,000	\$40,360,000	\$5,290,000	\$122,615,000