

Mission Statement

The mission of the Sewer Division is to enhance Concord's quality of life, and through sound management, innovation, teamwork and vision, provide dependable, high quality, responsive sewer utility services, consistent with values and at reasonable costs to Concord's citizens, businesses, institutions and visitors.

Sewer Fund Budget Contents

Overview	pp. 1-2
Sewer Rates	p. 3
Program Highlights	pp. 4-5
Revenues and Expenditures	pp. 6-10
Sewer Financial Statement	p. 11
Debt Service	p. 12
Capital Spending	pp. 13-14
Supplemental Information	pp. 15-16

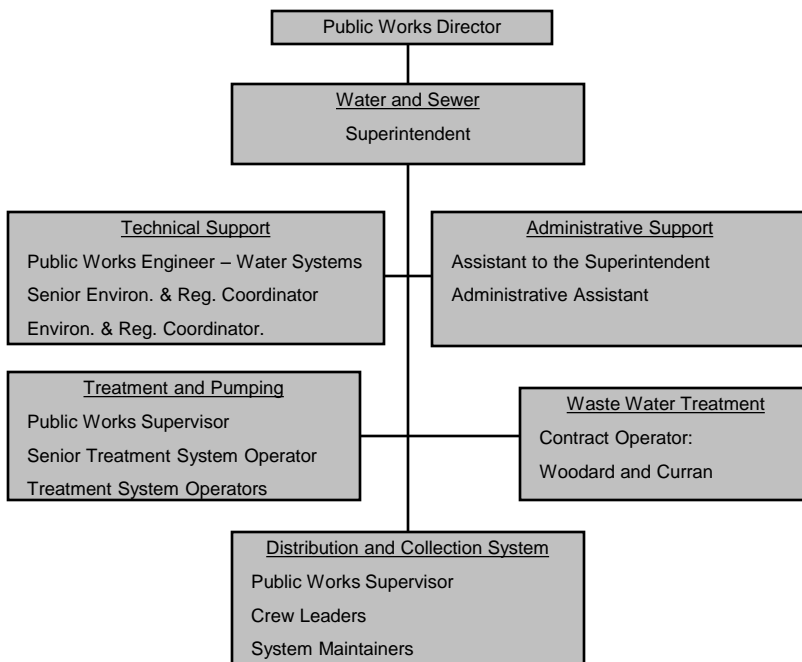
Sewer Fund Highlights

- The proposed FY16 sewer rate of \$0.1086 per cubic foot represents a 3% increase over the FY15 rate of \$0.1055 per cubic foot. Since FY 2007 sewer rates have increased by an average annual rate of 4.7%. For the average residential customer, the annual increase in the sewer bill will be \$18.60.
- The proposed FY16 capital improvement plan is \$2,042,080 which includes \$1,500,000 for design and complete rehabilitation of the two main sewer pumping stations at Lowell Road and Main Street in West Concord.
- Additional costs are budgeted for septage treatment in FY16 because the quantity of septage received at the Treatment Plant has increased by 10%.
- The proposed FY16 operating budget is \$3,257,555, an increase of 3.4% from FY15.

Expenditure Summary

	FY13 Actual	FY14 Actual	FY15 Budget	FY16 Proposed
Operating Income	\$ (815,360)	\$ (880,985)	\$ (577,025)	\$ (559,556)
Net Income	\$ 132,957	\$ 2,407,283	\$ (99,109)	\$ (464,693)
Undesignated Fund Balance	\$ 4,099,618	\$ 7,394,518	\$ 7,370,314	\$ 5,766,172

See page V-9 for greater detail on income and fund balance results.



Description:

In 1894, Concord received legislative authority to create a municipal sewer system. Today, the system consists of 33 miles of collection main, two pumping stations, six neighborhood lift stations, and an advanced wastewater treatment plant.

The 1976 Annual Town Meeting established a Sewer Fund to ensure that the operation, maintenance, and capital improvement of the sewer system would be a financially viable enterprise. Expenses for this system are covered entirely by user fees. As of 2014 the total value of collection system and treatment plant infrastructure assets was approximately 21.4 million dollars.

The municipal sewer system serves 1,834 residential and commercial customers representing approximately 34% of the community. The wastewater treatment facility continues to process over 1.0 million gallons per year of septage pumped from residential and commercial establishments served by private septic systems within the Town of Concord.

Long-Term Financial Stability

Along with its core mission to operate and maintain the Town’s municipal sewer system in a reliable and efficient manner, the sewer enterprise must also be financially self-supporting. This means that the Sewer Division is expected to cover all costs associated with operations, capital maintenance and repairs by generating sufficient revenue through user fees and special service fees. The Sewer Division maintains a detailed 10-year financial proforma to facilitate long range planning for all revenues and anticipated investments.

Since the sewer enterprise fund was formally established in 1976, there have been no property tax contributions to subsidize pre-existing operations or infrastructure improvements. Taxpayer support has been sought through Town Meeting for projects which have been designed to expand the sewer collection system and to support major upgrades to the Wastewater Treatment plant, as it also accepts septage from properties which are not directly connected to the sewer system.

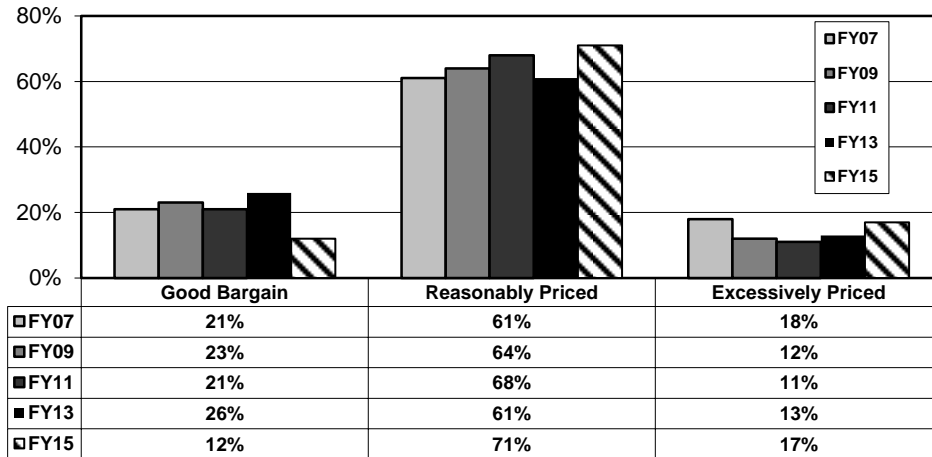
Town Residential Survey

In the fall of 2006, 2008, 2010, and 2012, the Town conducted a telephone survey of 375 randomly selected Concord residents. In the fall of 2014 (FY15), the polling methodology changed and a survey was sent out to all Concord households and 1,337 responses were received. From those responses, 530 respondents said that they use the Town sewer system.

1. What is your opinion of the price of Town Sewer Services?

The vast majority of Concord households that are on Town sewer lines feel that the service is at least “reasonably priced,” while 12% of survey respondents even describe it as “a good bargain.”

1. Opinion of Sewer Service Price



Sewer Rates:

The total revenue projected to be raised through sewer rates in FY16 is **\$2,563,000**.

Rates are set each year by the Public Works Commission following a public hearing with the following goals:

1. To ensure that the Division has the resources to operate, maintain and improve the system;
2. To minimize rate “shock” so that sewer costs can be a relatively predictable expense; and
3. To accurately reflect sewer use (which may be different than seasonally skewed water use).

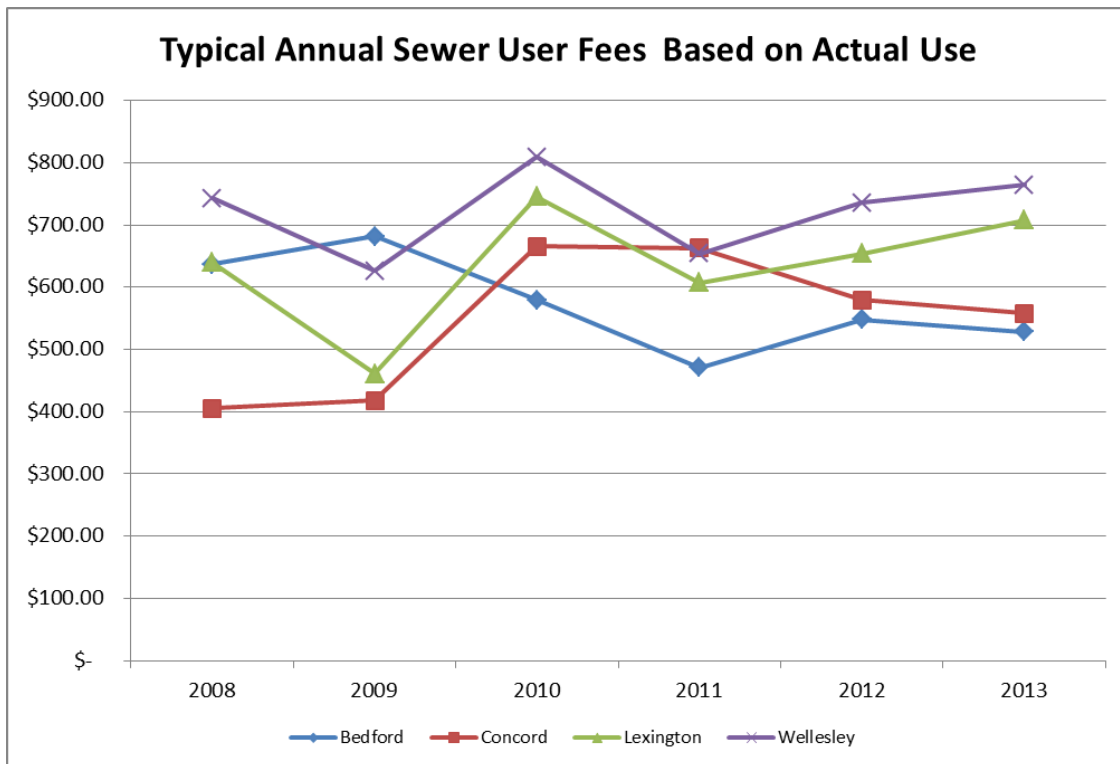
Sewer Rate Highlights

The proposed FY16 sewer rate is \$0.1086 per cubic foot (1 cubic foot = 7.48 gallons).

- The FY16 rate of \$0.1086 represents a 3% increase over the FY15 rate. For the average residential customer, the annual increase in the sewer bill will be \$18.60.
- Summer/fall residential sewer usage is billed at the level of winter/spring water consumption to eliminate the effect of seasonal outdoor water use.
- Non-residential sewer billing is based on water use year-round.
- The proposed septage rate is \$0.083 per gallon which represents a 2.5% increase from FY15.

Benchmarking Sewer Rates

The comparison of sewer rates between individual systems and communities can be particularly difficult, given the wide variation in management and financial structures and customer demographics. Some level of public sewerage service is provided by 57% of Massachusetts communities. Some systems, like Concord, adhere to strict enterprise principles (i.e., full cost accounting with consideration of long range investments and depreciation of fixed assets) while other systems are subsidized through a municipality's general fund. Statewide, 56% of communities have adopted a flat rate structure, 32% use an ascending rate structure and 11% assess a flat fee. More sophisticated and flexible rate designs, such as the winter/spring demand basis employed by Concord for residential customers, have been adopted by only 3% of systems across the state (from Tighe and Bond rate survey 2012). The table below demonstrates how rate adjustments (and cost of service) over time have impacted Concord and three neighboring systems based on actual water use.



Wastewater Program

In addition to routine operations, maintenance and improvements to ensure reliable and quality service to all municipal customers, the programs and initiatives detailed below strike the delicate balance between essential needs and broader community and regulatory interests, particularly in the area of increasingly complex and sophisticated water resource management goals.

Wastewater treatment capacity limitations continue to pose the single most immediate and formidable wastewater challenge facing the community. The following summarizes some of the more important developments and recommendations made to date.



Primary Clari-thickener - Drive Replacement

NPDES Surface Water Discharge Permit: Concord's appeal of its National Elimination System Discharge System Permit (NPDES) (originally issued on August, 2, 2013) remains open. In accordance with recently revised permit appeal procedures, the Town submitted a formal petition for relief of contested provisions to both EPA and MassDEP. Bowditch and Dewey, LLP, provided legal counsel through this formal appeal process. On May 22, 2014, the Town was afforded a rare opportunity to have its arguments heard in front of EPA's Environmental Appeal Board. This hearing was offered to provide the Town with an opportunity to clarify its positions as they related to a new Aluminum discharge standard, more stringent pH limits, and flow limits that continue to restrict Concord's ability to meet wastewater needs that have been clearly identified and supported by Town meeting action. Throughout this effort, the Town Manager, Board of Selectmen, and Public Works Commission have all been kept informed of these developments and understand the balance the Town is seeking regarding permit compliance costs and associated environmental benefits. The Town will continue to work with both EPA and DEP, where appropriate, towards a mutually beneficial resolution.

Wastewater Treatment Facility: Woodard & Curran, Inc. continues to operate the Town's Wastewater Treatment Plant (WWTP), located off Bedford Street, under the supervision of the Water and Sewer Division. The plant operates in compliance with requirements detailed in state and federally issued permits.

An invitation for bids was issued and contract awarded to John W. Egan Inc. (West Newton, MA) who performed the structural rehabilitation of two primary clari-thickeners and the headworks channel located at the Wastewater Treatment Facility. The scope of work included cleaning, repairs and application of a corrosion-resistant coating to these structures. When this work was completed, the mechanical drive for primary clari-thickener (Unit #2) was replaced with a new unit furnished by DBS Manufacturing (Atlanta, GA).

Sewer Station Improvements: Notable improvements made within the sewer pumping stations include the decommissioning of an antiquated operator lift system within the Assabet station, the replacement of a "muffin monster" (a rugged wastewater grinding machine), installation of a no-clog pump impeller in the last of three pumps in the Lowell Road station, and retrofitting of portable emergency generator connectors at neighborhood lift stations to reduce response time when emergency power is required.

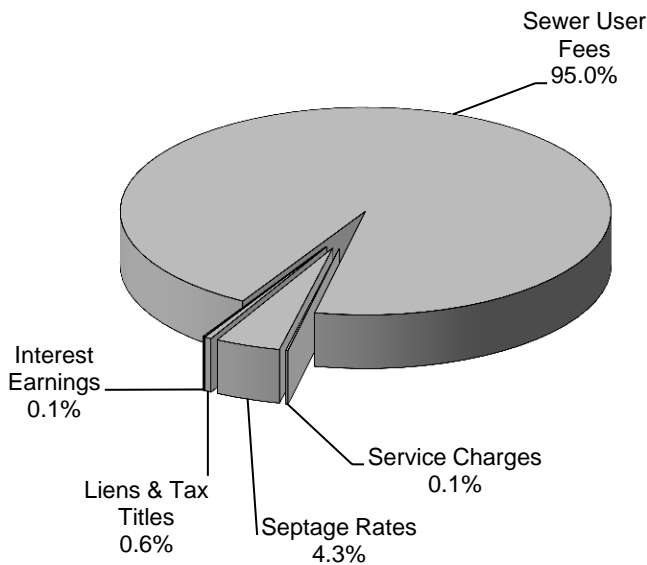
Inflow/Infiltration: Continued investigation and repairs of inflow and infiltration (I/I) problems are important to the upkeep of a properly functioning sewer system. Over the last several decades, Concord has undertaken a variety of efforts with the goal of identifying the locations of I/I problems and correcting the problems deemed most detrimental to the sewer system. This work has included flow monitoring, television inspections of numerous reaches of sewer pipe, smoke testing, dye testing, root control treatment, joint testing and sealing, pipe lining, and occasionally replacement of sewer pipe. In addition, manhole inspections are performed to evaluate the integrity of sewer manholes and their potential for contributing to I/I, with rehabilitation performed as necessary.

Program Implementation:

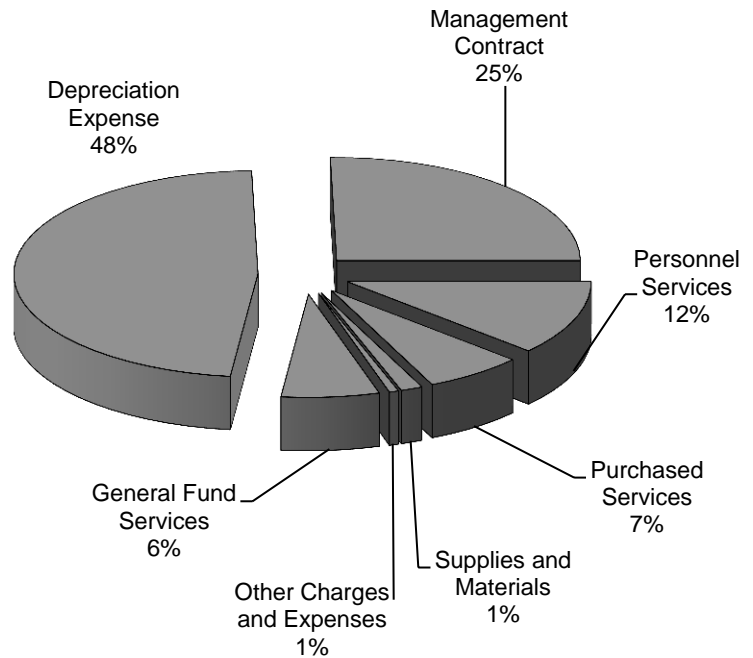
The proposed FY16 operating budget is \$3,257,555. This represents a 3% increase as compared to the Sewer Fund’s revised FY15 operating budget. Depreciation expense reflects the cost of the annual use, or wear-and-tear, of the Sewer Division’s approximately \$21.4 million worth of infrastructure (recorded as of the end of FY14). The FY16 budgeted depreciation expense of \$1,556,563 is roughly 7% of these capital assets. Personnel Services are budgeted at \$380,980 in FY16, a 5.7% increase from the revised FY15 total of \$360,528.

Excluding depreciation, the FY16 budget proposes level funding for wastewater collection and a 2.5% increase in wastewater treatment. The costs associated with the operation of the Wastewater Treatment facility are directly related to meeting state and federally mandated National Pollutant Discharge Elimination System (NPDES) permit requirements and funding contract operation services presently provided by Woodard & Curran. Concord’s 5-year NPDES permit is presently under review by EPA and DEP and will be re-issued in the near future. More restrictive water quality limits resulting in increased costs for chemicals, electricity and sludge management are anticipated in this budget .

FY16 Operating Revenues
 Totaling \$2,698,000



FY16 Operating Expenses
 Totaling \$3,257,556



Operating Income:

This FY16 Budget calls for Operating Expenditures that are \$559,556 above Operating Revenues. This results in an operating loss for the year. However, by FY22, Operating Income turns positive as depreciation expense, which accounts for roughly 47% of all operating expenses, begins to decline and revenue increase (see page V-10, Sewer Financial Statements).

OPERATING REVENUES				
	FY13 Actual	FY14 Actual	Rev. FY15 Budget	FY16 Budget
Sewer User Fees	\$ 2,176,131	\$ 2,261,081	\$ 2,438,000	\$ 2,563,000
Service Charges	5,675	7,538	4,000	4,000
Septage Rates	88,056	96,550	114,000	116,000
Liens & Tax Titles	11,363	8,857	15,000	12,000
Other Revenue	3,052	11,357	3,000	3,000
Total Operating Revenues	\$ 2,284,277	\$ 2,385,383	\$ 2,574,000	\$ 2,698,000
OPERATING EXPENSES				
Sewer Divisions	FY13	FY14	Rev. FY15	FY16
Collection	Actual	Actual	Budget	Budget
Personnel Services	\$ 302,411	\$ 316,561	\$ 315,388	\$ 334,119
Purchased Services	106,362	365,511	188,993	178,256
Supplies & Materials	53,960	41,667	57,175	47,154
Other Charges & Expenses	18,028	25,018	20,266	20,400
General Fund Services	95,785	100,511	103,284	105,660
Audit Adjustments	(1,149)	30,603	-	-
Subtotal	\$ 575,397	\$ 879,871	\$ 685,106	\$ 685,589
Treatment				
Personnel Expenses	\$ 47,510	\$ 49,709	\$ 45,140	\$ 46,861
Purchased Services	18,787	7,383	35,000	35,000
Management Contract	720,050	741,412	806,813	827,883
Supplies & Materials	-	-	-	-
Other Charges & Expenses	200	3,485	-	-
General Fund Services	95,785	100,511	103,284	105,660
Audit Adjustments	-	-	-	-
Subtotal	\$ 882,332	\$ 902,500	\$ 990,237	\$ 1,015,404
Depreciation Expense	1,641,908	1,483,997	1,475,682	1,556,563
Total Operating Expense	\$ 3,099,637	\$ 3,266,368	\$ 3,151,025	\$ 3,257,556
RETIREMENT AND OPEB ASSESSMENT				
<i>For Informational Purpose Only</i>				
	FY13 Actual	FY14 Actual	Rev. FY15 Budget	FY16 Budget
Retirement Assessment	\$ 9,039	\$ 12,490	\$ 12,832	\$ 18,070
OPEB Assessment	4,544	4,849	5,000	5,500
Total Assessment	\$ 13,583	\$ 17,339	\$ 17,832	\$ 23,570

AUTHORIZED POSITIONS					
Collection Personnel Costs	Rev. FY15 Budget		FY16 Budget		
	Positions/Hours	\$ Amount	Positions/Hours	\$ Amount	
Regular Staff					
Water and Sewer Superintendent	0.20 FTEs	\$ 21,650	0.20 FTEs	\$ 21,331	
Assistant to Superintendent	0.20	17,141	0.20	16,889	
Senior Env. & Reg. Coordinator	0.20	15,646	0.20	15,021	
Env. & Reg. Coordinator	0.20	10,302	0.20	9,930	
Administrative Assistant	0.20	12,335	0.20	12,609	
Public Works Supervisor	0.40	32,653	0.40	33,461	
Crew Leader	0.40	27,388	0.40	28,065	
Senior Treatment System Operator	0.00	13,464	0.20	13,799	
Treatment System Operator	0.60	22,570	0.40	23,783	
System Maintainer	1.00	50,047	1.00	51,031	
Standby Pay (5111)	365 hrs	14,270	365 hrs	14,622	
Charges to Snow Account	40	(1,082)	0	-	
Charges to Projects	N/A	-	N/A	-	
Salary Adjustments	N/A	-	N/A	5,161	
Subtotal	3.40 FTEs	\$ 236,384	3.40 FTEs	\$ 245,702	
Employee Benefits					
Health Insurance	N/A	\$ 13,000	N/A	\$ 14,000	
Life Insurance	N/A	-	N/A	-	
Dental Insurance	N/A	-	N/A	-	
OPEB	N/A	5,000	N/A	5,500	
Retirement Contribution	N/A	12,832	N/A	18,070	
Subtotal	N/A	\$ 30,832	N/A	\$ 37,570	
Payroll Taxes					
Medicare Tax	N/A	\$ 3,000	N/A	\$ 3,500	
Social Security Contribution	N/A	-	N/A	-	
Subtotal	N/A	\$ 3,000	N/A	\$ 3,500	
Other Personnel Costs					
Overtime (5130)	800 hrs.	\$ 38,528	800 hrs.	\$ 40,080	
Police Overtime (5131)	100	4,000	100	4,000	
IT Salary (5111)	N/A	2,644	N/A	2,666	
Salary Adjustments OT (5130)	N/A	-	N/A	601	
Subtotal	N/A	\$ 45,172	N/A	\$ 47,346	
Total Collections	3.40 FTEs	\$ 315,388	3.40 FTEs	\$ 334,119	
Treatment Personnel Costs					
Public Works Engineer	0.80 FTEs	\$ 58,000	0.80 FTEs	\$ 58,086	
Charge to Capital Projects	N/A	(16,860)	N/A	(16,874)	
Salary Adjustments (2%)	N/A	-	N/A	1,649	
Health	N/A	3,000	N/A	3,000	
Medicare Tax	N/A	1,000	N/A	1,000	
Total Treatment	0.80 FTEs	\$ 45,140	0.80 FTEs	\$ 46,861	
Total Sewer Personnel	4.20 FTEs	\$ 360,528	4.20 FTEs	\$ 380,980	

NET INCOME				
	FY13	FY14	Rev. FY15	FY16
	Actual	Actual	Budget	Budget
Statement of Net Income:				
Operating Revenues	\$ 2,284,277	\$ 2,385,383	\$ 2,574,000	\$ 2,698,000
Less Operating Expenses	(3,099,637)	(3,266,368)	(3,151,025)	(3,257,556)
Operating Income	\$ (815,360)	\$ (880,985)	\$ (577,025)	\$ (559,556)
Non-operating Revenues (Expenses)				
Add Investment Income	\$ 8,584	\$ 14,316	\$ 36,815	\$ 65,484
Add CoMag Incentive Payments	1,006,882	2,943,125	-	-
Add Sewer Improvement Revenues	118,936	504,999	612,500	201,000
Less Int. Exp and Admin. Fees	(186,087)	(174,172)	(171,399)	(171,621)
Non-operating Income	\$ 948,315	\$ 3,288,268	\$ 477,916	\$ 94,863
Net Income	\$ 132,957	\$ 2,407,283	\$ (99,109)	\$ (464,693)

Note: FY14 Net Income of \$2,407,283 plus Sewer Betterment income of \$158,012 minus expenses of \$34,377 + \$2,578 in Betterment interest and issuance expense plus the transfer in of \$79,512 for the General Fund portion of the WPAT loan equals the change in net assets of \$2,607,852 seen in the FY14 Audited Financial Statements.

AVAILABLE RESOURCES				
Resources Available from Current Operations for Replacement & Renewal of Facility:				
	FY13	FY14	Rev. FY15	FY16
Capital Purposes	Actual	Actual	Budget	Budget
Add Depreciation Expense	\$ 1,641,908	\$ 1,483,997	\$ 1,475,682	\$ 1,556,563
Add Net Income	132,957	2,407,283	(99,109)	(464,693)
Add Bond Proceeds	-	-	600,000	-
Less Bonds Payable	(593,420)	(601,599)	(613,557)	(653,932)
Net Available for Capital	\$ 1,181,445	\$ 3,289,681	\$ 1,363,016	\$ 437,938

Note: Net Available for Capital does not include funds available in the Sewer Improvement Fund

CASH POSITION AND FUND BALANCE FORECAST				
Cash at Year Opening	FY15		FY16	
Cash on July 1st	\$ 7,375,157		\$ 7,350,953	
Add Receivables	374,988		374,988	
Less Cash held for Liabilities	(355,627)		(355,627)	
Fund Balance on July 1st	\$ 7,394,518		\$ 7,370,314	
Fund Balance Details (projected)	Operating Fund	Depreciation Fund	Operating Fund	Depreciation Fund
Fund Balance on July 1st	\$ (119,337)	\$ 7,513,855	\$ (832,003)	\$ 8,202,317
Net Income	(99,109)	-	(464,693)	-
Bonds Payable	(613,557)	-	(653,932)	-
Borrowing Proceeds	-	600,000	-	-
Capital Borrowing	-	(600,000)	-	-
Capital Outlay (non-borrowing)	-	(787,220)	-	(2,042,080)
Add Depreciation Expense	-	1,475,682	-	1,556,563
Balance Projected at June 30th	(832,003)	8,202,317	(1,950,628)	7,716,800
Fund Balance on June 30th	\$ 7,370,314		\$ 5,766,172	
Cash at Year End (projected)				
Fund Balance on June 30th	\$ 7,370,314		\$ 5,766,172	
Less Receivables	(374,988)		(374,988)	
Add Cash Held for Liabilities	355,627		355,627	
Projected Cash at June 30th	\$ 7,350,953		\$ 5,746,811	
Sewer Improvement Fund Cash	\$ 2,977,265		\$ 2,925,265	
Unrestricted Cash	\$ 4,373,688		\$ 2,821,546	

SEWER IMPROVEMENT FUND								
	FY13		FY14		Rev. FY15		FY16	
	Actual		Actual		Budget		Budget	
Cash on July 1st	\$	1,986,531	\$	2,073,319	\$	2,525,765	\$	2,977,265
Revenues		118,936		504,999		612,500		201,000
Expenditures		(32,148)		(52,553)		(161,000)		(253,000)
Adjustment		-		-		-		-
Cash on June 30th	\$	2,073,319	\$	2,525,765	\$	2,977,265	\$	2,925,265
Net Activity	\$	86,788	\$	452,446	\$	451,500	\$	(52,000)

Note: The Sewer Improvement Fund is included in the cash and fund analysis found on the preceding page (the Sewer Betterment Account, shown below, is not).

SEWER BETTERMENT CASH FLOW ANALYSIS								
	FY13		FY14		Rev. FY15		FY16	
	Actual		Actual		Budget		Budget	
Activity								
Cash at July 1st	\$	718,136	\$	733,061	\$	747,596	\$	761,125
Cash Received		173,117		172,547		171,358		158,597
Debt Service and Admin. Cost		(158,192)		(158,012)		(157,829)		(157,641)
Cash at June 30th	\$	733,061	\$	747,596	\$	761,125	\$	762,081
Net Activity	\$	14,925	\$	14,535	\$	13,529	\$	956
Net Assets (as of June 30th)								
Cash	\$	733,061	\$	747,596	\$	761,125	\$	762,081
Betterment Receivables		1,020,009		886,206		748,014		620,113
Net Assets	\$	1,753,069	\$	1,633,802	\$	1,509,139	\$	1,382,194
Less Remaining Debt Service		(2,038,732)		(1,880,720)		(1,726,892)		(1,565,250)
Surplus / Deficit	\$	(285,663)	\$	(246,918)	\$	(217,753)	\$	(183,056)

Note: The negative number shown as Surplus / Deficit will be offset by future collections from interest earned on the account's cash holdings, as well as by interest charged to property owners with outstanding balances (both of which accounting practices do not allow to be shown as an asset).

The **Sewer Improvement Fund** was established under a policy formulated by the Public Works Commission and authorized by Article 25 at Town Meeting in 1989 whereby new connections and uses outside the scope of the 1984 Sewer Facilities Plan pay a fee which is used to create new capacity in the sewer system for the additional flows, either through expansion of the existing sewer infrastructure or reduction in infiltration and inflow.

The **Sewer Betterment Fund** segregates costs and receipts related to expansion of the sewer system. When sewer service is extended into new neighborhoods by vote of Town Meeting, a portion of the cost for the sewer mains in the street and the pumping stations in the neighborhood is assessed as a betterment to the properties on those streets that directly benefit by having sewer available; the remainder of the cost is paid by the Sewer Fund and the Town property tax. The amount of the betterment is set by the Public Works Commission after the sewer extension project is finished and all costs have been paid. Betterments must be paid by property owners when sewer service becomes available whether they immediately tie into the sewer or not. Payments may be made at once or spread over a number of years.

Sewer Fund

Revenues and Expenditures

Sewer Fund: Plan and Projection	ACTUAL		Actual	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	10 Years
	FY 2013	FY 2014													FY16-25
Operating Revenue															
User Fees	2,176,131	2,261,081	2,438,000	2,563,000	2,668,000	2,964,000	3,098,000	3,239,000	3,385,000	3,536,000	3,694,000	3,858,000	3,994,000	4,166,000	31,797,000
Other	108,146	124,302	136,000	135,000	137,000	140,000	144,000	147,000	150,000	152,000	155,000	158,000	158,000	158,000	1,460,000
Subtotal	2,284,277	2,385,383	2,574,000	2,698,000	2,805,000	3,106,000	3,242,000	3,386,000	3,535,000	3,688,000	3,849,000	4,016,000	4,152,000	4,324,000	33,257,000
Operating Expense															
O & M	1,457,727	1,782,373	1,675,342	1,700,992	1,752,242	1,859,044	1,915,501	1,973,254	2,032,760	2,094,073	2,157,249	2,222,344	2,289,593	2,357,842	19,512,906
Depreciation	1,641,908	1,483,997	1,475,682	1,556,563	1,650,889	1,705,993	1,736,902	1,736,902	1,736,902	1,736,902	1,736,902	1,736,902	1,736,902	1,736,902	14,910,496
Subtotal	3,099,635	3,266,370	3,151,025	3,257,555	3,403,131	3,564,037	3,652,402	3,699,937	3,769,662	3,830,974	3,894,151	3,961,246	4,026,494	4,093,744	34,423,402
Operating Income															
	-815,358	-880,987	-577,025	-559,555	-598,131	-592,497	-30,402	-7,834	107,158	173,347	397,467	523,081	523,081	523,081	-1,166,402
ADD: Interest Income	8,584	14,316	36,815	65,484	107,154	159,877	129,667	119,536	140,252	163,896	190,658	102,422	102,422	102,422	1,348,018
Co-Mag Incentive Payments	1,006,882	2,943,125	612,500	201,000	802,000	201,000	201,000	201,000	201,000	201,000	201,000	201,000	201,000	201,000	2,611,000
Sewer Improvement Fees	118,936	504,999	612,500	201,000	802,000	201,000	201,000	201,000	201,000	201,000	201,000	201,000	201,000	201,000	2,611,000
LESS: Interest Expense															
Existing Debt	186,087	162,472	165,399	150,621	134,242	110,792	98,710	86,384	73,808	60,979	48,502	34,979	48,502	34,979	921,651
New Debt	0	0	0	21,000	19,950	17,850	21,800	20,250	18,700	17,150	15,600	14,050	15,600	14,050	185,250
Bond Anticipation Notes (BANs)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,750
Issuance expense	0	11,700	6,000	0	0	100	1,000	0	0	0	0	0	0	0	1,100
Net Income	132,957	2,407,281	-99,109	-464,691	156,831	-359,695	177,004	206,069	355,902	460,114	725,023	777,475	777,475	777,475	1,682,865
Available Resources from:															
Net income	132,957	2,407,281	-99,109	-464,691	156,831	-359,695	177,004	206,069	355,902	460,114	725,023	777,475	777,475	777,475	1,682,865
Depreciation expense	1,641,908	1,483,997	1,475,682	1,556,563	1,650,889	1,705,993	1,736,902	1,736,902	1,736,902	1,736,902	1,736,902	1,736,902	1,736,902	1,736,902	14,910,496
subtotal	1,774,865	3,891,278	1,376,574	1,091,871	1,807,721	1,346,298	1,533,906	1,626,648	1,750,984	1,880,694	2,019,308	2,048,049	2,048,049	2,048,049	16,593,361
Funds Provided by Improvement Fees	32,148	32,833	161,000	253,000	107,000	594,000	1,215,000	1,219,000	123,000	127,000	135,000	135,000	135,000	135,000	100,000
Bond proceeds	0	0	600,000	0	0	100,000	100,000	0	0	0	0	0	0	0	100,000
Loan proceeds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100,000
LESS: Principal repayments															
Existing Debt	593,420	601,599	613,557	623,932	534,516	556,331	567,570	579,036	590,734	602,668	614,843	627,265	627,265	627,265	5,842,209
New Debt	0	0	0	30,000	30,000	30,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	360,000
BAN Repayment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100,000
Net Available for Capital Purposes	1,213,593	3,322,512	1,524,017	690,939	1,350,205	1,364,984	2,216,551	2,145,336	1,130,612	1,247,250	1,499,465	1,369,026	1,499,465	1,520,784	10,491,152
Capital Plan	177,612	128,582	1,387,220	2,042,080	486,360	974,150	2,296,950	2,227,670	344,210	358,760	372,330	402,510	386,910	402,510	9,891,930
Cash Position															
Beginning balance	3,192,145	3,945,812	7,375,157	7,350,954	5,746,814	6,503,658	6,300,493	5,005,093	4,367,162	5,128,651	5,994,347	6,971,902	6,971,902	6,971,902	
ADD: Net available	1,213,593	3,322,512	1,524,017	690,939	1,350,205	1,364,984	2,216,551	2,145,336	1,130,612	1,247,250	1,499,465	1,369,026	1,499,465	1,520,784	
LESS: Planned Capital	177,612	128,582	1,387,220	2,042,080	486,360	974,150	2,296,950	2,227,670	344,210	358,760	372,330	402,510	386,910	402,510	
Sewer Improvement Fee Support	32,148	32,833	161,000	253,000	107,000	594,000	1,215,000	1,219,000	123,000	127,000	135,000	135,000	135,000	135,000	
Changes in assets & liabilities	250,166	-268,249													
Ending balance	3,945,812	7,375,157	7,350,954	5,746,814	6,503,658	6,300,493	5,005,093	4,367,162	5,128,651	5,994,347	6,971,902	7,950,176	7,950,176	7,950,176	
(does not include Betterment balance)															
Sewer Improvement Fund Balance	2,073,319	2,525,765	2,977,265	2,925,265	3,620,265	3,227,265	2,213,265	1,952,265	1,273,265	1,347,265	1,483,265	1,417,265	1,483,265	1,544,265	
(included in Ending Balance)															
Ending balance w/o Sewer Improvement	1,872,493	4,849,392	4,373,689	2,821,548	2,883,393	3,073,227	2,791,828	2,508,494	3,093,896	3,781,386	4,577,082	5,488,636	5,488,636	6,405,911	

DEBT SERVICE

	FY13 Actual	FY14 Actual	Rev. FY15 Budget	FY16 Budget
Long Term Debt Repayment:				
Principal	\$ 593,420	\$ 601,599	\$ 613,557	\$ 653,932
Interest	181,698	162,472	154,461	161,461
Issuance Expense	-	-	6,000	-
Administration Fee (WPAT)	12,448	11,700	10,938	10,160
Totals	\$ 787,566	\$ 775,771	\$ 784,956	\$ 825,553

Note: The Debt Schedule above and on the facing page does not account for Accrual periods across fiscal years, and so differs from the Town's Audited Financial Statements.

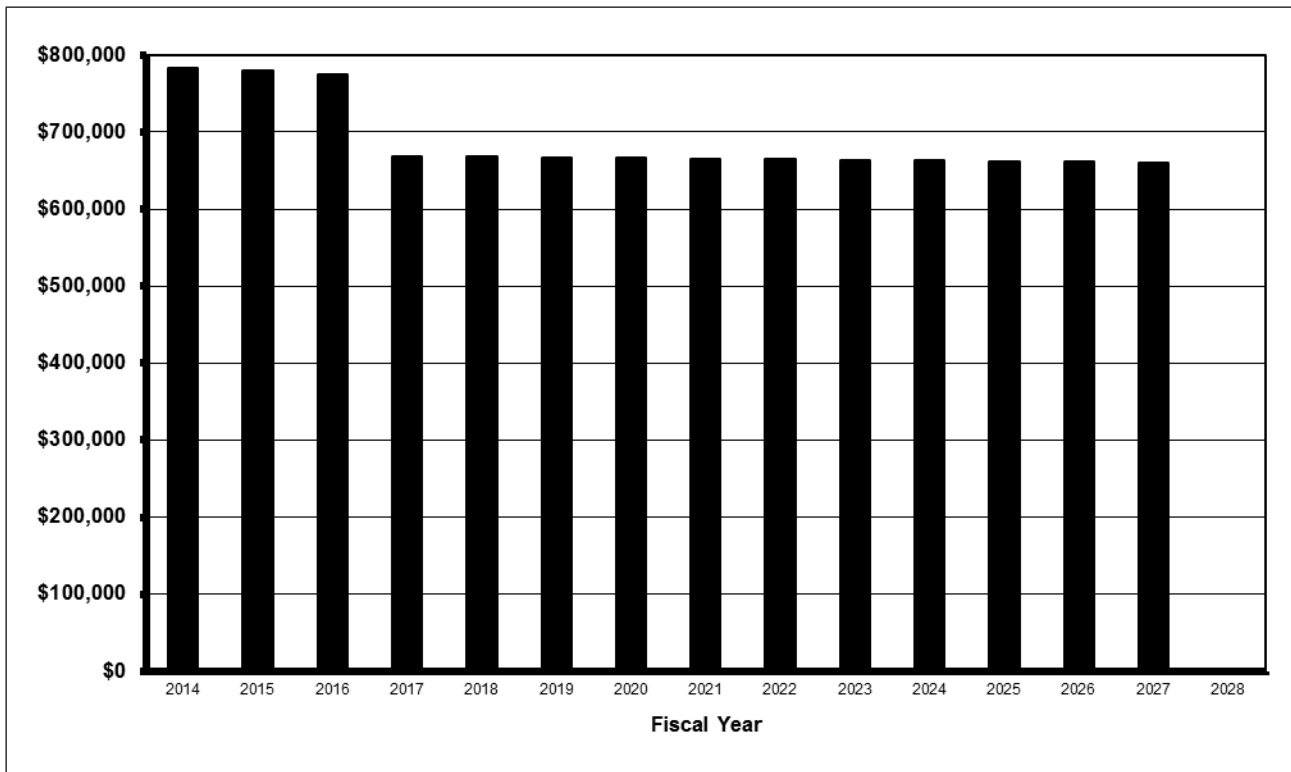
PAYMENTS TO THE GENERAL FUND

	FY13 Actual	FY14 Actual	Rev. FY15 Budget	FY16 Budget
Management & Engineering:				
Public Works Administration	\$ 33,032	\$ 34,084	\$ 34,724	\$ 34,542
Public Works Engineering	17,436	21,461	22,027	21,866
Highway Maintenance	4,324	4,496	4,654	4,691
133/135 Keyes Road	11,900	11,635	11,801	12,006
Subtotals	\$ 66,692	\$ 71,676	\$ 73,206	\$ 73,105
Financial & Administrative:				
Town Manager	\$ 28,809	\$ 29,304	\$ 30,464	\$ 28,522
Human Resources	5,152	5,286	5,337	5,532
Finance Administration	16,876	17,732	18,241	18,392
Treasurer-Collector	12,327	12,634	12,849	13,019
Town Accountant:				
General Services	11,819	12,285	12,197	11,883
Audit Services	6,000	6,000	6,000	6,840
Town House Facilities	3,447	3,364	3,368	3,316
Subtotals	\$ 84,430	\$ 86,605	\$ 88,456	\$ 87,504
Natural Resource:				
Planning	\$ 6,125	\$ 6,531	\$ 7,085	\$ 7,181
Natural Resources	5,868	6,035	6,270	6,315
Health	28,455	30,175	31,550	31,644
Subtotals	\$ 40,448	\$ 42,741	\$ 44,905	\$ 45,140
Salary Reserve	\$ -	\$ -	\$ -	\$ 5,571
Totals	\$ 191,570	\$ 201,022	\$ 206,567	\$ 211,320

SEWER DEBT SERVICE

Exclusive of betterment financing

Fiscal Year	Principal	Interest	Admin. Fees	Total
2013	593,420	194,146	12,448	\$800,014
2014	603,388	179,930	11,700	\$795,018
2015	613,557	165,399	10,938	\$789,894
2016	623,932	150,621	10,160	\$784,713
2017	534,516	134,242	9,366	\$678,124
2018	545,314	122,634	8,556	\$676,504
2019	556,331	110,792	7,730	\$674,853
2020	567,570	98,710	6,887	\$673,167
2021	579,036	86,384	6,027	\$671,447
2022	590,734	73,808	5,149	\$669,691
2023	602,668	60,979	4,254	\$667,901
2024	614,843	48,502	3,341	\$666,686
2025	627,265	34,979	2,410	\$664,654
2026	639,936	21,182	1,459	\$662,577
2027	652,865	7,108	490	\$660,463
2028	0	0	0	\$0
Totals	\$8,945,375	\$1,489,416	\$100,915	\$10,535,706



FY16 Capital Plan:**COLLECTION SYSTEM****Station Structures: \$12,000**

Annual capital outlay for improvements and replacement of structures including six neighborhood lift stations and two main pump stations.

Station Equipment: \$1,525,000

Annual capital outlay for improvements and replacement of equipment housed within six neighborhood lift stations and two main pump stations. Equipment is required to control, monitor, pump, store, and treat wastewater enroute to WWTP including motors, pumps, motor control panels, and air compressors. Complete upgrades are planned for Lowell Road and Assabet Avenue pump stations (deferred from FY15 budget) including replacement of major mechanical, electrical, and instrumentation systems as well as upgrades for odor control and solids handling.

Mains (Sewer Collectors): \$16,000

Annual capital outlay for improvements to and extension of distribution system. Program is intended to insure that aging and deteriorating main is repaired or replaced in a manner that will maximize service. The Water & Sewer Division will continue to coordinate system improvements with other Town departments to insure division activities are performed in concert with other public works initiatives (such as Roads Program and CMLP initiatives). Planned work includes routine casting replacements and adjustments.

Inflow/Infiltration: \$103,000

The wastewater treatment plant currently receives about one million gallons of sewer flow per day. In accordance with our WWTP NPDES permit, annual inflow and infiltration (I/I) activities are required to reduce groundwater and storm water which enters the collection system through deteriorating pipes, leaking manholes or illicit storm water connections. Planned work includes targeted TV inspections, metering and spot repair of sewer mains.

Meter Replacement Program: \$24,000

Sewer fund portion of costs associated with system-wide meter maintenance and replacement efforts. Efforts will include advancement of smart water meter technology to allow for increased customer awareness of individual water consumption patterns and water saving opportunities.

WASTE WATER TREATMENT PLANT**Structures: \$125,000**

Annual capital outlay for improvements and replacement of WWTP structures. Planned improvements include the rehabilitation of the mechanical system associated with primary clarithickner #1, cleaning of a 20,000 gallon septage holding tank, and replacement of a roof located on the former chlorine contact building located adjacent to discharge weir.

Equipment: \$25,000

Annual cost to replace equipment presently used beyond recommended service life, including motors, pumps, motor control panels, chemical feed systems, and process instrumentation. Planned work includes electrical/process control upgrades to the plant water system and refurbishment of the primary sludge pump.

GENERAL PLANT**Keyes Road Facility: \$26,000**

Capital outlay for improvements to Water/Sewer administrative office and garage facilities.

Vehicles: \$20,400

The Water/Sewer fleet consists of 17 service vehicles and miscellaneous equipment such as compressor, vacuum, skid steer, and forklifts which are replaced in accordance with CPW criteria based on industry-accepted useful-life measures. Planned replacements include two ¾ ton service vehicles and a portable vacuum/trailer unit.

Wastewater Capacity: \$150,000

Includes ongoing wastewater capacity assessment activities including long-term NPDES surface water compliance efforts, treatment and disposal alternative analysis, and the development of an integrated water resource management plan (pending EPA support and interest).

CAPITAL SPENDING PLAN									
	Actual FY13	Actual FY14	FY15	FY16	FY17	FY18	FY19	FY20	Total FY16-20
<u>Collection System</u>									
<u>Pumping Plant</u>									
Station Structures	0	0	11,000	12,000	13,000	14,000	15,000	16,000	70,000
Station Equipment	65,257	43,968	100,000	1,525,000	26,000	27,000	28,000	29,000	1,635,000
Subtotal	65,257	43,968	111,000	1,537,000	39,000	41,000	43,000	45,000	1,705,000
<u>Collection Plant</u>									
Sewer Mains/Laterals	0	0	15,000	16,000	17,000	18,000	19,000	20,000	90,000
Inflow/Infiltration (Note 1)	0	32,833	100,000	103,000	107,000	111,000	115,000	119,000	555,000
Meter Replacements	11,741	0	41,000	24,000	25,000	23,000	25,000	28,000	125,000
Subtotal	11,741	32,833	156,000	143,000	149,000	152,000	159,000	167,000	770,000
<u>Wastewater Treatment Plant</u>									
Structures	22,960	19,675	284,000	125,000	200,000	200,000	30,000	31,000	586,000
Plant Equipment	14,994	0	115,000	25,000	26,000	27,000	28,000	29,000	135,000
Capacity/Treatment Optimization	0	0	0	0	0	0	800,000	800,000	1,600,000
Depreciable Personal Services	13,743	14,772	15,220	15,680	16,160	16,650	17,150	17,670	83,310
Subtotal	51,697	34,447	414,220	165,680	242,160	243,650	875,150	877,670	2,404,310
<u>General Plant</u>									
Keyes Road CPW Facility	5,405	0	25,000	26,000	27,000	28,000	100,000	28,000	209,000
Vehicle Replacements	11,364	17,334	20,000	20,400	29,200	26,500	19,800	10,000	105,900
Subtotal	16,769	17,334	45,000	46,400	56,200	54,500	119,800	38,000	314,900
<u>Wastewater Management Project</u>									
Wastewater Planning (Note 1)	32,148	0	61,000	150,000	0	483,000	1,100,000	1,100,000	2,833,000
W.R. Grace land acquisition (funded through borrowing)			600,000						0
Subtotal	32,148	0	661,000	150,000	0	483,000	1,100,000	1,100,000	2,833,000
Total Capital Uses	177,612	128,582	1,387,220	2,042,080	486,360	974,150	2,296,950	2,227,670	8,027,210
Funding the Capital Plan									
Total - User Fees	145,464	95,749	626,220	1,789,080	379,360	380,150	981,950	1,008,670	4,539,210
Total - Sewer Improvement Fees	32,148	32,833	161,000	253,000	107,000	594,000	1,215,000	1,219,000	3,388,000
Total - Borrowing			600,000				100,000		100,000
Total Capital Sources	177,612	128,582	1,387,220	2,042,080	486,360	974,150	2,296,950	2,227,670	8,027,210
Note 1: Charged to Sewer Improvement Fund									

SEWER RATES

(Per Cubic Foot)

Class of Customer	Current FY15	Effective 6/1/15	%Chg.
S-15	(1 cubic foot = 7.48 gallons)		
1 Residential Service Rate billed year around but uses wintertime average consumption for non-wintertime months.	\$ 0.1055	\$ 0.1086	3%
2 Non-Residential Service Rate billed year around using actual readings for each billing period.	\$ 0.1055	\$ 0.1086	3%
3 Chiller/Cooling System Discharge Sewer Service For large non-residential sewer customers with dedicated cooling-system water supply	\$ 0.0211	\$ 0.0217	3%

Sample Impacts	Current Annual	New Annual	Annual Change	Monthly Change	% Chg.
1 Average Residential Customer (1,000 cu ft bimonthly wintertime use)	\$ 633	\$ 652	\$ 18.60	\$ 1.55	3%
2 Typical Non-Residential Customer (1,800 cu ft bimonthly)	\$ 1,139	\$ 1,173	\$ 33.48	\$ 2.79	3%

