

Section V

Sewer Fund

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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

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Highlights

- The proposed FY11 sewer rate of \$8.76 per unit represents a 5% increase over the FY 2010 rate of \$8.35 per unit.
- The proposed FY11 capital improvement plan is \$488,000.
- In accordance with Article 41 of 2009, Wastewater Planning Capacity Study, the Town has hired Weston & Sampson to assess wastewater management alternatives required to meet long-range community development and redevelopment visions.
- The proposed FY11 operating budget is \$3,141,500, a decrease of 0.5% from that of FY10.

Expenditure Summary

	FY08 Actual	FY09 Actual	FY10 Budgeted	FY11 Proposed
Operating Income	\$ (461,035)	\$ (635,123)	\$ (880,494)	\$ (755,500)
Net Income	\$ (649,882)	\$ (706,668)	\$(1,055,780)	\$ (914,647)
Undesignated Fund Balance	\$ 2,772,173	\$ 3,581,726	\$ 2,866,144	\$ 2,670,005

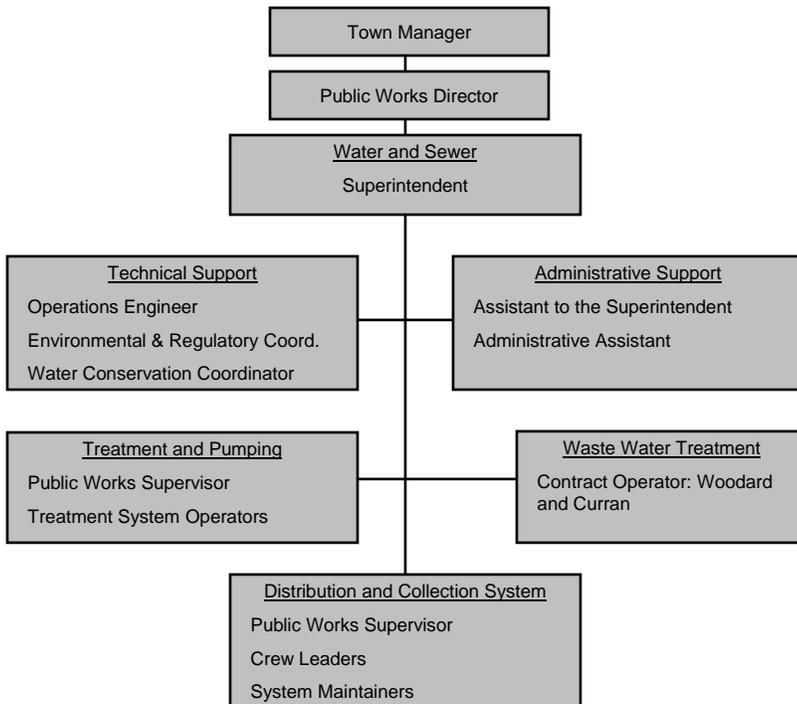
See page V-11 for greater detail on income and fund balance results.

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 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 2009, the total value of collection system and treatment plant infrastructure assets was approximately 29 million dollars.

The municipal sewer system serves over 1,780 residential and commercial customers representing approximately 35% of the community. The wastewater treatment facility also handles approximately 1.5 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.

Citizen Survey

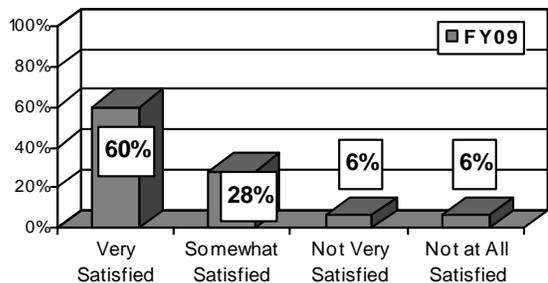
In September of 2006 and again in November of 2008, the Town conducted a telephone survey of 300 randomly selected Concord residents. For the Sewer Division, three questions were asked:

1. How satisfied are you with the overall quality of Town Sewer Services?

Nearly 90% of respondents reported being at least “somewhat satisfied” with the Town’s Sewer Services, while 60% reported being “very satisfied.”

The FY09 survey was the first to include this question.

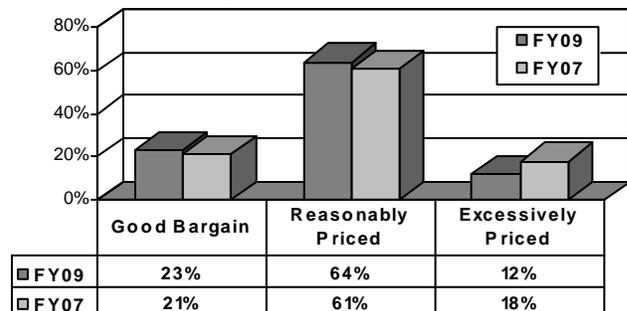
1. Satisfaction with Sewer Services



2. 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 23% of survey respondents even describe it as “a good bargain.”

2. Opinion of Sewer Service Price



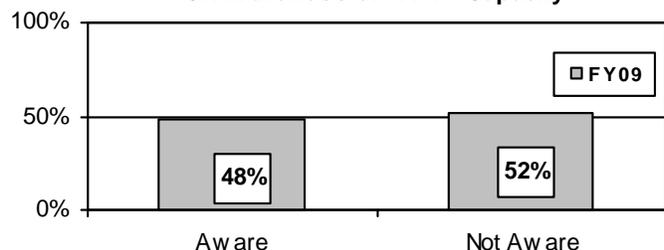
3. Are you aware that the wastewater treatment plant is nearing capacity and that this may limit the ability of sewer services to be expanded in the future?

The response suggests that many residents are aware of limitations that the current wastewater treatment capacity imposes on the Town.

A component of the \$142,000 wastewater management plan (Art. 41 of 2009) will involve public education efforts on this issue.

See page V-4 for more on capacity issues.

3. Awareness of WWTP Capacity



Sewer Rates:

The total revenue projected to be raised through sewer rates in FY 2011 is: **\$2,260,000**. This represents 95% of total Sewer Fund revenues.

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

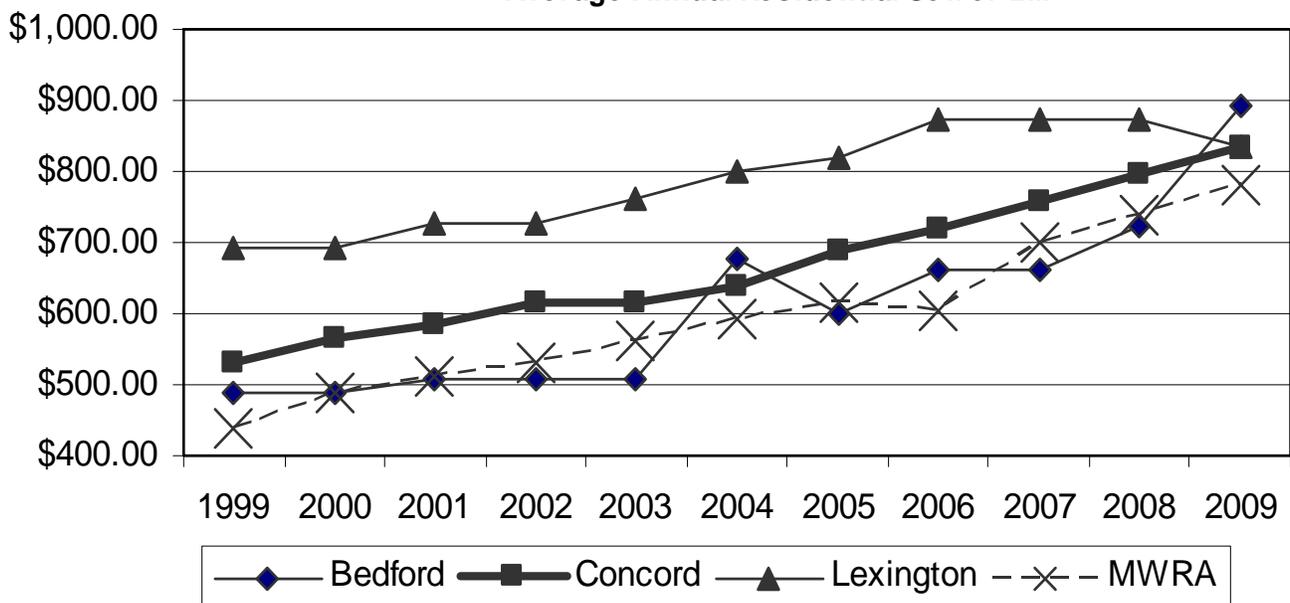
The proposed FY 2011 sewer rate is \$8.76 per unit (1 unit = 748 gallons) which represents a 5% increase over the FY 2010 rate.

- 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 FY 2011 septage rate is \$0.075 per gallon which represents a 1.3% increase from FY 2010.

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 58% 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, 58% of communities have adopted a flat rate structure, 26% use an ascending rate structure and 13% 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.

Average Annual Residential Sewer Bill



Discussion: This table demonstrates how rate adjustments (and cost of service) over time have impacted Concord and three neighboring systems.

Wastewater services and treatment needs have received a significant amount of attention within the past decade, both within the community and by outside regulatory agencies. These interests have spurred a number of studies, which have culminated in capital improvements (including process upgrades and service area expansions) and, of equal importance, identified service limitations.

The programs and initiatives detailed below have been designed to strike a balance between customer interests relating to cost effective and reliable service, and broader community and regulatory interests attributed to evolving water resource protection challenges and publicly supported land-use development and re-development.



The Bedford Street Wastewater Treatment Facility

Wastewater Planning: The Concord community has continued to maintain a high level of interest in long-range wastewater planning. Following the December 2007 release of the “Status of Municipal Wastewater Treatment in Concord, MA,” the Wastewater Planning Task Force formed at the request of the Board of Selectmen presented Article 41 “Wastewater Planning Capacity Study” at the 2009 Annual Town Meeting. A resolution of support for this article called for an evaluation of wastewater treatment and capacity management alternatives to accommodate wastewater flows above and beyond those flows necessary to meet existing requirements and obligations resulting from development and re-development under current zoning.

Weston & Sampson has been hired to assess wastewater management alternatives required to meet long-range community development and redevelopment visions. Their scope of service includes: the review of past wastewater planning work, the development of a Conceptual Wastewater Alternative Analysis, and the development of a detailed wastewater alternatives analysis which will involve public participation and possible presentations to future Town Meetings.

In keeping with this same Town Meeting resolution, Woodard & Curran was tasked to complete a capacity assessment of the new wastewater treatment plant, focusing on process-specific flow and loading capacity constraints. Their findings indicate that for a relatively modest level of investment, flow and nutrient loads to this facility could be increased from the present permitted rate of 1.2 million gallons per day (average). It is understood that regardless of what alternatives are evaluated, any significant increases or changes in municipal wastewater management efforts will involve state and federal review and approval.

Pumping Station Equipment/Structures: Efforts continue to be made to systematically and efficiently replace all of the original pumping equipment associated with our wastewater pumping facilities as they reach the end of their useful lives. Much of the equipment within these facilities was installed in the mid 1980s. A contract was issued to Aqua Line Utility, Inc. (E. Bridgewater, MA) for the rehabilitation of the Laurel and Pilgrim Road sewer ejector stations, two of the four mid 1980s neighborhood lift stations. The rehabilitation efforts include the installation of emergency bypass systems and reconditioning of the subsurface chambers along with the integration of newer, more efficient and operator-friendly submersible pumping systems. Park Lane and Gifford Lane stations are of a similar vintage and are slated for similar upgrades in the near future.

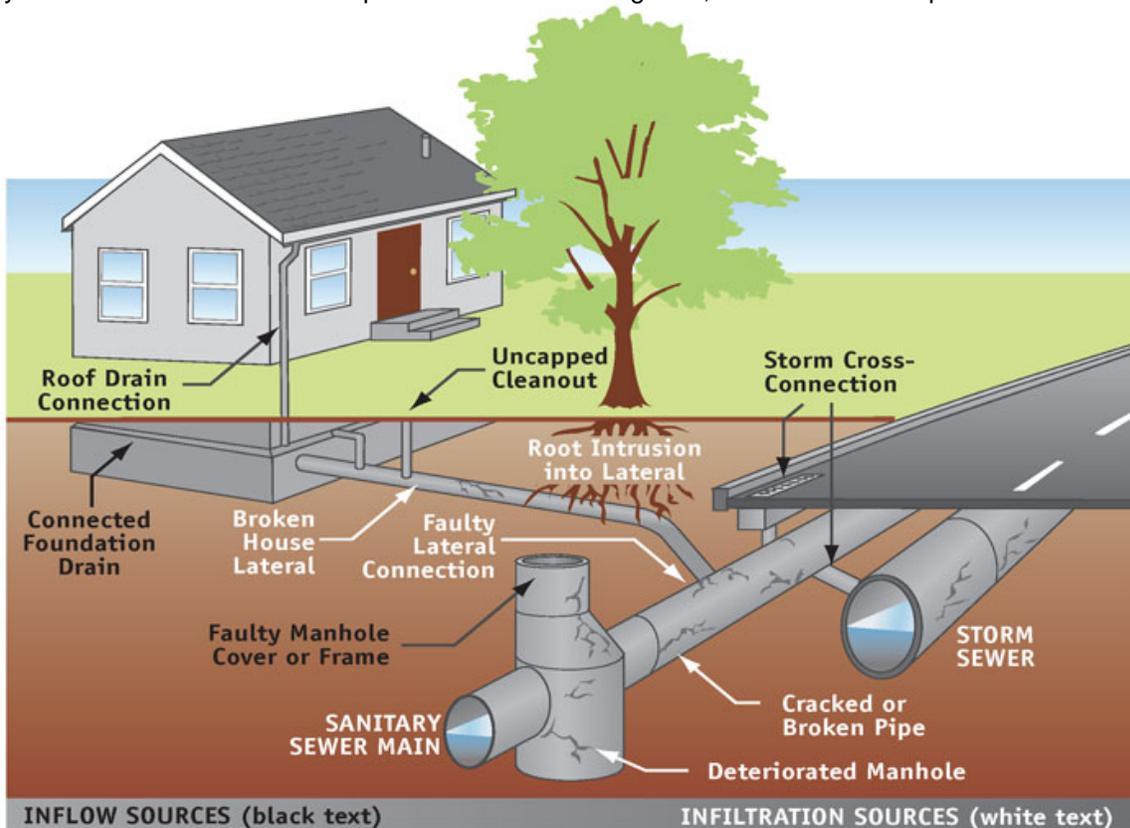
Wastewater Treatment Facility: Woodard & Curran, Inc. continues to operate the Town's Wastewater Treatment Plant (WWTP), located off of Bedford Street, under the supervision of the Water and Sewer Division. The plant maintains excellent compliance with its regulatory requirements, in accordance with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

In accordance with the National Pollutant Discharge Elimination System Permit as of the March 13, 2009 deadline, the facility was required to meet a new summer seasonal monthly average for total phosphorous limit of 0.2 mg/l. The performance of the "CoMag" phosphorus reduction system continues to be outstanding, eliciting ongoing national and international attention. EPA was so impressed with its performance that they included a tour of the facility in conjunction with their regional wastewater technology symposium designed to highlight innovative technologies for nutrient removal.

Hemi Enterprises (Attleboro, MA) disassembled, sandblasted, painted, and reassembled equipment contained within the 40-foot diameter concrete primary clarifiers and one concrete grit detritor. During this work, many of the smaller mechanical components associated with each piece of equipment were replaced or refurbished. This activity is performed every eight to ten years and ensures continued operation of this important equipment into the future.

Inflow and Infiltration (I/I)

Inflow/Infiltration: Continued investigation and repairs of inflow and infiltration problems are important to the upkeep of a properly functioning sewer system. Over the last several decades, Concord has performed a variety of work with the goals 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.



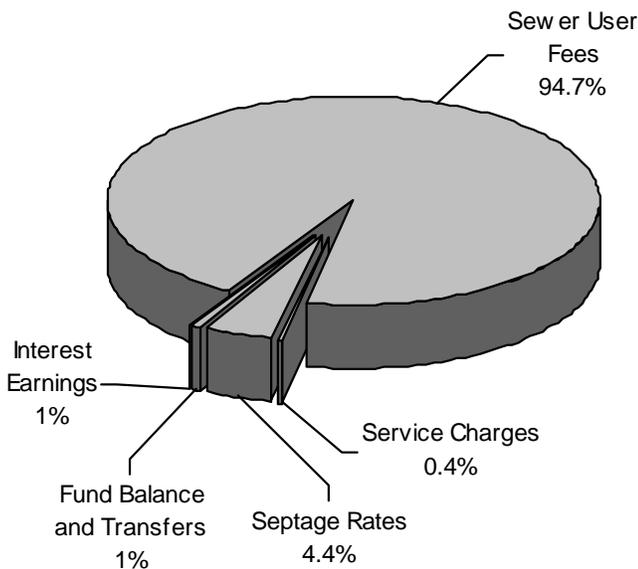
Graphic Credit: King County, Washington, Department of Natural Resources and Parks

Program Implementation:

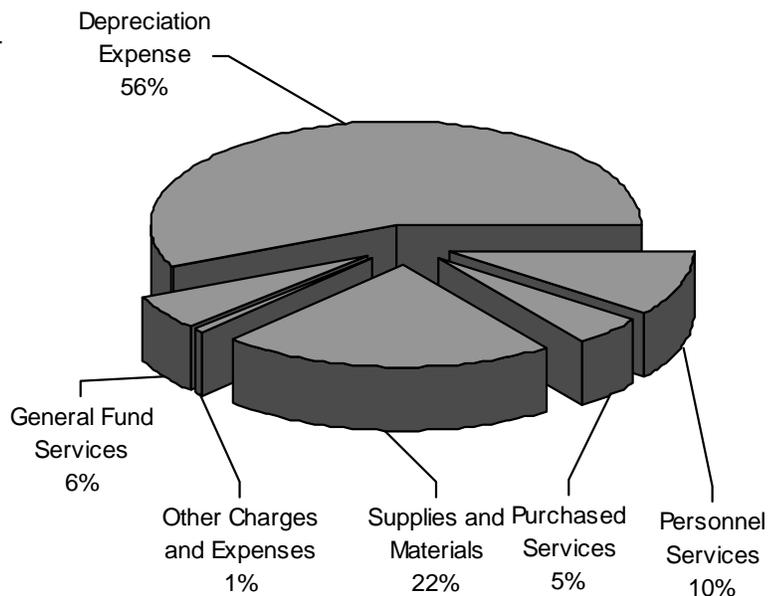
The proposed fiscal year 2011 operating budget is \$3,141,500. This represents a 0.5% decrease as compared to the sewer fund's revised FY10 operating budget. Depreciation expense reflects the cost of the annual use, or wear-and-tear, of the Sewer Division's more than \$29 million worth of infrastructure (as of the end of FY09). The budgeted depreciation expense, totaling \$1,780,580, therefore reflects a depreciation of roughly 6% of these capital assets in FY11. Personnel Services are budgeted to total \$319,143 in FY11, an 8.4% increase from the revised FY10 total of \$294,518 (adjusted to account for vacant positions). No additional personnel have been requested.

Overall, the operating and maintenance expenses, net of depreciation expense, associated with the wastewater collection and treatment systems will decrease from the revised FY10 budget of \$1,386,633 to a proposed FY11 budget plan of \$1,341,340, a 3.3% reduction. The proposed budget increase for the wastewater collection system is 2.8% with a 6.5% decrease proposed for the Wastewater Treatment Plant. 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, and contract operation service presently performed by Woodard & Curran. The reduction in proposed FY11 costs reflects the decision to re-assign existing Water/Sewer Division operations personnel to the WWTP to meet new operational demands attributed to the enhanced treatment technology.

Operating Revenues
Totalling \$2,386,000



Operating Expenses
Totalling \$3,141,500



Operating Income:

This FY11 Budget calls for Operating Expenditures that are \$755,500 above Operating Revenues. This results in an operating loss for the year. However, by FY17, the Sewer Fund recovers its operating balance as its depreciation expense, which accounts for roughly 50% of all operating expenses, begins to decline and revenues increase (see page V-11, Sewer Financial Statements).

OPERATING REVENUES

	FY08 Actual	FY09 Actual	FY10 Budget	FY11 Budget
Sewer User Fees	\$ 1,907,670	\$ 1,968,085	\$ 2,146,000	\$ 2,260,000
Service Charges	8,587	5,950	9,000	9,000
Septage Rates	90,970	111,400	110,000	106,000
Liens & Tax Titles	5,158	8,015	8,000	8,000
Other Revenue	322	24,601	3,000	3,000
Operating Revenues Total	\$ 2,012,707	\$ 2,118,051	\$ 2,276,000	\$ 2,386,000

OPERATING EXPENSES

<u>Sewer Divisions</u>	FY08	FY09	FY10	FY11
<u>Collection</u>	Actual	Actual	Budget	Budget
Personnel Services	\$ 246,339	\$ 250,500	\$ 256,834	\$ 273,339
Purchased Services	101,159	103,194	119,333	127,064
Supplies & Materials	43,574	45,230	47,332	36,273
Other Charges & Expenses	14,308	14,828	16,478	17,978
General Fund Services	82,104	86,936	88,458	88,608
Audit Adjustments	-	(61,045)	-	-
Subtotal	\$ 487,484	\$ 439,643	\$ 528,435	\$ 543,262
<u>Treatment</u>				
Personnel Expenses	\$ 45,012	\$ 45,284	\$ 37,684	\$ 45,804
Purchased Services	24,977	19,940	23,200	23,000
Supplies & Materials	517,555	705,252	724,836	660,246
Other Charges & Expenses	-	10,567	-	-
General Fund Services	82,104	86,936	88,457	88,608
Subtotal	\$ 669,648	\$ 867,979	\$ 874,177	\$ 817,658
<u>Other</u>				
Depreciation Expense	1,316,610	1,445,552	1,753,882	1,780,580
Capital Reserve	-	-	-	-
Subtotal	\$ 1,316,610	\$ 1,445,552	\$ 1,753,882	\$ 1,780,580
Total Operating Expense	\$ 2,473,742	\$ 2,753,174	\$ 3,156,494	\$ 3,141,500

AUTHORIZED POSITIONS

Collections Personnel Costs	FY10 Budget		FY11 Budget	
	Positions/Hours	\$ Amount	Positions/Hours	\$ Amount
Regular Staff				
Water and Sewer Superintendent	0.20 FTEs	\$ 19,277	0.20 FTEs	\$ 19,277
Assistant to Superintendent	0.20	14,868	0.20	14,868
Environmental Analyst	0.20	11,875	0.20	11,800
Administrative Assistant	0.20	10,369	0.20	10,394
Public Works Supervisor	0.40	27,630	0.40	27,630
Crew Leader	0.40	23,138	0.40	23,138
Treatment System Operator	0.60	30,250	0.60	30,250
System Maintainer	1.00	43,027	1.00	42,847
Subtotal	3.20 FTEs	\$ 180,434	3.20 FTEs	\$ 180,204
Other Personnel				
GIS Intern	312 hrs.	4,680	312 hrs.	5,460
Subtotal	0.15 FTEs	\$ 4,680	0.15 FTEs	\$ 5,460
Employee Benefits				
Health Insurance	N/A	\$ 13,600	N/A	\$ 15,700
Life Insurance	N/A	125	N/A	200
Dental Insurance	N/A	75	N/A	100
OPEB	N/A	15,978	N/A	16,963
Retirement Contribution	N/A	5,824	N/A	6,000
Subtotal	N/A	\$ 35,602	N/A	\$ 38,963
Payroll Taxes				
Medicare Tax	N/A	\$ 2,200	N/A	\$ 2,200
Social Security Contribution	N/A	300	N/A	300
Subtotal	N/A	\$ 2,500	N/A	\$ 2,500
Other Personnel Costs				
Overtime (5130)	400 hrs.	\$ 14,540	500 hrs.	\$ 18,570
Police Overtime (5131)	90 hrs.	3,600	90 hrs.	3,600
Standby Pay (5111)	680 hrs.	20,264	680 hrs.	20,663
Charges to Snow Account	40 hrs.	(923)	40 hrs.	(1,011)
Vacancy Savings (Sys. Maintainer)	N/A	-	N/A	-
Salary Adjustments (2%)	N/A	(3,863)	N/A	4,390
Subtotal	N/A	\$ 33,618	N/A	\$ 46,212
Total Collections	3.35 FTEs	\$ 256,834	3.35 FTEs	\$ 273,339
Treatment Personnel Costs				
Operations Engineer	0.80 FTEs	\$ 58,628	0.80 FTEs	\$ 56,405
Vacancy Savings	N/A	(9,387)	N/A	-
Charge to Capital Projects	N/A	(14,657)	N/A	(14,101)
Salary Adjustments (2%)	N/A	-	N/A	-
Health	N/A	2,600	N/A	3,000
Life	N/A	-	N/A	-
Dental	N/A	-	N/A	-
Social Security	N/A	500	N/A	500
Total Treatment	0.80 FTEs	\$ 37,684	0.80 FTEs	\$ 45,804
Total Sewer Personnel	4.15 FTEs	\$ 294,518	4.15 FTEs	\$ 319,143

NET INCOME

	FY08 Actual	FY09 Actual	FY10 Budget	FY11 Budget
Statement of Net Income:				
Operating Revenues	\$ 2,012,707	\$ 2,118,051	\$ 2,276,000	\$ 2,386,000
Less Operating Expenses	(2,473,742)	(2,753,174)	(3,156,494)	(3,141,500)
Operating Income	\$ (461,035)	\$ (635,123)	\$ (880,494)	\$ (755,500)
Non-operating Revenues (Expenses)				
Add Investment Income	\$ 160,841	\$ 76,803	\$ 32,001	\$ 34,298
Add Sewer Improvement Fees	69,591	104,292	29,000	29,000
Less Interest Expense	(357,598)	(252,640)	(236,287)	(222,445)
Less Issuance Expense	(61,681)	-	-	-
Non-operating Income	\$ (188,847)	\$ (71,545)	\$ (175,286)	\$ (159,147)
Net Income	\$ (649,882)	\$ (706,668)	\$ (1,055,780)	\$ (914,647)

AVAILABLE RESOURCES

Resources Available from Current Operations for Replacement & Renewal of Facility:				
	FY08 Actual	FY09 Actual	FY10 Budget	FY11 Budget
Capital Purposes				
Add Depreciation Exp. & Cap. Rsv.	\$ 1,316,610	\$ 1,445,552	\$ 1,753,882	\$ 1,780,580
Add Net Income	(649,882)	(706,668)	(1,055,780)	(914,647)
Less Bonds Payable	(710,128)	(561,727)	(564,684)	(574,072)
Net Available for Capital	\$ (43,400)	\$ 177,157	\$ 133,418	\$ 291,861

CASH POSITION AND FUND BALANCE FORECAST

	FY10		FY11	
	Operating Fund	Depreciation Fund	Operating Fund	Depreciation Fund
Cash at Year Opening				
Cash on July 1st	\$ 3,557,962		\$ 2,842,380	
Add Receivables	371,041		371,041	
Less Cash held for Liabilities	(347,277)		(347,277)	
Fund Balance on July 1st	\$ 3,581,726		\$ 2,866,144	
Fund Balance Details (projected)				
Fund Balance on July 1st	\$ 2,661,411	\$ 920,315	\$ 1,040,947	\$ 1,825,197
Net Income	(1,055,780)	-	(914,647)	-
Bonds Payable	(564,684)	-	(574,072)	-
Capital Outlay (non-borrowing)	-	(849,000)	-	(488,000)
Interfund Transfer	-	-	447,772	(447,772)
Add Depreciation Exp./Capital Rsv.	-	1,753,882	-	1,780,580
Balance Projected at June 30th	1,040,947	1,825,197	0	2,670,005
Fund Balance on June 30th	\$ 2,866,144		\$ 2,670,005	
Cash at Year End (projected)				
Fund Balance on June 30th	\$ 2,866,144		\$ 2,670,005	
Less Receivables	(371,041)		(371,041)	
Add Cash Held for Liabilities	347,277		347,277	
Projected Cash at June 30th	\$ 2,842,380		\$ 2,646,241	
Sewer Improvement Fund Cash	\$ 1,670,631		\$ 1,532,631	
Unrestricted Cash	\$ 1,171,749		\$ 1,113,610	

Sewer Fund

Revenues and Expenditures

Sewer Improvement Fund

	FY08 Actual	FY09 Actual	FY10 Budget	FY11 Budget
Cash on July 1st	\$ 1,881,774	\$ 1,906,360	\$ 1,957,631	\$ 1,670,631
Revenues	69,591	104,292	29,000	29,000
Expenditures	(45,005)	(55,910)	(316,000)	(167,000)
Adjustment	-	2,890	-	-
Cash on June 30th	\$ 1,906,360	\$ 1,957,631	\$ 1,670,631	\$ 1,532,631

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 Account

	FY08 Actual	FY09 Actual	FY10 Budget	FY11 Budget
Total Assets				
A Unapportioned Principal Receivable	\$ 1,822,201	\$ 1,656,184	\$ 1,527,245	\$ 1,398,306
B Cash	461,850	508,102	516,049	523,443
Apportioned Principal Receivable	1,222	-	-	-
Apportioned Interest Receivable	539	-	-	-
Tax Title Receivable	2,017	4,196	4,196	4,196
Total Assets	\$ 2,287,829	\$ 2,168,482	\$ 2,047,490	\$ 1,925,945
Total Liabilities				
Beginning Liability	2,990,456.69	2,831,418.18	2,672,542.13	2,513,832.40
Loan and Interest Payoff	(159,038.51)	(158,876.05)	(158,709.72)	(158,540.42)
Ending Liability	2,831,418.18	2,672,542.13	2,513,832.40	2,355,291.99
Net Assets	(543,589)	(504,061)	(466,343)	(429,347)

Note: The negative number shown as Net Assets will be offset by future collections on interest (which accounting practices do not allow to be shown as a receivable).

Sewer Betterment Asset Details

	FY08 Actual	FY09 Actual	FY10 Budget	FY11 Budget
Unapportioned Principal Receivable				
Original Loan Receivable	\$ 2,054,539	\$ 1,822,201	\$ 1,656,184	\$ 1,527,245
Committed + Early Pay-offs	232,338	166,017	128,939	128,939
A End of Year Receivable	\$ 1,822,201	\$ 1,656,184	\$ 1,527,245	\$ 1,398,306
Cash				
Cash at July 1st	\$ 327,293	\$ 461,850	\$ 508,102	\$ 516,049
Add Revenues	275,931	194,847	161,576	159,484
Add Interest Earnings	17,665	10,280	5,081	6,451
Less Expenses - Debt Repayment	\$ (159,039)	\$ (158,876)	\$ (158,710)	\$ (158,540)
B Cash at June 30th	461,850	508,102	516,049	523,443

	B	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
		ACTUAL	Revised		PROJECTION											10 years
		FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020		FY11-20	
1																
2	Sewer Fund: Plan and Projection															
3																
5	Operating Revenue															
6	User Fees	1,968,085	2,146,000	2,260,000	2,380,000	2,507,000	2,640,000	2,781,000	2,929,000	3,085,000	3,249,000	3,421,000	3,604,000		28,856,000	
7	Other	149,966	130,000	126,000	132,000	139,000	142,000	145,000	148,000	151,000	154,000	158,000	161,001		1,456,001	
8	Subtotal	2,118,051	2,276,000	2,386,000	2,512,000	2,646,000	2,782,000	2,926,000	3,077,000	3,236,000	3,403,000	3,579,000	3,765,001		30,312,001	
9	Operating Expense															
10	O & M	1,307,622	1,402,612	1,360,920	1,476,840	1,606,224	1,654,411	1,704,043	1,755,165	1,807,820	1,862,054	1,917,916	1,975,453		17,120,846	
11	Depreciation	1,445,552	1,753,882	1,780,580	1,788,625	1,650,325	1,488,754	1,436,789	1,381,341	1,387,137	1,406,934	1,407,824	801,128		14,529,435	
12	Subtotal	2,753,174	3,156,494	3,141,500	3,265,465	3,256,549	3,143,165	3,140,833	3,136,505	3,194,957	3,268,988	3,325,739	2,776,581		31,650,282	
13																
14	Operating Income	-635,123	-880,494	-755,500	-753,465	-610,549	-361,165	-214,833	-59,505	41,043	134,012	253,261	988,420		-1,338,281	
15																
16	ADD: Interest Income	76,803	32,001	34,298	63,996	61,363	62,945	71,023	82,099	90,130	102,032	126,680	158,313		852,877	
17																
18	Sewer Improvement Fees	104,292	29,000	29,000	29,000	29,000	29,000	29,000	29,000	29,000	29,000	29,000	29,000		290,000	
19																
20	LESS: Interest Expense															
21	Existing Debt	252,640	236,287	222,445	208,400	194,146	179,930	165,399	150,621	134,242	122,634	110,792	98,710		1,587,319	
22	Existing Debt - Phase I	0	0	0	0	0	0	0	0	0	0	0	0		0	
23	Bond Anticipation Notes (BANs)	0	0	0	0	0	0	0	0	0	0	0	0		0	
24	Issuance expense	0	0	0	0	0	0	0	0	0	0	0	0		0	
25																
26	Net Income	-706,668	-1,055,780	-914,647	-868,869	-714,332	-449,150	-280,208	-99,028	25,931	142,410	298,149	1,077,023		-1,782,722	
27																
28	Available Resources from:															
29	Net income	-706,668	-1,055,780	-914,647	-868,869	-714,332	-449,150	-280,208	-99,028	25,931	142,410	298,149	1,077,023		-1,782,722	
30	Depreciation expense	1,445,552	1,753,882	1,780,580	1,788,625	1,650,325	1,488,754	1,436,789	1,381,341	1,387,137	1,406,934	1,407,824	801,128		14,529,435	
31	subtotal	738,884	698,102	865,933	919,756	935,992	1,039,604	1,156,581	1,282,313	1,413,068	1,549,344	1,705,972	1,878,150		12,746,713	
32	Bond proceeds														0	
33	Loan proceeds														0	
34																
35	LESS: Principal repayments															
36	Existing Debt	561,727	564,684	574,072	583,649	593,420	603,388	613,557	623,932	534,516	545,314	556,331	567,570		5,795,749	
37																
38																
39	Net Available for Capital Purposes	177,157	133,418	291,861	336,107	342,572	436,216	543,024	658,381	878,552	1,004,030	1,149,641	1,310,580		6,950,964	
40																
41	Capital Plan	681,649	849,000	488,000	505,000	378,000	265,000	274,000	293,000	866,500	391,000	321,500	330,000		4,112,000	
42																
43	Cash Position															
44	Beginning balance	3,580,812	3,557,962	2,842,380	2,646,241	2,477,347	2,441,920	2,613,135	2,882,159	3,247,540	3,259,592	3,872,622	4,700,763			
45																
46	ADD: Net available	177,157	133,418	291,861	336,107	342,572	436,216	543,024	658,381	878,552	1,004,030	1,149,641	1,310,580			
47																
48	LESS: Planned Capital	681,649	849,000	488,000	505,000	378,000	265,000	274,000	293,000	866,500	391,000	321,500	330,000			
49	adjustment to audit	-481,642														
50	Ending balance	3,557,962	2,842,380	2,646,241	2,477,347	2,441,920	2,613,135	2,882,159	3,247,540	3,259,592	3,872,622	4,700,763	5,681,343			
51																
52	Sewer Improvement Fund Balance	1,957,631	1,670,631	1,532,631	1,461,631	1,390,631	1,319,631	1,248,631	1,177,631	1,106,631	1,032,631	958,631	884,631			
53	(included in Ending Balance)															
54	Ending balance w/o Sewer Improvement	1,600,331	1,171,749	1,113,610	1,015,716	1,051,289	1,293,504	1,633,528	2,069,909	2,152,961	2,839,991	3,742,132	4,796,712			

DEBT SERVICE

	FY08 Actual	FY09 Actual	FY10 Budget	FY11 Budget
Long Term Debt Repayment:				
Principal	\$ 533,827	\$ 561,727	\$ 534,684	\$ 574,072
Interest	285,256	252,640	236,287	222,445
BAN Interest Expense	-	-	-	-
Debt Issuance Expenses	61,681	-	-	-
Totals	\$ 880,764	\$ 814,367	\$ 770,971	\$ 796,517

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.

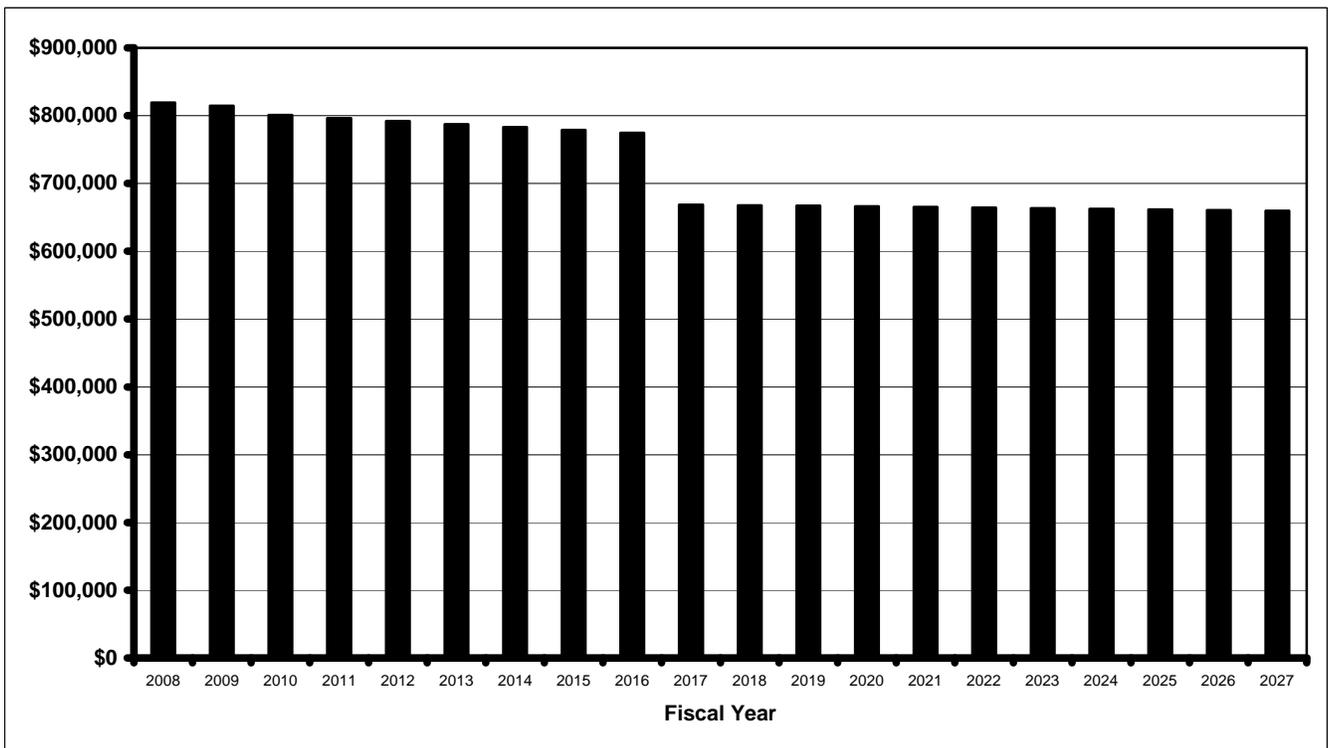
PAYMENTS TO THE GENERAL FUND

	FY08 Actual	FY09 Actual	FY10 Budget	FY11 Budget
Management & Engineering:				
Highway Maintenance	\$3,642	\$3,828	3,944	\$3,944
133/135 Keyes Road	13,344	12,852	12,729	11,935
Public Works Engineering	15,134	16,096	16,184	15,408
Public Works Administration	28,178	27,870	28,882	28,880
Subtotals	\$60,298	\$60,646	\$61,739	\$60,167
Financial & Administrative:				
Town Manager	\$23,827	\$26,083	\$ 26,314	\$ 25,765
Town Accountant:				
General Services	10,837	10,352	10,858	10,752
Audit Services	5,520	6,000	6,000	6,000
Treasurer-Collector	10,472	10,684	11,078	11,364
Finance Administration	13,715	16,910	16,561	15,319
Human Resources	2,911	3,349	3,788	4,137
Information Systems	0	0	1,283	1,287
Town House Facilities	3,059	2,961	2,987	3,466
Subtotals	\$70,341	\$76,339	\$78,869	\$78,090
Natural Resource Protection:				
Planning	\$5,234	\$5,469	\$ 5,490	\$5,489
Natural Resource Protection	4,913	5,232	5,171	5,269
Health	23,421	26,185	25,646	25,582
Subtotals	\$33,568	\$36,886	\$36,307	\$36,340
Retirement Contribution	\$0	\$0	\$0	\$0
Salary Reserve	\$0	\$0	\$0	\$2,619
Totals	\$164,207	\$173,871	\$176,915	\$177,216

Sewer Debt Service (\$)

Exclusive of betterment financing

Fiscal Year	Principal	Interest	Admin. Fees	Total
2008	533,827	269,081	16,175	\$819,083
2009	561,727	237,158	15,482	\$814,367
2010	564,684	221,684	14,603	\$800,971
2011	574,072	208,546	13,899	\$796,517
2012	583,649	195,219	13,181	\$792,049
2013	593,420	181,698	12,448	\$787,566
2014	603,388	168,230	11,700	\$783,318
2015	613,557	154,461	10,938	\$778,956
2016	623,932	140,461	10,160	\$774,553
2017	534,516	124,876	9,366	\$668,758
2018	545,314	114,078	8,556	\$667,948
2019	556,331	103,062	7,730	\$667,123
2020	567,570	91,823	6,887	\$666,280
2021	579,036	80,357	6,027	\$665,420
2022	590,734	68,659	5,149	\$664,542
2023	602,668	56,725	4,254	\$663,647
2024	614,843	44,550	3,341	\$662,734
2025	627,265	32,129	2,410	\$661,804
2026	639,936	19,457	1,459	\$660,852
2027	652,865	6,529	490	\$659,884
Totals	\$11,763,334	\$2,518,781	\$174,254	\$14,456,369



FY11 Capital Plan:**COLLECTION SYSTEM****Station Structures: \$15,000**

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

Station Equipment: \$100,000

Annual capital outlay for improvements and replacement of equipment housed within six neighborhood lift stations and two main pump stations. This equipment is required to control, monitor, pump, store, and treat wastewater en-route to the WWTP including mechanical systems (motors, pumps, air compressors, piping, valves, etc.) and associated instrumentation and electrical systems. Specific work scheduled to be performed includes the replacement and possible reconfiguration of the Gifford Lane or the Park Lane neighborhood sewer lift station.

Mains (Sewer Collectors): \$10,000

Annual capital outlay for improvements and extension to sewer collector system. The program is intended to insure that aging, deteriorating mains and appurtenances are replaced in a methodical and prudent manner. The Division will continue to coordinate system upgrades with other Town Departments to insure division needs are considered in light of other public works improvement efforts (such as Roads Program and CMLP initiatives).

Inflow/Infiltration: \$100,000

The wastewater treatment plant currently receives about one million gallons of sewer flow per day. Annual inflow and infiltration (I/I) activities are required to reduce groundwater and stormwater which enters the collection system through deteriorating pipes, leaking manholes or illicit stormwater connections. An active annual I/I program is also a requirement of our WWTP National Pollutant Discharge Elimination System (NPDES) permit.

Meter Replacement Program: \$17,000

Sewer fund portion (20%) of costs associated with system-wide meter replacement efforts. Investment and effort expanded in coordination with meter reading and billing system hardware and software upgrades made in concert with CMLP initiative.

Services: \$5,000

Costs associated with the replacement/installation (street to property line) of approximately 2-3 new sewer-service connections to our collection system plus installation of 10-20 service cleanouts in Concord Center — to be coordinated with the improvements associated with the Roads Program.

WASTE WATER TREATMENT PLANT**Structures: \$100,000**

Annual capital outlay for improvements and replacement of WWTP structures. Planned work includes the rehabilitation of mechanical system associated with a trickling filter (unit #1), repairs to Grit Room access door louvers, and possible repairs to the main building roofing system.

Equipment: \$35,000

Annual cost to replace equipment presently in use beyond its recommended service life, including motors, pumps, motor control panels, chemical feed systems, and process instrumentation. Planned work includes replacement of the influent flow meter, replacement of pump associated with the building drain system and other unscheduled improvement needs.

Wastewater Planning: \$67,000

Design and permitting activities associated with wastewater treatment expansion/enhancement interests which will likely include groundwater recharge alternatives.

Based upon the recommendations of the Wastewater Planning Task Force, a wastewater management alternatives analyses will be conducted to identify potential alternatives and associated costs required to handle up to 600,000 gallons per day of wastewater flow to support the Town's long-range economic and residential planning visions.

GENERAL PLANT**Keyes Road Facility: \$7,000**

Sewer Fund portion (20%) of capital outlay for improvements to Water/Sewer Administrative Office and Garage facilities. The plan is to complete a rehabilitation project involving the electric room, heating system and field operations work area.

Miscellaneous Field Equipment and Tools: \$5,000

Miscellaneous equipment not included in 5-year capital equipment/vehicle plan.

Vehicles: \$27,000

Sewer Fund portion (20%) of fleet replacement costs. The Water/Sewer Fleet consists of 17 vehicles and miscellaneous service equipment such as a compressor, vacuum, etc. Plan includes addition of new emergency generator required as back-up power supply for sewer ejector stations.

Capital Spending Plan

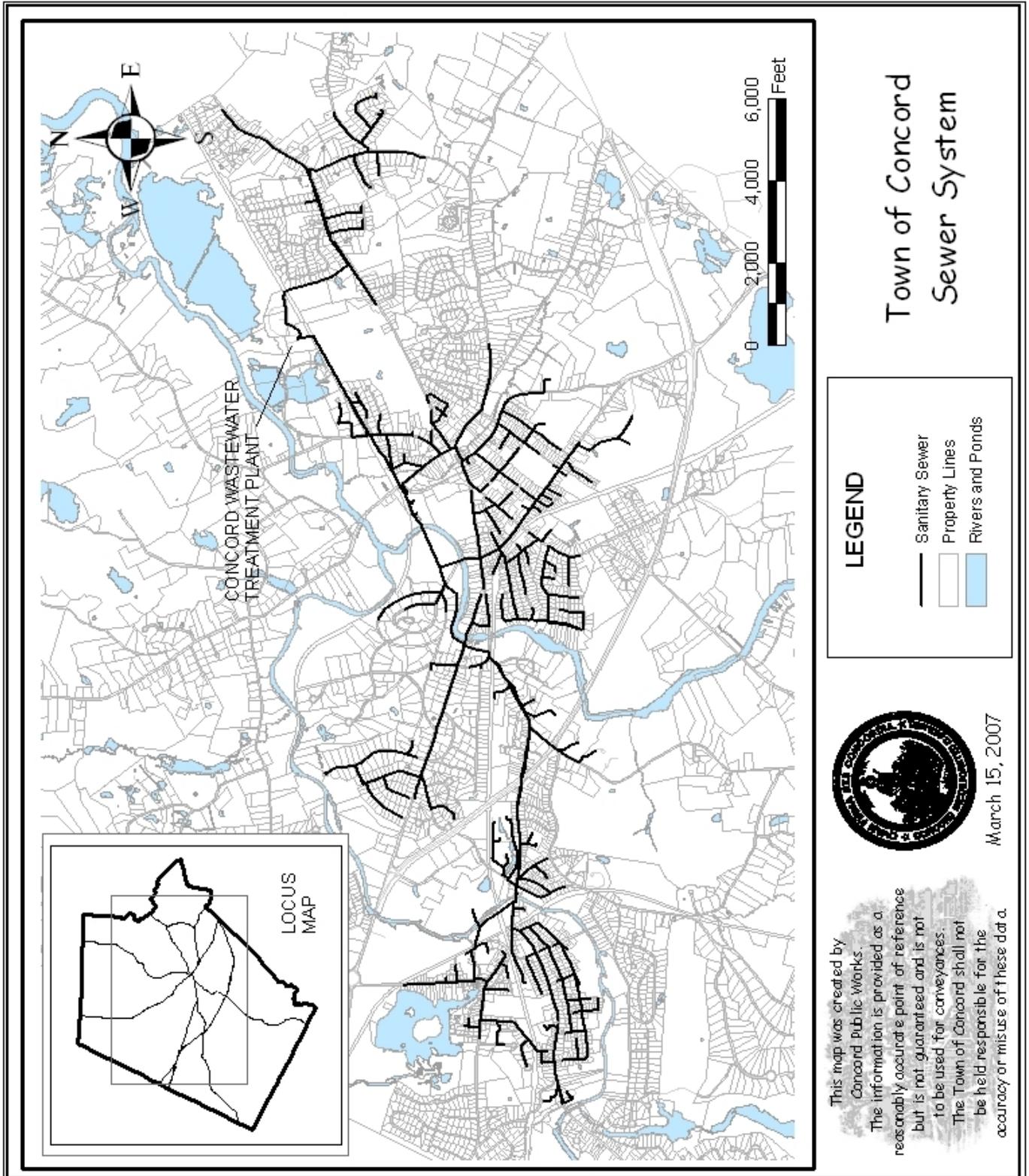
<u>Capital Activities</u>	FY08 Actual	FY09 Actual	FY10 Budget	FY11 Budget
<u>Collection System</u>				
<u>Pumping Plant</u>				
Station Structures	4,995	734	10,000	15,000
Station Equipment	61,520	54,465	250,000	100,000
Other	-	-	-	-
Subtotal	66,515	55,199	260,000	115,000
<u>Collection Plant</u>				
Sewer Mains/Laterals	18,041	29,013	10,000	10,000
Inflow & Infiltration	90,032	88,904	203,000	100,000
Meter Replacement	45,192	6,937	4,000	17,000
Sewer Service Connections	-	-	5,000	5,000
Subtotal	153,265	124,854	222,000	132,000
<u>Wastewater Treatment Plant</u>				
Structures	12,821	3,065	168,000	100,000
Plant Equipment	10,400	7,502	30,000	35,000
Other	-	-	-	-
Facilities Plan Improvements	4,353,042	405,465	25,000	-
Capacity/Treatment Optimization	564,622	26,794	12,000	-
Personnel Services	9,968	10,833	-	-
Subtotal	4,950,853	453,659	235,000	135,000
<u>General Plant</u>				
Keyes Road CPW Facility	\$ -	\$ 399	\$ 7,000	\$ 7,000
Harris System/GIS	-	-	-	-
Vehicle Replacement	5,958	10,322	7,000	27,000
Miscellaneous Equipment	2,575	-	5,000	5,000
Personnel Services	7,503	9,214	-	-
Subtotal	16,036	19,935	19,000	39,000
<u>Wastewater Management Project</u>				
Wastewater Planning	31,218	28,002	113,000	67,000
Phase I Construction Cost	176,522	-	-	-
Subtotal	207,740	28,002	113,000	67,000
<u>Audit Adjustments</u>				
Audit Adjustment (Personnel)	-	-	-	-
Audit Adjustment (Other)	(466,678)	-	-	-
Subtotal	(466,678)	-	-	-
Total	\$ 4,927,731	\$ 681,649	\$ 849,000	\$ 488,000
Funding the Capital Plan				
From Debt	\$ -	\$ -	\$ -	-
From Water Fund Resources	\$ 4,927,731	\$ 681,649	\$ 849,000	\$ 488,000
Total	\$ 4,927,731	\$ 681,649	\$ 849,000	\$ 488,000

FY11 SEWER RATES

(Per 100 Cubic Feet)

Class of Customer	Current	Proposed	%Chg.
S-10	(1 unit = 100 cubic feet = 748 gallons)		
1 Residential Service Rate billed year around but uses wintertime average consumption for non-wintertime months.	\$ 8.35	\$ 8.76	5%
2 Non-Residential Service Rate billed year around using actual readings for each billing period.	\$ 8.35	\$ 8.76	5%

Sample Impacts	Current Annual	Proposed Annual	Annual Change	Monthly Change	% Chg.
1 Average Residential Customer (17 units bimonthly wintertime use)	\$ 835	\$ 876	\$ 41.00	\$ 3.42	5%
2 Typical Non-Residential Customer (18 cubic feet bimonthly)	\$ 902	\$ 946	\$ 44.28	\$ 3.69	5%



Town of Concord Sewer System

LEGEND

- Sanitary Sewer
- ▭ Property Lines
- ▭ Rivers and Ponds



March 15, 2007

This map was created by Concord Public Works. The information is provided as a reasonably accurate point of reference but is not guaranteed and is not to be used for conveyances. The Town of Concord shall not be held responsible for the accuracy or misuse of these data.

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