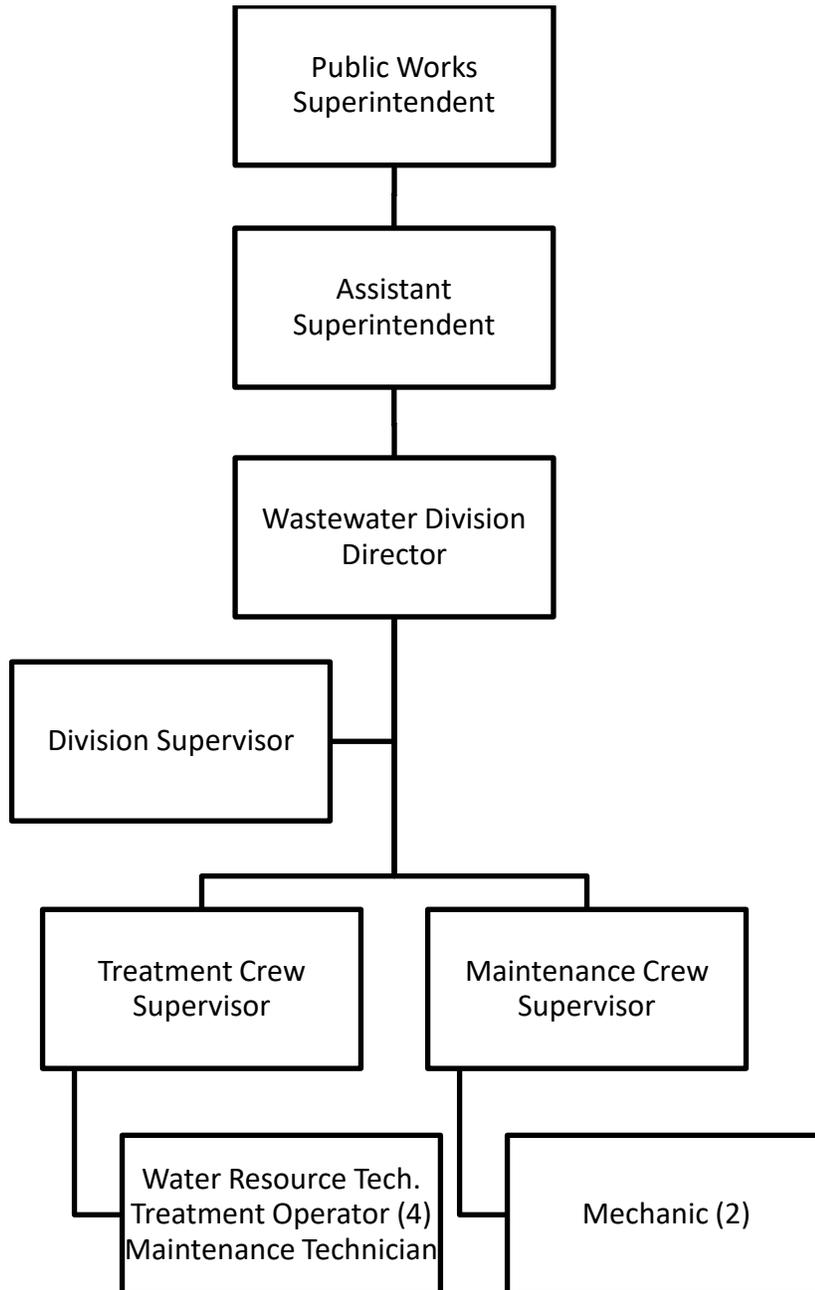


**SEWER
FUND**

SEWER FUND

MISSION STATEMENT: To provide an environmentally safe system for collection, treatment, and disposal of sewage and to do so through a user fee based revenue system.



SEWER FUND SUMMARY

	FY 16 Actual	FY 17 Actual	FY 18 Actual	FY 19 Budget	FY 20 Proposed	Change FY 19 - 20	Percent Change
Operating Revenues	\$ 4,233,462	4,260,696	4,096,617	4,413,500	4,452,000	38,500	0.9%
Interest and Late Fees	\$ 30,022	45,823	76,260	20,000	40,000	20,000	100.0%
Grants	\$ 0	0	0	0	0	0	0.0%
SUBTOTAL REVENUES	\$ 4,263,484	4,306,519	4,172,878	4,433,500	4,492,000	58,500	1.3%
Borrowing							
Authorizations	\$ 0	0	0	0	0	0	0.0%
Available Funds	\$ 0	0	0	0	0	0	0.0%
Surplus Funds	\$ 0	0	33,017	92,376	15,578	(76,798)	-83.1%
TOTAL RESOURCES	\$ 4,263,484	4,306,519	4,205,895	4,525,876	4,507,578	(18,298)	-0.4%
Operating Budget	\$ 3,016,612	2,779,697	3,100,494	3,302,895	3,311,717	8,822	0.3%
Debt Service	\$ 386,158	378,610	376,791	619,771	698,537	78,766	12.7%
Capital Program	\$ 250,000	240,000	405,000	255,000	120,000	(135,000)	-52.9%
Interfund Transactions	\$ 0	0	0	0	0	0	0.0%
TOTAL APPROPRIATION	\$ 3,652,770	3,398,307	3,882,285	4,177,666	4,130,254	(47,412)	-1.1%
Indirect Costs Appropriated in General Fund	354,140	334,098	336,744	348,210	377,324	29,114	8.4%
TOTAL EXPENDITURES	\$ 4,006,910	3,732,405	4,219,029	4,525,876	4,507,578	(18,298)	-0.4%

SEWER FUND

RESOURCES

GOAL STATEMENT: To provide an adequate amount and proper balance of revenue sources to ensure that the Sewer Fund is completely self-supporting.

LONG RANGE OBJECTIVES:

- To maintain projection models to facilitate rate setting.
- To plan rate increases to meet long term fund objectives.

STATUS UPDATE OF FY 19 OBJECTIVES:

- To continue to adequately fund operating and capital needs. **ACCOMPLISHED**
- To develop a more defined policy regarding an appropriate reserve level for Sewer Fund Surplus. **ONGOING**

FY 20 OBJECTIVES:

- To continue to adequately fund operating and capital needs.
- To develop a more defined policy regarding an appropriate reserve level for Sewer Fund Surplus.

SERVICE LEVELS:

	FY 14	FY 15	FY 16	FY 17	FY 18
	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>
Funding Composition (%)					
Operating Revenues	96	99	99	99	97
Interest	1	1	1	1	2
Grants	0	0	0	0	0
Surplus Funds	3	0	0	0	1

SEWER FUND

RESOURCES

	FY 16 Actual	FY 17 Actual	FY 18 Actual	FY 19 Budget	FY 20 Proposed	Change FY 19 - 20	Percent Change
Sewer Rates	\$ 4,010,977	4,086,881	3,787,327	4,270,500	4,294,000	23,500	0.6%
Sewer Liens	\$ 69,242	73,091	90,477	50,000	65,000	15,000	30.0%
Sewer Entrances	\$ 122,050	53,000	162,200	60,000	60,000	0	0.0%
Septic Disposal	\$ 24,195	42,345	49,905	33,000	33,000	0	0.0%
Sewer Miscellaneous	\$ 6,998	5,378	6,708	0	0	0	0.0%
Sewer Interest and Late Fees	\$ 30,022	45,823	76,260	20,000	40,000	20,000	100.0%
	\$ 4,263,484	4,306,519	4,172,878	4,433,500	4,492,000	58,500	1.3%

SIGNIFICANT BUDGET CHANGES:

The overall sewer budget of \$4,492,000 increases by 1.3%. The current sewer rate is \$3.90 per 100 cf. A rate increase to \$4.00 per 100 cf (2.6%) is recommended for FY 20. This rate increase will help maintain an adequate fund balance in future years. \$15,578 will be appropriated from Sewer Fund Surplus to support capital in this budget. The July 1, 2018 Sewer Fund Free Cash balance was \$1,492,380 (35.7% of operating revenues—this percentage will decrease in coming years). The Town's water/sewer rates remain below state and regional averages.

SEWER FUND**4441: SEWER MAINTENANCE**

GOAL STATEMENT: To maintain sanitary sewers throughout the Town and provide a 24-hour-a-day response capability for emergency situations.

RECENT ACCOMPLISHMENTS & CURRENT CHALLENGES:**Accomplishments**

- Repaired a broken force main at the South East #4 Station.
- Completed over 100 manhole inspections throughout the collection system.
- Through the use of contractors, televised over 14,000 linear feet of sewer lines on West Pomeroy Lane and South East Street.
- Repaired several manhole leaks, stopping a combined 36,000 gallons of ground water per day from reaching the WWTP.
- Repaired broken sewer main on Columbia Drive.

Challenges

- Lack of a sewer camera prevents accurate pipeline assessment and prohibits repair work.
- Unusually heavy rains this year.
- Approximately 50% of collection system doesn't pass through a pump station, so flow profiles are limited.

LONG RANGE OBJECTIVES:

- To use flow monitoring devices and sewer inspection camera to implement point-repair program in the collection system.
- To use real time data from pump stations to reduce frequency of physical station checks and allocate more resources to collection system maintenance, repair, and rehabilitation.

STATUS UPDATE OF FY 19 OBJECTIVES:

- To begin construction of the Amherst Woods/Station Road Sewer phase 3 project. **ONGOING**
- To upgrade the air relief valves in the West Street pump station force main. This force main carries all the wastewater from South Amherst to the wastewater treatment facility. **RESCHEDULED**
- To replace the gate valves in the West Street pump station. **RESCHEDULED**
- To install variable frequency drives in the West Street Pump Station. **RESCHEDULED**

FY 20 OBJECTIVES:

- To continue to improve inflow and infiltration (I/I) mitigation efforts in compliance with DEP mandated I/I study phase II. To include continuing the current sewer manhole inspection program and replacing "vented" manhole covers with solid covers to prevent I/I.
- To obtain and install VFDs for West Street Pumping Station.
- To repair (slip-line) the sewer on West Pomeroy Lane.
- To create access roads to cross-country manholes off West Pomeroy Lane and East Hadley Road.

SERVICE LEVELS:

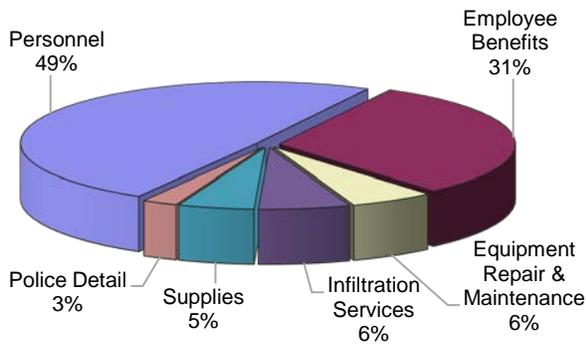
	FY 14	FY 15	FY 16	FY 17	FY 18
	Actual	Actual	Actual	Actual	Actual
Sanitary Sewer Complaints	42	41	38	42	39
Sewer Main Stoppages	7	5	11	23	21
Sewer Main Flushing (mi)	30	35	14	26	35
Sewer Mains Treated for Roots (linear ft)	5,540	5,500	4,922	7,316	7,403
Sewer Maintained (miles)	122	122	122	122	122
T.V.'d Sections of Problem Sewers (linear ft)	11,042	5,000	150	1,542	10,554
Sewer Rehabilitated (ft)	0	0	0	315	100
Sewer Replaced (ft)	7,217	0	0	355	0
Sewer Extended (ft)	0	12,000	0	9,000	3,800

SEWER FUND

4441: SEWER MAINTENANCE

	FY 16 Actual	FY 17 Actual	FY 18 Actual	FY 19 Budget	FY 20 Proposed	Change FY 19 - 20	Percent Change
Personnel Services	\$ 65,605	80,778	81,320	97,032	102,982	5,950	6.1%
Operating Expenses	\$ 74,032	78,777	99,402	85,272	105,574	20,302	23.8%
Capital Outlay	\$ 0	0	0	0		0	0.0%
TOTAL APPROPRIATION	\$ 139,637	159,555	180,721	182,304	208,556	26,252	14.4%
SOURCES OF FUNDS							
Sewer Revenues	\$ 139,637	159,555	180,721	182,304	208,556	26,252	14.4%
POSITIONS							
Full Time	2.00	2.00	2.00	2.00	2.00	0.00	
Part Time with Benefits	0.00	0.00	0.00	0.00	0.00	0.00	
Full Time Equivalents	2.00	2.00	2.00	2.00	2.00	0.00	

MAJOR COMPONENTS:



Personnel Services include funds for one maintenance worker and two laborer/truck drivers shared with the Highway budget in the General Fund.

\$64,774 is budgeted for health, retirement, life insurance, and other employee benefits.

Equipment Repair and Maintenance includes funds for renting equipment to pump sewers.

Infiltration Services provide funds for root control and video inspections.

Departmental Supplies provide miscellaneous sewer materials such as pipes, elbows, caps, etc.

Police Detail provides for traffic control.

SIGNIFICANT BUDGET CHANGES:
 Personnel Services changes are for step increases and COLA's.
 Operating expenses increase due to changes in health insurance enrollment.

SEWER FUND**4440: WASTEWATER TREATMENT PLANT**

GOAL STATEMENT: To treat all wastewater discharges to the Connecticut River within standards set by the U.S. Environmental Protection Agency and Massachusetts Department of Environmental Protection.

RECENT ACCOMPLISHMENTS & CURRENT CHALLENGES:**Accomplishments**

- Maintained operation of the treatment facility with only one minor violation while managing wastewater flows of 5-6 million gallons a day (MGD); normal flows are 2.5-3 MGD. Made repairs to the superstructure on primary clarifier #1.
- Rebuilt thickened waste activated sludge pump #2 and retrofitted it with a mechanical seal.
- Updated and reinforced safety chains and guardrails throughout the plant.
- Repairs made to 600kW main plant generator.

Challenges:

- I/I impact at the WWTP.
- No effluent or return activated sludge flow meter.

LONG RANGE OBJECTIVES:

- To plan, design, and implement a major upgrade to the existing treatment facility to meet current and future needs. Some of the improvements will be to:
 - Obtain and install new drives for final clarifiers.
 - Aerator upgrades pending new NPDES permit.
 - Install new Stamford baffles in final clarifier #1.
 - Replace 2 under-sized plant water pumps with 1 adequately sized pump.
 - Plant water ground valves.

STATUS UPDATE OF FY 19 OBJECTIVES:

- To continue the investigation of water reuse options at the WWTP to replace processes that use potable water. **ONGOING**
- To replace West Street pump station force main air releases. **RESCHEDULED**
- To implement new operations permit for facility. **ONGOING**
- To replace plant water strainer and inoperative valves. **RESCHEDULED**
- To continue investigating alternate control strategies to provide stability to the plant's biological process. **ONGOING**
- To commission new heating boiler system. **ACCOMPLISHED**
- To continue pilot program with MassCEC and UMass Amherst to study different ways to operate the facility to reduce secondary bio-solids and nitrogen. **ACCOMPLISHED**
- To continue to support to UMass Civil Engineering Department Piloting facility. **ONGOING**

FY 20 OBJECTIVES:

- To install new gravity belt thickener in place of old dissolved air flotation unit.
- To rebuild or replace thickened waste activated sludge pump #3.
- To purchase and install an effluent flow meter that would allow more accurate pacing of chlorine.
- To upgrade plant supervisor control and data acquisition computer.

SEWER FUND

4440: WASTEWATER TREATMENT PLANT

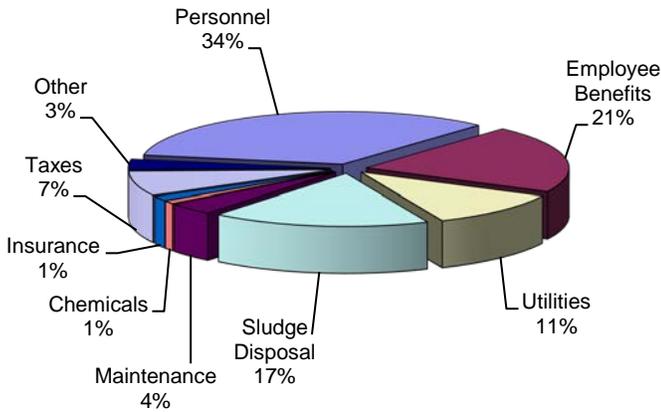
SERVICE LEVELS:	FY 14	FY 15	FY 16	FY 17	FY 18
	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>
Flow Totals (billion gals)	1.41	1.37	1.24	1.19	1.32
Chlorine (lbs)	8,935	9,857	9,695	11,212	10,010
Polymer (lbs)	3,223	3,762	3,513	4,067	3,126
Tests Achieving EPA Standards:					
Main Plant	99.9%	99.9%	100%	99.9%	99.9%
Pumping Stations Operated	20	20	20	21	21
Grit & Screenings Deposited at Sanitary Landfill (cu.yd)	56	40	76	99	78
Septic Waste Delivered to Plant (loads)	254	209	172	336	308
Liquid Sludge Disposed (gal)	4,216,300	4,120,884	3,793,492	4,018,587	3,807,140
Dry Sludge Produced (tons)	1,035	1,038	1,023	989	986

SEWER FUND

4440: WASTEWATER TREATMENT PLANT

	FY 16 Actual	FY 17 Actual	FY 18 Actual	FY 19 Budget	FY 20 Proposed	Change FY 19 - 20	Percent Change
Personnel Services	\$ 939,987	946,466	947,030	1,021,569	1,053,745	32,176	3.1%
Operating Expenses	\$ 1,933,782	1,673,676	1,972,743	2,085,022	2,035,416	(49,606)	-2.4%
Capital Outlay	\$ 3,205	0	0	14,000	14,000	0	0.0%
TOTAL APPROPRIATION	\$ 2,876,974	2,620,142	2,919,773	3,120,591	3,103,161	(17,430)	-0.6%
SOURCES OF FUNDS							
Sewer Revenues	\$ 2,876,974	2,620,142	2,919,773	3,120,591	3,103,161	(17,430)	-0.6%
Surplus Funds	\$ 0	0	0	0	0	0	0.0%
POSITIONS							
Full Time	16.48	16.31	16.32	16.32	16.34	0.02	
Part Time with Benefits	0.00	0.00	0.00	0.00	0.00	0.00	
Full Time Equivalents	16.48	16.31	16.32	16.32	16.34	0.02	

MAJOR COMPONENTS:



Personnel Services include salaries for the Assistant Superintendent (shared with the Water Fund and the General Fund), a Division Director, two Supervisors, a Water Resources Technician, four Treatment Operators, three Mechanics, a Laborer and a Maintenance Worker. Engineering division staff, a Division Supervisor, an Office Manager, an Administrative Analyst, and an Applications Manager, are shared with the General Fund and the Water Fund. A Utility Technician, an Environmental Scientist, and an Electrician are shared with the Water Fund. The Procurement Officer is shared with the General Fund, Water Fund, and Transportation Fund. Also included is \$36,000 for overtime.

Employee Benefits include \$641,873 for health, retirement, life insurance, OPEB, and other employee benefits.

Utilities include \$302,000 for electricity, \$35,000 for fuel, and

\$5,200 for water.

Maintenance includes funds for repair of facilities, vehicles, and equipment.

Insurance includes building, vehicle, and liability coverage.

SIGNIFICANT BUDGET CHANGES:

Personnel Services changes are for step increases and COLA's.

Operating expenses decrease by 2.4% due to changes in health, property, building, and casualty insurance.

SEWER FUND**GENERAL FUND SERVICES**

GOAL STATEMENT: To compensate the General Fund for services provided by various departments.

LONG RANGE OBJECTIVES:**STATUS UPDATE OF FY 19 OBJECTIVES:**

- To ensure that all costs related to sewer services are identified and appropriately charged through evaluation and modification of the indirect cost model used to assess charges for General Fund administrative support. **ANNUAL GOAL MET**
- To charge the General Fund for services provided. **ACCOMPLISHED**

FY 20 OBJECTIVES:

- To ensure that all costs related to sewer services are identified and appropriately charged through evaluation and modification of the indirect cost model used to assess charges for General Fund administrative support.
- To charge the General Fund for services provided.

SERVICE LEVELS:

	FY 14 <u>Actual</u>	FY 15 <u>Actual</u>	FY 16 <u>Actual</u>	FY 17 <u>Actual</u>	FY 18 <u>Actual</u>
Departments Reimbursed	6	6	6	6	6
Percentage of Total Fund Expenses Paid to the General Fund	8	9	9	9	8

SEWER FUND

GENERAL FUND SERVICES

	FY 16 Actual	FY 17 Actual	FY 18 Actual	FY 19 Budget	FY 20 Proposed	Change FY 19 - 20	Percent Change
General Fund Services	\$ 354,140	334,098	336,744	348,210	377,324	29,114	8.4%
Transfers to Other Funds	\$ 0	0	0	0	0	0	0.0%
TOTAL APPROPRIATION	\$ 354,140	334,098	336,744	348,210	377,324	29,114	8.4%
SOURCES OF FUNDS							
Sewer Revenues	\$ 354,140	334,098	336,744	348,210	377,324	29,114	8.4%

MAJOR COMPONENTS:

General Fund Services: The General Fund provides services which are used by the Sewer Fund. Transfers are made from the Sewer Fund to the General Fund to compensate for the cost of these services. Additionally, the General Fund uses resources of the Sewer Fund and pays for that use. These payments are netted against amounts owed to the General Fund. Charges for FY 20 are as follows:

Town Council	7% of budget	\$ 6,867
Town Manager	7% of budget	35,229
Finance Department	9% of budget	143,858
Human Resources/ Human Rights	6% of budget	25,339
Information Technology	8% of budget	46,023
Public Works Administration	31% of budget	97,554
Equipment Maintenance	10% of budget	37,454
Rental of Garage at Wastewater Treatment Facility		<u>(15,000)</u>
TOTAL		<u>\$377,324</u>

SIGNIFICANT BUDGET CHANGES:

The Town Council has been added for compensation to the General Fund and the offsetting expences for equipment for catch basin cleaning has been eliminated as this now resides in the Sewer Fund.

SEWER FUND**DEBT SERVICE**

GOAL STATEMENT: To provide funds for principal and interest payments for temporary and long-term debt.

LONG RANGE OBJECTIVES:**STATUS UPDATE OF FY 19 OBJECTIVES:**

- To make payments on debt incurred for the Pine Street Project. **ANNUAL GOAL MET**
- To make payments on debt incurred for the 2012 Harkness Road and Amherst Woods sewer extension projects. **ANNUAL GOAL MET**

FY 20 OBJECTIVES:

- To make payments on debt incurred for the Pine Street Project.
- To make payments on debt incurred for the 2012 Harkness Road and Amherst Woods sewer extension projects.

SERVICE LEVELS:

	FY 14 <u>Actual</u>	FY 15 <u>Actual</u>	FY 16 <u>Actual</u>	FY 17 <u>Actual</u>	FY 18 <u>Actual</u>
Issues Outstanding	3	3	3	3	3
New Issues	1	0	0	0	1

SEWER FUND

DEBT SERVICE

		FY 16 Actual	FY 17 Actual	FY 18 Actual	FY 19 Budget	FY 20 Proposed	Change FY 19 - 20	Percent Change
Principal	\$	267,200	267,200	267,200	463,400	469,600	6,200	1.3%
Interest	\$	118,958	111,410	109,591	156,371	228,937	72,566	46.4%
TOTAL APPROPRIATION	\$	386,158	378,610	376,791	619,771	698,537	78,766	12.7%
SOURCES OF FUNDS								
Sewer Revenues	\$	386,158	378,610	376,791	619,771	698,537	78,766	12.7%

MAJOR COMPONENTS:	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
Sewer Extension	\$206,600	\$ 64,627	\$271,227
Pine Street Extension	53,000	23,610	76,610
Sewer Extension, Harkness Design	10,000	700	10,700
Amherst Woods Sewer Extension	<u>200,000</u>	<u>140,000</u>	<u>340,000</u>
	<u>\$469,600</u>	<u>\$228,937</u>	<u>\$698,537</u>

SIGNIFICANT BUDGET CHANGES:
None.

SEWER FUND

CAPITAL PROGRAM SUMMARY

GOAL STATEMENT: To provide for the maintenance and improvement of the Town's sewer system.

LONG RANGE OBJECTIVES:

- To plan, design, and implement a major upgrade to the existing treatment facility to meet current and future needs.
- To implement a long range Sewer Extension Master Plan consistent with economic development goals of the Town.

STATUS UPDATE OF FY 19 OBJECTIVES:

- To complete the following:
 - Collection System Improvements
To upgrade pumps and generators at several of the waste water pump stations. **ACCOMPLISHED**
 - Treatment System Improvements
To rebuild second grinder pump. **ACCOMPLISHED**
To install new effluent pump meter. **RESCHEDULED**
 - New vehicle. **ACCOMPLISHED**
 - New Gravity Belt Thickener to replace existing sludge backup thickening system. **ONGOING**

FY 20 OBJECTIVES:

- To complete the following:
 - Begin design reuse water treatment facility,
 - Finalize the East Amherst Sewer expansions,
 - Install new valves and pump drives in West Street Pump Station,
 - New dump truck,
 - New mower.

SERVICE LEVELS:	FY 14	FY 15	FY 16	FY 17	FY 18
	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>	<u>Actual</u>
Number of Projects:					
Departmental Equipment	0	2	1	1	0
Existing Facilities	3	3	3	3	3
New Facilities	0	0	0	0	0

SEWER FUND

CAPITAL PROGRAM SUMMARY

		FY 16 Actual	FY 17 Actual	FY 18 Actual	FY 19 Budget	FY 20 Proposed	Change FY 19 - 20	Percent Change
Departmental Equip.	\$	45,000	35,000	0	50,000	60,000	10,000	20.0%
Existing Facilities	\$	205,000	205,000	405,000	205,000	60,000	(145,000)	-70.7%
New Facilities	\$	0	0	0	0		0	0.0%
TOTAL APPROPRIATION	\$	250,000	240,000	405,000	255,000	120,000	(135,000)	-52.9%
SOURCES OF FUNDS								
Sewer Revenues	\$	250,000	240,000	371,983	162,624	104,422	(58,202)	-35.8%
Other Available Funds	\$	0	0	0	0	0	0	0.0%
Surplus Funds	\$	0	0	33,017	92,376	15,578	(76,798)	-83.1%

MAJOR COMPONENTS:		
Facilities	\$50,000	Collection System Improvements
	10,000	DPW Facilities Improvements
Equipment	50,000	Dump Truck
	10,000	Mower