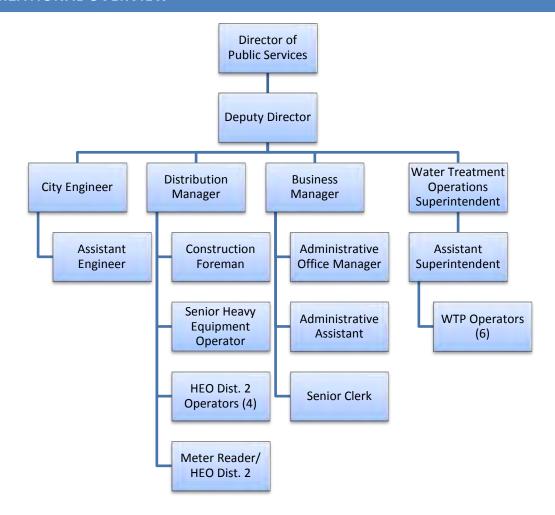


DEPARTMENT OF PUBLIC SERVICES: WATER DIVISION

MISSION STATEMENT

The mission of the Department of Public Services' Water Division is to provide safe and reliable water treatment, supply, storage and distribution services to all customers of the Division, as well as, to maintain the related infrastructure in a cost effective and environmentally sensitive manner for the short and long term benefit of our customers and the environment.

ORGANIZATIONAL OVERVIEW



Position	FY2017 Actual	FY2018 Actual	FY2019 Budgeted
Public Services Director	0.33	0.33	0.33
Public Services Deputy Director	0.33	0.33	0.33
Business Manager	0.33	0.33	0.33
City Engineer	0.33	0.33	0.33
Assistant City Engineer	0.33	0.33	0.33
Superintendent of Water Operations	1.0	1.0	1.0
Assistant Superintendent of Water Operations	1.0	1.0	1.0
Water Distribution Manager	1.0	1.0	1.0
Administrative Office Manager	0.5	0.5	0.5
Administrative Assistant	0.5	0.5	0.5
Data Entry Clerk I	0.5	0.5	0.5
WTP Operator T-4	4.0	4.0	4.0
WTP Operator T-3	0.0	1.0	1.0
WTP Operator T-2	2.0	1.0	1.0
WD Construction Foreman	1.0	1.0	1.0
Senior HEO D2	1.0	1.0	0.0
HEO D2	5.0	4.0	5.0
Meter Reader – HEO D2	0.7	0.7	0.7
Total Full Time-Equivalents	19.9	18.9	18.9

PERFORMANCE MEASUREMENTS

Performance Indicator	Unit of Measure	Actual FY2015	Actual FY2016	Actual FY2017	Estimated FY2018
Aging Infrastructure Replacement	Linear feet	1,300	1,561	1,500	800
Volume of water treated	Million gallons	679	719	655	685
Water/Sewer Liens	Number	252	251	258	254

FY2018 ACCOMPLISHMENTS

Water Main Work

- Installed 1,000 linear feet of 12"water main on Hale Street including customer connections and replaced a fire hydrant. Accomplished this by installing tees and valves to keep the existing water main live during installation of the new 12" water main
- Completed installation of 500 linear feet of 8" water main on Finnegan Way including customer connections and addition of one fire hydrant. Replaced an existing hydrant as well as installation of two isolation valves
- Conducted semi-annual City-wide hydrant flushing of fire hydrants in both Newburyport and Newbury
- Completed over 1,400 Dig Safe mark outs requests (emergency requests from National Grid, State mandated requirements for any digging or excavating)
- Repaired 29 water main/service leaks

Water Treatment Plant

- Purchased treatment chemicals through the Northeast Merrimack Valley/Consortium which allows for the lowest pricing based on the purchasing power of 54 members of the consortium
- Bathymetric studies were completed at the Upper Artichoke, Lower Artichoke and Indian Hill Reservoirs. The study confirmed:
 - Current depths of the reservoirs and any changes
 - Updated information on the sediment depths in the reservoirs
- An updated Safe Yield Study was completed and submitted to the City. The safe yield identified:
 - Current reservoir calculated volumes
 - o Safe and firm yield volume calculations for the reservoir system which will aid in planning future City water requirements and reserve capacity management during drought conditions
- Treatment staff assisted MADEP with their reservoir water quality sampling program. MADEP is
 expected to provide the City with a detailed reservoir system report in the coming years
- Water and DPS staff assisted AECOM and Barrie Miller Well Drilling for the test well exploration and well testing program at the Evergreen Golf Course. The golf course was the last known area in the City to explore for additional well water supply. The findings included updates on the estimated water resource size for Well No. 2 and the most current water quality information. The report was presented to the Mayor, City Departments, Water & Sewer Commission, City Council and the Planning Board
- Reconstructed the existing Water Treatment Plant sludge drying bed for better dewatering operations. These beds are used to dewater the lagoon sludge several times per year. Proper drying bed operation allows:
 - o Maximizing sludge removal per pumping operation
 - o Maximum sludge storage between seasons
 - o Maintaining EPA compliance through maximum lagoon capacity

Engineering

- The Engineering Division and Water Construction crew performed a number of design projects to improve our City's infrastructure, including the Plum Island Hydrant Replacement Project. Construction began on this project in calendar year 2017 and will continue into summer of 2018. The work includes replacing 145 fire hydrants and the installation of 63 isolation valves on Plum Island. The division is responsible for project coordination between the contractor and City personnel and the division also manages daily construction operations and public relations.
- Engineering played a vital role in and attended multiple task force group meetings and workshops
 for the City's Climate Change Resiliency Committee. Both groups are preparing Resiliency Plans to
 assist Newburyport and the Great Marsh communities in dealing with impacts from climate
 change, including impacts to our public water supply, water treatment facility, and distribution
 system.

Business Office

Business Office continued to assist customers with timely and accurate water/sewer bills, as well
as, prompt and professional response to customer concerns. The number of customers receiving ebills rather than paper bills continues to increase.

FY2019 TRENDS

Managing reservoir levels and conserving water will continue to be a primary area of focus. The Water Division will continue to maintain and preserve our water sources as well as our infrastructure to maintain clean and safe drinking water.

The Water Construction Crew will continue to perform preventative maintenance such as flushing, exercising valves, and reinstallation of service main valves throughout the distribution system. Given the age of certain areas of the system, routine capital investments will be needed to maintain and improve the vast network of water mains throughout Newburyport and Newbury.

Engineering will continue to provide technical assistance, design, and construction oversight on water-related projects.

The Water/Sewer Business Office will continue to manage over 8,000 customer accounts, actively pursue the collection of unpaid bills, prepare rate analysis, and develop and monitor budgets.

FY2019 GOALS AND OBJECTIVES

GOAL 1: REPLACE AGING WATER MAIN

Objectives:

- Replace mains in conjunction with the roadway five-year paving plan
- Prioritize main replacements in segments that improve water quality and service

GOAL 2: CONTINUE DOWNTOWN WATER/SEWER/DRAINAGE UTILITY UPGRADE PROJECT

Objectives:

- Continue to find short-term low cost fixes to relieve flooding in the downtown
- Continue to work on master plan that includes design of a replacement drainage system that will be incorporated within the sewer and water replacement master plan
- Complete preliminary study by working closely with other divisions of DPS and public utility companies

GOAL 3: CONTINUE TO MEET THE REQUIREMENTS OF THE FEDERAL AND STATE WATER TREATMENT PERMITS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) WATER MANAGEMENT ACT DIVISION

Objectives:

- Provide safe and reliable drinking water
- Experience no permit violations
- Work with MADEP on the new Water Management Act withdrawal limits

GOAL 4: PREPARE GIS MAP AND MOBILE APP OF WATER DISTRIBUTION SYSTEM

Objectives:

• The primary goal of this project is mapping the location of key components in the system so they may be located during emergency situations and also show detailed information regarding the connections between properties. Most importantly, this program will reduce the operator's time locating the components of the system and as a result, allow us to conduct a timelier repair. The goal is to have 25% of the distribution system mapped during FY2019.

GOAL 5: METER REPLACEMENT PROGRAM

Objectives:

• Start design and implement of a multi-year Citywide Meter Replacement Program. This improvement will upgrade software, make meter reading faster and easier and produce real-time customer data. Our goal is to replace 25% of all meters within the next two years.

GOAL 6: PREPARE CLIMATE CHANGE RESILIENCY PLAN

Objectives:

Bartlett Spring Pond, Lower Artichoke Reservoir Dam, and the Artichoke Pumping Station are
vulnerable to flooding, storm surge, rising seas, and floodwaters from Merrimack River.
Preparations must be made to protect these systems from flood damage especially in light of
climate change impacts which bring more intense storms. The goal is to hire a firm to evaluate our
water supply and distribution assets and prepare a Resiliency Plan highlighting the various means
of protection.

PROGRAM & SERVICES

Treatment

- Provide safe and reliable water treatment
- Meet all State and Federal drinking water standards
- Work within the WMA withdrawal limits
- Manage water supply areas
- •Maintain equipment at the WTP
- Maintain 2 well stations and 5 pumping stations
- Maintain 2 water storage tanks

Distribution

- Maintenance and repair of 120 miles of water mains
- Maintenance and repair of 942 hydrants City wide
- •24 hour response to customer issues
- Computerized meter reading City wide for City of Newburyport and the Town of Newbury

Administration/ Billing

- Manage over 8,000 customer accounts
- Actively pursue the collection of unpaid balances
- Manage customer service inquires and work orders
- Process Monthly Billing to Customers within Billing Cycle
- Review and Sign Off on Building Permits
- Provide Budgets, Rate Analysis, Abatement requests and reports to Water and Sewer Commission

Engineering

- •Technical assistance to resolve problems and provide solutions.
- Design water main replacement projects.
- •Review of waterrelated design and construction projects.
- Construction oversight
- Participate in the creation of a Resiliency Plan to protect the City's water supply.

WATER ENTERPRISE FUND (060-450)

	FY2016	FY2017	FY2018	FY2019	\$	%
	ACTUAL	ACTUAL	BUDGET	PROPOSED	CHANGE	CHANGE
001 - PERSONNEL SERVICES						
51101 - DPS SAL DIRECTOR	37,704	39,189	39,762	40,557	795	2.0%
51102 - DPS SAL DEPUTY DIRECTOR	32,049	31,839	33,895	33,895	0	0.0%
51103 - DPS SAL BUSINESS MANAGER	23,762	22,046	22,880	23,338	458	2.0%
51117 - DPS SAL ASST ENGINEER	15,948	20,314	20,641	20,641	0	0.0%
51118 - WAT SALTREATMENT OPS SUPT	79,938	70,422	91,800	91,800	0	0.0%
51119 - DPS SAL CITY ENGINEER	30,515	30,200	30,686	30,686	0	0.0%
51131 - DPS SAL ADMIN ASSISTANT	21,608	19,064	23,079	24,012	933	4.0%
51132 - DPS SAL ADMIN OFFICE MGR	29,475	24,576	26,490	25,462	(1,028)	-3.9%
51134 - WAT SAL DISTRIBUTION MNGR	76,146	75,359	76,571	78,103	1,532	2.0%
51158 - WAT SALLABOR	703,546	716,823	801,942	842,147	40,205	5.0%
51190 - WAT SAL SUMMER EMPLOYEES	10,533	11,946	21,600	21,600	0	0.0%
51301 - WAT OVERTIME	145,509	148,011	140,840	147,600	6,760	4.8%
51401 - WAT LONGEVITY	13,108	12,725	9,750	9,750	0	0.0%
51402 - WAT LICENSE STIPENDS	0	4,000	8,100	9,100	1,000	12.3%
51403 - WAT HOLIDAY PAY	12,937	18,352	18,835	19,962	1,127	6.0%
51405 - WAT CLOTHING REIMBURSEMENT	11,910	12,531	11,823	11,823	0	0.0%
51411 - WAT NIGHT DIFFERENTIAL	1,456	1,504	1,464	3,544	2,080	142.1%
51420 - WAT EDUCATION CREDITS	0	425	425	425	0	0.0%
51710 - WAT RETIREMENTS/SICK LEAVE	0	44,799	23,979	34,102	10,123	42.2%
51711 - WAT RETIREMENT SYSTEM	290,744	269,058	287,215	283,169	(4,045)	-1.4%
51750 - WAT WORKERS COMP INS	33,563	36,920	45,042	49,546	4,504	10.0%
51760 - WAT HEALTH INSURANCE	241,884	301,048	339,421	355,714	16,292	4.8%
51770 - WAT FICA PAYROLL TAXES	17,106	18,407	17,770	18,596	826	4.6%
001 - PERSONNEL SERVICES Total	1,829,441	1,929,559	2,094,011	2,175,572	81,561	3.9%
002 - PURCHASE OF SERVICES						
52101 - WAT HEAT	8,455	13,739	15,000	15,000	0	0.0%
52102 - WAT ELECTRICITY	242,215	184,628	250,000	250,000	0	0.0%
52401 - WAT IT EXPENSE	52,215	29,076	73,008	73,008	0	0.0%
52402 - WAT GEN CONSTRUCTION	80,560	88,392	100,000	100,000	0	0.0%
52403 - WAT MAINT-VEHICLES	24,605	28,507	30,000	30,000	0	0.0%
52404 - WAT DISTRIBUTN MAINT	75,235	72,078	62,400	62,400	0	0.0%
52405 - WAT TREATMENT MAINT	72,258	67,823	72,500	72,500	0	0.0%
52406 - WAT MAINT-EQUIPMENT	16,486	10,598	12,000	12,000	0	0.0%
53001 - WAT FINANCIAL AUDIT	6,825	7,166	7,883	7,883	0	0.0%
53020 - WAT LEGAL EXPENSES	17,761	16,202	50,000	50,000	0	0.0%
53024 - WAT BOND/NOTE EXP	25,843	24,385	24,386	24,386	0	0.0%
53025 - WAT ENGINEER RETAINER	8,494	62,109	75,000	75,000	0	0.0%
53026 - WAT POLICE DETAILS	26,125	46,800	20,000	20,000	0	0.0%
53028 - WAT PRE-EMPLOYMENT PHYSICAL	1,936	1,076	1,500	1,500	0	0.0%
53029 - WAT CONTRACT-CROSS CONN TEST	18,450	19,770	19,000	19,000	0	0.0%
53030 - WAT SLUDGE REMOVAL/FILTER PLT	9,285	26,100	20,000	•	0	0.0%
206		•	,	ort Fiscal Ve	22r 2010 R	udaet

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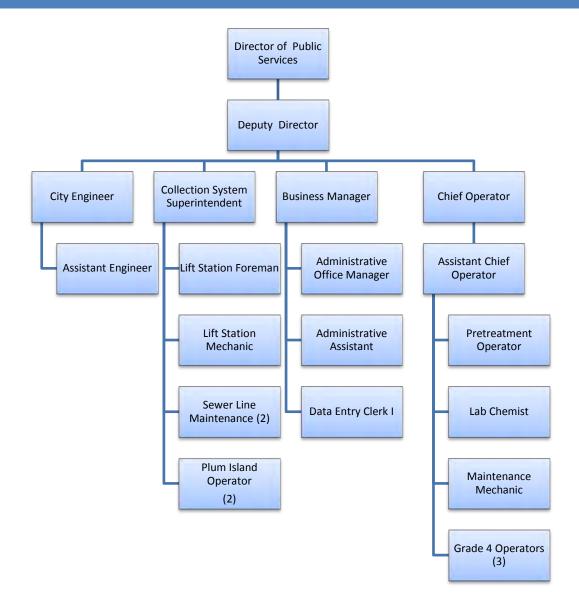
	FY2016	FY2017	FY2018	FY2019	\$	%
	ACTUAL	ACTUAL	BUDGET	PROPOSED	CHANGE	CHANGE
53031 - WAT TEST-SURFACE WAT SAMPLING	5,973	14,393	7,500	7,500	0	0.0%
53032 - WAT WATER TEST	17,204	18,861	27,954	39,054	11,100	39.7%
53402 - WAT TELECOMMUNICATNS	10,452	10,689	10,620	10,620	0	0.0%
53780 - WAT PAYMT IN LIEU TAXES	5,667	5,720	8,500	8,500	0	0.0%
002 - PURCHASE OF SERVICES Total	726,045	748,111	887,251	898,351	11,100	1.3%
OOA CURRUES						
004 - SUPPLIES	16 472	10.025	10.750	10.750	0	0.00/
54201 - WAT GENERAL OFC EXP	16,472	19,035	18,750	18,750	0	0.0%
54301 - WAT CONSERVATION	5,000	3,460	5,000	5,000	0	0.0%
54302 - WAT CHEMICALS	116,782	145,374	125,000	•	0	0.0%
54303 - WAT CONSUMER REPORT	8,098	8,629	8,000	8,000	(204)	0.0%
54801 - WAT FUEL/OIL VEHICLE(S)	13,392	27,515	27,172	26,870	(301)	
55800 - WAT MISC SUPPLIES	1,239	1,015	2,225	2,225	0	0.0%
004 - SUPPLIES Total	160,982	205,027	186,147	185,845	(301)	-0.2%
007 - OTHER CHARGES & EXPENSES						
	22.470	14 522	24 500	24 500	0	0.00/
57100 - WAT TRAINING/TRAVEL	22,179	14,533	24,500	24,500	0	0.0%
57301 - WAT SDWA	5,537	5,446	6,107	6,107	0	0.0%
57401 - WAT MUNICIPAL INSURANCE	52,163	57,379	63,117	75,500	,	19.6%
57407 - WAT EDUCATION CREDIT	1,125	0	0	0	0	
57800 - WTR LEGAL SETTLEMENT	0	114,500	0	0	0	10.00/
007 - OTHER CHARGES & EXPENSES Total	81,004	191,859	93,724	106,107	12,383	13.2%
008 - CAPITAL OUTLAY						
58310 - WAT G.I.S.	18,563	6,997	10,000	10,000	0	0.0%
58401 - WAT SECURITY FENCE/WELLS	(425)	0,557	0	0,000	0	0.070
58513 - WAT WTR MAIN REPLAC PROGRAM	87,953	100,239	100,000	100,000	0	0.0%
58536 - WAT DPS BLDG EQUIP/FURNITURE	15,000	0	0	· .	0	0.070
58550 - WAT VEHICLE/EQUIP REPLACE	40,000	28,311	51,000	130,000	79,000	154.9%
008 - CAPITAL OUTLAY Total	161,091	135,547	161,000	240,000	79,000	49.1%
	, , , ,		. ,	.,	-,	
009 - DEBT SERVICE						
59100 - WAT DEBT PRINCIPAL	1,352,589	1,400,008	1,244,494	1,396,401	151,906	12.2%
59150 - WAT DEBT INTEREST	476,952	442,614	441,244	457,738	16,495	3.7%
009 - DEBT SERVICE Total	1,829,541	1,842,622	1,685,738	1,854,139	168,401	10.0%
Cundant	4 700 400	F 0F0 705	F 407 077	F 460 04 1	252 444	C 051
Grand Total	4,788,103	5,052,725	5,107,870	5,460,014	352,144	6.9%

DEPARTMENT OF PUBLIC SERVICES: SEWER DIVISION

MISSION STATEMENT

The mission of the Department of Public Services Sewer Division is to provide quality and efficient wastewater collection, operation and treatment services to all customers as well as to maintain the related infrastructure in a cost effective and environmentally sensitive manner for the short and long term-benefit of our customers and the environment.

ORGANIZATIONAL OVERVIEW



Desition	EV2017	EV2010	EV2010
Position	FY2017	FY2018	FY2019
	Actual	Actual	Budgeted
Public Service Director	0.33	0.33	0.33
Public Service Deputy Director	0.33	0.33	0.33
City Engineer	0.33	0.33	0.33
Business Manager	0.33	0.33	0.33
Business office Manager	0.5	0.5	0.5
Administrative Assistant	0.5	0.5	0.5
Assistant Engineer	0.33	0.33	0.33
Data Entry Clerk I	0.5	0.5	0.5
Chief Operator	1.0	1.0	1.0
Assistant Chief Operator	1.0	1.0	1.0
Pretreatment Coordinator	1.0	1.0	1.0
Senior Maintenance Forman	1.0	1.0	1.0
Collection System Superintendent	1.0	1.0	1.0
Lab Chemist	1.0	1.0	1.0
Operator Grade IV	3.0	3.0	3.0
Maint/Prevent Maintenance	1.0	1.0	1.0
Mechanic			
Pump Station Operator/Mechanic	2.0	2.0	2.0
Sewer Line Maintenance Operator	2.0	2.0	2.0
Plum Island Operator	2.0	2.0	2.0
Meter Reader	0.3	0.3	0.3
Total Full Time-Equivalents	19.5	19.5	19.5

PERFORMANCE MEASUREMENTS

Performance Indicator	Unit of Measure	Actual FY2015	Actual FY2016	Actual FY2017	Estimated FY2018
LF of sewer main cleaned yearly	Linear Feet	113,044	185,678	150,665	160,000
Response to issues, alarms and sewer calls/WWTF/lift station Number of calls FY2016 are higher due to new call tracking process / procedure	Calls	75	*100	65	TBD
FOG Program/Compliance Number of business with grease traps. Newbury/Newburyport	Per establishment	N/A	N/A	N/A	**85 Inspected
Plum Island Vacuum System alarms and sewer calls	Calls	PI Failure	45	60	TBD
Odor Complaints	Calls	>25	>25	3	0
Wastewater treated	Gallons/ millions	554	563	647	615
Biosolids for composting	Metric Tons		687	596	642
Oxygen Consuming Material removed from Wastewater	Pounds/ Million	1.5	1.6	1.1	1.5
Water/Sewer Liens	Number	252	251	258	254

^{*}New tracking method.

FY2018 ACCOMPLISHMENTS

Fats Oil and Grease (FOG) Program

- Initiated Fats Oil and Grease (FOG) inspection procedure to help with the ongoing grease issue the City is currently facing:
 - Created a FOG app for Sewer and BOH to use during inspection, bringing the total number of mobile apps in use to three
 - o Held three day workshop/PowerPoint presentation to all industries in the City regarding the FOG program. Very well received
 - Working to reduce amount of grease entering the system throughout the City, conducting unannounced inspections on a regular basis making sure the Fog, Fats, Oil, Grease (FOG) program is followed
 - Continue to educate public on what not to flush posted on Sewer Division web site as Keeping Sewer Pipes Clean!
 - o CCTV continues throughout the City's collection system in order to evaluate/ replace/ and repair any issue/ defects as needed. Also, CCTV helps locate FOG issues before backups occur

^{**140} establishments with grease traps that will be inspected for the FOG program.

Collections

- O&M continues to be high priority regarding Plum Island:
 - o Completed alarm install on Plum Island
 - Completion of the state of the art mobile app
- Construction started/ongoing with new Graf lift station; estimated time of completion fall 2018
- Conducted proper O&M repair and preventative maintenance to Wastewater Treatment Facility and collection system:
 - o Cleaned approximately 150,665 linear feet of sewer main
 - o Cleaned 16 lift station wet wells twice per year per station
 - Manhole repair throughout the City in an effort to reduce Inflow/Infiltration (I/I) repairs consists of replacing frames and covers, resurfacing inside of the MH with cement (hydraulic cement), sealing joints between inlet and invert
 - Including sewer main replacement on Dawes, 700 LF of 6" clay was replaced with 700' of 6" PVC
- Responded and repaired as needed all sewer issues to help prevent Sanitary Sewer Overflow (SSO)

Odor Control

- Continue working with Environmental Partners Group on solutions to reduce odors by completing installation of the new biofilter system at the Waste Water Treatment Facility (WWTF)
- Continue working on reduction of Nitrogen; at this juncture our NPDES permit does not address
 nitrogen limits but all indications are that this will be required in the future and we are ramping up
 to address a reduction

Operations

- Sludge quality continues to be of exceptional quality to compost
- Continued Safety Training and Spill Prevention and Counter Measures Plan trainings in-house for all personnel
- Continued to provide quality customer service
- No major Industrial Pretreatment (IPP) violations

Engineering

 The Engineering department worked with legal counsel to obtain all the necessary temporary and permanent easements to construct and maintain a new access road to the West End Sewer Main that runs along the Lower Artichoke Reservoir. They also finalized the design obtained an Order of Conditions from the Conservation Commission, and awarded the construction bid. Construction will begin spring 2018.

FY2019 TRENDS

The focus of the Sewer Department operations and collections will continue to operate the entire sewer system in the most efficient way using Supervisory Control and Data Acquisition (SCADA). SCADA software allows operators to see real time operations, rather than receiving an alarm after it's too late. The Sewer Department is also using SCADA type system at lift stations called Mission. The technology

of these two systems allows the Sewer Department to continue to maintain the wastewater infrastructure at optimal levels. Staff will continue to learn new techniques on solving issues that may arise, including navigating and operating the newly installed SCADA alarm implemented.

Will continue to focus on Inflow/Infiltration (I/I) reduction by responding and repairing any sewer issues discovered during routine cleaning or CCTV work inspections.

The NPDES permit continues to have significant impact on the Newburyport Sewer Division. Efforts continue to be made to coordinate the use of existing resources to maximize the benefits for the entire community while tracking costs to assure compliance with the Enterprise Fund requirements.

Engineering will manage the construction of the West End Sewer Main Access Road Process through FY2018 and into FY2019.

The Water/Sewer Business Office will continue to manage over 8,000 customer accounts, actively pursue the collection of unpaid bills, prepare rate analysis, and develop and monitor budgets.

FY2019 GOALS & OBJECTIVES

<u>GOAL 1</u>: PROVIDE PROPER OPERATIONS AND MAINTENANCE SERVICES TO OUR CUSTOMERS; CONTINUE WORKING TO ENSURE PROPER OPERATIONS OF THE COLLECTION SYSTEM, VACUUM SYSTEM AND WWTF

Objectives:

- Maintain the Wastewater Treatment Facility (WWTF); lift stations, sewer mains, and Plum Island with minimal disruption to our customers
- Respond, repair, and maintain all sewer issues that may occur at the WWTF, lift stations, Plum Island, and sewer mains throughout the City in a timely manner
- Continue to improve health and safety issues for our employees
- Reduce Inflow and Infiltration (I/I) throughout the City and institute a flowmeter program
- Prevent Sanitary Sewer Overflow (SSO) through constant communication and education
- Continue to educate public on what not to flush; see "Keeping Clean Sewer Pipes" on the City's web site
- Maintain as one of our highest priorities, to reduce odor
- Optimization of new biofilter and associated components

GOAL 2: CONTINUE TO OPERATE THE WWTF UNDER THE REQUIREMENTS OF THE NPDES PERMIT AT THE HIGHEST LEVEL INCLUDED MAXIMUM POLLUTANT LIMITS A MINIMUM PERCENT REMOVAL

Objectives:

- Meet permit limits and provide quality wastewater discharge
- Reduction in Nitrogen limits
- Completion of the anoxic zone
- Prepare to enter into a new NDPES permit with DEP
- Conduct facility plant and process evaluation and engineering based needs assessment
- Develop and implement Treatment plant and collection system corrosion control strategy

GOAL 3: FATS OIL AND GREASE (FOG) PROGRAM

Objective:

- Keeping gravity mains free and clear from grease and debris, preventing SSO activity from occurring
- Continue fighting the grease issue the City is currently facing, as stated above, currently creating a
 mobile app which will be use in the field during inspection by Sewer personnel as well as the BOH,
 the intent of the app is to have multiple different departments using the same app to track the
 issues regarding grease/ traps/cleaning/etc.
- The mobile app will be a tremendous help in finding the cause/ help with reduction and elimination
 of the grease issue
- Continue to CCTV sewer mains for grease issues throughout the City
- Holding individuals accountable for actions from their respected industries
- Continue working to reduce amount of grease entering the system throughout the City, conducting unannounced inspections on a regular basis making sure the FOG program is followed

GOAL 4: COLLECTION SYSTEM

Objectives:

- Maintain all pump stations throughout the City with the highest standards
- Perform O&M on all sewer mains throughout the City, Keeping mains free and clear, preventing SSO activity from occurring
- Continue fighting the grease issue the City is currently facing, as stated above, currently creating a
 mobile app which will be use in the field during inspection by Sewer operators as well as the BOH,
 the intent of the app is to have multiple different departments using the same app to track the
 issues regarding grease/ traps/cleaning/etc.
- The mobile app will be a tremendous help in finding the cause/help with reduction and elimination of the grease issue while holding individuals accountable for actions from their respected industries

GOAL 5: PLUM ISLAND VACUUM SYSTEM

Objectives:

- Continue O&M on all valve pits/and pump station on Plum Island
- Continue on developing ways to help operate the system in the cold months
- Install new idea on how to remove frozen valves in a timely manner

GOAL 6: DOWNTOWN WATER/SEWER/DRAIN UTILITY UPGRADES PROJECT

Objectives:

- Continue to find short-term low cost fixes to relieve flooding in the downtown
- Continue to work on master plan that includes design of a replacement drainage system that will be incorporated within the sewer and water replacement master plan
- Complete preliminary study by working closely with other divisions of DPS and public utility companies

GOAL 7: PREPARE CLIMATE CHANGE RESILIENCY PLAN

Objectives:

- The Waste Water Treatment Facility and many of the City's sewer pumping stations are vulnerable to flooding, storm surge, and rising seas; preparations must be made to protect the facility from flood damage especially in light of climate change impacts which bring more intense storms
- Hire a firm to evaluate our WWTF and pumping stations and prepare a Resiliency Plan highlighting the various means of protection in collaboration with the City's Resiliency ad hoc team

Treatment

- Provide quality and efficient treatment for wastewater to be discharged to Merrimac River.
- Meet the requirements for the NPDES permit.
- Submit yearly reports to the DEP/EPA.
- Maintain proper operations of the WWTF.
- Complete phase two odor control project WWTF upgrade.
- 24/7 on call personnel to respond to all calls during and after hours at the WWTF.

Collection

- Maintenance of 16 pump stations including Plum Island.
- Clean and maintain 75 miles of gravity sewer mains.
- 24 hour response to customer issues.
- Video sewer mains for the reduction of (II) Inflow/Infiltration for NPDES permit requirements.
- O&M on sewer mains and lift stations to reduce sewer SSO.

Administration/ Billing

- Manage over 8,000 customer accounts.
- Actively pursue the collection of unpaid balances.
- Manage customer service inquiries and work orders
- Process Monthly Billing to Customers within Billing Cycle.
- Review and sign off on Building Permits
- Provide
 Budgets,Rate
 Analysis,
 Abatement
 requests and
 reports to Water
 and Sewer
 Commission

Engineering

- Technical assistance to resolve problems and provide solutions.
- Design access roads and sewer main replacements.
- Review of sewer rehabilitiation and replacement projects.
- Project management of sewer design projects.
- Construction oversight.

SEWER ENTERPRISE FUND (061-440)

T I	FY2016	FY2017	FY2018	FY2019	\$	%
	ACTUAL	ACTUAL	BUDGET	PROPOSED	CHANGE	CHANGE
001 - PERSONNEL SERVICES						
51101 - DPS SAL DIRECTOR	37,704	39,189	39,762	40,557	795	2.0%
51102 - DPS SAL DEPUTY DIRECTOR	32,049	31,839	33,895	33,895	0	0.0%
51103 - DPS SAL BUSINESS MANAGER	23,762	22,046	22,880	23,338	458	2.0%
51116 - SEW SAL CHIEF OPERATOR	75,316	79,346	96,900	96,900	0	0.0%
51117 - DPS SAL ASST ENGINEER	15,948	20,314	20,641	20,641	0	0.0%
51119 - DPS SAL CITY ENGINEER	30,515	30,200	30,686	30,686	0	0.0%
51122 - SEW SAL SUPT OF COLLECTIONS	85,399	84,517	85,876	85,876	0	0.0%
51131 - DPS SAL ADMIN ASSISTANT	21,608	19,064	23,079	24,012	933	4.0%
51132 - DPS SAL ADMIN OFFICE MGR	29,475	24,576	26,490	25,462	(1,028)	-3.9%
51158 - SEW SAL LABOR	767,003	815,245	848,137	870,904	22,767	2.7%
51190 - SEW SAL SUMMER EMPLOYEES	10,873	7,890	21,600	21,600	0	0.0%
51301 - SEW OVERTIME	158,268	202,714	196,724	201,839	5,115	2.6%
51401 - SEW LONGEVITY	13,061	6,202	6,378	6,378	0	0.0%
51402 - SEW LICENSE STIPENDS	0	500	5,600	9,600	4,000	71.4%
51405 - SEW CLOTHING REIMBURSEMENT	10,603	12,309	12,143	12,143	0	0.0%
51420 - SEW EDUCATION CREDITS	850	850	850	850	0	0.0%
51422 - SEW EDUCATION	4,539	0	0	0	0	
51710 - SEW RETIREMENTS/SICK LEAVE	44,637	41,909	0	10,120	10,120	
51711 - SEW RETIREMENT SYSTEM	283,666	281,482	309,292	333,756	24,463	7.9%
51750 - SEW WORKERS COMP INS	22,997	25,296	30,862	33,948	3,087	10.0%
51760 - SEW HEALTH INSURANCE	293,610	319,850	395,928	414,932	19,005	4.8%
51770 - SEW FICA PAYROLL TAXES	13,010	16,155	19,333	19,836	503	2.6%
001 - PERSONNEL SERVICES Total	1,974,894	2,081,494	2,227,056	2,317,272	90,216	4.1%
002 - PURCHASE OF SERVICES						
52101 - SEW HEAT	33,103	21,118	37,000	37,000	0	0.0%
52102 - SEW ELECTRICITY	292,194	425,980	356,326	356,326	0	0.0%
52401 - SEW IT EXPENSE	30,484	64,817	46,092	49,567	3,475	7.5%
52402 - SEW MAINT-GENERAL	31,593	39,417	36,350	36,350	0	0.0%
52403 - SEW MAINT-VEHICLES	22,089	24,350	27,000	27,000	0	0.0%
52405 - SWR MAINT-PLUM ISLAND	0	0	0	20,000	20,000	
52406 - SEW MAINT-EQUIPMENT	111,723	171,667	109,204	110,704	1,500	1.4%
52407 - SEW UNIFORM/SAFETY EQUIPMENT	15,034	18,979	15,136	15,136	0	0.0%
52408 - SEW MAINT-SEWER LINE	63,458	33,533	90,000	73,850	(16,150)	-17.9%
52409 - SEW MAINT-DRAINS	57,210	39,000	39,000	39,000	0	0.0%
53001 - SEW FINANCIAL AUDIT	6,825	7,166	7,883	7,883	0	0.0%
53020 - SEW LEGAL EXPENSES	20,492	21,452	50,000	50,000	0	0.0%
53024 - SEW BOND/NOTE EXP	41,174	37,650	37,650	37,650	0	0.0%
53026 - SEW POLICE DETAILS	4,700	2,707	10,000	10,000	0	0.0%
53028 - SEW MEDICAL/DRUG TESTING	4,151	5,379	4,500	4,500	0	0.0%
53030 - SEW CONSULTANT FEES	97,161	57,914	75,000	75,000	0	0.0%

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	FY2016	FY2017	FY2018	FY2019	\$	%
	ACTUAL	ACTUAL	BUDGET	PROPOSED	CHANGE	CHANGE
53035 - SEW INDUSTRIAL PRETREATMENT	10,919	10,256	14,550	14,550	0	0.0%
53040 - SEW BIOSOLIDS DISPOSAL	267,180	261,519	325,140	267,002	(58,138)	-17.9%
53050 - SEW VENDOR LAB TESTING	14,547	12,221	19,350	19,350	0	0.0%
53402 - SEW TELECOMMUNICATNS	21,610	21,256	26,740	26,740	0	0.0%
002 - PURCHASE OF SERVICES Total	1,145,647	1,276,381	1,326,920	1,277,607	(49,313)	-3.7%
004 - SUPPLIES						
54201 - SEW GENERAL OFC EXP	17,599	30,029	18,500	18,500	0	0.0%
54302 - SEW PLANT CHEMICALS	179,774	180,724	243,060	333,060	90,000	37.0%
54303 - SEW LAB CHEM/EQUIP/SUPPLIES	9,531	18,683	13,750	13,750	0	0.0%
54310 - SEW HOSE	0	404	3,850	0	(3,850)	-100.0%
54801 - SEW FUEL/OIL VEHICLE(S)	22,226	33,996	30,018	30,018	0	0.0%
54802 - SEW LUBRICANTS	0	4,651	5,000	5,000	0	0.0%
55800 - SEW MISC SUPPLIES	234	573	1,800	1,800	0	0.0%
004 - SUPPLIES Total	229,365	269,059	315,978	402,128	86,150	27.3%
007 - OTHER CHARGES & EXPENSES						
57100 - SEW TRAINING/TRAVEL	0	10,301	17,800	17,800	0	0.0%
57300 - SEW DUES/LIC/SUBSCRIPTIONS	1,169	471	1,350	1,350	0	0.0%
57401 - SEW MUNICIPAL INSURANCE	49,773	185,515	60,225	72,171	11,946	19.8%
007 - OTHER CHARGES & EXPENSES Total	50,942	196,287	79,375	91,321	11,946	15.0%
008 - CAPITAL OUTLAY						
58310 - SEW G.I.S.	8,993	10,861	10,000	10,000	0	0.0%
58330 - SEW I/I REHABILITATION	99,217	37,070	100,000	100,000	0	0.0%
58361 - SEW REPAIR LIFT STATIONS	131,467	119,256	150,000	150,000	0	0.0%
58362 - SEW EFFLUENT SAMPLER	5,881	6,786	6,000	6,000	0	0.0%
58536 - SEW DPS BLDG EQUIP/FURNITURE	15,000	0	0	0	0	
58550 - SEW VEHICLE/EQUIP REPLACE	0	0	9,000	5,000	(4,000)	-44.4%
008 - CAPITAL OUTLAY Total	260,557	173,973	275,000	271,000	(4,000)	-1.5%
009 - DEBT SERVICE						
59100 - SEW DEBT PRINCIPAL	1,525,110	1,444,430	1,862,984	2,006,272	143,289	7.7%
59150 - SEW DEBT INTEREST	691,430	785,845	948,591	995,608	47,017	5.0%
59250 - SEW INT TEMP LOAN	0	0	24,750	32,684	7,934	32.1%
009 - DEBT SERVICE Total	2,216,540	2,230,275	2,836,325	3,034,564	198,239	7.0%
Grand Total	5,877,944	6,227,469	7,060,654	7,393,893	333,239	4.7%

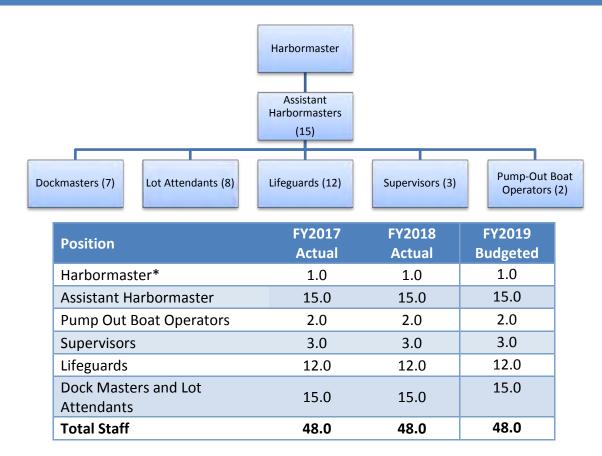
HARBORMASTER

MISSION STATEMENT

The Harbormaster Department is responsible for all the navigable water ways, Cashman Park boat ramp, docks along the central water front, Plum Island parking lot, Transient Boaters Facility, Public Restrooms and Life Guards in the City of Newburyport. Among the duties and tasks of the department are to insure the safety and property of the citizens and to aid and assist boaters, bathers and any other users of our waterways in the time of need.

The department responds to all calls for assistance from other agencies such as the Coast Guard, police, Fire, Environmental Police and other neighboring communities. The Harbormaster also assists the Health Department in collecting water samples for their testing requirements to ensure safe water for the bathers and fisherman. The Harbormaster Department is an ambassador on the water for the City and we help, direct and assist new boaters to the City on safety issues and keep them abreast of conditions and where to keep their vessels.

ORGANIZATIONAL OVERVIEW



^{*}Harbormaster is the only year-round full-time employee.

PERFORMANCE MEASUREMENTS

Performance Indicator	Unit of Measure	Actual FY2015	Actual FY2016	Actual FY2017	Estimated FY2018
Waterway Permits	#	1,477	1,491	1495	1500
Mooring Permits	#	176	196	186	200
Dingy Permits	#	36	41	43	50
Cashman Park Annual Parking Permits	#	70	72	75	75

FY2018 ACCOMPLISHMENTS

- Received occupancy permit for New Harbormaster Transient Boaters facility and Public Restrooms.
 Operated and maintained for the first season with no major issues and had lots of positive feedback
- Continued increased training of our Lifeguards and, Assistant Harbormasters which resulted in many lifesaving rescues
- Hosted a one week NASBLA accredited boating course on Boat operations and crewman that got us nationally certified as Boat Crew Man
- Continued to provided safety training and special procedure training to the Whittier bridge project employees and workers, which again resulted in several successful rescues with minimal injury
- Increased training with enhanced relationship with the Police and Fire departments and the Coast Guard. Imposed a interdepartmental mutual aid with Salisbury and Amesbury Harbormasters
- Assisted the Maritime museum with the very successful visit of the tall ships for Maritime Days' bringing thousands of tourists to the City by boat and land; and support Yankee Homecoming and River fest

FY2019 TRENDS

The weather plays a significant factor in revenues and activities associated with the Harbormasters Department. FY 2018 is expected to be a busy recreational boating season with more boats traveling and more visitors to the City of Newburyport based upon the low cost of fuel and the additional amenities our City now provides with the new facility. The local marinas are expected to be at over ninety (90%) percent capacity as more boats are being placed on our waterways.

The commercial boating industry, however, has been declining based upon many more regulations and restrictions that are being imposed on the fishing industry. On the positive side the Commercial Tuna fishing has had record quota caught and been extremely busy.

FY2019 GOALS & OBJECTIVES

GOAL 1: PROMOTE NEWBURYPORT AS A BOATING DESTINATION

Objectives:

Work with the City, Harbor Commission and other stakeholders to develop a plan to promote
 Newburyport as a world-class boating destination through advertising, social media and events;
 Attract more transient boaters to our City now that we have more amenities to offer the boaters

GOAL 2: ADDITONAL DREDGING OF THE RIVER

Objectives:

 Work with the MRBA, Mayors Office and Army Corp of Engineers to continue and to expedite the dredging of the river and related areas for the safety of mariners and transient boaters

GOAL 3: TALL SHIP VISIT

Objectives:

 Work with the Maritime Museum, Harbor Commission and all other stake holders, bringing in another tall ship for our City

GOAL 4: IMPROVE ONLINE PERMITTING

Objectives:

Improve our online data base for online permit renewals

Patrol Operations

- Reports directly to the Harbormaster
- Enforces all state and local boating laws
- Responds to any water or boating emergency within the waters of Newburyport
- Assist the Coast Guard and other communities along the waterways of Newburyport when asked
- Monitor all Newburyport vessels for current mooring and waterway permit stickers
- •Give safety information and boating regulations
- •Patrol Merrimac River
- Collect dock fees
- Help with flow of boats at Cashman Park
- Assist lifeguards with monitoring the beach and Plum Island Jetties

Pump Out Boat Operations

- Pump out all boats in Newburyport when called upon
- Maintain a log for amount of gallons pumped out to comply with state grant
- Report to
 Harbormaster on
 any maintenance
 issues or boat or
 land based pump
 station

Supervisors

- Help with scheduling of all staff
- Assist with payroll
- Answer phones
- Oversee fee collections for accurate bookkeeping
- Daily financial reports
- •Supervision of Lifeguards, Dock masters, Cashman Attendants
- Report discrepancies or maintenance issues to Harbormaster
- Maintain daily radio checks
- Make daily bank deposits

Dockmaster, Parking Lot & Boat Ramp Attendants

- Collect usage fees
 Assist hoaters with
- Assist boaters with proper tie up of vessels
- Keep boardwalk and City docks organized and clean
- Keep comfort station clean and full of toiletry supplies
- Responsible for cash bank and accurate account for all transactions

Lifeguards

- Enforce all beach regulations
- Maintain and keep the beach clean
- Give information about beach regulations, water and fishing conditions
- Report beach or water related violations to Harbormaster and Head Lifeguard
- Patrol beach
- Provide live saving and emergency response

HARBORMASTER ENTERPRISE FUND (6520-295)

	FY2016	FY2017	FY2018	FY2019	\$	%
	ACTUAL	ACTUAL	BUDGET	PROPOSED	CHANGE	CHANGE
001 - PERSONNEL SERVICES						
51101 - HBR SAL HARBORMASTER	70,323	65,252	68,248	68,248	0	0.0%
51102 - HBR ASST HARBORMASTERS	21,488	19,775	25,000	28,000	3,000	12.0%
51181 - HBR SUPPERVISORS	15,216	20,539	20,000	22,000	2,000	10.0%
51183 - HBR LIFEGUARDS	32,397	39,228	45,000	45,000	0	0.0%
51184 - HBR ADMINISTRATIVE ASST	5,805	6,726	8,000	9,000	1,000	12.5%
51185 - HBR CASHMAN PK ATTEND	17,155	18,578	18,000	18,000	0	0.0%
51186 - HBR DOCKMASTER	7,198	8,399	10,000	10,000	0	0.0%
51187 - HBR PI PARKING LOT ATTEND	8,428	13,298	12,000	12,000	0	0.0%
51188 - HBR SHELLFISH CONSTABLE	2,586	2,510	2,500	2,500	0	0.0%
51740 - HBR RETIREMENT SYSTEM	17,559	16,738	18,913	18,795	(118)	-0.6%
51750 - HBR WORKERS COMP INS	0	0	3,550	7,110	3,560	100.3%
51760 - HBR HEALTH INSURANCE	21,899	23,359	29,528	30,945	1,417	4.8%
51770 - HBR FICA PAYROLL TAXES	5,532	7,418	7,300	7,446	146	2.0%
001 - PERSONNEL SERVICES Total	225,586	241,820	268,039	279,044	11,005	4.1%
002 - PURCHASE OF SERVICES						
52103 - HBR HEAT/ELECTRICITY	2,397	4,062	12,000	10,000	(2,000)	-16.7%
52401 - HBR CASHMAN PARK	1,844	6,528	2,500	2,500	0	0.0%
52405 - HBR IT EXPENSE	2,535	4,368	4,500	4,500	0	0.0%
52410 - HBR FISH PIER	87	398	500	500	0	0.0%
52420 - HBR MAINT/EQUIP BOAT	3,367	2,666	4,000	4,000	0	0.0%
52430 - HBR INSTALL/REPAIR FLTS, DK	6,733	4,414	7,000	5,500	(1,500)	-21.4%
52435 - HBR FACILITIES MAINT	737	1,666	2,500	2,000	(500)	-20.0%
52445 - HBR PLUM ISLAND EXP	3,990	3,918	4,500	4,500	0	0.0%
52721 - HBR PUMPOUT MAINT	110	3,000	3,000	3,000	0	0.0%
53001 - HBR FINANCIAL AUDIT	0	0	2,750	2,750	0	0.0%
53030 - HBR PRINTING & SIGNS	1,086	1,804	2,300	2,000	(300)	-13.0%
53402 - HBR TELECOMMUNICATIONS	1,998	2,425	2,500	3,000	500	20.0%
53406 - HBR POSTAGE MAILINGS	2,682	1,790	2,000	3,000	1,000	50.0%
002 - PURCHASE OF SERVICES Total	27,565	37,039	50,050	47,250	(2,800)	-5.6%

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	FY2016	FY2017	FY2018	FY2019	\$	%
	ACTUAL	ACTUAL	BUDGET	PROPOSED	CHANGE	CHANGE
004 - SUPPLIES						
54200 - HBR OFFICE SUPPLIES	114	364	500	500	0	0.0%
54250 - HBR HARBOR COMMISSION EXP	1,100	2,014	2,200	2,200	0	0.0%
54305 - HBR UNIFORM/SAFETY EQUIP	2,034	2,008	2,500	2,500	0	0.0%
54801 - HBR FUEL/OIL BOATS	10,935	12,159	12,000	12,000	0	0.0%
55800 - HBR MISC SUPPLIES	674	1,450	1,500	1,500	0	0.0%
004 - SUPPLIES Total	14,856	17,995	18,700	18,700	0	0.0%
007 - OTHER CHARGES & EXPENSES						
57100 - HBR TRAINING/TRAVEL	0	42	500	500	0	0.0%
57300 - HBR DUES/MEMBERSHIPS	160	150	500	500	0	0.0%
57430 - HBR INSURANCE	3,255	5,883	10,000	10,000	0	0.0%
007 - OTHER CHARGES & EXPENSES Total	3,415	6,075	11,000	11,000	0	0.0%
008 - CAPITAL OUTLAY						
58500 - HBR ADDITIONAL EQUIPMENT	23,052	49,508	50,000	50,000	0	0.0%
008 - CAPITAL OUTLAY Total	23,052	49,508	50,000	50,000	0	0.0%
009 - DEBT SERVICE						
59100 - HBR DEBT SERVICE	11,768	64,375	70,041	76,835	6,794	9.7%
009 - DEBT SERVICE Total	11,768	64,375	70,041	76,835	6,794	9.7%
Grand Total	306,242	416,812	467,830	482,829	14,999	3.2%