

Section 11:

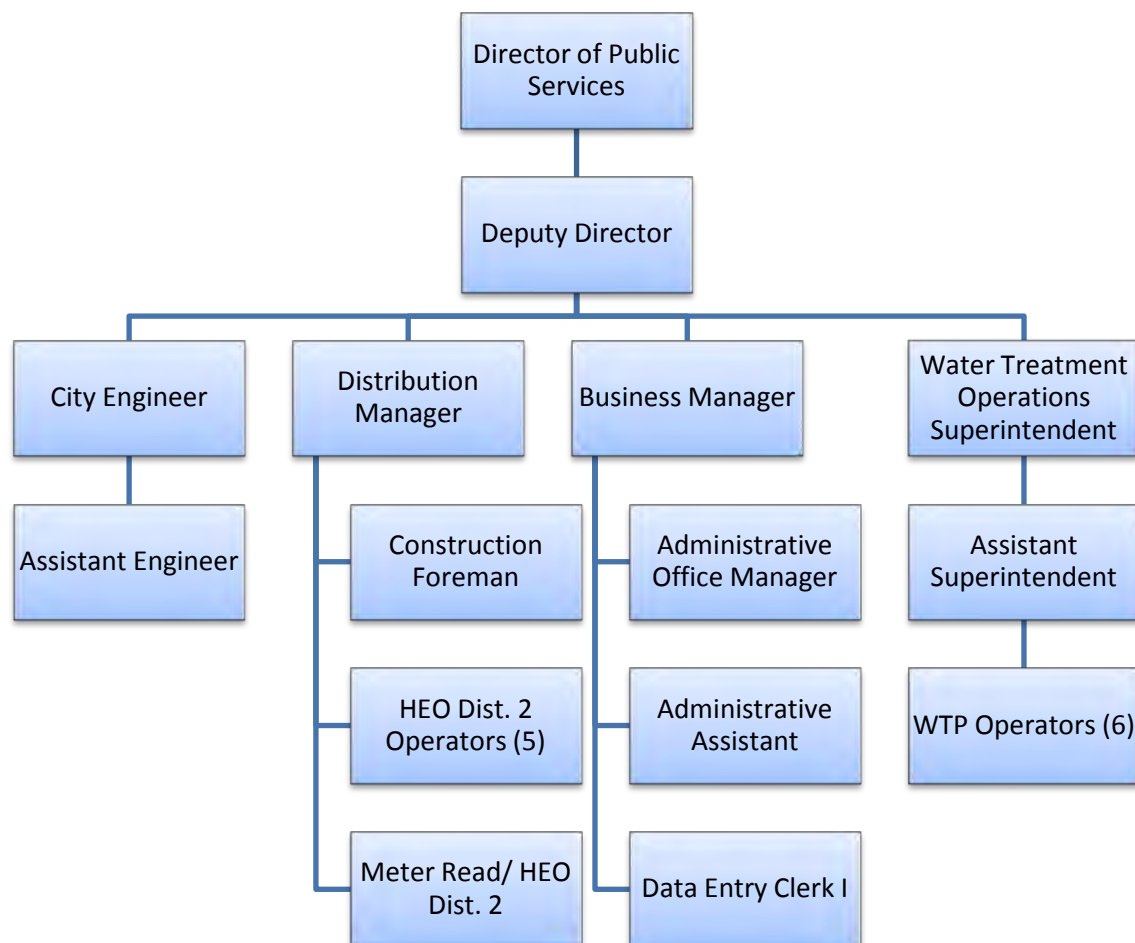
Enterprise Funds

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	FY2018 Actual	FY2019 Actual	FY2020 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	1.0	1.0	1.0
WTP Operator T-2	1.0	1.0	1.0
WD Construction Foreman	1.0	1.0	1.0
Senior HEO D2	1.0	0.0	0
HEO D2	4.0	5.0	5.0
Meter Reader – HEO D2	0.7	0.7	0.7
Total Full Time-Equivalents	18.9	18.9	18.9

PERFORMANCE MEASUREMENTS

Performance Indicator	Unit of Measure	Actual FY2016	Actual FY2017	Actual FY2018	Estimated FY2019
Aging Infrastructure Replacement	Linear feet	1,561	1,500	800	800
Volume of water treated	Million gallons	719	655	684	680
Water/Sewer Liens	Number	251	258	244	240

FY2019 ACCOMPLISHMENTS

Water Main Work

- Installed 800 linear feet of 8" water main on Toppans Lane including customer connections, replaced three fire hydrants and added one new hydrant. Accomplished this by installing tees and valves to keep the existing water main live during installation of the new 8" water main.
- Conducted semi-annual City-wide hydrant flushing of fire hydrants in both Newburyport and Newbury. Working with our consultant, the Division began piloting an uni-directional flushing program in West End and on Plum Island.
- Completed over 1,485 Dig Safe mark outs requests (emergency requests from National Grid, State mandated requirements for any digging or excavating).
- Repaired 28 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.
- Completed the 2018 EPA/MADEP required Lead and Cooper sampling program for the City's residents, schools and daycares. Due to the excellent sampling results, Newburyport is on a reduced sampling program. The State requires the City to test every three years.
- Completed the 2018 system wide MADEP Sanitary Survey. The survey is conducted every three years by the State and reviews the water treatment plant, pump station, water tanks, reservoirs and the water distribution system. The City passed with no violations.
- Completed the redevelopment of Well No. 2. In addition, a new well pump and variable frequency drive (VFD) replaced the 15 year old pump. The new well pump and VFD are more energy efficient.
- Completed the first phase of the Indian Hill and Artichoke dam inspections that are required every ten years.
- Yearly reconstruction of 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:
 - Maximizing sludge removal per pumping operation
 - Maximum sludge storage between seasons
 - 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 be closed out in 2019. The contractor completed replacement of 145 fire hydrants and 62 isolation valves on the 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. The remaining work in 2019 is repairing the roadway pavement patches.

- Engineering played a vital role in and attended multiple task force group meetings and workshops for the City's Climate Change Resiliency Committee. Engineering has assisted the Water Division in the planning phases of creating capital improvement projects and budgeting for feasibility studies and resilience plans for our water supply and water infrastructure.

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 e-bills rather than paper bills continues to increase, as well as the number of payments made on-line.

FY2020 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, including improvements to the systems to protect against climate change impacts.

The Water/Sewer Business Office will continue to manage over 8,000 customer accounts, actively pursue the collection of unpaid bills, prepare rate analysis, develop and monitor budgets, and track water consumption which is continuing to decrease. Consumption has decreased 14.0% from FY13 through FY18.

FY2020 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 and consultants, Tata and Howard, on the new Water Management Act withdrawal limits.
- Complete dam inspections and review the reservoir resiliency options
- Redevelop Well No. 1.
- Implement recommendations from Sanitary Survey and SOPs (Standard Operating Procedures).

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 50% of the distribution system, including all valves and service locations mapped during FY2020. Updating the GIS Map using the Mobile App began October 2018

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, the Lower Artichoke Reservoir, and the Artichoke Pump Station are vulnerable to flooding, storm surge, rising seas, and floodwaters from Merrimack River inundating and contaminating our systems. 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 supplies and the Artichoke Pump Station 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 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 water main replacement projects.
- Review of water-related design and construction projects.
- Construction oversight
- Participate in the creation of a Resiliency Plan to protect the City's water supply.



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WATER ENTERPRISE FUND (060-450)

	FY2017 ACTUAL	FY2018 ACTUAL	FY2019 BUDGET	FY2020 PROPOSED	\$ CHANGE	% CHANGE
001 - PERSONNEL SERVICES						
51101 - DPS SAL DIRECTOR	39,189	39,795	40,557	44,228	3,671	9.1%
51102 - DPS SAL DEPUTY DIRECTOR	31,839	34,052	33,895	35,535	1,640	4.8%
51103 - DPS SAL BUSINESS MANAGER	22,046	22,880	23,338	24,924	1,586	6.8%
51117 - DPS SAL ASST ENGINEER	20,314	20,641	20,641	22,723	2,082	10.1%
51118 - WAT SAL TREATMENT OPS SUPT	70,422	91,800	91,800	96,243	4,443	4.8%
51119 - DPS SAL CITY ENGINEER	30,200	30,686	30,686	32,171	1,484	4.8%
51120 - WAT SAL ASST SUPT WATER	0	0	0	81,042	81,042	
51131 - DPS SAL ADMIN ASSISTANT	19,064	21,253	24,012	24,676	664	2.8%
51132 - DPS SAL ADMIN OFFICE MGR	24,576	19,325	25,462	26,694	1,232	4.8%
51134 - WAT SAL DISTRIBUTION MNGR	75,359	76,571	78,103	78,704	601	0.8%
51158 - WAT SAL LABOR	716,823	717,132	842,147	787,985	(54,162)	-6.4%
51190 - WAT SAL SUMMER EMPLOYEES	11,946	11,424	21,600	21,600	0	0.0%
51301 - WAT OVERTIME	148,011	172,818	147,600	154,980	7,380	5.0%
51401 - WAT LONGEVITY	12,725	11,434	9,750	11,687	1,937	19.9%
51402 - WAT LICENSE STIPENDS	4,000	4,200	9,100	11,100	2,000	22.0%
51403 - WAT HOLIDAY PAY	18,352	16,835	19,962	17,705	(2,257)	-11.3%
51405 - WAT CLOTHING REIMBURSEMENT	12,531	11,944	11,823	11,823	0	0.0%
51411 - WAT NIGHT DIFFERENTIAL	1,504	1,459	3,544	4,392	848	23.9%
51420 - WAT EDUCATION CREDITS	425	425	425	425	0	0.0%
51710 - WAT RETIREMENTS/SICK LEAVE	44,799	5,172	34,102	0	(34,102)	-100.0%
51711 - WAT RETIREMENT SYSTEM	269,058	287,215	283,169	305,311	22,141	7.8%
51750 - WAT WORKERS COMP INS	36,920	45,042	49,546	52,024	2,477	5.0%
51760 - WAT HEALTH INSURANCE	301,048	327,740	355,714	362,828	7,114	2.0%
51770 - WAT FICA PAYROLL TAXES	18,407	19,259	18,596	19,526	930	5.0%
001 - PERSONNEL SERVICES Total	1,929,559	1,989,100	2,175,572	2,228,325	52,753	2.4%
002 - PURCHASE OF SERVICES						
52101 - WAT HEAT	13,739	13,830	15,000	15,000	0	0.0%
52102 - WAT ELECTRICITY	184,628	289,329	250,000	275,000	25,000	10.0%
52401 - WAT IT EXPENSE	29,076	71,255	73,008	97,987	24,979	34.2%
52402 - WAT GEN CONSTRUCTION	88,392	130,255	100,000	100,000	0	0.0%
52403 - WAT MAINT-VEHICLES	28,507	25,244	30,000	30,000	0	0.0%
52404 - WAT DISTRIBUTN MAINT	72,078	59,649	62,400	72,660	10,260	16.4%
52405 - WAT TREATMENT MAINT	67,823	65,660	72,500	72,500	0	0.0%
52406 - WAT MAINT-EQUIPMENT	10,598	11,042	12,000	14,000	2,000	16.7%
53001 - WAT FINANCIAL AUDIT	7,166	7,883	7,883	7,883	0	0.0%
53020 - WAT LEGAL EXPENSES	16,202	0	50,000	25,000	(25,000)	-50.0%
53024 - WAT BOND/NOTE EXP	24,385	22,894	24,386	24,386	0	0.0%
53025 - WAT ENGINEER RETAINER	62,109	53,811	75,000	75,000	0	0.0%
53026 - WAT POLICE DETAILS	46,800	18,337	20,000	20,000	0	0.0%
53028 - WAT PRE-EMPLOYMENT PHYSICAL	1,076	1,327	1,500	1,500	0	0.0%

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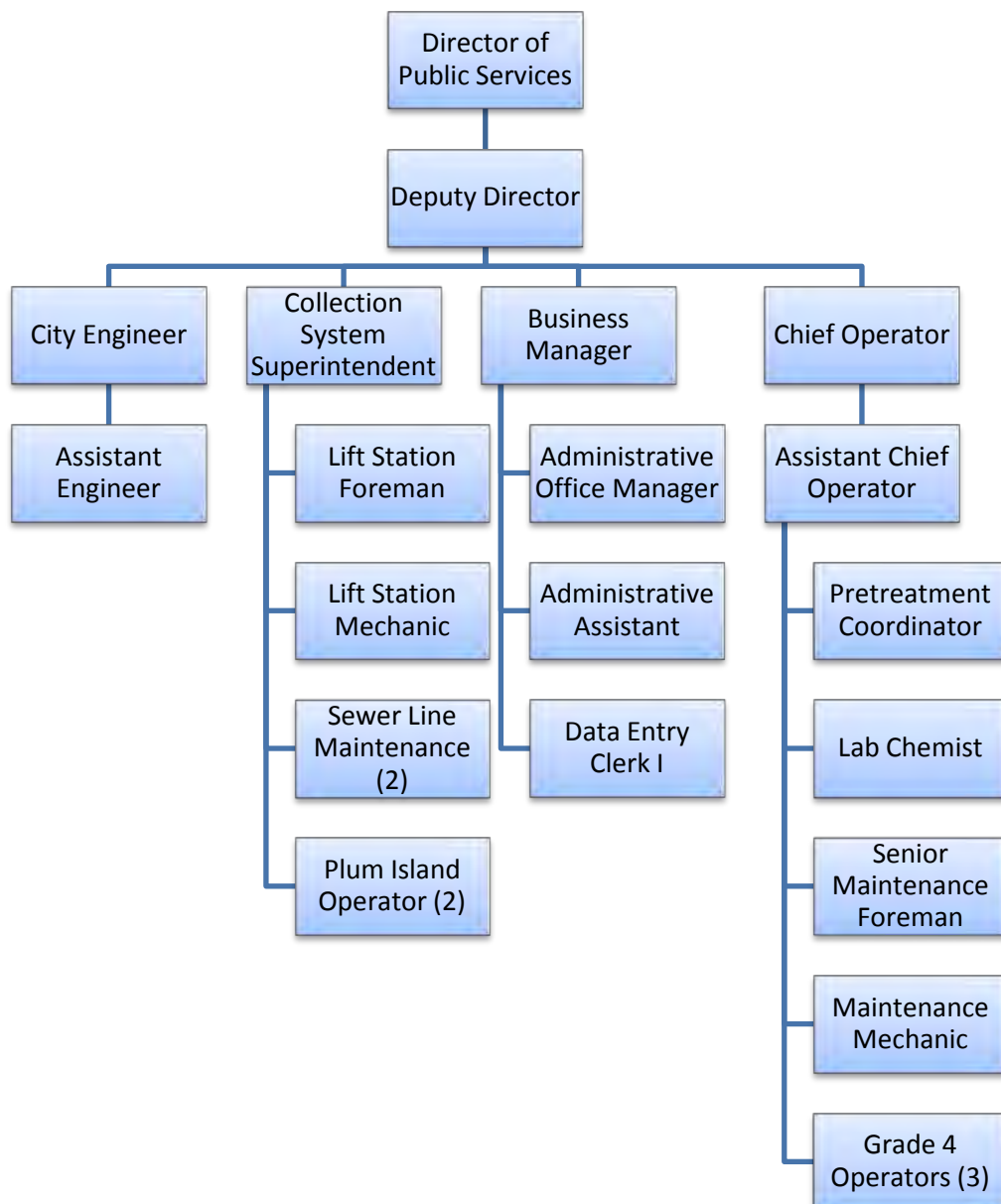
	FY2017 ACTUAL	FY2018 ACTUAL	FY2019 BUDGET	FY2020 PROPOSED	\$ CHANGE	% CHANGE
53029 - WAT CONTRACT-CROSS CONN TEST	19,770	18,540	19,000	19,000	0	0.0%
53030 - WAT SLUDGE REMOVAL/FILTER PLT	26,100	17,807	20,000	25,000	5,000	25.0%
53031 - WAT TEST-SURFACE WAT SAMPLING	14,393	0	7,500	7,500	0	0.0%
53032 - WAT WATER TEST	18,861	18,911	39,054	36,554	(2,500)	-6.4%
53402 - WAT TELECOMMUNICATNS	10,689	10,282	10,620	10,620	0	0.0%
53780 - WAT PAYMT IN LIEU TAXES	5,720	5,778	8,500	8,500	0	0.0%
002 - PURCHASE OF SERVICES Total	748,111	841,833	898,351	938,090	39,739	4.4%
004 - SUPPLIES						
54201 - WAT GENERAL OFC EXP	19,035	14,516	18,750	20,125	1,375	7.3%
54301 - WAT CONSERVATION	3,460	1,451	5,000	5,000	0	0.0%
54302 - WAT CHEMICALS	145,374	117,030	125,000	125,000	0	0.0%
54303 - WAT CONSUMER REPORT	8,629	7,810	8,000	8,000	0	0.0%
54801 - WAT FUEL/OIL VEHICLE(S)	27,515	17,280	26,870	26,870	(0)	0.0%
55800 - WAT MISC SUPPLIES	1,015	1,225	2,225	2,225	0	0.0%
004 - SUPPLIES Total	205,027	159,312	185,845	187,220	1,375	0.7%
007 - OTHER CHARGES & EXPENSES						
57100 - WAT TRAINING/TRAVEL	14,533	12,928	24,500	24,500	0	0.0%
57301 - WAT SDWA	5,446	5,583	6,107	5,569	(538)	-8.8%
57401 - WAT MUNICIPAL INSURANCE	57,379	63,117	75,500	79,275	3,775	5.0%
57800 - WTR LEGAL SETTLEMENT	114,500	0	0	0	0	
007 - OTHER CHARGES & EXPENSES Total	191,859	81,627	106,107	109,344	3,237	3.1%
008 - CAPITAL OUTLAY						
58310 - WAT G.I.S.	6,997	2,025	10,000	10,000	0	0.0%
58513 - WAT WTR MAIN REPLAC PROGRAM	100,239	69,049	100,000	100,000	0	0.0%
58550 - WAT VEHICLE/EQUIP REPLACE	28,311	39,521	130,000	5,000	(125,000)	-96.2%
008 - CAPITAL OUTLAY Total	135,547	110,595	240,000	115,000	(125,000)	-52.1%
009 - DEBT SERVICE						
59100 - WAT DEBT PRINCIPAL	1,400,008	1,284,468	1,396,401	1,410,766	14,365	1.0%
59150 - WAT DEBT INTEREST	442,614	401,270	457,738	407,344	(50,394)	-11.0%
009 - DEBT SERVICE Total	1,842,622	1,685,738	1,854,139	1,818,110	(36,029)	-1.9%
Grand Total	5,052,725	4,868,205	5,460,014	5,396,089	(63,925)	-1.2%

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



Position	FY2018 Actual	FY2019 Actual	FY2020 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
Administrative 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 Foreman	1.0	1.0	1.0
Collection System Superintendent	1.0	1.0	1.0
Lab Chemist	1.0	1.0	1.0
Lift Station Foreman	1.0	1.0	1.0
Operator Grade IV	3.0	3.0	3.0
Maint/Prevent Maintenance Mechanic	1.0	1.0	1.0
Pump Station Operator/Mechanic	1.0	1.0	1.0
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 FY2016	Actual FY2017	Actual FY2018	Estimated FY2019
LF of sewer main cleaned yearly	Linear Feet	185,678	150,665	107,051	100,000
Response to issues, alarms and sewer calls/WWTF/lift station Number of calls FY2016 are higher due to new call tracking process / procedure	Calls	*100	65	50	50
FOG Program/Compliance Number of business with grease traps. Newbury/Newburyport	Per establishment	N/A	N/A	140	60
Plum Island Vacuum System alarms and sewer calls	Calls	45	60	40	32
Odor Complaints	Calls	>25	3	2	0
Wastewater treated	Gallons/ millions	563	647	654	660
Biosolids for composting	Metric Tons	687	596	670	675
Oxygen Consuming Material removed from Wastewater	Pounds/ Million	1.6	1.1	1.27	1.3
Water/Sewer Liens	Number	251	258	244	240

*New tracking method.

FY2019 ACCOMPLISHMENTS

Graf Road Pump Station Online

- After years of safety concerns and capacity issues, construction of the new Graf Road Pump Station is complete and online allowing flow from new construction to be added to the system without capacity issues at the station.
 - Eliminates operators from entering the confined space wet well of old station.
 - Reduces the concern of Sanitary Sewer Overflow (SSO), with addition of third pump for redundancy.
 - New Station saving on operating cost, new station allows pumps with Variable Frequency Drive (VFD) to match flow allowing pumps to continuously operate without shutting down, saving on the start /stop.

Collections

- Operating and Maintenance (O&M) continues to be high priority regarding Plum Island:
 - Negotiated with the town of Newbury to purchase 4 new vacuum pumps on the island, total cost \$241,000, of which Newbury to pay \$142,747 (60%) of cost.
 - These vacuum pumps are the heart of the system, without them the system will not operate.
 - New pump will reduce run times, therefore, saving on operating cost.
 - New pumps will be installed with new VFDs (variable frequency drive).

- Continuing working with alarm system (SCADA).
- Conducted proper O&M repair and preventative maintenance to Wastewater Treatment Facility and collection system:
 - Cleaned approximately 107,051 linear feet of sewer main which represents 1/3 of the City's sewer mains.
 - Cleaned 16 lift station wet wells twice per year per station.
 - Manhole repairs throughout the City in an effort to reduce Inflow/Infiltration (I/I) repairs consists of replacing frames and covers, resurfacing inside of the Manhole with cement (hydraulic cement), sealing joints between inlet and invert.
- Responded and repaired as needed all sewer issues to help prevent Sanitary Sewer Overflow (SSO).

Odor Control

- Contract #2 for Odor Control Improvements substantially completed March 2018
- Plum Island Force main odor/corrosion control project completed.

Operations

- Sludge quality continues to be of exceptional quality to compost which reduces removal and process costs.
- Continued Safety Training and Spill Prevention and Counter Measures Plan trainings in-house for all personnel.
- Continued to provide quality customer service.
- No Notices of Violations issued for Industrial Pretreatment Program (IPP).
- 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.
- Rehabilitation and pump rebuild of Secondary Pump station complete.

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. The road was constructed in summer 2018.

FY2020 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.

We 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, including the degree and number of imposed limits, continues to have a significant impact on the Newburyport Sewer Division. Efforts continue to maximize internal resources and employ innovation and modernization to minimize the associated financial impact on rate payers and the enterprise funds.

Engineering will continue to assist the Sewer Division on an as-needed basis, including the ongoing task of evaluating and preparing the City's sewer infrastructure for impacts due to climate change.

The Water/Sewer Business Office will continue to manage over 8,000 customer accounts, actively pursue the collection of unpaid bills, prepare rate analysis, develop and monitor budgets, and track water consumption which is continuing to decrease. Consumption has decreased 14.0% from FY13 through FY18.

FY2020 GOALS & OBJECTIVES

GOAL 1: 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), 16 lift stations, 75 miles of sewer mains, and additional 24 miles of Plum Island vacuum system 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.
- Continue odor monitoring and mitigation as a high priority.
- Optimize the new biofilter and associated components.

GOAL 2: CONTINUE TO OPERATE THE WWTF UNDER THE REQUIREMENTS OF THE NPDES PERMIT

Objectives:

- Meet permit limits and provide quality wastewater discharge
- Reduce Nitrogen levels.
- Complete the anoxic zone (low-oxygen dissolve 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: ACHIEVE FULL COMPLIANCE FOR FATS OIL AND GREASE (FOG) PROGRAM

Objective:

- Keep gravity mains free and clear from grease and debris, preventing SSO activity from occurring
- Continue utilizing new mobile app. The mobile app is a tremendous help in finding the cause/ help with reduction and elimination of the grease issue.
- 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.
- Continue to CCTV sewer mains for grease issues throughout the City.
- Hold individuals accountable for actions from their respected industries.

GOAL 4: MAINTAIN COLLECTION SYSTEM

Objectives:

- Maintenance of all pump stations throughout the City.
- 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, using the mobile app in the field during inspection by Sewer operators.

GOAL 5: ENHANCE PLUM ISLAND VACUUM SYSTEM

Objectives:

- Continue improvement of the Plum Island Vacuum System.
- 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.

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

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 evaluate and upgrade the sewer and water replacement master plan.
- Complete preliminary study by working closely with other divisions of DPS and public utility companies.

GOAL 7: IMPLEMENT 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.
- DPS hired a firm to evaluate our WWTF for vulnerabilities due to climate change impacts and to prepare a Resiliency Plan highlighting the various means of protection in collaboration with the City's Resiliency ad hoc team. The Plan is scheduled for completion by June 30, 2019. This goal is to begin the implementation process for those resiliency measures that are the most urgent and those which can be implemented immediately.
- Prepare Resiliency Plans for the City's 16 pumping stations to ensure that they are elevated above predicted flood elevations and protected from impacts caused from changes to our climate.

Treatment	Collection	Administration/ Billing	Engineering
<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Technical assistance to resolve problems and provide solutions. • Design access roads and sewer main replacements. • Review of sewer rehabilitation and replacement projects. • Project management of sewer design projects. • Construction oversight. • Resiliency Plans to protect infrastructure from climate change impacts.

SEWER ENTERPRISE FUND (061-440)

	FY2017 ACTUAL	FY2018 ACTUAL	FY2019 BUDGET	FY2020 PROPOSED	\$ CHANGE	% CHANGE
001 - PERSONNEL SERVICES						
51101 - DPS SAL DIRECTOR	39,189	39,795	40,557	44,228	3,671	9.1%
51102 - DPS SAL DEPUTY DIRECTOR	31,839	34,052	33,895	35,535	1,640	4.8%
51103 - DPS SAL BUSINESS MANAGER	22,046	22,880	23,338	24,924	1,586	6.8%
51116 - SEW SAL CHIEF OPERATOR	79,346	96,900	96,900	101,590	4,690	4.8%
51117 - DPS SAL ASST ENGINEER	20,314	20,641	20,641	22,723	2,082	10.1%
51119 - DPS SAL CITY ENGINEER	30,200	30,686	30,686	32,171	1,484	4.8%
51120 - SEW SAL ASST CHIEF OPERATOR	0	0	0	81,062	81,062	
51122 - SEW SAL SUPT OF COLLECTIONS	84,517	85,877	85,876	97,645	11,769	13.7%
51131 - DPS SAL ADMIN ASSISTANT	19,064	20,330	24,012	24,676	664	2.8%
51132 - DPS SAL ADMIN OFFICE MGR	24,576	20,248	25,462	26,694	1,232	4.8%
51158 - SEW SAL LABOR	815,245	826,724	870,904	844,575	(26,329)	-3.0%
51190 - SEW SAL SUMMER EMPLOYEES	7,890	7,152	21,600	21,600	0	0.0%
51301 - SEW OVERTIME	202,714	195,135	201,839	216,397	14,558	7.2%
51401 - SEW LONGEVITY	6,202	5,881	6,378	6,378	0	0.0%
51402 - SEW LICENSE STIPENDS	500	2,425	9,600	9,100	(500)	-5.2%
51405 - SEW CLOTHING REIMBURSEMENT	12,309	13,299	12,143	12,143	0	0.0%
51420 - SEW EDUCATION CREDITS	850	850	850	850	0	0.0%
51710 - SEW RETIREMENTS/SICK LEAVE	41,909	9,253	10,120	14,326	4,206	41.6%
51711 - SEW RETIREMENT SYSTEM	281,482	309,292	333,756	339,872	6,116	1.8%
51750 - SEW WORKERS COMP INS	25,296	30,862	33,948	35,646	1,697	5.0%
51760 - SEW HEALTH INSURANCE	319,850	347,732	414,932	423,231	8,299	2.0%
51770 - SEW FICA PAYROLL TAXES	16,155	15,338	19,836	20,827	992	5.0%
001 - PERSONNEL SERVICES Total	2,081,494	2,135,352	2,317,272	2,436,193	118,921	5.1%
002 - PURCHASE OF SERVICES						
52101 - SEW HEAT	21,118	26,099	37,000	37,000	0	0.0%
52102 - SEW ELECTRICITY	425,980	411,489	356,326	381,326	25,000	7.0%
52401 - SEW IT EXPENSE	64,817	47,720	49,567	50,292	725	1.5%
52402 - SEW MAINT-GENERAL	39,417	37,417	36,350	36,350	0	0.0%
52403 - SEW MAINT-VEHICLES	24,350	20,721	27,000	27,000	0	0.0%
52405 - SWR MAINT-PLUM ISLAND	0	0	20,000	25,000	5,000	25.0%
52406 - SEW MAINT-EQUIPMENT	171,667	86,127	110,704	125,704	15,000	13.5%
52407 - SEW UNIFORM/SAFETY EQUIPMENT	18,979	16,941	15,136	15,136	0	0.0%
52408 - SEW MAINT-SEWER LINE	33,533	70,027	73,850	73,850	0	0.0%
52409 - SEW MAINT-DRAINS	39,000	23,824	39,000	39,000	0	0.0%
53001 - SEW FINANCIAL AUDIT	7,166	7,833	7,883	7,883	0	0.0%
53020 - SEW LEGAL EXPENSES	21,452	0	50,000	25,000	(25,000)	-50.0%
53024 - SEW BOND/NOTE EXP	37,650	35,731	37,650	37,650	0	0.0%
53026 - SEW POLICE DETAILS	2,707	8,479	10,000	10,000	0	0.0%
53028 - SEW MEDICAL/DRUG TESTING	5,379	4,993	4,500	4,500	0	0.0%

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	FY2017 ACTUAL	FY2018 ACTUAL	FY2019 BUDGET	FY2020 PROPOSED	\$ CHANGE	% CHANGE
53030 - SEW CONSULTANT FEES	57,914	18,448	75,000	75,000	0	0.0%
53035 - SEW INDUSTRIAL PRETREATMENT	10,256	9,701	14,550	14,550	0	0.0%
53040 - SEW BIOSOLIDS DISPOSAL	261,519	253,215	267,002	268,972	1,970	0.7%
53050 - SEW VENDOR LAB TESTING	12,221	11,818	19,350	24,695	5,345	27.6%
53402 - SEW TELECOMMUNICATNS	21,256	21,981	26,740	26,740	0	0.0%
002 - PURCHASE OF SERVICES Total	1,276,381	1,112,562	1,277,607	1,305,648	28,040	2.2%
004 - SUPPLIES						
54201 - SEW GENERAL OFC EXP	30,029	18,164	18,500	18,570	70	0.4%
54302 - SEW PLANT CHEMICALS	180,724	313,585	333,060	404,060	71,000	21.3%
54303 - SEW LAB CHEM/EQUIP/SUPPLIES	18,683	16,292	13,750	13,750	0	0.0%
54310 - SEW HOSE	404	0	0	0	0	
54801 - SEW FUEL/OIL VEHICLE(S)	33,996	23,163	30,018	30,018	0	0.0%
54802 - SEW LUBRICANTS	4,651	255	5,000	5,000	0	0.0%
55800 - SEW MISC SUPPLIES	573	285	1,800	1,800	0	0.0%
004 - SUPPLIES Total	269,059	371,746	402,128	473,198	71,070	17.7%
007 - OTHER CHARGES & EXPENSES						
57100 - SEW TRAINING/TRAVEL	10,301	10,952	17,800	17,800	0	0.0%
57300 - SEW DUES/LIC/SUBSCRIPTIONS	471	1,260	1,350	1,350	0	0.0%
57401 - SEW MUNICIPAL INSURANCE	185,515	60,225	72,171	75,779	3,609	5.0%
007 - OTHER CHARGES & EXPENSES Total	196,287	72,437	91,321	94,929	3,609	4.0%
008 - CAPITAL OUTLAY						
58310 - SEW G.I.S.	10,861	13,061	10,000	10,000	0	0.0%
58330 - SEW I/I REHABILITATION	37,070	24,492	100,000	100,000	0	0.0%
58361 - SEW REPAIR LIFT STATIONS	119,256	136,368	150,000	150,000	0	0.0%
58362 - SEW EFFLUENT SAMPLER	6,786	6,295	6,000	6,000	0	0.0%
58550 - SEW VEHICLE/EQUIP REPLACE	0	7,841	5,000	5,000	0	0.0%
008 - CAPITAL OUTLAY Total	173,973	188,057	271,000	271,000	0	0.0%
009 - DEBT SERVICE						
59100 - SEW DEBT PRINCIPAL	1,444,430	1,913,000	2,006,272	2,077,432	71,159	3.5%
59150 - SEW DEBT INTEREST	785,845	899,392	995,608	933,206	(62,402)	-6.3%
59250 - SEW INT TEMP LOAN	0	23,933	32,684	20,000	(12,684)	-38.8%
009 - DEBT SERVICE Total	2,230,275	2,836,325	3,034,564	3,030,638	(3,926)	-0.1%
Grand Total	6,227,469	6,716,478	7,393,893	7,611,606	217,713	2.9%

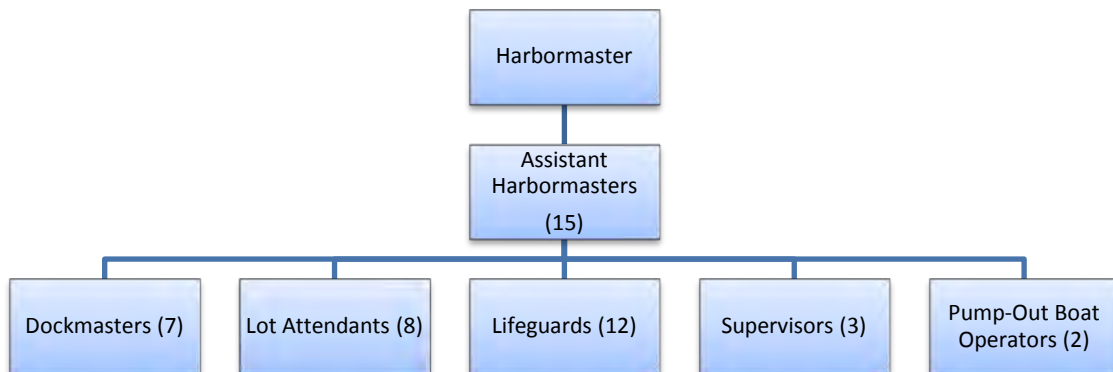
HARBORMASTER

MISSION STATEMENT

The Harbormaster Department is responsible for all the navigable water ways in the City of Newburyport. The Harbormaster Department permits all boats and moorings within the City. The Department manages Cashman Park boat ramp, Central water front docks, Plum Island parking lot, Transient Boaters Facility, Harbormaster Public Restrooms and Life Guards in the City of Newburyport. The department insures the safety and property of the citizens, and to aid and assist boaters, bathers and any other users of our waterways.

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 fishermen. The Harbormaster Department serves as an ambassador on the water for the City and we help, direct and assist new boaters and Marinas to the City on safety issues and keep them abreast of weather conditions and where to keep their vessels.

ORGANIZATIONAL OVERVIEW



Position	FY2018 Actual	FY2019 Actual	FY2020 Budgeted
Harbormaster*	1.0	1.0	1
Assistant Harbormaster	15.0	15.0	15
Pump Out Boat Operators	2.0	2.0	2
Supervisors	3.0	3.0	3
Lifeguards	12.0	12.0	12
Dock Masters and Lot Attendants	15.0	15.0	15
Total Staff	48.0	48.0	48

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

PERFORMANCE MEASUREMENTS

Performance Indicator	Unit of Measure	Actual FY2017	Actual FY2018	Actual FY2019	Estimated FY2020
Waterway Permits	#	1,491	1,495	1,449	1449
Mooring Permits	#	196	186	186	186
Dingy Permits	#	41	43	47	47
Cashman Park Annual Parking Permits	#	72	75	87	87

FY2019 ACCOMPLISHMENTS

- Provided certified trainings for our Lifeguards and, Assistant Harbormasters which resulted in many lifesaving rescues.
- Hosted a one-week National Association of State Boating Law Administrators (NASBLA) accredited boating course on boat operations and crewman. Department staff are now nationally certified as Boat Crewmen.
- Provided safety and special procedure training to the Whittier bridge project employees and workers, which resulted in 6 successful rescues with minimal injury.
- Coordinated training and enhanced relationships with the Police, Fire and the Coast Guard.
- Developed an interdepartmental mutual aid agreement with Salisbury and Amesbury Harbormasters.
- Worked closely with “The Home Base Foundation” and veterans’ organizations, by providing personalized marine escort on their boating trips.
- Coordinated with, the City, Police, Fire and the Mayor’s office, collectively the “Public Safety team”, and managed the marine activities to assist in providing a safe and successful Riverfest, the largest in the city’s history.
- Secured The Mobile Access Command Unit (MACU), at no cost to the city, which was equipped with the latest cameras in public safety and security technologies.
- Assisted in scheduling “The Impossible Dream” catamaran to our city to give the opportunity for citizens with a handicap to enjoy time on the water.

FY2020 TRENDS

The weather plays a significant factor in revenues and activities associated with the Harbormasters Department. FY 2020 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.

FY2020 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.
- Develop a data tracking system for the transient docks.

GOAL 2: ADVOCATE FOR THE DREDGING OF THE MERRIMACK RIVER

Objectives:

- Work with the Merrimack River Beach Alliance (MRBA), Mayor's Office, Harbor Commission and Army Corp of Engineers to continue and to expedite the dredging of the Merrimack 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 more tall ships for our City.

PROGRAMS & SERVICES

Patrol Operations	Pump Out Boat Operations	Supervisors	Dockmaster, Parking Lot & Boat Ramp Attendants	Lifeguards
<ul style="list-style-type: none"> •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 	<ul style="list-style-type: none"> •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 	<ul style="list-style-type: none"> •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 	<ul style="list-style-type: none"> •Collect usage fees •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 	<ul style="list-style-type: none"> •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)

	FY2017 ACTUAL	FY2018 ACTUAL	FY2019 BUDGET	FY2020 PROPOSED	\$ CHANGE	% CHANGE
001 - PERSONNEL SERVICES						
51101 - HBR SAL HARBORMASTER	65,252	68,248	68,248	79,327	11,080	16.2%
51102 - HBR ASST HARBORMASTERS	19,775	23,379	28,000	30,000	2,000	7.1%
51181 - HBR SUPERVISORS	20,539	17,215	22,000	34,000	12,000	54.5%
51183 - HBR LIFEGUARDS	39,228	44,089	45,000	48,000	3,000	6.7%
51184 - HBR ADMINISTRATIVE ASST	6,726	8,072	9,000	0	(9,000)	-100.0%
51185 - HBR CASHMAN PK ATTEND	18,578	19,085	18,000	18,000	0	0.0%
51186 - HBR DOCKMASTER	8,399	8,225	10,000	10,000	0	0.0%
51187 - HBR PI PARKING LOT ATTEND	13,298	10,935	12,000	12,000	0	0.0%
51188 - HBR SHELLFISH CONSTABLE	2,510	2,500	2,500	2,500	0	0.0%
51740 - HBR RETIREMENT SYSTEM	16,738	18,913	18,795	22,454	3,659	19.5%
51750 - HBR WORKERS COMP INS	0	6,811	7,110	8,000	890	12.5%
51760 - HBR HEALTH INSURANCE	23,359	24,687	30,945	31,564	619	2.0%
51770 - HBR FICA PAYROLL TAXES	7,418	5,450	7,446	8,000	554	7.4%
001 - PERSONNEL SERVICES Total	241,820	257,607	279,044	303,845	24,801	8.9%
002 - PURCHASE OF SERVICES						
52103 - HBR HEAT/ELECTRICITY	4,062	8,350	10,000	10,000	0	0.0%
52401 - HBR CASHMAN PARK	6,528	2,425	2,500	2,500	0	0.0%
52405 - HBR IT EXPENSE	4,368	3,376	4,500	4,500	0	0.0%
52410 - HBR FISH PIER	398	436	500	500	0	0.0%
52420 - HBR MAINT/EQUIP BOAT	2,666	6,629	4,000	5,000	1,000	25.0%
52430 - HBR INSTALL/REPAIR FLTS, DK	4,414	6,991	5,500	7,500	2,000	36.4%
52435 - HBR FACILITIES MAINT	1,666	2,367	2,000	2,000	0	0.0%
52445 - HBR PLUM ISLAND EXP	3,918	3,023	4,500	4,500	0	0.0%
52721 - HBR PUMPOUT MAINT	3,000	3,420	3,000	3,000	0	0.0%
53001 - HBR FINANCIAL AUDIT	0	2,750	2,750	2,750	0	0.0%
53030 - HBR PRINTING & SIGNS	1,804	2,058	2,000	2,000	0	0.0%
53402 - HBR TELECOMMUNICATIONS	2,425	3,913	3,000	3,000	0	0.0%
53406 - HBR POSTAGE MAILINGS	1,790	2,900	3,000	3,000	0	0.0%
002 - PURCHASE OF SERVICES Total	37,039	48,640	47,250	50,250	3,000	6.3%
004 - SUPPLIES						
54200 - HBR OFFICE SUPPLIES	364	832	500	500	0	0.0%
54250 - HBR HARBOR COMMISSION EXP	2,014	1,850	2,200	2,200	0	0.0%
54305 - HBR UNIFORM/SAFETY EQUIP	2,008	2,468	2,500	2,500	0	0.0%
54801 - HBR FUEL/OIL BOATS	12,159	11,060	12,000	12,000	0	0.0%
55800 - HBR MISC SUPPLIES	1,450	654	1,500	1,500	0	0.0%
004 - SUPPLIES Total	17,995	16,865	18,700	18,700	0	0.0%

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	FY2017 ACTUAL	FY2018 ACTUAL	FY2019 BUDGET	FY2020 PROPOSED	\$ CHANGE	% CHANGE
007 - OTHER CHARGES & EXPENSES						
57100 - HBR TRAINING/TRAVEL	42	225	500	1,000	500	100.0%
57300 - HBR DUES/MEMBERSHIPS	150	170	500	500	0	0.0%
57430 - HBR INSURANCE	5,883	7,378	10,000	10,000	0	0.0%
007 - OTHER CHARGES & EXPENSES Total	6,075	7,773	11,000	11,500	500	4.5%
008 - CAPITAL OUTLAY						
58500 - HBR ADDITIONAL EQUIPMENT	49,508	47,909	50,000	50,000	0	0.0%
008 - CAPITAL OUTLAY Total	49,508	47,909	50,000	50,000	0	0.0%
009 - DEBT SERVICE						
59100 - HBR DEBT SERVICE	64,375	74,535	76,835	80,573	3,738	4.9%
009 - DEBT SERVICE Total	64,375	74,535	76,835	80,573	3,738	4.9%
Grand Total	416,812	453,329	482,829	514,868	32,039	6.6%



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