

PUBLIC WORKS DEPARTMENT

Department Purpose Statement

The purpose of the Public Works Department Enterprise Funds is to provide the citizens of the town with an environmentally sound, efficient and cost effective means of obtaining drinking water and disposal of solid waste and wastewater.

Enterprise Funds



SOLID WASTE



**WATER
POLLUTION
CONTROL**



**WATER
SUPPLY**

SOLID WASTE ENTERPRISE FUND

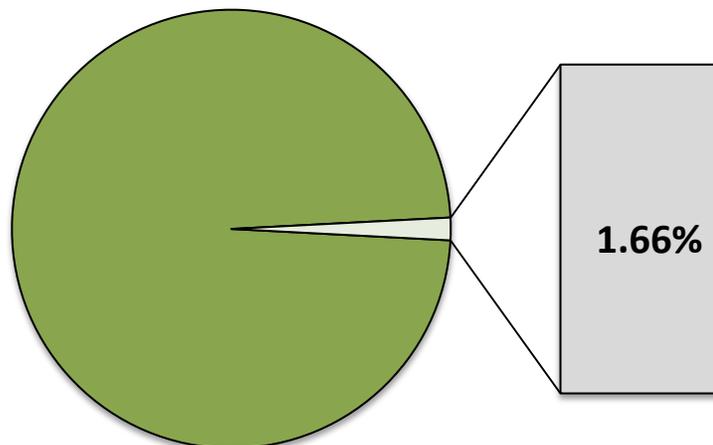
Department Purpose Statement

To provide the citizens of Barnstable with an environmentally sound, cost-effective means of disposing or recycling of municipal solid waste at reasonable market rates that support all solid waste disposal and recycling costs.

Transfer Station

Recycling Centers

% of FY 2023 All Appropriated Funds



Solid Waste Enterprise Fund comprises 1.66% of all appropriated funds.

Solid Waste Enterprise Fund Services Provided

<https://www.townofbarnstable.us/Departments/solidwaste/>

The Solid Waste Division manages and coordinates the transfer and disposal of solid waste and recyclables on the Town's behalf. The transfer station involves a compactor type system that allows residents to dispose of their bagged waste. A residential sticker is sold annually which entitles purchasers to utilize the Residential Transfer Station.



Solid Waste Facility – Arial View

Recent Accomplishments

- ✓ Improved and continued with online sticker sales portal;
- ✓ Applied for and received MassDEP Recycling Dividends Program grant in the amount of \$11,700;
- ✓ Completed and submitted all MassDEP, Cape Cod Commission and Town reports and permits;
- ✓ Continuing to find and implement strategies and methods to reduce cost for disposal of MSW and recyclables;
- ✓ Continued with post closure monitoring and maintenance of capped landfill, and;
- ✓ Attended seminars on ways to expand recycling efforts in all areas.

Solid Waste Enterprise Fund Goals and Objectives

- Town Council's Quality of Life Strategic Plan (SP)

Short-Term:

1. Continue to explore new efficient systems to address rising costs of disposal of recyclable material. **(SP: Public Health and Safety, Finance, and Infrastructure)**



Solid Waste Facility

Long-Term:

1. Pursue all available grants to improve costs of operations. **(SP: Finance)**
2. Construct the improvements to the Solid Waste Facility and pursuing available grants for completion. **(SP: Finance)**

Solid Waste Enterprise Fund Budget Comparison

Solid Waste Enterprise Fund						
	Actual	Projected	Approved	Proposed	Change	Percent
Source of Funding	FY 2021	FY 2022	FY 2022	FY 2023	FY22 - 23	Change
Charges for Services	\$4,282,782	\$3,513,052	\$3,333,363	\$3,717,049	\$383,686	11.51%
Interest and Other	56,430	54,832	71,050	55,000	(16,050)	-22.59%
Total Operating Sources	\$4,339,211	\$3,567,884	\$3,404,413	\$3,772,049	\$367,636	10.80%
Total Sources of Funding	\$4,339,211	\$3,567,884	\$3,404,413	\$3,772,049	\$367,636	10.80%
Direct Operating Expenses						
Personnel	\$1,173,896	\$1,162,669	\$1,187,435	\$1,213,823	\$26,388	2.22%
Benefits	147,310	133,763	153,308	152,631	(677)	-0.44%
Operating Expenses	2,140,900	2,030,710	1,939,287	1,952,787	13,500	0.70%
Capital Outlay	-	-	70,000	-	(70,000)	-100.00%
Debt Service	63,395	57,440	57,440	53,950	(3,490)	-6.08%
Total Direct Operating Expenses	\$3,525,501	\$3,384,582	\$3,407,469	\$3,373,191	(\$34,278)	-1.01%
Indirect Operating Costs						
General Fund Staff	\$86,312	\$81,103	\$81,103	\$95,736	\$14,633	18.04%
Pensions	221,007	238,246	238,246	234,937	(3,309)	-1.39%
Audit & Software Costs	11,962	12,072	12,072	13,949	1,876	15.54%
Property, Casualty, Liability Insur.	22,692	27,261	27,261	26,004	(1,258)	-4.61%
Workers' Compensation Insurance	56,137	38,590	38,590	74,208	35,618	92.30%
Retirees Health Insurance	28,475	28,764	28,764	25,402	(3,363)	-11.69%
Total Indirect Operating Expenses	\$426,585	\$426,037	\$426,037	\$470,235	\$44,199	10.37%
Total Operating Expenses	\$3,952,086	\$3,810,618	\$3,833,506	\$3,843,426	\$9,920	0.26%
Capital Improvements Program	15,464	-	210,000	422,347	212,347	101.12%
Total Capital Expenses	\$15,464	\$0	\$210,000	\$422,347	\$212,347	101.12%
Total Expenses	\$3,967,550	\$3,810,618	\$4,043,506	\$4,265,773	\$222,267	5.50%
Excess (Deficiency) Cash Basis	\$371,662	(\$242,734)	(\$639,093)	(\$493,724)	\$145,369	
Beginning Certified Free Cash	<u>\$1,748,575</u>		<u>\$2,120,237</u>	<u>\$1,481,144</u>		
FY22 Projected Excess (Deficiency)				<u>(242,734)</u>		
Ending Proj. Certified Free Cash	<u><u>\$2,120,237</u></u>		<u><u>\$1,481,144</u></u>	<u><u>\$744,686</u></u>		

Summary of Budget Changes

The direct operating Solid Waste Enterprise Fund's proposed FY 2023 budget decreased by (\$34,278), or (1.01%) from the approved FY 2022 budget. Personnel budget change includes contractual obligations. Operating budget change includes increases to various line items. This also includes transferring the budget for hazmat disposal to the Public Works General Fund operations. Capital outlay cost decreased by the onetime purchases for two new packer container units as well as a Kubota RTV vehicle in the FY 2022 budget.

Solid Waste Enterprise Fund Budget Reconciliation

Job Title	FY 2021	FY 2022	FY 2023	Change
Admin Assistant to DPW Director	0.15	0.15	0.15	-
Administrative Assistant	1.00	1.00	1.00	-
Assistant DPW Director	0.15	0.15	0.15	-
Director of Public Works	0.15	0.15	0.15	-
Equipment Operator	2.00	2.00	2.00	-
Financial Coordinator	0.15	0.15	0.15	-
Lab/Craftperson/Gate Attendant	4.00	4.00	4.00	-
Mechanic/Working Foreman	1.00	1.00	1.00	-
Principal Dept/Div Assistant	1.00	1.00	1.00	-
Recycling Laborer	4.00	4.00	4.00	-
Solid Waste General Foreman	1.00	1.00	1.00	-
Solid Waste Supervisor	1.00	1.00	1.00	-
Town Engineer	0.15	0.15	0.15	-
Town Safety Officer	0.20	-	-	-
Full-time Equivalent Employees	15.95	15.75	15.75	-

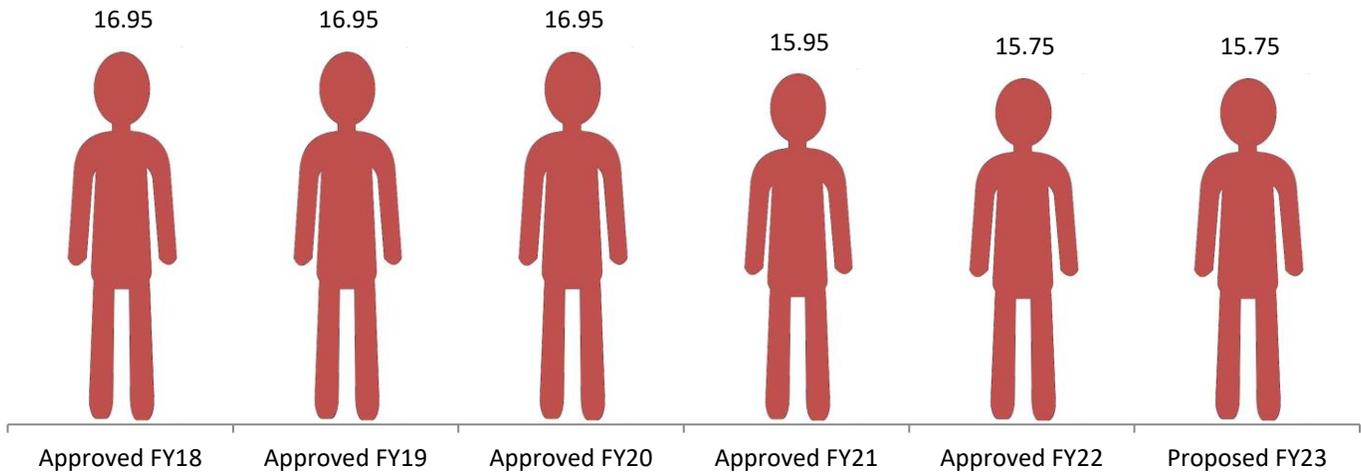
Budget Reconciliation	Personnel	Operating	Capital	Totals	FTE
FY 2022 Approved Budget				\$3,833,506	
Contractual Obligations Net of Staff Turnover	25,711	-	-	25,711	-
Change in Indirect Costs	28,947	15,252	-	44,199	-
One-Time Charges		-	(70,000)	(70,000)	-
Debt Service	-	(3,490)	-	(3,490)	-
FY 2023 Budget Changes					
1. Contract Service Hazardous Waste Disposal	-	(40,000)	-	(40,000)	-
2. Municipal Solid Waste (MSW) Disposal Fee	-	25,000	-	25,000	-
3. Increase to CHARM-Recycling Disposal	-	10,000	-	10,000	-
4. Increase to R&M Heavy Equipment	-	6,000	-	6,000	-
5. Increase to Parts/Accessories line item	-	3,000	-	3,000	-
6. Increase to Repairs & Maintenance - Vehicles	-	1,500	-	1,500	-
7. Electricity Expense Increase	-	3,000	-	3,000	-
8. Increase to Office Supplies line item	-	1,000	-	1,000	-
9. Increase to Contract Services-Other	-	1,500	-	1,500	-
10. Safety Equipment line item	-	1,500	-	1,500	-
11. Increase to Telephone Service Line item	-	1,000	-	1,000	-
FY 2023 Proposed Budget	\$54,658	\$25,262	(\$70,000)	\$3,843,426	-

Solid Waste Enterprise Fund Budget Reconciliation (Continued)

- 1. Decrease to Contract Service Hazardous Waste Disposal line item** – Request to transfer the Contract Services Hazardous Waste Disposal line item to the Public Works General Fund operations to fund the four Household Hazardous Waste (HHW) collections run by the Transfer Station & Recycling Center.
- 2. Increase to Municipal Solid Waste (MSW) Disposal Fee** - This request is necessary to cover the increase to the tipping fee for MSW at the Transfer Station & Recycling Center. The Solid Waste Division has a disposal contract with New Bedford Waste Services. This contract has an annual escalator to the tipping fee for MSW of 2.5%. The requested increase is to cover the contractual increase.
- 3. Increase to CHARM-Recycling Disposal line item** - Request to increase the Center for Hard-to-Recycle Materials (CHARM) recycling disposal line item to fund the disposal and recycling of hard to recycle items which include mattresses, propane tanks, and tires. These items include but are not limited to mattresses, propane tanks, and refrigerators. These items require a certain vendor and costs for this service have gone up.
- 4. Increase to R&M Heavy Equipment** - Requesting to increase the Repair and Maintenance (R&M) Heavy Equipment line item. This line item is responsible for funding the repairs of heavy equipment and machinery at the Solid Waste Division. Approval and funding of this request will allow the Solid Waste Division to maintain and repair the heavy equipment and machinery to a safe working condition.
- 5. Increase to Parts/Accessories line item** - This request is necessary to fund the purchase of parts and accessories used in the repair and maintenance of the vehicles and equipment of the Transfer Station & Recycling Center. Being able to maintain and repair is vital to the overall operation of the facility. With vehicles and heavy machinery being properly maintained and repaired, the facility can continue to service its users at a high level.
- 6. Increase to Repairs & Maintenance – Vehicles** - This request is for an increase to the Repairs & Maintenance – Vehicles line item. This line item is responsible for funding the repairs to the trucks and wheeled vehicles of the Solid Waste Division. This covers the costs associated with repairs and maintenance of vehicles by vendors.
- 7. Electricity Expense Increase** - The Transfer Station & Recycling Center operates much of its essential equipment with electricity. Some of these items are administrative like computers, fax machines, and phones. The compactor units, which are essential to our operation, function many times a day with the use of electricity. They utilize very large electrical motors that require a significant amount of electricity to function.
- 8. Increase to Office Supplies line item** - The efficiency of the Office and Gate House at the Transfer Station & Recycling Center is dependent on the ability to provide the service effectively. Office supplies are necessary for these functions. This funding is necessary to maintain a high level of customer service.
- 9. Increase to Contract Services** - This request is to increase the line item for contracted services for the Solid Waste Division. Each year the Solid Waste Division contracts out a rate study to show the financial outlook of the division and use this information to decide on fee structures to financially support the operations of the division.
- 10. Safety Equipment line item** - Efficiency and effectiveness will be provided by the ability of employees to protect themselves and others while performing duties that are hazardous or dangerous.
- 11. Increase to Telephone Service Line item** - Request to increase the Telephone Service line item. This line item funds the installation, maintenance, and repairs of the telephone system at the Transfer Station & Recycling Center.

Solid Waste Enterprise Fund Factors Affecting FTE's

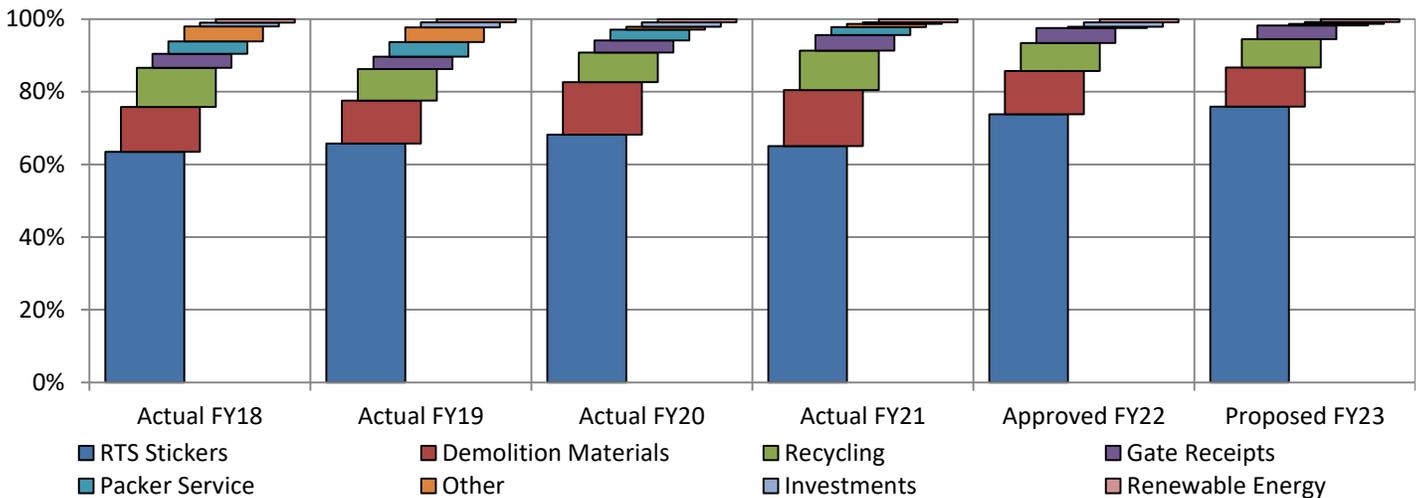
Full Time Employee History



The facility transferred (1.00)fte in FY 2021 budget due to transferring the Packer Service program to Public Works General Fund operations.

Solid Waste Enterprise Fund Factors Affecting Revenues

Total Revenue Sources (Excluding Taxes) Historical and Budgeted

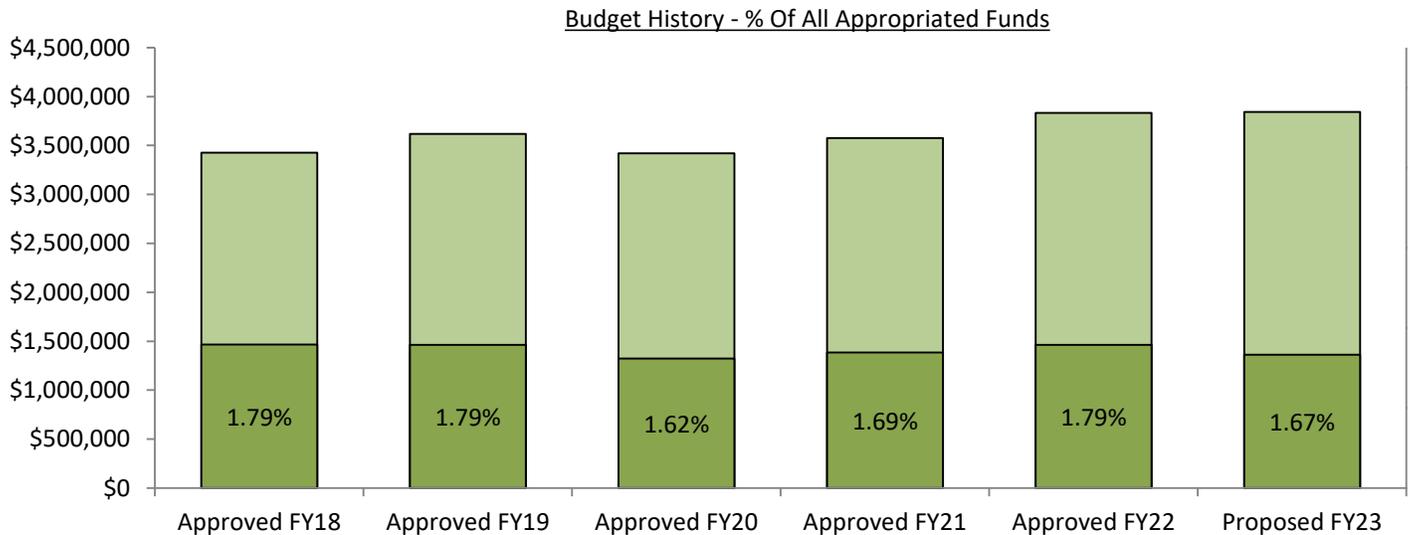


Solid Waste receives 98% from Charges for Services. This includes charges for recyclables, disposals, and annual sticker holder sales. The annual residential sticker sales account for 76% of total revenue sources at the facility.

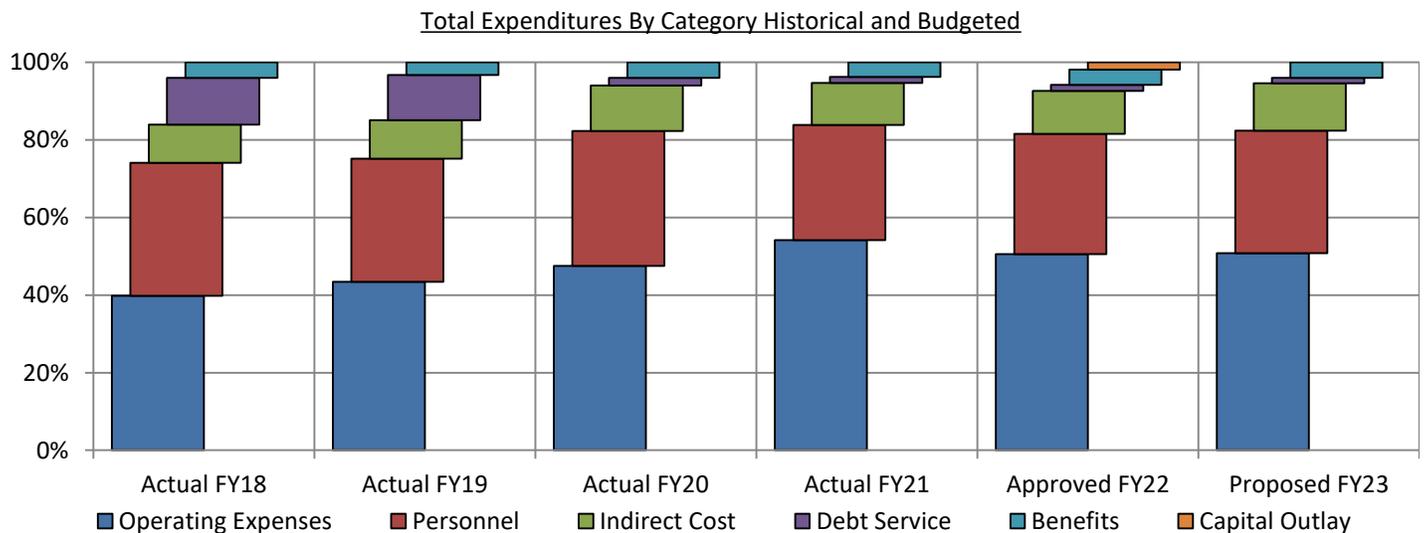
The Solid Waste Enterprise Fund revenues are affected by rates set at the residential transfer station and recycling facility. Rates are reviewed annually for services provided by this facility. The two major sources of revenue for the Enterprise Fund are the residential sticker and the tonnage fees charged for disposal of construction and demolition materials by homeowners and local small businesses.

The Solid Waste Division has continued to maintain a consistent level of service even with increases in items being disposed. The Transfer Station & Recycling Center implemented online sticker purchases in FY 2021. Residents who utilize the facility drive the operations at the Solid Waste Division. The Solid Waste Division sells roughly 9,400 Transfer Station Stickers annually.

Solid Waste Enterprise Fund Factors Affecting Expenses



The budget has increased 2% annually on average over a six-year period. This operation has remained within the 1.67% to 1.79% range of all appropriated funds over the same period.



Personnel and benefits combined comprise 48% of this fund's expenses. Operating expenses comprise the second largest category at 47%.

This operation has undergone some significant changes over the past few years. The town's tipping fee per ton for waste disposal has significantly increased. This operation also provides recycling services for all town residents for a charge if they don't have a transfer station sticker. This was previously provided free; however, significant changes in the international recycling markets have resulted in increased costs eliminating the free service. The town now pays over \$100 per ton for the disposal of recycled materials. This includes paper, plastics, and glass. There is still a market for corrugated cardboard and metals.

The largest cost affecting operations at the Solid Waste Facility is the disposal for materials. This area of the budget has seen significant cost increases in contracts with larger entities that receive the materials once it's been collected and sorted by the facility. This includes both disposing of waste and recycling materials. Furthermore, the market for recycled materials has turned upside, costing the facility to dispose of the materials rather than sell it. These underlining issues are far exceeding the facilities ability to charge affordable fees to cover operating cost.

Division Workload Indicators

	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Projection
Received and Transferred (tons)	8,203	8,946	8,300	8,450
Received Single Stream Recyclables (tons)	809		850	900
Received Corrugated Cardboard (tons)	589	589	620	720
Packer Service Collected Municipal Properties (tons)	383	286	400	450
Received and Transferred Construction and Demolition (tons)	2,978	3,409	3,000	3,120
Screened Compost (cubic yards)	4,000	-	-	
TV's & Computers	2,270 (pieces)	2,056 (pieces)	2,400 (pieces)	2,300 (pieces)
Metal (tons)	913	961	950	900
Cast Iron (tons)	34	25	25	25
Aluminum (tons)	11	14	11	11
Refrigerator & AC's (pieces)	2,808	2,808	2,900	2,950
Glass (tons)	248	391	300	300
Plastics (tons)	123	123	130	140
Mixed Paper & Newspaper (tons)	515	539	580	600
Copper & Brass (tons)	1	1	1	1
Tires (pieces)	829	478	920	943
Propane Tanks (pieces)	1,047	460	1,100	1,000
Mattresses (pieces)	3,512	3,683	2,600	3,000
Fluorescent Bulbs (pieces)	24,200	24,200	23,250	23,350
Books (tons)	50	46	50	55
Clothing (tons)	94	121	100	110
Waste Oil (gallons)	8,200	6	8,150	8,000
Manure (tons)	625	815	630	600

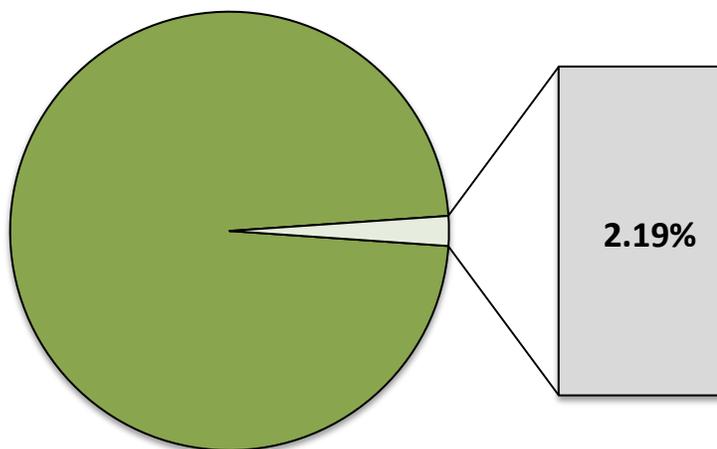
WATER POLLUTION CONTROL ENTERPRISE FUND

Purpose Statement

The purpose of the Water Pollution Control Division is to provide the citizens of the Town with an environmentally safe, efficient, and effective means of disposing of sanitary waste.



% of FY 2023 All Appropriated Funds



Water Pollution Control Enterprise Fund comprises 2.19% of all appropriated funds.

Water Pollution Control Enterprise Fund Services Provided

<https://www.townofbarnstable.us/Departments/waterpollution/>

The Water Pollution Control Program, an enterprise account-funded program under the Department of Public Works, manages a wastewater collection, treatment and disposal system, including the operation and maintenance of 2 wastewater treatment plants, 28 sewage pump stations, and 55 miles of sewer lines, and a cluster septic system. The program also includes the operation of a laboratory for testing the quality of sewage and treated effluent in order to ensure compliance with State and Federal regulations. In addition, the program manages an accounts receivable and billing system for users of the sewer system. The program provides owners of properties with on-site septic systems with a means of disposing of septic that is pumped routinely from their systems in order to prevent premature failure of the system and contamination of the groundwater.



Water Pollution Control Facility – Aerial View

The Water Pollution Control Fund is used to account for revenues and expenses associated with the Wastewater Facility on Bearses Way in Hyannis, the treatment plant located in Marstons Mills on school property along Osterville-West Barnstable Road, and a treatment system near Red Lily Pond. The main facility in Hyannis acts as a repository for residential and commercial sewage and septic. The facility in Marstons Mills services the two school buildings and a residential housing development located adjacent to the school property. The Red Lilly Pond system services residential properties located near the pond.

The Water Pollution Control laboratory provides operational staff with a variety of data to measure and track the performance of the wastewater treatment processes and to quantify the amount of nitrogen being removed from the incoming sewage. Other metrics used to track performance include pump runtimes, linear feet of sewer cleaned and inspected, the amount of sludge generated and processed, and the amount of emergency call-ins requiring staff response.

Water Pollution Control Enterprise Fund Recent Accomplishments

- ✓ Completed the relocation of the Rendezvous Lane Pump Station;
- ✓ Completed the rehabilitation of the WPCF chlorine delivery system;
- ✓ Completed an Asset Management Evaluation for the Hyannis WPCF;
- ✓ Replaced the WPCF Control Building programmable logic computer (PLC);
- ✓ Replaced over 1,200 diffuser heads in the WPCF aeration basins;
- ✓ Replaced the plant water booster pumps for the sludge thickening process, and;
- ✓ Completed the rehabilitation of the Periwinkle Drive Pump Station;
- ✓ Replaced four “three-way” valves at the WPCF primary and secondary clarifiers.
- ✓ Began construction of major improvements to the WPCF Solids Handling building;

Water Pollution Control Enterprise Fund Goals and Objectives

- Town Council's Quality of Life Strategic Plan (SP)

Short-Term:

1. Complete the rehabilitation of the Route 6A Pump Station and install new generators at the Independence Park, Sea Street, and Marston Avenue pump stations. **(SP: Infrastructure, Public Health and Safety, Finance, Environment and Natural Resources)**
2. Complete an evaluation of denitrification technologies that could be constructed at the Hyannis WPCF. **(SP: Infrastructure, Public Health and Safety, Finance, Environment and Natural Resources)**
3. Complete and evaluation and design of improvements to the Old Colony Pump Station. **(SP: Infrastructure, Public Health and Safety, Finance, Environment and Natural Resources)**
4. Begin construction of improvements to the Freezer Road Pump Station. **(SP: Infrastructure, Public Health and Safety, Finance, Environment and Natural Resources)**



Water Pollution Control Facility – Clarifier



Water Pollution Control Facility – Buildings

Long-Term:

1. Complete the construction of improvements to the WPCF Solids Handling Building. **(SP: Public Health and Safety, Finance, Environment and Natural Resources)**
2. Complete the design and construction of gravity sewer on Bearses Way and decommission vacuum sewer in this area. **(SP: Infrastructure, Public Health and Safety, Finance, Environment and Natural Resources)**
3. Complete the design and construction of improvements to address all capacity concerns within the Growth Incentive Zone in Hyannis. **(SP: Infrastructure, Public Health and Safety, Finance, Environment and Natural Resources)**
4. Continue implementation of the Town's Comprehensive Wastewater Management Plan. **(SP: Infrastructure, Public Health and Safety, Finance, Environment and Natural Resources , Education, Communication)**

Water Pollution Control Enterprise Fund Budget Comparison

Water Pollution Control Enterprise Fund						
	Actual	Projected	Approved	Proposed	Change	Percent
Source of Funding	FY 2021	FY 2022	FY 2022	FY 2023	FY22 - 23	Change
Fines & Penalties	\$69,998	\$63,042	\$60,000	\$60,000	\$0	0.00%
Fees, Licenses, Permits	12,083	11,431	9,180	9,180	-	0.00%
Charges for Services	4,915,113	4,981,906	4,516,460	4,744,588	228,128	5.05%
Interest and Other	263,617	266,823	228,800	228,800	-	0.00%
Total Operating Sources	\$5,260,811	\$5,323,203	\$4,814,440	\$5,042,568	\$228,128	4.74%
Trust Funds	45,000	-	-	-	-	0.00%
Borrowing Authorizations	2,236,053	-	2,465,000	14,950,000	12,485,000	506.49%
Total Capital Sources	\$2,281,053	\$0	\$2,465,000	\$14,950,000	\$12,485,000	506.49%
Total Sources of Funding	\$7,541,864	\$5,323,203	\$7,279,440	\$19,992,568	\$12,713,128	174.64%
Direct Operating Expenses						
Personnel	\$1,093,297	\$1,163,477	\$1,234,336	\$1,298,705	\$64,369	5.21%
Benefits	128,810	105,573	126,582	172,845	46,263	36.55%
Operating Expenses	1,367,444	1,591,316	1,626,970	1,693,970	67,000	4.12%
Capital Outlay	22,562	126,170	140,000	140,000	-	0.00%
Debt Service	1,074,310	1,171,242	1,171,242	1,098,505	(72,737)	-6.21%
Total Direct Operating Expenses	\$3,686,422	\$4,157,778	\$4,299,130	\$4,404,025	\$104,894	2.44%
Indirect Operating Costs						
General Fund Staff	\$164,853	\$162,793	\$162,793	\$190,140	\$27,348	16.80%
Pensions	218,405	232,737	232,737	267,789	35,051	15.06%
Audit & Software Costs	16,142	17,233	17,233	20,270	3,037	17.62%
Property, Casualty, Liability Insur.	51,425	61,079	61,079	65,063	3,984	6.52%
Workers' Compensation Insurance	27,152	49,114	49,114	57,288	8,173	16.64%
Retirees Health Insurance	39,863	38,347	38,347	37,993	(354)	-0.92%
Total Indirect Operating Expenses	\$517,840	\$561,304	\$561,304	\$638,543	\$77,239	13.76%
Total Operating Expenses	\$4,204,262	\$4,719,082	\$4,860,434	\$5,042,568	\$182,134	3.75%
Capital Improvements Program	1,984,161	-	3,540,000	15,185,000	11,645,000	328.95%
Total Capital Expenses	\$1,984,161	\$0	\$3,540,000	\$15,185,000	\$11,645,000	328.95%
Total Expenses	\$6,188,423	\$4,719,082	\$8,400,434	\$20,227,568	\$11,827,134	140.79%
Excess (Deficiency) Cash Basis	\$1,353,442	\$604,121	(\$1,120,994)	(\$235,000)	\$885,994	
Beginning Certified Free Cash	<u>\$9,637,775</u>		<u>\$10,991,216</u>	<u>\$9,870,222</u>		
FY22 Projected Excess (Deficiency)				<u>604,121</u>		
Ending Proj. Certified Free Cash	<u><u>\$10,991,216</u></u>		<u><u>\$9,870,222</u></u>	<u><u>\$10,239,343</u></u>		

Water Pollution Control Enterprise Fund Budget Comparison

Summary of Budget Changes

The direct operating Water Pollution Control's proposed FY 2023 budget increased by \$104,894 or 2.44% from the approved FY 2022 budget. Personnel budget change includes contractual obligations as well as a net two additional maintenance laborers. Operating budget change includes cost associated with electricity, water purchases, alarm systems, and uniforms. Capital outlay continues the annual operating capital and Stewart's Creeks grinder pump purchases.

Water Pollution Control Enterprise Fund Budget Reconciliation

Job Title	FY 2021	FY 2022	FY 2023	Change
Admin Assistant Sewer Billing	1.00	1.00	1.00	-
Admin Assistant to DPW Director	0.15	0.15	0.15	-
Assistant DPW Director	0.15	0.15	0.15	-
Assistant Mechanic	1.00	1.00	1.00	-
Chief Plant Operator	1.00	1.00	1.00	-
Construction Project Inspector	1.00	-	-	-
Director of Public Works	0.15	0.15	0.15	-
Financial Coordinator	0.15	0.15	0.15	-
Laboratory Tech/Chemist	2.00	2.00	2.00	-
Plant Operator/Maintenance Laborer	6.00	6.00	8.00	2.00
Principal Clerk	1.00	1.00	1.00	-
Town Safety Officer	0.20	-	-	-
Senior Project Manager Embayment	0.40	0.40	0.40	-
Town Engineer	0.15	0.15	0.15	-
Water Pollution Control Division Supervisor	1.00	1.00	1.00	-
Full-time Equivalent Employees	15.35	14.15	16.15	2.00

Budget Reconciliation	Personnel	Operating	Capital	Totals	FTE
FY 2022 Approved Budget				\$4,860,434	
Contractual Obligations Net of Staff Turnover	5,959	-	-	5,959	-
Change in Indirect Costs	42,871	34,368	-	77,239	-
One-Time Charges	-	-	(140,000)	(140,000)	-
Debt Service	-	(72,737)	-	(72,737)	-
FY 2023 Budget Changes					
1. Two Grade 5 Maintenance Laborers	104,673	-	-	104,673	2.00
2. Electricity Budget Increase	-	20,000	-	20,000	-
3. Water Budget Increase	-	4,000	-	4,000	-
4. Pump Station Alarm Upgrades	-	40,000	-	40,000	-
5. Uniforms Budget Increase	-	3,000	-	3,000	-
6. Operating Capital Renewal	-	-	90,000	90,000	-
7. Stewart's Creek Grinder Pump Purchases	-	-	50,000	50,000	-
FY 2023 Proposed Budget	\$153,502	\$28,631	\$-	\$5,042,568	2.00

Water Pollution Control Enterprise Fund Budget Reconciliation

- 1. Two Grade 5 Maintenance Laborers** - Maintenance Laborers are responsible for routine maintenance in caring for the buildings, grounds, equipment, and vehicles of the Water Pollution Control Division. As the Town's sewer system continues to expand, more routine maintenance will be required. The Town recently added one new pump station at the Cape Cod 5 Headquarters and two more pump stations are being constructed within the next two years on Strawberry Hill Road and at the intersection of Phinney's Lane and Route 28. The Phinney's Lane Pump Station will be one of the largest pump stations in Town once constructed and will require daily inspections per State law.
- 2. Electricity Budget Increase** - The Water Pollution Control Division uses a large amount of electricity for the transportation and treatment of wastewater. Due to the amount of electricity used at the Water Pollution Control Facility and pump stations, even a small rate increase can have a large impact on the electricity budget. The WPCD recently acquired one new pump station located at the new Cape Cod 5 headquarters and two more pump stations are in the process of being constructed. As these stations begin to take on flow, electrical consumption will increase.
- 3. Water Budget Increase** - Water departments Town-wide has implemented significant rate increases in recent years in order to cover the cost of PFAS treatment. In 2021, the Hyannis Water System increased rates by 7%, and the Barnstable Fire District increased rates by 20%. The WPCD currently maintains 28 pump stations and two wastewater treatment facilities where water is used for cleaning, cooling, sludge processing, irrigation, and domestic use at the facility's offices and locker room. In order to cover the rising costs of municipal water, an increase to the water budget is necessary.
- 4. Pump Station Alarm Upgrades** - The Town's sewage pump stations are equipped with alarm systems that utilize cellular service to communicate pump station conditions to the WPCD's operators. These alarms notify operators of abnormal conditions such as high tank levels, abnormal pump runtimes, and power outages. The majority of the cellular communication modules currently in use rely on AT&T 3G cellular services. AT&T is in the process of phasing out 3G service, and these modules are in need of immediate replacement. The next generation of alarm module provides cellular service from multiple cellular carriers rather than just one carrier. This protects the pump stations from "going dark" during cellular carrier outages, which have occurred during several recent storm events. The new modules can be upgraded remotely rather than manually, which requires less labor for WPCD operators.
- 5. Uniforms Budget Increase** - The WPCD has submitted a request to hire two new full time employees to maintain the Town's growing sewer system and wastewater treatment facilities. The collective bargaining agreement between the Town and AFSCME union provides employees with a uniform allowance of \$600, a boot allowance of \$250, and requires the Town to supply employees with foul weather gear. In order to accommodate the hiring of these new full time employees, a uniform budget increase will be necessary.
- 6. Operating Capital** - Operating Capital Renewal is a recurring budget request that funds the replacement of large pieces of equipment and other critical components of the wastewater treatment plant and collection system.
- 7. Stewart's Creek Grinder Pump Purchases** - As part of the Stewart's Creek sewer expansion project, betterments were assessed for properties within the project area, which included the purchase of grinder pumps for every property connected to low pressure sewer. The project budget was closed out in the fall of 2018 and the money was returned to the sewer reserve fund. This request will set aside a portion of sewer reserves in order to continue purchasing high quality grinder pumps for properties tied to low pressure sewer in the Stewart's Creek project area. This appropriation includes funding sufficient to cover the cost of grinder pumps for overdue connections and for properties due to connect in FY2023.

Water Pollution Control Enterprise Fund Factors Affecting FTE's

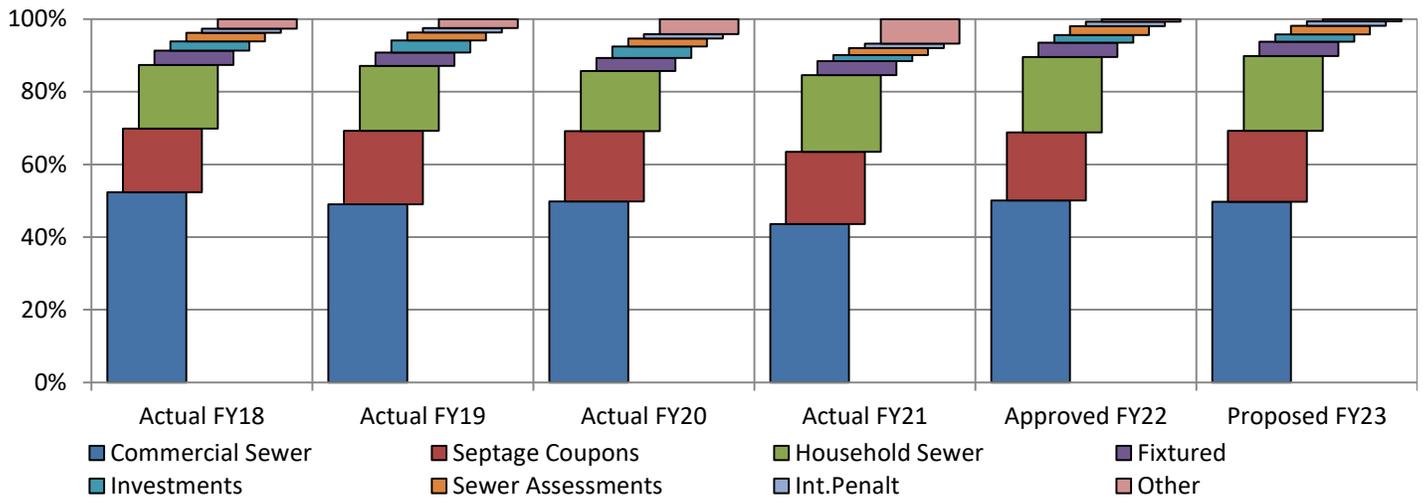
Full Time Employee History



FY 2022 Safety Office salary (0.20) reallocated to the Town Manager's budget. The FY 2023 budget includes a net 2.00 additional FTE's for the maintenance laborers and construction inspector transferring to the CWMP.

Water Pollution Control Enterprise Fund Factors Affecting Revenues

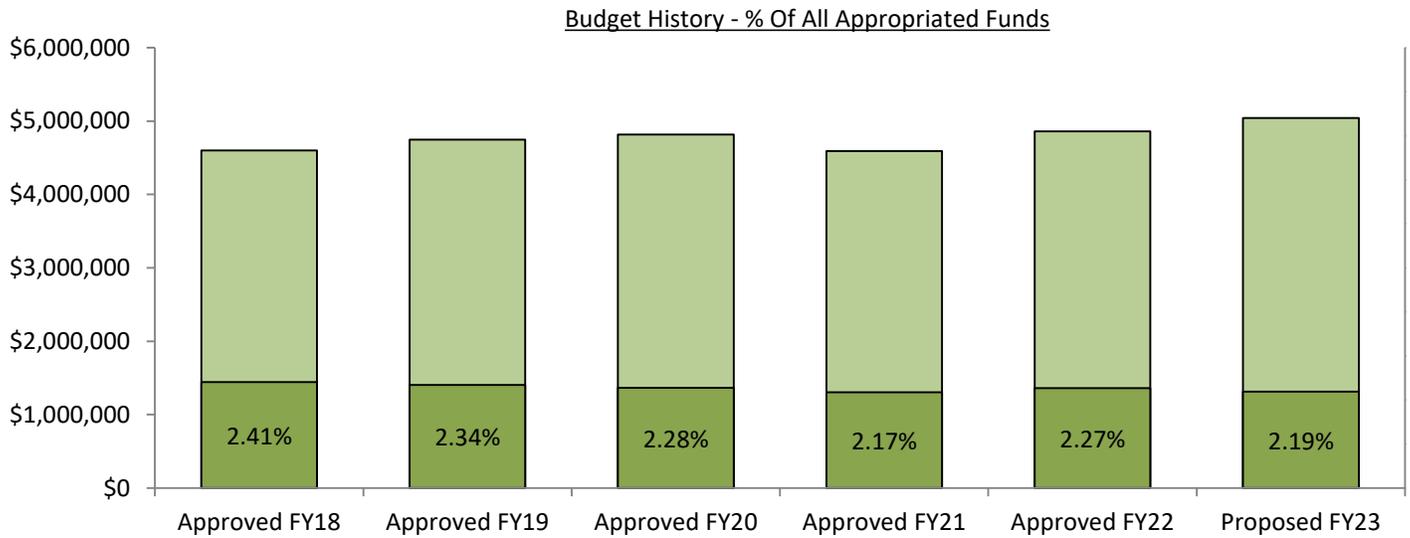
Total Revenue Sources (Excluding Taxes) Historical and Budgeted



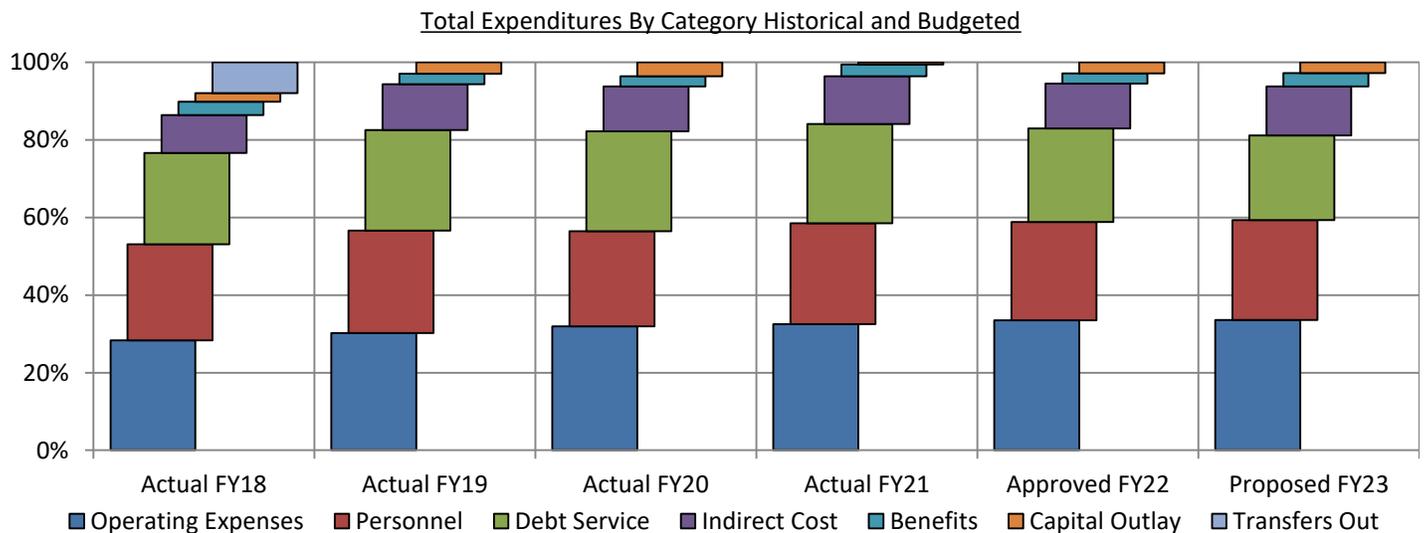
Charges for services accounts for 94% resources to support the budget, which includes commercial and household sewer.

Sewer rates charged to users of the system account for a majority of the revenue in this fund. The number of customers tied into the facility can have a significant impact on revenue. The rates are set in accordance with the necessary revenue required to run the sewer operations and pay back the borrowings issued for the sewer plant improvements. The expansion of the sewer collection system will not be placed on ratepayers. Rate increases of approximately 2% to 5% have been implemented over the past several years. Once the Comprehensive Wastewater Management Plan (CWMP) projects are installed, an estimate for the changes in the customer base can be included in this.

Water Pollution Control Enterprise Fund Factors Affecting Expenses



The budget has increased 1.60% annually on average over a six-year period. This operation has decreased from 2.41% to 2.19% of all appropriated funds over the same period.



These operations are fixed cost intensive and require continuous maintenance and upgrades to the system. Debt service accounts for roughly 25% of all sewer related borrowings for existing loans to maintain existing infrastructure. Personnel and benefits account for 28% of total cost.

This operation will experience significant changes because of the town's Comprehensive Wastewater Management Plan (CWMP). This plan includes the expansion of collection systems and the centralized treatment of wastewater. There has been much discussion of various funding scenarios for sewer expansion, effluent mitigation, and nitrogen management. Part of the expansion discussion includes issues of ability-to-pay and cost allocation. In the past, the federal and state governments subsidized 90% of capital costs for construction of new wastewater facilities and sewer expansion. Decisions will need to be made in regards to the cost allocation for public sewer expansions. Cost allocations may include betterments, sewer rates, tax rates, and other potential new sources of revenue, net of any federal and state funding that may be available.

Water Pollution Control Division Workload Indicators

WPCD workload is measured by total sewer accounts, gallons of wastewater treated, gallons of septage and grease received, and dry tons of sludge processed. The WPCD operates under a staffing plan that is reviewed and approved by Mass DEP every two years. Workload is expected to increase with the completion of the Strawberry Hill Road sewer expansion project in the spring of 2023. Workload will continue to increase as the Town executes its Comprehensive Wastewater Management Plan (CWMP).



Water Pollution Control Facility – Secondary Clarifiers

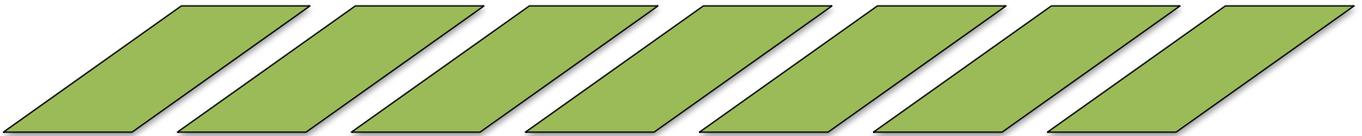
	FY19 Actuals	FY20 Actuals	FY21 Actuals	FY22 Projection
Treated Gallons of Wastewater	597,413,700	539,729,720	525,527,200	545,000,000
Treated Gallons of Septage	9,143,000	9,370,000	10,214,000	10,000,000
Treated Gallons of Grease	792,600	697,500	582,500	650,000
Processed Dry Sludge (tons)	1,018	983	972	1,000
Jet-rod Cleaning Sewer Line (miles)	3.00	3.3	2.1	3.0
Television Inspection Sewer Line (miles)	3.90	3.1	1.2	2.0

WATER SUPPLY ENTERPRISE FUND

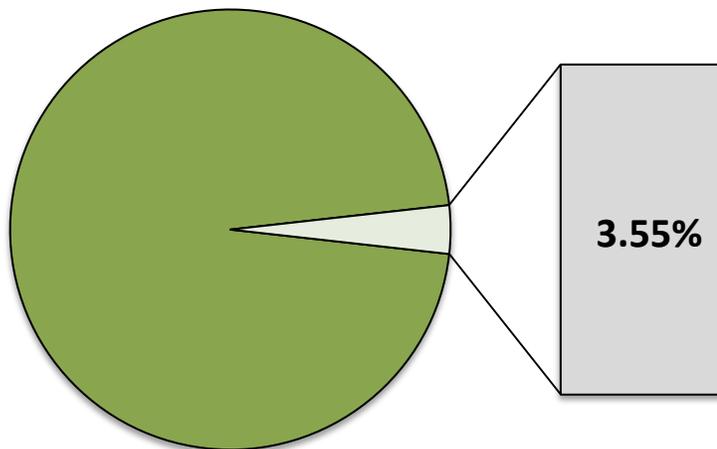
Purpose Statement

The purpose of the Water Supply Division is to provide commercial and residential properties in Hyannis, Hyannisport and West Hyannisport with a safe, efficient and effective means of obtaining drinking water and fire-readiness services

Sustainable Water Supply



% of FY 2023 All Appropriated Funds



Water Supply Enterprise Fund comprises 3.55% of all appropriated funds.

"Besides air there is nothing more important than water"

Water Supply Enterprise Fund Services Provided

<https://www.townofbarnstable.us/Departments/watersupply/>

The Water Supply program, an enterprise account-funded program under the Department of Public Works, oversees the contract management and operation of a water supply system that provides potable water and fire-readiness services to the residents and businesses (approximately 7,700 accounts) located in Hyannis, Hyannis Port, West Hyannis Port. The management of the system involves substantial investment in water supply sources, pumping, treatment, storage and distribution infrastructure, customer service and regulatory compliance.

The Water Supply Fund was created through the acquisition of the asset acquisition of the Barnstable Water Company. This operation provides service to residential and commercial properties within the village of Hyannis. An outside contractor provides for the daily management of the water service.



The new permanent interconnection with the COMM water system on Longview Drive in Hyannis

Water Supply Enterprise Fund Recent Accomplishments

- ✓ Completed the second phase of the new well exploration program by test well drilling on seven parcels of public land in the Town of Barnstable to find additional water supply wells for the Hyannis Water System;
- ✓ Finalized construction of the Harold Tobey Maher Filtration Facility;
- ✓ Commenced construction of the permanent interconnection with the COMM water system on Longview Drive;
- ✓ Pumped, treated, and distributed 883,922,000 Gallons of Water in FY 2021, and;
- ✓ Increased water quality by continuing the unidirectional flushing system for the Hyannis Water System.

Water Supply Enterprise Fund Goals and Objectives

- Town Council's Quality of Life Strategic Plan (SP)

Short-Term:

1. Maintain close contractual oversight of the administration, finances, and operation of the Water Supply Division. **(SP: Regulatory Process and Performance, Education, Communication, Finance)**
2. Continue to implement the capital funded pipe replacement program by focusing on water quality improvements and deficient water pipe while maximizing results and minimizing customer impact. **(SP: Infrastructure, Environment and Natural Resources, Regulatory Process and Performance, and Education, Finance)**
3. Continue to develop and integrate the Water Supply Division's technical and administrative requirements within the Town's regulatory, planning, and legal system. **(SP: Environment and Natural Resources, Regulatory Process and Performance, Education, Finance, Communication)**
4. Proceed with the implementation of the new source alternatives evaluation report to provide the Hyannis Water System with drinking water production sources that yield high quality drinking water and needed redundancy. **(SP: Environment and Natural Resources, Regulatory Process and Performance, Infrastructure)**
5. Implement the well building and treatment plant rehabilitation program by prioritizing and replacing building components, process control equipment, security, and electrical systems. **(SP: Infrastructure, Finance)**



Harold E. Tobey Maher Water Filtration Plant

Long-Term:

1. Provide cost-effective water supply services to the customers of the Hyannis Water System. **(SP: Environment and Natural Resources, Regulatory Process and Performance, and Education, Communication)**
2. Maintain all assets of the Division to current standards and provide information to the Hyannis Water Board and the DPW Director on needed repairs, and improvements to the water system. **(SP: Infrastructure, Environment and Natural Resources, Regulatory Process and Performance, Education, Communication, Finance)**
3. Insure reliable and redundant fire-flows to assist the Hyannis Fire Department and support demands on the system. **(SP: Infrastructure, Regulatory Process and Performance)**
4. Continue to strive for excellence in customer service, asset-management, and cost-control within the Division. **(SP: Infrastructure, Regulatory Process and Performance, Education, Communication)**

Water Supply Enterprise Fund Budget Comparison

Water Supply Enterprise Fund						
	Actual	Projected	Approved	Proposed	Change	Percent
Source of Funding	FY 2021	FY 2022	FY 2022	FY 2023	FY22 - 23	Change
Intergovernmental Aid	\$856,863	\$0	\$0	\$0	\$0	0.00%
Fines & Penalties	12,198	655	18,833	19,020	187	0.99%
Fees, Licenses, Permits	223,986	141,876	151,447	152,949	1,502	0.99%
Charges for Services	6,699,842	6,688,199	6,462,583	6,640,315	177,732	2.75%
Interest and Other	569,106	783,824	601,843	603,628	1,785	0.30%
Transfers In	500,000	360,000	360,000	675,250	315,250	87.57%
Total Operating Sources	\$8,861,995	\$7,974,554	\$7,594,706	\$8,091,162	\$496,456	6.54%
Intergovernmental Aid	200,000	-	-	-	-	0.00%
Borrowing Authorizations	2,305,000	-	1,050,000	2,530,000	1,480,000	140.95%
Total Capital Sources	\$2,505,000	\$0	\$1,050,000	\$2,530,000	\$1,480,000	140.95%
Total Sources of Funding	\$11,366,995	\$7,974,554	\$8,644,706	\$10,621,162	\$1,976,456	22.86%
Direct Operating Expenses						
Personnel	\$218,243	\$223,783	\$228,078	\$232,217	\$4,139	1.81%
Benefits	20,996	19,457	21,835	26,061	4,225	19.35%
Operating Expenses	3,427,772	3,794,366	4,030,957	4,420,496	389,539	9.66%
Capital Outlay	174,247	157,663	166,000	166,000	-	0.00%
Debt Service	2,279,998	2,486,314	2,938,192	3,065,347	127,155	4.33%
Total Direct Operating Expenses	\$6,121,255	\$6,681,584	\$7,385,062	\$7,910,121	\$525,059	7.11%
Indirect Operating Costs						
General Fund Staff	\$80,226	\$86,158	\$86,158	\$91,981	\$5,823	6.76%
Pensions	84,287	92,318	92,318	54,825	(37,493)	-40.61%
Audit & Software Costs	6,629	6,867	6,867	7,598	731	10.65%
Property, Casualty, Liability Insur.	21,595	24,301	24,301	26,076	1,776	7.31%
Retirees Health Insurance	-	-	-	561	561	0.00%
Total Indirect Operating Expenses	\$192,737	\$209,644	\$209,644	\$181,041	(\$28,602)	-13.64%
Total Operating Expenses	\$6,313,992	\$6,891,227	\$7,594,706	\$8,091,162	\$496,456	6.54%
Capital Improvements Program	4,052,163	-	1,250,000	2,795,000	1,545,000	123.60%
Total Capital Expenses	\$4,052,163	\$0	\$1,250,000	\$2,795,000	\$1,545,000	123.60%
Total Expenses	\$10,366,155	\$6,891,227	\$8,844,706	\$10,886,162	\$2,041,456	23.08%
Excess (Deficiency) Cash Basis	\$1,000,840	\$1,083,326	(\$200,000)	(\$265,000)	(\$65,000)	
Beginning Certified Free Cash	\$492,046		\$1,492,886	\$1,292,886		
FY22 Projected Excess (Deficiency)				1,083,326		
Ending Proj. Certified Free Cash	\$1,492,886		\$1,292,886	\$2,111,212		

Summary of Budget Changes

The direct operating Water Supply Enterprise Fund's proposed FY 2023 budget increased by \$525,059 or 7.11% from the approved FY 2022 budget. Personnel budget change includes contractual obligations. Operating budget change includes the annual Suez contract cost increase. Capital outlay continues the annual emergency repairs program.

Water Supply Enterprise Fund Budget Reconciliation

Job Title	FY 2021
Admin Assistant	0.75
Assistant DPW Director	0.15
Director of Public Works	0.15
Town Safety Officer	0.05
Town Engineer	0.15
Water Supervisor	1.00
Full-time Equivalent Employees	2.25

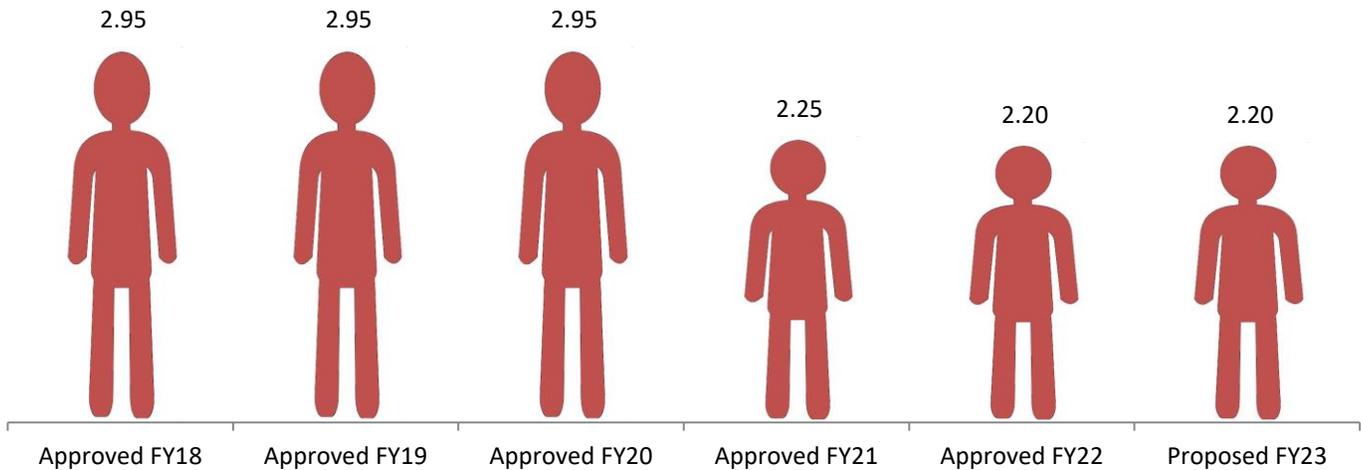
FY 2022	FY 2023	Change
0.75	0.75	-
0.15	0.15	-
0.15	0.15	-
-	-	-
0.15	0.15	-
1.00	1.00	-
2.20	2.20	-

Budget Reconciliation	Personnel	Operating	Capital	Totals	FTE
FY 2022 Approved Budget				\$7,594,706	
Contractual Obligations Net of Staff Turnover	8,364	-	-	8,364	-
Change in Indirect Costs	(36,932)	8,329.78	-	(28,602)	
One-Time Charges	-	-	(166,000)	(166,000)	-
Debt Service	-	127,155	-	127,155	-
FY 2023 Budget Changes					
1. Suez Contract Increase	-	398,539	-	398,539	-
2. Easement Payment Eliminated	-	(9,000)	-	(9,000)	-
3. Operating Capital	-	-	166,000	166,000	-
FY 2023 Proposed Budget	\$(28,568)	\$525,024	\$-	\$8,091,162	-

- 1. Operations Contract, Year 14 increase** – To fund the increase in cost for the operations contract with Suez relative to the yearly escalation formula, personnel retainage increases and the addition of an FTE to deal with the new filtration plant and additional carbon filters. This decision package request is based on a number provided by Suez according the contractual escalation formula based on various indexes and additional costs.
- 2. Easement payment elimination** - To remove the Mill Pond Village permanent easement payment expense for \$9,000 from the Water Supply Division’s operating budget. FY 2022 was the last payment year for this obligation.
- 3. Operating Capital** - This recurring funding request for operating capital expenses is an integral part of the operations since. It funds for police details and toward emergency repairs as detailed in the operations contract. During water main breaks and other emergencies, it is paramount to use police details for security and safety of the water utility workers and the public. The operations contract requires the availability of these funds to deal with emergency repairs.

Water Supply Enterprise Fund Factors Affecting FTE's

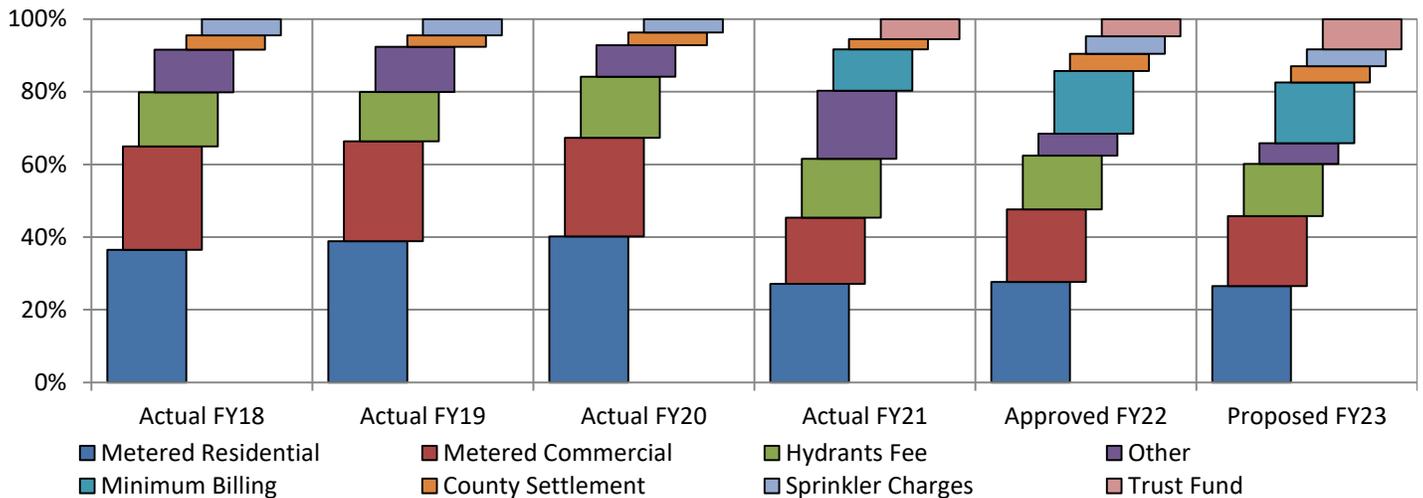
Full Time Employee History



The FY 2021 budget reallocated (0.70)fte's to the General Fund and FY 2022 reallocates (0.05) to the Town Manager's budget.

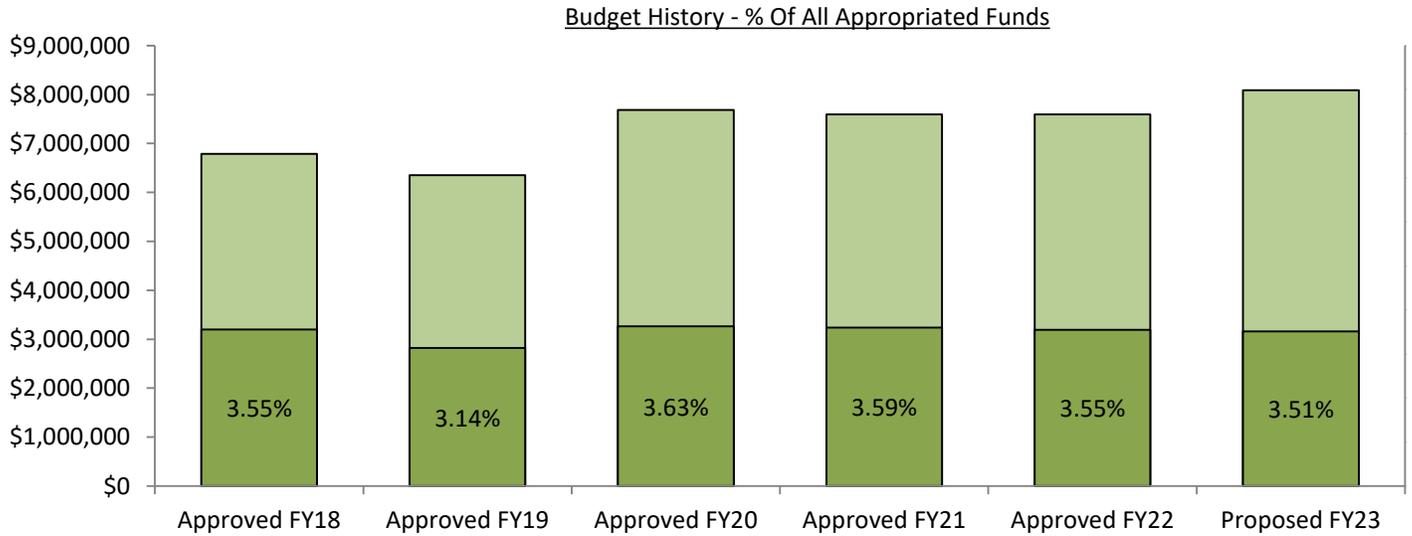
Water Supply Enterprise Fund Factors Affecting Revenues

Total Revenue Sources (Excluding Taxes) Historical and Budgeted

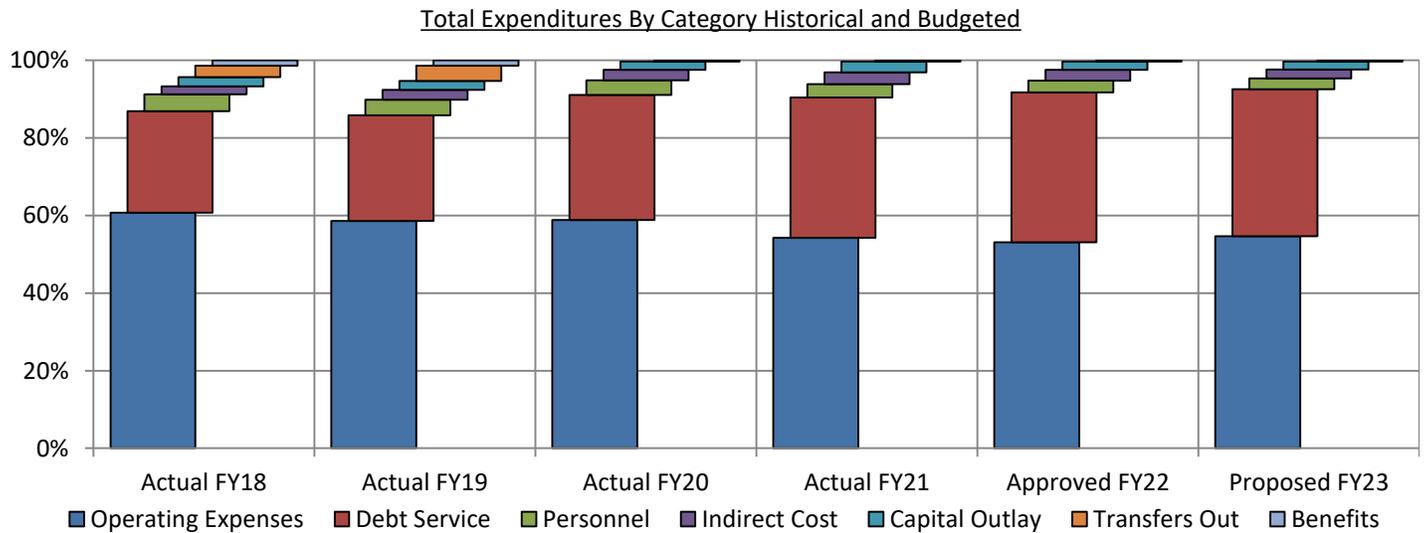


The rates are set in accordance with the necessary revenue required to run the water operations and pay back borrowings issued for water related capital improvements. The metered residential and commercial account for 50% of total revenue sources and hydrant fees 15%. The Enterprise Fund also receives revenue from the Barnstable County settlement and contributions from the special revenue fund (Short-term rental taxes).

Water Supply Enterprise Fund Factors Affecting Expenses



The budget has increased 3.20% annually on average over a six-year period. This operation has remained in the 3.55% to 3.63% range of all appropriated funds over the same period.



The town contracts with SUEZ North America to run its water supply operation. This is a multiyear contract with built in escalators. It is expected that this operation will continue to be operated under a contract. As more treatment systems are constructed, the annual operating cost of the system, including the management contract, will increase.

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