

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

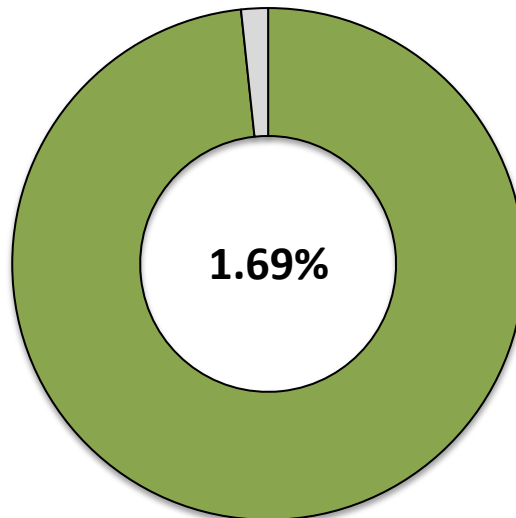
Department Purpose Statement

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

Percentage of FY21 All Appropriated Funds



Solid Waste Enterprise Fund comprises 1.69% of all appropriated funds.

SOLID WASTE ENTERPRISE FUND

Enterprise Fund Services Provided

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.

Recent Accomplishments

- 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
- Attended seminars on ways to expand recycling efforts in all areas



Solid Waste Facility – Aerial View

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)**

Long-Term:

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

SOLID WASTE ENTERPRISE FUND

Enterprise Fund Budget Comparison

| Solid Waste Enterprise Fund | Actual | Projected | Approved | Proposed | Change | Percent |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|----------------|
| Source of Funding | FY 2019 | FY 2020 | FY 2020 | FY 2021 | FY20 - 21 | Change |
| Charges for Services | \$3,228,563 | \$3,275,585 | \$3,058,500 | \$3,010,675 | (\$47,825) | -1.56% |
| Interest and Other | 84,777 | 85,997 | 71,000 | 71,050 | 50 | 0.07% |
| Total Operating Source of Funding | \$3,313,340 | \$3,361,582 | \$3,129,500 | \$3,081,725 | (\$47,775) | -1.53% |
| Expense Category | | | | | | |
| Personnel | \$1,103,469 | \$1,220,577 | \$1,293,933 | \$1,229,550 | (\$64,383) | -4.98% |
| Benefits | 338,092 | 346,416 | 370,352 | 382,623 | 12,271 | 3.31% |
| Operating Expenses | 1,521,012 | 1,470,983 | 1,593,254 | 1,803,561 | 210,307 | 13.20% |
| Debt Service | 403,702 | 65,305 | 65,305 | 63,395 | (1,910) | -2.92% |
| Transfers Out | 94,192 | 97,039 | 97,039 | 98,274 | 1,235 | 1.27% |
| Total Operating Budget | \$3,460,467 | \$3,200,320 | \$3,419,883 | \$3,577,403 | \$157,520 | 4.61% |
| Capital Improvements Program | 16,715 | 230,000 | 240,000 | 100,000 | (140,000) | -58.33% |
| Total Capital Expenses | \$16,715 | \$230,000 | \$240,000 | \$100,000 | (\$140,000) | -58.33% |
| Total Expenses | \$3,477,182 | \$3,430,320 | \$3,659,883 | \$3,677,403 | \$17,520 | 0.48% |
| Excess (Deficiency) Cash Basis | (\$163,842) | (\$68,738) | (\$530,383) | (\$595,678) | (\$65,295) | |

| | | | |
|--|---------------------|---------------------|---------------------|
| Beginning Certified Free Cash | \$ 2,988,985 | \$ 2,825,143 | \$ 2,294,760 |
| FY 2020 Projected Excess (Deficiency) | | | (68,738) |
| Ending Projected Certified Free Cash | \$ 2,825,143 | \$ 2,294,760 | \$ 1,630,344 |

| Job Title | FY 2019 | FY 2020 | FY 2021 | 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 | 5.00 | 5.00 | 4.00 | (1.00) |
| Mechanic/Working Foreman | 2.00 | 2.00 | 2.00 | - |
| Principal Dept/Div Assistant | 1.00 | 1.00 | 1.00 | - |
| Recycling Laborer | 4.00 | 4.00 | 4.00 | - |
| Safety Officer | 0.20 | 0.20 | 0.20 | - |
| Solid Waste Supervisor | 1.00 | 1.00 | 1.00 | - |
| Town Engineer | 0.15 | 0.15 | 0.15 | - |
| Full-time Equivalent Employees | 16.95 | 16.95 | 15.95 | (1.00) |

SOLID WASTE ENTERPRISE FUND

Enterprise Fund Budget Comparison (Continued)

| Budget Reconciliation | Personnel | Operating | Capital Outlay | Totals | FTE |
|---|-------------------|------------------|----------------|--------------------|---------------|
| FY 2020 Approved Budget | | | | \$3,419,883 | |
| Contractual Obligations Net of Staff Turnover | (8,946) | - | - | (8,946) | - |
| Change in Indirect Costs | 30,128 | 773 | - | 30,901 | - |
| One-Time Charges | (12,940) | (1,910) | - | (14,850) | - |
| FY 2021 Budget Changes | | | | | |
| 1. Seasonal Positions Reduced | (11,500) | - | - | (11,500) | - |
| 2. Disposal Tipping Fee | - | 360,489 | - | 360,489 | - |
| 3. Charm Recycling Disposal Fee | - | 20,000 | - | 20,000 | - |
| 4. Buildings/Grounds Maintenance | - | (40,000) | - | (40,000) | - |
| 5. Landfill Post Closure Maintenance Budget | - | (40,000) | - | (40,000) | - |
| 6. Vehicle & Heavy Equipment Maintenance | - | (7,000) | - | (7,000) | - |
| 7. Hazardous Waste Disposal | - | (10,000) | - | (10,000) | - |
| 8. Credit Card Service Charges | - | (10,000) | - | (10,000) | - |
| 9. Diesel Budget Reduction | - | (10,470) | - | (10,470) | - |
| 10. Gasoline Budget Reduction | - | (1,050) | - | (1,050) | - |
| 11. Contract Services | - | (4,500) | - | (4,500) | - |
| 12. Various Budget Line Items Reduced | - | (28,200) | - | (28,200) | - |
| 13. Packer Service Program | (48,854) | (18,500) | - | (67,354) | (1.00) |
| FY 2021 Proposed Budget | (\$52,112) | \$209,632 | \$0 | \$3,577,403 | (1.00) |

Summary of Budget Changes

The Solid Waste Enterprise Fund’s proposed FY 2021 budget is increasing 4.61% from the approved FY 2020 budget. Although several reductions have been made such as the elimination of the Packer Service program, cost associated with disposal of solid waste and recycling materials has far exceeded any reductions.

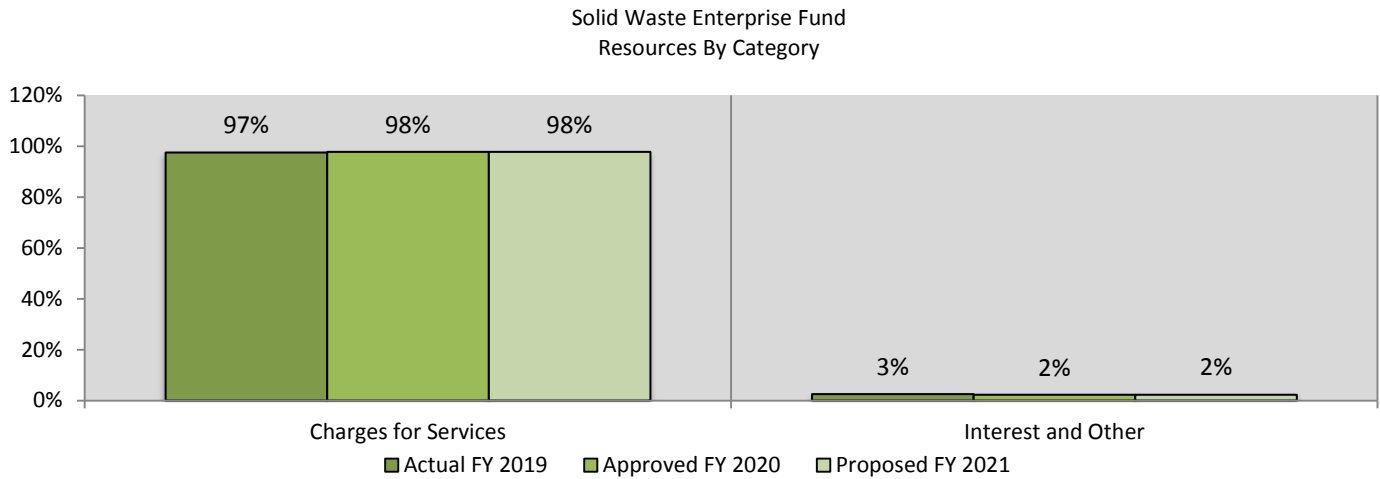
- 1. Seasonal Positions Budget Reduced** – There will be little to no impact. We have not utilized seasonal positions in a few years and have not seen an effect on our operation. We were not planning to hire any seasonal positions this year or next.
- 2. Disposal Tipping Fee** – The Transfer Station & Recycling Center accepts municipal solid waste (MSW) from full Transfer Station Sticker Holders. Over the past year the tipping fee associated with transferring MSW for disposal or incineration have nearly doubled. In order to continue to accept and transfer sticker holders MSW, the line item for disposal will need to be increased.
- 3. Charm Recycling Disposal Fee** – The Transfer Station & Recycling Center accepts hard to recycle items, throughout the entire year. Most of these items have a disposal cost associated with them. These fees have been increasing over the years and an increase to the line item is necessary to cover these costs.
- 4. Building/Grounds Maintenance** – Impacts of the reductions to Buildings/Grounds line item will make it difficult for repairs to the multiple buildings and grounds areas at the Transfer Station very difficult. With the age and usage of the buildings and grounds, these repairs can happen without notice and could result in repairs that are heavily involved, expensive and detrimental to the operation of the facility.
- 5. Landfill Post Closure Maintenance Budget** – Massachusetts Department of Environmental Protection requires maintenance and testing of capped landfills. The funding of this work will come from another account specified by Finance due to previous savings for this requirement.

Enterprise Fund Budget Comparison (Continued)

- 6. Vehicle & Heavy Equipment Maintenance** – Reduction of this line item can impact the Transfer Station’s ability to repair the heavy equipment, i.e. rubber tire loader, when it is necessary to have the repairs done at specialized repair shops. Without this ability, the operation of the Transfer Station will be severely impacted. The lack of available heavy equipment will be detrimental to the safe and effective operation of the facility.
- 7. Hazardous Waste Disposal** – Reduction of this line item will affect the ability of the Transfer Station to fund the same number of Household Hazardous Waste (HHW) Collections. Currently, the Division hosts 4 HHW Collections throughout the year. With this reduction, the facility may only be able to hold 2 HHW Collections.
- 8. Credit Card Service Charge** – Reduction of this line item can affect the Transfer Station’s ability to accept credit cards from residents and small businesses paying for stickers and disposal fees.
- 9. Diesel Budget Reduction** – The price of diesel is expected to drop 40% and the proposed reduction is 40% of the current funding level.
- 10. Gasoline Budget Reduction** – The price of gasoline is expected to drop 40% and the proposed reduction is 40% of the current funding level.
- 11. Contract Services** – Impacts of Contract Services reductions will be the loss of the yearly compost screening operation. This operation screens the yard waste after several years of breaking down into a material that is given away at no charge to Full Sticker and Recycle Only Sticker holders.
- 12. Various Budget Line Items Reduced** – A town wide exercise was conducted for department managers to review their budgets for recommended budget reductions. This is a summation of budget lines that were adjusted and not consider as detrimental to services.
- 13. Packer Service Program** - The elimination of the Packer Service Program will affect the Solid Waste Division by eliminated 1 full time position. The program is self-funding and will not affect the remainder of the Solid Waste Division budget. This elimination will affect general funded operation that uses the packer service to empty dumpsters and barrels around Town. These locations will need to contract out a private hauler to continue with their waste disposal.

SOLID WASTE ENTERPRISE FUND

Enterprise Fund Budget Comparison (Continued)



Factors Affecting Revenues

The Solid Waste Fund revenues are affected by rates set at the residential transfer station and recycling facility. Rates are set annually for services provided by this facility. The two major sources of revenue for the 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 increase in items being disposed of. Residents who utilize the facility drive the operations at the Solid Waste Division. Full Transfer Station Sticker sale numbers stayed level in FY 2019 compared to FY 2018. Recycle Only Sticker numbers have increased approximately 150 stickers in FY 2019. For FY 2021, Solid Waste Division is projected to have an increase in tons of Municipal Solid Waste (MSW) disposed of. On December 1, 2018, the Transfer Station & Recycling Center moved from single stream recycling to source separated recycling. This change has assisted in reducing some costs for recyclable material.

Status on Performance:

The operations at the Solid Waste Division are driven by residents who utilize the facility. Transfer Station Sticker sale numbers were down approximately 60 stickers from FY 2018 to FY 2019. Recycle Only Sticker numbers have also decreased by approximately 200 stickers from FY 2018 to FY 2019. In the beginning of FY 2019, the Transfer Station & Recycling Center moved from single stream recycling to source separated recycling.

Charges for services account for 98% of total revenue sources. This includes the annual residential transfer station sticker.

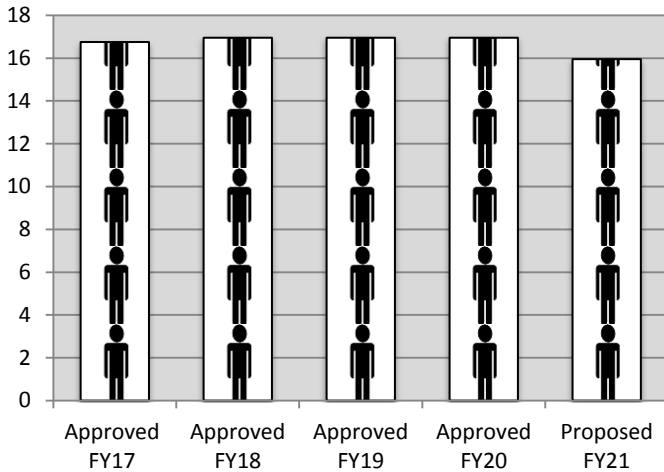
Factors Affecting Expenses

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 dispose of waste and recycling materials. Furthermore, the market for recycle 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.

SOLID WASTE ENTERPRISE FUND

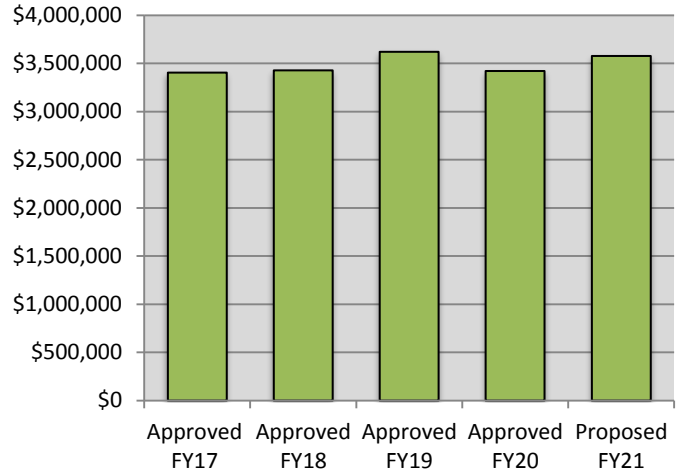
Enterprise Fund Budget History

Solid Waste Enterprise Fund
Full Time Employee History



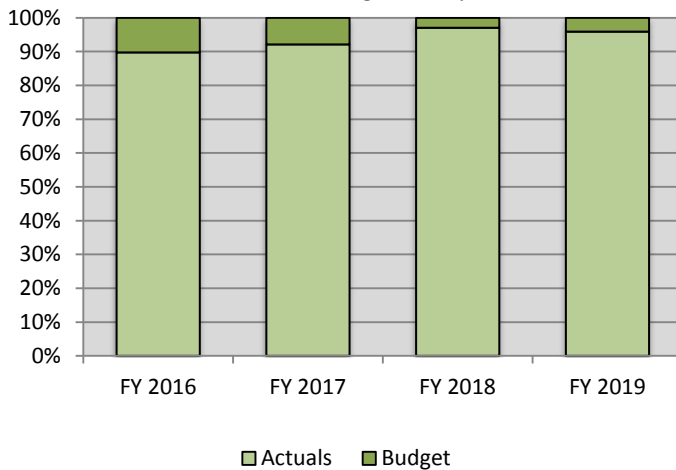
The facility is eliminating (1) fte in FY 2021 budget due to the closing of the Packer Service program.

Solid Waste Enterprise Fund
Budget History



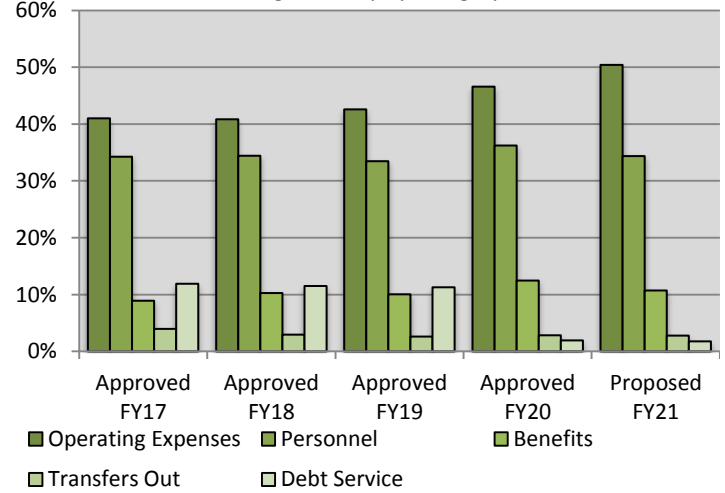
The Solid Waste Enterprise Fund budget has increased 1.02% over the five-year period. The drop off in debt service cost associate the landfill cap has help mitigate cost.

Solid Waste Enterprise Fund
Actuals to Budget History



Solid Waste actual expenditures range 90% to 97% of annually approved budgets.

Solid Waste Enterprise Fund
Budget History By Category



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

SOLID WASTE ENTERPRISE FUND

Division Workload Indicators

| | FY17 Actuals | FY18 Actuals | FY19 Actuals | FY20 Projection |
|---|-----------------|-----------------|-----------------|--------------------|
| Received and Transferred (tons) | 8,300 | 8,500 | 8,203 | 8,300 |
| Received Single Stream Recyclables (tons) | 1,828 | 2,025 | 809 | 850 |
| Received Corrugated Cardboard (tons) | 466 | 589 | 589 | 620 |
| Packer Service Collected Municipal Properties (tons) | 405 | 384 | 383 | 400 |
| Received and Transferred Construction and Demolition (tons) | 2,549 | 2,518 | 2,978 | 3,000 |
| Screened Compost (cubic yards) | 4,500 | 4,500 | 4,000 | 4,150 |
| TV's & Computers (tons) | 9,309 (tons) | 80 (tons) | 2,270 (pieces) | 2,400 (pieces) |
| Metal (tons) | 708 | 820 | 913 | 950 |
| Cast Iron (tons) | 40 | 22 | 34 | 25 |
| Aluminum (tons) | 27 | 12 | 11 | 11 |
| Refrigerator & AC's (pieces) | - | 2,081 | 2,808 | 2,900 |
| Glass (tons) | - | - | 248 | 300 |
| Plastics (tons) | - | - | 123 | 130 |
| Mixed Paper & Newspaper (tons) | - | - | 515 | 580 |
| Copper & Brass (tons) | 5 | 2 | 1 | 1 |
| Tires (pieces) | 1,137 | 943 | 829 | 920 |
| Propane Tanks (pieces) | 1,095 | 1,047 | 1,047 | 1,100 |
| Mattresses (pieces) | 1,241 | 1,907 | 3,512 | 2,600 |
| Fluorescent Bulbs (pieces) | 20,503 | 24,200 | 24,200 | 23,250 |
| Books (tons) | 55 | 51 | 50 | 50 |
| Clothing (tons) | 94 | 75 | 94 | 100 |
| Waste Oil (gallons) | 7,850 | 8,200 | 8,200 | 8,150 |
| Manure (tons) | 540 | 679 | 625 | 630 |

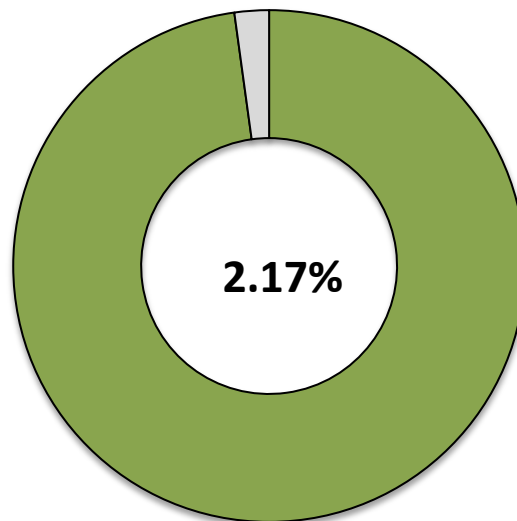
WATER POLLUTION CONTROL ENTERPRISE FUND

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.



Percentage of FY21 All Appropriated Funds



Water Pollution Control Enterprise Fund comprises 2.17% of all appropriated funds.

Enterprise Fund Services Provided

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 a secondary wastewater treatment plant, 30 sewage pump stations, and 55 miles of sewer lines. The Program also includes the operation of a pretreatment program, and a laboratory for testing the quality of sewage and septic to prevent the introduction of toxic wastes into the system and to ensure compliance with Federal and State 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 pumped routinely from their systems 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 Lilly 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.

Recent Accomplishments

- Completed upgrades to the WPCF SCADA (supervisory control and data acquisition) system.
- Completed the rehabilitation of the headworks grit removal system.
- Completed an evaluation and asset management plan for the Town's 27 sewage pump stations.
- Completed an evaluation and design of an effluent flow meter for the Hyannis WPCF and submitted to Mass DEP for review.
- Completed the relining of the Pleasant Street sewers.
- Completed the installation of a new emergency backup generator at the Marks Path Pump Station.
- Completed an evaluation of the South Street and Barnstable Road sewers.
- Completed the rebuild of Pump 2 at the Old Colony Pump Station.

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

Short-Term:

1. Complete design and begin construction of improvements to the WPCF Solids Handling building. **(SP: Infrastructure, Public Health and Safety, Finance, Environment and Natural Resources)**
2. Complete the construction of improvements to the Rendezvous Lane pump station in order to address coastal resiliency. **(SP: Infrastructure, Public Health and Safety, Finance, Environment and Natural Resources)**
3. Begin construction of improvements to WPCF Pump Stations as called for in the 2019 Pump Station Asset Management Plan. **(SP: Infrastructure, Public Health and Safety, Finance, Environment and Natural Resources)**
4. Complete the construction of an effluent flow meter at the Hyannis WPCF. **(SP: Infrastructure, Public Health and Safety, Finance, Environment and Natural Resources)**
5. Further refine existing groundwater models in order to determine the exact disposal capacity of the Hyannis WPCF. **(SP: Public Health and Safety, Environment and Natural Resources)**

Long-Term:

1. Complete targeted sewer system evaluation surveys and begin implementation of a sewer rehabilitation program with a focus on removing sources of infiltration and inflow from the sewer system. **(SP: Public Health and Safety, Finance, Environment and Natural Resources)**
2. Complete the design and construction of gravity sewer on Barse's Way and decommission vacuum sewer in this area. **(SP: Infrastructure, Public Health and Safety, Finance, Environment and Natural Resources)**
3. Complete the evaluation and design of improvements to the WPCF aeration and headworks processes. **(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)**
5. Complete the design and construction of improvements to South Street and Barnstable Road sewers. **(SP: Infrastructure, Public Health and Safety, Finance, Environment and Natural Resources)**



Water Pollution Control Facility – Buildings

WATER POLLUTION CONTROL ENTERPRISE FUND

Enterprise Fund Budget Comparison

| Water Pollution Control Enterprise Fund | Actual | Projected | Approved | Proposed | Change | Percent |
|--|--------------------|---------------------|---------------------|--------------------|----------------------|-----------------|
| Source of Funding | FY 2019 | FY 2020 | FY 2020 | FY 2021 | FY20 - 21 | Change |
| Intergovernmental Aid | \$9,071 | \$11,816 | \$0 | \$0 | \$0 | 0.00% |
| Fines & Penalties | 59,836 | 46,890 | 30,000 | 60,000 | 30,000 | 100.00% |
| Fees, Licenses, Permits | 6,620 | 13,310 | 3,000 | 9,180 | 6,180 | 206.00% |
| Charges for Services | 4,561,185 | 4,880,468 | 4,621,380 | 4,292,459 | (328,921) | -7.12% |
| Interest and Other | 286,822 | 327,671 | 162,000 | 228,800 | 66,800 | 41.23% |
| Total Operating Source of Funding | \$4,923,534 | \$5,280,155 | \$4,816,380 | \$4,590,439 | (\$225,941) | -4.69% |
| Borrowing Authorizations | - | 6,684,000 | 6,684,000 | - | (6,684,000) | -100.00% |
| Total Capital Source of Funding | \$0 | \$6,684,000 | \$6,684,000 | \$0 | (\$6,684,000) | -100.00% |
| Total Sources of Funding | \$4,923,534 | \$11,964,155 | \$11,500,380 | \$4,590,439 | (\$6,909,941) | -60.08% |
| Expense Category | | | | | | |
| Personnel | \$1,140,468 | \$1,175,000 | \$1,242,102 | \$1,238,344 | (\$3,758) | -0.30% |
| Benefits | 391,366 | 410,000 | 426,490 | 388,475 | (38,015) | -8.91% |
| Operating Expenses | 1,374,210 | 1,500,000 | 1,635,176 | 1,538,045 | (97,131) | -5.94% |
| Capital Outlay | 126,746 | 175,000 | 195,000 | 140,000 | (55,000) | -28.21% |
| Debt Service | 1,120,892 | 1,145,487 | 1,145,487 | 1,104,580 | (40,907) | -3.57% |
| Transfers Out | 169,466 | 172,125 | 172,125 | 180,995 | 8,870 | 5.15% |
| Total Operating Budget | \$4,323,148 | \$4,577,612 | \$4,816,380 | \$4,590,439 | (\$225,941) | -4.69% |
| Capital Improvements Program | 309,672 | 7,284,000 | 7,284,000 | - | (7,284,000) | -100.00% |
| Total Capital Expenses | \$309,672 | \$7,284,000 | \$7,284,000 | \$0 | (\$7,284,000) | -100.00% |
| Total Expenses | \$4,632,820 | \$11,861,612 | \$12,100,380 | \$4,590,439 | (\$7,509,941) | -62.06% |
| Excess (Deficiency) Cash Basis | \$290,714 | \$102,543 | (\$600,000) | \$0 | \$600,000 | |

| | | | |
|--|---------------------|---------------------|---------------------|
| Beginning Certified Free Cash | \$ 9,044,033 | \$ 9,334,747 | \$ 8,734,747 |
| FY 2020 Projected Excess (Deficiency) | | | 102,543 |
| Ending Projected Certified Free Cash | \$ 9,334,747 | \$ 8,734,747 | \$ 8,837,290 |

| Job Title | FY 2019 | FY 2020 | FY 2021 | 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 Maintenance Mechanic | 1.00 | 1.00 | 1.00 | - |
| Chief Plant Operator | 1.00 | 1.00 | 1.00 | - |
| Construction Project Inspector | 1.00 | 1.00 | 1.00 | - |
| Director of Public Works | 0.15 | 0.15 | 0.15 | - |
| Financial Coordinator | 0.15 | 0.15 | 0.15 | - |
| Labratory Tech/Chemist | 2.00 | 2.00 | 2.00 | - |
| Plant Operator/Maintenance Laborer | 5.00 | 5.00 | 5.00 | - |
| Principal Clerk | 1.00 | 1.00 | 1.00 | - |
| Safety Officer | 0.20 | 0.20 | 0.20 | - |
| Senior Project Manager | 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 | 15.35 | 15.35 | - |

WATER POLLUTION CONTROL ENTERPRISE FUND

Enterprise Fund Budget Comparison (Continued)

| Budget Reconciliation | Personnel | Operating | Capital Outlay | Totals | FTE |
|---|-------------------|--------------------|-----------------------|--------------------|------------|
| FY 2020 Approved Budget | | | | \$4,816,380 | |
| Contractual Obligations Net of Staff Turnover | (8,482) | - | - | (8,482) | - |
| Change in Indirect Costs | 6,091 | 8,469 | - | 14,560 | |
| One-Time Charges | (22,082) | (40,907) | (55,000) | (117,989) | - |
| FY 2021 Budget Changes | | | | | |
| 1. Temporary Positions Budget Reduction | (12,300) | - | - | (12,300) | - |
| 2. Overtime Budget Reduction | (5,000) | - | - | (5,000) | - |
| 3. Gasoline Budget Reduction | - | (6,130) | - | (6,130) | - |
| 4. Electricity Budget Reduction | - | (9,000) | - | (9,000) | - |
| 5. Solid Waste Disposal Budget Reduction | - | (15,000) | - | (15,000) | - |
| 6. Vehicle Maintenance Budget Reduction | - | (15,000) | - | (15,000) | - |
| 7. Repair and Maintenance Budget Reduction | - | (20,000) | - | (20,000) | - |
| 8. Various Budget Line Item Reductions | - | (28,500) | - | (28,500) | - |
| 9. Computer Software Budget Reduction | - | (25,000) | - | (25,000) | - |
| 10. Asset Management Grant Matching | - | 21,900 | - | 21,900 | - |
| FY 2021 Proposed Budget | (\$41,773) | (\$129,168) | (\$55,000) | \$4,590,439 | - |

Summary of Budget Changes

The Water Pollution Control’s proposed FY 2021 budget is decreasing -4.69% from the approved FY 2020 budget. Significant budget reductions in various operations combined with a decrease in debt service attributes to most of the budget change.

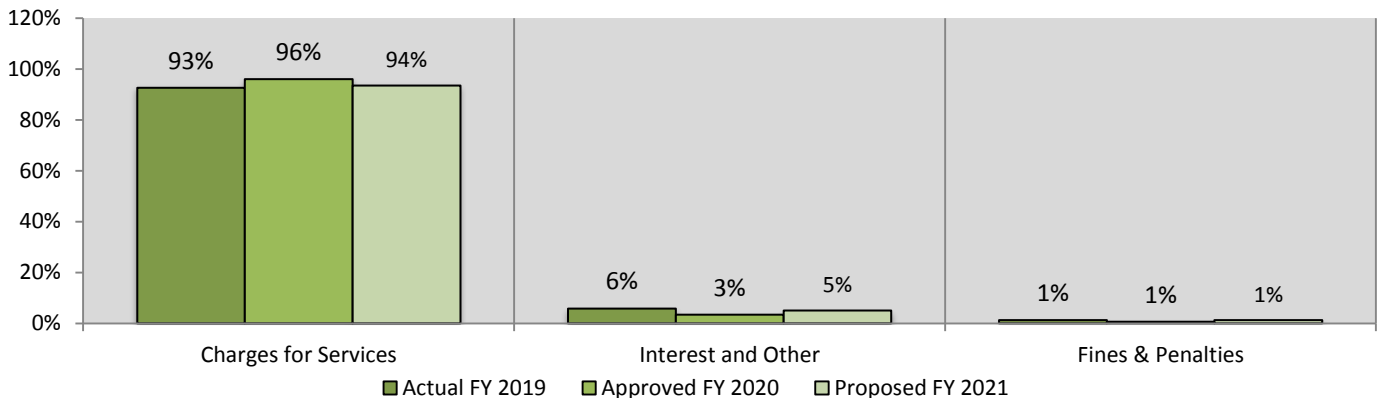
- 1. Temporary Positions Budget Reduction** – Elimination of salaries and wages for temporary seasonal labor. WPCD would be unable to fund seasonal laborers to assist staff operations during peak season for landscape and other miscellaneous improvements.
- 2. Overtime Budget Reduction** – Haulers would have reduced hours for weekend dumping as Saturday hours would be reduced.
- 3. Gasoline Budget Reduction** – Gas Fuel prices have dropped and are expected to remain low for the foreseeable future. If prices were to spike, this budget would be overspent and this would impact other unrelated budget lines.
- 4. Electricity Budget Reduction** – If the WPCD’s renewable energy systems were to go down for an extended amount of time, WPCD would be responsible for a large increase in electrical costs, likely requiring an emergency appropriation.
- 5. Solid Waste Disposal Budget Reduction** – Decrease sludge disposal budget, however, it would put the operations at risk of significant budget overages if septage, wastewater flow, or rates increase.
- 6. Vehicle Maintenance Budget Reduction** – The bulk of this budget funds repairs to the WPCD vacuum sewer truck. Maintenance would be deferred as until a new truck is procured in FY 2022, pending CIP approval.

WATER POLLUTION CONTROL ENTERPRISE FUND

Enterprise Fund Budget Comparison (Continued)

7. **Repair and Maintenance Budget Reduction** – This budget funds routine maintenance and emergency sewer repairs, which can be costly. Routine CCTV and contracted sewer cleaning may be put off until late in the fiscal year as the budget comes into focus.
8. **Various Budget Line Item Reductions** – A town wide exercise was conducted for department managers to review their budgets for recommended budget reductions. This is a summation of budget lines that were adjusted and not consider as detrimental to services.
9. **Computer Software Budget Reduction** – The computer software budget was planned to be reduced in FY 2021 and the savings were to be spread across other budgets. Reducing this budget effectively eliminates the planned increases to other underfunded budget lines. This budget may also be used for SCADA PLC upgrades.
10. **Asset Management Grant Matching** - Through the Massachusetts Department of Environmental Protection Clean Water SRF program, the State offers a 60/40 matching grant for the purpose of enhancing asset management programs at water and wastewater utilities. The Town of Barnstable Water Pollution Control Division has applied for this grant and is listed on the 2020 Draft Intended Use Plan as a recipient of this grant. The purpose of this request is to fund a 40% share of the project cost for the enhancement of the asset management program at the Water Pollution Control Facility. Nearly half of the Town’s 40% share is being provided as in-kind services, with \$21,900 required as cash match. In 2019, the Town worked with a consultant to complete an inventory of assets and formulate an asset management program for the Town’s 27 sewage pumping stations.

Water Pollution Control Enterprise Fund
Resources By Category



Factors Affecting Revenues

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. Rate increases of approximately 1 to 5 percent have been implemented over the past several years.

Charges for services accounts for 94% of total sources of revenue. Revenue from commercial sewer is approximately \$2.5 million annually.

WATER POLLUTION CONTROL ENTERPRISE FUND

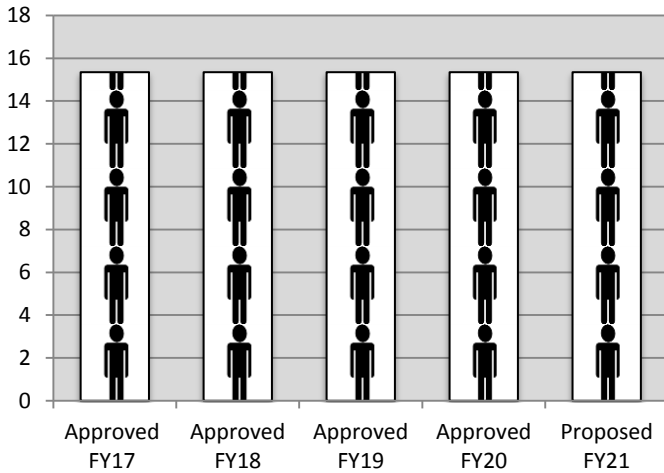
Enterprise Fund Budget Comparison (Continued)

Factors Affecting Expenses

Current staffing level remains the same. Reductions to various operating line items may constrain the funds operations in the near future. The proposed budget includes a request for an Asset Management Grant, which should help proactively manage facility assets.

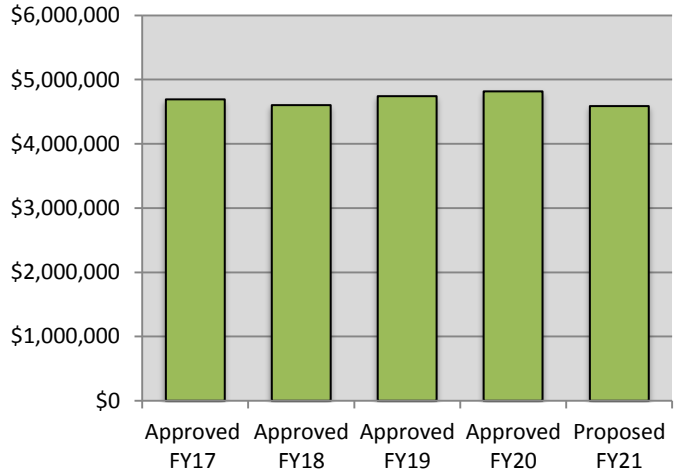
Enterprise Fund Budget History

Water Pollution Control Enterprise Fund
Full Time Employee History



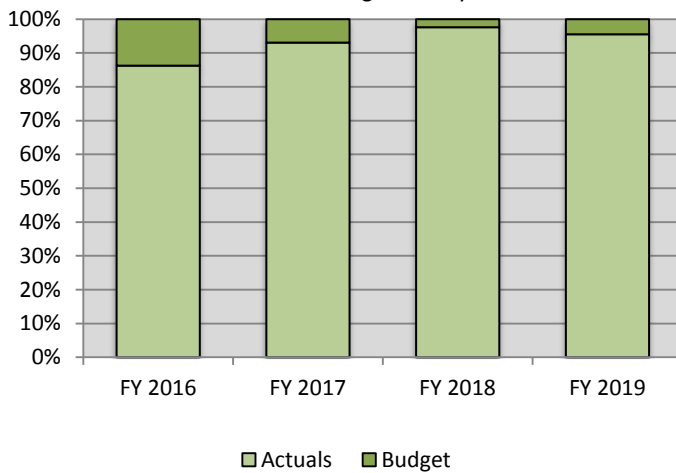
Full-time equivalent employees have remained level for the past few fiscal years.

Water Pollution Control Enterprise Fund
Budget History



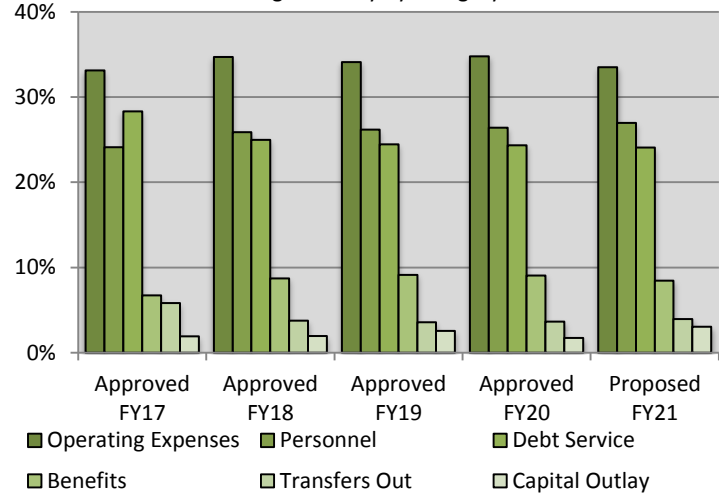
The Water Pollution Control Enterprise Fund budget has remained level over the past five years.

Water Pollution Control Enterprise Fund
Actuals to Budget History



Water Pollution Control's actual expenditures has range 86% to 97% of annually approved budgets.

Water Pollution Control Enterprise Fund
Budget History By Category



Operating expenses is the largest component at 35%

WATER POLLUTION CONTROL ENTERPRISE FUND

Division Workload Indicators

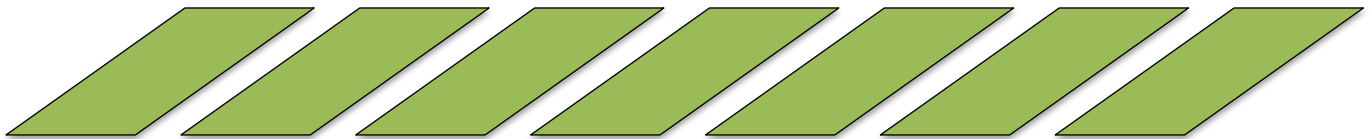
| | FY17 Actuals | FY18 Actuals | FY19 Actuals | FY20 Projection |
|--|-------------------------|-------------------------|-------------------------|----------------------------|
| Treated Gallons of Wastewater | 564,433,700 | 595,687,800 | 597,413,700 | 610,330 |
| Treated Gallons of Septage | 9,906,800 | 8,922,100 | 9,143,000 | 9,250,300 |
| Treated Gallons of Grease | 697,900 | 799,100 | 792,600 | 796,450 |
| Processed Dry Sludge (tons) | 1,015 | 1,041 | 1,018 | 1,100 |
| Jet-rod Cleaning Sewer Line (miles) | 4.50 | 3.90 | 3.00 | 3.00 |
| Television Inspection Sewer Line (miles) | 2.10 | 2.30 | 3.90 | 4.00 |

WATER SUPPLY ENTERPRISE FUND

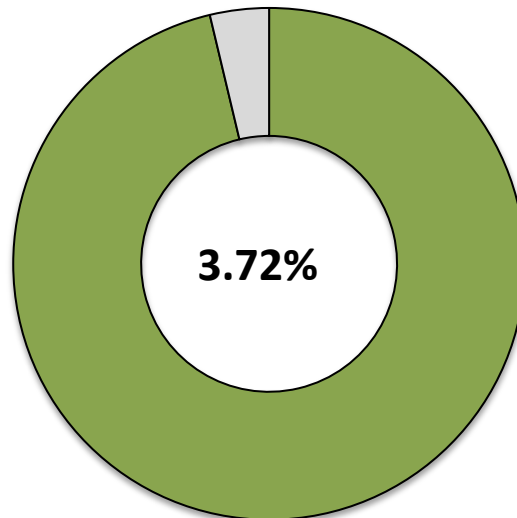
Purpose Statement

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



Percentage of FY21 All Appropriated Funds



Water Supply Enterprise Fund comprises 3.72% of all appropriated funds.

Enterprise Fund Services Provided

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 7300 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 Hyannis 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.



Mary Dunn – Filtration System

Recent Accomplishments

- Pumped, treated, and distributed 807,608,000 Gallons of Water in FY19.
- Increased water quality by continuing the unidirectional flushing system for the Hyannis Water System.
- The completion of the first phase of the cleaning and lining pipe rehabilitation project on Main Street from the Barnstable Road intersection to School Street.
- The completion of the water main replacement and upgrade project at the Route 28 / Bearse's Way Intersection in conjunction with a Mass DOT project.
- Finalized and published the first phase of the new source alternatives study for additional water supply options for the Hyannis Water System.
- Completed the full design for the Maher Filtration Facility, received DEP-SRF approval, went out to bid and awarded the contract.

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. Finalize the construction of the water filtration building at the Maher facility, receive DEP approvals, bring the plant on line, and cease the purchase of water. **(SP: Infrastructure, Environment and Natural Resources, Regulatory Process and Performance, and Education)**
4. 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)**
5. 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)**
6. 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)**

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)**



Maher Filtration Under Construction

WATER SUPPLY ENTERPRISE FUND

Enterprise Fund Budget Comparison

| Water Supply Enterprise Fund | Actual | Projected | Approved | Proposed | Change | Percent |
|--|---------------------|--------------------|----------------------|---------------------|--------------------|----------------|
| Source of Funding | FY 2019 | FY 2020 | FY 2020 | FY 2021 | FY20 - 21 | Change |
| Intergovernmental Aid | \$40,343 | \$0 | \$0 | \$0 | \$0 | 0.00% |
| Fines & Penalties | 28,520 | 22,240 | 41,522 | 36,900 | (4,622) | -11.13% |
| Fees, Licenses, Permits | 217,910 | 168,000 | 99,832 | 310,100 | 210,268 | 210.62% |
| Charges for Services | 5,682,178 | 6,132,000 | 5,840,540 | 6,266,771 | 426,231 | 7.30% |
| Interest and Other | 529,346 | 550,000 | 583,121 | 487,500 | (95,621) | -16.40% |
| Transfers In | - | - | - | 500,000 | 500,000 | 0.00% |
| Total Operating Source of Funding | \$6,498,297 | \$6,872,240 | \$6,565,015 | \$7,601,271 | \$1,036,256 | 15.78% |
| Borrowing Authorizations | 2,039,500 | 1,050,000 | 1,050,000 | 1,400,000 | 350,000 | 33.33% |
| Total Capital Source of Funding | \$2,039,500 | \$1,050,000 | \$1,050,000 | \$1,400,000 | \$350,000 | 33.33% |
| Total Sources of Funding | \$8,537,797 | \$7,922,240 | \$7,615,015 | \$9,001,271 | \$1,386,256 | 18.20% |
| Expense Category | | | | | | |
| Personnel | \$279,612 | \$270,000 | \$295,428 | \$220,390 | (\$75,038) | -25.40% |
| Benefits | 94,885 | 98,000 | 102,152 | 105,717 | 3,565 | 3.49% |
| Operating Expenses | 4,076,646 | 4,158,007 | 4,636,381 | 4,796,392 | 160,011 | 3.45% |
| Capital Outlay | 155,654 | 128,745 | 166,000 | 166,000 | - | 0.00% |
| Debt Service | 1,893,515 | 2,444,005 | 2,396,974 | 2,489,734 | 92,760 | 3.87% |
| Transfers Out | 453,596 | 88,080 | 88,080 | 86,855 | (1,225) | -1.39% |
| Total Operating Budget | \$6,953,908 | \$7,186,837 | \$7,685,015 | \$7,865,088 | \$180,073 | 2.34% |
| Capital Improvements Program | 1,226,418 | 500,000 | 1,545,000 | 1,550,000 | 5,000 | 0.32% |
| Total Capital Expenses | \$1,226,418 | \$500,000 | \$1,545,000 | \$1,550,000 | \$5,000 | 0.32% |
| Total Expenses | \$8,180,326 | \$7,686,837 | \$9,230,015 | \$9,415,088 | \$185,073 | 2.01% |
| Excess (Deficiency) Cash Basis | \$357,471 | \$235,403 | (\$1,615,000) | (\$413,817) | \$1,201,183 | |
| Beginning Certified Free Cash | \$ 2,532,232 | | \$ 2,889,703 | \$ 1,274,703 | | |
| FY 2020 Projected Excess (Deficiency) | | | | 235,403 | | |
| Ending Projected Certified Free Cash | \$ 2,889,703 | | \$ 1,274,703 | \$ 1,096,290 | | |
| Job Title | FY 2019 | | FY 2020 | FY 2021 | Change | |
| Admin Assistant | 0.75 | | 0.75 | 0.75 | - | |
| Admin Assistant to DPW Director | 0.15 | | 0.15 | - | (0.15) | |
| Assistant DPW Director | 0.15 | | 0.15 | 0.15 | - | |
| Director of Public Works | 0.15 | | 0.15 | 0.15 | - | |
| Financial Coordinator | 0.15 | | 0.15 | - | (0.15) | |
| Safety Officer | 0.05 | | 0.05 | 0.05 | - | |
| Senior Project Manager | 0.40 | | 0.40 | - | (0.40) | |
| Town Engineer | 0.15 | | 0.15 | 0.15 | - | |
| Water Supervisor | 1.00 | | 1.00 | 1.00 | - | |
| Full-time Equivalent Employees | 2.95 | | 2.95 | 2.25 | (0.70) | |

WATER SUPPLY ENTERPRISE FUND

Enterprise Fund Budget Comparison (Continued)

| Budget Reconciliation | Personnel | Operating | Capital Outlay | Totals | FTE |
|---|-------------------|------------------|-----------------------|--------------------|---------------|
| FY 2020 Approved Budget | | | | \$7,685,015 | |
| Contractual Obligations Net of Staff Turnover | (5,422) | - | - | (5,422) | - |
| Change in Indirect Costs | 2,651 | 1,775 | - | 4,426 | |
| One-Time Charges | 914 | 92,760 | - | 93,674 | - |
| FY 2021 Budget Changes | | | | | |
| 1. Temporary Positions Budget Reduction | (9,320) | - | - | (9,320) | - |
| 2. Overtime Budget Reduction | (6,500) | - | - | (6,500) | - |
| 3. Reallocated Positions to Public Works GF | (53,796) | - | - | (53,796) | (0.70) |
| 4. Tools & Equipment Budget Reduction | - | (7,000) | - | (7,000) | - |
| 5. Various Budget Line Item Reductions | - | (2,120) | - | (2,120) | - |
| 6. Building/Grounds Maintenance Reduction | - | (7,750) | - | (7,750) | - |
| 7. Legal/Litigation Budget Reduction | - | (50,000) | - | (50,000) | - |
| 8. Suez Operations Contract | - | 153,881 | - | 153,881 | - |
| 9. Water Purchase Yarmouth & COMM | - | (493,000) | - | (493,000) | - |
| 10. Carbon Filter Systems | - | 190,000 | - | 190,000 | - |
| 11. O&M Cost Maher Filtration Plant | - | 373,000 | - | 373,000 | - |
| FY 2021 Proposed Budget | \$(71,473) | \$251,546 | \$ - | \$7,865,088 | (0.70) |

Summary of Budget Changes

The Water Supply Enterprise Fund’s proposed FY 2021 budget is increasing 2.34% from the approved FY 2020 budget. The new Maher Filtration operating & maintenance cost attribute most to the budget change; however, these costs are being mitigated by the need to purchase less water from other communities.

- 1. Temporary Position Budget Reduction** – Summer time intern positions and re-prioritize project completion schedules and time lines.
- 2. Overtime Budget Reduction** – Overtime budget is being reduced as, which operations will re-prioritize project completion schedules and time lines.
- 3. Reallocated Positions to Public Works General Fund** – Adjustments are made to several administrative positions that are funded from the General Fund and Enterprise Funds.
- 4. Tools & Equipment Budget Reduction** – Tools and equipment will not be replaced or upgraded.
- 5. Various Budget Line Item Reductions** – A town wide exercise was conducted for department managers to review their budgets for recommended budget reductions. This is a summation of budget lines that are small and not consider as detrimental to services.
- 6. Building/Grounds Maintenance Reduction** – Only limited repairs will be done on the facilities.
- 7. Legal/Litigation Budget Reduction** – Professional services-legal will be reduced.
- 8. Suez Operations Contract** – This request addresses the contractually required yearly increase for fiscal year 2021.

WATER SUPPLY ENTERPRISE FUND

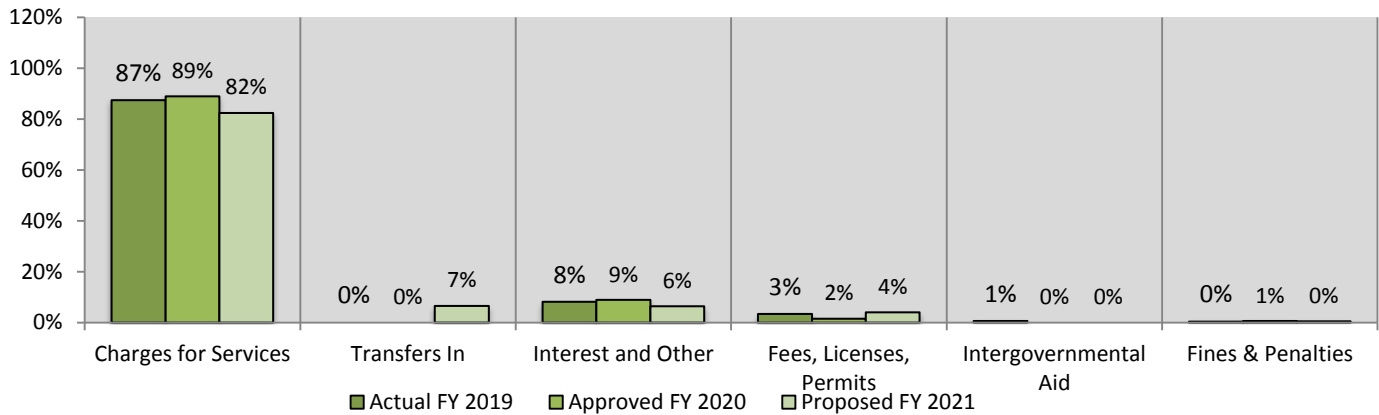
Enterprise Fund Budget Comparison (Continued)

9. **Water Purchase Yarmouth & COMM** – This decision package requests a decrease in funding for water purchases from the Yarmouth and COMM water departments in the amount of \$493,000 for a total of \$852,000. The decrease of funding relates to the anticipated start-up of the Maher Filtration Plant, currently under construction. With the new plant on-line there will be no need to purchase water.

10. **Carbon Filter Systems** – This decision package requests an increase in funding for the activated carbon exchange line-item. With the needed installation of four additional interim carbon filtration systems at the Airport and Straightway wells, it is anticipated that this additional funding will be needed to keep providing good quality drinking water.

11. **O&M Maher Filtration Plant** - This decision package requests an increase in funding for the operation & maintenance expenses related to the Maher Filtration Plant, currently under construction. Tata & Howard, the design engineer provided a design memorandum describing the key conclusions and recommendations resulting from the pilot testing. In the financial summary chapter, the operation and maintenance costs are estimated to be \$373,000 for the first year.

Water Supply Enterprise Fund
Resources By Category



Factors Affecting Revenues

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.

Charges for services are 82% of total sources of revenues, which metered sales accounts for 77% of this category followed by public hydrants fees 14%. Revenue growth for this operation is mainly due to rate increases implemented to cover the increase in operating costs.

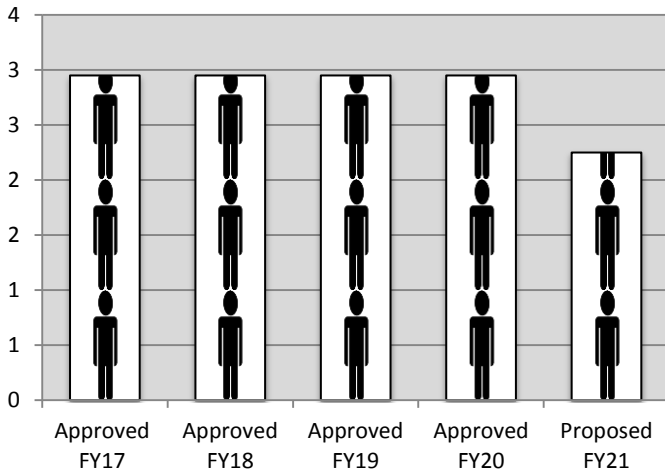
Factors Affecting Expenses

Management of this service is provided for by an outside contractor and it is expected to continue operating in this manner. The capital improvement portion of this service has a significant impact on expenses. The system has incurred expenses in excess of \$10 million recently to install water treatment facilities at the Mary Dunn and Maher wells.

WATER SUPPLY ENTERPRISE FUND

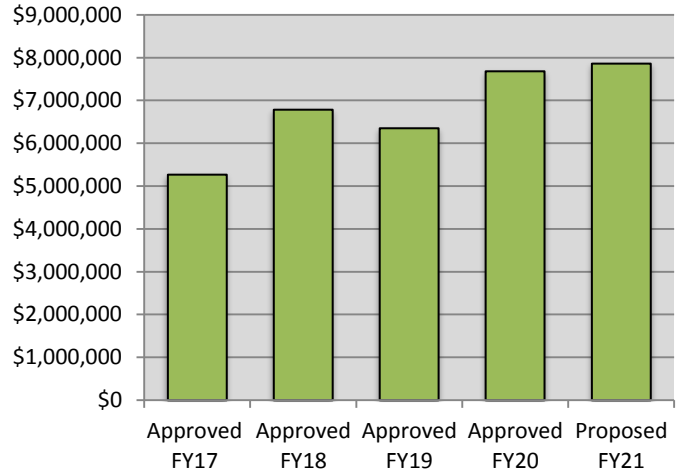
Enterprise Fund Budget History

Water Supply Enterprise Fund
Full Time Employee History



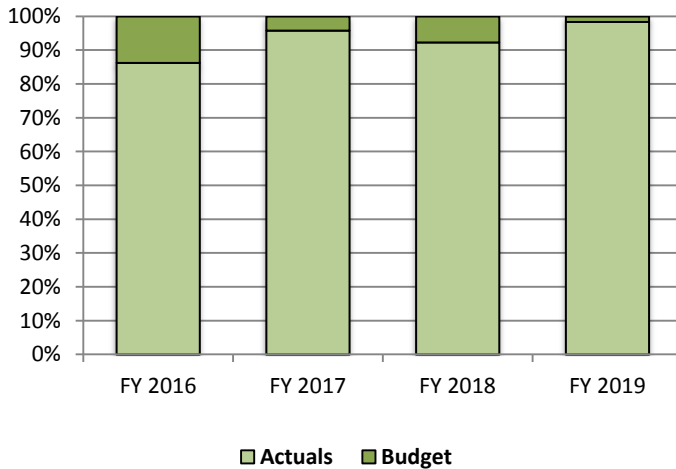
The proposed FY 2021 budget reallocated (0.70) fte's to the General Fund.

Water Supply Enterprise Fund
Budget History



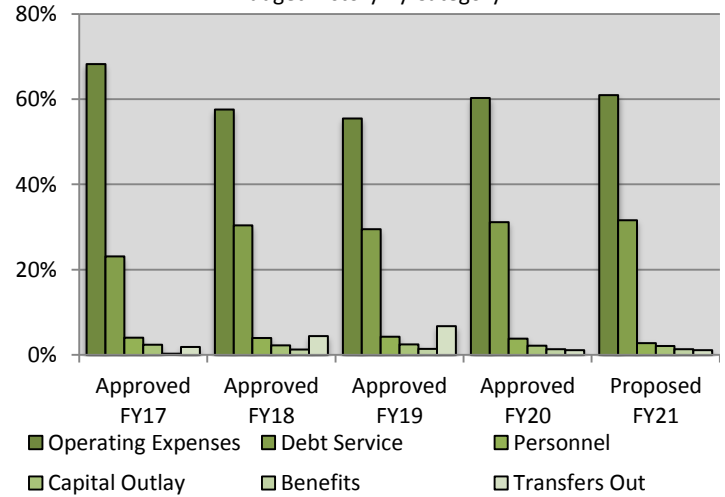
The significant increase is mainly due to an increase in debt service from an aggressive capital improvement program as well as increases in the management contract for the system's operations as more treatment facilities are brought on-line. This budget has increased 9.85% annually over the five-year period.

Water Supply Enterprise Fund
Actuals to Budget History



Water Supply actual expenditures range 86% to 98% of annually approved budgets.

Water Supply Enterprise Fund
Budget History By Category



Operating expenses represent the largest component of the budget comprising 61% followed by debt service at 32%.