



SEWER DEPARTMENT

March 2022



Mission

- **To serve the public with professional and efficient wastewater service**
- **To provide cost effective wastewater collection and treatment services**
- **To preserve the environment and water quality of our coastline and beaches**

Objectives

- **Reliability**
- **Redundancy**
- **Resiliency**



Office Staff

- John Struzziery, Director of Wastewater Operations
- Brian Kiely, Assistant Director
- Mike McDonough, Facility Coordinator
- Catherine Joaquim, Clerk/Bookkeeper

Operator

- Woodard & Curran





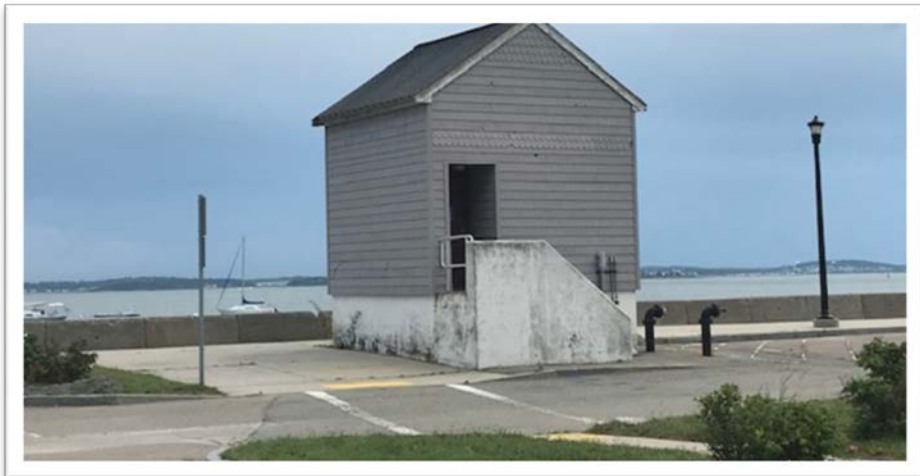
Permanent Sewer Commission

- Rick Matilla, Chair
- Peter Pyclik, Vice Chair
- Andrew Grosso
- Vacancies, two



Profile of System

- WWTF design: 3.07 mgd
- 2022 average daily flow: 1.5 mgd
- 42 miles of sewers 6" to 36" in diameter
- 14,000 lf of force mains 4"-14" in diameter
- 7 pumping stations and 1 stormwater pumping station
- 177 grinder pumps/low pressure sewers
- Age of system:
 - sewers dating back to 1860
 - WWTP 1978/1980
 - most sewers 1970s and 1980s
- Treatment Facility
 - 24/7/365
 - Contract Operator: 6 full-time staff M-F; 2 on S-S



Overview of Plan



Conducted condition assessments



Developed asset management plan ranking criticality and risk of all assets



Developed five-year capital plan



Developed financing plan, including new billing structure and rate



Obtained grants and low interest loans



Focus on **Reliability-Redundancy-Resiliency**

Past Years Capital Projects

\$12.3M in Low-Interest Loans Through DEP - May 2018

- Atlantic Ave/Gunrock Area Improvements
- Interceptor
- Sewer System Evaluation Survey and Outfall Assessment

\$4.7M Bond – May 2018 Structural/Building Repairs Bond

- HVAC Replacement Project (\$5.8M Project)
- Effluent Pump Room/Pump Station #5
- Headworks

\$5.6M Bond – May 2019 System Upgrades Bond

- HVAC Replacement Project (\$5.8M Project)
- Control Building Upgrades Project (\$10.67M Project)
- Pump Station #9 Engineering

\$9.5M Bond – June 2020 Capital Improvement/Plant Upgrades Bond

- Control Building Upgrades Project (\$10.67M Project)



Grants Received

2018: CZM transformer	\$148,350
2018: GAP II Energy	61,685
2019: CZM Resiliency Berm	259,896
2020: CEC Innovative Technologies	140,627
2020: CZM Resiliency Design	205,414
2021: FEMA Electrical Relocation	398,303
2022: Earmark for PS 9	2,000,000
Total	\$3,214,275



Accomplishments

Reliability

- ✓ Sewer rehab projects completed-Interceptor/Atlantic Ave
- ✓ Influent gate installed
- ✓ Influent piping and valves replaced
- ✓ Effluent gate installed and valves replaced
- ✓ Pump station pumps and piping replaced (#1 & #3)
- ✓ Clarifier gear drives replaced
- ✓ Outfall repairs (partial)

Redundancy

- ✓ Auxiliary pump installed
- ✓ Spare portable pumps and generator
- ✓ Spare effluent pumps
- ✓ Aeration tanks retrofit

Resiliency

- ✓ Influent gate installed
- ✓ Installed above ground fuel storage tank
- ✓ Elevated transformer
- ✓ Elevated HVAC/Electric (in progress)
- ✓ Designed site resiliency measures/berm



Challenges

- Aging infrastructure
- Aging work force
- Greater needs than funds available
- Positioning for infrastructure funding
- Sea Level Rise/Climate Change Vulnerability
- Preventive Maintenance
- Changing regulations & reporting
- Reducing Infiltration/Inflow
- Pandemic related costs & delays
- User rates
- Getting the work done



Questions / Discussion

 Sewer system

 Operating budget

 Capital plan

 Projects

 Challenges

 Other