

2017 ANNUAL REPORT

To the Honorable Board of Selectmen and Citizens of Hull:



The Sewer Department operates as an enterprise account and as such is required to raise all revenue to cover operating expenses. These revenues are raised through sewer user fees and permit receipts. In 2017, the average flow at the treatment plant was approximately 1.57 million gallons per day (mgd). The wastewater treatment facility was designed to treat an average of 3.07 mgd.

Some of the sewers in the older parts of Town such as the Village, Sagamore Hill, and Green Hill areas were built in the 1860s and are still in use today, while most of the newer sewers were constructed in the 1970s and 1980s. The collection system consists of about four miles of 30-inch and 36-inch diameter interceptor sewers that transport wastewater by gravity from over 40 miles of collector sewers from neighborhood streets. In addition, there are seven pumping stations that lift wastewater from lower, flatter areas to the gravity system. All wastewater eventually makes its way to the wastewater treatment facility where it is processed and chlorinated before being discharged to the ocean about one half mile between the facility and Boston Lighthouse.

Woodard & Curran, is our contract operator for the treatment facility and collection system and staffs the facility seven days a week, 365 days per year. Woodard & Curran also provides engineering services related to the treatment facility and collection system.

The primary focus in 2017 was to comply with various reporting and compliance requirements put forth in an Order on Consent issued by EPA in 2016 which also included preparation of a Fiscal Sustainability Plan. In developing this Plan, we received a grant to help prepare a geographic information system (GIS) that electronically maps and inventories most of the collection system. As part of the work, approximately 10,000 feet of sewer was cleaned and televised and condition assessments made on those sewers. Collection system and treatment system assets have been ranked based on risk and criticality to form the basis of our capital improvement plan (CIP). Structural safety, immediate needs, and corrosion

assessments were made throughout the treatment facility. Funding for needed improvements and the CIP will be through federal and state grants and low interest loan programs, other funding sources, and sewer enterprise account user rates.

Work also focused on improving functionality, reliability and redundancy of our pump stations and treatment facility mechanical components. One pump was rebuilt at Pump Station No. 3 along George Washington Boulevard and all pressure piping and valves within that station was replaced. An auxiliary pump that was purchased in prior years was used to divert flow around the facility so that we could replace piping and valves in the influent pump room. Another major improvement completed was the installation/replacement of the influent gate that can help regulate or divert flows to the plant when needed. Numerous other repairs, replacements and basic ongoing maintenance was performed. However, there are significant repairs and replacements that will be needed and were prioritized as part of the Fiscal Sustainability Plan.

Each year over 1,200 tests of the performance of the treatment plant are submitted to the Massachusetts Department of Environmental Protection and the EPA to demonstrate that the Facility follows compliance with its discharge permit. The Facility complied with discharge permit requirements throughout the year except for a few minor reported variations or exceedances.

Planning and positioning for funding of our CIP also took place as well as authorizing design of the initial capital improvement projects, protection of the facility during high flow events, odor mitigation measures, and technology enhancements for improved operational control.

We also met throughout the year with representatives of Cohasset, Hingham, and Scituate to assess the viability of taking greater flows from Cohasset and new flows from North Scituate. The first step will be completed in early 2018. The benefits to Hull in this regionalization concept will be more users to distribute costs among, improvements to our collection and treatment system, and better positioning for funding of our capital improvements program.

As always, “flushable” wipes and cooking grease continues to be a major problem in the sewer system. The presence of these materials in the system often leads to business and/or residential back-ups and cost a lot of money to remove. The money spent on these issues takes funding away from other, often more important issues that need to be resolved for continuity of operations. Please read the newsletter that is included in each sewer bill to find helpful hints on ways to decrease your possibility of experiencing a sewer back-up as well as tips and pointers as to what you should and shouldn’t introduce into the municipal sewer system.

Woodard & Curran is acknowledged for their extra effort and diligence over the past year, particularly during storm events. The members of the Permanent Sewer Commission: Rick Matilla, Louis Collins, Richard Booth, and Peter Pyclik are recognized for their volunteer efforts in shaping sewer policies and budget awareness/monitoring as

it relates to user rates. A special thank you also, to long time commission member, Ed Babcock who resigned part way through the year.

Finally, a special thank you to our office staff, Carol O'Connor and Terri Berardinelli for their professionalism, attention to detail, Carol's financial skills, and Terri's organizational skills, all of which are important in dealing with day to day matters.

Much has been put in place and I look forward to continued support of all in helping to renew our wastewater collection and treatment systems.

Respectfully submitted,

John J. Struzziery, P.E.
Director of Wastewater Operations