

## **POLLUTION CONTROL FISCAL YEAR 2020-2021 REPORT**

**THE DIVISION OF WATER POLLUTION CONTROL** is responsible for the collection, treatment, and discharge of wastewater. Activities include: wastewater treatment, sludge disposal, laboratory analysis, sewer line cleaning, inspection and repair, as well as treatment plant and pump station maintenance. This Division also assists the Parks & Recreation Department for the mechanical maintenance of the Veteran's Memorial Park swimming pool pump and filtration system.

During the past year, the Division treated 877,910,000 gallons of wastewater at a treatment efficiency of 98% Biochemical Oxygen Demand, 98% Total Suspended Solids and discharging an average of 93 pounds of nitrogen per day. The Town is required to maintain a treatment efficiency of 85% and discharge no more than 106 pounds of nitrogen per day under the current discharge permit issued by the Connecticut Department of Energy and Environmental Protection (DEEP). In treating the wastewater, 815 dry tons of solids were removed and transported to the Hartford Metropolitan District Facility (MDC) for final processing in accordance with the Town's participation in a cooperative regional sludge management program. Wastewater service is provided to 8,587 residences and 359 industrial and commercial businesses in South Windsor and Manchester. Service is provided to out of town properties in accordance with the provisions of inter-town sewer agreements. Through such agreements communities are benefited by limiting the number of expensive pump stations which would otherwise have to be constructed and operated.

Sanitary sewers are an essential part of the Town's economic development. The I-291 Corridor on Ellington Road is an example of this. The Pollution Control Department constructed a 1,000-foot force main to serve commercial/industrial development from the interstate to Chapel Road in October 2020. Since this time the Town has seen three large scale distribution centers constructed with other prospective opportunities for future growth in this area. The entire force main project was funded through a grant from the Small Town Economic Assistance Program (STEAP).

The Clark Street, Benedict Drive, and Pleasant Valley Pump Stations entered into the design phase of a comprehensive rehabilitation. Each pump station has reached its useful life. The smallest of the three pump stations to be upgraded is Pleasant Valley which accepts residential flow from the western portions of Pleasant Valley Road. The Benedict Drive Pump Station is the Town's second largest pump station and serves the eastern portion of town made up of mainly residential neighborhoods. Clark Street is the Town's largest pump station which accepts flow from the Benedict Drive Pump Station, portions of Manchester, and the south easterly section of South Windsor. This amounts to the conveyance of approximately 50% of the Town's wastewater to the treatment plant located on Vibert Road.

Chapel Road Phase 2 was completed this year and consisted of relining 4,000 feet of 8-32" sewer pipe that was in a deteriorated state. The Chapel Road sewer conveys a large portion of the Town's sewage including much of the industrial sector. Relining sewer pipe with cured-in-place pipe is an efficient and effective method to rehabilitating pipe that minimizes disruption to sewer users and vehicular roadway traffic.

Anthony E. Manfre, Superintendent of Pollution Control

**WATER POLLUTION CONTROL AUTHORITY** - The Water Pollution Control Authority (WPCA) is a statutorily independent entity having complete jurisdiction over all elements of the sanitary sewer system within the Town. It is responsible for the proper functioning and continuous operation of South Windsor's sanitary sewage system which is essential for public health and safety, economic development, environmental protection, and the quality of life for those living and working in our Town. The Authority consists of seven (7) members and two (2) alternates appointed by the Town Council for staggered terms of four (4) years. Its members are citizens of the Town who volunteer their time to oversee and implement policies created by the Authority to protect the operation of the sewerage system, the environment and ultimately public health. By contract, it is administered through the municipal staff of the Town as the most cost-efficient means of executing legal mandates and daily operations. The Authority authorizes the annual budget, levies benefit assessments, establishes fair and reasonable sewer user charges, approves connections and expansions to the system and applies for state and federal funds as authorized by Chapter 103 of the Connecticut General Statutes and Town of South Windsor Ordinances.

The thirteen staff, including ten licensed operators, are responsible for the treatment plant, eleven pump stations, and one hundred thirty miles of sewer pipe, including twenty miles of cross-country lines. Together the Authority and Operations staff work as stewards of the treatment system and seek to provide the best value for the ratepayers. Planning for future needs of this complex and widespread system entails a degree of unavoidable uncertainty, including, exposure to unforeseen natural events, accidents, revenue fluctuations, and unplanned maintenance, facility repair, and improvements as the infrastructure ages. As the operation and maintenance of the wastewater treatment plant and collection system is funded almost entirely through sewer user fees, Authority members establish fair and prudent fiscal policies to ensure adequate funding for proper maintenance, upgrade, repair and replacement of the system's components.

Electric utility costs comprise one of the largest budgetary line items consuming over ten percent of the Operation and Maintenance budget. The Town has contracted with Lodestar Energy to utilize an offsite solar field helping to defray these costs through electrical credits. A demand response program was also put in place that will shed power back to the grid and generate an estimated \$20,000 in revenue toward the operation of the treatment plant and pump stations.

Over the last several years several infrastructure studies regarding the collection system have been undertaken and completed. By investing in this activity, the Authority has been able to prioritize capital expenditures to prevent significant interruptions in service. A ten-year capital improvement program has been adopted to rehabilitate the facilities and

equipment of the system. Each element has been assigned a rating based upon the condition of the components and a preliminary cost estimate for planning purposes. Should federal infrastructure funds become available, South Windsor is well positioned to move quickly to improve our system and take advantage of a revenue stream that will help minimize user rate increases.

The Water Pollution Control Authority set the Fiscal Year 2020-2021 budget of \$5,388,961 of which \$3,991,793 is the operating budget. The remaining funds are allocated to debt service and capital projects. In recent years the Authority has taken proactive measures to rehabilitate the collection system infrastructure and meet reserve funding goals to ensure the stabilization of sewer user fees. For the second consecutive year, there has been no increase in the sewer user rate and South Windsor's rate remains twenty per cent below the state average.

This past fiscal year \$1,005,000 was budgeted for capital improvement projects which included \$845,000 for rehabilitating 4,000 feet of sewer pipe in Chapel Road and another \$160,000 for a variety of smaller pipe and manhole rehabilitation projects. Additionally, application has been made to the State for twenty-year low interest loans under the Clean Water Act to fund upgrades of the Benedict Drive, Clark Street and Pleasant Valley pump stations. In anticipation of loan approval, \$1,100,000 of Replacement Reserve funds were allocated to offset the costs of design phases of those projects. The fund will be replenished upon approval and receipt of the loans.

By Regulation, two Reserve Funds are maintained: the Operating Reserve equal to three months of the operation budget and a Replacement Reserve equal to two percent of the Pollution Abatement Facility Asset Value. At the completion of Fiscal Year 2020-2021 the Operating Reserve funding goal of \$987,000 was exceeded by over \$600,000. The excess funds were transferred to the Replacement Reserve account, which carried a yearend balance of \$820,000. The budgetary goal of that account is \$4,400,000. With the addition of the excess funds, unexpended budget line items, proceeds from the Clean Water Act loans and other sources of revenue, the Replacement Reserve is expected to reach 90% of its goal in Fiscal Year 2021/2022. These balances are a factor in determining the overall bond rating for the Town.

The WPCA approved 11 residential connections and 7 commercial/industrial connections resulting in a total assessment of \$318,694.71. This included: Connection Charges of \$213,913.71, Capacity Charges of \$50,599.00, and Benefit Assessments of \$54,182.

During the Fiscal Year 2020-2021, there were 43 new residential connections and 4 Commercial/Industrial connections made to the public sewer system bringing the total connections to 8,593 residential and 359 commercial/industrial.

In 2015 the WPCA approved the implementation of the sewer user charge discount program for qualified residents. A qualified resident is a residential sewer user who is eligible for property tax relief under the State of Connecticut Qualifying Income for the Elderly and Totally Disabled Tax Relief Program. The application period is from February 1<sup>st</sup> through May 15<sup>th</sup>, the same period as the Town's Property Tax Relief Program. Application is made through the Human Services Department. During fiscal year 2020-2021 191 residents participated in the program resulting in \$19,200.39 in discounted residential fees.

Thomas Ruby, *Chairperson*