

2018 ANNUAL REPORT

TOWN OF WINTERVILLE COLLECTION SYSTEM

PERMIT: WQCS00117

The Clean Water Act of 1999 requires wastewater collection systems to provide an annual report to their customers. This report summarizes the performance of the Town of Winterville's wastewater collection system for the 12-month period from January 1, 2018 to December 31, 2018.

The Town of Winterville operates a wastewater collection system under permit WQCS00117, issued by the Division of Water Quality, NC Department of Environment and Natural Resources. The permit was issued on March 4, 2013 and is valid from June 1, 2013 until March 31, 2021. This system consists of approximately 48.60 miles of gravity sewer, approximately 1.4 miles of pressure sewer, approximately 11.9 miles of force main, 23 duplex pump stations, 62 simplex pump stations that discharge to a pressure sewer and serve a single building, and all the associated piping, valves, and appurtenances necessary to operate a wastewater collection system for the Town of Winterville.

Wastewater collected by this system is pumped to the Contentnea Metropolitan Sewerage District (CMSD) wastewater treatment plant in Grifton via a fourteen inch diameter force main, where it is treated prior to discharge into Contentnea Creek. CMSD operates under permit number NC0032077.

During the year 2018, the Town of Winterville system collected 282,404,000 gallons of wastewater, an average of 773,710 gallons per day. The Town had three Sanitary Sewer Overflows (SSO) in 2018. The first overflow occurred on March 24 at the Church Street Lift Station. An estimated volume of 200 gallons of untreated wastewater was released from the force main where it enters the meter vault. Town staff immediately bypassed the broken section of pipe using the meter vault bypass valves. Staff then set up temporary bypass piping above ground and replaced all of the remaining SDR 21 PVC force main between the meter vault and wet well with new Protecto 401 lined ductile iron pipe. The second overflow occurred during the replacement of this portion of force main. A 6" hose blew off of the bypass pump during the night and caused an estimated 2,500 gallons of untreated wastewater to be pumped onto the ground. Approximately 500 gallons of this was estimated to reach surface waters. The third spill that the Town experienced in 2018 was due to Hurricane Florence in September. Torrential rains led to a manhole in Jones Street overflowing intermittently. There was approximately 943 gallons of wastewater that exited the manhole during this event and entered into the storm drainage system. Each of these spills was reported to the State as required and corrective action has been undertaken to try and eliminate future spills.

Our 23 pump stations are visited and inspected three times a week to ensure that they are operating correctly. Each of the 23 pumping stations is equipped with two pumps that alternate in operation and provide redundancy for emergencies. The Town also has backup generators and by-pass pumps which can quickly be mobilized to the lift stations in case of a power failure.

Over the last 12 months, many upgrades have been made to our existing collection system and lift stations including replacing pumps and impellers, replacing worn electrical components such as starters, and making point repairs to eliminate infiltration. The Town has also recently completed a sanitary sewer rehab project which replaced approximately 3,000 LF of existing vitrified clay sewer pipe with new SDR 26 PVC sewer pipe as well as abandoned an old lift station and replaced it with a new lift station with greater capacity. The Town also is approximately 99% complete with a project to replace the existing control panel and add a standby generator at the Church Street lift station. These upgrades should help improve the efficiency and reliability of our collection system and lift stations, as well as reduce inflow and infiltration which leads to sanitary sewer overflows during rain events. The Town also completed it's Asset & Inventory Assessment, and began planning for the next sewer rehab project based on the results of the assessment (smoke testing and flow monitoring). This assesment located deficiencies and problems with our collection system, mainly including inflow and infiltration problems, and the Town hopes to address them in 2019. By eliminating these issues, the Town will be better prepared to handle large flows during heavy rain events and prevent future SSO's.

To help reduce the grease build up in the town's collection system each lift station is cleaned a minimum of once a quarter. In addition, a minimum of 10 percent of the gravity sewer mains are cleaned per year.

Hard copies of this report are available at Winterville Town Hall located at 2571 Railroad Street, as well as online at www.wintervillenc.com. Should you have any questions, please contact the Public Works Department, by mail at P.O.Box 1459, Winterville, N.C. 28590; by telephone at 252.215.2427; or visit us at www.wintervillenc.com.

This report is accurate and complete to the best of my knowledge.

Travis Welborn, PE
Public Works Director
Town of Winterville