## **2015 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, 2015 to December 31, 2015.

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 47.70 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 2015, the Town of Winterville system collected 302,779,000 gallons of wastewater, an average of 829,532 gallons per day. The Town had one Sanitary Sewer Overflows (SSO) in 2015. The overflow occurred on August 30, 2015 when an 8" force main along an unnamed tributary to Swift Creek failed. An estimated volume of 22,722 gallons of untreated wastewater was released from the force main before repairs could be completed. The Town was assessed a Notice of Violation and Civil Penalty from the Division of Water Resources as a result of the incident. Town staff doubled the inspection frequency of this force main in order to minimize potential for 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 lift stations including replacing pumps and impellers, replacing worn electrical components such as soft starts, and updating our generator receptacles. The Town also added a pad mounted standby generator to the Chapman Street Lift Station in 2015. This is the largest station in Town based on flow. These upgrades should help improve the efficiency and reliability of our lift stations. The Town's consulting Engineer also completed a comprehensive sanitary sewer evaluation on approximately 1/3 of the Town. This evaluation pointed out deficiencies and problems with our

collection system, mainly including inflow and infiltration problems. Town staff is already in the process of correcting these issues. 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 <u>www.wintervillenc.com</u>. 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 <u>www.wintervillenc.com</u>.

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

Travis Welborn, PE Public Works Director Town of Winterville