

City of Locust
Post Office Box 190
Locust, North Carolina 28097-0190
(704) 888-5260

**City of Locust
Annual Wastewater Collection Report
2023-2024**

Introduction:

This report is produced in compliance with House Bill 1160 passed by the General Assembly of the State of North Carolina requiring that all entities that own or operate a wastewater collection system make an annual report available to their customers. This report includes information regarding system operations, violations, and educational material.

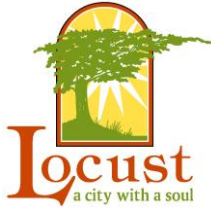
This report is designed to provide an understanding and informative description of the wastewater collection system and promote a general public awareness of its operations.

General Information:

System Name:	City of Locust Wastewater Collection System
Responsible Entity:	City of Locust
Persons in Charge:	ORC: Tim Flieger, Cert# 994828 Backup ORC: Chris McLain, Cert# 1002246 Backup ORC: Robbie Pickler, Cert# 1009849
Applicable Permit:	Collection System Permit #WQCS00365

Collection System Overview:

The City of Locust Wastewater Collection System has approximately 1998 sewer connections that serve residential, commercial, and industrial customers. The system is unique in design, because it has all types of available sewer service technology in service. It consists of approximately 10 miles of forcemain, 15 miles of vacuum main, 24 miles of gravity main, and 2600' of low pressure. There are 3 main pump stations and 9 lift stations that help convey the untreated sewer to the POTW, located in Oakboro. The purpose of the wastewater collection system is to collect and transport the sewage generated by the city's customers to the wastewater treatment plant which is owned and operated by Stanly County Utilities.



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Performance:

The City of Locust's Public Works Department performs the operation and maintenance of the collection system. During the reporting period, the City of Locust Wastewater Collection System collected and conveyed 126,129,626.4 gallons of untreated wastewater. The department consists of 6 full-time employees. This department performs all the station and system maintenance that arises within the wastewater system. Station maintenance includes, but not limited to, daily station visits, landscape/lawn maintenance, housekeeping, wet well cleaning, inflow and infiltration reduction, and all mechanical maintenance/repairs. System maintenance includes, but not limited to, line cleaning, inflow and infiltration reduction, service tap installation, maintenance, and repair of the low-pressure system (23 grinder pumps), repair to all sewer main lines, customer collection/disconnection enforcement, 24/7 customer call ins, new construction inspection, and mowing/inspections of sewer right of ways/easements.

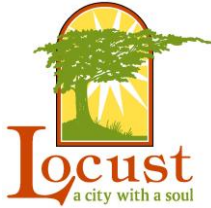
Collection Station/System Maintenance Accomplishments:

- Responded to 61 after-hour calls.
- Conducted PM services on all vacuum pumps at BHVS#1 & MCVS#2 (4x).
- Installed 3 new service taps.
- Inspected 138 new connections.
- Inspected, mowed, and maintained 78.4 miles of off-road right of way (7x).
- Completed 2775 utility locates

How We Protect Our Environment and Collection System:

We would like to reduce sanitary sewer overflows (SSO) to 0% so we work hard through preventative, pro-active measures to protect our system. The following is an overview of some of the programs we've activated to protect our system and environment to prevent overflows:

I/I Reduction continued to be a major focus this past year. Inflow and infiltration plays a large role in the efficiency of a system; therefore, our focus has been to minimize this issue. Primarily through visual inspections, we've reduced unwanted stormwater in our system tremendously. Remote Monitoring/Vacuum Pit Maintenance was our primary focal point in this year's I/I Reduction Program. By focusing on this improvement, we maximized our systems capacity, reduced energy consumption, reduced financial burden, and most importantly protected our environment.



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The City of Locust continues to improve our ***Fats, Oils, and Grease (FOG) Program*** as well. Most Sanitary Sewer Overflows (SSO's) are caused by F.O.G and can be prevented through education and training. Food Service Establishments (FSE) are the biggest contributors to this program and receive most of our attention. Random site visits/inspections are conducted at all FSE's and this is how we educate and enforce our FOG ordinance/ program. During the reporting period, **50** on-site visits were recorded. While (0) Notice of Violations (NOV) were issued. Education, training, and follow-through have been our key approaches to a more effective and pro-active FOG reduction program.

How We're Advancing Our Collection System:

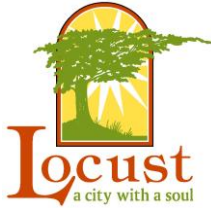
For a wastewater system to thrive, it must grow and evolve over time. The longevity of a sanitary sewer system not only relies on a good maintenance plan, but it relies on the evolution of technology. Over the years, many advancements have been made to help the operations and efficiency of our wastewater systems. The following are advancements that we've utilized over the past year:

Remote Monitoring is now being utilized to operate and manage our vacuum sewer system. We've partnered with FloVac America to audit our current Airvac Vacuum Sewer System and now that the evaluation process is complete, we've proceeded to install and implement strategically placed monitoring/recording equipment into our vacuum pits so that we can monitor the systems heartbeat in real-time. The new equipment now allows us to monitor incoming flows during wet and dry periods, system vacuum levels, and notify our operators if there is a pit failure where the equipment is in place. The ability to monitor during the wet periods will be instrumental in attacking our I/I and minimizing its effect on our system. We will continue to expand on this project annually. It will take years to complete, but we are committed to seeing it to completion. This is another way of operating our utility at the most efficient manner possible.

Increased Capacity continues to take place in our 200N (Contract#1), Creekview (Contract #2), and Elm St. (Contract #3 & #4) Sanitary Sewer Sub Basins (**200NSSSB-CVSSSB-ESSSSB**). Status of projects at close of FY is as follows...

- Contract #1- 75% complete with an estimated completion date of December 2024
- Contract #2- 60% complete with an estimated completion date of March 2025
- Contract #3- 90% complete with an estimated completion date of October 2024
- Contract #4- 100% complete

System capacity will greatly increase with these projects and put the City of Locust in great shape for the foreseeable future.



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Violations:

The City of Locust had (0) zero reportable spills (SSO) during the reporting period.

Availability of Report:

A copy of this report is available at City Hall 186 Ray Kennedy Dr. Locust, North Carolina; and on the city's website at www.locustnc.com

Certification:

I certify under penalty of law that this report is complete and accurate to the best of my knowledge. I further certify that this report has been made available to the users and customers of the City of Locust.

Date:_____

Timothy C. Flieger
Director of Public Works
City of Locust
Department of Public Works