



City of Concord Water Resources Department Wastewater Collection System

Annual Report

Fiscal Year July 2022 - June 2023

Why do we publish this report?

N.C. General Statute Chapter 143, Article 21, Part 1, 143-215.1C requires municipalities that operate wastewater collection and treatment systems to publish an annual report summarizing the performances of their collection system and treatment works and the extent to which the system has violated their permit, federal or state laws, regulations, or rules related to the protection of water quality.

General Information

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| System Name: | City of Concord Wastewater Collection System |
| Responsible Entity: | City of Concord |
| Persons in Charge: | Jeff Corley, Director of Water Resources Chad Grimm, Wastewater Utility Services Superintendent & System Operator |
| Applicable Permits: | WQCS00326 Tributary to NC0036269 and NC0081621 |

The Treatment Process

The City of Concord discharges its wastewater to both of the Water and Sewer Authority of Cabarrus County's (WSACC) Treatment Plants: Rocky River Regional and Muddy Creek.

The Wastewater Collection System

The City of Concord's Wastewater Collection System came into existence in the early 1900's and continued to be upgraded and extended to become the system we operate today. The system currently consists of over 592 miles of sewer pipelines, approximately 15,355 manholes, and 23 wastewater pump stations. The City of Concord's Wastewater Division performs the operation and maintenance of the City's collection system, which serves approximately 40,747 customers.

Our crews provide maintenance service to the system and its customers with professionalism and efficiency:

- Two rapid-response crews respond to all calls related to potential blockages and overflows in the system.

- Two jet-vac truck crews perform maintenance on the system by removing obstructions that may be present in the system, thus limiting the number of possible back-ups and overflows. An inflow-infiltration crew locates defects and obstructions in the pipelines using a camera that videotapes the inside of the sewer lines.
- The City also has a crew that is dedicated to the operation and maintenance of the City's wastewater pump stations.
- One service line installation and repair crew installs new service lateral connections to the City's sewer mains and repairs sewer mains as well as manholes.
- One right-of-way crew that is dedicated to mowing all right-of-ways.
- One crew of heavy construction has been dedicated to heavy right-of-way clearing or to fill in as a repair crew to do new installs and make repairs as well. All right-of-way maintenance crews collect data on the location of the various components of the City's system that provides maintenance of the wastewater collection system rights-of-way's that performs semi- annual inspections of the system.

During this fiscal year, the City of Concord was requested to investigate approximately 122 reports of possible sewer-related backups. These calls were related to both municipal and private lines. The City of Concord had 0 incidences that resulted in the spill or overflow of more than 1,000 gallons of wastewater to surface waters of the State.

The City has a System Protection Superintendent who is responsible for the implementation of the Fats, Oil, and Grease Program (FOG), along with sewer right-of-way notification to ensure easement accessibility. Notification letters are mailed to all new property owners that have easements on their properties when property ownership is transferred. The System Protection Superintendent reviews plans for new construction and up-fit plans dealing with food preparation and grease disposal. The System Protection group conducts annual FOG inspections to avoid grease build up. When the Wastewater crews find overflows, they work with the System Protection Superintendent to hang educational doorhangers.

The City of Concord is continually performing preventative maintenance activities and undergoing rehabilitation projects to prevent sanitary sewer overflows. The following activities have been completed during the past fiscal year.

| | |
|-------------------------------|---------------------|
| Jet-Vac Line Cleaning | 254,496 linear feet |
| Dye Testing | 9 |
| Sewer Service Inspections | 240 |
| Sewer Line Replacements | 0 linear feet |
| Smoke Testing | 18,000 linear feet |
| T.V. Inspections | 47,712 linear feet |
| Pipe Lining | 27,826 linear feet |
| Manholes Rehabilitated | 100 |
| Manholes Inspected | 6,716 |
| High Priority Lines Inspected | 86.9 miles |
| Miles of right-of-way mowed | 123 miles |

The City of Concord also operates an in-house flow monitoring program. The desired outcomes of this program are to ensure adequate system capacity, prevent sanitary sewer overflows, identify segments of the system impacted by inflow and infiltration, and prioritize field investigations and repairs that could create the greatest reduction in the conveyance and treatment of unnecessary flow.



Don't Feed the Grease Goblin!

DO

- ✓ Put oil and grease in collection containers
- ✓ Remove oil and grease from kitchen utensils, equipment and food preparation areas with scrapers/towels/brooms
- ✓ Keep grease out of wash water
- ✓ Place food scraps in collection containers

DO NOT

- ⊗ Pour oil and grease down drains
- ⊗ Wash fryers/griddles, pots/pans and plates with water until oil and grease are removed
- ⊗ Use hot water to rinse grease off surfaces
- ⊗ Put food scraps down drains

REPORT ILLEGAL DUMPING TO:
City of Concord Customer Service
(704) 920-5555

Published by:

The City of Concord
Water Resources Department
Crystal Scheip
Water Resources Engineering Manager

Copies of this report are available for review at
the following locations:

Alfred M. Brown Operations Center
635 Alfred Brown Jr. Ct. SW,
Concord, North Carolina

City Hall
35 Cabarrus Ave. W
Concord, North Carolina

This report may also be viewed on the City's
website at www.concordnc.gov.

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 or customers of the named system and that those users have been notified of its availability.


Jeff Corley, Director of Water Resources

Date: 7/19/23