



The City of Kannapolis Wastewater Collections System Annual Report Fiscal Year July 2020 - June 2021

Why Do We Publish This Report?

On July 21, 1999, North Carolina Governor James Hunt signed a law, House Bill 1160, requiring annual reports from municipalities that operate wastewater collection and treatment systems.

The annual reports inform system users of specific items such as the number of wastewater overflows, violations of permit conditions or environmental regulations. The law also requires the City to report the impact of any such violations on the environment and corrective measures taken to minimize recurrences.

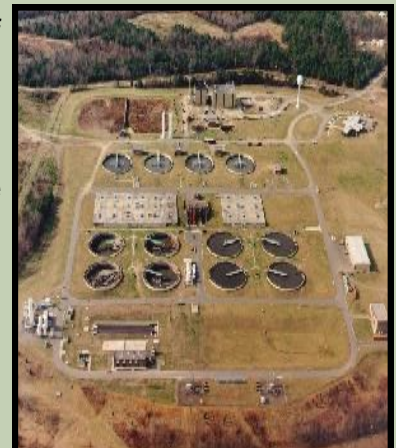
We have decided to inform you, the system user, not only of the required facts but of the importance each user has in this function and what you can do to help ensure its reliability.

The Treatment Process

The City of Kannapolis discharges its wastewater to the Water and Sewer Authority of Cabarrus County's (WSACC's) Rocky River Regional Wastewater Treatment Plant located in southern Cabarrus County.

The plant (NPDES Permit # NC0036269) has a treatment capacity of 26.5 million gallons per day (MGD) and uses a pure-oxygen activated sludge secondary treatment system that processes both domestic and industrial wastewater from both in-plant and off-site sources.

The solids processing operation relies on a combination of proven and cost effective technology available for the solids handling process.



The Wastewater Collection System

The City of Kannapolis' Wastewater Collection System was installed from the mid-1900's to Present day. The system consists of approximately 326 miles of sewer pipelines and fourteen wastewater lift stations. The City of Kannapolis Public Works Department performs the operation and maintenance of the collection system that serves approximately 19,000 customers.

During our reporting year, our crews provided maintenance service to the system and its customers with professionalism and efficiency.



The Maintenance crew cleans the City's sewer system to limit the number of wastewater back-ups and overflows. A wastewater response crew responds to all calls related to potential blockages, customer back-ups and overflows within the collection system.



The Closed-Circuit TV Inspection crew uses a wheel-driven camera that records the interior of wastewater pipes to identify defects, obstructions, check effectiveness of the cleaning operations and inspects all new collection system extensions before the City accepts them for operation and maintenance.



The Pump Station crew maintains the City's fourteen wastewater lift stations. The crew performed 728 routine inspections and responded to 31 alarms at the lift stations this year.



The City's maintenance crew clears the wastewater collections system's outfalls within rights-of-way and performs semi-annual inspections of the system.



The City has three Construction and Maintenance crews that install new service connections, performs minor system expansions and provides repairs to existing wastewater infrastructure.

Contract services are utilized for the installation of any major wastewater collection system expansions, the replacement of aging deteriorating infrastructure, infrastructure inspections, and some routine outfall maintenance.

The City of Kannapolis' Engineering Staff assists collection crews by providing additional technical support to operations and periodic updates to system maps and construction drawings.

The City of Kannapolis has several construction projects underway to further enhance the level of service and quality of life to our citizens. In addition, we continually perform proactive maintenance to the collection system to prevent wastewater overflows.



The following maintenance was completed:

Manholes raised & upgraded:	18
Repairs to laterals:	55
Sewer main repairs:	12
Lateral blockages, unblocked & rodded:	932
Closed-circuit camera inspection (linear feet):	51,477
Cleanouts installed:	11
Sewer mains cleaned (linear feet):	220,031
Cleanout caps installed	38

Collection System Overflows

The City of Kannapolis investigated approximately 960 possible municipal and private wastewater related back-ups and overflows during the fiscal year. The thirty-two incidents listed below resulted in a spill or overflow of wastewater to the surface waters and were reported to the State. All locations were hydraulically cleaned up and down stream, debris was removed (if any) and were video inspected. The affected areas were flushed with fresh water, treated with lime, seeded, and straw was spread.

Incidents that were reported to the State: July 2020 - June 2021

- 07/25/2020 - 1209 Mason Street, 900 gallons - debris blockage
- 08/16/2020 - 199 Oakdale Avenue, 2,000 gallons - torrential rain
- 08/16/2020 - 2009 Mallard Point Drive, 1,950 gallons - torrential rain
- 08/16/2020 - 269 Esther Circle, 54,000 gallons - torrential rain
- 08/16/2020 - 1901 Concord Lake Road, 600 gallons - pump failure and torrential rain
- 08/27/2020 - 4637 Nob Hill Drive, 10 gallons - debris blockage
- 08/31/2020 - 269 Esther Circle, 300 gallons - torrential rain
- 11/10/2020 - 405 East 18th Street, 2,173 gallons - pipe break
- 11/12/2020 - 5555 Charlie Walker Road, 16,500 gallons - rain
- 11/12/2020 - 269 Esther Circle, 54,000 gallons - torrential rain
- 11/12/2020 - 2009 Mallard Point Drive, 1,950 gallons - torrential rain
- 11/12/2020 - 199 Oakdale Avenue, 258,750 gallons - torrential rain
- 11/12/2020 - 1201 Mason Street, 2,100 gallons - torrential rain
- 11/12/2020 - 1016 Sprucewood Street, 19,200 gallons - grease blockage
- 11/12/2020 - 2036 Summit Ridge Lane, 21,000 gallons - torrential rain
- 11/13/2020 - 2308 Moose Road, 40,500 gallons - pipe break
- 12/10/2020 - 700 Smith Street, 30 gallons - debris blockage
- 12/19/2020 - 1016 Dakota Street, 200 gallons - roots blockage
- 01/11/2021 - 2317 Concord Lake Road, 950 gallons - grease blockage
- 02/04/2021 - 1403 N. Cannon Boulevard, 60 gallons - grease blockage
- 02/08/2021 - 100 S. Harding Avenue, 75 gallons - grease blockage
- 02/16/2021 - 1203 Sunset Drive, 100 gallons - roots blockage
- 02/18/2021 - 216 S. Rose Avenue, 600 gallons - roots blockage
- 03/25/2021 - 269 Esther Circle, 43,800 gallons - torrential rain
- 03/26/2021 - 199 Oakdale Avenue, 6,600 gallons - torrential rain
- 03/26/2021 - 1201 Mason Street, 300 gallons - torrential rain
- 03/26/2021 - 2009 Mallard Point Drive, 720 gallons - torrential rain
- 04/05/2021 - 703 Rainbow Drive, 75 gallons - grease blockage
- 04/12/2021 - 2405 Glendale Avenue, 270 gallons - roots blockage
- 04/13/2021 - 1004 Maywood Street, 15 gallons - pipe failure
- 04/13/2021 - 899 Fairview Street, 150 gallons - pipe failure
- 05/13/2021 - 203 East 29th Street, 30 gallons - cleanout failure caused by customer industrial process.

TO PREVENT WASTEWATER OVERFLOWS

- **NEVER** put oils, liquid or solid greases, fatty meat, or other food scraps down a drain - even if you use a motorized garbage disposal.
- **NEVER** put down a drain feminine products, cotton swabs, matchsticks, convenience wipes such as baby, hygienic, cleaning and disinfectant, as well as toilet bowl scrubbers and paper towels even if labeled as "disposable or flushable".
- **NEVER** use hot water to melt grease so it will go down the drain easier.
- **NEVER** flush any of the items listed above down a toilet.

- **ALWAYS** keep grease out of wash water by wiping dishes with a disposable towel before washing.
- **ALWAYS** remove solidified grease from kitchen utensils, equipment, wares and food preparation areas with scrapers or paper towels. Dispose of scrapings and towels in trash cans.
- **ALWAYS** allow hot liquid grease to solidify and then dispose of properly.
- **ALWAYS** place all food scraps in trash collection containers.
- **ALWAYS** recycle restaurant grease by using contract rendering services and have grease traps cleaned and serviced frequently.

- **REPORT** trucks discharging liquids or other substances into open municipal sewer manholes.
- **REPORT** acts of vandalism on manholes, sewer lines, lift stations, hydrants and other structures.
- **REPORT** illegal dumping of toxic, corrosive, or flammable substances into manholes, drains, or toilets.

REPORT SUCH INCIDENTS TO:

**City of Kannapolis Operations Center
(704) 920-4200**

PUBLISHED BY:

**The City of Kannapolis
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1401 Bethpage Road
Kannapolis, NC 28081**

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**Alex Anderson
Director of Water Resources**

**Copies of this report are available at
the following locations:**

**City of Kannapolis Operations Center
1401 Bethpage Road
Kannapolis, NC 28081**

**Customer Service Center
Kannapolis City Hall
401 Laureate Way
Kannapolis, NC 28081**

**This report may also be viewed on
the City's website at:**

www.kannapolisnc.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.

Alex Anderson

Alex Anderson, Director of Water Resources

Date: July 30 2021