

City of Gastonia – Two Rivers Utilities Wastewater System Performance Report July 2022 - June 2023



What is wastewater?

Wastewater is water that has been used to bathe, wash dishes and laundry, and flush toilets in residential, commercial, and industrial facilities. Commercial and industrial businesses release wastewater to the City's sewer system.

What happens to wastewater in the sewer?

A collection system of underground pipes sends wastewater by both gravity pipes. This allows the wastewater to flow underground to pump stations, which raises wastewater in areas where it cannot flow by gravity. TRU's collection system is continuously maintained by cleaning, repairing or replacing pipes, pumps, and other equipment. From July 2022 through June 2023, TRU staff cleaned 70 miles of sewer pipe. Five miles of pipe were captured on video for maintenance or identification of problems and 89 miles of outfall utility easements were mowed and maintained to preserve right-of-way access. Ongoing maintenance and cleaning efforts are what make it possible for nearly four billion gallons of wastewater to flow to one of the three wastewater treatment plants (WWTP) owned by TRU each year.

The City presents this Performance Report, which is required annually by the North Carolina Department of Environmental Quality. The City of Gastonia proudly owns and operates Two Rivers Utilities (TRU), the provider of water and wastewater services to Gastonia and a large portion of Gaston County. TRU continues to provide high quality wastewater services to its customers and welcomes your comments about this report.

Sanitary Sewer Overflows (SSOs)

7/1/22 - 6/30/23

All overflows were promptly responded to and properly disinfected.

Date	Location	Gallons	Cause
7/5/2022	2000 Woodgreen Dr	720	Pipe Failure/Break
7/14/2022	2221 Robinwood Rd	600	Debris in line
9/2/2022	2115 Lyon St	3,000	Grease blockage
9/19/2022	2015 Hughes Ave	300	Pipe Failure/Break
9/20/2022	1204 Iva Ave	200	Grease blockage
10/17/2022	2707 Ashbourne Dr	800	Grease blockage
11/8/2022	2555 Court Dr	6,000	Debris in line
11/24/2022	4030 Broadview Ln	900	Grease blockage
11/30/2022	1125 Edgewood Cir	630	Inflow & Infiltration
12/15/2022	1125 Edgewood Cir	1,058	Inflow & Infiltration
12/30/2022	1723 Echo Ln	720	Roots in line
1/4/2023	1125 Edgewood Cir	9,000	Inflow & Infiltration
1/11/2023	1000 Fernforest Dr	400	Debris in line
1/25/2023	1125 Edgewood Cir	3,000	Inflow & Infiltration
2/28/2023	330 Rosemary Ln	36,000	Pipe Failure/Break
4/9/2023	2983 Seth Ct	600	Debris in line
4/20/2023	304 Old Willis School Rd	3,000	Lift Station Failure
4/28/2023	3175 Duke St	36,000	Inflow & Infiltration



Infiltration/Inflow

Stormwater and groundwater can get into the sewer collection system through cracked pipes or manholes (infiltration) and illegal drains or sumps (inflow). Heavy rain can add millions of gallons of extra water per day to the system, causing overflows. TRU staff performs smoke testing, video inspections, and flow monitoring to help identify problems so any issues can be addressed.

Fats, Oils and Grease



When Fats, Oils and Grease (FOG) goes into the sewer, it clogs pipes and is a major cause of overflows. The best way to help is to not flush cooking greases or oils into the drain. For information please contact:

Tyler Alexander

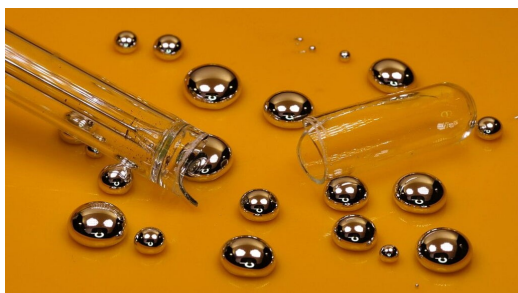
Water/Sewer Compliance Specialist

P: 704-854-6669

E: tylera@tworiversutilities.com

Mercury Minimization

TRU monitors and regulates mercury discharges from customers through education and required monitoring. Common sources of mercury are dental mercury fillings, thermometers, laboratory chemicals, fluorescent bulbs, and button cell batteries. Items that contain mercury should always be disposed of properly at a Gaston County recycling center.



Do not flush wet wipes into the sewer

Wastewater workers often have to deal with a significant number of wipes (i.e. wipes for infants, disinfecting, sanitation, etc.) found in the collection and wastewater treatment systems. Wipes, regardless of “flushable” labeling, do not break down like toilet paper, and should only be put in trash cans. Wipes remain in sewer lines for long periods of time and eventually combine with grease and other solids causing blockages and sanitary sewer overflows. ***Please put wipes, and other harmful products, in the trash and continue to help protect our environment!***

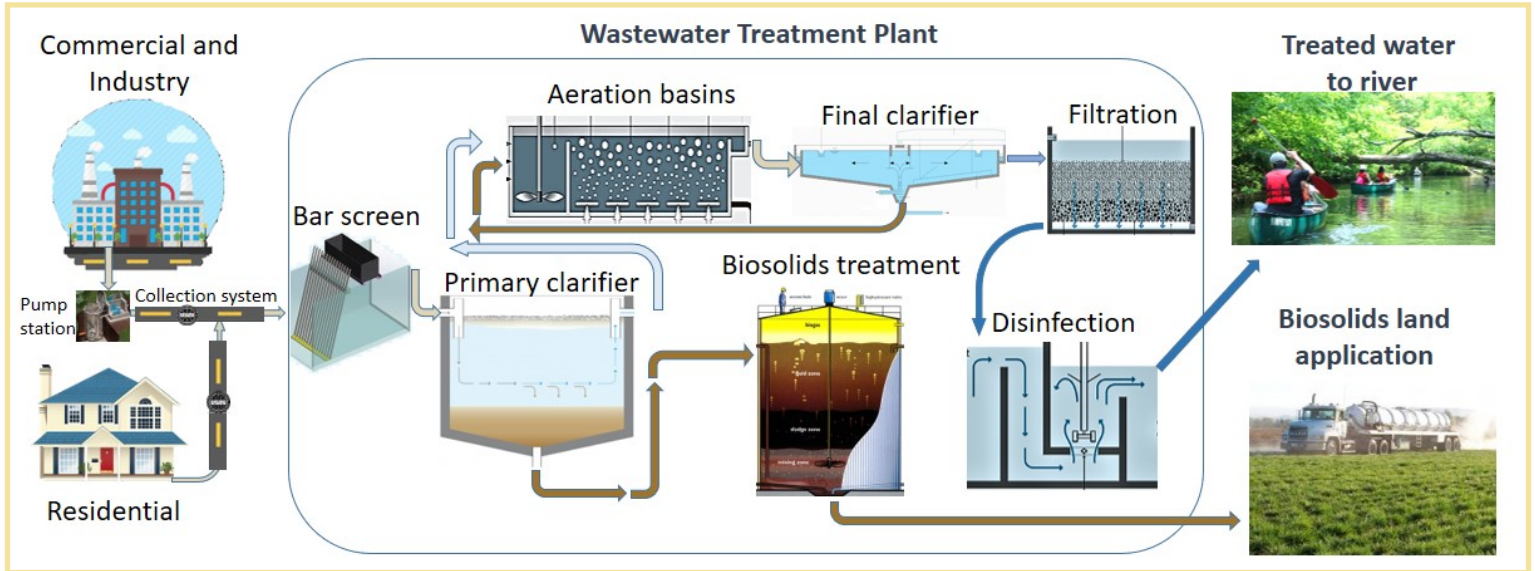


WWTP Compliance Summary

The TRU WWTPs have permit limits and monitoring requirements regulated by the North Carolina Department of Environmental Quality (NCDEQ). Last year more than 110,000 analytical tests were performed to ensure Gastonia's wastewater plants were operating efficiently and effectively. During 7/1/2022-6/30/23, Long Creek WWTP had one permit limit violation, for which the cause was unable to be determined; Biological Oxygen Demand (BOD) weekly average for second week of July was 9.7 mg/L (Limit is 7.5 mg/L). The violation was promptly addressed by staff. Crowders Creek WWTP has been 100% compliant for the past two years and Eagle Road WWTP has been 100% compliant since 2017. The biosolids land application program has operated with no permit violations since 2015.

How and where is the City of Gastonia's wastewater processed?

- Crowders Creek and Long Creek WWTPs have advanced biological nutrient removal systems where microorganisms break down wastewater and remove nutrients such as nitrogen and phosphorus. Crowders Creek WWTP is permitted to treat six million gallons per day while the Long Creek WWTP is permitted to treat 16 million gallons per day, the treated wastewater from the Crowders WWTP discharges to Crowders Creek and the treated wastewater from the Long Creek WWTP discharges to the South Fork Catawba River.
- The Eagle Road WWTP uses a combination of biological and chemical treatment to remove pollutants. This WWTP is permitted to treat four million gallons per day. The treated wastewater discharges into the South Fork Catawba River.
- At all three treatment plants, solids are separated from the water and pumped into digesters to stimulate biological treatment, converting solids to organic matter known as biosolids. Biosolids are then used to fertilize permitted farmland sites as a free source of nitrogen and phosphorus for local farmers.

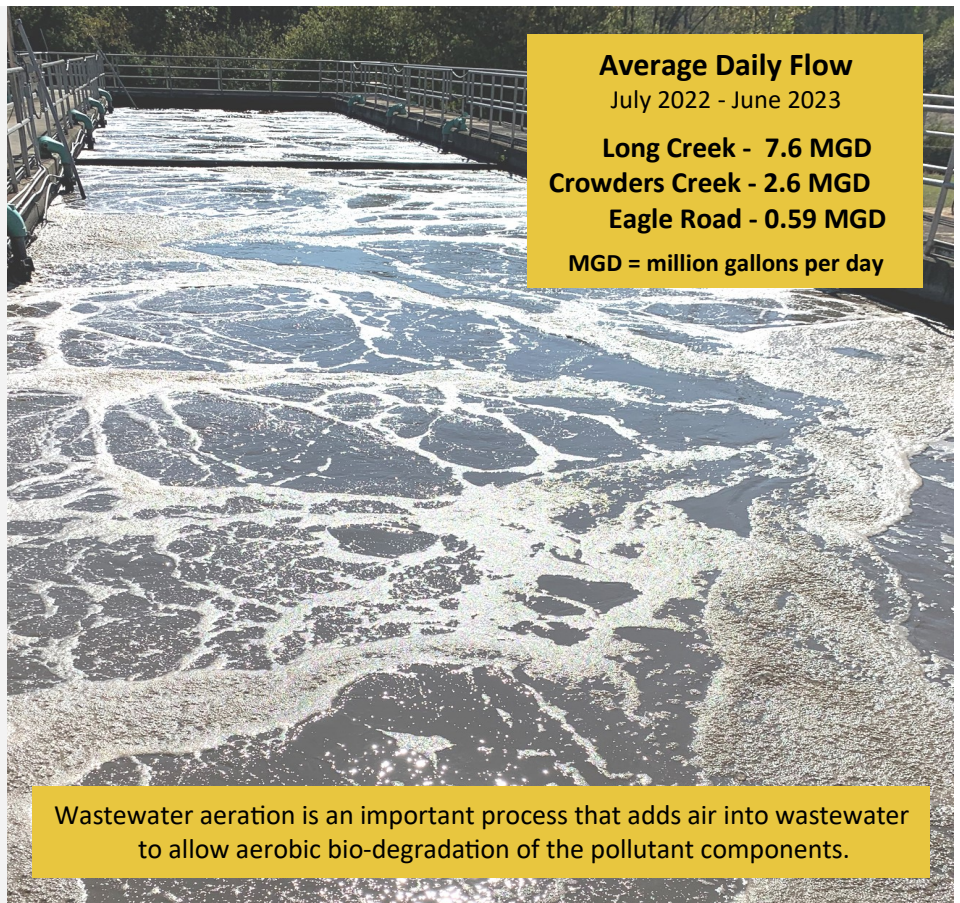


Two Rivers Utilities Wastewater Treatment Plants (WWTP)

Long Creek WWTP is located on Old Spencer Mountain Rd, north of Gastonia and east of Dallas. This facility serves the northern, central and southeastern sections of Gastonia; the Towns of High Shoals, Ranlo, McAdenville and Stanley; and portions of Gaston County, and the Towns of Dallas and Lowell.

Crowders Creek WWTP is located on South Hwy 321 in South Gastonia. It serves the southwestern and western sections of Gastonia; all of Bessemer City and Clover, SC; and parts of Kings Mountain, NC.

Eagle Road WWTP is located on Eagle Road in Cramerton and serves the Town of Cramerton and portions of Belmont and Lowell.





Wildlife is found all around Wastewater Treatment Plants. Wastewater Staff often rescue types of animals from danger and provide them a safe haven.



Wildlife And Industry Together (W.A.I.T.)

All three WWTPs participate in the National Wildlife Federation's W.A.I.T. program to support educational awareness. This program encourages businesses to create natural habitats for plants and wildlife utilizing available land on their property. The goal is to establish protected native wildlife habitats and provide an educational resource for the community. Wildflower fields, deer, bluebirds, butterflies, rabbits, geese, purple martins, hawks, wood ducks, and osprey, along with many other creatures, thrive at TRU's WWTPs.

To partner with this effort, contact:

Brennon Clemmons

P. 704-842-5108

E. brennonc@tworiversutilities.com



TRU has the only wastewater facilities in the state to be designated as Environmental Steward by North Carolina's Environmental Stewardship Initiative recognition program.



CERTIFIED ENVIRONMENTAL MANAGEMENT SYSTEM

TRU's Wastewater Treatment Division has been ISO 14001 certified since 2001.

Permits and Certifications

WASTEWATER LABORATORY

NCDHHS Drinking Water Cert No. 37422

NCDEQ Wastewater/Groundwater Cert No. 210

WASTEWATER COLLECTION SYSTEM

Permit # WQCS00017

EAGLE ROAD WWTP

NPDES Permit # NC0006033

CROWDERS CREEK WWTP

NPDES Permit # NC0074268

LONG CREEK WWTP

NPDES Permit # NC0020184

BIOSOLIDS LAND APPLICATION

NC Permit # WQ0001793

Report Availability

This report is available on the City website at: www.gastonianc.gov

Copies are available at the following locations: Garland Municipal Business Center, 150 S. York Street; Gaston County Main Library, 1555 E. Garrison Boulevard; and the Cramerton Town Hall, 155 N. Main Street, Cramerton. If you would like to receive a copy via mail, please call 704-854-6668.

Certification

I certify, under penalty of law, that this report is complete and accurate to the best of my knowledge. I further certify 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.

Brian Potocki

Director of Public Utilities

For more detailed information please contact:

Brian Potocki, Director of Public Utilities

704-866-6728, brianp@tworiversutilities.com

or

Stephanie Scheringer, Assistant Director of Public Utilities

704-866-6726, stephanies@tworiversutilities.com