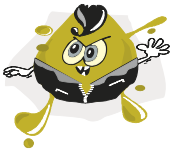




Environmental Programs Service Initiative



In an effort to support educational awareness and promote better learning, the Wastewater Treatment Division is a participant of the **W.A.I.T. Program**. W.A.I.T. stands for **Wildlife And Industry Together**. The program encourages businesses to create natural habitats for plants and wildlife from unused land at their facilities. The goal is to establish protected native wildlife habitats and provide a educational resource for the entire community. The City's Crowders Creek Wastewater facility has two wildflower meadows, blue bird boxes and wood duck boxes. The Long Creek facility has blue bird and wood duck boxes. If you are interested in partnering with this effort, contact Janet Maddox at (704) 854-6672 or janetm@cityofgastonia.com



Help Us Defeat the Grease Goblin

Grease is a leading cause of sewer blockages and overflows. The Fats, Oil & Grease Reduction Program seeks to reduce these occurrences by educating the public on how to prevent grease from entering the sewer system. Special emphasis has been placed on food service establishments, but we all need to do our part to keep grease out of the sewer system. For more information on our program, contact our The Fats, Oil & Grease Reduction Program Coordinator at (704) 854-6669.



Environmental Commitment

- The Wastewater Treatment Division has been ISO 14001 certified since 2001. Gastonia was one of the first certified publicly operated wastewater divisions in the United States.
- Member of National Biosolids Partnership
- Participant in the North Carolina Environmental Steward Program
 - Long Creek WWTP designated as Environmental Steward since 2005
 - Crowders Creek WWTP was designated as an Environmental Steward in 2010.

Copies of this report are available at the City Hall at 181 South Street, the main Library at 1555 East Garrison Boulevard and the Municipal Operations Center at 1300 North Broad Street. Notification of availability is provided by the local Time Warner Cable Community Channel 16, the City's web site at www.cityofgastonia.com and via utility bills.

For more detailed information, contact the Division Manager of Wastewater Treatment: Larry Cummings at (704) 866-6991 larryc@cityofgastonia.com or the Division Manager of Water & Wastewater Maintenance: Keith Morton at (704) 866-6728 or keithm@cityofgastonia.com.

The Long Creek Wastewater Treatment facility has NPDES Permit No. NC0020184. The Crowders Creek Wastewater Treatment facility has NPDES Permit No. NC0074268. The Residuals Land Application Permit No. WQ0001793 authorizes application of biosolids on 2,052.9 acres and Permit No. ND0084883 authorizes application of biosolids on approximately 414 acres. The Wastewater Collection System Permit number is WQCS0017.

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.

Michael C. Graham
Crowders Creek WWTP
Operator in Responsible Charge

David V. Morgan
Long Creek WWTP
Operator in Responsible Charge

Jim T. Klenovic
Wastewater Collection System
Operator in Responsible Charge



ANNUAL WASTEWATER SYSTEM PERFORMANCE REPORT 2009-2010



Supporting wildlife and plant life



ISO 14001



WHAT IS WASTEWATER?

Wastewater or sewage is water, plus whatever is added, that drains from your home's sinks, toilets, bathtubs and washing machines. People also create wastewater at work. Offices, businesses and manufacturers create not only domestic wastewater but also can create wastewater combined with the discharge associated with a manufacturing process or a service.

The City of Gastonia has an extensive system of pipes that collects both the domestic and industrial wastewater and transports it to one of two wastewater treatment facilities operated by the City of Gastonia.



Crowders Creek Facility

The Crowders Creek facility, located on South York Road, serves the southwestern and western sections of Gastonia, all of Bessemer City and Clover S.C., as well as parts of Kings Mountain.

The Long Creek facility located on Old Spencer Mountain Road serves the northern, central and southeastern sections of Gastonia and portions of Gaston County including the Town of Ranlo.

WHAT DO WASTEWATER TREATMENT PLANTS DO?

Wastewater treatment plants clean our wastewater and prevent contaminants from getting into the environment. When wastewater enters a treatment facility, **bar screens** catch and remove trash and large objects. **Grit chambers** then remove heavy particles like gravel, seeds and coffee grounds. Wastewater then flows through large settling tanks called **clarifiers** that allow any remaining heavy particles to settle to the bottom. After the primary clarifiers, the liquid portion flows into **anaerobic, anoxic and oxic basins** where naturally occurring microorganisms consume the pollutants.

The wastewater then flows into final clarifiers where the microorganisms settle out and are returned to the basins. The flow now goes through **filters** and then is **disinfected** before the treated water is returned to the creek or river. The **solids**, which have been removed from the water portion, are pumped to **digesters** that are heated to provide biological treatment of solids that are turned into organic matter known as "**biosolids.**" These biosolids are used to fertilize state-permitted farmland. After treatment, the Crowders Creek plant discharges the cleaned water to Crowders Creek, while the Long Creek plant discharges to the South Fork Catawba River.

The Water/Wastewater Maintenance Division maintains collection system pipes and lines in order to prevent sanitary sewer overflows (SSO's) and keep wastewater flowing through the collection system to the treatment plants for treatment. During this report year, 89.2 miles of pipes were cleaned and 205 lines were videoed due to problems.



COMPLIANCE SUMMARY

The City of Gastonia's two wastewater treatment plants have permit limits and monitoring requirements regulated by the North Carolina Department of Environment and Natural Resources (NCDENR). NCDENR also requires all North Carolina Wastewater Collection and Treatment Systems to annually report to its customers all sanitary sewer overflows (SSOs), violations of state-issued permit limits and reporting requirements. The following overflows and violations occurred from July 2009 through June 2010:

TREATMENT PLANT COMPLIANCE

Long Creek and Crowders Creek Wastewater Treatment Plants were both 100% compliant with permit limits and reporting requirement during this reporting year.



Fish in Crowders Creek

SANITARY SEWER OVERFLOWS

<u>Date</u>	<u>Location</u>	<u>Volume (Gallons)</u>	<u>Cause</u>
07/23/09	2949 Audrey Dr.	400	Debris
08/11/09	Catawba Pump Station	3,125	Error by contractor
11/26/09	1529 Echo Lane	400	Grease
12/25/09	Catawba PS	12,000	Heavy rain
01/02/10	3068 Colony Dr.	400	Grease
02/05/10	10th Ave & Jackson	13,250	Heavy rain
02/12/10	1364 Dove Creek Ct.	3,250	Line roots
02/14/10	905 W. 6th B Ave.	400	Grease
03/29/10	10th Ave & Jackson	5,300	Heavy rain
04/05/10	1622 E. Garrison	400	Grease