WASTEWATER SPILLS
JULY 1, 2006 - JUNE 30, 2007

DATE	CAUSE	GAL. SPILLED	GAL. TO STREAM	LOCATION
8/29/06	Creek channel undermined pipe causing a drop & seepage	**120**	**120**	110 ft. from manhole 326 & 343 near 310 McNeil Rd.
8/30/06	Inflow and Infiltration	**15,000**	**9,000**	Little Buffalo Creek Lift Station
8/30/06	Sewer service had improper secured clean out cap	**60**	**60**	602 West Chisholm Street
9/19/06	Debris in line	**900**	**900**	2702 Bel Air Drive at manhole #1909
9/25/06	Pump Station Equipment Failure	**2,100**	**1,000**	Manhole 3870 near 4016 Lee Avenue
10/11/06	Debris in line	**450**	**450**	Near 614 magnolia street
11/7/06	Inflow and Infiltration	**66,420**	**50,700**	Little Buffalo Creek Lift Station Manholes 4210, 4220, and 4235
11/16/16	Inflow and Infiltration	**30,900**	**19,500**	Little Buffalo Creek Lift Station Manholes 4210, 4220, and 4235
11/22/06	Inflow and Infiltration	**94,380**	**91,380**	Little Buffalo Creek Lift Station Manhole 129, 4210, 4220, and 4233.
11/22/06	Inflow and Infiltration	**24,430**	**11,065**	305 Rose Street Manhole # 3753 522 Sunset Ave. Manhole # 1833 544 Sunset Ave. Manhole # 1764 616 Sunset Ave. Manhole # 1765 Jenkins and Maple Manhole # 1793 Sycamore and 2nd, Manhole #1912 Westlake Downs Lift Station Manhole # 856 1206 Spring Lane, Manhole #1088 Cameron Drive, Manhole # 3753 Inter Market and Hickory St., Manhole # 1877
12/22/06	Inflow and Infiltration	**9,000**	**6,000**	Little Buffalo Creek Lift Station
12/25/16	Inflow and Infiltration	**108,900**	**99,000**	Little Buffalo Creek Lift Station Manholes 4210, 4220, 4234, and 4235
1/6/07	Inflow and Infiltration	**9,000**	**6,000**	Little Buffalo Creek Lift Station
1/16/07	Grease	**60**	**60**	Manhole 1807, 223 Hillcrest
1/22/07	Grease	**120**	**100**	Manhole 3268,located near 2700 Horner Blvd
2/14/07	Inflow and Infiltration	**25,500**	**25,500**	Little Buffalo Creek Lift Station
6/19/07	Pump Station Equipment Failure	**1,500**	**1,000**	Jackson Heights Lift Station
6/29/07	Inflow and Infiltration	**17,700**	**10,000**	Little Buffalo Creek Lift Station Manhole 4210, 4220
	TOTAL SPILLED	**406,540**	**331,835**	

Notes:
*Spills are reportable if any amount reaches the surface waters or the spill amount is greater than 1,000 gallons.

How do sewer overflows happen?

Sanitary sewer overflows occur when wastewater escapes from the sanitary sewer system to the ground. Any wastewater spill in excess of 1,000 gallons or any amount that reaches surface waters must be reported to the Division of Water Quality and revealed in this report to our customers. There are several causes for sanitary sewer spills, such as excessive rainfall that causes overloading of sewer lines, pump station malfunction, tree roots or debris in lines, structural damage, vandalism, grease, and electrical failures. The chart that follows details the amount, location, and cause of our spills during this reporting period.

System Performance

Sanford had thirty-two wastewater spills this past fiscal year. Some of these spills were at more than one location. Of the thirty-two spills, two were due to debris and roots in the lines, four were due to equipment failure and structural damage, two were due to grease, and twenty-four were due to excessive rain inflow and infiltration. The volume of wastewater spilled was 406,540 gallons. The volume that reached a stream was 331,835 gallons.

The wastewater treatment plant treated 1.522 billion gallons of wastewater during the year, so the volume of sanitary sewer overflows comprises 0.02 percent of the total flow. Only one gallon was spilled for every 4,743 gallons treated. Our largest spill event was 99,000 gallons on December 25, 2006. This spill was caused by heavy rain. Thirty-one percent of the total volume spilled for the year occurred during this event.

Planning for the Future Growth of our Wastewater System

The Big Buffalo Wastewater Treatment Plant is designed for a capacity of 6.8 million gallons per day, and we are presently treating an average of 4.3 million gallons per day. With normal growth, our plant will be at capacity by 2015 or in eight years. However, if Sanford experiences more rapid growth, we could reach capacity sooner.

Because it takes a long time to expand or build a new plant, the City has requested permission from the state to expand our existing plant. We will be making a request in the near future to build a new plant near the Cape Fear River. For the 2007-2008 fiscal year, $1.2 million has been budgeted, to study and model the Deep and Cape Fear Rivers and to do population growth projections for Lee County for the next 35 years. This information will be submitted to the state to justify our need to expand the existing plant and to build a new plant. In addition, the City has budgeted $1.5 million in 2007-2008 to design an upgrade of the existing Big Buffalo plant.

There is a possibility that we will not be allowed to expand our existing plant. Therefore, the City is also looking into expanding its reclaimed water usage to industries in an effort to curb overall water usage, free up more capacity in the river, and to extend the life of the wastewater plant. We have asked local industries to examine the feasibility of introducing the use of reclaimed water into their operations.

We will continue to search for the most cost effective and efficient ways to maximize our plant and sewer infrastructures growth. Our goal is to protect the environment and increase the effectiveness of our system.


Cape Fear River

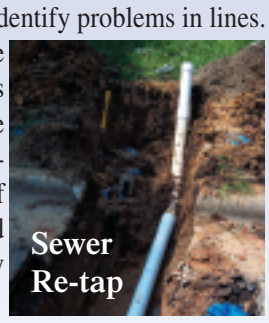
Sewer Rehabilitation

The City of Sanford has approximately seventy miles of sewer lines in the collection system that are fifty years or older which are being rehabilitated with cured-in-place pipe lining. This past fiscal year the Engineering Division spent three million dollars on the rehabilitation of sewer lines that included: the videoing, cleaning, and installation of 100,000 linear feet of cured-in-place pipe lining. Within the next seven to ten years, we hope to have all the lines fifty years or older rehabbed. Additionally, The Wastewater Construction and Maintenance Division spent $245,103 this past fiscal year on repairs and replacements in the collection system.

Maintenance Programs

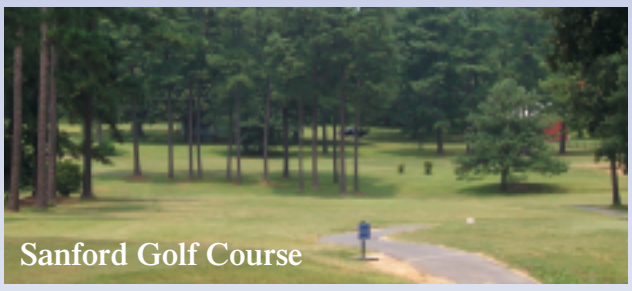
Sewer Line Cleaning: This past year we cleaned forty eight percent of our lines. Our staff responded to 218 stoppage complaints, and we rodded and jetted ninety-one miles of sewer main.

Smoke Testing and "TV-ing" lines: Smoke testing is an efficient and inexpensive way to identify problems in lines. The pressurized smoke fills the line and escapes wherever there is an opening. TV-ing a line involves a closed circuit inspection unit that takes actual video of the lines. This year we videoed and smoke tested approximately five miles of sewer line.


Sewer Re-tap

Easement-clearing Program: Wastewater lines are located along utility easements. Our staff performs inspections of the lines and mows the easements. This past fiscal year the staff mowed thirty-nine miles of right-of-way, inspected thirty-five miles of priority (aerial) lines, and inspected eighty-five miles of collection lines.

FOG Program: The City of Sanford's "Fats, Oils, and Grease Program" has been in effect for four years. The purpose of the program is to prevent the accumulation of fats, oils, and grease in the sanitary sewer system. We have 227 commercial facilities participating in the program. Four new traps were installed, ninety-three grease traps were inspected, and 728,732 gallons of grease-containing fluids were removed through routine maintenance.


Sanford Golf Course

Reuse Program: Sanford's reuse program decreases the amount of nutrients and flow discharged into the river. Treated wastewater in recent years has been used to irrigate the local municipal golf course. Also, solids are converted to a dense residue, removed, and reused on permitted land in Lee, Chatham, and Montgomery Counties. This past year we applied seven million gallons of biosolids to permitted land.

What can customers do to help?

Do not clog your drain or ours! Wastewater collection systems are designed to handle three things: used water, human waste, and toilet paper. Please do not place anything else in the system.

Keep your drain on a low fat diet! Fats, oils, and grease clog sewer lines just like they clog your arteries. Collect grease in a container and dispose of it in the garbage.

Check before you dig! Do not plant trees, shrubs, and other vegetation or erect fences and other structures on or near sewer lines, easements, or manholes. Roots can cause backups and structures can hinder access to the sewer system.

Dispose of chemicals properly! Do not put hazardous wastes into the sewer system. Please dispose of these according to the package labeling, or take them to a collection site for hazardous waste.

It is illegal to vandalize manholes. Do not put limbs, leaves, objects, or chemicals into manholes. If you see someone vandalizing a manhole, call the Police Department immediately.

The City of Sanford's Annual Wastewater Report

Once again, we are pleased to provide an overview detailing the operation, maintenance, and performance of Sanford's wastewater collection system. We use this opportunity each year to keep citizens informed and to meet our State compliance requirements.

Did you know?

The City currently operates and maintains 190.4 miles of gravity wastewater line; twenty miles of pressurized force main; 4,436 manholes; and eleven wastewater lift stations. The system serves a residential population of approximately 20,000, as well as, 1,500 commercial and industrial customers.

Working Hard for You

There are two divisions responsible for wastewater collection and treatment for the Public Works Department. The Wastewater Treatment Plant maintains the treatment facilities, and the Wastewater Construction and Maintenance Division maintains the collection system.

City employees are on duty twenty-four hours, seven days per week, monitoring all system activity from the plant control room. Technicians observe wastewater discharge at local industries in order to monitor compliance, and laboratory personnel monitor the effluent daily by testing twenty wastewater parameters.

Community Participation

You are invited to participate in our public forum and voice your concerns about wastewater treatment. The City of Sanford Council meets the first and third Tuesdays of each month beginning at 1 p.m. and 7 p.m. respectively at City Hall, 225 East Weatherspoon Street, Sanford, NC.

For more information about this report, copies, or any questions relating to the wastewater treatment system, please call Laura Spivey, Public Works Administrator, at (919) 775-8299 or visit our web site at www.sanfordnc.net.

Sewer Projects

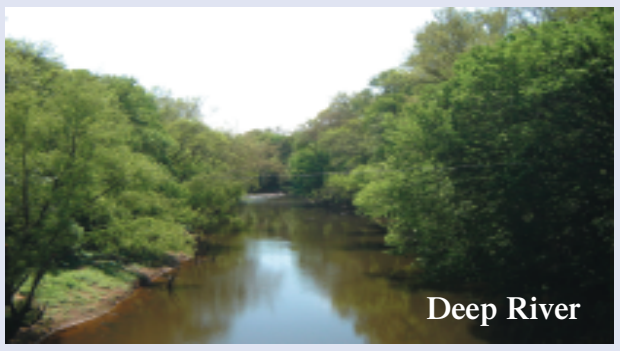
Northview Sewer Improvements

With $1.9 million in grant funding, the Northview Sewer Improvements Project is in the beginning stages of construction. The City plans to construct a new lift station at the Northview site and install ten thousand feet of new forced main to the wastewater plant. Additionally, eight thousand feet of gravity sewer will be extended to the Little Buffalo Lift Station, allowing the station to be abandoned. This project will reduce the number of overflows in the Amos Bridges road area, and increase the capacity of the Big Buffalo outfall to allow additional growth in west Sanford. Construction of this project should be completed in 2008.

Little Buffalo Lift Station

Where does wastewater go?

Wastewater travels through many underground pipes that carry the wastewater away from homes, businesses, schools, hospitals, and industries. The waste flows by gravity to lift stations located in strategic areas around the City. Pumps lift the wastewater to a higher elevation where it can continue to flow by gravity to the Big Buffalo Wastewater Treatment Plant. There the wastewater is treated and discharged into Deep River near Cumnock.



Deep River

Treatment Process

The Big Buffalo Wastewater Treatment Plant is an advanced treatment facility with a permitted capacity of 6.8 million gallons per day. Physical, biological, and chemical processes at the plant treat wastewater before it is released into the environment. First, it passes through a bar screen and then through a grit chamber where debris is removed prior to reaching the influent pumps that pump it to the aeration basins.

Microorganisms in the aeration basin are used to convert organic matter to a solid residue. The aeration basins discharge the wastewater to the clarifiers where solids are broken down further. Clear water in the clarifiers then travels to the filters. The wastewater is disinfected by a chlorination process and safely dechlorinated prior to being discharged through an outfall pipe into the Deep River.

Wastewater System Performance 2006-2007

CITY OF SANFORD N.C. CHARTERED 1875

ANNUAL WASTEWATER REPORT

City of Sanford Public Works Center
601 N. Fifth Street, Sanford, NC 27330
Fedd Walker
Operator in Responsible Charge, Collection
Phone (919) 775-8336
Permit #NC0024147/#WQCS00047

Big Buffalo Wastewater Treatment Plant
5327 Iron Furnace Road, Sanford, NC 27330
Jay Grainger
Operator in Responsible Charge,
Wastewater Treatment Plant
Phone (919) 775-8305
Permit #NC0024147/#WQ0000543

IMPORTANT PHONE NUMBERS

Public Works Service Center.....(919)775-8351
Water Billing Department.....(919)775-8216
Police Emergencies.....**911**
Fire Emergencies.....**911**
Police Dept.(non-emergencies)...(919)775-8266
Fire Dept. (non-emergencies).....(919)775-8313

We certify that this report is accurate to the best of our knowledge. It is being mailed to The NC Division of Water Quality and to all City of Sanford wastewater customers. The report is also available at City Hall, the Public Works Center, and the Wastewater Treatment Plant.