

YOU CAN HELP!

Please follow these guidelines:

- Collect fat, oils, and grease in a container and dispose of it in the garbage.
- Place personal hygiene products and diapers in a waste-basket. Do not flush plastics.
- Place food scraps in the trash or start a compost area. Use the garbage disposal as little as possible.
- Don't pour hazardous materials, such as pesticides, paint, and herbicides down the drain.
- 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.

Sewer Collection System Activities

The City of Sanford's Sewer Construction and Maintenance Department performs routine and preventative maintenance on the collection system daily and are on call for any problems with the system twenty four hours a day. This department consists of twelve highly trained and certified employees.

Routine maintenance:

- Responded to 245 sewer backup or stoppage investigations
- Jetted 55.62 miles of sewer main
- Staff mowed 15.93 miles of right-of-way, inspected 53 miles of priority (aerial) lines, and collection lines.
- Videod .67 miles of line.

FOG PROGRAM

The City of Sanford's "Fats, Oils, and Grease Program" has been in effect for ten years. The purpose of the program is to prevent the accumulation of fats, oils, and grease in the sanitary sewer system. We have 171 commercial facilities with 179 grease traps participating in the program. Our FOG coordinator inspected 120 grease traps this year and 1,017,056 gallons of grease-containing fluids were removed through routine maintenance.

Sanford did not experience any sewer overflows this year due to grease.

SEWER IMPROVEMENTS

The City continued its rehabilitation efforts by completing a number of projects that replaced manholes and sewer lines throughout the community totaling approximately half a million dollars.

City of Sanford Public Works Center

601 N. Fifth Street, Sanford, NC 27330

Gerald Cox

Operator in Responsible Charge, Collection
Phone (919) 777-1210

Permit #NC0024147/#WQCS00047

Big Buffalo Wastewater Reclamation Facility

5327 Iron Furnace Road, Sanford, NC 27330

Scott Siletsky

Operator in Responsible Charge,
Wastewater Reclamation Facility
Phone (919) 775-8305

Permit #NC0024147/#WQ0000543

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 7 P.M. at City Hall, 225 East Weatherspoon Street, Sanford, NC.

Information on the Internet:

Visit the City of Sanford's Web site to view and print this report at (www.sanfordnc.net) and for information on all city departments and departmental contacts. Also, the North Carolina Department of Environment and Natural Resources has a Web site (www.denr.state.nc.us) that provides complete and current information on water and wastewater issues in North Carolina.

City of Sanford Public Access Channel

Please view the City of Sanford's Public Access Channel on Charter Cablevision Channel 11 for coverage of Council meetings, sewer and water construction activities, street closings, community announcements, and other information relevant to City activities.

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) 777-1116.

*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 Reclamation Facility.*

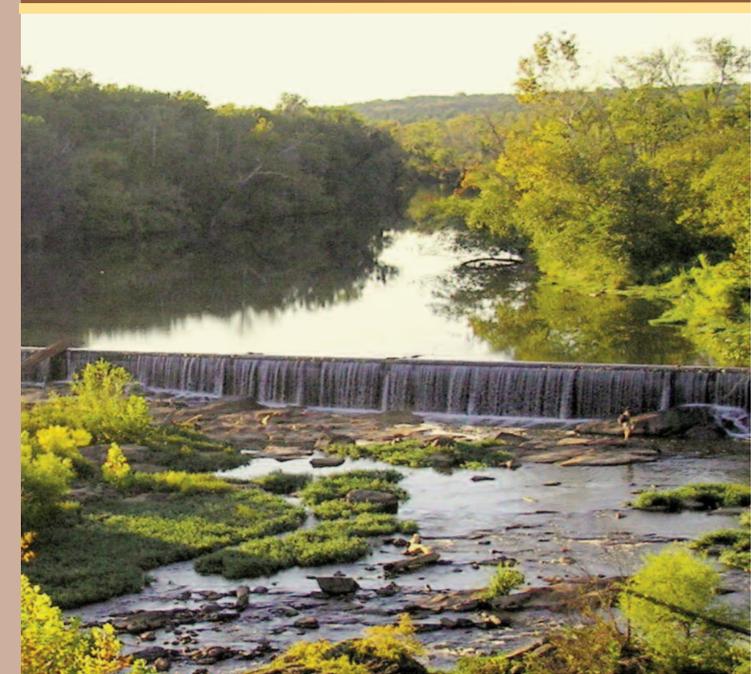


2015-2016

ANNUAL

WASTEWATER REPORT

Wastewater System Performance



The City of Sanford's Annual Wastewater Treatment and Collection System Report

The City of Sanford is pleased to provide an overview detailing the operation, maintenance and performance of your municipal Water Reclamation Facility and Wastewater Collection System. This report gives us the opportunity to keep you informed and to meet our State compliance requirements.

Big Buffalo Wastewater Reclamation Facility

Treatment Process

Sanford's Big Buffalo Wastewater Reclamation Facility is an advanced treatment facility with a permitted capacity of 12 million gallons per day. This past fiscal year we treated over 1.7 billion gallons of wastewater. This is an average of 4.7 million gallons a day. This facility treats waste from eighteen thousand residential customers, fifteen schools and fifteen industries in Sanford. Physical and biological processes at the plant treat wastewater before it is released into the environment.

The reclaimed water is treated by a Biological Nutrient Removal process and safely disinfected further by Ultraviolet Lights prior to being discharged through an outfall pipe into the Deep River under the National Pollutant Discharge Elimination System permit (NPDES) number NC0024147.

Staffing

Critical plant equipment is monitored twenty-four hours a day by thirteen highly trained and certified employees at the Big Buffalo WRF. Employees are certified by the State of North Carolina for proficiency in plant operation, pump station maintenance, laboratory analysis, land application of biosolids, and pretreatment management. City employees are on duty twenty-four hours, seven days per week monitoring all system activity from the plant control room.

Biosolids

The nutrient-rich organic materials resulting from the treatment of domestic sewage at the Big buffalo WRF are called biosolids. Recycling these biosolids is the most environmentally friendly and cost effective method for the City to manage its biosolids. These solids are converted to a dense residue, removed, and reused on permitted land. The City's Land Application program has 58 fields permitted for use, for a total of 1,069.96 acres available for the application of biosolids. This fiscal year we applied 594.16 dry tons to 6 fields which equals 387.7 acres.

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. 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.

Pretreatment Program

Pretreatment programs help water reclamation facilities maintain the requirements of water quality before it is returned to the river basin. Big Buffalo WWRf is designed to handle domestic waste. Therefore, industries that produce certain amounts of non domestic waste are required to have a permit for disposal. We currently have ten industries in the program. The City issues permits to these industries specifying the parameters of concern and flow limitations. Industrial discharges are monitored to specify the maximum amounts of pollutants that may be discharged into the facility. Staff conducts routine monitoring and inspections of these industries to ensure compliance.

Facility Laboratory Analysis

Sanford's reclamation facility maintains a certified analytical laboratory approved by the State of North Carolina and the EPA. Our lab is certified to perform environmental analysis and report monitoring data to the Division of Water Quality for compliance with NPDES effluent and pretreatment regulations. Technicians observe wastewater discharge at local industries in order to monitor compliance, and laboratory personnel monitor the effluent daily by testing twenty wastewater parameters. All data reported this year was in compliance with the NPDES permit.

WASTEWATER SPILLS JULY 1, 2015 - JUNE 30, 2016						
Date	Duration	Cause	Gal. Spilled	Gal. to Stream	Location	
10/22/15	1 hr	Vandalism	250	250	1109 3rd Sreet	
11/2/15	2 hrs 15 min	Heavy Rain, Long period of rain	135	135	Third and Goldsboro St	
11/2/15	2 hrs	Heavy Rain, Long period of rain	60	60	Second Street & Sycamore	
11/2/15	2 hrs 35 min	Heavy Rain, Long period of rain	155	155	Jenkins and Maple Ave.	
11/2/15	4 hrs 45 min	Heavy Rain, Long period of rain	855	855	Hickory and Market	
11/2/15	1 hr	Heavy Rain, Long period of rain	60	60	616 Sunset Dr	
11/2/15	2 hrs 20 min	Heavy Rain, Long period of rain	140	140	522 Sunset Dr	
11/2/15	6 hrs 45 min	Heavy Rain, Long period of rain	2,025	2,025	305 Rose Street	
12/23/15	4 hrs 20 min	Inflow and Infiltration	780	780	707 Third St. - MH's 2110, 2142	
12/23/15	2 hrs	Inflow and Infiltration	600	600	305 Rose Street	
12/23/15	1 hr 40 min	Inflow and Infiltration	300	300	Third and Goldsboro St	
12/23/15	4 hrs 20 min	Inflow and Infiltration	2,460	2,460	2002 N. Shoreline - MH's 1380,1415,1467	
12/30/15	13 hrs 48 min	Inflow and Infiltration	4,140	4,140	Shoreline and Knollwood-MH 1308	
12/30/15	51 min	Inflow and Infiltration	102	102	Thirds Street and Goldsboro St	
12/30/15	45 min	Inflow and Infiltration	90	90	305 Rose Street	
12/31/15	15 hrs	Inflow and Infiltration	4,500	4,500	Shoreline and Knollwood-MH 1308	
12/31/15	7 hrs	Inflow and Infiltration	2,100	2,100	Third Street and Goldsboro St	
2/3/16	16 hrs 55 min	Severe Natural Condition	3,060	3,060	Jenkins and Maple Ave.	
2/3/16	10 hrs 10 min	Severe Natural Condition	1,020	1,020	Hickory and Market	
2/3/16	11 hrs 5 min	Severe Natural Condition	3,325	3,325	707 Third Street - Clean out	
5/8/16	1 hr	Roots	180	180	605 Lakeside Drive	
6/29/16	3 hrs	Severe Natural Condition	900	900	305 East Rose St.	
6/29/16	2 hrs 30 min	Severe Natural Condition	450	450	522 Sunset Dr	
6/29/16	3 hrs 30 min	Severe Natural Condition	720	720	Maple and Jenkins St, 2nd and Sycamore	
6/30/16	1 hr	Severe Natural Condition	180	180	Intersection Market and Hickory St	
Total Spilled			28,587	28,587		

Fiscal Year	Total Spills	GAL. TO STREAM
04/05	37	483,065
05/06	42	300,635
06/07	30	331,835
07/08	19	182,520
08/09	35	171,203
09/10	19	6,775
10/11	1	200
11/12	1	0
12/13	10	6,900
13/14	19	15,120
14/15	1	90
15/16	29	28,587

Notes *Spill is not reportable to State if 1,000 gallons or less & does not reach surface waters.
 **Spill is reportable to State if over 1,000 gallons, or if any amount reaches surface waters.
 ***Annual Wastewater Report only requires spills over 1,000 gallons reaching surface waters to be listed.

COLLECTION SYSTEM PERFORMANCE

Sanitary Sewer Overflow (SSO)

On a daily basis approximately 4 million gallons of wastewater moves through the collection system from bathtubs, showers, kitchen sinks, toilets, washing machines, and dishwashers from homes and businesses to the Big Buffalo WWRf.

Sanford has a wastewater collection system with a total of 260 miles of gravity wastewater lines and pressurized force mains ranging in diameter from six inches to thirty-six inches. This system also encompasses nine sewer lift stations and 4,700 manholes.

Sanitary sewer overflows occur when wastewater escapes from the sanitary sewer system to the ground.

Sanitary sewer overflow reasons...

- Heavy rainfall accumulation
- Pump station malfunction
- Tree roots
- Debris in lines
- Structural damage
- Vandalism
- Grease accumulation
- Electrical failures