

CITY OF ROXBORO

ANNUAL WASTEWATER COLLECTION AND TREATMENT SYSTEM REPORT

July 1, 2006-June 30, 2007

The City of Roxboro is pleased to provide this annual report on the operation of its Wastewater Treatment Plant and Collection System.

Roxboro Wastewater Treatment Plant

Your Wastewater Treatment Plant is designed to treat 5 million gallons per day. For the fiscal year 2006-2007 the average daily flow was 2.19 mgd. The facility provides biochemical oxygen demand (BOD), suspended solids removal and converts organic and inorganic nitrogen to the nitrate form. The Roxboro WWTP is an advanced secondary treatment plant, consisting of preliminary treat-

ment followed by single stage nitrification activated sludge. Waste activated sludge/biosolids are further stabilized in two aerobic digesters. After digestion, waste activated sludge/biosolids are dewatered on approximately 6 acres of sludge drying lagoons. After air drying the sludge/biosolids meet class B requirements set forth by the North Carolina Division of

Water Quality and can be safely land applied to permitted land. The City of Roxboro is currently under contract with Synagro Inc. to land apply its sludge/biosolids.



Your Wastewater System

The Collection System, consist of over 100 miles of sewer lines, manholes, eleven lift stations and the Wastewater Treatment Plant. The Wastewater Treatment Plant has been in operation since 1965 and was last upgraded during the mid 1980's. Both the Collection System and the

Wastewater Treatment Plant are part of the City of Roxboro's Public Service's Department. As part of the Public Service's Department our goal is to provide better service to the citizens of Roxboro as well as customers outside the city limits, who are connected to the Treatment System.

Along with providing this service, we are constantly aware of and committed to protecting the environment.

The Wastewater Treatment Plant is located at 902 Cavell-Chub Lake Road and is regulated by the Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) permit # NC0021024. North Carolina Stormwater General Permit No. NCG110000. North Carolina Collection System Permit No. WQCS00048.

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THE CITY OF ROXBORO'S PUBLIC SERVICES DEPARTMENT IS COMMITTED TO PROVIDING THE CITIZENS OF ROXBORO WITH THE HIGHEST LEVEL OF SERVICE WHILE PROTECTING THE ENVIRONMENT.

COLLECTION SYSTEM PERFORMANCE

The City of Roxboro's Collection System Permit # WQCS00048 expired on 6/30/07. Application for renewal has been submitted and the city continues to operate its collection system based on the conditions listed in the expired permit.

Replacement of the sewer line from Marlowe's Creek along Depot St. to Foushee St. funded in the 2005-2006 budget has been completed. Collection System inflow and infiltration work in the amount of \$500,000 budgeted for 2006-2007

has begun in the Somerset area. KRG Utilities will be completing the work identified in an I & I study completed by Hydrastructures Inc.

The city was recently notified of a revised strategy to address sewer collection system issues by the North Carolina Division of Water Quality. Beginning June 1, 2007 any reportable sanitary sewer (SSO) overflow will be issued a Notice of Violation (NOV). On Dec. 1, 2007 civil penalties will be issued for SSO's based on volume, volume reaching surface waters, duration, gravity, impacts to pub-

lic health and fish kills or recreational area closures. The division will consider the permittee's history of spills, the cost of rectifying the damage, whether the spill was intentional and money saved by non-compliance. City Collection System staff take sanitary sewer overflows very seriously with a goal of protecting the environment and providing you the customer with continuous service. You can help too, by reading and applying the information outlined on page 3 of this newsletter in your home.

WASTEWATER TREATMENT PLANT PERFORMANCE



POLLUTION PREVENTION AT HOME

Fats, Oils and Grease (FOG) Pollution Prevention at Home

Not everything you may pour down the drain will make it to the Wastewater Treatment Plant. Fats, Oils and Grease, also known as FOG, can stick to your home's sewer pipe eventually blocking the pipe and causing a household sewage backup as well as overflows and high costs to the home owner for clean up and restoration work.

Blockages in your sewer may also cause raw sewage to discharge onto your property, your neighbor's property or into your home. This can be a serious health hazard to the occupants of the home and may be a very costly problem. Currently, within the City of Roxboro and Person County, the occurrence of grease build-up within our sewers has become an increasingly costly and time consuming problem.

Where does the household grease come from?

Most people know that household grease is a by-product of cooking. Grease is generated from such things as:

- Meats
- Dairy products
- Sauces
- Butter/margarine
- Cooking oils and greases
- Shortening/lard

- Food scraps

Most of the grease is disposed of down the sink drain during food preparation and after meal clean up. The grease enters the sewer pipes and sticks to the sides and roof of the pipes. Over time the grease builds up to a point in which the pipe is entirely blocked off resulting in sewage backups and overflows onto your property or into your home.

If you have garbage disposal you should also know they do not eliminate grease from entering and accumulating in the sewers. These units only break up and introduce smaller particles of waste material into the sewer system. Likewise, commercial additives and detergents that claim they dissolve grease may only pass FOG further down the system where it will cause problems in other areas of the sewer system.

There is an increase operational and maintenance cost for the City, which causes higher sewer bills to customers.

What are the results of a sewer blockage from your home?

A sewer blockage caused by an accumulation of grease from your home may result in:

- Raw sewage overflowing into your home or a neighbor's home, over your property, your neighbor's properties, streets, local parks and into local water bodies.
- The cleanup of a sewage overflow can be expensive and unpleasant and often the cleanup must be paid by the owner.
- There is a potential for

contact with disease causing bacteria.

Tips To Reduce FOG:

- Never pour grease down the sink drains or toilets.
- Scrape grease and food scraps off your plates, utensils, pots, pans, food preparation area and cooking areas and place them in the garbage can or compost pile.
- Place a drain screen in your sink to catch food scraps and dispose of grease and food scraps in your green bin or compost pile.
- Use disposable paper towels to wipe up grease and dispose of the paper towel in the garbage can or compost pile.
- Be consumer wise when using a commercial cleaner or detergent which claims to dissolve grease as they may only transport the problem further down the sewer system.

Should you have any questions or comments, please direct inquiries to the Wastewater Treatment Plant at 599-8232.



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WHAT THE CITY IS DOING

- The Roxboro City Council approved the purchase of a Sewer Line Cleaning truck. This truck will be capable of rodding clogged sewer lines as well as vacuuming out sewer lift station wet wells. At \$170,000 this truck represents a substantial investment by the city in its efforts to reduce the number of sanitary sewer overflow's.
- A new influent bar screen is scheduled to be installed at the Wastewater Treatment Plant (WWTP) later this year. The new automatic screen will replace a manual bar screen that is currently being used.

