Proper use of the sanitary sewer system is important to the longevity of the service and infrastructure. Wastewater generally consists of used water from toilets, bathtubs, and sinks. Certain items can be detrimental to the collection system and wastewater treatment plant. Do not add the following to the sanitary sewer system:

- Fats, oils, and grease
- Clothes, rags, diapers
- Nuts, bolts, screws
- Gasoline, motor oil



#### **Our Way Forward**

Currituck County will be smoke testing the collection system by Spring 2019 to find sources of I&I. This common, non-toxic test will allow the County to identify problem areas in the system to repair or replace. Additional information will be sent out prior to testing. Residents should take this time to fix any known problems on their property that can contribute to l&l (e.g. broken plumbing, missing cleanout cap). Homeowners found with any deliberate source contributing to I&I may be fined.



#### By Currituck County Code of Ordinances, Section 13-139, draining stormwater or groundwater into the sanitary sewer system is prohibited. Fines for illegal connections can be up to \$1,000 per day per violation.

Currituck County encourages residents to use good judgment when using the sanitary sewer service and to share this information with your neighbors. Please contact the Currituck County Wastewater Department if there are any questions or concerns.



#### **Currituck County** Wastewater Department

Wastewater Superintendent

Glenn Vance (252) 232-6062 Glenn.Vance@CurrituckCountyNC.gov

#### **County Engineer**

Eric Weatherly, PE (252) 232-6035 Eric.Weatherly@CurrituckCountyNC.gov

# **OCEAN SANDS** SANITARY SEWER SERVICE INFORMATION

Wastewater Department 2018



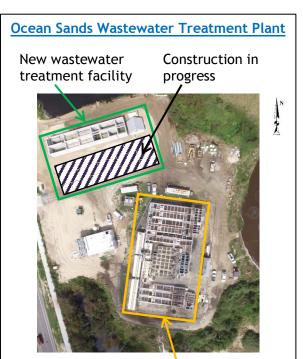
Example of sewer smoke testing

# Purpose

This brochure provides education to the public on the sanitary sewer service and the importance of proper usage in Ocean Sands.

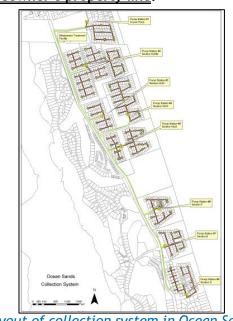
# Background

Currituck County provides sanitary sewer service for over 1,000 sewer connections in the Ocean Sands development. This service, established through the Ocean Sands Water and Sewer District, can treat 500,000 gallons per day of wastewater at the Ocean Sands Wastewater Treatment Plant. The treatment plant was constructed in 1976 and will be replaced by a newer facility that will treat 600,000 gallons per day by Summer 2019.



Old wastewater treatment facility (to be demolished)

Over 7 miles of underground piping and 8 lift stations make up the Ocean Sands wastewater collection system. Wastewater from homes flow through these pipes by gravity to a pump station. The pump station then pumps it to the wastewater treatment plant where it gets treated and disposed. Currituck County is responsible for the operation and maintenance of the collection system <u>up to the</u> homeowner's property line.



Layout of collection system in Ocean Sands

#### Issues

Flooding events have negative impacts on the Ocean Sands Wastewater Treatment Plant due to Inflow and Infiltration (I&I). This term describes the ways stormwater and groundwater enters into the sanitary sewer system.

**Inflow** is water that enters into the sanitary sewer system from **above-ground sources** (e.g. stormwater). Sources include:

- Manhole covers
- Roof drain & cleanout connections



Examples of Infow sources

Infiltration is water that enters into the sanitary sewer system from **below-ground** sources (e.g. groundwater). Sources include:

- Defective pipe joints
- Cracked or collapsed pipes



Example of Infiltration source - Inside view of water coming into sanitary sewer pipe

I&I is a problem because:

- It overloads the capacity of the wastewater treatment plant
- It reduces the effectiveness of the treatment process
- It causes raw sewage to backup into homes and streets



Sewage backup due to Inflow & Infiltration