

# Wastewater

Wastewater is water that has been used for various purposes around a community, including sewage, stormwater, and all other water used by residences, businesses, and industry. Wastewater requires treatment before it returns to lakes, rivers and streams to protect the health of the water body and community.

The Wastewater Treatment Department is responsible for ensuring that all wastewater collected through the Town's sewer system is treated and disposed of in a manner that complies with applicable discharge and non-discharge permits. The Wastewater Treatment Department is committed to ensuring that all wastewater is managed and processed in an efficient and environmentally friendly manner, while striving to offer a high level of customer service.



The Town of Plymouth uses a public sewer system (pump stations) and is treated in a single, centralized location. Sewers collect municipal wastewater from homes, businesses, and industries and deliver it to its treatment plant for processing. After wastewater is treated, it is reused or discharged to surface water or ground water. Every effort is made to ensure that the Town's wastewater treatment facilities meet or exceed all state and Federal water quality and land application standards.

It is extremely important to avoid clogging pump stations. When overly large solids or certain types of debris such as clothing, rags, trash, large solids, and some household products such as baby wipes, facial wipes, feminine hygiene products, etc., enter the system, the pumps are prone to clogging. Once clogged, the Town's wastewater station and sewer system can backup storm drains, causing sewage overflows.

Fats, oils, and grease can be a major problem for the Town of Plymouth's sewers. When poured down the drain, fats, oils, and grease harden inside sewer pipes, constricting wastewater flow

and clogging the pipes. Since fats, oils and grease are lighter than water, they tend to accumulate at the top and sides of sewer pipes and will build up until a blockage occurs. When a blockage happens, the sewer will back up or overflow, resulting in property and environmental damage. Restaurants and other food service establishments are a significant source of fats, oils, and grease because of the amount of grease they use in cooking and other food preparation work.

## **Help Prevent Sewer Back-ups and Overflows**

A sewage overflow is the release of untreated or partially treated sewage from the Town's sanitary sewer.

Because sewage overflows contain raw sewage they carry bacteria, viruses, parasitic organisms, intestinal worms, and inhaled molds and fungi. As a result, they may cause diseases ranging in severity from mild gastroenteritis (causing stomach cramps and diarrhea) to life-threatening ailments such as cholera, dysentery, infections, hepatitis, and severe gastroenteritis.

Sewage overflow can also damage property and the environment. When overflows occur, the affected area must be thoroughly cleaned and disinfected to reduce the risk of disease. A significant concern is that overflows can enter oceans, bays, estuaries, rivers, lakes, and streams that will affect water quality. When bodies of water cannot be used for shellfish harvesting, fishing, or recreation, and negatively impact tourism, the area experiences an economic loss as well. The cost of rehabilitation and other measures can also result in fines and an increase in rates.

Have you ever experienced a sewer back-up or overflow? Did you know that most sewer back-ups and overflows can be prevented with a progressive preventative maintenance program? The Town of Plymouth needs customer partners who are willing to assist in preventing sewer back-ups and overflows.

The Town of Plymouth's Sewer Use Ordinance requires that restaurants install and maintain a grease trap and/or interceptor to prevent grease from entering the sewer system. However, there are many more residential kitchens on the sewer system than there are restaurants. By reducing the amount of fats, oils and grease that enter the sewer system from homes, you can help protect the environment by preventing sewer back-ups and overflows.

Sanitary sewer systems are designed to handle three things: used water, human body waste, and toilet paper. You can help by doing these simple things that will help the Town protect water quality and maintain our sewer system.

### **Do Not:**

- Pour grease, fats, and oils from cooking down the drain
- Use the toilet as a wastebasket
- Use the sewer to dispose of food scraps

## Do:

- Collect grease in a container and dispose of it properly in the garbage
- Place food scraps in waste containers or garbage bags for disposal with solid waste or start a compost pile.
- Place a wastebasket in the bathroom to dispose of solid waste. Disposable diapers, and personal hygiene products do not belong in the sewer system.

**DON'T FEED THE GREASE GOBLIN !**  
The **GREASE GOBLIN** Causes Sewers To Overflow.



The **GREASE GOBLIN**  
Your drain's worst enemy!

<b>DO !</b>	<b>DO NOT !</b>
✓ Put oil and grease in collection containers	✗ Pour oil and grease down drains
✓ Remove oil and grease from kitchen utensils, equipment and food preparation areas with scrapers/towels/brooms	✗ Wash fryers/griddles, pots/pans, and plates with water until oil and grease are removed
✓ Keep grease out of wash water	✗ Use <b>hot</b> water to rinse grease off surfaces
✓ Place food scraps in collection containers	✗ Put food scraps down drains

For more information, contact N.C. Division of Environmental Assistance and Customer Service  
Toll Free: (877) 623-6748  
North Carolina Department of Environment and Natural Resources

they too! Most sewer back-ups occur between property owner is responsible for fixing the ding costly plumbing bills. When the blockage correct the problem.



## Sewer Blockage Formation



The start of a blocked pipe begins when grease and solids collect on the top and sides of the pipe interior.



The build-up increases over time when grease and other debris are washed down the drain.



Excessive accumulation will restrict the flow of wastewater and can result in a sanitary sewer overflow.



Obstructions (grease, roots, etc.) can severely restrict wastewater flow, causing backups and overflows.



Blockages can occur in all types of sewer lines, including those made of concrete, brick, or pipe.



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