

WHAT TO DO WHEN THE DRAINS  
**STOP** FLOWING?

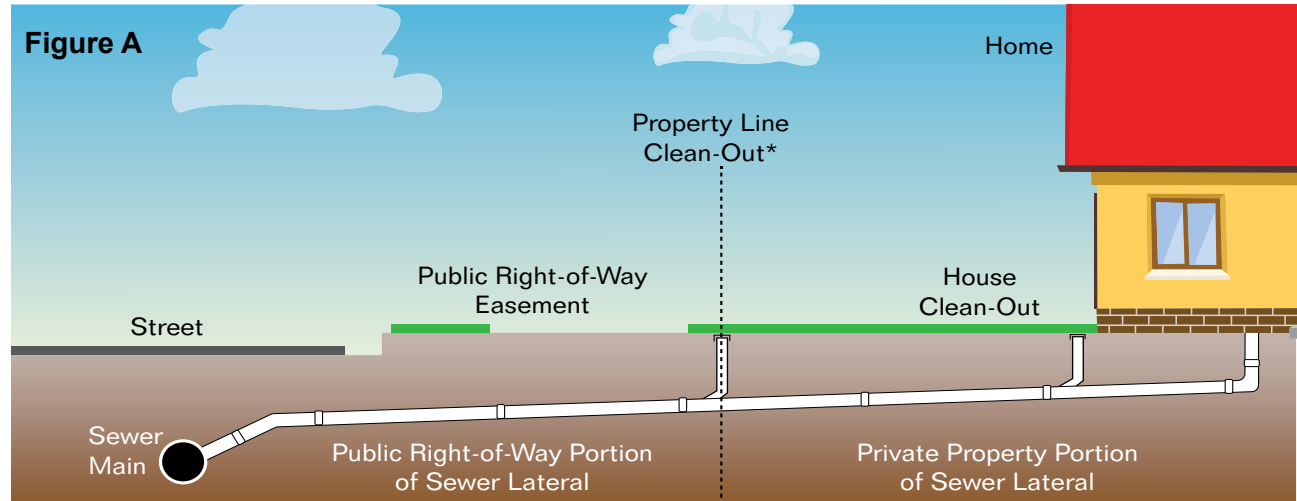
# WHAT TO DO WHEN THE DRAINS **STOP** FLOWING?

When wastewater (sewer) stops draining in your home, it is a very serious problem that can be considered a plumbing emergency. Since the water has no place to go, it starts to come back up into the household plumbing.

When wastewater is not draining properly, determine if the drainage problem is only affecting one fixture, or multiple fixtures. If it is only one fixture, then the blockage is probably related to the fixture itself, or the interior plumbing near the fixture. If you cannot clear the blockage yourself then you should seek a plumbing professional. If multiple drains in the home are not flowing properly, then you may have a blockage in the sewer drain that flows from the home to the City's sewer main. When you have a clogged sewer drain, you should not use any of the plumbing in the home until the stoppage is cleared.

## Who is responsible for clearing the sewer line blockage?

Responsibility for the maintenance of sewer piping from the home to the sewer main connection is shared between the property owner and the City of Wilson. The property owner is responsible for the piping from home to the property line cleanout. The City of Wilson maintains the sewer line beginning at the property line cleanout. Please see Figure A to understand your sewer pipe maintenance responsibilities.



\*Not standard on all properties

## Whom should I call first?

If you have multiple fixtures that are not draining properly, try to locate your property line cleanout (see Figure B). It is typically located a few feet from the edge of your property near the street. It should be flush with the ground, but may be covered by landscaping. Some homes may not have a property line cleanout. If you can locate the cleanout, try to remove the cover of the cleanout. If you feel any pressure, stop immediately and contact the City of Wilson. If you remove the cover and you see standing water in the pipe, or it is trying to flow up through the clean-out, contact the City of Wilson. If water appears to be flowing freely at this point, then the stoppage is prior to the property line cleanout and is the property owner's responsibility.



## What will the City do when called?

If you think there is a blockage after the property line cleanout, contact the City of Wilson's Unified Communications Center at (252) 399-2424. A service crew will be dispatched to inspect the sewer lines and they will clear any blockages that are within the City's area of responsibility at no cost to you. If they determine the blockage is prior to the property line cleanout, you will be notified so you can contact a plumbing professional.

## Collection System Maintenance and Projects Completed:

- 34.3 miles of pipe cleaned
- 18.2 miles of pipe inspected
- 4,764 feet of sewer taps inspected (approximately 160 taps)
- 5,989 feet of pipe replaced
- 46 sewer services replaced
- 15 grease blockages cleared from sewer mains



# MISSION STATEMENT

*“Protecting our Environment and Water Quality, through Teamwork and Excellent Service, now and for future generations.”*

## HOMINY CREEK WATER RECLAMATION FACILITY (WRF)

The WRF is located in Wilson at 3100 Stantonsburg Road. It is a state-of-the-art regional treatment plant that processes wastewater for approximately 20,300 metered customers and a service population of approximately 52,000. The City of Wilson also treats wastewater from the Town of Black Creek, the Town of Lucama, the Town of Saratoga, and the Town of Sims.

The term water reclamation defines the treatment or processing of wastewater to make it reusable with specific treatment reliability. Reclaimed water must also comply with very stringent water quality criteria. The term water reuse defines the use of treated wastewater for beneficial uses, such as agricultural irrigation and industrial cooling. The City of Wilson is committed to reusing reclaimed water in areas that drinking water is not needed such as irrigation water for Wedgewood Golf Course, the Burt Gillette Athletic Complex and industrial process/cooling water. The reclaimed water system is part of the City's water conservation plan.



This report provides information concerning the City of Wilson's wastewater collection and treatment system performance for July 1, 2023 to June 30, 2024 as required in the North Carolina Clean Water Act of 1999 (House Bill 1160). If you have any questions about the information contained in this report, or would like to learn more about your wastewater collection system or the Hominy Creek Water Reclamation Facility, please call (252) 399-2492.

### Table Definitions & Key

- < - less than
- > - greater than
- MGD (Million Gallons per Day)** - a unit of measurement for flow volume.
- NTU (Nephelometric Turbidity Units)** - a unit of measurement for turbidity. The lower the value, the clearer the water.
- PPM (Parts per Million)** - a unit of measurement. Parts per million compares to 1 minute in 2 years.
- PPB (Parts per Billion)** - a unit of measurement. Parts per billion compares to 1 minute in 2,000 years.
- SU (Standard Units)** - a unit of measurement for pH.
- Ammonia** - one of several forms of nitrogen that exist in aquatic environments. Excessive ammonia can cause toxic effects to aquatic life. Ammonia is measured in PPM.
- BOD (Biochemical Oxygen Demand)** - a required test that determines the amount of oxygen required by microorganisms to consume pollutants. BOD is measured in PPM.
- Chronic Toxicity** - a required test used to determine the potential effects of treated wastewater discharged into the receiving stream. The test ensures that treated wastewater discharged into surface waters does not negatively impact aquatic ecosystems.
- DO (Dissolved Oxygen)** - a required test used to determine the amount of oxygen that is present in water. It is a direct indicator of an aquatic resource's ability to support aquatic life. DO is measured in PPM.
- FC (Fecal Coliform)** - a required test used to determine the presence of disease causing organisms. FC are harmless but are used as indicators of other organisms (if FC are present others may be present). FC is measured as number of colonies per 100 milliliters of sample.
- pH** - a required test used to determine the hydrogen ion concentration in water. It is used to indicate basicity or acidity of a solution on a scale of 0 to 14, with pH 7 being neutral.
- TN (Total Nitrogen)** - a required test used to determine the sum of the different forms of nitrogen found in water, including nitrate, nitrite and ammonia. Nitrogen is a critical nutrient required for all life but elevated concentrations can result in excessive growth of algae and aquatic plants. TN is measured in PPM.
- TP (Total Phosphorus)** - a required test used to determine all the different forms of phosphorus found in water. Phosphorus is a critical nutrient required for all life but elevated concentrations can result in excessive growth of algae and aquatic plants. TP is measured in PPM.
- TRC (Total Residual Chlorine)** - a required test used to determine the total amount of remaining chlorine present in water. Chlorine is added to destroy or deactivate disease-producing microorganisms. Excess residual chlorine may cause adverse effects to aquatic life. TRC is measured in PPB.
- TSS (Total Suspended Solids)** - a required test that measures the amount of suspended solids in a sample. TSS are measured in parts PPM.
- Turbidity** - a required test that measures clarity of water. It is used to indicate water quality and filtration effectiveness. Turbidity is measured in NTU.

### NPDES PERMIT COMPLIANCE (NC0023906)

The WRF was compliant with all NPDES permit limits this year.

#### PLANT PERFORMANCE

Pollutant	Concentration	Pollutant	Concentration
<b>Ammonia Nitrogen</b>	<b>PPM</b>	<b>Flow</b>	<b>Million Gallons per Day (MGD)</b>
Average	0.05	Average	7.49
Permit Limit	1.0/3.0 (summer - monthly/weekly) 2.0/6.0 (winter - monthly/weekly)	Permit Limit	14.00 (monthly)
<b>Biochemical Oxygen Demand</b>	<b>PPM</b>	<b>pH</b>	<b>SU</b>
Average	0.6	Minimum - Maximum	6.4 - 7.9
Permit Limit	5.0/7.5 (summer - monthly/weekly) 10.0/15.0 (winter - monthly/weekly)	Permit Limit	Within 6.0 - 9.0 (daily)
<b>Chronic Toxicity</b>		<b>Total Nitrogen</b>	<b>Lbs/Yr</b>
Test Performed Quarterly	Passed all	Pounds Discharged	43,845
Permit Limit	Pass or Fail	Permit Limit	157,886
<b>Dissolved Oxygen</b>	<b>PPM</b>	<b>Total Phosphorus</b>	<b>PPM</b>
Average	9.2	Average	0.13
Permit Limit	> 7.0 (daily)	Permit Limit	2.00 (quarterly)
<b>Fecal Coliform</b>	<b>Colonies/100 milliliters (ml) of sample</b>	<b>Total Residual Chlorine</b>	<b>PPB</b>
Average	3	Average	0.16
Permit Limit	200/400 (monthly/weekly)	Permit Limit	18.0 (daily)
		<b>Total Suspended Solids</b>	<b>PPM</b>
		Average	0.1
		Permit Limit	30.0/45.0 (monthly/weekly)

### REUSE PERMIT COMPLIANCE (WQ0018709)

The WRF was compliant with all Reuse permit limits this year.

#### PLANT PERFORMANCE

Pollutant	Concentration	Pollutant	Concentration
<b>Ammonia Nitrogen</b>	<b>PPM</b>	<b>Total Suspended Solids</b>	<b>PPM</b>
Average	0.07	Average	<0.01
Permit Limit	4.0/6.0 (monthly/daily)	Permit Limit	5.0/10.0 (monthly/daily)
<b>Biochemical Oxygen Demand</b>	<b>PPM</b>	<b>Turbidity</b>	<b>NTU</b>
Average	2.3	Average	0.45
Permit Limit	10.0/15.0 (monthly/daily)	Permit Limit	10.0 (daily)
<b>Fecal Coliform</b>	<b>Colonies/100 milliliters (ml) of sample</b>		
Average	<1		
Permit Limit	14/25 (monthly/daily)		

## SANITARY SEWER OVERFLOWS (SSOs)

Sanitary sewer overflows (SSOs) occur when untreated sewage is discharged into the environment prior to reaching the sewer treatment facilities. These typically occur at manholes, pump stations, or broken sewer pipes. Infiltration/inflow (I/I) is unwanted water that enters the sewer collection system through deteriorating older pipes, leaking manholes, illegal connections such as roof drains, etc. During heavy rains, pipes can become overloaded from I/I and cause SSOs. Pipe stoppages caused by fats, oils and grease can also lead to SSOs. Replacing and rehabilitating these lines and manholes reduces I/I into the sanitary sewer system, thus protecting the public health, improving treatment plant efficiency and reducing system maintenance. Generators provide emergency back-up power for pump stations and help prevent SSOs.



During fiscal year 2023-2024, the City of Wilson experienced fifteen (15) reportable SSOs and one (1) reportable discharge of reuse water. The WRF treated 2.9 billion gallons of wastewater during this period.

### July 17, 2023

701 Christman Street SW  
**Total:** 140 gallons  
**Cause:** Pipe blockage due to grease

### August 6, 2023

601 Sunnyside Lane W  
**Total:** 14,400 gallons  
**Cause:** Pipe blockage due to grease and debris

### August 29, 2023

4508 Country Club Drive N  
**Total:** 2,000 gallons  
**Cause:** Pipe failure

### September 27, 2023

1305 Westwood Avenue W  
**Total:** 500 gallons  
**Cause:** Pipe blockage due to grease

### October 20, 2023

Intersection of Blakewood Street E & Fikewood Street E  
**Total:** 300 gallons  
**Cause:** Pipe blockage due to grease

### November 13, 2023

2007 Black Creek Road SE  
**Total:** 300 gallons  
**Cause:** Pipe blockage due to roots

### November 21, 2023

2301 Stantonsburg Road SE  
**Total:** 450 gallons  
**Cause:** Pipe blockage due to debris

### November 22, 2023

500 Dale Street SW  
**Total:** 100 gallons  
**Cause:** Pipe blockage due to grease

### December 18, 2023

622 New Street S  
**Total:** 200 gallons  
**Cause:** Pipe blockage due to debris

### February 6, 2024

2311 Wilco Boulevard S  
**Total:** 600 gallons  
**Cause:** Pipe blockage due to grease

### March 2, 2024

601 Dewey Street W  
**Total:** 500 gallons  
**Cause:** Pipe blockage due to grease

### March 7, 2024

2658 Tilghman Road N  
**Total:** 48,000 gallons  
**Cause:** Inflow & infiltration during severe rain event

### March 28, 2024

2658 Tilghman Road N  
**Total:** 29,100 gallons  
**Cause:** Inflow & infiltration during severe rain event

### March 30, 2024

2106 Tilghman Road N  
**Total:** 800 gallons  
**Cause:** Pipe blockage due to grease

### June 19, 2024

1500 U.S. Hwy 301 N  
**Total:** 51,300 gallons (Reuse Water)  
**Cause:** Pipe failure

### June 26, 2024

606 Trinity Drive W  
**Total:** 600 gallons  
**Cause:** Pipe blockage due to grease



Customers who observe a sanitary sewer overflow should report these as emergencies to the City of Wilson's Unified Communications Center at (252) 399-2424.

Cientes que observan un desbordamiento del drenaje sanitario, deben reportar estas situaciones de emergencia al centro de comunicaciones unificadas de la Ciudad de Wilson, al telefono (252) 399-2424.

## WHAT THE CUSTOMER CAN DO TO HELP

In order to help the City of Wilson continue a high standard of water quality and protection of the environment, please follow these simple steps:

**DO NOT use the toilet as a wastebasket** – place a wastebasket in each bathroom for the disposal of solid waste, disposable diapers, condoms, and personal hygiene products that DO NOT belong in the sewer system.

**DO NOT use the sink to dispose of food scraps** – place food scraps in the garbage for disposal with solid wastes, or better yet, start a compost pile.

## STOP THE CLOG!

The majority of sewer backups and overflows caused by fats, oils, and grease (FOG) originate in residential areas. You can help prevent clogs by learning about FOG and how to dispose of it. By following three simple steps, you can make sure your pipes keep flowing properly. *What should you do? It's easy!*



### 1. CAN IT!

Once cooled, pour leftover oils and grease into a sturdy container, like an empty coffee can or glass jar.



### 2. SCRAPE IT!

Before washing, scrape out fats, oils and grease residuals from pots, pans and dishes.



### 3. TRASH IT!

Put fatty and greasy food scraps in the garbage, not the drain.



## DO NOT FLUSH!



Flushing paper towels and other garbage down the toilet wastes water and can create sewer backups and SSOs. The related costs associated with these SSOs can be passed on to ratepayers. Even if the label reads "flushable", you are still **safer and more environmentally correct** to place the item in a trashcan.

The following is a partial list of items that should not be flushed:

- ✗ Baby wipes, diapers
- ✗ Candy and other food wrappers
- ✗ Aquarium gravel or kitty litter
- ✗ Underwear
- ✗ Cigarette butts
- ✗ Clothing labels
- ✗ Rubber items such as latex gloves
- ✗ Disposable toilet brushes
- ✗ Rags and towels
- ✗ Cleaning sponges
- ✗ Sanitary napkins
- ✗ Cotton swabs, medicated wipes (all brands)
- ✗ Toys
- ✗ Hair
- ✗ Syringes
- ✗ Plastic items

## PROTECTING THE NEUSE RIVER

The Lower Neuse River Basin Association, Inc. (LNBA) and the Neuse River Compliance Association, Inc. (NRCA) are 501(c)(3) non-profit corporations comprised of municipalities and industries located in the Neuse River Basin. The mission of these organizations is to monitor and preserve the waters of the Neuse River and Neuse River estuary through innovative and cost-effective wastewater treatment and reduction strategies. The NRCA group is composed of 28 wastewater treatment facilities located in the Neuse River Basin. NRCA was issued North Carolina's first basin-wide NPDES permit for nitrogen control January 1, 2003 and was reissued in 2008, 2013, and 2018. The group was given a mandate to reduce their Total Nitrogen discharge by 30%. Through the combined efforts of its entire membership, the NRCA exceeded the mandated 30% nitrogen reduction by removing over 58% of their nitrogen loading to the Neuse River estuary in 2023.

The City of Wilson is proud to be a charter member of both the LNBA and NRCA.

## FOR MORE WATER QUALITY INFORMATION

**City of Wilson – Water Resources**  
(252) 399-2492  
[www.wilsonnc.org/water-resources](http://www.wilsonnc.org/water-resources)

**U.S. Environmental Protection Agency**  
[www.epa.gov](http://www.epa.gov)

**N.C. Environmental Education**  
[www.eenorthcarolina.org](http://www.eenorthcarolina.org)

**Lower Neuse Basin Association**  
[www.lnba.net](http://www.lnba.net)

**American Rivers**  
[www.americanrivers.org](http://www.americanrivers.org)

**North Carolina Department of Environmental Quality**  
(919) 733-2321  
[www.deq.nc.gov](http://www.deq.nc.gov)

**U.S. Geological Survey**  
[www.usgs.gov](http://www.usgs.gov)

**Water's Worth It**  
[www.watersworthit.org](http://www.watersworthit.org)

**Sound Rivers**  
[www.soundrivers.org](http://www.soundrivers.org)

## AFFILIATIONS

The City of Wilson Water Reclamation Division is affiliated with the following organizations:

- Water Environment Federation
- American Water Works Association
- N.C. Water Quality Association
  - N.C. One Water
- N.C. Water Works Association
- N.C. Pretreatment Consortium
- N.C. Rural Water Association
- Lower Neuse Basin Association
- Neuse River Compliance Association