



# EDUCATION PACKET

Reclaimed Water Designer, Contractor, and User Training — Revised August 2023





# Training Outline

- Who Should Be Trained?
- What Is Reclaimed Water?
- What Are the Benefits of Reclaimed Water?
- What Can Reclaimed Water Be Used For?
- What Can't Reclaimed Water Be Used For?
- What Are Your Responsibilities?
- Reclaimed Water Bulk Fill Procedures
- Spill Prevention / Response
- Contact Information

# Who Should Be Trained?

- Designers of reclaimed water systems
- Installers of reclaimed water systems
- Anyone operating reclaimed water equipment
- Customers receiving reclaimed water
- Anyone hauling reclaimed water
- Anyone utilizing reclaimed water

Training is required prior to performing any duties associated with the distribution and use of reclaimed water.

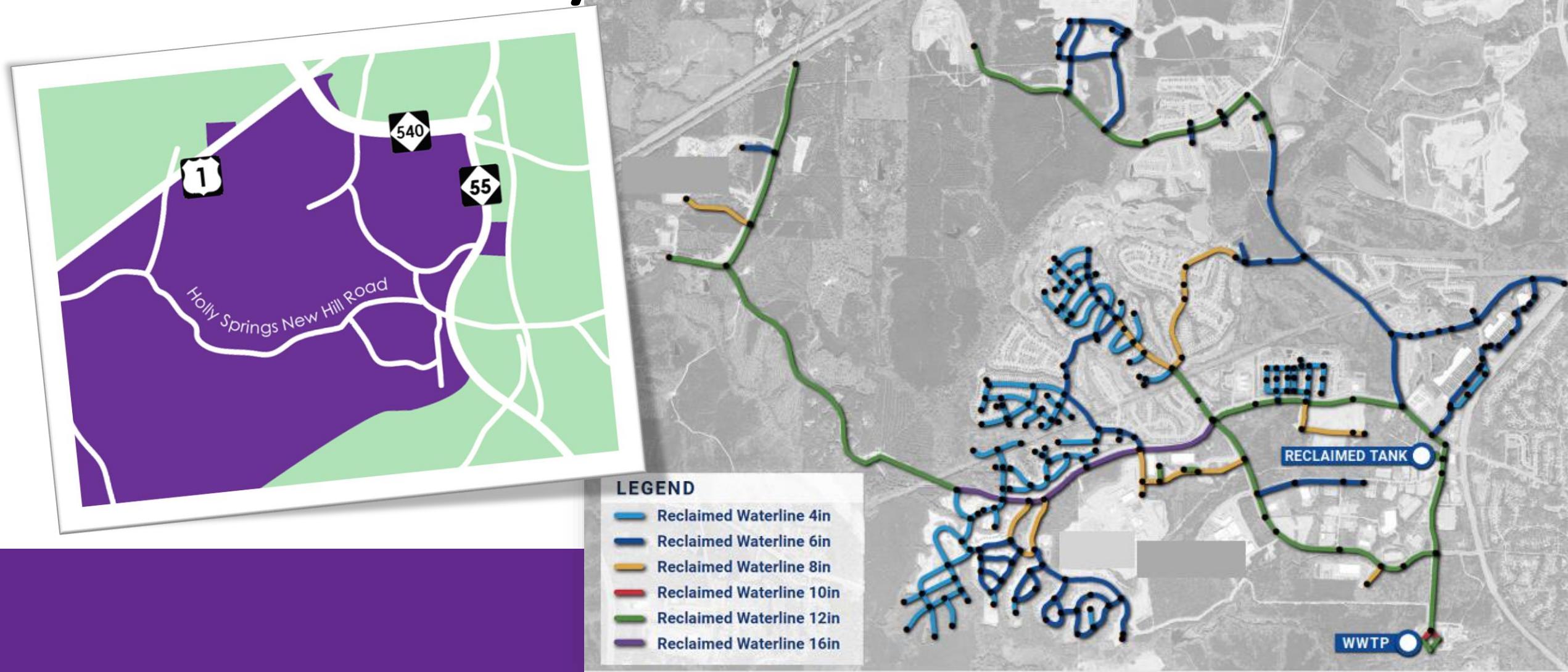


# What Is Reclaimed Water?

Reclaimed water is:

- Wastewater that has undergone advanced treatment to be “reused” for purposes other than drinking.
- Produced at the Town’s Utley Creek Water Reclamation Facility.
- Identified by the lavender or purple colored pipes, meter boxes, and other system components.
- A valuable resource.

# Reclaimed Water Service Area and Distribution System



# What Are the Benefits of Reclaimed Water?

Utilizing reclaimed water:

- Minimizes the amount of drinking water that must be produced.
- Is less expensive than drinking water.
- Delays the need for developing costly new water sources and building treatment plants.
- Reduces the amount of nutrients (Nitrogen and Phosphorus) discharged from the Water Reclamation Facility.
- Helps to protect the environment.



# What Can Reclaimed Water Be Used for?

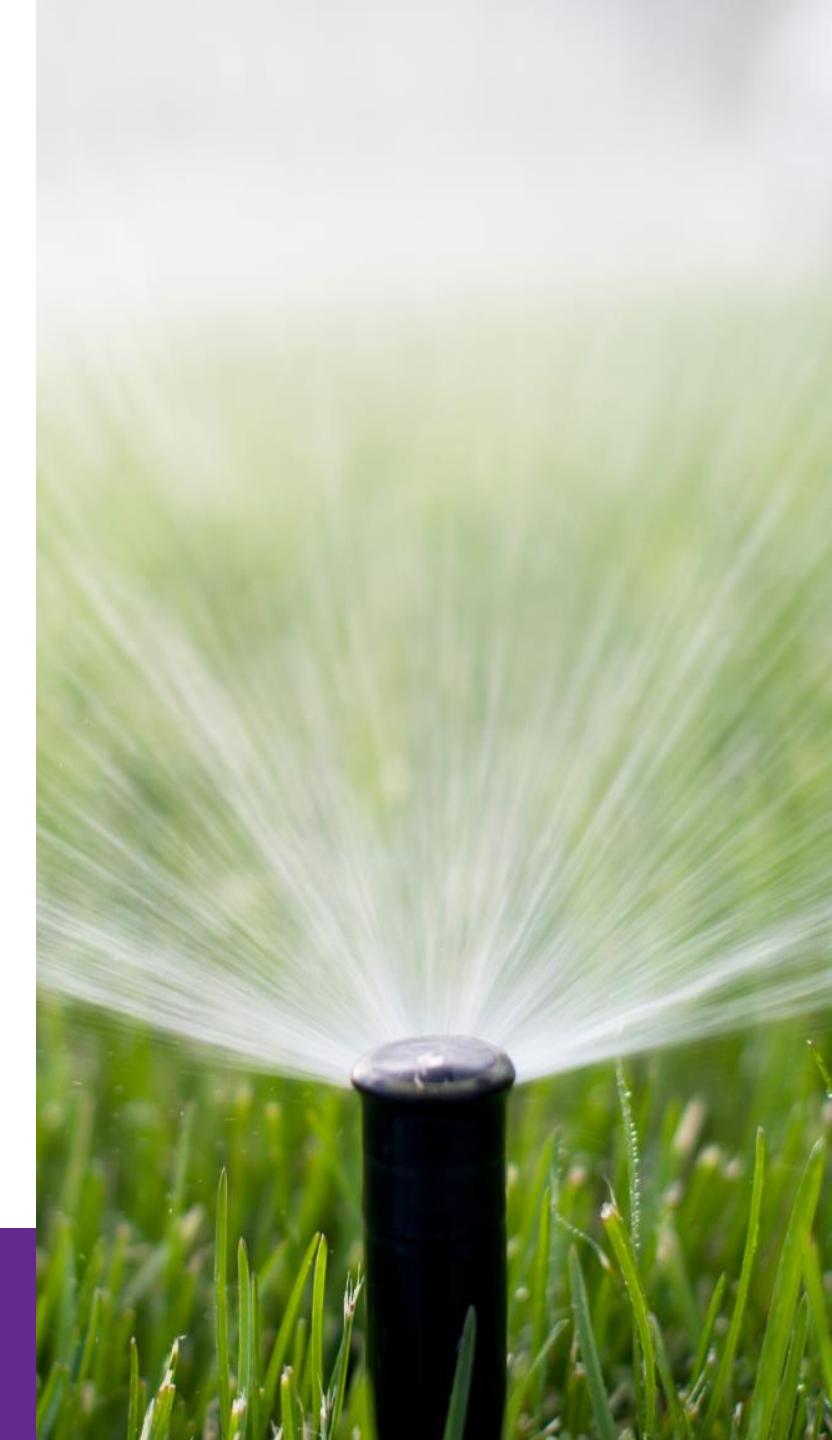


- Watering lawns, trees, or flower beds
- Decorative ponds and fountains with no connection to surface waters or storm drains
- Pesticide and fertilizer application
- Concrete mixing and cutting
- Make up water for brine slurry
- Soil compaction / dust suppression
- Street sweeping
- Sewer cleaning
- Vehicle washing, if recaptured or applied without spray

# Buffers and Controls with Reclaimed Water Use

With reclaimed water use, there shall be:

- NO surface runoff to any stream, street, storm drain, etc.
- NO irrigation within 100-feet of potable (drinking water) wells.
- NO irrigation within 10-feet of non-potable wells.
- NO exceedance of allowable irrigation rates.
- Stream and surface water buffers of 25-feet.



# Decorative Ponds and Fountains

- General Requirements:
  - Must drain to the sanitary sewer system
  - Cannot drain / overflow into storm sewer or natural waterways
  - Town inspection is required 48-hours in advance
- Signage must be purple Pantone 522 in color and must be maintained in permanent location
  - In accordance with State and Town standards
- All spills or discharges must be reported to the Town IMMEDIATELY



# What Can't Reclaimed Water Be Used for?



Reclaimed water should NOT be used for:

- ⊖ Irrigation during inclement weather (rain)
- ⊖ Watering food crops
- ⊖ Bathing pets or livestock
- ⊖ Washing vehicles (unless reclaimed water is captured or applied without spray)
- ⊖ Filling of swimming pools, hot tubs, spas or similar devices
- ⊖ Pressure washing
- ⊖ Recreational or household uses
- ⊖ Uses that violate buffer requirements or result in runoff
- ⊖ Usage not specifically authorized by the Town's permit
- ⊖ No hose bibs allowed

# What Can't Reclaimed Water Be Used for?

Reclaimed water should NOT be used for DRINKING!

Reclaimed water is NOT intended for consumption by humans or animals.





# Reclaimed Water User Responsibilities

Reclaimed users are responsible for:

- Compliance with all State and Town regulations.
- Using reclaimed water only for approved uses.
- Maintaining buffers around wells and streams.
- Using good personal hygiene practices.
- Maintaining reclaimed water systems per installer guidelines.
- Reporting all spills to the Utilities & Infrastructure Department at 919-577-3150.

# What Are the Customer's Responsibilities?

Make sure your Designer and / or Installer provides you with:

- Emergency contact information
- Map showing valve and head layout
- Identification of water supply and shut off instructions
- Design application rate (inches per hour)
- Operating and recommended maintenance schedules
- Instructions on adjusting the system
- Irrigation system Operation & Maintenance (O&M) manual



A close-up photograph of a black irrigation sprinkler head spraying a fine mist of water onto vibrant green grass. The spray pattern is circular and slightly blurred, indicating motion. The background is a soft-focus green field.

# What Are the Customer's Responsibilities?

Watch your irrigation system operate at least one a month.

- Look for:
  - Water ponding
  - Overspray or runoff
  - Leaks
- Test:
  - Rain sensor or moisture probe
  - Backflow preventer (by certified technician)
  - Controller battery back up
  - Control valves
- Winterize every fall:
  - Turn controller off
  - Drain all lines

PROMPTLY CORRECT ANY PROBLEMS YOU OBSERVE!



# What Are the Town's Responsibilities?

Town staff are responsible for program compliance and will:

- Provide reclaimed water meeting State standards
- Notify users of planned or emergency outages
- Report usage on a monthly basis
- Perform site inspections – right of entry included in permits
- Respond to reported spills
- Educate the public



# What are the Designer's Responsibilities?

- Compliance with:
  - North Carolina Administrative Code: 15A NCAC 02U Reclaimed Water
  - Town Engineering Design & Construction Standards, Code of Ordinances Chapter 16 – Public Enterprises, and relevant policies
- Following accepted Irrigation Design standards
- Submitting a soils study to determine precipitation rate
- General O&M for the customer
- No cross connections with any potable water
- No above ground hose bib connections

# Reclaimed Water Quality

Meeting and monitoring Water Quality parameters is the responsibility of the Town's Utley Creek Water Reclamation Facility Staff.

Water quality reports are available upon request.

Online turbidity and chlorine residual instruments provide 24/7 monitoring.

If reclaimed water is not in compliance with State requirements for distribution, delivery of reclaimed water will cease until back in compliance.



# Obtaining Reclaimed Water

- Permits are required to construct AND use reclaimed water.
- The Town of Holly Springs is a delegated authority by the State to issue permits for residential / small commercial irrigation and bulk users.
- North Carolina Department of Environmental Quality issues permits for reclaimed water main extensions, large commercial sites, and industrial users.

ROY COOPER  
Governor  
ELIZABETH S. BISER  
Secretary  
S. DANIEL SMITH  
Director



September 23, 2021

KENDRA D. PARRISH, PE – EXECUTIVE DIRECTOR OF UTILITIES AND INFRASTRUCTURE SERVICES  
TOWN OF HOLLY SPRINGS  
125 SOUTH MAIN STREET  
HOLLY SPRINGS, NORTH CAROLINA 27540

Subject: Permit No. WQ0032289  
Utley Creek WWTP Reclaimed  
Water System  
Reclaimed Water Local Program  
and Reclaimed Water  
Generation, Conjunctive  
Utilization, Bulk Distribution,  
and Distribution Systems  
Wake County

Dear Ms. Parrish:

In accordance with your permit minor modification and renewal request received June 29, 2021, we are forwarding herewith Permit No. WQ0032289 dated September 23, 2021, to the Town of Holly Springs for the continued operation of the subject reclaimed water generation, conjunctive utilization, bulk distribution, distribution system, and local program.

The following modifications to the subject permit are as follows: updated the size of the feed pumps in the liquid sodium hypochlorite disinfection system to 33.7 gallons per hour (GPH); added Twelve Oaks Conjunctive Utilization System (Permit No. WQ0039842) as an approved conjunctive reclaimed water offsite user.

This permit shall be effective from the date of issuance through February 29, 2028, shall void Permit No. WQ0032289 issued January 19, 2017, and shall be subject to the conditions and limitations therein. The Permittee shall submit a renewal application no later than September 2, 2027.

Please pay attention to the monitoring requirements listed Attachments A, B, and D for they may differ from the previous permit issuance. Failure to establish an adequate system for collecting and maintaining the required operational information shall result in future compliance problems.

The Division has removed the following permit conditions since the last permit issuance dated January 19, 2017:

- Old Condition III.4. – This condition has been incorporated in the new Condition III.3.
- Old Condition III.10. – This condition is included in the new Condition IV.9.
- Old Condition III.22. – This condition is included in the new Condition III.22.

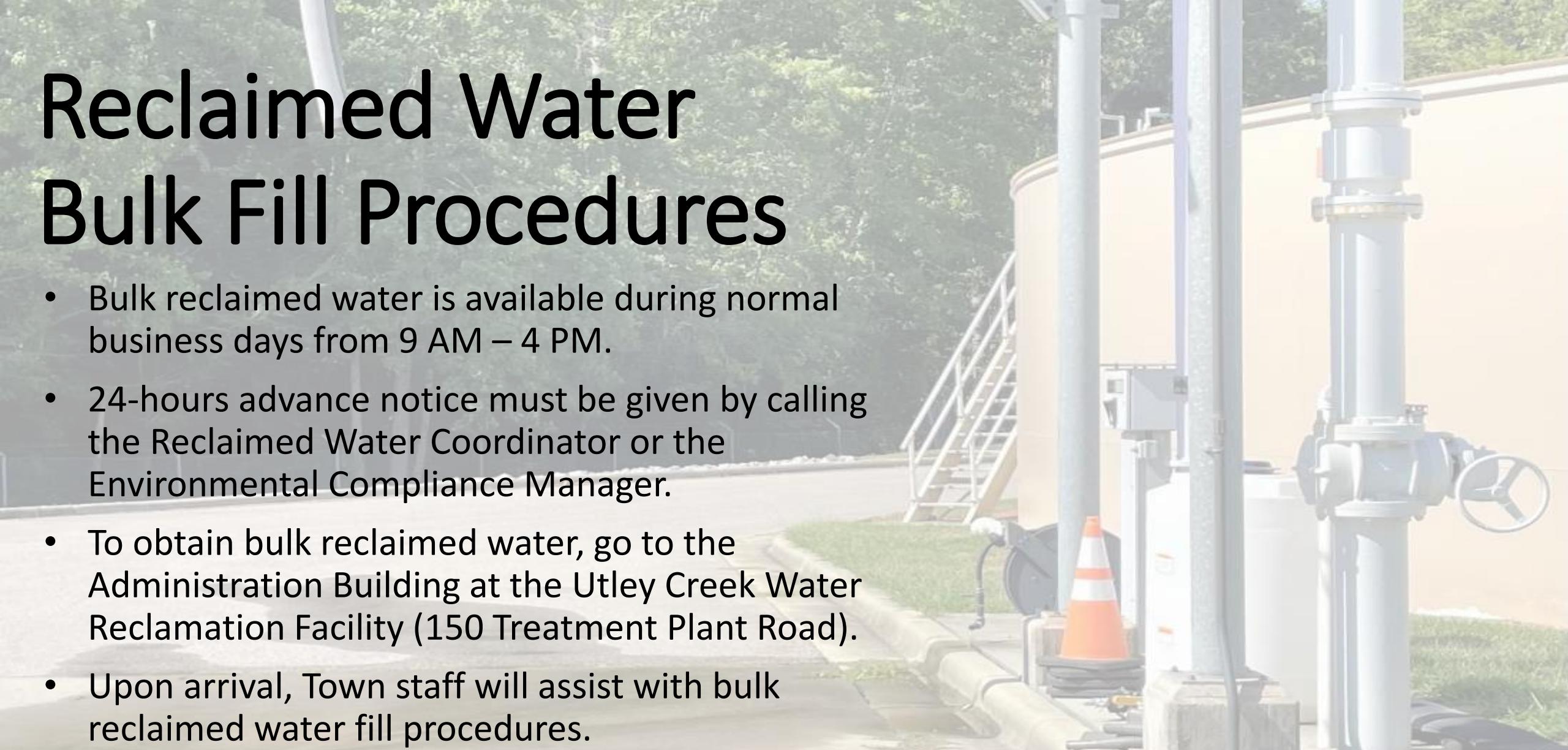


North Carolina Department of Environmental Quality | Division of Water Resources  
512 North Salisbury Street | 1617 Mail Service Center | Raleigh, North Carolina 27699-9607  
919.707.3000



# Reclaimed Water Bulk Fill Procedures

- Bulk reclaimed water is available during normal business days from 9 AM – 4 PM.
- 24-hours advance notice must be given by calling the Reclaimed Water Coordinator or the Environmental Compliance Manager.
- To obtain bulk reclaimed water, go to the Administration Building at the Utley Creek Water Reclamation Facility (150 Treatment Plant Road).
- Upon arrival, Town staff will assist with bulk reclaimed water fill procedures.



# Reclaimed Water Spill Prevention

- Users shall transport and apply reclaimed water to prevent spillage.
- Irrigation water shall be applied to not create runoff which could flow into adjacent areas not approved for reclaimed water application.
- If runoff / ponding occurs, confined to an approved area:
  - Cease application immediately.
  - Truck driver providing water shall remain at the site until all water infiltrates into the soil.
  - Truck driver to provide signage notifying public of reclaimed use.



# Reclaimed Water Spill Response

- If runoff / ponding leaves the application site, location not deemed acceptable for reclaimed water application:
  - Application shall be stopped immediately.
  - *Truck driver shall immediately notify the Town's Reclaimed Water Coordinator and/or the Environmental Compliance Manager to report the spill.*
  - If ponding occurs, appropriate signage shall be installed to warn the public of the presence of reclaimed water, until the spill is remedied.



# Reclaimed Water Spill Response

- If spill occurs, impermeable surface that could allow water to flow to a nearby storm drainage device such as a catch basin:
  - The storm drainage device shall be blocked to prevent flow from entering the device until the reclaimed water is removed or evaporates.
  - The truck driver shall remain at the site until the spill is remedied or Town personnel arrive in response to the spill notification.



# More Information

For additional information or concerns regarding the policies or details of the Reclaimed Water Program, please contact:

Reclaimed Water Coordinator

Aaron Baker  
919-218-7493

[Aaron.baker@hollyspringsnc.gov](mailto:Aaron.baker@hollyspringsnc.gov)

Utilities Manager – Environmental Compliance

Karen Foster  
919-524-2509

[Karen.foster@hollyspringsnc.gov](mailto:Karen.foster@hollyspringsnc.gov)

