



Information Sheet & Frequently Asked Questions

Proposed Northeast Forsyth Water Reclamation Facility

Water and Sewer Department: Mission and Awards

The mission of the Forsyth County Water & Sewer Department is to provide Forsyth County with the highest quality of water and sewer service through progressive leadership and environmental stewardship.

We fulfill our mission through several activities, including the management of drinking water production and water reclamation (wastewater treatment) facilities. The county currently manages one drinking water facility and seven water reclamation facilities. We also manage a water distribution system of approximately 1,066 miles and a wastewater collection system of approximately 590 miles, with 57 pump stations.

In 2018, Forsyth County was recognized by the Georgia Association of Water Professionals for achieving GOLD status for both the distribution and collection systems. The GOLD water distribution system award is given to utilities that operate in an outstanding manner and achieve a score of 95% or higher on their audit.

The GOLD water collection system is given to utilities that are operated and maintained in an environmentally conscientious and cost-effective manner, as determined by an audit of wastewater professionals.

The current plan for the proposed Northeast Forsyth Water Reclamation Facility

As early as 2002, Forsyth County has been master planning for a water reclamation facility in northeast Forsyth that will use advanced wastewater treatment processes. The purpose of this facility would be to allow development on public sewer, reducing the number of septic systems and private wastewater treatment facilities. Since early 2000, the Georgia Environmental Protection Division (GEPD) has been expressing to Forsyth County the need for us to reclaim and treat wastewater so it can be returned to streams and lakes.

The county is planning to design and construct a water reclamation facility that uses advanced wastewater treatment on this 99-acre site. The actual facility will require between 20-25 acres. We have not engineered the facility, nor do we have a set of plans. We expect the facility will be constructed in phases beginning in 2020, with an initial capacity of 2.5 million gallons per day (MGD), then expanding to 5.0 MGD and then to 10.0 MGD. The highly treated wastewater would then be released into Lake Lanier, somewhere in Chestatee Bay area, off Waldrip Road.

Before GEPD approves the discharge location, they will use computer models to ensure the highly treated reclaimed water will meet water quality standards for Lake Lanier. Although GEPD has not provided standards that the treated water must meet (or be cleaner than), we expect these will at least be equal to the "Lake Lanier Standards" that Gwinnett and Gainesville are currently required to meet. To meet these standards, we will design the plant for advanced wastewater treatment, using some of the best equipment and process available. These standards, which are

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likely the most stringent standards in Georgia, will call for the water to be cleaner than the standards currently in the permits at any other Forsyth County water reclamation facilities. In essence, cleaner than the raw water currently pulled from the lake for treatment and distribution.

It is highly likely we will also design and construct odor control processes to virtually eliminate offsite odors. We are planning to design and construct backup systems and equipment. Also, we are looking to construct a tank to hold any water that does not meet standards and then retreat this water before releasing it to the lake – a failsafe system.

The facility will be a modern design with an attractive appearance – although very little of the facility will be visible from nearby neighbors or public roads. We will include a landscaping plan in the construction work to again make this an attractive site and to assist in sound, odor and light screening. We will use the natural site topography and existing trees as much as possible to reduce the visibility from nearby homes.

As this will be our newest facility, we expect to provide tours of the facility to the public, as well as students from the nearby schools. As water and wastewater professionals, we are proud to provide this level of treatment for our community. This facility makes Forsyth County environmentally friendly and sustainable for our future generations – for our children and grandchildren to have a clean environment to enjoy.

Frequently Asked Questions (FAQs)

Why does the county need another water reclamation (wastewater treatment) facility?

The county creates a Comprehensive Plan and Sewer System Master Plan to help ensure we have the infrastructure to meet residents' needs now and in the future. Over the next 20 years, the county population is forecast to rise to over 325,000. These population projections are used to calculate wastewater flow estimates and, along with other factors, determine the necessary system improvements. A new facility in the northeast portion of the county is one of those identified system improvements.

<https://www.forsythco.com/Departments-Offices/Planning-Community-Development/Long-Range-Planning/Comprehensive-Plan-2017-2037>

<https://www.forsythco.com/Portals/0/Documents/WaterDept/Engineering%20Standards/Forsyth%20WW%20Master%20Plan.pdf>

Why can't new developments have septic tanks instead of sanitary sewer?

Forsyth County is part of the Metropolitan North Georgia Water Planning District (Metro District). The Metro District was created by the Georgia General Assembly in 2001 to establish policy, create plans and promote intergovernmental coordination of regional water issues. One of goals of this plan is to place new development on sanitary sewer instead of septic systems.

http://northgeorgiawater.org/wp-content/uploads/2018/03/Water-Resource-Management-Plan_REVISED.pdf

(See Section 5 – Integrated Water Resources Management Action Items, specifically Sub-sections 8 through 11.)

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Why can't new developments have septic tanks instead of sanitary sewer? (cont.)

Having a sanitary sewer collection system helps ensure that water sources in the Chattahoochee River basin are appropriately replenished. This is important for several reasons:

- Lake Lanier and the Chattahoochee River are drinking water sources for Forsyth County, Metro Atlanta and areas south of Atlanta.
- We expect that in the near future, water withdrawal permits will require the return of reclaimed water to Lake Lanier.
- To ensure we have water for future generations, Forsyth County is in the process of obtaining a withdrawal permit from the GEPD and the Army Corps of Engineers. This means that instead of purchasing raw (untreated/unfiltered) water through the city of Cumming, the county will be able to directly withdraw water from Lake Lanier.
- Ensuring the return of clean water to these sources is important to our residents, users of Lake Lanier and the economic development of the region, including Forsyth.

Why was this location selected? Why can't it be located in an industrial area?

- The property is an appropriate size for this use and will allow good setback and buffers for the facility.
- Most remaining property in industrial areas is not large enough to accommodate this facility.
- The property is central to the area that will be served and in close proximity to the anticipated discharge location.
- This is a good site for both the county and the Board of Education (proximity to the new school).
- The location provides the ability to return reclaimed water to Lake Lanier.

Why weren't surrounding residents notified earlier in the process?

All Forsyth County land acquisition discussions occur during Board of Commissioners' (B.O.C.) Executive Session. This allows the county to evaluate various parcels at their current market value, before land speculation drives up prices. The separate action, in public, occurs at a regular board meeting. The motion to purchase this parcel, pending a due diligence process, was voted on during the public portion of the September 11, 2018 B.O.C. Work Session.

We are currently conducting due diligence on the property, which will end in early January.

Will my property or other taxes go up to pay for this new facility?

No, there will not be any tax increase to pay for the new water reclamation facility. The funds will come from Water and Sewer capital improvement funds, which come from connection fees paid by new sanitary sewer customers.

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What about the water quality? Won't putting reclaimed water into Lake Lanier be bad for the lake and surrounding communities? Will you be putting the reclaimed water into Four Mile Creek?

Permits for water reclamation facilities outline in detail the quality that reclaimed water coming out of the facilities must meet – and Lake Lanier has some of the most stringent requirements for this reclaimed water. Bacteria, along with nutrients like phosphorus, nitrogen and other organics are strictly regulated, as these have been found to be a determinant of the quality of the reclaimed water and a measure of its suitability to be responsibly returned to the environment.

The proposed facility in northeast Forsyth would use proven, state-of-the-art technology to ensure that these standards are met. The reclaimed water that water reclamation facilities return to the lake is typically cleaner than the raw water that comes from the lake for drinking water.

Current discussions with GEPD include requiring Forsyth County to discharge the reclaimed water (highly treated wastewater) directly back into Lake Lanier, not into Four Mile Creek.

There was recently a sewage spill near the Fowler Wastewater Treatment Facility. Over 180,000 gallons spilled into Big Creek. How can you guarantee that won't happen at this facility?

- While spills like the one near the Fowler Wastewater Treatment Facility can occur, it is rare. And when they do, water utilities are required to report them to the public and media if the wastewater reaches a creek or stream.
- Regarding this most recent spill, we are required to monitor water quality in the creek for one year and provide reports to GEPD. If we identify unusual results, we take corrective action.
- Most gravity sewer lines are located in low lying areas, which is also where creeks and streams are located.
- The recent spill was caused by a rain/flood event. A large volume of rainwater entered the sanitary sewerage system, causing the overflow. While the total amount of water must be reported, the volume of wastewater that was mixed in with the rainwater was much less than 180,000 gallons. The rainwater significantly diluted the wastewater.
- While we cannot guarantee that a spill won't occur, we can guarantee that we take precautions to proactively prevent them.

How will the county manage noise and odors at the facility? Won't there be light pollution and extra traffic? I don't want to live next to an industrial-looking facility.

- Forsyth makes every effort to be a good neighbor at all our facilities. There are technologies and processes that are employed to reduce both noise and odors, and the county will ensure that these are utilized.
- We will use downcast lighting and other controls to minimize light pollution.
- Traffic may increase during construction (as with any development). Once the facility is completed and operational, we expect less than 10 employees per shift, as well as occasional deliveries and pickups.
- We must provide security for all our facilities, including water reclamation facilities. However, we will minimize the industrial look and feel by using landscaping, building design and other techniques.