



FISCAL YEAR 2023 | TOWN OF HILLSBOROUGH

Wastewater Quality Report

July 2022-June 2023

Published in August 2023

Hillsborough's wastewater collection and treatment work helps protect the Eno River, which is classified as nutrient sensitive. The town is dedicated to maintaining the high water quality of our river and has successfully reduced the total nitrogen discharged into the river by approximately 85% since 2004. This effort helps to ensure clean, safe water for all recreational uses.



Last fiscal year:

- Our wastewater plant treated 403 million gallons of wastewater.
- In our treated wastewater, we discharged into the Eno River 57.6% of the allowed total nitrogen and 56.7% of the allowed total phosphorus.

We are committed to providing you with efficient and quality service and with relevant information to help you understand our operations.

Inside are details about how wastewater is treated, how the sewer system is maintained, and what you can do to help prevent higher sewer rates.

This clarifying tank is part of the secondary wastewater treatment process. The mechanical arm removes settled and floating solids from the treated water in preparation of tertiary filtration.

Who Are We?

We are the dedicated water professionals working around the clock to ensure you have safe, clean drinking water when you need it and to properly return used water to the environment.



Utilities Director
Marie Strandwitz

Nearly every employee has earned one or more water-related certifications, requiring extensive training, testing and continuing education. Some are nationally recognized for excellence in our profession, having won many awards.

The longest tenured employee has been with the town for over 25 years! Others have moved over their 20+ years with the town from entry-level positions installing pipes to upper-level positions as supervisors. We have staff well beyond retirement eligibility and some just beginning their exciting careers in the municipal water sector.

These smiling faces care deeply about quality customer service and provide it to you through system upkeep and responsiveness at any time — often at the sacrifice of their family lives, holidays and spare time. Utility work is a dirty job with lots of hazards, emergencies, complexities, and headaches. It takes a special kind of employee to persevere in our field.

The town is proud to have this team and hope you will give them a hello and a thank you when you see them out and about.

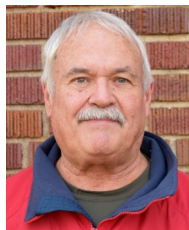


Chief Wastewater Plant Operator Shawn Maines performs monthly maintenance on a turbidity and suspended solids probe, one of 12 probes for various measurements at the plant. He started as a wastewater plant operator I for the town in 1998 and earned operator II and III titles over the years, with the operator III designation signifying he has obtained the highest level of certification in wastewater treatment.

Water Treatment Plant: Cleans and disinfects water from the Eno River and conducts 24-hour monitoring and evaluation with daily bacterial checks and a state-certified bacteriological laboratory.



Water Plant Superintendent
Nathan Cates



Operator in Responsible Charge
Sam Dunevant



Water Plant Operator III
Malcolm Hester



Water Plant Operator III
Lynn Reagan



Water Plant Operator I
Curtis Watkins



Plant Maintenance Mechanic I
Chad Wilson



Water Plant Operator Trainee
Jacob Hamlin

Who Are We?

Water Distribution and Wastewater Collection Division: Maintains water lines, storage tanks, fire hydrants, utility easements and other assets necessary to get clean water to you and sewer lines, pump stations and other assets vital to take wastewater from you.



Utility System
Superintendent
Joel Lashley



Utility
Infrastructure
Protection
Supervisor
Troy Miller



Utility System
Supervisor
Lacy Painter



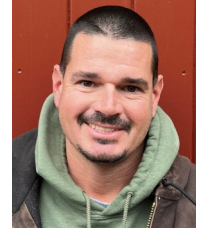
Utility
Maintenance
Supervisor
Al Robertson



Utility System
Mechanic III
Scott Smith



Utility System
Mechanic II
Thomas Smith



Utility System
Mechanic I
Brent Anderson



Utility System
Mechanic I
Graham Dodson



Utility System
Mechanic I
Tyler Parker



Utility System
Mechanic I
Keith Scarboro



Utility
Maintenance
Technician I
Seth Frazier



Utility
Maintenance
Technician I
Jorge Lopez



Utility
Maintenance
Technician I
Justin Parker



Utility
Maintenance
Technician I
Jacob Womble

Utilities Administration:

Performs technical and administrative tasks for overall operation of the water and sewer system.



Environmental
Engineering
Supervisor
Bryant Green



Civil Engineering
Technician Tyler

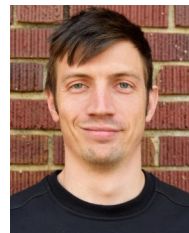


Utilities
Inspector
Lucas Cates

Wastewater Treatment Plant: Separates water from wastewater, disinfects the water and returns it to the environment.



Deputy Utilities
Director for
Water Treatment
Jeff Mahagan



Wastewater
Laboratory
Supervisor
Corwin Hess



Chief
Wastewater
Plant Operator
Shawn Maines



Wastewater
Plant Operator II
Jeff Davis



Wastewater
Plant Operator I
Joey Smith



Plant
Maintenance
Mechanic I
Dennis Apple



Plant
Maintenance
Mechanic I
David Labby

Definitions of Acronyms, Words and Phrases

Ammonia as N — Ammonia is a nutrient that contains nitrogen and hydrogen. “Ammonia as N” values are based only on the nitrogen component.

Average Daily Flow — The average of the daily flow of treated wastewater discharged into the Eno River.

Biochemical Oxygen Demand (BOD) — The amount of dissolved oxygen needed by aerobic biological organisms to break down organic material present in treated wastewater. The Hillsborough Wastewater Treatment Plant is allowed a maximum of 5 milligrams per liter.

Biosolids — Solid particles removed from wastewater.

Maximum Monthly Flow — An average of the daily flow per month of treated wastewater discharged into the Eno River. The Hillsborough Wastewater Treatment Plant is permitted to treat up to a maximum monthly flow of 3 million gallons of wastewater per day. This equates to approximately an annual average daily flow of 2.2 million gallons per day.

mg/L — One part per million or one milligram per liter

mgd — Million gallons per day

lb/yr — Pounds per year

Not Applicable (N/A) — Information not applicable

Sanitary Sewer Overflow — The discharge of untreated sewage from a sanitary sewer into the environment prior to reaching sewage treatment facilities.

Total Nitrogen — The sum of all nitrogen forms. Nitrogen is a nutrient that is harmful to aquatic life in large supplies. It promotes the growth of algae, which uses up oxygen in water when decomposing.

Total Phosphorus — The sum of all phosphorus forms. Phosphorus is a nutrient that is harmful to aquatic life in large supplies. It promotes the growth of algae, which uses up oxygen in water when decomposing.

Summary and Highlights

The Hillsborough Utilities Department strives to protect the environment through the proper collection and treatment of wastewater. We continually look for ways to improve our systems.

Highlights:

- Completed a project funded by the American Rescue Plan Act to protect metal surfaces in the plant’s clarifiers.
- We had four sanitary sewer overflows in Fiscal Year 2023. Two were caused by accumulated debris, one was due to a pipe failure, and another was due to a utility contractor installing fiber optic line and accidentally boring a hole through the sewer line.
- Maintenance crews cleaned 8.5 miles of sewer lines and inspected 1.9 miles of lines. The town has 84.06 miles of gravity sewer pipes.
- The maintenance crew received two full days of hands-on electrical training. This training helps them work more safely and also provides the skills and knowledge for troubleshooting electrical systems.
- The trailer carrying the town’s closed-circuit television camera for inspecting sewer lines serves as a public education tool. It features messaging in English and Spanish about keeping wipes and fats, oils and grease out of the sewer system.



While carrying a camera for sewer line inspections, this trailer also reminds the community to keep wipes and fats, oils and grease out of the sewer system.

- Each year since a risk assessment analysis was completed in Fiscal Year 2019, the town works to make improvements at the Wastewater Treatment Plant to reduce risk.

This past year, we designed and installed a new fall-protection platform to provide staff with significantly more safe entry and exit of the clarifiers. We also replaced about 800 feet of safety handrail. Additionally, a thick metal barrier was installed to hide the stored chlorine cylinders and protect them from small arms fire.

Wastewater Collection System

The town's underground water utilities is a maze of pipes, valves, and pumps. The distribution system distributes drinking water to customers. The collection system collects wastewater from customers and transports it to the wastewater plant for treatment and return into the Eno River.

Maintenance

Every year, staff is required by state mandate to hydraulically clean a minimum of 10% of the gravity sewer lines in the system.

The lines are inspected using a closed-circuit television camera that produces a film on DVD. The video is then used to locate where lines are failing or in need of maintenance or cleaning.

Additional staff duties include:

- Mowing and inspecting sewer easements twice per year.
- Maintaining and operating pumping stations.
- Responding to emergencies. Most emergency responses are for pumping station problems. Some are for blocked pipes due to improper disposal of grease, rags and trash.



COLLECTION TEAM: Wastewater collection employees are highly certified and continually evaluate and maintain the town's system of sewer manholes, pipes, and pump stations to ensure the system is operating properly and to prevent spills. See [Water Distribution and Wastewater Collection](#) page.

| Resource | Quantity | Explanation |
|-------------------------|--------------|---|
| Pipes | 100.82 miles | |
| Gravity Sewer | 84.06 miles* | Downward sloping pipe that transports wastewater by gravity |
| Force Main Sewer | 16.76 miles | Pressurized pipe that transports wastewater where gravity flow is not possible |
| Public Pumping Stations | 27 | Intermediate collection chamber that uses pumps to lift wastewater to a higher elevation. |
| Manholes | 2,163 | Sewer system access point |
| Employees | 5** | Responsible for day-to-day operations |

* Includes all pipes in town GIS system, which could report sewer laterals and privately owned mains.

** Additional employees provide related work, including sewer taps, point repairs and inspections.

MAINTAINING SEWER LINES:

Tree roots penetrated this sewer pipe (top photo). Such issues can be found in the town's annual inspection of a portion of the system's gravity lines. A jet hose (bottom photo) is used to clean and clear sewer pipes.



Pumping Stations

Gravity is the most cost-effective way to transport water. However, pumping stations are often necessary to keep wastewater flowing to the treatment plant. The stations are expensive to operate, and failures can result in sanitary sewer overflows and fines.

Unfortunately, Hillsborough has more pumping stations than a typical municipality due to its rolling terrain and likely because the infrastructure was preferred decades ago due to its low upfront costs. The town has been working to reduce pumping stations and has eliminated two since 2005. Eliminating these stations is costly initially as gravity sewers also must be constructed.

See [FAQ: Water and Sewer Rates](#) for more on pumping stations.

Wastewater Collection System Performance

Smoke testing of sewer pipes (below) helps find areas where rain or surface and ground water may be entering pipes.



A vacuum truck (above) is used to clean out a clogged pump station. Clogs from wipes and grease can be costly to clean up and can damage equipment.



Crews inspect manholes in the town's service areas. Manholes are raised in floodplains, like along Riverwalk.

Permit Information

| Permit Number | Operator in Responsible Charge | Contact |
|---------------|--|--------------|
| WQCS00077 | Utility System Superintendent Joel Lashley | 919-296-9651 |

Maintenance

| Maintenance subject | Amount completed | Explanation |
|---------------------|------------------|---|
| Pipes | 3.55 miles | Inspected with closed-circuit television camera |
| | 8.6 miles | Cleaned with high pressure jet wash |
| Public Sewer | 233.4 feet | Smoke tested |
| | 0.0 miles | Relined |
| Manholes | 714 | Inspected |
| | 11 | Relined |

Sanitary Sewer Overflows

| Date | Location | Spill volume (Gallons) | Volume reaching surface water (Gallons) | Cause |
|-----------|------------------------------------|------------------------|---|---|
| 8/24/2022 | North Churton Street | 300 | Unknown | Debris in line |
| 4/10/2023 | Shelton Court | 5,000 | 2,000 | Pipe failure |
| 5/3/2023 | North Cameron Street | 200 | None | Debris in line |
| 5/23/2023 | Scarlett Mountain Road and N.C. 86 | 1,500 | None | Line damaged by construction activities |

Wastewater Treatment Plant

The Wastewater Treatment Plant provides service for all of Hillsborough and several surrounding communities. Six employees operate the plant.

Treatment Processes

| Process | Explanation |
|------------------------------|---|
| Preliminary Treatment | Removal, cleaning and compacting of trash from wastewater. |
| Secondary Treatment | Removal of organics and nutrients from wastewater in a five-stage process. |
| Tertiary Treatment | Filtration to remove suspended solids that remain. |
| Disinfection | Addition of chlorine to disinfect. |
| Dechlorination | Removal of chlorine from treated water prior to release into Eno River. |
| Post-aeration | Raising of oxygen level in treated water prior to release into Eno River. |
| Solids Processing | Treatment, thickening and pressing of solids for delivery to composting facility. |



Deputy Utilities Director—Water Treatment Jeff Mahagan leads tours of the plant. See a [video](#) on how wastewater is treated and returned to the Eno River in Hillsborough (available on the town’s website and YouTube

Our Mission

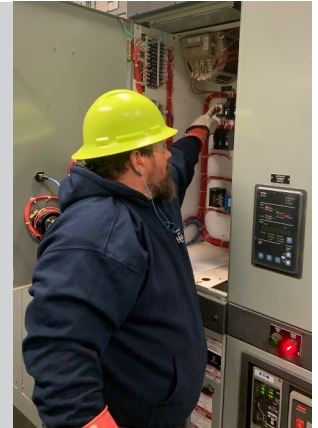
To protect, preserve, and enhance the Eno River by managing the wastewater treatment processes in an efficient and economical manner.

Our Vision

Instill in our customers a sense of pride and contentment — knowing that their local wastewater utility is diligently working to provide outstanding environmental protection for today and for the future generations to come.

Our Objectives

- Provide good stewardship of the resources entrusted to us by the Town of Hillsborough residents and customers.



- Treat the wastewater to a quality that provides a healthy environment for the Eno River aquatic life, the downstream recreational users, and the downstream drinking water supplies.
- Manage the biosolids program in a way that is beneficial to both the environment and the local farmers who use the product.
- Proactively work with pertinent local and state agencies, organizations, and individuals to monitor and protect the region’s water, soil, and air environments.



The current Wastewater Treatment Plant was completed in 1977 and was upgraded in 2001, 2007 and 2014. The original plant was built in the 1960s.

Tours of the plant are offered to other municipalities, engineers, high school and university programs, and the Hillsborough community.

If you would like to tour the plant, please call 919-296-9670 to schedule a visit.

Wastewater Treatment Plant Performance

The Wastewater Treatment Plant operates 24 hours a day each day. Employees are highly certified and continually operate and maintain the plant to ensure compliance with state and federal permits and regulations.



The basins in the foreground of the photo above and in the bottom right photo are part of the secondary treatment of wastewater in which organic material and nutrients are removed in a five-stage process. The clarifying tank in the top right photo also is part of the secondary treatment. Plant Maintenance Mechanic I David Labby inspects the mechanical arm that removes settled and floating solids prior to tertiary filtration. Deputy Utilities Director for Water Treatment Jeff Mahagan provides a tour to Government 101 participants in the bottom right photo.

Permit Information

The Wastewater Treatment Plant operates under state-issued permits. State regulators enforce these permits through review of required reports and inspections of facilities. Noncompliance with any part may result in a notice of violation, which may include fines of up to \$25,000 per day per violation.

| Permit Type | Permit Number | Operator in Responsible Charge | Contact |
|--------------------------|---------------|--|--------------|
| Wastewater Discharge | NC0026433 | Deputy Utilities Director—Water Treatment Jeff Mahagan | 919-296-9671 |
| Stormwater Discharge | NCG110000 | Deputy Utilities Director—Water Treatment Jeff Mahagan | 919-296-9671 |
| Laboratory Certification | 121 | Deputy Utilities Director—Water Treatment Jeff Mahagan | 919-296-9671 |

Facility Performance

| Subject | Detail | Subject | Permit limit | FY2023 actual | FY2022 actual | FY2021 actual |
|-------------------|----------------|---------------------------------|--------------|---------------|---------------|---------------|
| Permit Compliance | 100% Compliant | Average daily flow | N/A | 1.104 mgd | 1.053 mgd | 1.117 mgd |
| | | Maximum monthly flow | 3.0 mgd | 1.831 mgd | 1.358 mgd | 1.831 mgd |
| Inspections | No Inspection | Biochemical oxygen demand (BOD) | 5.0 mg/L | <2.0 mg/L | <2.0 mg/L | <2.0 mg/L |
| | | Ammonia (as N) | 1.0 mg/L | <0.1 mg/L | <0.1 mg/L | <0.1 mg/L |
| N.C. Facility | No Inspection | Total nitrogen | 10,422 lb/yr | 6,000 lb/yr | 4,444 lb/yr | 5,151 lb/yr |
| N.C. Laboratory | No Inspection | Total phosphorus | 1,352 lb/yr | 766 lb/yr | 606 lb/yr | 1,136 lb/yr |
| N.C. Stormwater | Passed | | | | | |

Good to Know



BRINGING POLLINATORS TO THE PLANT: A garden planted by a former employee attracts pollinators to the wastewater plant. The garden features more than a dozen types of pollinator-friendly plants such as bergamot, butterfly weed, blue salvia, tickseed, mountain mint, oregano and black-eyed Susans.

Report Illegal Dumping

If you see anyone dumping contents into an open manhole who is not in a town truck, please call 911 to report it.



If it's safe to do so discreetly, also take a photo and note some information to help the town prosecute the case. Details are helpful, including the time, date, location, name on the truck, truck number and license plate. Please do not directly confront anyone.

You can submit photos and information to Wastewater Treatment Plant Superintendent Jeff Mahagan at jeff.mahagan@hillsboroughnc.gov or to the Hillsborough Police Department or Orange County Sheriff's Office.

Help Wipe Out Sewer Problems

Flushing wipes, tampons and plastics leads to costly repairs

Hillsborough, we have a problem. It's the wipes and tampons you're flushing.

"If you put toilet paper under a stream of water, it breaks down immediately," Utilities Infrastructure Protection Supervisor Troy Miller said. "Wipes and other products don't break down. They clog pumps and motors at pump stations."



Flushing items that don't break down risks clogging pipes and creating overflows. Items to trash include:

- All parts of feminine hygiene products.
- Dental floss.
- Adhesive bandages.
- Sanitary and baby wipes — even if labeled "flushable."

Flushing plastic wraps and inserts from tampons sets up your sewer system for a fatberg that could clog pipes and lead to sewage spilling into the environment. Plastic items float and collect fats and oil, which also shouldn't be flushed. Most blockages in the town's sewer system are caused by flushable wipes, tampons and grease.

Wipes, tampons and plastics entangled in this sewer pump made it inoperable this past May. Each pump costs about \$34,000 and helps in transporting sewage to the treatment plant. Two pumps had to be replaced.

Protect Your Home and Environment



Overflows of a sanitary sewer can lead to violation notices and fines from the state, in addition to cleanup and environmental costs. Report spills immediately by calling 919-732-3621.

Fats, Oils and Grease

Food scraps and grease often are washed into the plumbing system through kitchen sinks. The grease sticks to the insides of sewer pipes in your home and in the streets.

Commercial additives, including detergents, that claim to dissolve grease may only pass grease down the line and cause problems in other areas.

Over time, grease can block an entire pipe, which can lead to:

- Raw sewage overflowing in your or your neighbor's homes, resulting in expensive and unpleasant cleanups.
- Raw sewage overflowing into parks, yards and streets.
- Human contact with disease-causing organisms.
- Higher sewer bills.

Sewer Blockage Formation



A blocked pipe starts when grease and solids collect on the top and sides of the pipe interior.



The buildup increases over time when grease and other debris are washed down the drain.



Excessive accumulation restricts wastewater flow and can cause a sanitary sewer overflow.

How Can You Help?

Discard used fats, oil and grease with other garbage or recycle.

- Orange County residents and businesses with 15 gallons or fewer of used cooking or fryer oil can bring it to the household hazardous waste collection centers at 1514 Eubanks Road (northwest of Chapel Hill) or 3605 Walnut Grove Church Road (north of Hillsborough). Only liquid oil is accepted. No water, bacon grease or lard is accepted.
- Use an old coffee can or jar as a grease container. The town has fat trappers available for free. Call 919-296-9653.
- Freeze or cool animal fats before discarding in the trash.
- Mix liquid vegetable fats with cat litter or coffee grounds in a sealable container before throwing in the trash.

Minimize use of garbage disposals.

- Scrape plates into trash cans.

Keep grease out of water for washing dishes.

- Use paper towels to wipe leftover oils and fats from pots and pans before washing. Discard paper towels in the trash.

See and share our [video](#) on fats, oils and grease.



Do not pour grease down drains.



Instead place grease in a can to discard in the trash. Contact the town for a free fat trapper.

Educational Outreach

More information is available on the [Utilities Educational Outreach](#) page of the town's website.

Or contact Utilities Infrastructure Protection Supervisor Troy Miller at 919-296-9653 or troy.miller@hillsboroughnc.gov.

What Am I Paying for?

We get this question a lot, and it is actually pretty complex! Overall, water is essential to our well-being, manufacturing and commercial activities. To return clean water to the river takes a lot of work and dedication.

Base and volumetric rates

Every customer connected to the system pays a base rate and possibly a volumetric rate. The base rate covers the operation of the system and current debts from large projects in which we needed to borrow money to complete the project. Anything received above our expenses is not “profit” as public utilities are not for-profit entities. The additional funds go into reserve accounts (think savings) to help pay for unexpected expenses and future projects.

Hillsborough’s sewer bill is based on the water usage and calculated similarly. As of July 1, 2023, the monthly base rate includes up to 2,125 gallons of water. Anyone who uses that amount or under pays just the base rate. Anyone who uses over 2,125 gallons also is charged an additional volumetric rate per 1,000 gallons.

The base rate is required to support the facilities, people, vehicles, computers, training/certification, safety equipment, treatment chemicals, building and vehicle insurance, electricity, regulatory compliance (sampling and reporting), debts from large projects, and much more. Basically, this is everything to “keep the lights on.”

Small customer base

The costs are spread across all customers. Hillsborough has a smaller customer base for which to spread these costs. Think about a pie. If there are four people to eat the pie, they each get a large piece. If there are 50 people, they each get a small bite. The rates per customer are based on the expenses of the water and sewer operation divided by the customers. The fewer customers, the more each must contribute. We are growing though, and that may help. The downsides are we will have more water and sewer pipes to take care of and our system is already very old in parts.

Water and sewer services on demand

We have to have clean water ready when you need it, and we have to be ready to treat it and safely return it to the Eno River after it is used.

Just like with food processing, industrial equipment, large buildings and chemicals are necessary to clean wastewater and to return that clean water to the Eno River. The equipment includes filters, pumps, blowers, tanks, piping, control panels and much more. All the equipment needs to be maintained, so it doesn’t break down. We also provide backup power to keep operations running when the power goes out for the storms North Carolina is known to have each year. The generators need to be serviced routinely and kept full of gas. We also need an onsite laboratory to test the water to be sure it is safe. The state and federal governments require that water meets stringent standards, so we must manage permits and take and analyze samples.

All this equipment and testing requires highly qualified people as water and sewer utilities is a challenging profession. Unfortunately, not many young people are interested. The town tries to remain competitive by paying people well and giving them benefits so they stay with the town.

Learn more

This — and more — factors into the rates each customer is charged. We welcome your questions and will be opening our facilities to tours in the coming months. We invite you to get to know our operations and people to better understand the basis of the costs for water and sewer services and your rates.



The Wastewater Treatment Plant takes dirty wastewater and turns it into crystal clear, clean water before returning it to the Eno River.

What if I Use Less than the Minimum Volume of Gallons?

An analogy that may be relatable is when you buy a car, the seller doesn't provide a discount off the price just because you say you won't drive it that much. The car still costs the manufacturer to make it, ship it, and register it with a department of motor vehicles. It costs the dealer to store it, clean it, fill it with gas, and process the paperwork when someone buys it. Even if the car sits in the driveway most days, the vehicle property tax still will be charged every year and the vehicle still needs to be insured and maintained so brakes, oil and tires are ready for use.

While a car may be a choice to buy, clean water is not a choice. It is expensive to clean water from a river for drinking, bathing and washing. And it is expensive to make it clean after it is used so the water does not kill fish or pollute the next downstream water user (Durham in our case) when we return it to the river.

Lowering the minimum use

The town and the Hillsborough Water and Sewer Advisory Committee are looking at ways to provide cost relief to more customers and have worked steadily to lower costs without severely impacting our financial standing. The minimum volume previously was 3,000 gallons per month. Over four years, starting in July 2013, the town lowered the minimum usage that comes with the base charge to 2,500 gallons. Fiscal Year 2024 is the third year of another four-year plan to lower the minimum use. The current plan will reduce the minimum to 2,000 gallons, which is the median minimum use in the state.

The town has 6,335 residential water connections. In Fiscal Year 2023, the average monthly use was 2,720 gallons for both in-town and out-of-town customers. In-town customers used about 2,632 gallons on average, with out-of-town customers using a bit more on average: 2,831 gallons.

Fixed costs

Operating the utility is a fixed cost. Whether zero gallons or 500 million gallons are produced or treated, we still need to keep the lights on — we still must pay to support our facilities, people, vehicles, computers, training/certification, safety equipment, treatment chemicals, building and vehicle insurance, electricity, regulatory compliance (sampling and reporting), debts from large projects, and much more.

For every rate modification for one class of customer, another area must make up the difference. The bottom line is the bottom line that must be met to be sustainable. It is a tough task to design rates to provide the financial securities we must have, to maintain the system, to replace aged infrastructure and to provide fairness across all customer classes.



DID YOU KNOW?



One gallon of Hillsborough's tap water costs about:



- 1 cent in town
- 2 cents out of town

for drinking water services



- 1.5 cents in town
- 3 cents out of town

for wastewater services

The average cost of a 1-gallon jug of water was \$1.64 at Hillsborough groceries in June 2023

*Most bottled water is sourced from municipal tap water. Hillsborough Fiscal Year 2024 rates start July 1, 2023.

Go Easy on Easements

Easements look like cleared paths to nowhere, but they grant the Utilities Department the right to access a town asset for maintenance and repairs.

Utility easements are normally at least:

- 20 feet wide for one utility pipeline.
- 30 feet wide for pipes deeper than 16 feet.
- 10 feet wide on both sides of a pipe for multiple pipes.

Easements reserve property for a specific purpose. Older water and sewer mains without a documented easement have a “prescriptive easement,” meaning they can be accessed by right after being in the ground so long without complaint.



Easements (or rights of way) provide the town with access to water and sewer assets for maintenance and repairs.

Make sure you know your responsibilities for utility easements.

Additional information on technical specifications for utilities and for sanitary sewer use can be found in the [Hillsborough Code of Ordinances](#), chapters 14 and 15.

For more information, contact the Water Distribution and Wastewater Collection Division at 919-296-9650.

Your responsibilities for easements

Easements do not remove property from an owner, but they must be kept clear of any plantings or structures since these can limit accessibility. Plant roots also can damage water and sewer pipes. See your responsibilities:

Be aware of land containing easements before building or planting.

Without authorization (given only under certain conditions), the town will not allow or replace plants, fences, sheds, fountains, patios, decks or other structures that impede clear access to the easement and maintenance of town infrastructure.

Maintain enough clearance around water and sewer features in road rights of way to allow the town access, operation and maintenance of the features.

These clearance requirements are measured from the center point (radius) of the device:

- Fire hydrants — 3 feet
- Manholes and concrete vaults — 6 feet
- Water meters, valve boxes, sewer cleanouts, and other utilities apparatus not listed — 2 feet

Maintain your property where easements are located and within the road right of way.

This includes mowing and can be done on your maintenance schedule.



Did You Know?

The Riverwalk greenway was built along a sewer easement, allowing recreation in an area that otherwise would not be developed.

Pictured is former Hillsborough Mayor Tom Stevens by an above-ground manhole. The elevated manholes along the Eno River help prevent floodwaters and heavy rain from entering the sewer system. The manholes are connected to one of the town’s main sewer interceptors, which move sewage from homes and businesses to the wastewater plant.

Protect Your Home and Environment



Clogging this manhole (above) are wipes and other products that should not be flushed.

This impeller (top right) from a sewer pump is supposed to rotate and move sewage, but it is wrapped in wipes and other trash. Do you see a fork hanging from the debris? Staff spent time cleaning the impeller to make it operable again (bottom right).



No Wipes in the Pipes

Only the three P's should be flushed: *pee, poo and toilet paper*.

Household cleaning and personal hygiene products labeled as flushable or safe for sewer or septic systems do not dissolve. They clog sewer lines and can damage sewer pumps and other equipment. Flushing trash down toilets and drains leads to the same problems as blocked pipes and can require replacement of equipment, leading to higher sewer bills.

More information is available on the [Utilities Educational Outreach](#) page of the town's website. Or contact Utilities Infrastructure Protection Supervisor Troy Miller at troy.miller@hillsboroughnc.gov or 919-296-9653.

See our video [No Wipes in the Pipes](#).

Involvement Welcomed

The community is welcome to attend meetings of the Hillsborough Board of Commissioners and Water and Sewer Advisory Committee.

The committee is composed of four in-town and four out-of-town water and sewer customers, who provide guidance and oversight for the town's water and sewer operations and make recommendations to the town board and staff.

The town board meets the second and fourth Monday of each month. The Water and Sewer Advisory Committee meets the first Thursday bimonthly starting in February. Meetings typically are at 7 p.m. in the Town Hall Annex, 105 E. Corbin St.



TOWN OF HILLSBOROUGH

NORTH CAROLINA

Wastewater Treatment Plant

355 Elizabeth Brady Road, PO Box 429
Hillsborough, NC 27278

919-296-9671

Wastewater Collection Division

715 Dimmocks Mill Road, PO Box 429
Hillsborough, NC 27278

919-732-9459

More Information

If you have questions about this report or the treatment of your wastewater, please contact the Wastewater Treatment Plant.

Printed copies of the report are available at the Town Hall Annex, 105 E. Corbin St. For a copy by mail, call 919-296-9630.

En español: *Este documento está disponible en español en la oficina de facturación y en el sitio web de la ciudad.*

www.hillsboroughnc.gov | [@HillsboroughGov](https://twitter.com/HillsboroughGov) | www.youtube.com/user/TownOfHillsboroughNC

Certification: *I certify under penalty of law that this report is complete and accurate to the best of my knowledge. I further certify that this report has been made available to the users or customers of the named system and that those users have been notified of its availability.*

Deputy Utilities Director—Water Treatment Jeff Mahagan