

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 wastewater users and customers of Stanly County Utilities and the Greater Badin Water and Sewer District system and those users have been notified of its availability.

Duane Wingo

Duane Wingo, Director
Stanly County Utilities

February 12, 2024



This institution is an equal opportunity provider and employer.

NOTIFICATION

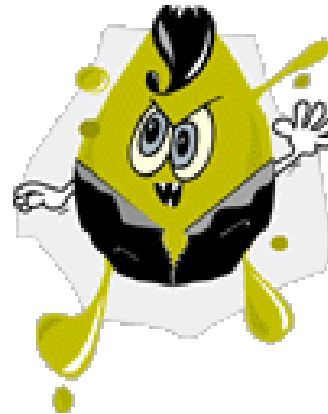
This report has been mailed to all water and sewer customers of Stanly County Utilities and the Greater Badin Water and Sewer District. Additional copies are available at the Stanly County Utilities business office — 1000 North First Street, Suite 12, Albemarle, NC (704) 986-3686 or visit our web site.

Beware of the **Grease Goblin**

DID YOU KNOW...

Most sanitary sewer backups occur between your home and the sewer main?

You can help prevent a costly and unsanitary overflow by following a few simple steps.



Do

Scrape excess grease in a container and dispose of it in the garbage.



Don't

Pour grease, fats and oils from cooking down the drain.



**IT'S NEVER OK TO POUR
FAT, OIL OR GREASE DOWN
THE DRAIN!**



Greater Badin Water and Sewer District and Stanly County Utilities 2023 Wastewater Performance Report



Stanly County Utilities
1000 North First Street, Suite 12
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(704) 986-3686

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<http://www.stanlycountync.gov/utilities/>

NC0074756	Greater Badin WWTP
NC0043532	West Stanly WWTP
WQCS00171	Stanly County Utilities Collections System
WQCS00019	Town of Richfield

This brochure is designed to inform and educate consumers about the performance and operation of the Greater Badin Water and Sewer District (GBW&SD) wastewater collections system and treatment plant and the Stanly County Utilities (SCU) wastewater collections system and West Stanly treatment plant. If you would like more information about GBW&SD or SCU, please contact the Stanly County Utilities business office.

How the treatment process works

GBW&SD provides wastewater collection and treatment services to homes, businesses, schools and others to ensure and promote public health and sanitation in the Badin community. The system received and treated 115 million gallons of domestic, commercial and industrial wastewater from approximately 701 wastewater customers in the year 2023. This amounts to an average of 315,167 gallons of wastewater per day. Wastewater is collected in an 11 mile system of sewer pipes and is transferred to the Greater Badin Wastewater Treatment Plant by gravity flow and pumped from two lift stations throughout the district. The West Stanly Wastewater Treatment Plant was purchased from the Town of Oakboro in May 2014. The system received and treated 226 million gallons of wastewater in 2023 from the collections system within Oakboro, Locust, Stanfield and Stanly County for an average of 621,252 gallons of wastewater per day. Once wastewater arrives at the treatment plants it is monitored, tested, treated and released back into the environment in a very clean state. Both plants are operated by well-trained, state certified operators who ensure the proper functioning of the facility, maintenance, and quality of the wastewater. Stanly County purchased the sewer collection system from the Town of Richfield in 2020. SCU collections system now consists of approximately 68 miles of collection mains that includes service to the northern part of Stanly County; the County Airport region, the Town of Red Cross, the communities of Palestine, Millingport, Ridgecrest, Misenheimer and Aquadale. Wastewater collections from these areas flows into treatment plants operated by Albemarle and Norwood. Combined they reported receiving 92.6 million gallons of wastewater with an overall average of 253,602 gallons of wastewater per day in 2023.

SYSTEM PERFORMANCE FOR 2023

2023 Wastewater Treatment Plant Violations

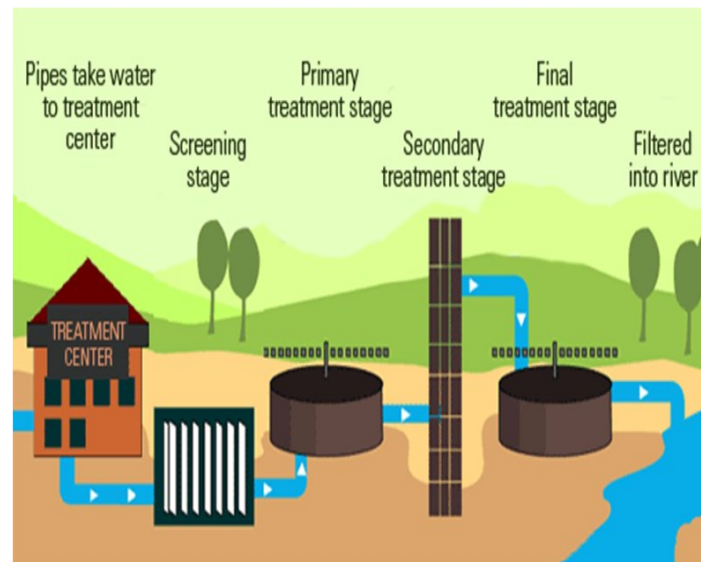
Greater Badin Wastewater Treatment Plant

Month	Violation	Type
January	Yes	Flow
February	Yes	Flow

West Stanly Wastewater Treatment Plant

Month	Violation	Type
January	Yes	Flow
March	Yes	Flow
April	Yes	Flow
May	Yes	Equip
June	Yes	Flow
July	Yes	Equip
August	Yes	Equip
December	Yes	Flow

The rated capacity of the Badin Wastewater Treatment Plant is 550,000 gallons per day. The rated capacity of West Stanly Wastewater Treatment Plant is 1.2 million gallons per day. A flow violation means the plant treated more wastewater than the rated capacity. This happens when heavy rains cause the system to take on rainwater. The plant can and does provide effective treatment at levels higher than the rated capacity. However, any numbers above the plant rating, constitutes a flow violation. Equipment failure can be caused by an electrical surge such as a lightning strike or simply age, due to the number of years in service.



**This description is not a standard for all treatment plants, but the principle is similar.*

2023 Sewer Overflows/Spills/Bypasses

Location	Date	Amount
McCoy LS	2/12/23	45,000 gallons
Deese Street LS	8/15/23	1,000 gallons
McCoy LS	10/28/23	9,000 gallons

In our three incidents listed above, events 1 and 2 were from severe storms and rain water entering the wastewater collection system increasing the flow beyond the rated capacity of the treatment plant or the collections system. The 3rd event, experienced equipment failure.

A sewer overflow or spill is indicated when untreated or partially treated wastewater is released from a pipe break or a manhole overflow. Overflows can result from pipes clogged with grease, tree roots, debris, damaged pipes or excessive inflow and infiltration (I&I) of other water into the collection pipes.

Wastewater spills can be harmful to the environment due to the potential for exposure to bacteria and other hazards. Each spill site is reported to NCDWR, published in local newspaper and the area is cleaned and treated to minimize the risk to the public.

* * *

The design is underway for a 2.5 mgd expansion project for the West Stanly WWTP facility and McCoy's Creek Lift Station. We anticipate construction to begin in 2025 with completion in late 2026. This will include a new force main line connection between McCoy and West Stanly WWTP. There will also be a new effluent force main line to the Rocky River.

* * *

Badin to mitigate an I&I study for storm water run off.

* * *

SCU has received \$1.2 million NCDEQ grant funding for the rehabilitation of the Richfield Sewer System acquired in 2020. The engineering and environmental studies are complete. It is ready for bid process. Construction beginning in Spring 2024.