

2021-2022

Wastewater System Performance Report





Wastewater System Overview

CFPUA is the primary wastewater services provider for New Hanover County and Wilmington, North Carolina, serving more than 72,000 individual homes, businesses, and other properties.

CFPUA operates two wastewater treatment plants and 1,100 miles of sewer mains.

In Fiscal Year 2022, which ran from July 2021 to June 2022, CFPUA collected and treated 6.2 billion gallons of wastewater. CFPUA spent \$10.6 million to operate and maintain the wastewater system and invested another \$11.1 million in capital upgrades, repairs, and replacements of aging infrastructure, and system growth.

Copies of this report are available at: 235 Government Center Drive and 305 Chestnut Street

You may also access this report on our website: www.CFPUA.org



James A. Loughlin Wastewater Treatment Plant (Northside)

2311 N. 23rd St., Wilmington Permitted Capacity: 16 million gallons/day



M'Kean Maffitt Wastewater Treatment Plant (Southside)

3436 River Road, Wilmington Permitted Capacity: 12 million gallons/day

Sanitary Sewer Overflows (SSOs), July 2021 - June 2022

Month of SSO	Incident Start Date	Volume Spilled (Gallons)	Volume to Surface Water (Gallons)	Watershed	Location	Probable Cause
August	8/12/2021	4,200	4,200	Barnards Creek	Intersection of Echo Farms Drive and Appleton Way	Pipe Failure
February	2/6/2022	8,000	8,000	Whiskey Creek	Lift Station, 4223 Whitehurst Drive	Pipe Failure; Received Notice of Deficiency - No civil penalty
March	3/28/2022	190	190	Heritage Park	Intersection of N. Kerr Avenue and Castle Hayne Road	Pipe Failure
June	6/23/2022	8,000	0	N/A	3317 Alex Trask Drive	Contractor working in the area drilled through pipe

NPDES Permit Summary, July 2021 - June 2022

Loughlin/Northside Wastewater Treatment Plant: No Violations of the NPDES Permit Limits

Maffitt/Southside Wastewater Treatment Plant: No Violations of the NPDES Permit Limits

Wastewater System Maintenance Overview

- Collection system gravity sewer mains cleaned: 102.74 miles
- Gravity mains inspected with CCTV: 31.29 miles
- Preventive maintenance work orders completed at pump stations: 10,063
- Corrective and emergency work orders at pump stations: 531



Northside and Southside Receive Gold Peak Performance Award

Both of CFPUA's wastewater treatment plants earned the National Association of Clean Water Agencies (NACWA) Gold Peak Performance Award for 2021. The awards recognize NACWA member facilities with no permit violations for the entire calendar year. The two facilities processed over 6.2 billion gallons of water with no violations.

Increased Resiliency, Just in Time for Hurricane Season

n 2021, CFPUA completed a generator enhancement project to boost resiliency at the Northside Wastewater Treatment Plant. The completed project included a new 2,000-kW standby generator, which replaced a 1,250-kW generator that was no longer capable of running all facilities at Northside. The new generator joins another 2,000-kW generator at Northside, either of which is capable of powering the entire facility in the event that commercial electricity is lost.

Pump Station Projects Increase Resiliency and Reliability

The Millbrook 3 Pump Station located at 210 Brookview Road and the Waterford Pump Station located at 125 Colchester Place recently underwent rehabilitation projects. The two sewer pump stations were prioritized for rehab based on their condition and criticality in the event of failure.

Upgrades included new wet wells, pumps, pump controls and enclosures for electrical equipment. A new fence was also added to the Waterford station, increased security and enhancing aesthetics. Both projects were completed on time with a final completion date of June 30, 2022. The total cost of rehabilitating these two pump stations was \$1,272,393. Even with ongoing supply chain delays and price increases in materials across the construction industry, the projects came in \$29,344 under budget.

Additional pump stations are prioritized for rehabilitation in Fiscal Year 2023.

Contact Us

For more detailed information about this report, contact an Operator in Responsible Charge (ORC):

Geoffrey Cermak, ORC | (910) 332-6562 James A. Loughlin (Northside) Wastewater Treatment Plant Permit No. NC0023965

Steven Styers, ORC | (910) 332-6578 M'Kean Maffitt (Southside) Wastewater Treatment Plant Permit No. NC0023973

Robert Daughtry, ORC | (910) 332-6637 CFPUA Utilities Collections System Superintendent Permit No. WQCS00012

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/customers of the CFPUA system and that those users have been notified of its availability.

Notification of availability of this report is provided through printed notice on water/ sewer bills and the Authority's website. This report was completed by staff of Cape Fear Public Utility Authority and is accurate to the best of our knowledge and belief.