

Cape Fear Public Utility Authority

2022-2023 Wastewater System Performance Report



Wastewater System Overview

Cape Fear Public Utility Authority (CFPUA) is the primary wastewater services provider for New Hanover County and the city of Wilmington, serving more than 74,000 individual homes, businesses, and other properties. CFPUA operates and maintains two wastewater treatment plants (WWTP), 158 pump stations, and over 1,100 miles of sewer mains. In fiscal year (FY) 2023, which spanned from July 2022 to June 2023, CFPUA collected and treated approximately 6.2 billion gallons of wastewater. CFPUA spent \$12.2 million to operate and maintain the wastewater system and invested another \$21 million in system growth and capital upgrades, repairs, and replacements of aging infrastructure.

Biosolids Management

Beginning in 2019, CFPUA transitioned to an in-house managed wastewater residuals program. CFPUA's managed residuals program consists of dewatering, contracted hauling of dewatered residuals, and landfill disposal. Landfill disposal is expected to continue due to the presence of PFAS in the dewatered residuals. Below is the FY 2023 program by the numbers for Southside WWTP, Northside WWTP, and the alum sludge processed for Sweeney Water Treatment Plant:

- Total CFPUA Production: 25,988 wet tons
- Total Landfill Disposal: 23,302 wet tons/990 loads hauled
- Total Processing Runtime: 6,052 hours

Treatment Plant Information

James A. Loughlin (Northside) WWTP
2311 N. 23rd St., Wilmington, NC 28401
Permitted Capacity: 16 million gallons/day

M'Kean Maffit (Southside) WWTP
3436 River Rd., Wilmington, NC 28412
Permitted Capacity: 12 million gallons/day

Wastewater System Contacts

Geoffrey Cermak, ORC
(910) 332-6562
James A. Loughlin (Northside) WWTP
Permit No. NC0023965

Steven Styers, ORC
(910) 332-6578
M'Kean Maffitt (Southside) WWTP
Permit No. NC0023973

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

NPDES Permit Summary July 2022–June 2023

No violations of the NPDES permit limits for both the James A. Loughlin (Northside) and M'Kean Maffit (Southside) WWTPs.

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Sanitary Sewer Overflows (SSOs)

SSO Month	Incident Start Date	Total Volume Spilled (Gallons)	Volume To Surface Water (Gallons)	Watershed	Location	Probable Cause	Enforcement Action
August	8/1/2022	2,340	0	Pages Creek	535 Middle Sound Loop Rd	Pipe failure	Notice of Deficiency
October	10/1/2022	1,050	0	Barnards Creek	Manhole at 4112 Echo Farms Blvd	Blockage due to grease and debris	Notice of Deficiency
December	12/26/2022	800	800	Cape Fear River	2 Dawson St	Equipment failure	Notice of Violation
January	1/12/2023	610	610	Bradley Creek	117 Hidden Lake Ln	Pipe failure	Notice of Violation
January	1/26/2023	510	510	Burnt Mill Creek	4360 Randall Pkwy	Debris in line	Notice of Violation
April	4/24/2023	3,000	2,000	Hewletts Creek	5609 Whisper Creek Ln	Pipe failure	Notice of Deficiency

*No civil penalties were given to CFPWA for the above SSO enforcement

Wastewater System Maintenance Overview

- Collection system gravity sewer mains cleaned: 124.83miles
- Gravity mains inspected with CCTV: 26.34 miles
- Preventive maintenance work orders completed at pump stations: 8,099
- Corrective and emergency work orders at pump stations: 66

Protect Our Pipes!

FOG (fats, oils, and grease) is found in many foods and cooking products and can cause major problems for our sewer system. FOG does not break down easily and builds up in pipes, causing blockages that can lead to SSOs. Proper disposal will help avoid costly sewer overflows, higher utility costs, and harm to the environment. Please remember to never flush any product other than toilet paper.

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System Performance Report



NACWA Gold Peak Performance Award

Both of CFPUA's wastewater treatment plants received the National Association of Clean Water Agencies (NACWA) Gold Peak Performance Award for calendar year (CY) 2022. This award recognizes NACWA member facilities with zero permit violations for the calendar year. Both facilities received this award last calendar year (CY 2021) as well.

AMWA Gold Award for Exceptional Utility Performance

In October of 2022, CFPUA received the Association of Metropolitan Water Agencies (AMWA) Gold Award for Exceptional Utility Performance. This award recognizes member water systems that demonstrate "high levels of performance in the areas of product quality, customer satisfaction, employee and leadership development, operational optimization, financial viability, community sustainability, enterprise resiliency, infrastructure strategy and performance, stakeholder understanding and support, and water resource sustainability." For more information please go to: <https://www.amwa.net/>

Certification and Availability Statements

CFPUA certifies under penalty of law that this report is complete and accurate to the best of staff knowledge. CFPUA further certifies that this report has been made available to the users and customers of the CFPUA system and that those users have been notified of the report availability.

Notification of availability of this report is provided through printed notice on water and sewer bills and on the CFPUA website. This report was completed by CFPUA staff and is accurate to the best of their knowledge and belief.

Copies of this report are available at:

- 235 Government Center Dr
- 305 Chestnut St
- www.cfpu.org

