# WASTEWATER COLLECTIONS AND

# TREATMENT SYSTEMS

# ANNUAL PERFORMANCE REPORT

July 1, 2024 – June 30, 2025



Fayetteville Public Works Commission

The Fayetteville Public Works Commission (PWC) enjoyed another year of truly excellent performance at both of our treatment plants and the collection systems they serve. Our plants have been recognized by the NC Department of Environmental Quality as "Exceptionally Performing Facilities." We had 14 events where sewage was released from the collection system, and these occurrences were mostly due to factors beyond our control. At both the treatment plants and in our sewage collection systems, this represents an extremely high level of service and system reliability that we strive to maintain. The following provides a summary of all collection system overflows and treatment plant permit exceedances.

# **Collections Systems**

#### **General Information**

Facility/System Name: Collection Systems

Responsible Entity: Fayetteville Public Works Commission, Town of Stedman,

NORCRESS, and Kelly Hills/Slocomb Road Water and

**Sewer District** 

Person in Charge/Contact: Chris Rainey, PE - Operations Manager

(910) 223-4718

Applicable Permit(s): (PWC) WQCS00007

(Stedman) WQCSD0537 (Norcress)WQCS00353

#### **Description of Collection Systems**

The following description of collection systems is for PWC and the three permitted entities with which PWC maintains operation and maintenance agreements.

PWC's sanitary sewer collection system is separated into two basins, the Cross Creek and the Rockfish Creek basins. The collection system consists of approximately 1,293 miles of sewer mains varying in size and material and includes 68 sewer pumping stations. In addition, 11 privately owned pumping stations are operated and maintained per O&M agreements. Main sizes range from 6" to 60". Wastewater is collected from approximately 93,353 customers in the City of Fayetteville and surrounding Cumberland County area. PWC serves approximately 17 Industrial, 6 Wholesale, 6,219 Non-Residential, 245 Flat Rate Non-Residential, 78,037 Residential, and 8,721 Flat Rate Residential customers. PWC also provides wastewater service to 96 City of Fayetteville sites and to 12 PWC locations. The wastewater is conveyed to the Cross Creek and Rockfish Creek Water Reclamation Facilities.

Since March 2001, PWC has operated and maintained the Town of Stedman sanitary sewer system, owned by the Town of Stedman. The system serves approximately 593 customers (540 residential and 53 non-residential) and consists of approximately 22.1 miles of sanitary sewer

mains and 4 pumping stations. The wastewater from Stedman is conveyed to the Rockfish Creek Water Reclamation Facility.

In September 2005, PWC began operation and maintenance of the NORCRESS (Wade, Godwin, and Falcon) sanitary sewer system, owned by Cumberland County. The system serves 387 customers (333 residential and 54 non-residential) and consists of approximately 35.3 miles of sanitary sewer mains and 4 pumping stations. The wastewater from NORCRESS is conveyed to the Cross Creek Water Reclamation Facility.

PWC also maintains and operates the Kelly Hills / Slocomb Road Water & Sewer District sanitary sewer collection system, owned by Cumberland County. The system serves approximately 100 customers (all residential) and consists of approximately 4.5 miles of sanitary sewer mains. The wastewater from Kelly Hills / Slocomb Road Water & Sewer District is conveyed to the Cross Creek Water Reclamation Facility.

Public Works Commission WOCS00007 - Summary of Collections System Performance for Fiscal Year (July 2024- June 2025)

During the fiscal year July 2024 – June 2025, approximately 8.75 billion gallons of wastewater were conveyed to the Cross Creek and Rockfish Creek Water Reclamation Facilities. Sanitary sewer overflows totaling 529,600 gallons, or 0.00001%, of total gallons conveyed were reported to the NC Department of Environmental Quality, Water Resources Division. Monthly as follows:

Month	Gallons	Month	Gallons
July	474,500	January	3,000
August	1,250	February	0
September	1,870	March	225
October	5,000	April	10,500
November	5	May	30,000
December	3,250	June	0

Sanitary sewer overflow events in which volumes exceeding 1,000 gallons overflowed or reached surface waters are included in the monthly estimates and are shown separately as follows:

Event 1: Date: 7/20/24 Gallons: 97,100

**Location:** 4479 Jockey Whip Lane

# **Description:**

This SSO was the result of a contractor's sewer outfall installation operation. The contractor left their excavation open and not sufficiently protected, and they were directly beside Lake Upchurch. After a rain event, Lake Upchurch began to flood the excavation and drain through the 24" sewer pipe that the contractor was installing. This influx of fresh water from the lake overwhelmed the collection system and caused a sewer overflow at a manhole.

#### Corrective measures:

PWC staff used numerous combination vacuum/jetter trucks to pump and haul wastewater to minimize the amount of sewage spilling until the inflow could be stopped. Another group of PWC maintenance staff installed an inflatable plug downstream of the source of the inflow, which ended the spill incident. Contractor personnel who arrived at the site constructed an earthen dam around the excavation to prevent any further water from entering the open sewer system. Sampling at the spill location was conducted, and results were forwarded to the DWR-FRO.

Event 2: Date: 7/20/24 Gallons: 377,400

**Location:** 4146 Fescue Court

#### **Description:**

This SSO was the result of a contractor's sewer outfall installation operation. The contractor left their excavation open and not sufficiently protected and they were directly beside Lake Upchurch. After a rain event, Lake Upchurch began to flood the excavation and drain through the 24" sewer pipe that the contractor was installing. This influx of fresh water from the lake overwhelmed the collection system and caused a sewer overflow at the riser joints of a manhole.

# Corrective measures:

PWC staff used numerous combination vacuum/jetter trucks to pump and haul wastewater to minimize the amount of sewage spilling until the inflow could be stopped. Another group of PWC maintenance staff installed an inflatable plug downstream of the source of the inflow, which ended

the spill incident. Contractor personnel who arrived at the site constructed an earthen dam around the excavation to prevent any further water from entering the open sewer system. Even after the plug and earthen dam were installed it took some time for the Collection System to return to normal flow levels and for the SSO to stop. Sampling at the spill location was conducted, and results were forwarded to the DWR-FRO.

Event 3: Date: 8/14/24 Gallons: 1,250

**Location:** 6969 Woodmark Drive

# **Description:**

This SSO was the result of a contractor who was installing 8" gravity sewer main hitting an AquaNC water main. The inflow of potable water into the contractor's excavation entered the Collection System thru a core bore in a manhole the contractor had installed. The influx of potable water into the Collection System caused a surcharging of the sewer system and subsequently wastewater to be released from a manhole. At the time that PWC maintenance staff arrived at the site, the spill had already ended, but there was evidence that a spill had occurred. AquaNC maintenance staff responded and shut off the damaged water main which ended the spill incident.

#### Corrective measures:

PWC maintenance personnel cleaned up the wastewater debris in the area and cleaned out the storm drainage system into which the wastewater had entered. The AquaNC water main was repaired and returned to service. The contractor doing the sewer installation cleaned up the rest of the damage from the water main break before they resumed their sewer installation operations. PWC maintenance staff also cleaned the sewer system upstream and downstream of the spill location to clear the sewer of any mud and debris which may have entered into the sewer system.

Event 4: Date: 9/1/24 Gallons: 970

**Location:** 6731 Vaughn Road

# **Description:**

This SSO was the result of a grease blockage in the sewer main. PWC was notified of an issue by a resident. Due to the grease blockage in the main, wastewater exited from a manhole and entered into a nearby storm drainage system. PWC maintenance staff were notified and responded immediately.

#### Corrective measures:

PWC maintenance staff jet rodded the sewer main to remove the grease blockage and end the spill incident. Wastewater exiting from the manhole in the street immediately entered a catch basin that directly discharged into an unnamed tributary to Little Rockfish Creek and was unable to be reclaimed. The affected area in the roadway was cleaned, and main line cleaning and CCTV inspections were conducted to ensure all grease and debris was removed. Sampling at the spill location was completed, and the results forwarded to the DWR-FRO.

Event 5: Date: 9/16/24 Gallons: 900

**Location:** 2809 Coronada Parkway

#### **Description:**

This SSO was the result of a grease and roots blockage in the sewer main. The issue was reported to PWC by a private resident. PWC maintenance staff were notified and responded immediately. Due to the extent of the grease and roots blockage, wastewater exited from a sewer manhole and entered an adjacent catch basin and then to a drainage ditch.

#### Corrective measures:

The sewer main was jet rodded to clear the grease and roots blockage and end the spill incident. Wastewater debris and residue entered into a nearby catch basin and was heavily diluted by active rainwater. Main cleaning and CCTV inspections were done upstream and downstream of the blockage location to ensure that all grease and roots were removed. Sampling was conducted, and the results were forwarded to the DWR-FRO.

Event 6: Date: 10/26/24 Gallons: 5,000

**Location:** 7204 Holmfield Road

#### **Description:**

This SSO was the result of a grease blockage in the sewer main. The overflow was reported to PWC by a private resident. Due to the extent of the grease blockage, wastewater exited from a sewer manhole in an easement, ponded in the easement area, and soaked into the ground.

# Corrective measures:

The sewer main was jet rodded to clear the grease blockage and end the spill incident. The wastewater which escaped from the manhole soaked into the ground in the easement. Wastewater residue was removed from the easement area by PWC maintenance staff. The affected area was treated with lime and odor counteractant. Main cleaning and CCTV inspections were conducted upstream and downstream of the incident location.

Event 7: Date: 11/12/24 Gallons: 5

**Location:** 5729 Waterwood Drive

# **Description:**

This SSO was the result of a pipe failure on a sewer lateral beneath the roadway. PWC maintenance staff was notified by a customer that there was water coming up in the road. When PWC staff arrived, they found the sewer lateral backed up and wastewater was surfacing from cracks in the pavement. The wastewater was entering into a nearby storm drainage system.

#### Corrective measures:

PWC maintenance staff jet rodded the sewer lateral to remove any stoppages, end the spill incident, and then televised the lateral with a CCTV camera to find the issue. It was discovered that the sewer lateral piping was separated beneath the roadway. PWC maintenance staff excavated and repaired the sewer lateral beneath the roadway. Wastewater debris was vacuumed and removed from the spill location and the affected storm drainage system. The storm drainage system was cleaned with potable water, and the resulting waste was reclaimed by the combination jetter/vacuum truck. Sampling was conducted, and results were forwarded to the DWR – FRO.

Event 8: Date: 12/12/24 Gallons: 3,250

**Location:** 3641 Sycamore Dairy Road

#### **Description:**

This SSO was the result of a grease and debris blockage in the sewer main. The issue was reported by a private resident. PWC maintenance staff responded immediately and found a manhole actively overflowing. Due to the extent of the grease and debris blockage, wastewater exited from a PWC manhole and entered a nearby storm drainage system.

#### Corrective measures:

The sewer main was jet rodded to clear the grease and debris blockage and end the spill incident. Wastewater and wastewater residue were removed from the curbline and the yard area. The affected storm drainage system was cleaned and vacuumed to reclaim the wastewater. Sewer main cleaning and CCTV inspections upstream and downstream of the spill location were completed. Sampling at the spill location was completed, and results were forwarded to the DWR-FRO.

Event 9: Date: 1/1/25 Gallons: 3,000

**Location:** 1052 Landau Road

# **Description:**

This SSO was the result of a debris blockage in the sewer main which was reported by a private resident. PWC maintenance personnel were immediately dispatched to evaluate the issue. There was an active spill occurring at the time of PWC's arrival. It was discovered that wastewater was exiting from a manhole in the street and entered a storm drainage system.

#### Corrective measures:

PWC maintenance staff jet rodded the sewer main to clear the debris blockage and end the spill incident. Wastewater and wastewater residue were removed from the curbline and the roadway. The affected storm drainage system was cleaned and vacuumed to reclaim the wastewater. Main cleaning and CCTV inspections upstream and downstream of the spill location were completed. Sampling at the spill location was completed, and results were forwarded to the DWR-FRO.

Event 10: Date: 3/4/25 Gallons: 225

**Location:** 1901 Owen Drive

# **Description:**

This SSO was the result of a pipe failure of a sewer lateral. The issue was reported to PWC by a customer. PWC Maintenance Staff immediately responded and found wastewater coming up in a parking lot. The wastewater ran across the parking lot and entered a nearby storm drainage system.

#### Corrective measures:

The sewer lateral was jet rodded to clear the blockage and end the spill incident. The wastewater and wastewater debris exiting from the sewer lateral were vacuumed/removed, and the affected storm drain was cleaned. Sampling was conducted and results were forwarded to the DWR-FRO. PWC maintenance personnel renewed the sewer lateral to resolve the cast iron pipe failure.

Event 11: Date: 4/27/25 Gallons: 2,250

**Location:** 4011 Trista Lane

#### **Description:**

This SSO was the result of the failure of a pump at a sewer bypass operation. A sewer main rehab contractor was preparing to clean and install 54" gravity outfall mainline liner. As part of this process, a sewer bypass pumping system was installed to bypass flows and is maintained by contractor forces. During the course of the day, the Field Supervisor received a call from the autodialer, stating something was wrong with the pumps. PWC personnel immediately responded to the site and the on-site contractor pump watch personnel had already activated some of the backup pumps for the bypass. Due to the issue with the primary pumps, the wastewater in the outfall line began surcharging until it exited from a manhole upstream of the bypass.

#### Corrective measures:

Upon evaluation of the bypass pumping system, it was determined that the primary bypass pumps were out of fuel. The contractor on site personnel immediately activated the backup pumps to start pumping down the surcharge in the outfall line. The primary pumps were refueled as well and placed back into service. There was not a spill at the bypass pump location, but PWC maintenance staff began investigating upstream and found evidence of an overflow from a manhole. The wastewater which exited from the consecutive manholes entered a nearby storm drainage system which discharged directly into Rockfish Creek. The area was cleaned up and treated with lime and odor counteractant. Sampling at the spill location was conducted, and results were forwarded to the DWR-FRO.

Event 12: Date: 4/27/25 Gallons: 8,250

**Location:** 4674 Research Drive

**Description:** 

This SSO was the result of the failure of a pump at a sewer bypass operation. A sewer main rehab contractor was preparing to clean and install 54" gravity outfall mainline liner. As part of this process, a sewer bypass pumping system was installed to bypass flows and is maintained by contractor forces. During the course of the day, the Field Supervisor received a call from the autodialer, stating something was wrong with the pumps. PWC personnel immediately responded to the site and the on-site contractor pump watch personnel had already activated some of the backup pumps for the bypass. Due to the issue with the primary pumps, the wastewater in the outfall line began surcharging until it exited from a manhole upstream of the bypass.

#### Corrective measures:

Upon evaluation of the bypass pumping system, it was determined that the primary bypass pumps were out of fuel. The contractor on site personnel immediately activated the backup pumps to start pumping down the surcharge in the outfall line. The primary pumps were refueled as well and placed back into service. There was not a spill at the bypass pump location, but PWC maintenance staff began investigating upstream and found evidence of an overflow from a manhole in an easement area. The wastewater that exited from the manhole soaked into the surrounding ground. Since the wastewater was contained there, no sampling was needed. The affected area was treated with lime and odor counteractant.

Event 13: Date: 5/23/25 Gallons: 30,000

**Location:** 4412 Claude Lee Road

#### **Description:**

This SSO was the result of the failure of a temporary bypass pipe at a sewer bypass operation. A sewer main rehab contractor was preparing to clean and install 54" gravity outfall mainline liner. As part of this process, a sewer bypass pumping system was installed to bypass flows and is maintained by contractor forces. During a routine inspection of the above ground bypass piping the pump watch personnel discovered a break in the pipe with wastewater escaping. The wastewater ponded in the easement area and ultimately entered an unnamed tributary to Rockfish Creek.

#### Corrective measures:

PWC personnel were notified immediately of what was taking place and the decision was made to remove the inflatable plug in the suction manhole and return the wastewater flow to the outfall line until the bypass pipe could be repaired. The outfall line was still functional, as there was not any lining taking place yet, so flow could be redirected back into the outfall due to the emergency situation. The wastewater that entered the creek could not be reclaimed. The wastewater and

wastewater debris that ponded in the easement were reclaimed and the area was treated with lime and odor counteractant. The contractor mobilized staff, equipment, and materials to remove the failed section of bypass piping and fused it in a repair. Sampling at the spill location was conducted and the results were forwarded to the DWR-FRO.

# Town of Stedman WOCSD0537 - Summary of Collections System Performance for Fiscal Year (July 2024 – June 2025):

During the fiscal year July 2024 – June 2025, approximately 46.6 million gallons of wastewater were conveyed to the PWC collection system and treated at the Rockfish Creek Water Reclamation Facility. No reportable sanitary sewer overflows were reported to the NC Department of Environmental Quality, Water Resources Division.

# NORCRESS WOCS00353 - Summary of Collections System Performance for Fiscal Year (July 2024 – June 2025):

During the fiscal year July 2024 – June 2025, approximately 49.2 million gallons of wastewater were conveyed to the PWC collection system and treated at the Cross Creek Water Reclamation Facility. There was one reportable sanitary sewer overflow reported to the NC Department of Environmental Quality, Water Resources Division. The sanitary sewer overflow totaled 4,500 gallons, or 0.00009% of total gallons conveyed. Monthly estimates are as follows:

Month	Gallons	Month	Gallons
July	0	January	0
August	4,500	February	0
September	0	March	0
October	0	April	0
November	0	May	0
December	0	June	0

Sanitary sewer overflow events in which volumes exceeding 1,000 gallons overflowed or reached surface waters are included in the monthly estimates and are shown separately as follows:

Event 1: Date: 8/8/24 Gallons: 4,500

**Location:** 6820 Lucas Street (NORCRESS)

#### **Description:**

This SSO was the result of severe natural conditions and regional flooding associated with Tropical Storm Debby. The lift station continued normal operations during the storm event until upstream system flows inundated the station. PWC Maintenance Staff immediately responded to the lift station to begin pump and haul operations.

#### Corrective measures:

Combination vacuum/jetter trucks were used to maintain the wet well until flows lessened to a point that the station could keep up on its own. The use of the combination vacuum/jetter trucks performing pump and haul operations ended the spill incident. PWC Maintenance Staff monitored the station for a period of time to ensure that the station would be able to continue to handle the flow levels coming in. There was no cleanup required due to the heavy dilution of the wastewater with the floodwater.

#### Kelly Hills - Summary of Collections System Performance for Fiscal Year (July 2024 - June 2025):

During the fiscal year July 2024 – June 2025, approximately 1.3 million gallons of wastewater were conveyed to the PWC collection system and treated at the Cross Creek Water Reclamation Facility. No reportable sanitary sewer overflows were reported to the NC Department of Environmental Quality, Water Resources Division.

Note: Copies of sanitary sewer overflow reports are on file at the Public Works Commission's Water Resources Construction Department located at 955 Old Wilmington Road.

# **Treatment Systems**

#### **General Information**

Facility/System Name: Cross Creek Water Reclamation Facility

Responsible Entity: Fayetteville Public Works Commission

Persons in Charge/Contact: Peter Norris Kinto, Facilities Supervisor

(910) 223-4711

Michael Scott McCoy, Facilities Manager

(910) 223-4757

Applicable Permit(s): NPDES NC0023957

WQ0000527 NCGNE1080

# **Description of Treatment Process:**

The Cross Creek facility is permitted to process 25 million gallons per day (MGD) of wastewater. The treatment processes consist of an influent pump station, mechanical bar screens, grit removal, primary clarification, activated sludge system with nitrification, secondary clarification, filtration, disinfection, and dechlorination. Biosolids generated by these processes are stabilized through anaerobic digestion and recycled as a fertilizer and soil conditioner to various land application sites.

# Summary of Treatment System Performance for Fiscal Year (July 2024 – June 2025):

The Cross Creek Water Reclamation Facility consistently met all permit requirements in the fiscal year.

Facility/System Name: Rockfish Creek Water Reclamation Facility

Responsible Entity: Fayetteville Public Works Commission

Persons in Charge/Contact: Peter Norris Kinto, Facilities Supervisor

(910) 223-4711

Michael Scott McCoy, Facilities Manager

(910) 223-4757

Applicable Permit(s): NPDES NC0050105

WQ0000527 NCGNE061

# **Description of Treatment Process:**

The Rockfish Creek facility is permitted to process 21 million gallons per day (MGD) of wastewater. The

treatment processes consist of an influent pump station, mechanical bar screens, grit removal, activated sludge system with nitrification, secondary clarification, filtration, disinfection, and dechlorination. Biosolids generated by these processes are stabilized through aerobic digestion and recycled as a fertilizer and soil conditioner to various land application sites.

# Summary of Treatment System Performance for Fiscal Year (July 2024 – June 2025):

The Rockfish Creek Water Reclamation Facility consistently met all permit requirements in the fiscal year.

# **Notification and Certification**

#### **Prevention:**

During the time from July 2024 – June 2025, PWC made the following efforts to reduce overflows as associated with grease:

- Conducted a public information campaign that included radio and television advertising, information in quarterly customer newsletter, videos, website updates, podcast, and information slides on City and County Government Access Channels.
- Provided approximately 1,100 "Fat Trapper" grease disposal containers and 6,000 disposable bags to customers as part of "Cease the Grease" Education program.
- Conducted priority cleaning and rehabilitation of "targeted problem" sewer lines.
- Conducted customer-targeted messages about proper grease and wipes disposal using mailings, outbound calls, eblast, NextDoor social media posts in identified grease/wipes problem areas.

#### **Notification:**

The report shall be available on the Fayetteville Public Works Commission's website (www.FayPWC.com) and at the PWC Communications/Community Relations Division Office (910-223-4009). A statement of availability will be included in customers' billing.

#### Certification:

I certify under penalty of law that this report is complete and accurate to the best of my knowledge. I further certify 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.

Misty Manning

Chief Operating Officer-Water Resources Division

Fayetteville Public Works Commission

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