

PUBLIC WORKS COMMISSION
MEETING OF WEDNESDAY, SEPTEMBER 9, 2026
8:30 AM

Present: Richard W. King, Chairman
Ronna Rowe Garrett, Vice Chairman
Donald L. Porter, Secretary
Christopher G. Davis, Treasurer

Others Present: Timothy L. Bryant, CEO/General Manager
Media

Absent: Derrick Thompson, Mayor Pro Tem/Liaison
Kirk deViere, Cumberland County Commission Chairman/Liaison
Jodi Phelps, Assistant City Manager
Faith Phillips, Assistant Cumberland County Manager
Chancer McLaughlin, Hope Mills Town Manager

I. REGULAR BUSINESS

Chairman Richard King called the meeting of September 9, 2026, to order at 8:30 a.m.

PLEDGE OF ALLEGIANCE

Commissioner King led the Commission in the Pledge of Allegiance.

APPROVAL OF THE AGENDA

Upon motion by Commissioner Christopher Davis, seconded by Commissioner Donald Porter, the agenda was unanimously approved.

II. CONSENT ITEMS

Upon motion by Commissioner Donald Porter, seconded by Commissioner Ronna Rowe Garrett, Consent Items were unanimously approved.

- A. Approve Minutes of meeting of August 26, 2026
- B. Approve purchase award recommendation for purchase of Two (2) Prefabricated Relay Control Houses for POD 5 and POD 1 to VFP, Inc., Roanoke, VA, the lowest responsive, responsible bidder and in the best interests of PWC in the total amount of \$1,009,762.00, and forward to City Council for approval.

The two (2) Prefabricated Relay Control Houses for POD 5 & POD 1 are budgeted in 001.0170.0802.353000.CPR1000541 and 001.0170.0802..353000.CPR1000364

Bid Date: August 27, 2026

Conforming Bidder

Total Price

VFP, Inc., Roanoke, VA	\$1,009,762.00
Modular Connections, LLC, Bessemer, AL	\$1,057,666.00

Non-Conforming Bidders

Technology International Inc., Lake Mary, FL

COMMENTS:: The bid notice was advertised through our usual channels on July 31, 2026, with a bid opening date of August 27, 2026. Bids were solicited from eleven (11) vendors, and three (3) bids were received. **SDBE/SLS Participation:** VFP, Inc., Roanoke, VA is not a small, local, or SDBE business. VFP, Inc anticipates to self-perform this contract.

- C. PWC Resolutions – PWC2026.16 thru PWC2026.19 - Resolutions Accepting State Loan Offers Under the Safe Drinking Water Act Amendments of 1996 and Directing the Filing of State Revolving Loan Applications for the Rockfish Creek WRF Expansion Phase 3 and PO Hoffer WTP Expansion Phase 3 Residuals Improvements projects.

- PWC2026.16 – Resolution to accept an amended \$85.5 million State Revolving Loan offer from the North Carolina Department of Environmental Quality (DEQ) for the PO Hoffer Glenville Lake GAC Construction Projects. The loan terms are 20 years, \$26 million principal forgiveness, 1.04% interest and 2% closing fee.
- PWC2026.17 – Resolution to accept a \$3 million State Reserve Loan offer from the North Carolina Department of Environmental Quality (DEQ) for the PO Hoffer Glenville Lake GAC Construction Projects. The loan terms are 20 years, 2.45% interest and 2% closing fee.
- PWC2026.18 – Resolution directing the filing of a State Revolving Loan application for the Rockfish Creek WRF Expansion Phase 3 project, currently estimated at \$215.6 million. PWC has received loan approval for \$85.5 million and will apply for the remaining \$130.1 million in additional funding.
- PWC2026.19 – Resolution directing the filing of a State Revolving Loan application to fund the PO Hoffer WTP Expansion Phase 3 Residuals Improvements project, currently estimated at \$50.6 million.

- D. PWCORD2026-36 – FY2027 Electric and Water/Wastewater (W/WW) Fund Budget Amendment #3

Within this budget amendment are increases in expenditures for the budget carryover reserve and encumbrance carryforward. The “encumbrance carryforward” is a governmental budgeting term that basically means an expenditure was committed via a purchase order in the prior year’s budget, was not fully completed in the prior year as anticipated and will be completed in this fiscal year with carryforward funds from the prior year. Section 3 of the Budget Ordinance adopted for FY 2027 allows for these carryforwards. An explanation of amended items is listed below:

Electric Fund

- Electric Fund Revenue: Total Electric Fund Revenue increased by \$3,226,300.
 - Total Budgetary Appropriations increased by \$3,226,300. This includes the increase of the Transfer from Budget Carryover Reserve by \$100,000 and the increase of the

Appropriation from Electric Net Position by \$3,126,300 to support the expenses below.

- Electric Fund Expenditures: Total Electric Fund Expenditures increased by \$3,226,300.
 - Operating Expenditures increased by \$511,400 and Capital increased by \$3,024,100 due to the encumbrance carryforward and budget carryover reserve items.

Water/Wastewater Fund

- W/WW Fund Revenue: Total W/WW Fund Revenue increased by \$100,000.
 - Total Budgetary Appropriations increased by \$100,000 due to the increase of the Transfer from Budget Carryover Reserve to support the expenses below. Total Budgetary Appropriations decreased by \$309,200 due to the decrease of the Appropriation to Electric Net Position.
- W/WW Fund Expenditures: Total W/WW Fund Expenditures increased by \$100,000.
 - Operating Expenditures increased by \$1,236,600 and Capital increased by \$1,565,000 due to the encumbrance carryforward and budget carryover reserve items.
 - Total Budgetary Appropriations decreased by \$2,701,600 due to the decrease of the Appropriation to W/WW Net Position.

END OF CONSENT

III. LEAK DETECTION PROGRM UPDATE

Presented by: Christopher Rainey, Water Resource Interim Chief Operating Officer
Michael Smith, WR Asset Mgmt. Coordinator

Mr. Chris Rainey, Water Resources Interim COO, introduced Mr. Michael Smith WR Asset Mgmt., Coordinator. Mr. Smith thanked the departments/employees integral in the success of the Leak Detection Program. They include:

- W/R Construction
- W/R Engineering
- Laboratory
- Utility Field Services
- Customer Accounts Call Center

Mr. Smith stated in March of 2026, the phase 4 started on the Non-Revenue Water Management/Leak Detection Program, which began with McKim & Creed. The services provided include:

- Acoustic leakage inspection technology (Correlators)
- Leakage pinpointing technology (Listening Sticks)
- Data analytics
- Implementation of a Non-Revenue Water (NRW) Assessment/Reduction Program

Acoustic Leak Detection Survey

Inspected the High-Pressure Water Zone (South of Raeford Road Corridor and West of Hope Mills Areas).

Conducted field inspections of potable water mains, valves, fire hydrants, and service connections to ensure adequate system representation across a range of pipe materials, asset types, and

infrastructure conditions. These inspections supported a comprehensive baseline assessment of the High-Pressure Water Zone

Acoustic Leakage Technology

Phocus 3 Noise Loggers and Communication Module:

A wireless leak detection and localization system designed to identify water leaks efficiently in temporary, semi-permanent, or permanent monitoring applications.



Mikron3 Kite Electronic Listening Stick and Ground Microphone:

An advanced acoustic leak detection system featuring high-sensitivity sensors and multiple frequency filtering options. It is ideal for detecting leaks directly on valves, hydrants, and other water system fittings, as well as over buried pipelines. The system can be used for both preliminary leak surveys and precise leak pinpointing.

Leakage Pinpointing Technology Used

A correlator is a specialized acoustic testing instrument designed to locate leaks in pressurized water mains. The device employs multiple sensors positioned on the pipeline at known distances from a suspected leak. By capturing and transmitting leak-generated sound signals, the correlator analyzes the time delay between signals, sensor separation distance, and sound velocity within the pipe material to accurately determine the leak location.



- *Eureka 3 Real-time Acoustic Correlator:*
Real-time correlator with advanced filtering system to pinpoint the most difficult leaks
- *Enigma/3M Non-Real Time Acoustic Correlator:*
Non-real-time correlating system for noisy, complex, or busy areas
- *Enigma HY-Q With Hydrophone Adaptor Non-Real Time Acoustic Correlator:*
Non-real-time correlating system further optimized for larger pipes and over longer distances

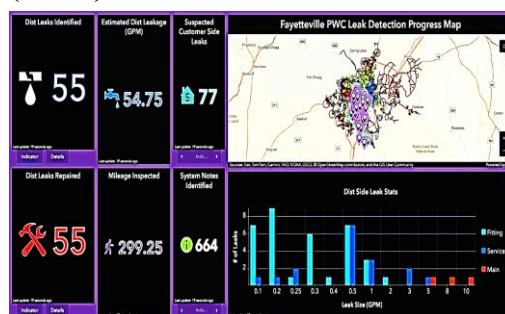
Chlorine and/or Fluoride Testy Kits



Chemical testing kits were used to analyze visible or surfacing water and identify its composition, assisting in determining whether the water originated from PWC's Water or from external environmental sources.

Reporting: Environmental Systems Research Institute (ESRI) GIS Dashboard

The ESRI Dashboard was implemented as the primary data collection and project management platform, enabling field personnel to record findings and monitor investigation progress. The data was overlaid onto PWC's existing water distribution GIS system, allowing for real-time mapping, analysis, and visualization of reported leaks and inspection activities through a centralized dashboard interface.



FY26 Findings

The investigation found that approximately 95% of potable water leakage was not visible at the surface, indicating that most leaks remained concealed below ground. Leak distribution by asset type included 35 leaks on fittings such as curb stops and meter adapters, 17 leaks on fire hydrants and water service lines, 3 leaks on water mains, and 77 leaks on customer-side private plumbing systems. This highlights the importance of proactive acoustic leak detection, as the majority of leaks could not have been identified through visual inspection alone.

The leak detection survey identified 55 leaks within PWC's water distribution system across 299.25 miles of inspected water mains, representing 21% of the utility's 1,438-mile distribution network. These leaks accounted for an estimated 54.75 GPM of water loss, or approximately 28.8 million gallons per year saved.

In addition, 77 suspected customer-side leaks were identified and referred to PWC's Conservation Specialists which work with customers to assist them with getting with a plumber. The project also documented 664 system notes and asset condition observations, including damaged infrastructure components, missing or inaccessible valves, and GIS mapping updates, providing valuable information for future maintenance and asset management efforts.

Results

- Most leaks were minimal to moderate in size: .10 to 10 gallons per minute
- One critical water leak was discovered: 6-Inch Cast Iron water main at 2500 Raeford Road
 - The asset has been identified for replacement with an 8-inch ductile iron water main under the planned NCDOT Raeford Road Project, which will address the existing infrastructure as part of the roadway improvements.

FY23 – FY26 Combined Results

Over the four-year period these efforts generated substantial operational, financial, and asset management benefits, with an estimated total financial benefit of \$1.43 million and a projected Return on Investment (ROI) of \$628,082.06.

The leak detection program inspected 1,018 miles (71%) of PWC's distribution infrastructure, identified 219 distribution system leaks, documented 249 suspected customer-side leaks, and recorded 1,150 asset condition observations. The program identified approximately 336.85 GPM of leakage, representing an estimated 177 million gallons of recoverable water annually.

Conclusion

The Non-Revenue Water and Leak Detection Program strengthens PWC's Asset Management Program (AMP) by Providing a data-driven framework to monitor performance; reducing water loss; and tracking progress toward operational and infrastructure improvement goals

Commission thanked staff for the presentation and the conservation efforts. Mr. Bryant stated staff is exploring the possibility of PWC acquiring necessary equipment and skills to conduct leak detection work in-house instead of relying solely on outside contractors.



IV. GENERAL MANAGER REPORT

Safety

Mr. Bryant recognized the PWC team for continuing to put safety into action every day. Since the start of the new fiscal year, injuries have remained relatively flat; however, one injury is one too many. He stated that the recently implemented safety observation program is helping strengthen safe work habits, including identifying hazards, planning work, and staying alert to changing conditions. Nearly 250 observations have been reported over the last few months, with almost half submitted by the Water Resources team. Mr. Bryant thanked the Water Resources team for its commitment to the initiative and encouraged everyone to continue making safety personal by following established procedures, using proper protective equipment, speaking up when something does not look right, and looking out for one another. He stated that working safely demonstrates PWC's core values and protects coworkers, customers, and the community PWC is privileged to serve.

People

Mr. Bryant stated the recently recognized Labor Day gives us a meaningful opportunity to pause and honor the skill, dedication, and hard work of every employee who serves our community. The work our team performs each day whether they are in the field, on the phone, in the office, or behind the scenes, keeps essential services running and improves the quality of life for the people we get to serve. Labor Day reminds us that every role matters. Every contribution has value and all honorable work carries dignity and importance to the entire PWC team.

Community Engagement

Mr. Bryant stated as a reminder, we are nearing the midpoint of the Atlantic tropical storm season. According to the National Hurricane Center's latest Atlantic tropical weather outlook, tropical cyclone formations are not expected in Atlantic over the next seven days. However, changing and increasingly unpredictable weather patterns remind us that we cannot become complacent simply because named storm activity has been limited thus far. The peak of the tropical storm season is still with us, and severe weather impacts can extend well beyond tropical systems. As we saw overlap over the last week strong thunderstorms and fast developing weather cells can bring significant wind damage and outages across our territory with little advanced notice. The PWC team remains vigilant and prepared to respond quickly and safely, and we encourage customers to do the same by keeping storm plans current, reviewing extended outage resources and staying prepared before conditions change.

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Running the Business

Mr. Bryant stated that Cape Fear River water levels have stabilized in recent weeks. Based on this improvement, and in accordance with the favorable water shortage response ordinance and authority delegated to the PWC General Manager, he authorized the rescission of Stage 1 voluntary water restrictions, effective September 9, 2026. Although local conditions have improved, drought remains a concern across North Carolina, with more than half of the state experiencing active drought conditions and additional areas classified as abnormally dry. PWC continues to urge customers to use water wisely and conserve where possible, noting that responsible water use helps protect shared resources, reduce customer bills, and ensure public water remains available for critical community needs.

V. COMMISSIONER/LIAISON COMMENTS

Commissioner Donald Porter

Commissioner Porter commended the staff who are working hard during storms and events. He stated they are out there doing dangerous work, and they have families to get back to just like the rest of us. He stated he appreciates have the Mayor Pro Tem and the County Chairman in our meetings and hope they are communicating just how hard our PWC crews work.

Commissioner Christopher Davis

No Comments

Commissioner Ronna Garrett

No Comments

Commissioner Richard King

Commissioner King stated he agrees with Commissioner Porter's comments.

VI. REPORTS AND INFORMATION

A. Career Opportunities

VII. CLOSED SESSION PURSUANT TO NORTH CAROLINA GENERAL STATUTES 143-318.11(A)(3) FOR LEGAL MATTERS

Commissioner Donald Porter motioned to enter Closed Session Pursuant to NCGS 143-318.11(A)(3) for Legal Matters. Motion was seconded by Commissioner Christopher Davis, and unanimously approved at 8:53 a.m.

There being no further discussion upon motion by Commissioner Christopher Davis, seconded by Commissioner Donald Porter, and unanimously approved, the Commission returned to open session at 9:35 a.m.

VIII. ADJOURNMENT

There being no further business, upon motion by Commissioner Ronna Rowe Garrett, seconded by Commissioner Christopher Davis, and unanimously approved, the meeting adjourned at 9:35 a.m.