

County of Louisa

Monthly Report



Louisa County Water Authority

September 2025



Background/History:

Louisa County Water Authority (LCWA) was created in 1968 by the Louisa County Board of Supervisors to engage in water and wastewater treatment in the County. The County has provided financial assistance as necessary since the Authority's inception as LCWA works to build a sufficient user and revenue base.

LCWA is comprised of several separate subsystems:

- The Northeast Creek Water Treatment Plant produces water for the Towns of Louisa and Mineral as well as surrounding areas, and utilizes conventional treatment followed by Nanofiltration. This plant uses raw water from the Northeast Creek Reservoir; treated water is delivered via a distribution system which connects end users outside of the Towns as well as Town-managed distribution systems within the Towns.
- The Regional Wastewater Treatment Plant, which is owned by the Town of Louisa and the County and serves the same areas as the Northeast Creek Plant above. LCWA operates this system under contract.
- The Zion Crossroads water system consists of seven (8) potable production wells, and thirteen (13) monitoring wells and serves the Zion Crossroads/Ferncliff areas through a distribution system.
- The Zion Crossroads Wastewater Treatment Plant and collection system serves the same area as the Zion Crossroads Water System above.
- The Bowlers Mill raw water system is owned by the County and operated by LCWA to provide raw water to Old Dominion Electric Cooperative.
- The New Bridge System at Lake Anna provides water and wastewater services to the development area near Lake Anna on Rt. 208.

Projects, Maintenance and Action Items:

Northeast Creek Water Treatment Plant:

Decking around generator – Footers dug, concrete poured 01-04-2024	
Shower Replacement – acquiring quotes / estimates	
Continue to build critical inventory	
Replace two non-functioning heaters	
Re-bed calcite contactors	
Interviews for an operator position	COMPLETE
Wigen Water Technology onsite week of October 20, 2025	
Bag filters received – Paisley-Kerr to install between September 15 – 22, 2025	COMPLETE
Bag filter installation	COMPLETE
Security fencing around backwash tank	

Louisa Regional Wastewater Treatment Plant:

Water leak	
Wet Well Fall Protection	
Implementing Optimization Study recommendations underway	
Continue to build critical inventory	
Acid bath tank for UV bulb cleaning	
Equipment - Tractor	
Auger for septage receiving station – budgetary price received – order placed	
Vector Attraction testing – Passed	COMPLETE
WER Study – required for permit renewal – sampling complete	
Zinc Translator Study – required for permit renewal – sampling complete	

Zion Crossroads Well System:

Negotiations with Fluvanna County on a rate to purchase water – agreement drafted	
Clean and paint Zion Crossroads Water Tank – interior	

Zion Crossroads WWTP:

Paving of concrete oval in front of lab	
Retaining wall	
Replace Lilly pod aerators – quote requested	
Replace SCADA – CIP budget request approved - underway	
Asphalt seal coat	
Security gate – FY2026	
Equipment - Truck	

UV System upgrade – in progress	
Mud washed into the plant due to heavy rain in Section L of Spring Creek – staff is working to mitigate – it takes time	COMPLETE

Dam work – Bowlers Mill and Northeast Creek:

Bowlers Mill – quote received, contract signed, funding is available – demo work complete	
---	--

New Bridge Water / Sewer System:

Shoreline Sign – being evaluated	
Build critical inventory	
Connect communications to NEC-WTP – in progress	
Upgrade design and PER underway – 95% plans review scheduled for late 2025 to early 2026	
Investigating a Pretreatment Program for the Tap House	COMPLETE
Checking for a backflow preventer for the boat dock	
Upgrades to maintain consistent compliance - underway	

Distribution / Collection System:

Commercial Meter Replacement – received ¾," 1," 1 ½," and 2" meters and ERTZ - ongoing	
Bush-hogging rights-of-way (preparing for smoke testing) - ongoing	
Smoke testing	
Replacing meter setters for UVA Dialysis and McDonald's	
St. Francis, Lagoon and High School pump station control panel replacement	
Middle School Addition	
CTE Building at the High School	
Ferncliff water / sewer line extension	
Spring Creek Section L under construction	

Miscellaneous:

Utility Standards - underway	
Amazon	
Cybersecurity	
Safety Manual – rewrite / update	
Safety training	
Accounting Policies	
Regional Water Supply Planning	
American Water Infrastructure Act updates	
Voltus	

September 2025 Income & Expenditures:

The Authority's O & M Expenditures exceeded O & M Revenues by \$25,363 for the month of September 2025. The Authority has a positive O & M cash flow of \$194,376 for FY2026 through September 30, 2025.

Capital Revenues exceeded Capital Expenditures by \$16,811 for the month of September 2025. The Authority has a negative Capital cash flow of \$96,215 for FY2026 through September 30, 2025.

O & M and Capital Expenditures together exceeded O & M and Capital Revenues by \$8,552 for the month of September 2025. The Authority has a positive combined O & M and Capital cash flow of \$98,161 for FY2026 through September 30, 2025.

Fund Balance:

VIP Stable NAV Liquidity Pool	\$336,529
VIP 1-3 Year High Quality Bond	\$859,117
Total Reserve Fund Balance (\$742,352 of these funds are restricted and not available for use for O&M Expenditures)	\$1,195,646

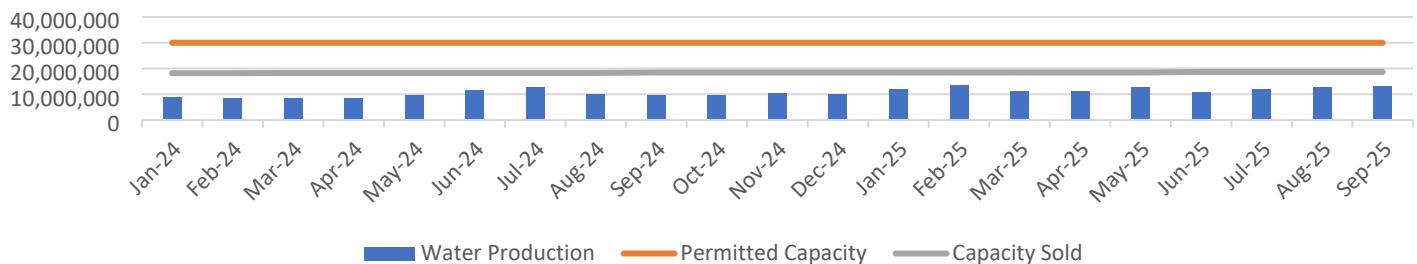
Restricted funds we are obligated to have on hand: **Included in the fund balance**

Customer Deposits	\$148,725
Accumulated Regional Sewer Connection Fees (restricted) less approved expenditures	\$428,828
Other Post-Employment Benefits	\$165,639

Production/Treatment Information:

The permitted capacity sold or allocated is 62.20%. The permitted capacity is 1 million gallons per day.

Northeast Creek Water Treatment Plant Water Production (Gallons per month)



Currently treating 418,000 gallons per day. The permitted capacity is 800,000 gallons per day.

Louisa Regional Wastewater Treatment Plant Effluent Treated (Gallons per month)



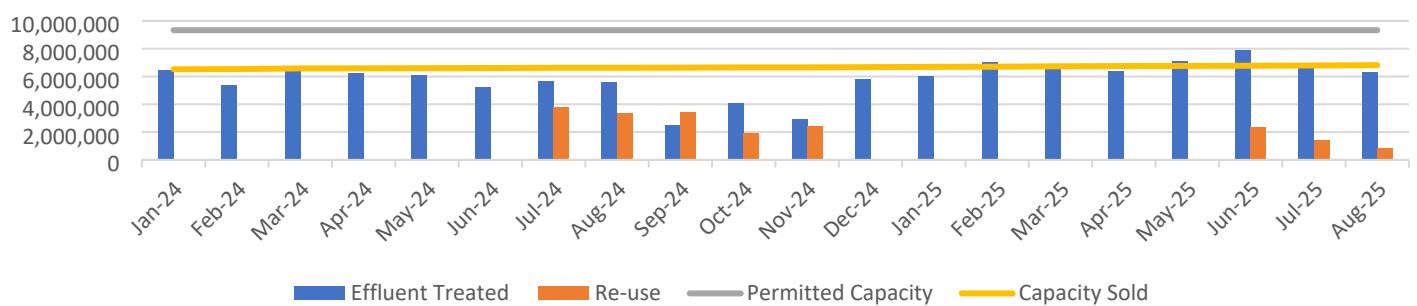
The permitted capacity sold or allocated is 43.06%. The permitted capacity is 624,800 gallons per day.

Zion Crossroads Wells Water Production (Gallons per month)



Currently treating approximately 162,000 gallons per day. The permitted capacity is 311,000 gallons per day.

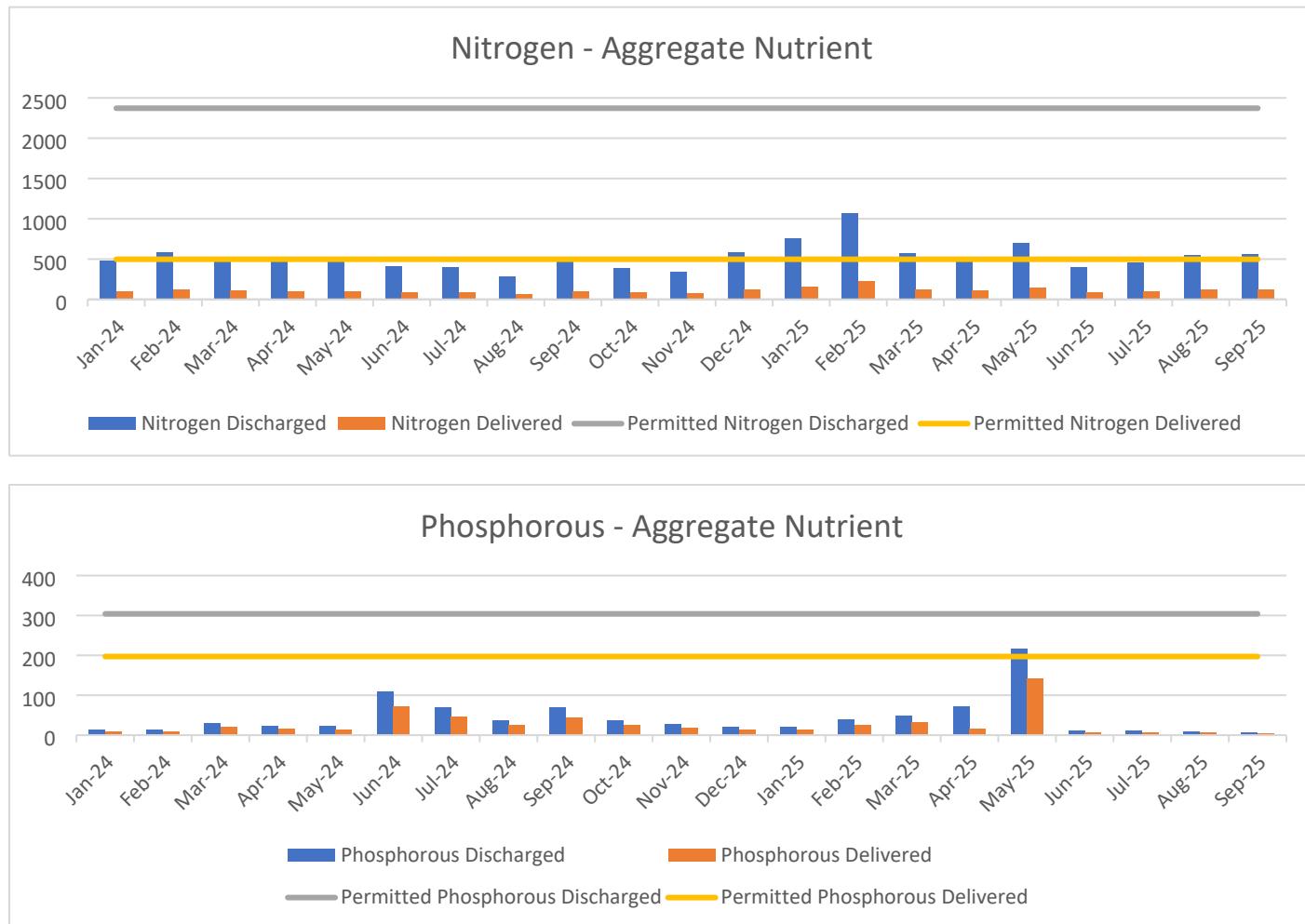
Zion Crossroads Wastewater Treatment Plant Treated Effluent / Re-Use (Gallons per month)



Nitrogen / Phosphorous:

Nitrogen and phosphorus are assigned limits on an aggregated Countywide basis which are set by the Department of Environmental Quality. Nitrogen and phosphorus each have a discharged limit (the amount discharged into the receiving stream) and a delivered limit (a calculation on the actual discharged amount that is delivered to the Chesapeake Bay).

In each graph below the gray line designates the permitted discharge amount; the blue column designates the actual discharged amount. The yellow line designates the permitted delivered amount; the orange column designates the actual delivered amount. In simplistic terms, the gray lines and blue columns go together, and the yellow lines and orange columns go together.



Total LCWA Connections:

Year	Number of Connections
2018	50
2019	26
2020	52
2021	64
2022	44
2023	38
2024	39
2025	46

*Through September 30, 2025.