

County of Louisa

Monthly Report



Louisa County Water Authority

June 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	
Sludge-Vac System – bids received, Notice to Proceed awarded – mobilization week of 11/11/2024, Plant shut down to half capacity beginning January 2025 – working on punch list items – completion anticipated in the next 30 – 60 days	
Shower Replacement – acquiring quotes / estimates	
Continue to build critical inventory	
Replace two non-functioning heaters	
Nanofiltration Repairs	
Rebuild gravity filter beds	
Replacement of filter drains	

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 septicage receiving station – budgetary price received – order placed	
Bearing to be replaced in rotor	
Belt press repairs	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:

Crossing Pointe Pump Station – Punch List items – flow meters and hour meter	COMPLETE
Paving of concrete oval in front of lab	
Retaining wall	
Upgrade Aqua Aerobic software	COMPLETE
Replace Lilly pod aerators – quote requested	
Replace SCADA – CIP budget request approved	
Asphalt seal coat	
Security gate – FY2026	
Equipment - Truck	

UV System upgrade – in progress	
Toxicity testing	
HACH maintenance scheduled	COMPLETE
Concrete pad – in progress	
Polymer containment – in progress	

Dam work – Bowlers Mill and Northeast Creek:

Bowlers Mill – quote received, contract signed, funding is available	
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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 September 2025	

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 Waterline Extension	

Miscellaneous:

Shannon Hill Business Park Utilities easements & plans review	
Utility Standards - underway	
Zion Crossroads Sewer Capacity Study – added change order to look at organic loading and hydraulic capacity	COMPLETE
Fishing Permits	COMPLETE
Amazon	
Cybersecurity	
Safety Manual – rewrite / update	
Safety training	
Accounting Policies	
Regional Water Supply Planning	
American Water Infrastructure Act updates	

June 2025 Income & Expenditures:

The Authority's O & M Expenditures exceeded O & M Revenues by \$5,949 for the month of June 2025. The Authority has a positive O & M cash flow of \$28,561 for FY2025 through June 30, 2025.

Capital Revenues exceeded Capital expenditures by \$124,034 for the month of June 2025. The Authority has a positive Capital cash flow of \$214,100 for FY2025 through June 30, 2025.

O & M and Capital Revenues together exceeded O & M and Capital Expenditures by \$118,085 for the month of June 2025. The Authority has a positive combined O & M and Capital cash flow of \$242,661 for FY2025 through June 30, 2025.

Investments – June 2025:

The Louisa County Water Authority Investments Report is a listing of the Authority's current investments. LCWA currently has two investments with the Virginia Investment Pool.

Fund Balance:

VIP Stable NAV Liquidity Pool	\$332,816
VIP 1-3 Year High Quality Bond	\$849,812
Total Reserve Fund Balance (\$739,102 of these funds are restricted and not available for use for O&M Expenditures)	\$1,182,628

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

Customer Deposits	\$144,635
Accumulated Regional Sewer Connection Fees (restricted) less approved expenditures	\$428,828
Other Post-Employment Benefits	\$165,639

Production/Treatment Information:

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



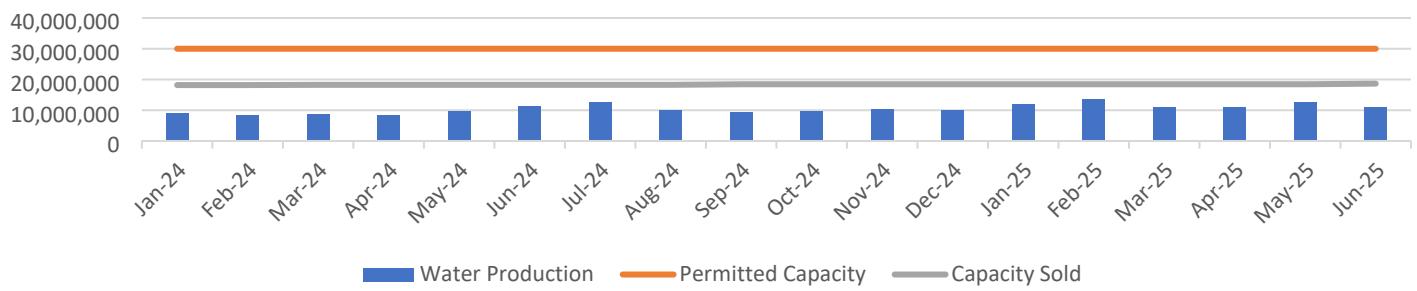
The permitted capacity sold or allocated is 62.19%. The permitted capacity is 1 million gallons per day.

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



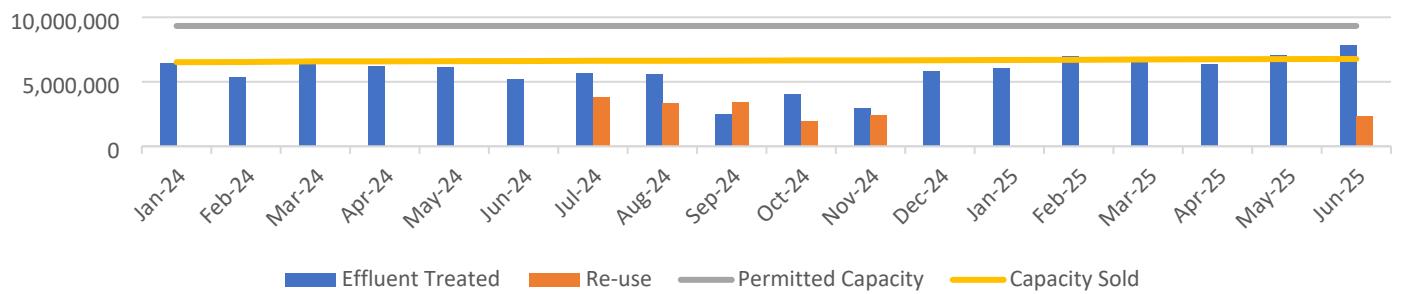
Currently treating 432,000 gallons per day. The permitted capacity is 800,000 gallons per day.

Zion Crossroads Wells Water Production (Gallons per month)



The permitted capacity sold is 42.51%. The permitted capacity is 624,800 gallons per day.

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

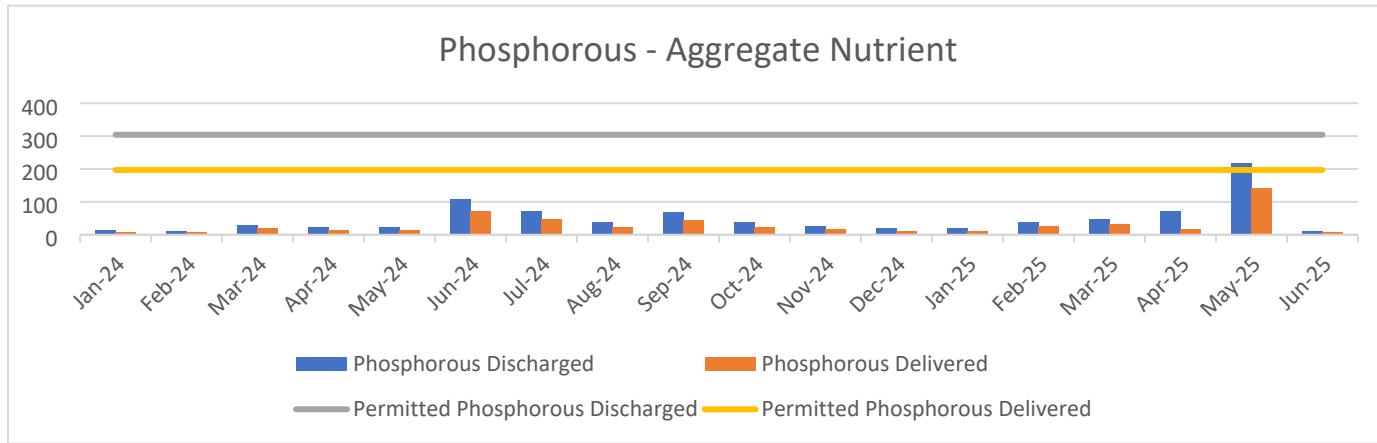
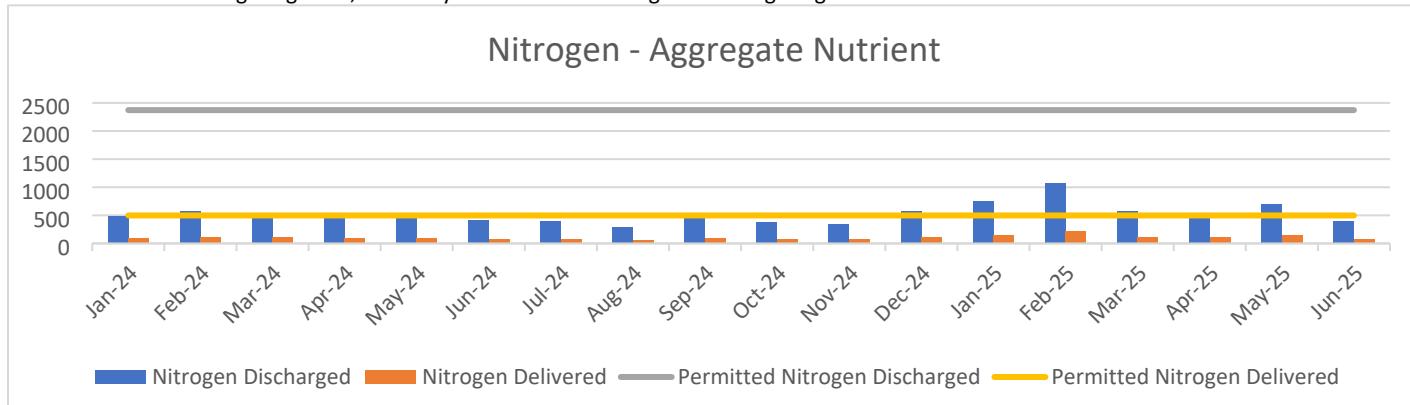


Currently treating approximately 230,000 gallons per day. The permitted capacity is 311,000 gallons per day.

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	28*

*Through June 30, 2025.