

# County of Louisa

## Monthly Report



## Louisa County Water Authority

### July 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	
Nanofiltration Repairs	
Rebuild gravity filter beds	COMPLETE
Replacement of filter drains	COMPLETE
Interviews for an operator position	
Wigen Water Technology onsite week of October 20, 2025, (??)	
Bag filters received – Paisley-Kerr to install between September 15 – 22, 2025	

##### **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	
Bearing to be replaced in rotor	COMPLETE
Toxicity Testing – will begin 08-10-2025 – 08-14-2025	COMPLETE
Vector Attraction testing – will begin 08-11-2025	
WER Study – required for permit renewal – beginning September 18, 2025	
Zinc Translator Study – required for permit renewal beginning September 18, 2025	

##### **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	

**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 September 2025	
Investigating a Pretreatment Program for the Tap House	
Checking for a backflow preventer for the boat dock	
Upgrades to maintain consistent compliance	

**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	
Spring Creek Well #2 – lead and copper testing	COMPLETE
Spring Creek Section L under construction	

**Miscellaneous:**

Shannon Hill Business Park Utilities - SOLD	COMPLETE
Utility Standards - underway	
Amazon	
Cybersecurity	
Safety Manual – rewrite / update	
Safety training	
Accounting Policies	
Regional Water Supply Planning	
American Water Infrastructure Act updates	
Voltus	

**August 2025 Income & Expenditures:**

The Authority’s O & M Revenues exceeded O & M Expenditures by \$132,063 for the month of August 2025. The Authority has a positive O & M cash flow of \$219,739 for FY2026 through August 31, 2026.

Capital Expenditures exceeded Capital Revenues by 107,335 for the month of August 2025. The Authority has a negative Capital cash flow of \$113,026 for FY2026 through August 31, 2025.

O & M and Capital Revenues together exceeded O & M and Capital Expenditures by \$24,728 for the month of August 2025. The Authority has a positive combined O & M and Capital cash flow of \$106,713 for FY2026 through August 31, 2025.

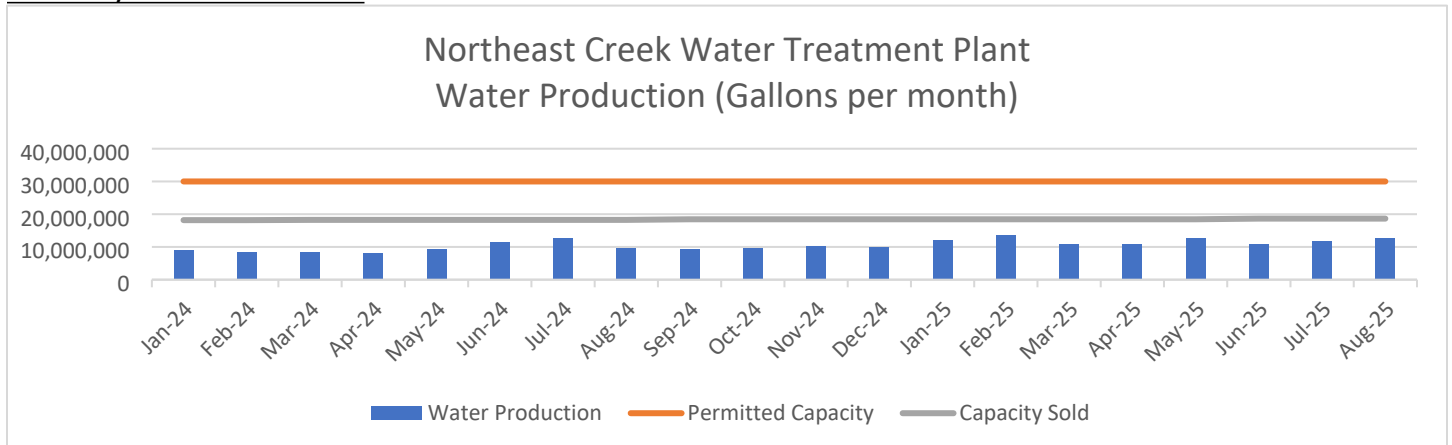
**Fund Balance:**

VIP Stable NAV Liquidity Pool	\$335,322
VIP 1-3 Year High Quality Bond	\$856,453
Total Reserve Fund Balance (\$742,352 of these funds are restricted and not available for use for O&M Expenditures)	\$1,191,785

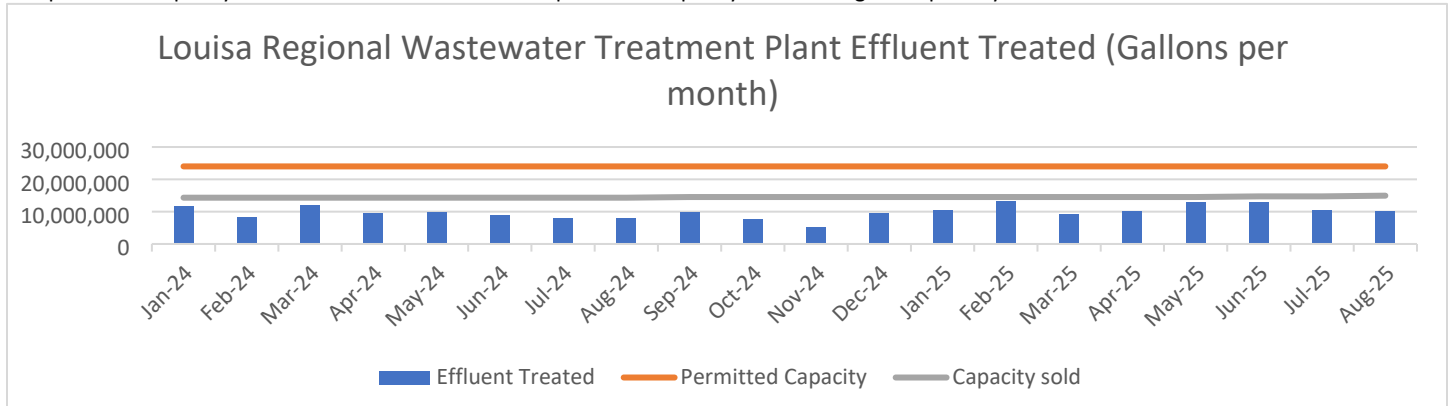
Restricted funds we are obligated to have on hand: \*\*Included in the fund balance\*\*

Customer Deposits	\$147,885
Accumulated Regional Sewer Connection Fees (restricted) less approved expenditures	\$428,828
Other Post-Employment Benefits	\$165,639

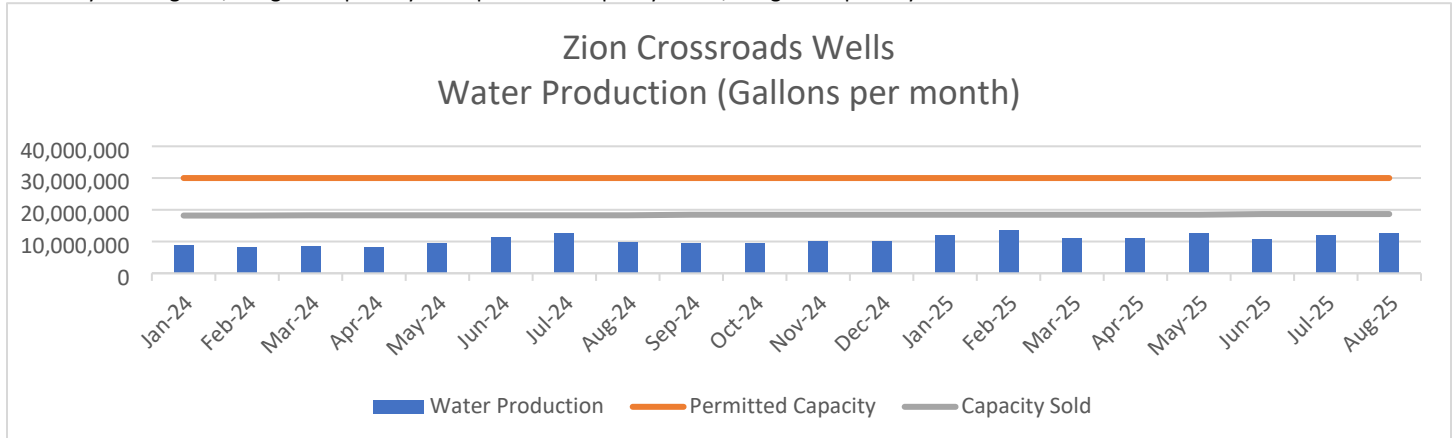
**Production/Treatment Information:**



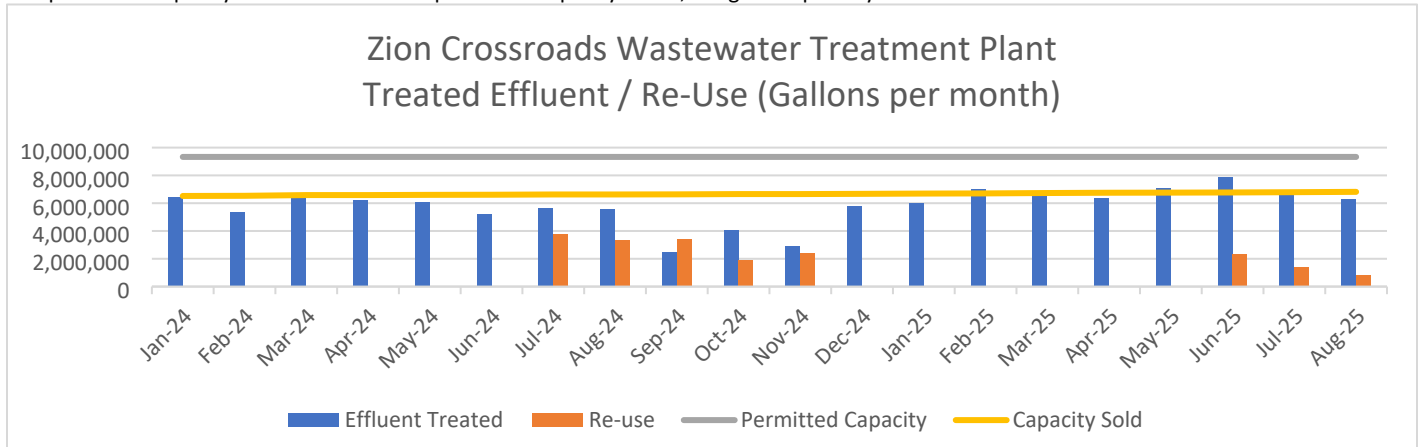
The permitted capacity sold or allocated is 62.19%. The permitted capacity is 1 million gallons per day.



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



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

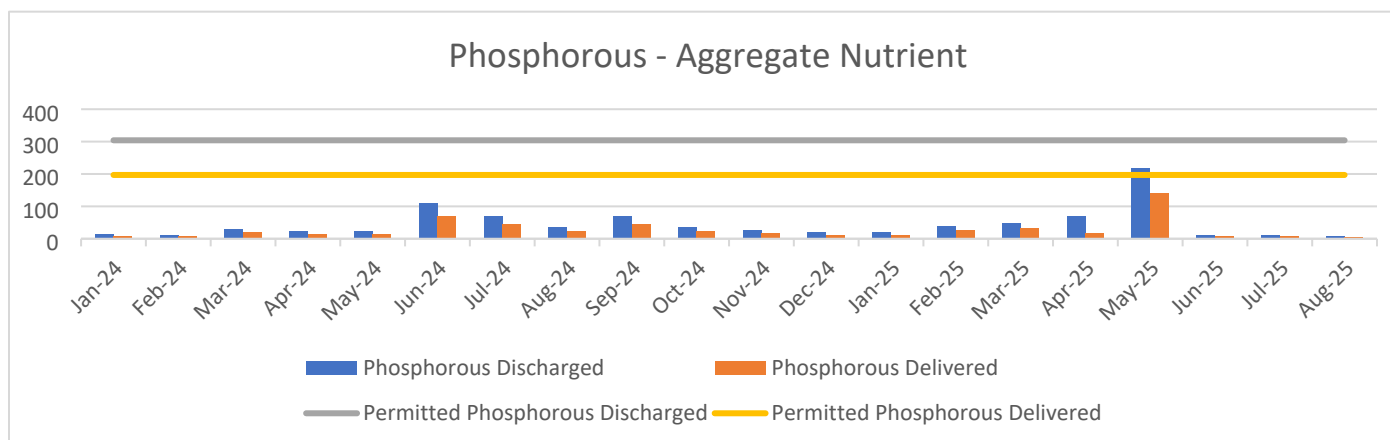
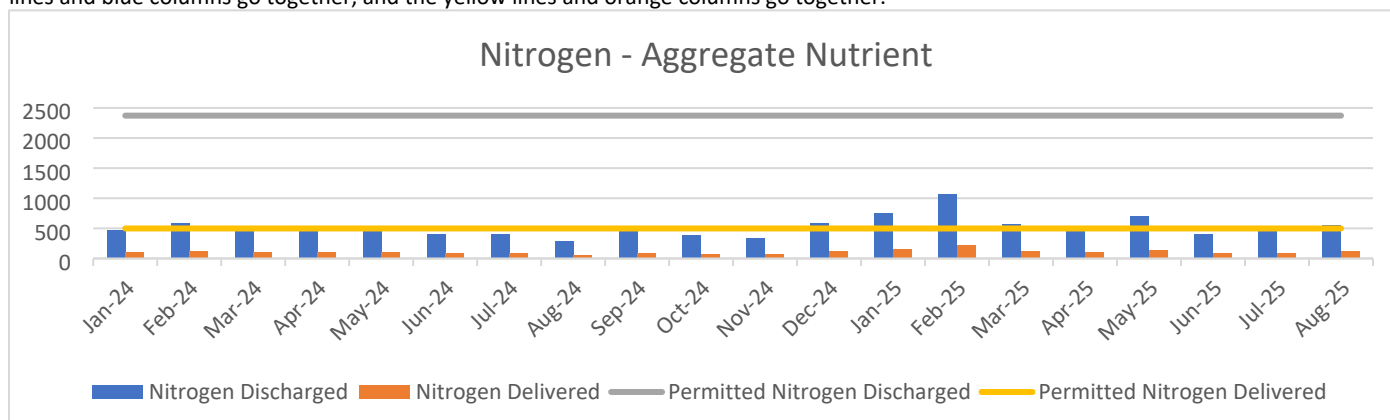


Currently treating approximately 230,000 gallons per day. The permitted capacity is 311,000 gallons per day.

### Nitrogen / Phosphorous:

Nitrogen and phosphorus are assigned limits on an aggregated Countywide basis which are set by the Department of Environmental Quality. Nitrogen and phosphorous 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	40

\*Through August 31, 2025.