

# County of Louisa

## Monthly Report



### Louisa County Water Authority

#### December 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 eight (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	
Security fencing around backwash tank	
Chlorination Maintenance	
PFAS Sampling	
Disinfection Byproducts – regain compliance	
Rapid mixer replacement	
Clear well cleaning – confined space entry	

###### **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	
WER Study – required for permit renewal – final samples will be collected the week of 12/15/2025	COMPLETE
Zinc Translator Study – required for permit renewal – final samples will be collected the week of 12/15/2025	COMPLETE
Influent pump failure on Christmas Eve – possible warranty coverage	
Influent pump maintenance / repairs – replace transducer	
Repair septage receiving flow reader – January to February before tech can do site visit	
Gear box bearing for rotor in ditch #3	

###### **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:**

Cut drainage ditch and regrade slope behind generator and lab building	
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Replace SCADA – CIP budget request approved - underway	
Asphalt seal coat – acquiring pricing	
Security gate – FY2026	
Equipment - Truck	
UV System upgrade – equipment is obsolete	
Replace Influent pumps within the next two years	

**Dam work – Bowlers Mill and Northeast Creek:**

Bowlers Mill – quote received, contract signed, funding is available – demo work complete	
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**New Bridge Water / Sewer System:**

Shoreline Sign – being evaluated	
Build critical inventory	
Upgrade design and PER underway – 95% plans review scheduled for late May 2026	
Upgrades to maintain consistent compliance - underway	
Pressure vessel inspection	

**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	COMPLETE
CTE Building at the High School	
Ferncliff water / sewer line extension – currently four boring crews are working	
Spring Creek Section L under construction – phase 1 complete – phase 2 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	
Asset Management / Mean time analysis	
Master Planning	

**December Income & Expenditures:**

The Authority's O & M Expenditures exceeded O & M Revenues by \$196,212 for the month of December 2025. The Authority has a positive O & M cash flow of \$86,069 for FY2026 through December 31, 2025.

Capital Expenditures exceeded Capital Revenues by \$93,373 for the month of December 2025. The Authority has a positive Capital cash flow of \$191,030 for FY2026 through December 31, 2025.

O & M and Capital Expenditures together exceeded O & M and Capital Revenues by \$289,585 for the month of December 2025. The Authority has a positive combined O & M and Capital cash flow of \$277,099 for FY2026 through December 31, 2025.

**Fund Balance:**

VIP Stable NAV Liquidity Pool	\$340,021
VIP 1-3 Year High Quality Bond	\$868,426
Total Reserve Fund Balance (\$742,352 of these funds are restricted and not available for use for O&M Expenditures)	\$1,208,447

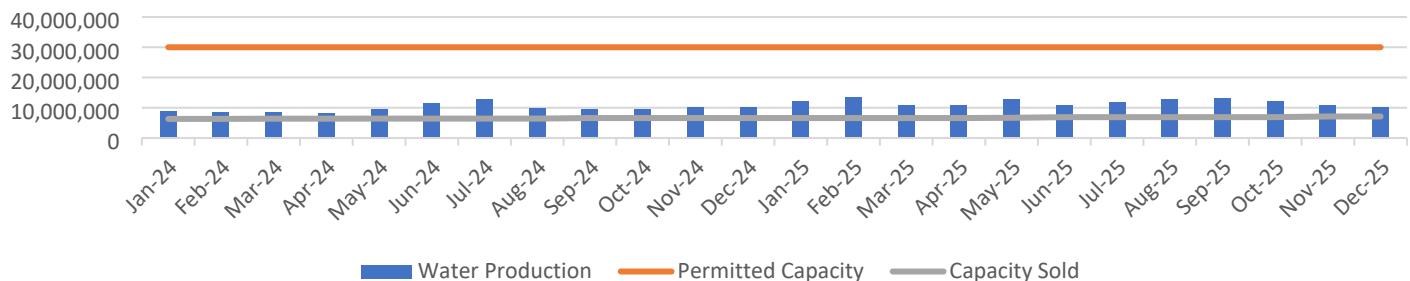
Restricted funds we are obligated to have on hand: \*\*Included in the fund balance\*\*

Customer Deposits	\$151,520
Accumulated Regional Sewer Connection Fees (restricted) less approved expenditures	\$528,367
Other Post-Employment Benefits	\$165,639

#### Production/Treatment Information:

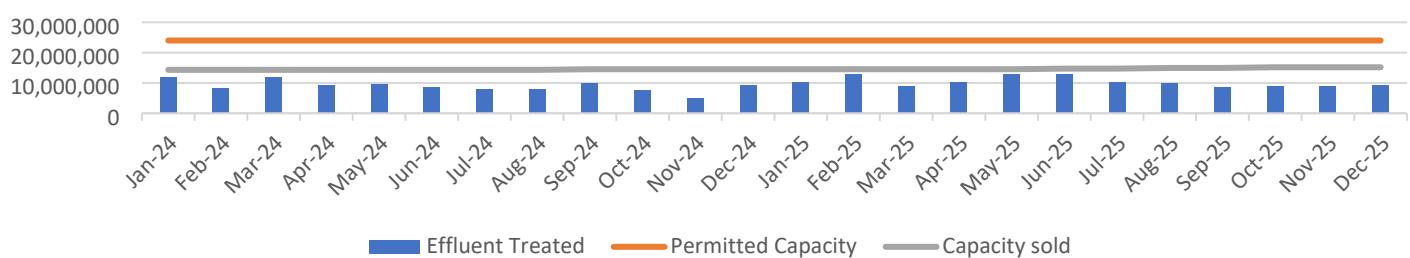
The permitted capacity sold is 7,107,000. The permitted capacity is 1 million gallons per day. Average daily treatment is 337,263 gallons.

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



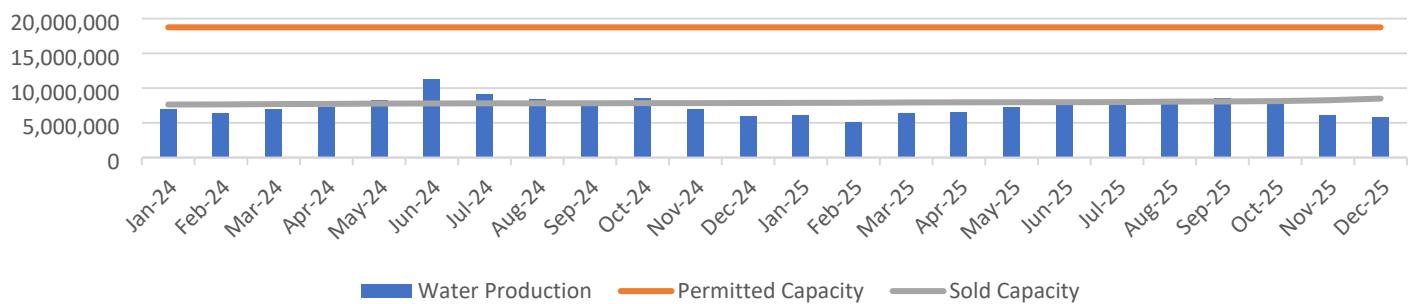
The permitted capacity sold or allocated is 505,733. The permitted capacity is 800,000 gallons per day. Average daily treatment 302,000 gallons.

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



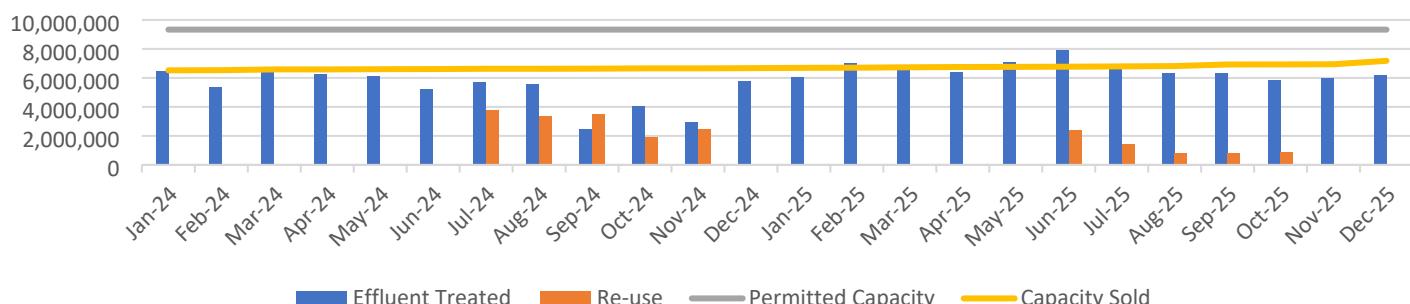
The permitted capacity sold or allocated is 275,067. The permitted capacity is 624,800 gallons per day.

#### Zion Crossroads Wells Water Production (Gallons per month)



The permitted capacity sold is 231,333. The permitted capacity is 311,000 gallons per day. Average daily treatment 199,107 gallons.

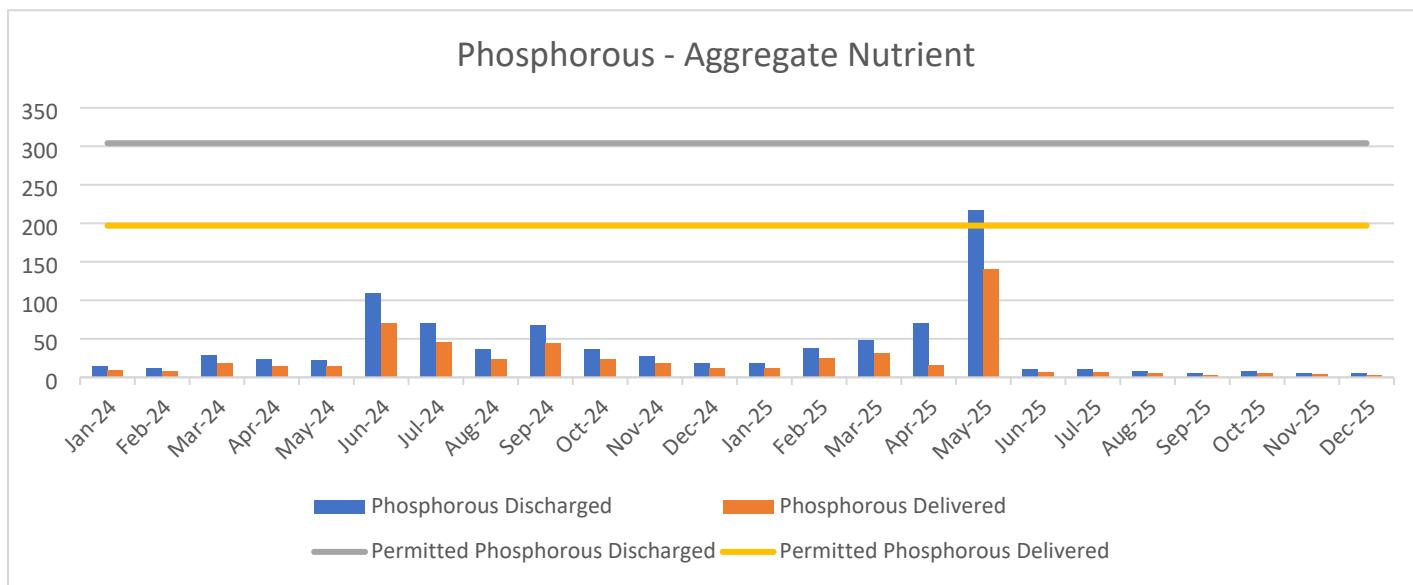
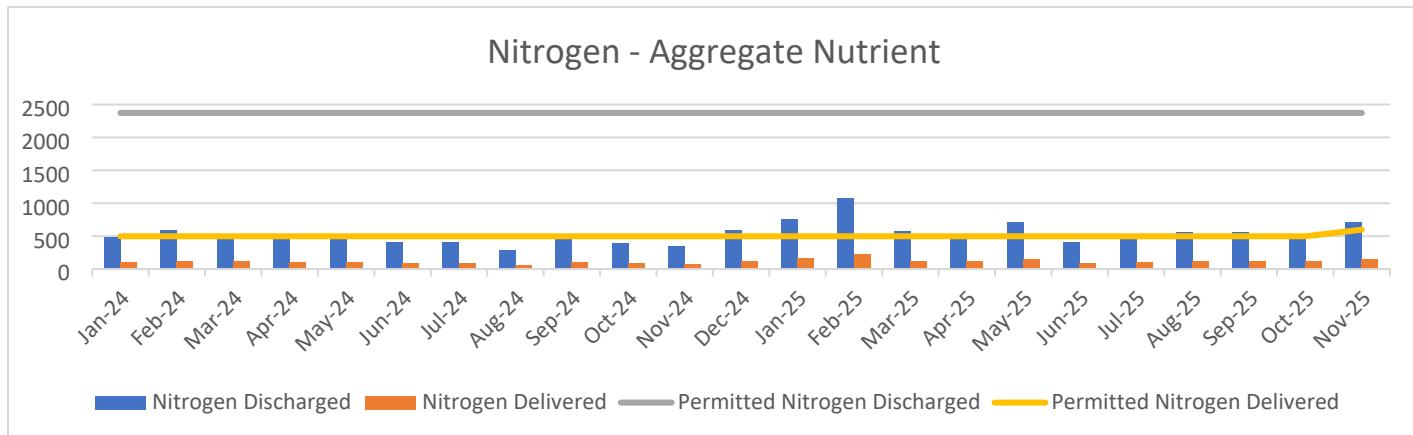
#### Zion Crossroads Wastewater Treatment Plant Treated Effluent / Re-Use (Gallons per month)



### **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	52*

\*Through December 31, 2025.