County of Louisa
Monthly Report

Louisa County Water Authority
October 2026

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	
Clear well cleaning – confined space entry	COMPLETE
Isolation valve replacement	
3rd Nanofiltration skid	
Gate valve – discharge pit	
Backwash valve replacement	
Forklift	
Rebuild high service pumps	
Float control valve	
Rewash flow meters	
Filter flow meters	
Chemical spill containment area work – engineer has evaluated	
Distilled water	
Raw line inserter valve	
Check valve at IDA	
HVAC and exhaust fan issues – week of October 12th	
Safety Platform for plate settling system – being fabricated	
Concrete between basins is beginning to deteriorate – engineer evaluated	
IDA tank washout	
Loading dock drain - flooding from stormwater when it rains	
Truck in shop transmission problem	
VDH Inspection October 27, 2026 10:00 am – 3:00 pm	COMPLETE
Disinfection Byproducts testing November 12, 2026	
Reservoir is 10" – 12" below normal pool	

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	
Belt press overhaul	
New Gorman Rupp pumps for old influent building	
New chain for grit collector	
UV overhaul	
Metal building for tractor, lift and lawnmower	
Replace suction line for Influent Pump Station	
Permit Renewal	
Septage Receiving Station Auger	

Zion Crossroads Well System:

Clean and paint Zion Crossroads Water Tank – interior	

Zion Crossroads WWTP:

Cut drainage ditch and regrade slope behind generator and lab building	
UV System upgrade – equipment is obsolete - underway	
Replace Influent pumps within the next two years	
Xylem vertical turbine pump for inventory	
Roof over UV to protect exposed equipment from elements	
Replace reuse and effluent pumps $114,388	
Reuse off for season	COMPLETE
Check valve failure – ordered	
Tractor	
Reaeration Blowers	
Clarifier walkway	
Gate change - underway	COMPLETE

Dam work – Bowlers Mill and Northeast Creek:

Annual Inspections October 15, 2026	

New Bridge Water / Sewer System:

Shoreline Sign – being evaluated	
Build critical inventory	
Upgrade design and PER underway – 95% design completed	
Spare chemical; feed pump	
Hydro Tank maintenance	
Manhole repairs	
Pump and flow metering system	
WIFI	
Access platform or access arm	
Replace curtain posts	
Generators	
Runoff from green sand filter backwash – engineer has evaluated	
Building for green sand filters	

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	
St. Francis, Lagoon and High School pump station control panel replacement – ordered	
Ferncliff water / sewer line extension – currently four boring crews are working	
Replace pumps and motors at St. Francis Pump Station	
Crossing Pointe construction	
Lagoon pump station water line installation	
Walmart / Stonegate manhole top section replacement	COMPLETE
Maintenance shop	
Fire hydrant and air relief valve replacement (water and sewer)	
6" Godwin pump with lay flat hose and fittings	

Miscellaneous:

Amazon	
Cybersecurity	
Safety Manual – rewrite / update	
Safety training	
Accounting Policies	
Regional Water Supply Planning	
American Water Infrastructure Act updates – 1st set of documents submitted / 2nd submission due 12/31/2026	
Asset Management / Mean time analysis	
Master Planning	
Hazardous Waste Day October 31, 2026	COMPLETE
Scrap metal will be picked up by LCWA staff and sent to scrap yard	
Radio read meter update program	
Replacement of accounting programs	

October Income & Expenditures:

The Authority's O & M Revenues exceeded O & M Expenditures by $155,482 for the month of October 2026. The Authority has a positive O & M cash flow of $50,603 for FY2027 through October 31, 2026.

Capital Expenditures exceeded Capital Revenues by $66,827 for the month of October 2026. The Authority has a positive Capital cash flow of $249,561 for FY2027 through October 31, 2026.

O & M and Capital Revenues together exceeded O & M and Capital Expenditures $88,655 for the month of October 2026. The Authority has a positive combined O & M and Capital cash flow of $300,164 for FY2027 through October 31, 2026.

Fund Balance:

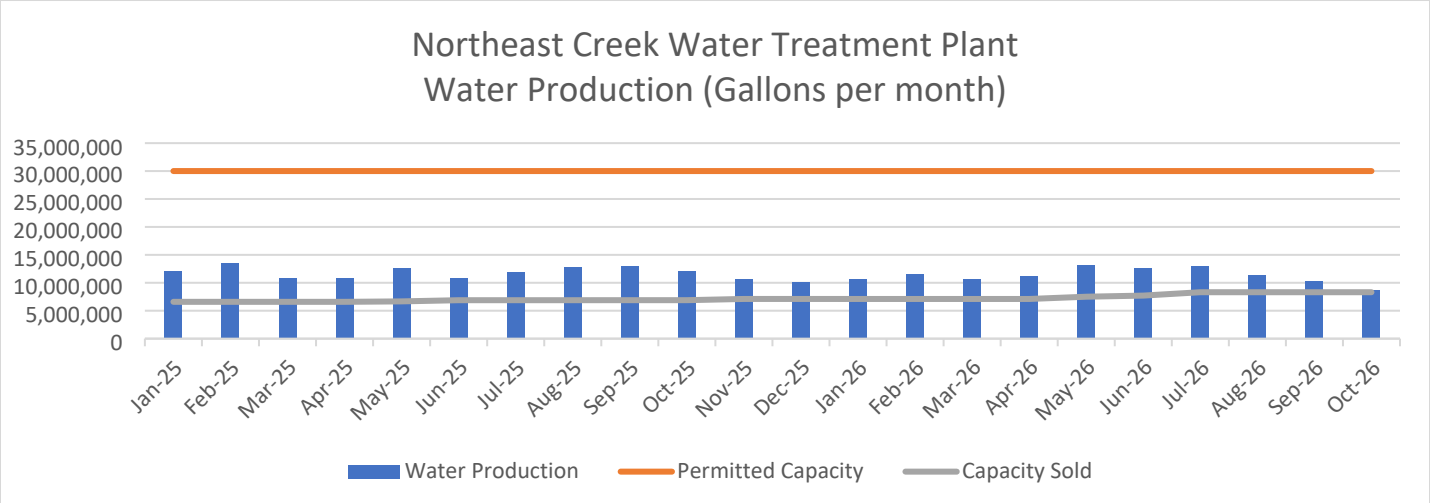
VIP Stable NAV Liquidity Pool **added Crossing Pointe connection fees to maximize interest while scheduling UV replacement at the Zion Crossroads WWTP**	$1,097,806
VIP 1-3 Year High-Quality Bond	$880,278
Total Reserve Fund Balance ($1,047,021 of these funds are restricted and not available for use in paying expenditures)	$1,978,084

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

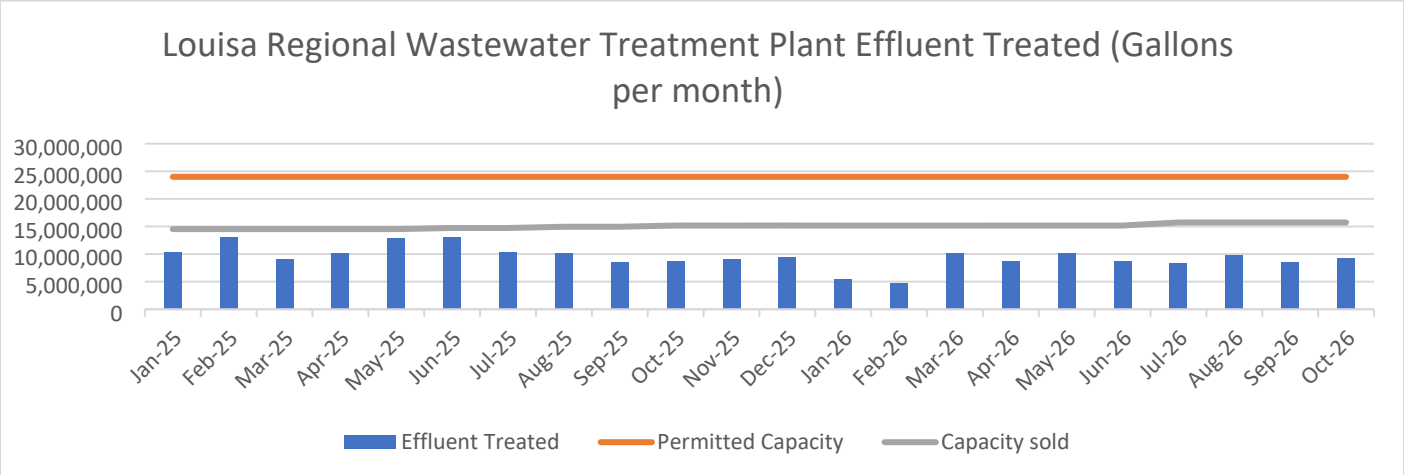
Customer Deposits	$180,083
Accumulated Regional Sewer Connection Fees (restricted) less approved expenditures	$701,299
Other Post-Employment Benefits	$165,639

Production/Treatment Information:

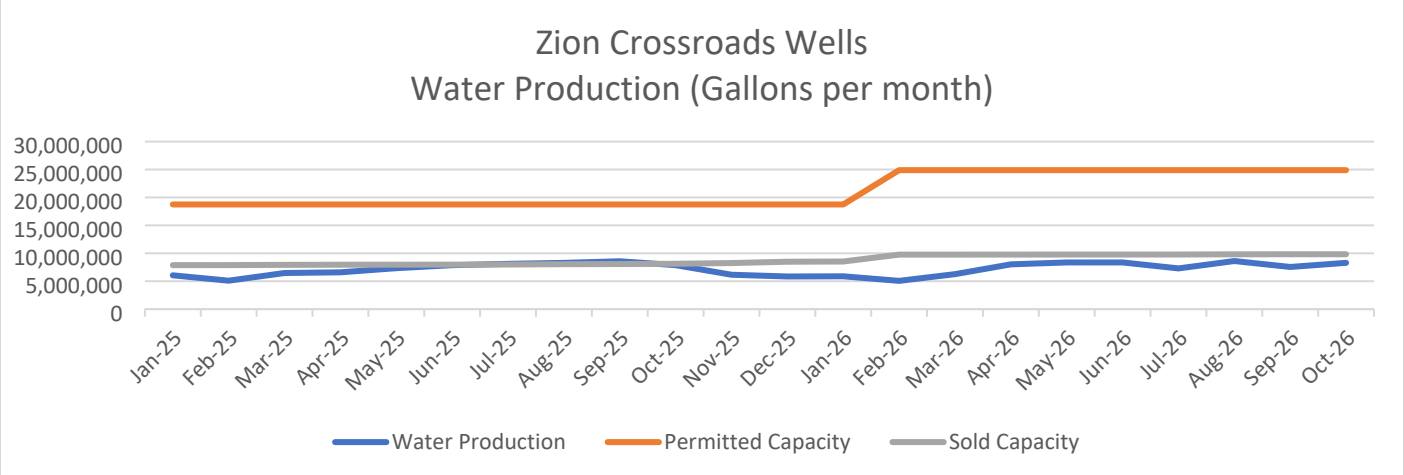
Northeast Creek Water Treatment Plant - The permitted capacity sold is 282,897 gallons per day. The total permitted capacity is 1 million gallons per day. Average daily treatment in October 2026 was 341,727 gallons per day.



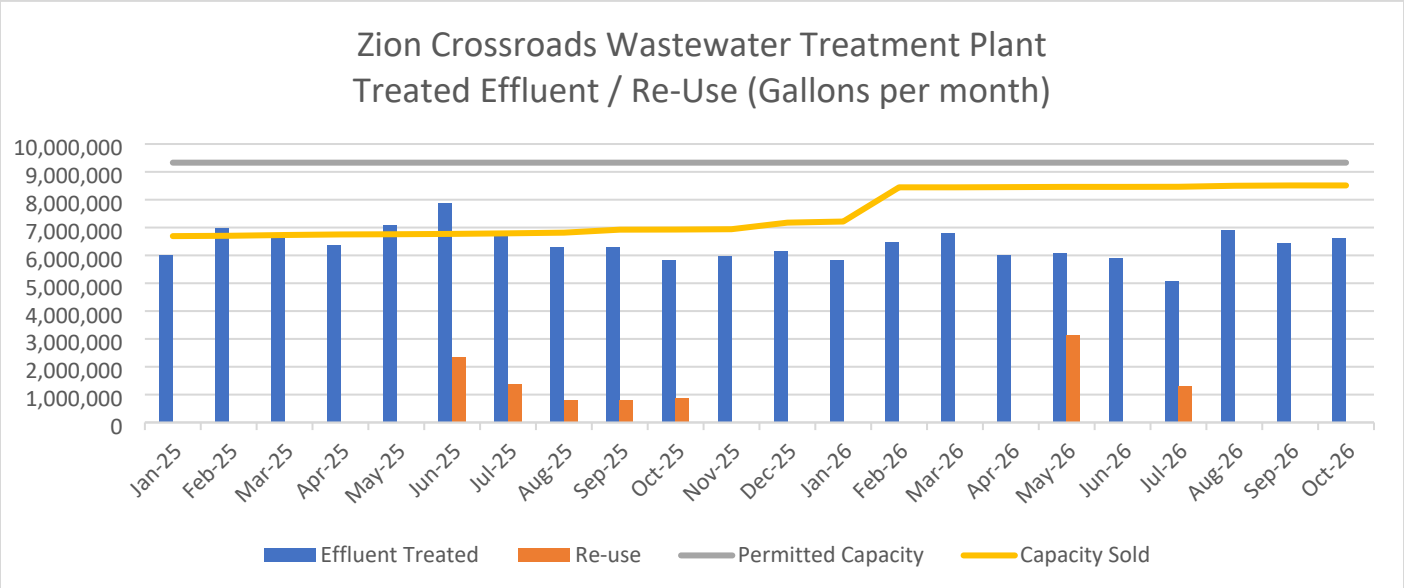
Louisa Regional WWTP - The permitted capacity sold or allocated is 524,000 gallons per day. The permitted capacity is 800,000 gallons per day. Average daily treatment was 296,129 gallons per day in October 2026.



Zion Crossroads Well System - The permitted capacity sold or allocated is 327,600 gallons per day. The permitted capacity is 829,600 gallons per day. Average daily treatment was 267,367 gallons per day in October 2026. Increase in permitted capacity because permit was updated to include Spring Creek Wells #1 & #2 in February 2026.



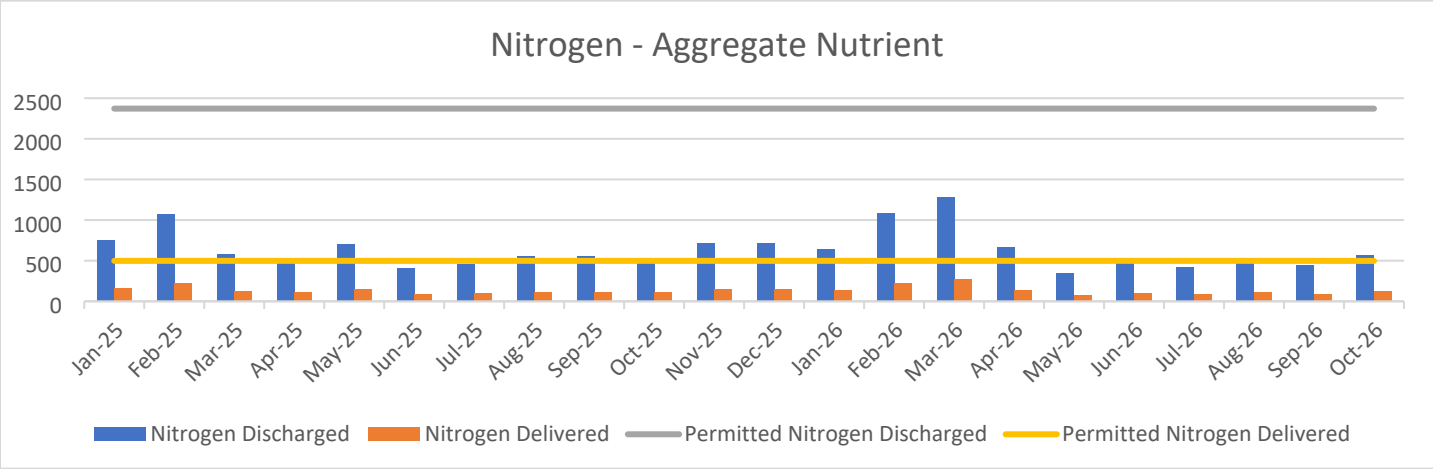
Zion Crossroads WWTP - The permitted capacity sold was 283,733 gallons per day. The permitted capacity is 311,000 gallons per day. Average daily treatment in October 2026 is 267,357 gallons per day.

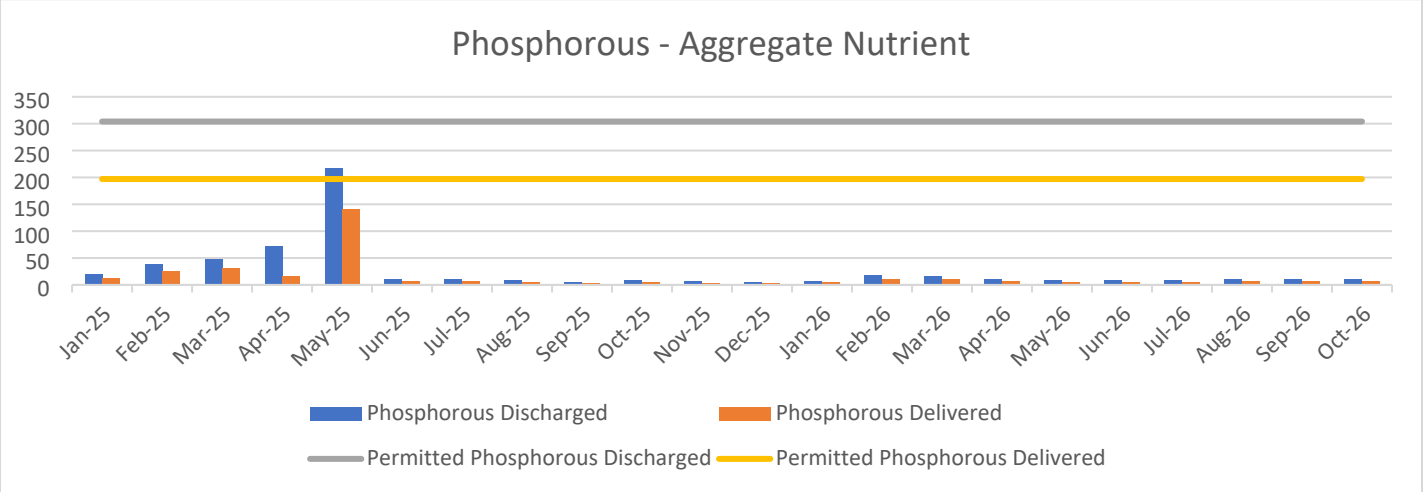


Nitrogen / Phosphorous:

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	52
2026*	58

*Through October 31, 2026.