

# H2info

## All New!

We are trying something new! In our efforts to provide transparency to our customers, we have decided to develop a quarterly newsletter. This issue of **H2info** will concentrate on introducing the Authority and outlining our current projects and initiatives. Future issues will provide details on a current project or initiative and spotlight an Authority employee.

## Louisa County Water Authority

Louisa County Water Authority was created in September 1968 by the Louisa County Board of Supervisors as a separate legal entity apart from the County. In September 2018, the Authority celebrated its 50th Anniversary. The Board of Directors is made up of seven members. All Board members are appointed by the Louisa County Board of Supervisors.

Although the Authority was created in 1968, not much transpired until the early 1980's with the construction of the Northeast Creek Reservoir, the Northeast Creek Water Treatment Plant (NEC-WTP) and the distribution system. In 2017, the NEC-WTP added a treatment process called Nanofiltration to meet the new Disinfection Byproducts Rule. The distribution system for the NEC-WTP extends from the Town of Mineral to the Town of Louisa and from the Town of Louisa to the NEC-WTP. The Town of Louisa purchases all of its water from the Authority, the Town of Mineral purchases some of its water from the Authority and the distribution system includes the school complex on Davis Highway and the Industrial Air Park. The NEC-WTP currently treats 250,000-280,000 gallons of water per day. There are three water tanks in the distribution system. Two standpipe tanks, one in reserve and one used for backwashing filters at the NEC-WTP. The third tank is a multi-leg tank used for storage and pressurizing the water lines.

In 1982, the County of Louisa and the Town of Louisa built the Louisa Regional Wastewater Treatment Plant (LRWWTP). In 1988, the Authority took over the operations and maintenance of the LRWWTP. The LRWWTP has been expanded twice to its current permitted capacity of 800,000 gallon per day of treatment to meet the needs of the community. In the mid-1990's, the collection system was expanded to the Town of Mineral. All of the Town of Louisa and the Town of Mineral's sewage is treated at the Louisa Regional Wastewater Treatment Plant. The collection system includes both gravity and force main lines. Four pump stations move sewage through the force main lines. The LRWWTP currently treats approximately 270,000-350,000 gallons per day.

In the early 2000's, the Zion Crossroads Wastewater Treatment Plant (ZCWWTP) and collection system construction began. The ZCWWTP was upgraded in 2013-2014 to an advanced treatment system. The ZCWWTP collection system extends from Ferncliff West on Rt.250 to the intersection of Rt.15 and Rt.250. North on Rt.15 to the Sommerfield Business Park. The collection system consists of gravity and force main lines. Three pump stations move sewage through the force main lines. The current permitted capacity of the ZCWWTP is 311,000 gallons per day. The permit can be increased to 700,000 gallons per day with the current facility. With another construction upgrade, capacity can be increased to 1.5 million gallons per day. The ZCWWTP currently treats approximately 130,000-150,000 gallons per day.

In the early 2000's, with the construction of the ZCWWTP a public water well system was developed along with the construction of the distribution system. The well system consists of six production wells. The permitted capacity of the six wells is 587,520 gallons per day. The wells are operated in a rotation to provide each well with a "rest" period allowing the well to recharge. The perimeter of the Green Springs wells property has thirteen wells, both deep and shallow, used to monitor the ground water levels. Two additional wells have been drilled and tested, but never placed into ser-



### Inside this issue of H2info

All New! .....	1
Louisa County Water Authority...	1
Louisa County Water Auth. Cont...	2
Hours of Operations.....	2
Contact Numbers.....	2
Current Projects and Initiatives...	2

Louisa County Water Authority



## Hours of operation

The Northeast Creek Water Treatment Plant, Louisa Regional Wastewater Treatment Plant and the Zion Crossroads Wastewater Treatment Plant are manned seven days a week, 365 days a year, from eight to twelve hours a day, including holidays and weekends.

The Business office is open Monday—Friday 8:00 am—4:30 pm.

## Contact Numbers

Business office phone: 540-967-1122

Business office Fax: 540-967-0656

Website: [louisacountywaterauthority.org](http://louisacountywaterauthority.org)

After hours emergency: 540-967-1234

# Louisa County Water Authority Continued

vice because water usage has not reached a level that demonstrates their need. If brought online, the two wells would increase permitted capacity by 204,800 gallons per day for a total permitted capacity of 792,320 gallons per day. The average current daily usage over the past year is 199,320 gallons per day. The water distribution system extends from the Green Springs Well site South along Rt.15 to the intersection of Rt.250 and Rt.15 and includes the Spring Creek Business Park, Walmart, Sommerfield Business Park and the Stonegate Apartments. There is one water tank in the distribution system—a pedesphere tank used for storage and to pressurize the distribution system.

Bowlers Mill reservoir houses a pump station that pumps raw water through a distribution system and includes a raw water storage tank. Old Dominion Electric Cooperative uses the raw water to raise the relative humidity in the turbines to generate electricity.

The Authority staff consists of 20 full-time employees and one part-time employee.

Office: Four full-time and one part-time.

Northeast Creek Water Treatment Plant: Two full-time and one part-time. \*

Distribution/Collection/Maintenance: Four full-time and one part-time.\*

Regional WWTP: Four full-time.

Zion Crossroads: Four full-time.

Wastewater Operations Manager: One full-time.

\*one employee splits time between water treatment and maintenance.

## Current Projects and Initiatives

### ●Safety! Safety!! Safety!!!

- 1) Fall Protection
- 2) Safety Manual update
- 3) Updating safety equipment
- 4) Updating all personal protective equipment

### ●Geographic Information System Mapping (GIS)

- 1) Work orders
- 2) System inventory
- 3) Asset management

### ●Fiscal goals

- 1) Fiscal independence
- 2) Build reserve funds
- 3) Manage O & M expenses

### ●Apprenticeship Program

- 1) Second approved program in Virginia
- 2) Locating a viable candidate

### ●Employee Training and Enhancement

- 1) Succession Planning
- 2) Training
- 3) Highly qualified staff
- 4) Fairly compensated staff

### ●Rate Structure

- 1) Rate reviews
- 2) Rate setting

### ●Tractor Purchase

- 1) Right-of-way clearing

### ●James River Water Project

### ●Zion Crossroads Wastewater Treatment Plant

- 1) Dechlorination Facility
- 2) Lightning protection system

### ●Louisa Regional Wastewater Treatment Plant

- 1) Filter building Modifications
- 2) Upgrade lighting
- 3) Addition of sidewalks
- 4) Splitter box modifications

### ●Northeast Creek Water Treatment Plant

- 1) Sludge-vac System

### ●Regulations

- 1) PFAS (Perfluorinated compounds, perfluoroalkyl acids, synthetic chemicals)
- 2) Safe Yield
- 3) Procurement
- 4) SCC Rule update decision
- 5) New Pretreatment rules
- 6) Phase Three Watershed Implementation Plan
- 7) Ammonia-Nitrogen limits
- 8) Reassignment of Nitrogen and Phosphorous Limits