Chesterfield County Department of Utilities’ customers are fortunate because their water is supplied by three sources. The three sources that supply Chesterfield County’s potable water are the James River (top photo), Swift Creek Reservoir (middle photo), and Lake Chesdin (bottom photo). A total capacity of 110.5 million gallons of water per day, or MGD, is available. The map above outlines the county’s water-service areas. The county is actively pursuing a fourth water supply as a resource for the next century.

The Chesterfield County Department of Utilities owns and operates the Addison-Evans Water Production and Laboratory Facility, which is located on Swift Creek Reservoir. This facility has a capacity of 12 MGD and produces approximately 19.1 percent of the county’s water needs. The county is one of five members of the regional Appomattox River Water Authority, or ARWA, which is located on Lake Chesdin. The county has a daily allocation of 66.5 MGD from the authority and receives approximately 56.4 percent of a typical daily water demand from this source. The third water source is the James River, which supplies the city of Richmond’s water treatment facility. The county’s contract with the city ensures an available supply of 32 MGD. An average of 24.5 percent of the county’s drinking water is provided by the James River.

**Water System Information Summary:**
- Miles of Water Lines: 2,046
- Water Storage Tanks: 24
- Total Water — Tank Capacity: 40.25 million gallons
- Water Pump Stations: 14
- Water — Active Services: 114,660
- Estimated Population Served: 328,141

**Water Sources:**
- James River (City of Richmond)
- Swift Creek Reservoir (Chesterfield County)
- Lake Chesdin (Appomattox River Water Authority)

**Water Plants:**
- **Addison-Evans Water Production and Laboratory Facility**
  - Capacity: 12 MGD
  - Average Production: 7.37 MGD
- **Appomattox River Water Authority**
  - Capacity: 96 MGD
  - Allocation: 66.5 MGD
  - Average Purchased: 21.73 MGD
- **City of Richmond**
  - Allocation: 32 MGD
  - Average Purchased: 9.44 MGD

**Total Water Capacity**
- 110.5 MGD

**Average Daily Flow**
- 38.54 MGD

All data listed in this brochure is reflective of June 30, 2020.
Chesterfield County Department of Utilities

2012 was the first full year that the Falling Creek Wastewater Treatment Plant operated its biological-nutrient removal facility. This ongoing treatment involves the use of advanced treatment technologies that convert ammonia in wastewater to nitrogen gas and releases it harmlessly into the air. The Proctors Creek Wastewater Treatment Plant’s first year of full operation of the same nutrient-removal technologies was 2014. The investment in these projects has proven successful. This year, these plants removed approximately 2.1 million pounds of nitrogen and 337,000 pounds of phosphorus thereby improving the water quality in the James River and Chesapeake Bay.

Wastewater System Information Summary:
Miles of Wastewater Lines: 2,164
Wastewater Pump Stations: 25
Wastewater — Active Services: 97,570
Estimated Population Served: 286,766
Total Capacity: 41.3 MGD
Wastewater Treated: 22.26 MGD

All data listed in this brochure is reflective of June 30, 2020.

Protecting the Water Quality of the James River and Chesapeake Bay

2012 was the first full year that the Falling Creek Wastewater Treatment Plant operated its biological-nutrient-removal facility. This ongoing treatment involves the use of advanced-treatment technologies that convert ammonia in wastewater to nitrogen gas and releases it harmlessly into the air. The Proctors Creek Wastewater Treatment Plant’s first year of full operation of the same nutrient-removal technologies was 2014. The investment in these projects has proven successful. This year, these plants removed approximately 2.1 million pounds of nitrogen and 337,000 pounds of phosphorus thereby improving the water quality in the James River and Chesapeake Bay.

Wastewater Plants:
Falling Creek Wastewater Treatment Plant
Capacity 12 MGD
Proctors Creek Wastewater Treatment Plant
Capacity 27 MGD
South Central Wastewater Treatment Plant
Capacity 2.3 MGD
The Chesterfield County Department of Utilities is a public water and wastewater utility that operates as an enterprise fund. It is sustained by the revenue of the department and uses no tax revenue. It is operated and funded much like a private company. The main functions of the department are providing its customers with the highest quality drinking water while also protecting the James River and Chesapeake Bay by operating advanced wastewater-treatment facilities. The department uses state-of-the-art technology to deliver the highest quality products and services to its customers.

The department provides water service to more than 114,000 customers and wastewater service to more than 97,000 customers. It works with an annual operating budget of approximately $73.6 million, has 303 full-time positions, owns one water-treatment plant and two wastewater-treatment plants, and controls 24 water-storage tanks and 39 pump stations. The department is diligent about ensuring that water is safely and efficiently delivered to customers. Chesterfield County water consumers can be assured that the water they drink meets or exceeds all federal drinking-water standards. They also enjoy some of the lowest rates in the area. Due to the department’s affordable rates and continuously solid financial position, the Chesterfield County Department of Utilities is one of only a handful of water and wastewater utilities in the nation to have achieved and maintained AAA ratings on its revenue bonds from each of the three top rating services. Financial stability, customer service, quality products and services, and workplace environment are the four key components that make up the department’s strategic performance plan. Performance measures are established for every division of the department and are tracked monthly or annually with an annual overview. The performance plan (available on the department’s webpage) is vital to the department’s success. By consistently evaluating its processes and progress, the department continuously improves its tradition of excellence in customer service.

Recognition and Achievements: Progressive management and efficient department operations have allowed the department to become a recognized leader in Virginia as well as the nation. Following are examples illustrating some of the department’s recent achievements:

2014, 2018 and 2019—Received the National Association of Clean Water Agencies’ Excellence in Management Recognition.
2015—Received the Association of Metropolitan Water Agencies Sustainable Water Utility Management Award.
2016—Received the Silver Medal in the Governor’s Environmental Excellence Award Program.
2016—The Triple-AAA bond rating is affirmed by the top three rating agencies with issuance of 2016 revenue bonds to refinance all outstanding debt. The department first achieved its triple AAA rating in 2002 and has maintained it continually since then.
2016—The Water Distribution section was the first water distribution system in the state to receive E2 certification from DEQ.
2017—Received national recognition as a Utility of the Future Today for being forward-thinking, innovative, and for providing resilient and value-added service to its communities.
2018—The Addison-Evans Water Production and Laboratory Facility received the 20-Year Director’s Award for maintaining partnership for safe drinking water program standards. The facility previously received the 10-Year and the 15-Year Director’s Award and was the first utility in Virginia to be recognized by the U.S. Environmental Protection Agency for a safe drinking-water program.
2019—The department’s wastewater treatment plants were reaffirmed as E3 facilities by DEQ and the water distribution system’s certification was reaffirmed as E2.
2020—Three department projects were recognized by the National Association of Counties. The department has received a total of 23 National Association of Counties’ awards received for employee innovation and cost-saving ideas.