



## PROJECT PROFILE

### GREENSVILLE COUNTY RESERVOIR

<b>OWNER</b>	Greensville County Water & Sewer Authority
<b>SIZE</b>	150 acres of construction area / 6.5 million sqft lined
<b>LOCATION</b>	Greensville County, VA
<b>DESIGN</b>	New Reservoir / 1 Billion Gallons of Raw Water 60 Mil HDPE Exposed Liner (Smooth) Textured Geomembrane Geotextile Cushion Layer Geocomposite Gas Venting System



## CONSTRAINTS

New Construction on 150 Acres of Disturbed Land

Extensive Pre-liner Earth Work

Local and National Regulations

Stringent Safety Concerns

Stringent Water Quality Requirements

## BACKGROUND

In 2017, the Greensville County Water & Sewage Authority (GCWSA) approved the construction of a new one-billion-gallon raw water storage reservoir and intermediate pump station facility in Greensville County, Virginia. The total project consisted of earth moving, construction of two large intake towers, pump installation, geomembrane installation, concrete work, and sediment & erosion controls. The raw water storage reservoir construction area consisted of 150 acres of disturbed land area.

The GCWSA awarded the contract to construct the Greensville County Reservoir to Curtis Contracting, Inc. (CCI), located in West Point, VA. CCI began construction in December 2017, moving approximately 1.7 million cubic yards of earth to form the shape of the reservoir impoundment area.

CCI also constructed the intermediate pump station, reservoir aeration, access roadways, and installation of an 18" raw waterline. Another major component of the construction of the reservoir was the installation of a geosynthetic liner system to contain the one billion gallons of raw water within the 150-acre reservoir.

## SOLUTION

CCI contracted Hallaton Environmental Linings to provide and install the reservoir's geosynthetic liner system. CCI also asked Hallaton to provide their expertise and knowledge with regards to the designed liner system. CCI consulted with Hallaton to provide some value engineering possibilities for the proposed liner system configuration.

Hallaton's field crews installed approximately 150,000 square feet of geosynthetics on a daily basis from May 2018 through November 2018. Hallaton worked continuously with CCI to ensure that a sufficient amount of prepared subgrade was available for lining installation during this time period. CCI did a fantastic job of staying out in front of Hallaton throughout the geosynthetic installation phase for the duration of this large project.

For more information visit the Hallaton Environmental Linings website at [www.hallaton.com](http://www.hallaton.com).



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