

Dillwyn Waste Water Treatment Plant Expansion Project Frequently Asked Questions

Where is Dillwyn?

The Dillwyn Waste Water Treatment Plant is located in Buckingham County, approximately 60 miles west of Richmond, Va., in the town of Dillwyn, within the James River Basin.

What is the composition of the Dillwyn Waste Water Treatment Plant?

The Dillwyn WWTP serves the town of Dillwyn, the areas near the intersection of Route 15 and Route 20, the industrial park, the high school and the middle school. The WWTP is currently permitted for 100,000 gallons per day and discharges a monthly average between 60,000 and 65,000 GPDs. During rain events, the WWTP has experienced peak flows as high as 150,000 GPD. Currently, the waste water system has 143 residential connections and 87 commercial/retail connections. Treated effluent is released into an unnamed tributary of Whispering Creek, in the James River Basin.

Why is USACE partnering with the city of Richmond?

Under Section 510 of the Water Resources Development Act, Norfolk District is addressing the bay's habitat protection and restoration, sediment pollution cleanup, restoration of tidal and non-tidal wetlands and native oyster restoration. Buckingham County's Dillwyn Waste Water Treatment Plant Expansion Project falls within the scope of the WRDA.

The city of Richmond is partnering with USACE to utilize their extensive experience in flood control and water quality projects.

What will the Dillwyn Waste Water Treatment Plant Expansion Project consist of?

District project planners said the expansion will include the installation of sequencing batch reactors with tertiary filtration and an ultraviolet disinfection upgrade. The existing head works will be demolished and replaced with a new structure fitted with new grinding and screening equipment to protect downstream equipment and improve the quality of treated material. A second equalization tank will be constructed to meet the capacity requirements for the 200,000 gallons per day facility. Additionally, a new influent flow meter, in-plant pump station, automated solids dewatering system, fuel storage tank, and electrical control building will be built.

The improvements will provide nutrient removal capabilities necessary to meet new permit conditions, and provide an added barrier of regulatory compliance.