

FRENCH BROAD RIVER - Riverbank Restoration

Year Constructed: 2015

Project Size 4750 Units/700 If

Client
Tennessee DOT

Reinforcement Geogrid

VegetationLive Stakes

EngineerFreese & Nichols

Contractor RiverWorks

+ Project Snapshot

A section of the French Broad Riverbank had been severely damaged due to flooding conditions during the construction of a new bridge. The bank erosion threatened both the recently installed bridge infrastructure and an adjacent railroad line. A regulatory directive was imposed, requiring an engineered, permanently vegetative stabilization method to be implemented. Envirolok created the solution needed to permanently stabilize the slope. The site was regraded in preparation for installation and along every third course of bags, geogrid was used to anchor the system. As rows of Envirolok bags were installed dormant brush material was placed for vegetation growth. Four boulder vanes were constructed into the river to help slow the velocity of the water and help direct stream flow away from the tow of the bank. Upon completion the top of the slope and all other areas were seeded and mulched with a riparian seed mix. During the dormant season native trees and shrubs were planted for long term stability. Continued monitoring has shown a strong Envirolok system with thriving vegetation.

