



Photo courtesy of F&M College

Big Spring Run

Stream and Floodplain Restoration

The Big Spring Run tributary is a headwater system that has been impacted by historical human activities. Big Spring Run became characterized by severe streambank erosion and stream bed degradation, with the nutrient-rich sediment released through these erosional processes affecting downstream water quality.

Environmental engineers, geologists, botanists, landowners and F&M students provided 8 years of scientific research and monitoring that allowed LandStudies to design this project to improve water quality in the watershed, enhance wildlife habitat, and provide added flood volume storage by returning the bottom of the stream valley to its historic condition, creating a wetland-meadow valley bottom complex.

The project removed 21,721 cubic yards of legacy sediment, restored 1,479 linear feet of stream valley and 3,074 linear feet of stream channel. LandStudies surveyed and developed design/construction documents, prepared permit applications and coordinated with federal, state, and local agencies to obtain approval to construct the project in compliance with clean water laws.

Now completed, the project improves water quality downstream, provides improved wildlife habitat, and provides added flood storage volume.

Services

Geomorphic Assessment | Design | Engineering | Permitting | Construction/Construction Management | Erosion Control, Native Seed and Native Plant Installation | Maintenance

Client

Pennsylvania Environmental Council

Location

Lancaster County, PA



During construction



Before construction