

Long Green Creek Stream Restoration

Project Overview 



Site Location:
Baltimore County, MD



Client / Owner:
Baltimore County Soil
Conservation District



Completion Date:
October 2019



Est. Construction Cost:
\$423,881

The Long Green Creek restoration project is located on an agricultural-zoned parcel. BCSCD was awarded funding for 891 feet of stream restoration on Long Green Creek, creation of oxbow wetlands, and installation of a one acre shallow-water wetland.

BCSCD contracted Ecotone to design and implement the restoration of Long Green Creek. Within the proposed project area, the existing low-flow channel is overly sinuous and the floodplain is disconnected. The fields adjacent to the stream flood during high flow events and lateral migration is evident.

After restoration, Long Green Creek will resemble a comprehensive stream/wetland complex. The stream will be realigned to a more stable planform and Ecotone will create several new low-flow channels that bypass the existing severe meanders. The channels will frequently spill over the banks onto surrounding designated wetland area – the stream valley will be planted with wetland vegetation, encouraging the formation of small pocket wetlands. Additionally, 160 feet of the old channel will be converted to wetlands and connected to the hydrology of the realigned stream. The project will embrace Ecotone’s “Less is More” approach to restoration and minimize rock import by adding native wood materials into the channel and floodplain. This material will be

Ecotone funded the design of this project, and the construction portion of the restoration of Long Green Creek is funded by the Chesapeake and Atlantic Coastal Bays Trust Fund, awarded for FY 2019. Design and permitting is complete – construction will begin in July 2019 and is anticipated to end by October 2019.

Project Highlights:

- Designed to improve wildlife habitat for waterfowl and aquatic species
- Will result in a stream-wetland complex that stores excess nutrients, sediment, and water.
- Reductions of 31 tons TSS/year, 99 lbs N/year, and 72 lbs P/year



Current conditions: Highly sinuous stream patterns and eroded banks are present along this reach of Long Green Creek.



Current conditions: This field adjacent to Long Green Creek will be converted to a shallow water wetland, which will retain water and provide habitat.



Proposed Conditions: A forested channel with riffles and heavily vegetated banks. This site will provide excellent habitat and water quality improvements.