

HAINES BRANCH MITIGATION, STREAM & ECOLOGICAL RESTORATION



DESCRIPTION

PHOTOS

Frederick County, MD

BayLand provided assessment and design services to develop and implement a Final Mitigation Plan including evaluation, planning, permitting, design, construction cost estimating, bidding services and construction management. The multi-year project was completed in August 2017 on budget and ahead of schedule, with no change order requests from the contractor, Meadville Land Service, Inc.

Restoration Highlights:

- 52-acre restoration site / 12,600 feet of stream valley / 1,166-acre drainage area
- 12,600 feet of restored or recreated stream channels including single channel and 9,000 feet anastomosed-channel systems with islands
- 16 acres of riparian buffer
- 23 acres of tall warm season grasses
- Vegetation included incorporating 3 acres wetland soil media, seeding and mulching 90 acres, planting 6,853 trees and shrubs, 11,783 bare root/tubelings, 86,278 herbaceous species and installing 3,457 live stakes
- 8.2 acres of created wetland and open water habitat
- 9 groundwater intercept dams (wetland augmentation)
- Various in-stream structures (5,580 LF of mountable berm, 3,900 of soil fabric lifts, 28 log-boulder step-pools, 4,086 LF of constructed riffles, 2 log-boulder j-hooks, 1,950 LF of toewood, etc.)
- Bioengineering

Client | Lehigh Cement Company, LLC

Engineer | BayLand

Subconsultants | Clear Creeks & Envirens

Contractor | Meadville Land Service, Inc.

Completed | 2017

Construction Cost | \$3,033,950

