Ridout Creek Small Watershed Restoration

Roadside Gully Stabilization

Creating Resilient Farms on an Historic Chesapeake Tributary by Utilizing Nature-Based Regenerative Stormwater Solutions Rooted in Eastern Forest Ravine Ecosystem Habitat and Geomorphology

Roadside Gully Stabilization

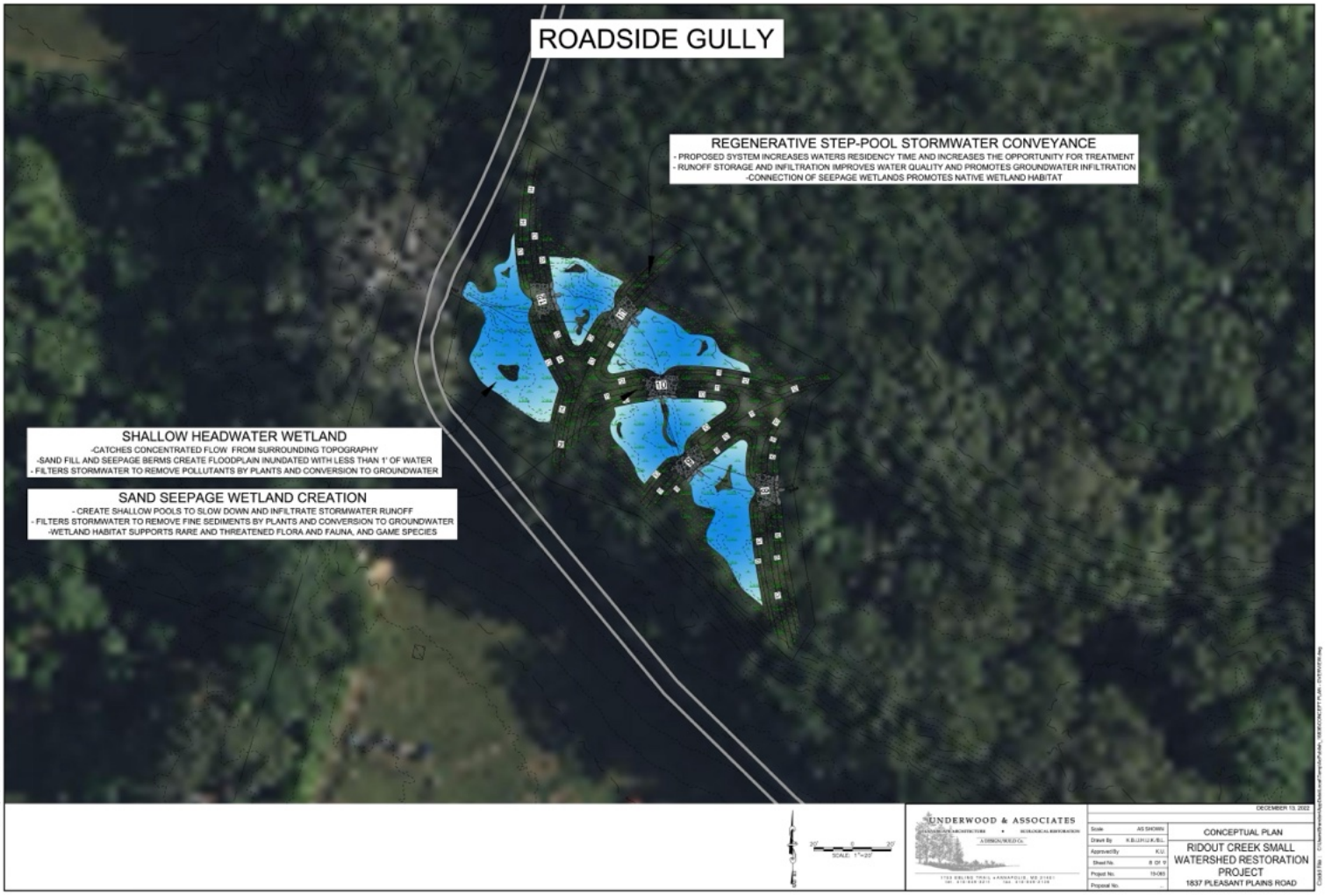
This is an historic area off of Whitehall Bay and the Chesapeake Bay and has been continuously farmed since the 1600's.Development in this area, however, has taken this once open agriculturally dominated peninsula and sliced it into multiple subdivisions surrounding the remaining farms that are left.

The 125 acre Hollywood Farm has become surrounded on two sides by subdivisions built in the second half of the 20th century. This increased impervious surface has contributed, in part, to increased runoff across their farm fields and into the forested buffers, creating increasingly incised gullies funneling silt laden stormwater into Ridout Creek.

Proposed Solution

We propose to manage farm runoff to create stream/wetland complexes using the single tool of Regenerative Stormwater Conveyance (RSC) which will promote the intersection of functioning farms and environmental stewardship.

RSC is a nature-based restoration approach that repairs degraded water courses by mimicking the biological, chemical, and geomorphic elements of native stream-wetland complexes.



RSC restoration techniques use a landscape approach to protect aquatic resources from the subestuary to headwater streams. The synthesis of the methods and techniques implemented in RSC construction results in dissipation of erosive flows from farm fields, retention and detention of stormwater, removal of pollutants, and exfiltration resulting in upwelling, cooler flow. The term “regenerative” refers not only to the fact that the establishment of this restored habitat is sustainable, but that it increasingly becomes more robust and self-sustaining over time to create greater biodiversity than conventional restorations or farm BMP’s.

Key Facts

Total Project Cost: $*320,000*

Key Metrics	
Drainage Area	37.97
TN Reduction (lbs/yr)	292.9
TP Reduction (lbs/yr)	55.41
TSS Reduction (tons/yr)	53.23
Size of Project footprint (sq ft)	18,075
Length of Stream/SWM (ft)	238
Wetland created (acres)	0.48
Reforestation (acres)	0.39
Practice length (ft)	238
Trees Planted (#)	157
Grass Buffers (acres)	0
Impervious Acre Credits	31.75

Severn RIVERKEEPER

Hollywood Farm Upland Runoff Photos


WARNING
ELECTRIC FENCE