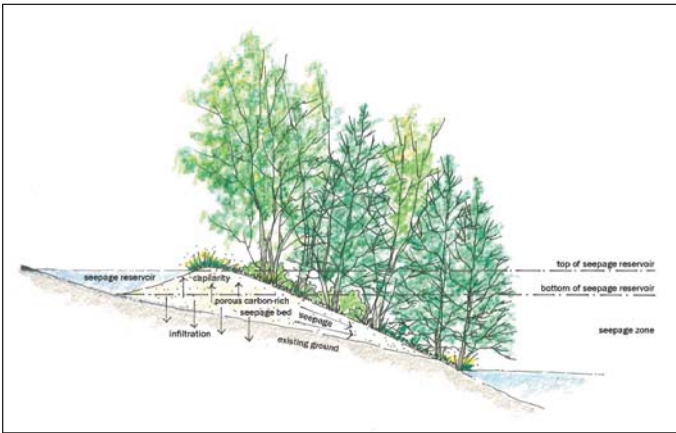


COUNTY OF ALBEMARLE

# Woodbrook Lagoons Enhancement Project

Charlottesville, Virginia



top: Rendering of site plan; bottom: Sand seepage berm detail

*Low impact restoration techniques transformed an abandoned sewage lagoon into a functioning landscape that improves ecological value and improves water quality.*

The Woodbrook Lagoons project provided Biohabitats with a unique opportunity to enhance and restore 7.5 acres of a former sanitary sewerage lagoon and 1,100 linear feet of stream and floodplain. Heavy development in this 225-acre watershed resulted in the degradation of a tributary to the South Fork of the Rivanna River. The goal for the project was to restore the stream reach and retrofit the former lagoon into a water quality feature.

Several baseflow weirs were designed to raise the water surface elevation of the tributary immediately upstream of the lagoon area. This allows stormflows to access the wide floodplain on a frequent basis. With minimal grading, out-of-bank flows enter the lagoon.

Stormwater in the lagoon will be temporarily impounded behind a sand seepage berm, allowing water to slowly infiltrate. The berm, which includes mulch, supports microbes which remove contaminants as stormwater passes through it. The roots from vegetation planted on the berm also take up nutrients. The temporary impoundment also functions to attenuate stormflows within the sub-watershed. To avoid disturbing the former landfill beneath the site, all work within the lagoon was constructed above existing grade.

## SERVICES

- Inventory & Assessments
- Design
- Permitting
- Construction Management
- Public Outreach

conservation planning  
ecological restoration  
regenerative design



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