

Seven Courts Stream Restoration

Perry Hall, Maryland

Photo by Baltimore County Department of Environmental Protection and Sustainability



The restoration of several degraded tributaries in a highly urbanized watershed helps Baltimore County reduce erosion while enhancing stormwater management and aquatic and riparian habitat.

SERVICES

Ecological Restoration
Infrastructure
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After assessing the extensively developed Lower Gunpowder Falls watershed in 2011, Baltimore County identified the Seven Courts subwatershed as a priority location for ecological restoration. With its history of land use changes, from agricultural to residential development, and its lack of adequate stormwater management devices, the subwatershed featured several impaired tributaries.

Using desktop analysis and field investigations, Biohabitats assessed the project area. This included geomorphic channel and stream problem assessments, wetland and riparian vegetation surveys, bank condition measurements, and the mapping of watershed geology, hydrology, soils, land use, stormwater facilities, and infrastructure. Biohabitats identified seven reaches of three tributaries and several outfall channels, totaling nearly 5,000 linear feet, as priority restoration opportunities.

After evaluating several restoration approaches, Biohabitats worked with the County to create a long-term, stable channel design to restore function and stability and enhance habitat and riparian forest structure for all of the degraded reaches. Biohabitats supervised construction, which was completed on time. The restoration satisfied the County's programmatic needs (e.g., protecting infrastructure and sediment and nutrient load reduction) while enhancing the overall function of the stream system. Post-construction monitoring, which is being conducted by a subconsultant and supervised by Biohabitats, has revealed the restoration has remained for the most part vertically and laterally stable and more diverse, native riparian communities are beginning to establish with the assistance of non-native invasive control.