

Long Branch Watershed Implementation Work Plan

Fairfax, Virginia



One of the oldest counties in the U.S. now has a roadmap to restoring a watershed degraded by development that preceded stormwater management regulations.

SERVICES

Ecological Restoration
Water Strategies

Much of Fairfax County was developed before stormwater regulations. In 2017, the State issued a TMDL requirement to reduce sediment within Accotink Creek. Long Branch, a tributary, was declared impaired, and its 3.7-square-mile subwatershed was assigned an annual waste load reduction of 2,433 tons. The County contracted Biohabitats to develop, implement, and monitor a holistic restoration approach focused on ecological uplift and TMDL compliance.

The initial stages of this multi-year effort focused on engagement, assessment, and monitoring. To involve stakeholders, Biohabitats developed a public input map to gather local knowledge from residents and users of the Long Branch Stream Valley Trail. Biohabitats completed a watershed assessment focusing on streams, outfalls, and stormwater retrofits. Assessments gathered data about existing conditions to prioritize restoration opportunities. A complimentary monitoring program evaluated the long-term health and resilience of the watershed. Pre-construction monitoring began in the fall of 2021.

Field assessment data, public input, and existing data resources were compiled into a project evaluation framework for identifying and prioritizing potential restoration projects. The framework scored retrofit opportunities within three categories: Ecological Benefits, Ancillary Benefits, and Feasibility. Stream restoration and retrofit priorities were identified for further field verification and integration into a phased implementation plan. Biohabitats will design and oversee the construction of seven miles of stream restoration and several stormwater retrofits.