

## Lower Spring Branch Stream Restoration

Baltimore County, Maryland



top: Initial conditions  
bottom: After restoration

As part of an on-call stream restoration contract, Biohabitats designed a restoration plan for Lower Spring Branch, a Class III Trout Stream that is a tributary to the Gunpowder River. Located downstream of an earlier Biohabitats stream

*Since restoration, five additional fish species have been collected in the upper section of the channel and measured water quality improvements have been recorded downstream of the project.*

restoration project, Lower Spring Branch is a large, hydrologically flashy channel within a suburban neighborhood.

Biohabitats' design focused on creating a self-maintaining channel, providing in-stream and riparian habitat, and protecting urban infrastructure. The project involved coordinating with numerous property owners, and accounting for multiple constraints posed by utilities, outfalls, and road crossings.

Specific tasks included the application of Rosgen Stream Classification System, hydrologic and hydraulic analyses, sediment transport analysis, ecological assessments, soil bioengineering, preparation of design and construction drawings including complete

specifications, channel geometry, site grading, engineers' cost estimate, regulatory permit applications, and a maintenance and monitoring program.

Biohabitats also prepared final plans for bid and managed construction. All construction documents and details were CADD-generated by Biohabitats technicians following County standards. Biohabitats' construction oversight services included daily site visits and as-built review. Construction was completed in fall of 2008, and the project is functioning as designed.

### SERVICES

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