
District Department of Energy & Environment

Park Drive Gully Outfall/Stream Restoration (Fort Davis and Texas Ave. Gullies)

Washington, DC



A stream restoration in Southeast DC mitigates flood threats in an urban residential area while enhancing the City's stormwater management infrastructure.

SERVICES

Construction
Design-build
Ecological Restoration
Water Strategies

In a design-build capacity, Biohabitats helped the District Department of Energy and Environment restore two stormwater outfall gullies located within Fort Davis Park, a National Park site located in a densely developed neighborhood of Southeast DC. Both gullies originate at the same roadway and run through the park but drain to different tributaries of the Anacostia River. The property was developed long before the existence of modern stormwater management controls, and storm flows from the surrounding neighborhood were eroding and degrading the gullies, creating flood threats, and transporting trash and pollutants into the Anacostia.

Biohabitats began by assessing the site. This included field reconnaissance, data review, site survey, and watershed delineation. Biohabitats then developed restoration concepts and prepared a design alternatives report to recommend and justify the most feasible and efficient solution. Informed by feedback from DOEE, Biohabitats produced a semi-final design package and detailed site information report and then a final design package with a construction cost estimate and specifications. A regenerative stormwater conveyance approach was used for both sites. Designs featured a series of large, steep boulder cascades and shallow pools to stabilize the system and dissipate stormwater energy while also improving adjacent wetlands and riparian areas. The team also procured all necessary permits.

The Biohabitats team will construct the restoration in the summer of 2023 and conduct several years of post-construction maintenance and monitoring. This restoration helps advance DOEE's efforts to reduce flooding and erosion in residential city areas through updated and sustainable stormwater management controls. Combined, the two efforts restore stability and function to 1,300 feet of stream.