## DISTRICT DEPARTMENT OF THE ENVIRONMENT

## Linnean Park Regenerative Stormwater Conveyance Design-Build

Washington, DC





from top: the stream after restoration; before restoration

Surprisingly, the neighborhood of Forest Hills, located less than seven miles from downtown Washington, DC, is aptly named. Bounded by Rock Creek Park to the east, the community boasts wooded slopes, expansive lots, and many open spaces.

When the District Department of the Environment wanted to restore a degraded perennial stream near one such open The restoration of a degraded, urban stream transformed a little used open space into a public park that provides wildlife habitat, cleaner water, an inviting natural amenity for the community.

space, a playground—they turned to Biohabitats for help. The stream, which was fed from a storm sewer outfall that had become stressed over the decades by increasing development, had become so eroded that it exposed a sewer line and had become a safety hazard. The channel, which was contributing large amounts of sediment downstream, was virtually lifeless, save for a riparian understory filled with invasive species.

Biohabitats applied a regenerative stormwater conveyance approach, a stream restoration technique which reconnects a tributary with its floodplain and converts a problem (stormwater) into a resource (groundwater) through infiltration. The design features a "bubbler" device that slowly

"leaks" groundwater and storm flows into the restored stream valley which includes a series of cascades, riffles, and shallow pools, as well as native riparian vegetation. The project, which was constructed within a three month period with minimal disturbance to the riparian forest not only improved stormwater management in this highly urban region, but added habitat, beauty, recreational opportunities, and safety to what is now an inviting park for the Forest Hills community.

## **SERVICES**

Inventory & Assessments
Design
Permitting
Construction
Construction Management
Management

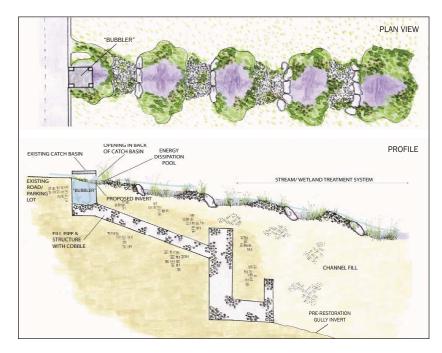
conservation planning
ecological restoration
regenerative design



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## Project Highlights





left: Outdated, failing storm drain system converted to a "bubbler" outfall leading to a natural system that filters water, adds habitat and recharges groundwater. above: Unlike the old outfall, which concentrated storm flows, the bubbler allows water to slowly "leak" into the stream and wetland treatment system.



Available woody material becomes a carbon source, and is repurposed as habitat, bridges, and benches.



