
Howard University

Howard University Law School Stormwater Retrofit

Washington, DC



*Retrofitting an urban parking lot
with green infrastructure benefits
a university campus and its
surrounding watershed.*

SERVICES

Design-build
Ecological Restoration

Stormwater runoff from the Howard University Law School parking lot had long been a concern of the University and its neighbors. During storms, runoff would repeatedly flood a corner of the lot and cause a buildup of sediment and debris. To make matters worse, swift-flowing stormwater from the lot carved a gully into the landscape, creating an expressway for pollutants and eroded sediment to rush into a nearby tributary to Soapstone Creek.

Biohabitats worked with the University to retrofit the parking lot in order to slow down and treat stormwater and prevent further erosion and stream contamination. The retrofit directs stormwater into nature-based features that naturally slow it down, allow sediment to settle, and help filter pollutants. The retrofit included the conversion of 0.5 acres of turf to a native plant meadow, the integration of 5,500 square feet of permeable pavement, and the creation of 4,000+ square feet of bioretention cells filled with engineered soils and low-maintenance, draught tolerant, native plants that thrive in temporarily flooded conditions. Stormwater is directed into the cells, where it is filtered by the engineered soils and plant roots before slowly being releasing into storm drains. A team of four undergraduates affiliated with the University's Office of Sustainability participated in the retrofit, contributing to the design

The retrofit treats up to 45,000 gallons of stormwater for every 1.2-inch storm event, and with its palette of native trees, herbaceous plants, and no-mow, native grasses, it also adds beauty and greenspace to the campus.