
District Department of Energy & Environment (DOEE)

RiverSmart Schools Low Impact Development Project - Year 1

District of Columbia, Washington, DC



Low Impact Design (LID) stormwater features at DC three schools create new educational opportunities while also improving water quality, habitat, and biodiversity in a densely urban environment.

SERVICES

Design-build
Nature Based Solutions
Water Strategies

Washington, DC's RiverSmart Schools program aims to improve water quality in the Anacostia River watershed while also enhancing wildlife habitat, highlighting water conservation, and providing public school students with new opportunities to learn and play outdoors. Through a multi-year design-build contract with DC's Department of Energy & Environment Biohabitats is creating Low Impact Development stormwater features at three District schools per year.

In the first year, Biohabitats worked with three schools that were grappling with standing water, soil compaction, and overall poor drainage. One was newly constructed and two were built before establishment of stormwater regulations. After conducting ecological assessments, Biohabitats developed conceptual designs for the features including bioretention, raised planters, cisterns, outdoor classroom areas, and replacement of impervious area with a vegetated swale.

Biohabitats and DOEE engaged faculty and staff from each school to gain their input, enhance their understanding of the proposed concepts, and discuss ways to integrate the new features into school programming. Biohabitats then prepared final design documents and implemented construction, which included volunteer planting days with students and the installation of interpretive signage.

With the collective capacity to store 100 CY of stormwater per rain event, the new features improve drainage, biodiversity, and outdoor experiences while also positively impacting water quality for the entire watershed.