

Congress Heights Recreation Center Regenerative Stormwater Conveyance

Washington, D.C.

Design-build project in Southeast DC's Ward 8 entailing the transformation of a degraded channel into a fully







The Biohabitats/Triangle Contracting Team was selected by DC DOEE for this design-build project. The Congress Heights Recreation Center is a small, but important, hub for residents of Southeast DC's Ward 8. The Center includes one of the District's most popular playgrounds. When uncontrolled flows from the surrounding neighborhood began degrading a stormwater channel that ran alongside the Center and flowed into a piped section of a headwater tributary to Oxon Run, the District Department of Energy and the Environment (DOEE) turn to Biohabitats and Triangle Contracting for help.

In a design-build capacity working with Biohabitats, Triangle transformed the degraded channel into a fully functioning stream system, complete with natural hydrology and a robust riparian zone. The goals of the project were to restore natural hydrology, reduce erosion and stormwater pollution, and improve habitat. The design met these goals through the installation of a Regenerative Storm Conveyance (RSC) design approach that safely conveys storm flows through the site while providing ecological and habitat improvement. Features included constructed riffles and a sand bed filter to clean stormwater, several boulder cascades to convey large flows down a steep slope, and a Water Quality Swale to filter stormwater from a small residential parking area. Care was taken to maintain the forested character of the area while improving the stream corridor, a streamside walking path and removing invasive species.