MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Hunters Woods III Stormwater Management Pond Retrofit

Gaithersburg, Maryland



The retrofit of an outdated dry pond improves water quality and the health of receiving waters while bringing the facility into compliance with current safety and design standards.

SERVICES Ecological Restoration Infrastructure Water A dry detention pond in the Hunters Woods neighborhood was built in the 1980s, long before the establishment of current stormwater management design and safety standards. It is located in the Cabin Branch Stream Valley Park, but as designed, it was providing relatively few ecological benefits.

To bring the facility into compliance with current safety and design standards and help Montgomery County meet its stringent MS4 permit requirements, Biohabitats designed and supervised the retrofit of the Hunters Woods stormwater management pond. The design, which transformed the facility into a wet pond, improved the facility's efficiency for providing quality and quantity control for the 6.2 impervious acres within the facility's 27.5-acre drainage area. The retrofit was achieved through grading changes, and the installation of a sediment forebay below two outfalls, a deep pool at the south end of the site, and a plunge pool downstream of the primary spillway. Wet meadow and low marsh plants were installed in and around the wet pool, helping to attract frogs and insects that will control mosquito populations. Trees were planted throughout the project area.

Once retrofitted, the pond will provide stormwater treatment for a 28-acre drainage area, including six acres of impervious surface. The project not only increased the capacity and safety of the pond, but it helped the County improve habitat, stream health, and water quality in Cabin Branch, Seneca Creek, and ultimately the Chesapeake Bay.