

# Blue Neighborhoods and Alleys: Stormwater Management

Baltimore, Maryland



*One of the first initiatives of its kind in the Chesapeake Bay region, this intensive and comprehensive retrofit of stormwater management practices within a small, densely developed area now serves as a model for other ultra-urban neighborhoods.*

pavement alleyways, rain barrels, downspout disconnection, and other green infrastructure techniques.

Biohabitats, collaborating with the Center for Watershed Protection, designed and supervised the construction of four bumpouts and three alleyways in two Baltimore neighborhoods. Performance of the retrofits was monitored to gauge success in meeting city National Pollutant Discharge Elimination System (NPDES) and Municipal Separate Storm Sewer (MS4) program requirements and goals. Monitoring also helped to determine which type of retrofit was most effective in terms of cost and performance in an ultra-urban environment. The monitoring scheme focused on runoff reduction and testing of BMP

performance with respect to routine maintenance. This holistic approach allowed for optimal transferability within the City, throughout the Chesapeake Bay Watershed, and beyond.

The National Fish and Wildlife Foundation provided a generous \$600,000 Chesapeake Bay Innovative Nutrient and Sediment Reduction grant to fund management, design, and construction for the project, while the City Departments of Transportation and Public Works agreed to provide an additional \$300,000 toward construction.

## SERVICES

- Green Infrastructure Design
- Construction Management
- Public Outreach
- Project Management

In an effort to reduce and treat stormwater runoff in highly urbanized areas of Baltimore City, a public/private partnership that included two municipal departments, two community associations,

and the well-respected Blue Water Baltimore Watershed Association launched an initiative to intensively retrofit several streets and alleys through the use of street bumpouts (bioretention), permeable

*conservation planning*  
*ecological restoration*  
*regenerative design*



800.220.0919  
www.biohabitats.com

