Local Success: Mount Street Biofilter

Bark-filter stormwater treatment unit
9 Mount Street, Baltimore, MD

Designed by the USDA Forest Service Projects Lab, and completed by Parks & People in the spring of 2014, this storm-water runoff pollution reduction installation serves a drainage area of 8,655 square feet. This model sends storm-water through an underground settling tank before allowing the water to drain into a dual box filtration system. The system is covered by a wooden deck that features inconspicuous access panels for water-monitoring. The deck has also served as a neighborhood resource used for community gatherings.

Due to the technical nature of this experimental filter, project implementation was completed by Parks & People's work crew, using a professionally drafted design as proposed by USDA Forest Service.

Cost = $40,000, plus additional costs for ongoing water-monitoring & maintenance.

Implementation Costs
Project Design
Site Preparation & Construction

- Excavation
- Materials for biofilter
- Installation

Maintenance Needs:

- Trash removal
- Periodic removal of sediment that collects in the filter
- Mowing of surrounding area

Lead Partners
USDA Forest Service
Parks & People Foundation

Exterior and interior views of the bark filter unit. The wooden platform acts as a cover to prevent tampering

Local Success: Hollins Rain Forest

2,240 square foot site (2 vacant rowhouse lots)
1032-34 Hollins Street

With funding from the Chesapeake and Atlantic Coastal Bays Trust Fund, Parks & People helped transform two adjacent vacant lots, prone to overgrowth and illegal dumping, into a community green space with two 84-square-foot rain gardens, picnic tables, and small garden beds for edibles. Designer Kevin Gaughan was hired to create a site plan, which placed the rain gardens on either side of the vacant lot to catch the runoff from adjacent buildings. The planting plan includes river birch, grasses, native perennials, and Charlie, a tree found uprooted and dying in the street by CUPS Coffeehouse employees and nurtured back to health.

The beds were dug out and planted by volunteers on two separate work days. CUPS Coffeehouse youth employees, owner Holly Gray, and neighborhood volunteers maintain the space. The site will eventually include a performance stage for local gatherings.

Cost for the site = $18,000 (includes design, project management, permitting, implementation, and maintenance costs)

Implementation Costs
Site Preparation & Rain Garden Construction

- Removal of trash, rubble, overgrowth, and invasives
- Sub-surface material (rain gardens)
- New topsoil and mulch (planting areas)
- Tool rental and equipment
- Plant material

Maintenance

- Trash removal
- Weeding
- Watering until plants are established (2-3 years)
- Mulch replacement
- Pruning trees and shrubs
- Replacement of dead plants

Lead Partners
CUPS Coffeehouse and Kitchen

Local Success: Franklin Square Elementary/Middle Rain Garden

1,850 square foot rain garden
1400 W Lexington St., Baltimore, MD, 21223

In 2014, building off of a 20 year relationship with Franklin Square Elementary & Middle School, (FMEMS), and with funding from the Chesapeake and Atlantic Coastal Bays Trust Fund, the Parks & People Foundation (P&P) created an 1850 square foot rain garden on the school grounds. Designer Joe Lutz was hired to create a garden plan that would capture and filter runoff from the adjacent parking lot.

P&P's work crew excavated the site to a maximum 6" depth below each inlet, and added 16" of bio-retention mix soil on top of the gravel& geotextile fabric. The BRANCHES youth crew planted the garden with nine river birch as well as hibiscus, inkberry holly, and red-twig dogwood shrubs and perennials such as asters, coneflower, and black-eyed susan. The school provides site maintenance, with occasional assistance from P&P and outside volunteer groups.

Project Cost: $29,800.00

Implementation Costs
Site Preparation & Rain Garden Construction

- Removal of trash, rubble, overgrowth, and turf.
- Sub-surface material (rain gardens)
- New topsoil and mulch (planting areas)
- Tool rental and equipment
- Crew member salaries
- Plant material

Maintenance

- Trash removal
- Weeding
- Watering until plants are established (2-3 years)
- Mulch replacement
- Pruning trees and shrubs
- Replacement of dead plants

Lead Partners
Franklin Square Elementary Middle School

Local Success: New Broadway East Community Park

17,182.6 sq. ft. site (18 vacant rowhouse lots)
1601-1635 N Gay St

The New Broadway East Community Park project is a collaborative greening project managed by Parks & People Foundation (P&P). P&P and partners Baltimore City (property owner) and Humanim (adjoining property owner) worked with the Broadway East community to transform a space formerly occupied by 18 dilapidated row homes into a thriving green space. The Chesapeake and Atlantic Coastal Bays Trust Fund and other partners provided funding to remove 24,300 cubic yards of poor soils and replaced them with healthy soil to sustain vegetation and to promote on-site stormwater infiltration. The construction drawings were developed by QUODESHCM, the landscape plan prepared by Mahan Rykiel, and Colbert Matz and Rosenfelt provided permit expediting services. Stewart-Tate and P&P's Landscape and Tree Care Services Unit were the project contractors.

Unique features of the project include the excavation of extant basement walls, the construction of 4,100 square feet of permeable concrete to create a walking path and parking area for 10 cars, and the construction of 700 square feet of permeable interlocking pavers as a decorative community gathering space in the center of the park. Another noteworthy amenity, donated by Boise, Inc. and ACTrees through Project UP, is two benches and a trash/recycling container made of recycled high-density paper composite material. In June 2013, P&P led more than 60 volunteers in a planting day, installing 3,250 square feet of planting beds, 20 large trees, and 9,200 square feet of lawn. The project received a Smart, Green & Growing Award for Innovations in Stormwater Management in 2013.

Cost for the site = $178,858 (Includes design, project management, permitting, implementation, and maintenance costs. Baltimore City also invested $875,430 in demolition, relocation, and sidewalk improvements).

Implementation Costs
Site Preparation & Rain Garden Construction Design costs

- Grading and excavation
- Soil amendment
- Raised bed creation
- Permeable pavement installation
- Tool rental and equipment
- Plant material
- Perimeter fence materials and installation

Maintenance

- Trash removal
- Weeding
- Lawn care (mowing, lime treatment, seeding, aeration)

- Mulch and top dressing replacement
- Pruning trees
- Replacement of dead plants