Glencoe Elementary School Rain Garden

Location: Portland, OR
Client: City of Portland, Bureau of Environmental Services
Design Firm(s): City of Portland, Bureau of Environmental Services
Landscape architect/Project contact: Kevin Robert Perry, ASLA
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ASLA Chapter: Oregon

Project Specifications
Project Description: Completed in 2003, this project at a local elementary school retrofitted an underutilized portion of the school grounds to create a interactive rain garden that accepts 35,000 sq/ft of runoff from adjacent streets and school pavement. The project responded to the neighborhoods chronic problem with local basement sewer backups. Project is considered a
strong success and has been extensively monitored for performance. Two years of monitoring showed that the rain garden managed 95% of the water entering it.

**Project Type:**
Institutional/education
A retrofit of an existing property

**Design features:** Rain garden

This project was designed to meet the following specific requirements or mandates:
Eliminate the neighborhood local basement sewer backups

**Impervious area managed:** less than 5,000 sq/ft

Amount of existing green space/open space conserved or preserved for managing stormwater on site: less than 5,000 sq/ft

The regulatory environment and regulator was supportive of the project.

Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements? Yes, the school was interested in an interactive rain garden design that complemented the adjacent native garden. The entire space is now considered a community green space.

**Cost & Jobs Analysis**

**Estimated Cost of Stormwater Project:** $50,000-$100,000 (Public funding: Local)

Was a green vs. grey cost analysis performed? Yes, the green solution was modeled as a cheaper alternative that pipe upsizing.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Slightly reduced costs (1-9% savings).

**Number of jobs created:** Not available

**Job hours devoted to project:** Not available
  - Planning and Design: Not available
  - Construction: Not available
  - Annual Maintenance: Not available
Performance Measures
Stormwater reduction performance analysis:
Extensive data can be found at:
http://www.portlandonline.com/bes/index.cfm?c=45388&a=147510

Additional Information
Links to images: Pictures can be available by contacting Kevin Robert Perry at 503-239-0600 or email at kevin@nevengan.com