



# Green Infrastructure & Stormwater Management CASE STUDY

---

## Stormwater Wetland Garden

**Location:** Temple University, Ambler, PA

**Client:** Temple University

**Design Firm(s):** Department of Landscape Architecture and Horticulture

**Landscape architect/Project contact:** Mary Myers, ASLA, Department Chair

**Email:** [mary.myers@temple.edu](mailto:mary.myers@temple.edu)

**ASLA Chapter:** Pennsylvania/Delaware

## Project Specifications

**Project Description:** The stormwater wetland garden infiltrates stormwater from a 5 acre area. The garden was constructed and planted by students between 1997-99 and has been in place for over a decade. Three hundred species of native plants transevaporate water back into the atmosphere and increase biodiversity.

### Project Type:

Institutional/education

A retrofit of an existing property

**Design features:** Bioretention facility, rain garden, downspout removal, and porous pavers.

**This project was designed to meet the following specific requirements or mandates:** Not applicable

**Impervious area managed:** 1 acre to 5 acres

**Amount of existing green space/open space conserved or preserved for managing stormwater on site:** 5,000 sq/ft to 1 acre

**The regulatory environment and regulator was** indifferent to the project.

**Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements?** No.

## Cost & Jobs Analysis

**Estimated Cost of Stormwater Project:** \$50,000-\$100,000 (Public funding: Not available)

**Was a green vs. grey cost analysis performed?** No

**Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)?** Significantly reduced costs (10% or greater savings). Not sure but believe there was a great cost savings over piped infrastructure. No pipes are used and there is no surface water outletting from the site.

**Number of jobs created:** volunteer labor by students/faculty/staff

**Job hours devoted to project:**

Planning and Design: Not available

Construction: Not available

Annual Maintenance: 100 maximum

## Performance Measures

**Stormwater reduction performance analysis:**

It appears that virtually 100% of water is retained on the site. No swale or off-site drainage is observable. We are in the process of collecting data.

**Community & economic benefits that have resulted from the project:** The stormwater wetland garden provides a campus amenity for passive recreation--quiet study place for students and a place to observe nature. Edible plants and plants that were selected for habitat (shade/cover) have increased insects, birds and small mammals in the area than previously.