



# Green Infrastructure & Stormwater Management CASE STUDY

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## Montgomery Naturalized Basin Maintenance

**Location:** Montgomery, IL

**Client:** The Village of Montgomery

**Design Firm(s):** Pizzo & Associates

**Landscape architect/Project contact:** Andy Stahr, ASLA

**Email:** [andys@pizzo.info](mailto:andys@pizzo.info)

**ASLA Chapter:** Illinois



Photo: Pizzo & Associates

### Project Specifications

**Project Description:** In 2007, the Village hired Pizzo & Associates, Ltd. as the Village's "Native Landscape and Water Quality Maintenance Contractor". Once the Village had taken control of a naturalized basin, Pizzo was charged with bringing any under-performing basins into acceptance and maintaining all of the Village-controlled basins once acceptance standards had been met. In 2007 the Village was in control of 3 naturalized basins, as of 2010 the Village is in

control of 12 naturalized basins. Tasks include native seed, plug, and tree installation, mowing, herbicide application, seed collection & dispersal, and professional prescribed fire.

**Project Type:**

Open space - park

A retrofit of an existing property

**Design features:** Naturalized stormwater system by use of native plant shoreline

**This project was designed to meet the following specific requirements or mandates:**

County ordinance, local ordinance

**Impervious area managed:** greater than 5 acres

**Amount of existing green space/open space conserved or preserved for managing stormwater on site:** greater than 5 acres. A total of 12 basins were restored to natural shoreline habitat.

**The regulatory environment and regulator was** supportive of the project.

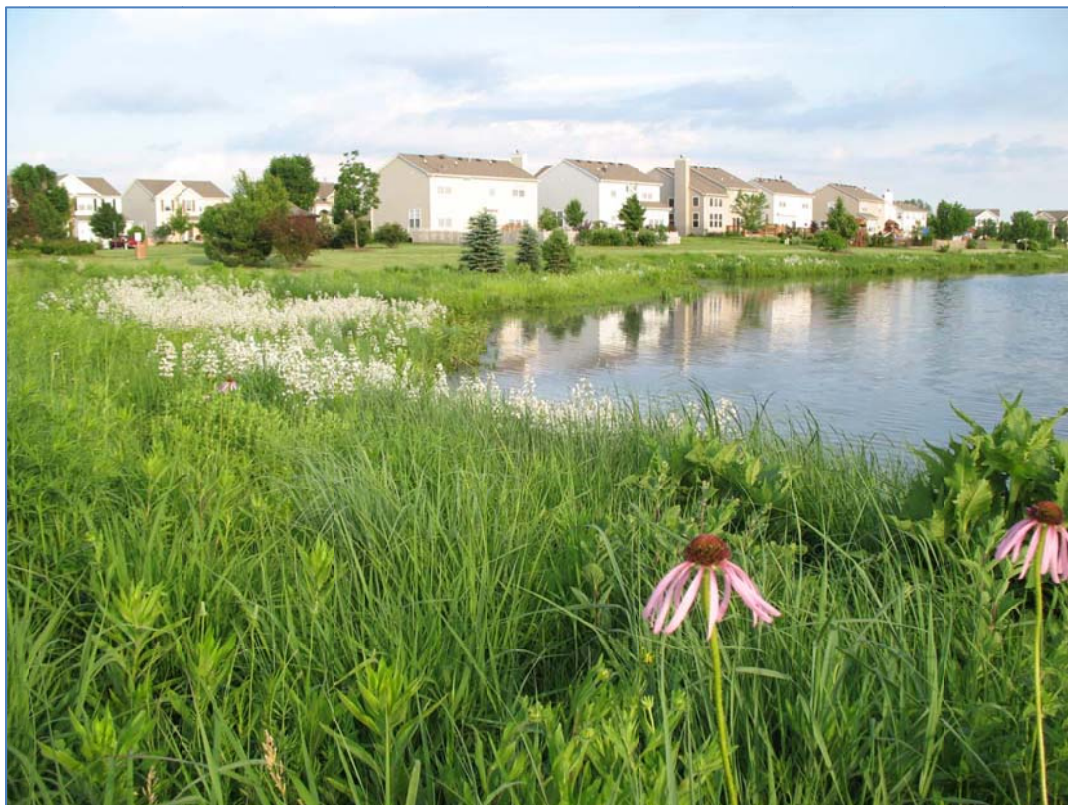


Photo: Pizzo & Associates

**Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements?** The Village's basin guidelines ensure that a

developer meets certain standards in the creation of a naturalized stormwater system and that the owner appropriately maintains the system in perpetuity. The guidelines include approved native seed mixes, approved methods of installation and approved methods of maintenance. Once a basin is accepted by the Village, the owner may opt to maintain the basin on their own (keeping the basin up to the standards required in the guidelines) or they may opt to have the basin become a Special Service Area (SSA), where the Village levies funds from the owner and takes control of basin stewardship and the responsibility of maintaining the basin up to the standards required by the guidelines. If an owner maintaining a basin independent of the Village fails to keep the basin within acceptable standards, the Village may enforce an underlying SSA and take control of the basin maintenance.

### **Cost & Jobs Analysis**

**Estimated Cost of Stormwater Project:** \$100,000-\$500,000 (Public funding: Local)

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

#### **Cost impact of conserving green/open space to the overall costs of the site**

**design/development project:** The Village of Montgomery believes that water quality is an extremely important issue; they also believe that naturalized detention basins are an efficient way to achieve their desired water quality outcomes while addressing traditional water quantity concerns through stormwater detention or retention systems. By requiring that these systems be naturalized, the Village is improving the quality of water passing through these stormwater systems while increasing habitat, reducing goose populations, and maintaining/improving aesthetics throughout their community. In order to do this, the Village used the existing Kane County Stormwater Ordinance as a base and developed their own document, Naturalized Stormwater Management Facility Design, Planting, and Management Plan Guidelines (PRI, January 2010), which goes a step beyond the County Ordinance and sets established standards.

**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).

**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

Other: Not available

## **Performance Measures**

### **Stormwater reduction performance analysis:**

The naturalization of each detention basin improved the Village of Montgomery's overall stormwater and retention systems.

## **Project Recognition**

2010 EPA & Chicago Wilderness Conservation Development Award; 2010 ILCA Gold Award