

# Stormwater Management Planning Nine Springs Neighborhood

City of Fitchburg  
Fitchburg, Wisconsin  
Project Initiation Date: 1997  
Project area: 1,232-acres



## Ecological Goals

- Promote ecologically based stormwater treatment systems
- Minimize impacts to springs, wetlands and other natural features

## Project Results

- All development and land planning is focused on improving water resources and open space
- Recommended BMPs are in place for future implementation

## Project Statement

Applied Ecological Services, Inc. (AES) teamed with Vierbacher Associates, Inc. (VA) to prepare an alternative stormwater management plan for the Nine Springs Neighborhood within the City of Fitchburg. Our team was selected for its experience and expertise in engineering ecologically based stormwater treatment systems that retain and infiltrate water in restored wetlands and upland prairie buffers. The Nine Springs Neighborhood Plan is based on the Stormwater Treatment Train™ model created by AES to minimize impacts to springs, wetlands and other natural features. Use of this model greatly reduces infrastructure costs, while improving ecosystem health and enhancing the human environment.

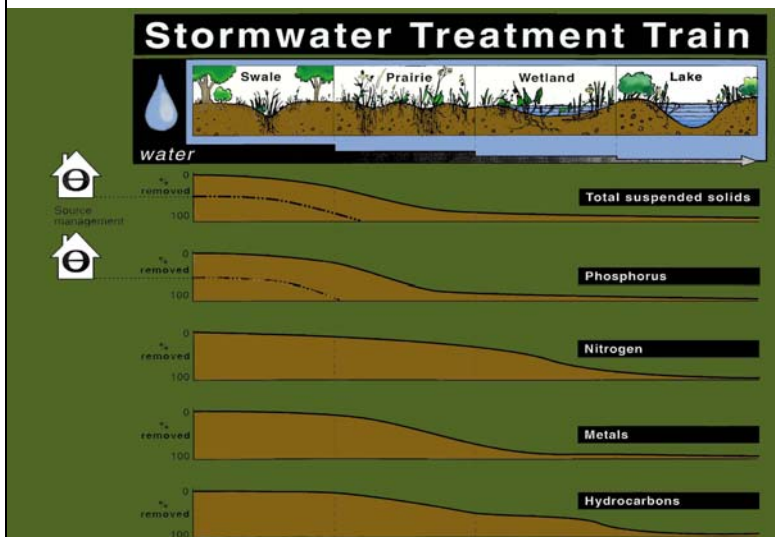
The AES/VA project team employed a suite of computer models to develop stormwater management systems scaled to address the entire watershed. This methodology required a broad base of information on existing site conditions, Best Management Practices (BMPs), and present and future land-use development patterns. Extensive planning and resource-based background information was gathered from governing agency databases and previous studies. Existing information was supplemented with field investigations to verify background information and to survey sensitive natural resource elements—vegetation, soils, streams, springs and wetlands, and surface and ground water quality—for use in the models.

The resulting stormwater management plan promotes use of recommended BMPs over time, as fiscal resources became available. It serves as a template for how future development and land planning must proceed to maintain a focus on providing high water quality resources, open space, healthy ecosystems and a high-quality human environment. The plan was unanimously recognized by community members as a win-win opportunity for ecological, economic and community benefits.

## Current Status

Completed in 1999, the plan will improve an existing environmental corridor while managing stormwater.

*The **Stormwater Treatment Train** utilizes created and restored wetlands and upland prairie buffers to treat stormwater on-site at greatly reduced costs and with excellent benefits for water quality, aesthetics and wildlife habitat.*



For more information, please reference  
<http://www.appliedeco.com>

