

Project Overview

“Conservation Techniques for Watershed-Wise Backyards and Businesses” is a demonstration project designed to encourage landowners to employ techniques on their property to improve the quality of the watershed. Techniques to reduce polluted stormwater runoff, conserve water, and improve wildlife habitat will be demonstrated at ClearWater Conservancy’s office location.

WHY DOES THE WATERSHED NEED TO BE IMPROVED?

- **STORMWATER POLLUTION:** Impervious surfaces, such as roads, parking lots, and rooftops, cannot absorb stormwater. Instead, stormwater runs over these surfaces, picking up pollutants. This polluted stormwater is taken by the storm sewer system to the nearest stream. Polluted stormwater runoff is a major source of pollution in our streams, negatively impacting the watershed.
- **DEPLETION OF GROUNDWATER:** Rising demand for water is depleting our groundwater supplies. We can conserve groundwater by reducing our water use and by encouraging stormwater infiltration through the soil, which recharges the groundwater.
- **LOSS OF HABITAT:** Development results in a loss of wildlife habitat through the removal of vegetation animals need for cover, nesting, food, and migration corridors.

BEFORE THE PROJECT...

ClearWater Conservancy’s office was typical of most developments in that it contributed to the degradation of the quality of the watershed by creating stormwater runoff while providing minimal wildlife habitat. Unnecessary pavement and rooftop runoff directed to the storm sewer system contributed to the polluted stormwater entering our streams. Also, the site was dominated by lawn and non-native plants, which provide little habitat for wildlife.

TECHNIQUES DEMONSTRATED

Through this project, techniques for minimizing stormwater runoff and conserving water, such as the use of paving alternatives, rain barrels, rain gardens and lawn alternatives, are demonstrated. Also, the use of native plants and the provision of food, cover, and nesting sites demonstrate methods for improving wildlife habitat.

OUTREACH ACTIVITIES

Once the creation of the demonstration site is completed, ClearWater Conservancy will actively use the site as an educational tool. Interpretive panels will be installed on-site to explain the techniques used. A series of workshops will provide tours of the site as well as a more detailed explanation of the techniques used.

ClearWater Conservancy
2555 North Atherton Street
State College, PA 16803
(814) 237-0400
www.clearwaterconservancy.org

Conservation Techniques for Watershed-Wise Backyards and Businesses



Project Summary

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Presented by

ClearWater Conservancy

with funding from:

Western Pennsylvania Watershed
Protection Program

Canaan Valley Institute

Pennsylvania Association of
Conservation Districts, Inc.

Watershed-Wise Techniques

RAIN GARDENS

A rain garden is a shallow basin or depression, positioned to capture stormwater runoff and planted with water-tolerant plants.



Rain gardens, which capture, filter, and absorb runoff, are both beautiful and functional.

Rain gardens:

- Reduce the amount of polluted stormwater runoff reaching streams
- Encourage stormwater to soak into the ground
- Provide wildlife habitat

LAWN ALTERNATIVES

Using alternatives to lawn, such as native wildflower meadows and woodland gardens, provides more wildlife habitat and requires less watering and chemical application than a lawn. Using lawn alternatives near streams is especially effective at reducing pollution entering streams and providing wildlife habitat.

Lawn alternatives:

- Reduce the amount of chemicals, such as fertilizer and pesticide, reaching streams
- Conserve water by reducing the need to irrigate
- Provide wildlife habitat
- Reduce lawn mower maintenance and emissions



Prairie was planted instead of lawn in this corporate setting.

RAIN BARRELS

A rain barrel is a large container that is placed under a downspout to collect rain water. This water can then be used to water plants as needed, decreasing the demand on our water supply.



ClearWater Conservancy's rain barrel is attached to a soaker hose to water an adjacent planting bed.

Rain barrels:

- Reduce the amount of polluted stormwater runoff reaching streams
- Conserve water by reducing the demand for water from the tap

PAVING ALTERNATIVES

Surfaces paved with traditional paving, such as asphalt or concrete, prevent rain from being absorbed into the ground and contribute to polluted stormwater runoff. Alternatives to traditional paving, which are appropriate for overflow parking and low-traffic areas, allow stormwater to soak into the soil.

Paving alternatives:

- Reduce the amount of polluted stormwater reaching streams
- Encourage stormwater to soak into the soil, filtering stormwater before it recharges groundwater

Paving Alternatives

- | | |
|-----------------------|--------------|
| grass block | wood decks |
| paving blocks | wood chips |
| porous concrete | crushed rock |
| grass driveway strips | |

LANDSCAPING WITH NATIVE PLANTS

Native plants--plants that occur naturally in a particular place without human intervention--typically require less water and fertilizer than non-native plants do. Also, native plants provide wildlife with the food and cover on which they depend.

Native plants:

- Provide wildlife habitat
- Discourage invasive non-native species and encourage biodiversity
- Require less chemicals, such as fertilizers and pesticides
- Conserve water by reducing the demand for water from the tap



New England aster

BACKYARD WILDLIFE HABITAT

Providing wildlife with the resources they need, such as water and plants for cover, food, and nesting, not only helps them survive, but also will draw wildlife to your yard for your enjoyment! Select a variety of native plants that will provide food and cover throughout the year.

Backyard wildlife habitat:

- Provides wildlife with the resources they need for reproduction and survival
- Encourages biodiversity
- Draws wildlife to your yard for your enjoyment



Hummingbirds are attracted to native plants such as bee balm and cardinal flower.

Project Credits

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