



WATER RESOURCE CENTER

FACT SHEET

Southwestern Pennsylvania Commission

WATER RESOURCE CENTER

Mission

To promote regional collaboration on water topics; be a leader in facilitating coordination and education; and provide technical assistance to its member governments.

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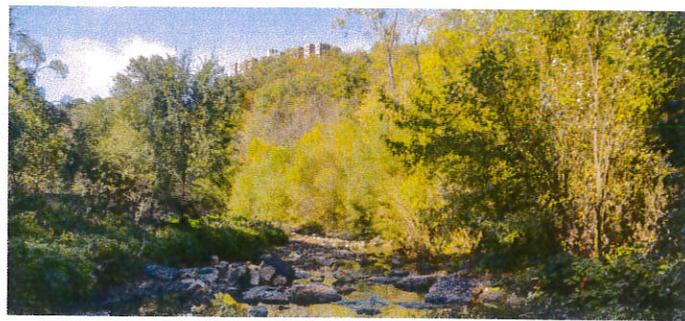
Riparian Buffer Restoration

STRUCTURAL STORMWATER BMPS

Riparian Buffer Restoration (RBR) is the restoration of the area surrounding streams, lakes, ponds, and wetlands. The restoration of these areas provides numerous stormwater management benefits, including water quality improvement, volume reduction, groundwater recharge, and peak rate control. Benefits beyond stormwater management are numerous, including providing wildlife habitat and providing aesthetic value.

RBR can be applied in a variety of settings, including forested landscapes, agricultural areas, suburban/developing sites, and urban areas. Design guidelines are available for these various landscapes in the PA Stormwater Best Management Practices Manual.

BMP Profile	
Name	Riparian Buffer Restoration
Type	Structural
Grouping	Restoration BMP
Stormwater Management Benefits	<ul style="list-style-type: none"> ◆ Water Quality ◆ Volume Reduction ◆ Groundwater Recharge ◆ Peak Rate Control
Potential Applications	<ul style="list-style-type: none"> ◆ Residential ◆ Commercial ◆ Ultra Urban ◆ Industrial ◆ Retrofit



Portions of Nine Mile Run (City of Pittsburgh) were restored in 2006. The photo to the left shows a portion of the restored riparian buffer area in 2014. Stormwater management functions of riparian buffer restoration projects become increasingly effective as the restoration vegetation grows.

Key Considerations for Riparian Buffer Restoration

- ◆ Land owner permission and support is critical
- ◆ Buffer width of 100' is preferred; 35' is considered the minimum width
- ◆ Forested buffers are the most effective for stormwater management and supporting wildlife
- ◆ Establish a plan for short term and long term maintenance and monitoring
- ◆ Use native trees, shrubs, and plants
- ◆ Buffers can be restored along perennial (flowing year-round), intermittent (seasonal / flows part of year), and ephemeral (flows after precipitation events) streams
- ◆ In addition to buffers around streams and rivers, riparian buffers around lakes, ponds, and wetlands are also very important. They can be restored with guidelines available in the PA Stormwater BMP Manual.

This information was adapted from the Pennsylvania Stormwater Best Practices Manual. Check out SPC's other fact sheets to learn more about specific BMPs, flooding, and more.