



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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Floodplain Restoration

STRUCTURAL STORMWATER BMPs

Floodplain Restoration aims to restore a floodplain to conditions present prior to development. It is a system-based BMP that strives to mimic undisturbed conditions between stream system elements: groundwater, stream surface flow, soils, and root systems of vegetation. This BMP has the ability to address problems on many scales, from the site level to the watershed level.

Stormwater management benefits of floodplain restoration include substantial water quality improvements, peak rate control, groundwater recharge, and volume reduction. Additional benefits of floodplain restoration include but are not limited to: increased aquatic and terrestrial habitats; increased wetland areas and native plants in floodplain; reduction of invasive plants; increased riparian areas; and, thermal cooling of stream baseflow.

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



Floodplain restoration is very effective for stormwater management, provides habitat, and much more. Shown above is Saucon Creek pre-restoration (left) and post-restoration (right) at locations in close proximity.

Key Considerations for Floodplain Restoration

- ◆ Effectively reduces flooding damage
- ◆ Greatly reduces or stops streambank and channel erosion
- ◆ Easily integrated into site planning process
- ◆ Maintenance and monitoring plans are important
- ◆ Must follow local, state, and federal floodplain requirements
- ◆ Floodplain restoration can be used as a BMP on-site or downstream from a development site
- ◆ Existing watershed conservation plans and inventories can help guide the selection of restoration areas
- ◆ Potential for incorporation of greenways and/or trails with floodplain restoration project

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.

Photos: landstudies.com