

# Protect Riparian Area

## Non-Structural Stormwater BMPs

*This factsheet is part of our non-structural stormwater BMP series. To access this series and many other educational resources, please visit: [spcwater.org](http://spcwater.org).*

**Protect / Conserve / Enhance Riparian Areas (PCERA)** is a non-structural best management practice (BMP) that preserves and enhances vegetated areas that are adjacent to streams and rivers. While this BMP focuses on stream and river riparian areas, it should be noted that riparian buffers around other waterbodies such as lakes, ponds, and wetlands are also very valuable. Riparian areas perform important stormwater and ecosystem functions. Stormwater management functions of riparian areas include water quality protection and improvement, runoff volume reduction, groundwater recharge, stream bank and channel stabilization, and some peak runoff rate control. Ecosystem functions include providing a food supply, habitat, and thermal protection for fish and other wildlife.



Photo Source: [pxhere.com/en/photo/113524](http://pxhere.com/en/photo/113524)

Preserving and enhancing riparian areas is one of the most effective ways to manage stormwater and protect Pennsylvania's waterways.

### Key Considerations of Protect / Conserve / Enhance Riparian Areas

- Maximize buffer widths to maximize stormwater and ecosystem benefits
- In Pennsylvania, riparian areas are forested under undisturbed conditions
- Forested buffers are the most effective for stormwater management and wildlife habitat
- When enhancing a riparian area that has been degraded by past practices, native trees, shrubs and plants should be used
- Municipal zoning and ordinances can be used to establish riparian buffer requirements

### BMP Profile

**Name:**

Protect / Conserve / Enhance Riparian Areas

**Type:**

Non-Structural

**Grouping:**

Protect Sensitive and Special Value Resources

**Stormwater**

**Management Benefits:**

- Water Quality
- Volume Reduction
- Groundwater Recharge
- Peak Rate Control

**Potential Applications:**

- Residential
- Commercial
- Industrial
- Retrofit
- Highway/Road



**For more information  
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