



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.*

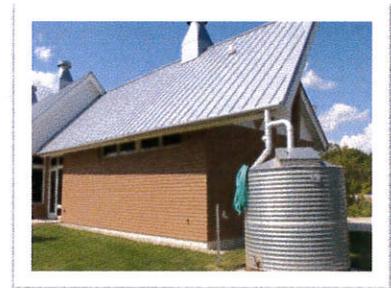
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# RUNOFF CAPTURE & REUSE STRUCTURAL STORMWATER BMPs

**Runoff Capture and Reuse** refers to the variety of techniques that are used to capture precipitation, store it for period of time, and reuse the water. Devices used to capture and store stormwater include rain barrels, cisterns, vertical storage mechanisms, and below-ground storage systems. These BMPs are most effective for use in controlling small, frequent storm events.

Stormwater management benefits of runoff capture and reuse devices include volume reduction, water quality improvements, peak rate control, and groundwater recharge. The ability of this BMP to perform each of these functions is dependent upon design and maintenance. This BMP can be applied in a variety of settings, including urban, residential, and commercial.

BMP Profile	
Name	Runoff Capture & Reuse
Type	Structural
Grouping	Volume and Peak Rate Reduction BMP
Stormwater Management Benefits	<ul style="list-style-type: none"> <li>◆ Volume Reduction</li> <li>◆ Water Quality Improvements</li> <li>◆ Peak Rate Control</li> <li>◆ Groundwater Recharge</li> </ul>
Potential Applications	<ul style="list-style-type: none"> <li>◆ Residential</li> <li>◆ Commercial</li> <li>◆ Ultra Urban</li> <li>◆ Industrial</li> <li>◆ Retrofit</li> </ul>



Some of the variations of runoff capture and reuse include underground storage (above left), rain barrels (above middle), and cisterns (above right). These systems are often implemented with other BMPs such as vegetated swales, rain gardens, and/or pervious pavement to maximize stormwater management performance.

### Key Considerations for Runoff Capture Reuse

- ◆ Most effective for use in small, frequent storm events
- ◆ Systems must bypass for large storm events
- ◆ Water should not be reused for potable purposes
- ◆ Captured water can be reused for irrigation or greywater needs such as flushing toilets
- ◆ Systems must be winterized to avoid damage from freezing
- ◆ Devices should be protected from light in order to avoid algae growth

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.

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