Wet Ponds (WPs), also called Retention Basins, are stormwater basins that include a permanent pool of water as well as additional capacity for temporary storage of stormwater. They are effective at controlling peak stormwater rates and also provide water quality benefits. Beyond stormwater management, WPs can also provide aesthetic and wildlife benefits. WPs can be used in a variety of land use settings, including residential, commercial, ultra urban, industrial, retrofit, and highways/roads.

WPs can be designed as either online (hydrologically connected to existing waterway) or offline (not hydrologically connected to an existing waterway). They are often used in conjunction with other stormwater BMPs that mitigate sediment accumulation. Existing dry detention basins can be retrofitted into a WP in order to achieve additional benefits.

Key Considerations for Wet Ponds

- Require sufficient source of inflow to maintain permanent pool and biological health
- Need high groundwater table
- Should include a forebay for sediment collection and removal
- Typically cover 1% - 3% of the total drainage area

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.