

# STORMWATER BMP SITES IN PAXTON CREEK WATERSHED

## BMP Type: Farm Show Rain Garden



Farm Show Rain Garden

**Name and Location:** Demonstration Rain Garden at the PA Farm Show Complex and Expo Center, located between Maclay Street and Wildwood Park Drive, Harrisburg

**Project Site Number and BMP Type Code:** 2B

**GPS Coordinates:** Lat N40.28808 degrees, Long W76.88265 degrees

**Site Features:** The Farm Show consists of multiple buildings, support facilities, and massive parking areas. Over 75 million gallons of precipitation fall annually upon its 20-acres of roofs, and 60-acres of asphalt parking lots -- creating immense opportunities for runoff collection, and reuse, or processing. An initial project for infiltrating this runoff is a rain garden constructed in late 2010 near the main entrance/Cameron St. lobby by the sidewalk and the building's northeast corner. This large rain garden consists of layers of amended soils (mix of topsoil, sand, and compost), vegetation (native herbs, shrubs and trees), and wood mulch that store and delay stormwater runoff, tolerate fluctuating water levels, resist winter salts from snowmelt, and partially remove pollutants during growing seasons. Constructing the garden involved challenges such as shallow, poor soils of low porosity, and limited continuing stormwater supply. The site has an under drain. Expected pollutant removals in fully functioning rain gardens are approximately: total suspended solids (mainly dirt), 85%; total phosphorus, 85%; nitrate, 30%. The pollutant removal efficiencies vary by season (greater removal in spring and summer), and by rain garden condition (declines if the garden soil pores clog, or vegetation declines). The Susquehanna River Basin Commission, and partners (The PA Department of Conservation and Natural Resources, PCWEA, Alliance for the Chesapeake Bay, and others) introduced the garden to the community with a workshop. The Farm Show has some explanatory materials about runoff best management practices (BMPs).

**Site Directions:** The demonstration BMP rain garden is on the east side of the complex, north of the main entrance/lobby at 2300 Cameron Street. Vehicle parking closest to the garden is the PA Farm Show's north parking lot, which is accessible by an entrance off Wildwood Park Drive near its intersection with Cameron Street and Elmerton Avenue. Exit 67B leads from Interstate-81 to Cameron Street.