

# STORMWATER BMP SITES IN PAXTON CREEK WATERSHED

## BMP Type: Harrisburg Postal Mails Processing Facility Retention Basin (Wet Pond)



Postal Mails Facility Retention Basin

**Name and Location:** Retention Basin serves the Harrisburg U.S. Postal Mails Processing Facility located on Crooked Hill Road, Susquehanna Township.

**Project Site Number and BMP Type Code:** 3L

**GPS Coordinates:** Lat N4028460 degrees, Long W76.87724 degrees

**Site Features:** Retention basins are deep excavations (depressions) in the landscape designed to receive runoff conveyed to them. They do not merely detain stormwater, and later release it into neighboring waterways (as detention basins perform). Retention basins include a permanent pool (wet pond) with additional capacity for stormwater storage. The wet area achieves partial water quality treatment mainly through bioretention processes (soils and vegetation where metabolic actions, infiltration, and evaporation function together in pollutant processing). Expected pollutant removals in fully functioning retention basins approximately are: total suspended solids (mainly dirt), 70%; total phosphorus, 60%; nitrate, 30%. The pollutant removal efficiencies vary by season (greater pollutant removal in spring and summer), and by basin condition or age (vegetation or soils porosity may decline).

The postal retention basin is a large, L-shaped depression near the southwest corner of the site. Only a small area at the end near Crooked Hill Road remains wet, dominated by Narrow Leaf Cattail and Purple Loosestrife vegetation. The basin's stormwater runoff storage capacity is huge (it has never filled in its 15-years history). The infiltration and water treatment capacity are limited by the small wetland size, shallow porous soils, high bedrock level, and a sloping rather than flat basin bottom. Uncut vegetation greatly enhances the stormwater treatment potential. For safety and security a high chain-link fence surrounds the basin.

**Site Directions:** The post office retention basin is located near the southwest corner of the postal building and public parking area at 1425 Crooked Hill Road. It is about 0.2 mi on the right (N) from the junction (& traffic light) of Crooked Hill Road and Elmerton Ave.