

Site 5: Upper Perkiomen School District

BMPs:

Naturalized basins
No-mow zones
Bioretention swales

In 2004, the Montgomery County Conservation District and the Upper Perkiomen High School applied for a Delaware Estuary Program Mini-grant to plant native vegetation in existing swales and a basin on school property. The project goal was to decrease sediments and nutrients flowing into the Green Lane Reservoir, a major drinking water supply in the area. The bioretention swales trap oils and greases from the parking lots, and the naturalized basin mitigates any excess nutrients from the athletic fields.

The swales and basins at the Upper Perkiomen School District enhance habitat for songbirds and other native wildlife species. Students of the high school Environmental Science class planted the swales and basin on three days in Spring and Fall of 2004. The plant species were selected based on their moisture preference, bloom date and wildlife value.

Address: 2 Walt Road, Pennsburg, PA 18073
Property owner: Upper Perkiomen School District
Website: www.upsd.org
Watershed: Perkiomen Creek, Green Lane Reservoir



Planning your visit: Please notify the high school office if visiting school property. The Bioswales are located between the parking lot and the main high school main entrance. The naturalized basin is located behind the athletic field on Walt Road.

Contact Info:

John Sheeran
Director of Facilities and Operations
(215) 541-2444
Jsheeran@upsd.org

Hours:

7AM-4PM

Parking: Visitor parking is available at the main entrance to the High School.



The Perkiomen High School offers a public location to demonstrate Stormwater BMPs to local residents and business owners. These BMPs can be easily implemented at other schools, golf courses, or residential developments, which make up a significant percentage of the land use in the Upper Perkiomen Watershed.



The bioretention swales at Upper Perkiomen High School collect and convey stormwater runoff from the main parking lot. The swales were planted by the students with native, water tolerant species in an effort to improve water quality by minimizing soil erosion and filtering stormwater runoff.

Planting List for Bioretention Swales and the Naturalized Basin at the High School

Herbaceous Species

- 200 *Asclepias incarnate*-Swamp Milkweed
- 450 *Carex lurida*-Lurid Sedge
- 250 *Carex stipata*-Awl-fruited Sedge
- 400 *Carex stricta*-Tussock Sedge
- 150 *Echinacea pupurea*-Purple Coneflower
- 150 *Elymus virginicus*-Virginia Wildrye
- 200 *Iris versicolor*-Blue Iris
- 500 *Juncus effuses*-Soft rush
- 400 *Lobelia cardinalis*-Cardinal Flower
- 100 *Panicum virgatum*-Switch Grass

Blooms

- June-July
- June-Oct.
- June
- June
- June-Sept.
- July-Sept.
- May-Sept.
- July
- July-Sept.
- Aug.-Sept.



Shrub Species

- | | | |
|--|--------------|--------------|
| 5 <i>Amelanchier canadensis</i> -Shadbush | Serviceberry | March/Spring |
| 10 <i>Aronia arbutifolia</i> —Red Chokeberry | | March—June |
| 20 <i>Cephanlanthus occidentlis</i> -Buttonbush | | June—Sept. |
| 25 <i>Cornus sericea</i> —Red-Osier Dogwood | | May—June |
| 20 <i>Illex verticillata</i> —Winerterberry | | May—June |
| 10 <i>Physocarpus opulifolius</i> —Common Ninebark | | May—June |
| 10 <i>Virburnum dentatum</i> —Arrowwood | | May—June |

Marlborough Elementary School

South on PA Route 29, the Marlborough Elementary School also has a naturalized Stormwater basin. Here, the school district simply stopped mowing the bottom of the basin in the Spring of 2002, allowing it to grow naturally. After one year, native plants began to dominate over the turf grass. Not only does this vegetation trap pollutants, but it reduced maintenance costs so effectively, that the school district decided to institute other no-mow zones throughout the district. The no-mow zones are the easiest, least expensive BMP to implement. However, if no native vegetation is planted, it is still important to monitor the plant community and remove invasive species.

