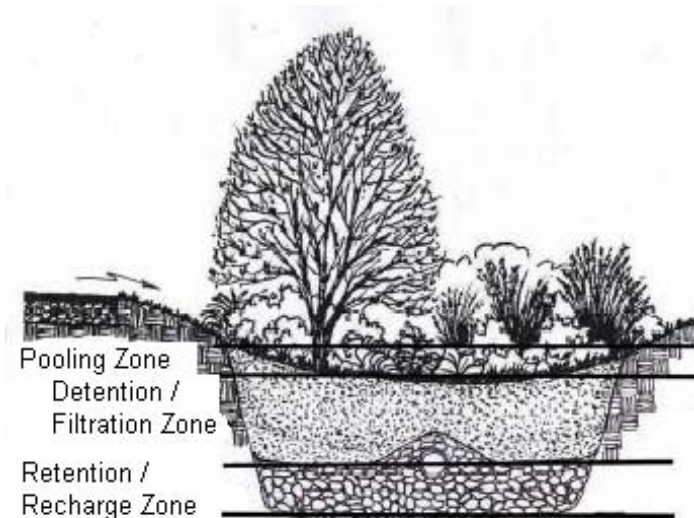


**Bioretention Cells (Woodbridge, VA)  
Leesylvania State Park  
Completed in Spring 2004**

Two bioretention cells, each 20' wide x 135' long x 4' deep were constructed at Leesylvania State Park in an area between a large parking lot and the Potomac River. The bioretention cells were retrofits to the pre-existing minimal landscaped area, which were replaced with proper soil media, trees, and shrubs to treat the stormwater runoff from the parking lot. The bioretention design and specifications were provided by DCR urban programs engineer, Shelby Hertzler and park staff completed construction under the direction of the park manager, Jim Klakowicz.



Photo of bioretention area following construction, April 2004.



**Construction** – Specifications for the bioretention cells followed those in the Virginia Stormwater Management Handbook, Chapter 2.5 and included pea gravel as recommended in the Prince George's County Bioretention Manual.

The bottom retention / recharge zone consists of a 6" layer of VA #57 clean stone with the bottom elevation at approximately 1.0', followed by a 4" pea gravel layer.

The middle detention and filtration zone has an underdrain, 4" perforated PVC pipe at elevation 2.0' and with a 4" pea gravel layers, and 2' of bioretention soil mix (50% sand, 25% leaf compost, 25% topsoil).

The top pooling zone is a mulched surface at elevation 4' and planted with native vegetation and shrubs that allows for up to 6" on ponding. A DI-7 drop inlet at elevation 4.5' was placed between the bioretention cells.

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**ACCESSIBILITY:** Daily during park hours. The bioretention cells are located below parking lot near boat ramp.

**DIRECTIONS:** Leesylvania State Park is in the southeast area of Prince William County, approximately 25 miles from Washington, D.C. and Fredericksburg. From I-95, take Rippon Landing Exit 156; then go east on Route 784 to U.S. 1. From U.S. 1, Route 610 (Neabsco Road) east two miles.



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