



FACTS ABOUT...

Fairland Regional Park Stormwater Management Demonstration Area



The Fairland Regional Park Stormwater Management Demonstration Area is located off I-95. Take Exit 33 onto MD Rte. 198 west towards Burtonsville. Then turn left at the second traffic light onto Old Gunpowder Road. Follow Old Gunpowder Road approximately 2 miles; Fairland Regional Park is on the right. The Stormwater Demonstration Area is in the back near the batting cages.

Controlling nonpoint source pollution is the responsibility of Maryland's State and local governments. To help citizens, engineers, inspectors, students, and business leaders understand nonpoint source pollution, federal, State, and local governments joined together to create an outdoor classroom. The Stormwater Management Demonstration Area at Fairland Regional Park (shared by Prince Georges and Montgomery Counties) began in 1987 as a cooperative effort involving the Environmental Protection Agency, the Maryland Department of the Environment, the Maryland National Capital Parks and Planning Commission, and the Prince George's County Department of Environmental Resources.

Fairland Regional Park is a 471-acre park providing areas for active recreation and open space preservation along the Little Paint Branch stream. The stormwater management demonstration area is located on a 67-acre reclaimed sand and gravel mine that was purchased in 1975. Reclamation of the mine began in the 1970's and the first baseball field complex was completed in 1985. Design of the stormwater demonstration began in 1987, and the first official tours were conducted in 1992. Examples of stormwater management and erosion and sediment control practices in use within Maryland are displayed along a walkway for easy access and viewing. These controls include:



The **extended detention wet basin** is one of the primary tools for stormwater management. Wet basins are reliable and attractive practices and offer many environmental benefits including habitat for waterfowl, wildlife, and warm water fish. Extended detention is the temporary storage of stormwater runoff within the wet basin, followed by the gradual release of the excess water. The basin at Fairland Park has been designed to detain low intensity storms for approximately 20 hours and provides flood management for various high intensity storms for the 67-acre drainage area. The runoff discharge rate is controlled through an eight-inch pipe and a series of small weirs located with the riser structure.



Shallow marshes aid in the removal of excess nutrients, such as nitrogen and phosphorous, from stormwater runoff. Shallow marshes also increase wildlife habitat in the suburban environment, providing cover and food for an abundance of wildlife. Vegetation planted within the shallow marsh includes bulrush, arrowhead, pickerel weed, and yellow water iris.

Bioretention is a filtering system that uses trees, shrubs, and grasses in combination with a sand filter to provide water quality management within urban areas. As plants grow, they drink water from the surrounding soil, removing pollutants as they do so. Low growing plants act as a filter for runoff when their foliage is dense and close to the ground. Also, the roots of trees and plant enhance the seepage of water into the ground, recharging groundwater. If used properly, bioretention systems protect water quality and provide shade and habitat.



Other practices included at the demonstration area include: *sediment trap, berms and diversion dikes, horizontal and vertical checkdams, silt fence, pipe slope drain, infiltration trenches, porous pavement, sand filter, stone check dam, water quality inlet for pretreatment, etc.* A 40-person education and training facility is also located at the park to assist in conducting workshops regarding nonpoint source pollution.

Federal, State and local governments are in an ongoing process of implementing evaluating, and upgrading stormwater management controls. Tours of the Stormwater Management Demonstration Area offer an increased understanding of how nonpoint source pollution is controlled. If you want more information concerning the stormwater management demonstration area, please contact the Water Management Administration's Sediment, Stormwater, and Dam Safety Program at **(410) 537-3543**.



For more information about stormwater best management practices or publications, please see MDE's Web Page (<http://www.mde.state.md.us>) and search on stormwater design manual.



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