

**Rain Garden (Harrisonburg, VA)  
DEQ Valley Regional Office  
Completed in April 2002**

In April 2002, the DEQ Valley Regional Office installed a rain garden to capture and treat storm water runoff from its parking lots, sidewalks, and rooftops. DEQ estimates that the rain garden captures runoff from 35,000 sq. ft. of impervious surface.

The rain garden design incorporates a 300 sq. ft. grassed swale with a 1000 sq. ft. rain garden containing amended soil, trees, shrubs, perennials, and hardwood mulch. The grass buffer strip slows runoff and filters particulates, and the rain garden removes petroleum products, sediment, metals, nutrients, and bacteria that would otherwise flow into Blacks Run, an impaired stream.

Ron Phillips in the DEQ Valley Regional Office coordinated the installation of the rain garden. Jack Kauffman and Judy Okay of the Virginia Dept. of Forestry (DOF) performed the survey and design and provided shrubs and perennials. HAZ MAT 2000, Inc. excavated the rain garden and provided all soil amendments. The Shenandoah Valley Pure Water 2000 Forum provided a grant for trees and mulch. Fine Earth provided mulch at cost. Mast Landscapes provided the sweet bay magnolia. The Harrisonburg High School Ecology and Horticulture classes provided additional perennials.



**Above:** The ditch where the rain garden was later constructed.

**Below:** Rain garden in June 2003, 14 months after construction.



**Construction** – The rain garden was placed along an existing drainage ditch on the property. The ditch was reshaped to be flatter and wider to slow water flow and encourage infiltration. To prepare the site, the contractor excavated 6” of clay soil and replaced it with a mixture of sand, topsoil, composted leaves, and mulch. The sand allows better infiltration, the topsoil provides the plants with adequate nutrients, and the organic material helps trap and breakdown pollutants. Plants include water-tolerant trees (river birch, sweet bay magnolia, silver maple, green ash), shrubs (buttonbush, red-twig dogwood), and perennials (iris, cardinal flower, joe pye weed, iron weed, goldenrod, solidago).

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**ACCESSIBILITY:** Site is accessible to view daily during regular work hours.

**DIRECTIONS:** I-81 to Exit #243 near Harrisonburg to Route 11 North. Travel 150 yards to the intersection (at stoplight) and turn right onto Pleasant Valley Road (between Ramada Inn and Exxon station). Continue on Pleasant Valley Road until you cross over I-81. Immediately after crossing I-81, turn right onto Early Road. Follow Early Road for ~ 1.2 miles to DEQ Valley Regional Office on right at 4411 Early Road. The rain garden is located at the end of the parking lot behind the dumpster enclosure.

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