## For more information:

- Center for Watershed Protection
  Ellicott City, MD.
  "The Architecture of Urban Stream Buffers." Article 39 in *The Practice of Watershed Protection.*
  www.cwp.org

- Chesapeake Bay Foundation, Inc.
  Phillip Merrill Environmental Center
  410-268-8816
  www.savethebay.cbf.org

- PA Native Plant Society
  Website includes a list of companies and organizations that can provide native plants if you are unable to find them locally.
  www.pawildflower.org

- U.S. Fish and Wildlife Service
  "Native Plants for Wildlife Habitat and Conservation" - a booklet on landscaping to protect the Chesapeake Bay Watershed.

- Washington Township Transfer Station
  12721 Buchanan Trail East
  Waynesboro, PA 17268
  717-762-4413
  Mon—Sat 8:00 a.m.—4:15 p.m.
  **Recyclables accepted at no charge**

A CD of the East Branch of the Antietam Creek Stream Survey done in September 2005, by The Center for Watershed Protection and AWA volunteers is available by contacting the AWA.

*We thank The Alexander Stewart, M.D. Foundation for a grant for this brochure.*

# Who Protects the Antietam Creek?

## *You can help!*

(Top: Kenneth Lehman Stream Restoration planting, Nov. '05
Bottom: Tree roots supporting bank of the Antietam upstream from Renfrew Park.)

## The Antietam Watershed Association's mission:

- to **preserve** the Antietam Creek as a resource for the community
- to **protect** the regional water supply
- to **proceed** co-operatively with community members and municipalities.

The AWA hopes that every person, property owner, organization and business will join the local watershed association's efforts.

### *You can help!*

By adapting one or more of these watershed protection techniques to your home or business, water will be filtered and more absorbed into the ground before it enters our local Antietam Creek and its tributaries.

**Antietam Watershed Association**

## Tips to Help Protect Your Watershed

- Wash your car on the lawn to water the grass at the same time and keep the harmful suds and detergents from entering the stream.
- Gutters and down spouts need to drain onto vegetative or gravel-filled seepage areas.
- Compost grass clippings and leaves.
- Use natural alternatives to chemical fertilizers.
- Don't mow to the edge of the stream. Save time and energy by planting moisture-loving shrubs and trees along banks.
- Pick up after your pets and dispose of waste in garbage or toilet.
- Recycle used motor oil
- Dry sweep driveways and sidewalks instead of hosing down or using motorized blower.

**Antietam Watershed Association**
**32 West Main Street**
**Waynesboro, PA 17268**
**717-762-9417**
**www.antietamws.org**

## BIORETENTION

Bioretention areas are gradually replacing the older water retention pond so often seen in low areas near major highways and large parking lots. They are appropriate for the same type of location, especially where there is fairly high pollution. The area is excavated and under-drainage, such as stone and a sand filter, is put in place. A permeable soil mix covers the surface of the area and it is landscaped with native wetland trees and shrubs. This provides increased filtration as well as cooling from the resulting shade and is particularly useful for areas near cold water trout streams such as Antietam Creek.

(Paul's Country Market Bioretention Design [top] and Rain Garden [bottom]; projects completed April '05)

## RAIN GARDEN

A rain garden uses plants and their root systems to filter water run off. Plant roots hold in the soil and absorb water. Rain gardens function to slow down the water running off roads, parking lots, roof tops or downspouts, to ease flooding, and to prevent any contaminants from directly entering storm drains or creeks. Native plants that require extra moisture and provide food and shelter for wildlife not only look good, but function like a sponge. Rain gardens can be adapted to your site, and can be used in combination with other techniques of water management.

## STREAM BANK RESTORATION

(Hess Properties' Stream Bank Restoration project April '04)

The Chesapeake Bay Foundation Farm Stewardship Program and local partners have a goal to restore wooded stream buffers along our Antietam and its tributaries. Plant buffers along streams provide habitat for wildlife such as songbirds, waterfowl and game animals. Wooded buffers known as riparian restorations improve stream quality and cool the water to support fish, reduce stream bank erosion and flooding.

## STREAM BANK FENCING WITH CATTLE CROSSING

Electric fencing adjacent to streams and wetlands, along with controlled cattle crossings, reduce excess nutrient leaching from manure. The water that runs through pastures is less contaminated; cattle stay healthier and have fewer foot and leg injuries. These conservation practices are part of the CBF Farm Stewardship Program, along with restored planting of native trees and shrubs along the stream banks.

(Stream Bank Restoration with Cattle Crossing, Landes Farm, Marsh Run Project, Oct. '02)

## DRY SWALE

Paved roads, parking lots and sidewalks with impervious surfaces do not allow rain water to be absorbed. The resulting runoff along with any pollutants moves quickly into storm drains and nearby creeks. Curved swales of grass, with appropriate additional drainage along the channel underneath the sod allows a portion of the runoff to soak into the ground. This provides some filtration and reduces the amount of water pouring into storm drains and creeks during heavy storms.

(Dry Swale to help absorb parking lot run off)

## BAYSCAPING

(Home of Rodney and Vicki Clark; Waynesboro, PA)

Bayscaping is a planned landscape design benefiting people, wildlife, our local Antietam Creek, and, ultimately, the Chesapeake Bay. Using Bayscape principles for your business, schools and homes, you can reduce mowing, fertilizer and pesticide use. Proper planting with native trees, shrubs, perennials and groundcovers can reduce soil erosion on slopes and provide a wind break and shade to help heat or cool buildings.

Since rain water carries excess nutrients and chemical contaminants away from our yards and paved areas, plants can help slow and filter the runoff into our local waterways. Choosing plants that need minimal care, adapt to wet or dry periods, and attract beneficial insects helps our environment.

(AWA has sponsored a state roadside clean up along Rattlesnake Run Road since 2003. Members patrol regularly.)

## TRASH CLEAN UP

Forests and roadsides where people dump trash are a threat to the water supply. Tires, rusting metal, paint cans, aerosol cans and chemicals are some of the items found dumped on roadside cleanups the past three years. Faithful walkers who adopt a road are setting a good example for us all: to properly dispose of trash and hazardous materials. Contact the Washington Township Transfer Station for guidelines, or your contracted trash collection service.

***Pristine forests are our first defense against contaminated waterways!***