Water Matters – May 2009
Mill Creek Stream Corridor Assessment

Despite clouds and forecasted showers, 24 Page County High School students, teachers, landowners, Water Quality Advisory Committee members and resource experts divided into five groups and set-out Friday morning, May 1, to walk along Mill Creek. Typically, the teams observed and documented the following: stream bank erosion (which is a source of excess sediment in streams), lack of vegetation (especially trees and shrubs which increases water temperatures and allows excess nutrients to wash into streams) and obstructions in the stream channel (which inhibits fish migration). In addition to surveying, team members picked up litter along the stream, identified trash and debris in the channel and learned to recognize first-hand how the health of a stream is directly linked to activities and actions occurring on the surrounding land.

Mill Creek has been listed as an *"impaired water body"* by the Virginia Department of Environmental Quality. This small stream that flows into the South Fork Shenandoah River near Hamburg is contaminated by bacteria making it generally unsafe for human contact. The Virginia Department of Environmental Quality (DEQ) has recently completed a Total Maximum Daily Load (TMDL) Implementation Plan for Hawksbill and Mill Creeks initiating environmental restoration.

The Advisory Committee successfully garnered funds, hired experienced trainers, and, most importantly, gathered volunteers to conduct the assessment of the Mill Creek's environmental health. This approach systematically documents sites needing restoration, provides necessary information to effectively address the issues, prioritizes conditions by relative importance, provides a "benchmark" to monitor progress, and instills a greater sense of stewardship and land care among the volunteers.

Following two days of intensive training, the students and other community volunteers were fully prepared to conduct the stream corridor assessment along the eight miles of Mill Creek and two of its unnamed tributaries. Training, conducted by the Izaak Walton League of America and funded through a National Fish and Wildlife Foundation grant, provided the volunteers with all the skills and information necessary for the task - what to look for, how to use hi-tech global positioning equipment and how to describe environmental damage. The training also covered how to be responsible visitors on private property, access to which, land owners voluntarily provided.

All who participated gained a much better understanding of Mill Creek, the direct relationship between land and water, and the importance of healthy, well-functioning streams. Arguably, however, the most valuable and far-reaching "victory" of this effort was the very real commitment expressed by the students to learn about the world around them; to understand the true meaning of "citizenship;" to become responsible community leaders and stewards of a brighter, cleaner, healthier environment for this and future generations.

The purpose of the Stream Corridor Assessment was to characterize the physical condition of Mill Creek in the spring of 2009. So what are the "next steps?" Maps and data tables will be prepared, stream conditions evaluated and priority restoration action plans formulated to guide restoration activities. All restoration efforts such as planting along stream banks to address erosion areas are voluntary for interested landowners.

This is the fifteenth article in a series addressing Page County's Water Resources and was written by Wink Hastings, a staff member of the National Park Service's Rivers, Trails and Conservation Assistance assigned to the Chesapeake Bay Program.