## Little Grave Creek Watershed Association Stream Bank Stabilization Projects

In the aftermath of the widespread flooding left behind from hurricane Ivan in the Northern Panhandle of West Virginia, the Little Grave Creek Watershed was one of the most adversely affected. As a result of the flooding this relatively small watershed had endured considerable amounts of stream bank erosion and sediment loading to the stream. This concerned many of the citizens who either lived along the creek or owned businesses in the watershed to the point that they decided to take action to correct the problems. In 2005 the citizens of the watershed formed the Little Grave Creek Watershed Association, and began to identify areas of concern and set forth a plan to correct the problems. In the process they have formed a great cooperative effort with many state and local agencies including the West Virginia Conservation Agency, the Northern Panhandle Conservation District, Marshall County Board of Education, the Marshall County Commission, and the West Virginia Department of Environmental Protection.

The Watershed Association has been able to secure a number of grants and donations including a stream partner grant in which they completed a couple of small restoration projects and developed educational outreach resources to inform the public. In addition, the watershed association held a cleanup and beautification day along the creek in which debris was removed and several trees were planted. Through their cooperative effort with the WVDEP the association also developed a watershed based plan in which fourteen stream bank stabilization sites were identified based on their advanced states of erosion and the amount of sediment each site contributed to the waterway. The association then began to work toward securing the funds necessary to correct each site.

Over the past winter the watershed association was able to secure funding to complete the stabilization work on ten of the fourteen sites. To ensure that all the necessary permits and designs were in place and that the work is completed correctly and on schedule the watershed association again called on their cooperative efforts with the Northern Panhandle Conservation District and the West Virginia Conservation Agency to manage funding, complete designs, contract and supervise the construction of the projects.

Construction on the stream bank stabilization sites began in March of this year, with construction on five of the sites completed and construction currently progressing on the sixth site. The estimated date of completion for construction on the remaining sites is early this summer. All the stream bank stabilization work is being completed using natural stream design features such as rock and log vanes, bank shaping and seeding, with the exception of a few of the sites where the stream banks have been shaped and protected with rock to prevent further erosion.

The watershed association is working to secure the funding necessary to complete the remaining four of the original fourteen identified sites. They are also working to develop another watershed based plan to identify sites to stabilize in the future, as well as applying for additional grants to fund more educational activities. The association members take great pride in the work that they have been able to complete and plan to continue to work to improve the condition and quality of their creek as they are already planning a stream clean up and adopt a highway program for this summer.

