



USDA-CSREES 2007 National Water Quality Conference

The Water Resources Monitoring Project, Spring Creek Watershed, Pennsylvania

The Water Resources Monitoring Project (WRMP) is a stakeholder-based program headquartered in the Spring Creek Watershed, Centre County, Pennsylvania, one of the fastest growing areas in the state. The WRMP was initiated in response to a community need to collect baseline water quality and quantity data for the long term protection of the watershed. The project was created and is currently administered by a volunteer group of environmental professionals who represent a diverse range of stakeholder interests and organizations, including the Pennsylvania State University, Centre County Conservation District, and several environmental consulting firms. The WRMP maintains three monitoring networks: baseflow, ground water, and storm flow. Each of these components is tailored to fit the needs of the watershed and project stakeholders. In 2005, the WRMP collaborated with The Pennsylvania State University and a consortium of partners in support of the Slab Cabin Run Bio-Retention Project. The bio-retention project will reconnect the urban influenced Slab Cabin Run with its floodplain and adjacent marsh via rock vane structures, thereby dissipating storm-water energy and reducing downstream flooding. The WRMP, in cooperation with the Spring Creek Chapter of Trout Unlimited, installed storm-water monitoring equipment above and below the project area to assess the effectiveness of the marsh before the in-stream structures were constructed. Twelve rainfall-runoff events occurred for which water quality and quantity samples were collected and analyzed. Results of the initial storm-water sampling show similar pollutant loads above and below the project area and indicate that the bio-retention capability of the marsh is not being fully utilized.

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