



DIRT & GRAVEL ROADS PROGRAM

In Pennsylvania, non-point source pollution is responsible for 88% of all impaired streams. The dust and sediment pollution resulting from the poor maintenance of the more than 27,000 miles of dirt and gravel roads in the Commonwealth has been shown to be a large contributor to this pollution.

In order to minimize the negative environmental impacts from dirt and gravel roads, the Warren County Conservation District entered into an agreement in 1997 with the PA State Conservation Commission to coordinate the Dirt & Gravel Road Maintenance Program (DGRP) in Warren County. The program makes up to \$4 million available statewide to fund safe, efficient, and environmentally sound maintenance of dirt and gravel roads.

The DGRP funds are appropriated through the PA State Conservation Commission to County Conservation Districts. A local Quality Assurance Board, with representation from the District, PA Fish & Boat Commission and the USDA Natural Resources Conservation Service, determines which projects are funded through a simplified grant application process.

Since the creation of the program in 1997, the Warren County Conservation District has funded the improvement of 70 work sites in Warren County, totaling over \$1,583,524. In 2008/2009 the District will receive

an allocation of \$196,000 to fund Dirt & Gravel Road Projects in Warren County.

In 1998, the Conservation District completed an assessment of all dirt and gravel roads in Warren County. The assessment identified approximately 500 various sites which are causing sediment pollution to waters of the Commonwealth. Improvements funded under the program must be at a site listed from the assessment.

One example of a Dirt and Gravel Road project would be Columbus Township's Stoney Lonesome Road. This site has many problems that are obvious and some that are not. To start, the road was built overtop of a stream channel that has since been fighting its way for decades to regain a stable defined channel. This has caused many problems for the Township. Practically every time it rains the road gets flooded and valuable gravel is washed downstream. Before any work was done on the road the ditches were large enough to swallow a small vehicle, and there was only one crosspipe on the whole road. The road bank was unstable and the toe of the bank was being eroded away by the ditch flow that was constant. Another major problem with the road was an extremely wet road base caused by excessive surface and groundwater. The road was receiving runoff from 2 driveways. There were many large hazardous trees hanging

over the road. And finally an unstable channel at the end of the road had created some erosion problems for a landowner and also caused a narrow spot in the road. Both banks of the channel were vertically eroded and sloughing off large amounts of soil into the UNT- Coffee Creek.

In order to address these numerous problems, Columbus Township has worked closely with the District and the Center for Dirt & Gravel Road Studies. The project was separated into 3 phases. Phase 1 was completed in 2005 which included removing large hazardous trees, installing many crosspipes, installing underdrain, raising the road profile, and doing some bank work on the upper section of the road. The total cost of Phase 1 was \$41,000.00. Phase 2 cost was \$49,000.00 and included more road bank work, gravel, a stream crossing, and road berm protection with 2' x 2' x 6' concrete blocks. And also 6" underdrain was installed in certain locations. The cost of Phase 3 was around \$41,000 and included more underdrain, some roadbank/streambank protection and a large 48" culvert pipe to eliminate a major erosion problem on the stream channel at the end of the road. For additional information on the Dirt & Gravel Roads Program in Warren County, please contact the District office at (814) 563-3117.