



Case Study: West Virginia Department of Transportation – Corridor H, Mt Storm, WV

In 2010, West Virginia DOT began the construction of the Fore Knobs project at Mt Storm, WV. The Fore Knobs project is located in extremely steep, windy and rugged terrain in Eastern WV and the



biggest issue was that the project was situated in areas classified as Tier 3 Streams by the WV Dept. of Environmental Services. The DES has identified turbidity as the greatest pollutant of concern in Tier 3 Areas.

Under DES Tier 3 Regulations, contractors are required to stabilize disturbed soil areas every 4 days and establish 70% growth before they can be released from their permit. Their main goal is to control erosion while minimizing turbidity of the stormwater effluent.

To add to an already challenging situation, the

Corridor H Site has several pristine trout ponds located near the edge of the highway right-of-way.

Initially, WV DOT had specified rolled fiber matting for temporary and final stabilization, but it became very clear that the difficulty of matting disturbed areas every 4 days placed an extremely challenging burden on the contractor, Mashuda Corp. All wood debris and rock would have to be removed before the areas could be matted and the slopes would have to be groomed to allow the blanket to be in 100% contact with the ground surface. Because the site is located in a windy area, the blankets would also have to be securely stapled into the ground.

All this work and expense for slopes that were still going to be moved again within in short amount of time.

Terra Novo Inc was approached by project officials because **EarthGuard** can be sprayed onto rugged ungroomed areas. Unlike other hydromulch products such as bonded fiber matrices and fiber reinforced matrix that are designed to dry and become a blanket areas treated with **EarthGuard** do not need full product coverage.

EarthGuard's unique chemistry allows it to work on the microscopic level with soil to maintain its stability by both preserving existing soil structure and flocculating sediment being dislodged by storm water or wind. **EarthGuard** remains active throughout its service life and will move to protect areas that were difficult to treat during initial installation due to the undulations in the terrain.

EarthGuard was initially applied in November 2010. Over the course of the winter and early spring, these treated areas received over 80" of precipitation.

The use of **EarthGuard** has allowed Mashuda Corp to stay in compliance with Tier 3 regulations and DOT officials continue to be extremely pleased with the **EarthGuard's** performance in maintaining erosion control on this site.