

# Gully treatment with grassed waterways



By Cam McGinnis, Morristown Field Office soil conservationist

Rutledge, Tennessee, resident David Hixon recently contacted the Morristown Field Office about an increasingly problematic gully that had divided his hayfield. The erosion was caused by stormwater runoff within a localized watershed with little vegetative cover to slow water above Hixon's farm.

After consulting with our area engineering staff, we concluded that a grassed waterway with rock lined waterways at the inlet and outlet of the structure would be the most effective way to address his growing problem. Through the National Water Quality Initiative program, Hixon was able to receive cost-share funding to hire a local contractor to install the practices.





The main objective of this practice is to spread the natural energy of water by providing a less concentrated area of flow. By reshaping the natural drainage area Hixon is now able to cross between his fields freely, but to be sure we also had a stream crossing installed to allow him to cross the structure even during wet periods. The structure's gradual slope (about 1.6 percent) combined with the less concentrated area of flow should prevent the gulley from reforming, allowing David to cross his farm freely without the worry of losing more farmland to erosion.

After construction, the entire structure and all the surrounding areas that were disturbed due to construction were reseeded with Brown Top Millet to provide a temporary, fast growing, cover while we waited for optimal seeding dates for perennial grass. As proper seeding dates approached the dry weather improved just enough to give David the opportunity to have Tall Fescue planted as the perennial cover that will provide year-round living



cover to stabilize the site. Hixon says he is very pleased with how the structure turned out and says he is glad it was addressed before things got worse.