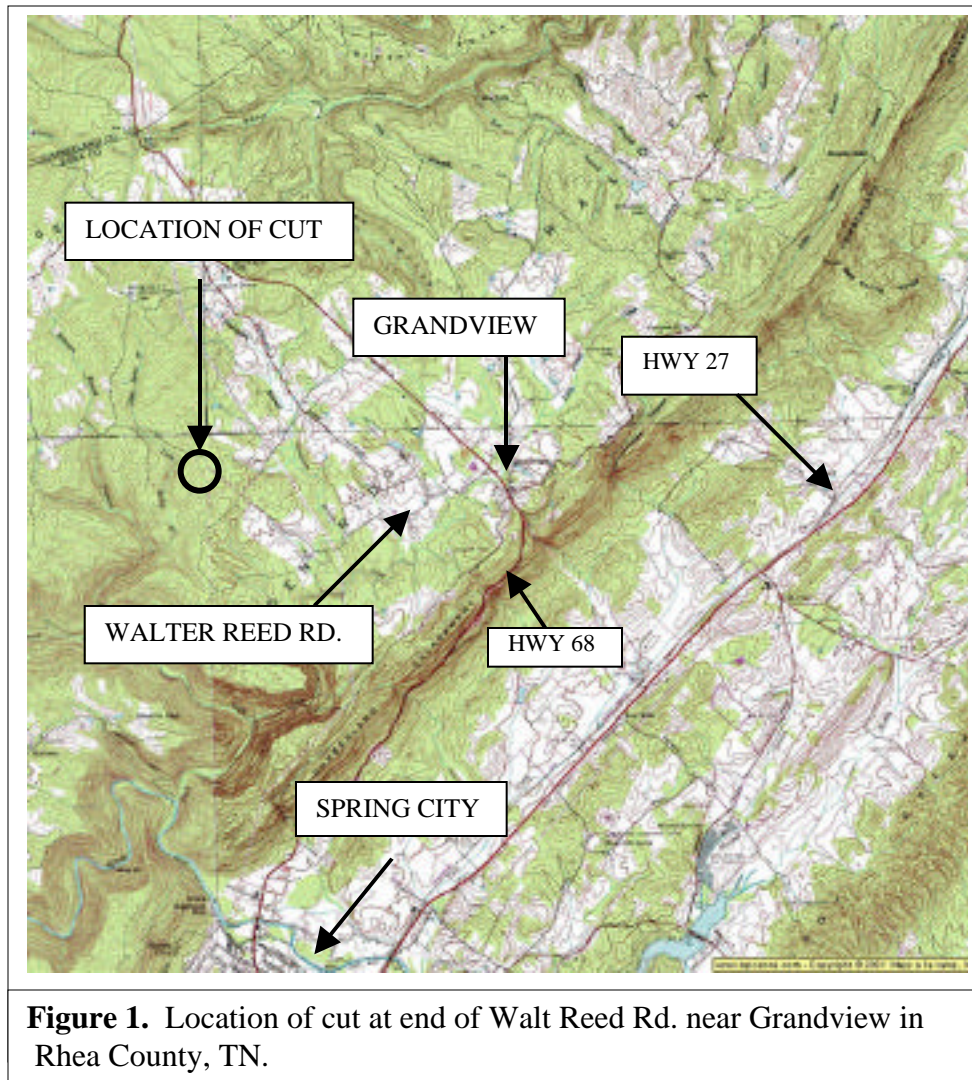


## Tennessee ForestWatch Water Quality and Best Management Practices Report

**Date of Inspection:** May 8, 2002

**Location:** Walt Reed Rd. Grandview, TN in Rhea County (See Fig. 1). Go to the end of Walt Reed Road. The area in this report is just beyond the end of the road on the left.

**GPS Coordinates:** 35°44.885N 84°52.601E



**Landowner:** Believed to be Coal Creek Properties from Florida. A local resident reported that the land had been owned by Black Mountain Coal Company who sold the land to Huber who sold to Coal Creek Properties

**Logger:** Unknown

**Inspectors:** Valerie Walling, Doug Murray, Cielo Sand

**Reason for Inspection:** Sighted from the road

**Size of Cut:** Approximately 50 acres of a 1700 acre tract

**Management Method:** Clearcut and perhaps seed tree/shelter wood

**Date of Completion:** Jan./Feb. of 2002 according to local resident

**Description of Topography:** 20% grade to flat

**Streams on Site:** Unnamed tributary of Edwards Branch (a tributary of Stinging Fork Creek)

### **SUMMARY OF INSPECTION**

The inspection of this site revealed stream damage and water pollution resulting from:

- 1) bank destabilization
- 2) point source pollution delivered to the stream by erosion channels
- 3) woody debris left in a marshy/wetland area
- 4) failure to stabilize the road leading into and crossing the stream
- 5) complete removal of the SMZ on a 20% slope adjacent to the stream

### **Bank Destabilization**

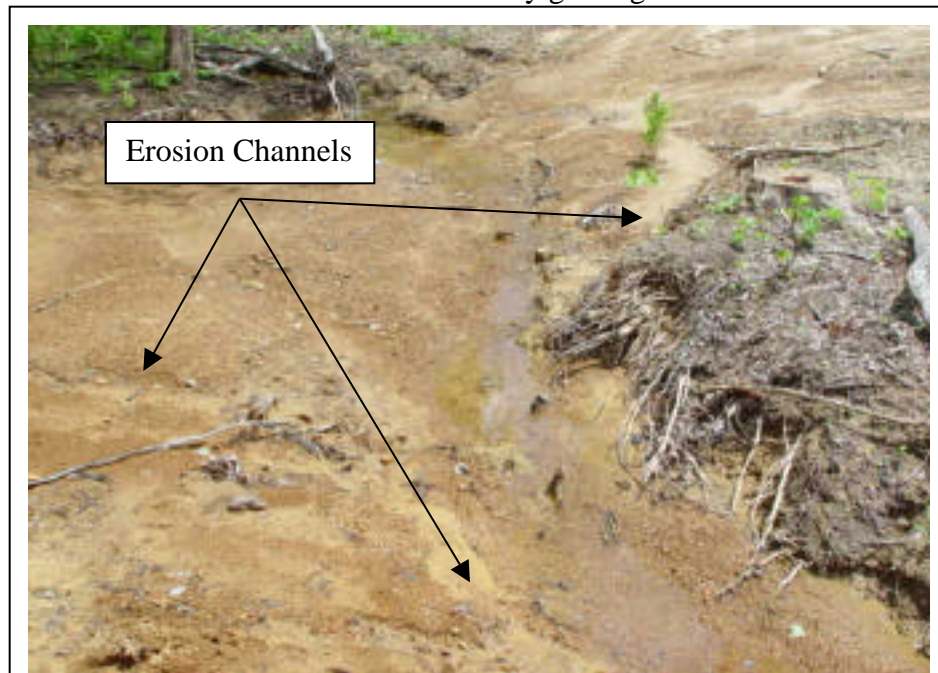
Figure 2 shows the stream bank down stream and immediately adjacent to the cut area. The banks are well stabilized by vegetation—mostly ferns—and the roots of trees growing near the stream. Figure 3 shows the banks of the stream in the logged area just upstream from figure 2. In this logged area, the banks are nearly denuded of vegetation



and the banks are eroding into the stream. Tree roots that once stabilized the bank (see SMZ removal) are now decaying allowing the banks to slough off into the stream.

### Erosion Channels

Erosion channels are forming on this site and delivering silt into the stream. Figures 4& 6 show some of these erosion channels. This problem appears to be particularly serious on the unstabilized road that crosses the stream. These small channels are already delivering silt to the stream and this constitutes point source pollution. The soil in this area is very fine and erodible and these erosion channels will only get larger over time.



**Figure 4.** Erosion channels forming and delivering sediment to stream

### Woody Debris and Wetland Damage



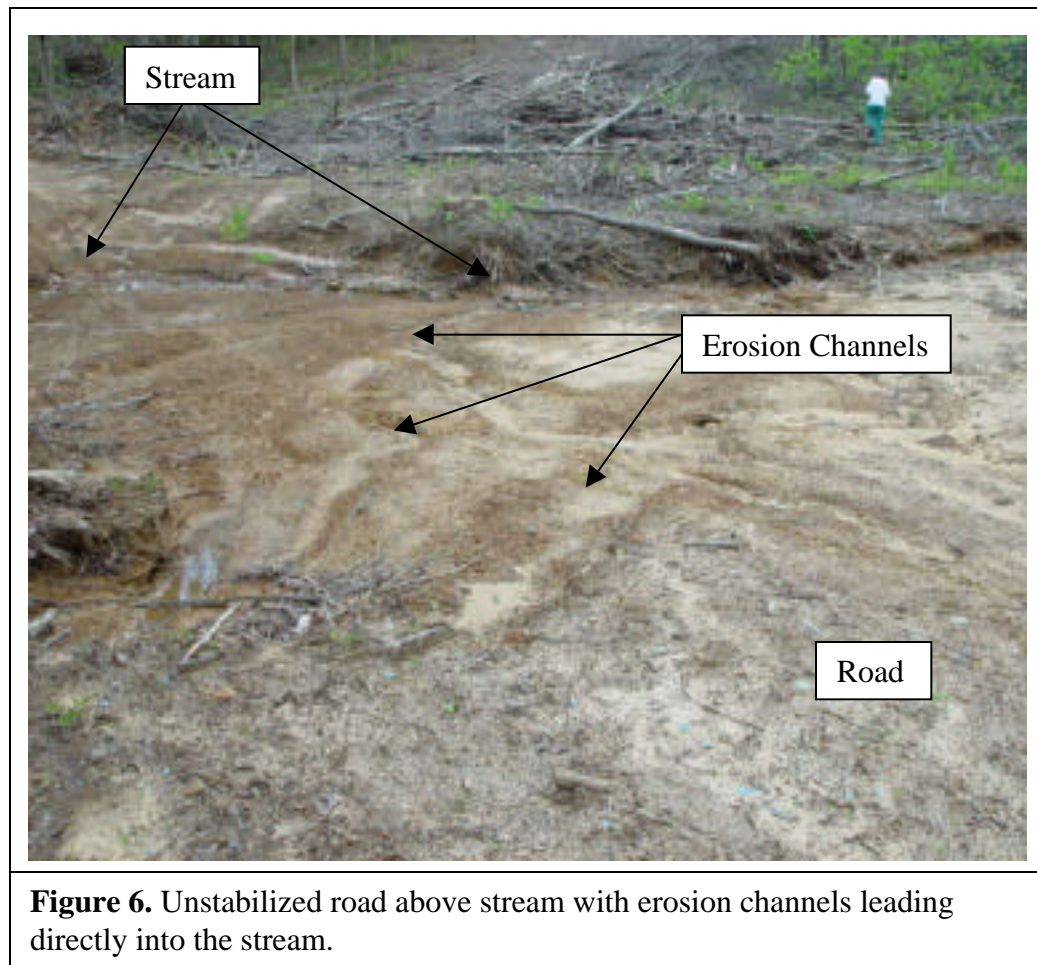
**Figure 5.** Wetland area impacted by heavy equipment and logging debris

A small wetland/marshy area is located adjacent to and to the east of the stream shown in figures 1-4. The predominant remaining vegetation in this wetland is fern. A road has been built across this wetland and according to federal law this road should have been removed prior to the retirement of the site.

Figure 5 shows a portion of the wetland area. No SMZ was retained in this area and woody logging debris was left in the water. This also constitutes point source pollution.. There are also imprints of tracks of heavy equipment in the wetland

### **Failure to Stabilize Road**

The road that crosses the wetland and stream has not been stabilized. Figure 6 shows that no attempt has been made to reseed, remove, or waterbar this road. The slope of this road



varies from approximately 20% to about 10% just prior to crossing the stream, and erosion channels are forming on the road and delivering silt to the stream (see figures 4 and 6).

### **SMZ Removed**

The SMZ has been totally removed on approximately 30-50 yards of stream bank as well as around the wetland shown in figure 5. All trees ranging from saplings to 18 inches in

diameter were removed from the streamside for a distance of about 50 feet where the slope ranges from 10-20%. A SMZ about 10 feet wide remains around the wetland area north of the road but this is inadequate to protect water quality even in a relatively flat area. Figure 7 shows part of the area where the SMZ has been totally removed.



**Figure 7.** A portion of the stream where the SMZ has been totally removed

### **CONCLUSION**

This site has numerous violations of both state and federal BMPs. Several of the violations have resulted in point source pollution and therefore violate the Clean Water Act.

Due to the seriousness of the violations identified by our inspection, we strongly urge TDF and TDEC to fully inspect the site and take the actions necessary to rectify the violations and protect our streams from further degradation.