

## **Chapter 5 - VEGETATIVE PRACTICE STANDARDS**

### **INTRODUCTION**

Vegetative cover is a principal method for stabilizing disturbed sites throughout Mississippi. The establishment of suitable vegetative cover affords excellent erosion protection and sedimentation control. It is relatively inexpensive, tends to be self healing, and practical long-term solution to site stabilization and erosion control.

Vegetative cover is an essential element in the planning and design process. This chapter contains standards and specifications for these best management practices.

### **EFFECTS OF VEGETATION ON EROSION AND SEDIMENTATION**

Dense, vigorous vegetation protects the soil surface from raindrop impact, a major force in dislodging soil particles and moving them downslope. It also shields the soil surface from the scouring effect of overland flow and decreases the erosive capacity of the flowing water by reducing its velocity.

The shielding effect of a plant canopy is augmented by roots and rhizomes that hold the soil, improve its physical condition, and increase the rate of infiltration, further decreasing runoff. Plants also reduce the moisture content of the soil through transpiration, thus increasing its capacity to absorb water (Figure 5-1).

Suitable vegetative cover affords excellent erosion protection and sedimentation control and is essential to the design and stabilization of many structural erosion control measures. Vegetative cover is relatively inexpensive to achieve and tends to be self-healing; it is often the only practical, long-term solution to stabilization and erosion control on most disturbed sites in Mississippi.

Planning from the start for vegetative stabilization reduces its cost, minimizes maintenance and repair, and makes structural erosion control measures more effective and less costly to maintain. Post-construction landscaping is also less costly where soils have not been eroded, slopes are not too steep, and weeds are not allowed to proliferate. Natural areas--those left undisturbed--can provide low-maintenance landscaping, shade, and screening. Large trees increase property value if they are properly protected during construction.

Besides preventing erosion, healthy vegetative cover provides a stable land surface that absorbs rainfall, cuts down on heat reflectance and dust, restricts weed growth, and complements architecture. The result is a pleasant environment for employees, tenants and customers, and an attractive site for homes. Property values can be increased dramatically by small investments in erosion control. Even the final landscaping represents only a small fraction of total construction costs and contributes greatly to the marketing potential of a development.