

# Critical Slopes

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Critical slopes are included under natural resources because they require protection in order to maintain the existing balance between slope, soils, geology, and vegetation. Critical slopes are defined as areas with a slope of 25 percent or greater. Clearing, grading, building, cropping, and overgrazing of these lands can result in extensive erosion and landslides or sloughing of soil and rock; excessive stormwater runoff, increased siltation and sedimentation; loss of aesthetic resource; and, in the event of septic system failure, a greater travel distance of septic effluent.

About 22 percent of the County acreage consist of critical slopes, as listed in the Soil Survey. About 20 percent of the County acreage are in slopes of 15-25 percent. Critical slopes are located throughout the County, but especially in mountainous areas adjacent to the Shenandoah National Park, on both sides of Route 29 South, and east of Route 20 from Carter's Bridge to the Orange County line.

Regulations to protect critical slopes by directing building and septic system locations to more suitable terrain are included in the Zoning Ordinance.

## Critical Slopes Standards

The following **GENERAL STANDARDS** should be used in areas of critical slope:

- Avoid use of septic systems on slopes of 20 percent or greater.
- Avoid road construction on slopes of 15 percent or more. Roads should follow the natural topography in a manner to minimize grading, cutting, and filling.
- In areas of 15 percent or more slope, maintain natural drainage channels in their natural state and/or stabilize such channels to protect the natural drainage systems from impact of development activity.
- Design public utility corridors to fit the topography. "Straight line" and "up and over" alignment in areas sensitive to such routing should not be permitted.
- Adapt development to the topography and natural setting of the County rather than modifying the topography and natural setting to accommodate development. Excessive grading, cutting, and filling should be discouraged while imaginative and sensitive design should be encouraged.
- In farming and forestry, practice those activities appropriate to the soils and topography of the land. Generally, the soils of the County are not conducive to intensive agricultural and forestal uses when slopes exceed 15 percent.
- As land slope increases, the rate of stormwater runoff increases. Discourage applications of fertilizers, pesticides, herbicides and other chemicals in areas of steep slope where they may be ineffective and can increase probabilities of surface and groundwater pollution.