

## Appendix J - DEQ List of Potential Critical Areas

DEQ developed the following list of potential critical areas, derived from VESCH and other sources, to aid plan preparers in identifying potential critical areas on a project. These areas should be considered when preparing a plan and identifying critical areas. Extra attention should be directed to these areas if they have potentially serious problems or are sensitive to sediment impacts.

### A. Steep Slopes:

#### i. Ranges of slope gradient erodibility:

1. 0-7% → Low erosion hazard
2. 7-15% → Moderate erosion hazard
3. ≥ 15% → High erosion hazard

#### ii. Erosion hazard becomes greater as the slopes length increases. Erosion hazard will become critical if the slope exceeds:

1. 0-7%            300 feet
2. 7-15%        150 feet
3. >15%        75 feet

### B. Areas with high erodibility, high reactivity of soils, etc.

- i. 0.23 and lower → low erodibility
- ii. 0.23 to 0.36 → moderate erodibility
- iii. ≥ 0.36 → high erodibility
- iv. Soil pH

### C. Areas that flow to environmentally sensitive areas (e.g. State waters including wetlands)

### D. Areas that require Virginia Wetland Protection permits

### E. Areas containing threatened or endangered species or their habitat, etc.

### F. Sink holes, wet weather/underground springs, karst areas, etc.

### G. Sensitive agricultural soils

### H. Other Potential Critical areas –

- i. Fragipans
- ii. Lacustrine soils
- iii. Dense basal tills
- iv. Soils with seasonally high water table
- v. Soils with less than 5 feet of depth to bedrock
- vi. Subsurface drainage areas
- vii. Open ditches
- viii. Diversions
- ix. Diversion terraces
- x. Buried utility lines (for farmstead consumptive use)
- xi. Water sources (developed springs, wells, etc...)
- xii. Grassed waterways
- xiii. Water impoundment structures (dams and ponds)
- xiv. Unnamed water flows