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