

# Appendix C Hydrologic Soil Groups

This appendix includes information on the Hydrologic Soil Groups in Ventura County to use in designing various BMPs:

- # Relevance of Hydrologic Soil Groups Information
- # Hydrologic Soil Groups

## *Relevance of Hydrologic Soil Groups Information*

The hydrologic soil groups of a development area are pertinent to best management practice design for BMP IN: Infiltration Facility and for identifying sites appropriate for detention basins. The predominant soil group will control the effectiveness of infiltration facilities or the suitability of an area for impounding water. Hydrologic soil group information should be used for preliminary siting studies only. Actual design should be based on in-situ soil investigations and testing by a qualified engineer or geologist.

<b>Soil Type (Hydrologic Soil Group)</b>	<b>Soil Type VCFCD</b>	<b>Infiltration Rate (in/hr)</b>
A	6,7	1.00 -8.3
B	4,5	0.5 -1.00
C	2,3	0.17-0.27
D	1	0.02-0.10
Infiltration rates shown represent the range covered by multiple sources, e.g. ASCE, BASMAA, etc.		

## *Hydrologic Soil Groups*

The hydrologic soil groups are classified by the USDA Natural Resources Conservation Service (NRCS), formerly the Soil Conservation Service. There are four hydrologic soil groups: A, B, C and D. Soils may be classified by two groups. Soil groups A and B have the highest infiltration rates, unless the soils under consideration have been compacted during construction. Soil groups A and B are typically the best

candidate soils for construction of infiltration facilities. Sites with soil groups C and D are usually more appropriate for detention basins.

Soils in group A have a low runoff potential and high infiltration rate, as the soils typically are sands and gravel. Soil group B includes soils with moderate infiltration rates when completely wetted. Group B soils are sandy loam soils with moderately fine to moderately coarse textures. Soils in group C have slow infiltration rates when thoroughly wetted and these soils typically are silty-loam soils with an impeding layer or soils with moderately fine to fine texture. Group D soils have a high runoff potential and very slow infiltration rate when thoroughly wetted. Group D soils include clay soils with high swelling potential, soils in a permanent high water table and shallow soils over nearly impervious material.

The hydrologic soil information presented here should be used as a general overview. For more specific information, consult the *Ventura County Soil Survey* (USDA SCS) or contact the Ventura County Resource Conservation District at (805) 386-4685.

