Corsica River Watershed Characterization

Excerpt Showing an Example of Characterizing the Soils of a Watershed

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Soils of the Corsica River Watershed

1. Interpreting Local Conditions with Natural Soil Groups

Soil conditions like soil type and moisture conditions greatly affect how land may be used and the potential for vegetation and habitat on the land. Soil conditions are one determining factor for water quality in streams and rivers. Local soil conditions vary greatly from site to site as published information in the Soil Survey for Centreville and Queen Anne's County shows. This information has been summarized into Natural Soil Groups to help identify useful generalizations about groups of soils.

Map 11 Soils By Natural Soils Groups shows the distribution of natural soils groups in the Corsica River Watershed as described in the table below.

2. Soils and Watershed Planning

Local soil conditions are a useful element for watershed planning and targeting restoration. Soils with limitations like wetness or slope naturally inhibit active use for farming or development and may then be available as restoration project sites. By comparing Map 11 Soils By Natural Soils Groups with the preceding maps Map 6 Land Use / Land Cover and Map 8 Green Infrastructure, it may be possible to discern how patterns of active or passive land use relate to soil conditions.

Natural Soils Groups and other soils assessments can be used to help identify potential areas for restoration projects or habitat protection. Hydric soils, for example, are more easily restored as wetlands than soils that were never saturated with water. See the chapter <u>Restoration Targeting Tools</u> for additional information.

Natural Soil Group Area Summary for the Corsica River Watershed			
	Soil Group Description	Acres and Percent of Total	
Prime Agricultural Soils	B1a - Well drained, moderate erodibility.	14,812	15,974 67%
	E1 - Moderately well drained, low erodibillity.	641	
	E3 - Moderately well drained, high erodibility.	521	
Soils With Limitations for Farming	A1a - Sandy, excessively well drained.	117	3,132
	B2a - Well drained with slowly permeable sublayers. Strongly to very strongly acid.	2,327	
	E2 - Seasonally wet or dry, perched watertable, strong acidity.	688	
Hydric Soils	F2 - Poorly or very poorly drained, strongly to extremely acid, low erodibility.	1,079	4,907 20%
	F3 - Poorly drained to various extents – clayey, sticky and plastic when wet. Very high erodibility.	2,626	
	G2 - Poorly and very poorly drained floodplains subject to flooding, seasonally wet.	1,202	