

Antecedent Rainfall Conditions and Curve Numbers

<i>Condition</i>	<i>General Description</i>	<i>5-Day Antecedent Rainfall in inches</i>	
		<i>Dormant Season</i>	<i>Growing Season</i>
I	Optimum soil condition from about lower plastic limit to wilting point	<0.5	<1.4
II	Average value for annual floods	0.5 - 1.1	1.4 - 2.1
III	Heavy rainfall or light rainfall and low temperatures within 5 days prior to the given storm	>1.1	>2.1

<i>Curve Number for Condition II</i>	<i>Factor to Convert Curve Number For Condition II to ...</i>	
	<i>Condition I</i>	<i>Condition III</i>
10	0.40	2.22
20	0.45	1.85
30	0.50	1.67
40	0.55	1.50
50	0.62	1.40
60	0.67	1.30
70	0.73	1.21
80	0.79	1.14
90	0.87	1.07
100	1.00	1.00

From U. S. Soil Conservation Service, National Engineering Handbook, Hydrology, Section 4, Part I, Watershed Planning (1964).

Nota : 1 inch = 2,540 cm

Hydrologic Soil Groups

Soils are classified by the Natural Resource Conservation Service into four Hydrologic Soil Groups based on the soil's runoff potential. The four Hydrologic Soils Groups are A, B, C and D. Where A's generally have the smallest runoff potential and Ds the greatest.

Details of this classification can be found in 'Urban Hydrology for Small Watersheds' published by the Engineering Division of the Natural Resource Conservation Service, United States Department of Agriculture, Technical Release-55.

Group A is sand, loamy sand or sandy loam types of soils. It has low runoff potential and high infiltration rates even when thoroughly wetted. They consist chiefly of deep, well to excessively drained sands or gravels and have a high rate of water transmission.

Group B is silt loam or loam. It has a moderate infiltration rate when thoroughly wetted and consists chiefly or moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures.

Group C soils are sandy clay loam. They have low infiltration rates when thoroughly wetted and consist chiefly of soils with a layer that impedes downward movement of water and soils with moderately fine to fine structure.

Group D soils are clay loam, silty clay loam, sandy clay, silty clay or clay. This HSG has the highest runoff potential. They have very low infiltration rates when thoroughly wetted and consist chiefly of clay soils with a high swelling potential, soils with a permanent high water table, soils with a claypan or clay layer at or near the surface and shallow soils over nearly impervious material.

Petit dictionnaire anglais / français

clay	argile
coarse	grossier
contour	courbes de niveau
ditcher	terrasse
fallow	jachère
grain	céréales
gravel	graviers
impervious	imperméable
loam	terre, sol
loss rate	pertes, infiltration
meadow	prairie, pâturage
organic content	mat. organique
pasture	pâturage
runoff	ruissellement
sewer	égout
silt	limon
slope	penne
soil	terre
steep	escarpé, raide
turf	gazon
watershed	bassin versant

