

Same as MO-ENG-13 with minor corrections

File Code: Coop Folder

VOLUME AND PEAK RATE OF RUNOFF

Landowner: _____

By: _____ Date: _____

Checked: _____ Date: _____

Land Use	Treatment	Hydrologic Soil Group								Sum of Product Acres X CN
		A		B		C		D		
		Acres	CN	Acres	CN	Acres	CN	Acres	CN	
Row Crops	Straight Row		67		78		85		89	
	Contour		65		75		82		86	
	Contour/Terrace		62		71		78		81	
Small Grain	-----		63		75		83		87	
Hayland	-----		58		72		81		85	
Pasture	Poor		68		79		86		89	
	Fair		49		69		79		84	
	Good		39		61		74		80	
Woodland	Poor Cover		45		66		77		83	
	Good cover		25		55		70		77	
Roads	Includes R.O.W.		74		84		90		92	
Farmsteads	-----		59		74		82		86	
Other										

DA = Drainage Area = Total Acres _____ Total Product _____

For curve numbers of other land uses, See EFH pages MO-2-9 and 10

Computed Runoff CN = $\frac{\text{Total Product}}{\text{Total Acres}}$ = _____ ; Use CN* = _____

Practice _____

Frequency Years _____

Rainfall, P Inches _____

Runoff, Q Inches _____
(EFH MO-2-11 to 24)

Total Runoff = $\frac{(DA \times Q)}{12}$ Ac-ft = _____

Average Watershed Landslope, Y = _____ % Flow Length, ℓ = _____ ft

Time of Concentration

T_c using ℓ , Y, CN and Figure 2-27, page 2-41 or using equation 2-5, page 2-5 of EFH

T_c = _____ hrs Initial abstraction, I_a = _____ in (Use CN with table 2-4 page 2-89)

Compute I_a / P ratios _____

Unit peak discharge, q_u _____

(Use T_c and I_a / P with exhibit 2-11, page 2-13 or EFH MO-2-34)

Peak Discharge, q_p , cfs _____

($q_p = q_u A Q$) where q_u = unit peak discharge; A = drainage area; and Q = runoff

* When the job warrants the use of CN other than 65, 70, 75, etc., a straight line interpolation can be made between discharge values for bracketing CN's.