# TR 55 Worksheet 7: Graphical Peak Discharge Method

Project: _____ Location: _____

Check one: ___Present ___Developed

1. Runoff curve number (CN)[1/]

** Note: Use only one CN value for each line**

| Soil name and hydrologic group (appendix A) | Cover description (cover type, treatment, and hydrologic condition, percent impervious, unconnected/connected impervious area ratio). | CN | | | Area ☐ acres ☐ sq. mile ☐ % | Product of CN x area |
|---|---|---|---|---|---|---|
| | | Table 2-2 | Figure 2-3 | Figure 2-4 | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| [1/] Use only one CN source per line | | | | Totals = | | |

CN (weighted) = $\frac{\text{total product}}{\text{total area}}$ = _____ = _____ Use CN = ☐ Calculate Values

2. Time of concentration ($T_c$)
   Average watershed slope Y = _____ percent
   Greatest flow length I = _____ feet
   Watershed lag L = _____ hr(s) (from Amendment FL1)
   $T_c$ = (1.67) (L) = _____ hr(s) or $T_c$ = _____ hr(s) (from Worksheet 3)

3. Rainfall distribution type = _____ (II, III, DMV)

| | Storm #1 | Storm #2 | Storm #3 |
|---|---|---|---|
| 4. Frequency ..... yr | | | |
| 5. Rainfall, P (24 hour) ..... in | | | |
| 6. Initial abstraction $I_a$ (Table 4-1) ..... | | | |
| 7. Compute $I_a/P$ ..... | | | |
| 8. Unit peak discharge, $q_u$ (Exhibit 4- _____) ..... csm/in | | | |
| 9. Drainage area $A_m$ (acres/640) ..... $mi^2$ | | | |
| 10. Runoff, Q (Use P and CN with Table 2-1, Figure 2-1, or equations 2-3 and 2-4) ..... in | | | |
| 11. Pond and swamp adjustment factor, $F_p$ _____ % pond and swamp area. (Use percent pond and swamp area with Table 4-2. Factor is 1.0 for 0 percent pond and swamp area. | | | |
| 12. Peak discharge, $q_p$ (Where $q_p = q_u A_m Q F_p$) ..... cfs | | | |
| 13. Volume of runoff. $V = 53.33 Q A_m$ ..... ac-ft | | | |

Designed By: _____ Date: _____

Checked By: _____ Date: _____

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