

CHAPTER 2

HYDROLOGY

2.2 Symbols And Definitions

To provide consistency within this chapter as well as throughout this manual the following symbols presented in Table 2.2-1 will be used. These symbols were selected because of their wide use in hydrologic publications. In some cases the same symbol is used in existing publications for more than one definition. Where this occurs in this chapter, the symbol will be defined where it occurs in the text or equations.

**Table 2.2-1
Symbols and Definitions**

<u>Symbol</u>	<u>Definition</u>	<u>Units</u>
A or a	Drainage area	acres
A_f	Channel flow area	ft ²
B	Channel bottom width	ft
C	Runoff coefficient	-
C_f	Frequency factor	-
CN	SCS-runoff curve number	-
D	Depth of flow	ft
d	Time interval	hours
F	Pond and swamp adjustment factor	-
I	Runoff intensity	in/hr
I	Percent of impervious cover	%
I_a	Initial abstraction from total rainfall	in
L	Flow length	ft
n	Manning roughness coefficient	-
P	Accumulated rainfall	in
P_w	Wetted perimeter	ft
Q	Rate of runoff	cfs (or inches)
q	Storm runoff during a time interval	in
q_u	Unit peak discharge	cfs (or cfs/mi ² /inch)
q_p	Peak rate of discharge	cfs
R or r	Hydraulic radius	ft
S or Y	Ground slope	ft/ft or %
S	Potential maximum retention	in
S or s	Slope of hydraulic grade line	ft/ft
SCS	Soil Conservation Service	-
T	Channel top width	ft
T_L or T	Lag time	hours
T_t	Travel time	hours
tc or Tc	Time concentration	min
V	Velocity	ft/s
WQ_R	Water quality storm runoff depth	in.
WQ_v	Water quality storm runoff volume	cubic feet

END OF SECTION 2.2