

442 Introduction to Hydrology

Assignment 14

Name: _____

The excess rainfall and direct runoff recorded for a storm are as follows:

Time (h)	1	2	3	4	5	6	7	8	9
Excess rainfall (in)	1.0	2.0	1.0	0.5					
Direct runoff (cfs)	10	120	400	560	500	450	250	100	50

Calculate the one-hour unit hydrograph.

Using the unit hydrograph derived earlier, determine the streamflow hydrograph for this watershed for the storm pattern given below. Assume the baseflow to be 15 cfs.

Time (h)	1	2	3
Excess rainfall (in)	0.5	1.0	0.25