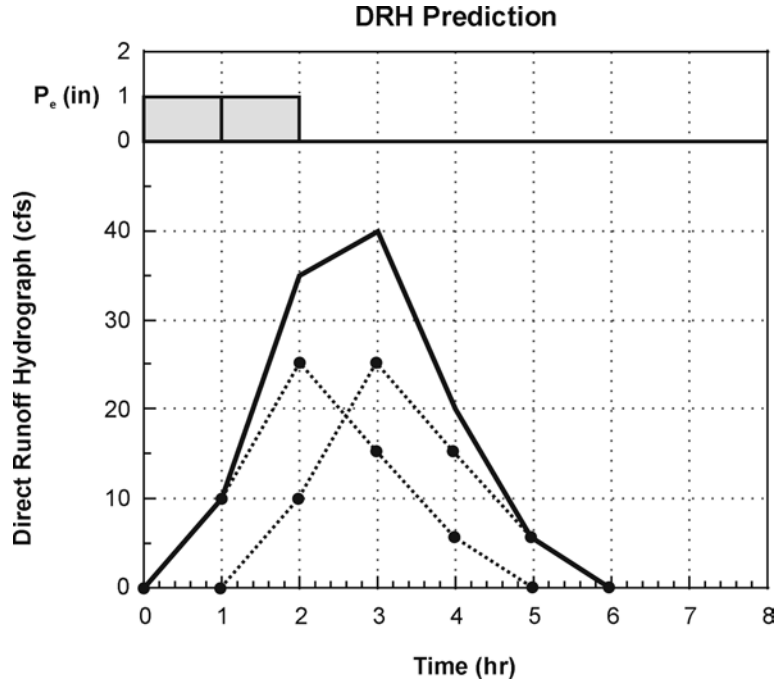


Lesson 22: Unit Hydrograph Concepts Practice

Predict the Direct Runoff Hydrograph



Time (hr)	(Given) Pe (in)	(Given) 1-hr UH (cfs)	1.0xUH DRH ₀ (cfs)	1.0xUH DRH ₁ (cfs)	Total-DRH (cfs)
0		0	0		0.0
1	1.0	10	10	0	10.0
2	1.0	25	25	10	35.0
3		15	15	25	40.0
4		5	5	15	20.0
5		0	0	5	5.0
6				0	0.0
ΣQ (cfs)		55.0	55.0	55.0	110.0
Vd (cfs-hr)		55.0	55.0	55.0	110.0
Vd (ac-ft)		4.545	4.545	4.545	9.091
Vd/Vd-UH		1	1	1	2
rd (in)		1	1	1	2

Lesson 22: Unit Hydrograph Concepts Practice

Predict the Direct Runoff Hydrograph

Time (hr)	(Given) Pe (in)	(Given) 1-hr UH (cfs)	2.0xUH DRH ₀ (cfs)	1.0xUH DRH ₁ (cfs)	0.5xUH DRH ₂ (cfs)	Total- DRH (cfs)	
0		0	0			0.0	
1	2.0	10	20	0		20.0	
2	1.0	25	50	10	0	60.0	
3	0.5	15	30	25	5	60.0	
4		5	10	15	12.5	37.5	
5		0	0	5	7.5	12.5	
6				0	2.5	2.5	
7					0	0.0	
		ΣQ (cfs)	55.0	110.0	55.0	27.5	192.5
		Vd (cfs-hr)	55.0	110.0	55.0	27.5	192.5
		Vd (ac-ft)	4.545	9.091	4.545	2.273	15.909
		Vd/Vd-UH	1	2	1	0.5	3.5
		rd (in)	1	2	1	0.5	3.5