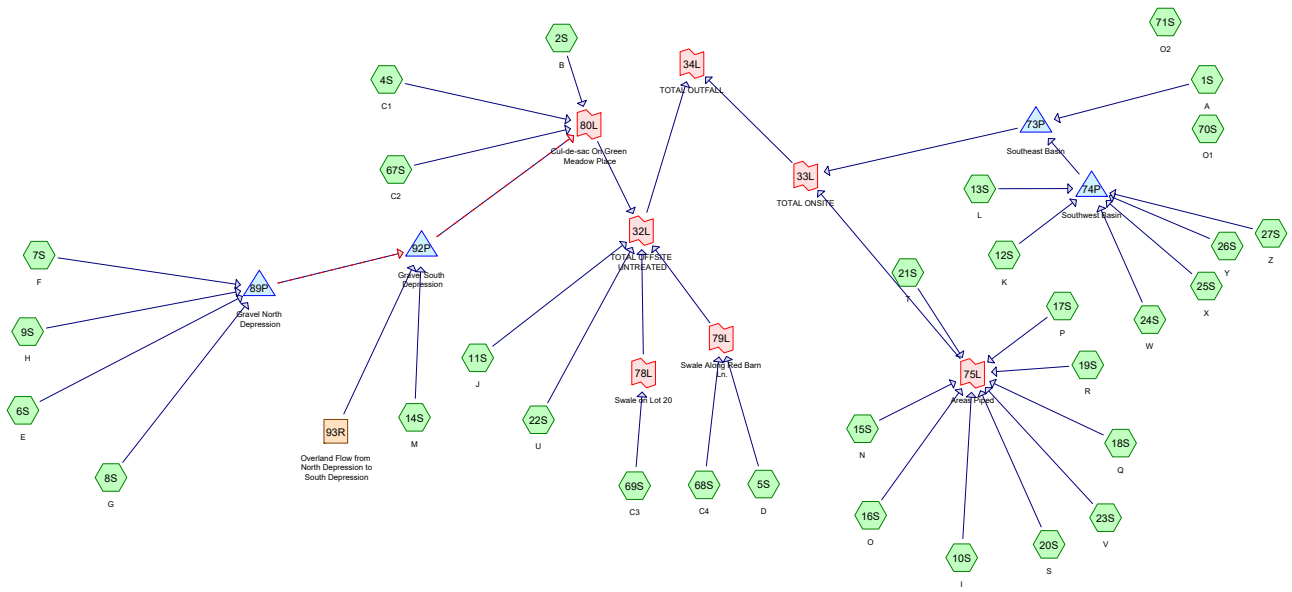
EXISTING CONDITIONS



Subcat Reach Pond Link

Routing Diagram for 20210426 - Existing and Proposed Conditions Mode
Prepared by Microsoft, Printed 4/28/2021

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
169,433	98	IMP (2S, 6S, 8S, 9S, 10S, 11S, 12S, 13S, 15S, 16S, 17S, 18S, 19S, 20S, 21S, 22S, 23S, 24S, 25S, 27S)
3,040	98	IMPERV (71S)
1,020,383	74	PER (1S, 2S, 4S, 5S, 6S, 7S, 8S, 9S, 10S, 11S, 12S, 13S, 14S, 15S, 16S, 17S, 18S, 19S, 21S, 22S, 23S, 24S, 25S, 26S, 27S, 67S, 68S, 69S)
141,335	74	PERV (70S, 71S)
97,984	98	ROOF (2S, 10S, 12S, 16S, 17S, 18S, 19S, 20S, 23S, 24S, 25S)
1,432,175	**79**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
0	HSG C	
0	HSG D	
1,432,175	Other	1S, 2S, 4S, 5S, 6S, 7S, 8S, 9S, 10S, 11S, 12S, 13S, 14S, 15S, 16S, 17S, 18S, 19S, 20S, 21S, 22S, 23S, 24S, 25S, 26S, 27S, 67S, 68S, 69S, 70S, 71S
1,432,175		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Subcatchment Numbers
0	0	0	0	169,433	169,433	IMP	2S, 6S, 8S, 9S, 10S, 11S, 12S, 13S, 15S, 16S, 17S, 18S, 19S, 20S, 21S, 22S, 23S, 24S, 25S, 27S
0	0	0	0	3,040	3,040	IMPERV	71S

Ground Covers (selected nodes) (continued)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Subcatchment Numbers
0	0	0	0	1,020,383	1,020,383	PER	1S, 2S, 4S, 5S, 6S, 7S, 8S, 9S, 10S, 11S, 12S, 13S, 14S, 15S, 16S, 17S, 18S, 19S, 21S, 22S, 23S, 24S, 25S,

Ground Covers (selected nodes) (continued)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Subcatchment Numbers
0	0	0	0	141,335	141,335	PERV	70S, 71S
0	0	0	0	97,984	97,984	ROOF	2S, 10S, 12S, 16S, 17S, 18S, 19S, 20S, 23S, 24S, 25S
0	**0**	**0**	**0**	**1,432,175**	**1,432,175**	**TOTAL AREA**	

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	89P	754.80	749.60	426.0	0.0122	0.025	12.0	0.0	0.0

Time span=1.00-48.00 hrs, dt=0.05 hrs, 941 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: A Runoff Area=156,438 sf 0.00% Impervious Runoff Depth=0.55"
Flow Length=375' Tc=15.6 min CN=74 Runoff=2.23 cfs 7,207 cf

Subcatchment 2S: B Runoff Area=141,137 sf 26.27% Impervious Runoff Depth=0.82"
Flow Length=700' Slope=0.0071 '/' Tc=19.8 min CN=80 Runoff=2.88 cfs 9,650 cf

Subcatchment 4S: C1 Runoff Area=12,661 sf 0.00% Impervious Runoff Depth=0.55"
Flow Length=100' Slope=0.0193 '/' Tc=11.4 min CN=74 Runoff=0.21 cfs 583 cf

Subcatchment 5S: D Runoff Area=24,345 sf 0.00% Impervious Runoff Depth=0.55"
Flow Length=170' Tc=10.2 min CN=74 Runoff=0.42 cfs 1,122 cf

Subcatchment 6S: E Runoff Area=138,758 sf 15.57% Impervious Runoff Depth=0.72"
Flow Length=471' Tc=10.6 min CN=78 Runoff=3.31 cfs 8,370 cf

Subcatchment 7S: F Runoff Area=13,305 sf 0.00% Impervious Runoff Depth=0.55"
Flow Length=100' Slope=0.0583 '/' Tc=7.3 min CN=74 Runoff=0.27 cfs 613 cf

Subcatchment 8S: G Runoff Area=66,971 sf 15.30% Impervious Runoff Depth=0.72"
Flow Length=295' Tc=12.7 min CN=78 Runoff=1.48 cfs 4,040 cf

Subcatchment 9S: H Runoff Area=16,147 sf 93.29% Impervious Runoff Depth=1.96"
Flow Length=200' Tc=6.0 min CN=96 Runoff=1.20 cfs 2,642 cf

Subcatchment 10S: I Runoff Area=10,482 sf 59.22% Impervious Runoff Depth=1.30"
Flow Length=100' Slope=0.0244 '/' Tc=6.0 min CN=88 Runoff=0.56 cfs 1,132 cf

Subcatchment 11S: J Runoff Area=838 sf 4.77% Impervious Runoff Depth=0.59"
Flow Length=15' Slope=0.0122 '/' Tc=6.0 min CN=75 Runoff=0.02 cfs 41 cf

Subcatchment 12S: K Runoff Area=28,606 sf 66.44% Impervious Runoff Depth=1.44"
Flow Length=980' Tc=26.2 min CN=90 Runoff=0.92 cfs 3,438 cf

Subcatchment 13S: L Runoff Area=43,723 sf 16.63% Impervious Runoff Depth=0.72"
Flow Length=851' Tc=22.3 min CN=78 Runoff=0.72 cfs 2,637 cf

Subcatchment 14S: M Runoff Area=53,002 sf 0.00% Impervious Runoff Depth=0.55"
Flow Length=475' Tc=15.2 min CN=74 Runoff=0.76 cfs 2,442 cf

Subcatchment 15S: N Runoff Area=6,616 sf 7.63% Impervious Runoff Depth=0.63"
Flow Length=65' Slope=0.0344 '/' Tc=6.4 min CN=76 Runoff=0.16 cfs 350 cf

Subcatchment 16S: O Runoff Area=18,705 sf 49.38% Impervious Runoff Depth=1.16"
Flow Length=150' Tc=10.4 min CN=86 Runoff=0.75 cfs 1,812 cf

Subcatchment 17S: P Runoff Area=18,391 sf 80.23% Impervious Runoff Depth=1.69"
Flow Length=35' Slope=0.0866 '/' Tc=6.0 min CN=93 Runoff=1.23 cfs 2,583 cf

Subcatchment 18S: Q Runoff Area=14,923 sf 57.14% Impervious Runoff Depth=1.30"
Flow Length=30' Slope=0.0989 '/' Tc=6.0 min CN=88 Runoff=0.79 cfs 1,612 cf

Subcatchment 19S: R Runoff Area=20,724 sf 79.35% Impervious Runoff Depth=1.69"
Flow Length=170' Tc=10.5 min CN=93 Runoff=1.17 cfs 2,911 cf

Subcatchment 20S: S Runoff Area=5,299 sf 100.00% Impervious Runoff Depth=2.17"
Flow Length=50' Slope=0.0049 '/' Tc=6.0 min CN=98 Runoff=0.41 cfs 959 cf

Subcatchment 21S: T Runoff Area=35,645 sf 39.81% Impervious Runoff Depth=1.04"
Flow Length=280' Tc=11.4 min CN=84 Runoff=1.23 cfs 3,086 cf

Subcatchment 22S: U Runoff Area=15,551 sf 9.77% Impervious Runoff Depth=0.63"
Flow Length=90' Slope=0.0528 '/' Tc=7.0 min CN=76 Runoff=0.38 cfs 823 cf

Subcatchment 23S: V Runoff Area=26,499 sf 91.36% Impervious Runoff Depth=1.96"
Flow Length=115' Tc=6.0 min CN=96 Runoff=1.96 cfs 4,336 cf

Subcatchment 24S: W Runoff Area=75,447 sf 27.41% Impervious Runoff Depth=0.87"
Flow Length=637' Tc=17.0 min CN=81 Runoff=1.78 cfs 5,481 cf

Subcatchment 25S: X Runoff Area=104,170 sf 23.49% Impervious Runoff Depth=0.82"
Flow Length=405' Tc=15.5 min CN=80 Runoff=2.40 cfs 7,122 cf

Subcatchment 26S: Y Runoff Area=12,489 sf 0.00% Impervious Runoff Depth=0.55"
Tc=6.0 min CN=74 Runoff=0.27 cfs 575 cf

Subcatchment 27S: Z Runoff Area=168,127 sf 6.58% Impervious Runoff Depth=0.63"
Flow Length=480' Tc=15.8 min CN=76 Runoff=2.83 cfs 8,894 cf

Subcatchment 67S: C2 Runoff Area=6,618 sf 0.00% Impervious Runoff Depth=0.55"
Flow Length=120' Slope=0.0262 '/' Tc=10.4 min CN=74 Runoff=0.11 cfs 305 cf

Subcatchment 68S: C4 Runoff Area=33,221 sf 0.00% Impervious Runoff Depth=0.55"
Flow Length=380' Tc=13.6 min CN=74 Runoff=0.50 cfs 1,531 cf

Subcatchment 69S: C3 Runoff Area=18,962 sf 0.00% Impervious Runoff Depth=0.55"
Flow Length=233' Slope=0.0278 '/' Tc=11.8 min CN=74 Runoff=0.31 cfs 874 cf

Subcatchment 70S: O1 Runoff Area=11,697 sf 0.00% Impervious Runoff Depth=0.55"
Tc=6.0 min CN=74 Runoff=0.25 cfs 539 cf

Subcatchment 71S: O2 Runoff Area=132,678 sf 2.29% Impervious Runoff Depth=0.59"
Flow Length=377' Tc=12.2 min CN=75 Runoff=2.33 cfs 6,556 cf

Reach 93R: Overland Flow from North Depression to South Avg. Flow Depth=0.00' Max Vel=0.00 fps
n=0.030 L=426.0' S=0.0127 '/' Capacity=108.75 cfs Outflow=0.00 cfs 0 cf

Pond 73P: Southeast Basin Peak Elev=730.50' Storage=2,064 cf Inflow=2.23 cfs 7,207 cf
Outflow=0.65 cfs 7,207 cf

Pond 74P: Southwest Basin Peak Elev=742.42' Storage=10,607 cf Inflow=8.55 cfs 28,148 cf
Outflow=2.26 cfs 28,148 cf

Pond 89P: Gravel North Depression Peak Elev=756.22' Storage=808 cf Inflow=5.77 cfs 15,665 cf
Discarded=0.44 cfs 5,850 cf Primary=2.22 cfs 7,795 cf Secondary=3.60 cfs 2,020 cf Outflow=6.12 cfs 15,665 cf

Pond 92P: Gravel South Depression Peak Elev=752.63' Storage=387 cf Inflow=6.32 cfs 12,257 cf
Primary=6.57 cfs 9,743 cf Secondary=0.10 cfs 2,514 cf Outflow=6.67 cfs 12,257 cf

Link 32L: TOTAL OFFSITE UNTREATED Inflow=10.68 cfs 27,185 cf
Primary=10.68 cfs 27,185 cf

Link 33L: TOTAL ONSITE Inflow=7.89 cfs 18,781 cf
Primary=7.89 cfs 18,781 cf

Link 34L: TOTAL OUTFALL Inflow=17.17 cfs 45,966 cf
Primary=17.17 cfs 45,966 cf

Link 75L: Areas Piped Inflow=7.89 cfs 18,781 cf
Primary=7.89 cfs 18,781 cf

Link 78L: Swale on Lot 20 Inflow=0.31 cfs 874 cf
Primary=0.31 cfs 874 cf

Link 79L: Swale Along Red Barn Ln. Inflow=0.91 cfs 2,652 cf
Primary=0.91 cfs 2,652 cf

Link 80L: Cul-de-sac On Green Meadow Place Inflow=9.16 cfs 22,795 cf
Primary=9.16 cfs 22,795 cf

Total Runoff Area = 1,432,175 sf Runoff Volume = 94,266 cf Average Runoff Depth = 0.79"
81.12% Pervious = 1,161,718 sf 18.88% Impervious = 270,457 sf

Summary for Subcatchment 1S: A

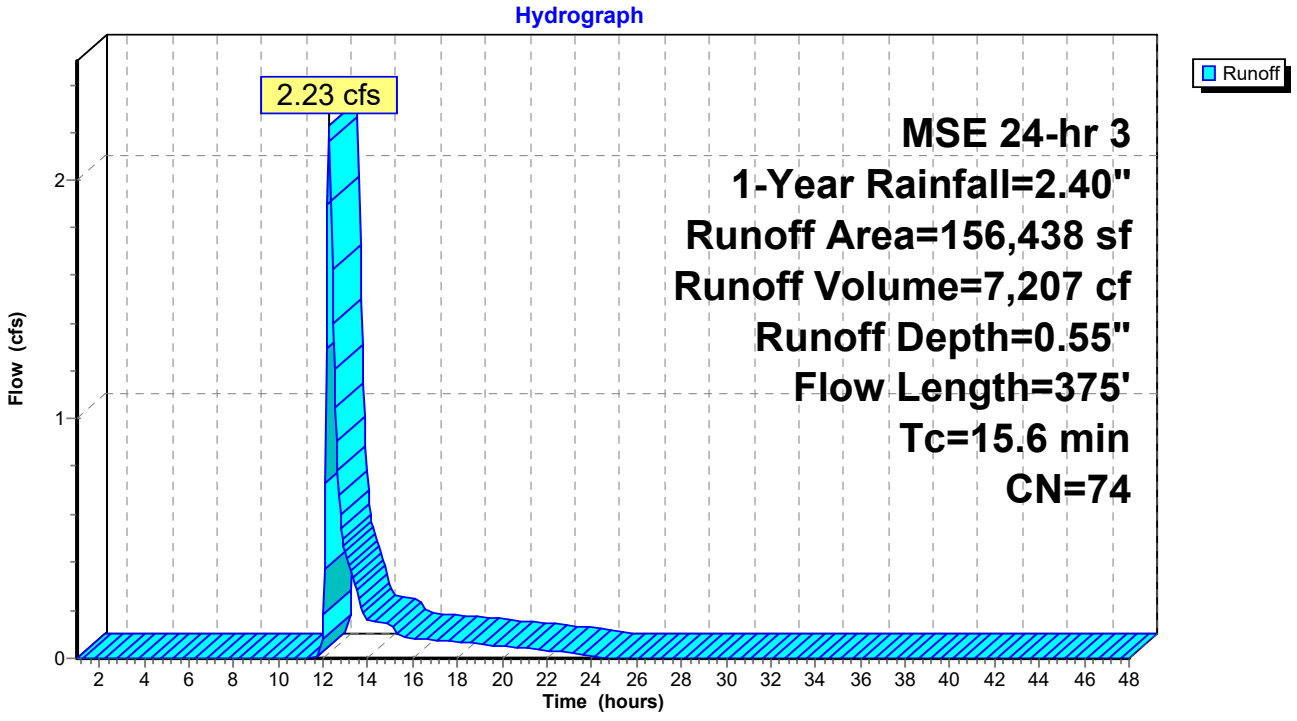
Runoff = 2.23 cfs @ 12.27 hrs, Volume= 7,207 cf, Depth= 0.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	156,438	74	PER
	156,438		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	100	0.0196	0.15		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
4.2	275	0.0243	1.09		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.6	375	Total			

Subcatchment 1S: A



Summary for Subcatchment 2S: B

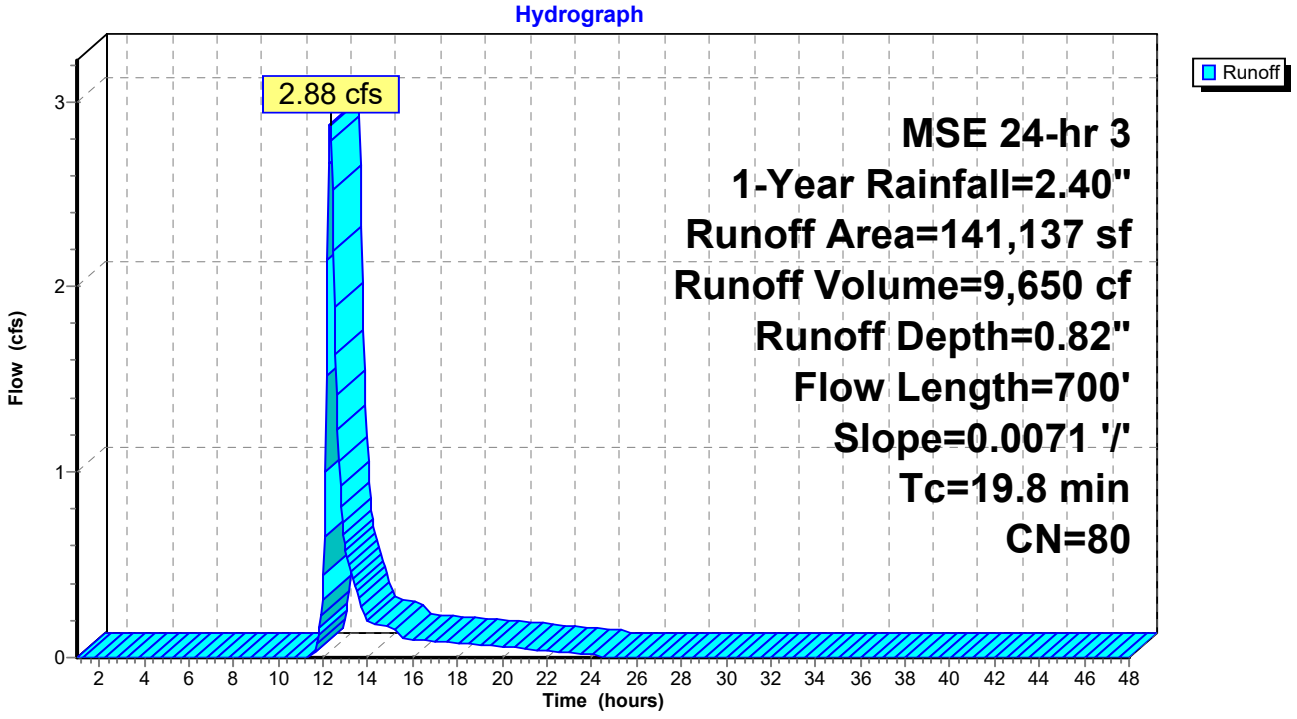
Runoff = 2.88 cfs @ 12.31 hrs, Volume= 9,650 cf, Depth= 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	104,065	74	PER
*	22,056	98	IMP
*	15,016	98	ROOF
	141,137	80	Weighted Average
	104,065		73.73% Pervious Area
	37,072		26.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	700	0.0071	0.59		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps

Subcatchment 2S: B



Summary for Subcatchment 4S: C1

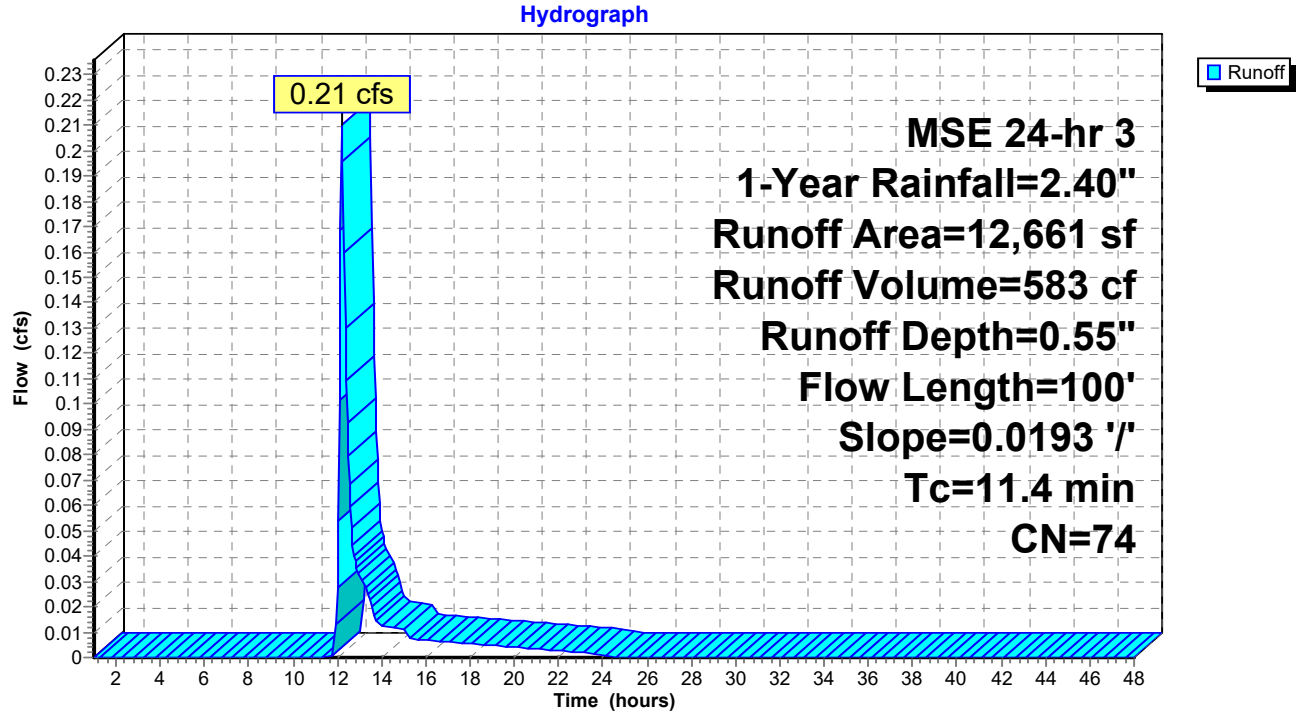
Runoff = 0.21 cfs @ 12.21 hrs, Volume= 583 cf, Depth= 0.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	12,661	74	PER
	12,661		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	100	0.0193	0.15		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 4S: C1



Summary for Subcatchment 5S: D

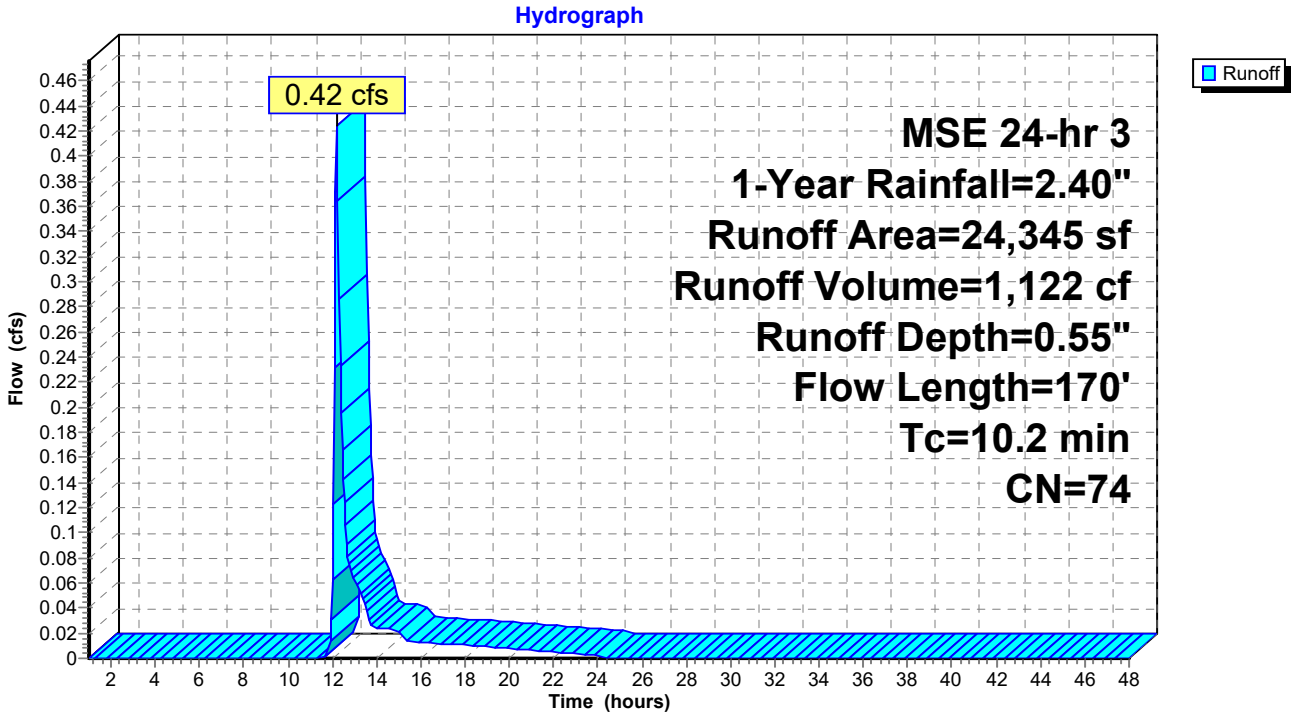
Runoff = 0.42 cfs @ 12.20 hrs, Volume= 1,122 cf, Depth= 0.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	24,345	74	PER
	24,345		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.0319	0.18		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	70	0.0317	1.25		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.2	170	Total			

Subcatchment 5S: D



Summary for Subcatchment 6S: E

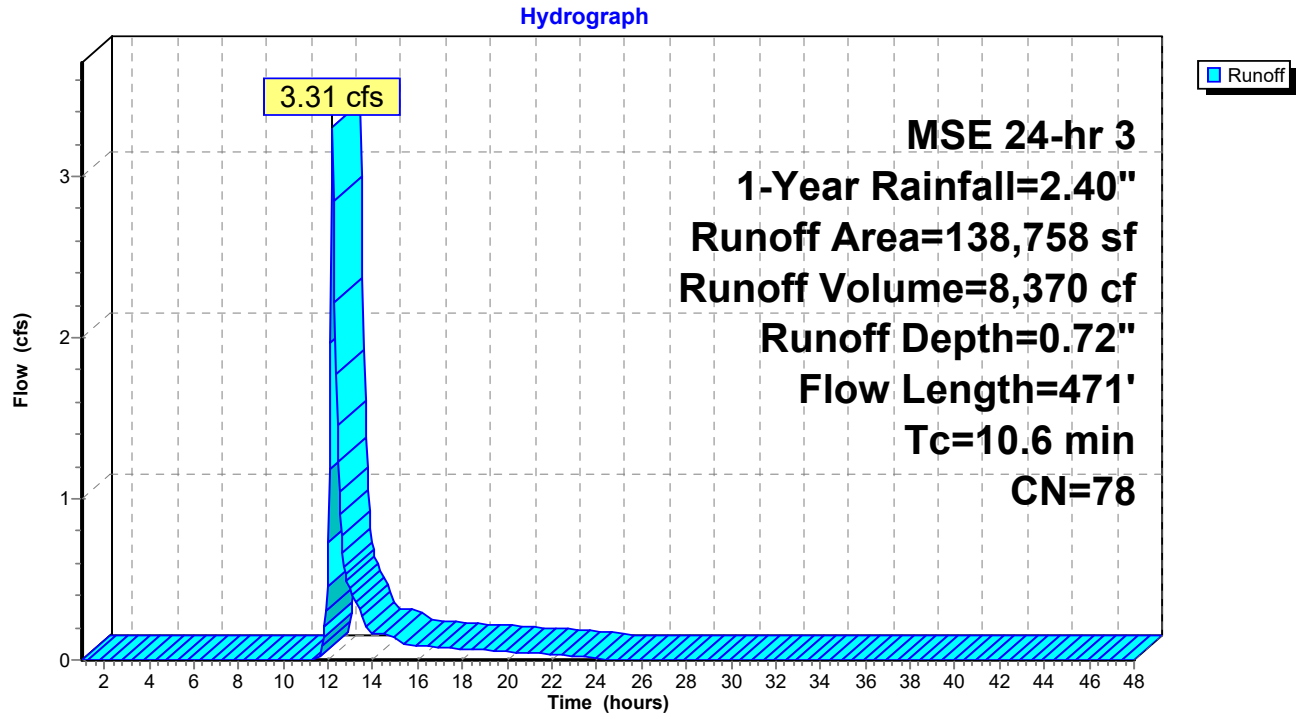
Runoff = 3.31 cfs @ 12.20 hrs, Volume= 8,370 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	117,151	74	PER
*	21,607	98	IMP
	138,758	78	Weighted Average
	117,151		84.43% Pervious Area
	21,607		15.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	100	0.0581	0.23		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	215	0.0405	4.09		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
2.3	156	0.0259	1.13		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.6	471	Total			

Subcatchment 6S: E



Summary for Subcatchment 7S: F

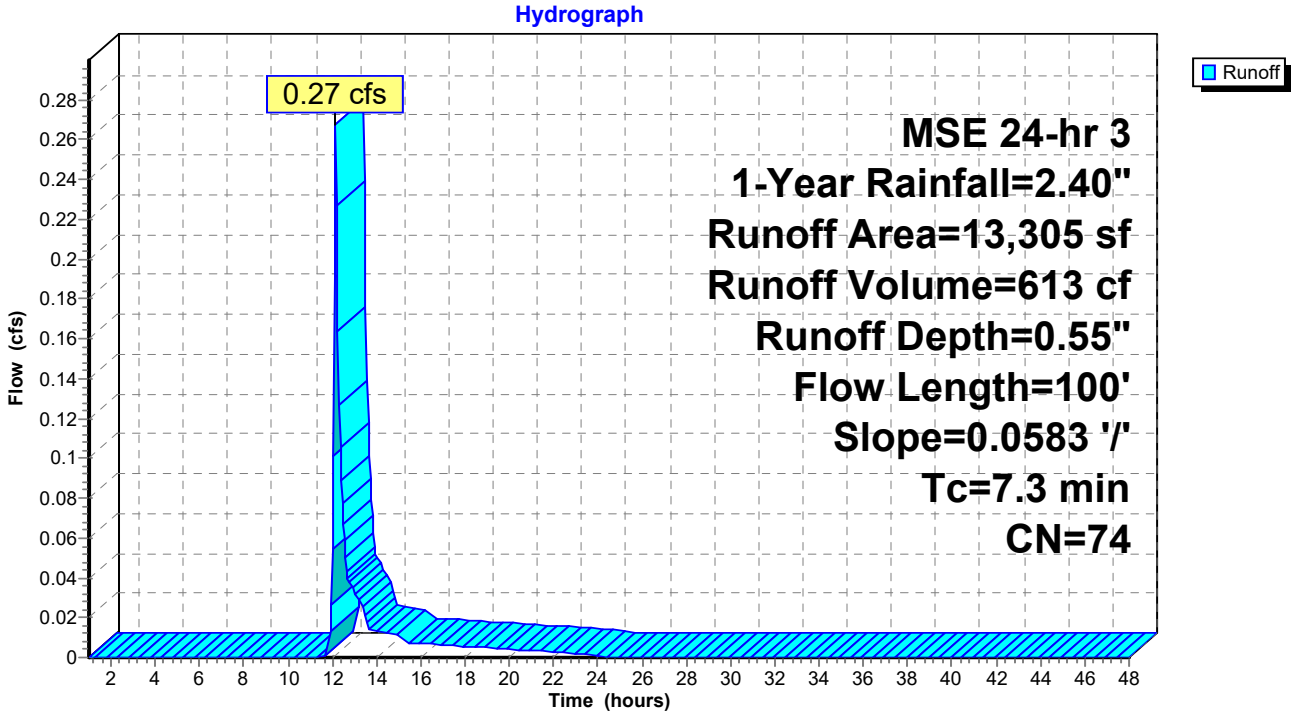
Runoff = 0.27 cfs @ 12.16 hrs, Volume= 613 cf, Depth= 0.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	13,305	74	PER
	13,305		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.3	100	0.0583	0.23		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 7S: F



Summary for Subcatchment 8S: G

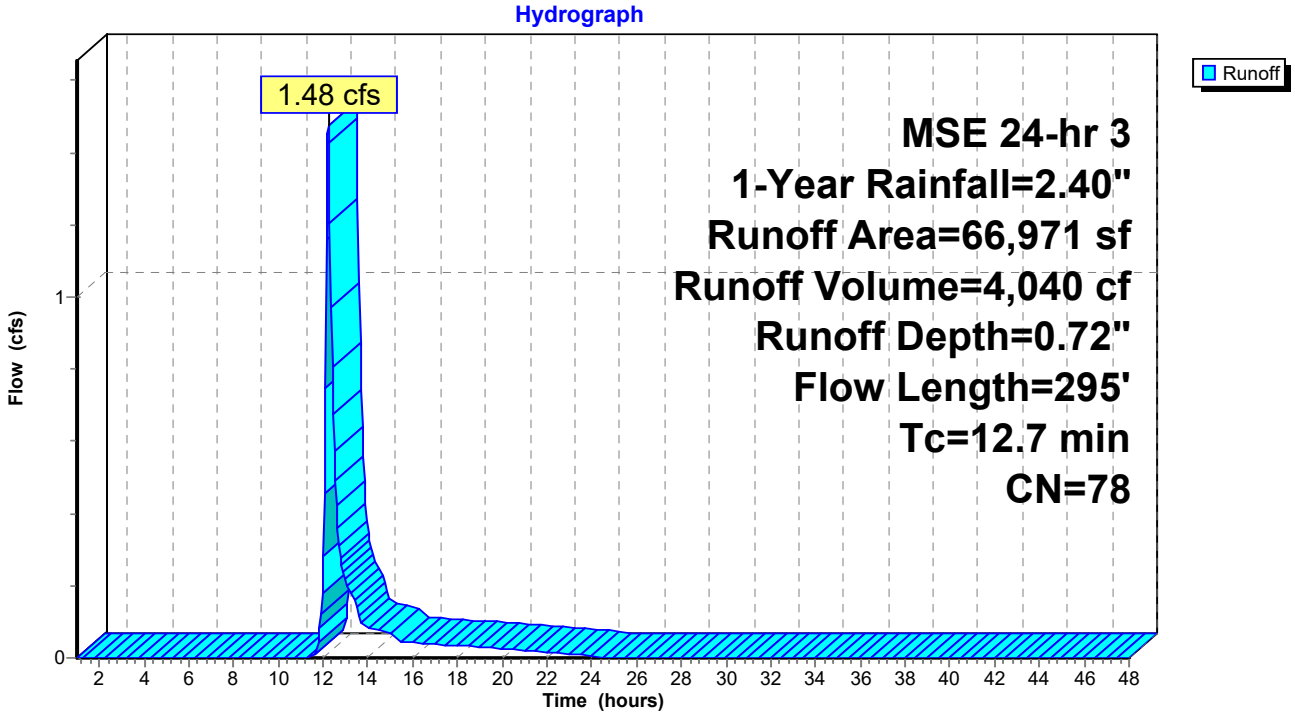
Runoff = 1.48 cfs @ 12.22 hrs, Volume= 4,040 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	56,727	74	PER
*	10,244	98	IMP
	66,971	78	Weighted Average
	56,727		84.70% Pervious Area
	10,244		15.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	100	0.0269	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
2.7	195	0.0305	1.22		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
12.7	295	Total			

Subcatchment 8S: G



Summary for Subcatchment 9S: H

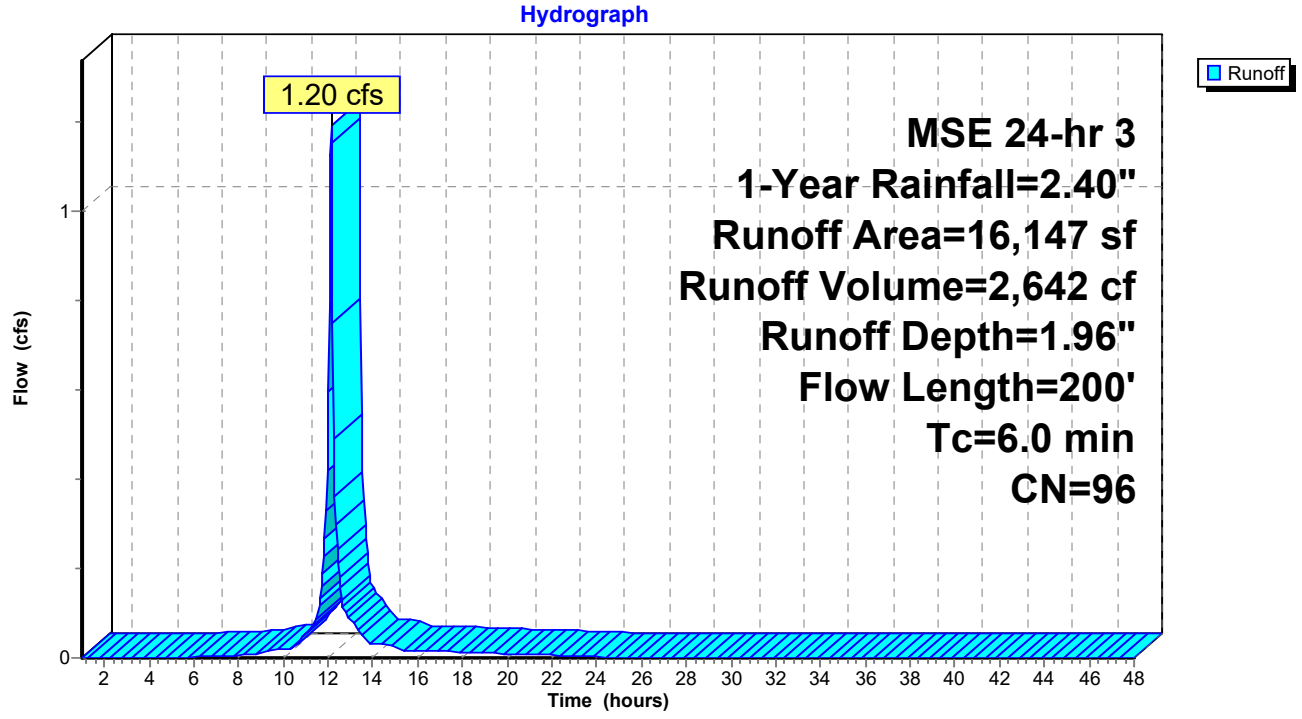
Runoff = 1.20 cfs @ 12.13 hrs, Volume= 2,642 cf, Depth= 1.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	1,084	74	PER
*	15,063	98	IMP
	16,147	96	Weighted Average
	1,084		6.71% Pervious Area
	15,063		93.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	100	0.0502	1.73		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
0.5	100	0.0263	3.29		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
1.5	200	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 9S: H



Summary for Subcatchment 10S: I

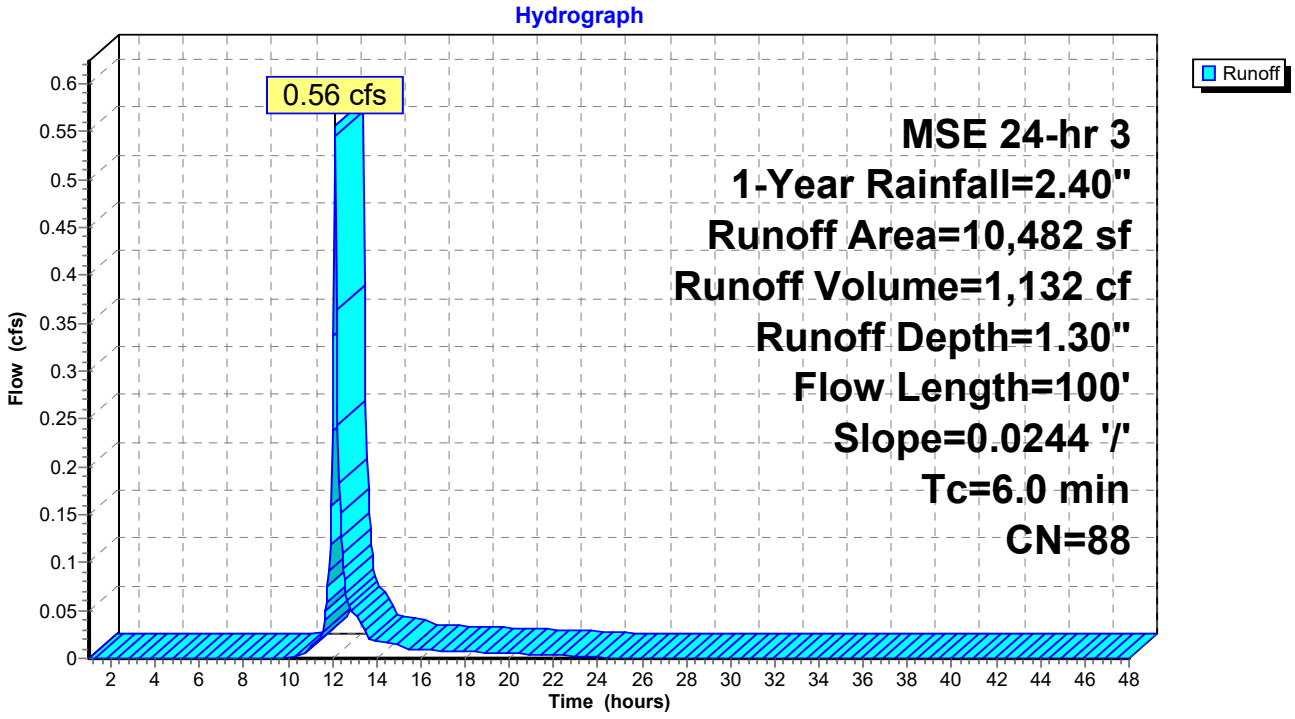
Runoff = 0.56 cfs @ 12.13 hrs, Volume= 1,132 cf, Depth= 1.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	4,275	74	PER
*	5,059	98	IMP
*	1,148	98	ROOF
	10,482	88	Weighted Average
	4,275		40.78% Pervious Area
	6,207		59.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	100	0.0244	1.30		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
1.3	100	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 10S: I



Summary for Subcatchment 11S: J

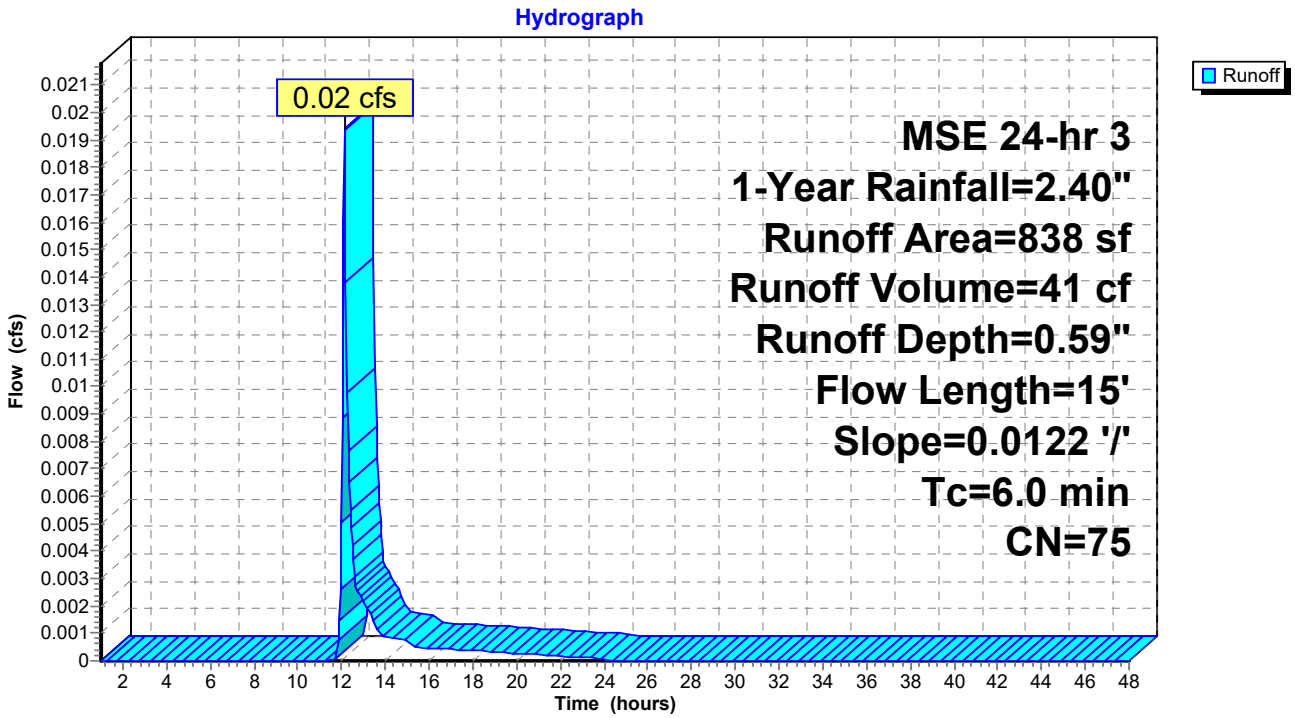
Runoff = 0.02 cfs @ 12.14 hrs, Volume= 41 cf, Depth= 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	798	74	PER
*	40	98	IMP
	838	75	Weighted Average
	798		95.23% Pervious Area
	40		4.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	15	0.0122	0.08		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
3.0	15	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 11S: J



Summary for Subcatchment 12S: K

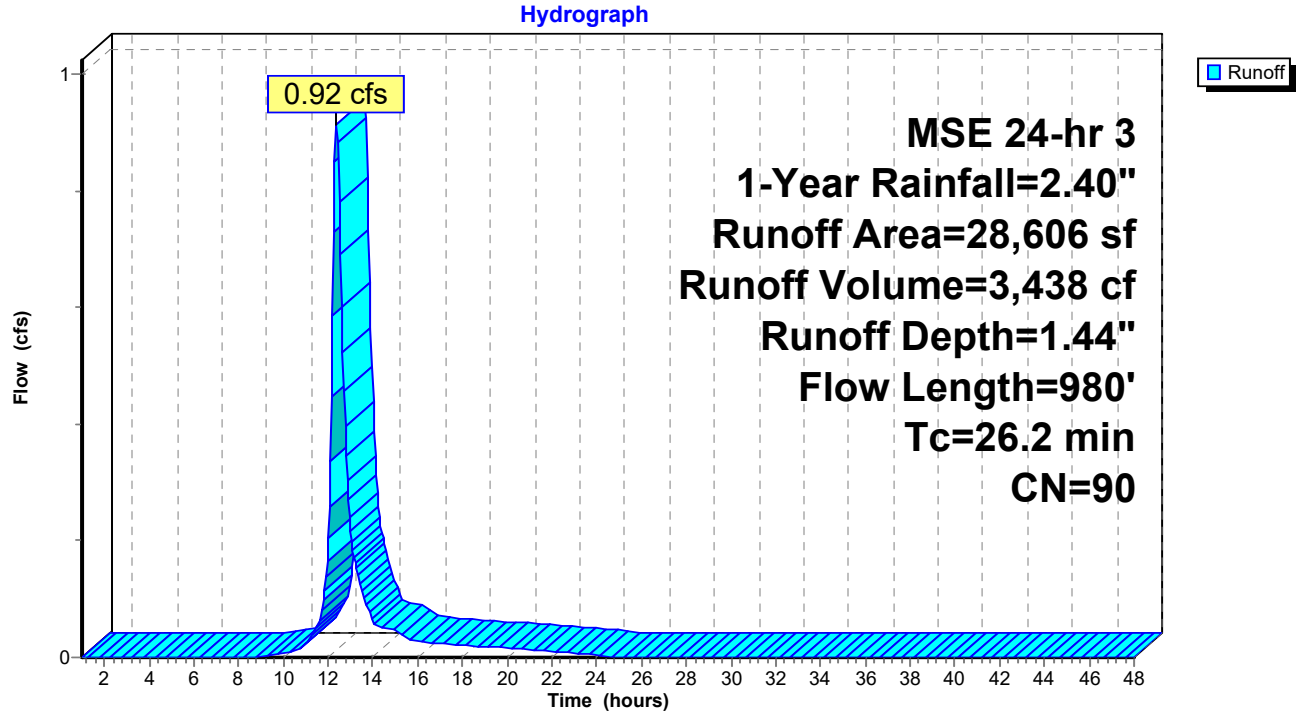
Runoff = 0.92 cfs @ 12.37 hrs, Volume= 3,438 cf, Depth= 1.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	9,600	74	PER
*	1,816	98	IMP
*	17,190	98	ROOF
	28,606	90	Weighted Average
	9,600		33.56% Pervious Area
	19,006		66.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.3	90	0.0161	0.13		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
14.9	890	0.0202	0.99		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
26.2	980	Total			

Subcatchment 12S: K



Summary for Subcatchment 13S: L

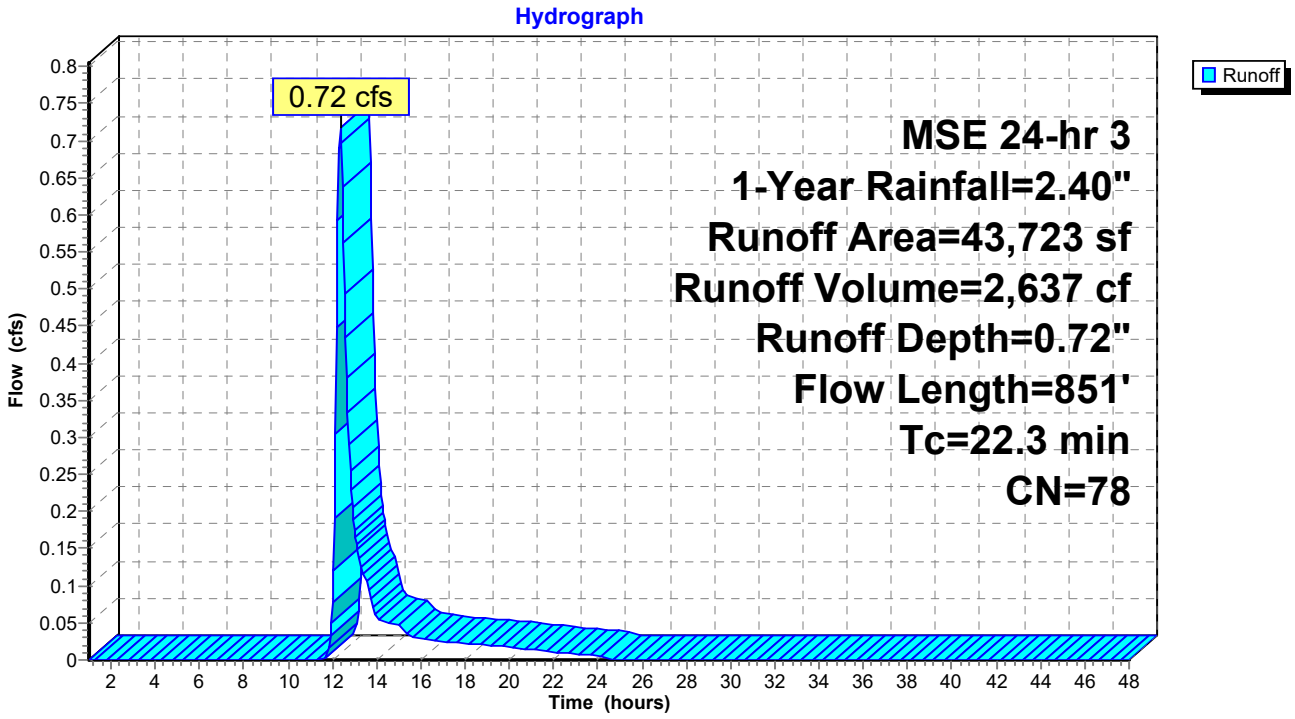
Runoff = 0.72 cfs @ 12.35 hrs, Volume= 2,637 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	36,454	74	PER
*	7,269	98	IMP
	43,723	78	Weighted Average
	36,454		83.37% Pervious Area
	7,269		16.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0307	0.18		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.9	130	0.0267	1.14		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.9	621	0.0183	0.95		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
22.3	851	Total			

Subcatchment 13S: L



Summary for Subcatchment 14S: M

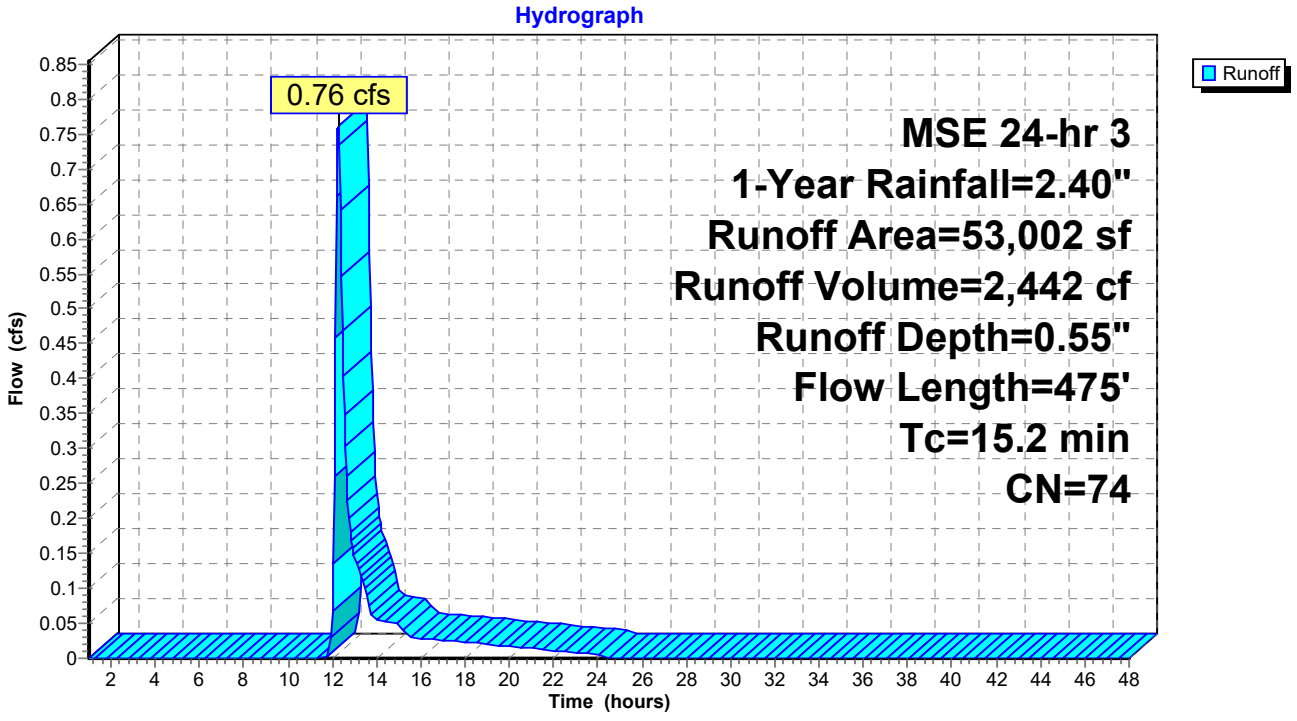
Runoff = 0.76 cfs @ 12.26 hrs, Volume= 2,442 cf, Depth= 0.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	53,002	74	PER
	53,002		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	100	0.0403	0.20		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
6.7	375	0.0180	0.94		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.2	475	Total			

Subcatchment 14S: M



Summary for Subcatchment 15S: N

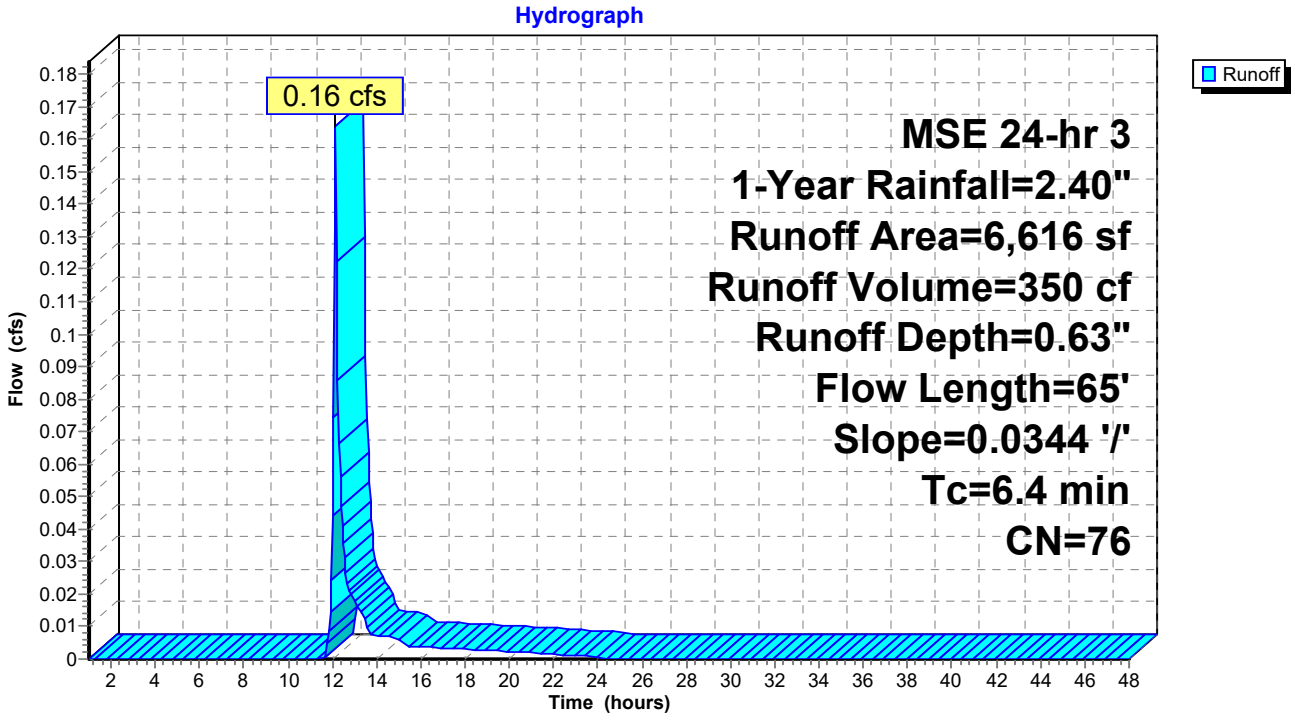
Runoff = 0.16 cfs @ 12.15 hrs, Volume= 350 cf, Depth= 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	6,111	74	PER
*	505	98	IMP
	6,616	76	Weighted Average
	6,111		92.37% Pervious Area
	505		7.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.4	65	0.0344	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 15S: N



Summary for Subcatchment 16S: O

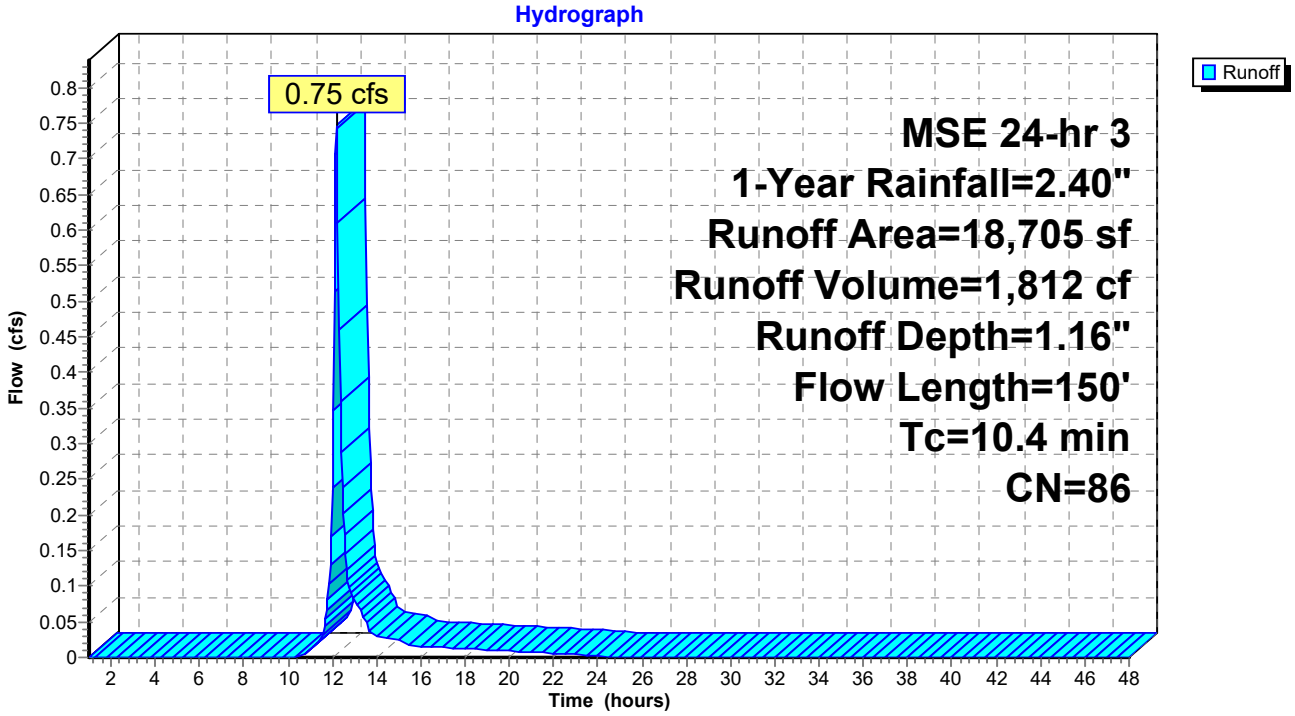
Runoff = 0.75 cfs @ 12.19 hrs, Volume= 1,812 cf, Depth= 1.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	9,468	74	PER
*	4,653	98	IMP
*	4,584	98	ROOF
	18,705	86	Weighted Average
	9,468		50.62% Pervious Area
	9,237		49.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	100	0.0274	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.5	50	0.0080	1.82		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
10.4	150	Total			

Subcatchment 16S: O



Summary for Subcatchment 17S: P

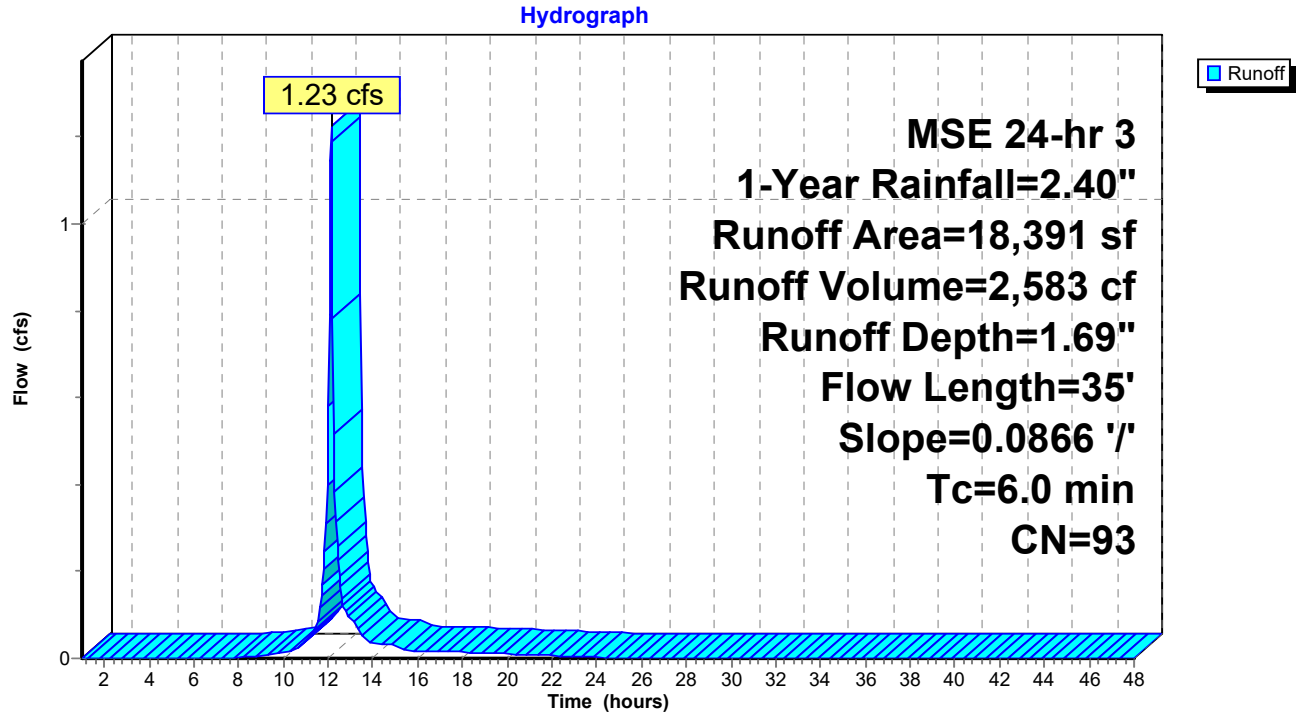
Runoff = 1.23 cfs @ 12.13 hrs, Volume= 2,583 cf, Depth= 1.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	3,636	74	PER
*	878	98	IMP
*	13,877	98	ROOF
	18,391	93	Weighted Average
	3,636		19.77% Pervious Area
	14,755		80.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	35	0.0866	0.22		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
2.7	35	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 17S: P



Summary for Subcatchment 18S: Q

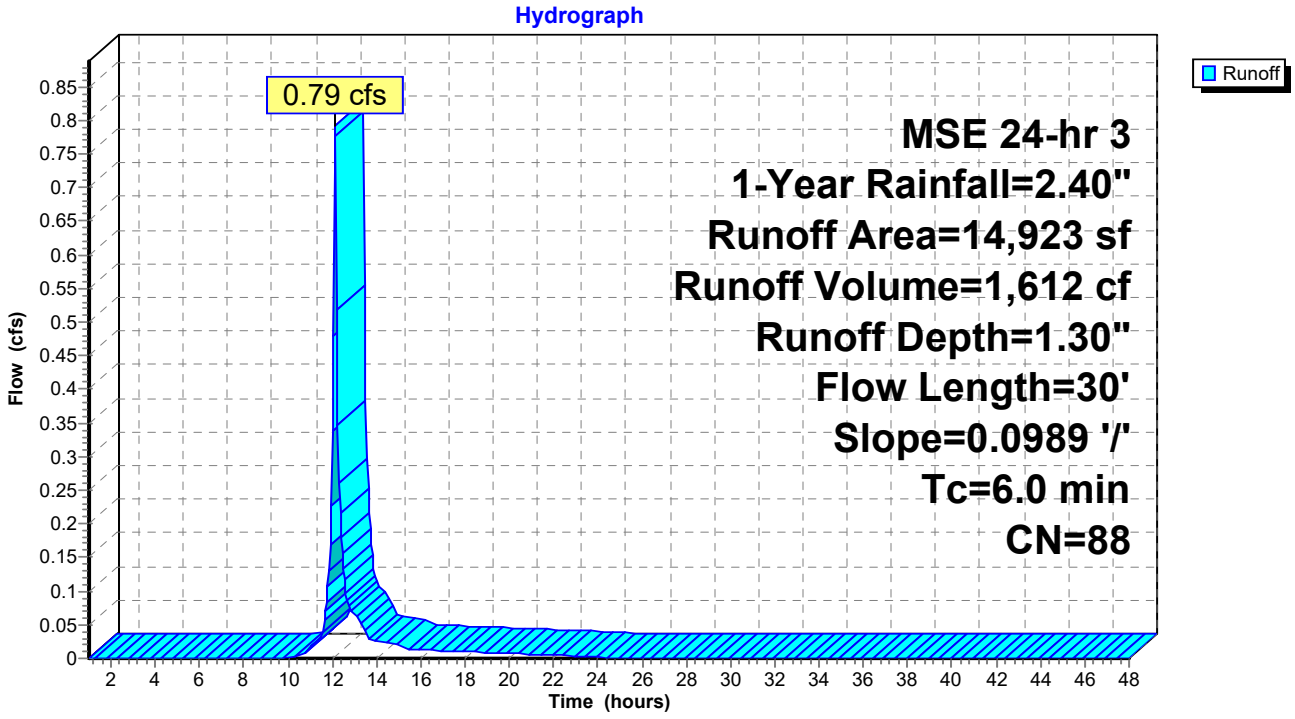
Runoff = 0.79 cfs @ 12.13 hrs, Volume= 1,612 cf, Depth= 1.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	6,396	74	PER
*	1,162	98	IMP
*	7,365	98	ROOF
	14,923	88	Weighted Average
	6,396		42.86% Pervious Area
	8,527		57.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	30	0.0989	0.22		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
2.3	30	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 18S: Q



Summary for Subcatchment 19S: R

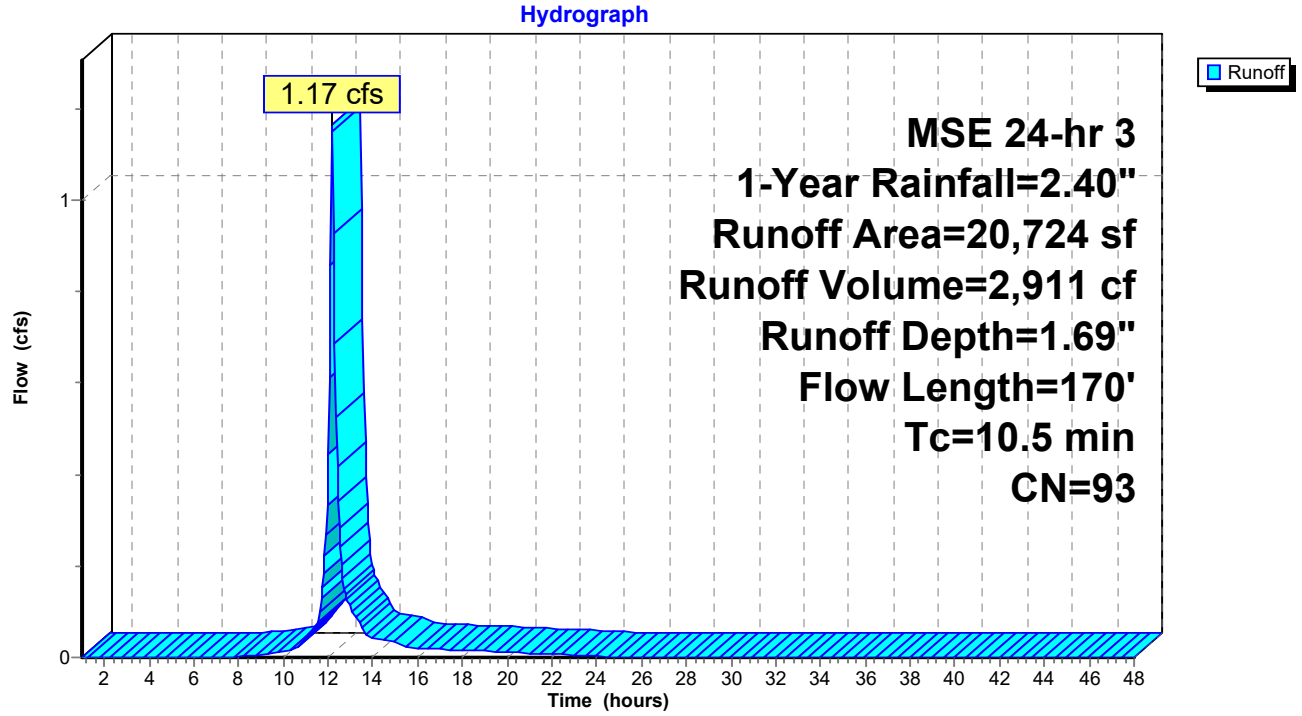
Runoff = 1.17 cfs @ 12.18 hrs, Volume= 2,911 cf, Depth= 1.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	4,279	74	PER
*	5,420	98	IMP
*	11,025	98	ROOF
	20,724	93	Weighted Average
	4,279		20.65% Pervious Area
	16,445		79.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0295	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	70	0.0320	1.25		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.5	170	Total			

Subcatchment 19S: R



Summary for Subcatchment 20S: S

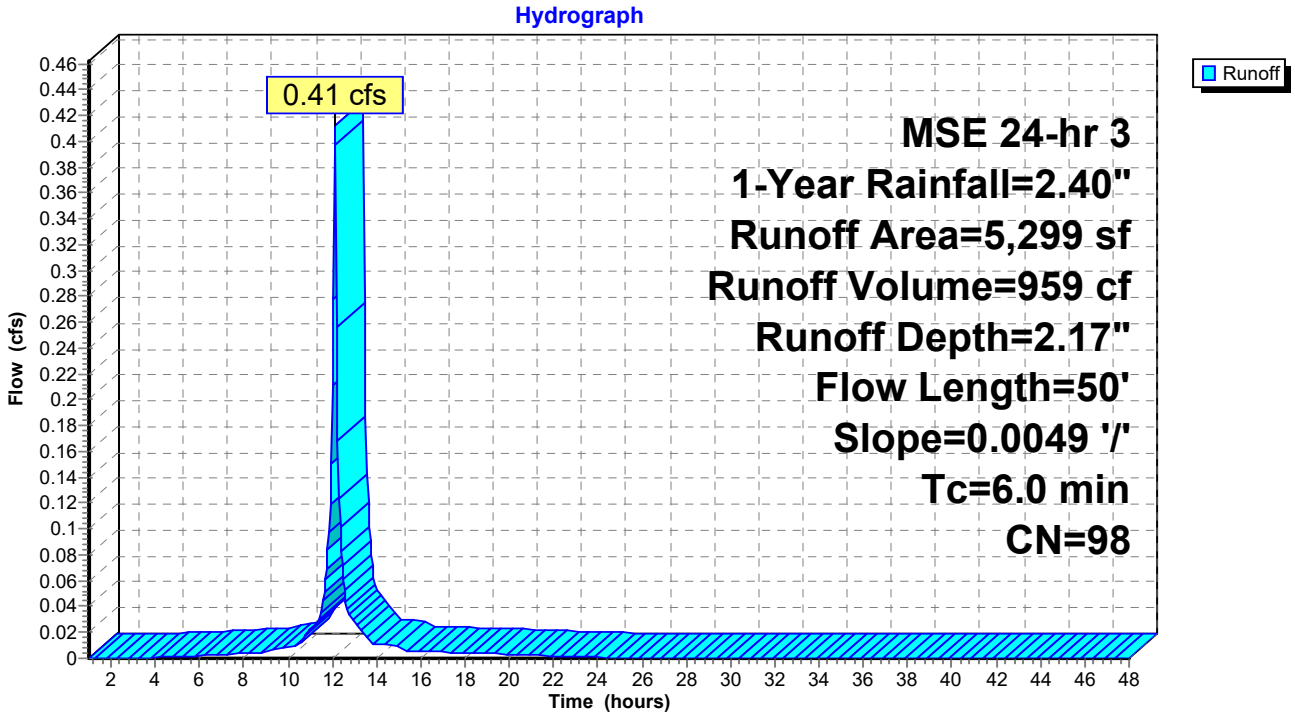
Runoff = 0.41 cfs @ 12.13 hrs, Volume= 959 cf, Depth= 2.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	808	98	IMP
*	4,491	98	ROOF
	5,299	98	Weighted Average
	5,299		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	50	0.0049	0.59		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
1.4	50	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 20S: S



Summary for Subcatchment 21S: T

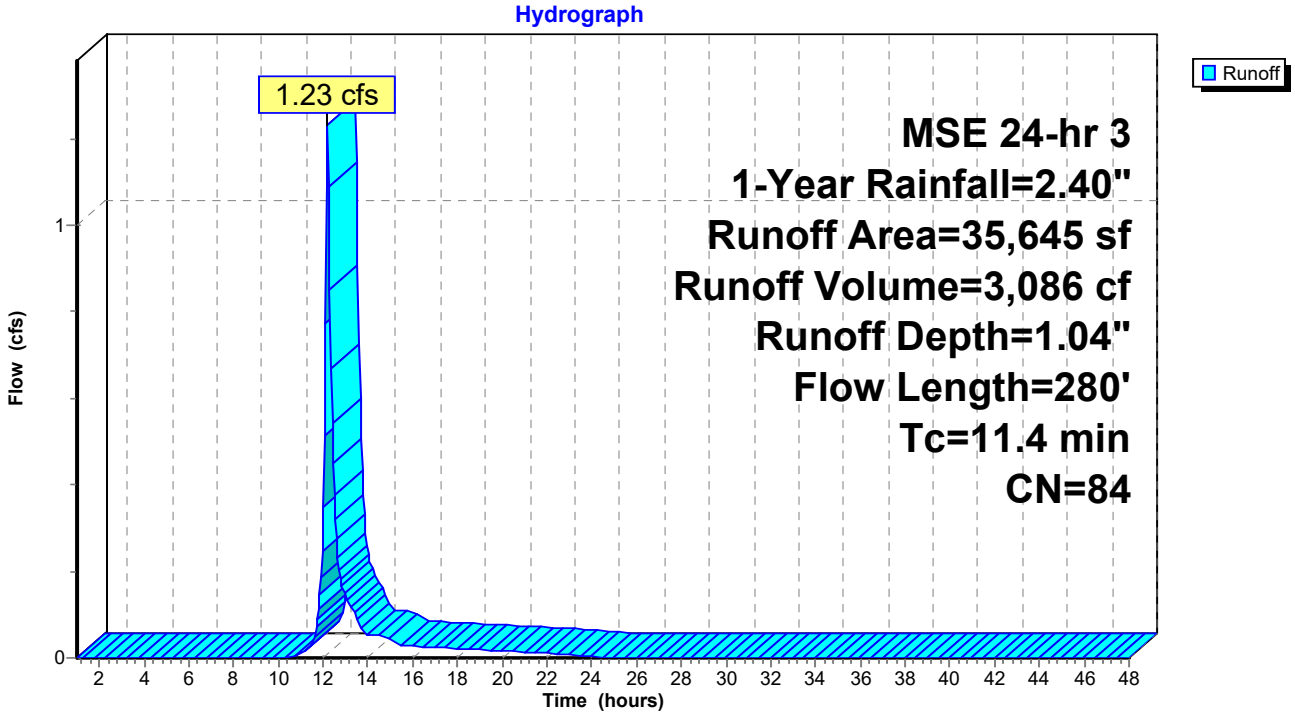
Runoff = 1.23 cfs @ 12.20 hrs, Volume= 3,086 cf, Depth= 1.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	21,454	74	PER
*	14,191	98	IMP
	35,645	84	Weighted Average
	21,454		60.19% Pervious Area
	14,191		39.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	100	0.0272	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.4	180	0.0111	2.14		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
11.4	280	Total			

Subcatchment 21S: T



Summary for Subcatchment 22S: U

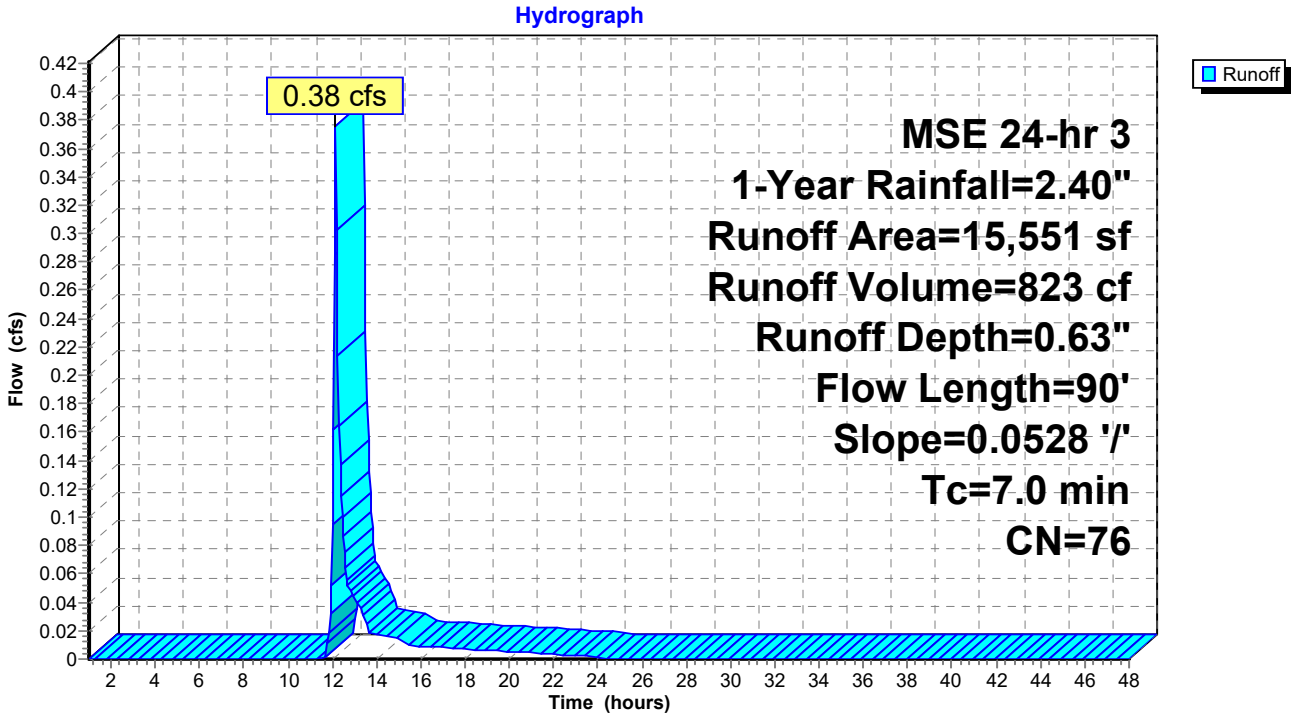
Runoff = 0.38 cfs @ 12.15 hrs, Volume= 823 cf, Depth= 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	14,032	74	PER
*	1,519	98	IMP
	15,551	76	Weighted Average
	14,032		90.23% Pervious Area
	1,519		9.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	90	0.0528	0.21		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 22S: U



Summary for Subcatchment 23S: V

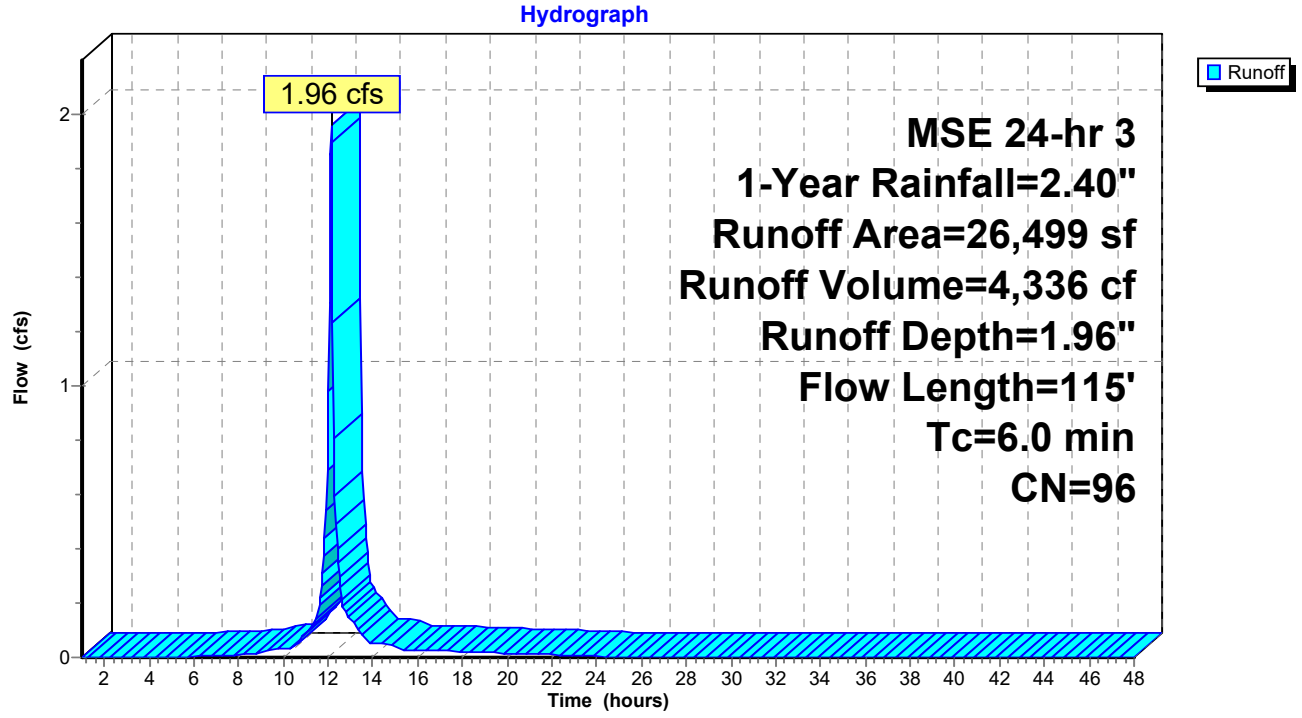
Runoff = 1.96 cfs @ 12.13 hrs, Volume= 4,336 cf, Depth= 1.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	2,290	74	PER
*	7,676	98	IMP
*	16,533	98	ROOF
	26,499	96	Weighted Average
	2,290		8.64% Pervious Area
	24,209		91.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	45	0.0345	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	70	0.0262	1.24		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
5.7	115	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 23S: V



Summary for Subcatchment 24S: W

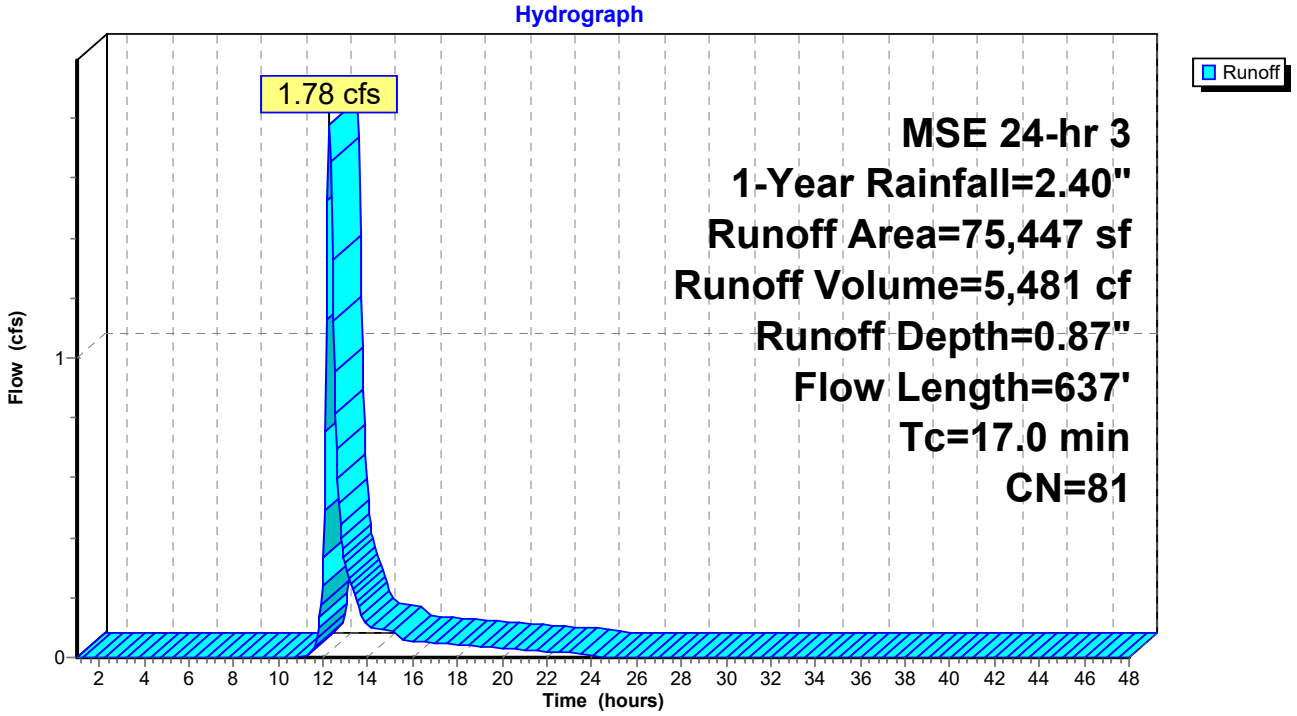
Runoff = 1.78 cfs @ 12.27 hrs, Volume= 5,481 cf, Depth= 0.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	54,767	74	PER
*	17,055	98	IMP
*	3,625	98	ROOF
	75,447	81	Weighted Average
	54,767		72.59% Pervious Area
	20,680		27.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	100	0.0458	0.21		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.2	100	0.0428	1.45		**Shallow Concentrated Flow, SF** Short Grass Pasture Kv= 7.0 fps
7.7	437	0.0183	0.95		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
17.0	637	Total			

Subcatchment 24S: W



Summary for Subcatchment 25S: X

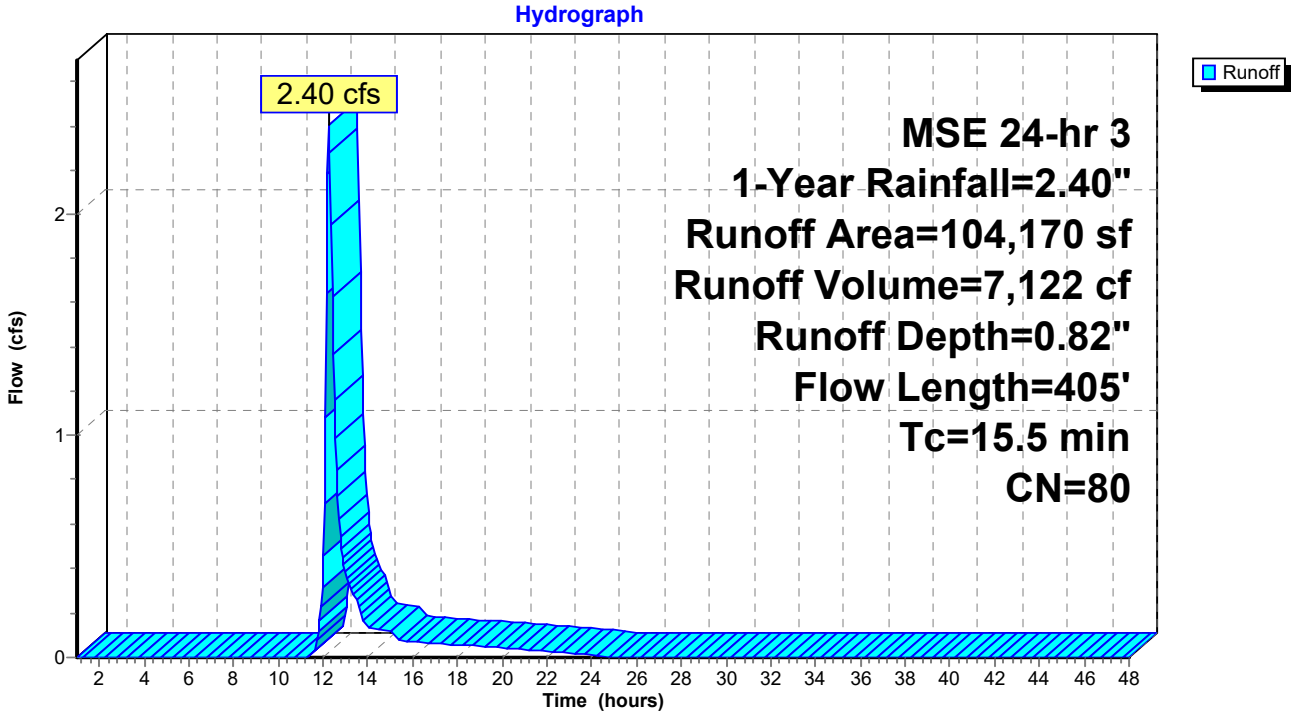
Runoff = 2.40 cfs @ 12.26 hrs, Volume= 7,122 cf, Depth= 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	79,699	74	PER
*	21,341	98	IMP
*	3,130	98	ROOF
	104,170	80	Weighted Average
	79,699		76.51% Pervious Area
	24,471		23.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.2	100	0.0205	0.15		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.8	115	0.0234	1.07		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
2.5	190	0.0316	1.24		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
15.5	405	Total			

Subcatchment 25S: X



Summary for Subcatchment 26S: Y

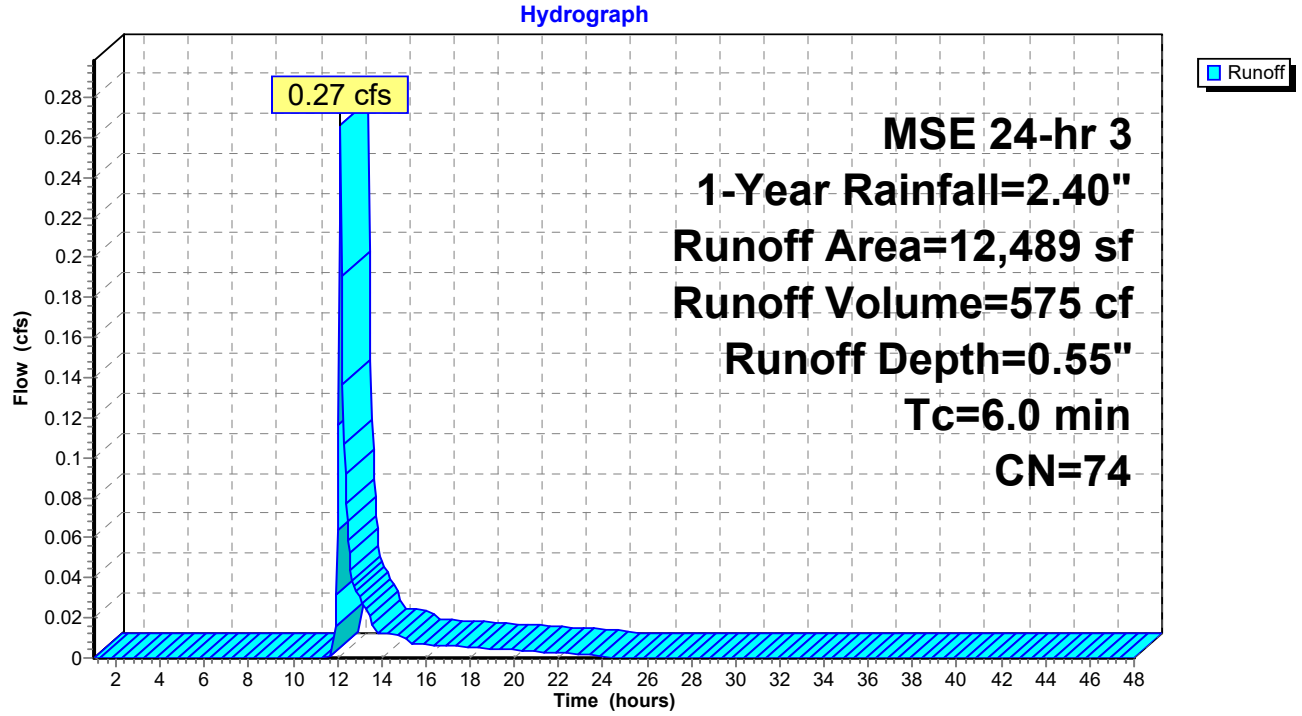
Runoff = 0.27 cfs @ 12.14 hrs, Volume= 575 cf, Depth= 0.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	12,489	74	PER
	12,489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, conservative**

Subcatchment 26S: Y



Summary for Subcatchment 27S: Z

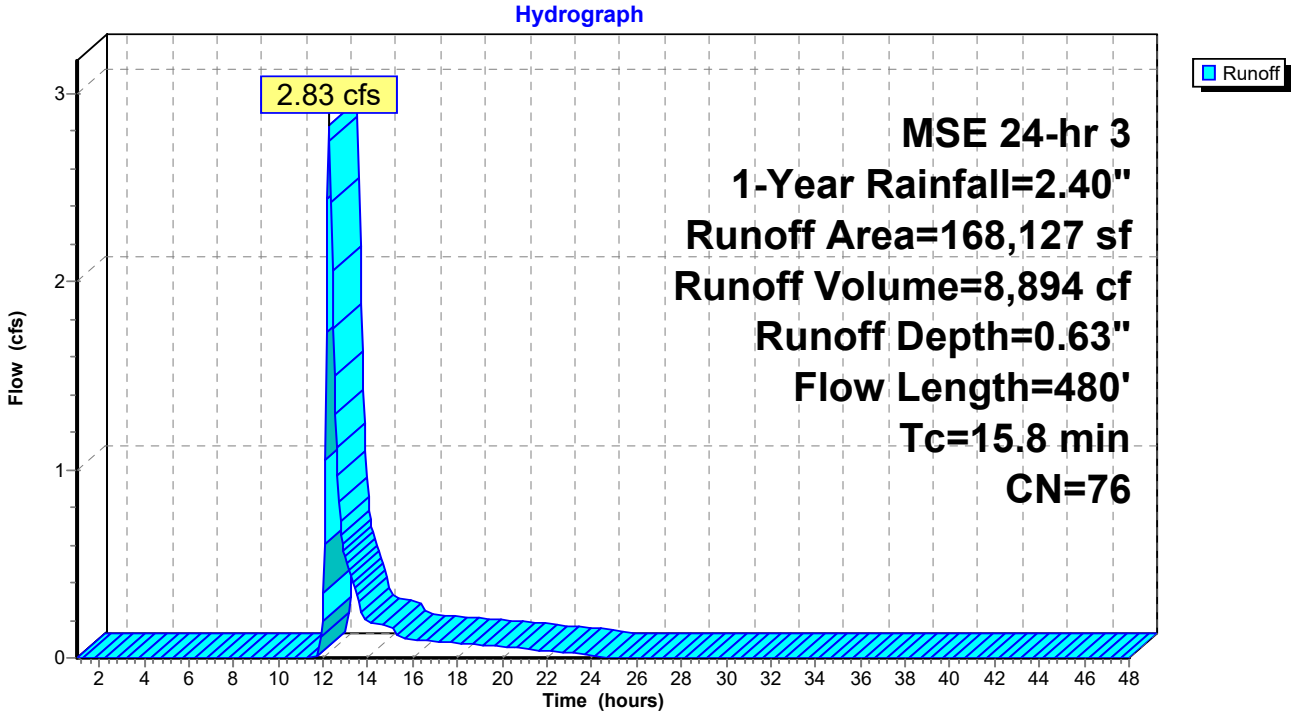
Runoff = 2.83 cfs @ 12.27 hrs, Volume= 8,894 cf, Depth= 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	157,056	74	PER
*	11,071	98	IMP
	168,127	76	Weighted Average
	157,056		93.42% Pervious Area
	11,071		6.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.5	100	0.0237	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
5.3	380	0.0291	1.19		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.8	480	Total			

Subcatchment 27S: Z



Summary for Subcatchment 67S: C2

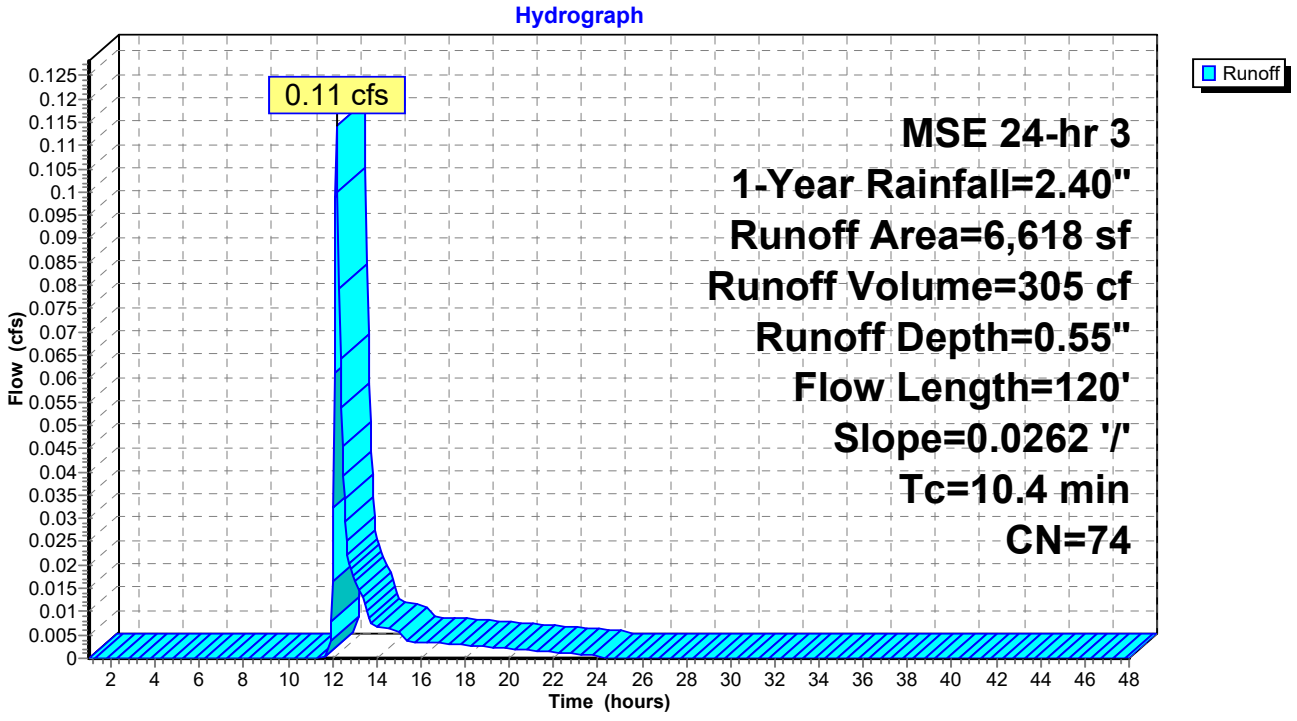
Runoff = 0.11 cfs @ 12.20 hrs, Volume= 305 cf, Depth= 0.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	6,618	74	PER
	6,618		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	100	0.0262	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.3	20	0.0262	1.13		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.4	120	Total			

Subcatchment 67S: C2



Summary for Subcatchment 68S: C4

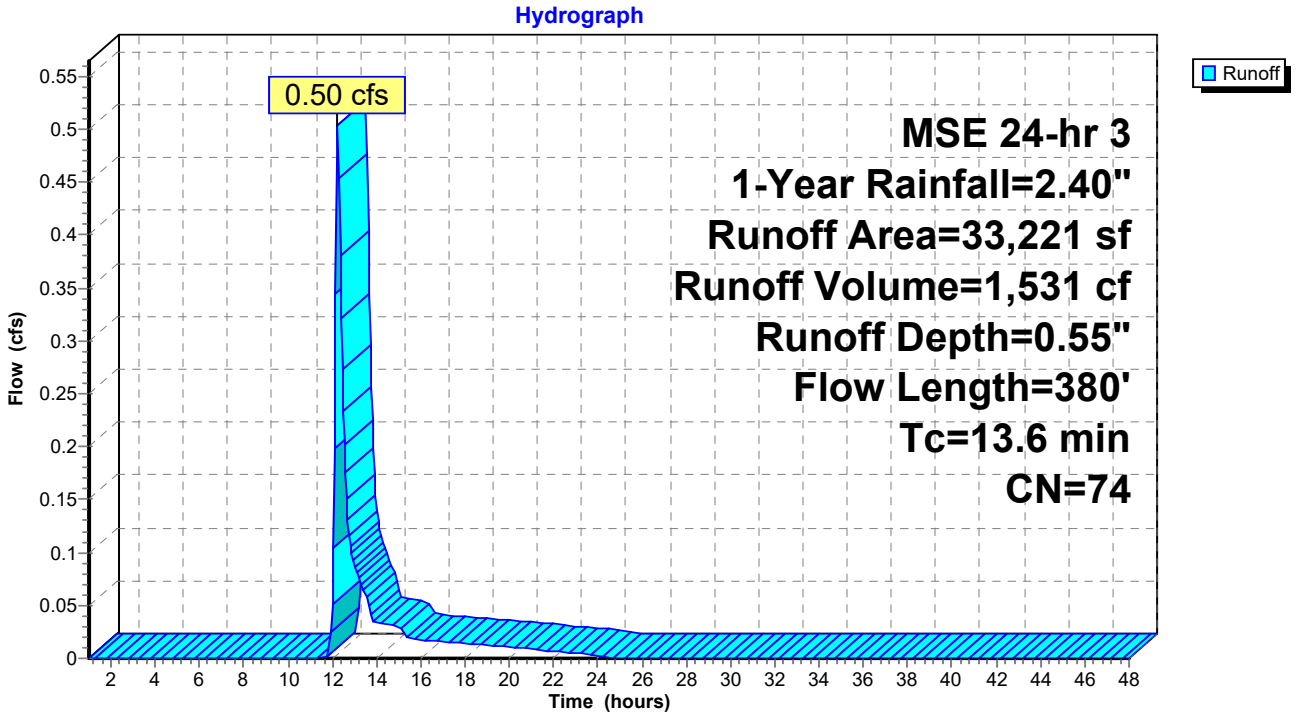
Runoff = 0.50 cfs @ 12.24 hrs, Volume= 1,531 cf, Depth= 0.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	33,221	74	PER
	33,221		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.0319	0.18		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
4.3	280	0.0235	1.07		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
13.6	380	Total			

Subcatchment 68S: C4



Summary for Subcatchment 69S: C3

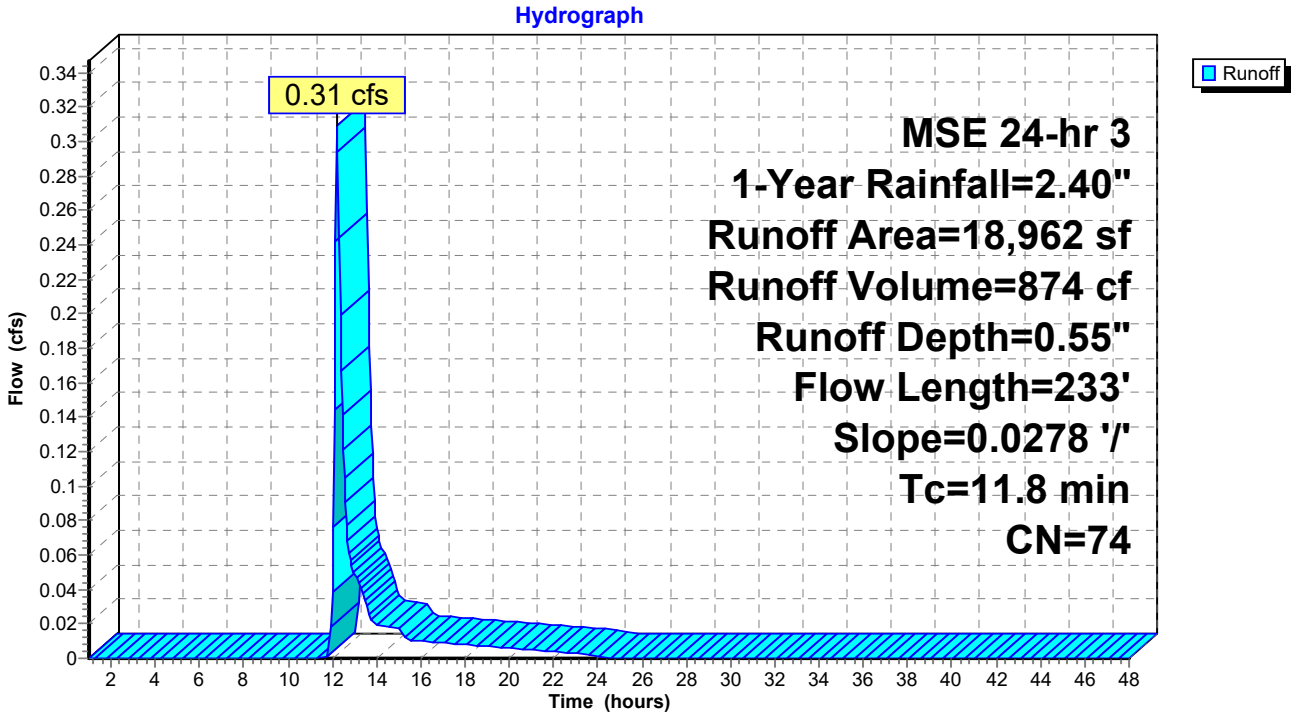
Runoff = 0.31 cfs @ 12.22 hrs, Volume= 874 cf, Depth= 0.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	18,962	74	PER
	18,962		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	100	0.0278	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.9	133	0.0278	1.17		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
11.8	233	Total			

Subcatchment 69S: C3



Summary for Subcatchment 70S: O1

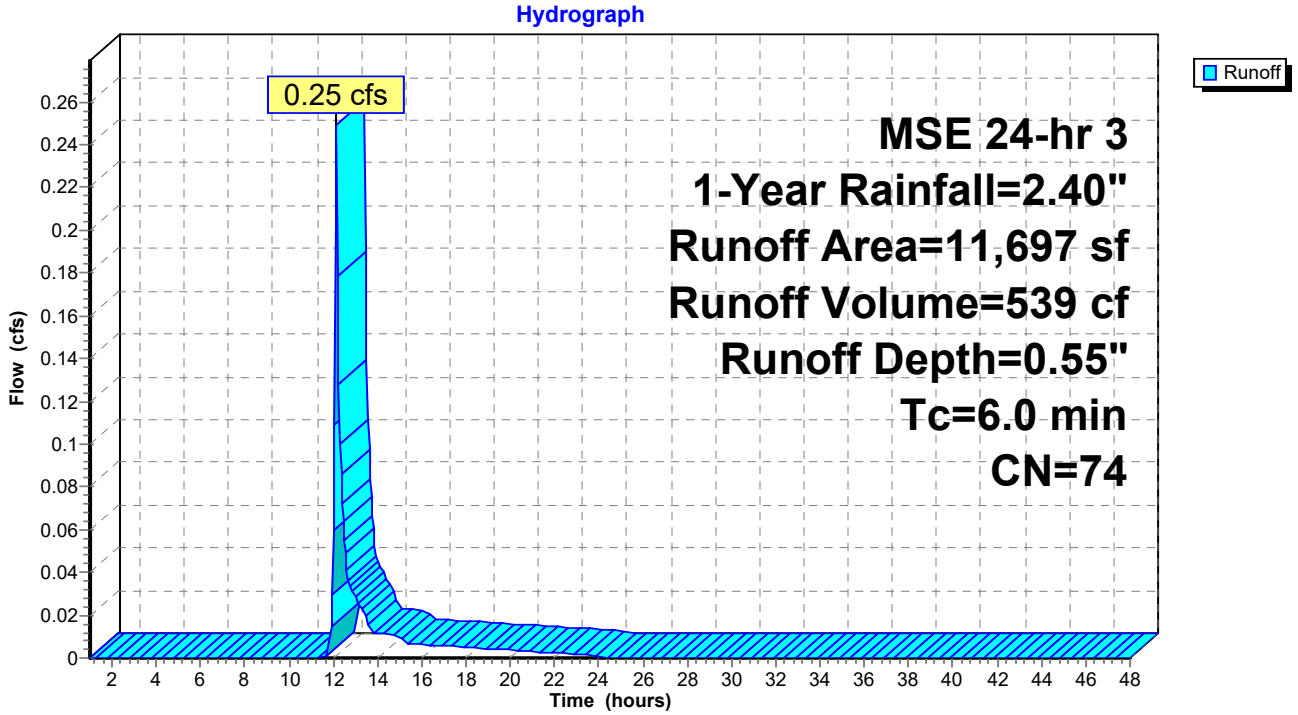
Runoff = 0.25 cfs @ 12.14 hrs, Volume= 539 cf, Depth= 0.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	11,697	74	PERV
	11,697		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 70S: O1



Summary for Subcatchment 71S: O2

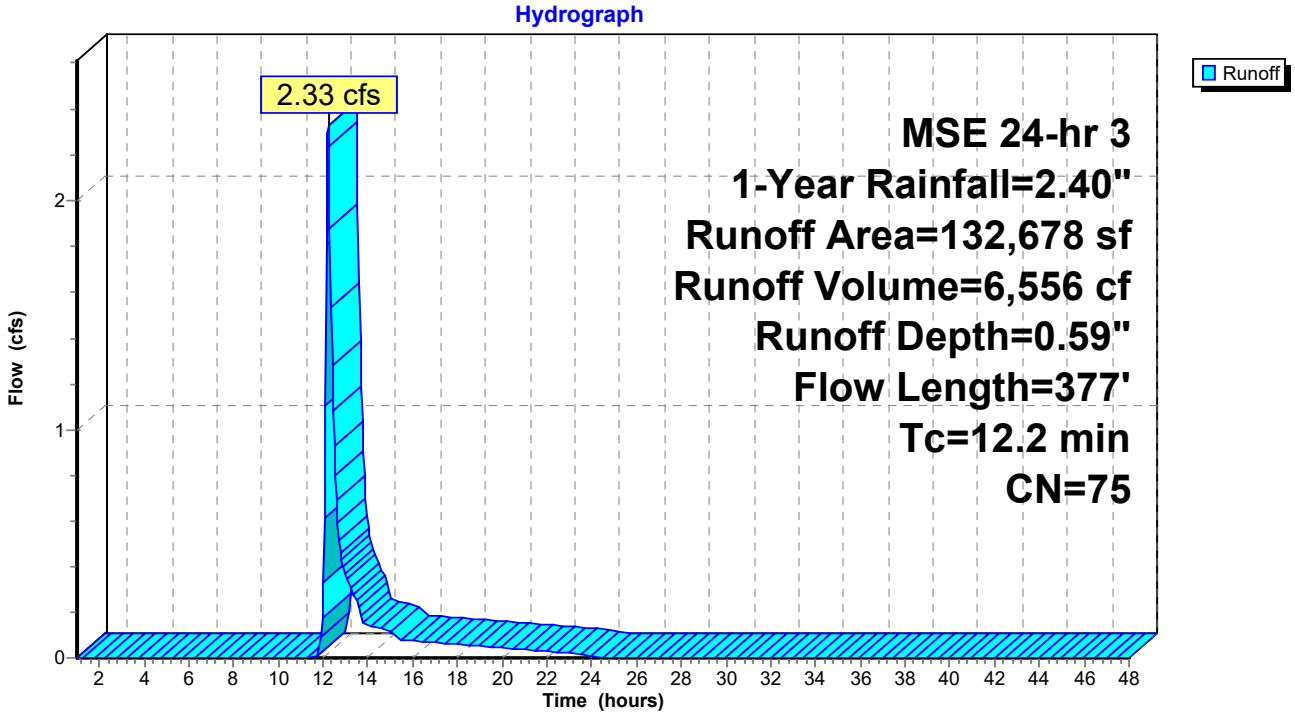
Runoff = 2.33 cfs @ 12.22 hrs, Volume= 6,556 cf, Depth= 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.40"

	Area (sf)	CN	Description
*	129,638	74	PERV
*	3,040	98	IMPERV
	132,678	75	Weighted Average
	129,638		97.71% Pervious Area
	3,040		2.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	77	0.0288	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
4.3	300	0.0135	1.16		**Shallow Concentrated Flow, SHALLOW CONC** Nearly Bare & Untilled Kv= 10.0 fps
12.2	377	Total			

Subcatchment 71S: O2



Summary for Reach 93R: Overland Flow from North Depression to South Depression

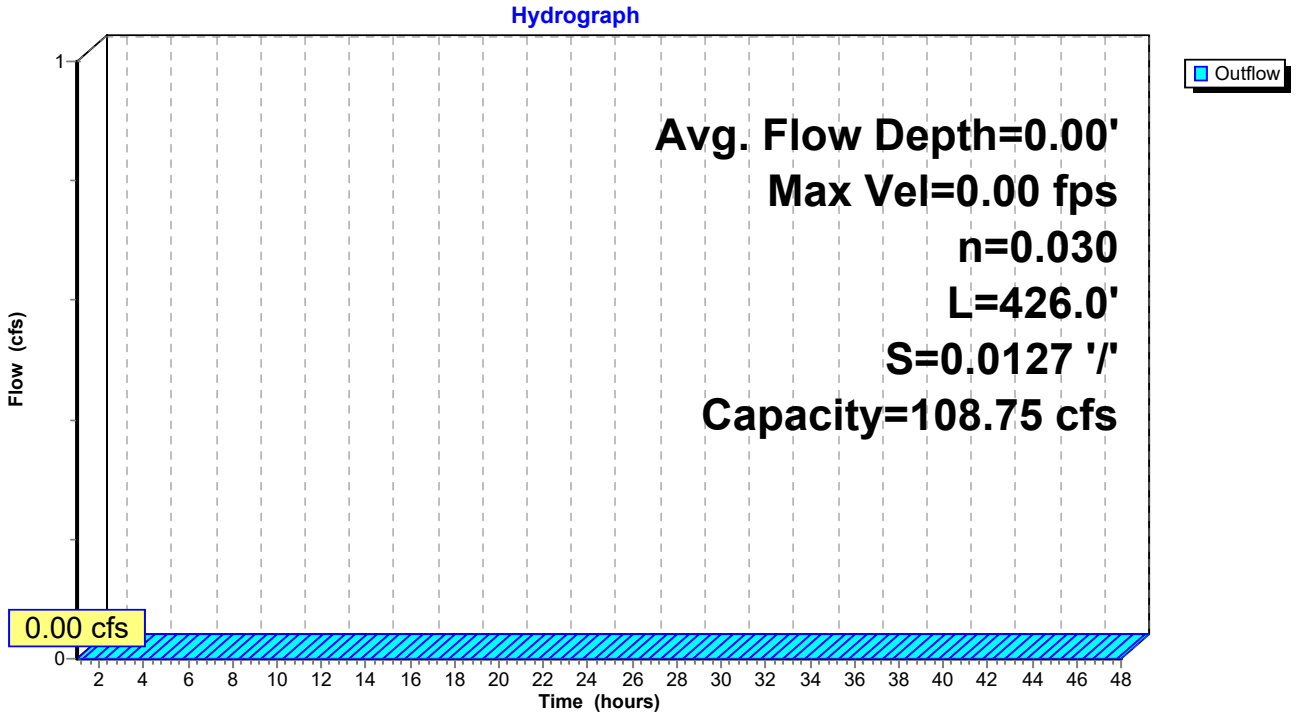
[43] Hint: Has no inflow (Outflow=Zero)

Bank-Full Depth= 0.50' Flow Area= 37.5 sf, Capacity= 108.75 cfs

50.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 50.0 '/' Top Width= 100.00'
Length= 426.0' Slope= 0.0127 '/'
Inlet Invert= 755.90', Outlet Invert= 750.50'

‡

Reach 93R: Overland Flow from North Depression to South Depression



Summary for Pond 73P: Southeast Basin

Inflow Area = 589,000 sf, 14.01% Impervious, Inflow Depth = 0.15" for 1-Year event
Inflow = 2.23 cfs @ 12.27 hrs, Volume= 7,207 cf
Outflow = 0.65 cfs @ 12.72 hrs, Volume= 7,207 cf, Atten= 71%, Lag= 27.1 min
Discarded = 0.65 cfs @ 12.72 hrs, Volume= 7,207 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 730.50' @ 12.72 hrs Surf.Area= 5,437 sf Storage= 2,064 cf

Plug-Flow detention time= 31.1 min calculated for 7,200 cf (100% of inflow)
Center-of-Mass det. time= 31.1 min (884.0 - 852.9)

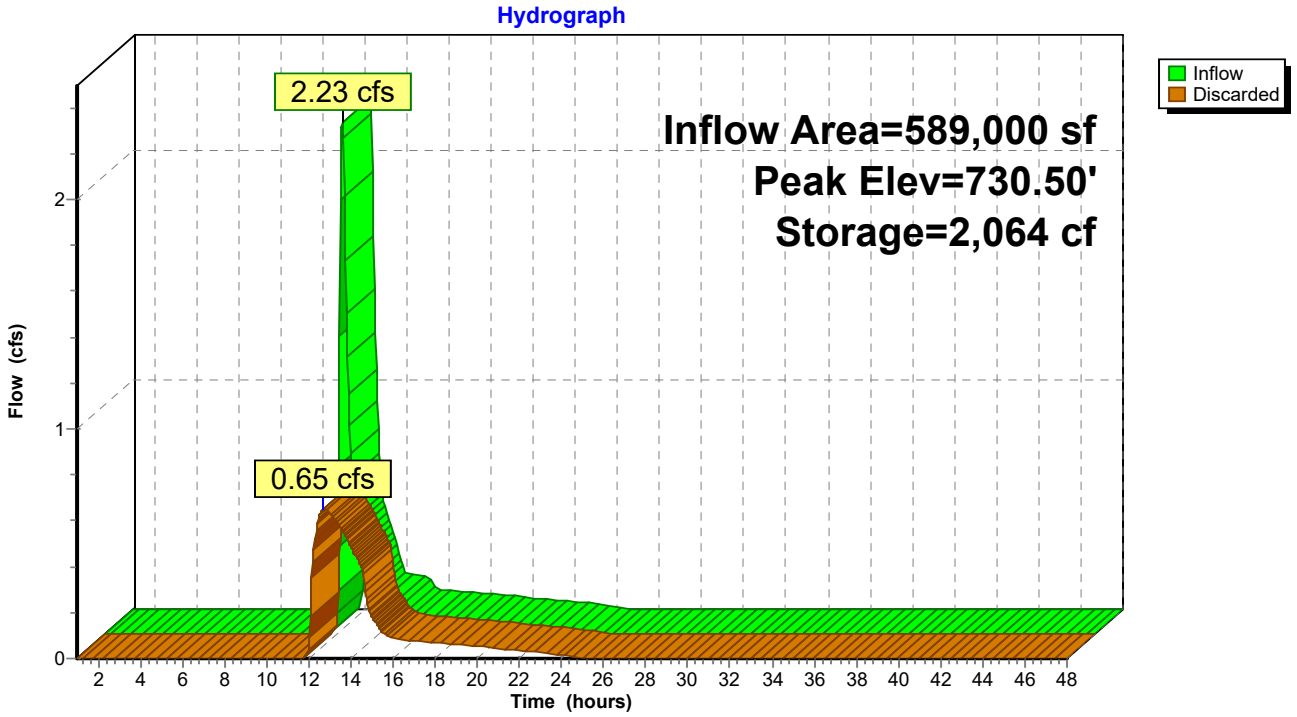
Volume	Invert	Avail.Storage	Storage Description
#1	730.00'	273,743 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
730.00	2,768	0	0
731.00	8,073	5,421	5,421
732.00	12,399	10,236	15,657
733.00	17,056	14,728	30,384
734.00	21,328	19,192	49,576
735.00	25,607	23,468	73,044
736.00	29,845	27,726	100,770
737.00	35,145	32,495	133,265
738.00	42,680	38,913	172,177
739.00	51,064	46,872	219,049
740.00	58,323	54,694	273,743

Device	Routing	Invert	Outlet Devices
#1	Discarded	730.00'	**5.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 720.00'

Discarded OutFlow Max=0.65 cfs @ 12.72 hrs HW=730.50' (Free Discharge)
↑**1=Exfiltration** (Controls 0.65 cfs)

Pond 73P: Southeast Basin



Summary for Pond 74P: Southwest Basin

Inflow Area = 432,562 sf, 19.07% Impervious, Inflow Depth = 0.78" for 1-Year event
Inflow = 8.55 cfs @ 12.27 hrs, Volume= 28,148 cf
Outflow = 2.26 cfs @ 12.79 hrs, Volume= 28,148 cf, Atten= 74%, Lag= 30.8 min
Discarded = 2.26 cfs @ 12.79 hrs, Volume= 28,148 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 742.42' @ 12.79 hrs Surf.Area= 11,687 sf Storage= 10,607 cf

Plug-Flow detention time= 69.2 min calculated for 28,148 cf (100% of inflow)
Center-of-Mass det. time= 69.2 min (906.5 - 837.3)

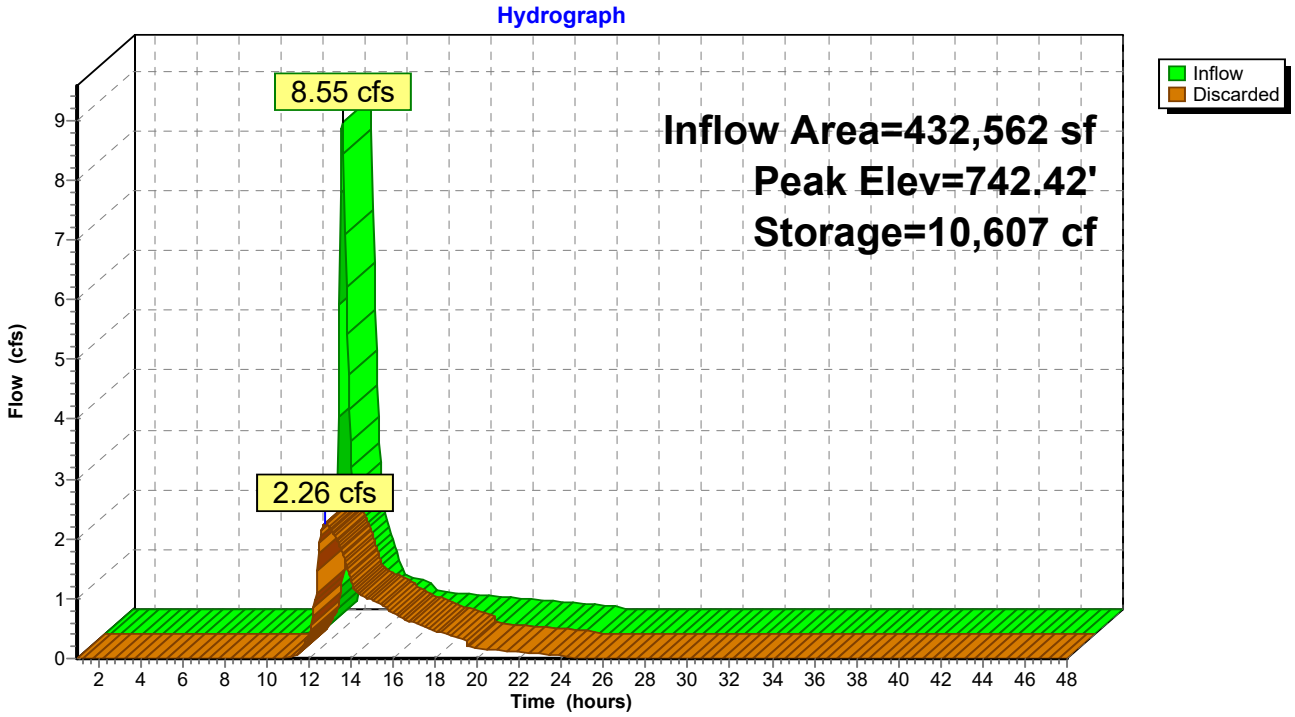
Volume	Invert	Avail.Storage	Storage Description
#1	740.00'	78,856 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
740.00	1,591	0	0
741.00	3,325	2,458	2,458
742.00	5,645	4,485	6,943
743.00	19,935	12,790	19,733
744.00	30,884	25,410	45,143
745.00	36,542	33,713	78,856

Device	Routing	Invert	Outlet Devices
#1	Discarded	740.00'	**8.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 720.00'

Discarded OutFlow Max=2.26 cfs @ 12.79 hrs HW=742.42' (Free Discharge)
1=Exfiltration (Controls 2.26 cfs)

Pond 74P: Southwest Basin



Summary for Pond 89P: Gravel North Depression

[93] Warning: Storage range exceeded by 0.22'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 235,181 sf, 19.95% Impervious, Inflow Depth = 0.80" for 1-Year event
Inflow = 5.77 cfs @ 12.19 hrs, Volume= 15,665 cf
Outflow = 6.12 cfs @ 12.19 hrs, Volume= 15,665 cf, Atten= 0%, Lag= 0.5 min
Discarded = 0.44 cfs @ 12.20 hrs, Volume= 5,850 cf
Primary = 2.22 cfs @ 12.28 hrs, Volume= 7,795 cf
Secondary = 3.60 cfs @ 12.19 hrs, Volume= 2,020 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 756.22' @ 12.19 hrs Surf.Area= 1,161 sf Storage= 808 cf

Plug-Flow detention time= 3.4 min calculated for 15,648 cf (100% of inflow)
Center-of-Mass det. time= 3.4 min (829.3 - 826.0)

Volume	Invert	Avail.Storage	Storage Description
#1	754.80'	808 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
754.80	237	0	0
755.50	725	337	337
756.00	1,161	472	808

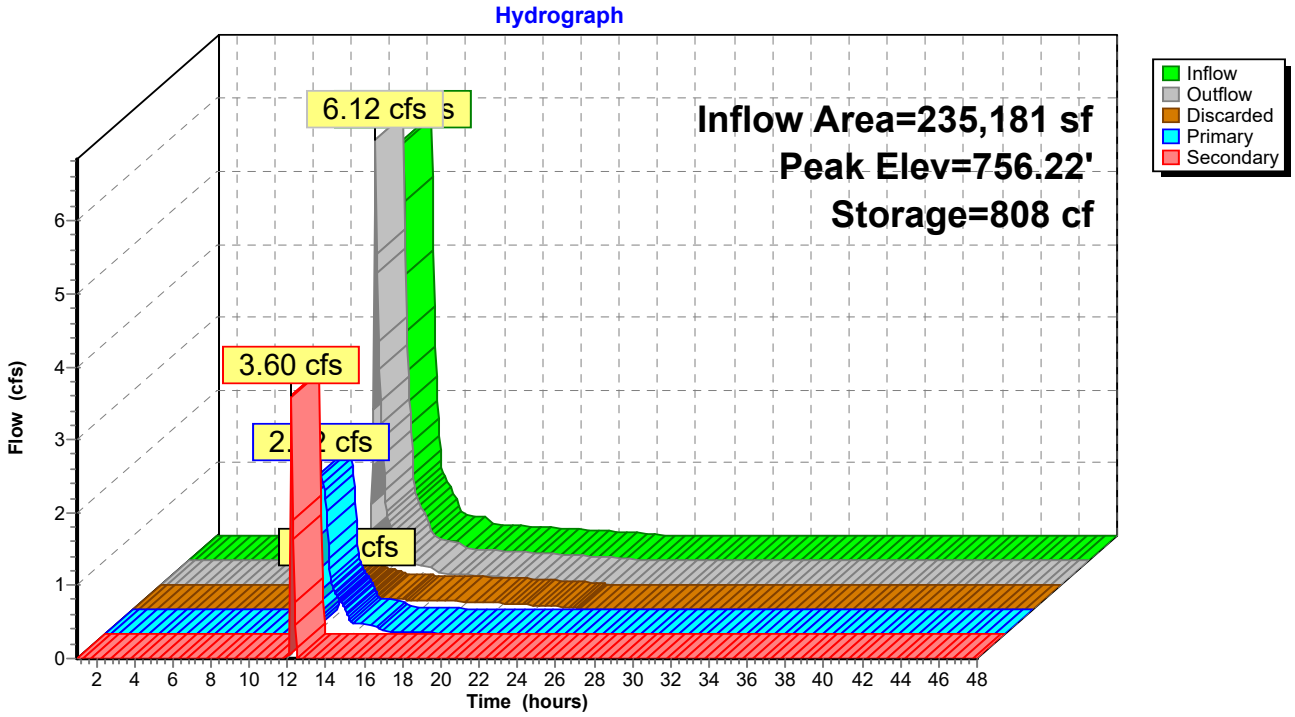
Device	Routing	Invert	Outlet Devices
#1	Primary	754.80'	**12.0" Round Culvert** L= 426.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 754.80' / 749.60' S= 0.0122 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.79 sf
#2	Secondary	755.80'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#3	Discarded	754.80'	**16.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 725.00'

Discarded OutFlow Max=0.44 cfs @ 12.20 hrs HW=756.22' (Free Discharge)
3=Exfiltration (Controls 0.44 cfs)

Primary OutFlow Max=2.21 cfs @ 12.28 hrs HW=756.06' (Free Discharge)
1=Culvert (Barrel Controls 2.21 cfs @ 2.87 fps)

Secondary OutFlow Max=3.44 cfs @ 12.19 hrs HW=756.21' (Free Discharge)
2=Broad-Crested Rectangular Weir (Weir Controls 3.44 cfs @ 1.67 fps)

Pond 89P: Gravel North Depression



Summary for Pond 92P: Gravel South Depression

[93] Warning: Storage range exceeded by 0.63'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing
[85] Warning: Oscillations may require smaller dt or Finer Routing (severity=28)
[61] Hint: Exceeded Reach 93R outlet invert by 2.13' @ 12.20 hrs
[79] Warning: Submerged Pond 89P Primary device # 1 OUTLET by 3.03'

Inflow Area = 288,183 sf, 16.28% Impervious, Inflow Depth = 0.51" for 1-Year event
Inflow = 6.32 cfs @ 12.20 hrs, Volume= 12,257 cf
Outflow = 6.67 cfs @ 12.20 hrs, Volume= 12,257 cf, Atten= 0%, Lag= 0.1 min
Primary = 6.57 cfs @ 12.20 hrs, Volume= 9,743 cf
Secondary = 0.10 cfs @ 12.20 hrs, Volume= 2,514 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 752.63' @ 12.20 hrs Surf.Area= 253 sf Storage= 387 cf

Plug-Flow detention time= 10.3 min calculated for 12,244 cf (100% of inflow)
Center-of-Mass det. time= 10.3 min (793.0 - 782.7)

Volume	Invert	Avail.Storage	Storage Description
#1	749.60'	387 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

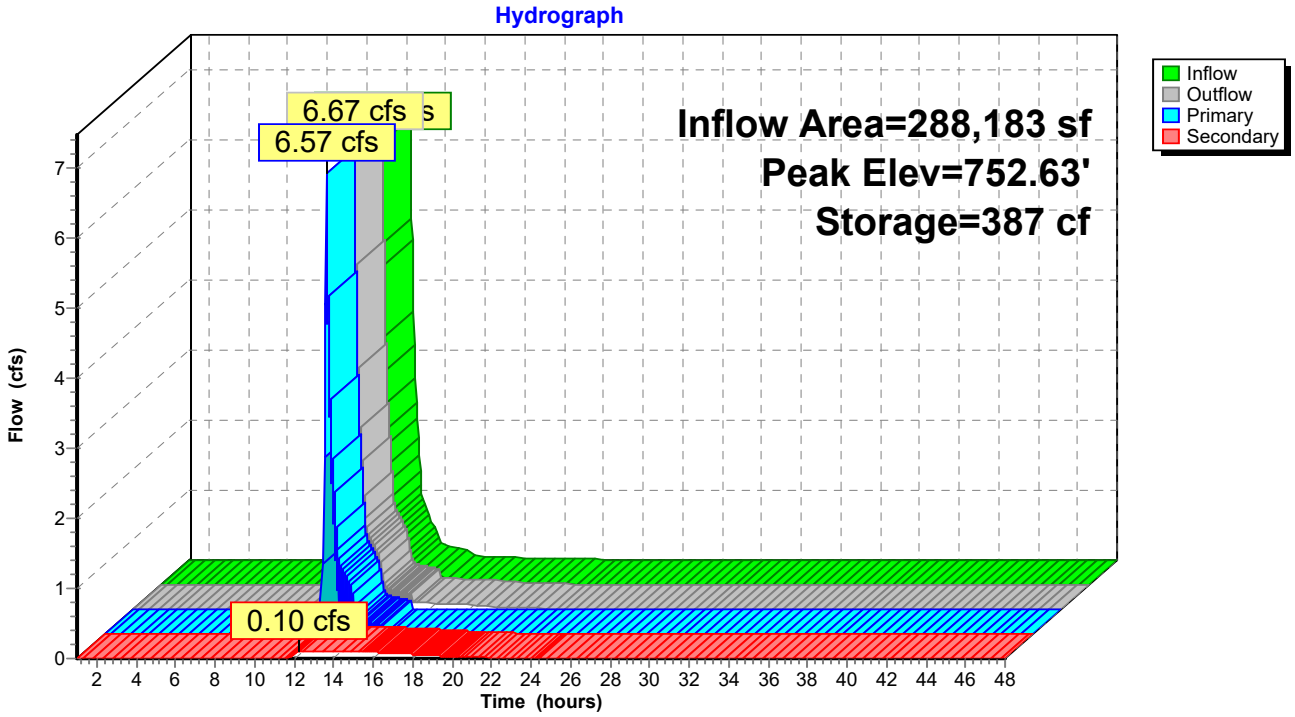
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
749.60	30	0	0
750.00	107	27	27
752.00	253	360	387

Device	Routing	Invert	Outlet Devices
#1	Primary	752.00'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#2	Secondary	749.60'	**16.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 725.00'

Primary OutFlow Max=6.50 cfs @ 12.20 hrs HW=752.63' (Free Discharge)
1=Broad-Crested Rectangular Weir (Weir Controls 6.50 cfs @ 2.07 fps)

Secondary OutFlow Max=0.10 cfs @ 12.20 hrs HW=752.63' (Free Discharge)
2=Exfiltration (Controls 0.10 cfs)

Pond 92P: Gravel South Depression

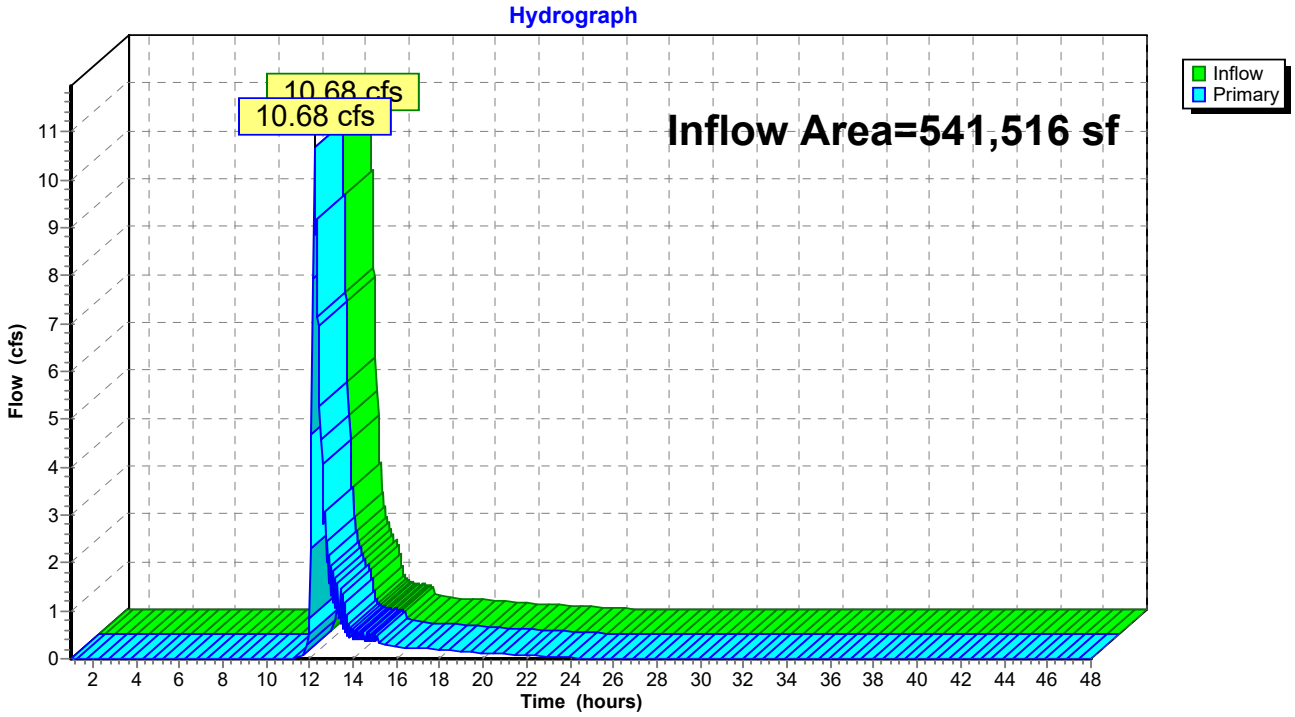


Summary for Link 32L: TOTAL OFFSITE UNTREATED

Inflow Area = 541,516 sf, 15.80% Impervious, Inflow Depth = 0.60" for 1-Year event
Inflow = 10.68 cfs @ 12.21 hrs, Volume= 27,185 cf
Primary = 10.68 cfs @ 12.21 hrs, Volume= 27,185 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 32L: TOTAL OFFSITE UNTREATED

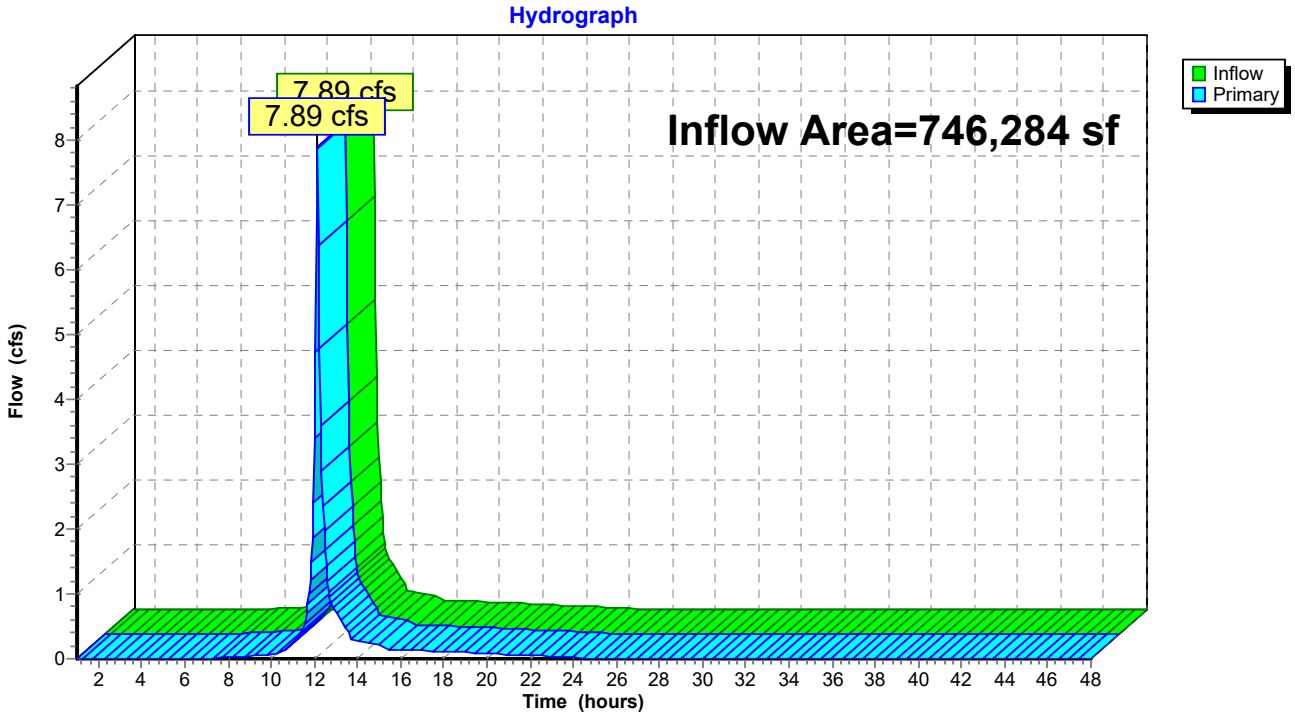


Summary for Link 33L: TOTAL ONSITE

Inflow Area = 746,284 sf, 24.37% Impervious, Inflow Depth = 0.30" for 1-Year event
Inflow = 7.89 cfs @ 12.14 hrs, Volume= 18,781 cf
Primary = 7.89 cfs @ 12.14 hrs, Volume= 18,781 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 33L: TOTAL ONSITE

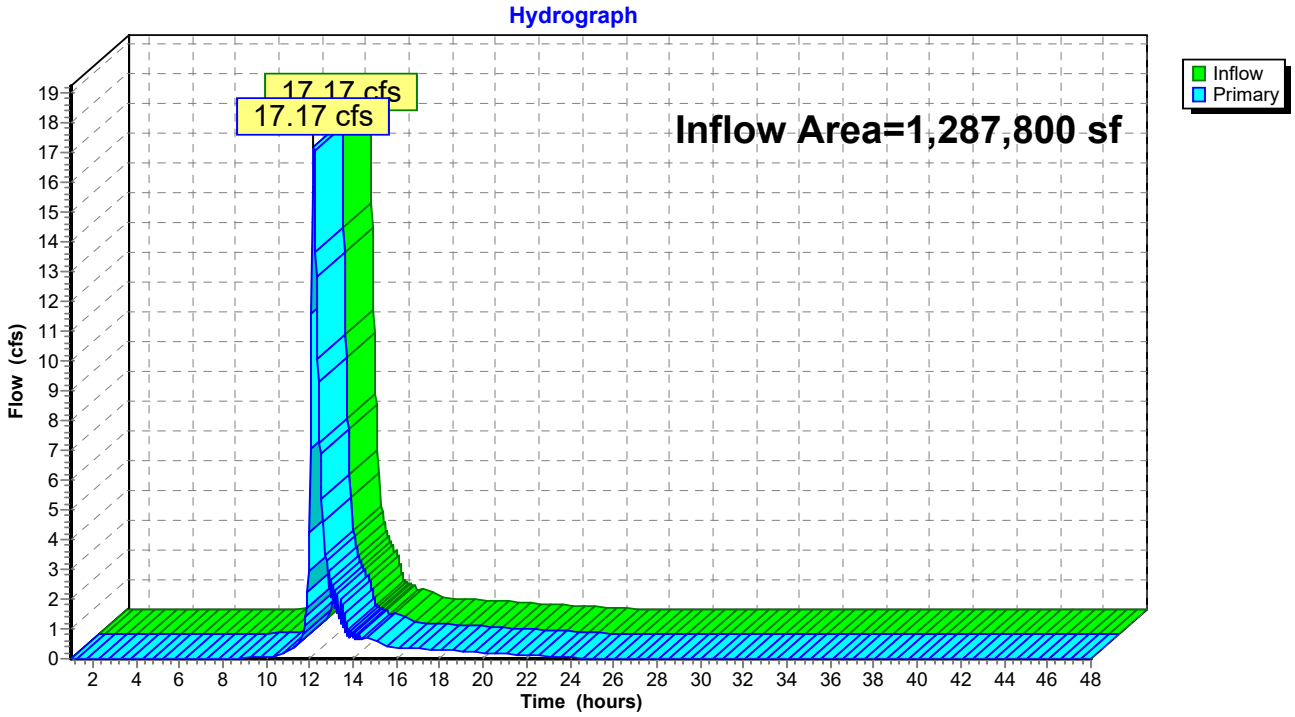


Summary for Link 34L: TOTAL OUTFALL

Inflow Area = 1,287,800 sf, 20.77% Impervious, Inflow Depth = 0.43" for 1-Year event
Inflow = 17.17 cfs @ 12.19 hrs, Volume= 45,966 cf
Primary = 17.17 cfs @ 12.19 hrs, Volume= 45,966 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 34L: TOTAL OUTFALL

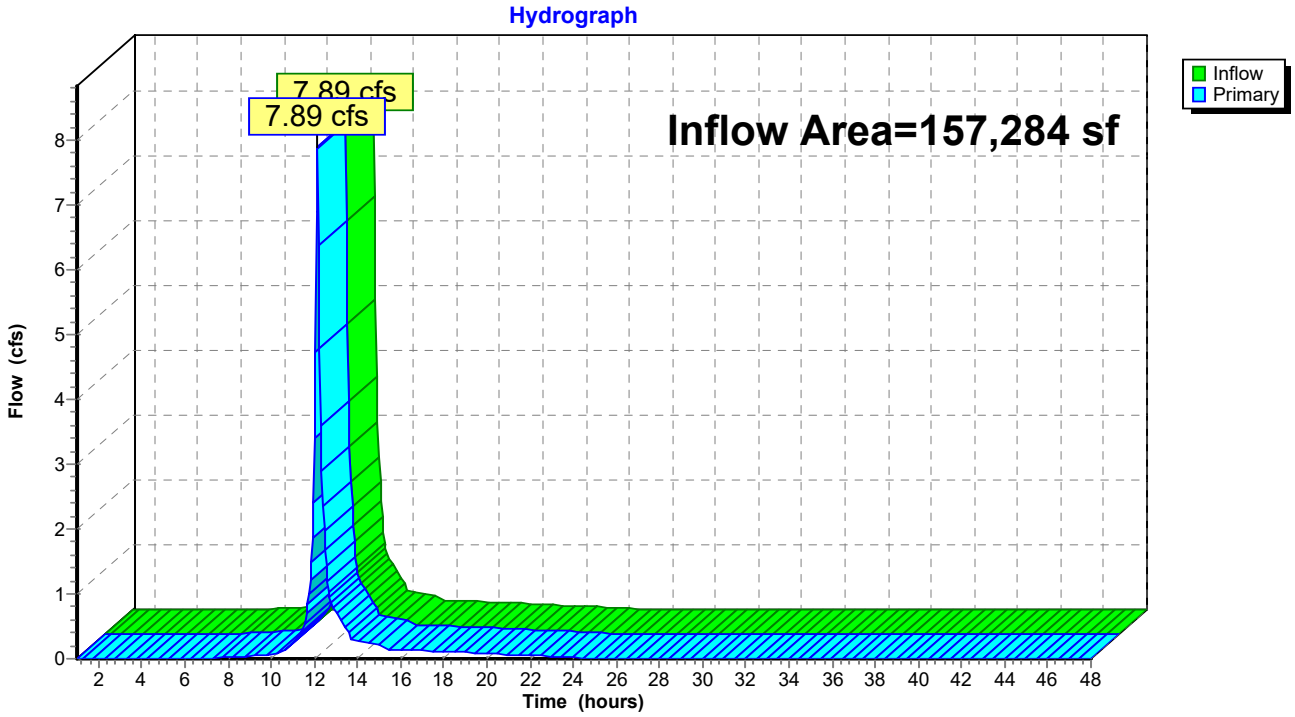


Summary for Link 75L: Areas Piped

Inflow Area = 157,284 sf, 63.18% Impervious, Inflow Depth = 1.43" for 1-Year event
Inflow = 7.89 cfs @ 12.14 hrs, Volume= 18,781 cf
Primary = 7.89 cfs @ 12.14 hrs, Volume= 18,781 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 75L: Areas Piped

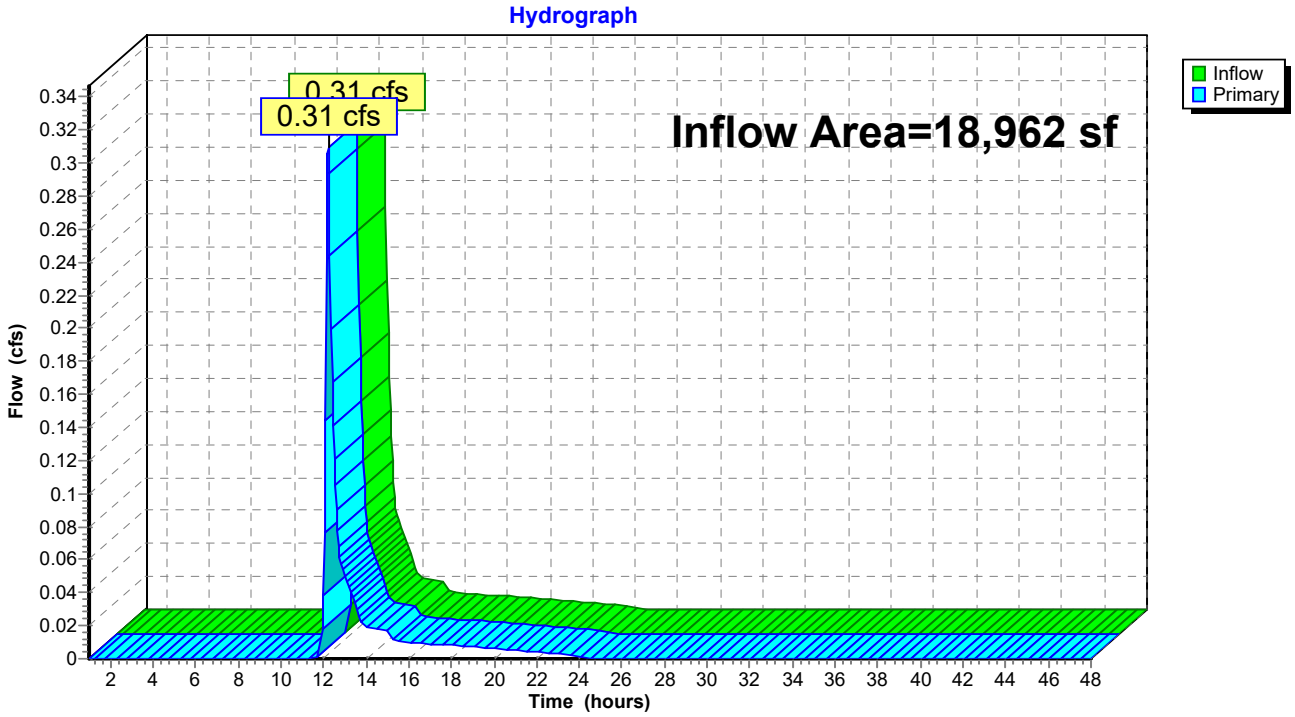


Summary for Link 78L: Swale on Lot 20

Inflow Area = 18,962 sf, 0.00% Impervious, Inflow Depth = 0.55" for 1-Year event
Inflow = 0.31 cfs @ 12.22 hrs, Volume= 874 cf
Primary = 0.31 cfs @ 12.22 hrs, Volume= 874 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 78L: Swale on Lot 20

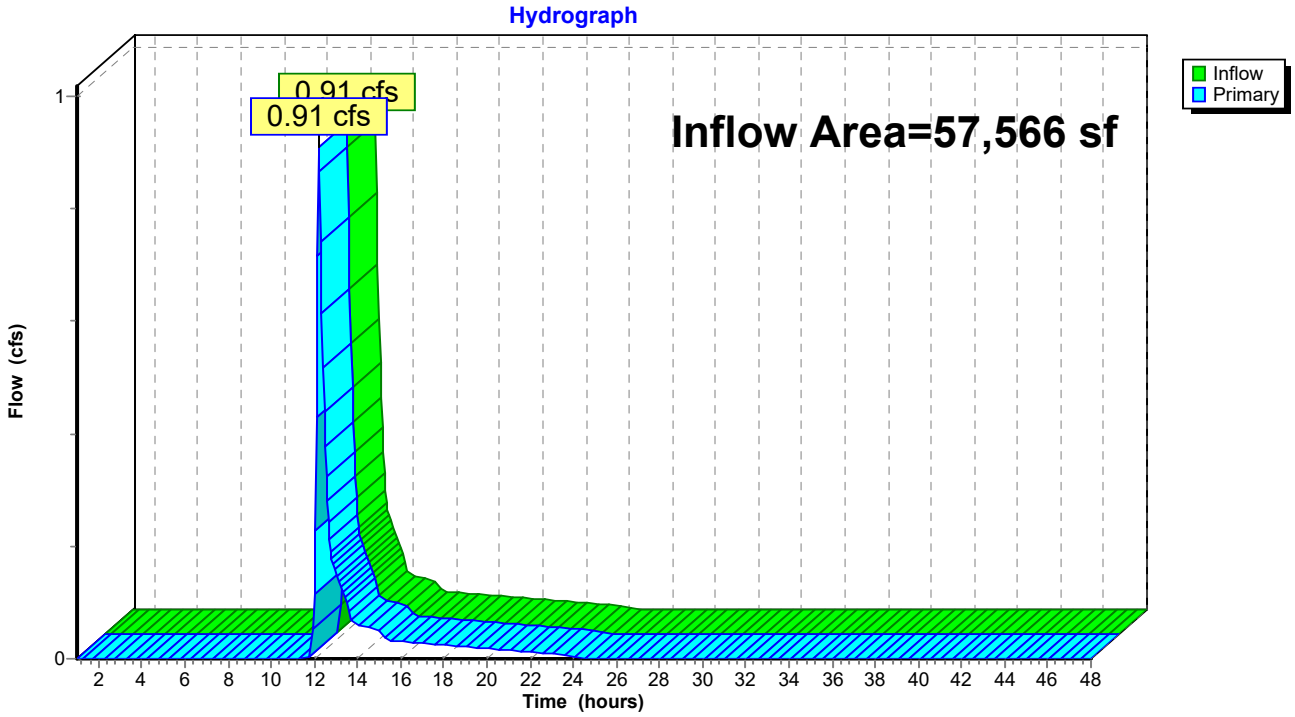


Summary for Link 79L: Swale Along Red Barn Ln.

Inflow Area = 57,566 sf, 0.00% Impervious, Inflow Depth = 0.55" for 1-Year event
Inflow = 0.91 cfs @ 12.22 hrs, Volume= 2,652 cf
Primary = 0.91 cfs @ 12.22 hrs, Volume= 2,652 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 79L: Swale Along Red Barn Ln.

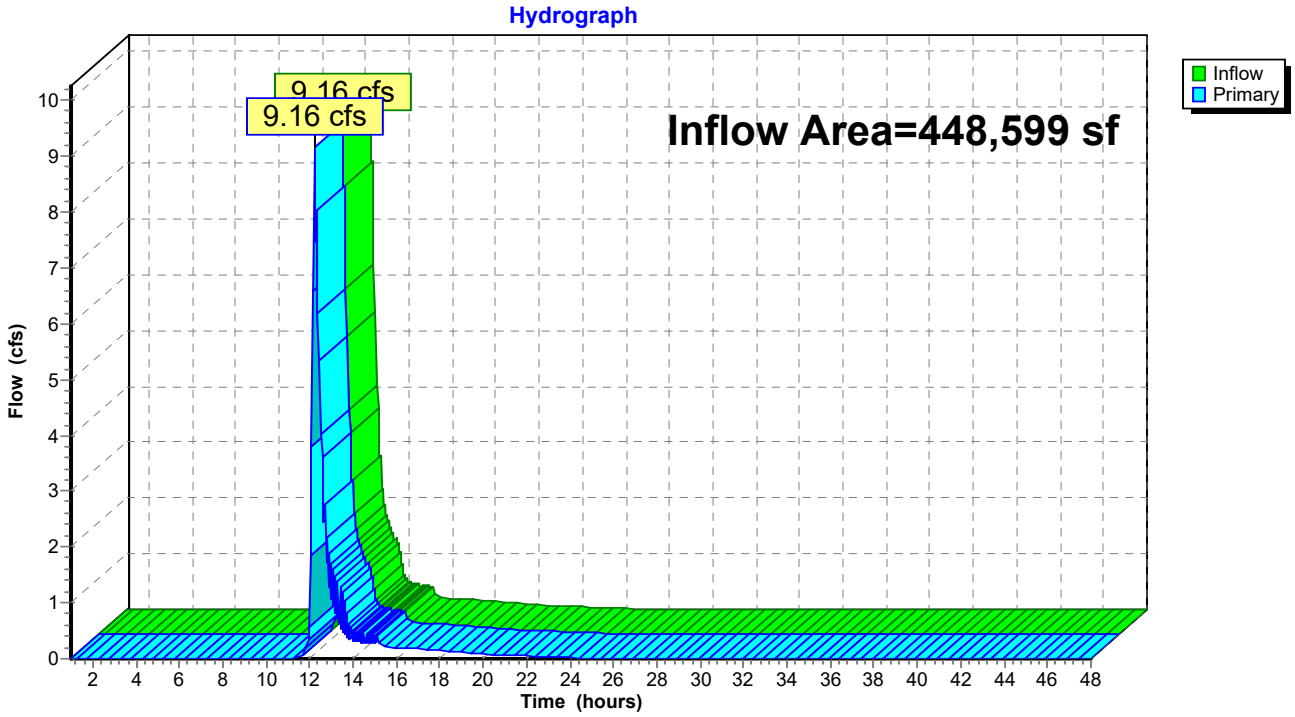


Summary for Link 80L: Cul-de-sac On Green Meadow Place

Inflow Area = 448,599 sf, 18.72% Impervious, Inflow Depth = 0.61" for 1-Year event
Inflow = 9.16 cfs @ 12.21 hrs, Volume= 22,795 cf
Primary = 9.16 cfs @ 12.21 hrs, Volume= 22,795 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 80L: Cul-de-sac On Green Meadow Place



Time span=1.00-48.00 hrs, dt=0.05 hrs, 941 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: A Runoff Area=156,438 sf 0.00% Impervious Runoff Depth=0.72"
Flow Length=375' Tc=15.6 min CN=74 Runoff=3.04 cfs 9,437 cf

Subcatchment 2S: B Runoff Area=141,137 sf 26.27% Impervious Runoff Depth=1.03"
Flow Length=700' Slope=0.0071 '/' Tc=19.8 min CN=80 Runoff=3.67 cfs 12,112 cf

Subcatchment 4S: C1 Runoff Area=12,661 sf 0.00% Impervious Runoff Depth=0.72"
Flow Length=100' Slope=0.0193 '/' Tc=11.4 min CN=74 Runoff=0.29 cfs 764 cf

Subcatchment 5S: D Runoff Area=24,345 sf 0.00% Impervious Runoff Depth=0.72"
Flow Length=170' Tc=10.2 min CN=74 Runoff=0.58 cfs 1,469 cf

Subcatchment 6S: E Runoff Area=138,758 sf 15.57% Impervious Runoff Depth=0.92"
Flow Length=471' Tc=10.6 min CN=78 Runoff=4.28 cfs 10,643 cf

Subcatchment 7S: F Runoff Area=13,305 sf 0.00% Impervious Runoff Depth=0.72"
Flow Length=100' Slope=0.0583 '/' Tc=7.3 min CN=74 Runoff=0.36 cfs 803 cf

Subcatchment 8S: G Runoff Area=66,971 sf 15.30% Impervious Runoff Depth=0.92"
Flow Length=295' Tc=12.7 min CN=78 Runoff=1.91 cfs 5,137 cf

Subcatchment 9S: H Runoff Area=16,147 sf 93.29% Impervious Runoff Depth=2.26"
Flow Length=200' Tc=6.0 min CN=96 Runoff=1.36 cfs 3,037 cf

Subcatchment 10S: I Runoff Area=10,482 sf 59.22% Impervious Runoff Depth=1.55"
Flow Length=100' Slope=0.0244 '/' Tc=6.0 min CN=88 Runoff=0.66 cfs 1,358 cf

Subcatchment 11S: J Runoff Area=838 sf 4.77% Impervious Runoff Depth=0.77"
Flow Length=15' Slope=0.0122 '/' Tc=6.0 min CN=75 Runoff=0.03 cfs 54 cf

Subcatchment 12S: K Runoff Area=28,606 sf 66.44% Impervious Runoff Depth=1.71"
Flow Length=980' Tc=26.2 min CN=90 Runoff=1.08 cfs 4,078 cf

Subcatchment 13S: L Runoff Area=43,723 sf 16.63% Impervious Runoff Depth=0.92"
Flow Length=851' Tc=22.3 min CN=78 Runoff=0.93 cfs 3,354 cf

Subcatchment 14S: M Runoff Area=53,002 sf 0.00% Impervious Runoff Depth=0.72"
Flow Length=475' Tc=15.2 min CN=74 Runoff=1.04 cfs 3,197 cf

Subcatchment 15S: N Runoff Area=6,616 sf 7.63% Impervious Runoff Depth=0.82"
Flow Length=65' Slope=0.0344 '/' Tc=6.4 min CN=76 Runoff=0.22 cfs 451 cf

Subcatchment 16S: O Runoff Area=18,705 sf 49.38% Impervious Runoff Depth=1.41"
Flow Length=150' Tc=10.4 min CN=86 Runoff=0.91 cfs 2,196 cf

Subcatchment 17S: P Runoff Area=18,391 sf 80.23% Impervious Runoff Depth=1.97"
Flow Length=35' Slope=0.0866 '/' Tc=6.0 min CN=93 Runoff=1.42 cfs 3,017 cf

Subcatchment 18S: Q Runoff Area=14,923 sf 57.14% Impervious Runoff Depth=1.55"
Flow Length=30' Slope=0.0989 '/' Tc=6.0 min CN=88 Runoff=0.95 cfs 1,933 cf

Subcatchment 19S: R Runoff Area=20,724 sf 79.35% Impervious Runoff Depth=1.97"
Flow Length=170' Tc=10.5 min CN=93 Runoff=1.35 cfs 3,399 cf

Subcatchment 20S: S Runoff Area=5,299 sf 100.00% Impervious Runoff Depth=2.47"
Flow Length=50' Slope=0.0049 '/' Tc=6.0 min CN=98 Runoff=0.47 cfs 1,091 cf

Subcatchment 21S: T Runoff Area=35,645 sf 39.81% Impervious Runoff Depth=1.27"
Flow Length=280' Tc=11.4 min CN=84 Runoff=1.51 cfs 3,782 cf

Subcatchment 22S: U Runoff Area=15,551 sf 9.77% Impervious Runoff Depth=0.82"
Flow Length=90' Slope=0.0528 '/' Tc=7.0 min CN=76 Runoff=0.50 cfs 1,061 cf

Subcatchment 23S: V Runoff Area=26,499 sf 91.36% Impervious Runoff Depth=2.26"
Flow Length=115' Tc=6.0 min CN=96 Runoff=2.24 cfs 4,985 cf

Subcatchment 24S: W Runoff Area=75,447 sf 27.41% Impervious Runoff Depth=1.09"
Flow Length=637' Tc=17.0 min CN=81 Runoff=2.25 cfs 6,837 cf

Subcatchment 25S: X Runoff Area=104,170 sf 23.49% Impervious Runoff Depth=1.03"
Flow Length=405' Tc=15.5 min CN=80 Runoff=3.06 cfs 8,939 cf

Subcatchment 26S: Y Runoff Area=12,489 sf 0.00% Impervious Runoff Depth=0.72"
Tc=6.0 min CN=74 Runoff=0.36 cfs 753 cf

Subcatchment 27S: Z Runoff Area=168,127 sf 6.58% Impervious Runoff Depth=0.82"
Flow Length=480' Tc=15.8 min CN=76 Runoff=3.76 cfs 11,469 cf

Subcatchment 67S: C2 Runoff Area=6,618 sf 0.00% Impervious Runoff Depth=0.72"
Flow Length=120' Slope=0.0262 '/' Tc=10.4 min CN=74 Runoff=0.16 cfs 399 cf

Subcatchment 68S: C4 Runoff Area=33,221 sf 0.00% Impervious Runoff Depth=0.72"
Flow Length=380' Tc=13.6 min CN=74 Runoff=0.69 cfs 2,004 cf

Subcatchment 69S: C3 Runoff Area=18,962 sf 0.00% Impervious Runoff Depth=0.72"
Flow Length=233' Slope=0.0278 '/' Tc=11.8 min CN=74 Runoff=0.42 cfs 1,144 cf

Subcatchment 70S: O1 Runoff Area=11,697 sf 0.00% Impervious Runoff Depth=0.72"
Tc=6.0 min CN=74 Runoff=0.34 cfs 706 cf

Subcatchment 71S: O2 Runoff Area=132,678 sf 2.29% Impervious Runoff Depth=0.77"
Flow Length=377' Tc=12.2 min CN=75 Runoff=3.13 cfs 8,518 cf

Reach 93R: Overland Flow from North Depression to South Avg. Flow Depth=0.00' Max Vel=0.00 fps
n=0.030 L=426.0' S=0.0127 '/' Capacity=108.75 cfs Outflow=0.00 cfs 0 cf

Pond 73P: Southeast Basin Peak Elev=730.67' Storage=3,071 cf Inflow=3.04 cfs 9,437 cf
Outflow=0.77 cfs 9,437 cf

Pond 74P: Southwest Basin Peak Elev=742.65' Storage=13,637 cf Inflow=10.98 cfs 35,431 cf
Outflow=2.88 cfs 35,431 cf

Pond 89P: Gravel North Depression Peak Elev=756.40' Storage=808 cf Inflow=7.38 cfs 19,620 cf
Discarded=0.45 cfs 6,471 cf Primary=2.21 cfs 9,486 cf Secondary=6.03 cfs 3,663 cf Outflow=8.59 cfs 19,620 cf

Pond 92P: Gravel South Depression Peak Elev=752.75' Storage=387 cf Inflow=8.86 cfs 16,346 cf
Primary=8.39 cfs 13,379 cf Secondary=0.10 cfs 2,968 cf Outflow=8.50 cfs 16,346 cf

Link 32L: TOTAL OFFSITE UNTREATED Inflow=13.66 cfs 35,352 cf
Primary=13.66 cfs 35,352 cf

Link 33L: TOTAL ONSITE Inflow=9.29 cfs 22,210 cf
Primary=9.29 cfs 22,210 cf

Link 34L: TOTAL OUTFALL Inflow=22.17 cfs 57,563 cf
Primary=22.17 cfs 57,563 cf

Link 75L: Areas Piped Inflow=9.29 cfs 22,210 cf
Primary=9.29 cfs 22,210 cf

Link 78L: Swale on Lot 20 Inflow=0.42 cfs 1,144 cf
Primary=0.42 cfs 1,144 cf

Link 79L: Swale Along Red Barn Ln. Inflow=1.24 cfs 3,473 cf
Primary=1.24 cfs 3,473 cf

Link 80L: Cul-de-sac On Green Meadow Place Inflow=11.77 cfs 29,621 cf
Primary=11.77 cfs 29,621 cf

Total Runoff Area = 1,432,175 sf Runoff Volume = 118,125 cf Average Runoff Depth = 0.99"
81.12% Pervious = 1,161,718 sf 18.88% Impervious = 270,457 sf

Summary for Subcatchment 1S: A

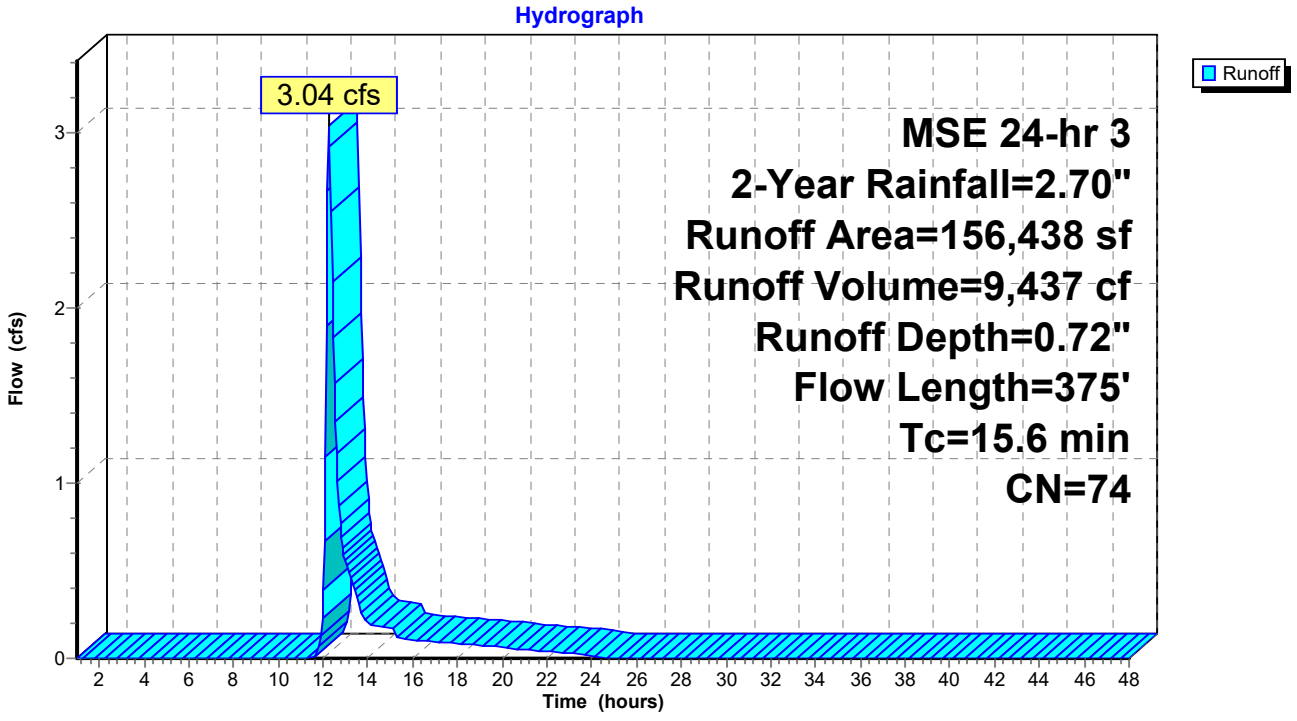
Runoff = 3.04 cfs @ 12.26 hrs, Volume= 9,437 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	156,438	74	PER
	156,438		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	100	0.0196	0.15		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
4.2	275	0.0243	1.09		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.6	375	Total			

Subcatchment 1S: A



Summary for Subcatchment 2S: B

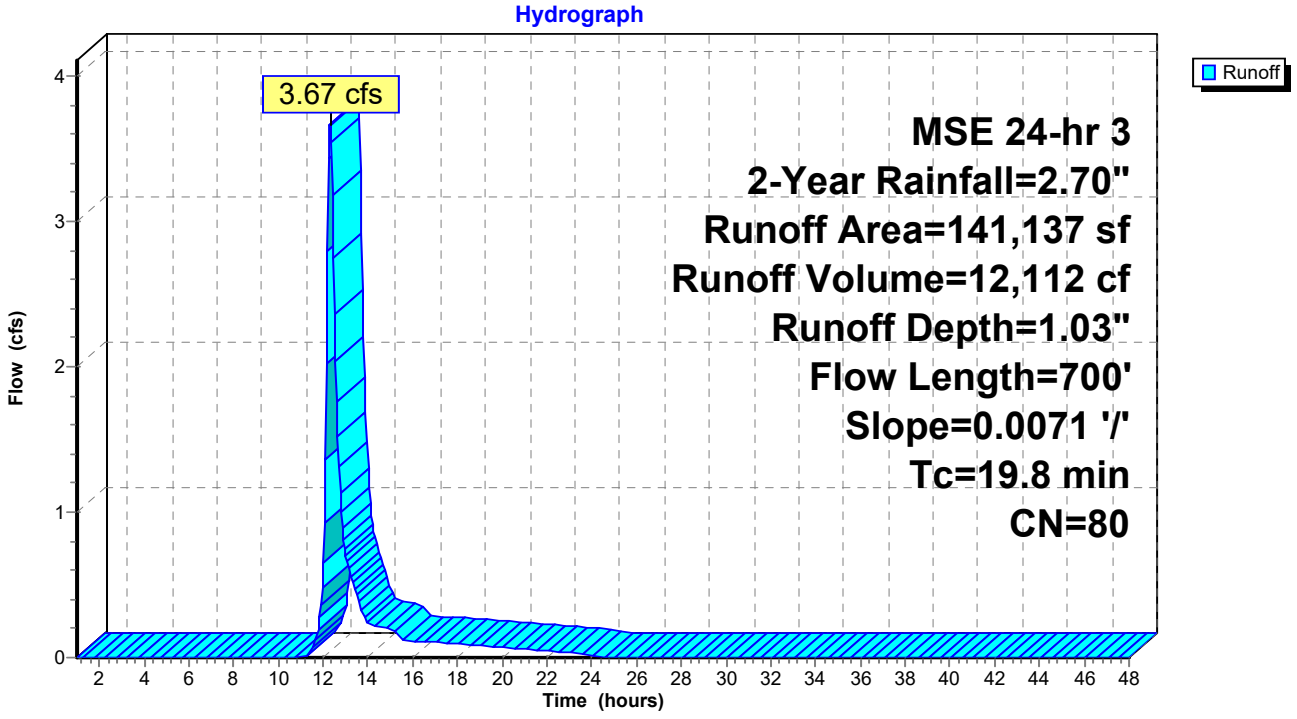
Runoff = 3.67 cfs @ 12.31 hrs, Volume= 12,112 cf, Depth= 1.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	104,065	74	PER
*	22,056	98	IMP
*	15,016	98	ROOF
	141,137	80	Weighted Average
	104,065		73.73% Pervious Area
	37,072		26.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	700	0.0071	0.59		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps

Subcatchment 2S: B



Summary for Subcatchment 4S: C1

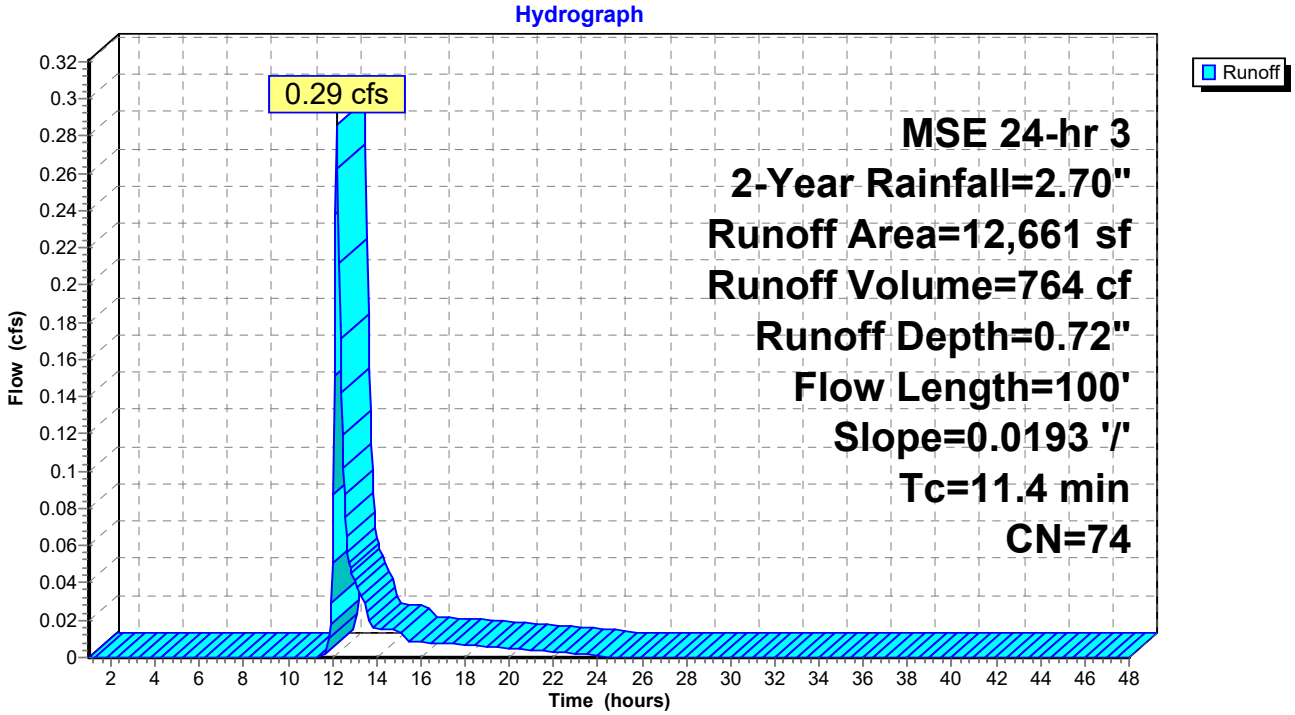
Runoff = 0.29 cfs @ 12.21 hrs, Volume= 764 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	12,661	74	PER
	12,661		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	100	0.0193	0.15		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 4S: C1



Summary for Subcatchment 5S: D

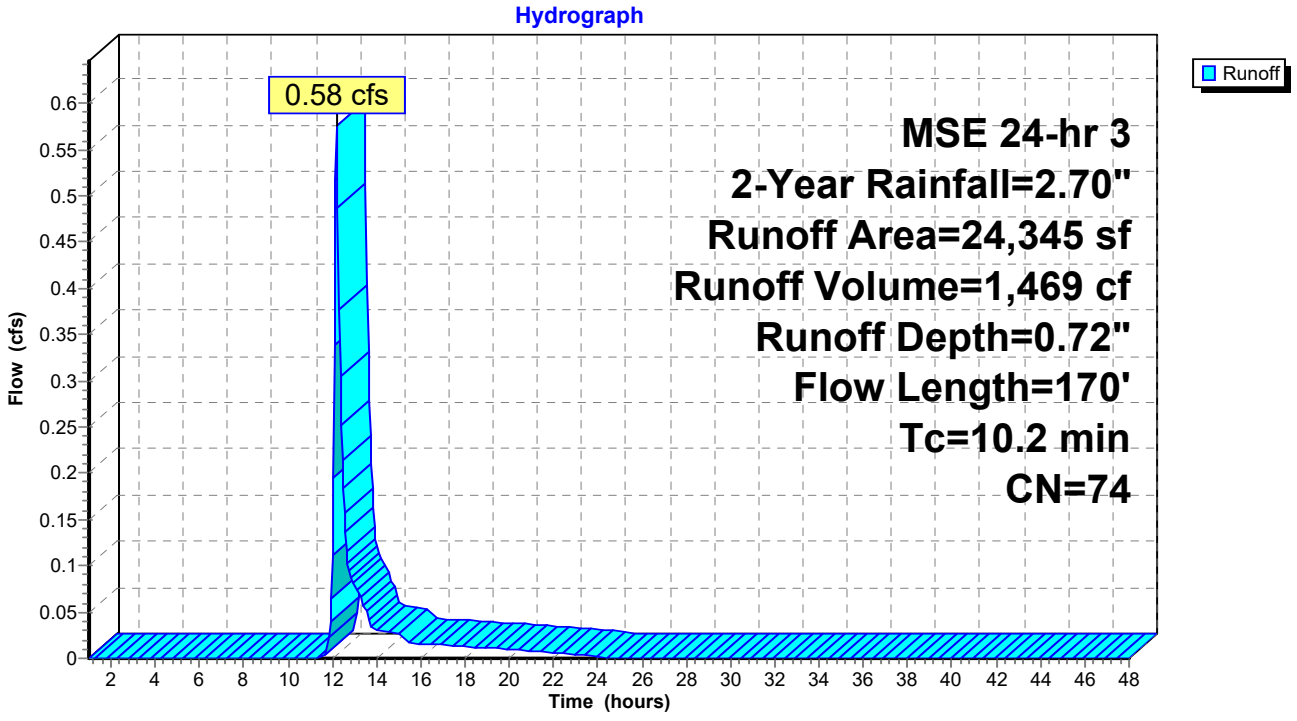
Runoff = 0.58 cfs @ 12.19 hrs, Volume= 1,469 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	24,345	74	PER
	24,345		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.0319	0.18		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	70	0.0317	1.25		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.2	170	Total			

Subcatchment 5S: D



Summary for Subcatchment 6S: E

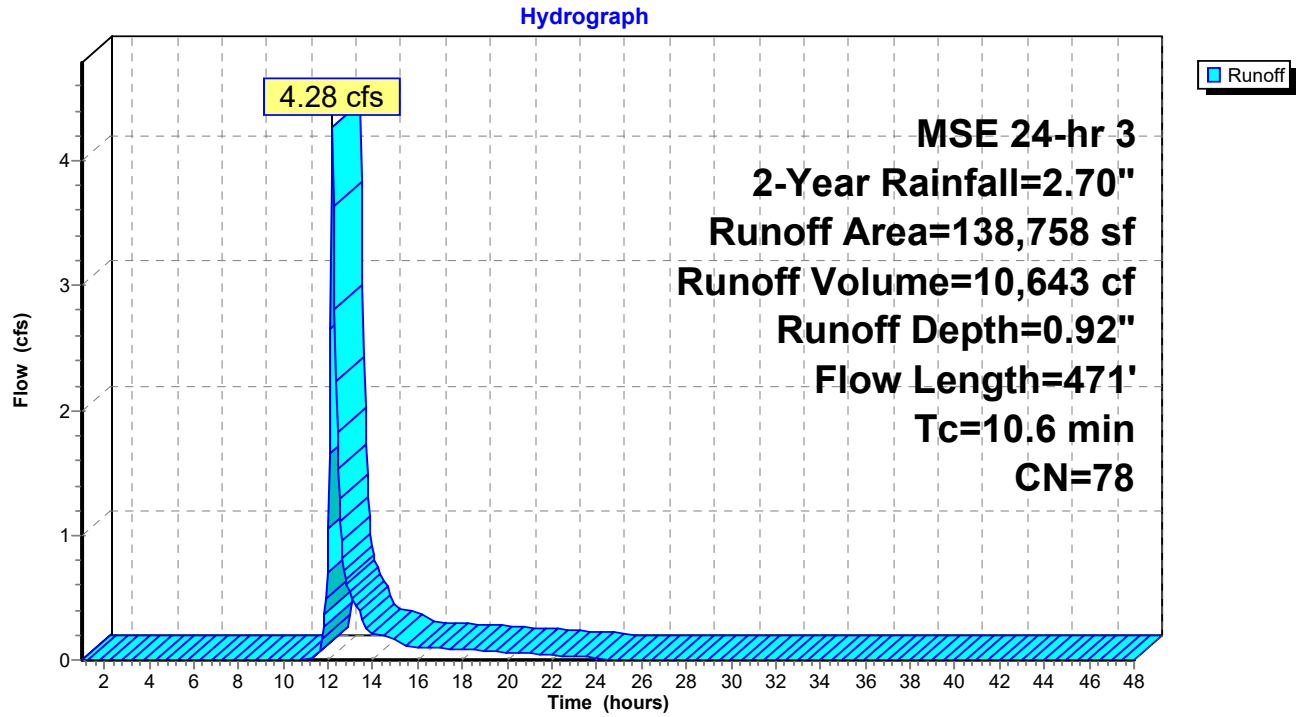
Runoff = 4.28 cfs @ 12.19 hrs, Volume= 10,643 cf, Depth= 0.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	117,151	74	PER
*	21,607	98	IMP
	138,758	78	Weighted Average
	117,151		84.43% Pervious Area
	21,607		15.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	100	0.0581	0.23		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	215	0.0405	4.09		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
2.3	156	0.0259	1.13		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.6	471	Total			

Subcatchment 6S: E



Summary for Subcatchment 7S: F

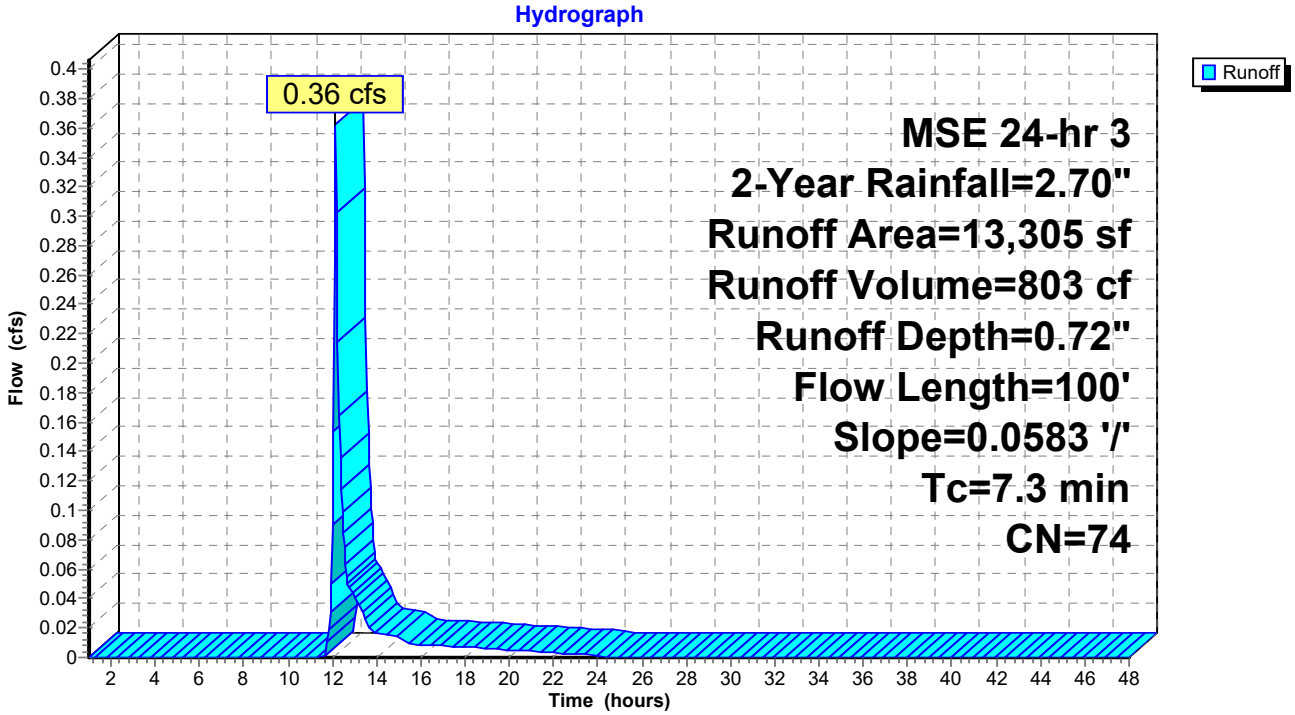
Runoff = 0.36 cfs @ 12.16 hrs, Volume= 803 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	13,305	74	PER
	13,305		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.3	100	0.0583	0.23		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 7S: F



Summary for Subcatchment 8S: G

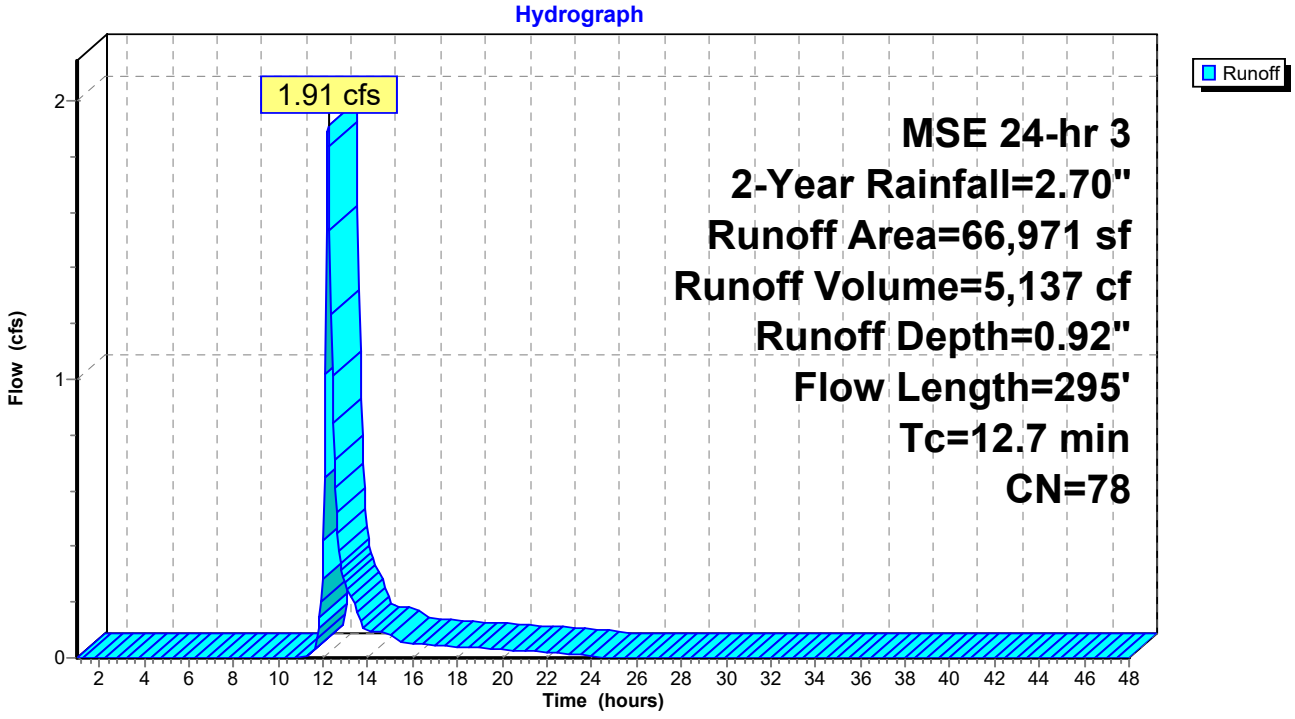
Runoff = 1.91 cfs @ 12.22 hrs, Volume= 5,137 cf, Depth= 0.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	56,727	74	PER
*	10,244	98	IMP
	66,971	78	Weighted Average
	56,727		84.70% Pervious Area
	10,244		15.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	100	0.0269	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
2.7	195	0.0305	1.22		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
12.7	295	Total			

Subcatchment 8S: G



Summary for Subcatchment 9S: H

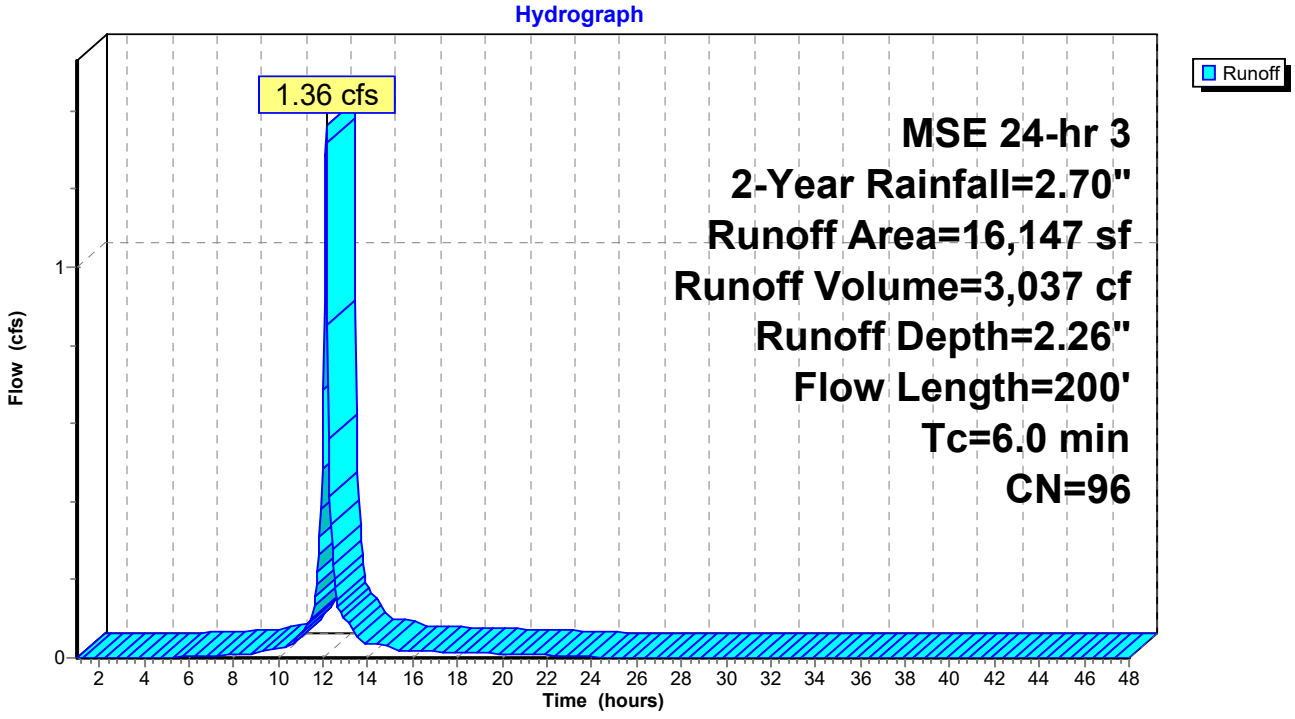
Runoff = 1.36 cfs @ 12.13 hrs, Volume= 3,037 cf, Depth= 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	1,084	74	PER
*	15,063	98	IMP
	16,147	96	Weighted Average
	1,084		6.71% Pervious Area
	15,063		93.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	100	0.0502	1.73		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
0.5	100	0.0263	3.29		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
1.5	200	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 9S: H



Summary for Subcatchment 10S: I

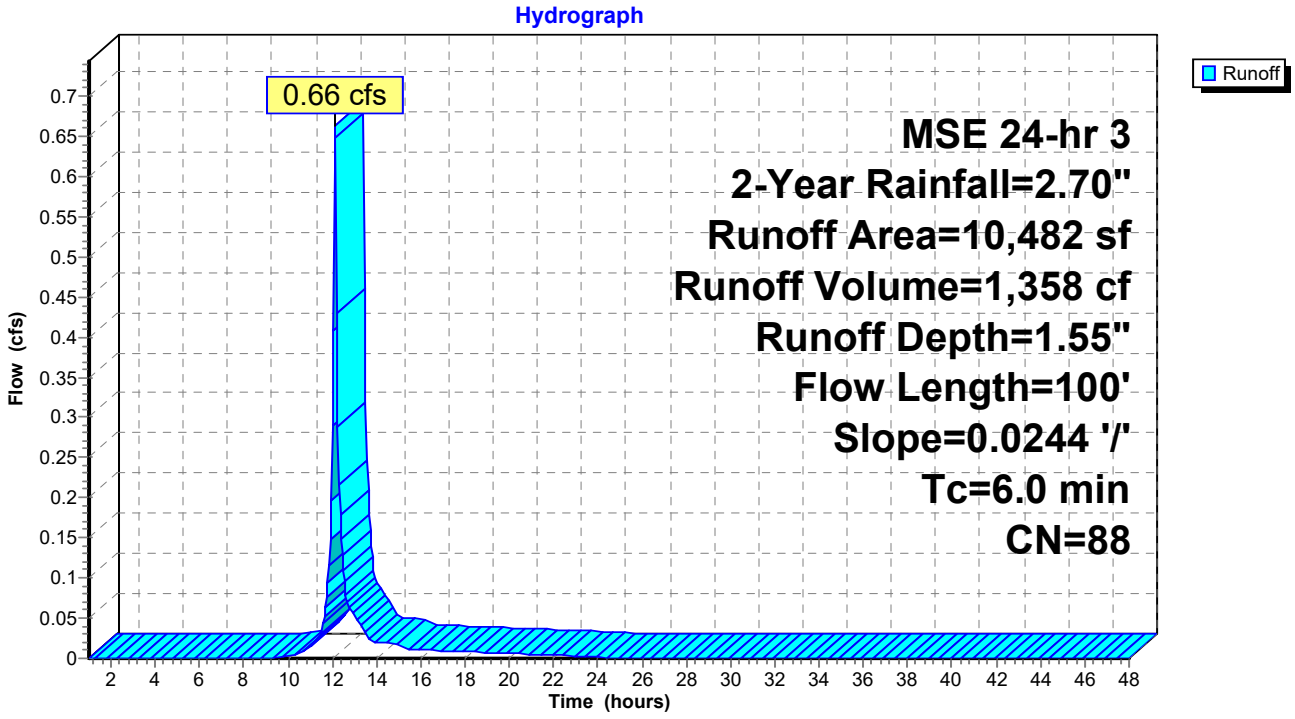
Runoff = 0.66 cfs @ 12.13 hrs, Volume= 1,358 cf, Depth= 1.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	4,275	74	PER
*	5,059	98	IMP
*	1,148	98	ROOF
	10,482	88	Weighted Average
	4,275		40.78% Pervious Area
	6,207		59.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	100	0.0244	1.30		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
1.3	100	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 10S: I



Summary for Subcatchment 11S: J

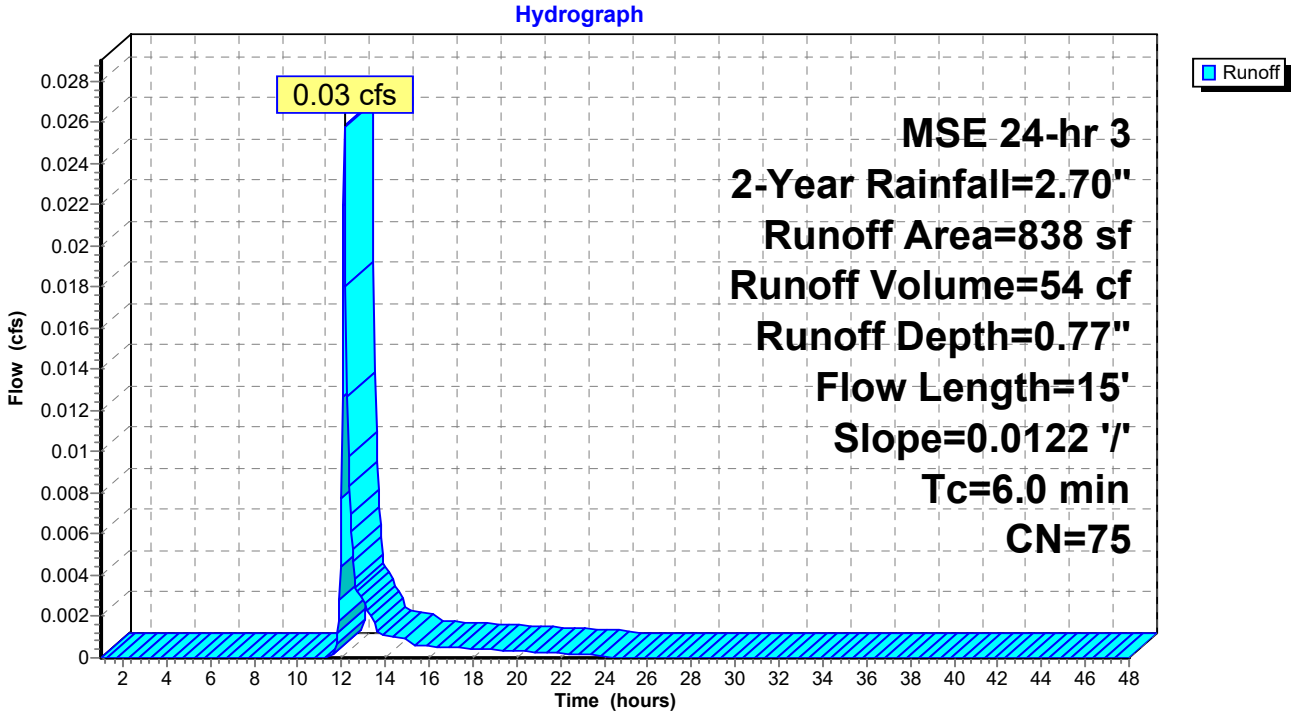
Runoff = 0.03 cfs @ 12.14 hrs, Volume= 54 cf, Depth= 0.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	798	74	PER
*	40	98	IMP
	838	75	Weighted Average
	798		95.23% Pervious Area
	40		4.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	15	0.0122	0.08		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
3.0	15	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 11S: J



Summary for Subcatchment 12S: K

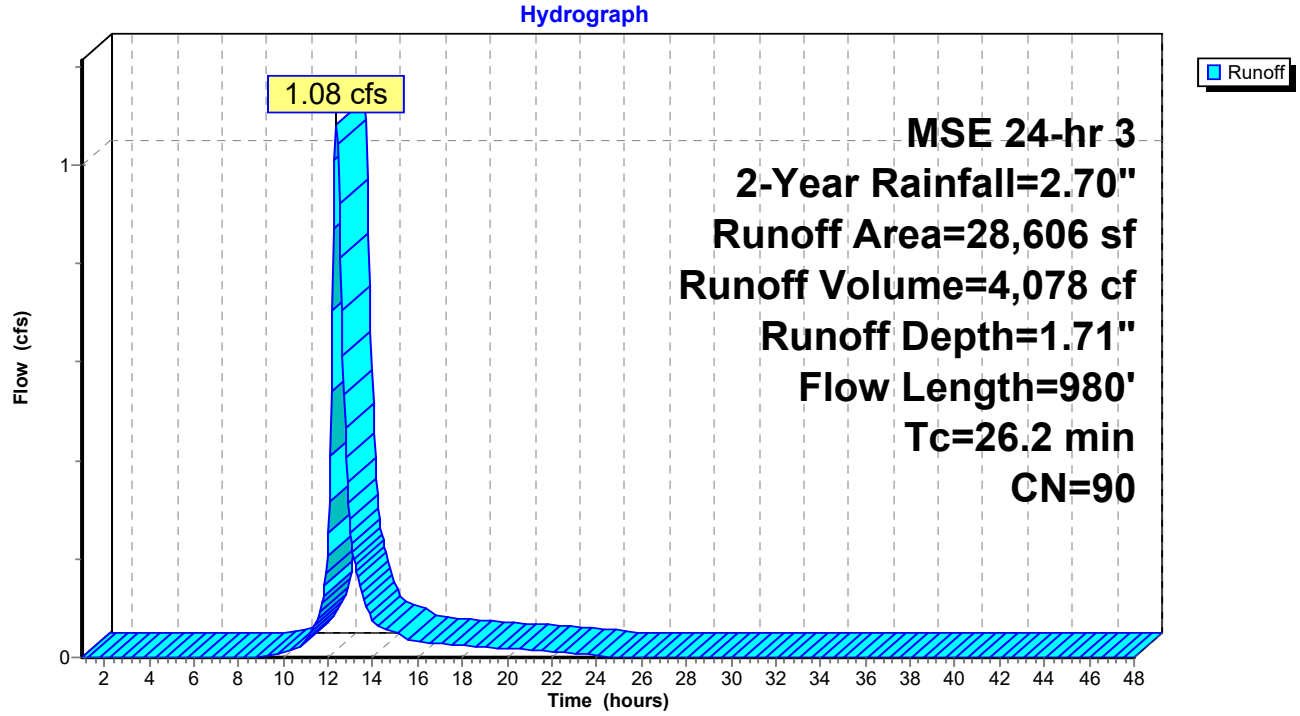
Runoff = 1.08 cfs @ 12.37 hrs, Volume= 4,078 cf, Depth= 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	9,600	74	PER
*	1,816	98	IMP
*	17,190	98	ROOF
	28,606	90	Weighted Average
	9,600		33.56% Pervious Area
	19,006		66.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.3	90	0.0161	0.13		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
14.9	890	0.0202	0.99		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
26.2	980	Total			

Subcatchment 12S: K



Summary for Subcatchment 13S: L

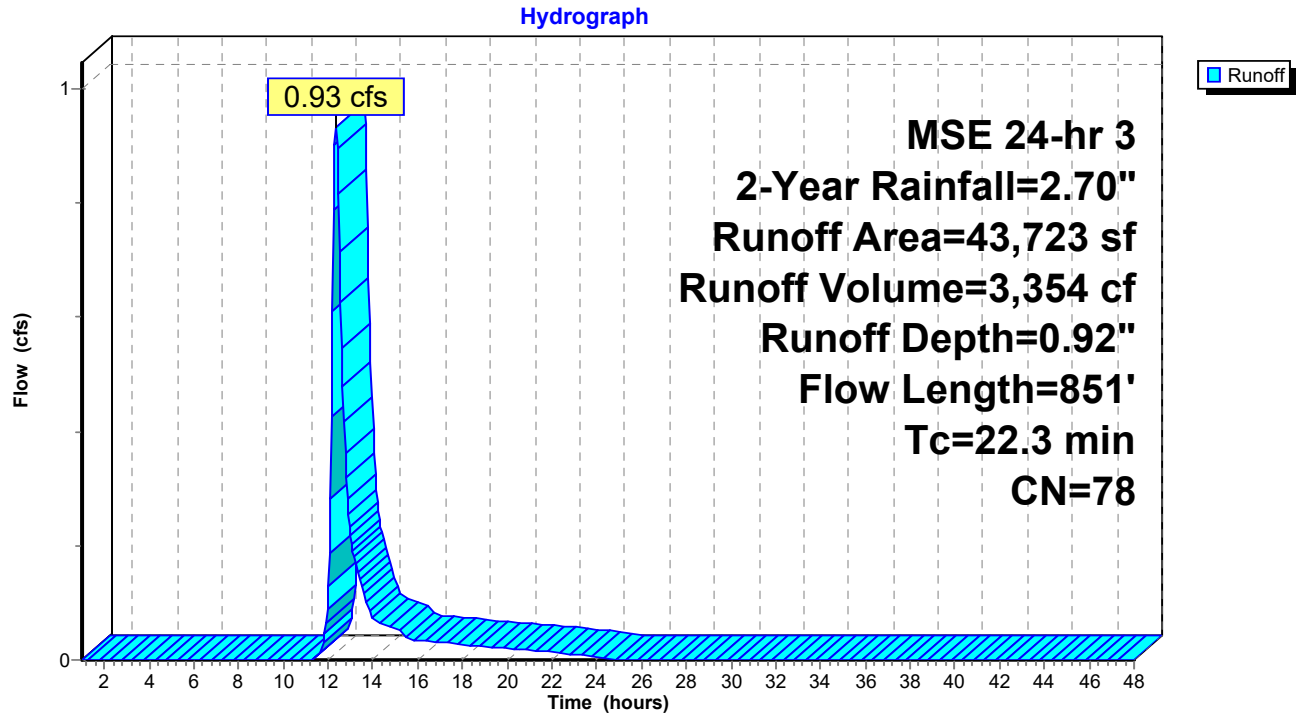
Runoff = 0.93 cfs @ 12.35 hrs, Volume= 3,354 cf, Depth= 0.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	36,454	74	PER
*	7,269	98	IMP
	43,723	78	Weighted Average
	36,454		83.37% Pervious Area
	7,269		16.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0307	0.18		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.9	130	0.0267	1.14		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.9	621	0.0183	0.95		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
22.3	851	Total			

Subcatchment 13S: L



Summary for Subcatchment 14S: M

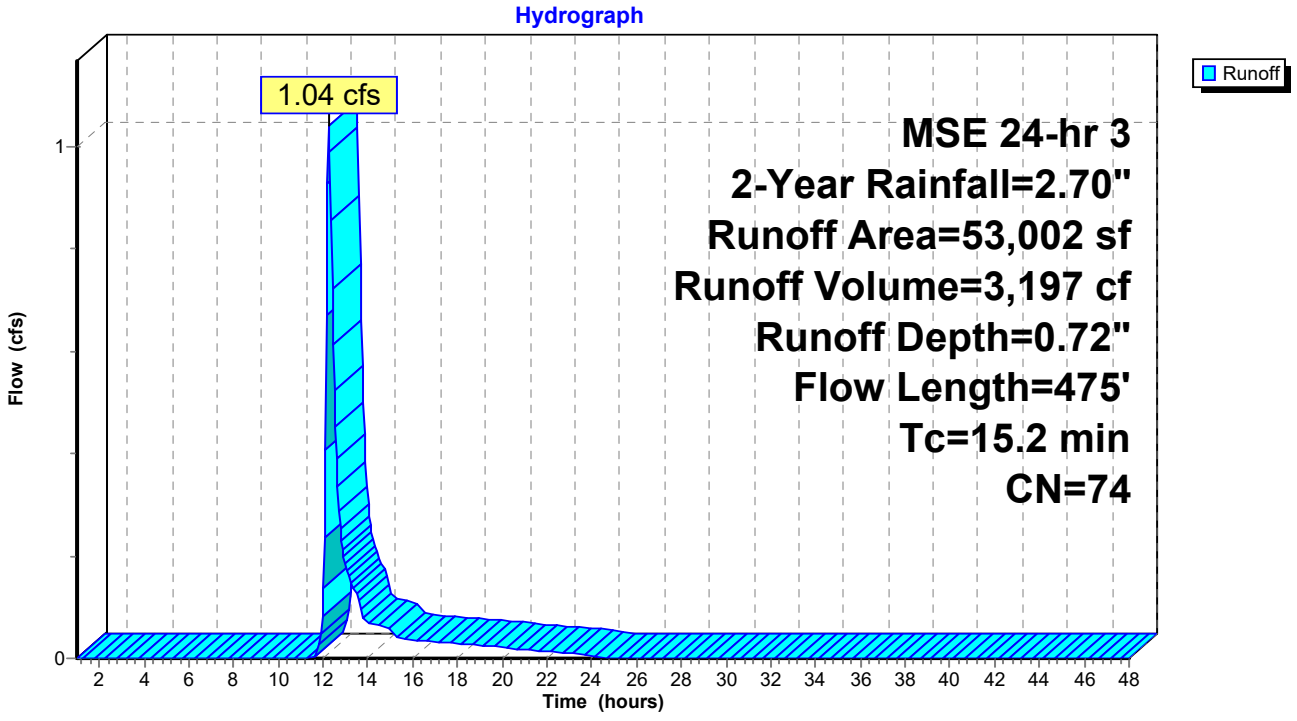
Runoff = 1.04 cfs @ 12.26 hrs, Volume= 3,197 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	53,002	74	PER
	53,002		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	100	0.0403	0.20		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
6.7	375	0.0180	0.94		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.2	475	Total			

Subcatchment 14S: M



Summary for Subcatchment 15S: N

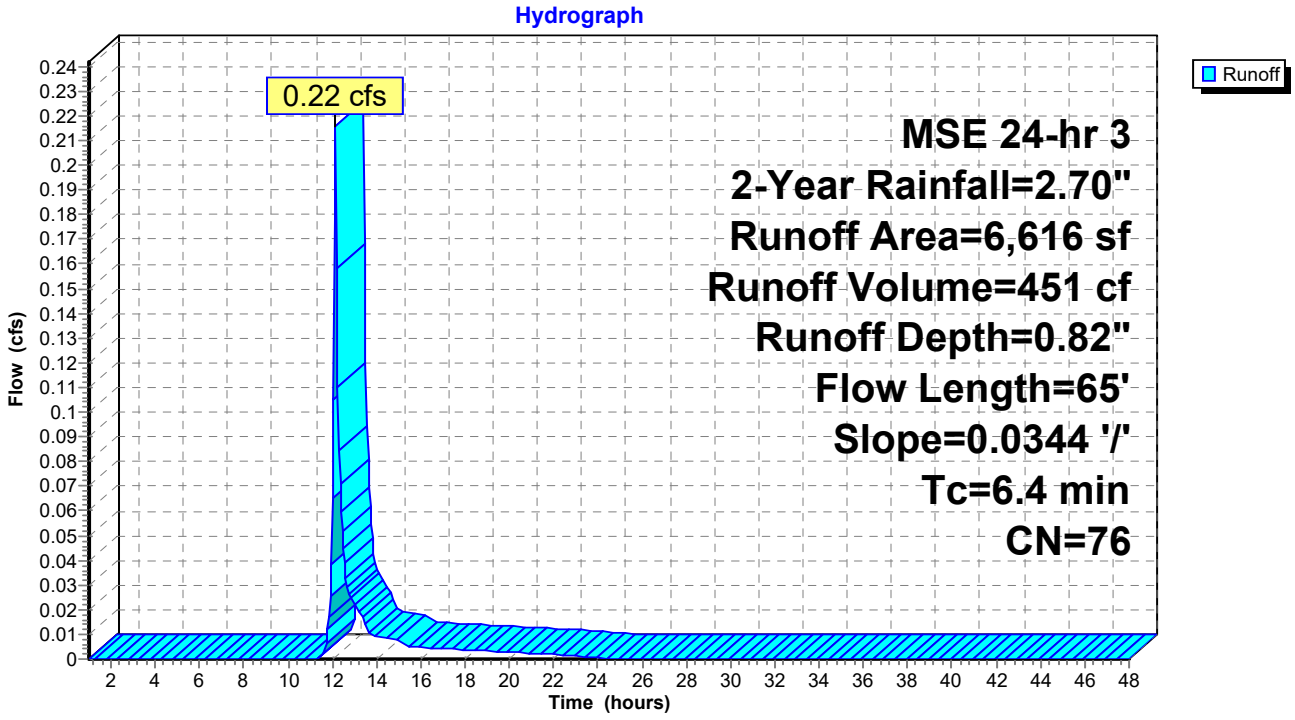
Runoff = 0.22 cfs @ 12.14 hrs, Volume= 451 cf, Depth= 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	6,111	74	PER
*	505	98	IMP
	6,616	76	Weighted Average
	6,111		92.37% Pervious Area
	505		7.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.4	65	0.0344	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 15S: N



Summary for Subcatchment 16S: O

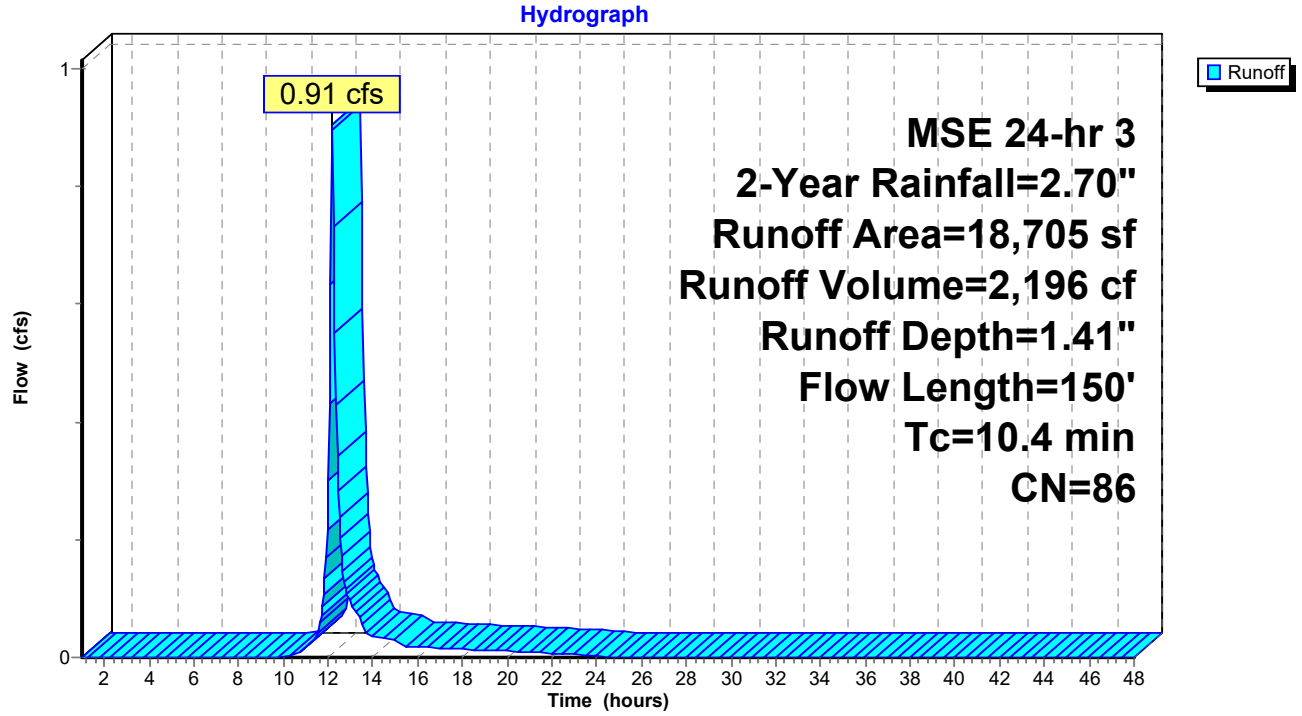
Runoff = 0.91 cfs @ 12.18 hrs, Volume= 2,196 cf, Depth= 1.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	9,468	74	PER
*	4,653	98	IMP
*	4,584	98	ROOF
	18,705	86	Weighted Average
	9,468		50.62% Pervious Area
	9,237		49.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	100	0.0274	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.5	50	0.0080	1.82		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
10.4	150	Total			

Subcatchment 16S: O



Summary for Subcatchment 17S: P

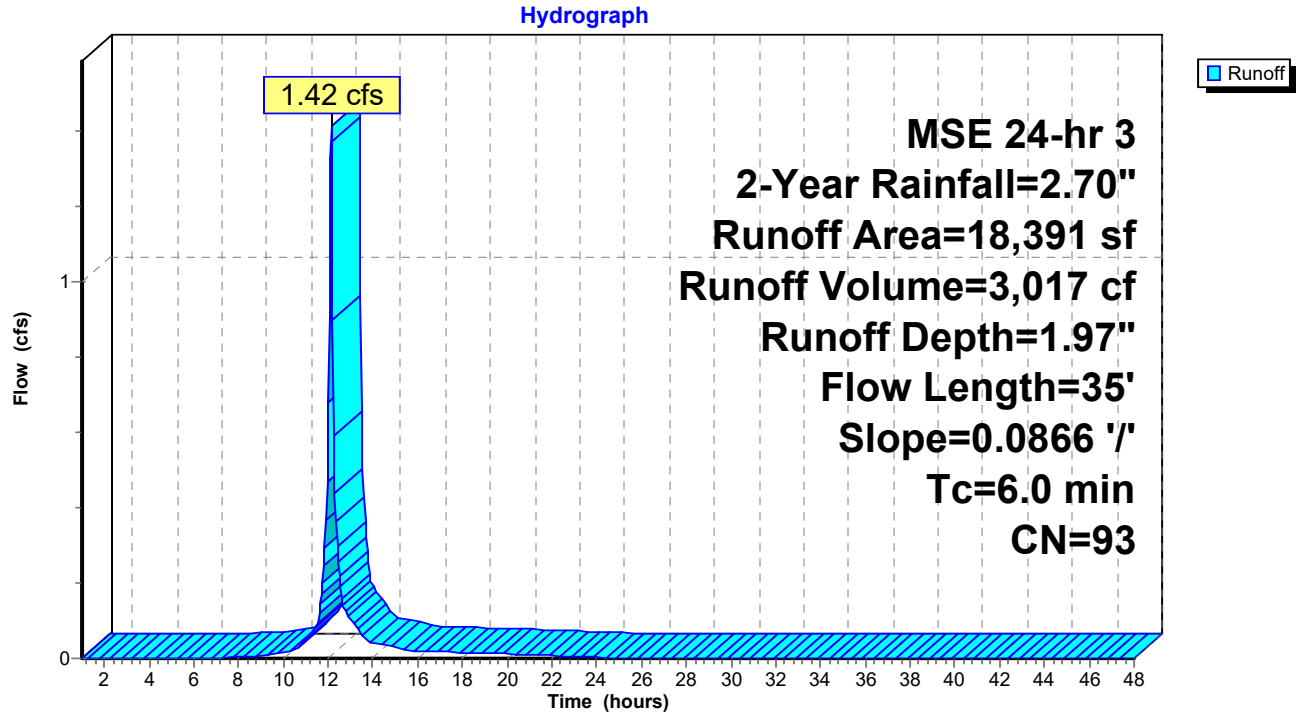
Runoff = 1.42 cfs @ 12.13 hrs, Volume= 3,017 cf, Depth= 1.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	3,636	74	PER
*	878	98	IMP
*	13,877	98	ROOF
	18,391	93	Weighted Average
	3,636		19.77% Pervious Area
	14,755		80.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	35	0.0866	0.22		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
2.7	35	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 17S: P



Summary for Subcatchment 18S: Q

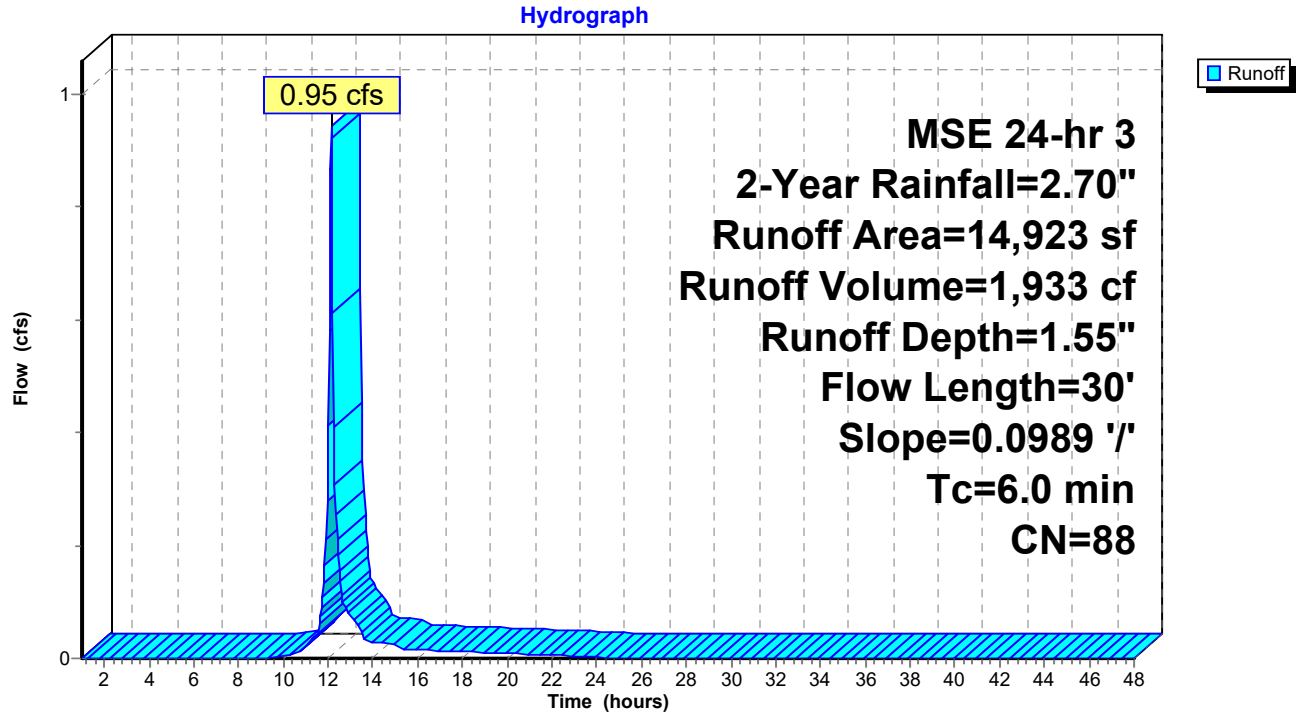
Runoff = 0.95 cfs @ 12.13 hrs, Volume= 1,933 cf, Depth= 1.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	6,396	74	PER
*	1,162	98	IMP
*	7,365	98	ROOF
	14,923	88	Weighted Average
	6,396		42.86% Pervious Area
	8,527		57.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	30	0.0989	0.22		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
2.3	30	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 18S: Q



Summary for Subcatchment 19S: R

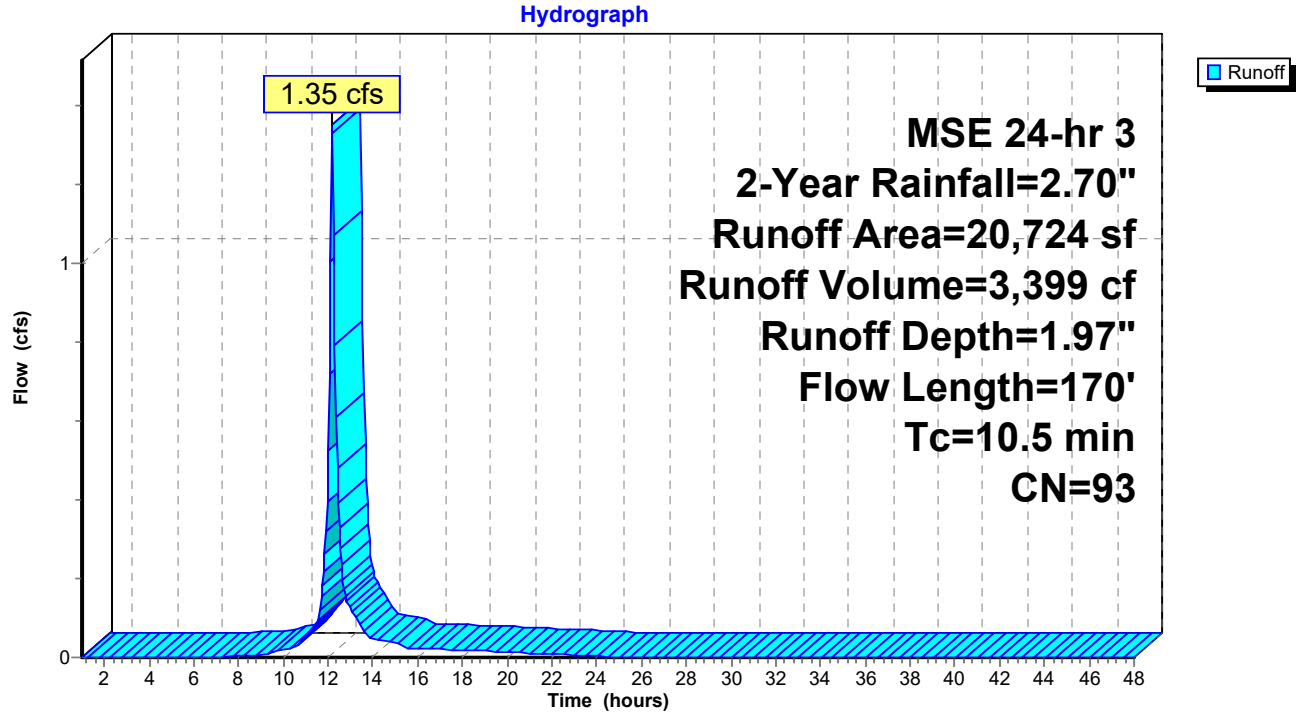
Runoff = 1.35 cfs @ 12.18 hrs, Volume= 3,399 cf, Depth= 1.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	4,279	74	PER
*	5,420	98	IMP
*	11,025	98	ROOF
	20,724	93	Weighted Average
	4,279		20.65% Pervious Area
	16,445		79.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0295	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	70	0.0320	1.25		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.5	170	Total			

Subcatchment 19S: R



Summary for Subcatchment 20S: S

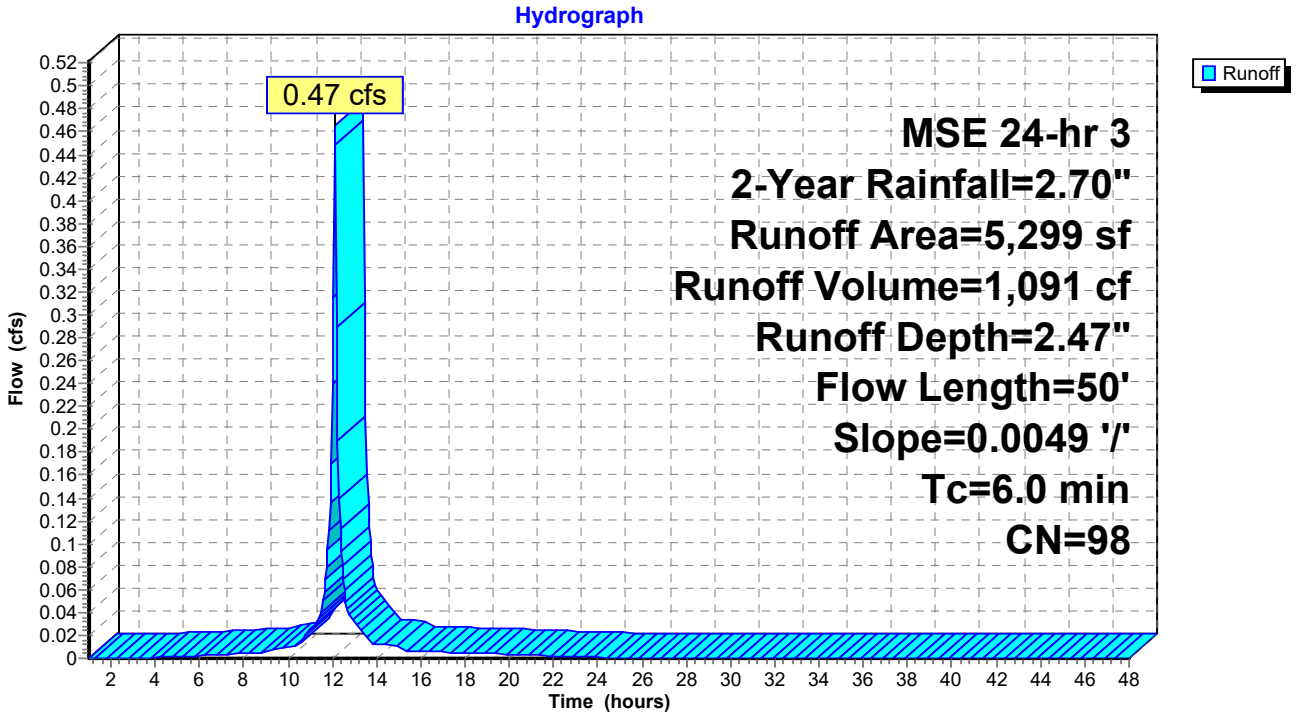
Runoff = 0.47 cfs @ 12.13 hrs, Volume= 1,091 cf, Depth= 2.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	808	98	IMP
*	4,491	98	ROOF
	5,299	98	Weighted Average
	5,299		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	50	0.0049	0.59		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
1.4	50	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 20S: S



Summary for Subcatchment 21S: T

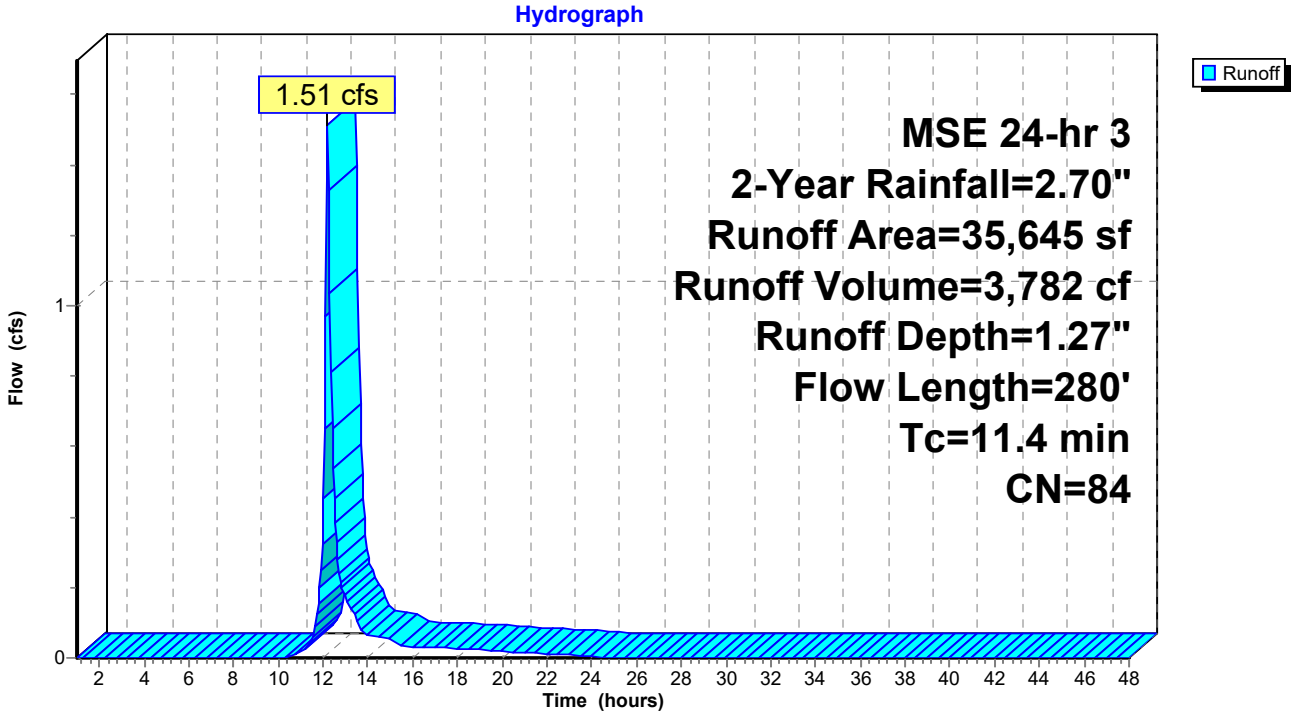
Runoff = 1.51 cfs @ 12.20 hrs, Volume= 3,782 cf, Depth= 1.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	21,454	74	PER
*	14,191	98	IMP
	35,645	84	Weighted Average
	21,454		60.19% Pervious Area
	14,191		39.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	100	0.0272	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.4	180	0.0111	2.14		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
11.4	280	Total			

Subcatchment 21S: T



Summary for Subcatchment 22S: U

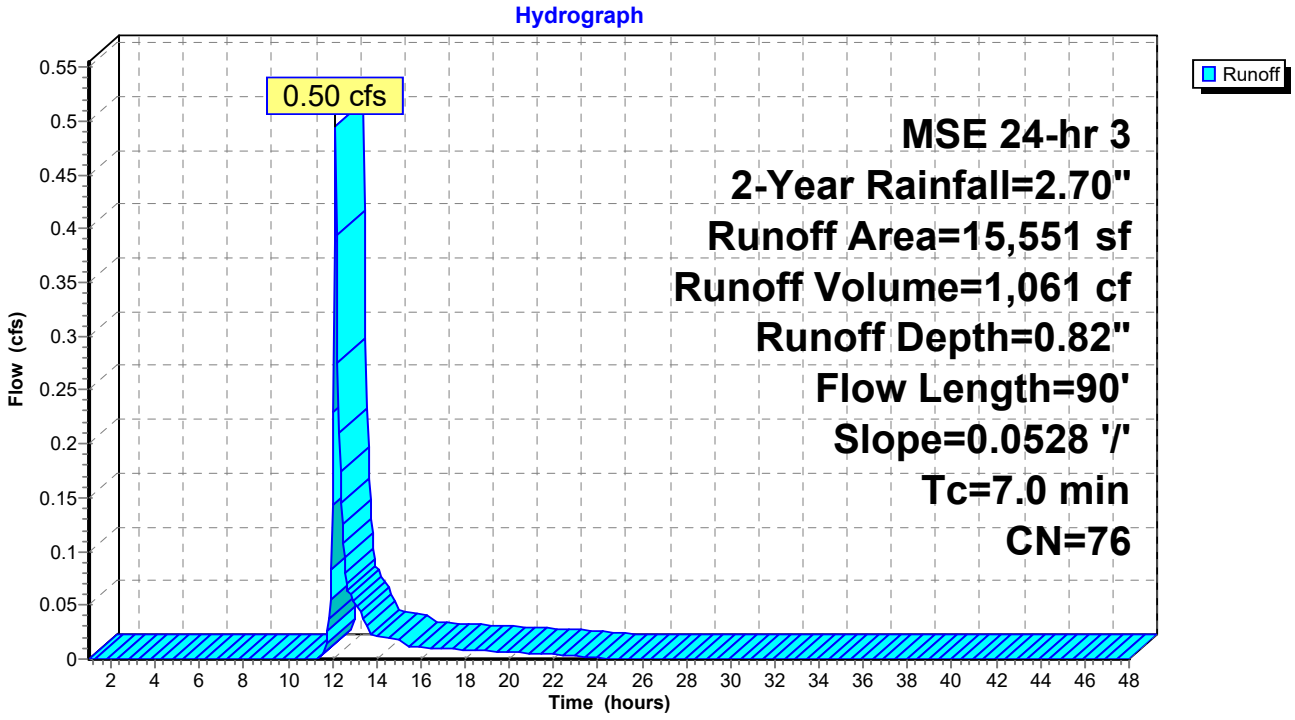
Runoff = 0.50 cfs @ 12.15 hrs, Volume= 1,061 cf, Depth= 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	14,032	74	PER
*	1,519	98	IMP
	15,551	76	Weighted Average
	14,032		90.23% Pervious Area
	1,519		9.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	90	0.0528	0.21		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 22S: U



Summary for Subcatchment 23S: V

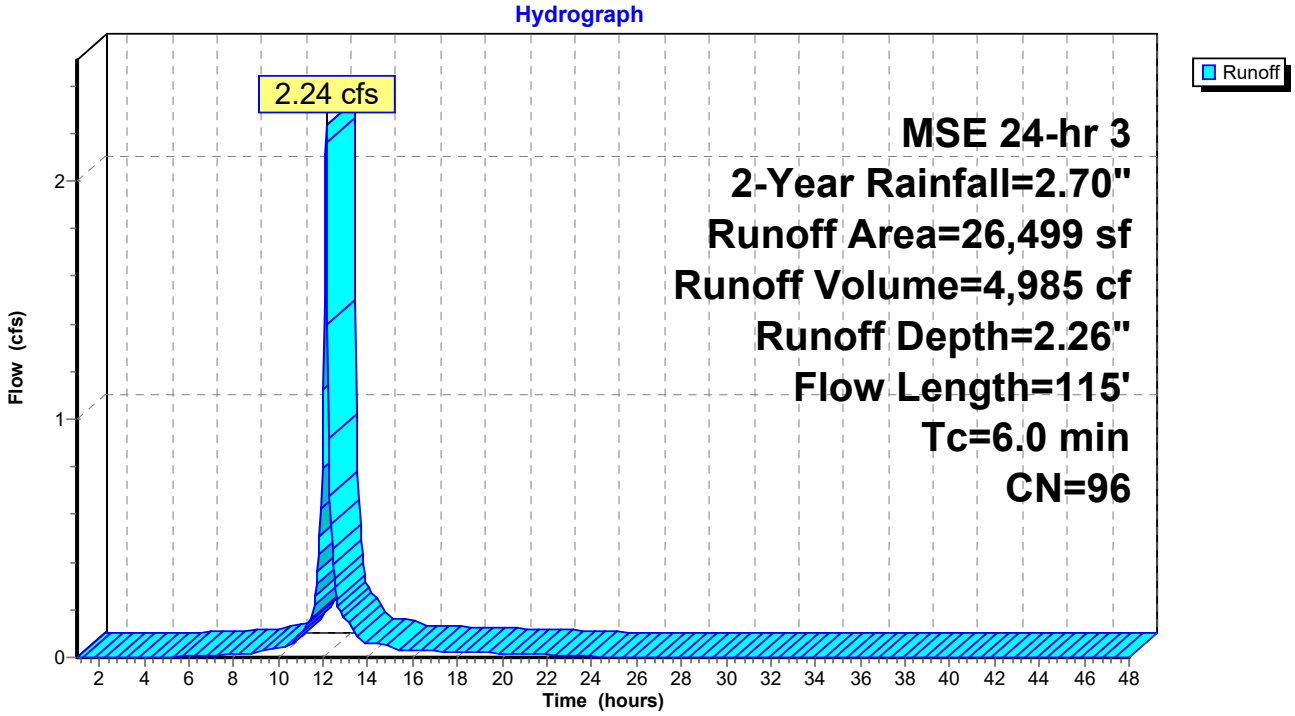
Runoff = 2.24 cfs @ 12.13 hrs, Volume= 4,985 cf, Depth= 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	2,290	74	PER
*	7,676	98	IMP
*	16,533	98	ROOF
	26,499	96	Weighted Average
	2,290		8.64% Pervious Area
	24,209		91.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	45	0.0345	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	70	0.0262	1.24		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
5.7	115	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 23S: V



Summary for Subcatchment 24S: W

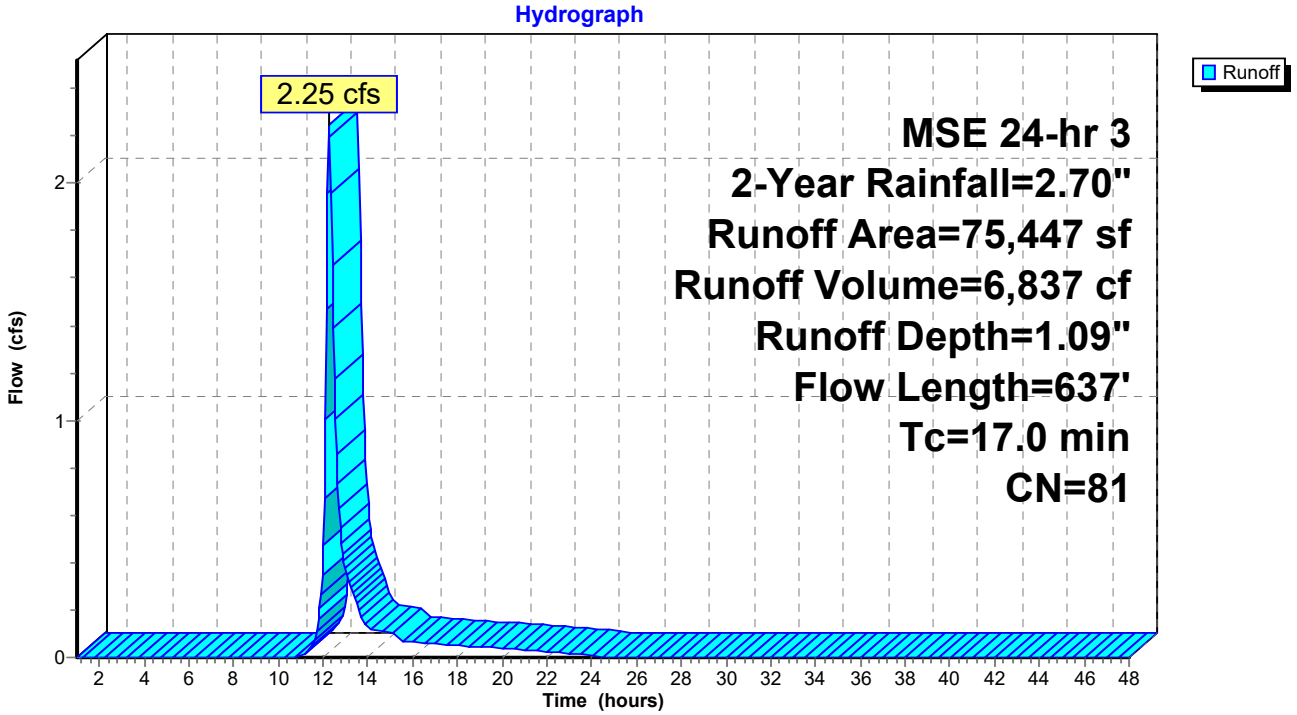
Runoff = 2.25 cfs @ 12.27 hrs, Volume= 6,837 cf, Depth= 1.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	54,767	74	PER
*	17,055	98	IMP
*	3,625	98	ROOF
	75,447	81	Weighted Average
	54,767		72.59% Pervious Area
	20,680		27.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	100	0.0458	0.21		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.2	100	0.0428	1.45		**Shallow Concentrated Flow, SF** Short Grass Pasture Kv= 7.0 fps
7.7	437	0.0183	0.95		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
17.0	637	Total			

Subcatchment 24S: W



Summary for Subcatchment 25S: X

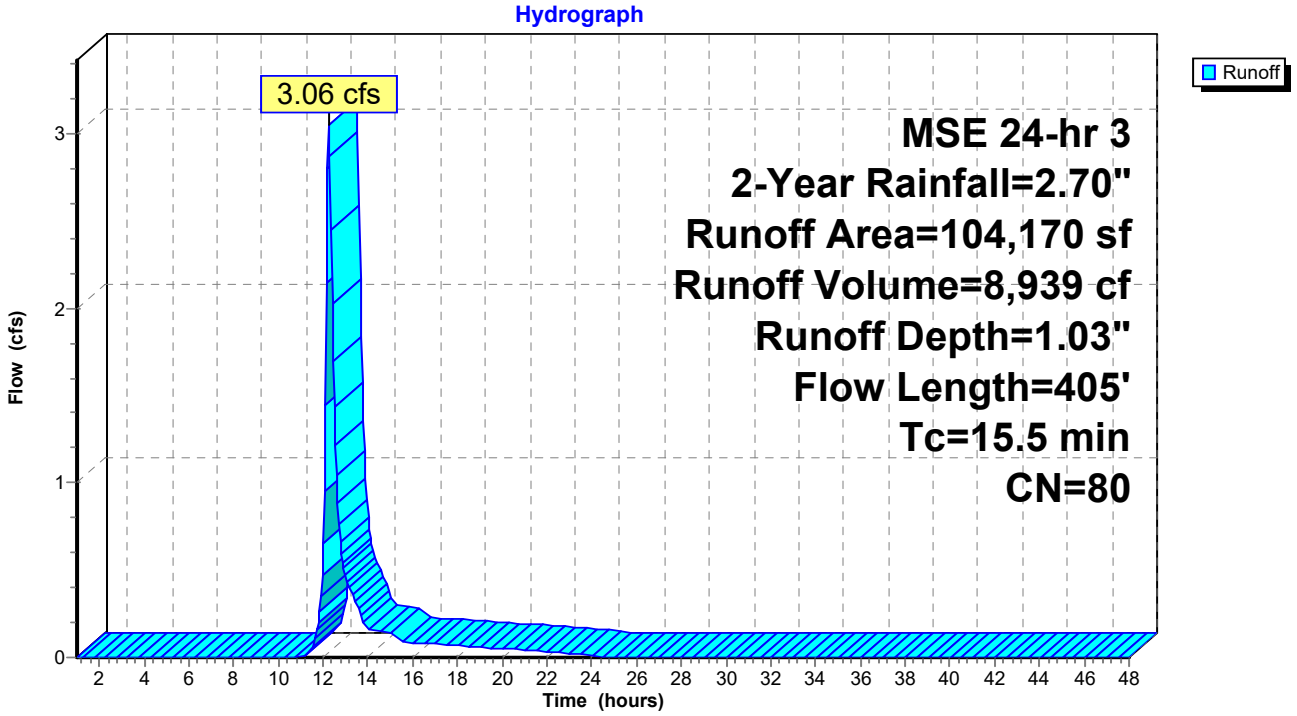
Runoff = 3.06 cfs @ 12.25 hrs, Volume= 8,939 cf, Depth= 1.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	79,699	74	PER
*	21,341	98	IMP
*	3,130	98	ROOF
	104,170	80	Weighted Average
	79,699		76.51% Pervious Area
	24,471		23.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.2	100	0.0205	0.15		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.8	115	0.0234	1.07		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
2.5	190	0.0316	1.24		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
15.5	405	Total			

Subcatchment 25S: X



Summary for Subcatchment 26S: Y

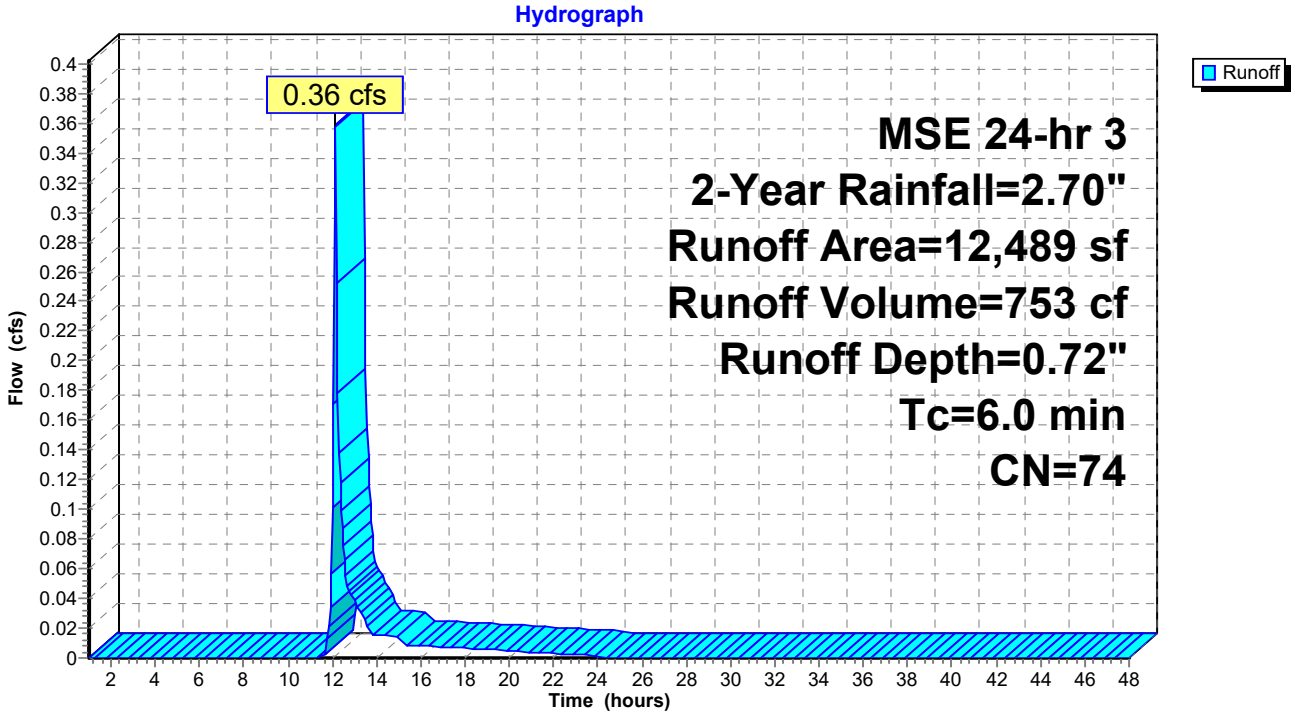
Runoff = 0.36 cfs @ 12.14 hrs, Volume= 753 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	12,489	74	PER
	12,489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, conservative**

Subcatchment 26S: Y



Summary for Subcatchment 27S: Z

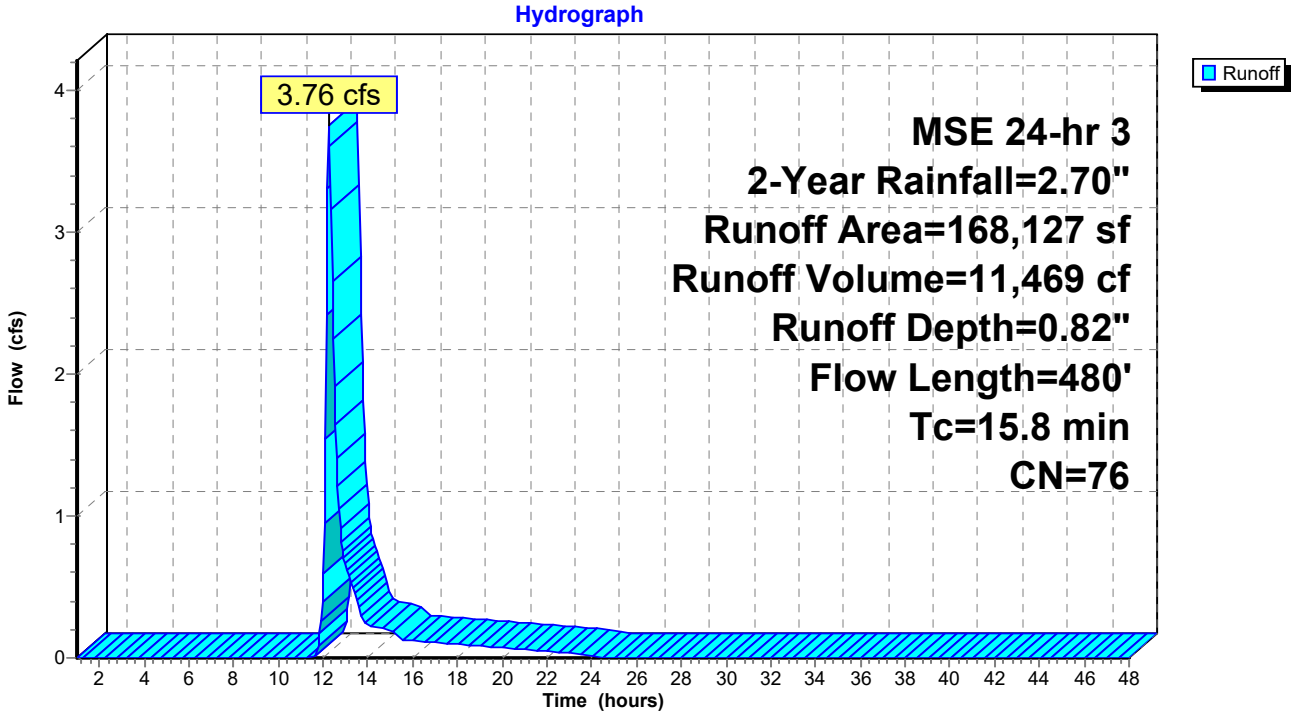
Runoff = 3.76 cfs @ 12.26 hrs, Volume= 11,469 cf, Depth= 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	157,056	74	PER
*	11,071	98	IMP
	168,127	76	Weighted Average
	157,056		93.42% Pervious Area
	11,071		6.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.5	100	0.0237	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
5.3	380	0.0291	1.19		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.8	480	Total			

Subcatchment 27S: Z



Summary for Subcatchment 67S: C2

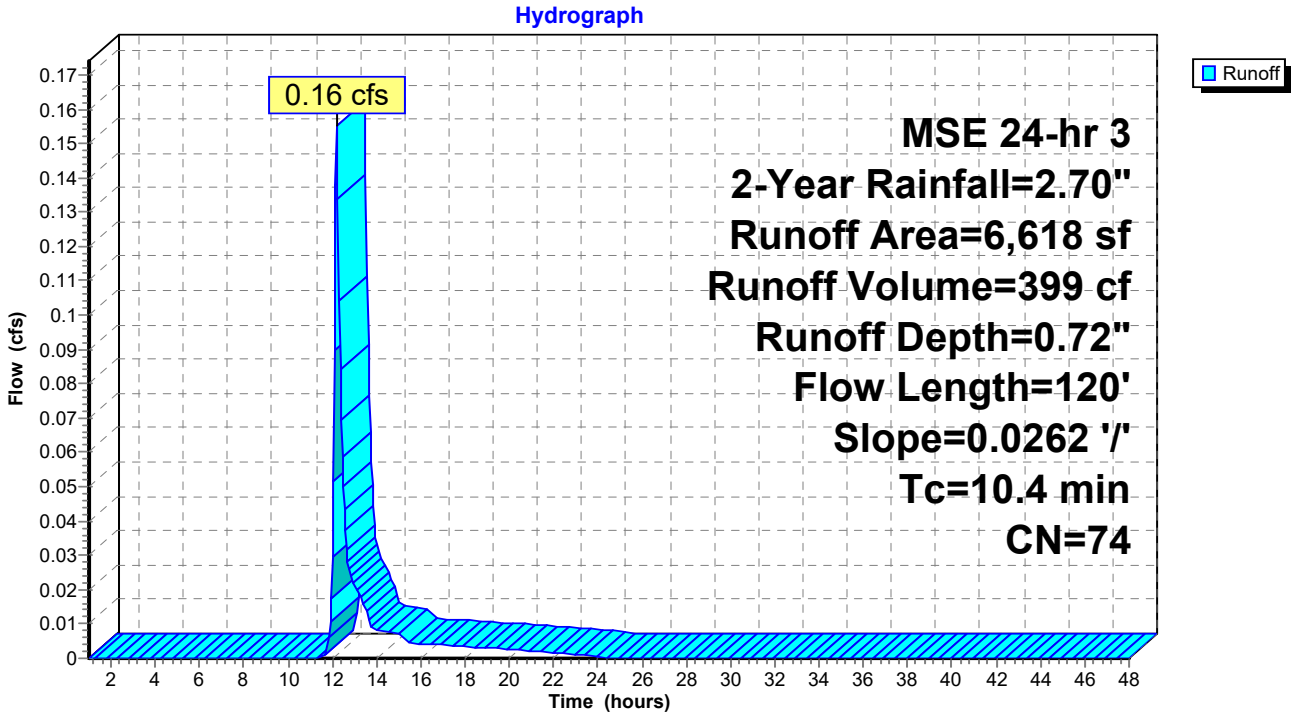
Runoff = 0.16 cfs @ 12.20 hrs, Volume= 399 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	6,618	74	PER
	6,618		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	100	0.0262	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.3	20	0.0262	1.13		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.4	120	Total			

Subcatchment 67S: C2



Summary for Subcatchment 68S: C4

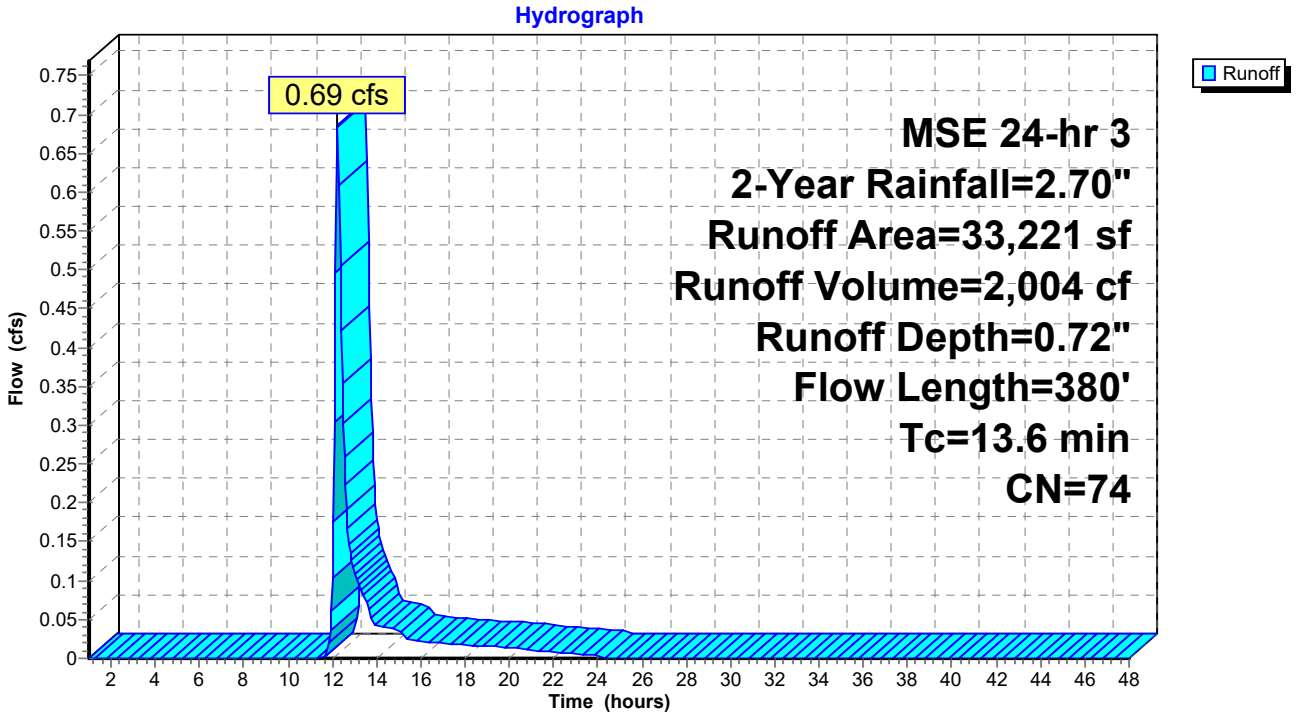
Runoff = 0.69 cfs @ 12.24 hrs, Volume= 2,004 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	33,221	74	PER
	33,221		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.0319	0.18		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
4.3	280	0.0235	1.07		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
13.6	380	Total			

Subcatchment 68S: C4



Summary for Subcatchment 69S: C3

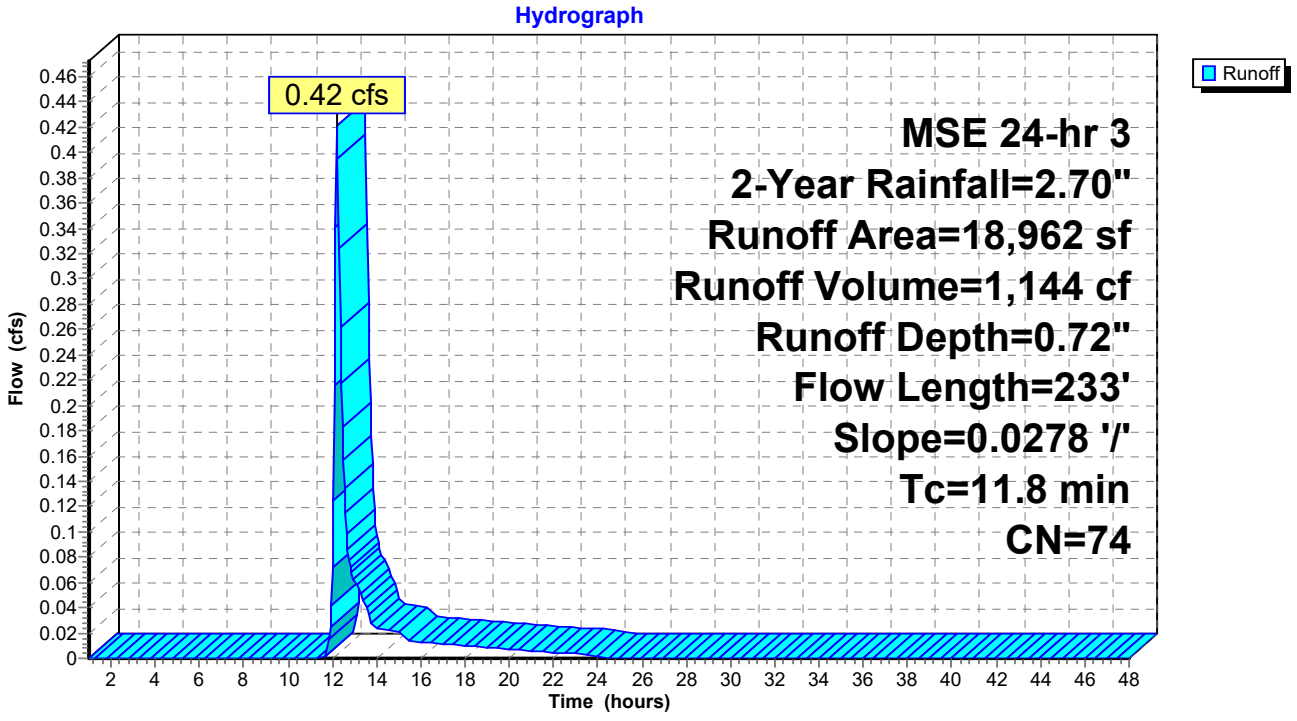
Runoff = 0.42 cfs @ 12.21 hrs, Volume= 1,144 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	18,962	74	PER
	18,962		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	100	0.0278	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.9	133	0.0278	1.17		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
11.8	233	Total			

Subcatchment 69S: C3



Summary for Subcatchment 70S: O1

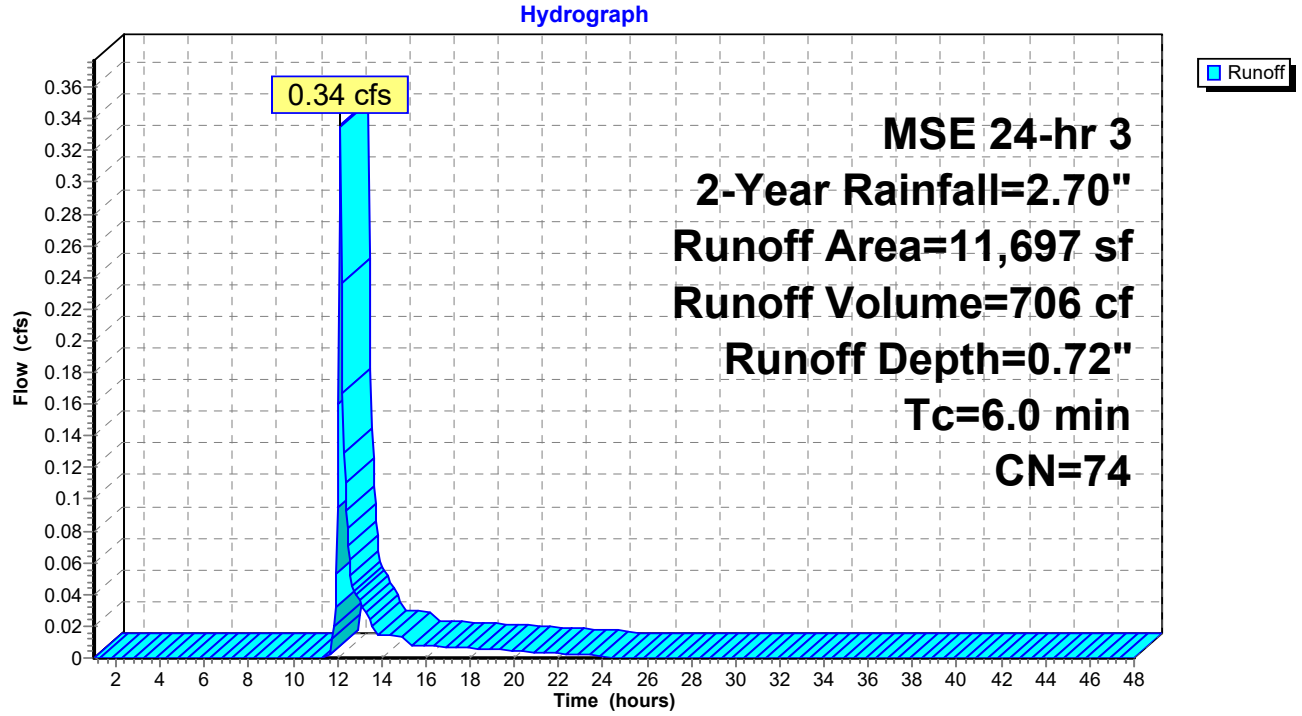
Runoff = 0.34 cfs @ 12.14 hrs, Volume= 706 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	11,697	74	PERV
	11,697		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 70S: O1



Summary for Subcatchment 71S: O2

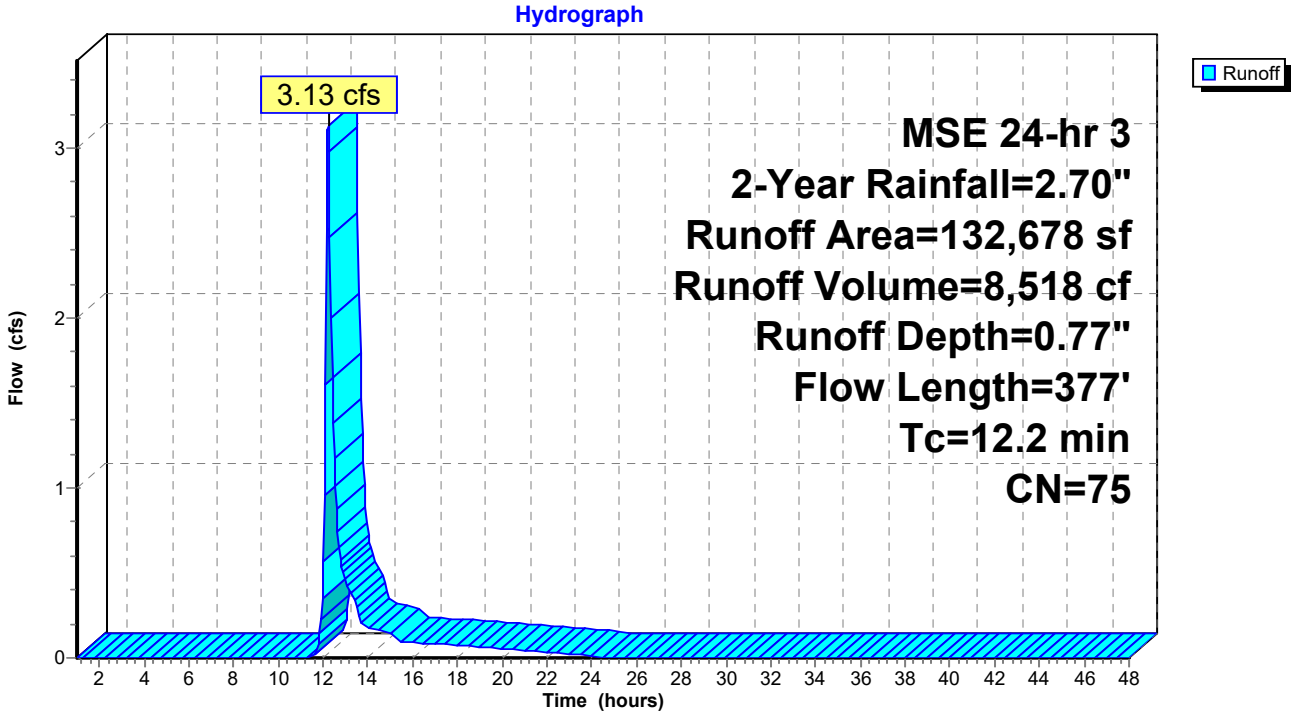
Runoff = 3.13 cfs @ 12.22 hrs, Volume= 8,518 cf, Depth= 0.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.70"

	Area (sf)	CN	Description
*	129,638	74	PERV
*	3,040	98	IMPERV
	132,678	75	Weighted Average
	129,638		97.71% Pervious Area
	3,040		2.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	77	0.0288	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
4.3	300	0.0135	1.16		**Shallow Concentrated Flow, SHALLOW CONC** Nearly Bare & Untilled Kv= 10.0 fps
12.2	377	Total			

Subcatchment 71S: O2



Summary for Reach 93R: Overland Flow from North Depression to South Depression

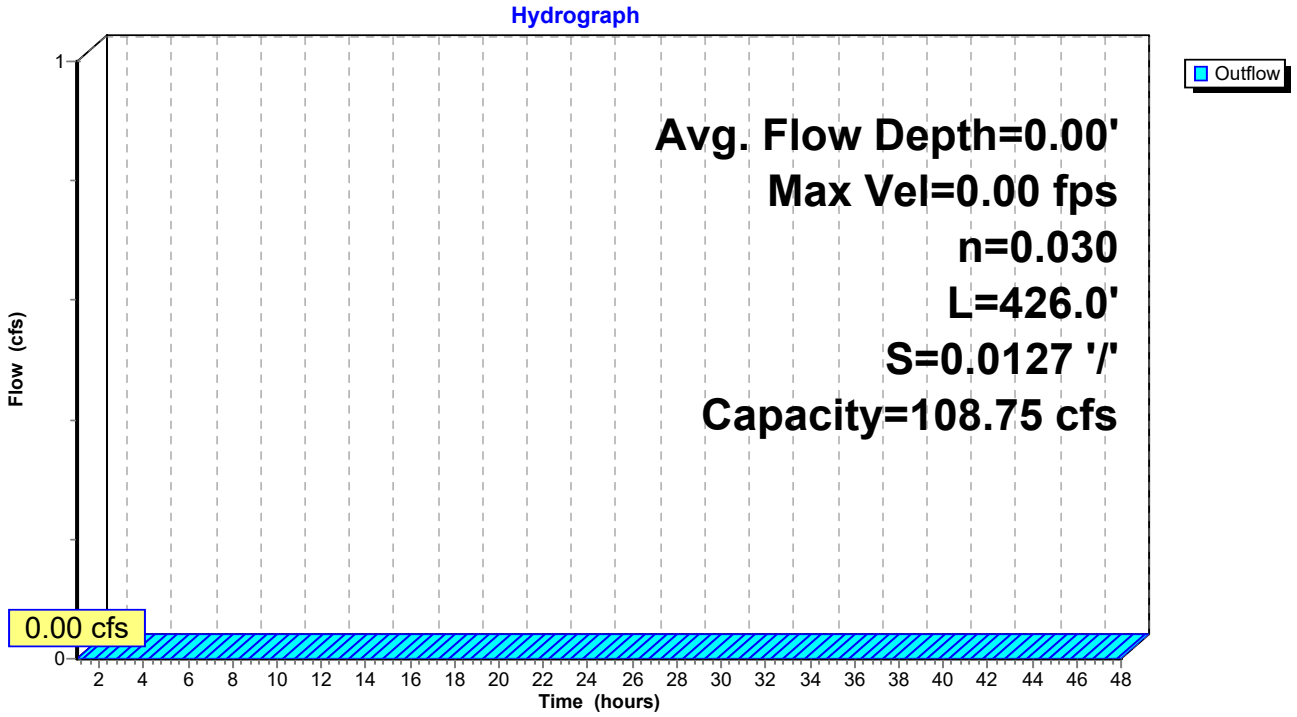
[43] Hint: Has no inflow (Outflow=Zero)

Bank-Full Depth= 0.50' Flow Area= 37.5 sf, Capacity= 108.75 cfs

50.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 50.0 '/' Top Width= 100.00'
Length= 426.0' Slope= 0.0127 '/'
Inlet Invert= 755.90', Outlet Invert= 750.50'

‡

Reach 93R: Overland Flow from North Depression to South Depression



Summary for Pond 73P: Southeast Basin

Inflow Area = 589,000 sf, 14.01% Impervious, Inflow Depth = 0.19" for 2-Year event
Inflow = 3.04 cfs @ 12.26 hrs, Volume= 9,437 cf
Outflow = 0.77 cfs @ 12.75 hrs, Volume= 9,437 cf, Atten= 75%, Lag= 29.4 min
Discarded = 0.77 cfs @ 12.75 hrs, Volume= 9,437 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 730.67' @ 12.75 hrs Surf.Area= 6,344 sf Storage= 3,071 cf

Plug-Flow detention time= 40.1 min calculated for 9,427 cf (100% of inflow)
Center-of-Mass det. time= 40.1 min (886.0 - 845.9)

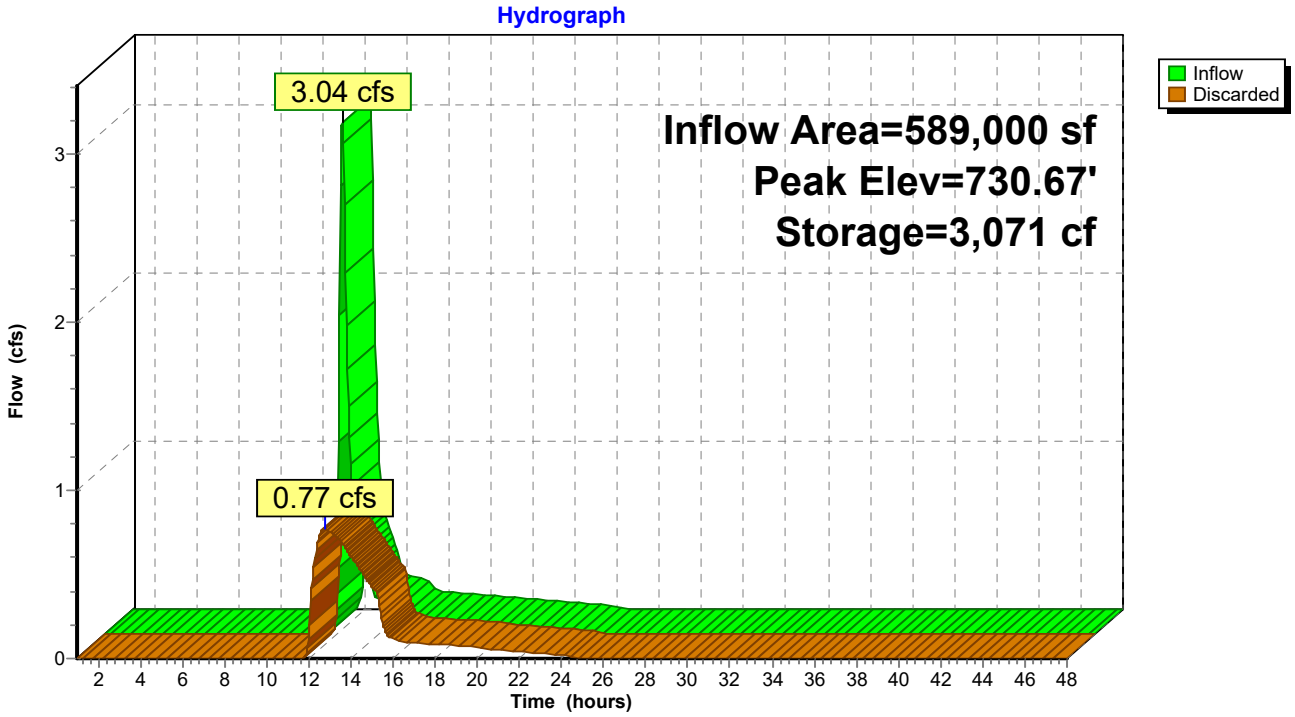
Volume	Invert	Avail.Storage	Storage Description
#1	730.00'	273,743 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
730.00	2,768	0	0
731.00	8,073	5,421	5,421
732.00	12,399	10,236	15,657
733.00	17,056	14,728	30,384
734.00	21,328	19,192	49,576
735.00	25,607	23,468	73,044
736.00	29,845	27,726	100,770
737.00	35,145	32,495	133,265
738.00	42,680	38,913	172,177
739.00	51,064	46,872	219,049
740.00	58,323	54,694	273,743

Device	Routing	Invert	Outlet Devices
#1	Discarded	730.00'	**5.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 720.00'

Discarded OutFlow Max=0.77 cfs @ 12.75 hrs HW=730.67' (Free Discharge)
↑**1=Exfiltration** (Controls 0.77 cfs)

Pond 73P: Southeast Basin



Summary for Pond 74P: Southwest Basin

Inflow Area = 432,562 sf, 19.07% Impervious, Inflow Depth = 0.98" for 2-Year event
Inflow = 10.98 cfs @ 12.27 hrs, Volume= 35,431 cf
Outflow = 2.88 cfs @ 12.77 hrs, Volume= 35,431 cf, Atten= 74%, Lag= 29.9 min
Discarded = 2.88 cfs @ 12.77 hrs, Volume= 35,431 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 742.65' @ 12.77 hrs Surf.Area= 14,939 sf Storage= 13,637 cf

Plug-Flow detention time= 70.6 min calculated for 35,393 cf (100% of inflow)
Center-of-Mass det. time= 70.6 min (902.8 - 832.3)

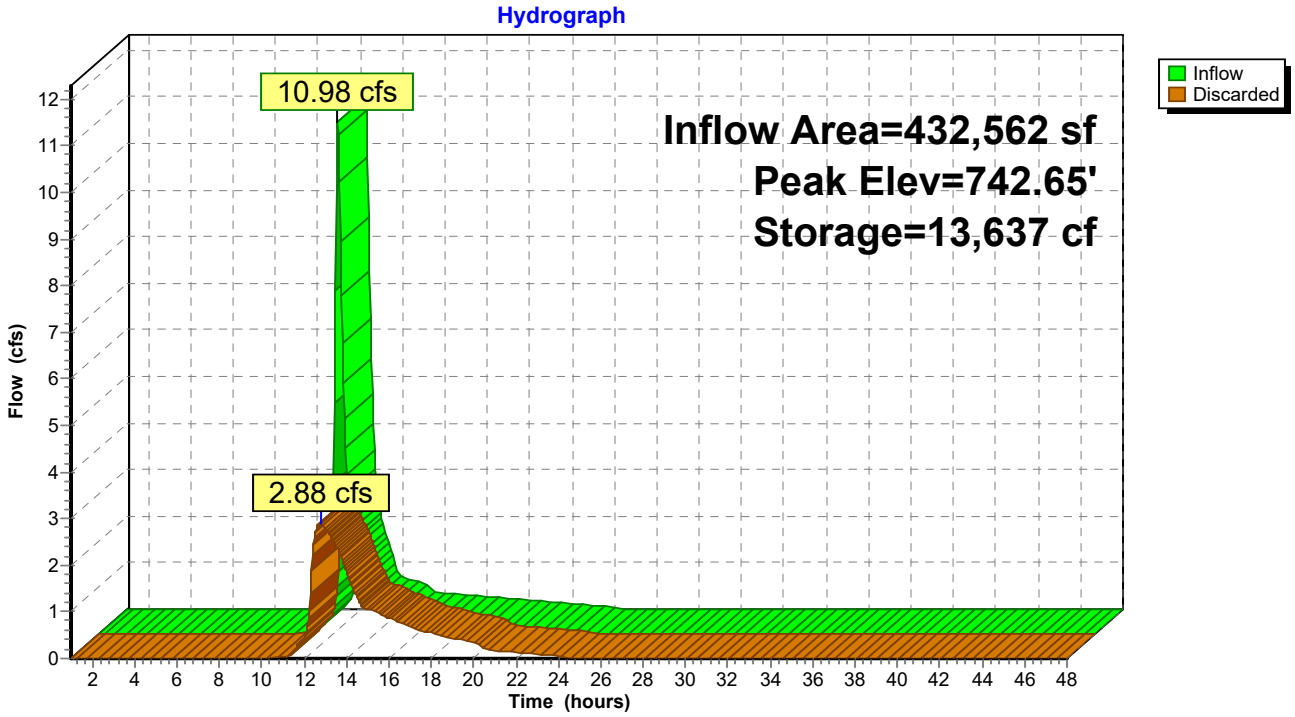
Volume	Invert	Avail.Storage	Storage Description
#1	740.00'	78,856 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
740.00	1,591	0	0
741.00	3,325	2,458	2,458
742.00	5,645	4,485	6,943
743.00	19,935	12,790	19,733
744.00	30,884	25,410	45,143
745.00	36,542	33,713	78,856

Device	Routing	Invert	Outlet Devices
#1	Discarded	740.00'	**8.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 720.00'

Discarded OutFlow Max=2.88 cfs @ 12.77 hrs HW=742.65' (Free Discharge)
↑**1=Exfiltration** (Controls 2.88 cfs)

Pond 74P: Southwest Basin



Summary for Pond 89P: Gravel North Depression

[93] Warning: Storage range exceeded by 0.40'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 235,181 sf, 19.95% Impervious, Inflow Depth = 1.00" for 2-Year event
Inflow = 7.38 cfs @ 12.18 hrs, Volume= 19,620 cf
Outflow = 8.59 cfs @ 12.16 hrs, Volume= 19,620 cf, Atten= 0%, Lag= 0.0 min
Discarded = 0.45 cfs @ 12.15 hrs, Volume= 6,471 cf
Primary = 2.21 cfs @ 12.12 hrs, Volume= 9,486 cf
Secondary = 6.03 cfs @ 12.16 hrs, Volume= 3,663 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 756.40' @ 12.16 hrs Surf.Area= 1,161 sf Storage= 808 cf

Plug-Flow detention time= 3.3 min calculated for 19,599 cf (100% of inflow)
Center-of-Mass det. time= 3.3 min (825.0 - 821.7)

Volume	Invert	Avail.Storage	Storage Description
#1	754.80'	808 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
754.80	237	0	0
755.50	725	337	337
756.00	1,161	472	808

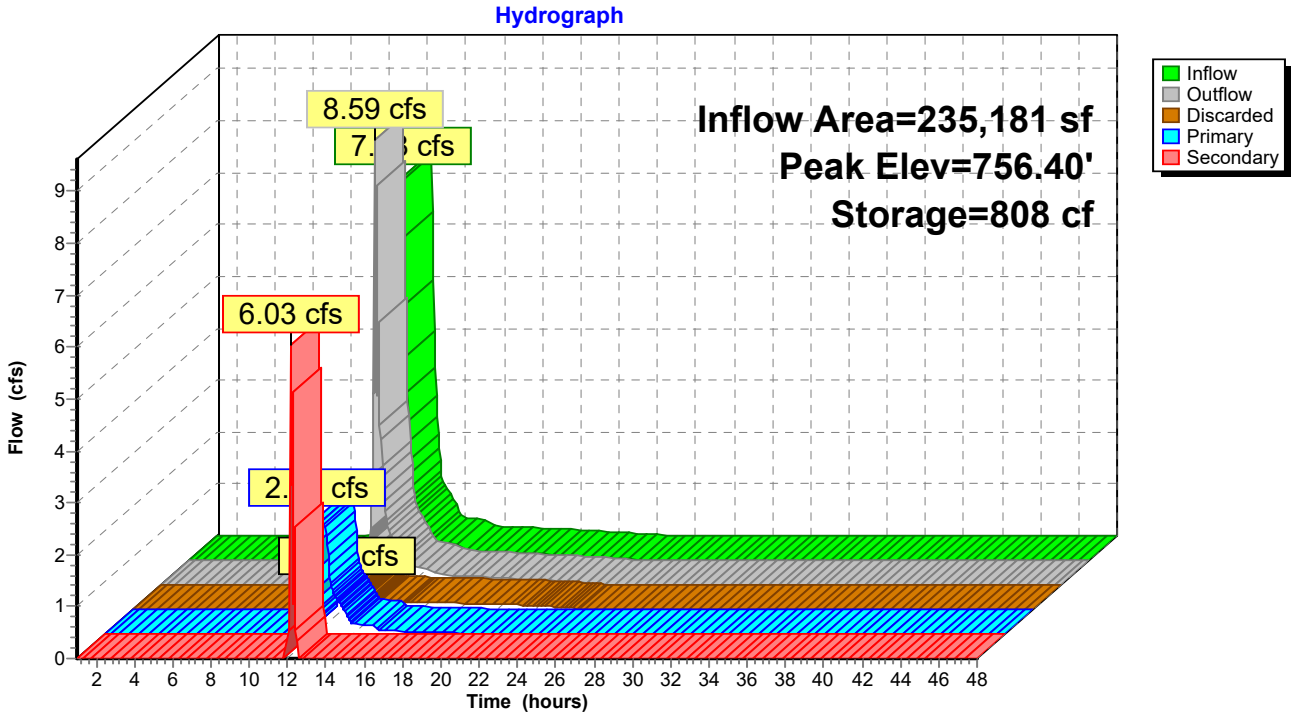
Device	Routing	Invert	Outlet Devices
#1	Primary	754.80'	**12.0" Round Culvert** L= 426.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 754.80' / 749.60' S= 0.0122 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.79 sf
#2	Secondary	755.80'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#3	Discarded	754.80'	**16.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 725.00'

Discarded OutFlow Max=0.45 cfs @ 12.15 hrs HW=756.39' (Free Discharge)
↑**3=Exfiltration** (Controls 0.45 cfs)

Primary OutFlow Max=2.07 cfs @ 12.12 hrs HW=756.14' (Free Discharge)
↑**1=Culvert** (Barrel Controls 2.07 cfs @ 2.64 fps)

Secondary OutFlow Max=5.52 cfs @ 12.16 hrs HW=756.36' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 5.52 cfs @ 1.96 fps)

Pond 89P: Gravel North Depression



Summary for Pond 92P: Gravel South Depression

[93] Warning: Storage range exceeded by 0.75'
[85] Warning: Oscillations may require smaller dt or Finer Routing (severity=28)
[61] Hint: Exceeded Reach 93R outlet invert by 2.24' @ 12.15 hrs
[79] Warning: Submerged Pond 89P Primary device # 1 OUTLET by 3.14'

Inflow Area = 288,183 sf, 16.28% Impervious, Inflow Depth = 0.68" for 2-Year event
Inflow = 8.86 cfs @ 12.16 hrs, Volume= 16,346 cf
Outflow = 8.50 cfs @ 12.16 hrs, Volume= 16,346 cf, Atten= 4%, Lag= 0.1 min
Primary = 8.39 cfs @ 12.16 hrs, Volume= 13,379 cf
Secondary = 0.10 cfs @ 12.16 hrs, Volume= 2,968 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 752.75' @ 12.16 hrs Surf.Area= 253 sf Storage= 387 cf

Plug-Flow detention time= 9.7 min calculated for 16,329 cf (100% of inflow)
Center-of-Mass det. time= 9.7 min (793.5 - 783.8)

Volume	Invert	Avail.Storage	Storage Description
#1	749.60'	387 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

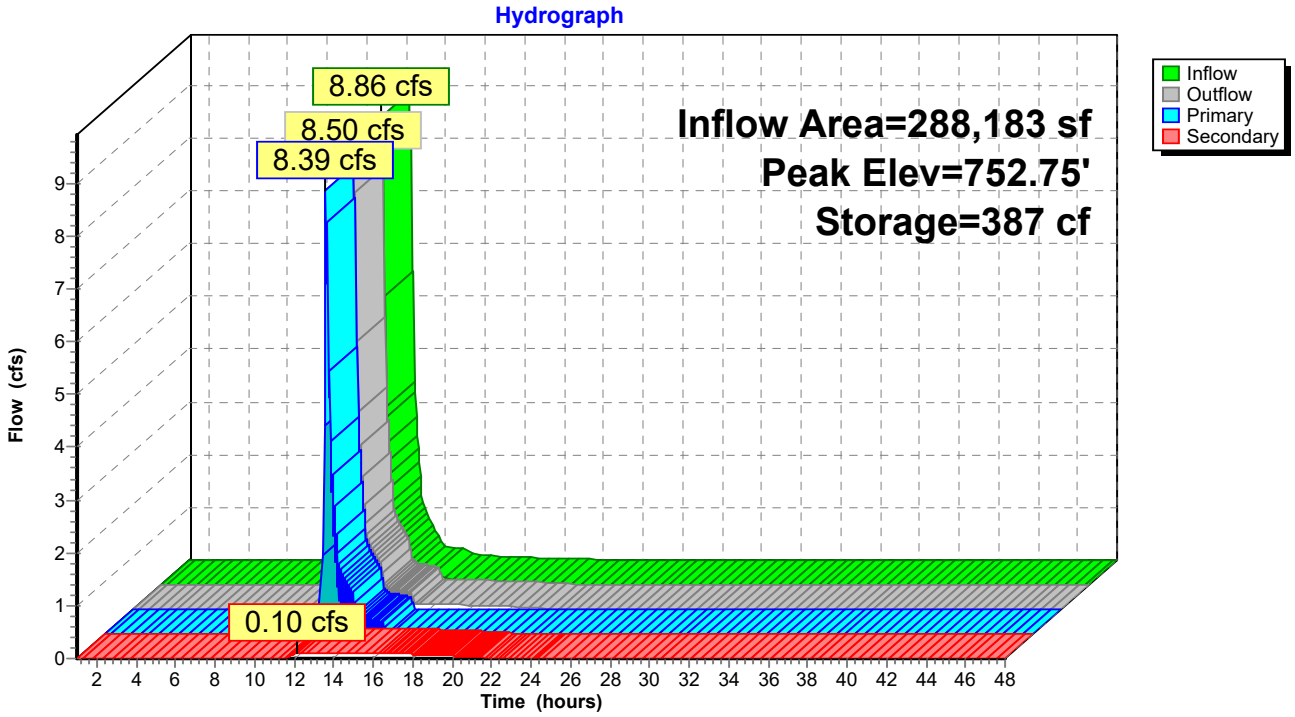
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
749.60	30	0	0
750.00	107	27	27
752.00	253	360	387

Device	Routing	Invert	Outlet Devices
#1	Primary	752.00'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#2	Secondary	749.60'	**16.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 725.00'

Primary OutFlow Max=7.87 cfs @ 12.16 hrs HW=752.71' (Free Discharge)
1=Broad-Crested Rectangular Weir (Weir Controls 7.87 cfs @ 2.20 fps)

Secondary OutFlow Max=0.10 cfs @ 12.16 hrs HW=752.71' (Free Discharge)
2=Exfiltration (Controls 0.10 cfs)

Pond 92P: Gravel South Depression

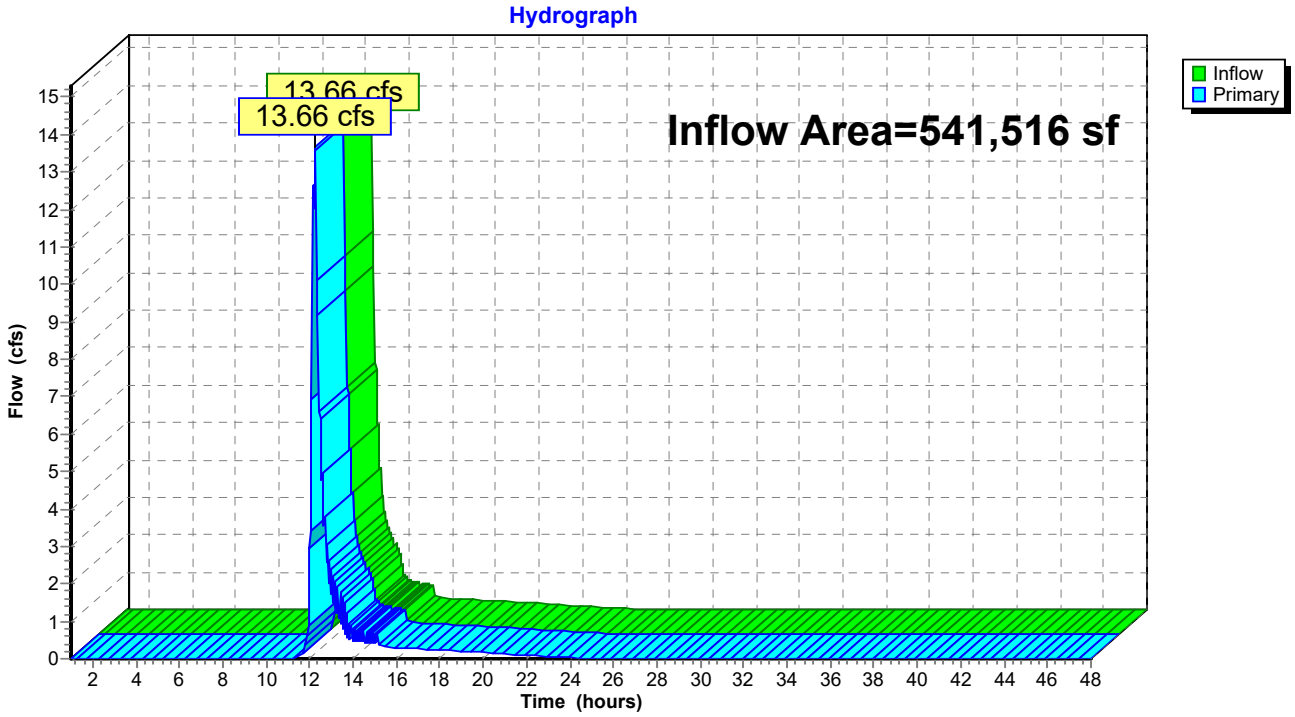


Summary for Link 32L: TOTAL OFFSITE UNTREATED

Inflow Area = 541,516 sf, 15.80% Impervious, Inflow Depth = 0.78" for 2-Year event
Inflow = 13.66 cfs @ 12.24 hrs, Volume= 35,352 cf
Primary = 13.66 cfs @ 12.24 hrs, Volume= 35,352 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 32L: TOTAL OFFSITE UNTREATED

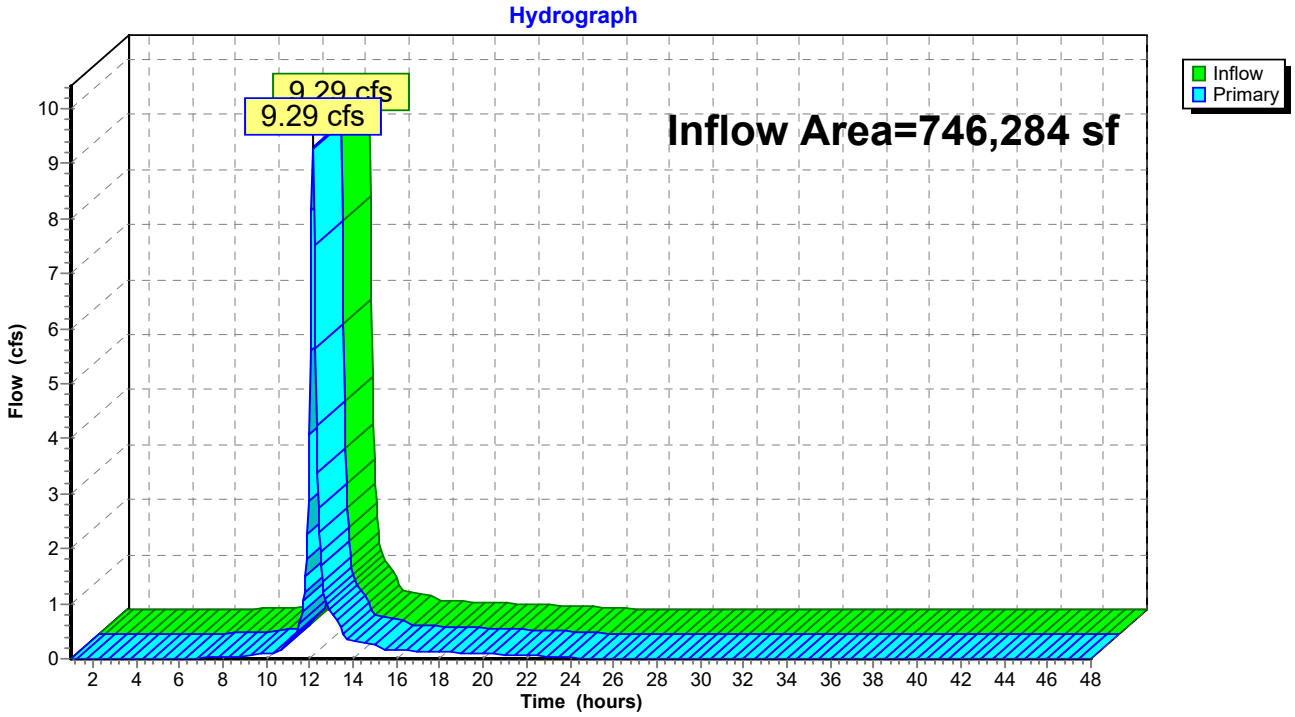


Summary for Link 33L: TOTAL ONSITE

Inflow Area = 746,284 sf, 24.37% Impervious, Inflow Depth = 0.36" for 2-Year event
Inflow = 9.29 cfs @ 12.14 hrs, Volume= 22,210 cf
Primary = 9.29 cfs @ 12.14 hrs, Volume= 22,210 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 33L: TOTAL ONSITE

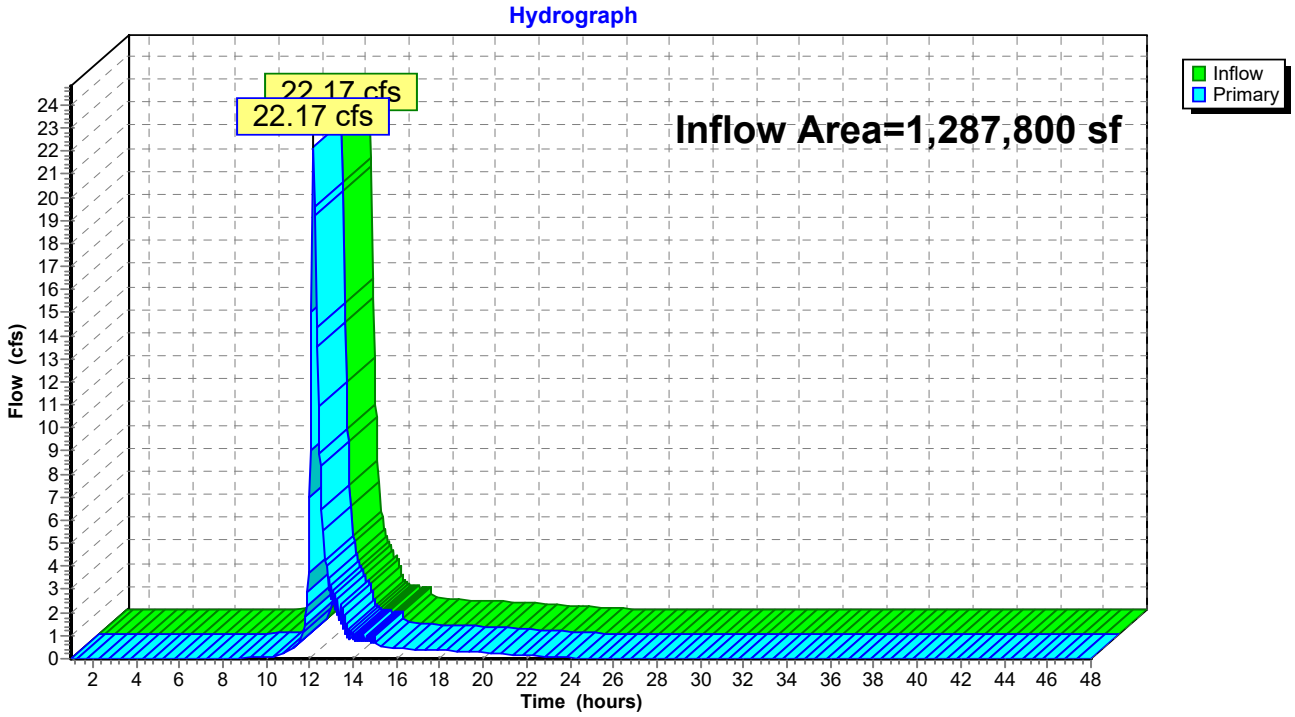


Summary for Link 34L: TOTAL OUTFALL

Inflow Area = 1,287,800 sf, 20.77% Impervious, Inflow Depth = 0.54" for 2-Year event
Inflow = 22.17 cfs @ 12.16 hrs, Volume= 57,563 cf
Primary = 22.17 cfs @ 12.16 hrs, Volume= 57,563 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 34L: TOTAL OUTFALL

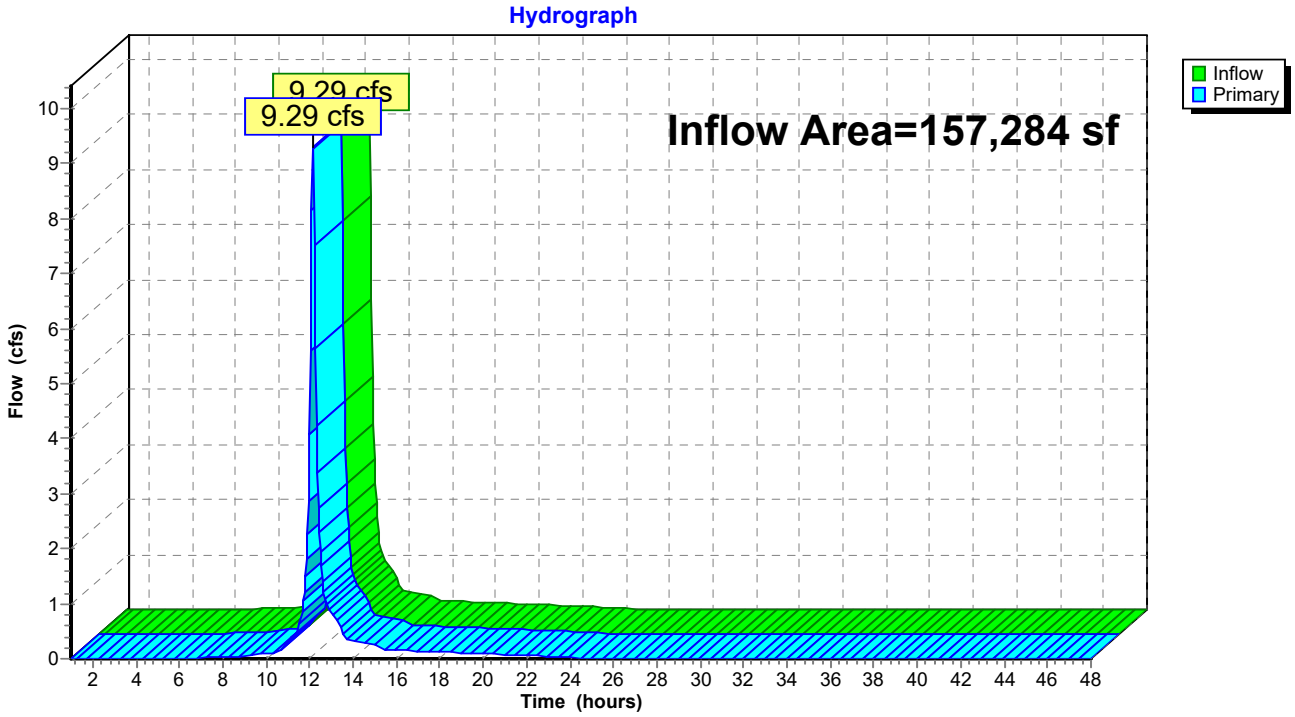


Summary for Link 75L: Areas Piped

Inflow Area = 157,284 sf, 63.18% Impervious, Inflow Depth = 1.69" for 2-Year event
Inflow = 9.29 cfs @ 12.14 hrs, Volume= 22,210 cf
Primary = 9.29 cfs @ 12.14 hrs, Volume= 22,210 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 75L: Areas Piped

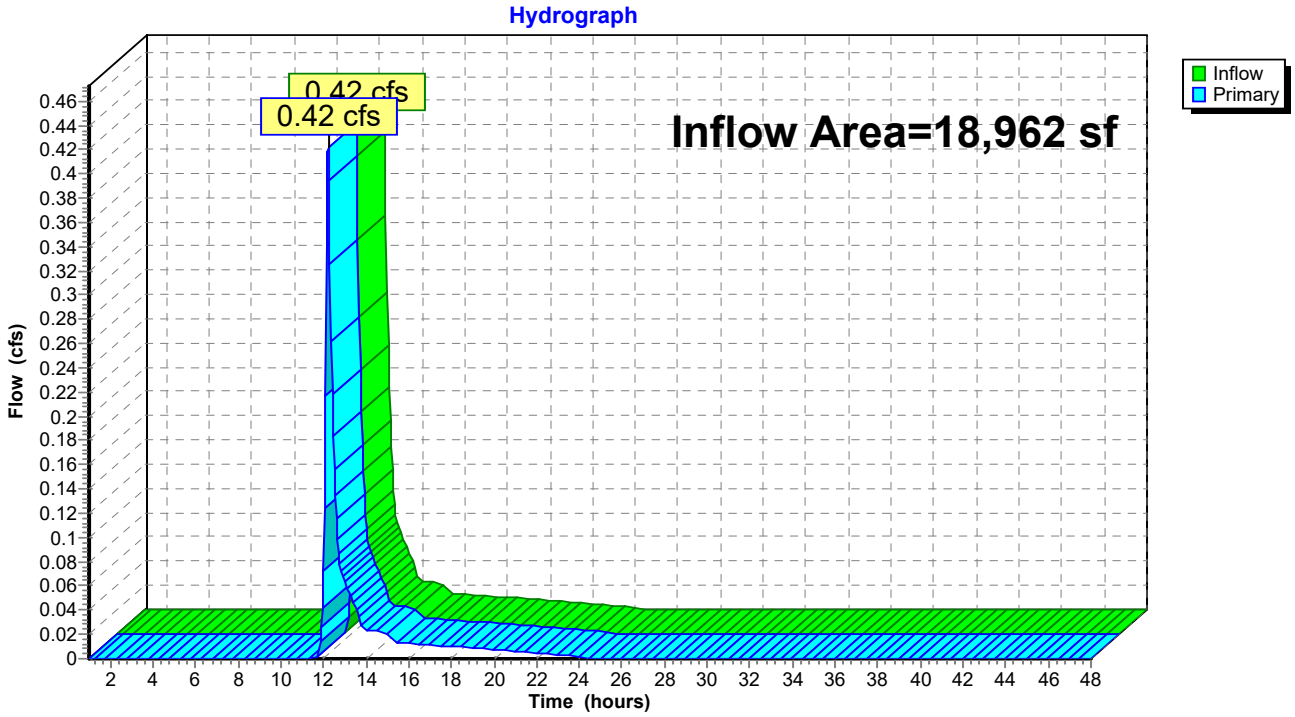


Summary for Link 78L: Swale on Lot 20

Inflow Area = 18,962 sf, 0.00% Impervious, Inflow Depth = 0.72" for 2-Year event
Inflow = 0.42 cfs @ 12.21 hrs, Volume= 1,144 cf
Primary = 0.42 cfs @ 12.21 hrs, Volume= 1,144 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 78L: Swale on Lot 20

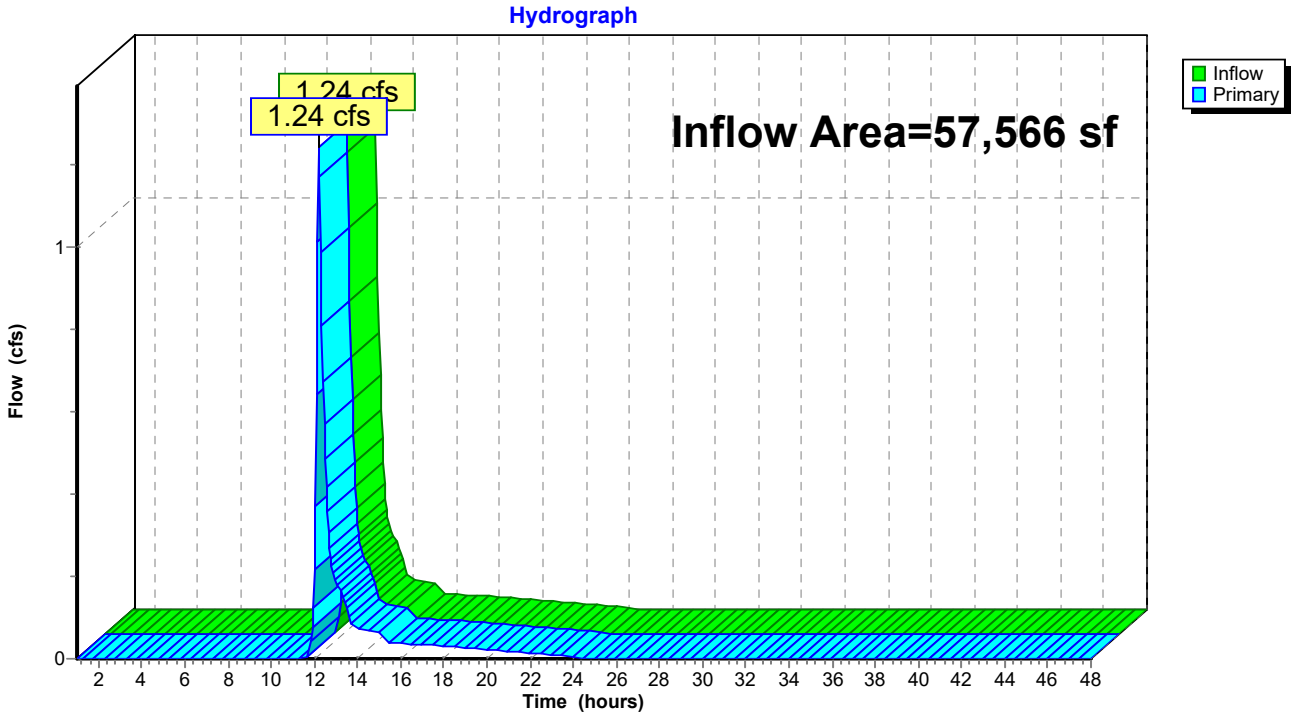


Summary for Link 79L: Swale Along Red Barn Ln.

Inflow Area = 57,566 sf, 0.00% Impervious, Inflow Depth = 0.72" for 2-Year event
Inflow = 1.24 cfs @ 12.21 hrs, Volume= 3,473 cf
Primary = 1.24 cfs @ 12.21 hrs, Volume= 3,473 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 79L: Swale Along Red Barn Ln.

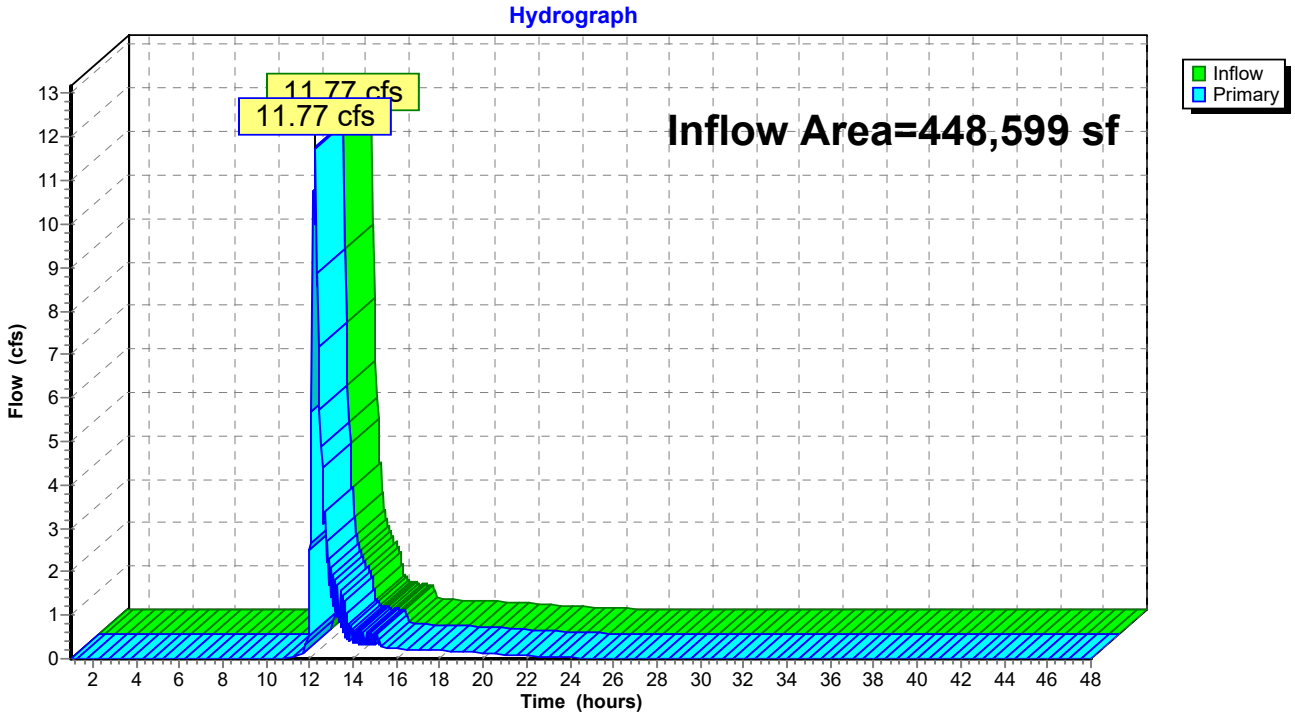


Summary for Link 80L: Cul-de-sac On Green Meadow Place

Inflow Area = 448,599 sf, 18.72% Impervious, Inflow Depth = 0.79" for 2-Year event
Inflow = 11.77 cfs @ 12.24 hrs, Volume= 29,621 cf
Primary = 11.77 cfs @ 12.24 hrs, Volume= 29,621 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 80L: Cul-de-sac On Green Meadow Place



Time span=1.00-48.00 hrs, dt=0.05 hrs, 941 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: A Runoff Area=156,438 sf 0.00% Impervious Runoff Depth=1.46"
Flow Length=375' Tc=15.6 min CN=74 Runoff=6.52 cfs 19,011 cf

Subcatchment 2S: B Runoff Area=141,137 sf 26.27% Impervious Runoff Depth=1.89"
Flow Length=700' Slope=0.0071 '/' Tc=19.8 min CN=80 Runoff=6.86 cfs 22,179 cf

Subcatchment 4S: C1 Runoff Area=12,661 sf 0.00% Impervious Runoff Depth=1.46"
Flow Length=100' Slope=0.0193 '/' Tc=11.4 min CN=74 Runoff=0.61 cfs 1,539 cf

Subcatchment 5S: D Runoff Area=24,345 sf 0.00% Impervious Runoff Depth=1.46"
Flow Length=170' Tc=10.2 min CN=74 Runoff=1.22 cfs 2,959 cf

Subcatchment 6S: E Runoff Area=138,758 sf 15.57% Impervious Runoff Depth=1.74"
Flow Length=471' Tc=10.6 min CN=78 Runoff=8.24 cfs 20,082 cf

Subcatchment 7S: F Runoff Area=13,305 sf 0.00% Impervious Runoff Depth=1.46"
Flow Length=100' Slope=0.0583 '/' Tc=7.3 min CN=74 Runoff=0.76 cfs 1,617 cf

Subcatchment 8S: G Runoff Area=66,971 sf 15.30% Impervious Runoff Depth=1.74"
Flow Length=295' Tc=12.7 min CN=78 Runoff=3.70 cfs 9,693 cf

Subcatchment 9S: H Runoff Area=16,147 sf 93.29% Impervious Runoff Depth=3.35"
Flow Length=200' Tc=6.0 min CN=96 Runoff=1.97 cfs 4,510 cf

Subcatchment 10S: I Runoff Area=10,482 sf 59.22% Impervious Runoff Depth=2.55"
Flow Length=100' Slope=0.0244 '/' Tc=6.0 min CN=88 Runoff=1.07 cfs 2,230 cf

Subcatchment 11S: J Runoff Area=838 sf 4.77% Impervious Runoff Depth=1.53"
Flow Length=15' Slope=0.0122 '/' Tc=6.0 min CN=75 Runoff=0.05 cfs 107 cf

Subcatchment 12S: K Runoff Area=28,606 sf 66.44% Impervious Runoff Depth=2.74"
Flow Length=980' Tc=26.2 min CN=90 Runoff=1.71 cfs 6,530 cf

Subcatchment 13S: L Runoff Area=43,723 sf 16.63% Impervious Runoff Depth=1.74"
Flow Length=851' Tc=22.3 min CN=78 Runoff=1.82 cfs 6,328 cf

Subcatchment 14S: M Runoff Area=53,002 sf 0.00% Impervious Runoff Depth=1.46"
Flow Length=475' Tc=15.2 min CN=74 Runoff=2.23 cfs 6,441 cf

Subcatchment 15S: N Runoff Area=6,616 sf 7.63% Impervious Runoff Depth=1.59"
Flow Length=65' Slope=0.0344 '/' Tc=6.4 min CN=76 Runoff=0.43 cfs 879 cf

Subcatchment 16S: O Runoff Area=18,705 sf 49.38% Impervious Runoff Depth=2.37"
Flow Length=150' Tc=10.4 min CN=86 Runoff=1.51 cfs 3,702 cf

Subcatchment 17S: P Runoff Area=18,391 sf 80.23% Impervious Runoff Depth=3.04"
Flow Length=35' Slope=0.0866 '/' Tc=6.0 min CN=93 Runoff=2.13 cfs 4,652 cf

Subcatchment 18S: Q Runoff Area=14,923 sf 57.14% Impervious Runoff Depth=2.55"
Flow Length=30' Slope=0.0989 '/' Tc=6.0 min CN=88 Runoff=1.52 cfs 3,175 cf

Subcatchment 19S: R Runoff Area=20,724 sf 79.35% Impervious Runoff Depth=3.04"
Flow Length=170' Tc=10.5 min CN=93 Runoff=2.03 cfs 5,242 cf

Subcatchment 20S: S Runoff Area=5,299 sf 100.00% Impervious Runoff Depth=3.58"
Flow Length=50' Slope=0.0049 '/' Tc=6.0 min CN=98 Runoff=0.66 cfs 1,579 cf

Subcatchment 21S: T Runoff Area=35,645 sf 39.81% Impervious Runoff Depth=2.20"
Flow Length=280' Tc=11.4 min CN=84 Runoff=2.61 cfs 6,548 cf

Subcatchment 22S: U Runoff Area=15,551 sf 9.77% Impervious Runoff Depth=1.59"
Flow Length=90' Slope=0.0528 '/' Tc=7.0 min CN=76 Runoff=0.99 cfs 2,066 cf

Subcatchment 23S: V Runoff Area=26,499 sf 91.36% Impervious Runoff Depth=3.35"
Flow Length=115' Tc=6.0 min CN=96 Runoff=3.24 cfs 7,402 cf

Subcatchment 24S: W Runoff Area=75,447 sf 27.41% Impervious Runoff Depth=1.96"
Flow Length=637' Tc=17.0 min CN=81 Runoff=4.12 cfs 12,340 cf

Subcatchment 25S: X Runoff Area=104,170 sf 23.49% Impervious Runoff Depth=1.89"
Flow Length=405' Tc=15.5 min CN=80 Runoff=5.69 cfs 16,370 cf

Subcatchment 26S: Y Runoff Area=12,489 sf 0.00% Impervious Runoff Depth=1.46"
Tc=6.0 min CN=74 Runoff=0.75 cfs 1,518 cf

Subcatchment 27S: Z Runoff Area=168,127 sf 6.58% Impervious Runoff Depth=1.59"
Flow Length=480' Tc=15.8 min CN=76 Runoff=7.65 cfs 22,338 cf

Subcatchment 67S: C2 Runoff Area=6,618 sf 0.00% Impervious Runoff Depth=1.46"
Flow Length=120' Slope=0.0262 '/' Tc=10.4 min CN=74 Runoff=0.33 cfs 804 cf

Subcatchment 68S: C4 Runoff Area=33,221 sf 0.00% Impervious Runoff Depth=1.46"
Flow Length=380' Tc=13.6 min CN=74 Runoff=1.46 cfs 4,037 cf

Subcatchment 69S: C3 Runoff Area=18,962 sf 0.00% Impervious Runoff Depth=1.46"
Flow Length=233' Slope=0.0278 '/' Tc=11.8 min CN=74 Runoff=0.90 cfs 2,304 cf

Subcatchment 70S: O1 Runoff Area=11,697 sf 0.00% Impervious Runoff Depth=1.46"
Tc=6.0 min CN=74 Runoff=0.70 cfs 1,422 cf

Subcatchment 71S: O2 Runoff Area=132,678 sf 2.29% Impervious Runoff Depth=1.53"
Flow Length=377' Tc=12.2 min CN=75 Runoff=6.50 cfs 16,867 cf

Reach 93R: Overland Flow from North Depression to South Avg. Flow Depth=0.00' Max Vel=0.00 fps
n=0.030 L=426.0' S=0.0127 '/' Capacity=108.75 cfs Outflow=0.00 cfs 0 cf

Pond 73P: Southeast Basin Peak Elev=731.28' Storage=7,855 cf Inflow=6.52 cfs 19,011 cf
Outflow=1.16 cfs 19,011 cf

Pond 74P: Southwest Basin Peak Elev=743.37' Storage=27,826 cf Inflow=20.86 cfs 65,424 cf
Outflow=4.67 cfs 65,424 cf

Pond 89P: Gravel North Depression Peak Elev=756.74' Storage=808 cf Inflow=13.89 cfs 35,902 cf
Discarded=0.45 cfs 8,349 cf Primary=2.20 cfs 15,965 cf Secondary=11.99 cfs 11,588 cf Outflow=14.62 cfs 35,902 cf

Pond 92P: Gravel South Depression Peak Elev=753.12' Storage=387 cf Inflow=15.90 cfs 33,994 cf
Primary=15.82 cfs 29,884 cf Secondary=0.10 cfs 4,110 cf Outflow=15.92 cfs 33,994 cf

Link 32L: TOTAL OFFSITE UNTREATED Inflow=26.03 cfs 69,989 cf
Primary=26.03 cfs 69,989 cf

Link 33L: TOTAL ONSITE Inflow=14.58 cfs 35,408 cf
Primary=14.58 cfs 35,408 cf

Link 34L: TOTAL OUTFALL Inflow=39.77 cfs 105,397 cf
Primary=39.77 cfs 105,397 cf

Link 75L: Areas Piped Inflow=14.58 cfs 35,408 cf
Primary=14.58 cfs 35,408 cf

Link 78L: Swale on Lot 20 Inflow=0.90 cfs 2,304 cf
Primary=0.90 cfs 2,304 cf

Link 79L: Swale Along Red Barn Ln. Inflow=2.65 cfs 6,996 cf
Primary=2.65 cfs 6,996 cf

Link 80L: Cul-de-sac On Green Meadow Place Inflow=22.01 cfs 58,516 cf
Primary=22.01 cfs 58,516 cf

Total Runoff Area = 1,432,175 sf Runoff Volume = 216,471 cf Average Runoff Depth = 1.81"
81.12% Pervious = 1,161,718 sf 18.88% Impervious = 270,457 sf

Summary for Subcatchment 1S: A

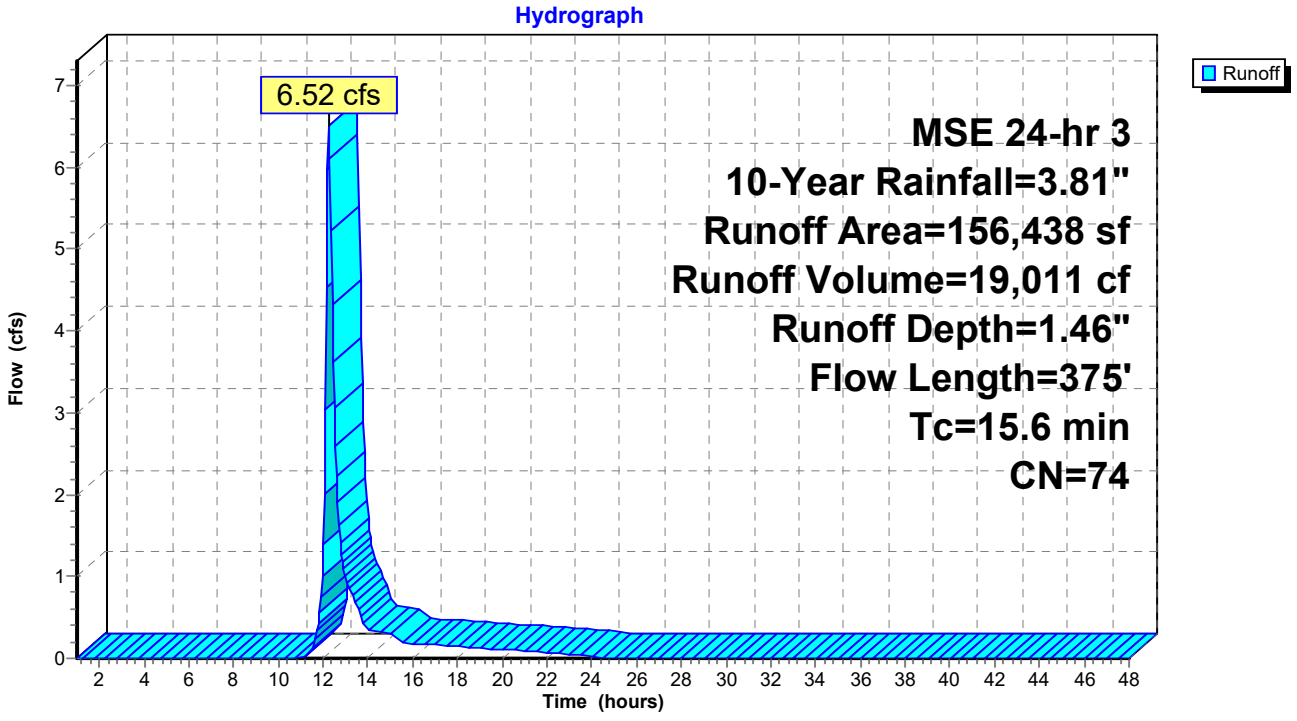
Runoff = 6.52 cfs @ 12.25 hrs, Volume= 19,011 cf, Depth= 1.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	156,438	74	PER
	156,438		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	100	0.0196	0.15		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
4.2	275	0.0243	1.09		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.6	375	Total			

Subcatchment 1S: A



Summary for Subcatchment 2S: B

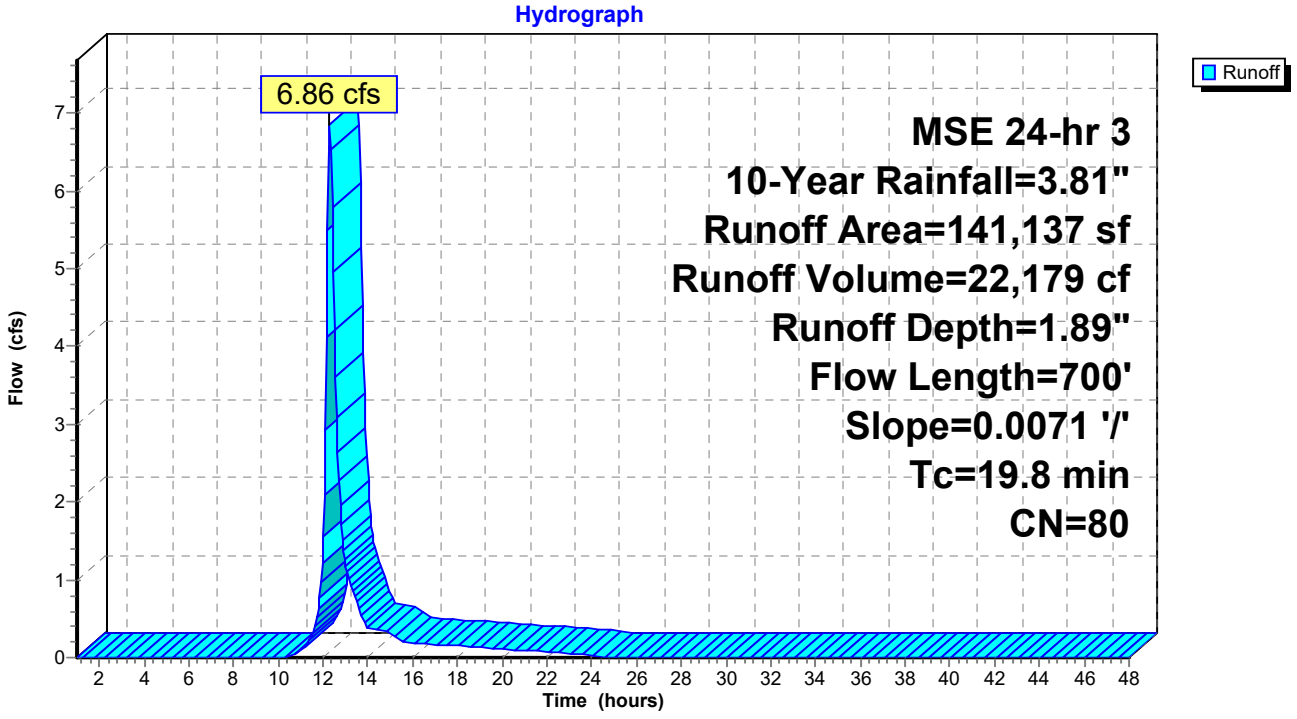
Runoff = 6.86 cfs @ 12.30 hrs, Volume= 22,179 cf, Depth= 1.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	104,065	74	PER
*	22,056	98	IMP
*	15,016	98	ROOF
	141,137	80	Weighted Average
	104,065		73.73% Pervious Area
	37,072		26.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	700	0.0071	0.59		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps

Subcatchment 2S: B



Summary for Subcatchment 4S: C1

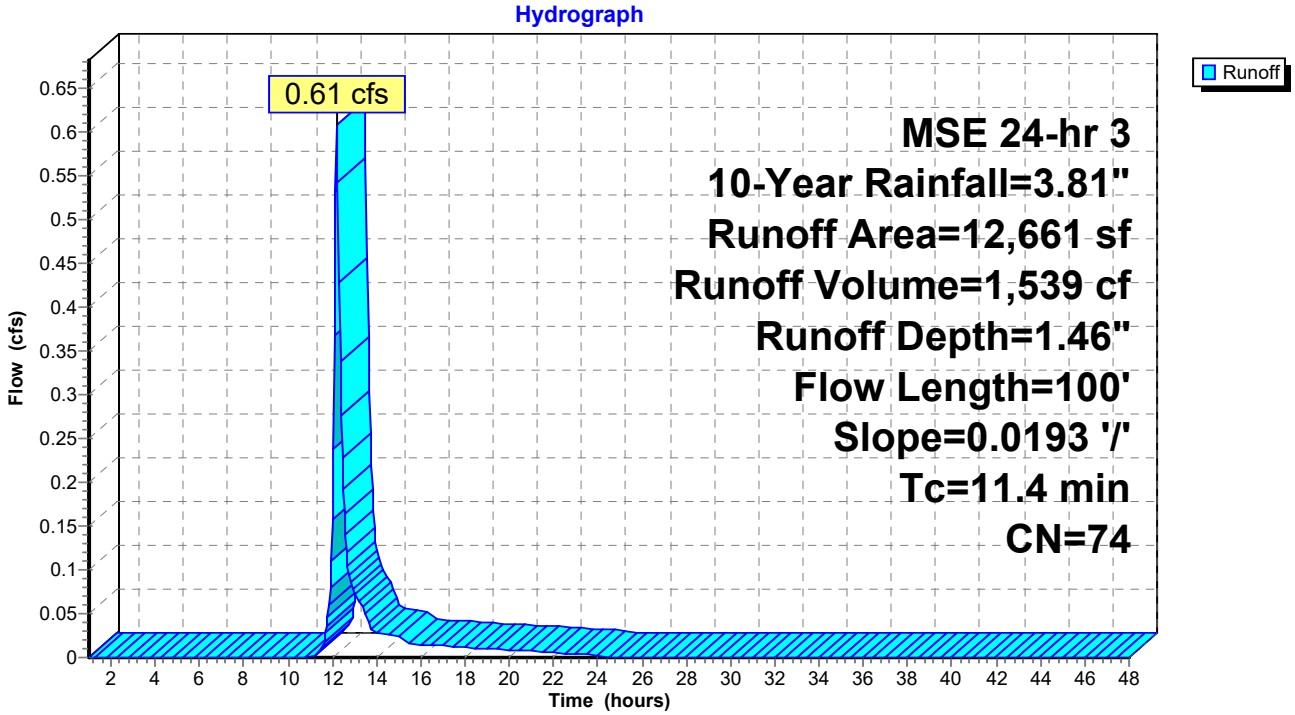
Runoff = 0.61 cfs @ 12.20 hrs, Volume= 1,539 cf, Depth= 1.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	12,661	74	PER
	12,661		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	100	0.0193	0.15		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 4S: C1



Summary for Subcatchment 5S: D

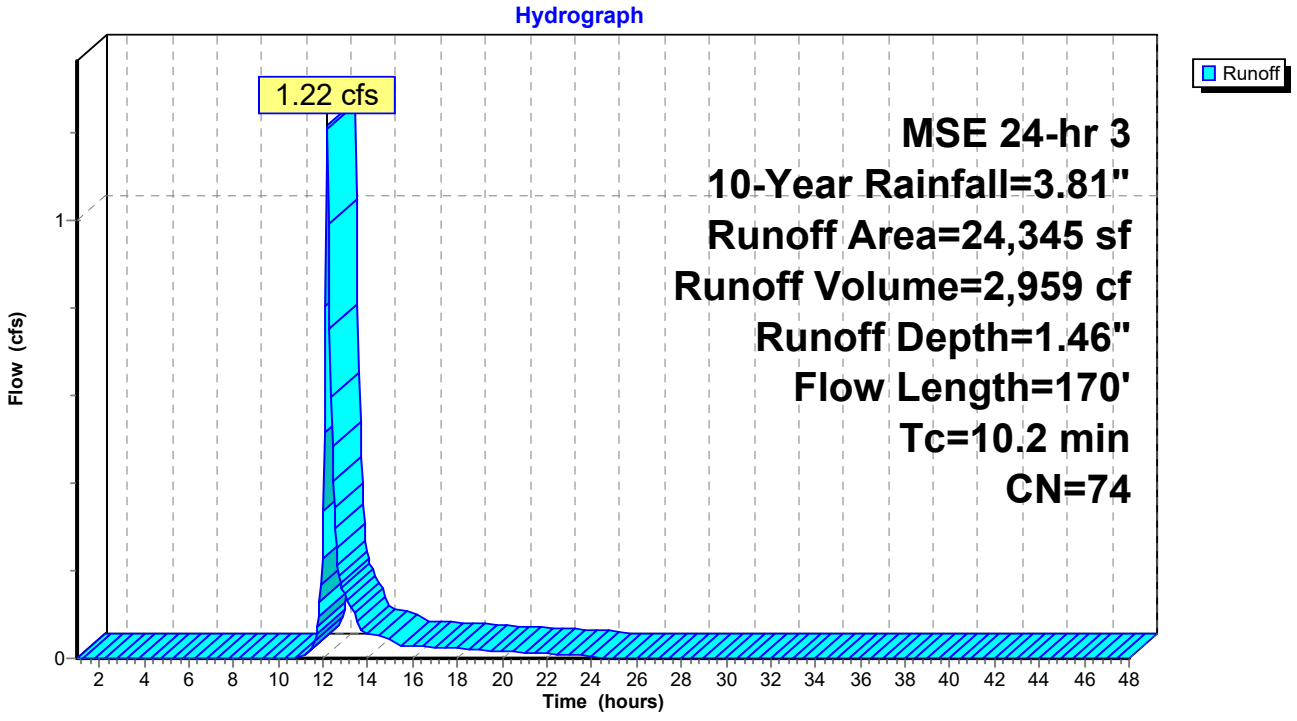
Runoff = 1.22 cfs @ 12.19 hrs, Volume= 2,959 cf, Depth= 1.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	24,345	74	PER
	24,345		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.0319	0.18		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	70	0.0317	1.25		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.2	170	Total			

Subcatchment 5S: D



Summary for Subcatchment 6S: E

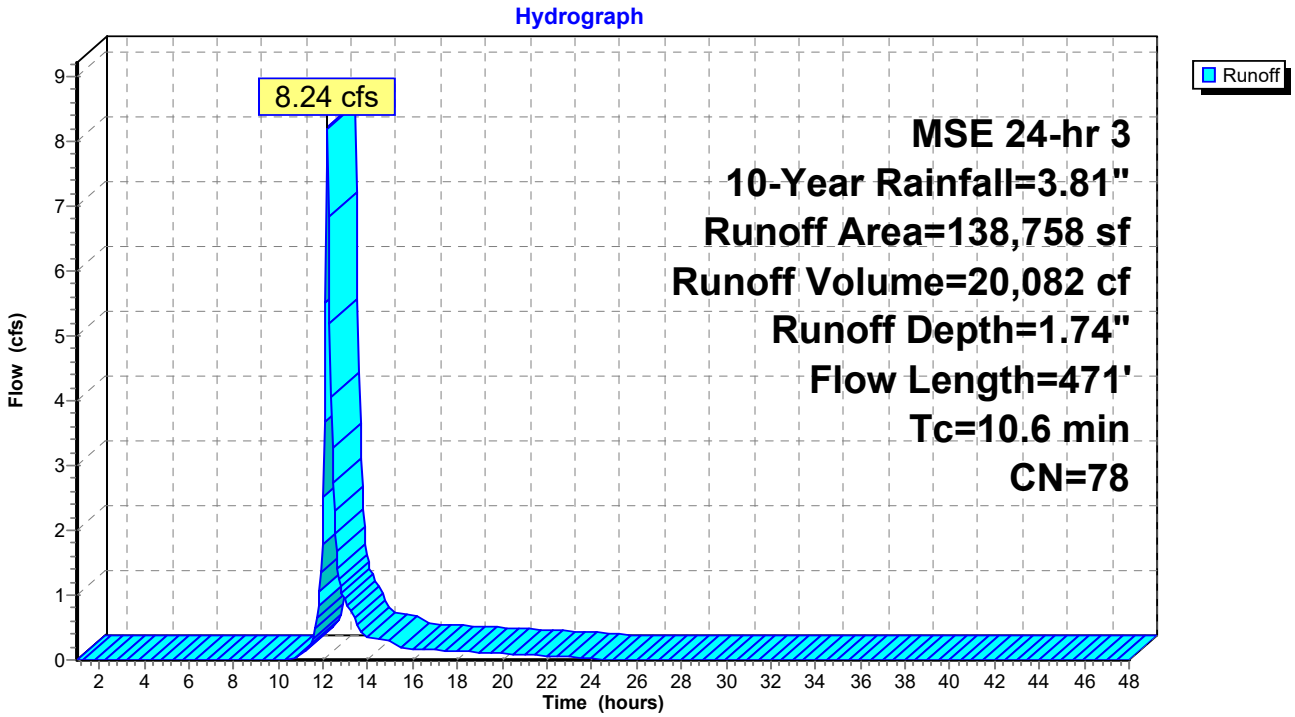
Runoff = 8.24 cfs @ 12.19 hrs, Volume= 20,082 cf, Depth= 1.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	117,151	74	PER
*	21,607	98	IMP
	138,758	78	Weighted Average
	117,151		84.43% Pervious Area
	21,607		15.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	100	0.0581	0.23		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	215	0.0405	4.09		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
2.3	156	0.0259	1.13		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.6	471	Total			

Subcatchment 6S: E



Summary for Subcatchment 7S: F

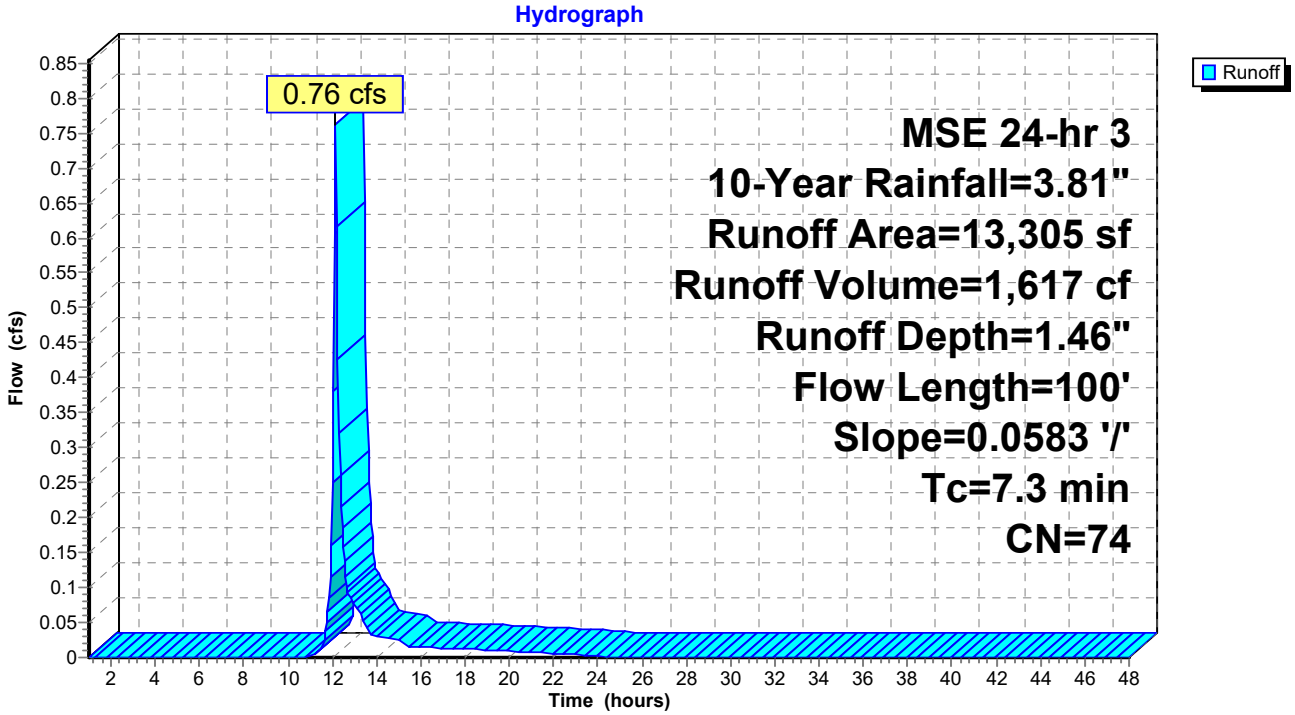
Runoff = 0.76 cfs @ 12.15 hrs, Volume= 1,617 cf, Depth= 1.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	13,305	74	PER
	13,305		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.3	100	0.0583	0.23		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 7S: F



Summary for Subcatchment 8S: G

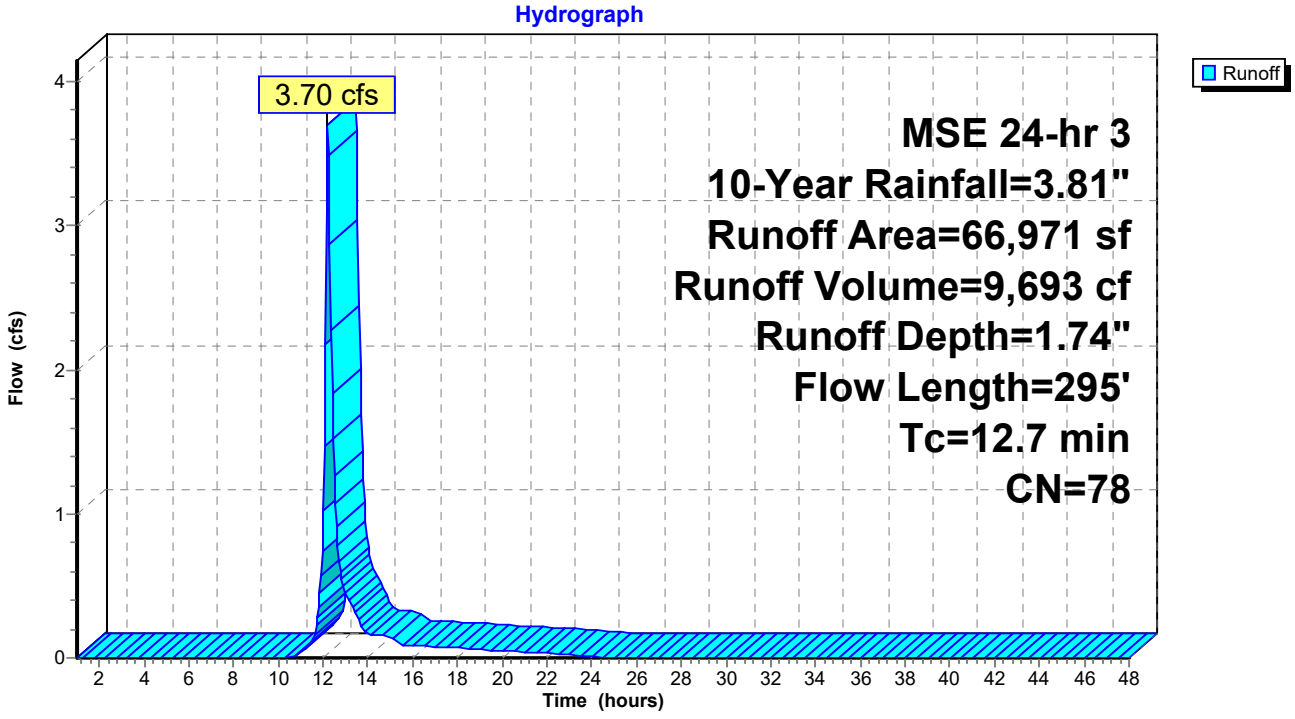
Runoff = 3.70 cfs @ 12.21 hrs, Volume= 9,693 cf, Depth= 1.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	56,727	74	PER
*	10,244	98	IMP
	66,971	78	Weighted Average
	56,727		84.70% Pervious Area
	10,244		15.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	100	0.0269	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
2.7	195	0.0305	1.22		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
12.7	295	Total			

Subcatchment 8S: G



Summary for Subcatchment 9S: H

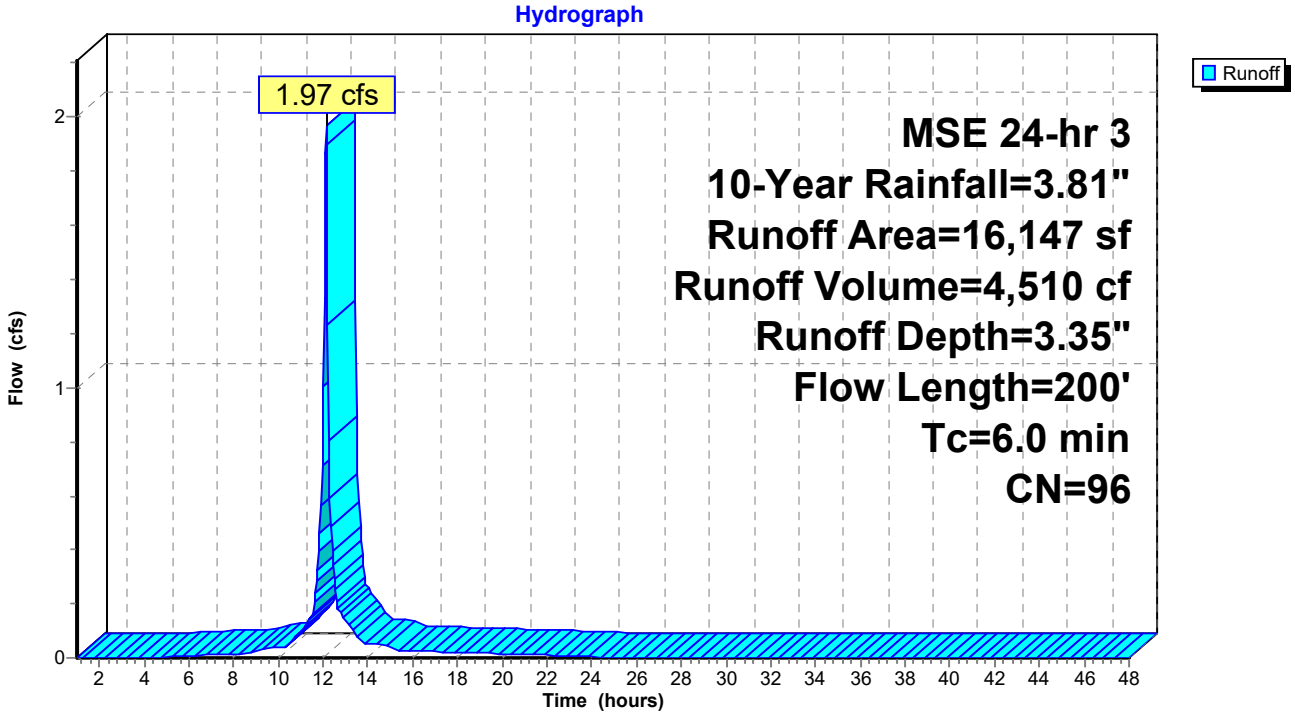
Runoff = 1.97 cfs @ 12.13 hrs, Volume= 4,510 cf, Depth= 3.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	1,084	74	PER
*	15,063	98	IMP
	16,147	96	Weighted Average
	1,084		6.71% Pervious Area
	15,063		93.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	100	0.0502	1.73		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
0.5	100	0.0263	3.29		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
1.5	200	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 9S: H



Summary for Subcatchment 10S: I

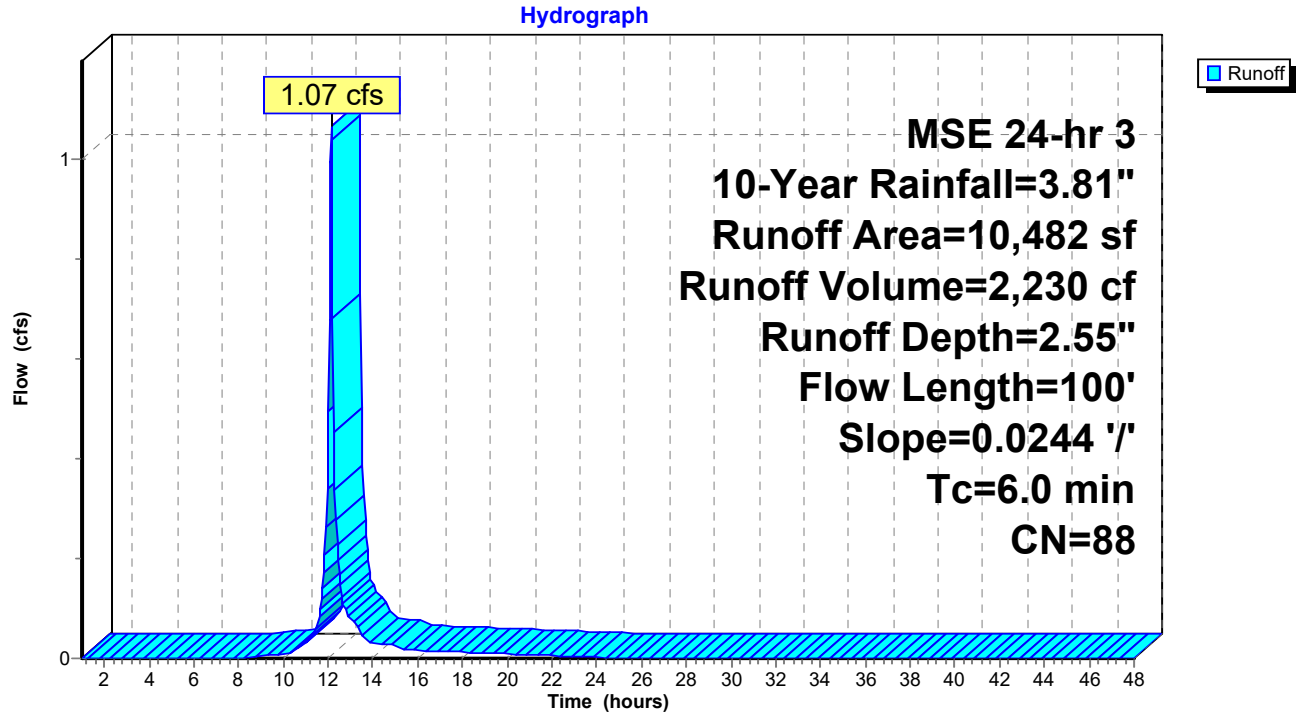
Runoff = 1.07 cfs @ 12.13 hrs, Volume= 2,230 cf, Depth= 2.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	4,275	74	PER
*	5,059	98	IMP
*	1,148	98	ROOF
	10,482	88	Weighted Average
	4,275		40.78% Pervious Area
	6,207		59.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	100	0.0244	1.30		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
1.3	100	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 10S: I



Summary for Subcatchment 11S: J

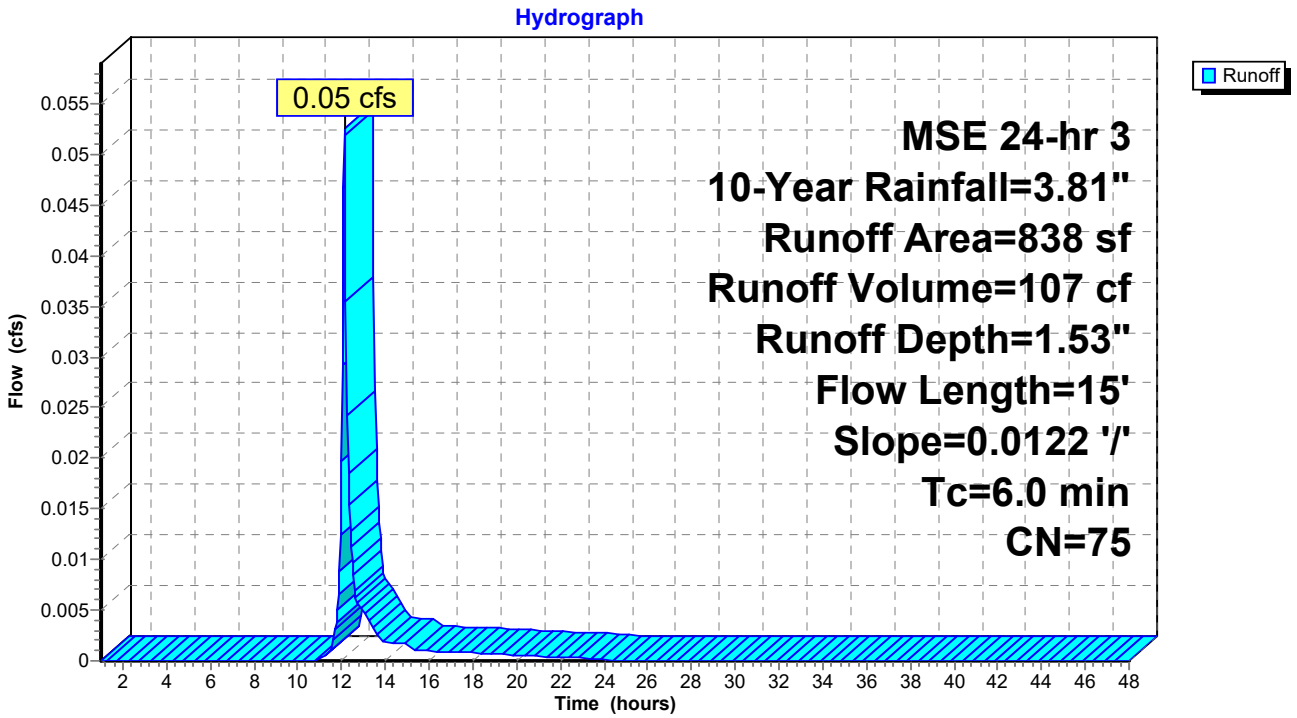
Runoff = 0.05 cfs @ 12.14 hrs, Volume= 107 cf, Depth= 1.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	798	74	PER
*	40	98	IMP
	838	75	Weighted Average
	798		95.23% Pervious Area
	40		4.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	15	0.0122	0.08		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
3.0	15	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 11S: J



Summary for Subcatchment 12S: K

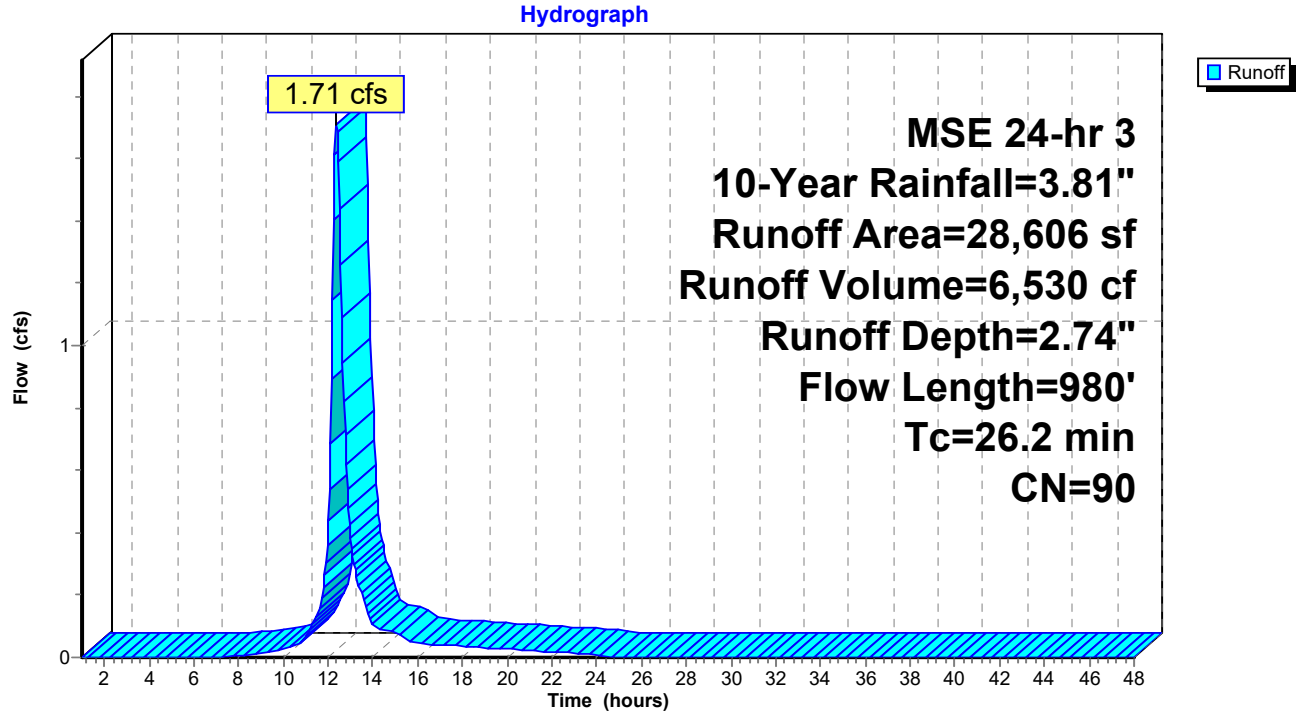
Runoff = 1.71 cfs @ 12.37 hrs, Volume= 6,530 cf, Depth= 2.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	9,600	74	PER
*	1,816	98	IMP
*	17,190	98	ROOF
	28,606	90	Weighted Average
	9,600		33.56% Pervious Area
	19,006		66.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.3	90	0.0161	0.13		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
14.9	890	0.0202	0.99		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
26.2	980	Total			

Subcatchment 12S: K



Summary for Subcatchment 13S: L

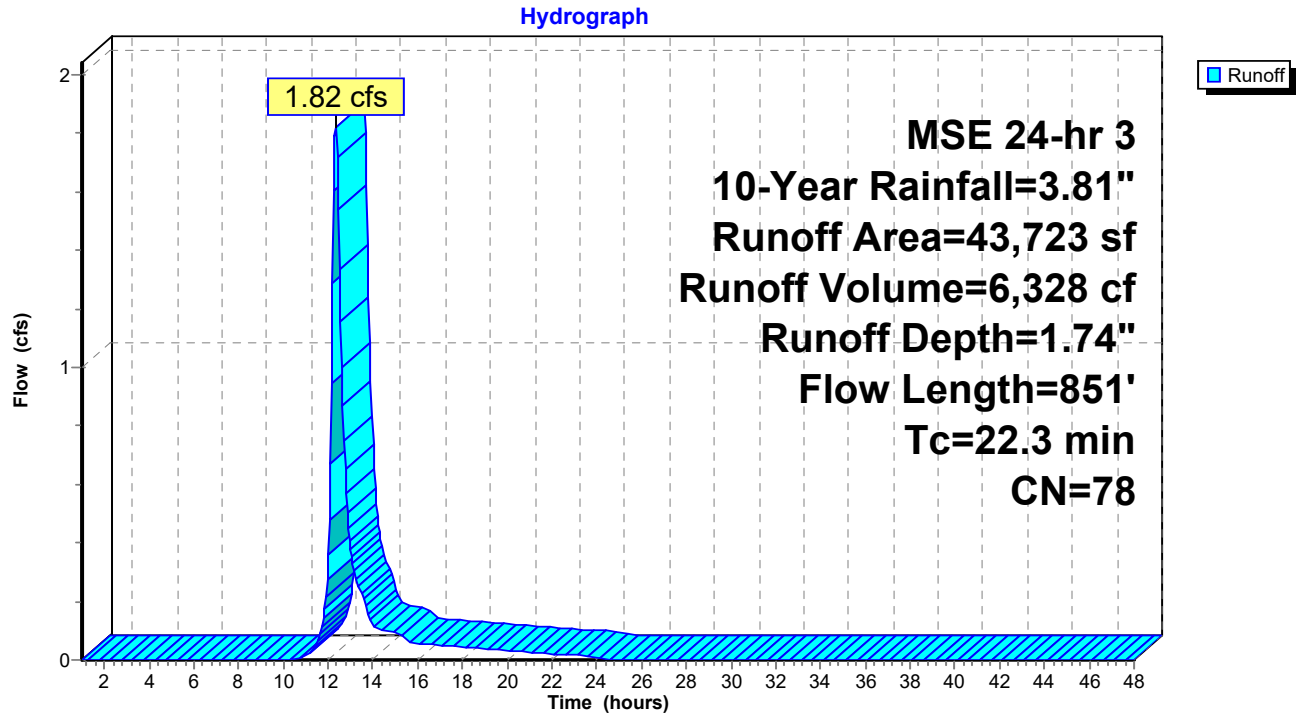
Runoff = 1.82 cfs @ 12.34 hrs, Volume= 6,328 cf, Depth= 1.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	36,454	74	PER
*	7,269	98	IMP
	43,723	78	Weighted Average
	36,454		83.37% Pervious Area
	7,269		16.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0307	0.18		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.9	130	0.0267	1.14		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.9	621	0.0183	0.95		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
22.3	851	Total			

Subcatchment 13S: L



Summary for Subcatchment 14S: M

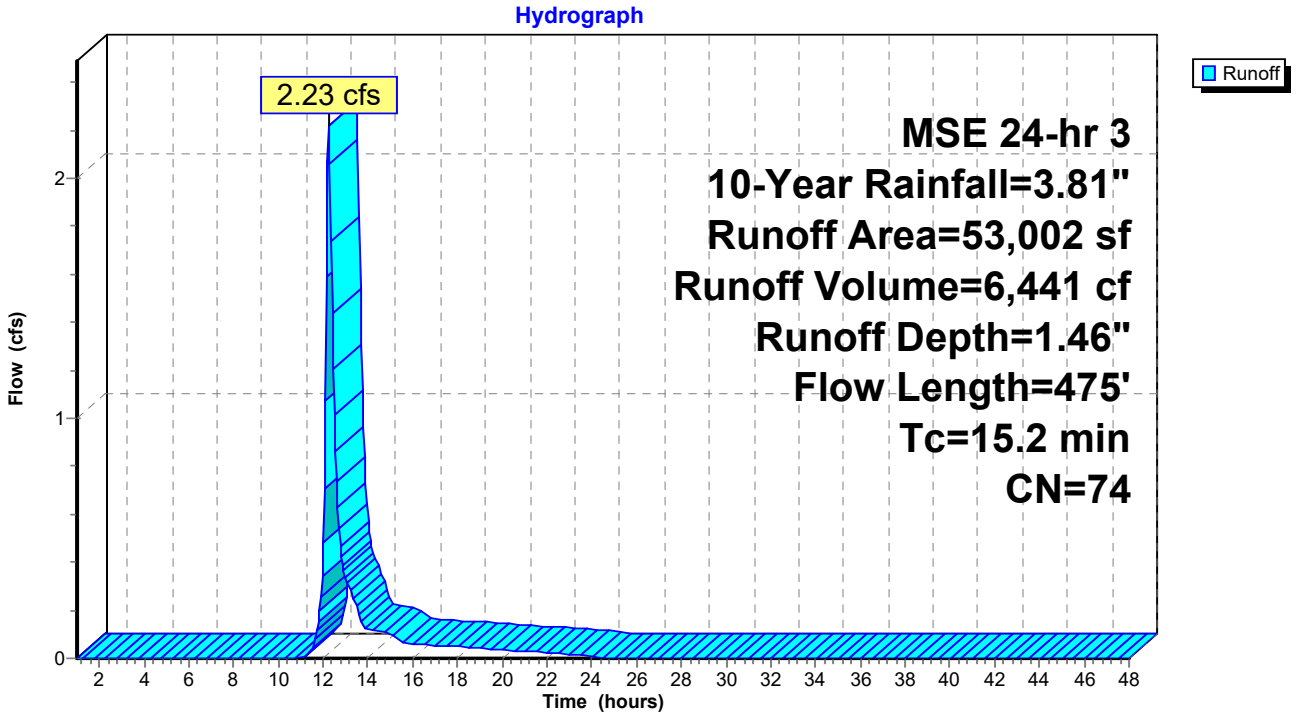
Runoff = 2.23 cfs @ 12.25 hrs, Volume= 6,441 cf, Depth= 1.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	53,002	74	PER
	53,002		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	100	0.0403	0.20		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
6.7	375	0.0180	0.94		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.2	475	Total			

Subcatchment 14S: M



Summary for Subcatchment 15S: N

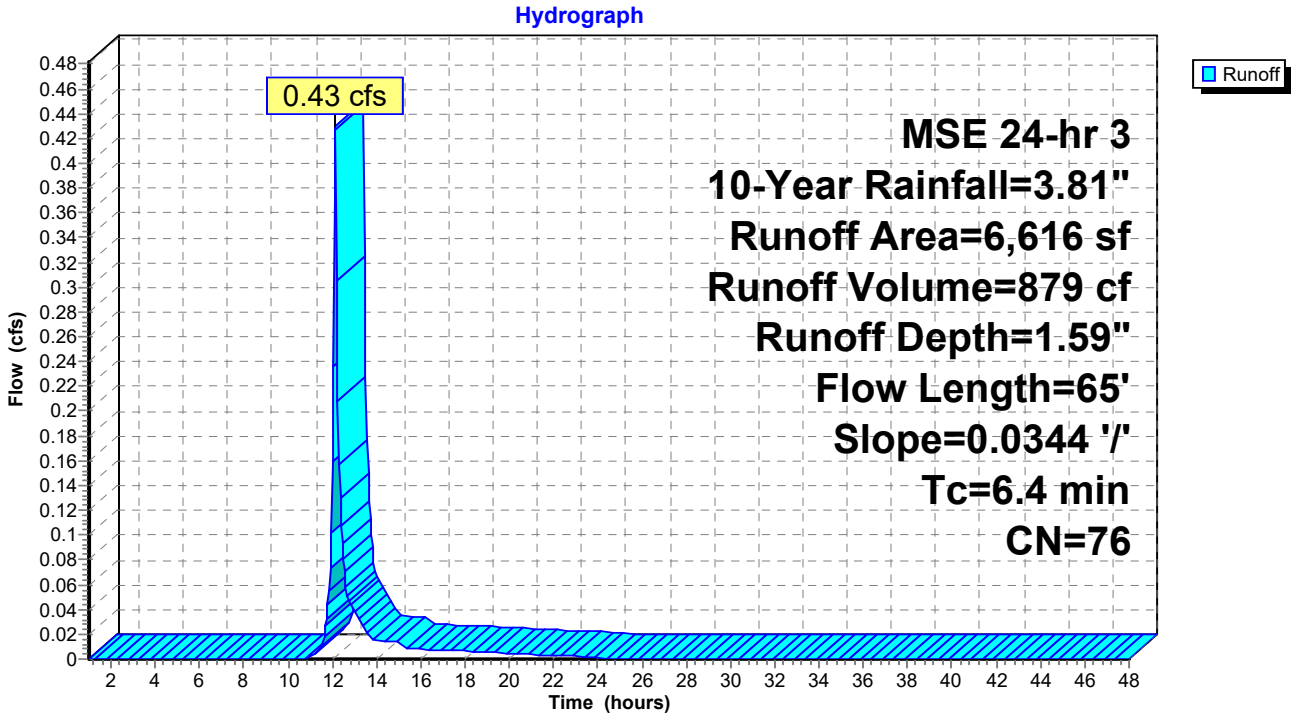
Runoff = 0.43 cfs @ 12.14 hrs, Volume= 879 cf, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	6,111	74	PER
*	505	98	IMP
	6,616	76	Weighted Average
	6,111		92.37% Pervious Area
	505		7.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.4	65	0.0344	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 15S: N



Summary for Subcatchment 16S: O

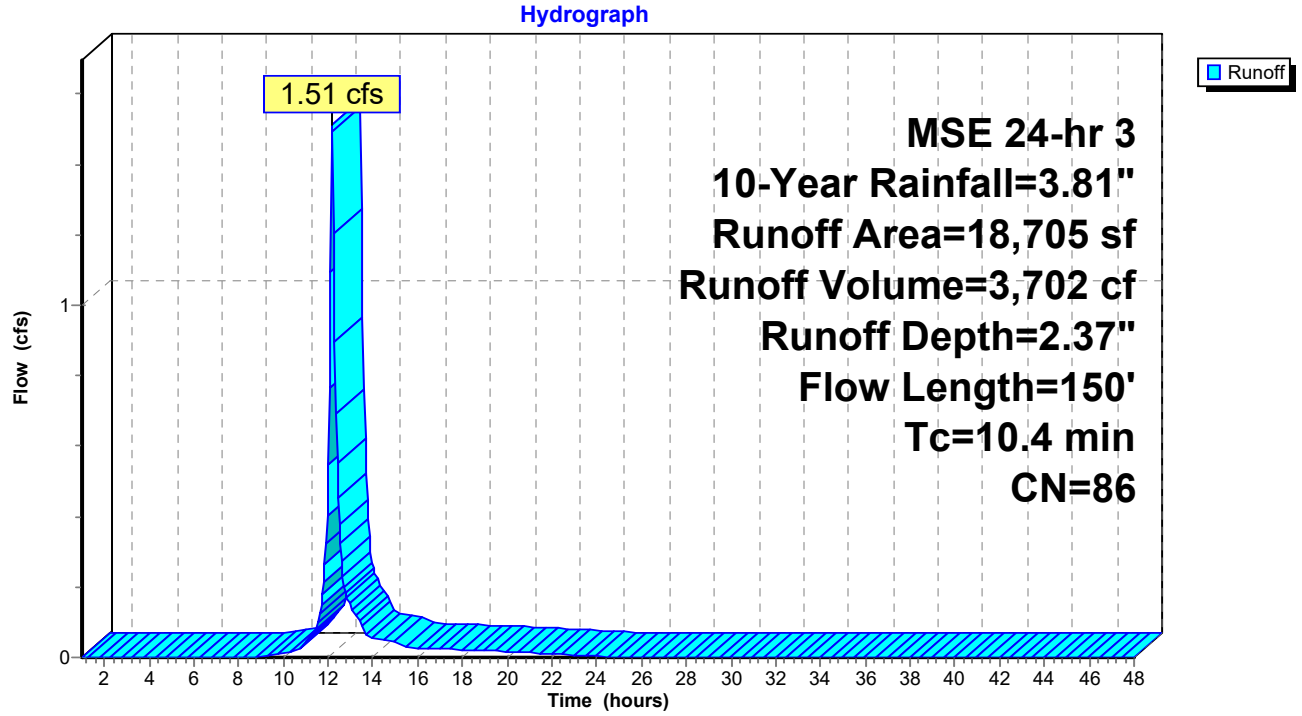
Runoff = 1.51 cfs @ 12.18 hrs, Volume= 3,702 cf, Depth= 2.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	9,468	74	PER
*	4,653	98	IMP
*	4,584	98	ROOF
	18,705	86	Weighted Average
	9,468		50.62% Pervious Area
	9,237		49.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	100	0.0274	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.5	50	0.0080	1.82		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
10.4	150	Total			

Subcatchment 16S: O



Summary for Subcatchment 17S: P

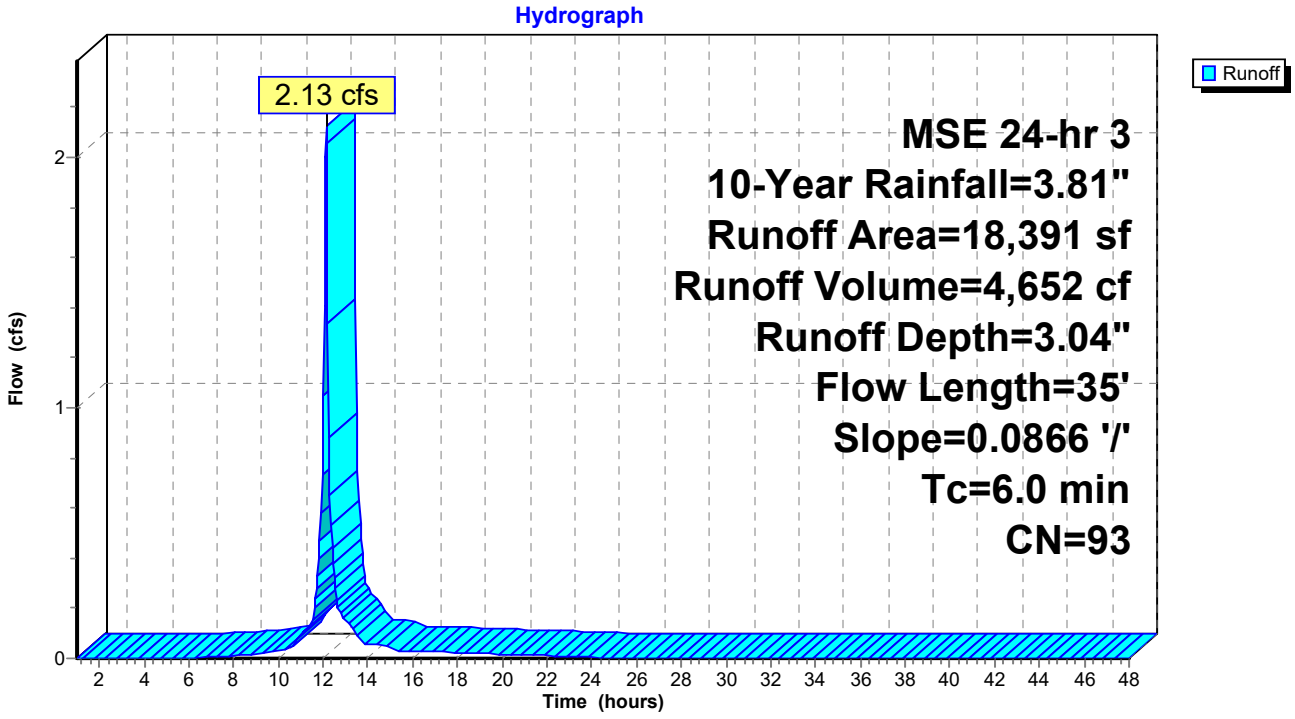
Runoff = 2.13 cfs @ 12.13 hrs, Volume= 4,652 cf, Depth= 3.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	3,636	74	PER
*	878	98	IMP
*	13,877	98	ROOF
	18,391	93	Weighted Average
	3,636		19.77% Pervious Area
	14,755		80.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	35	0.0866	0.22		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
2.7	35	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 17S: P



Summary for Subcatchment 18S: Q

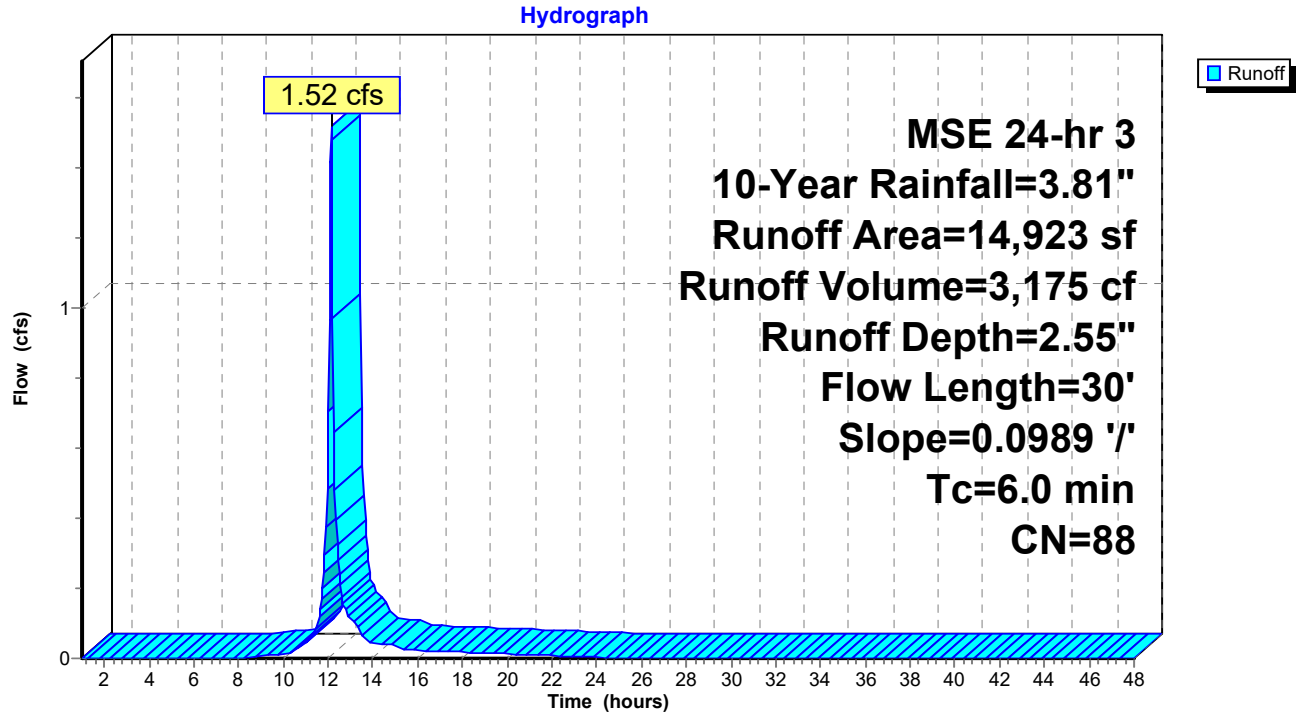
Runoff = 1.52 cfs @ 12.13 hrs, Volume= 3,175 cf, Depth= 2.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	6,396	74	PER
*	1,162	98	IMP
*	7,365	98	ROOF
	14,923	88	Weighted Average
	6,396		42.86% Pervious Area
	8,527		57.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	30	0.0989	0.22		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
2.3	30	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 18S: Q



Summary for Subcatchment 19S: R

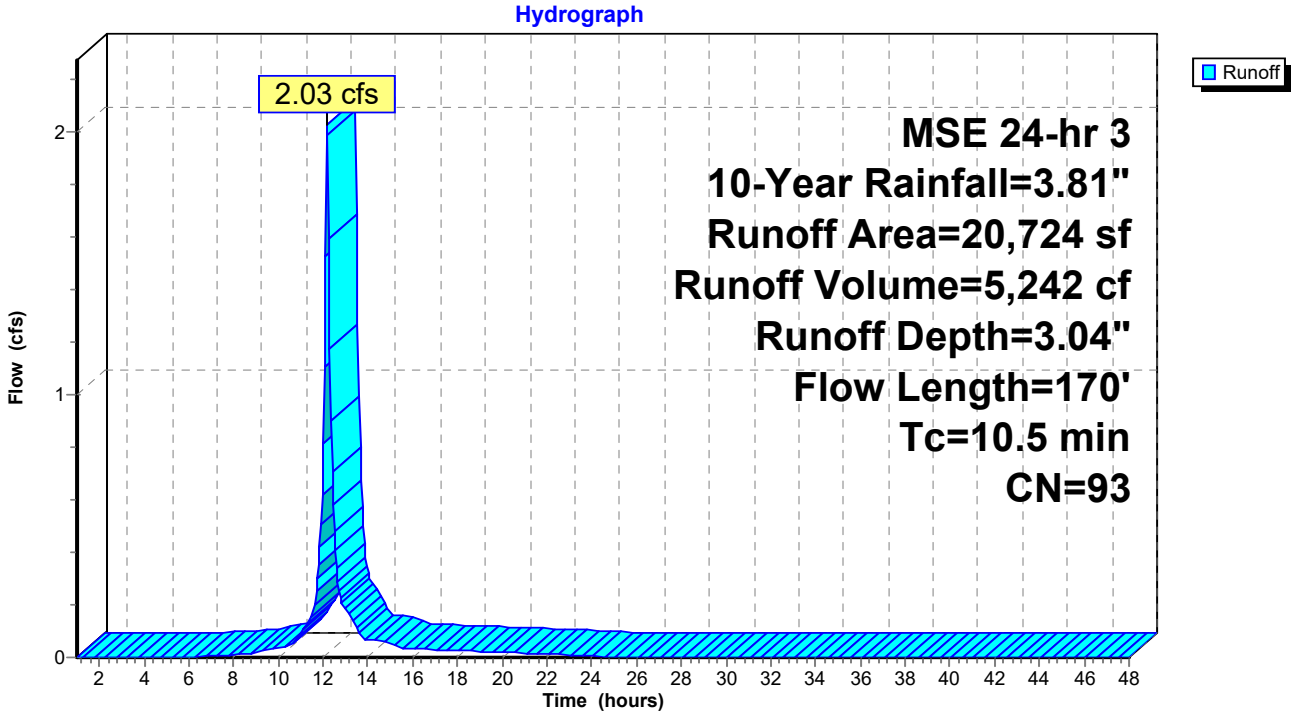
Runoff = 2.03 cfs @ 12.18 hrs, Volume= 5,242 cf, Depth= 3.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	4,279	74	PER
*	5,420	98	IMP
*	11,025	98	ROOF
	20,724	93	Weighted Average
	4,279		20.65% Pervious Area
	16,445		79.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0295	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	70	0.0320	1.25		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.5	170	Total			

Subcatchment 19S: R



Summary for Subcatchment 20S: S

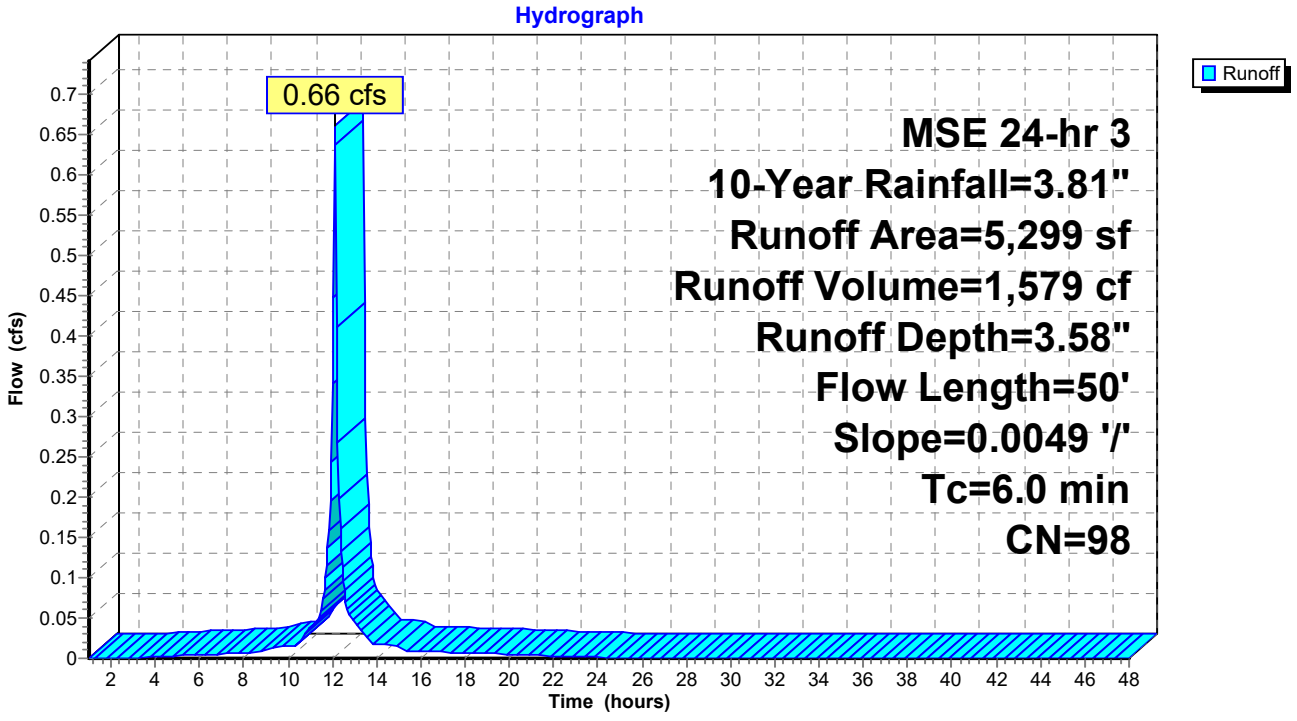
Runoff = 0.66 cfs @ 12.13 hrs, Volume= 1,579 cf, Depth= 3.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	808	98	IMP
*	4,491	98	ROOF
	5,299	98	Weighted Average
	5,299		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	50	0.0049	0.59		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
1.4	50	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 20S: S



Summary for Subcatchment 21S: T

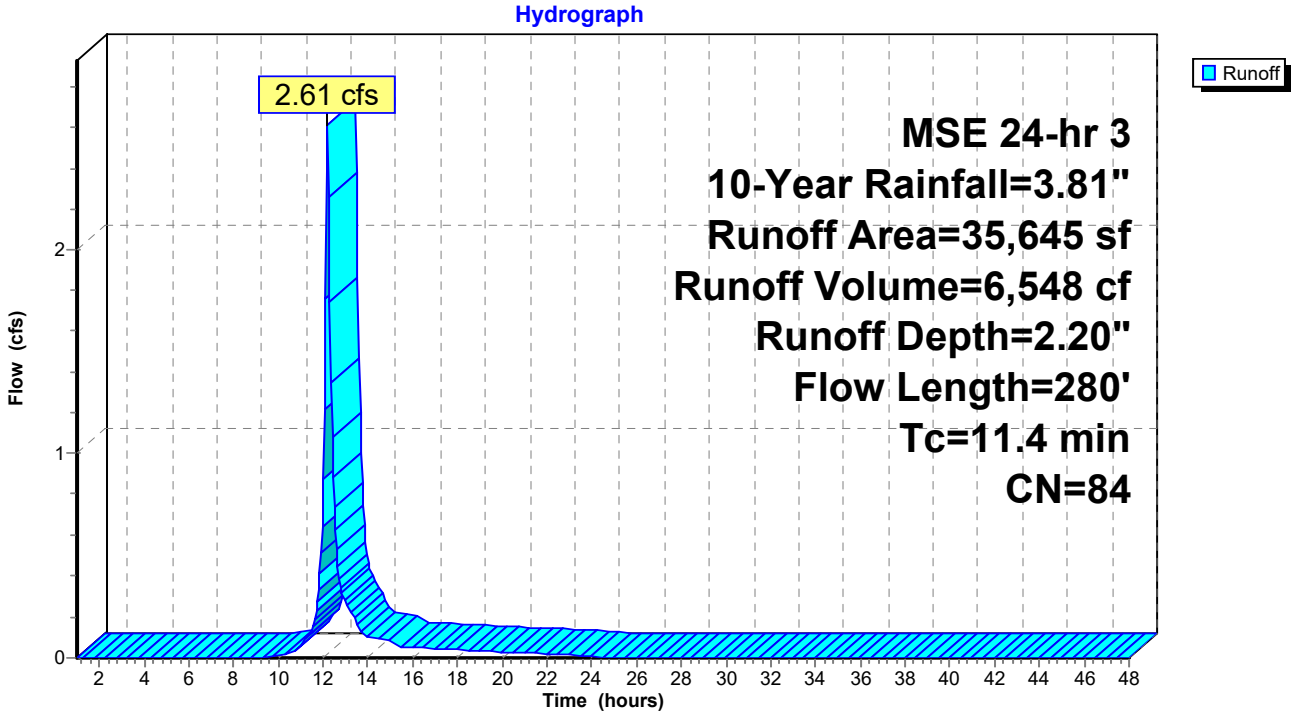
Runoff = 2.61 cfs @ 12.19 hrs, Volume= 6,548 cf, Depth= 2.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	21,454	74	PER
*	14,191	98	IMP
	35,645	84	Weighted Average
	21,454		60.19% Pervious Area
	14,191		39.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	100	0.0272	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.4	180	0.0111	2.14		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
11.4	280	Total			

Subcatchment 21S: T



Summary for Subcatchment 22S: U

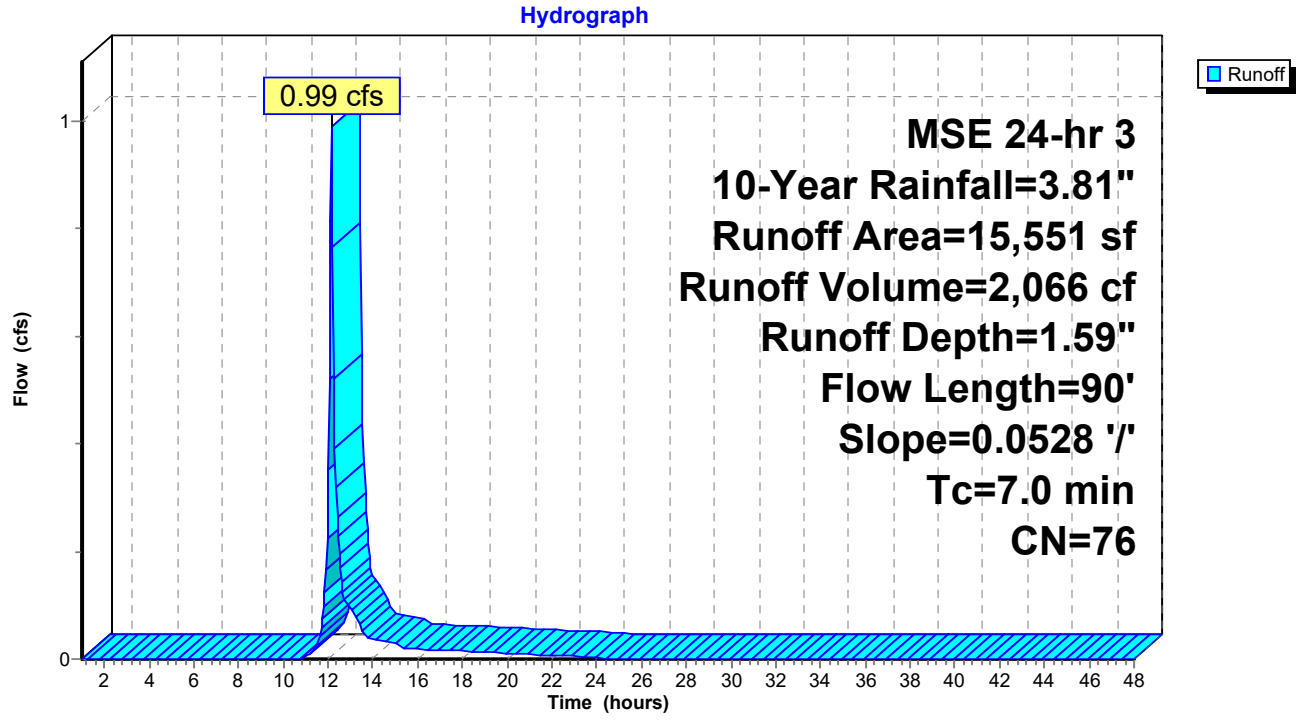
Runoff = 0.99 cfs @ 12.15 hrs, Volume= 2,066 cf, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	14,032	74	PER
*	1,519	98	IMP
	15,551	76	Weighted Average
	14,032		90.23% Pervious Area
	1,519		9.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	90	0.0528	0.21		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 22S: U



Summary for Subcatchment 23S: V

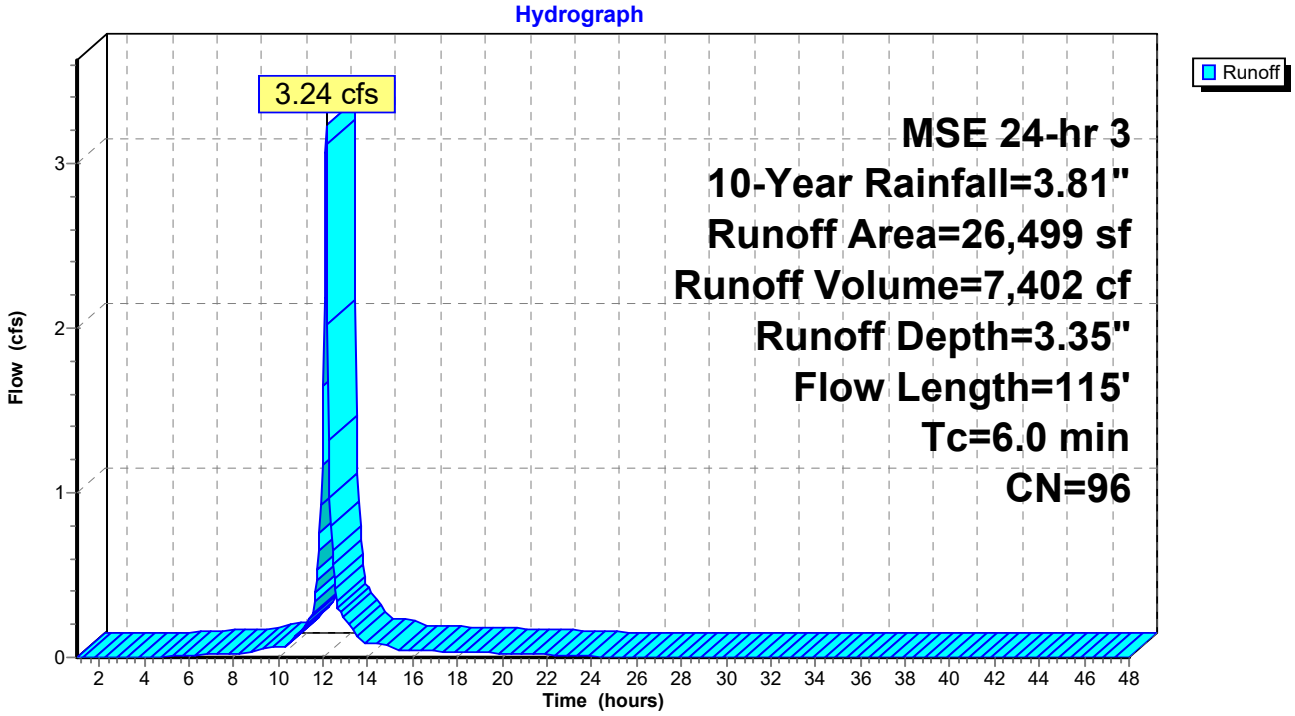
Runoff = 3.24 cfs @ 12.13 hrs, Volume= 7,402 cf, Depth= 3.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	2,290	74	PER
*	7,676	98	IMP
*	16,533	98	ROOF
	26,499	96	Weighted Average
	2,290		8.64% Pervious Area
	24,209		91.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	45	0.0345	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	70	0.0262	1.24		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
5.7	115	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 23S: V



Summary for Subcatchment 24S: W

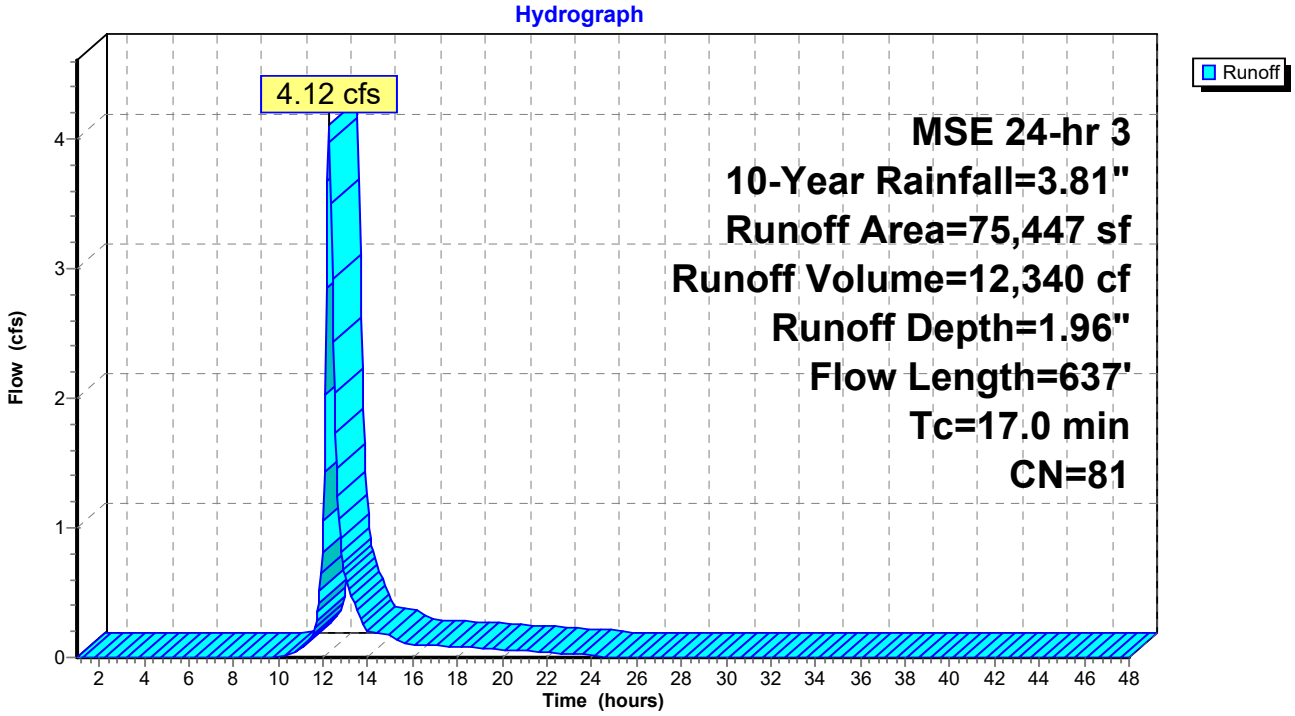
Runoff = 4.12 cfs @ 12.26 hrs, Volume= 12,340 cf, Depth= 1.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	54,767	74	PER
*	17,055	98	IMP
*	3,625	98	ROOF
	75,447	81	Weighted Average
	54,767		72.59% Pervious Area
	20,680		27.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	100	0.0458	0.21		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.2	100	0.0428	1.45		**Shallow Concentrated Flow, SF** Short Grass Pasture Kv= 7.0 fps
7.7	437	0.0183	0.95		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
17.0	637	Total			

Subcatchment 24S: W



Summary for Subcatchment 25S: X

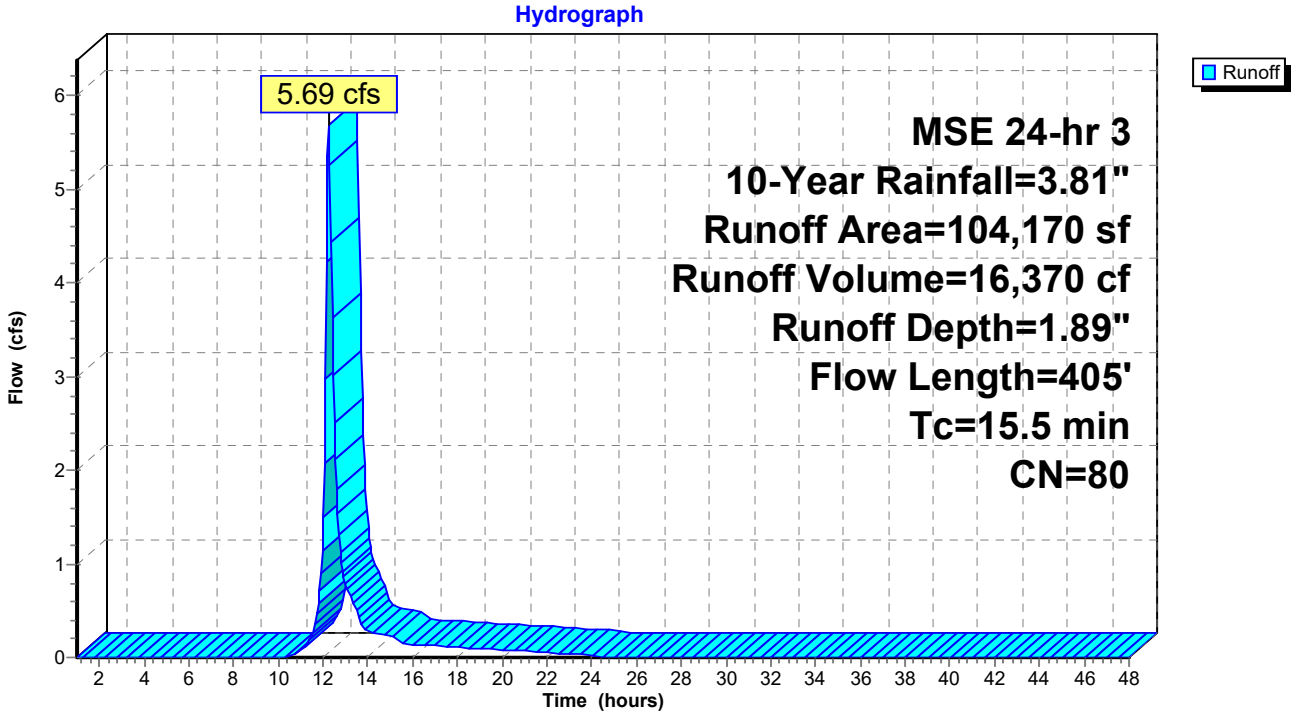
Runoff = 5.69 cfs @ 12.25 hrs, Volume= 16,370 cf, Depth= 1.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	79,699	74	PER
*	21,341	98	IMP
*	3,130	98	ROOF
	104,170	80	Weighted Average
	79,699		76.51% Pervious Area
	24,471		23.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.2	100	0.0205	0.15		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.8	115	0.0234	1.07		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
2.5	190	0.0316	1.24		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
15.5	405	Total			

Subcatchment 25S: X



Summary for Subcatchment 26S: Y

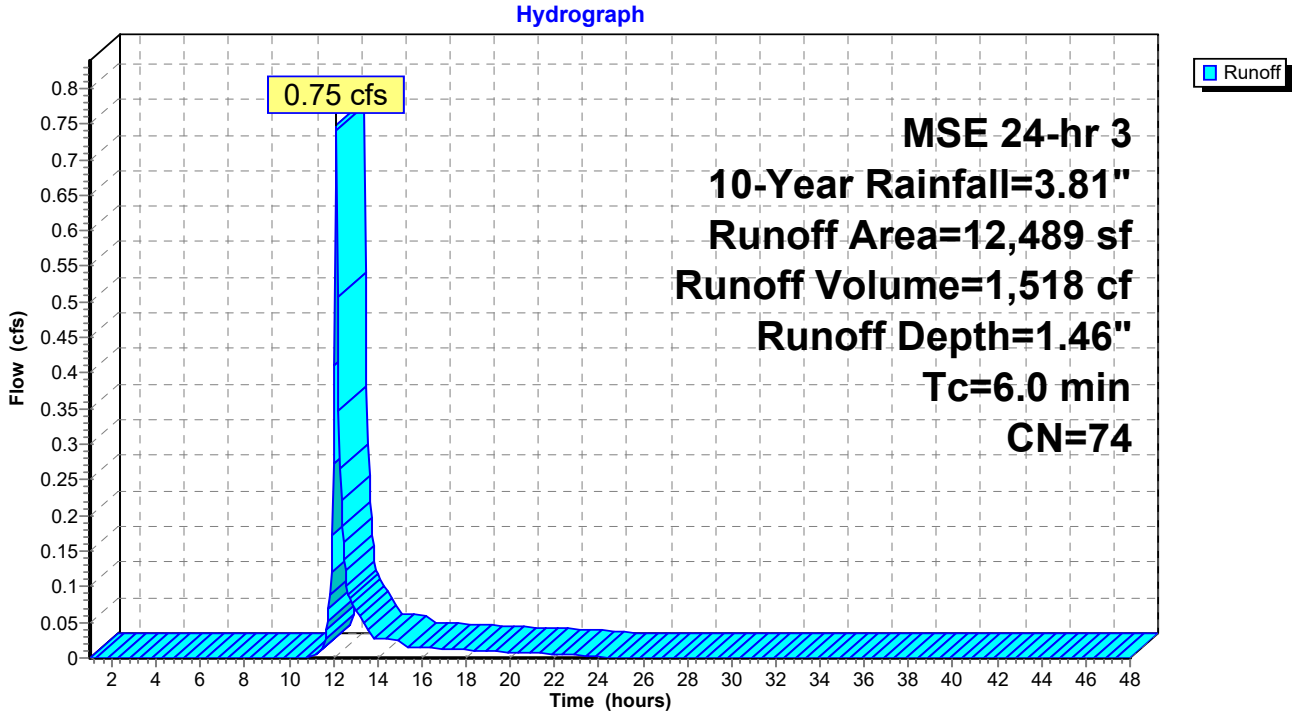
Runoff = 0.75 cfs @ 12.14 hrs, Volume= 1,518 cf, Depth= 1.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	12,489	74	PER
	12,489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, conservative**

Subcatchment 26S: Y



Summary for Subcatchment 27S: Z

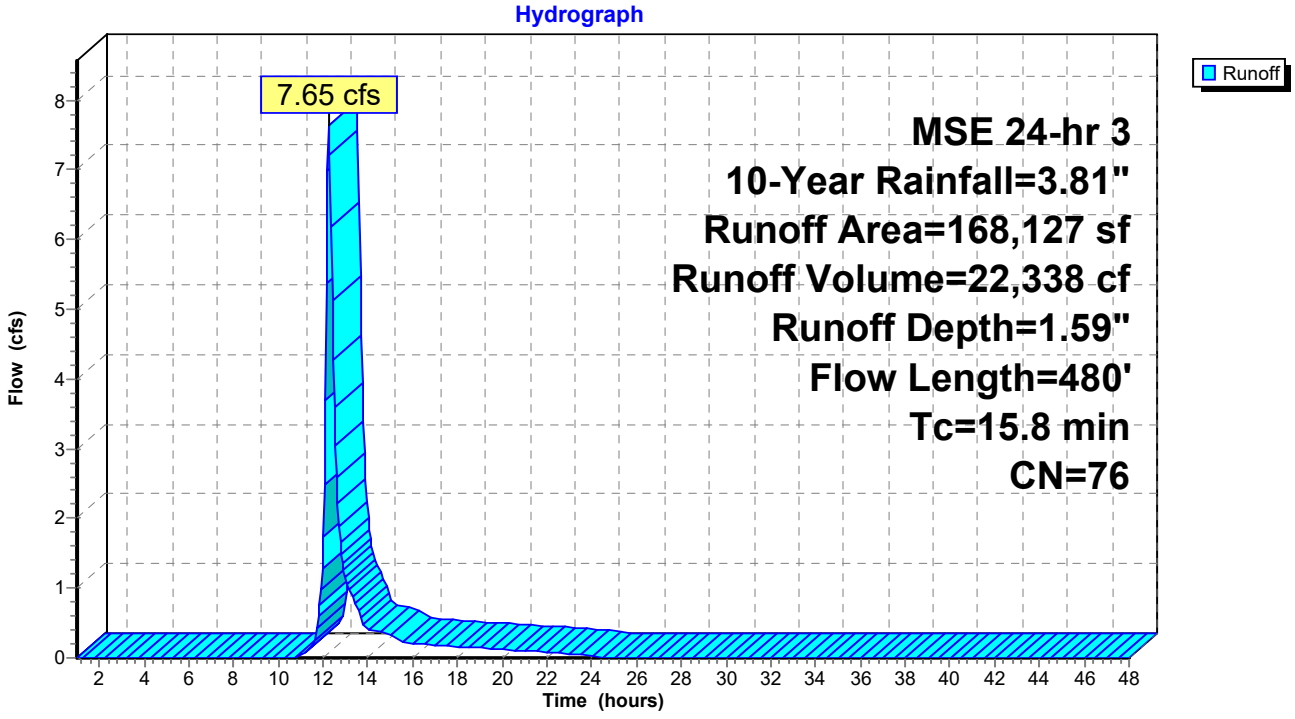
Runoff = 7.65 cfs @ 12.26 hrs, Volume= 22,338 cf, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	157,056	74	PER
*	11,071	98	IMP
	168,127	76	Weighted Average
	157,056		93.42% Pervious Area
	11,071		6.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.5	100	0.0237	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
5.3	380	0.0291	1.19		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.8	480	Total			

Subcatchment 27S: Z



Summary for Subcatchment 67S: C2

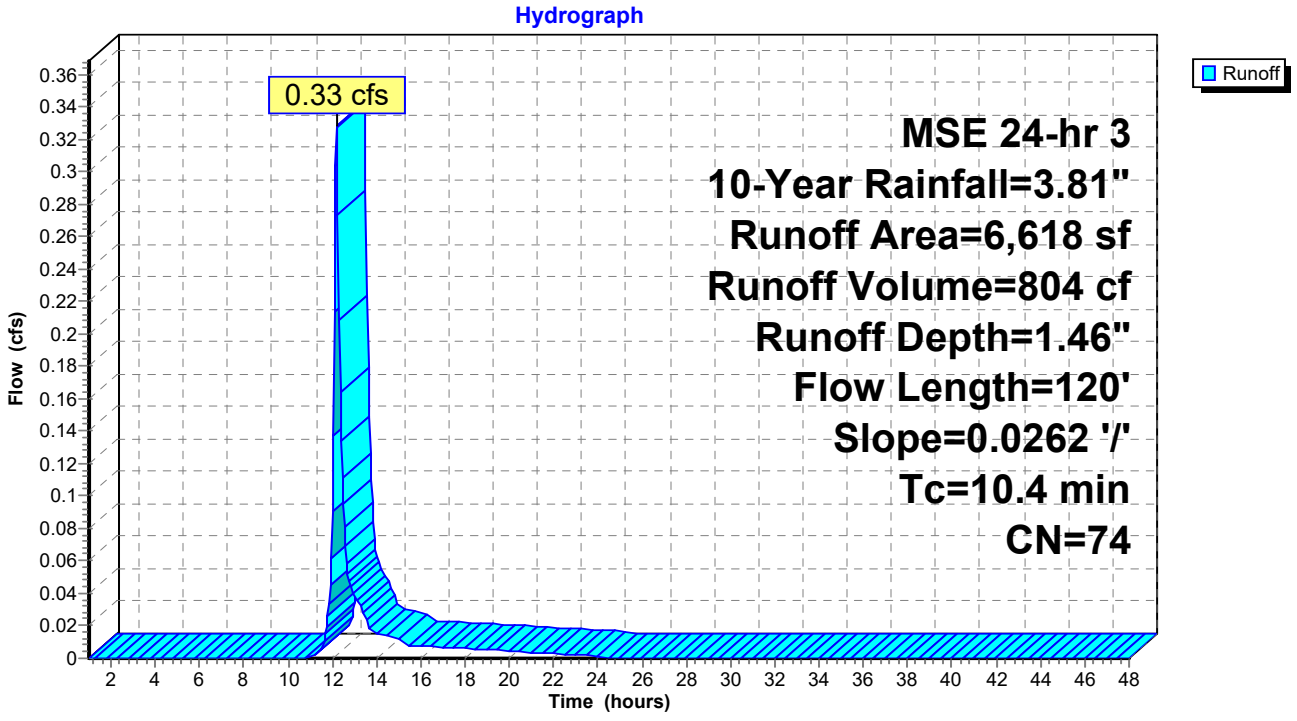
Runoff = 0.33 cfs @ 12.19 hrs, Volume= 804 cf, Depth= 1.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	6,618	74	PER
	6,618		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	100	0.0262	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.3	20	0.0262	1.13		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.4	120	Total			

Subcatchment 67S: C2



Summary for Subcatchment 68S: C4

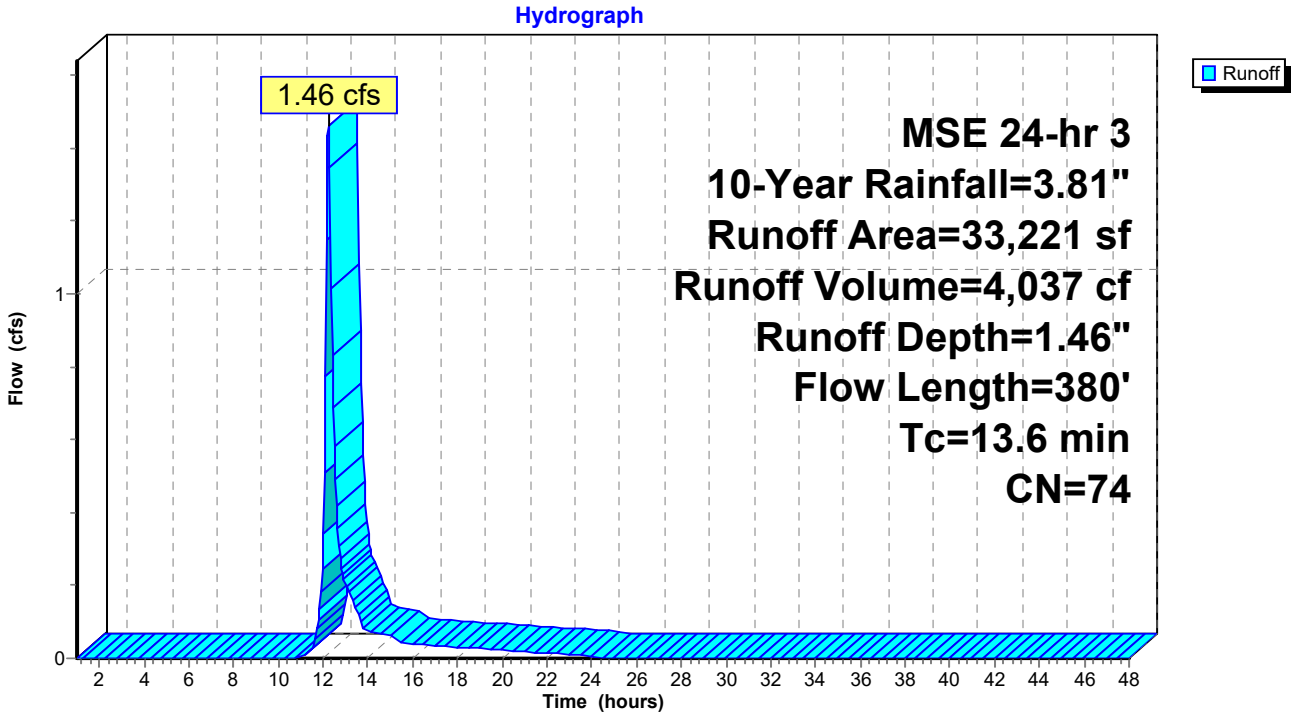
Runoff = 1.46 cfs @ 12.23 hrs, Volume= 4,037 cf, Depth= 1.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	33,221	74	PER
	33,221		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.0319	0.18		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
4.3	280	0.0235	1.07		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
13.6	380	Total			

Subcatchment 68S: C4



Summary for Subcatchment 69S: C3

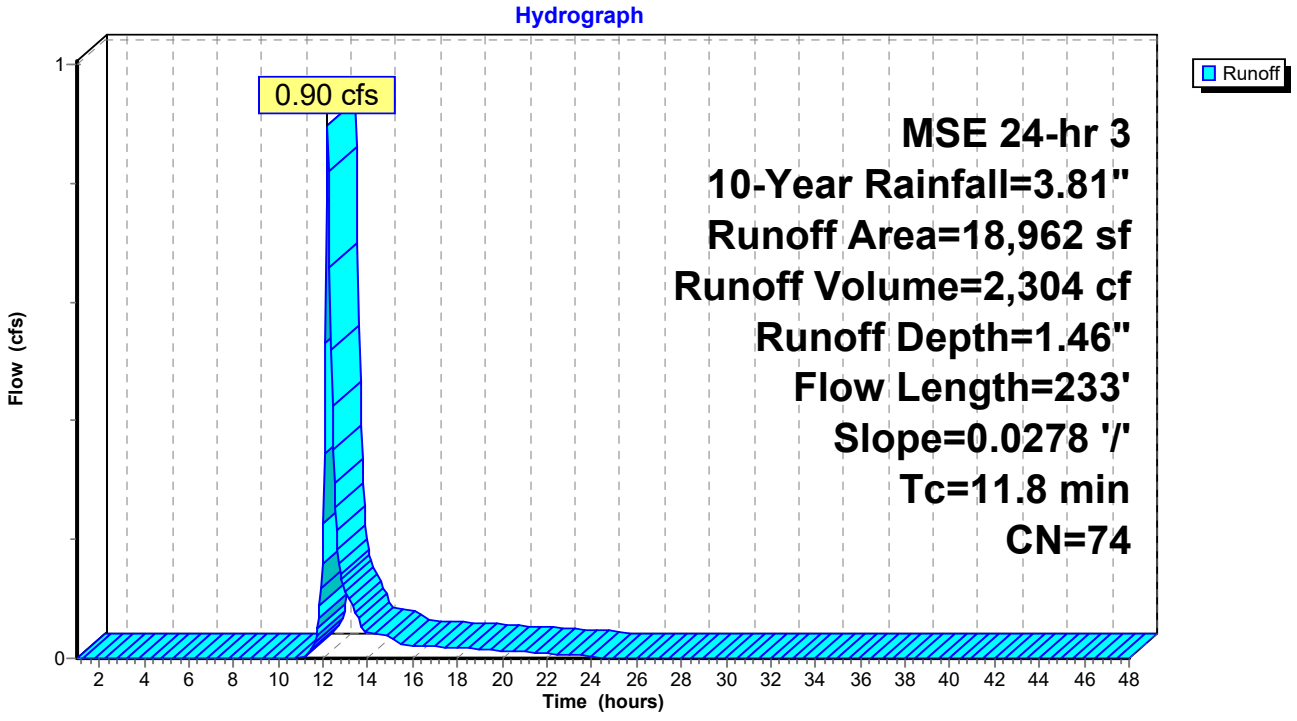
Runoff = 0.90 cfs @ 12.21 hrs, Volume= 2,304 cf, Depth= 1.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	18,962	74	PER
	18,962		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	100	0.0278	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.9	133	0.0278	1.17		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
11.8	233	Total			

Subcatchment 69S: C3



Summary for Subcatchment 70S: O1

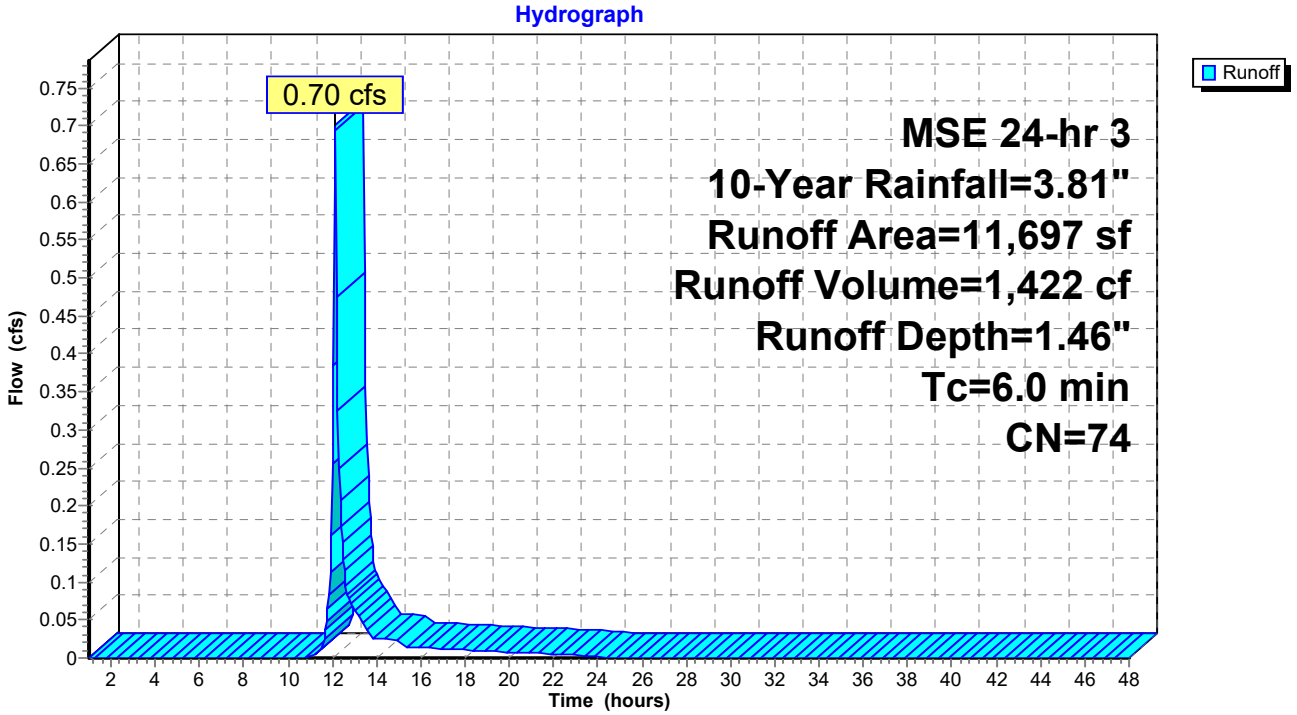
Runoff = 0.70 cfs @ 12.14 hrs, Volume= 1,422 cf, Depth= 1.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	11,697	74	PERV
	11,697		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 70S: O1



Summary for Subcatchment 71S: O2

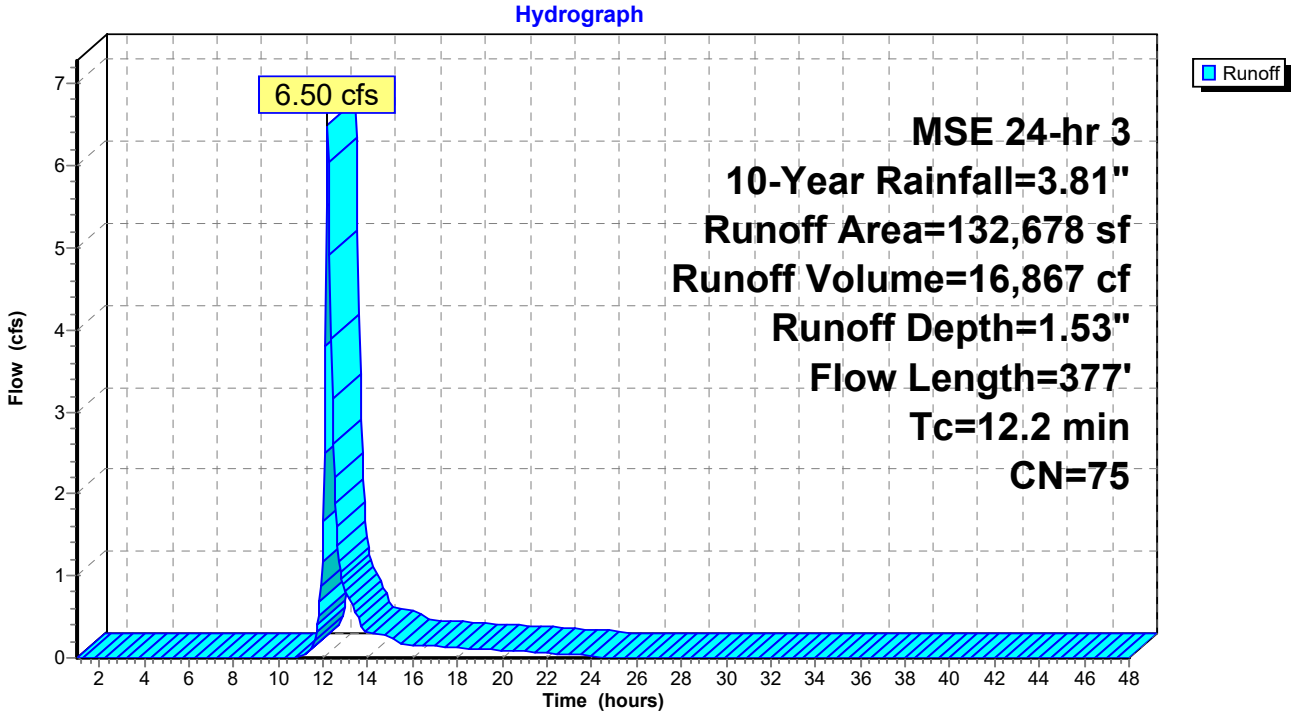
Runoff = 6.50 cfs @ 12.21 hrs, Volume= 16,867 cf, Depth= 1.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.81"

	Area (sf)	CN	Description
*	129,638	74	PERV
*	3,040	98	IMPERV
	132,678	75	Weighted Average
	129,638		97.71% Pervious Area
	3,040		2.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	77	0.0288	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
4.3	300	0.0135	1.16		**Shallow Concentrated Flow, SHALLOW CONC** Nearly Bare & Untilled Kv= 10.0 fps
12.2	377	Total			

Subcatchment 71S: O2



Summary for Reach 93R: Overland Flow from North Depression to South Depression

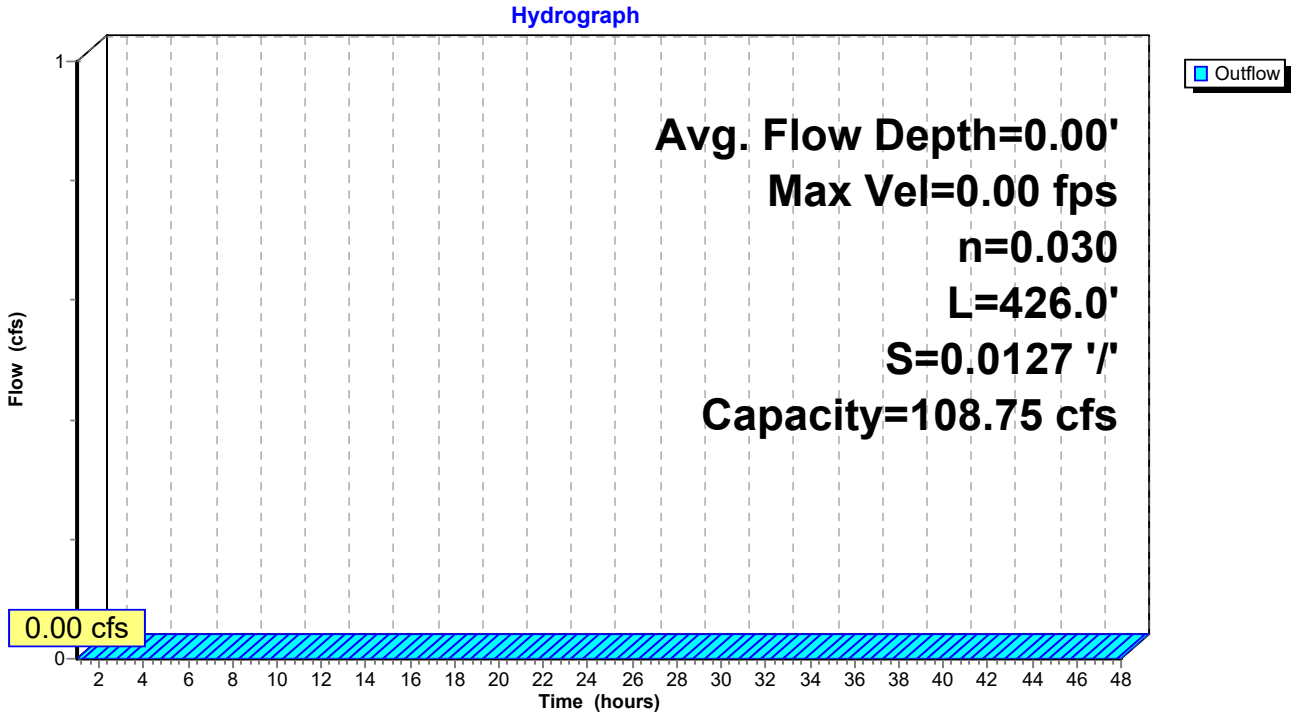
[43] Hint: Has no inflow (Outflow=Zero)

Bank-Full Depth= 0.50' Flow Area= 37.5 sf, Capacity= 108.75 cfs

50.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 50.0 '/' Top Width= 100.00'
Length= 426.0' Slope= 0.0127 '/'
Inlet Invert= 755.90', Outlet Invert= 750.50'

‡

Reach 93R: Overland Flow from North Depression to South Depression



Summary for Pond 73P: Southeast Basin

Inflow Area = 589,000 sf, 14.01% Impervious, Inflow Depth = 0.39" for 10-Year event
Inflow = 6.52 cfs @ 12.25 hrs, Volume= 19,011 cf
Outflow = 1.16 cfs @ 12.86 hrs, Volume= 19,011 cf, Atten= 82%, Lag= 36.2 min
Discarded = 1.16 cfs @ 12.86 hrs, Volume= 19,011 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 731.28' @ 12.86 hrs Surf.Area= 9,286 sf Storage= 7,855 cf

Plug-Flow detention time= 71.5 min calculated for 18,991 cf (100% of inflow)
Center-of-Mass det. time= 71.4 min (901.1 - 829.6)

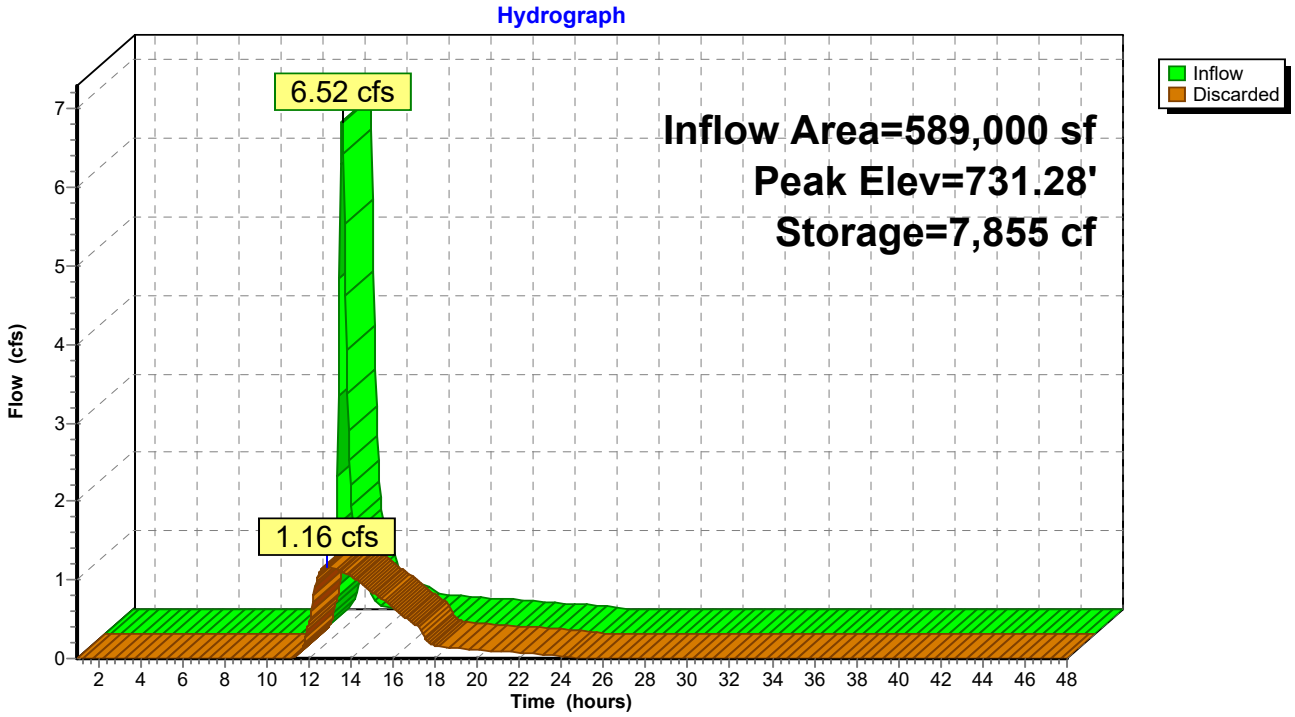
Volume	Invert	Avail.Storage	Storage Description
#1	730.00'	273,743 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
730.00	2,768	0	0
731.00	8,073	5,421	5,421
732.00	12,399	10,236	15,657
733.00	17,056	14,728	30,384
734.00	21,328	19,192	49,576
735.00	25,607	23,468	73,044
736.00	29,845	27,726	100,770
737.00	35,145	32,495	133,265
738.00	42,680	38,913	172,177
739.00	51,064	46,872	219,049
740.00	58,323	54,694	273,743

Device	Routing	Invert	Outlet Devices
#1	Discarded	730.00'	**5.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 720.00'

Discarded OutFlow Max=1.16 cfs @ 12.86 hrs HW=731.28' (Free Discharge)
↑**1=Exfiltration** (Controls 1.16 cfs)

Pond 73P: Southeast Basin



Summary for Pond 74P: Southwest Basin

Inflow Area = 432,562 sf, 19.07% Impervious, Inflow Depth = 1.81" for 10-Year event
Inflow = 20.86 cfs @ 12.26 hrs, Volume= 65,424 cf
Outflow = 4.67 cfs @ 12.79 hrs, Volume= 65,424 cf, Atten= 78%, Lag= 31.9 min
Discarded = 4.67 cfs @ 12.79 hrs, Volume= 65,424 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 743.37' @ 12.79 hrs Surf.Area= 23,971 sf Storage= 27,826 cf

Plug-Flow detention time= 81.1 min calculated for 65,424 cf (100% of inflow)
Center-of-Mass det. time= 81.1 min (900.6 - 819.5)

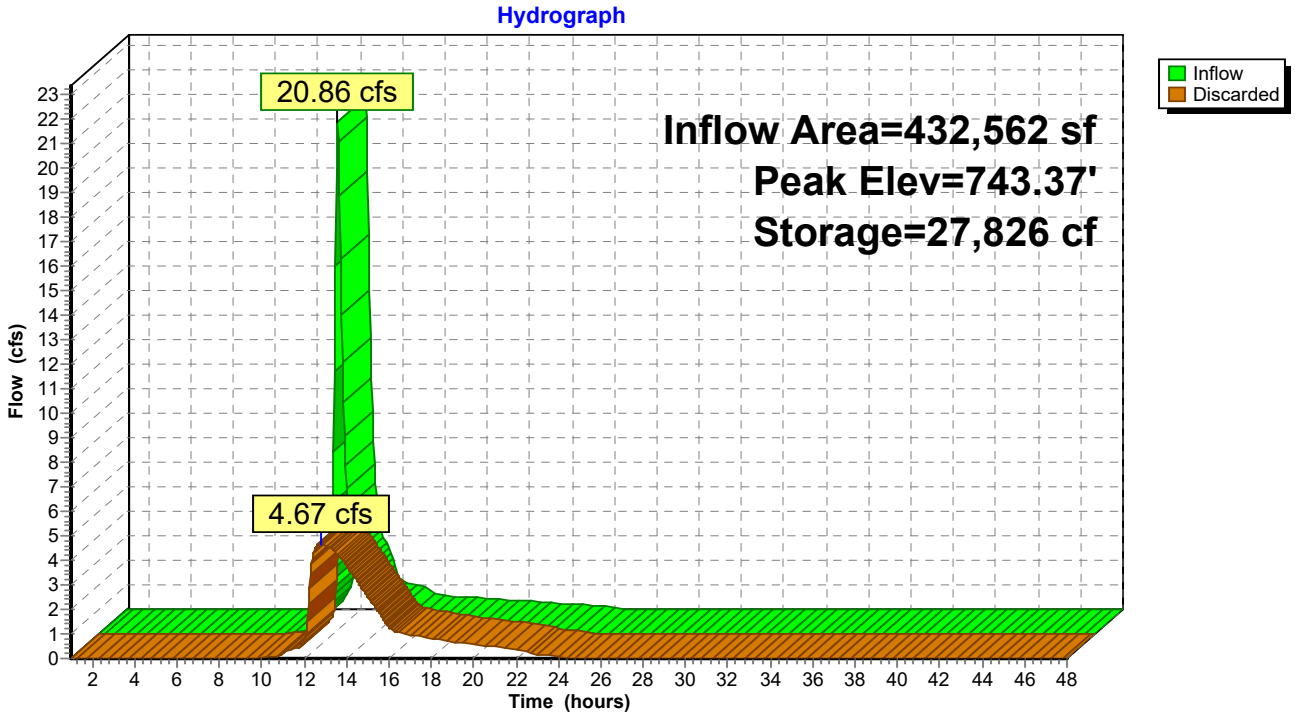
Volume	Invert	Avail.Storage	Storage Description
#1	740.00'	78,856 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
740.00	1,591	0	0
741.00	3,325	2,458	2,458
742.00	5,645	4,485	6,943
743.00	19,935	12,790	19,733
744.00	30,884	25,410	45,143
745.00	36,542	33,713	78,856

Device	Routing	Invert	Outlet Devices
#1	Discarded	740.00'	**8.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 720.00'

Discarded OutFlow Max=4.67 cfs @ 12.79 hrs HW=743.37' (Free Discharge)
↑—**1=Exfiltration** (Controls 4.67 cfs)

Pond 74P: Southwest Basin



Summary for Pond 89P: Gravel North Depression

[93] Warning: Storage range exceeded by 0.74'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 235,181 sf, 19.95% Impervious, Inflow Depth = 1.83" for 10-Year event
Inflow = 13.89 cfs @ 12.18 hrs, Volume= 35,902 cf
Outflow = 14.62 cfs @ 12.16 hrs, Volume= 35,902 cf, Atten= 0%, Lag= 0.0 min
Discarded = 0.45 cfs @ 12.16 hrs, Volume= 8,349 cf
Primary = 2.20 cfs @ 12.01 hrs, Volume= 15,965 cf
Secondary = 11.99 cfs @ 12.16 hrs, Volume= 11,588 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 756.74' @ 12.16 hrs Surf.Area= 1,161 sf Storage= 808 cf

Plug-Flow detention time= 2.9 min calculated for 35,864 cf (100% of inflow)
Center-of-Mass det. time= 2.9 min (813.4 - 810.5)

Volume	Invert	Avail.Storage	Storage Description
#1	754.80'	808 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
754.80	237	0	0
755.50	725	337	337
756.00	1,161	472	808

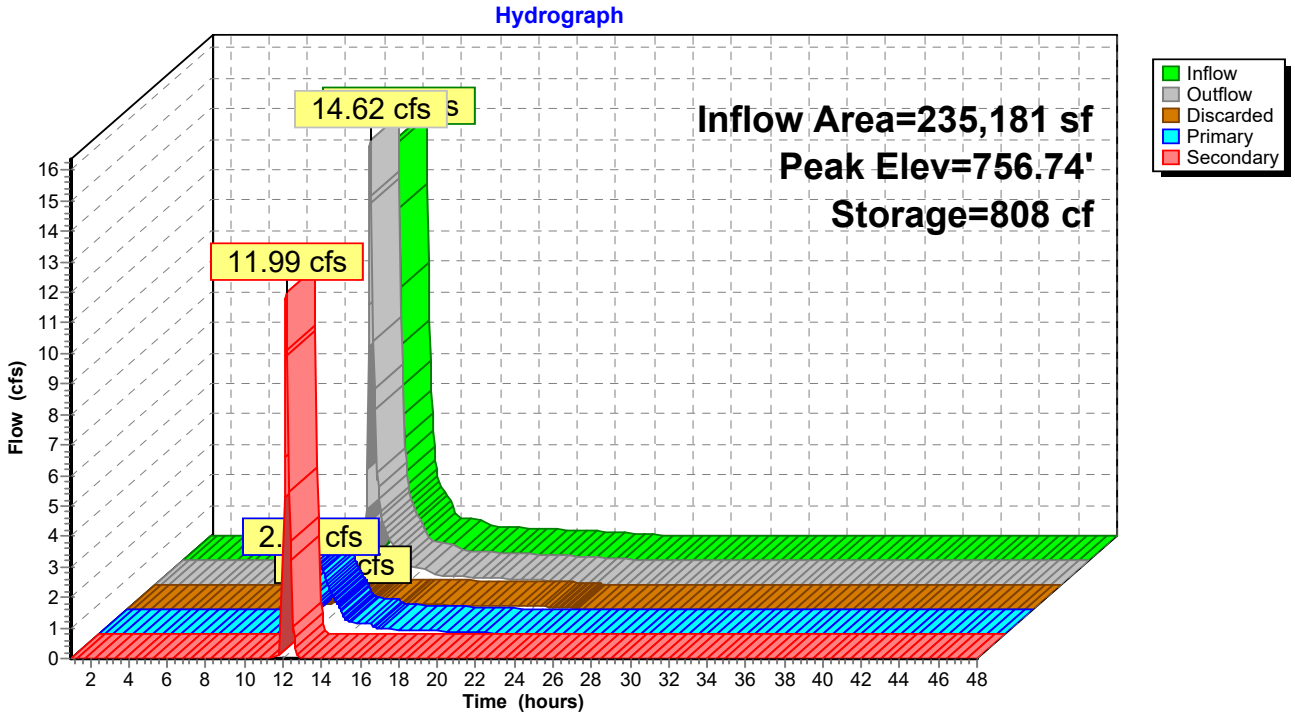
Device	Routing	Invert	Outlet Devices
#1	Primary	754.80'	**12.0" Round Culvert** L= 426.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 754.80' / 749.60' S= 0.0122 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.79 sf
#2	Secondary	755.80'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#3	Discarded	754.80'	**16.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 725.00'

Discarded OutFlow Max=0.45 cfs @ 12.16 hrs HW=756.70' (Free Discharge)
3=Exfiltration (Controls 0.45 cfs)

Primary OutFlow Max=2.20 cfs @ 12.01 hrs HW=756.09' (Free Discharge)
1=Culvert (Barrel Controls 2.20 cfs @ 2.83 fps)

Secondary OutFlow Max=11.33 cfs @ 12.16 hrs HW=756.70' (Free Discharge)
2=Broad-Crested Rectangular Weir (Weir Controls 11.33 cfs @ 2.50 fps)

Pond 89P: Gravel North Depression



Summary for Pond 92P: Gravel South Depression

[93] Warning: Storage range exceeded by 1.12'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing
[61] Hint: Exceeded Reach 93R outlet invert by 2.60' @ 12.15 hrs
[79] Warning: Submerged Pond 89P Primary device # 1 OUTLET by 3.50'

Inflow Area = 288,183 sf, 16.28% Impervious, Inflow Depth = 1.42" for 10-Year event
Inflow = 15.90 cfs @ 12.17 hrs, Volume= 33,994 cf
Outflow = 15.92 cfs @ 12.17 hrs, Volume= 33,994 cf, Atten= 0%, Lag= 0.0 min
Primary = 15.82 cfs @ 12.17 hrs, Volume= 29,884 cf
Secondary = 0.10 cfs @ 12.17 hrs, Volume= 4,110 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 753.12' @ 12.17 hrs Surf.Area= 253 sf Storage= 387 cf

Plug-Flow detention time= 7.2 min calculated for 33,958 cf (100% of inflow)
Center-of-Mass det. time= 7.2 min (793.3 - 786.2)

Volume	Invert	Avail.Storage	Storage Description
#1	749.60'	387 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

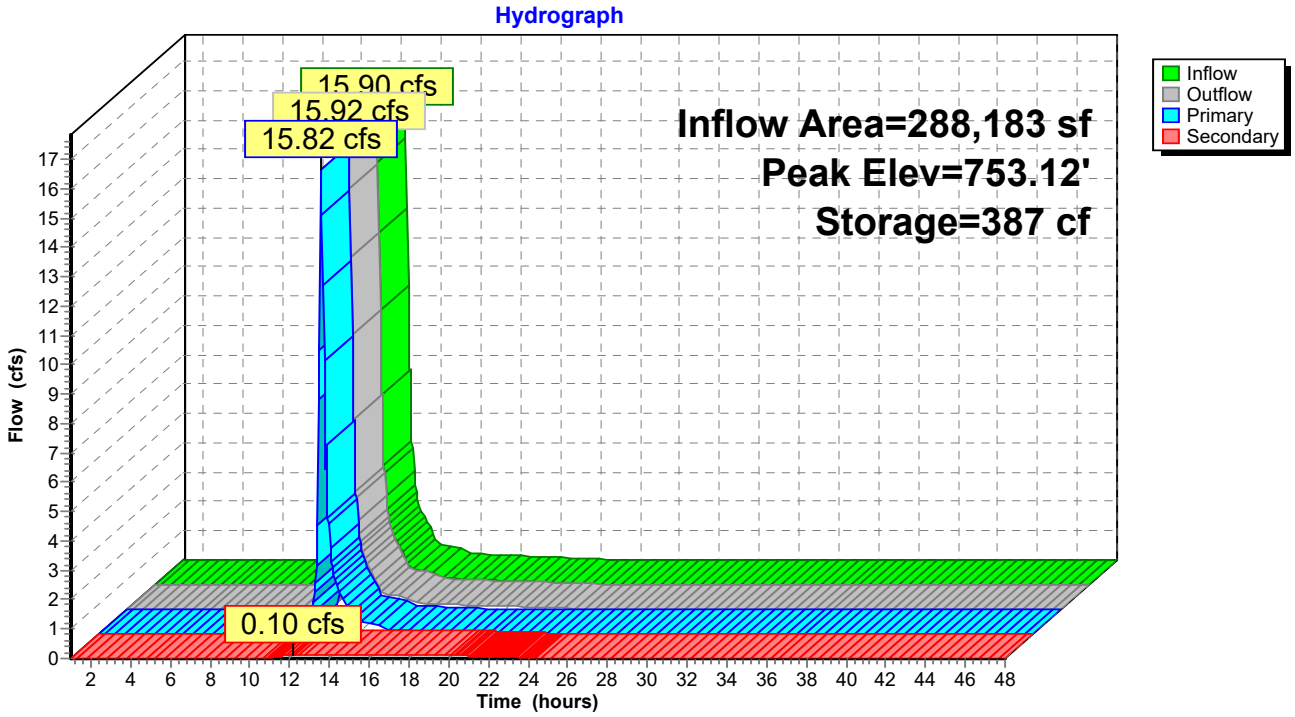
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
749.60	30	0	0
750.00	107	27	27
752.00	253	360	387

Device	Routing	Invert	Outlet Devices
#1	Primary	752.00'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#2	Secondary	749.60'	**16.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 725.00'

Primary OutFlow Max=15.05 cfs @ 12.17 hrs HW=753.08' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 15.05 cfs @ 2.78 fps)

Secondary OutFlow Max=0.10 cfs @ 12.17 hrs HW=753.08' (Free Discharge)
↑—**2=Exfiltration** (Controls 0.10 cfs)

Pond 92P: Gravel South Depression

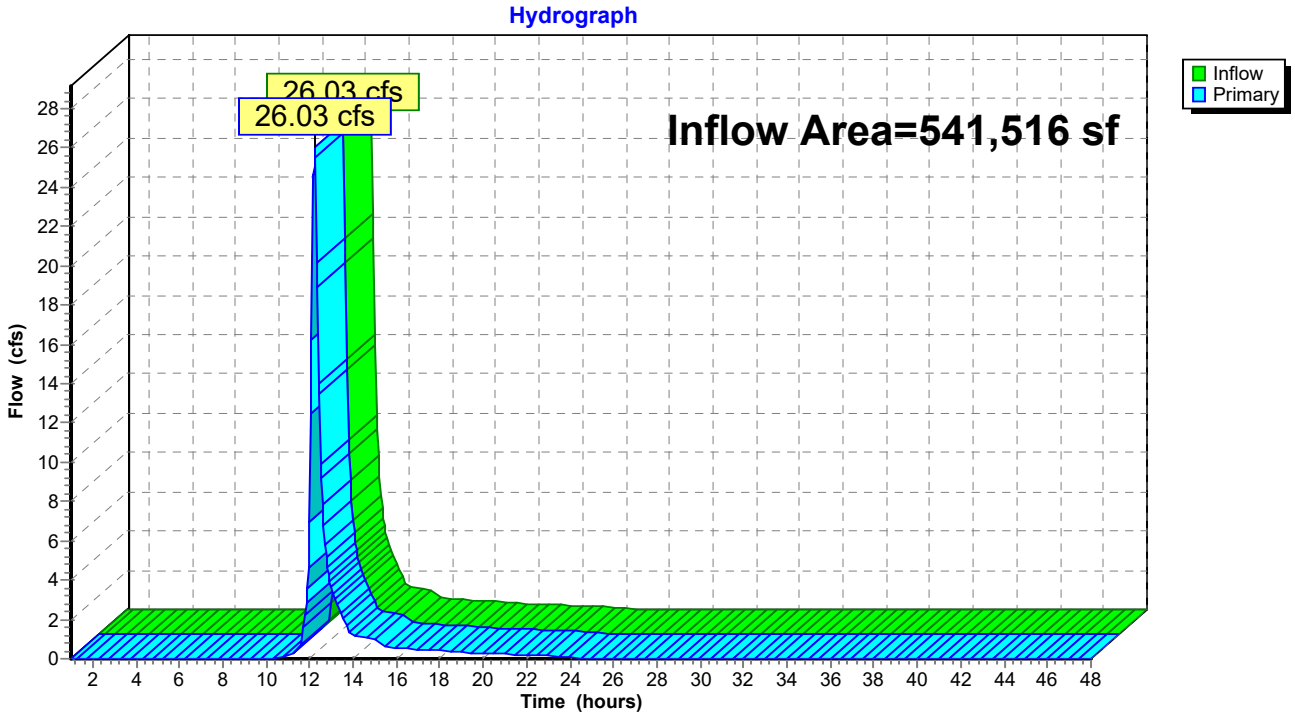


Summary for Link 32L: TOTAL OFFSITE UNTREATED

Inflow Area = 541,516 sf, 15.80% Impervious, Inflow Depth = 1.55" for 10-Year event
Inflow = 26.03 cfs @ 12.23 hrs, Volume= 69,989 cf
Primary = 26.03 cfs @ 12.23 hrs, Volume= 69,989 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 32L: TOTAL OFFSITE UNTREATED

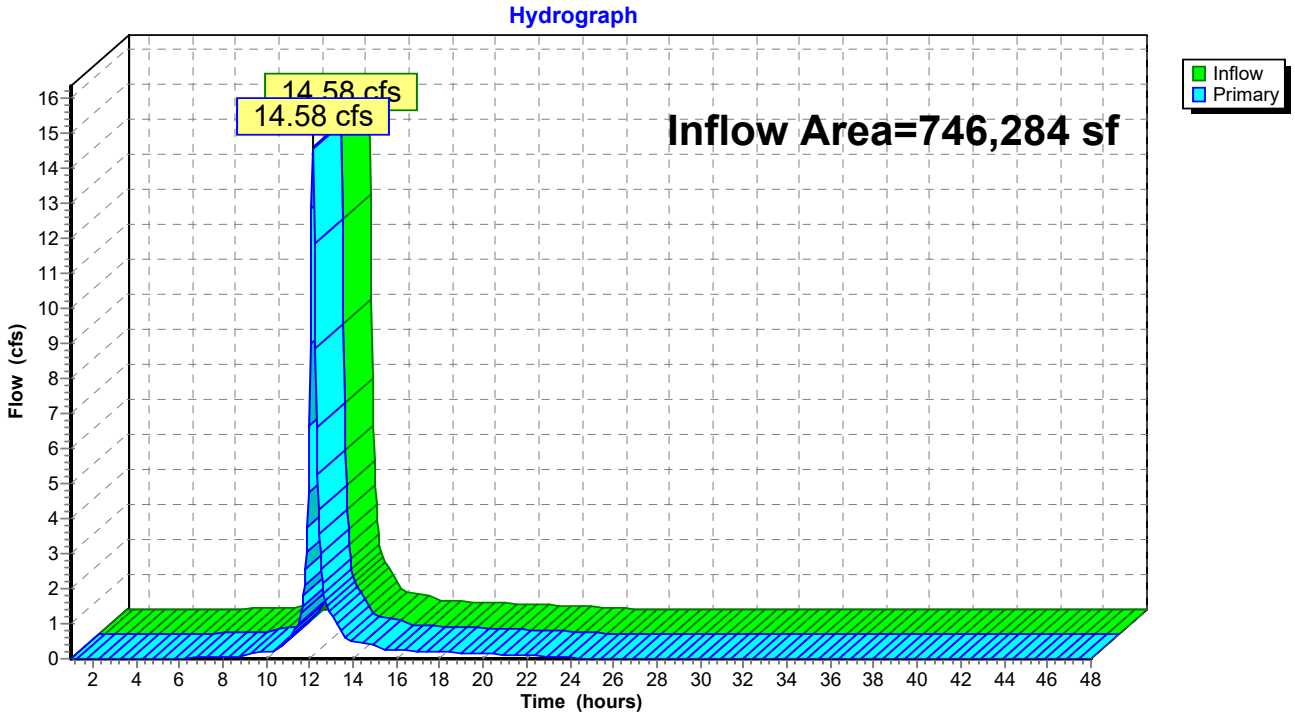


Summary for Link 33L: TOTAL ONSITE

Inflow Area = 746,284 sf, 24.37% Impervious, Inflow Depth = 0.57" for 10-Year event
Inflow = 14.58 cfs @ 12.14 hrs, Volume= 35,408 cf
Primary = 14.58 cfs @ 12.14 hrs, Volume= 35,408 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 33L: TOTAL ONSITE

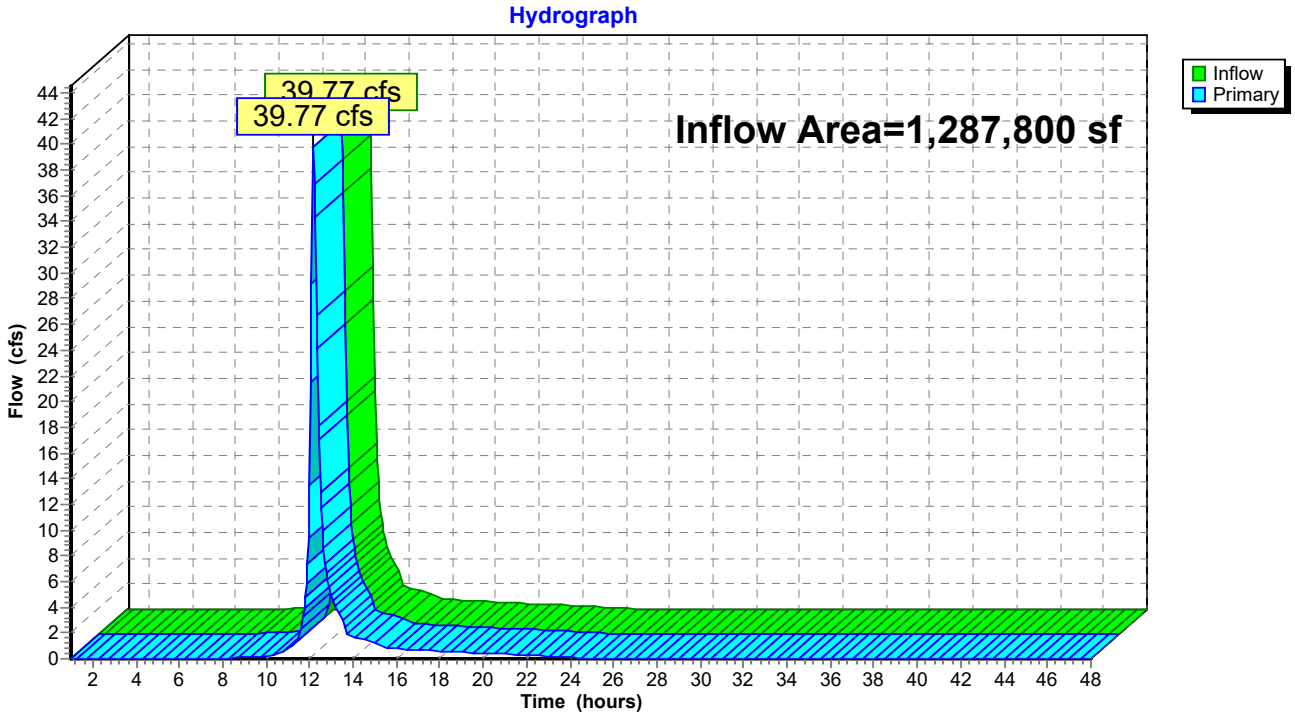


Summary for Link 34L: TOTAL OUTFALL

Inflow Area = 1,287,800 sf, 20.77% Impervious, Inflow Depth = 0.98" for 10-Year event
Inflow = 39.77 cfs @ 12.17 hrs, Volume= 105,397 cf
Primary = 39.77 cfs @ 12.17 hrs, Volume= 105,397 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 34L: TOTAL OUTFALL

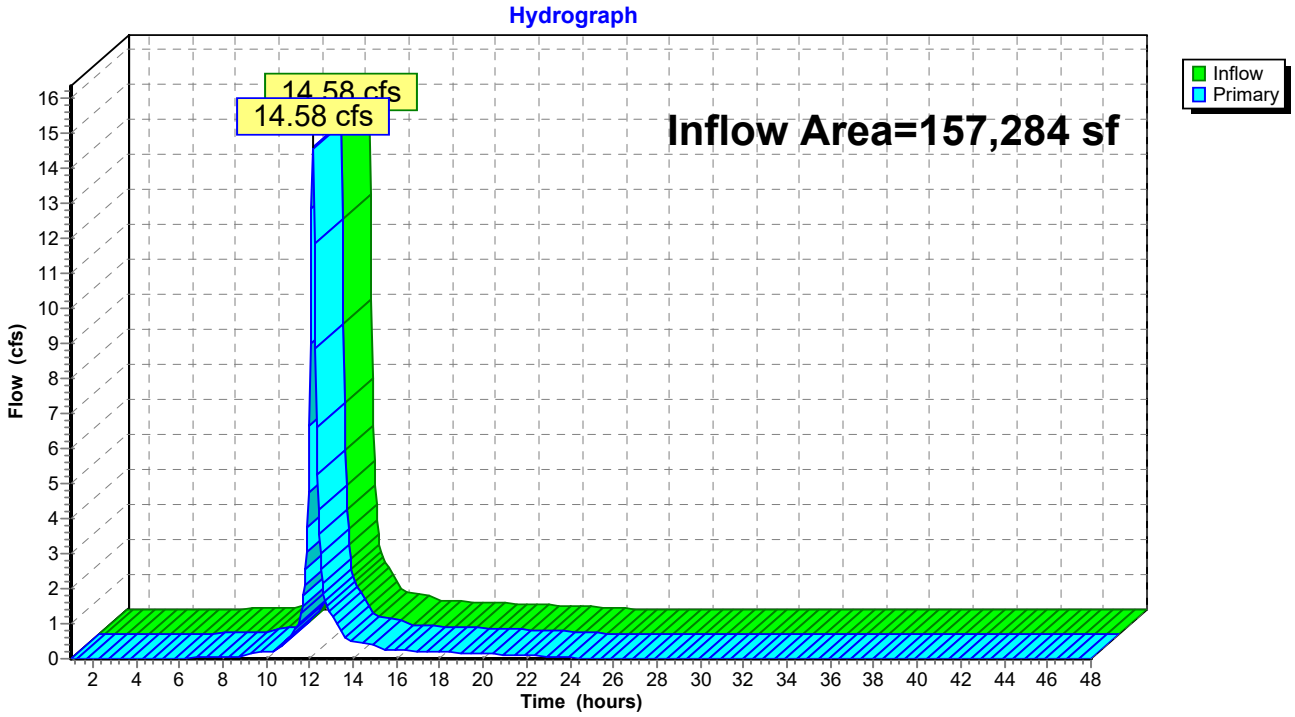


Summary for Link 75L: Areas Piped

Inflow Area = 157,284 sf, 63.18% Impervious, Inflow Depth = 2.70" for 10-Year event
Inflow = 14.58 cfs @ 12.14 hrs, Volume= 35,408 cf
Primary = 14.58 cfs @ 12.14 hrs, Volume= 35,408 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 75L: Areas Piped

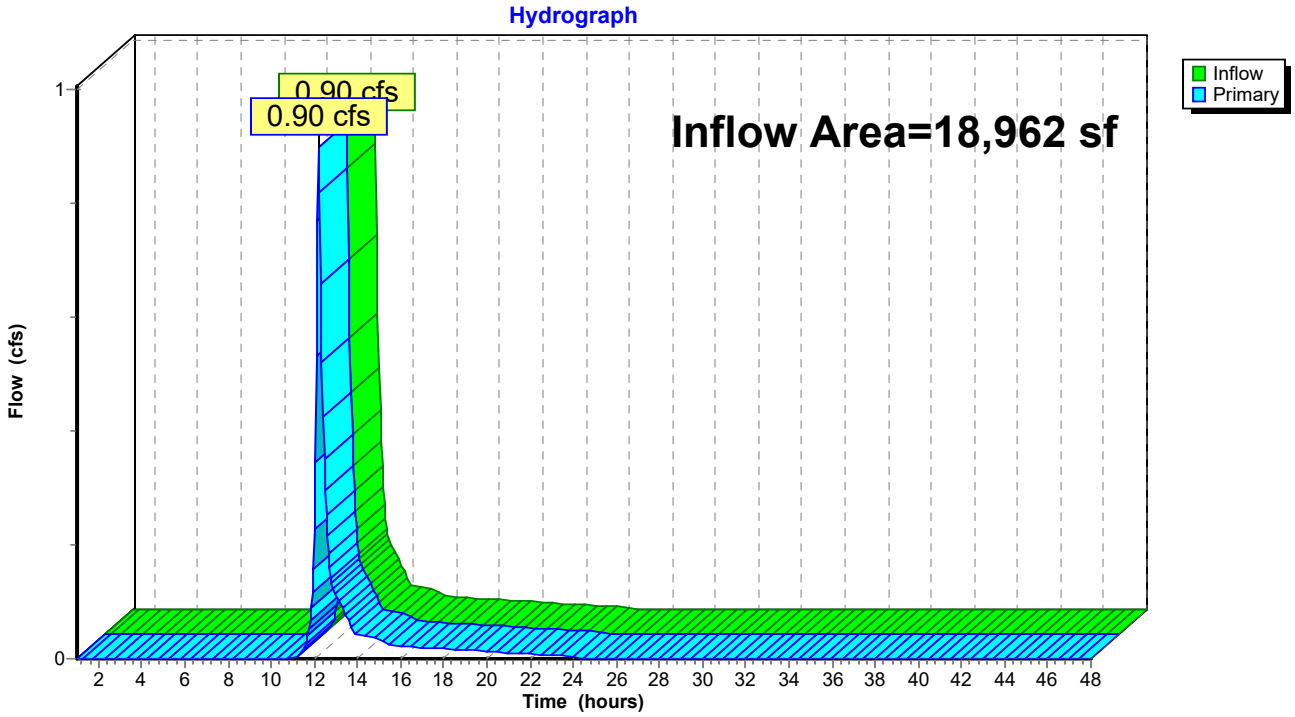


Summary for Link 78L: Swale on Lot 20

Inflow Area = 18,962 sf, 0.00% Impervious, Inflow Depth = 1.46" for 10-Year event
Inflow = 0.90 cfs @ 12.21 hrs, Volume= 2,304 cf
Primary = 0.90 cfs @ 12.21 hrs, Volume= 2,304 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 78L: Swale on Lot 20

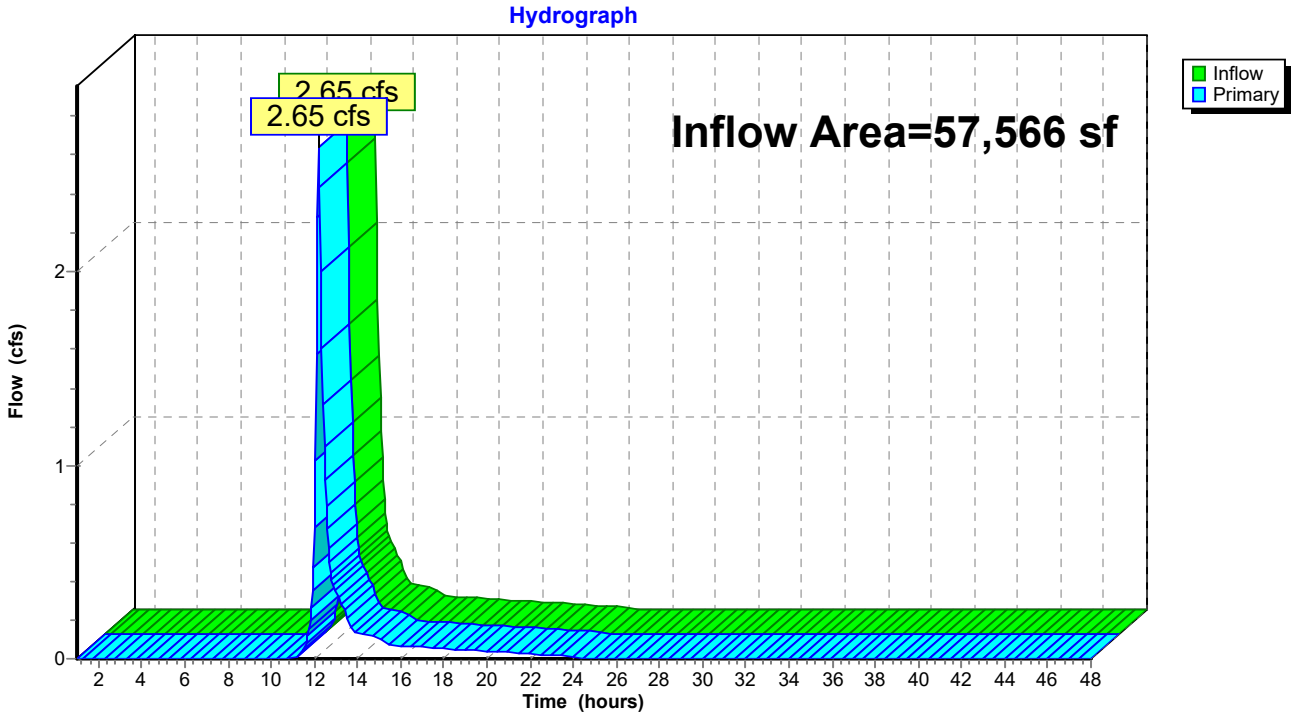


Summary for Link 79L: Swale Along Red Barn Ln.

Inflow Area = 57,566 sf, 0.00% Impervious, Inflow Depth = 1.46" for 10-Year event
Inflow = 2.65 cfs @ 12.21 hrs, Volume= 6,996 cf
Primary = 2.65 cfs @ 12.21 hrs, Volume= 6,996 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 79L: Swale Along Red Barn Ln.

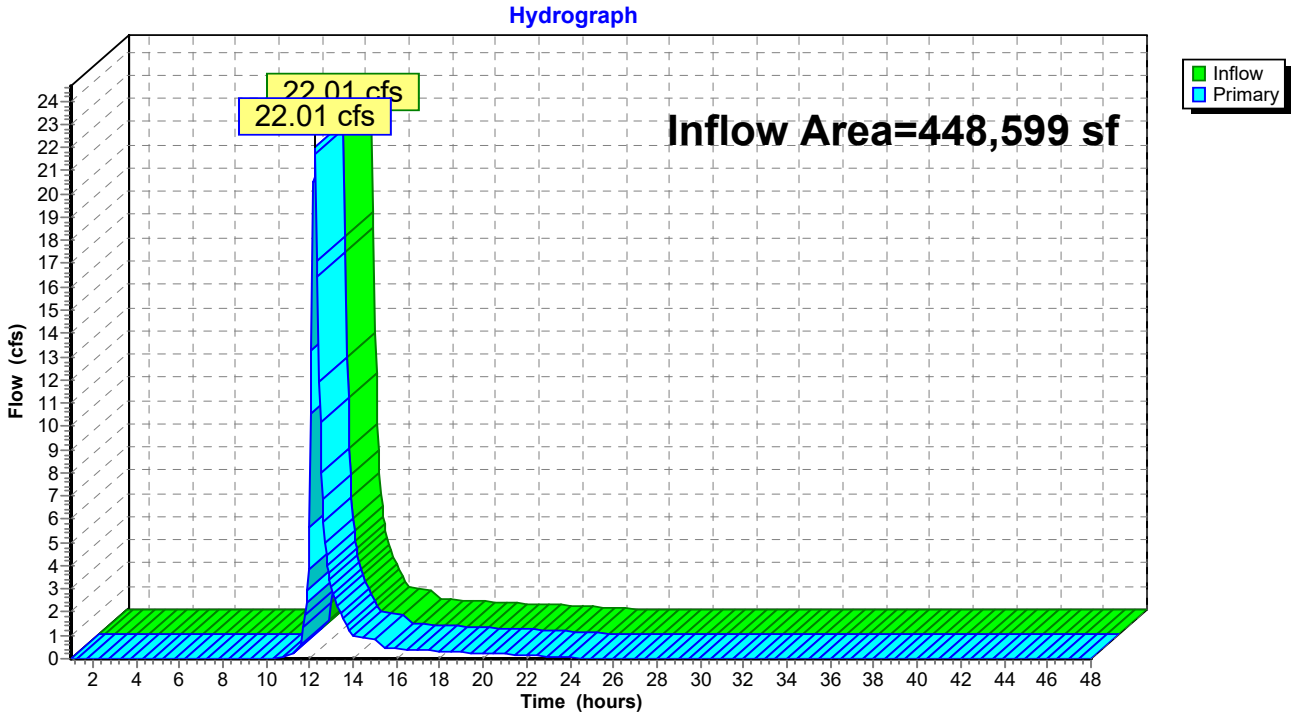


Summary for Link 80L: Cul-de-sac On Green Meadow Place

Inflow Area = 448,599 sf, 18.72% Impervious, Inflow Depth = 1.57" for 10-Year event
Inflow = 22.01 cfs @ 12.23 hrs, Volume= 58,516 cf
Primary = 22.01 cfs @ 12.23 hrs, Volume= 58,516 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 80L: Cul-de-sac On Green Meadow Place



Time span=1.00-48.00 hrs, dt=0.05 hrs, 941 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: A Runoff Area=156,438 sf 0.00% Impervious Runoff Depth=3.34"
Flow Length=375' Tc=15.6 min CN=74 Runoff=15.17 cfs 43,501 cf

Subcatchment 2S: B Runoff Area=141,137 sf 26.27% Impervious Runoff Depth=3.94"
Flow Length=700' Slope=0.0071 '/' Tc=19.8 min CN=80 Runoff=14.29 cfs 46,388 cf

Subcatchment 4S: C1 Runoff Area=12,661 sf 0.00% Impervious Runoff Depth=3.34"
Flow Length=100' Slope=0.0193 '/' Tc=11.4 min CN=74 Runoff=1.41 cfs 3,521 cf

Subcatchment 5S: D Runoff Area=24,345 sf 0.00% Impervious Runoff Depth=3.34"
Flow Length=170' Tc=10.2 min CN=74 Runoff=2.81 cfs 6,770 cf

Subcatchment 6S: E Runoff Area=138,758 sf 15.57% Impervious Runoff Depth=3.74"
Flow Length=471' Tc=10.6 min CN=78 Runoff=17.60 cfs 43,227 cf

Subcatchment 7S: F Runoff Area=13,305 sf 0.00% Impervious Runoff Depth=3.34"
Flow Length=100' Slope=0.0583 '/' Tc=7.3 min CN=74 Runoff=1.75 cfs 3,700 cf

Subcatchment 8S: G Runoff Area=66,971 sf 15.30% Impervious Runoff Depth=3.74"
Flow Length=295' Tc=12.7 min CN=78 Runoff=7.95 cfs 20,863 cf

Subcatchment 9S: H Runoff Area=16,147 sf 93.29% Impervious Runoff Depth=5.71"
Flow Length=200' Tc=6.0 min CN=96 Runoff=3.26 cfs 7,679 cf

Subcatchment 10S: I Runoff Area=10,482 sf 59.22% Impervious Runoff Depth=4.80"
Flow Length=100' Slope=0.0244 '/' Tc=6.0 min CN=88 Runoff=1.93 cfs 4,192 cf

Subcatchment 11S: J Runoff Area=838 sf 4.77% Impervious Runoff Depth=3.44"
Flow Length=15' Slope=0.0122 '/' Tc=6.0 min CN=75 Runoff=0.12 cfs 240 cf

Subcatchment 12S: K Runoff Area=28,606 sf 66.44% Impervious Runoff Depth=5.02"
Flow Length=980' Tc=26.2 min CN=90 Runoff=3.06 cfs 11,970 cf

Subcatchment 13S: L Runoff Area=43,723 sf 16.63% Impervious Runoff Depth=3.74"
Flow Length=851' Tc=22.3 min CN=78 Runoff=3.96 cfs 13,621 cf

Subcatchment 14S: M Runoff Area=53,002 sf 0.00% Impervious Runoff Depth=3.34"
Flow Length=475' Tc=15.2 min CN=74 Runoff=5.18 cfs 14,738 cf

Subcatchment 15S: N Runoff Area=6,616 sf 7.63% Impervious Runoff Depth=3.54"
Flow Length=65' Slope=0.0344 '/' Tc=6.4 min CN=76 Runoff=0.94 cfs 1,949 cf

Subcatchment 16S: O Runoff Area=18,705 sf 49.38% Impervious Runoff Depth=4.58"
Flow Length=150' Tc=10.4 min CN=86 Runoff=2.83 cfs 7,140 cf

Subcatchment 17S: P Runoff Area=18,391 sf 80.23% Impervious Runoff Depth=5.36"
Flow Length=35' Slope=0.0866 '/' Tc=6.0 min CN=93 Runoff=3.62 cfs 8,215 cf

Subcatchment 18S: Q Runoff Area=14,923 sf 57.14% Impervious Runoff Depth=4.80"
Flow Length=30' Slope=0.0989 '/' Tc=6.0 min CN=88 Runoff=2.75 cfs 5,968 cf

Subcatchment 19S: R Runoff Area=20,724 sf 79.35% Impervious Runoff Depth=5.36"
Flow Length=170' Tc=10.5 min CN=93 Runoff=3.47 cfs 9,257 cf

Subcatchment 20S: S Runoff Area=5,299 sf 100.00% Impervious Runoff Depth=5.94"
Flow Length=50' Slope=0.0049 '/' Tc=6.0 min CN=98 Runoff=1.08 cfs 2,624 cf

Subcatchment 21S: T Runoff Area=35,645 sf 39.81% Impervious Runoff Depth=4.37"
Flow Length=280' Tc=11.4 min CN=84 Runoff=5.05 cfs 12,967 cf

Subcatchment 22S: U Runoff Area=15,551 sf 9.77% Impervious Runoff Depth=3.54"
Flow Length=90' Slope=0.0528 '/' Tc=7.0 min CN=76 Runoff=2.18 cfs 4,582 cf

Subcatchment 23S: V Runoff Area=26,499 sf 91.36% Impervious Runoff Depth=5.71"
Flow Length=115' Tc=6.0 min CN=96 Runoff=5.35 cfs 12,602 cf

Subcatchment 24S: W Runoff Area=75,447 sf 27.41% Impervious Runoff Depth=4.05"
Flow Length=637' Tc=17.0 min CN=81 Runoff=8.42 cfs 25,452 cf

Subcatchment 25S: X Runoff Area=104,170 sf 23.49% Impervious Runoff Depth=3.94"
Flow Length=405' Tc=15.5 min CN=80 Runoff=11.82 cfs 34,238 cf

Subcatchment 26S: Y Runoff Area=12,489 sf 0.00% Impervious Runoff Depth=3.34"
Tc=6.0 min CN=74 Runoff=1.71 cfs 3,473 cf

Subcatchment 27S: Z Runoff Area=168,127 sf 6.58% Impervious Runoff Depth=3.54"
Flow Length=480' Tc=15.8 min CN=76 Runoff=17.10 cfs 49,541 cf

Subcatchment 67S: C2 Runoff Area=6,618 sf 0.00% Impervious Runoff Depth=3.34"
Flow Length=120' Slope=0.0262 '/' Tc=10.4 min CN=74 Runoff=0.76 cfs 1,840 cf

Subcatchment 68S: C4 Runoff Area=33,221 sf 0.00% Impervious Runoff Depth=3.34"
Flow Length=380' Tc=13.6 min CN=74 Runoff=3.42 cfs 9,238 cf

Subcatchment 69S: C3 Runoff Area=18,962 sf 0.00% Impervious Runoff Depth=3.34"
Flow Length=233' Slope=0.0278 '/' Tc=11.8 min CN=74 Runoff=2.08 cfs 5,273 cf

Subcatchment 70S: O1 Runoff Area=11,697 sf 0.00% Impervious Runoff Depth=3.34"
Tc=6.0 min CN=74 Runoff=1.60 cfs 3,253 cf

Subcatchment 71S: O2 Runoff Area=132,678 sf 2.29% Impervious Runoff Depth=3.44"
Flow Length=377' Tc=12.2 min CN=75 Runoff=14.77 cfs 37,990 cf

Reach 93R: Overland Flow from North Depression to South Avg. Flow Depth=0.00' Max Vel=0.00 fps
n=0.030 L=426.0' S=0.0127 '/' Capacity=108.75 cfs Outflow=0.00 cfs 0 cf

Pond 73P: Southeast Basin Peak Elev=732.44' Storage=21,596 cf Inflow=15.17 cfs 43,501 cf
Outflow=1.90 cfs 43,501 cf

Pond 74P: Southwest Basin Peak Elev=744.69' Storage=67,914 cf Inflow=44.20 cfs 138,294 cf
Outflow=7.01 cfs 138,294 cf

Pond 89P: Gravel North Depression Peak Elev=757.33' Storage=808 cf Inflow=29.24 cfs 75,469 cf
Discarded=0.46 cfs 11,415 cf Primary=2.28 cfs 29,061 cf Secondary=26.83 cfs 34,992 cf Outflow=29.57 cfs 75,469 cf

Pond 92P: Gravel South Depression Peak Elev=753.74' Storage=387 cf Inflow=33.14 cfs 78,792 cf
Primary=33.08 cfs 73,606 cf Secondary=0.11 cfs 5,186 cf Outflow=33.18 cfs 78,792 cf

Link 32L: TOTAL OFFSITE UNTREATED Inflow=56.84 cfs 156,643 cf
Primary=56.84 cfs 156,643 cf

Link 33L: TOTAL ONSITE Inflow=25.99 cfs 64,915 cf
Primary=25.99 cfs 64,915 cf

Link 34L: TOTAL OUTFALL Inflow=80.70 cfs 221,558 cf
Primary=80.70 cfs 221,558 cf

Link 75L: Areas Piped Inflow=25.99 cfs 64,915 cf
Primary=25.99 cfs 64,915 cf

Link 78L: Swale on Lot 20 Inflow=2.08 cfs 5,273 cf
Primary=2.08 cfs 5,273 cf

Link 79L: Swale Along Red Barn Ln. Inflow=6.14 cfs 16,007 cf
Primary=6.14 cfs 16,007 cf

Link 80L: Cul-de-sac On Green Meadow Place Inflow=46.93 cfs 130,541 cf
Primary=46.93 cfs 130,541 cf

Total Runoff Area = 1,432,175 sf Runoff Volume = 456,010 cf Average Runoff Depth = 3.82"
81.12% Pervious = 1,161,718 sf 18.88% Impervious = 270,457 sf

Summary for Subcatchment 1S: A

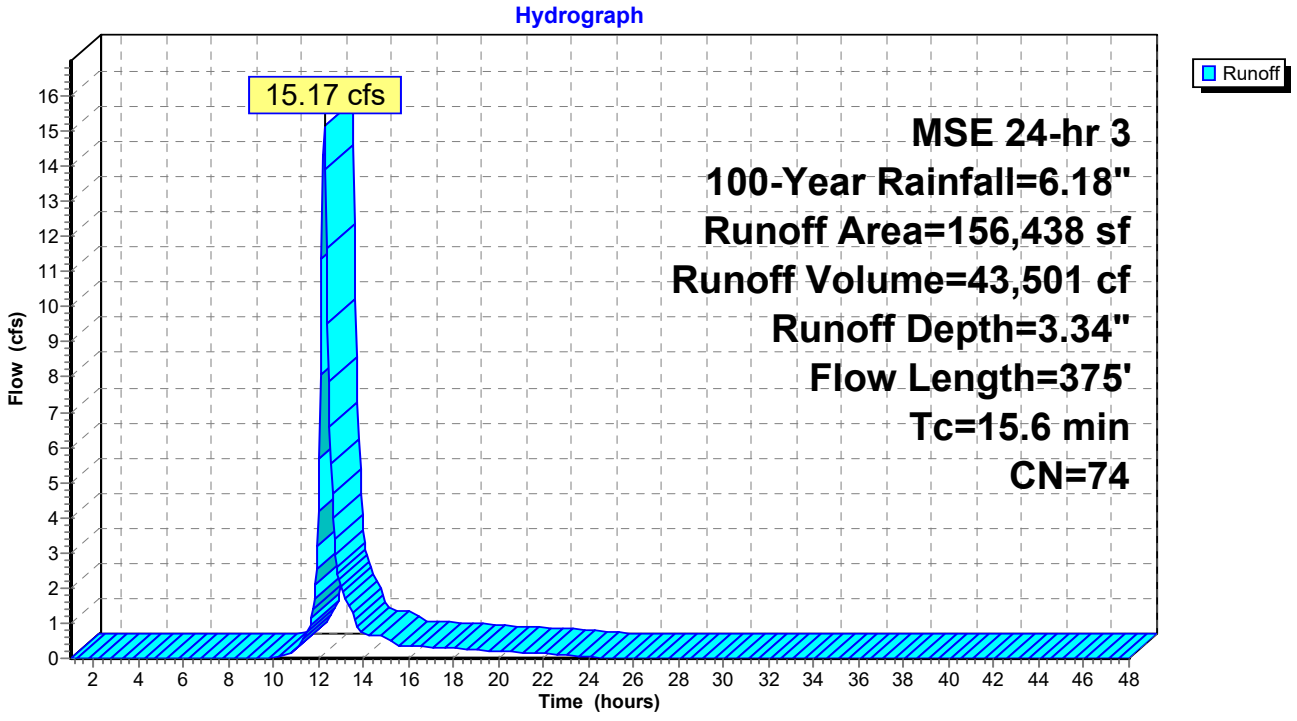
Runoff = 15.17 cfs @ 12.25 hrs, Volume= 43,501 cf, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	156,438	74	PER
	156,438		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	100	0.0196	0.15		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
4.2	275	0.0243	1.09		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.6	375	Total			

Subcatchment 1S: A



Summary for Subcatchment 2S: B

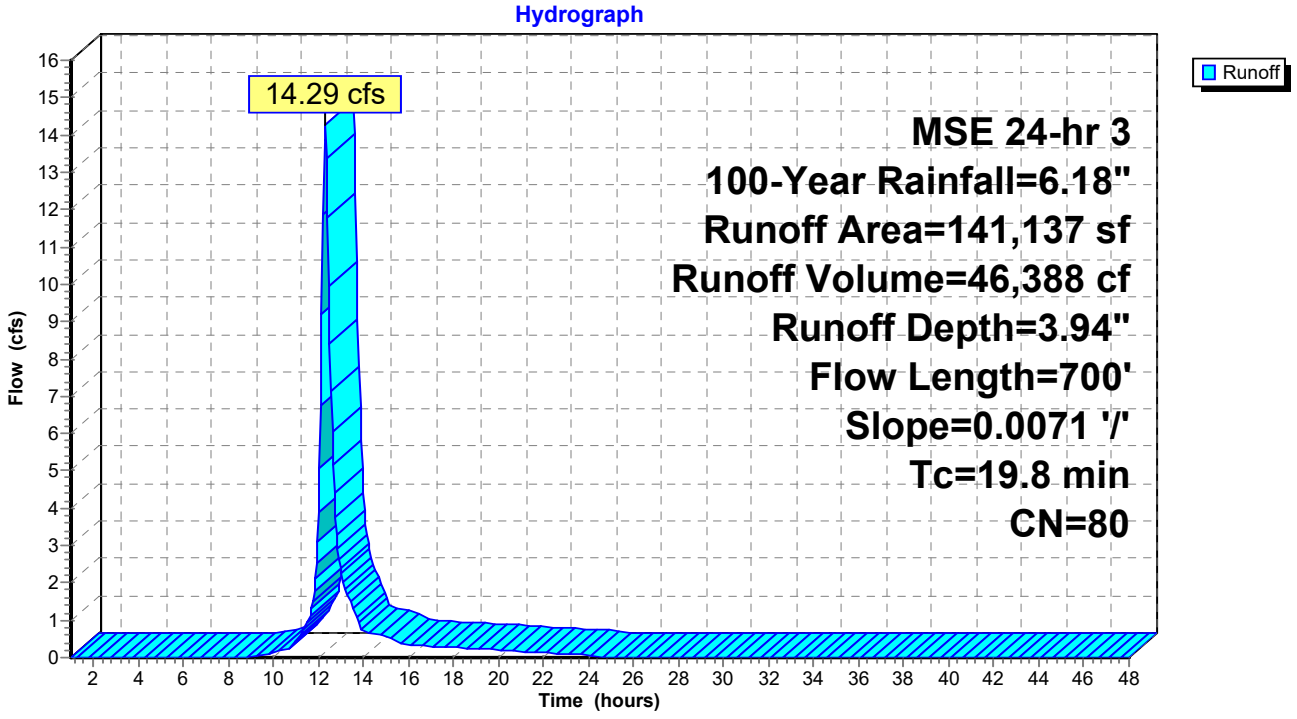
Runoff = 14.29 cfs @ 12.29 hrs, Volume= 46,388 cf, Depth= 3.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	104,065	74	PER
*	22,056	98	IMP
*	15,016	98	ROOF
	141,137	80	Weighted Average
	104,065		73.73% Pervious Area
	37,072		26.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	700	0.0071	0.59		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps

Subcatchment 2S: B



Summary for Subcatchment 4S: C1

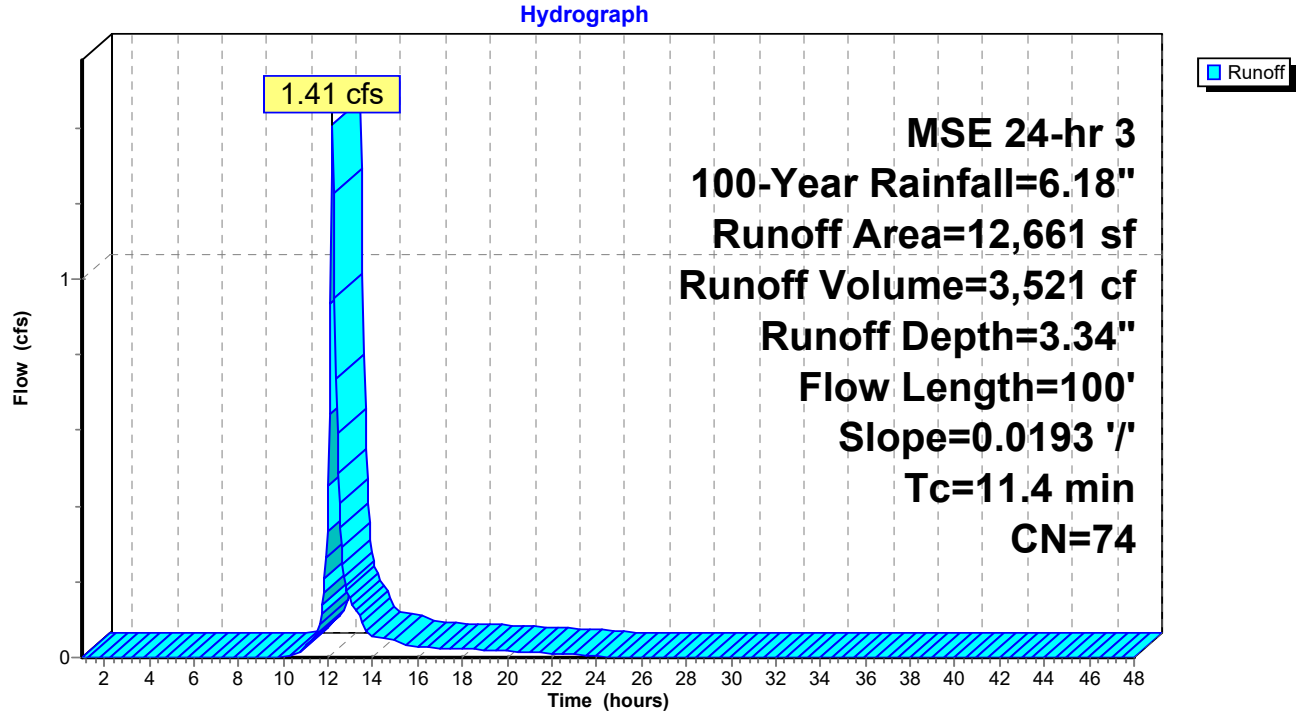
Runoff = 1.41 cfs @ 12.20 hrs, Volume= 3,521 cf, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	12,661	74	PER
	12,661		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	100	0.0193	0.15		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 4S: C1



Summary for Subcatchment 5S: D

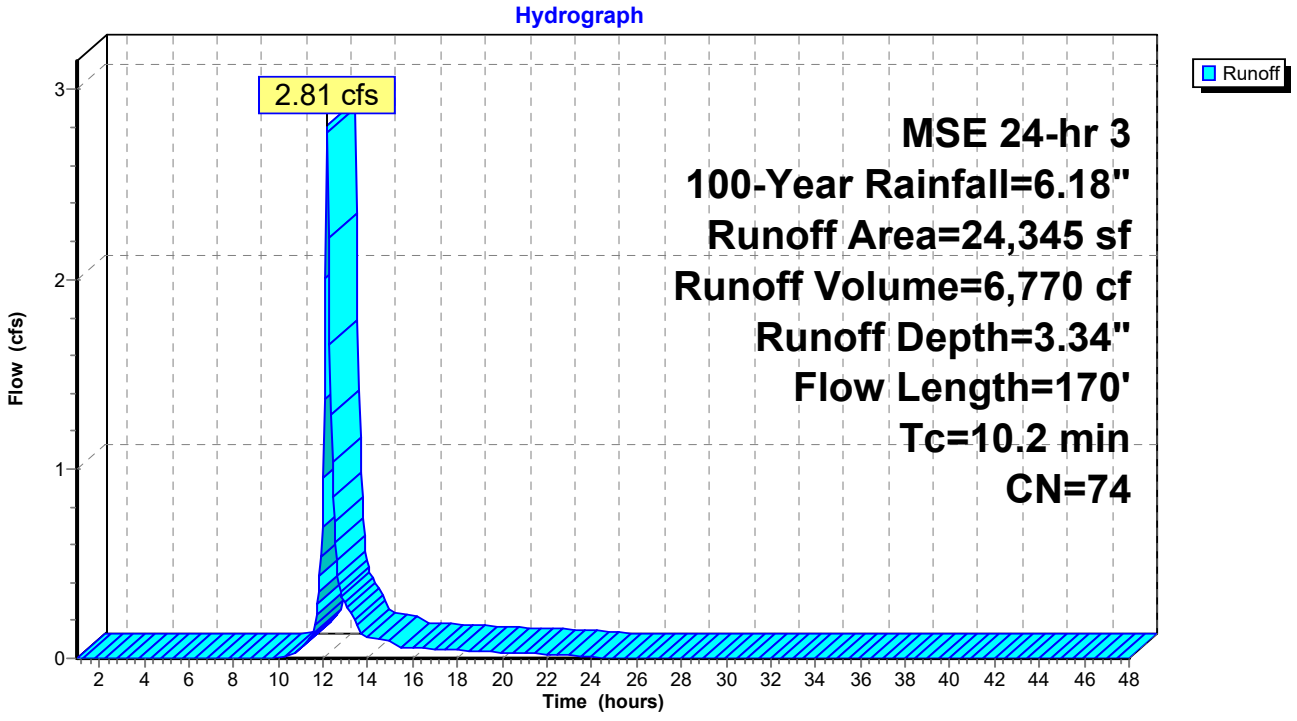
Runoff = 2.81 cfs @ 12.18 hrs, Volume= 6,770 cf, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	24,345	74	PER
	24,345		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.0319	0.18		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	70	0.0317	1.25		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.2	170	Total			

Subcatchment 5S: D



Summary for Subcatchment 6S: E

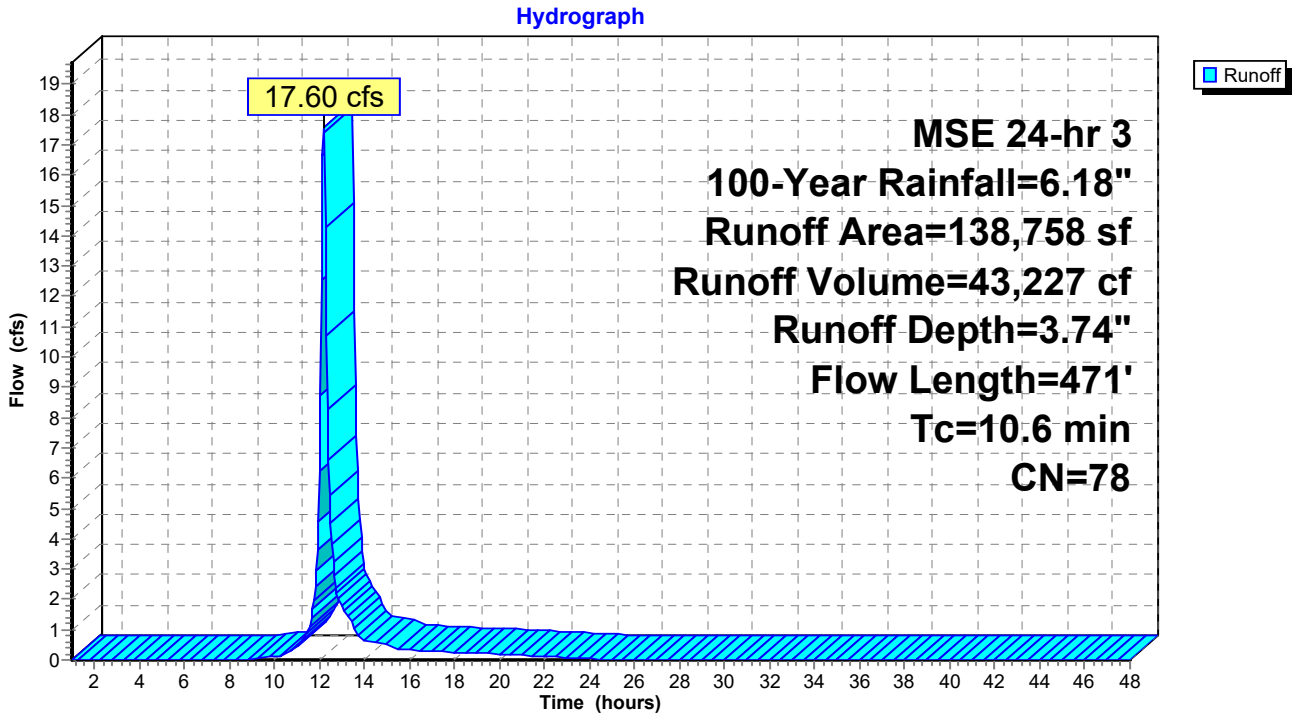
Runoff = 17.60 cfs @ 12.18 hrs, Volume= 43,227 cf, Depth= 3.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	117,151	74	PER
*	21,607	98	IMP
	138,758	78	Weighted Average
	117,151		84.43% Pervious Area
	21,607		15.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	100	0.0581	0.23		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	215	0.0405	4.09		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
2.3	156	0.0259	1.13		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.6	471	Total			

Subcatchment 6S: E



Summary for Subcatchment 7S: F

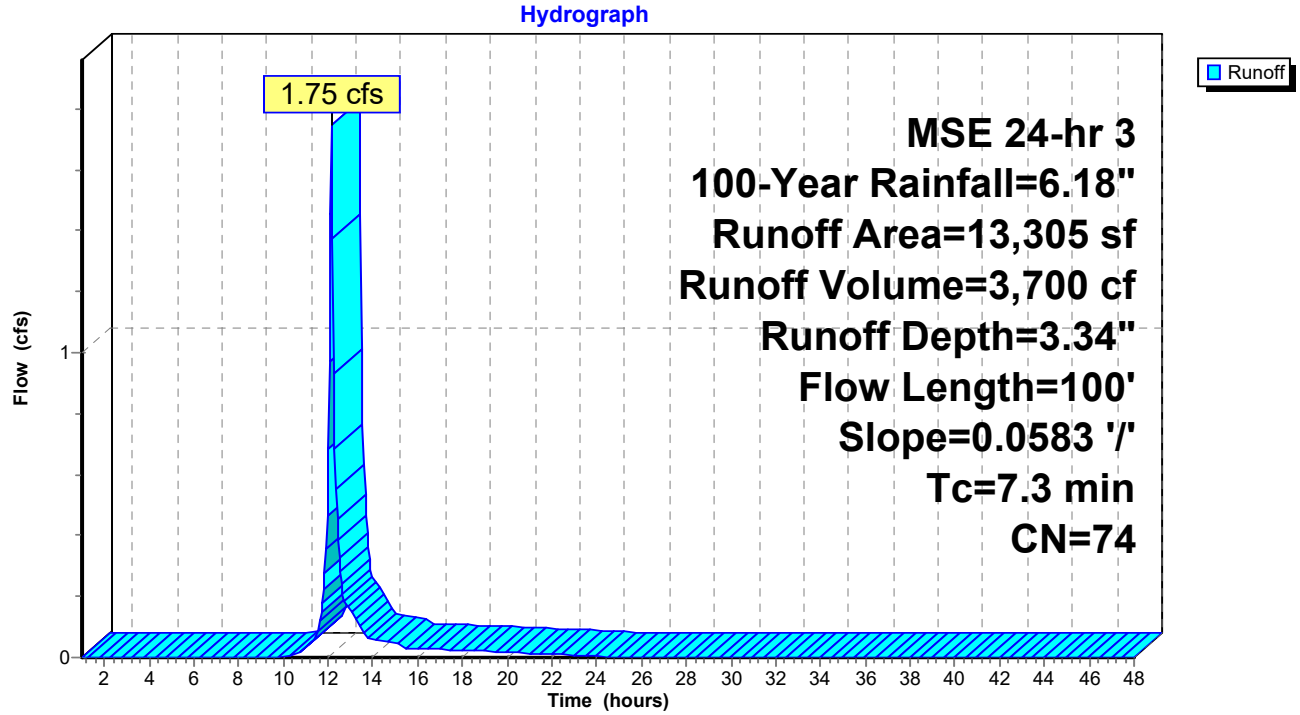
Runoff = 1.75 cfs @ 12.15 hrs, Volume= 3,700 cf, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	13,305	74	PER
	13,305		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.3	100	0.0583	0.23		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 7S: F



Summary for Subcatchment 8S: G

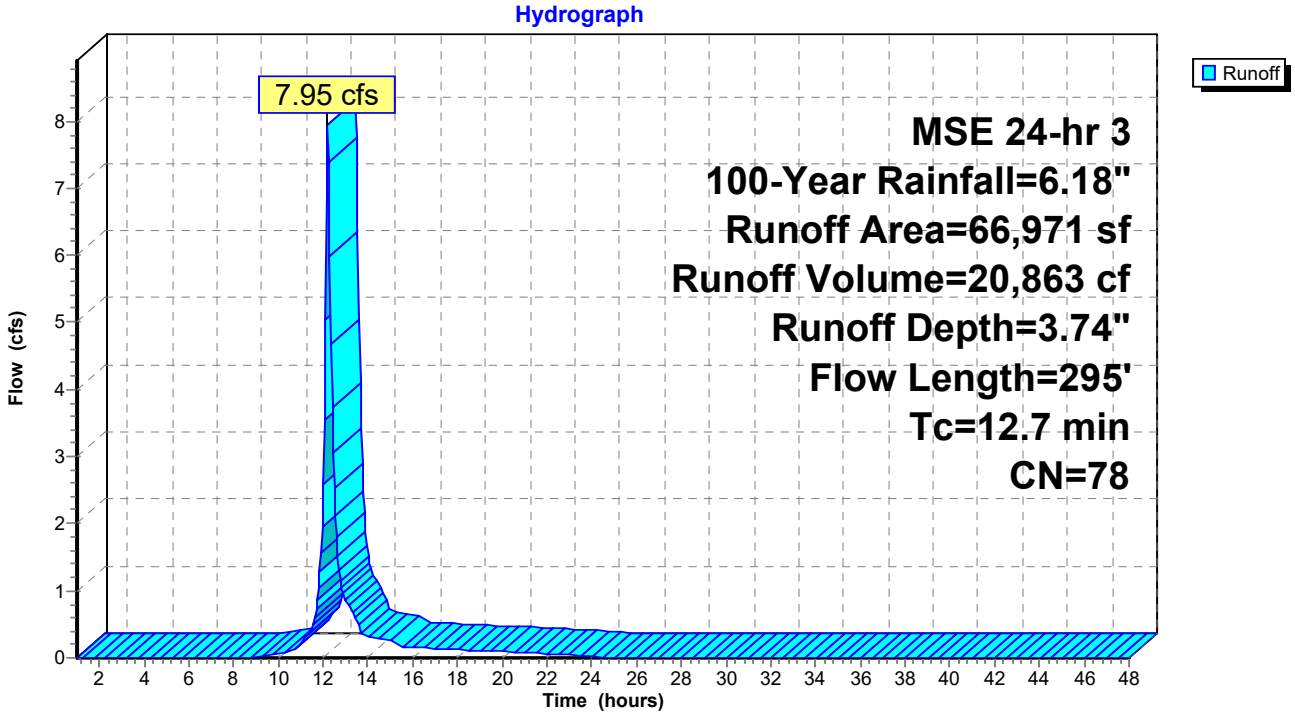
Runoff = 7.95 cfs @ 12.21 hrs, Volume= 20,863 cf, Depth= 3.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	56,727	74	PER
*	10,244	98	IMP
	66,971	78	Weighted Average
	56,727		84.70% Pervious Area
	10,244		15.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	100	0.0269	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
2.7	195	0.0305	1.22		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
12.7	295	Total			

Subcatchment 8S: G



Summary for Subcatchment 9S: H

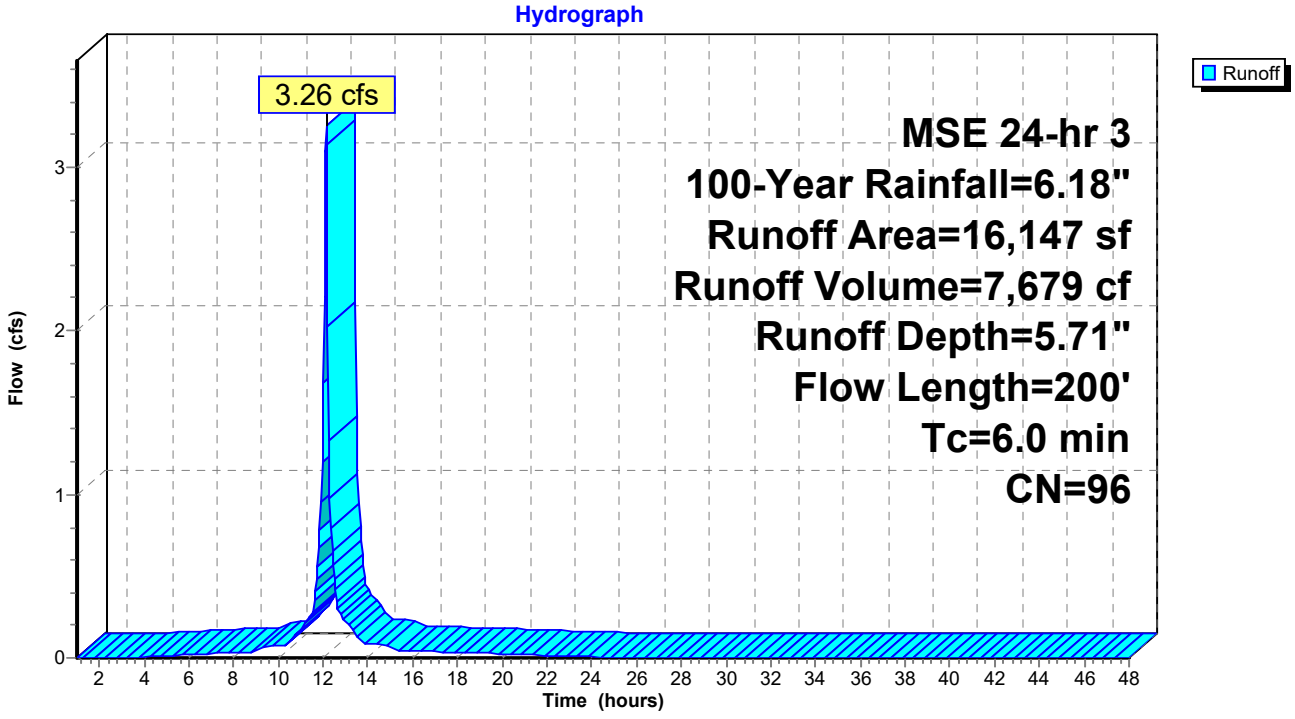
Runoff = 3.26 cfs @ 12.13 hrs, Volume= 7,679 cf, Depth= 5.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	1,084	74	PER
*	15,063	98	IMP
	16,147	96	Weighted Average
	1,084		6.71% Pervious Area
	15,063		93.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	100	0.0502	1.73		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
0.5	100	0.0263	3.29		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
1.5	200	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 9S: H



Summary for Subcatchment 10S: I

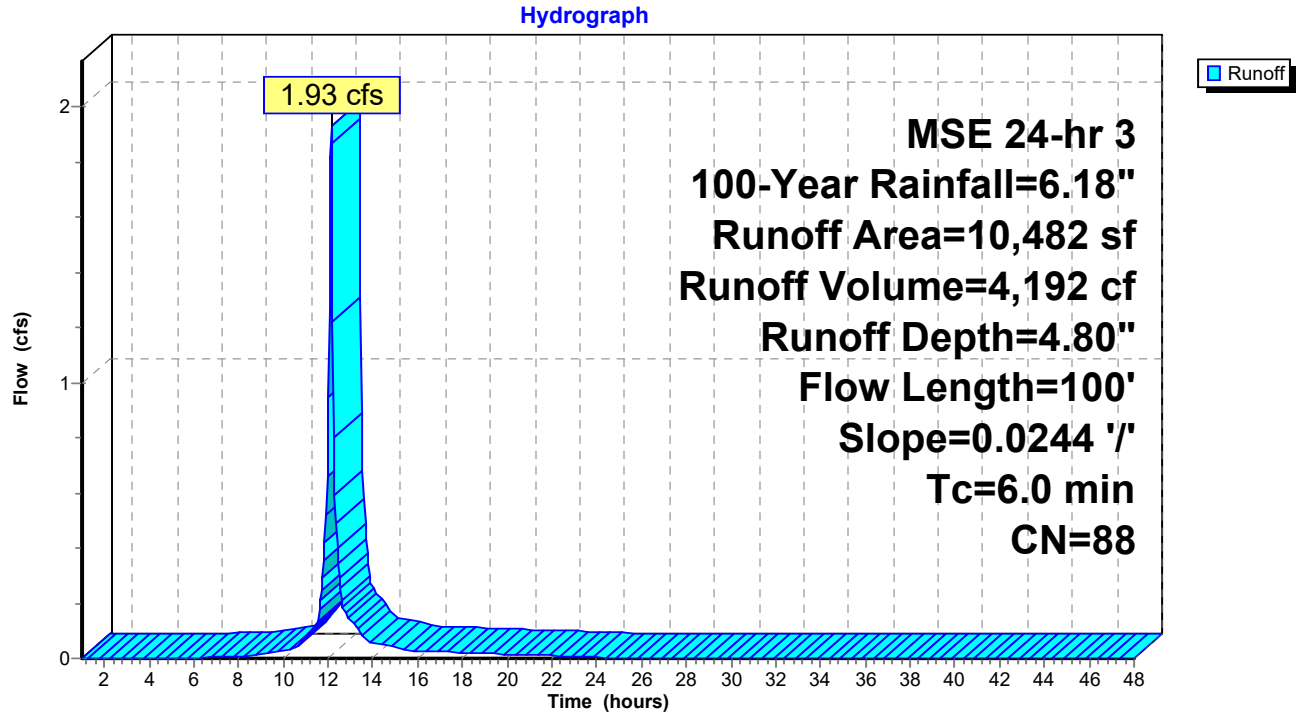
Runoff = 1.93 cfs @ 12.13 hrs, Volume= 4,192 cf, Depth= 4.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	4,275	74	PER
*	5,059	98	IMP
*	1,148	98	ROOF
	10,482	88	Weighted Average
	4,275		40.78% Pervious Area
	6,207		59.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	100	0.0244	1.30		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
1.3	100	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 10S: I



Summary for Subcatchment 11S: J

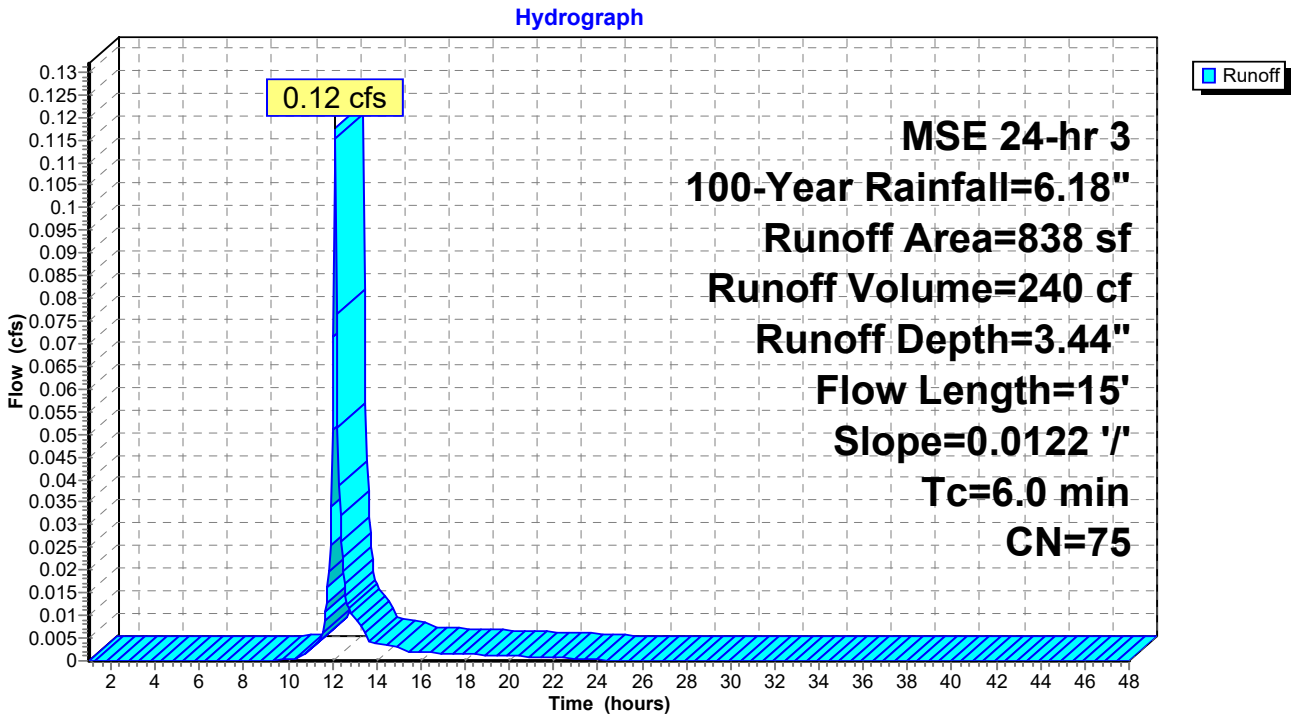
Runoff = 0.12 cfs @ 12.13 hrs, Volume= 240 cf, Depth= 3.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	798	74	PER
*	40	98	IMP
	838	75	Weighted Average
	798		95.23% Pervious Area
	40		4.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	15	0.0122	0.08		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
3.0	15	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 11S: J



Summary for Subcatchment 12S: K

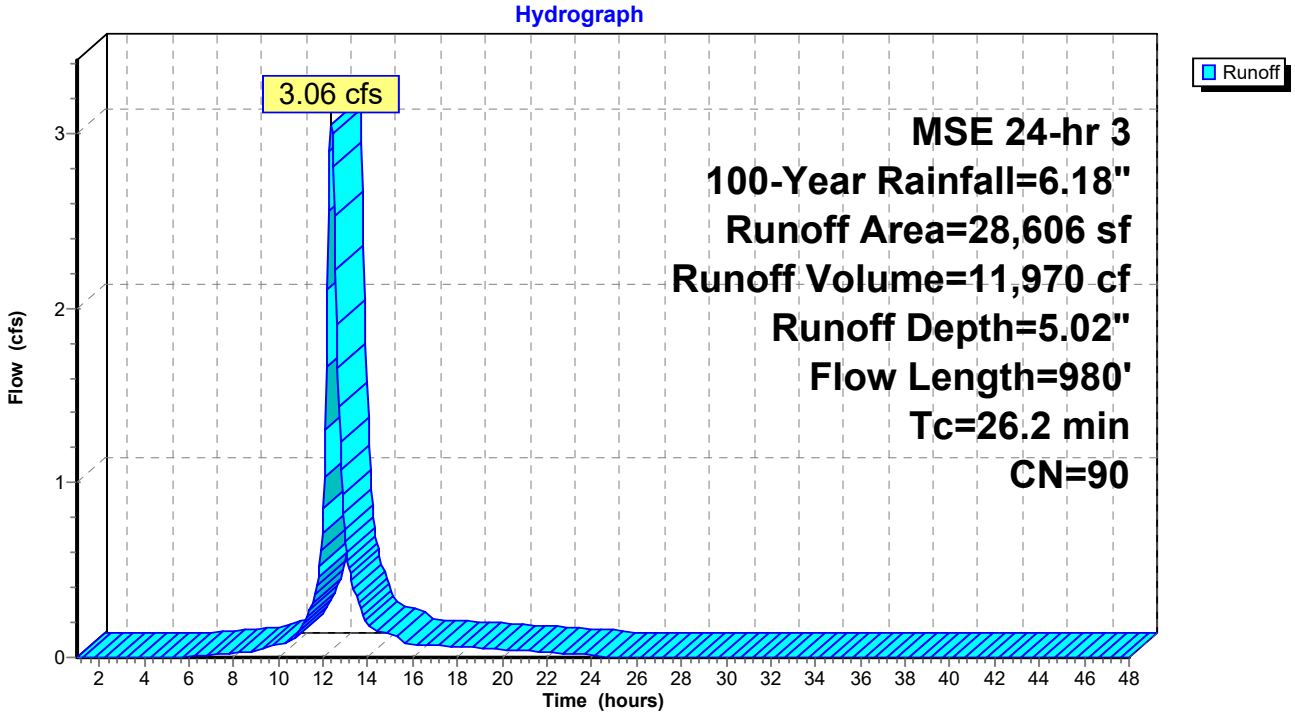
Runoff = 3.06 cfs @ 12.36 hrs, Volume= 11,970 cf, Depth= 5.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	9,600	74	PER
*	1,816	98	IMP
*	17,190	98	ROOF
	28,606	90	Weighted Average
	9,600		33.56% Pervious Area
	19,006		66.44% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.3	90	0.0161	0.13		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
14.9	890	0.0202	0.99		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
26.2	980	Total			

Subcatchment 12S: K



Summary for Subcatchment 13S: L

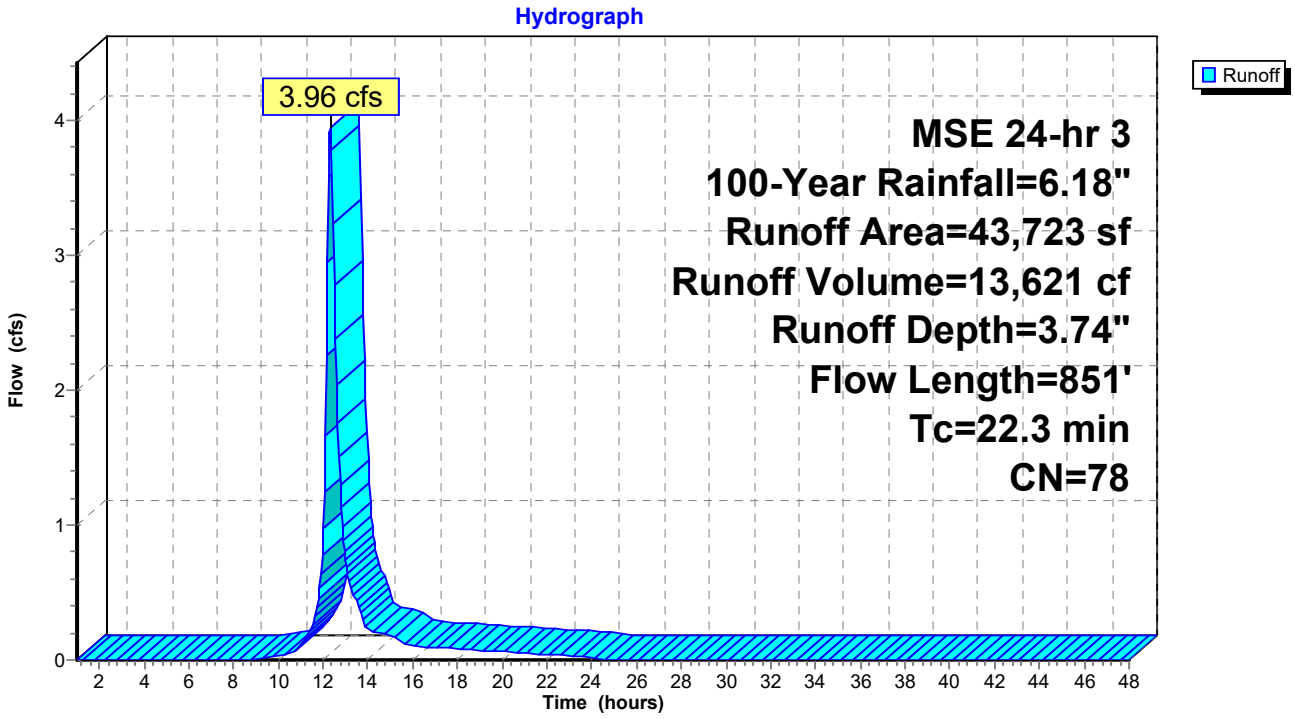
Runoff = 3.96 cfs @ 12.32 hrs, Volume= 13,621 cf, Depth= 3.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	36,454	74	PER
*	7,269	98	IMP
	43,723	78	Weighted Average
	36,454		83.37% Pervious Area
	7,269		16.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0307	0.18		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.9	130	0.0267	1.14		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.9	621	0.0183	0.95		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
22.3	851	Total			

Subcatchment 13S: L



Summary for Subcatchment 14S: M

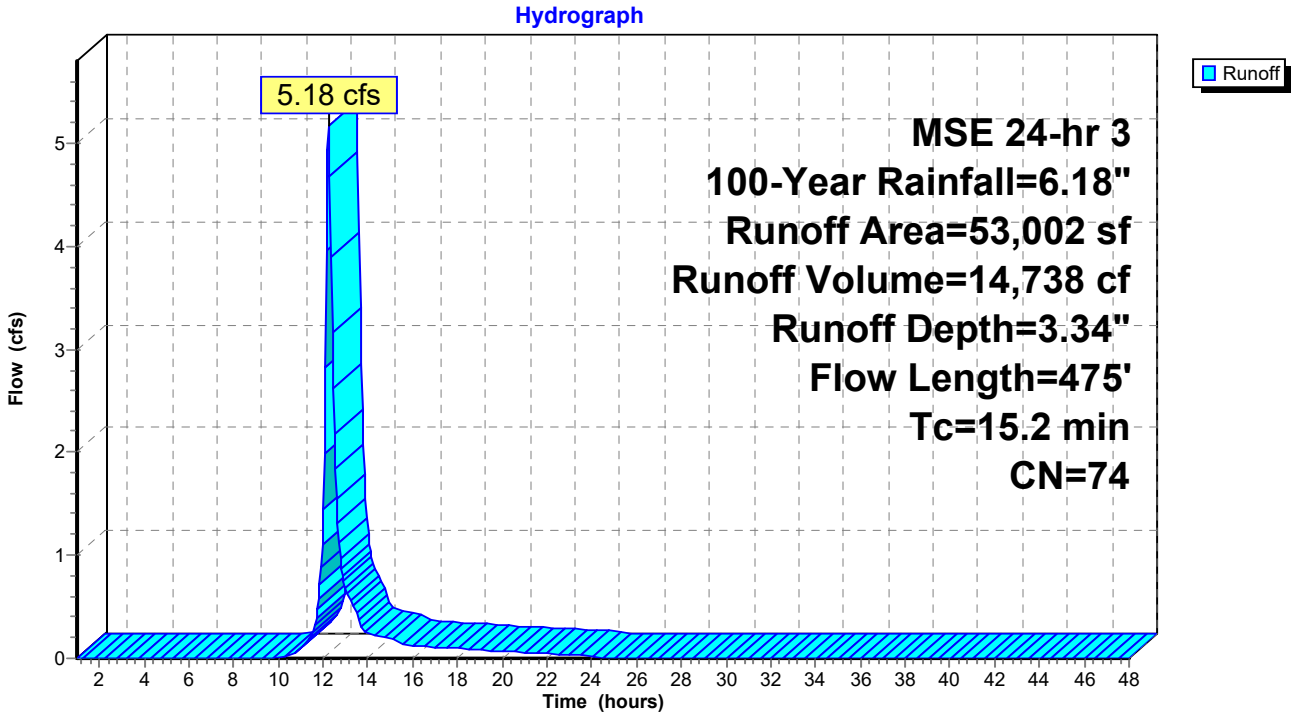
Runoff = 5.18 cfs @ 12.24 hrs, Volume= 14,738 cf, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	53,002	74	PER
	53,002		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	100	0.0403	0.20		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
6.7	375	0.0180	0.94		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.2	475	Total			

Subcatchment 14S: M



Summary for Subcatchment 15S: N

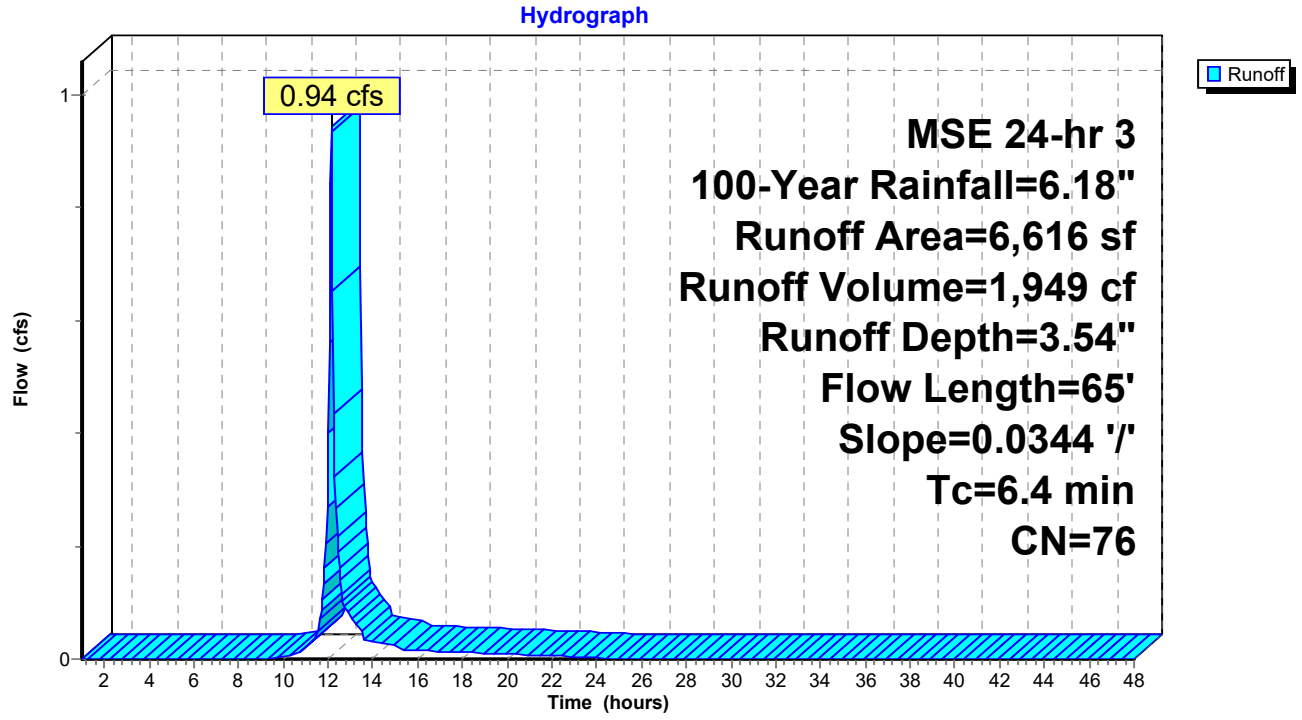
Runoff = 0.94 cfs @ 12.14 hrs, Volume= 1,949 cf, Depth= 3.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	6,111	74	PER
*	505	98	IMP
	6,616	76	Weighted Average
	6,111		92.37% Pervious Area
	505		7.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.4	65	0.0344	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 15S: N



Summary for Subcatchment 16S: O

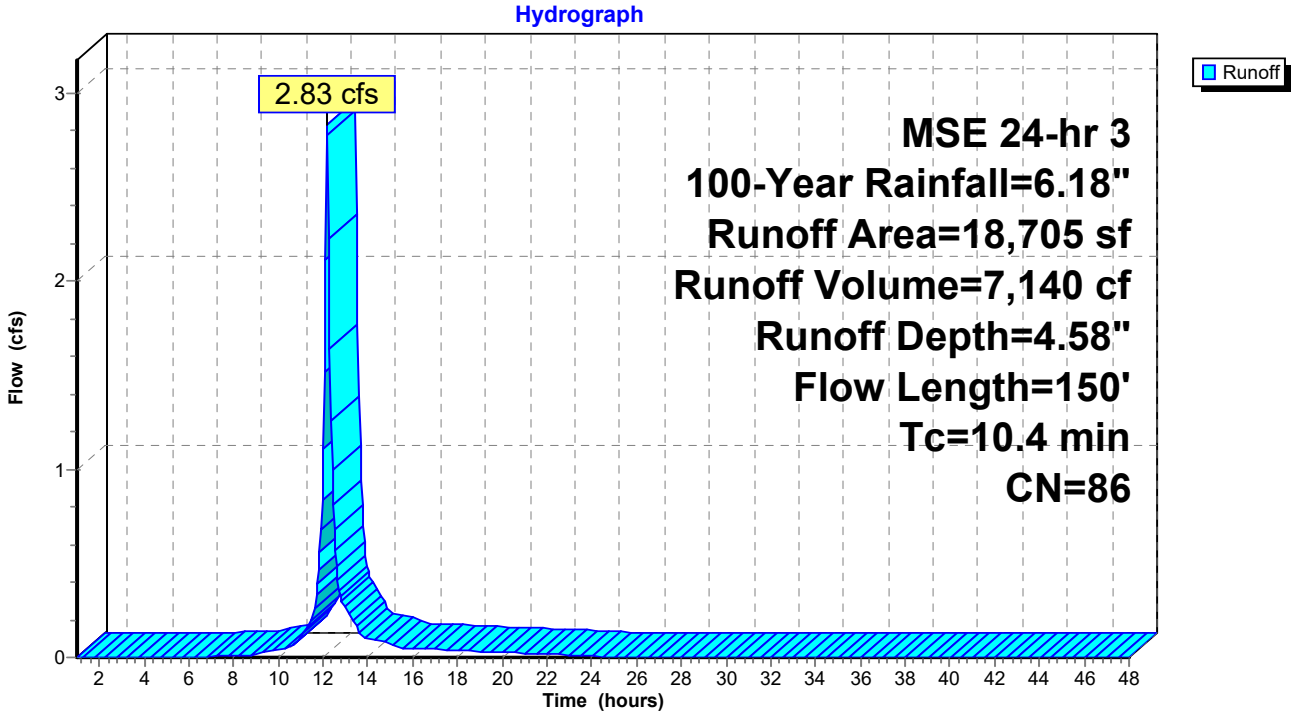
Runoff = 2.83 cfs @ 12.18 hrs, Volume= 7,140 cf, Depth= 4.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	9,468	74	PER
*	4,653	98	IMP
*	4,584	98	ROOF
	18,705	86	Weighted Average
	9,468		50.62% Pervious Area
	9,237		49.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	100	0.0274	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.5	50	0.0080	1.82		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
10.4	150	Total			

Subcatchment 16S: O



Summary for Subcatchment 17S: P

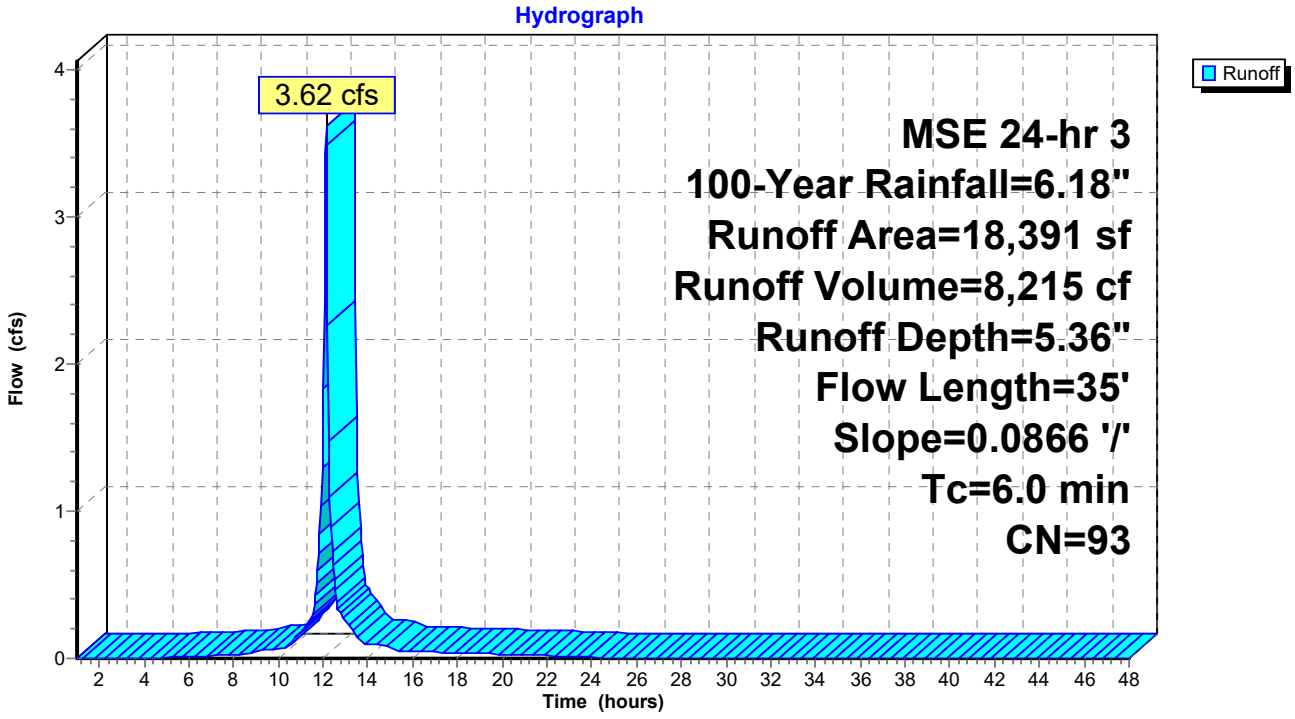
Runoff = 3.62 cfs @ 12.13 hrs, Volume= 8,215 cf, Depth= 5.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	3,636	74	PER
*	878	98	IMP
*	13,877	98	ROOF
	18,391	93	Weighted Average
	3,636		19.77% Pervious Area
	14,755		80.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.7	35	0.0866	0.22		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
2.7	35	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 17S: P



Summary for Subcatchment 18S: Q

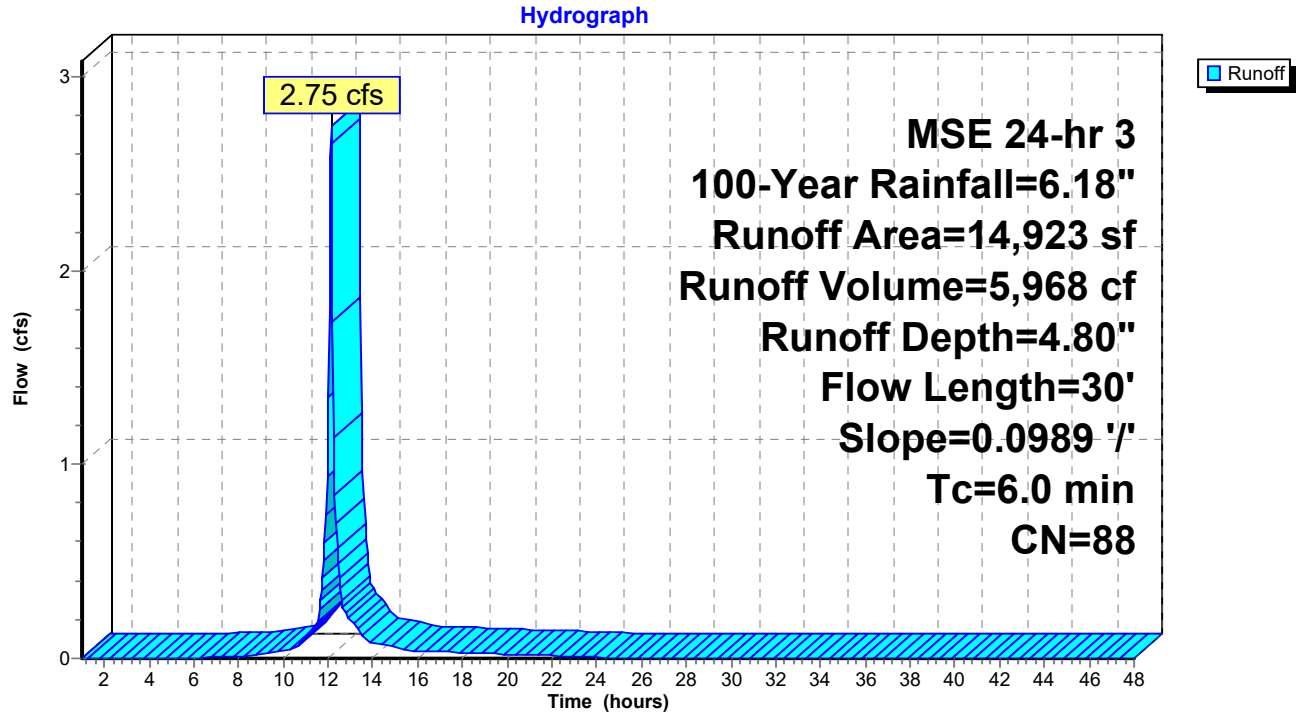
Runoff = 2.75 cfs @ 12.13 hrs, Volume= 5,968 cf, Depth= 4.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	6,396	74	PER
*	1,162	98	IMP
*	7,365	98	ROOF
	14,923	88	Weighted Average
	6,396		42.86% Pervious Area
	8,527		57.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	30	0.0989	0.22		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
2.3	30	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 18S: Q



Summary for Subcatchment 19S: R

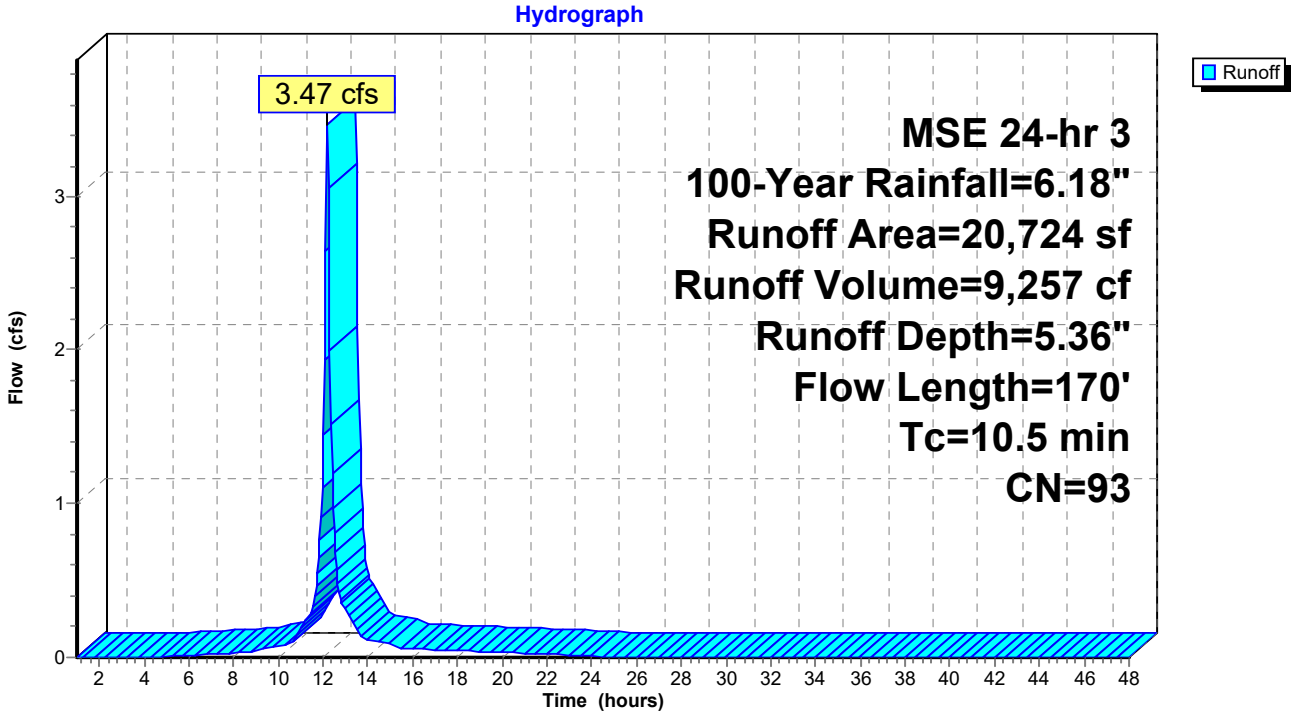
Runoff = 3.47 cfs @ 12.18 hrs, Volume= 9,257 cf, Depth= 5.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	4,279	74	PER
*	5,420	98	IMP
*	11,025	98	ROOF
	20,724	93	Weighted Average
	4,279		20.65% Pervious Area
	16,445		79.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	100	0.0295	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	70	0.0320	1.25		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.5	170	Total			

Subcatchment 19S: R



Summary for Subcatchment 20S: S

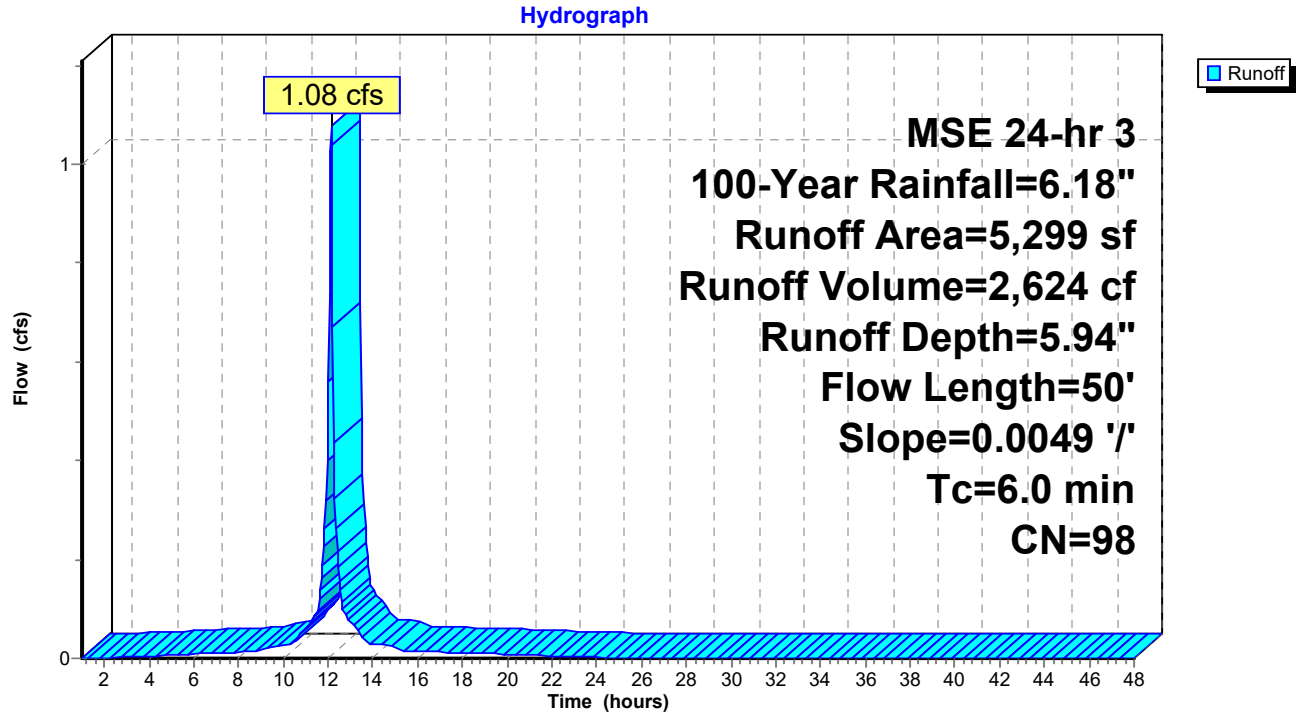
Runoff = 1.08 cfs @ 12.13 hrs, Volume= 2,624 cf, Depth= 5.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	808	98	IMP
*	4,491	98	ROOF
	5,299	98	Weighted Average
	5,299		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	50	0.0049	0.59		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
1.4	50	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 20S: S



Summary for Subcatchment 21S: T

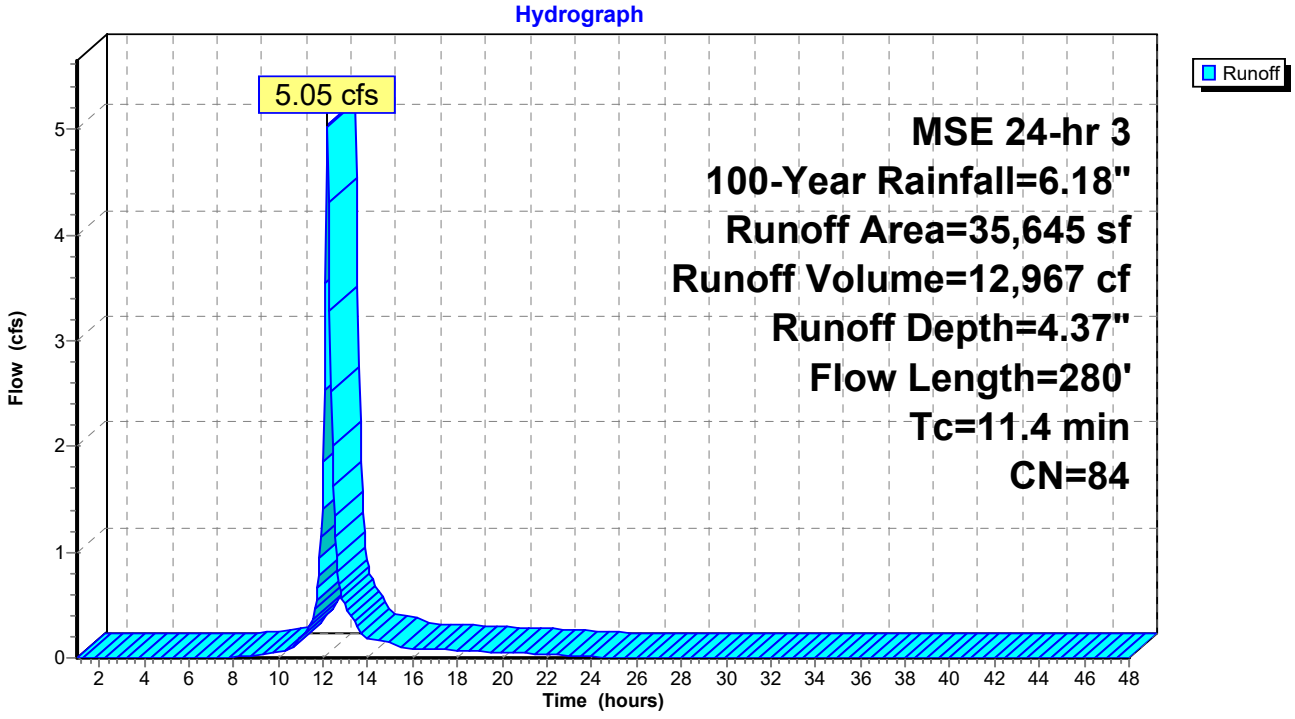
Runoff = 5.05 cfs @ 12.19 hrs, Volume= 12,967 cf, Depth= 4.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	21,454	74	PER
*	14,191	98	IMP
	35,645	84	Weighted Average
	21,454		60.19% Pervious Area
	14,191		39.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	100	0.0272	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.4	180	0.0111	2.14		**Shallow Concentrated Flow, SCF** Paved Kv= 20.3 fps
11.4	280	Total			

Subcatchment 21S: T



Summary for Subcatchment 22S: U

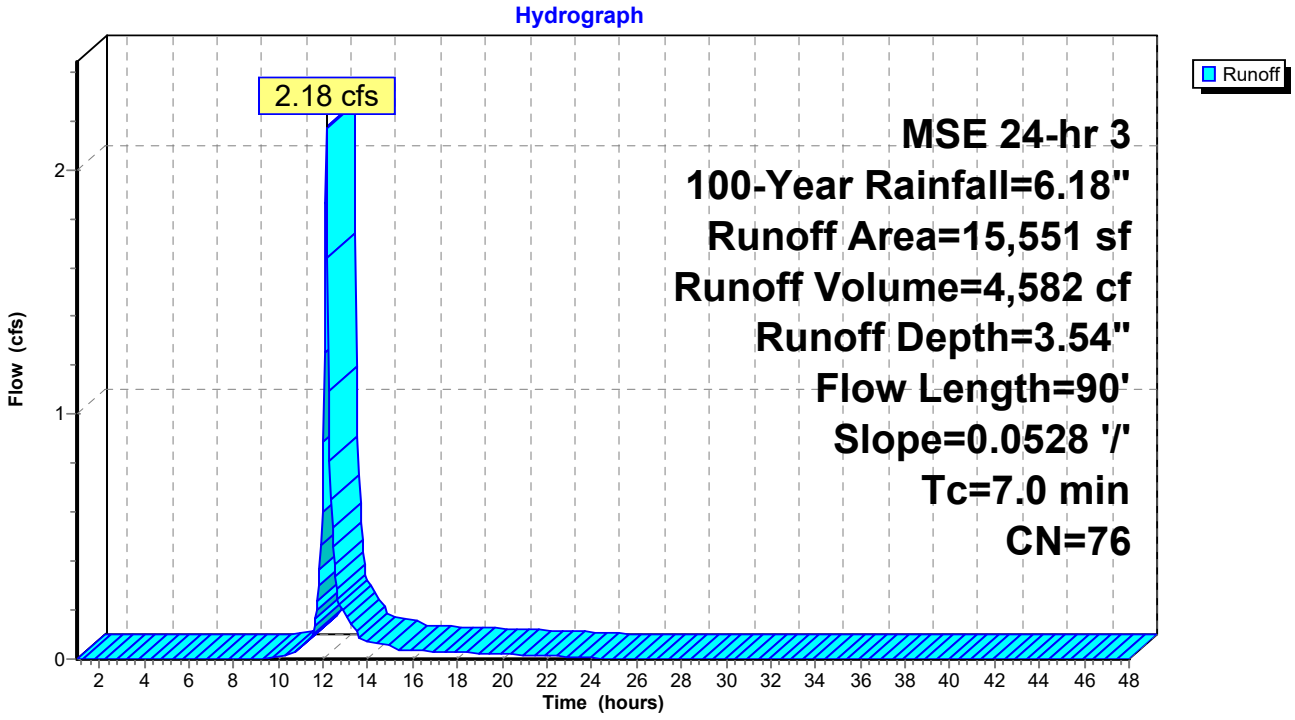
Runoff = 2.18 cfs @ 12.14 hrs, Volume= 4,582 cf, Depth= 3.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	14,032	74	PER
*	1,519	98	IMP
	15,551	76	Weighted Average
	14,032		90.23% Pervious Area
	1,519		9.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	90	0.0528	0.21		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"

Subcatchment 22S: U



Summary for Subcatchment 23S: V

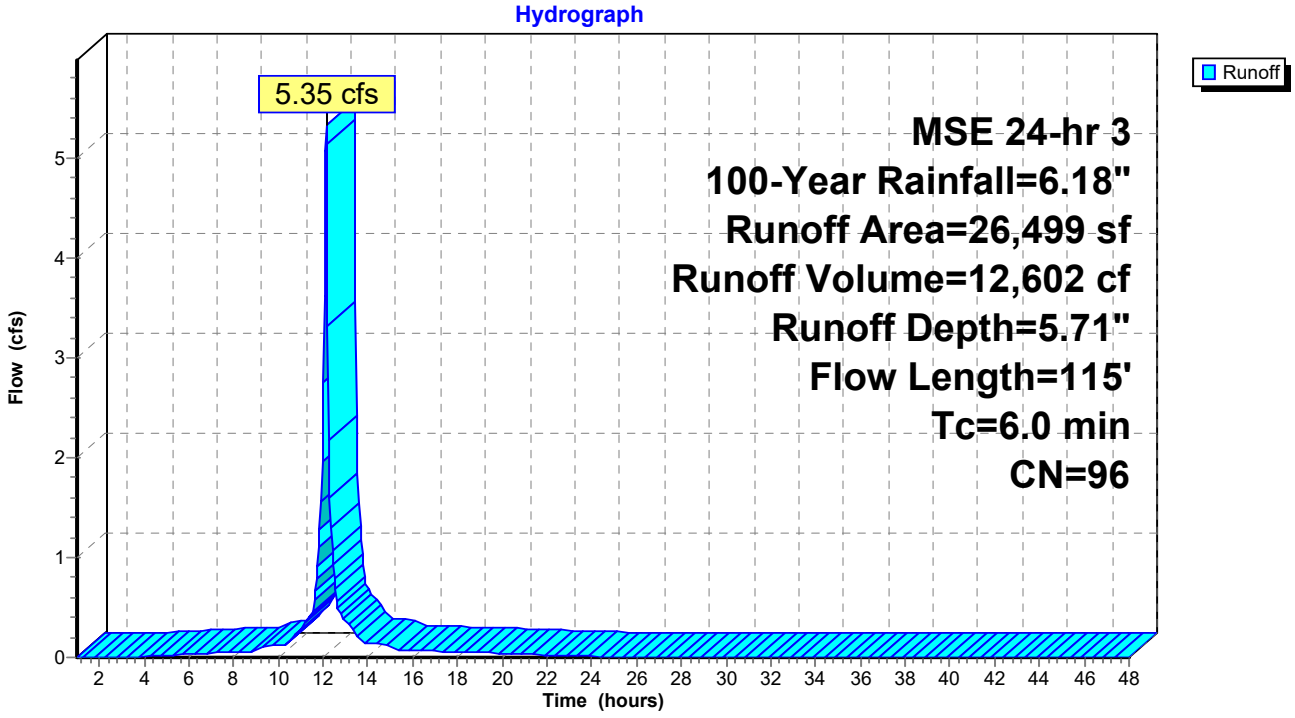
Runoff = 5.35 cfs @ 12.13 hrs, Volume= 12,602 cf, Depth= 5.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	2,290	74	PER
*	7,676	98	IMP
*	16,533	98	ROOF
	26,499	96	Weighted Average
	2,290		8.64% Pervious Area
	24,209		91.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	45	0.0345	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.9	70	0.0262	1.24		**Sheet Flow, SF** Smooth surfaces n= 0.011 P2= 2.42"
5.7	115	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 23S: V



Summary for Subcatchment 24S: W

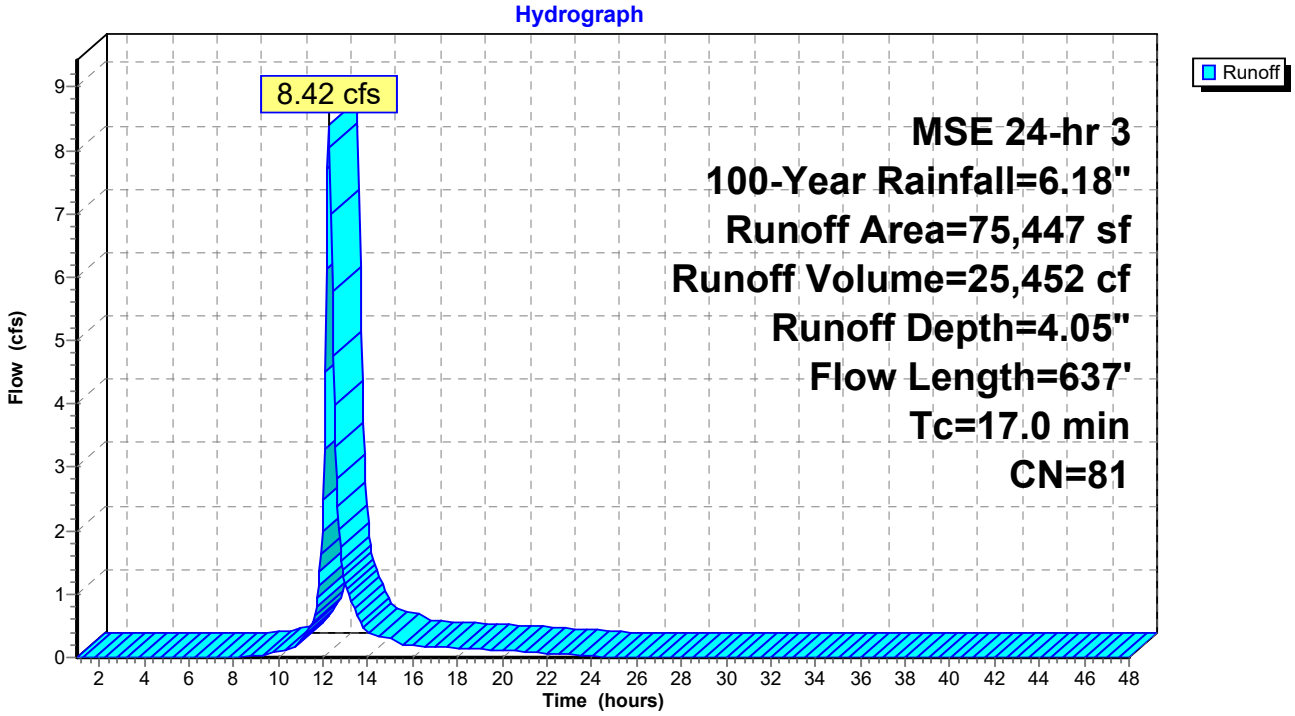
Runoff = 8.42 cfs @ 12.26 hrs, Volume= 25,452 cf, Depth= 4.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	54,767	74	PER
*	17,055	98	IMP
*	3,625	98	ROOF
	75,447	81	Weighted Average
	54,767		72.59% Pervious Area
	20,680		27.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	100	0.0458	0.21		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.2	100	0.0428	1.45		**Shallow Concentrated Flow, SF** Short Grass Pasture Kv= 7.0 fps
7.7	437	0.0183	0.95		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
17.0	637	Total			

Subcatchment 24S: W



Summary for Subcatchment 25S: X

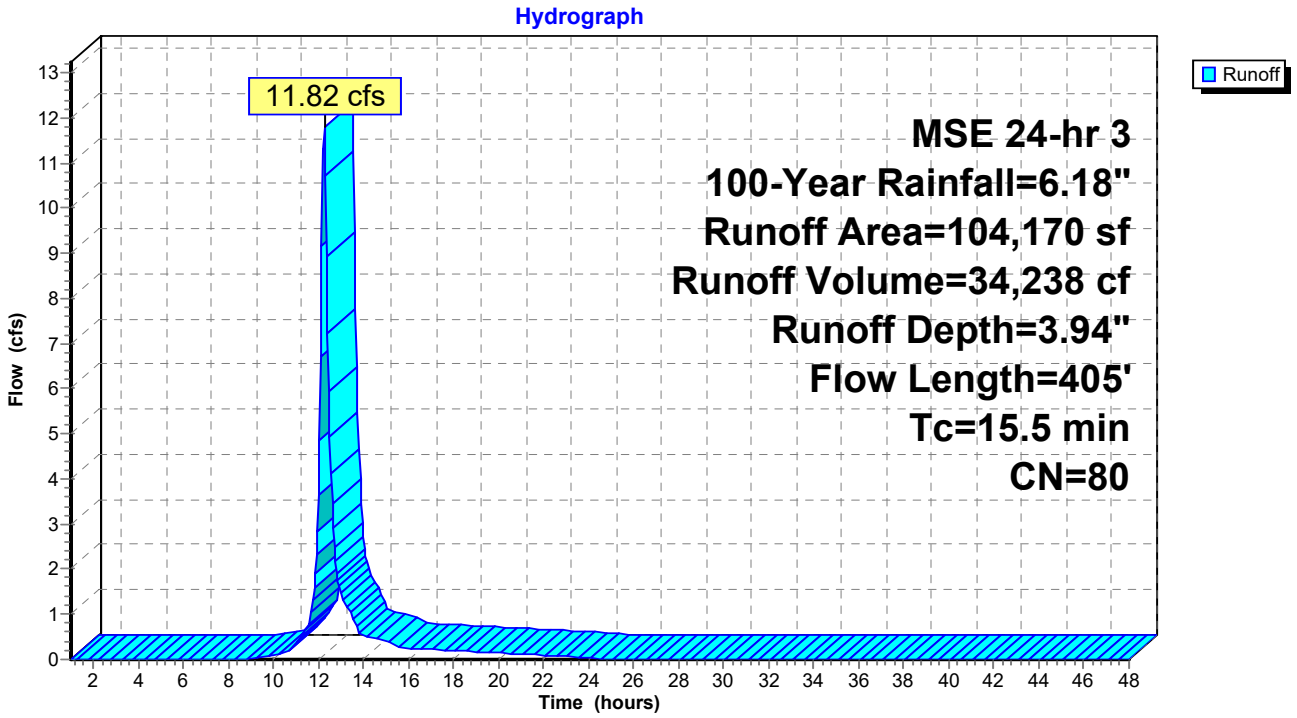
Runoff = 11.82 cfs @ 12.24 hrs, Volume= 34,238 cf, Depth= 3.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	79,699	74	PER
*	21,341	98	IMP
*	3,130	98	ROOF
	104,170	80	Weighted Average
	79,699		76.51% Pervious Area
	24,471		23.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.2	100	0.0205	0.15		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.8	115	0.0234	1.07		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
2.5	190	0.0316	1.24		**Shallow Concentrated Flow, FLOW TO SW POND** Short Grass Pasture Kv= 7.0 fps
15.5	405	Total			

Subcatchment 25S: X



Summary for Subcatchment 26S: Y

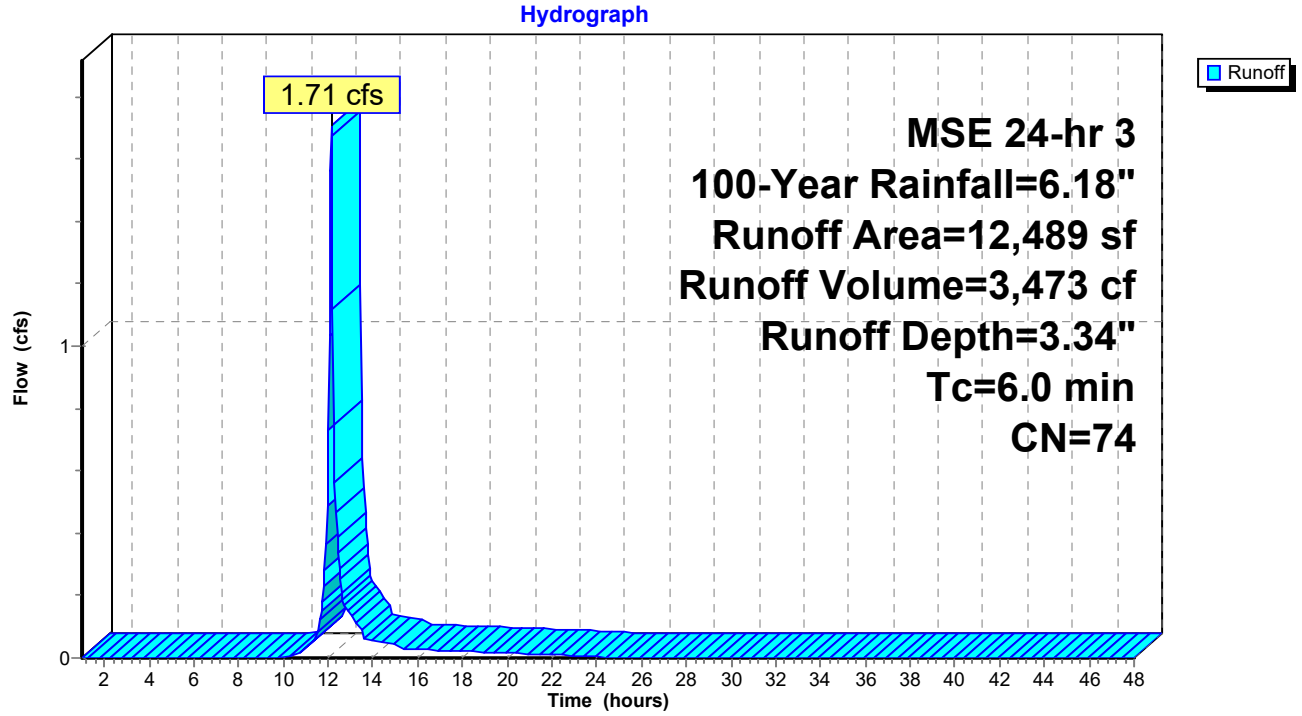
Runoff = 1.71 cfs @ 12.13 hrs, Volume= 3,473 cf, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	12,489	74	PER
	12,489		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, conservative**

Subcatchment 26S: Y



Summary for Subcatchment 27S: Z

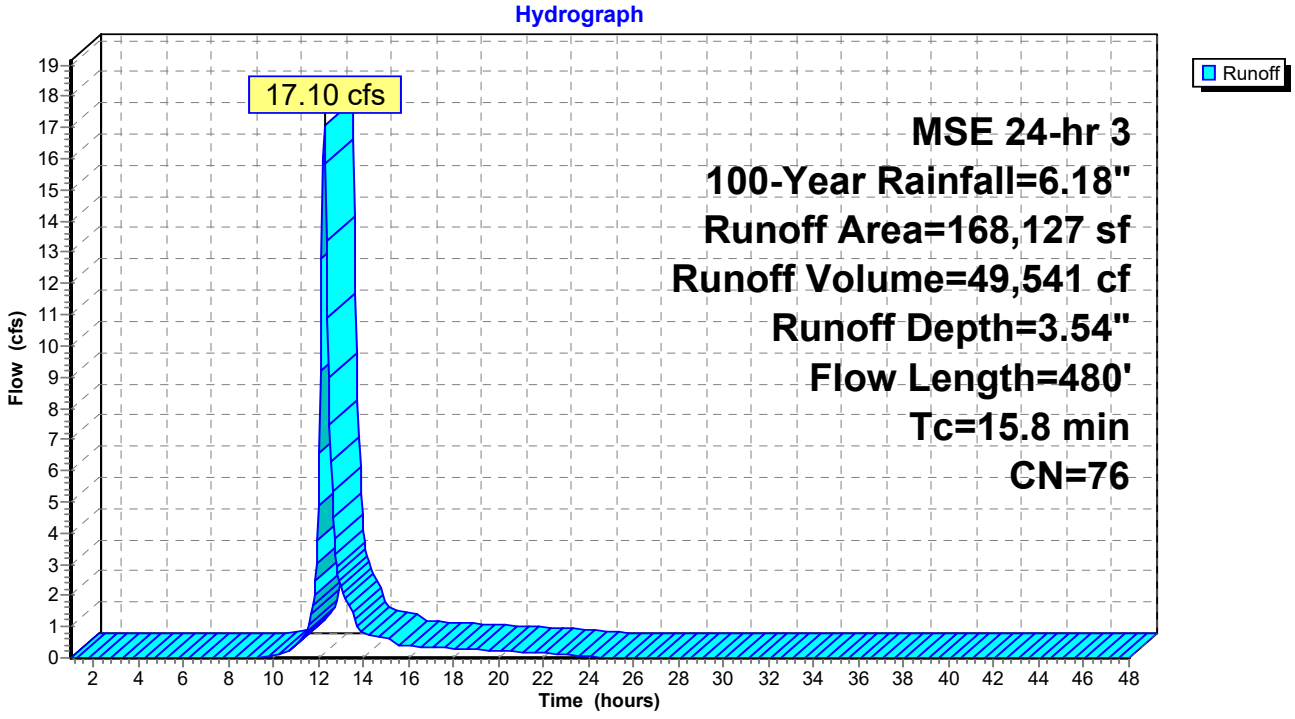
Runoff = 17.10 cfs @ 12.25 hrs, Volume= 49,541 cf, Depth= 3.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	157,056	74	PER
*	11,071	98	IMP
	168,127	76	Weighted Average
	157,056		93.42% Pervious Area
	11,071		6.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.5	100	0.0237	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
5.3	380	0.0291	1.19		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
15.8	480	Total			

Subcatchment 27S: Z



Summary for Subcatchment 67S: C2

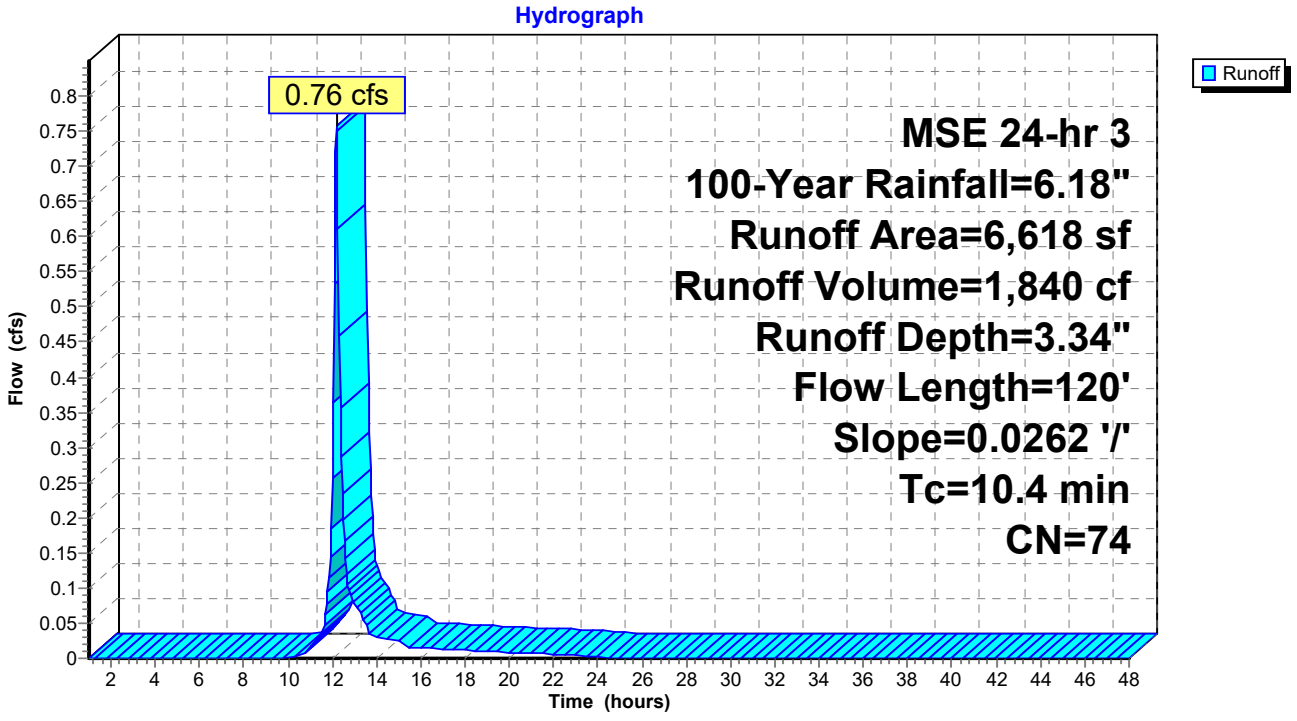
Runoff = 0.76 cfs @ 12.18 hrs, Volume= 1,840 cf, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	6,618	74	PER
	6,618		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	100	0.0262	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
0.3	20	0.0262	1.13		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
10.4	120	Total			

Subcatchment 67S: C2



Summary for Subcatchment 68S: C4

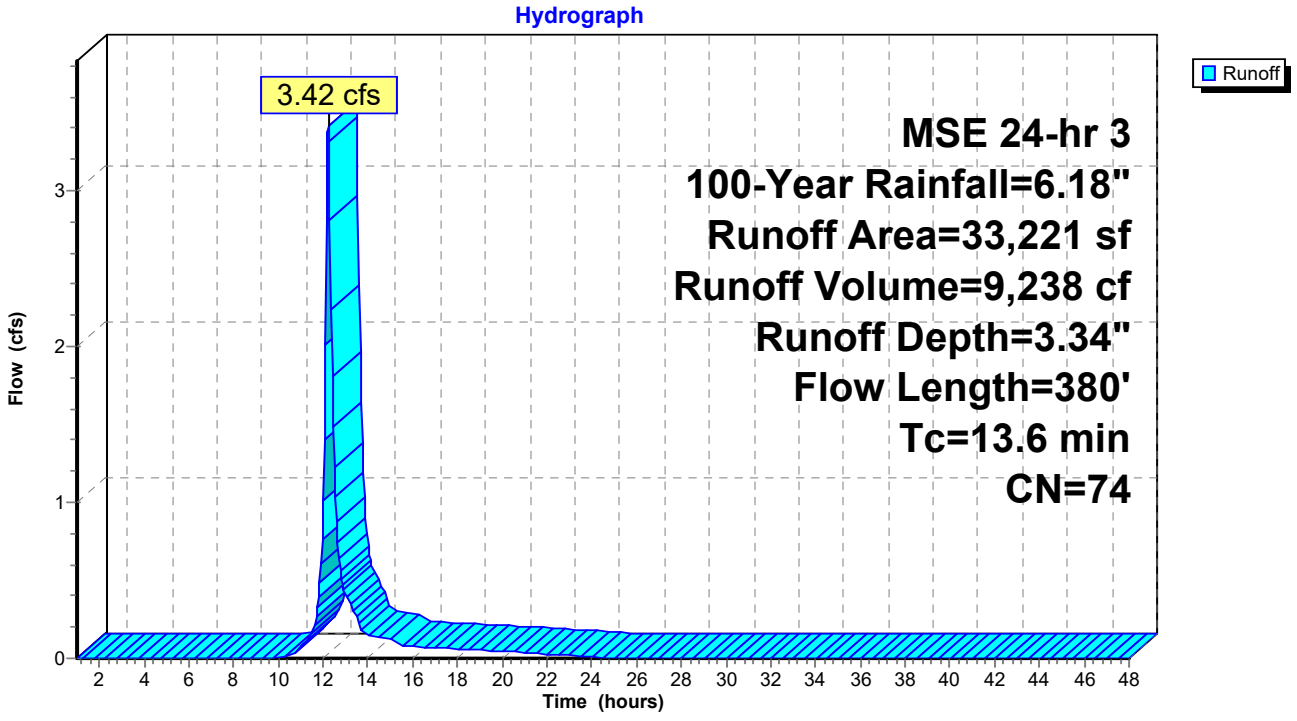
Runoff = 3.42 cfs @ 12.22 hrs, Volume= 9,238 cf, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	33,221	74	PER
	33,221		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.3	100	0.0319	0.18		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
4.3	280	0.0235	1.07		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
13.6	380	Total			

Subcatchment 68S: C4



Summary for Subcatchment 69S: C3

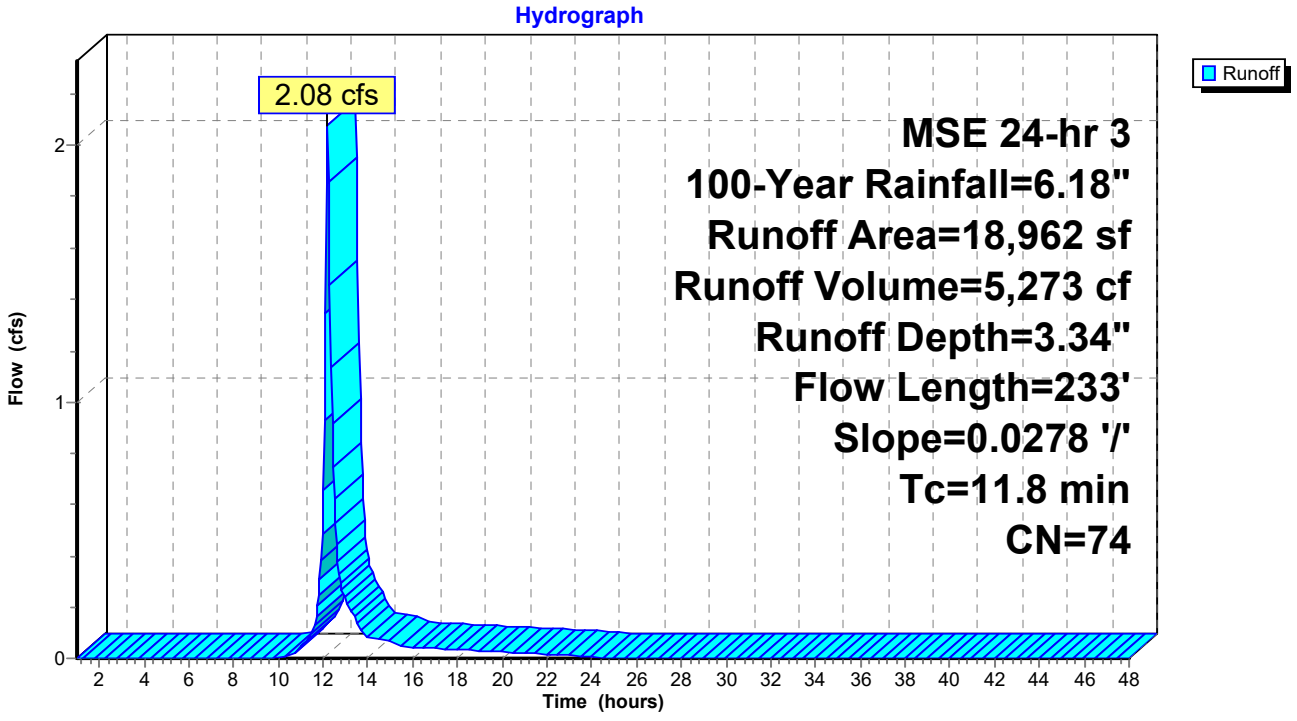
Runoff = 2.08 cfs @ 12.20 hrs, Volume= 5,273 cf, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	18,962	74	PER
	18,962		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	100	0.0278	0.17		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
1.9	133	0.0278	1.17		**Shallow Concentrated Flow, SCF** Short Grass Pasture Kv= 7.0 fps
11.8	233	Total			

Subcatchment 69S: C3



Summary for Subcatchment 70S: O1

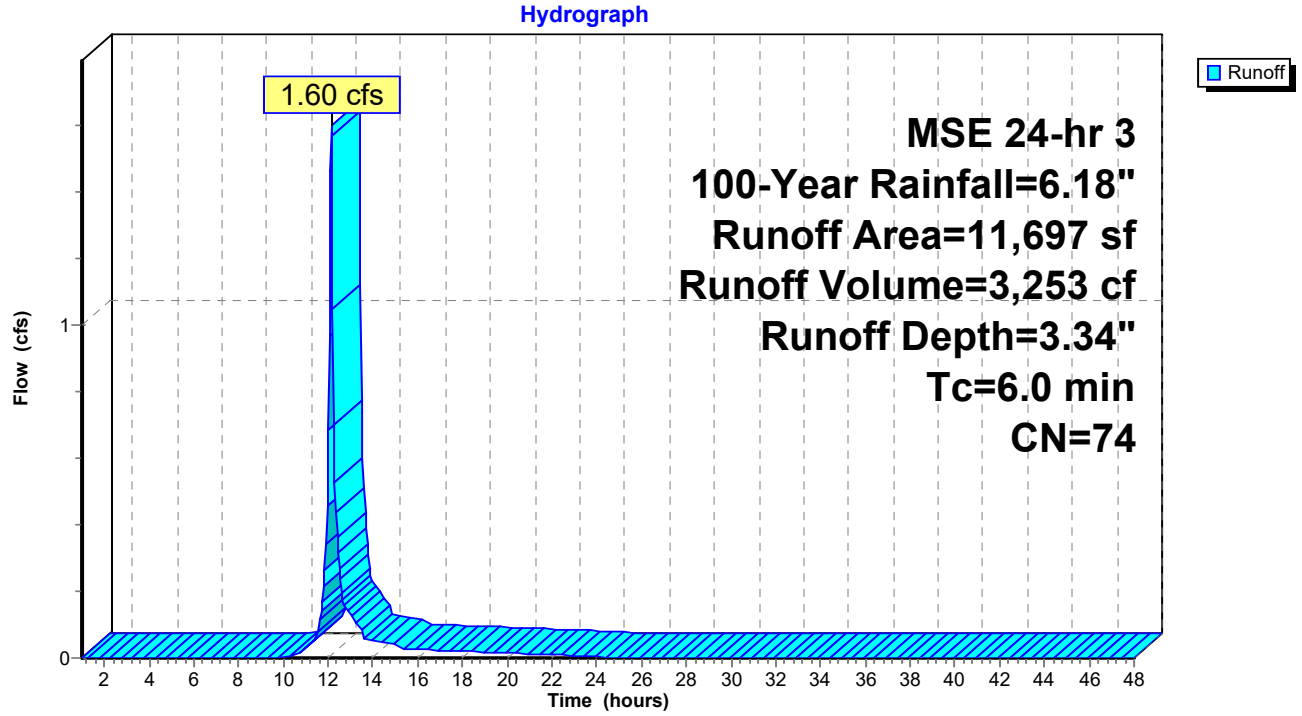
Runoff = 1.60 cfs @ 12.13 hrs, Volume= 3,253 cf, Depth= 3.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	11,697	74	PERV
	11,697		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 70S: O1



Summary for Subcatchment 71S: O2

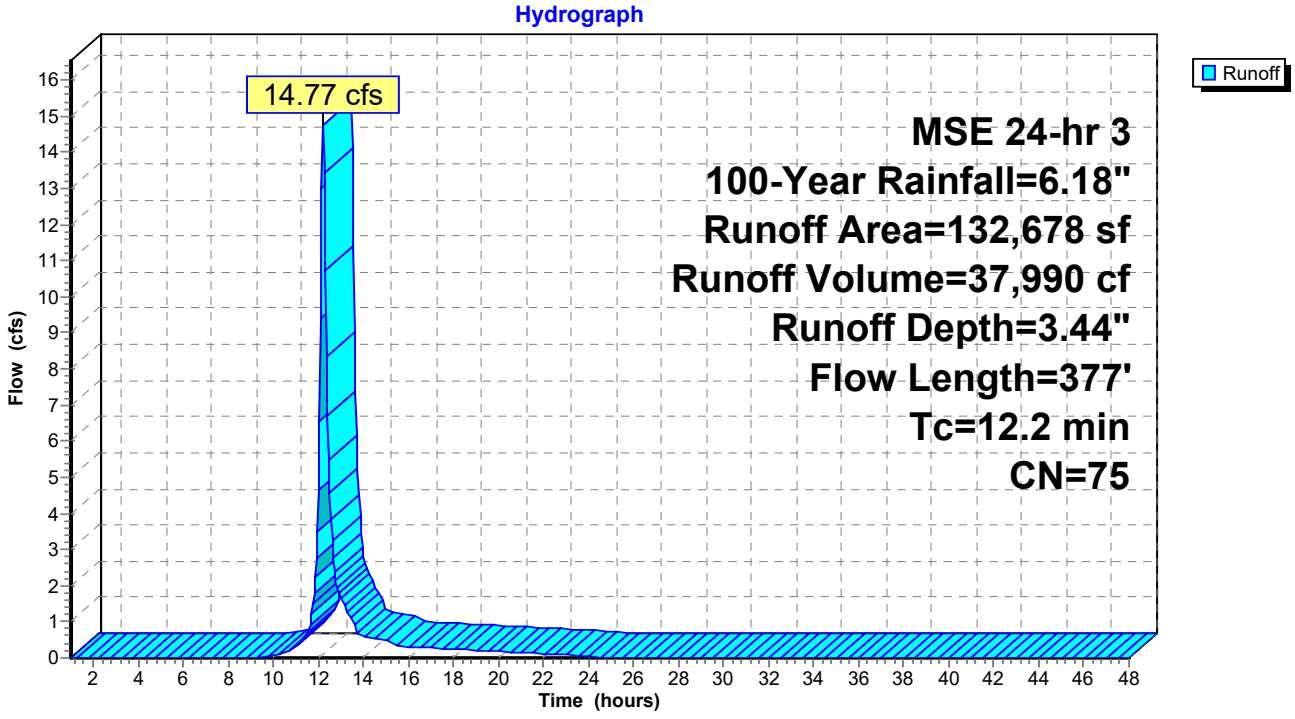
Runoff = 14.77 cfs @ 12.20 hrs, Volume= 37,990 cf, Depth= 3.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.18"

	Area (sf)	CN	Description
*	129,638	74	PERV
*	3,040	98	IMPERV
	132,678	75	Weighted Average
	129,638		97.71% Pervious Area
	3,040		2.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	77	0.0288	0.16		**Sheet Flow, SF** Grass: Short n= 0.150 P2= 2.42"
4.3	300	0.0135	1.16		**Shallow Concentrated Flow, SHALLOW CONC** Nearly Bare & Untilled Kv= 10.0 fps
12.2	377	Total			

Subcatchment 71S: O2



Summary for Reach 93R: Overland Flow from North Depression to South Depression

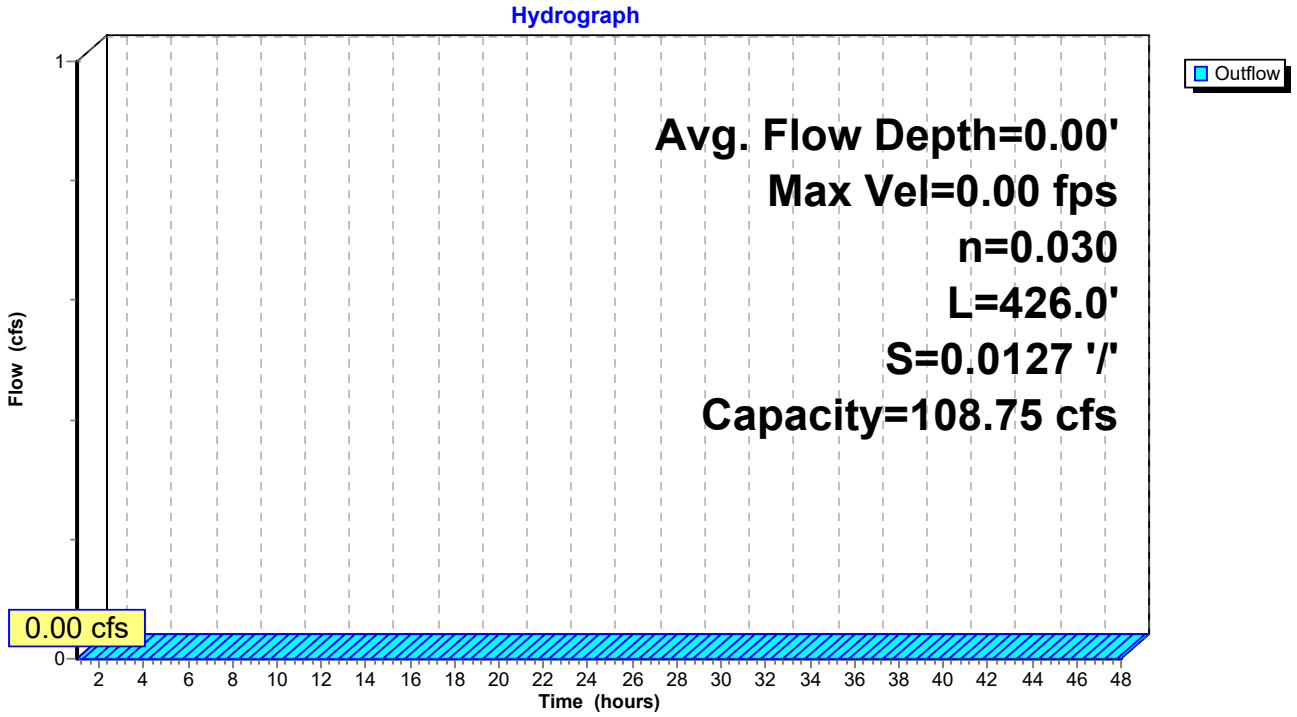
[43] Hint: Has no inflow (Outflow=Zero)

Bank-Full Depth= 0.50' Flow Area= 37.5 sf, Capacity= 108.75 cfs

50.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 50.0 '/' Top Width= 100.00'
Length= 426.0' Slope= 0.0127 '/'
Inlet Invert= 755.90', Outlet Invert= 750.50'

‡

Reach 93R: Overland Flow from North Depression to South Depression



Summary for Pond 73P: Southeast Basin

Inflow Area = 589,000 sf, 14.01% Impervious, Inflow Depth = 0.89" for 100-Year event
Inflow = 15.17 cfs @ 12.25 hrs, Volume= 43,501 cf
Outflow = 1.90 cfs @ 13.05 hrs, Volume= 43,501 cf, Atten= 87%, Lag= 48.4 min
Discarded = 1.90 cfs @ 13.05 hrs, Volume= 43,501 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 732.44' @ 13.05 hrs Surf.Area= 14,459 sf Storage= 21,596 cf

Plug-Flow detention time= 129.0 min calculated for 43,501 cf (100% of inflow)
Center-of-Mass det. time= 128.8 min (941.2 - 812.4)

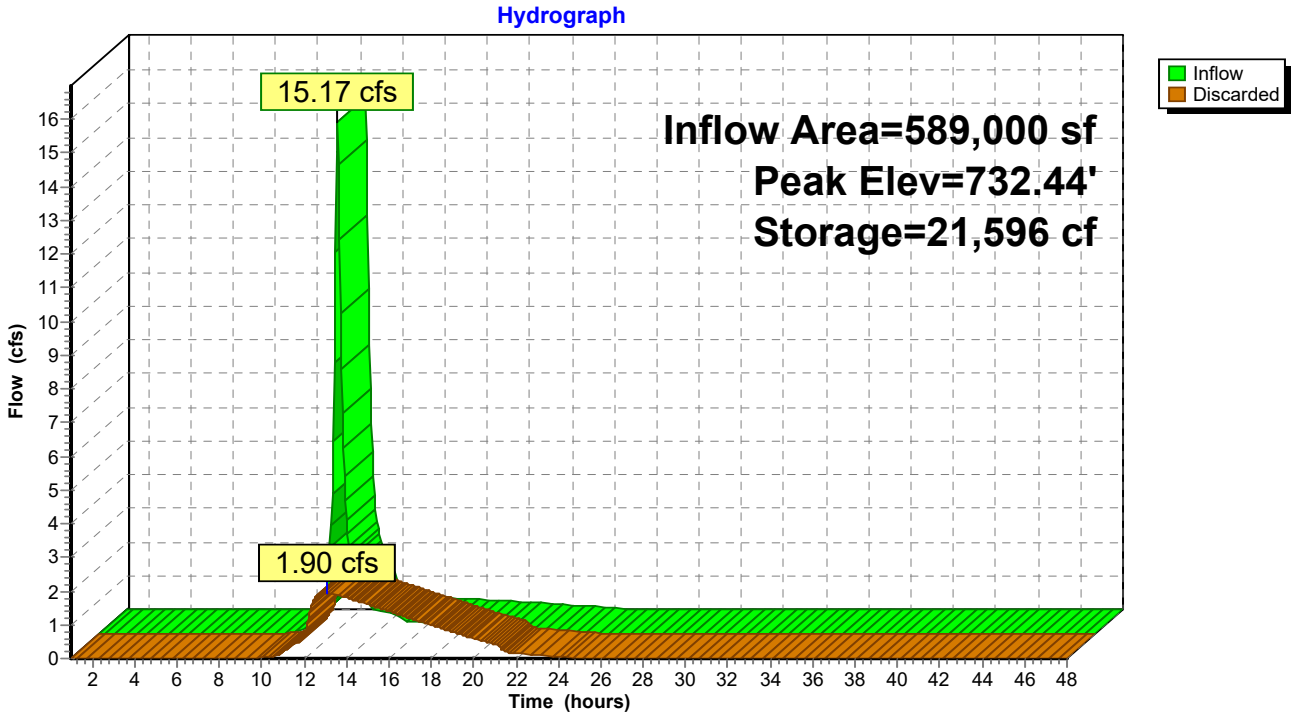
Volume	Invert	Avail.Storage	Storage Description
#1	730.00'	273,743 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
730.00	2,768	0	0
731.00	8,073	5,421	5,421
732.00	12,399	10,236	15,657
733.00	17,056	14,728	30,384
734.00	21,328	19,192	49,576
735.00	25,607	23,468	73,044
736.00	29,845	27,726	100,770
737.00	35,145	32,495	133,265
738.00	42,680	38,913	172,177
739.00	51,064	46,872	219,049
740.00	58,323	54,694	273,743

Device	Routing	Invert	Outlet Devices
#1	Discarded	730.00'	**5.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 720.00'

Discarded OutFlow Max=1.90 cfs @ 13.05 hrs HW=732.44' (Free Discharge)
↑**1=Exfiltration** (Controls 1.90 cfs)

Pond 73P: Southeast Basin



Summary for Pond 74P: Southwest Basin

Inflow Area = 432,562 sf, 19.07% Impervious, Inflow Depth = 3.84" for 100-Year event
Inflow = 44.20 cfs @ 12.25 hrs, Volume= 138,294 cf
Outflow = 7.01 cfs @ 12.92 hrs, Volume= 138,294 cf, Atten= 84%, Lag= 40.1 min
Discarded = 7.01 cfs @ 12.92 hrs, Volume= 138,294 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 744.69' @ 12.92 hrs Surf.Area= 34,807 sf Storage= 67,914 cf

Plug-Flow detention time= 114.9 min calculated for 138,147 cf (100% of inflow)
Center-of-Mass det. time= 114.8 min (919.5 - 804.7)

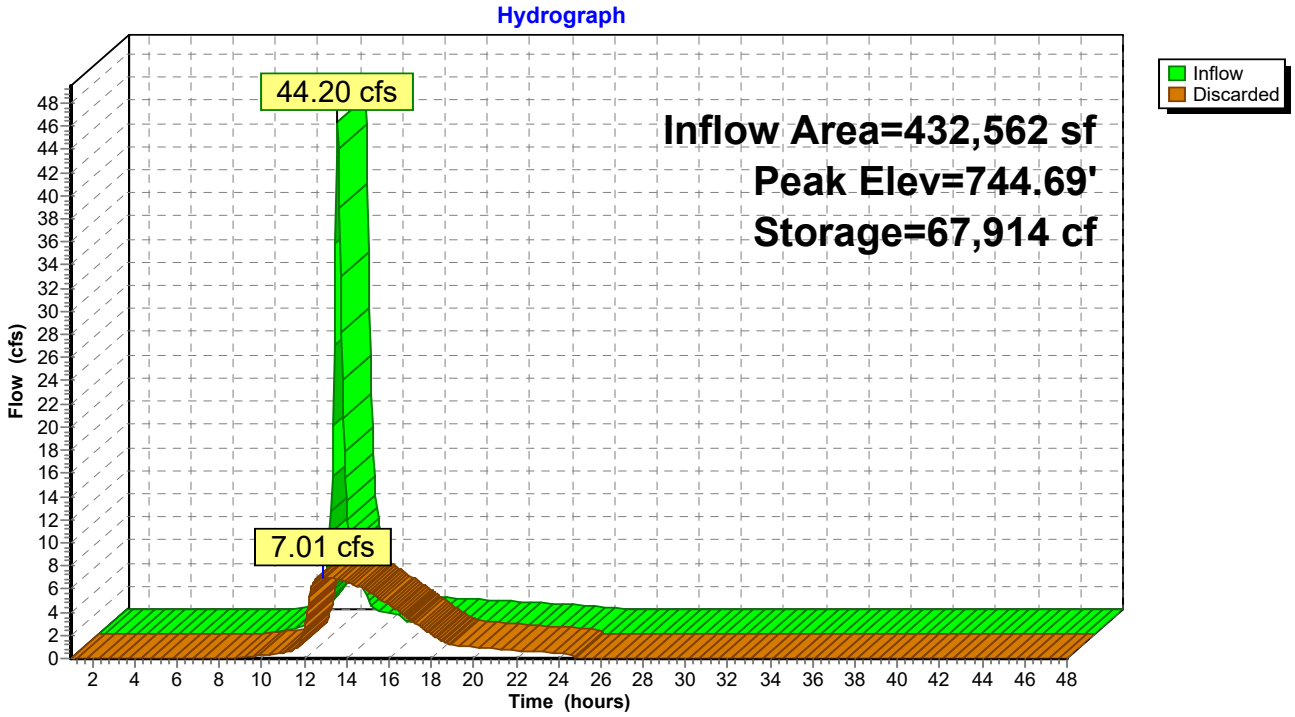
Volume	Invert	Avail.Storage	Storage Description
#1	740.00'	78,856 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
740.00	1,591	0	0
741.00	3,325	2,458	2,458
742.00	5,645	4,485	6,943
743.00	19,935	12,790	19,733
744.00	30,884	25,410	45,143
745.00	36,542	33,713	78,856

Device	Routing	Invert	Outlet Devices
#1	Discarded	740.00'	**8.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 720.00'

Discarded OutFlow Max=7.01 cfs @ 12.92 hrs HW=744.69' (Free Discharge)
↑**1=Exfiltration** (Controls 7.01 cfs)

Pond 74P: Southwest Basin



Summary for Pond 89P: Gravel North Depression

[93] Warning: Storage range exceeded by 1.33'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 235,181 sf, 19.95% Impervious, Inflow Depth = 3.85" for 100-Year event
Inflow = 29.24 cfs @ 12.18 hrs, Volume= 75,469 cf
Outflow = 29.57 cfs @ 12.17 hrs, Volume= 75,469 cf, Atten= 0%, Lag= 0.0 min
Discarded = 0.46 cfs @ 12.17 hrs, Volume= 11,415 cf
Primary = 2.28 cfs @ 12.17 hrs, Volume= 29,061 cf
Secondary = 26.83 cfs @ 12.17 hrs, Volume= 34,992 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 757.33' @ 12.17 hrs Surf.Area= 1,161 sf Storage= 808 cf

Plug-Flow detention time= 2.4 min calculated for 75,389 cf (100% of inflow)
Center-of-Mass det. time= 2.4 min (799.2 - 796.9)

Volume	Invert	Avail.Storage	Storage Description
#1	754.80'	808 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
754.80	237	0	0
755.50	725	337	337
756.00	1,161	472	808

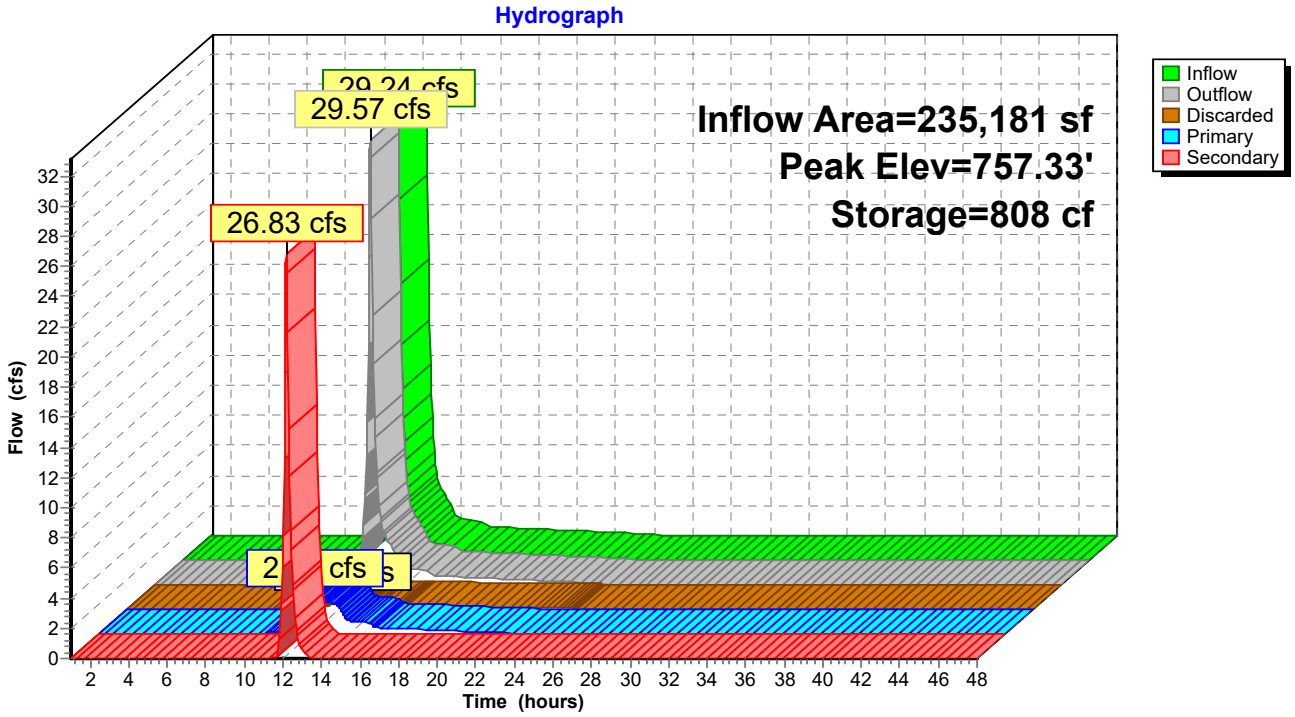
Device	Routing	Invert	Outlet Devices
#1	Primary	754.80'	**12.0" Round Culvert** L= 426.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 754.80' / 749.60' S= 0.0122 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.79 sf
#2	Secondary	755.80'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#3	Discarded	754.80'	**16.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 725.00'

Discarded OutFlow Max=0.46 cfs @ 12.17 hrs HW=757.30' (Free Discharge)
↑**3=Exfiltration** (Controls 0.46 cfs)

Primary OutFlow Max=2.28 cfs @ 12.17 hrs HW=757.30' (Free Discharge)
↑**1=Culvert** (Barrel Controls 2.28 cfs @ 2.90 fps)

Secondary OutFlow Max=25.89 cfs @ 12.17 hrs HW=757.30' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 25.89 cfs @ 3.46 fps)

Pond 89P: Gravel North Depression



Summary for Pond 92P: Gravel South Depression

[93] Warning: Storage range exceeded by 1.74'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing
[61] Hint: Exceeded Reach 93R outlet invert by 3.23' @ 12.20 hrs
[79] Warning: Submerged Pond 89P Primary device # 1 OUTLET by 4.13'

Inflow Area = 288,183 sf, 16.28% Impervious, Inflow Depth = 3.28" for 100-Year event
Inflow = 33.14 cfs @ 12.18 hrs, Volume= 78,792 cf
Outflow = 33.18 cfs @ 12.18 hrs, Volume= 78,792 cf, Atten= 0%, Lag= 0.1 min
Primary = 33.08 cfs @ 12.18 hrs, Volume= 73,606 cf
Secondary = 0.11 cfs @ 12.18 hrs, Volume= 5,186 cf

Routing by Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs
Peak Elev= 753.74' @ 12.18 hrs Surf.Area= 253 sf Storage= 387 cf

Plug-Flow detention time= 3.9 min calculated for 78,708 cf (100% of inflow)
Center-of-Mass det. time= 4.0 min (789.0 - 785.0)

Volume	Invert	Avail.Storage	Storage Description
#1	749.60'	387 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

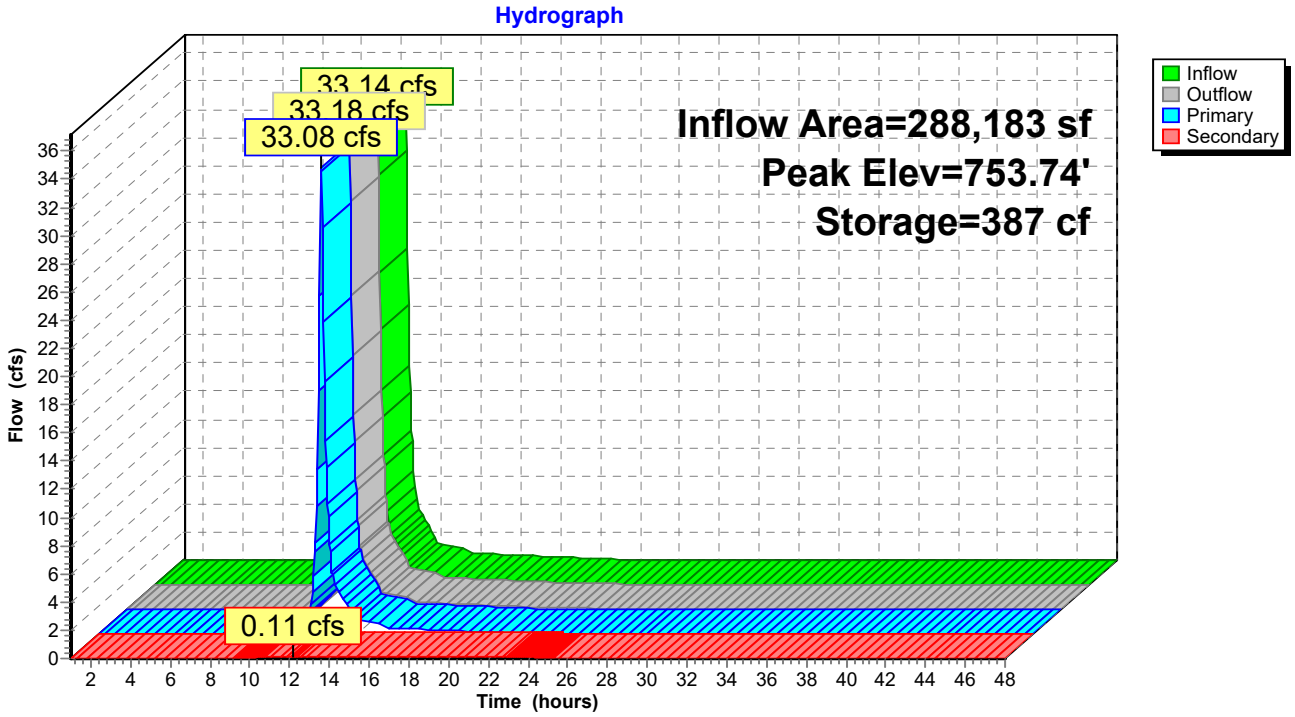
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
749.60	30	0	0
750.00	107	27	27
752.00	253	360	387

Device	Routing	Invert	Outlet Devices
#1	Primary	752.00'	**5.0' long x 2.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32
#2	Secondary	749.60'	**16.000 in/hr Exfiltration over Horizontal area** Conductivity to Groundwater Elevation = 725.00'

Primary OutFlow Max=32.55 cfs @ 12.18 hrs HW=753.72' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 32.55 cfs @ 3.78 fps)

Secondary OutFlow Max=0.11 cfs @ 12.18 hrs HW=753.72' (Free Discharge)
↑—**2=Exfiltration** (Controls 0.11 cfs)

Pond 92P: Gravel South Depression

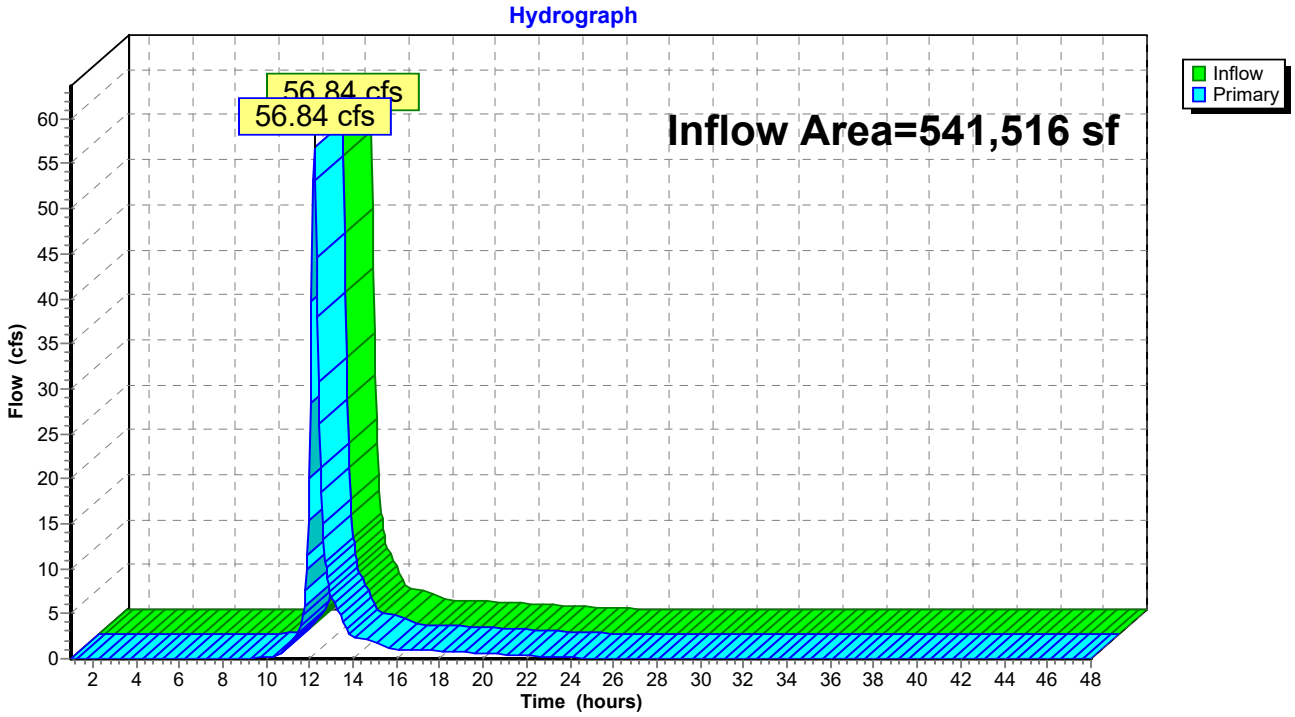


Summary for Link 32L: TOTAL OFFSITE UNTREATED

Inflow Area = 541,516 sf, 15.80% Impervious, Inflow Depth = 3.47" for 100-Year event
Inflow = 56.84 cfs @ 12.20 hrs, Volume= 156,643 cf
Primary = 56.84 cfs @ 12.20 hrs, Volume= 156,643 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 32L: TOTAL OFFSITE UNTREATED

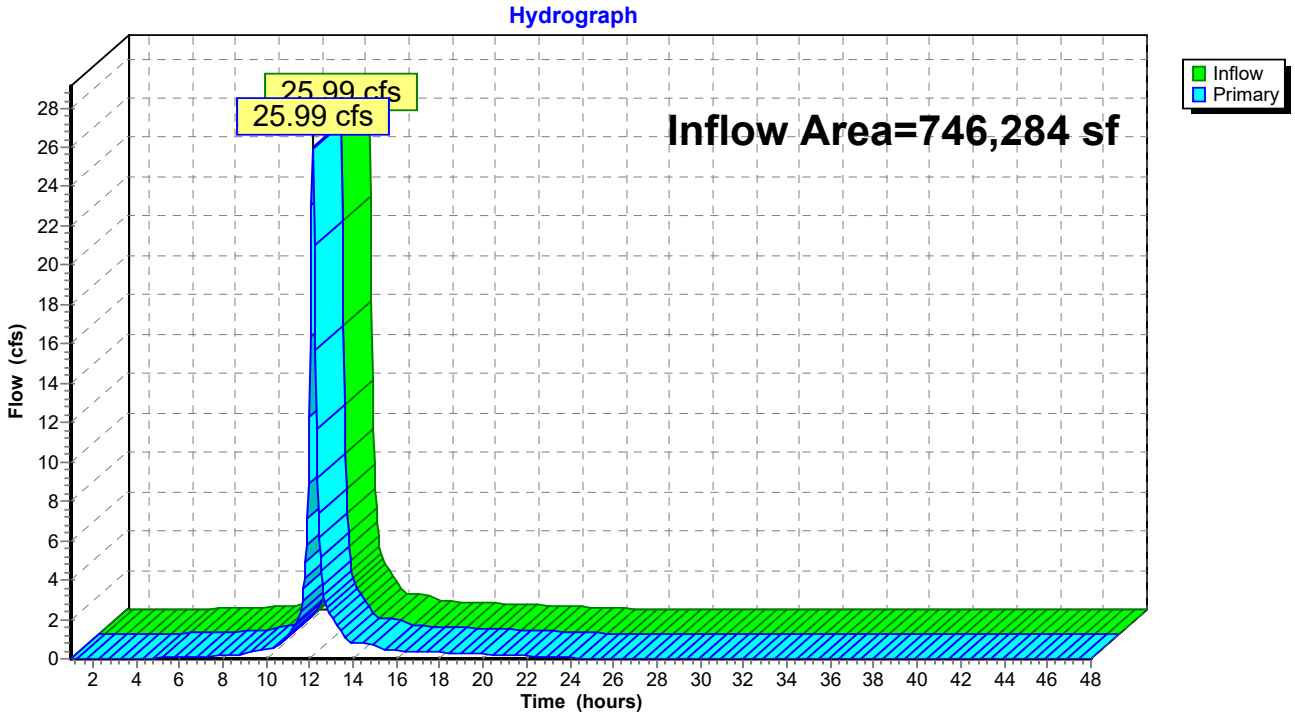


Summary for Link 33L: TOTAL ONSITE

Inflow Area = 746,284 sf, 24.37% Impervious, Inflow Depth = 1.04" for 100-Year event
Inflow = 25.99 cfs @ 12.14 hrs, Volume= 64,915 cf
Primary = 25.99 cfs @ 12.14 hrs, Volume= 64,915 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 33L: TOTAL ONSITE

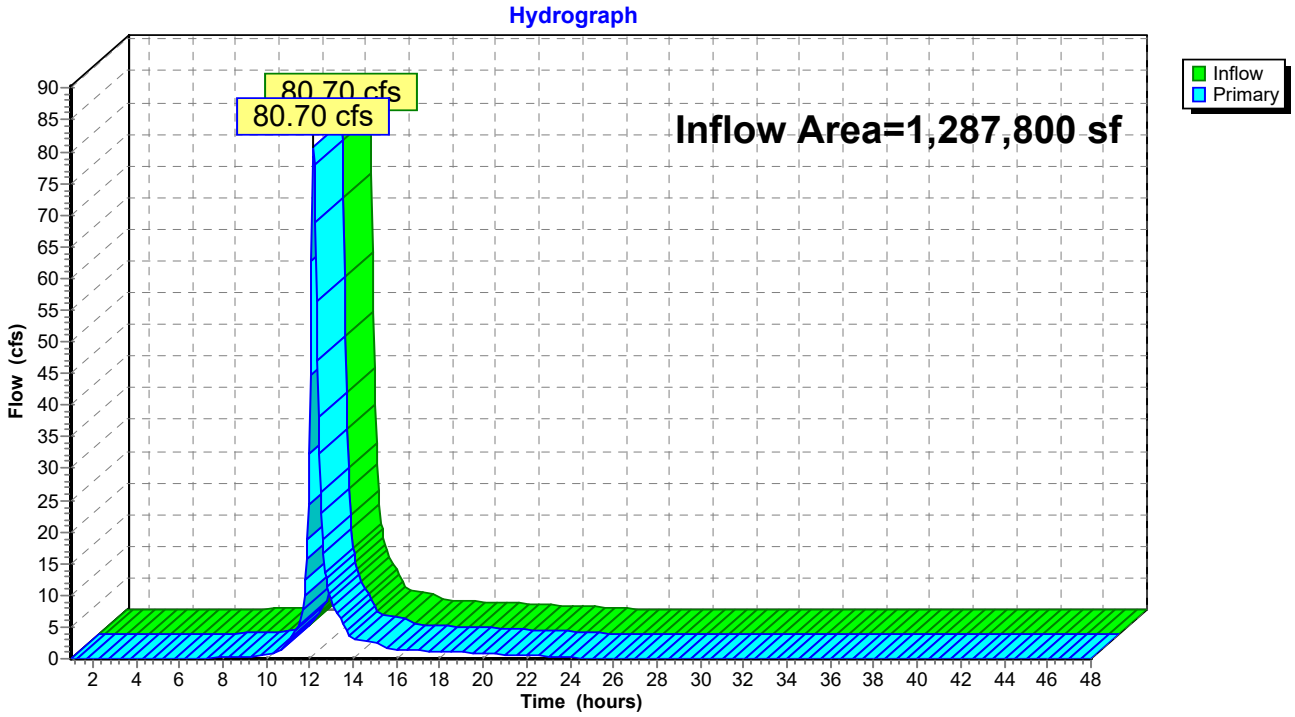


Summary for Link 34L: TOTAL OUTFALL

Inflow Area = 1,287,800 sf, 20.77% Impervious, Inflow Depth = 2.06" for 100-Year event
Inflow = 80.70 cfs @ 12.17 hrs, Volume= 221,558 cf
Primary = 80.70 cfs @ 12.17 hrs, Volume= 221,558 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 34L: TOTAL OUTFALL

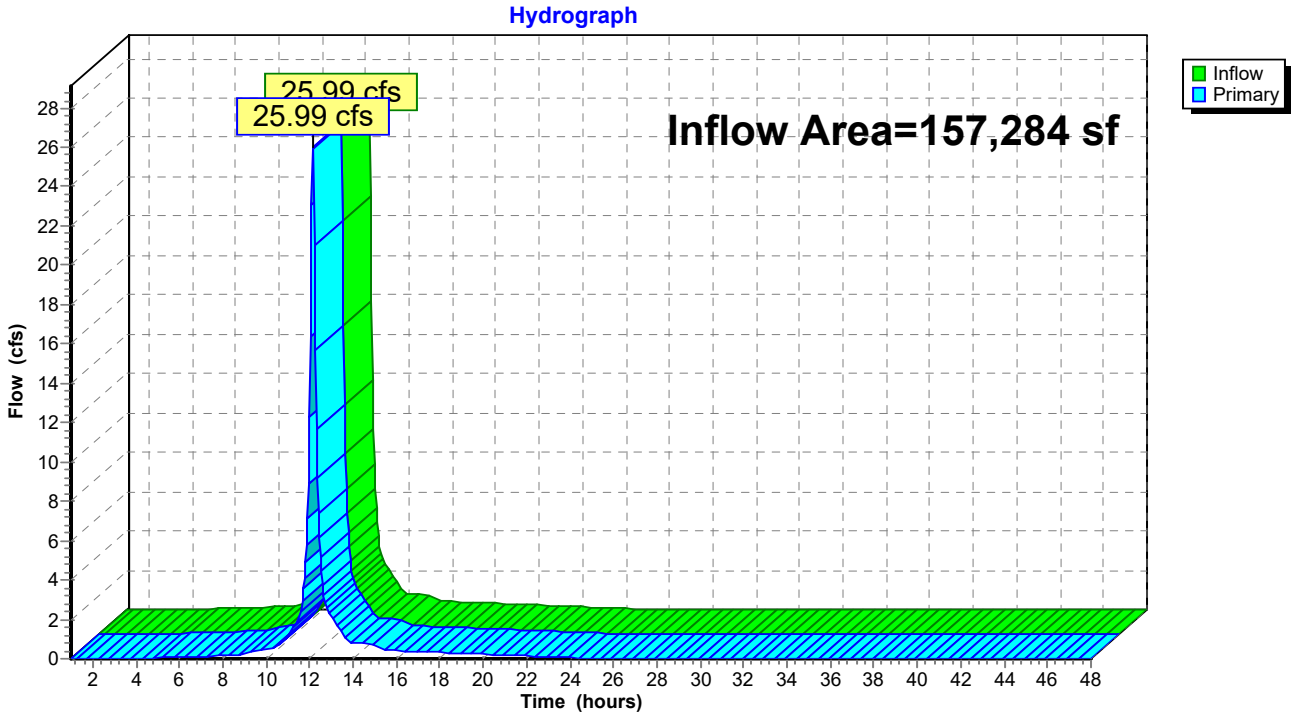


Summary for Link 75L: Areas Piped

Inflow Area = 157,284 sf, 63.18% Impervious, Inflow Depth = 4.95" for 100-Year event
Inflow = 25.99 cfs @ 12.14 hrs, Volume= 64,915 cf
Primary = 25.99 cfs @ 12.14 hrs, Volume= 64,915 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 75L: Areas Piped

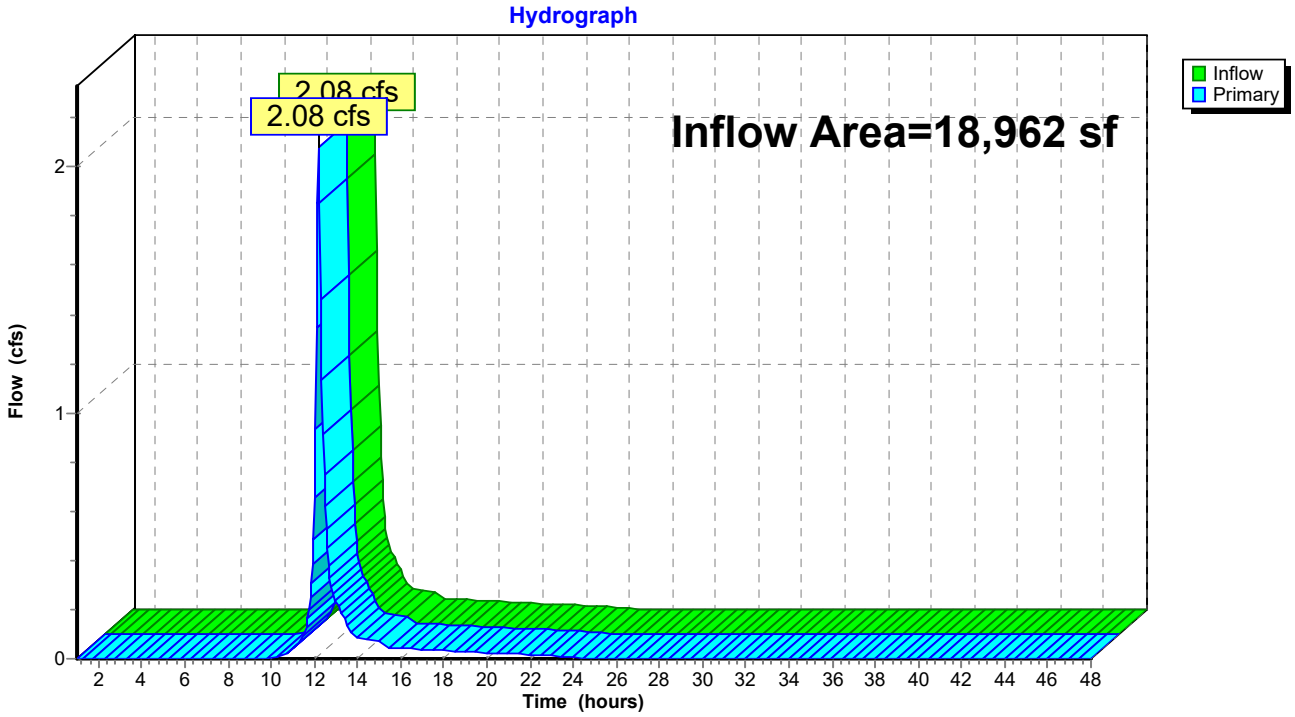


Summary for Link 78L: Swale on Lot 20

Inflow Area = 18,962 sf, 0.00% Impervious, Inflow Depth = 3.34" for 100-Year event
Inflow = 2.08 cfs @ 12.20 hrs, Volume= 5,273 cf
Primary = 2.08 cfs @ 12.20 hrs, Volume= 5,273 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 78L: Swale on Lot 20

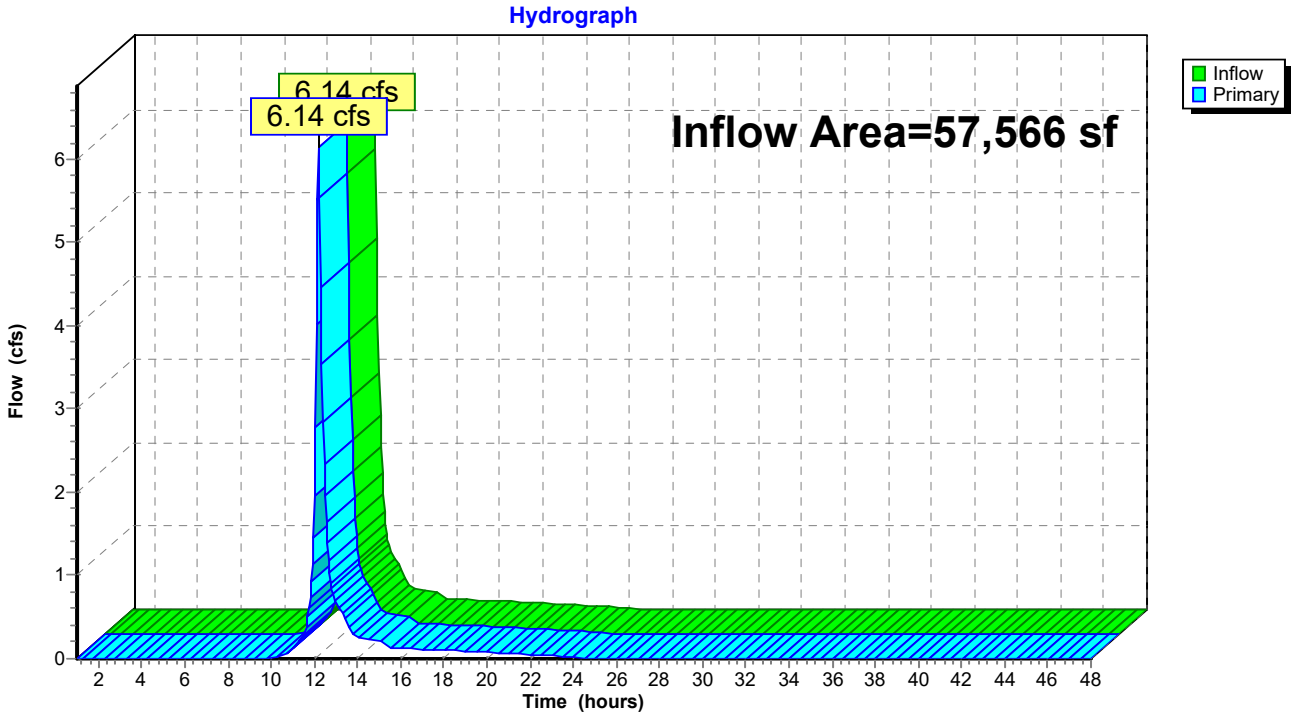


Summary for Link 79L: Swale Along Red Barn Ln.

Inflow Area = 57,566 sf, 0.00% Impervious, Inflow Depth = 3.34" for 100-Year event
Inflow = 6.14 cfs @ 12.20 hrs, Volume= 16,007 cf
Primary = 6.14 cfs @ 12.20 hrs, Volume= 16,007 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 79L: Swale Along Red Barn Ln.



Summary for Link 80L: Cul-de-sac On Green Meadow Place

Inflow Area = 448,599 sf, 18.72% Impervious, Inflow Depth = 3.49" for 100-Year event
Inflow = 46.93 cfs @ 12.21 hrs, Volume= 130,541 cf
Primary = 46.93 cfs @ 12.21 hrs, Volume= 130,541 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.05 hrs

Link 80L: Cul-de-sac On Green Meadow Place