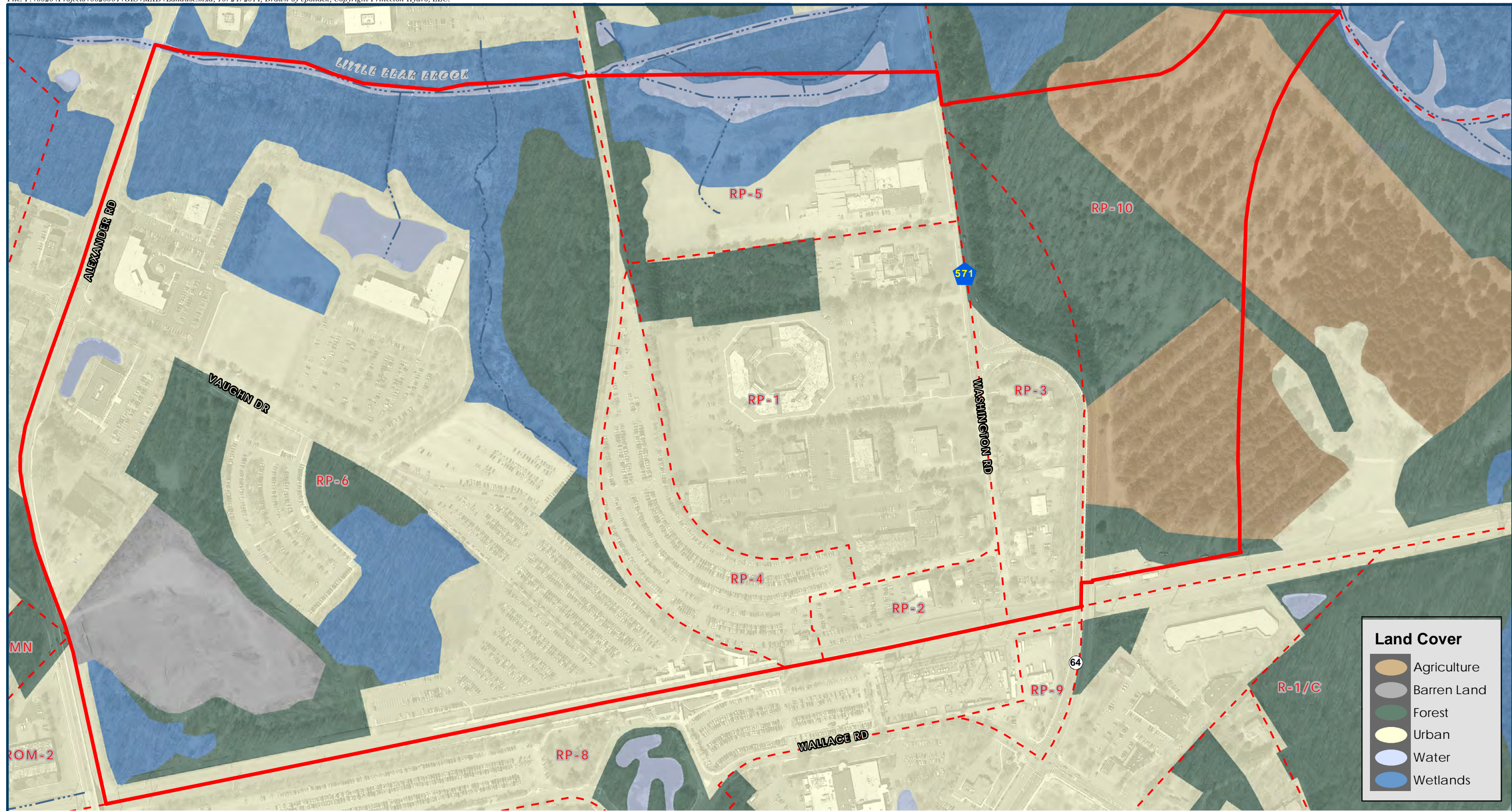










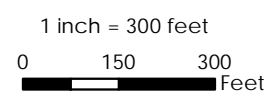
**Appendix C:
Existing Conditions Calculations**






Land Cover	
	Agriculture
	Barren Land
	Forest
	Urban
	Water
	Wetlands

LAND USE/LAND COVER MAP

REGIONAL STORMWATER MANAGEMENT ANALYSIS
 REDEVELOPMENT AREA
 WEST WINDSOR TOWNSHIP
 MERCER COUNTY, NEW JERSEY



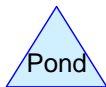
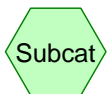
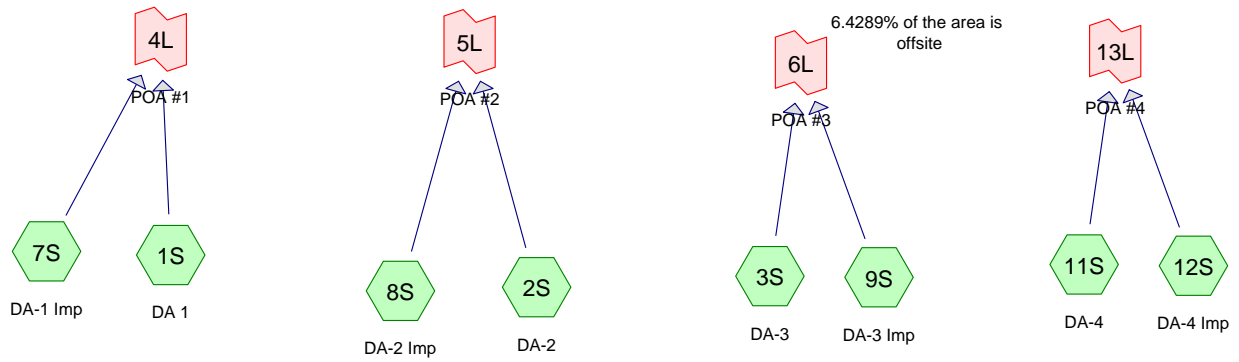
Legend	
	Zoning Boundary
	Project Area
	Stream

Princeton Hydro



- NOTES
1. Zoning boundary, project area (RP zones 1 - 6; 10 partial), and parcel limits obtained from West Windsor Township.
 2. Streams obtained from NJDEP GIS website.
 3. 2007 Land Use/Land Cover obtained from NJDEP GIS website.

Coordinate System: NAD 1983 StatePlane New Jersey FIPS 2900 Feet
 Projection: Transverse Mercator



Routing Diagram for Existing Conditions

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
66.839	71	(1S, 11S)
58.416	56	(2S, 3S)
59.290	98	(7S, 8S, 9S, 12S)
184.545	75	TOTAL AREA

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Pipe Listing (all 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	1S	0.00	0.00	745.0	0.0094	0.011	24.0	0.0	0.0
2	2S	0.00	0.00	468.0	0.0171	0.015	36.0	0.0	0.0
3	3S	0.00	0.00	550.0	0.0018	0.013	15.0	0.0	0.0
4	3S	0.00	0.00	145.0	0.0050	0.013	24.0	0.0	0.0
5	3S	0.00	0.00	192.0	0.0050	0.013	24.0	0.0	0.0
6	7S	0.00	0.00	300.0	0.0170	0.013	15.0	0.0	0.0
7	7S	0.00	0.00	887.0	0.0044	0.013	24.0	0.0	0.0
8	8S	0.00	0.00	635.0	0.0027	0.013	15.0	0.0	0.0
9	8S	0.00	0.00	1,817.0	0.0056	0.013	30.0	0.0	0.0
10	9S	0.00	0.00	1,042.0	0.0044	0.013	15.0	0.0	0.0
11	9S	0.00	0.00	1,043.0	0.0044	0.013	24.0	0.0	0.0
12	11S	0.00	0.00	790.0	0.0038	0.013	15.0	0.0	0.0

Existing Conditions

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Type II 24-hr 2-yr Rainfall=3.30"

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Time span=0.00-45.00 hrs, dt=0.05 hrs, 901 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: DA 1

Runoff Area=41.830 ac 0.00% Impervious Runoff Depth=0.94"
Flow Length=2,579' Tc=37.4 min CN=71 Runoff=26.17 cfs 3.273 af

Subcatchment 2S: DA-2

Runoff Area=23.370 ac 0.00% Impervious Runoff Depth=0.31"
Flow Length=3,110' Tc=39.1 min CN=56 Runoff=2.50 cfs 0.607 af

Subcatchment 3S: DA-3

Runoff Area=35.046 ac 0.00% Impervious Runoff Depth=0.31"
Flow Length=2,000' Tc=31.5 min CN=56 Runoff=4.26 cfs 0.910 af

Subcatchment 7S: DA-1 Imp

Runoff Area=15.270 ac 100.00% Impervious Runoff Depth=3.07"
Flow Length=2,526' Tc=23.9 min CN=98 Runoff=42.32 cfs 3.903 af

Subcatchment 8S: DA-2 Imp

Runoff Area=15.160 ac 100.00% Impervious Runoff Depth=3.07"
Flow Length=2,879' Tc=17.2 min CN=98 Runoff=49.83 cfs 3.875 af

Subcatchment 9S: DA-3 Imp

Runoff Area=27.850 ac 100.00% Impervious Runoff Depth=3.07"
Flow Length=2,295' Tc=9.1 min CN=98 Runoff=116.48 cfs 7.118 af

Subcatchment 11S: DA-4

Runoff Area=25.009 ac 0.00% Impervious Runoff Depth=0.94"
Flow Length=2,122' Tc=28.4 min CN=71 Runoff=18.99 cfs 1.957 af

Subcatchment 12S: DA-4 Imp

Runoff Area=1.010 ac 100.00% Impervious Runoff Depth=3.07"
Tc=5.0 min CN=98 Runoff=4.77 cfs 0.258 af

Link 4L: POA #1

Inflow=61.02 cfs 7.175 af
Primary=61.02 cfs 7.175 af

Link 5L: POA #2

Inflow=50.16 cfs 4.482 af
Primary=50.16 cfs 4.482 af

Link 6L: POA #3

Inflow=116.68 cfs 8.029 af
Primary=116.68 cfs 8.029 af

Link 13L: POA #4

Inflow=19.53 cfs 2.215 af
Primary=19.53 cfs 2.215 af

Total Runoff Area = 184.545 ac Runoff Volume = 21.901 af Average Runoff Depth = 1.42"
67.87% Pervious = 125.255 ac 32.13% Impervious = 59.290 ac

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Type II 24-hr 2-yr Rainfall=3.30"

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Summary for Subcatchment 1S: DA 1

Runoff = 26.17 cfs @ 12.37 hrs, Volume= 3.273 af, Depth= 0.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
* 41.830	71	
41.830		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	100	0.0299	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
4.3	422	0.0267	1.63		Shallow Concentrated Flow, Nearly Bare & Untilled Kv= 10.0 fps
20.4	672	0.0121	0.55		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.5	745	0.0094	8.25	25.92	Pipe Channel, RCP_Round 24" 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.011 Concrete pipe, straight & clean
0.3	209		11.35		Lake or Reservoir, Mean Depth= 4.00'
2.7	431	0.0020	2.71	37.95	Trap/Vee/Rect Channel Flow, Bot.W=12.00' D=1.00' Z= 2.0 '/' Top.W=16.00' n= 0.022 Earth, clean & straight
37.4	2,579	Total			

Existing Conditions

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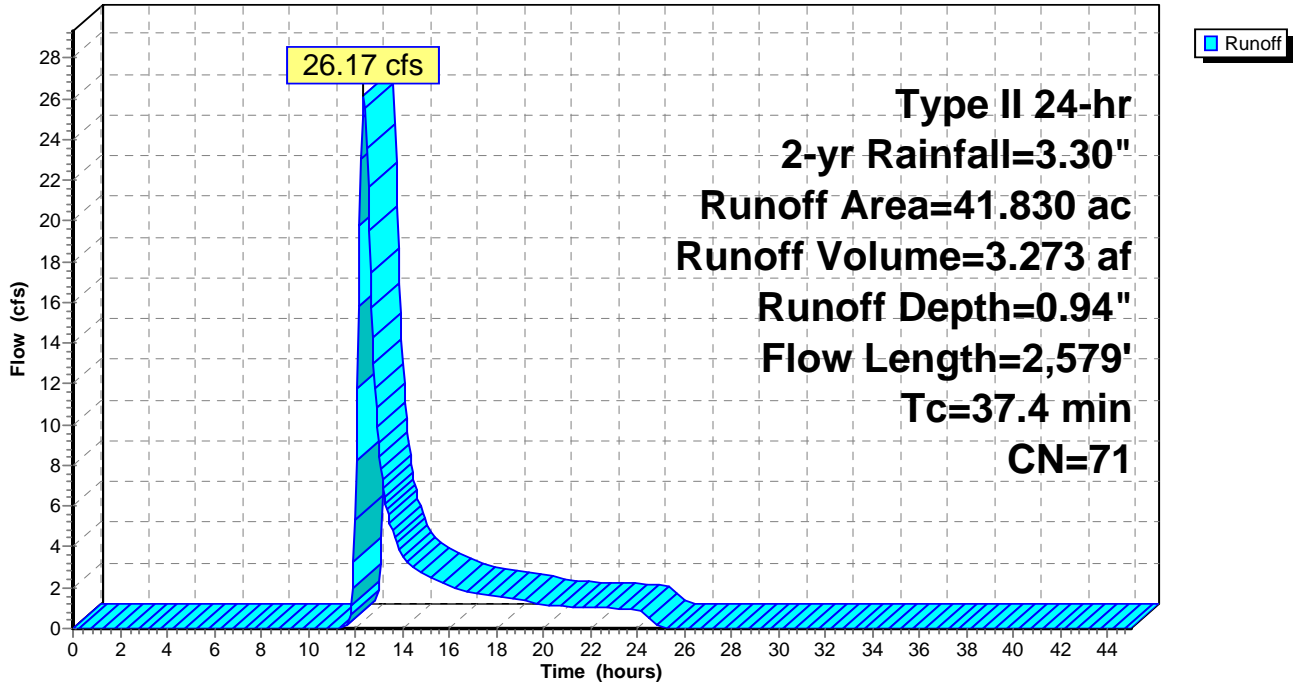
Type II 24-hr 2-yr Rainfall=3.30"

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Subcatchment 1S: DA 1

Hydrograph



Existing Conditions

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Type II 24-hr 2-yr Rainfall=3.30"

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Summary for Subcatchment 2S: DA-2

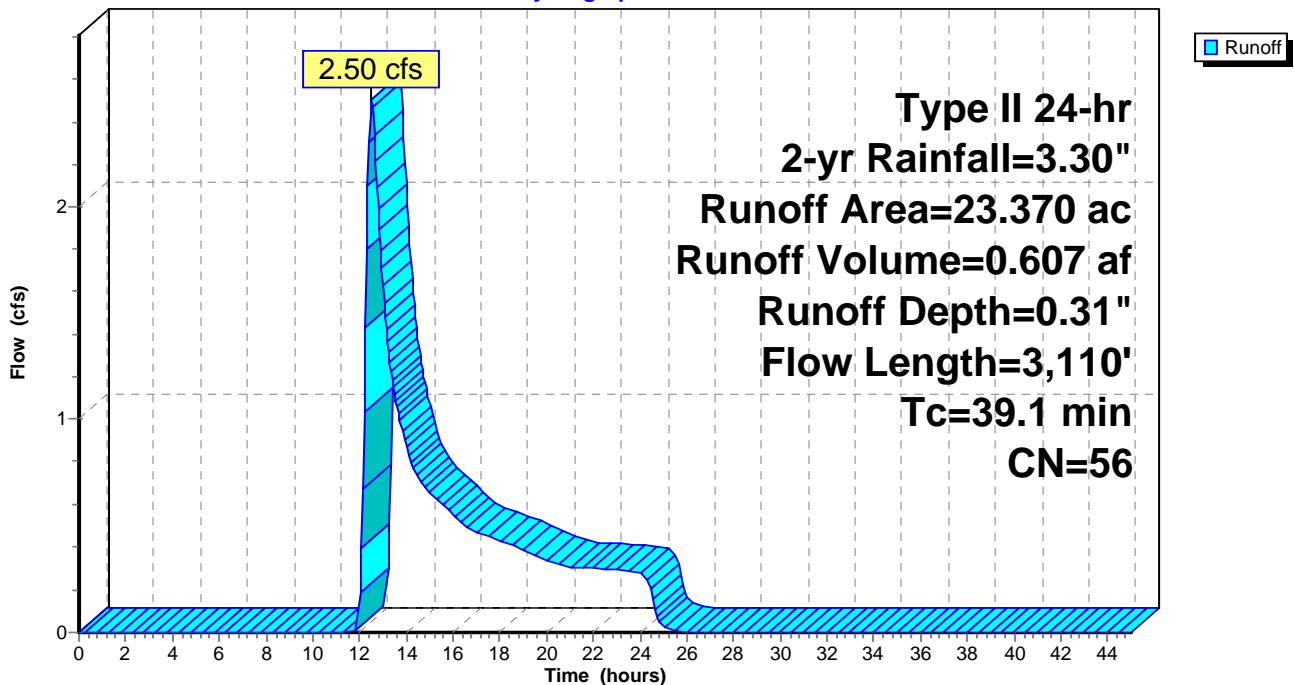
Runoff = 2.50 cfs @ 12.52 hrs, Volume= 0.607 af, Depth= 0.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description			
* 23.370	56				
23.370		100.00% Pervious Area			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	97	0.0410	0.23		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
24.9	1,031	0.0190	0.69		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.7	468	0.0171	10.69	75.59	Pipe Channel, RCP_Round 36" 36.0" Round Area= 7.1 sf Perim= 9.4' r= 0.75' n= 0.015 Concrete sewer w/manholes & inlets
6.4	1,514	0.0079	3.94	23.63	Trap/Vee/Rect Channel Flow, Bot.W=3.00' D=1.00' Z= 3.0'/' Top.W=9.00' n= 0.025 Earth, clean & winding
39.1	3,110	Total			

Subcatchment 2S: DA-2

Hydrograph



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Type II 24-hr 2-yr Rainfall=3.30"

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Summary for Subcatchment 3S: DA-3

Runoff = 4.26 cfs @ 12.40 hrs, Volume= 0.910 af, Depth= 0.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
* 35.046	56	
35.046		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	391	0.1692	2.88		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.6	472	0.0059	0.54		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
9.4	250	0.0040	0.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
4.1	550	0.0018	2.23	2.74	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
0.5	145	0.0050	5.09	16.00	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
0.6	192	0.0050	5.09	16.00	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
31.5	2,000	Total			

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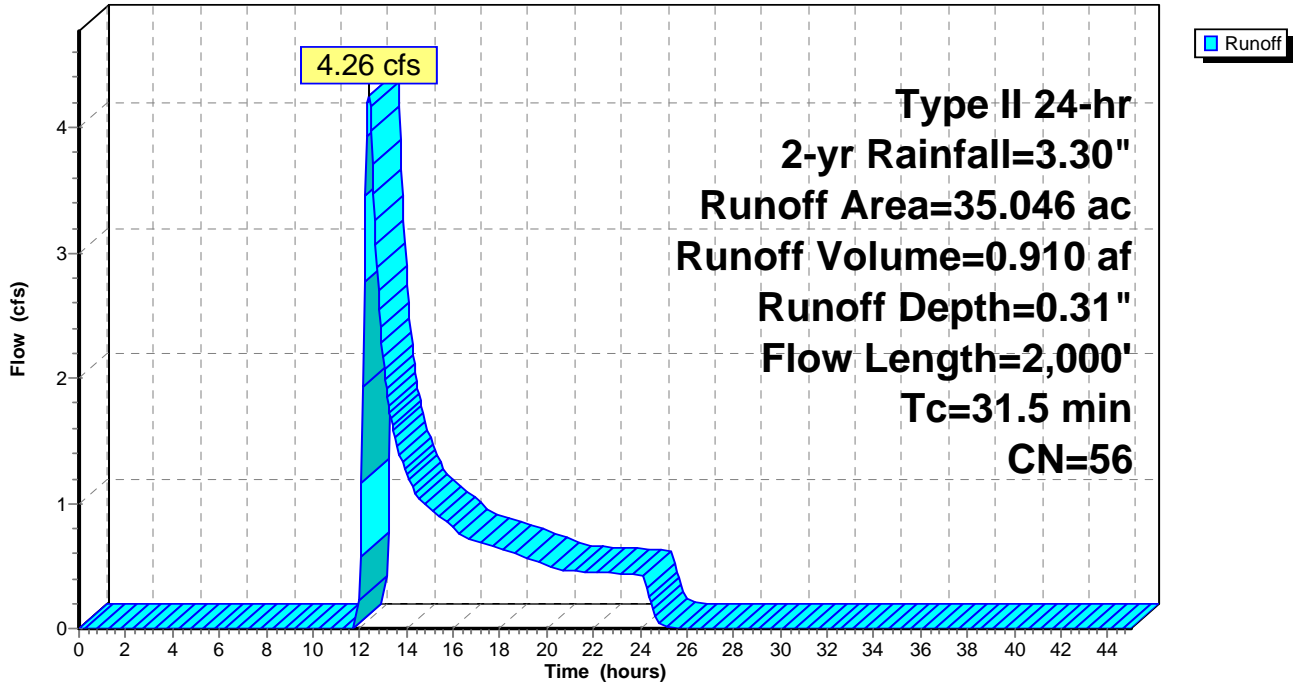
Type II 24-hr 2-yr Rainfall=3.30"

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Subcatchment 3S: DA-3

Hydrograph



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Type II 24-hr 2-yr Rainfall=3.30"

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Summary for Subcatchment 7S: DA-1 Imp

Runoff = 42.32 cfs @ 12.16 hrs, Volume= 3.903 af, Depth= 3.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
* 15.270	98	
15.270		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	55	0.0001	0.15		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
6.1	108	0.0740	0.30		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
3.6	340	0.0059	1.56		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.7	300	0.0170	6.86	8.42	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
3.1	887	0.0044	4.78	15.01	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
4.2	836	0.0018	3.32	165.90	Channel Flow, Area= 50.0 sf Perim= 20.0' r= 2.50' n= 0.035
23.9	2,526	Total			

Existing Conditions

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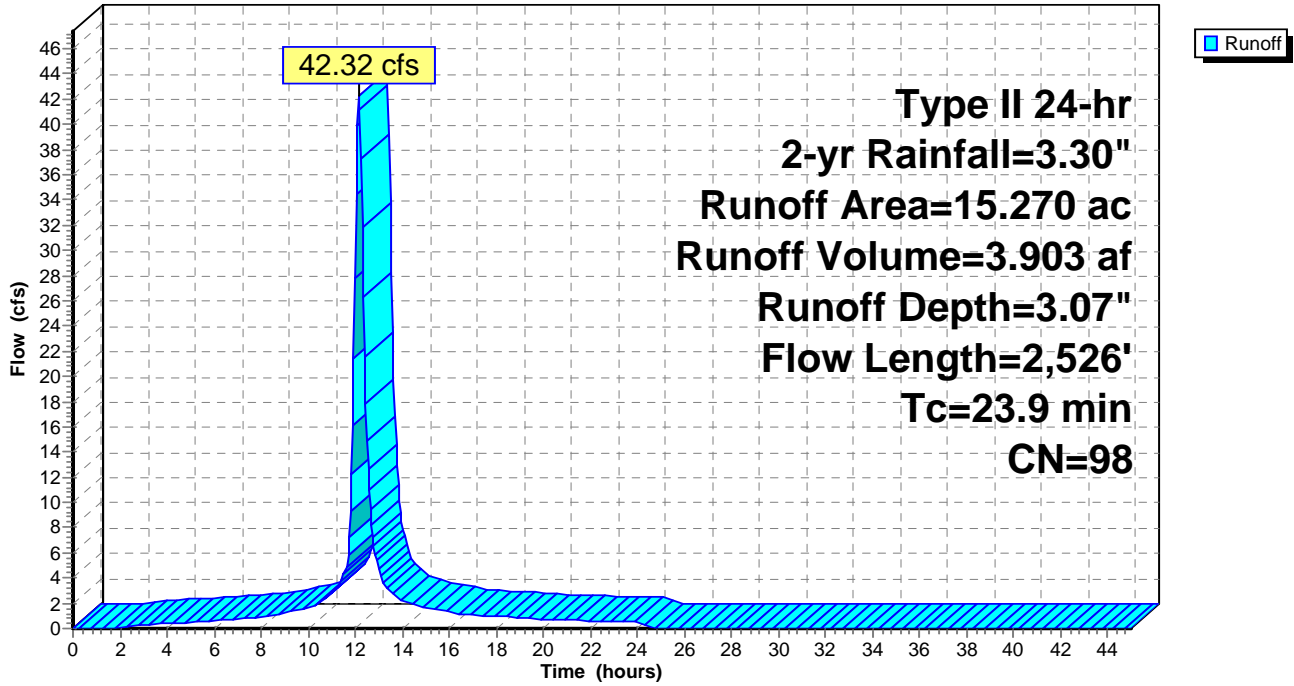
Type II 24-hr 2-yr Rainfall=3.30"

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Subcatchment 7S: DA-1 Imp

Hydrograph



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Type II 24-hr 2-yr Rainfall=3.30"

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Summary for Subcatchment 8S: DA-2 Imp

Runoff = 49.83 cfs @ 12.09 hrs, Volume= 3.875 af, Depth= 3.07"

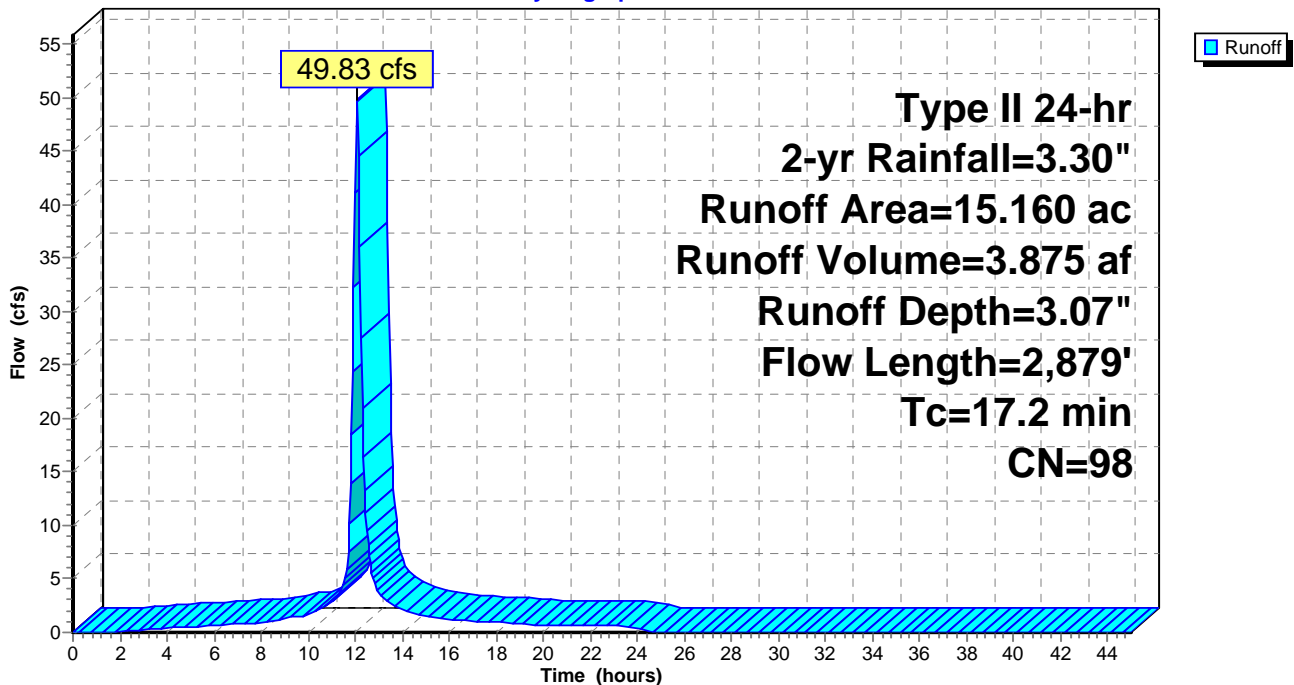
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
* 15.160	98	
15.160		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	427	0.0017	0.84		Shallow Concentrated Flow, Paved Kv= 20.3 fps
3.9	635	0.0027	2.74	3.36	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
4.8	1,817	0.0056	6.25	30.69	Pipe Channel, 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013
17.2	2,879	Total			

Subcatchment 8S: DA-2 Imp

Hydrograph



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Type II 24-hr 2-yr Rainfall=3.30"

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Summary for Subcatchment 9S: DA-3 Imp

Runoff = 116.48 cfs @ 12.00 hrs, Volume= 7.118 af, Depth= 3.07"

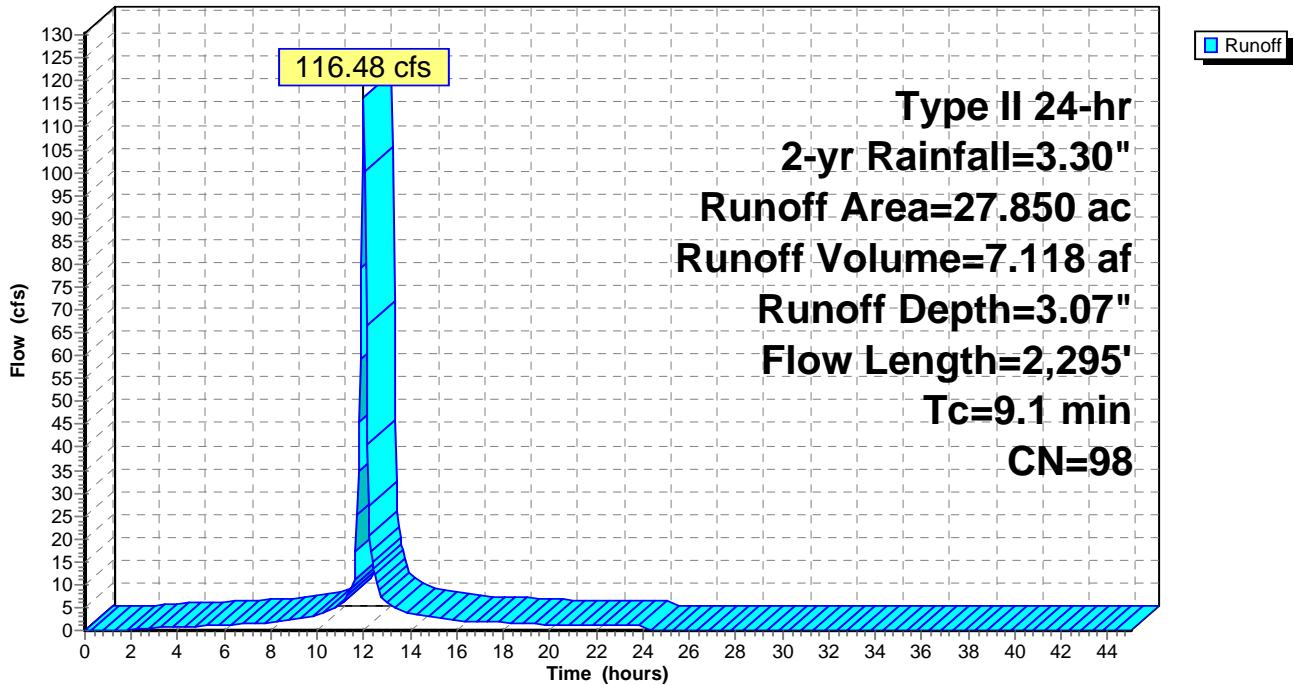
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
* 27.850	98	
27.850		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	210	0.1211	7.06		Shallow Concentrated Flow, Paved Kv= 20.3 fps
5.0	1,042	0.0044	3.49	4.28	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
3.6	1,043	0.0044	4.78	15.01	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
9.1	2,295	Total			

Subcatchment 9S: DA-3 Imp

Hydrograph



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Type II 24-hr 2-yr Rainfall=3.30"

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Summary for Subcatchment 11S: DA-4

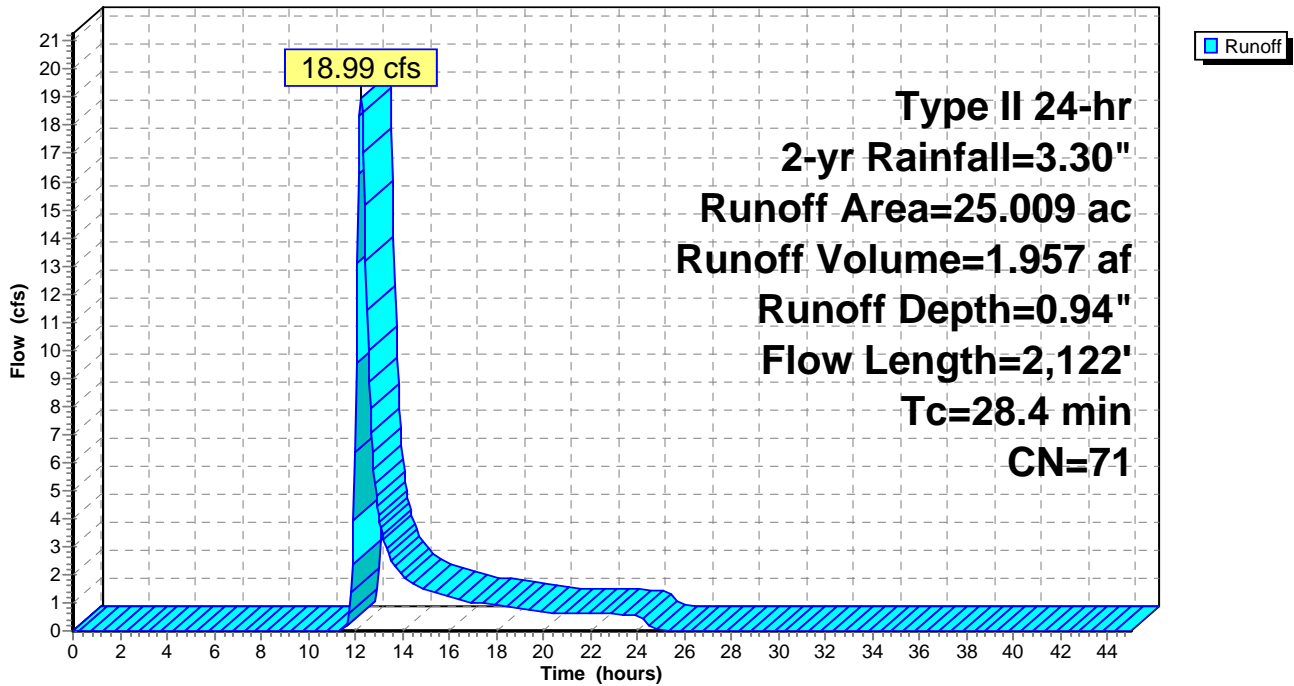
Runoff = 18.99 cfs @ 12.25 hrs, Volume= 1.957 af, Depth= 0.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description			
* 25.009	71				
25.009		100.00% Pervious Area			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.4	648	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
8.9	684	0.0073	1.28		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
4.1	790	0.0038	3.24	3.98	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
28.4	2,122	Total			

Subcatchment 11S: DA-4

Hydrograph



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Type II 24-hr 2-yr Rainfall=3.30"

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Summary for Subcatchment 12S: DA-4 Imp

[49] Hint: Tc<2dt may require smaller dt

Runoff = 4.77 cfs @ 11.95 hrs, Volume= 0.258 af, Depth= 3.07"

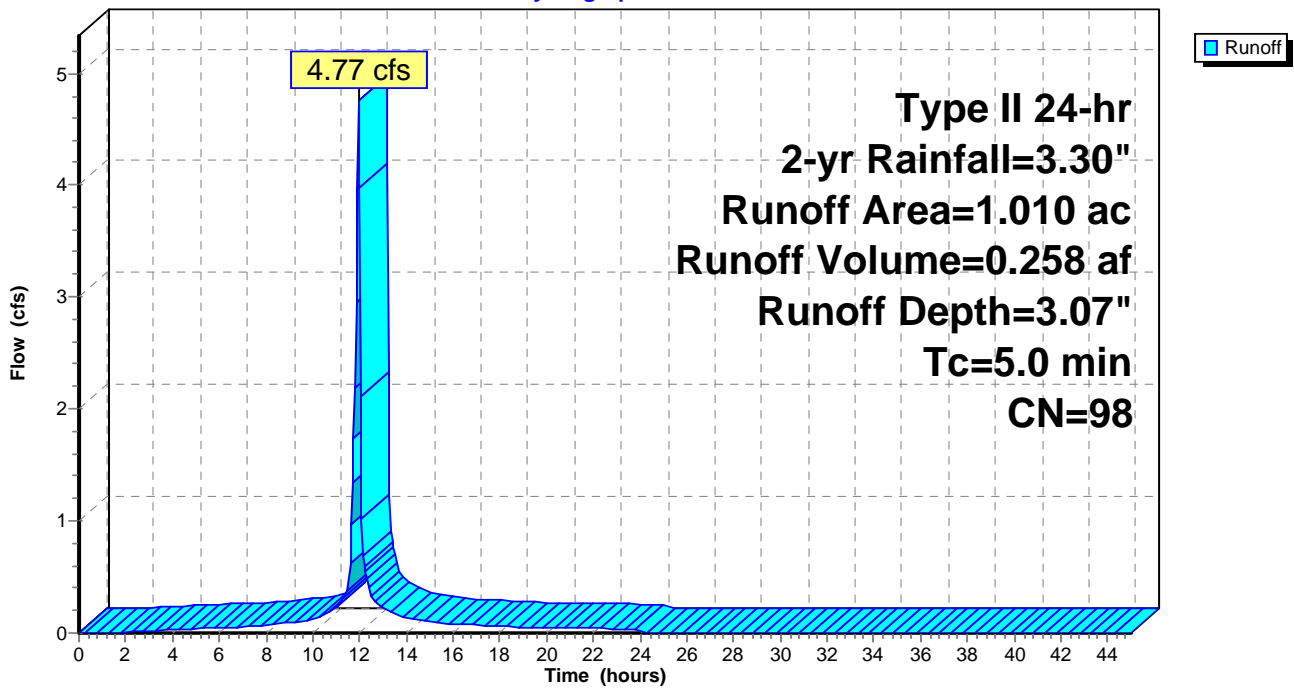
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
* 1.010	98	
1.010		100.00% Impervious Area

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

Subcatchment 12S: DA-4 Imp

Hydrograph



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Type II 24-hr 2-yr Rainfall=3.30"

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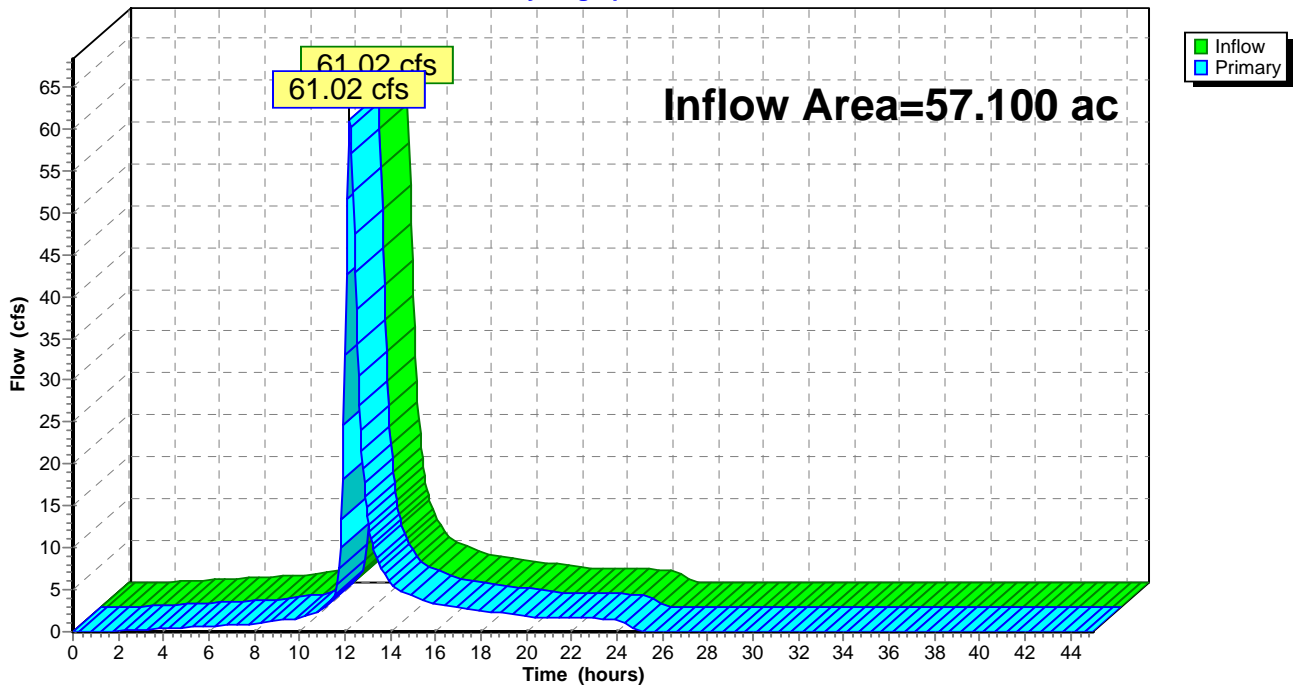
Summary for Link 4L: POA #1

Inflow Area = 57.100 ac, 26.74% Impervious, Inflow Depth = 1.51" for 2-yr event
Inflow = 61.02 cfs @ 12.22 hrs, Volume= 7.175 af
Primary = 61.02 cfs @ 12.22 hrs, Volume= 7.175 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 4L: POA #1

Hydrograph



Existing Conditions

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Type II 24-hr 2-yr Rainfall=3.30"

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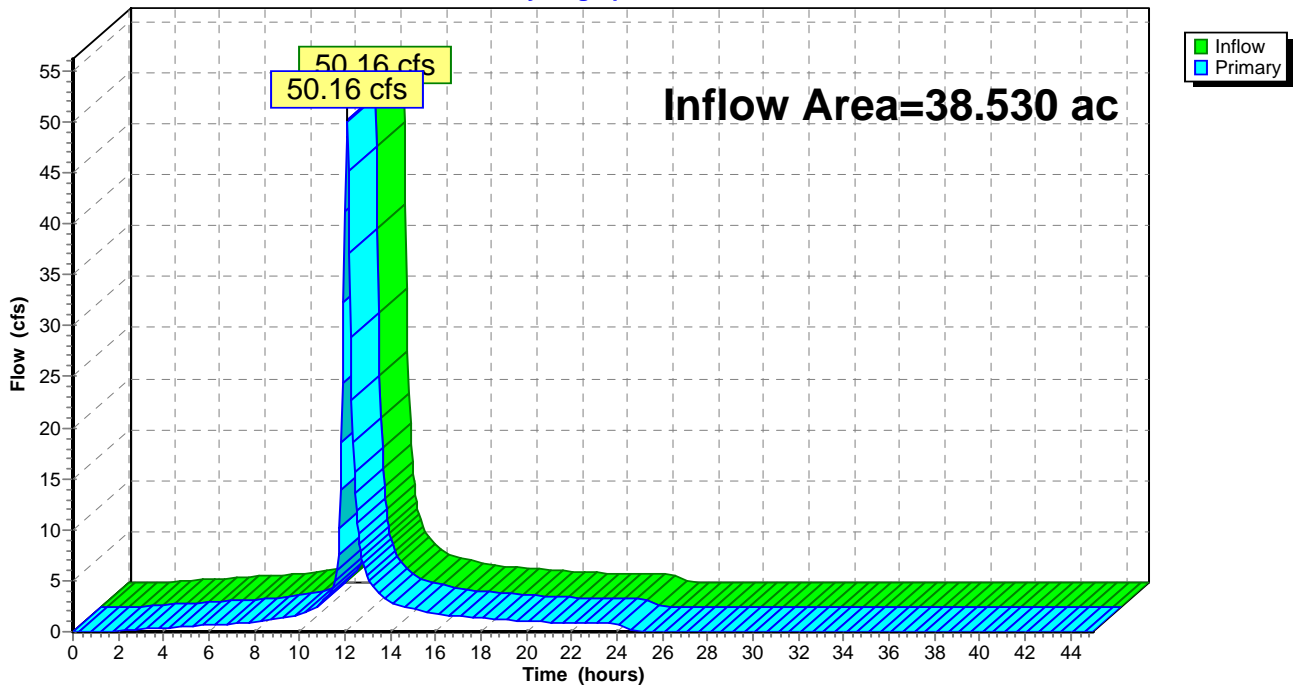
Summary for Link 5L: POA #2

Inflow Area = 38.530 ac, 39.35% Impervious, Inflow Depth = 1.40" for 2-yr event
Inflow = 50.16 cfs @ 12.09 hrs, Volume= 4.482 af
Primary = 50.16 cfs @ 12.09 hrs, Volume= 4.482 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 5L: POA #2

Hydrograph



Existing Conditions

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Type II 24-hr 2-yr Rainfall=3.30"

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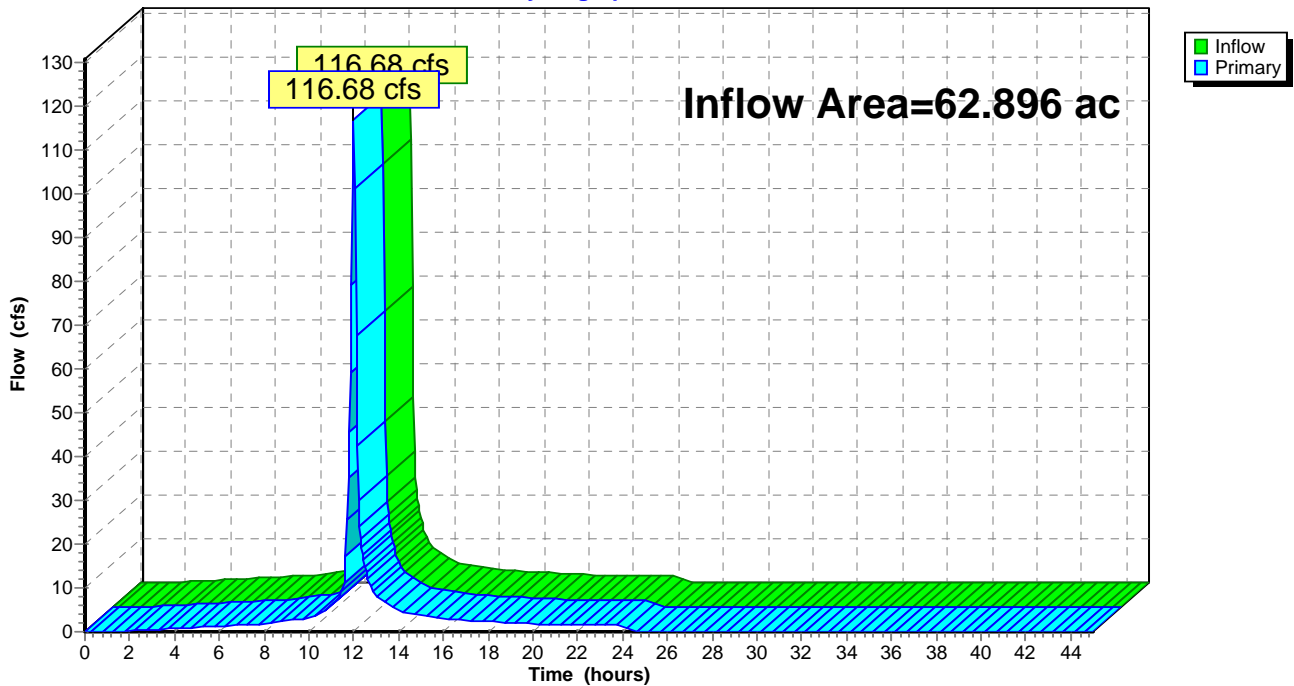
Summary for Link 6L: POA #3

Inflow Area = 62.896 ac, 44.28% Impervious, Inflow Depth = 1.53" for 2-yr event
Inflow = 116.68 cfs @ 12.00 hrs, Volume= 8.029 af
Primary = 116.68 cfs @ 12.00 hrs, Volume= 8.029 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 6L: POA #3

Hydrograph



Existing Conditions

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Type II 24-hr 2-yr Rainfall=3.30"

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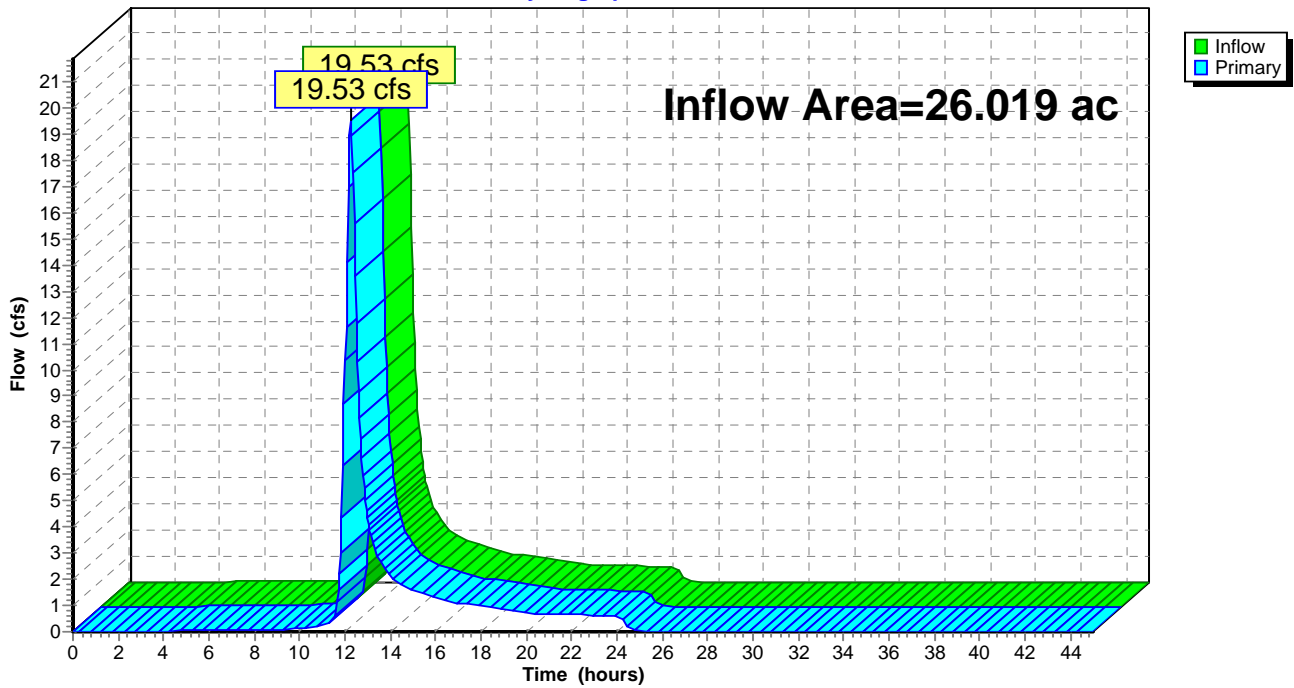
Summary for Link 13L: POA #4

Inflow Area = 26.019 ac, 3.88% Impervious, Inflow Depth = 1.02" for 2-yr event
Inflow = 19.53 cfs @ 12.25 hrs, Volume= 2.215 af
Primary = 19.53 cfs @ 12.25 hrs, Volume= 2.215 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 13L: POA #4

Hydrograph



Existing Conditions

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Type II 24-hr 10-yr Rainfall=5.00"

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Time span=0.00-45.00 hrs, dt=0.05 hrs, 901 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: DA 1	Runoff Area=41.830 ac 0.00% Impervious Runoff Depth=2.12" Flow Length=2,579' Tc=37.4 min CN=71 Runoff=64.41 cfs 7.378 af
Subcatchment 2S: DA-2	Runoff Area=23.370 ac 0.00% Impervious Runoff Depth=1.04" Flow Length=3,110' Tc=39.1 min CN=56 Runoff=13.94 cfs 2.028 af
Subcatchment 3S: DA-3	Runoff Area=35.046 ac 0.00% Impervious Runoff Depth=1.04" Flow Length=2,000' Tc=31.5 min CN=56 Runoff=24.43 cfs 3.042 af
Subcatchment 7S: DA-1 Imp	Runoff Area=15.270 ac 100.00% Impervious Runoff Depth=4.76" Flow Length=2,526' Tc=23.9 min CN=98 Runoff=64.62 cfs 6.061 af
Subcatchment 8S: DA-2 Imp	Runoff Area=15.160 ac 100.00% Impervious Runoff Depth=4.76" Flow Length=2,879' Tc=17.2 min CN=98 Runoff=76.06 cfs 6.017 af
Subcatchment 9S: DA-3 Imp	Runoff Area=27.850 ac 100.00% Impervious Runoff Depth=4.76" Flow Length=2,295' Tc=9.1 min CN=98 Runoff=177.65 cfs 11.055 af
Subcatchment 11S: DA-4	Runoff Area=25.009 ac 0.00% Impervious Runoff Depth=2.12" Flow Length=2,122' Tc=28.4 min CN=71 Runoff=46.41 cfs 4.411 af
Subcatchment 12S: DA-4 Imp	Runoff Area=1.010 ac 100.00% Impervious Runoff Depth=4.76" Tc=5.0 min CN=98 Runoff=7.27 cfs 0.401 af
Link 4L: POA #1	Inflow=116.40 cfs 13.439 af Primary=116.40 cfs 13.439 af
Link 5L: POA #2	Inflow=80.27 cfs 8.046 af Primary=80.27 cfs 8.046 af
Link 6L: POA #3	Inflow=182.18 cfs 14.096 af Primary=182.18 cfs 14.096 af
Link 13L: POA #4	Inflow=47.25 cfs 4.812 af Primary=47.25 cfs 4.812 af

Total Runoff Area = 184.545 ac Runoff Volume = 40.393 af Average Runoff Depth = 2.63"
67.87% Pervious = 125.255 ac 32.13% Impervious = 59.290 ac

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Type II 24-hr 10-yr Rainfall=5.00"

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Summary for Subcatchment 1S: DA 1

Runoff = 64.41 cfs @ 12.35 hrs, Volume= 7.378 af, Depth= 2.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 41.830	71	
41.830		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	100	0.0299	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
4.3	422	0.0267	1.63		Shallow Concentrated Flow, Nearly Bare & Untilled Kv= 10.0 fps
20.4	672	0.0121	0.55		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.5	745	0.0094	8.25	25.92	Pipe Channel, RCP_Round 24" 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.011 Concrete pipe, straight & clean
0.3	209		11.35		Lake or Reservoir, Mean Depth= 4.00'
2.7	431	0.0020	2.71	37.95	Trap/Vee/Rect Channel Flow, Bot.W=12.00' D=1.00' Z= 2.0 '/' Top.W=16.00' n= 0.022 Earth, clean & straight
37.4	2,579	Total			

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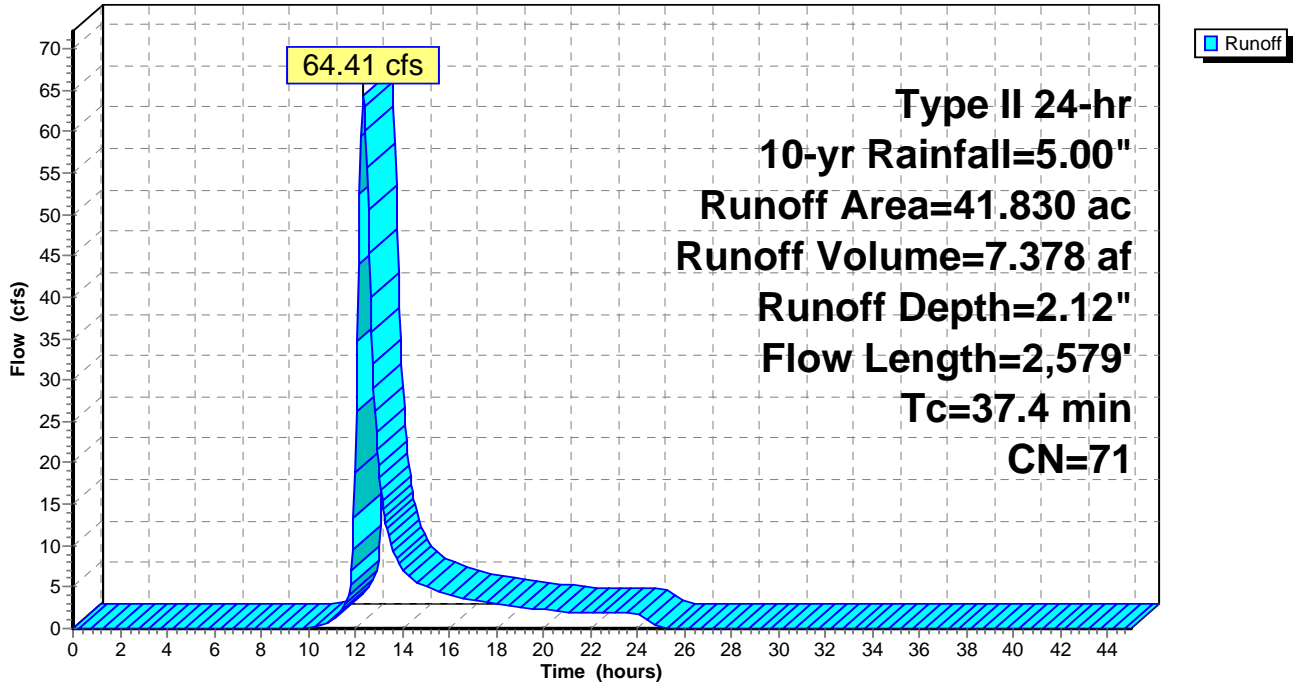
Type II 24-hr 10-yr Rainfall=5.00"

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Subcatchment 1S: DA 1

Hydrograph



Existing Conditions

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Type II 24-hr 10-yr Rainfall=5.00"

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Summary for Subcatchment 2S: DA-2

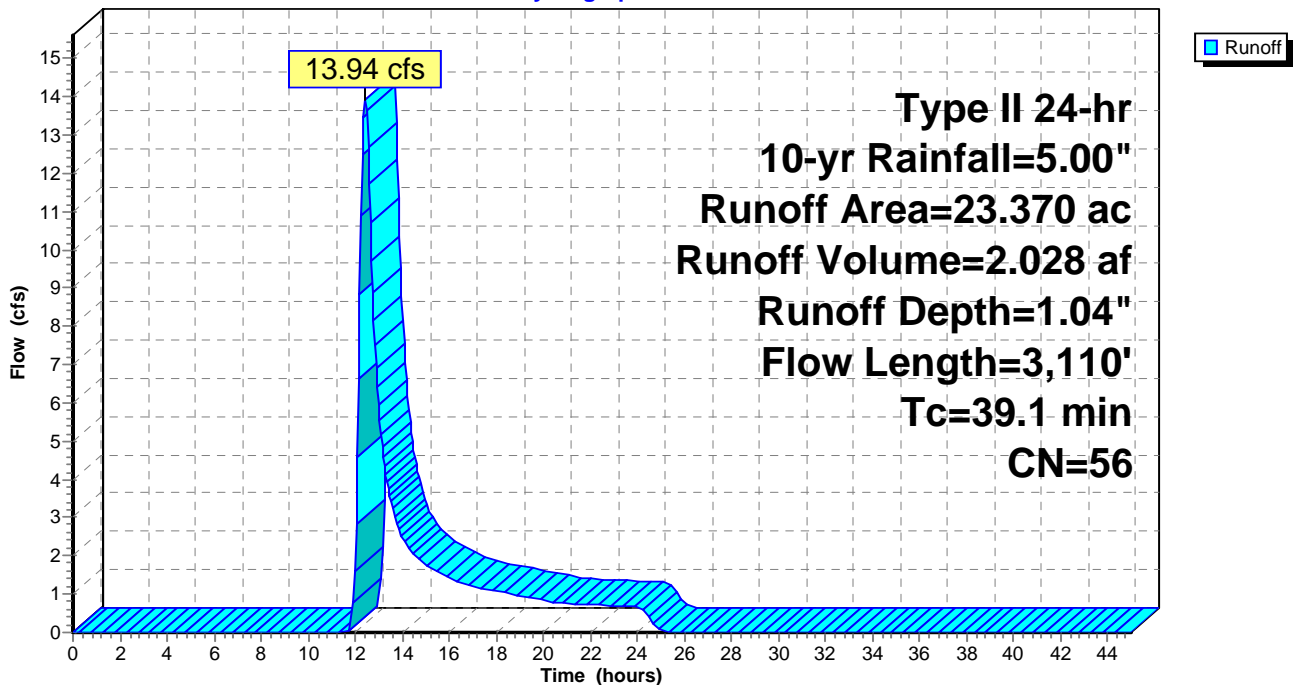
Runoff = 13.94 cfs @ 12.42 hrs, Volume= 2.028 af, Depth= 1.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description			
* 23.370	56				
23.370		100.00% Pervious Area			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	97	0.0410	0.23		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
24.9	1,031	0.0190	0.69		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.7	468	0.0171	10.69	75.59	Pipe Channel, RCP_Round 36" 36.0" Round Area= 7.1 sf Perim= 9.4' r= 0.75' n= 0.015 Concrete sewer w/manholes & inlets
6.4	1,514	0.0079	3.94	23.63	Trap/Vee/Rect Channel Flow, Bot.W=3.00' D=1.00' Z= 3.0 '/' Top.W=9.00' n= 0.025 Earth, clean & winding
39.1	3,110	Total			

Subcatchment 2S: DA-2

Hydrograph



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Type II 24-hr 10-yr Rainfall=5.00"

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Summary for Subcatchment 3S: DA-3

Runoff = 24.43 cfs @ 12.31 hrs, Volume= 3.042 af, Depth= 1.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 35.046	56	
35.046		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	391	0.1692	2.88		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.6	472	0.0059	0.54		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
9.4	250	0.0040	0.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
4.1	550	0.0018	2.23	2.74	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
0.5	145	0.0050	5.09	16.00	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
0.6	192	0.0050	5.09	16.00	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
31.5	2,000	Total			

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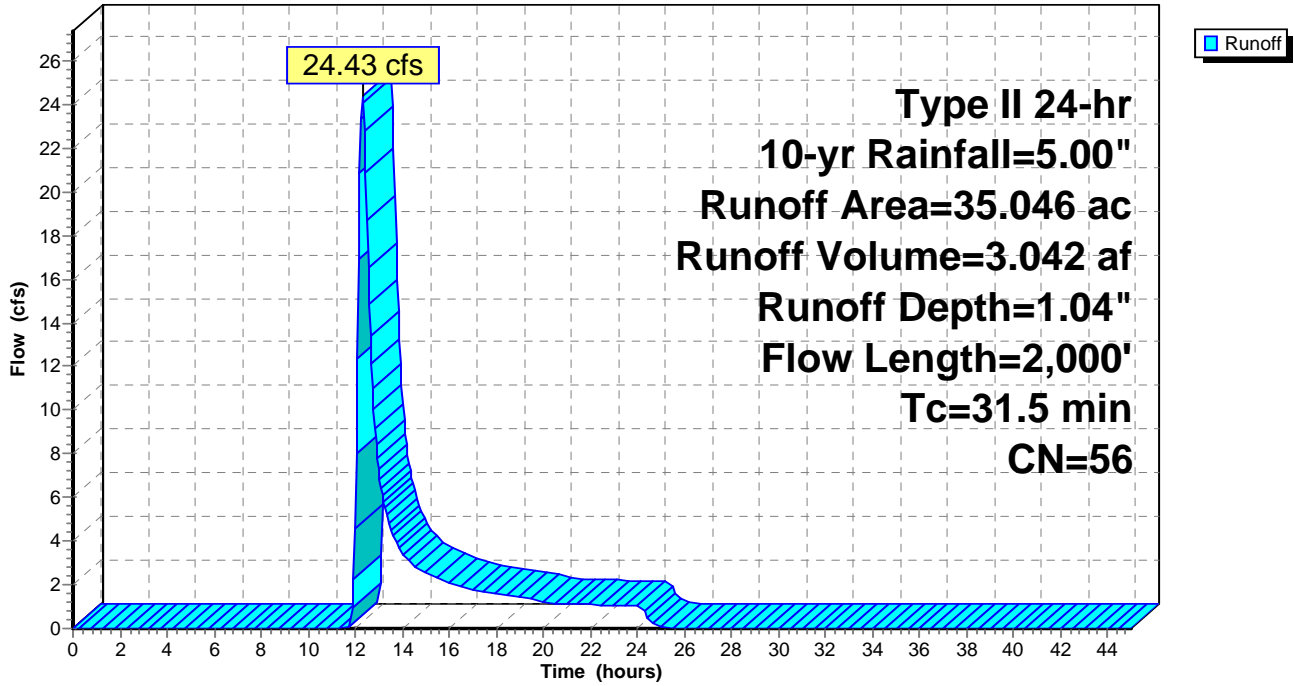
Type II 24-hr 10-yr Rainfall=5.00"

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Subcatchment 3S: DA-3

Hydrograph



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Type II 24-hr 10-yr Rainfall=5.00"

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Summary for Subcatchment 7S: DA-1 Imp

Runoff = 64.62 cfs @ 12.16 hrs, Volume= 6.061 af, Depth= 4.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 15.270	98	
15.270		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	55	0.0001	0.15		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
6.1	108	0.0740	0.30		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
3.6	340	0.0059	1.56		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.7	300	0.0170	6.86	8.42	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
3.1	887	0.0044	4.78	15.01	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
4.2	836	0.0018	3.32	165.90	Channel Flow, Area= 50.0 sf Perim= 20.0' r= 2.50' n= 0.035
23.9	2,526	Total			

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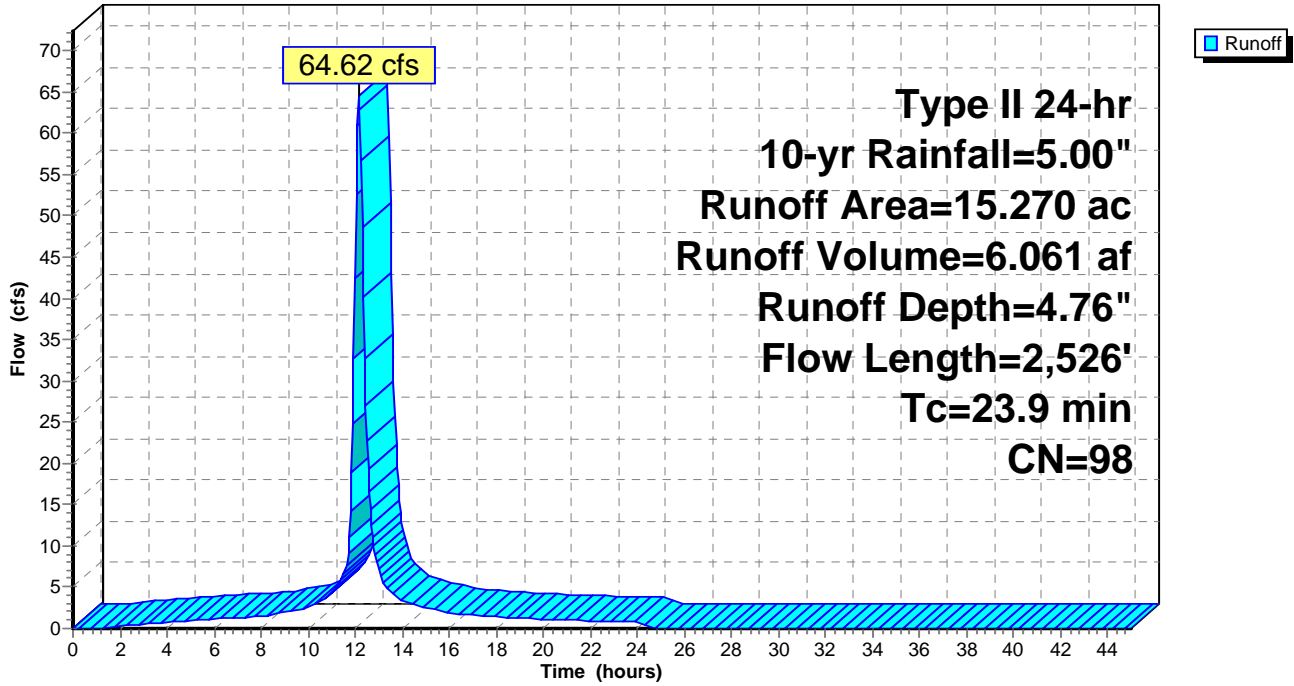
Type II 24-hr 10-yr Rainfall=5.00"

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Subcatchment 7S: DA-1 Imp

Hydrograph



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Type II 24-hr 10-yr Rainfall=5.00"

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Summary for Subcatchment 8S: DA-2 Imp

Runoff = 76.06 cfs @ 12.09 hrs, Volume= 6.017 af, Depth= 4.76"

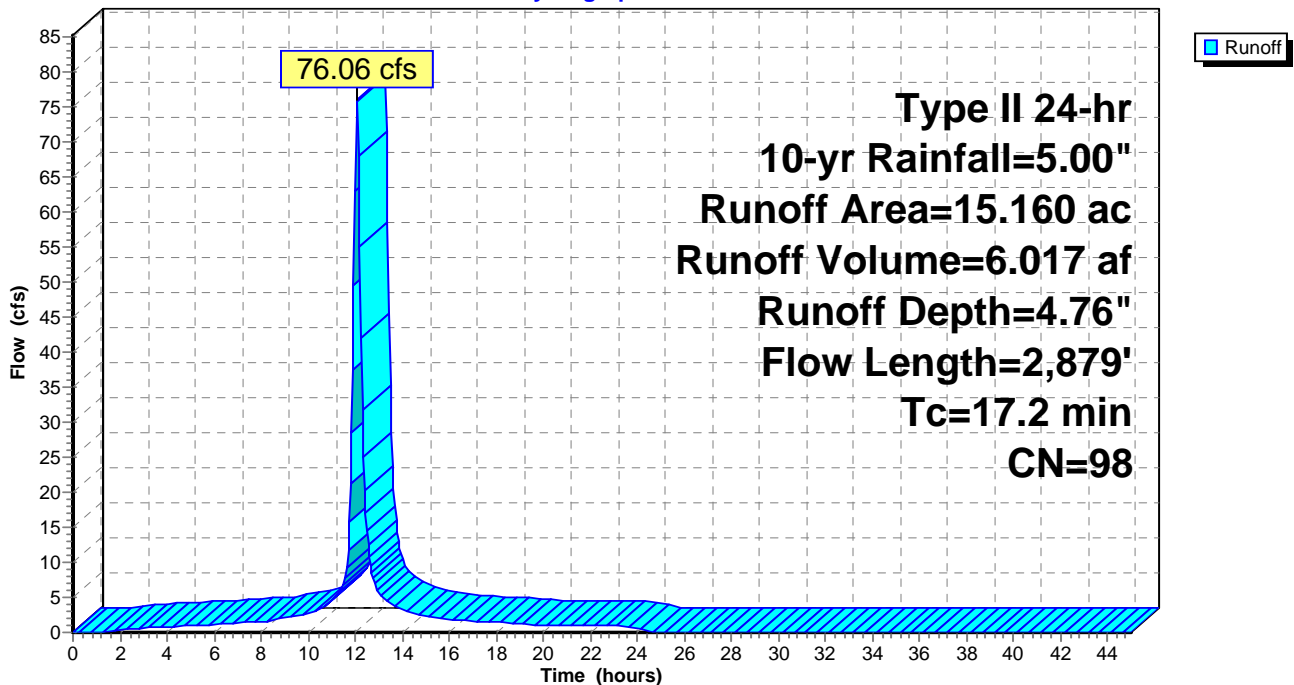
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 15.160	98	
15.160		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	427	0.0017	0.84		Shallow Concentrated Flow, Paved Kv= 20.3 fps
3.9	635	0.0027	2.74	3.36	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
4.8	1,817	0.0056	6.25	30.69	Pipe Channel, 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013
17.2	2,879	Total			

Subcatchment 8S: DA-2 Imp

Hydrograph



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Type II 24-hr 10-yr Rainfall=5.00"

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Summary for Subcatchment 9S: DA-3 Imp

Runoff = 177.65 cfs @ 12.00 hrs, Volume= 11.055 af, Depth= 4.76"

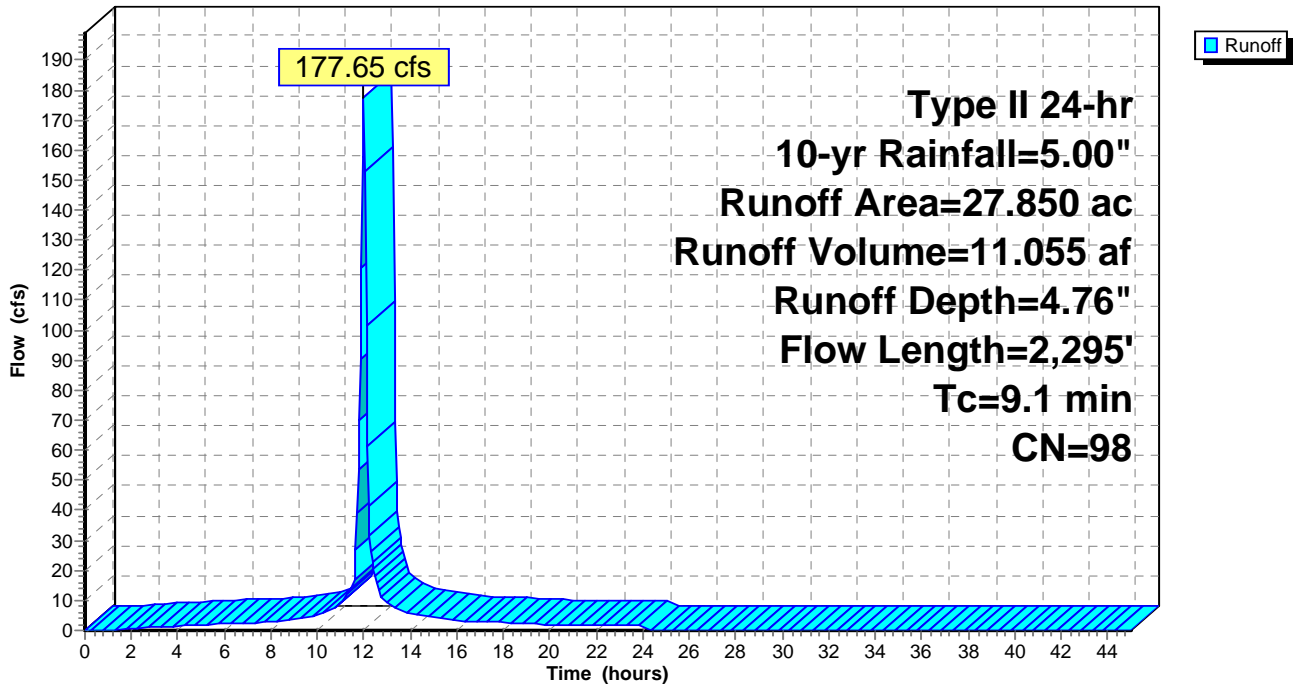
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 27.850	98	
27.850		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	210	0.1211	7.06		Shallow Concentrated Flow, Paved Kv= 20.3 fps
5.0	1,042	0.0044	3.49	4.28	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
3.6	1,043	0.0044	4.78	15.01	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
9.1	2,295	Total			

Subcatchment 9S: DA-3 Imp

Hydrograph



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Type II 24-hr 10-yr Rainfall=5.00"

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Summary for Subcatchment 11S: DA-4

Runoff = 46.41 cfs @ 12.23 hrs, Volume= 4.411 af, Depth= 2.12"

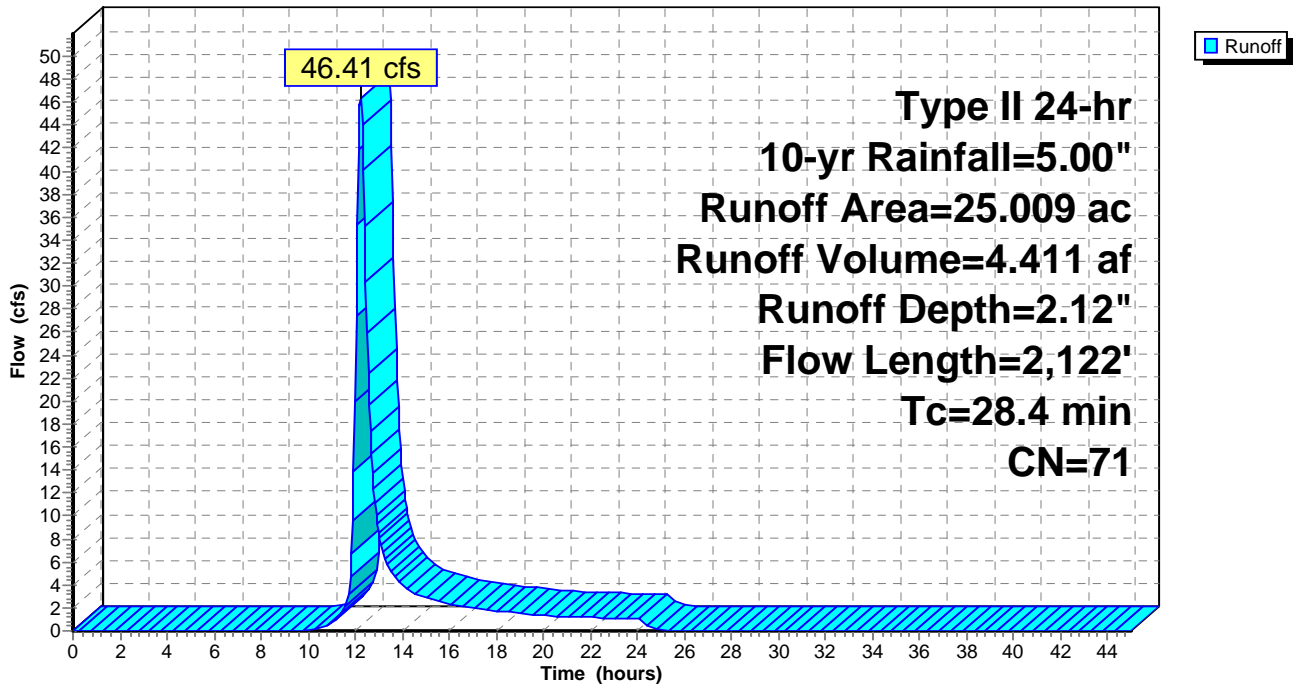
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 25.009	71	
25.009		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.4	648	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
8.9	684	0.0073	1.28		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
4.1	790	0.0038	3.24	3.98	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
28.4	2,122	Total			

Subcatchment 11S: DA-4

Hydrograph



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Type II 24-hr 10-yr Rainfall=5.00"

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Summary for Subcatchment 12S: DA-4 Imp

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 7.27 cfs @ 11.95 hrs, Volume= 0.401 af, Depth= 4.76"

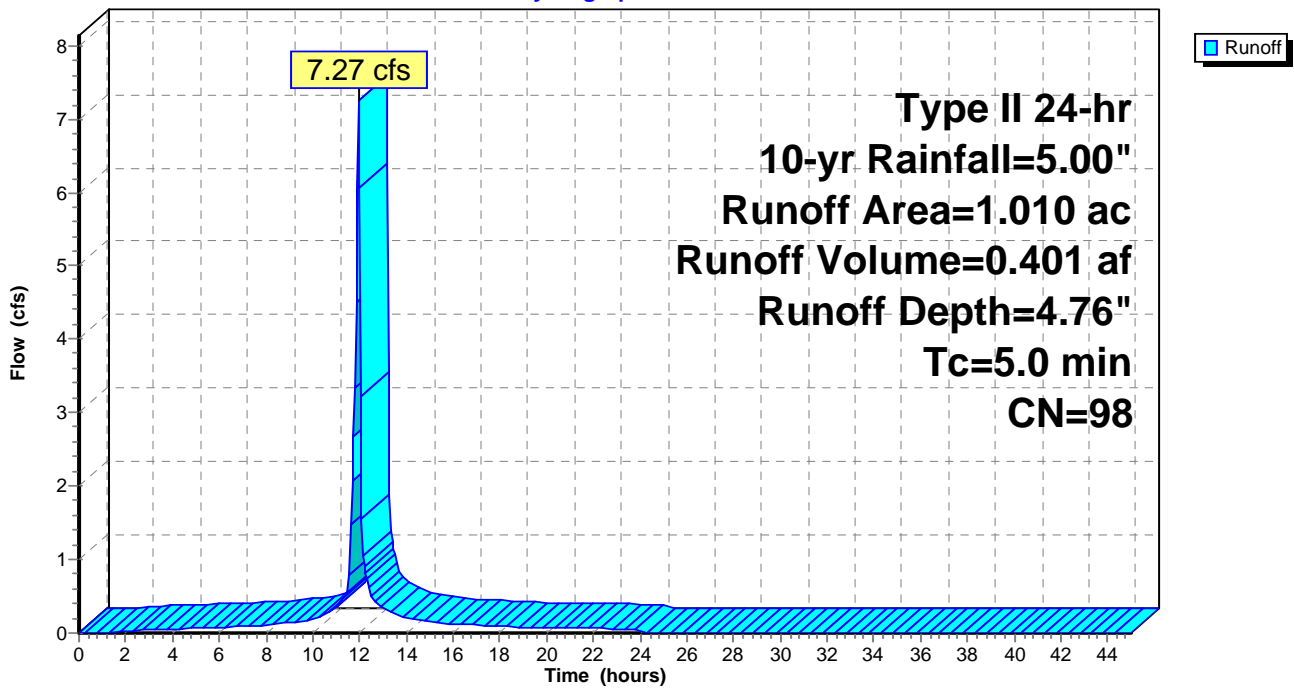
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 1.010	98	
1.010		100.00% Impervious Area

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

Subcatchment 12S: DA-4 Imp

Hydrograph



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Type II 24-hr 10-yr Rainfall=5.00"

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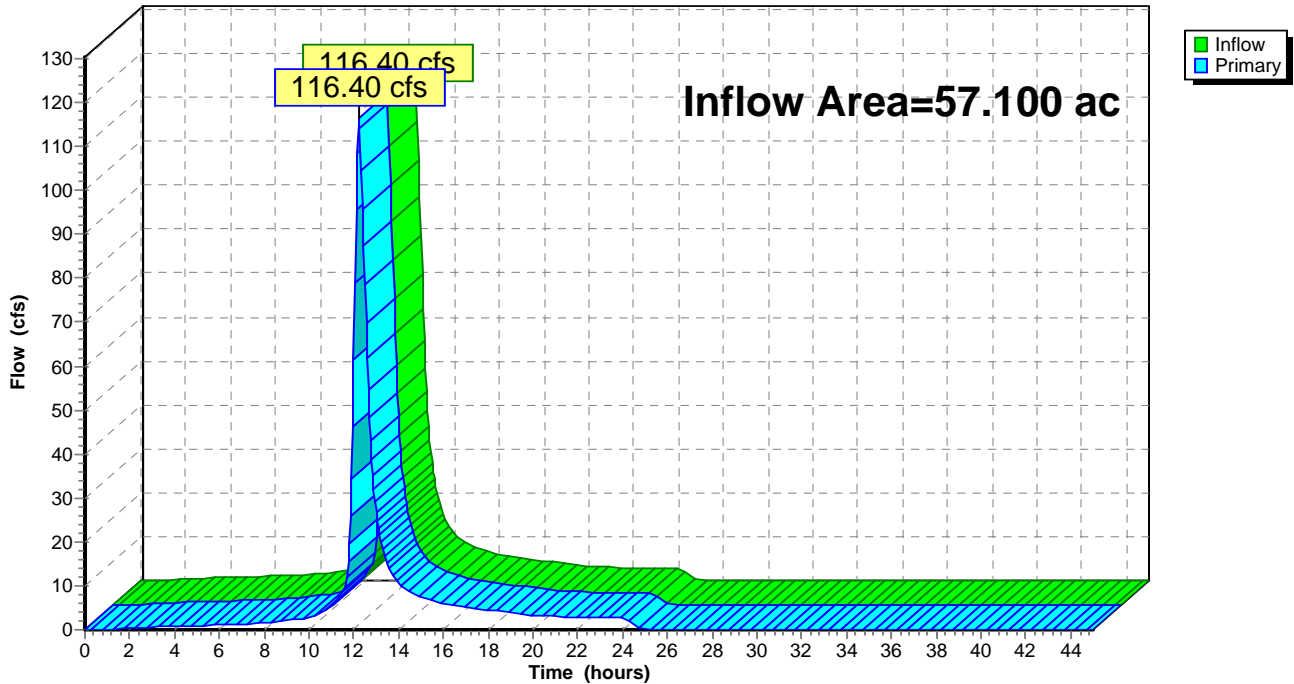
Summary for Link 4L: POA #1

Inflow Area = 57.100 ac, 26.74% Impervious, Inflow Depth = 2.82" for 10-yr event
Inflow = 116.40 cfs @ 12.23 hrs, Volume= 13.439 af
Primary = 116.40 cfs @ 12.23 hrs, Volume= 13.439 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 4L: POA #1

Hydrograph



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Type II 24-hr 10-yr Rainfall=5.00"

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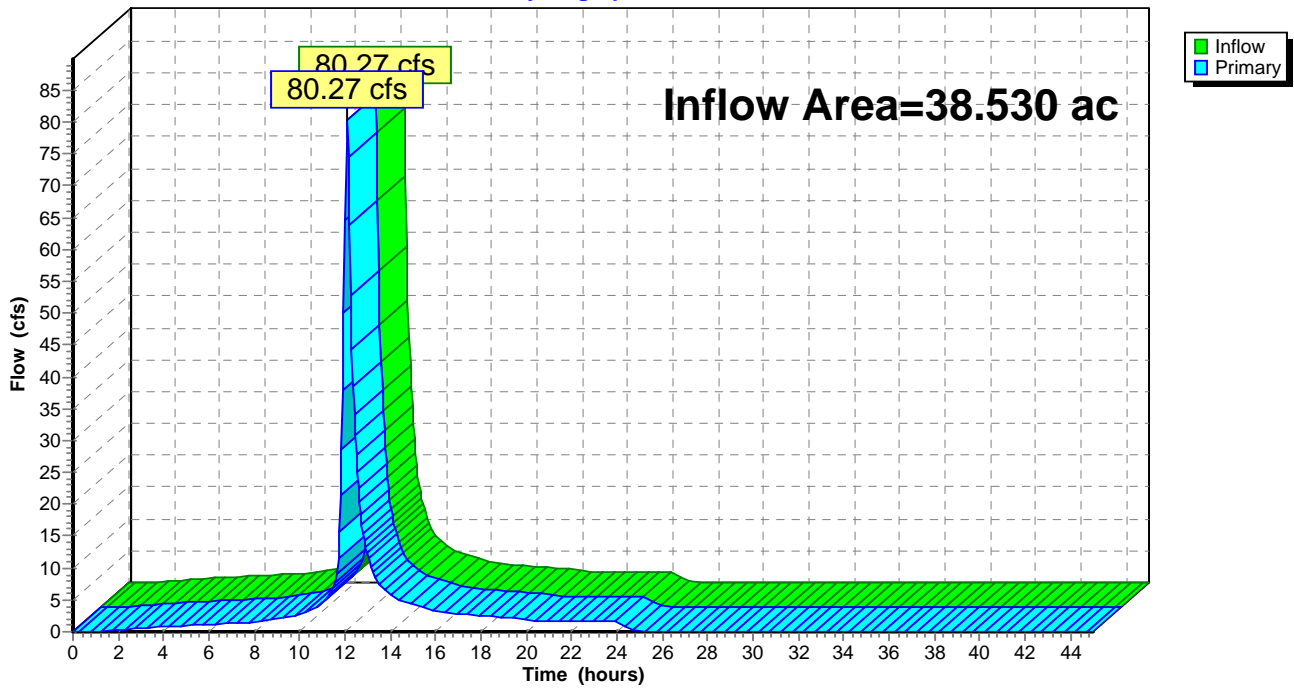
Summary for Link 5L: POA #2

Inflow Area = 38.530 ac, 39.35% Impervious, Inflow Depth = 2.51" for 10-yr event
Inflow = 80.27 cfs @ 12.10 hrs, Volume= 8.046 af
Primary = 80.27 cfs @ 12.10 hrs, Volume= 8.046 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 5L: POA #2

Hydrograph



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Type II 24-hr 10-yr Rainfall=5.00"

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Summary for Link 6L: POA #3

Inflow Area = 62.896 ac, 44.28% Impervious, Inflow Depth = 2.69" for 10-yr event

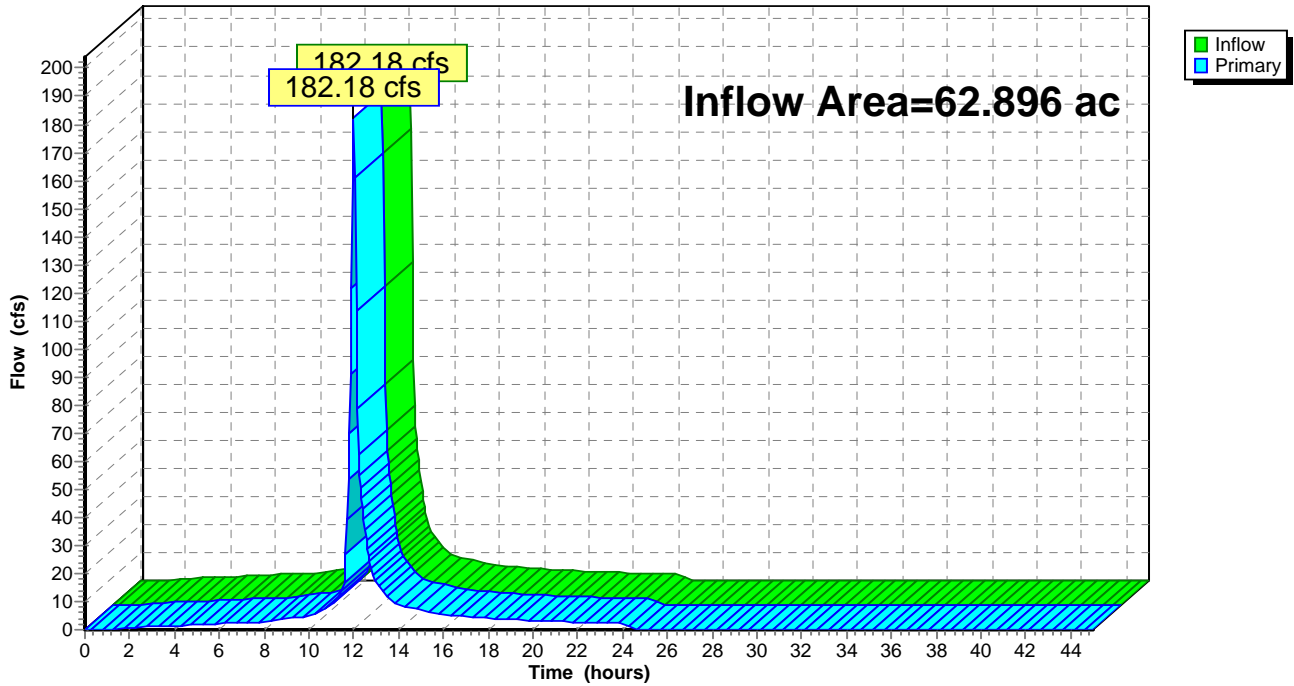
Inflow = 182.18 cfs @ 12.00 hrs, Volume= 14.096 af

Primary = 182.18 cfs @ 12.00 hrs, Volume= 14.096 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 6L: POA #3

Hydrograph



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Type II 24-hr 10-yr Rainfall=5.00"

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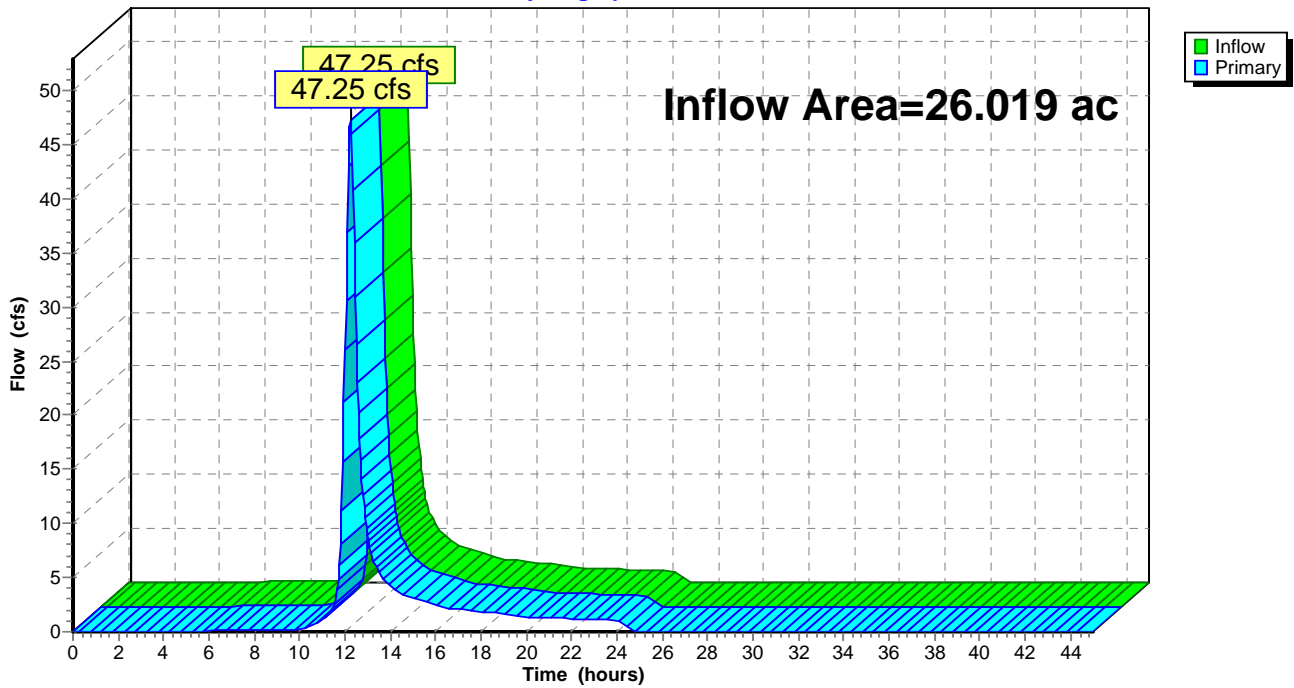
Summary for Link 13L: POA #4

Inflow Area = 26.019 ac, 3.88% Impervious, Inflow Depth = 2.22" for 10-yr event
Inflow = 47.25 cfs @ 12.23 hrs, Volume= 4.812 af
Primary = 47.25 cfs @ 12.23 hrs, Volume= 4.812 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 13L: POA #4

Hydrograph



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Type II 24-hr 100-yr Rainfall=8.30"

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Time span=0.00-45.00 hrs, dt=0.05 hrs, 901 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: DA 1	Runoff Area=41.830 ac 0.00% Impervious Runoff Depth=4.84" Flow Length=2,579' Tc=37.4 min CN=71 Runoff=151.34 cfs 16.874 af
Subcatchment 2S: DA-2	Runoff Area=23.370 ac 0.00% Impervious Runoff Depth=3.10" Flow Length=3,110' Tc=39.1 min CN=56 Runoff=50.07 cfs 6.045 af
Subcatchment 3S: DA-3	Runoff Area=35.046 ac 0.00% Impervious Runoff Depth=3.10" Flow Length=2,000' Tc=31.5 min CN=56 Runoff=87.22 cfs 9.065 af
Subcatchment 7S: DA-1 Imp	Runoff Area=15.270 ac 100.00% Impervious Runoff Depth=8.06" Flow Length=2,526' Tc=23.9 min CN=98 Runoff=107.72 cfs 10.256 af
Subcatchment 8S: DA-2 Imp	Runoff Area=15.160 ac 100.00% Impervious Runoff Depth=8.06" Flow Length=2,879' Tc=17.2 min CN=98 Runoff=126.75 cfs 10.182 af
Subcatchment 9S: DA-3 Imp	Runoff Area=27.850 ac 100.00% Impervious Runoff Depth=8.06" Flow Length=2,295' Tc=9.1 min CN=98 Runoff=295.95 cfs 18.706 af
Subcatchment 11S: DA-4	Runoff Area=25.009 ac 0.00% Impervious Runoff Depth=4.84" Flow Length=2,122' Tc=28.4 min CN=71 Runoff=108.78 cfs 10.089 af
Subcatchment 12S: DA-4 Imp	Runoff Area=1.010 ac 100.00% Impervious Runoff Depth=8.06" Tc=5.0 min CN=98 Runoff=12.10 cfs 0.678 af
Link 4L: POA #1	Inflow=237.48 cfs 27.131 af Primary=237.48 cfs 27.131 af
Link 5L: POA #2	Inflow=150.41 cfs 16.227 af Primary=150.41 cfs 16.227 af
Link 6L: POA #3	Inflow=326.68 cfs 27.771 af Primary=326.68 cfs 27.771 af
Link 13L: POA #4	Inflow=110.20 cfs 10.767 af Primary=110.20 cfs 10.767 af

Total Runoff Area = 184.545 ac Runoff Volume = 81.896 af Average Runoff Depth = 5.33"
67.87% Pervious = 125.255 ac 32.13% Impervious = 59.290 ac

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Type II 24-hr 100-yr Rainfall=8.30"

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Summary for Subcatchment 1S: DA 1

Runoff = 151.34 cfs @ 12.33 hrs, Volume= 16.874 af, Depth= 4.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description			
* 41.830	71				
41.830		100.00% Pervious Area			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	100	0.0299	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
4.3	422	0.0267	1.63		Shallow Concentrated Flow, Nearly Bare & Untilled Kv= 10.0 fps
20.4	672	0.0121	0.55		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.5	745	0.0094	8.25	25.92	Pipe Channel, RCP_Round 24" 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.011 Concrete pipe, straight & clean
0.3	209		11.35		Lake or Reservoir, Mean Depth= 4.00'
2.7	431	0.0020	2.71	37.95	Trap/Vee/Rect Channel Flow, Bot.W=12.00' D=1.00' Z= 2.0 '/' Top.W=16.00' n= 0.022 Earth, clean & straight
37.4	2,579	Total			

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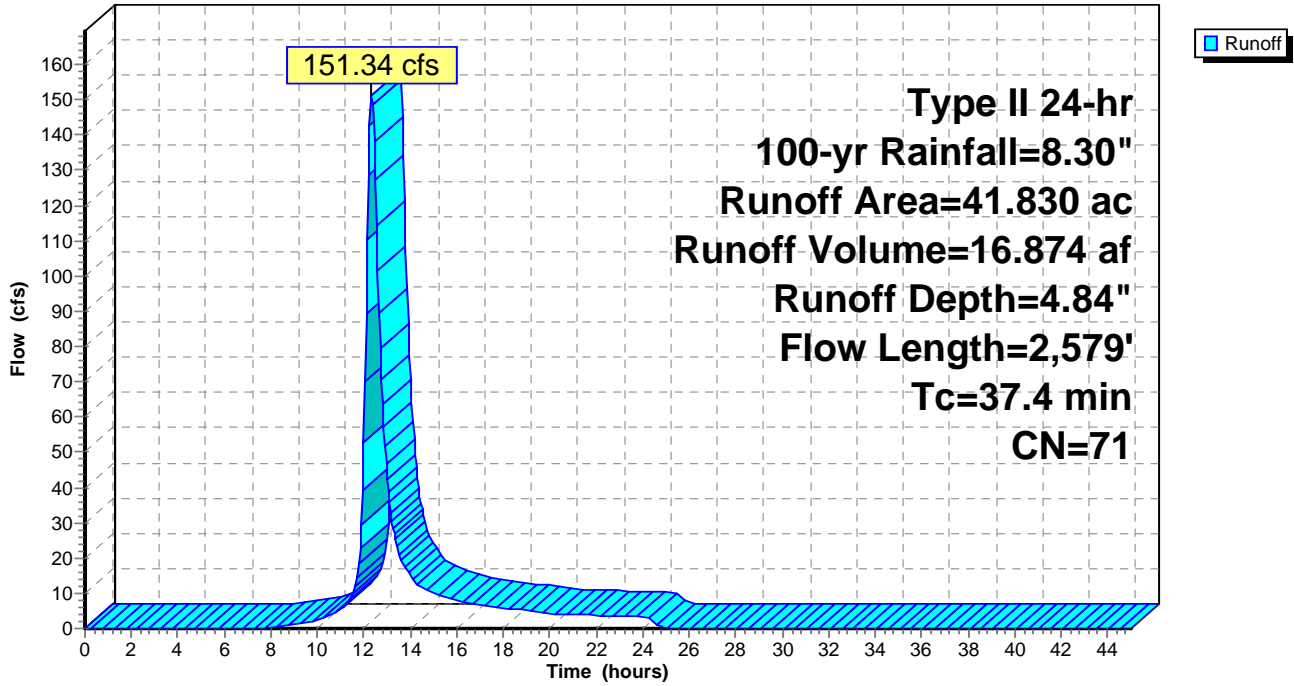
Type II 24-hr 100-yr Rainfall=8.30"

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Subcatchment 1S: DA 1

Hydrograph



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Type II 24-hr 100-yr Rainfall=8.30"

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Summary for Subcatchment 2S: DA-2

Runoff = 50.07 cfs @ 12.38 hrs, Volume= 6.045 af, Depth= 3.10"

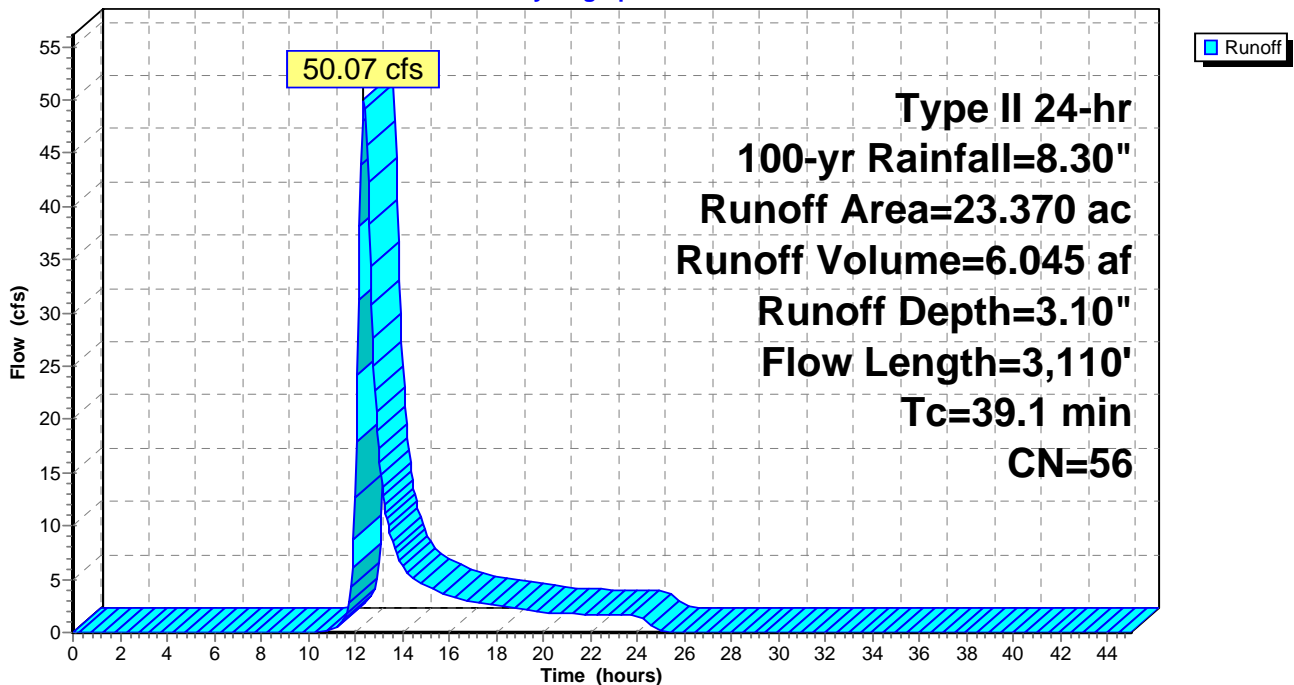
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 23.370	56	
23.370		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	97	0.0410	0.23		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
24.9	1,031	0.0190	0.69		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
0.7	468	0.0171	10.69	75.59	Pipe Channel, RCP_Round 36" 36.0" Round Area= 7.1 sf Perim= 9.4' r= 0.75' n= 0.015 Concrete sewer w/manholes & inlets
6.4	1,514	0.0079	3.94	23.63	Trap/Vee/Rect Channel Flow, Bot.W=3.00' D=1.00' Z= 3.0 '/' Top.W=9.00' n= 0.025 Earth, clean & winding
39.1	3,110	Total			

Subcatchment 2S: DA-2

Hydrograph



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Type II 24-hr 100-yr Rainfall=8.30"

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Summary for Subcatchment 3S: DA-3

Runoff = 87.22 cfs @ 12.28 hrs, Volume= 9.065 af, Depth= 3.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 35.046	56	
35.046		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	391	0.1692	2.88		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.6	472	0.0059	0.54		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
9.4	250	0.0040	0.44		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
4.1	550	0.0018	2.23	2.74	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
0.5	145	0.0050	5.09	16.00	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
0.6	192	0.0050	5.09	16.00	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
31.5	2,000	Total			

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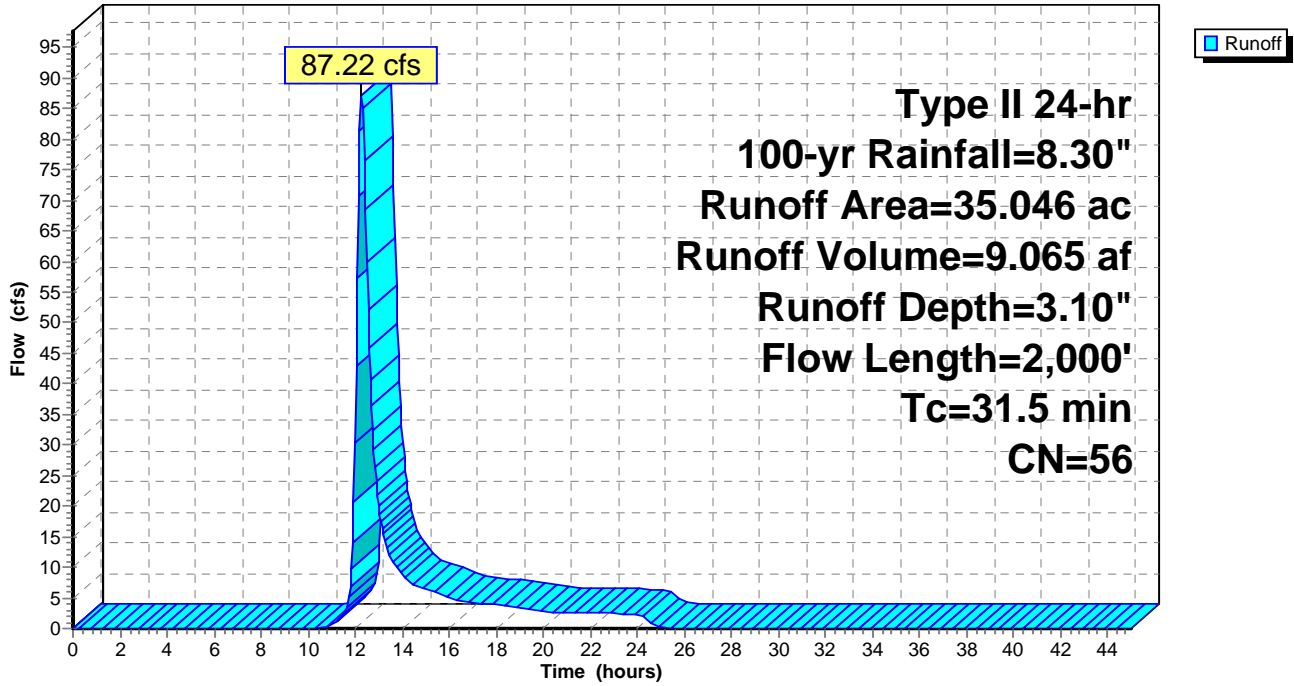
Type II 24-hr 100-yr Rainfall=8.30"

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Subcatchment 3S: DA-3

Hydrograph



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Type II 24-hr 100-yr Rainfall=8.30"

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Summary for Subcatchment 7S: DA-1 Imp

Runoff = 107.72 cfs @ 12.16 hrs, Volume= 10.256 af, Depth= 8.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 15.270	98	
15.270		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	55	0.0001	0.15		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
6.1	108	0.0740	0.30		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
3.6	340	0.0059	1.56		Shallow Concentrated Flow, Paved Kv= 20.3 fps
0.7	300	0.0170	6.86	8.42	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
3.1	887	0.0044	4.78	15.01	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
4.2	836	0.0018	3.32	165.90	Channel Flow, Area= 50.0 sf Perim= 20.0' r= 2.50' n= 0.035
23.9	2,526	Total			

Existing Conditions

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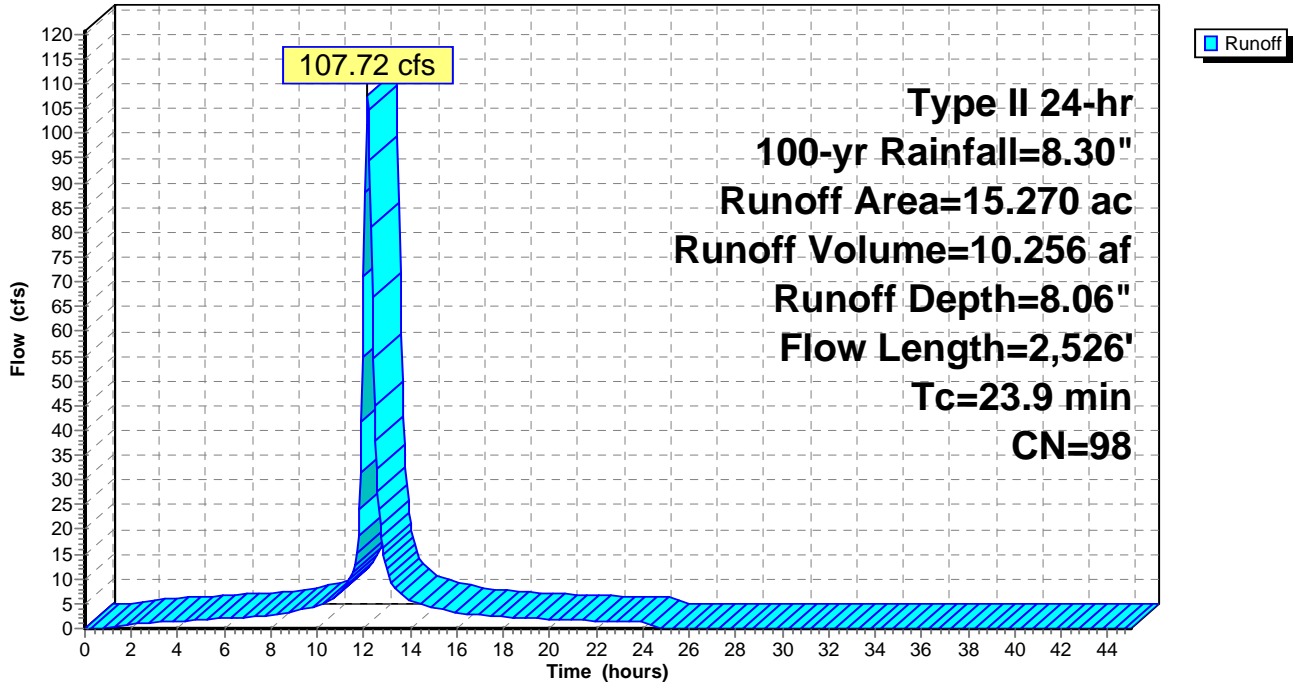
Type II 24-hr 100-yr Rainfall=8.30"

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Subcatchment 7S: DA-1 Imp

Hydrograph



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Type II 24-hr 100-yr Rainfall=8.30"

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Summary for Subcatchment 8S: DA-2 Imp

Runoff = 126.75 cfs @ 12.09 hrs, Volume= 10.182 af, Depth= 8.06"

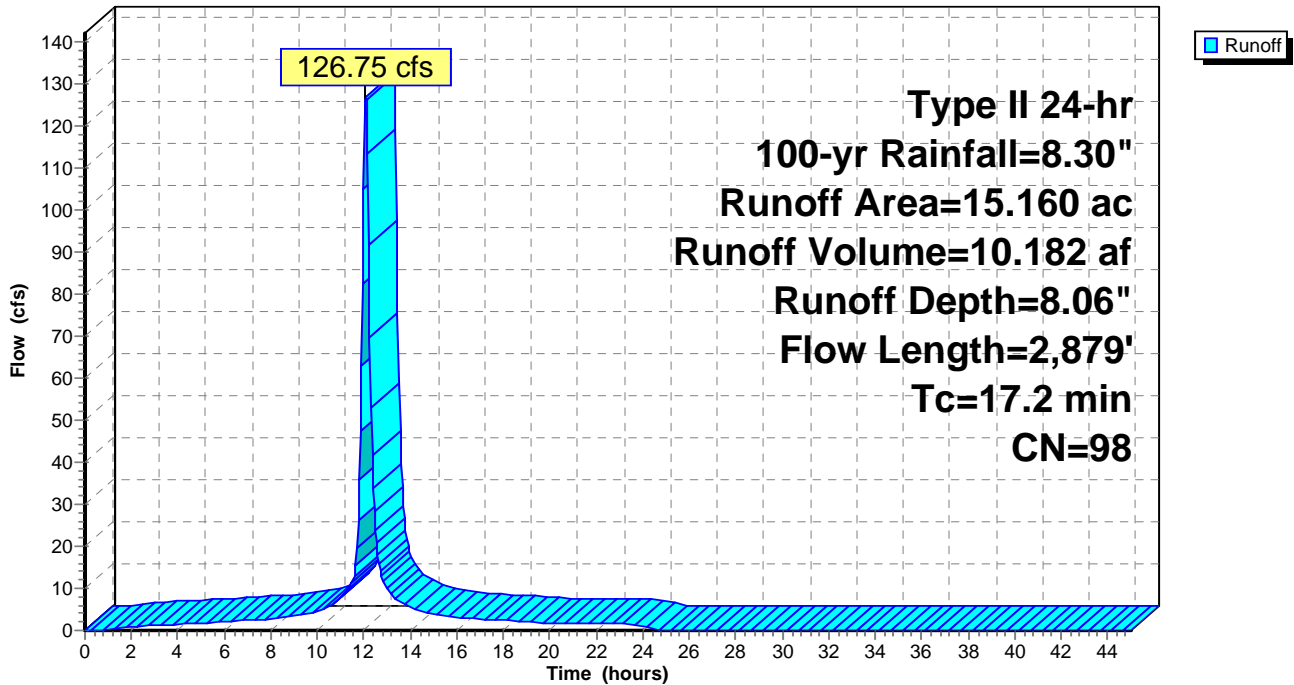
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 15.160	98	
15.160		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	427	0.0017	0.84		Shallow Concentrated Flow, Paved Kv= 20.3 fps
3.9	635	0.0027	2.74	3.36	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
4.8	1,817	0.0056	6.25	30.69	Pipe Channel, 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013
17.2	2,879	Total			

Subcatchment 8S: DA-2 Imp

Hydrograph



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Type II 24-hr 100-yr Rainfall=8.30"

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Summary for Subcatchment 9S: DA-3 Imp

Runoff = 295.95 cfs @ 12.00 hrs, Volume= 18.706 af, Depth= 8.06"

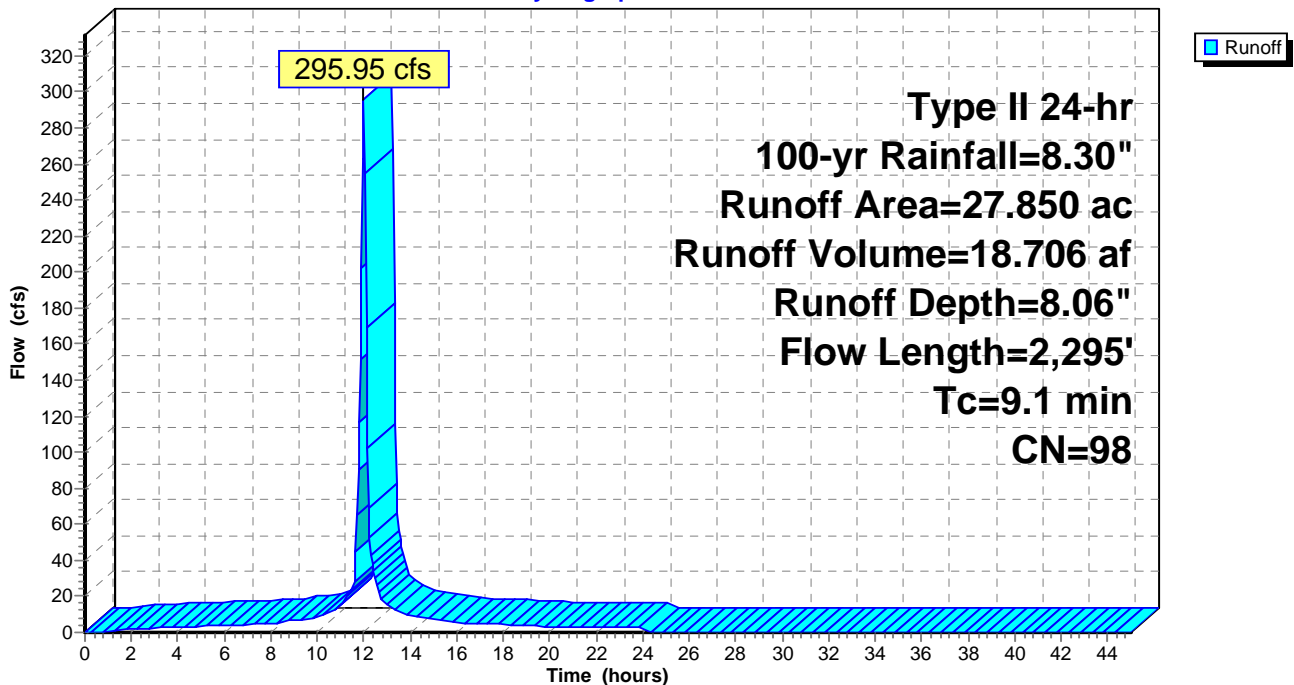
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 27.850	98	
27.850		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	210	0.1211	7.06		Shallow Concentrated Flow, Paved Kv= 20.3 fps
5.0	1,042	0.0044	3.49	4.28	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
3.6	1,043	0.0044	4.78	15.01	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
9.1	2,295	Total			

Subcatchment 9S: DA-3 Imp

Hydrograph



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Type II 24-hr 100-yr Rainfall=8.30"

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Summary for Subcatchment 11S: DA-4

Runoff = 108.78 cfs @ 12.22 hrs, Volume= 10.089 af, Depth= 4.84"

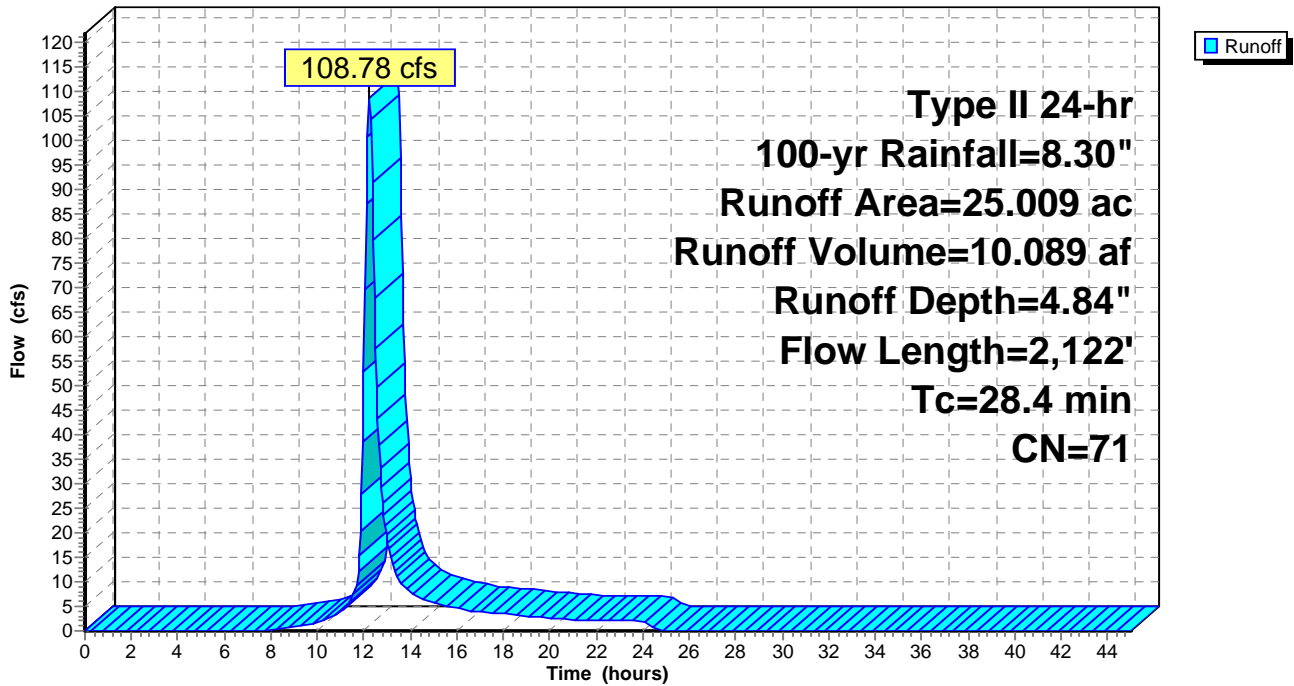
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 25.009	71	
25.009		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.4	648	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
8.9	684	0.0073	1.28		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
4.1	790	0.0038	3.24	3.98	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
28.4	2,122	Total			

Subcatchment 11S: DA-4

Hydrograph



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Type II 24-hr 100-yr Rainfall=8.30"

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Summary for Subcatchment 12S: DA-4 Imp

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 12.10 cfs @ 11.95 hrs, Volume= 0.678 af, Depth= 8.06"

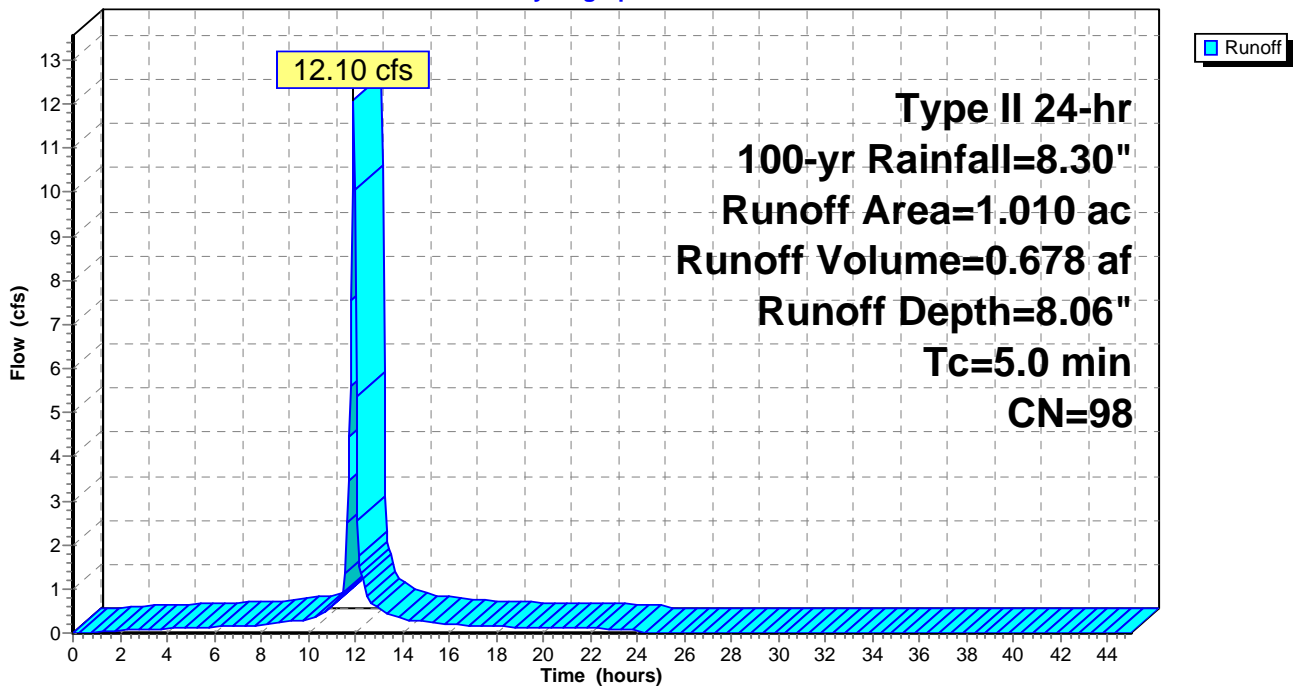
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, $dt=0.05$ hrs
Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 1.010	98	
1.010		100.00% Impervious Area

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

Subcatchment 12S: DA-4 Imp

Hydrograph



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Type II 24-hr 100-yr Rainfall=8.30"

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Summary for Link 4L: POA #1

Inflow Area = 57.100 ac, 26.74% Impervious, Inflow Depth = 5.70" for 100-yr event

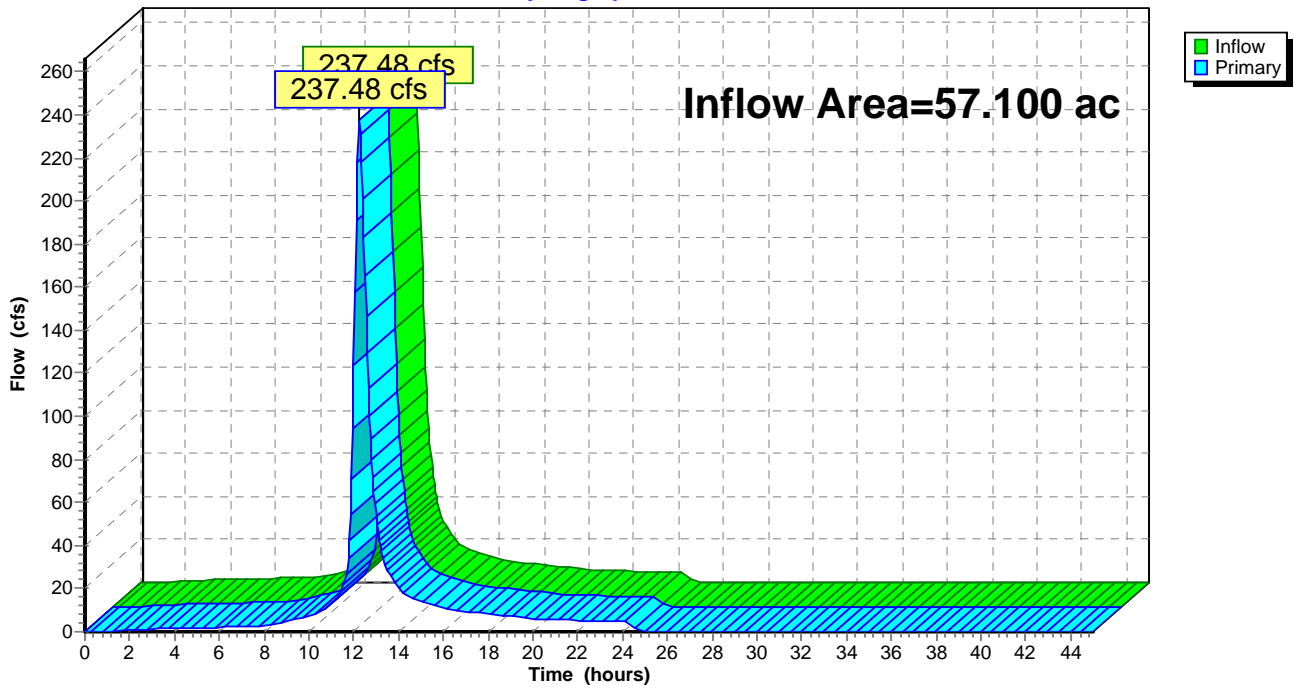
Inflow = 237.48 cfs @ 12.24 hrs, Volume= 27.131 af

Primary = 237.48 cfs @ 12.24 hrs, Volume= 27.131 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 4L: POA #1

Hydrograph



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Type II 24-hr 100-yr Rainfall=8.30"

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Summary for Link 5L: POA #2

Inflow Area = 38.530 ac, 39.35% Impervious, Inflow Depth = 5.05" for 100-yr event

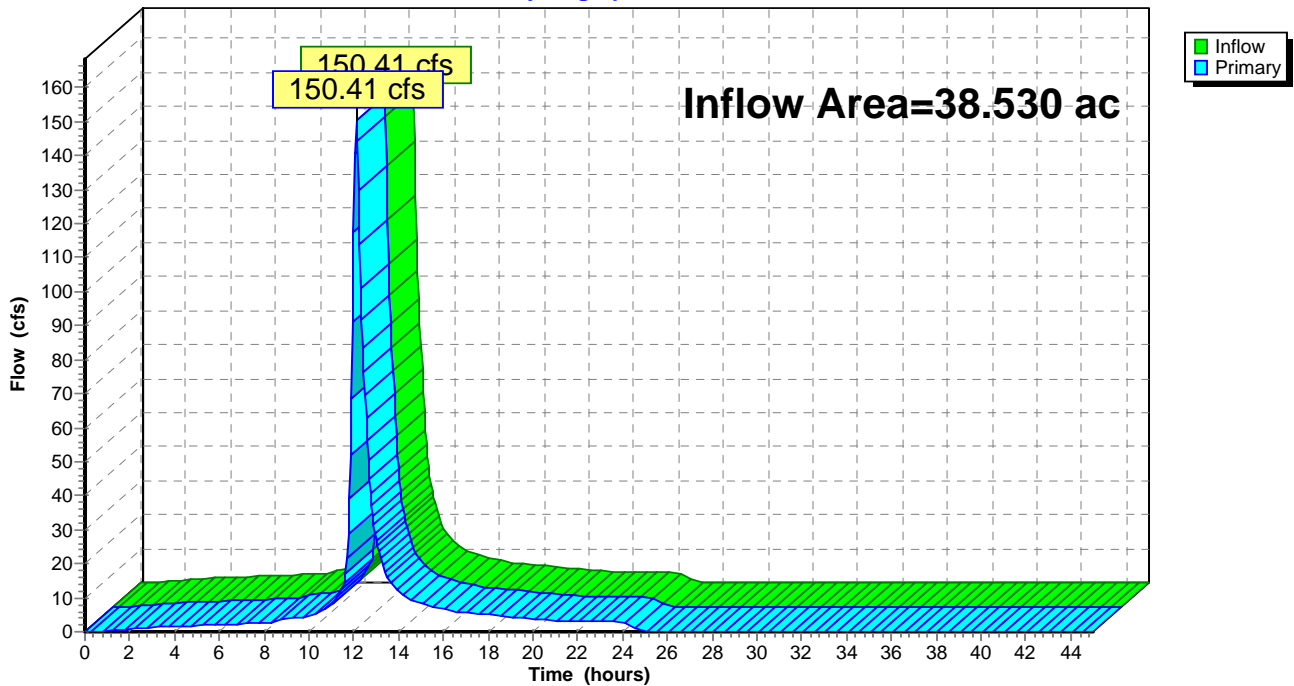
Inflow = 150.41 cfs @ 12.11 hrs, Volume= 16.227 af

Primary = 150.41 cfs @ 12.11 hrs, Volume= 16.227 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 5L: POA #2

Hydrograph



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Type II 24-hr 100-yr Rainfall=8.30"

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Summary for Link 6L: POA #3

Inflow Area = 62.896 ac, 44.28% Impervious, Inflow Depth = 5.30" for 100-yr event

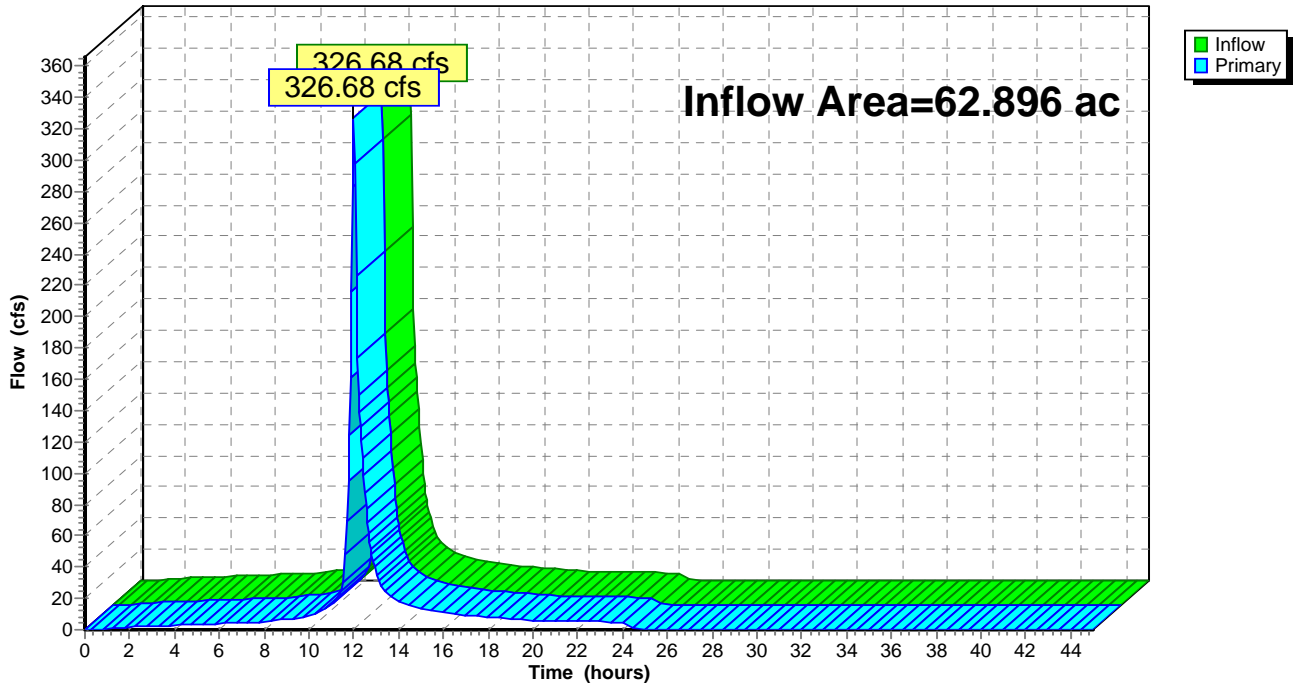
Inflow = 326.68 cfs @ 12.01 hrs, Volume= 27.771 af

Primary = 326.68 cfs @ 12.01 hrs, Volume= 27.771 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 6L: POA #3

Hydrograph



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Type II 24-hr 100-yr Rainfall=8.30"

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Summary for Link 13L: POA #4

Inflow Area = 26.019 ac, 3.88% Impervious, Inflow Depth = 4.97" for 100-yr event

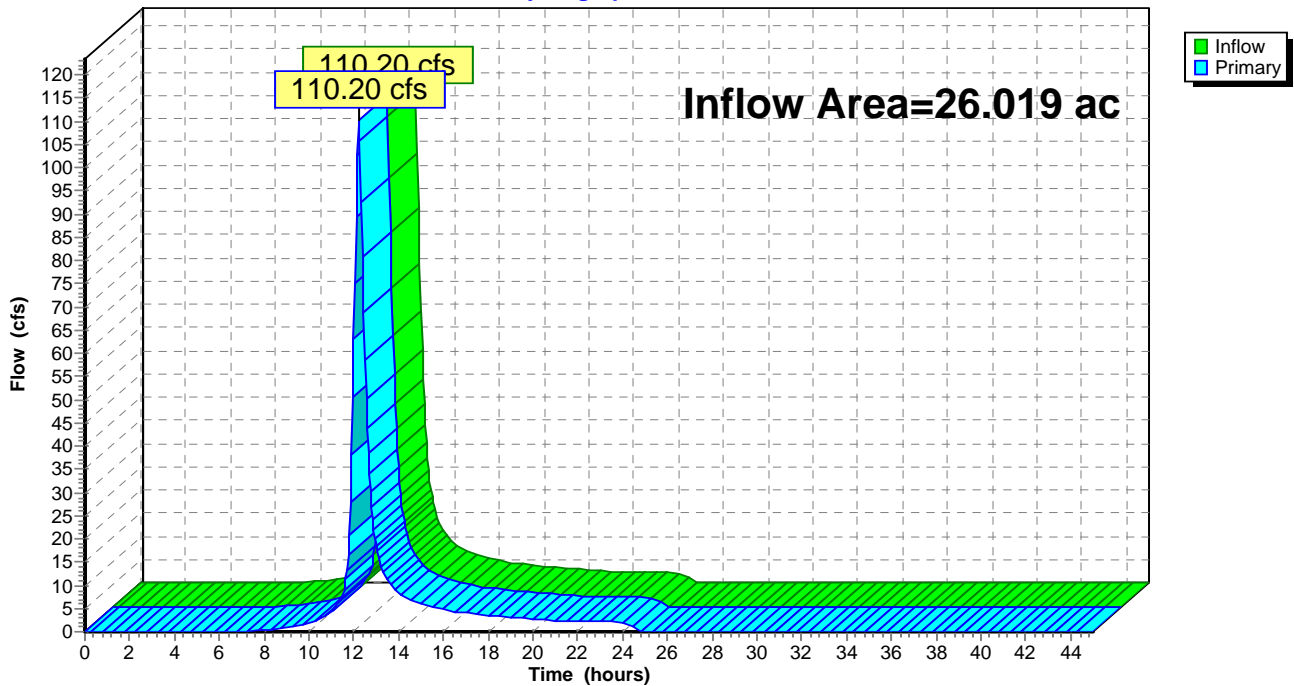
Inflow = 110.20 cfs @ 12.22 hrs, Volume= 10.767 af

Primary = 110.20 cfs @ 12.22 hrs, Volume= 10.767 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

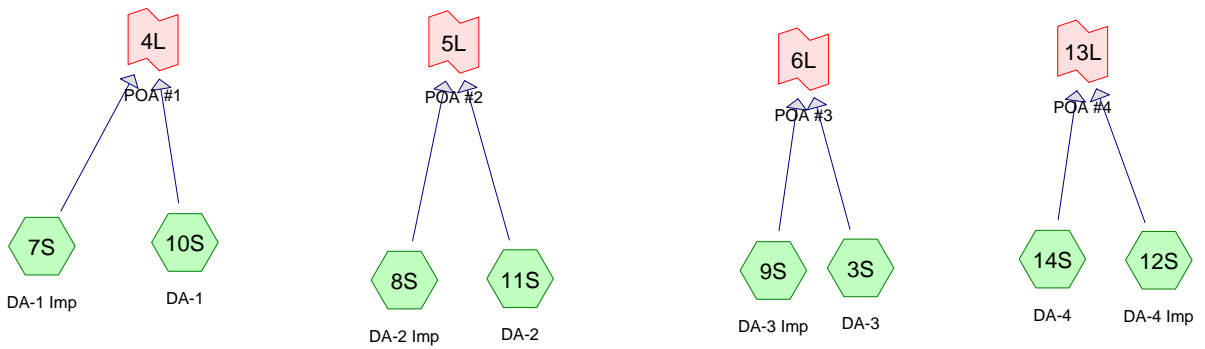
Link 13L: POA #4

Hydrograph



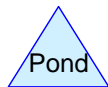
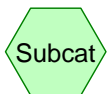


**Appendix D:
Build-out Conditions Calculations**



FOR ZONE RP-6 ALL AREAS WERE INCLUDED AS THE LIMITS OF ENVIRONMENTAL CONSTRAINTS HAVE NOT BEEN DELINEATED

ALL ZONES WITH MULTIPLE % IMPERVIOUS THE HIGHEST WAS USED TO DETERMINE MOST CONSERVATIVE RESULTS



Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
11.709	98	(12S)
14.310	71	(14S)
3.079	39	>75% Grass cover, Good, HSG A (10S)
2.631	80	>75% Grass cover, Good, HSG D (10S)
0.158	80	RP- 2 D (3S)
0.502	80	RP- 4D (3S)
24.166	98	RP-1 (9S)
1.228	39	RP-1 A (3S)
0.044	80	RP-1 D (3S)
3.032	98	RP-2 (9S)
0.002	39	RP-2 A (3S)
8.811	98	RP-3 (9S)
0.889	39	RP-3 A (3S)
0.090	80	RP-3 D (3S)
7.066	98	RP-4 (8S, 9S)
0.001	39	RP-4 (11S)
0.194	80	RP-4 (11S)
0.089	39	RP-4 A (3S)
2.992	98	RP-5 (9S)
4.428	39	RP-5 A (3S)
5.508	80	RP-5 D (3S)
1.503	98	RP-5 WATER (3S)
84.632	98	RP-6 (7S, 8S, 9S)
2.305	39	RP-6 (11S)
1.353	80	RP-6 (11S)
0.030	39	RP-6 A (3S)
0.005	80	RP-6 D (3S)
180.757	91	TOTAL AREA

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
3.079	HSG A	10S
0.000	HSG B	
0.000	HSG C	
2.631	HSG D	10S
175.047	Other	3S, 7S, 8S, 9S, 11S, 12S, 14S
180.757		TOTAL AREA

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	26.019	26.019		12S, 14S
3.079	0.000	0.000	2.631	0.000	5.710	>75% Grass cover, Good	10S
0.000	0.000	0.000	0.000	0.158	0.158	RP- 2 D	3S
0.000	0.000	0.000	0.000	0.502	0.502	RP- 4D	3S
0.000	0.000	0.000	0.000	24.166	24.166	RP-1	9S
0.000	0.000	0.000	0.000	1.228	1.228	RP-1 A	3S
0.000	0.000	0.000	0.000	0.044	0.044	RP-1 D	3S
0.000	0.000	0.000	0.000	3.032	3.032	RP-2	9S
0.000	0.000	0.000	0.000	0.002	0.002	RP-2 A	3S
0.000	0.000	0.000	0.000	8.811	8.811	RP-3	9S
0.000	0.000	0.000	0.000	0.889	0.889	RP-3 A	3S
0.000	0.000	0.000	0.000	0.090	0.090	RP-3 D	3S
0.000	0.000	0.000	0.000	7.261	7.261	RP-4	8S, 9S, 11S
0.000	0.000	0.000	0.000	0.089	0.089	RP-4 A	3S
0.000	0.000	0.000	0.000	2.992	2.992	RP-5	9S
0.000	0.000	0.000	0.000	4.428	4.428	RP-5 A	3S
0.000	0.000	0.000	0.000	5.508	5.508	RP-5 D	3S
0.000	0.000	0.000	0.000	1.503	1.503	RP-5 WATER	3S
0.000	0.000	0.000	0.000	88.290	88.290	RP-6	7S, 8S, 9S, 11S
0.000	0.000	0.000	0.000	0.030	0.030	RP-6 A	3S
0.000	0.000	0.000	0.000	0.005	0.005	RP-6 D	3S
3.079	0.000	0.000	2.631	175.047	180.757	TOTAL AREA	

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Pipe Listing (all 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	7S	0.00	0.00	806.0	0.0211	0.013	15.0	0.0	0.0
2	7S	0.00	0.00	1,208.0	0.0090	0.013	18.0	0.0	0.0
3	7S	0.00	0.00	887.0	0.0044	0.013	24.0	0.0	0.0
4	8S	0.00	0.00	635.0	0.0027	0.013	15.0	0.0	0.0
5	8S	0.00	0.00	1,817.0	0.0056	0.013	30.0	0.0	0.0
6	9S	0.00	0.00	2,000.0	0.0125	0.013	15.0	0.0	0.0
7	9S	0.00	0.00	850.0	0.0069	0.013	24.0	0.0	0.0
8	12S	0.00	0.00	1,400.0	0.0100	0.013	15.0	0.0	0.0
9	12S	0.00	0.00	1,250.0	0.0100	0.013	24.0	0.0	0.0

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Type II 24-hr 2-yr Rainfall=3.30"

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Time span=0.00-45.00 hrs, dt=0.05 hrs, 901 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 3S: DA-3 Runoff Area=14.476 ac 10.38% Impervious Runoff Depth=0.56"
Flow Length=2,300' Tc=23.8 min CN=63 Runoff=6.05 cfs 0.681 af

Subcatchment 7S: DA-1 Imp Runoff Area=51.395 ac 100.00% Impervious Runoff Depth=3.07"
Flow Length=3,987' Tc=20.7 min CN=98 Runoff=154.08 cfs 13.136 af

Subcatchment 8S: DA-2 Imp Runoff Area=34.677 ac 100.00% Impervious Runoff Depth=3.07"
Flow Length=2,879' Tc=17.2 min CN=98 Runoff=113.99 cfs 8.863 af

Subcatchment 9S: DA-3 Imp Runoff Area=44.627 ac 100.00% Impervious Runoff Depth=3.07"
Flow Length=3,250' Tc=19.0 min CN=98 Runoff=139.94 cfs 11.406 af

Subcatchment 10S: DA-1 Runoff Area=5.710 ac 0.00% Impervious Runoff Depth=0.38"
Flow Length=800' Tc=18.6 min CN=58 Runoff=1.42 cfs 0.179 af

Subcatchment 11S: DA-2 Runoff Area=3.853 ac 0.00% Impervious Runoff Depth=0.28"
Flow Length=400' Tc=12.1 min CN=55 Runoff=0.69 cfs 0.090 af

Subcatchment 12S: DA-4 Imp Runoff Area=11.709 ac 100.00% Impervious Runoff Depth=3.07"
Flow Length=3,200' Tc=12.6 min CN=98 Runoff=43.97 cfs 2.993 af

Subcatchment 14S: DA-4 Runoff Area=14.310 ac 0.00% Impervious Runoff Depth=0.94"
Flow Length=1,050' Tc=20.2 min CN=71 Runoff=13.61 cfs 1.120 af

Link 4L: POA #1 Inflow=155.39 cfs 13.316 af
Primary=155.39 cfs 13.316 af

Link 5L: POA #2 Inflow=114.67 cfs 8.953 af
Primary=114.67 cfs 8.953 af

Link 6L: POA #3 Inflow=144.45 cfs 12.088 af
Primary=144.45 cfs 12.088 af

Link 13L: POA #4 Inflow=54.14 cfs 4.112 af
Primary=54.14 cfs 4.112 af

Total Runoff Area = 180.757 ac Runoff Volume = 38.469 af Average Runoff Depth = 2.55"
20.38% Pervious = 36.846 ac 79.62% Impervious = 143.911 ac

Summary for Subcatchment 3S: DA-3

Runoff = 6.05 cfs @ 12.22 hrs, Volume= 0.681 af, Depth= 0.56"

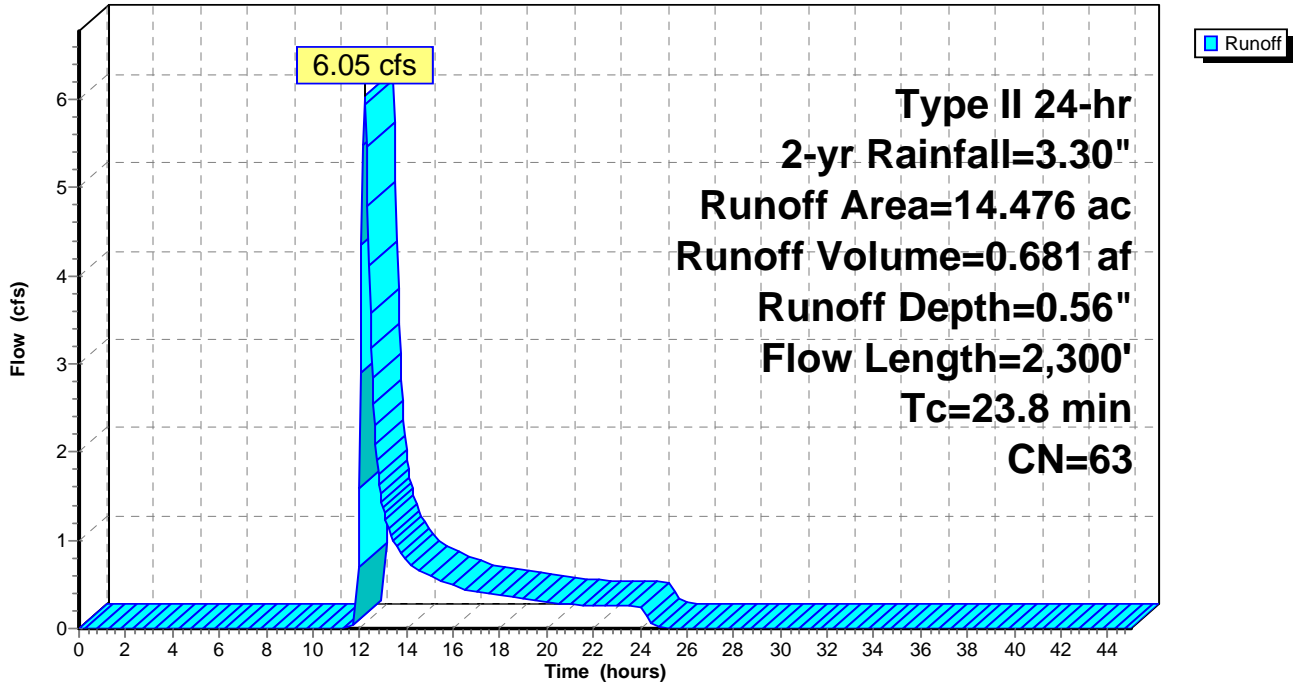
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
* 1.228	39	RP-1 A
* 0.044	80	RP-1 D
* 0.002	39	RP-2 A
* 0.158	80	RP- 2 D
* 0.889	39	RP-3 A
* 0.090	80	RP-3 D
* 0.089	39	RP-4 A
* 0.502	80	RP- 4D
* 4.428	39	RP-5 A
* 5.508	80	RP-5 D
* 1.503	98	RP-5 WATER
* 0.030	39	RP-6 A
* 0.005	80	RP-6 D
14.476	63	Weighted Average
12.973		89.62% Pervious Area
1.503		10.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	50	0.0050	0.09		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
8.3	750	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
5.9	1,500	0.0100	4.25	33.97	Channel Flow, Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.035
23.8	2,300	Total			

Subcatchment 3S: DA-3

Hydrograph



Hydrograph for Subcatchment 3S: DA-3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	3.30	0.56	0.00
0.50	0.02	0.00	0.00	27.00	3.30	0.56	0.00
1.00	0.03	0.00	0.00	27.50	3.30	0.56	0.00
1.50	0.05	0.00	0.00	28.00	3.30	0.56	0.00
2.00	0.07	0.00	0.00	28.50	3.30	0.56	0.00
2.50	0.09	0.00	0.00	29.00	3.30	0.56	0.00
3.00	0.11	0.00	0.00	29.50	3.30	0.56	0.00
3.50	0.14	0.00	0.00	30.00	3.30	0.56	0.00
4.00	0.16	0.00	0.00	30.50	3.30	0.56	0.00
4.50	0.18	0.00	0.00	31.00	3.30	0.56	0.00
5.00	0.21	0.00	0.00	31.50	3.30	0.56	0.00
5.50	0.24	0.00	0.00	32.00	3.30	0.56	0.00
6.00	0.26	0.00	0.00	32.50	3.30	0.56	0.00
6.50	0.29	0.00	0.00	33.00	3.30	0.56	0.00
7.00	0.33	0.00	0.00	33.50	3.30	0.56	0.00
7.50	0.36	0.00	0.00	34.00	3.30	0.56	0.00
8.00	0.40	0.00	0.00	34.50	3.30	0.56	0.00
8.50	0.44	0.00	0.00	35.00	3.30	0.56	0.00
9.00	0.49	0.00	0.00	35.50	3.30	0.56	0.00
9.50	0.54	0.00	0.00	36.00	3.30	0.56	0.00
10.00	0.60	0.00	0.00	36.50	3.30	0.56	0.00
10.50	0.67	0.00	0.00	37.00	3.30	0.56	0.00
11.00	0.78	0.00	0.00	37.50	3.30	0.56	0.00
11.50	0.93	0.00	0.00	38.00	3.30	0.56	0.00
12.00	2.19	0.15	1.59	38.50	3.30	0.56	0.00
12.50	2.43	0.22	3.17	39.00	3.30	0.56	0.00
13.00	2.55	0.26	1.37	39.50	3.30	0.56	0.00
13.50	2.64	0.29	0.97	40.00	3.30	0.56	0.00
14.00	2.71	0.32	0.78	40.50	3.30	0.56	0.00
14.50	2.76	0.34	0.66	41.00	3.30	0.56	0.00
15.00	2.82	0.36	0.60	41.50	3.30	0.56	0.00
15.50	2.86	0.38	0.55	42.00	3.30	0.56	0.00
16.00	2.90	0.39	0.49	42.50	3.30	0.56	0.00
16.50	2.94	0.41	0.44	43.00	3.30	0.56	0.00
17.00	2.98	0.42	0.42	43.50	3.30	0.56	0.00
17.50	3.01	0.44	0.40	44.00	3.30	0.56	0.00
18.00	3.04	0.45	0.38	44.50	3.30	0.56	0.00
18.50	3.07	0.46	0.36	45.00	3.30	0.56	0.00
19.00	3.09	0.47	0.34				
19.50	3.12	0.48	0.32				
20.00	3.14	0.49	0.29				
20.50	3.16	0.50	0.28				
21.00	3.18	0.51	0.27				
21.50	3.20	0.52	0.27				
22.00	3.22	0.53	0.26				
22.50	3.24	0.54	0.26				
23.00	3.26	0.55	0.26				
23.50	3.28	0.56	0.25				
24.00	3.30	0.56	0.25				
24.50	3.30	0.56	0.05				
25.00	3.30	0.56	0.00				
25.50	3.30	0.56	0.00				
26.00	3.30	0.56	0.00				

Summary for Subcatchment 7S: DA-1 Imp

Runoff = 154.08 cfs @ 12.12 hrs, Volume= 13.136 af, Depth= 3.07"

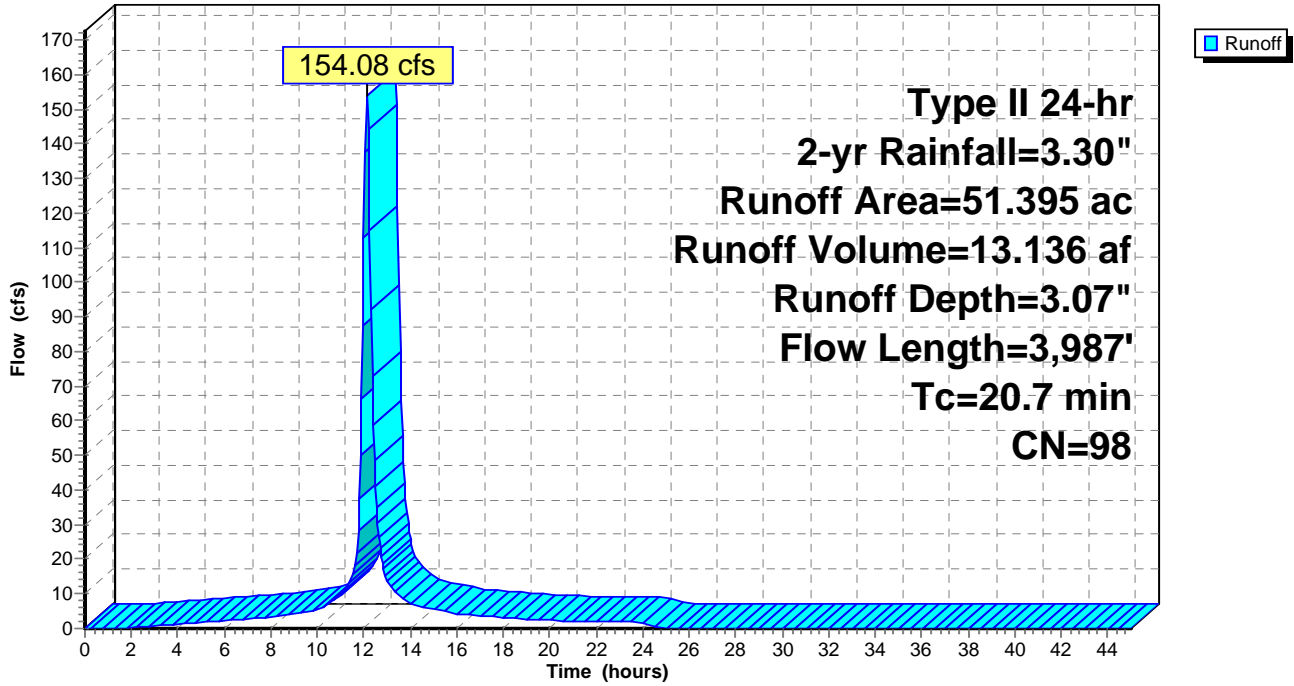
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
* 51.395	98	RP-6
51.395		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	50	0.0001	0.15		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
2.3	200	0.0050	1.44		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.8	806	0.0211	7.65	9.38	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
3.6	1,208	0.0090	5.64	9.97	Pipe Channel, 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013
3.1	887	0.0044	4.78	15.01	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
4.2	836	0.0018	3.32	165.90	Channel Flow, Area= 50.0 sf Perim= 20.0' r= 2.50' n= 0.035
20.7	3,987	Total			

Subcatchment 7S: DA-1 Imp

Hydrograph



Hydrograph for Subcatchment 7S: DA-1 Imp

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	3.30	3.07	0.00
0.50	0.02	0.00	0.00	27.00	3.30	3.07	0.00
1.00	0.03	0.00	0.00	27.50	3.30	3.07	0.00
1.50	0.05	0.00	0.04	28.00	3.30	3.07	0.00
2.00	0.07	0.00	0.33	28.50	3.30	3.07	0.00
2.50	0.09	0.01	0.61	29.00	3.30	3.07	0.00
3.00	0.11	0.02	0.87	29.50	3.30	3.07	0.00
3.50	0.14	0.03	1.10	30.00	3.30	3.07	0.00
4.00	0.16	0.04	1.31	30.50	3.30	3.07	0.00
4.50	0.18	0.06	1.52	31.00	3.30	3.07	0.00
5.00	0.21	0.08	1.76	31.50	3.30	3.07	0.00
5.50	0.24	0.09	1.99	32.00	3.30	3.07	0.00
6.00	0.26	0.12	2.23	32.50	3.30	3.07	0.00
6.50	0.29	0.14	2.46	33.00	3.30	3.07	0.00
7.00	0.33	0.17	2.68	33.50	3.30	3.07	0.00
7.50	0.36	0.20	2.91	34.00	3.30	3.07	0.00
8.00	0.40	0.23	3.12	34.50	3.30	3.07	0.00
8.50	0.44	0.26	3.57	35.00	3.30	3.07	0.00
9.00	0.49	0.30	4.39	35.50	3.30	3.07	0.00
9.50	0.54	0.35	4.94	36.00	3.30	3.07	0.00
10.00	0.60	0.41	5.53	36.50	3.30	3.07	0.00
10.50	0.67	0.48	7.09	37.00	3.30	3.07	0.00
11.00	0.78	0.57	9.61	37.50	3.30	3.07	0.00
11.50	0.93	0.73	14.77	38.00	3.30	3.07	0.00
12.00	2.19	1.96	112.94	38.50	3.30	3.07	0.00
12.50	2.43	2.20	40.95	39.00	3.30	3.07	0.00
13.00	2.55	2.32	13.94	39.50	3.30	3.07	0.00
13.50	2.64	2.41	9.58	40.00	3.30	3.07	0.00
14.00	2.71	2.48	7.40	40.50	3.30	3.07	0.00
14.50	2.76	2.53	6.12	41.00	3.30	3.07	0.00
15.00	2.82	2.59	5.49	41.50	3.30	3.07	0.00
15.50	2.86	2.63	4.89	42.00	3.30	3.07	0.00
16.00	2.90	2.67	4.30	42.50	3.30	3.07	0.00
16.50	2.94	2.71	3.85	43.00	3.30	3.07	0.00
17.00	2.98	2.74	3.63	43.50	3.30	3.07	0.00
17.50	3.01	2.78	3.41	44.00	3.30	3.07	0.00
18.00	3.04	2.81	3.20	44.50	3.30	3.07	0.00
18.50	3.07	2.84	2.99	45.00	3.30	3.07	0.00
19.00	3.09	2.86	2.78				
19.50	3.12	2.89	2.56				
20.00	3.14	2.91	2.35				
20.50	3.16	2.93	2.20				
21.00	3.18	2.95	2.16				
21.50	3.20	2.97	2.11				
22.00	3.22	2.99	2.07				
22.50	3.24	3.01	2.03				
23.00	3.26	3.03	1.99				
23.50	3.28	3.05	1.94				
24.00	3.30	3.07	1.90				
24.50	3.30	3.07	0.22				
25.00	3.30	3.07	0.00				
25.50	3.30	3.07	0.00				
26.00	3.30	3.07	0.00				

Summary for Subcatchment 8S: DA-2 Imp

Runoff = 113.99 cfs @ 12.09 hrs, Volume= 8.863 af, Depth= 3.07"

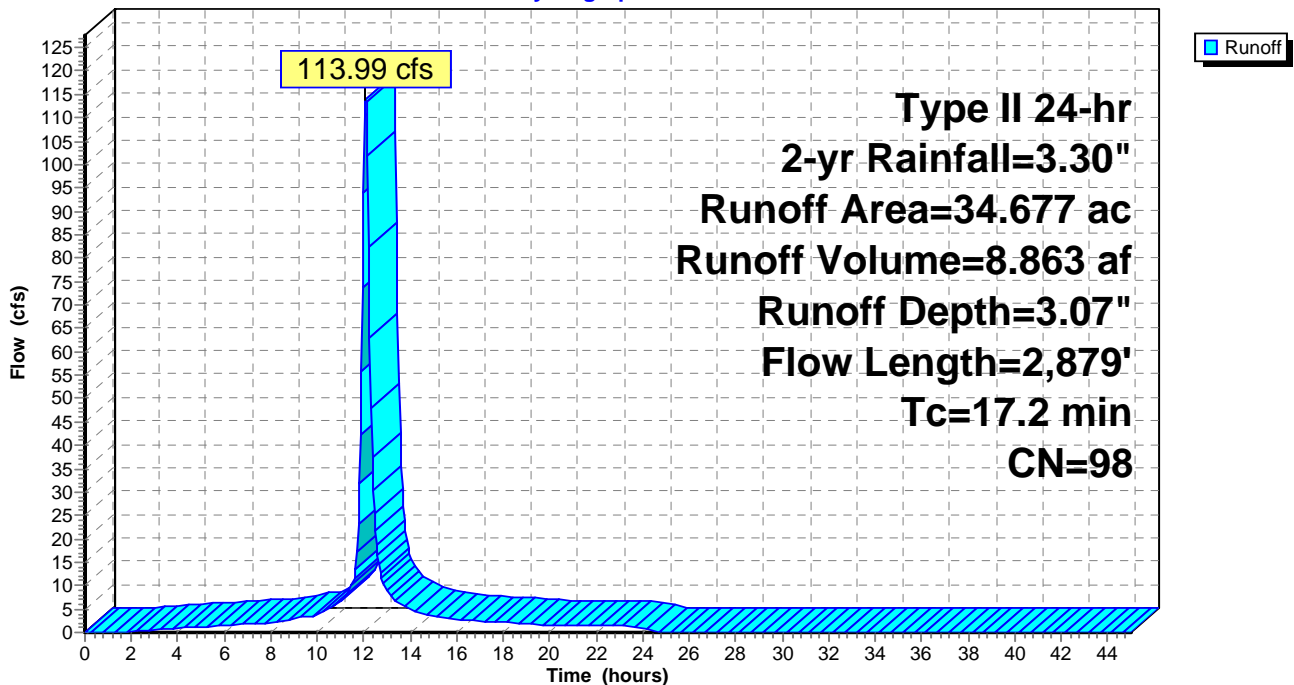
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
* 1.750	98	RP-4
* 32.927	98	RP-6
34.677	98	Weighted Average
34.677		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	427	0.0017	0.84		Shallow Concentrated Flow, Paved Kv= 20.3 fps
3.9	635	0.0027	2.74	3.36	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
4.8	1,817	0.0056	6.25	30.69	Pipe Channel, 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013
17.2	2,879	Total			

Subcatchment 8S: DA-2 Imp

Hydrograph



Hydrograph for Subcatchment 8S: DA-2 Imp

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	3.30	3.07	0.00
0.50	0.02	0.00	0.00	27.00	3.30	3.07	0.00
1.00	0.03	0.00	0.00	27.50	3.30	3.07	0.00
1.50	0.05	0.00	0.04	28.00	3.30	3.07	0.00
2.00	0.07	0.00	0.24	28.50	3.30	3.07	0.00
2.50	0.09	0.01	0.43	29.00	3.30	3.07	0.00
3.00	0.11	0.02	0.60	29.50	3.30	3.07	0.00
3.50	0.14	0.03	0.76	30.00	3.30	3.07	0.00
4.00	0.16	0.04	0.90	30.50	3.30	3.07	0.00
4.50	0.18	0.06	1.04	31.00	3.30	3.07	0.00
5.00	0.21	0.08	1.20	31.50	3.30	3.07	0.00
5.50	0.24	0.09	1.36	32.00	3.30	3.07	0.00
6.00	0.26	0.12	1.52	32.50	3.30	3.07	0.00
6.50	0.29	0.14	1.68	33.00	3.30	3.07	0.00
7.00	0.33	0.17	1.83	33.50	3.30	3.07	0.00
7.50	0.36	0.20	1.98	34.00	3.30	3.07	0.00
8.00	0.40	0.23	2.12	34.50	3.30	3.07	0.00
8.50	0.44	0.26	2.46	35.00	3.30	3.07	0.00
9.00	0.49	0.30	3.02	35.50	3.30	3.07	0.00
9.50	0.54	0.35	3.35	36.00	3.30	3.07	0.00
10.00	0.60	0.41	3.81	36.50	3.30	3.07	0.00
10.50	0.67	0.48	4.92	37.00	3.30	3.07	0.00
11.00	0.78	0.57	6.71	37.50	3.30	3.07	0.00
11.50	0.93	0.73	10.49	38.00	3.30	3.07	0.00
12.00	2.19	1.96	94.15	38.50	3.30	3.07	0.00
12.50	2.43	2.20	21.60	39.00	3.30	3.07	0.00
13.00	2.55	2.32	8.70	39.50	3.30	3.07	0.00
13.50	2.64	2.41	6.26	40.00	3.30	3.07	0.00
14.00	2.71	2.48	4.86	40.50	3.30	3.07	0.00
14.50	2.76	2.53	4.07	41.00	3.30	3.07	0.00
15.00	2.82	2.59	3.66	41.50	3.30	3.07	0.00
15.50	2.86	2.63	3.26	42.00	3.30	3.07	0.00
16.00	2.90	2.67	2.86	42.50	3.30	3.07	0.00
16.50	2.94	2.71	2.58	43.00	3.30	3.07	0.00
17.00	2.98	2.74	2.43	43.50	3.30	3.07	0.00
17.50	3.01	2.78	2.29	44.00	3.30	3.07	0.00
18.00	3.04	2.81	2.15	44.50	3.30	3.07	0.00
18.50	3.07	2.84	2.00	45.00	3.30	3.07	0.00
19.00	3.09	2.86	1.86				
19.50	3.12	2.89	1.71				
20.00	3.14	2.91	1.57				
20.50	3.16	2.93	1.48				
21.00	3.18	2.95	1.45				
21.50	3.20	2.97	1.42				
22.00	3.22	2.99	1.39				
22.50	3.24	3.01	1.37				
23.00	3.26	3.03	1.34				
23.50	3.28	3.05	1.31				
24.00	3.30	3.07	1.28				
24.50	3.30	3.07	0.07				
25.00	3.30	3.07	0.00				
25.50	3.30	3.07	0.00				
26.00	3.30	3.07	0.00				

Summary for Subcatchment 9S: DA-3 Imp

Runoff = 139.94 cfs @ 12.10 hrs, Volume= 11.406 af, Depth= 3.07"

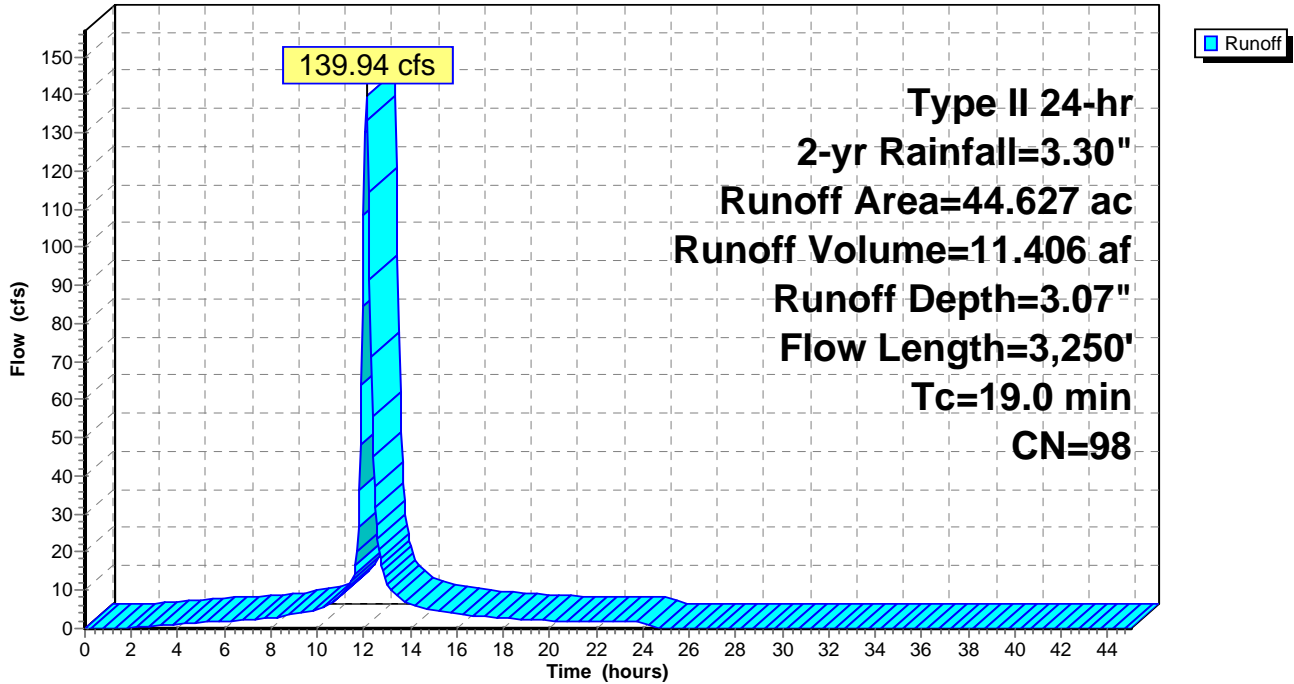
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
* 24.166	98	RP-1
* 3.032	98	RP-2
* 8.811	98	RP-3
* 5.316	98	RP-4
* 2.992	98	RP-5
* 0.310	98	RP-6
44.627	98	Weighted Average
44.627		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	150	0.0010	0.46		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
3.9	150	0.0010	0.64		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.5	100	0.0050	1.14		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
5.7	2,000	0.0125	5.89	7.22	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
2.4	850	0.0069	5.98	18.79	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
19.0	3,250	Total			

Subcatchment 9S: DA-3 Imp

Hydrograph



Hydrograph for Subcatchment 9S: DA-3 Imp

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	3.30	3.07	0.00
0.50	0.02	0.00	0.00	27.00	3.30	3.07	0.00
1.00	0.03	0.00	0.00	27.50	3.30	3.07	0.00
1.50	0.05	0.00	0.05	28.00	3.30	3.07	0.00
2.00	0.07	0.00	0.30	28.50	3.30	3.07	0.00
2.50	0.09	0.01	0.54	29.00	3.30	3.07	0.00
3.00	0.11	0.02	0.76	29.50	3.30	3.07	0.00
3.50	0.14	0.03	0.96	30.00	3.30	3.07	0.00
4.00	0.16	0.04	1.14	30.50	3.30	3.07	0.00
4.50	0.18	0.06	1.33	31.00	3.30	3.07	0.00
5.00	0.21	0.08	1.54	31.50	3.30	3.07	0.00
5.50	0.24	0.09	1.74	32.00	3.30	3.07	0.00
6.00	0.26	0.12	1.95	32.50	3.30	3.07	0.00
6.50	0.29	0.14	2.15	33.00	3.30	3.07	0.00
7.00	0.33	0.17	2.34	33.50	3.30	3.07	0.00
7.50	0.36	0.20	2.53	34.00	3.30	3.07	0.00
8.00	0.40	0.23	2.72	34.50	3.30	3.07	0.00
8.50	0.44	0.26	3.13	35.00	3.30	3.07	0.00
9.00	0.49	0.30	3.85	35.50	3.30	3.07	0.00
9.50	0.54	0.35	4.30	36.00	3.30	3.07	0.00
10.00	0.60	0.41	4.85	36.50	3.30	3.07	0.00
10.50	0.67	0.48	6.24	37.00	3.30	3.07	0.00
11.00	0.78	0.57	8.49	37.50	3.30	3.07	0.00
11.50	0.93	0.73	13.15	38.00	3.30	3.07	0.00
12.00	2.19	1.96	108.68	38.50	3.30	3.07	0.00
12.50	2.43	2.20	31.58	39.00	3.30	3.07	0.00
13.00	2.55	2.32	11.56	39.50	3.30	3.07	0.00
13.50	2.64	2.41	8.19	40.00	3.30	3.07	0.00
14.00	2.71	2.48	6.34	40.50	3.30	3.07	0.00
14.50	2.76	2.53	5.27	41.00	3.30	3.07	0.00
15.00	2.82	2.59	4.74	41.50	3.30	3.07	0.00
15.50	2.86	2.63	4.22	42.00	3.30	3.07	0.00
16.00	2.90	2.67	3.70	42.50	3.30	3.07	0.00
16.50	2.94	2.71	3.33	43.00	3.30	3.07	0.00
17.00	2.98	2.74	3.14	43.50	3.30	3.07	0.00
17.50	3.01	2.78	2.95	44.00	3.30	3.07	0.00
18.00	3.04	2.81	2.77	44.50	3.30	3.07	0.00
18.50	3.07	2.84	2.59	45.00	3.30	3.07	0.00
19.00	3.09	2.86	2.40				
19.50	3.12	2.89	2.22				
20.00	3.14	2.91	2.03				
20.50	3.16	2.93	1.91				
21.00	3.18	2.95	1.87				
21.50	3.20	2.97	1.83				
22.00	3.22	2.99	1.80				
22.50	3.24	3.01	1.76				
23.00	3.26	3.03	1.72				
23.50	3.28	3.05	1.69				
24.00	3.30	3.07	1.65				
24.50	3.30	3.07	0.14				
25.00	3.30	3.07	0.00				
25.50	3.30	3.07	0.00				
26.00	3.30	3.07	0.00				

Summary for Subcatchment 10S: DA-1

Runoff = 1.42 cfs @ 12.17 hrs, Volume= 0.179 af, Depth= 0.38"

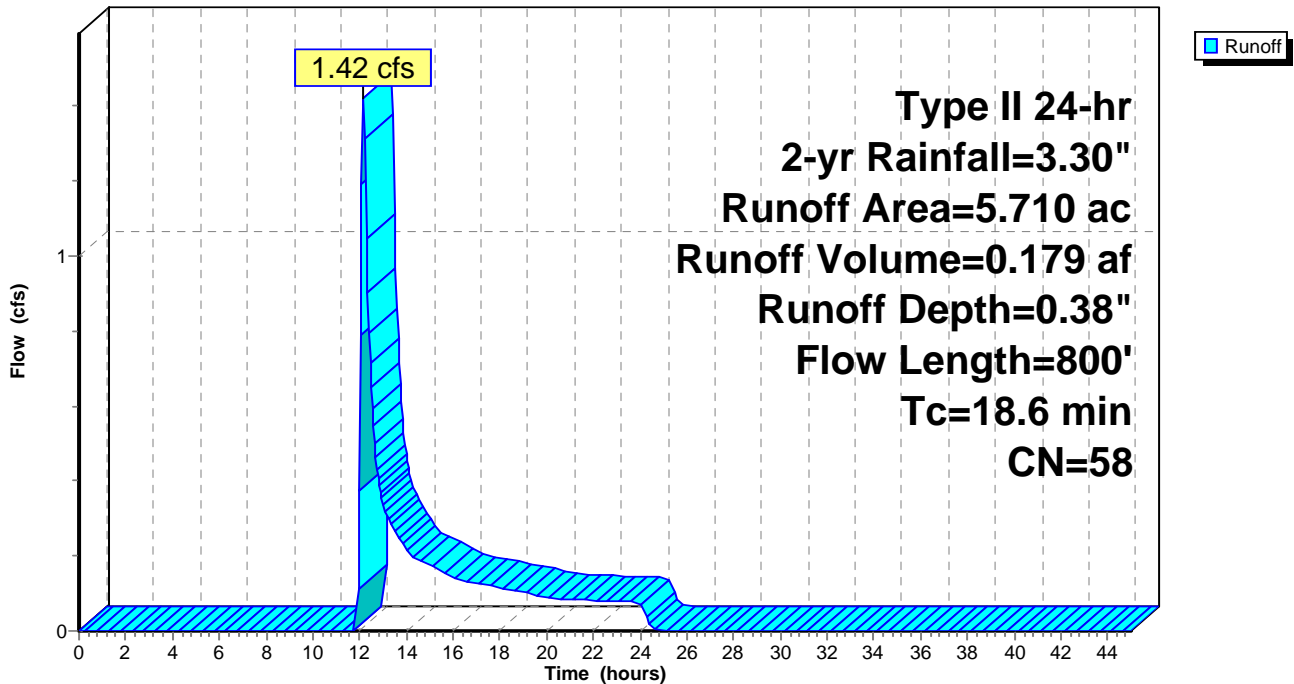
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
3.079	39	>75% Grass cover, Good, HSG A
0.349	80	>75% Grass cover, Good, HSG D
2.282	80	>75% Grass cover, Good, HSG D
5.710	58	Weighted Average
5.710		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	50	0.0050	0.09		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
2.8	250	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
6.2	500	0.0010	1.34	10.74	Channel Flow, Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.035
18.6	800	Total			

Subcatchment 10S: DA-1

Hydrograph



Hydrograph for Subcatchment 10S: DA-1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	3.30	0.38	0.00
0.50	0.02	0.00	0.00	27.00	3.30	0.38	0.00
1.00	0.03	0.00	0.00	27.50	3.30	0.38	0.00
1.50	0.05	0.00	0.00	28.00	3.30	0.38	0.00
2.00	0.07	0.00	0.00	28.50	3.30	0.38	0.00
2.50	0.09	0.00	0.00	29.00	3.30	0.38	0.00
3.00	0.11	0.00	0.00	29.50	3.30	0.38	0.00
3.50	0.14	0.00	0.00	30.00	3.30	0.38	0.00
4.00	0.16	0.00	0.00	30.50	3.30	0.38	0.00
4.50	0.18	0.00	0.00	31.00	3.30	0.38	0.00
5.00	0.21	0.00	0.00	31.50	3.30	0.38	0.00
5.50	0.24	0.00	0.00	32.00	3.30	0.38	0.00
6.00	0.26	0.00	0.00	32.50	3.30	0.38	0.00
6.50	0.29	0.00	0.00	33.00	3.30	0.38	0.00
7.00	0.33	0.00	0.00	33.50	3.30	0.38	0.00
7.50	0.36	0.00	0.00	34.00	3.30	0.38	0.00
8.00	0.40	0.00	0.00	34.50	3.30	0.38	0.00
8.50	0.44	0.00	0.00	35.00	3.30	0.38	0.00
9.00	0.49	0.00	0.00	35.50	3.30	0.38	0.00
9.50	0.54	0.00	0.00	36.00	3.30	0.38	0.00
10.00	0.60	0.00	0.00	36.50	3.30	0.38	0.00
10.50	0.67	0.00	0.00	37.00	3.30	0.38	0.00
11.00	0.78	0.00	0.00	37.50	3.30	0.38	0.00
11.50	0.93	0.00	0.00	38.00	3.30	0.38	0.00
12.00	2.19	0.07	0.37	38.50	3.30	0.38	0.00
12.50	2.43	0.12	0.65	39.00	3.30	0.38	0.00
13.00	2.55	0.14	0.34	39.50	3.30	0.38	0.00
13.50	2.64	0.17	0.27	40.00	3.30	0.38	0.00
14.00	2.71	0.19	0.22	40.50	3.30	0.38	0.00
14.50	2.76	0.20	0.19	41.00	3.30	0.38	0.00
15.00	2.82	0.22	0.17	41.50	3.30	0.38	0.00
15.50	2.86	0.23	0.16	42.00	3.30	0.38	0.00
16.00	2.90	0.24	0.14	42.50	3.30	0.38	0.00
16.50	2.94	0.26	0.13	43.00	3.30	0.38	0.00
17.00	2.98	0.27	0.13	43.50	3.30	0.38	0.00
17.50	3.01	0.28	0.12	44.00	3.30	0.38	0.00
18.00	3.04	0.29	0.12	44.50	3.30	0.38	0.00
18.50	3.07	0.30	0.11	45.00	3.30	0.38	0.00
19.00	3.09	0.30	0.10				
19.50	3.12	0.31	0.10				
20.00	3.14	0.32	0.09				
20.50	3.16	0.33	0.08				
21.00	3.18	0.34	0.08				
21.50	3.20	0.34	0.08				
22.00	3.22	0.35	0.08				
22.50	3.24	0.36	0.08				
23.00	3.26	0.36	0.08				
23.50	3.28	0.37	0.08				
24.00	3.30	0.38	0.08				
24.50	3.30	0.38	0.01				
25.00	3.30	0.38	0.00				
25.50	3.30	0.38	0.00				
26.00	3.30	0.38	0.00				

Summary for Subcatchment 11S: DA-2

Runoff = 0.69 cfs @ 12.10 hrs, Volume= 0.090 af, Depth= 0.28"

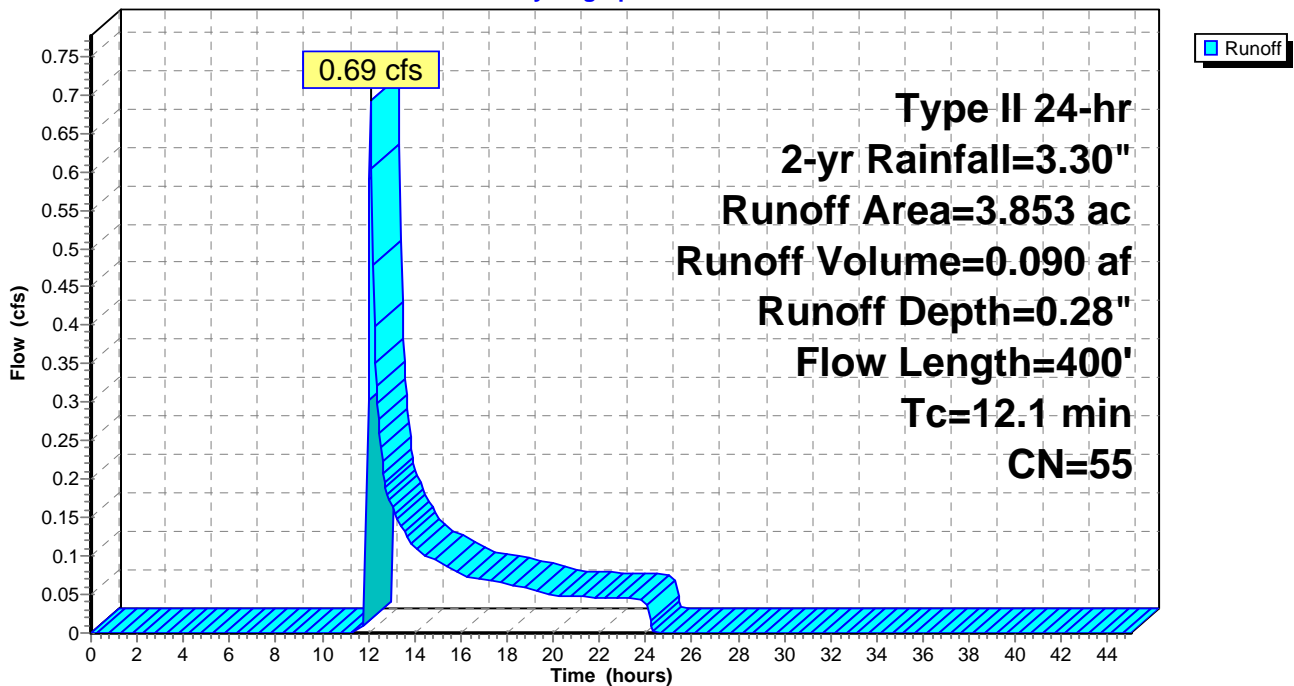
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
* 0.001	39	RP-4
* 0.194	80	RP-4
* 2.305	39	RP-6
* 0.182	80	RP-6
* 1.171	80	RP-6
3.853	55	Weighted Average
3.853		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	50	0.0050	0.09		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
1.7	150	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.8	200	0.0100	4.25	33.97	Channel Flow, Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.035
12.1	400	Total			

Subcatchment 11S: DA-2

Hydrograph



Hydrograph for Subcatchment 11S: DA-2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	3.30	0.28	0.00
0.50	0.02	0.00	0.00	27.00	3.30	0.28	0.00
1.00	0.03	0.00	0.00	27.50	3.30	0.28	0.00
1.50	0.05	0.00	0.00	28.00	3.30	0.28	0.00
2.00	0.07	0.00	0.00	28.50	3.30	0.28	0.00
2.50	0.09	0.00	0.00	29.00	3.30	0.28	0.00
3.00	0.11	0.00	0.00	29.50	3.30	0.28	0.00
3.50	0.14	0.00	0.00	30.00	3.30	0.28	0.00
4.00	0.16	0.00	0.00	30.50	3.30	0.28	0.00
4.50	0.18	0.00	0.00	31.00	3.30	0.28	0.00
5.00	0.21	0.00	0.00	31.50	3.30	0.28	0.00
5.50	0.24	0.00	0.00	32.00	3.30	0.28	0.00
6.00	0.26	0.00	0.00	32.50	3.30	0.28	0.00
6.50	0.29	0.00	0.00	33.00	3.30	0.28	0.00
7.00	0.33	0.00	0.00	33.50	3.30	0.28	0.00
7.50	0.36	0.00	0.00	34.00	3.30	0.28	0.00
8.00	0.40	0.00	0.00	34.50	3.30	0.28	0.00
8.50	0.44	0.00	0.00	35.00	3.30	0.28	0.00
9.00	0.49	0.00	0.00	35.50	3.30	0.28	0.00
9.50	0.54	0.00	0.00	36.00	3.30	0.28	0.00
10.00	0.60	0.00	0.00	36.50	3.30	0.28	0.00
10.50	0.67	0.00	0.00	37.00	3.30	0.28	0.00
11.00	0.78	0.00	0.00	37.50	3.30	0.28	0.00
11.50	0.93	0.00	0.00	38.00	3.30	0.28	0.00
12.00	2.19	0.03	0.30	38.50	3.30	0.28	0.00
12.50	2.43	0.07	0.26	39.00	3.30	0.28	0.00
13.00	2.55	0.09	0.17	39.50	3.30	0.28	0.00
13.50	2.64	0.11	0.13	40.00	3.30	0.28	0.00
14.00	2.71	0.12	0.11	40.50	3.30	0.28	0.00
14.50	2.76	0.14	0.10	41.00	3.30	0.28	0.00
15.00	2.82	0.15	0.09	41.50	3.30	0.28	0.00
15.50	2.86	0.16	0.09	42.00	3.30	0.28	0.00
16.00	2.90	0.17	0.08	42.50	3.30	0.28	0.00
16.50	2.94	0.18	0.07	43.00	3.30	0.28	0.00
17.00	2.98	0.19	0.07	43.50	3.30	0.28	0.00
17.50	3.01	0.20	0.07	44.00	3.30	0.28	0.00
18.00	3.04	0.21	0.06	44.50	3.30	0.28	0.00
18.50	3.07	0.21	0.06	45.00	3.30	0.28	0.00
19.00	3.09	0.22	0.06				
19.50	3.12	0.23	0.05				
20.00	3.14	0.23	0.05				
20.50	3.16	0.24	0.05				
21.00	3.18	0.25	0.05				
21.50	3.20	0.25	0.05				
22.00	3.22	0.26	0.05				
22.50	3.24	0.26	0.05				
23.00	3.26	0.27	0.05				
23.50	3.28	0.28	0.04				
24.00	3.30	0.28	0.04				
24.50	3.30	0.28	0.00				
25.00	3.30	0.28	0.00				
25.50	3.30	0.28	0.00				
26.00	3.30	0.28	0.00				

Summary for Subcatchment 12S: DA-4 Imp

Runoff = 43.97 cfs @ 12.04 hrs, Volume= 2.993 af, Depth= 3.07"

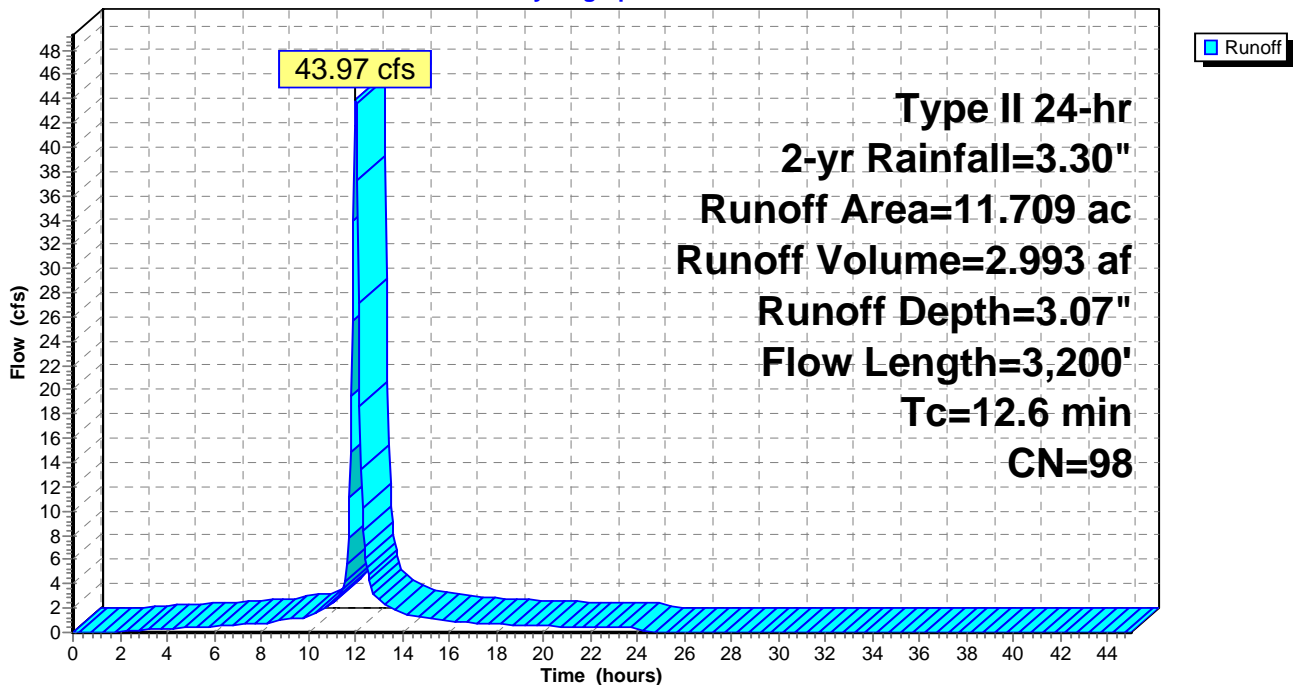
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
* 11.709	98	
11.709		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	50	0.0050	0.70		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
4.1	500	0.0100	2.03		Shallow Concentrated Flow, Paved Kv= 20.3 fps
4.4	1,400	0.0100	5.26	6.46	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
2.9	1,250	0.0100	7.20	22.62	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
12.6	3,200	Total			

Subcatchment 12S: DA-4 Imp

Hydrograph



Hydrograph for Subcatchment 12S: DA-4 Imp

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	3.30	3.07	0.00
0.50	0.02	0.00	0.00	27.00	3.30	3.07	0.00
1.00	0.03	0.00	0.00	27.50	3.30	3.07	0.00
1.50	0.05	0.00	0.02	28.00	3.30	3.07	0.00
2.00	0.07	0.00	0.09	28.50	3.30	3.07	0.00
2.50	0.09	0.01	0.15	29.00	3.30	3.07	0.00
3.00	0.11	0.02	0.21	29.50	3.30	3.07	0.00
3.50	0.14	0.03	0.26	30.00	3.30	3.07	0.00
4.00	0.16	0.04	0.31	30.50	3.30	3.07	0.00
4.50	0.18	0.06	0.36	31.00	3.30	3.07	0.00
5.00	0.21	0.08	0.41	31.50	3.30	3.07	0.00
5.50	0.24	0.09	0.47	32.00	3.30	3.07	0.00
6.00	0.26	0.12	0.52	32.50	3.30	3.07	0.00
6.50	0.29	0.14	0.57	33.00	3.30	3.07	0.00
7.00	0.33	0.17	0.62	33.50	3.30	3.07	0.00
7.50	0.36	0.20	0.67	34.00	3.30	3.07	0.00
8.00	0.40	0.23	0.72	34.50	3.30	3.07	0.00
8.50	0.44	0.26	0.86	35.00	3.30	3.07	0.00
9.00	0.49	0.30	1.05	35.50	3.30	3.07	0.00
9.50	0.54	0.35	1.13	36.00	3.30	3.07	0.00
10.00	0.60	0.41	1.33	36.50	3.30	3.07	0.00
10.50	0.67	0.48	1.73	37.00	3.30	3.07	0.00
11.00	0.78	0.57	2.37	37.50	3.30	3.07	0.00
11.50	0.93	0.73	3.79	38.00	3.30	3.07	0.00
12.00	2.19	1.96	41.76	38.50	3.30	3.07	0.00
12.50	2.43	2.20	5.40	39.00	3.30	3.07	0.00
13.00	2.55	2.32	2.76	39.50	3.30	3.07	0.00
13.50	2.64	2.41	2.03	40.00	3.30	3.07	0.00
14.00	2.71	2.48	1.59	40.50	3.30	3.07	0.00
14.50	2.76	2.53	1.35	41.00	3.30	3.07	0.00
15.00	2.82	2.59	1.22	41.50	3.30	3.07	0.00
15.50	2.86	2.63	1.08	42.00	3.30	3.07	0.00
16.00	2.90	2.67	0.94	42.50	3.30	3.07	0.00
16.50	2.94	2.71	0.86	43.00	3.30	3.07	0.00
17.00	2.98	2.74	0.81	43.50	3.30	3.07	0.00
17.50	3.01	2.78	0.77	44.00	3.30	3.07	0.00
18.00	3.04	2.81	0.72	44.50	3.30	3.07	0.00
18.50	3.07	2.84	0.67	45.00	3.30	3.07	0.00
19.00	3.09	2.86	0.62				
19.50	3.12	2.89	0.57				
20.00	3.14	2.91	0.52				
20.50	3.16	2.93	0.50				
21.00	3.18	2.95	0.49				
21.50	3.20	2.97	0.48				
22.00	3.22	2.99	0.47				
22.50	3.24	3.01	0.46				
23.00	3.26	3.03	0.45				
23.50	3.28	3.05	0.44				
24.00	3.30	3.07	0.43				
24.50	3.30	3.07	0.00				
25.00	3.30	3.07	0.00				
25.50	3.30	3.07	0.00				
26.00	3.30	3.07	0.00				

Summary for Subcatchment 14S: DA-4

Runoff = 13.61 cfs @ 12.15 hrs, Volume= 1.120 af, Depth= 0.94"

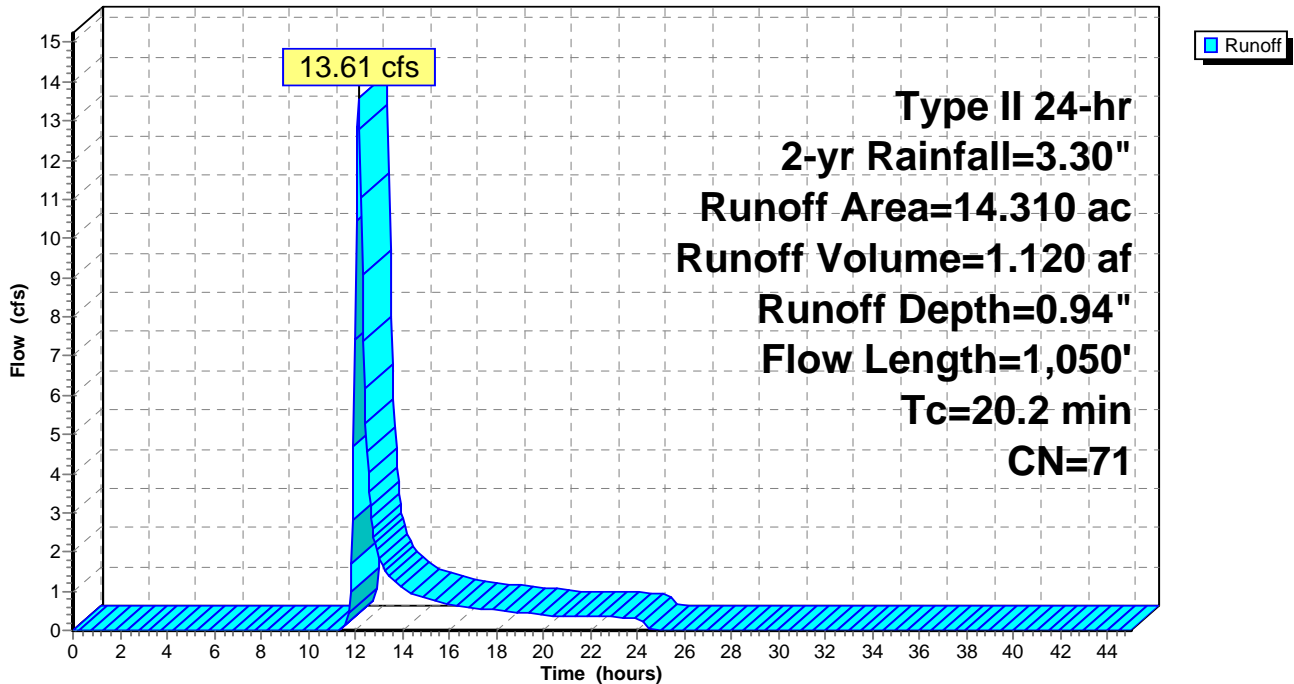
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 2-yr Rainfall=3.30"

Area (ac)	CN	Description
* 14.310	71	
14.310		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.0	50	0.0050	0.21		Sheet Flow, Fallow n= 0.050 P2= 3.30"
14.2	500	0.0070	0.59		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.0	500	0.0100	4.25	33.97	Channel Flow, Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.035
20.2	1,050	Total			

Subcatchment 14S: DA-4

Hydrograph



Hydrograph for Subcatchment 14S: DA-4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	3.30	0.94	0.00
0.50	0.02	0.00	0.00	27.00	3.30	0.94	0.00
1.00	0.03	0.00	0.00	27.50	3.30	0.94	0.00
1.50	0.05	0.00	0.00	28.00	3.30	0.94	0.00
2.00	0.07	0.00	0.00	28.50	3.30	0.94	0.00
2.50	0.09	0.00	0.00	29.00	3.30	0.94	0.00
3.00	0.11	0.00	0.00	29.50	3.30	0.94	0.00
3.50	0.14	0.00	0.00	30.00	3.30	0.94	0.00
4.00	0.16	0.00	0.00	30.50	3.30	0.94	0.00
4.50	0.18	0.00	0.00	31.00	3.30	0.94	0.00
5.00	0.21	0.00	0.00	31.50	3.30	0.94	0.00
5.50	0.24	0.00	0.00	32.00	3.30	0.94	0.00
6.00	0.26	0.00	0.00	32.50	3.30	0.94	0.00
6.50	0.29	0.00	0.00	33.00	3.30	0.94	0.00
7.00	0.33	0.00	0.00	33.50	3.30	0.94	0.00
7.50	0.36	0.00	0.00	34.00	3.30	0.94	0.00
8.00	0.40	0.00	0.00	34.50	3.30	0.94	0.00
8.50	0.44	0.00	0.00	35.00	3.30	0.94	0.00
9.00	0.49	0.00	0.00	35.50	3.30	0.94	0.00
9.50	0.54	0.00	0.00	36.00	3.30	0.94	0.00
10.00	0.60	0.00	0.00	36.50	3.30	0.94	0.00
10.50	0.67	0.00	0.00	37.00	3.30	0.94	0.00
11.00	0.78	0.00	0.00	37.50	3.30	0.94	0.00
11.50	0.93	0.00	0.06	38.00	3.30	0.94	0.00
12.00	2.19	0.34	7.41	38.50	3.30	0.94	0.00
12.50	2.43	0.45	4.56	39.00	3.30	0.94	0.00
13.00	2.55	0.52	1.89	39.50	3.30	0.94	0.00
13.50	2.64	0.56	1.37	40.00	3.30	0.94	0.00
14.00	2.71	0.60	1.08	40.50	3.30	0.94	0.00
14.50	2.76	0.63	0.92	41.00	3.30	0.94	0.00
15.00	2.82	0.66	0.83	41.50	3.30	0.94	0.00
15.50	2.86	0.68	0.75	42.00	3.30	0.94	0.00
16.00	2.90	0.71	0.67	42.50	3.30	0.94	0.00
16.50	2.94	0.73	0.61	43.00	3.30	0.94	0.00
17.00	2.98	0.75	0.58	43.50	3.30	0.94	0.00
17.50	3.01	0.77	0.55	44.00	3.30	0.94	0.00
18.00	3.04	0.78	0.52	44.50	3.30	0.94	0.00
18.50	3.07	0.80	0.49	45.00	3.30	0.94	0.00
19.00	3.09	0.82	0.45				
19.50	3.12	0.83	0.42				
20.00	3.14	0.84	0.39				
20.50	3.16	0.86	0.37				
21.00	3.18	0.87	0.36				
21.50	3.20	0.88	0.35				
22.00	3.22	0.89	0.35				
22.50	3.24	0.90	0.34				
23.00	3.26	0.92	0.34				
23.50	3.28	0.93	0.33				
24.00	3.30	0.94	0.33				
24.50	3.30	0.94	0.03				
25.00	3.30	0.94	0.00				
25.50	3.30	0.94	0.00				
26.00	3.30	0.94	0.00				

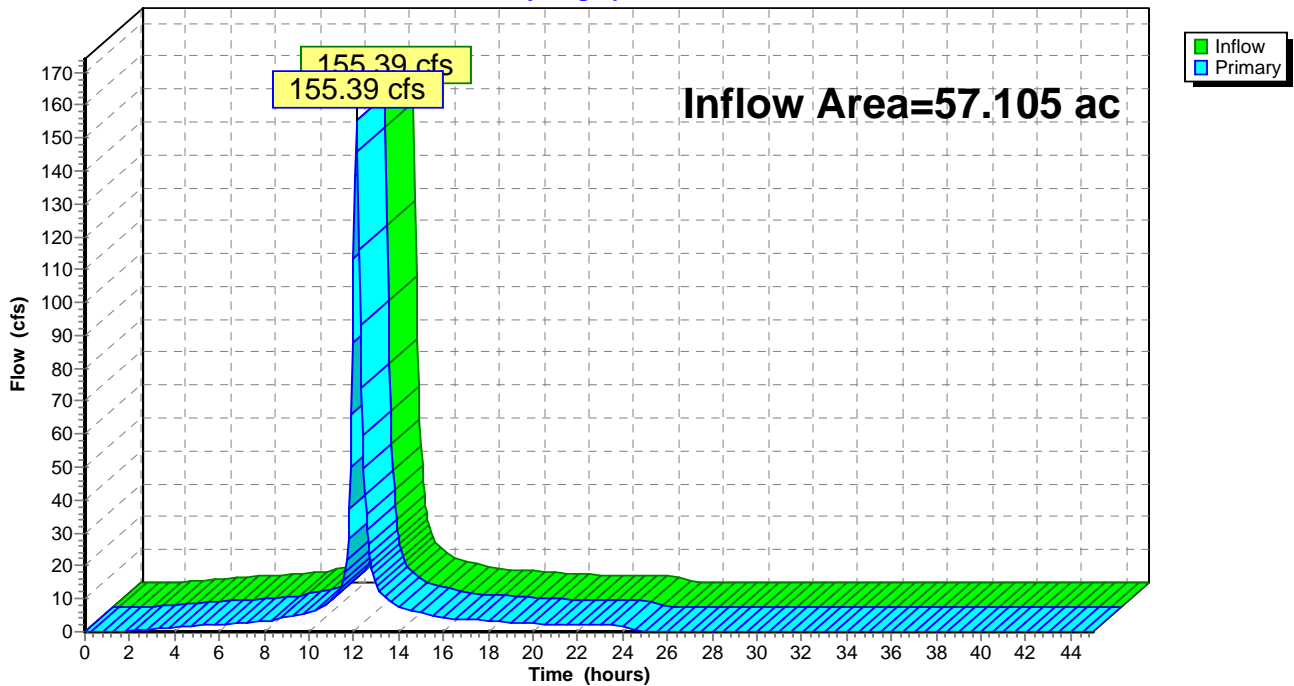
Summary for Link 4L: POA #1

Inflow Area = 57.105 ac, 90.00% Impervious, Inflow Depth = 2.80" for 2-yr event
Inflow = 155.39 cfs @ 12.12 hrs, Volume= 13.316 af
Primary = 155.39 cfs @ 12.12 hrs, Volume= 13.316 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 4L: POA #1

Hydrograph



Hydrograph for Link 4L: POA #1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.00	0.00	0.00
0.50	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.50	0.00	0.00	0.00
1.50	0.04	0.00	0.04	28.00	0.00	0.00	0.00
2.00	0.33	0.00	0.33	28.50	0.00	0.00	0.00
2.50	0.61	0.00	0.61	29.00	0.00	0.00	0.00
3.00	0.87	0.00	0.87	29.50	0.00	0.00	0.00
3.50	1.10	0.00	1.10	30.00	0.00	0.00	0.00
4.00	1.31	0.00	1.31	30.50	0.00	0.00	0.00
4.50	1.52	0.00	1.52	31.00	0.00	0.00	0.00
5.00	1.76	0.00	1.76	31.50	0.00	0.00	0.00
5.50	1.99	0.00	1.99	32.00	0.00	0.00	0.00
6.00	2.23	0.00	2.23	32.50	0.00	0.00	0.00
6.50	2.46	0.00	2.46	33.00	0.00	0.00	0.00
7.00	2.68	0.00	2.68	33.50	0.00	0.00	0.00
7.50	2.91	0.00	2.91	34.00	0.00	0.00	0.00
8.00	3.12	0.00	3.12	34.50	0.00	0.00	0.00
8.50	3.57	0.00	3.57	35.00	0.00	0.00	0.00
9.00	4.39	0.00	4.39	35.50	0.00	0.00	0.00
9.50	4.94	0.00	4.94	36.00	0.00	0.00	0.00
10.00	5.53	0.00	5.53	36.50	0.00	0.00	0.00
10.50	7.09	0.00	7.09	37.00	0.00	0.00	0.00
11.00	9.61	0.00	9.61	37.50	0.00	0.00	0.00
11.50	14.77	0.00	14.77	38.00	0.00	0.00	0.00
12.00	113.31	0.00	113.31	38.50	0.00	0.00	0.00
12.50	41.60	0.00	41.60	39.00	0.00	0.00	0.00
13.00	14.28	0.00	14.28	39.50	0.00	0.00	0.00
13.50	9.85	0.00	9.85	40.00	0.00	0.00	0.00
14.00	7.62	0.00	7.62	40.50	0.00	0.00	0.00
14.50	6.30	0.00	6.30	41.00	0.00	0.00	0.00
15.00	5.66	0.00	5.66	41.50	0.00	0.00	0.00
15.50	5.05	0.00	5.05	42.00	0.00	0.00	0.00
16.00	4.44	0.00	4.44	42.50	0.00	0.00	0.00
16.50	3.98	0.00	3.98	43.00	0.00	0.00	0.00
17.00	3.75	0.00	3.75	43.50	0.00	0.00	0.00
17.50	3.54	0.00	3.54	44.00	0.00	0.00	0.00
18.00	3.32	0.00	3.32	44.50	0.00	0.00	0.00
18.50	3.10	0.00	3.10	45.00	0.00	0.00	0.00
19.00	2.88	0.00	2.88				
19.50	2.66	0.00	2.66				
20.00	2.44	0.00	2.44				
20.50	2.29	0.00	2.29				
21.00	2.24	0.00	2.24				
21.50	2.20	0.00	2.20				
22.00	2.15	0.00	2.15				
22.50	2.11	0.00	2.11				
23.00	2.07	0.00	2.07				
23.50	2.02	0.00	2.02				
24.00	1.98	0.00	1.98				
24.50	0.22	0.00	0.22				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				

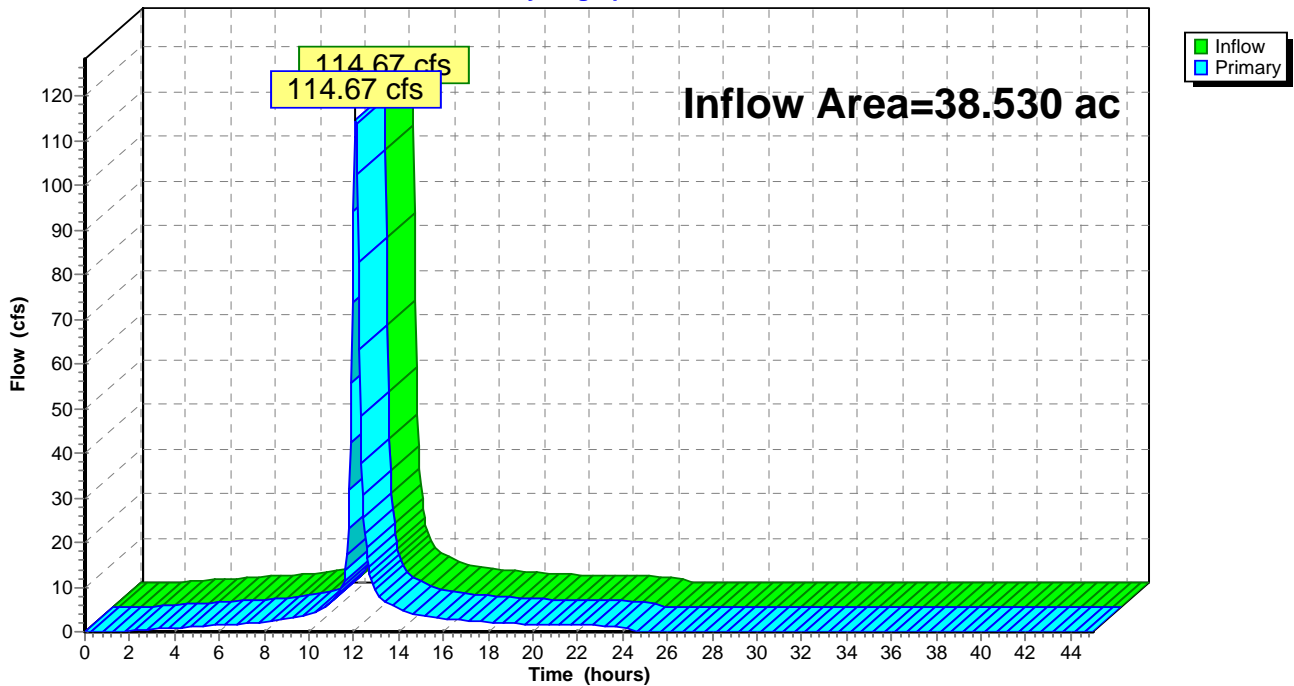
Summary for Link 5L: POA #2

Inflow Area = 38.530 ac, 90.00% Impervious, Inflow Depth = 2.79" for 2-yr event
Inflow = 114.67 cfs @ 12.09 hrs, Volume= 8.953 af
Primary = 114.67 cfs @ 12.09 hrs, Volume= 8.953 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 5L: POA #2

Hydrograph



Hydrograph for Link 5L: POA #2

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.00	0.00	0.00
0.50	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.50	0.00	0.00	0.00
1.50	0.04	0.00	0.04	28.00	0.00	0.00	0.00
2.00	0.24	0.00	0.24	28.50	0.00	0.00	0.00
2.50	0.43	0.00	0.43	29.00	0.00	0.00	0.00
3.00	0.60	0.00	0.60	29.50	0.00	0.00	0.00
3.50	0.76	0.00	0.76	30.00	0.00	0.00	0.00
4.00	0.90	0.00	0.90	30.50	0.00	0.00	0.00
4.50	1.04	0.00	1.04	31.00	0.00	0.00	0.00
5.00	1.20	0.00	1.20	31.50	0.00	0.00	0.00
5.50	1.36	0.00	1.36	32.00	0.00	0.00	0.00
6.00	1.52	0.00	1.52	32.50	0.00	0.00	0.00
6.50	1.68	0.00	1.68	33.00	0.00	0.00	0.00
7.00	1.83	0.00	1.83	33.50	0.00	0.00	0.00
7.50	1.98	0.00	1.98	34.00	0.00	0.00	0.00
8.00	2.12	0.00	2.12	34.50	0.00	0.00	0.00
8.50	2.46	0.00	2.46	35.00	0.00	0.00	0.00
9.00	3.02	0.00	3.02	35.50	0.00	0.00	0.00
9.50	3.35	0.00	3.35	36.00	0.00	0.00	0.00
10.00	3.81	0.00	3.81	36.50	0.00	0.00	0.00
10.50	4.92	0.00	4.92	37.00	0.00	0.00	0.00
11.00	6.71	0.00	6.71	37.50	0.00	0.00	0.00
11.50	10.49	0.00	10.49	38.00	0.00	0.00	0.00
12.00	94.45	0.00	94.45	38.50	0.00	0.00	0.00
12.50	21.86	0.00	21.86	39.00	0.00	0.00	0.00
13.00	8.87	0.00	8.87	39.50	0.00	0.00	0.00
13.50	6.40	0.00	6.40	40.00	0.00	0.00	0.00
14.00	4.97	0.00	4.97	40.50	0.00	0.00	0.00
14.50	4.17	0.00	4.17	41.00	0.00	0.00	0.00
15.00	3.75	0.00	3.75	41.50	0.00	0.00	0.00
15.50	3.34	0.00	3.34	42.00	0.00	0.00	0.00
16.00	2.93	0.00	2.93	42.50	0.00	0.00	0.00
16.50	2.65	0.00	2.65	43.00	0.00	0.00	0.00
17.00	2.50	0.00	2.50	43.50	0.00	0.00	0.00
17.50	2.36	0.00	2.36	44.00	0.00	0.00	0.00
18.00	2.21	0.00	2.21	44.50	0.00	0.00	0.00
18.50	2.06	0.00	2.06	45.00	0.00	0.00	0.00
19.00	1.91	0.00	1.91				
19.50	1.77	0.00	1.77				
20.00	1.62	0.00	1.62				
20.50	1.53	0.00	1.53				
21.00	1.50	0.00	1.50				
21.50	1.47	0.00	1.47				
22.00	1.44	0.00	1.44				
22.50	1.41	0.00	1.41				
23.00	1.38	0.00	1.38				
23.50	1.35	0.00	1.35				
24.00	1.32	0.00	1.32				
24.50	0.07	0.00	0.07				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				

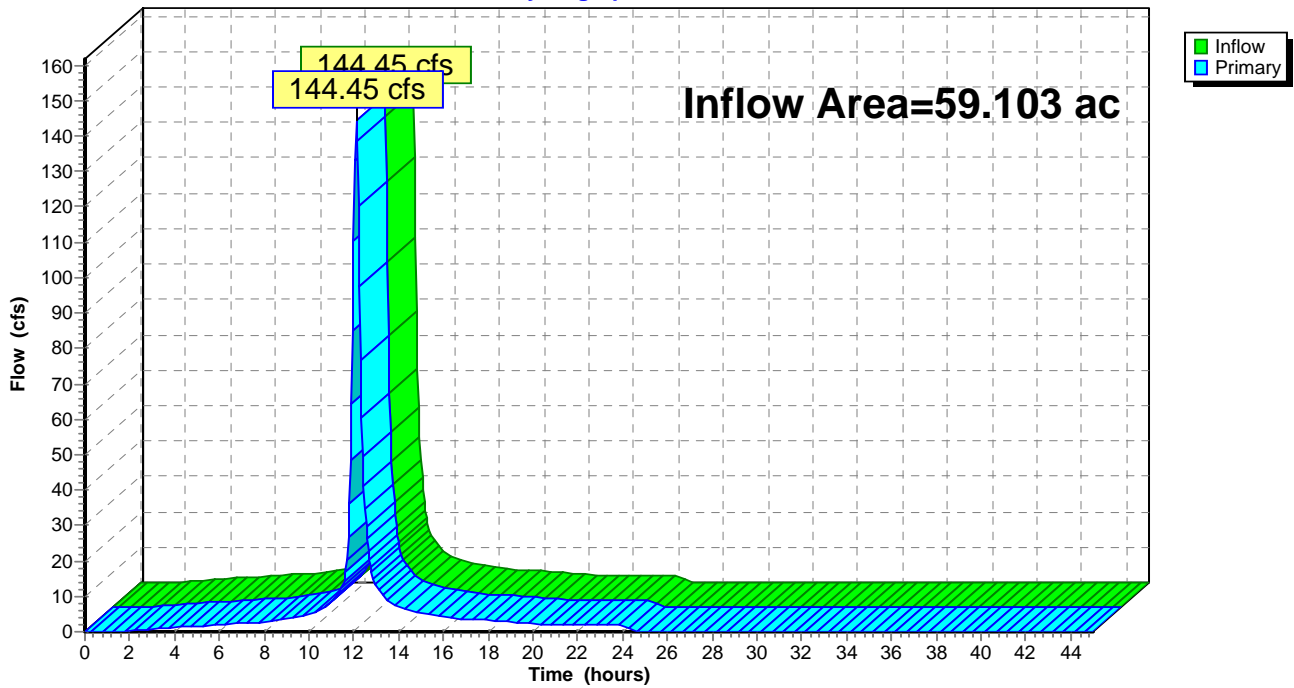
Summary for Link 6L: POA #3

Inflow Area = 59.103 ac, 78.05% Impervious, Inflow Depth = 2.45" for 2-yr event
Inflow = 144.45 cfs @ 12.11 hrs, Volume= 12.088 af
Primary = 144.45 cfs @ 12.11 hrs, Volume= 12.088 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 6L: POA #3

Hydrograph



Hydrograph for Link 6L: POA #3

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.00	0.00	0.00
0.50	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.50	0.00	0.00	0.00
1.50	0.05	0.00	0.05	28.00	0.00	0.00	0.00
2.00	0.30	0.00	0.30	28.50	0.00	0.00	0.00
2.50	0.54	0.00	0.54	29.00	0.00	0.00	0.00
3.00	0.76	0.00	0.76	29.50	0.00	0.00	0.00
3.50	0.96	0.00	0.96	30.00	0.00	0.00	0.00
4.00	1.14	0.00	1.14	30.50	0.00	0.00	0.00
4.50	1.33	0.00	1.33	31.00	0.00	0.00	0.00
5.00	1.54	0.00	1.54	31.50	0.00	0.00	0.00
5.50	1.74	0.00	1.74	32.00	0.00	0.00	0.00
6.00	1.95	0.00	1.95	32.50	0.00	0.00	0.00
6.50	2.15	0.00	2.15	33.00	0.00	0.00	0.00
7.00	2.34	0.00	2.34	33.50	0.00	0.00	0.00
7.50	2.53	0.00	2.53	34.00	0.00	0.00	0.00
8.00	2.72	0.00	2.72	34.50	0.00	0.00	0.00
8.50	3.13	0.00	3.13	35.00	0.00	0.00	0.00
9.00	3.85	0.00	3.85	35.50	0.00	0.00	0.00
9.50	4.30	0.00	4.30	36.00	0.00	0.00	0.00
10.00	4.85	0.00	4.85	36.50	0.00	0.00	0.00
10.50	6.24	0.00	6.24	37.00	0.00	0.00	0.00
11.00	8.49	0.00	8.49	37.50	0.00	0.00	0.00
11.50	13.15	0.00	13.15	38.00	0.00	0.00	0.00
12.00	110.26	0.00	110.26	38.50	0.00	0.00	0.00
12.50	34.75	0.00	34.75	39.00	0.00	0.00	0.00
13.00	12.93	0.00	12.93	39.50	0.00	0.00	0.00
13.50	9.16	0.00	9.16	40.00	0.00	0.00	0.00
14.00	7.12	0.00	7.12	40.50	0.00	0.00	0.00
14.50	5.93	0.00	5.93	41.00	0.00	0.00	0.00
15.00	5.34	0.00	5.34	41.50	0.00	0.00	0.00
15.50	4.77	0.00	4.77	42.00	0.00	0.00	0.00
16.00	4.20	0.00	4.20	42.50	0.00	0.00	0.00
16.50	3.78	0.00	3.78	43.00	0.00	0.00	0.00
17.00	3.56	0.00	3.56	43.50	0.00	0.00	0.00
17.50	3.36	0.00	3.36	44.00	0.00	0.00	0.00
18.00	3.15	0.00	3.15	44.50	0.00	0.00	0.00
18.50	2.95	0.00	2.95	45.00	0.00	0.00	0.00
19.00	2.74	0.00	2.74				
19.50	2.53	0.00	2.53				
20.00	2.32	0.00	2.32				
20.50	2.19	0.00	2.19				
21.00	2.14	0.00	2.14				
21.50	2.10	0.00	2.10				
22.00	2.06	0.00	2.06				
22.50	2.02	0.00	2.02				
23.00	1.98	0.00	1.98				
23.50	1.94	0.00	1.94				
24.00	1.90	0.00	1.90				
24.50	0.18	0.00	0.18				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				

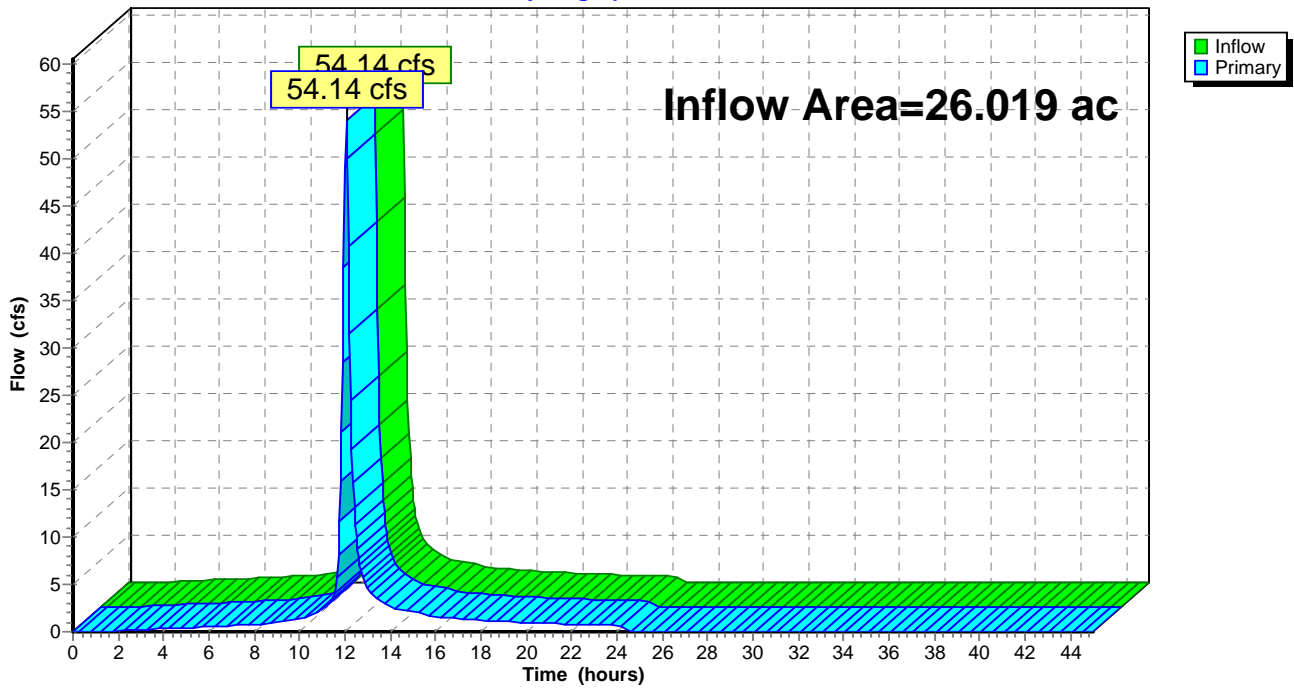
Summary for Link 13L: POA #4

Inflow Area = 26.019 ac, 45.00% Impervious, Inflow Depth = 1.90" for 2-yr event
Inflow = 54.14 cfs @ 12.05 hrs, Volume= 4.112 af
Primary = 54.14 cfs @ 12.05 hrs, Volume= 4.112 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 13L: POA #4

Hydrograph



Hydrograph for Link 13L: POA #4

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.00	0.00	0.00
0.50	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.50	0.00	0.00	0.00
1.50	0.02	0.00	0.02	28.00	0.00	0.00	0.00
2.00	0.09	0.00	0.09	28.50	0.00	0.00	0.00
2.50	0.15	0.00	0.15	29.00	0.00	0.00	0.00
3.00	0.21	0.00	0.21	29.50	0.00	0.00	0.00
3.50	0.26	0.00	0.26	30.00	0.00	0.00	0.00
4.00	0.31	0.00	0.31	30.50	0.00	0.00	0.00
4.50	0.36	0.00	0.36	31.00	0.00	0.00	0.00
5.00	0.41	0.00	0.41	31.50	0.00	0.00	0.00
5.50	0.47	0.00	0.47	32.00	0.00	0.00	0.00
6.00	0.52	0.00	0.52	32.50	0.00	0.00	0.00
6.50	0.57	0.00	0.57	33.00	0.00	0.00	0.00
7.00	0.62	0.00	0.62	33.50	0.00	0.00	0.00
7.50	0.67	0.00	0.67	34.00	0.00	0.00	0.00
8.00	0.72	0.00	0.72	34.50	0.00	0.00	0.00
8.50	0.86	0.00	0.86	35.00	0.00	0.00	0.00
9.00	1.05	0.00	1.05	35.50	0.00	0.00	0.00
9.50	1.13	0.00	1.13	36.00	0.00	0.00	0.00
10.00	1.33	0.00	1.33	36.50	0.00	0.00	0.00
10.50	1.73	0.00	1.73	37.00	0.00	0.00	0.00
11.00	2.37	0.00	2.37	37.50	0.00	0.00	0.00
11.50	3.85	0.00	3.85	38.00	0.00	0.00	0.00
12.00	49.17	0.00	49.17	38.50	0.00	0.00	0.00
12.50	9.96	0.00	9.96	39.00	0.00	0.00	0.00
13.00	4.65	0.00	4.65	39.50	0.00	0.00	0.00
13.50	3.40	0.00	3.40	40.00	0.00	0.00	0.00
14.00	2.67	0.00	2.67	40.50	0.00	0.00	0.00
14.50	2.27	0.00	2.27	41.00	0.00	0.00	0.00
15.00	2.05	0.00	2.05	41.50	0.00	0.00	0.00
15.50	1.83	0.00	1.83	42.00	0.00	0.00	0.00
16.00	1.61	0.00	1.61	42.50	0.00	0.00	0.00
16.50	1.47	0.00	1.47	43.00	0.00	0.00	0.00
17.00	1.39	0.00	1.39	43.50	0.00	0.00	0.00
17.50	1.31	0.00	1.31	44.00	0.00	0.00	0.00
18.00	1.23	0.00	1.23	44.50	0.00	0.00	0.00
18.50	1.15	0.00	1.15	45.00	0.00	0.00	0.00
19.00	1.07	0.00	1.07				
19.50	0.99	0.00	0.99				
20.00	0.91	0.00	0.91				
20.50	0.87	0.00	0.87				
21.00	0.85	0.00	0.85				
21.50	0.83	0.00	0.83				
22.00	0.82	0.00	0.82				
22.50	0.80	0.00	0.80				
23.00	0.79	0.00	0.79				
23.50	0.77	0.00	0.77				
24.00	0.76	0.00	0.76				
24.50	0.04	0.00	0.04				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				

20150313_PropCond

Prepared by HP

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Type II 24-hr 10-yr Rainfall=5.00"

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Time span=0.00-45.00 hrs, dt=0.05 hrs, 901 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 3S: DA-3 Runoff Area=14.476 ac 10.38% Impervious Runoff Depth=1.51"
Flow Length=2,300' Tc=23.8 min CN=63 Runoff=20.19 cfs 1.820 af

Subcatchment 7S: DA-1 Imp Runoff Area=51.395 ac 100.00% Impervious Runoff Depth=4.76"
Flow Length=3,987' Tc=20.7 min CN=98 Runoff=235.23 cfs 20.400 af

Subcatchment 8S: DA-2 Imp Runoff Area=34.677 ac 100.00% Impervious Runoff Depth=4.76"
Flow Length=2,879' Tc=17.2 min CN=98 Runoff=173.98 cfs 13.764 af

Subcatchment 9S: DA-3 Imp Runoff Area=44.627 ac 100.00% Impervious Runoff Depth=4.76"
Flow Length=3,250' Tc=19.0 min CN=98 Runoff=213.62 cfs 17.714 af

Subcatchment 10S: DA-1 Runoff Area=5.710 ac 0.00% Impervious Runoff Depth=1.17"
Flow Length=800' Tc=18.6 min CN=58 Runoff=6.70 cfs 0.556 af

Subcatchment 11S: DA-2 Runoff Area=3.853 ac 0.00% Impervious Runoff Depth=0.98"
Flow Length=400' Tc=12.1 min CN=55 Runoff=4.57 cfs 0.315 af

Subcatchment 12S: DA-4 Imp Runoff Area=11.709 ac 100.00% Impervious Runoff Depth=4.76"
Flow Length=3,200' Tc=12.6 min CN=98 Runoff=67.08 cfs 4.648 af

Subcatchment 14S: DA-4 Runoff Area=14.310 ac 0.00% Impervious Runoff Depth=2.12"
Flow Length=1,050' Tc=20.2 min CN=71 Runoff=32.83 cfs 2.524 af

Link 4L: POA #1 Inflow=241.91 cfs 20.956 af
Primary=241.91 cfs 20.956 af

Link 5L: POA #2 Inflow=178.36 cfs 14.079 af
Primary=178.36 cfs 14.079 af

Link 6L: POA #3 Inflow=231.16 cfs 19.534 af
Primary=231.16 cfs 19.534 af

Link 13L: POA #4 Inflow=93.99 cfs 7.172 af
Primary=93.99 cfs 7.172 af

Total Runoff Area = 180.757 ac Runoff Volume = 61.741 af Average Runoff Depth = 4.10"
20.38% Pervious = 36.846 ac 79.62% Impervious = 143.911 ac

Summary for Subcatchment 3S: DA-3

Runoff = 20.19 cfs @ 12.19 hrs, Volume= 1.820 af, Depth= 1.51"

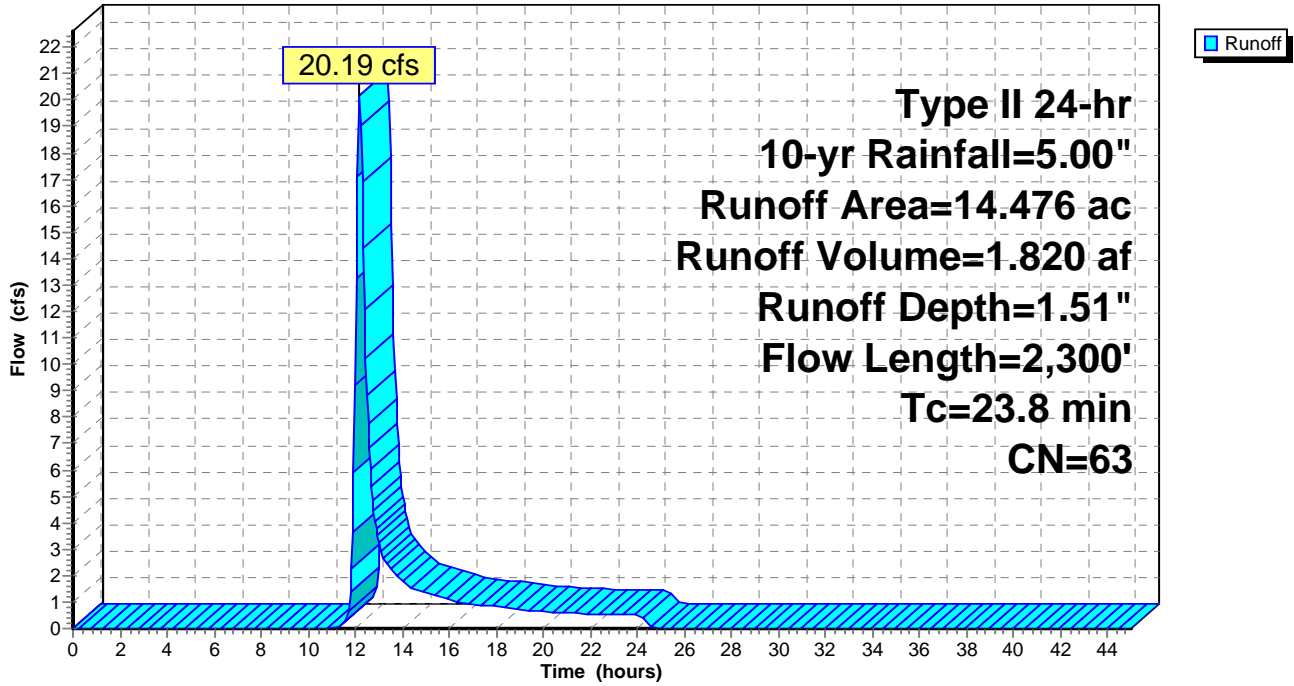
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 1.228	39	RP-1 A
* 0.044	80	RP-1 D
* 0.002	39	RP-2 A
* 0.158	80	RP- 2 D
* 0.889	39	RP-3 A
* 0.090	80	RP-3 D
* 0.089	39	RP-4 A
* 0.502	80	RP- 4D
* 4.428	39	RP-5 A
* 5.508	80	RP-5 D
* 1.503	98	RP-5 WATER
* 0.030	39	RP-6 A
* 0.005	80	RP-6 D
14.476	63	Weighted Average
12.973		89.62% Pervious Area
1.503		10.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	50	0.0050	0.09		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
8.3	750	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
5.9	1,500	0.0100	4.25	33.97	Channel Flow, Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.035
23.8	2,300	Total			

Subcatchment 3S: DA-3

Hydrograph



Hydrograph for Subcatchment 3S: DA-3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	5.00	1.51	0.00
0.50	0.03	0.00	0.00	27.00	5.00	1.51	0.00
1.00	0.05	0.00	0.00	27.50	5.00	1.51	0.00
1.50	0.08	0.00	0.00	28.00	5.00	1.51	0.00
2.00	0.11	0.00	0.00	28.50	5.00	1.51	0.00
2.50	0.14	0.00	0.00	29.00	5.00	1.51	0.00
3.00	0.17	0.00	0.00	29.50	5.00	1.51	0.00
3.50	0.21	0.00	0.00	30.00	5.00	1.51	0.00
4.00	0.24	0.00	0.00	30.50	5.00	1.51	0.00
4.50	0.28	0.00	0.00	31.00	5.00	1.51	0.00
5.00	0.32	0.00	0.00	31.50	5.00	1.51	0.00
5.50	0.36	0.00	0.00	32.00	5.00	1.51	0.00
6.00	0.40	0.00	0.00	32.50	5.00	1.51	0.00
6.50	0.45	0.00	0.00	33.00	5.00	1.51	0.00
7.00	0.50	0.00	0.00	33.50	5.00	1.51	0.00
7.50	0.55	0.00	0.00	34.00	5.00	1.51	0.00
8.00	0.60	0.00	0.00	34.50	5.00	1.51	0.00
8.50	0.66	0.00	0.00	35.00	5.00	1.51	0.00
9.00	0.74	0.00	0.00	35.50	5.00	1.51	0.00
9.50	0.82	0.00	0.00	36.00	5.00	1.51	0.00
10.00	0.91	0.00	0.00	36.50	5.00	1.51	0.00
10.50	1.02	0.00	0.00	37.00	5.00	1.51	0.00
11.00	1.18	0.00	0.00	37.50	5.00	1.51	0.00
11.50	1.42	0.01	0.16	38.00	5.00	1.51	0.00
12.00	3.31	0.57	9.20	38.50	5.00	1.51	0.00
12.50	3.67	0.75	8.85	39.00	5.00	1.51	0.00
13.00	3.86	0.84	3.32	39.50	5.00	1.51	0.00
13.50	4.00	0.92	2.26	40.00	5.00	1.51	0.00
14.00	4.10	0.97	1.78	40.50	5.00	1.51	0.00
14.50	4.19	1.02	1.48	41.00	5.00	1.51	0.00
15.00	4.27	1.07	1.34	41.50	5.00	1.51	0.00
15.50	4.34	1.11	1.22	42.00	5.00	1.51	0.00
16.00	4.40	1.14	1.08	42.50	5.00	1.51	0.00
16.50	4.46	1.18	0.97	43.00	5.00	1.51	0.00
17.00	4.51	1.21	0.92	43.50	5.00	1.51	0.00
17.50	4.56	1.24	0.87	44.00	5.00	1.51	0.00
18.00	4.61	1.26	0.83	44.50	5.00	1.51	0.00
18.50	4.65	1.29	0.78	45.00	5.00	1.51	0.00
19.00	4.69	1.32	0.73				
19.50	4.73	1.34	0.67				
20.00	4.76	1.36	0.62				
20.50	4.79	1.38	0.58				
21.00	4.82	1.40	0.57				
21.50	4.85	1.42	0.56				
22.00	4.89	1.44	0.55				
22.50	4.91	1.46	0.54				
23.00	4.94	1.47	0.53				
23.50	4.97	1.49	0.53				
24.00	5.00	1.51	0.52				
24.50	5.00	1.51	0.09				
25.00	5.00	1.51	0.00				
25.50	5.00	1.51	0.00				
26.00	5.00	1.51	0.00				

Summary for Subcatchment 7S: DA-1 Imp

Runoff = 235.23 cfs @ 12.12 hrs, Volume= 20.400 af, Depth= 4.76"

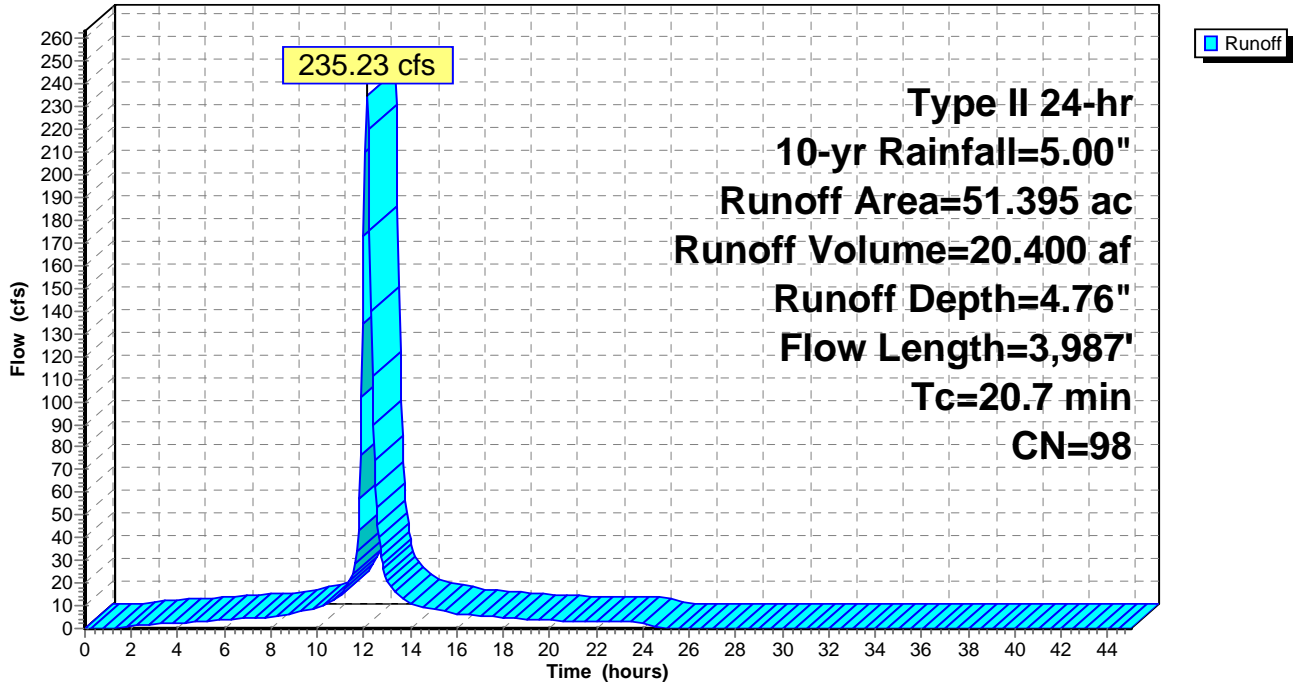
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 51.395	98	RP-6
51.395		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	50	0.0001	0.15		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
2.3	200	0.0050	1.44		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.8	806	0.0211	7.65	9.38	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
3.6	1,208	0.0090	5.64	9.97	Pipe Channel, 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013
3.1	887	0.0044	4.78	15.01	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
4.2	836	0.0018	3.32	165.90	Channel Flow, Area= 50.0 sf Perim= 20.0' r= 2.50' n= 0.035
20.7	3,987	Total			

Subcatchment 7S: DA-1 Imp

Hydrograph



Hydrograph for Subcatchment 7S: DA-1 Imp

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	5.00	4.76	0.00
0.50	0.03	0.00	0.00	27.00	5.00	4.76	0.00
1.00	0.05	0.00	0.02	27.50	5.00	4.76	0.00
1.50	0.08	0.01	0.53	28.00	5.00	4.76	0.00
2.00	0.11	0.02	1.07	28.50	5.00	4.76	0.00
2.50	0.14	0.03	1.52	29.00	5.00	4.76	0.00
3.00	0.17	0.05	1.91	29.50	5.00	4.76	0.00
3.50	0.21	0.07	2.24	30.00	5.00	4.76	0.00
4.00	0.24	0.10	2.53	30.50	5.00	4.76	0.00
4.50	0.28	0.13	2.83	31.00	5.00	4.76	0.00
5.00	0.32	0.16	3.17	31.50	5.00	4.76	0.00
5.50	0.36	0.19	3.51	32.00	5.00	4.76	0.00
6.00	0.40	0.23	3.84	32.50	5.00	4.76	0.00
6.50	0.45	0.27	4.17	33.00	5.00	4.76	0.00
7.00	0.50	0.31	4.48	33.50	5.00	4.76	0.00
7.50	0.55	0.36	4.80	34.00	5.00	4.76	0.00
8.00	0.60	0.41	5.10	34.50	5.00	4.76	0.00
8.50	0.66	0.47	5.78	35.00	5.00	4.76	0.00
9.00	0.74	0.54	7.03	35.50	5.00	4.76	0.00
9.50	0.82	0.61	7.85	36.00	5.00	4.76	0.00
10.00	0.91	0.70	8.73	36.50	5.00	4.76	0.00
10.50	1.02	0.81	11.13	37.00	5.00	4.76	0.00
11.00	1.18	0.96	14.99	37.50	5.00	4.76	0.00
11.50	1.42	1.20	22.88	38.00	5.00	4.76	0.00
12.00	3.31	3.08	172.87	38.50	5.00	4.76	0.00
12.50	3.67	3.44	62.36	39.00	5.00	4.76	0.00
13.00	3.86	3.63	21.19	39.50	5.00	4.76	0.00
13.50	4.00	3.76	14.56	40.00	5.00	4.76	0.00
14.00	4.10	3.86	11.25	40.50	5.00	4.76	0.00
14.50	4.19	3.95	9.29	41.00	5.00	4.76	0.00
15.00	4.27	4.03	8.34	41.50	5.00	4.76	0.00
15.50	4.34	4.10	7.43	42.00	5.00	4.76	0.00
16.00	4.40	4.16	6.53	42.50	5.00	4.76	0.00
16.50	4.46	4.22	5.85	43.00	5.00	4.76	0.00
17.00	4.51	4.27	5.51	43.50	5.00	4.76	0.00
17.50	4.56	4.32	5.19	44.00	5.00	4.76	0.00
18.00	4.61	4.37	4.86	44.50	5.00	4.76	0.00
18.50	4.65	4.41	4.54	45.00	5.00	4.76	0.00
19.00	4.69	4.45	4.22				
19.50	4.73	4.49	3.89				
20.00	4.76	4.52	3.57				
20.50	4.79	4.56	3.35				
21.00	4.82	4.59	3.27				
21.50	4.85	4.62	3.21				
22.00	4.89	4.65	3.15				
22.50	4.91	4.68	3.08				
23.00	4.94	4.71	3.02				
23.50	4.97	4.74	2.95				
24.00	5.00	4.76	2.89				
24.50	5.00	4.76	0.33				
25.00	5.00	4.76	0.01				
25.50	5.00	4.76	0.00				
26.00	5.00	4.76	0.00				

Summary for Subcatchment 8S: DA-2 Imp

Runoff = 173.98 cfs @ 12.09 hrs, Volume= 13.764 af, Depth= 4.76"

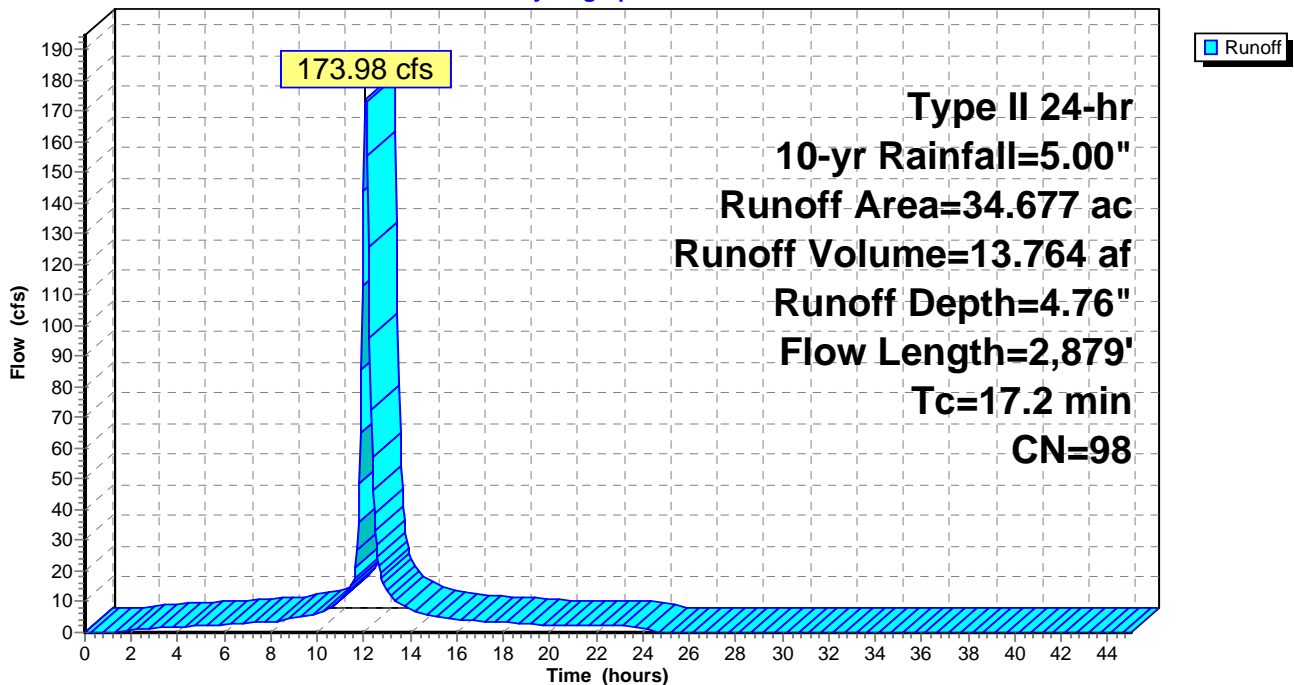
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 1.750	98	RP-4
* 32.927	98	RP-6
34.677	98	Weighted Average
34.677		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	427	0.0017	0.84		Shallow Concentrated Flow, Paved Kv= 20.3 fps
3.9	635	0.0027	2.74	3.36	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
4.8	1,817	0.0056	6.25	30.69	Pipe Channel, 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013
17.2	2,879	Total			

Subcatchment 8S: DA-2 Imp

Hydrograph



Hydrograph for Subcatchment 8S: DA-2 Imp

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	5.00	4.76	0.00
0.50	0.03	0.00	0.00	27.00	5.00	4.76	0.00
1.00	0.05	0.00	0.02	27.50	5.00	4.76	0.00
1.50	0.08	0.01	0.40	28.00	5.00	4.76	0.00
2.00	0.11	0.02	0.76	28.50	5.00	4.76	0.00
2.50	0.14	0.03	1.06	29.00	5.00	4.76	0.00
3.00	0.17	0.05	1.31	29.50	5.00	4.76	0.00
3.50	0.21	0.07	1.53	30.00	5.00	4.76	0.00
4.00	0.24	0.10	1.73	30.50	5.00	4.76	0.00
4.50	0.28	0.13	1.93	31.00	5.00	4.76	0.00
5.00	0.32	0.16	2.17	31.50	5.00	4.76	0.00
5.50	0.36	0.19	2.39	32.00	5.00	4.76	0.00
6.00	0.40	0.23	2.62	32.50	5.00	4.76	0.00
6.50	0.45	0.27	2.84	33.00	5.00	4.76	0.00
7.00	0.50	0.31	3.05	33.50	5.00	4.76	0.00
7.50	0.55	0.36	3.26	34.00	5.00	4.76	0.00
8.00	0.60	0.41	3.46	34.50	5.00	4.76	0.00
8.50	0.66	0.47	3.98	35.00	5.00	4.76	0.00
9.00	0.74	0.54	4.84	35.50	5.00	4.76	0.00
9.50	0.82	0.61	5.32	36.00	5.00	4.76	0.00
10.00	0.91	0.70	6.01	36.50	5.00	4.76	0.00
10.50	1.02	0.81	7.72	37.00	5.00	4.76	0.00
11.00	1.18	0.96	10.46	37.50	5.00	4.76	0.00
11.50	1.42	1.20	16.25	38.00	5.00	4.76	0.00
12.00	3.31	3.08	143.96	38.50	5.00	4.76	0.00
12.50	3.67	3.44	32.87	39.00	5.00	4.76	0.00
13.00	3.86	3.63	13.23	39.50	5.00	4.76	0.00
13.50	4.00	3.76	9.52	40.00	5.00	4.76	0.00
14.00	4.10	3.86	7.39	40.50	5.00	4.76	0.00
14.50	4.19	3.95	6.18	41.00	5.00	4.76	0.00
15.00	4.27	4.03	5.56	41.50	5.00	4.76	0.00
15.50	4.34	4.10	4.95	42.00	5.00	4.76	0.00
16.00	4.40	4.16	4.34	42.50	5.00	4.76	0.00
16.50	4.46	4.22	3.92	43.00	5.00	4.76	0.00
17.00	4.51	4.27	3.69	43.50	5.00	4.76	0.00
17.50	4.56	4.32	3.48	44.00	5.00	4.76	0.00
18.00	4.61	4.37	3.26	44.50	5.00	4.76	0.00
18.50	4.65	4.41	3.04	45.00	5.00	4.76	0.00
19.00	4.69	4.45	2.82				
19.50	4.73	4.49	2.60				
20.00	4.76	4.52	2.38				
20.50	4.79	4.56	2.25				
21.00	4.82	4.59	2.20				
21.50	4.85	4.62	2.16				
22.00	4.89	4.65	2.12				
22.50	4.91	4.68	2.07				
23.00	4.94	4.71	2.03				
23.50	4.97	4.74	1.99				
24.00	5.00	4.76	1.94				
24.50	5.00	4.76	0.11				
25.00	5.00	4.76	0.00				
25.50	5.00	4.76	0.00				
26.00	5.00	4.76	0.00				

Summary for Subcatchment 9S: DA-3 Imp

Runoff = 213.62 cfs @ 12.10 hrs, Volume= 17.714 af, Depth= 4.76"

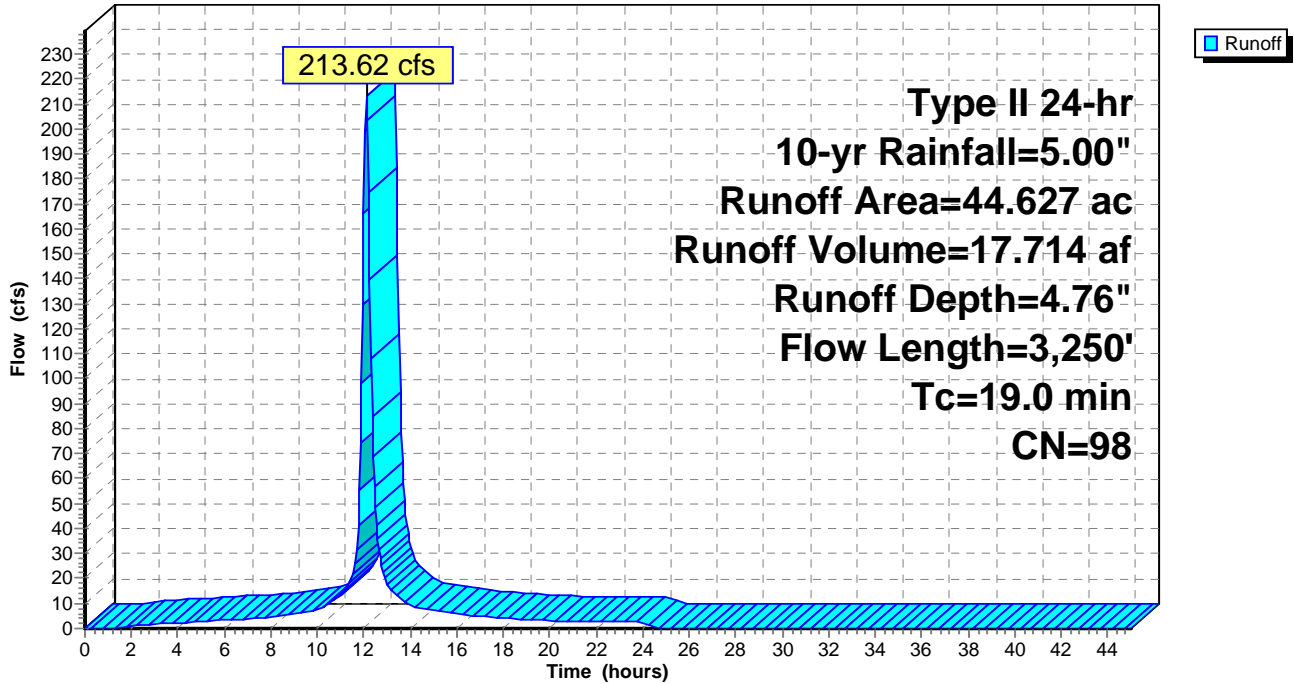
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 24.166	98	RP-1
* 3.032	98	RP-2
* 8.811	98	RP-3
* 5.316	98	RP-4
* 2.992	98	RP-5
* 0.310	98	RP-6
44.627	98	Weighted Average
44.627		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	150	0.0010	0.46		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
3.9	150	0.0010	0.64		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.5	100	0.0050	1.14		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
5.7	2,000	0.0125	5.89	7.22	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
2.4	850	0.0069	5.98	18.79	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
19.0	3,250	Total			

Subcatchment 9S: DA-3 Imp

Hydrograph



Hydrograph for Subcatchment 9S: DA-3 Imp

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	5.00	4.76	0.00
0.50	0.03	0.00	0.00	27.00	5.00	4.76	0.00
1.00	0.05	0.00	0.02	27.50	5.00	4.76	0.00
1.50	0.08	0.01	0.48	28.00	5.00	4.76	0.00
2.00	0.11	0.02	0.95	28.50	5.00	4.76	0.00
2.50	0.14	0.03	1.34	29.00	5.00	4.76	0.00
3.00	0.17	0.05	1.67	29.50	5.00	4.76	0.00
3.50	0.21	0.07	1.96	30.00	5.00	4.76	0.00
4.00	0.24	0.10	2.21	30.50	5.00	4.76	0.00
4.50	0.28	0.13	2.47	31.00	5.00	4.76	0.00
5.00	0.32	0.16	2.77	31.50	5.00	4.76	0.00
5.50	0.36	0.19	3.06	32.00	5.00	4.76	0.00
6.00	0.40	0.23	3.35	32.50	5.00	4.76	0.00
6.50	0.45	0.27	3.63	33.00	5.00	4.76	0.00
7.00	0.50	0.31	3.91	33.50	5.00	4.76	0.00
7.50	0.55	0.36	4.18	34.00	5.00	4.76	0.00
8.00	0.60	0.41	4.44	34.50	5.00	4.76	0.00
8.50	0.66	0.47	5.07	35.00	5.00	4.76	0.00
9.00	0.74	0.54	6.17	35.50	5.00	4.76	0.00
9.50	0.82	0.61	6.83	36.00	5.00	4.76	0.00
10.00	0.91	0.70	7.66	36.50	5.00	4.76	0.00
10.50	1.02	0.81	9.79	37.00	5.00	4.76	0.00
11.00	1.18	0.96	13.23	37.50	5.00	4.76	0.00
11.50	1.42	1.20	20.36	38.00	5.00	4.76	0.00
12.00	3.31	3.08	166.27	38.50	5.00	4.76	0.00
12.50	3.67	3.44	48.07	39.00	5.00	4.76	0.00
13.00	3.86	3.63	17.57	39.50	5.00	4.76	0.00
13.50	4.00	3.76	12.45	40.00	5.00	4.76	0.00
14.00	4.10	3.86	9.64	40.50	5.00	4.76	0.00
14.50	4.19	3.95	8.01	41.00	5.00	4.76	0.00
15.00	4.27	4.03	7.20	41.50	5.00	4.76	0.00
15.50	4.34	4.10	6.41	42.00	5.00	4.76	0.00
16.00	4.40	4.16	5.63	42.50	5.00	4.76	0.00
16.50	4.46	4.22	5.06	43.00	5.00	4.76	0.00
17.00	4.51	4.27	4.77	43.50	5.00	4.76	0.00
17.50	4.56	4.32	4.49	44.00	5.00	4.76	0.00
18.00	4.61	4.37	4.21	44.50	5.00	4.76	0.00
18.50	4.65	4.41	3.93	45.00	5.00	4.76	0.00
19.00	4.69	4.45	3.65				
19.50	4.73	4.49	3.37				
20.00	4.76	4.52	3.08				
20.50	4.79	4.56	2.90				
21.00	4.82	4.59	2.84				
21.50	4.85	4.62	2.78				
22.00	4.89	4.65	2.73				
22.50	4.91	4.68	2.67				
23.00	4.94	4.71	2.62				
23.50	4.97	4.74	2.56				
24.00	5.00	4.76	2.50				
24.50	5.00	4.76	0.21				
25.00	5.00	4.76	0.00				
25.50	5.00	4.76	0.00				
26.00	5.00	4.76	0.00				

Summary for Subcatchment 10S: DA-1

Runoff = 6.70 cfs @ 12.14 hrs, Volume= 0.556 af, Depth= 1.17"

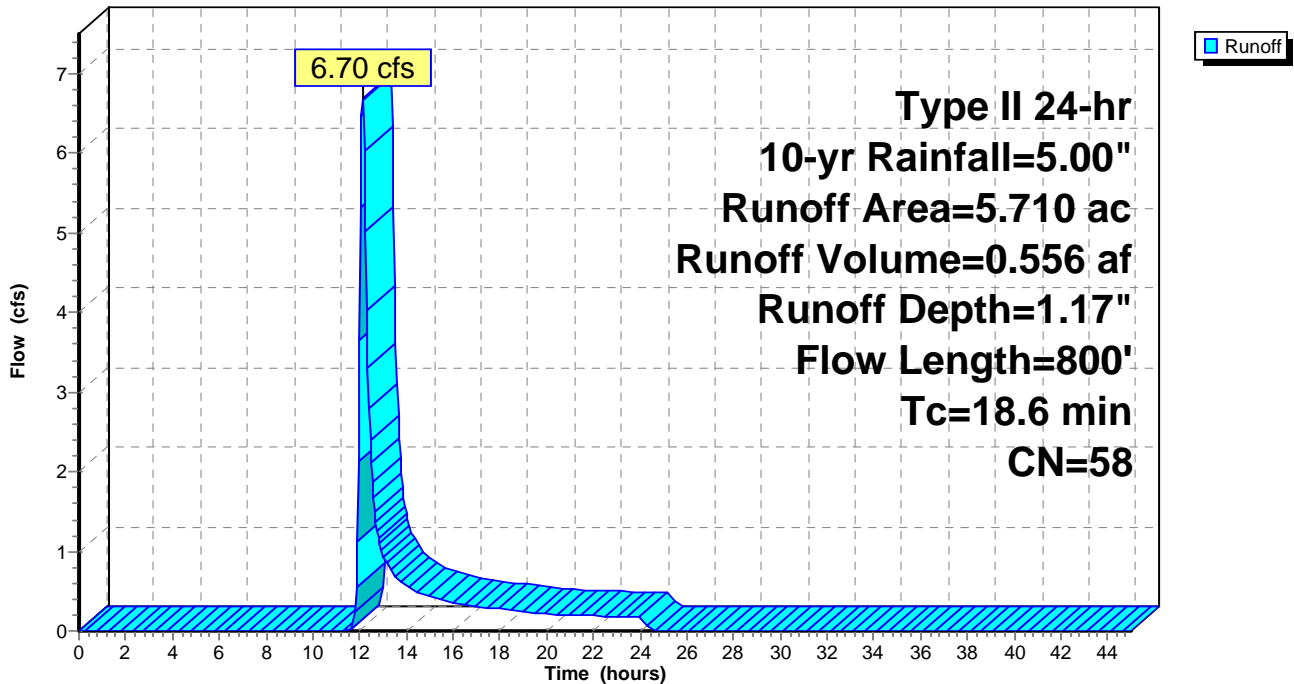
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
3.079	39	>75% Grass cover, Good, HSG A
0.349	80	>75% Grass cover, Good, HSG D
2.282	80	>75% Grass cover, Good, HSG D
5.710	58	Weighted Average
5.710		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	50	0.0050	0.09		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
2.8	250	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
6.2	500	0.0010	1.34	10.74	Channel Flow, Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.035
18.6	800	Total			

Subcatchment 10S: DA-1

Hydrograph



Hydrograph for Subcatchment 10S: DA-1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	5.00	1.17	0.00
0.50	0.03	0.00	0.00	27.00	5.00	1.17	0.00
1.00	0.05	0.00	0.00	27.50	5.00	1.17	0.00
1.50	0.08	0.00	0.00	28.00	5.00	1.17	0.00
2.00	0.11	0.00	0.00	28.50	5.00	1.17	0.00
2.50	0.14	0.00	0.00	29.00	5.00	1.17	0.00
3.00	0.17	0.00	0.00	29.50	5.00	1.17	0.00
3.50	0.21	0.00	0.00	30.00	5.00	1.17	0.00
4.00	0.24	0.00	0.00	30.50	5.00	1.17	0.00
4.50	0.28	0.00	0.00	31.00	5.00	1.17	0.00
5.00	0.32	0.00	0.00	31.50	5.00	1.17	0.00
5.50	0.36	0.00	0.00	32.00	5.00	1.17	0.00
6.00	0.40	0.00	0.00	32.50	5.00	1.17	0.00
6.50	0.45	0.00	0.00	33.00	5.00	1.17	0.00
7.00	0.50	0.00	0.00	33.50	5.00	1.17	0.00
7.50	0.55	0.00	0.00	34.00	5.00	1.17	0.00
8.00	0.60	0.00	0.00	34.50	5.00	1.17	0.00
8.50	0.66	0.00	0.00	35.00	5.00	1.17	0.00
9.00	0.74	0.00	0.00	35.50	5.00	1.17	0.00
9.50	0.82	0.00	0.00	36.00	5.00	1.17	0.00
10.00	0.91	0.00	0.00	36.50	5.00	1.17	0.00
10.50	1.02	0.00	0.00	37.00	5.00	1.17	0.00
11.00	1.18	0.00	0.00	37.50	5.00	1.17	0.00
11.50	1.42	0.00	0.00	38.00	5.00	1.17	0.00
12.00	3.31	0.38	3.64	38.50	5.00	1.17	0.00
12.50	3.67	0.52	2.11	39.00	5.00	1.17	0.00
13.00	3.86	0.60	0.95	39.50	5.00	1.17	0.00
13.50	4.00	0.66	0.71	40.00	5.00	1.17	0.00
14.00	4.10	0.71	0.56	40.50	5.00	1.17	0.00
14.50	4.19	0.75	0.48	41.00	5.00	1.17	0.00
15.00	4.27	0.79	0.44	41.50	5.00	1.17	0.00
15.50	4.34	0.82	0.40	42.00	5.00	1.17	0.00
16.00	4.40	0.85	0.35	42.50	5.00	1.17	0.00
16.50	4.46	0.88	0.32	43.00	5.00	1.17	0.00
17.00	4.51	0.91	0.31	43.50	5.00	1.17	0.00
17.50	4.56	0.93	0.29	44.00	5.00	1.17	0.00
18.00	4.61	0.96	0.28	44.50	5.00	1.17	0.00
18.50	4.65	0.98	0.26	45.00	5.00	1.17	0.00
19.00	4.69	1.00	0.24				
19.50	4.73	1.02	0.23				
20.00	4.76	1.04	0.21				
20.50	4.79	1.06	0.20				
21.00	4.82	1.07	0.19				
21.50	4.85	1.09	0.19				
22.00	4.89	1.11	0.19				
22.50	4.91	1.12	0.19				
23.00	4.94	1.14	0.18				
23.50	4.97	1.15	0.18				
24.00	5.00	1.17	0.18				
24.50	5.00	1.17	0.01				
25.00	5.00	1.17	0.00				
25.50	5.00	1.17	0.00				
26.00	5.00	1.17	0.00				

Summary for Subcatchment 11S: DA-2

Runoff = 4.57 cfs @ 12.06 hrs, Volume= 0.315 af, Depth= 0.98"

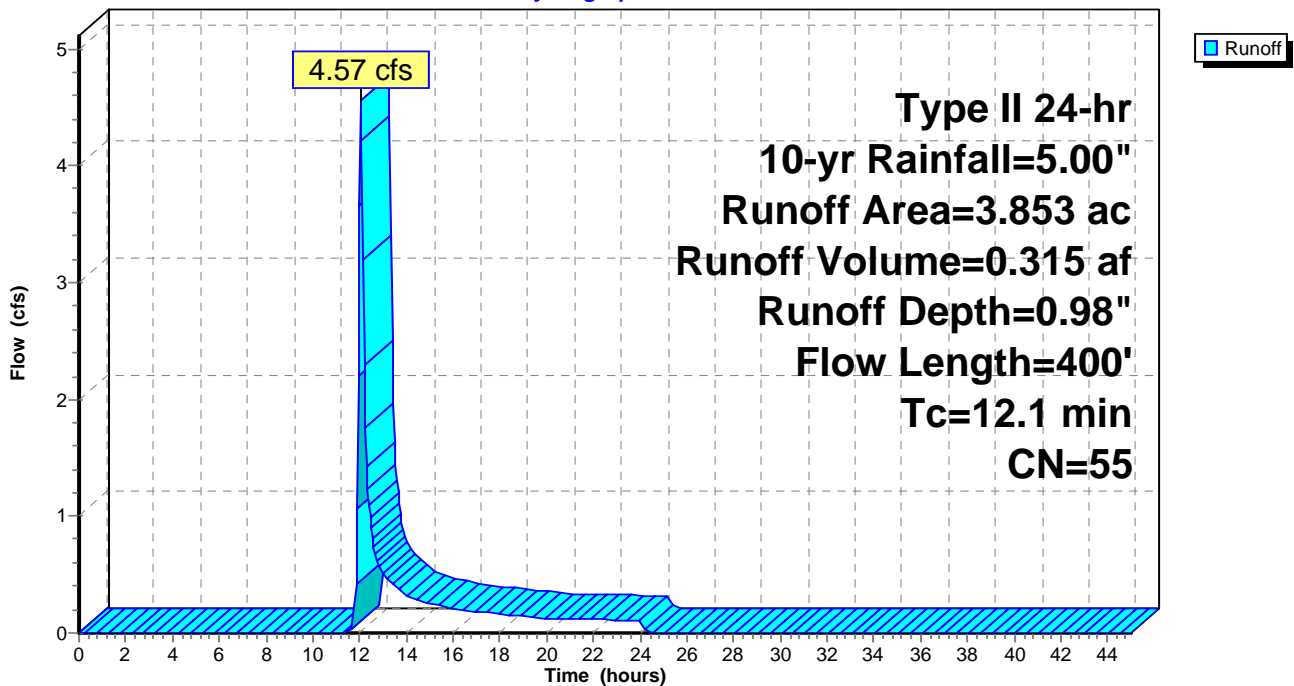
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 0.001	39	RP-4
* 0.194	80	RP-4
* 2.305	39	RP-6
* 0.182	80	RP-6
* 1.171	80	RP-6
3.853	55	Weighted Average
3.853		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	50	0.0050	0.09		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
1.7	150	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.8	200	0.0100	4.25	33.97	Channel Flow, Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.035
12.1	400	Total			

Subcatchment 11S: DA-2

Hydrograph



Hydrograph for Subcatchment 11S: DA-2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	5.00	0.98	0.00
0.50	0.03	0.00	0.00	27.00	5.00	0.98	0.00
1.00	0.05	0.00	0.00	27.50	5.00	0.98	0.00
1.50	0.08	0.00	0.00	28.00	5.00	0.98	0.00
2.00	0.11	0.00	0.00	28.50	5.00	0.98	0.00
2.50	0.14	0.00	0.00	29.00	5.00	0.98	0.00
3.00	0.17	0.00	0.00	29.50	5.00	0.98	0.00
3.50	0.21	0.00	0.00	30.00	5.00	0.98	0.00
4.00	0.24	0.00	0.00	30.50	5.00	0.98	0.00
4.50	0.28	0.00	0.00	31.00	5.00	0.98	0.00
5.00	0.32	0.00	0.00	31.50	5.00	0.98	0.00
5.50	0.36	0.00	0.00	32.00	5.00	0.98	0.00
6.00	0.40	0.00	0.00	32.50	5.00	0.98	0.00
6.50	0.45	0.00	0.00	33.00	5.00	0.98	0.00
7.00	0.50	0.00	0.00	33.50	5.00	0.98	0.00
7.50	0.55	0.00	0.00	34.00	5.00	0.98	0.00
8.00	0.60	0.00	0.00	34.50	5.00	0.98	0.00
8.50	0.66	0.00	0.00	35.00	5.00	0.98	0.00
9.00	0.74	0.00	0.00	35.50	5.00	0.98	0.00
9.50	0.82	0.00	0.00	36.00	5.00	0.98	0.00
10.00	0.91	0.00	0.00	36.50	5.00	0.98	0.00
10.50	1.02	0.00	0.00	37.00	5.00	0.98	0.00
11.00	1.18	0.00	0.00	37.50	5.00	0.98	0.00
11.50	1.42	0.00	0.00	38.00	5.00	0.98	0.00
12.00	3.31	0.29	3.65	38.50	5.00	0.98	0.00
12.50	3.67	0.41	0.90	39.00	5.00	0.98	0.00
13.00	3.86	0.48	0.51	39.50	5.00	0.98	0.00
13.50	4.00	0.53	0.40	40.00	5.00	0.98	0.00
14.00	4.10	0.57	0.32	40.50	5.00	0.98	0.00
14.50	4.19	0.61	0.28	41.00	5.00	0.98	0.00
15.00	4.27	0.64	0.26	41.50	5.00	0.98	0.00
15.50	4.34	0.67	0.23	42.00	5.00	0.98	0.00
16.00	4.40	0.70	0.21	42.50	5.00	0.98	0.00
16.50	4.46	0.72	0.19	43.00	5.00	0.98	0.00
17.00	4.51	0.75	0.18	43.50	5.00	0.98	0.00
17.50	4.56	0.77	0.17	44.00	5.00	0.98	0.00
18.00	4.61	0.79	0.16	44.50	5.00	0.98	0.00
18.50	4.65	0.81	0.16	45.00	5.00	0.98	0.00
19.00	4.69	0.83	0.15				
19.50	4.73	0.85	0.13				
20.00	4.76	0.86	0.12				
20.50	4.79	0.88	0.12				
21.00	4.82	0.89	0.12				
21.50	4.85	0.91	0.12				
22.00	4.89	0.92	0.11				
22.50	4.91	0.94	0.11				
23.00	4.94	0.95	0.11				
23.50	4.97	0.97	0.11				
24.00	5.00	0.98	0.11				
24.50	5.00	0.98	0.00				
25.00	5.00	0.98	0.00				
25.50	5.00	0.98	0.00				
26.00	5.00	0.98	0.00				

Summary for Subcatchment 12S: DA-4 Imp

Runoff = 67.08 cfs @ 12.04 hrs, Volume= 4.648 af, Depth= 4.76"

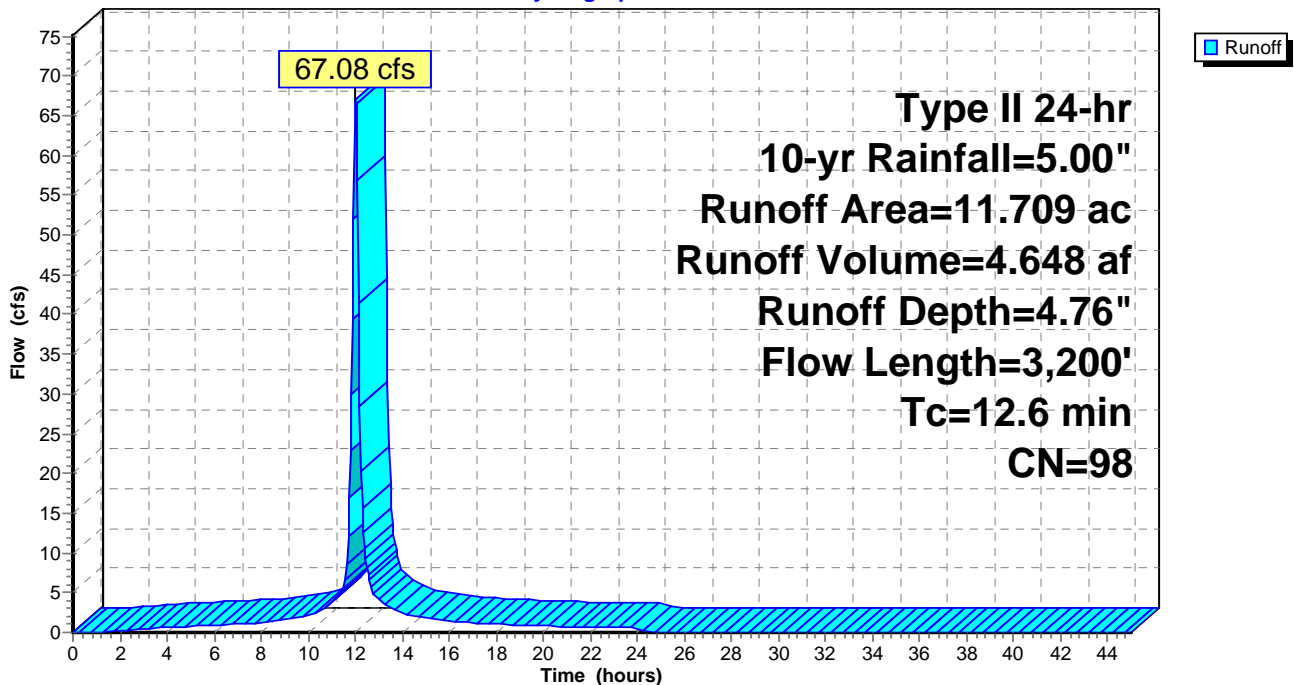
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 11.709	98	
11.709		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	50	0.0050	0.70		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
4.1	500	0.0100	2.03		Shallow Concentrated Flow, Paved Kv= 20.3 fps
4.4	1,400	0.0100	5.26	6.46	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
2.9	1,250	0.0100	7.20	22.62	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
12.6	3,200	Total			

Subcatchment 12S: DA-4 Imp

Hydrograph



Hydrograph for Subcatchment 12S: DA-4 Imp

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	5.00	4.76	0.00
0.50	0.03	0.00	0.00	27.00	5.00	4.76	0.00
1.00	0.05	0.00	0.02	27.50	5.00	4.76	0.00
1.50	0.08	0.01	0.15	28.00	5.00	4.76	0.00
2.00	0.11	0.02	0.27	28.50	5.00	4.76	0.00
2.50	0.14	0.03	0.37	29.00	5.00	4.76	0.00
3.00	0.17	0.05	0.45	29.50	5.00	4.76	0.00
3.50	0.21	0.07	0.53	30.00	5.00	4.76	0.00
4.00	0.24	0.10	0.59	30.50	5.00	4.76	0.00
4.50	0.28	0.13	0.66	31.00	5.00	4.76	0.00
5.00	0.32	0.16	0.74	31.50	5.00	4.76	0.00
5.50	0.36	0.19	0.82	32.00	5.00	4.76	0.00
6.00	0.40	0.23	0.89	32.50	5.00	4.76	0.00
6.50	0.45	0.27	0.97	33.00	5.00	4.76	0.00
7.00	0.50	0.31	1.04	33.50	5.00	4.76	0.00
7.50	0.55	0.36	1.11	34.00	5.00	4.76	0.00
8.00	0.60	0.41	1.18	34.50	5.00	4.76	0.00
8.50	0.66	0.47	1.38	35.00	5.00	4.76	0.00
9.00	0.74	0.54	1.68	35.50	5.00	4.76	0.00
9.50	0.82	0.61	1.80	36.00	5.00	4.76	0.00
10.00	0.91	0.70	2.09	36.50	5.00	4.76	0.00
10.50	1.02	0.81	2.70	37.00	5.00	4.76	0.00
11.00	1.18	0.96	3.69	37.50	5.00	4.76	0.00
11.50	1.42	1.20	5.87	38.00	5.00	4.76	0.00
12.00	3.31	3.08	63.77	38.50	5.00	4.76	0.00
12.50	3.67	3.44	8.21	39.00	5.00	4.76	0.00
13.00	3.86	3.63	4.19	39.50	5.00	4.76	0.00
13.50	4.00	3.76	3.09	40.00	5.00	4.76	0.00
14.00	4.10	3.86	2.41	40.50	5.00	4.76	0.00
14.50	4.19	3.95	2.05	41.00	5.00	4.76	0.00
15.00	4.27	4.03	1.85	41.50	5.00	4.76	0.00
15.50	4.34	4.10	1.64	42.00	5.00	4.76	0.00
16.00	4.40	4.16	1.44	42.50	5.00	4.76	0.00
16.50	4.46	4.22	1.31	43.00	5.00	4.76	0.00
17.00	4.51	4.27	1.24	43.50	5.00	4.76	0.00
17.50	4.56	4.32	1.16	44.00	5.00	4.76	0.00
18.00	4.61	4.37	1.09	44.50	5.00	4.76	0.00
18.50	4.65	4.41	1.02	45.00	5.00	4.76	0.00
19.00	4.69	4.45	0.94				
19.50	4.73	4.49	0.87				
20.00	4.76	4.52	0.79				
20.50	4.79	4.56	0.76				
21.00	4.82	4.59	0.74				
21.50	4.85	4.62	0.73				
22.00	4.89	4.65	0.71				
22.50	4.91	4.68	0.70				
23.00	4.94	4.71	0.68				
23.50	4.97	4.74	0.67				
24.00	5.00	4.76	0.65				
24.50	5.00	4.76	0.01				
25.00	5.00	4.76	0.00				
25.50	5.00	4.76	0.00				
26.00	5.00	4.76	0.00				

Summary for Subcatchment 14S: DA-4

Runoff = 32.83 cfs @ 12.14 hrs, Volume= 2.524 af, Depth= 2.12"

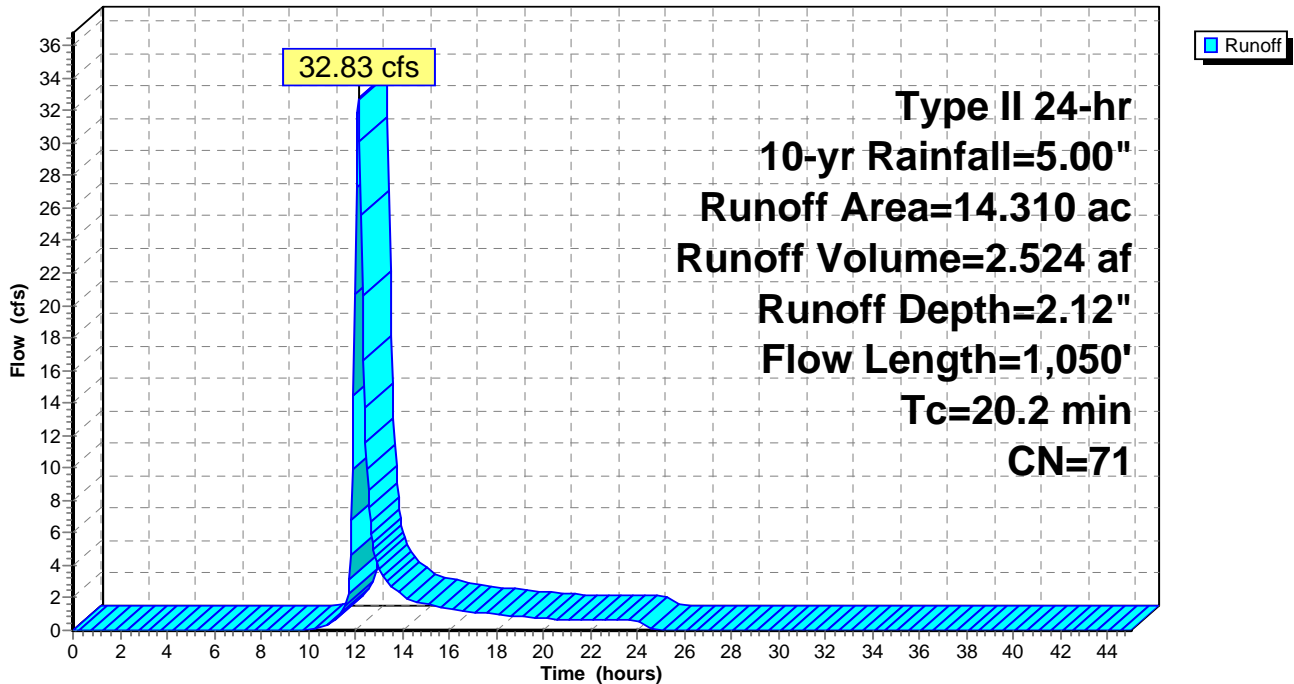
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=5.00"

Area (ac)	CN	Description
* 14.310	71	
14.310		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.0	50	0.0050	0.21		Sheet Flow, Fallow n= 0.050 P2= 3.30"
14.2	500	0.0070	0.59		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.0	500	0.0100	4.25	33.97	Channel Flow, Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.035
20.2	1,050	Total			

Subcatchment 14S: DA-4

Hydrograph



Hydrograph for Subcatchment 14S: DA-4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	5.00	2.12	0.00
0.50	0.03	0.00	0.00	27.00	5.00	2.12	0.00
1.00	0.05	0.00	0.00	27.50	5.00	2.12	0.00
1.50	0.08	0.00	0.00	28.00	5.00	2.12	0.00
2.00	0.11	0.00	0.00	28.50	5.00	2.12	0.00
2.50	0.14	0.00	0.00	29.00	5.00	2.12	0.00
3.00	0.17	0.00	0.00	29.50	5.00	2.12	0.00
3.50	0.21	0.00	0.00	30.00	5.00	2.12	0.00
4.00	0.24	0.00	0.00	30.50	5.00	2.12	0.00
4.50	0.28	0.00	0.00	31.00	5.00	2.12	0.00
5.00	0.32	0.00	0.00	31.50	5.00	2.12	0.00
5.50	0.36	0.00	0.00	32.00	5.00	2.12	0.00
6.00	0.40	0.00	0.00	32.50	5.00	2.12	0.00
6.50	0.45	0.00	0.00	33.00	5.00	2.12	0.00
7.00	0.50	0.00	0.00	33.50	5.00	2.12	0.00
7.50	0.55	0.00	0.00	34.00	5.00	2.12	0.00
8.00	0.60	0.00	0.00	34.50	5.00	2.12	0.00
8.50	0.66	0.00	0.00	35.00	5.00	2.12	0.00
9.00	0.74	0.00	0.00	35.50	5.00	2.12	0.00
9.50	0.82	0.00	0.00	36.00	5.00	2.12	0.00
10.00	0.91	0.00	0.04	36.50	5.00	2.12	0.00
10.50	1.02	0.01	0.20	37.00	5.00	2.12	0.00
11.00	1.18	0.03	0.50	37.50	5.00	2.12	0.00
11.50	1.42	0.08	1.23	38.00	5.00	2.12	0.00
12.00	3.31	0.95	20.68	38.50	5.00	2.12	0.00
12.50	3.67	1.18	9.90	39.00	5.00	2.12	0.00
13.00	3.86	1.30	3.84	39.50	5.00	2.12	0.00
13.50	4.00	1.39	2.74	40.00	5.00	2.12	0.00
14.00	4.10	1.46	2.15	40.50	5.00	2.12	0.00
14.50	4.19	1.52	1.80	41.00	5.00	2.12	0.00
15.00	4.27	1.58	1.63	41.50	5.00	2.12	0.00
15.50	4.34	1.63	1.47	42.00	5.00	2.12	0.00
16.00	4.40	1.67	1.30	42.50	5.00	2.12	0.00
16.50	4.46	1.71	1.17	43.00	5.00	2.12	0.00
17.00	4.51	1.75	1.11	43.50	5.00	2.12	0.00
17.50	4.56	1.79	1.05	44.00	5.00	2.12	0.00
18.00	4.61	1.82	0.99	44.50	5.00	2.12	0.00
18.50	4.65	1.85	0.93	45.00	5.00	2.12	0.00
19.00	4.69	1.88	0.86				
19.50	4.73	1.91	0.80				
20.00	4.76	1.94	0.74				
20.50	4.79	1.96	0.69				
21.00	4.82	1.98	0.68				
21.50	4.85	2.01	0.67				
22.00	4.89	2.03	0.66				
22.50	4.91	2.05	0.64				
23.00	4.94	2.07	0.63				
23.50	4.97	2.10	0.62				
24.00	5.00	2.12	0.61				
24.50	5.00	2.12	0.06				
25.00	5.00	2.12	0.00				
25.50	5.00	2.12	0.00				
26.00	5.00	2.12	0.00				

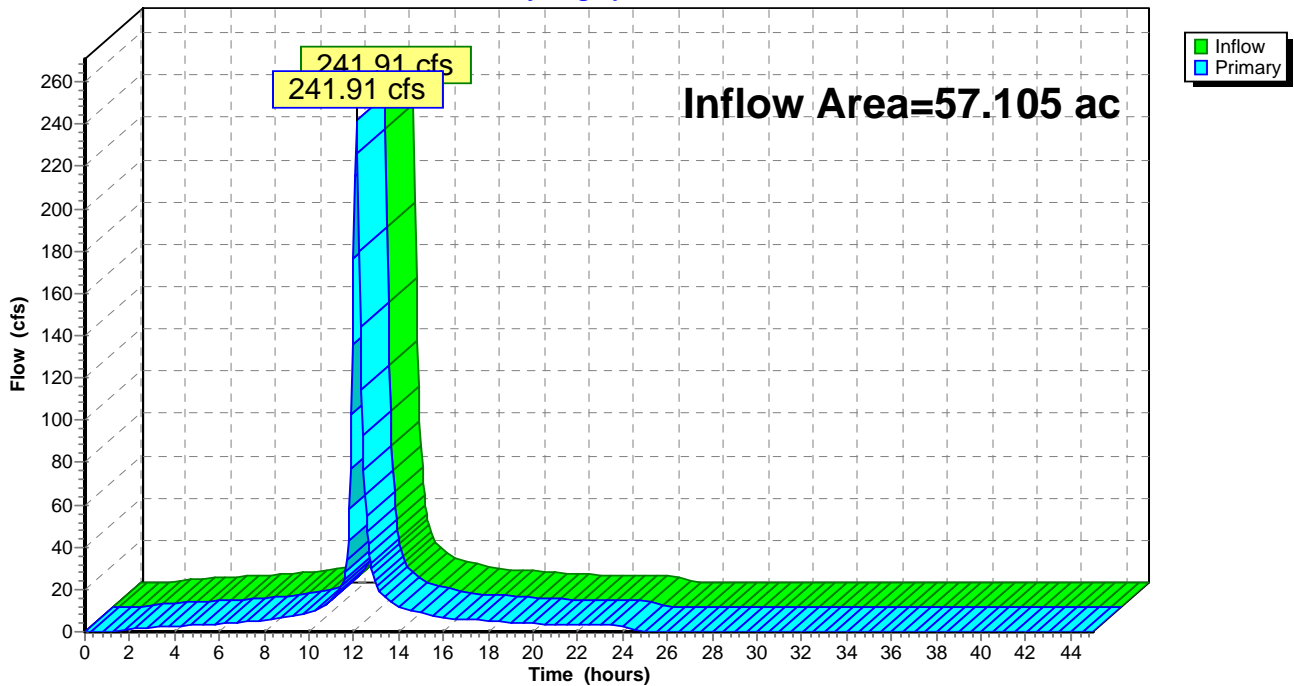
Summary for Link 4L: POA #1

Inflow Area = 57.105 ac, 90.00% Impervious, Inflow Depth = 4.40" for 10-yr event
Inflow = 241.91 cfs @ 12.12 hrs, Volume= 20.956 af
Primary = 241.91 cfs @ 12.12 hrs, Volume= 20.956 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 4L: POA #1

Hydrograph



Hydrograph for Link 4L: POA #1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.00	0.00	0.00
0.50	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.00	0.02	0.00	0.02	27.50	0.00	0.00	0.00
1.50	0.53	0.00	0.53	28.00	0.00	0.00	0.00
2.00	1.07	0.00	1.07	28.50	0.00	0.00	0.00
2.50	1.52	0.00	1.52	29.00	0.00	0.00	0.00
3.00	1.91	0.00	1.91	29.50	0.00	0.00	0.00
3.50	2.24	0.00	2.24	30.00	0.00	0.00	0.00
4.00	2.53	0.00	2.53	30.50	0.00	0.00	0.00
4.50	2.83	0.00	2.83	31.00	0.00	0.00	0.00
5.00	3.17	0.00	3.17	31.50	0.00	0.00	0.00
5.50	3.51	0.00	3.51	32.00	0.00	0.00	0.00
6.00	3.84	0.00	3.84	32.50	0.00	0.00	0.00
6.50	4.17	0.00	4.17	33.00	0.00	0.00	0.00
7.00	4.48	0.00	4.48	33.50	0.00	0.00	0.00
7.50	4.80	0.00	4.80	34.00	0.00	0.00	0.00
8.00	5.10	0.00	5.10	34.50	0.00	0.00	0.00
8.50	5.78	0.00	5.78	35.00	0.00	0.00	0.00
9.00	7.03	0.00	7.03	35.50	0.00	0.00	0.00
9.50	7.85	0.00	7.85	36.00	0.00	0.00	0.00
10.00	8.73	0.00	8.73	36.50	0.00	0.00	0.00
10.50	11.13	0.00	11.13	37.00	0.00	0.00	0.00
11.00	14.99	0.00	14.99	37.50	0.00	0.00	0.00
11.50	22.88	0.00	22.88	38.00	0.00	0.00	0.00
12.00	176.52	0.00	176.52	38.50	0.00	0.00	0.00
12.50	64.47	0.00	64.47	39.00	0.00	0.00	0.00
13.00	22.14	0.00	22.14	39.50	0.00	0.00	0.00
13.50	15.27	0.00	15.27	40.00	0.00	0.00	0.00
14.00	11.82	0.00	11.82	40.50	0.00	0.00	0.00
14.50	9.77	0.00	9.77	41.00	0.00	0.00	0.00
15.00	8.78	0.00	8.78	41.50	0.00	0.00	0.00
15.50	7.83	0.00	7.83	42.00	0.00	0.00	0.00
16.00	6.88	0.00	6.88	42.50	0.00	0.00	0.00
16.50	6.17	0.00	6.17	43.00	0.00	0.00	0.00
17.00	5.82	0.00	5.82	43.50	0.00	0.00	0.00
17.50	5.48	0.00	5.48	44.00	0.00	0.00	0.00
18.00	5.14	0.00	5.14	44.50	0.00	0.00	0.00
18.50	4.80	0.00	4.80	45.00	0.00	0.00	0.00
19.00	4.46	0.00	4.46				
19.50	4.12	0.00	4.12				
20.00	3.78	0.00	3.78				
20.50	3.54	0.00	3.54				
21.00	3.47	0.00	3.47				
21.50	3.40	0.00	3.40				
22.00	3.33	0.00	3.33				
22.50	3.27	0.00	3.27				
23.00	3.20	0.00	3.20				
23.50	3.13	0.00	3.13				
24.00	3.06	0.00	3.06				
24.50	0.35	0.00	0.35				
25.00	0.01	0.00	0.01				
25.50	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				

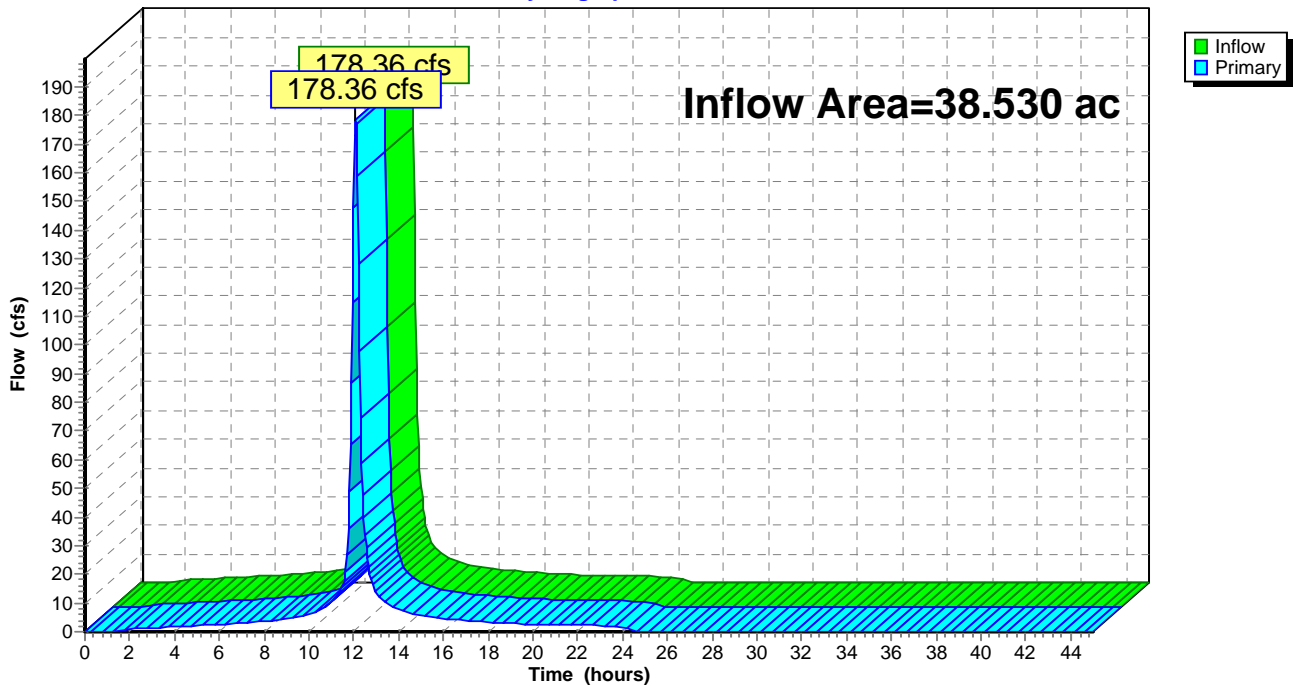
Summary for Link 5L: POA #2

Inflow Area = 38.530 ac, 90.00% Impervious, Inflow Depth = 4.38" for 10-yr event
Inflow = 178.36 cfs @ 12.08 hrs, Volume= 14.079 af
Primary = 178.36 cfs @ 12.08 hrs, Volume= 14.079 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 5L: POA #2

Hydrograph



Hydrograph for Link 5L: POA #2

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.00	0.00	0.00
0.50	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.00	0.02	0.00	0.02	27.50	0.00	0.00	0.00
1.50	0.40	0.00	0.40	28.00	0.00	0.00	0.00
2.00	0.76	0.00	0.76	28.50	0.00	0.00	0.00
2.50	1.06	0.00	1.06	29.00	0.00	0.00	0.00
3.00	1.31	0.00	1.31	29.50	0.00	0.00	0.00
3.50	1.53	0.00	1.53	30.00	0.00	0.00	0.00
4.00	1.73	0.00	1.73	30.50	0.00	0.00	0.00
4.50	1.93	0.00	1.93	31.00	0.00	0.00	0.00
5.00	2.17	0.00	2.17	31.50	0.00	0.00	0.00
5.50	2.39	0.00	2.39	32.00	0.00	0.00	0.00
6.00	2.62	0.00	2.62	32.50	0.00	0.00	0.00
6.50	2.84	0.00	2.84	33.00	0.00	0.00	0.00
7.00	3.05	0.00	3.05	33.50	0.00	0.00	0.00
7.50	3.26	0.00	3.26	34.00	0.00	0.00	0.00
8.00	3.46	0.00	3.46	34.50	0.00	0.00	0.00
8.50	3.98	0.00	3.98	35.00	0.00	0.00	0.00
9.00	4.84	0.00	4.84	35.50	0.00	0.00	0.00
9.50	5.32	0.00	5.32	36.00	0.00	0.00	0.00
10.00	6.01	0.00	6.01	36.50	0.00	0.00	0.00
10.50	7.72	0.00	7.72	37.00	0.00	0.00	0.00
11.00	10.46	0.00	10.46	37.50	0.00	0.00	0.00
11.50	16.25	0.00	16.25	38.00	0.00	0.00	0.00
12.00	147.61	0.00	147.61	38.50	0.00	0.00	0.00
12.50	33.76	0.00	33.76	39.00	0.00	0.00	0.00
13.00	13.75	0.00	13.75	39.50	0.00	0.00	0.00
13.50	9.92	0.00	9.92	40.00	0.00	0.00	0.00
14.00	7.71	0.00	7.71	40.50	0.00	0.00	0.00
14.50	6.46	0.00	6.46	41.00	0.00	0.00	0.00
15.00	5.82	0.00	5.82	41.50	0.00	0.00	0.00
15.50	5.18	0.00	5.18	42.00	0.00	0.00	0.00
16.00	4.54	0.00	4.54	42.50	0.00	0.00	0.00
16.50	4.11	0.00	4.11	43.00	0.00	0.00	0.00
17.00	3.88	0.00	3.88	43.50	0.00	0.00	0.00
17.50	3.65	0.00	3.65	44.00	0.00	0.00	0.00
18.00	3.42	0.00	3.42	44.50	0.00	0.00	0.00
18.50	3.19	0.00	3.19	45.00	0.00	0.00	0.00
19.00	2.97	0.00	2.97				
19.50	2.74	0.00	2.74				
20.00	2.51	0.00	2.51				
20.50	2.37	0.00	2.37				
21.00	2.32	0.00	2.32				
21.50	2.28	0.00	2.28				
22.00	2.23	0.00	2.23				
22.50	2.19	0.00	2.19				
23.00	2.14	0.00	2.14				
23.50	2.10	0.00	2.10				
24.00	2.05	0.00	2.05				
24.50	0.11	0.00	0.11				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				

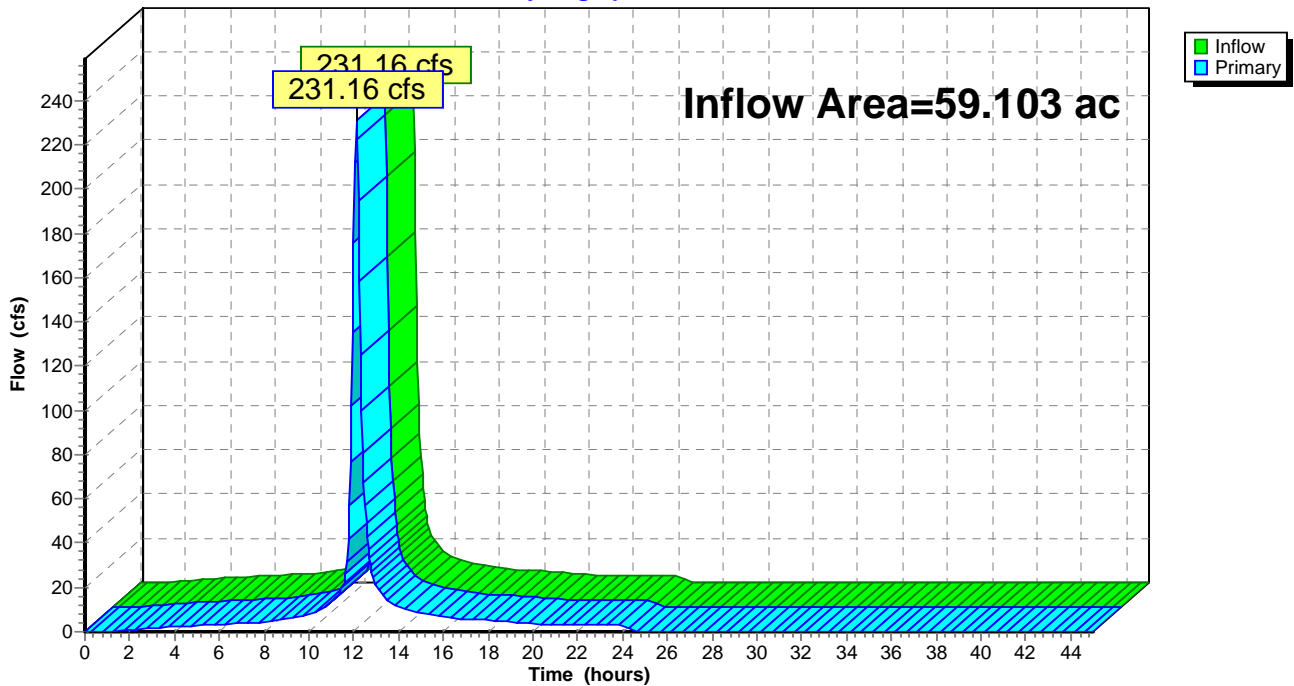
Summary for Link 6L: POA #3

Inflow Area = 59.103 ac, 78.05% Impervious, Inflow Depth = 3.97" for 10-yr event
Inflow = 231.16 cfs @ 12.11 hrs, Volume= 19.534 af
Primary = 231.16 cfs @ 12.11 hrs, Volume= 19.534 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 6L: POA #3

Hydrograph



Hydrograph for Link 6L: POA #3

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.00	0.00	0.00
0.50	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.00	0.02	0.00	0.02	27.50	0.00	0.00	0.00
1.50	0.48	0.00	0.48	28.00	0.00	0.00	0.00
2.00	0.95	0.00	0.95	28.50	0.00	0.00	0.00
2.50	1.34	0.00	1.34	29.00	0.00	0.00	0.00
3.00	1.67	0.00	1.67	29.50	0.00	0.00	0.00
3.50	1.96	0.00	1.96	30.00	0.00	0.00	0.00
4.00	2.21	0.00	2.21	30.50	0.00	0.00	0.00
4.50	2.47	0.00	2.47	31.00	0.00	0.00	0.00
5.00	2.77	0.00	2.77	31.50	0.00	0.00	0.00
5.50	3.06	0.00	3.06	32.00	0.00	0.00	0.00
6.00	3.35	0.00	3.35	32.50	0.00	0.00	0.00
6.50	3.63	0.00	3.63	33.00	0.00	0.00	0.00
7.00	3.91	0.00	3.91	33.50	0.00	0.00	0.00
7.50	4.18	0.00	4.18	34.00	0.00	0.00	0.00
8.00	4.44	0.00	4.44	34.50	0.00	0.00	0.00
8.50	5.07	0.00	5.07	35.00	0.00	0.00	0.00
9.00	6.17	0.00	6.17	35.50	0.00	0.00	0.00
9.50	6.83	0.00	6.83	36.00	0.00	0.00	0.00
10.00	7.66	0.00	7.66	36.50	0.00	0.00	0.00
10.50	9.79	0.00	9.79	37.00	0.00	0.00	0.00
11.00	13.23	0.00	13.23	37.50	0.00	0.00	0.00
11.50	20.52	0.00	20.52	38.00	0.00	0.00	0.00
12.00	175.47	0.00	175.47	38.50	0.00	0.00	0.00
12.50	56.92	0.00	56.92	39.00	0.00	0.00	0.00
13.00	20.89	0.00	20.89	39.50	0.00	0.00	0.00
13.50	14.71	0.00	14.71	40.00	0.00	0.00	0.00
14.00	11.42	0.00	11.42	40.50	0.00	0.00	0.00
14.50	9.49	0.00	9.49	41.00	0.00	0.00	0.00
15.00	8.54	0.00	8.54	41.50	0.00	0.00	0.00
15.50	7.63	0.00	7.63	42.00	0.00	0.00	0.00
16.00	6.71	0.00	6.71	42.50	0.00	0.00	0.00
16.50	6.03	0.00	6.03	43.00	0.00	0.00	0.00
17.00	5.69	0.00	5.69	43.50	0.00	0.00	0.00
17.50	5.36	0.00	5.36	44.00	0.00	0.00	0.00
18.00	5.03	0.00	5.03	44.50	0.00	0.00	0.00
18.50	4.70	0.00	4.70	45.00	0.00	0.00	0.00
19.00	4.37	0.00	4.37				
19.50	4.04	0.00	4.04				
20.00	3.71	0.00	3.71				
20.50	3.48	0.00	3.48				
21.00	3.41	0.00	3.41				
21.50	3.35	0.00	3.35				
22.00	3.28	0.00	3.28				
22.50	3.22	0.00	3.22				
23.00	3.15	0.00	3.15				
23.50	3.09	0.00	3.09				
24.00	3.02	0.00	3.02				
24.50	0.30	0.00	0.30				
25.00	0.01	0.00	0.01				
25.50	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				

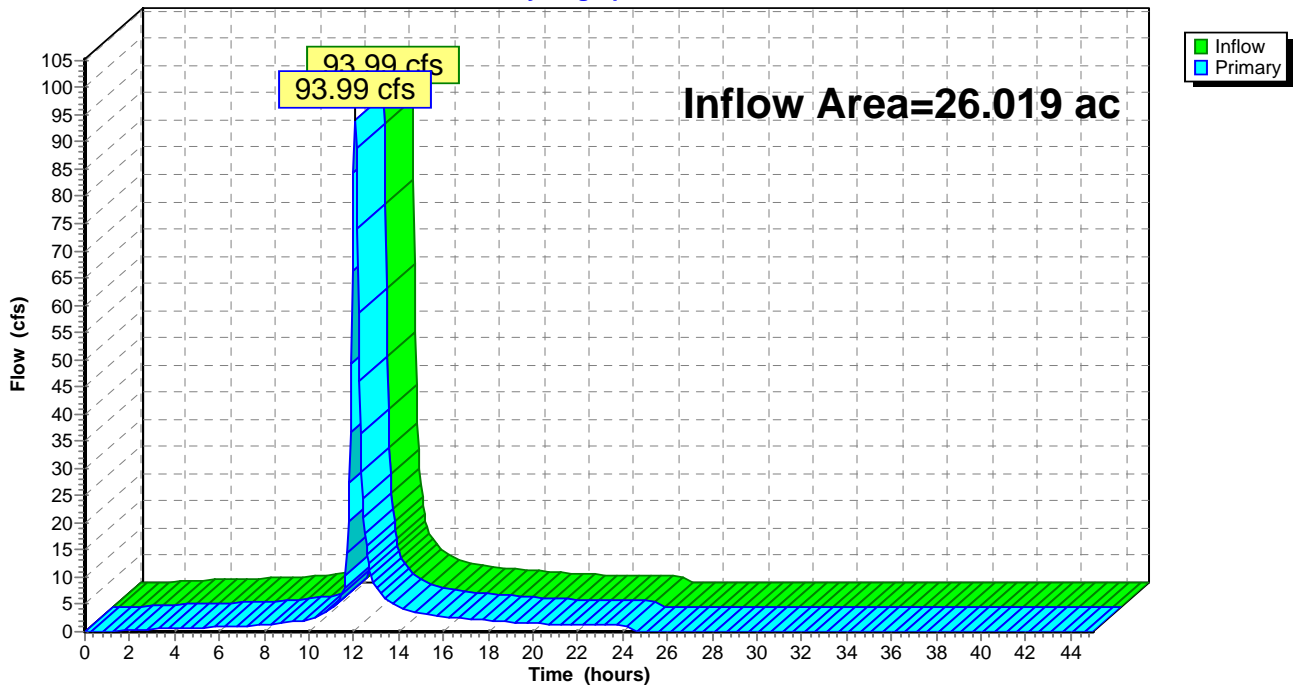
Summary for Link 13L: POA #4

Inflow Area = 26.019 ac, 45.00% Impervious, Inflow Depth = 3.31" for 10-yr event
Inflow = 93.99 cfs @ 12.06 hrs, Volume= 7.172 af
Primary = 93.99 cfs @ 12.06 hrs, Volume= 7.172 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 13L: POA #4

Hydrograph



Hydrograph for Link 13L: POA #4

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.00	0.00	0.00
0.50	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.00	0.02	0.00	0.02	27.50	0.00	0.00	0.00
1.50	0.15	0.00	0.15	28.00	0.00	0.00	0.00
2.00	0.27	0.00	0.27	28.50	0.00	0.00	0.00
2.50	0.37	0.00	0.37	29.00	0.00	0.00	0.00
3.00	0.45	0.00	0.45	29.50	0.00	0.00	0.00
3.50	0.53	0.00	0.53	30.00	0.00	0.00	0.00
4.00	0.59	0.00	0.59	30.50	0.00	0.00	0.00
4.50	0.66	0.00	0.66	31.00	0.00	0.00	0.00
5.00	0.74	0.00	0.74	31.50	0.00	0.00	0.00
5.50	0.82	0.00	0.82	32.00	0.00	0.00	0.00
6.00	0.89	0.00	0.89	32.50	0.00	0.00	0.00
6.50	0.97	0.00	0.97	33.00	0.00	0.00	0.00
7.00	1.04	0.00	1.04	33.50	0.00	0.00	0.00
7.50	1.11	0.00	1.11	34.00	0.00	0.00	0.00
8.00	1.18	0.00	1.18	34.50	0.00	0.00	0.00
8.50	1.38	0.00	1.38	35.00	0.00	0.00	0.00
9.00	1.68	0.00	1.68	35.50	0.00	0.00	0.00
9.50	1.80	0.00	1.80	36.00	0.00	0.00	0.00
10.00	2.13	0.00	2.13	36.50	0.00	0.00	0.00
10.50	2.90	0.00	2.90	37.00	0.00	0.00	0.00
11.00	4.20	0.00	4.20	37.50	0.00	0.00	0.00
11.50	7.10	0.00	7.10	38.00	0.00	0.00	0.00
12.00	84.44	0.00	84.44	38.50	0.00	0.00	0.00
12.50	18.11	0.00	18.11	39.00	0.00	0.00	0.00
13.00	8.03	0.00	8.03	39.50	0.00	0.00	0.00
13.50	5.83	0.00	5.83	40.00	0.00	0.00	0.00
14.00	4.56	0.00	4.56	40.50	0.00	0.00	0.00
14.50	3.85	0.00	3.85	41.00	0.00	0.00	0.00
15.00	3.48	0.00	3.48	41.50	0.00	0.00	0.00
15.50	3.11	0.00	3.11	42.00	0.00	0.00	0.00
16.00	2.73	0.00	2.73	42.50	0.00	0.00	0.00
16.50	2.48	0.00	2.48	43.00	0.00	0.00	0.00
17.00	2.34	0.00	2.34	43.50	0.00	0.00	0.00
17.50	2.21	0.00	2.21	44.00	0.00	0.00	0.00
18.00	2.08	0.00	2.08	44.50	0.00	0.00	0.00
18.50	1.94	0.00	1.94	45.00	0.00	0.00	0.00
19.00	1.81	0.00	1.81				
19.50	1.67	0.00	1.67				
20.00	1.53	0.00	1.53				
20.50	1.45	0.00	1.45				
21.00	1.42	0.00	1.42				
21.50	1.40	0.00	1.40				
22.00	1.37	0.00	1.37				
22.50	1.34	0.00	1.34				
23.00	1.32	0.00	1.32				
23.50	1.29	0.00	1.29				
24.00	1.26	0.00	1.26				
24.50	0.07	0.00	0.07				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				

Time span=0.00-45.00 hrs, dt=0.05 hrs, 901 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 3S: DA-3 Runoff Area=14.476 ac 10.38% Impervious Runoff Depth=3.91"
Flow Length=2,300' Tc=23.8 min CN=63 Runoff=56.01 cfs 4.712 af

Subcatchment 7S: DA-1 Imp Runoff Area=51.395 ac 100.00% Impervious Runoff Depth=8.06"
Flow Length=3,987' Tc=20.7 min CN=98 Runoff=392.07 cfs 34.520 af

Subcatchment 8S: DA-2 Imp Runoff Area=34.677 ac 100.00% Impervious Runoff Depth=8.06"
Flow Length=2,879' Tc=17.2 min CN=98 Runoff=289.93 cfs 23.291 af

Subcatchment 9S: DA-3 Imp Runoff Area=44.627 ac 100.00% Impervious Runoff Depth=8.06"
Flow Length=3,250' Tc=19.0 min CN=98 Runoff=356.03 cfs 29.975 af

Subcatchment 10S: DA-1 Runoff Area=5.710 ac 0.00% Impervious Runoff Depth=3.33"
Flow Length=800' Tc=18.6 min CN=58 Runoff=21.54 cfs 1.585 af

Subcatchment 11S: DA-2 Runoff Area=3.853 ac 0.00% Impervious Runoff Depth=2.99"
Flow Length=400' Tc=12.1 min CN=55 Runoff=16.04 cfs 0.960 af

Subcatchment 12S: DA-4 Imp Runoff Area=11.709 ac 100.00% Impervious Runoff Depth=8.06"
Flow Length=3,200' Tc=12.6 min CN=98 Runoff=111.76 cfs 7.865 af

Subcatchment 14S: DA-4 Runoff Area=14.310 ac 0.00% Impervious Runoff Depth=4.84"
Flow Length=1,050' Tc=20.2 min CN=71 Runoff=76.13 cfs 5.773 af

Link 4L: POA #1 Inflow=413.60 cfs 36.105 af
Primary=413.60 cfs 36.105 af

Link 5L: POA #2 Inflow=304.81 cfs 24.252 af
Primary=304.81 cfs 24.252 af

Link 6L: POA #3 Inflow=407.37 cfs 34.686 af
Primary=407.37 cfs 34.686 af

Link 13L: POA #4 Inflow=177.40 cfs 13.637 af
Primary=177.40 cfs 13.637 af

Total Runoff Area = 180.757 ac Runoff Volume = 108.681 af Average Runoff Depth = 7.22"
20.38% Pervious = 36.846 ac 79.62% Impervious = 143.911 ac

Summary for Subcatchment 3S: DA-3

Runoff = 56.01 cfs @ 12.18 hrs, Volume= 4.712 af, Depth= 3.91"

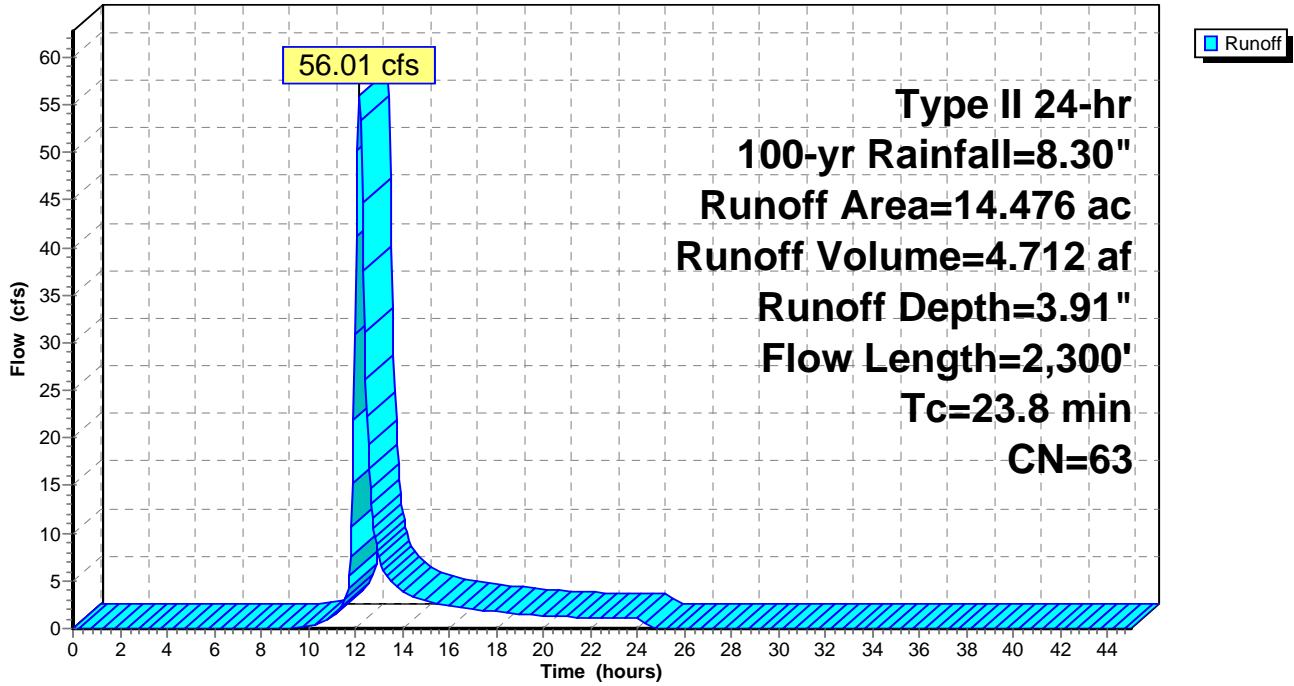
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 1.228	39	RP-1 A
* 0.044	80	RP-1 D
* 0.002	39	RP-2 A
* 0.158	80	RP- 2 D
* 0.889	39	RP-3 A
* 0.090	80	RP-3 D
* 0.089	39	RP-4 A
* 0.502	80	RP- 4D
* 4.428	39	RP-5 A
* 5.508	80	RP-5 D
* 1.503	98	RP-5 WATER
* 0.030	39	RP-6 A
* 0.005	80	RP-6 D
14.476	63	Weighted Average
12.973		89.62% Pervious Area
1.503		10.38% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	50	0.0050	0.09		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
8.3	750	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
5.9	1,500	0.0100	4.25	33.97	Channel Flow, Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.035
23.8	2,300	Total			

Subcatchment 3S: DA-3

Hydrograph



Hydrograph for Subcatchment 3S: DA-3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	8.30	3.91	0.00
0.50	0.04	0.00	0.00	27.00	8.30	3.91	0.00
1.00	0.09	0.00	0.00	27.50	8.30	3.91	0.00
1.50	0.13	0.00	0.00	28.00	8.30	3.91	0.00
2.00	0.18	0.00	0.00	28.50	8.30	3.91	0.00
2.50	0.23	0.00	0.00	29.00	8.30	3.91	0.00
3.00	0.29	0.00	0.00	29.50	8.30	3.91	0.00
3.50	0.34	0.00	0.00	30.00	8.30	3.91	0.00
4.00	0.40	0.00	0.00	30.50	8.30	3.91	0.00
4.50	0.46	0.00	0.00	31.00	8.30	3.91	0.00
5.00	0.52	0.00	0.00	31.50	8.30	3.91	0.00
5.50	0.59	0.00	0.00	32.00	8.30	3.91	0.00
6.00	0.66	0.00	0.00	32.50	8.30	3.91	0.00
6.50	0.74	0.00	0.00	33.00	8.30	3.91	0.00
7.00	0.82	0.00	0.00	33.50	8.30	3.91	0.00
7.50	0.91	0.00	0.00	34.00	8.30	3.91	0.00
8.00	1.00	0.00	0.00	34.50	8.30	3.91	0.00
8.50	1.10	0.00	0.00	35.00	8.30	3.91	0.00
9.00	1.22	0.00	0.00	35.50	8.30	3.91	0.00
9.50	1.35	0.01	0.11	36.00	8.30	3.91	0.00
10.00	1.50	0.02	0.29	36.50	8.30	3.91	0.00
10.50	1.69	0.04	0.62	37.00	8.30	3.91	0.00
11.00	1.95	0.09	1.22	37.50	8.30	3.91	0.00
11.50	2.35	0.20	2.57	38.00	8.30	3.91	0.00
12.00	5.50	1.84	30.87	38.50	8.30	3.91	0.00
12.50	6.10	2.25	22.26	39.00	8.30	3.91	0.00
13.00	6.41	2.47	7.68	39.50	8.30	3.91	0.00
13.50	6.63	2.63	5.09	40.00	8.30	3.91	0.00
14.00	6.81	2.76	3.96	40.50	8.30	3.91	0.00
14.50	6.95	2.87	3.27	41.00	8.30	3.91	0.00
15.00	7.08	2.96	2.95	41.50	8.30	3.91	0.00
15.50	7.20	3.05	2.65	42.00	8.30	3.91	0.00
16.00	7.30	3.13	2.35	42.50	8.30	3.91	0.00
16.50	7.40	3.20	2.10	43.00	8.30	3.91	0.00
17.00	7.48	3.27	1.99	43.50	8.30	3.91	0.00
17.50	7.57	3.33	1.88	44.00	8.30	3.91	0.00
18.00	7.64	3.39	1.77	44.50	8.30	3.91	0.00
18.50	7.72	3.45	1.66	45.00	8.30	3.91	0.00
19.00	7.78	3.50	1.55				
19.50	7.85	3.55	1.43				
20.00	7.90	3.59	1.32				
20.50	7.96	3.63	1.23				
21.00	8.01	3.67	1.21				
21.50	8.06	3.71	1.19				
22.00	8.11	3.75	1.16				
22.50	8.16	3.79	1.14				
23.00	8.21	3.83	1.12				
23.50	8.25	3.87	1.10				
24.00	8.30	3.91	1.08				
24.50	8.30	3.91	0.20				
25.00	8.30	3.91	0.01				
25.50	8.30	3.91	0.00				
26.00	8.30	3.91	0.00				

Summary for Subcatchment 7S: DA-1 Imp

Runoff = 392.07 cfs @ 12.12 hrs, Volume= 34.520 af, Depth= 8.06"

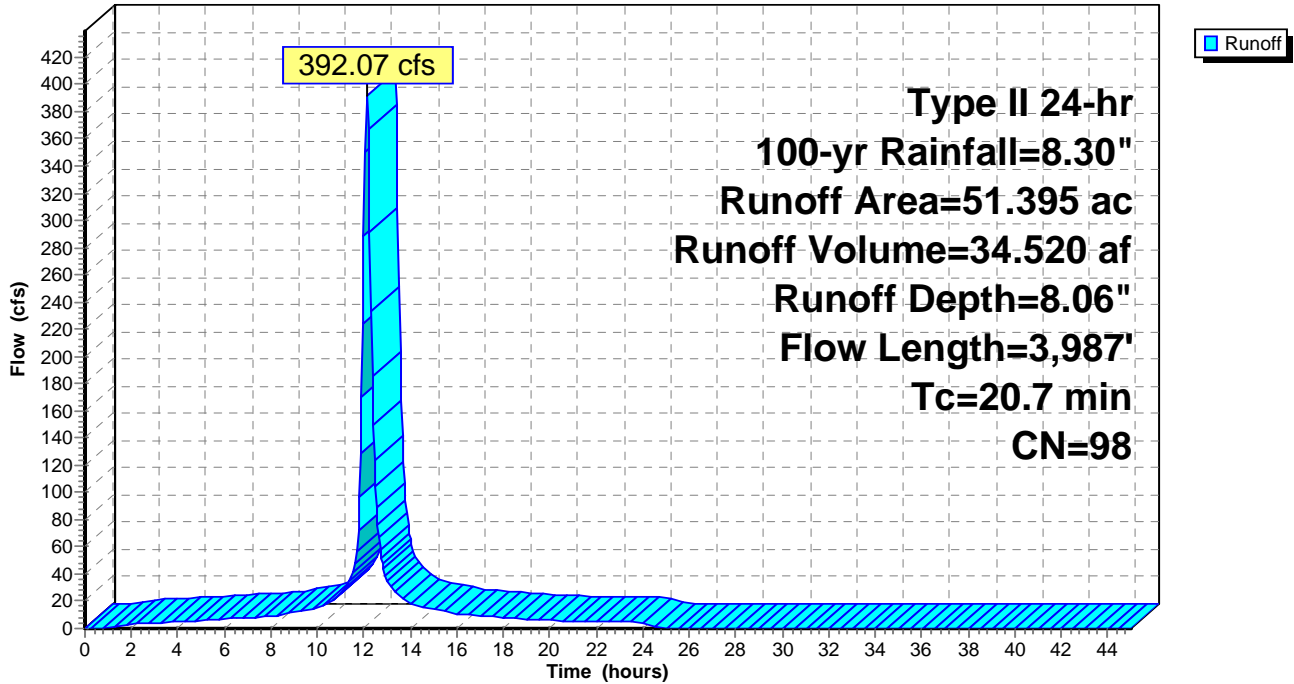
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 51.395	98	RP-6
51.395		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.7	50	0.0001	0.15		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
2.3	200	0.0050	1.44		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.8	806	0.0211	7.65	9.38	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
3.6	1,208	0.0090	5.64	9.97	Pipe Channel, 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013
3.1	887	0.0044	4.78	15.01	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
4.2	836	0.0018	3.32	165.90	Channel Flow, Area= 50.0 sf Perim= 20.0' r= 2.50' n= 0.035
20.7	3,987	Total			

Subcatchment 7S: DA-1 Imp

Hydrograph



Hydrograph for Subcatchment 7S: DA-1 Imp

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	8.30	8.06	0.00
0.50	0.04	0.00	0.00	27.00	8.30	8.06	0.00
1.00	0.09	0.01	0.72	27.50	8.30	8.06	0.00
1.50	0.13	0.03	1.98	28.00	8.30	8.06	0.00
2.00	0.18	0.06	2.90	28.50	8.30	8.06	0.00
2.50	0.23	0.09	3.58	29.00	8.30	8.06	0.00
3.00	0.29	0.13	4.13	29.50	8.30	8.06	0.00
3.50	0.34	0.18	4.59	30.00	8.30	8.06	0.00
4.00	0.40	0.23	4.99	30.50	8.30	8.06	0.00
4.50	0.46	0.28	5.42	31.00	8.30	8.06	0.00
5.00	0.52	0.34	5.94	31.50	8.30	8.06	0.00
5.50	0.59	0.40	6.46	32.00	8.30	8.06	0.00
6.00	0.66	0.47	6.96	32.50	8.30	8.06	0.00
6.50	0.74	0.54	7.45	33.00	8.30	8.06	0.00
7.00	0.82	0.62	7.93	33.50	8.30	8.06	0.00
7.50	0.91	0.70	8.40	34.00	8.30	8.06	0.00
8.00	1.00	0.79	8.87	34.50	8.30	8.06	0.00
8.50	1.10	0.89	9.99	35.00	8.30	8.06	0.00
9.00	1.22	1.01	12.08	35.50	8.30	8.06	0.00
9.50	1.35	1.14	13.42	36.00	8.30	8.06	0.00
10.00	1.50	1.28	14.85	36.50	8.30	8.06	0.00
10.50	1.69	1.47	18.85	37.00	8.30	8.06	0.00
11.00	1.95	1.73	25.29	37.50	8.30	8.06	0.00
11.50	2.35	2.12	38.46	38.00	8.30	8.06	0.00
12.00	5.50	5.27	288.56	38.50	8.30	8.06	0.00
12.50	6.10	5.86	103.79	39.00	8.30	8.06	0.00
13.00	6.41	6.17	35.24	39.50	8.30	8.06	0.00
13.50	6.63	6.39	24.22	40.00	8.30	8.06	0.00
14.00	6.81	6.57	18.70	40.50	8.30	8.06	0.00
14.50	6.95	6.71	15.45	41.00	8.30	8.06	0.00
15.00	7.08	6.84	13.86	41.50	8.30	8.06	0.00
15.50	7.20	6.96	12.35	42.00	8.30	8.06	0.00
16.00	7.30	7.06	10.85	42.50	8.30	8.06	0.00
16.50	7.40	7.16	9.72	43.00	8.30	8.06	0.00
17.00	7.48	7.25	9.15	43.50	8.30	8.06	0.00
17.50	7.57	7.33	8.62	44.00	8.30	8.06	0.00
18.00	7.64	7.40	8.08	44.50	8.30	8.06	0.00
18.50	7.72	7.48	7.54	45.00	8.30	8.06	0.00
19.00	7.78	7.54	7.01				
19.50	7.85	7.61	6.47				
20.00	7.90	7.66	5.93				
20.50	7.96	7.72	5.56				
21.00	8.01	7.77	5.44				
21.50	8.06	7.82	5.33				
22.00	8.11	7.87	5.23				
22.50	8.16	7.92	5.12				
23.00	8.21	7.97	5.01				
23.50	8.25	8.01	4.91				
24.00	8.30	8.06	4.80				
24.50	8.30	8.06	0.55				
25.00	8.30	8.06	0.01				
25.50	8.30	8.06	0.00				
26.00	8.30	8.06	0.00				

Summary for Subcatchment 8S: DA-2 Imp

Runoff = 289.93 cfs @ 12.09 hrs, Volume= 23.291 af, Depth= 8.06"

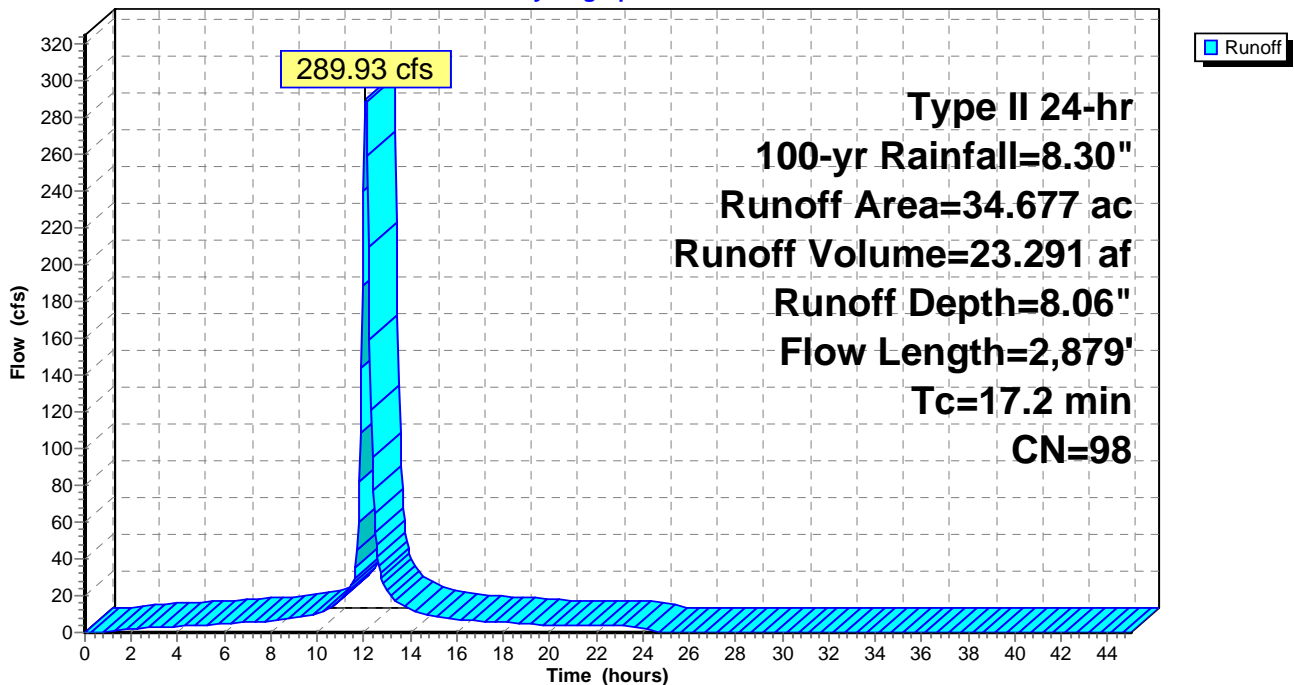
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 1.750	98	RP-4
* 32.927	98	RP-6
34.677	98	Weighted Average
34.677		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	427	0.0017	0.84		Shallow Concentrated Flow, Paved Kv= 20.3 fps
3.9	635	0.0027	2.74	3.36	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
4.8	1,817	0.0056	6.25	30.69	Pipe Channel, 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013
17.2	2,879	Total			

Subcatchment 8S: DA-2 Imp

Hydrograph



Hydrograph for Subcatchment 8S: DA-2 Imp

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	8.30	8.06	0.00
0.50	0.04	0.00	0.00	27.00	8.30	8.06	0.00
1.00	0.09	0.01	0.58	27.50	8.30	8.06	0.00
1.50	0.13	0.03	1.42	28.00	8.30	8.06	0.00
2.00	0.18	0.06	2.01	28.50	8.30	8.06	0.00
2.50	0.23	0.09	2.46	29.00	8.30	8.06	0.00
3.00	0.29	0.13	2.83	29.50	8.30	8.06	0.00
3.50	0.34	0.18	3.13	30.00	8.30	8.06	0.00
4.00	0.40	0.23	3.40	30.50	8.30	8.06	0.00
4.50	0.46	0.28	3.70	31.00	8.30	8.06	0.00
5.00	0.52	0.34	4.05	31.50	8.30	8.06	0.00
5.50	0.59	0.40	4.39	32.00	8.30	8.06	0.00
6.00	0.66	0.47	4.73	32.50	8.30	8.06	0.00
6.50	0.74	0.54	5.06	33.00	8.30	8.06	0.00
7.00	0.82	0.62	5.38	33.50	8.30	8.06	0.00
7.50	0.91	0.70	5.70	34.00	8.30	8.06	0.00
8.00	1.00	0.79	6.02	34.50	8.30	8.06	0.00
8.50	1.10	0.89	6.87	35.00	8.30	8.06	0.00
9.00	1.22	1.01	8.31	35.50	8.30	8.06	0.00
9.50	1.35	1.14	9.08	36.00	8.30	8.06	0.00
10.00	1.50	1.28	10.23	36.50	8.30	8.06	0.00
10.50	1.69	1.47	13.07	37.00	8.30	8.06	0.00
11.00	1.95	1.73	17.65	37.50	8.30	8.06	0.00
11.50	2.35	2.12	27.30	38.00	8.30	8.06	0.00
12.00	5.50	5.27	240.16	38.50	8.30	8.06	0.00
12.50	6.10	5.86	54.69	39.00	8.30	8.06	0.00
13.00	6.41	6.17	22.00	39.50	8.30	8.06	0.00
13.50	6.63	6.39	15.83	40.00	8.30	8.06	0.00
14.00	6.81	6.57	12.28	40.50	8.30	8.06	0.00
14.50	6.95	6.71	10.28	41.00	8.30	8.06	0.00
15.00	7.08	6.84	9.24	41.50	8.30	8.06	0.00
15.50	7.20	6.96	8.22	42.00	8.30	8.06	0.00
16.00	7.30	7.06	7.21	42.50	8.30	8.06	0.00
16.50	7.40	7.16	6.51	43.00	8.30	8.06	0.00
17.00	7.48	7.25	6.14	43.50	8.30	8.06	0.00
17.50	7.57	7.33	5.78	44.00	8.30	8.06	0.00
18.00	7.64	7.40	5.41	44.50	8.30	8.06	0.00
18.50	7.72	7.48	5.05	45.00	8.30	8.06	0.00
19.00	7.78	7.54	4.69				
19.50	7.85	7.61	4.33				
20.00	7.90	7.66	3.96				
20.50	7.96	7.72	3.74				
21.00	8.01	7.77	3.66				
21.50	8.06	7.82	3.59				
22.00	8.11	7.87	3.52				
22.50	8.16	7.92	3.45				
23.00	8.21	7.97	3.37				
23.50	8.25	8.01	3.30				
24.00	8.30	8.06	3.23				
24.50	8.30	8.06	0.18				
25.00	8.30	8.06	0.00				
25.50	8.30	8.06	0.00				
26.00	8.30	8.06	0.00				

Summary for Subcatchment 9S: DA-3 Imp

Runoff = 356.03 cfs @ 12.10 hrs, Volume= 29.975 af, Depth= 8.06"

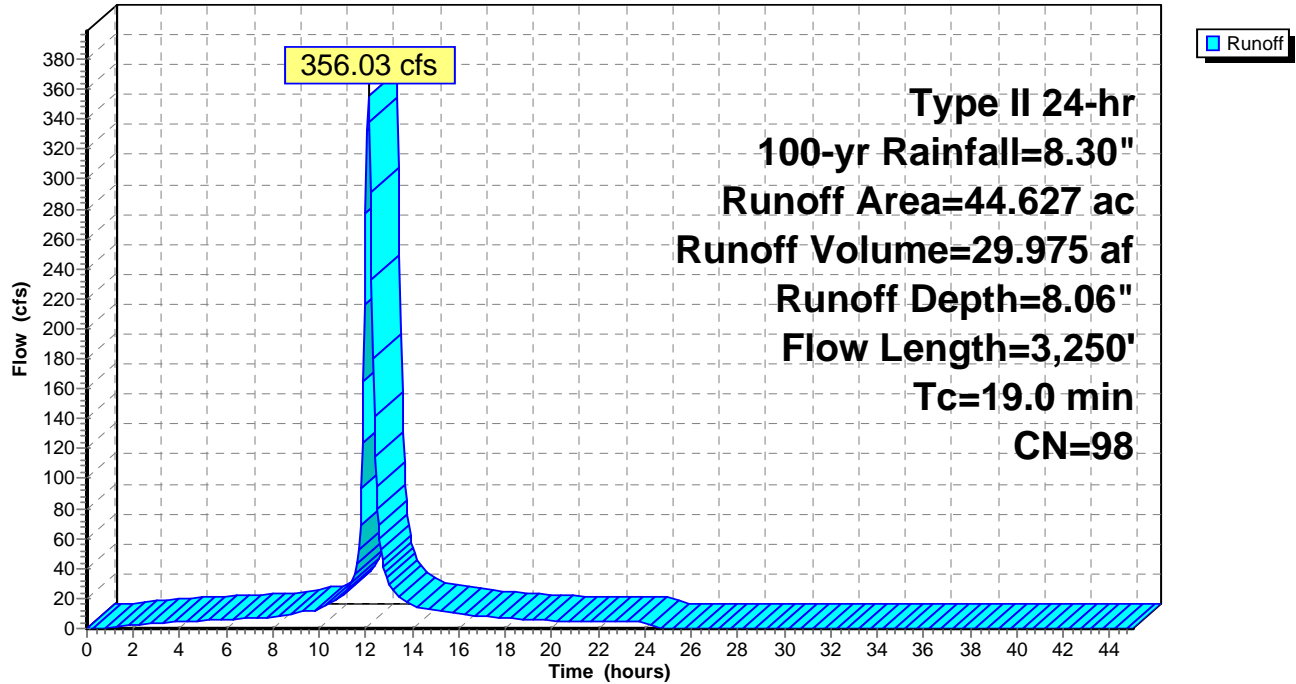
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 24.166	98	RP-1
* 3.032	98	RP-2
* 8.811	98	RP-3
* 5.316	98	RP-4
* 2.992	98	RP-5
* 0.310	98	RP-6
44.627	98	Weighted Average
44.627		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	150	0.0010	0.46		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
3.9	150	0.0010	0.64		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.5	100	0.0050	1.14		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
5.7	2,000	0.0125	5.89	7.22	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
2.4	850	0.0069	5.98	18.79	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
19.0	3,250	Total			

Subcatchment 9S: DA-3 Imp

Hydrograph



Hydrograph for Subcatchment 9S: DA-3 Imp

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	8.30	8.06	0.00
0.50	0.04	0.00	0.00	27.00	8.30	8.06	0.00
1.00	0.09	0.01	0.68	27.50	8.30	8.06	0.00
1.50	0.13	0.03	1.77	28.00	8.30	8.06	0.00
2.00	0.18	0.06	2.55	28.50	8.30	8.06	0.00
2.50	0.23	0.09	3.14	29.00	8.30	8.06	0.00
3.00	0.29	0.13	3.61	29.50	8.30	8.06	0.00
3.50	0.34	0.18	4.01	30.00	8.30	8.06	0.00
4.00	0.40	0.23	4.35	30.50	8.30	8.06	0.00
4.50	0.46	0.28	4.73	31.00	8.30	8.06	0.00
5.00	0.52	0.34	5.18	31.50	8.30	8.06	0.00
5.50	0.59	0.40	5.63	32.00	8.30	8.06	0.00
6.00	0.66	0.47	6.06	32.50	8.30	8.06	0.00
6.50	0.74	0.54	6.49	33.00	8.30	8.06	0.00
7.00	0.82	0.62	6.91	33.50	8.30	8.06	0.00
7.50	0.91	0.70	7.32	34.00	8.30	8.06	0.00
8.00	1.00	0.79	7.72	34.50	8.30	8.06	0.00
8.50	1.10	0.89	8.76	35.00	8.30	8.06	0.00
9.00	1.22	1.01	10.59	35.50	8.30	8.06	0.00
9.50	1.35	1.14	11.67	36.00	8.30	8.06	0.00
10.00	1.50	1.28	13.02	36.50	8.30	8.06	0.00
10.50	1.69	1.47	16.59	37.00	8.30	8.06	0.00
11.00	1.95	1.73	22.32	37.50	8.30	8.06	0.00
11.50	2.35	2.12	34.22	38.00	8.30	8.06	0.00
12.00	5.50	5.27	277.46	38.50	8.30	8.06	0.00
12.50	6.10	5.86	80.00	39.00	8.30	8.06	0.00
13.00	6.41	6.17	29.21	39.50	8.30	8.06	0.00
13.50	6.63	6.39	20.70	40.00	8.30	8.06	0.00
14.00	6.81	6.57	16.03	40.50	8.30	8.06	0.00
14.50	6.95	6.71	13.32	41.00	8.30	8.06	0.00
15.00	7.08	6.84	11.96	41.50	8.30	8.06	0.00
15.50	7.20	6.96	10.66	42.00	8.30	8.06	0.00
16.00	7.30	7.06	9.35	42.50	8.30	8.06	0.00
16.50	7.40	7.16	8.41	43.00	8.30	8.06	0.00
17.00	7.48	7.25	7.92	43.50	8.30	8.06	0.00
17.50	7.57	7.33	7.46	44.00	8.30	8.06	0.00
18.00	7.64	7.40	6.99	44.50	8.30	8.06	0.00
18.50	7.72	7.48	6.53	45.00	8.30	8.06	0.00
19.00	7.78	7.54	6.06				
19.50	7.85	7.61	5.59				
20.00	7.90	7.66	5.13				
20.50	7.96	7.72	4.82				
21.00	8.01	7.77	4.72				
21.50	8.06	7.82	4.63				
22.00	8.11	7.87	4.53				
22.50	8.16	7.92	4.44				
23.00	8.21	7.97	4.35				
23.50	8.25	8.01	4.25				
24.00	8.30	8.06	4.16				
24.50	8.30	8.06	0.35				
25.00	8.30	8.06	0.00				
25.50	8.30	8.06	0.00				
26.00	8.30	8.06	0.00				

Summary for Subcatchment 10S: DA-1

Runoff = 21.54 cfs @ 12.12 hrs, Volume= 1.585 af, Depth= 3.33"

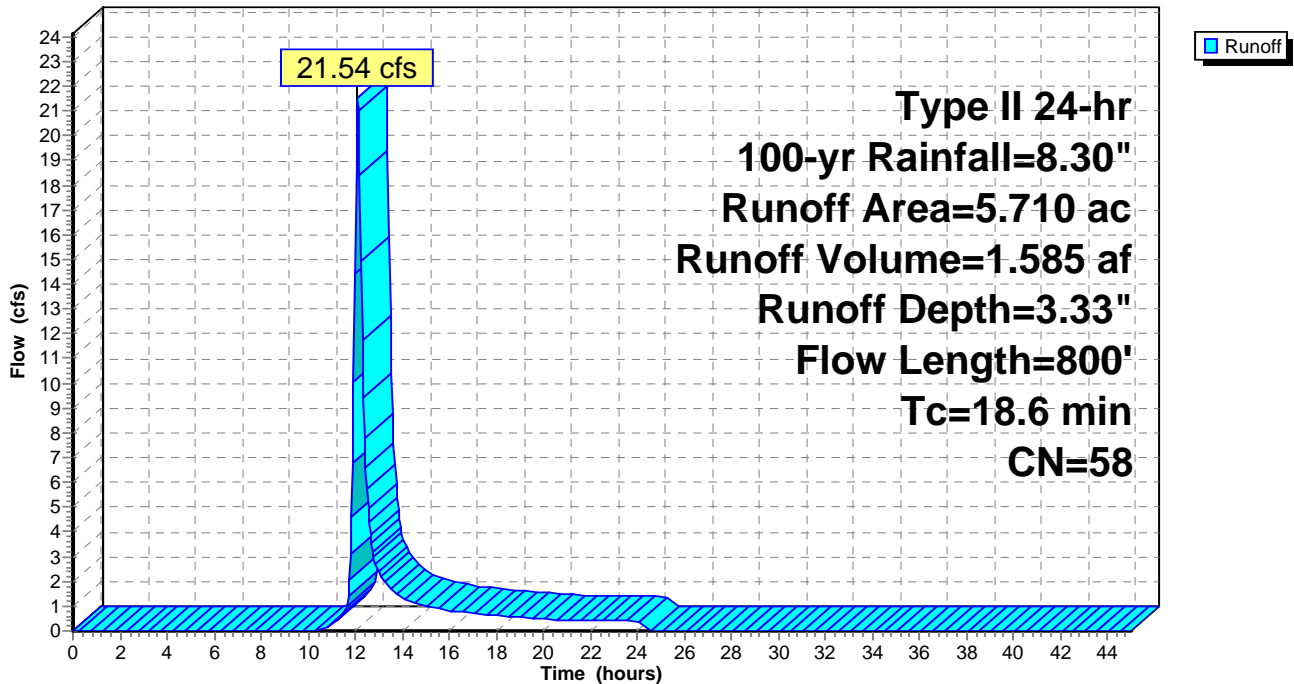
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
3.079	39	>75% Grass cover, Good, HSG A
0.349	80	>75% Grass cover, Good, HSG D
2.282	80	>75% Grass cover, Good, HSG D
5.710	58	Weighted Average
5.710		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	50	0.0050	0.09		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
2.8	250	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
6.2	500	0.0010	1.34	10.74	Channel Flow, Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.035
18.6	800	Total			

Subcatchment 10S: DA-1

Hydrograph



Hydrograph for Subcatchment 10S: DA-1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	8.30	3.33	0.00
0.50	0.04	0.00	0.00	27.00	8.30	3.33	0.00
1.00	0.09	0.00	0.00	27.50	8.30	3.33	0.00
1.50	0.13	0.00	0.00	28.00	8.30	3.33	0.00
2.00	0.18	0.00	0.00	28.50	8.30	3.33	0.00
2.50	0.23	0.00	0.00	29.00	8.30	3.33	0.00
3.00	0.29	0.00	0.00	29.50	8.30	3.33	0.00
3.50	0.34	0.00	0.00	30.00	8.30	3.33	0.00
4.00	0.40	0.00	0.00	30.50	8.30	3.33	0.00
4.50	0.46	0.00	0.00	31.00	8.30	3.33	0.00
5.00	0.52	0.00	0.00	31.50	8.30	3.33	0.00
5.50	0.59	0.00	0.00	32.00	8.30	3.33	0.00
6.00	0.66	0.00	0.00	32.50	8.30	3.33	0.00
6.50	0.74	0.00	0.00	33.00	8.30	3.33	0.00
7.00	0.82	0.00	0.00	33.50	8.30	3.33	0.00
7.50	0.91	0.00	0.00	34.00	8.30	3.33	0.00
8.00	1.00	0.00	0.00	34.50	8.30	3.33	0.00
8.50	1.10	0.00	0.00	35.00	8.30	3.33	0.00
9.00	1.22	0.00	0.00	35.50	8.30	3.33	0.00
9.50	1.35	0.00	0.00	36.00	8.30	3.33	0.00
10.00	1.50	0.00	0.00	36.50	8.30	3.33	0.00
10.50	1.69	0.01	0.08	37.00	8.30	3.33	0.00
11.00	1.95	0.03	0.26	37.50	8.30	3.33	0.00
11.50	2.35	0.10	0.72	38.00	8.30	3.33	0.00
12.00	5.50	1.46	14.44	38.50	8.30	3.33	0.00
12.50	6.10	1.82	5.70	39.00	8.30	3.33	0.00
13.00	6.41	2.02	2.36	39.50	8.30	3.33	0.00
13.50	6.63	2.16	1.72	40.00	8.30	3.33	0.00
14.00	6.81	2.28	1.36	40.50	8.30	3.33	0.00
14.50	6.95	2.38	1.15	41.00	8.30	3.33	0.00
15.00	7.08	2.47	1.04	41.50	8.30	3.33	0.00
15.50	7.20	2.55	0.94	42.00	8.30	3.33	0.00
16.00	7.30	2.62	0.83	42.50	8.30	3.33	0.00
16.50	7.40	2.68	0.75	43.00	8.30	3.33	0.00
17.00	7.48	2.74	0.71	43.50	8.30	3.33	0.00
17.50	7.57	2.80	0.67	44.00	8.30	3.33	0.00
18.00	7.64	2.86	0.63	44.50	8.30	3.33	0.00
18.50	7.72	2.91	0.59	45.00	8.30	3.33	0.00
19.00	7.78	2.96	0.55				
19.50	7.85	3.00	0.51				
20.00	7.90	3.04	0.47				
20.50	7.96	3.08	0.45				
21.00	8.01	3.12	0.44				
21.50	8.06	3.15	0.43				
22.00	8.11	3.19	0.42				
22.50	8.16	3.23	0.41				
23.00	8.21	3.26	0.41				
23.50	8.25	3.30	0.40				
24.00	8.30	3.33	0.39				
24.50	8.30	3.33	0.03				
25.00	8.30	3.33	0.00				
25.50	8.30	3.33	0.00				
26.00	8.30	3.33	0.00				

Summary for Subcatchment 11S: DA-2

Runoff = 16.04 cfs @ 12.05 hrs, Volume= 0.960 af, Depth= 2.99"

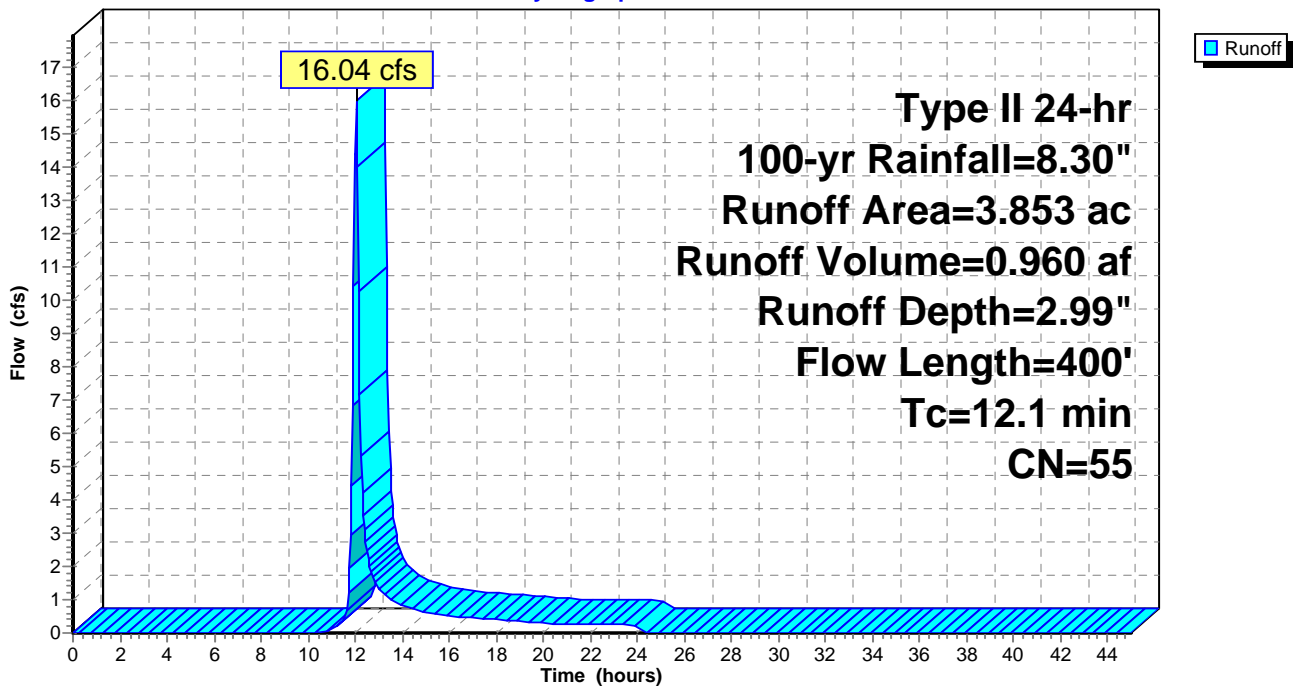
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 0.001	39	RP-4
* 0.194	80	RP-4
* 2.305	39	RP-6
* 0.182	80	RP-6
* 1.171	80	RP-6
3.853	55	Weighted Average
3.853		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	50	0.0050	0.09		Sheet Flow, Grass: Short n= 0.150 P2= 3.30"
1.7	150	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.8	200	0.0100	4.25	33.97	Channel Flow, Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.035
12.1	400	Total			

Subcatchment 11S: DA-2

Hydrograph



Hydrograph for Subcatchment 11S: DA-2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	8.30	2.99	0.00
0.50	0.04	0.00	0.00	27.00	8.30	2.99	0.00
1.00	0.09	0.00	0.00	27.50	8.30	2.99	0.00
1.50	0.13	0.00	0.00	28.00	8.30	2.99	0.00
2.00	0.18	0.00	0.00	28.50	8.30	2.99	0.00
2.50	0.23	0.00	0.00	29.00	8.30	2.99	0.00
3.00	0.29	0.00	0.00	29.50	8.30	2.99	0.00
3.50	0.34	0.00	0.00	30.00	8.30	2.99	0.00
4.00	0.40	0.00	0.00	30.50	8.30	2.99	0.00
4.50	0.46	0.00	0.00	31.00	8.30	2.99	0.00
5.00	0.52	0.00	0.00	31.50	8.30	2.99	0.00
5.50	0.59	0.00	0.00	32.00	8.30	2.99	0.00
6.00	0.66	0.00	0.00	32.50	8.30	2.99	0.00
6.50	0.74	0.00	0.00	33.00	8.30	2.99	0.00
7.00	0.82	0.00	0.00	33.50	8.30	2.99	0.00
7.50	0.91	0.00	0.00	34.00	8.30	2.99	0.00
8.00	1.00	0.00	0.00	34.50	8.30	2.99	0.00
8.50	1.10	0.00	0.00	35.00	8.30	2.99	0.00
9.00	1.22	0.00	0.00	35.50	8.30	2.99	0.00
9.50	1.35	0.00	0.00	36.00	8.30	2.99	0.00
10.00	1.50	0.00	0.00	36.50	8.30	2.99	0.00
10.50	1.69	0.00	0.00	37.00	8.30	2.99	0.00
11.00	1.95	0.01	0.10	37.50	8.30	2.99	0.00
11.50	2.35	0.06	0.40	38.00	8.30	2.99	0.00
12.00	5.50	1.24	14.37	38.50	8.30	2.99	0.00
12.50	6.10	1.58	2.47	39.00	8.30	2.99	0.00
13.00	6.41	1.76	1.36	39.50	8.30	2.99	0.00
13.50	6.63	1.89	1.03	40.00	8.30	2.99	0.00
14.00	6.81	2.00	0.82	40.50	8.30	2.99	0.00
14.50	6.95	2.09	0.71	41.00	8.30	2.99	0.00
15.00	7.08	2.18	0.64	41.50	8.30	2.99	0.00
15.50	7.20	2.25	0.58	42.00	8.30	2.99	0.00
16.00	7.30	2.32	0.51	42.50	8.30	2.99	0.00
16.50	7.40	2.38	0.47	43.00	8.30	2.99	0.00
17.00	7.48	2.44	0.45	43.50	8.30	2.99	0.00
17.50	7.57	2.49	0.42	44.00	8.30	2.99	0.00
18.00	7.64	2.54	0.40	44.50	8.30	2.99	0.00
18.50	7.72	2.59	0.37	45.00	8.30	2.99	0.00
19.00	7.78	2.64	0.35				
19.50	7.85	2.68	0.32				
20.00	7.90	2.72	0.29				
20.50	7.96	2.75	0.28				
21.00	8.01	2.79	0.28				
21.50	8.06	2.82	0.27				
22.00	8.11	2.86	0.27				
22.50	8.16	2.89	0.26				
23.00	8.21	2.93	0.26				
23.50	8.25	2.96	0.25				
24.00	8.30	2.99	0.25				
24.50	8.30	2.99	0.00				
25.00	8.30	2.99	0.00				
25.50	8.30	2.99	0.00				
26.00	8.30	2.99	0.00				

Summary for Subcatchment 12S: DA-4 Imp

Runoff = 111.76 cfs @ 12.04 hrs, Volume= 7.865 af, Depth= 8.06"

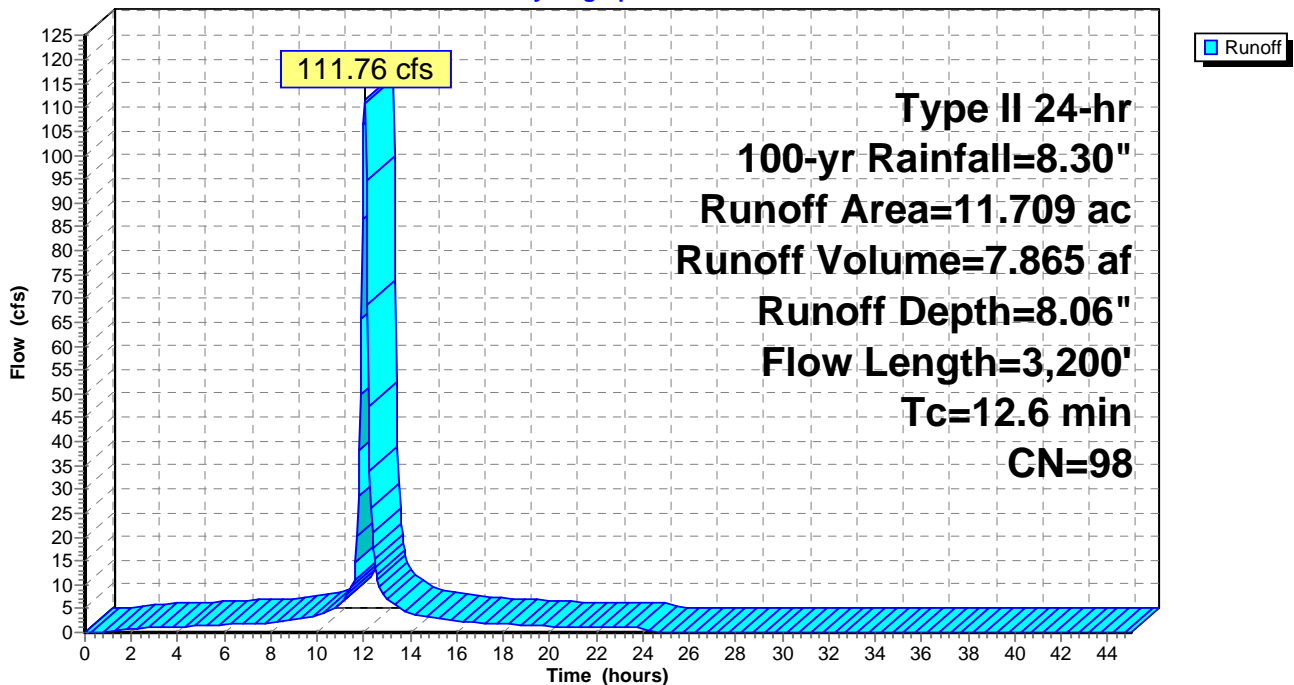
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 11.709	98	
11.709		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	50	0.0050	0.70		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.30"
4.1	500	0.0100	2.03		Shallow Concentrated Flow, Paved Kv= 20.3 fps
4.4	1,400	0.0100	5.26	6.46	Pipe Channel, 15.0" Round Area= 1.2 sf Perim= 3.9' r= 0.31' n= 0.013
2.9	1,250	0.0100	7.20	22.62	Pipe Channel, 24.0" Round Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.013
12.6	3,200	Total			

Subcatchment 12S: DA-4 Imp

Hydrograph



Hydrograph for Subcatchment 12S: DA-4 Imp

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	8.30	8.06	0.00
0.50	0.04	0.00	0.00	27.00	8.30	8.06	0.00
1.00	0.09	0.01	0.24	27.50	8.30	8.06	0.00
1.50	0.13	0.03	0.51	28.00	8.30	8.06	0.00
2.00	0.18	0.06	0.70	28.50	8.30	8.06	0.00
2.50	0.23	0.09	0.85	29.00	8.30	8.06	0.00
3.00	0.29	0.13	0.97	29.50	8.30	8.06	0.00
3.50	0.34	0.18	1.07	30.00	8.30	8.06	0.00
4.00	0.40	0.23	1.16	30.50	8.30	8.06	0.00
4.50	0.46	0.28	1.26	31.00	8.30	8.06	0.00
5.00	0.52	0.34	1.38	31.50	8.30	8.06	0.00
5.50	0.59	0.40	1.50	32.00	8.30	8.06	0.00
6.00	0.66	0.47	1.61	32.50	8.30	8.06	0.00
6.50	0.74	0.54	1.72	33.00	8.30	8.06	0.00
7.00	0.82	0.62	1.83	33.50	8.30	8.06	0.00
7.50	0.91	0.70	1.94	34.00	8.30	8.06	0.00
8.00	1.00	0.79	2.05	34.50	8.30	8.06	0.00
8.50	1.10	0.89	2.39	35.00	8.30	8.06	0.00
9.00	1.22	1.01	2.88	35.50	8.30	8.06	0.00
9.50	1.35	1.14	3.07	36.00	8.30	8.06	0.00
10.00	1.50	1.28	3.56	36.50	8.30	8.06	0.00
10.50	1.69	1.47	4.58	37.00	8.30	8.06	0.00
11.00	1.95	1.73	6.23	37.50	8.30	8.06	0.00
11.50	2.35	2.12	9.86	38.00	8.30	8.06	0.00
12.00	5.50	5.27	106.29	38.50	8.30	8.06	0.00
12.50	6.10	5.86	13.65	39.00	8.30	8.06	0.00
13.00	6.41	6.17	6.97	39.50	8.30	8.06	0.00
13.50	6.63	6.39	5.14	40.00	8.30	8.06	0.00
14.00	6.81	6.57	4.00	40.50	8.30	8.06	0.00
14.50	6.95	6.71	3.41	41.00	8.30	8.06	0.00
15.00	7.08	6.84	3.07	41.50	8.30	8.06	0.00
15.50	7.20	6.96	2.73	42.00	8.30	8.06	0.00
16.00	7.30	7.06	2.39	42.50	8.30	8.06	0.00
16.50	7.40	7.16	2.18	43.00	8.30	8.06	0.00
17.00	7.48	7.25	2.06	43.50	8.30	8.06	0.00
17.50	7.57	7.33	1.93	44.00	8.30	8.06	0.00
18.00	7.64	7.40	1.81	44.50	8.30	8.06	0.00
18.50	7.72	7.48	1.69	45.00	8.30	8.06	0.00
19.00	7.78	7.54	1.57				
19.50	7.85	7.61	1.44				
20.00	7.90	7.66	1.32				
20.50	7.96	7.72	1.26				
21.00	8.01	7.77	1.23				
21.50	8.06	7.82	1.21				
22.00	8.11	7.87	1.18				
22.50	8.16	7.92	1.16				
23.00	8.21	7.97	1.14				
23.50	8.25	8.01	1.11				
24.00	8.30	8.06	1.09				
24.50	8.30	8.06	0.01				
25.00	8.30	8.06	0.00				
25.50	8.30	8.06	0.00				
26.00	8.30	8.06	0.00				

Summary for Subcatchment 14S: DA-4

Runoff = 76.13 cfs @ 12.13 hrs, Volume= 5.773 af, Depth= 4.84"

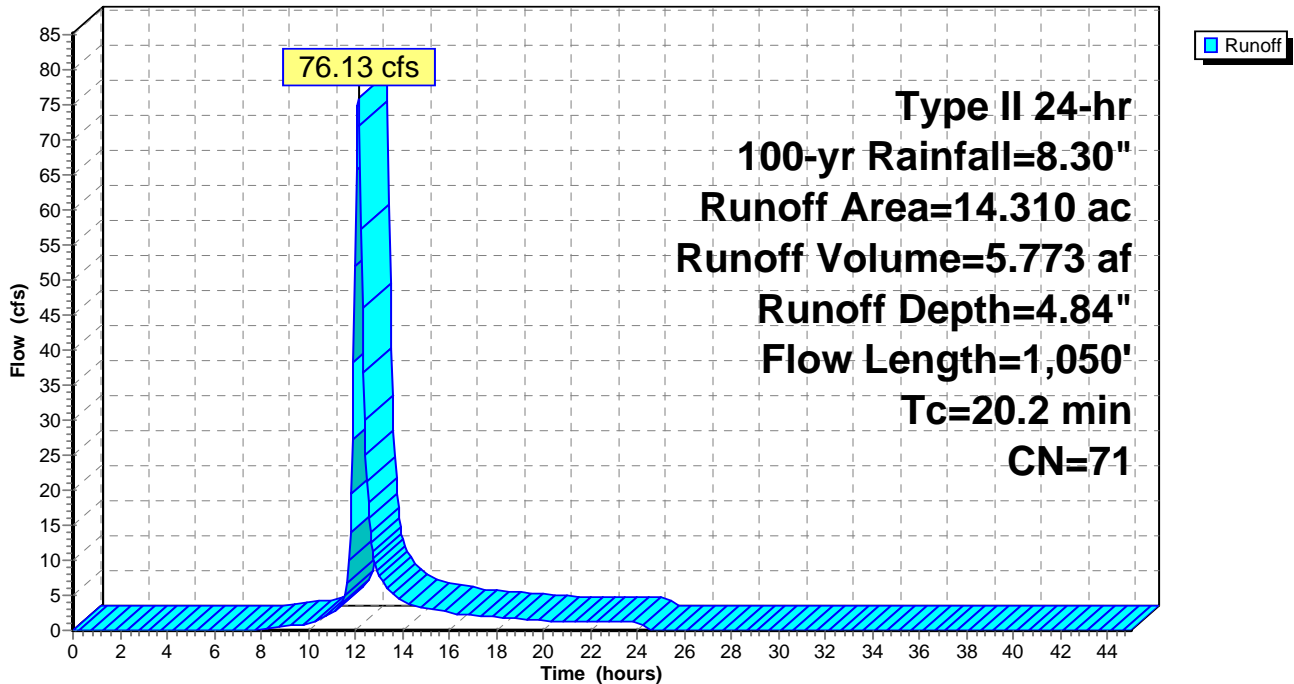
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=8.30"

Area (ac)	CN	Description
* 14.310	71	
14.310		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.0	50	0.0050	0.21		Sheet Flow, Fallow n= 0.050 P2= 3.30"
14.2	500	0.0070	0.59		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.0	500	0.0100	4.25	33.97	Channel Flow, Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.035
20.2	1,050	Total			

Subcatchment 14S: DA-4

Hydrograph



Hydrograph for Subcatchment 14S: DA-4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.50	8.30	4.84	0.00
0.50	0.04	0.00	0.00	27.00	8.30	4.84	0.00
1.00	0.09	0.00	0.00	27.50	8.30	4.84	0.00
1.50	0.13	0.00	0.00	28.00	8.30	4.84	0.00
2.00	0.18	0.00	0.00	28.50	8.30	4.84	0.00
2.50	0.23	0.00	0.00	29.00	8.30	4.84	0.00
3.00	0.29	0.00	0.00	29.50	8.30	4.84	0.00
3.50	0.34	0.00	0.00	30.00	8.30	4.84	0.00
4.00	0.40	0.00	0.00	30.50	8.30	4.84	0.00
4.50	0.46	0.00	0.00	31.00	8.30	4.84	0.00
5.00	0.52	0.00	0.00	31.50	8.30	4.84	0.00
5.50	0.59	0.00	0.00	32.00	8.30	4.84	0.00
6.00	0.66	0.00	0.00	32.50	8.30	4.84	0.00
6.50	0.74	0.00	0.00	33.00	8.30	4.84	0.00
7.00	0.82	0.00	0.00	33.50	8.30	4.84	0.00
7.50	0.91	0.00	0.05	34.00	8.30	4.84	0.00
8.00	1.00	0.01	0.15	34.50	8.30	4.84	0.00
8.50	1.10	0.02	0.28	35.00	8.30	4.84	0.00
9.00	1.22	0.04	0.49	35.50	8.30	4.84	0.00
9.50	1.35	0.06	0.72	36.00	8.30	4.84	0.00
10.00	1.50	0.10	1.00	36.50	8.30	4.84	0.00
10.50	1.69	0.15	1.54	37.00	8.30	4.84	0.00
11.00	1.95	0.25	2.49	37.50	8.30	4.84	0.00
11.50	2.35	0.42	4.57	38.00	8.30	4.84	0.00
12.00	5.50	2.50	51.92	38.50	8.30	4.84	0.00
12.50	6.10	2.98	21.30	39.00	8.30	4.84	0.00
13.00	6.41	3.23	7.86	39.50	8.30	4.84	0.00
13.50	6.63	3.42	5.54	40.00	8.30	4.84	0.00
14.00	6.81	3.56	4.32	40.50	8.30	4.84	0.00
14.50	6.95	3.68	3.60	41.00	8.30	4.84	0.00
15.00	7.08	3.79	3.24	41.50	8.30	4.84	0.00
15.50	7.20	3.89	2.91	42.00	8.30	4.84	0.00
16.00	7.30	3.98	2.56	42.50	8.30	4.84	0.00
16.50	7.40	4.06	2.30	43.00	8.30	4.84	0.00
17.00	7.48	4.13	2.18	43.50	8.30	4.84	0.00
17.50	7.57	4.21	2.05	44.00	8.30	4.84	0.00
18.00	7.64	4.27	1.93	44.50	8.30	4.84	0.00
18.50	7.72	4.33	1.81	45.00	8.30	4.84	0.00
19.00	7.78	4.39	1.68				
19.50	7.85	4.44	1.56				
20.00	7.90	4.49	1.43				
20.50	7.96	4.54	1.34				
21.00	8.01	4.59	1.32				
21.50	8.06	4.63	1.29				
22.00	8.11	4.67	1.27				
22.50	8.16	4.72	1.24				
23.00	8.21	4.76	1.22				
23.50	8.25	4.80	1.19				
24.00	8.30	4.84	1.17				
24.50	8.30	4.84	0.12				
25.00	8.30	4.84	0.00				
25.50	8.30	4.84	0.00				
26.00	8.30	4.84	0.00				

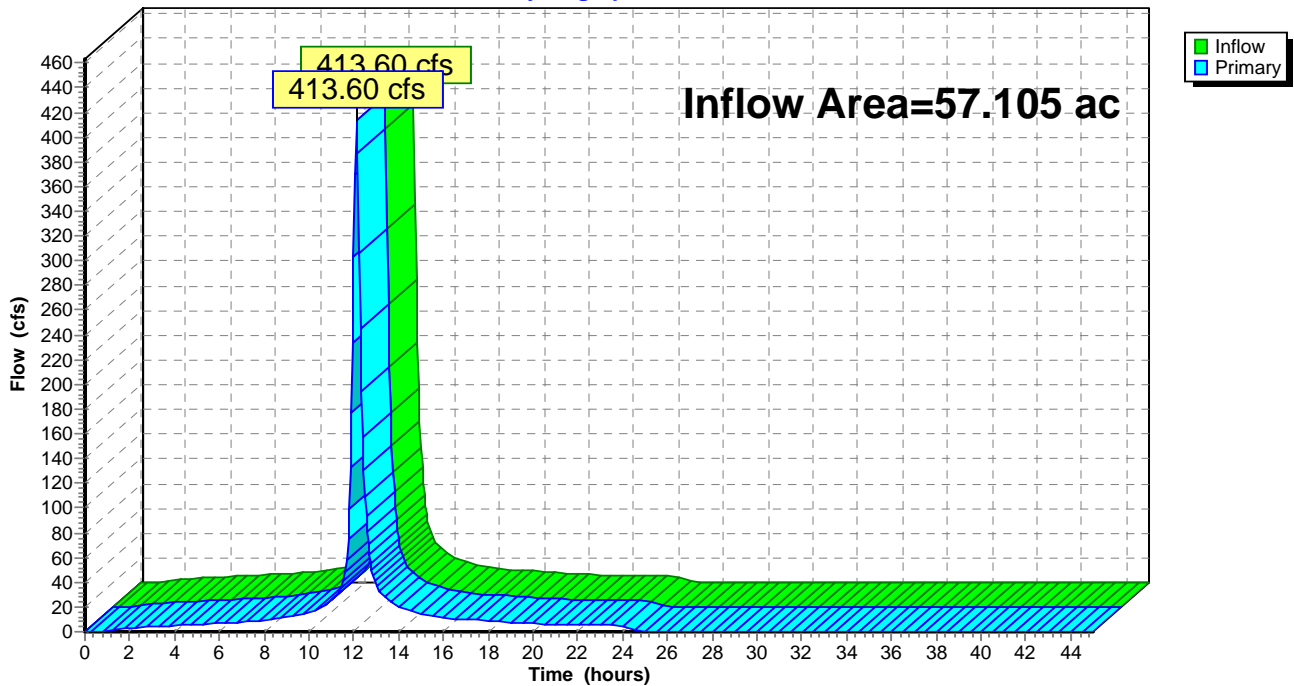
Summary for Link 4L: POA #1

Inflow Area = 57.105 ac, 90.00% Impervious, Inflow Depth = 7.59" for 100-yr event
Inflow = 413.60 cfs @ 12.12 hrs, Volume= 36.105 af
Primary = 413.60 cfs @ 12.12 hrs, Volume= 36.105 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 4L: POA #1

Hydrograph



Hydrograph for Link 4L: POA #1

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.00	0.00	0.00
0.50	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.00	0.72	0.00	0.72	27.50	0.00	0.00	0.00
1.50	1.98	0.00	1.98	28.00	0.00	0.00	0.00
2.00	2.90	0.00	2.90	28.50	0.00	0.00	0.00
2.50	3.58	0.00	3.58	29.00	0.00	0.00	0.00
3.00	4.13	0.00	4.13	29.50	0.00	0.00	0.00
3.50	4.59	0.00	4.59	30.00	0.00	0.00	0.00
4.00	4.99	0.00	4.99	30.50	0.00	0.00	0.00
4.50	5.42	0.00	5.42	31.00	0.00	0.00	0.00
5.00	5.94	0.00	5.94	31.50	0.00	0.00	0.00
5.50	6.46	0.00	6.46	32.00	0.00	0.00	0.00
6.00	6.96	0.00	6.96	32.50	0.00	0.00	0.00
6.50	7.45	0.00	7.45	33.00	0.00	0.00	0.00
7.00	7.93	0.00	7.93	33.50	0.00	0.00	0.00
7.50	8.40	0.00	8.40	34.00	0.00	0.00	0.00
8.00	8.87	0.00	8.87	34.50	0.00	0.00	0.00
8.50	9.99	0.00	9.99	35.00	0.00	0.00	0.00
9.00	12.08	0.00	12.08	35.50	0.00	0.00	0.00
9.50	13.42	0.00	13.42	36.00	0.00	0.00	0.00
10.00	14.85	0.00	14.85	36.50	0.00	0.00	0.00
10.50	18.93	0.00	18.93	37.00	0.00	0.00	0.00
11.00	25.55	0.00	25.55	37.50	0.00	0.00	0.00
11.50	39.18	0.00	39.18	38.00	0.00	0.00	0.00
12.00	303.00	0.00	303.00	38.50	0.00	0.00	0.00
12.50	109.49	0.00	109.49	39.00	0.00	0.00	0.00
13.00	37.60	0.00	37.60	39.50	0.00	0.00	0.00
13.50	25.94	0.00	25.94	40.00	0.00	0.00	0.00
14.00	20.06	0.00	20.06	40.50	0.00	0.00	0.00
14.50	16.59	0.00	16.59	41.00	0.00	0.00	0.00
15.00	14.90	0.00	14.90	41.50	0.00	0.00	0.00
15.50	13.29	0.00	13.29	42.00	0.00	0.00	0.00
16.00	11.67	0.00	11.67	42.50	0.00	0.00	0.00
16.50	10.47	0.00	10.47	43.00	0.00	0.00	0.00
17.00	9.87	0.00	9.87	43.50	0.00	0.00	0.00
17.50	9.29	0.00	9.29	44.00	0.00	0.00	0.00
18.00	8.71	0.00	8.71	44.50	0.00	0.00	0.00
18.50	8.14	0.00	8.14	45.00	0.00	0.00	0.00
19.00	7.56	0.00	7.56				
19.50	6.98	0.00	6.98				
20.00	6.40	0.00	6.40				
20.50	6.01	0.00	6.01				
21.00	5.88	0.00	5.88				
21.50	5.76	0.00	5.76				
22.00	5.65	0.00	5.65				
22.50	5.53	0.00	5.53				
23.00	5.42	0.00	5.42				
23.50	5.30	0.00	5.30				
24.00	5.19	0.00	5.19				
24.50	0.58	0.00	0.58				
25.00	0.01	0.00	0.01				
25.50	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				

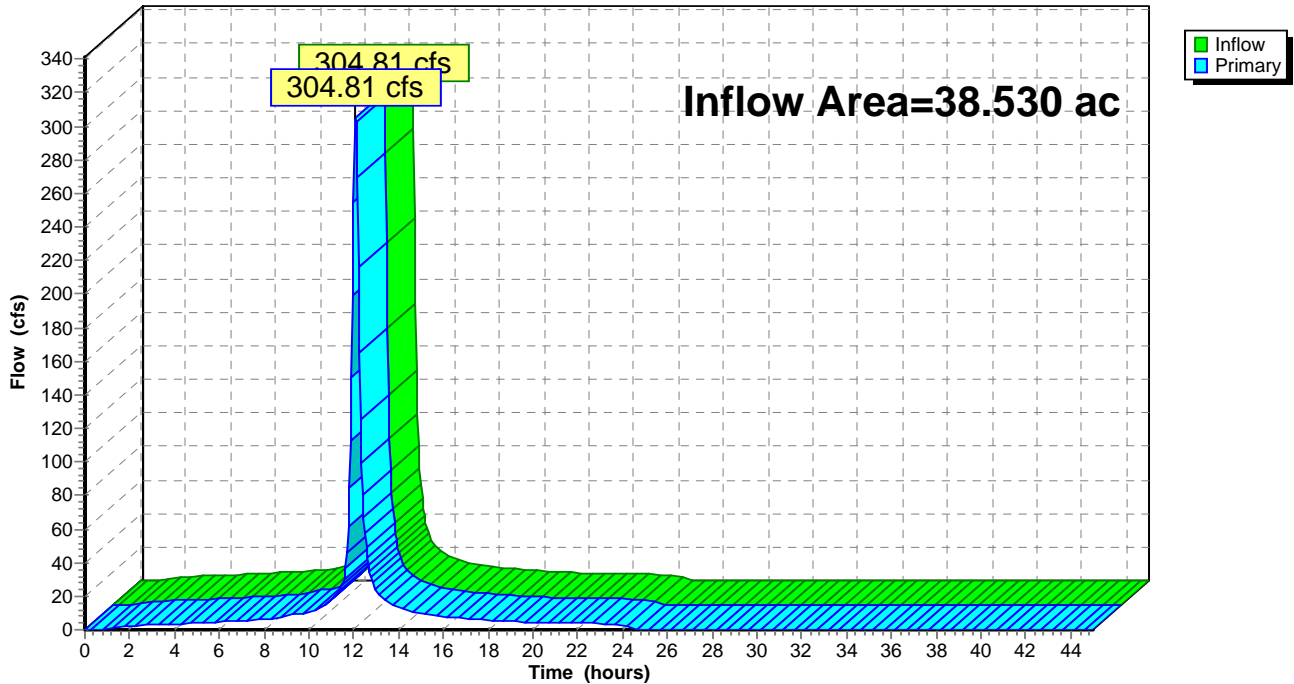
Summary for Link 5L: POA #2

Inflow Area = 38.530 ac, 90.00% Impervious, Inflow Depth = 7.55" for 100-yr event
Inflow = 304.81 cfs @ 12.08 hrs, Volume= 24.252 af
Primary = 304.81 cfs @ 12.08 hrs, Volume= 24.252 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 5L: POA #2

Hydrograph



Hydrograph for Link 5L: POA #2

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.00	0.00	0.00
0.50	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.00	0.58	0.00	0.58	27.50	0.00	0.00	0.00
1.50	1.42	0.00	1.42	28.00	0.00	0.00	0.00
2.00	2.01	0.00	2.01	28.50	0.00	0.00	0.00
2.50	2.46	0.00	2.46	29.00	0.00	0.00	0.00
3.00	2.83	0.00	2.83	29.50	0.00	0.00	0.00
3.50	3.13	0.00	3.13	30.00	0.00	0.00	0.00
4.00	3.40	0.00	3.40	30.50	0.00	0.00	0.00
4.50	3.70	0.00	3.70	31.00	0.00	0.00	0.00
5.00	4.05	0.00	4.05	31.50	0.00	0.00	0.00
5.50	4.39	0.00	4.39	32.00	0.00	0.00	0.00
6.00	4.73	0.00	4.73	32.50	0.00	0.00	0.00
6.50	5.06	0.00	5.06	33.00	0.00	0.00	0.00
7.00	5.38	0.00	5.38	33.50	0.00	0.00	0.00
7.50	5.70	0.00	5.70	34.00	0.00	0.00	0.00
8.00	6.02	0.00	6.02	34.50	0.00	0.00	0.00
8.50	6.87	0.00	6.87	35.00	0.00	0.00	0.00
9.00	8.31	0.00	8.31	35.50	0.00	0.00	0.00
9.50	9.08	0.00	9.08	36.00	0.00	0.00	0.00
10.00	10.23	0.00	10.23	36.50	0.00	0.00	0.00
10.50	13.08	0.00	13.08	37.00	0.00	0.00	0.00
11.00	17.75	0.00	17.75	37.50	0.00	0.00	0.00
11.50	27.70	0.00	27.70	38.00	0.00	0.00	0.00
12.00	254.54	0.00	254.54	38.50	0.00	0.00	0.00
12.50	57.16	0.00	57.16	39.00	0.00	0.00	0.00
13.00	23.36	0.00	23.36	39.50	0.00	0.00	0.00
13.50	16.86	0.00	16.86	40.00	0.00	0.00	0.00
14.00	13.10	0.00	13.10	40.50	0.00	0.00	0.00
14.50	10.98	0.00	10.98	41.00	0.00	0.00	0.00
15.00	9.88	0.00	9.88	41.50	0.00	0.00	0.00
15.50	8.80	0.00	8.80	42.00	0.00	0.00	0.00
16.00	7.72	0.00	7.72	42.50	0.00	0.00	0.00
16.50	6.98	0.00	6.98	43.00	0.00	0.00	0.00
17.00	6.58	0.00	6.58	43.50	0.00	0.00	0.00
17.50	6.20	0.00	6.20	44.00	0.00	0.00	0.00
18.00	5.81	0.00	5.81	44.50	0.00	0.00	0.00
18.50	5.42	0.00	5.42	45.00	0.00	0.00	0.00
19.00	5.04	0.00	5.04				
19.50	4.65	0.00	4.65				
20.00	4.26	0.00	4.26				
20.50	4.02	0.00	4.02				
21.00	3.94	0.00	3.94				
21.50	3.86	0.00	3.86				
22.00	3.79	0.00	3.79				
22.50	3.71	0.00	3.71				
23.00	3.63	0.00	3.63				
23.50	3.56	0.00	3.56				
24.00	3.48	0.00	3.48				
24.50	0.18	0.00	0.18				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				

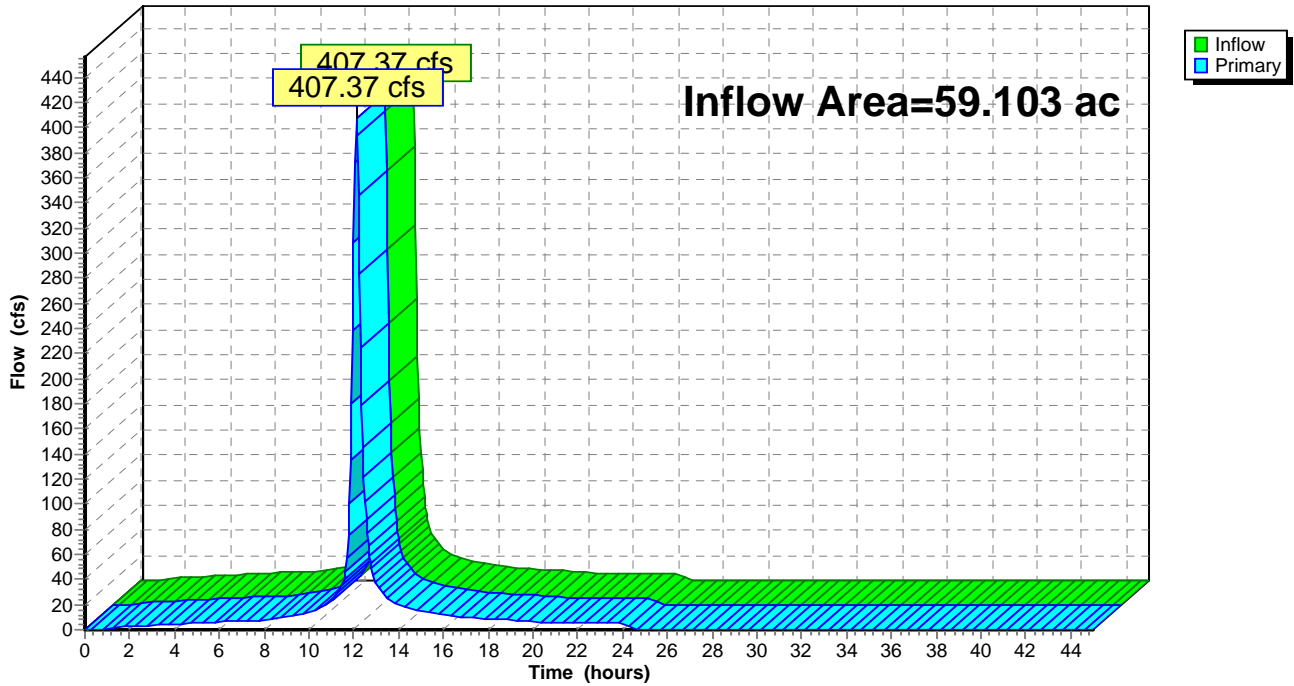
Summary for Link 6L: POA #3

Inflow Area = 59.103 ac, 78.05% Impervious, Inflow Depth = 7.04" for 100-yr event
Inflow = 407.37 cfs @ 12.11 hrs, Volume= 34.686 af
Primary = 407.37 cfs @ 12.11 hrs, Volume= 34.686 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 6L: POA #3

Hydrograph



Hydrograph for Link 6L: POA #3

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.00	0.00	0.00
0.50	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.00	0.68	0.00	0.68	27.50	0.00	0.00	0.00
1.50	1.77	0.00	1.77	28.00	0.00	0.00	0.00
2.00	2.55	0.00	2.55	28.50	0.00	0.00	0.00
2.50	3.14	0.00	3.14	29.00	0.00	0.00	0.00
3.00	3.61	0.00	3.61	29.50	0.00	0.00	0.00
3.50	4.01	0.00	4.01	30.00	0.00	0.00	0.00
4.00	4.35	0.00	4.35	30.50	0.00	0.00	0.00
4.50	4.73	0.00	4.73	31.00	0.00	0.00	0.00
5.00	5.18	0.00	5.18	31.50	0.00	0.00	0.00
5.50	5.63	0.00	5.63	32.00	0.00	0.00	0.00
6.00	6.06	0.00	6.06	32.50	0.00	0.00	0.00
6.50	6.49	0.00	6.49	33.00	0.00	0.00	0.00
7.00	6.91	0.00	6.91	33.50	0.00	0.00	0.00
7.50	7.32	0.00	7.32	34.00	0.00	0.00	0.00
8.00	7.72	0.00	7.72	34.50	0.00	0.00	0.00
8.50	8.76	0.00	8.76	35.00	0.00	0.00	0.00
9.00	10.59	0.00	10.59	35.50	0.00	0.00	0.00
9.50	11.78	0.00	11.78	36.00	0.00	0.00	0.00
10.00	13.32	0.00	13.32	36.50	0.00	0.00	0.00
10.50	17.21	0.00	17.21	37.00	0.00	0.00	0.00
11.00	23.54	0.00	23.54	37.50	0.00	0.00	0.00
11.50	36.79	0.00	36.79	38.00	0.00	0.00	0.00
12.00	308.33	0.00	308.33	38.50	0.00	0.00	0.00
12.50	102.26	0.00	102.26	39.00	0.00	0.00	0.00
13.00	36.90	0.00	36.90	39.50	0.00	0.00	0.00
13.50	25.79	0.00	25.79	40.00	0.00	0.00	0.00
14.00	19.99	0.00	19.99	40.50	0.00	0.00	0.00
14.50	16.59	0.00	16.59	41.00	0.00	0.00	0.00
15.00	14.91	0.00	14.91	41.50	0.00	0.00	0.00
15.50	13.31	0.00	13.31	42.00	0.00	0.00	0.00
16.00	11.70	0.00	11.70	42.50	0.00	0.00	0.00
16.50	10.51	0.00	10.51	43.00	0.00	0.00	0.00
17.00	9.91	0.00	9.91	43.50	0.00	0.00	0.00
17.50	9.34	0.00	9.34	44.00	0.00	0.00	0.00
18.00	8.76	0.00	8.76	44.50	0.00	0.00	0.00
18.50	8.18	0.00	8.18	45.00	0.00	0.00	0.00
19.00	7.61	0.00	7.61				
19.50	7.03	0.00	7.03				
20.00	6.44	0.00	6.44				
20.50	6.05	0.00	6.05				
21.00	5.93	0.00	5.93				
21.50	5.81	0.00	5.81				
22.00	5.70	0.00	5.70				
22.50	5.58	0.00	5.58				
23.00	5.47	0.00	5.47				
23.50	5.35	0.00	5.35				
24.00	5.24	0.00	5.24				
24.50	0.54	0.00	0.54				
25.00	0.01	0.00	0.01				
25.50	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				

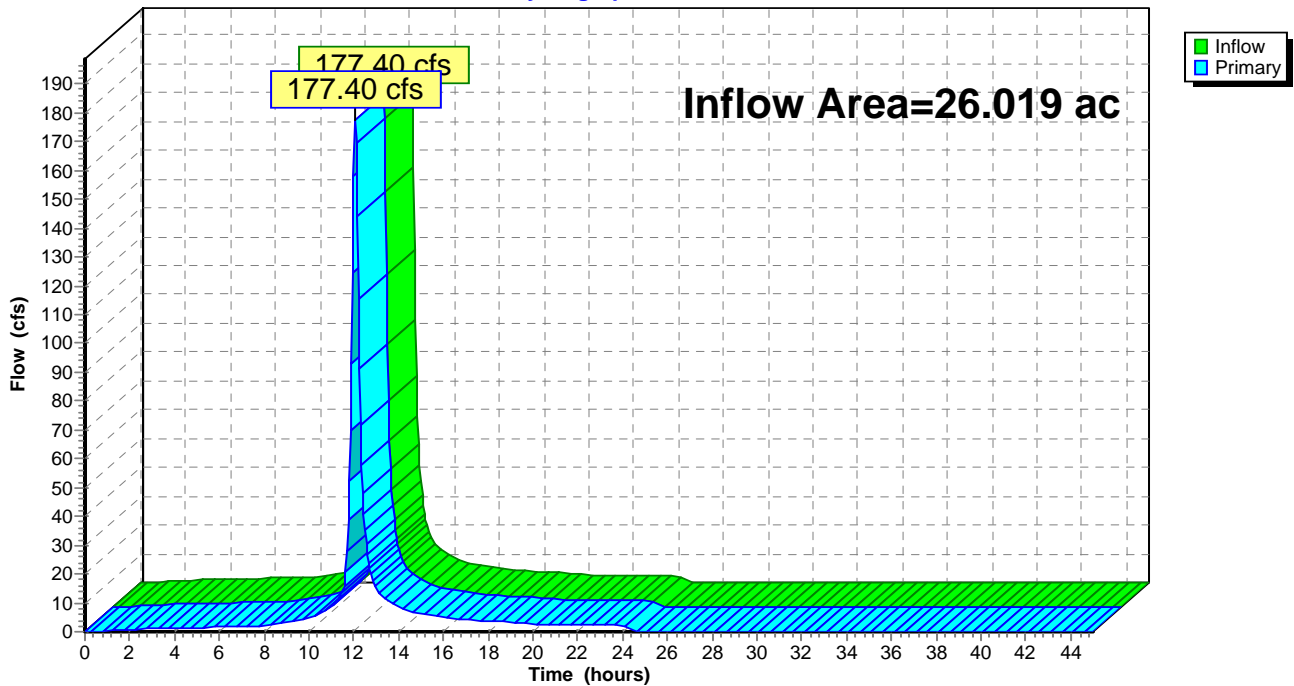
Summary for Link 13L: POA #4

Inflow Area = 26.019 ac, 45.00% Impervious, Inflow Depth = 6.29" for 100-yr event
Inflow = 177.40 cfs @ 12.06 hrs, Volume= 13.637 af
Primary = 177.40 cfs @ 12.06 hrs, Volume= 13.637 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-45.00 hrs, dt= 0.05 hrs

Link 13L: POA #4

Hydrograph



Hydrograph for Link 13L: POA #4

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.50	0.00	0.00	0.00
0.50	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.00	0.24	0.00	0.24	27.50	0.00	0.00	0.00
1.50	0.51	0.00	0.51	28.00	0.00	0.00	0.00
2.00	0.70	0.00	0.70	28.50	0.00	0.00	0.00
2.50	0.85	0.00	0.85	29.00	0.00	0.00	0.00
3.00	0.97	0.00	0.97	29.50	0.00	0.00	0.00
3.50	1.07	0.00	1.07	30.00	0.00	0.00	0.00
4.00	1.16	0.00	1.16	30.50	0.00	0.00	0.00
4.50	1.26	0.00	1.26	31.00	0.00	0.00	0.00
5.00	1.38	0.00	1.38	31.50	0.00	0.00	0.00
5.50	1.50	0.00	1.50	32.00	0.00	0.00	0.00
6.00	1.61	0.00	1.61	32.50	0.00	0.00	0.00
6.50	1.72	0.00	1.72	33.00	0.00	0.00	0.00
7.00	1.83	0.00	1.83	33.50	0.00	0.00	0.00
7.50	1.99	0.00	1.99	34.00	0.00	0.00	0.00
8.00	2.20	0.00	2.20	34.50	0.00	0.00	0.00
8.50	2.67	0.00	2.67	35.00	0.00	0.00	0.00
9.00	3.37	0.00	3.37	35.50	0.00	0.00	0.00
9.50	3.80	0.00	3.80	36.00	0.00	0.00	0.00
10.00	4.56	0.00	4.56	36.50	0.00	0.00	0.00
10.50	6.12	0.00	6.12	37.00	0.00	0.00	0.00
11.00	8.71	0.00	8.71	37.50	0.00	0.00	0.00
11.50	14.43	0.00	14.43	38.00	0.00	0.00	0.00
12.00	158.21	0.00	158.21	38.50	0.00	0.00	0.00
12.50	34.95	0.00	34.95	39.00	0.00	0.00	0.00
13.00	14.84	0.00	14.84	39.50	0.00	0.00	0.00
13.50	10.68	0.00	10.68	40.00	0.00	0.00	0.00
14.00	8.32	0.00	8.32	40.50	0.00	0.00	0.00
14.50	7.01	0.00	7.01	41.00	0.00	0.00	0.00
15.00	6.32	0.00	6.32	41.50	0.00	0.00	0.00
15.50	5.63	0.00	5.63	42.00	0.00	0.00	0.00
16.00	4.95	0.00	4.95	42.50	0.00	0.00	0.00
16.50	4.48	0.00	4.48	43.00	0.00	0.00	0.00
17.00	4.23	0.00	4.23	43.50	0.00	0.00	0.00
17.50	3.99	0.00	3.99	44.00	0.00	0.00	0.00
18.00	3.74	0.00	3.74	44.50	0.00	0.00	0.00
18.50	3.49	0.00	3.49	45.00	0.00	0.00	0.00
19.00	3.25	0.00	3.25				
19.50	3.00	0.00	3.00				
20.00	2.75	0.00	2.75				
20.50	2.60	0.00	2.60				
21.00	2.55	0.00	2.55				
21.50	2.50	0.00	2.50				
22.00	2.45	0.00	2.45				
22.50	2.40	0.00	2.40				
23.00	2.35	0.00	2.35				
23.50	2.30	0.00	2.30				
24.00	2.26	0.00	2.26				
24.50	0.14	0.00	0.14				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				
26.00	0.00	0.00	0.00				