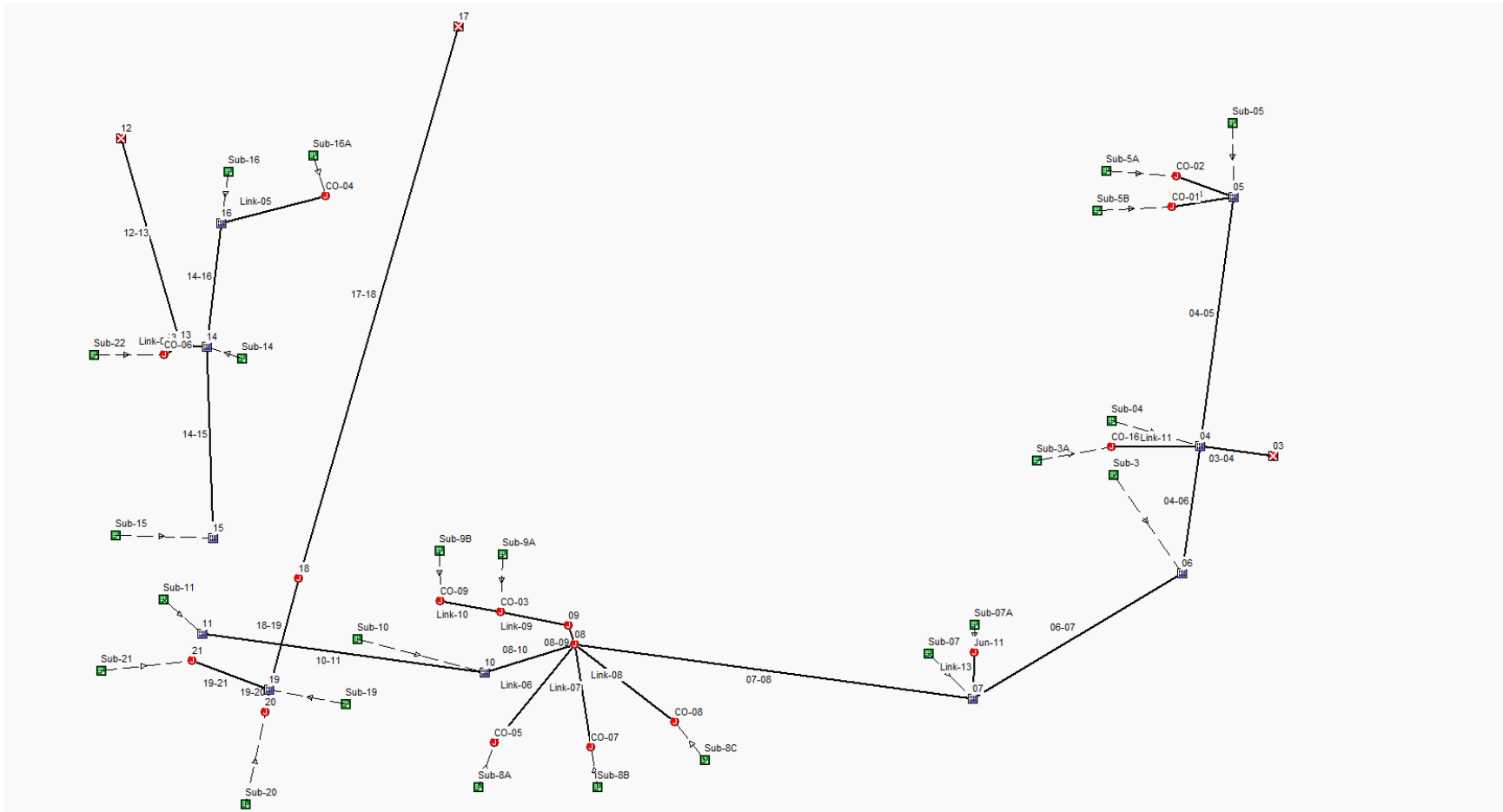


**ATTACHMENT D**  
**STORM AND SANITARY REPORTS**  
**STORM SEWER**



### Project Description

File Name ..... CMWA\_STORM\_SEWER.SPF

### Project Options

Flow Units ..... CFS  
 Elevation Type ..... Elevation  
 Hydrology Method ..... SCS TR-55  
 Time of Concentration (TOC) Method ..... SCS TR-55  
 Link Routing Method ..... Kinematic Wave  
 Enable Overflow Ponding at Nodes ..... YES  
 Skip Steady State Analysis Time Periods ... NO

### Analysis Options

Start Analysis On ..... Jun 21, 2019 00:00:00  
 End Analysis On ..... Jun 22, 2019 00:00:00  
 Start Reporting On ..... Jun 21, 2019 00:00:00  
 Antecedent Dry Days ..... 0 days  
 Runoff (Dry Weather) Time Step ..... 0 01:00:00 days hh:mm:ss  
 Runoff (Wet Weather) Time Step ..... 0 00:05:00 days hh:mm:ss  
 Reporting Time Step ..... 0 00:05:00 days hh:mm:ss  
 Routing Time Step ..... 30 seconds

### Number of Elements

Qty  
 Rain Gages ..... 3  
 Subbasins..... 23  
 Nodes..... 30  
     *Junctions* ..... 17  
     *Outfalls* ..... 3  
     *Flow Diversions* ..... 0  
     *Inlets* ..... 10  
     *Storage Nodes* ..... 0  
 Links..... 27  
     *Channels* ..... 0  
     *Pipes* ..... 27  
     *Pumps* ..... 0  
     *Orifices* ..... 0  
     *Weirs* ..... 0  
     *Outlets* ..... 0  
 Pollutants ..... 0  
 Land Uses ..... 0

### Rainfall Details

SN	Rain Gage ID	Data Source	Data Source ID	Rainfall Type	Rain Units	State	County	Return Period (years)	Rainfall Depth (inches)	Rainfall Distribution
1	100-24	Time Series	100-24	Cumulative	inches	Kentucky	Bourbon	100	6.56	SCS Type II 24-hr
2	10-24	Time Series	10-24	Cumulative	inches	Kentucky	Bourbon	10	4.27	SCS Type II 24-hr
3	25-24	Time Series	25-24	Cumulative	inches	Kentucky	Bourbon	25	5.11	SCS Type II 24-hr

**Subbasin Summary**

SN	Subbasin ID	Area (ac)	Weighted Curve Number	Total Rainfall (in)	Total Runoff (in)	Total Runoff Volume (ac-in)	Peak Runoff (cfs)	Time of Concentration (days hh:mm:ss)
1	Sub-04	0.29	89.61	4.27	3.14	0.90	1.22	0 00:10:00
2	Sub-05	0.26	90.69	4.27	3.24	0.86	1.14	0 00:10:00
3	Sub-07	0.18	91.56	4.27	3.33	0.60	0.79	0 00:10:00
4	Sub-07A	0.16	98.00	4.27	4.03	0.65	0.78	0 00:10:00
5	Sub-10	0.26	94.24	4.27	3.61	0.95	1.22	0 00:10:00
6	Sub-11	0.40	93.45	4.27	3.53	1.41	1.82	0 00:10:00
7	Sub-14	0.45	85.16	4.27	2.72	1.21	1.67	0 00:10:00
8	Sub-15	0.35	82.86	4.27	2.51	0.88	1.22	0 00:10:00
9	Sub-16	0.04	74.00	4.27	1.79	0.08	0.11	0 00:10:00
10	Sub-16A	0.13	74.00	4.27	1.80	0.24	0.33	0 00:10:00
11	Sub-19	0.48	98.00	4.27	4.03	1.92	2.32	0 00:10:00
12	Sub-20	7.96	91.38	4.27	3.32	26.38	28.66	0 00:19:00
13	Sub-21	0.49	98.00	4.27	4.03	1.98	2.42	0 00:10:00
14	Sub-22	0.97	98.00	4.27	4.03	3.91	4.74	0 00:10:00
15	Sub-3	1.38	91.78	4.27	3.36	4.62	6.11	0 00:10:00
16	Sub-3A	0.37	98.00	4.27	4.03	1.49	1.82	0 00:10:00
17	Sub-5A	0.28	98.00	4.27	4.03	1.13	1.38	0 00:10:00
18	Sub-5B	0.28	98.00	4.27	4.03	1.12	1.35	0 00:10:00
19	Sub-8A	1.04	98.00	4.27	4.03	4.21	5.11	0 00:10:00
20	Sub-8B	1.04	98.00	4.27	4.03	4.21	5.11	0 00:10:00
21	Sub-8C	0.13	98.00	4.27	4.03	0.52	0.63	0 00:10:00
22	Sub-9A	1.34	98.00	4.27	4.03	5.39	6.56	0 00:10:00
23	Sub-9B	1.33	98.00	4.27	4.03	5.38	6.52	0 00:10:00

**Node Summary**

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft <sup>2</sup> )	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	08	Junction	866.96	874.82	866.96	874.82	10.00	26.17	868.63	0.00	6.19	0 00:00	0.00	0.00
2	09	Junction	867.80	875.12	867.80	875.12	0.00	12.68	869.01	0.00	6.11	0 00:00	0.00	0.00
3	13	Junction	863.09	874.14	863.09	874.14	10.00	7.86	868.95	0.00	5.19	0 00:00	0.00	0.00
4	18	Junction	853.77	874.84	853.77	874.84	0.00	32.09	854.81	0.00	20.03	0 00:00	0.00	0.00
5	20	Junction	864.23	867.90	864.23	867.90	0.00	28.54	865.10	0.00	2.79	0 00:00	0.00	0.00
6	21	Junction	869.86	874.64	869.86	874.64	10.00	2.36	870.23	0.00	4.40	0 00:00	0.00	0.00
7	CO-01	Junction	871.83	875.83	871.83	875.83	0.00	1.32	872.09	0.00	3.74	0 00:00	0.00	0.00
8	CO-02	Junction	871.83	875.83	871.83	875.83	0.00	1.35	872.16	0.00	3.67	0 00:00	0.00	0.00
9	CO-03	Junction	869.51	875.83	869.51	875.83	0.00	12.77	870.63	0.00	5.20	0 00:00	0.00	0.00
10	CO-04	Junction	871.83	875.83	871.83	875.83	0.00	0.33	872.06	0.00	3.77	0 00:00	0.00	0.00
11	CO-05	Junction	867.21	875.83	867.21	875.83	0.00	4.99	867.90	0.00	7.93	0 00:00	0.00	0.00
12	CO-06	Junction	863.24	875.83	863.24	0.00	0.00	4.63	863.95	0.00	11.88	0 00:00	0.00	0.00
13	CO-07	Junction	867.21	875.83	867.21	875.83	0.00	4.99	867.90	0.00	7.93	0 00:00	0.00	0.00
14	CO-08	Junction	867.16	875.83	867.16	875.83	0.00	0.61	867.48	0.00	8.35	0 00:00	0.00	0.00
15	CO-09	Junction	870.83	875.83	870.83	875.83	0.00	6.37	871.56	0.00	4.27	0 00:00	0.00	0.00
16	CO-16	Junction	867.47	875.83	867.47	875.83	867.47	1.78	867.97	0.00	7.86	0 00:00	0.00	0.00
17	Jun-11	Junction	864.02	875.13	864.02	875.83	0.00	0.77	864.39	0.00	10.74	0 00:00	0.00	0.00
18	03	Outfall	840.45					40.08	841.16					
19	12	Outfall	861.00					7.83	861.71					
20	17	Outfall	833.01					31.97	834.05					

### Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/Total Depth Ratio	Total Time Reported (min)	Surcharged Condition
1	03-04	Pipe	04	03	71.92	859.78	840.45	26.8800	30.000	0.0120	40.08	230.37	0.17	35.17	0.70	0.28	0.00	Calculated
2	04-05	Pipe	05	04	243.06	868.16	863.30	2.0000	15.000	0.0120	3.77	9.90	0.38	7.55	0.54	0.43	0.00	Calculated
3	04-06	Pipe	06	04	125.00	860.75	858.88	1.5000	30.000	0.0120	33.38	54.35	0.61	11.63	1.41	0.57	0.00	Calculated
4	06-07	Pipe	07	06	236.32	863.21	860.85	1.0000	30.000	0.0120	27.55	44.44	0.62	9.55	1.42	0.57	0.00	Calculated
5	07-08	Pipe	08	07	389.51	866.96	863.31	0.9400	30.000	0.0120	26.09	43.01	0.61	9.24	1.40	0.56	0.00	Calculated
6	08-09	Pipe	09	08	19.08	867.80	867.61	1.0000	24.000	0.0120	12.68	24.52	0.52	7.87	1.02	0.51	0.00	Calculated
7	08-10	Pipe	10	08	91.23	867.52	867.06	0.5000	15.000	0.0120	2.94	4.95	0.59	4.21	0.69	0.56	0.00	Calculated
8	10-11	Pipe	11	10	276.00	869.00	867.62	0.5000	15.000	0.0120	1.77	4.95	0.36	3.74	0.52	0.41	0.00	Calculated
9	12-13	Pipe	13	12	209.05	863.09	861.00	1.0000	30.000	0.0120	7.83	44.43	0.18	6.83	0.71	0.28	0.00	Calculated
10	13-14	Pipe	14	13	25.18	868.60	868.35	1.0000	15.000	0.0120	3.26	7.00	0.47	5.60	0.60	0.48	0.00	Calculated
11	14-15	Pipe	15	14	185.79	869.79	868.70	0.5900	15.000	0.0120	1.21	5.36	0.22	3.56	0.40	0.32	0.00	Calculated
12	14-16	Pipe	16	14	122.21	870.50	868.70	1.4700	10.000	0.0120	0.41	2.88	0.14	3.75	0.21	0.25	0.00	Calculated
13	17-18	Pipe	18	17	518.95	853.77	833.01	4.0000	30.000	0.0120	31.97	88.87	0.36	16.66	1.04	0.41	0.00	Calculated
14	18-19	Pipe	19	18	149.66	862.85	853.87	6.0000	30.000	0.0120	32.09	108.85	0.29	19.48	0.92	0.37	0.00	Calculated
15	19-20	Pipe	20	19	22.95	864.23	862.85	6.0100	30.000	0.0120	28.58	108.96	0.26	18.71	0.87	0.35	0.00	Calculated
16	19-21	Pipe	21	19	79.04	869.86	867.49	3.0000	15.000	0.0120	2.35	12.12	0.19	7.64	0.37	0.30	0.00	Calculated
17	Link-02	Pipe	CO-01	05	53.00	868.69	868.16	1.0000	10.000	0.0120	1.32	6.25	0.21	9.07	0.26	0.31	0.00	Calculated
18	Link-03	Pipe	CO-02	05	119.00	869.35	868.16	1.0000	10.000	0.0120	1.34	4.17	0.32	6.82	0.33	0.39	0.00	Calculated
19	Link-04	Pipe	CO-06	13	10.00	863.24	863.19	0.5000	24.000	0.0120	4.62	17.33	0.27	4.67	0.71	0.35	0.00	Calculated
20	Link-05	Pipe	CO-04	16	26.97	871.83	871.56	1.0000	8.000	0.0120	0.33	1.31	0.25	3.13	0.23	0.34	0.00	Calculated
21	Link-06	Pipe	CO-05	08	10.00	867.21	867.06	1.5000	15.000	0.0120	4.99	8.57	0.58	7.25	0.69	0.55	0.00	Calculated
22	Link-07	Pipe	CO-07	08	10.00	867.21	867.06	1.5000	15.000	0.0120	4.99	8.57	0.58	7.25	0.69	0.55	0.00	Calculated
23	Link-08	Pipe	CO-08	08	10.00	867.16	867.06	1.0000	8.000	0.0120	0.61	1.31	0.47	3.68	0.32	0.48	0.00	Calculated
24	Link-09	Pipe	CO-03	09	214.81	869.51	867.90	0.7500	24.000	0.0120	12.68	21.22	0.60	7.09	1.12	0.56	0.00	Calculated
25	Link-10	Pipe	CO-09	CO-03	66.00	870.83	869.51	2.0000	15.000	0.0120	6.36	9.90	0.64	8.55	0.73	0.58	0.00	Calculated
26	Link-11	Pipe	CO-16	04	185.00	867.47	865.15	1.2500	10.000	0.0120	1.77	2.66	0.67	5.25	0.50	0.60	0.00	Calculated
27	Link-13	Pipe	Jun-11	07	81.00	864.02	863.21	1.0000	10.000	0.0150	0.76	1.90	0.40	3.30	0.37	0.44	0.00	Calculated

### Inlet Summary

SN Element ID	Inlet Manufacturer	Manufacturer Part Number	Inlet Location	Number of Inlets	Catchbasin Invert Elevation (ft)	Max (Rim) Elevation (ft)	Initial Water Elevation (ft)	Ponded Area (ft <sup>2</sup> )	Peak Flow (cfs)	Peak Flow Intercepted (cfs)	Peak Flow Bypassing Inlet (cfs)	Peak Flow during Peak (cfs)	Inlet Allowable Spread (ft)	Max Gutter Spread during Peak (ft)	Max Gutter Water Elev. during Peak (ft)
1 04	NEENAH FOUNDRY	R-3246	On Sag	1	858.78	869.74	858.78	100.00	1.20	N/A	N/A	N/A	7.00	2.67	869.89
2 05	NEENAH FOUNDRY	R-3246	On Sag	1	868.16	872.17	868.16	100.00	1.12	N/A	N/A	N/A	7.00	2.54	872.32
3 06	NEENAH FOUNDRY	R-3246	On Sag	3	860.75	868.48	860.75	100.00	6.01	N/A	N/A	N/A	7.00	4.95	868.75
4 07	FHWA HEC-22 GENERIC	N/A	On Sag	1	863.21	873.55	863.21	100.00	0.78	N/A	N/A	N/A	7.00	4.09	873.77
5 10	NEENAH FOUNDRY	R-3246	On Sag	1	867.52	873.42	867.52	100.00	1.20	N/A	N/A	N/A	7.00	2.66	873.58
6 11	NEENAH FOUNDRY	R-3246	On Sag	1	869.00	873.03	869.00	100.00	1.79	N/A	N/A	N/A	7.00	3.89	873.25
7 14	FHWA HEC-22 GENERIC	N/A	On Sag	1	868.60	872.61	868.60	100.00	1.66	N/A	N/A	N/A	7.00	6.97	872.98
8 15	FHWA HEC-22 GENERIC	N/A	On Sag	1	869.79	873.54	869.79	100.00	1.22	N/A	N/A	N/A	7.00	5.81	873.85
9 16	FHWA HEC-22 GENERIC	N/A	On Sag	1	870.50	874.50	870.50	100.00	0.11	N/A	N/A	N/A	7.00	8.43	874.84
10 19	NEENAH FOUNDRY	R-1878-B7G	On Sag	1	862.85	872.58	862.85	100.00	2.27	N/A	N/A	N/A	7.00	2.75	872.69

## Subbasin Hydrology

### Subbasin : Sub-04

#### Input Data

Area (ac) ..... 0.29  
 Weighted Curve Number ..... 89.61  
 Rain Gage ID ..... 10-24

#### Composite Curve Number

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.19	C	98.00
> 75% grass cover, Good	0.10	C	74.00
Composite Area & Weighted CN	0.29		89.61

#### Time of Concentration

TOC Method : SCS TR-55

Sheet Flow Equation :

$$T_c = (0.007 * ((n * L_f)^{0.8})) / ((P^{0.5}) * (S_f^{0.4}))$$

Where :

T<sub>c</sub> = Time of Concentration (hr)  
 n = Manning's roughness  
 L<sub>f</sub> = Flow Length (ft)  
 P = 2 yr, 24 hr Rainfall (inches)  
 S<sub>f</sub> = Slope (ft/ft)

Shallow Concentrated Flow Equation :

V = 16.1345 \* (S<sub>f</sub><sup>0.5</sup>) (unpaved surface)  
 V = 20.3282 \* (S<sub>f</sub><sup>0.5</sup>) (paved surface)  
 V = 15.0 \* (S<sub>f</sub><sup>0.5</sup>) (grassed waterway surface)  
 V = 10.0 \* (S<sub>f</sub><sup>0.5</sup>) (nearly bare & untilled surface)  
 V = 9.0 \* (S<sub>f</sub><sup>0.5</sup>) (cultivated straight rows surface)  
 V = 7.0 \* (S<sub>f</sub><sup>0.5</sup>) (short grass pasture surface)  
 V = 5.0 \* (S<sub>f</sub><sup>0.5</sup>) (woodland surface)  
 V = 2.5 \* (S<sub>f</sub><sup>0.5</sup>) (forest w/heavy litter surface)  
 T<sub>c</sub> = (L<sub>f</sub> / V) / (3600 sec/hr)

Where:

T<sub>c</sub> = Time of Concentration (hr)  
 L<sub>f</sub> = Flow Length (ft)  
 V = Velocity (ft/sec)  
 S<sub>f</sub> = Slope (ft/ft)

Channel Flow Equation :

$$V = (1.49 * (R^{2/3}) * (S_f^{0.5})) / n$$

R = A<sub>q</sub> / W<sub>p</sub>  
 T<sub>c</sub> = (L<sub>f</sub> / V) / (3600 sec/hr)

Where :

T<sub>c</sub> = Time of Concentration (hr)  
 L<sub>f</sub> = Flow Length (ft)  
 R = Hydraulic Radius (ft)  
 A<sub>q</sub> = Flow Area (ft<sup>2</sup>)  
 W<sub>p</sub> = Wetted Perimeter (ft)  
 V = Velocity (ft/sec)  
 S<sub>f</sub> = Slope (ft/ft)  
 n = Manning's roughness

User-Defined TOC override (minutes): 10

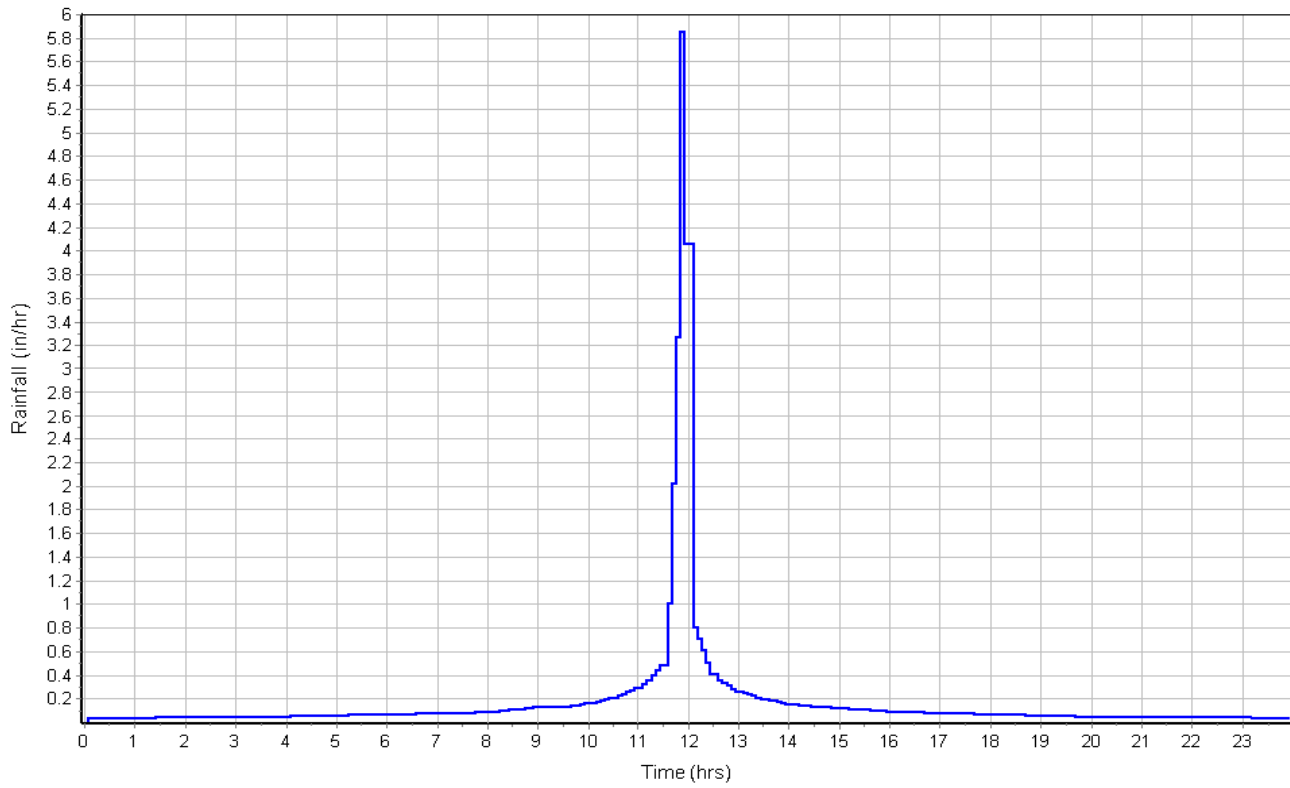
#### Subbasin Runoff Results

Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 3.14  
 Peak Runoff (cfs) ..... 1.22  
 Weighted Curve Number ..... 89.61  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

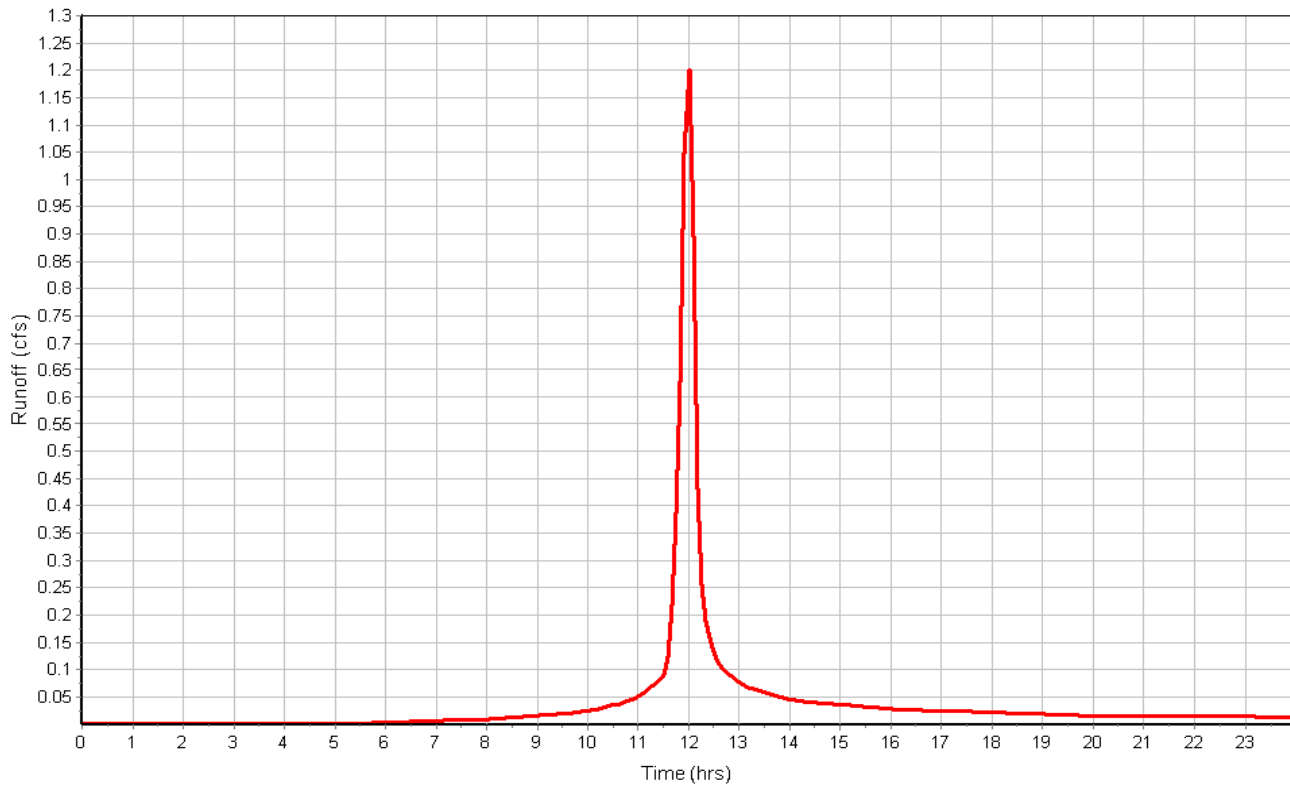


Subbasin : Sub-04

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-05**

**Input Data**

Area (ac) ..... 0.26  
 Weighted Curve Number ..... 90.69  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.18	D	98.00
> 75% grass cover, Good	0.08	C	74.00
Composite Area & Weighted CN	0.26		90.69

**Time of Concentration**

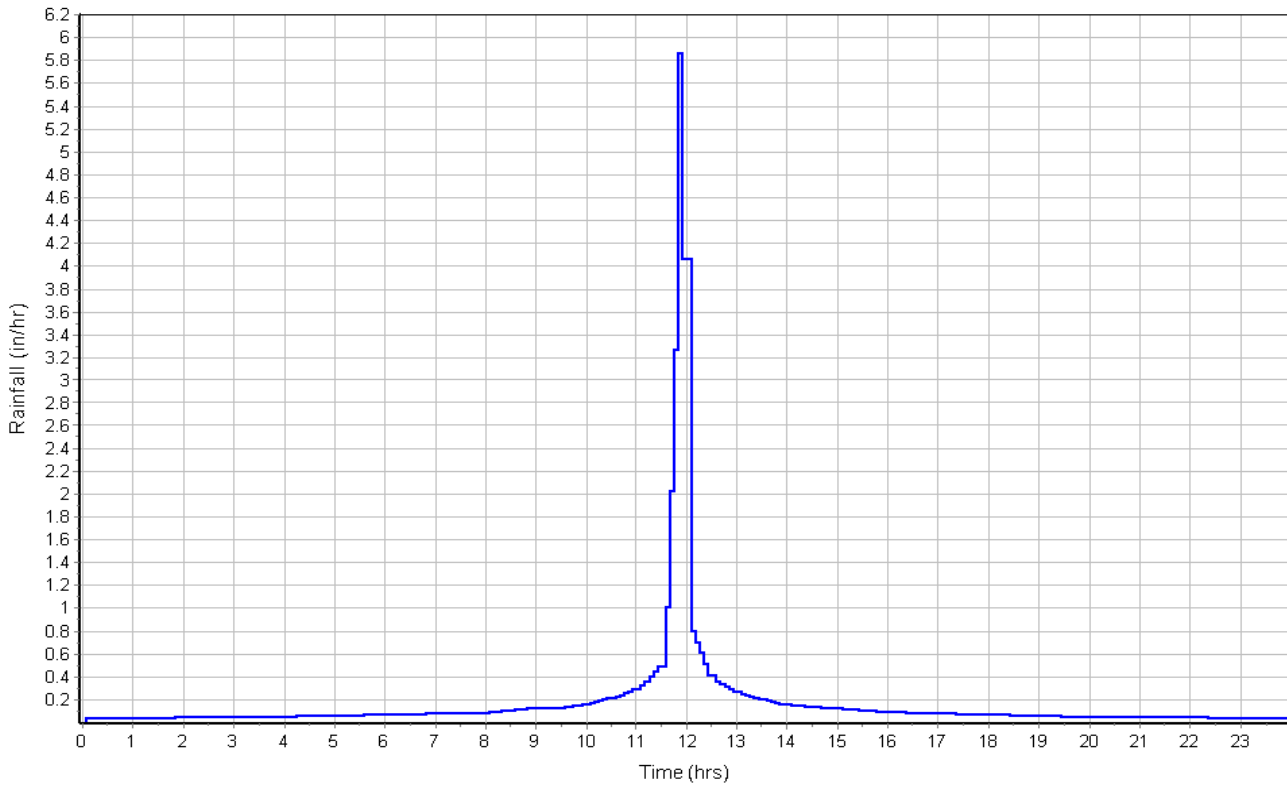
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

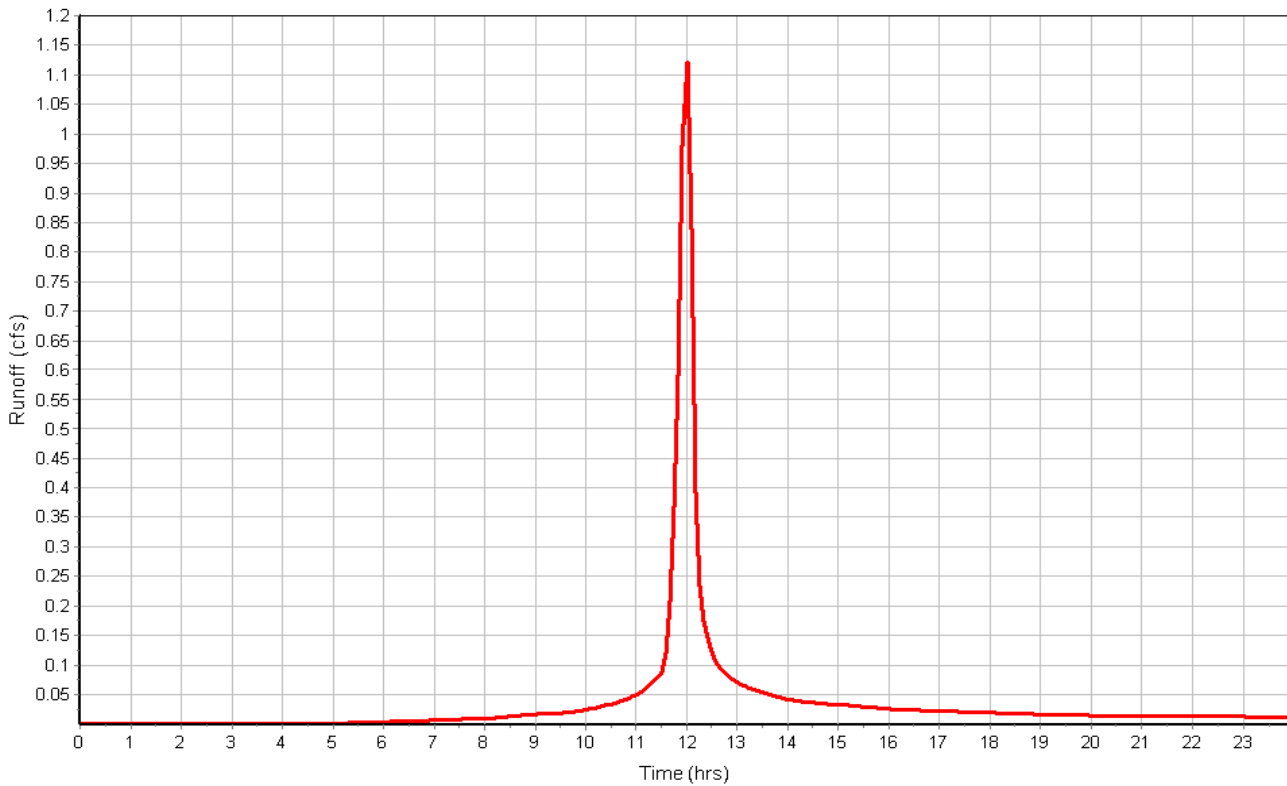
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 3.24  
 Peak Runoff (cfs) ..... 1.14  
 Weighted Curve Number ..... 90.69  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-05

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-07**

**Input Data**

Area (ac) ..... 0.18  
 Weighted Curve Number ..... 91.56  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.13	C	98.00
> 75% grass cover, Good	0.05	C	74.00
Composite Area & Weighted CN	0.18		91.56

**Time of Concentration**

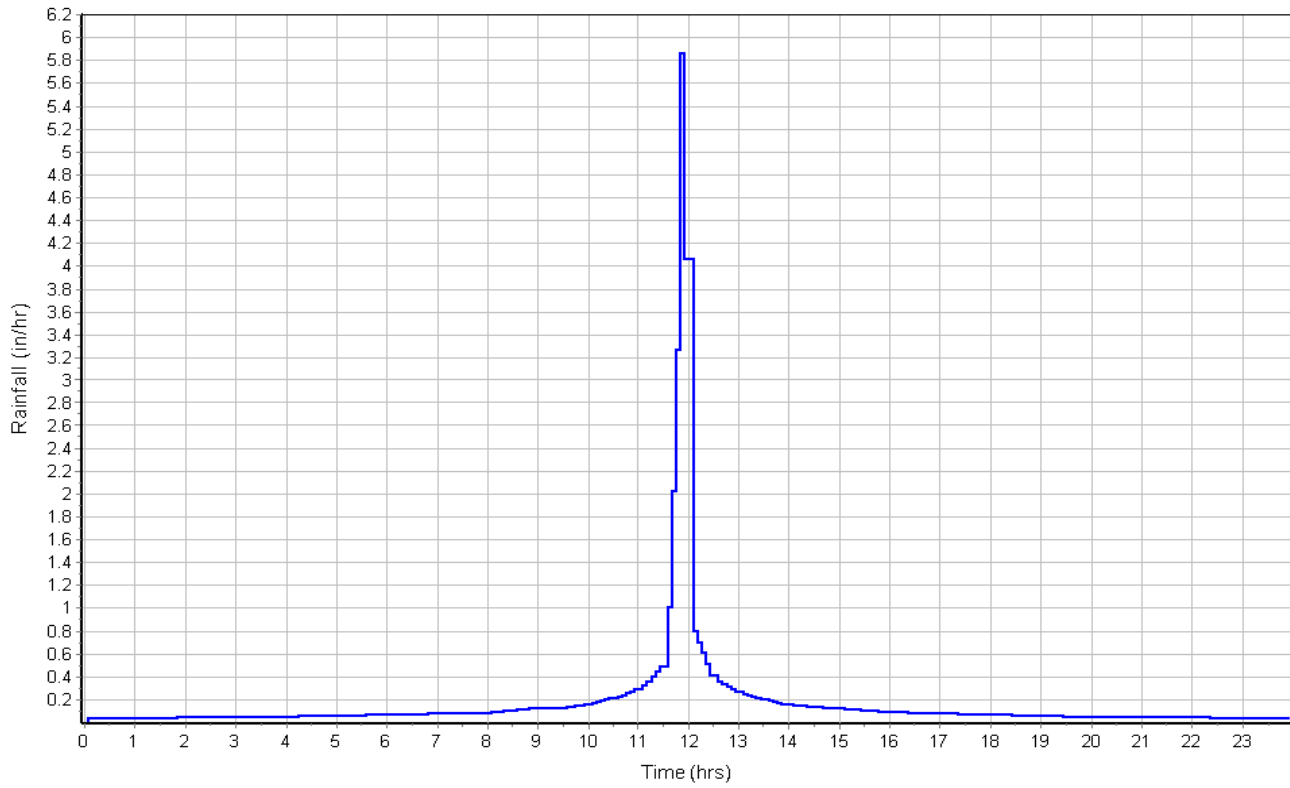
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

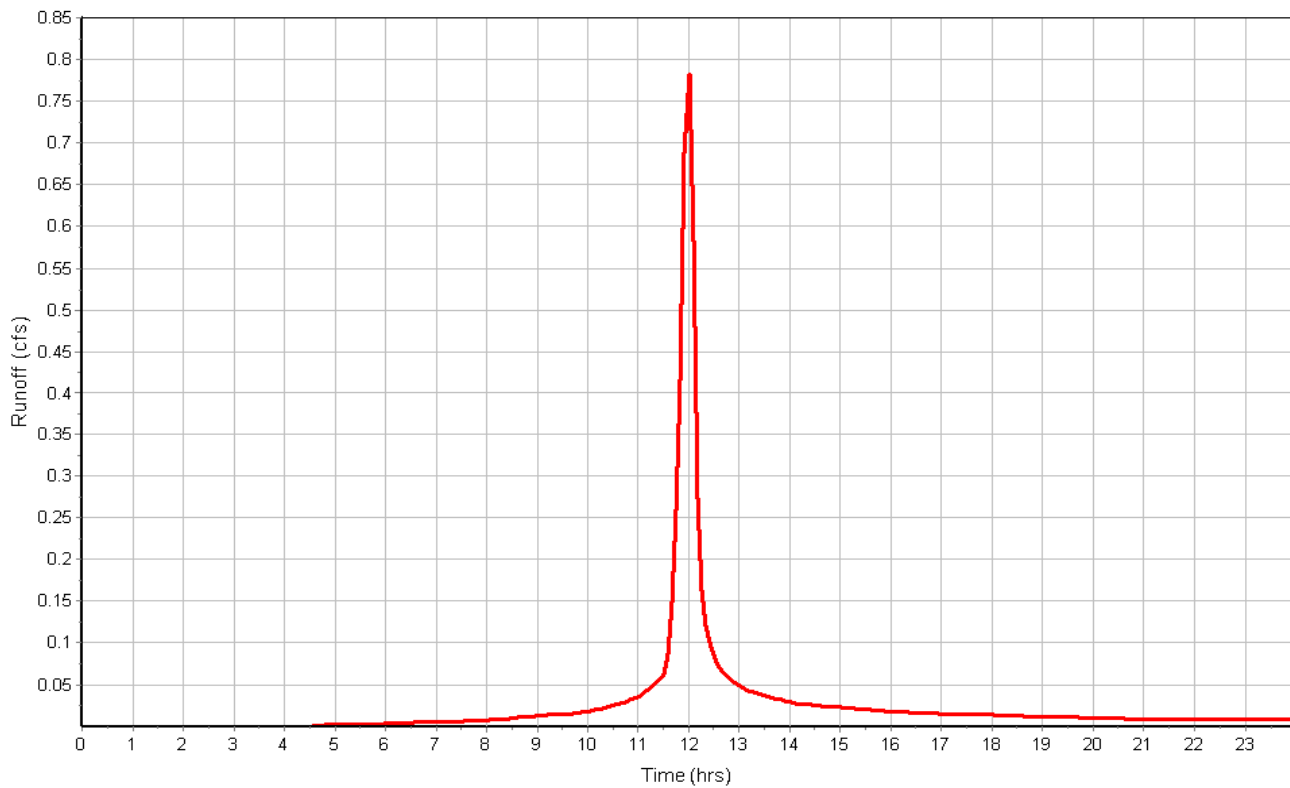
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 3.33  
 Peak Runoff (cfs) ..... 0.79  
 Weighted Curve Number ..... 91.56  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-07

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-07A**

**Input Data**

Area (ac) ..... 0.16  
 Weighted Curve Number ..... 98.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.16	C	98.00
Composite Area & Weighted CN	0.16		98.00

**Time of Concentration**

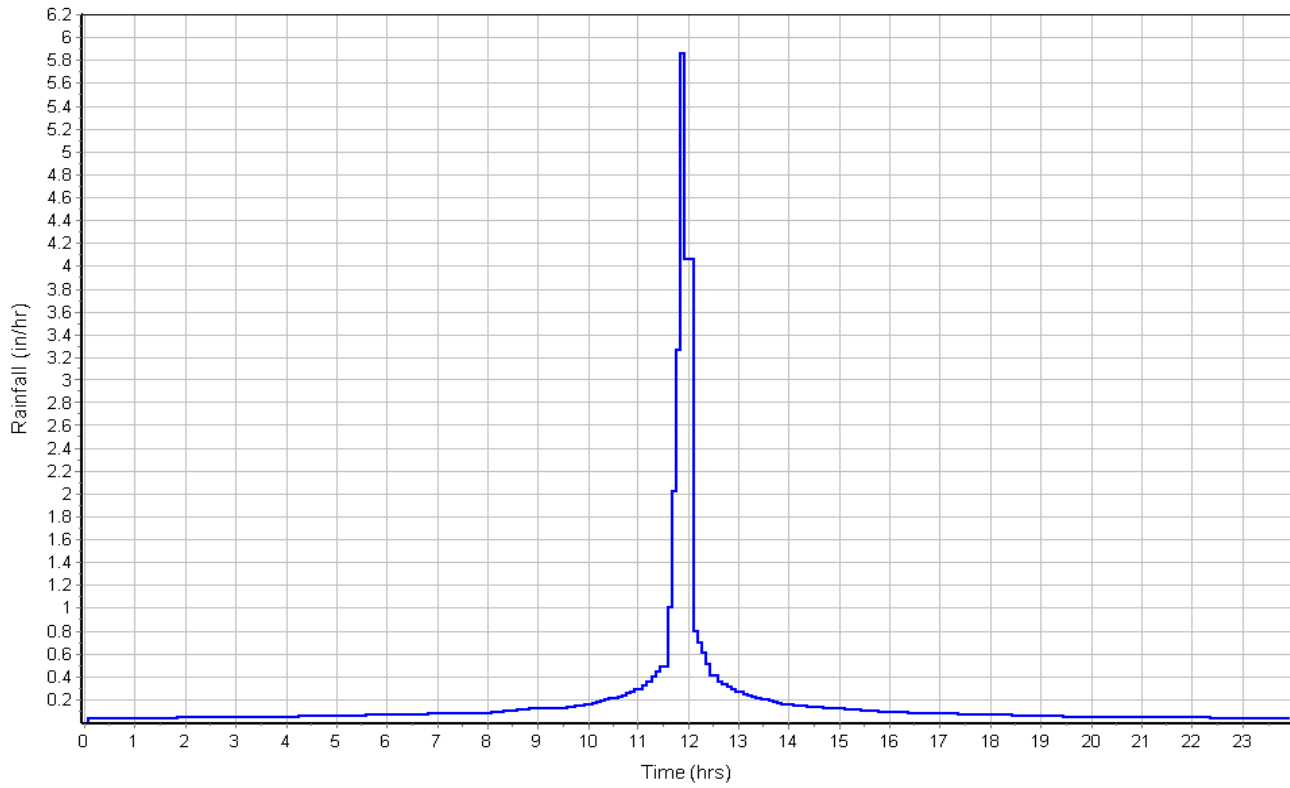
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

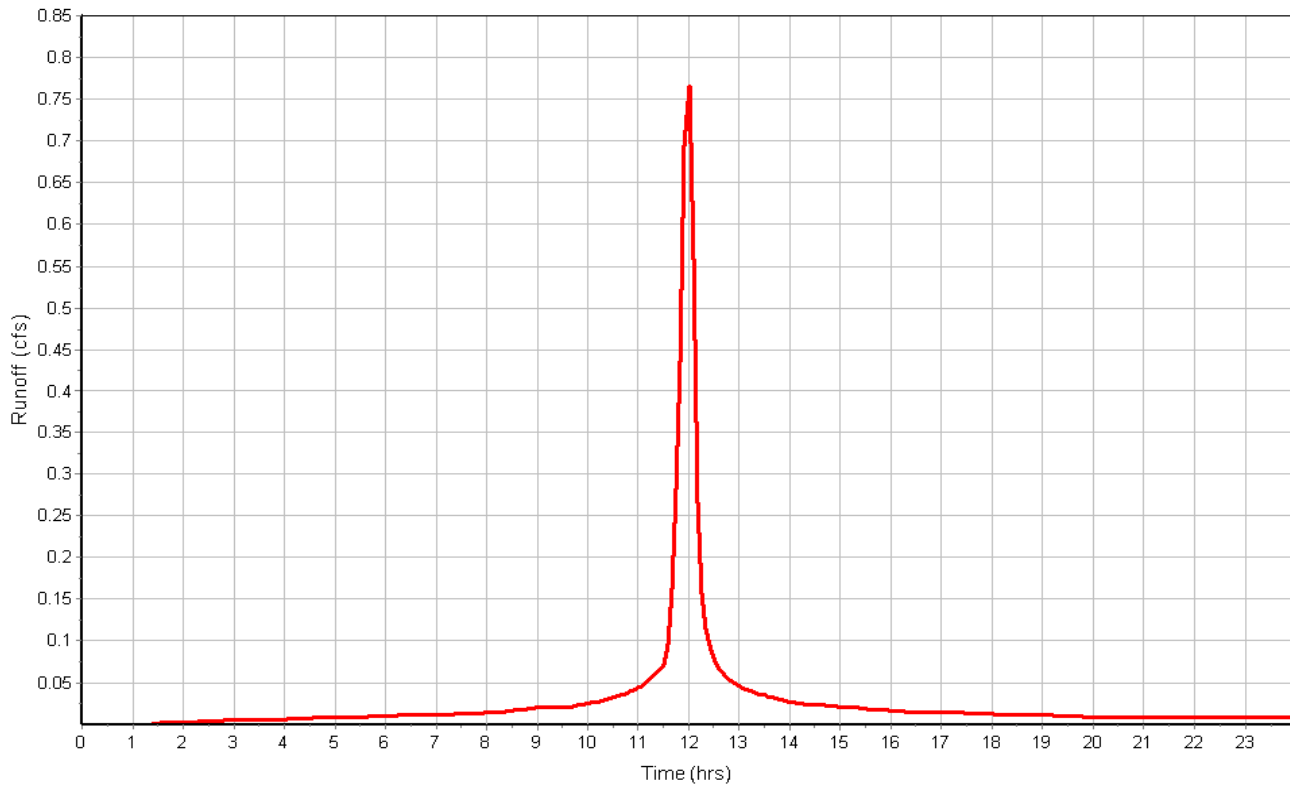
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 4.03  
 Peak Runoff (cfs) ..... 0.78  
 Weighted Curve Number ..... 98.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-07A

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-10**

**Input Data**

Area (ac) ..... 0.26  
 Weighted Curve Number ..... 94.24  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	0.04	C	74.00
Paved parking & roofs	0.22	C	98.00
Composite Area & Weighted CN	0.26		94.24

**Time of Concentration**

User-Defined TOC override (minutes): 10

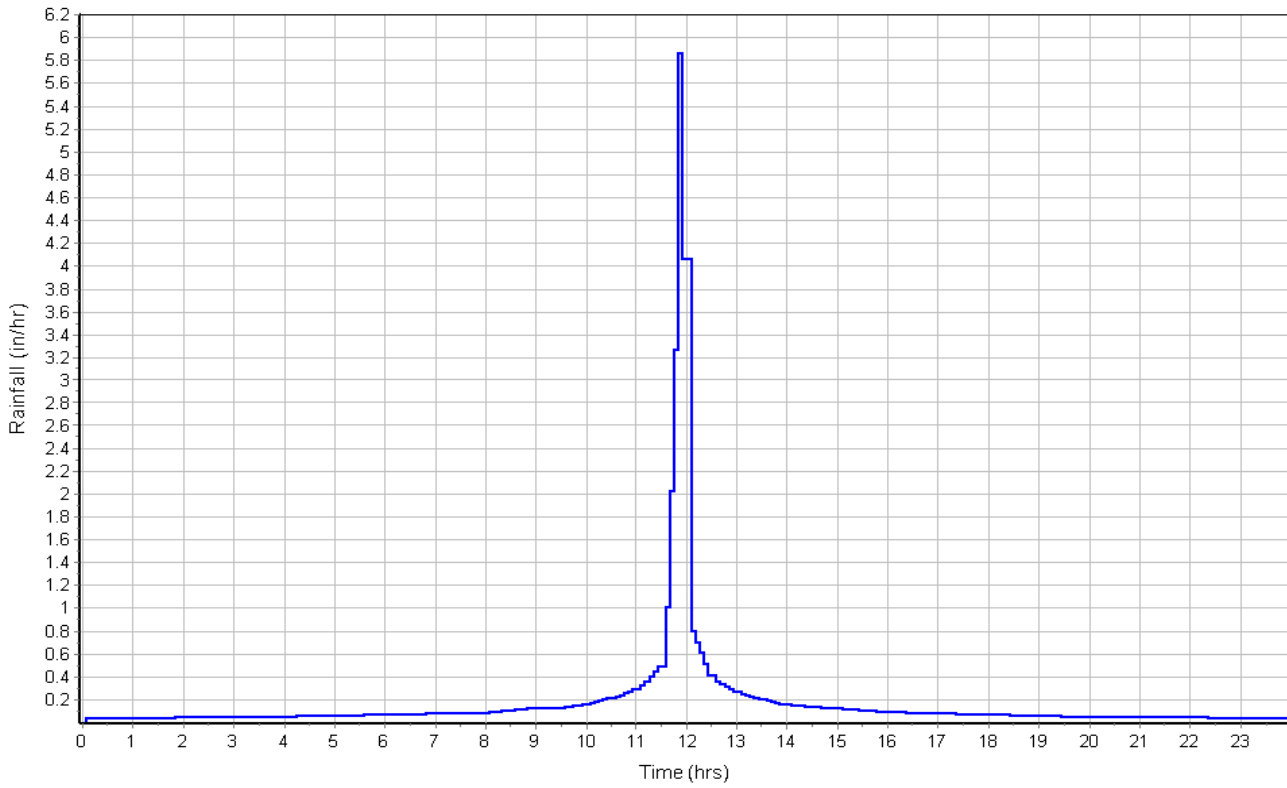
**Subbasin Runoff Results**

Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 3.61  
 Peak Runoff (cfs) ..... 1.22  
 Weighted Curve Number ..... 94.24  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

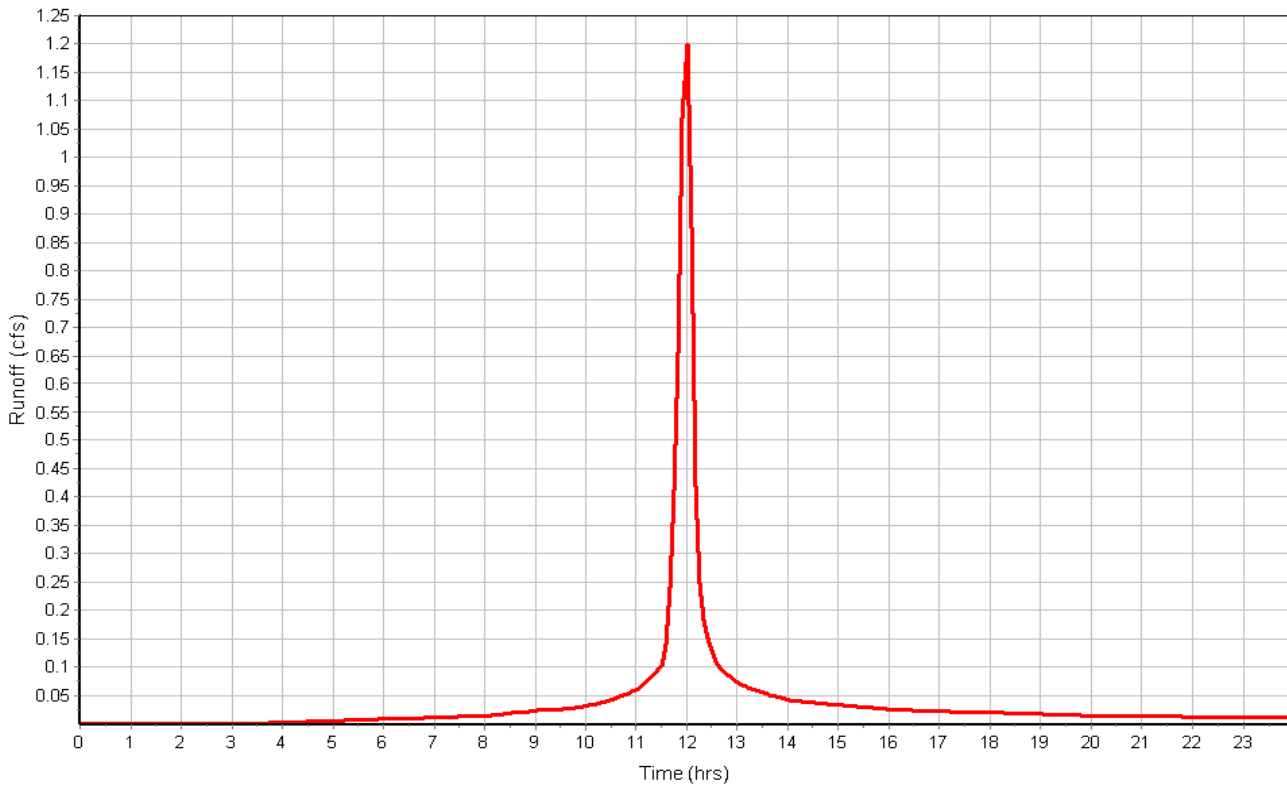


Subbasin : Sub-10

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-11**

**Input Data**

Area (ac) ..... 0.40  
 Weighted Curve Number ..... 93.45  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	0.08	C	74.00
Paved parking & roofs	0.32	C	98.00
Composite Area & Weighted CN	0.40		93.45

**Time of Concentration**

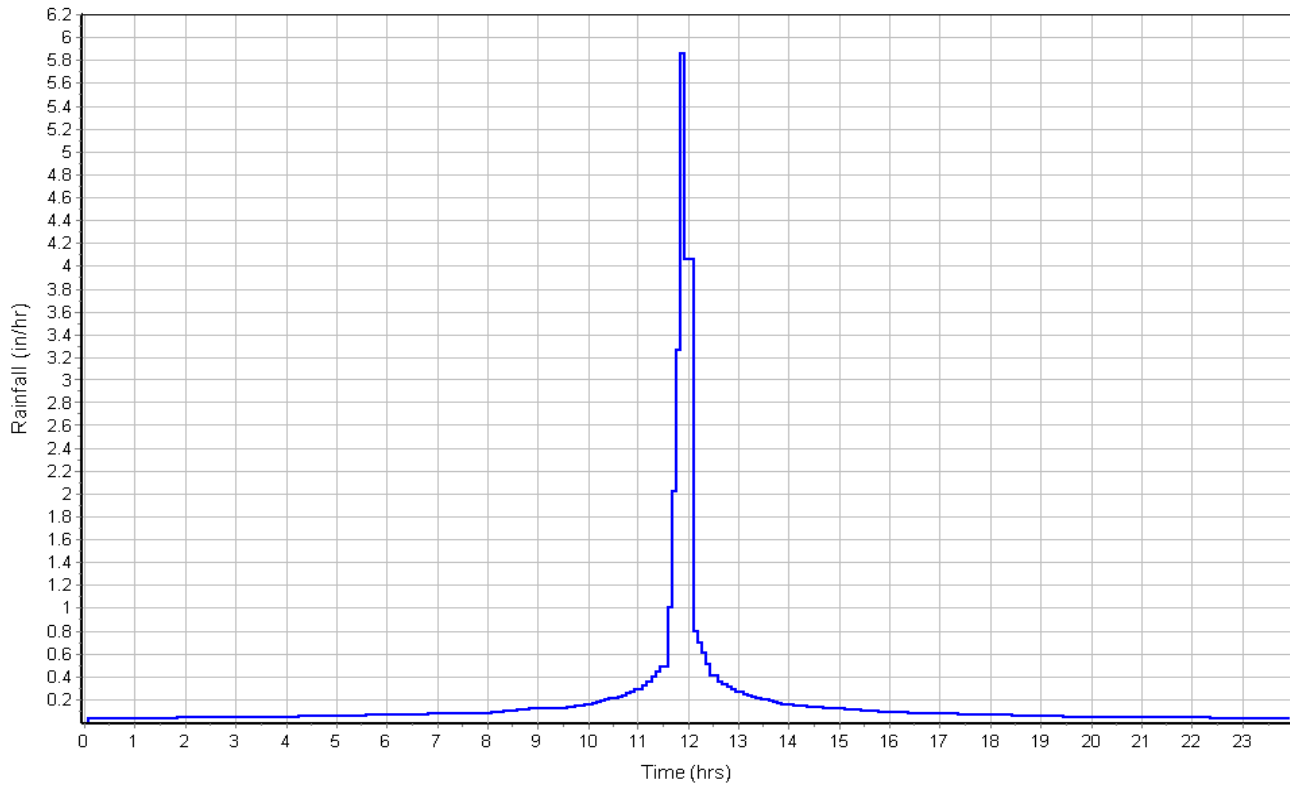
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

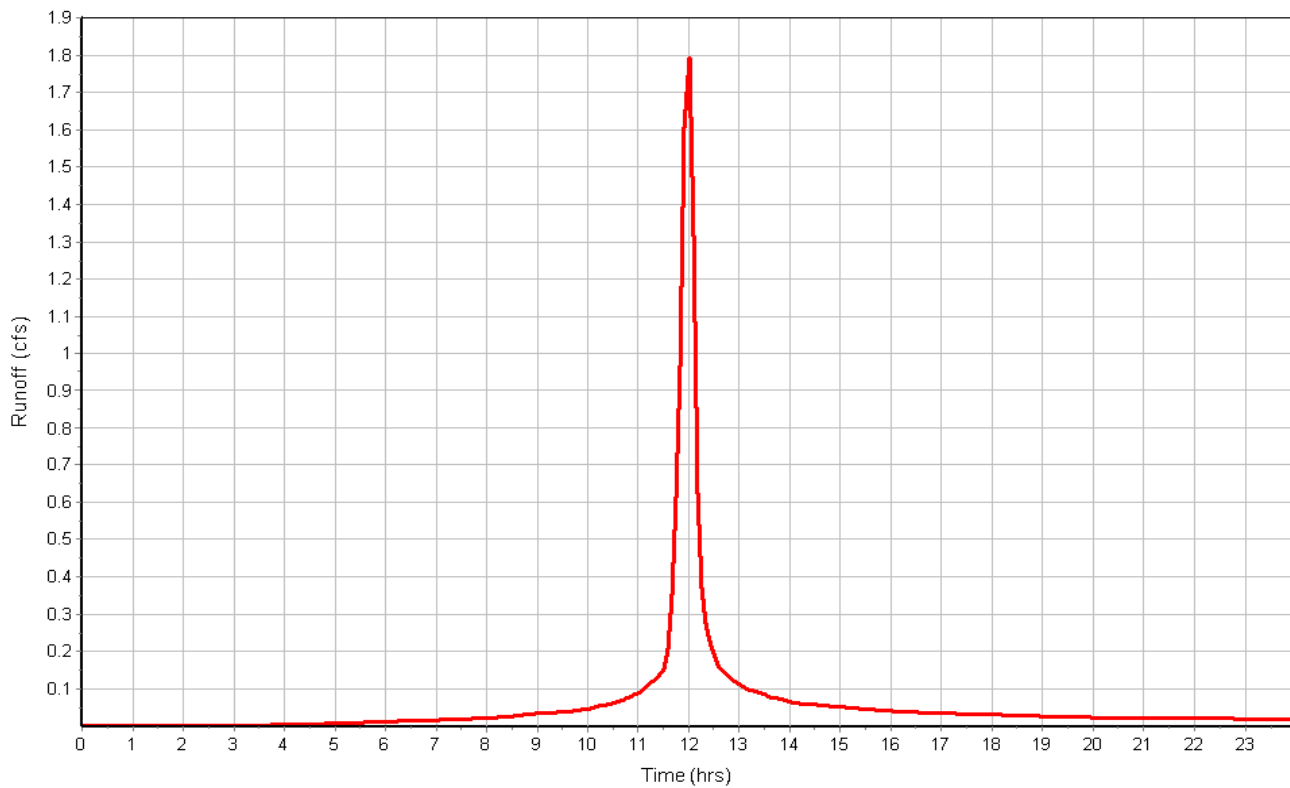
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 3.53  
 Peak Runoff (cfs) ..... 1.82  
 Weighted Curve Number ..... 93.45  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-11

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-14**

**Input Data**

Area (ac) ..... 0.45  
 Weighted Curve Number ..... 85.16  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.21	C	98.00
> 75% grass cover, Good	0.24	C	74.00
Composite Area & Weighted CN	0.45		85.16

**Time of Concentration**

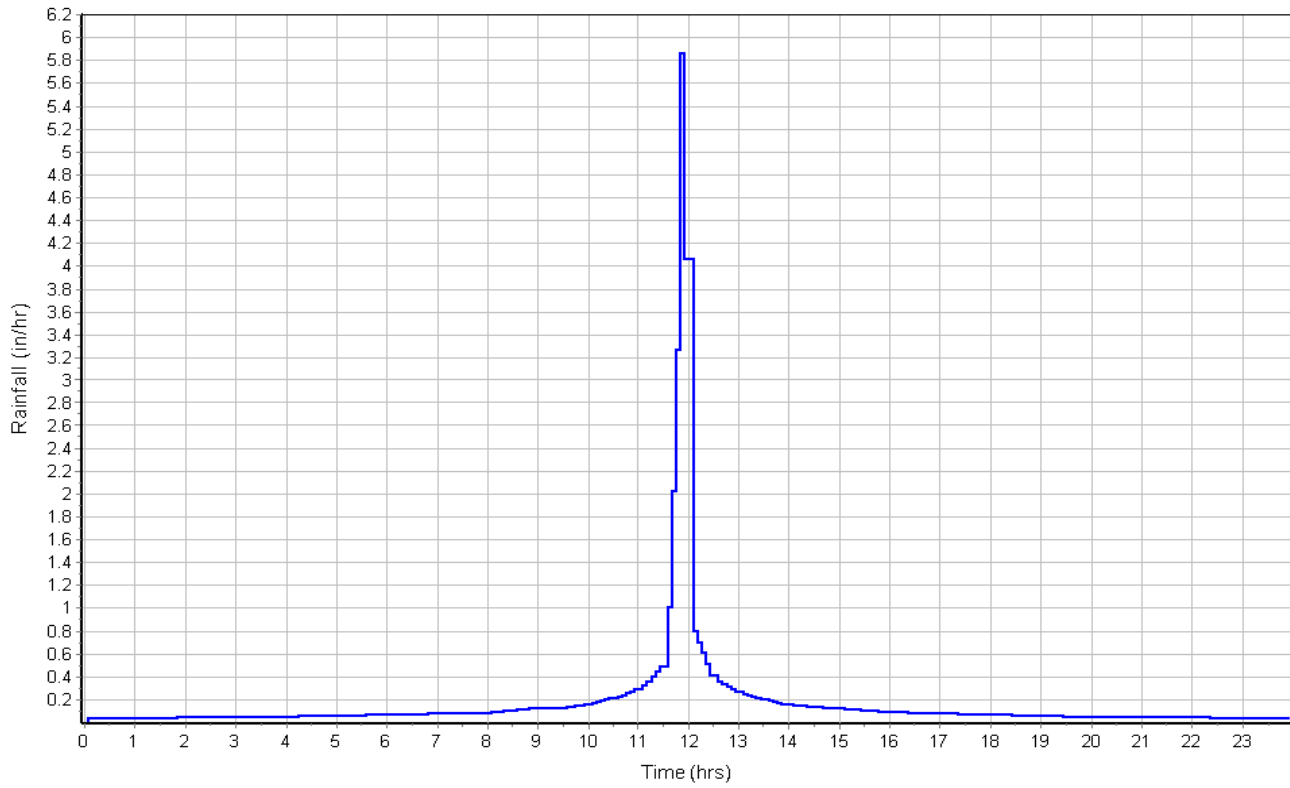
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

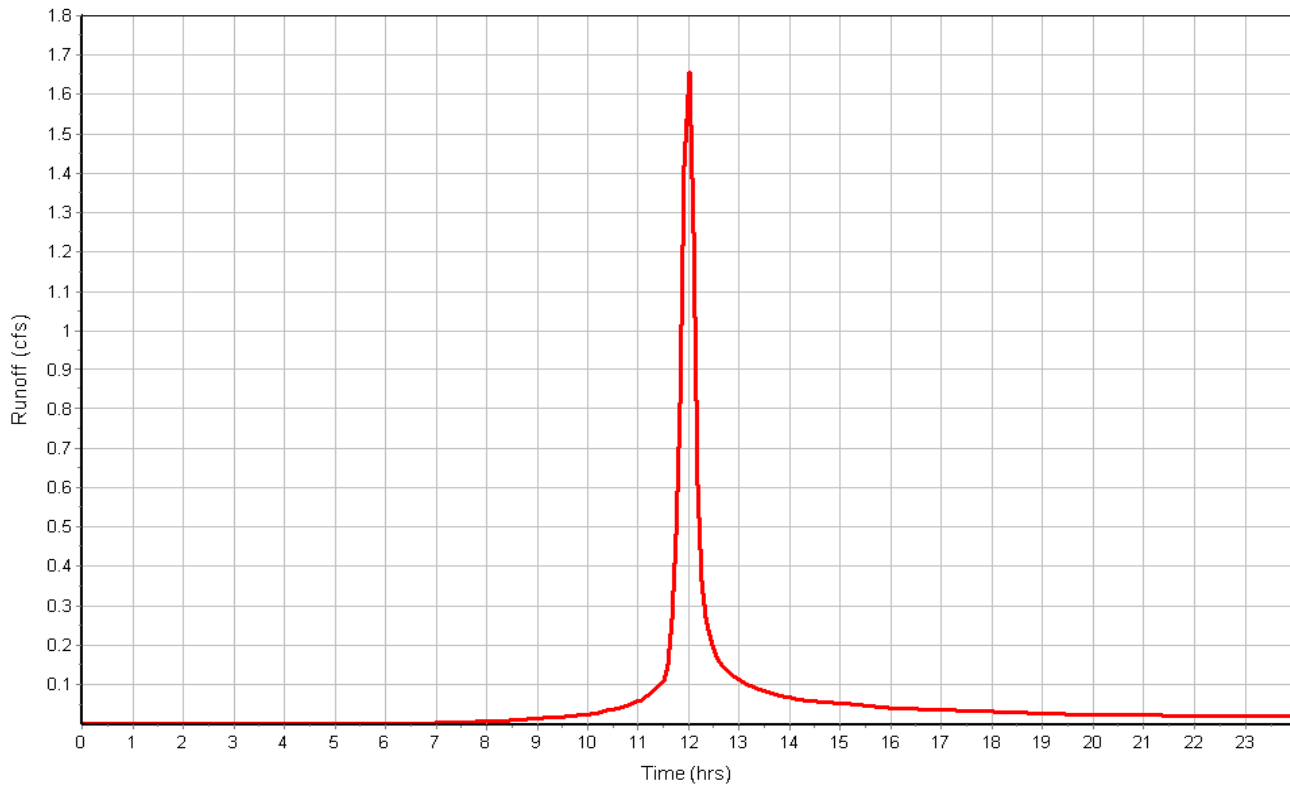
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 2.72  
 Peak Runoff (cfs) ..... 1.67  
 Weighted Curve Number ..... 85.16  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-14

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-15**

**Input Data**

Area (ac) ..... 0.35  
 Weighted Curve Number ..... 82.86  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.13	C	98.00
> 75% grass cover, Good	0.22	C	74.00
Composite Area & Weighted CN	0.35		82.86

**Time of Concentration**

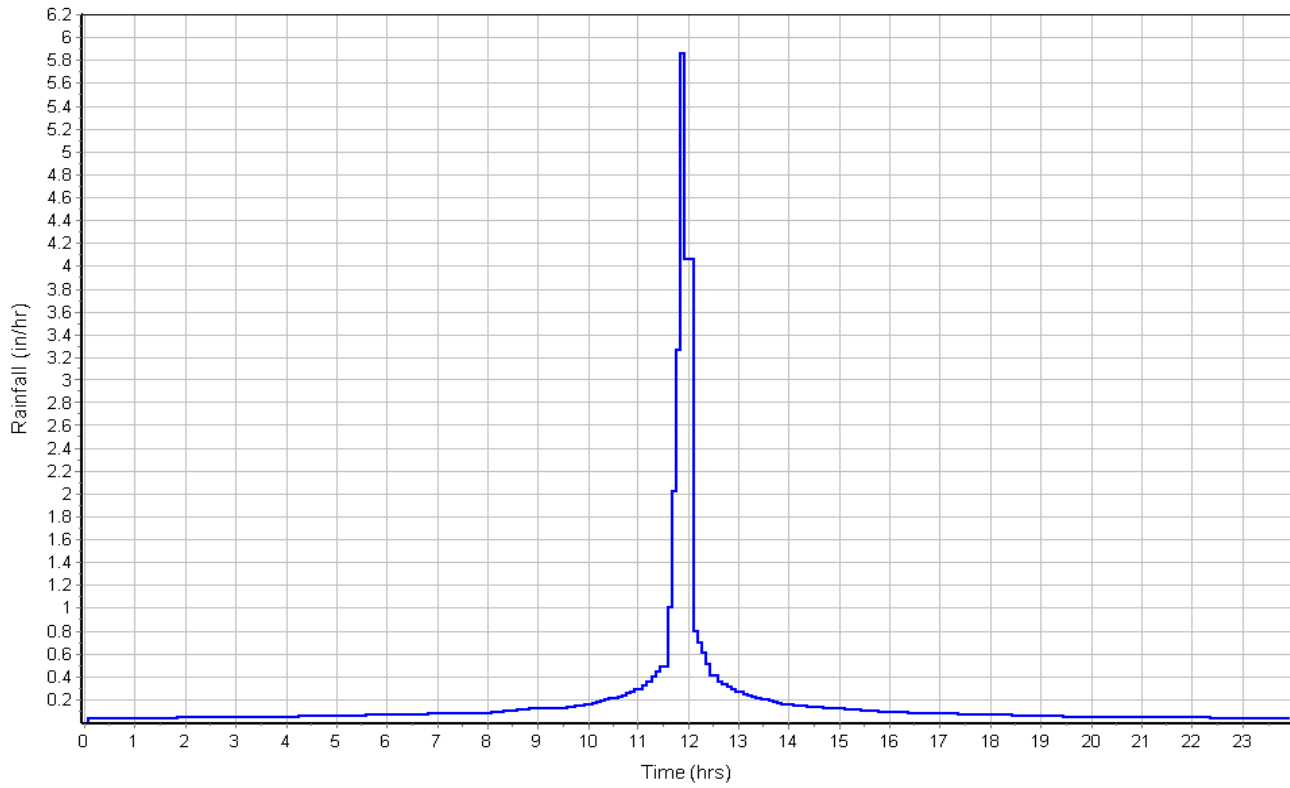
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

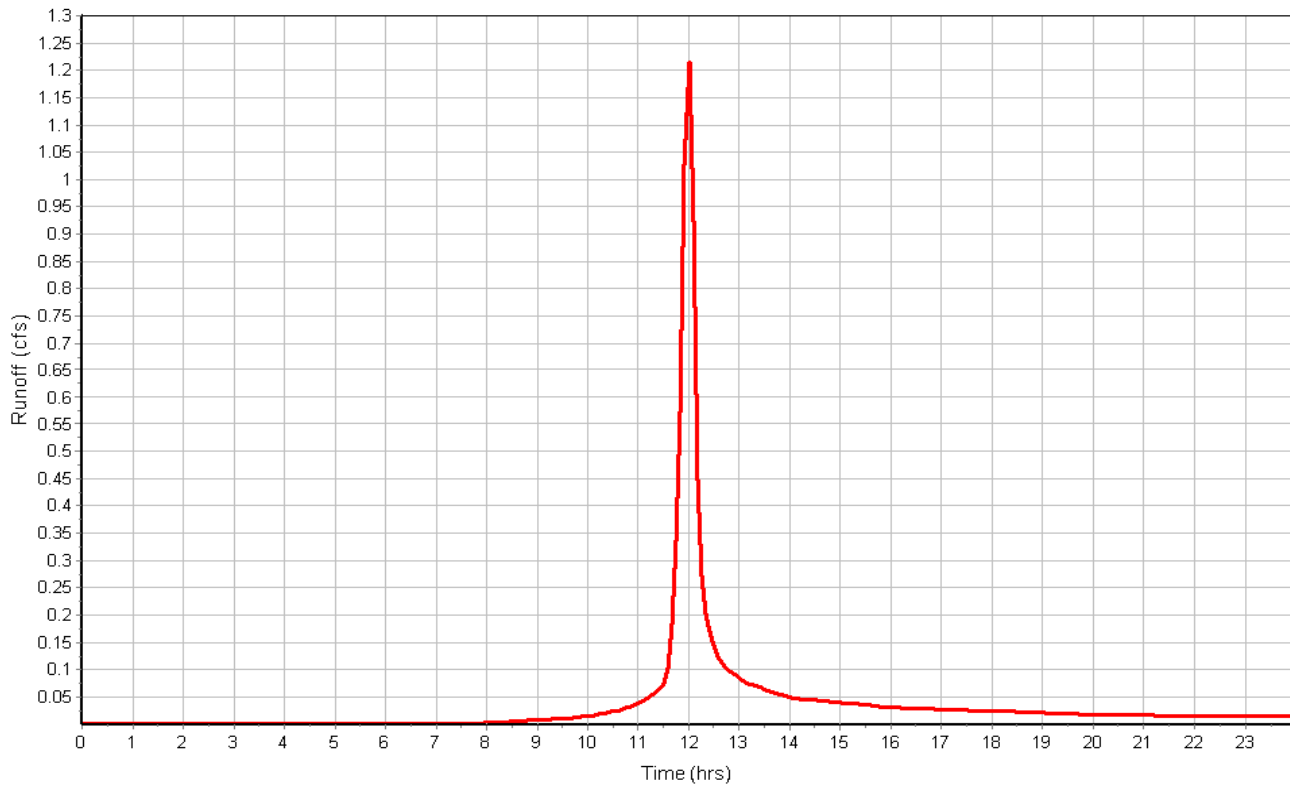
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 2.51  
 Peak Runoff (cfs) ..... 1.22  
 Weighted Curve Number ..... 82.86  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-15

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-16**

**Input Data**

Area (ac) ..... 0.04  
 Weighted Curve Number ..... 74.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	0.04	C	74.00
Composite Area & Weighted CN	0.04		74.00

**Time of Concentration**

User-Defined TOC override (minutes): 10

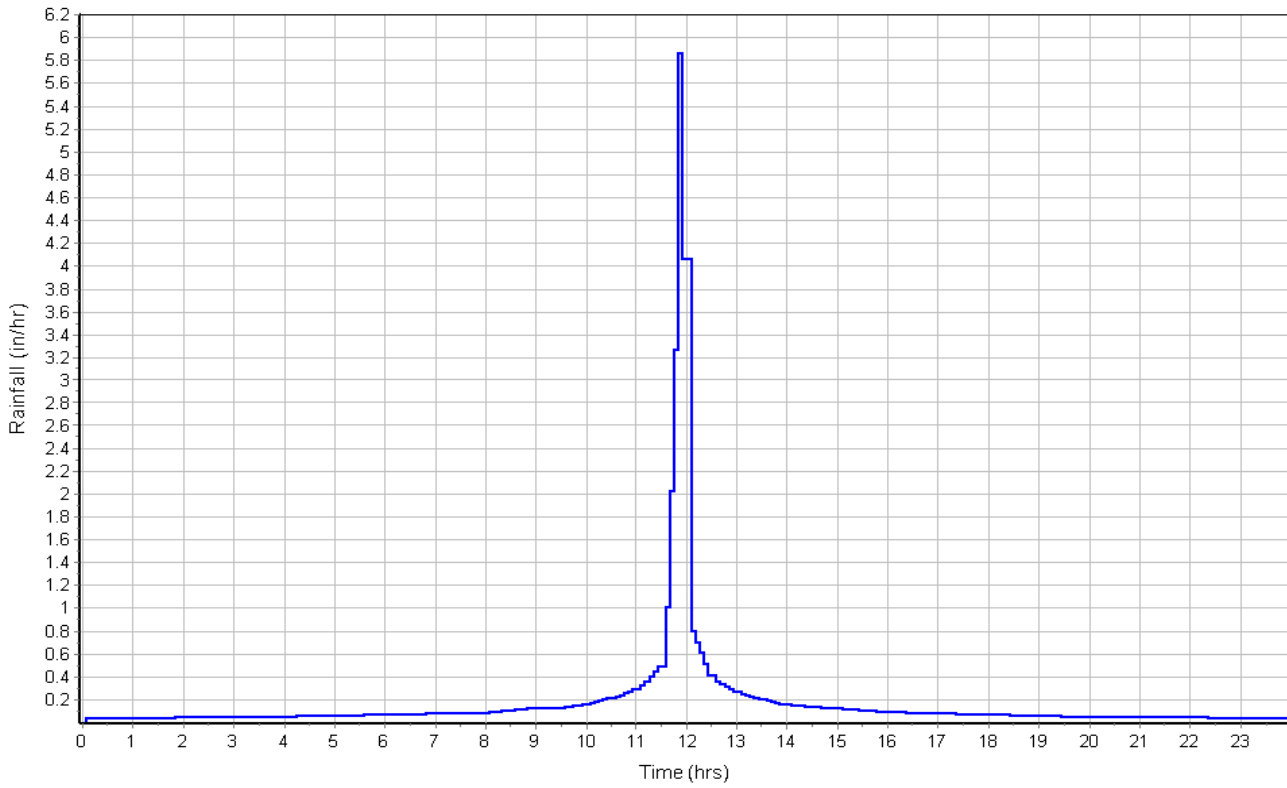
**Subbasin Runoff Results**

Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 1.79  
 Peak Runoff (cfs) ..... 0.11  
 Weighted Curve Number ..... 74.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

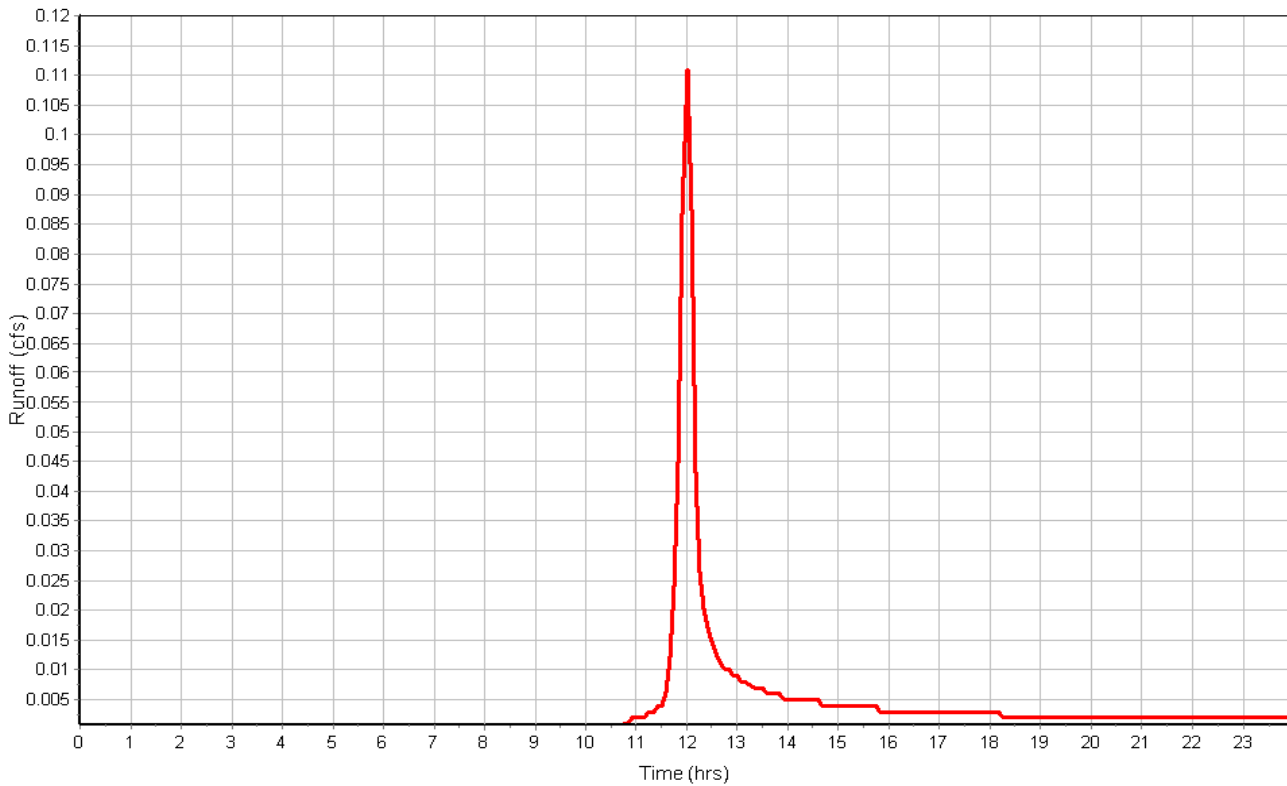


Subbasin : Sub-16

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-16A**

**Input Data**

Area (ac) ..... 0.13  
 Weighted Curve Number ..... 74.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	0.13	C	74.00
Composite Area & Weighted CN	0.13		74.00

**Time of Concentration**

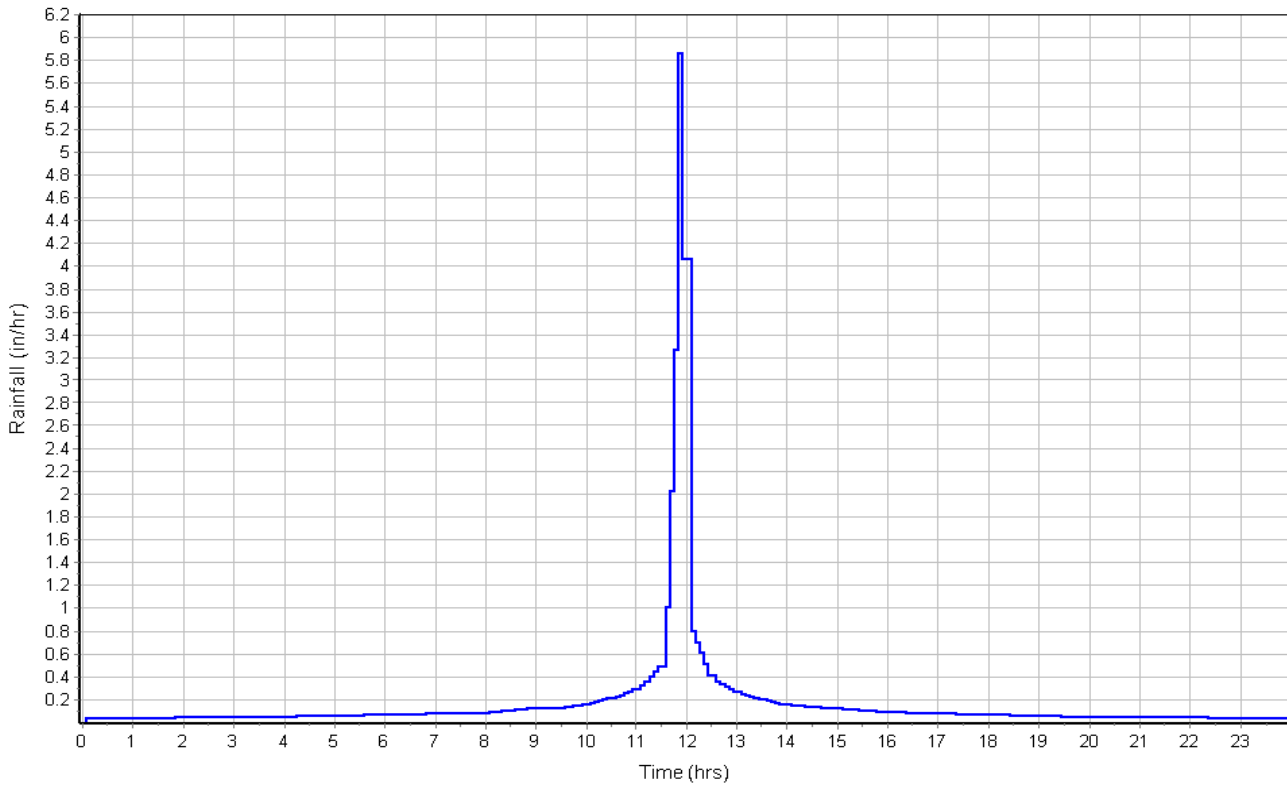
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

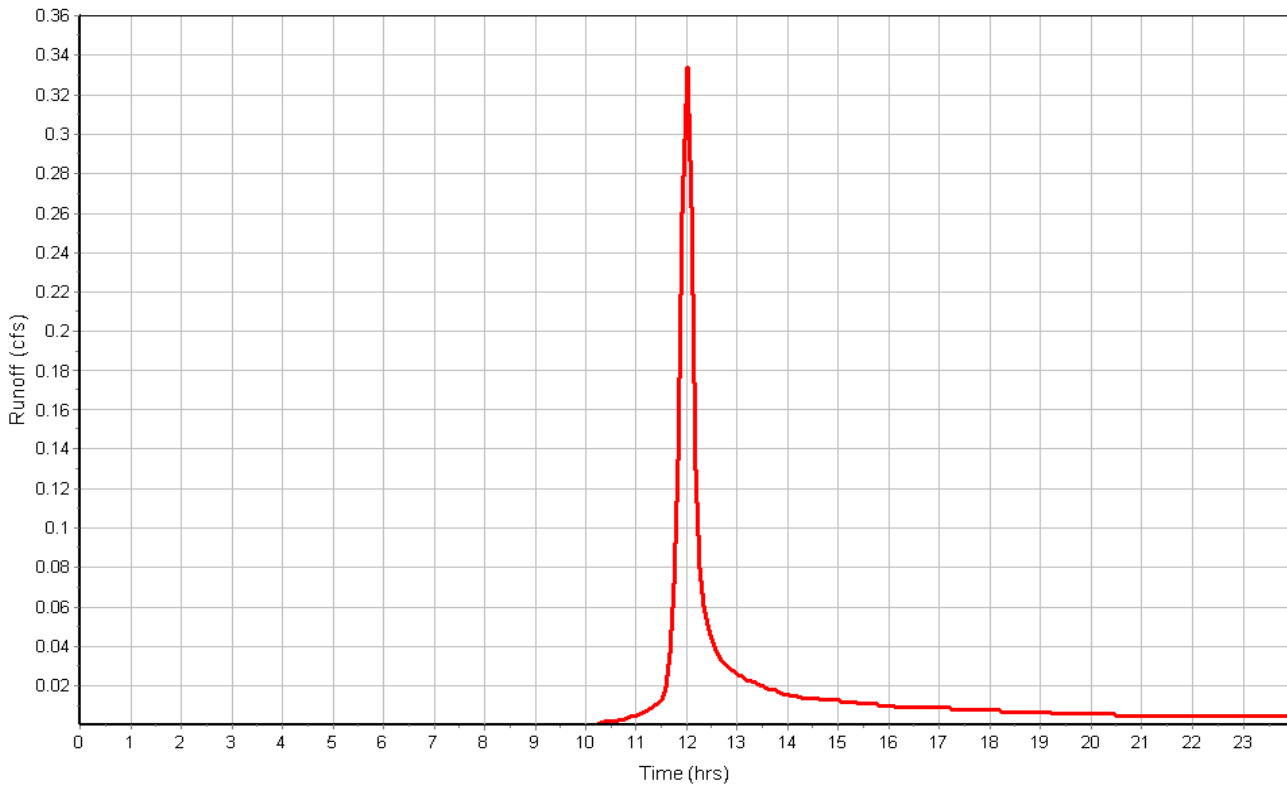
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 1.80  
 Peak Runoff (cfs) ..... 0.33  
 Weighted Curve Number ..... 74.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-16A

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-19**

**Input Data**

Area (ac) ..... 0.48  
 Weighted Curve Number ..... 98.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.48	C	98.00
Composite Area & Weighted CN	0.48		98.00

**Time of Concentration**

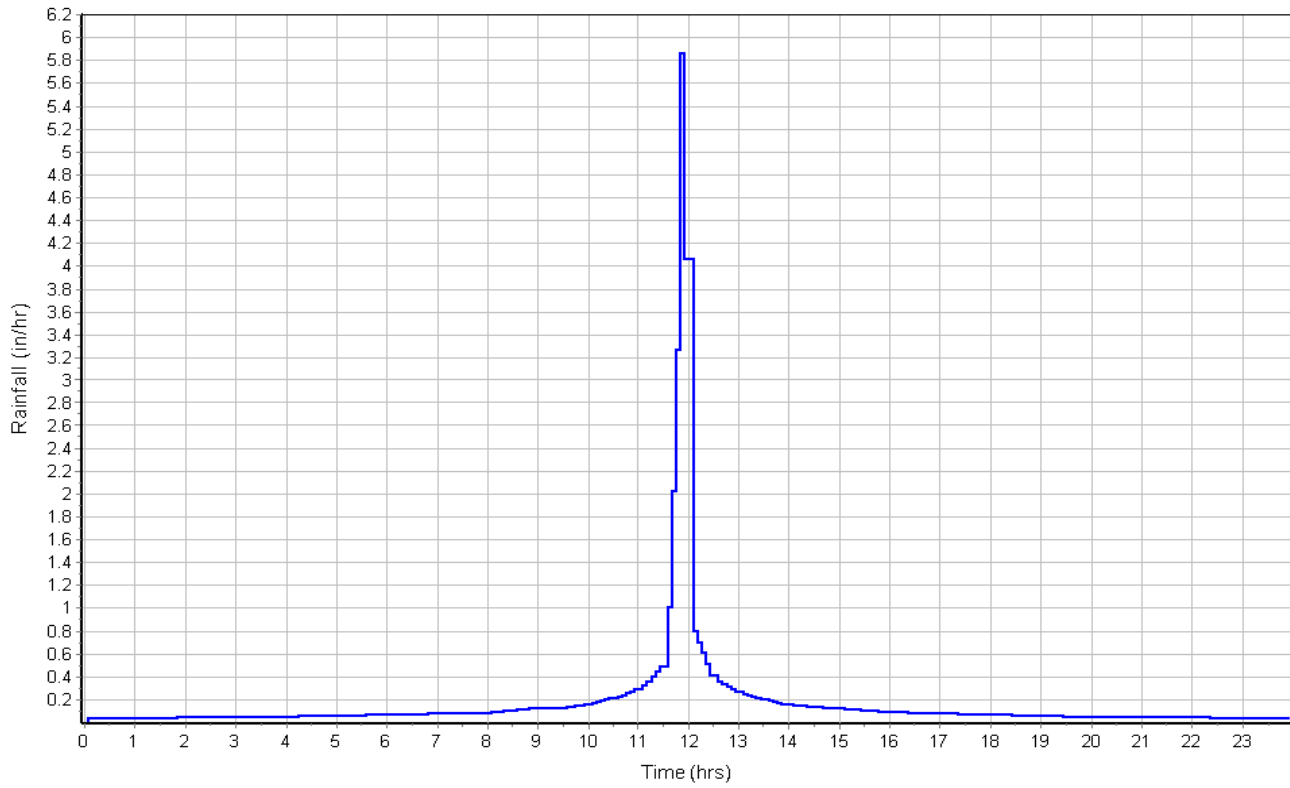
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

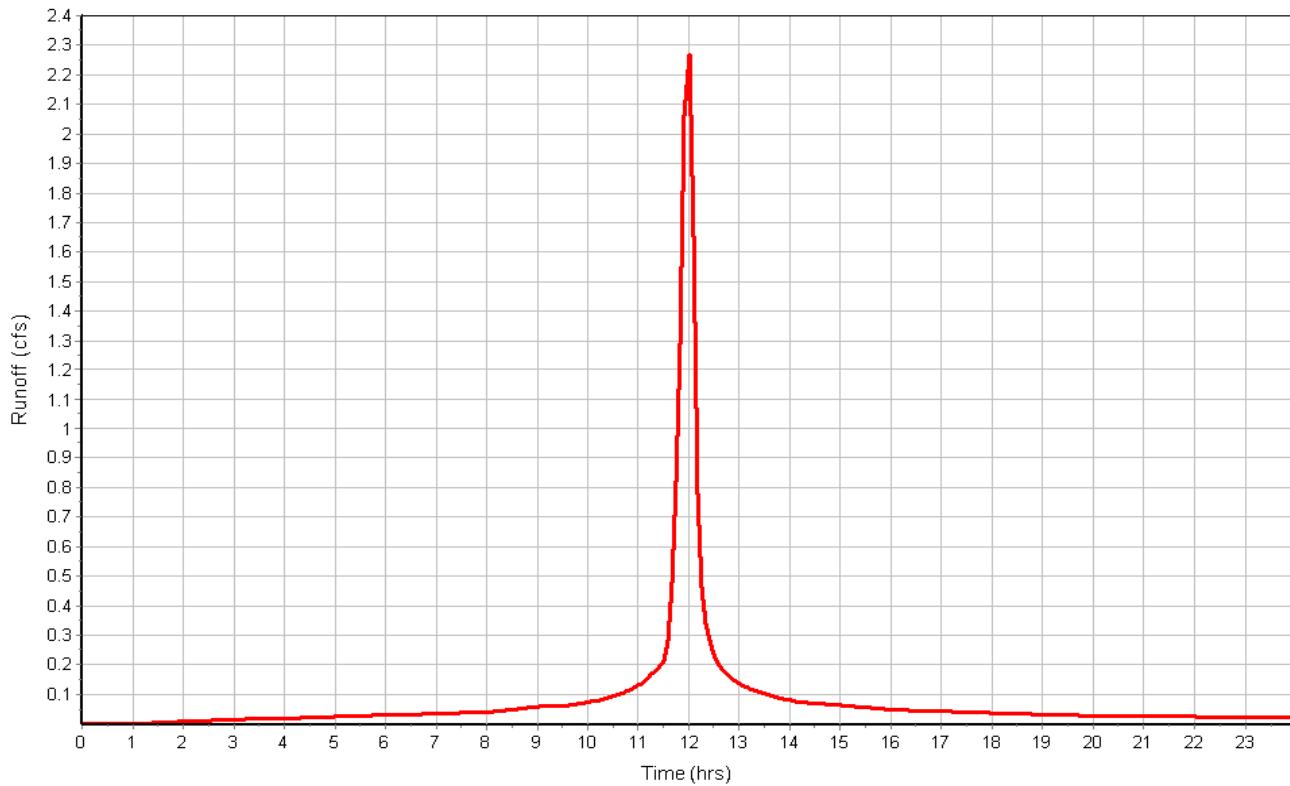
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 4.03  
 Peak Runoff (cfs) ..... 2.32  
 Weighted Curve Number ..... 98.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-19

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-20**

**Input Data**

Area (ac) ..... 7.96  
 Weighted Curve Number ..... 91.38  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	2.20	C	74.00
Paved parking & roofs	5.76	C	98.00
Composite Area & Weighted CN	7.96		91.38

**Time of Concentration**

Sheet Flow Computations	Subarea	Subarea	Subarea
	A	B	C
Manning's Roughness :	.24	0.00	0.00
Flow Length (ft) :	200	0.00	0.00
Slope (%) :	5	0.00	0.00
2 yr, 24 hr Rainfall (in) :	2.97	0.00	0.00
Velocity (ft/sec) :	0.19	0.00	0.00
Computed Flow Time (min) :	17.88	0.00	0.00

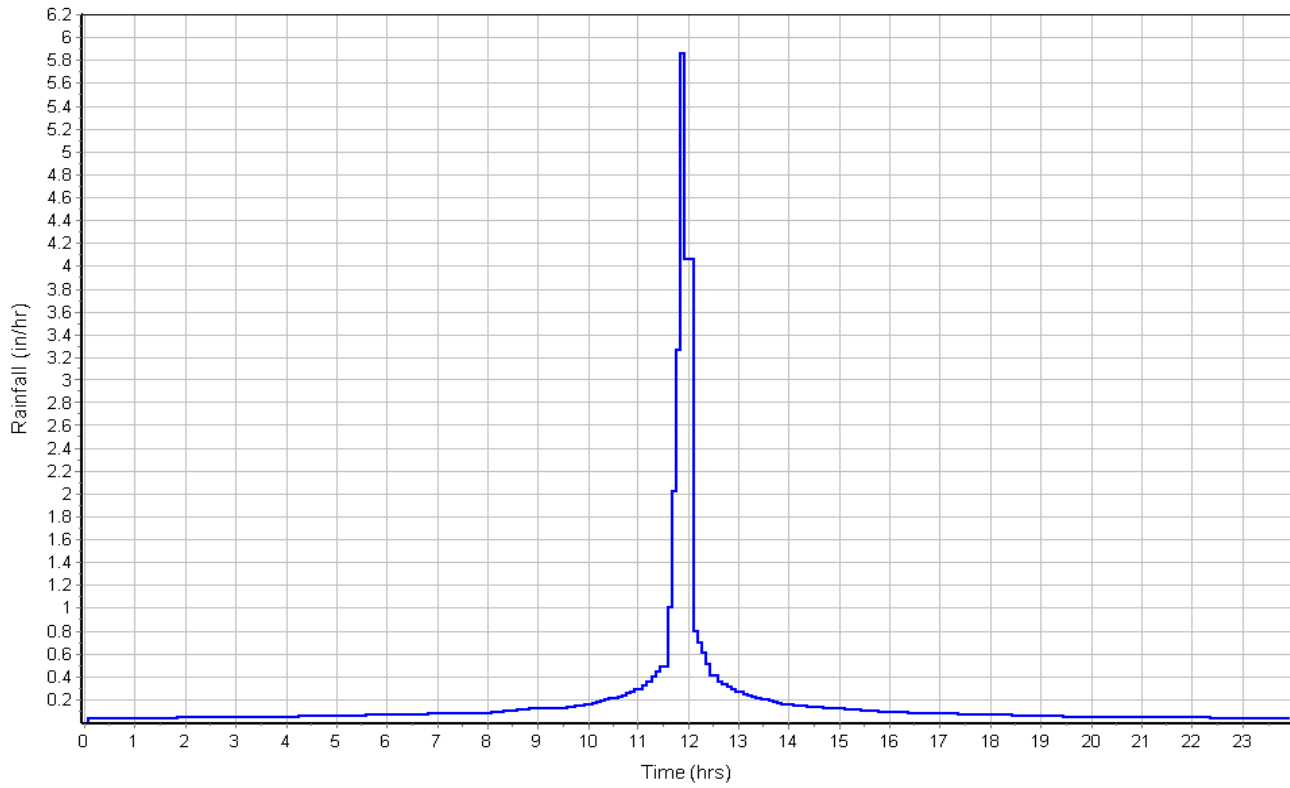
Shallow Concentrated Flow Computations	Subarea	Subarea	Subarea
	A	B	C
Flow Length (ft) :	250	0.00	0.00
Slope (%) :	6	0.00	0.00
Surface Type :	Grassed waterway	Unpaved	Unpaved
Velocity (ft/sec) :	3.67	0.00	0.00
Computed Flow Time (min) :	1.14	0.00	0.00
Total TOC (min) .....	19.01		

**Subbasin Runoff Results**

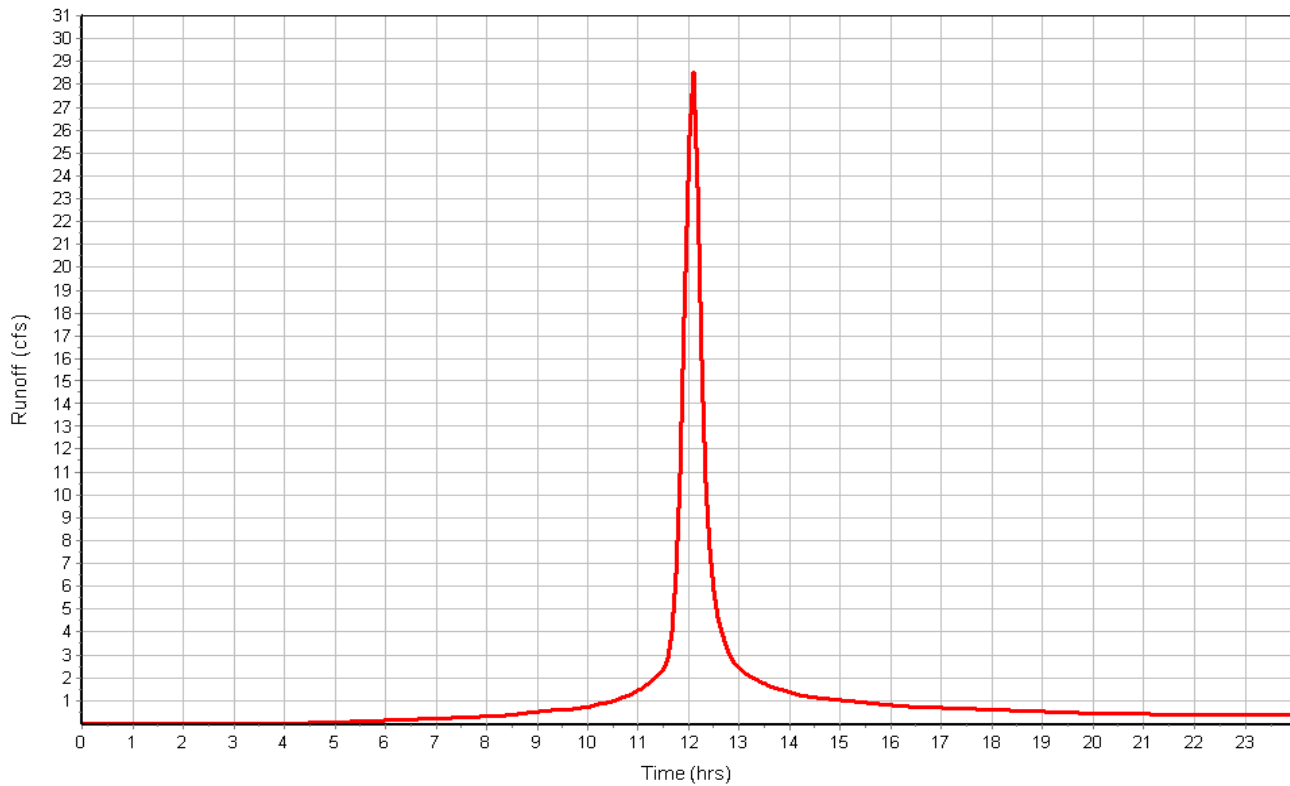
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 3.32  
 Peak Runoff (cfs) ..... 28.66  
 Weighted Curve Number ..... 91.38  
 Time of Concentration (days hh:mm:ss) ..... 0 00:19:01

Subbasin : Sub-20

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-21**

**Input Data**

Area (ac) ..... 0.49  
 Weighted Curve Number ..... 98.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.49	C	98.00
Composite Area & Weighted CN	0.49		98.00

**Time of Concentration**

User-Defined TOC override (minutes): 10

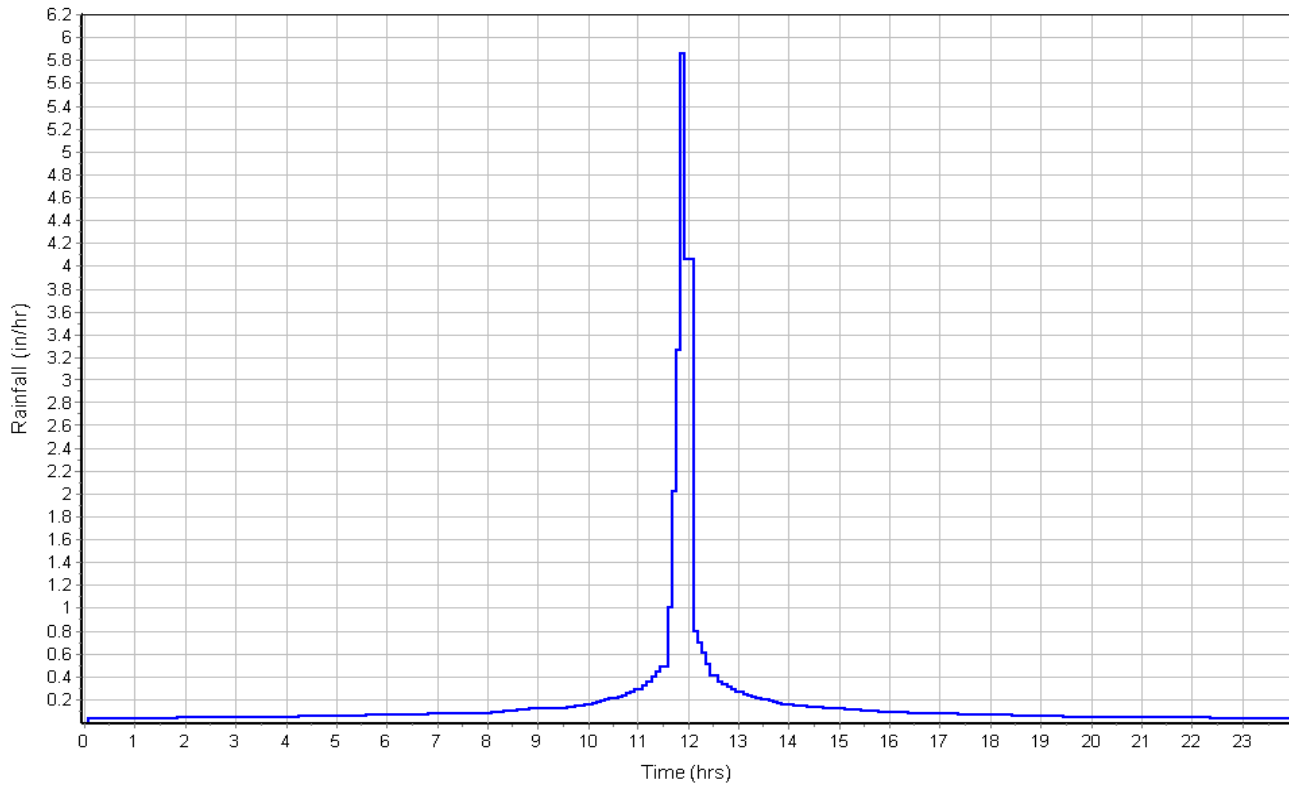
**Subbasin Runoff Results**

Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 4.03  
 Peak Runoff (cfs) ..... 2.42  
 Weighted Curve Number ..... 98.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

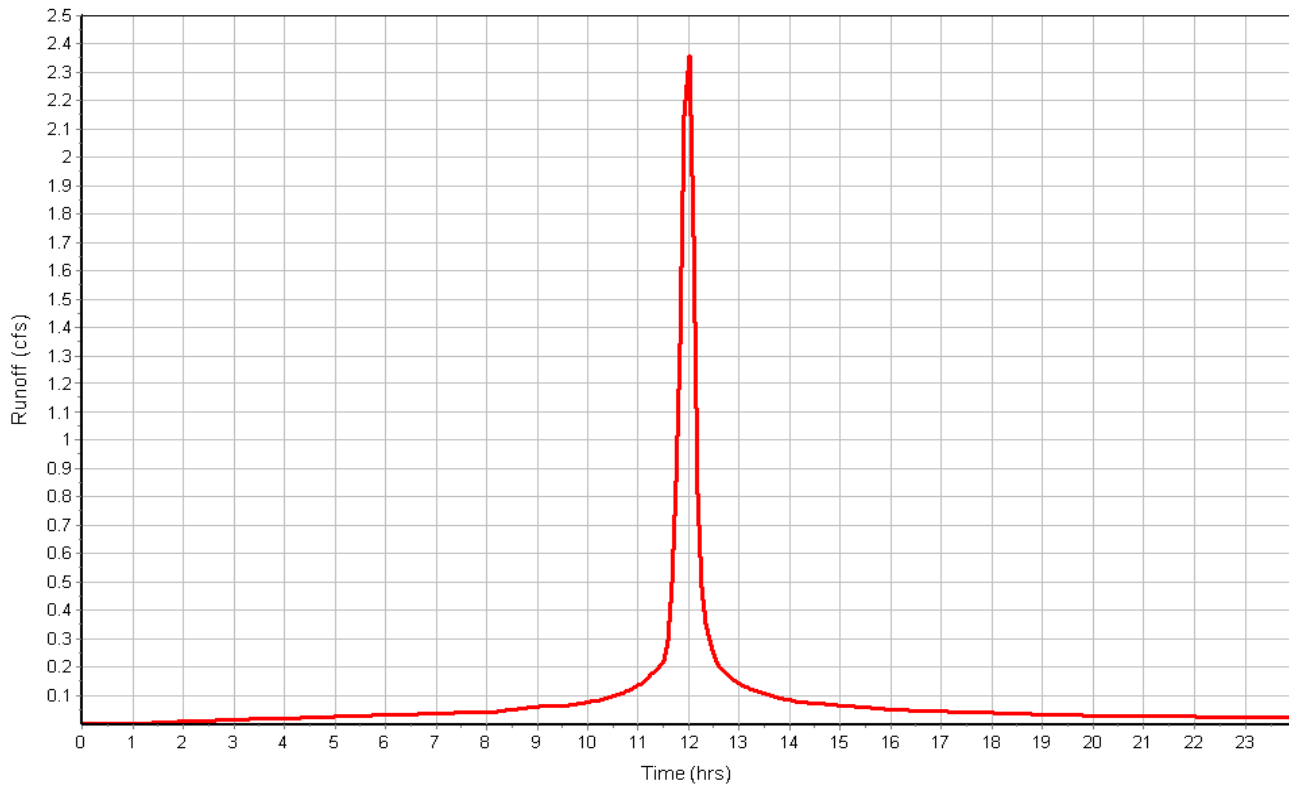


Subbasin : Sub-21

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-22**

**Input Data**

Area (ac) ..... 0.97  
 Weighted Curve Number ..... 98.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.97	C	98.00
Composite Area & Weighted CN	0.97		98.00

**Time of Concentration**

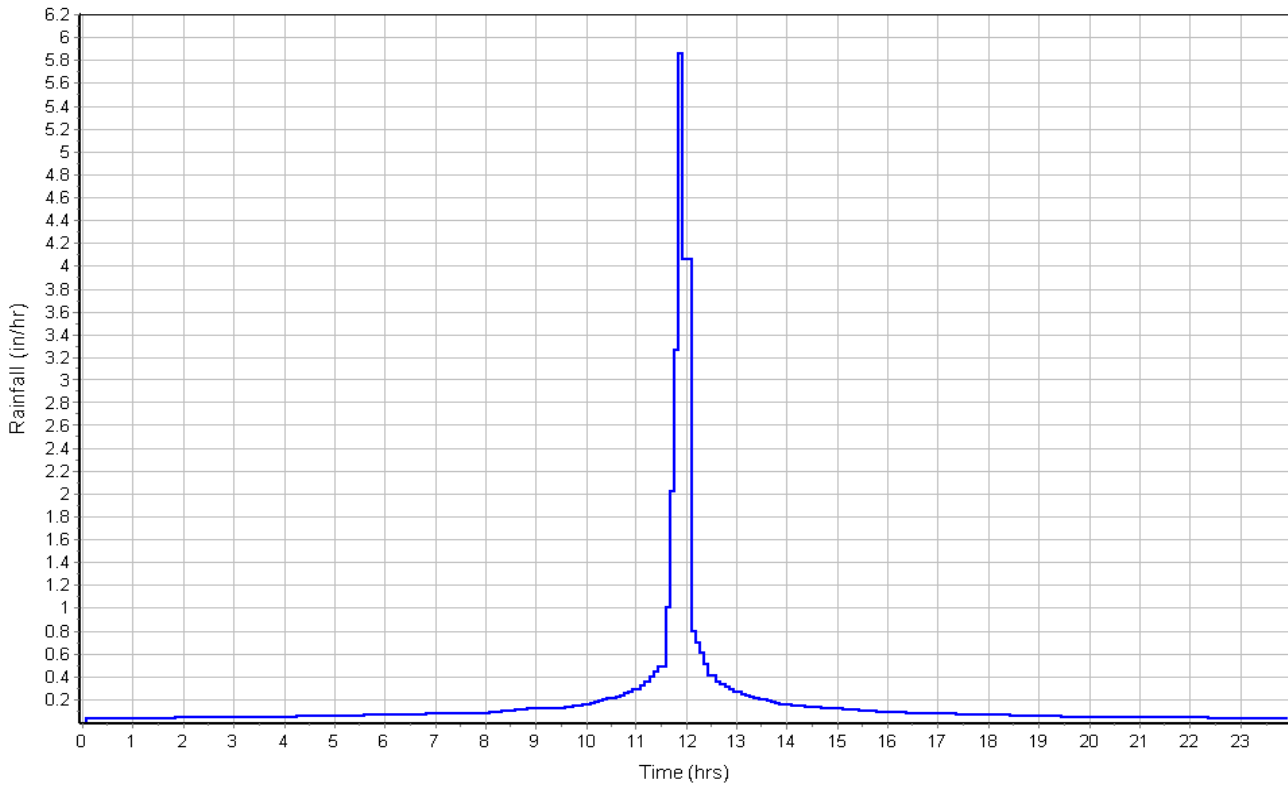
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

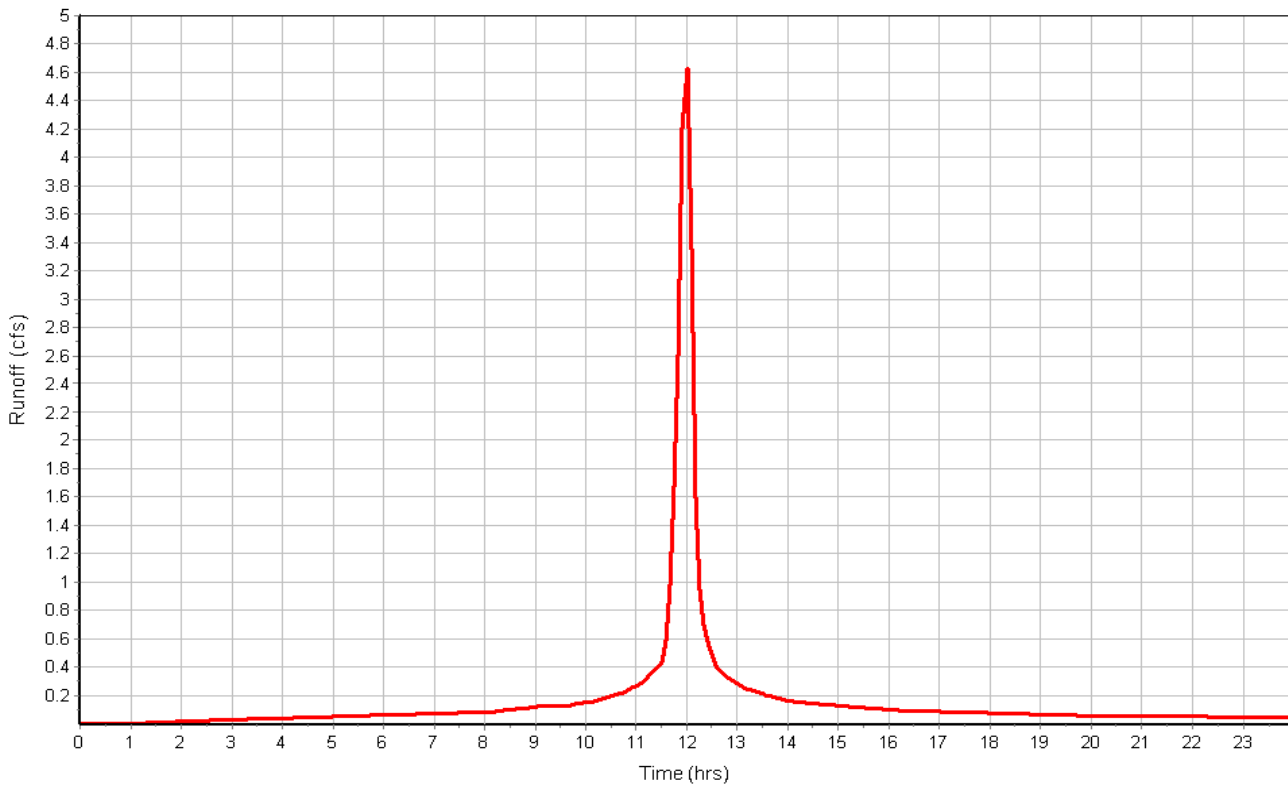
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 4.03  
 Peak Runoff (cfs) ..... 4.74  
 Weighted Curve Number ..... 98.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-22

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-3**

**Input Data**

Area (ac) ..... 1.38  
 Weighted Curve Number ..... 91.78  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
> 75% grass cover, Good	0.36	C	74.00
Paved parking & roofs	1.02	C	98.00
Composite Area & Weighted CN	1.38		91.78

**Time of Concentration**

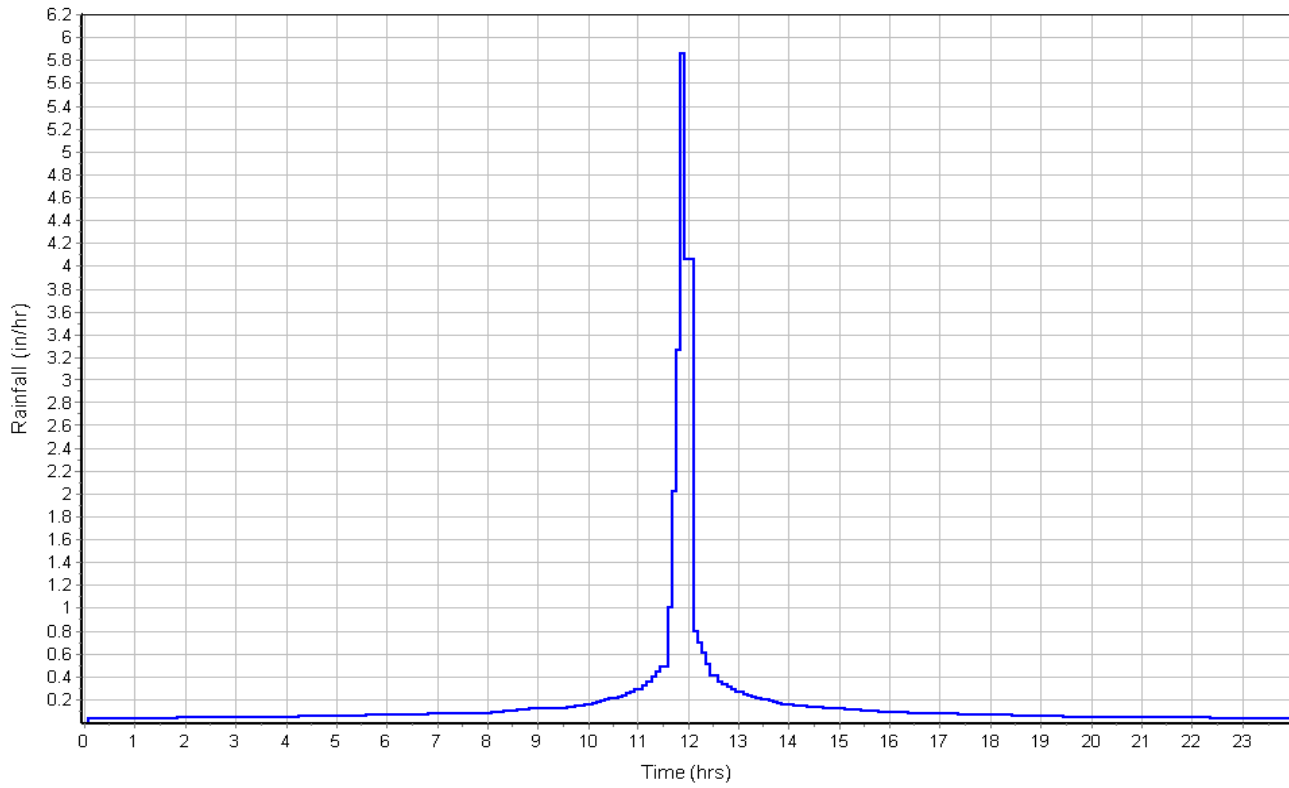
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

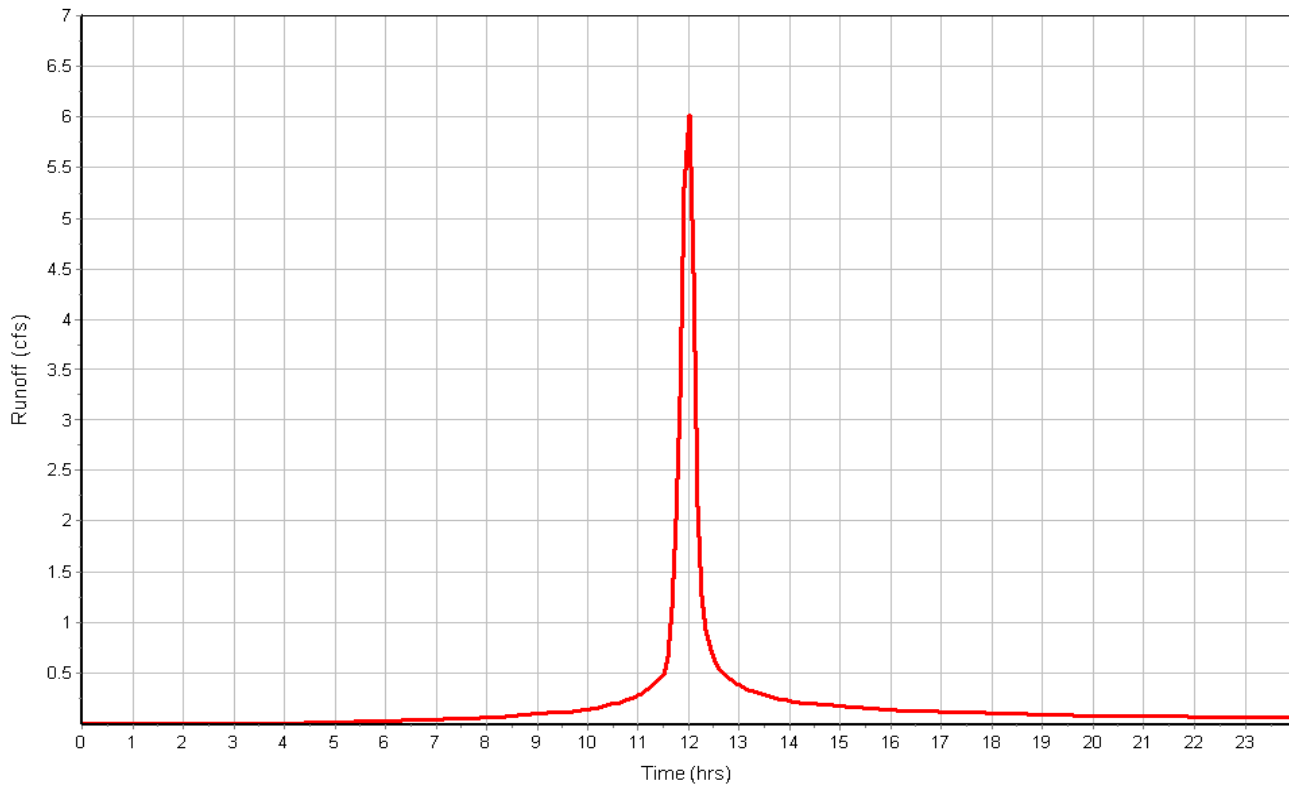
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 3.36  
 Peak Runoff (cfs) ..... 6.11  
 Weighted Curve Number ..... 91.78  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-3

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-3A**

**Input Data**

Area (ac) ..... 0.37  
 Weighted Curve Number ..... 98.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.37	C	98.00
Composite Area & Weighted CN	0.37		98.00

**Time of Concentration**

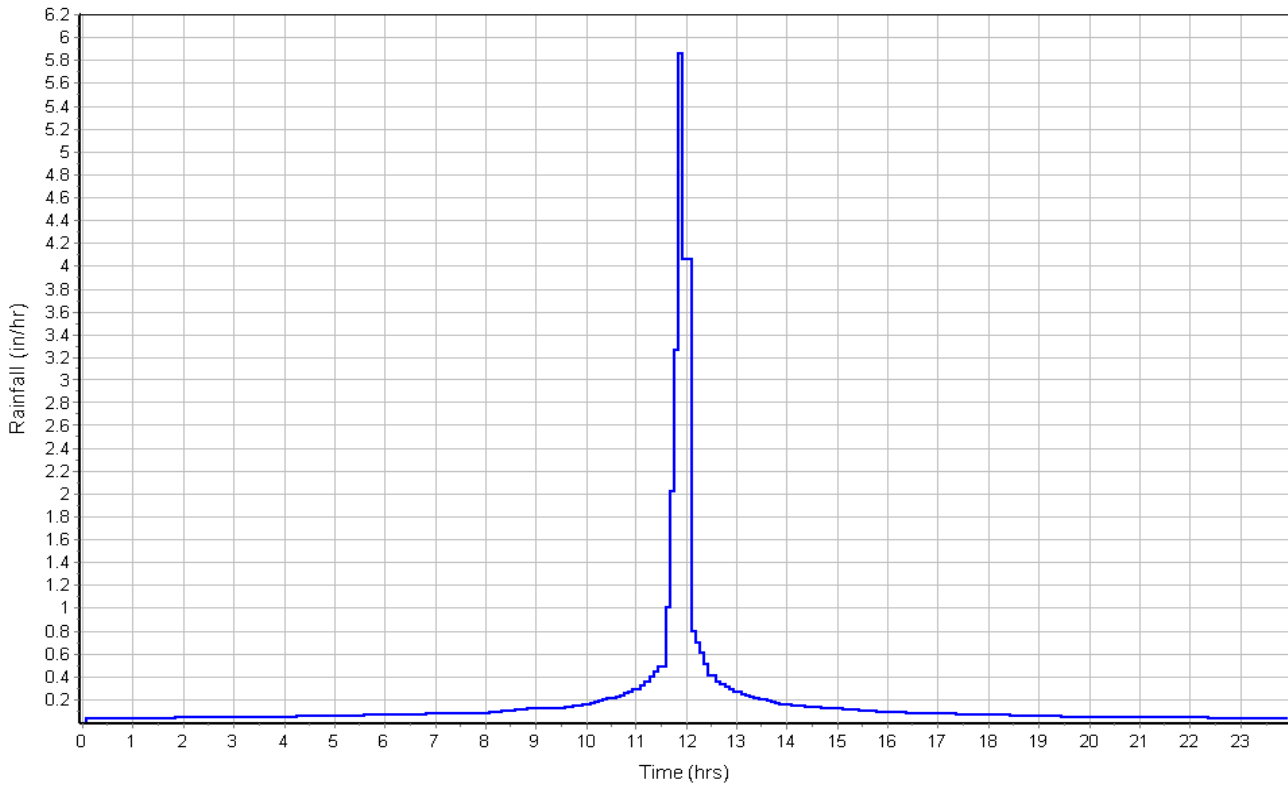
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

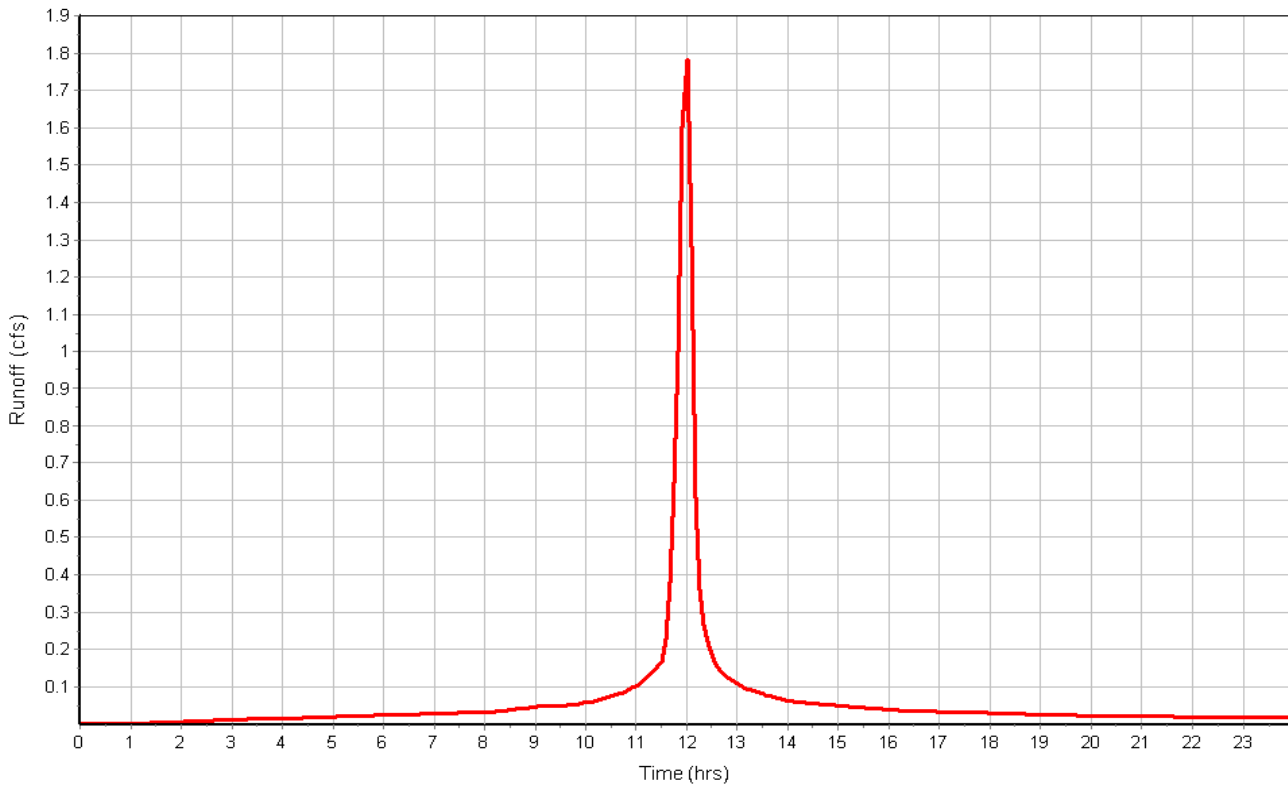
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 4.03  
 Peak Runoff (cfs) ..... 1.82  
 Weighted Curve Number ..... 98.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-3A

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-5A**

**Input Data**

Area (ac) ..... 0.28  
 Weighted Curve Number ..... 98.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.28	C	98.00
Composite Area & Weighted CN	0.28		98.00

**Time of Concentration**

User-Defined TOC override (minutes): 10

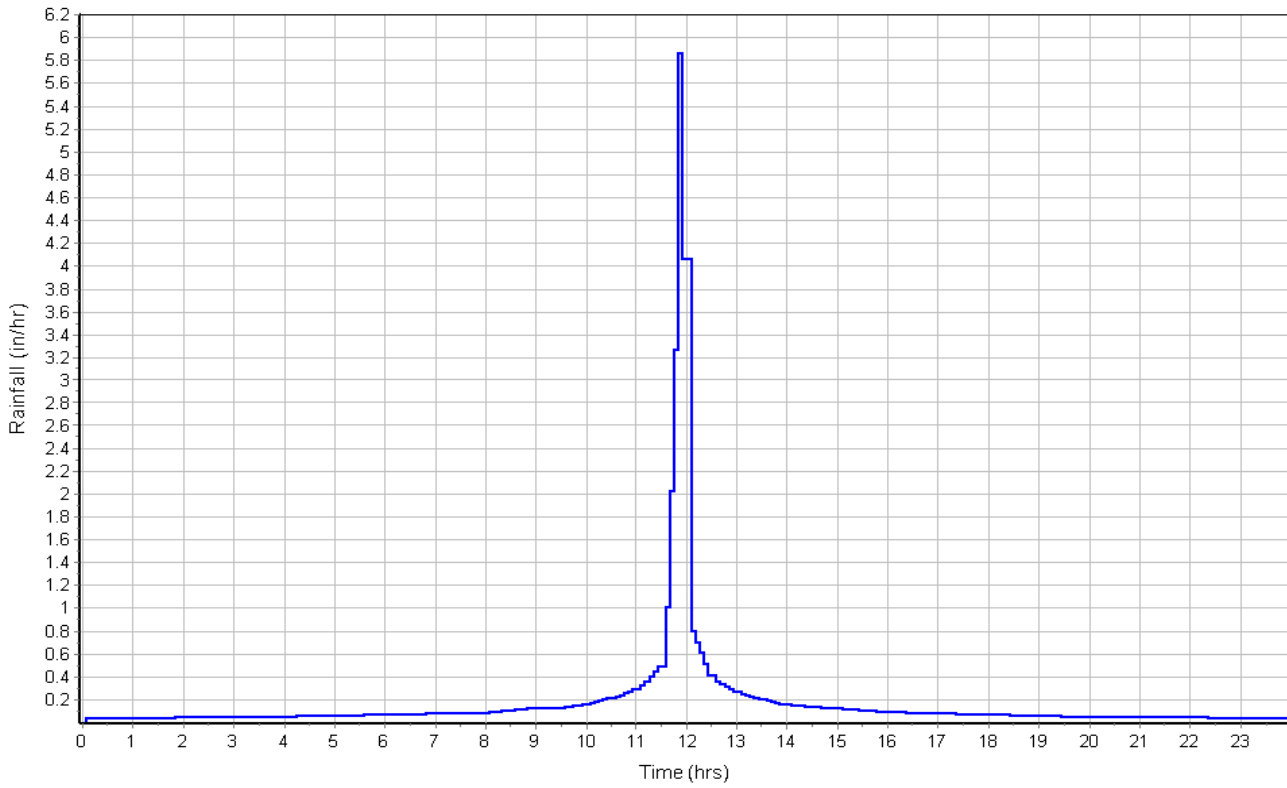
**Subbasin Runoff Results**

Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 4.03  
 Peak Runoff (cfs) ..... 1.38  
 Weighted Curve Number ..... 98.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

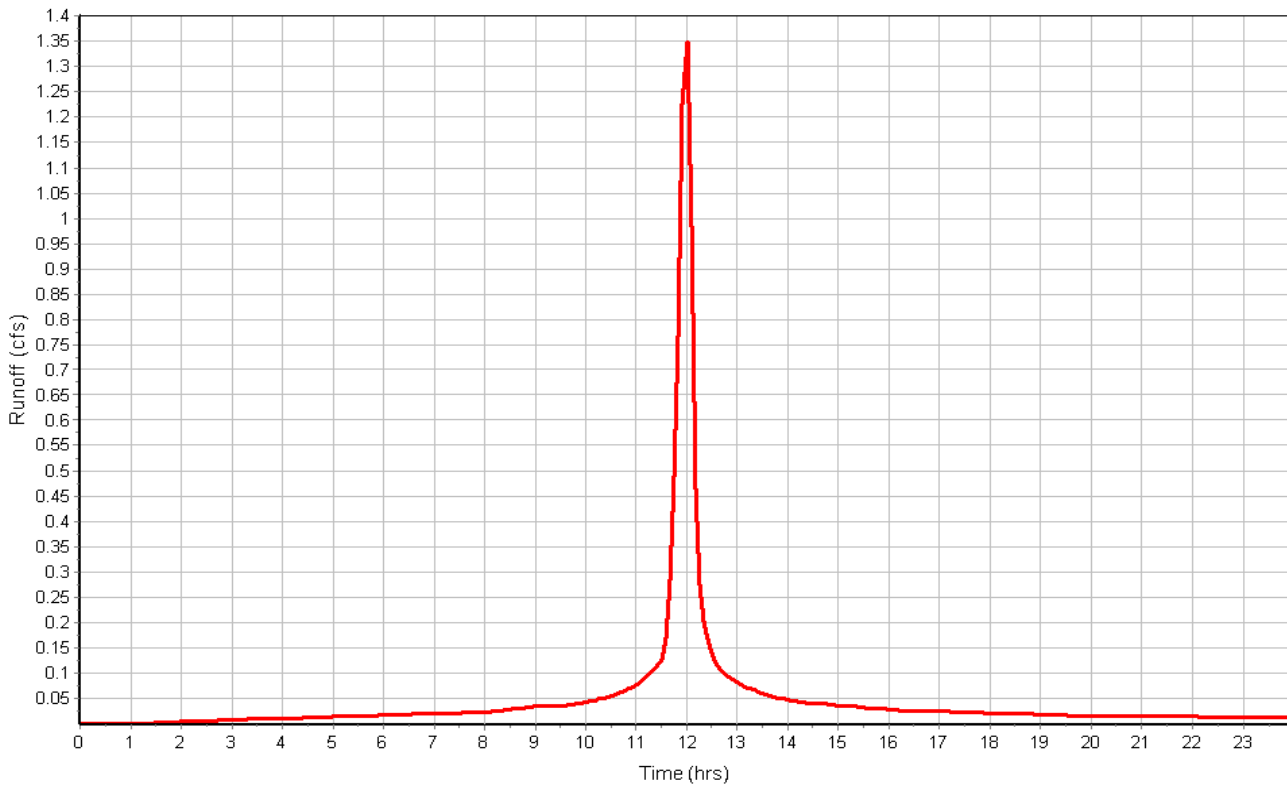


Subbasin : Sub-5A

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-5B**

**Input Data**

Area (ac) ..... 0.28  
 Weighted Curve Number ..... 98.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.28	C	98.00
Composite Area & Weighted CN	0.28		98.00

**Time of Concentration**

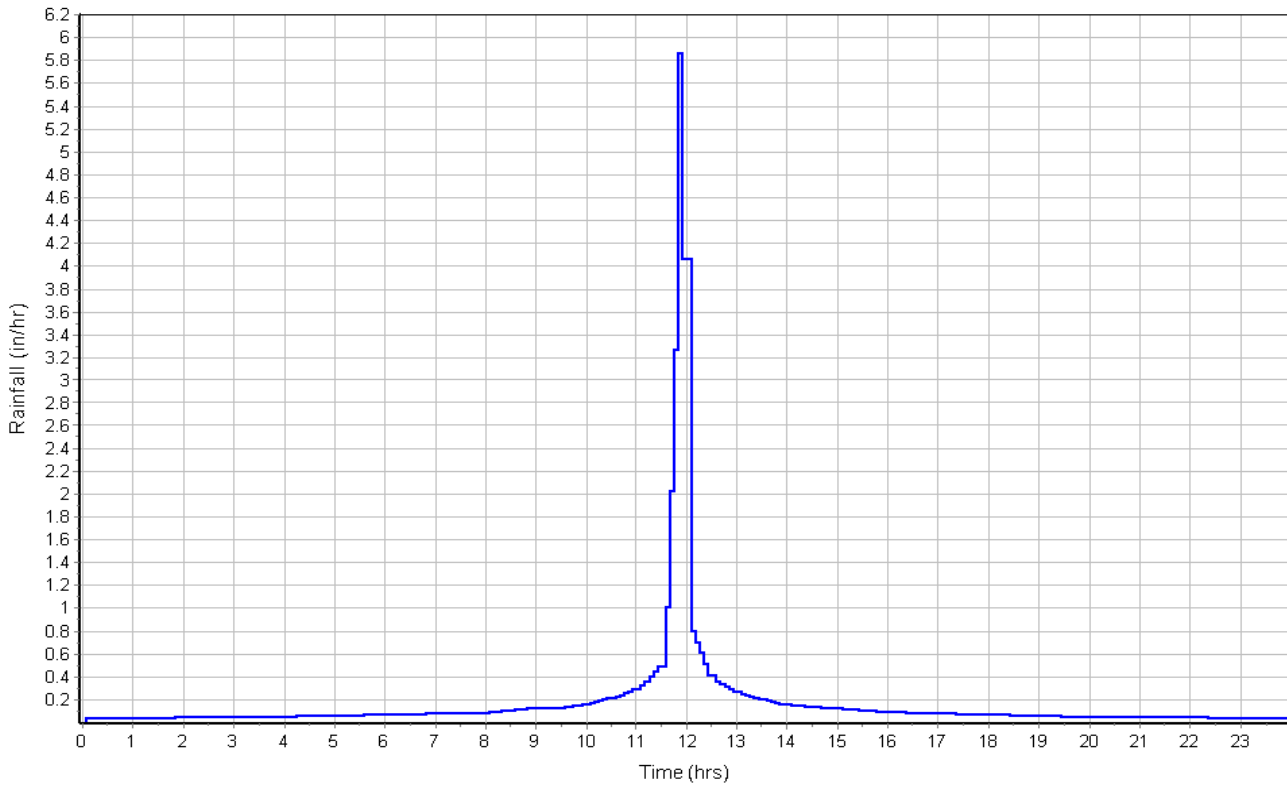
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

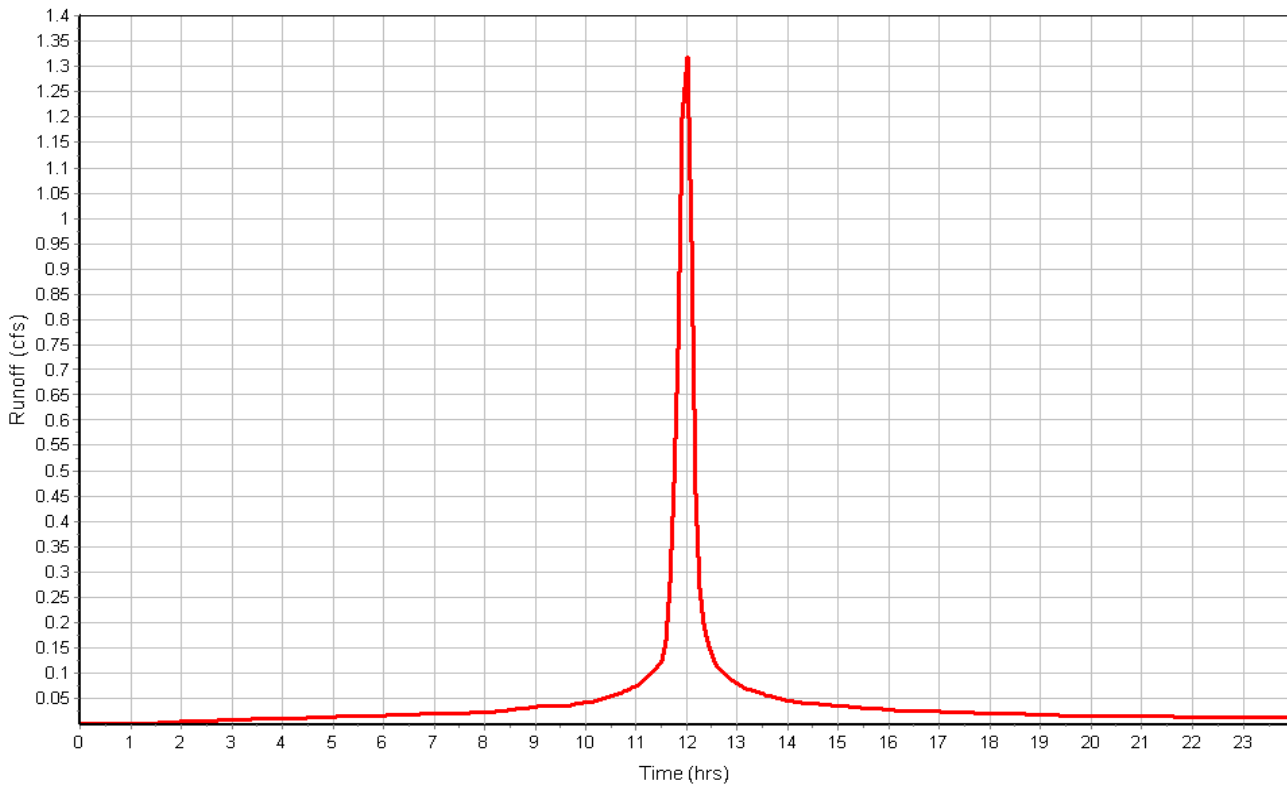
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 4.03  
 Peak Runoff (cfs) ..... 1.35  
 Weighted Curve Number ..... 98.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-5B

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-8A**

**Input Data**

Area (ac) ..... 1.04  
 Weighted Curve Number ..... 98.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	1.04	C	98.00
Composite Area & Weighted CN	1.04		98.00

**Time of Concentration**

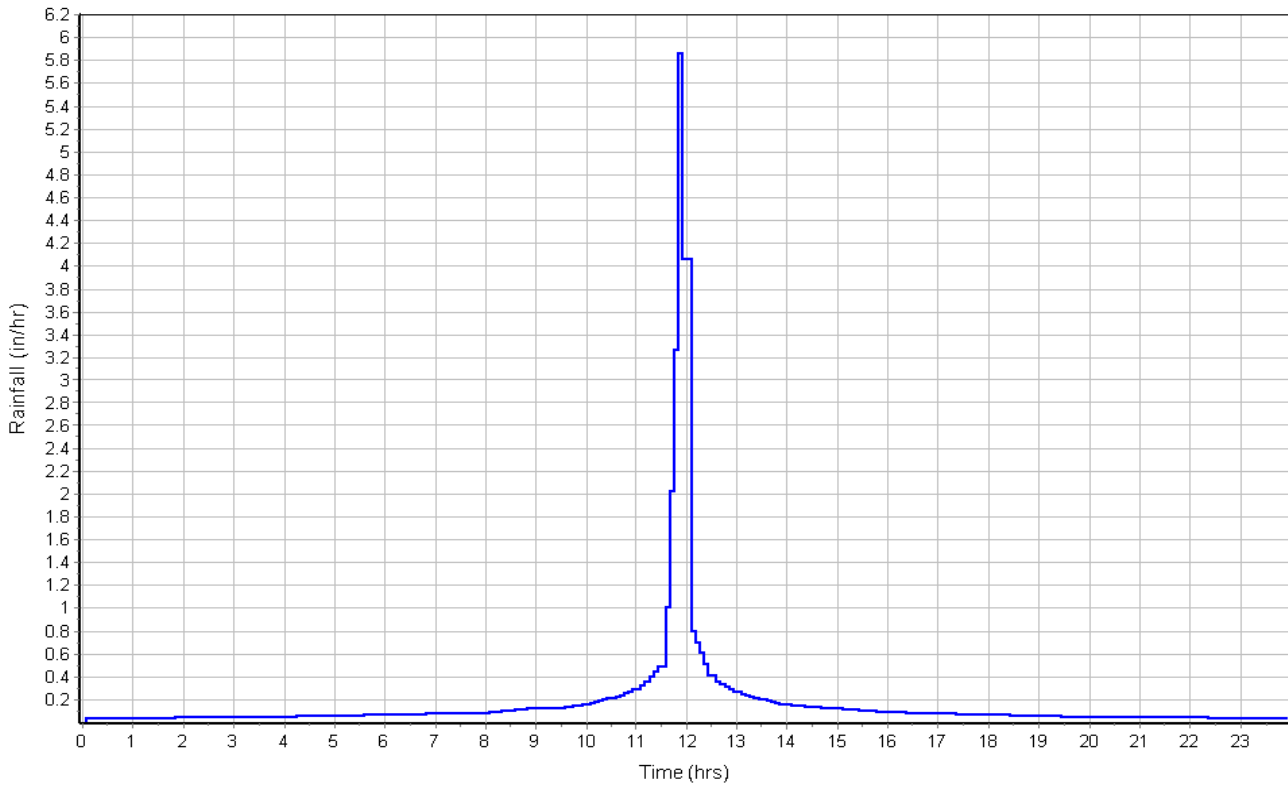
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

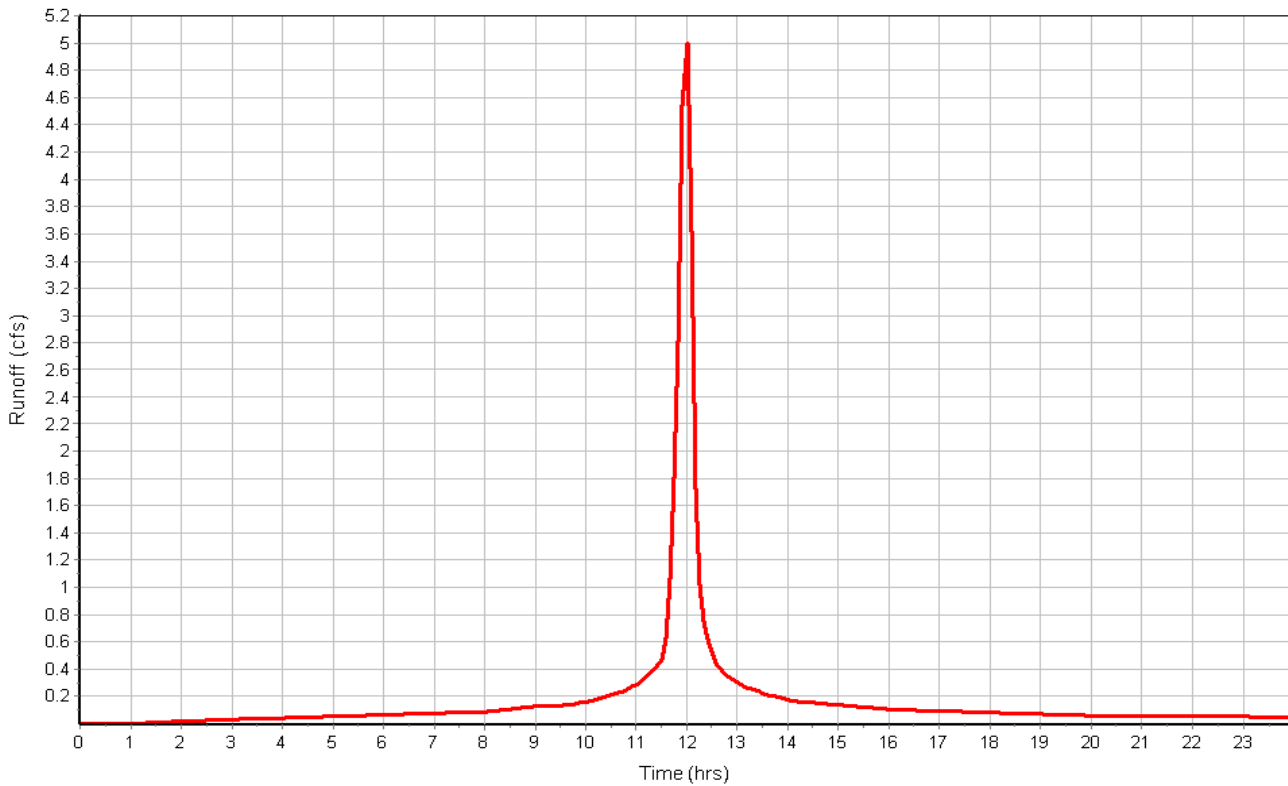
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 4.03  
 Peak Runoff (cfs) ..... 5.11  
 Weighted Curve Number ..... 98.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-8A

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-8B**

**Input Data**

Area (ac) ..... 1.04  
 Weighted Curve Number ..... 98.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	1.04	C	98.00
> 75% grass cover, Good	0.00	C	74.00
Composite Area & Weighted CN	1.04		98.00

**Time of Concentration**

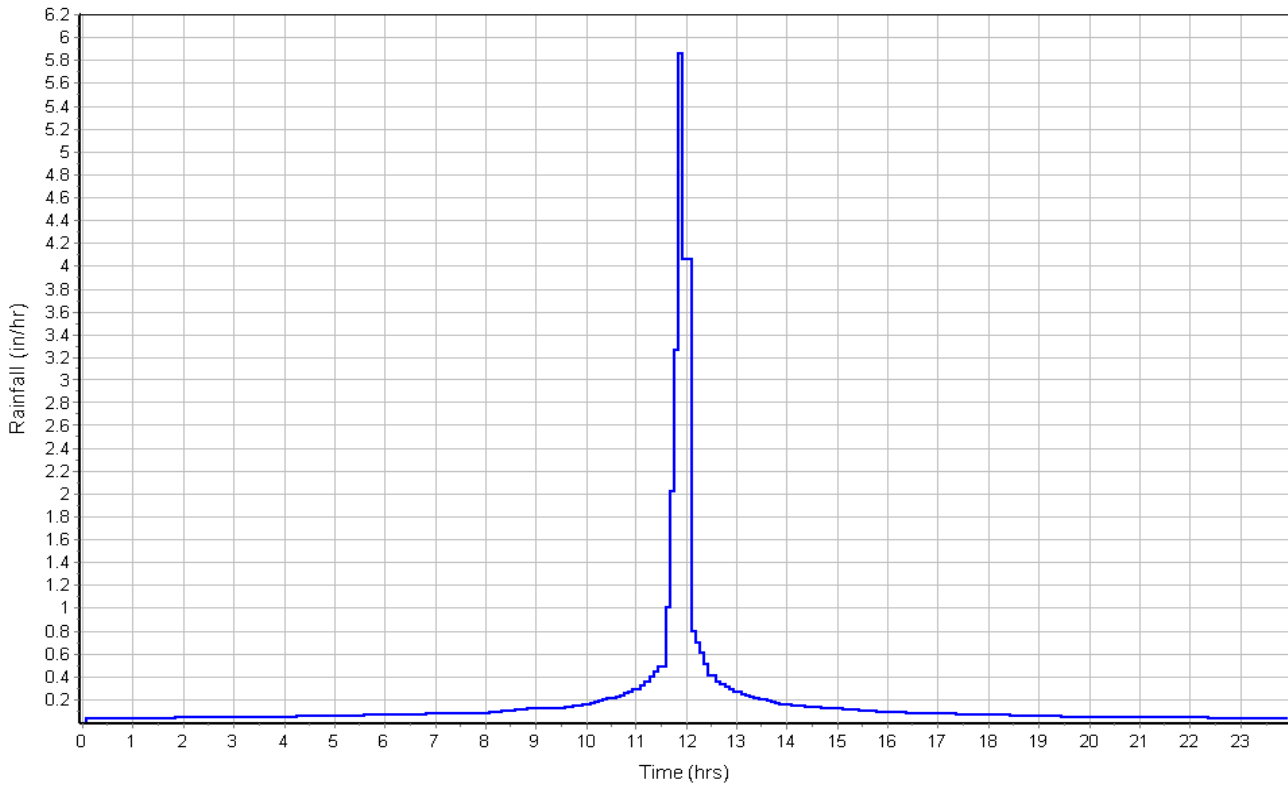
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

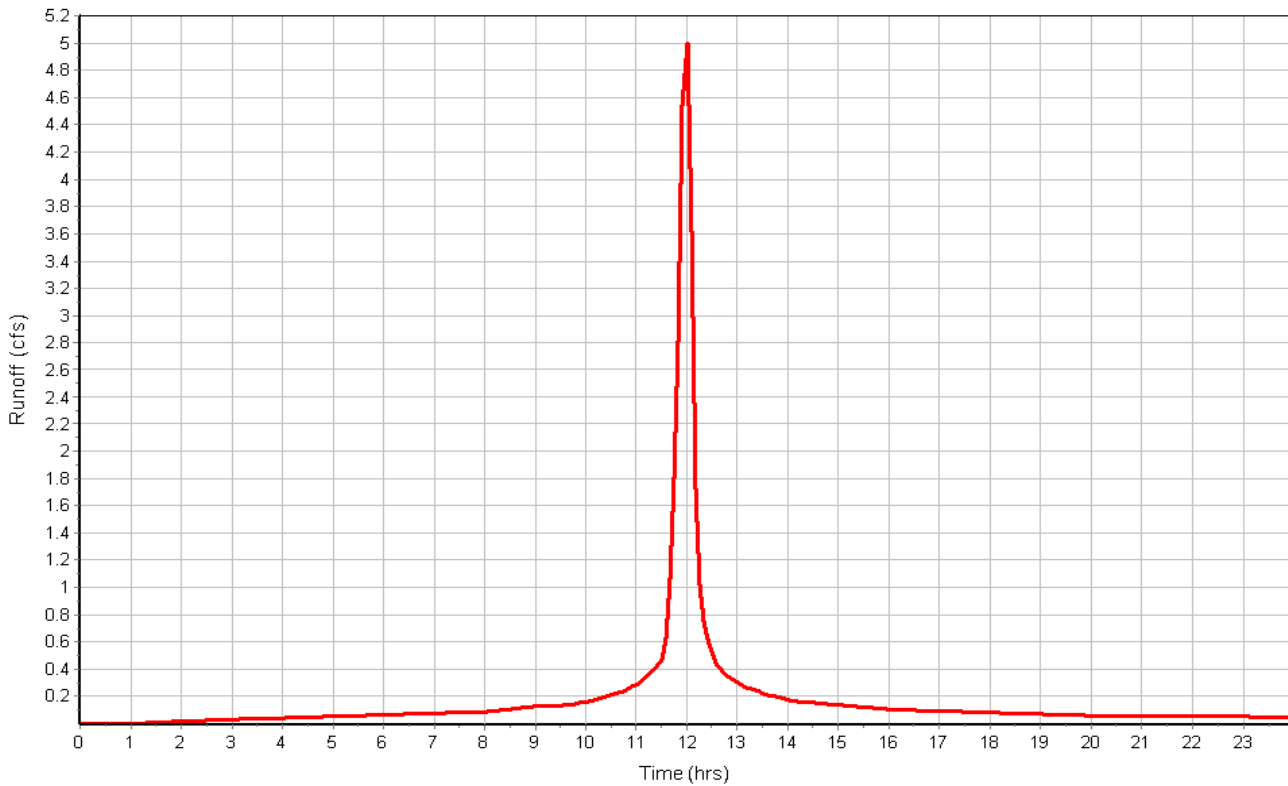
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 4.03  
 Peak Runoff (cfs) ..... 5.11  
 Weighted Curve Number ..... 98.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-8B

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-8C**

**Input Data**

Area (ac) ..... 0.13  
 Weighted Curve Number ..... 98.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	0.13	C	98.00
> 75% grass cover, Good	0.00	C	74.00
Composite Area & Weighted CN	0.13		98.00

**Time of Concentration**

User-Defined TOC override (minutes): 10

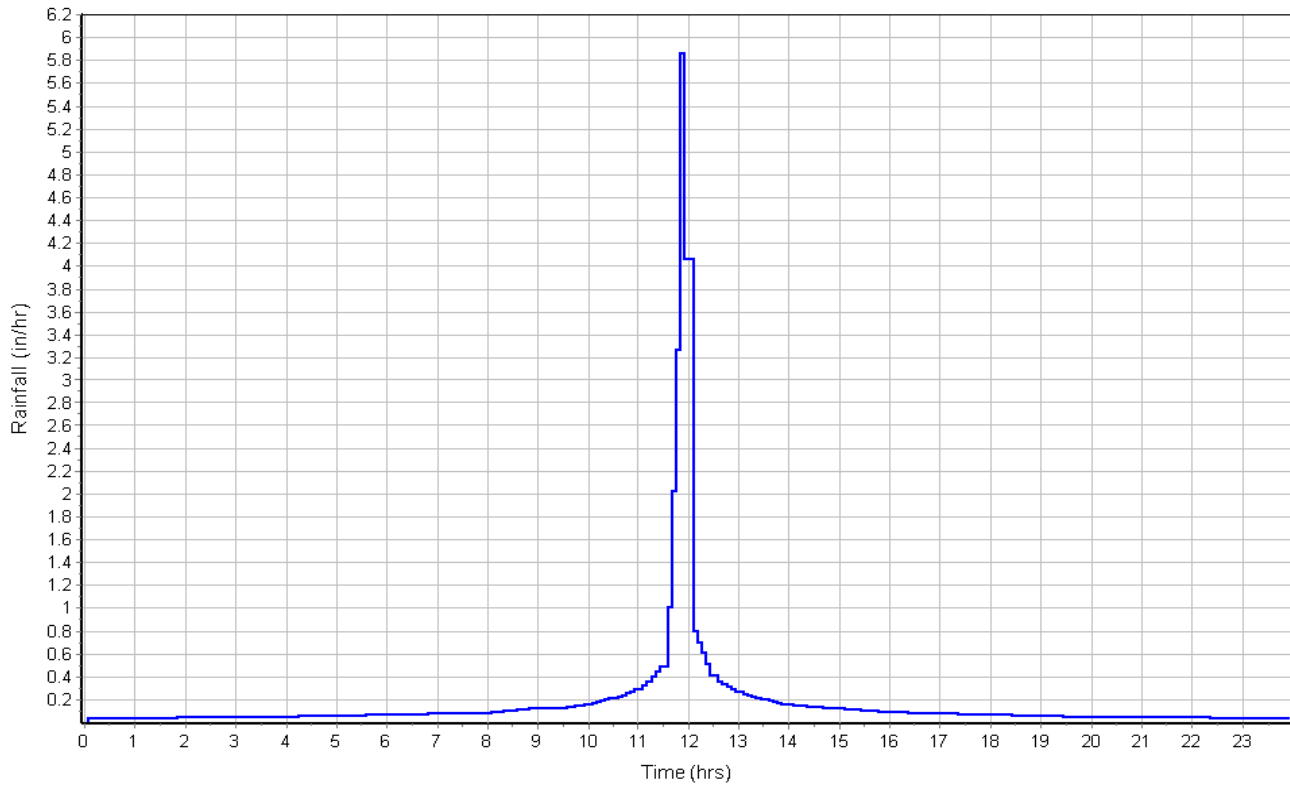
**Subbasin Runoff Results**

Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 4.03  
 Peak Runoff (cfs) ..... 0.63  
 Weighted Curve Number ..... 98.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

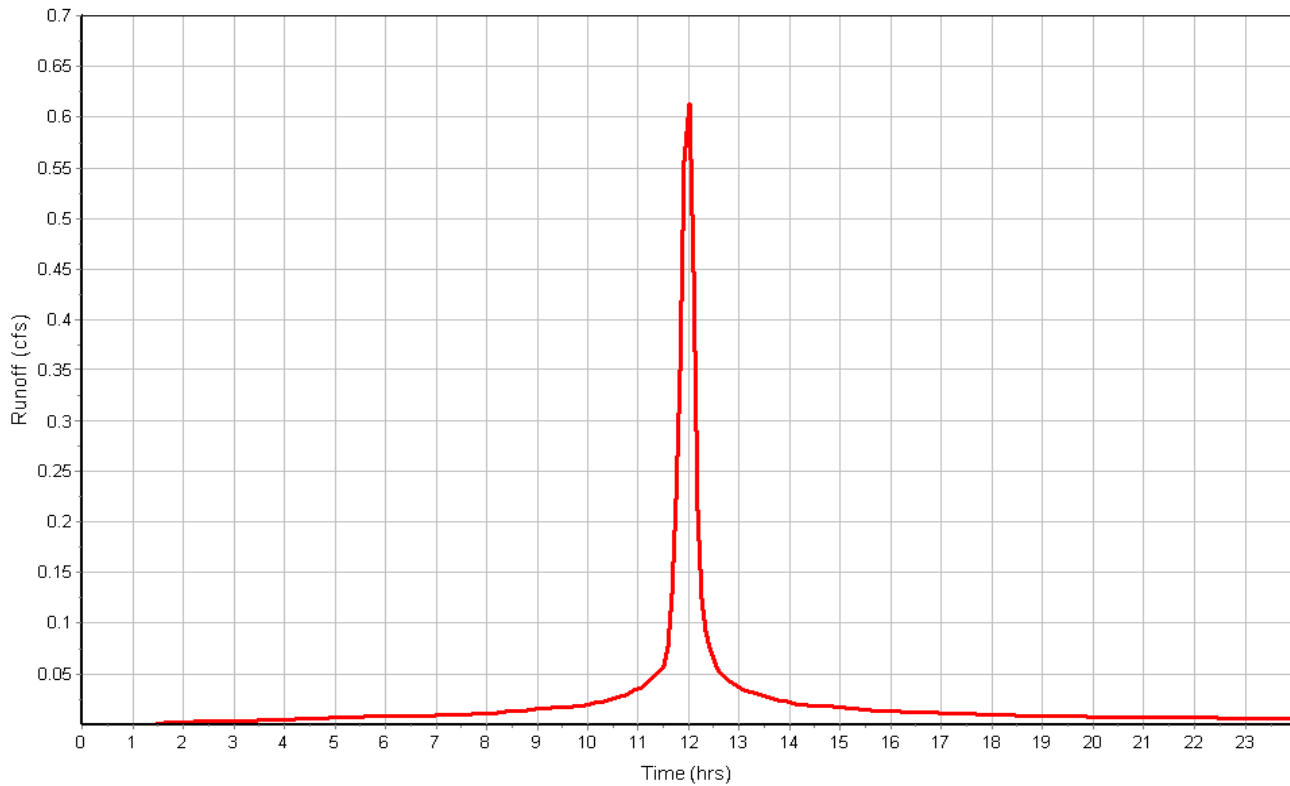


Subbasin : Sub-8C

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-9A**

**Input Data**

Area (ac) ..... 1.34  
 Weighted Curve Number ..... 98.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	1.34	C	98.00
Composite Area & Weighted CN	1.34		98.00

**Time of Concentration**

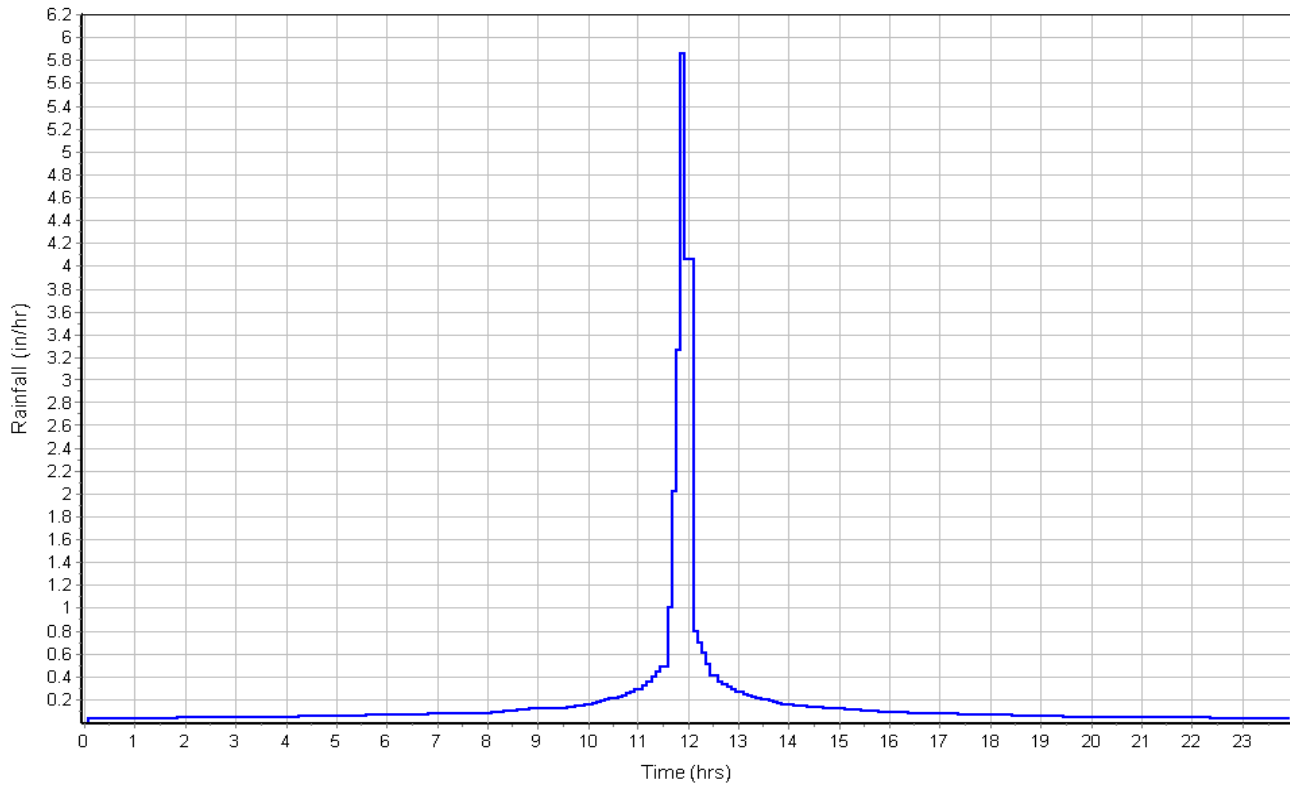
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

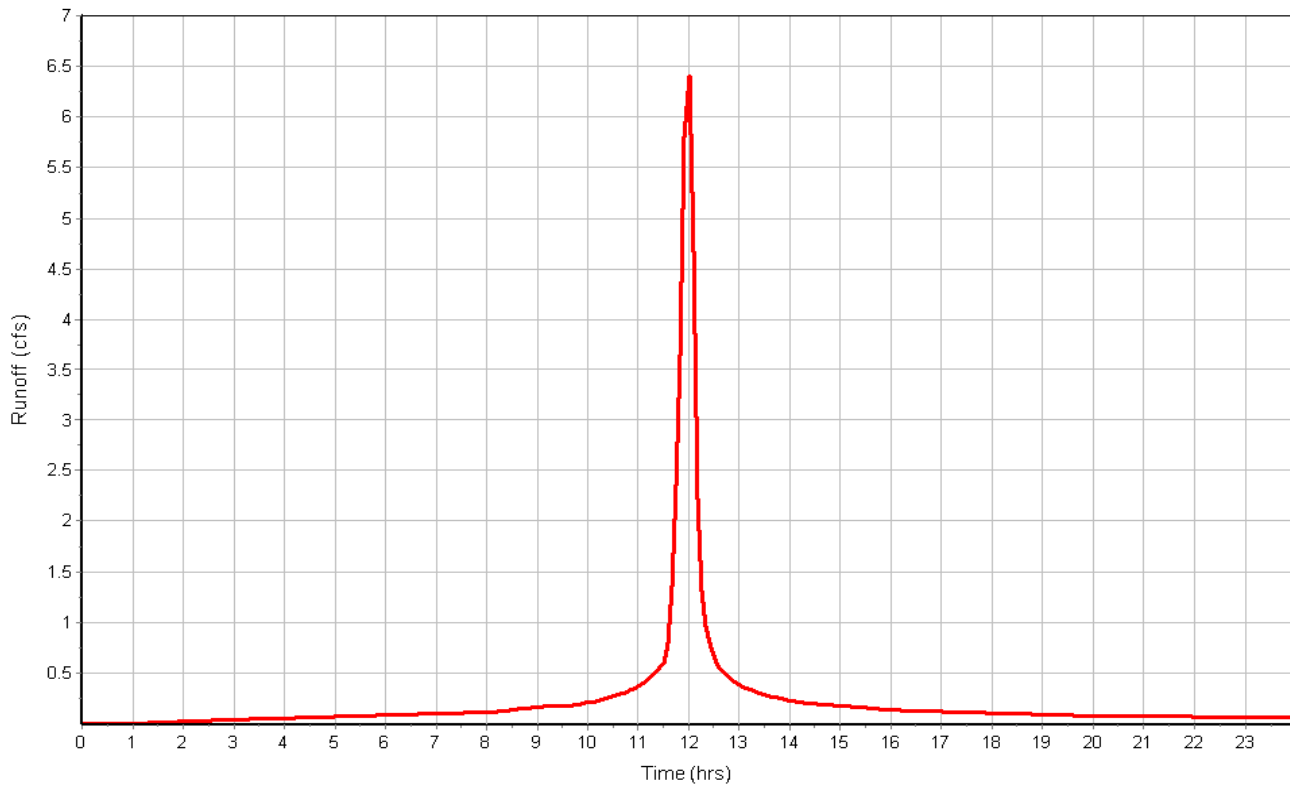
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 4.03  
 Peak Runoff (cfs) ..... 6.56  
 Weighted Curve Number ..... 98.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-9A

Rainfall Intensity Graph



Runoff Hydrograph



**Subbasin : Sub-9B**

**Input Data**

Area (ac) ..... 1.33  
 Weighted Curve Number ..... 98.00  
 Rain Gage ID ..... 10-24

**Composite Curve Number**

Soil/Surface Description	Area (acres)	Soil Group	Curve Number
Paved parking & roofs	5.00	C	98.00
Composite Area & Weighted CN	5.00		98.00

**Time of Concentration**

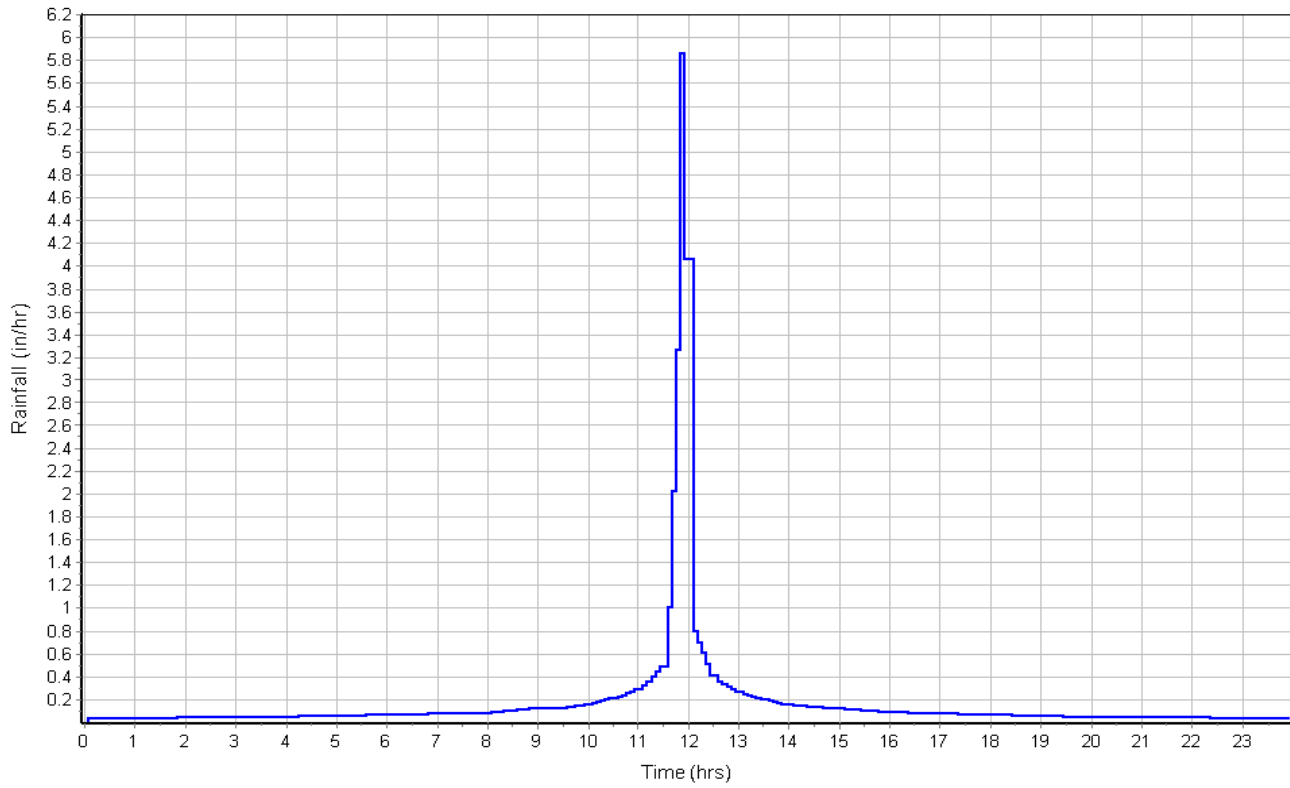
User-Defined TOC override (minutes): 10

**Subbasin Runoff Results**

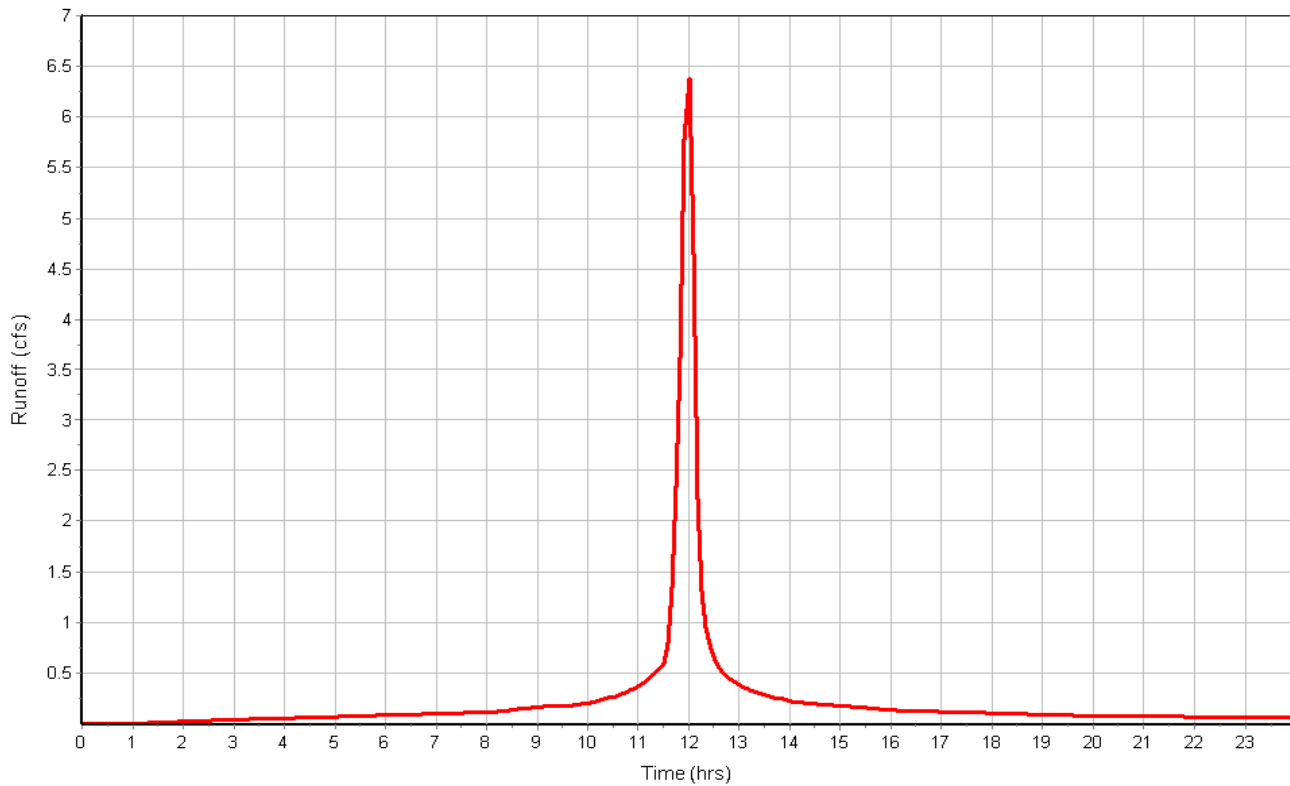
Total Rainfall (in) ..... 4.27  
 Total Runoff (in) ..... 4.03  
 Peak Runoff (cfs) ..... 6.52  
 Weighted Curve Number ..... 98.00  
 Time of Concentration (days hh:mm:ss) ..... 0 00:10:00

Subbasin : Sub-9B

Rainfall Intensity Graph



Runoff Hydrograph



**Junction Input**

SN Element ID	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Ground/Rim (Max) Offset (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Surcharge Elevation (ft)	Surcharge Depth (ft)	Ponded Area (ft <sup>2</sup> )	Minimum Pipe Cover (in)
1 08	866.96	874.82	7.86	866.96	0.00	874.82	0.00	10.00	62.54
2 09	867.80	875.12	7.32	867.80	0.00	875.12	0.00	0.00	62.64
3 13	863.09	874.14	11.05	863.09	0.00	874.14	0.00	10.00	54.52
4 18	853.77	874.84	21.07	853.77	0.00	874.84	0.00	0.00	221.64
5 20	864.23	867.90	3.67	864.23	0.00	867.90	0.00	0.00	13.99
6 21	869.86	874.64	4.78	869.86	0.00	874.64	0.00	10.00	42.30
7 CO-01	871.83	875.83	4.00	871.83	0.00	875.83	0.00	0.00	75.68
8 CO-02	871.83	875.83	4.00	871.83	0.00	875.83	0.00	0.00	67.76
9 CO-03	869.51	875.83	6.32	869.51	0.00	875.83	0.00	0.00	51.84
10 CO-04	871.83	875.83	4.00	871.83	0.00	875.83	0.00	0.00	40.00
11 CO-05	867.21	875.83	8.62	867.21	0.00	875.83	0.00	0.00	88.44
12 CO-06	863.24	875.83	12.59	863.24	0.00	0.00	-875.83	0.00	127.08
13 CO-07	867.21	875.83	8.62	867.21	0.00	875.83	0.00	0.00	88.44
14 CO-08	867.16	875.83	8.67	867.16	0.00	875.83	0.00	0.00	96.04
15 CO-09	870.83	875.83	5.00	870.83	0.00	875.83	0.00	0.00	45.00
16 CO-16	867.47	875.83	8.36	867.47	0.00	875.83	0.00	867.47	90.34
17 Jun-11	864.02	875.13	11.11	864.02	0.00	875.83	0.70	0.00	123.32

**Junction Results**

SN Element ID	Peak Inflow (cfs)	Peak Lateral Inflow (cfs)	Max HGL Elevation (ft)	Max HGL Depth (ft)	Max Surcharge Depth (ft)	Min Freeboard (ft)	Average HGL Elevation (ft)	Average HGL Depth (ft)	Time of Max HGL Occurrence (days hh:mm)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1 08	26.17	0.00	868.63	1.67	0.00	6.19	867.76	0.80	0 12:05	0 00:00	0.00	0.00
2 09	12.68	0.00	869.01	1.21	0.00	6.11	868.06	0.26	0 12:05	0 00:00	0.00	0.00
3 13	7.86	0.00	868.95	5.86	0.00	5.19	868.42	5.33	0 12:05	0 00:00	0.00	0.00
4 18	32.09	0.00	854.81	1.04	0.00	20.03	854.01	0.24	0 12:10	0 00:00	0.00	0.00
5 20	28.54	28.54	865.10	0.87	0.00	2.79	864.36	0.13	0 12:10	0 00:00	0.00	0.00
6 21	2.36	2.36	870.23	0.37	0.00	4.40	869.92	0.06	0 12:05	0 00:00	0.00	0.00
7 CO-01	1.32	1.32	872.09	0.26	0.00	3.74	871.87	0.04	0 12:05	0 00:00	0.00	0.00
8 CO-02	1.35	1.35	872.16	0.33	0.00	3.67	871.88	0.05	0 12:05	0 00:00	0.00	0.00
9 CO-03	12.77	6.40	870.63	1.12	0.00	5.20	869.67	0.16	0 12:05	0 00:00	0.00	0.00
10 CO-04	0.33	0.33	872.06	0.23	0.00	3.77	871.86	0.03	0 12:05	0 00:00	0.00	0.00
11 CO-05	4.99	4.99	867.90	0.69	0.00	7.93	867.31	0.10	0 12:05	0 00:00	0.00	0.00
12 CO-06	4.63	4.63	863.95	0.71	0.00	11.88	863.35	0.11	0 12:05	0 00:00	0.00	0.00
13 CO-07	4.99	4.99	867.90	0.69	0.00	7.93	867.31	0.10	0 12:05	0 00:00	0.00	0.00
14 CO-08	0.61	0.61	867.48	0.32	0.00	8.35	867.21	0.05	0 12:05	0 00:00	0.00	0.00
15 CO-09	6.37	6.37	871.56	0.73	0.00	4.27	870.93	0.10	0 12:05	0 00:00	0.00	0.00
16 CO-16	1.78	1.78	867.97	0.50	0.00	7.86	867.54	0.07	0 12:05	0 00:00	0.00	0.00
17 Jun-11	0.77	0.77	864.39	0.37	0.00	10.74	864.07	0.05	0 12:05	0 00:00	0.00	0.00

Pipe Input

SN	Element ID	Length (ft)	Inlet Invert Elevation (ft)	Inlet Invert Offset (ft)	Outlet Invert Elevation (ft)	Outlet Invert Offset (ft)	Total Drop (ft)	Average Slope (%)	Pipe Shape	Pipe Diameter or Height (in)	Pipe Width (in)	Manning's Roughness	Entrance Losses	Exit/Bend Losses	Additional Losses	Initial Flow (cfs)	Flap Gate	No. of Barrels
1	03-04	71.92	859.78	1.00	840.45	0.00	19.33	26.8800	CIRCULAR	30.000	30.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
2	04-05	243.06	868.16	0.00	863.30	4.52	4.86	2.0000	CIRCULAR	15.000	15.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
3	04-06	125.00	860.75	0.00	858.88	0.10	1.87	1.5000	CIRCULAR	30.000	30.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
4	06-07	236.32	863.21	0.00	860.85	0.10	2.36	1.0000	CIRCULAR	30.000	30.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
5	07-08	389.51	866.96	0.00	863.31	0.10	3.65	0.9400	CIRCULAR	30.000	30.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
6	08-09	19.08	867.80	0.00	867.61	0.65	0.19	1.0000	CIRCULAR	24.000	24.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
7	08-10	91.23	867.52	0.00	867.06	0.10	0.46	0.5000	CIRCULAR	15.000	15.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
8	10-11	276.00	869.00	0.00	867.62	0.10	1.38	0.5000	CIRCULAR	15.000	15.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
9	12-13	209.05	863.09	0.00	861.00	0.00	2.09	1.0000	CIRCULAR	30.000	30.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
10	13-14	25.18	868.60	0.00	868.35	5.26	0.25	1.0000	CIRCULAR	15.000	15.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
11	14-15	185.79	869.79	0.00	868.70	0.10	1.09	0.5900	CIRCULAR	15.000	15.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
12	14-16	122.21	870.50	0.00	868.70	0.10	1.80	1.4700	CIRCULAR	9.960	9.960	0.0120	0.5000	0.5000	0.0000	0.00	No	1
13	17-18	518.95	853.77	0.00	833.01	0.00	20.76	4.0000	CIRCULAR	30.000	30.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
14	18-19	149.66	862.85	0.00	853.87	0.10	8.98	6.0000	CIRCULAR	30.000	30.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
15	19-20	22.95	864.23	0.00	862.85	0.00	1.38	6.0100	CIRCULAR	30.000	30.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
16	19-21	79.04	869.86	0.00	867.49	4.64	2.37	3.0000	CIRCULAR	15.000	15.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
17	Link-02	53.00	868.69	-3.14	868.16	0.00	0.53	1.0000	CIRCULAR	9.960	9.960	0.0120	0.5000	0.5000	0.0000	0.00	No	1
18	Link-03	119.00	869.35	-2.48	868.16	0.00	1.19	1.0000	CIRCULAR	9.960	9.960	0.0120	0.5000	0.5000	0.0000	0.00	No	1
19	Link-04	10.00	863.24	0.00	863.19	0.10	0.05	0.5000	CIRCULAR	24.000	24.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
20	Link-05	26.97	871.83	0.00	871.56	1.06	0.27	1.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	0.00	No	1
21	Link-06	10.00	867.21	0.00	867.06	0.10	0.15	1.5000	CIRCULAR	15.000	15.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
22	Link-07	10.00	867.21	0.00	867.06	0.10	0.15	1.5000	CIRCULAR	15.000	15.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
23	Link-08	10.00	867.16	0.00	867.06	0.10	0.10	1.0000	CIRCULAR	8.040	8.040	0.0120	0.5000	0.5000	0.0000	0.00	No	1
24	Link-09	214.81	869.51	0.00	867.90	0.10	1.61	0.7500	CIRCULAR	24.000	24.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
25	Link-10	66.00	870.83	0.00	869.51	0.00	1.32	2.0000	CIRCULAR	15.000	15.000	0.0120	0.5000	0.5000	0.0000	0.00	No	1
26	Link-11	185.00	867.47	0.00	865.15	6.37	2.32	1.2500	CIRCULAR	9.960	9.960	0.0120	0.5000	0.5000	0.0000	0.00	No	1
27	Link-13	81.00	864.02	0.00	863.21	0.00	0.81	1.0000	CIRCULAR	9.960	9.960	0.0150	0.5000	0.5000	0.0000	0.00	No	1



### Pipe Results

SN	Element ID	Peak Flow	Time of Peak Flow Occurrence	Design Flow Capacity	Peak Flow/Design Flow Ratio	Peak Flow Velocity	Travel Time	Peak Flow Depth	Peak Flow Depth/Total Depth Ratio	Total Time Surcharged	Froude Number	Reported Condition
		(cfs)	(days hh:mm)	(cfs)		(ft/sec)	(min)	(ft)		(min)		
1	03-04	40.08	0 12:05	230.37	0.17	35.17	0.03	0.70	0.28	0.00		Calculated
2	04-05	3.77	0 12:05	9.90	0.38	7.55	0.54	0.54	0.43	0.00		Calculated
3	04-06	33.38	0 12:05	54.35	0.61	11.63	0.18	1.41	0.57	0.00		Calculated
4	06-07	27.55	0 12:06	44.44	0.62	9.55	0.41	1.42	0.57	0.00		Calculated
5	07-08	26.09	0 12:05	43.01	0.61	9.24	0.70	1.40	0.56	0.00		Calculated
6	08-09	12.68	0 12:05	24.52	0.52	7.87	0.04	1.02	0.51	0.00		Calculated
7	08-10	2.94	0 12:05	4.95	0.59	4.21	0.36	0.69	0.56	0.00		Calculated
8	10-11	1.77	0 12:06	4.95	0.36	3.74	1.23	0.52	0.41	0.00		Calculated
9	12-13	7.83	0 12:05	44.43	0.18	6.83	0.51	0.71	0.28	0.00		Calculated
10	13-14	3.26	0 12:05	7.00	0.47	5.60	0.07	0.60	0.48	0.00		Calculated
11	14-15	1.21	0 12:05	5.36	0.22	3.56	0.87	0.40	0.32	0.00		Calculated
12	14-16	0.41	0 12:05	2.88	0.14	3.75	0.54	0.21	0.25	0.00		Calculated
13	17-18	31.97	0 12:10	88.87	0.36	16.66	0.52	1.04	0.41	0.00		Calculated
14	18-19	32.09	0 12:10	108.85	0.29	19.48	0.13	0.92	0.37	0.00		Calculated
15	19-20	28.58	0 12:10	108.96	0.26	18.71	0.02	0.87	0.35	0.00		Calculated
16	19-21	2.35	0 12:05	12.12	0.19	7.64	0.17	0.37	0.30	0.00		Calculated
17	Link-02	1.32	0 12:05	6.25	0.21	9.07	0.10	0.26	0.31	0.00		Calculated
18	Link-03	1.34	0 12:05	4.17	0.32	6.82	0.29	0.33	0.39	0.00		Calculated
19	Link-04	4.62	0 12:05	17.33	0.27	4.67	0.04	0.71	0.35	0.00		Calculated
20	Link-05	0.33	0 12:05	1.31	0.25	3.13	0.14	0.23	0.34	0.00		Calculated
21	Link-06	4.99	0 12:05	8.57	0.58	7.25	0.02	0.69	0.55	0.00		Calculated
22	Link-07	4.99	0 12:05	8.57	0.58	7.25	0.02	0.69	0.55	0.00		Calculated
23	Link-08	0.61	0 12:05	1.31	0.47	3.68	0.05	0.32	0.48	0.00		Calculated
24	Link-09	12.68	0 12:05	21.22	0.60	7.09	0.50	1.12	0.56	0.00		Calculated
25	Link-10	6.36	0 12:05	9.90	0.64	8.55	0.13	0.73	0.58	0.00		Calculated
26	Link-11	1.77	0 12:05	2.66	0.67	5.25	0.59	0.50	0.60	0.00		Calculated
27	Link-13	0.76	0 12:05	1.90	0.40	3.30	0.41	0.37	0.44	0.00		Calculated

**Inlet Input**

SN Element ID	Inlet Manufacturer	Manufacturer Part Number	Inlet Location	Number of Inlets	Catchbasin Invert Elevation (ft)	Max (Rim) Elevation (ft)	Inlet Depth (ft)	Initial Water Elevation (ft)	Initial Water Depth (ft)	Ponded Area (ft <sup>2</sup> )	Grate Clogging Factor (%)
1 04	NEENAH FOUNDRY	R-3246	On Sag	1	858.78	869.74	10.96	858.78	0.00	100.00	50.00
2 05	NEENAH FOUNDRY	R-3246	On Sag	1	868.16	872.17	4.01	868.16	0.00	100.00	50.00
3 06	NEENAH FOUNDRY	R-3246	On Sag	3	860.75	868.48	7.73	860.75	0.00	100.00	50.00
4 07	FHWA HEC-22 GENERIC	N/A	On Sag	1	863.21	873.55	10.33	863.21	0.00	100.00	50.00
5 10	NEENAH FOUNDRY	R-3246	On Sag	1	867.52	873.42	5.90	867.52	0.00	100.00	50.00
6 11	NEENAH FOUNDRY	R-3246	On Sag	1	869.00	873.03	4.03	869.00	0.00	100.00	50.00
7 14	FHWA HEC-22 GENERIC	N/A	On Sag	1	868.60	872.61	4.01	868.60	0.00	100.00	50.00
8 15	FHWA HEC-22 GENERIC	N/A	On Sag	1	869.79	873.54	3.75	869.79	0.00	100.00	50.00
9 16	FHWA HEC-22 GENERIC	N/A	On Sag	1	870.50	874.50	4.00	870.50	0.00	100.00	50.00
10 19	NEENAH FOUNDRY	R-1878-B7G	On Sag	1	862.85	872.58	9.73	862.85	0.00	100.00	0.00

**Roadway & Gutter Input**

SN Element ID	Roadway Longitudinal Slope (ft/ft)	Roadway Cross Slope (ft/ft)	Roadway Manning's Roughness	Gutter Cross Slope (ft/ft)	Gutter Width (ft)	Gutter Depression (in)	Allowable Spread (ft)
1 04	N/A	0.0500	0.0130	0.0620	2.00	0.0000	7.00
2 05	N/A	0.0500	0.0130	0.0620	2.00	0.0000	7.00
3 06	N/A	0.0500	0.0130	0.0620	2.00	0.0000	7.00
4 07	N/A	0.0500	0.0130	0.0620	2.00	0.0000	7.00
5 10	N/A	0.0500	0.0130	0.0620	2.00	0.0000	7.00
6 11	N/A	0.0500	0.0130	0.0620	2.00	0.0000	7.00
7 14	N/A	0.0500	0.0130	0.0620	2.00	0.0000	7.00
8 15	N/A	0.0500	0.0130	0.0620	2.00	0.0000	7.00
9 16	N/A	0.0500	0.0130	0.0620	2.00	0.0000	7.00
10 19	N/A	0.0500	0.0130	0.0620	2.00	0.0000	7.00

**Inlet Results**

SN Element ID	Peak Flow	Peak Lateral Inflow	Peak Flow Intercepted	Peak Flow Bypassing Inlet	Inlet Efficiency during Peak	Max Gutter Spread during Peak	Max Gutter Water Elev. during Peak	Max Gutter Water Depth during Peak	Time of Max Depth Occurrence	Total Flooded Volume	Total Time Flooded
	(cfs)	(cfs)	(cfs)	(cfs)	(%)	(ft)	(ft)	(ft)	(days hh:mm)	(ac-in)	(min)
1 04	1.20	1.20	N/A	N/A	N/A	2.67	869.89	0.16	0 12:05	0.00	0.00
2 05	1.12	1.12	N/A	N/A	N/A	2.54	872.32	0.15	0 12:05	0.00	0.00
3 06	6.01	6.01	N/A	N/A	N/A	4.95	868.75	0.27	0 12:06	0.00	0.00
4 07	0.78	0.78	N/A	N/A	N/A	4.09	873.77	0.22	0 12:05	0.00	0.00
5 10	1.20	1.20	N/A	N/A	N/A	2.66	873.58	0.16	0 12:05	0.00	0.00
6 11	1.79	1.79	N/A	N/A	N/A	3.89	873.25	0.22	0 12:05	0.00	0.00
7 14	1.66	1.66	N/A	N/A	N/A	6.97	872.98	0.37	0 12:05	0.00	0.00
8 15	1.22	1.22	N/A	N/A	N/A	5.81	873.85	0.31	0 12:05	0.00	0.00
9 16	0.11	0.11	N/A	N/A	N/A	8.43	874.84	0.34	0 12:05	0.00	0.00
10 19	2.27	2.27	N/A	N/A	N/A	2.75	872.69	0.11	0 12:05	0.00	0.00

## Node Summary

SN	Element ID	Element Type	Invert Elevation (ft)	Ground/Rim (Max) Elevation (ft)	Initial Water Elevation (ft)	Surcharge Elevation (ft)	Ponded Area (ft <sup>2</sup> )	Peak Inflow (cfs)	Max HGL Elevation Attained (ft)	Max Surcharge Depth Attained (ft)	Min Freeboard Attained (ft)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1	08	Junction	866.96	874.82	866.96	874.82	10.00	26.17	868.63	0.00	6.19	0 00:00	0.00	0.00
2	09	Junction	867.80	875.12	867.80	875.12	0.00	12.68	869.01	0.00	6.11	0 00:00	0.00	0.00
3	13	Junction	863.09	874.14	863.09	874.14	10.00	7.86	868.95	0.00	5.19	0 00:00	0.00	0.00
4	18	Junction	853.77	874.84	853.77	874.84	0.00	32.09	854.81	0.00	20.03	0 00:00	0.00	0.00
5	20	Junction	864.23	867.90	864.23	867.90	0.00	28.54	865.10	0.00	2.79	0 00:00	0.00	0.00
6	21	Junction	869.86	874.64	869.86	874.64	10.00	2.36	870.23	0.00	4.40	0 00:00	0.00	0.00
7	CO-01	Junction	871.83	875.83	871.83	875.83	0.00	1.32	872.09	0.00	3.74	0 00:00	0.00	0.00
8	CO-02	Junction	871.83	875.83	871.83	875.83	0.00	1.35	872.16	0.00	3.67	0 00:00	0.00	0.00
9	CO-03	Junction	869.51	875.83	869.51	875.83	0.00	12.77	870.63	0.00	5.20	0 00:00	0.00	0.00
10	CO-04	Junction	871.83	875.83	871.83	875.83	0.00	0.33	872.06	0.00	3.77	0 00:00	0.00	0.00
11	CO-05	Junction	867.21	875.83	867.21	875.83	0.00	4.99	867.90	0.00	7.93	0 00:00	0.00	0.00
12	CO-06	Junction	863.24	875.83	863.24	0.00	0.00	4.63	863.95	0.00	11.88	0 00:00	0.00	0.00
13	CO-07	Junction	867.21	875.83	867.21	875.83	0.00	4.99	867.90	0.00	7.93	0 00:00	0.00	0.00
14	CO-08	Junction	867.16	875.83	867.16	875.83	0.00	0.61	867.48	0.00	8.35	0 00:00	0.00	0.00
15	CO-09	Junction	870.83	875.83	870.83	875.83	0.00	6.37	871.56	0.00	4.27	0 00:00	0.00	0.00
16	CO-16	Junction	867.47	875.83	867.47	875.83	867.47	1.78	867.97	0.00	7.86	0 00:00	0.00	0.00
17	Jun-11	Junction	864.02	875.13	864.02	875.83	0.00	0.77	864.39	0.00	10.74	0 00:00	0.00	0.00
18	03	Outfall	840.45					40.08	841.16					
19	12	Outfall	861.00					7.83	861.71					
20	17	Outfall	833.01					31.97	834.05					

### Link Summary

SN	Element ID	Element Type	From (Inlet) Node	To (Outlet) Node	Length (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Average Slope (%)	Diameter or Height (in)	Manning's Roughness	Peak Flow (cfs)	Design Flow Capacity (cfs)	Peak Flow/Design Flow Ratio	Peak Flow Velocity (ft/sec)	Peak Flow Depth (ft)	Peak Flow Depth/Total Depth Ratio	Total Time Reported (min)	Surcharged Condition
1	03-04	Pipe	04	03	71.92	859.78	840.45	26.8800	30.000	0.0120	40.08	230.37	0.17	35.17	0.70	0.28	0.00	Calculated
2	04-05	Pipe	05	04	243.06	868.16	863.30	2.0000	15.000	0.0120	3.77	9.90	0.38	7.55	0.54	0.43	0.00	Calculated
3	04-06	Pipe	06	04	125.00	860.75	858.88	1.5000	30.000	0.0120	33.38	54.35	0.61	11.63	1.41	0.57	0.00	Calculated
4	06-07	Pipe	07	06	236.32	863.21	860.85	1.0000	30.000	0.0120	27.55	44.44	0.62	9.55	1.42	0.57	0.00	Calculated
5	07-08	Pipe	08	07	389.51	866.96	863.31	0.9400	30.000	0.0120	26.09	43.01	0.61	9.24	1.40	0.56	0.00	Calculated
6	08-09	Pipe	09	08	19.08	867.80	867.61	1.0000	24.000	0.0120	12.68	24.52	0.52	7.87	1.02	0.51	0.00	Calculated
7	08-10	Pipe	10	08	91.23	867.52	867.06	0.5000	15.000	0.0120	2.94	4.95	0.59	4.21	0.69	0.56	0.00	Calculated
8	10-11	Pipe	11	10	276.00	869.00	867.62	0.5000	15.000	0.0120	1.77	4.95	0.36	3.74	0.52	0.41	0.00	Calculated
9	12-13	Pipe	13	12	209.05	863.09	861.00	1.0000	30.000	0.0120	7.83	44.43	0.18	6.83	0.71	0.28	0.00	Calculated
10	13-14	Pipe	14	13	25.18	868.60	868.35	1.0000	15.000	0.0120	3.26	7.00	0.47	5.60	0.60	0.48	0.00	Calculated
11	14-15	Pipe	15	14	185.79	869.79	868.70	0.5900	15.000	0.0120	1.21	5.36	0.22	3.56	0.40	0.32	0.00	Calculated
12	14-16	Pipe	16	14	122.21	870.50	868.70	1.4700	10.000	0.0120	0.41	2.88	0.14	3.75	0.21	0.25	0.00	Calculated
13	17-18	Pipe	18	17	518.95	853.77	833.01	4.0000	30.000	0.0120	31.97	88.87	0.36	16.66	1.04	0.41	0.00	Calculated
14	18-19	Pipe	19	18	149.66	862.85	853.87	6.0000	30.000	0.0120	32.09	108.85	0.29	19.48	0.92	0.37	0.00	Calculated
15	19-20	Pipe	20	19	22.95	864.23	862.85	6.0100	30.000	0.0120	28.58	108.96	0.26	18.71	0.87	0.35	0.00	Calculated
16	19-21	Pipe	21	19	79.04	869.86	867.49	3.0000	15.000	0.0120	2.35	12.12	0.19	7.64	0.37	0.30	0.00	Calculated
17	Link-02	Pipe	CO-01	05	53.00	868.69	868.16	1.0000	10.000	0.0120	1.32	6.25	0.21	9.07	0.26	0.31	0.00	Calculated
18	Link-03	Pipe	CO-02	05	119.00	869.35	868.16	1.0000	10.000	0.0120	1.34	4.17	0.32	6.82	0.33	0.39	0.00	Calculated
19	Link-04	Pipe	CO-06	13	10.00	863.24	863.19	0.5000	24.000	0.0120	4.62	17.33	0.27	4.67	0.71	0.35	0.00	Calculated
20	Link-05	Pipe	CO-04	16	26.97	871.83	871.56	1.0000	8.000	0.0120	0.33	1.31	0.25	3.13	0.23	0.34	0.00	Calculated
21	Link-06	Pipe	CO-05	08	10.00	867.21	867.06	1.5000	15.000	0.0120	4.99	8.57	0.58	7.25	0.69	0.55	0.00	Calculated
22	Link-07	Pipe	CO-07	08	10.00	867.21	867.06	1.5000	15.000	0.0120	4.99	8.57	0.58	7.25	0.69	0.55	0.00	Calculated
23	Link-08	Pipe	CO-08	08	10.00	867.16	867.06	1.0000	8.000	0.0120	0.61	1.31	0.47	3.68	0.32	0.48	0.00	Calculated
24	Link-09	Pipe	CO-03	09	214.81	869.51	867.90	0.7500	24.000	0.0120	12.68	21.22	0.60	7.09	1.12	0.56	0.00	Calculated
25	Link-10	Pipe	CO-09	CO-03	66.00	870.83	869.51	2.0000	15.000	0.0120	6.36	9.90	0.64	8.55	0.73	0.58	0.00	Calculated
26	Link-11	Pipe	CO-16	04	185.00	867.47	865.15	1.2500	10.000	0.0120	1.77	2.66	0.67	5.25	0.50	0.60	0.00	Calculated
27	Link-13	Pipe	Jun-11	07	81.00	864.02	863.21	1.0000	10.000	0.0150	0.76	1.90	0.40	3.30	0.37	0.44	0.00	Calculated

### Inlet Summary

SN Element ID	Inlet Manufacturer	Manufacturer Part Number	Inlet Location	Number of Inlets	Catchbasin Invert Elevation (ft)	Max (Rim) Elevation (ft)	Initial Water Elevation (ft)	Ponded Area (ft <sup>2</sup> )	Peak Flow (cfs)	Peak Flow Intercepted (cfs)	Peak Flow Bypassing Inlet (cfs)	Peak Flow Efficiency (%)	Inlet Allowable Spread (ft)	Max Gutter Spread during Peak (ft)	Max Gutter Water Elev. during Peak (ft)
1 04	NEENAH FOUNDRY	R-3246	On Sag	1	858.78	869.74	858.78	100.00	1.20	N/A	N/A	N/A	7.00	2.67	869.89
2 05	NEENAH FOUNDRY	R-3246	On Sag	1	868.16	872.17	868.16	100.00	1.12	N/A	N/A	N/A	7.00	2.54	872.32
3 06	NEENAH FOUNDRY	R-3246	On Sag	3	860.75	868.48	860.75	100.00	6.01	N/A	N/A	N/A	7.00	4.95	868.75
4 07	FHWA HEC-22 GENERIC	N/A	On Sag	1	863.21	873.55	863.21	100.00	0.78	N/A	N/A	N/A	7.00	4.09	873.77
5 10	NEENAH FOUNDRY	R-3246	On Sag	1	867.52	873.42	867.52	100.00	1.20	N/A	N/A	N/A	7.00	2.66	873.58
6 11	NEENAH FOUNDRY	R-3246	On Sag	1	869.00	873.03	869.00	100.00	1.79	N/A	N/A	N/A	7.00	3.89	873.25
7 14	FHWA HEC-22 GENERIC	N/A	On Sag	1	868.60	872.61	868.60	100.00	1.66	N/A	N/A	N/A	7.00	6.97	872.98
8 15	FHWA HEC-22 GENERIC	N/A	On Sag	1	869.79	873.54	869.79	100.00	1.22	N/A	N/A	N/A	7.00	5.81	873.85
9 16	FHWA HEC-22 GENERIC	N/A	On Sag	1	870.50	874.50	870.50	100.00	0.11	N/A	N/A	N/A	7.00	8.43	874.84
10 19	NEENAH FOUNDRY	R-1878-B7G	On Sag	1	862.85	872.58	862.85	100.00	2.27	N/A	N/A	N/A	7.00	2.75	872.69

## Junction Results

SN Element ID	Peak Inflow (cfs)	Peak Lateral Inflow (cfs)	Max HGL Elevation (ft)	Max HGL Depth (ft)	Max Surcharge Depth (ft)	Min Freeboard (ft)	Average HGL Elevation (ft)	Average HGL Depth (ft)	Time of Max HGL Occurrence (days hh:mm)	Time of Peak Flooding Occurrence (days hh:mm)	Total Flooded Volume (ac-in)	Total Time Flooded (min)
1 08	26.17	0.00	868.63	1.67	0.00	6.19	867.76	0.80	0 12:05	0 00:00	0.00	0.00
2 09	12.68	0.00	869.01	1.21	0.00	6.11	868.06	0.26	0 12:05	0 00:00	0.00	0.00
3 13	7.86	0.00	868.95	5.86	0.00	5.19	868.42	5.33	0 12:05	0 00:00	0.00	0.00
4 18	32.09	0.00	854.81	1.04	0.00	20.03	854.01	0.24	0 12:10	0 00:00	0.00	0.00
5 20	28.54	28.54	865.10	0.87	0.00	2.79	864.36	0.13	0 12:10	0 00:00	0.00	0.00
6 21	2.36	2.36	870.23	0.37	0.00	4.40	869.92	0.06	0 12:05	0 00:00	0.00	0.00
7 CO-01	1.32	1.32	872.09	0.26	0.00	3.74	871.87	0.04	0 12:05	0 00:00	0.00	0.00
8 CO-02	1.35	1.35	872.16	0.33	0.00	3.67	871.88	0.05	0 12:05	0 00:00	0.00	0.00
9 CO-03	12.77	6.40	870.63	1.12	0.00	5.20	869.67	0.16	0 12:05	0 00:00	0.00	0.00
10 CO-04	0.33	0.33	872.06	0.23	0.00	3.77	871.86	0.03	0 12:05	0 00:00	0.00	0.00
11 CO-05	4.99	4.99	867.90	0.69	0.00	7.93	867.31	0.10	0 12:05	0 00:00	0.00	0.00
12 CO-06	4.63	4.63	863.95	0.71	0.00	11.88	863.35	0.11	0 12:05	0 00:00	0.00	0.00
13 CO-07	4.99	4.99	867.90	0.69	0.00	7.93	867.31	0.10	0 12:05	0 00:00	0.00	0.00
14 CO-08	0.61	0.61	867.48	0.32	0.00	8.35	867.21	0.05	0 12:05	0 00:00	0.00	0.00
15 CO-09	6.37	6.37	871.56	0.73	0.00	4.27	870.93	0.10	0 12:05	0 00:00	0.00	0.00
16 CO-16	1.78	1.78	867.97	0.50	0.00	7.86	867.54	0.07	0 12:05	0 00:00	0.00	0.00
17 Jun-11	0.77	0.77	864.39	0.37	0.00	10.74	864.07	0.05	0 12:05	0 00:00	0.00	0.00



**Pipe Results**

SN	Element ID	Peak Flow	Time of Peak Flow Occurrence	Design Flow Capacity	Peak Flow/Design Flow Ratio	Peak Flow Velocity	Travel Time	Peak Flow Depth	Peak Flow Depth/Total Depth Ratio	Total Time Surcharged	Froude Number	Reported Condition
		(cfs)	(days hh:mm)	(cfs)		(ft/sec)	(min)	(ft)		(min)		
1	03-04	40.08	0 12:05	230.37	0.17	35.17	0.03	0.70	0.28	0.00		Calculated
2	04-05	3.77	0 12:05	9.90	0.38	7.55	0.54	0.54	0.43	0.00		Calculated
3	04-06	33.38	0 12:05	54.35	0.61	11.63	0.18	1.41	0.57	0.00		Calculated
4	06-07	27.55	0 12:06	44.44	0.62	9.55	0.41	1.42	0.57	0.00		Calculated
5	07-08	26.09	0 12:05	43.01	0.61	9.24	0.70	1.40	0.56	0.00		Calculated
6	08-09	12.68	0 12:05	24.52	0.52	7.87	0.04	1.02	0.51	0.00		Calculated
7	08-10	2.94	0 12:05	4.95	0.59	4.21	0.36	0.69	0.56	0.00		Calculated
8	10-11	1.77	0 12:06	4.95	0.36	3.74	1.23	0.52	0.41	0.00		Calculated
9	12-13	7.83	0 12:05	44.43	0.18	6.83	0.51	0.71	0.28	0.00		Calculated
10	13-14	3.26	0 12:05	7.00	0.47	5.60	0.07	0.60	0.48	0.00		Calculated
11	14-15	1.21	0 12:05	5.36	0.22	3.56	0.87	0.40	0.32	0.00		Calculated
12	14-16	0.41	0 12:05	2.88	0.14	3.75	0.54	0.21	0.25	0.00		Calculated
13	17-18	31.97	0 12:10	88.87	0.36	16.66	0.52	1.04	0.41	0.00		Calculated
14	18-19	32.09	0 12:10	108.85	0.29	19.48	0.13	0.92	0.37	0.00		Calculated
15	19-20	28.58	0 12:10	108.96	0.26	18.71	0.02	0.87	0.35	0.00		Calculated
16	19-21	2.35	0 12:05	12.12	0.19	7.64	0.17	0.37	0.30	0.00		Calculated
17	Link-02	1.32	0 12:05	6.25	0.21	9.07	0.10	0.26	0.31	0.00		Calculated
18	Link-03	1.34	0 12:05	4.17	0.32	6.82	0.29	0.33	0.39	0.00		Calculated
19	Link-04	4.62	0 12:05	17.33	0.27	4.67	0.04	0.71	0.35	0.00		Calculated
20	Link-05	0.33	0 12:05	1.31	0.25	3.13	0.14	0.23	0.34	0.00		Calculated
21	Link-06	4.99	0 12:05	8.57	0.58	7.25	0.02	0.69	0.55	0.00		Calculated
22	Link-07	4.99	0 12:05	8.57	0.58	7.25	0.02	0.69	0.55	0.00		Calculated
23	Link-08	0.61	0 12:05	1.31	0.47	3.68	0.05	0.32	0.48	0.00		Calculated
24	Link-09	12.68	0 12:05	21.22	0.60	7.09	0.50	1.12	0.56	0.00		Calculated
25	Link-10	6.36	0 12:05	9.90	0.64	8.55	0.13	0.73	0.58	0.00		Calculated
26	Link-11	1.77	0 12:05	2.66	0.67	5.25	0.59	0.50	0.60	0.00		Calculated
27	Link-13	0.76	0 12:05	1.90	0.40	3.30	0.41	0.37	0.44	0.00		Calculated

**Inlet Results**

SN Element ID	Peak Flow	Peak Lateral Inflow	Peak Flow Intercepted	Peak Flow Bypassing Inlet	Inlet Efficiency during Peak	Max Gutter Spread during Peak	Max Gutter Water Elev. during Peak	Max Gutter Water Depth during Peak	Time of Max Depth Occurrence	Total Flooded Volume	Total Time Flooded
	(cfs)	(cfs)	(cfs)	(cfs)	(%)	(ft)	(ft)	(ft)	(days hh:mm)	(ac-in)	(min)
1 04	1.20	1.20	N/A	N/A	N/A	2.67	869.89	0.16	0 12:05	0.00	0.00
2 05	1.12	1.12	N/A	N/A	N/A	2.54	872.32	0.15	0 12:05	0.00	0.00
3 06	6.01	6.01	N/A	N/A	N/A	4.95	868.75	0.27	0 12:06	0.00	0.00
4 07	0.78	0.78	N/A	N/A	N/A	4.09	873.77	0.22	0 12:05	0.00	0.00
5 10	1.20	1.20	N/A	N/A	N/A	2.66	873.58	0.16	0 12:05	0.00	0.00
6 11	1.79	1.79	N/A	N/A	N/A	3.89	873.25	0.22	0 12:05	0.00	0.00
7 14	1.66	1.66	N/A	N/A	N/A	6.97	872.98	0.37	0 12:05	0.00	0.00
8 15	1.22	1.22	N/A	N/A	N/A	5.81	873.85	0.31	0 12:05	0.00	0.00
9 16	0.11	0.11	N/A	N/A	N/A	8.43	874.84	0.34	0 12:05	0.00	0.00
10 19	2.27	2.27	N/A	N/A	N/A	2.75	872.69	0.11	0 12:05	0.00	0.00