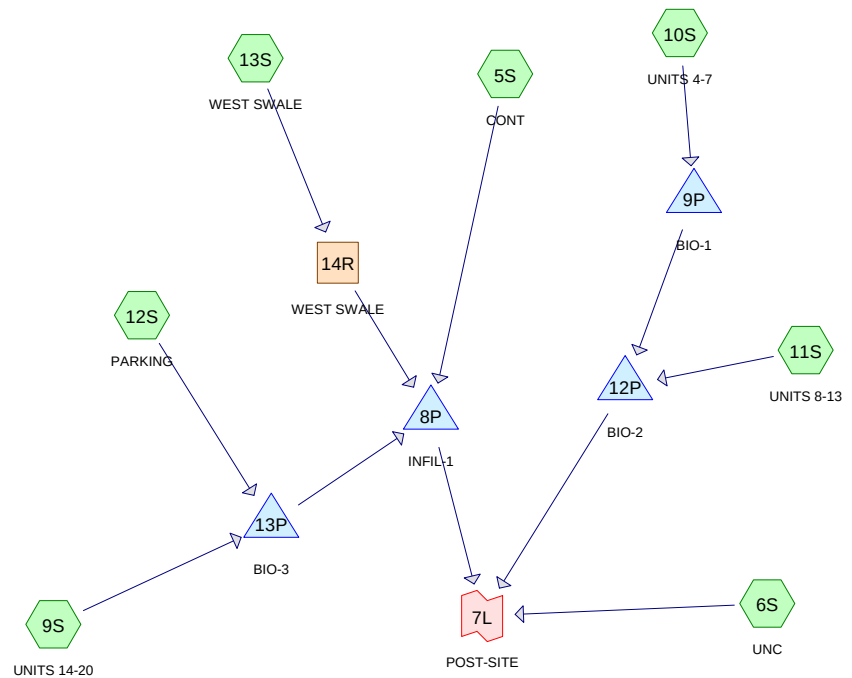
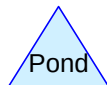


Subcat



Reach



Pond



Link

Routing Diagram for BAYVIEW-REVISED FOR TOWN
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Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-yr	Type III 24-hr		Default	24.00	1	2.80	2
2	10-yr	Type III 24-hr		Default	24.00	1	4.90	2
3	25-yr	Type III 24-hr		Default	24.00	1	6.10	2
4	100-yr	Type III 24-hr		Default	24.00	1	8.60	2

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.068	98	(4) New Roofs, HSG B (10S)
0.102	98	(6) nEW Roofs, HSG B (11S)
0.119	98	(7) New Roofs, HSG B (9S)
3.473	61	>75% Grass cover, Good, HSG B (2S, 5S, 6S, 9S, 10S, 11S, 13S)
0.181	98	Ex. House/Barn/Pavement, HSG B (2S)
0.147	98	Ex. Impervious, HSG B (10S)
0.083	98	Exist. Roofs, HSG B (13S)
0.165	98	New Paved parking, HSG B (13S)
0.110	85	Onsite Gravel Driveway, HSG B (2S)
0.037	98	Paved parking, HSG B (9S)
0.255	70	Pervious pavement, HSG B (12S)
4.740	69	TOTAL AREA

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
4.740	HSG B	2S, 5S, 6S, 9S, 10S, 11S, 12S, 13S
0.000	HSG C	
0.000	HSG D	
0.000	Other	
4.740		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	0.068	0.000	0.000	0.000	0.068	(4) New Roofs	10S
0.000	0.102	0.000	0.000	0.000	0.102	(6) nEW Roofs	11S
0.000	0.119	0.000	0.000	0.000	0.119	(7) New Roofs	9S
0.000	3.473	0.000	0.000	0.000	3.473	>75% Grass cover, Good	2S, 5S, 6S, 9S, 10S, 11S, 13S
0.000	0.181	0.000	0.000	0.000	0.181	Ex. House/Barn/Pavement	2S
0.000	0.147	0.000	0.000	0.000	0.147	Ex. Impervious	10S
0.000	0.083	0.000	0.000	0.000	0.083	Exist. Roofs	13S
0.000	0.165	0.000	0.000	0.000	0.165	New Paved parking	13S
0.000	0.110	0.000	0.000	0.000	0.110	Onsite Gravel Driveway	2S
0.000	0.037	0.000	0.000	0.000	0.037	Paved parking	9S
0.000	0.255	0.000	0.000	0.000	0.255	Pervious pavement	12S
0.000	4.740	0.000	0.000	0.000	4.740	TOTAL AREA	

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Type III 24-hr 1-yr Rainfall=2.80"

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Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 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 2S: PRE	Runoff Area=103,234 sf 7.65% Impervious Runoff Depth=0.42" Flow Length=375' Tc=9.9 min CN=65 Runoff=0.67 cfs 0.082 af
Subcatchment 5S: CONT	Runoff Area=7,479 sf 0.00% Impervious Runoff Depth=0.29" Tc=6.0 min CN=61 Runoff=0.03 cfs 0.004 af
Subcatchment 6S: UNC	Runoff Area=9,629 sf 0.00% Impervious Runoff Depth=0.29" Tc=6.0 min CN=61 Runoff=0.03 cfs 0.005 af
Subcatchment 9S: UNITS 14-20	Runoff Area=16,419 sf 41.35% Impervious Runoff Depth=0.88" Tc=6.0 min CN=76 Runoff=0.37 cfs 0.028 af
Subcatchment 10S: UNITS 4-7	Runoff Area=17,061 sf 54.93% Impervious Runoff Depth=1.16" Tc=6.0 min CN=81 Runoff=0.52 cfs 0.038 af
Subcatchment 11S: UNITS 8-13	Runoff Area=11,862 sf 37.48% Impervious Runoff Depth=0.83" Tc=6.0 min CN=75 Runoff=0.25 cfs 0.019 af
Subcatchment 12S: PARKING	Runoff Area=11,116 sf 0.00% Impervious Runoff Depth=0.61" Tc=6.0 min CN=70 Runoff=0.15 cfs 0.013 af
Subcatchment 13S: WEST SWALE	Runoff Area=29,668 sf 36.34% Impervious Runoff Depth=0.78" Tc=6.0 min CN=74 Runoff=0.57 cfs 0.044 af
Reach 14R: WEST SWALE	Avg. Flow Depth=0.11' Max Vel=2.13 fps Inflow=0.57 cfs 0.044 af n=0.030 L=306.0' S=0.0392 '/' Capacity=7.36 cfs Outflow=0.53 cfs 0.044 af
Pond 8P: INFIL-1	Peak Elev=124.56' Storage=920 cf Inflow=0.56 cfs 0.049 af Discarded=0.05 cfs 0.049 af Primary=0.00 cfs 0.000 af Outflow=0.05 cfs 0.049 af
Pond 9P: BIO-1	Peak Elev=137.41' Storage=690 cf Inflow=0.52 cfs 0.038 af Discarded=0.04 cfs 0.038 af Primary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.038 af
Pond 12P: BIO-2	Peak Elev=132.15' Storage=246 cf Inflow=0.25 cfs 0.019 af Discarded=0.04 cfs 0.019 af Primary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.019 af
Pond 13P: BIO-3	Peak Elev=127.25' Storage=611 cf Inflow=0.52 cfs 0.041 af Discarded=0.06 cfs 0.041 af Primary=0.00 cfs 0.000 af Outflow=0.06 cfs 0.041 af
Link 3L: PRE-SITE	Inflow=0.67 cfs 0.082 af Primary=0.67 cfs 0.082 af
Link 7L: POST-SITE	Inflow=0.03 cfs 0.005 af Primary=0.03 cfs 0.005 af

Total Runoff Area = 4.740 ac Runoff Volume = 0.234 af Average Runoff Depth = 0.59"
80.97% Pervious = 3.838 ac 19.03% Impervious = 0.902 ac

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Type III 24-hr 1-yr Rainfall=2.80"

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Summary for Subcatchment 2S: PRE

Runoff = 0.67 cfs @ 12.18 hrs, Volume= 0.082 af, Depth= 0.42"
Routed to Link 3L : PRE-SITE

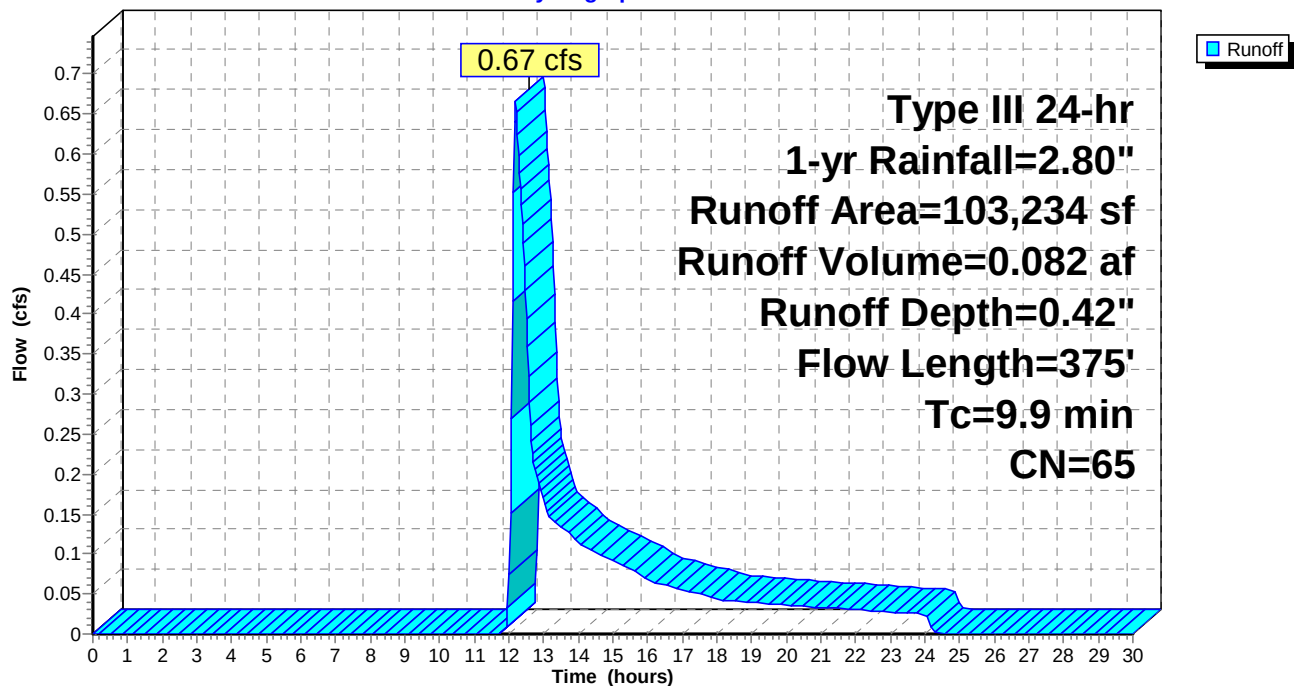
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

	Area (sf)	CN	Description
*	7,898	98	Ex. House/Barn/Pavement, HSG B
*	4,797	85	Onsite Gravel Driveway, HSG B
	90,539	61	>75% Grass cover, Good, HSG B
	103,234	65	Weighted Average
	95,336	62	92.35% Pervious Area
	7,898	98	7.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	107	0.0750	0.20		Sheet Flow, Grass: Dense n= 0.240 P2= 3.33"
1.2	268	0.0520	3.67		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
9.9	375	Total			

Subcatchment 2S: PRE

Hydrograph



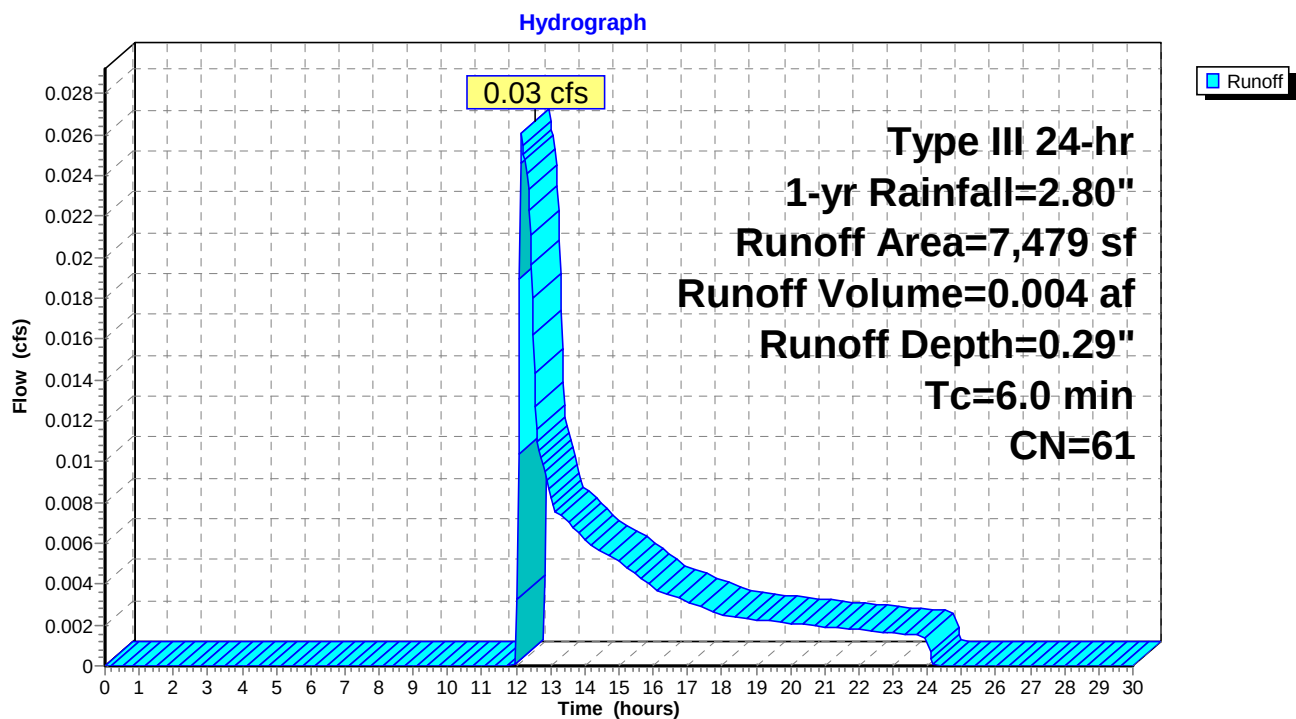
Summary for Subcatchment 5S: CONT

Runoff = 0.03 cfs @ 12.16 hrs, Volume= 0.004 af, Depth= 0.29"
 Routed to Pond 8P : INFIL-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Type III 24-hr 1-yr Rainfall=2.80"

Area (sf)	CN	Description
7,479	61	>75% Grass cover, Good, HSG B
7,479	61	100.00% Pervious Area

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

Subcatchment 5S: CONT

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Type III 24-hr 1-yr Rainfall=2.80"

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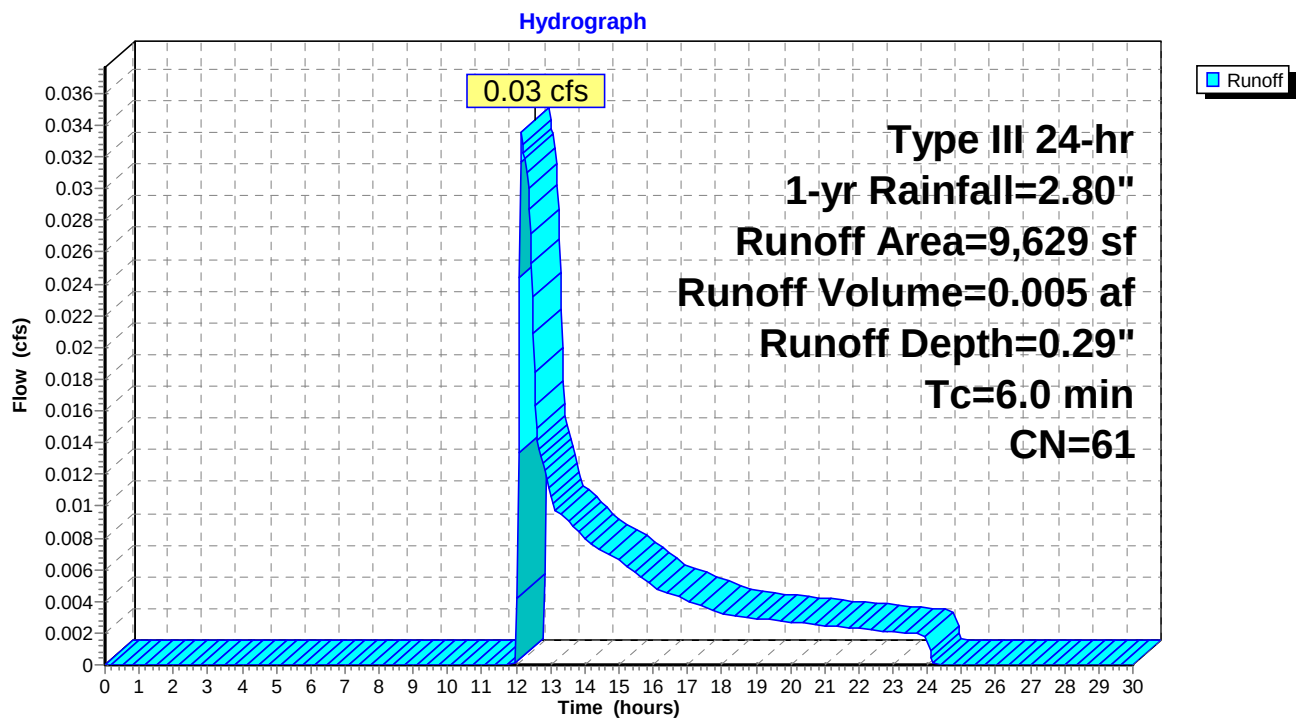
Summary for Subcatchment 6S: UNC

Runoff = 0.03 cfs @ 12.16 hrs, Volume= 0.005 af, Depth= 0.29"
Routed to Link 7L : POST-SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

Area (sf)	CN	Description
6,242	61	>75% Grass cover, Good, HSG B
3,387	61	>75% Grass cover, Good, HSG B
9,629	61	Weighted Average
9,629	61	100.00% Pervious Area

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

Subcatchment 6S: UNC

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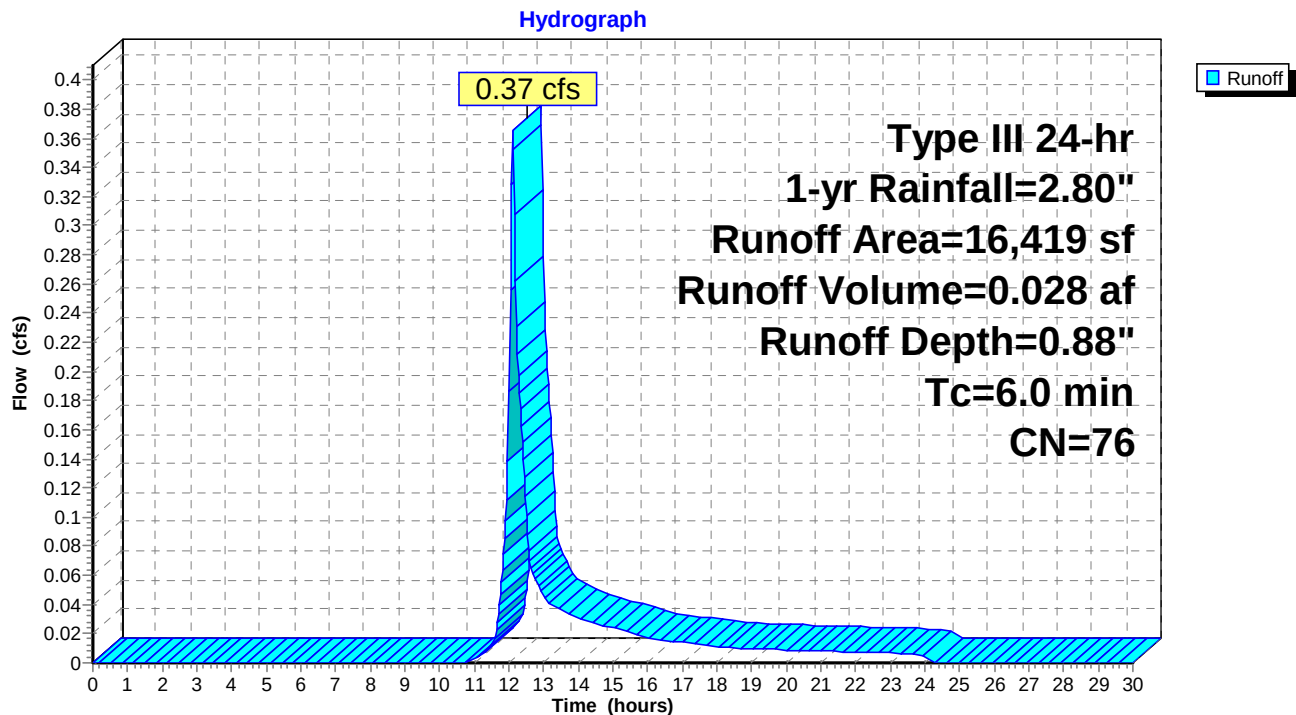
Summary for Subcatchment 9S: UNITS 14-20

Runoff = 0.37 cfs @ 12.10 hrs, Volume= 0.028 af, Depth= 0.88"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

	Area (sf)	CN	Description
*	5,187	98	(7) New Roofs, HSG B
	1,602	98	Paved parking, HSG B
	9,630	61	>75% Grass cover, Good, HSG B
	16,419	76	Weighted Average
	9,630	61	58.65% Pervious Area
	6,789	98	41.35% Impervious Area

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

Subcatchment 9S: UNITS 14-20

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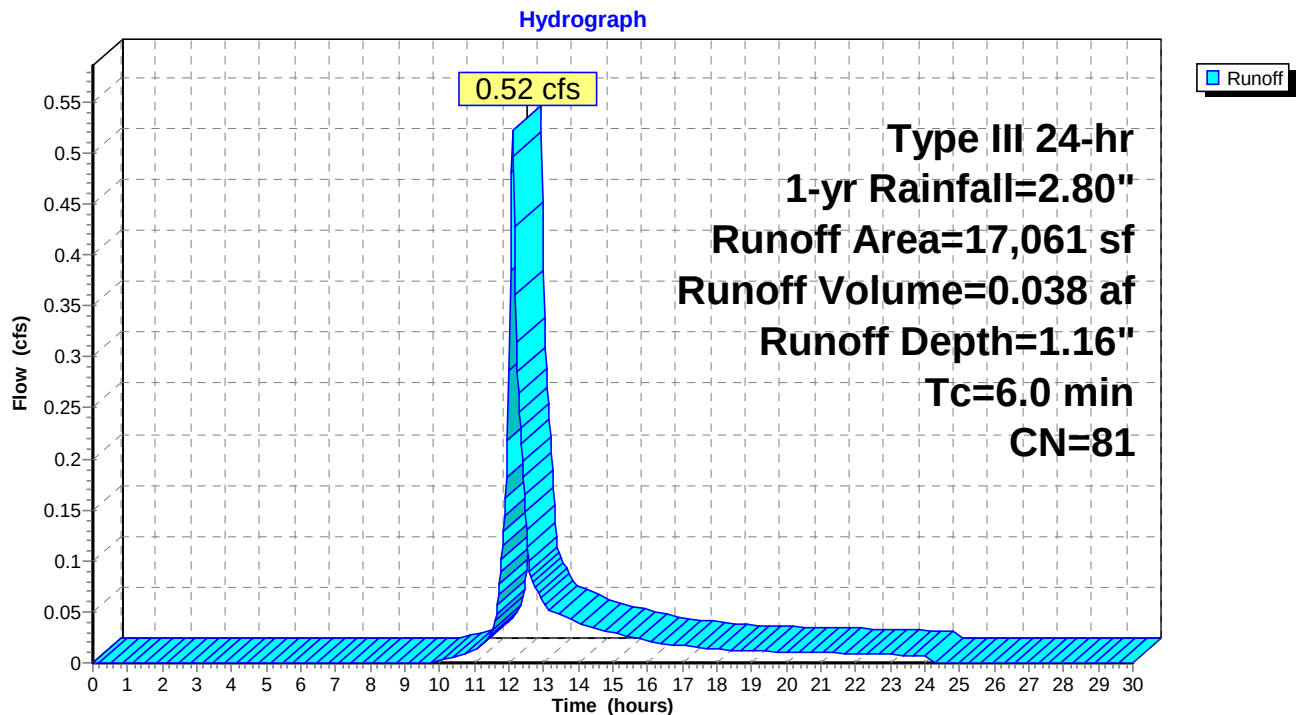
Summary for Subcatchment 10S: UNITS 4-7

Runoff = 0.52 cfs @ 12.09 hrs, Volume= 0.038 af, Depth= 1.16"
Routed to Pond 9P : BIO-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

	Area (sf)	CN	Description
*	2,964	98	(4) New Roofs, HSG B
*	6,407	98	Ex. Impervious, HSG B
	7,690	61	>75% Grass cover, Good, HSG B
	17,061	81	Weighted Average
	7,690	61	45.07% Pervious Area
	9,371	98	54.93% Impervious Area

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

Subcatchment 10S: UNITS 4-7

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Type III 24-hr 1-yr Rainfall=2.80"

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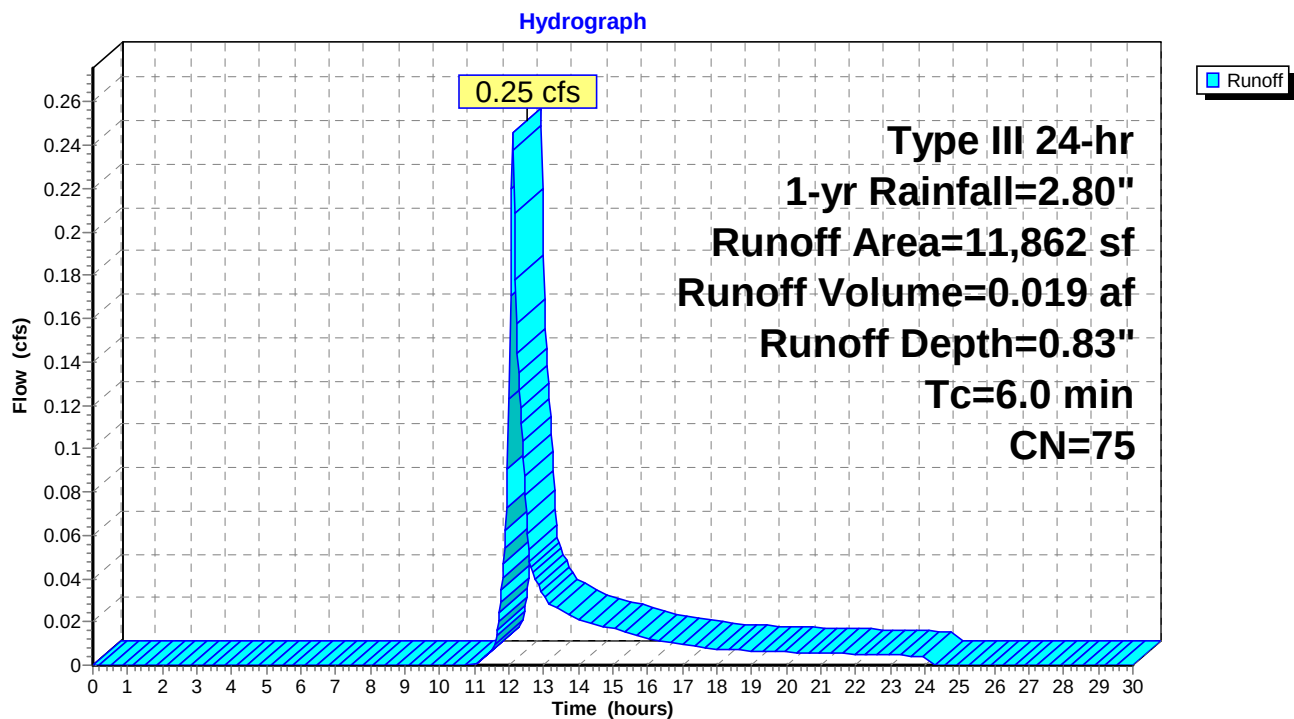
Summary for Subcatchment 11S: UNITS 8-13

Runoff = 0.25 cfs @ 12.10 hrs, Volume= 0.019 af, Depth= 0.83"
Routed to Pond 12P : BIO-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

	Area (sf)	CN	Description
*	4,446	98	(6) nEW Roofs, HSG B
	7,416	61	>75% Grass cover, Good, HSG B
	11,862	75	Weighted Average
	7,416	61	62.52% Pervious Area
	4,446	98	37.48% Impervious Area

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

Subcatchment 11S: UNITS 8-13

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Type III 24-hr 1-yr Rainfall=2.80"

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Summary for Subcatchment 12S: PARKING

Runoff = 0.15 cfs @ 12.10 hrs, Volume= 0.013 af, Depth= 0.61"
Routed to Pond 13P : BIO-3

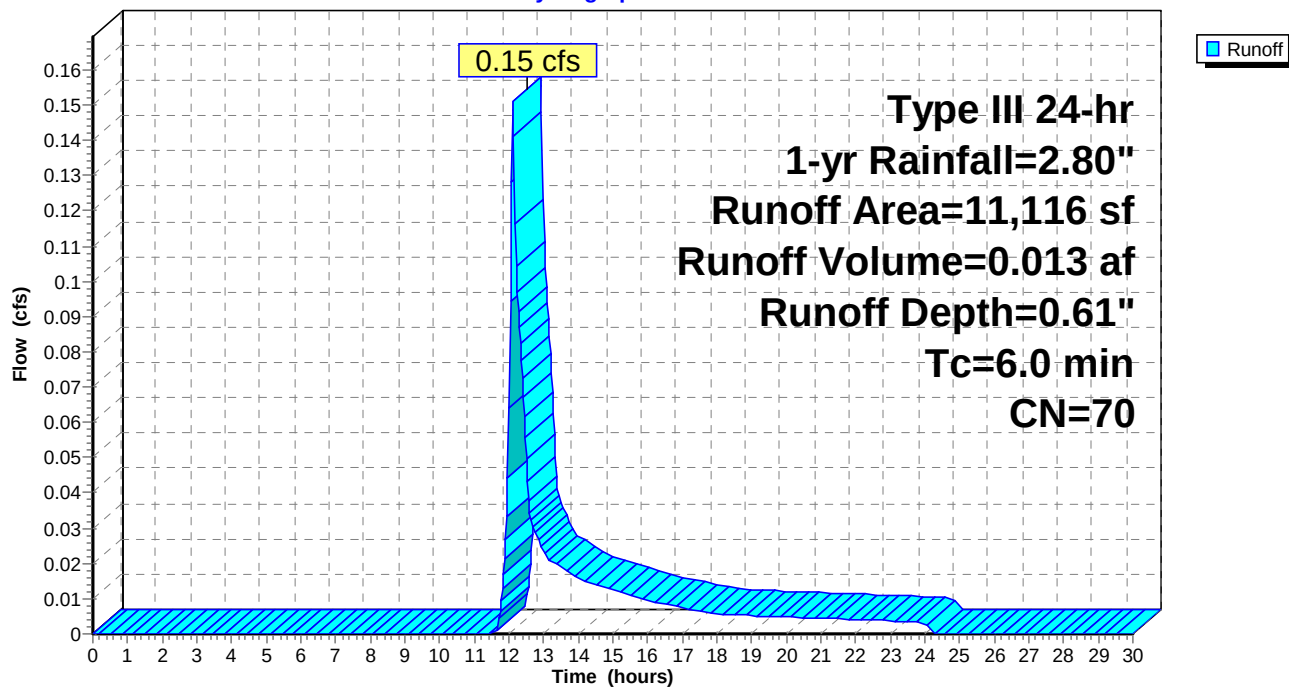
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

	Area (sf)	CN	Description
*	11,116	70	Pervious pavement, HSG B
	11,116	70	100.00% Pervious Area

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

Subcatchment 12S: PARKING

Hydrograph



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Type III 24-hr 1-yr Rainfall=2.80"

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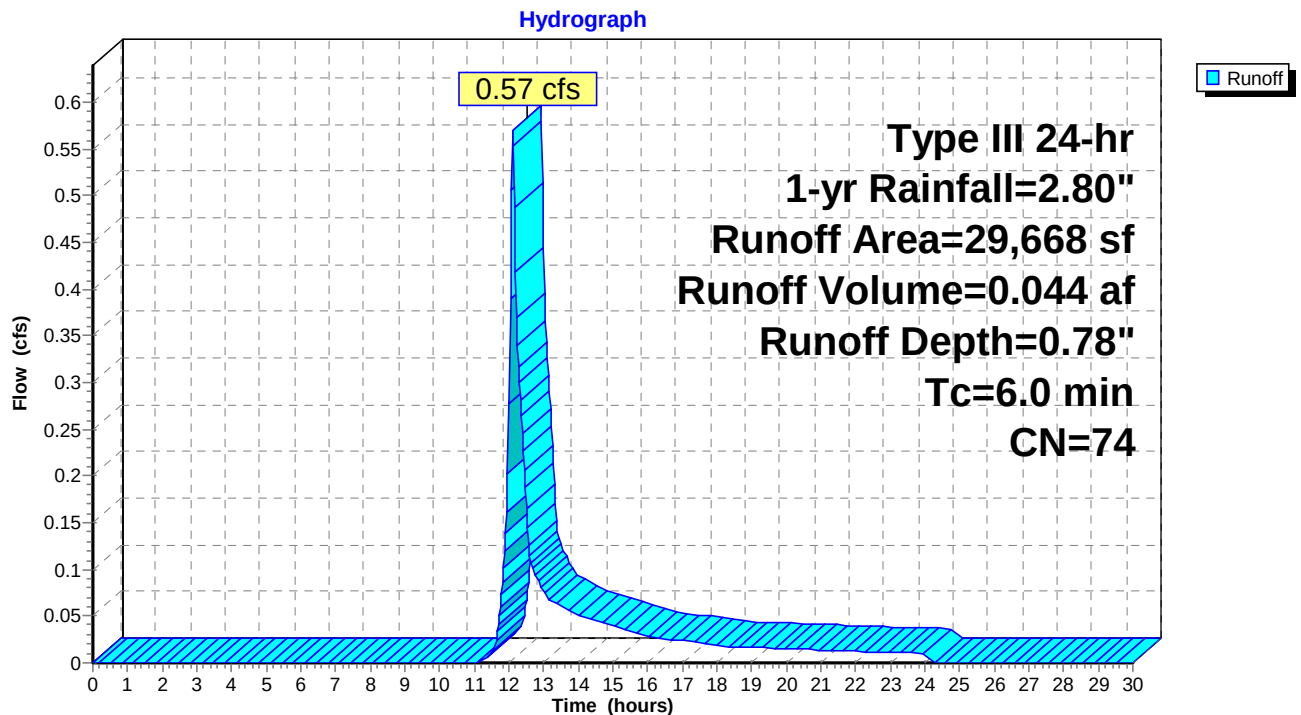
Summary for Subcatchment 13S: WEST SWALE

Runoff = 0.57 cfs @ 12.10 hrs, Volume= 0.044 af, Depth= 0.78"
Routed to Reach 14R : WEST SWALE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 1-yr Rainfall=2.80"

	Area (sf)	CN	Description
*	3,613	98	Exist. Roofs, HSG B
*	7,168	98	New Paved parking, HSG B
	18,887	61	>75% Grass cover, Good, HSG B
	29,668	74	Weighted Average
	18,887	61	63.66% Pervious Area
	10,781	98	36.34% Impervious Area

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

Subcatchment 13S: WEST SWALE

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Type III 24-hr 1-yr Rainfall=2.80"

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Summary for Reach 14R: WEST SWALE

Inflow Area = 0.681 ac, 36.34% Impervious, Inflow Depth = 0.78" for 1-yr event
Inflow = 0.57 cfs @ 12.10 hrs, Volume= 0.044 af
Outflow = 0.53 cfs @ 12.17 hrs, Volume= 0.044 af, Atten= 6%, Lag= 4.1 min
Routed to Pond 8P : INFIL-1

Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Max. Velocity= 2.13 fps, Min. Travel Time= 2.4 min

Avg. Velocity= 0.66 fps, Avg. Travel Time= 7.7 min

Peak Storage= 78 cf @ 12.13 hrs

Average Depth at Peak Storage= 0.11', Surface Width= 2.46'

Bank-Full Depth= 0.50' Flow Area= 1.5 sf, Capacity= 7.36 cfs

2.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding

Side Slope Z-value= 2.0 '/' Top Width= 4.00'

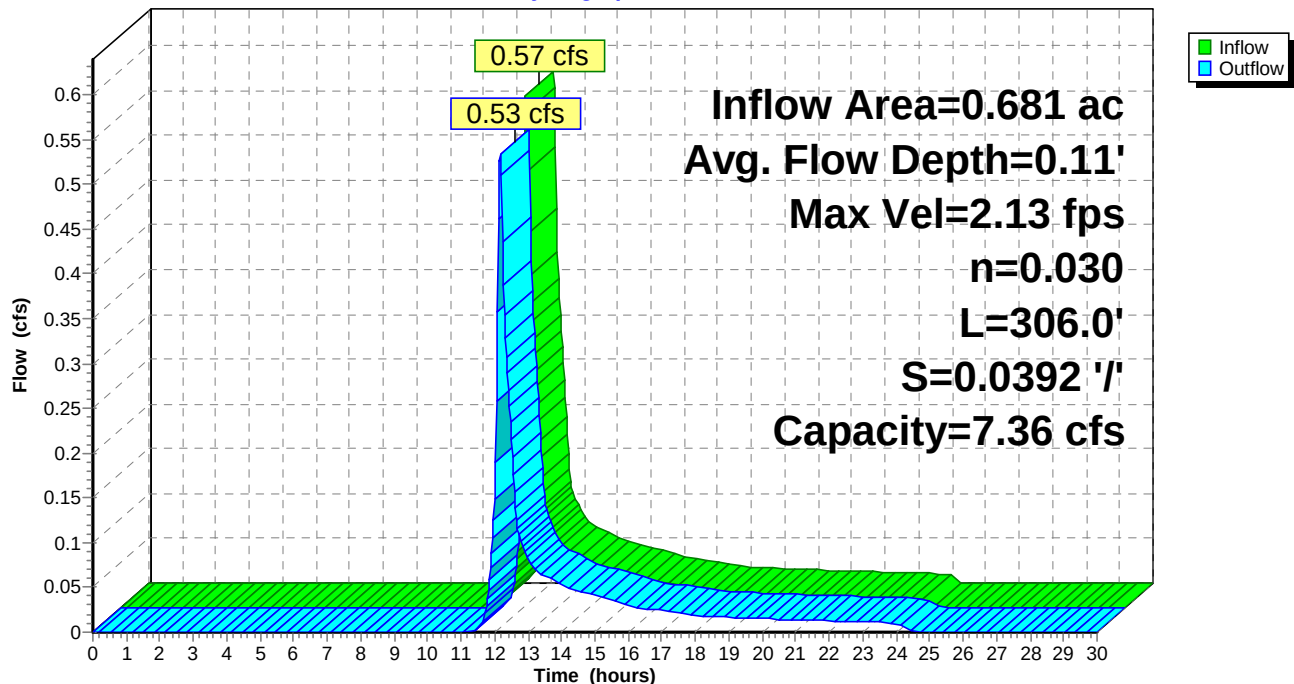
Length= 306.0' Slope= 0.0392 '/'

Inlet Invert= 138.00', Outlet Invert= 126.00'



Reach 14R: WEST SWALE

Hydrograph



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Type III 24-hr 1-yr Rainfall=2.80"

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Summary for Pond 8P: INFIL-1

Inflow Area = 1.485 ac, 27.16% Impervious, Inflow Depth = 0.39" for 1-yr event
 Inflow = 0.56 cfs @ 12.17 hrs, Volume= 0.049 af
 Outflow = 0.05 cfs @ 15.02 hrs, Volume= 0.049 af, Atten= 92%, Lag= 171.4 min
 Discarded = 0.05 cfs @ 15.02 hrs, Volume= 0.049 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 124.56' @ 15.02 hrs Surf.Area= 1,954 sf Storage= 920 cf

Plug-Flow detention time= 233.3 min calculated for 0.049 af (100% of inflow)
 Center-of-Mass det. time= 233.2 min (1,116.7 - 883.6)

Volume	Invert	Avail.Storage	Storage Description
#1	124.00'	4,879 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

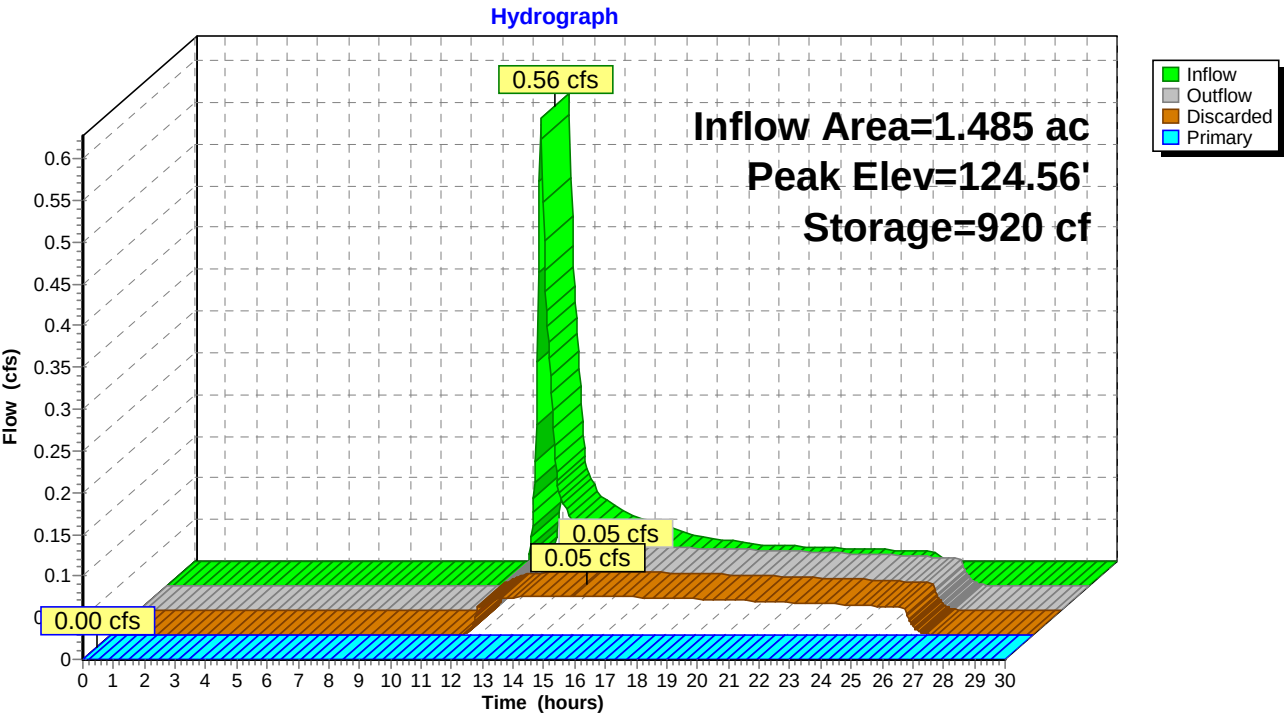
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
124.00	1,356	0	0
125.00	2,432	1,894	1,894
126.00	3,538	2,985	4,879

Device	Routing	Invert	Outlet Devices
#1	Discarded	124.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	125.53'	30.0' long x 6.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65
			2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Discarded OutFlow Max=0.05 cfs @ 15.02 hrs HW=124.56' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=124.00' (Free Discharge)
 ↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 8P: INFIL-1



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Type III 24-hr 1-yr Rainfall=2.80"

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Summary for Pond 9P: BIO-1

Inflow Area = 0.392 ac, 54.93% Impervious, Inflow Depth = 1.16" for 1-yr event
 Inflow = 0.52 cfs @ 12.09 hrs, Volume= 0.038 af
 Outflow = 0.04 cfs @ 13.78 hrs, Volume= 0.038 af, Atten= 92%, Lag= 101.2 min
 Discarded = 0.04 cfs @ 13.78 hrs, Volume= 0.038 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Pond 12P : BIO-2

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 137.41' @ 13.78 hrs Surf.Area= 1,781 sf Storage= 690 cf

Plug-Flow detention time= 164.1 min calculated for 0.038 af (100% of inflow)
 Center-of-Mass det. time= 164.0 min (1,010.4 - 846.4)

Volume	Invert	Avail.Storage	Storage Description
#1	137.00'	1,824 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
137.00	1,582	0	0
138.00	2,066	1,824	1,824

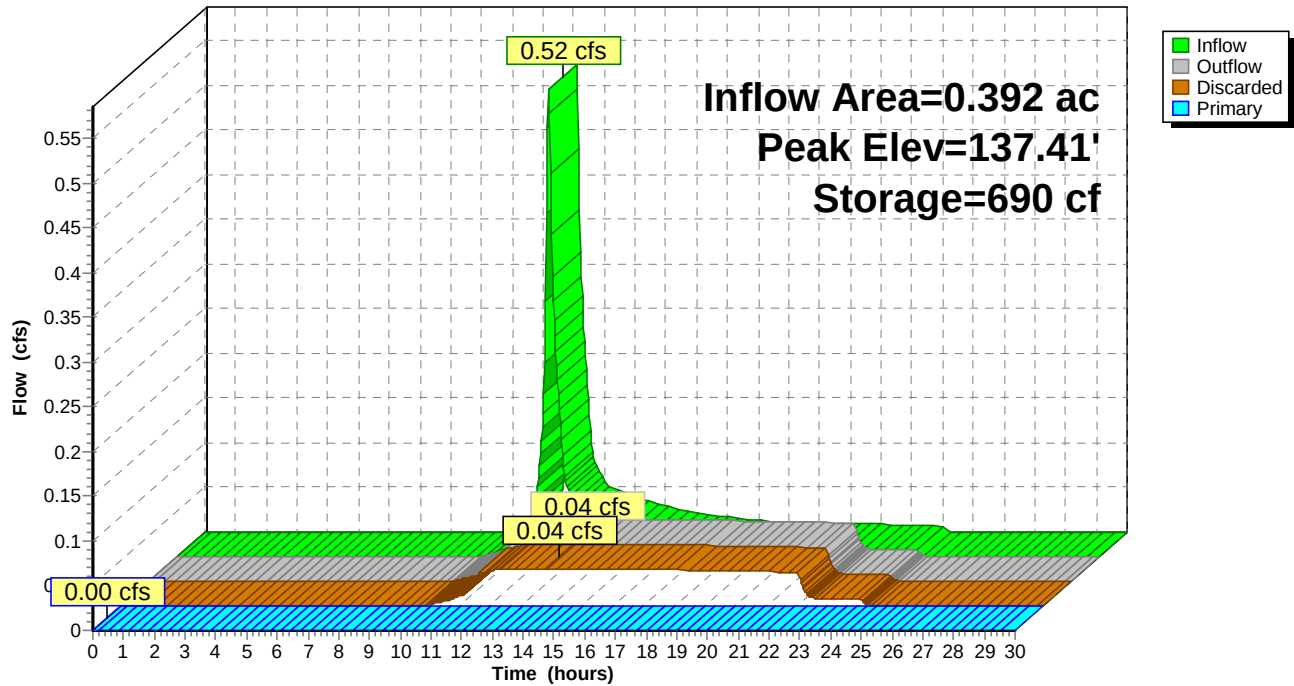
Device	Routing	Invert	Outlet Devices
#1	Discarded	137.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	137.58'	6.0' long x 2.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50
			Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88
			2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.04 cfs @ 13.78 hrs HW=137.41' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=137.00' (Free Discharge)
 ↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 9P: BIO-1

Hydrograph



BAYVIEW-REVISED FOR TOWN

Type III 24-hr 1-yr Rainfall=2.80"

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Summary for Pond 12P: BIO-2

Inflow Area = 0.664 ac, 47.77% Impervious, Inflow Depth = 0.34" for 1-yr event
 Inflow = 0.25 cfs @ 12.10 hrs, Volume= 0.019 af
 Outflow = 0.04 cfs @ 12.73 hrs, Volume= 0.019 af, Atten= 84%, Lag= 38.2 min
 Discarded = 0.04 cfs @ 12.73 hrs, Volume= 0.019 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 132.15' @ 12.73 hrs Surf.Area= 1,703 sf Storage= 246 cf

Plug-Flow detention time= 51.7 min calculated for 0.019 af (100% of inflow)
 Center-of-Mass det. time= 51.7 min (919.1 - 867.4)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	4,385 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	1,619	0	0
133.00	2,184	1,902	1,902
134.00	2,783	2,484	4,385

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	133.33'	6.0' long x 2.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50
			Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88
			2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.04 cfs @ 12.73 hrs HW=132.15' (Free Discharge)

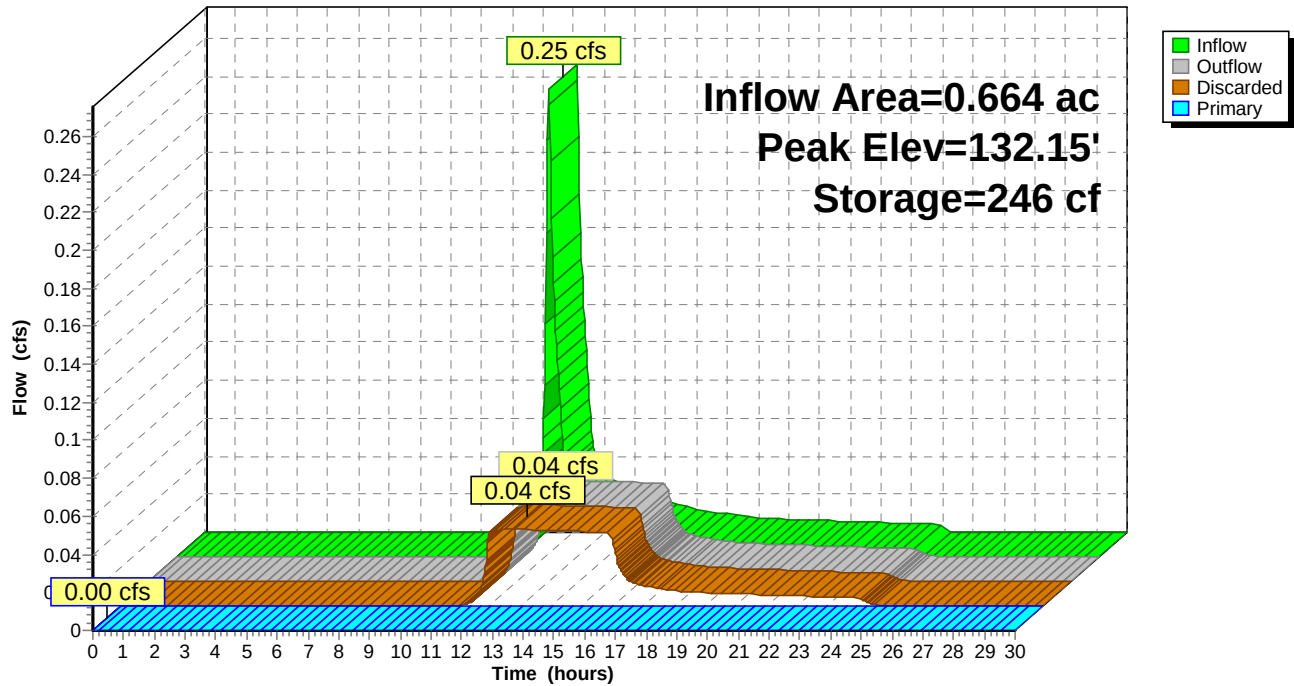
↑ **1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=132.00' (Free Discharge)

↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 12P: BIO-2

Hydrograph



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Type III 24-hr 1-yr Rainfall=2.80"

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Summary for Pond 13P: BIO-3

Inflow Area = 0.632 ac, 24.66% Impervious, Inflow Depth = 0.77" for 1-yr event
 Inflow = 0.52 cfs @ 12.10 hrs, Volume= 0.041 af
 Outflow = 0.06 cfs @ 13.29 hrs, Volume= 0.041 af, Atten= 89%, Lag= 71.4 min
 Discarded = 0.06 cfs @ 13.29 hrs, Volume= 0.041 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Pond 8P : INFIL-1

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 127.25' @ 13.29 hrs Surf.Area= 2,516 sf Storage= 611 cf

Plug-Flow detention time= 99.2 min calculated for 0.041 af (100% of inflow)
 Center-of-Mass det. time= 99.0 min (970.0 - 871.0)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	5,843 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	2,383	0	0
128.00	2,915	2,649	2,649
129.00	3,472	3,194	5,843

Device	Routing	Invert	Outlet Devices
#1	Discarded	127.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	128.58'	5.0' long x 4.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

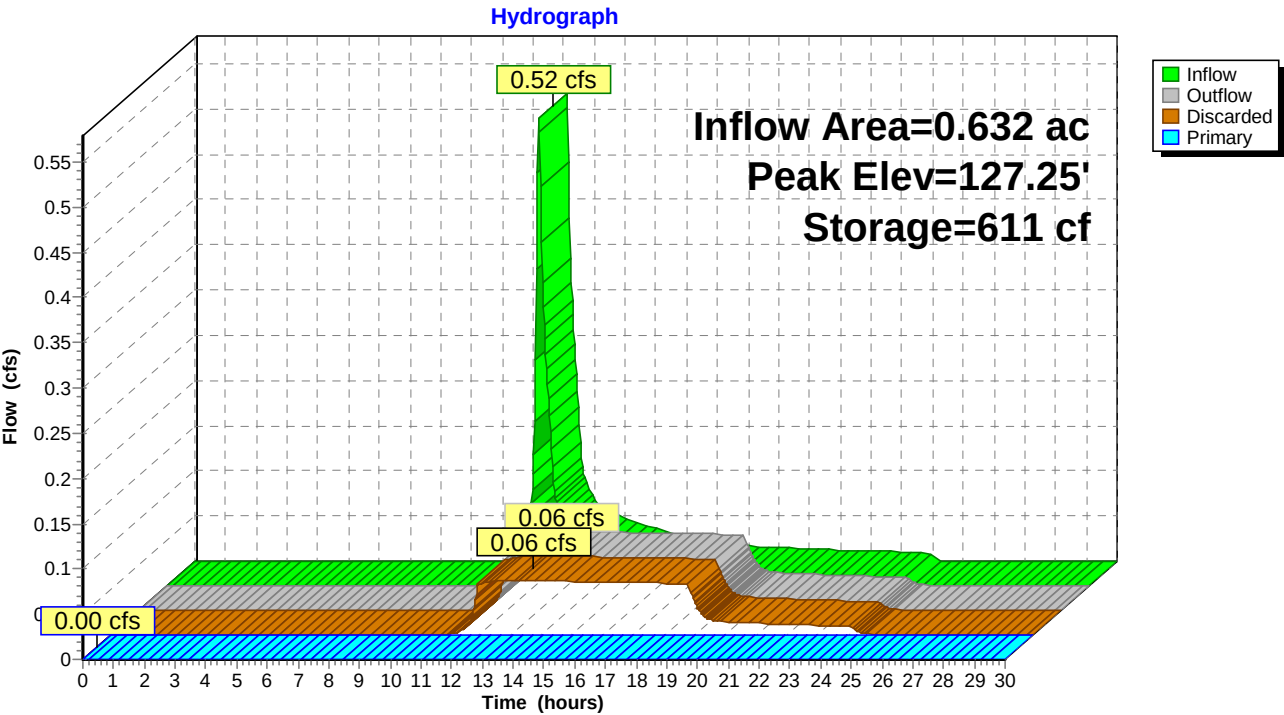
Discarded OutFlow Max=0.06 cfs @ 13.29 hrs HW=127.25' (Free Discharge)

↑ **1=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=127.00' (Free Discharge)

↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

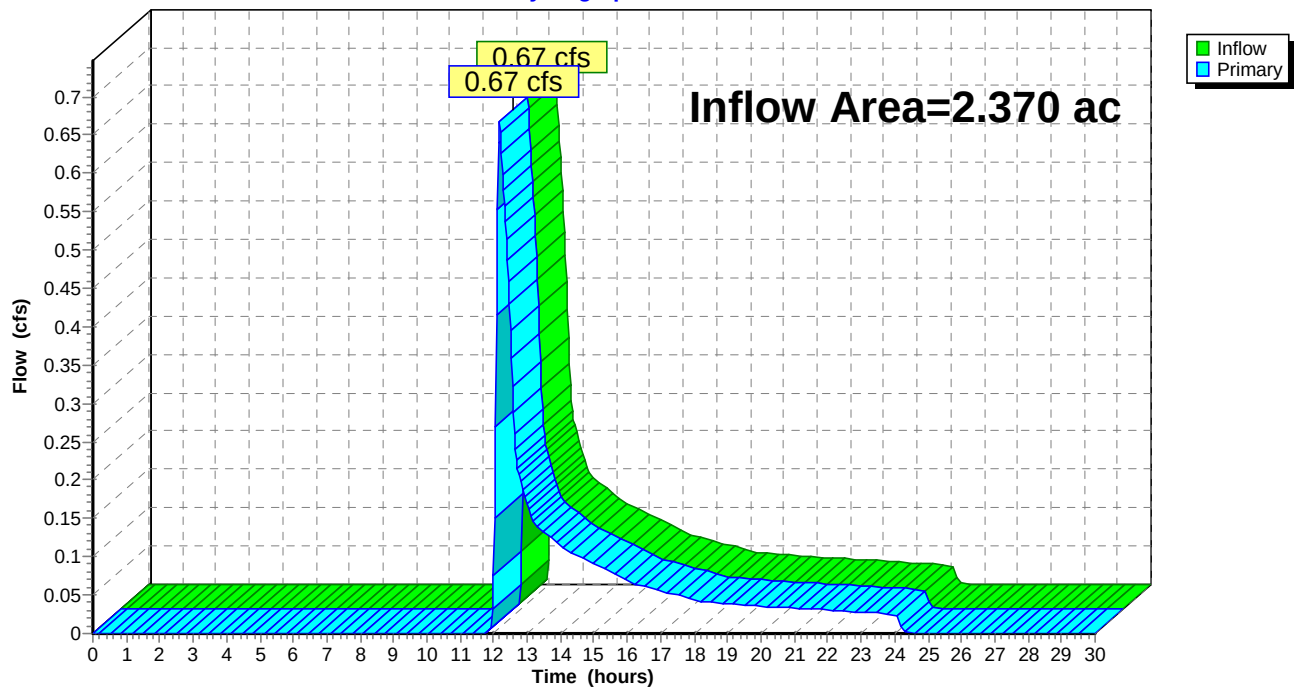
Pond 13P: BIO-3



Summary for Link 3L: PRE-SITE

Inflow Area = 2.370 ac, 7.65% Impervious, Inflow Depth = 0.42" for 1-yr event
Inflow = 0.67 cfs @ 12.18 hrs, Volume= 0.082 af
Primary = 0.67 cfs @ 12.18 hrs, Volume= 0.082 af, Atten= 0%, Lag= 0.0 min

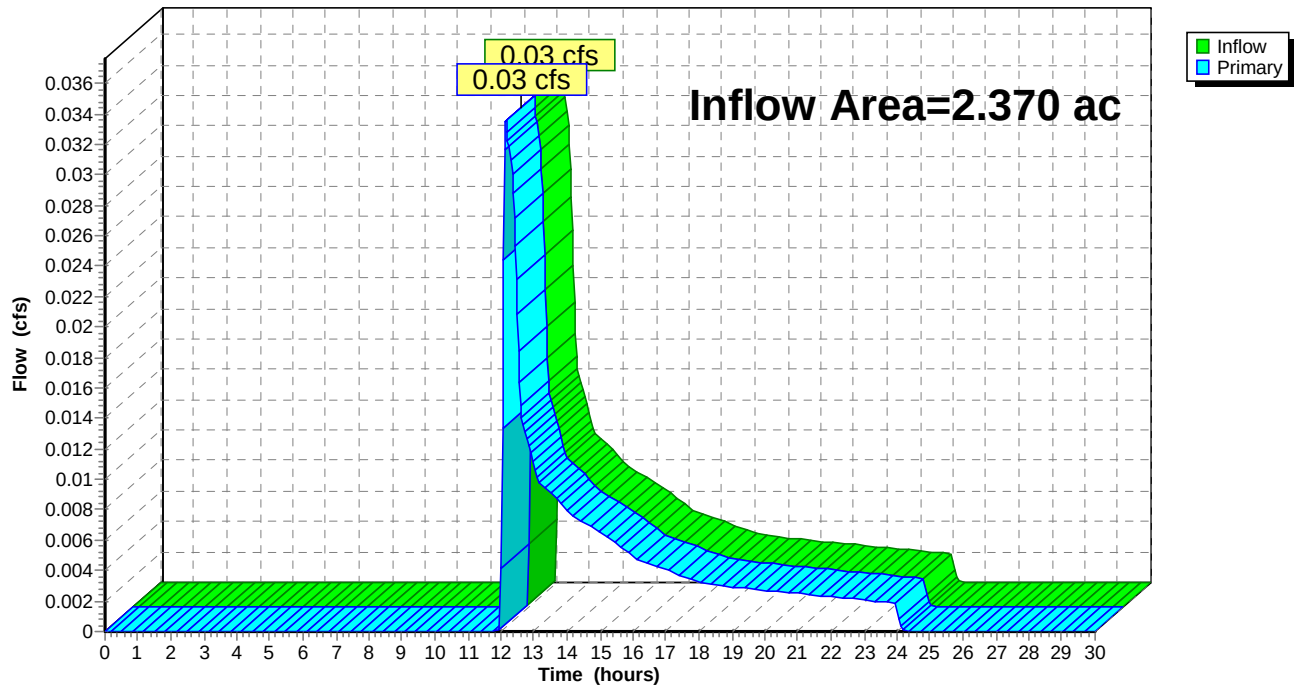
Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 3L: PRE-SITE**Hydrograph**

Summary for Link 7L: POST-SITE

Inflow Area = 2.370 ac, 30.40% Impervious, Inflow Depth = 0.03" for 1-yr event
Inflow = 0.03 cfs @ 12.16 hrs, Volume= 0.005 af
Primary = 0.03 cfs @ 12.16 hrs, Volume= 0.005 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 7L: POST-SITE**Hydrograph**

BAYVIEW-REVISED FOR TOWN

Type III 24-hr 10-yr Rainfall=4.90"

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Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 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 2S: PRE	Runoff Area=103,234 sf 7.65% Impervious Runoff Depth=1.59" Flow Length=375' Tc=9.9 min CN=65 Runoff=3.63 cfs 0.313 af
Subcatchment 5S: CONT	Runoff Area=7,479 sf 0.00% Impervious Runoff Depth=1.31" Tc=6.0 min CN=61 Runoff=0.24 cfs 0.019 af
Subcatchment 6S: UNC	Runoff Area=9,629 sf 0.00% Impervious Runoff Depth=1.31" Tc=6.0 min CN=61 Runoff=0.31 cfs 0.024 af
Subcatchment 9S: UNITS 14-20	Runoff Area=16,419 sf 41.35% Impervious Runoff Depth=2.45" Tc=6.0 min CN=76 Runoff=1.08 cfs 0.077 af
Subcatchment 10S: UNITS 4-7	Runoff Area=17,061 sf 54.93% Impervious Runoff Depth=2.90" Tc=6.0 min CN=81 Runoff=1.32 cfs 0.095 af
Subcatchment 11S: UNITS 8-13	Runoff Area=11,862 sf 37.48% Impervious Runoff Depth=2.37" Tc=6.0 min CN=75 Runoff=0.75 cfs 0.054 af
Subcatchment 12S: PARKING	Runoff Area=11,116 sf 0.00% Impervious Runoff Depth=1.96" Tc=6.0 min CN=70 Runoff=0.57 cfs 0.042 af
Subcatchment 13S: WEST SWALE	Runoff Area=29,668 sf 36.34% Impervious Runoff Depth=2.28" Tc=6.0 min CN=74 Runoff=1.81 cfs 0.130 af
Reach 14R: WEST SWALE	Avg. Flow Depth=0.23' Max Vel=3.17 fps Inflow=1.81 cfs 0.130 af n=0.030 L=306.0' S=0.0392 '/' Capacity=7.36 cfs Outflow=1.75 cfs 0.130 af
Pond 8P: INFIL-1	Peak Elev=125.54' Storage=3,376 cf Inflow=1.97 cfs 0.148 af Discarded=0.07 cfs 0.102 af Primary=0.11 cfs 0.014 af Outflow=0.18 cfs 0.116 af
Pond 9P: BIO-1	Peak Elev=137.70' Storage=1,227 cf Inflow=1.32 cfs 0.095 af Discarded=0.05 cfs 0.062 af Primary=0.64 cfs 0.033 af Outflow=0.68 cfs 0.095 af
Pond 12P: BIO-2	Peak Elev=133.23' Storage=2,412 cf Inflow=1.06 cfs 0.087 af Discarded=0.05 cfs 0.078 af Primary=0.00 cfs 0.000 af Outflow=0.05 cfs 0.078 af
Pond 13P: BIO-3	Peak Elev=128.08' Storage=2,885 cf Inflow=1.65 cfs 0.119 af Discarded=0.07 cfs 0.106 af Primary=0.00 cfs 0.000 af Outflow=0.07 cfs 0.106 af
Link 3L: PRE-SITE	Inflow=3.63 cfs 0.313 af Primary=3.63 cfs 0.313 af
Link 7L: POST-SITE	Inflow=0.31 cfs 0.038 af Primary=0.31 cfs 0.038 af

Total Runoff Area = 4.740 ac Runoff Volume = 0.753 af Average Runoff Depth = 1.91"
80.97% Pervious = 3.838 ac 19.03% Impervious = 0.902 ac

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Type III 24-hr 10-yr Rainfall=4.90"

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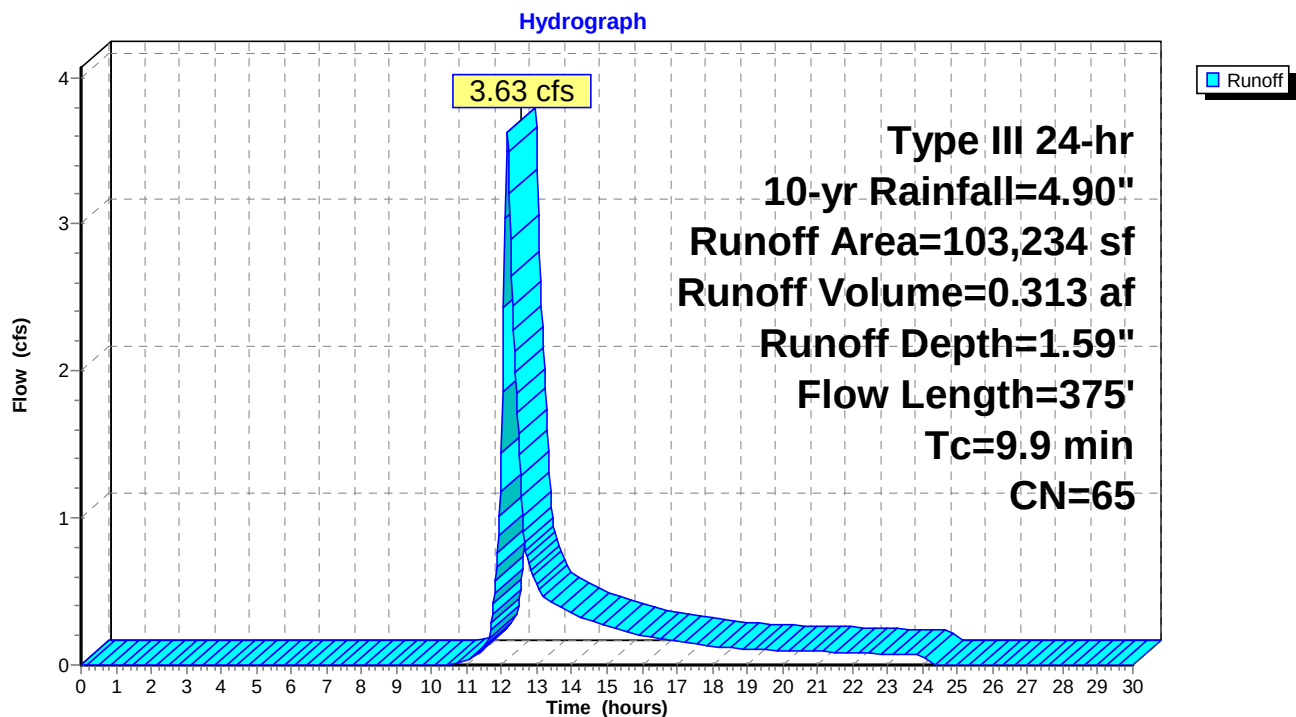
Summary for Subcatchment 2S: PRE

Runoff = 3.63 cfs @ 12.15 hrs, Volume= 0.313 af, Depth= 1.59"
Routed to Link 3L : PRE-SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	7,898	98	Ex. House/Barn/Pavement, HSG B
*	4,797	85	Onsite Gravel Driveway, HSG B
	90,539	61	>75% Grass cover, Good, HSG B
	103,234	65	Weighted Average
	95,336	62	92.35% Pervious Area
	7,898	98	7.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	107	0.0750	0.20		Sheet Flow, Grass: Dense n= 0.240 P2= 3.33"
1.2	268	0.0520	3.67		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
9.9	375	Total			

Subcatchment 2S: PRE

Summary for Subcatchment 5S: CONT

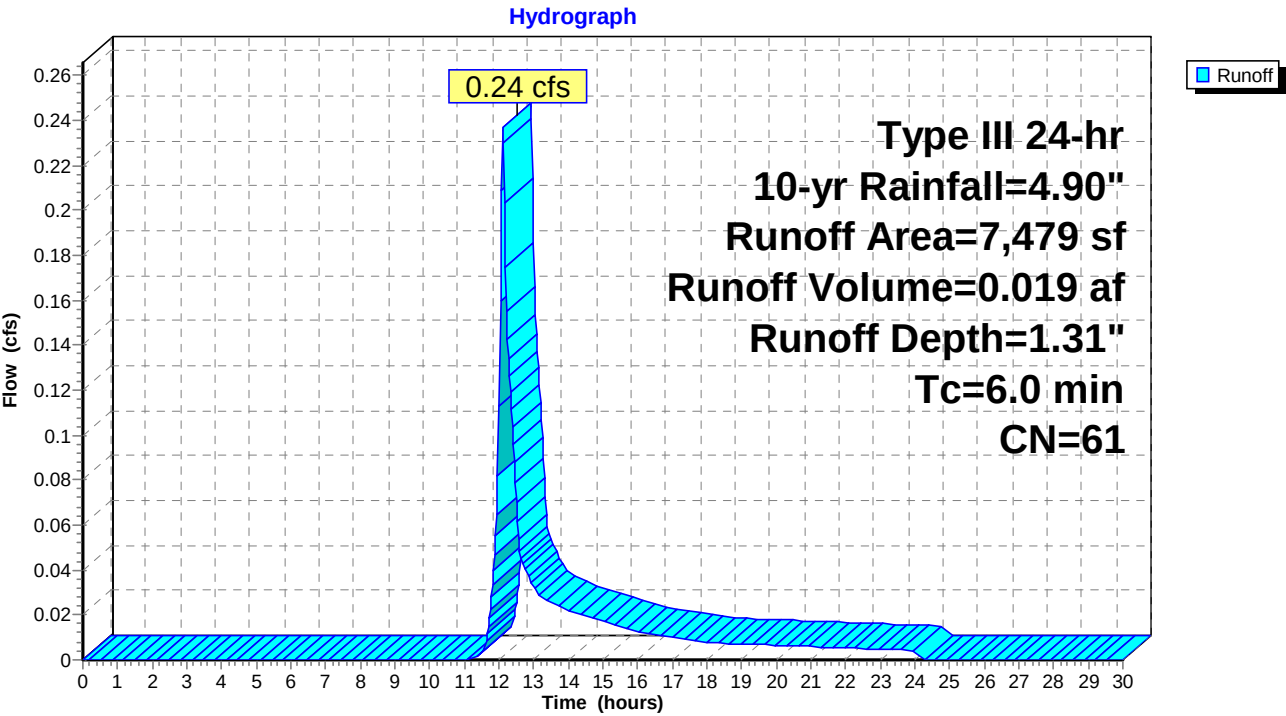
Runoff = 0.24 cfs @ 12.10 hrs, Volume= 0.019 af, Depth= 1.31"
Routed to Pond 8P : INFIL-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

Area (sf)	CN	Description
7,479	61	>75% Grass cover, Good, HSG B
7,479	61	100.00% Pervious Area

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

Subcatchment 5S: CONT



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Type III 24-hr 10-yr Rainfall=4.90"

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Summary for Subcatchment 6S: UNC

Runoff = 0.31 cfs @ 12.10 hrs, Volume= 0.024 af, Depth= 1.31"
Routed to Link 7L : POST-SITE

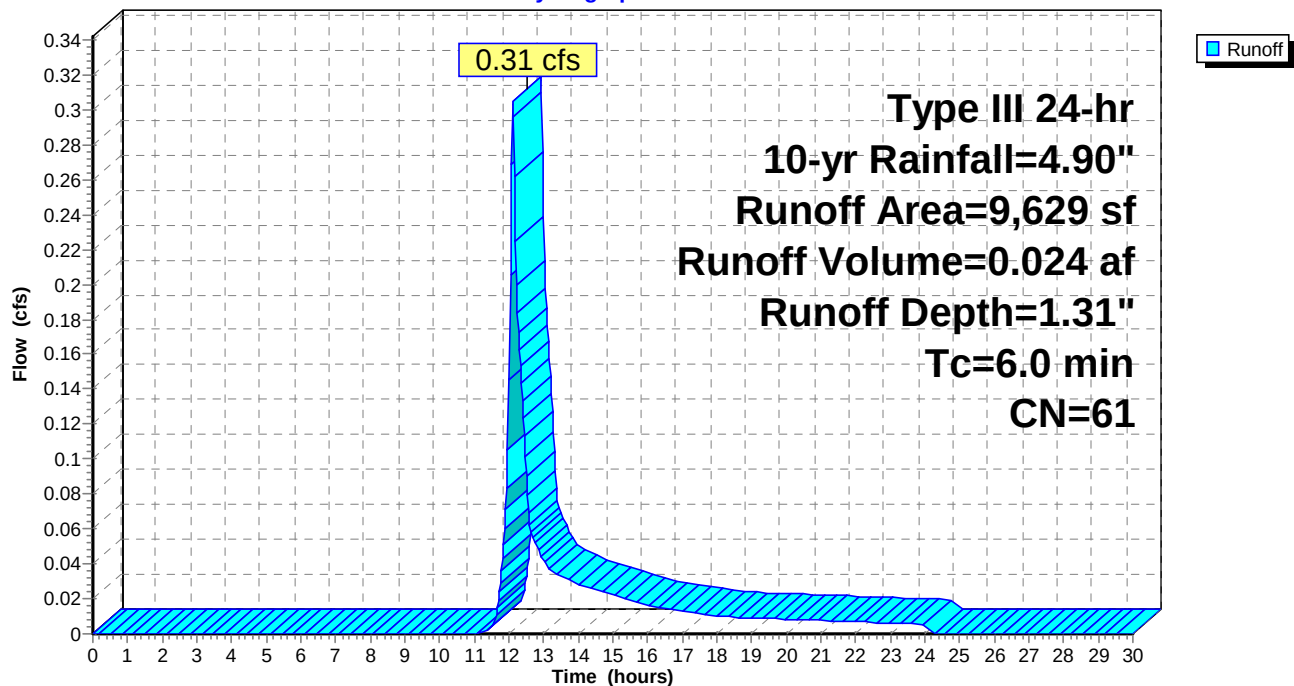
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

Area (sf)	CN	Description
6,242	61	>75% Grass cover, Good, HSG B
3,387	61	>75% Grass cover, Good, HSG B
9,629	61	Weighted Average
9,629	61	100.00% Pervious Area

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

Subcatchment 6S: UNC

Hydrograph



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Type III 24-hr 10-yr Rainfall=4.90"

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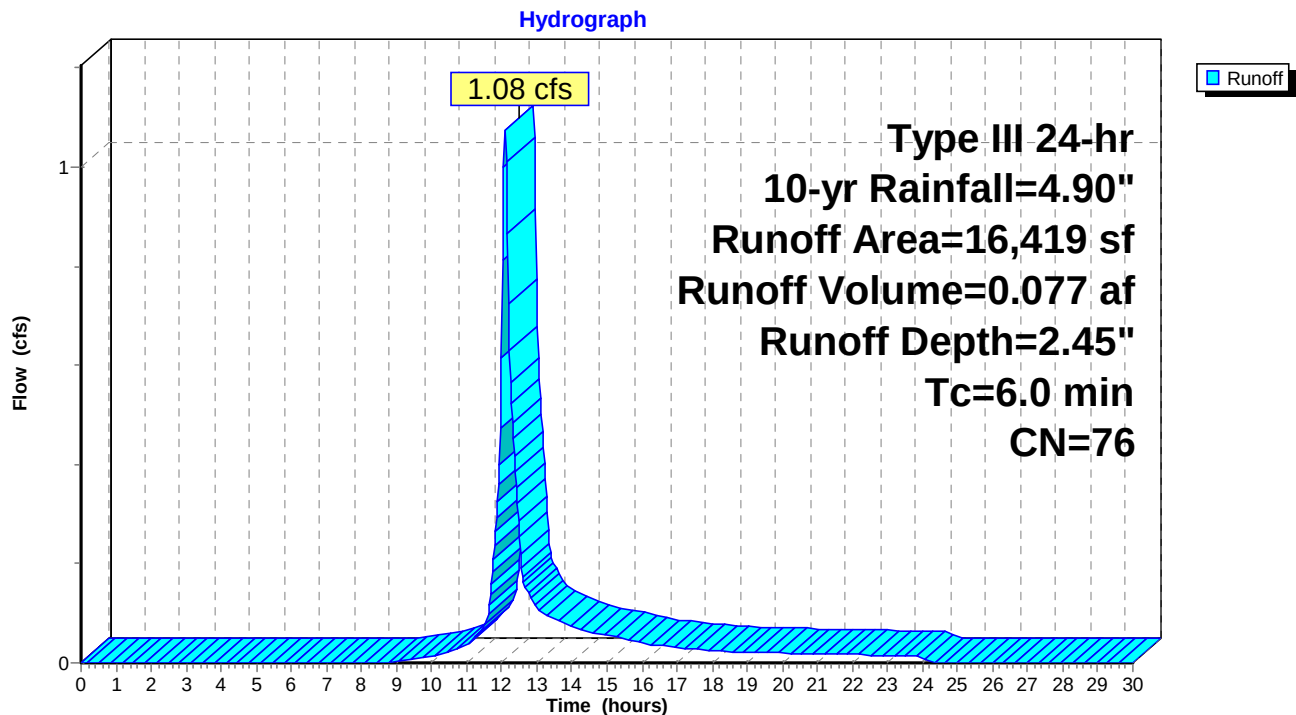
Summary for Subcatchment 9S: UNITS 14-20

Runoff = 1.08 cfs @ 12.09 hrs, Volume= 0.077 af, Depth= 2.45"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	5,187	98	(7) New Roofs, HSG B
	1,602	98	Paved parking, HSG B
	9,630	61	>75% Grass cover, Good, HSG B
	16,419	76	Weighted Average
	9,630	61	58.65% Pervious Area
	6,789	98	41.35% Impervious Area

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

Subcatchment 9S: UNITS 14-20

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Type III 24-hr 10-yr Rainfall=4.90"

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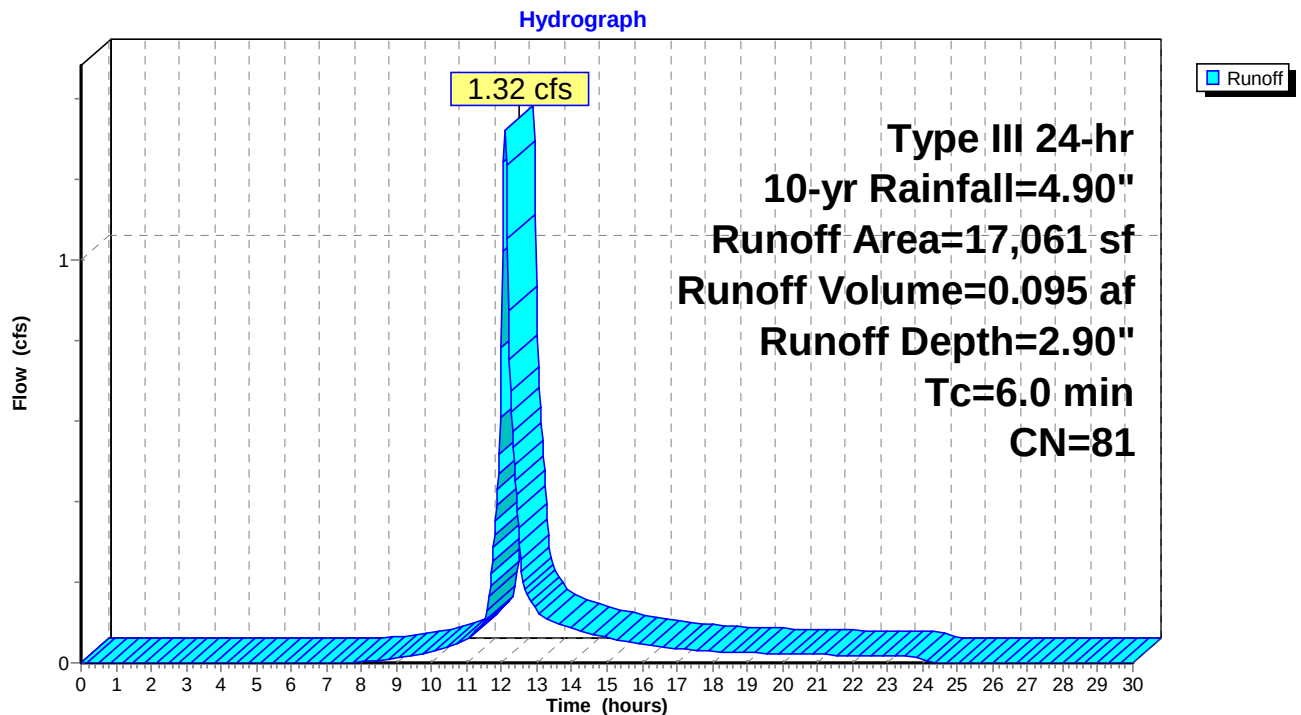
Summary for Subcatchment 10S: UNITS 4-7

Runoff = 1.32 cfs @ 12.09 hrs, Volume= 0.095 af, Depth= 2.90"
Routed to Pond 9P : BIO-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	2,964	98	(4) New Roofs, HSG B
*	6,407	98	Ex. Impervious, HSG B
	7,690	61	>75% Grass cover, Good, HSG B
	17,061	81	Weighted Average
	7,690	61	45.07% Pervious Area
	9,371	98	54.93% Impervious Area

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

Subcatchment 10S: UNITS 4-7

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Type III 24-hr 10-yr Rainfall=4.90"

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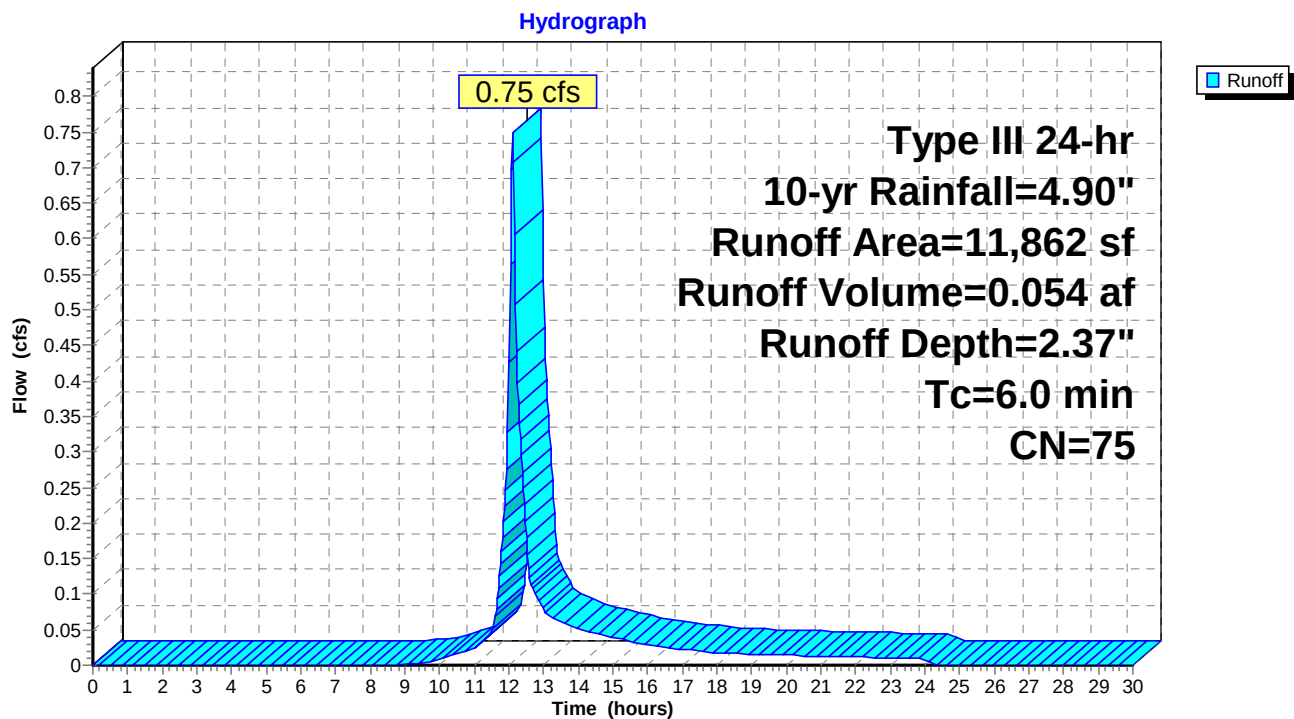
Summary for Subcatchment 11S: UNITS 8-13

Runoff = 0.75 cfs @ 12.09 hrs, Volume= 0.054 af, Depth= 2.37"
Routed to Pond 12P : BIO-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	4,446	98	(6) nEW Roofs, HSG B
	7,416	61	>75% Grass cover, Good, HSG B
	11,862	75	Weighted Average
	7,416	61	62.52% Pervious Area
	4,446	98	37.48% Impervious Area

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

Subcatchment 11S: UNITS 8-13

Summary for Subcatchment 12S: PARKING

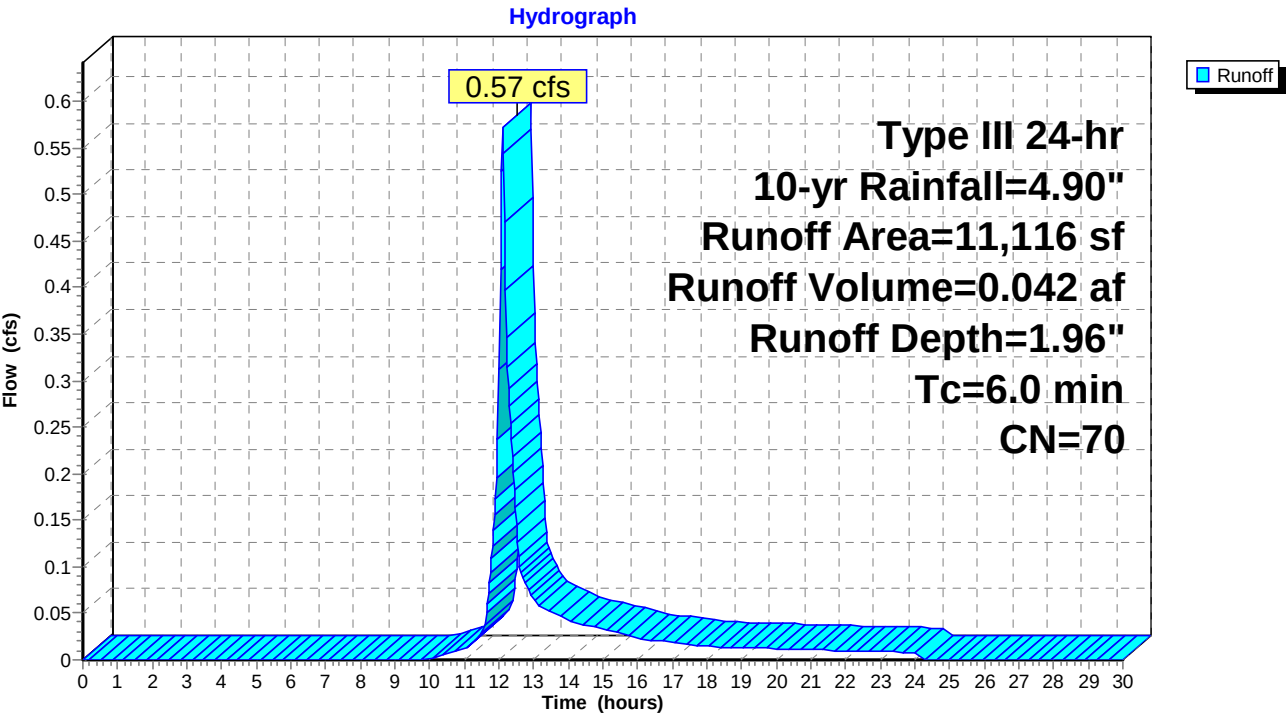
Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.042 af, Depth= 1.96"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	11,116	70	Pervious pavement, HSG B
	11,116	70	100.00% Pervious Area

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

Subcatchment 12S: PARKING



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Type III 24-hr 10-yr Rainfall=4.90"

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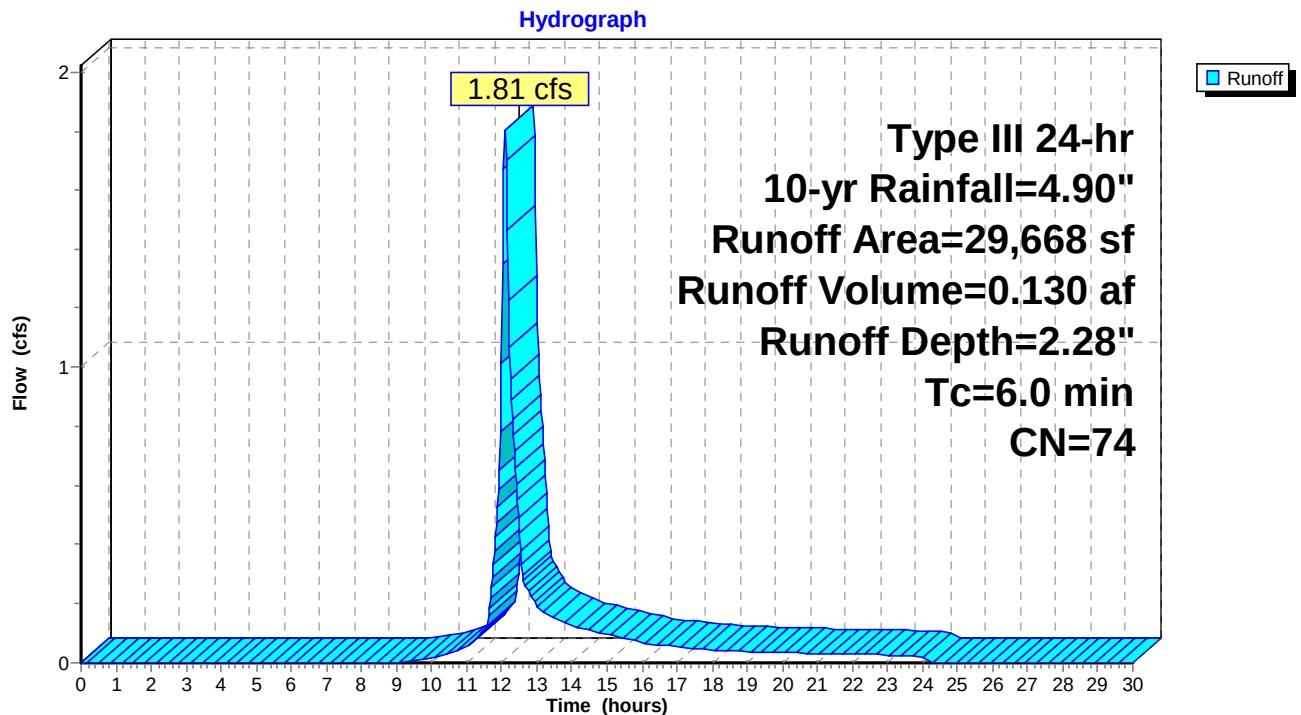
Summary for Subcatchment 13S: WEST SWALE

Runoff = 1.81 cfs @ 12.09 hrs, Volume= 0.130 af, Depth= 2.28"
Routed to Reach 14R : WEST SWALE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 10-yr Rainfall=4.90"

	Area (sf)	CN	Description
*	3,613	98	Exist. Roofs, HSG B
*	7,168	98	New Paved parking, HSG B
	18,887	61	>75% Grass cover, Good, HSG B
	29,668	74	Weighted Average
	18,887	61	63.66% Pervious Area
	10,781	98	36.34% Impervious Area

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

Subcatchment 13S: WEST SWALE

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Type III 24-hr 10-yr Rainfall=4.90"

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Summary for Reach 14R: WEST SWALE

Inflow Area = 0.681 ac, 36.34% Impervious, Inflow Depth = 2.28" for 10-yr event
Inflow = 1.81 cfs @ 12.09 hrs, Volume= 0.130 af
Outflow = 1.75 cfs @ 12.14 hrs, Volume= 0.130 af, Atten= 3%, Lag= 2.8 min
Routed to Pond 8P : INFIL-1

Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Max. Velocity= 3.17 fps, Min. Travel Time= 1.6 min

Avg. Velocity= 0.90 fps, Avg. Travel Time= 5.7 min

Peak Storage= 169 cf @ 12.11 hrs

Average Depth at Peak Storage= 0.23' , Surface Width= 2.90'

Bank-Full Depth= 0.50' Flow Area= 1.5 sf, Capacity= 7.36 cfs

2.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding

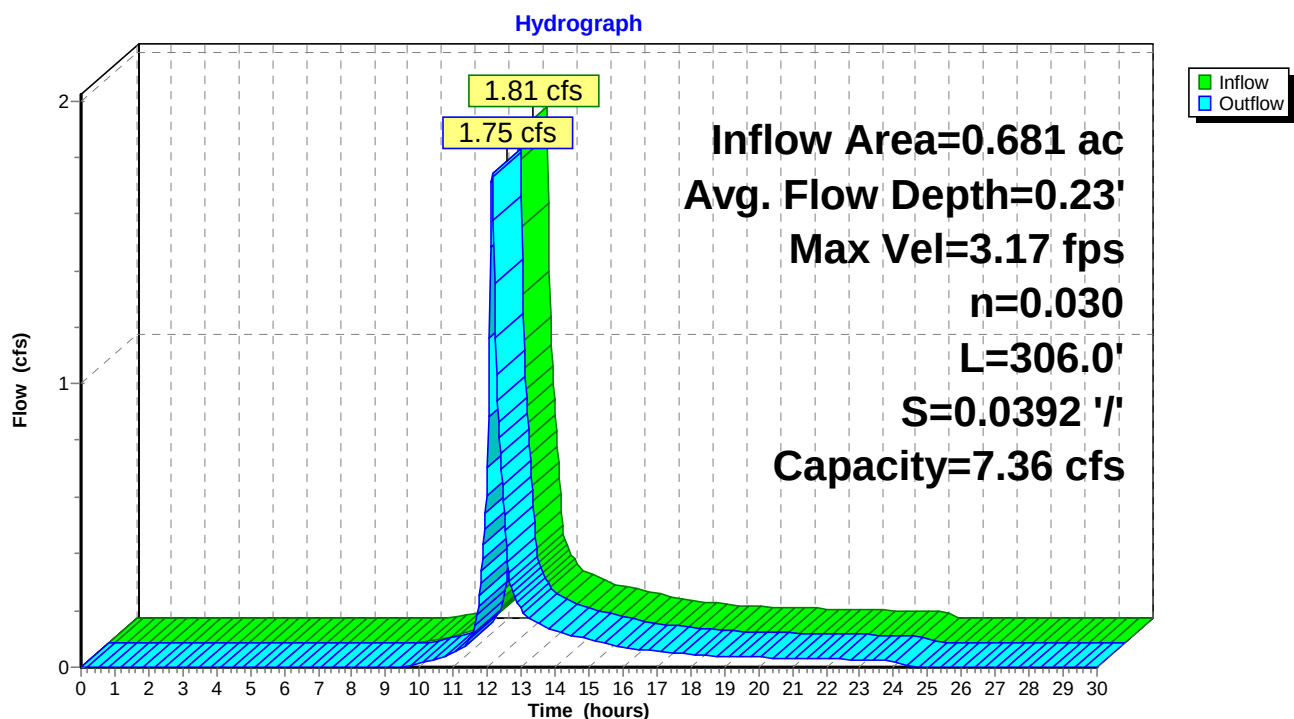
Side Slope Z-value= 2.0 '/' Top Width= 4.00'

Length= 306.0' Slope= 0.0392 '/'

Inlet Invert= 138.00', Outlet Invert= 126.00'



Reach 14R: WEST SWALE



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Type III 24-hr 10-yr Rainfall=4.90"

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Summary for Pond 8P: INFIL-1

Inflow Area = 1.485 ac, 27.16% Impervious, Inflow Depth = 1.20" for 10-yr event
 Inflow = 1.97 cfs @ 12.13 hrs, Volume= 0.148 af
 Outflow = 0.18 cfs @ 13.52 hrs, Volume= 0.116 af, Atten= 91%, Lag= 83.4 min
 Discarded = 0.07 cfs @ 13.52 hrs, Volume= 0.102 af
 Primary = 0.11 cfs @ 13.52 hrs, Volume= 0.014 af
 Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 125.54' @ 13.52 hrs Surf.Area= 3,032 sf Storage= 3,376 cf

Plug-Flow detention time= 405.5 min calculated for 0.116 af (78% of inflow)
 Center-of-Mass det. time= 321.6 min (1,169.1 - 847.5)

Volume	Invert	Avail.Storage	Storage Description
#1	124.00'	4,879 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

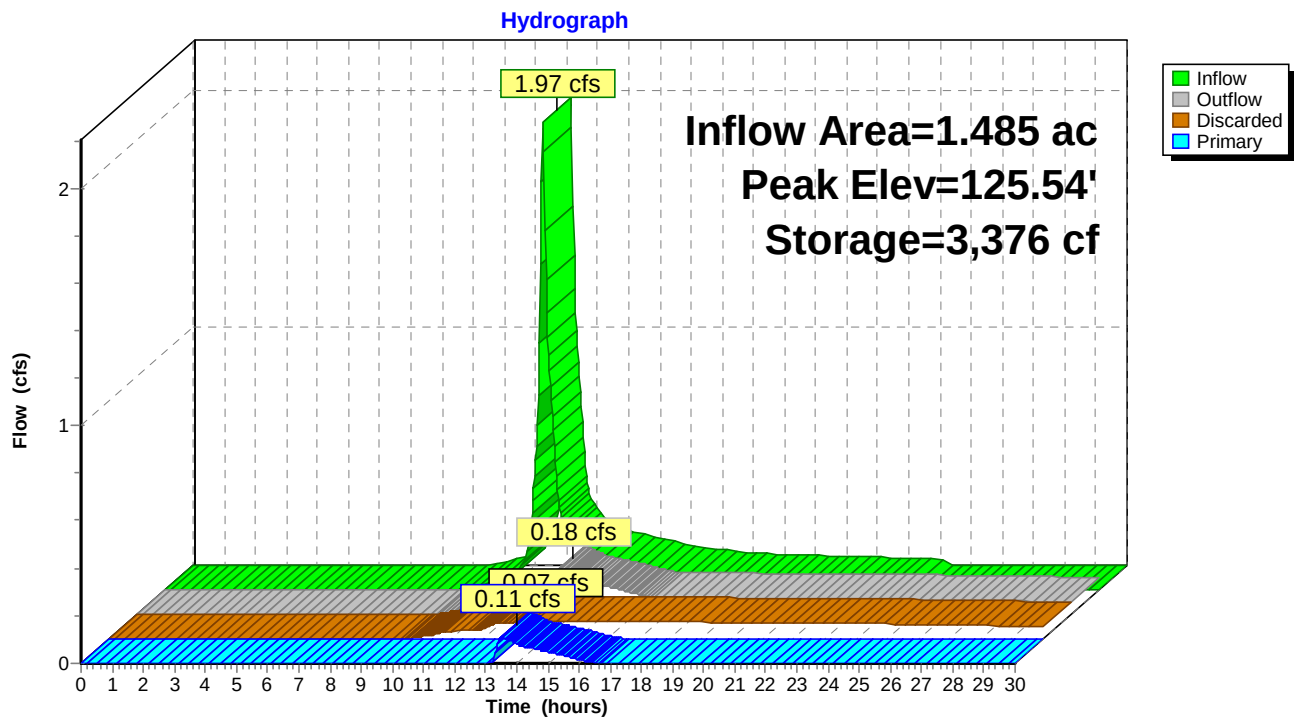
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
124.00	1,356	0	0
125.00	2,432	1,894	1,894
126.00	3,538	2,985	4,879

Device	Routing	Invert	Outlet Devices
#1	Discarded	124.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	125.53'	30.0' long x 6.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65
			2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Discarded OutFlow Max=0.07 cfs @ 13.52 hrs HW=125.54' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.07 cfs)

Primary OutFlow Max=0.10 cfs @ 13.52 hrs HW=125.54' (Free Discharge)
 ↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 0.10 cfs @ 0.27 fps)

Pond 8P: INFIL-1



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Type III 24-hr 10-yr Rainfall=4.90"

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Summary for Pond 9P: BIO-1

Inflow Area = 0.392 ac, 54.93% Impervious, Inflow Depth = 2.90" for 10-yr event
 Inflow = 1.32 cfs @ 12.09 hrs, Volume= 0.095 af
 Outflow = 0.68 cfs @ 12.24 hrs, Volume= 0.095 af, Atten= 48%, Lag= 9.1 min
 Discarded = 0.05 cfs @ 12.24 hrs, Volume= 0.062 af
 Primary = 0.64 cfs @ 12.24 hrs, Volume= 0.033 af
 Routed to Pond 12P : BIO-2

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 137.70' @ 12.24 hrs Surf.Area= 1,921 sf Storage= 1,227 cf

Plug-Flow detention time= 167.6 min calculated for 0.095 af (100% of inflow)
 Center-of-Mass det. time= 167.5 min (987.5 - 819.9)

Volume	Invert	Avail.Storage	Storage Description
#1	137.00'	1,824 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

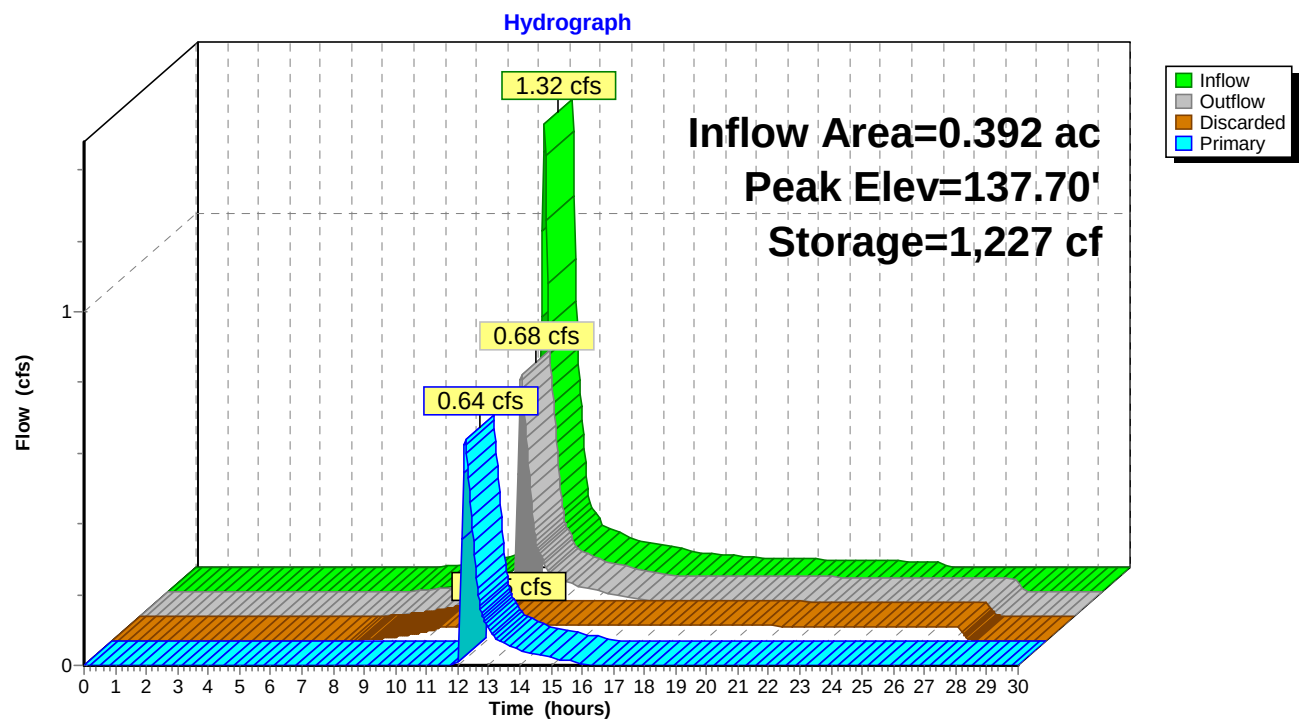
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
137.00	1,582	0	0
138.00	2,066	1,824	1,824

Device	Routing	Invert	Outlet Devices
#1	Discarded	137.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	137.58'	6.0' long x 2.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50
			Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88
			2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.05 cfs @ 12.24 hrs HW=137.70' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.64 cfs @ 12.24 hrs HW=137.70' (Free Discharge)
 ↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 0.64 cfs @ 0.88 fps)

Pond 9P: BIO-1



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Type III 24-hr 10-yr Rainfall=4.90"

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Summary for Pond 12P: BIO-2

Inflow Area = 0.664 ac, 47.77% Impervious, Inflow Depth = 1.56" for 10-yr event
 Inflow = 1.06 cfs @ 12.20 hrs, Volume= 0.087 af
 Outflow = 0.05 cfs @ 15.25 hrs, Volume= 0.078 af, Atten= 95%, Lag= 182.9 min
 Discarded = 0.05 cfs @ 15.25 hrs, Volume= 0.078 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 133.23' @ 15.25 hrs Surf.Area= 2,320 sf Storage= 2,412 cf

Plug-Flow detention time= 440.1 min calculated for 0.078 af (90% of inflow)
 Center-of-Mass det. time= 397.5 min (1,209.6 - 812.1)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	4,385 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	1,619	0	0
133.00	2,184	1,902	1,902
134.00	2,783	2,484	4,385

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	133.33'	6.0' long x 2.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50
			Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88
			2.85 3.07 3.20 3.32

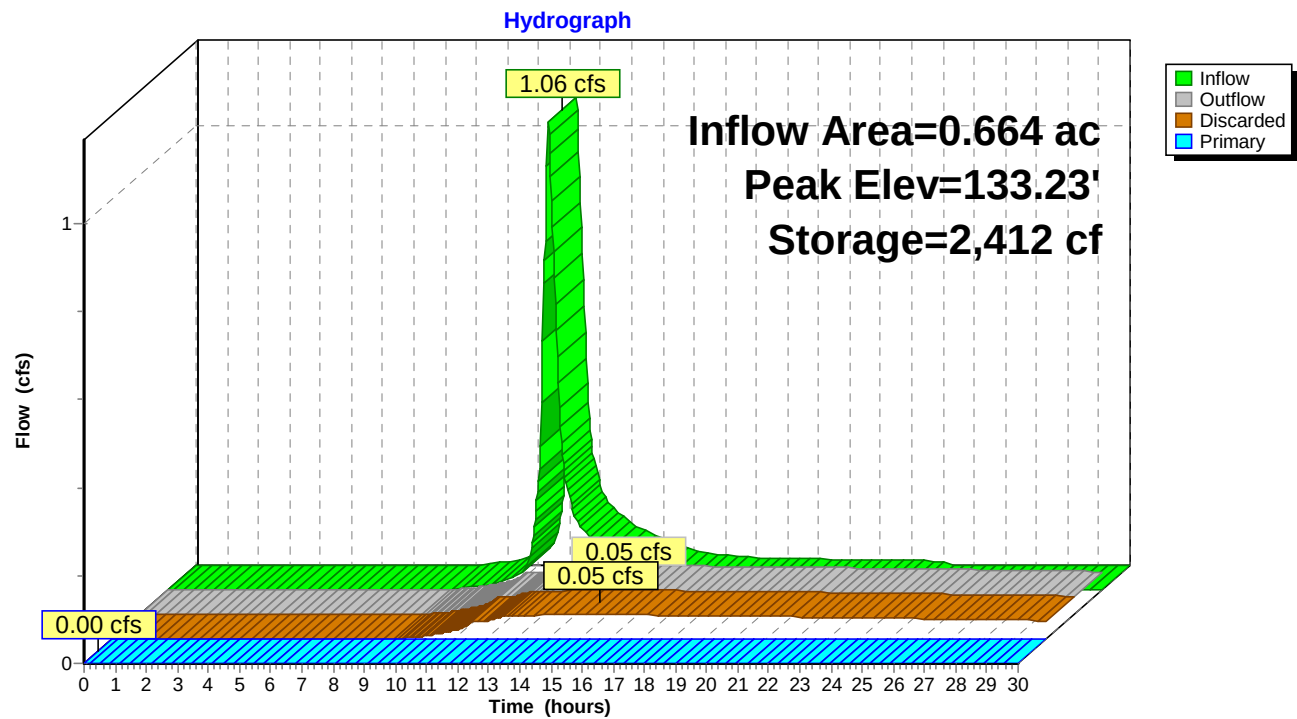
Discarded OutFlow Max=0.05 cfs @ 15.25 hrs HW=133.23' (Free Discharge)

↑ **1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=132.00' (Free Discharge)

↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 12P: BIO-2



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Type III 24-hr 10-yr Rainfall=4.90"

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Summary for Pond 13P: BIO-3

Inflow Area = 0.632 ac, 24.66% Impervious, Inflow Depth = 2.26" for 10-yr event
 Inflow = 1.65 cfs @ 12.09 hrs, Volume= 0.119 af
 Outflow = 0.07 cfs @ 15.75 hrs, Volume= 0.106 af, Atten= 96%, Lag= 219.6 min
 Discarded = 0.07 cfs @ 15.75 hrs, Volume= 0.106 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Pond 8P : INFIL-1

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 128.08' @ 15.75 hrs Surf.Area= 2,960 sf Storage= 2,885 cf

Plug-Flow detention time= 424.1 min calculated for 0.105 af (89% of inflow)
 Center-of-Mass det. time= 371.4 min (1,210.1 - 838.7)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	5,843 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	2,383	0	0
128.00	2,915	2,649	2,649
129.00	3,472	3,194	5,843

Device	Routing	Invert	Outlet Devices
#1	Discarded	127.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	128.58'	5.0' long x 4.0' breadth Broad-Crested Rectangular Weir
Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00			
2.50 3.00 3.50 4.00 4.50 5.00 5.50			
Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66			
2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32			

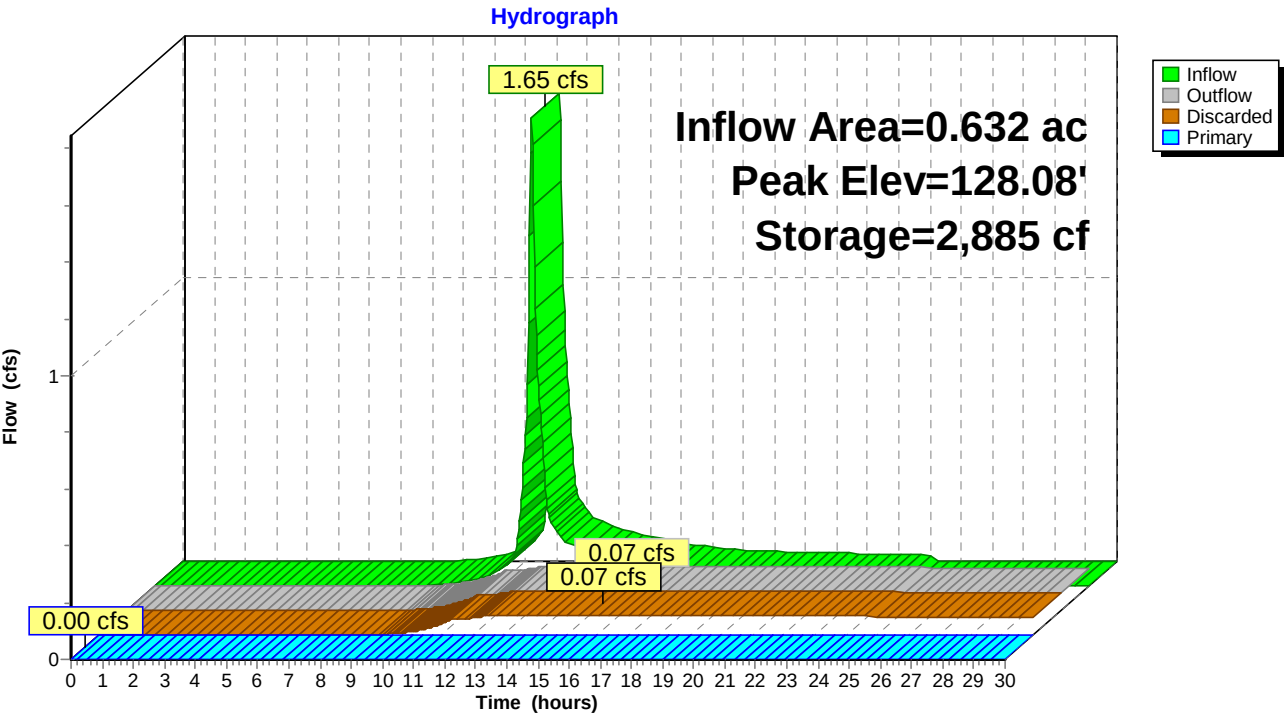
Discarded OutFlow Max=0.07 cfs @ 15.75 hrs HW=128.08' (Free Discharge)

↑ **1=Exfiltration** (Exfiltration Controls 0.07 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=127.00' (Free Discharge)

↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

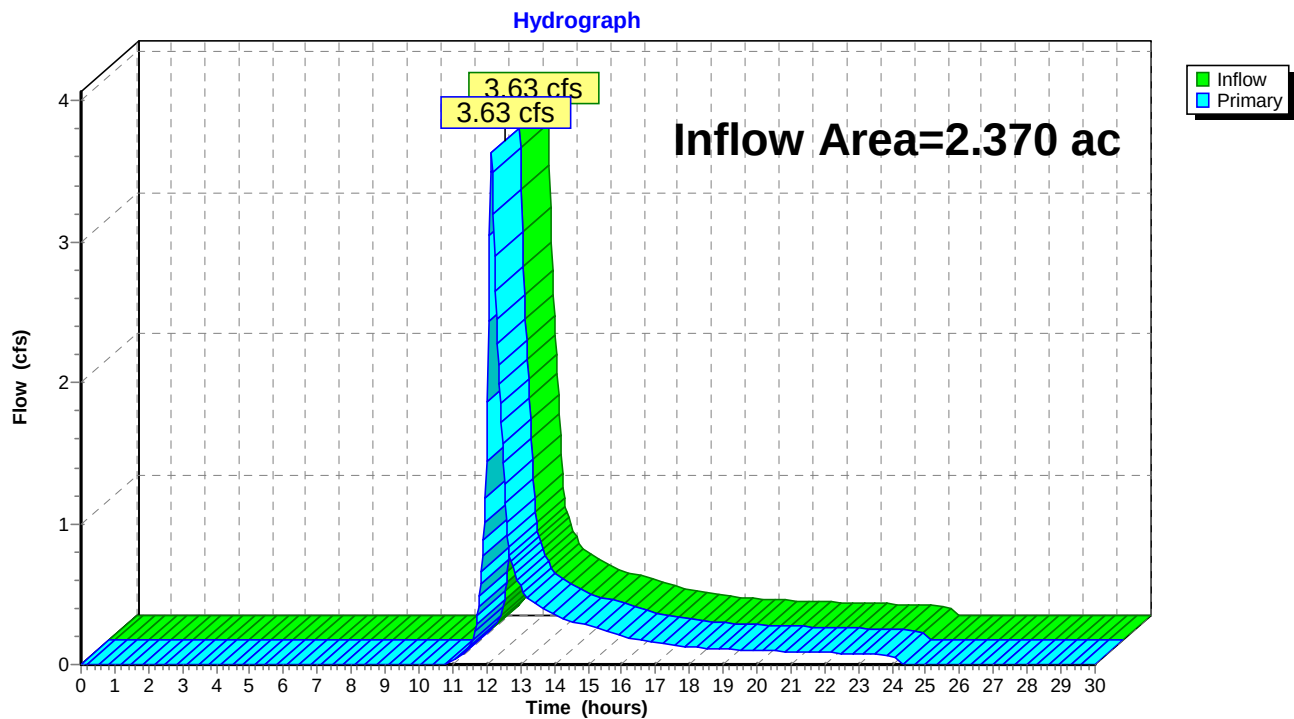
Pond 13P: BIO-3



Summary for Link 3L: PRE-SITE

Inflow Area = 2.370 ac, 7.65% Impervious, Inflow Depth = 1.59" for 10-yr event
Inflow = 3.63 cfs @ 12.15 hrs, Volume= 0.313 af
Primary = 3.63 cfs @ 12.15 hrs, Volume= 0.313 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 3L: PRE-SITE

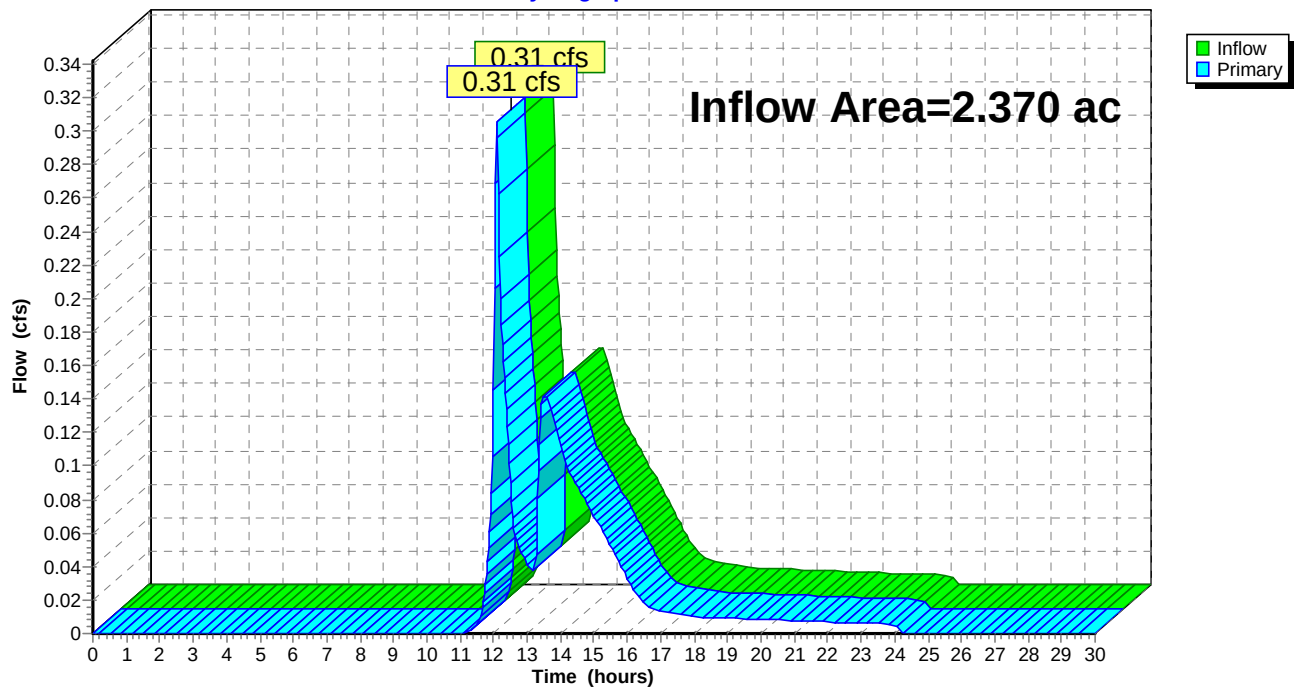
Summary for Link 7L: POST-SITE

Inflow Area = 2.370 ac, 30.40% Impervious, Inflow Depth = 0.19" for 10-yr event
Inflow = 0.31 cfs @ 12.10 hrs, Volume= 0.038 af
Primary = 0.31 cfs @ 12.10 hrs, Volume= 0.038 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 7L: POST-SITE

Hydrograph



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Type III 24-hr 25-yr Rainfall=6.10"

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Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 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 2S: PRE	Runoff Area=103,234 sf 7.65% Impervious Runoff Depth=2.42" Flow Length=375' Tc=9.9 min CN=65 Runoff=5.74 cfs 0.479 af
Subcatchment 5S: CONT	Runoff Area=7,479 sf 0.00% Impervious Runoff Depth=2.07" Tc=6.0 min CN=61 Runoff=0.40 cfs 0.030 af
Subcatchment 6S: UNC	Runoff Area=9,629 sf 0.00% Impervious Runoff Depth=2.07" Tc=6.0 min CN=61 Runoff=0.51 cfs 0.038 af
Subcatchment 9S: UNITS 14-20	Runoff Area=16,419 sf 41.35% Impervious Runoff Depth=3.47" Tc=6.0 min CN=76 Runoff=1.52 cfs 0.109 af
Subcatchment 10S: UNITS 4-7	Runoff Area=17,061 sf 54.93% Impervious Runoff Depth=3.97" Tc=6.0 min CN=81 Runoff=1.80 cfs 0.130 af
Subcatchment 11S: UNITS 8-13	Runoff Area=11,862 sf 37.48% Impervious Runoff Depth=3.37" Tc=6.0 min CN=75 Runoff=1.07 cfs 0.076 af
Subcatchment 12S: PARKING	Runoff Area=11,116 sf 0.00% Impervious Runoff Depth=2.88" Tc=6.0 min CN=70 Runoff=0.86 cfs 0.061 af
Subcatchment 13S: WEST SWALE	Runoff Area=29,668 sf 36.34% Impervious Runoff Depth=3.27" Tc=6.0 min CN=74 Runoff=2.60 cfs 0.186 af
Reach 14R: WEST SWALE	Avg. Flow Depth=0.28' Max Vel=3.56 fps Inflow=2.60 cfs 0.186 af n=0.030 L=306.0' S=0.0392 '/' Capacity=7.36 cfs Outflow=2.52 cfs 0.186 af
Pond 8P: INFIL-1	Peak Elev=125.59' Storage=3,534 cf Inflow=2.89 cfs 0.218 af Discarded=0.07 cfs 0.108 af Primary=1.17 cfs 0.072 af Outflow=1.24 cfs 0.180 af
Pond 9P: BIO-1	Peak Elev=137.78' Storage=1,386 cf Inflow=1.80 cfs 0.130 af Discarded=0.05 cfs 0.069 af Primary=1.39 cfs 0.061 af Outflow=1.43 cfs 0.130 af
Pond 12P: BIO-2	Peak Elev=133.43' Storage=2,899 cf Inflow=2.31 cfs 0.138 af Discarded=0.06 cfs 0.084 af Primary=0.49 cfs 0.037 af Outflow=0.55 cfs 0.121 af
Pond 13P: BIO-3	Peak Elev=128.59' Storage=4,478 cf Inflow=2.38 cfs 0.170 af Discarded=0.08 cfs 0.119 af Primary=0.02 cfs 0.002 af Outflow=0.10 cfs 0.122 af
Link 3L: PRE-SITE	Inflow=5.74 cfs 0.479 af Primary=5.74 cfs 0.479 af
Link 7L: POST-SITE	Inflow=1.42 cfs 0.147 af Primary=1.42 cfs 0.147 af

Total Runoff Area = 4.740 ac Runoff Volume = 1.109 af Average Runoff Depth = 2.81"
80.97% Pervious = 3.838 ac 19.03% Impervious = 0.902 ac

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Type III 24-hr 25-yr Rainfall=6.10"

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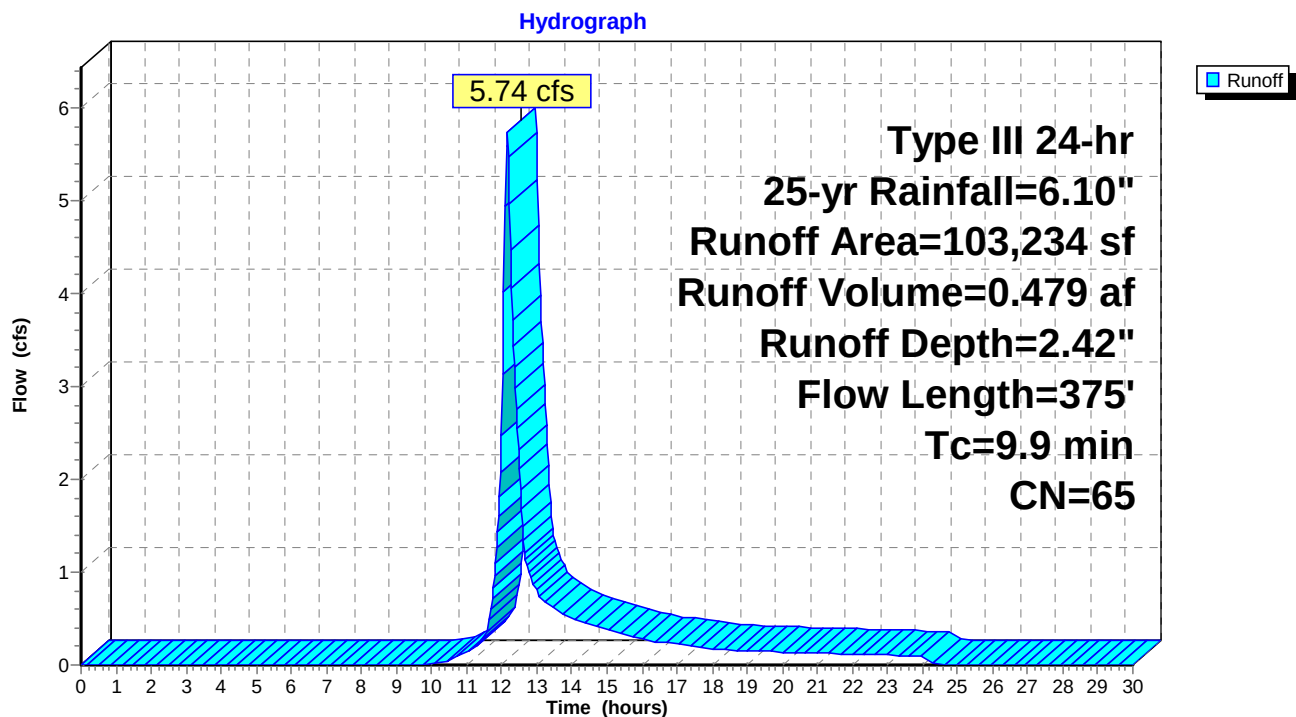
Summary for Subcatchment 2S: PRE

Runoff = 5.74 cfs @ 12.15 hrs, Volume= 0.479 af, Depth= 2.42"
Routed to Link 3L : PRE-SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

	Area (sf)	CN	Description
*	7,898	98	Ex. House/Barn/Pavement, HSG B
*	4,797	85	Onsite Gravel Driveway, HSG B
	90,539	61	>75% Grass cover, Good, HSG B
	103,234	65	Weighted Average
	95,336	62	92.35% Pervious Area
	7,898	98	7.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	107	0.0750	0.20		Sheet Flow, Grass: Dense n= 0.240 P2= 3.33"
1.2	268	0.0520	3.67		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
9.9	375	Total			

Subcatchment 2S: PRE

Summary for Subcatchment 5S: CONT

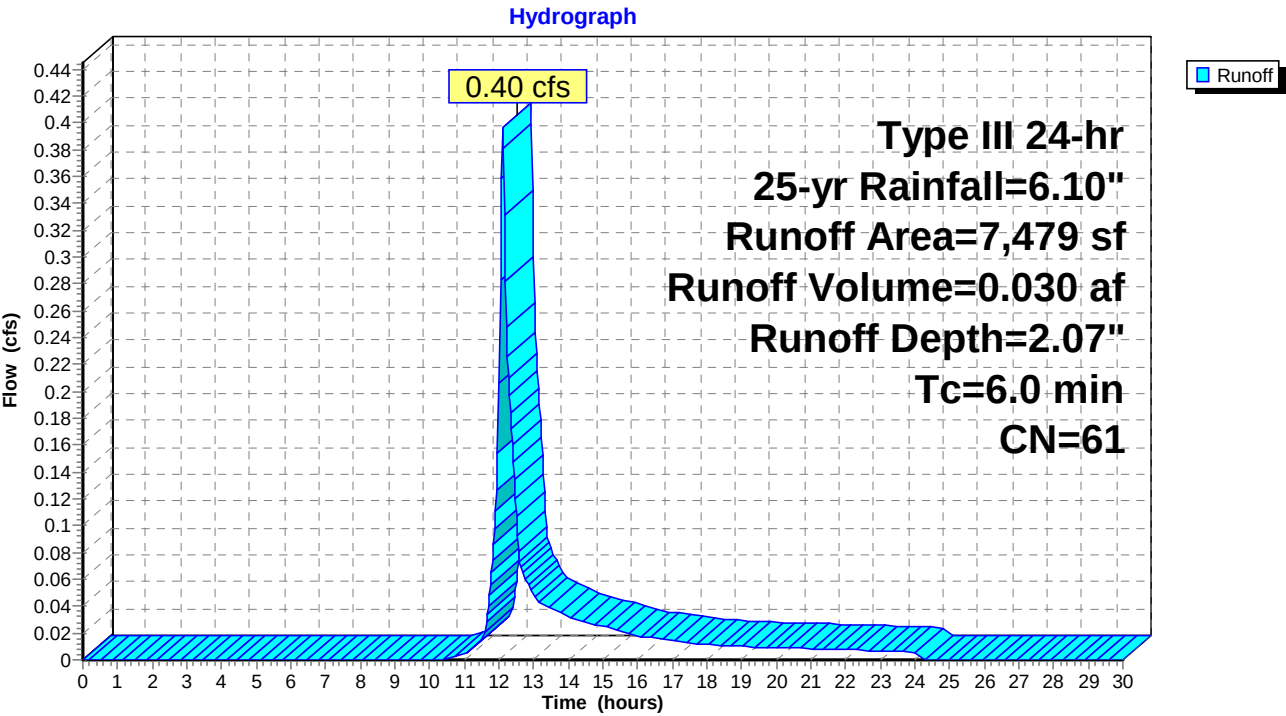
Runoff = 0.40 cfs @ 12.10 hrs, Volume= 0.030 af, Depth= 2.07"
Routed to Pond 8P : INFIL-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

Area (sf)	CN	Description
7,479	61	>75% Grass cover, Good, HSG B
7,479	61	100.00% Pervious Area

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

Subcatchment 5S: CONT



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Type III 24-hr 25-yr Rainfall=6.10"

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Summary for Subcatchment 6S: UNC

Runoff = 0.51 cfs @ 12.10 hrs, Volume= 0.038 af, Depth= 2.07"
Routed to Link 7L : POST-SITE

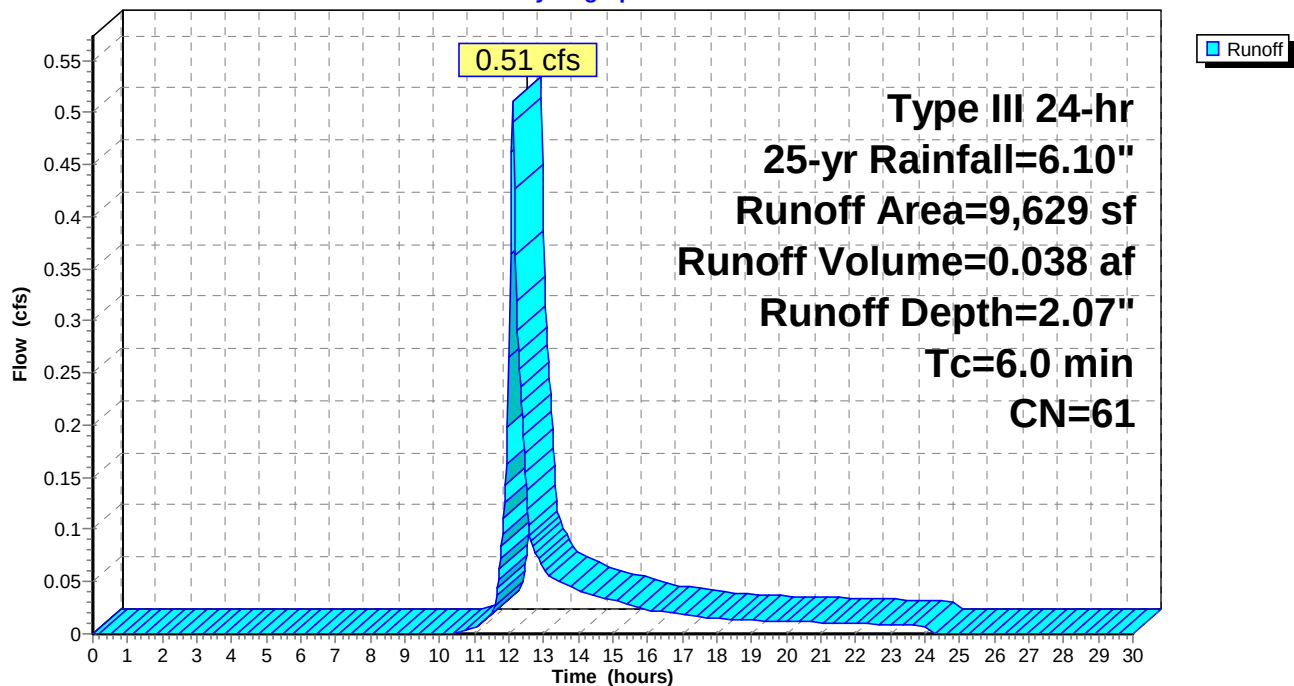
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

Area (sf)	CN	Description
6,242	61	>75% Grass cover, Good, HSG B
3,387	61	>75% Grass cover, Good, HSG B
9,629	61	Weighted Average
9,629	61	100.00% Pervious Area

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

Subcatchment 6S: UNC

Hydrograph



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Type III 24-hr 25-yr Rainfall=6.10"

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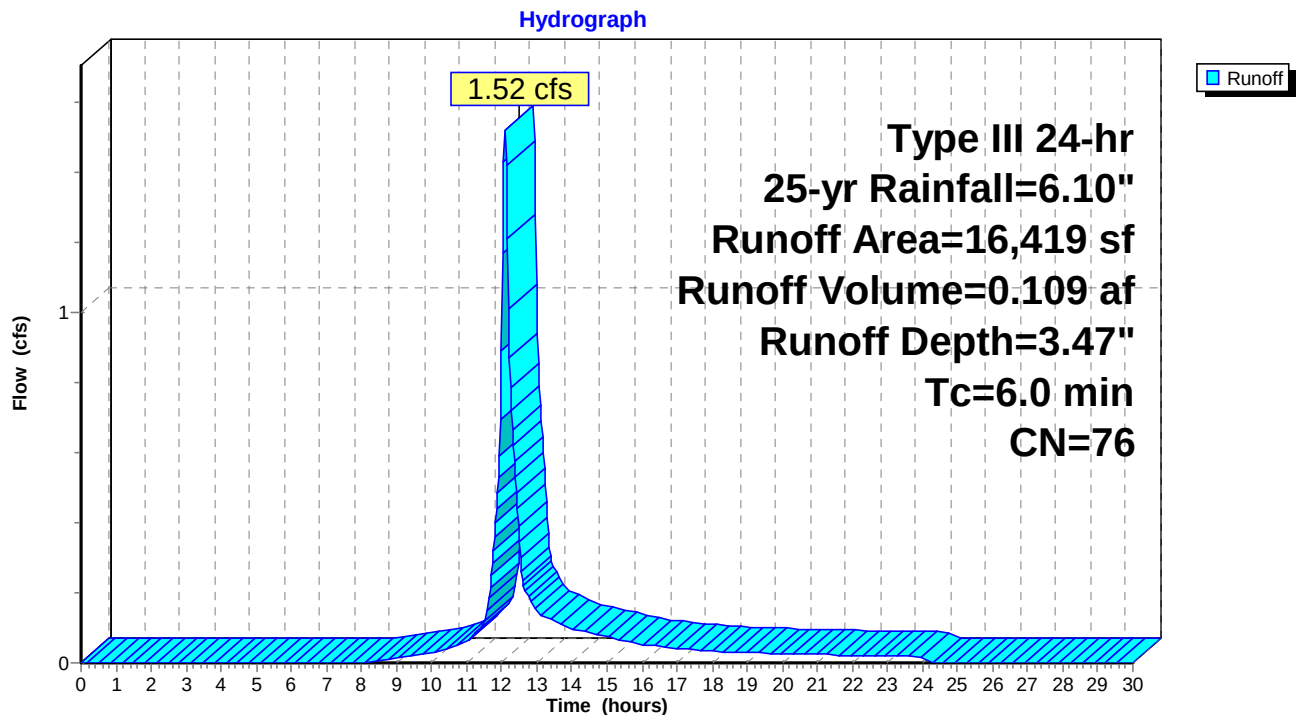
Summary for Subcatchment 9S: UNITS 14-20

Runoff = 1.52 cfs @ 12.09 hrs, Volume= 0.109 af, Depth= 3.47"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

	Area (sf)	CN	Description
*	5,187	98	(7) New Roofs, HSG B
	1,602	98	Paved parking, HSG B
	9,630	61	>75% Grass cover, Good, HSG B
	16,419	76	Weighted Average
	9,630	61	58.65% Pervious Area
	6,789	98	41.35% Impervious Area

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

Subcatchment 9S: UNITS 14-20

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Type III 24-hr 25-yr Rainfall=6.10"

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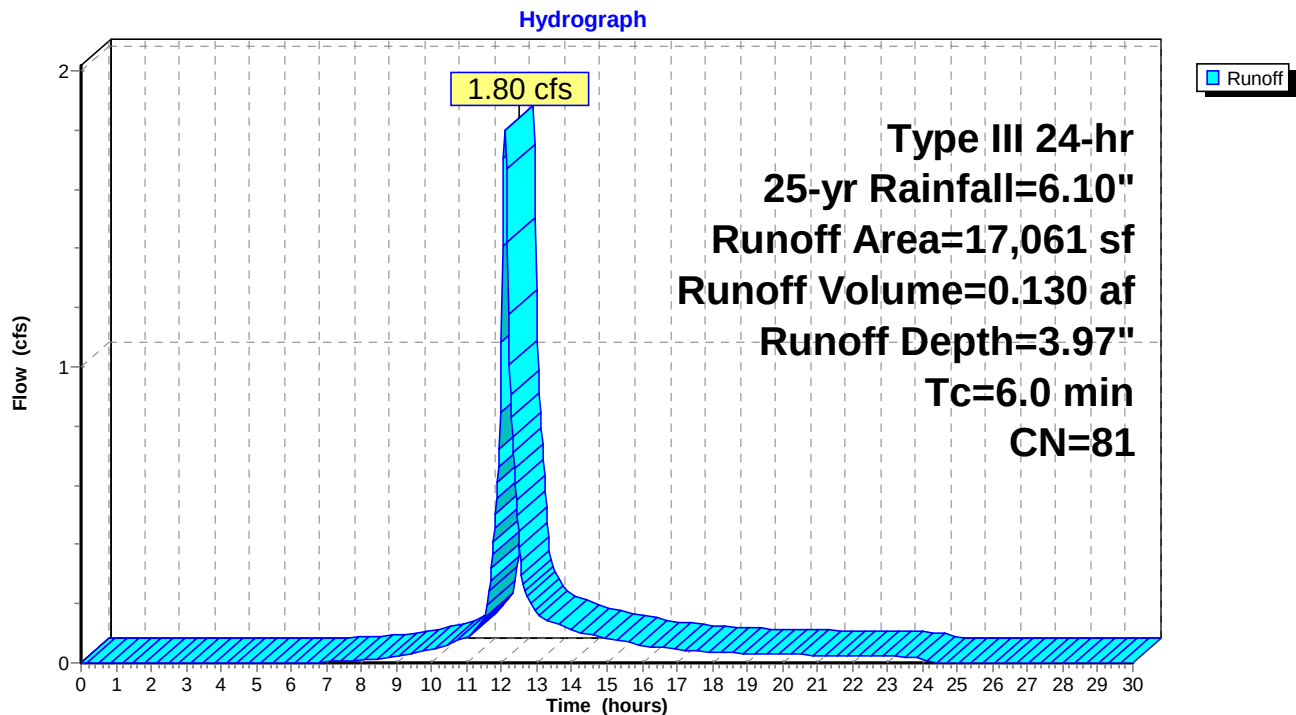
Summary for Subcatchment 10S: UNITS 4-7

Runoff = 1.80 cfs @ 12.09 hrs, Volume= 0.130 af, Depth= 3.97"
Routed to Pond 9P : BIO-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

	Area (sf)	CN	Description
*	2,964	98	(4) New Roofs, HSG B
*	6,407	98	Ex. Impervious, HSG B
	7,690	61	>75% Grass cover, Good, HSG B
	17,061	81	Weighted Average
	7,690	61	45.07% Pervious Area
	9,371	98	54.93% Impervious Area

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

Subcatchment 10S: UNITS 4-7

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Type III 24-hr 25-yr Rainfall=6.10"

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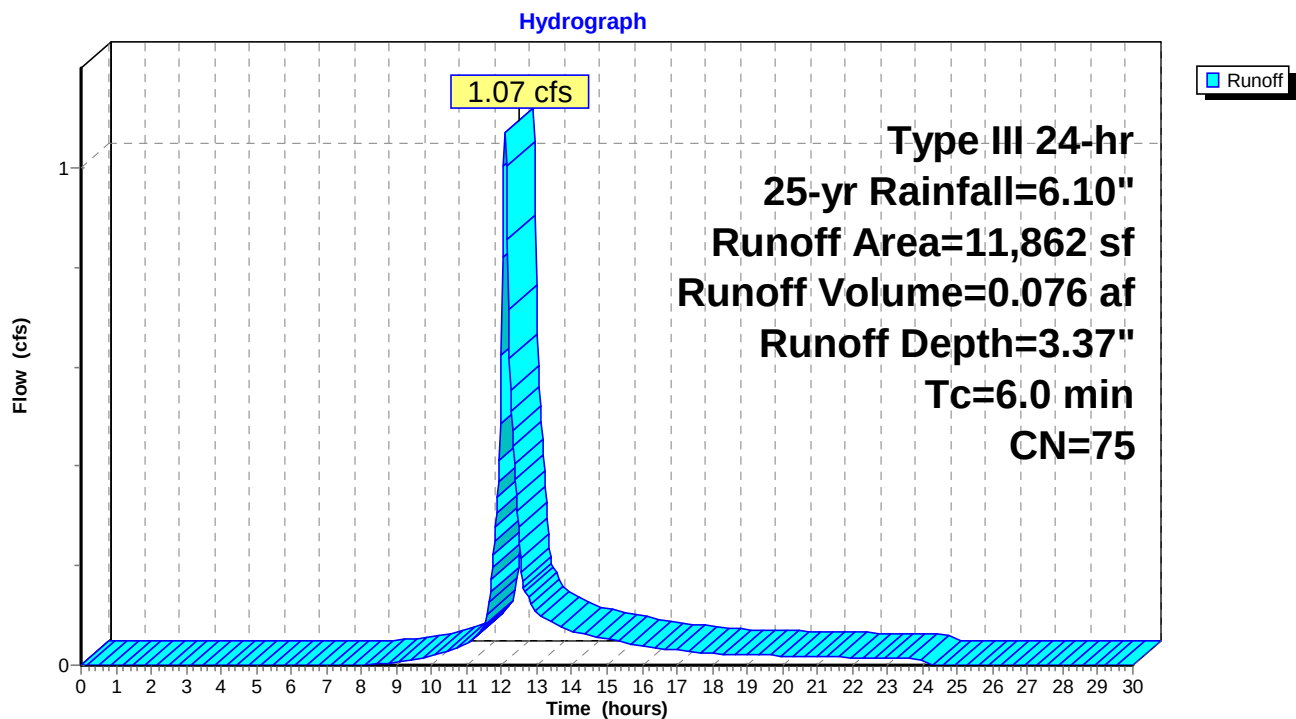
Summary for Subcatchment 11S: UNITS 8-13

Runoff = 1.07 cfs @ 12.09 hrs, Volume= 0.076 af, Depth= 3.37"
Routed to Pond 12P : BIO-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

	Area (sf)	CN	Description
*	4,446	98	(6) nEW Roofs, HSG B
	7,416	61	>75% Grass cover, Good, HSG B
	11,862	75	Weighted Average
	7,416	61	62.52% Pervious Area
	4,446	98	37.48% Impervious Area

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

Subcatchment 11S: UNITS 8-13

Summary for Subcatchment 12S: PARKING

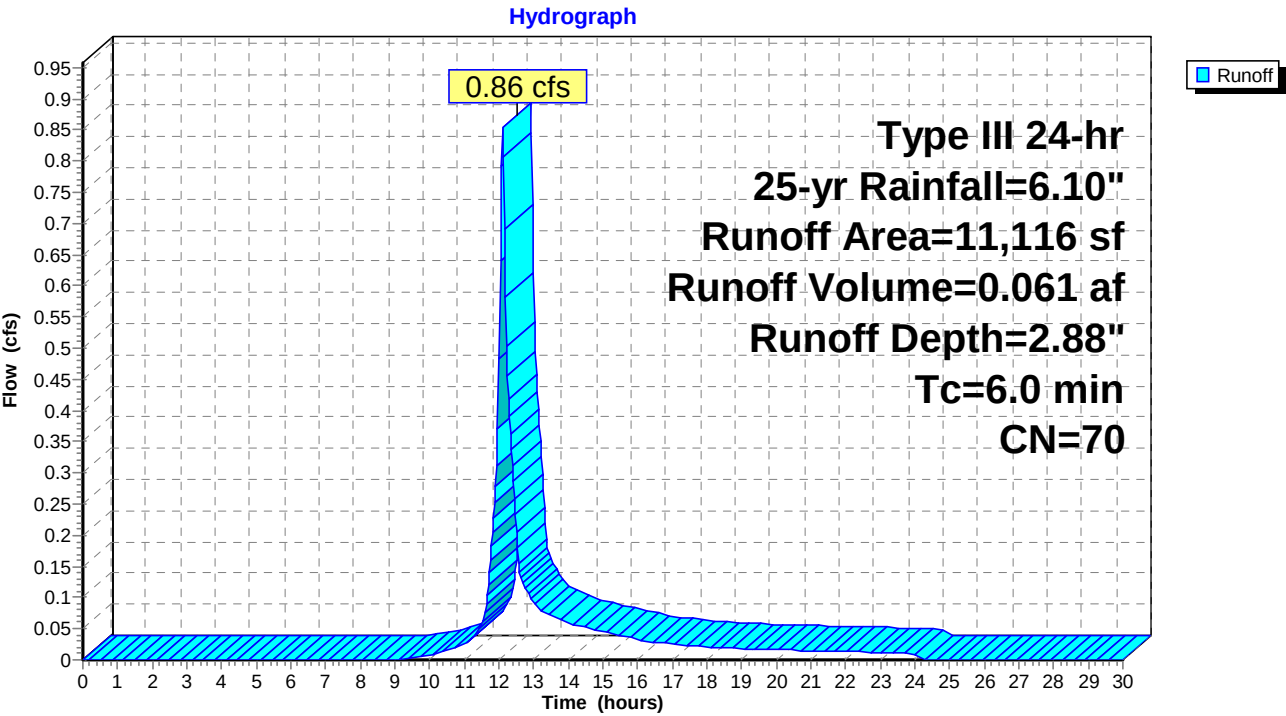
Runoff = 0.86 cfs @ 12.09 hrs, Volume= 0.061 af, Depth= 2.88"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

	Area (sf)	CN	Description
*	11,116	70	Pervious pavement, HSG B
	11,116	70	100.00% Pervious Area

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

Subcatchment 12S: PARKING



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Type III 24-hr 25-yr Rainfall=6.10"

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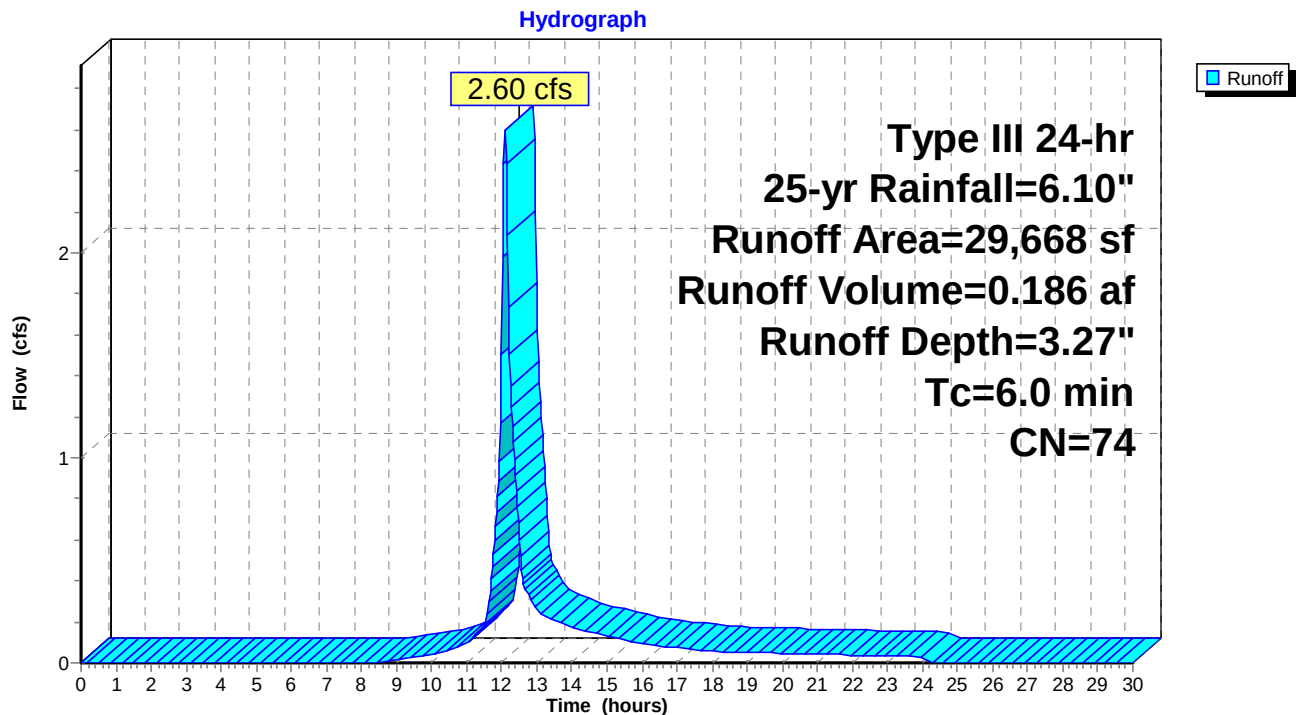
Summary for Subcatchment 13S: WEST SWALE

Runoff = 2.60 cfs @ 12.09 hrs, Volume= 0.186 af, Depth= 3.27"
Routed to Reach 14R : WEST SWALE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 25-yr Rainfall=6.10"

	Area (sf)	CN	Description
*	3,613	98	Exist. Roofs, HSG B
*	7,168	98	New Paved parking, HSG B
	18,887	61	>75% Grass cover, Good, HSG B
	29,668	74	Weighted Average
	18,887	61	63.66% Pervious Area
	10,781	98	36.34% Impervious Area

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

Subcatchment 13S: WEST SWALE

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Type III 24-hr 25-yr Rainfall=6.10"

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Summary for Reach 14R: WEST SWALE

Inflow Area = 0.681 ac, 36.34% Impervious, Inflow Depth = 3.27" for 25-yr event
Inflow = 2.60 cfs @ 12.09 hrs, Volume= 0.186 af
Outflow = 2.52 cfs @ 12.13 hrs, Volume= 0.186 af, Atten= 3%, Lag= 2.5 min
Routed to Pond 8P : INFIL-1

Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Max. Velocity= 3.56 fps, Min. Travel Time= 1.4 min

Avg. Velocity= 1.00 fps, Avg. Travel Time= 5.1 min

Peak Storage= 218 cf @ 12.11 hrs

Average Depth at Peak Storage= 0.28' , Surface Width= 3.11'

Bank-Full Depth= 0.50' Flow Area= 1.5 sf, Capacity= 7.36 cfs

2.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding

Side Slope Z-value= 2.0 '/' Top Width= 4.00'

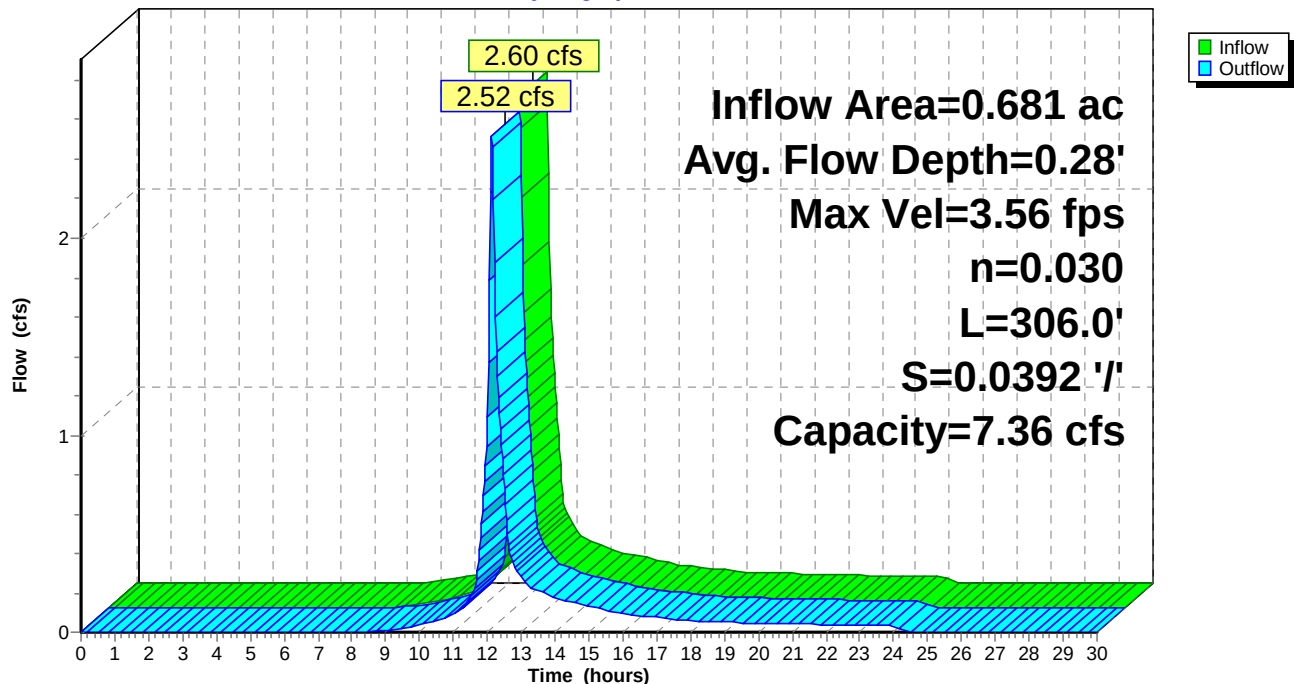
Length= 306.0' Slope= 0.0392 '/'

Inlet Invert= 138.00', Outlet Invert= 126.00'



Reach 14R: WEST SWALE

Hydrograph



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Type III 24-hr 25-yr Rainfall=6.10"

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Summary for Pond 8P: INFIL-1

Inflow Area = 1.485 ac, 27.16% Impervious, Inflow Depth = 1.76" for 25-yr event
 Inflow = 2.89 cfs @ 12.13 hrs, Volume= 0.218 af
 Outflow = 1.24 cfs @ 12.38 hrs, Volume= 0.180 af, Atten= 57%, Lag= 15.0 min
 Discarded = 0.07 cfs @ 12.38 hrs, Volume= 0.108 af
 Primary = 1.17 cfs @ 12.38 hrs, Volume= 0.072 af
 Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 125.59' @ 12.38 hrs Surf.Area= 3,089 sf Storage= 3,534 cf

Plug-Flow detention time= 278.0 min calculated for 0.180 af (83% of inflow)
 Center-of-Mass det. time= 206.4 min (1,044.0 - 837.6)

Volume	Invert	Avail.Storage	Storage Description
#1	124.00'	4,879 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

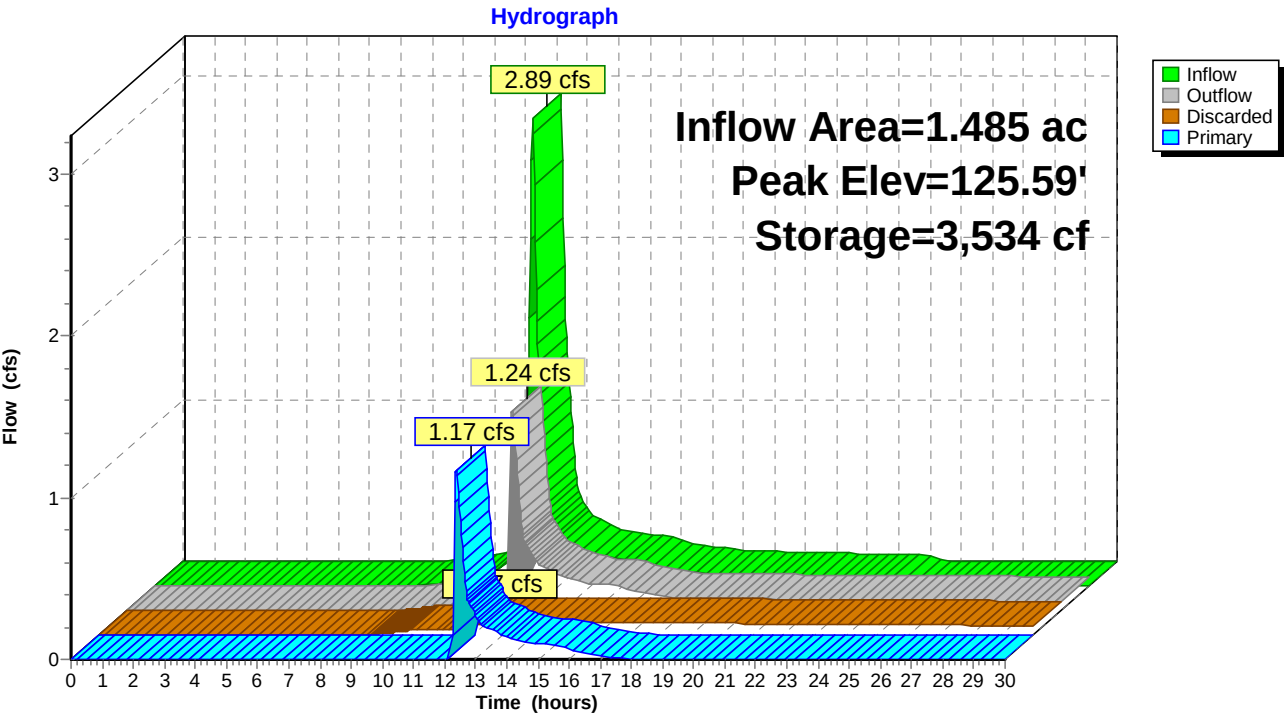
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
124.00	1,356	0	0
125.00	2,432	1,894	1,894
126.00	3,538	2,985	4,879

Device	Routing	Invert	Outlet Devices
#1	Discarded	124.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	125.53'	30.0' long x 6.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65
			2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Discarded OutFlow Max=0.07 cfs @ 12.38 hrs HW=125.59' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.07 cfs)

Primary OutFlow Max=1.15 cfs @ 12.38 hrs HW=125.59' (Free Discharge)
 ↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 1.15 cfs @ 0.60 fps)

Pond 8P: INFIL-1



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Type III 24-hr 25-yr Rainfall=6.10"

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Summary for Pond 9P: BIO-1

Inflow Area = 0.392 ac, 54.93% Impervious, Inflow Depth = 3.97" for 25-yr event
 Inflow = 1.80 cfs @ 12.09 hrs, Volume= 0.130 af
 Outflow = 1.43 cfs @ 12.15 hrs, Volume= 0.130 af, Atten= 21%, Lag= 3.9 min
 Discarded = 0.05 cfs @ 12.15 hrs, Volume= 0.069 af
 Primary = 1.39 cfs @ 12.15 hrs, Volume= 0.061 af
 Routed to Pond 12P : BIO-2

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 137.78' @ 12.15 hrs Surf.Area= 1,961 sf Storage= 1,386 cf

Plug-Flow detention time= 140.0 min calculated for 0.130 af (100% of inflow)
 Center-of-Mass det. time= 140.0 min (950.9 - 810.9)

Volume	Invert	Avail.Storage	Storage Description
#1	137.00'	1,824 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

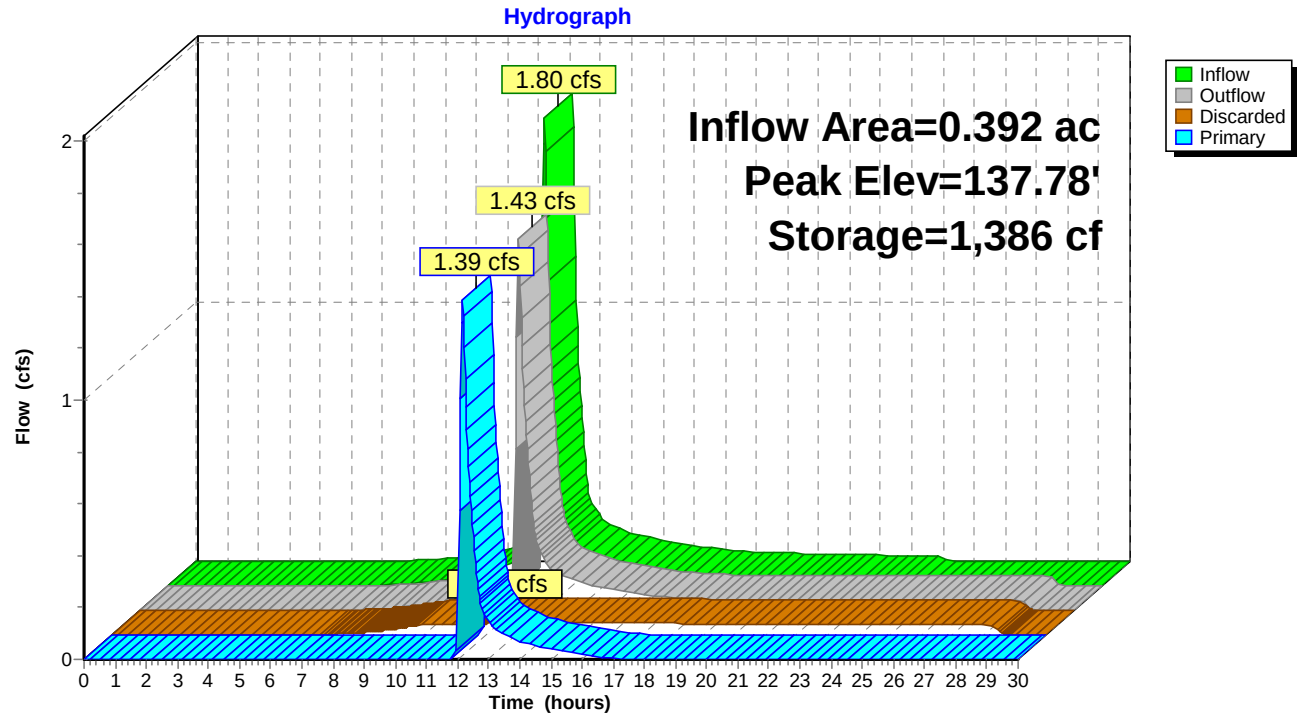
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
137.00	1,582	0	0
138.00	2,066	1,824	1,824

Device	Routing	Invert	Outlet Devices
#1	Discarded	137.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	137.58'	6.0' long x 2.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50
			Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88
			2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.05 cfs @ 12.15 hrs HW=137.78' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=1.38 cfs @ 12.15 hrs HW=137.78' (Free Discharge)
 ↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 1.38 cfs @ 1.14 fps)

Pond 9P: BIO-1



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Type III 24-hr 25-yr Rainfall=6.10"

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Summary for Pond 12P: BIO-2

Inflow Area = 0.664 ac, 47.77% Impervious, Inflow Depth = 2.49" for 25-yr event
 Inflow = 2.31 cfs @ 12.13 hrs, Volume= 0.138 af
 Outflow = 0.55 cfs @ 12.58 hrs, Volume= 0.121 af, Atten= 76%, Lag= 27.0 min
 Discarded = 0.06 cfs @ 12.58 hrs, Volume= 0.084 af
 Primary = 0.49 cfs @ 12.58 hrs, Volume= 0.037 af
 Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 133.43' @ 12.58 hrs Surf.Area= 2,442 sf Storage= 2,899 cf

Plug-Flow detention time= 318.3 min calculated for 0.121 af (88% of inflow)
 Center-of-Mass det. time= 273.6 min (1,075.1 - 801.5)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	4,385 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	1,619	0	0
133.00	2,184	1,902	1,902
134.00	2,783	2,484	4,385

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	133.33'	6.0' long x 2.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50
			Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88
			2.85 3.07 3.20 3.32

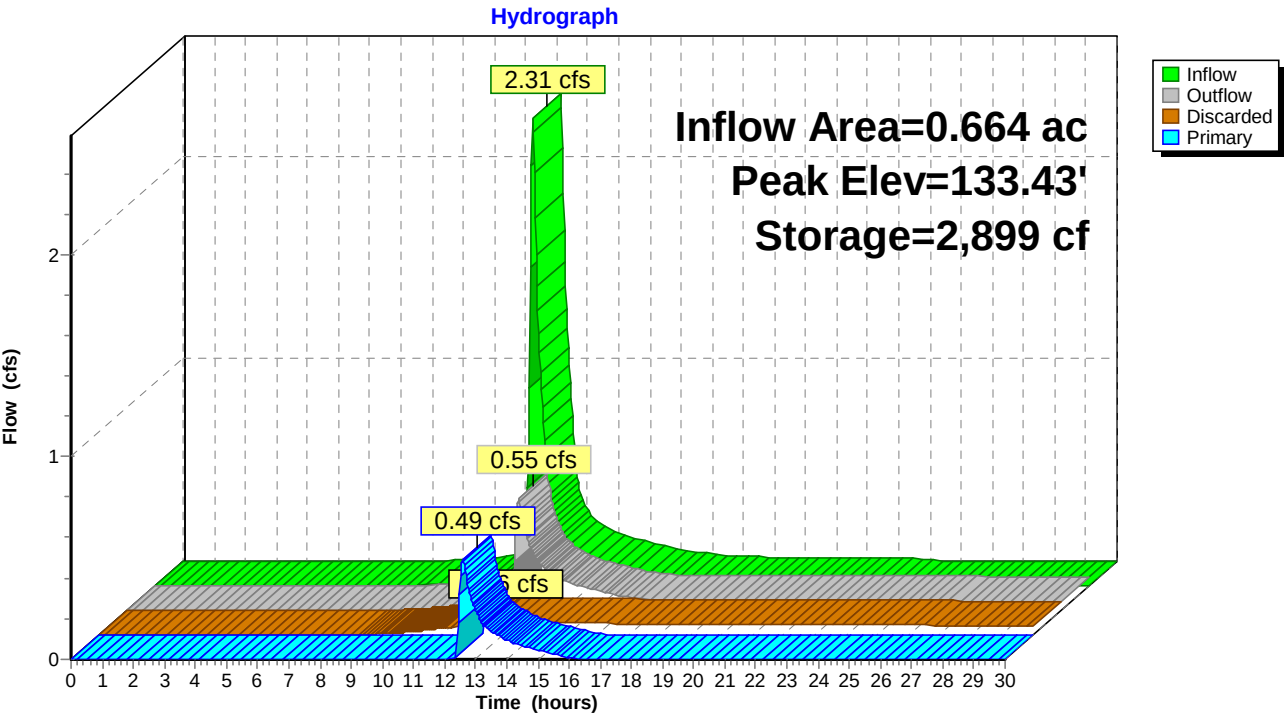
Discarded OutFlow Max=0.06 cfs @ 12.58 hrs HW=133.43' (Free Discharge)

↑ **1=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.49 cfs @ 12.58 hrs HW=133.43' (Free Discharge)

↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 0.49 cfs @ 0.81 fps)

Pond 12P: BIO-2



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Summary for Pond 13P: BIO-3

Inflow Area = 0.632 ac, 24.66% Impervious, Inflow Depth = 3.23" for 25-yr event
 Inflow = 2.38 cfs @ 12.09 hrs, Volume= 0.170 af
 Outflow = 0.10 cfs @ 15.59 hrs, Volume= 0.122 af, Atten= 96%, Lag= 209.7 min
 Discarded = 0.08 cfs @ 15.59 hrs, Volume= 0.119 af
 Primary = 0.02 cfs @ 15.59 hrs, Volume= 0.002 af
 Routed to Pond 8P : INFIL-1

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 128.59' @ 15.59 hrs Surf.Area= 3,246 sf Storage= 4,478 cf

Plug-Flow detention time= 459.3 min calculated for 0.122 af (72% of inflow)
 Center-of-Mass det. time= 364.7 min (1,193.1 - 828.4)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	5,843 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

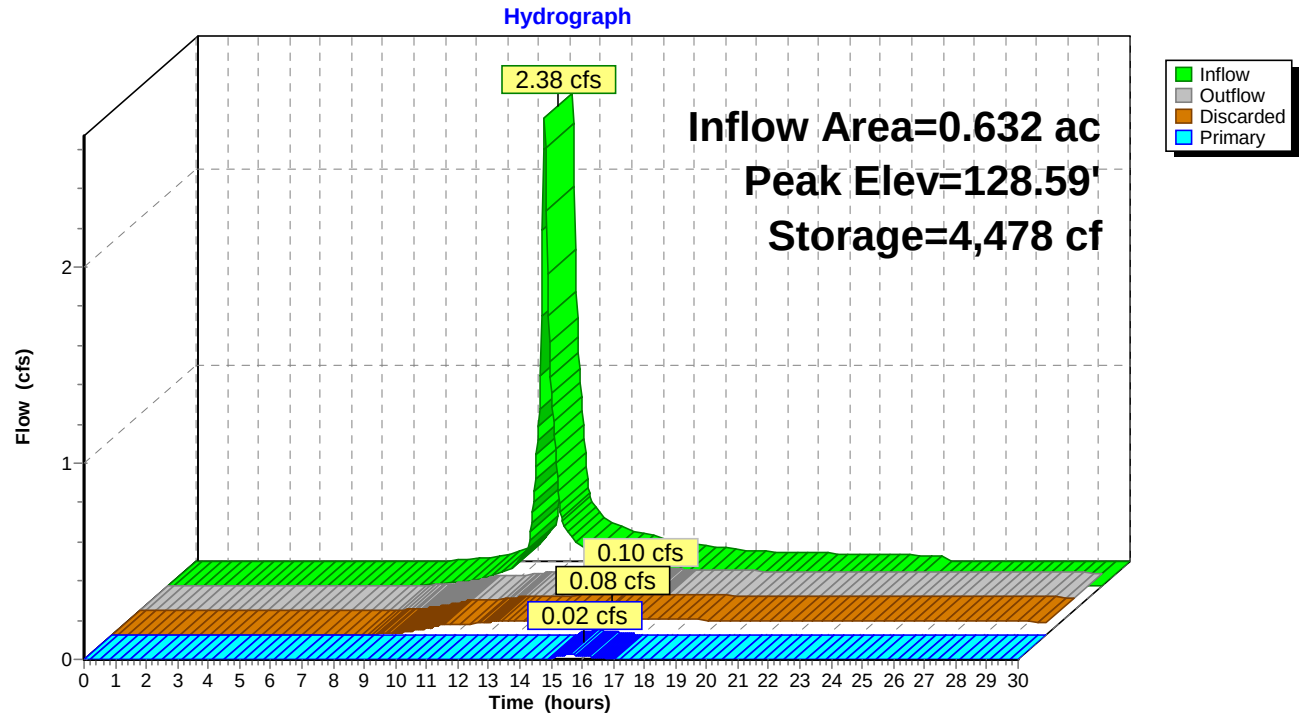
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	2,383	0	0
128.00	2,915	2,649	2,649
129.00	3,472	3,194	5,843

Device	Routing	Invert	Outlet Devices
#1	Discarded	127.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	128.58'	5.0' long x 4.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.08 cfs @ 15.59 hrs HW=128.59' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.08 cfs)

Primary OutFlow Max=0.02 cfs @ 15.59 hrs HW=128.59' (Free Discharge)
 ↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 0.02 cfs @ 0.28 fps)

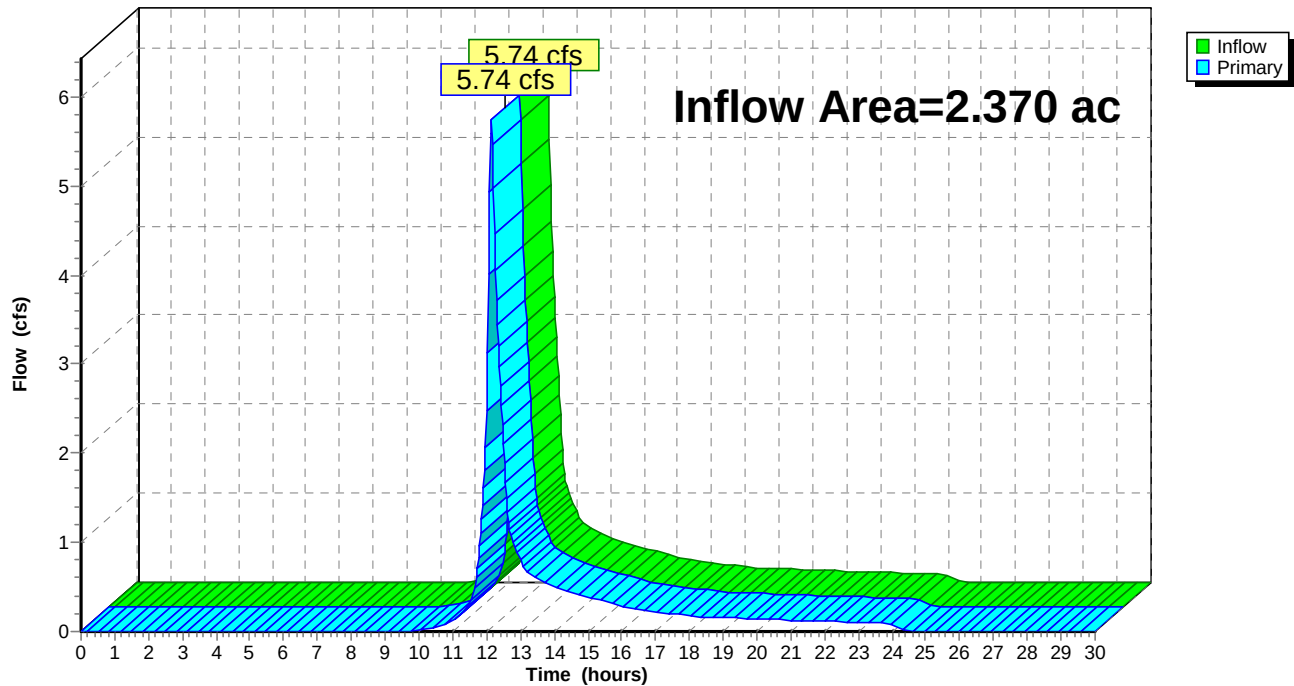
Pond 13P: BIO-3



Summary for Link 3L: PRE-SITE

Inflow Area = 2.370 ac, 7.65% Impervious, Inflow Depth = 2.42" for 25-yr event
Inflow = 5.74 cfs @ 12.15 hrs, Volume= 0.479 af
Primary = 5.74 cfs @ 12.15 hrs, Volume= 0.479 af, Atten= 0%, Lag= 0.0 min

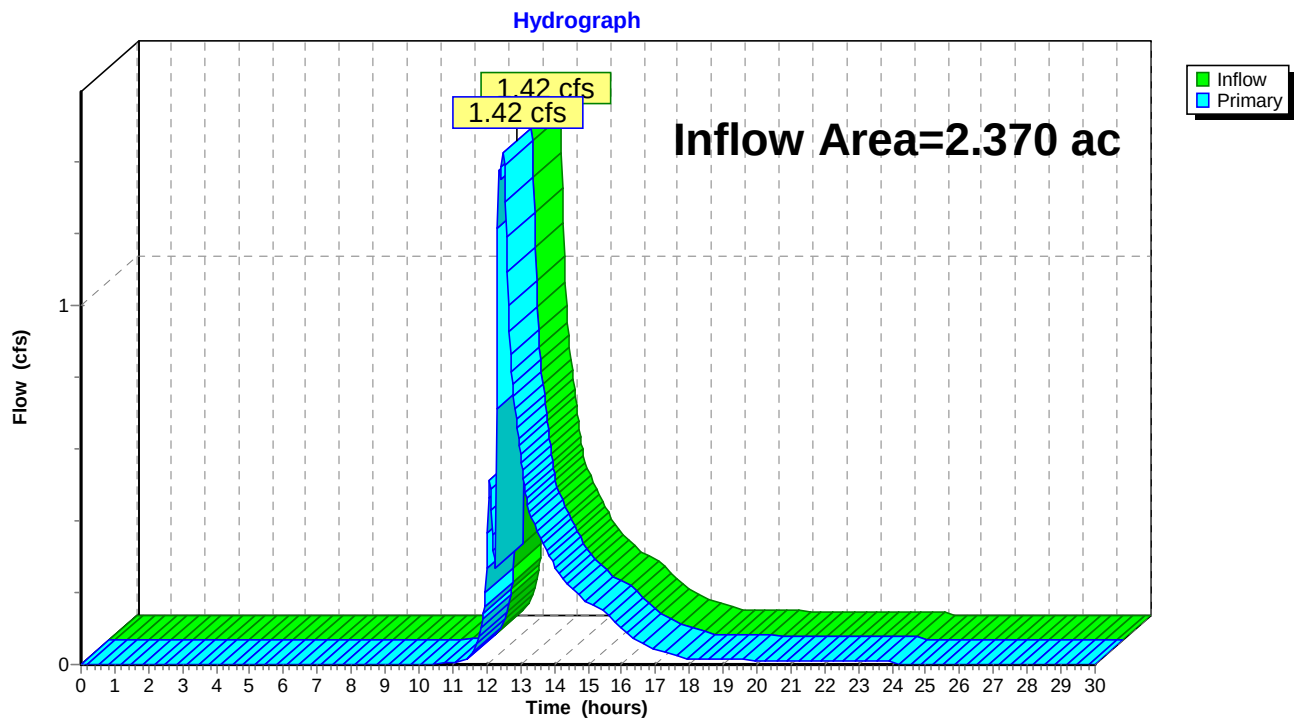
Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 3L: PRE-SITE**Hydrograph**

Summary for Link 7L: POST-SITE

Inflow Area = 2.370 ac, 30.40% Impervious, Inflow Depth = 0.75" for 25-yr event
Inflow = 1.42 cfs @ 12.49 hrs, Volume= 0.147 af
Primary = 1.42 cfs @ 12.49 hrs, Volume= 0.147 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 7L: POST-SITE

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Type III 24-hr 100-yr Rainfall=8.60"

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Time span=0.00-30.00 hrs, dt=0.03 hrs, 1001 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 2S: PRE	Runoff Area=103,234 sf 7.65% Impervious Runoff Depth=4.38" Flow Length=375' Tc=9.9 min CN=65 Runoff=10.61 cfs 0.866 af
Subcatchment 5S: CONT	Runoff Area=7,479 sf 0.00% Impervious Runoff Depth=3.91" Tc=6.0 min CN=61 Runoff=0.78 cfs 0.056 af
Subcatchment 6S: UNC	Runoff Area=9,629 sf 0.00% Impervious Runoff Depth=3.91" Tc=6.0 min CN=61 Runoff=1.00 cfs 0.072 af
Subcatchment 9S: UNITS 14-20	Runoff Area=16,419 sf 41.35% Impervious Runoff Depth=5.71" Tc=6.0 min CN=76 Runoff=2.49 cfs 0.179 af
Subcatchment 10S: UNITS 4-7	Runoff Area=17,061 sf 54.93% Impervious Runoff Depth=6.31" Tc=6.0 min CN=81 Runoff=2.81 cfs 0.206 af
Subcatchment 11S: UNITS 8-13	Runoff Area=11,862 sf 37.48% Impervious Runoff Depth=5.59" Tc=6.0 min CN=75 Runoff=1.76 cfs 0.127 af
Subcatchment 12S: PARKING	Runoff Area=11,116 sf 0.00% Impervious Runoff Depth=4.98" Tc=6.0 min CN=70 Runoff=1.48 cfs 0.106 af
Subcatchment 13S: WEST SWALE	Runoff Area=29,668 sf 36.34% Impervious Runoff Depth=5.47" Tc=6.0 min CN=74 Runoff=4.32 cfs 0.310 af
Reach 14R: WEST SWALE	Avg. Flow Depth=0.37' Max Vel=4.17 fps Inflow=4.32 cfs 0.310 af n=0.030 L=306.0' S=0.0392 '/' Capacity=7.36 cfs Outflow=4.20 cfs 0.310 af
Pond 8P: INFIL-1	Peak Elev=125.69' Storage=3,843 cf Inflow=4.93 cfs 0.465 af Discarded=0.08 cfs 0.116 af Primary=4.66 cfs 0.305 af Outflow=4.74 cfs 0.420 af
Pond 9P: BIO-1	Peak Elev=137.88' Storage=1,573 cf Inflow=2.81 cfs 0.206 af Discarded=0.05 cfs 0.079 af Primary=2.50 cfs 0.127 af Outflow=2.55 cfs 0.206 af
Pond 12P: BIO-2	Peak Elev=133.65' Storage=3,440 cf Inflow=4.16 cfs 0.253 af Discarded=0.06 cfs 0.090 af Primary=2.77 cfs 0.140 af Outflow=2.83 cfs 0.230 af
Pond 13P: BIO-3	Peak Elev=128.80' Storage=5,156 cf Inflow=3.97 cfs 0.285 af Discarded=0.08 cfs 0.128 af Primary=1.23 cfs 0.098 af Outflow=1.31 cfs 0.227 af
Link 3L: PRE-SITE	Inflow=10.61 cfs 0.866 af Primary=10.61 cfs 0.866 af
Link 7L: POST-SITE	Inflow=7.53 cfs 0.517 af Primary=7.53 cfs 0.517 af

Total Runoff Area = 4.740 ac Runoff Volume = 1.922 af Average Runoff Depth = 4.87"
80.97% Pervious = 3.838 ac 19.03% Impervious = 0.902 ac

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Type III 24-hr 100-yr Rainfall=8.60"

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Summary for Subcatchment 2S: PRE

Runoff = 10.61 cfs @ 12.14 hrs, Volume= 0.866 af, Depth= 4.38"
Routed to Link 3L : PRE-SITE

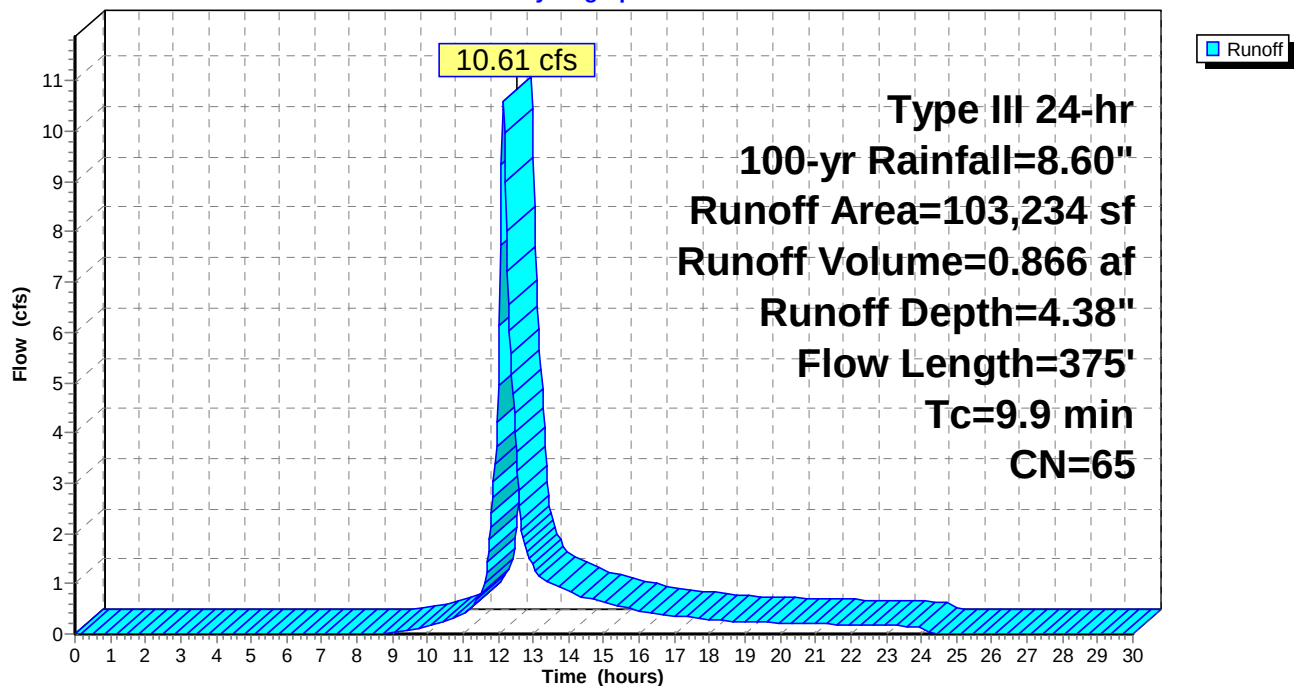
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

	Area (sf)	CN	Description
*	7,898	98	Ex. House/Barn/Pavement, HSG B
*	4,797	85	Onsite Gravel Driveway, HSG B
	90,539	61	>75% Grass cover, Good, HSG B
	103,234	65	Weighted Average
	95,336	62	92.35% Pervious Area
	7,898	98	7.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	107	0.0750	0.20		Sheet Flow, Grass: Dense n= 0.240 P2= 3.33"
1.2	268	0.0520	3.67		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
9.9	375	Total			

Subcatchment 2S: PRE

Hydrograph



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Type III 24-hr 100-yr Rainfall=8.60"

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Summary for Subcatchment 5S: CONT

Runoff = 0.78 cfs @ 12.09 hrs, Volume= 0.056 af, Depth= 3.91"
Routed to Pond 8P : INFIL-1

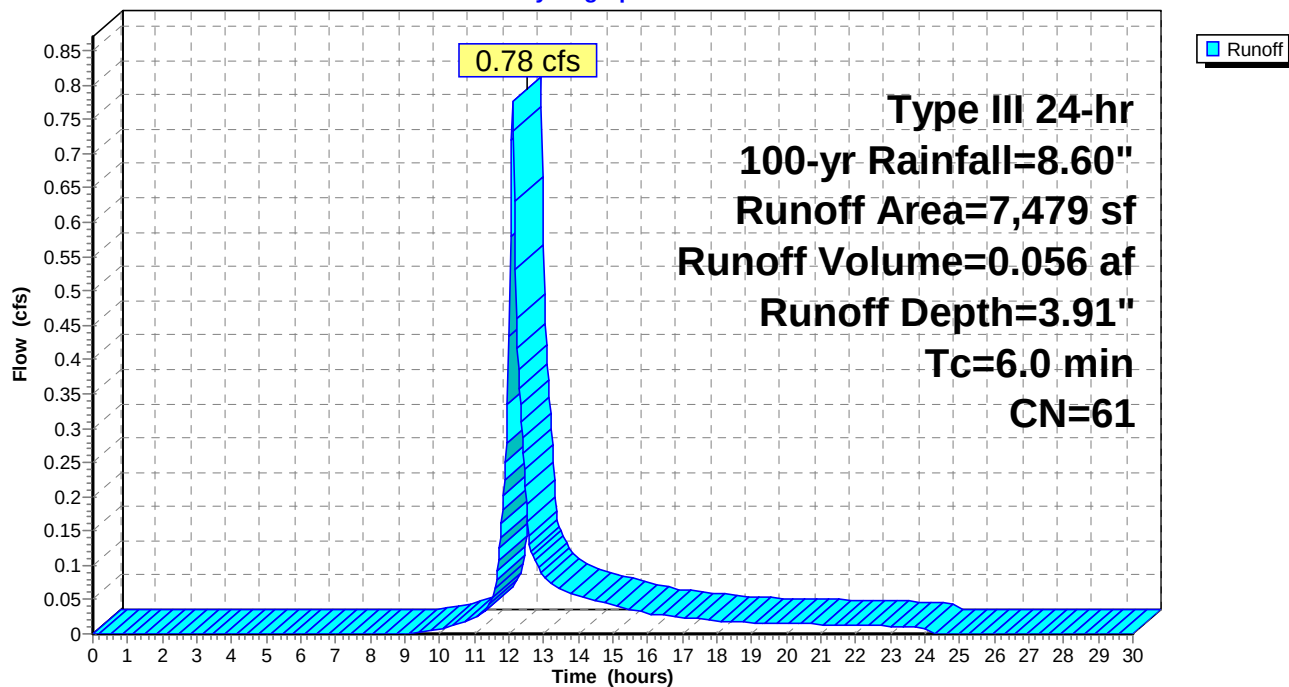
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

Area (sf)	CN	Description
7,479	61	>75% Grass cover, Good, HSG B
7,479	61	100.00% Pervious Area

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

Subcatchment 5S: CONT

Hydrograph



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Type III 24-hr 100-yr Rainfall=8.60"

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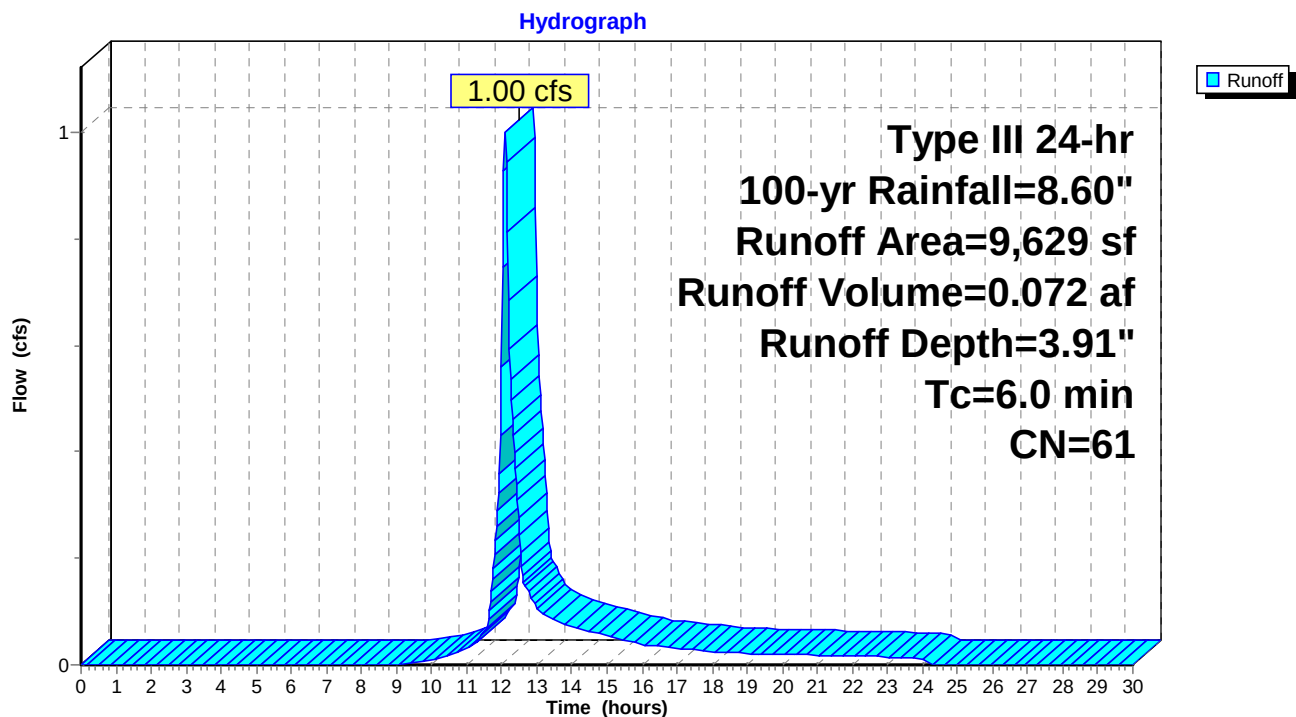
Summary for Subcatchment 6S: UNC

Runoff = 1.00 cfs @ 12.09 hrs, Volume= 0.072 af, Depth= 3.91"
Routed to Link 7L : POST-SITE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

Area (sf)	CN	Description
6,242	61	>75% Grass cover, Good, HSG B
3,387	61	>75% Grass cover, Good, HSG B
9,629	61	Weighted Average
9,629	61	100.00% Pervious Area

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

Subcatchment 6S: UNC

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Type III 24-hr 100-yr Rainfall=8.60"

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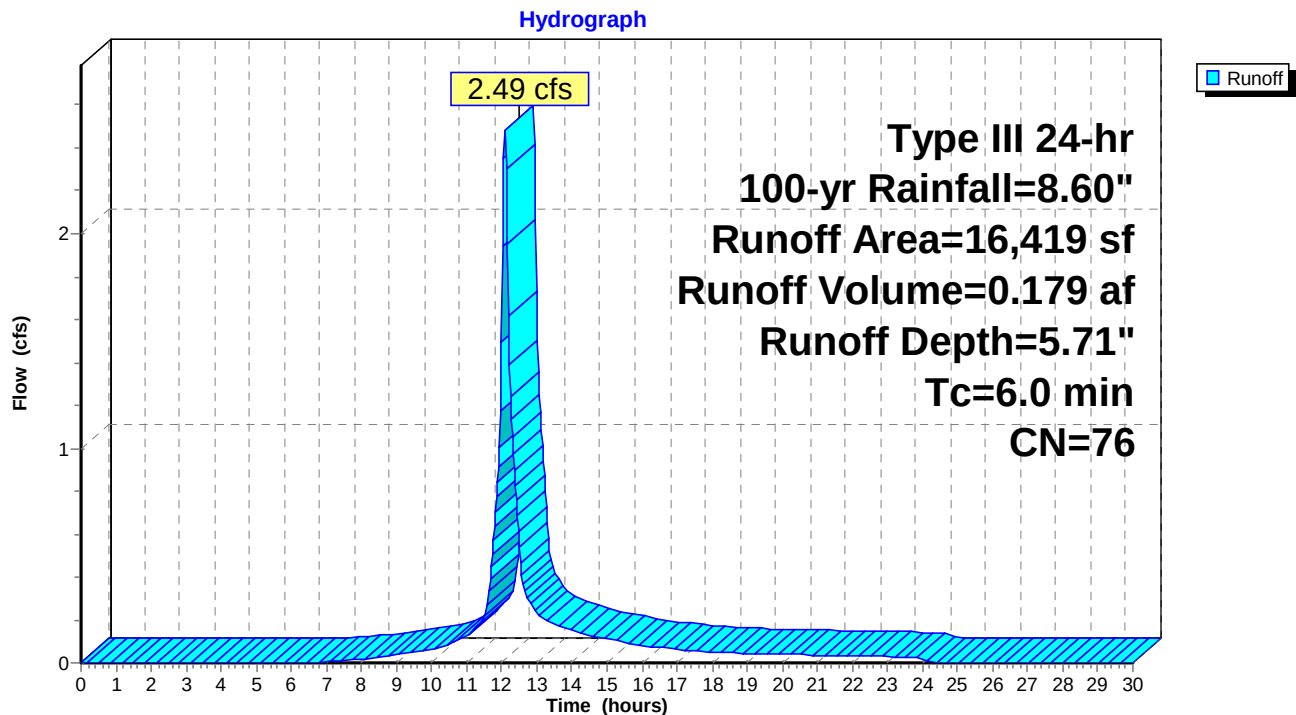
Summary for Subcatchment 9S: UNITS 14-20

Runoff = 2.49 cfs @ 12.09 hrs, Volume= 0.179 af, Depth= 5.71"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

	Area (sf)	CN	Description
*	5,187	98	(7) New Roofs, HSG B
	1,602	98	Paved parking, HSG B
	9,630	61	>75% Grass cover, Good, HSG B
	16,419	76	Weighted Average
	9,630	61	58.65% Pervious Area
	6,789	98	41.35% Impervious Area

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

Subcatchment 9S: UNITS 14-20

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Type III 24-hr 100-yr Rainfall=8.60"

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Summary for Subcatchment 10S: UNITS 4-7

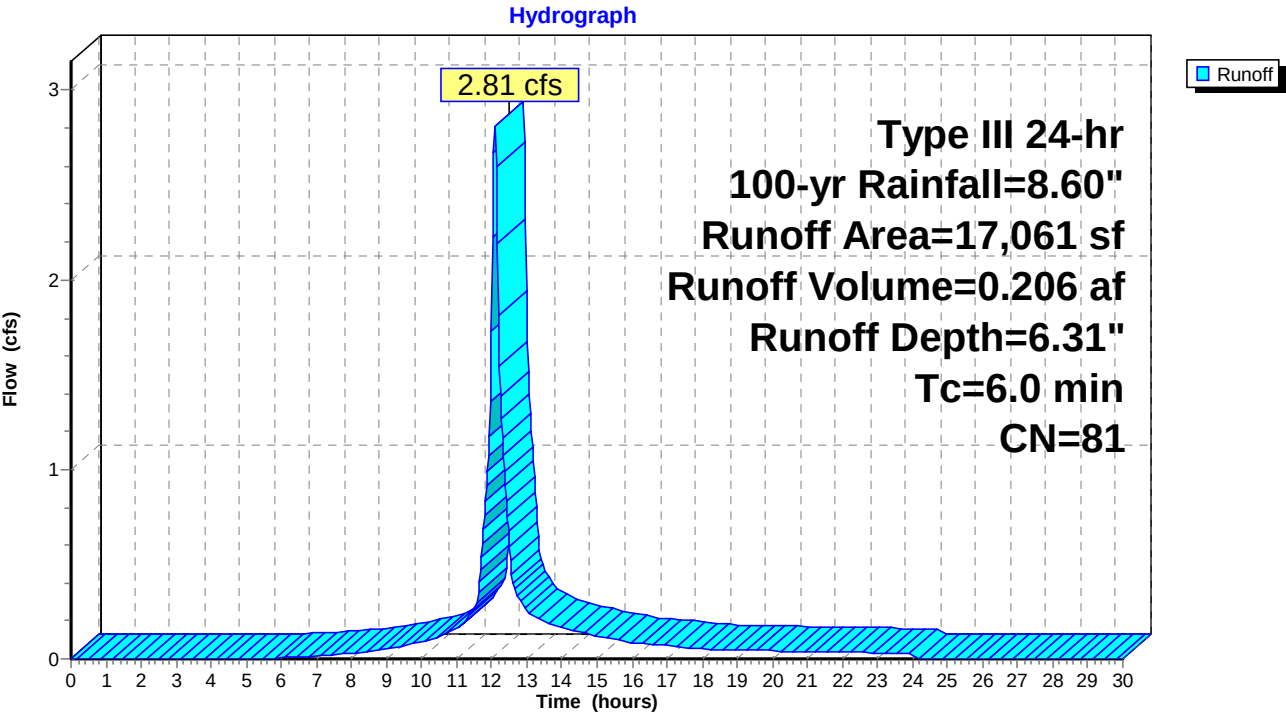
Runoff = 2.81 cfs @ 12.09 hrs, Volume= 0.206 af, Depth= 6.31"
Routed to Pond 9P : BIO-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

	Area (sf)	CN	Description
*	2,964	98	(4) New Roofs, HSG B
*	6,407	98	Ex. Impervious, HSG B
	7,690	61	>75% Grass cover, Good, HSG B
	17,061	81	Weighted Average
	7,690	61	45.07% Pervious Area
	9,371	98	54.93% Impervious Area

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

Subcatchment 10S: UNITS 4-7



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Type III 24-hr 100-yr Rainfall=8.60"

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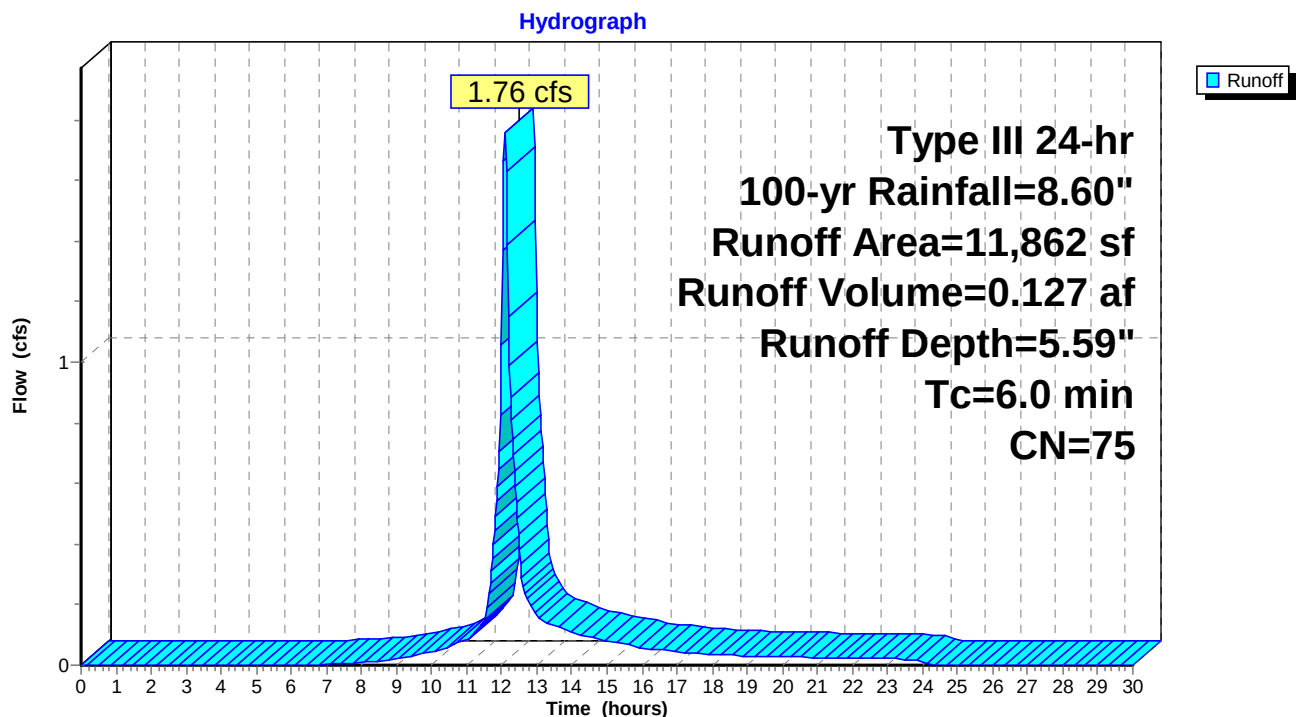
Summary for Subcatchment 11S: UNITS 8-13

Runoff = 1.76 cfs @ 12.09 hrs, Volume= 0.127 af, Depth= 5.59"
Routed to Pond 12P : BIO-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

	Area (sf)	CN	Description
*	4,446	98	(6) nEW Roofs, HSG B
	7,416	61	>75% Grass cover, Good, HSG B
	11,862	75	Weighted Average
	7,416	61	62.52% Pervious Area
	4,446	98	37.48% Impervious Area

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

Subcatchment 11S: UNITS 8-13

Summary for Subcatchment 12S: PARKING

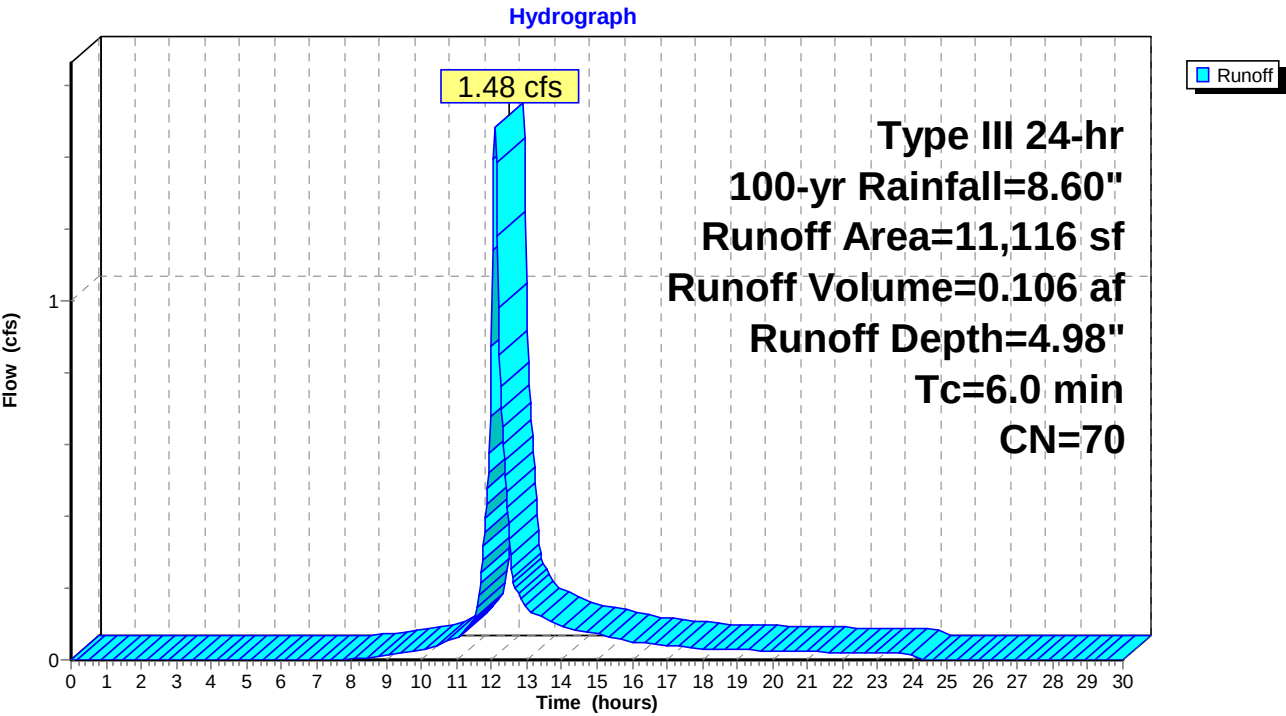
Runoff = 1.48 cfs @ 12.09 hrs, Volume= 0.106 af, Depth= 4.98"
Routed to Pond 13P : BIO-3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

	Area (sf)	CN	Description
*	11,116	70	Pervious pavement, HSG B
	11,116	70	100.00% Pervious Area

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

Subcatchment 12S: PARKING



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Type III 24-hr 100-yr Rainfall=8.60"

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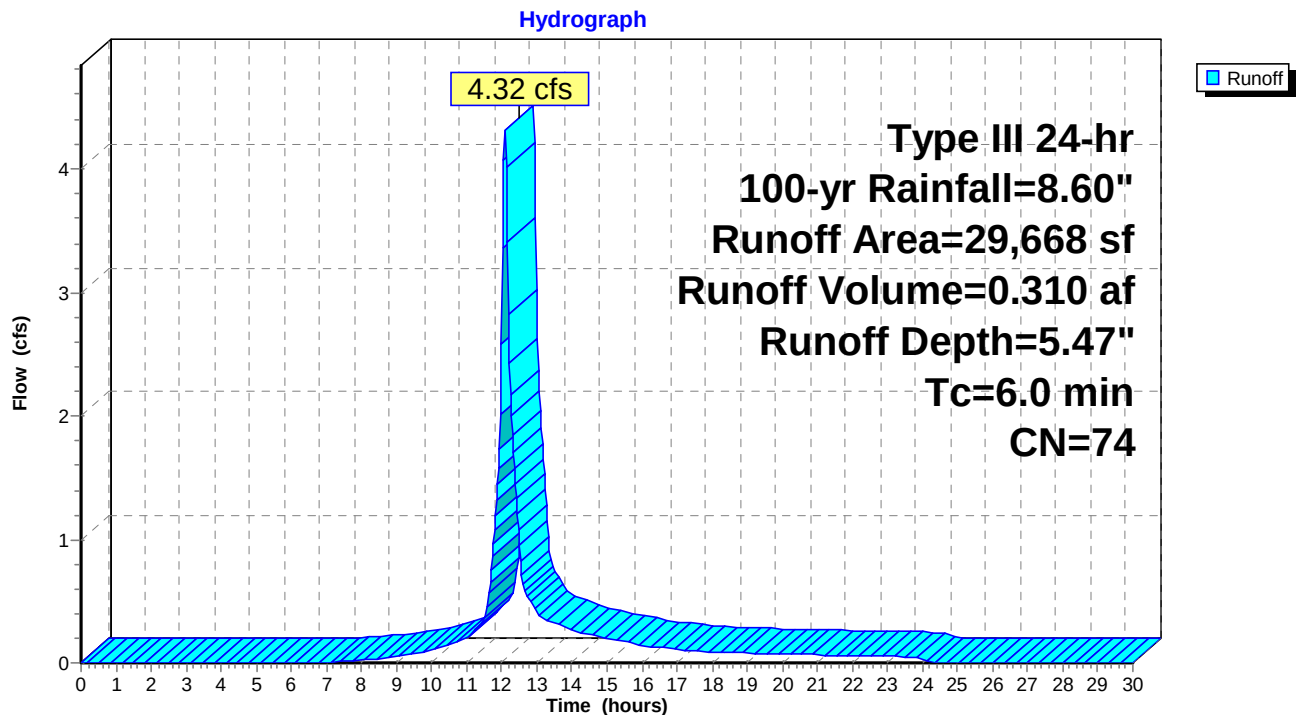
Summary for Subcatchment 13S: WEST SWALE

Runoff = 4.32 cfs @ 12.09 hrs, Volume= 0.310 af, Depth= 5.47"
Routed to Reach 14R : WEST SWALE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
Type III 24-hr 100-yr Rainfall=8.60"

	Area (sf)	CN	Description
*	3,613	98	Exist. Roofs, HSG B
*	7,168	98	New Paved parking, HSG B
	18,887	61	>75% Grass cover, Good, HSG B
	29,668	74	Weighted Average
	18,887	61	63.66% Pervious Area
	10,781	98	36.34% Impervious Area

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

Subcatchment 13S: WEST SWALE

BAYVIEW-REVISED FOR TOWN

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Type III 24-hr 100-yr Rainfall=8.60"

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Summary for Reach 14R: WEST SWALE

Inflow Area = 0.681 ac, 36.34% Impervious, Inflow Depth = 5.47" for 100-yr event
Inflow = 4.32 cfs @ 12.09 hrs, Volume= 0.310 af
Outflow = 4.20 cfs @ 12.12 hrs, Volume= 0.310 af, Atten= 3%, Lag= 2.2 min
Routed to Pond 8P : INFIL-1

Routing by Stor-Ind+Trans method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Max. Velocity= 4.17 fps, Min. Travel Time= 1.2 min

Avg. Velocity= 1.16 fps, Avg. Travel Time= 4.4 min

Peak Storage= 312 cf @ 12.10 hrs

Average Depth at Peak Storage= 0.37' , Surface Width= 3.49'

Bank-Full Depth= 0.50' Flow Area= 1.5 sf, Capacity= 7.36 cfs

2.00' x 0.50' deep channel, n= 0.030 Earth, grassed & winding

Side Slope Z-value= 2.0 '/' Top Width= 4.00'

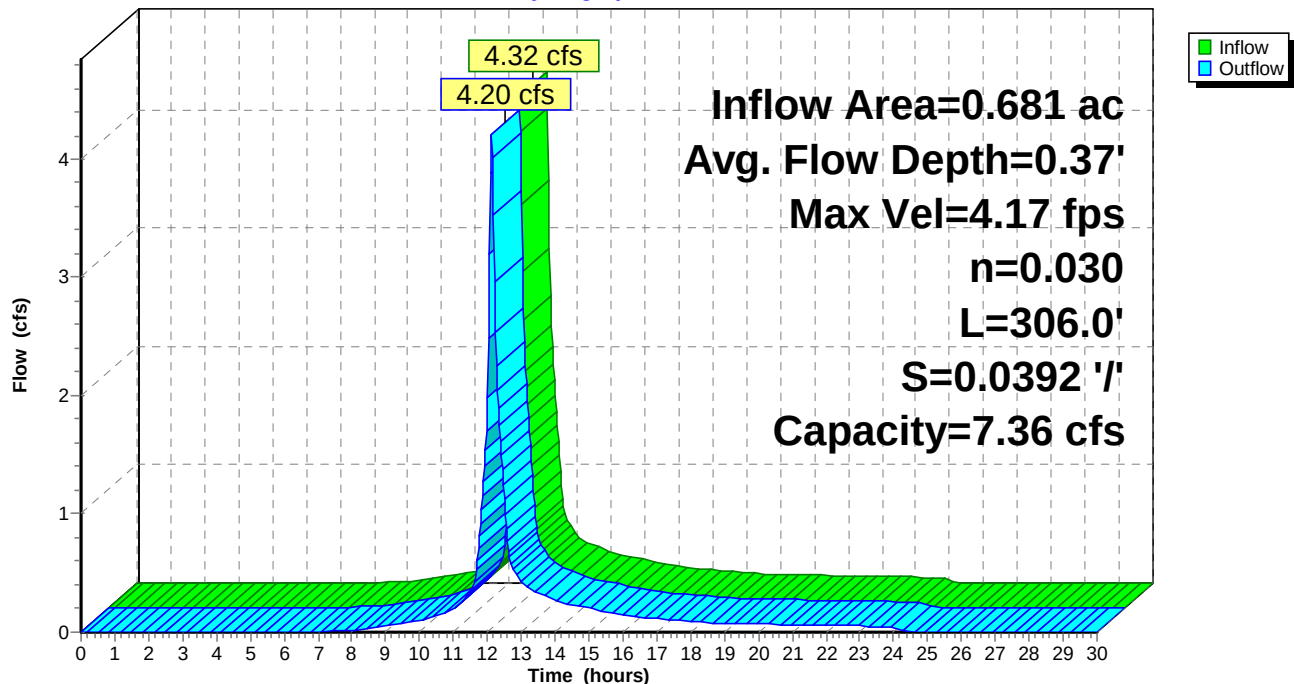
Length= 306.0' Slope= 0.0392 '/'

Inlet Invert= 138.00', Outlet Invert= 126.00'



Reach 14R: WEST SWALE

Hydrograph



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Type III 24-hr 100-yr Rainfall=8.60"

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Summary for Pond 8P: INFIL-1

Inflow Area = 1.485 ac, 27.16% Impervious, Inflow Depth = 3.75" for 100-yr event
 Inflow = 4.93 cfs @ 12.12 hrs, Volume= 0.465 af
 Outflow = 4.74 cfs @ 12.15 hrs, Volume= 0.420 af, Atten= 4%, Lag= 1.7 min
 Discarded = 0.08 cfs @ 12.15 hrs, Volume= 0.116 af
 Primary = 4.66 cfs @ 12.15 hrs, Volume= 0.305 af
 Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 125.69' @ 12.15 hrs Surf.Area= 3,198 sf Storage= 3,843 cf

Plug-Flow detention time= 129.5 min calculated for 0.420 af (90% of inflow)
 Center-of-Mass det. time= 86.8 min (905.4 - 818.6)

Volume	Invert	Avail.Storage	Storage Description
#1	124.00'	4,879 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
124.00	1,356	0	0
125.00	2,432	1,894	1,894
126.00	3,538	2,985	4,879

Device	Routing	Invert	Outlet Devices
#1	Discarded	124.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	125.53'	30.0' long x 6.0' breadth Broad-Crested Rectangular Weir
Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00			
2.50 3.00 3.50 4.00 4.50 5.00 5.50			
Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65			
2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83			

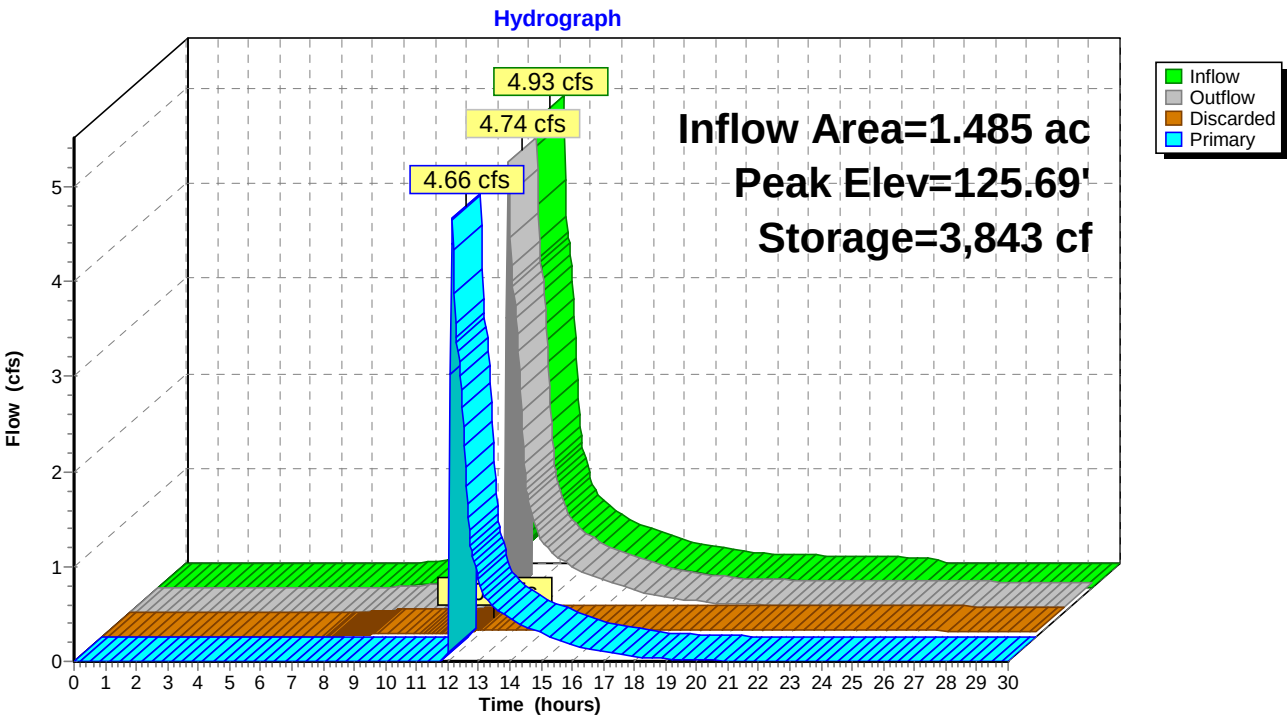
Discarded OutFlow Max=0.08 cfs @ 12.15 hrs HW=125.69' (Free Discharge)

↑ **1=Exfiltration** (Exfiltration Controls 0.08 cfs)

Primary OutFlow Max=4.64 cfs @ 12.15 hrs HW=125.69' (Free Discharge)

↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 4.64 cfs @ 0.95 fps)

Pond 8P: INFIL-1



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Type III 24-hr 100-yr Rainfall=8.60"

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Summary for Pond 9P: BIO-1

Inflow Area = 0.392 ac, 54.93% Impervious, Inflow Depth = 6.31" for 100-yr event
 Inflow = 2.81 cfs @ 12.09 hrs, Volume= 0.206 af
 Outflow = 2.55 cfs @ 12.13 hrs, Volume= 0.206 af, Atten= 10%, Lag= 2.4 min
 Discarded = 0.05 cfs @ 12.13 hrs, Volume= 0.079 af
 Primary = 2.50 cfs @ 12.13 hrs, Volume= 0.127 af
 Routed to Pond 12P : BIO-2

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 137.88' @ 12.13 hrs Surf.Area= 2,006 sf Storage= 1,573 cf

Plug-Flow detention time= 107.5 min calculated for 0.206 af (100% of inflow)
 Center-of-Mass det. time= 107.0 min (904.9 - 797.9)

Volume	Invert	Avail.Storage	Storage Description
#1	137.00'	1,824 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

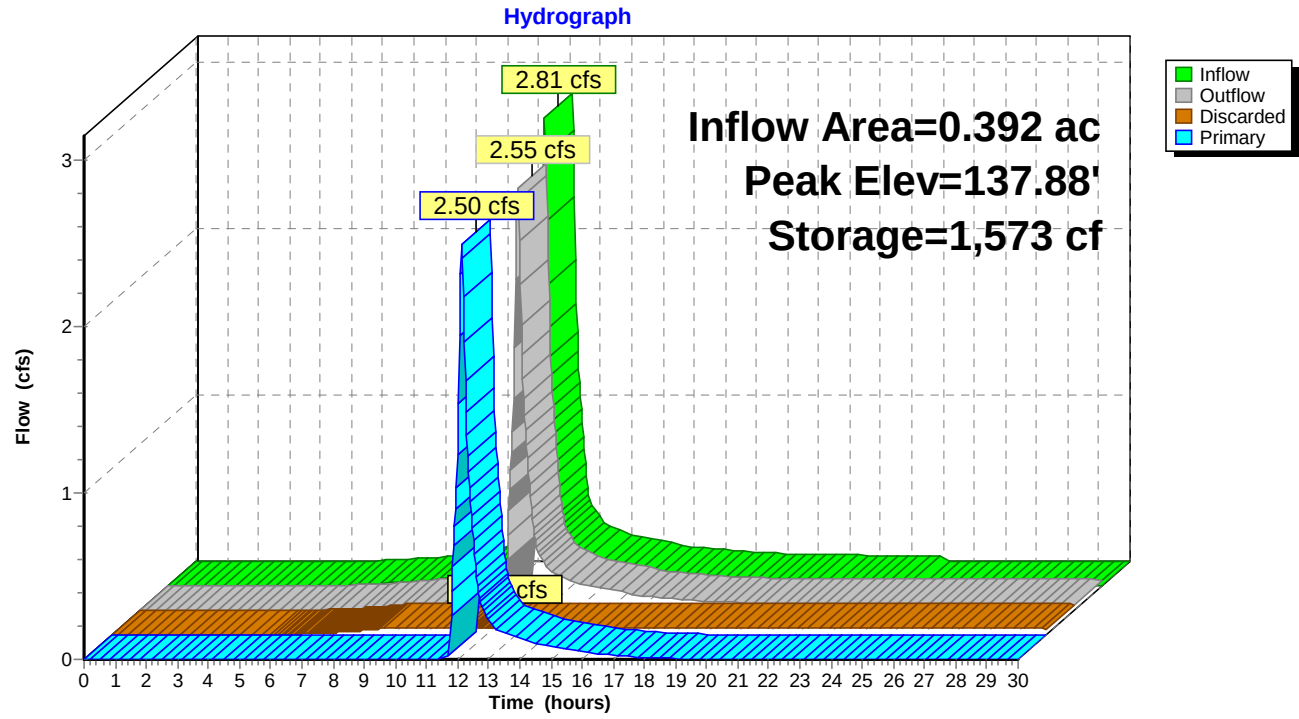
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
137.00	1,582	0	0
138.00	2,066	1,824	1,824

Device	Routing	Invert	Outlet Devices
#1	Discarded	137.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	137.58'	6.0' long x 2.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50
			Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88
			2.85 3.07 3.20 3.32

Discarded OutFlow Max=0.05 cfs @ 12.13 hrs HW=137.88' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=2.48 cfs @ 12.13 hrs HW=137.88' (Free Discharge)
 ↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 2.48 cfs @ 1.40 fps)

Pond 9P: BIO-1



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Type III 24-hr 100-yr Rainfall=8.60"

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Summary for Pond 12P: BIO-2

Inflow Area = 0.664 ac, 47.77% Impervious, Inflow Depth = 4.58" for 100-yr event
 Inflow = 4.16 cfs @ 12.11 hrs, Volume= 0.253 af
 Outflow = 2.83 cfs @ 12.22 hrs, Volume= 0.230 af, Atten= 32%, Lag= 6.8 min
 Discarded = 0.06 cfs @ 12.22 hrs, Volume= 0.090 af
 Primary = 2.77 cfs @ 12.22 hrs, Volume= 0.140 af
 Routed to Link 7L : POST-SITE

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 133.65' @ 12.22 hrs Surf.Area= 2,572 sf Storage= 3,440 cf

Plug-Flow detention time= 177.7 min calculated for 0.230 af (91% of inflow)
 Center-of-Mass det. time= 142.1 min (933.8 - 791.8)

Volume	Invert	Avail.Storage	Storage Description
#1	132.00'	4,385 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
132.00	1,619	0	0
133.00	2,184	1,902	1,902
134.00	2,783	2,484	4,385

Device	Routing	Invert	Outlet Devices
#1	Discarded	132.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	133.33'	6.0' long x 2.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50
			Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88
			2.85 3.07 3.20 3.32

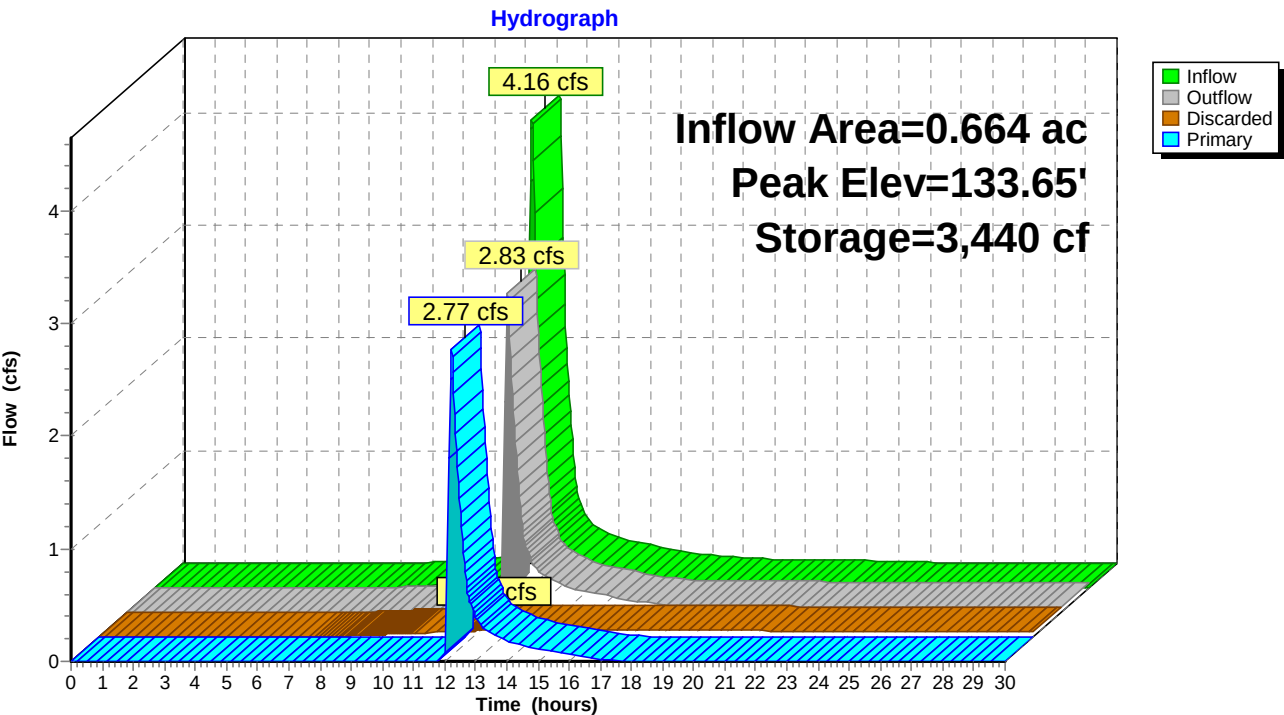
Discarded OutFlow Max=0.06 cfs @ 12.22 hrs HW=133.64' (Free Discharge)

↑ **1=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=2.73 cfs @ 12.22 hrs HW=133.64' (Free Discharge)

↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 2.73 cfs @ 1.45 fps)

Pond 12P: BIO-2



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Type III 24-hr 100-yr Rainfall=8.60"

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Summary for Pond 13P: BIO-3

Inflow Area = 0.632 ac, 24.66% Impervious, Inflow Depth = 5.42" for 100-yr event
 Inflow = 3.97 cfs @ 12.09 hrs, Volume= 0.285 af
 Outflow = 1.31 cfs @ 12.40 hrs, Volume= 0.227 af, Atten= 67%, Lag= 18.7 min
 Discarded = 0.08 cfs @ 12.40 hrs, Volume= 0.128 af
 Primary = 1.23 cfs @ 12.40 hrs, Volume= 0.098 af
 Routed to Pond 8P : INFIL-1

Routing by Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs
 Peak Elev= 128.80' @ 12.40 hrs Surf.Area= 3,360 sf Storage= 5,156 cf

Plug-Flow detention time= 276.1 min calculated for 0.227 af (80% of inflow)
 Center-of-Mass det. time= 198.3 min (1,012.1 - 813.7)

Volume	Invert	Avail.Storage	Storage Description
#1	127.00'	5,843 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

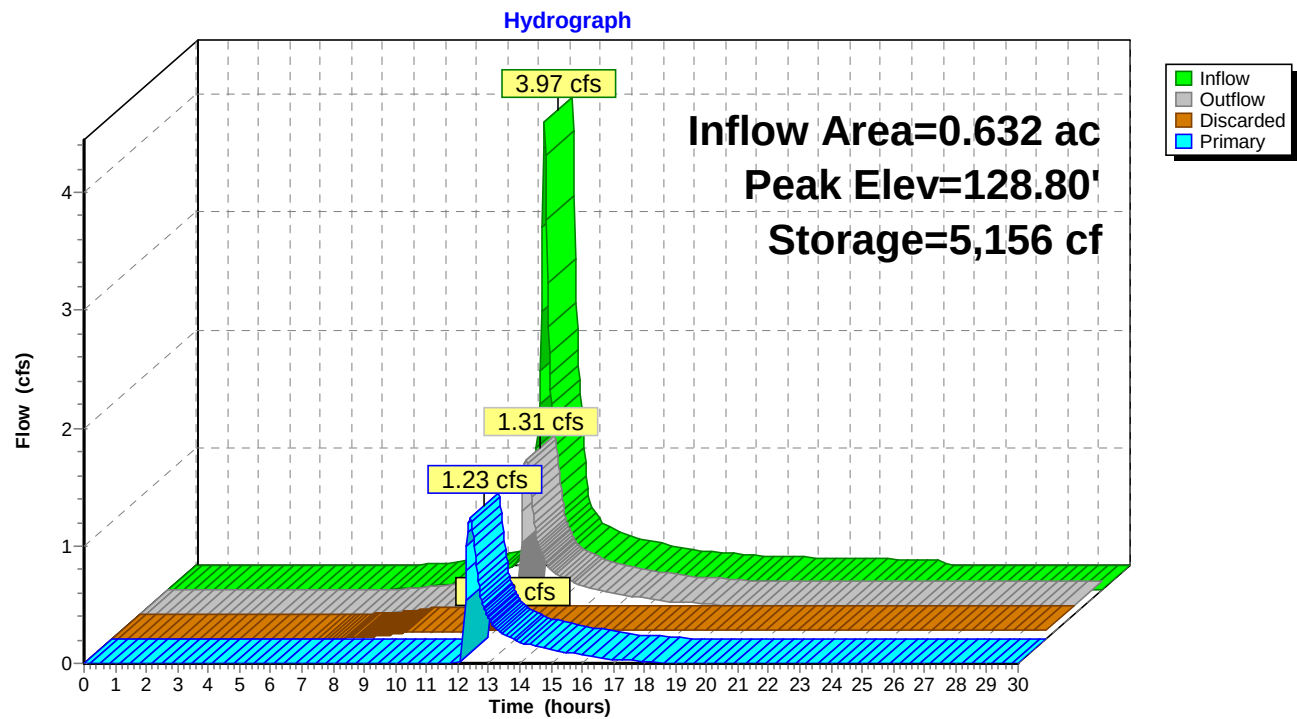
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
127.00	2,383	0	0
128.00	2,915	2,649	2,649
129.00	3,472	3,194	5,843

Device	Routing	Invert	Outlet Devices
#1	Discarded	127.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	128.58'	5.0' long x 4.0' breadth Broad-Crested Rectangular Weir
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00
			2.50 3.00 3.50 4.00 4.50 5.00 5.50
			Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66
			2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Discarded OutFlow Max=0.08 cfs @ 12.40 hrs HW=128.80' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.08 cfs)

Primary OutFlow Max=1.22 cfs @ 12.40 hrs HW=128.80' (Free Discharge)
 ↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 1.22 cfs @ 1.12 fps)

Pond 13P: BIO-3



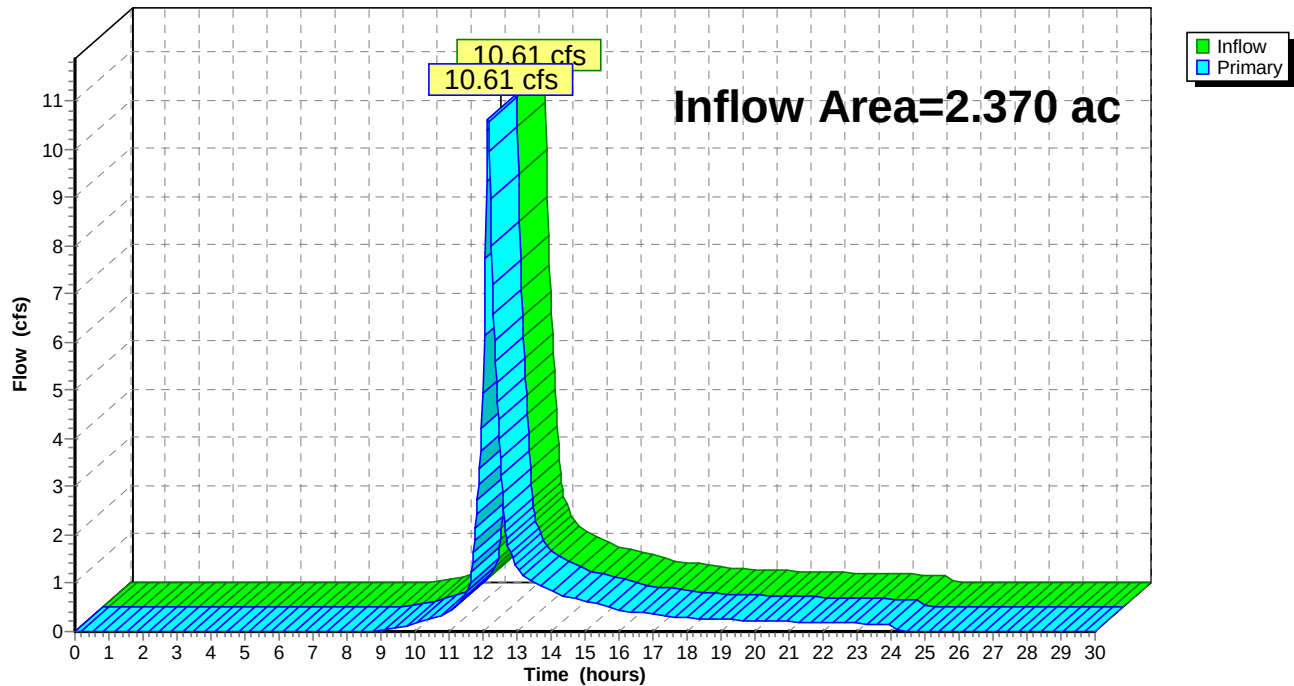
Summary for Link 3L: PRE-SITE

Inflow Area = 2.370 ac, 7.65% Impervious, Inflow Depth = 4.38" for 100-yr event
Inflow = 10.61 cfs @ 12.14 hrs, Volume= 0.866 af
Primary = 10.61 cfs @ 12.14 hrs, Volume= 0.866 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 3L: PRE-SITE

Hydrograph



Summary for Link 7L: POST-SITE

Inflow Area = 2.370 ac, 30.40% Impervious, Inflow Depth = 2.62" for 100-yr event
Inflow = 7.53 cfs @ 12.18 hrs, Volume= 0.517 af
Primary = 7.53 cfs @ 12.18 hrs, Volume= 0.517 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.03 hrs

Link 7L: POST-SITE