

Proposed Hydrology

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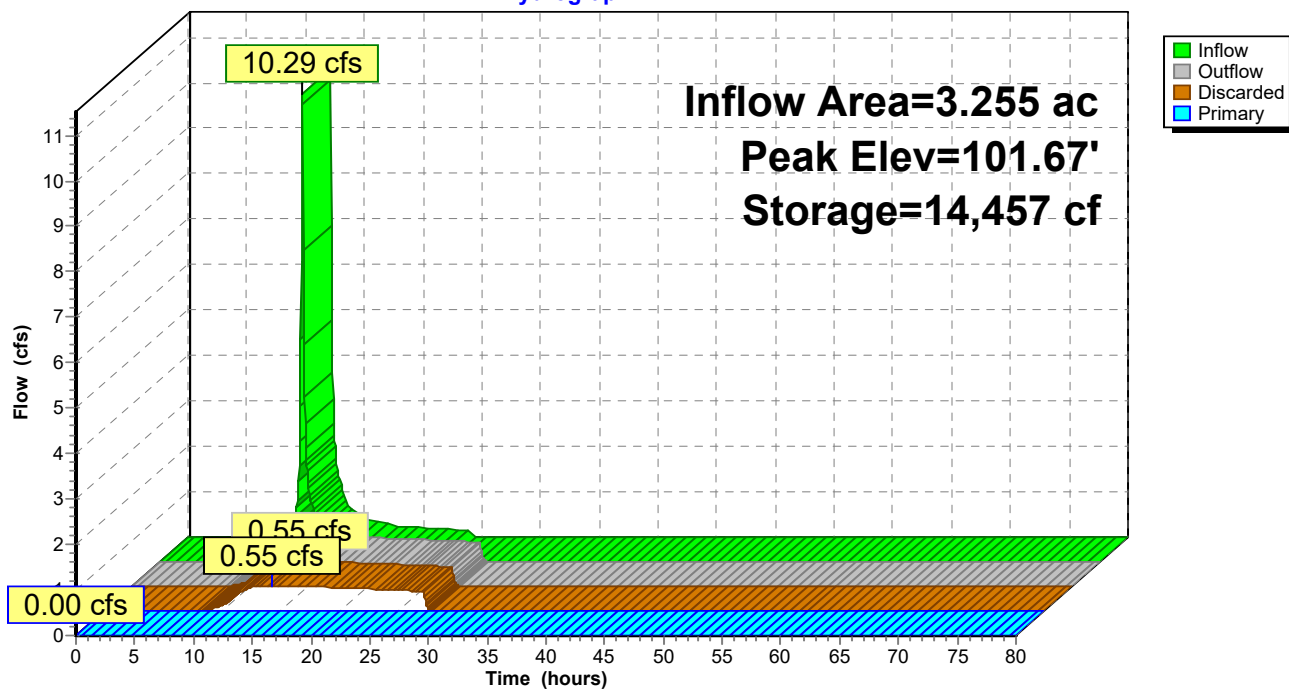
NRCC 24-hr C 10-Year Rainfall=5.05"

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Pond BAS 2-F: BAS 2-F

Hydrograph



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Summary for Pond BAS 3-A: BAS 3-A

Inflow Area = 2.218 ac, 40.95% Impervious, Inflow Depth = 3.22" for 10-Year event
Inflow = 8.61 cfs @ 12.13 hrs, Volume= 0.595 af
Outflow = 0.21 cfs @ 17.27 hrs, Volume= 0.595 af, Atten= 98%, Lag= 308.4 min
Discarded = 0.21 cfs @ 17.27 hrs, Volume= 0.595 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 103.50' @ 17.27 hrs Surf.Area= 9,027 sf Storage= 16,701 cf

Plug-Flow detention time= 876.9 min calculated for 0.595 af (100% of inflow)
Center-of-Mass det. time= 877.5 min (1,698.6 - 821.2)

Volume	Invert	Avail.Storage	Storage Description
#1	101.00'	21,516 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
101.00	4,600	0	0	4,600
104.00	10,100	21,516	21,516	10,172

Device	Routing	Invert	Outlet Devices
#1	Discarded	101.00'	1.020 in/hr Exfiltration over Wetted area
#2	Primary	103.80'	20.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.21 cfs @ 17.27 hrs HW=103.50' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.21 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=101.00' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

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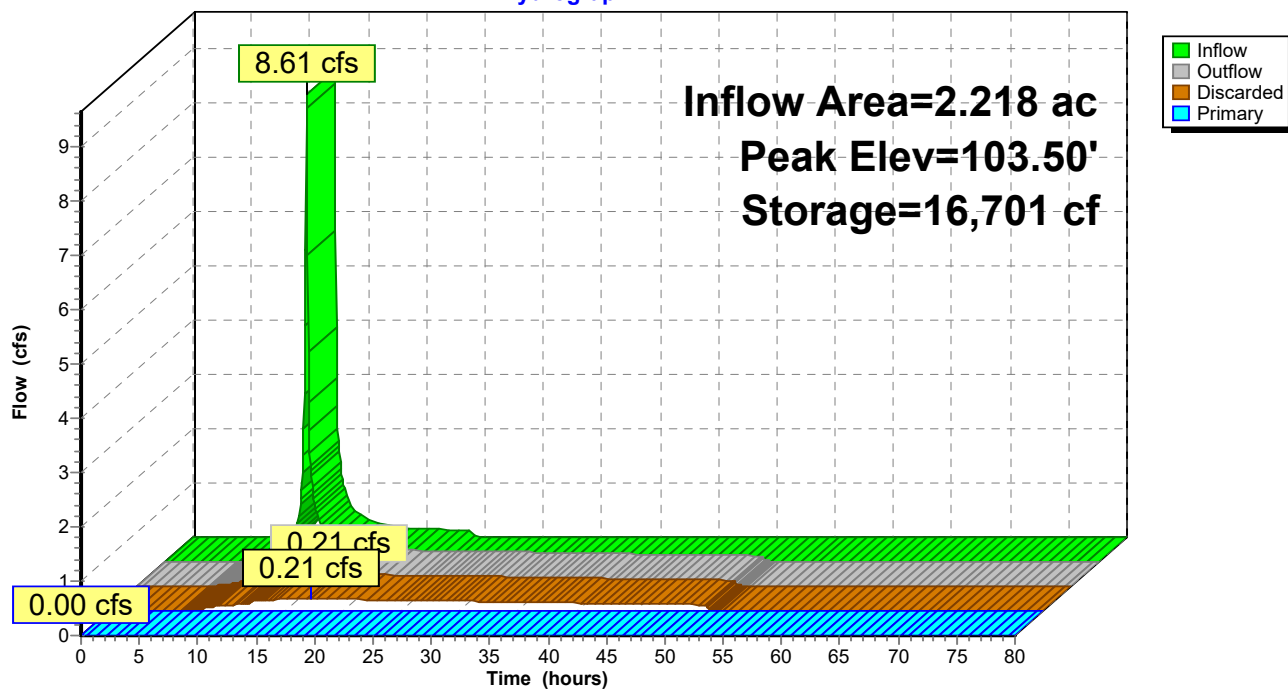
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Pond BAS 3-A: BAS 3-A

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Summary for Pond BAS 3-B: BAS 3-B

Inflow Area = 6.110 ac, 38.90% Impervious, Inflow Depth = 2.40" for 10-Year event
Inflow = 18.03 cfs @ 12.13 hrs, Volume= 1.224 af
Outflow = 0.37 cfs @ 20.44 hrs, Volume= 1.224 af, Atten= 98%, Lag= 498.7 min
Discarded = 0.37 cfs @ 20.44 hrs, Volume= 1.224 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 99.96' @ 20.44 hrs Surf.Area= 15,451 sf Storage= 36,514 cf

Plug-Flow detention time= 1,101.7 min calculated for 1.223 af (100% of inflow)
Center-of-Mass det. time= 1,102.3 min (1,949.9 - 847.6)

Volume	Invert	Avail.Storage	Storage Description
#1	97.00'	53,920 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
97.00	9,500	0	0	9,500
101.00	17,900	53,920	53,920	18,059

Device	Routing	Invert	Outlet Devices
#1	Discarded	97.00'	1.020 in/hr Exfiltration over Wetted area
#2	Primary	100.70'	8.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.37 cfs @ 20.44 hrs HW=99.96' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.37 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=97.00' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

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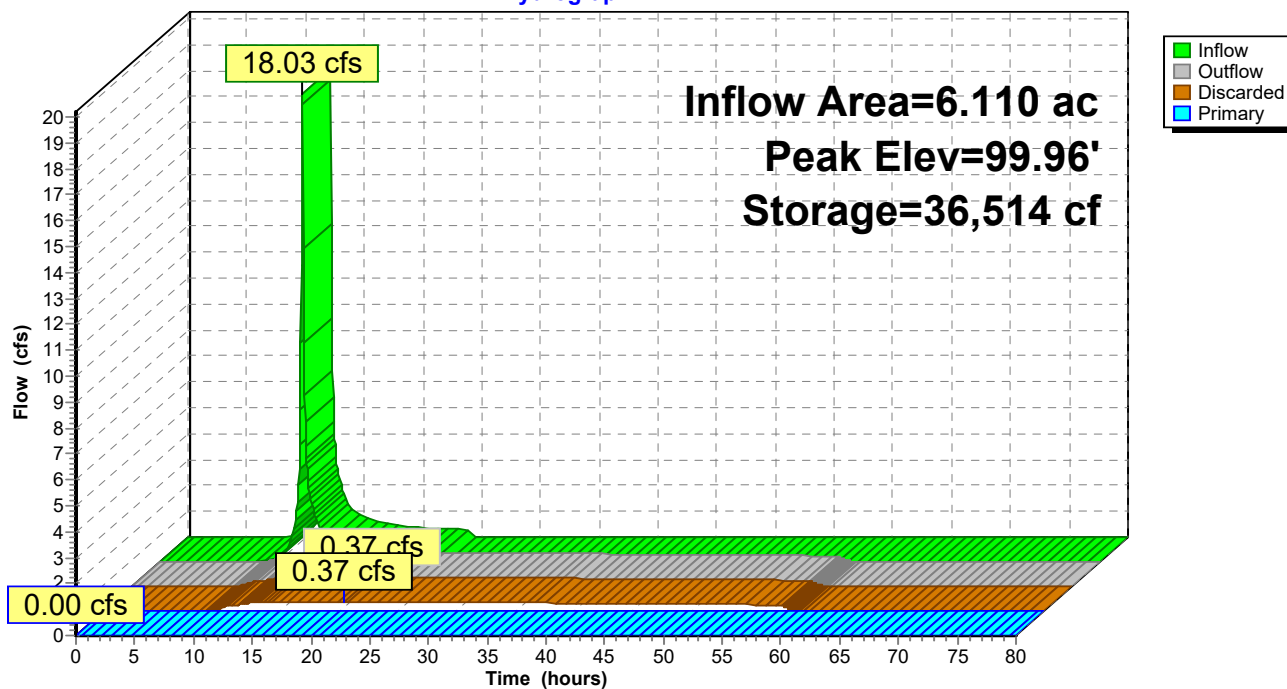
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Pond BAS 3-B: BAS 3-B

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Summary for Pond BAS 6-A: BAS 6-A

Inflow Area = 3.389 ac, 43.46% Impervious, Inflow Depth = 2.66" for 10-Year event
Inflow = 11.07 cfs @ 12.13 hrs, Volume= 0.753 af
Outflow = 0.37 cfs @ 16.09 hrs, Volume= 0.753 af, Atten= 97%, Lag= 237.2 min
Discarded = 0.37 cfs @ 16.09 hrs, Volume= 0.753 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 89.31' @ 16.09 hrs Surf.Area= 15,512 sf Storage= 18,596 cf

Plug-Flow detention time= 542.0 min calculated for 0.752 af (100% of inflow)
Center-of-Mass det. time= 542.1 min (1,381.3 - 839.1)

Volume	Invert	Avail.Storage	Storage Description
#1	88.00'	47,858 cf	Custom Stage Data (Conic) Listed below (Recalc)

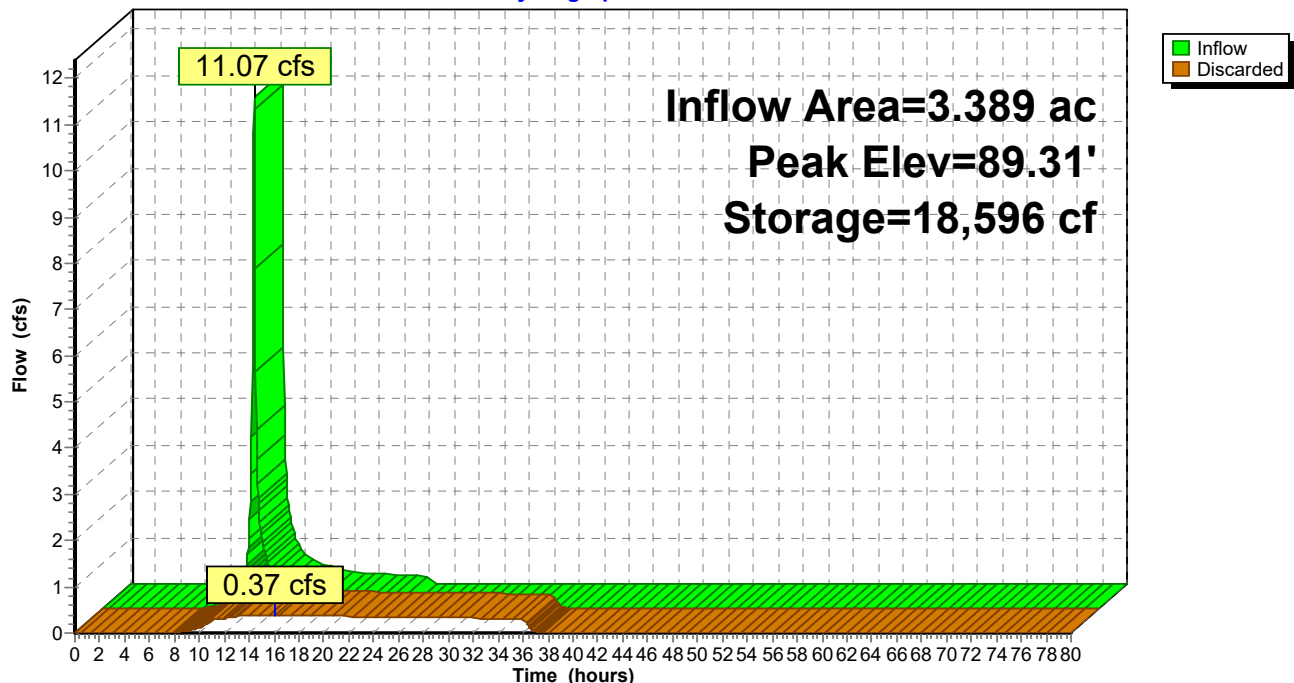
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
88.00	13,000	0	0	13,000
91.00	19,100	47,858	47,858	19,246

Device	Routing	Invert	Outlet Devices
#1	Discarded	88.00'	1.020 in/hr Exfiltration over Wetted area

Discarded OutFlow Max=0.37 cfs @ 16.09 hrs HW=89.31' (Free Discharge)
↑1=Exfiltration (Exfiltration Controls 0.37 cfs)

Pond BAS 6-A: BAS 6-A

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Summary for Pond BAS 7-A: BAS 7-A

Inflow Area = 4.980 ac, 47.17% Impervious, Inflow Depth = 2.32" for 10-Year event
Inflow = 14.18 cfs @ 12.13 hrs, Volume= 0.963 af
Outflow = 0.38 cfs @ 17.61 hrs, Volume= 0.963 af, Atten= 97%, Lag= 328.8 min
Discarded = 0.38 cfs @ 17.61 hrs, Volume= 0.963 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 93.01' @ 17.61 hrs Surf.Area= 16,091 sf Storage= 26,162 cf

Plug-Flow detention time= 776.7 min calculated for 0.962 af (100% of inflow)
Center-of-Mass det. time= 777.0 min (1,627.4 - 850.4)

Volume	Invert	Avail.Storage	Storage Description
#1	91.00'	43,803 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
91.00	10,200	0	0	10,200
94.00	19,500	43,803	43,803	19,588

Device	Routing	Invert	Outlet Devices
#1	Discarded	91.00'	1.020 in/hr Exfiltration over Wetted area
#2	Primary	93.87'	20.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.38 cfs @ 17.61 hrs HW=93.01' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.38 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=91.00' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

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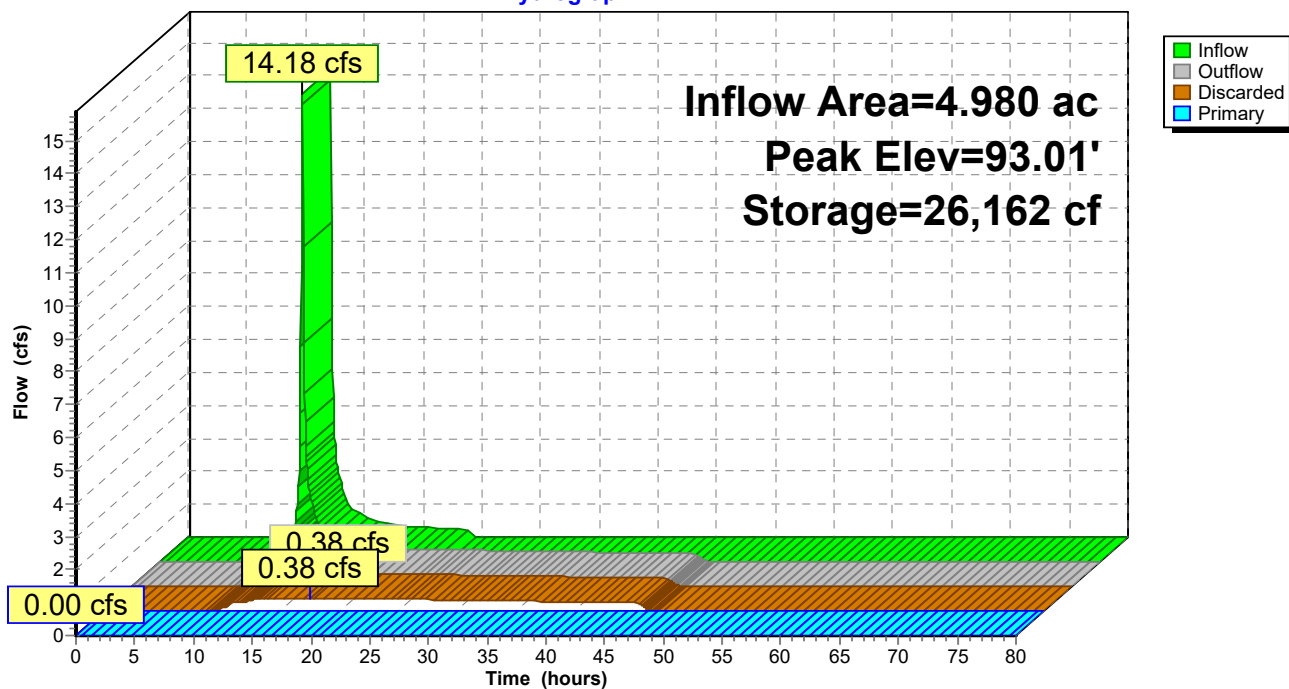
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Pond BAS 7-A: BAS 7-A

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Summary for Pond BAS 9-A: BAS 9-A

Inflow Area = 1.494 ac, 25.66% Impervious, Inflow Depth = 0.83" for 10-Year event
Inflow = 1.20 cfs @ 12.15 hrs, Volume= 0.103 af
Outflow = 0.12 cfs @ 14.24 hrs, Volume= 0.103 af, Atten= 90%, Lag= 125.8 min
Discarded = 0.12 cfs @ 14.24 hrs, Volume= 0.103 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 61.76' @ 14.24 hrs Surf.Area= 2,113 sf Storage= 1,440 cf

Plug-Flow detention time= 129.0 min calculated for 0.103 af (100% of inflow)
Center-of-Mass det. time= 129.0 min (1,049.8 - 920.8)

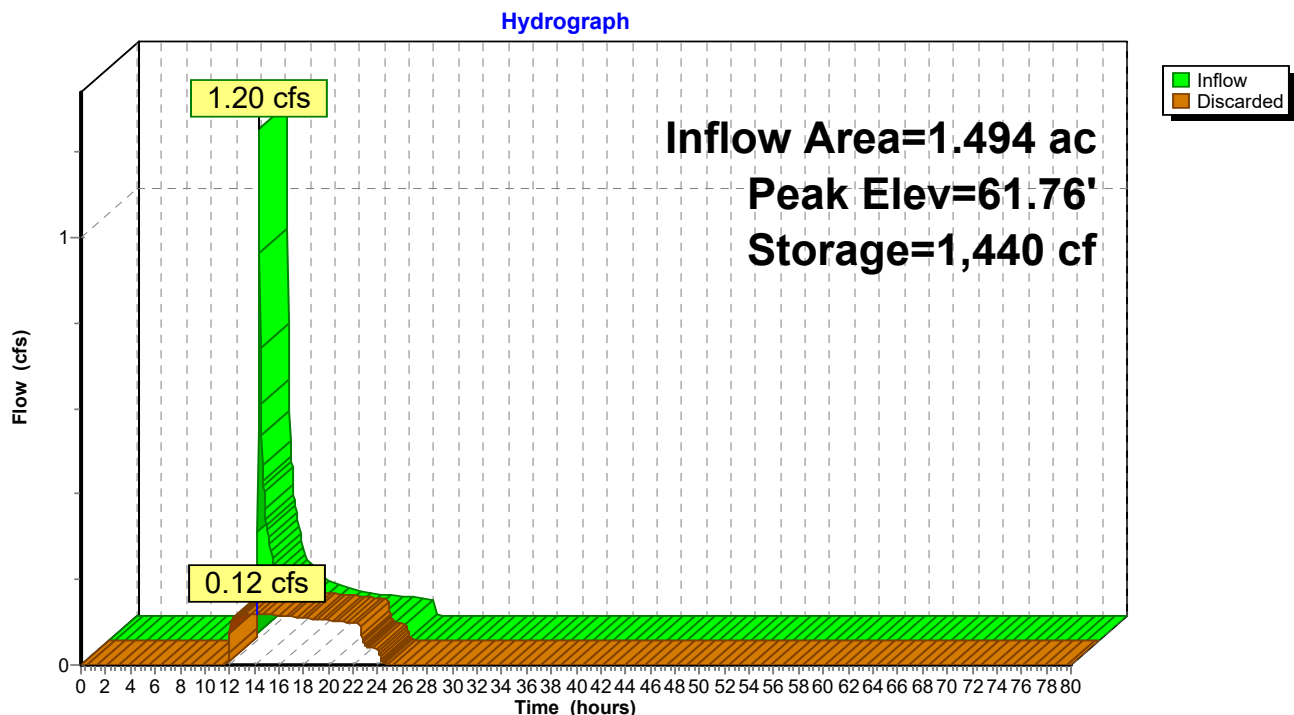
Volume	Invert	Avail.Storage	Storage Description
#1	61.00'	7,774 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
61.00	1,700	0	0	1,700
64.00	3,600	7,774	7,774	3,675

Device	Routing	Invert	Outlet Devices
#1	Discarded	61.00'	2.410 in/hr Exfiltration over Wetted area

Discarded OutFlow Max=0.12 cfs @ 14.24 hrs HW=61.76' (Free Discharge)
↑1=Exfiltration (Exfiltration Controls 0.12 cfs)

Pond BAS 9-A: BAS 9-A



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Summary for Pond BAS 9-B: BAS 9-B

Inflow Area = 5.910 ac, 58.27% Impervious, Inflow Depth = 2.33" for 10-Year event
Inflow = 16.76 cfs @ 12.13 hrs, Volume= 1.150 af
Outflow = 4.64 cfs @ 12.37 hrs, Volume= 1.150 af, Atten= 72%, Lag= 14.4 min
Discarded = 0.39 cfs @ 12.37 hrs, Volume= 0.625 af
Primary = 4.25 cfs @ 12.37 hrs, Volume= 0.525 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 63.40' @ 12.37 hrs Surf.Area= 6,913 sf Storage= 17,118 cf

Plug-Flow detention time= 241.8 min calculated for 1.149 af (100% of inflow)
Center-of-Mass det. time= 242.1 min (1,088.1 - 846.0)

Volume	Invert	Avail.Storage	Storage Description
#1	60.00'	29,817 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
60.00	3,300	0	0	3,300
61.00	4,300	3,789	3,789	4,323
65.00	9,000	26,028	29,817	9,159

Device	Routing	Invert	Outlet Devices
#1	Discarded	60.00'	2.410 in/hr Exfiltration over Wetted area
#2	Device 3	62.40'	1.5' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#3	Primary	60.00'	18.0" Round Culvert L= 41.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 60.00' / 59.79' S= 0.0051 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.77 sf

Discarded OutFlow Max=0.39 cfs @ 12.37 hrs HW=63.40' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.39 cfs)

Primary OutFlow Max=4.23 cfs @ 12.37 hrs HW=63.40' (Free Discharge)

↑**3=Culvert** (Passes 4.23 cfs of 16.09 cfs potential flow)

↑**2=Sharp-Crested Rectangular Weir** (Weir Controls 4.23 cfs @ 3.26 fps)

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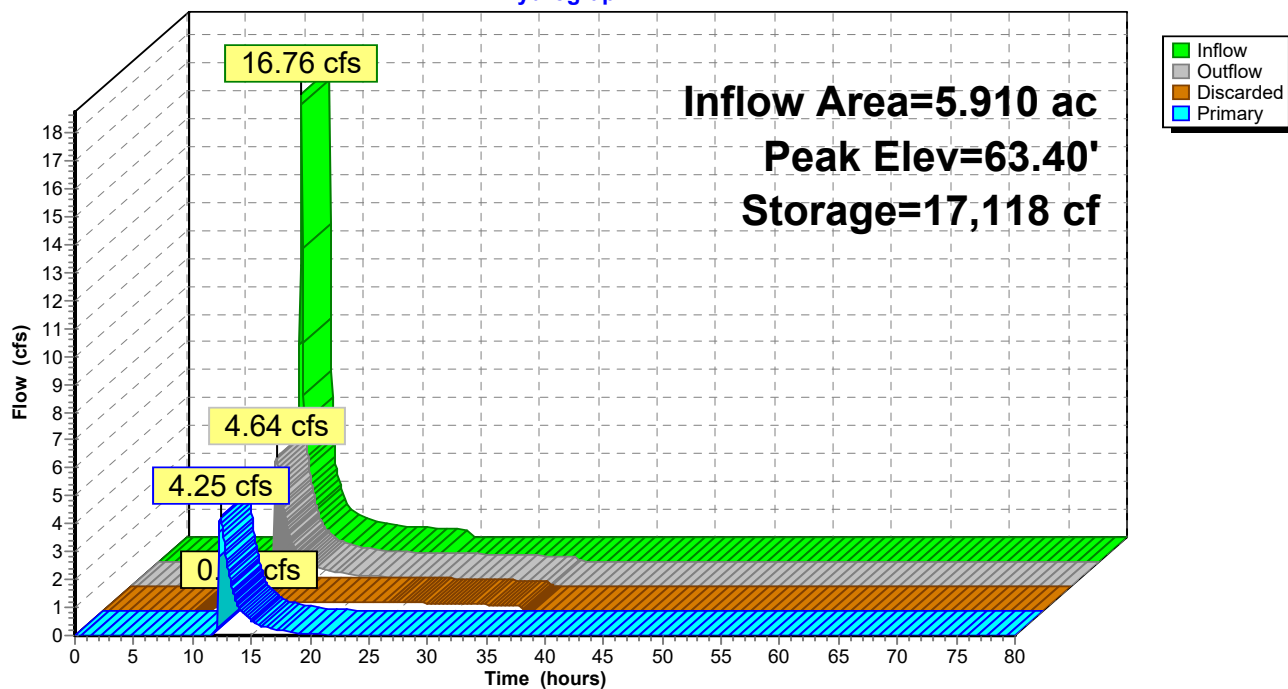
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Pond BAS 9-B: BAS 9-B

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Summary for Pond W-N: Wetland Series N

Inflow Area = 30.869 ac, 27.45% Impervious, Inflow Depth > 0.49" for 10-Year event
 Inflow = 7.74 cfs @ 12.23 hrs, Volume= 1.257 af
 Outflow = 1.57 cfs @ 12.94 hrs, Volume= 1.220 af, Atten= 80%, Lag= 43.0 min
 Primary = 1.57 cfs @ 12.94 hrs, Volume= 1.220 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
 Peak Elev= 85.96' @ 12.94 hrs Surf.Area= 25,575 sf Storage= 11,404 cf

Plug-Flow detention time= 261.9 min calculated for 1.220 af (97% of inflow)
 Center-of-Mass det. time= 174.8 min (1,680.4 - 1,505.6)

Volume	Invert	Avail.Storage	Storage Description	
#1	85.50'	151,214 cf	Custom Stage Data (Conic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
85.50	24,094	0	0	24,094
88.00	32,690	70,707	70,707	32,818
89.00	39,800	36,187	106,894	39,960
90.00	49,000	44,320	151,214	49,190

Device	Routing	Invert	Outlet Devices
#1	Primary	85.50'	24.0" Round RCP_Round 24" L= 46.2' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 85.50' / 83.90' S= 0.0346 ' S= 0.0346 ' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 3.14 sf

Primary OutFlow Max=1.57 cfs @ 12.94 hrs HW=85.96' (Free Discharge)

↑1=RCP_Round 24" (Inlet Controls 1.57 cfs @ 2.88 fps)

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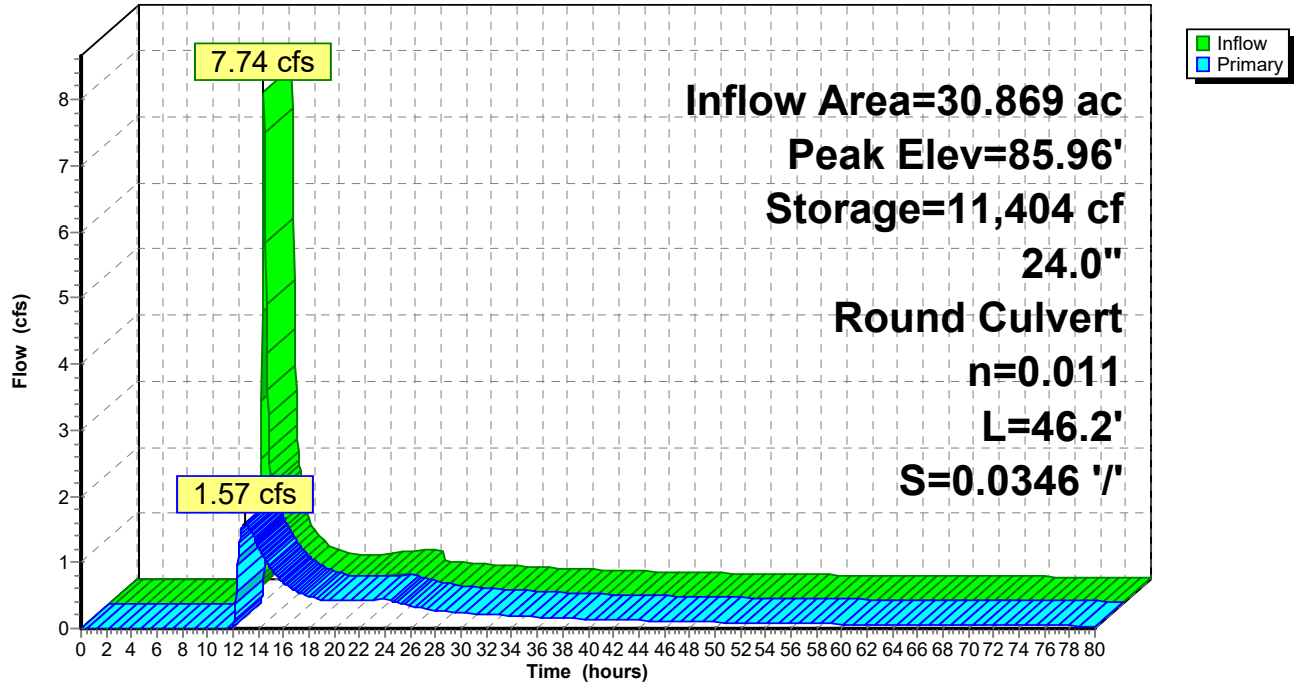
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Pond W-N: Wetland Series N

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Summary for Pond W-O: Wetland Series O

Inflow Area = 61.489 ac, 21.22% Impervious, Inflow Depth > 0.69" for 10-Year event
Inflow = 9.95 cfs @ 12.38 hrs, Volume= 3.538 af
Outflow = 2.40 cfs @ 13.92 hrs, Volume= 3.473 af, Atten= 76%, Lag= 92.1 min
Primary = 2.40 cfs @ 13.92 hrs, Volume= 3.473 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 79.83' @ 13.92 hrs Surf.Area= 20,231 sf Storage= 20,970 cf

Plug-Flow detention time= 189.9 min calculated for 3.473 af (98% of inflow)
Center-of-Mass det. time= 134.2 min (1,704.4 - 1,570.1)

Volume	Invert	Avail.Storage	Storage Description
#1	78.68'	102,529 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
78.68	16,400	0	0	16,400
80.00	20,844	24,523	24,523	20,889
81.00	37,500	28,767	53,290	37,556
82.00	62,000	49,239	102,529	62,069

Device	Routing	Invert	Outlet Devices
#1	Primary	78.68'	12.0" Round Culvert L= 172.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 78.68' / 75.00' S= 0.0214 ' S= 0.0214 ' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Primary	80.80'	20.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Primary OutFlow Max=2.40 cfs @ 13.92 hrs HW=79.83' (Free Discharge)

1=Culvert (Inlet Controls 2.40 cfs @ 3.06 fps)
2=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

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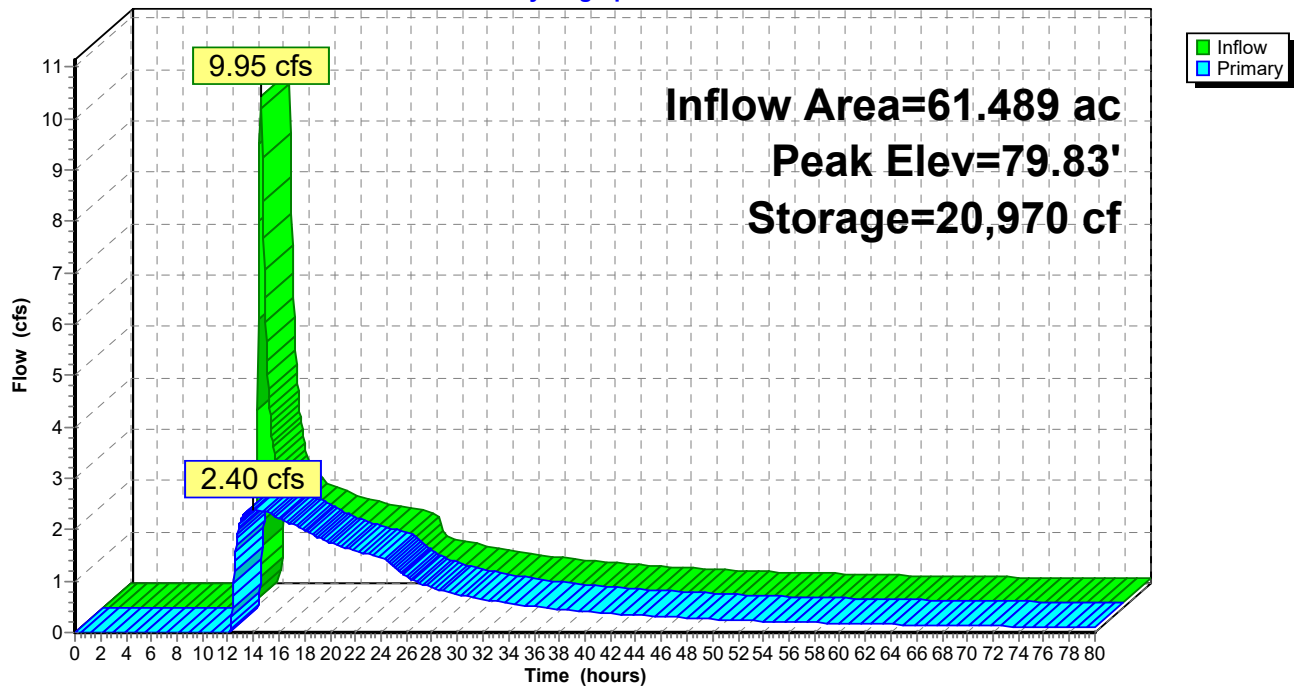
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Pond W-O: Wetland Series O

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Summary for Pond W-QP: Wetland Series Q & P

Inflow Area = 42.589 ac, 23.35% Impervious, Inflow Depth > 0.72" for 10-Year event
Inflow = 15.07 cfs @ 12.23 hrs, Volume= 2.550 af
Outflow = 1.01 cfs @ 18.12 hrs, Volume= 2.226 af, Atten= 93%, Lag= 353.2 min
Primary = 1.01 cfs @ 18.12 hrs, Volume= 2.226 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 79.32' @ 18.12 hrs Surf.Area= 85,561 sf Storage= 51,819 cf

Plug-Flow detention time= 961.1 min calculated for 2.226 af (87% of inflow)
Center-of-Mass det. time= 697.2 min (1,955.8 - 1,258.6)

Volume	Invert	Avail.Storage	Storage Description
#1	78.70'	402,154 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
78.70	82,500	0	0	82,500
83.00	105,000	402,154	402,154	105,477

Device	Routing	Invert	Outlet Devices
#1	Primary	78.70'	12.0" Round Culvert L= 20.6' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 78.70' / 78.30' S= 0.0194 ' S= 0.0194 ' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.79 sf

Primary OutFlow Max=1.00 cfs @ 18.12 hrs HW=79.32' (Free Discharge)

↑**1=Culvert** (Barrel Controls 1.00 cfs @ 2.83 fps)

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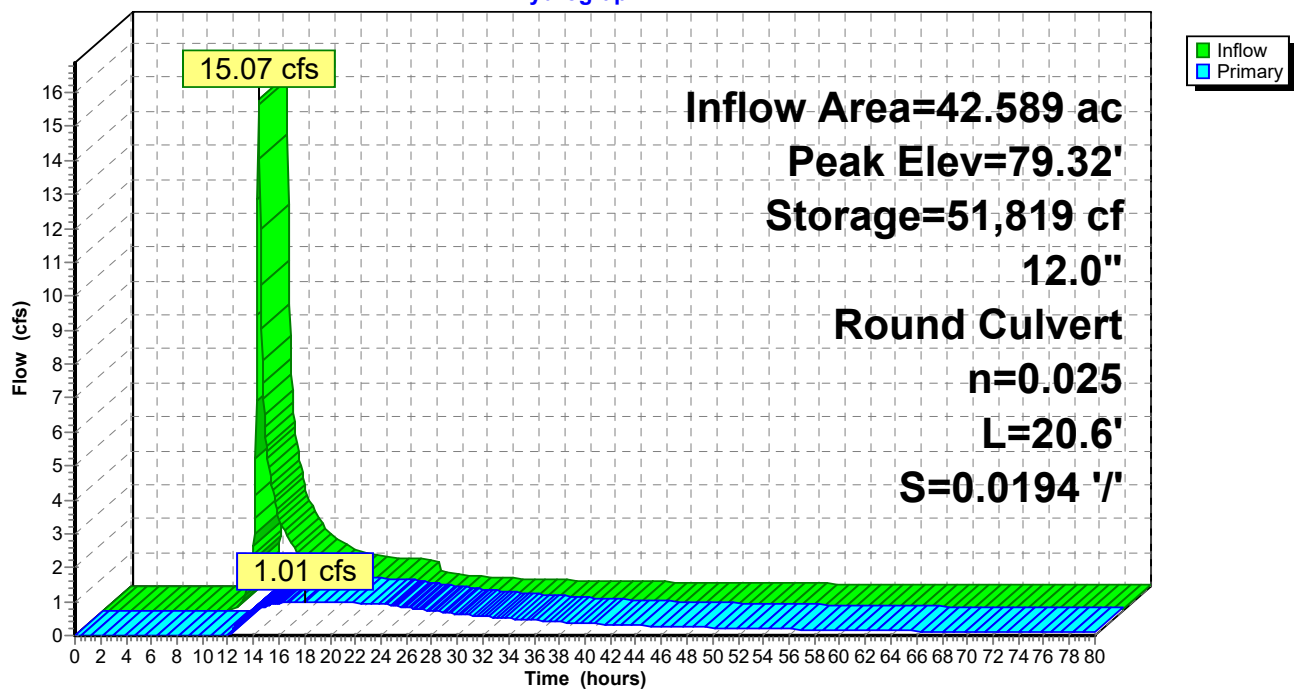
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Pond W-QP: Wetland Series Q & P

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Summary for Pond W-R: Wetland Series R

Inflow Area = 25.797 ac, 32.85% Impervious, Inflow Depth = 1.24" for 10-Year event
Inflow = 25.43 cfs @ 12.29 hrs, Volume= 2.676 af
Outflow = 0.28 cfs @ 24.30 hrs, Volume= 0.544 af, Atten= 99%, Lag= 720.7 min
Primary = 0.28 cfs @ 24.30 hrs, Volume= 0.544 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 87.64' @ 24.30 hrs Surf.Area= 84,550 sf Storage= 112,238 cf

Plug-Flow detention time= 1,604.5 min calculated for 0.543 af (20% of inflow)
Center-of-Mass det. time= 1,446.8 min (2,326.0 - 879.2)

Volume	Invert	Avail.Storage	Storage Description
#1	86.27'	521,661 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
86.27	78,906	0	0	78,906
92.00	103,740	521,661	521,661	104,484

Device	Routing	Invert	Outlet Devices
#1	Primary	87.30'	8.0" Round Culvert L= 240.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 87.30' / 86.50' S= 0.0033 ' S= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=0.28 cfs @ 24.30 hrs HW=87.64' (Free Discharge)

↑**1=Culvert** (Barrel Controls 0.28 cfs @ 2.21 fps)

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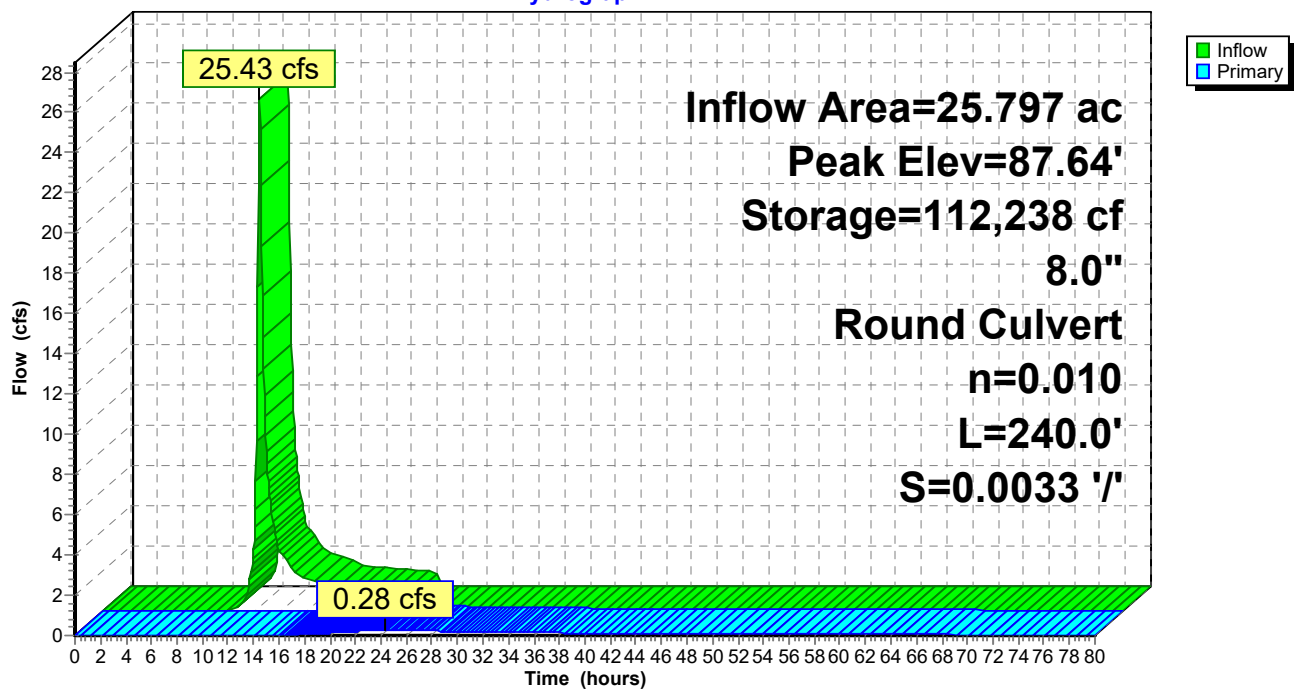
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Pond W-R: Wetland Series R

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Summary for Subcatchment E-13:

Runoff = 1.35 cfs @ 12.20 hrs, Volume= 0.129 af, Depth= 1.19"

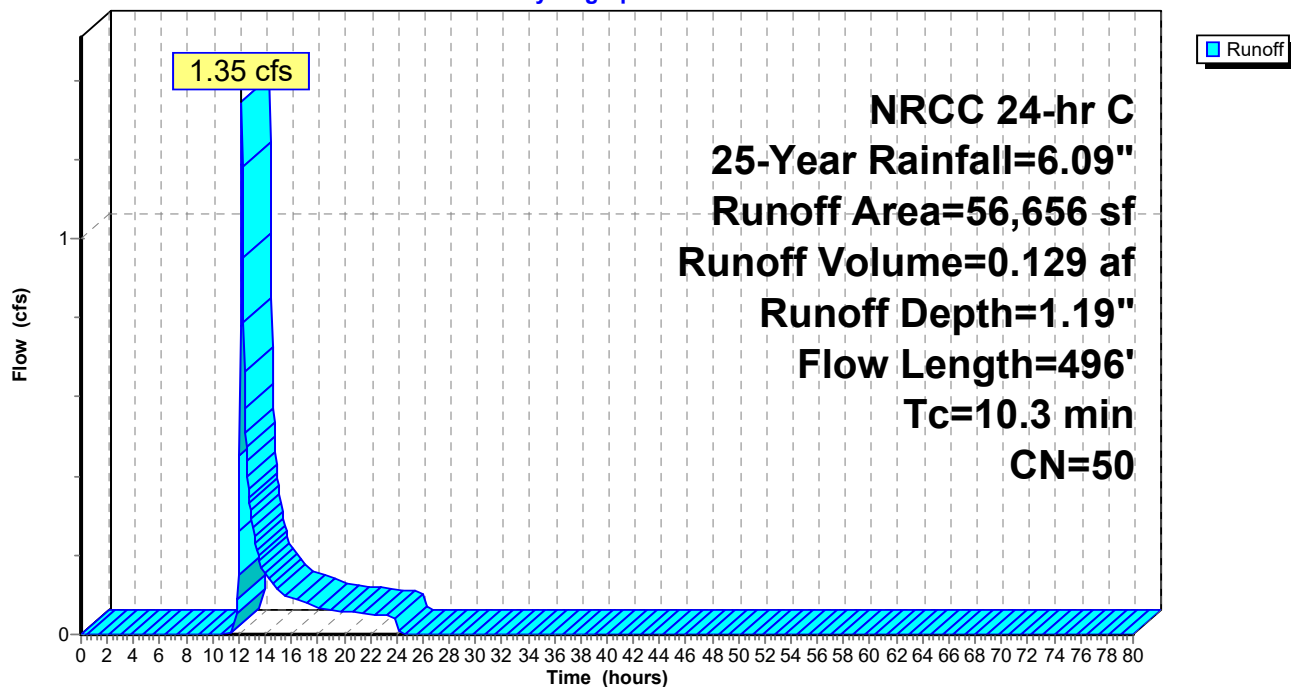
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
30,938	32	Woods/grass comb., Good, HSG A
25,718	72	Woods/grass comb., Good, HSG C
56,656	50	Weighted Average
56,656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	50	0.0160	0.14		Sheet Flow, Grass Grass: Short n= 0.150 P2= 3.37"
2.1	194	0.0479	1.53		Shallow Concentrated Flow, HR-C Short Grass Pasture Kv= 7.0 fps
2.2	252	0.0748	1.91		Shallow Concentrated Flow, HR-A Short Grass Pasture Kv= 7.0 fps
10.3	496	Total			

Subcatchment E-13:

Hydrograph



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Summary for Subcatchment P-10A: P-10A

Runoff = 0.05 cfs @ 12.54 hrs, Volume= 0.021 af, Depth= 0.32"

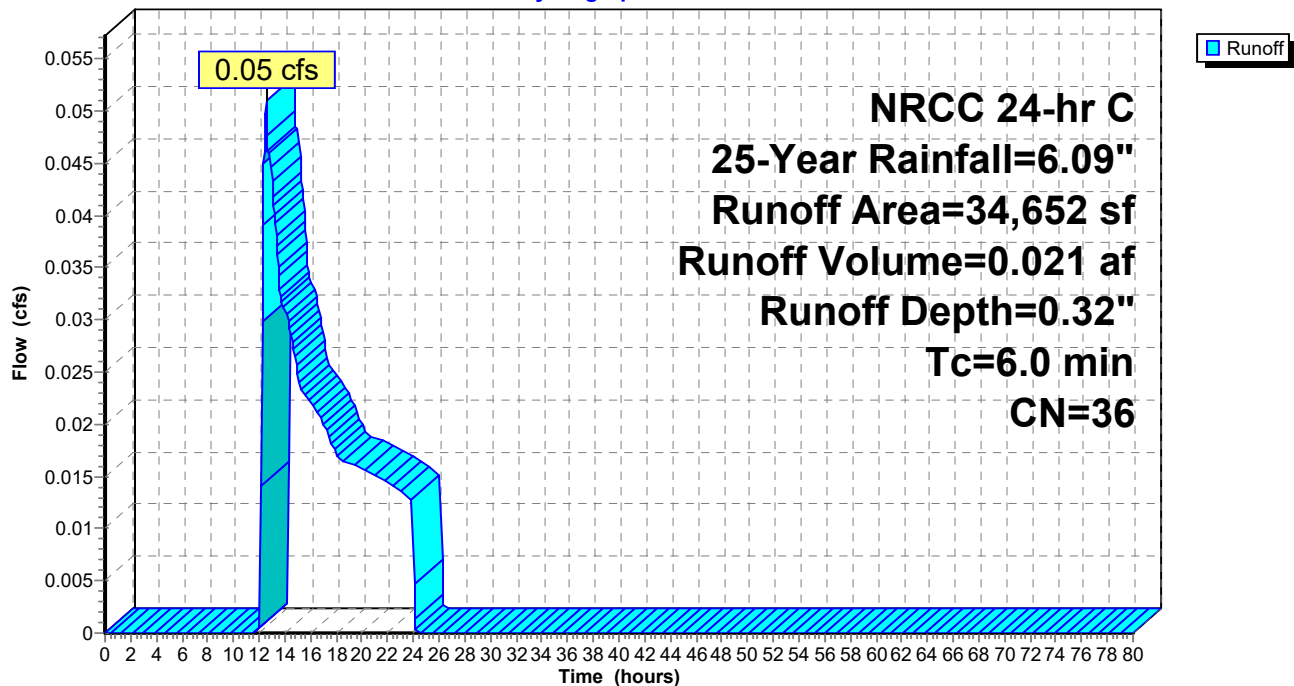
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	2,500	98	roof
	2,500	39	>75% Grass cover, Good, HSG A
	29,652	30	Woods, Good, HSG A
	34,652	36	Weighted Average
	32,152		92.79% Pervious Area
	2,500		7.21% Impervious Area

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

Subcatchment P-10A: P-10A

Hydrograph



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Summary for Subcatchment P-10B: P-10B

Runoff = 3.47 cfs @ 12.14 hrs, Volume= 0.239 af, Depth= 2.15"

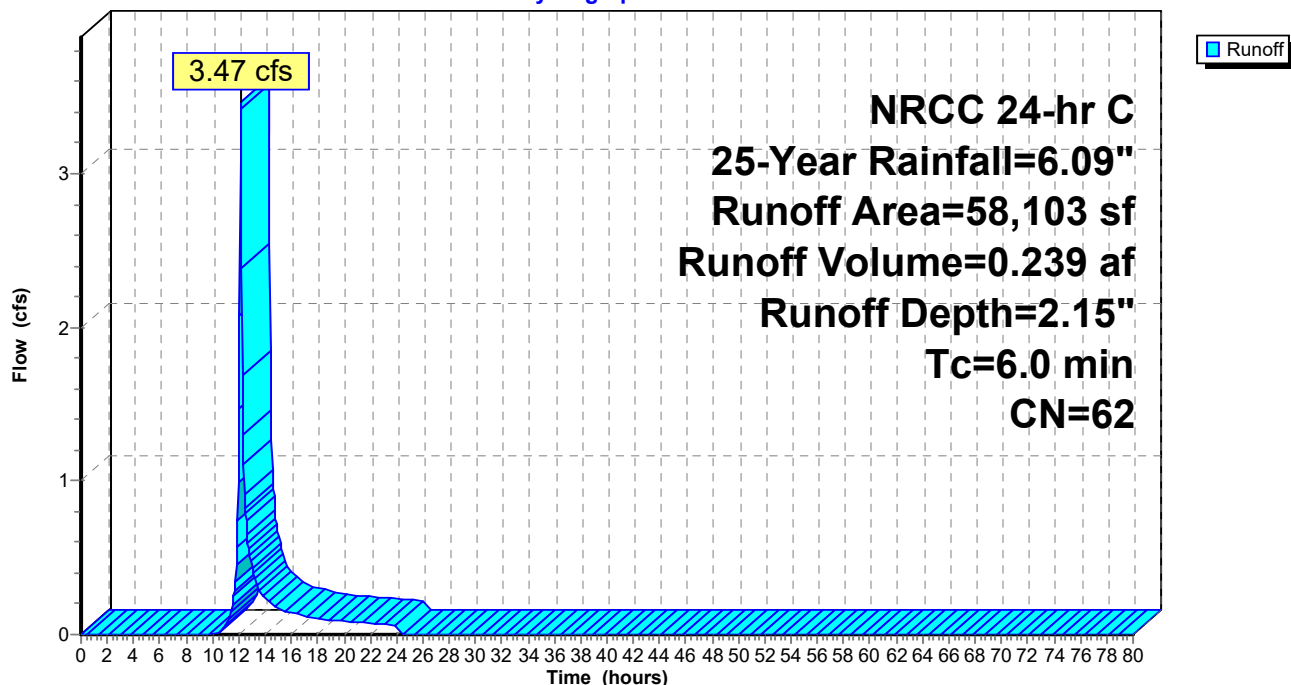
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	2,050	98	basin
	56,053	61	1/4 acre lots, 38% imp, HSG A
	58,103	62	Weighted Average
	34,753		59.81% Pervious Area
	23,350		40.19% Impervious Area

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

Subcatchment P-10B: P-10B

Hydrograph



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Summary for Subcatchment P-10U: P-10U

Runoff = 0.09 cfs @ 12.93 hrs, Volume= 0.044 af, Depth= 0.27"

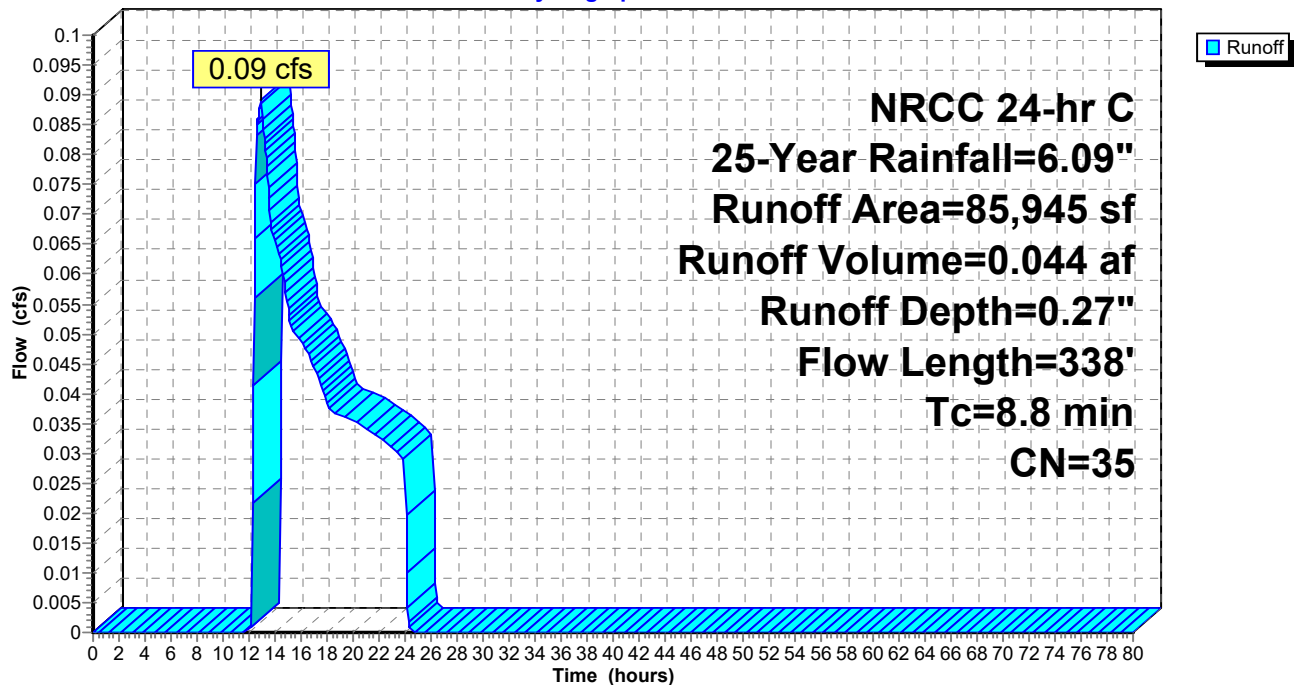
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
4,986	98	Paved parking, HSG A
68,659	30	Woods, Good, HSG A
12,300	39	>75% Grass cover, Good, HSG A
85,945	35	Weighted Average
80,959		94.20% Pervious Area
4,986		5.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	50	0.0784	0.12		Sheet Flow, Wooded Woods: Light underbrush n= 0.400 P2= 3.37"
1.3	138	0.1246	1.76		Shallow Concentrated Flow, Wooded Woodland Kv= 5.0 fps
0.5	150	0.0729	5.48		Shallow Concentrated Flow, Paved Paved Kv= 20.3 fps
8.8	338	Total			

Subcatchment P-10U: P-10U

Hydrograph



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Summary for Subcatchment P-11A: P-11A

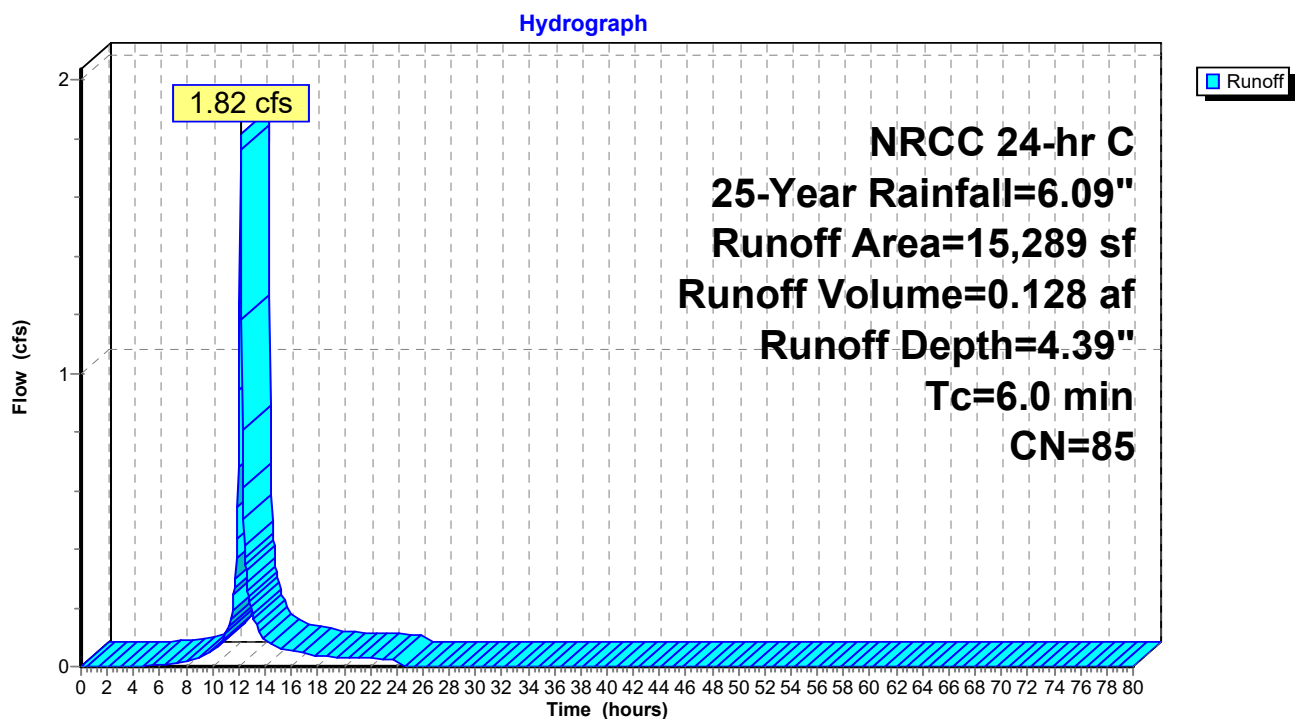
Runoff = 1.82 cfs @ 12.13 hrs, Volume= 0.128 af, Depth= 4.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
3,400	39	>75% Grass cover, Good, HSG A
* 11,889	98	road with sidewalk
15,289	85	Weighted Average
3,400		22.24% Pervious Area
11,889		77.76% Impervious Area

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

Subcatchment P-11A: P-11A



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Summary for Subcatchment P-11B: P-11B

Runoff = 6.71 cfs @ 12.14 hrs, Volume= 0.492 af, Depth= 1.49"

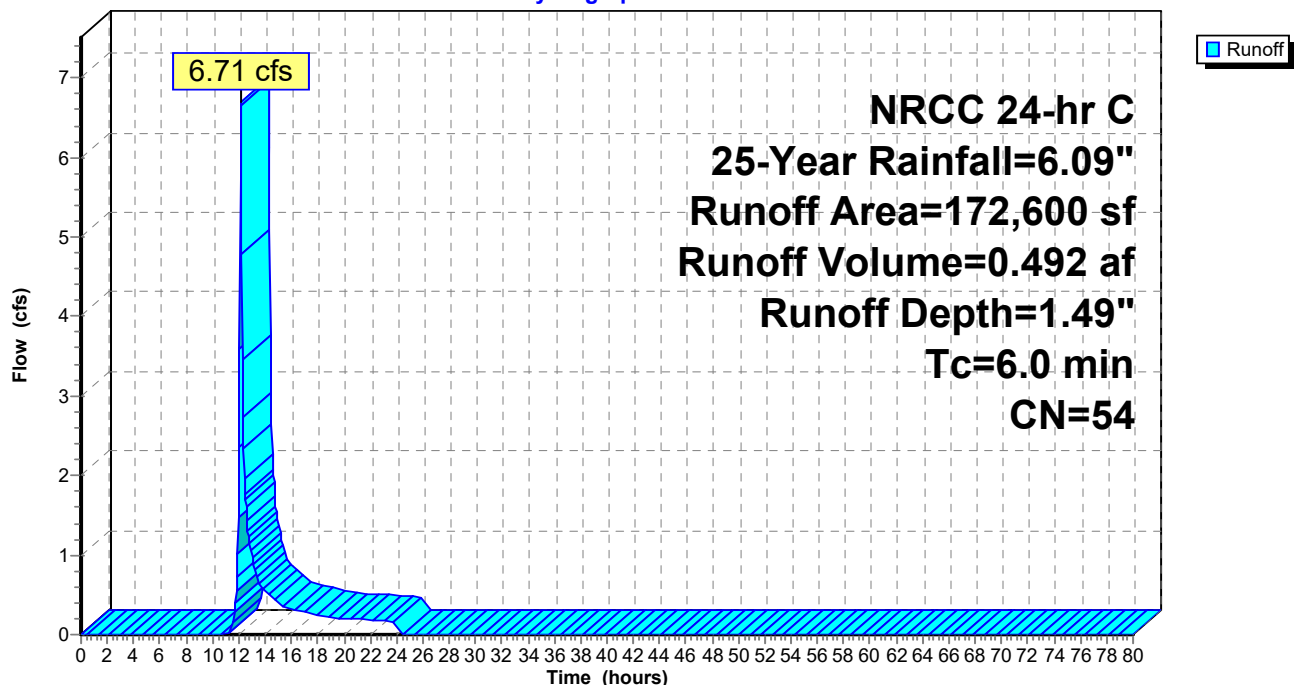
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	9,500	98	roof
	87,100	39	>75% Grass cover, Good, HSG A
	46,000	61	>75% Grass cover, Good, HSG B
*	30,000	75	stone field
	172,600	54	Weighted Average
	163,100		94.50% Pervious Area
	9,500		5.50% Impervious Area

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

Subcatchment P-11B: P-11B

Hydrograph



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Summary for Subcatchment P-11U: P-11U

Runoff = 0.17 cfs @ 12.42 hrs, Volume= 0.056 af, Depth= 0.42"

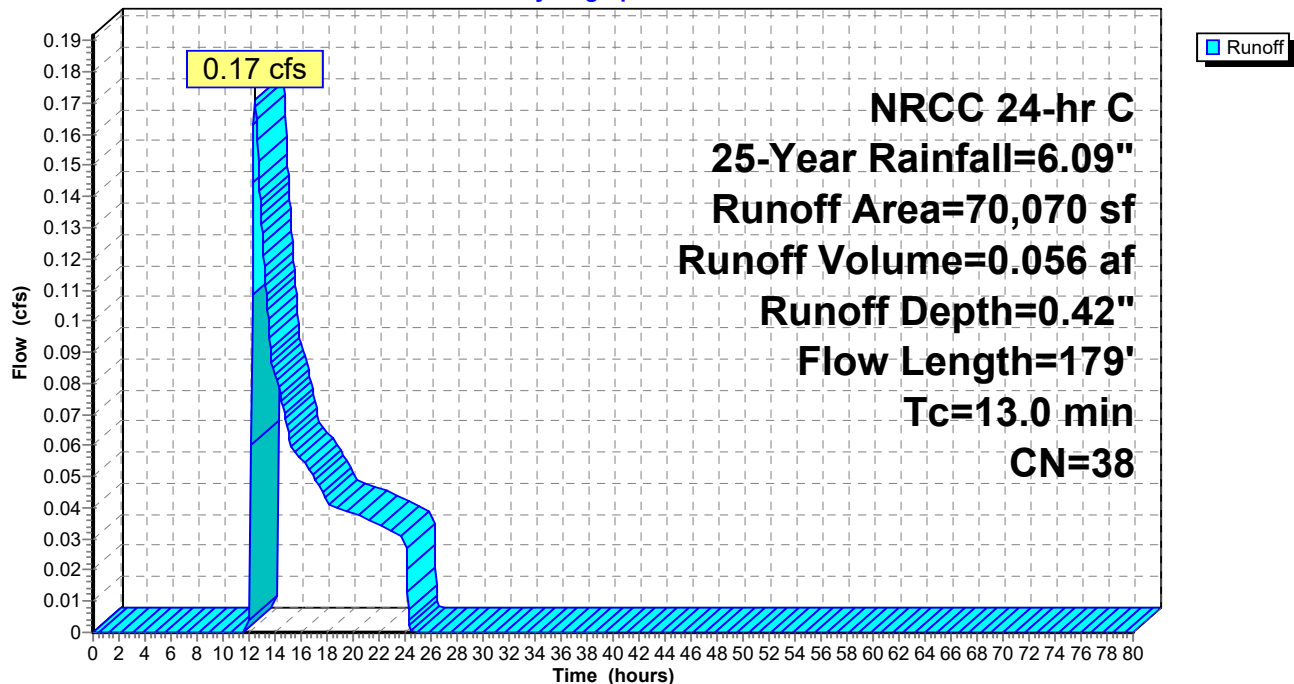
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
23,000	55	Woods, Good, HSG B
47,070	30	Woods, Good, HSG A
70,070	38	Weighted Average
70,070		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.6	50	0.0880	0.07		Sheet Flow, Sheet Flow
					Woods: Dense underbrush n= 0.800 P2= 3.37"
1.4	129	0.0942	1.53		Shallow Concentrated Flow, HR-B
					Woodland Kv= 5.0 fps
13.0	179	Total			

Subcatchment P-11U: P-11U

Hydrograph



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Summary for Subcatchment P-12A: P-12A

Runoff = 21.62 cfs @ 12.13 hrs, Volume= 1.469 af, Depth= 2.69"

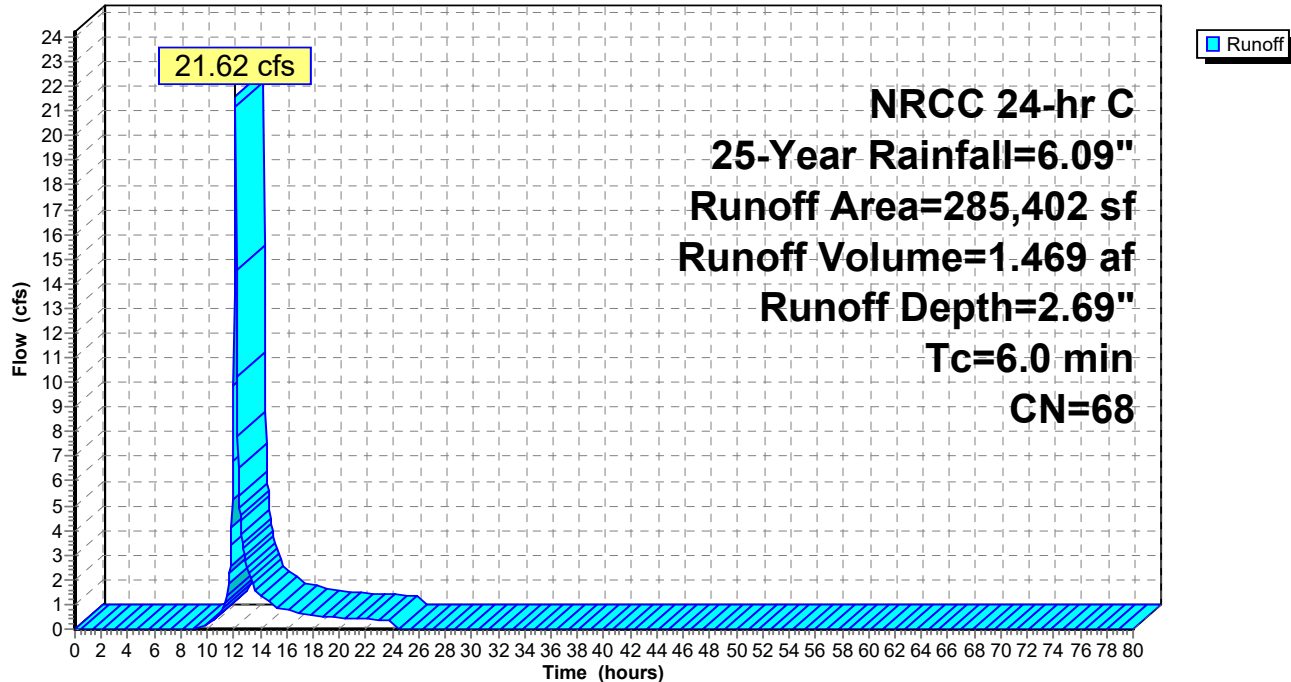
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	9,500	98	basin
	138,400	75	1/4 acre lots, 38% imp, HSG B
	33,000	61	1/4 acre lots, 38% imp, HSG A
	87,300	61	>75% Grass cover, Good, HSG B
	17,202	39	>75% Grass cover, Good, HSG A
	285,402	68	Weighted Average
	210,770		73.85% Pervious Area
	74,632		26.15% Impervious Area

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

Subcatchment P-12A: P-12A

Hydrograph



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Summary for Subcatchment P-12B: P-12B

Runoff = 13.83 cfs @ 12.14 hrs, Volume= 0.983 af, Depth= 1.73"

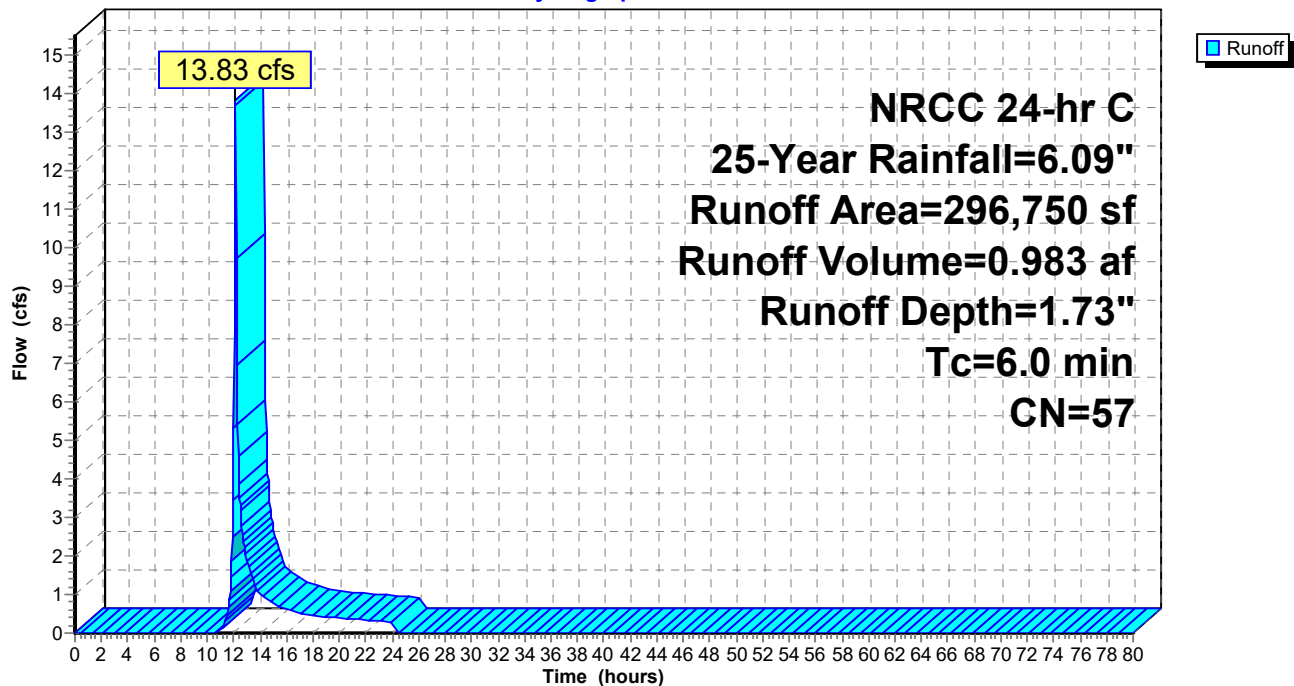
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	24,250	98	basin
	110,800	75	1/4 acre lots, 38% imp, HSG B
	161,700	39	>75% Grass cover, Good, HSG A
	296,750	57	Weighted Average
	230,396		77.64% Pervious Area
	66,354		22.36% Impervious Area

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

Subcatchment P-12B: P-12B

Hydrograph



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Summary for Subcatchment P-12U: P-12U

Runoff = 2.45 cfs @ 12.20 hrs, Volume= 0.270 af, Depth= 0.90"

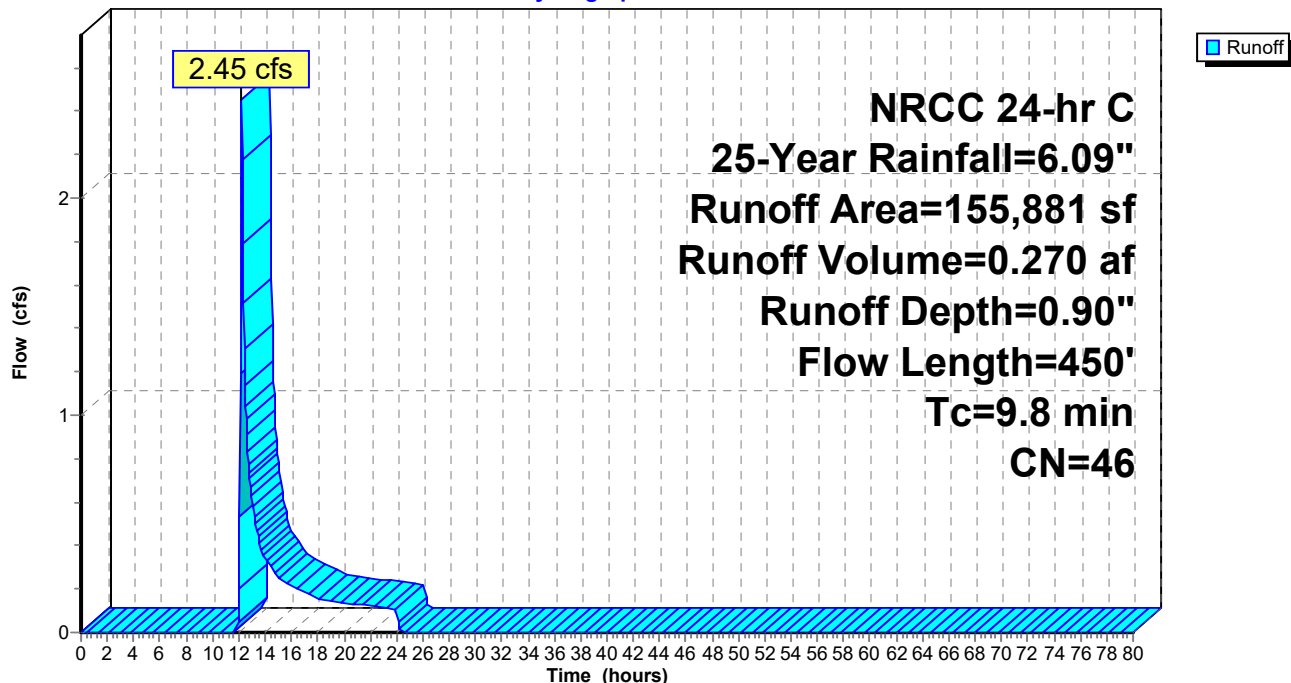
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
80,000	32	Woods/grass comb., Good, HSG A
59,250	58	Woods/grass comb., Good, HSG B
900	79	Woods/grass comb., Good, HSG D
* 5,000	98	2 units roof
10,731	61	>75% Grass cover, Good, HSG B
155,881	46	Weighted Average
150,881		96.79% Pervious Area
5,000		3.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.9	50	0.1200	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.37"
3.9	400	0.0600	1.71		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
9.8	450	Total			

Subcatchment P-12U: P-12U

Hydrograph



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Summary for Subcatchment P-14: P-14

Runoff = 38.94 cfs @ 12.32 hrs, Volume= 4.430 af, Depth= 1.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
268,666	32	Woods/grass comb., Good, HSG A
329,442	58	Woods/grass comb., Good, HSG B
623,088	72	Woods/grass comb., Good, HSG C
1,221,196	59	Weighted Average
1,221,196		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0200	0.17		Sheet Flow, Grass Grass: Short n= 0.150 P2= 3.37"
0.8	25	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.2	185	0.0417	1.43		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.3	31	0.0470	1.52		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.5	173	0.0279	1.17		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.8	75	0.0514	1.59		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.1	181	0.0409	1.42		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.1	82	0.0343	1.30		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.7	129	0.0339	1.29		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
21.0	981	Total			

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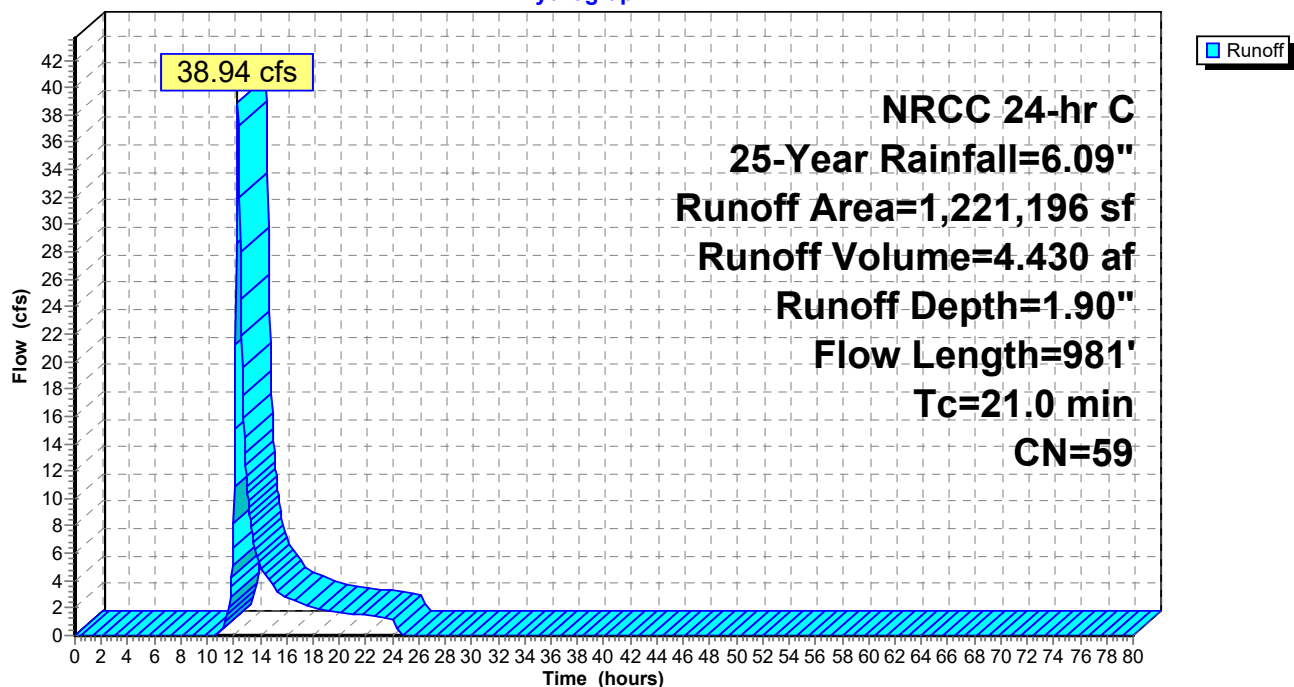
NRCC 24-hr C 25-Year Rainfall=6.09"

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Subcatchment P-14: P-14

Hydrograph



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Summary for Subcatchment P-15A: P-15A

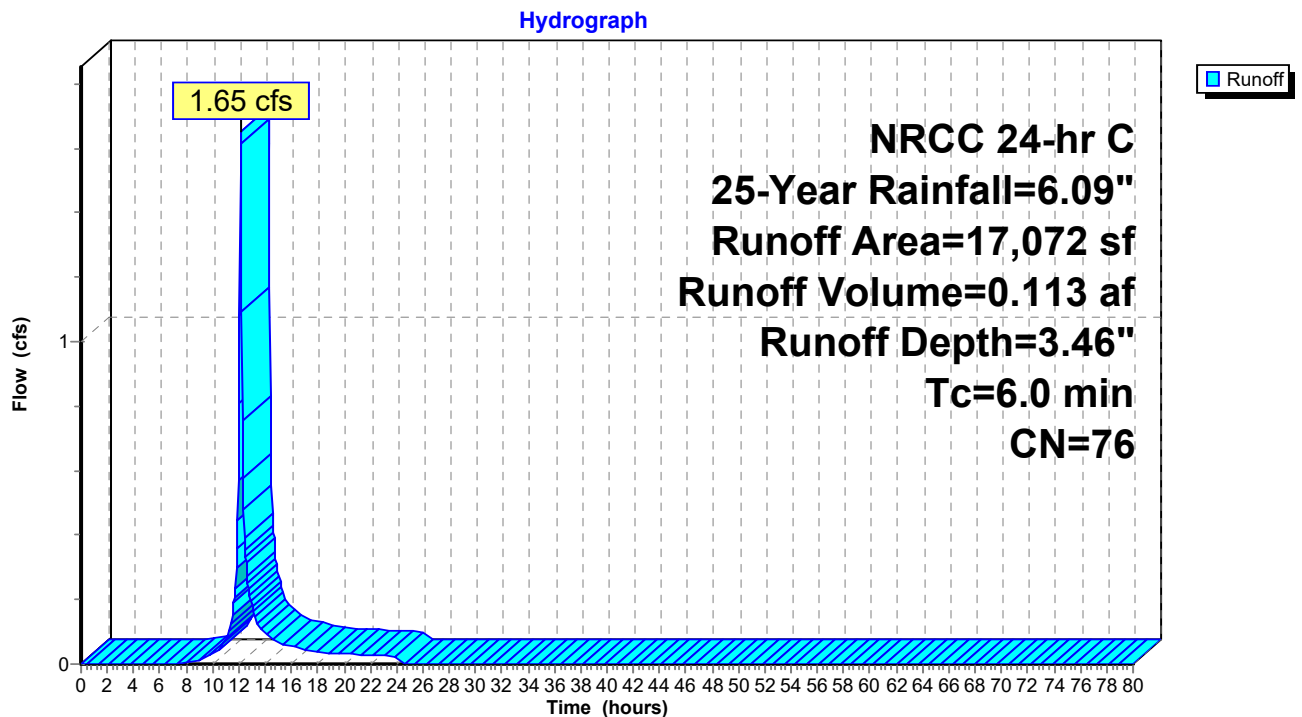
Runoff = 1.65 cfs @ 12.13 hrs, Volume= 0.113 af, Depth= 3.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	780	98	BASIN
*	6,250	98	2.5 UNITS
	10,042	61	>75% Grass cover, Good, HSG B
	17,072	76	Weighted Average
	10,042		58.82% Pervious Area
	7,030		41.18% Impervious Area

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

Subcatchment P-15A: P-15A



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Summary for Subcatchment P-15U: P-15U

Runoff = 1.72 cfs @ 12.20 hrs, Volume= 0.166 af, Depth= 1.19"

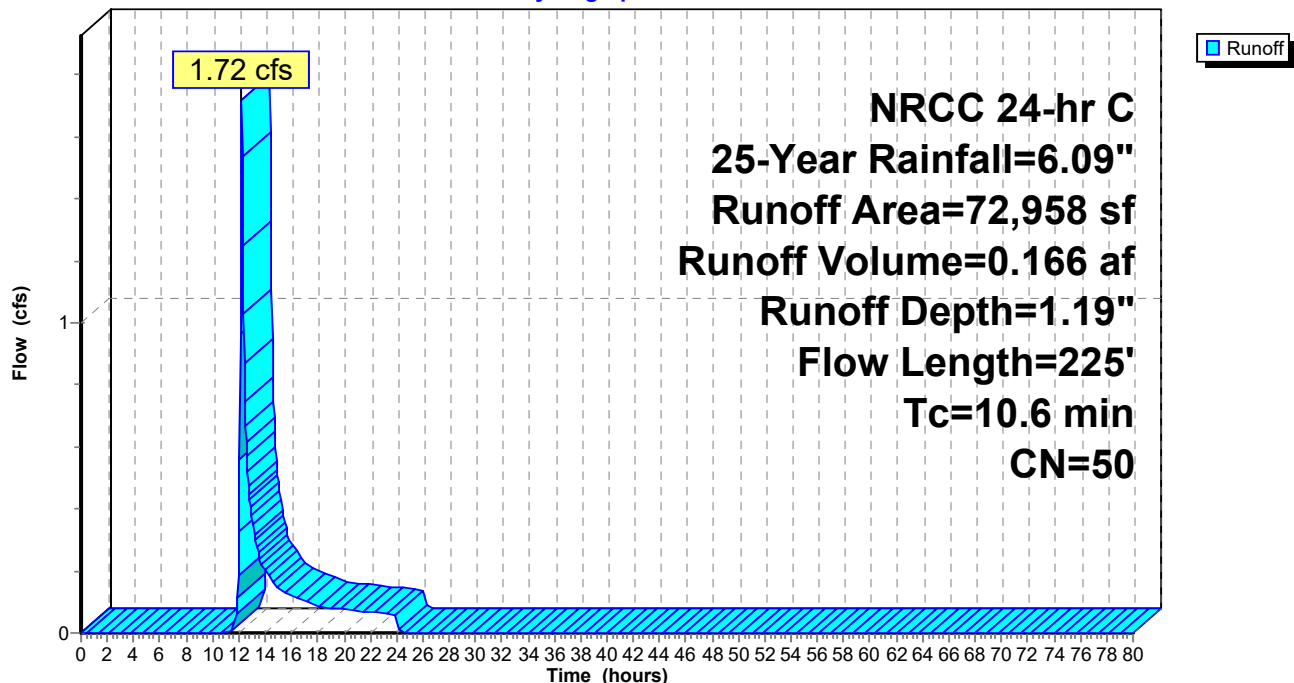
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
13,300	55	Woods, Good, HSG B
26,658	61	>75% Grass cover, Good, HSG B
22,600	30	Woods, Good, HSG A
5,500	77	Woods, Good, HSG D
4,900	39	>75% Grass cover, Good, HSG A
72,958	50	Weighted Average
72,958		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0500	0.10		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.37"
2.3	175	0.0650	1.27		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
10.6	225	Total			

Subcatchment P-15U: P-15U

Hydrograph



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Summary for Subcatchment P-1A: P-1A

Runoff = 16.66 cfs @ 12.13 hrs, Volume= 1.140 af, Depth= 3.56"

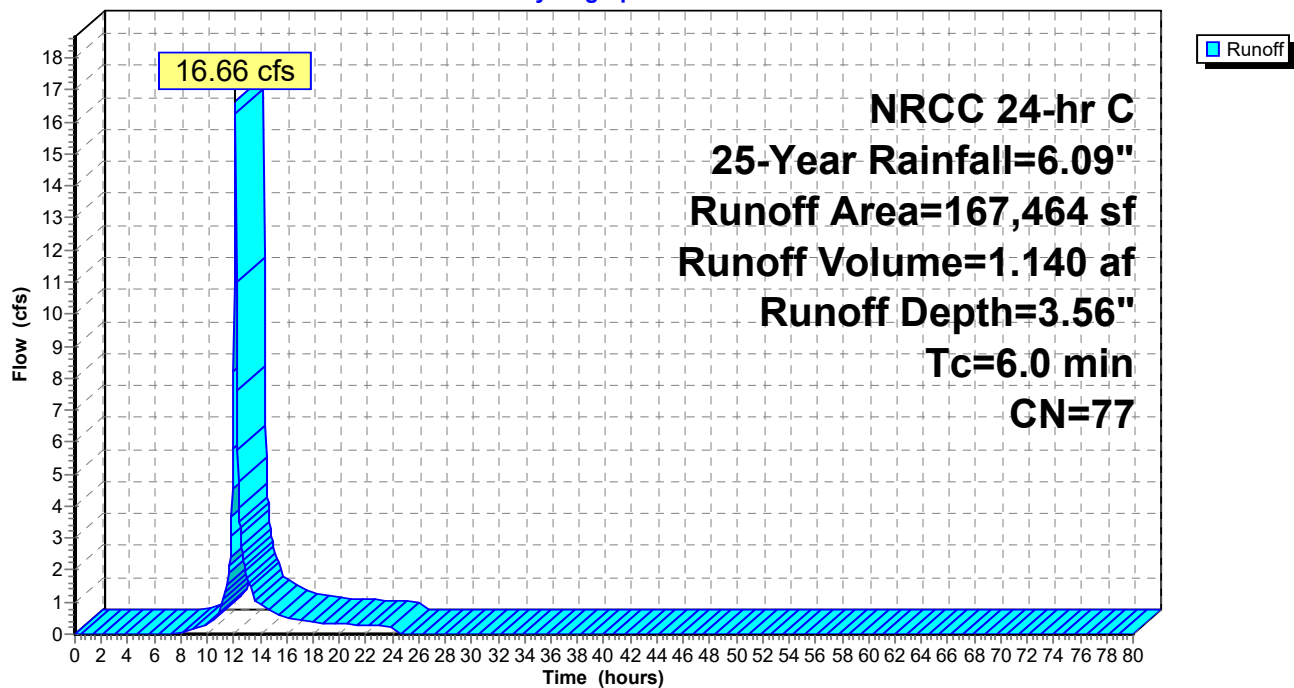
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	5,750	98	basin
*	38,880	98	1620 lf of road
*	3,150	98	630 lf of sidewalk
*	2,500	98	1 unit
*	23,400	98	17 units driveway
	7,380	55	Woods, Good, HSG B
	86,404	61	>75% Grass cover, Good, HSG B
	167,464	77	Weighted Average
	93,784		56.00% Pervious Area
	73,680		44.00% Impervious Area

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

Subcatchment P-1A: P-1A

Hydrograph



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Summary for Subcatchment P-1B: P-1B

Runoff = 11.22 cfs @ 12.33 hrs, Volume= 1.264 af, Depth= 2.42"

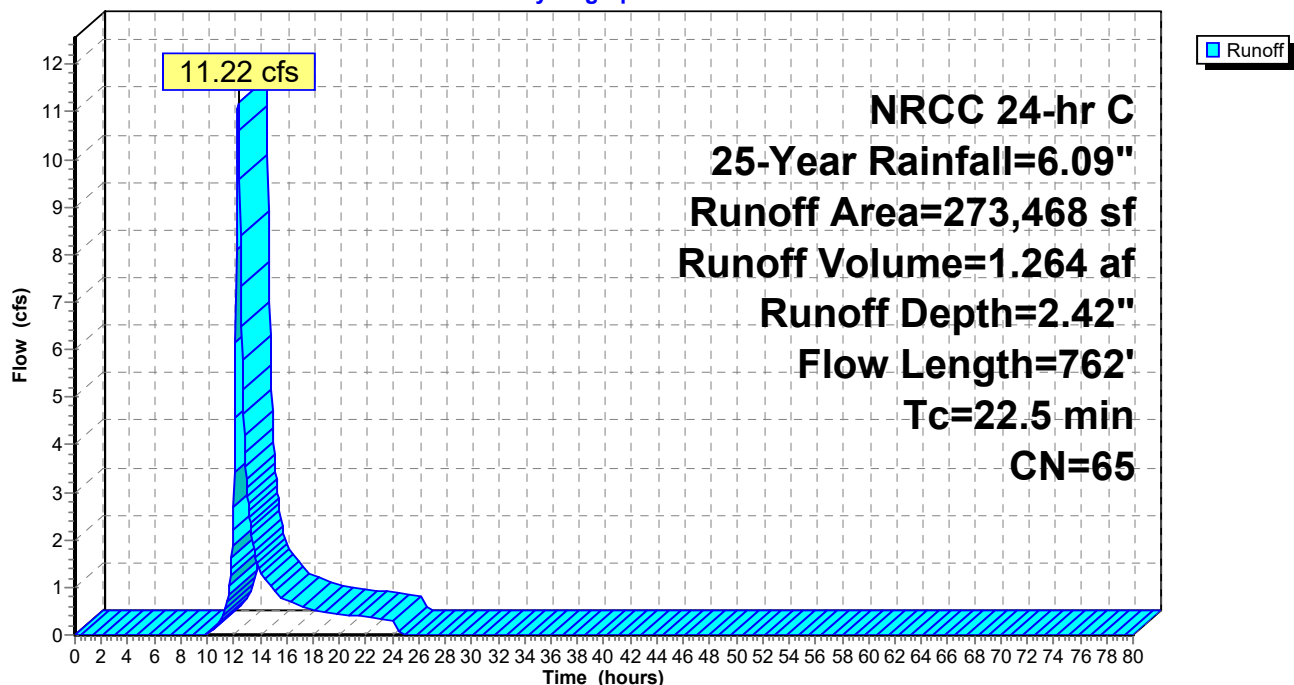
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	3,150	98	BASIN
*	8,000	85	500 LF GRAVEL ROAD B SOILS
*	18,750	98	7.5 UNITS
	243,568	61	>75% Grass cover, Good, HSG B
	273,468	65	Weighted Average
	251,568		91.99% Pervious Area
	21,900		8.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	50	0.0200	0.15		Sheet Flow, Grass: Short n= 0.150 P2= 3.37"
17.0	712	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
22.5	762	Total			

Subcatchment P-1B: P-1B

Hydrograph



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Summary for Subcatchment P-1C: P-1C

Runoff = 0.79 cfs @ 12.13 hrs, Volume= 0.057 af, Depth= 4.71"

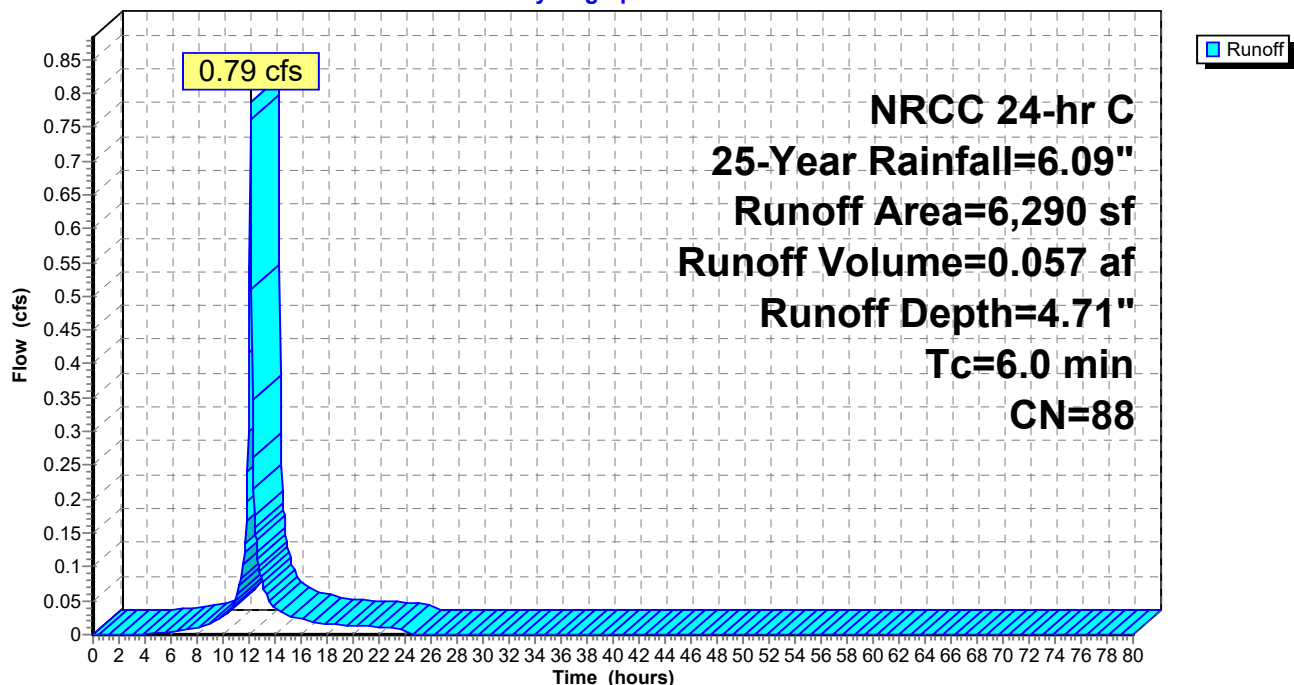
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	70	98	BASIN
*	3,744	98	156 LF OF ROAD
*	780	98	156 LF OF SIDEWALK
	1,696	61	>75% Grass cover, Good, HSG B
	6,290	88	Weighted Average
	1,696		26.96% Pervious Area
	4,594		73.04% Impervious Area

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

Subcatchment P-1C: P-1C

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Summary for Subcatchment P-1U: P-1U

Runoff = 9.02 cfs @ 12.21 hrs, Volume= 0.789 af, Depth= 2.07"

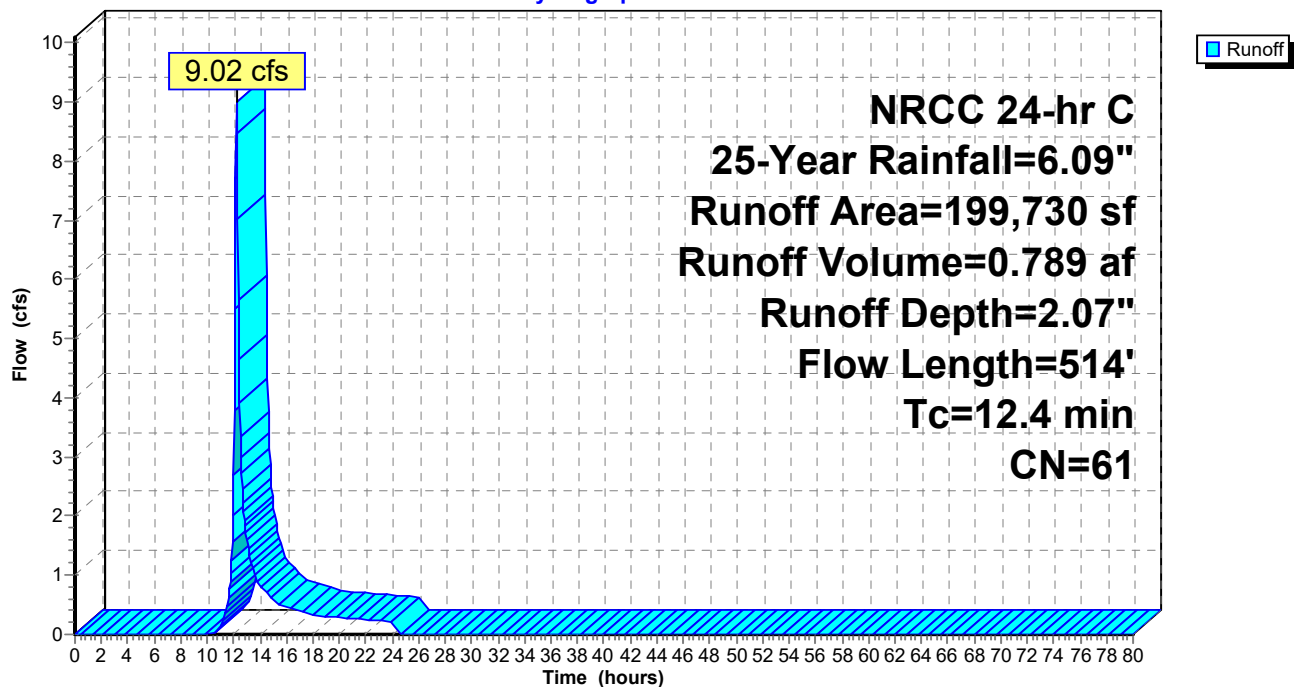
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
108,480	61	>75% Grass cover, Good, HSG B
80,000	55	Woods, Good, HSG B
* 11,250	98	4.5 UNITS
199,730	61	Weighted Average
188,480		94.37% Pervious Area
11,250		5.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	50	0.1400	0.15		Sheet Flow, Wooded Woods: Light underbrush n= 0.400 P2= 3.37"
6.9	464	0.0500	1.12		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.4	514	Total			

Subcatchment P-1U: P-1U

Hydrograph



Proposed Hydrology

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Summary for Subcatchment P-2A: P-2A

Runoff = 5.94 cfs @ 12.14 hrs, Volume= 0.411 af, Depth= 2.07"

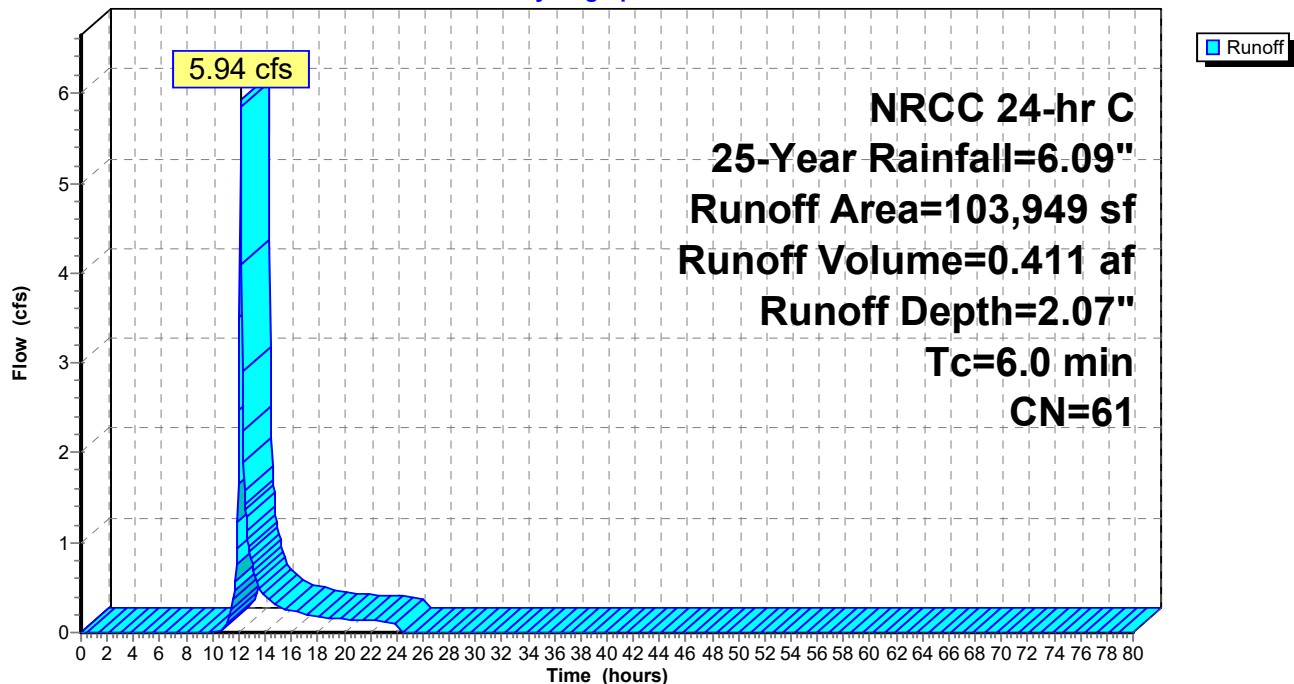
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
103,949	61	1/4 acre lots, 38% imp, HSG A
64,448		62.00% Pervious Area
39,501		38.00% Impervious Area

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

Subcatchment P-2A: P-2A

Hydrograph



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Summary for Subcatchment P-2B: P-2B

Runoff = 3.97 cfs @ 12.13 hrs, Volume= 0.269 af, Depth= 2.78"

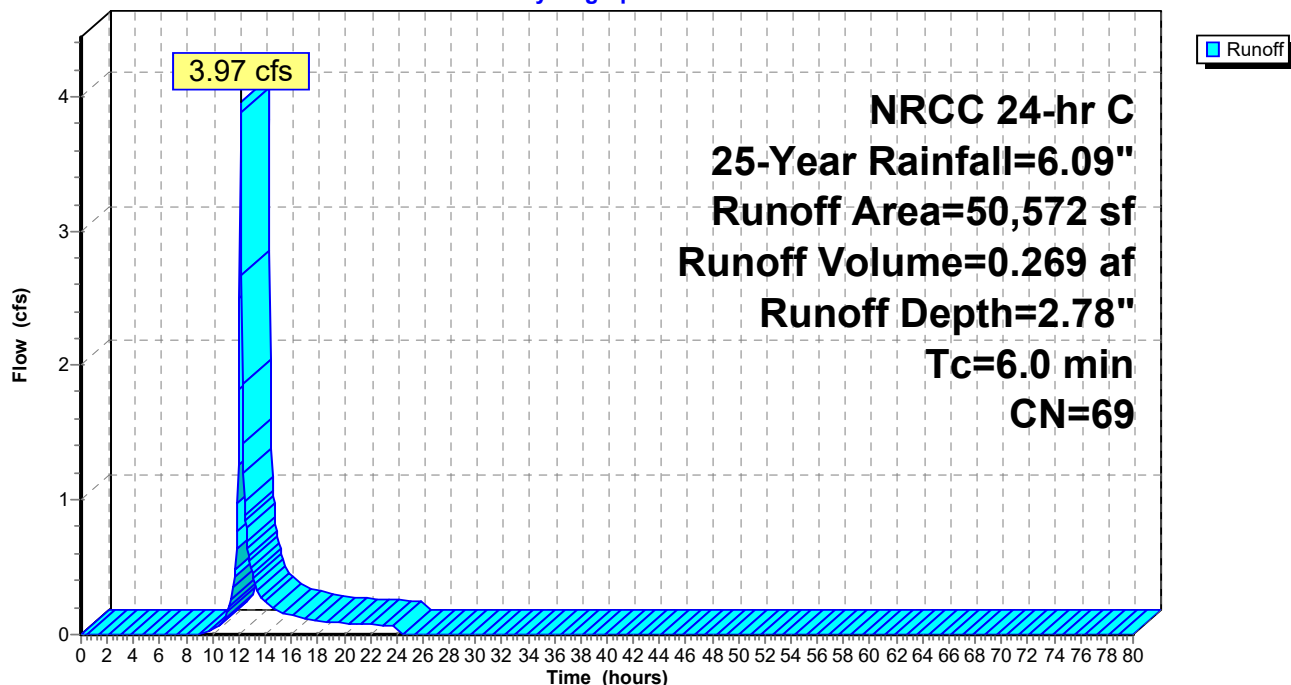
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
34,300	61	1/4 acre lots, 38% imp, HSG A
16,272	87	1/4 acre lots, 38% imp, HSG D
50,572	69	Weighted Average
31,355		62.00% Pervious Area
19,217		38.00% Impervious Area

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

Subcatchment P-2B: P-2B

Hydrograph



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Summary for Subcatchment P-2C: P-2C

Runoff = 7.57 cfs @ 12.13 hrs, Volume= 0.534 af, Depth= 4.39"

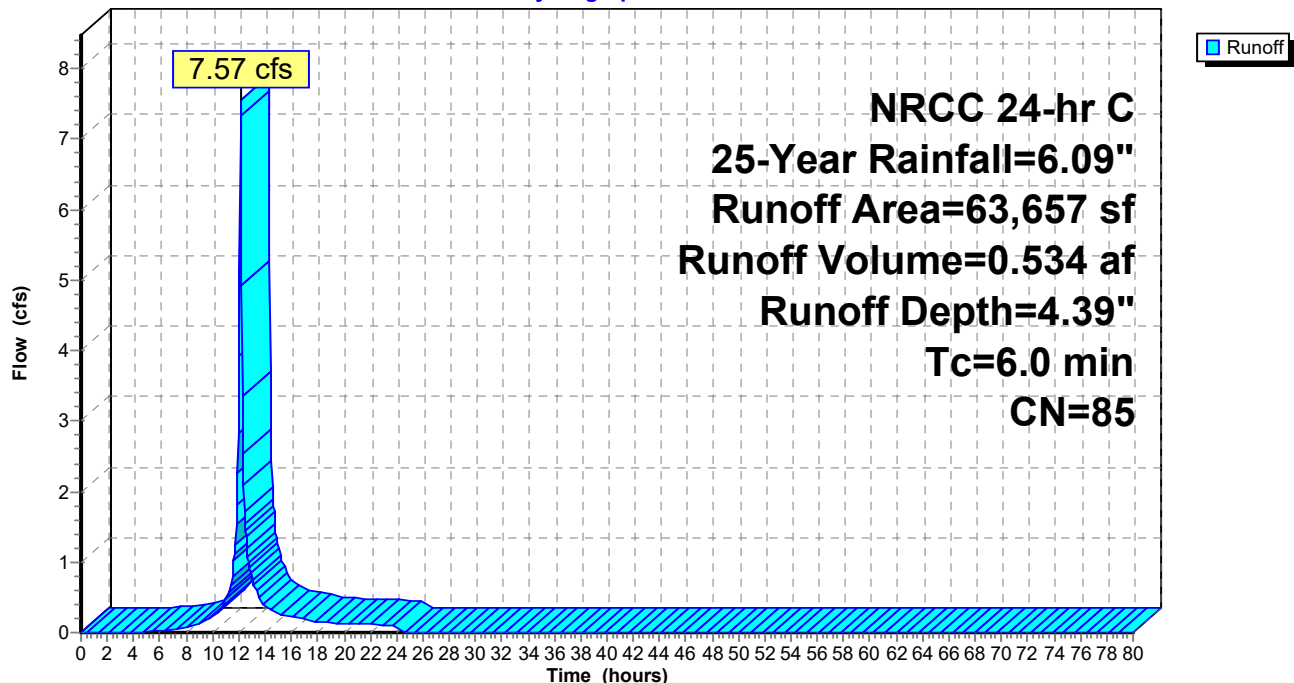
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
54,284	87	1/4 acre lots, 38% imp, HSG D
9,373	75	1/4 acre lots, 38% imp, HSG B
63,657	85	Weighted Average
39,467		62.00% Pervious Area
24,190		38.00% Impervious Area

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

Subcatchment P-2C: P-2C

Hydrograph



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Summary for Subcatchment P-2D: P-2D

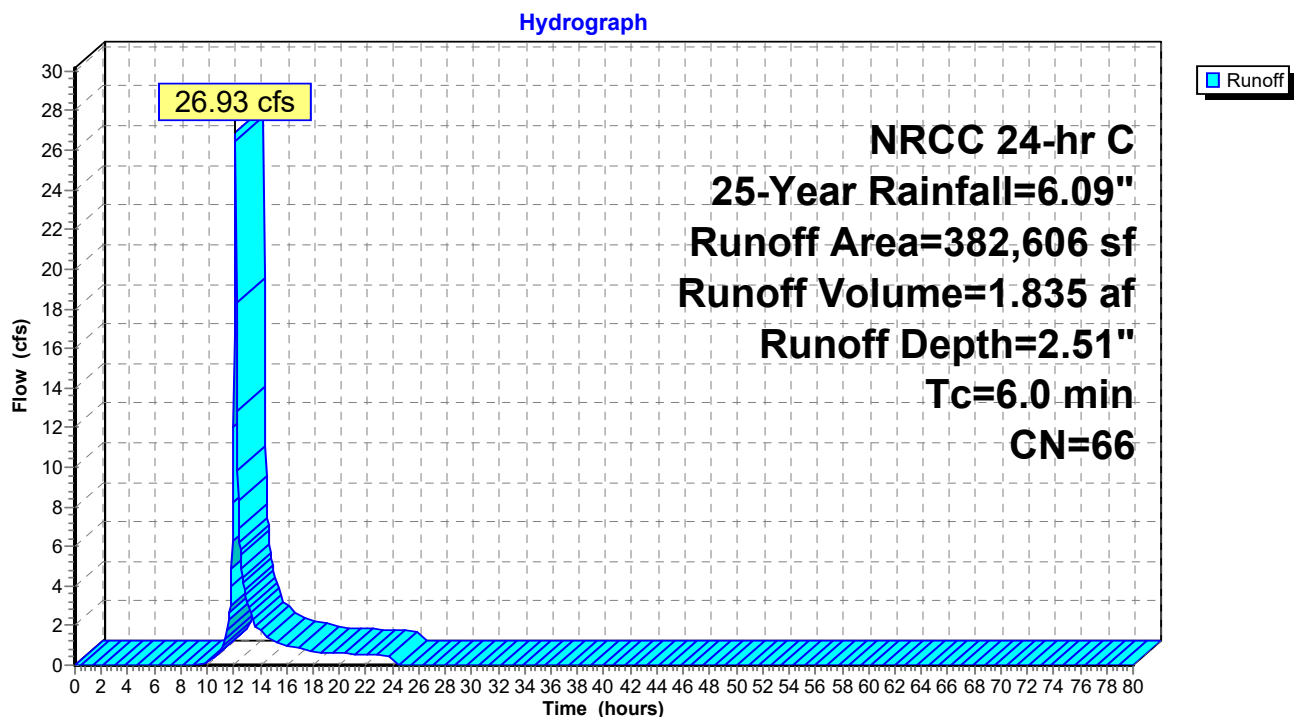
Runoff = 26.93 cfs @ 12.13 hrs, Volume= 1.835 af, Depth= 2.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
163,640	61	1/4 acre lots, 38% imp, HSG A
82,633	87	1/4 acre lots, 38% imp, HSG D
* 15,400	98	basin
30,500	30	Woods, Good, HSG A
9,200	77	Woods, Good, HSG D
* 17,400	98	exist impervious
13,000	74	>75% Grass cover, Good, HSG C
10,000	80	>75% Grass cover, Good, HSG D
40,833	39	>75% Grass cover, Good, HSG A
382,606	66	Weighted Average
256,222		66.97% Pervious Area
126,384		33.03% Impervious Area

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

Subcatchment P-2D: P-2D



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Summary for Subcatchment P-2E: P-2E

Runoff = 11.44 cfs @ 12.13 hrs, Volume= 0.785 af, Depth= 3.66"

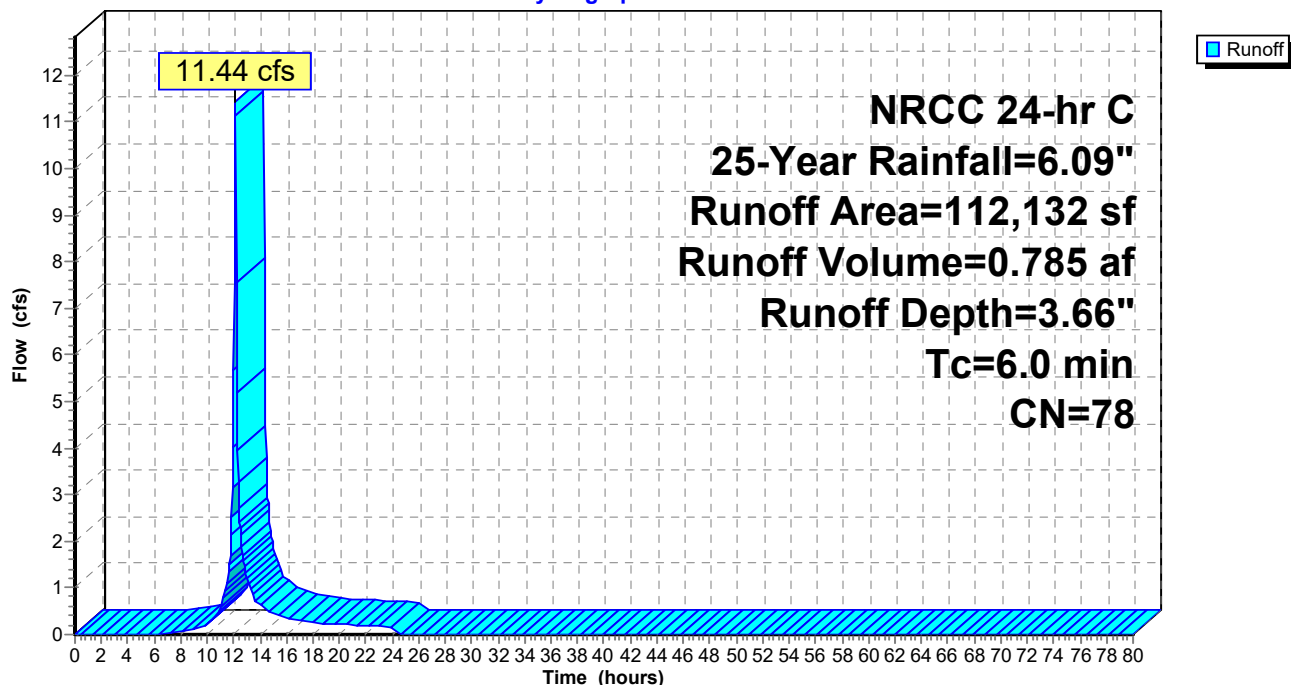
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	12,500	98	basin
	99,632	75	1/4 acre lots, 38% imp, HSG B
	112,132	78	Weighted Average
	61,772		55.09% Pervious Area
	50,360		44.91% Impervious Area

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

Subcatchment P-2E: P-2E

Hydrograph



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Summary for Subcatchment P-2F: P-2F

Runoff = 13.74 cfs @ 12.13 hrs, Volume= 0.938 af, Depth= 3.46"

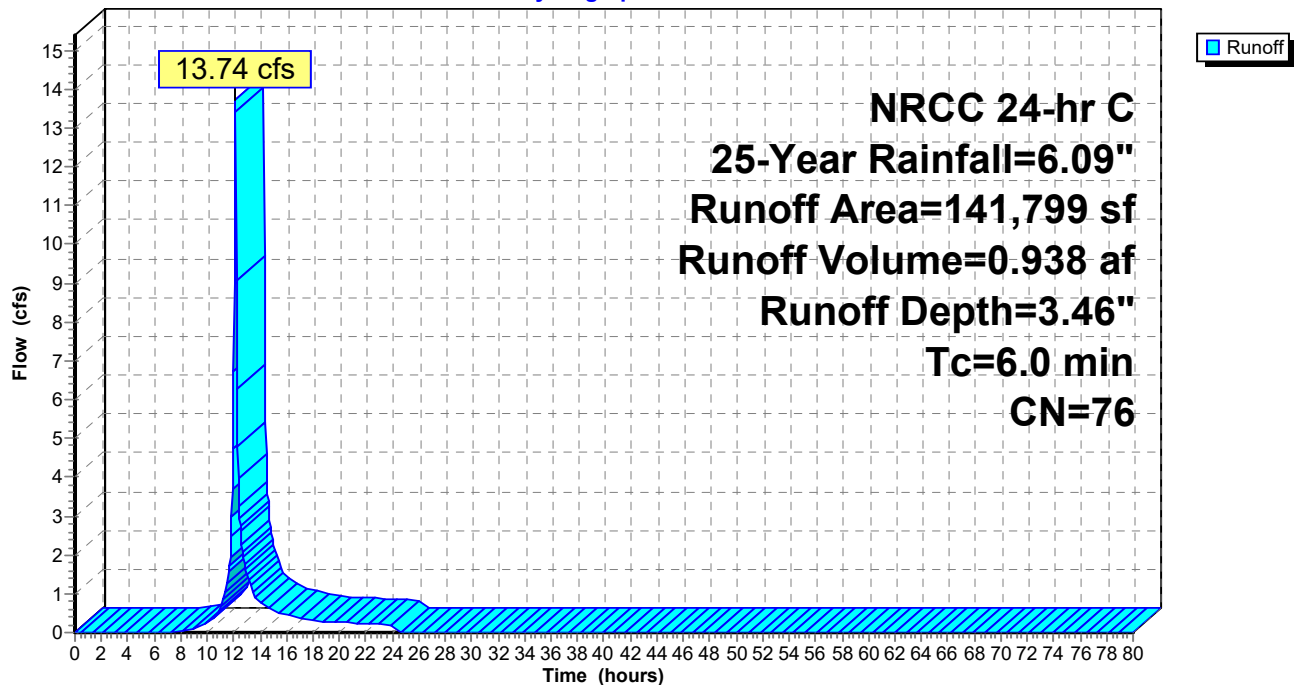
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
134,299	75	1/4 acre lots, 38% imp, HSG B
* 7,500	98	basin
141,799	76	Weighted Average
83,265		58.72% Pervious Area
58,534		41.28% Impervious Area

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

Subcatchment P-2F: P-2F

Hydrograph



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Summary for Subcatchment P-2U: P-2U

Runoff = 41.48 cfs @ 12.53 hrs, Volume= 6.087 af, Depth= 2.60"

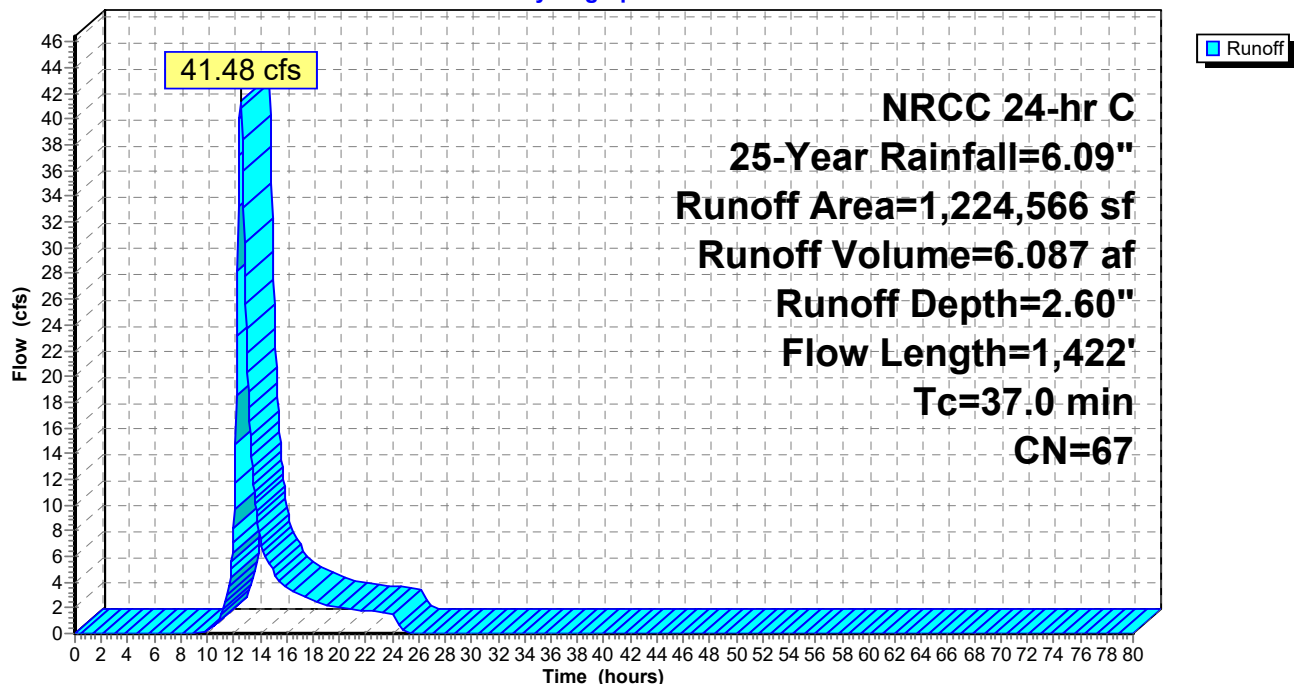
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
126,300	32	Woods/grass comb., Good, HSG A
394,200	58	Woods/grass comb., Good, HSG B
232,300	72	Woods/grass comb., Good, HSG C
418,475	79	Woods/grass comb., Good, HSG D
* 53,291	98	Wetland, HSG D
1,224,566	67	Weighted Average
1,171,275		95.65% Pervious Area
53,291		4.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	100	0.0830	0.31		Sheet Flow, Sheet Flow Grass: Short n= 0.150 P2= 3.37"
25.9	973	0.0080	0.63		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
5.7	349	0.0040	1.02		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
37.0	1,422	Total			

Subcatchment P-2U: P-2U

Hydrograph



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Summary for Subcatchment P-3A: P-3A

Runoff = 11.04 cfs @ 12.13 hrs, Volume= 0.772 af, Depth= 4.17"

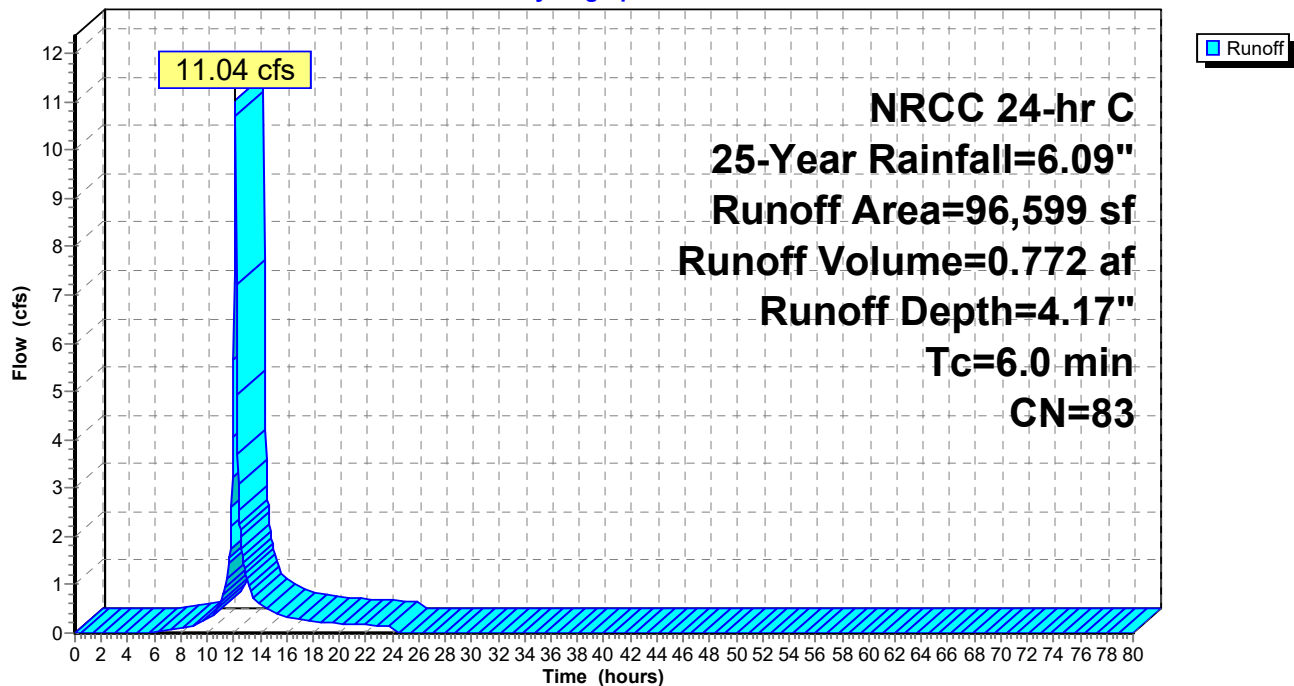
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	4,600	98	BASIN
	36,100	75	1/4 acre lots, 38% imp, HSG B
	55,899	87	1/4 acre lots, 38% imp, HSG D
	96,599	83	Weighted Average
	57,039		59.05% Pervious Area
	39,560		40.95% Impervious Area

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

Subcatchment P-3A: P-3A

Hydrograph



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Summary for Subcatchment P-3B: P-3B

Runoff = 24.40 cfs @ 12.13 hrs, Volume= 1.660 af, Depth= 3.26"

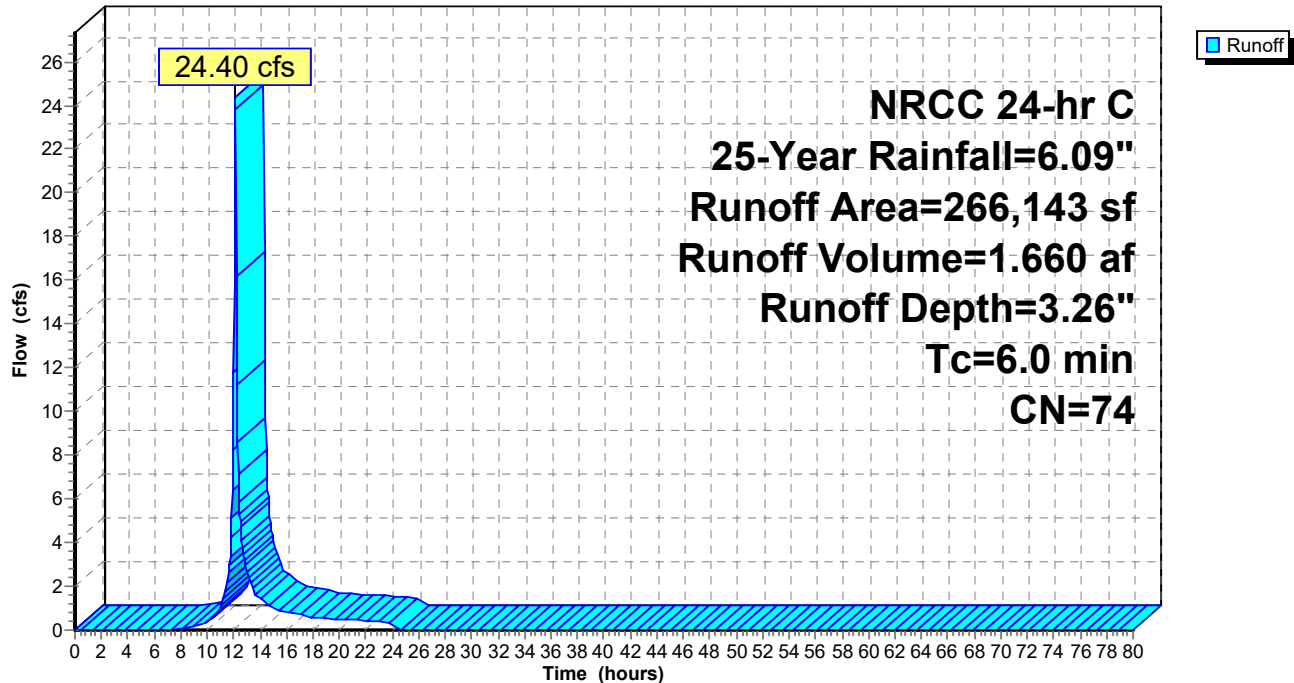
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	9,500	98	BASIN
	9,200	30	Woods, Good, HSG A
	247,443	75	1/4 acre lots, 38% imp, HSG B
	266,143	74	Weighted Average
	162,615		61.10% Pervious Area
	103,528		38.90% Impervious Area

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

Subcatchment P-3B: P-3B

Hydrograph



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Summary for Subcatchment P-3U: P-3U

Runoff = 36.63 cfs @ 12.29 hrs, Volume= 3.782 af, Depth= 2.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	169,500	98	wetland, HSG D
	108,000	30	Woods, Good, HSG A
	98,000	39	>75% Grass cover, Good, HSG A
	136,977	61	>75% Grass cover, Good, HSG B
	76,000	55	Woods, Good, HSG B
*	15,800	98	EXIST Roof and Pavement
	58,000	77	Woods, Good, HSG D
	58,000	80	>75% Grass cover, Good, HSG D
*	32,500	98	13 UNITS
*	6,400	98	400 LF OF ROAD
*	1,800	98	2 UNITS DRIVEWAY
	760,977	67	Weighted Average
	534,977		70.30% Pervious Area
	226,000		29.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.7	50	0.0340	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.37"
1.4	111	0.0356	1.32		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.0	59	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.1	10	0.0136	2.37		Shallow Concentrated Flow, Impervious Paved Kv= 20.3 fps
2.6	135	0.0156	0.87		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.0	120	0.0198	0.98		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.1	32	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
18.9	517	Total			

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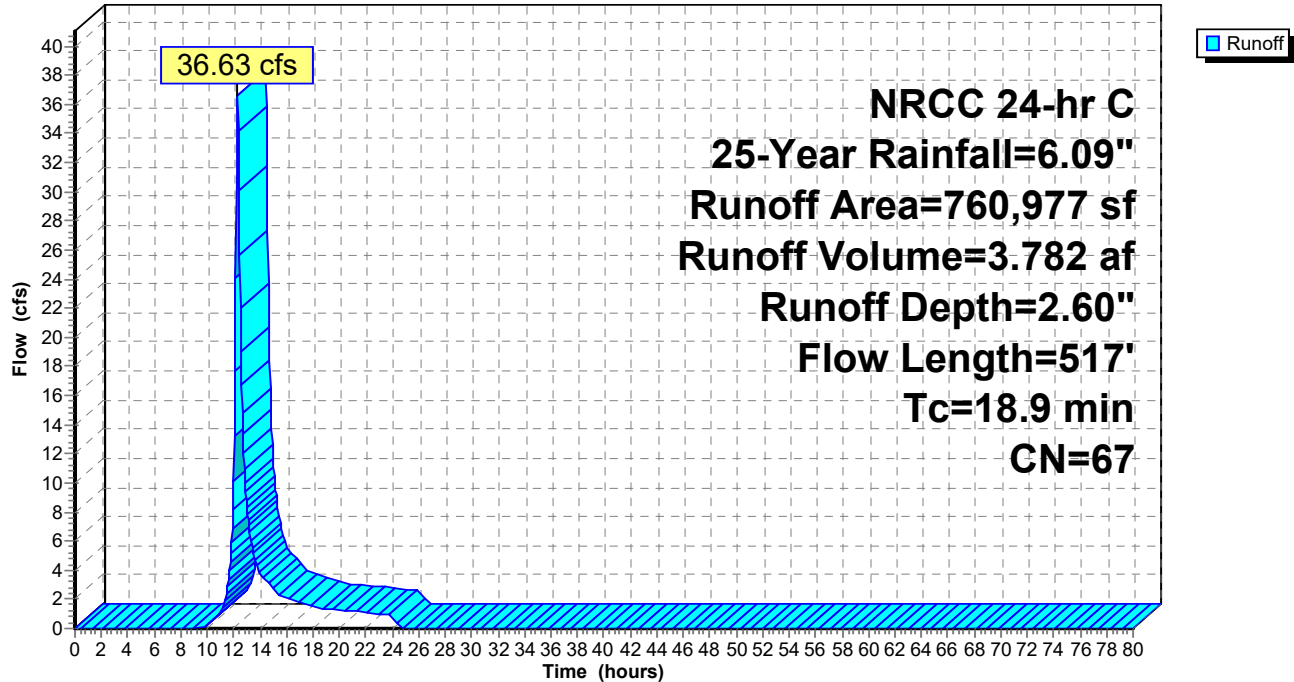
NRCC 24-hr C 25-Year Rainfall=6.09"

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Subcatchment P-3U: P-3U

Hydrograph



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Summary for Subcatchment P-4: P-4

Runoff = 0.51 cfs @ 12.15 hrs, Volume= 0.041 af, Depth= 1.11"

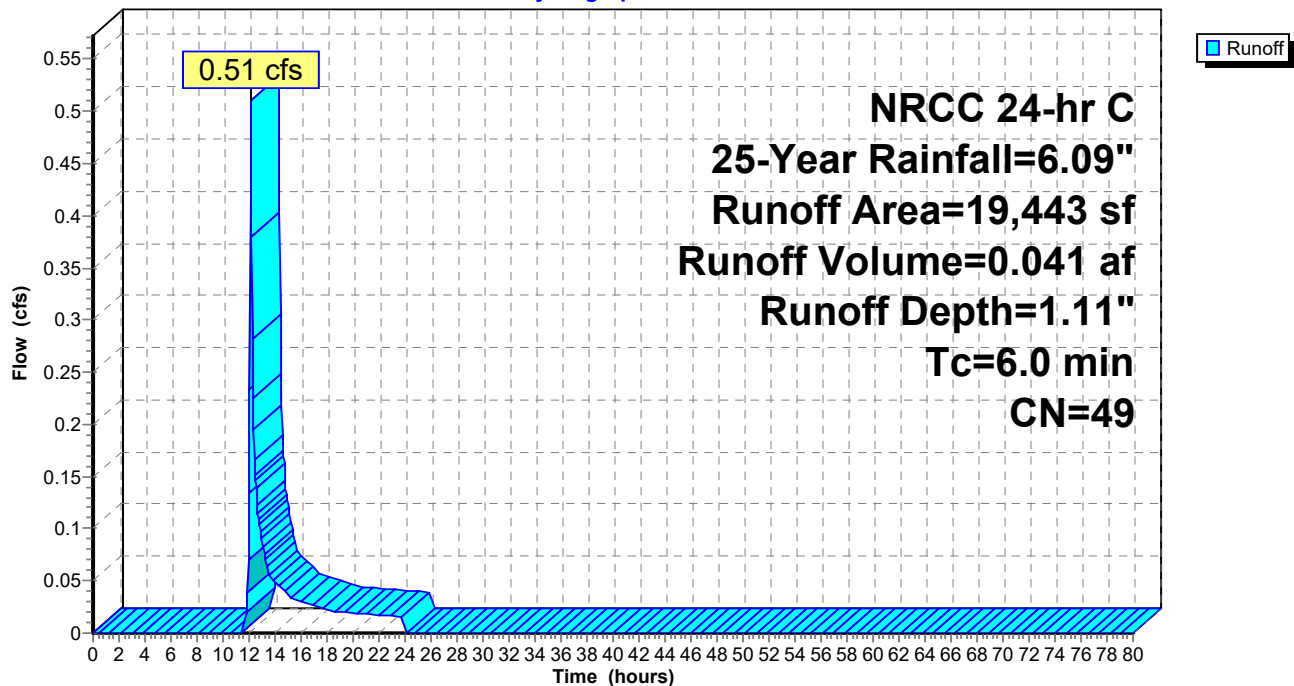
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
5,200	30	Woods, Good, HSG A
10,262	39	>75% Grass cover, Good, HSG A
* 3,981	98	roof and pavement
19,443	49	Weighted Average
15,462		79.52% Pervious Area
3,981		20.48% Impervious Area

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

Subcatchment P-4: P-4

Hydrograph



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Summary for Subcatchment P-5U: P-5U

Runoff = 11.41 cfs @ 12.22 hrs, Volume= 1.021 af, Depth= 2.42"

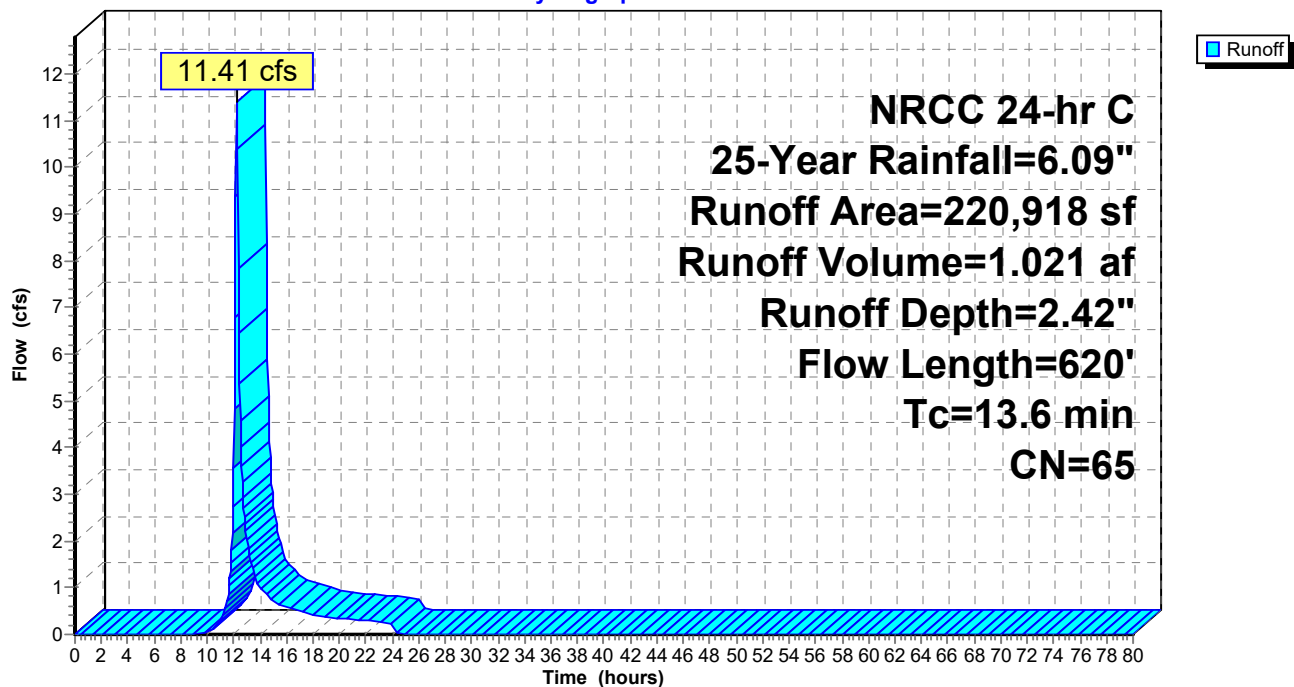
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
83,000	39	>75% Grass cover, Good, HSG A
17,000	61	>75% Grass cover, Good, HSG B
* 24,100	98	WETLAND, 0% imp, HSG D
96,818	80	>75% Grass cover, Good, HSG D
220,918	65	Weighted Average
220,918		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	50	0.0160	0.14		Sheet Flow, Grass: Short n= 0.150 P2= 3.37"
7.6	570	0.0315	1.24		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
13.6	620	Total			

Subcatchment P-5U: P-5U

Hydrograph



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Summary for Subcatchment P-6A: P-6A

Runoff = 14.68 cfs @ 12.13 hrs, Volume= 1.005 af, Depth= 3.56"

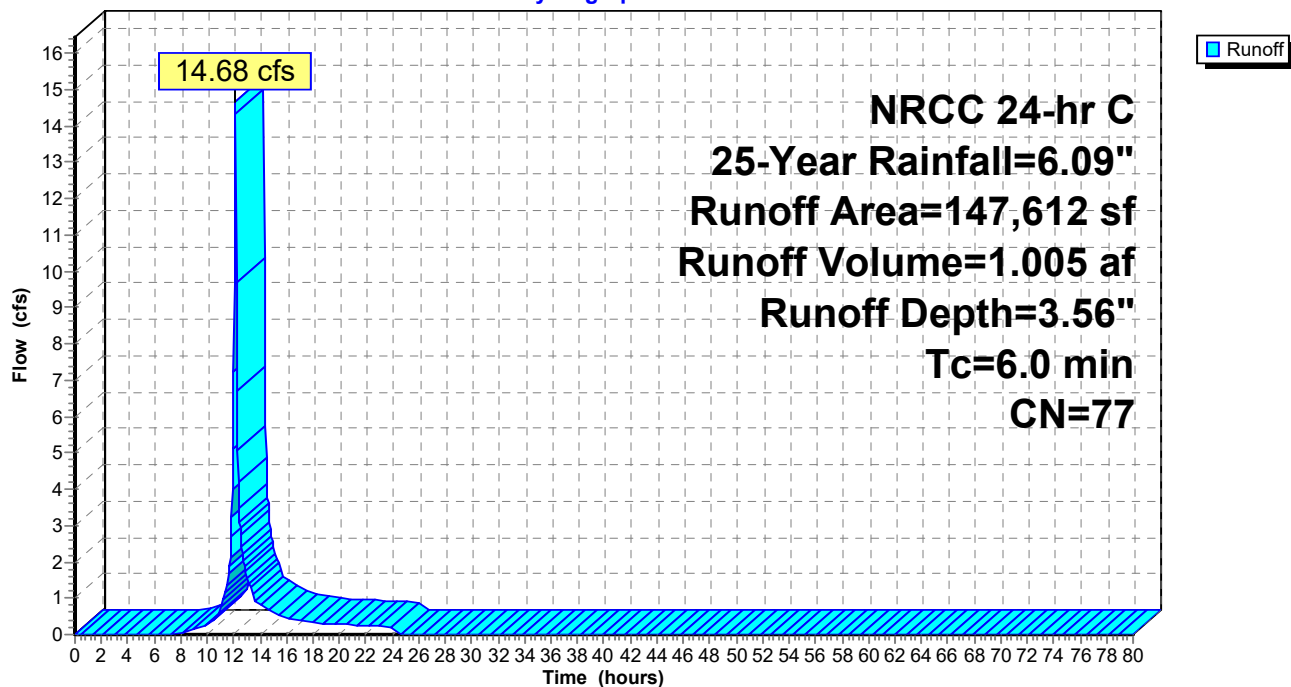
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
134,612	75	1/4 acre lots, 38% imp, HSG B
* 13,000	98	basin
147,612	77	Weighted Average
83,459		56.54% Pervious Area
64,153		43.46% Impervious Area

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

Subcatchment P-6A: P-6A

Hydrograph



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Summary for Subcatchment P-6U: P-6U

Runoff = 20.91 cfs @ 12.22 hrs, Volume= 1.868 af, Depth= 2.69"

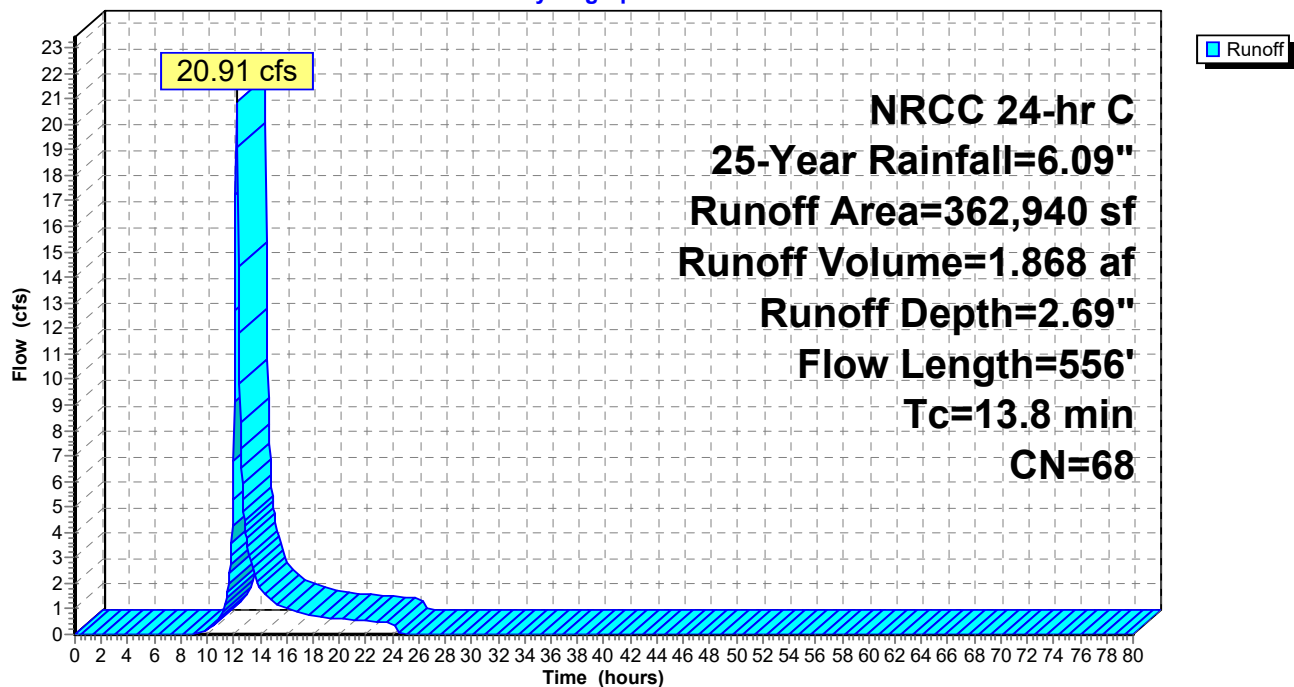
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
45,100	32	Woods/grass comb., Good, HSG A
164,917	58	Woods/grass comb., Good, HSG B
* 82,500	98	WETLAND, 0% imp, HSG D
70,423	80	>75% Grass cover, Good, HSG D
362,940	68	Weighted Average
362,940		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	100	0.0296	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.37"
5.6	456	0.0380	1.36		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
13.8	556	Total			

Subcatchment P-6U: P-6U

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Summary for Subcatchment P-7A: P-7A

Runoff = 19.32 cfs @ 12.13 hrs, Volume= 1.313 af, Depth= 3.16"

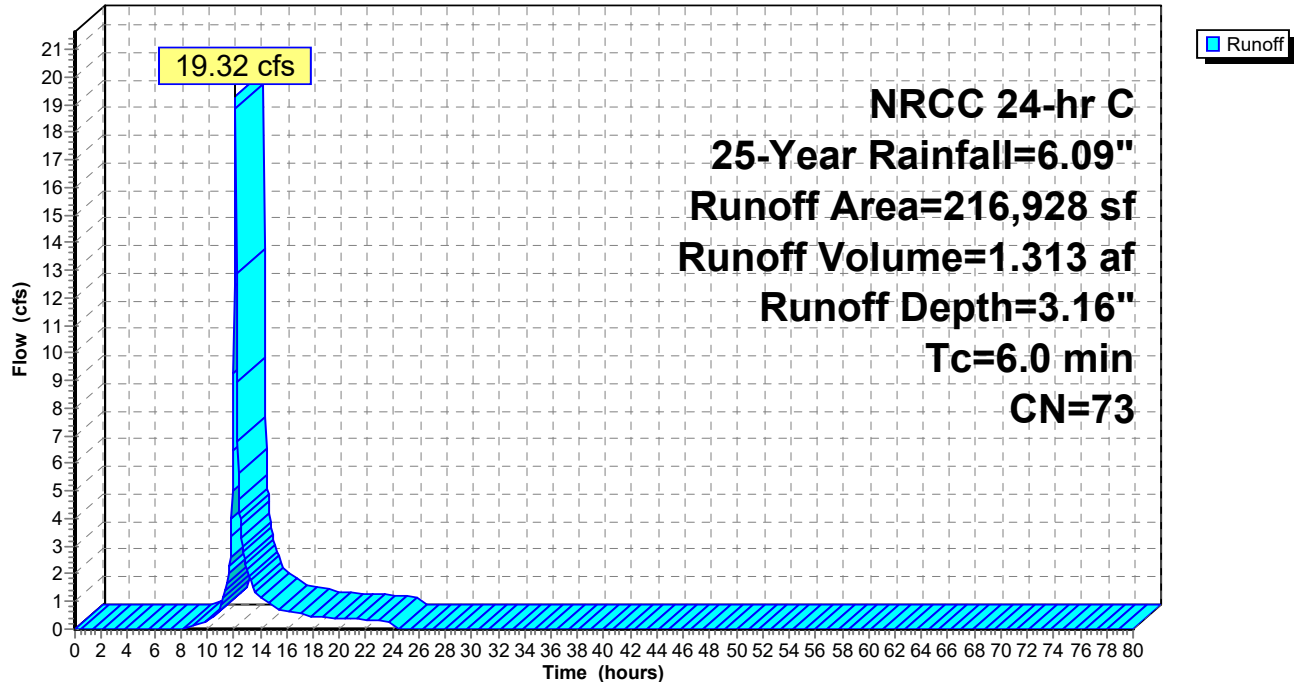
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	50,000	98	pavement parking
*	4,500	98	roof
*	10,200	98	basin
	99,000	75	1/4 acre lots, 38% imp, HSG B
	53,228	39	>75% Grass cover, Good, HSG A
	216,928	73	Weighted Average
	114,608		52.83% Pervious Area
	102,320		47.17% Impervious Area

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

Subcatchment P-7A: P-7A

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Summary for Subcatchment P-7U: P-7U

Runoff = 16.19 cfs @ 12.37 hrs, Volume= 2.008 af, Depth= 1.73"

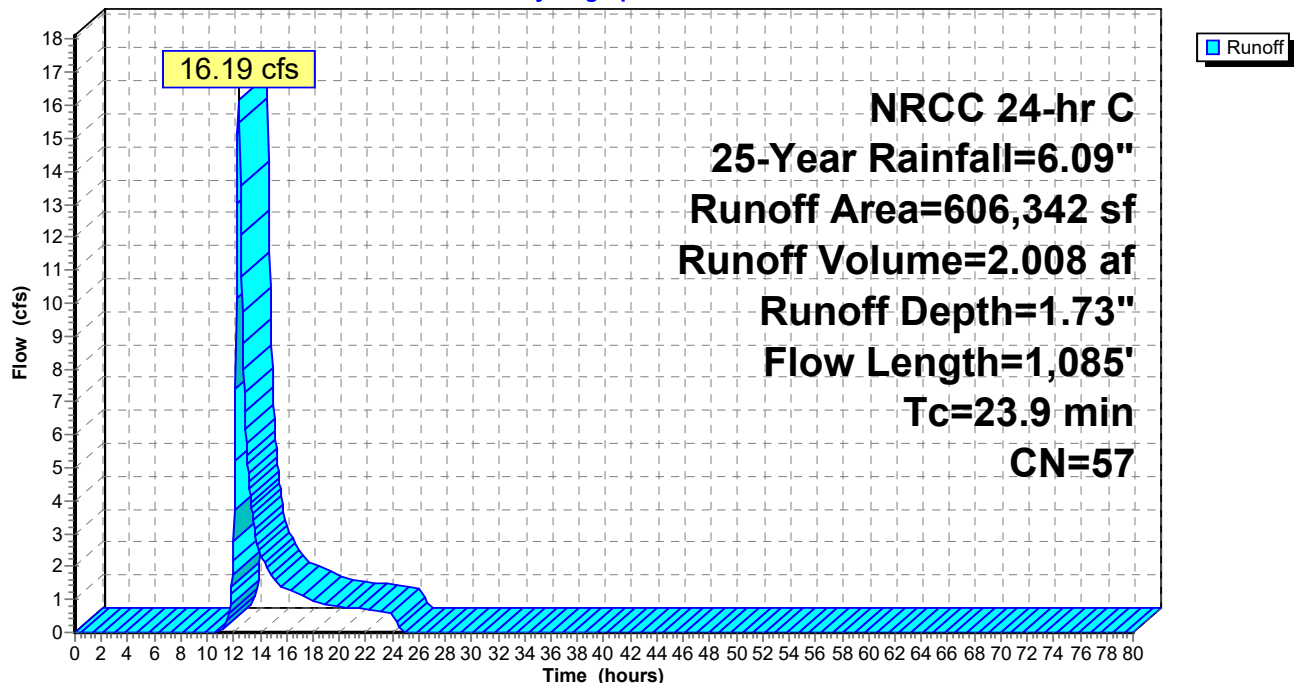
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
32,738	98	Paved parking, HSG B
118,803	32	Woods/grass comb., Good, HSG A
403,863	58	Woods/grass comb., Good, HSG B
33,128	80	>75% Grass cover, Good, HSG D
17,810	98	Water Surface, 0% imp, HSG A
606,342	57	Weighted Average
573,604		94.60% Pervious Area
32,738		5.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4	100	0.0160	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 3.37"
13.5	985	0.0300	1.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
23.9	1,085	Total			

Subcatchment P-7U: P-7U

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Summary for Subcatchment P-8U: P-8U

Runoff = 5.28 cfs @ 12.16 hrs, Volume= 0.394 af, Depth= 1.90"

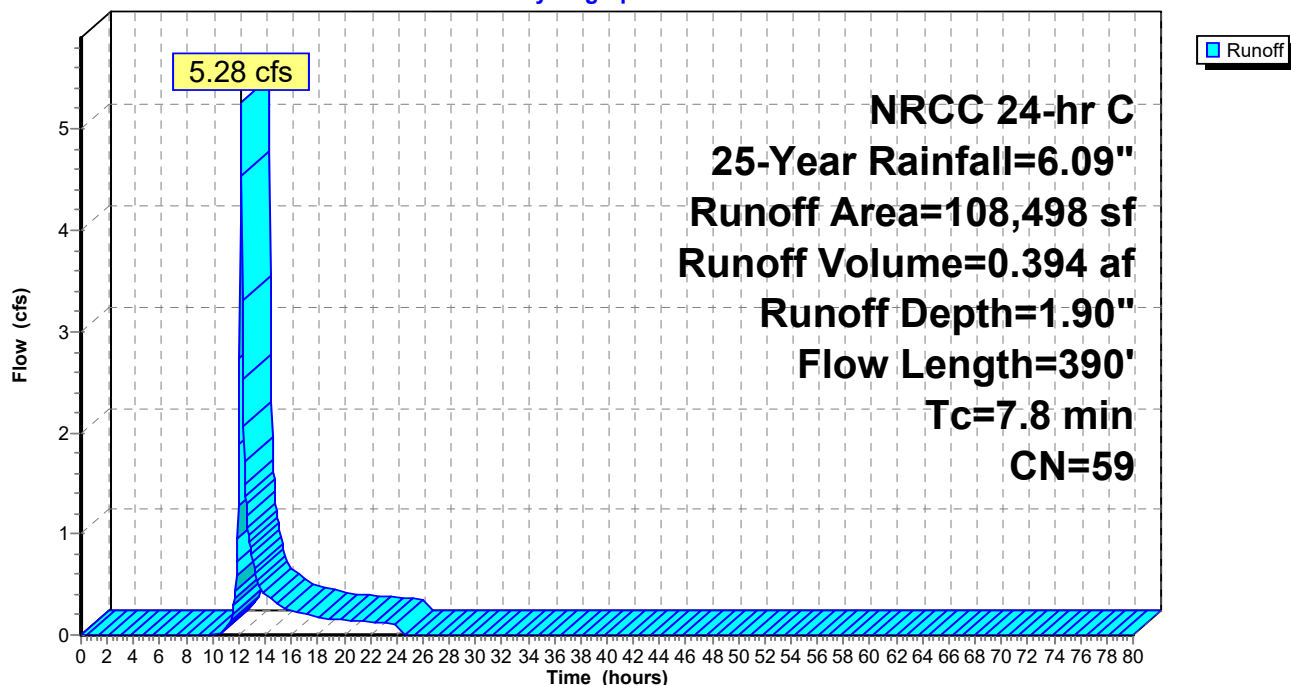
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	7,000	98	roof
	5,726	98	Water Surface, 0% imp, HSG A
	12,978	39	>75% Grass cover, Good, HSG A
	43,794	61	>75% Grass cover, Good, HSG B
	6,600	30	Woods, Good, HSG A
	32,400	55	Woods, Good, HSG B
	108,498	59	Weighted Average
	101,498		93.55% Pervious Area
	7,000		6.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.7	50	0.0120	0.12		Sheet Flow, Sheet Flow Grass: Short n= 0.150 P2= 3.37"
1.1	340	0.0940	4.94		Shallow Concentrated Flow, HR-A Unpaved Kv= 16.1 fps
7.8	390	Total			

Subcatchment P-8U: P-8U

Hydrograph



Proposed Hydrology

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Summary for Subcatchment P-9A: P-9A

Runoff = 2.20 cfs @ 12.14 hrs, Volume= 0.166 af, Depth= 1.34"

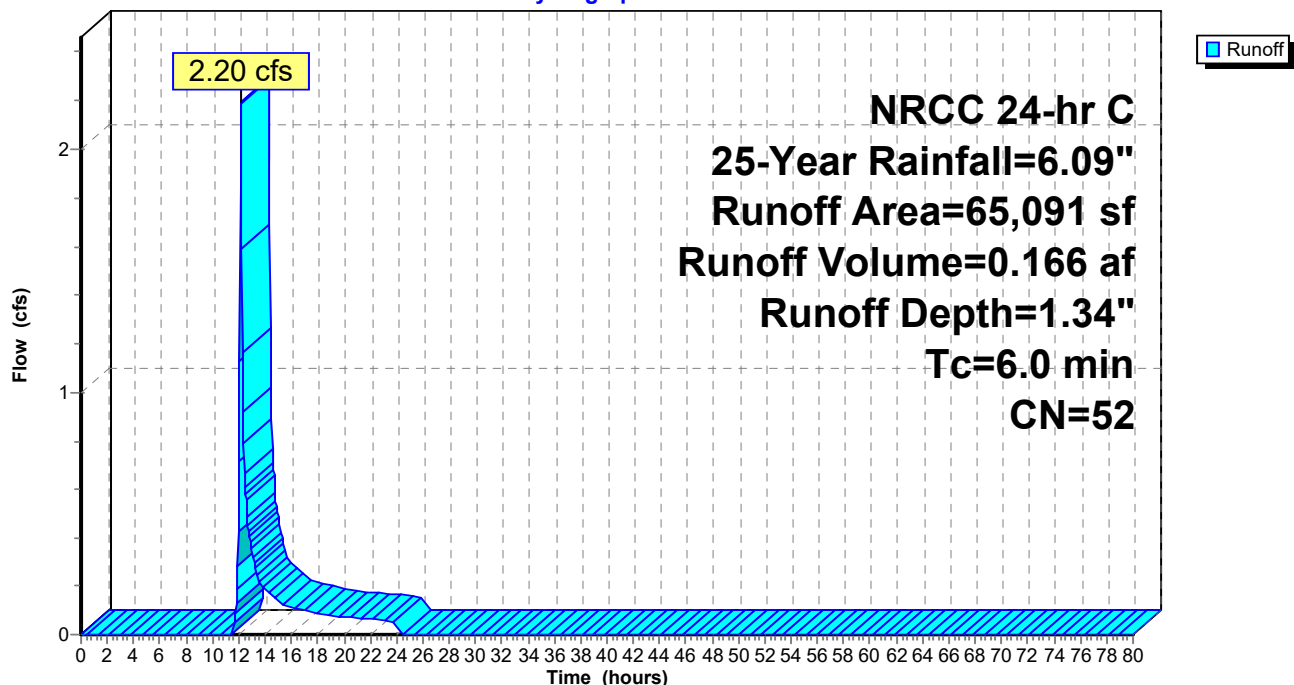
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
	13,200	30	Woods, Good, HSG A
*	15,000	98	ROADS
*	1,700	98	BASIN
	35,191	39	>75% Grass cover, Good, HSG A
	65,091	52	Weighted Average
	48,391		74.34% Pervious Area
	16,700		25.66% Impervious Area

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

Subcatchment P-9A: P-9A

Hydrograph



Proposed Hydrology

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Summary for Subcatchment P-9B: P-9B

Runoff = 5.56 cfs @ 12.14 hrs, Volume= 0.382 af, Depth= 2.24"

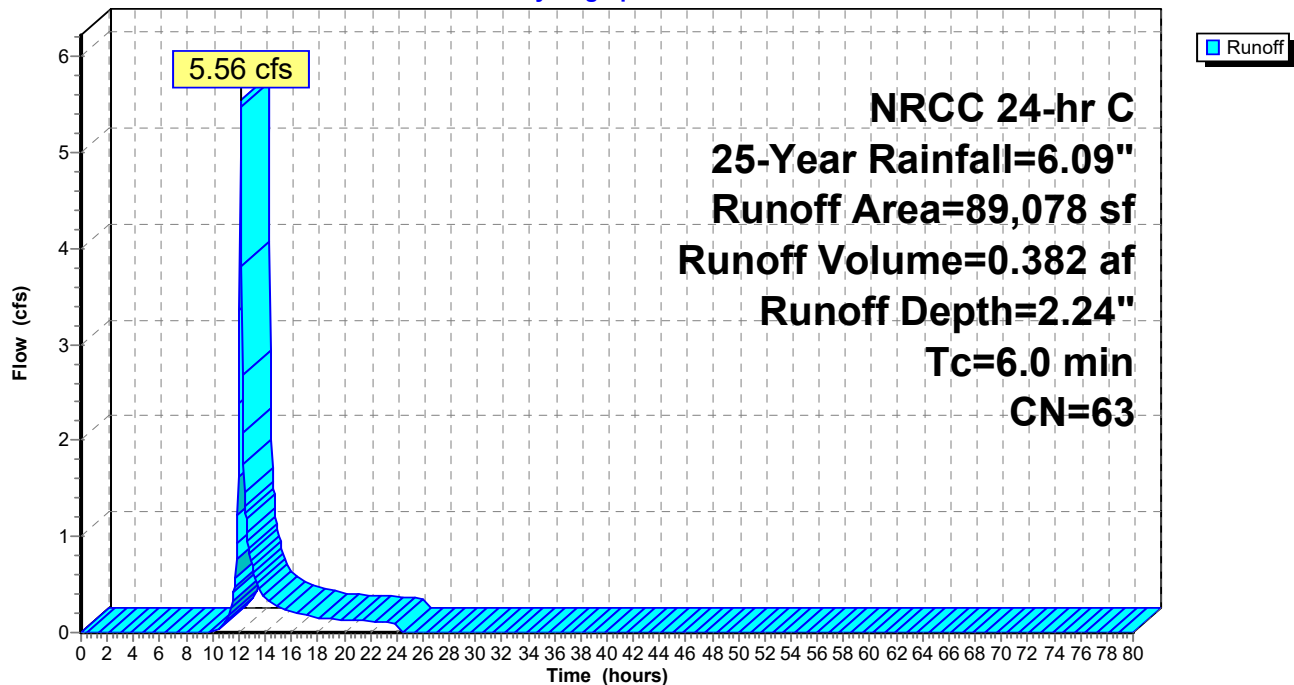
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

	Area (sf)	CN	Description
*	4,300	98	BASIN
	84,778	61	1/4 acre lots, 38% imp, HSG A
	89,078	63	Weighted Average
	52,562		59.01% Pervious Area
	36,516		40.99% Impervious Area

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

Subcatchment P-9B: P-9B

Hydrograph



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Summary for Subcatchment P-9C: P-9C

Runoff = 17.18 cfs @ 12.13 hrs, Volume= 1.178 af, Depth= 3.66"

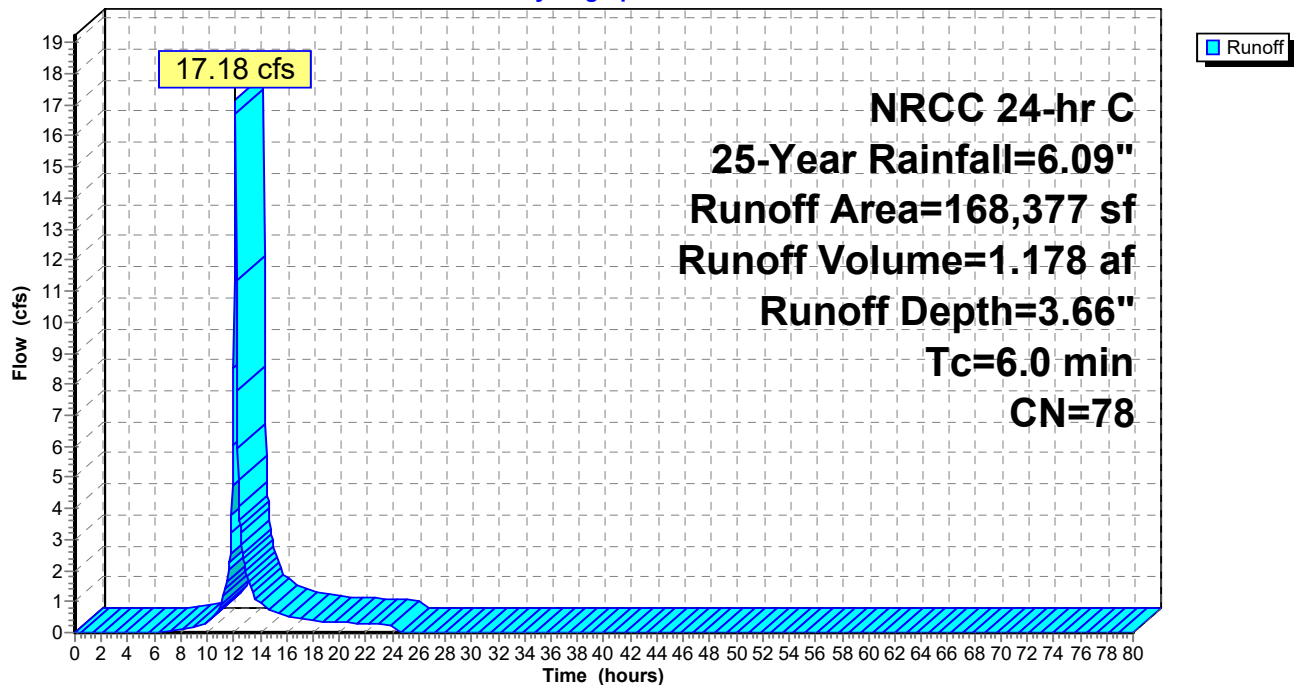
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
20,800	30	Woods, Good, HSG A
104,000	98	Paved parking, HSG A
34,077	39	>75% Grass cover, Good, HSG A
* 9,500	98	ROOF
168,377	78	Weighted Average
54,877		32.59% Pervious Area
113,500		67.41% Impervious Area

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

Subcatchment P-9C: P-9C

Hydrograph



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Summary for Subcatchment P-9U: P-9U

Runoff = 1.11 cfs @ 12.16 hrs, Volume= 0.125 af, Depth= 0.71"

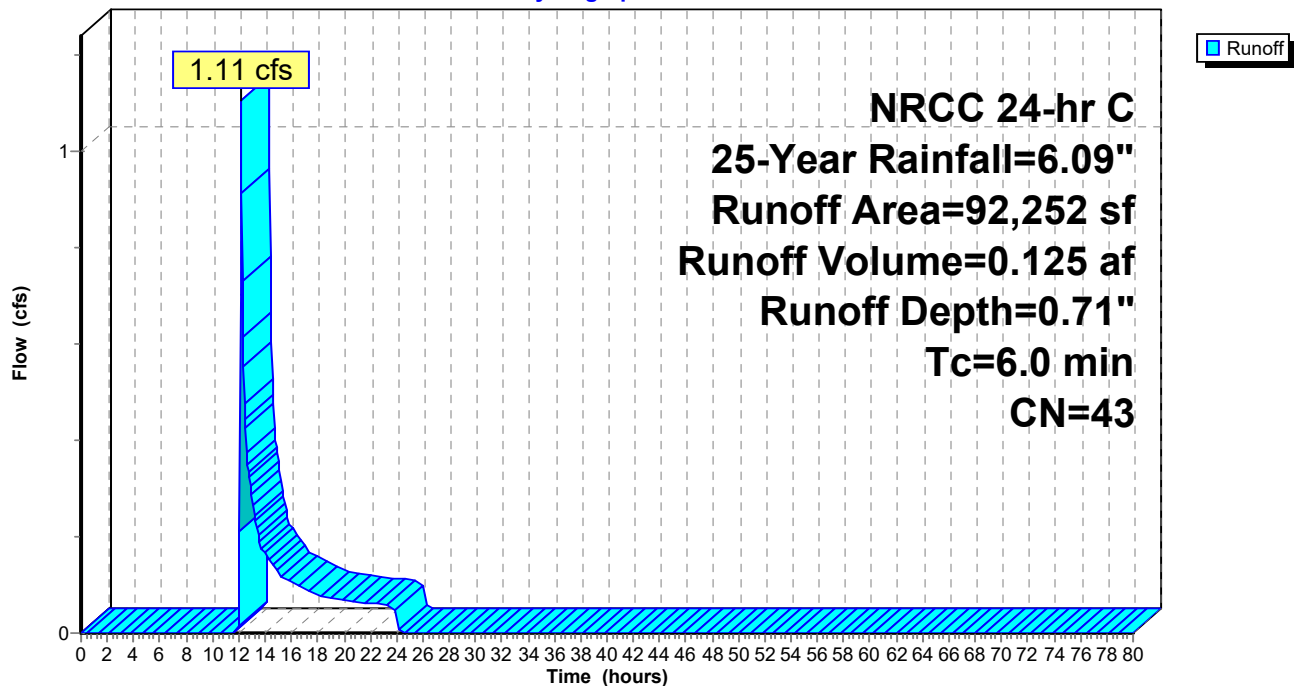
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 25-Year Rainfall=6.09"

Area (sf)	CN	Description
36,000	30	Woods, Good, HSG A
12,000	98	Paved parking, HSG A
44,252	39	>75% Grass cover, Good, HSG A
92,252	43	Weighted Average
80,252		86.99% Pervious Area
12,000		13.01% Impervious Area

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

Subcatchment P-9U: P-9U

Hydrograph



Proposed Hydrology

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Summary for Reach DP-1: Wetland Series R

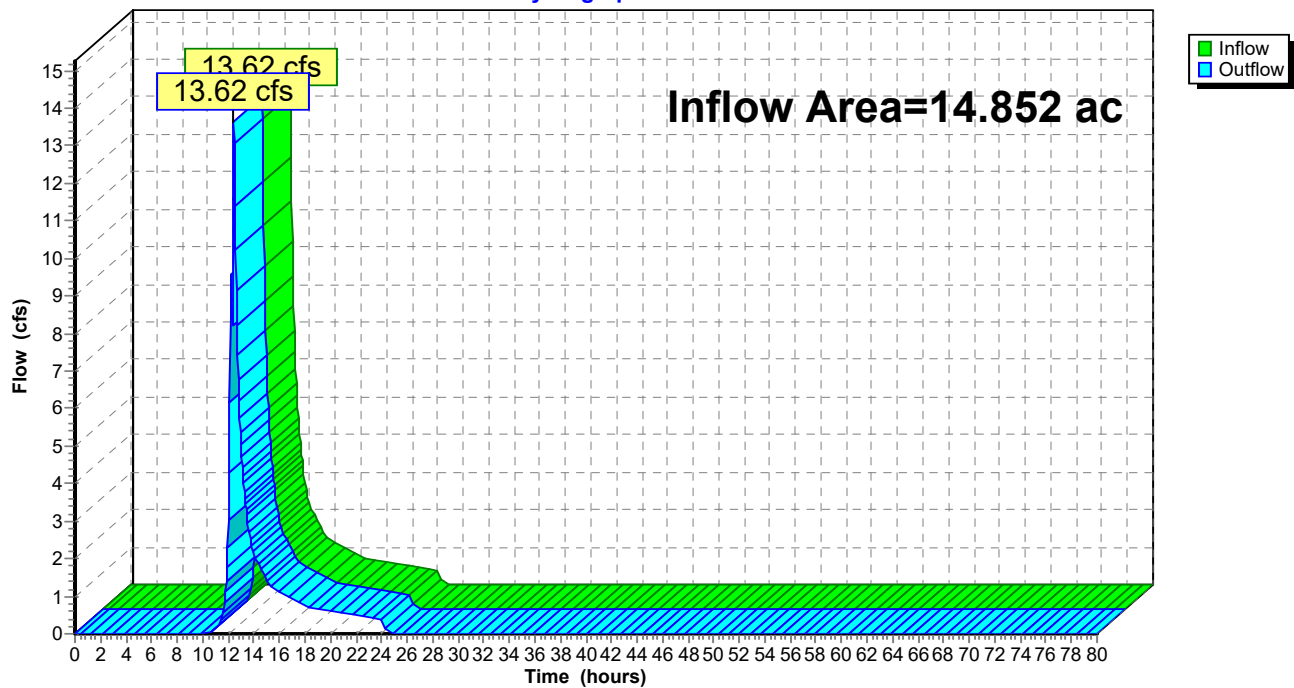
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 14.852 ac, 17.22% Impervious, Inflow Depth = 1.39" for 25-Year event
Inflow = 13.62 cfs @ 12.43 hrs, Volume= 1.723 af
Outflow = 13.62 cfs @ 12.43 hrs, Volume= 1.723 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-1: Wetland Series R

Hydrograph



Proposed Hydrology

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Summary for Reach DP-10: West Elm Street

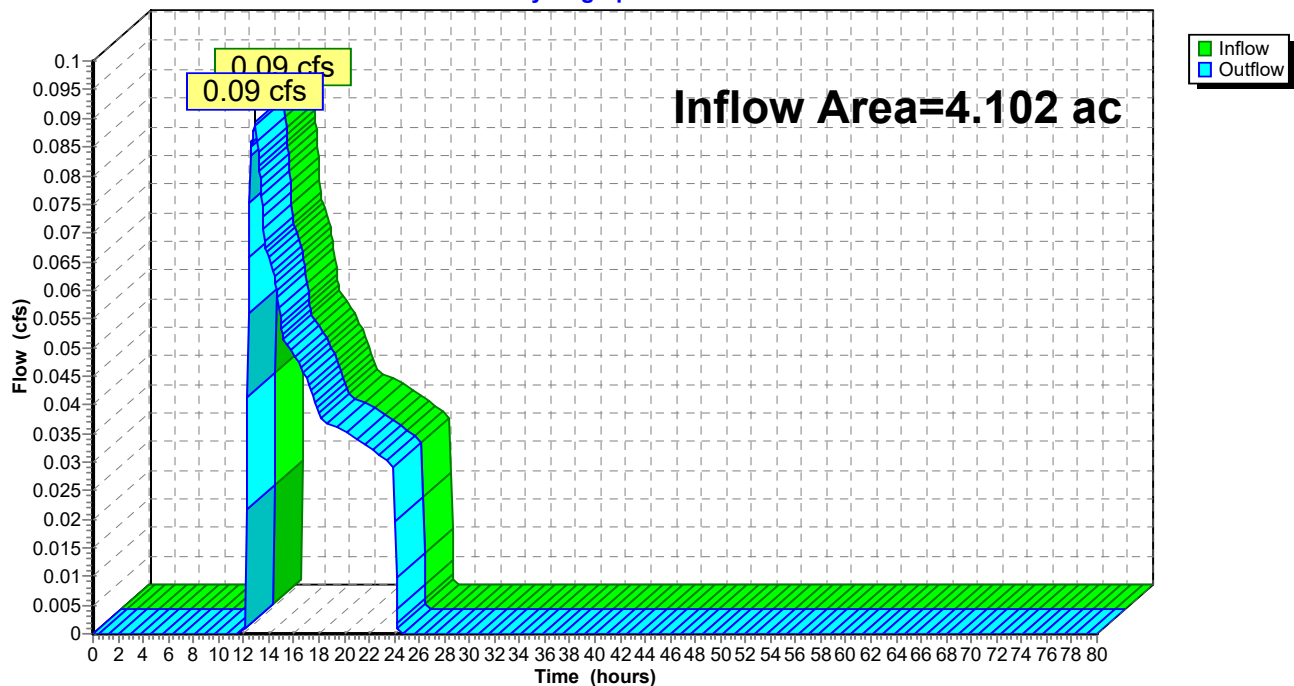
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 4.102 ac, 17.26% Impervious, Inflow Depth = 0.13" for 25-Year event
Inflow = 0.09 cfs @ 12.93 hrs, Volume= 0.044 af
Outflow = 0.09 cfs @ 12.93 hrs, Volume= 0.044 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-10: West Elm Street

Hydrograph



Proposed Hydrology

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Summary for Reach DP-11: Wetland Series A

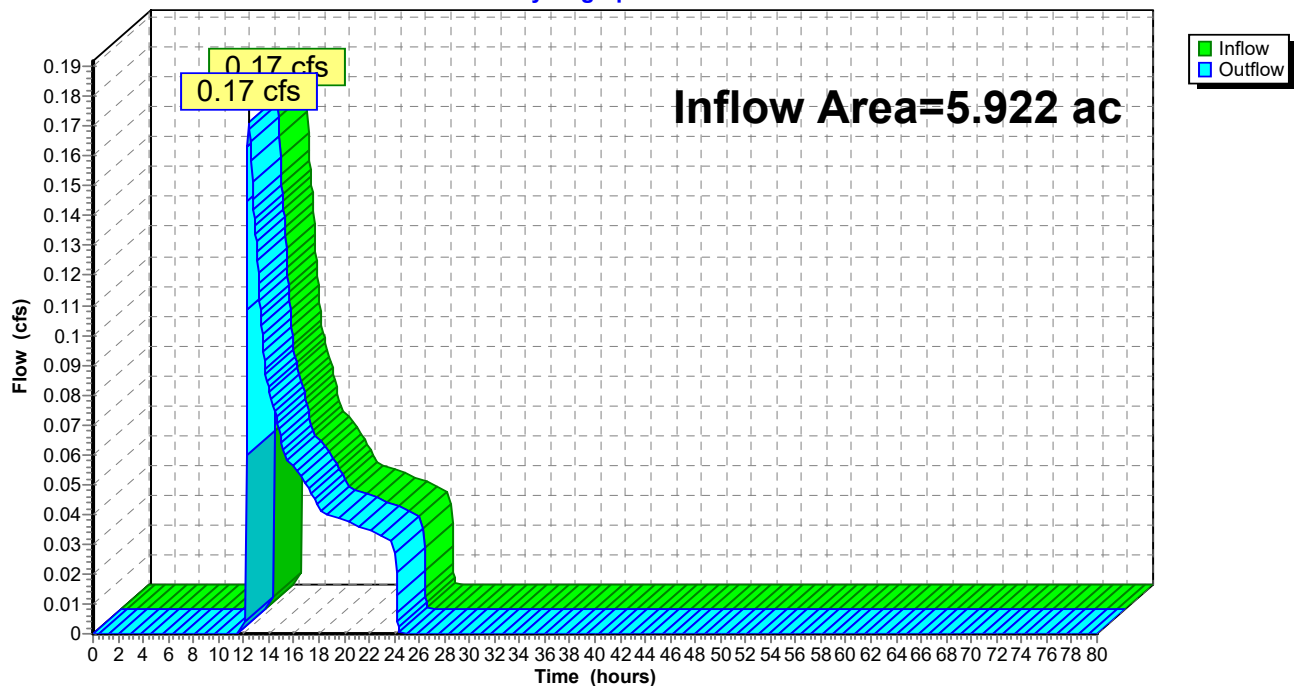
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 5.922 ac, 8.29% Impervious, Inflow Depth = 0.11" for 25-Year event
Inflow = 0.17 cfs @ 12.42 hrs, Volume= 0.056 af
Outflow = 0.17 cfs @ 12.42 hrs, Volume= 0.056 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-11: Wetland Series A

Hydrograph



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Summary for Reach DP-12: Wetland Series A

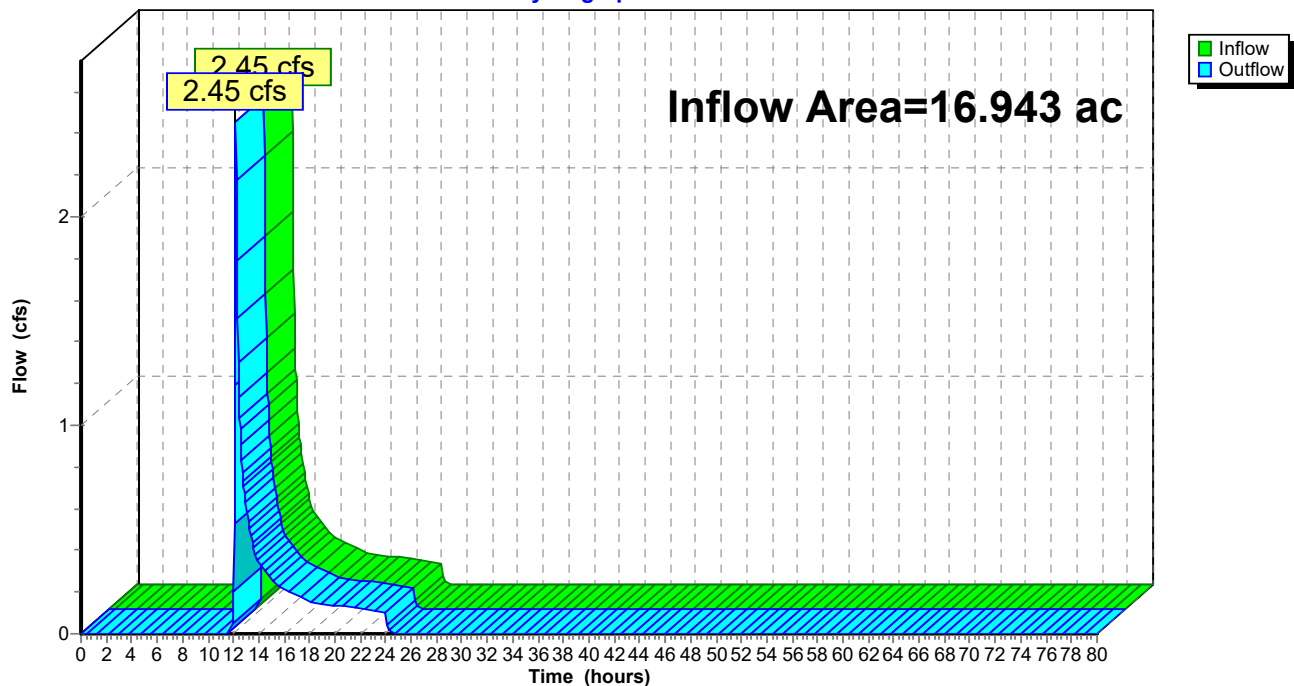
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 16.943 ac, 19.78% Impervious, Inflow Depth = 0.19" for 25-Year event
Inflow = 2.45 cfs @ 12.20 hrs, Volume= 0.270 af
Outflow = 2.45 cfs @ 12.20 hrs, Volume= 0.270 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-12: Wetland Series A

Hydrograph



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Summary for Reach DP-13: Wetland Series B

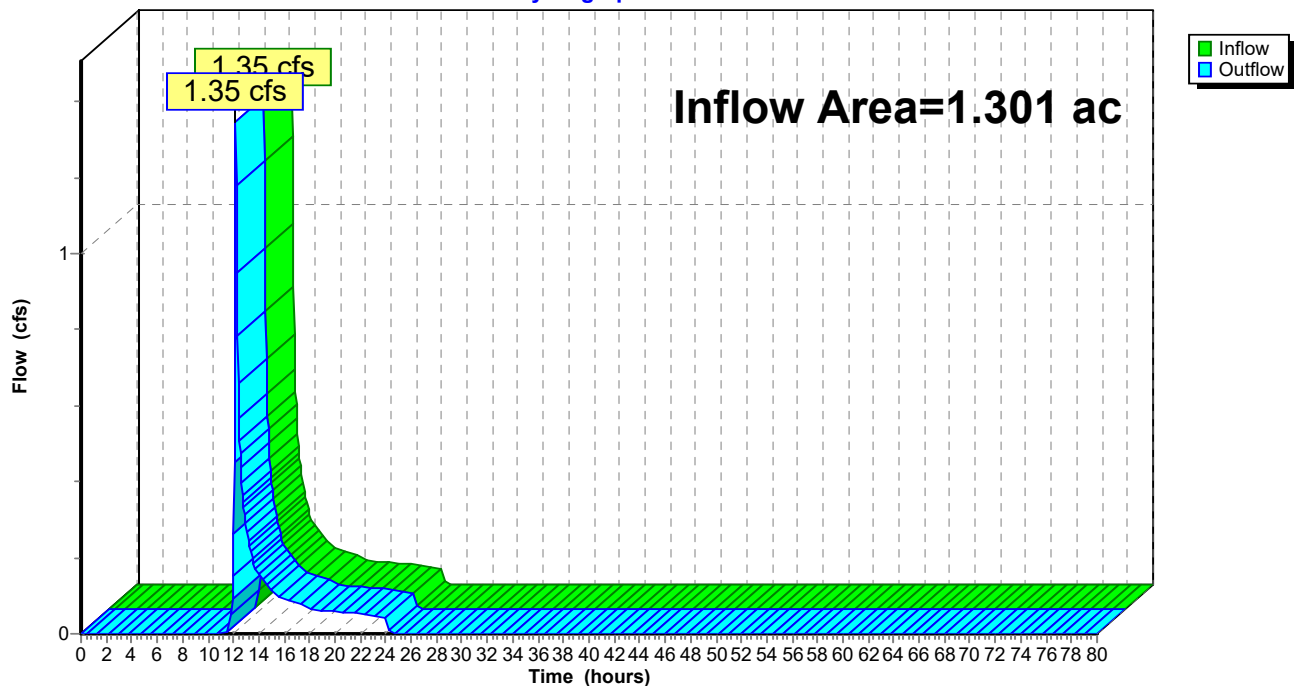
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.301 ac, 0.00% Impervious, Inflow Depth = 1.19" for 25-Year event
Inflow = 1.35 cfs @ 12.20 hrs, Volume= 0.129 af
Outflow = 1.35 cfs @ 12.20 hrs, Volume= 0.129 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-13: Wetland Series B

Hydrograph



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Summary for Reach DP-14: Wetland Series C,D,E,,K,J

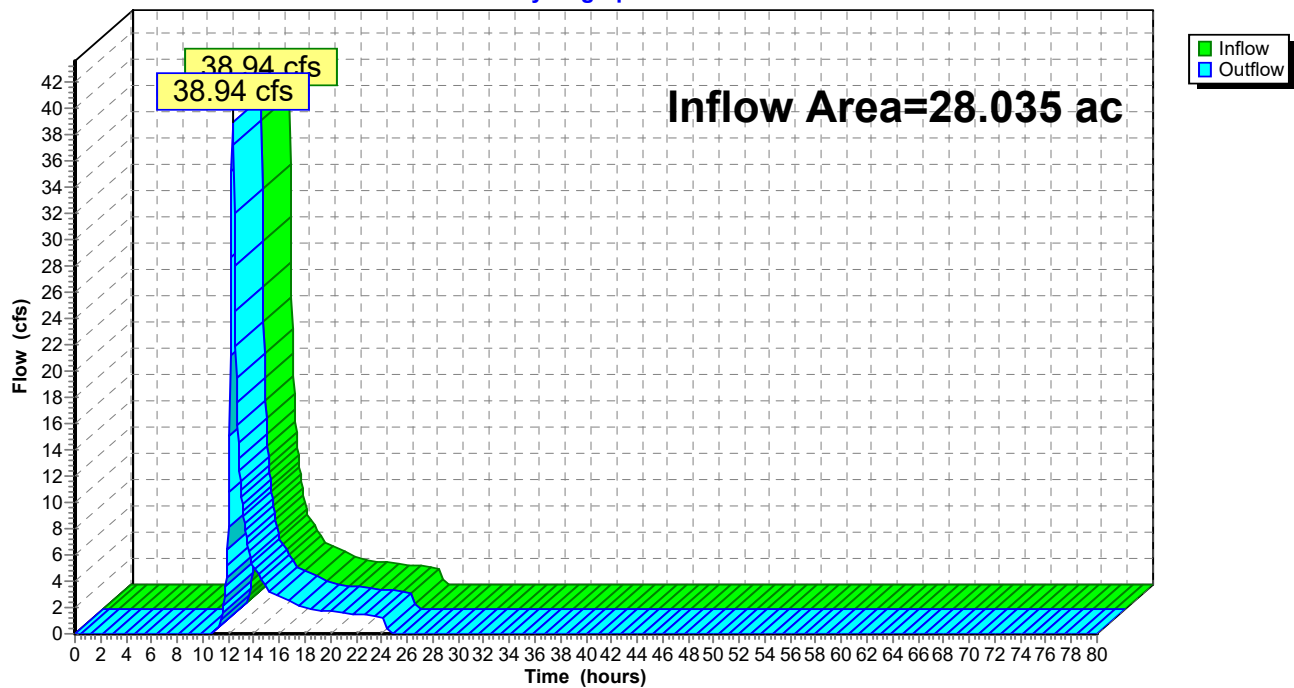
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 28.035 ac, 0.00% Impervious, Inflow Depth = 1.90" for 25-Year event
Inflow = 38.94 cfs @ 12.32 hrs, Volume= 4.430 af
Outflow = 38.94 cfs @ 12.32 hrs, Volume= 4.430 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-14: Wetland Series C,D,E,,K,J

Hydrograph



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Summary for Reach DP-15: Wetland Series H

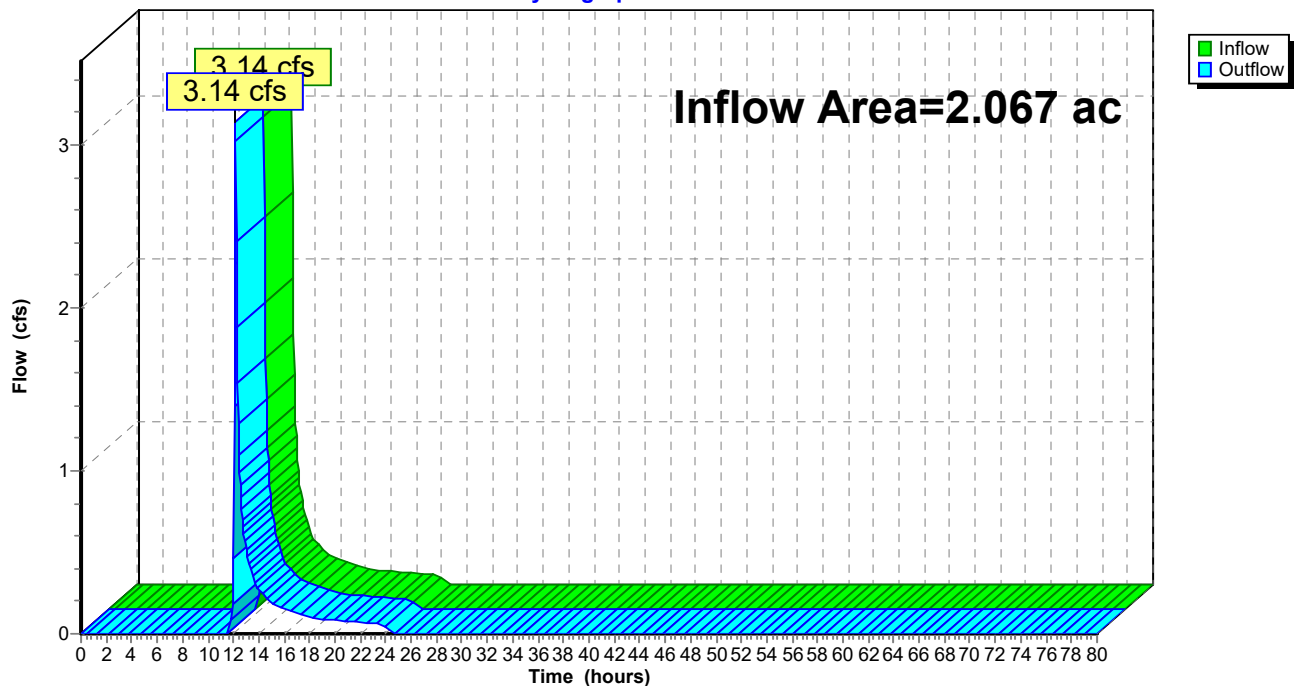
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 2.067 ac, 7.81% Impervious, Inflow Depth = 1.34" for 25-Year event
Inflow = 3.14 cfs @ 12.17 hrs, Volume= 0.230 af
Outflow = 3.14 cfs @ 12.17 hrs, Volume= 0.230 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-15: Wetland Series H

Hydrograph



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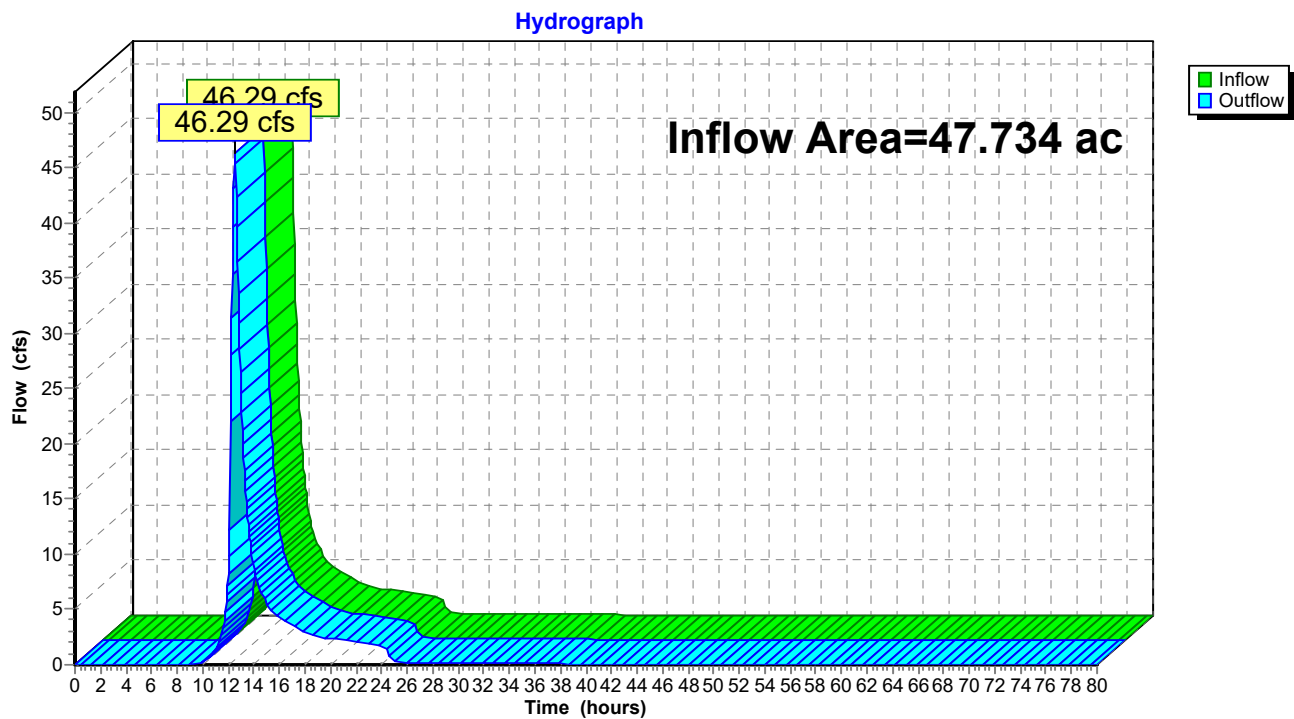
Summary for Reach DP-2: Wetland Series I

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 47.734 ac, 17.87% Impervious, Inflow Depth = 1.81" for 25-Year event
Inflow = 46.29 cfs @ 12.52 hrs, Volume= 7.196 af
Outflow = 46.29 cfs @ 12.52 hrs, Volume= 7.196 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-2: Wetland Series I



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Summary for Reach DP-3: 8" Copper Pipe

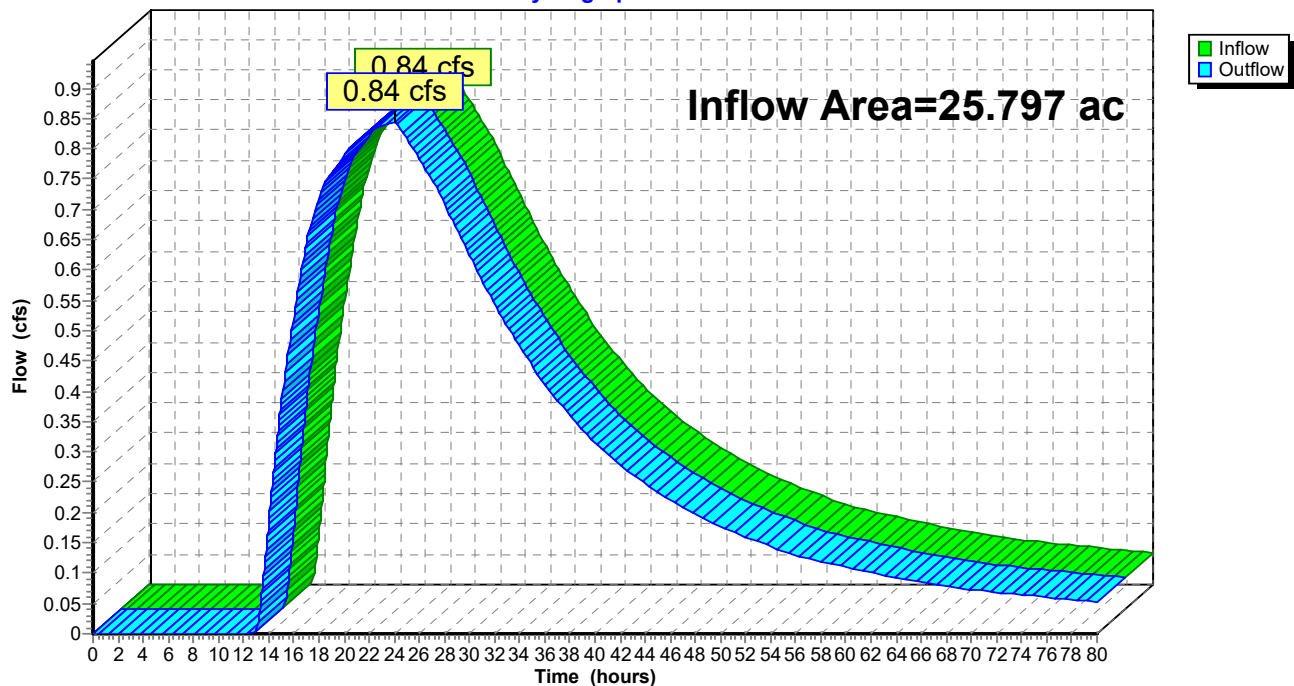
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 25.797 ac, 32.85% Impervious, Inflow Depth > 0.81" for 25-Year event
Inflow = 0.84 cfs @ 24.13 hrs, Volume= 1.749 af
Outflow = 0.84 cfs @ 24.13 hrs, Volume= 1.749 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-3: 8" Copper Pipe

Hydrograph



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Summary for Reach DP-4: Dwelley Street

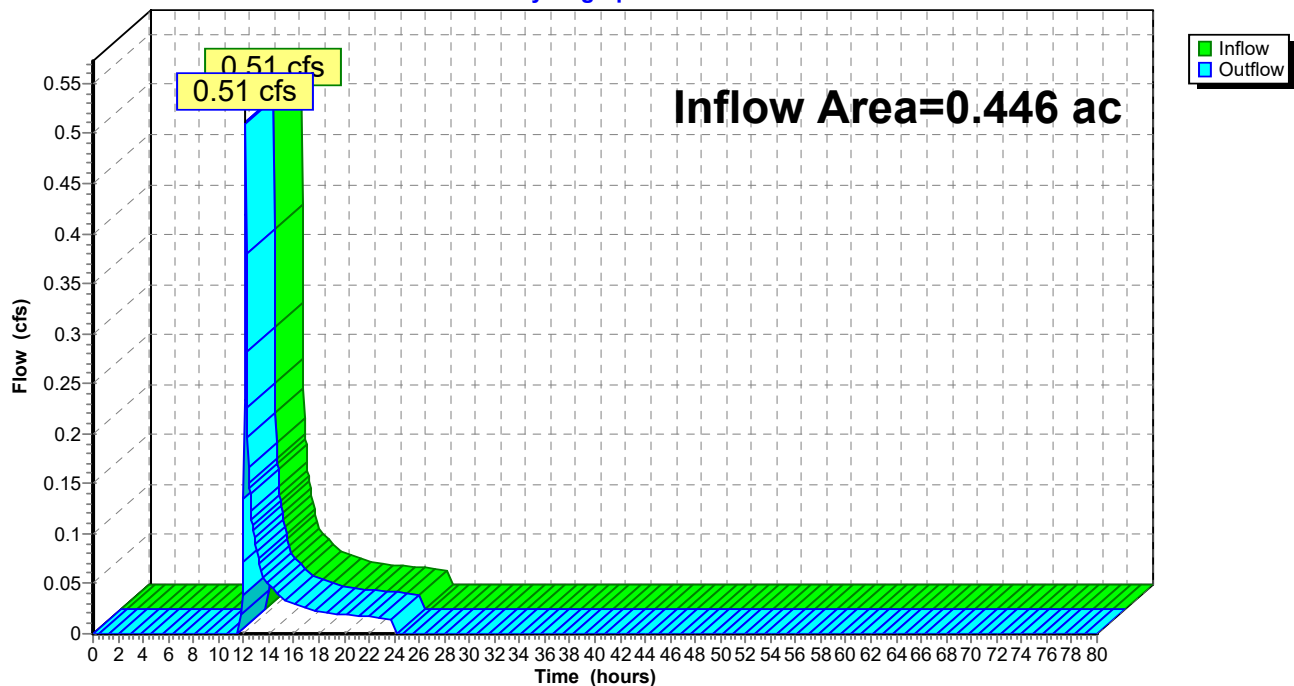
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.446 ac, 20.48% Impervious, Inflow Depth = 1.11" for 25-Year event
Inflow = 0.51 cfs @ 12.15 hrs, Volume= 0.041 af
Outflow = 0.51 cfs @ 12.15 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-4: Dwelley Street

Hydrograph



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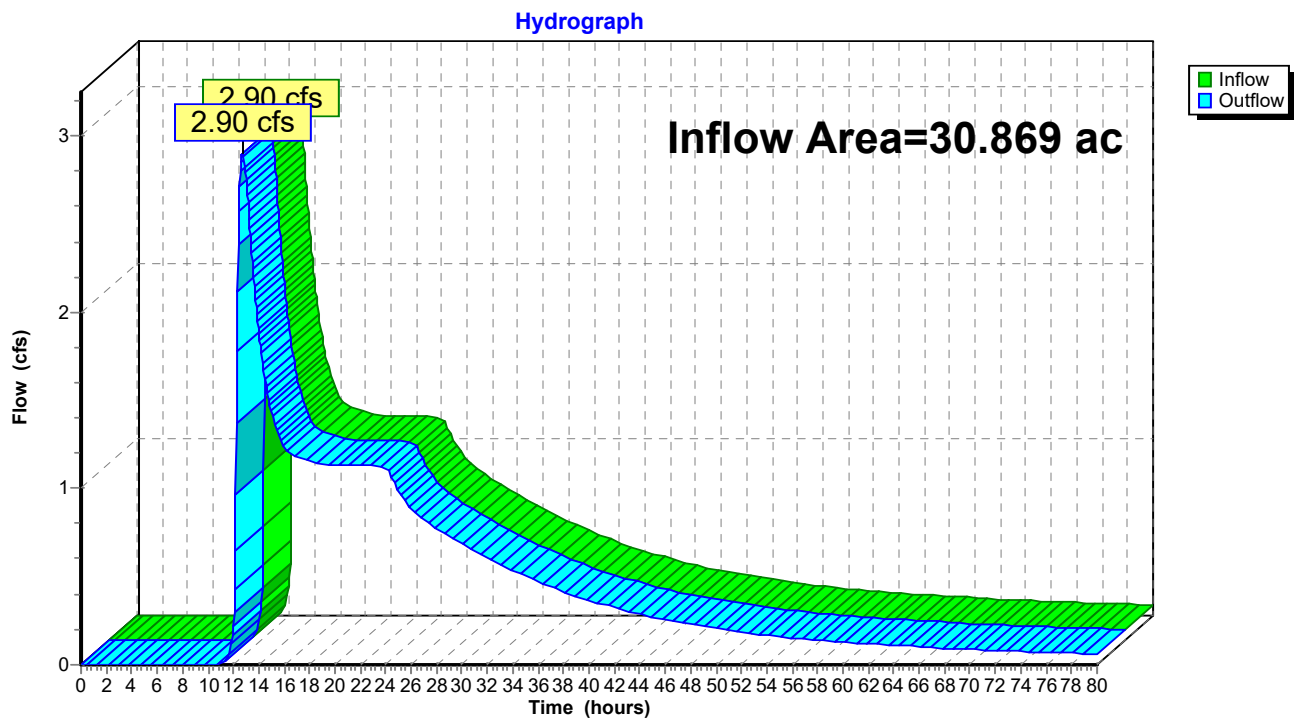
Summary for Reach DP-5: 24" RCP PIPE

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 30.869 ac, 27.45% Impervious, Inflow Depth > 1.06" for 25-Year event
Inflow = 2.90 cfs @ 12.71 hrs, Volume= 2.721 af
Outflow = 2.90 cfs @ 12.71 hrs, Volume= 2.721 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-5: 24" RCP PIPE



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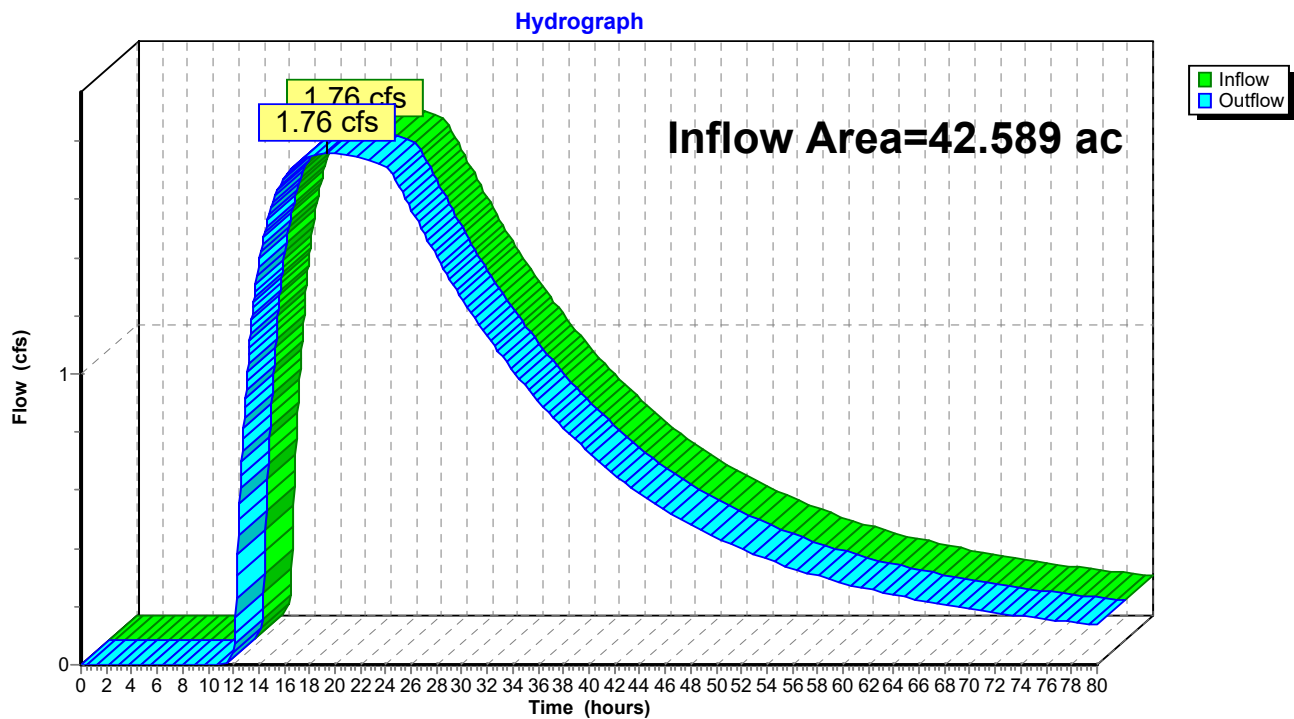
Summary for Reach DP-6: 12" RCP PIPE

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 42.589 ac, 23.35% Impervious, Inflow Depth > 1.18" for 25-Year event
Inflow = 1.76 cfs @ 19.41 hrs, Volume= 4.183 af
Outflow = 1.76 cfs @ 19.41 hrs, Volume= 4.183 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-6: 12" RCP PIPE



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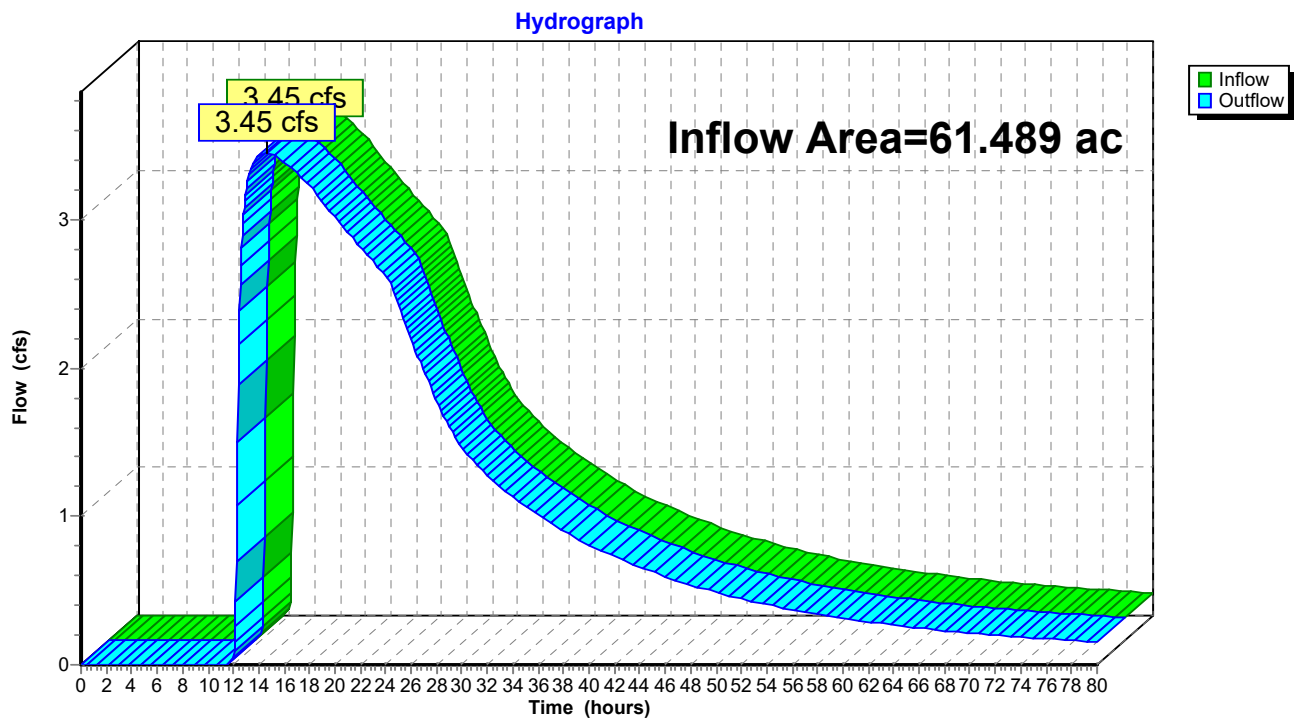
Summary for Reach DP-7: 12" RCP PIPE

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 61.489 ac, 21.22% Impervious, Inflow Depth > 1.19" for 25-Year event
Inflow = 3.45 cfs @ 14.63 hrs, Volume= 6.108 af
Outflow = 3.45 cfs @ 14.63 hrs, Volume= 6.108 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-7: 12" RCP PIPE



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Summary for Reach DP-8: Wetlands Series X

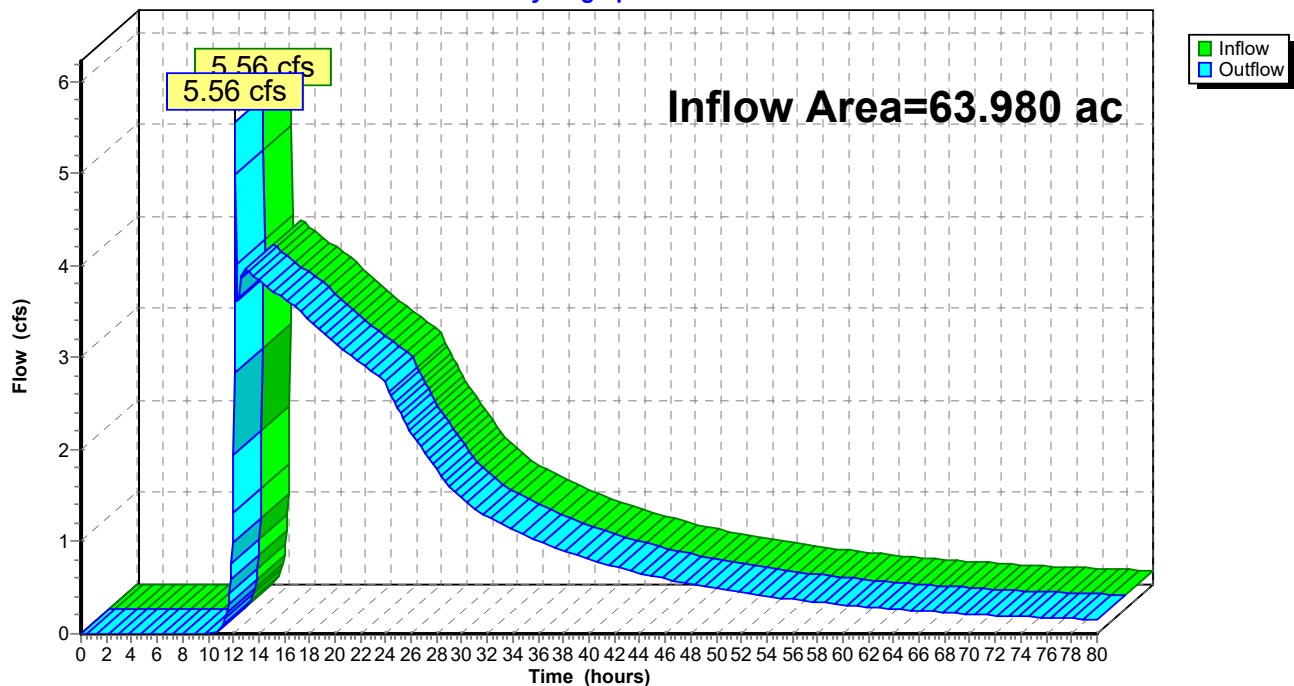
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 63.980 ac, 20.64% Impervious, Inflow Depth > 1.22" for 25-Year event
Inflow = 5.56 cfs @ 12.16 hrs, Volume= 6.502 af
Outflow = 5.56 cfs @ 12.16 hrs, Volume= 6.502 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-8: Wetlands Series X

Hydrograph



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Summary for Reach DP-9: West Elm Street

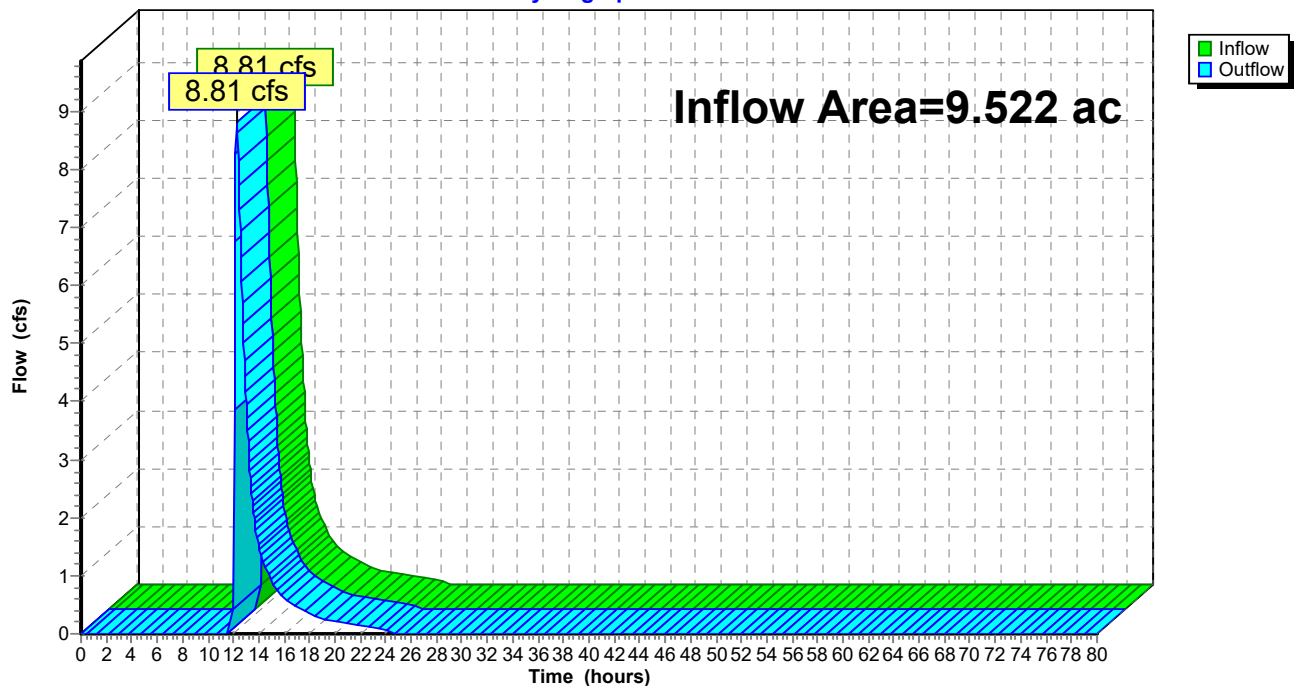
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 9.522 ac, 43.08% Impervious, Inflow Depth = 1.29" for 25-Year event
Inflow = 8.81 cfs @ 12.27 hrs, Volume= 1.027 af
Outflow = 8.81 cfs @ 12.27 hrs, Volume= 1.027 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-9: West Elm Street

Hydrograph



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Summary for Reach DP-ELM: West Elm Street

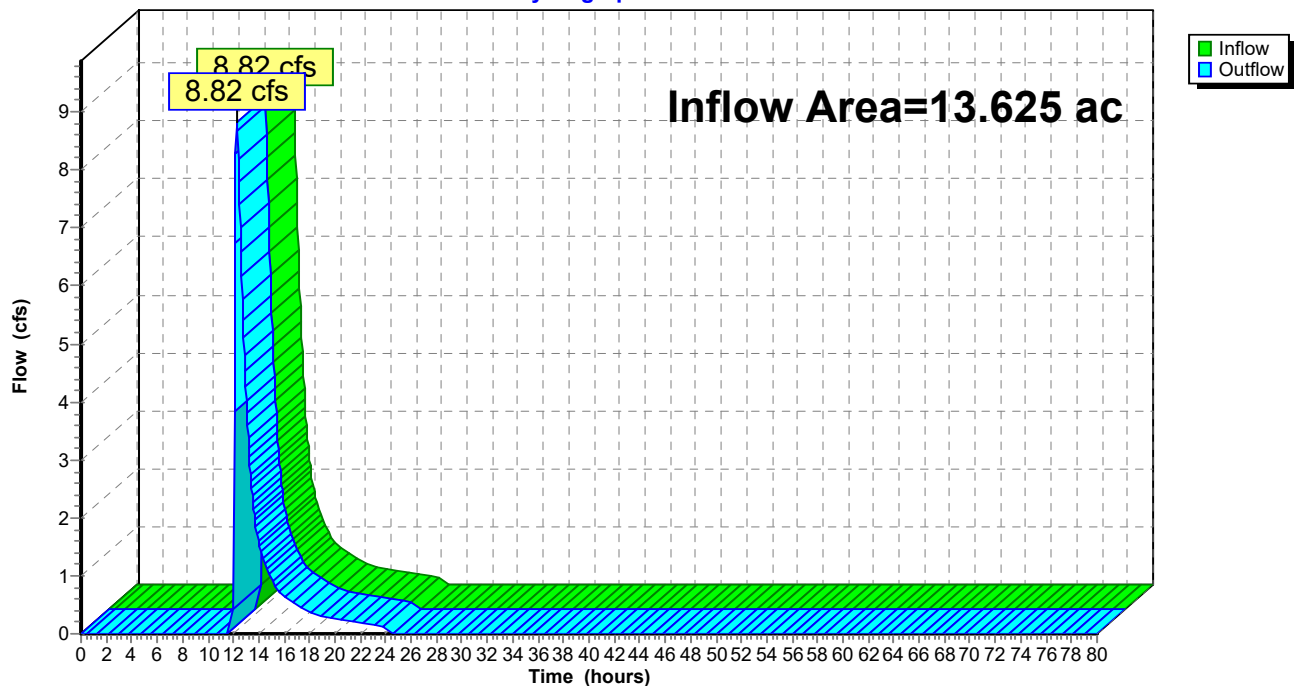
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 13.625 ac, 35.31% Impervious, Inflow Depth = 0.94" for 25-Year event
Inflow = 8.82 cfs @ 12.27 hrs, Volume= 1.071 af
Outflow = 8.82 cfs @ 12.27 hrs, Volume= 1.071 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-ELM: West Elm Street

Hydrograph



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Summary for Reach DP-WA: Wetland Series A

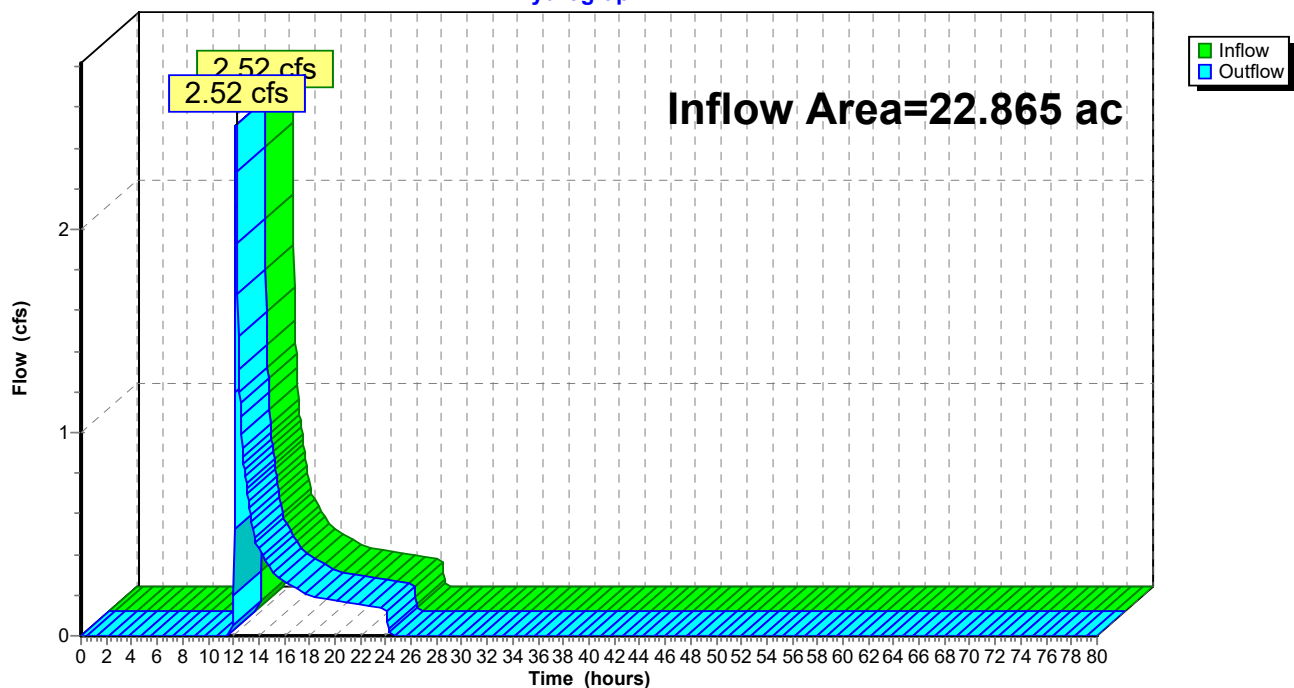
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 22.865 ac, 16.80% Impervious, Inflow Depth = 0.17" for 25-Year event
Inflow = 2.52 cfs @ 12.21 hrs, Volume= 0.326 af
Outflow = 2.52 cfs @ 12.21 hrs, Volume= 0.326 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-WA: Wetland Series A

Hydrograph



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Summary for Reach DP-WI: Wetland Series/Stream I

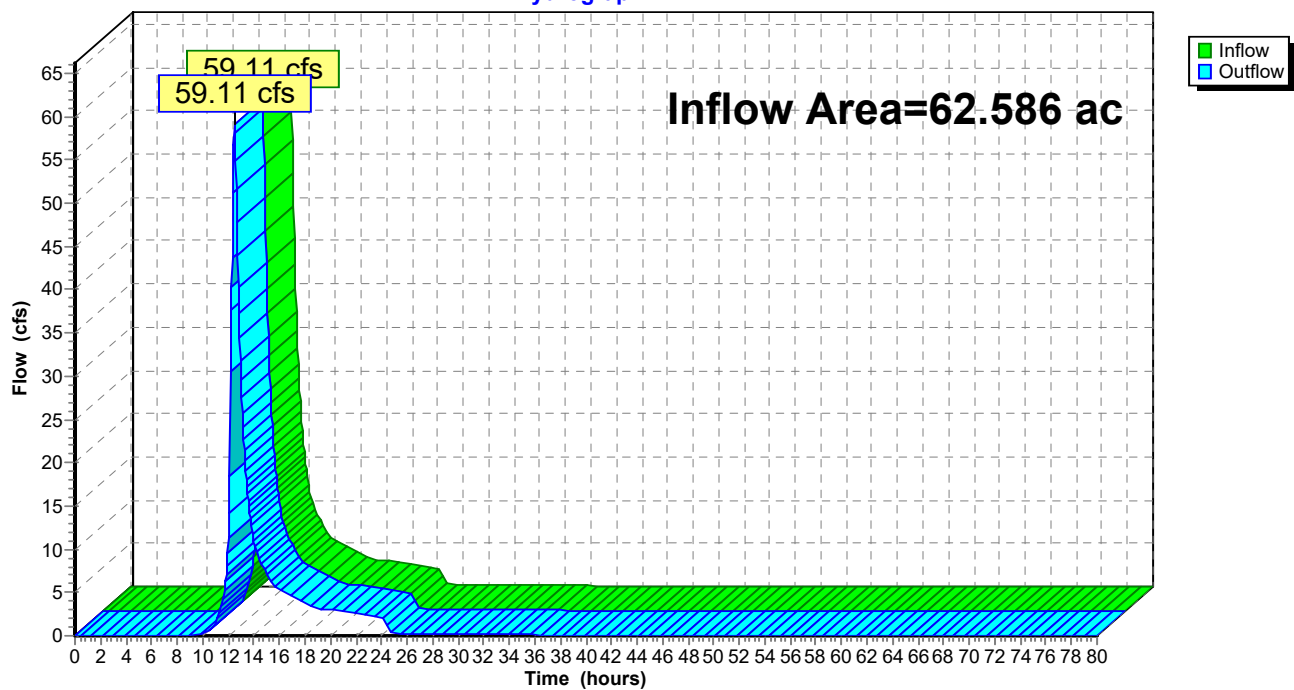
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 62.586 ac, 17.71% Impervious, Inflow Depth = 1.71" for 25-Year event
Inflow = 59.11 cfs @ 12.47 hrs, Volume= 8.919 af
Outflow = 59.11 cfs @ 12.47 hrs, Volume= 8.919 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-WI: Wetland Series/Stream I

Hydrograph



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Summary for Pond BAS 1-A: BAS 1-A

Inflow Area = 3.844 ac, 44.00% Impervious, Inflow Depth = 3.56" for 25-Year event
Inflow = 16.66 cfs @ 12.13 hrs, Volume= 1.140 af
Outflow = 0.26 cfs @ 22.44 hrs, Volume= 1.140 af, Atten= 98%, Lag= 618.5 min
Discarded = 0.26 cfs @ 22.44 hrs, Volume= 1.140 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 82.35' @ 22.44 hrs Surf.Area= 11,182 sf Storage= 36,756 cf

Plug-Flow detention time= 1,513.1 min calculated for 1.139 af (100% of inflow)
Center-of-Mass det. time= 1,514.1 min (2,344.1 - 830.0)

Volume	Invert	Avail.Storage	Storage Description
#1	78.00'	44,308 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
78.00	5,723	0	0
83.00	12,000	44,308	44,308

Device	Routing	Invert	Outlet Devices
#1	Discarded	78.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	82.85'	8.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.26 cfs @ 22.44 hrs HW=82.35' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.26 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=78.00' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Proposed Hydrology

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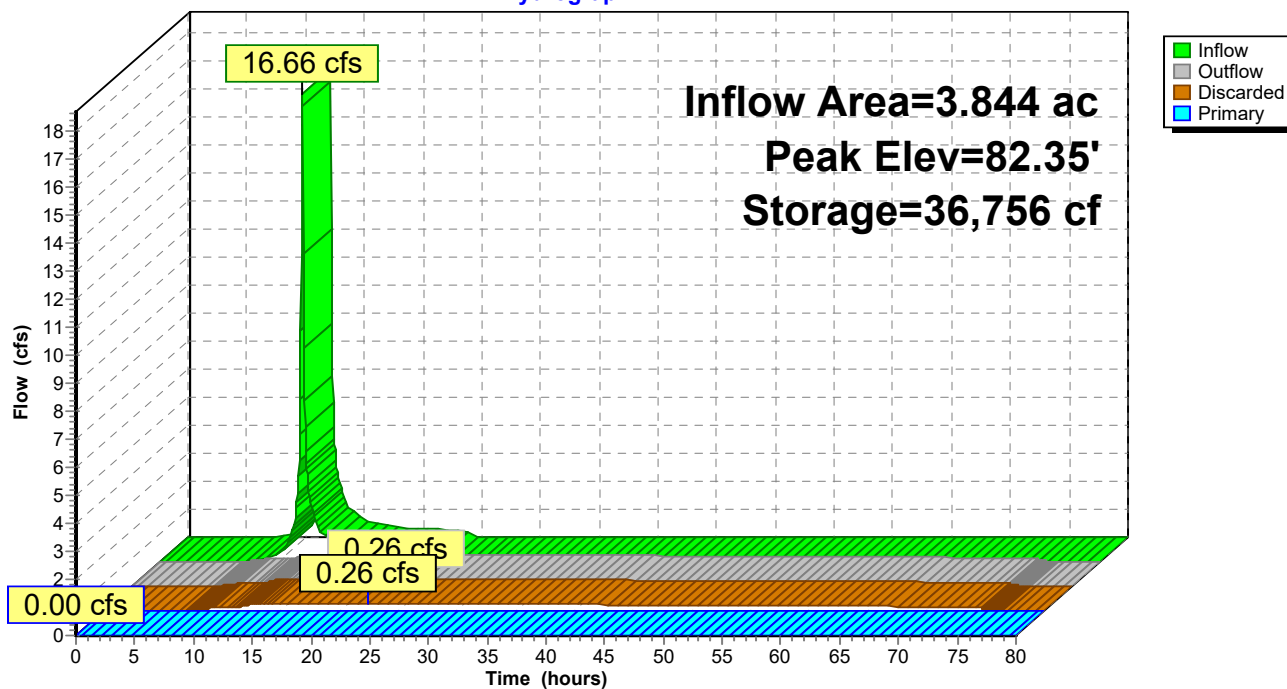
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Pond BAS 1-A: BAS 1-A

Hydrograph



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Summary for Pond BAS 1-B: BAS 1-B

Inflow Area = 6.278 ac, 8.01% Impervious, Inflow Depth = 2.42" for 25-Year event
Inflow = 11.22 cfs @ 12.33 hrs, Volume= 1.264 af
Outflow = 9.61 cfs @ 12.46 hrs, Volume= 1.264 af, Atten= 14%, Lag= 7.4 min
Discarded = 0.14 cfs @ 12.46 hrs, Volume= 0.365 af
Primary = 9.47 cfs @ 12.46 hrs, Volume= 0.899 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 82.77' @ 12.46 hrs Surf.Area= 5,781 sf Storage= 12,384 cf

Plug-Flow detention time= 268.1 min calculated for 1.264 af (100% of inflow)
Center-of-Mass det. time= 267.9 min (1,144.4 - 876.4)

Volume	Invert	Avail.Storage	Storage Description
#1	80.00'	13,755 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
80.00	3,170	0	0
83.00	6,000	13,755	13,755

Device	Routing	Invert	Outlet Devices
#1	Discarded	80.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	82.27'	10.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.14 cfs @ 12.46 hrs HW=82.76' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.14 cfs)

Primary OutFlow Max=9.38 cfs @ 12.46 hrs HW=82.76' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 9.38 cfs @ 1.90 fps)

Proposed Hydrology

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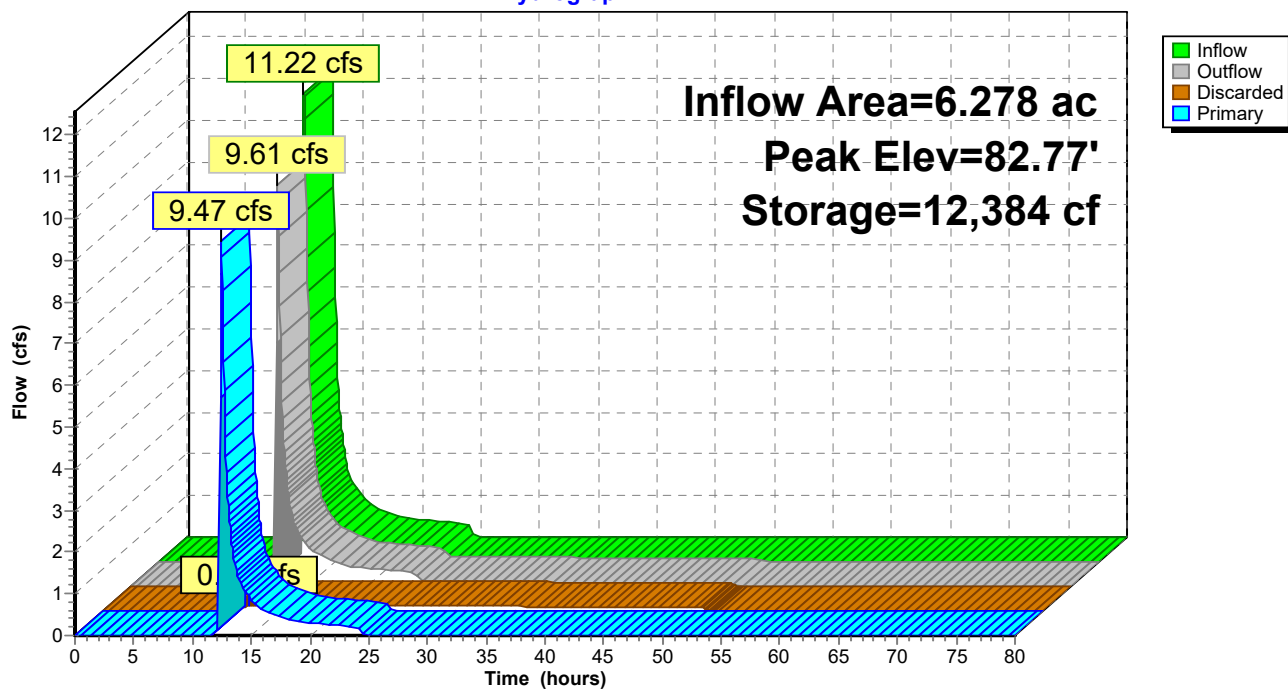
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Pond BAS 1-B: BAS 1-B

Hydrograph



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Summary for Pond BAS 1-C: BAS 1-C

Inflow Area = 0.144 ac, 73.04% Impervious, Inflow Depth = 4.71" for 25-Year event
Inflow = 0.79 cfs @ 12.13 hrs, Volume= 0.057 af
Outflow = 0.77 cfs @ 12.14 hrs, Volume= 0.057 af, Atten= 2%, Lag= 1.0 min
Discarded = 0.01 cfs @ 12.14 hrs, Volume= 0.023 af
Primary = 0.76 cfs @ 12.14 hrs, Volume= 0.034 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 82.95' @ 12.14 hrs Surf.Area= 445 sf Storage= 502 cf

Plug-Flow detention time= 232.6 min calculated for 0.057 af (100% of inflow)
Center-of-Mass det. time= 233.2 min (1,029.8 - 796.6)

Volume	Invert	Avail.Storage	Storage Description
#1	81.00'	525 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
81.00	70	0	0
83.00	455	525	525

Device	Routing	Invert	Outlet Devices
#1	Discarded	81.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	82.80'	5.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.01 cfs @ 12.14 hrs HW=82.95' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.75 cfs @ 12.14 hrs HW=82.95' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 0.75 cfs @ 1.02 fps)

Proposed Hydrology

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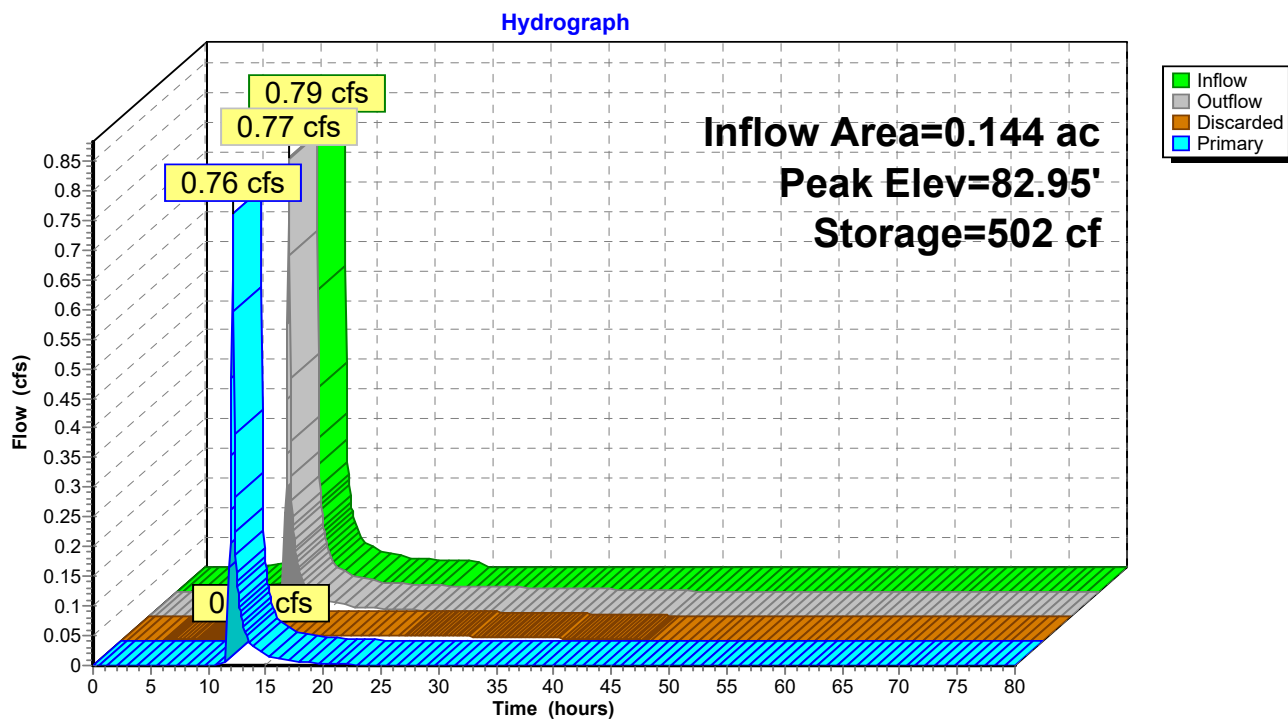
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Pond BAS 1-C: BAS 1-C



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Summary for Pond BAS 10-A: EXIST BAS 10-A

Inflow Area = 0.796 ac, 7.21% Impervious, Inflow Depth = 0.32" for 25-Year event
Inflow = 0.05 cfs @ 12.54 hrs, Volume= 0.021 af
Outflow = 0.01 cfs @ 24.00 hrs, Volume= 0.021 af, Atten= 76%, Lag= 687.7 min
Discarded = 0.01 cfs @ 24.00 hrs, Volume= 0.021 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 54.83' @ 24.00 hrs Surf.Area= 1,015 sf Storage= 472 cf

Plug-Flow detention time= 510.1 min calculated for 0.021 af (100% of inflow)
Center-of-Mass det. time= 509.6 min (1,521.4 - 1,011.9)

Volume	Invert	Avail.Storage	Storage Description	
#1	54.00'	16,389 cf	Custom Stage Data (Conic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
54.00	220	0	0	220
55.00	1,250	665	665	1,254
56.00	2,210	1,707	2,372	2,225
59.00	4,000	9,183	11,555	4,108
60.10	4,800	4,833	16,389	4,949

Device	Routing	Invert	Outlet Devices
#1	Discarded	54.00'	0.520 in/hr Exfiltration over Wetted area
#2	Primary	60.00'	15.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Discarded OutFlow Max=0.01 cfs @ 24.00 hrs HW=54.83' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=54.00' (Free Discharge)

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

Proposed Hydrology

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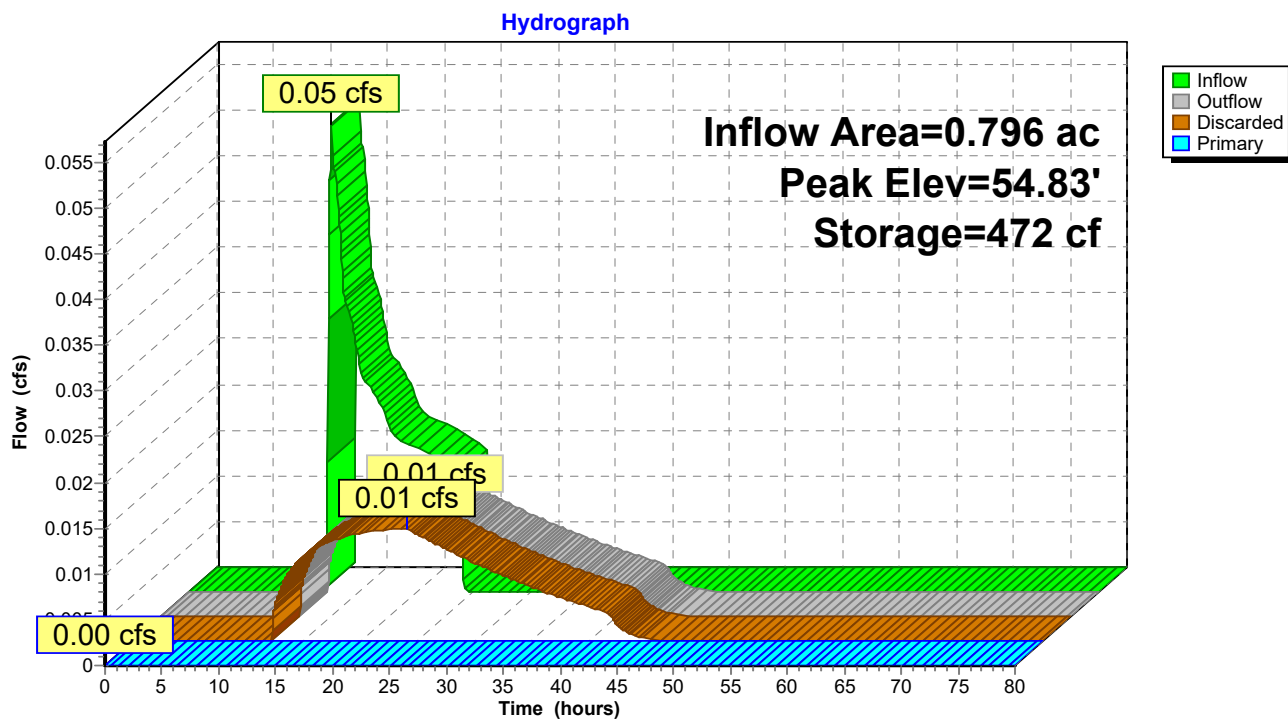
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Pond BAS 10-A: EXIST BAS 10-A



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Summary for Pond BAS 10-B: BAS 10-B

Inflow Area = 1.334 ac, 40.19% Impervious, Inflow Depth = 2.15" for 25-Year event
Inflow = 3.47 cfs @ 12.14 hrs, Volume= 0.239 af
Outflow = 0.19 cfs @ 14.71 hrs, Volume= 0.239 af, Atten= 95%, Lag= 154.5 min
Discarded = 0.19 cfs @ 14.71 hrs, Volume= 0.239 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 78.85' @ 14.71 hrs Surf.Area= 3,342 sf Storage= 4,944 cf

Plug-Flow detention time= 308.3 min calculated for 0.239 af (100% of inflow)
Center-of-Mass det. time= 308.3 min (1,177.5 - 869.2)

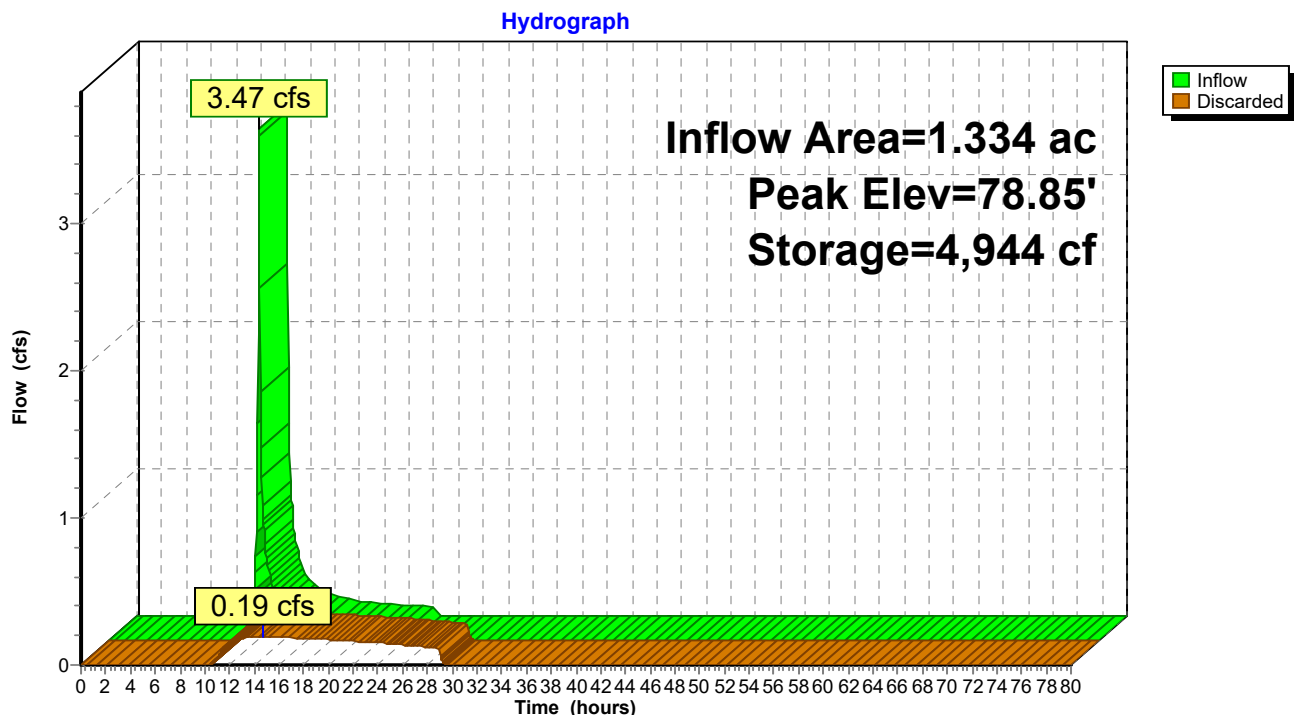
Volume	Invert	Avail.Storage	Storage Description
#1	77.00'	9,319 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
77.00	2,050	0	0	2,050
80.00	4,300	9,319	9,319	4,376

Device	Routing	Invert	Outlet Devices
#1	Discarded	77.00'	2.410 in/hr Exfiltration over Wetted area

Discarded OutFlow Max=0.19 cfs @ 14.71 hrs HW=78.85' (Free Discharge)
↑1=Exfiltration (Exfiltration Controls 0.19 cfs)

Pond BAS 10-B: BAS 10-B



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Summary for Pond BAS 11-B: BAS 11-B

Inflow Area = 4.313 ac, 11.38% Impervious, Inflow Depth = 1.73" for 25-Year event
Inflow = 8.51 cfs @ 12.14 hrs, Volume= 0.621 af
Outflow = 0.72 cfs @ 13.62 hrs, Volume= 0.621 af, Atten= 92%, Lag= 89.0 min
Discarded = 0.72 cfs @ 13.62 hrs, Volume= 0.621 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 44.79' @ 13.62 hrs Surf.Area= 30,000 sf Storage= 9,449 cf

Plug-Flow detention time= 118.8 min calculated for 0.620 af (100% of inflow)
Center-of-Mass det. time= 118.7 min (994.4 - 875.7)

Volume	Invert	Avail.Storage	Storage Description
#1	44.00'	12,000 cf	Custom Stage Data (Conic) Listed below (Recalc) 30,000 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
44.00	30,000	0	0	30,000
45.00	30,000	30,000	30,000	30,614

Device	Routing	Invert	Outlet Devices
#1	Discarded	44.00'	1.020 in/hr Exfiltration over Wetted area
#2	Primary	44.98'	800.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Discarded OutFlow Max=0.72 cfs @ 13.62 hrs HW=44.79' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.72 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=44.00' (Free Discharge)
↑**2=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

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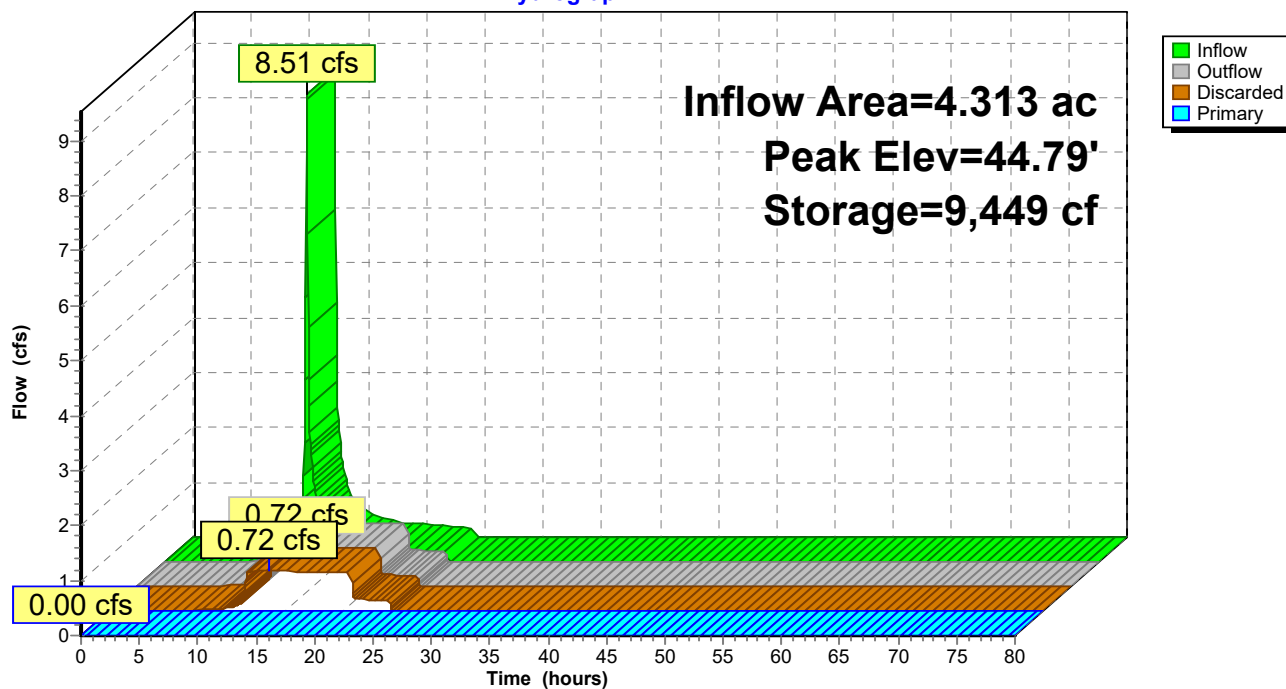
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Pond BAS 11-B: BAS 11-B

Hydrograph



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Summary for Pond BAS 12-A: BAS 12-A

Inflow Area = 6.552 ac, 26.15% Impervious, Inflow Depth = 2.69" for 25-Year event
Inflow = 21.62 cfs @ 12.13 hrs, Volume= 1.469 af
Outflow = 1.32 cfs @ 14.09 hrs, Volume= 1.469 af, Atten= 94%, Lag= 117.5 min
Discarded = 0.84 cfs @ 14.09 hrs, Volume= 1.404 af
Primary = 0.48 cfs @ 14.09 hrs, Volume= 0.064 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 95.70' @ 14.09 hrs Surf.Area= 14,919 sf Storage= 32,675 cf

Plug-Flow detention time= 428.8 min calculated for 1.468 af (100% of inflow)
Center-of-Mass det. time= 429.0 min (1,282.3 - 853.3)

Volume	Invert	Avail.Storage	Storage Description
#1	93.00'	37,274 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
93.00	9,500	0	0	9,500
96.00	15,600	37,274	37,274	15,714

Device	Routing	Invert	Outlet Devices
#1	Discarded	93.00'	2.410 in/hr Exfiltration over Wetted area
#2	Primary	95.63'	10.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.84 cfs @ 14.09 hrs HW=95.70' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.84 cfs)

Primary OutFlow Max=0.48 cfs @ 14.09 hrs HW=95.70' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 0.48 cfs @ 0.70 fps)

Proposed Hydrology

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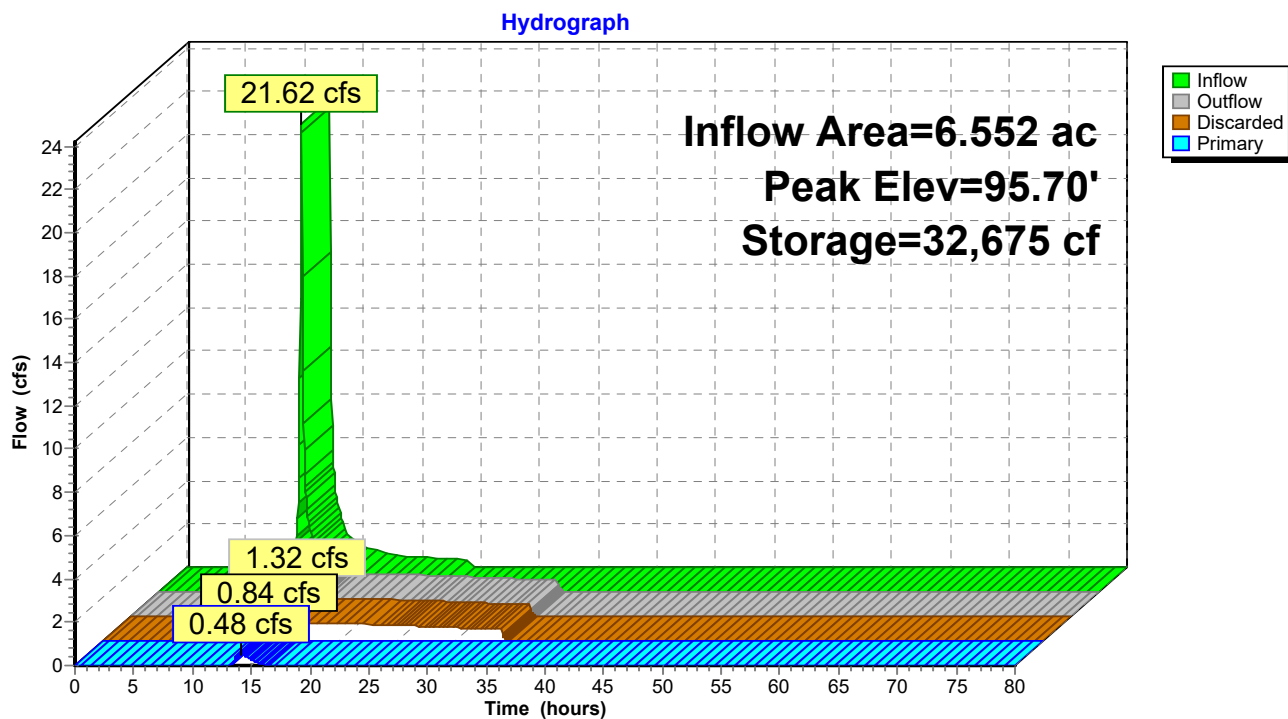
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Pond BAS 12-A: BAS 12-A



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Summary for Pond BAS 12-B: BAS 12-B

Inflow Area = 13.364 ac, 24.22% Impervious, Inflow Depth = 0.94" for 25-Year event
Inflow = 13.83 cfs @ 12.14 hrs, Volume= 1.047 af
Outflow = 0.64 cfs @ 16.16 hrs, Volume= 1.047 af, Atten= 95%, Lag= 241.0 min
Discarded = 0.64 cfs @ 16.16 hrs, Volume= 1.047 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 91.93' @ 16.16 hrs Surf.Area= 27,157 sf Storage= 23,935 cf

Plug-Flow detention time= 418.2 min calculated for 1.047 af (100% of inflow)
Center-of-Mass det. time= 418.0 min (1,300.8 - 882.8)

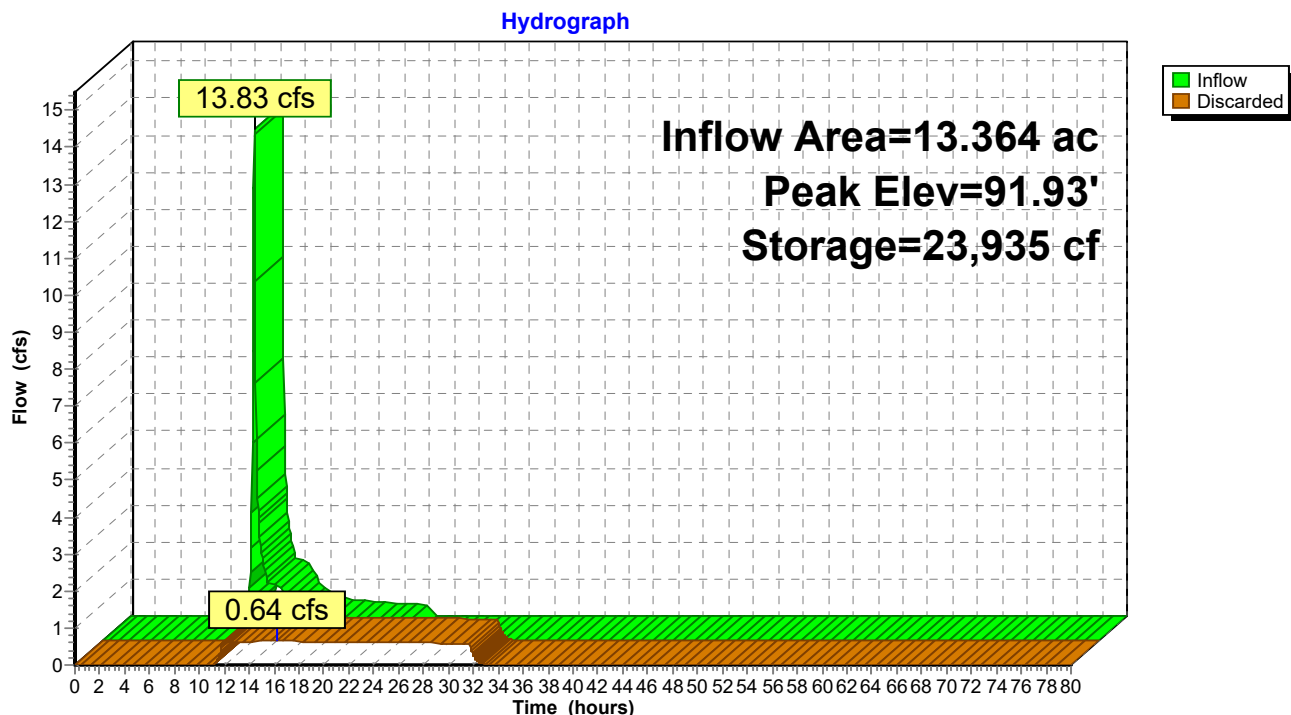
Volume	Invert	Avail.Storage	Storage Description
#1	91.00'	87,248 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
91.00	24,250	0	0	24,250
94.00	34,200	87,248	87,248	34,364

Device	Routing	Invert	Outlet Devices
#1	Discarded	91.00'	1.020 in/hr Exfiltration over Wetted area

Discarded OutFlow Max=0.64 cfs @ 16.16 hrs HW=91.93' (Free Discharge)
↑1=Exfiltration (Exfiltration Controls 0.64 cfs)

Pond BAS 12-B: BAS 12-B



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Summary for Pond BAS 15-A: BAS 15-A

Inflow Area = 0.392 ac, 41.18% Impervious, Inflow Depth = 3.46" for 25-Year event
Inflow = 1.65 cfs @ 12.13 hrs, Volume= 0.113 af
Outflow = 1.60 cfs @ 12.15 hrs, Volume= 0.113 af, Atten= 3%, Lag= 1.1 min
Discarded = 0.03 cfs @ 12.15 hrs, Volume= 0.049 af
Primary = 1.57 cfs @ 12.15 hrs, Volume= 0.064 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 82.95' @ 12.15 hrs Surf.Area= 1,142 sf Storage= 923 cf

Plug-Flow detention time= 158.3 min calculated for 0.113 af (100% of inflow)
Center-of-Mass det. time= 158.6 min (991.2 - 832.6)

Volume	Invert	Avail.Storage	Storage Description
#1	82.00'	980 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
82.00	800	0	0
83.00	1,160	980	980

Device	Routing	Invert	Outlet Devices
#1	Discarded	82.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	82.80'	10.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.03 cfs @ 12.15 hrs HW=82.95' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=1.57 cfs @ 12.15 hrs HW=82.95' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 1.57 cfs @ 1.04 fps)

Proposed Hydrology

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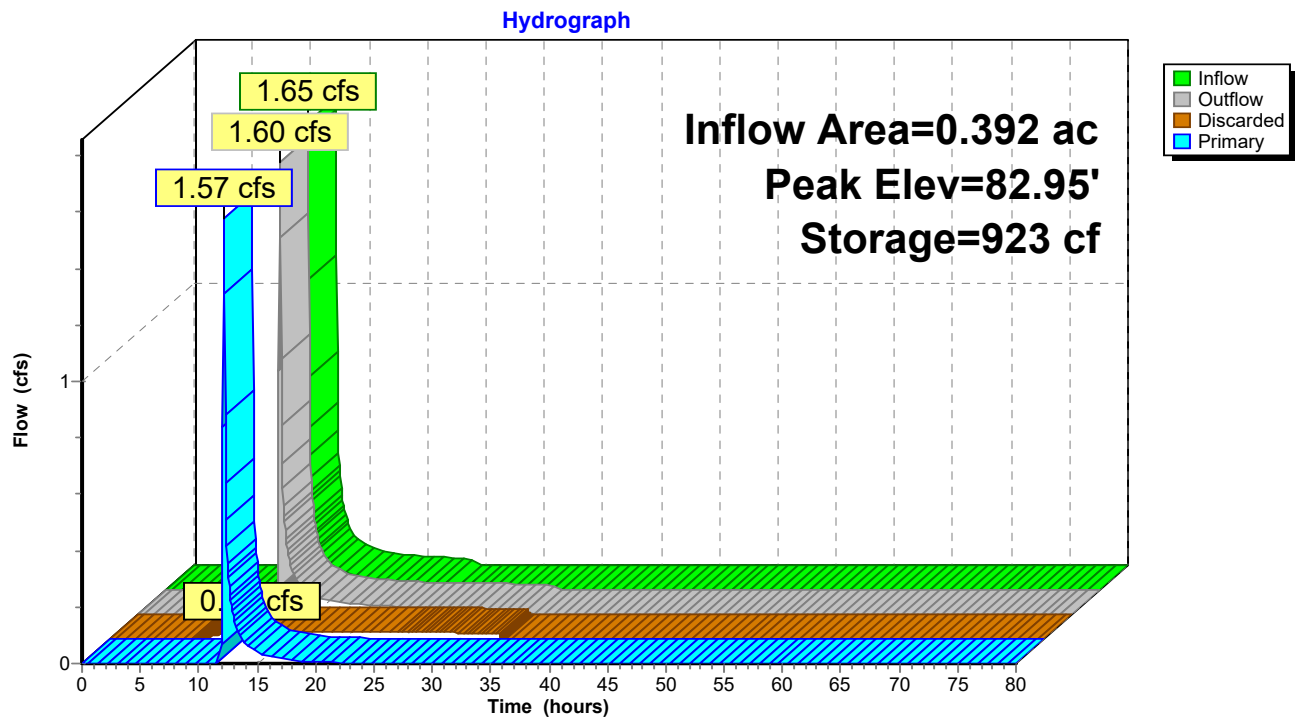
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Pond BAS 15-A: BAS 15-A



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Summary for Pond BAS 2-A: DET BAS 2-A

Inflow Area = 2.386 ac, 38.00% Impervious, Inflow Depth = 2.07" for 25-Year event
Inflow = 5.94 cfs @ 12.14 hrs, Volume= 0.411 af
Outflow = 0.22 cfs @ 16.80 hrs, Volume= 0.410 af, Atten= 96%, Lag= 279.6 min
Primary = 0.22 cfs @ 16.80 hrs, Volume= 0.410 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 104.84' @ 16.80 hrs Surf.Area= 6,995 sf Storage= 10,428 cf

Plug-Flow detention time= 638.4 min calculated for 0.410 af (100% of inflow)
Center-of-Mass det. time= 636.8 min (1,508.8 - 872.0)

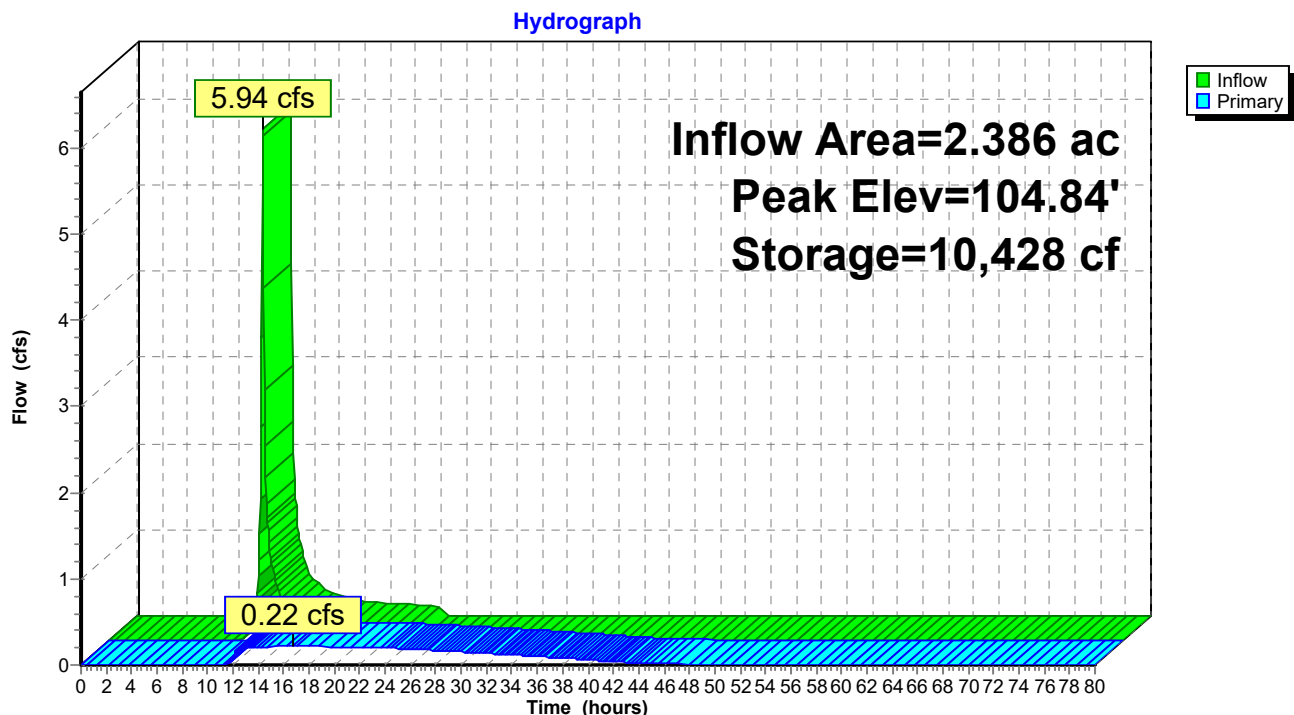
Volume	Invert	Avail.Storage	Storage Description
#1	103.00'	19,643 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
103.00	4,450	0	0	4,450
106.00	8,900	19,643	19,643	8,982

Device	Routing	Invert	Outlet Devices
#1	Primary	103.00'	2.5" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.22 cfs @ 16.80 hrs HW=104.84' (Free Discharge)
↑1=Orifice/Grate (Orifice Controls 0.22 cfs @ 6.34 fps)

Pond BAS 2-A: DET BAS 2-A



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Summary for Pond BAS 2-B: BAS 2-B

Inflow Area = 1.161 ac, 38.00% Impervious, Inflow Depth = 2.78" for 25-Year event
Inflow = 3.97 cfs @ 12.13 hrs, Volume= 0.269 af
Outflow = 3.12 cfs @ 12.20 hrs, Volume= 0.269 af, Atten= 21%, Lag= 3.8 min
Discarded = 0.04 cfs @ 12.20 hrs, Volume= 0.103 af
Primary = 3.08 cfs @ 12.20 hrs, Volume= 0.167 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 99.91' @ 12.20 hrs Surf.Area= 3,544 sf Storage= 2,975 cf

Plug-Flow detention time= 252.8 min calculated for 0.269 af (100% of inflow)
Center-of-Mass det. time= 252.7 min (1,103.5 - 850.8)

Volume	Invert	Avail.Storage	Storage Description
#1	99.00'	3,295 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
99.00	3,000	0	0	3,000
100.00	3,600	3,295	3,295	3,634

Device	Routing	Invert	Outlet Devices
#1	Discarded	99.00'	0.520 in/hr Exfiltration over Surface area
#2	Primary	99.73'	15.0' long x 15.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.04 cfs @ 12.20 hrs HW=99.91' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=3.05 cfs @ 12.20 hrs HW=99.91' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 3.05 cfs @ 1.13 fps)

Proposed Hydrology

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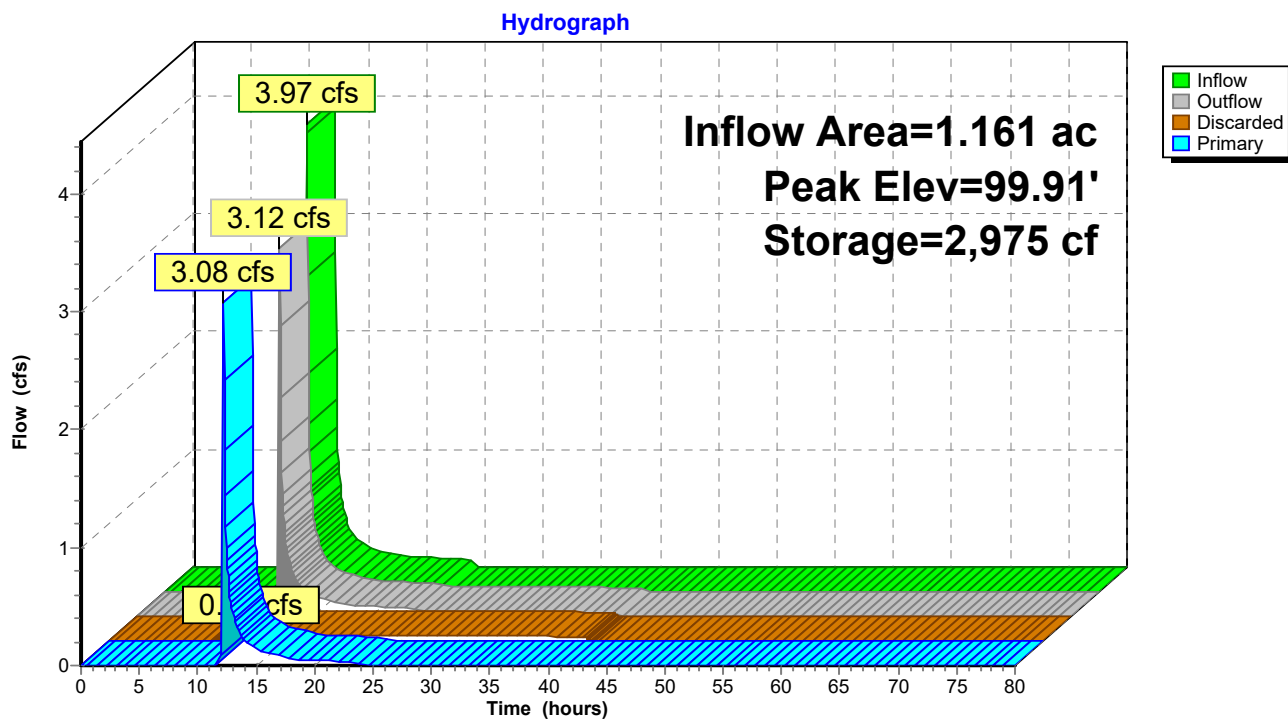
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Pond BAS 2-B: BAS 2-B



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Summary for Pond BAS 2-C: BAS 2-C

Inflow Area = 1.461 ac, 38.00% Impervious, Inflow Depth = 4.39" for 25-Year event
Inflow = 7.57 cfs @ 12.13 hrs, Volume= 0.534 af
Outflow = 6.05 cfs @ 12.20 hrs, Volume= 0.534 af, Atten= 20%, Lag= 4.0 min
Discarded = 0.09 cfs @ 12.20 hrs, Volume= 0.283 af
Primary = 5.96 cfs @ 12.20 hrs, Volume= 0.251 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 102.90' @ 12.20 hrs Surf.Area= 3,827 sf Storage= 8,310 cf

Plug-Flow detention time= 517.2 min calculated for 0.534 af (100% of inflow)
Center-of-Mass det. time= 518.1 min (1,324.9 - 806.8)

Volume	Invert	Avail.Storage	Storage Description
#1	100.00'	8,693 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
100.00	2,000	0	0	2,000
103.00	3,900	8,693	8,693	3,984

Device	Routing	Invert	Outlet Devices
#1	Primary	102.67'	20.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#2	Discarded	100.00'	1.020 in/hr Exfiltration over Surface area

Discarded OutFlow Max=0.09 cfs @ 12.20 hrs HW=102.90' (Free Discharge)
↑**2=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=5.83 cfs @ 12.20 hrs HW=102.90' (Free Discharge)
↑**1=Broad-Crested Rectangular Weir** (Weir Controls 5.83 cfs @ 1.28 fps)

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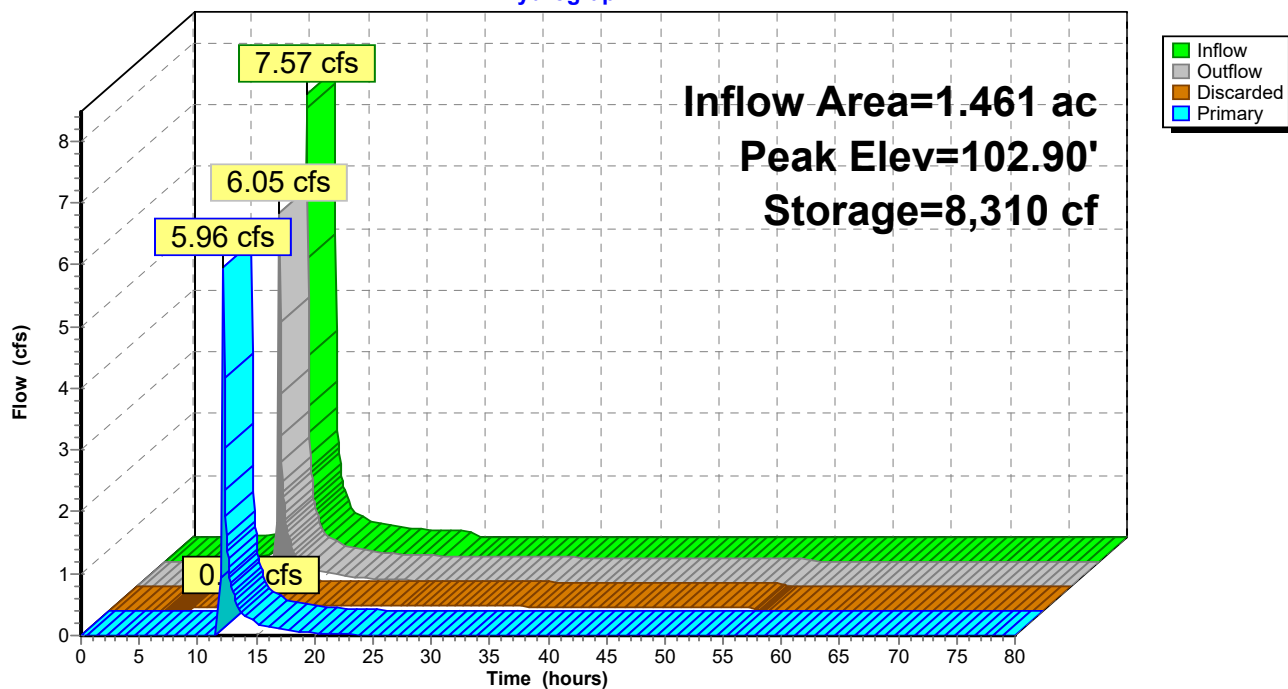
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Pond BAS 2-C: BAS 2-C

Hydrograph



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Summary for Pond BAS 2-D: BAS 2-D

Inflow Area = 8.783 ac, 33.03% Impervious, Inflow Depth = 2.51" for 25-Year event
Inflow = 26.93 cfs @ 12.13 hrs, Volume= 1.835 af
Outflow = 0.52 cfs @ 22.33 hrs, Volume= 1.835 af, Atten= 98%, Lag= 611.5 min
Discarded = 0.52 cfs @ 22.33 hrs, Volume= 1.835 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 108.04' @ 22.33 hrs Surf.Area= 21,754 sf Storage= 56,122 cf

Plug-Flow detention time= 1,169.5 min calculated for 1.835 af (100% of inflow)
Center-of-Mass det. time= 1,169.3 min (2,027.8 - 858.5)

Volume	Invert	Avail.Storage	Storage Description
#1	105.00'	78,167 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
105.00	15,400	0	0	15,400
109.00	24,000	78,167	78,167	24,225

Device	Routing	Invert	Outlet Devices
#1	Discarded	105.00'	1.020 in/hr Exfiltration over Wetted area
#2	Primary	108.80'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.52 cfs @ 22.33 hrs HW=108.04' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.52 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=105.00' (Free Discharge)
↑**2=Orifice/Grate** (Controls 0.00 cfs)

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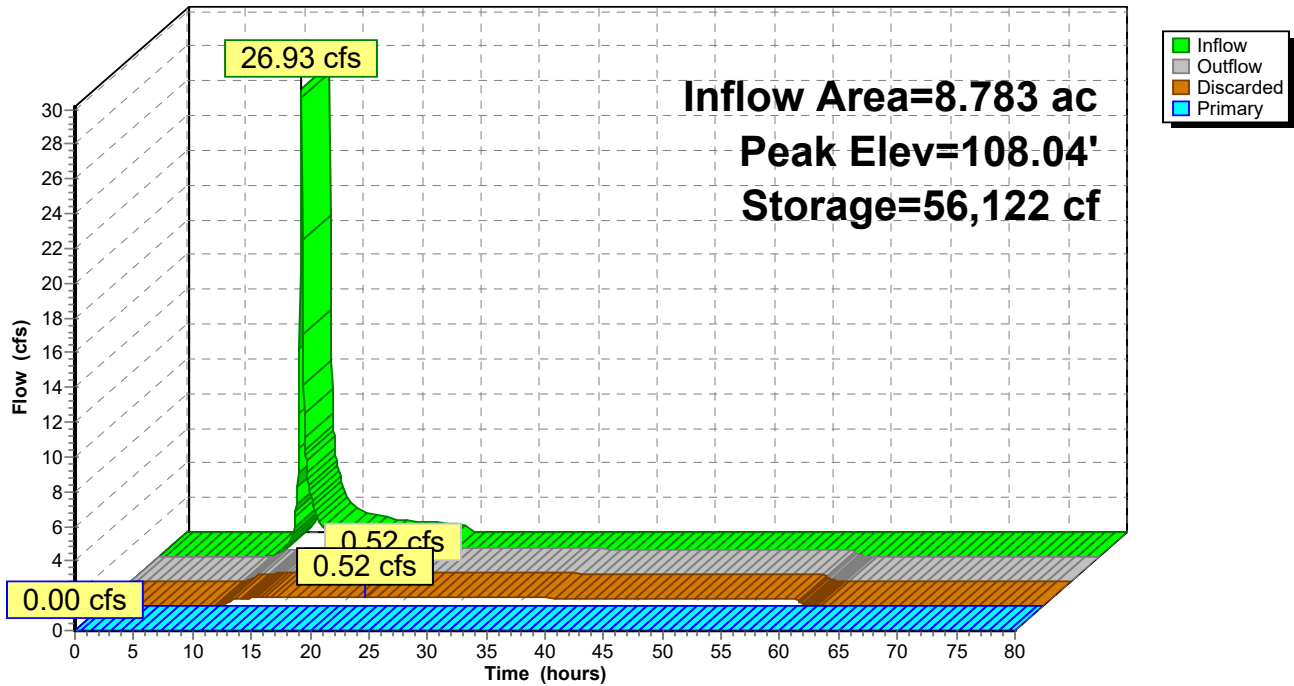
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Pond BAS 2-D: BAS 2-D

Hydrograph



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Summary for Pond BAS 2-E: BAS 2-E

Inflow Area = 2.574 ac, 44.91% Impervious, Inflow Depth = 3.66" for 25-Year event
Inflow = 11.44 cfs @ 12.13 hrs, Volume= 0.785 af
Outflow = 2.82 cfs @ 12.40 hrs, Volume= 0.785 af, Atten= 75%, Lag= 16.0 min
Discarded = 0.20 cfs @ 12.40 hrs, Volume= 0.503 af
Primary = 2.62 cfs @ 12.40 hrs, Volume= 0.282 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 100.83' @ 12.40 hrs Surf.Area= 16,745 sf Storage= 13,435 cf

Plug-Flow detention time= 400.2 min calculated for 0.785 af (100% of inflow)
Center-of-Mass det. time= 400.1 min (1,227.4 - 827.3)

Volume	Invert	Avail.Storage	Storage Description
#1	100.00'	16,244 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
100.00	15,500	0	0	15,500
101.00	17,000	16,244	16,244	17,067

Device	Routing	Invert	Outlet Devices
#1	Discarded	100.00'	0.520 in/hr Exfiltration over Wetted area
#2	Primary	100.70'	20.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.20 cfs @ 12.40 hrs HW=100.83' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.20 cfs)

Primary OutFlow Max=2.61 cfs @ 12.40 hrs HW=100.83' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 2.61 cfs @ 0.98 fps)

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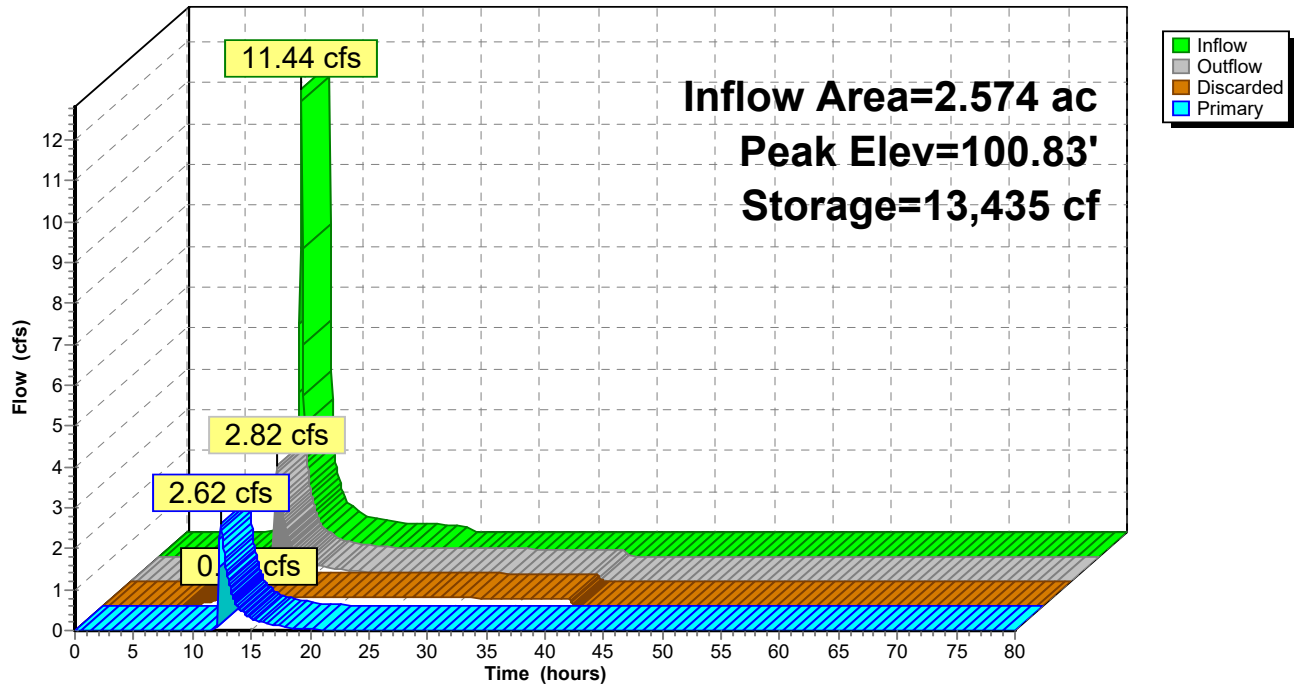
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Pond BAS 2-E: BAS 2-E

Hydrograph



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Summary for Pond BAS 2-F: BAS 2-F

Inflow Area = 3.255 ac, 41.28% Impervious, Inflow Depth = 3.46" for 25-Year event
Inflow = 13.74 cfs @ 12.13 hrs, Volume= 0.938 af
Outflow = 0.60 cfs @ 14.77 hrs, Volume= 0.938 af, Atten= 96%, Lag= 158.4 min
Discarded = 0.60 cfs @ 14.77 hrs, Volume= 0.938 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 102.33' @ 14.77 hrs Surf.Area= 10,636 sf Storage= 21,159 cf

Plug-Flow detention time= 380.8 min calculated for 0.937 af (100% of inflow)
Center-of-Mass det. time= 380.9 min (1,213.5 - 832.6)

Volume	Invert	Avail.Storage	Storage Description
#1	100.00'	28,589 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
100.00	7,600	0	0	7,600
103.00	11,600	28,589	28,589	11,732

Device	Routing	Invert	Outlet Devices
#1	Discarded	100.00'	2.410 in/hr Exfiltration over Wetted area
#2	Primary	102.85'	8.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.60 cfs @ 14.77 hrs HW=102.33' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.60 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=100.00' (Free Discharge)

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

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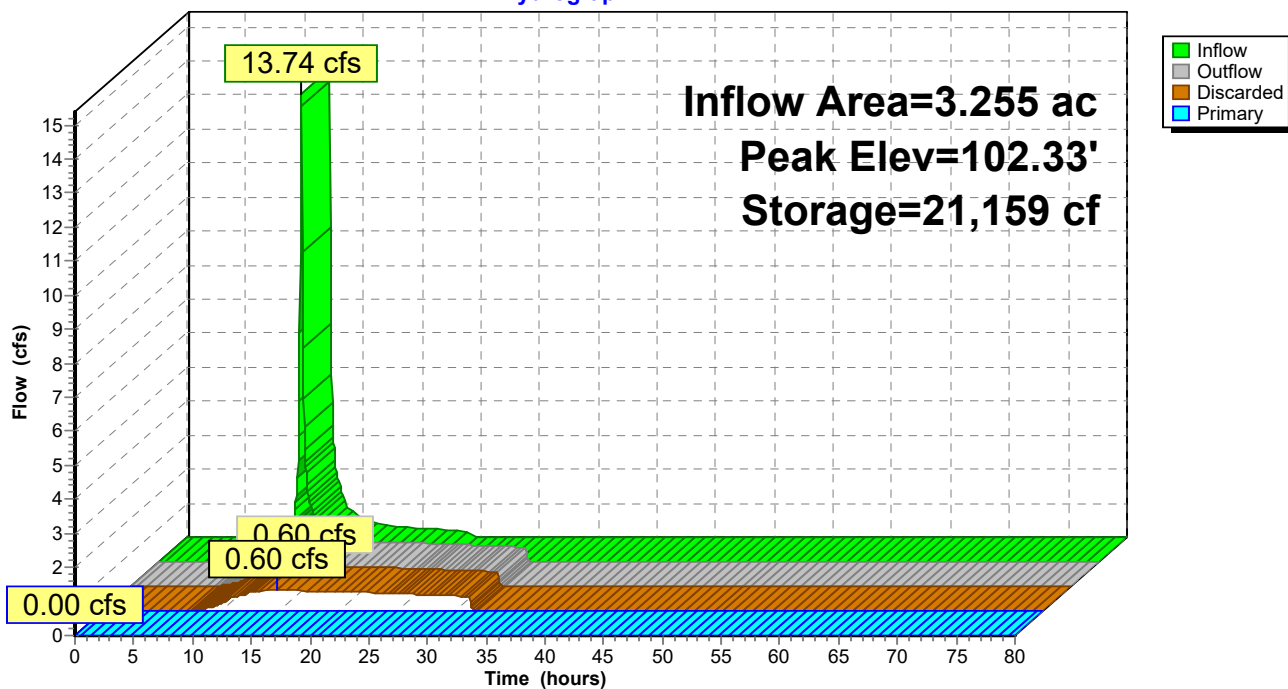
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Pond BAS 2-F: BAS 2-F

Hydrograph



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Summary for Pond BAS 3-A: BAS 3-A

Inflow Area = 2.218 ac, 40.95% Impervious, Inflow Depth = 4.17" for 25-Year event
Inflow = 11.04 cfs @ 12.13 hrs, Volume= 0.772 af
Outflow = 0.69 cfs @ 13.59 hrs, Volume= 0.772 af, Atten= 94%, Lag= 87.7 min
Discarded = 0.23 cfs @ 13.59 hrs, Volume= 0.698 af
Primary = 0.46 cfs @ 13.59 hrs, Volume= 0.073 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 103.84' @ 13.59 hrs Surf.Area= 9,754 sf Storage= 19,935 cf

Plug-Flow detention time= 880.2 min calculated for 0.771 af (100% of inflow)
Center-of-Mass det. time= 880.8 min (1,693.8 - 813.0)

Volume	Invert	Avail.Storage	Storage Description
#1	101.00'	21,516 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
101.00	4,600	0	0	4,600
104.00	10,100	21,516	21,516	10,172

Device	Routing	Invert	Outlet Devices
#1	Discarded	101.00'	1.020 in/hr Exfiltration over Wetted area
#2	Primary	103.80'	20.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.23 cfs @ 13.59 hrs HW=103.84' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.23 cfs)

Primary OutFlow Max=0.44 cfs @ 13.59 hrs HW=103.84' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 0.44 cfs @ 0.54 fps)

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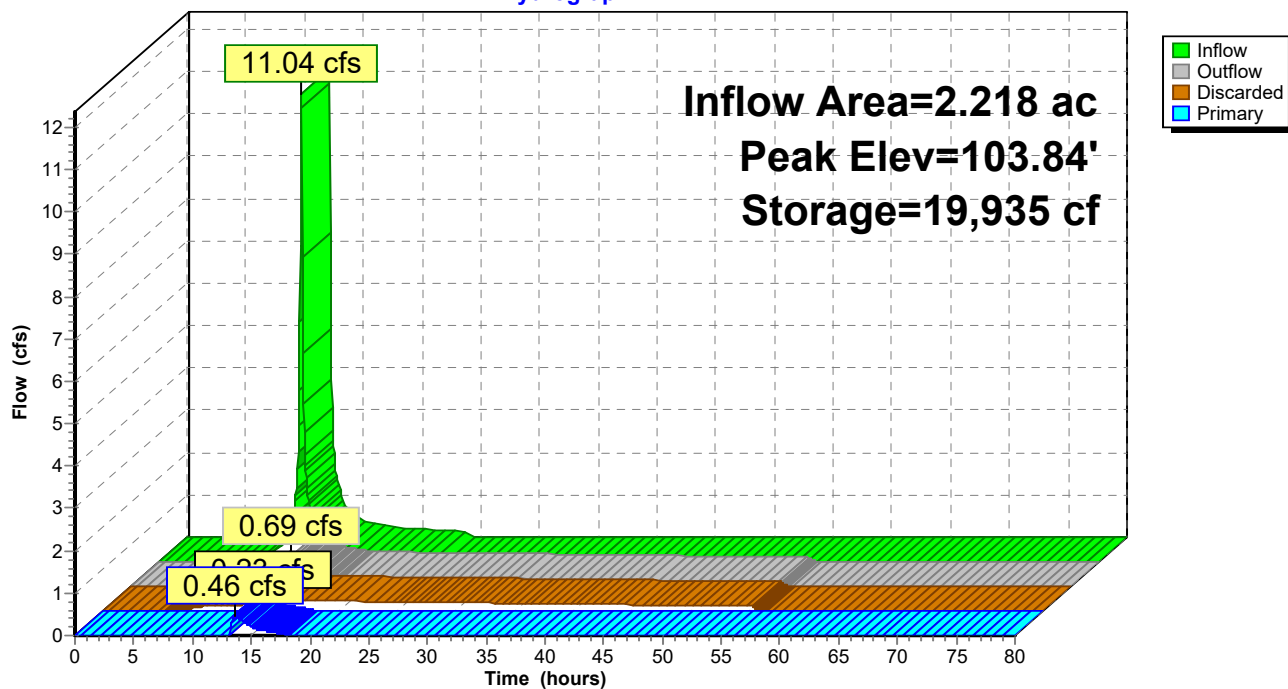
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Pond BAS 3-A: BAS 3-A

Hydrograph



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Summary for Pond BAS 3-B: BAS 3-B

Inflow Area = 6.110 ac, 38.90% Impervious, Inflow Depth = 3.26" for 25-Year event
Inflow = 24.40 cfs @ 12.13 hrs, Volume= 1.660 af
Outflow = 0.70 cfs @ 16.94 hrs, Volume= 1.660 af, Atten= 97%, Lag= 288.2 min
Discarded = 0.41 cfs @ 16.94 hrs, Volume= 1.575 af
Primary = 0.29 cfs @ 16.94 hrs, Volume= 0.085 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 100.76' @ 16.94 hrs Surf.Area= 17,311 sf Storage= 49,615 cf

Plug-Flow detention time= 1,260.3 min calculated for 1.659 af (100% of inflow)
Center-of-Mass det. time= 1,261.1 min (2,099.0 - 837.9)

Volume	Invert	Avail.Storage	Storage Description
#1	97.00'	53,920 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
97.00	9,500	0	0	9,500
101.00	17,900	53,920	53,920	18,059

Device	Routing	Invert	Outlet Devices
#1	Discarded	97.00'	1.020 in/hr Exfiltration over Wetted area
#2	Primary	100.70'	8.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.41 cfs @ 16.94 hrs HW=100.76' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.41 cfs)

Primary OutFlow Max=0.28 cfs @ 16.94 hrs HW=100.76' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 0.28 cfs @ 0.63 fps)

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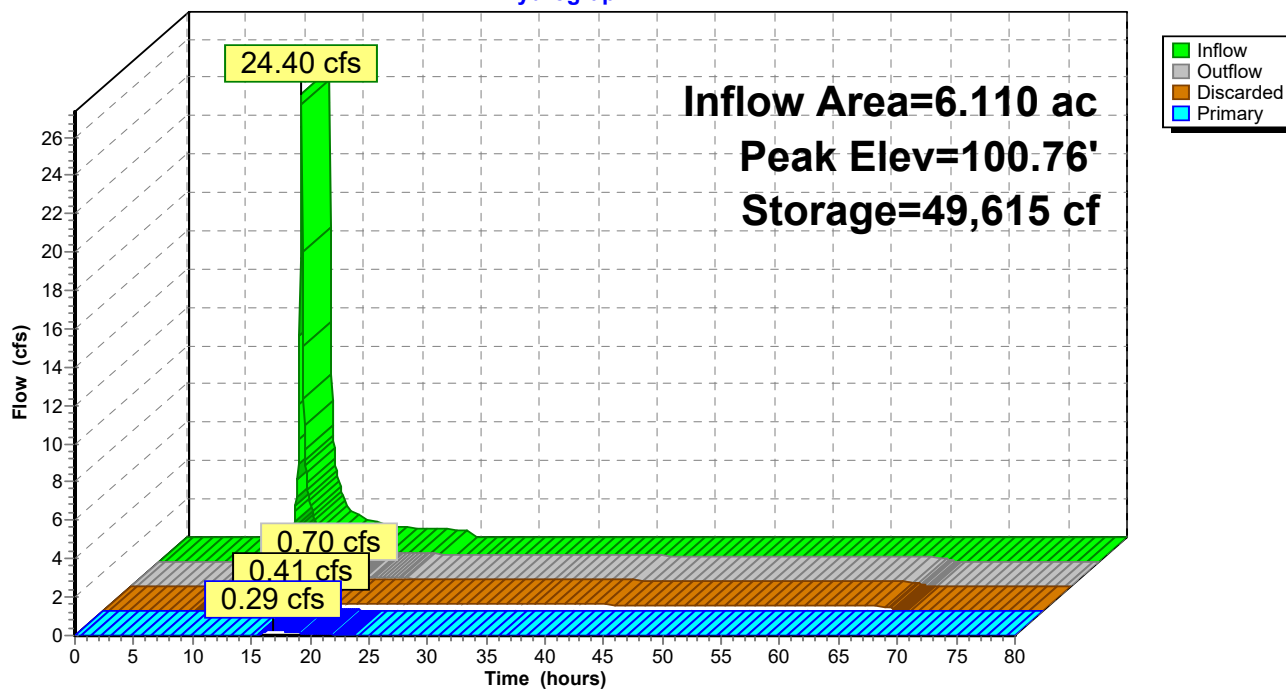
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Pond BAS 3-B: BAS 3-B

Hydrograph



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Summary for Pond BAS 6-A: BAS 6-A

Inflow Area = 3.389 ac, 43.46% Impervious, Inflow Depth = 3.56" for 25-Year event
Inflow = 14.68 cfs @ 12.13 hrs, Volume= 1.005 af
Outflow = 0.39 cfs @ 17.08 hrs, Volume= 1.005 af, Atten= 97%, Lag= 297.1 min
Discarded = 0.39 cfs @ 17.08 hrs, Volume= 1.005 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 89.82' @ 17.08 hrs Surf.Area= 16,557 sf Storage= 26,802 cf

Plug-Flow detention time= 721.6 min calculated for 1.004 af (100% of inflow)
Center-of-Mass det. time= 721.9 min (1,551.9 - 830.0)

Volume	Invert	Avail.Storage	Storage Description
#1	88.00'	47,858 cf	Custom Stage Data (Conic) Listed below (Recalc)

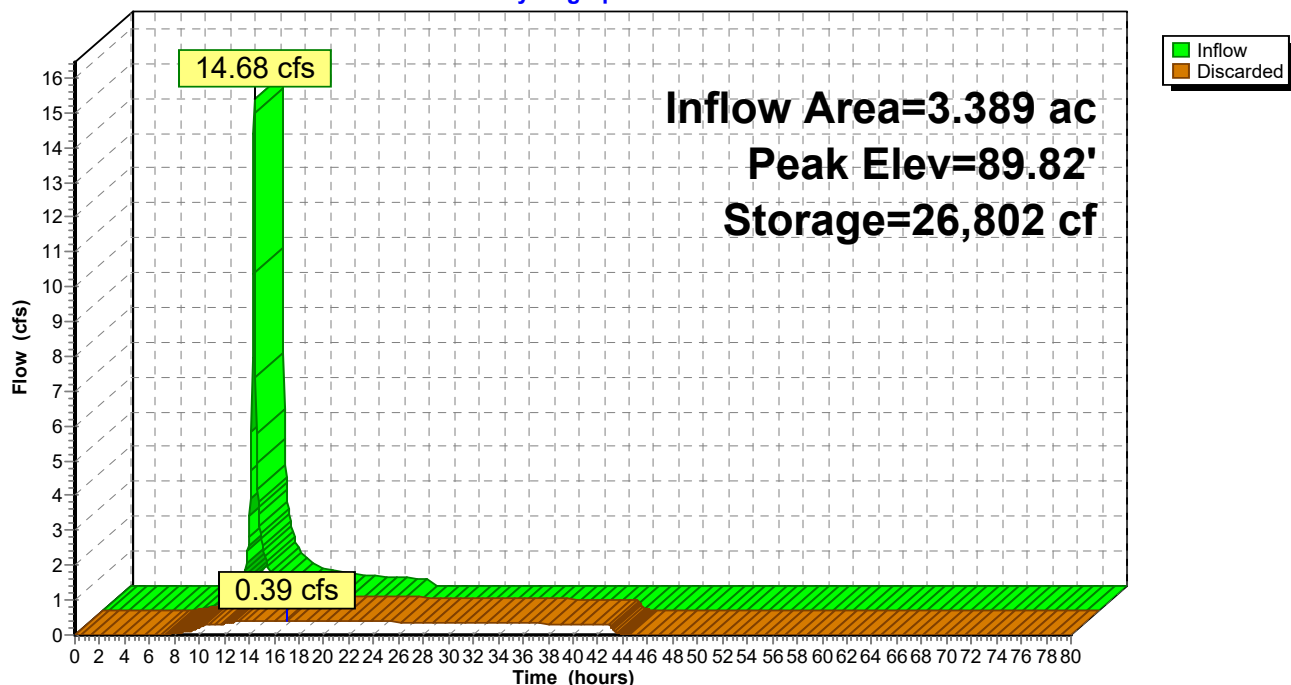
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
88.00	13,000	0	0	13,000
91.00	19,100	47,858	47,858	19,246

Device	Routing	Invert	Outlet Devices
#1	Discarded	88.00'	1.020 in/hr Exfiltration over Wetted area

Discarded OutFlow Max=0.39 cfs @ 17.08 hrs HW=89.82' (Free Discharge)
↑1=Exfiltration (Exfiltration Controls 0.39 cfs)

Pond BAS 6-A: BAS 6-A

Hydrograph



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Summary for Pond BAS 7-A: BAS 7-A

Inflow Area = 4.980 ac, 47.17% Impervious, Inflow Depth = 3.16" for 25-Year event
 Inflow = 19.32 cfs @ 12.13 hrs, Volume= 1.313 af
 Outflow = 0.44 cfs @ 18.15 hrs, Volume= 1.313 af, Atten= 98%, Lag= 361.0 min
 Discarded = 0.44 cfs @ 18.15 hrs, Volume= 1.313 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
 Peak Elev= 93.69' @ 18.15 hrs Surf.Area= 18,392 sf Storage= 37,883 cf

Plug-Flow detention time= 981.2 min calculated for 1.312 af (100% of inflow)
 Center-of-Mass det. time= 981.8 min (1,822.3 - 840.5)

Volume	Invert	Avail.Storage	Storage Description
#1	91.00'	43,803 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
91.00	10,200	0	0	10,200
94.00	19,500	43,803	43,803	19,588

Device	Routing	Invert	Outlet Devices
#1	Discarded	91.00'	1.020 in/hr Exfiltration over Wetted area
#2	Primary	93.87'	20.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.44 cfs @ 18.15 hrs HW=93.69' (Free Discharge)
 ↑1=Exfiltration (Exfiltration Controls 0.44 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=91.00' (Free Discharge)
 ↑2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

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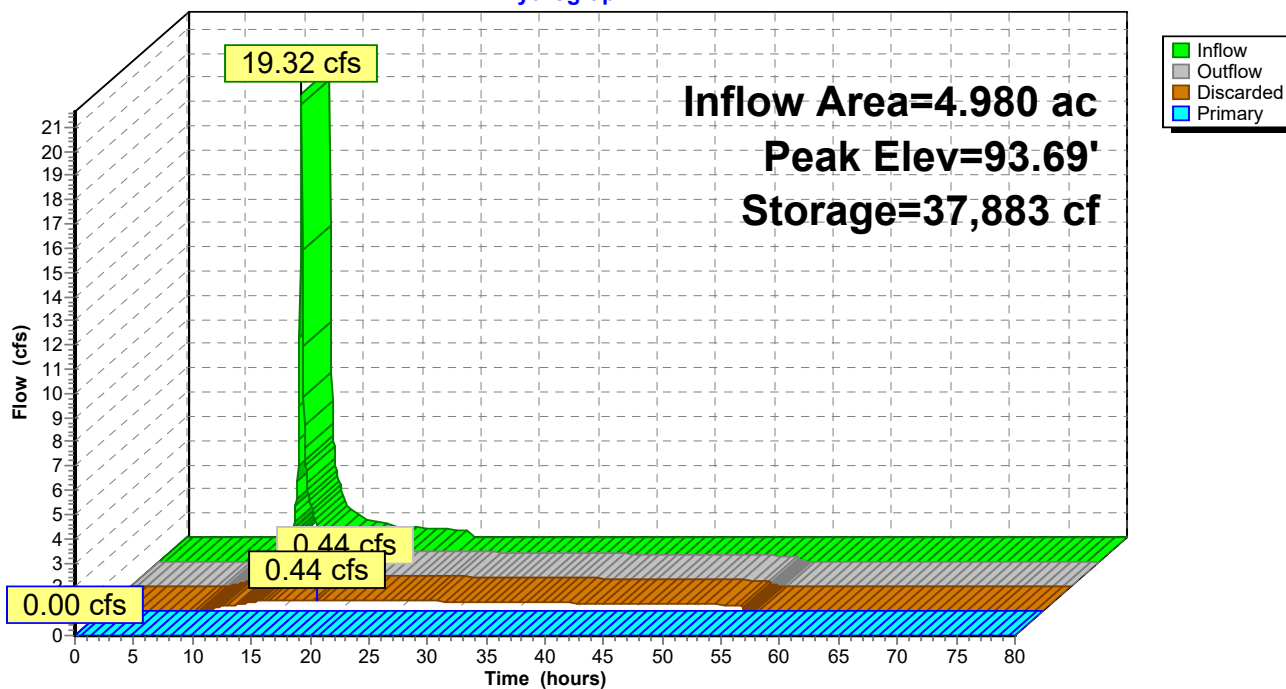
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Pond BAS 7-A: BAS 7-A

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Summary for Pond BAS 9-A: BAS 9-A

Inflow Area = 1.494 ac, 25.66% Impervious, Inflow Depth = 1.34" for 25-Year event
Inflow = 2.20 cfs @ 12.14 hrs, Volume= 0.166 af
Outflow = 0.14 cfs @ 14.88 hrs, Volume= 0.166 af, Atten= 93%, Lag= 164.4 min
Discarded = 0.14 cfs @ 14.88 hrs, Volume= 0.166 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 62.46' @ 14.88 hrs Surf.Area= 2,534 sf Storage= 3,063 cf

Plug-Flow detention time= 259.0 min calculated for 0.166 af (100% of inflow)
Center-of-Mass det. time= 259.0 min (1,159.8 - 900.8)

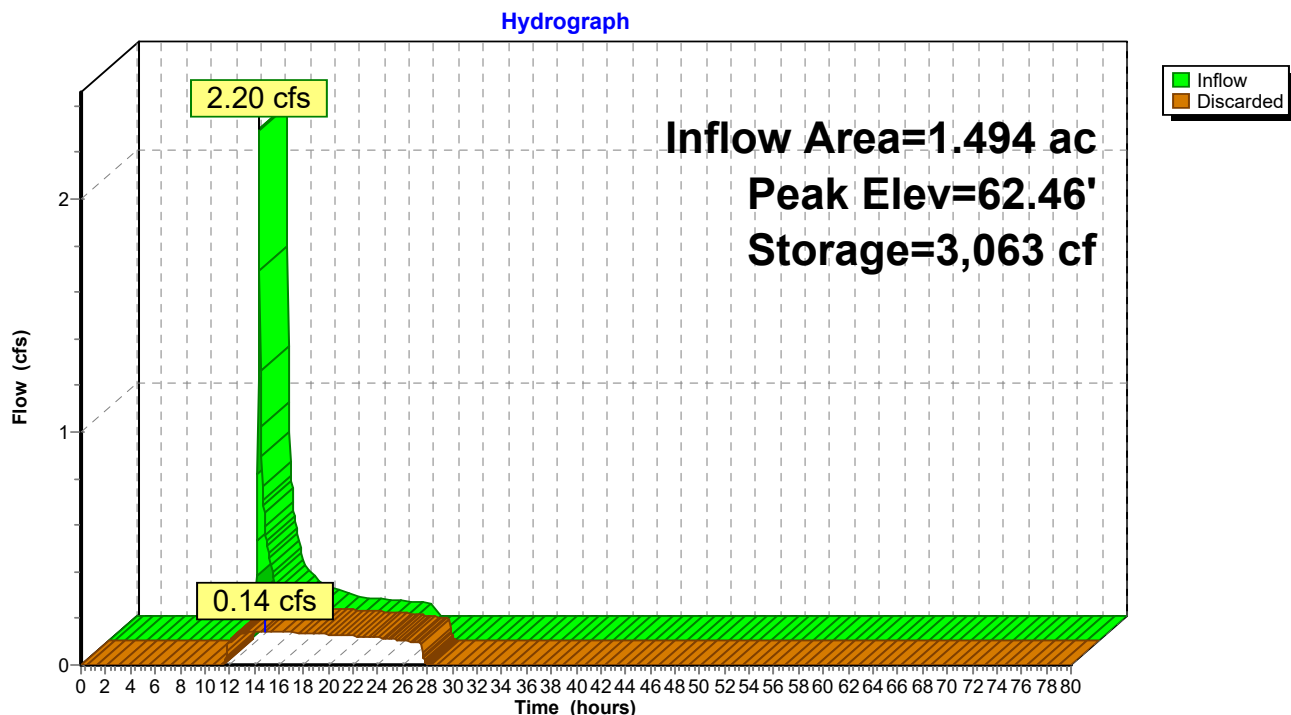
Volume	Invert	Avail.Storage	Storage Description
#1	61.00'	7,774 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
61.00	1,700	0	0	1,700
64.00	3,600	7,774	7,774	3,675

Device	Routing	Invert	Outlet Devices
#1	Discarded	61.00'	2.410 in/hr Exfiltration over Wetted area

Discarded OutFlow Max=0.14 cfs @ 14.88 hrs HW=62.46' (Free Discharge)
↑1=Exfiltration (Exfiltration Controls 0.14 cfs)

Pond BAS 9-A: BAS 9-A



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Summary for Pond BAS 9-B: BAS 9-B

Inflow Area = 5.910 ac, 58.27% Impervious, Inflow Depth = 3.17" for 25-Year event
Inflow = 22.73 cfs @ 12.13 hrs, Volume= 1.560 af
Outflow = 8.56 cfs @ 12.29 hrs, Volume= 1.560 af, Atten= 62%, Lag= 9.7 min
Discarded = 0.44 cfs @ 12.29 hrs, Volume= 0.658 af
Primary = 8.12 cfs @ 12.29 hrs, Volume= 0.902 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 64.05' @ 12.29 hrs Surf.Area= 7,732 sf Storage= 21,899 cf

Plug-Flow detention time= 191.3 min calculated for 1.560 af (100% of inflow)
Center-of-Mass det. time= 191.2 min (1,028.1 - 836.9)

Volume	Invert	Avail.Storage	Storage Description
#1	60.00'	29,817 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
60.00	3,300	0	0	3,300
61.00	4,300	3,789	3,789	4,323
65.00	9,000	26,028	29,817	9,159

Device	Routing	Invert	Outlet Devices
#1	Discarded	60.00'	2.410 in/hr Exfiltration over Wetted area
#2	Device 3	62.40'	1.5' long Sharp-Crested Rectangular Weir 2 End Contraction(s)
#3	Primary	60.00'	18.0" Round Culvert L= 41.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 60.00' / 59.79' S= 0.0051 ' /' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.77 sf

Discarded OutFlow Max=0.44 cfs @ 12.29 hrs HW=64.05' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.44 cfs)

Primary OutFlow Max=8.11 cfs @ 12.29 hrs HW=64.05' (Free Discharge)

↑**3=Culvert** (Passes 8.11 cfs of 18.42 cfs potential flow)

↑**2=Sharp-Crested Rectangular Weir** (Weir Controls 8.11 cfs @ 4.20 fps)

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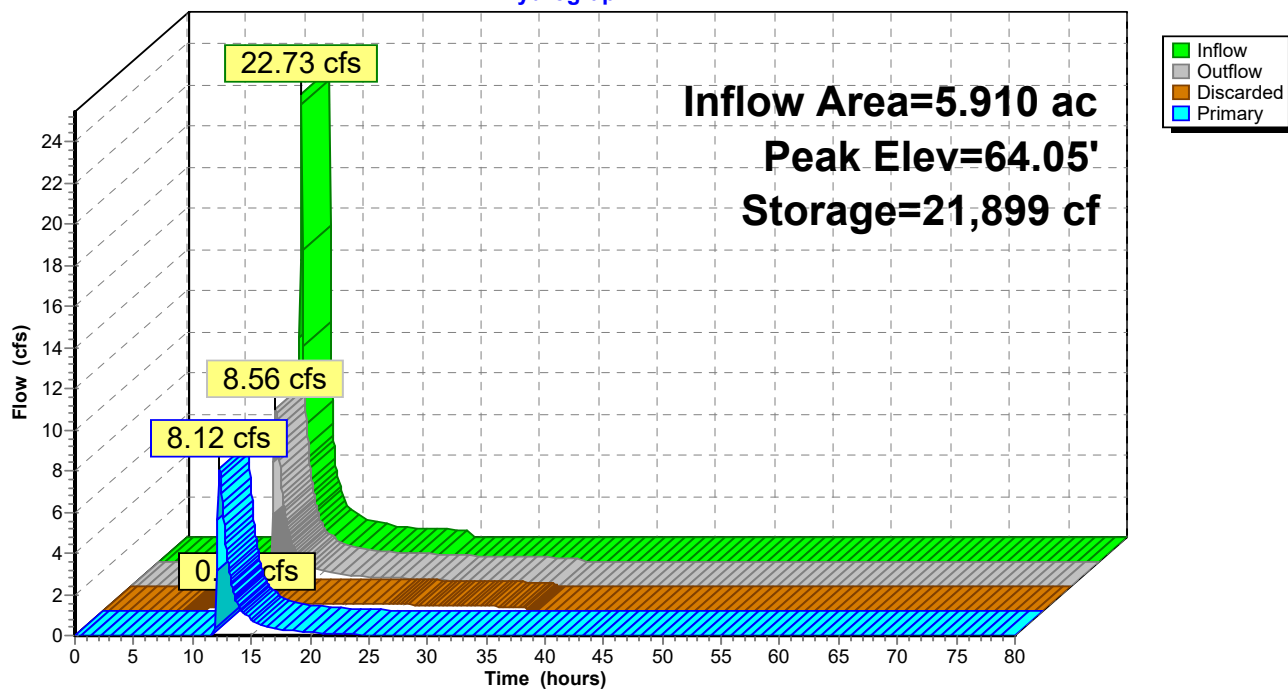
NRCC 24-hr C 25-Year Rainfall=6.09"

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Pond BAS 9-B: BAS 9-B

Hydrograph



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Summary for Pond W-N: Wetland Series N

Inflow Area = 30.869 ac, 27.45% Impervious, Inflow Depth > 1.08" for 25-Year event
Inflow = 11.41 cfs @ 12.22 hrs, Volume= 2.770 af
Outflow = 2.90 cfs @ 12.71 hrs, Volume= 2.721 af, Atten= 75%, Lag= 29.3 min
Primary = 2.90 cfs @ 12.71 hrs, Volume= 2.721 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 86.13' @ 12.71 hrs Surf.Area= 26,149 sf Storage= 15,918 cf

Plug-Flow detention time= 181.7 min calculated for 2.720 af (98% of inflow)
Center-of-Mass det. time= 129.3 min (1,696.6 - 1,567.3)

Volume	Invert	Avail.Storage	Storage Description	
#1	85.50'	151,214 cf	Custom Stage Data (Conic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
85.50	24,094	0	0	24,094
88.00	32,690	70,707	70,707	32,818
89.00	39,800	36,187	106,894	39,960
90.00	49,000	44,320	151,214	49,190

Device	Routing	Invert	Outlet Devices
#1	Primary	85.50'	24.0" Round RCP_Round 24" L= 46.2' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 85.50' / 83.90' S= 0.0346 ' S= 0.0346 ' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 3.14 sf

Primary OutFlow Max=2.90 cfs @ 12.71 hrs HW=86.13' (Free Discharge)

↑1=RCP_Round 24" (Inlet Controls 2.90 cfs @ 3.39 fps)

Proposed Hydrology

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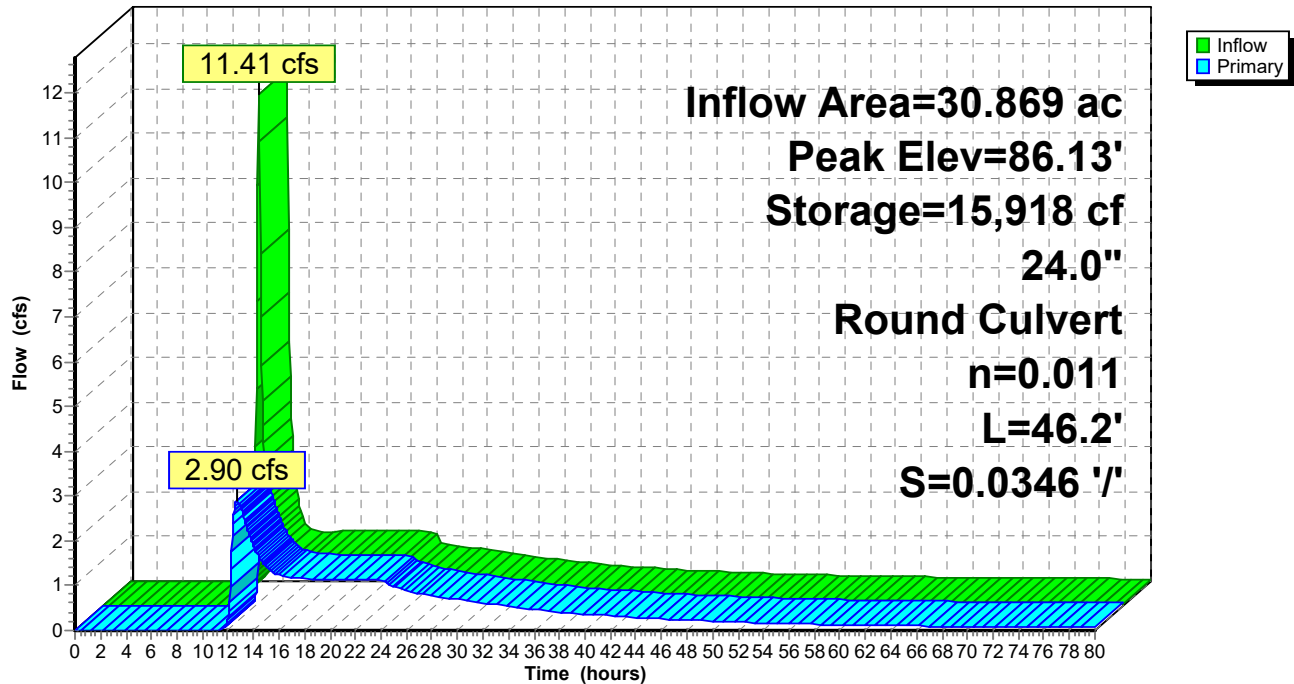
NRCC 24-hr C 25-Year Rainfall=6.09"

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Pond W-N: Wetland Series N

Hydrograph



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Summary for Pond W-O: Wetland Series O

Inflow Area = 61.489 ac, 21.22% Impervious, Inflow Depth > 1.21" for 25-Year event
 Inflow = 16.59 cfs @ 12.37 hrs, Volume= 6.191 af
 Outflow = 3.45 cfs @ 14.63 hrs, Volume= 6.108 af, Atten= 79%, Lag= 135.6 min
 Primary = 3.45 cfs @ 14.63 hrs, Volume= 6.108 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
 Peak Elev= 80.51' @ 14.63 hrs Surf.Area= 28,802 sf Storage= 37,232 cf

Plug-Flow detention time= 177.5 min calculated for 6.105 af (99% of inflow)
 Center-of-Mass det. time= 137.3 min (1,745.3 - 1,608.0)

Volume	Invert	Avail.Storage	Storage Description
#1	78.68'	102,529 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
78.68	16,400	0	0	16,400
80.00	20,844	24,523	24,523	20,889
81.00	37,500	28,767	53,290	37,556
82.00	62,000	49,239	102,529	62,069

Device	Routing	Invert	Outlet Devices
#1	Primary	78.68'	12.0" Round Culvert L= 172.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 78.68' / 75.00' S= 0.0214 ' S= 0.0214 ' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Primary	80.80'	20.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Primary OutFlow Max=3.45 cfs @ 14.63 hrs HW=80.51' (Free Discharge)

1=Culvert (Inlet Controls 3.45 cfs @ 4.39 fps)
 2=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Proposed Hydrology

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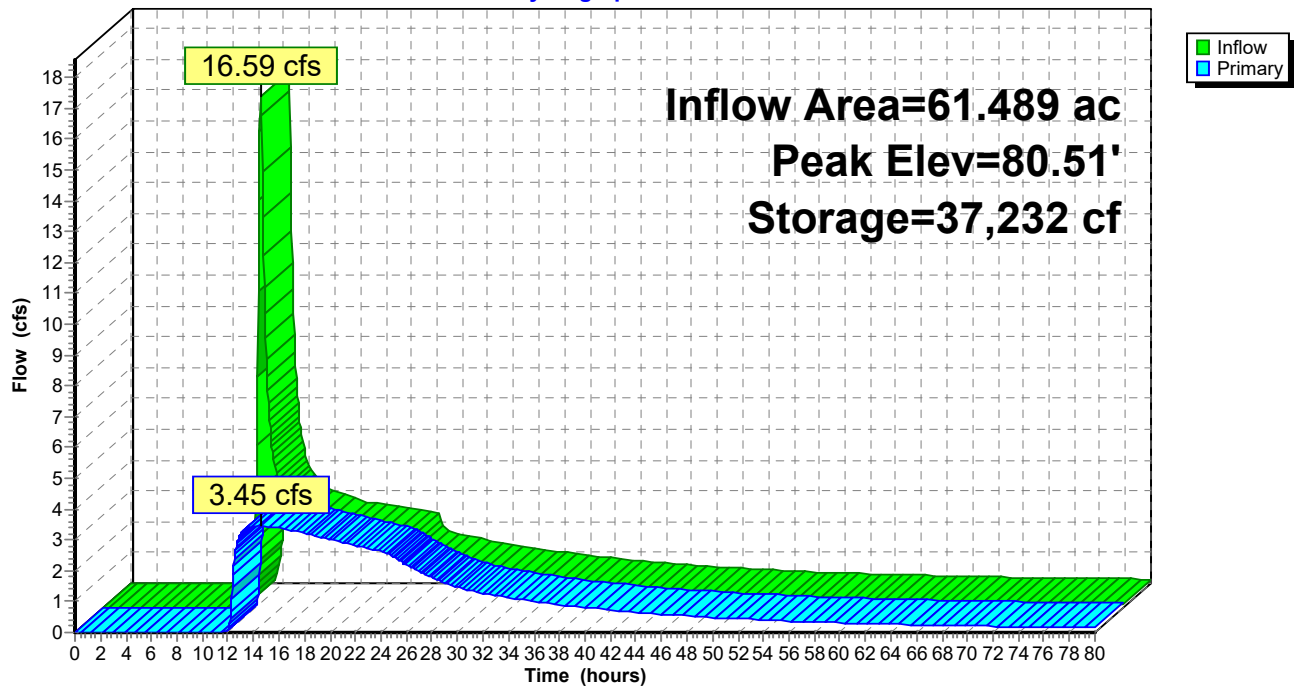
NRCC 24-hr C 25-Year Rainfall=6.09"

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Pond W-O: Wetland Series O

Hydrograph



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Summary for Pond W-QP: Wetland Series Q & P

Inflow Area = 42.589 ac, 23.35% Impervious, Inflow Depth > 1.29" for 25-Year event
Inflow = 21.99 cfs @ 12.23 hrs, Volume= 4.589 af
Outflow = 1.76 cfs @ 19.41 hrs, Volume= 4.183 af, Atten= 92%, Lag= 430.7 min
Primary = 1.76 cfs @ 19.41 hrs, Volume= 4.183 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 79.58' @ 19.41 hrs Surf.Area= 86,873 sf Storage= 74,324 cf

Plug-Flow detention time= 792.8 min calculated for 4.180 af (91% of inflow)
Center-of-Mass det. time= 591.3 min (1,947.7 - 1,356.3)

Volume	Invert	Avail.Storage	Storage Description
#1	78.70'	402,154 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
78.70	82,500	0	0	82,500
83.00	105,000	402,154	402,154	105,477

Device	Routing	Invert	Outlet Devices
#1	Primary	78.70'	12.0" Round Culvert L= 20.6' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 78.70' / 78.30' S= 0.0194 ' S= 0.0194 ' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.79 sf

Primary OutFlow Max=1.76 cfs @ 19.41 hrs HW=79.58' (Free Discharge)

↑**1=Culvert** (Barrel Controls 1.76 cfs @ 3.21 fps)

Proposed Hydrology

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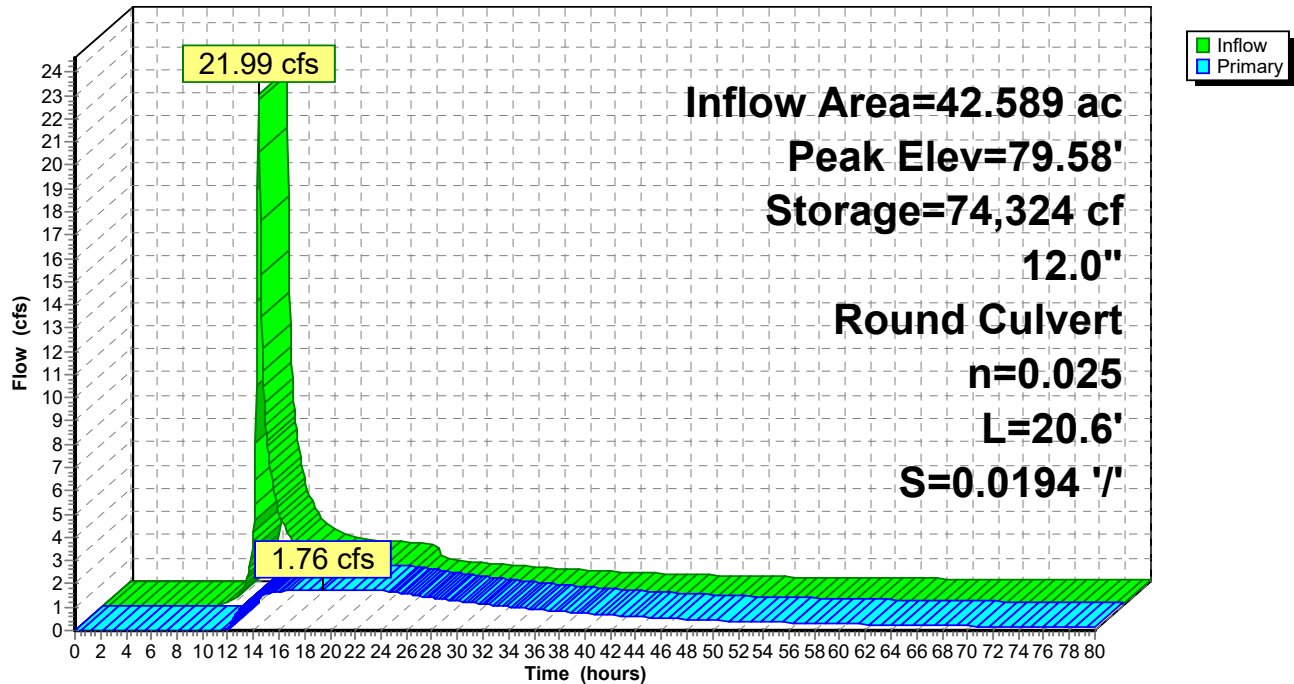
NRCC 24-hr C 25-Year Rainfall=6.09"

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Pond W-QP: Wetland Series Q & P

Hydrograph



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Summary for Pond W-R: Wetland Series R

Inflow Area = 25.797 ac, 32.85% Impervious, Inflow Depth = 1.83" for 25-Year event
Inflow = 36.63 cfs @ 12.29 hrs, Volume= 3.941 af
Outflow = 0.84 cfs @ 24.13 hrs, Volume= 1.749 af, Atten= 98%, Lag= 710.3 min
Primary = 0.84 cfs @ 24.13 hrs, Volume= 1.749 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 88.04' @ 24.13 hrs Surf.Area= 86,206 sf Storage= 145,892 cf

Plug-Flow detention time= 1,243.2 min calculated for 1.748 af (44% of inflow)
Center-of-Mass det. time= 1,102.7 min (1,975.8 - 873.0)

Volume	Invert	Avail.Storage	Storage Description
#1	86.27'	521,661 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
86.27	78,906	0	0	78,906
92.00	103,740	521,661	521,661	104,484

Device	Routing	Invert	Outlet Devices
#1	Primary	87.30'	8.0" Round Culvert L= 240.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 87.30' / 86.50' S= 0.0033 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=0.84 cfs @ 24.13 hrs HW=88.04' (Free Discharge)

↑**1=Culvert** (Inlet Controls 0.84 cfs @ 2.42 fps)

Proposed Hydrology

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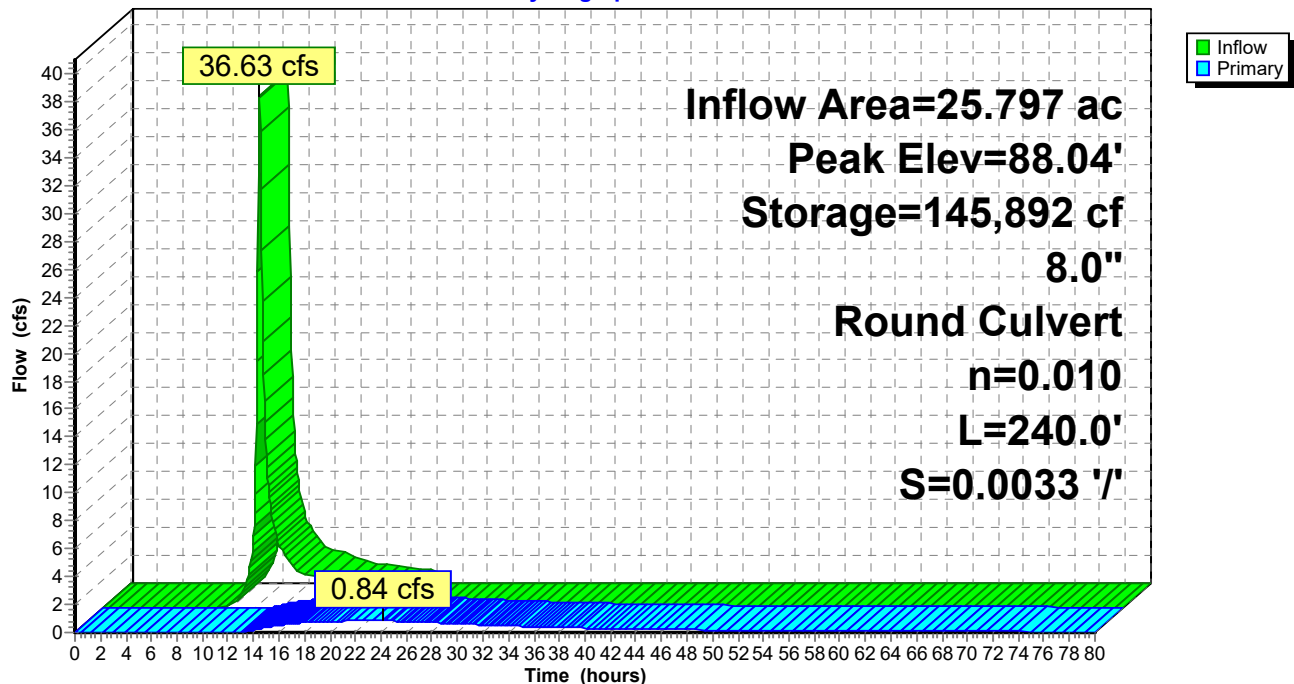
NRCC 24-hr C 25-Year Rainfall=6.09"

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Pond W-R: Wetland Series R

Hydrograph



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Summary for Subcatchment E-13:

Runoff = 2.62 cfs @ 12.19 hrs, Volume= 0.224 af, Depth= 2.07"

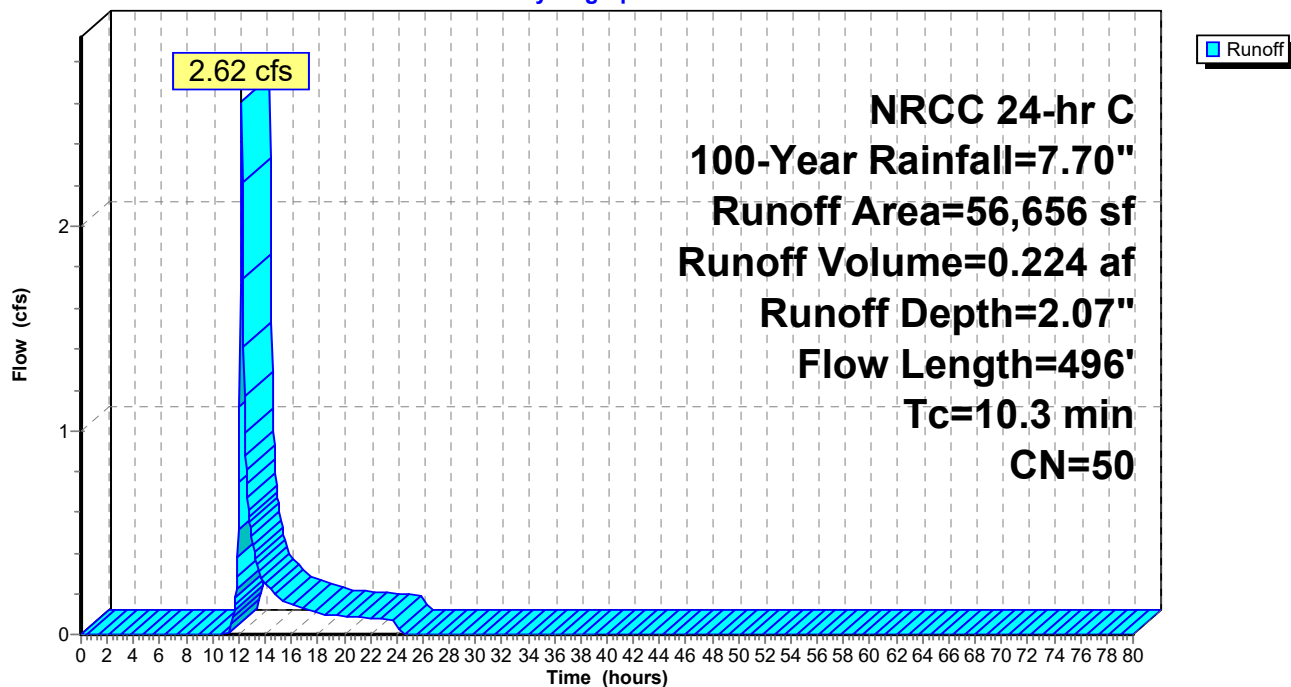
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
30,938	32	Woods/grass comb., Good, HSG A
25,718	72	Woods/grass comb., Good, HSG C
56,656	50	Weighted Average
56,656		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	50	0.0160	0.14		Sheet Flow, Grass Grass: Short n= 0.150 P2= 3.37"
2.1	194	0.0479	1.53		Shallow Concentrated Flow, HR-C Short Grass Pasture Kv= 7.0 fps
2.2	252	0.0748	1.91		Shallow Concentrated Flow, HR-A Short Grass Pasture Kv= 7.0 fps
10.3	496	Total			

Subcatchment E-13:

Hydrograph



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Summary for Subcatchment P-10A: P-10A

Runoff = 0.39 cfs @ 12.17 hrs, Volume= 0.052 af, Depth= 0.78"

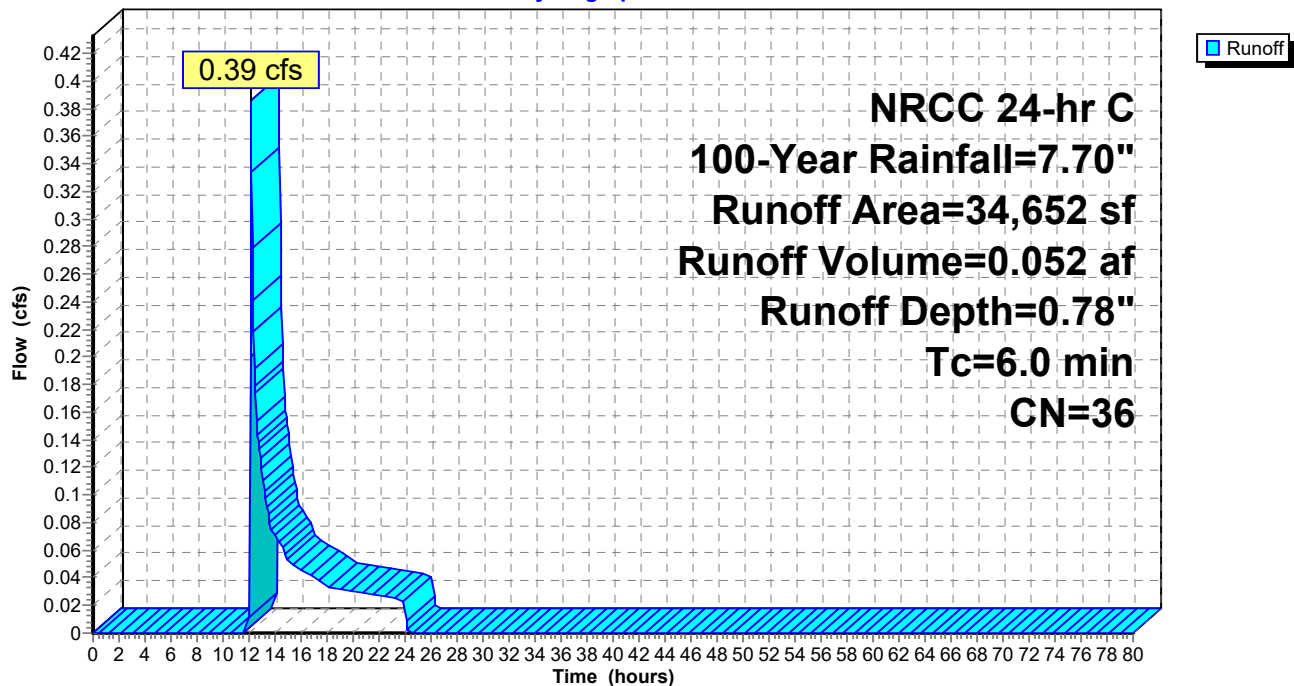
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	2,500	98	roof
	2,500	39	>75% Grass cover, Good, HSG A
	29,652	30	Woods, Good, HSG A
	34,652	36	Weighted Average
	32,152		92.79% Pervious Area
	2,500		7.21% Impervious Area

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

Subcatchment P-10A: P-10A

Hydrograph



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Summary for Subcatchment P-10B: P-10B

Runoff = 5.44 cfs @ 12.13 hrs, Volume= 0.370 af, Depth= 3.33"

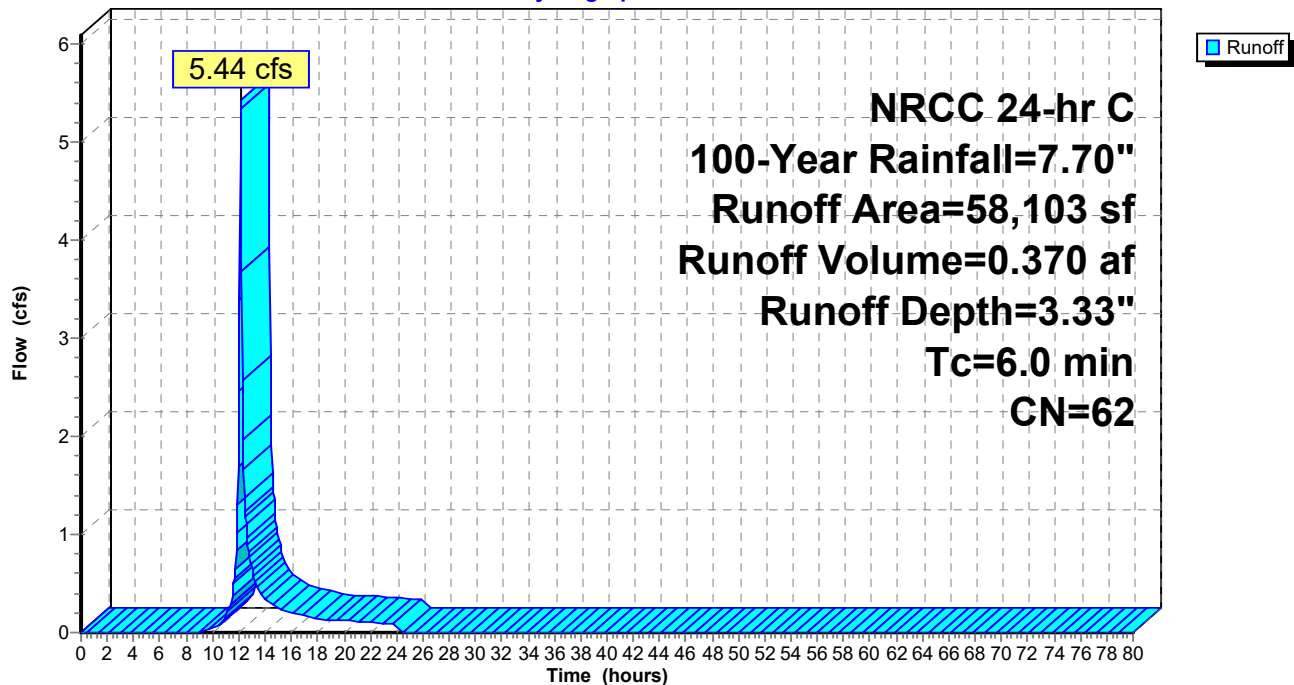
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	2,050	98	basin
	56,053	61	1/4 acre lots, 38% imp, HSG A
	58,103	62	Weighted Average
	34,753		59.81% Pervious Area
	23,350		40.19% Impervious Area

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

Subcatchment P-10B: P-10B

Hydrograph



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Summary for Subcatchment P-10U: P-10U

Runoff = 0.62 cfs @ 12.22 hrs, Volume= 0.116 af, Depth= 0.70"

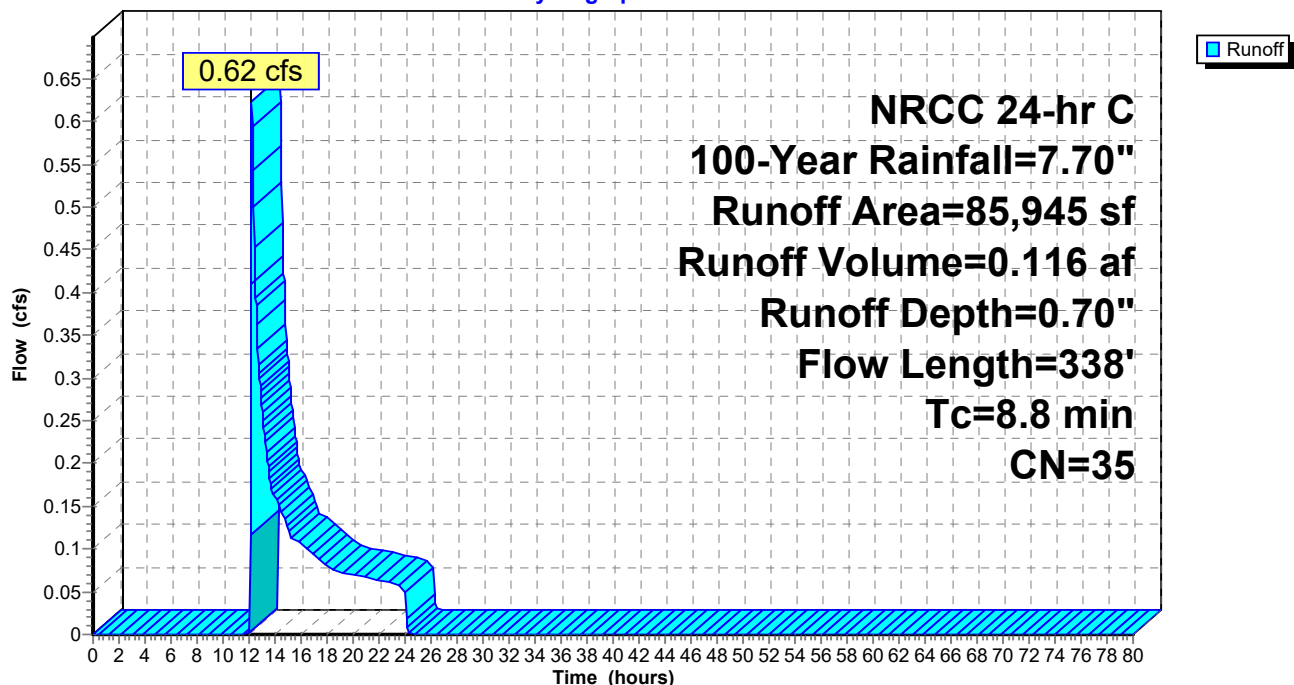
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
4,986	98	Paved parking, HSG A
68,659	30	Woods, Good, HSG A
12,300	39	>75% Grass cover, Good, HSG A
85,945	35	Weighted Average
80,959		94.20% Pervious Area
4,986		5.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	50	0.0784	0.12		Sheet Flow, Wooded Woods: Light underbrush n= 0.400 P2= 3.37"
1.3	138	0.1246	1.76		Shallow Concentrated Flow, Wooded Woodland Kv= 5.0 fps
0.5	150	0.0729	5.48		Shallow Concentrated Flow, Paved Paved Kv= 20.3 fps
8.8	338	Total			

Subcatchment P-10U: P-10U

Hydrograph



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Summary for Subcatchment P-11A: P-11A

Runoff = 2.41 cfs @ 12.13 hrs, Volume= 0.173 af, Depth= 5.92"

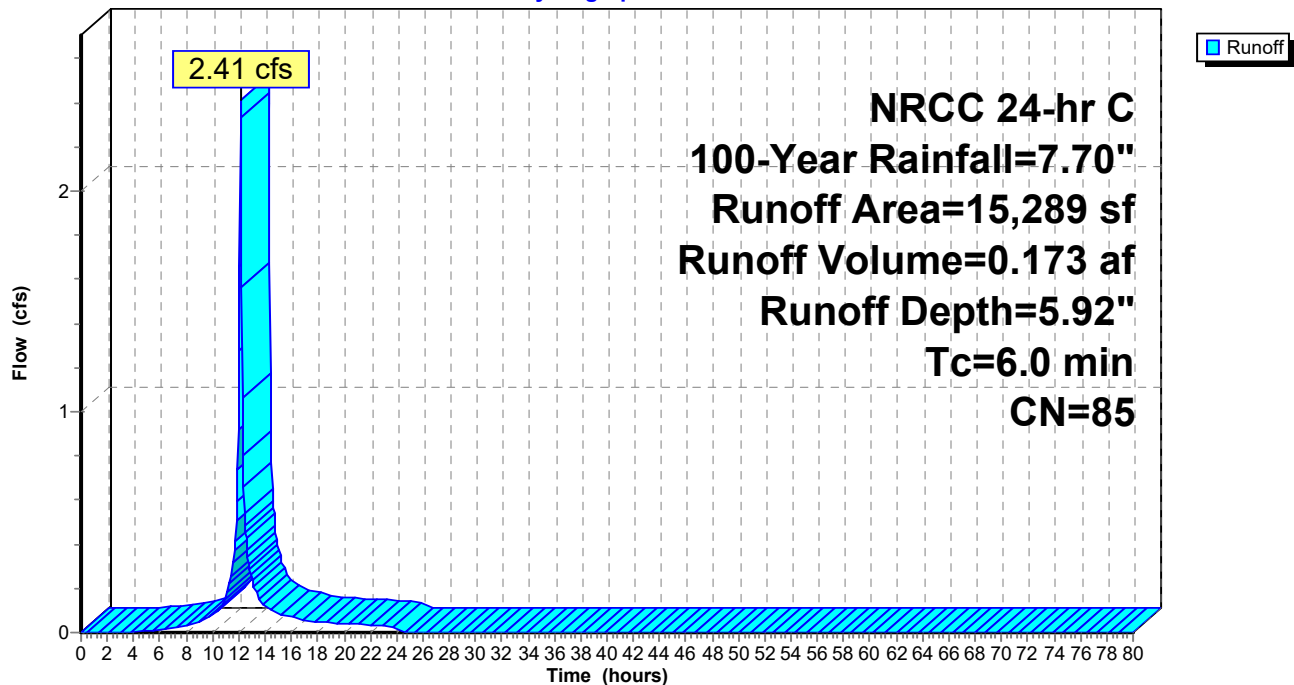
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
3,400	39	>75% Grass cover, Good, HSG A
* 11,889	98	road with sidewalk
15,289	85	Weighted Average
3,400		22.24% Pervious Area
11,889		77.76% Impervious Area

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

Subcatchment P-11A: P-11A

Hydrograph



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Summary for Subcatchment P-11B: P-11B

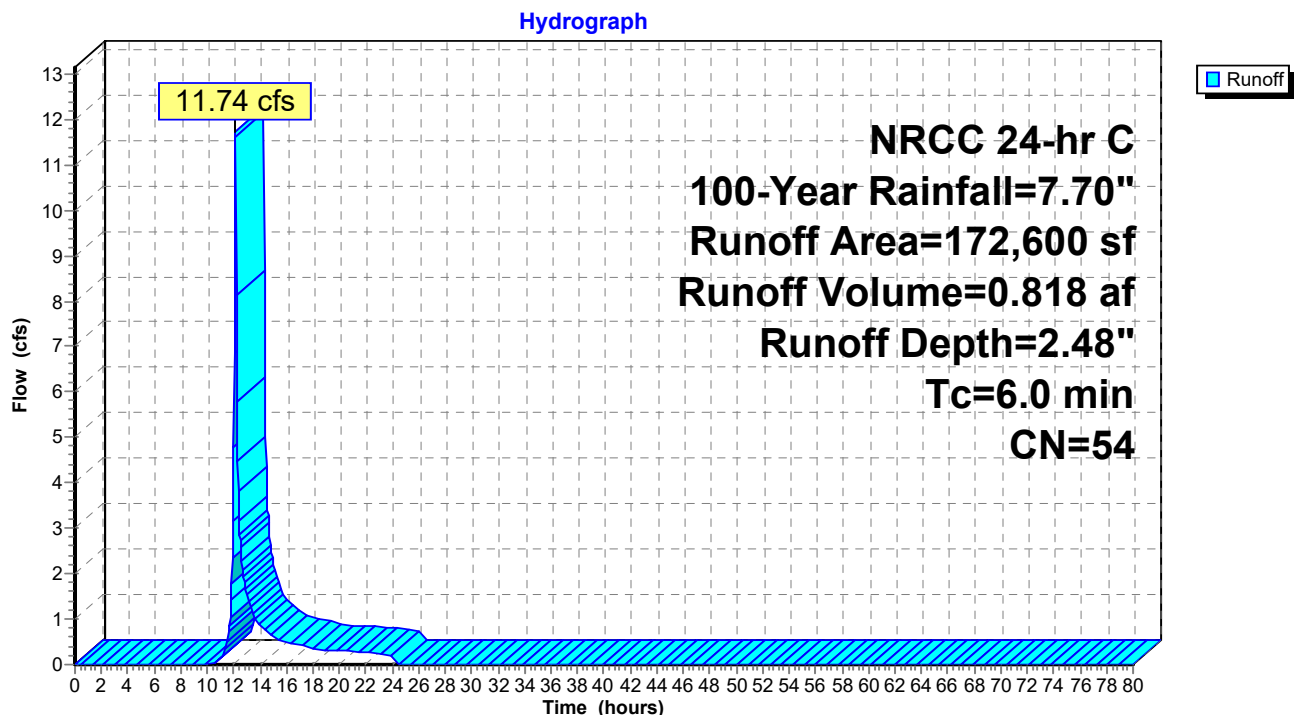
Runoff = 11.74 cfs @ 12.14 hrs, Volume= 0.818 af, Depth= 2.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	9,500	98	roof
	87,100	39	>75% Grass cover, Good, HSG A
	46,000	61	>75% Grass cover, Good, HSG B
*	30,000	75	stone field
	172,600	54	Weighted Average
	163,100		94.50% Pervious Area
	9,500		5.50% Impervious Area

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

Subcatchment P-11B: P-11B



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Summary for Subcatchment P-11U: P-11U

Runoff = 0.86 cfs @ 12.26 hrs, Volume= 0.127 af, Depth= 0.95"

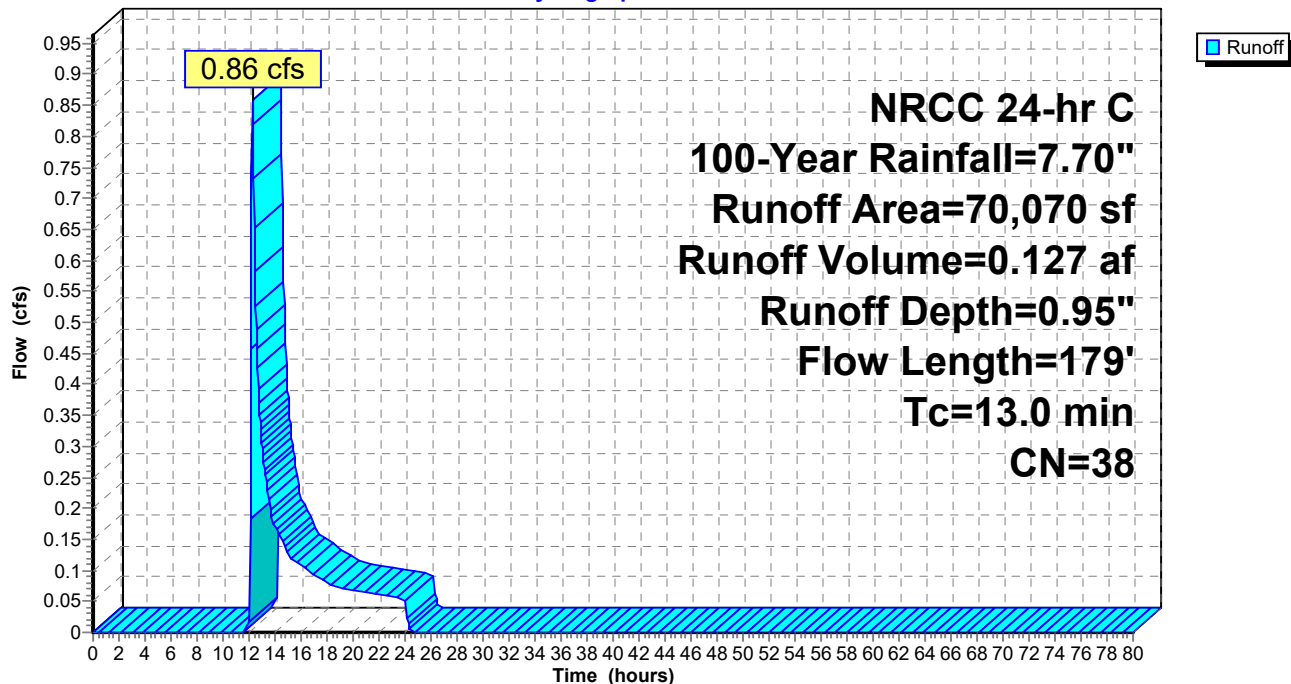
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
23,000	55	Woods, Good, HSG B
47,070	30	Woods, Good, HSG A
70,070	38	Weighted Average
70,070		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.6	50	0.0880	0.07		Sheet Flow, Sheet Flow Woods: Dense underbrush n= 0.800 P2= 3.37"
1.4	129	0.0942	1.53		Shallow Concentrated Flow, HR-B Woodland Kv= 5.0 fps
13.0	179	Total			

Subcatchment P-11U: P-11U

Hydrograph



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Summary for Subcatchment P-12A: P-12A

Runoff = 32.01 cfs @ 12.13 hrs, Volume= 2.176 af, Depth= 3.98"

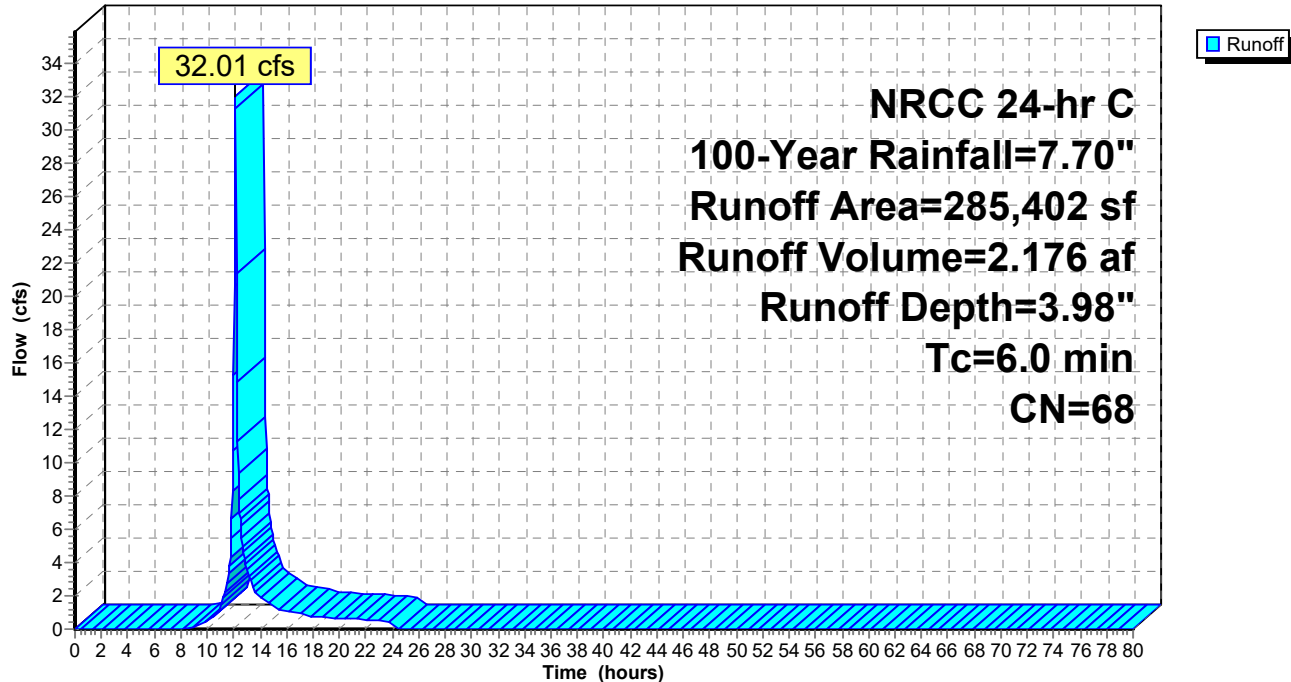
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	9,500	98	basin
	138,400	75	1/4 acre lots, 38% imp, HSG B
	33,000	61	1/4 acre lots, 38% imp, HSG A
	87,300	61	>75% Grass cover, Good, HSG B
	17,202	39	>75% Grass cover, Good, HSG A
	285,402	68	Weighted Average
	210,770		73.85% Pervious Area
	74,632		26.15% Impervious Area

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

Subcatchment P-12A: P-12A

Hydrograph



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Summary for Subcatchment P-12B: P-12B

Runoff = 23.04 cfs @ 12.14 hrs, Volume= 1.584 af, Depth= 2.79"

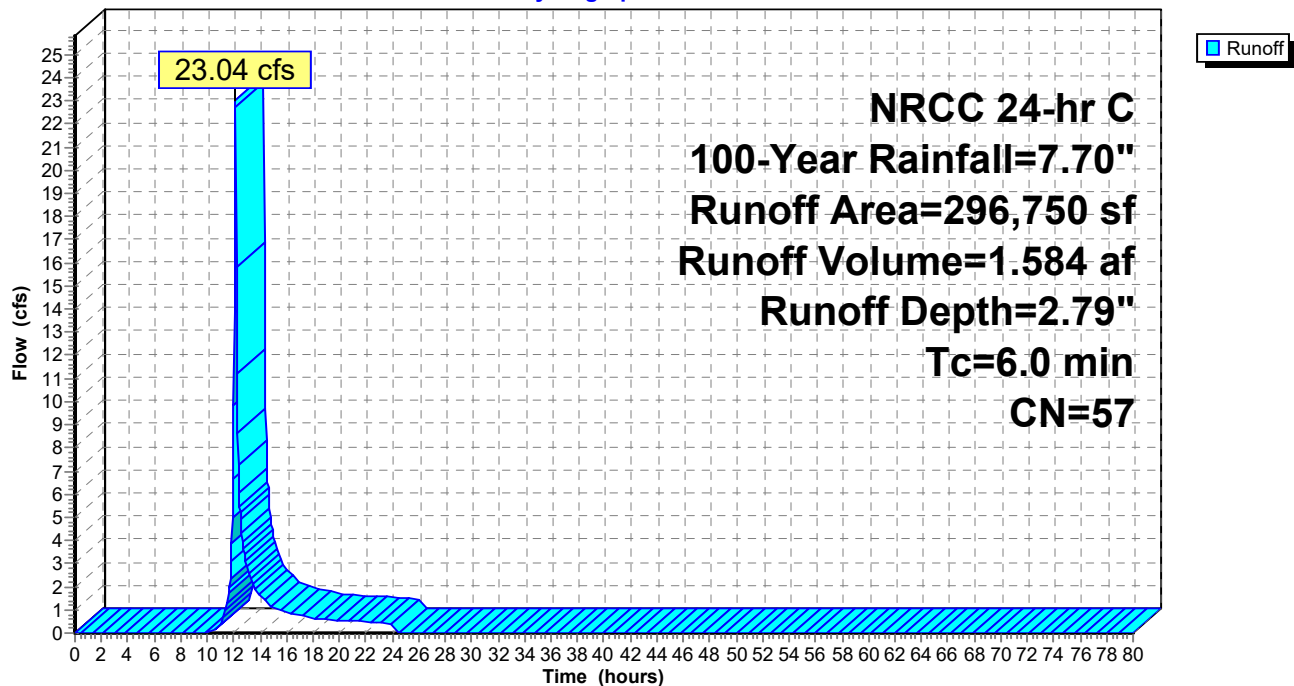
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	24,250	98	basin
	110,800	75	1/4 acre lots, 38% imp, HSG B
	161,700	39	>75% Grass cover, Good, HSG A
	296,750	57	Weighted Average
	230,396		77.64% Pervious Area
	66,354		22.36% Impervious Area

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

Subcatchment P-12B: P-12B

Hydrograph



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NRCC 24-hr C 100-Year Rainfall=7.70"

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Summary for Subcatchment P-12U: P-12U

Runoff = 5.56 cfs @ 12.19 hrs, Volume= 0.500 af, Depth= 1.68"

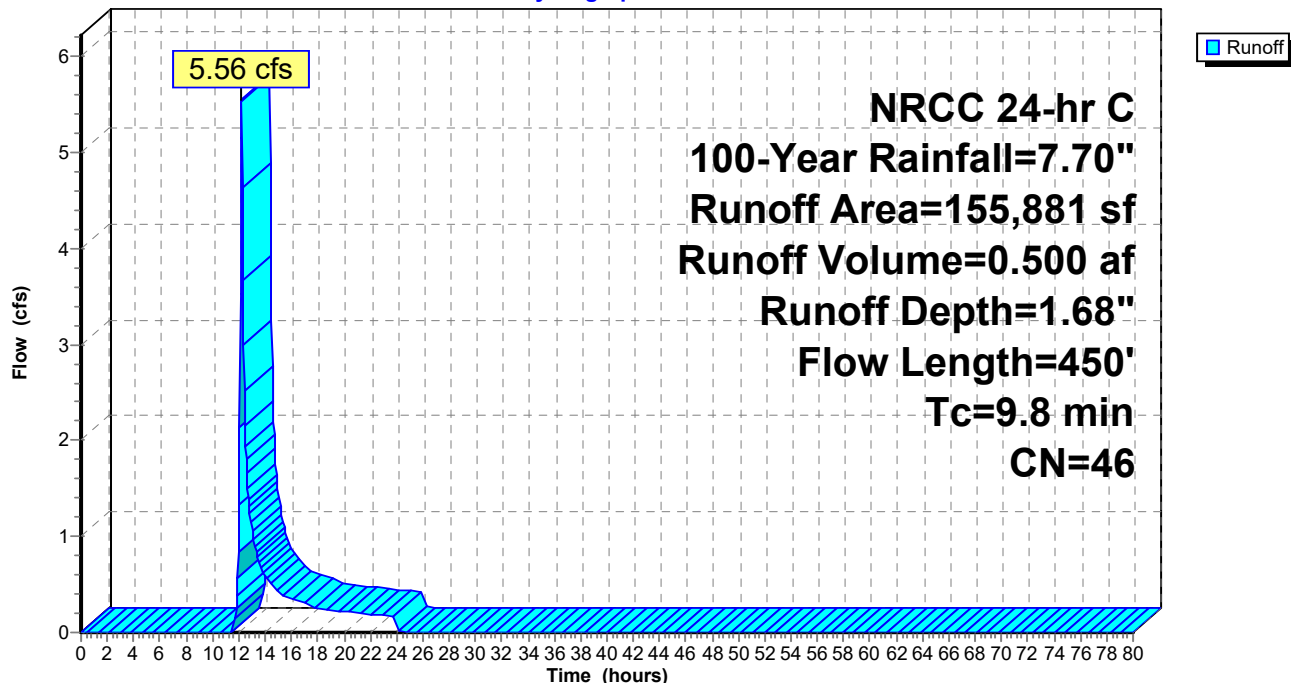
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
80,000	32	Woods/grass comb., Good, HSG A
59,250	58	Woods/grass comb., Good, HSG B
900	79	Woods/grass comb., Good, HSG D
* 5,000	98	2 units roof
10,731	61	>75% Grass cover, Good, HSG B
155,881	46	Weighted Average
150,881		96.79% Pervious Area
5,000		3.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.9	50	0.1200	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.37"
3.9	400	0.0600	1.71		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
9.8	450	Total			

Subcatchment P-12U: P-12U

Hydrograph



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NRCC 24-hr C 100-Year Rainfall=7.70"

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Summary for Subcatchment P-14: P-14

Runoff = 64.06 cfs @ 12.32 hrs, Volume= 7.016 af, Depth= 3.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
268,666	32	Woods/grass comb., Good, HSG A
329,442	58	Woods/grass comb., Good, HSG B
623,088	72	Woods/grass comb., Good, HSG C
1,221,196	59	Weighted Average
1,221,196		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.5	100	0.0200	0.17		Sheet Flow, Grass Grass: Short n= 0.150 P2= 3.37"
0.8	25	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.2	185	0.0417	1.43		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.3	31	0.0470	1.52		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.5	173	0.0279	1.17		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.8	75	0.0514	1.59		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.1	181	0.0409	1.42		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.1	82	0.0343	1.30		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.7	129	0.0339	1.29		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
21.0	981	Total			

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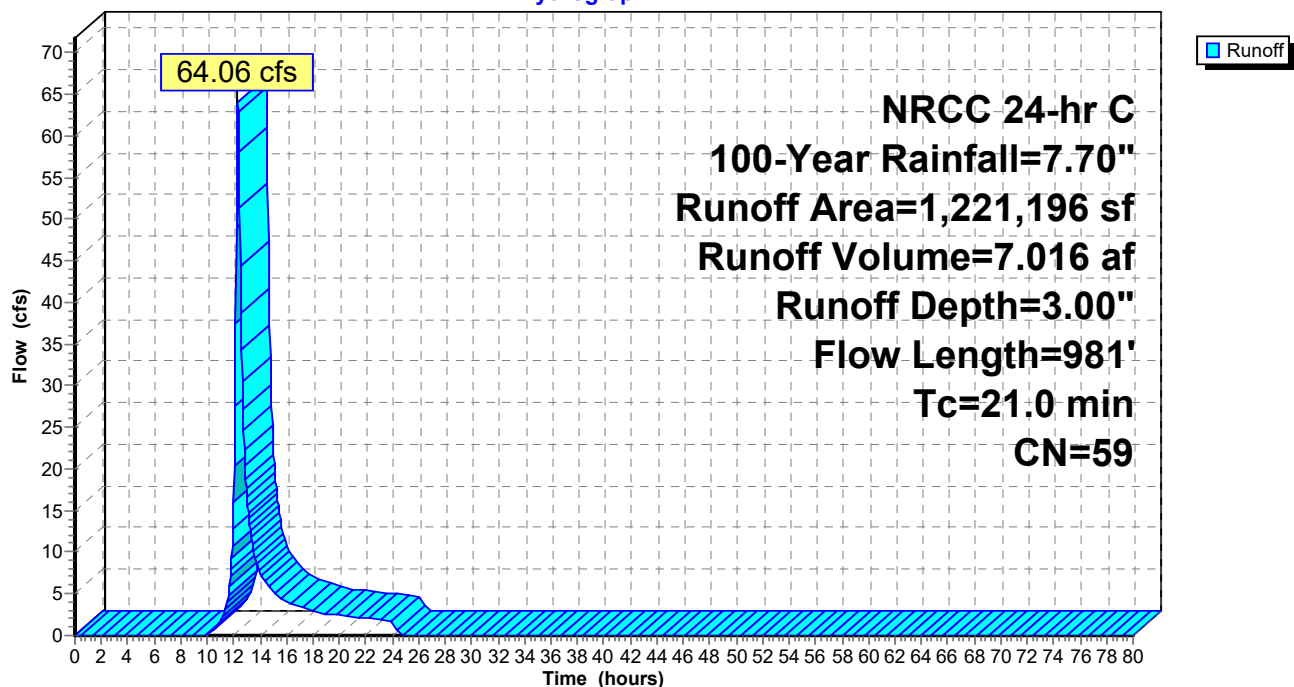
NRCC 24-hr C 100-Year Rainfall=7.70"

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Subcatchment P-14: P-14

Hydrograph



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Summary for Subcatchment P-15A: P-15A

Runoff = 2.31 cfs @ 12.13 hrs, Volume= 0.160 af, Depth= 4.89"

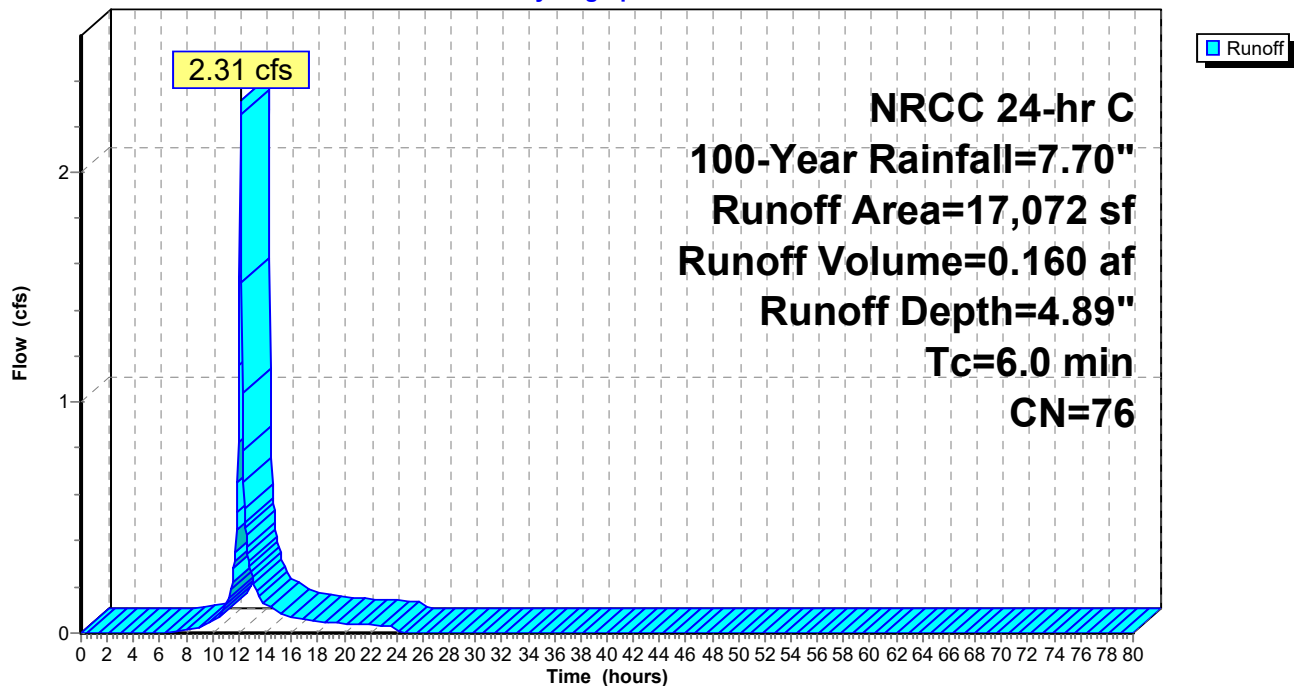
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	780	98	BASIN
*	6,250	98	2.5 UNITS
	10,042	61	>75% Grass cover, Good, HSG B
	17,072	76	Weighted Average
	10,042		58.82% Pervious Area
	7,030		41.18% Impervious Area

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

Subcatchment P-15A: P-15A

Hydrograph



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Summary for Subcatchment P-15U: P-15U

Runoff = 3.34 cfs @ 12.20 hrs, Volume= 0.289 af, Depth= 2.07"

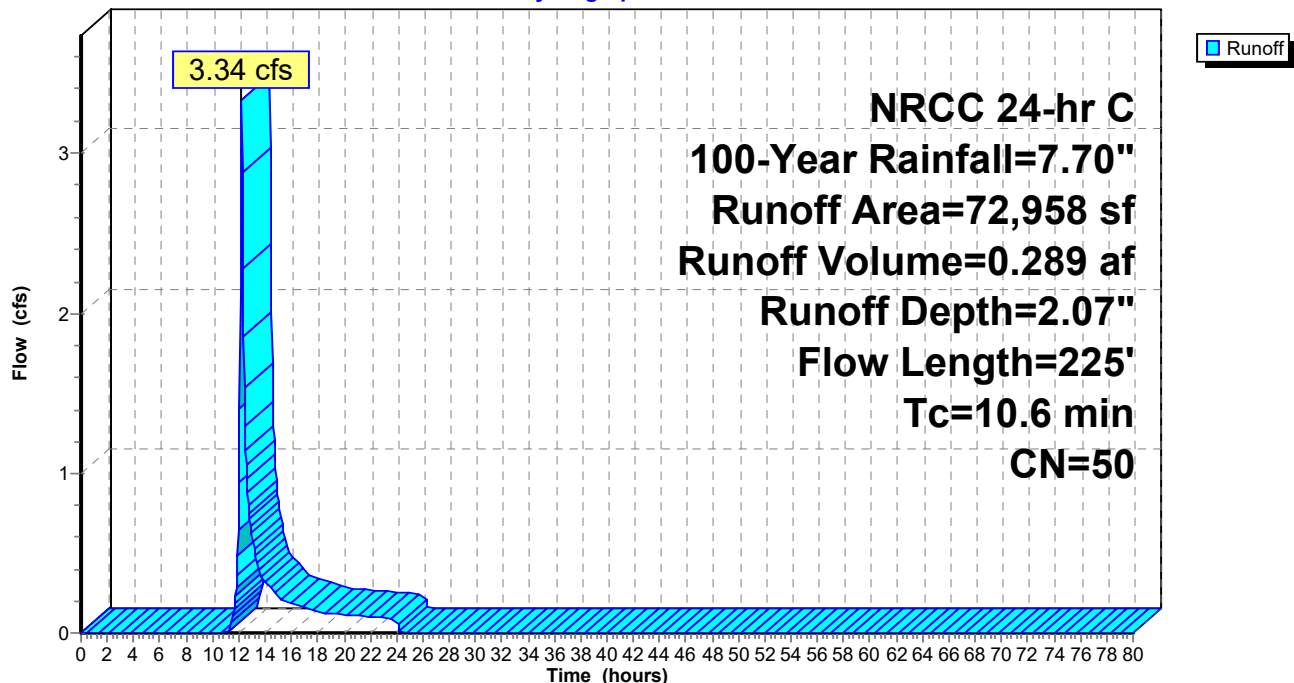
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
13,300	55	Woods, Good, HSG B
26,658	61	>75% Grass cover, Good, HSG B
22,600	30	Woods, Good, HSG A
5,500	77	Woods, Good, HSG D
4,900	39	>75% Grass cover, Good, HSG A
72,958	50	Weighted Average
72,958		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	50	0.0500	0.10		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.37"
2.3	175	0.0650	1.27		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
10.6	225	Total			

Subcatchment P-15U: P-15U

Hydrograph



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Summary for Subcatchment P-1A: P-1A

Runoff = 23.13 cfs @ 12.13 hrs, Volume= 1.602 af, Depth= 5.00"

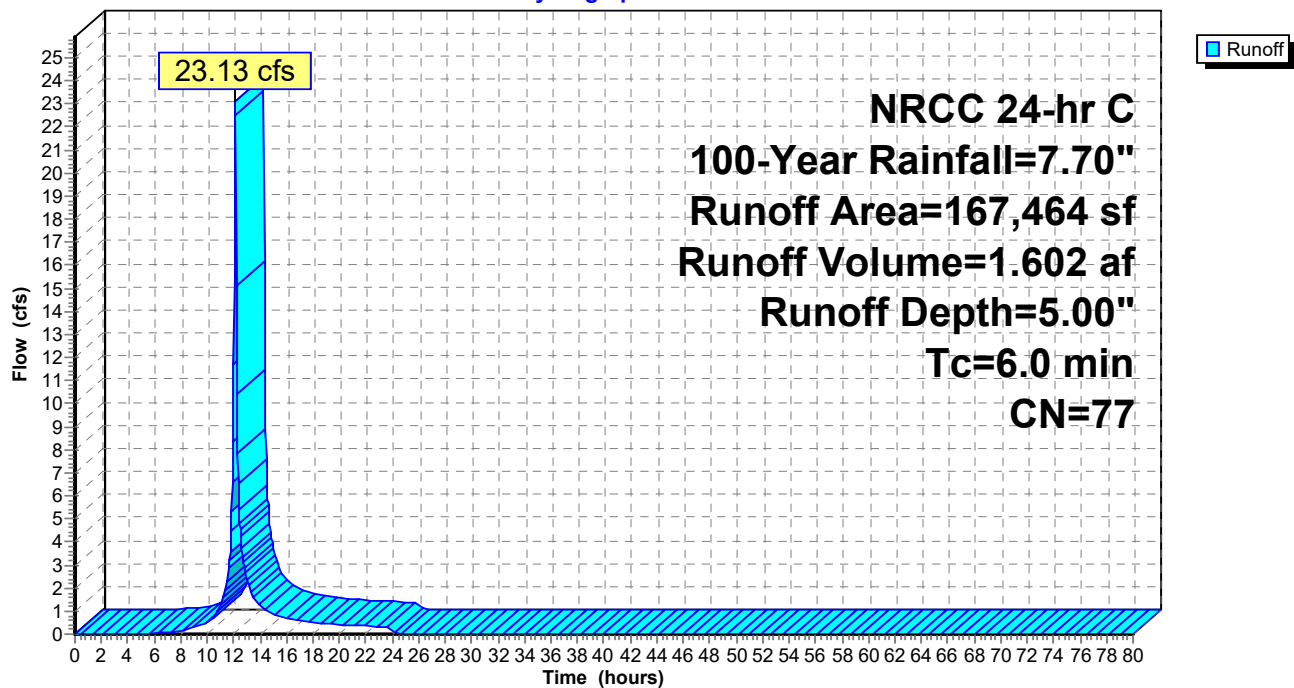
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	5,750	98	basin
*	38,880	98	1620 lf of road
*	3,150	98	630 lf of sidewalk
*	2,500	98	1 unit
*	23,400	98	17 units driveway
	7,380	55	Woods, Good, HSG B
	86,404	61	>75% Grass cover, Good, HSG B
	167,464	77	Weighted Average
	93,784		56.00% Pervious Area
	73,680		44.00% Impervious Area

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

Subcatchment P-1A: P-1A

Hydrograph



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Summary for Subcatchment P-1B: P-1B

Runoff = 17.24 cfs @ 12.33 hrs, Volume= 1.911 af, Depth= 3.65"

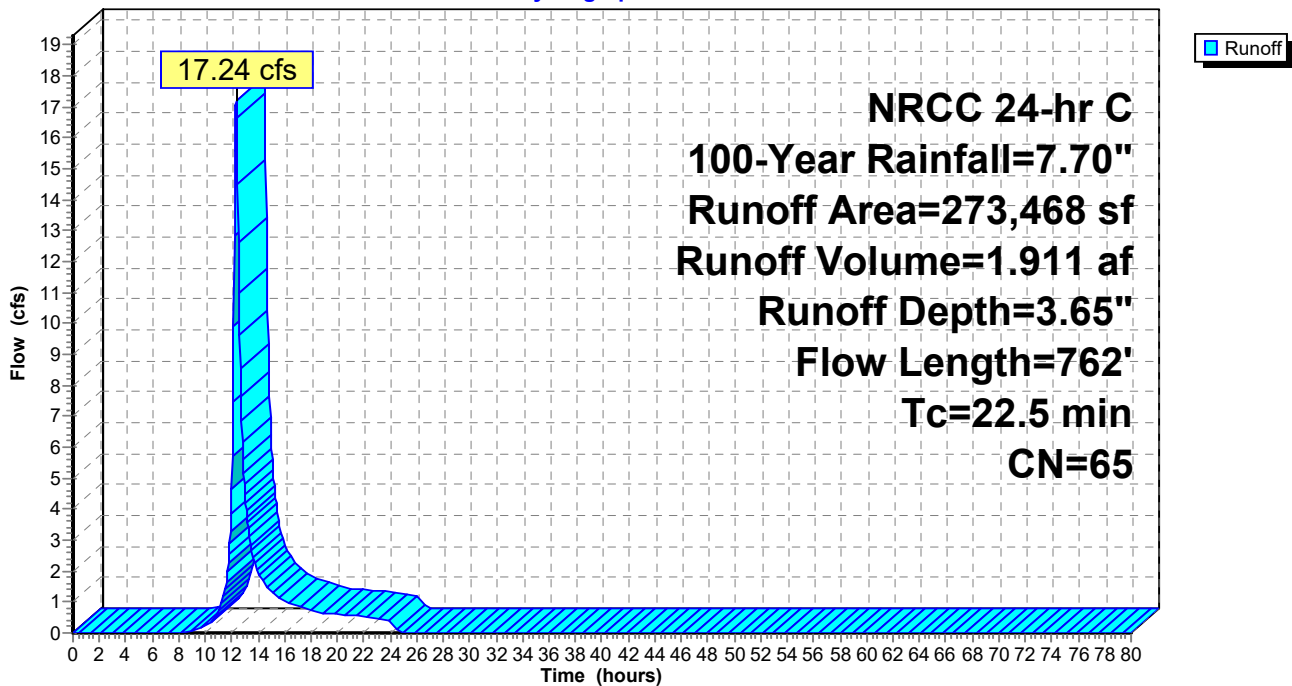
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
* 3,150	98	BASIN
* 8,000	85	500 LF GRAVEL ROAD B SOILS
* 18,750	98	7.5 UNITS
243,568	61	>75% Grass cover, Good, HSG B
273,468	65	Weighted Average
251,568		91.99% Pervious Area
21,900		8.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	50	0.0200	0.15		Sheet Flow, Grass: Short n= 0.150 P2= 3.37"
17.0	712	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
22.5	762	Total			

Subcatchment P-1B: P-1B

Hydrograph



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Summary for Subcatchment P-1C: P-1C

Runoff = 1.03 cfs @ 12.13 hrs, Volume= 0.076 af, Depth= 6.28"

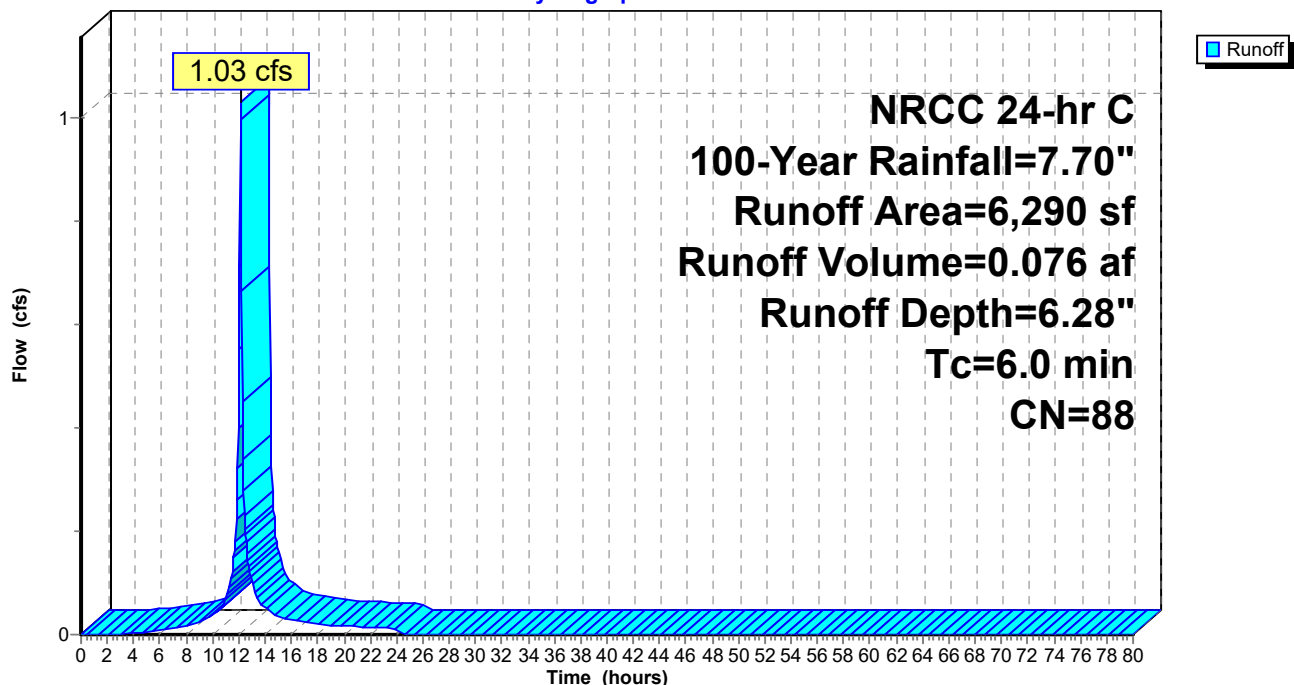
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	70	98	BASIN
*	3,744	98	156 LF OF ROAD
*	780	98	156 LF OF SIDEWALK
	1,696	61	>75% Grass cover, Good, HSG B
	6,290	88	Weighted Average
	1,696		26.96% Pervious Area
	4,594		73.04% Impervious Area

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

Subcatchment P-1C: P-1C

Hydrograph



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Summary for Subcatchment P-1U: P-1U

Runoff = 14.39 cfs @ 12.21 hrs, Volume= 1.229 af, Depth= 3.22"

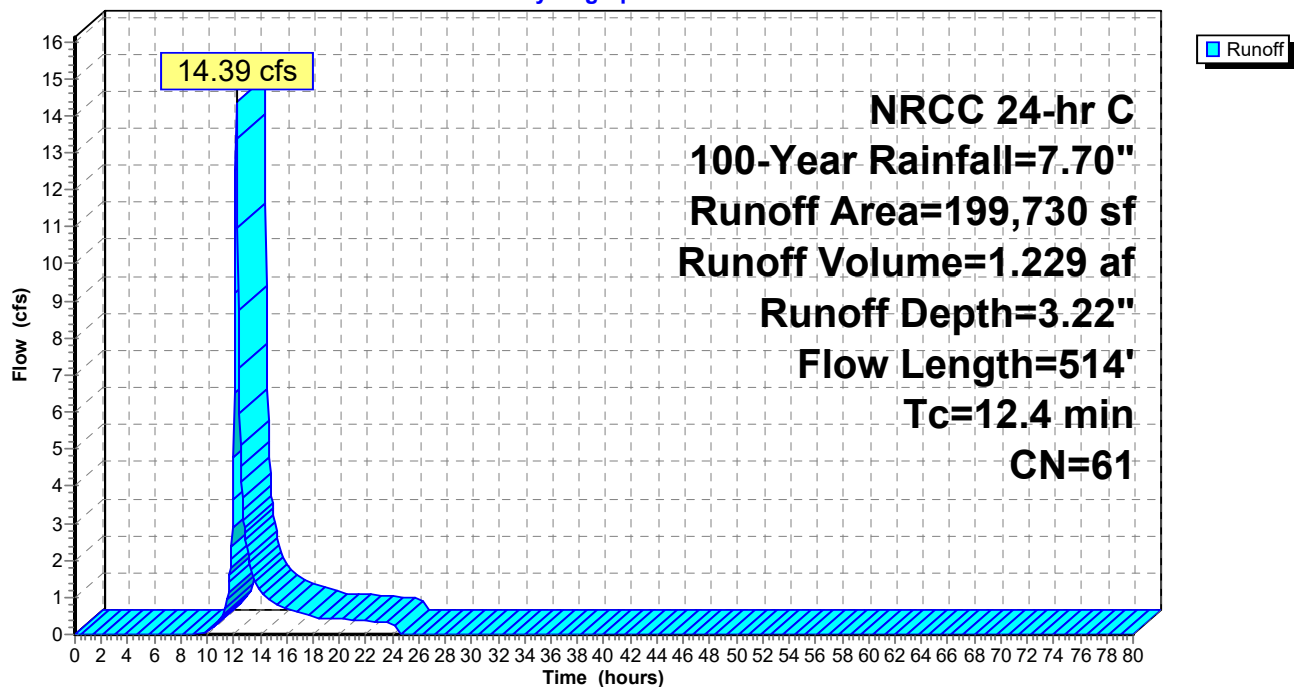
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
108,480	61	>75% Grass cover, Good, HSG B
80,000	55	Woods, Good, HSG B
* 11,250	98	4.5 UNITS
199,730	61	Weighted Average
188,480		94.37% Pervious Area
11,250		5.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	50	0.1400	0.15		Sheet Flow, Wooded Woods: Light underbrush n= 0.400 P2= 3.37"
6.9	464	0.0500	1.12		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.4	514	Total			

Subcatchment P-1U: P-1U

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Summary for Subcatchment P-2A: P-2A

Runoff = 9.40 cfs @ 12.13 hrs, Volume= 0.640 af, Depth= 3.22"

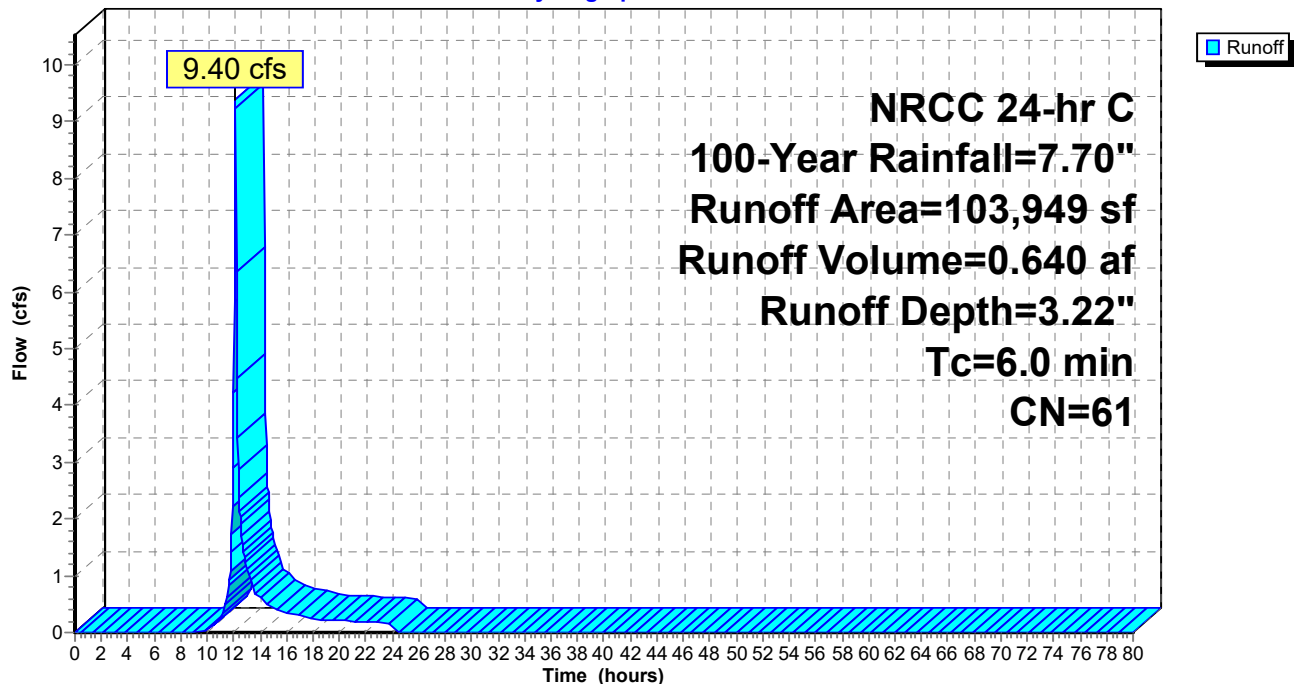
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
103,949	61	1/4 acre lots, 38% imp, HSG A
64,448		62.00% Pervious Area
39,501		38.00% Impervious Area

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

Subcatchment P-2A: P-2A

Hydrograph



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Summary for Subcatchment P-2B: P-2B

Runoff = 5.83 cfs @ 12.13 hrs, Volume= 0.396 af, Depth= 4.10"

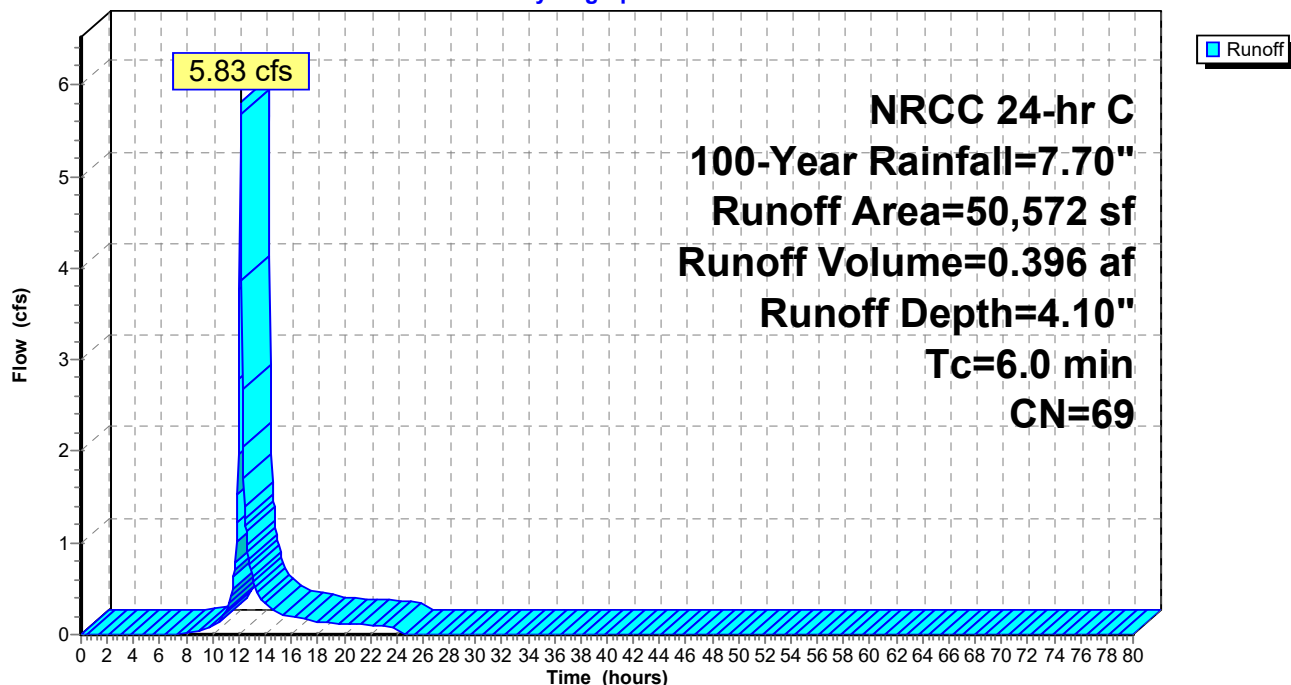
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
34,300	61	1/4 acre lots, 38% imp, HSG A
16,272	87	1/4 acre lots, 38% imp, HSG D
50,572	69	Weighted Average
31,355		62.00% Pervious Area
19,217		38.00% Impervious Area

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

Subcatchment P-2B: P-2B

Hydrograph



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Summary for Subcatchment P-2C: P-2C

Runoff = 10.04 cfs @ 12.13 hrs, Volume= 0.721 af, Depth= 5.92"

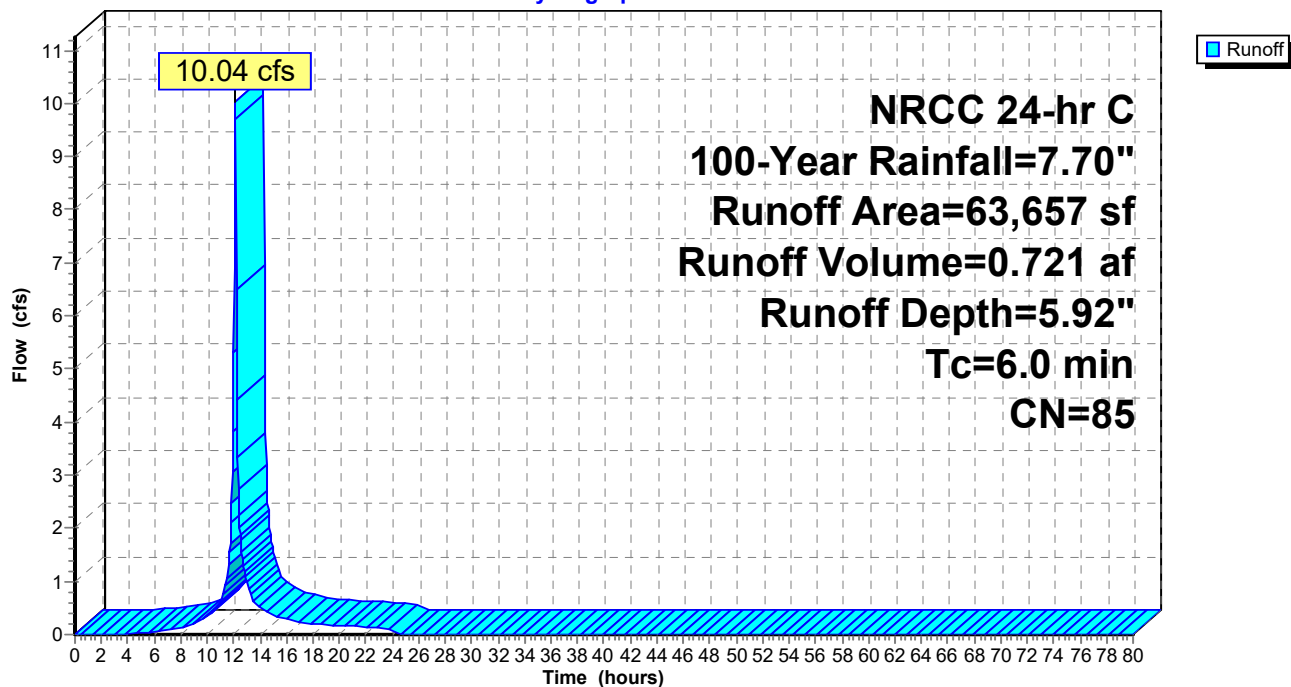
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
54,284	87	1/4 acre lots, 38% imp, HSG D
9,373	75	1/4 acre lots, 38% imp, HSG B
63,657	85	Weighted Average
39,467		62.00% Pervious Area
24,190		38.00% Impervious Area

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

Subcatchment P-2C: P-2C

Hydrograph



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Summary for Subcatchment P-2D: P-2D

Runoff = 40.57 cfs @ 12.13 hrs, Volume= 2.754 af, Depth= 3.76"

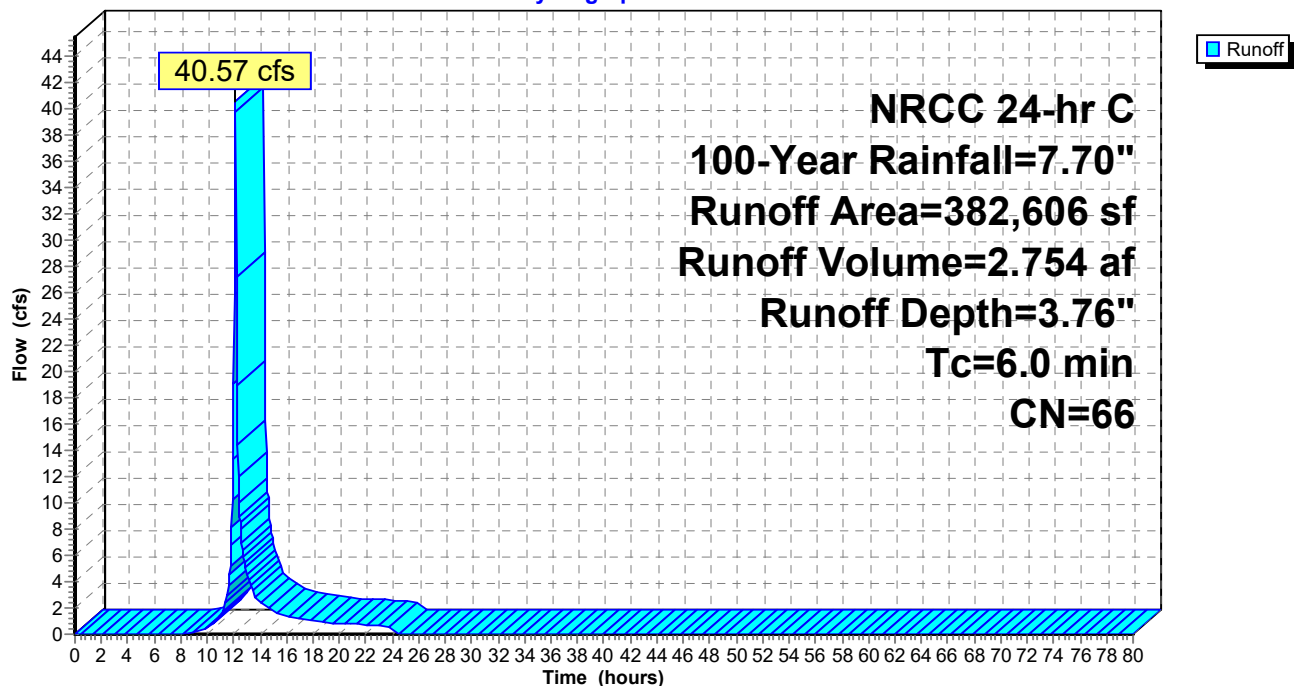
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
163,640	61	1/4 acre lots, 38% imp, HSG A
82,633	87	1/4 acre lots, 38% imp, HSG D
* 15,400	98	basin
30,500	30	Woods, Good, HSG A
9,200	77	Woods, Good, HSG D
* 17,400	98	exist impervious
13,000	74	>75% Grass cover, Good, HSG C
10,000	80	>75% Grass cover, Good, HSG D
40,833	39	>75% Grass cover, Good, HSG A
382,606	66	Weighted Average
256,222		66.97% Pervious Area
126,384		33.03% Impervious Area

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

Subcatchment P-2D: P-2D

Hydrograph



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Summary for Subcatchment P-2E: P-2E

Runoff = 15.79 cfs @ 12.13 hrs, Volume= 1.097 af, Depth= 5.11"

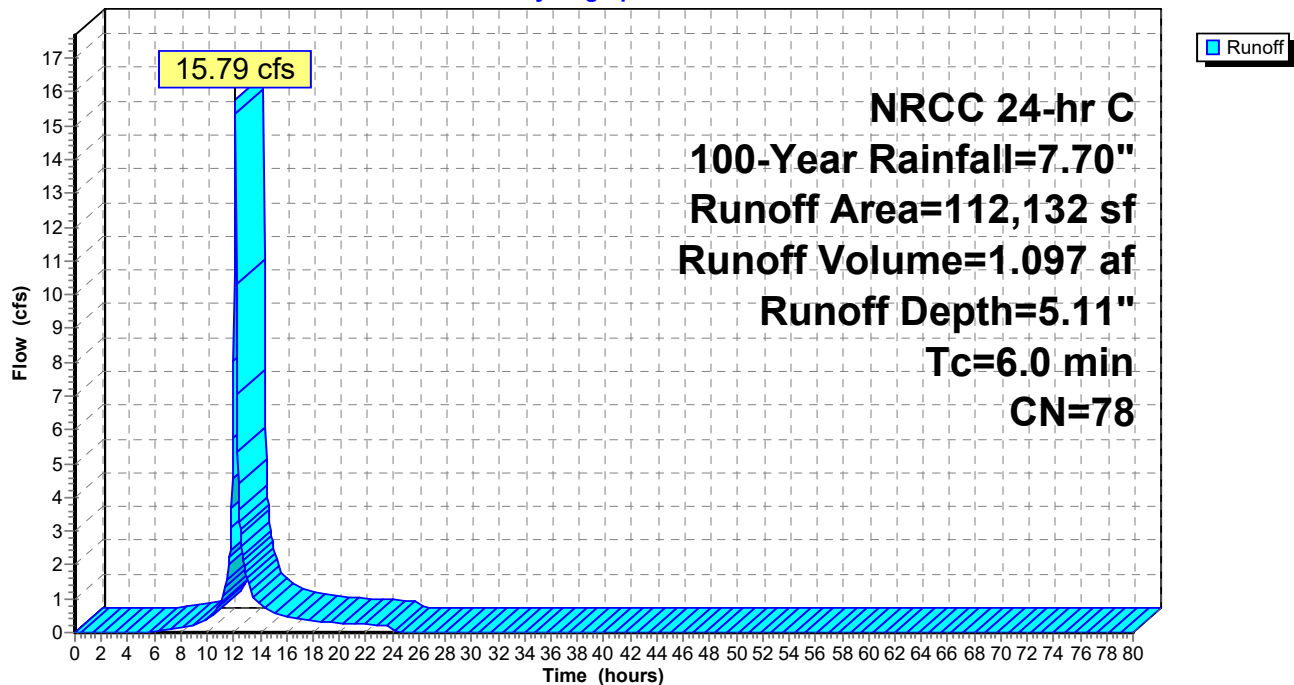
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	12,500	98	basin
	99,632	75	1/4 acre lots, 38% imp, HSG B
	112,132	78	Weighted Average
	61,772		55.09% Pervious Area
	50,360		44.91% Impervious Area

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

Subcatchment P-2E: P-2E

Hydrograph



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Summary for Subcatchment P-2F: P-2F

Runoff = 19.20 cfs @ 12.13 hrs, Volume= 1.325 af, Depth= 4.89"

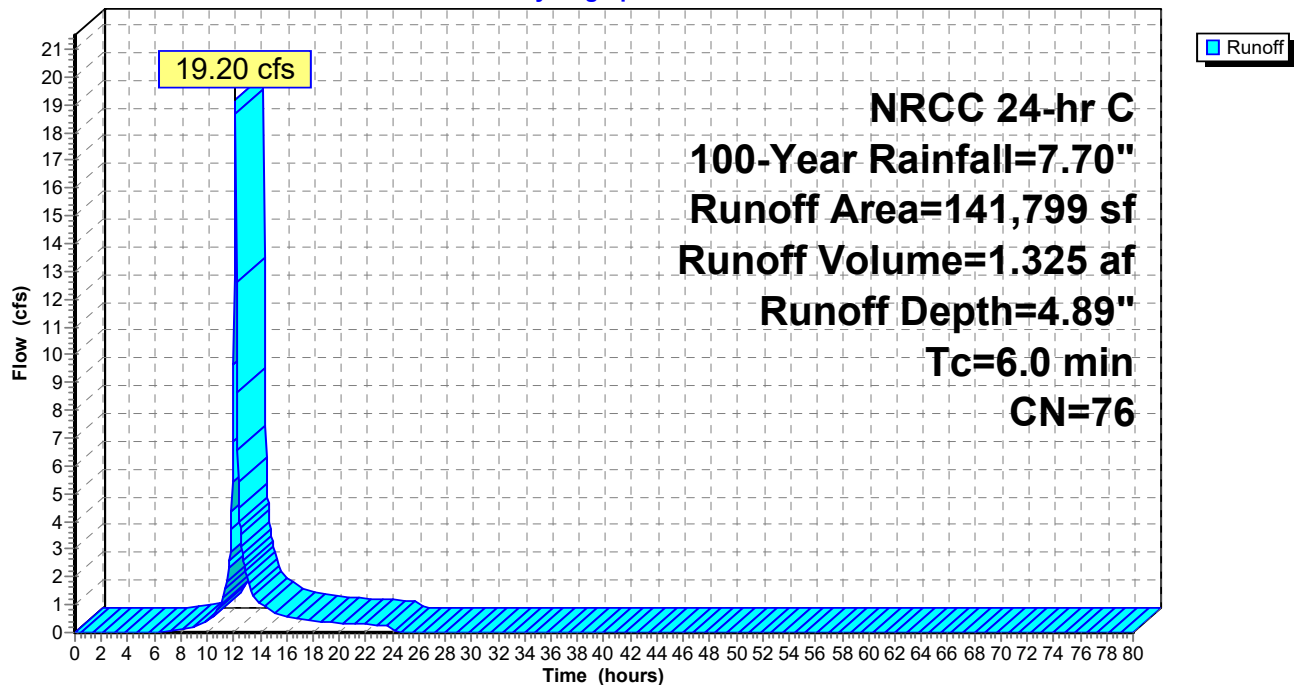
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
134,299	75	1/4 acre lots, 38% imp, HSG B
* 7,500	98	basin
141,799	76	Weighted Average
83,265		58.72% Pervious Area
58,534		41.28% Impervious Area

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

Subcatchment P-2F: P-2F

Hydrograph



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Summary for Subcatchment P-2U: P-2U

Runoff = 62.66 cfs @ 12.52 hrs, Volume= 9.075 af, Depth= 3.87"

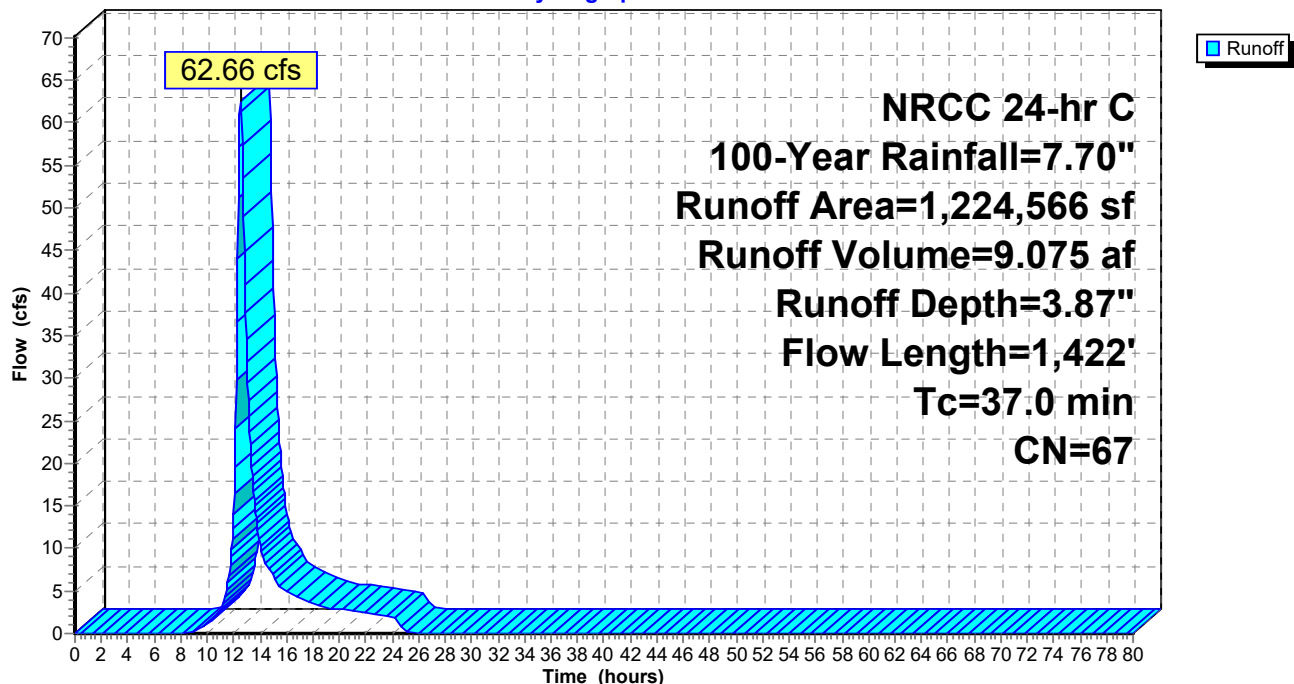
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
126,300	32	Woods/grass comb., Good, HSG A
394,200	58	Woods/grass comb., Good, HSG B
232,300	72	Woods/grass comb., Good, HSG C
418,475	79	Woods/grass comb., Good, HSG D
* 53,291	98	Wetland, HSG D
1,224,566	67	Weighted Average
1,171,275		95.65% Pervious Area
53,291		4.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	100	0.0830	0.31		Sheet Flow, Sheet Flow Grass: Short n= 0.150 P2= 3.37"
25.9	973	0.0080	0.63		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
5.7	349	0.0040	1.02		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
37.0	1,422	Total			

Subcatchment P-2U: P-2U

Hydrograph



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Summary for Subcatchment P-3A: P-3A

Runoff = 14.81 cfs @ 12.13 hrs, Volume= 1.052 af, Depth= 5.69"

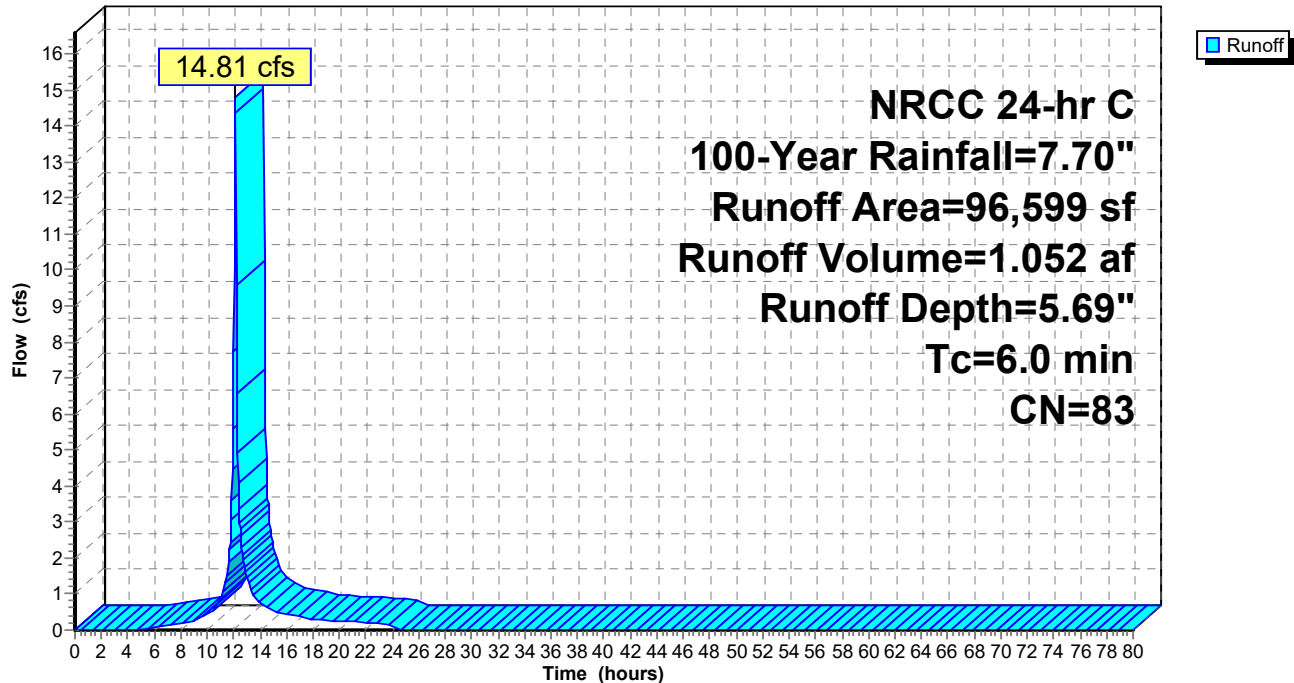
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	4,600	98	BASIN
	36,100	75	1/4 acre lots, 38% imp, HSG B
	55,899	87	1/4 acre lots, 38% imp, HSG D
	96,599	83	Weighted Average
	57,039		59.05% Pervious Area
	39,560		40.95% Impervious Area

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

Subcatchment P-3A: P-3A

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Summary for Subcatchment P-3B: P-3B

Runoff = 34.55 cfs @ 12.13 hrs, Volume= 2.372 af, Depth= 4.66"

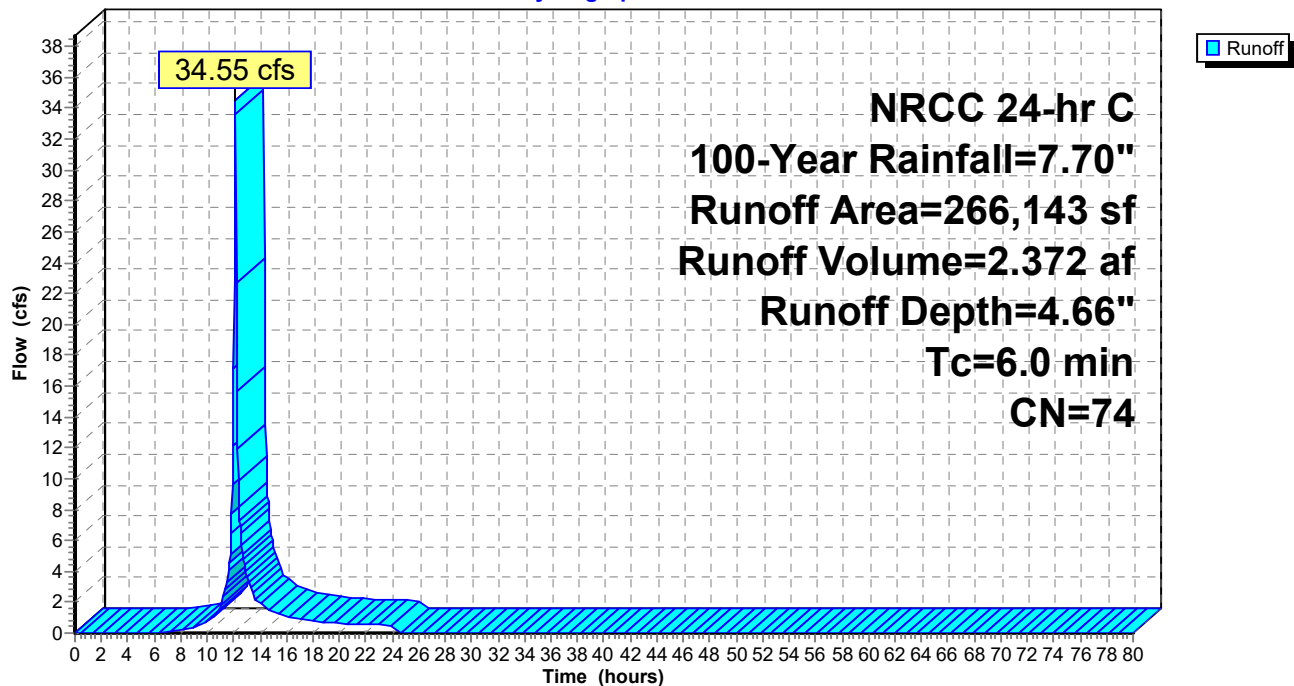
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	9,500	98	BASIN
	9,200	30	Woods, Good, HSG A
	247,443	75	1/4 acre lots, 38% imp, HSG B
	266,143	74	Weighted Average
	162,615		61.10% Pervious Area
	103,528		38.90% Impervious Area

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

Subcatchment P-3B: P-3B

Hydrograph



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Summary for Subcatchment P-3U: P-3U

Runoff = 55.19 cfs @ 12.28 hrs, Volume= 5.639 af, Depth= 3.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	169,500	98	wetland, HSG D
	108,000	30	Woods, Good, HSG A
	98,000	39	>75% Grass cover, Good, HSG A
	136,977	61	>75% Grass cover, Good, HSG B
	76,000	55	Woods, Good, HSG B
*	15,800	98	EXIST Roof and Pavement
	58,000	77	Woods, Good, HSG D
	58,000	80	>75% Grass cover, Good, HSG D
*	32,500	98	13 UNITS
*	6,400	98	400 LF OF ROAD
*	1,800	98	2 UNITS DRIVEWAY
	760,977	67	Weighted Average
	534,977		70.30% Pervious Area
	226,000		29.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.7	50	0.0340	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.37"
1.4	111	0.0356	1.32		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.0	59	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.1	10	0.0136	2.37		Shallow Concentrated Flow, Impervious Paved Kv= 20.3 fps
2.6	135	0.0156	0.87		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.0	120	0.0198	0.98		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
1.1	32	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
18.9	517	Total			

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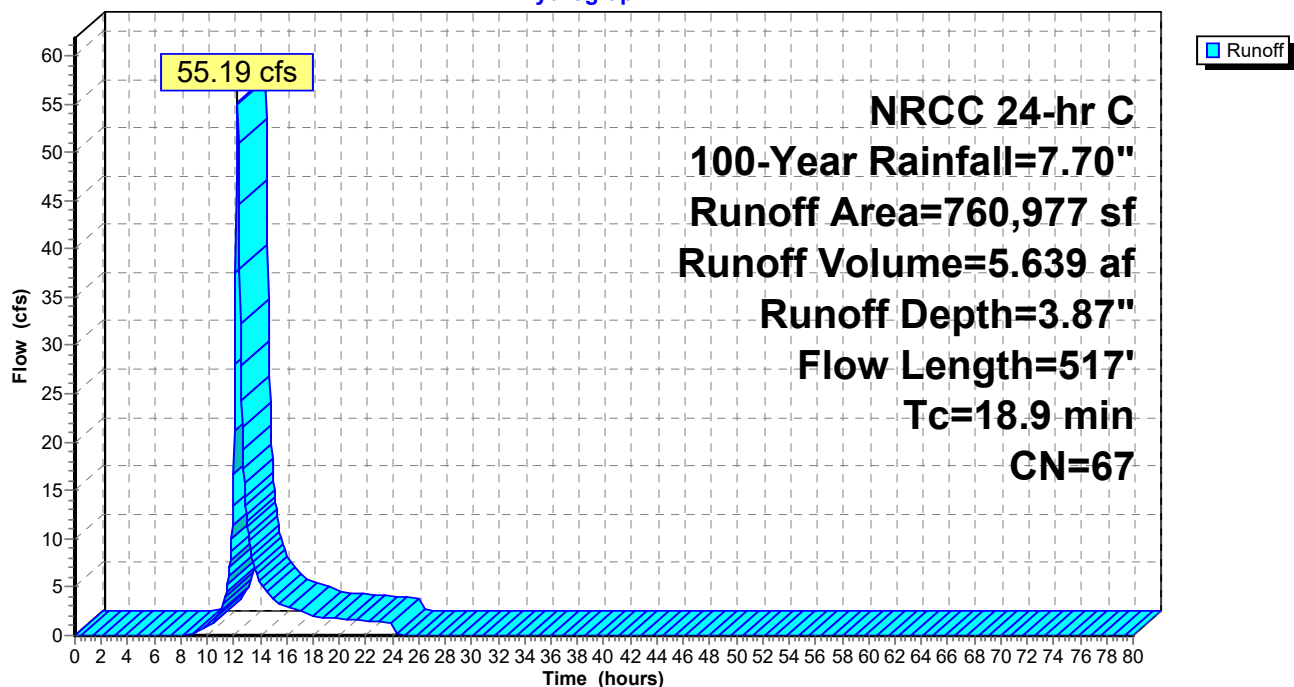
NRCC 24-hr C 100-Year Rainfall=7.70"

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Subcatchment P-3U: P-3U

Hydrograph



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Summary for Subcatchment P-4: P-4

Runoff = 1.01 cfs @ 12.14 hrs, Volume= 0.073 af, Depth= 1.97"

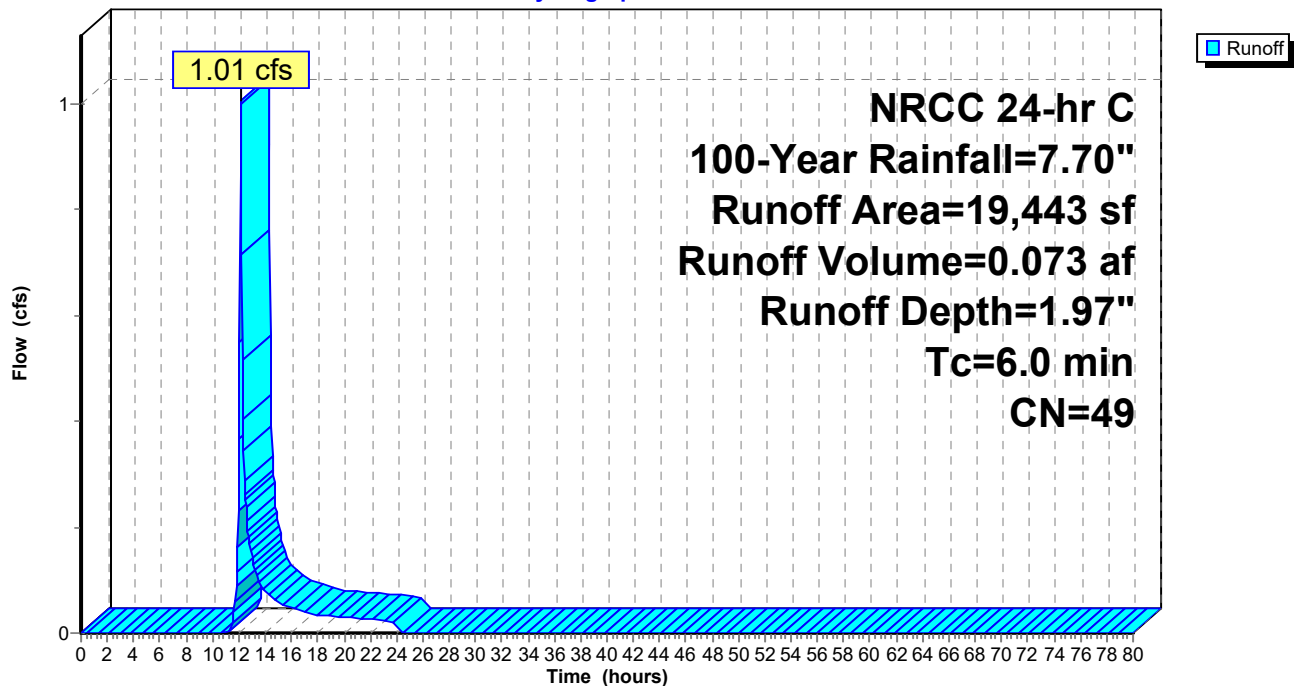
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
5,200	30	Woods, Good, HSG A
10,262	39	>75% Grass cover, Good, HSG A
* 3,981	98	roof and pavement
19,443	49	Weighted Average
15,462		79.52% Pervious Area
3,981		20.48% Impervious Area

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

Subcatchment P-4: P-4

Hydrograph



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NRCC 24-hr C 100-Year Rainfall=7.70"

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Summary for Subcatchment P-5U: P-5U

Runoff = 17.48 cfs @ 12.22 hrs, Volume= 1.544 af, Depth= 3.65"

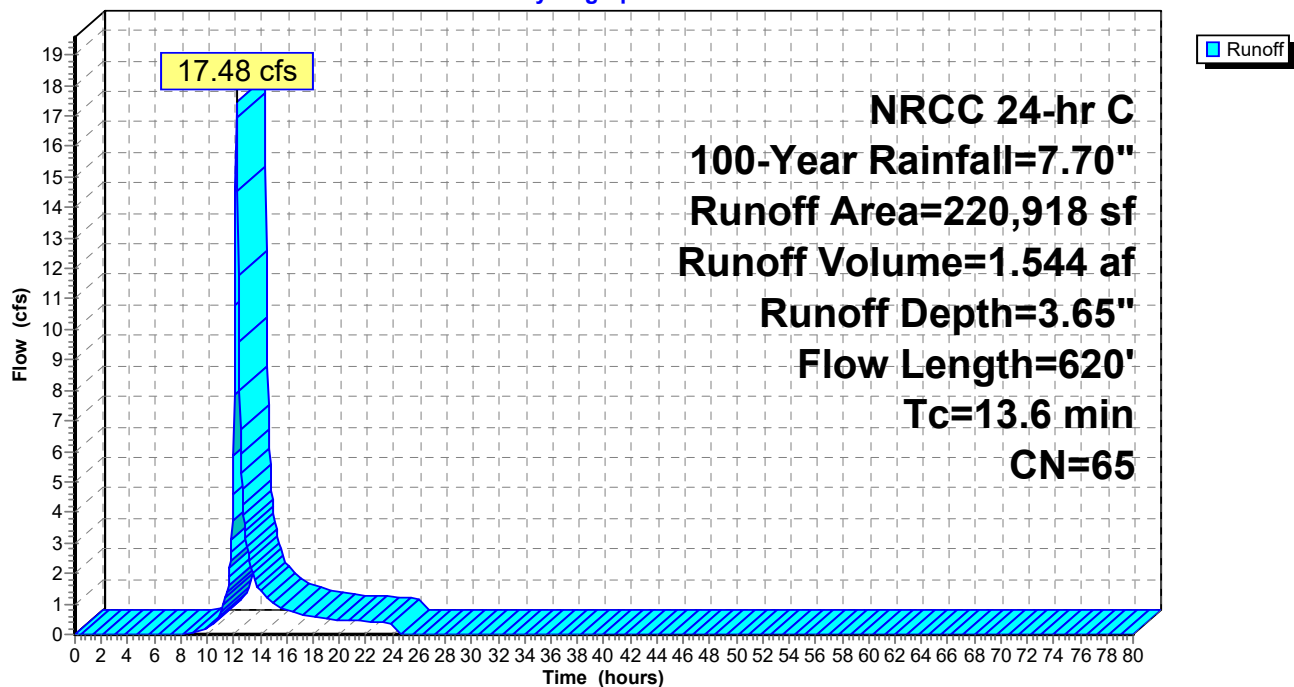
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
83,000	39	>75% Grass cover, Good, HSG A
17,000	61	>75% Grass cover, Good, HSG B
* 24,100	98	WETLAND, 0% imp, HSG D
96,818	80	>75% Grass cover, Good, HSG D
220,918	65	Weighted Average
220,918		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	50	0.0160	0.14		Sheet Flow, Grass: Short n= 0.150 P2= 3.37"
7.6	570	0.0315	1.24		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
13.6	620	Total			

Subcatchment P-5U: P-5U

Hydrograph



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Summary for Subcatchment P-6A: P-6A

Runoff = 20.39 cfs @ 12.13 hrs, Volume= 1.412 af, Depth= 5.00"

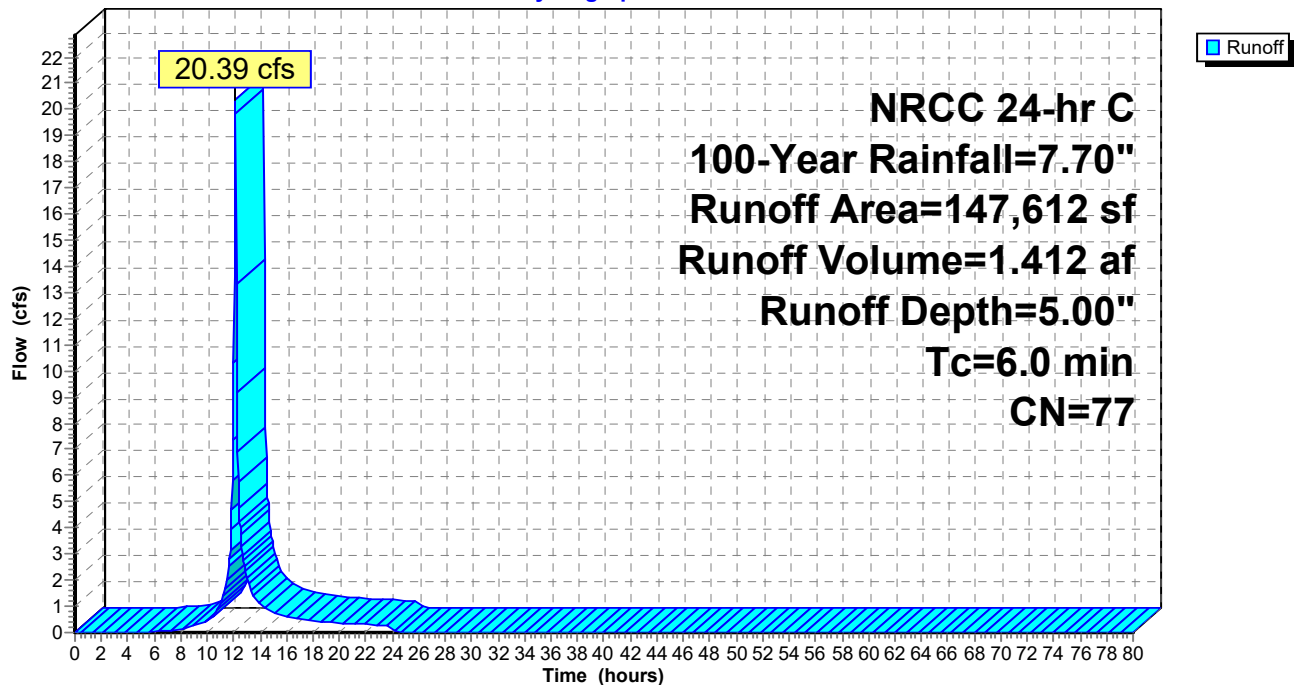
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
134,612	75	1/4 acre lots, 38% imp, HSG B
* 13,000	98	basin
147,612	77	Weighted Average
83,459		56.54% Pervious Area
64,153		43.46% Impervious Area

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

Subcatchment P-6A: P-6A

Hydrograph



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Summary for Subcatchment P-6U: P-6U

Runoff = 31.18 cfs @ 12.22 hrs, Volume= 2.767 af, Depth= 3.98"

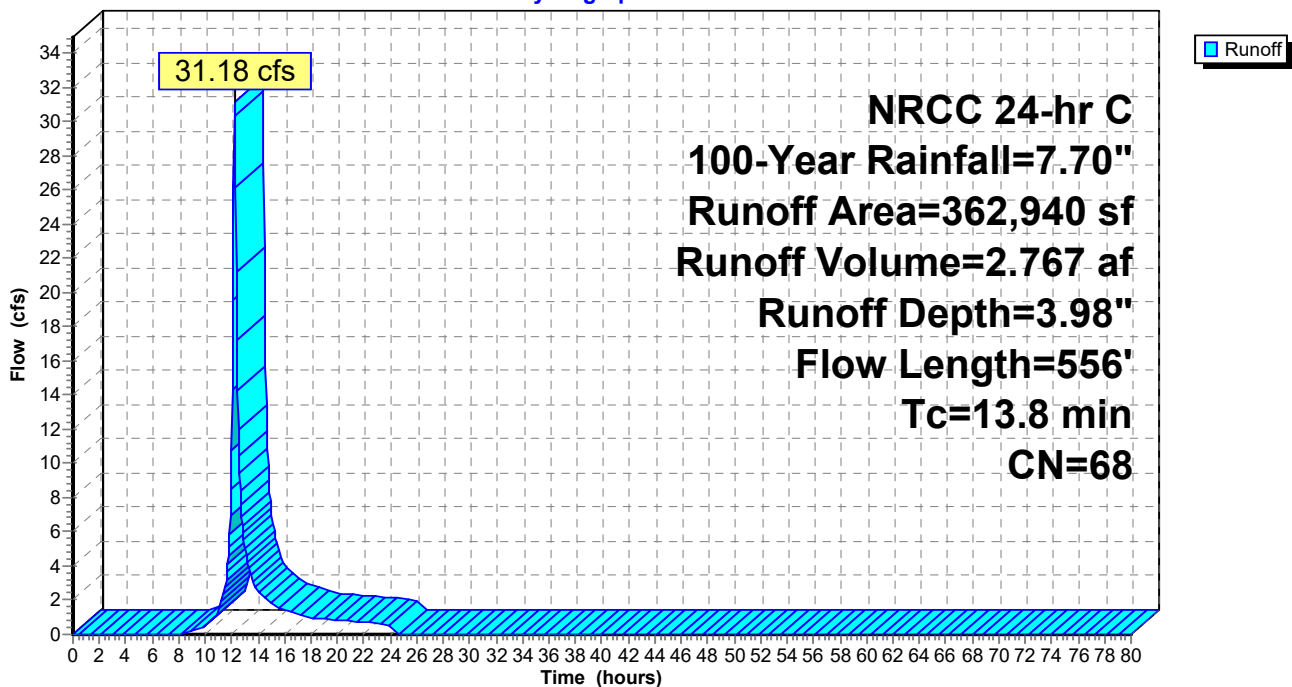
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
45,100	32	Woods/grass comb., Good, HSG A
164,917	58	Woods/grass comb., Good, HSG B
* 82,500	98	WETLAND, 0% imp, HSG D
70,423	80	>75% Grass cover, Good, HSG D
362,940	68	Weighted Average
362,940		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	100	0.0296	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.37"
5.6	456	0.0380	1.36		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
13.8	556	Total			

Subcatchment P-6U: P-6U

Hydrograph



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Summary for Subcatchment P-7A: P-7A

Runoff = 27.54 cfs @ 12.13 hrs, Volume= 1.886 af, Depth= 4.55"

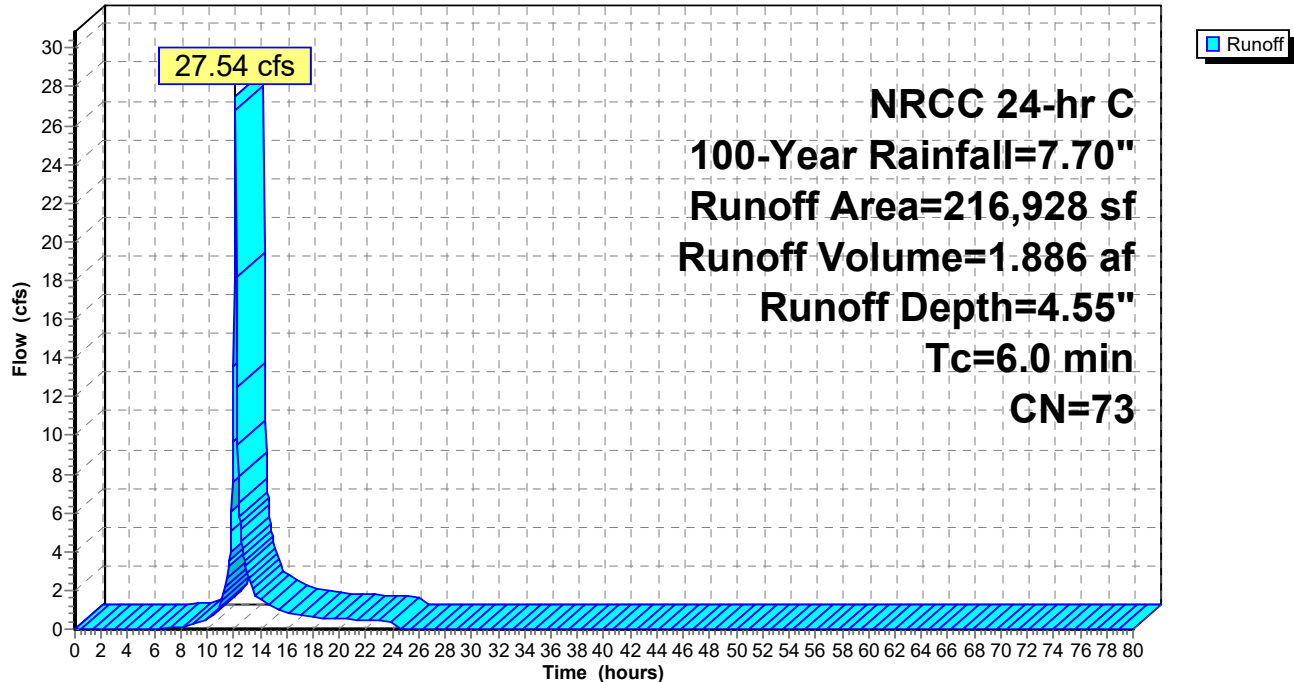
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	50,000	98	pavement parking
*	4,500	98	roof
*	10,200	98	basin
	99,000	75	1/4 acre lots, 38% imp, HSG B
	53,228	39	>75% Grass cover, Good, HSG A
	216,928	73	Weighted Average
	114,608		52.83% Pervious Area
	102,320		47.17% Impervious Area

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

Subcatchment P-7A: P-7A

Hydrograph



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Summary for Subcatchment P-7U: P-7U

Runoff = 27.44 cfs @ 12.36 hrs, Volume= 3.237 af, Depth= 2.79"

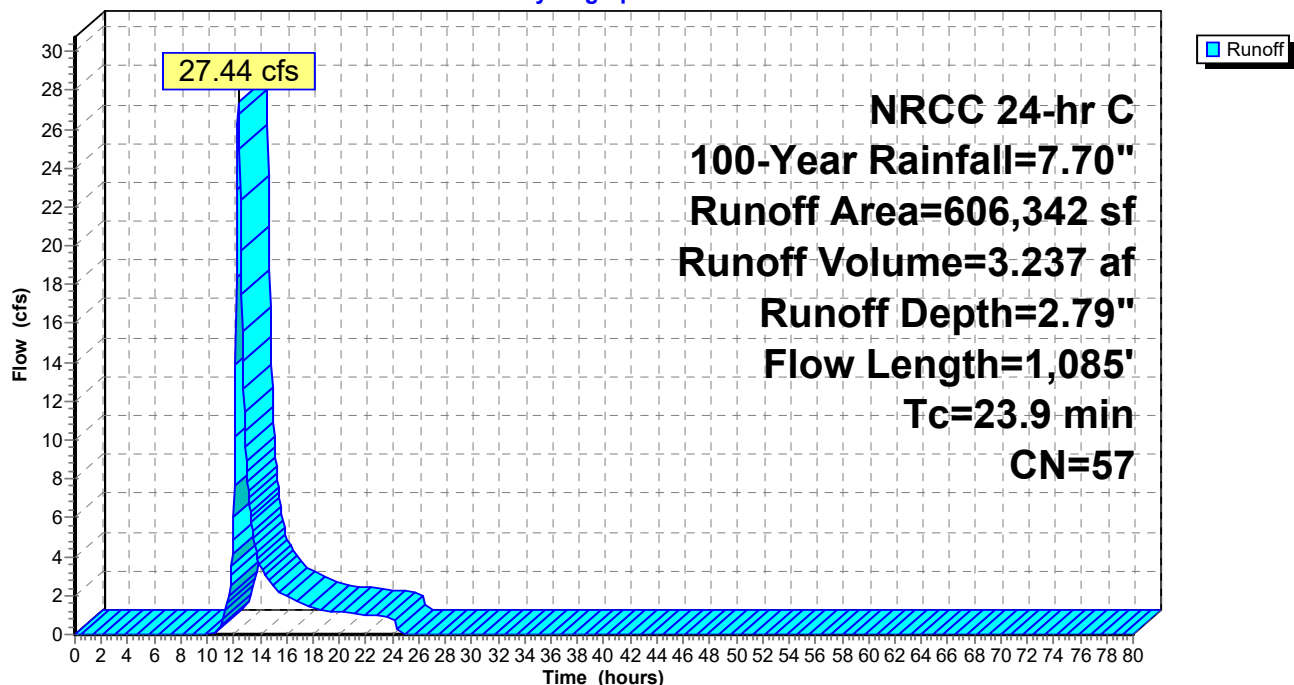
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
32,738	98	Paved parking, HSG B
118,803	32	Woods/grass comb., Good, HSG A
403,863	58	Woods/grass comb., Good, HSG B
33,128	80	>75% Grass cover, Good, HSG D
17,810	98	Water Surface, 0% imp, HSG A
606,342	57	Weighted Average
573,604		94.60% Pervious Area
32,738		5.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4	100	0.0160	0.16		Sheet Flow, Grass: Short n= 0.150 P2= 3.37"
13.5	985	0.0300	1.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
23.9	1,085	Total			

Subcatchment P-7U: P-7U

Hydrograph



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Summary for Subcatchment P-8U: P-8U

Runoff = 8.60 cfs @ 12.15 hrs, Volume= 0.623 af, Depth= 3.00"

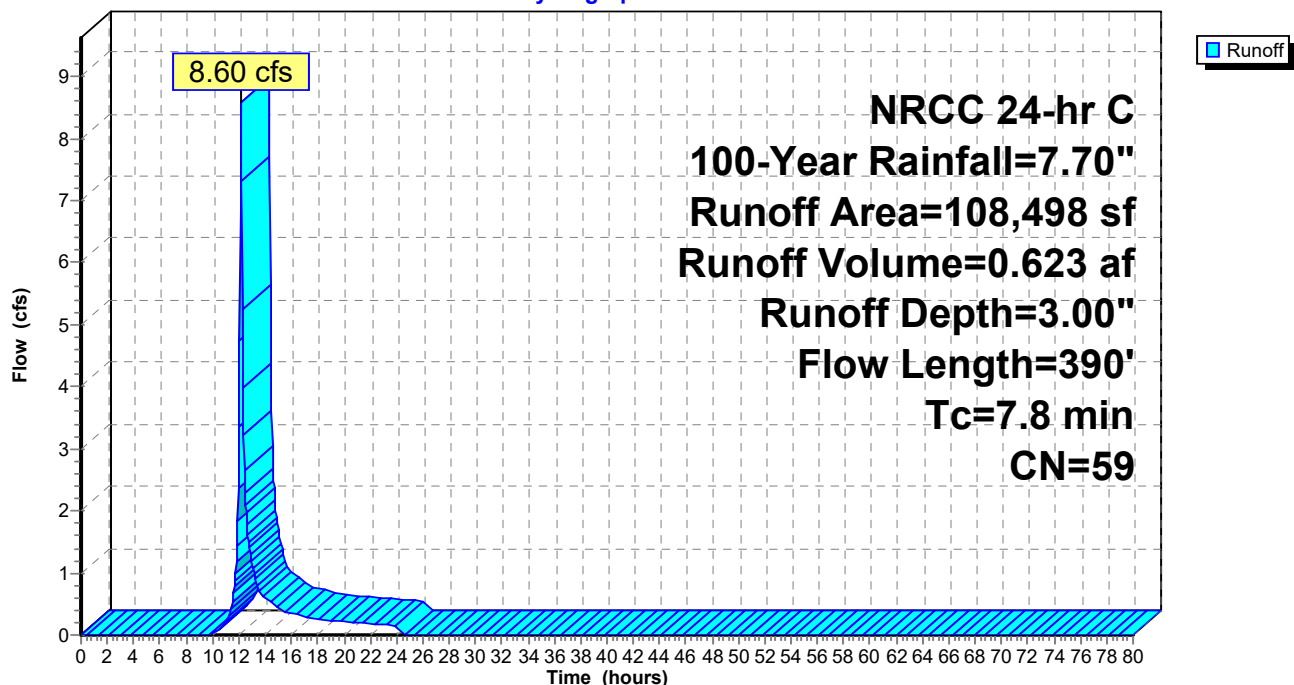
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
* 7,000	98	roof
5,726	98	Water Surface, 0% imp, HSG A
12,978	39	>75% Grass cover, Good, HSG A
43,794	61	>75% Grass cover, Good, HSG B
6,600	30	Woods, Good, HSG A
32,400	55	Woods, Good, HSG B
108,498	59	Weighted Average
101,498		93.55% Pervious Area
7,000		6.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.7	50	0.0120	0.12		Sheet Flow, Sheet Flow Grass: Short n= 0.150 P2= 3.37"
1.1	340	0.0940	4.94		Shallow Concentrated Flow, HR-A Unpaved Kv= 16.1 fps
7.8	390	Total			

Subcatchment P-8U: P-8U

Hydrograph



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Summary for Subcatchment P-9A: P-9A

Runoff = 4.01 cfs @ 12.14 hrs, Volume= 0.283 af, Depth= 2.27"

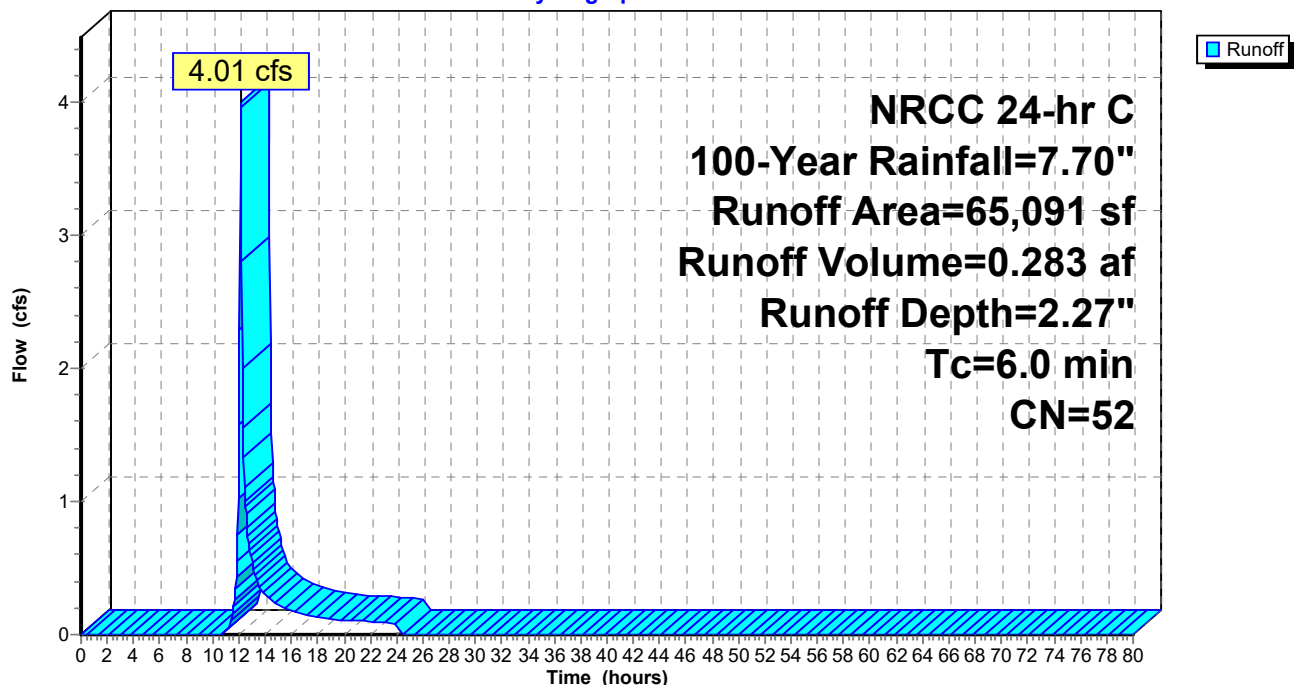
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
	13,200	30	Woods, Good, HSG A
*	15,000	98	ROADS
*	1,700	98	BASIN
	35,191	39	>75% Grass cover, Good, HSG A
	65,091	52	Weighted Average
	48,391		74.34% Pervious Area
	16,700		25.66% Impervious Area

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

Subcatchment P-9A: P-9A

Hydrograph



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Summary for Subcatchment P-9B: P-9B

Runoff = 8.62 cfs @ 12.13 hrs, Volume= 0.585 af, Depth= 3.43"

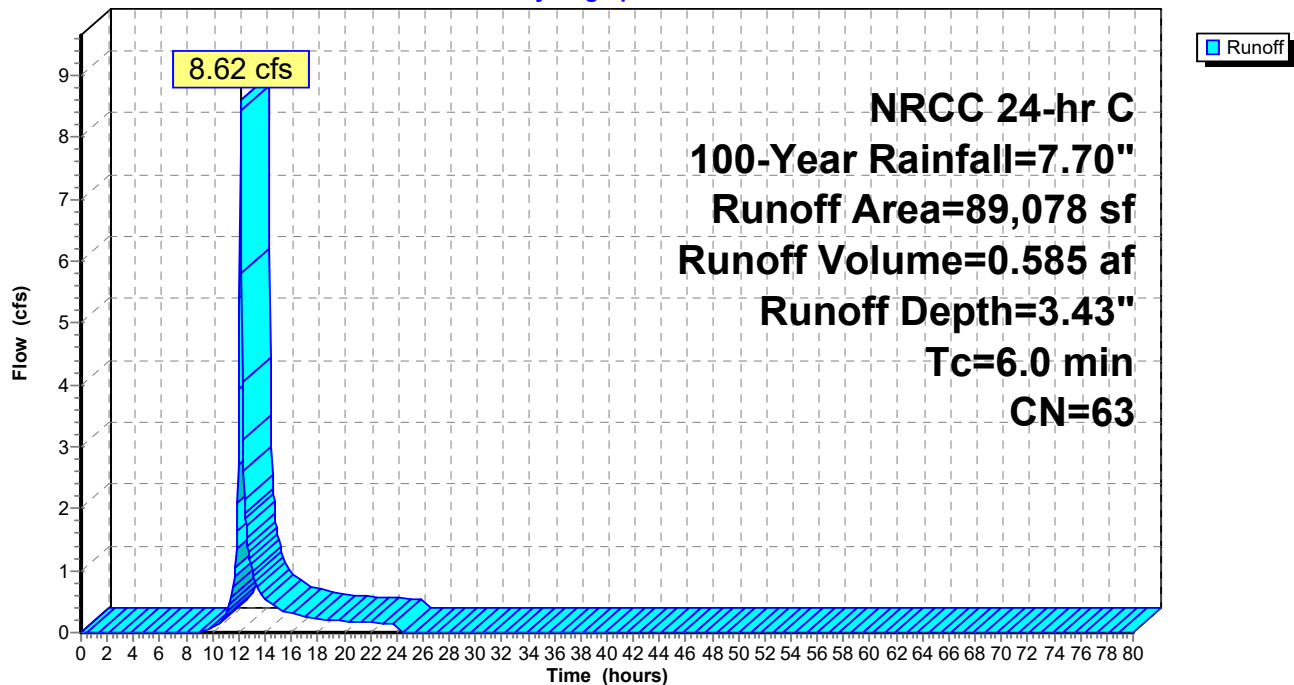
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

	Area (sf)	CN	Description
*	4,300	98	BASIN
	84,778	61	1/4 acre lots, 38% imp, HSG A
	89,078	63	Weighted Average
	52,562		59.01% Pervious Area
	36,516		40.99% Impervious Area

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

Subcatchment P-9B: P-9B

Hydrograph



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Summary for Subcatchment P-9C: P-9C

Runoff = 23.71 cfs @ 12.13 hrs, Volume= 1.647 af, Depth= 5.11"

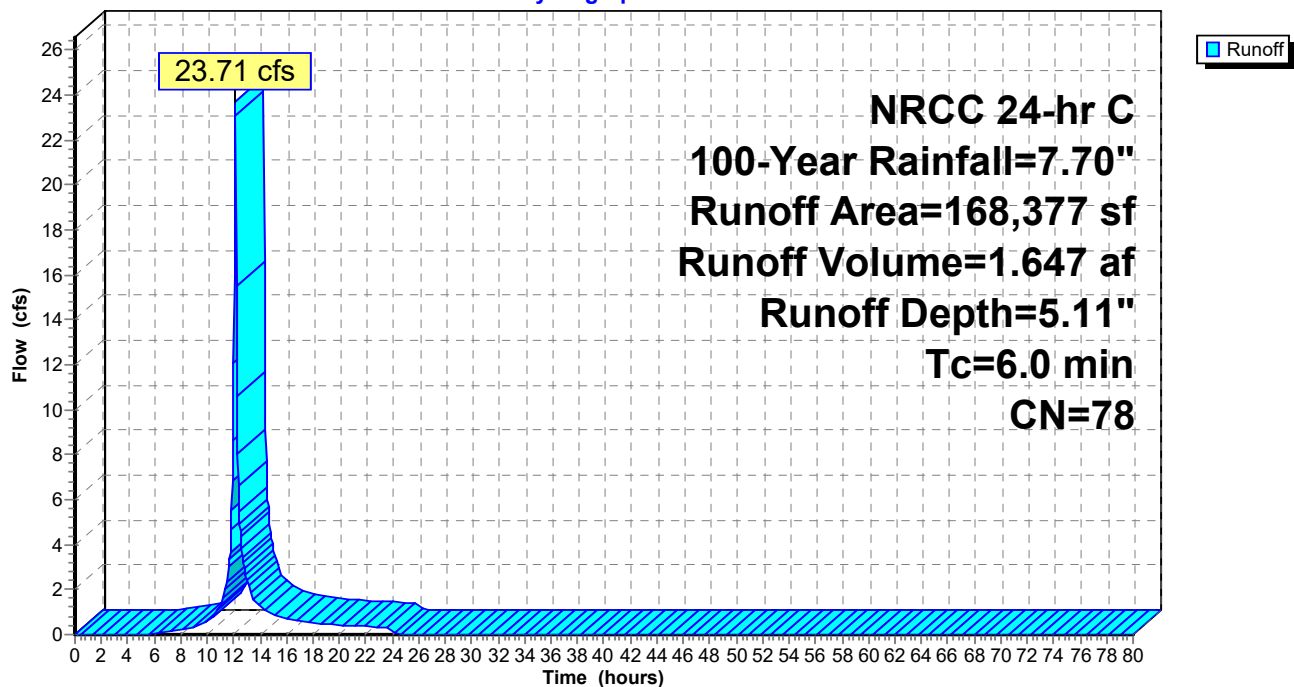
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
20,800	30	Woods, Good, HSG A
104,000	98	Paved parking, HSG A
34,077	39	>75% Grass cover, Good, HSG A
* 9,500	98	ROOF
168,377	78	Weighted Average
54,877		32.59% Pervious Area
113,500		67.41% Impervious Area

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

Subcatchment P-9C: P-9C

Hydrograph



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Summary for Subcatchment P-9U: P-9U

Runoff = 3.01 cfs @ 12.15 hrs, Volume= 0.246 af, Depth= 1.39"

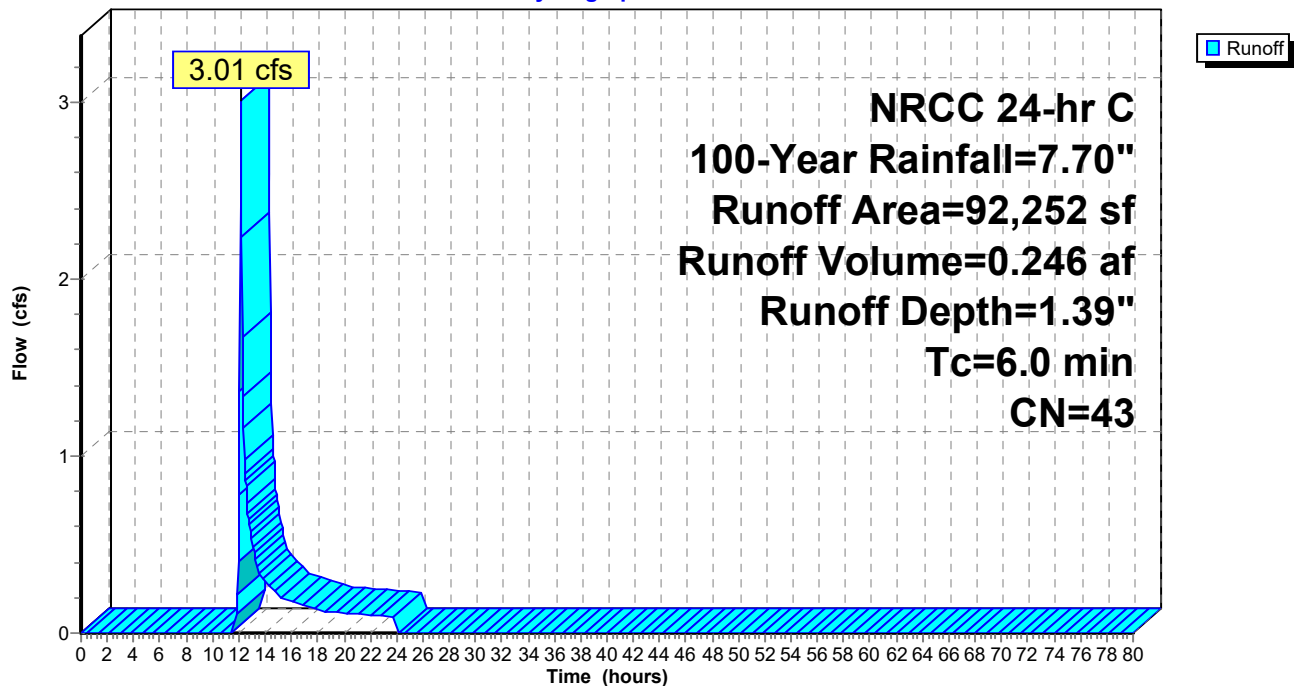
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
NRCC 24-hr C 100-Year Rainfall=7.70"

Area (sf)	CN	Description
36,000	30	Woods, Good, HSG A
12,000	98	Paved parking, HSG A
44,252	39	>75% Grass cover, Good, HSG A
92,252	43	Weighted Average
80,252		86.99% Pervious Area
12,000		13.01% Impervious Area

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

Subcatchment P-9U: P-9U

Hydrograph



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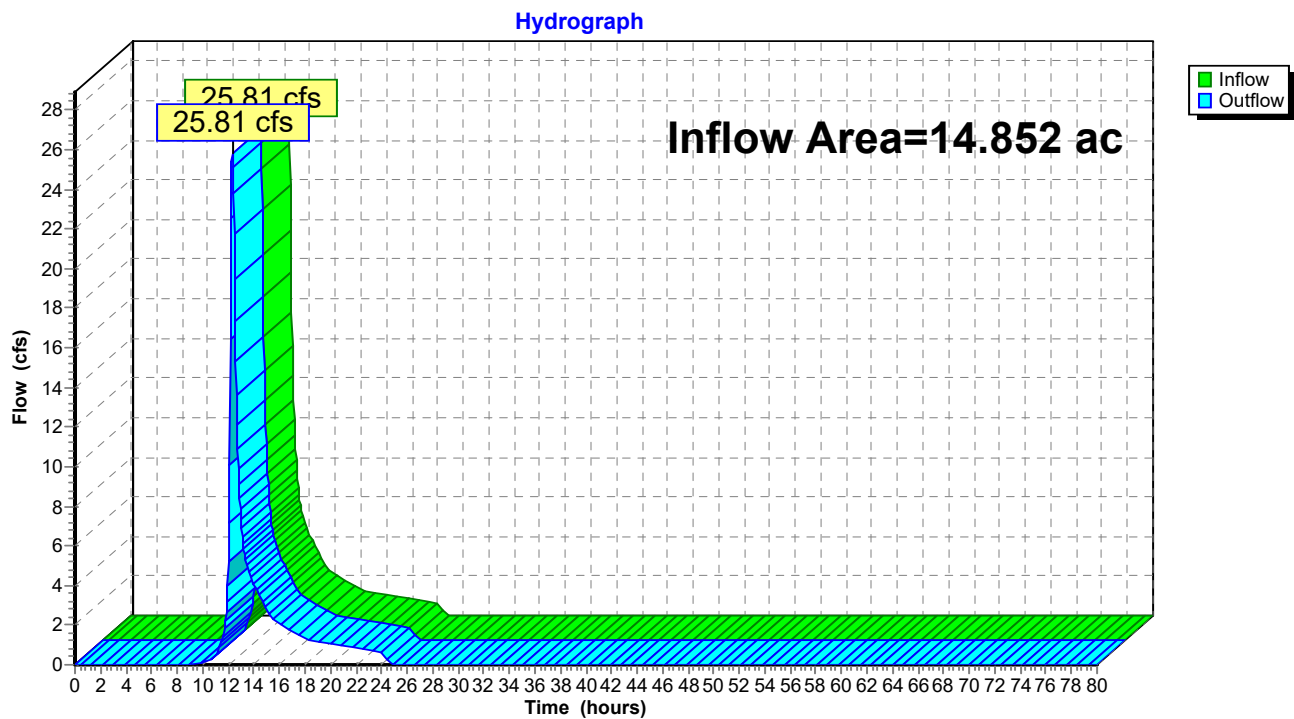
Summary for Reach DP-1: Wetland Series R

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 14.852 ac, 17.22% Impervious, Inflow Depth = 2.51" for 100-Year event
Inflow = 25.81 cfs @ 12.30 hrs, Volume= 3.106 af
Outflow = 25.81 cfs @ 12.30 hrs, Volume= 3.106 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-1: Wetland Series R



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Summary for Reach DP-10: West Elm Street

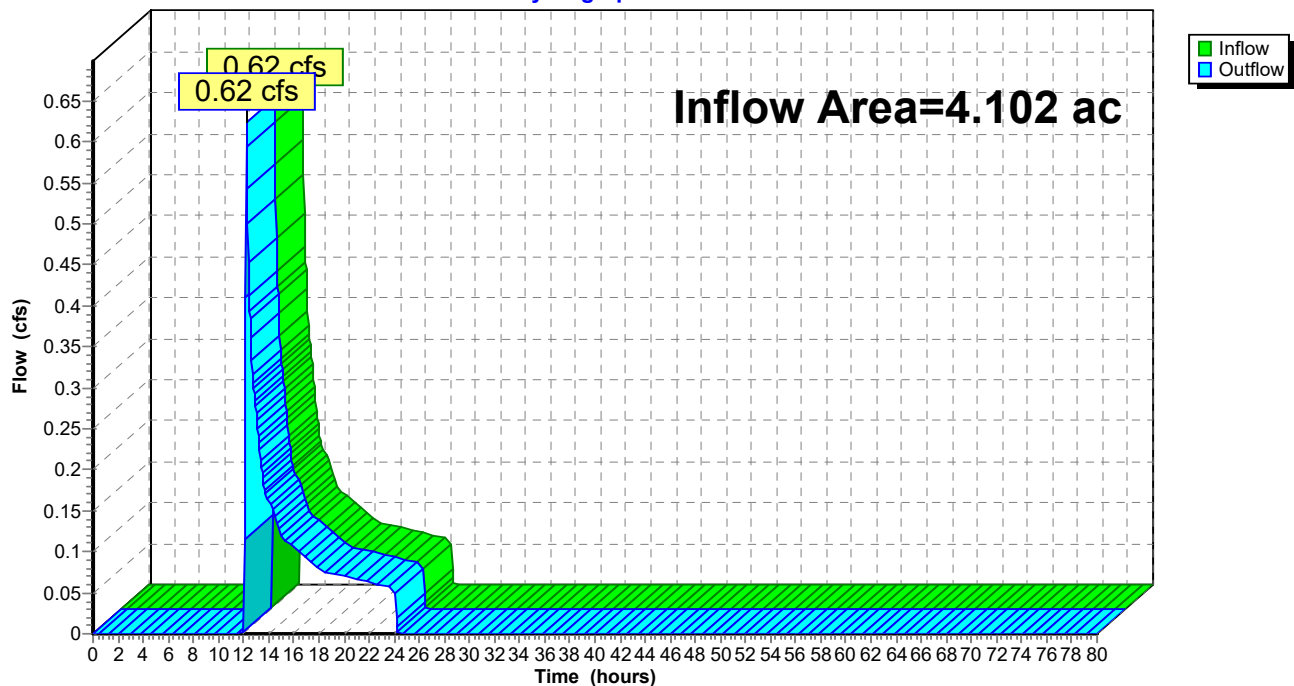
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 4.102 ac, 17.26% Impervious, Inflow Depth = 0.34" for 100-Year event
Inflow = 0.62 cfs @ 12.22 hrs, Volume= 0.116 af
Outflow = 0.62 cfs @ 12.22 hrs, Volume= 0.116 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-10: West Elm Street

Hydrograph



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Summary for Reach DP-11: Wetland Series A

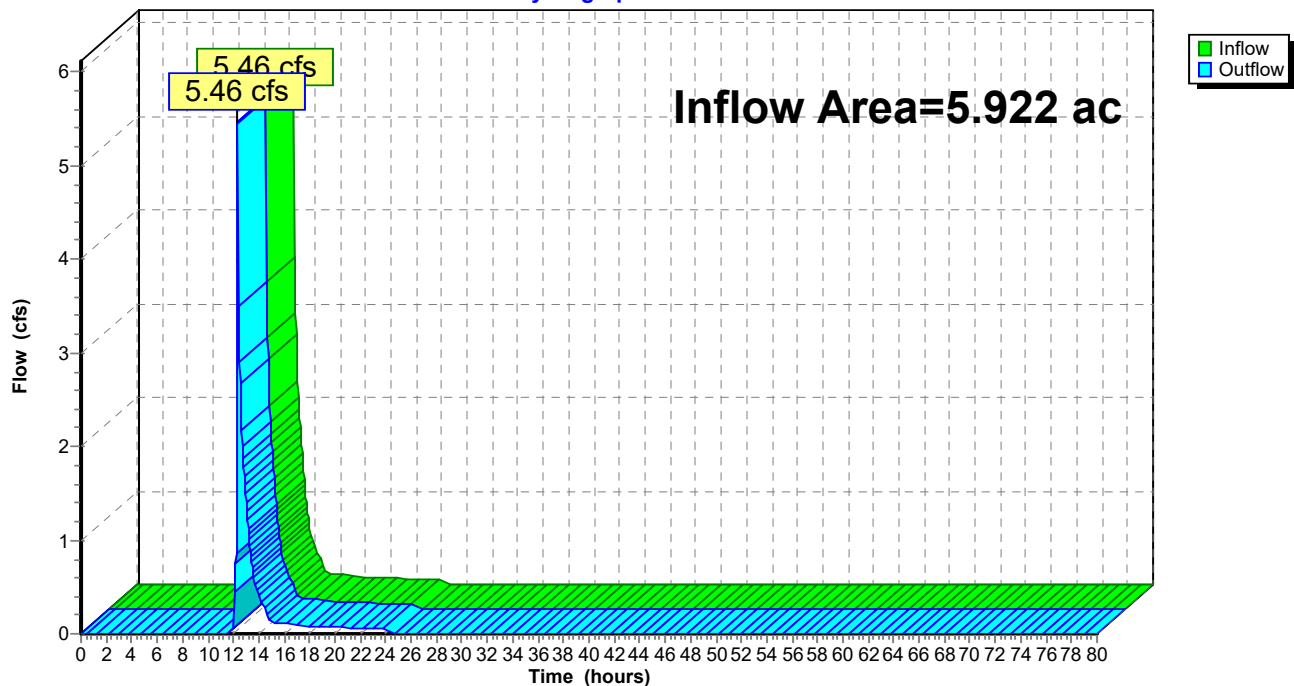
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 5.922 ac, 8.29% Impervious, Inflow Depth = 0.62" for 100-Year event
Inflow = 5.46 cfs @ 12.35 hrs, Volume= 0.308 af
Outflow = 5.46 cfs @ 12.35 hrs, Volume= 0.308 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-11: Wetland Series A

Hydrograph



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Summary for Reach DP-12: Wetland Series A

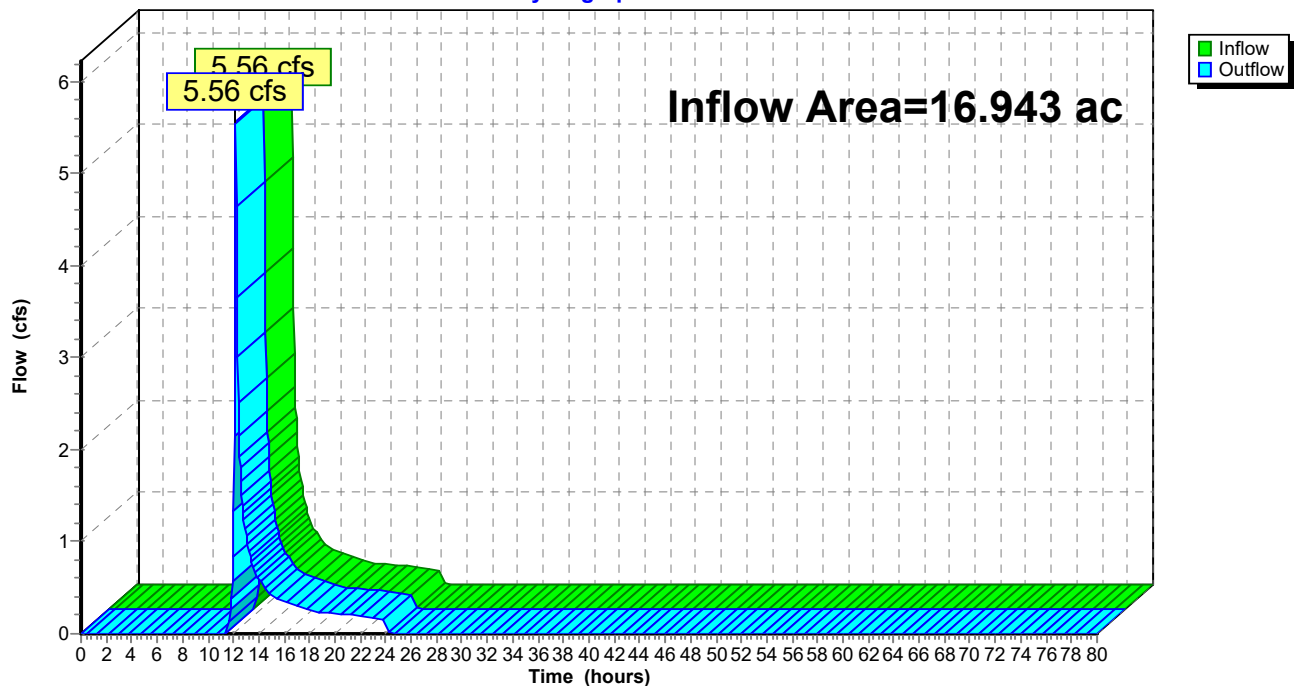
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 16.943 ac, 19.78% Impervious, Inflow Depth = 0.35" for 100-Year event
Inflow = 5.56 cfs @ 12.19 hrs, Volume= 0.500 af
Outflow = 5.56 cfs @ 12.19 hrs, Volume= 0.500 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-12: Wetland Series A

Hydrograph



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Summary for Reach DP-13: Wetland Series B

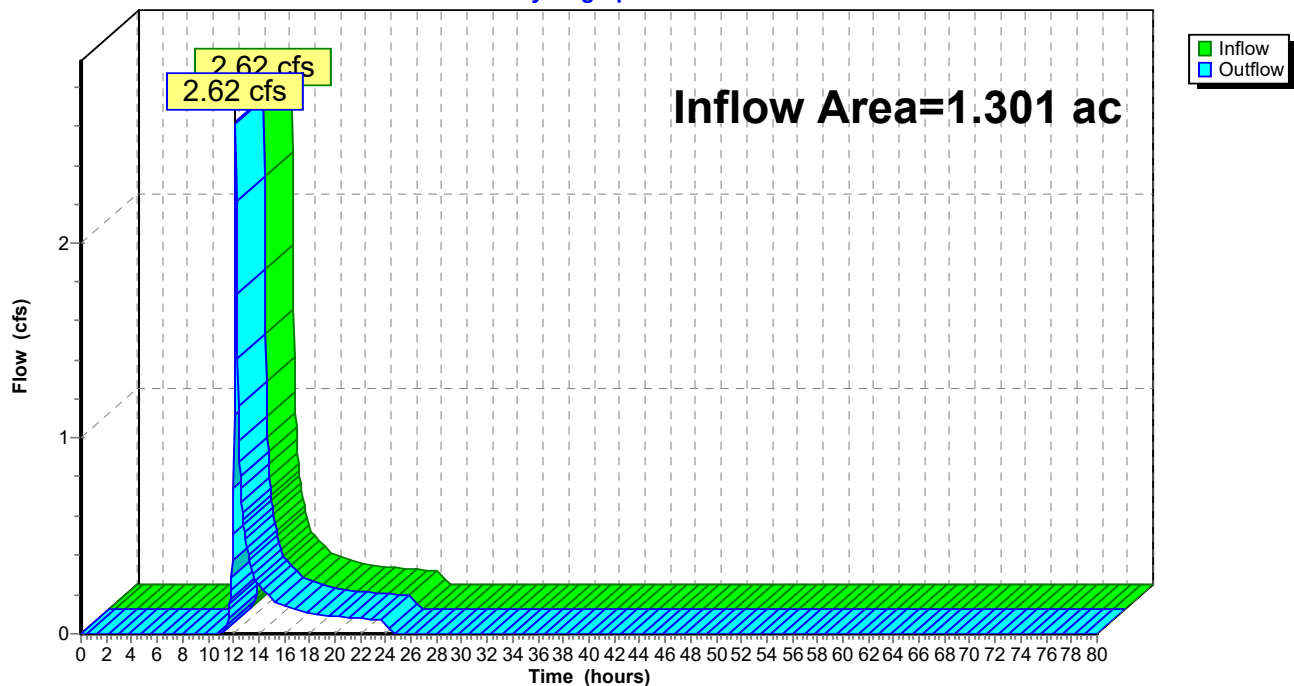
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.301 ac, 0.00% Impervious, Inflow Depth = 2.07" for 100-Year event
Inflow = 2.62 cfs @ 12.19 hrs, Volume= 0.224 af
Outflow = 2.62 cfs @ 12.19 hrs, Volume= 0.224 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-13: Wetland Series B

Hydrograph



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Summary for Reach DP-14: Wetland Series C,D,E,,K,J

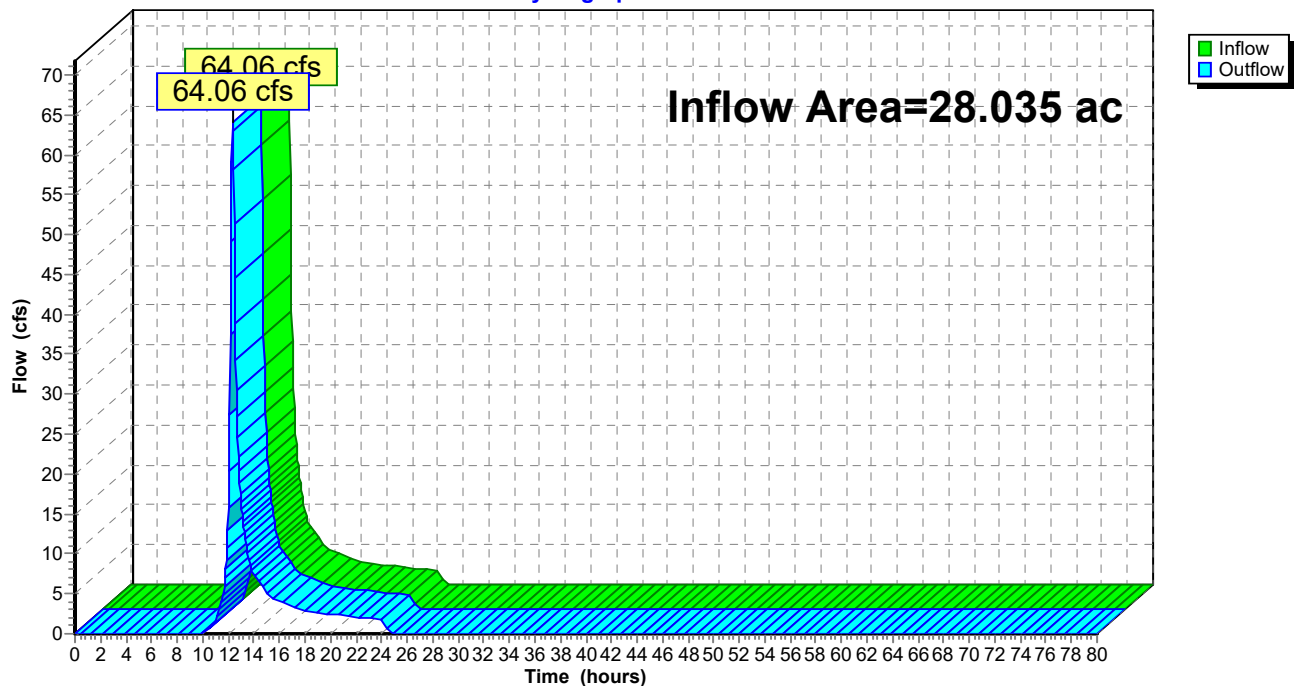
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 28.035 ac, 0.00% Impervious, Inflow Depth = 3.00" for 100-Year event
Inflow = 64.06 cfs @ 12.32 hrs, Volume= 7.016 af
Outflow = 64.06 cfs @ 12.32 hrs, Volume= 7.016 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-14: Wetland Series C,D,E,,K,J

Hydrograph



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Summary for Reach DP-15: Wetland Series H

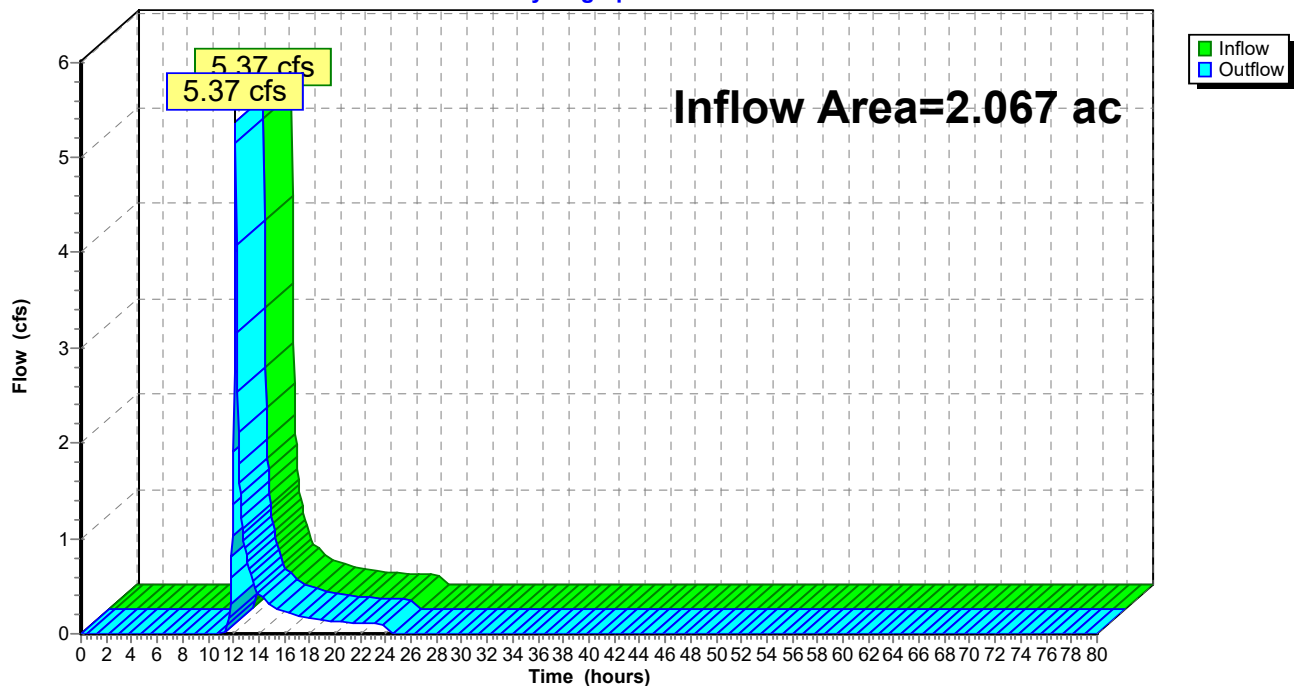
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 2.067 ac, 7.81% Impervious, Inflow Depth = 2.31" for 100-Year event
Inflow = 5.37 cfs @ 12.17 hrs, Volume= 0.397 af
Outflow = 5.37 cfs @ 12.17 hrs, Volume= 0.397 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-15: Wetland Series H

Hydrograph



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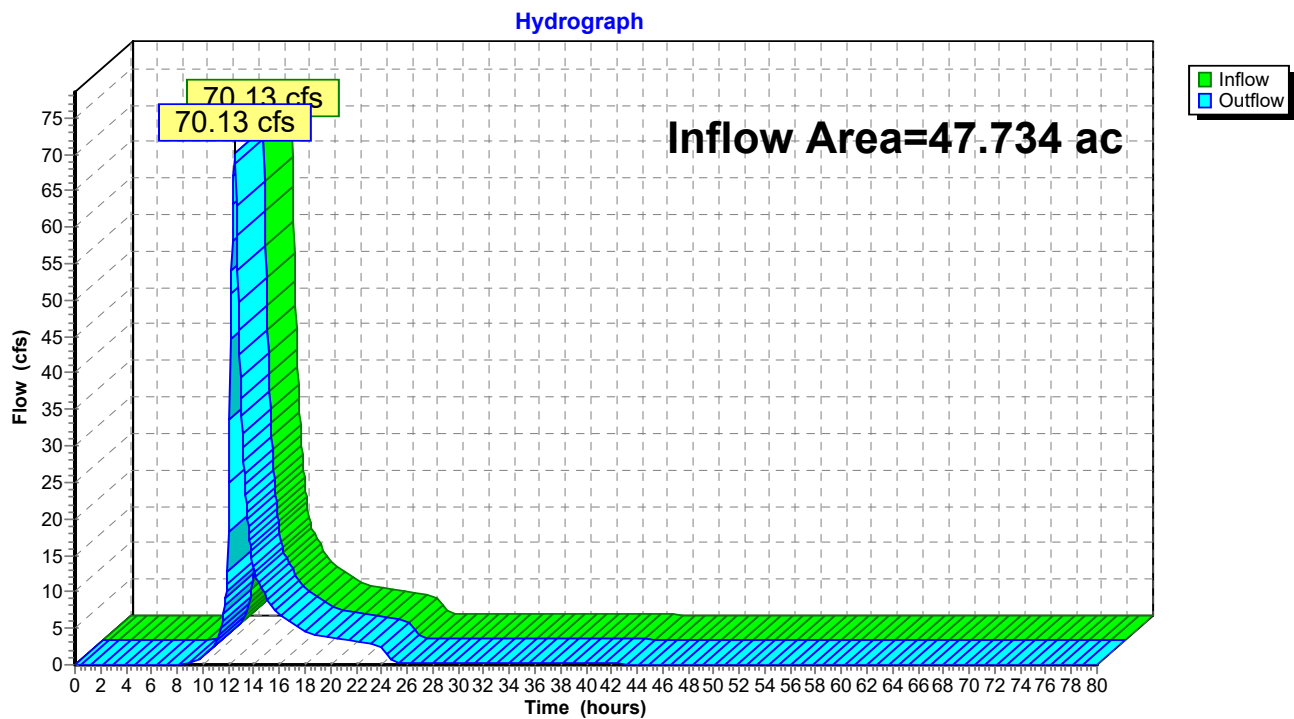
Summary for Reach DP-2: Wetland Series I

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 47.734 ac, 17.87% Impervious, Inflow Depth = 2.91" for 100-Year event
Inflow = 70.13 cfs @ 12.50 hrs, Volume= 11.558 af
Outflow = 70.13 cfs @ 12.50 hrs, Volume= 11.558 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-2: Wetland Series I



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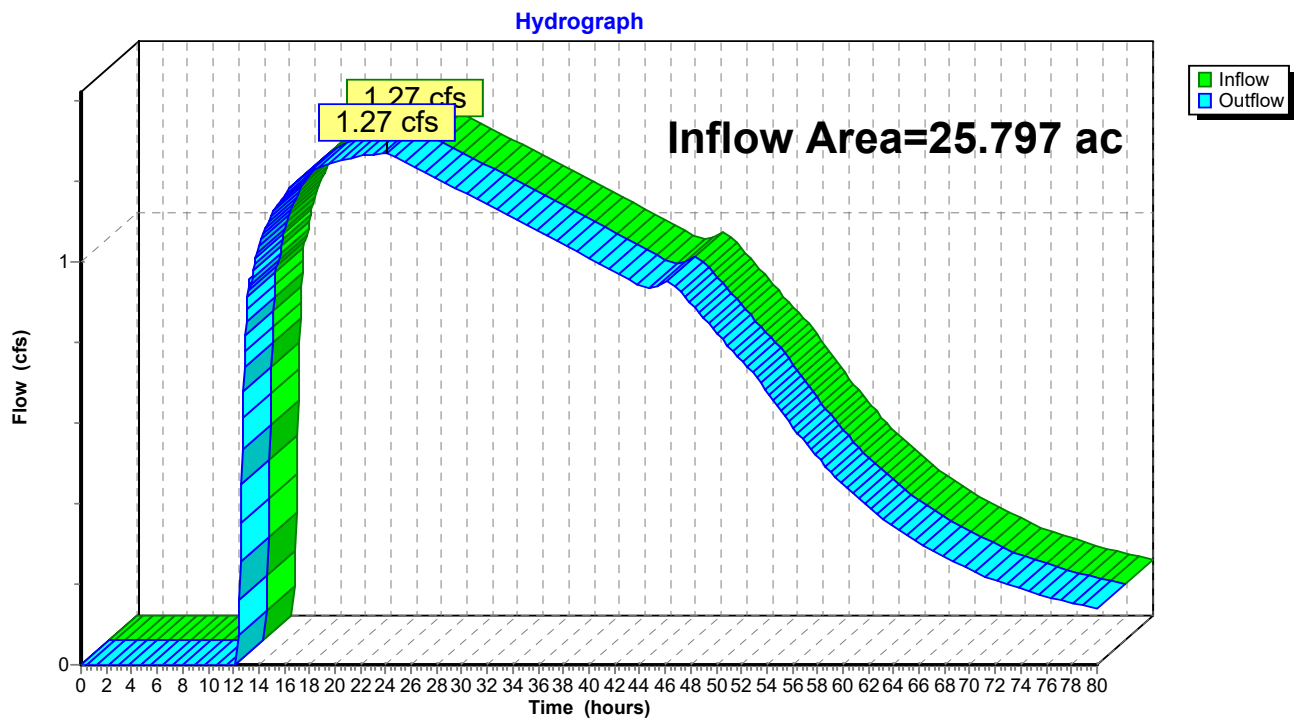
Summary for Reach DP-3: 8" Copper Pipe

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 25.797 ac, 32.85% Impervious, Inflow Depth > 2.02" for 100-Year event
Inflow = 1.27 cfs @ 24.10 hrs, Volume= 4.340 af
Outflow = 1.27 cfs @ 24.10 hrs, Volume= 4.340 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-3: 8" Copper Pipe



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Summary for Reach DP-4: Dwelley Street

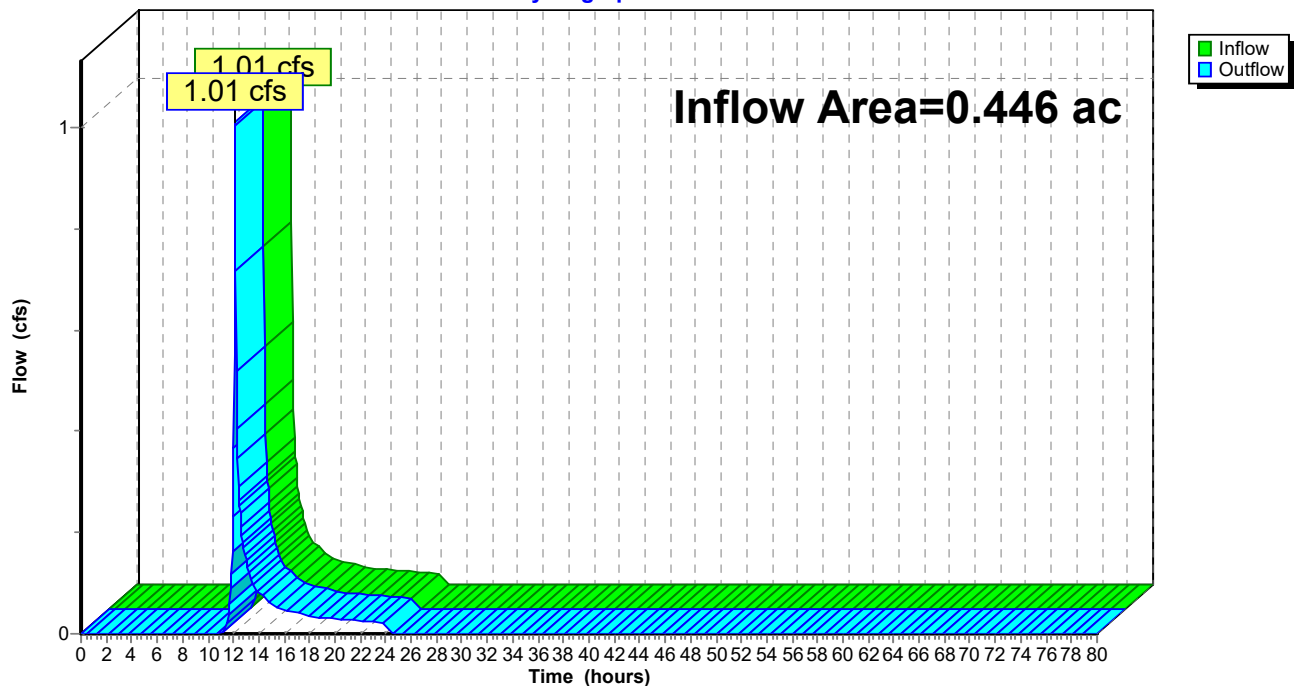
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.446 ac, 20.48% Impervious, Inflow Depth = 1.97" for 100-Year event
Inflow = 1.01 cfs @ 12.14 hrs, Volume= 0.073 af
Outflow = 1.01 cfs @ 12.14 hrs, Volume= 0.073 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-4: Dwelley Street

Hydrograph



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Summary for Reach DP-5: 24" RCP PIPE

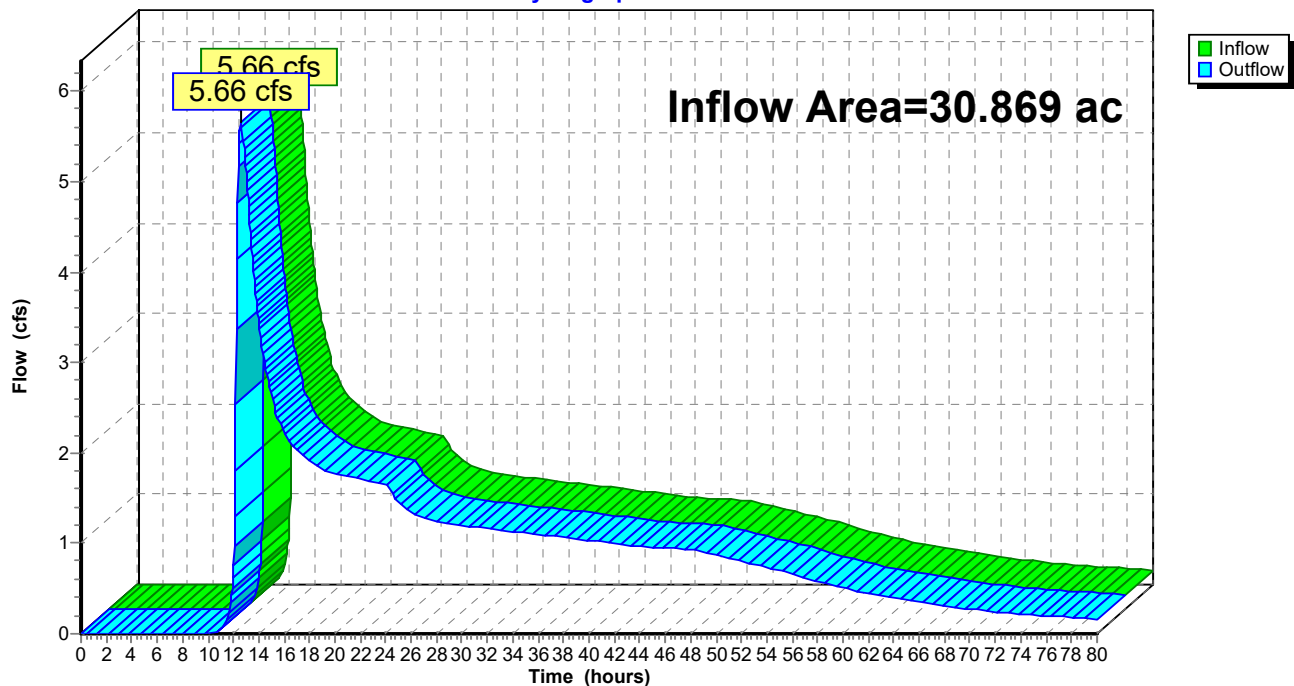
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 30.869 ac, 27.45% Impervious, Inflow Depth > 2.26" for 100-Year event
Inflow = 5.66 cfs @ 12.60 hrs, Volume= 5.804 af
Outflow = 5.66 cfs @ 12.60 hrs, Volume= 5.804 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-5: 24" RCP PIPE

Hydrograph



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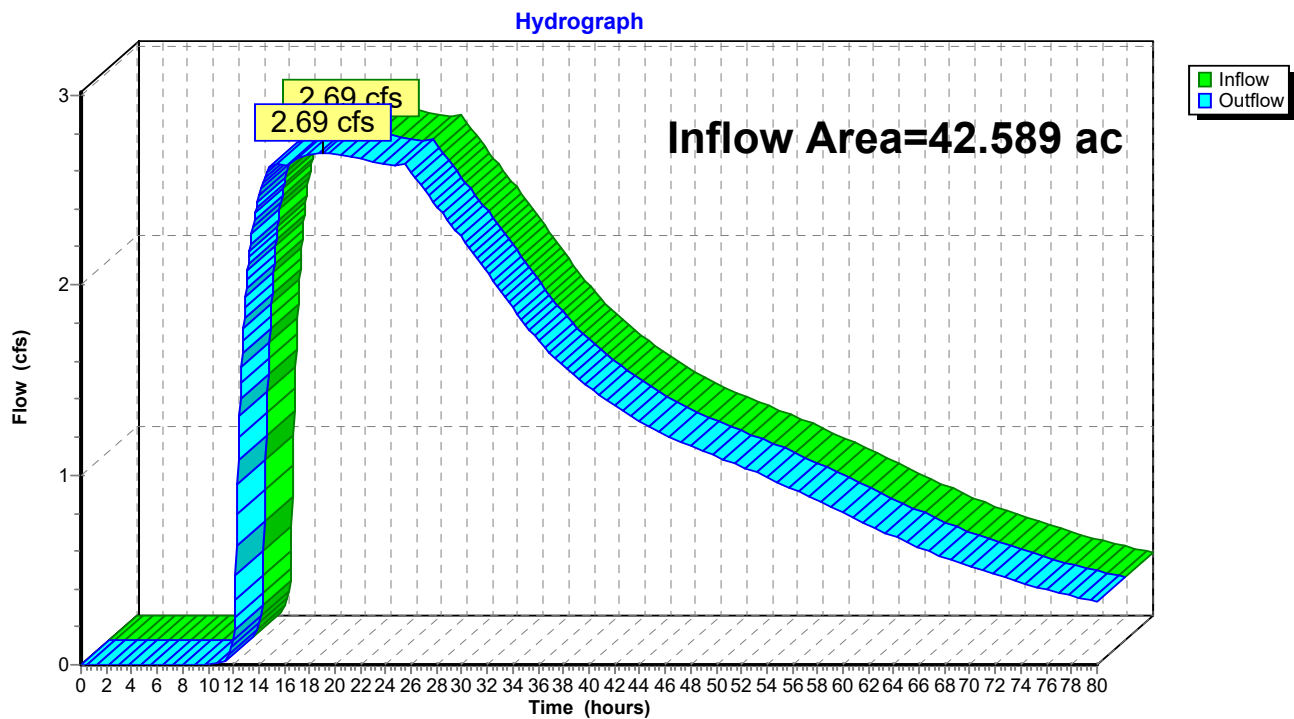
Summary for Reach DP-6: 12" RCP PIPE

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 42.589 ac, 23.35% Impervious, Inflow Depth > 2.23" for 100-Year event
Inflow = 2.69 cfs @ 18.99 hrs, Volume= 7.929 af
Outflow = 2.69 cfs @ 18.99 hrs, Volume= 7.929 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-6: 12" RCP PIPE



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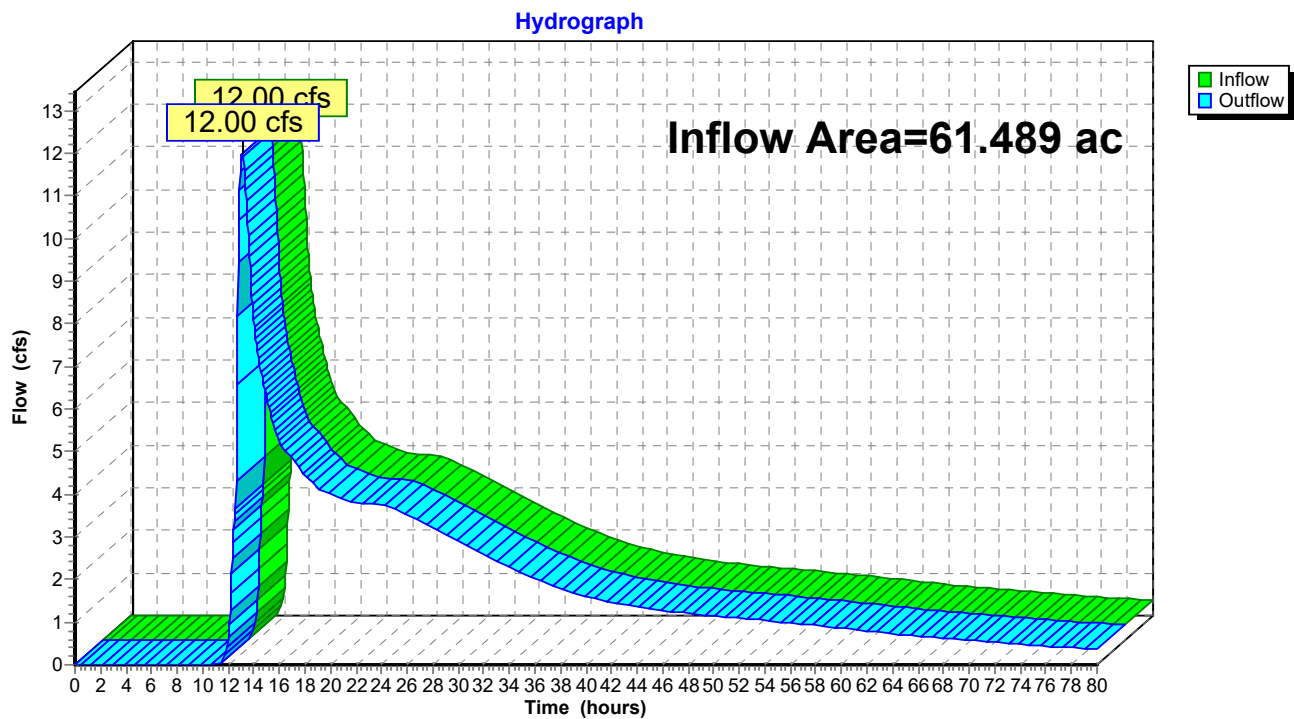
Summary for Reach DP-7: 12" RCP PIPE

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 61.489 ac, 21.22% Impervious, Inflow Depth > 2.23" for 100-Year event
Inflow = 12.00 cfs @ 13.08 hrs, Volume= 11.448 af
Outflow = 12.00 cfs @ 13.08 hrs, Volume= 11.448 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-7: 12" RCP PIPE



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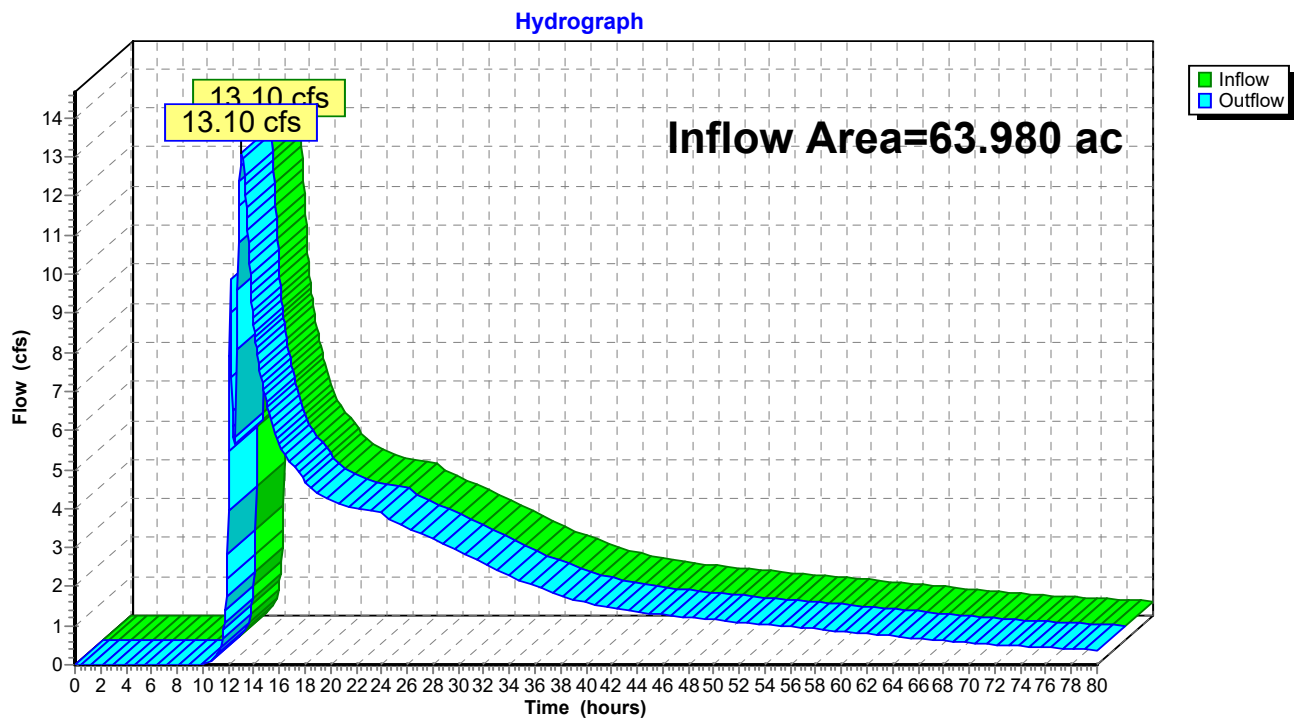
Summary for Reach DP-8: Wetlands Series X

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 63.980 ac, 20.64% Impervious, Inflow Depth > 2.26" for 100-Year event
Inflow = 13.10 cfs @ 13.06 hrs, Volume= 12.071 af
Outflow = 13.10 cfs @ 13.06 hrs, Volume= 12.071 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-8: Wetlands Series X



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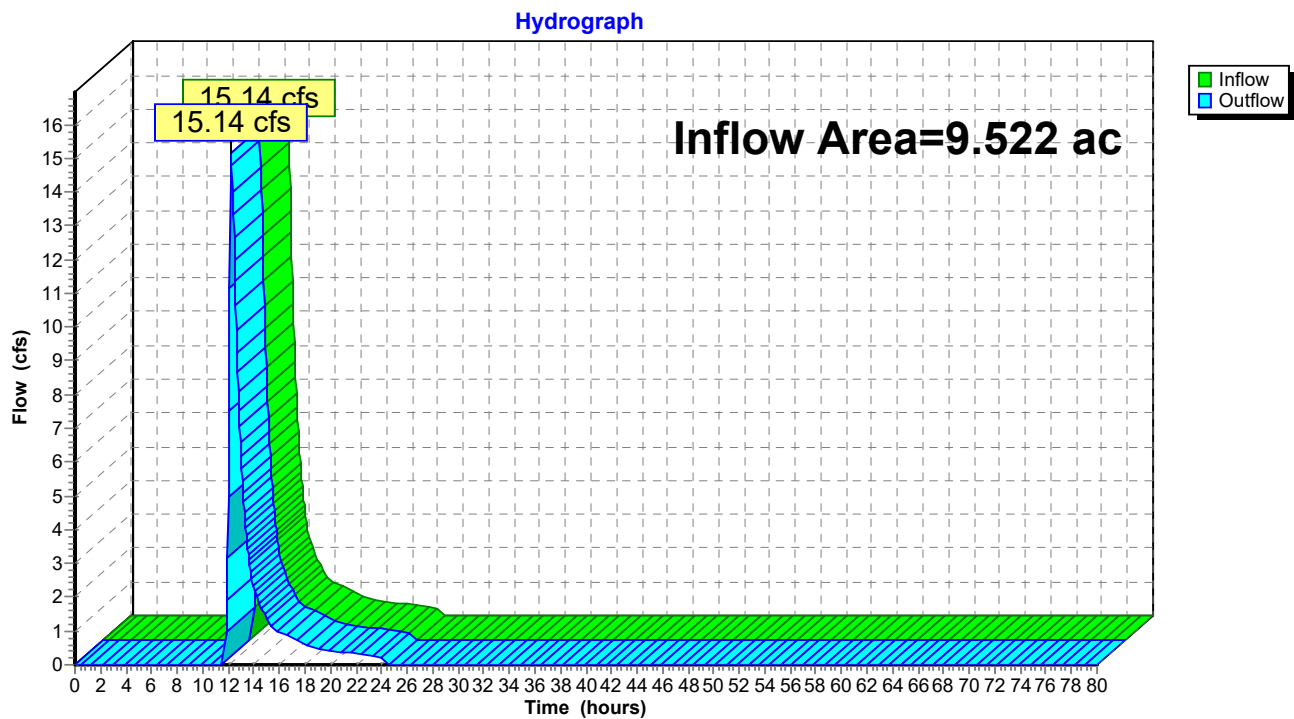
Summary for Reach DP-9: West Elm Street

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 9.522 ac, 43.08% Impervious, Inflow Depth = 2.24" for 100-Year event
Inflow = 15.14 cfs @ 12.22 hrs, Volume= 1.780 af
Outflow = 15.14 cfs @ 12.22 hrs, Volume= 1.780 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-9: West Elm Street



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Summary for Reach DP-ELM: West Elm Street

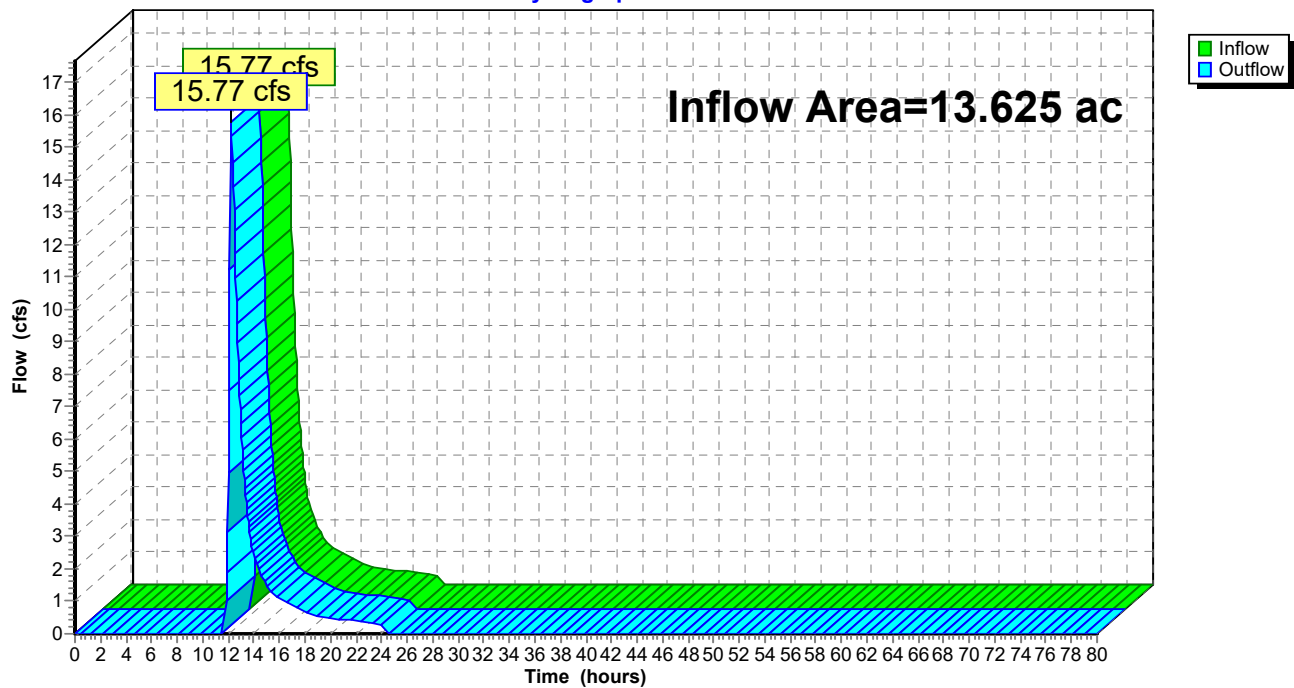
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 13.625 ac, 35.31% Impervious, Inflow Depth = 1.67" for 100-Year event
Inflow = 15.77 cfs @ 12.22 hrs, Volume= 1.896 af
Outflow = 15.77 cfs @ 12.22 hrs, Volume= 1.896 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-ELM: West Elm Street

Hydrograph



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Summary for Reach DP-WA: Wetland Series A

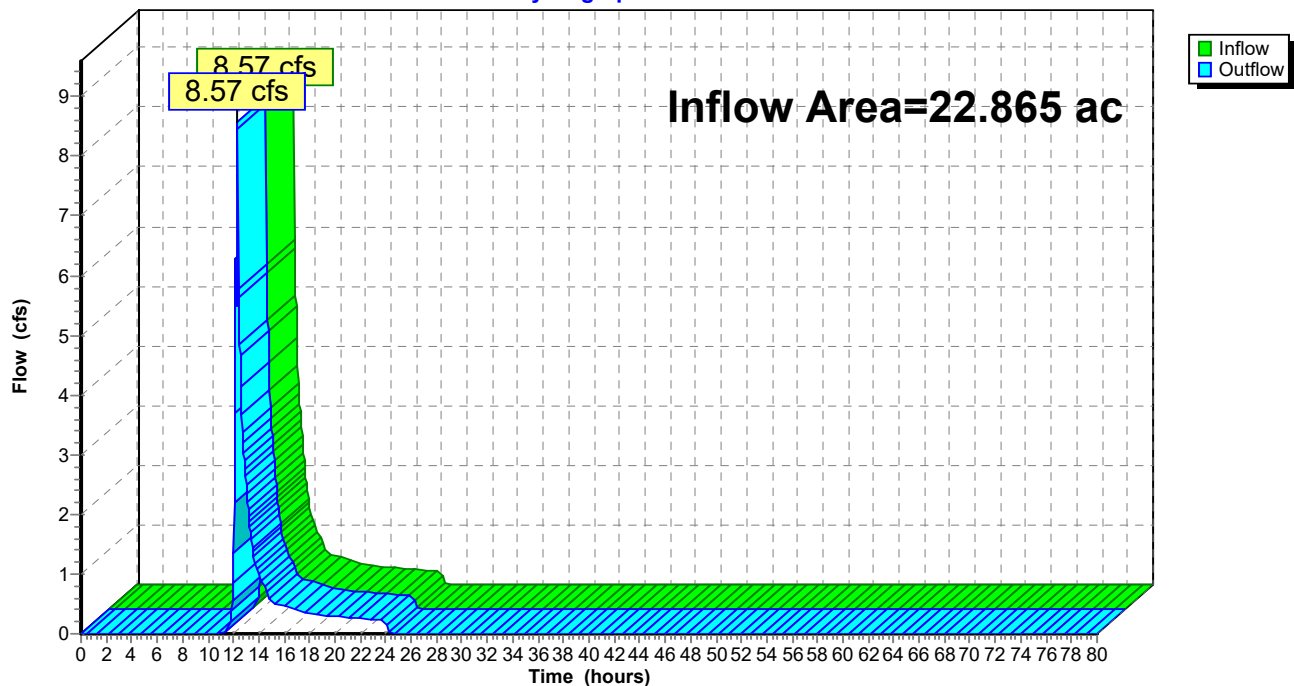
[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 22.865 ac, 16.80% Impervious, Inflow Depth = 0.42" for 100-Year event
Inflow = 8.57 cfs @ 12.34 hrs, Volume= 0.808 af
Outflow = 8.57 cfs @ 12.34 hrs, Volume= 0.808 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-WA: Wetland Series A

Hydrograph



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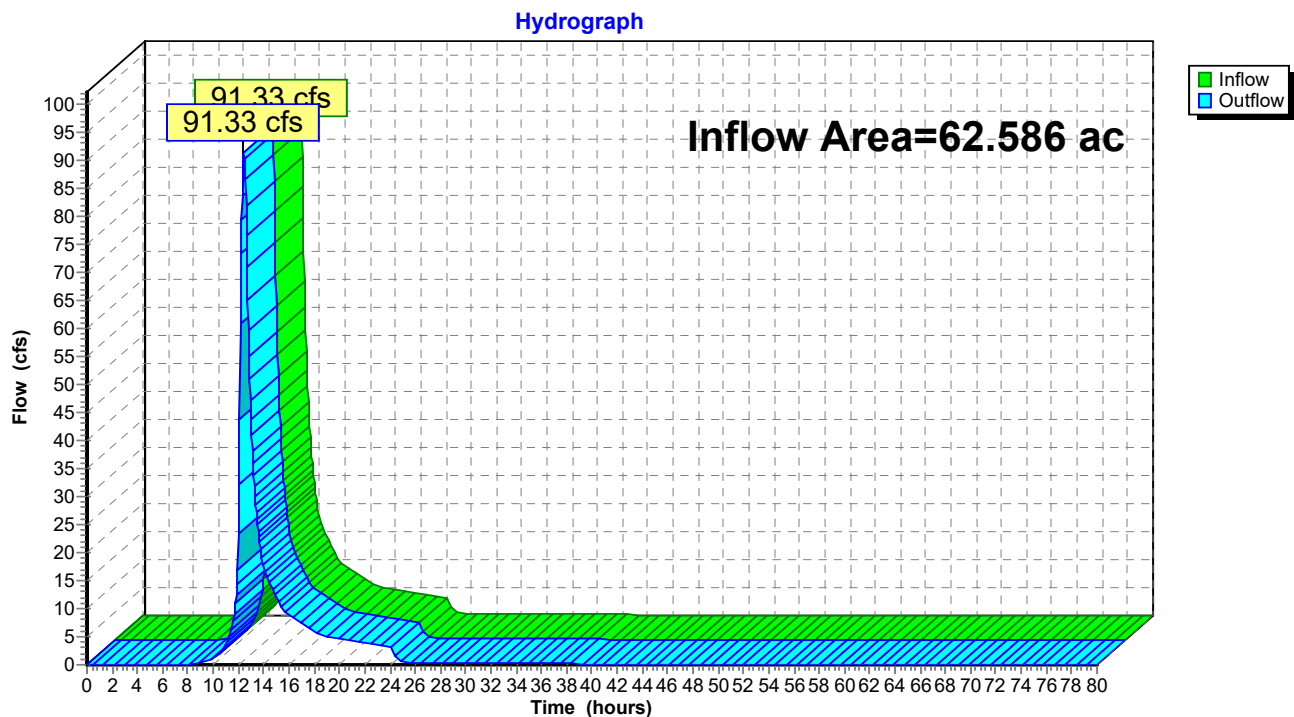
Summary for Reach DP-WI: Wetland Series/Stream I

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 62.586 ac, 17.71% Impervious, Inflow Depth = 2.81" for 100-Year event
Inflow = 91.33 cfs @ 12.43 hrs, Volume= 14.664 af
Outflow = 91.33 cfs @ 12.43 hrs, Volume= 14.664 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs

Reach DP-WI: Wetland Series/Stream I



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Summary for Pond BAS 1-A: BAS 1-A

Inflow Area = 3.844 ac, 44.00% Impervious, Inflow Depth = 5.00" for 100-Year event
Inflow = 23.13 cfs @ 12.13 hrs, Volume= 1.602 af
Outflow = 1.26 cfs @ 14.00 hrs, Volume= 1.588 af, Atten= 95%, Lag= 112.2 min
Discarded = 0.28 cfs @ 14.00 hrs, Volume= 1.300 af
Primary = 0.98 cfs @ 14.00 hrs, Volume= 0.288 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 82.98' @ 14.00 hrs Surf.Area= 11,970 sf Storage= 44,023 cf

Plug-Flow detention time= 1,356.6 min calculated for 1.587 af (99% of inflow)
Center-of-Mass det. time= 1,352.6 min (2,171.8 - 819.2)

Volume	Invert	Avail.Storage	Storage Description
#1	78.00'	44,308 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
78.00	5,723	0	0
83.00	12,000	44,308	44,308

Device	Routing	Invert	Outlet Devices
#1	Discarded	78.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	82.85'	8.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.28 cfs @ 14.00 hrs HW=82.98' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.28 cfs)

Primary OutFlow Max=0.96 cfs @ 14.00 hrs HW=82.98' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 0.96 cfs @ 0.95 fps)

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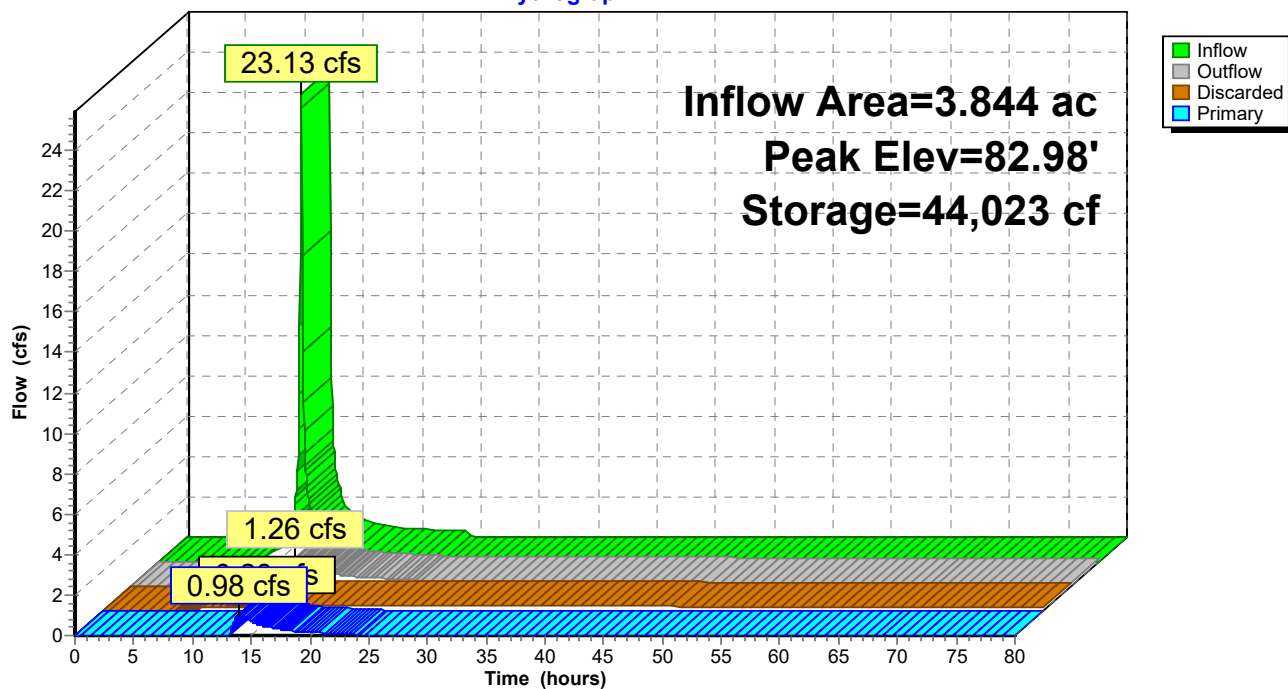
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Pond BAS 1-A: BAS 1-A

Hydrograph



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Summary for Pond BAS 1-B: BAS 1-B

Inflow Area = 6.278 ac, 8.01% Impervious, Inflow Depth = 3.65" for 100-Year event
Inflow = 17.24 cfs @ 12.33 hrs, Volume= 1.911 af
Outflow = 16.52 cfs @ 12.39 hrs, Volume= 1.911 af, Atten= 4%, Lag= 3.6 min
Discarded = 0.14 cfs @ 12.39 hrs, Volume= 0.375 af
Primary = 16.38 cfs @ 12.39 hrs, Volume= 1.536 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 82.99' @ 12.39 hrs Surf.Area= 5,994 sf Storage= 13,715 cf

Plug-Flow detention time= 181.5 min calculated for 1.910 af (100% of inflow)
Center-of-Mass det. time= 182.4 min (1,045.5 - 863.1)

Volume	Invert	Avail.Storage	Storage Description
#1	80.00'	13,755 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
80.00	3,170	0	0
83.00	6,000	13,755	13,755

Device	Routing	Invert	Outlet Devices
#1	Discarded	80.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	82.27'	10.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.14 cfs @ 12.39 hrs HW=82.99' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.14 cfs)

Primary OutFlow Max=16.29 cfs @ 12.39 hrs HW=82.99' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 16.29 cfs @ 2.26 fps)

Proposed Hydrology

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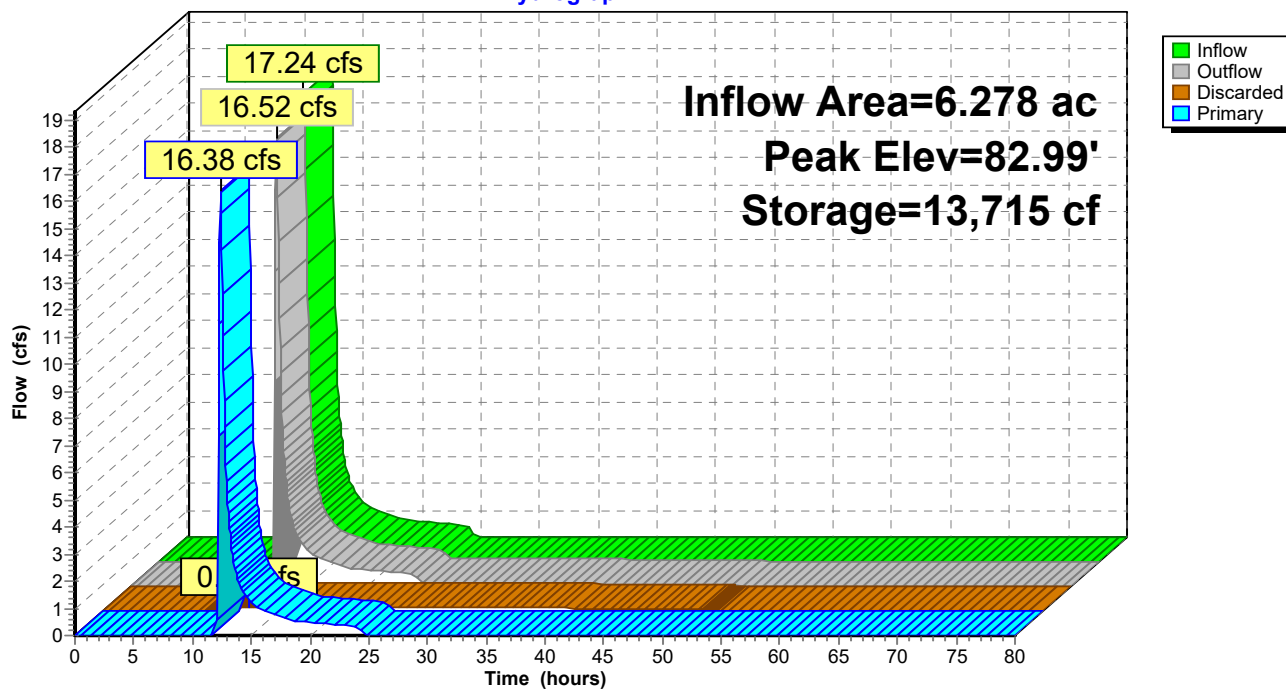
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Pond BAS 1-B: BAS 1-B

Hydrograph



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Summary for Pond BAS 1-C: BAS 1-C

Inflow Area = 0.144 ac, 73.04% Impervious, Inflow Depth = 6.28" for 100-Year event
Inflow = 1.03 cfs @ 12.13 hrs, Volume= 0.076 af
Outflow = 1.02 cfs @ 12.14 hrs, Volume= 0.076 af, Atten= 2%, Lag= 0.9 min
Discarded = 0.01 cfs @ 12.14 hrs, Volume= 0.023 af
Primary = 1.00 cfs @ 12.14 hrs, Volume= 0.052 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 82.98' @ 12.14 hrs Surf.Area= 451 sf Storage= 515 cf

Plug-Flow detention time= 183.0 min calculated for 0.076 af (100% of inflow)
Center-of-Mass det. time= 182.9 min (971.0 - 788.1)

Volume	Invert	Avail.Storage	Storage Description
#1	81.00'	525 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
81.00	70	0	0
83.00	455	525	525

Device	Routing	Invert	Outlet Devices
#1	Discarded	81.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	82.80'	5.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.01 cfs @ 12.14 hrs HW=82.98' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.98 cfs @ 12.14 hrs HW=82.98' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 0.98 cfs @ 1.12 fps)

Proposed Hydrology

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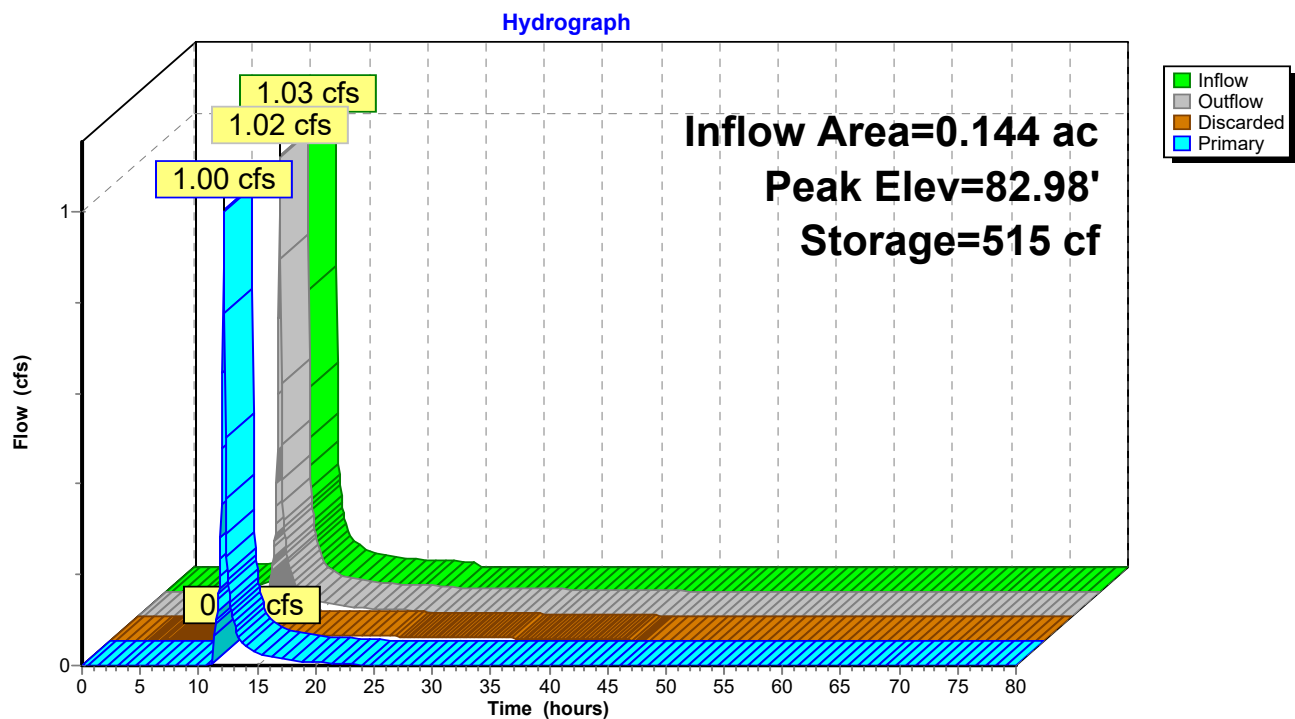
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Pond BAS 1-C: BAS 1-C



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Summary for Pond BAS 10-A: EXIST BAS 10-A

Inflow Area = 0.796 ac, 7.21% Impervious, Inflow Depth = 0.78" for 100-Year event
Inflow = 0.39 cfs @ 12.17 hrs, Volume= 0.052 af
Outflow = 0.02 cfs @ 24.03 hrs, Volume= 0.052 af, Atten= 95%, Lag= 711.9 min
Discarded = 0.02 cfs @ 24.03 hrs, Volume= 0.052 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 55.53' @ 24.03 hrs Surf.Area= 1,728 sf Storage= 1,456 cf

Plug-Flow detention time= 860.4 min calculated for 0.052 af (100% of inflow)
Center-of-Mass det. time= 860.1 min (1,815.6 - 955.6)

Volume	Invert	Avail.Storage	Storage Description	
#1	54.00'	16,389 cf	Custom Stage Data (Conic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
54.00	220	0	0	220
55.00	1,250	665	665	1,254
56.00	2,210	1,707	2,372	2,225
59.00	4,000	9,183	11,555	4,108
60.10	4,800	4,833	16,389	4,949

Device	Routing	Invert	Outlet Devices
#1	Discarded	54.00'	0.520 in/hr Exfiltration over Wetted area
#2	Primary	60.00'	15.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Discarded OutFlow Max=0.02 cfs @ 24.03 hrs HW=55.53' (Free Discharge)

↑**1=Exfiltration** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=54.00' (Free Discharge)

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

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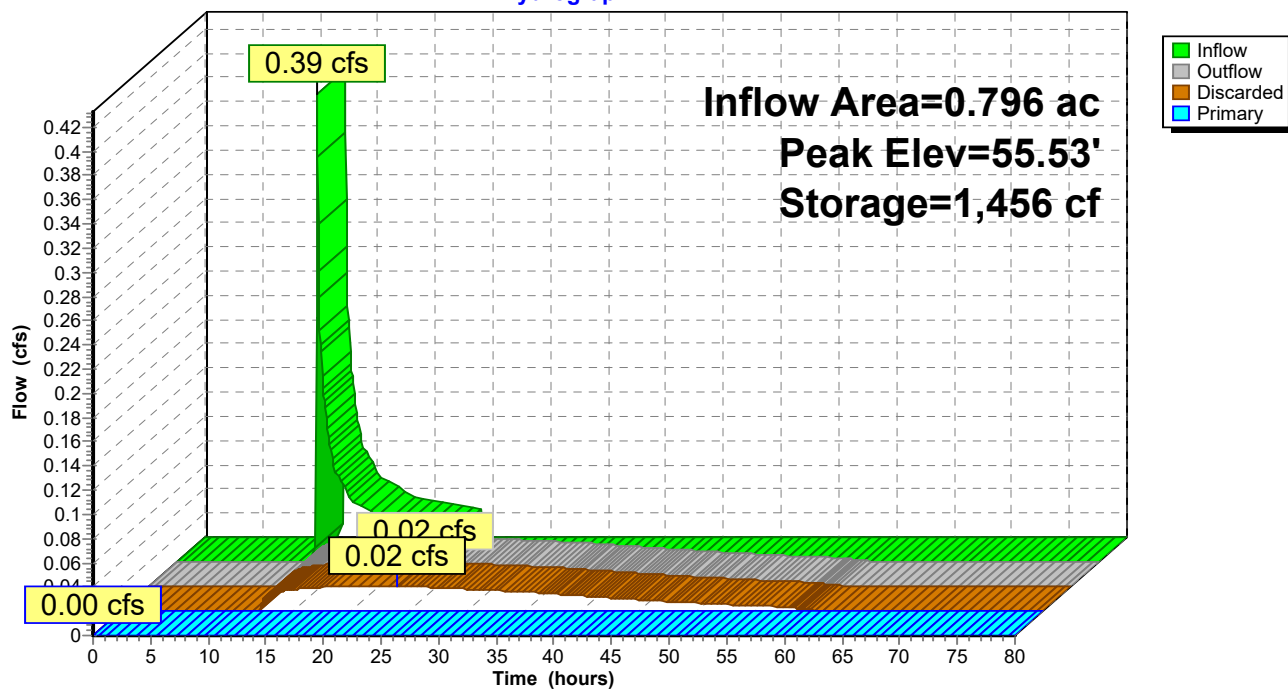
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Pond BAS 10-A: EXIST BAS 10-A

Hydrograph



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Summary for Pond BAS 10-B: BAS 10-B

Inflow Area = 1.334 ac, 40.19% Impervious, Inflow Depth = 3.33" for 100-Year event
Inflow = 5.44 cfs @ 12.13 hrs, Volume= 0.370 af
Outflow = 0.23 cfs @ 15.05 hrs, Volume= 0.370 af, Atten= 96%, Lag= 174.8 min
Discarded = 0.23 cfs @ 15.05 hrs, Volume= 0.370 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 79.82' @ 15.05 hrs Surf.Area= 4,141 sf Storage= 8,557 cf

Plug-Flow detention time= 437.2 min calculated for 0.369 af (100% of inflow)
Center-of-Mass det. time= 437.4 min (1,292.4 - 855.0)

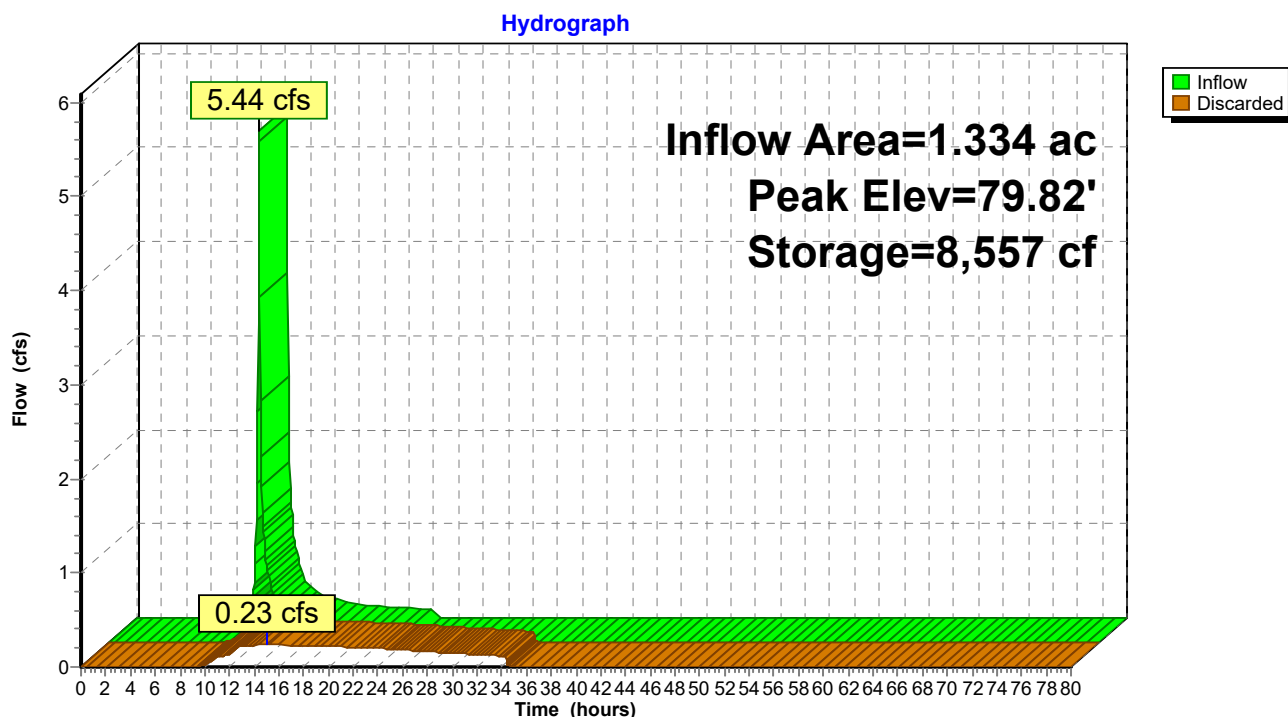
Volume	Invert	Avail.Storage	Storage Description
#1	77.00'	9,319 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
77.00	2,050	0	0	2,050
80.00	4,300	9,319	9,319	4,376

Device	Routing	Invert	Outlet Devices
#1	Discarded	77.00'	2.410 in/hr Exfiltration over Wetted area

Discarded OutFlow Max=0.23 cfs @ 15.05 hrs HW=79.82' (Free Discharge)
↑1=Exfiltration (Exfiltration Controls 0.23 cfs)

Pond BAS 10-B: BAS 10-B



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Summary for Pond BAS 11-B: BAS 11-B

Inflow Area = 4.313 ac, 11.38% Impervious, Inflow Depth = 2.76" for 100-Year event
Inflow = 14.14 cfs @ 12.14 hrs, Volume= 0.991 af
Outflow = 5.44 cfs @ 12.35 hrs, Volume= 0.991 af, Atten= 62%, Lag= 12.6 min
Discarded = 0.72 cfs @ 12.35 hrs, Volume= 0.810 af
Primary = 4.72 cfs @ 12.35 hrs, Volume= 0.181 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 44.99' @ 12.35 hrs Surf.Area= 30,000 sf Storage= 11,933 cf

Plug-Flow detention time= 140.4 min calculated for 0.991 af (100% of inflow)
Center-of-Mass det. time= 140.3 min (1,002.3 - 861.9)

Volume	Invert	Avail.Storage	Storage Description
#1	44.00'	12,000 cf	Custom Stage Data (Conic) Listed below (Recalc) 30,000 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
44.00	30,000	0	0	30,000
45.00	30,000	30,000	30,000	30,614

Device	Routing	Invert	Outlet Devices
#1	Discarded	44.00'	1.020 in/hr Exfiltration over Wetted area
#2	Primary	44.98'	800.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Discarded OutFlow Max=0.72 cfs @ 12.35 hrs HW=44.99' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.72 cfs)

Primary OutFlow Max=4.39 cfs @ 12.35 hrs HW=44.99' (Free Discharge)
↑**2=Sharp-Crested Rectangular Weir** (Weir Controls 4.39 cfs @ 0.39 fps)

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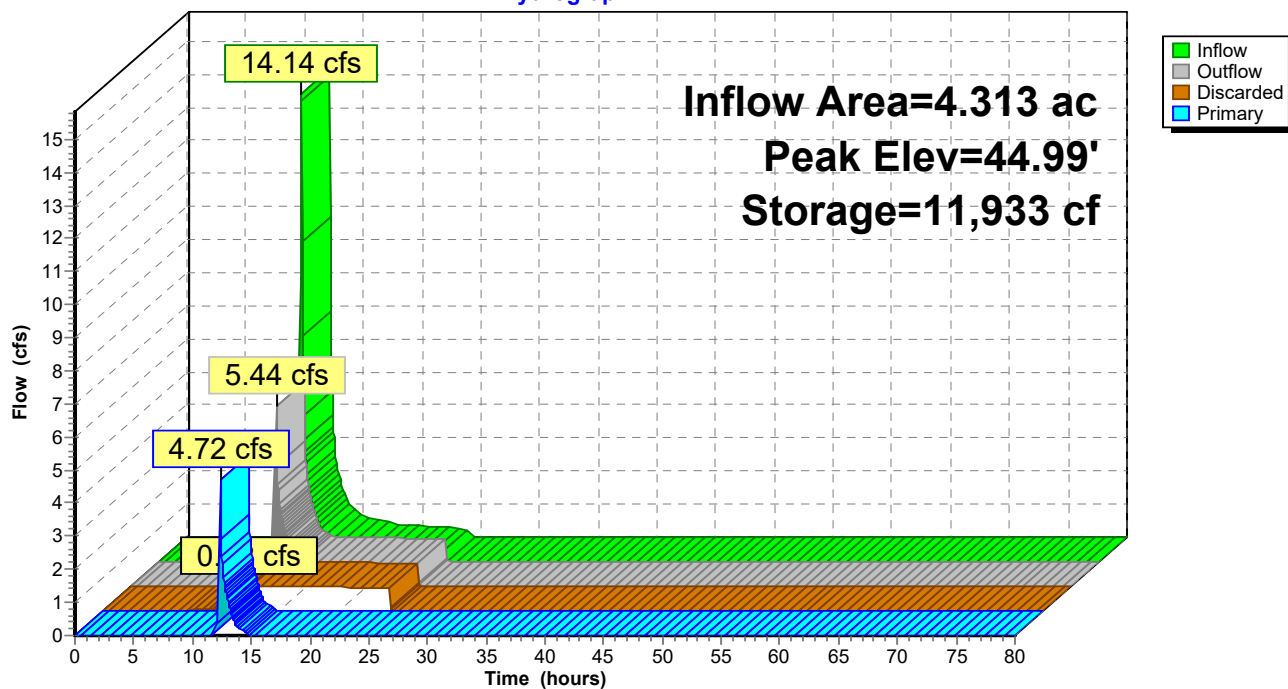
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Pond BAS 11-B: BAS 11-B

Hydrograph



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Summary for Pond BAS 12-A: BAS 12-A

Inflow Area = 6.552 ac, 26.15% Impervious, Inflow Depth = 3.98" for 100-Year event
Inflow = 32.01 cfs @ 12.13 hrs, Volume= 2.176 af
Outflow = 6.51 cfs @ 12.51 hrs, Volume= 2.176 af, Atten= 80%, Lag= 23.0 min
Discarded = 0.87 cfs @ 12.51 hrs, Volume= 1.564 af
Primary = 5.63 cfs @ 12.51 hrs, Volume= 0.611 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 95.98' @ 12.51 hrs Surf.Area= 15,559 sf Storage= 36,994 cf

Plug-Flow detention time= 335.1 min calculated for 2.174 af (100% of inflow)
Center-of-Mass det. time= 335.3 min (1,176.1 - 840.8)

Volume	Invert	Avail.Storage	Storage Description
#1	93.00'	37,274 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
93.00	9,500	0	0	9,500
96.00	15,600	37,274	37,274	15,714

Device	Routing	Invert	Outlet Devices
#1	Discarded	93.00'	2.410 in/hr Exfiltration over Wetted area
#2	Primary	95.63'	10.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.87 cfs @ 12.51 hrs HW=95.98' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.87 cfs)

Primary OutFlow Max=5.62 cfs @ 12.51 hrs HW=95.98' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 5.62 cfs @ 1.60 fps)

Proposed Hydrology

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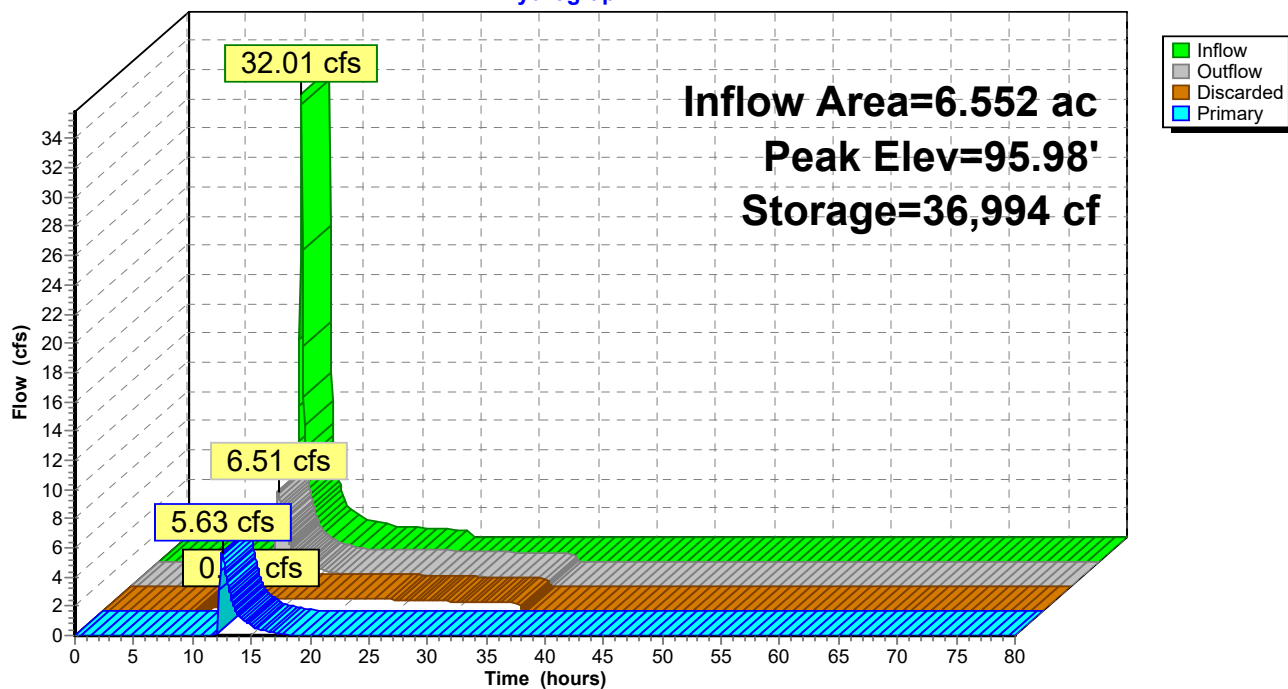
NRCC 24-hr C 100-Year Rainfall=7.70"

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Pond BAS 12-A: BAS 12-A

Hydrograph



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Summary for Pond BAS 12-B: BAS 12-B

Inflow Area = 13.364 ac, 24.22% Impervious, Inflow Depth = 1.97" for 100-Year event
Inflow = 23.04 cfs @ 12.14 hrs, Volume= 2.196 af
Outflow = 0.76 cfs @ 17.68 hrs, Volume= 2.196 af, Atten= 97%, Lag= 332.9 min
Discarded = 0.76 cfs @ 17.68 hrs, Volume= 2.196 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 93.37' @ 17.68 hrs Surf.Area= 31,978 sf Storage= 66,492 cf

Plug-Flow detention time= 934.4 min calculated for 2.194 af (100% of inflow)
Center-of-Mass det. time= 934.8 min (1,785.8 - 850.9)

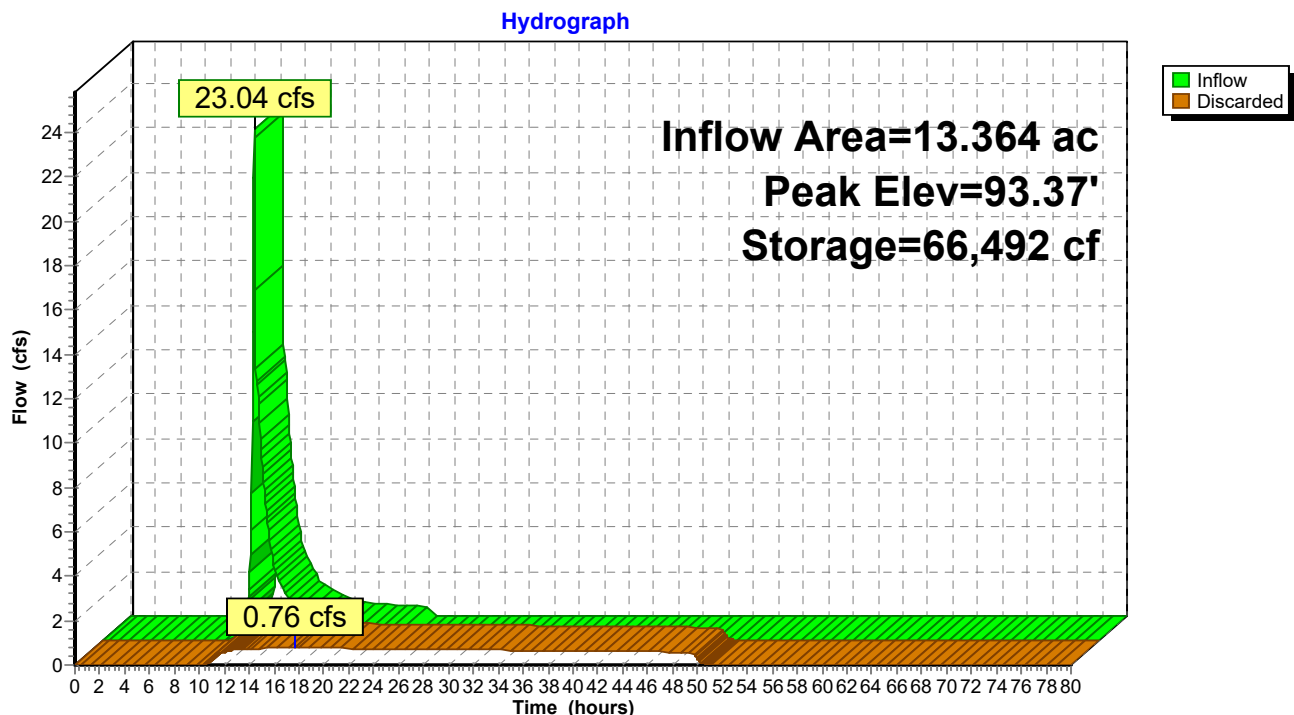
Volume	Invert	Avail.Storage	Storage Description
#1	91.00'	87,248 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
91.00	24,250	0	0	24,250
94.00	34,200	87,248	87,248	34,364

Device	Routing	Invert	Outlet Devices
#1	Discarded	91.00'	1.020 in/hr Exfiltration over Wetted area

Discarded OutFlow Max=0.76 cfs @ 17.68 hrs HW=93.37' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.76 cfs)

Pond BAS 12-B: BAS 12-B



Proposed Hydrology

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Summary for Pond BAS 15-A: BAS 15-A

Inflow Area = 0.392 ac, 41.18% Impervious, Inflow Depth = 4.89" for 100-Year event
Inflow = 2.31 cfs @ 12.13 hrs, Volume= 0.160 af
Outflow = 2.25 cfs @ 12.15 hrs, Volume= 0.160 af, Atten= 3%, Lag= 1.1 min
Discarded = 0.03 cfs @ 12.15 hrs, Volume= 0.051 af
Primary = 2.22 cfs @ 12.15 hrs, Volume= 0.109 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 82.99' @ 12.15 hrs Surf.Area= 1,156 sf Storage= 969 cf

Plug-Flow detention time= 116.7 min calculated for 0.159 af (100% of inflow)
Center-of-Mass det. time= 116.9 min (938.6 - 821.7)

Volume	Invert	Avail.Storage	Storage Description
#1	82.00'	980 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
82.00	800	0	0
83.00	1,160	980	980

Device	Routing	Invert	Outlet Devices
#1	Discarded	82.00'	1.020 in/hr Exfiltration over Surface area
#2	Primary	82.80'	10.0' long x 23.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.03 cfs @ 12.15 hrs HW=82.99' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Primary OutFlow Max=2.21 cfs @ 12.15 hrs HW=82.99' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 2.21 cfs @ 1.17 fps)

Proposed Hydrology

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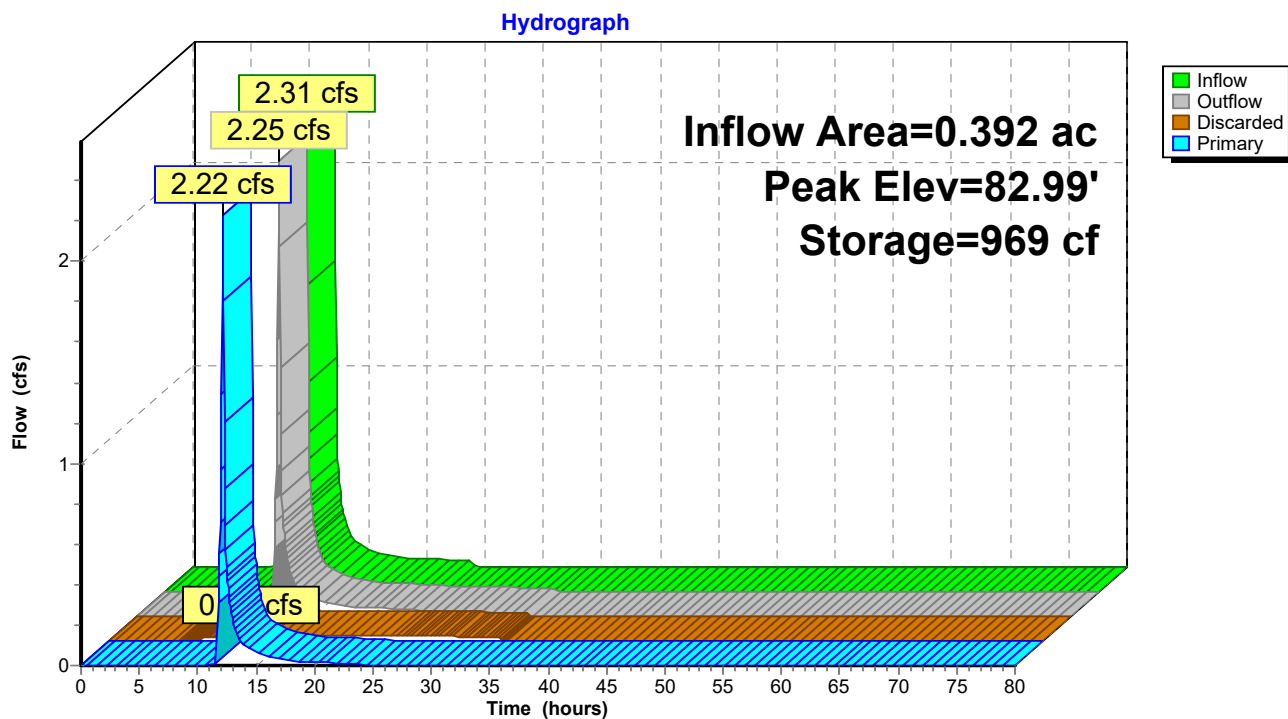
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Pond BAS 15-A: BAS 15-A



Proposed Hydrology

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Summary for Pond BAS 2-A: DET BAS 2-A

Inflow Area = 2.386 ac, 38.00% Impervious, Inflow Depth = 3.22" for 100-Year event
Inflow = 9.40 cfs @ 12.13 hrs, Volume= 0.640 af
Outflow = 0.27 cfs @ 17.53 hrs, Volume= 0.638 af, Atten= 97%, Lag= 323.5 min
Primary = 0.27 cfs @ 17.53 hrs, Volume= 0.638 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 105.79' @ 17.53 hrs Surf.Area= 8,534 sf Storage= 17,790 cf

Plug-Flow detention time= 831.2 min calculated for 0.638 af (100% of inflow)
Center-of-Mass det. time= 829.6 min (1,687.0 - 857.4)

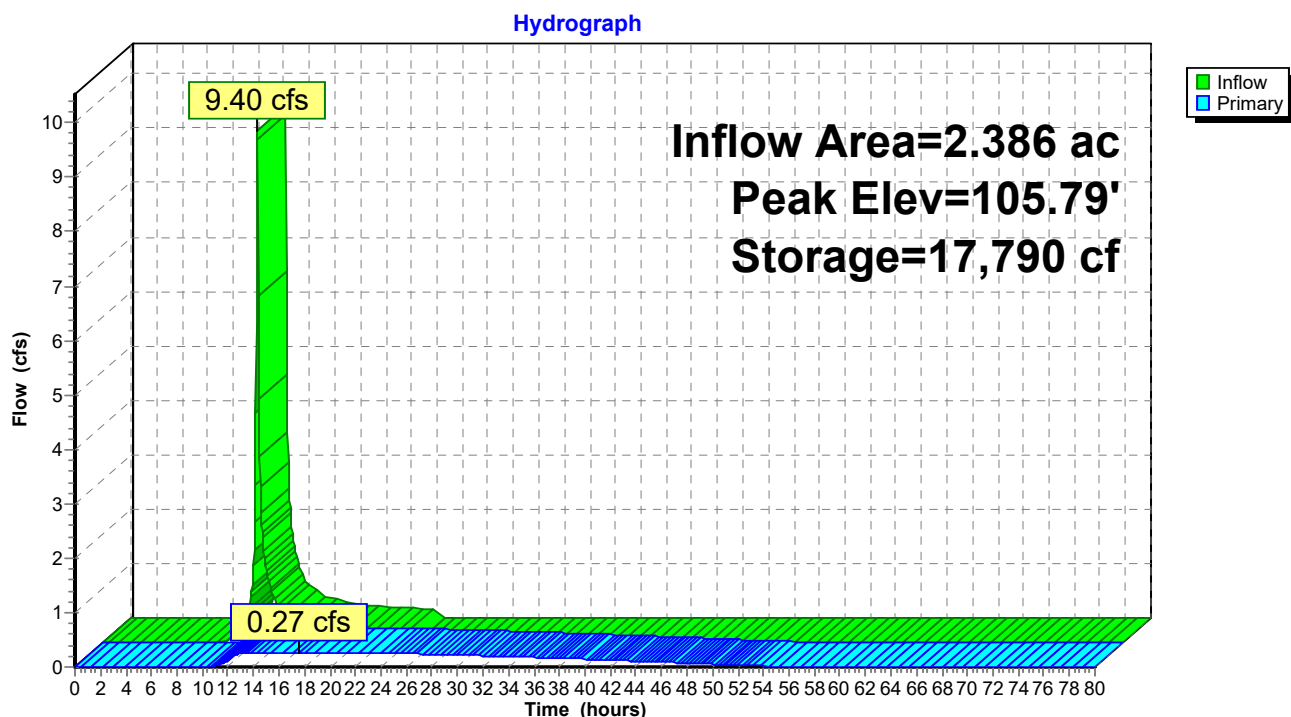
Volume	Invert	Avail.Storage	Storage Description
#1	103.00'	19,643 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
103.00	4,450	0	0	4,450
106.00	8,900	19,643	19,643	8,982

Device	Routing	Invert	Outlet Devices
#1	Primary	103.00'	2.5" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.27 cfs @ 17.53 hrs HW=105.79' (Free Discharge)
↑1=Orifice/Grate (Orifice Controls 0.27 cfs @ 7.89 fps)

Pond BAS 2-A: DET BAS 2-A



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Summary for Pond BAS 2-B: BAS 2-B

Inflow Area = 1.161 ac, 38.00% Impervious, Inflow Depth = 4.10" for 100-Year event
Inflow = 5.83 cfs @ 12.13 hrs, Volume= 0.396 af
Outflow = 5.39 cfs @ 12.16 hrs, Volume= 0.396 af, Atten= 8%, Lag= 1.7 min
Discarded = 0.04 cfs @ 12.16 hrs, Volume= 0.106 af
Primary = 5.34 cfs @ 12.16 hrs, Volume= 0.290 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 99.99' @ 12.16 hrs Surf.Area= 3,594 sf Storage= 3,260 cf

Plug-Flow detention time= 177.0 min calculated for 0.396 af (100% of inflow)
Center-of-Mass det. time= 176.9 min (1,015.3 - 838.4)

Volume	Invert	Avail.Storage	Storage Description
#1	99.00'	3,295 cf	Custom Stage Data (Conic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
99.00	3,000	0	0	3,000
100.00	3,600	3,295	3,295	3,634

Device	Routing	Invert	Outlet Devices
#1	Discarded	99.00'	0.520 in/hr Exfiltration over Surface area
#2	Primary	99.73'	15.0' long x 15.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Discarded OutFlow Max=0.04 cfs @ 12.16 hrs HW=99.99' (Free Discharge)
↑**1=Exfiltration** (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=5.22 cfs @ 12.16 hrs HW=99.99' (Free Discharge)
↑**2=Broad-Crested Rectangular Weir** (Weir Controls 5.22 cfs @ 1.36 fps)

Proposed Hydrology

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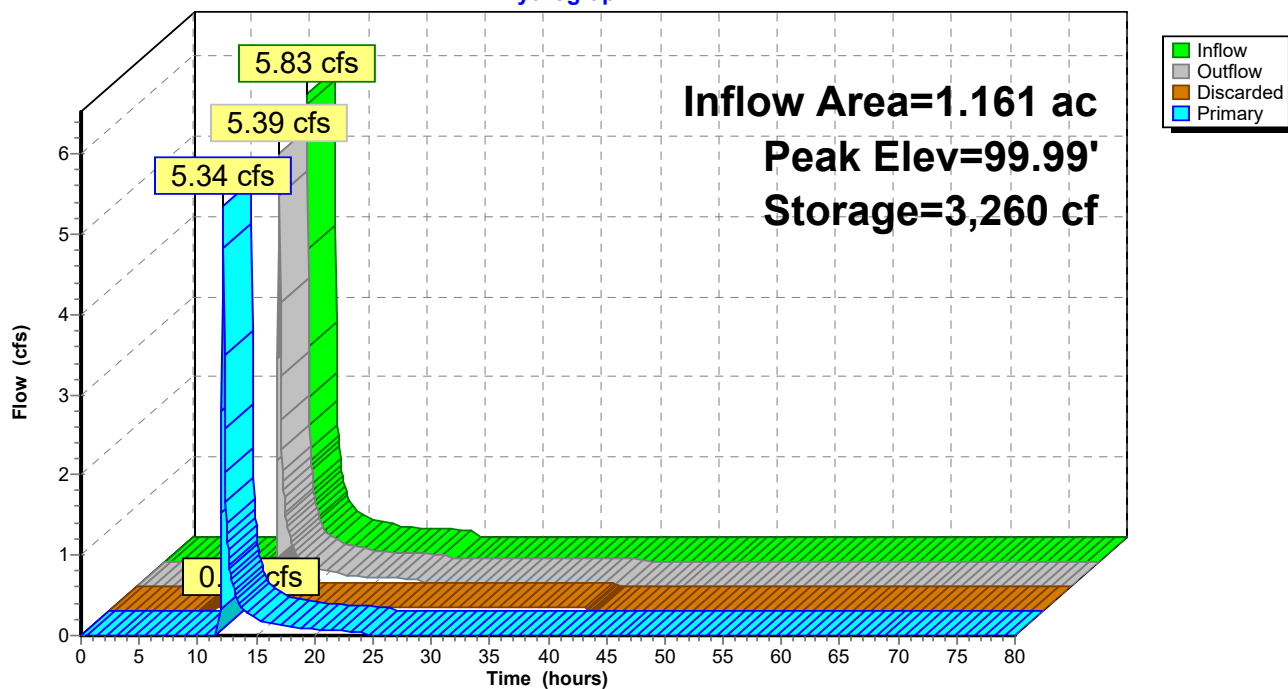
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Pond BAS 2-B: BAS 2-B

Hydrograph



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Summary for Pond BAS 2-C: BAS 2-C

Inflow Area = 1.461 ac, 38.00% Impervious, Inflow Depth = 5.92" for 100-Year event
Inflow = 10.04 cfs @ 12.13 hrs, Volume= 0.721 af
Outflow = 9.63 cfs @ 12.15 hrs, Volume= 0.721 af, Atten= 4%, Lag= 1.3 min
Discarded = 0.09 cfs @ 12.15 hrs, Volume= 0.289 af
Primary = 9.54 cfs @ 12.15 hrs, Volume= 0.432 af

Routing by Stor-Ind method, Time Span= 0.00-80.00 hrs, dt= 0.05 hrs
Peak Elev= 102.99' @ 12.15 hrs Surf.Area= 3,889 sf Storage= 8,636 cf

Plug-Flow detention time= 391.6 min calculated for 0.721 af (100% of inflow)
Center-of-Mass det. time= 392.6 min (1,190.1 - 797.5)

Volume	Invert	Avail.Storage	Storage Description		
#1	100.00'	8,693 cf	Custom Stage Data (Conic) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
100.00	2,000	0	0	2,000	
103.00	3,900	8,693	8,693	3,984	

Device	Routing	Invert	Outlet Devices									
#1	Primary	102.67'	20.0' long x 23.0' breadth Broad-Crested Rectangular Weir									
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60									
			Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63									
#2	Discarded	100.00'	1.020 in/hr Exfiltration over Surface area									

Discarded OutFlow Max=0.09 cfs @ 12.15 hrs HW=102.99' (Free Discharge)
↑**2=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=9.52 cfs @ 12.15 hrs HW=102.99' (Free Discharge)
↑**1=Broad-Crested Rectangular Weir** (Weir Controls 9.52 cfs @ 1.51 fps)