

Appendix G

Stormwater and Utility Reports

WASP
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CLUSTER SUBDIVISION
DRAINAGE ANALYSIS

Meadows at Briarcliff
715 Sleepy Hollow Road
Briarcliff Manor, NY 10510
Section - Block – Lot: (105.17 – 1 – 15)

Pocantico River Basin



January 18, 2022

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1. SUBDIVISION STORMWATER MANAGEMENT DESIGN

Introduction

Wasp Engineering Group, PLLC has been retained by Zappico Real Estate Development (Zappico) to provide watershed hydrologic analysis and stormwater management hydraulic design support in conjunction with the proposed thirty-one (31) lot residential development located on Sleepy Hollow Road in the Town of Mount Pleasant. Subdivision design drawings prepared by Zappico detailing the proposed cluster development layout, existing and proposed topography and utility layout have been utilized as the basis for analysis and design findings summarized in this report.

The development proposes to create a total of thirty-one (31) single-family residential lots from the existing residential parcel that measures 36.83 acres. Two lots that preserve existing residential dwellings will be created in addition to twenty-nine new building lots that together compose the 31 dwelling lot total. The balance of undeveloped land that measures approximately 19 acres will be preserved as open space parcel number 32.

The existing parcel consists of three residential dwellings sited amongst wooded/undeveloped hillside and wetlands. The property is bounded between Sleepy Hollow Road on the west, undeveloped woodland to the north and existing residential development to the south. Pocantico Lake immediately borders the site along the eastern property line. Proposed construction is focused on the upper portion of the lot located in proximity to Sleepy Hollow Road. Downgrade lot areas closer to Pocantico Lake and wetlands are proposed to remain undisturbed.

Stormwater management practices for the new proposed subdivision have been designed to meet and exceed the sizing criteria prescribed by §183 "Stormwater Management and Erosion and Control"; and §A227-25 "Subdivision Regulations – Improvements" of the Mount Pleasant Town Code less reduced zoning bulk dimensions as a cluster subdivision. Additional report contents have been included in response to specific scoping items in accordance with Draft Environmental Impact Statement (DEIS), as adopted December 20, 2021. Subsequent sections included in this report summarize the design basis, analysis findings and technical references that have been prepared.

Existing Conditions

The existing property is comprised of tax Lot 15 (1,604,175 sq. feet) located on the eastern shoulder of Sleepy Hollow Road shown southeast of the intersection of Wilderness Way. Adjoining land use located to the south and west consists of single-family residential dwellings. Additional undeveloped woodland borders the property on the adjoining parcel to the north. Approximately 4 acres are occupied by three residential dwellings surrounded by grass lawn and common driveway. The balance of lot area (32.83 acres) consists of woodland areas situated around the parcel perimeter on its western, southern and eastern boundaries. Locally-regulated wetlands are found in the southwest corner of the property. Pocantico Lake directly abuts the parcel along its eastern boundary. Common tree species found on the property include Maple, Oak, Hickory, Wild Cherry, Birch, Ash, Tulip, Beech, Hickory and Pine. The provided survey drawing illustrates utility easement for the Croton Aqueduct traversing the parcel along a north-south orientation within the western portion of the lot.

The existing topography of the site is relatively flat at the center before sloping away towards the property lines in 3 general directions north, east, and southwest. Elevations within the center of the site vary between 344' to 376'.9'. Three distinct sub-watersheds can be described from the site area. Land area to the east of the divide drains directly towards Pocantico Lake. Steep slopes transition on the border with Pocantico Lake located at elevation +/-220'. Property areas to the west of the drainage divide drain towards on-site wetlands area that culminates in mapped watercourse leaving the property near the southwest corner. A small portion of the northwest parcel drains towards an off-site watercourse before eventually entering Pocantico Lake to the north. Characteristics of specific drainage subcatchments are summarized as follows:

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EDA-1: 3.11 acres located in northwest corner of site. Area includes existing residential dwelling, common driveway and grass lawns. Time of concentration: 16.5 minutes. CN=65. Mapped soils consist of mostly HSG B with some HSG C group soils. Drains to north towards off-site watercourse tributary to Pocantico Lake.

EDA-2: 20.24 acres composing eastern portion of site. Area includes (2) existing residential dwellings, swimming pool common driveway, grass lawns and undeveloped woodland. Time of concentration: 22.8 minutes. CN = 60. Mapped soils consist of HSG B group soils. Drains to east directly into Pocantico Lake.

EDA-3: 13.68 acres located in northwest corner of site. Area includes small portion of common driveway but mostly undeveloped woodland and wetland areas. Time of concentration: 30.5 minutes. CN=71. Mapped soils consist of mostly HSG B with small portions of HSG C and HSG A group soils

No stormwater management facilities have been identified on the existing parcel or immediate surrounding vicinity to the project site. Individual drainage subcatchments either directly discharge to Pocantico Lake (EDA-2); or indirectly through on-site wetlands area (EDA-3) and undeveloped downhill woodland (EDA-1) that ultimately reach Pocantico Lake

Please refer to existing subdivision drainage area map "EDA" as enclosed in Report Section 2. Existing site drainage area was calculated were assigned curve numbers based upon mapped soil ratings and surface cover in accordance with the SCS TR-55 drainage methodology.

Proposed Conditions

The project proposes to create thirty-one (31) new individual building lots in accordance with the bulk density requirements for the Town of Mount Pleasant R-40-Zone. Each lot will contain a new residential dwelling, asphalt pavement driveway and walkway area. The layout of conceptual building lots and dwelling envelopes was modeled based upon drawings prepared by Zappico Real Estate Development. Land area immediately surrounding each dwelling is proposed as grass lawn. Total area of development is limited to +/- 11.3 acres. Proposed development avoids steep slope area along the eastern transition to Pocantico Lake and wetland and regulated buffer areas. Proposed topography within the area of disturbance generally follows the existing drainage directions with leveling across portions of building lots.

New drainage collection structures are shown to be constructed as part of new subdivision roadway layout. The cluster subdivision contemplates collection of runoff from individual lot impervious surfaces (i.e. new rooftop and driveways) as part of the drainage collection network. One stormwater infiltration basin is planned to be located within the rear of proposed Lots 5, 6 & 7 and is intended to provide for both mitigation of stormwater quality and quantity based impacts. Planned stormwater infiltration basin will be designed following all required elements prescribed by Chapter 6 of the NYSDEC Stormwater Management Design Manual. Full capture and infiltration of runoff volume from new development area for storm events up to and including the 100 year – 24 hour event is sized to be feasible based upon conceptual design layout. Characteristics of specific proposed drainage subcatchments are summarized as follows:

PDA-1 : 1.41 acres located in northwest corner of site. Area consists of uncaptured existing rear yard of proposed lots #1 - #4. Time of concentration: 15.6 minutes. CN=69. Mapped soils consist of mostly HSG B with some HSG C group soils. Drains to north towards off-site watercourse tributary to Pocantico Lake.

PDA-2 : 13.86 acres composing eastern portion of site. Area includes the rear steep portions of lots #6 - #16; and open space parcel #32 that will remain undeveloped woodland. PDA-2 includes the existing dwelling and coverage on Lot # 14. Time of concentration: 11.3 minutes. CN = 59. Mapped soils consist of HSG B group soils. Drains to east directly into Pocantico Lake.

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PDA-2A: 9.23 acres located centrally to the site. Subcatchment includes all new subdivision roadway and new lot impervious areas. Proposed stormwater infiltration basin at the rear of Lots #5 – 7 is included within PDA-2A for the capture and treatment of stormwater runoff. Time of concentration: 14.4 minutes. CN = 72. Mapped soils consist of HSG B Group soils.

PDA-3: 12.22 acres not captured by subdivision stormwater management practice areas located in the western portion of the site closest to Sleepy Hollow Road. Area includes existing onsite wetland areas and will remain undeveloped woodland. Portion of existing structures and coverage on proposed Lots #15, #25, #26 and downgrade lawn areas on Lots #27-#31 are included in PDA-3. Time of concentration: 30.3 minutes. CN=73. Mapped soils consist of HSG B with portions of HSG C and HSG A group soils

Please refer to existing subdivision drainage area map “PDA” as enclosed in Report Section 2. Proposed site drainage area was calculated were assigned curve numbers based upon mapped soil ratings and surface cover in accordance with the SCS TR-55 drainage methodology.

Design Basis

Town of Mount Pleasant stormwater code §A227-25 requirements were used as the basis for the subdivision stormwater management design. The proposed subdivision is regulated as a “Major Land Development Activity” and warrants the preparation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with §183. Town code specifies that the proposed impact to runoff conditions resulting from design storm events up to the 50 year-24 hour event must be used as the basis for design. Consideration of the 100 year design storm as required by NYSDEC regulations for peak flow attenuation has been included in this analysis. Further consideration of the 500 year design storm has been included in accordance with the approved EIS scoping document

Pre-development and post development site conditions were hydrologically modeled and assessed following the SCS Curve Number methodology using HydroCAD V10.22 software. Site specific precipitation data obtained from the Northeast Regional Climate Center was compared to storm rainfall depths listed in Town Code §183-12. The greater of each value for each storm return period was selected for use in modeling as identified in **bold type**. The following table summarizes design rainfalls modeled for the required storm return periods.

Design Rainfall Depth (Inches)								
Data	1 Year	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year	500 Year
NRCC ¹	2.78"	3.42"	4.30"	5.13"	6.47"	7.72"	9.22"	13.99"
Town ²	2.8"	3.5"	4.5"	5.0"	6.0"	7.0"	7.5"	-
Notes								
1 - Site design rainfall depths obtained through Northeast Regional Climate Center (NRCC) Precip.Net climatology data as endorsed by NYSDEC								
2 - Town design rainfall depths listed as per Town of Mount Pleasant Code Chapter 183-12(1)								

One stormwater infiltration basin is planned to be located within the rear of proposed Lots 5, 6 & 7. Infiltration basin storage has been calculated based upon the actual illustrated grade contours using storage-storage pond computations in the HydroCAD software. Total available basin storage is calculated at approximately 174,238 cubic feet considering a maximum water surface elevation of 355.00 feet. Outlet controls are conceptually designed to be provided through precast concrete structure with vertical orifice (weir plate) set at elevation 353.10'; routed through 30" diameter culvert that will discharge to properly sized level spreader practice in the uphill portion of PDA-2 as shown on the post development watershed map. Secondary emergency spillway is planned at elevation 353.50'.

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The prepared HydroCAD analysis considers conservative percolation rates of 3.0 inches per hour that must be confirmed with field testing during the design development process. The proposed infiltration basin has been currently sized to contain the full runoff volume for the 100 year design storm without bypass. Typical percolation rates in excess of conservative design assumption will provide faster infiltration and less volume utilized within the proposed basin.

Analysis Findings

Detailed HydroCAD analysis reports for both pre-development and post-development site conditions are included in Section 3 of this report. Both conditions evaluate the same total drainage area as reaching the ultimate design point in the Pocantico River basin.

The proposed stormwater infiltration basin on Lots #5-#7 has been conceptually sited with adequate footprint to mitigate the increase in stormwater runoff created by the new development. The proposed condition HydroCAD report calculates the maximum storage volume from development area "PDA-2A" for the 100-year design storm as 119,148 cubic feet at maximum water surface elevation 353.06'. No release of stormwater through the basin outlet control structure is modeled for this event; all collected runoff volume is to be infiltrated to the basin footprint.

The following table compares of peak runoff rates leaving the site during pre and post-development conditions. The analysis identifies that the proposed full capture of runoff within subcatchment "PDA-2A" effectively mitigates increased stormwater runoff resulting from the new development. Post development peak runoff rates reaching downhill design points to mitigated to below pre-development levels. More significant reductions are recognized during larger design storm events. Detailed HydroCAD modeling reports used as the basis for the summary table below can be viewed in Report Section 4.

COMPARISON OF PEAK RUNOFF RATES (C.F.S.)									
Drainage Area	Runoff Condition	Storm Event (Year)							
		1	2	5	10	25	50	100	500
DA 1 North Stream Basin	EDA-1	0.75	1.65	3.25	4.39	7.04	9.70	13.04	24.15
	PDA-1	0.56	1.05	1.89	2.46	3.77	5.06	6.65	11.86
	Change (%)	-25.33%	-36.36%	-41.85%	-43.96%	-46.45%	-47.84%	-49.00%	-50.89%
DA 2 Pocantico Lake	EDA-2	2.05	5.6	13.0	18.57	31.99	45.80	64.00	124.16
	PDA-2*	1.37	4.19	10.77	15.73	27.67	40.04	55.95	110.70
	Change (%)	-33.17%	-25.18%	-17.15%	-15.29%	-13.50%	-12.58%	-12.58%	-10.84%
DA 3 On-Site Wetlands	EDA-3	5.5	9.5	16.05	20.48	30.42	40.06	51.89	90.23
	PDA-3	5.40	9.13	15.17	19.25	28.37	37.18	47.97	82.73
	Change (%)	-1.82%	-3.89%	-5.48%	-6.01%	-6.74%	-7.19%	-7.55%	-8.31%
COMBINED	Existing	8.15	16.43	31.32	42.03	67.02	92.13	123.95	230.46
	Proposed	7.15	13.30	23.88	31.33	49.08	67.96	92.05	173.79
	Change (%)	-12.27%	-19.05%	-23.75%	-25.46%	-26.77%	-26.23%	-25.74%	-24.59%

*- PDA-2 is routed in HydroCAD with PDA-2A as tributary. No flows are released from PDA-2A except for the 500 year design storm event.

Similar analysis of development runoff volumes was prepared through HydroCAD modeling. The Table below provided comparison summary of pre and post development runoff volumes reaching downstream design points. Significant reduction in runoff volume are recognized through the proposed development concept. It can be noted that additional

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site specific green infrastructure practices such as construction of pervious paver patios and rain barrel placement are not considered in this analysis but will provide further mitigation of runoff volume from impervious surfaces.

Runoff peak flows and volumes produced during the most extreme 500 year design storm event are routed through the proposed stormwater infiltration basin. The maximum water surface elevation reached at 354.19' is well contained below the top of berm at 356.00. Bypassed flows are safely routed through the outlet control structure and emergency spillway feature while maintaining almost two feet of freeboard. Peak runoff rates and volumes within PDA-1 and PDA-3 are similarly reduced under developed condition compared to existing.

COMPARISON OF RUNOFF VOLUME (Cu. Ft.)									
Drainage Area	Runoff Condition	Storm Event (Year)							
		1	2	5	10	25	50	100	500
DA 1 North Stream Basin	EDA-1	4,716	8,491	15,021	19,653	30,470	41,427	55,345	102,893
	PDA-1	2,890	4,875	8,190	10,489	15,763	21,019	27,618	49,813
	Change (%)	-38.72%	-42.59%	-45.48%	-46.63%	-48.27%	-49.26%	-50.10%	-51.59%
DA 2 Pocantico Lake	EDA-2	19,239	38,659	74,180	100,212	162,609	227,307	310,892	603,035
	PDA-2*	11,971	24,734	48,390	65,855	107,963	151,850	208,760	529,973
	Change (%)	-37.78%	-36.02%	-34.77%	-34.28%	-33.61%	-33.20%	-32.85%	-12.12%
DA 3 On-Site Wetlands	EDA-3	34,347	55,652	90,378	114,115	167,901	220,917	286,957	506,796
	PDA-3	32,984	52,789	84,832	106,632	155,842	204,179	264,244	463,556
	Change (%)	-3.97%	-5.14%	-6.14%	-6.56%	-7.18%	-7.58%	-7.92%	-8.53%
COMBINED	Existing	58,303	102,801	179,579	233,980	360,980	489,651	653,194	1,212,723
	Proposed	47,845	82,398	141,412	182,977	279,568	377,049	500,622	1,043,342
	Change (%)	-17.94%	-19.85%	-21.25%	-21.80%	-22.55%	-23.00%	-23.36%	-13.97%

Permits and Approvals

Development of the project site requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of NYSDEC SPDES General Permit GP-20-001; as supplemented by the Town of Mount Pleasant Code Chapter 183. Necessary approvals related to the stormwater management design are listed below. The project site is located outside of the NYC DEP east of Hudson watershed and does not require NYC DEP approvals:

- SWPPP Approval – Town of Mount Pleasant Ch. 183
- NYSDEC: SPDES General Permit for Stormwater Discharges from Construction Activity (GP-20-001)

Water Quality / Pretreatment Measures

Construction phase water quality will be protected through implementation of an effective erosion and sediment control plan to be developed as part of the project Stormwater Pollution Prevention Plan. Best practices for site controls will be incorporated in the erosion and sediment control plan consistent with the NYSDEC New York Standards & Specifications for Erosion and Sediment Control manual, latest edition. Site practices already contemplated for implementation during the project include but are not limited to: silt fencing, drain inlet protection, stabilized construction entrance and temporary stabilization techniques (straw mulch and seed application). Open site disturbance will be

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minimized through phasing of construction work. The construction phasing plan will be designed to excavate the proposed infiltration basin area to function as a temporary sediment basin prior to the start of general earthwork. Consistent with NYSDEC design guidelines, the proposed sediment basin invert elevation will be planned at least two (2) feet higher than the permanent infiltration basin to provide removal of captured fines during grading of the permanent stormwater management practice.

Proposed infiltration practices are required to provide pretreatment in accordance with design specifications for infiltration outlined in Chapter 6 of the NYSDEC Stormwater Management Design Manual. Practices at the project site will be served by "flow-through" based pretreatment structures that are currently intended as hydrodynamic separators. Proprietary pre-treatment structures are recognized as acceptable by Chapter 9 of the Stormwater Management Design Manual and are widely used in land development. Design sizing for flow based pretreatment structures is based upon peak flowrates determined in accordance with Chapter 4 of the Stormwater Management Design Manual.

Chapter 4 of the Stormwater Management Design Manual requires sizing for water quality based upon the 90th percentile rainfall event that is roughly 1.5 inches. Runoff reduction volume (RRv) is a similar sizing criteria that implements the elimination of stormwater runoff through design of green infrastructure or standard management practices with RRv capacity. Stormwater infiltration is a standard management practice that is recognized with 100% (highest possible) RRv capacity. 100 percent of runoff volume routed within the design capacity of the practice area is eliminated from runoff leaving the Project Site.

Proposed stormwater infiltration practice is conceptually designed to provide full capture and infiltration of runoff collected from the 100 year, 24-hour design storm. This design attribute fully addresses and significantly exceeds the mitigation requirements for water quality treatment and runoff reduction volume specified in the NYSDEC Stormwater management design manual and Town of Mount Pleasant code.

Green Infrastructure / Low Impact Development / Pollutant Loading

Stormwater infiltration practices are considered highly desirable for their ability to return rainfall runoff to underground soil strata that mimics natural, undeveloped conditions. Infiltration of runoff provides groundwater table recharge and provides reduction in introduction of nutrient pollutants to downstream waterbodies. Sediment forms of phosphorous nitrogen and other solids are captured by properly designed stormwater management practices. Reduction in soluble forms of nutrient pollutants is also recognized by uptake by vegetation and plantings within and surrounding the infiltration practice area.

NYSDEC publishes listing of waterbodies identified to have established TMDLs or other known impairment by specific pollutant sources. The document known as the New York State Section 303(d) List of Impacted/TMDL Waters is updated semi-annually with the most current final listing dated 2018. Pocantico Lake is absent from the current Section 303(d) list and therefore does not have an established water quality impairment or pollutant of concern. Proper sizing and maintenance of proposed stormwater infiltration practices, including uphill collection and pretreatment structure components will support the long term performance of sediment/pollutant removal in at the project site in accordance with NYSDEC design specifications.

Post Construction Maintenance

Proper implementation of a post-construction stormwater management practice inspection and maintenance program is essential to long-term system performance. Site stormwater collection system components include catch basins, pipe culverts and vegetated swales. Stormwater management practice components include stormwater infiltration

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practice, pretreatment structures and outlet controls. Sizing of all practices is specified by the criteria indicated in Chapter 6 of the NYSDEC Stormwater Management Design Manual. Typical inspection and maintenance for the proposed stormwater components at the project site include but are not limited to:

- Visual inspection and removal of accumulated sediment and debris from roadway catch basins
- Removal of accumulated debris from vegetated swale. Restoration of eroded channel surface
- Select trimming/cutting of overgrowth within vegetated swales
- Removal of sediment material, suspected solids & floatables from Hydrodynamic Separator (pretreatment)
- Camera inspection of underground piping and infiltration pipe components.
- Proprietary unit maintenance procedures per manufacturer recommendations

Detailed inspection and maintenance program requirements are required to be included as part of the final Stormwater Pollution Prevention Plan (SWPPP) developed for the project site design. The project SWPPP will be prepared as part of the Subdivision Application process prior to the issuance of final approval and subsequent permits to allow land development. Performance of post-construction inspection and maintenance is currently intended to be the responsibility of an established Homeowner's Association (HOA) entity in lieu of individual homeowners. The HOA will be required to enter into legally binding and recorded agreement with the Town of Mount Pleasant to perform required inspection and maintenance tasks. Typical "stormwater maintenance agreements" follow the NYSDEC template made available through SPDES and MS4 permit programs. Ultimately the Town of Mount Pleasant will review and approve the terms of the agreement that implements the requirements of the NYSDEC and Town.

Significant Rainfall Events

Several extreme storm events have impacted the region within the last twenty-five years. Notable storms within this period include: Hurricane Floyd (September 17, 1999), Hurricane Irene (August 27, 2011), Hurricane Sandy (October 29, 2012) and most recently the remnants of Hurricane Ida (September 1, 2021). Storm data records published by the National Weather Service through the New York Significant Weather Events Archive were reviewed in preparation of this section.

Resulting impacts of wind damage and storm surge/coastal flooding are most commonly associated with Hurricanes. Although memorable, these impacts are not applicable to analysis of stormwater runoff to inland areas. Specific storm events recognized for extreme inland rainfall are limited to the following:

- Hurricane Floyd – Regional rainfall of 6-12 inches – 24 hour period
- Hurricane Irene – Regional rainfall of 4-8 inches – 21 hour period (12:00 AM-9:00 PM)
- (remnants) Hurricane Ida – Regional rainfall of 4-8.5 inches – 8 hour period (9:00PM-5:00AM)

Concentrated rainfall within short duration can be examined for production of the most extreme runoff rates. Regional rainfall received during Hurricane Ida over the short period of 8 hours matches the total rainfall measured over nearly 24 hours from other historic storm events. Based upon this, rainfall conditions produced during Hurricane Ida have been examined through project site HydroCAD modeling for conceptual study of resulting conditions. The rainfall map provided below from the National Weather Service identifies total precipitation near the project site between 6.0-7.0 inches. For the purposes of this conceptual examination, site rainfall of 7.5 inches over 8 hours has been conservatively modeled.

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The comparison tables below summarize peak runoff rates and total storm runoff volume generated over site drainage subcatchments during conceptual storm Ida. Peak flows and volumes reported fall between the similar values for 50 year, 24-hour and 100 year, 24-hour rainfall events discussed under the analysis section. Measurable reductions both in peak flowrates and runoff volumes are reported for all subcatchments under proposed development conditions compared to existing.

Proposed sizing of subdivision stormwater management practices appears fully capable of containing runoff conditions produced during conceptual storm Ida. Practices sized for the 100 year, 24-hour rain event have larger capacities than required for capture and infiltration of Hurricane Ida. Runoff conditions reaching the identified downhill design points are reduced compared to current site conditions.

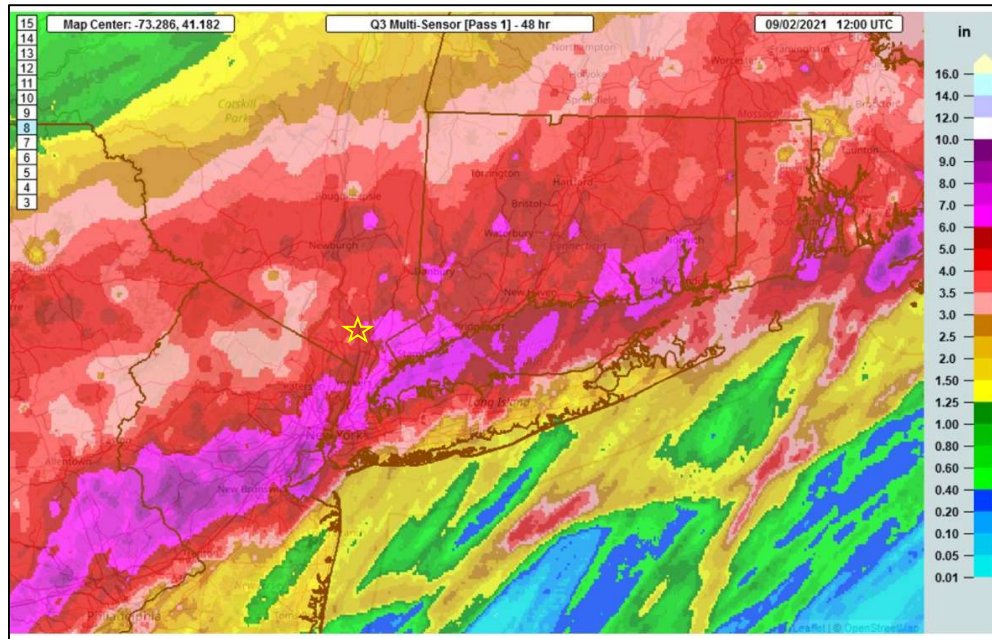


FIGURE – Total Storm Rainfall – Hurricane Ida

COMPARISON OF PEAK RUNOFF RATES (C.F.S.)		
Drainage Area	Runoff Condition	Storm Event (Year)
		"Ida"
DA 1 North Stream Basin	EDA-1	10.81
	PDA-1	5.65
	Change (%)	-47.73%
DA 2 Pocantico Lake	EDA-2	51.13
	PDA-2*	43.87
	Change (%)	-14.20%
DA 3 On-Site Wetlands	EDA-3	45.6
	PDA-3	42.24
	Change (%)	-7.37%
COMBINED	Existing	104.02
	Proposed	76.99
	Change (%)	-25.99%

COMPARISON OF RUNOFF VOLUME (Cu. Ft.)		
Drainage Area	Runoff Condition	Storm Event (Year)
		"Ida"
DA 1 North Stream Basin	EDA-1	39,450
	PDA-1	20,076
	Change (%)	-49.11%
DA 2 Pocantico Lake	EDA-2	215,550
	PDA-2*	143,862
	Change (%)	-33.26%
DA 3 On-Site Wetlands	EDA-3	211,432
	PDA-3	195,540
	Change (%)	-7.52%
COMBINED	Existing	466,431
	Proposed	359,478
	Change (%)	-22.93%

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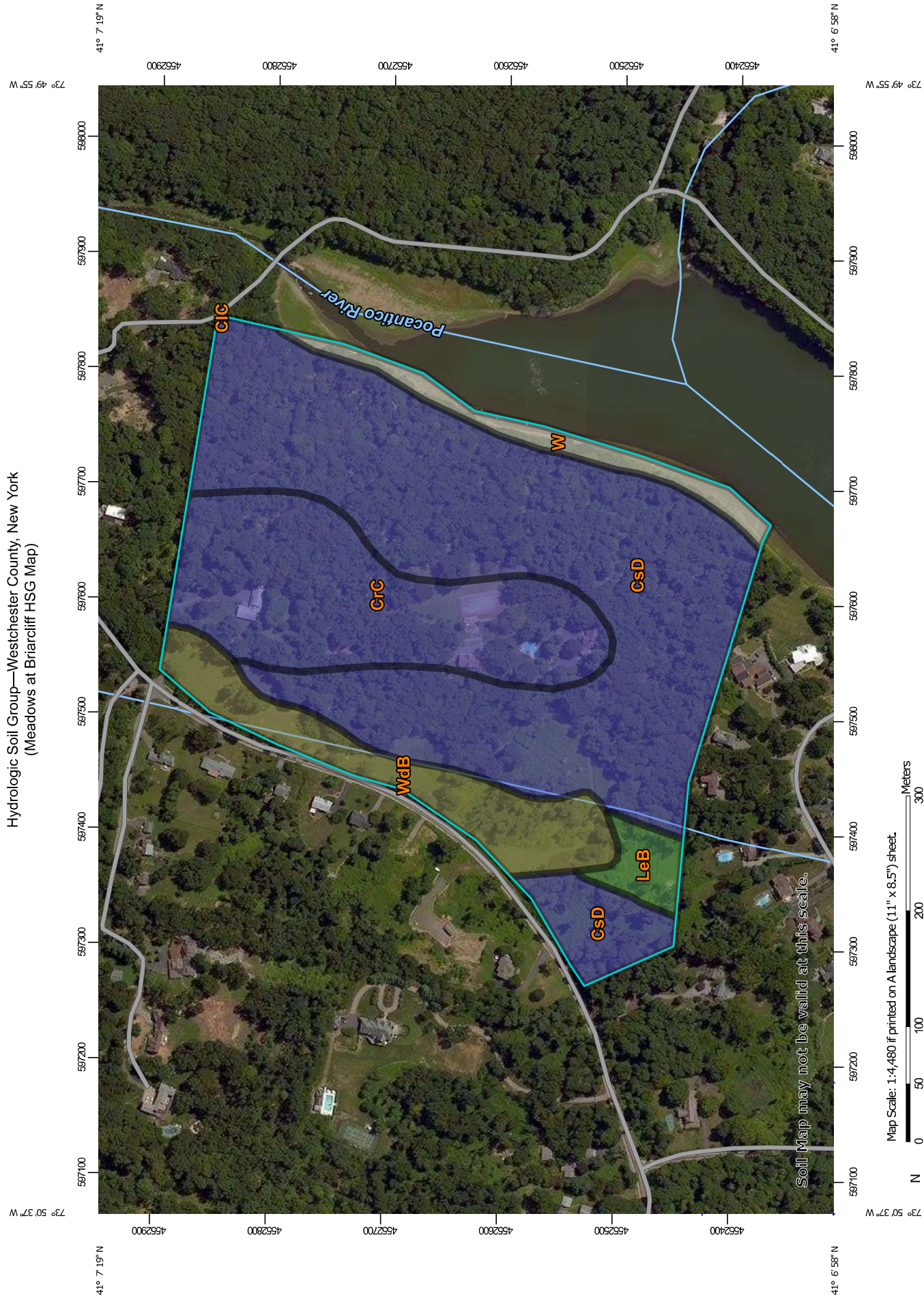
2. SUBDIVISION DRAINAGE AREA MAPS

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3. USDA SOIL MAP

Hydrologic Soil Group—Westchester County, New York (Meadows at Briarcliff HSG Map)



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

C

C/D

D

Not rated or not available

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Westchester County, New York

Survey Area Data: Version 16, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 21, 2014—Aug 27, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CIC	Charlton fine sandy loam, 8 to 15 percent slopes, very stony	B	0.0	0.0%
CrC	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	B	10.0	22.5%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	B	26.7	60.2%
LeB	Leicester loam, 2 to 8 percent slopes, very stony	A/D	1.1	2.4%
W	Water		1.8	4.1%
WdB	Woodbridge loam, 3 to 8 percent slopes	C/D	4.7	10.7%
Totals for Area of Interest			44.3	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

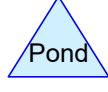
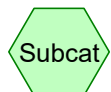
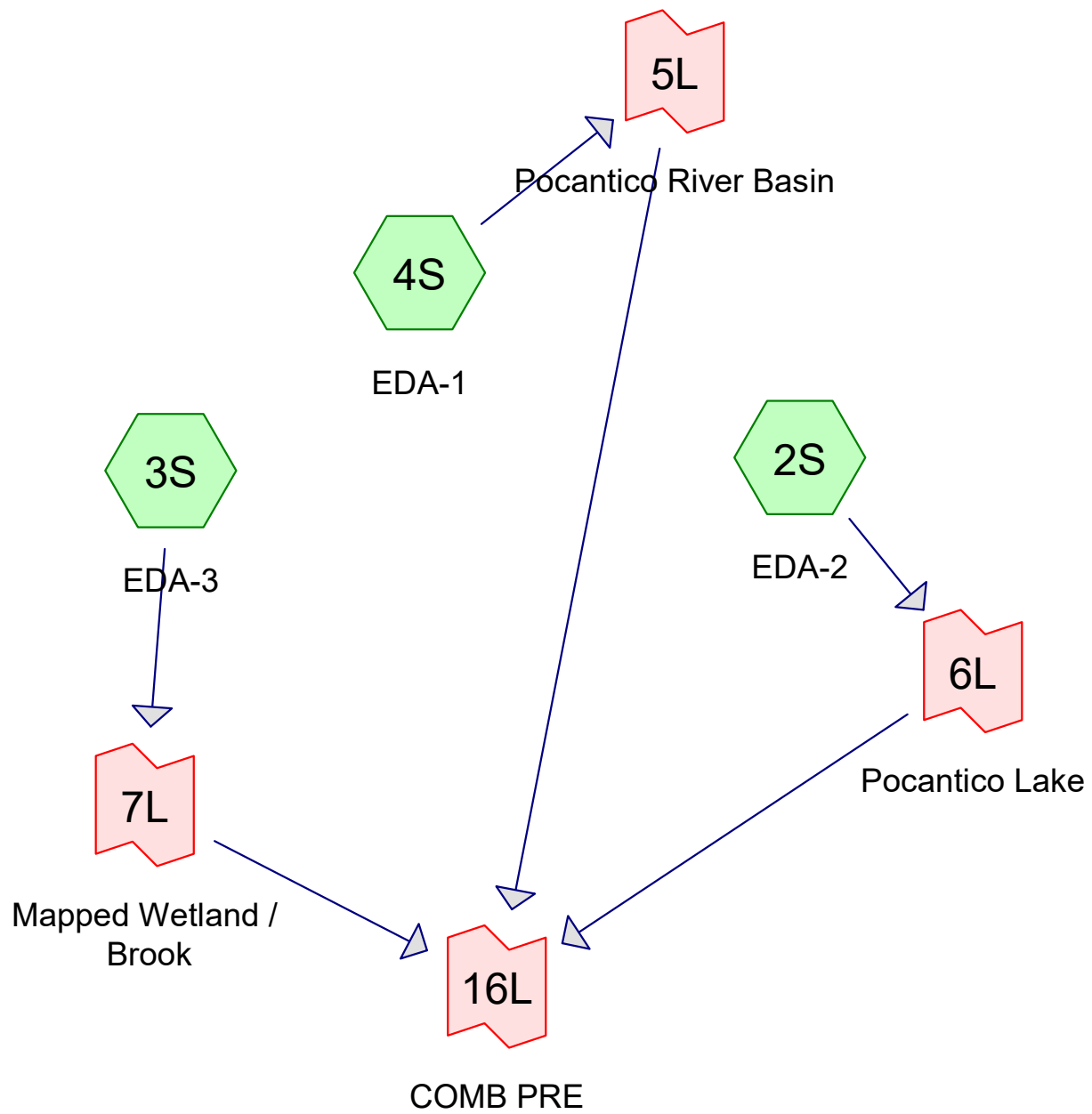
Component Percent Cutoff: None Specified

Tie-break Rule: Higher

WASP
ENGINEERING GROUP, PLLC

44 Flagler Road
Poughquag, New York 12570
Phone: 914 384 9655

4. SUBDIVISION HYDROCAD REPORTS



Routing Diagram for Meadows Briarcliff_CONV_01032022
Prepared by Wasp Engineering Group, PLLC, Printed 1/13/2022
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Meadows Briarcliff_CONV_01032022*Type III 24-hr 1 Year Rainfall=2.80"*

Prepared by Wasp Engineering Group, PLLC

Printed 1/13/2022

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Page 2

Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2S: EDA-2

Runoff Area=872,905 sf 4.09% Impervious Runoff Depth=0.26"
Flow Length=1,000' Tc=22.8 min CN=60 Runoff=2.05 cfs 19,239 cf

Subcatchment 3S: EDA-3

Runoff Area=595,781 sf 30.45% Impervious Runoff Depth=0.69"
Flow Length=1,190' Tc=30.5 min CN=72 Runoff=5.50 cfs 34,347 cf

Subcatchment 4S: EDA-1

Runoff Area=135,489 sf 12.59% Impervious Runoff Depth=0.42"
Flow Length=460' Tc=16.5 min CN=65 Runoff=0.75 cfs 4,716 cf

Link 5L: Pocantico River Basin

Inflow=0.75 cfs 4,716 cf
Primary=0.75 cfs 4,716 cf

Link 6L: Pocantico Lake

Inflow=2.05 cfs 19,239 cf
Primary=2.05 cfs 19,239 cf

Link 7L: Mapped Wetland / Brook

Inflow=5.50 cfs 34,347 cf
Primary=5.50 cfs 34,347 cf

Link 16L: COMB PRE

Inflow=8.15 cfs 58,303 cf
Primary=8.15 cfs 58,303 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 58,303 cf Average Runoff Depth = 0.44"
85.40% Pervious = 1,370,019 sf 14.60% Impervious = 234,156 sf

Summary for Subcatchment 2S: EDA-2

Runoff = 2.05 cfs @ 12.54 hrs, Volume= 19,239 cf, Depth= 0.26"

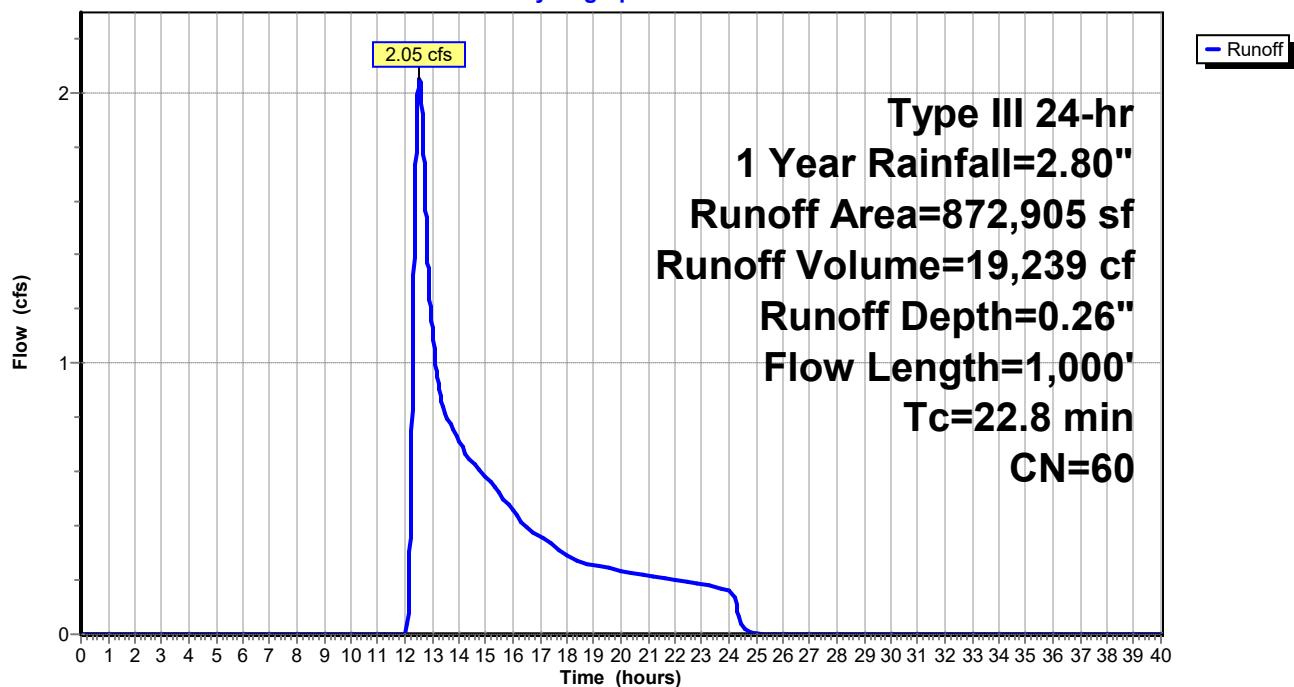
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

	Area (sf)	CN	Description
*	35,674	98	Ex. IMP Pavement, Rooftops
	74,836	61	>75% Grass cover, Good, HSG B
	762,395	58	Woods/grass comb., Good, HSG B
	872,905	60	Weighted Average
	837,231		95.91% Pervious Area
	35,674		4.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0520	0.12		Sheet Flow, Shallow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
4.2	280	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
0.1	40	0.0670	5.25		Shallow Concentrated Flow, Driveway Crossing Paved Kv= 20.3 fps
4.3	580	0.2030	2.25		Shallow Concentrated Flow, Shallow Conc. Woodland Woodland Kv= 5.0 fps
22.8	1,000	Total			

Subcatchment 2S: EDA-2

Hydrograph



Summary for Subcatchment 3S: EDA-3

Runoff = 5.50 cfs @ 12.50 hrs, Volume= 34,347 cf, Depth= 0.69"

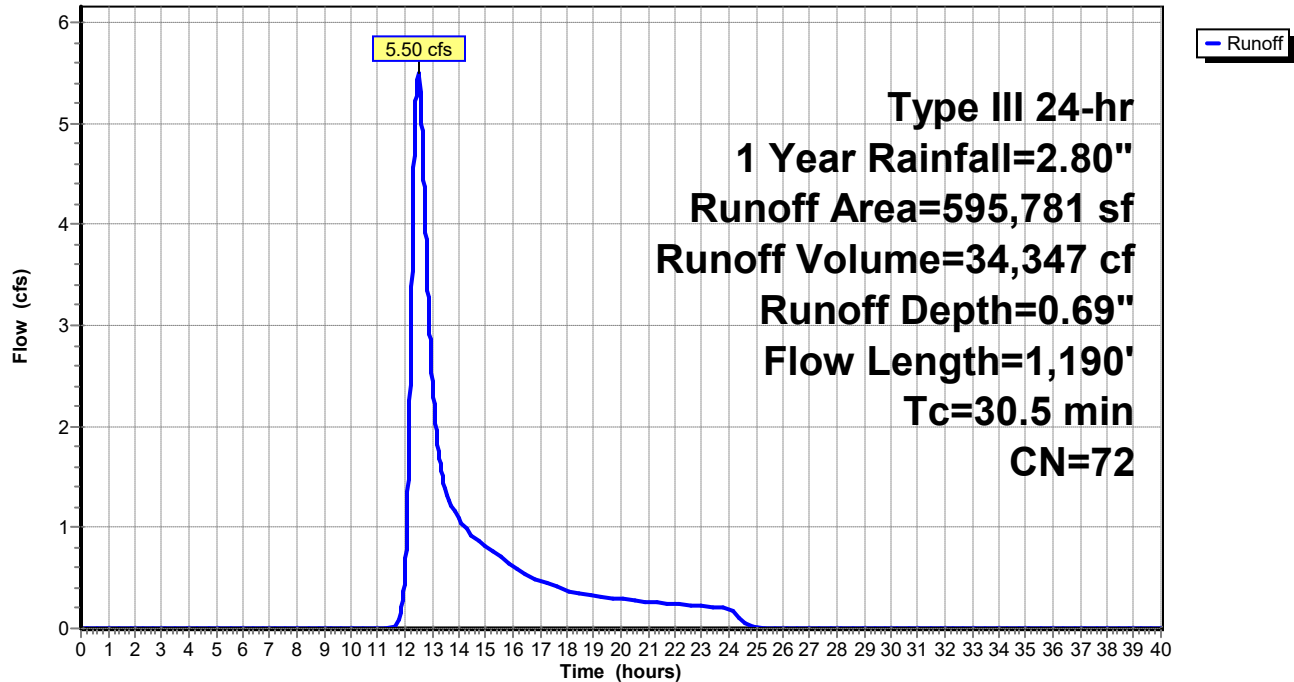
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

	Area (sf)	CN	Description
*	7,168	98	Ex. IMP Pavement, Rooftops
	24,964	61	>75% Grass cover, Good, HSG B
	65,870	74	>75% Grass cover, Good, HSG C
	260,380	58	Woods/grass comb., Good, HSG B
	42,355	72	Woods/grass comb., Good, HSG C
	20,791	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	595,781	72	Weighted Average
	414,360		69.55% Pervious Area
	181,421		30.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
1.7	200	0.1600	2.00		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.9	210	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.2	200	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.1	400	0.1095	0.83		Shallow Concentrated Flow, Shallow Conc. Wetland Forest w/Heavy Litter Kv= 2.5 fps
0.2	80	0.0875	5.87	46.95	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.5	1,190	Total			

Subcatchment 3S: EDA-3

Hydrograph



Summary for Subcatchment 4S: EDA-1

Runoff = 0.75 cfs @ 12.31 hrs, Volume= 4,716 cf, Depth= 0.42"

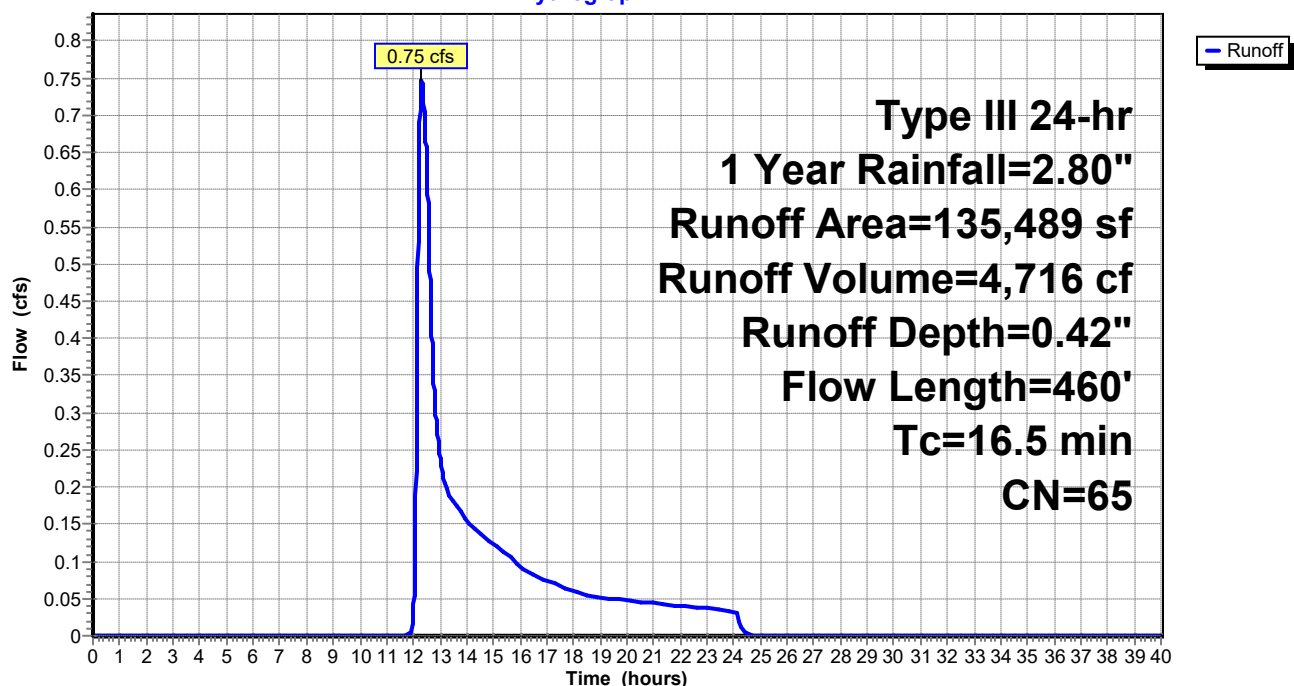
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Type III 24-hr 1 Year Rainfall=2.80"

Area (sf)	CN	Description
* 17,061	98	Ex. IMP Pavement, Rooftops
40,462	61	>75% Grass cover, Good, HSG B
8,644	72	Woods/grass comb., Good, HSG C
69,322	58	Woods/grass comb., Good, HSG B
135,489	65	Weighted Average
118,428		87.41% Pervious Area
17,061		12.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0640	0.13		Sheet Flow, Woods Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
3.0	230	0.0665	1.29		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
0.4	130	0.0608	5.01		Shallow Concentrated Flow, Driveway Flow
					Paved Kv= 20.3 fps
16.5	460	Total			

Subcatchment 4S: EDA-1

Hydrograph



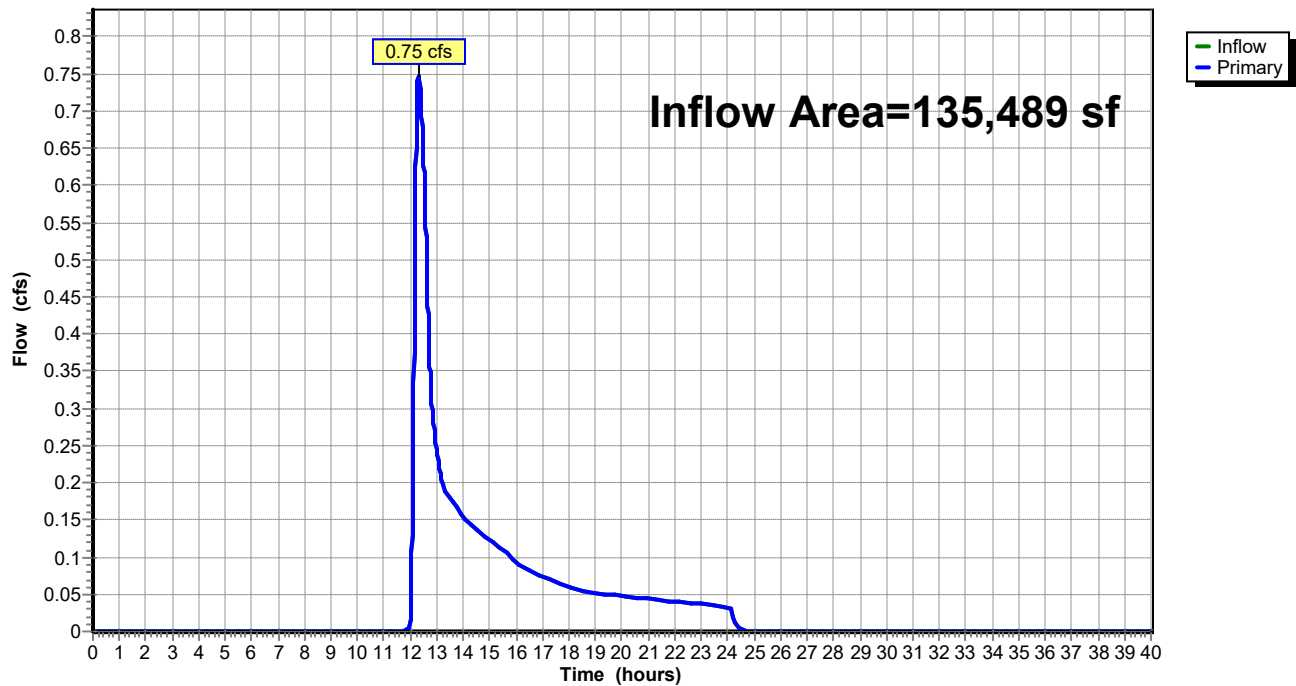
Summary for Link 5L: Pocantico River Basin

Inflow Area = 135,489 sf, 12.59% Impervious, Inflow Depth = 0.42" for 1 Year event
 Inflow = 0.75 cfs @ 12.31 hrs, Volume= 4,716 cf
 Primary = 0.75 cfs @ 12.31 hrs, Volume= 4,716 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 5L: Pocantico River Basin

Hydrograph



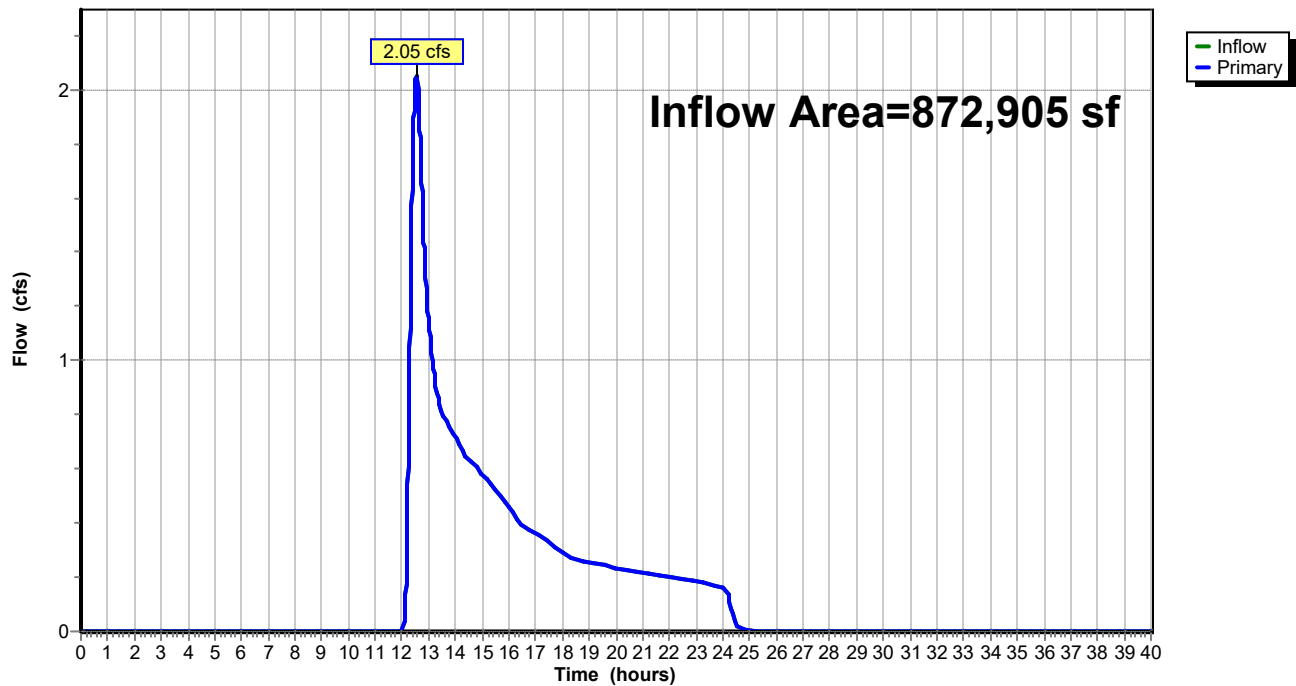
Summary for Link 6L: Pocantico Lake

Inflow Area = 872,905 sf, 4.09% Impervious, Inflow Depth = 0.26" for 1 Year event
 Inflow = 2.05 cfs @ 12.54 hrs, Volume= 19,239 cf
 Primary = 2.05 cfs @ 12.54 hrs, Volume= 19,239 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 6L: Pocantico Lake

Hydrograph

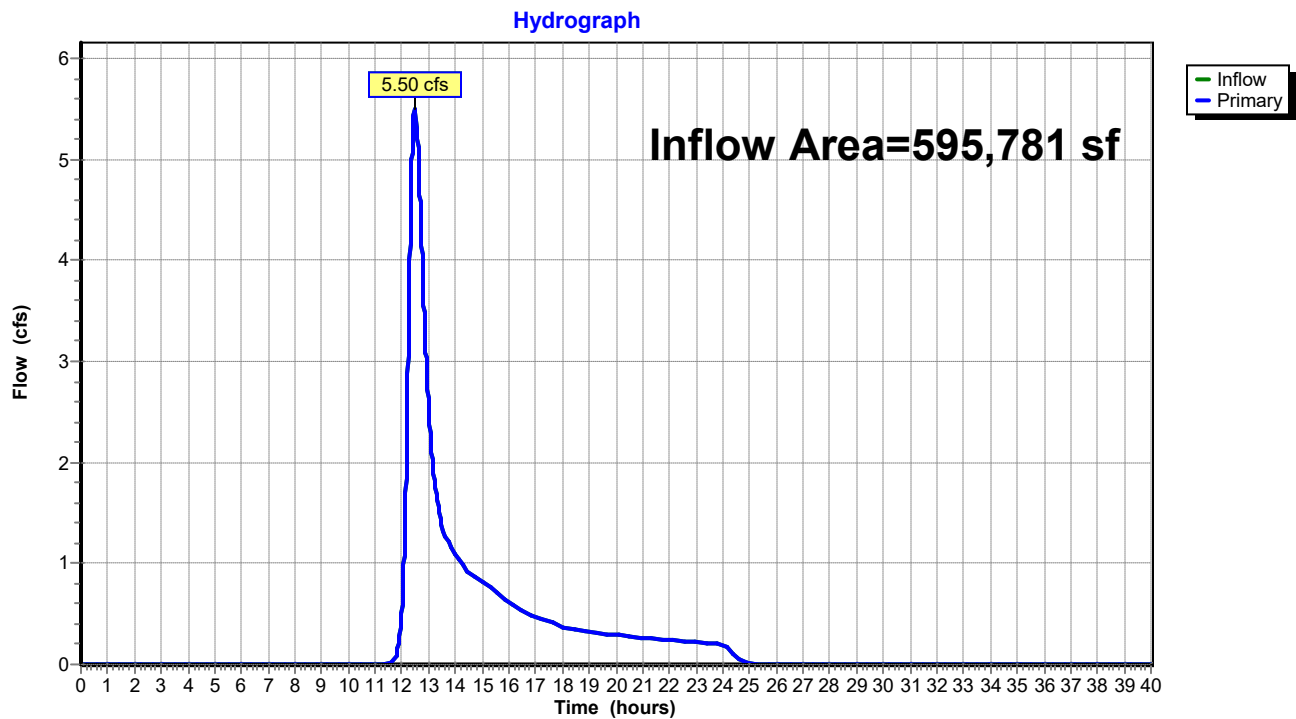


Summary for Link 7L: Mapped Wetland / Brook

Inflow Area = 595,781 sf, 30.45% Impervious, Inflow Depth = 0.69" for 1 Year event
 Inflow = 5.50 cfs @ 12.50 hrs, Volume= 34,347 cf
 Primary = 5.50 cfs @ 12.50 hrs, Volume= 34,347 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 7L: Mapped Wetland / Brook



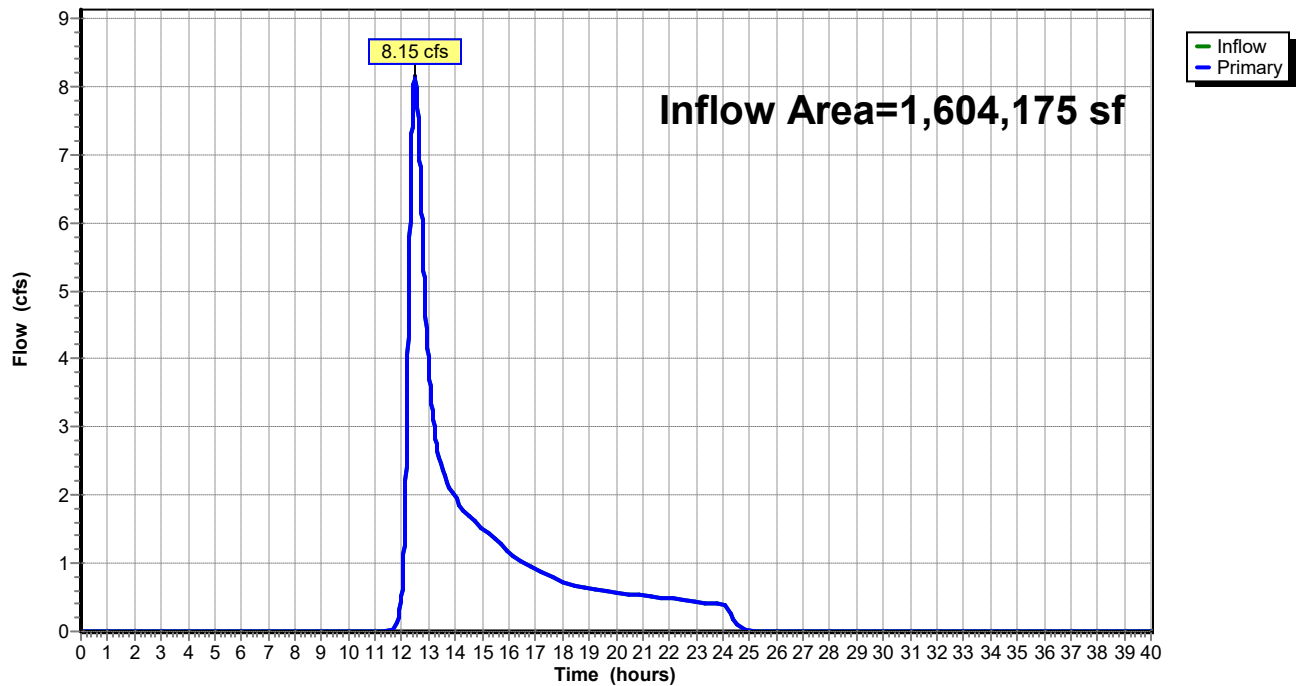
Summary for Link 16L: COMB PRE

Inflow Area = 1,604,175 sf, 14.60% Impervious, Inflow Depth = 0.44" for 1 Year event
 Inflow = 8.15 cfs @ 12.50 hrs, Volume= 58,303 cf
 Primary = 8.15 cfs @ 12.50 hrs, Volume= 58,303 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 16L: COMB PRE

Hydrograph



Meadows Briarcliff_CONV_01032022*Type III 24-hr 2 Year Rainfall=3.50"*

Prepared by Wasp Engineering Group, PLLC

Printed 1/13/2022

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2S: EDA-2

Runoff Area=872,905 sf 4.09% Impervious Runoff Depth=0.53"
Flow Length=1,000' Tc=22.8 min CN=60 Runoff=5.60 cfs 38,659 cf

Subcatchment 3S: EDA-3

Runoff Area=595,781 sf 30.45% Impervious Runoff Depth=1.12"
Flow Length=1,190' Tc=30.5 min CN=72 Runoff=9.50 cfs 55,652 cf

Subcatchment 4S: EDA-1

Runoff Area=135,489 sf 12.59% Impervious Runoff Depth=0.75"
Flow Length=460' Tc=16.5 min CN=65 Runoff=1.65 cfs 8,491 cf

Link 5L: Pocantico River Basin

Inflow=1.65 cfs 8,491 cf
Primary=1.65 cfs 8,491 cf

Link 6L: Pocantico Lake

Inflow=5.60 cfs 38,659 cf
Primary=5.60 cfs 38,659 cf

Link 7L: Mapped Wetland / Brook

Inflow=9.50 cfs 55,652 cf
Primary=9.50 cfs 55,652 cf

Link 16L: COMB PRE

Inflow=16.43 cfs 102,801 cf
Primary=16.43 cfs 102,801 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 102,801 cf Average Runoff Depth = 0.77"
85.40% Pervious = 1,370,019 sf 14.60% Impervious = 234,156 sf

Summary for Subcatchment 2S: EDA-2

Runoff = 5.60 cfs @ 12.44 hrs, Volume= 38,659 cf, Depth= 0.53"

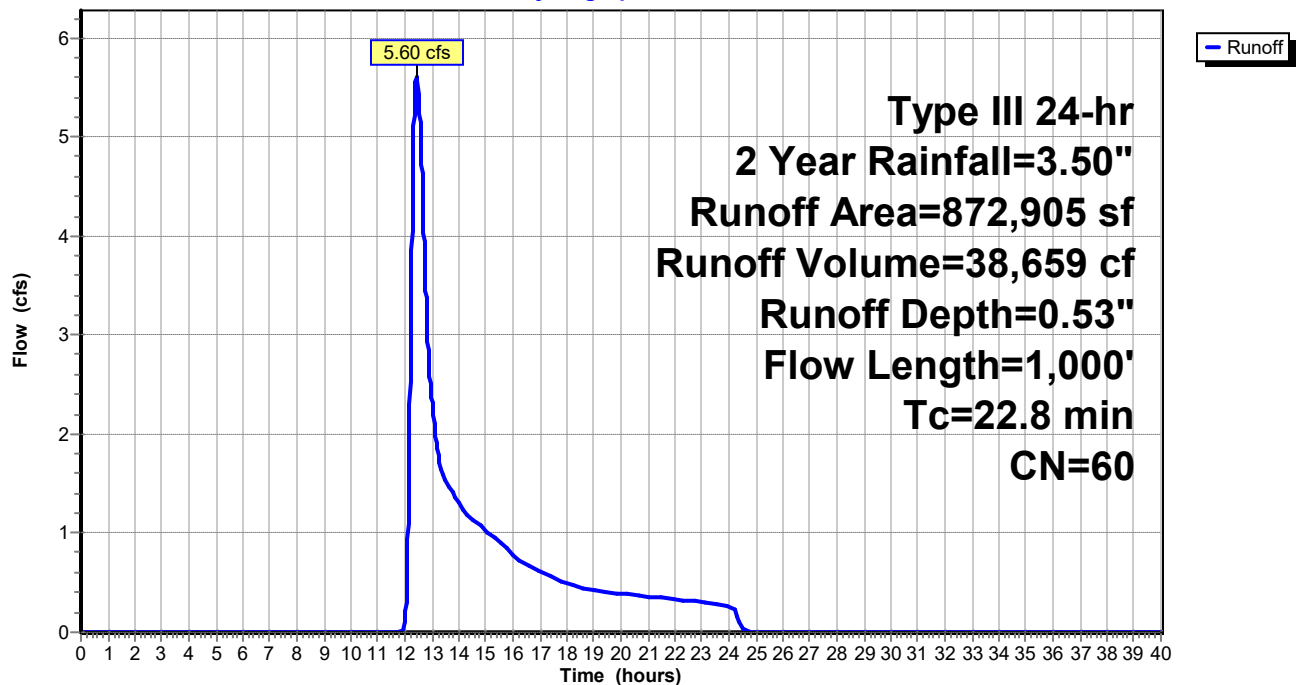
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Year Rainfall=3.50"

	Area (sf)	CN	Description
*	35,674	98	Ex. IMP Pavement, Rooftops
	74,836	61	>75% Grass cover, Good, HSG B
	762,395	58	Woods/grass comb., Good, HSG B
	872,905	60	Weighted Average
	837,231		95.91% Pervious Area
	35,674		4.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0520	0.12		Sheet Flow, Shallow Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
4.2	280	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods
					Woodland Kv= 5.0 fps
0.1	40	0.0670	5.25		Shallow Concentrated Flow, Driveway Crossing
					Paved Kv= 20.3 fps
4.3	580	0.2030	2.25		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
22.8	1,000	Total			

Subcatchment 2S: EDA-2

Hydrograph



Summary for Subcatchment 3S: EDA-3

Runoff = 9.50 cfs @ 12.47 hrs, Volume= 55,652 cf, Depth= 1.12"

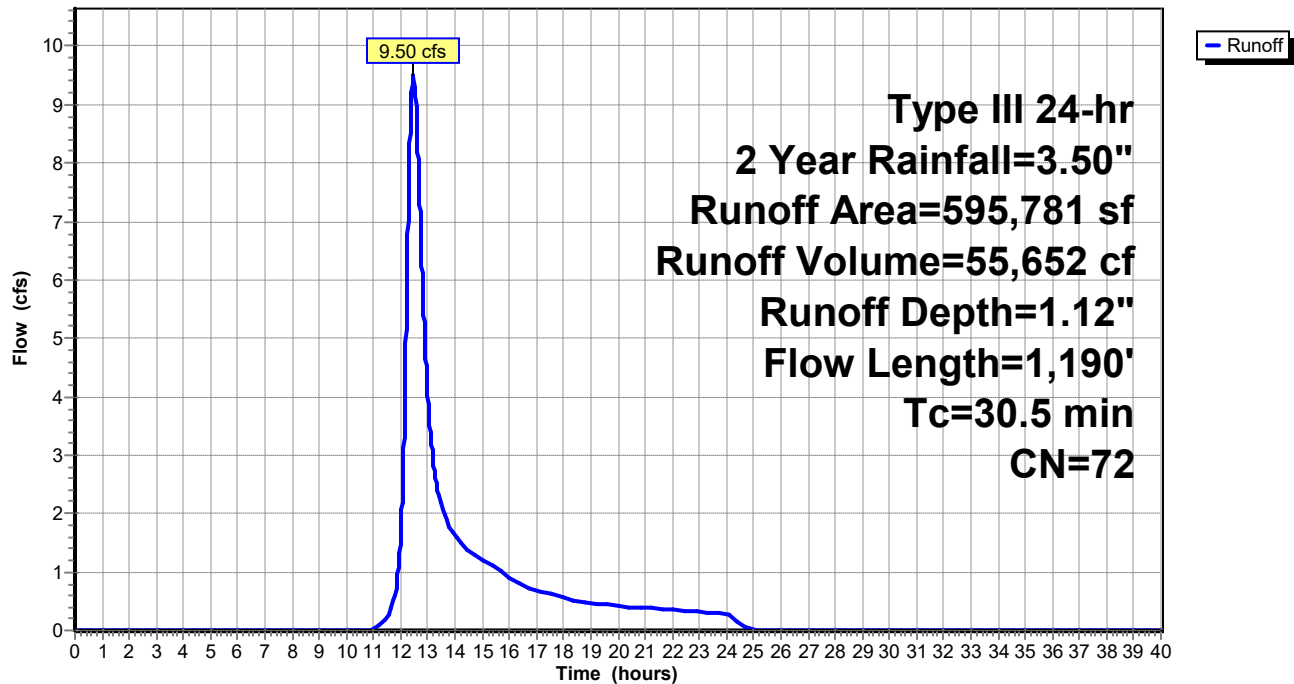
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 Year Rainfall=3.50"

	Area (sf)	CN	Description
*	7,168	98	Ex. IMP Pavement, Rooftops
	24,964	61	>75% Grass cover, Good, HSG B
	65,870	74	>75% Grass cover, Good, HSG C
	260,380	58	Woods/grass comb., Good, HSG B
	42,355	72	Woods/grass comb., Good, HSG C
	20,791	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	595,781	72	Weighted Average
	414,360		69.55% Pervious Area
	181,421		30.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
1.7	200	0.1600	2.00		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.9	210	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.2	200	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.1	400	0.1095	0.83		Shallow Concentrated Flow, Shallow Conc. Wetland Forest w/Heavy Litter Kv= 2.5 fps
0.2	80	0.0875	5.87	46.95	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.5	1,190	Total			

Subcatchment 3S: EDA-3

Hydrograph



Summary for Subcatchment 4S: EDA-1

Runoff = 1.65 cfs @ 12.27 hrs, Volume= 8,491 cf, Depth= 0.75"

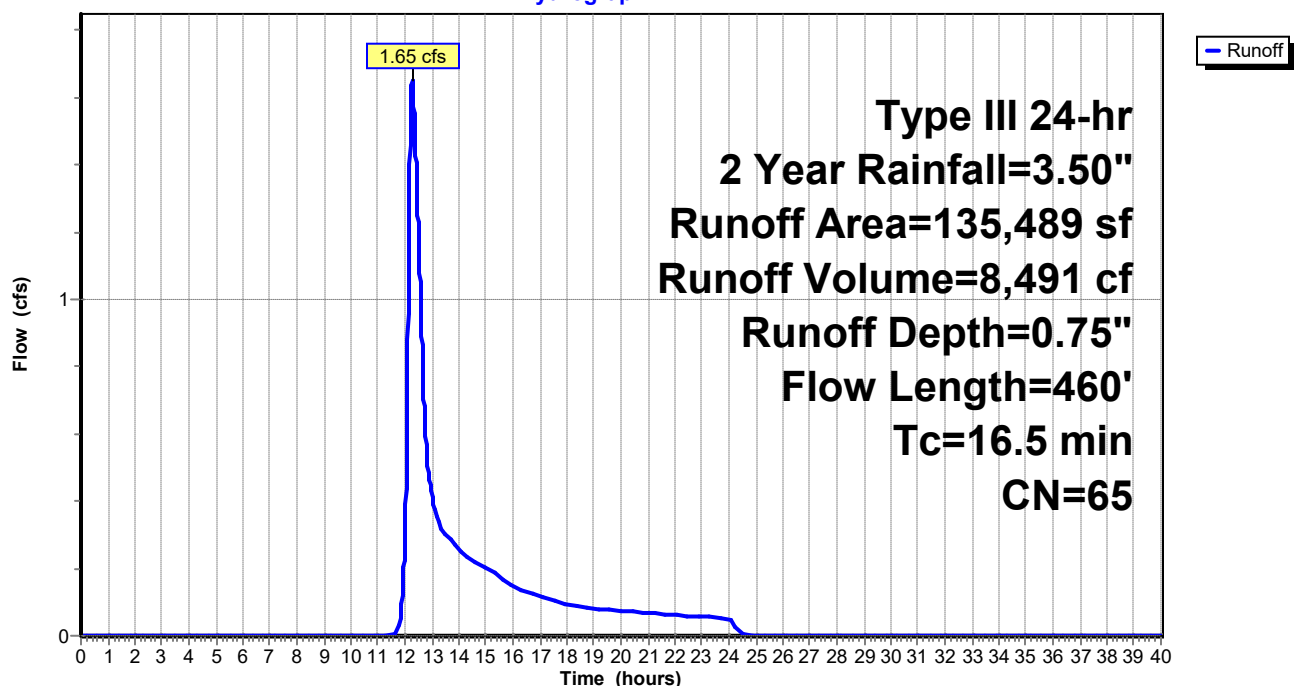
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Type III 24-hr 2 Year Rainfall=3.50"

	Area (sf)	CN	Description
*	17,061	98	Ex. IMP Pavement, Rooftops
	40,462	61	>75% Grass cover, Good, HSG B
	8,644	72	Woods/grass comb., Good, HSG C
	69,322	58	Woods/grass comb., Good, HSG B
	135,489	65	Weighted Average
	118,428		87.41% Pervious Area
	17,061		12.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0640	0.13		Sheet Flow, Woods Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
3.0	230	0.0665	1.29		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
0.4	130	0.0608	5.01		Shallow Concentrated Flow, Driveway Flow
					Paved Kv= 20.3 fps
16.5	460	Total			

Subcatchment 4S: EDA-1

Hydrograph



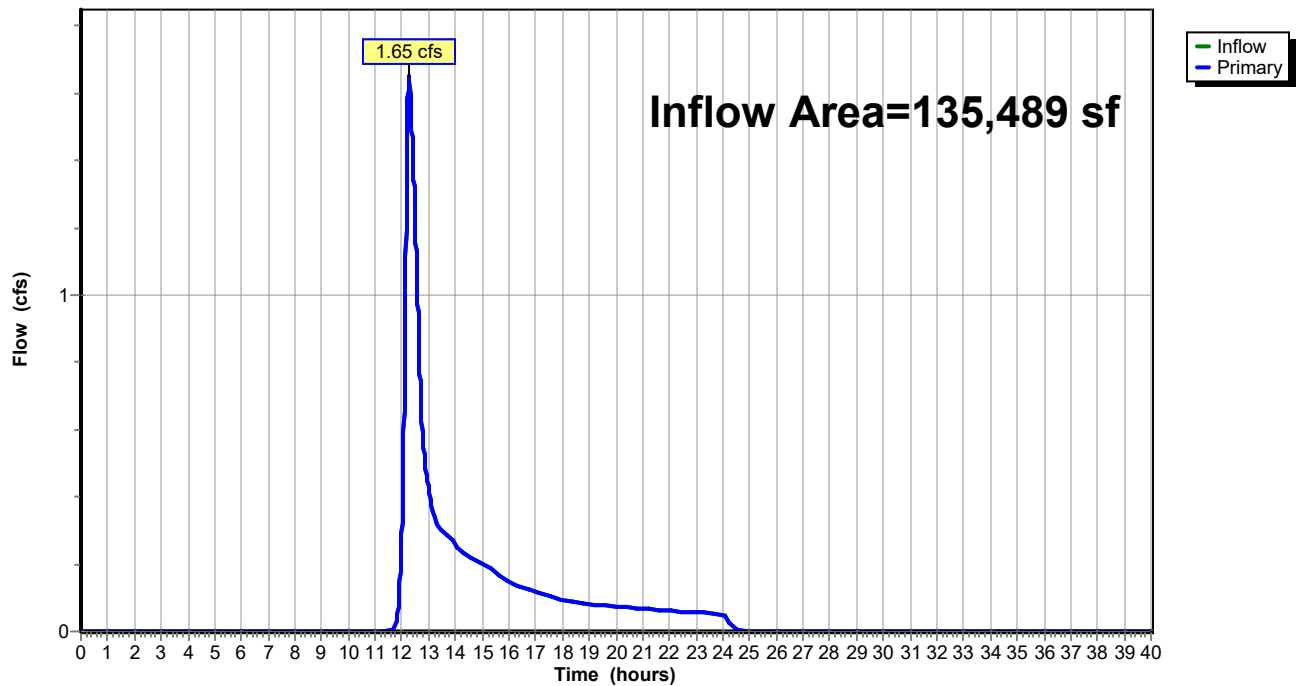
Summary for Link 5L: Pocantico River Basin

Inflow Area = 135,489 sf, 12.59% Impervious, Inflow Depth = 0.75" for 2 Year event
 Inflow = 1.65 cfs @ 12.27 hrs, Volume= 8,491 cf
 Primary = 1.65 cfs @ 12.27 hrs, Volume= 8,491 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 5L: Pocantico River Basin

Hydrograph



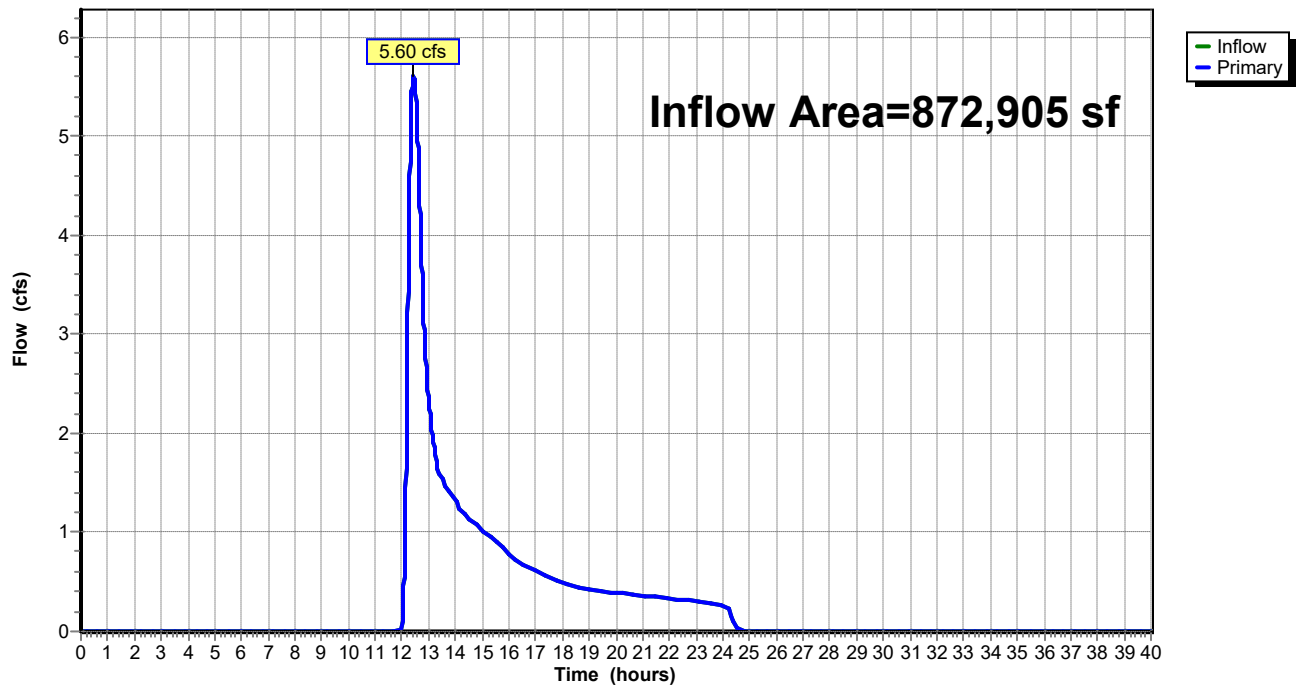
Summary for Link 6L: Pocantico Lake

Inflow Area = 872,905 sf, 4.09% Impervious, Inflow Depth = 0.53" for 2 Year event
 Inflow = 5.60 cfs @ 12.44 hrs, Volume= 38,659 cf
 Primary = 5.60 cfs @ 12.44 hrs, Volume= 38,659 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 6L: Pocantico Lake

Hydrograph

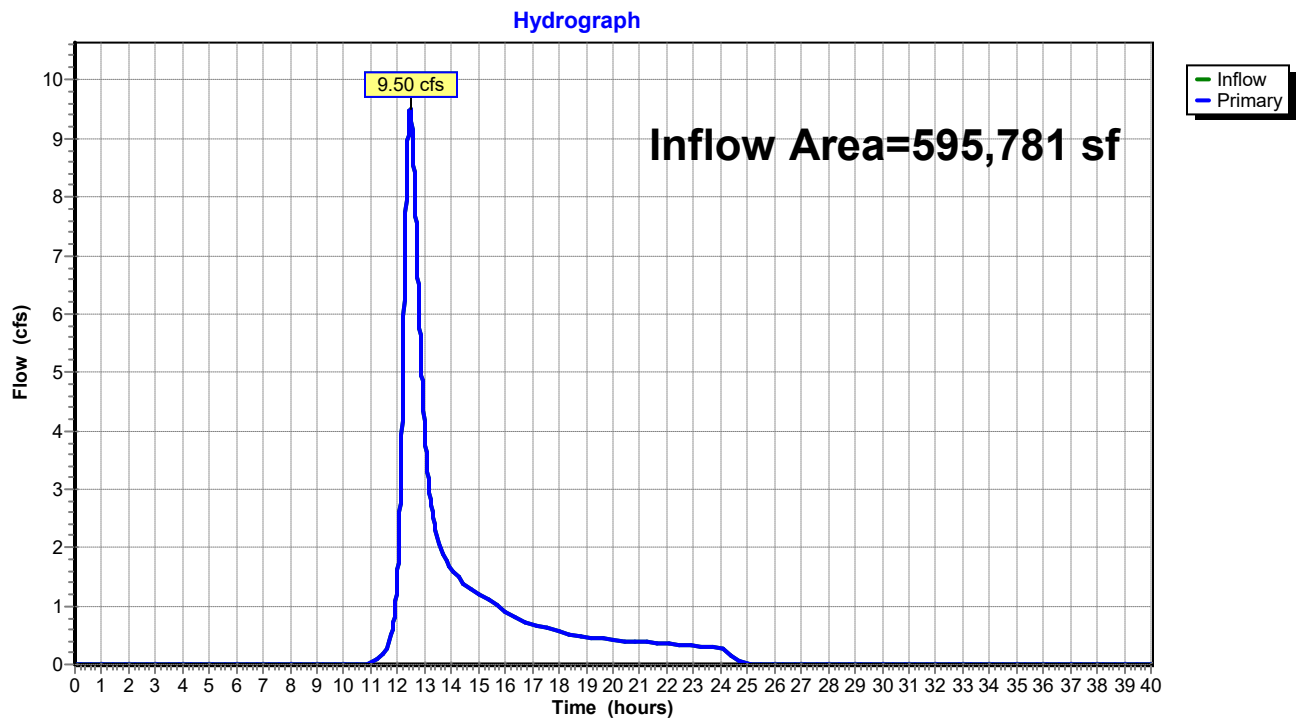


Summary for Link 7L: Mapped Wetland / Brook

Inflow Area = 595,781 sf, 30.45% Impervious, Inflow Depth = 1.12" for 2 Year event
 Inflow = 9.50 cfs @ 12.47 hrs, Volume= 55,652 cf
 Primary = 9.50 cfs @ 12.47 hrs, Volume= 55,652 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 7L: Mapped Wetland / Brook



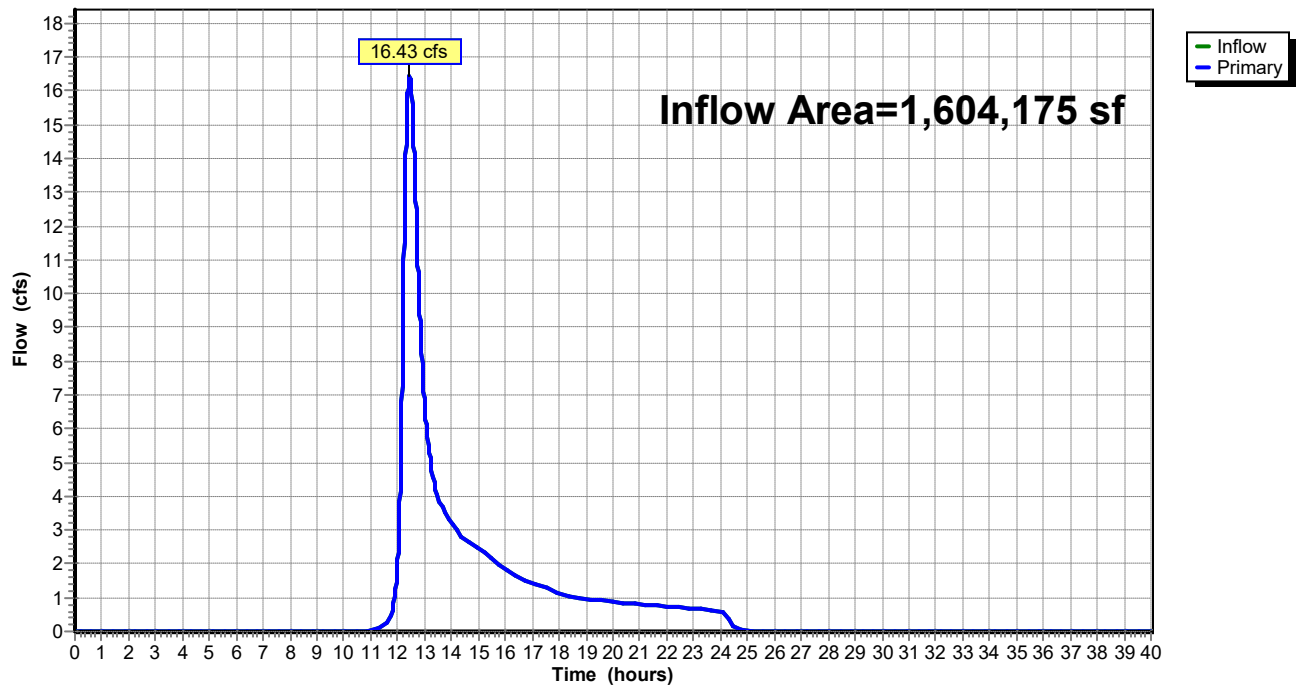
Summary for Link 16L: COMB PRE

Inflow Area = 1,604,175 sf, 14.60% Impervious, Inflow Depth = 0.77" for 2 Year event
 Inflow = 16.43 cfs @ 12.44 hrs, Volume= 102,801 cf
 Primary = 16.43 cfs @ 12.44 hrs, Volume= 102,801 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 16L: COMB PRE

Hydrograph



Meadows Briarcliff_CONV_01032022*Type III 24-hr 5 Year Rainfall=4.50"*

Prepared by Wasp Engineering Group, PLLC

Printed 1/13/2022

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2S: EDA-2

Runoff Area=872,905 sf 4.09% Impervious Runoff Depth=1.02"
Flow Length=1,000' Tc=22.8 min CN=60 Runoff=13.00 cfs 74,180 cf

Subcatchment 3S: EDA-3

Runoff Area=595,781 sf 30.45% Impervious Runoff Depth=1.82"
Flow Length=1,190' Tc=30.5 min CN=72 Runoff=16.05 cfs 90,378 cf

Subcatchment 4S: EDA-1

Runoff Area=135,489 sf 12.59% Impervious Runoff Depth=1.33"
Flow Length=460' Tc=16.5 min CN=65 Runoff=3.25 cfs 15,021 cf

Link 5L: Pocantico River Basin

Inflow=3.25 cfs 15,021 cf
Primary=3.25 cfs 15,021 cf

Link 6L: Pocantico Lake

Inflow=13.00 cfs 74,180 cf
Primary=13.00 cfs 74,180 cf

Link 7L: Mapped Wetland / Brook

Inflow=16.05 cfs 90,378 cf
Primary=16.05 cfs 90,378 cf

Link 16L: COMB PRE

Inflow=31.32 cfs 179,579 cf
Primary=31.32 cfs 179,579 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 179,579 cf Average Runoff Depth = 1.34"
85.40% Pervious = 1,370,019 sf 14.60% Impervious = 234,156 sf

Summary for Subcatchment 2S: EDA-2

Runoff = 13.00 cfs @ 12.38 hrs, Volume= 74,180 cf, Depth= 1.02"

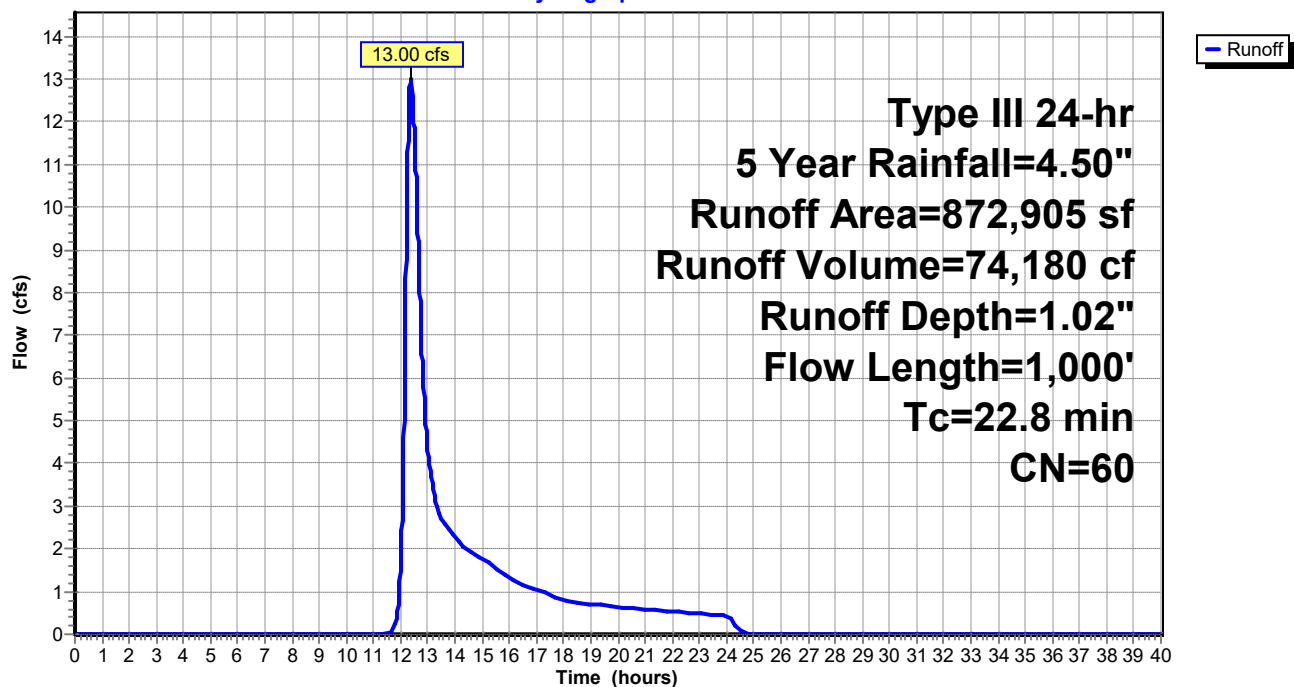
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 5 Year Rainfall=4.50"

	Area (sf)	CN	Description
*	35,674	98	Ex. IMP Pavement, Rooftops
	74,836	61	>75% Grass cover, Good, HSG B
	762,395	58	Woods/grass comb., Good, HSG B
	872,905	60	Weighted Average
	837,231		95.91% Pervious Area
	35,674		4.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0520	0.12		Sheet Flow, Shallow Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
4.2	280	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods
					Woodland Kv= 5.0 fps
0.1	40	0.0670	5.25		Shallow Concentrated Flow, Driveway Crossing
					Paved Kv= 20.3 fps
4.3	580	0.2030	2.25		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
22.8	1,000	Total			

Subcatchment 2S: EDA-2

Hydrograph



Summary for Subcatchment 3S: EDA-3

Runoff = 16.05 cfs @ 12.44 hrs, Volume= 90,378 cf, Depth= 1.82"

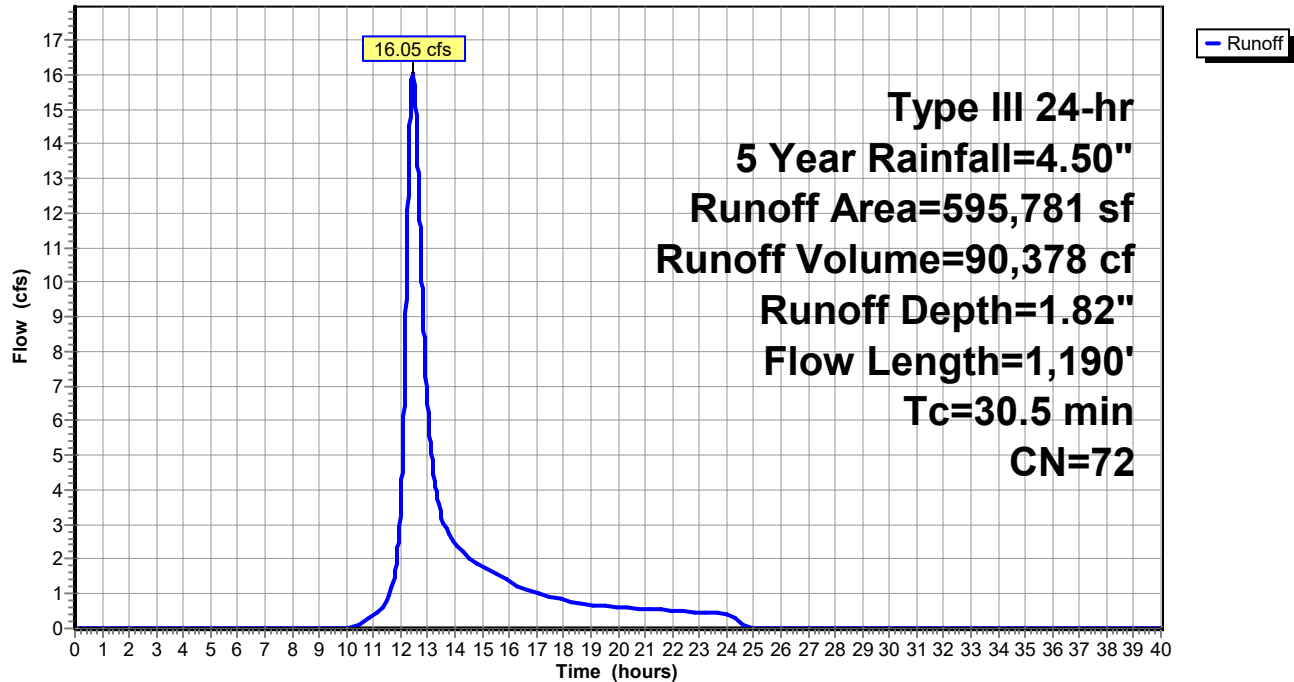
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 5 Year Rainfall=4.50"

	Area (sf)	CN	Description
*	7,168	98	Ex. IMP Pavement, Rooftops
	24,964	61	>75% Grass cover, Good, HSG B
	65,870	74	>75% Grass cover, Good, HSG C
	260,380	58	Woods/grass comb., Good, HSG B
	42,355	72	Woods/grass comb., Good, HSG C
	20,791	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	595,781	72	Weighted Average
	414,360		69.55% Pervious Area
	181,421		30.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
1.7	200	0.1600	2.00		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.9	210	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.2	200	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.1	400	0.1095	0.83		Shallow Concentrated Flow, Shallow Conc. Wetland Forest w/Heavy Litter Kv= 2.5 fps
0.2	80	0.0875	5.87	46.95	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.5	1,190	Total			

Subcatchment 3S: EDA-3

Hydrograph



Summary for Subcatchment 4S: EDA-1

Runoff = 3.25 cfs @ 12.25 hrs, Volume= 15,021 cf, Depth= 1.33"

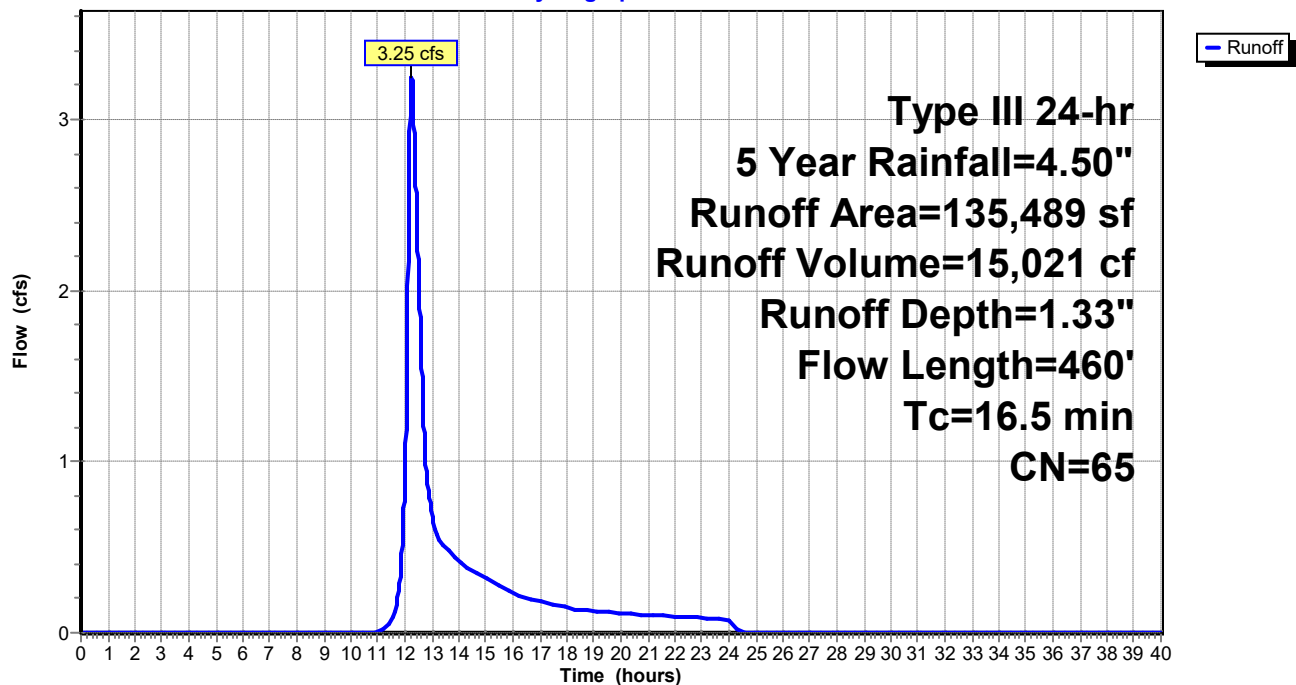
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 5 Year Rainfall=4.50"

	Area (sf)	CN	Description
*	17,061	98	Ex. IMP Pavement, Rooftops
	40,462	61	>75% Grass cover, Good, HSG B
	8,644	72	Woods/grass comb., Good, HSG C
	69,322	58	Woods/grass comb., Good, HSG B
	135,489	65	Weighted Average
	118,428		87.41% Pervious Area
	17,061		12.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0640	0.13		Sheet Flow, Woods Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
3.0	230	0.0665	1.29		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
0.4	130	0.0608	5.01		Shallow Concentrated Flow, Driveway Flow
					Paved Kv= 20.3 fps
16.5	460	Total			

Subcatchment 4S: EDA-1

Hydrograph



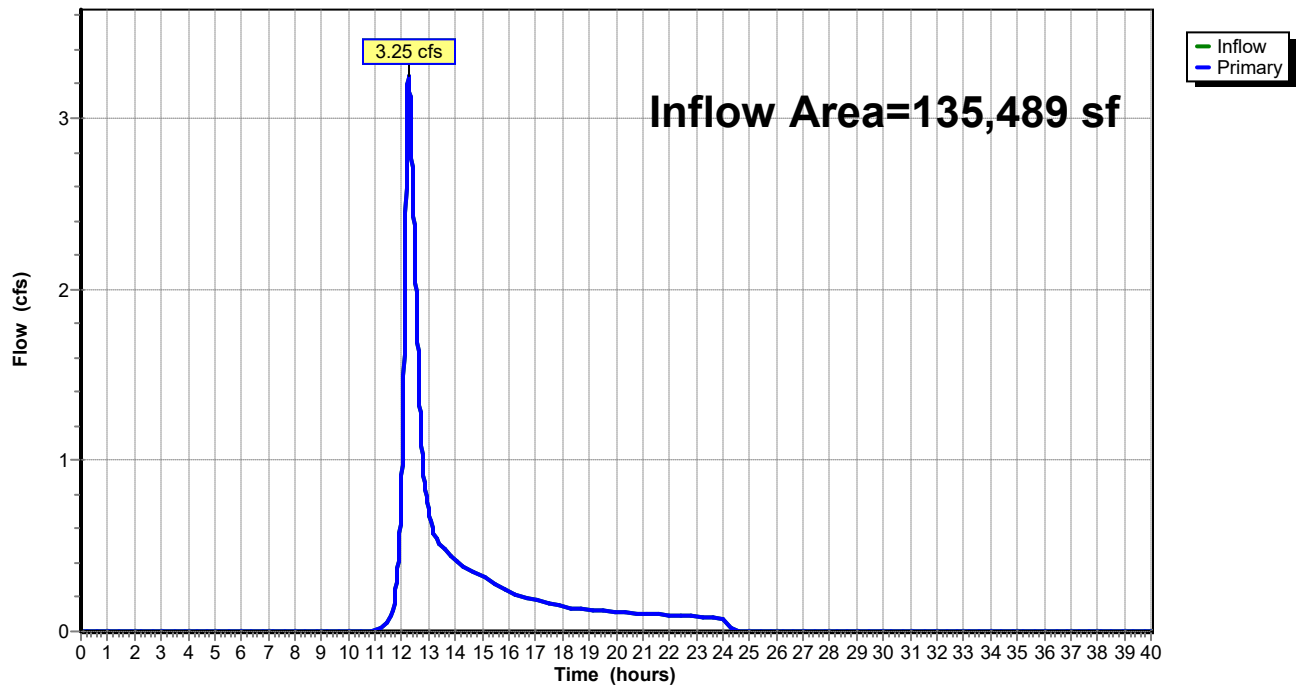
Summary for Link 5L: Pocantico River Basin

Inflow Area = 135,489 sf, 12.59% Impervious, Inflow Depth = 1.33" for 5 Year event
 Inflow = 3.25 cfs @ 12.25 hrs, Volume= 15,021 cf
 Primary = 3.25 cfs @ 12.25 hrs, Volume= 15,021 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 5L: Pocantico River Basin

Hydrograph



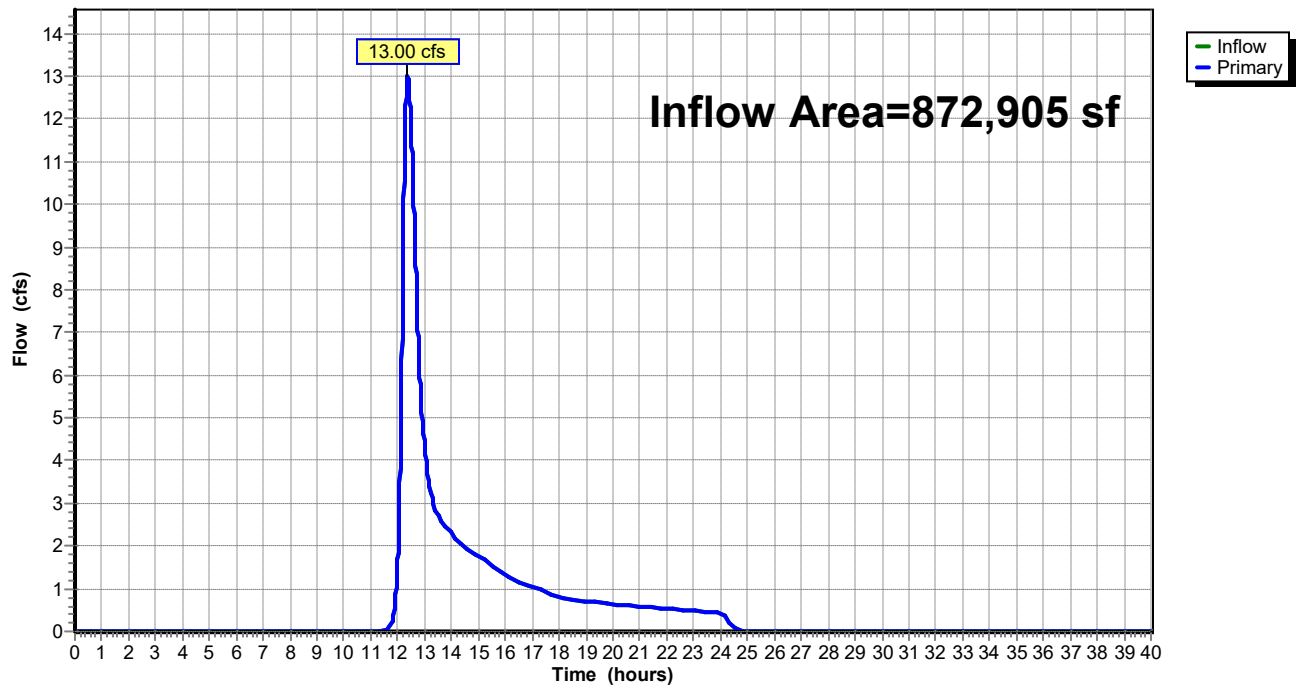
Summary for Link 6L: Pocantico Lake

Inflow Area = 872,905 sf, 4.09% Impervious, Inflow Depth = 1.02" for 5 Year event
 Inflow = 13.00 cfs @ 12.38 hrs, Volume= 74,180 cf
 Primary = 13.00 cfs @ 12.38 hrs, Volume= 74,180 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 6L: Pocantico Lake

Hydrograph



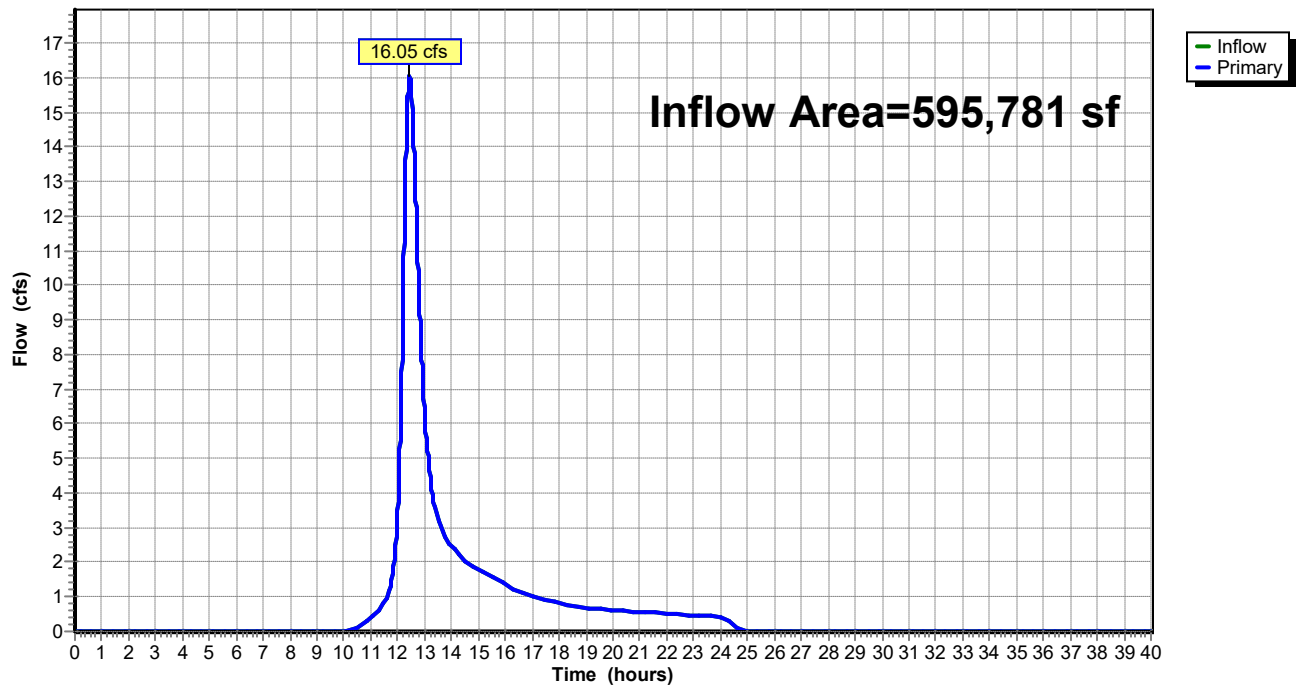
Summary for Link 7L: Mapped Wetland / Brook

Inflow Area = 595,781 sf, 30.45% Impervious, Inflow Depth = 1.82" for 5 Year event
 Inflow = 16.05 cfs @ 12.44 hrs, Volume= 90,378 cf
 Primary = 16.05 cfs @ 12.44 hrs, Volume= 90,378 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 7L: Mapped Wetland / Brook

Hydrograph



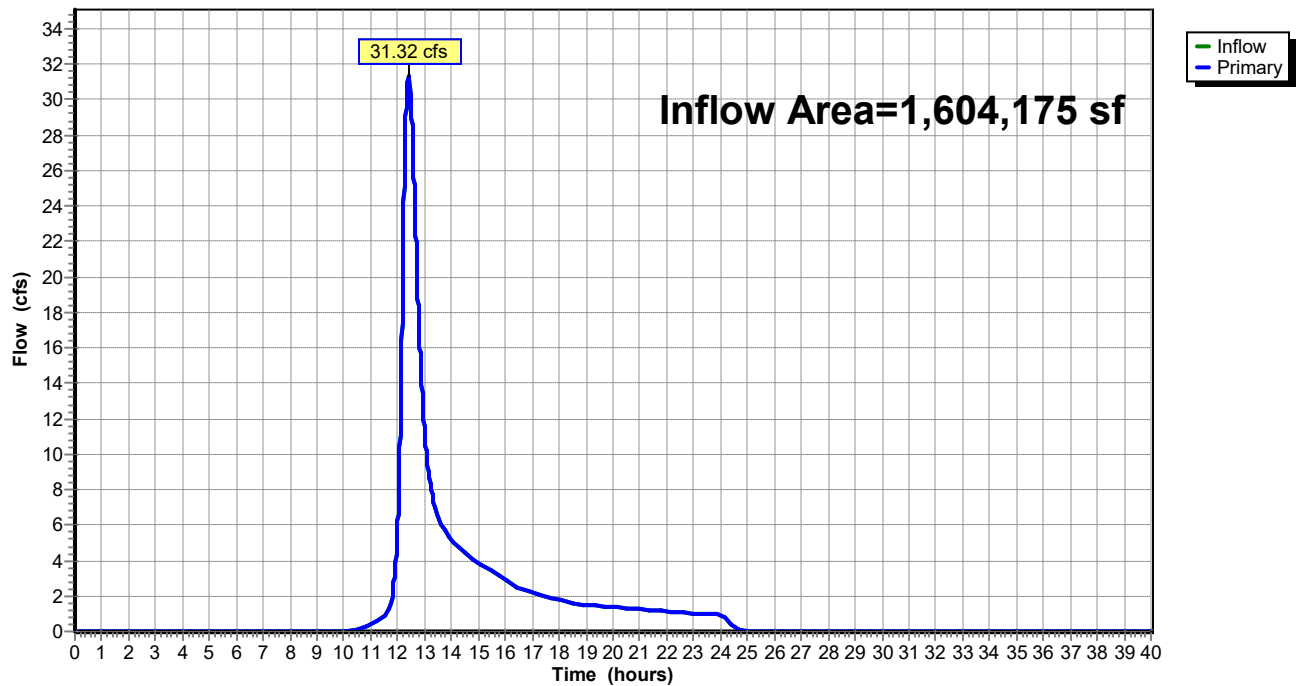
Summary for Link 16L: COMB PRE

Inflow Area = 1,604,175 sf, 14.60% Impervious, Inflow Depth = 1.34" for 5 Year event
 Inflow = 31.32 cfs @ 12.39 hrs, Volume= 179,579 cf
 Primary = 31.32 cfs @ 12.39 hrs, Volume= 179,579 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 16L: COMB PRE

Hydrograph



Meadows Briarcliff_CONV_01032022

Type III 24-hr 10 Year Rainfall=5.13"

Prepared by Wasp Engineering Group, PLLC

Printed 1/13/2022

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2S: EDA-2

Runoff Area=872,905 sf 4.09% Impervious Runoff Depth=1.38"
Flow Length=1,000' Tc=22.8 min CN=60 Runoff=18.57 cfs 100,212 cf

Subcatchment 3S: EDA-3

Runoff Area=595,781 sf 30.45% Impervious Runoff Depth=2.30"
Flow Length=1,190' Tc=30.5 min CN=72 Runoff=20.48 cfs 114,115 cf

Subcatchment 4S: EDA-1

Runoff Area=135,489 sf 12.59% Impervious Runoff Depth=1.74"
Flow Length=460' Tc=16.5 min CN=65 Runoff=4.39 cfs 19,653 cf

Link 5L: Pocantico River Basin

Inflow=4.39 cfs 19,653 cf
Primary=4.39 cfs 19,653 cf

Link 6L: Pocantico Lake

Inflow=18.57 cfs 100,212 cf
Primary=18.57 cfs 100,212 cf

Link 7L: Mapped Wetland / Brook

Inflow=20.48 cfs 114,115 cf
Primary=20.48 cfs 114,115 cf

Link 16L: COMB PRE

Inflow=42.03 cfs 233,980 cf
Primary=42.03 cfs 233,980 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 233,980 cf Average Runoff Depth = 1.75"
85.40% Pervious = 1,370,019 sf 14.60% Impervious = 234,156 sf

Summary for Subcatchment 2S: EDA-2

Runoff = 18.57 cfs @ 12.36 hrs, Volume= 100,212 cf, Depth= 1.38"

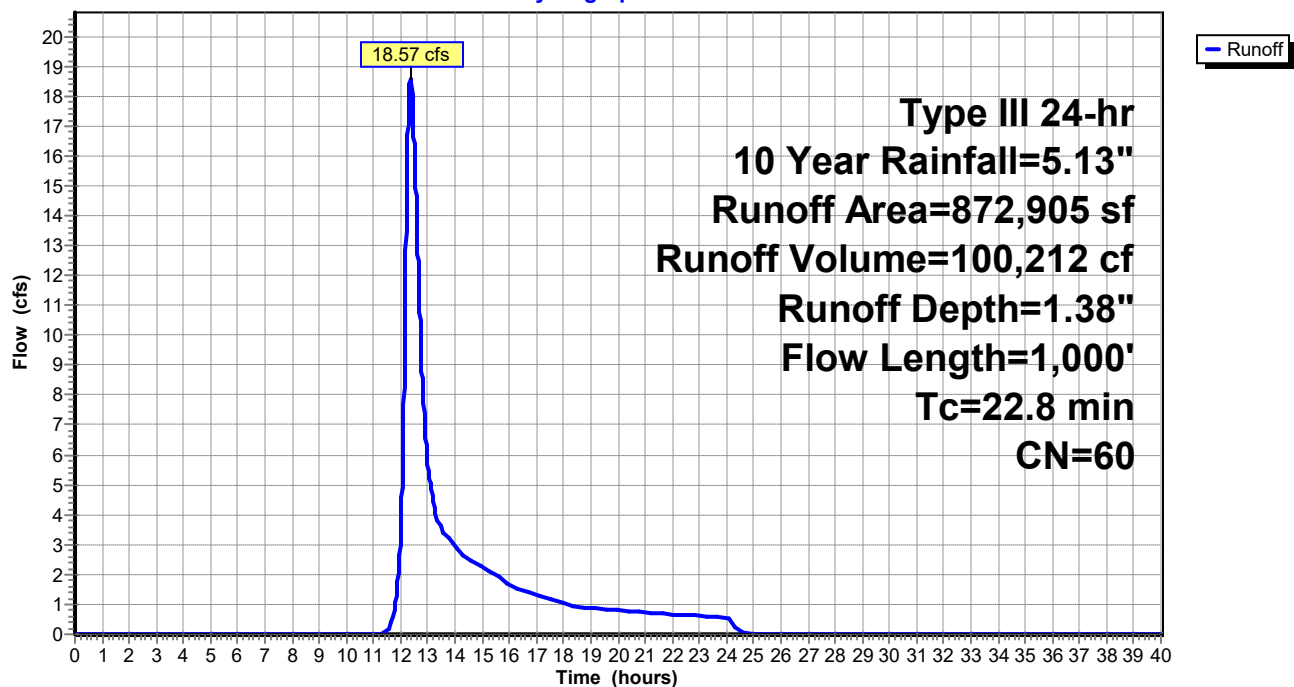
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10 Year Rainfall=5.13"

	Area (sf)	CN	Description
*	35,674	98	Ex. IMP Pavement, Rooftops
	74,836	61	>75% Grass cover, Good, HSG B
	762,395	58	Woods/grass comb., Good, HSG B
	872,905	60	Weighted Average
	837,231		95.91% Pervious Area
	35,674		4.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0520	0.12		Sheet Flow, Shallow Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
4.2	280	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods
					Woodland Kv= 5.0 fps
0.1	40	0.0670	5.25		Shallow Concentrated Flow, Driveway Crossing
					Paved Kv= 20.3 fps
4.3	580	0.2030	2.25		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
22.8	1,000	Total			

Subcatchment 2S: EDA-2

Hydrograph



Summary for Subcatchment 3S: EDA-3

Runoff = 20.48 cfs @ 12.44 hrs, Volume= 114,115 cf, Depth= 2.30"

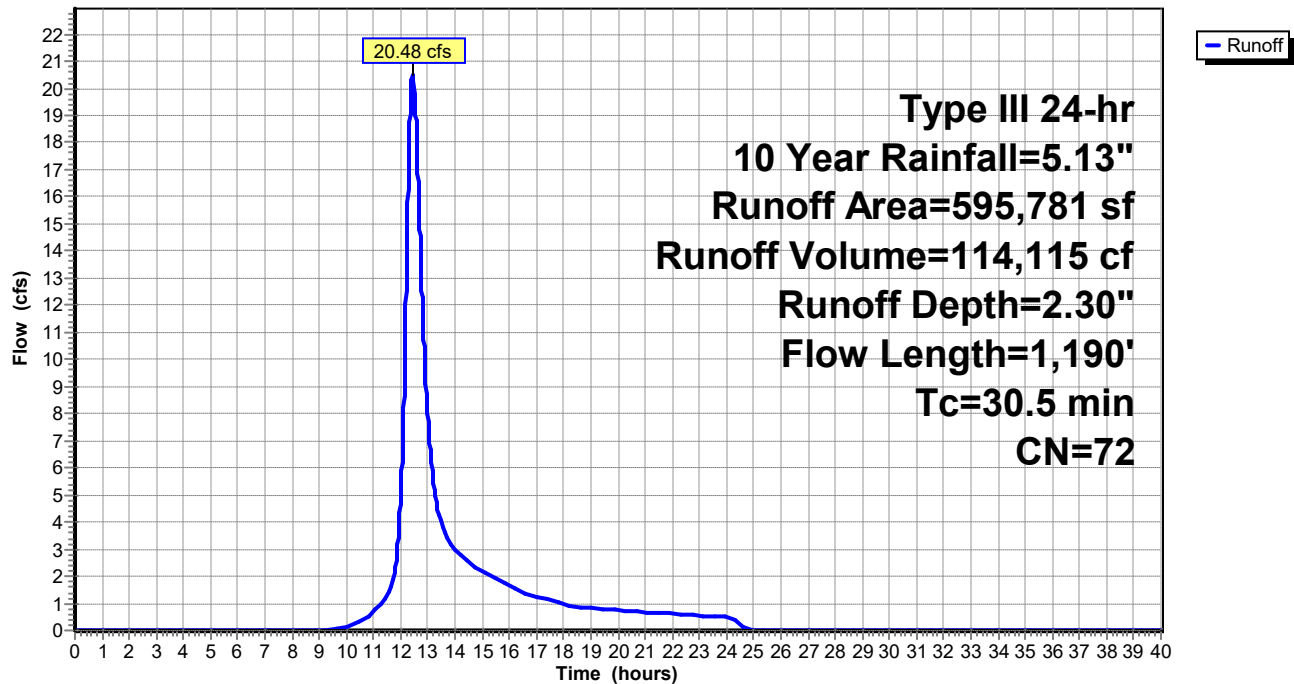
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.13"

	Area (sf)	CN	Description
*	7,168	98	Ex. IMP Pavement, Rooftops
	24,964	61	>75% Grass cover, Good, HSG B
	65,870	74	>75% Grass cover, Good, HSG C
	260,380	58	Woods/grass comb., Good, HSG B
	42,355	72	Woods/grass comb., Good, HSG C
	20,791	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	595,781	72	Weighted Average
	414,360		69.55% Pervious Area
	181,421		30.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
1.7	200	0.1600	2.00		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.9	210	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.2	200	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.1	400	0.1095	0.83		Shallow Concentrated Flow, Shallow Conc. Wetland Forest w/Heavy Litter Kv= 2.5 fps
0.2	80	0.0875	5.87	46.95	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.5	1,190	Total			

Subcatchment 3S: EDA-3

Hydrograph



Summary for Subcatchment 4S: EDA-1

Runoff = 4.39 cfs @ 12.24 hrs, Volume= 19,653 cf, Depth= 1.74"

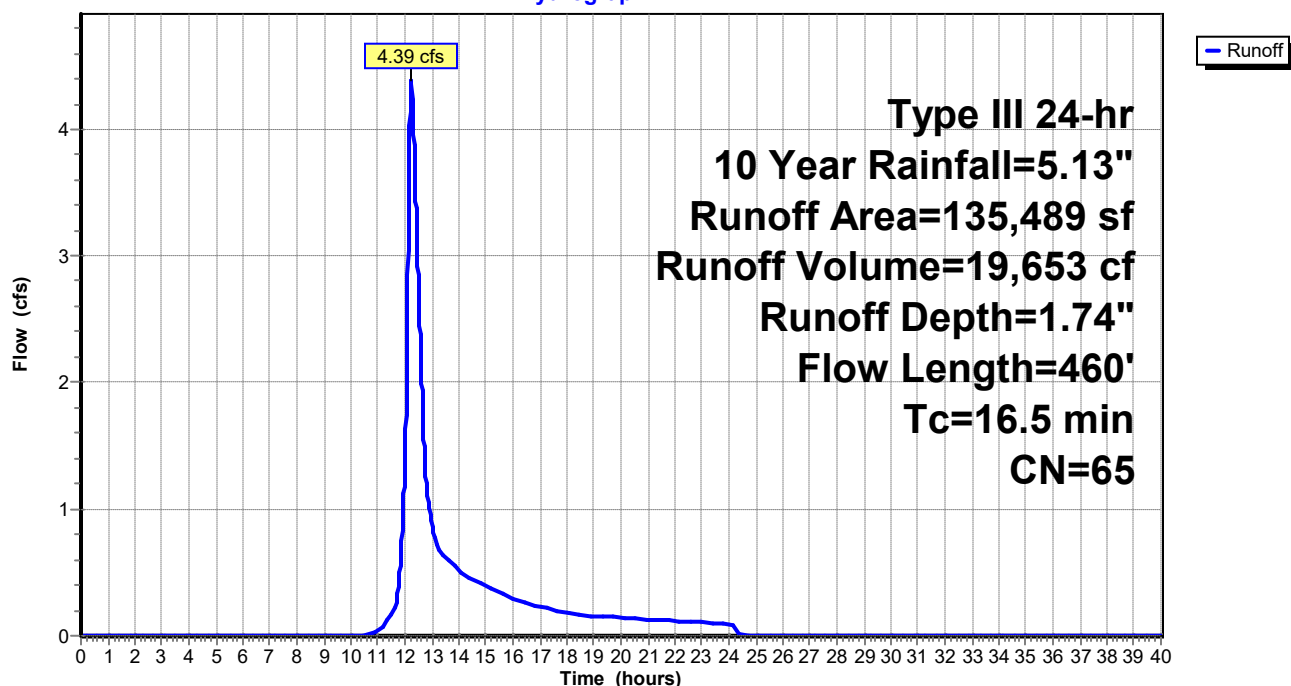
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.13"

	Area (sf)	CN	Description
*	17,061	98	Ex. IMP Pavement, Rooftops
	40,462	61	>75% Grass cover, Good, HSG B
	8,644	72	Woods/grass comb., Good, HSG C
	69,322	58	Woods/grass comb., Good, HSG B
	135,489	65	Weighted Average
	118,428		87.41% Pervious Area
	17,061		12.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0640	0.13		Sheet Flow, Woods Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
3.0	230	0.0665	1.29		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
0.4	130	0.0608	5.01		Shallow Concentrated Flow, Driveway Flow
					Paved Kv= 20.3 fps
16.5	460	Total			

Subcatchment 4S: EDA-1

Hydrograph



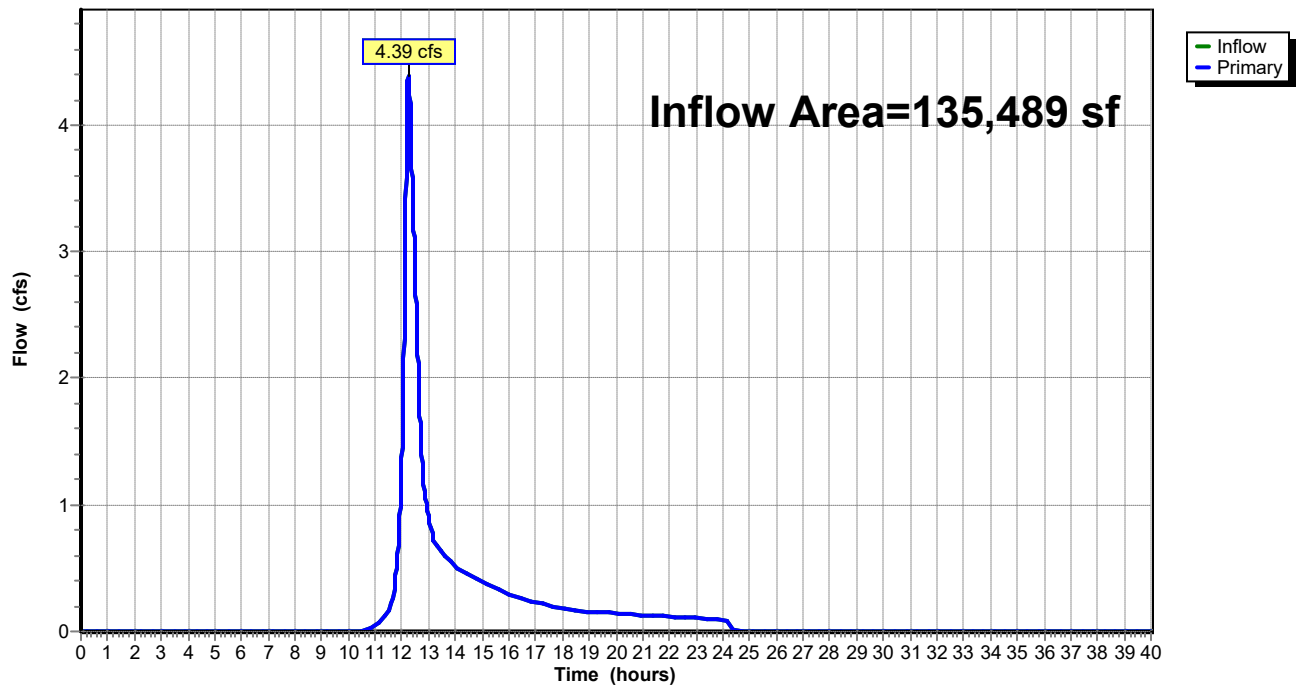
Summary for Link 5L: Pocantico River Basin

Inflow Area = 135,489 sf, 12.59% Impervious, Inflow Depth = 1.74" for 10 Year event
 Inflow = 4.39 cfs @ 12.24 hrs, Volume= 19,653 cf
 Primary = 4.39 cfs @ 12.24 hrs, Volume= 19,653 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 5L: Pocantico River Basin

Hydrograph



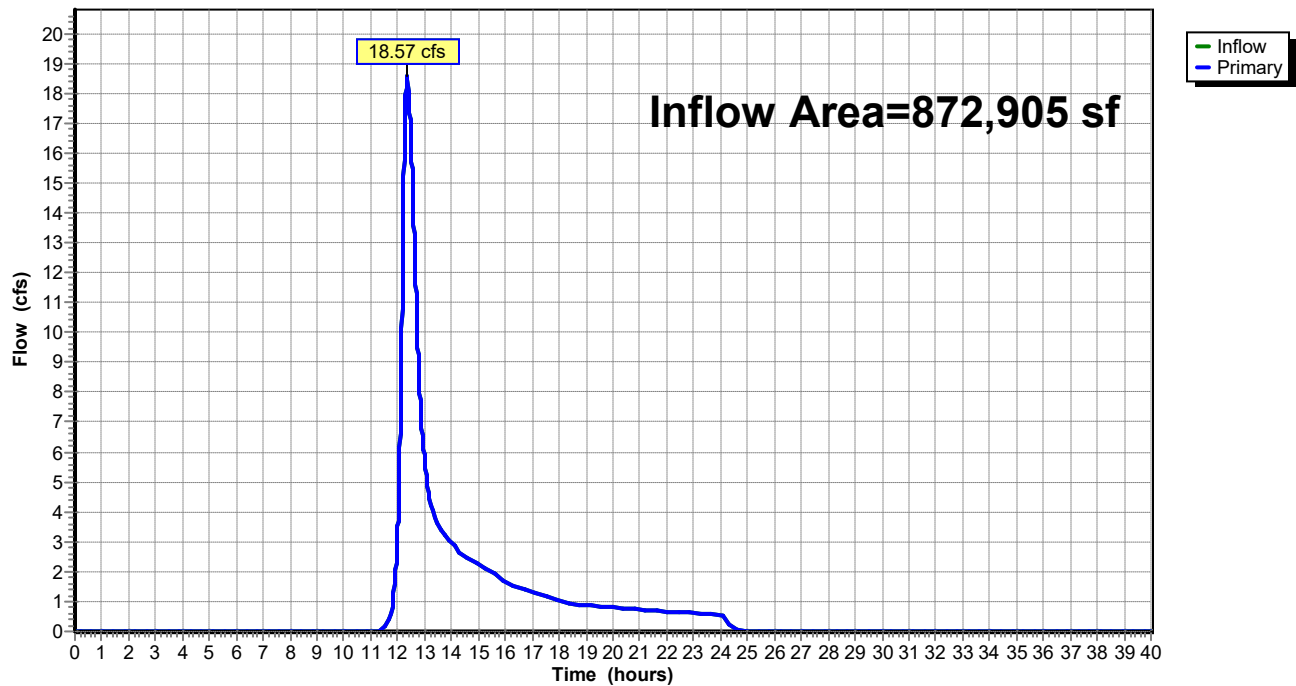
Summary for Link 6L: Pocantico Lake

Inflow Area = 872,905 sf, 4.09% Impervious, Inflow Depth = 1.38" for 10 Year event
 Inflow = 18.57 cfs @ 12.36 hrs, Volume= 100,212 cf
 Primary = 18.57 cfs @ 12.36 hrs, Volume= 100,212 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 6L: Pocantico Lake

Hydrograph



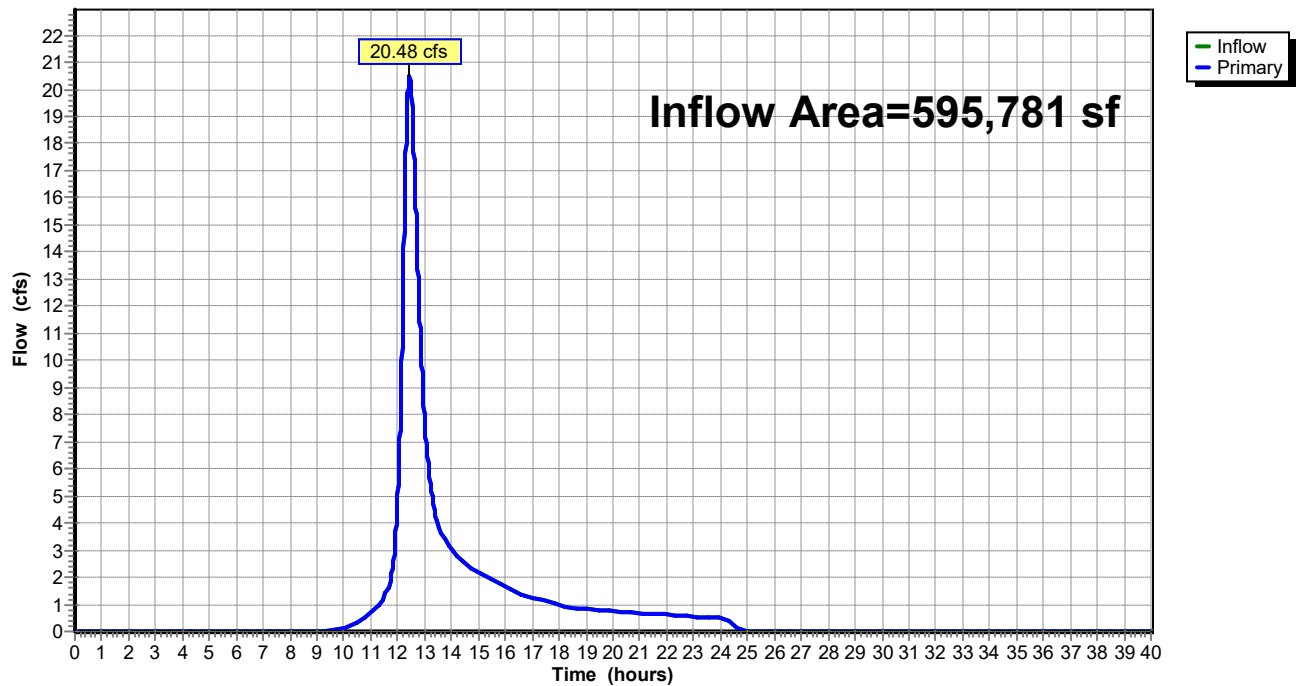
Summary for Link 7L: Mapped Wetland / Brook

Inflow Area = 595,781 sf, 30.45% Impervious, Inflow Depth = 2.30" for 10 Year event
 Inflow = 20.48 cfs @ 12.44 hrs, Volume= 114,115 cf
 Primary = 20.48 cfs @ 12.44 hrs, Volume= 114,115 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 7L: Mapped Wetland / Brook

Hydrograph



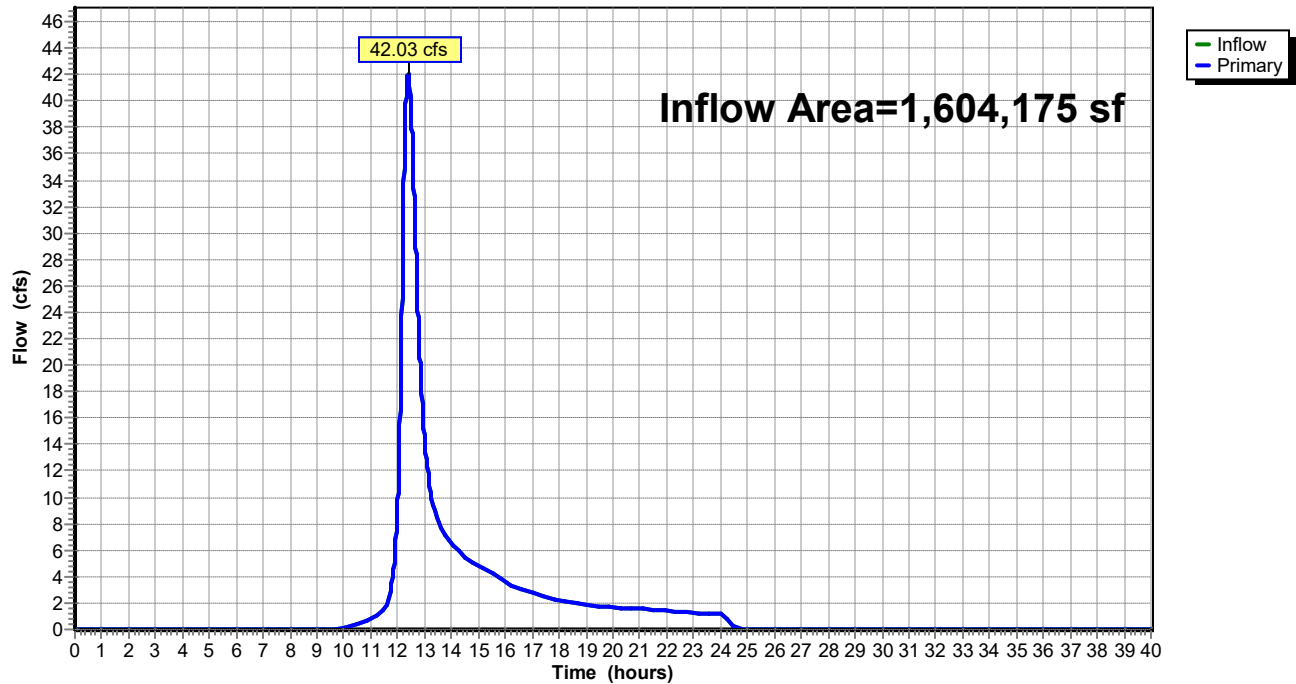
Summary for Link 16L: COMB PRE

Inflow Area = 1,604,175 sf, 14.60% Impervious, Inflow Depth = 1.75" for 10 Year event
 Inflow = 42.03 cfs @ 12.38 hrs, Volume= 233,980 cf
 Primary = 42.03 cfs @ 12.38 hrs, Volume= 233,980 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 16L: COMB PRE

Hydrograph



Meadows Briarcliff_CONV_01032022*Type III 24-hr 25 YEAR Rainfall=6.47"*

Prepared by Wasp Engineering Group, PLLC

Printed 1/13/2022

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2S: EDA-2

Runoff Area=872,905 sf 4.09% Impervious Runoff Depth=2.24"
Flow Length=1,000' Tc=22.8 min CN=60 Runoff=31.99 cfs 162,609 cf

Subcatchment 3S: EDA-3

Runoff Area=595,781 sf 30.45% Impervious Runoff Depth=3.38"
Flow Length=1,190' Tc=30.5 min CN=72 Runoff=30.42 cfs 167,901 cf

Subcatchment 4S: EDA-1

Runoff Area=135,489 sf 12.59% Impervious Runoff Depth=2.70"
Flow Length=460' Tc=16.5 min CN=65 Runoff=7.04 cfs 30,470 cf

Link 5L: Pocantico River Basin

Inflow=7.04 cfs 30,470 cf
Primary=7.04 cfs 30,470 cf

Link 6L: Pocantico Lake

Inflow=31.99 cfs 162,609 cf
Primary=31.99 cfs 162,609 cf

Link 7L: Mapped Wetland / Brook

Inflow=30.42 cfs 167,901 cf
Primary=30.42 cfs 167,901 cf

Link 16L: COMB PRE

Inflow=67.02 cfs 360,980 cf
Primary=67.02 cfs 360,980 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 360,980 cf Average Runoff Depth = 2.70"
85.40% Pervious = 1,370,019 sf 14.60% Impervious = 234,156 sf

Summary for Subcatchment 2S: EDA-2

Runoff = 31.99 cfs @ 12.34 hrs, Volume= 162,609 cf, Depth= 2.24"

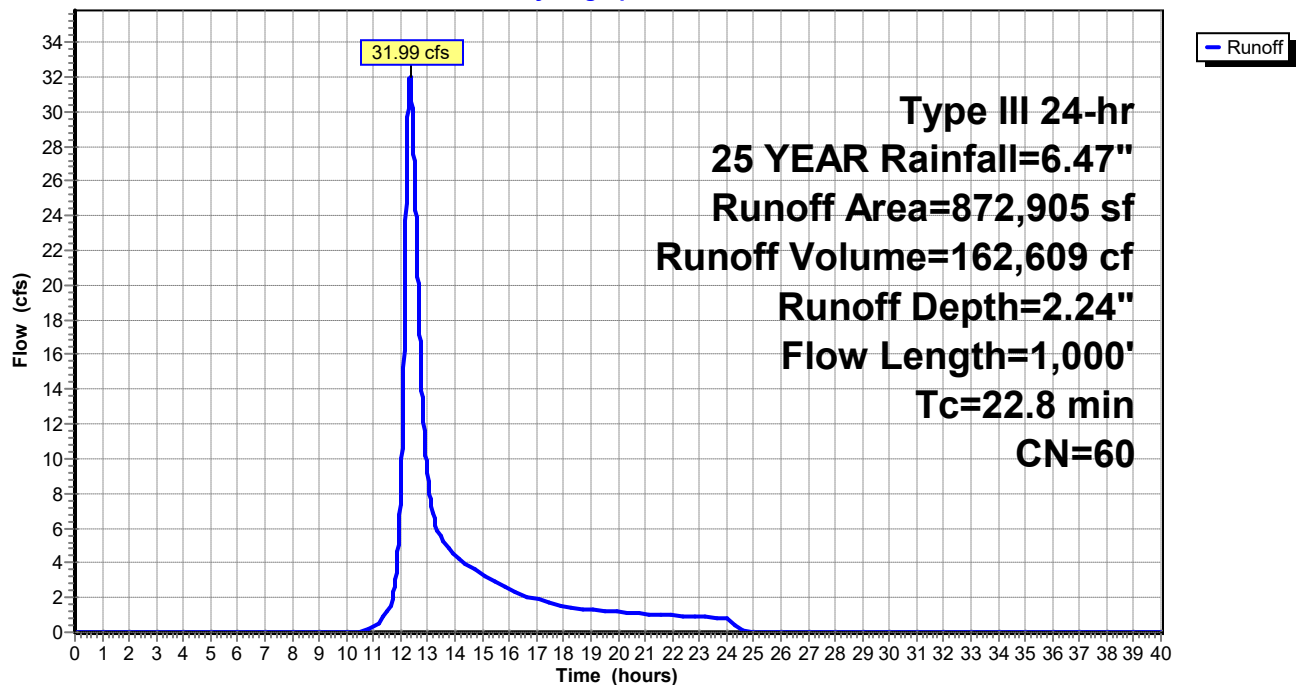
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YEAR Rainfall=6.47"

	Area (sf)	CN	Description
*	35,674	98	Ex. IMP Pavement, Rooftops
	74,836	61	>75% Grass cover, Good, HSG B
	762,395	58	Woods/grass comb., Good, HSG B
	872,905	60	Weighted Average
	837,231		95.91% Pervious Area
	35,674		4.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0520	0.12		Sheet Flow, Shallow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
4.2	280	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
0.1	40	0.0670	5.25		Shallow Concentrated Flow, Driveway Crossing Paved Kv= 20.3 fps
4.3	580	0.2030	2.25		Shallow Concentrated Flow, Shallow Conc. Woodland Woodland Kv= 5.0 fps
22.8	1,000	Total			

Subcatchment 2S: EDA-2

Hydrograph



Summary for Subcatchment 3S: EDA-3

Runoff = 30.42 cfs @ 12.44 hrs, Volume= 167,901 cf, Depth= 3.38"

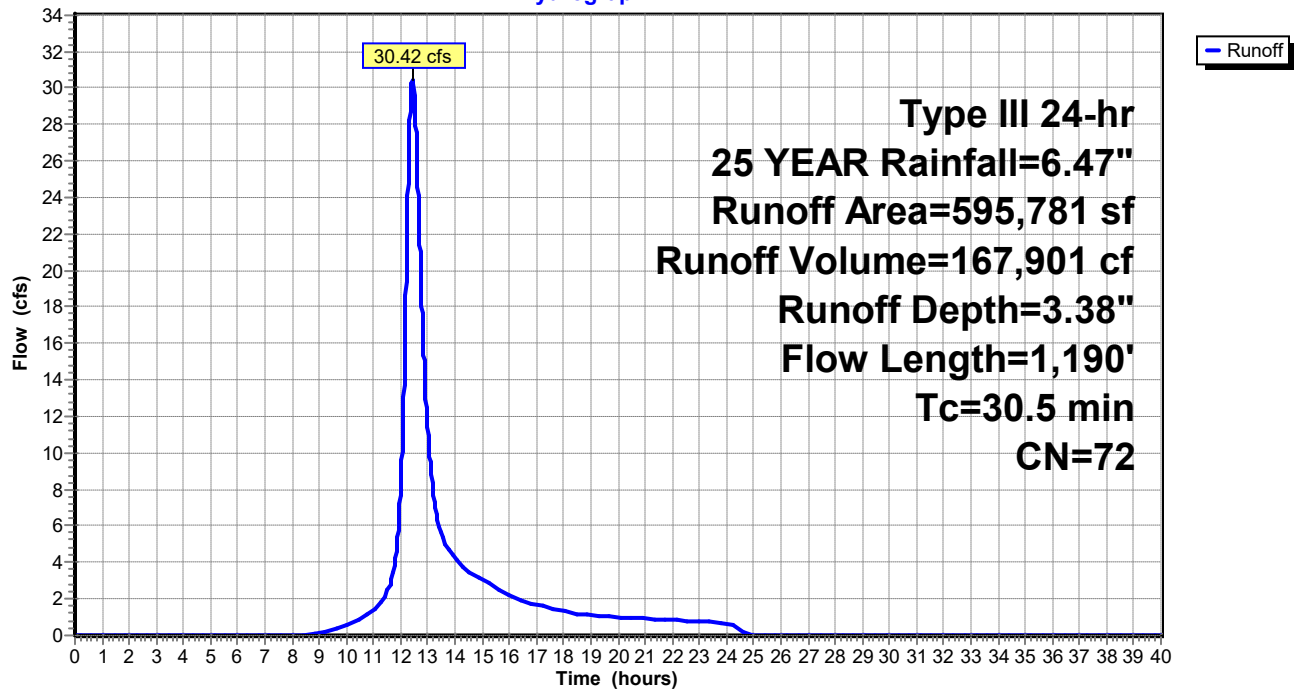
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YEAR Rainfall=6.47"

	Area (sf)	CN	Description
*	7,168	98	Ex. IMP Pavement, Rooftops
	24,964	61	>75% Grass cover, Good, HSG B
	65,870	74	>75% Grass cover, Good, HSG C
	260,380	58	Woods/grass comb., Good, HSG B
	42,355	72	Woods/grass comb., Good, HSG C
	20,791	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	595,781	72	Weighted Average
	414,360		69.55% Pervious Area
	181,421		30.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
1.7	200	0.1600	2.00		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.9	210	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.2	200	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.1	400	0.1095	0.83		Shallow Concentrated Flow, Shallow Conc. Wetland Forest w/Heavy Litter Kv= 2.5 fps
0.2	80	0.0875	5.87	46.95	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.5	1,190	Total			

Subcatchment 3S: EDA-3

Hydrograph



Summary for Subcatchment 4S: EDA-1

Runoff = 7.04 cfs @ 12.23 hrs, Volume= 30,470 cf, Depth= 2.70"

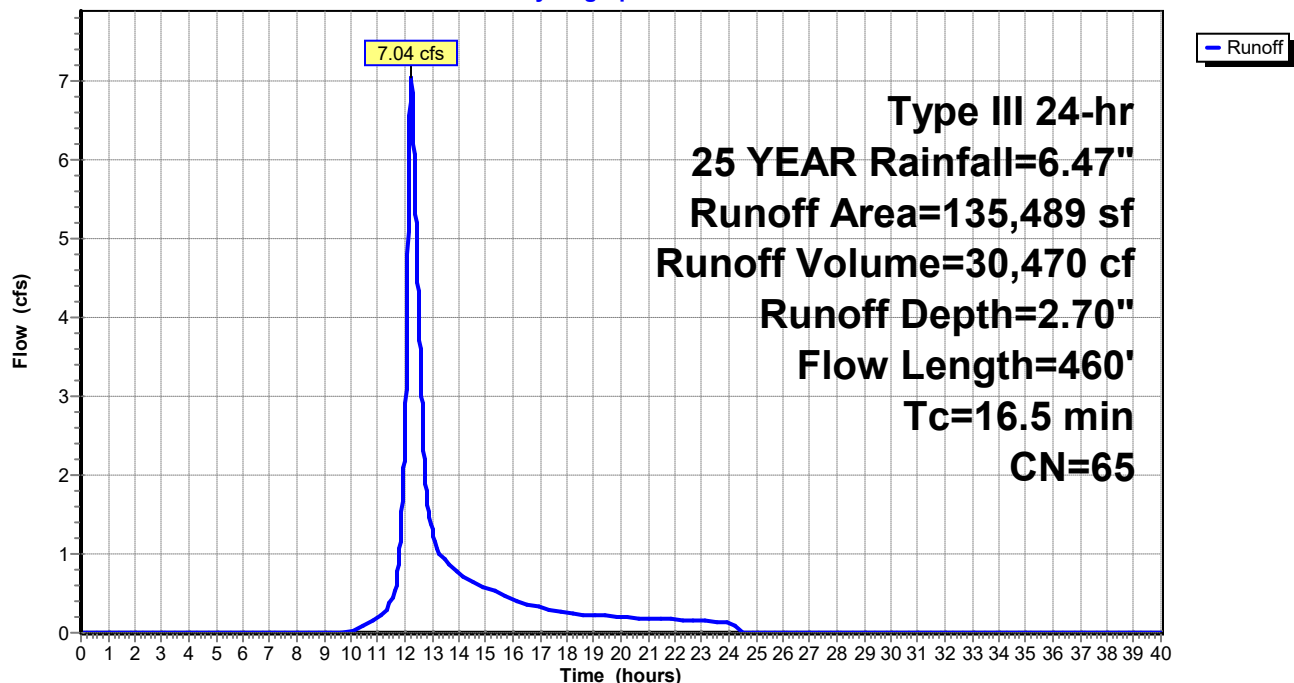
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YEAR Rainfall=6.47"

	Area (sf)	CN	Description
*	17,061	98	Ex. IMP Pavement, Rooftops
	40,462	61	>75% Grass cover, Good, HSG B
	8,644	72	Woods/grass comb., Good, HSG C
	69,322	58	Woods/grass comb., Good, HSG B
	135,489	65	Weighted Average
	118,428		87.41% Pervious Area
	17,061		12.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0640	0.13		Sheet Flow, Woods Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
3.0	230	0.0665	1.29		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
0.4	130	0.0608	5.01		Shallow Concentrated Flow, Driveway Flow
					Paved Kv= 20.3 fps
16.5	460	Total			

Subcatchment 4S: EDA-1

Hydrograph



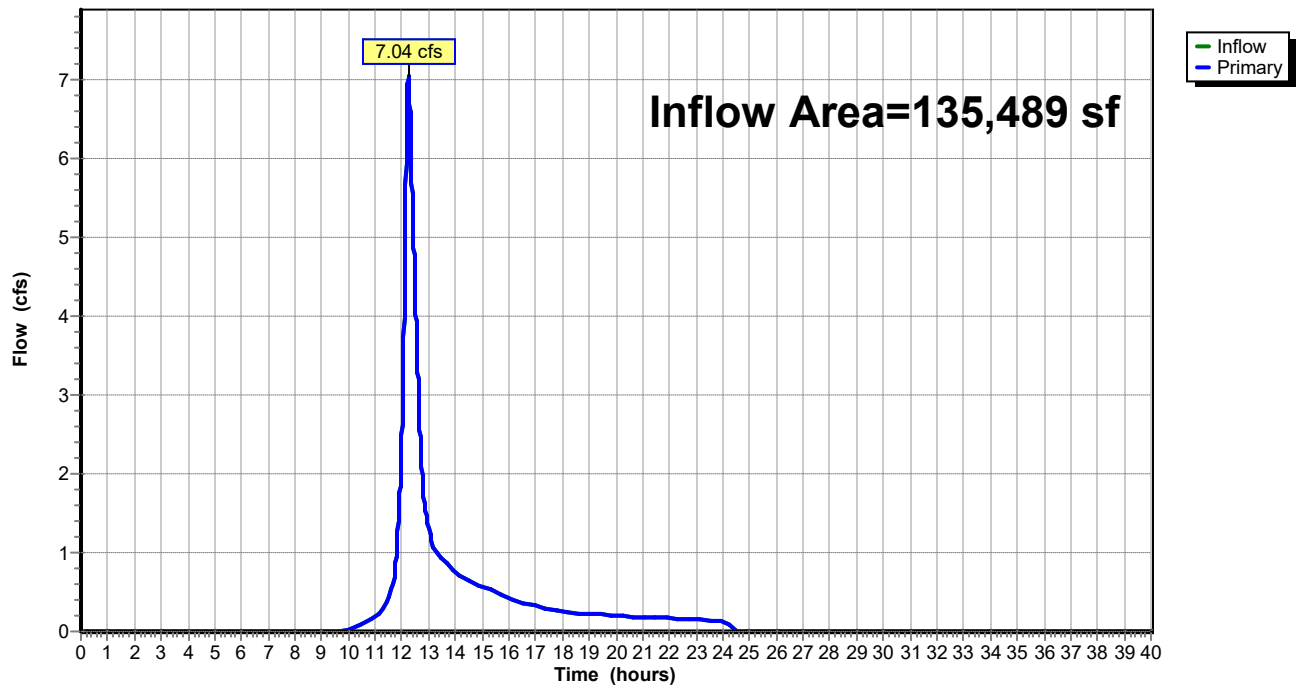
Summary for Link 5L: Pocantico River Basin

Inflow Area = 135,489 sf, 12.59% Impervious, Inflow Depth = 2.70" for 25 YEAR event
 Inflow = 7.04 cfs @ 12.23 hrs, Volume= 30,470 cf
 Primary = 7.04 cfs @ 12.23 hrs, Volume= 30,470 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 5L: Pocantico River Basin

Hydrograph



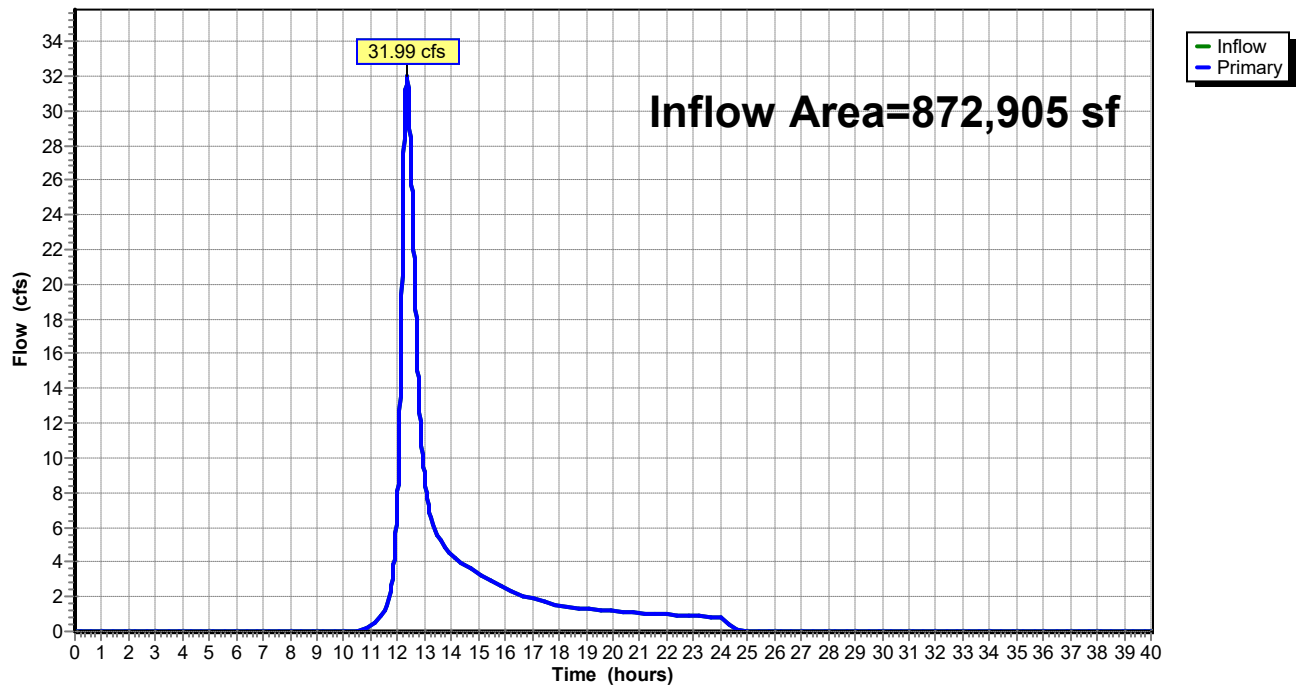
Summary for Link 6L: Pocantico Lake

Inflow Area = 872,905 sf, 4.09% Impervious, Inflow Depth = 2.24" for 25 YEAR event
 Inflow = 31.99 cfs @ 12.34 hrs, Volume= 162,609 cf
 Primary = 31.99 cfs @ 12.34 hrs, Volume= 162,609 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 6L: Pocantico Lake

Hydrograph

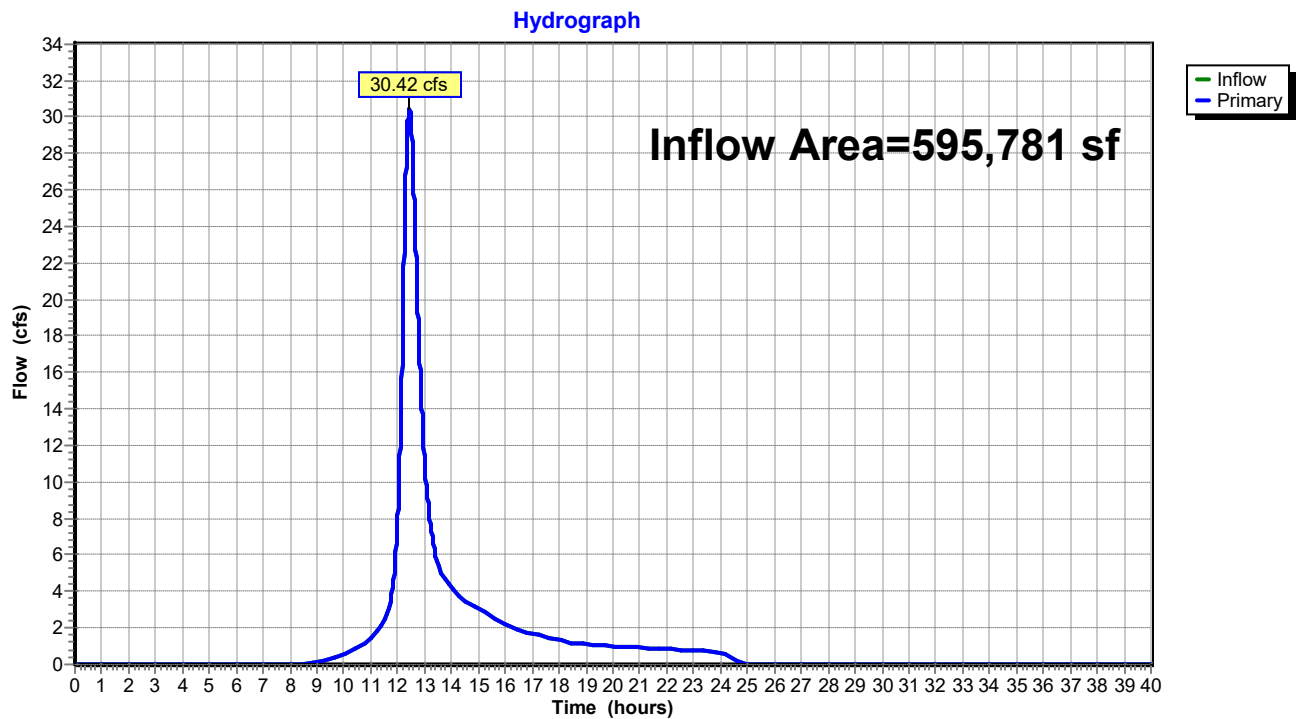


Summary for Link 7L: Mapped Wetland / Brook

Inflow Area = 595,781 sf, 30.45% Impervious, Inflow Depth = 3.38" for 25 YEAR event
 Inflow = 30.42 cfs @ 12.44 hrs, Volume= 167,901 cf
 Primary = 30.42 cfs @ 12.44 hrs, Volume= 167,901 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 7L: Mapped Wetland / Brook

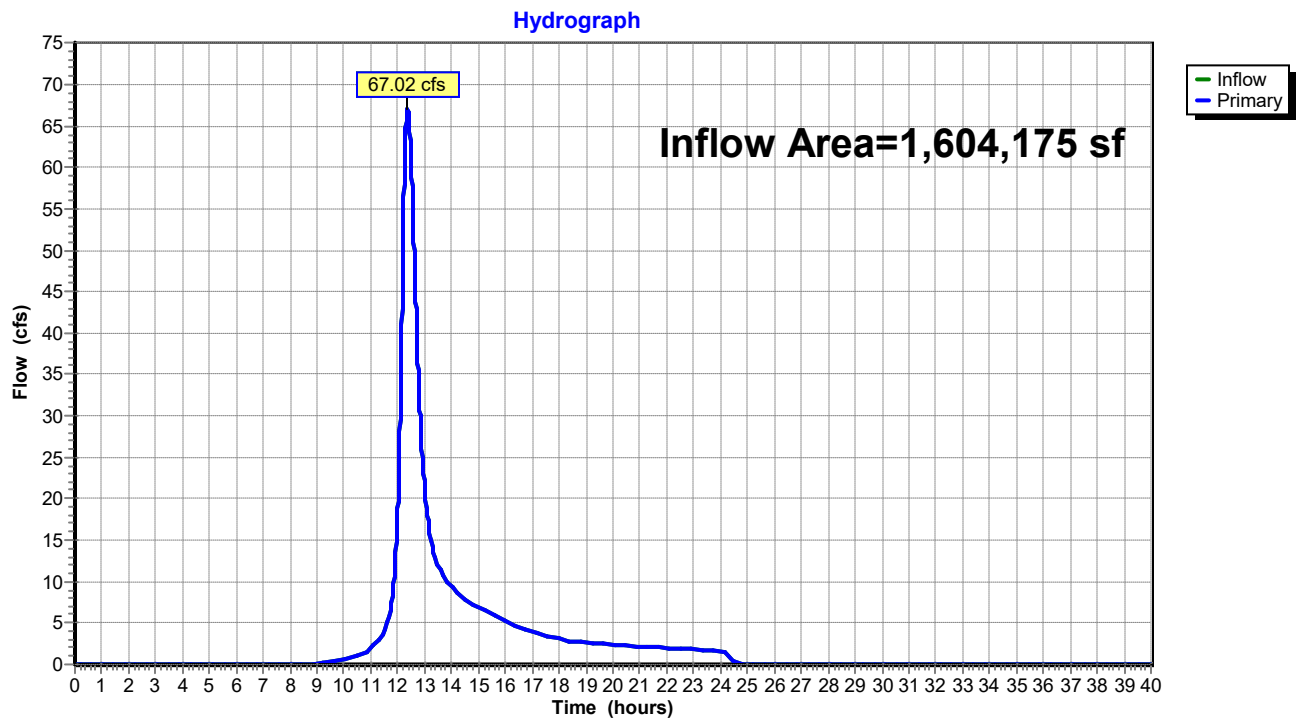


Summary for Link 16L: COMB PRE

Inflow Area = 1,604,175 sf, 14.60% Impervious, Inflow Depth = 2.70" for 25 YEAR event
 Inflow = 67.02 cfs @ 12.37 hrs, Volume= 360,980 cf
 Primary = 67.02 cfs @ 12.37 hrs, Volume= 360,980 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 16L: COMB PRE



Meadows Briarcliff_CONV_01032022*Type III 24-hr 50 Year Rainfall=7.72"*

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2S: EDA-2

Runoff Area=872,905 sf 4.09% Impervious Runoff Depth=3.12"
Flow Length=1,000' Tc=22.8 min CN=60 Runoff=45.80 cfs 227,307 cf

Subcatchment 3S: EDA-3

Runoff Area=595,781 sf 30.45% Impervious Runoff Depth=4.45"
Flow Length=1,190' Tc=30.5 min CN=72 Runoff=40.06 cfs 220,917 cf

Subcatchment 4S: EDA-1

Runoff Area=135,489 sf 12.59% Impervious Runoff Depth=3.67"
Flow Length=460' Tc=16.5 min CN=65 Runoff=9.70 cfs 41,427 cf

Link 5L: Pocantico River Basin

Inflow=9.70 cfs 41,427 cf
Primary=9.70 cfs 41,427 cf

Link 6L: Pocantico Lake

Inflow=45.80 cfs 227,307 cf
Primary=45.80 cfs 227,307 cf

Link 7L: Mapped Wetland / Brook

Inflow=40.06 cfs 220,917 cf
Primary=40.06 cfs 220,917 cf

Link 16L: COMB PRE

Inflow=92.13 cfs 489,651 cf
Primary=92.13 cfs 489,651 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 489,651 cf Average Runoff Depth = 3.66"
85.40% Pervious = 1,370,019 sf 14.60% Impervious = 234,156 sf

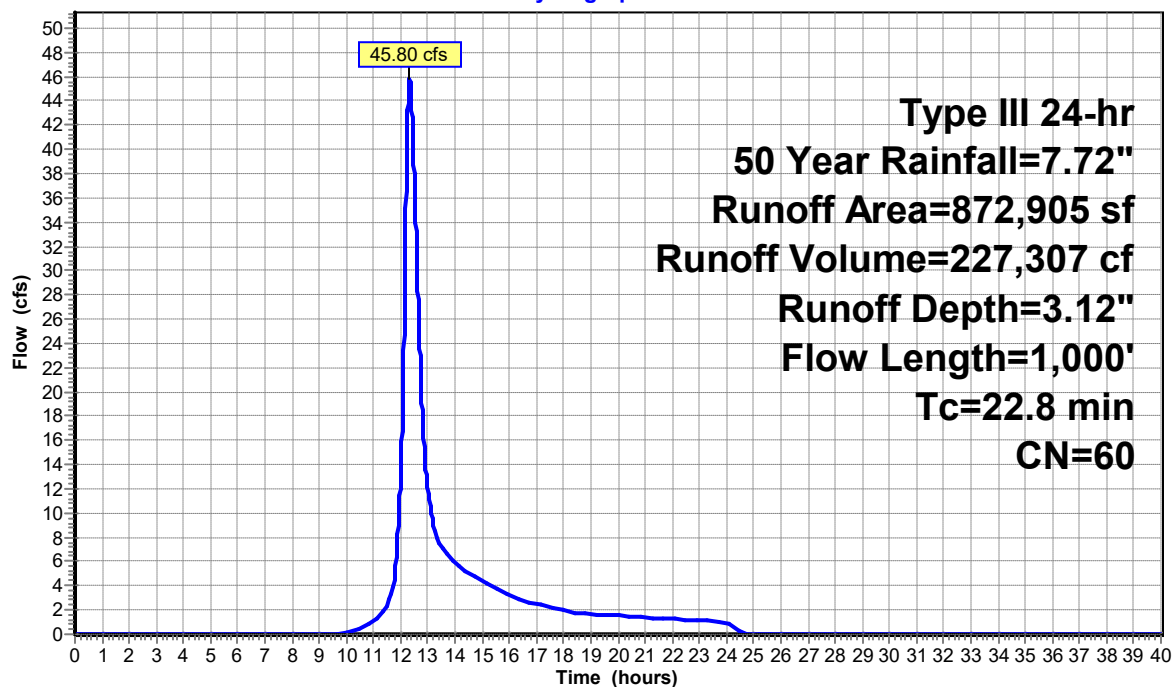
Summary for Subcatchment 2S: EDA-2

Runoff = 45.80 cfs @ 12.34 hrs, Volume= 227,307 cf, Depth= 3.12"

 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Type III 24-hr 50 Year Rainfall=7.72"

	Area (sf)	CN	Description
*	35,674	98	Ex. IMP Pavement, Rooftops
	74,836	61	>75% Grass cover, Good, HSG B
	762,395	58	Woods/grass comb., Good, HSG B
	872,905	60	Weighted Average
	837,231		95.91% Pervious Area
	35,674		4.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0520	0.12		Sheet Flow, Shallow Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
4.2	280	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods
					Woodland Kv= 5.0 fps
0.1	40	0.0670	5.25		Shallow Concentrated Flow, Driveway Crossing
					Paved Kv= 20.3 fps
4.3	580	0.2030	2.25		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
22.8	1,000	Total			

Subcatchment 2S: EDA-2
Hydrograph


Summary for Subcatchment 3S: EDA-3

Runoff = 40.06 cfs @ 12.43 hrs, Volume= 220,917 cf, Depth= 4.45"

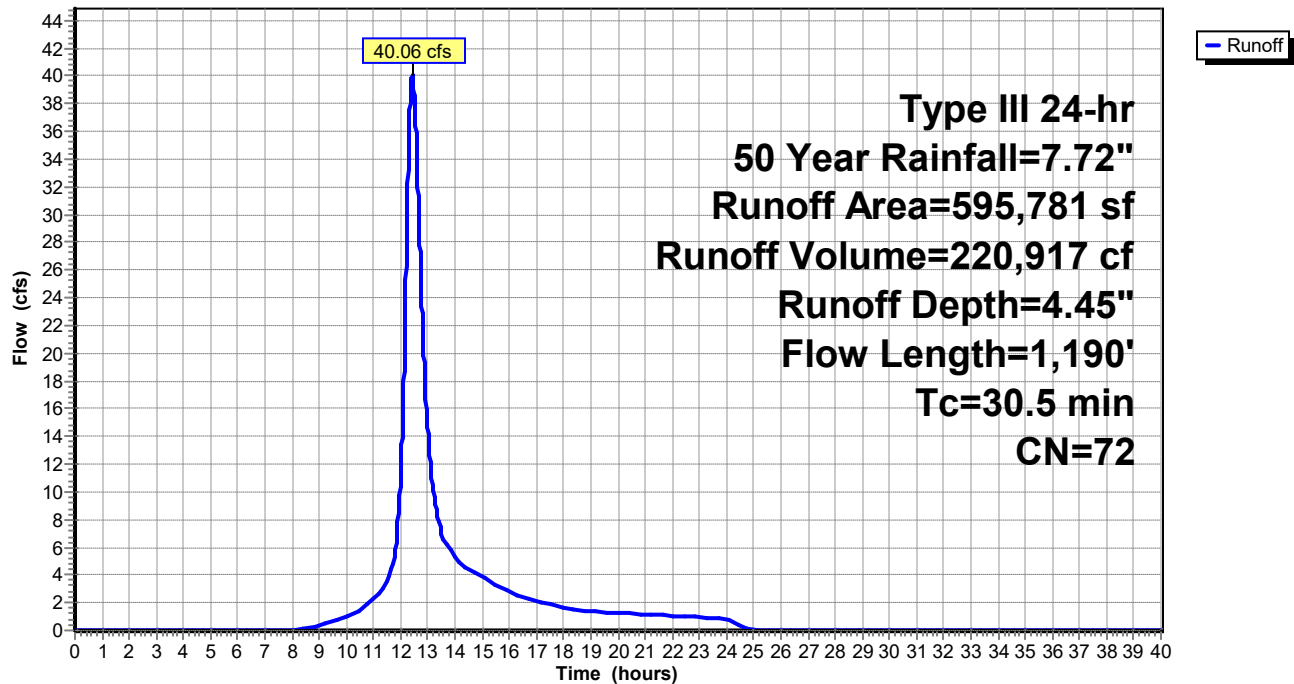
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 Year Rainfall=7.72"

	Area (sf)	CN	Description
*	7,168	98	Ex. IMP Pavement, Rooftops
	24,964	61	>75% Grass cover, Good, HSG B
	65,870	74	>75% Grass cover, Good, HSG C
	260,380	58	Woods/grass comb., Good, HSG B
	42,355	72	Woods/grass comb., Good, HSG C
	20,791	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	595,781	72	Weighted Average
	414,360		69.55% Pervious Area
	181,421		30.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
1.7	200	0.1600	2.00		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.9	210	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.2	200	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.1	400	0.1095	0.83		Shallow Concentrated Flow, Shallow Conc. Wetland Forest w/Heavy Litter Kv= 2.5 fps
0.2	80	0.0875	5.87	46.95	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.5	1,190	Total			

Subcatchment 3S: EDA-3

Hydrograph



Summary for Subcatchment 4S: EDA-1

Runoff = 9.70 cfs @ 12.23 hrs, Volume= 41,427 cf, Depth= 3.67"

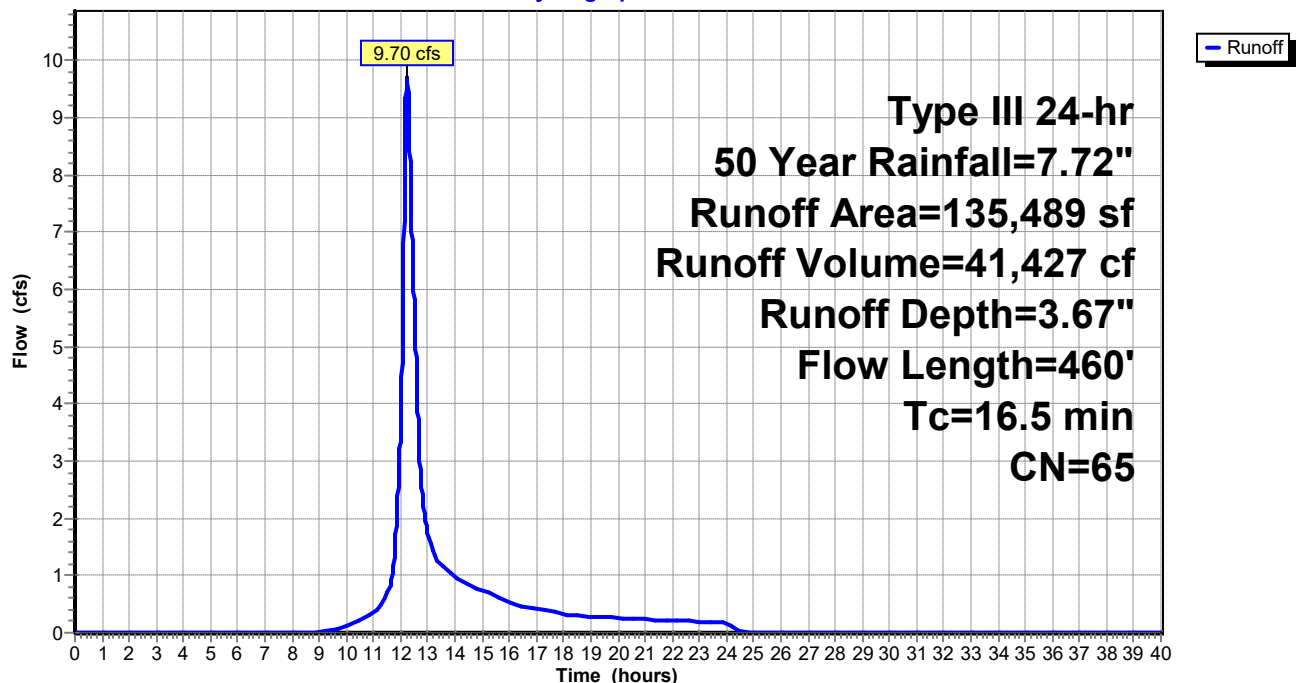
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Type III 24-hr 50 Year Rainfall=7.72"

	Area (sf)	CN	Description
*	17,061	98	Ex. IMP Pavement, Rooftops
	40,462	61	>75% Grass cover, Good, HSG B
	8,644	72	Woods/grass comb., Good, HSG C
	69,322	58	Woods/grass comb., Good, HSG B
	135,489	65	Weighted Average
	118,428		87.41% Pervious Area
	17,061		12.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0640	0.13		Sheet Flow, Woods Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
3.0	230	0.0665	1.29		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
0.4	130	0.0608	5.01		Shallow Concentrated Flow, Driveway Flow
					Paved Kv= 20.3 fps
16.5	460	Total			

Subcatchment 4S: EDA-1

Hydrograph



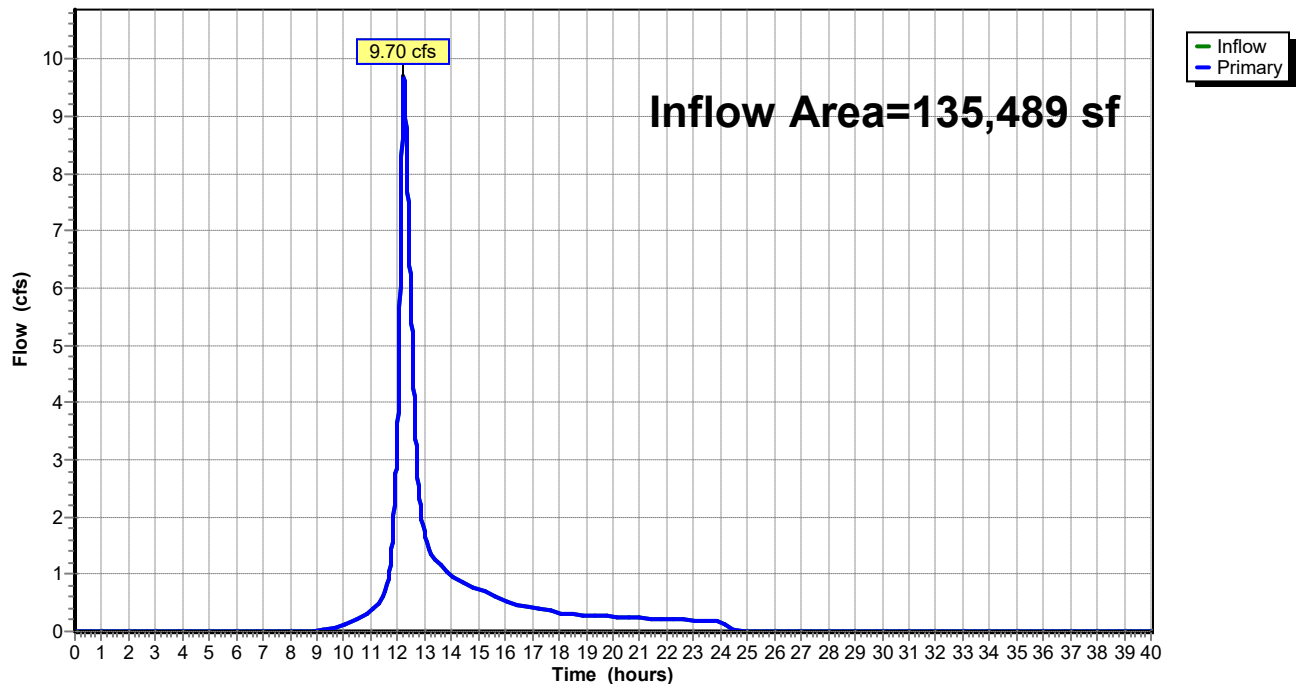
Summary for Link 5L: Pocantico River Basin

Inflow Area = 135,489 sf, 12.59% Impervious, Inflow Depth = 3.67" for 50 Year event
 Inflow = 9.70 cfs @ 12.23 hrs, Volume= 41,427 cf
 Primary = 9.70 cfs @ 12.23 hrs, Volume= 41,427 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 5L: Pocantico River Basin

Hydrograph



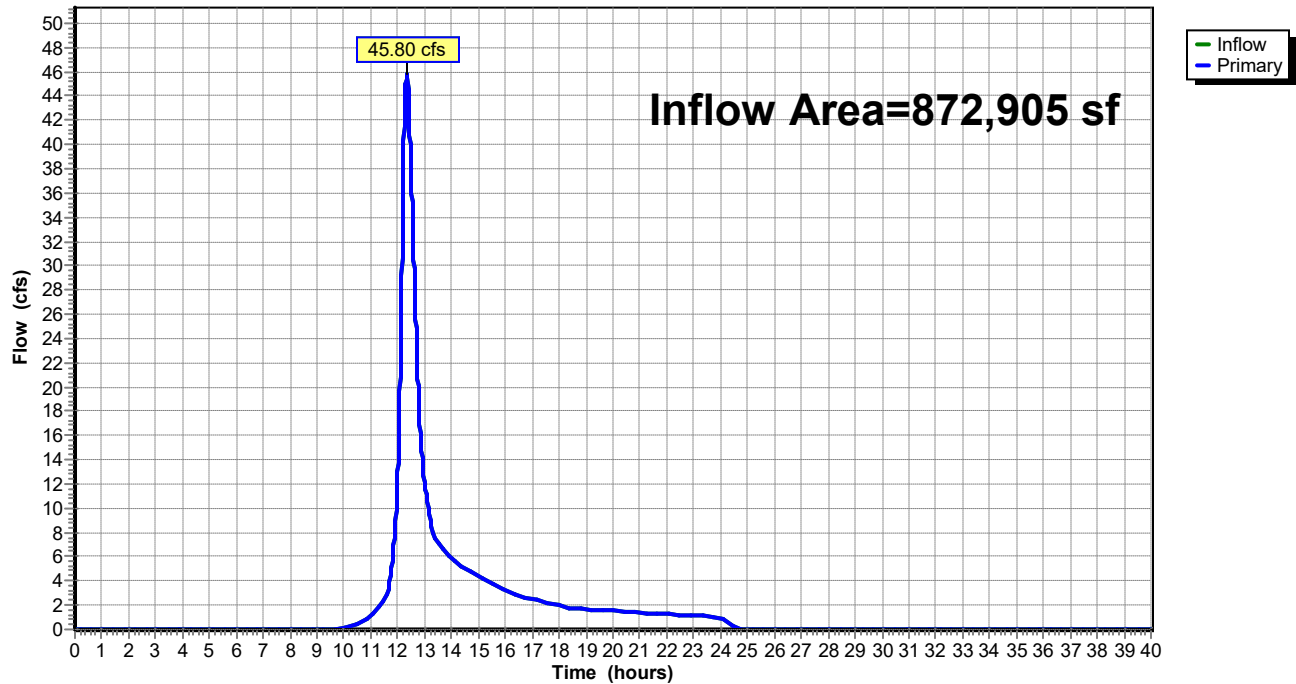
Summary for Link 6L: Pocantico Lake

Inflow Area = 872,905 sf, 4.09% Impervious, Inflow Depth = 3.12" for 50 Year event
 Inflow = 45.80 cfs @ 12.34 hrs, Volume= 227,307 cf
 Primary = 45.80 cfs @ 12.34 hrs, Volume= 227,307 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 6L: Pocantico Lake

Hydrograph



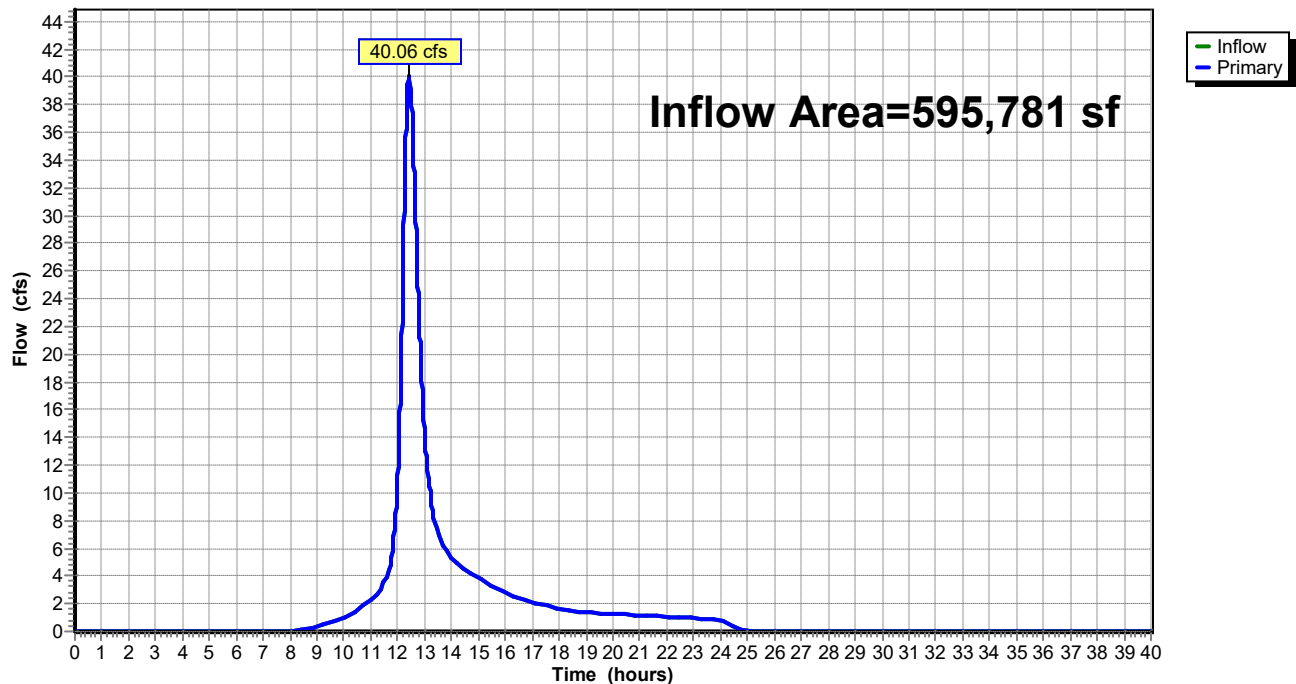
Summary for Link 7L: Mapped Wetland / Brook

Inflow Area = 595,781 sf, 30.45% Impervious, Inflow Depth = 4.45" for 50 Year event
 Inflow = 40.06 cfs @ 12.43 hrs, Volume= 220,917 cf
 Primary = 40.06 cfs @ 12.43 hrs, Volume= 220,917 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 7L: Mapped Wetland / Brook

Hydrograph



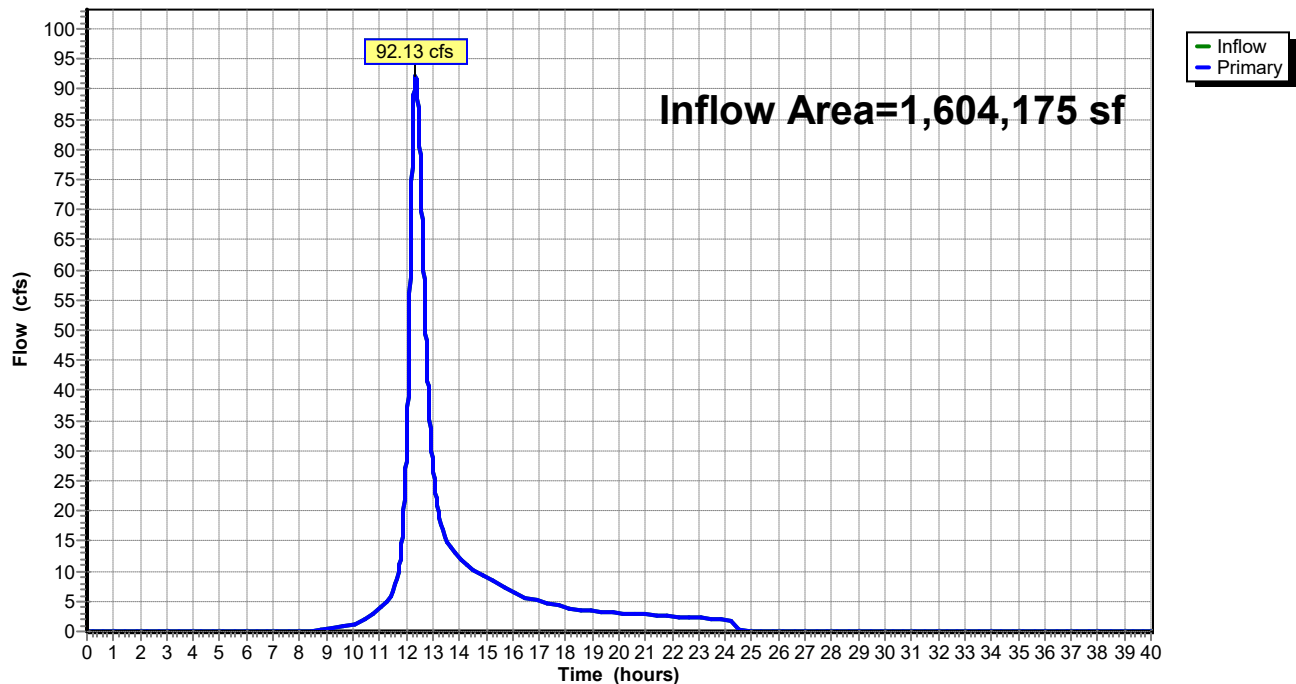
Summary for Link 16L: COMB PRE

Inflow Area = 1,604,175 sf, 14.60% Impervious, Inflow Depth = 3.66" for 50 Year event
 Inflow = 92.13 cfs @ 12.36 hrs, Volume= 489,651 cf
 Primary = 92.13 cfs @ 12.36 hrs, Volume= 489,651 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 16L: COMB PRE

Hydrograph



Meadows Briarcliff_CONV_01032022*Type III 24-hr 100 Year Rainfall=9.22"*

Prepared by Wasp Engineering Group, PLLC

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2S: EDA-2

Runoff Area=872,905 sf 4.09% Impervious Runoff Depth=4.27"
Flow Length=1,000' Tc=22.8 min CN=60 Runoff=63.47 cfs 310,892 cf

Subcatchment 3S: EDA-3

Runoff Area=595,781 sf 30.45% Impervious Runoff Depth=5.78"
Flow Length=1,190' Tc=30.5 min CN=72 Runoff=51.89 cfs 286,957 cf

Subcatchment 4S: EDA-1

Runoff Area=135,489 sf 12.59% Impervious Runoff Depth=4.90"
Flow Length=460' Tc=16.5 min CN=65 Runoff=13.04 cfs 55,345 cf

Link 5L: Pocantico River Basin

Inflow=13.04 cfs 55,345 cf
Primary=13.04 cfs 55,345 cf

Link 6L: Pocantico Lake

Inflow=63.47 cfs 310,892 cf
Primary=63.47 cfs 310,892 cf

Link 7L: Mapped Wetland / Brook

Inflow=51.89 cfs 286,957 cf
Primary=51.89 cfs 286,957 cf

Link 16L: COMB PRE

Inflow=123.95 cfs 653,194 cf
Primary=123.95 cfs 653,194 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 653,194 cf Average Runoff Depth = 4.89"
85.40% Pervious = 1,370,019 sf 14.60% Impervious = 234,156 sf

Summary for Subcatchment 2S: EDA-2

Runoff = 63.47 cfs @ 12.33 hrs, Volume= 310,892 cf, Depth= 4.27"

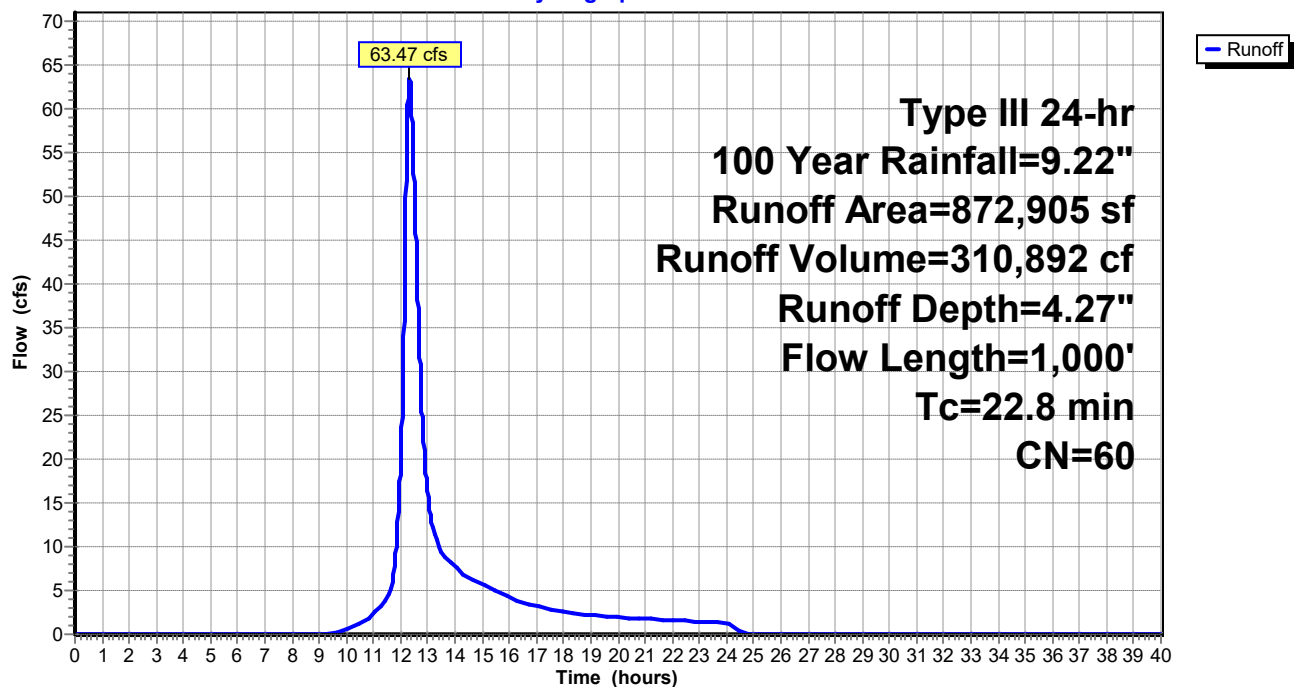
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=9.22"

	Area (sf)	CN	Description
*	35,674	98	Ex. IMP Pavement, Rooftops
	74,836	61	>75% Grass cover, Good, HSG B
	762,395	58	Woods/grass comb., Good, HSG B
	872,905	60	Weighted Average
	837,231		95.91% Pervious Area
	35,674		4.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0520	0.12		Sheet Flow, Shallow Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
4.2	280	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods
					Woodland Kv= 5.0 fps
0.1	40	0.0670	5.25		Shallow Concentrated Flow, Driveway Crossing
					Paved Kv= 20.3 fps
4.3	580	0.2030	2.25		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
22.8	1,000	Total			

Subcatchment 2S: EDA-2

Hydrograph



Summary for Subcatchment 3S: EDA-3

Runoff = 51.89 cfs @ 12.43 hrs, Volume= 286,957 cf, Depth= 5.78"

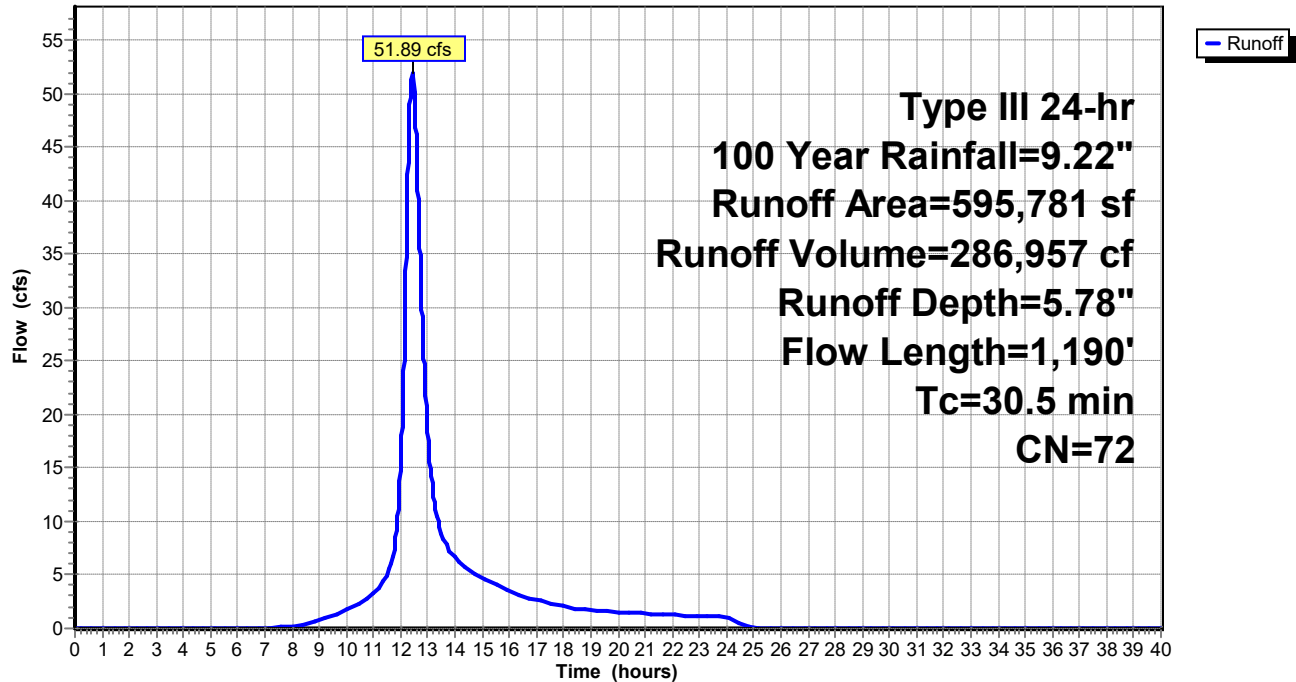
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=9.22"

	Area (sf)	CN	Description
*	7,168	98	Ex. IMP Pavement, Rooftops
	24,964	61	>75% Grass cover, Good, HSG B
	65,870	74	>75% Grass cover, Good, HSG C
	260,380	58	Woods/grass comb., Good, HSG B
	42,355	72	Woods/grass comb., Good, HSG C
	20,791	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	595,781	72	Weighted Average
	414,360		69.55% Pervious Area
	181,421		30.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
1.7	200	0.1600	2.00		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.9	210	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.2	200	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.1	400	0.1095	0.83		Shallow Concentrated Flow, Shallow Conc. Wetland Forest w/Heavy Litter Kv= 2.5 fps
0.2	80	0.0875	5.87	46.95	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.5	1,190	Total			

Subcatchment 3S: EDA-3

Hydrograph



Summary for Subcatchment 4S: EDA-1

Runoff = 13.04 cfs @ 12.23 hrs, Volume= 55,345 cf, Depth= 4.90"

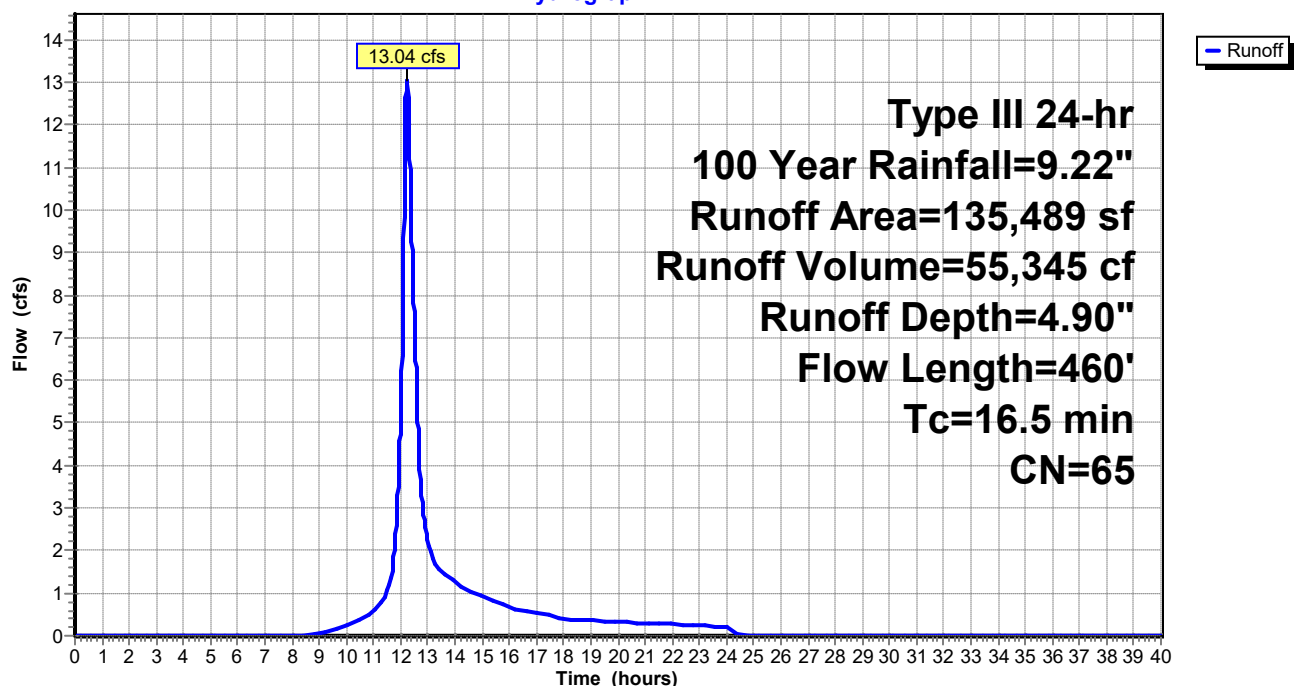
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=9.22"

	Area (sf)	CN	Description
*	17,061	98	Ex. IMP Pavement, Rooftops
	40,462	61	>75% Grass cover, Good, HSG B
	8,644	72	Woods/grass comb., Good, HSG C
	69,322	58	Woods/grass comb., Good, HSG B
	135,489	65	Weighted Average
	118,428		87.41% Pervious Area
	17,061		12.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0640	0.13		Sheet Flow, Woods Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
3.0	230	0.0665	1.29		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
0.4	130	0.0608	5.01		Shallow Concentrated Flow, Driveway Flow
					Paved Kv= 20.3 fps
16.5	460	Total			

Subcatchment 4S: EDA-1

Hydrograph



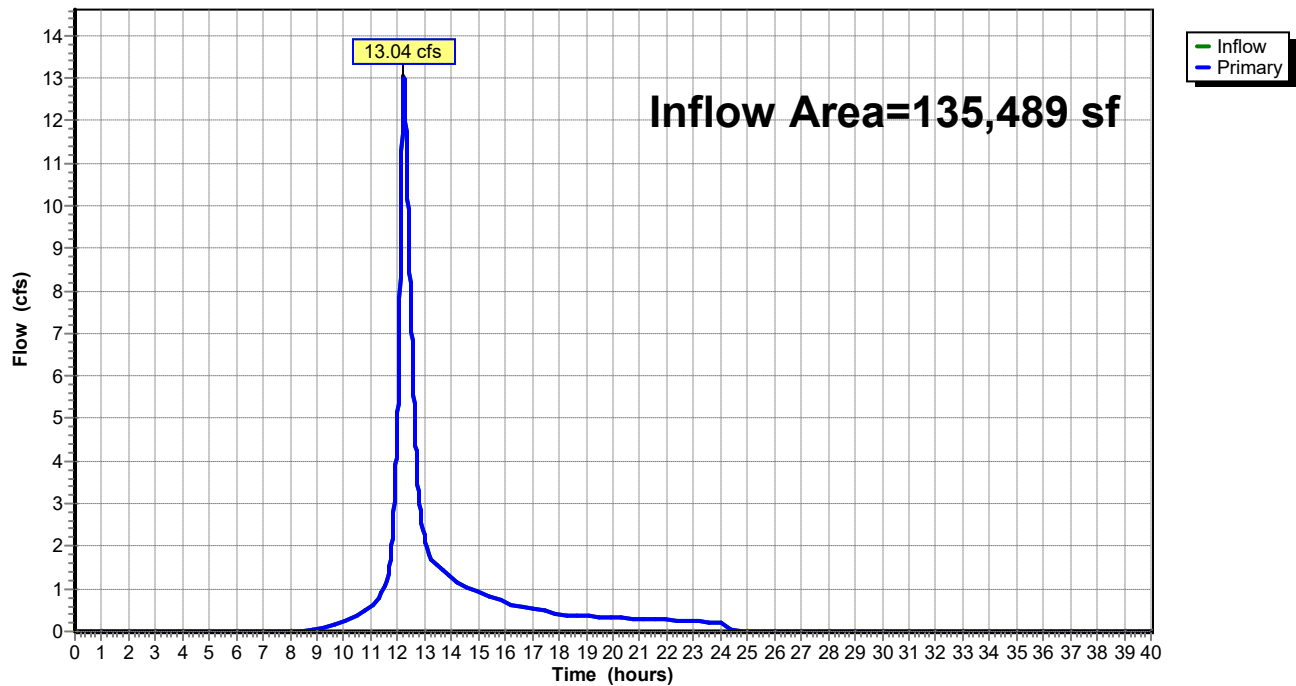
Summary for Link 5L: Pocantico River Basin

Inflow Area = 135,489 sf, 12.59% Impervious, Inflow Depth = 4.90" for 100 Year event
 Inflow = 13.04 cfs @ 12.23 hrs, Volume= 55,345 cf
 Primary = 13.04 cfs @ 12.23 hrs, Volume= 55,345 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 5L: Pocantico River Basin

Hydrograph



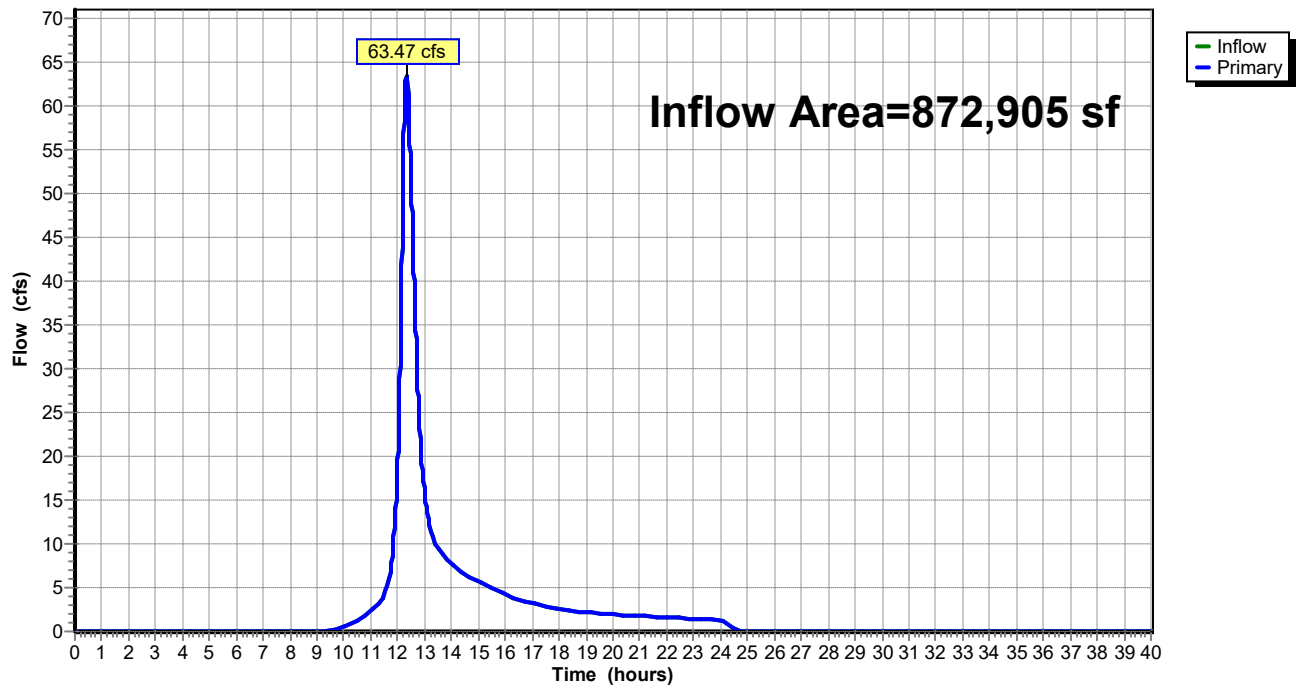
Summary for Link 6L: Pocantico Lake

Inflow Area = 872,905 sf, 4.09% Impervious, Inflow Depth = 4.27" for 100 Year event
 Inflow = 63.47 cfs @ 12.33 hrs, Volume= 310,892 cf
 Primary = 63.47 cfs @ 12.33 hrs, Volume= 310,892 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 6L: Pocantico Lake

Hydrograph



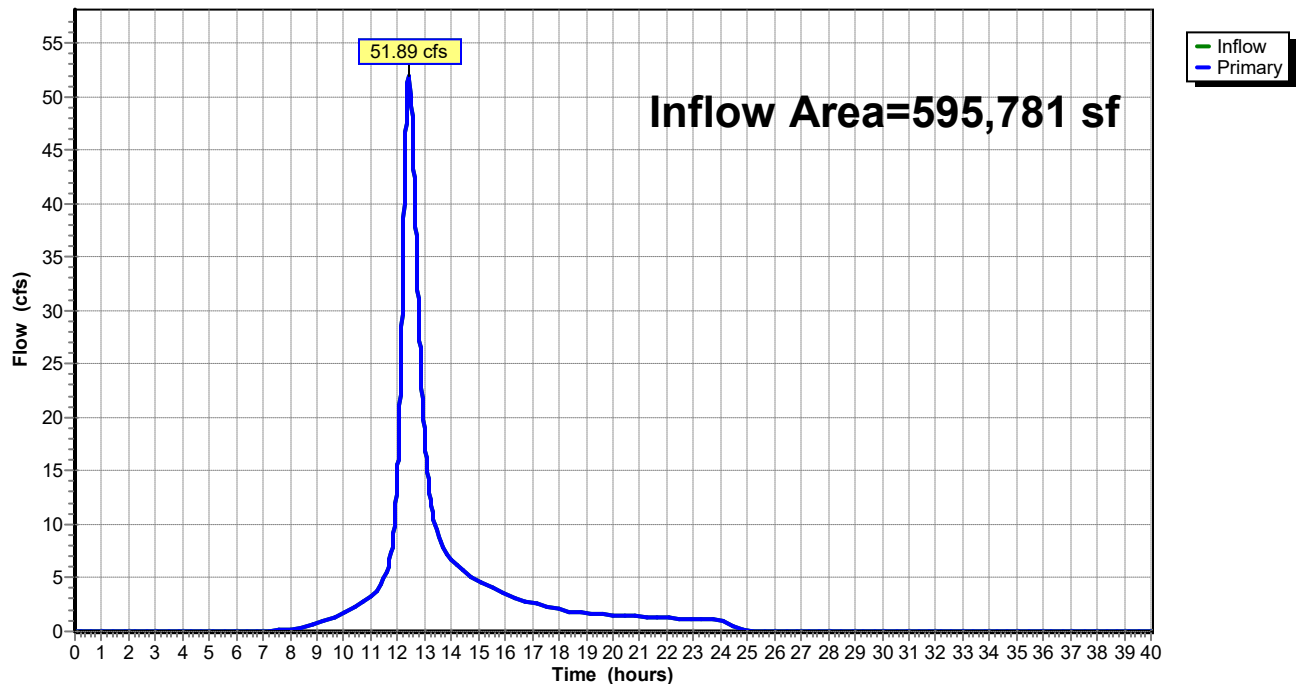
Summary for Link 7L: Mapped Wetland / Brook

Inflow Area = 595,781 sf, 30.45% Impervious, Inflow Depth = 5.78" for 100 Year event
 Inflow = 51.89 cfs @ 12.43 hrs, Volume= 286,957 cf
 Primary = 51.89 cfs @ 12.43 hrs, Volume= 286,957 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 7L: Mapped Wetland / Brook

Hydrograph



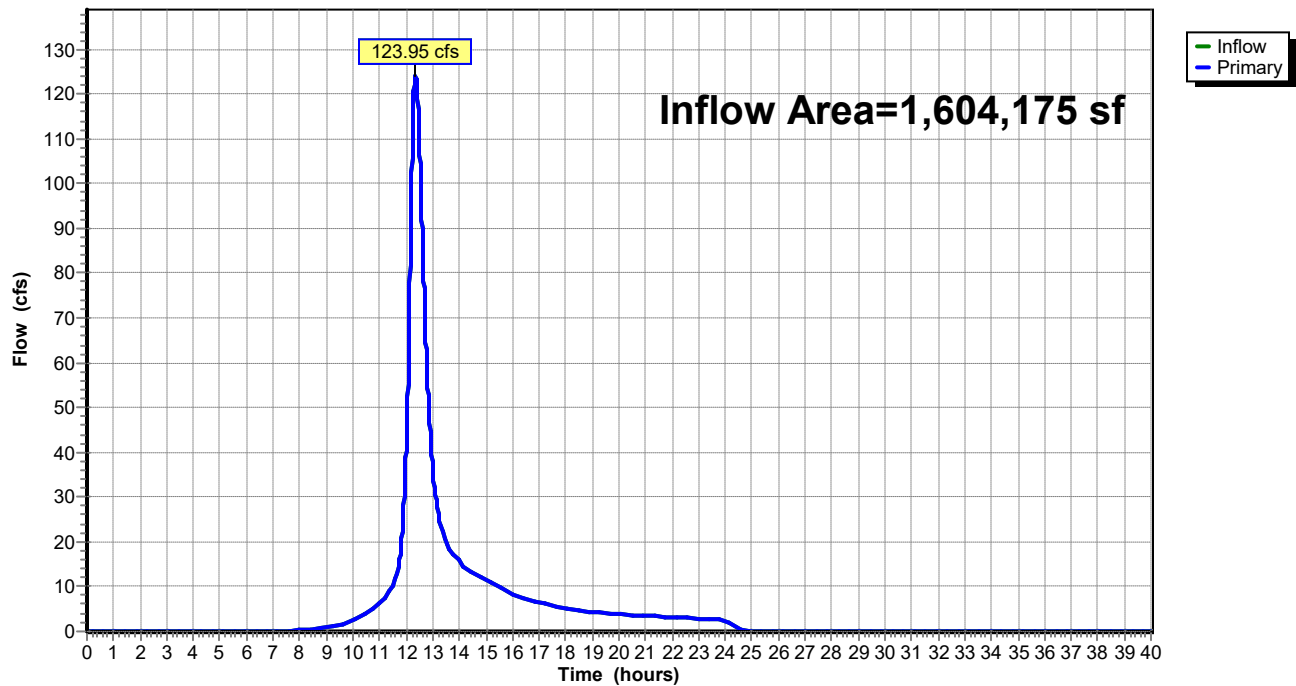
Summary for Link 16L: COMB PRE

Inflow Area = 1,604,175 sf, 14.60% Impervious, Inflow Depth = 4.89" for 100 Year event
 Inflow = 123.95 cfs @ 12.34 hrs, Volume= 653,194 cf
 Primary = 123.95 cfs @ 12.34 hrs, Volume= 653,194 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 16L: COMB PRE

Hydrograph



Meadows Briarcliff_CONV_01032022*Type III 24-hr 500 Year Rainfall=13.99"*

Prepared by Wasp Engineering Group, PLLC

Printed 1/13/2022

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2S: EDA-2

Runoff Area=872,905 sf 4.09% Impervious Runoff Depth=8.29"
Flow Length=1,000' Tc=22.8 min CN=60 Runoff=124.16 cfs 603,035 cf

Subcatchment 3S: EDA-3

Runoff Area=595,781 sf 30.45% Impervious Runoff Depth=10.21"
Flow Length=1,190' Tc=30.5 min CN=72 Runoff=90.23 cfs 506,796 cf

Subcatchment 4S: EDA-1

Runoff Area=135,489 sf 12.59% Impervious Runoff Depth=9.11"
Flow Length=460' Tc=16.5 min CN=65 Runoff=24.15 cfs 102,893 cf

Link 5L: Pocantico River Basin

Inflow=24.15 cfs 102,893 cf
Primary=24.15 cfs 102,893 cf

Link 6L: Pocantico Lake

Inflow=124.16 cfs 603,035 cf
Primary=124.16 cfs 603,035 cf

Link 7L: Mapped Wetland / Brook

Inflow=90.23 cfs 506,796 cf
Primary=90.23 cfs 506,796 cf

Link 16L: COMB PRE

Inflow=230.46 cfs 1,212,723 cf
Primary=230.46 cfs 1,212,723 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 1,212,723 cf Average Runoff Depth = 9.07"
85.40% Pervious = 1,370,019 sf 14.60% Impervious = 234,156 sf

Summary for Subcatchment 2S: EDA-2

Runoff = 124.16 cfs @ 12.31 hrs, Volume= 603,035 cf, Depth= 8.29"

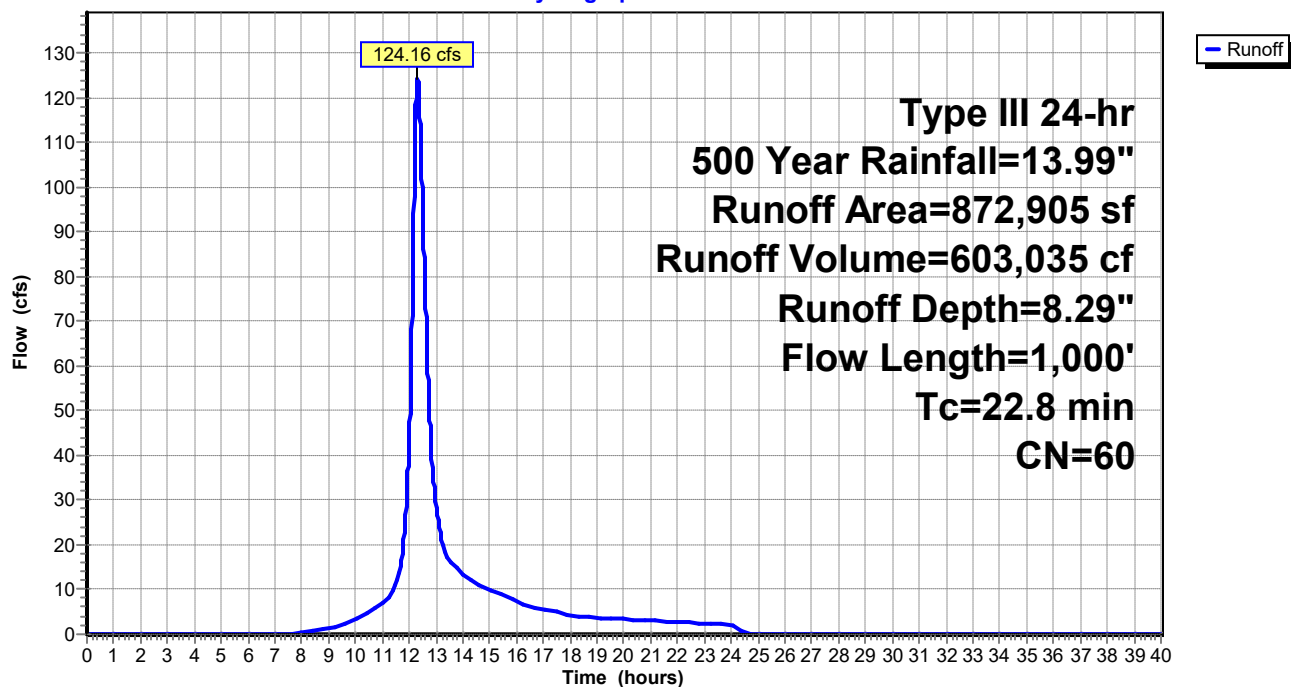
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 500 Year Rainfall=13.99"

	Area (sf)	CN	Description
*	35,674	98	Ex. IMP Pavement, Rooftops
	74,836	61	>75% Grass cover, Good, HSG B
	762,395	58	Woods/grass comb., Good, HSG B
	872,905	60	Weighted Average
	837,231		95.91% Pervious Area
	35,674		4.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0520	0.12		Sheet Flow, Shallow Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
4.2	280	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods
					Woodland Kv= 5.0 fps
0.1	40	0.0670	5.25		Shallow Concentrated Flow, Driveway Crossing
					Paved Kv= 20.3 fps
4.3	580	0.2030	2.25		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
22.8	1,000	Total			

Subcatchment 2S: EDA-2

Hydrograph



Summary for Subcatchment 3S: EDA-3

Runoff = 90.23 cfs @ 12.41 hrs, Volume= 506,796 cf, Depth=10.21"

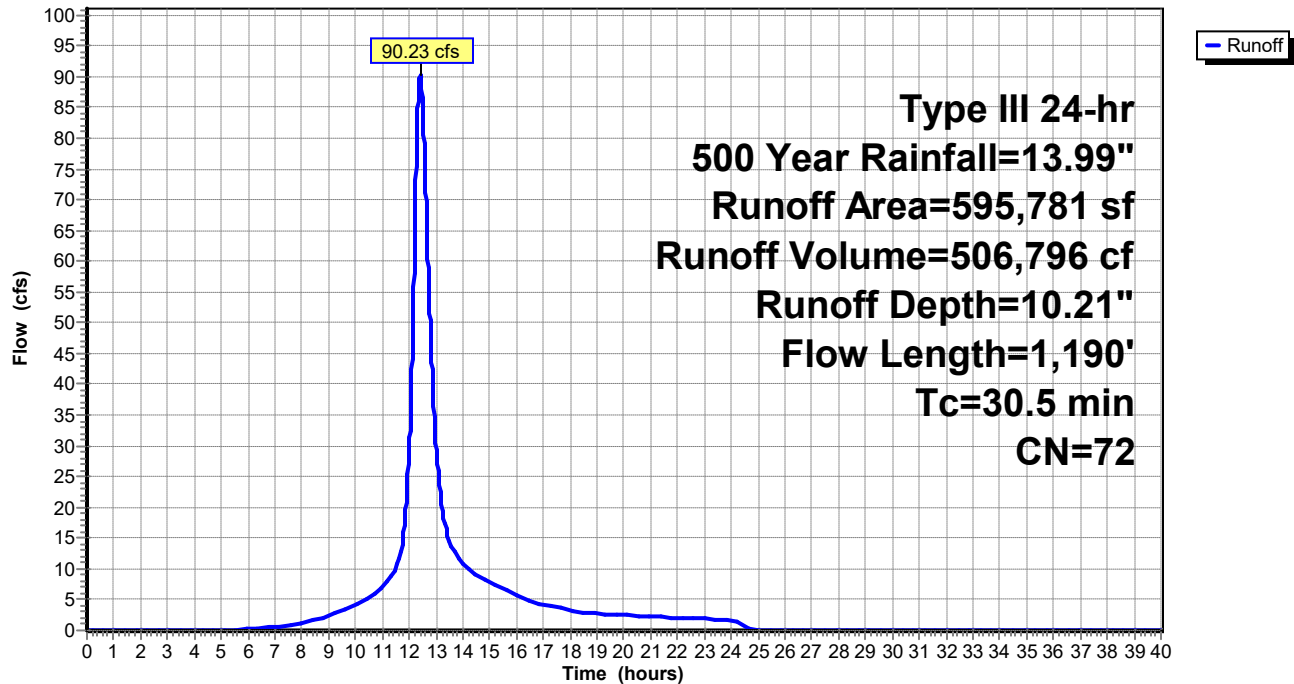
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 500 Year Rainfall=13.99"

	Area (sf)	CN	Description
*	7,168	98	Ex. IMP Pavement, Rooftops
	24,964	61	>75% Grass cover, Good, HSG B
	65,870	74	>75% Grass cover, Good, HSG C
	260,380	58	Woods/grass comb., Good, HSG B
	42,355	72	Woods/grass comb., Good, HSG C
	20,791	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	595,781	72	Weighted Average
	414,360		69.55% Pervious Area
	181,421		30.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
1.7	200	0.1600	2.00		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.9	210	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.2	200	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.1	400	0.1095	0.83		Shallow Concentrated Flow, Shallow Conc. Wetland Forest w/Heavy Litter Kv= 2.5 fps
0.2	80	0.0875	5.87	46.95	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.5	1,190	Total			

Subcatchment 3S: EDA-3

Hydrograph



Summary for Subcatchment 4S: EDA-1

Runoff = 24.15 cfs @ 12.23 hrs, Volume= 102,893 cf, Depth= 9.11"

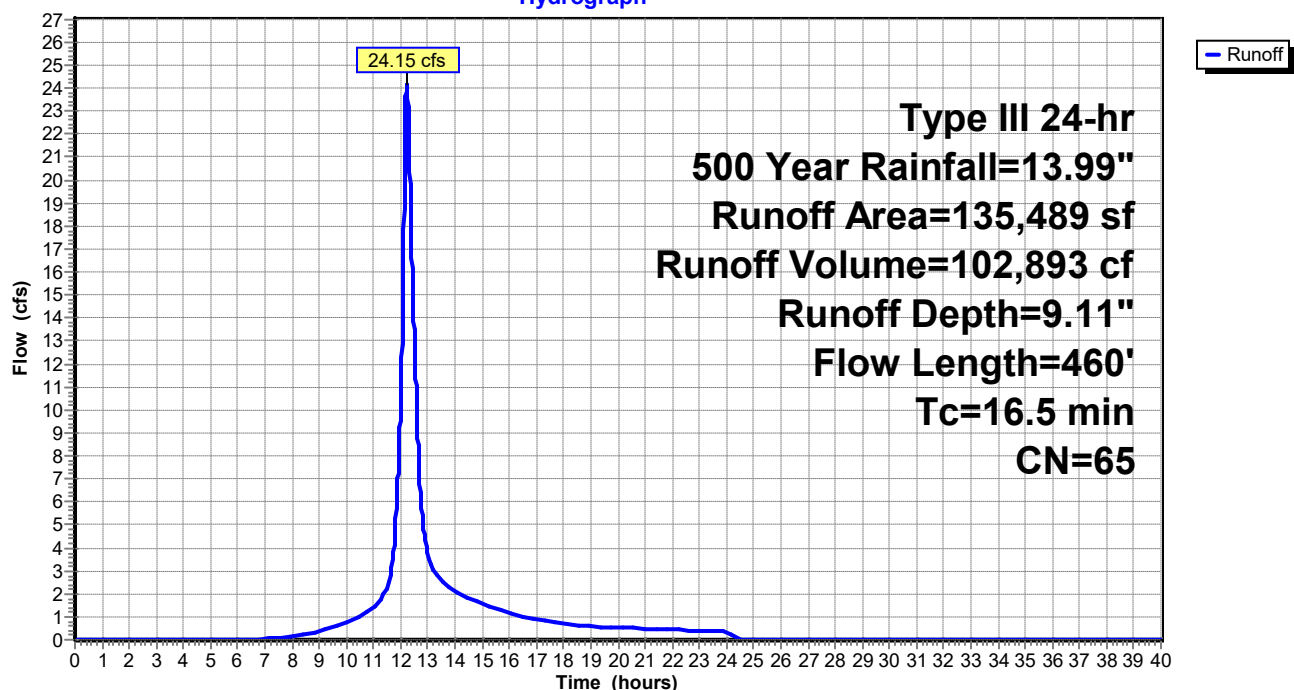
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 500 Year Rainfall=13.99"

	Area (sf)	CN	Description
*	17,061	98	Ex. IMP Pavement, Rooftops
	40,462	61	>75% Grass cover, Good, HSG B
	8,644	72	Woods/grass comb., Good, HSG C
	69,322	58	Woods/grass comb., Good, HSG B
	135,489	65	Weighted Average
	118,428		87.41% Pervious Area
	17,061		12.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0640	0.13		Sheet Flow, Woods Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
3.0	230	0.0665	1.29		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
0.4	130	0.0608	5.01		Shallow Concentrated Flow, Driveway Flow
					Paved Kv= 20.3 fps
16.5	460	Total			

Subcatchment 4S: EDA-1

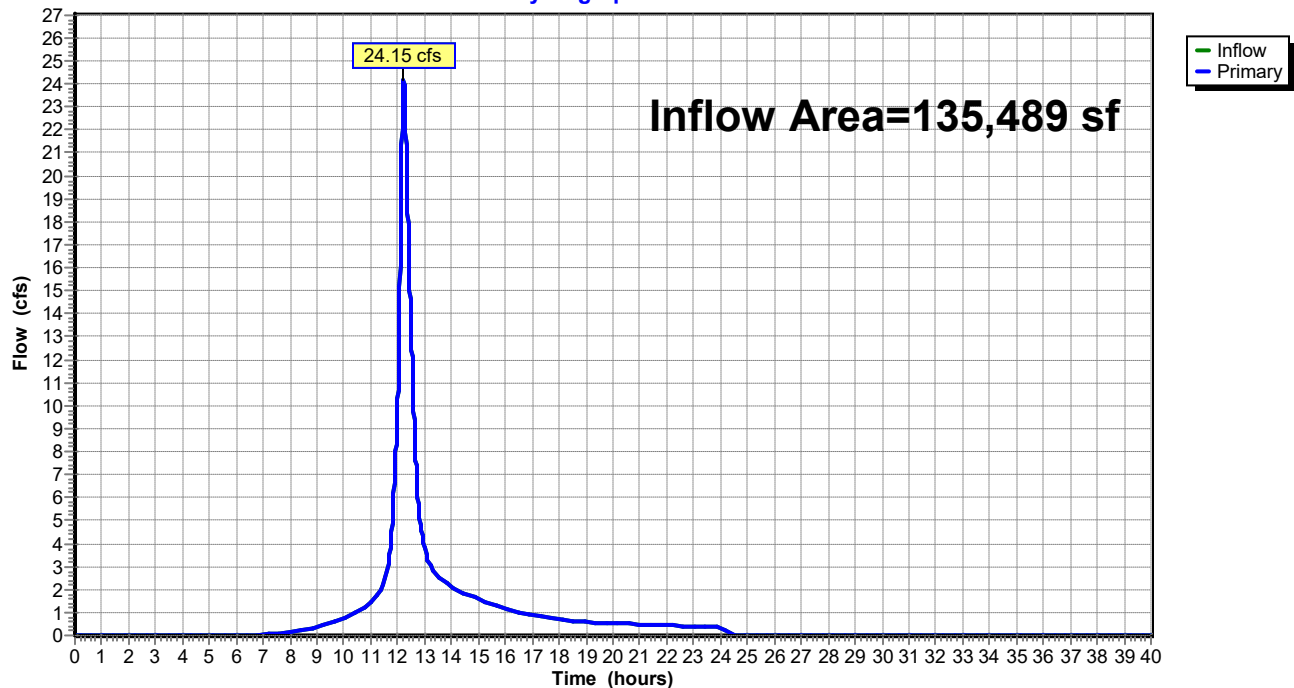
Hydrograph



Summary for Link 5L: Pocantico River Basin

Inflow Area = 135,489 sf, 12.59% Impervious, Inflow Depth = 9.11" for 500 Year event
Inflow = 24.15 cfs @ 12.23 hrs, Volume= 102,893 cf
Primary = 24.15 cfs @ 12.23 hrs, Volume= 102,893 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 5L: Pocantico River Basin**Hydrograph**

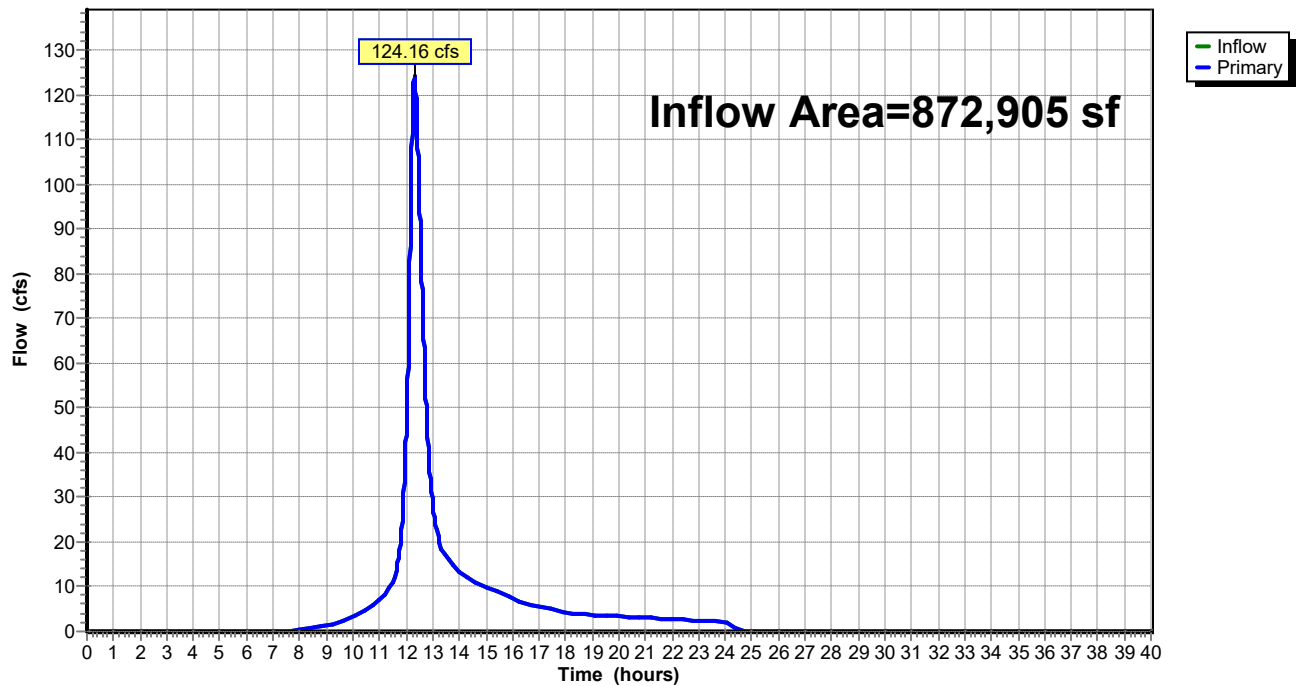
Summary for Link 6L: Pocantico Lake

Inflow Area = 872,905 sf, 4.09% Impervious, Inflow Depth = 8.29" for 500 Year event
 Inflow = 124.16 cfs @ 12.31 hrs, Volume= 603,035 cf
 Primary = 124.16 cfs @ 12.31 hrs, Volume= 603,035 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 6L: Pocantico Lake

Hydrograph

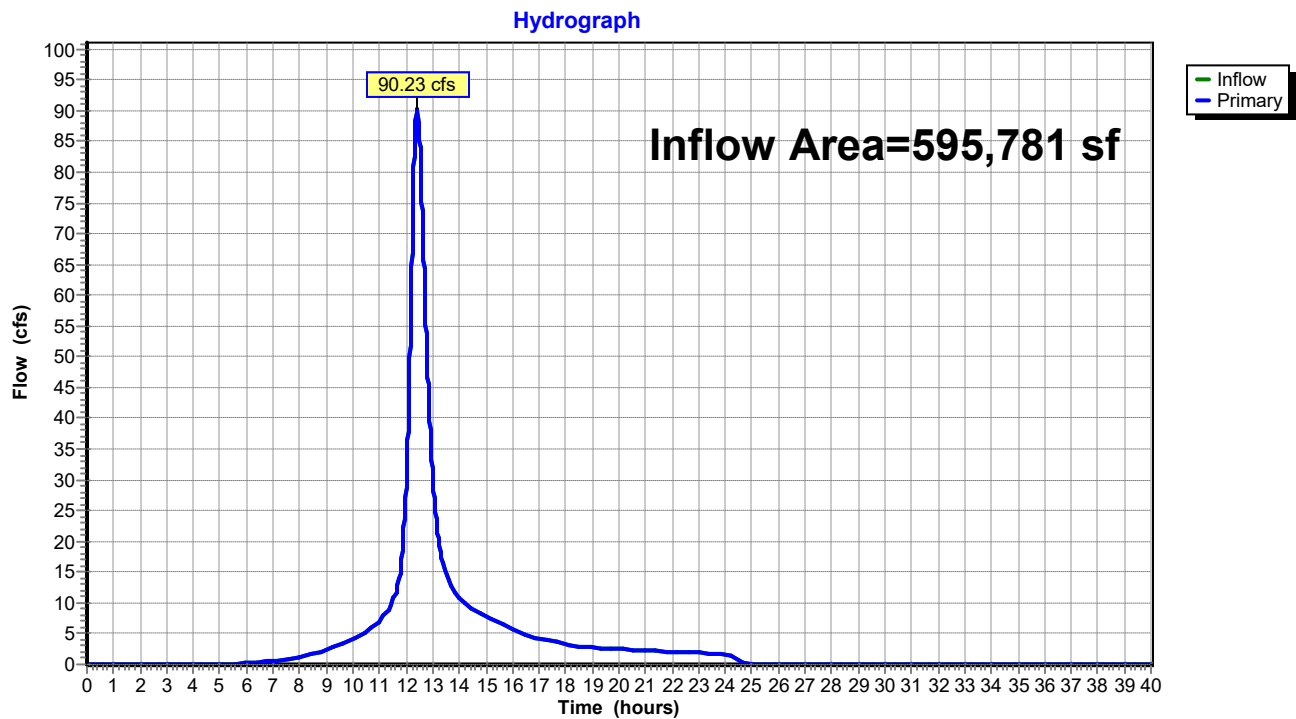


Summary for Link 7L: Mapped Wetland / Brook

Inflow Area = 595,781 sf, 30.45% Impervious, Inflow Depth = 10.21" for 500 Year event
 Inflow = 90.23 cfs @ 12.41 hrs, Volume= 506,796 cf
 Primary = 90.23 cfs @ 12.41 hrs, Volume= 506,796 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 7L: Mapped Wetland / Brook



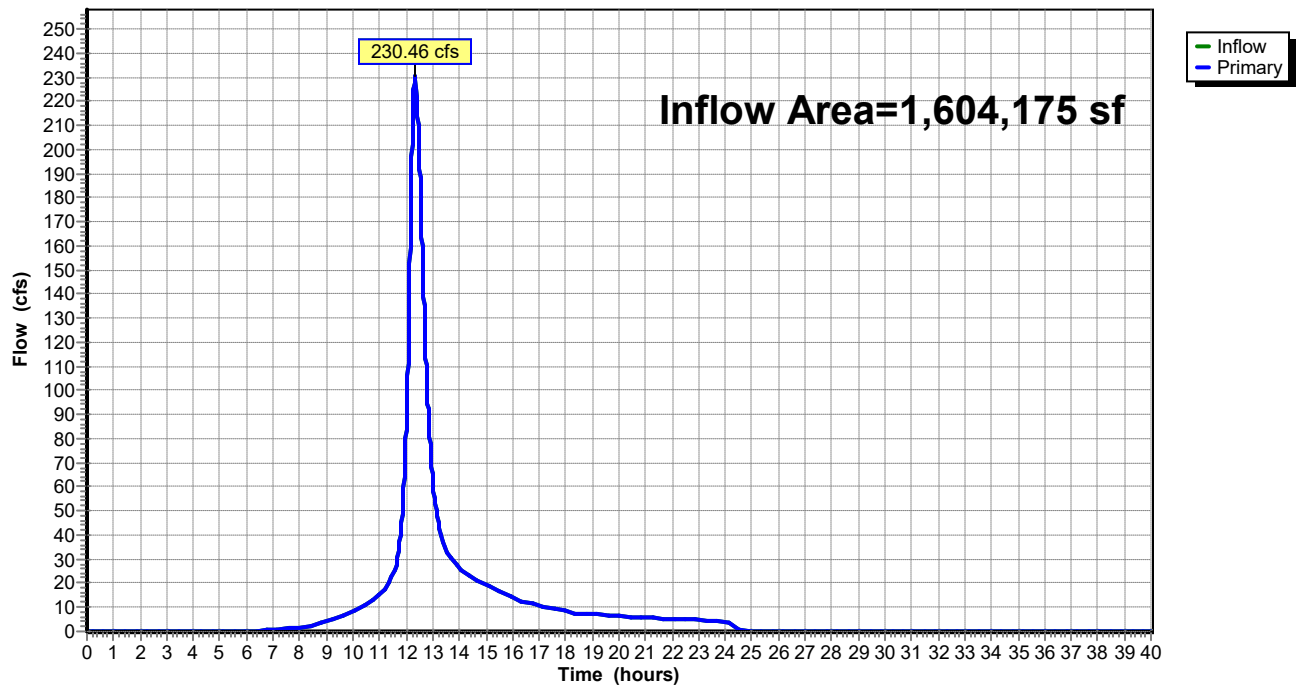
Summary for Link 16L: COMB PRE

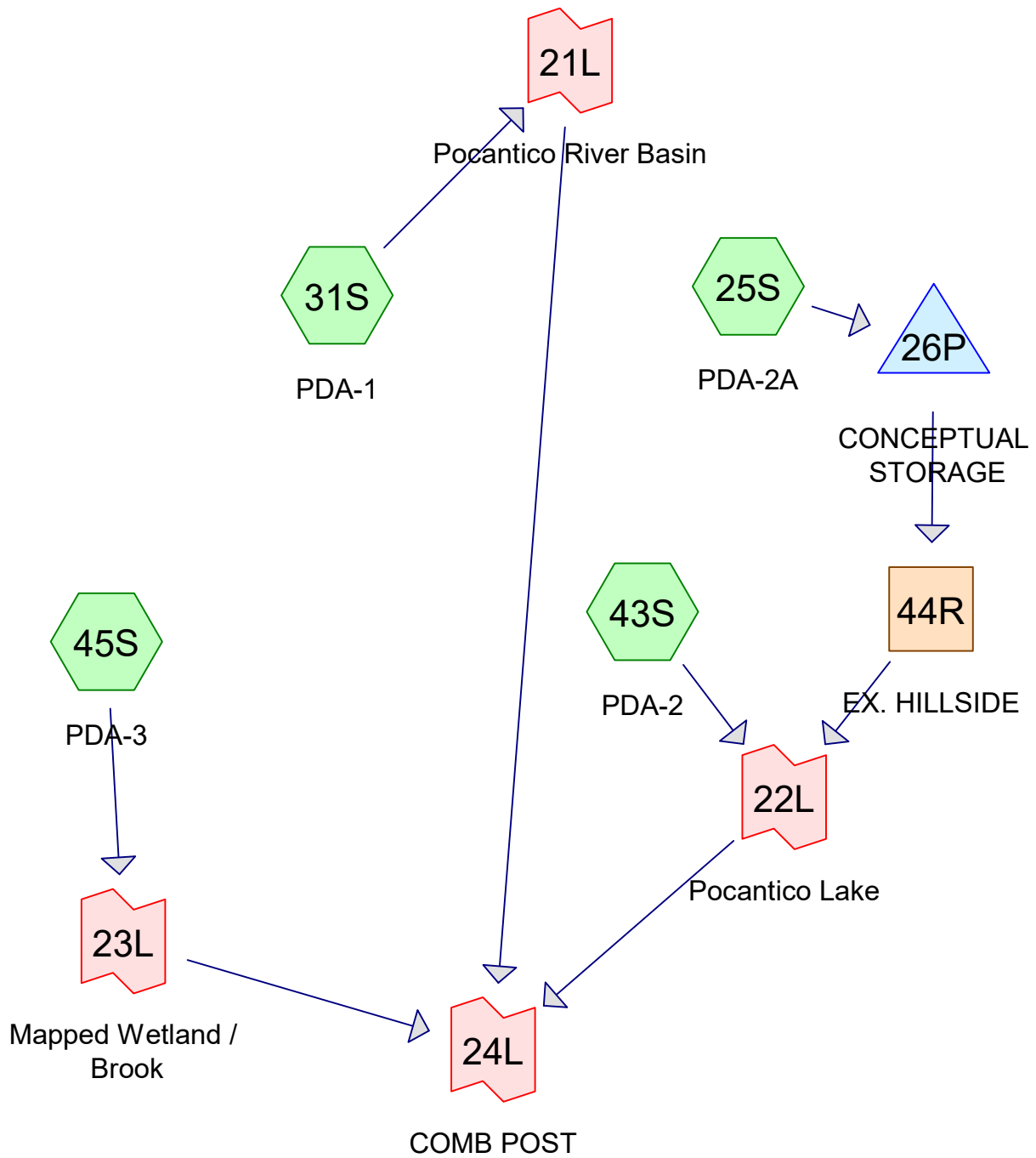
Inflow Area = 1,604,175 sf, 14.60% Impervious, Inflow Depth = 9.07" for 500 Year event
 Inflow = 230.46 cfs @ 12.34 hrs, Volume= 1,212,723 cf
 Primary = 230.46 cfs @ 12.34 hrs, Volume= 1,212,723 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 16L: COMB PRE

Hydrograph





Routing Diagram for Meadows Briarcliff_01122022

Prepared by Wasp Engineering Group, PLLC, Printed 1/14/2022
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Meadows Briarcliff_01122022

Type III 24-hr 1 Year Rainfall=2.80"

Prepared by Wasp Engineering Group, PLLC

Printed 1/14/2022

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Page 2

Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 25S: PDA-2A

Runoff Area=401,971 sf 30.05% Impervious Runoff Depth=0.69"
Flow Length=760' Tc=14.4 min CN=72 Runoff=5.00 cfs 23,174 cf

Subcatchment 31S: PDA-1

Runoff Area=61,330 sf 10.95% Impervious Runoff Depth=0.57"
Flow Length=160' Tc=15.6 min CN=69 Runoff=0.56 cfs 2,890 cf

Subcatchment 43S: PDA-2

Runoff Area=603,866 sf 1.84% Impervious Runoff Depth=0.24"
Flow Length=530' Tc=11.3 min CN=59 Runoff=1.37 cfs 11,971 cf

Subcatchment 45S: PDA-3

Runoff Area=537,001 sf 33.53% Impervious Runoff Depth=0.74"
Flow Length=970' Tc=30.3 min CN=73 Runoff=5.40 cfs 32,984 cf

Reach 44R: EX. HILLSIDE

Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.080 L=390.0' S=0.3077 '/' Capacity=216.58 cfs Outflow=0.00 cfs 0 cf

Pond 26P: CONCEPTUAL STORAGE

Peak Elev=348.24' Storage=4,933 cf Inflow=5.00 cfs 23,174 cf
Discarded=1.42 cfs 23,183 cf Primary=0.00 cfs 0 cf Outflow=1.42 cfs 23,183 cf

Link 21L: Pocantico River Basin

Inflow=0.56 cfs 2,890 cf
Primary=0.56 cfs 2,890 cf

Link 22L: Pocantico Lake

Inflow=1.37 cfs 11,971 cf
Primary=1.37 cfs 11,971 cf

Link 23L: Mapped Wetland / Brook

Inflow=5.40 cfs 32,984 cf
Primary=5.40 cfs 32,984 cf

Link 24L: COMB POST

Inflow=7.15 cfs 47,845 cf
Primary=7.15 cfs 47,845 cf

Total Runoff Area = 1,604,168 sf Runoff Volume = 71,019 cf Average Runoff Depth = 0.53"
80.13% Pervious = 1,285,469 sf 19.87% Impervious = 318,699 sf

Summary for Subcatchment 25S: PDA-2A

Runoff = 5.00 cfs @ 12.22 hrs, Volume= 23,174 cf, Depth= 0.69"

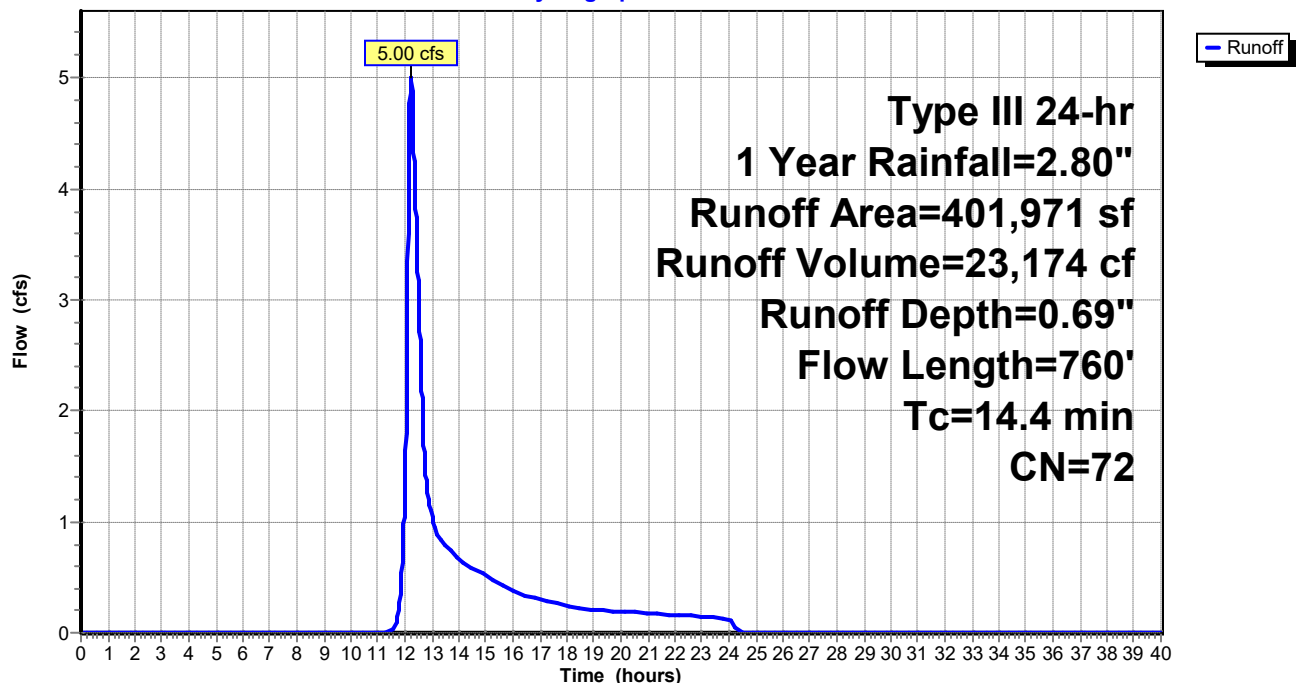
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

	Area (sf)	CN	Description
*	120,802	98	PROP IMP Pavement, Rooftops
	228,381	61	>75% Grass cover, Good, HSG B
	52,788	58	Woods/grass comb., Good, HSG B
	401,971	72	Weighted Average
	281,169		69.95% Pervious Area
	120,802		30.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0780	0.21		Sheet Flow, Sheet Flow Lawn Grass: Dense n= 0.240 P2= 3.41"
6.2	450	0.0300	1.21		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
0.2	210	0.0500	18.68	91.72	Pipe Channel, 30" PIPE 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013 Concrete pipe, bends & connections
14.4	760	Total			

Subcatchment 25S: PDA-2A

Hydrograph



Summary for Subcatchment 31S: PDA-1

Runoff = 0.56 cfs @ 12.26 hrs, Volume= 2,890 cf, Depth= 0.57"

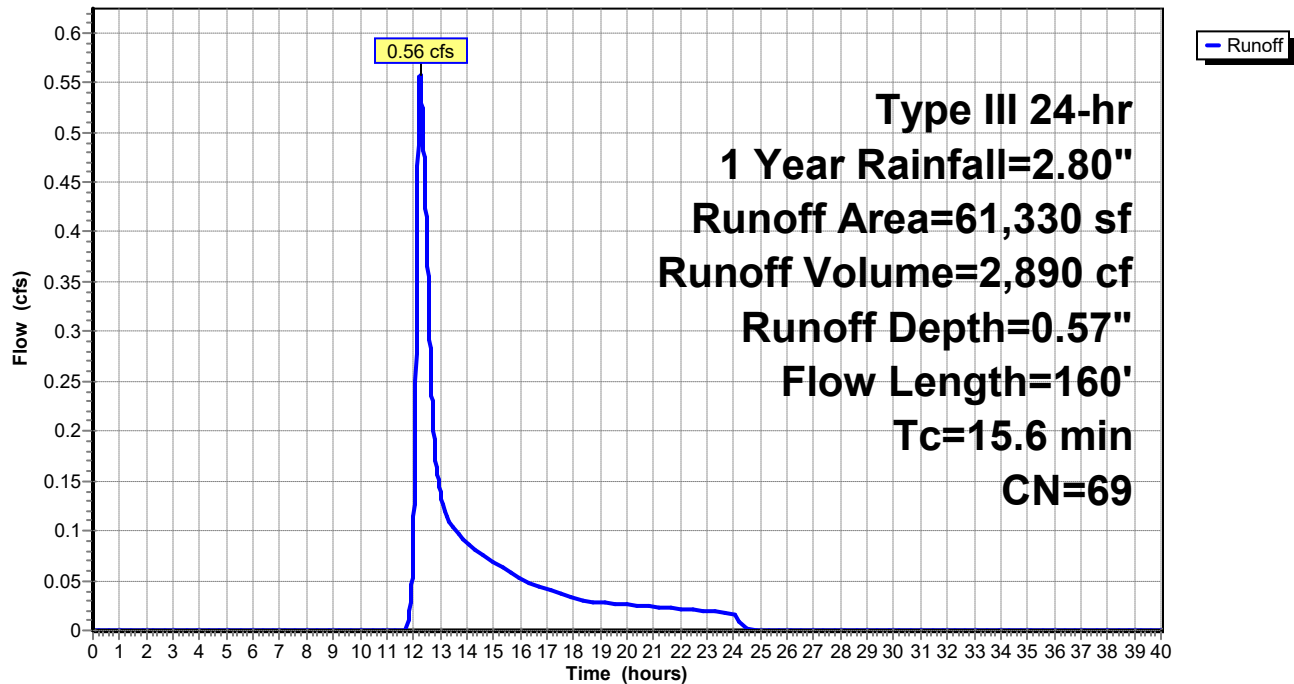
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

Area (sf)	CN	Description
27,090	61	>75% Grass cover, Good, HSG B
16,693	74	>75% Grass cover, Good, HSG C
5,935	72	Woods/grass comb., Good, HSG C
4,898	58	Woods/grass comb., Good, HSG B
6,714	98	Paved parking, HSG B
61,330	69	Weighted Average
54,616		89.05% Pervious Area
6,714		10.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	100	0.0450	0.11		Sheet Flow, Wooded Sheet Flow Woods: Light underbrush n= 0.400 P2= 3.41"
0.5	35	0.0550	1.17		Shallow Concentrated Flow, Woods Shallow Conc Flow Woodland Kv= 5.0 fps
0.0	15	0.0667	5.24		Shallow Concentrated Flow, Driveway crossing Paved Kv= 20.3 fps
0.1	10	0.0600	1.71		Shallow Concentrated Flow, Grass Shoulder Short Grass Pasture Kv= 7.0 fps
15.6	160	Total			

Subcatchment 31S: PDA-1

Hydrograph



Summary for Subcatchment 43S: PDA-2

Runoff = 1.37 cfs @ 12.40 hrs, Volume= 11,971 cf, Depth= 0.24"

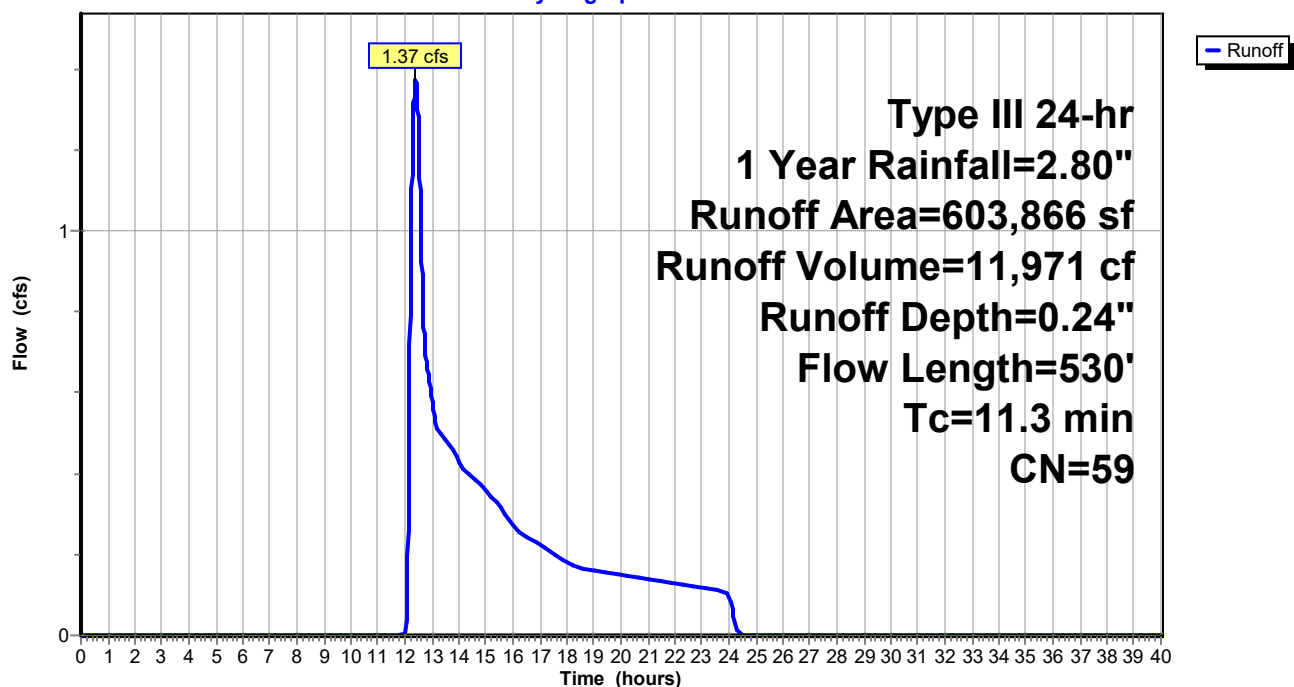
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Type III 24-hr 1 Year Rainfall=2.80"

	Area (sf)	CN	Description
*	11,116	98	EX. IMP Pavement, Rooftops
	57,480	61	>75% Grass cover, Good, HSG B
	535,270	58	Woods/grass comb., Good, HSG B
	603,866	59	Weighted Average
	592,750		98.16% Pervious Area
	11,116		1.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.1800	0.19		Sheet Flow, Sheet Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
2.7	430	0.2840	2.66		Shallow Concentrated Flow, Shallow Woods
					Woodland Kv= 5.0 fps
11.3	530	Total			

Subcatchment 43S: PDA-2

Hydrograph



Summary for Subcatchment 45S: PDA-3

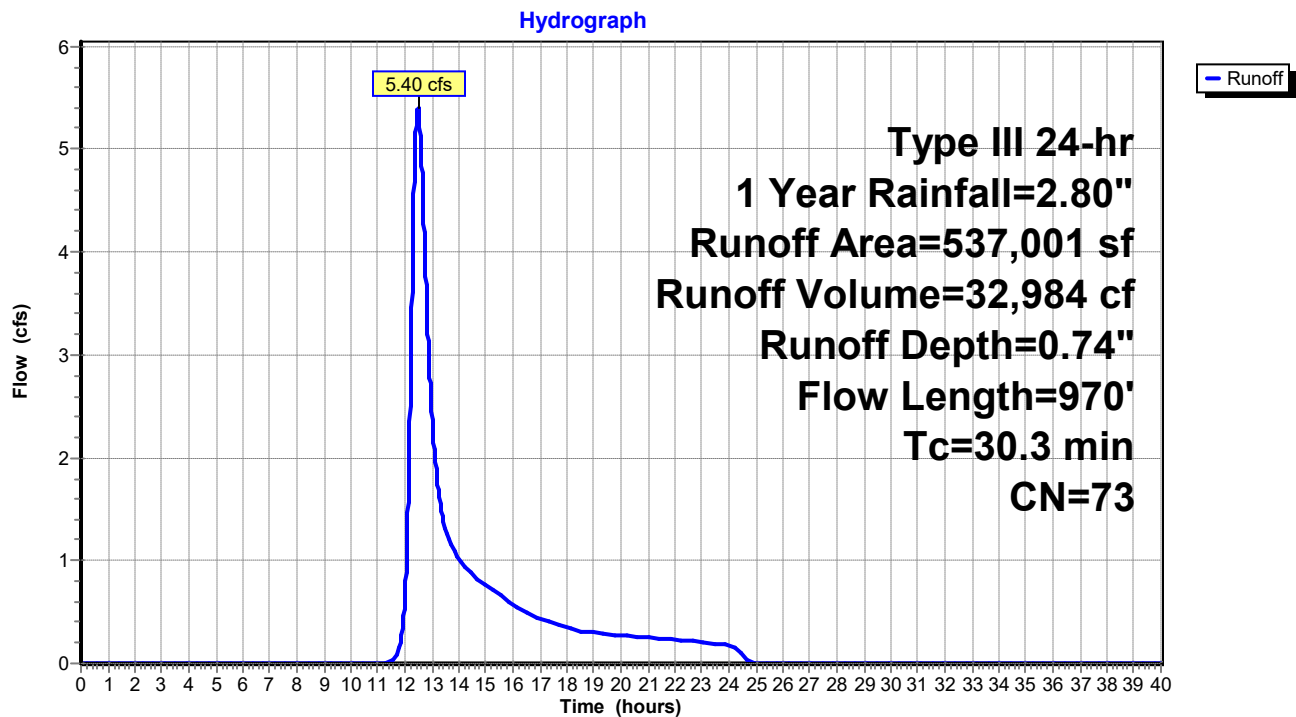
Runoff = 5.40 cfs @ 12.49 hrs, Volume= 32,984 cf, Depth= 0.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.80"

	Area (sf)	CN	Description
*	5,814	98	Ex. IMP Pavement, Rooftops
	60,762	74	>75% Grass cover, Good, HSG C
	50,551	61	>75% Grass cover, Good, HSG B
	191,609	58	Woods/grass comb., Good, HSG B
	34,183	72	Woods/grass comb., Good, HSG C
	19,829	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	537,001	73	Weighted Average
	356,934		66.47% Pervious Area
	180,067		33.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	50	0.2800	0.20		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
10.9	50	0.1000	0.08		Sheet Flow, Sheet Flow Wetlands Woods: Dense underbrush n= 0.800 P2= 3.41"
4.7	200	0.0800	0.71		Shallow Concentrated Flow, Shallow Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.0	180	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.2	390	0.1000	0.79		Shallow Concentrated Flow, Shallow Conc Wetlands Forest w/Heavy Litter Kv= 2.5 fps
0.3	100	0.1100	6.58	52.64	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.3	970	Total			

Subcatchment 45S: PDA-3



Summary for Reach 44R: EX. HILLSIDE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 0.00" for 1 Year event
 Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
 Avg. Velocity= 0.00 fps, Avg. Travel Time= 0.0 min

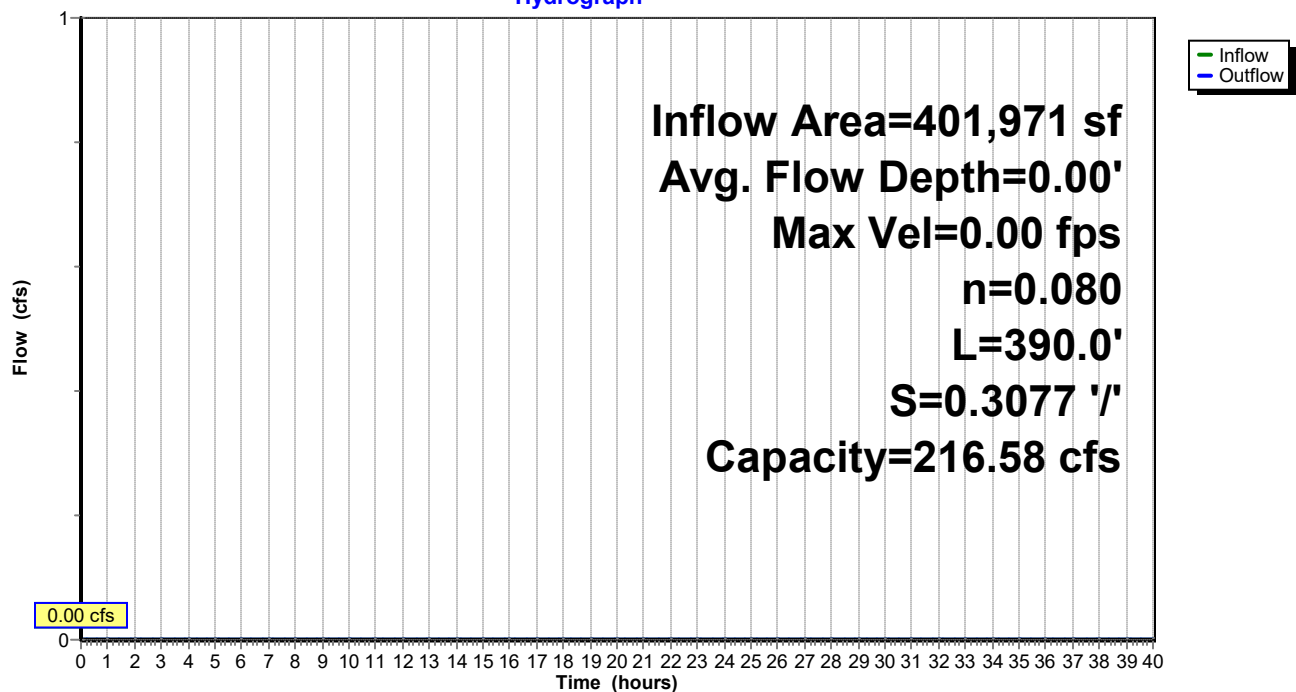
Peak Storage= 0 cf @ 0.00 hrs
 Average Depth at Peak Storage= 0.00'
 Bank-Full Depth= 1.00' Flow Area= 23.0 sf, Capacity= 216.58 cfs

20.00' x 1.00' deep channel, n= 0.080 Earth, long dense weeds
 Side Slope Z-value= 3.0 '/' Top Width= 26.00'
 Length= 390.0' Slope= 0.3077 '/'
 Inlet Invert= 340.00', Outlet Invert= 220.00'



Reach 44R: EX. HILLSIDE

Hydrograph



Summary for Pond 26P: CONCEPTUAL STORAGE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 0.69" for 1 Year event
 Inflow = 5.00 cfs @ 12.22 hrs, Volume= 23,174 cf
 Outflow = 1.42 cfs @ 12.78 hrs, Volume= 23,183 cf, Atten= 72%, Lag= 33.2 min
 Discarded = 1.42 cfs @ 12.78 hrs, Volume= 23,183 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 348.24' @ 12.78 hrs Surf.Area= 20,453 sf Storage= 4,933 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 21.5 min (907.8 - 886.3)

Volume	Invert	Avail.Storage	Storage Description		
#1	348.00'	174,238 cf	LOT 5-6 BASIN (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
348.00	20,140	650.0	0	0	20,140
350.00	22,790	675.1	42,903	42,903	23,100
352.00	25,542	700.2	48,306	91,209	26,172
354.00	28,392	725.3	53,909	145,117	29,356
355.00	29,855	737.9	29,120	174,238	30,996

Device	Routing	Invert	Outlet Devices											
#1	Discarded	348.00'	3.000 in/hr INFILTRATION over Surface area											
#2	Primary	353.50'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir											
			Head (feet)	0.20	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80	2.00	
				2.50	3.00	3.50	4.00	4.50	5.00	5.50				
			Coef. (English)	2.37	2.51	2.70	2.68	2.68	2.67	2.65	2.65	2.65		
				2.65	2.66	2.66	2.67	2.69	2.72	2.76	2.83			
#3	Primary	348.00'	30.0" Round 30" CULVERT OUT											
			L= 100.0' CPP, square edge headwall, Ke= 0.500											
			Inlet / Outlet Invert= 348.00' / 340.00' S= 0.0800 '/' Cc= 0.900											
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 4.91 sf											
#4	Device 3	353.10'	48.0" W x 12.0" H Vert. 48" VERT ORIFICE C= 0.600											

Discarded OutFlow Max=1.42 cfs @ 12.78 hrs HW=348.24' (Free Discharge)

↑ **1=INFILTRATION** (Exfiltration Controls 1.42 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=348.00' TW=340.00' (Dynamic Tailwater)

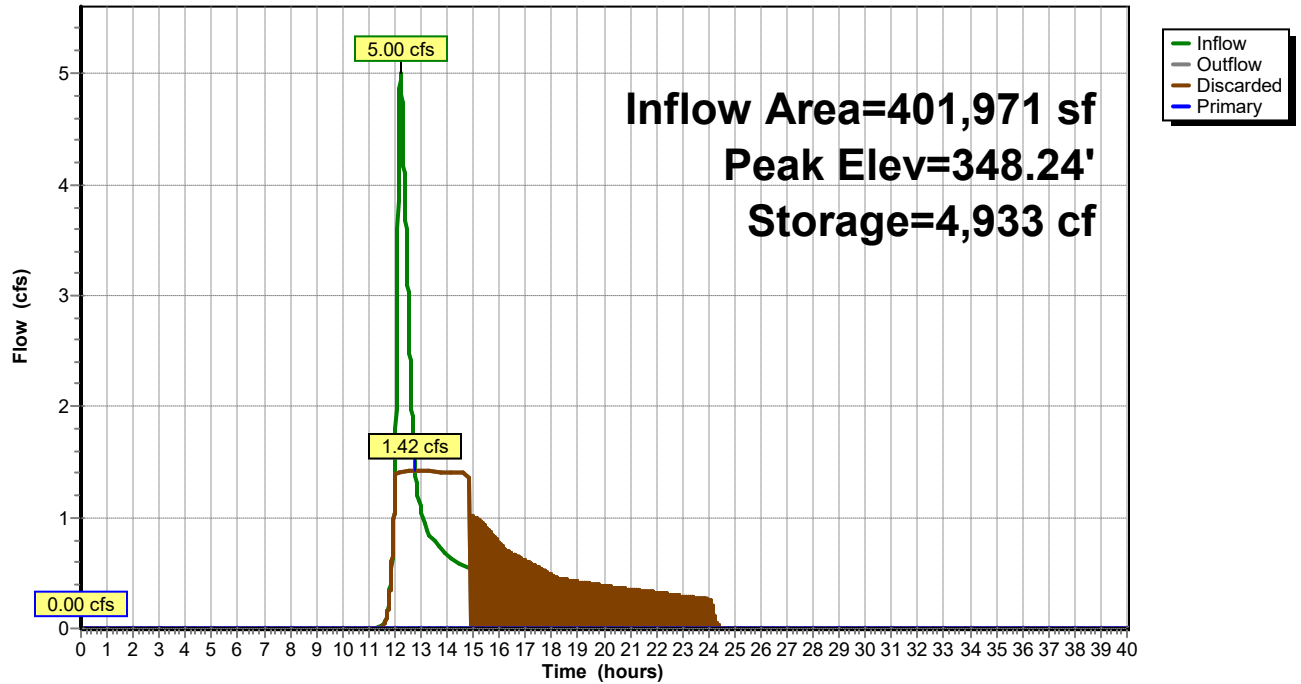
↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

↑ **3=30" CULVERT OUT** (Controls 0.00 cfs)

↑ **4=48" VERT ORIFICE** (Controls 0.00 cfs)

Pond 26P: CONCEPTUAL STORAGE

Hydrograph



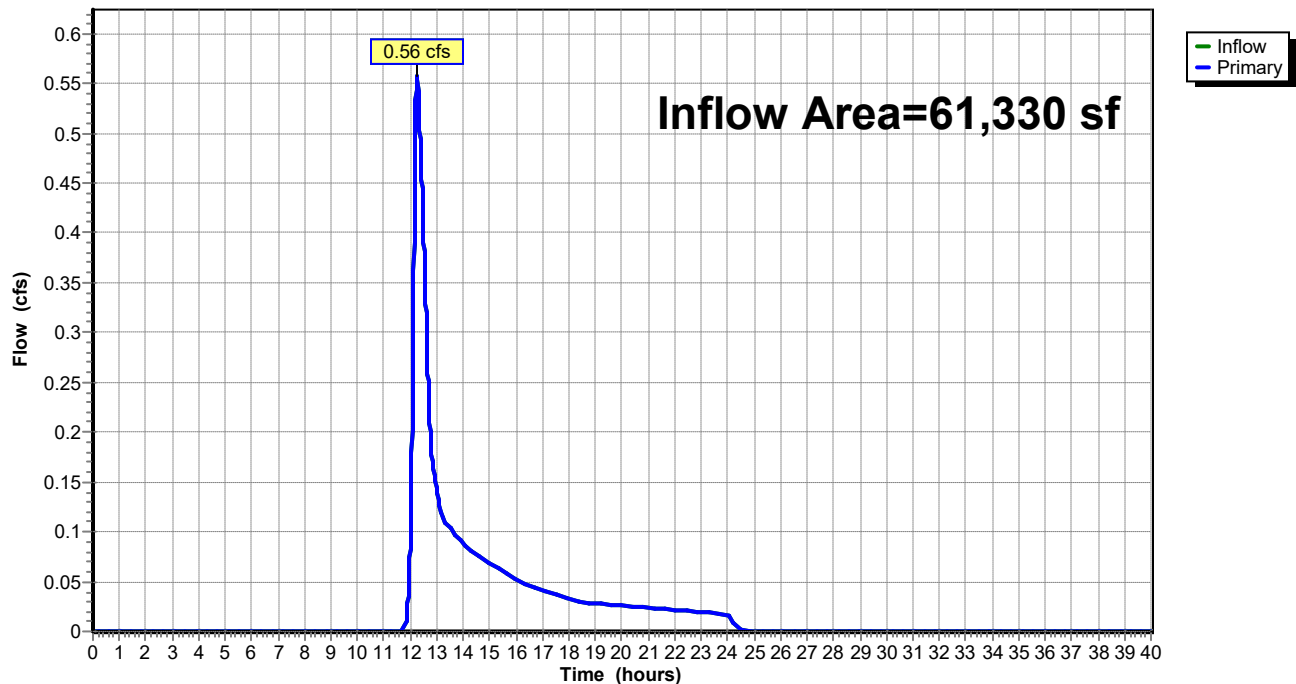
Summary for Link 21L: Pocantico River Basin

Inflow Area = 61,330 sf, 10.95% Impervious, Inflow Depth = 0.57" for 1 Year event
 Inflow = 0.56 cfs @ 12.26 hrs, Volume= 2,890 cf
 Primary = 0.56 cfs @ 12.26 hrs, Volume= 2,890 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 21L: Pocantico River Basin

Hydrograph



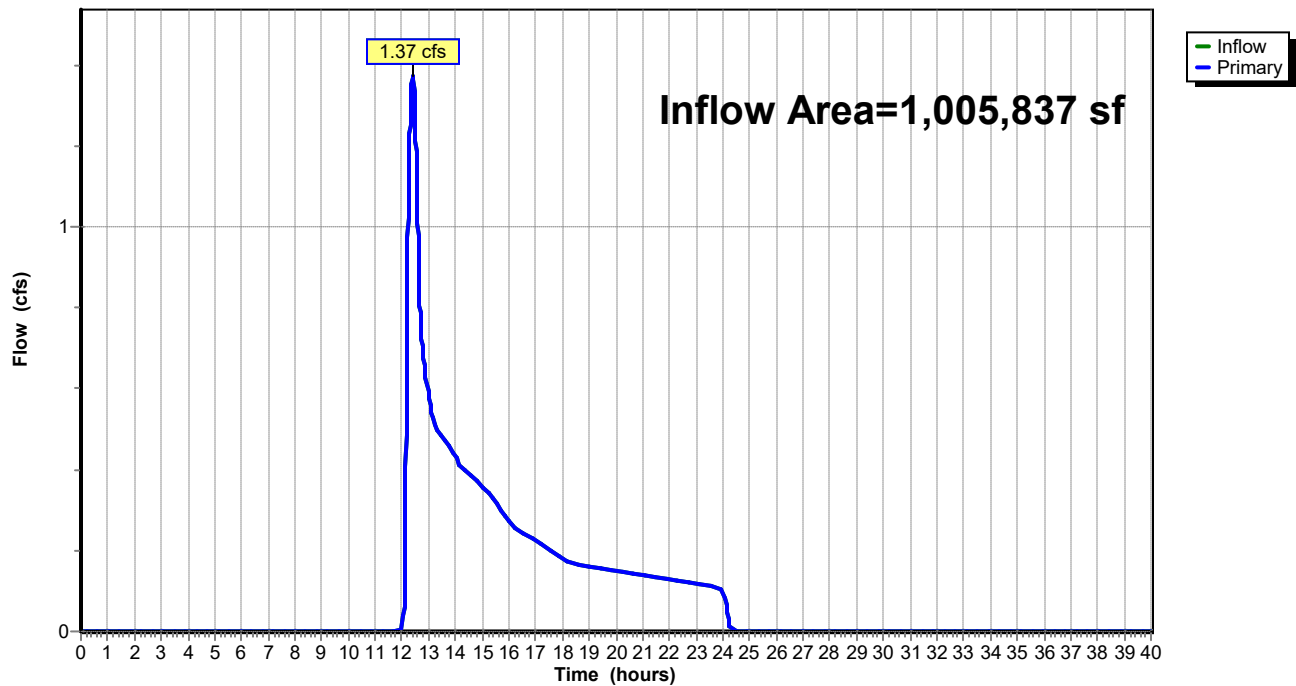
Summary for Link 22L: Pocantico Lake

Inflow Area = 1,005,837 sf, 13.12% Impervious, Inflow Depth = 0.14" for 1 Year event
 Inflow = 1.37 cfs @ 12.40 hrs, Volume= 11,971 cf
 Primary = 1.37 cfs @ 12.40 hrs, Volume= 11,971 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 22L: Pocantico Lake

Hydrograph

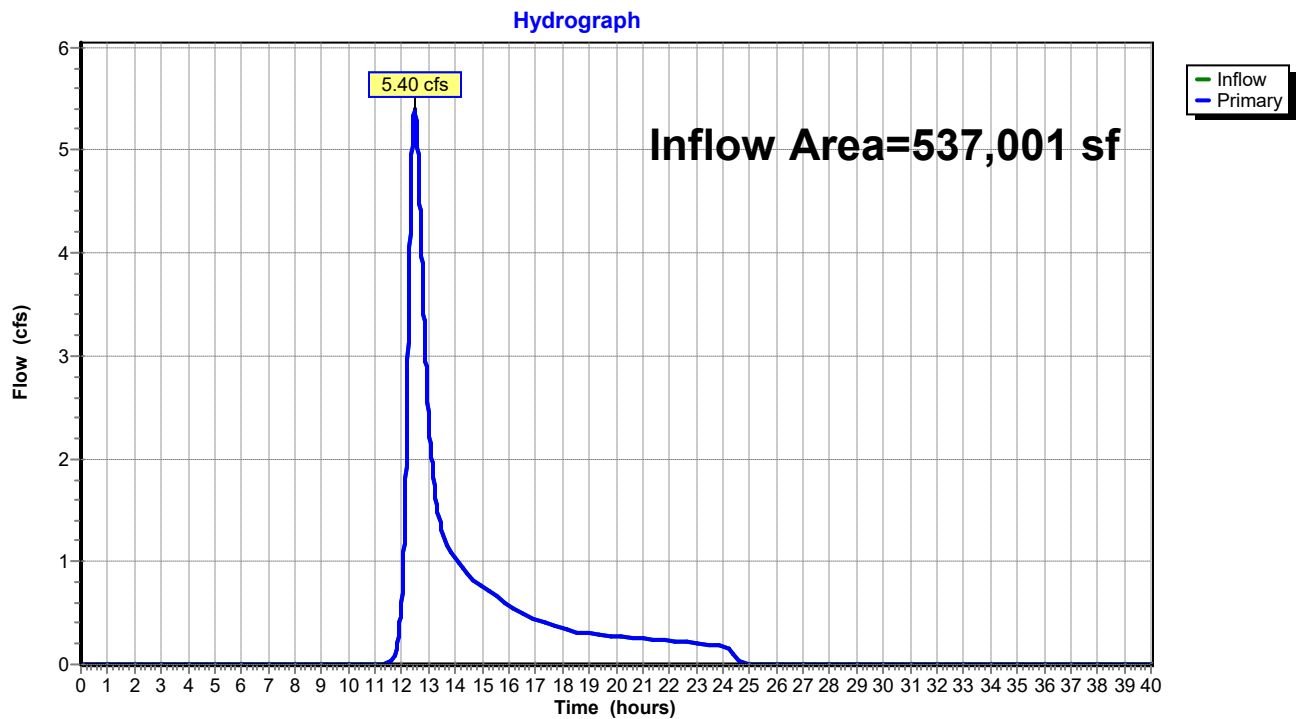


Summary for Link 23L: Mapped Wetland / Brook

Inflow Area = 537,001 sf, 33.53% Impervious, Inflow Depth = 0.74" for 1 Year event
 Inflow = 5.40 cfs @ 12.49 hrs, Volume= 32,984 cf
 Primary = 5.40 cfs @ 12.49 hrs, Volume= 32,984 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 23L: Mapped Wetland / Brook

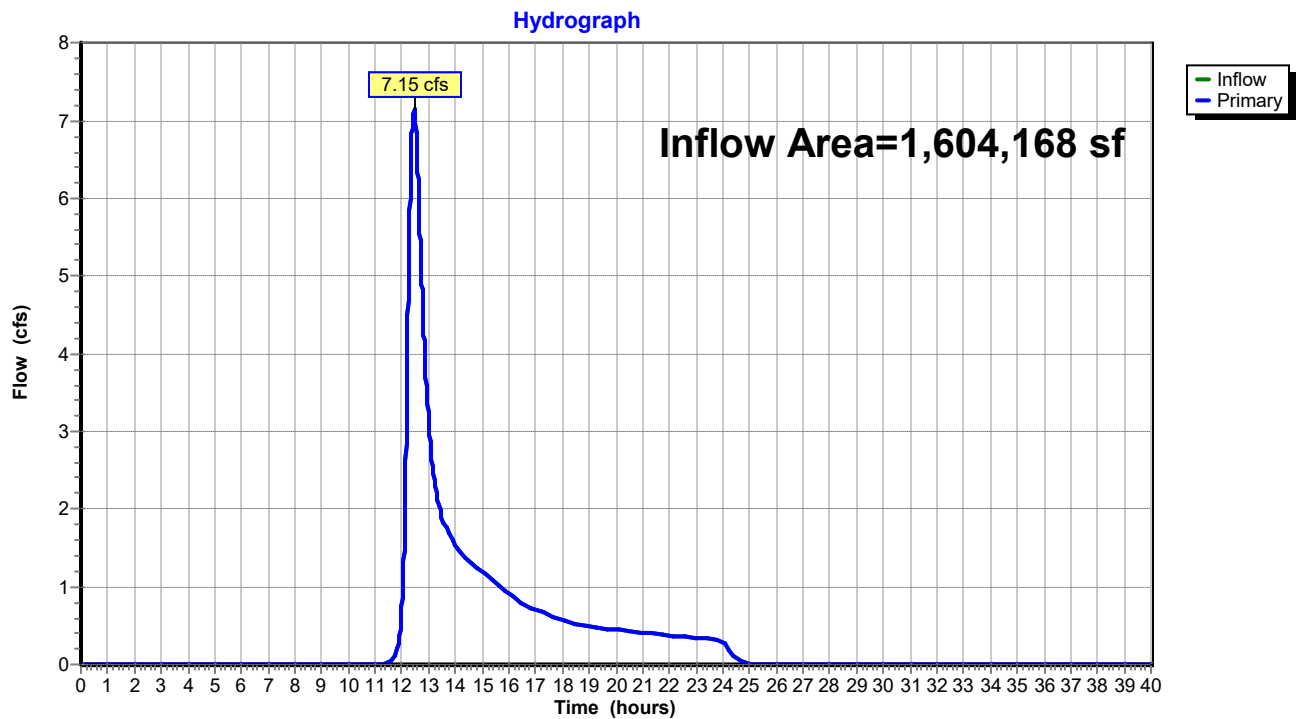


Summary for Link 24L: COMB POST

Inflow Area = 1,604,168 sf, 19.87% Impervious, Inflow Depth = 0.36" for 1 Year event
 Inflow = 7.15 cfs @ 12.45 hrs, Volume= 47,845 cf
 Primary = 7.15 cfs @ 12.45 hrs, Volume= 47,845 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 24L: COMB POST



Meadows Briarcliff_01122022

Type III 24-hr 2 YEAR Rainfall=3.50"

Prepared by Wasp Engineering Group, PLLC

Printed 1/14/2022

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 25S: PDA-2A

Runoff Area=401,971 sf 30.05% Impervious Runoff Depth=1.12"
Flow Length=760' Tc=14.4 min CN=72 Runoff=8.74 cfs 37,548 cf

Subcatchment 31S: PDA-1

Runoff Area=61,330 sf 10.95% Impervious Runoff Depth=0.95"
Flow Length=160' Tc=15.6 min CN=69 Runoff=1.05 cfs 4,875 cf

Subcatchment 43S: PDA-2

Runoff Area=603,866 sf 1.84% Impervious Runoff Depth=0.49"
Flow Length=530' Tc=11.3 min CN=59 Runoff=4.19 cfs 24,734 cf

Subcatchment 45S: PDA-3

Runoff Area=537,001 sf 33.53% Impervious Runoff Depth=1.18"
Flow Length=970' Tc=30.3 min CN=73 Runoff=9.13 cfs 52,789 cf

Reach 44R: EX. HILLSIDE

Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.080 L=390.0' S=0.3077 '/' Capacity=216.58 cfs Outflow=0.00 cfs 0 cf

Pond 26P: CONCEPTUAL STORAGE

Peak Elev=348.58' Storage=11,803 cf Inflow=8.74 cfs 37,548 cf
Discarded=1.45 cfs 37,559 cf Primary=0.00 cfs 0 cf Outflow=1.45 cfs 37,559 cf

Link 21L: Pocantico River Basin

Inflow=1.05 cfs 4,875 cf
Primary=1.05 cfs 4,875 cf

Link 22L: Pocantico Lake

Inflow=4.19 cfs 24,734 cf
Primary=4.19 cfs 24,734 cf

Link 23L: Mapped Wetland / Brook

Inflow=9.13 cfs 52,789 cf
Primary=9.13 cfs 52,789 cf

Link 24L: COMB POST

Inflow=13.30 cfs 82,398 cf
Primary=13.30 cfs 82,398 cf

Total Runoff Area = 1,604,168 sf Runoff Volume = 119,946 cf Average Runoff Depth = 0.90"
80.13% Pervious = 1,285,469 sf 19.87% Impervious = 318,699 sf

Summary for Subcatchment 25S: PDA-2A

Runoff = 8.74 cfs @ 12.21 hrs, Volume= 37,548 cf, Depth= 1.12"

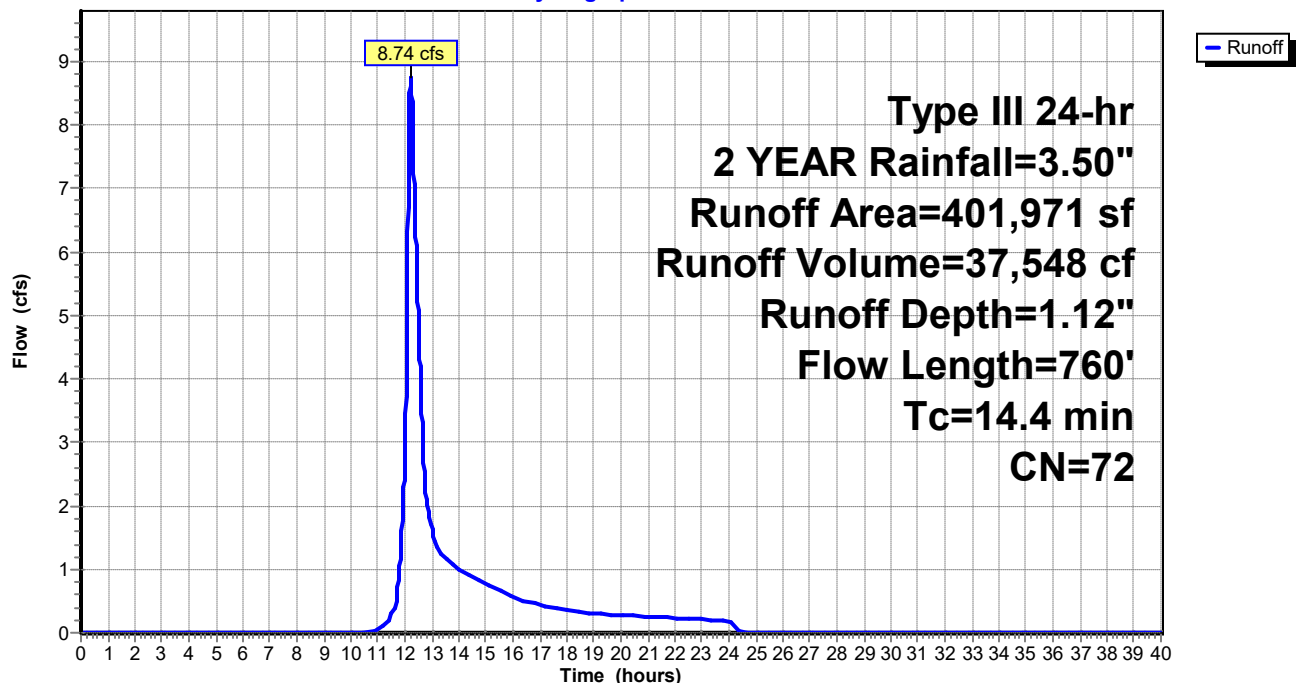
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 YEAR Rainfall=3.50"

	Area (sf)	CN	Description
*	120,802	98	PROP IMP Pavement, Rooftops
	228,381	61	>75% Grass cover, Good, HSG B
	52,788	58	Woods/grass comb., Good, HSG B
	401,971	72	Weighted Average
	281,169		69.95% Pervious Area
	120,802		30.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0780	0.21		Sheet Flow, Sheet Flow Lawn Grass: Dense n= 0.240 P2= 3.41"
6.2	450	0.0300	1.21		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
0.2	210	0.0500	18.68	91.72	Pipe Channel, 30" PIPE 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013 Concrete pipe, bends & connections
14.4	760	Total			

Subcatchment 25S: PDA-2A

Hydrograph



Summary for Subcatchment 31S: PDA-1

Runoff = 1.05 cfs @ 12.24 hrs, Volume= 4,875 cf, Depth= 0.95"

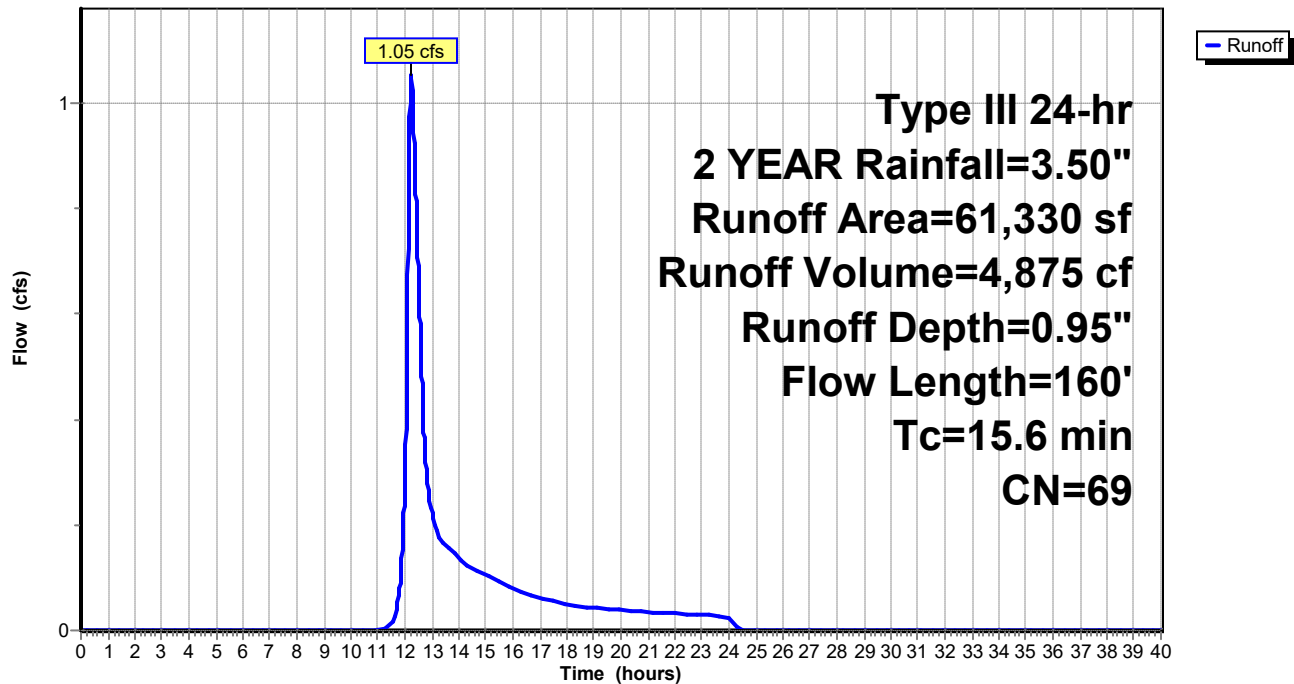
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 YEAR Rainfall=3.50"

Area (sf)	CN	Description
27,090	61	>75% Grass cover, Good, HSG B
16,693	74	>75% Grass cover, Good, HSG C
5,935	72	Woods/grass comb., Good, HSG C
4,898	58	Woods/grass comb., Good, HSG B
6,714	98	Paved parking, HSG B
61,330	69	Weighted Average
54,616		89.05% Pervious Area
6,714		10.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	100	0.0450	0.11		Sheet Flow, Wooded Sheet Flow Woods: Light underbrush n= 0.400 P2= 3.41"
0.5	35	0.0550	1.17		Shallow Concentrated Flow, Woods Shallow Conc Flow Woodland Kv= 5.0 fps
0.0	15	0.0667	5.24		Shallow Concentrated Flow, Driveway crossing Paved Kv= 20.3 fps
0.1	10	0.0600	1.71		Shallow Concentrated Flow, Grass Shoulder Short Grass Pasture Kv= 7.0 fps
15.6	160	Total			

Subcatchment 31S: PDA-1

Hydrograph



Summary for Subcatchment 43S: PDA-2

Runoff = 4.19 cfs @ 12.22 hrs, Volume= 24,734 cf, Depth= 0.49"

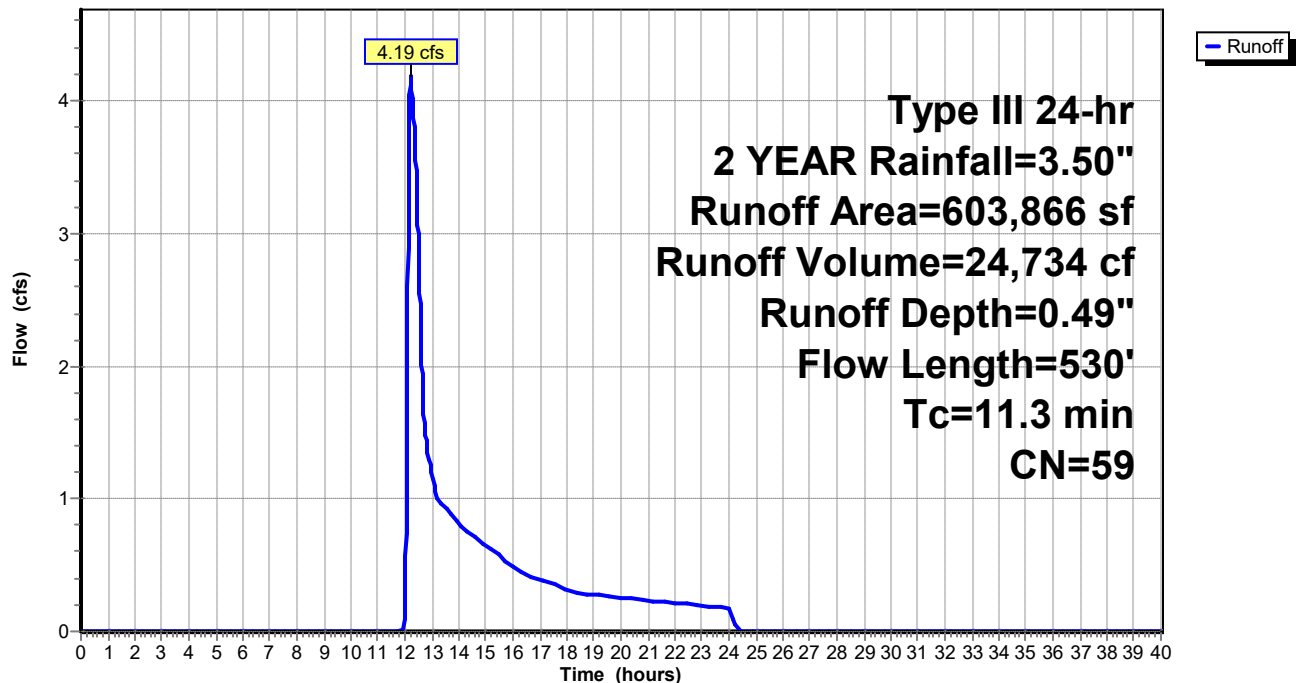
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 YEAR Rainfall=3.50"

	Area (sf)	CN	Description
*	11,116	98	EX. IMP Pavement, Rooftops
	57,480	61	>75% Grass cover, Good, HSG B
	535,270	58	Woods/grass comb., Good, HSG B
	603,866	59	Weighted Average
	592,750		98.16% Pervious Area
	11,116		1.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.1800	0.19		Sheet Flow, Sheet Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
2.7	430	0.2840	2.66		Shallow Concentrated Flow, Shallow Woods
					Woodland Kv= 5.0 fps
11.3	530	Total			

Subcatchment 43S: PDA-2

Hydrograph



Summary for Subcatchment 45S: PDA-3

Runoff = 9.13 cfs @ 12.46 hrs, Volume= 52,789 cf, Depth= 1.18"

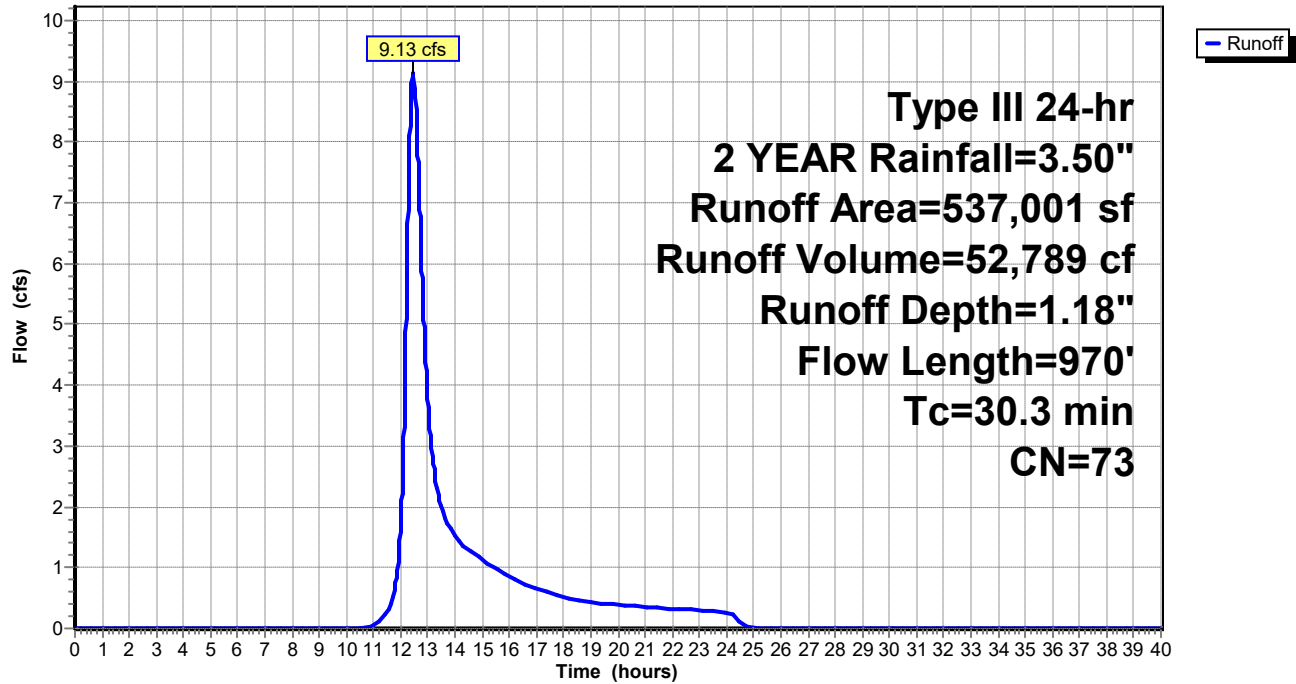
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 2 YEAR Rainfall=3.50"

	Area (sf)	CN	Description
*	5,814	98	Ex. IMP Pavement, Rooftops
	60,762	74	>75% Grass cover, Good, HSG C
	50,551	61	>75% Grass cover, Good, HSG B
	191,609	58	Woods/grass comb., Good, HSG B
	34,183	72	Woods/grass comb., Good, HSG C
	19,829	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	537,001	73	Weighted Average
	356,934		66.47% Pervious Area
	180,067		33.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	50	0.2800	0.20		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
10.9	50	0.1000	0.08		Sheet Flow, Sheet Flow Wetlands Woods: Dense underbrush n= 0.800 P2= 3.41"
4.7	200	0.0800	0.71		Shallow Concentrated Flow, Shallow Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.0	180	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.2	390	0.1000	0.79		Shallow Concentrated Flow, Shallow Conc Wetlands Forest w/Heavy Litter Kv= 2.5 fps
0.3	100	0.1100	6.58	52.64	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.3	970	Total			

Subcatchment 45S: PDA-3

Hydrograph



Summary for Reach 44R: EX. HILLSIDE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 0.00" for 2 YEAR event
 Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
 Avg. Velocity= 0.00 fps, Avg. Travel Time= 0.0 min

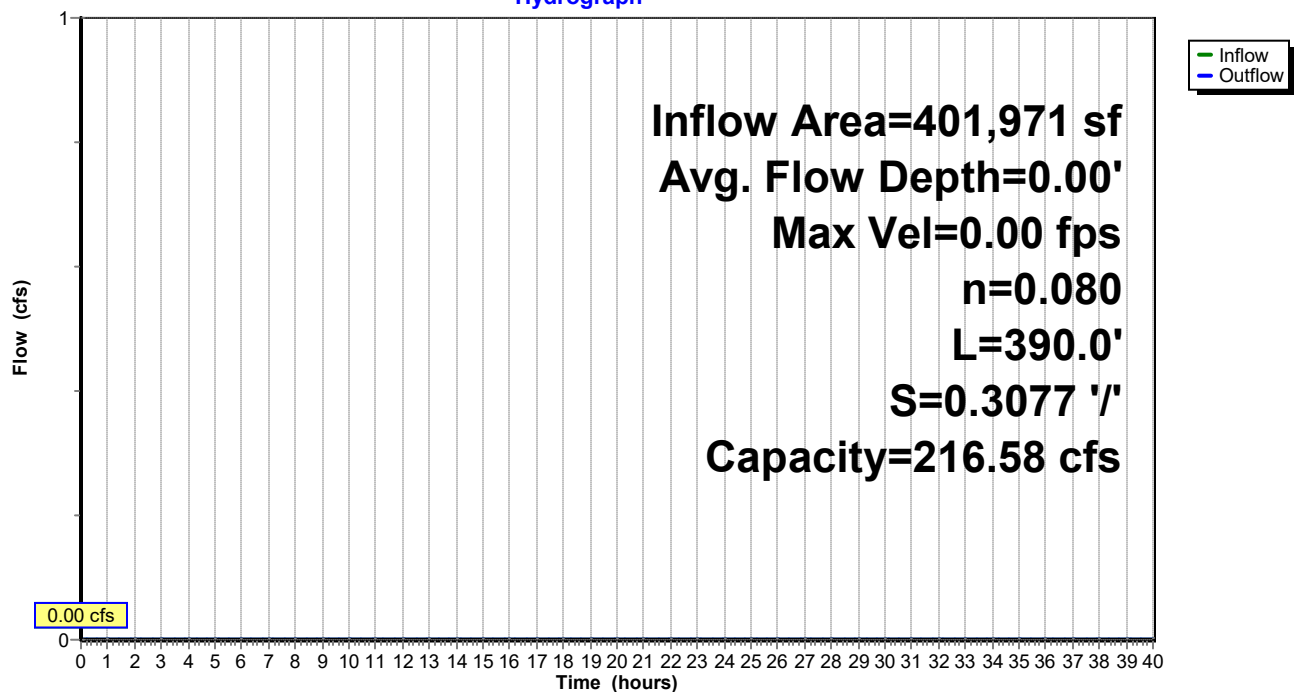
Peak Storage= 0 cf @ 0.00 hrs
 Average Depth at Peak Storage= 0.00'
 Bank-Full Depth= 1.00' Flow Area= 23.0 sf, Capacity= 216.58 cfs

20.00' x 1.00' deep channel, n= 0.080 Earth, long dense weeds
 Side Slope Z-value= 3.0 '/' Top Width= 26.00'
 Length= 390.0' Slope= 0.3077 '/'
 Inlet Invert= 340.00', Outlet Invert= 220.00'



Reach 44R: EX. HILLSIDE

Hydrograph



Summary for Pond 26P: CONCEPTUAL STORAGE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 1.12" for 2 YEAR event
 Inflow = 8.74 cfs @ 12.21 hrs, Volume= 37,548 cf
 Outflow = 1.45 cfs @ 13.12 hrs, Volume= 37,559 cf, Atten= 83%, Lag= 54.3 min
 Discarded = 1.45 cfs @ 13.12 hrs, Volume= 37,559 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 348.58' @ 13.12 hrs Surf.Area= 20,886 sf Storage= 11,803 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 68.2 min (938.8 - 870.6)

Volume	Invert	Avail.Storage	Storage Description		
#1	348.00'	174,238 cf	LOT 5-6 BASIN (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
348.00	20,140	650.0	0	0	20,140
350.00	22,790	675.1	42,903	42,903	23,100
352.00	25,542	700.2	48,306	91,209	26,172
354.00	28,392	725.3	53,909	145,117	29,356
355.00	29,855	737.9	29,120	174,238	30,996

Device	Routing	Invert	Outlet Devices											
#1	Discarded	348.00'	3.000 in/hr INFILTRATION over Surface area											
#2	Primary	353.50'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir											
			Head (feet)	0.20	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80	2.00	
				2.50	3.00	3.50	4.00	4.50	5.00	5.50				
			Coef. (English)	2.37	2.51	2.70	2.68	2.68	2.67	2.65	2.65	2.65		
				2.65	2.66	2.66	2.67	2.69	2.72	2.76	2.83			
#3	Primary	348.00'	30.0" Round 30" CULVERT OUT											
			L= 100.0' CPP, square edge headwall, Ke= 0.500											
			Inlet / Outlet Invert= 348.00' / 340.00' S= 0.0800 '/' Cc= 0.900											
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 4.91 sf											
#4	Device 3	353.10'	48.0" W x 12.0" H Vert. 48" VERT ORIFICE C= 0.600											

Discarded OutFlow Max=1.45 cfs @ 13.12 hrs HW=348.58' (Free Discharge)

↑ **1=INFILTRATION** (Exfiltration Controls 1.45 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=348.00' TW=340.00' (Dynamic Tailwater)

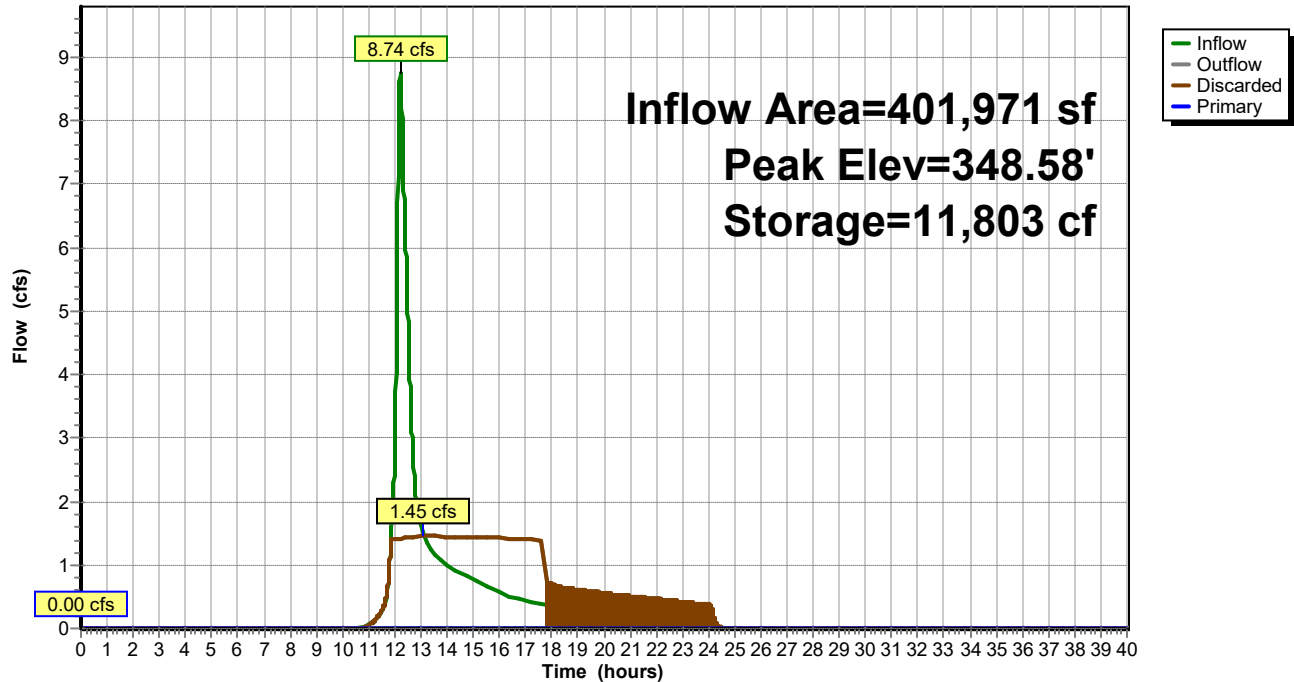
↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

↑ **3=30" CULVERT OUT** (Controls 0.00 cfs)

↑ **4=48" VERT ORIFICE** (Controls 0.00 cfs)

Pond 26P: CONCEPTUAL STORAGE

Hydrograph



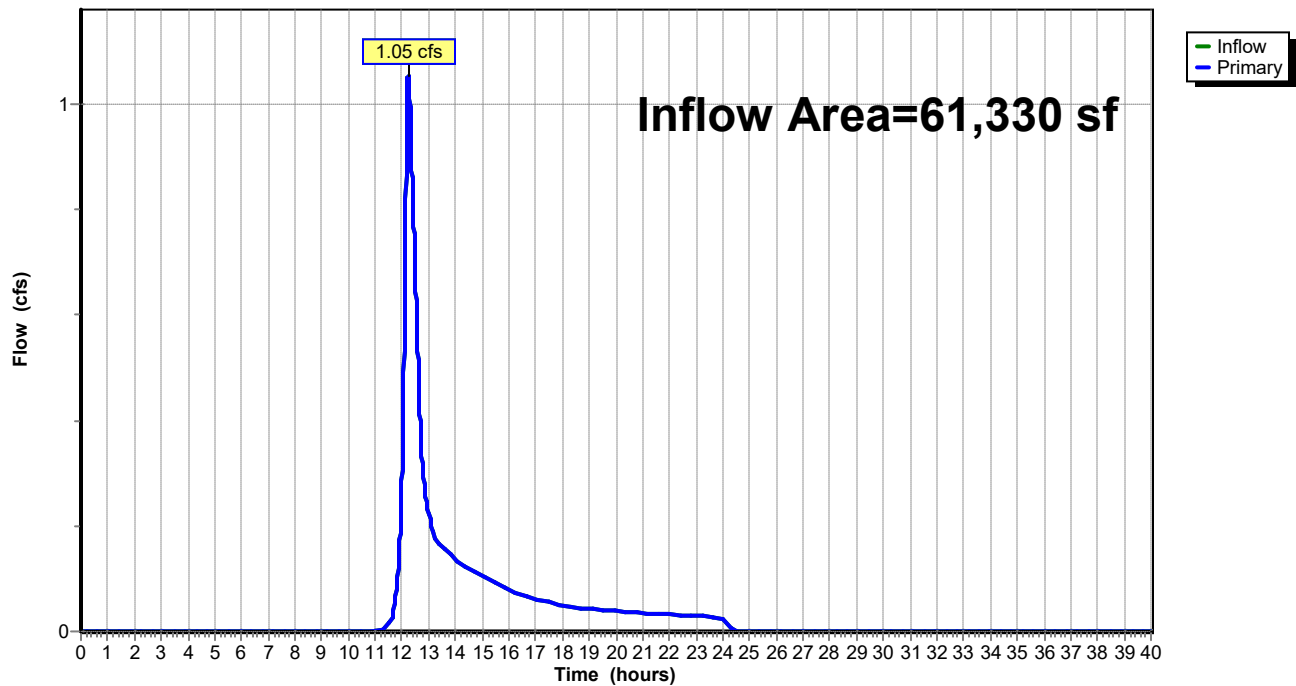
Summary for Link 21L: Pocantico River Basin

Inflow Area = 61,330 sf, 10.95% Impervious, Inflow Depth = 0.95" for 2 YEAR event
 Inflow = 1.05 cfs @ 12.24 hrs, Volume= 4,875 cf
 Primary = 1.05 cfs @ 12.24 hrs, Volume= 4,875 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 21L: Pocantico River Basin

Hydrograph



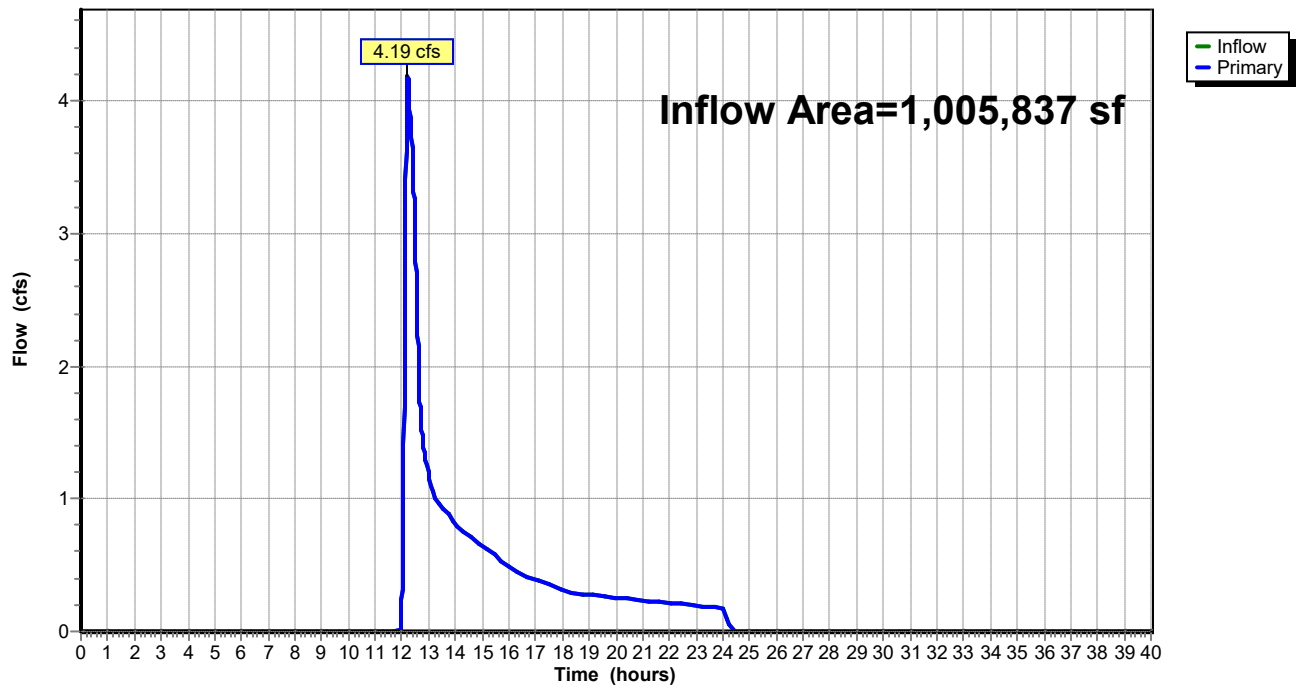
Summary for Link 22L: Pocantico Lake

Inflow Area = 1,005,837 sf, 13.12% Impervious, Inflow Depth = 0.30" for 2 YEAR event
 Inflow = 4.19 cfs @ 12.22 hrs, Volume= 24,734 cf
 Primary = 4.19 cfs @ 12.22 hrs, Volume= 24,734 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 22L: Pocantico Lake

Hydrograph

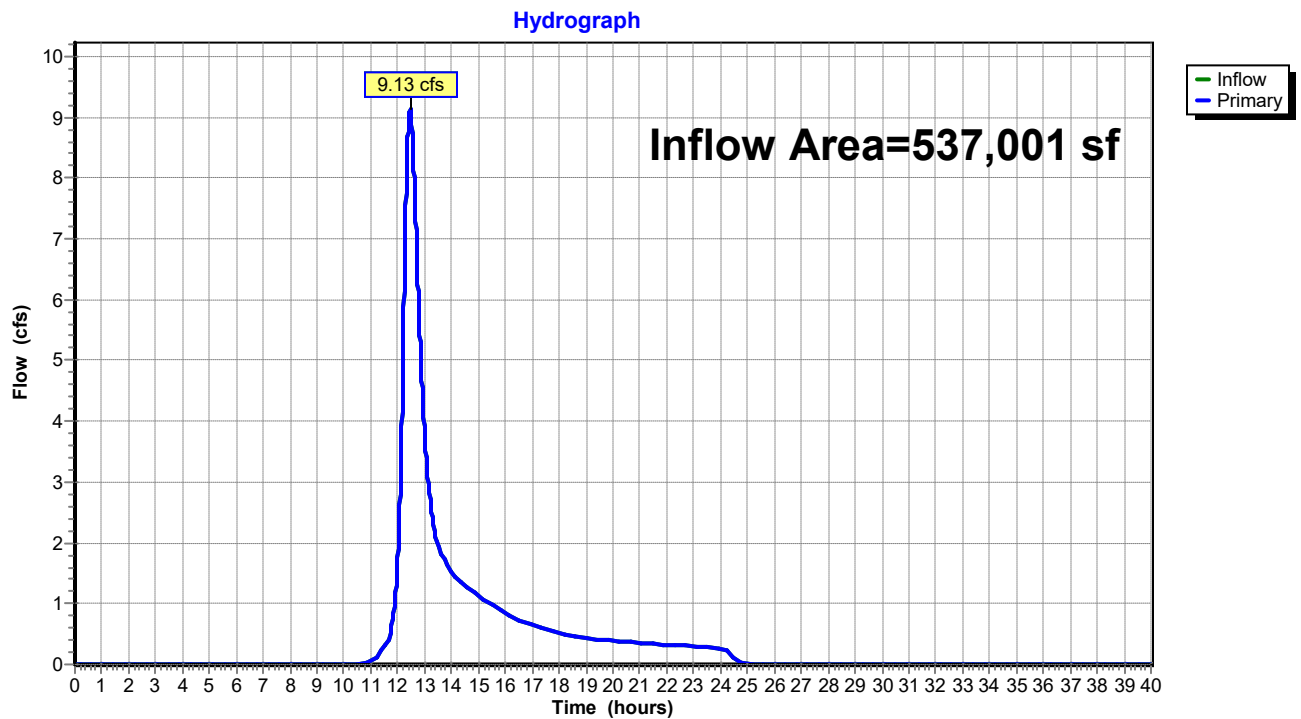


Summary for Link 23L: Mapped Wetland / Brook

Inflow Area = 537,001 sf, 33.53% Impervious, Inflow Depth = 1.18" for 2 YEAR event
 Inflow = 9.13 cfs @ 12.46 hrs, Volume= 52,789 cf
 Primary = 9.13 cfs @ 12.46 hrs, Volume= 52,789 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 23L: Mapped Wetland / Brook



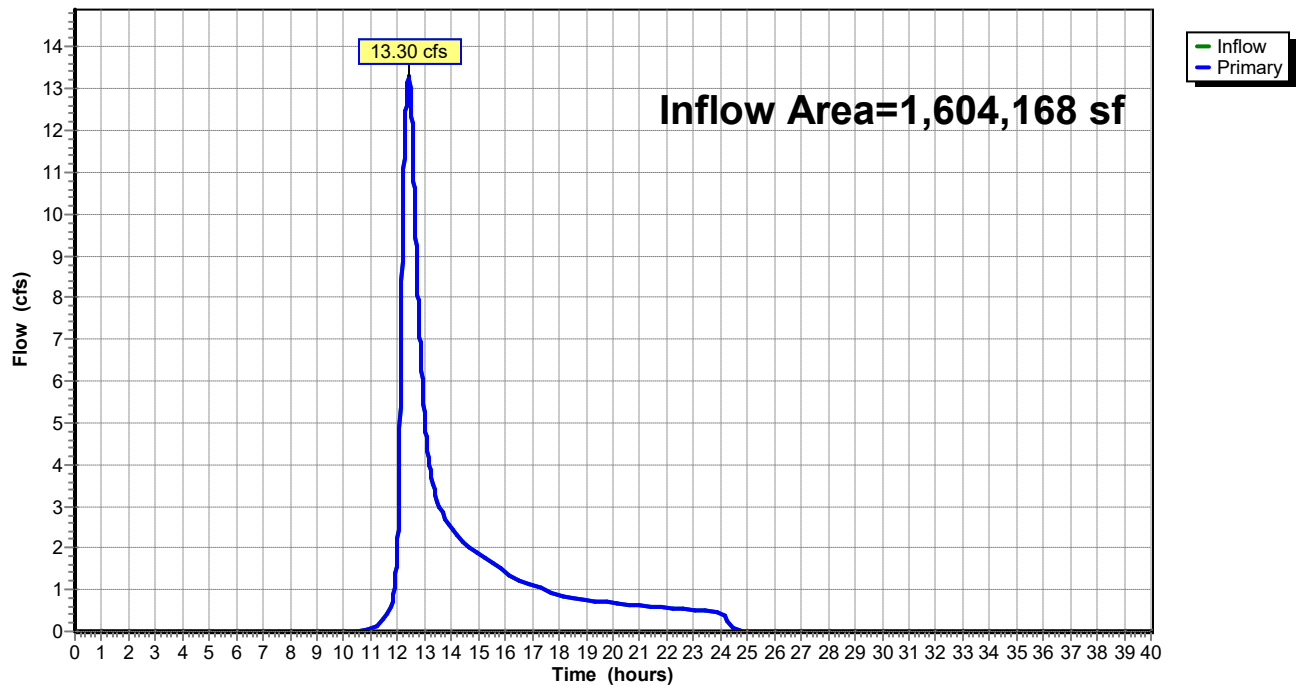
Summary for Link 24L: COMB POST

Inflow Area = 1,604,168 sf, 19.87% Impervious, Inflow Depth = 0.62" for 2 YEAR event
 Inflow = 13.30 cfs @ 12.42 hrs, Volume= 82,398 cf
 Primary = 13.30 cfs @ 12.42 hrs, Volume= 82,398 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 24L: COMB POST

Hydrograph



Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 25S: PDA-2A

Runoff Area=401,971 sf 30.05% Impervious Runoff Depth=1.82"
Flow Length=760' Tc=14.4 min CN=72 Runoff=14.80 cfs 60,978 cf

Subcatchment 31S: PDA-1

Runoff Area=61,330 sf 10.95% Impervious Runoff Depth=1.60"
Flow Length=160' Tc=15.6 min CN=69 Runoff=1.89 cfs 8,190 cf

Subcatchment 43S: PDA-2

Runoff Area=603,866 sf 1.84% Impervious Runoff Depth=0.96"
Flow Length=530' Tc=11.3 min CN=59 Runoff=10.77 cfs 48,390 cf

Subcatchment 45S: PDA-3

Runoff Area=537,001 sf 33.53% Impervious Runoff Depth=1.90"
Flow Length=970' Tc=30.3 min CN=73 Runoff=15.17 cfs 84,832 cf

Reach 44R: EX. HILLSIDE

Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.080 L=390.0' S=0.3077 '/' Capacity=216.58 cfs Outflow=0.00 cfs 0 cf

Pond 26P: CONCEPTUAL STORAGE

Peak Elev=349.20' Storage=25,106 cf Inflow=14.80 cfs 60,978 cf
Discarded=1.51 cfs 60,990 cf Primary=0.00 cfs 0 cf Outflow=1.51 cfs 60,990 cf

Link 21L: Pocantico River Basin

Inflow=1.89 cfs 8,190 cf
Primary=1.89 cfs 8,190 cf

Link 22L: Pocantico Lake

Inflow=10.77 cfs 48,390 cf
Primary=10.77 cfs 48,390 cf

Link 23L: Mapped Wetland / Brook

Inflow=15.17 cfs 84,832 cf
Primary=15.17 cfs 84,832 cf

Link 24L: COMB POST

Inflow=23.88 cfs 141,412 cf
Primary=23.88 cfs 141,412 cf

Total Runoff Area = 1,604,168 sf Runoff Volume = 202,389 cf Average Runoff Depth = 1.51"
80.13% Pervious = 1,285,469 sf 19.87% Impervious = 318,699 sf

Summary for Subcatchment 25S: PDA-2A

Runoff = 14.80 cfs @ 12.21 hrs, Volume= 60,978 cf, Depth= 1.82"

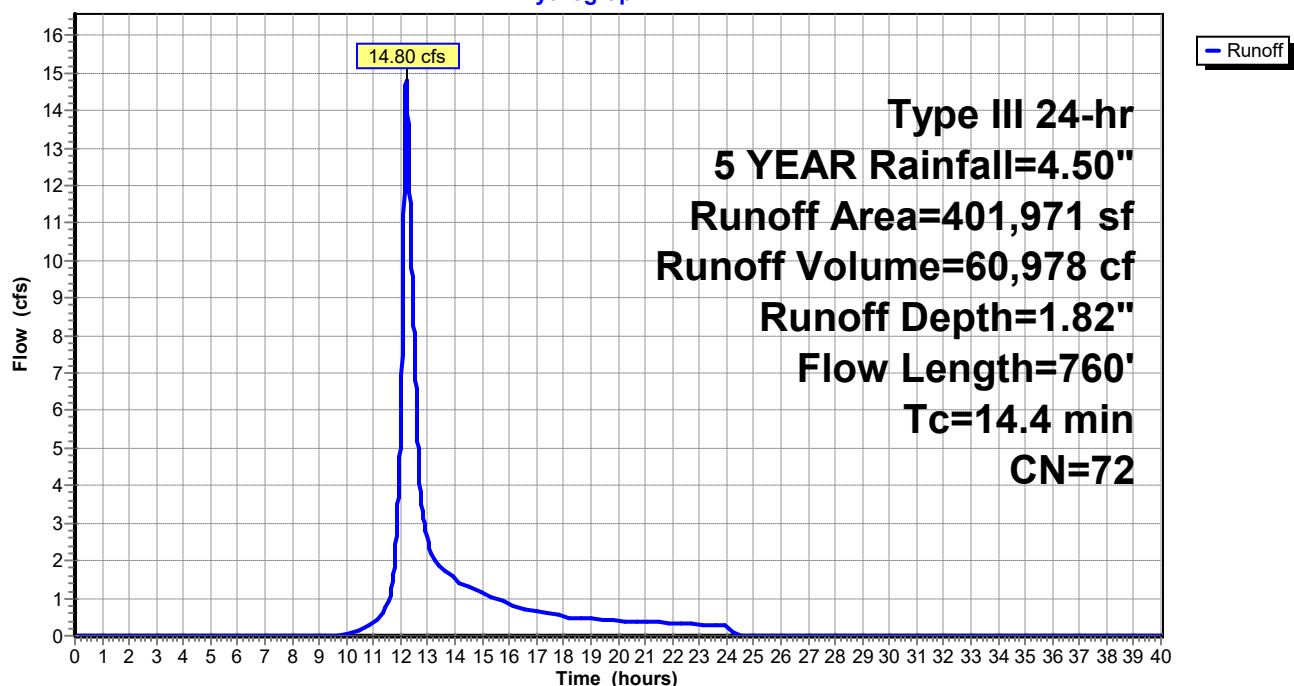
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 5 YEAR Rainfall=4.50"

	Area (sf)	CN	Description
*	120,802	98	PROP IMP Pavement, Rooftops
	228,381	61	>75% Grass cover, Good, HSG B
	52,788	58	Woods/grass comb., Good, HSG B
	401,971	72	Weighted Average
	281,169		69.95% Pervious Area
	120,802		30.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0780	0.21		Sheet Flow, Sheet Flow Lawn Grass: Dense n= 0.240 P2= 3.41"
6.2	450	0.0300	1.21		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
0.2	210	0.0500	18.68	91.72	Pipe Channel, 30" PIPE 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013 Concrete pipe, bends & connections
14.4	760	Total			

Subcatchment 25S: PDA-2A

Hydrograph



Summary for Subcatchment 31S: PDA-1

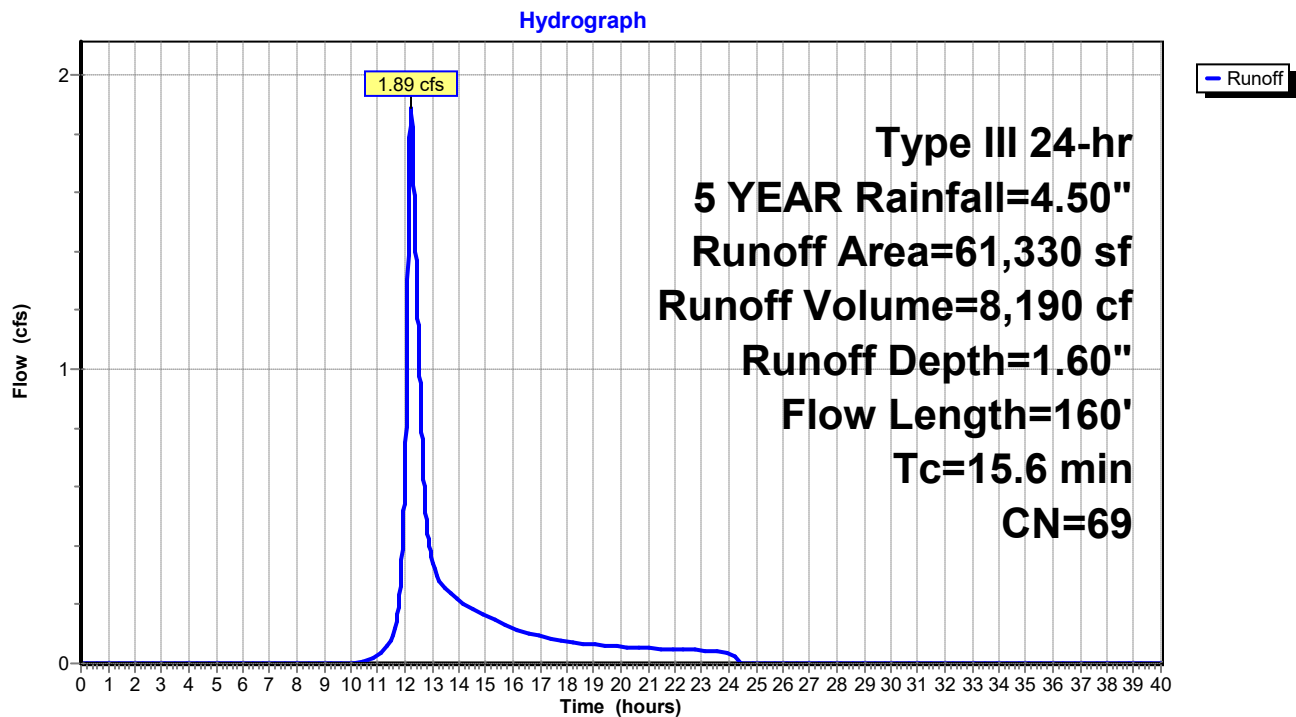
Runoff = 1.89 cfs @ 12.22 hrs, Volume= 8,190 cf, Depth= 1.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 5 YEAR Rainfall=4.50"

Area (sf)	CN	Description
27,090	61	>75% Grass cover, Good, HSG B
16,693	74	>75% Grass cover, Good, HSG C
5,935	72	Woods/grass comb., Good, HSG C
4,898	58	Woods/grass comb., Good, HSG B
6,714	98	Paved parking, HSG B
61,330	69	Weighted Average
54,616		89.05% Pervious Area
6,714		10.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	100	0.0450	0.11		Sheet Flow, Wooded Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
0.5	35	0.0550	1.17		Shallow Concentrated Flow, Woods Shallow Conc Flow
					Woodland Kv= 5.0 fps
0.0	15	0.0667	5.24		Shallow Concentrated Flow, Driveway crossing
					Paved Kv= 20.3 fps
0.1	10	0.0600	1.71		Shallow Concentrated Flow, Grass Shoulder
					Short Grass Pasture Kv= 7.0 fps
15.6	160	Total			

Subcatchment 31S: PDA-1



Summary for Subcatchment 43S: PDA-2

Runoff = 10.77 cfs @ 12.18 hrs, Volume= 48,390 cf, Depth= 0.96"

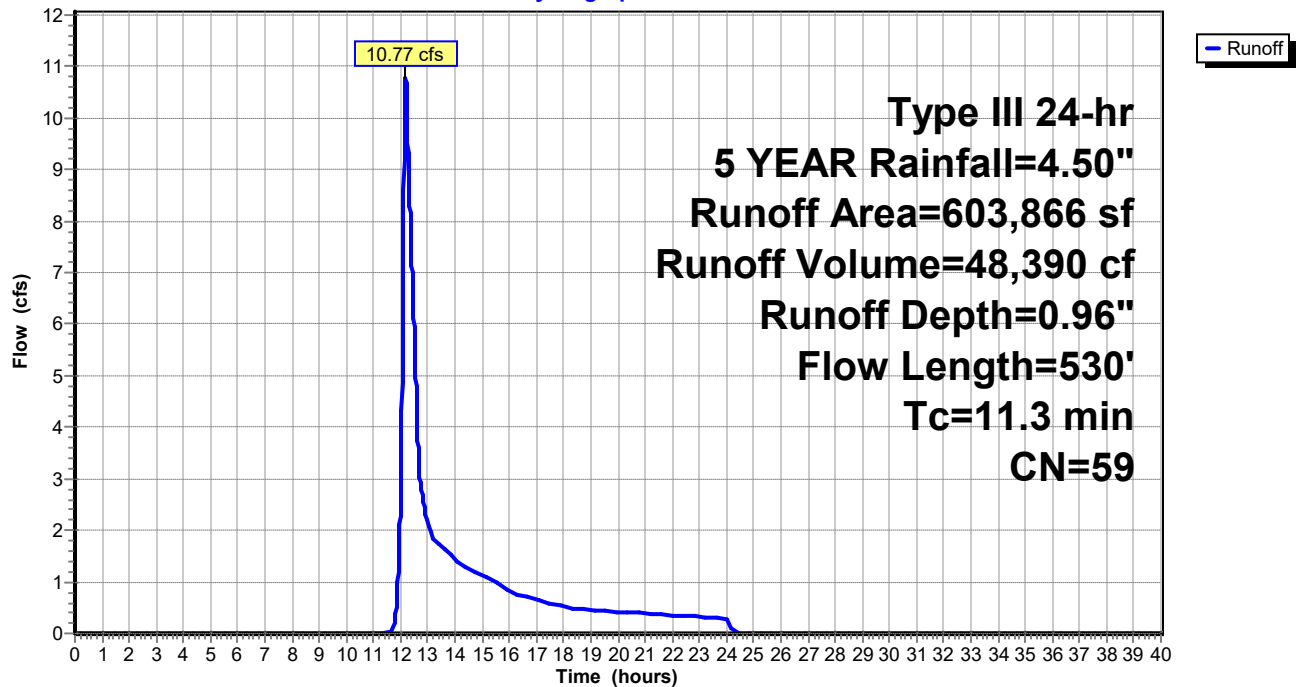
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 5 YEAR Rainfall=4.50"

Area (sf)	CN	Description
* 11,116	98	EX. IMP Pavement, Rooftops
57,480	61	>75% Grass cover, Good, HSG B
535,270	58	Woods/grass comb., Good, HSG B
603,866	59	Weighted Average
592,750		98.16% Pervious Area
11,116		1.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.1800	0.19		Sheet Flow, Sheet Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
2.7	430	0.2840	2.66		Shallow Concentrated Flow, Shallow Woods
					Woodland Kv= 5.0 fps
11.3	530	Total			

Subcatchment 43S: PDA-2

Hydrograph



Summary for Subcatchment 45S: PDA-3

Runoff = 15.17 cfs @ 12.43 hrs, Volume= 84,832 cf, Depth= 1.90"

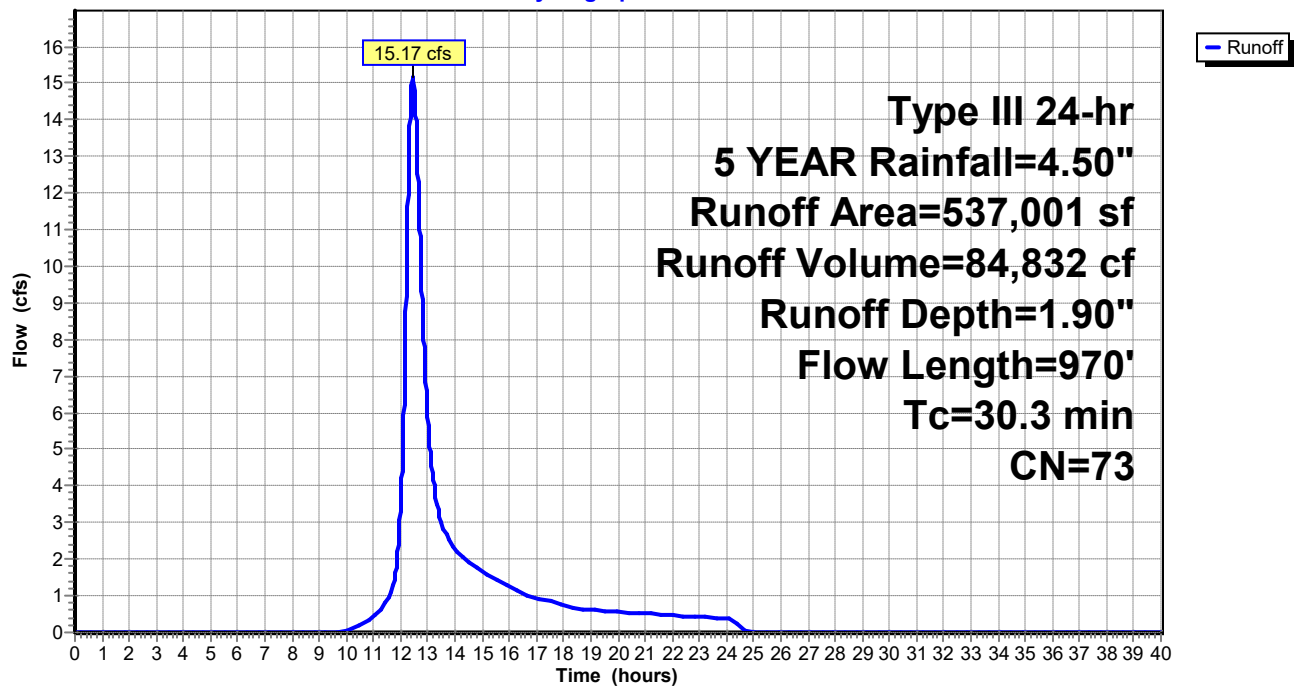
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 5 YEAR Rainfall=4.50"

	Area (sf)	CN	Description
*	5,814	98	Ex. IMP Pavement, Rooftops
	60,762	74	>75% Grass cover, Good, HSG C
	50,551	61	>75% Grass cover, Good, HSG B
	191,609	58	Woods/grass comb., Good, HSG B
	34,183	72	Woods/grass comb., Good, HSG C
	19,829	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	537,001	73	Weighted Average
	356,934		66.47% Pervious Area
	180,067		33.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	50	0.2800	0.20		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
10.9	50	0.1000	0.08		Sheet Flow, Sheet Flow Wetlands Woods: Dense underbrush n= 0.800 P2= 3.41"
4.7	200	0.0800	0.71		Shallow Concentrated Flow, Shallow Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.0	180	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.2	390	0.1000	0.79		Shallow Concentrated Flow, Shallow Conc Wetlands Forest w/Heavy Litter Kv= 2.5 fps
0.3	100	0.1100	6.58	52.64	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.3	970	Total			

Subcatchment 45S: PDA-3

Hydrograph



Summary for Reach 44R: EX. HILLSIDE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 0.00" for 5 YEAR event
 Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
 Avg. Velocity= 0.00 fps, Avg. Travel Time= 0.0 min

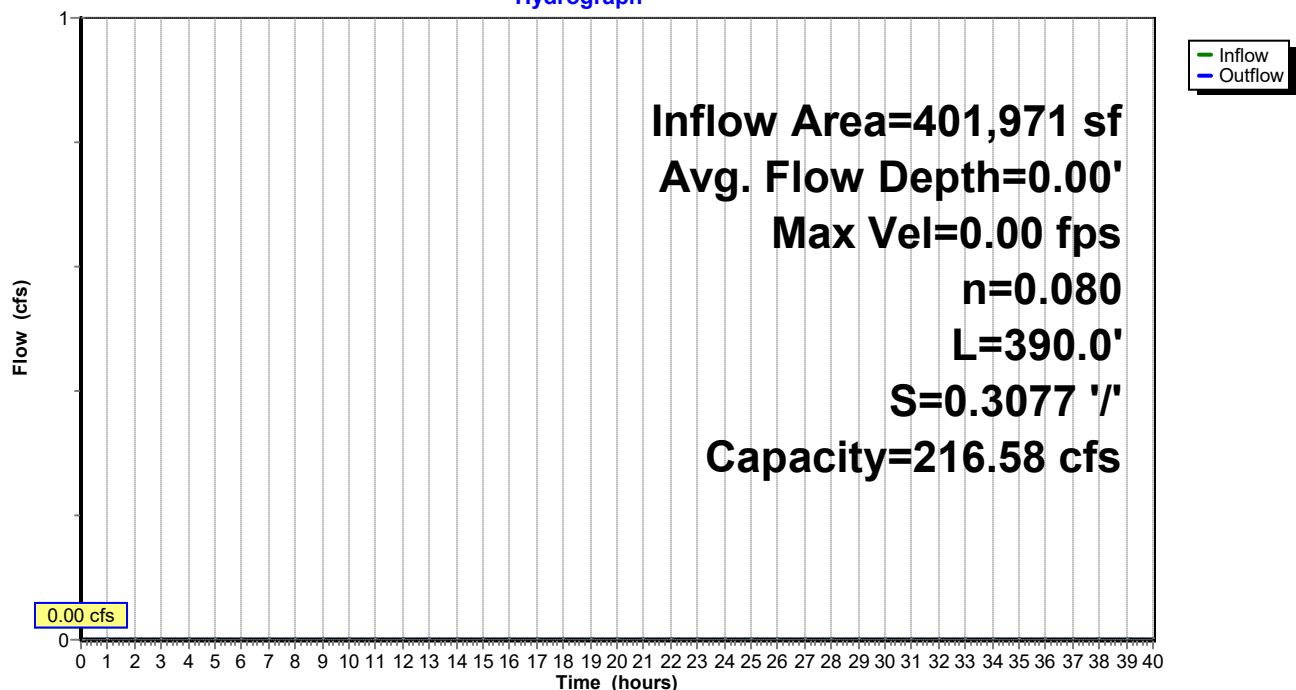
Peak Storage= 0 cf @ 0.00 hrs
 Average Depth at Peak Storage= 0.00'
 Bank-Full Depth= 1.00' Flow Area= 23.0 sf, Capacity= 216.58 cfs

20.00' x 1.00' deep channel, n= 0.080 Earth, long dense weeds
 Side Slope Z-value= 3.0 '/' Top Width= 26.00'
 Length= 390.0' Slope= 0.3077 '/'
 Inlet Invert= 340.00', Outlet Invert= 220.00'



Reach 44R: EX. HILLSIDE

Hydrograph



Summary for Pond 26P: CONCEPTUAL STORAGE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 1.82" for 5 YEAR event
 Inflow = 14.80 cfs @ 12.21 hrs, Volume= 60,978 cf
 Outflow = 1.51 cfs @ 14.00 hrs, Volume= 60,990 cf, Atten= 90%, Lag= 107.9 min
 Discarded = 1.51 cfs @ 14.00 hrs, Volume= 60,990 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 349.20' @ 14.00 hrs Surf.Area= 21,710 sf Storage= 25,106 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 163.9 min (1,019.8 - 855.9)

Volume	Invert	Avail.Storage	Storage Description		
#1	348.00'	174,238 cf	LOT 5-6 BASIN (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
348.00	20,140	650.0	0	0	20,140
350.00	22,790	675.1	42,903	42,903	23,100
352.00	25,542	700.2	48,306	91,209	26,172
354.00	28,392	725.3	53,909	145,117	29,356
355.00	29,855	737.9	29,120	174,238	30,996

Device	Routing	Invert	Outlet Devices											
#1	Discarded	348.00'	3.000 in/hr INFILTRATION over Surface area											
#2	Primary	353.50'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir											
			Head (feet)	0.20	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80	2.00	
				2.50	3.00	3.50	4.00	4.50	5.00	5.50				
			Coef. (English)	2.37	2.51	2.70	2.68	2.68	2.67	2.65	2.65	2.65		
				2.65	2.66	2.66	2.67	2.69	2.72	2.76	2.83			
#3	Primary	348.00'	30.0" Round 30" CULVERT OUT											
			L= 100.0' CPP, square edge headwall, Ke= 0.500											
			Inlet / Outlet Invert= 348.00' / 340.00' S= 0.0800 '/' Cc= 0.900											
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 4.91 sf											
#4	Device 3	353.10'	48.0" W x 12.0" H Vert. 48" VERT ORIFICE C= 0.600											

Discarded OutFlow Max=1.51 cfs @ 14.00 hrs HW=349.20' (Free Discharge)

↑ **1=INFILTRATION** (Exfiltration Controls 1.51 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=348.00' TW=340.00' (Dynamic Tailwater)

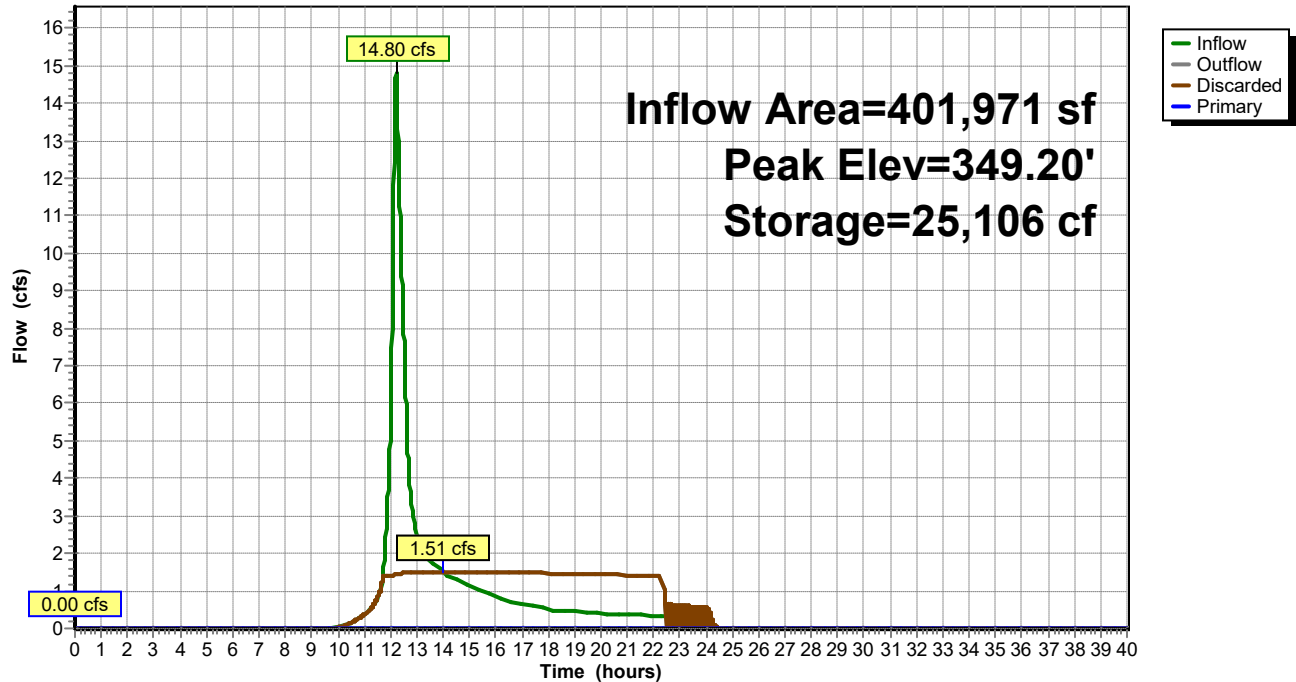
↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

↑ **3=30" CULVERT OUT** (Controls 0.00 cfs)

↑ **4=48" VERT ORIFICE** (Controls 0.00 cfs)

Pond 26P: CONCEPTUAL STORAGE

Hydrograph



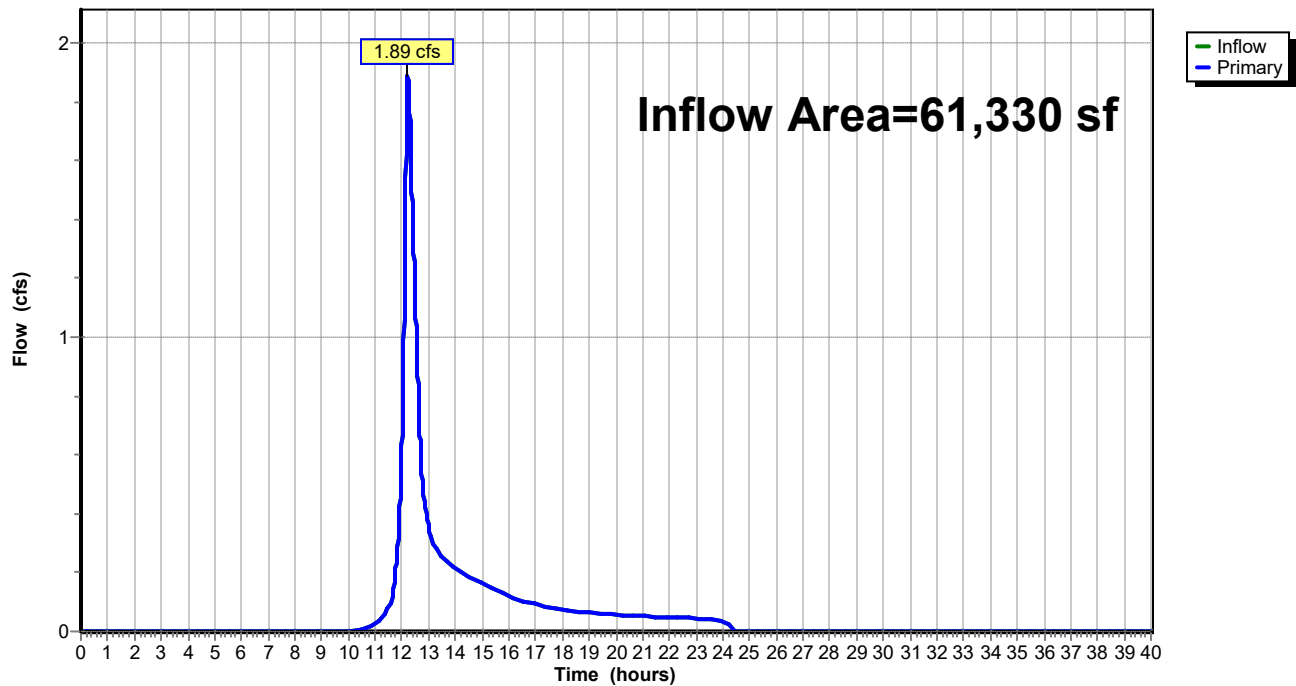
Summary for Link 21L: Pocantico River Basin

Inflow Area = 61,330 sf, 10.95% Impervious, Inflow Depth = 1.60" for 5 YEAR event
 Inflow = 1.89 cfs @ 12.22 hrs, Volume= 8,190 cf
 Primary = 1.89 cfs @ 12.22 hrs, Volume= 8,190 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 21L: Pocantico River Basin

Hydrograph



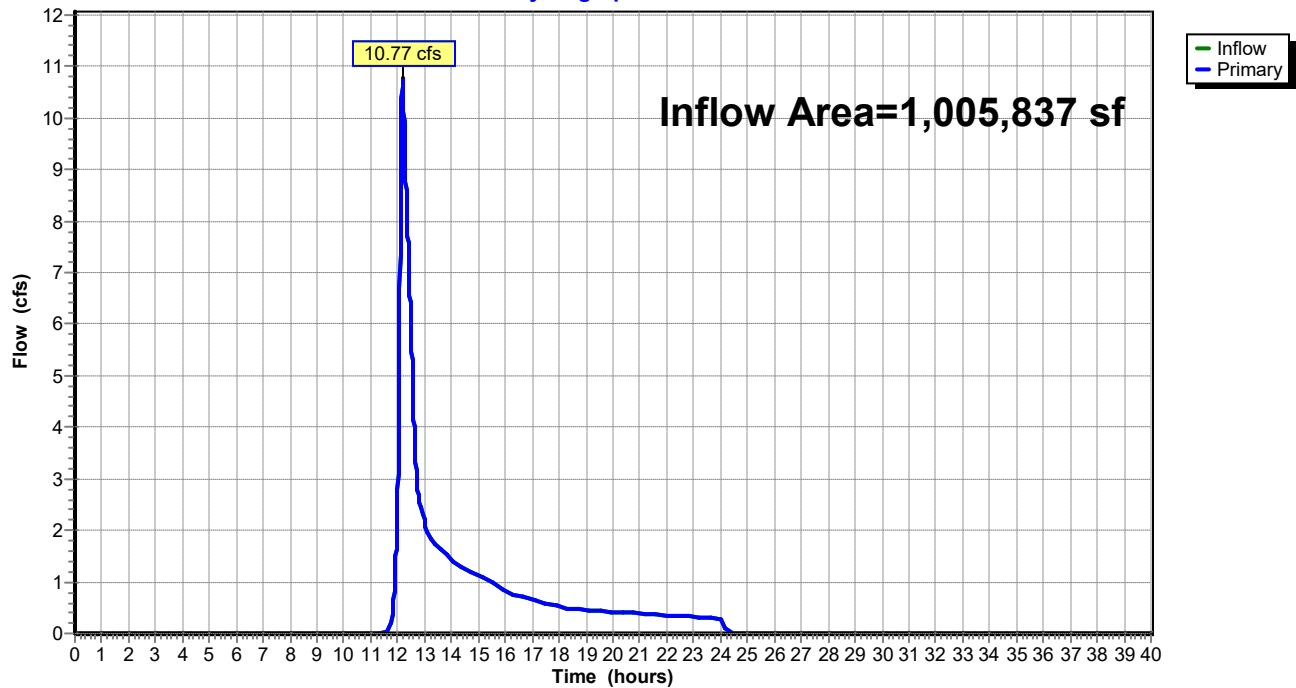
Summary for Link 22L: Pocantico Lake

Inflow Area = 1,005,837 sf, 13.12% Impervious, Inflow Depth = 0.58" for 5 YEAR event
 Inflow = 10.77 cfs @ 12.18 hrs, Volume= 48,390 cf
 Primary = 10.77 cfs @ 12.18 hrs, Volume= 48,390 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 22L: Pocantico Lake

Hydrograph

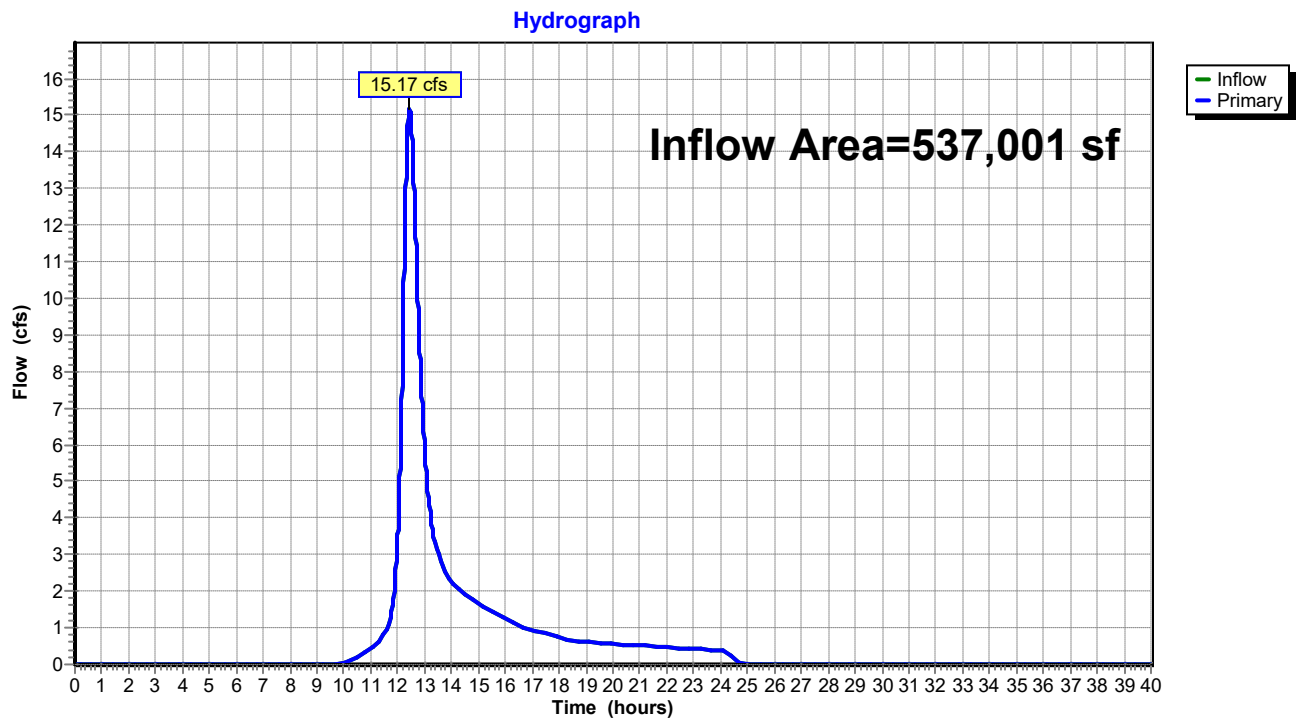


Summary for Link 23L: Mapped Wetland / Brook

Inflow Area = 537,001 sf, 33.53% Impervious, Inflow Depth = 1.90" for 5 YEAR event
 Inflow = 15.17 cfs @ 12.43 hrs, Volume= 84,832 cf
 Primary = 15.17 cfs @ 12.43 hrs, Volume= 84,832 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 23L: Mapped Wetland / Brook



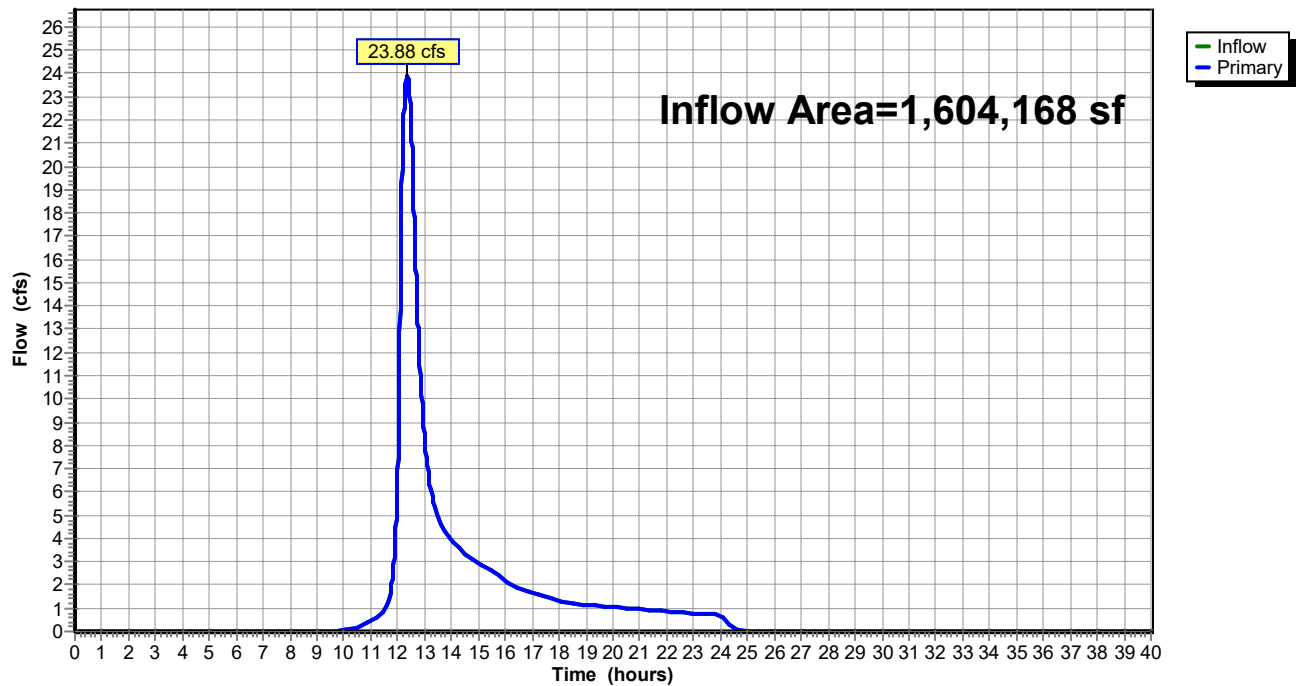
Summary for Link 24L: COMB POST

Inflow Area = 1,604,168 sf, 19.87% Impervious, Inflow Depth = 1.06" for 5 YEAR event
 Inflow = 23.88 cfs @ 12.36 hrs, Volume= 141,412 cf
 Primary = 23.88 cfs @ 12.36 hrs, Volume= 141,412 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 24L: COMB POST

Hydrograph



Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 25S: PDA-2A

Runoff Area=401,971 sf 30.05% Impervious Runoff Depth=2.30"
Flow Length=760' Tc=14.4 min CN=72 Runoff=18.90 cfs 76,993 cf

Subcatchment 31S: PDA-1

Runoff Area=61,330 sf 10.95% Impervious Runoff Depth=2.05"
Flow Length=160' Tc=15.6 min CN=69 Runoff=2.46 cfs 10,489 cf

Subcatchment 43S: PDA-2

Runoff Area=603,866 sf 1.84% Impervious Runoff Depth=1.31"
Flow Length=530' Tc=11.3 min CN=59 Runoff=15.73 cfs 65,855 cf

Subcatchment 45S: PDA-3

Runoff Area=537,001 sf 33.53% Impervious Runoff Depth=2.38"
Flow Length=970' Tc=30.3 min CN=73 Runoff=19.25 cfs 106,632 cf

Reach 44R: EX. HILLSIDE

Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.080 L=390.0' S=0.3077 '/' Capacity=216.58 cfs Outflow=0.00 cfs 0 cf

Pond 26P: CONCEPTUAL STORAGE

Peak Elev=349.66' Storage=35,146 cf Inflow=18.90 cfs 76,993 cf
Discarded=1.55 cfs 76,994 cf Primary=0.00 cfs 0 cf Outflow=1.55 cfs 76,994 cf

Link 21L: Pocantico River Basin

Inflow=2.46 cfs 10,489 cf
Primary=2.46 cfs 10,489 cf

Link 22L: Pocantico Lake

Inflow=15.73 cfs 65,855 cf
Primary=15.73 cfs 65,855 cf

Link 23L: Mapped Wetland / Brook

Inflow=19.25 cfs 106,632 cf
Primary=19.25 cfs 106,632 cf

Link 24L: COMB POST

Inflow=31.33 cfs 182,977 cf
Primary=31.33 cfs 182,977 cf

Total Runoff Area = 1,604,168 sf Runoff Volume = 259,969 cf Average Runoff Depth = 1.94"
80.13% Pervious = 1,285,469 sf 19.87% Impervious = 318,699 sf

Summary for Subcatchment 25S: PDA-2A

Runoff = 18.90 cfs @ 12.21 hrs, Volume= 76,993 cf, Depth= 2.30"

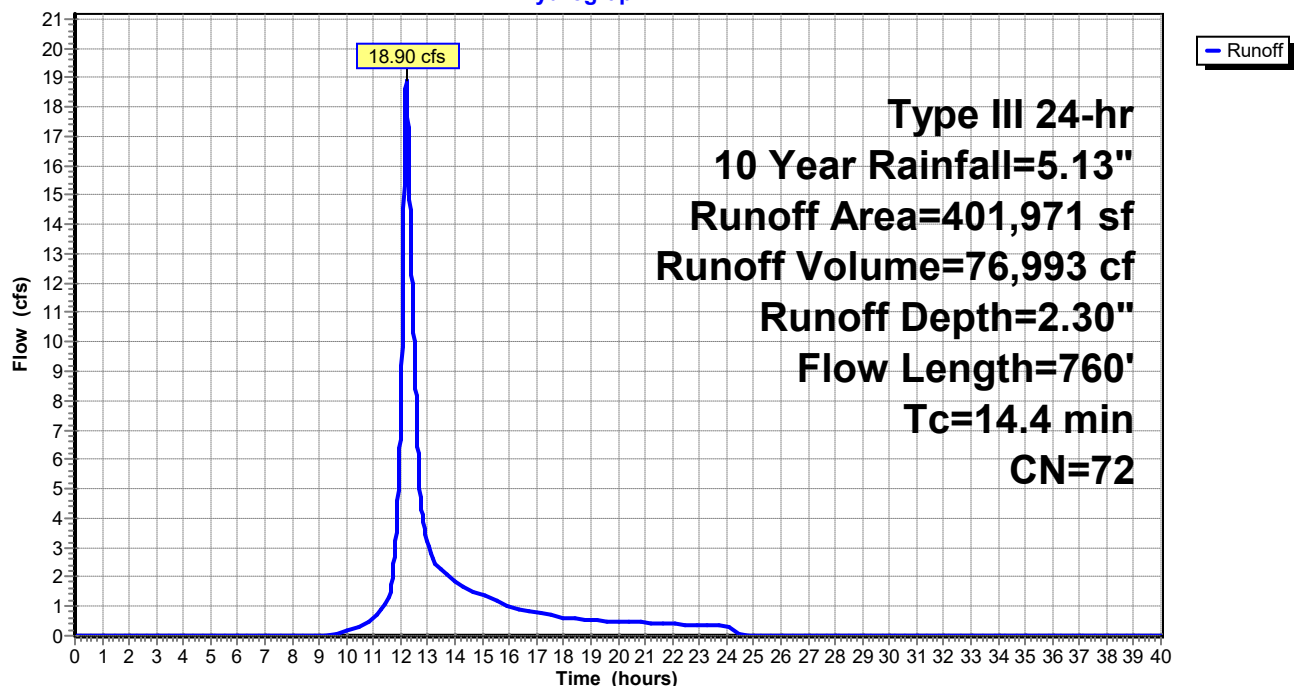
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10 Year Rainfall=5.13"

	Area (sf)	CN	Description
*	120,802	98	PROP IMP Pavement, Rooftops
	228,381	61	>75% Grass cover, Good, HSG B
	52,788	58	Woods/grass comb., Good, HSG B
	401,971	72	Weighted Average
	281,169		69.95% Pervious Area
	120,802		30.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0780	0.21		Sheet Flow, Sheet Flow Lawn Grass: Dense n= 0.240 P2= 3.41"
6.2	450	0.0300	1.21		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
0.2	210	0.0500	18.68	91.72	Pipe Channel, 30" PIPE 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013 Concrete pipe, bends & connections
14.4	760	Total			

Subcatchment 25S: PDA-2A

Hydrograph



Summary for Subcatchment 31S: PDA-1

Runoff = 2.46 cfs @ 12.22 hrs, Volume= 10,489 cf, Depth= 2.05"

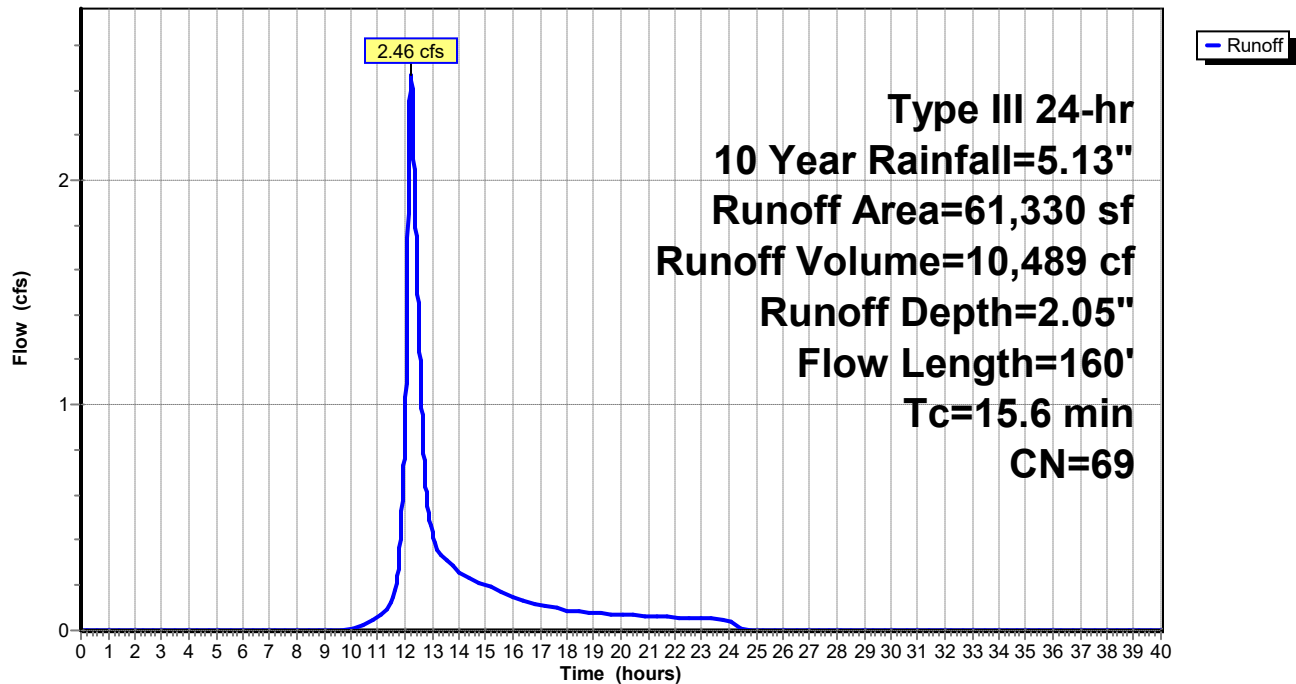
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.13"

Area (sf)	CN	Description
27,090	61	>75% Grass cover, Good, HSG B
16,693	74	>75% Grass cover, Good, HSG C
5,935	72	Woods/grass comb., Good, HSG C
4,898	58	Woods/grass comb., Good, HSG B
6,714	98	Paved parking, HSG B
61,330	69	Weighted Average
54,616		89.05% Pervious Area
6,714		10.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	100	0.0450	0.11		Sheet Flow, Wooded Sheet Flow Woods: Light underbrush n= 0.400 P2= 3.41"
0.5	35	0.0550	1.17		Shallow Concentrated Flow, Woods Shallow Conc Flow Woodland Kv= 5.0 fps
0.0	15	0.0667	5.24		Shallow Concentrated Flow, Driveway crossing Paved Kv= 20.3 fps
0.1	10	0.0600	1.71		Shallow Concentrated Flow, Grass Shoulder Short Grass Pasture Kv= 7.0 fps
15.6	160	Total			

Subcatchment 31S: PDA-1

Hydrograph



Summary for Subcatchment 43S: PDA-2

Runoff = 15.73 cfs @ 12.17 hrs, Volume= 65,855 cf, Depth= 1.31"

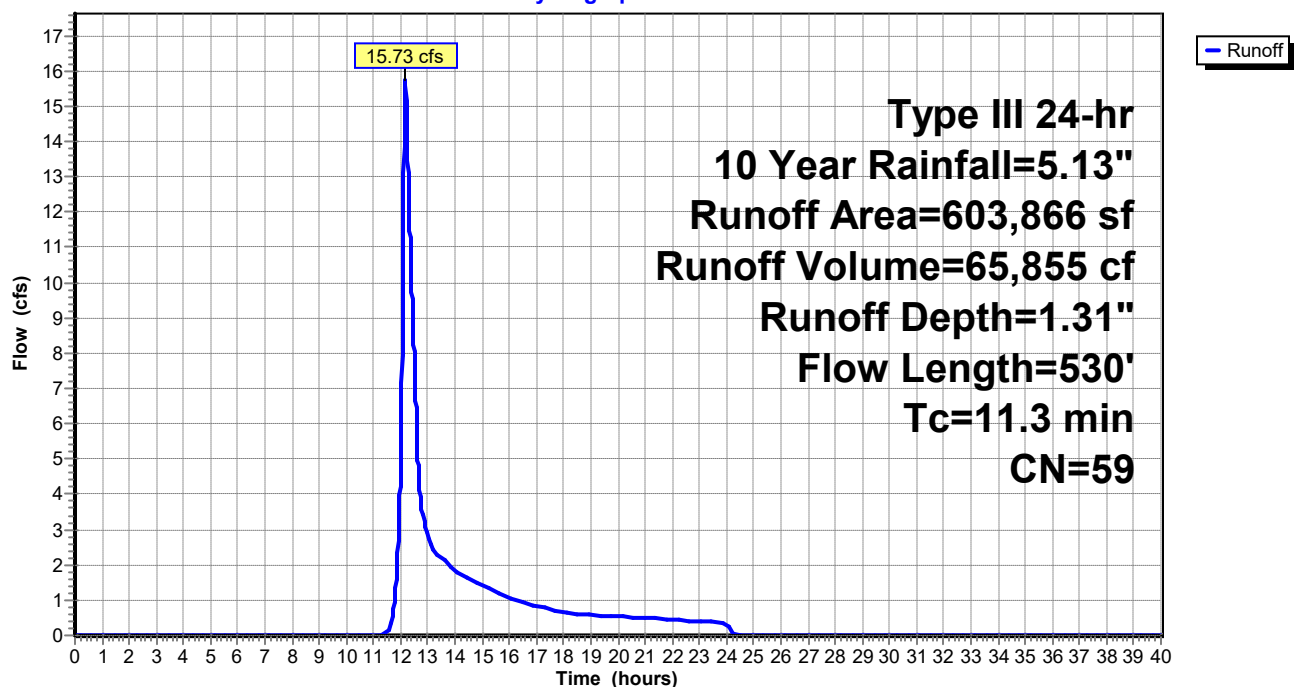
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.13"

	Area (sf)	CN	Description
*	11,116	98	EX. IMP Pavement, Rooftops
	57,480	61	>75% Grass cover, Good, HSG B
	535,270	58	Woods/grass comb., Good, HSG B
	603,866	59	Weighted Average
	592,750		98.16% Pervious Area
	11,116		1.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.1800	0.19		Sheet Flow, Sheet Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
2.7	430	0.2840	2.66		Shallow Concentrated Flow, Shallow Woods
					Woodland Kv= 5.0 fps
11.3	530	Total			

Subcatchment 43S: PDA-2

Hydrograph



Summary for Subcatchment 45S: PDA-3

Runoff = 19.25 cfs @ 12.43 hrs, Volume= 106,632 cf, Depth= 2.38"

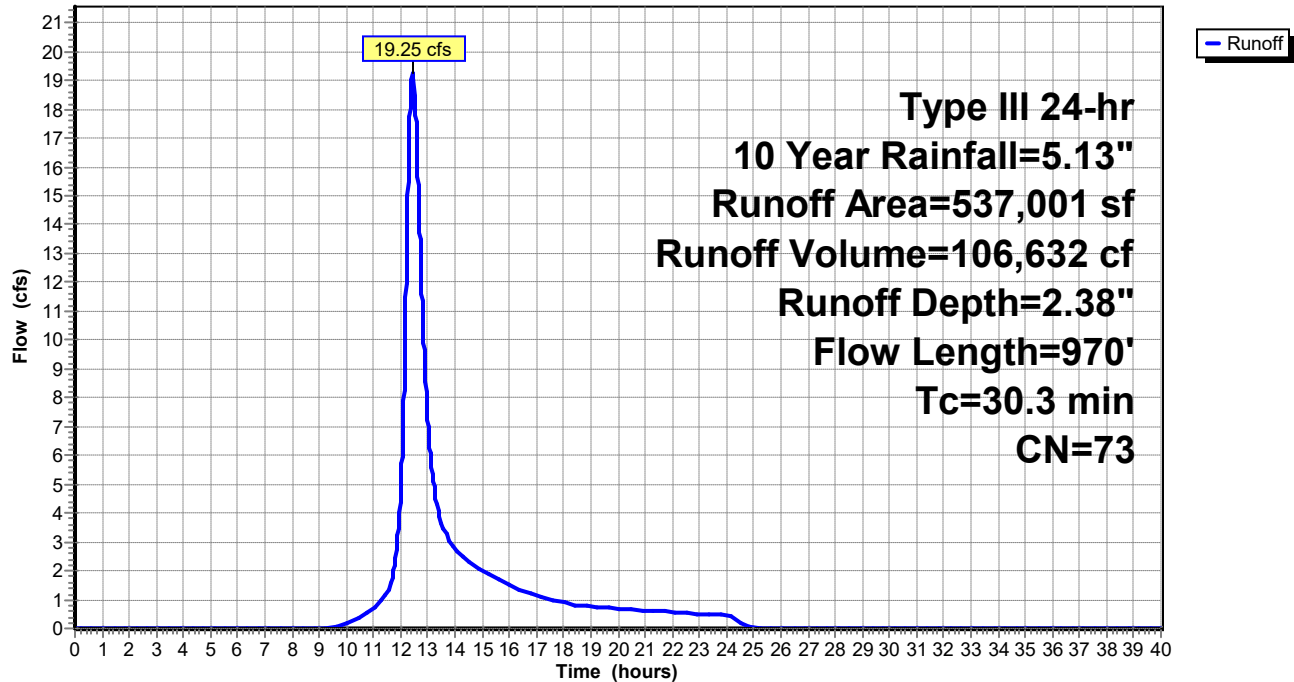
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.13"

	Area (sf)	CN	Description
*	5,814	98	Ex. IMP Pavement, Rooftops
	60,762	74	>75% Grass cover, Good, HSG C
	50,551	61	>75% Grass cover, Good, HSG B
	191,609	58	Woods/grass comb., Good, HSG B
	34,183	72	Woods/grass comb., Good, HSG C
	19,829	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	537,001	73	Weighted Average
	356,934		66.47% Pervious Area
	180,067		33.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	50	0.2800	0.20		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
10.9	50	0.1000	0.08		Sheet Flow, Sheet Flow Wetlands Woods: Dense underbrush n= 0.800 P2= 3.41"
4.7	200	0.0800	0.71		Shallow Concentrated Flow, Shallow Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.0	180	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.2	390	0.1000	0.79		Shallow Concentrated Flow, Shallow Conc Wetlands Forest w/Heavy Litter Kv= 2.5 fps
0.3	100	0.1100	6.58	52.64	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.3	970	Total			

Subcatchment 45S: PDA-3

Hydrograph



Summary for Reach 44R: EX. HILLSIDE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 0.00" for 10 Year event
 Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
 Avg. Velocity= 0.00 fps, Avg. Travel Time= 0.0 min

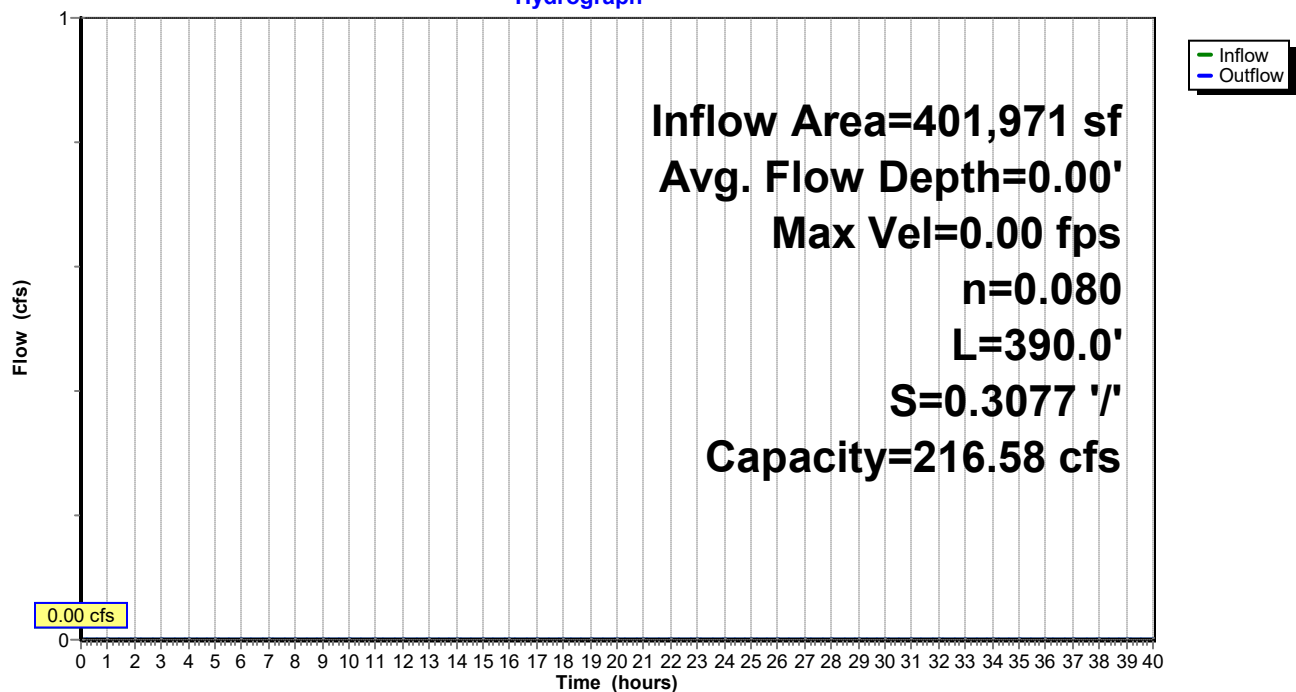
Peak Storage= 0 cf @ 0.00 hrs
 Average Depth at Peak Storage= 0.00'
 Bank-Full Depth= 1.00' Flow Area= 23.0 sf, Capacity= 216.58 cfs

20.00' x 1.00' deep channel, n= 0.080 Earth, long dense weeds
 Side Slope Z-value= 3.0 '/' Top Width= 26.00'
 Length= 390.0' Slope= 0.3077 '/'
 Inlet Invert= 340.00', Outlet Invert= 220.00'



Reach 44R: EX. HILLSIDE

Hydrograph



Summary for Pond 26P: CONCEPTUAL STORAGE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 2.30" for 10 Year event
 Inflow = 18.90 cfs @ 12.21 hrs, Volume= 76,993 cf
 Outflow = 1.55 cfs @ 14.56 hrs, Volume= 76,994 cf, Atten= 92%, Lag= 141.4 min
 Discarded = 1.55 cfs @ 14.56 hrs, Volume= 76,994 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 349.66' @ 14.56 hrs Surf.Area= 22,323 sf Storage= 35,146 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 232.8 min (1,081.9 - 849.0)

Volume	Invert	Avail.Storage	Storage Description		
#1	348.00'	174,238 cf	LOT 5-6 BASIN (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
348.00	20,140	650.0	0	0	20,140
350.00	22,790	675.1	42,903	42,903	23,100
352.00	25,542	700.2	48,306	91,209	26,172
354.00	28,392	725.3	53,909	145,117	29,356
355.00	29,855	737.9	29,120	174,238	30,996

Device	Routing	Invert	Outlet Devices											
#1	Discarded	348.00'	3.000 in/hr INFILTRATION over Surface area											
#2	Primary	353.50'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir											
			Head (feet)	0.20	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80	2.00	
				2.50	3.00	3.50	4.00	4.50	5.00	5.50				
			Coef. (English)	2.37	2.51	2.70	2.68	2.68	2.67	2.65	2.65	2.65		
				2.65	2.66	2.66	2.67	2.69	2.72	2.76	2.83			
#3	Primary	348.00'	30.0" Round 30" CULVERT OUT											
			L= 100.0' CPP, square edge headwall, Ke= 0.500											
			Inlet / Outlet Invert= 348.00' / 340.00' S= 0.0800 '/' Cc= 0.900											
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 4.91 sf											
#4	Device 3	353.10'	48.0" W x 12.0" H Vert. 48" VERT ORIFICE C= 0.600											

Discarded OutFlow Max=1.55 cfs @ 14.56 hrs HW=349.66' (Free Discharge)

↑ **1=INFILTRATION** (Exfiltration Controls 1.55 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=348.00' TW=340.00' (Dynamic Tailwater)

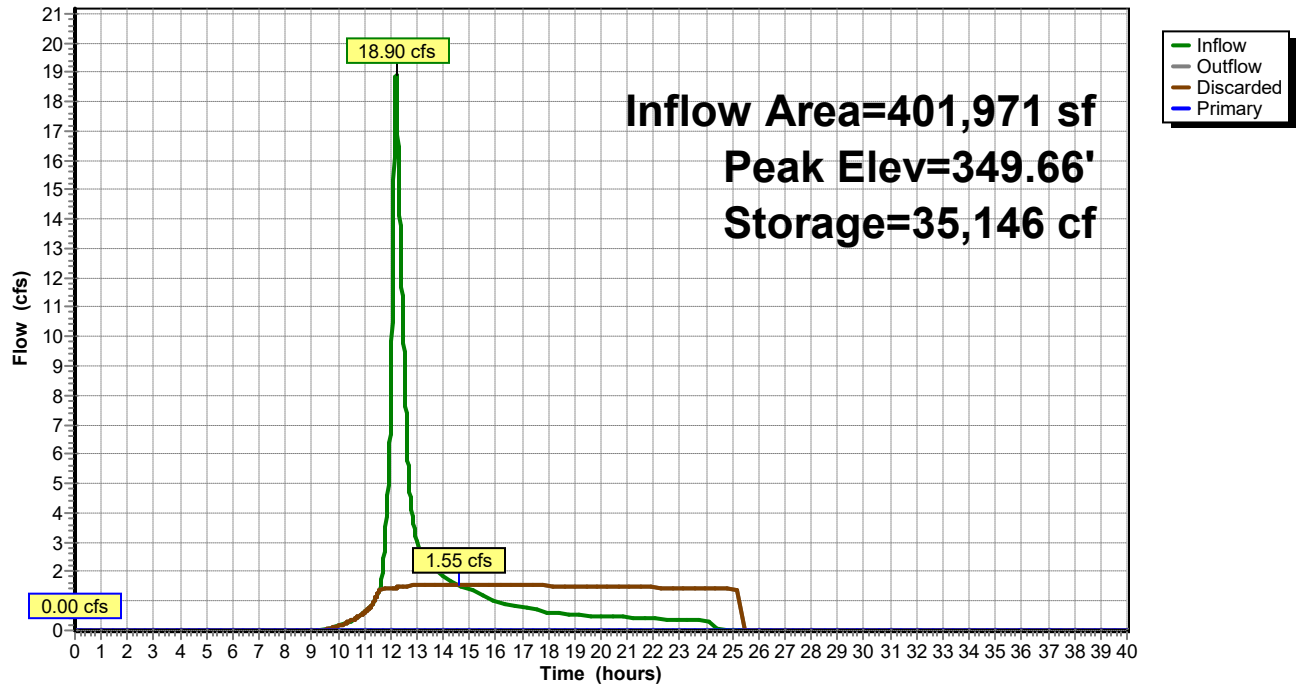
↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

↑ **3=30" CULVERT OUT** (Controls 0.00 cfs)

↑ **4=48" VERT ORIFICE** (Controls 0.00 cfs)

Pond 26P: CONCEPTUAL STORAGE

Hydrograph



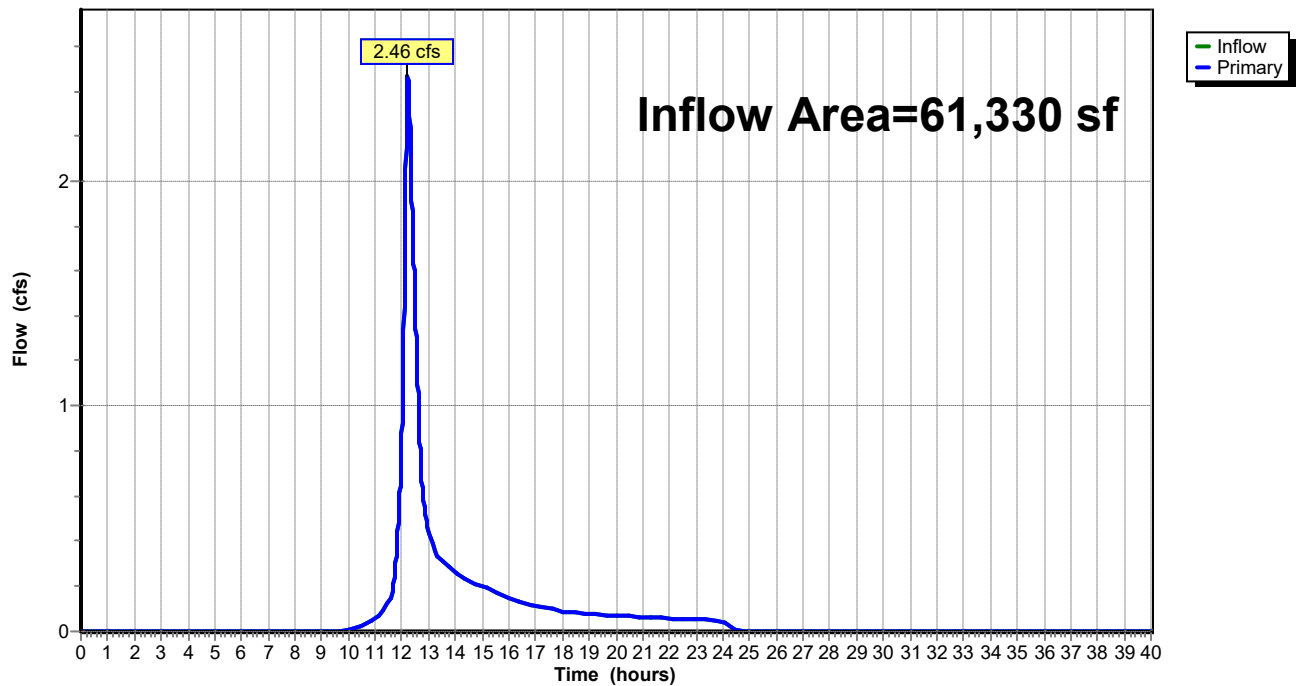
Summary for Link 21L: Pocantico River Basin

Inflow Area = 61,330 sf, 10.95% Impervious, Inflow Depth = 2.05" for 10 Year event
 Inflow = 2.46 cfs @ 12.22 hrs, Volume= 10,489 cf
 Primary = 2.46 cfs @ 12.22 hrs, Volume= 10,489 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 21L: Pocantico River Basin

Hydrograph



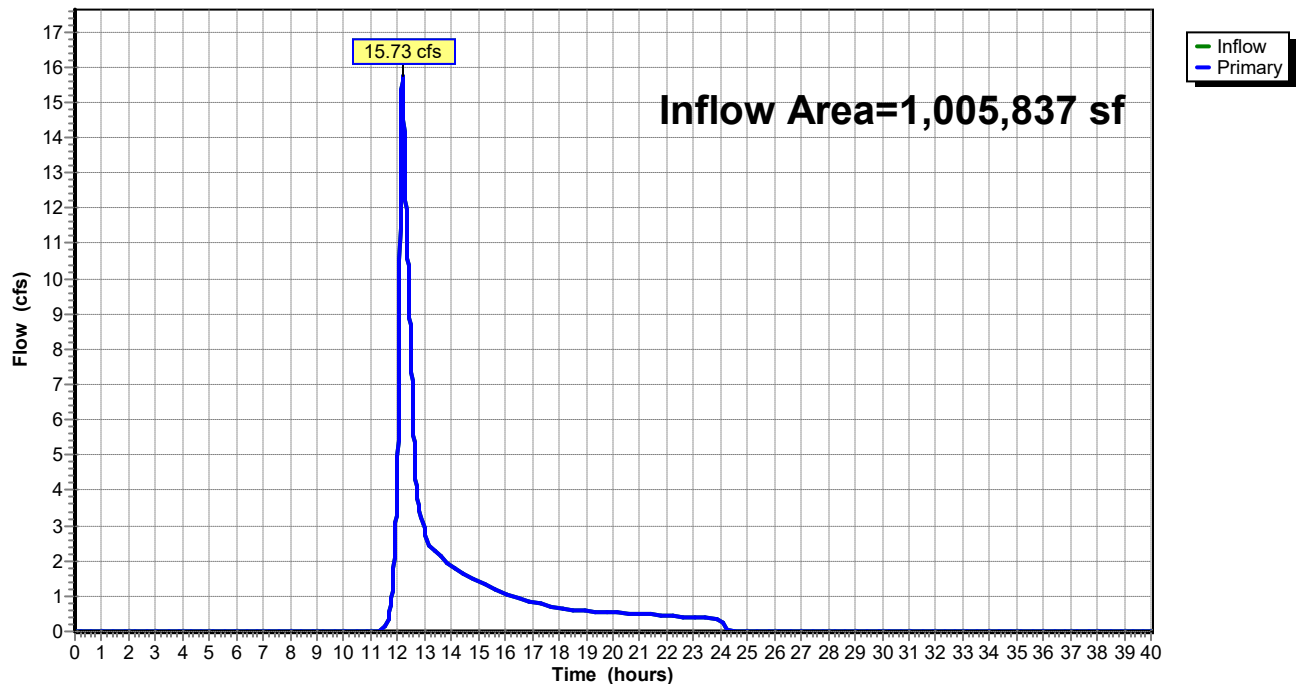
Summary for Link 22L: Pocantico Lake

Inflow Area = 1,005,837 sf, 13.12% Impervious, Inflow Depth = 0.79" for 10 Year event
 Inflow = 15.73 cfs @ 12.17 hrs, Volume= 65,855 cf
 Primary = 15.73 cfs @ 12.17 hrs, Volume= 65,855 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 22L: Pocantico Lake

Hydrograph



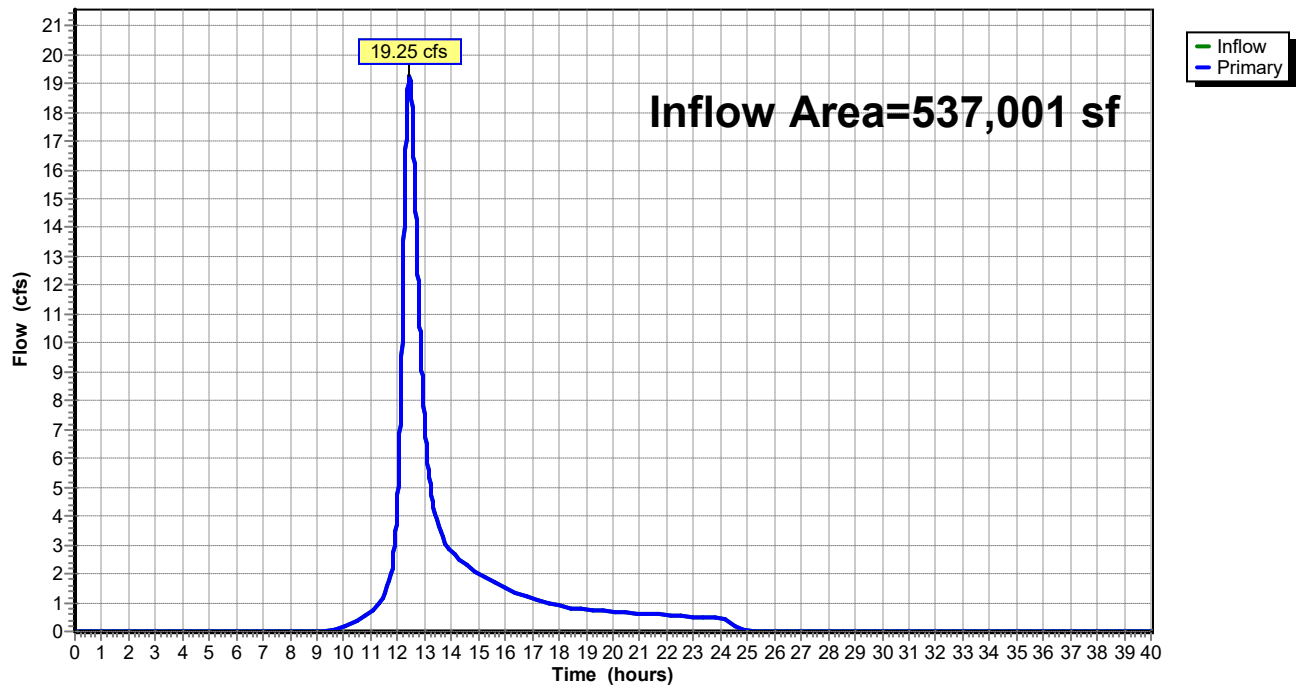
Summary for Link 23L: Mapped Wetland / Brook

Inflow Area = 537,001 sf, 33.53% Impervious, Inflow Depth = 2.38" for 10 Year event
 Inflow = 19.25 cfs @ 12.43 hrs, Volume= 106,632 cf
 Primary = 19.25 cfs @ 12.43 hrs, Volume= 106,632 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 23L: Mapped Wetland / Brook

Hydrograph



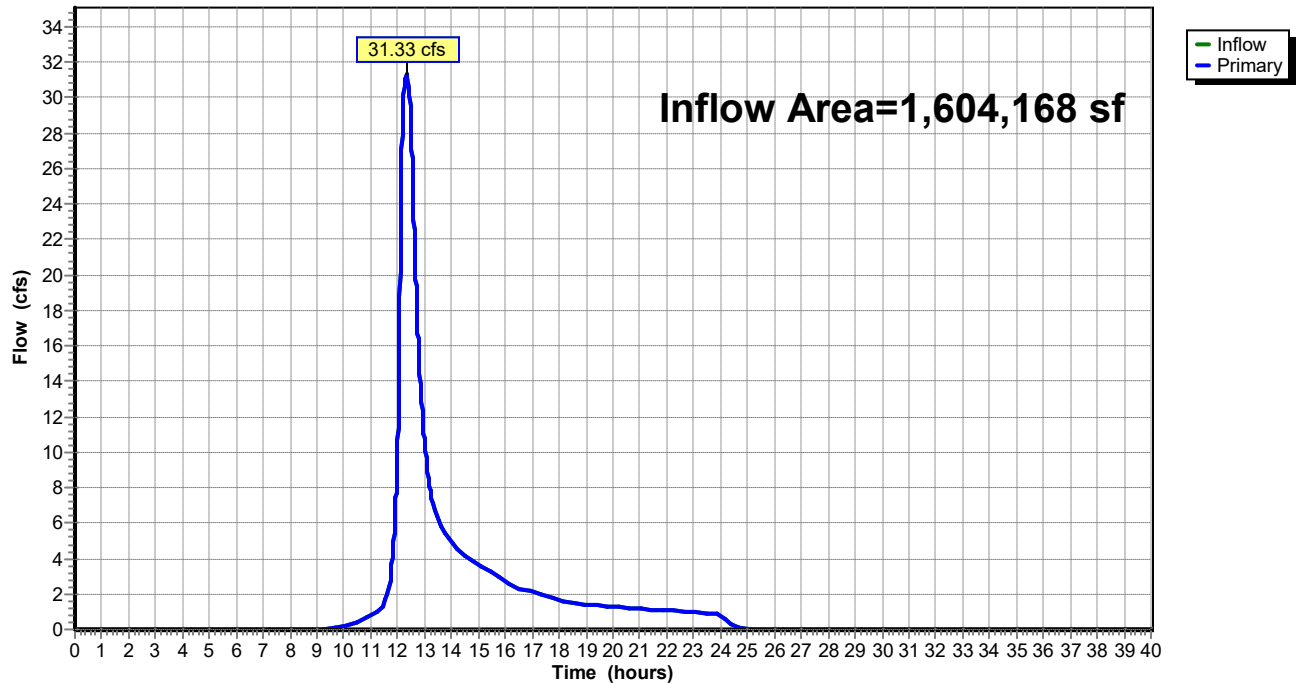
Summary for Link 24L: COMB POST

Inflow Area = 1,604,168 sf, 19.87% Impervious, Inflow Depth = 1.37" for 10 Year event
 Inflow = 31.33 cfs @ 12.35 hrs, Volume= 182,977 cf
 Primary = 31.33 cfs @ 12.35 hrs, Volume= 182,977 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 24L: COMB POST

Hydrograph



Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 25S: PDA-2A

Runoff Area=401,971 sf 30.05% Impervious Runoff Depth=3.38"
Flow Length=760' Tc=14.4 min CN=72 Runoff=28.07 cfs 113,282 cf

Subcatchment 31S: PDA-1

Runoff Area=61,330 sf 10.95% Impervious Runoff Depth=3.08"
Flow Length=160' Tc=15.6 min CN=69 Runoff=3.77 cfs 15,763 cf

Subcatchment 43S: PDA-2

Runoff Area=603,866 sf 1.84% Impervious Runoff Depth=2.15"
Flow Length=530' Tc=11.3 min CN=59 Runoff=27.67 cfs 107,963 cf

Subcatchment 45S: PDA-3

Runoff Area=537,001 sf 33.53% Impervious Runoff Depth=3.48"
Flow Length=970' Tc=30.3 min CN=73 Runoff=28.37 cfs 155,842 cf

Reach 44R: EX. HILLSIDE

Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.080 L=390.0' S=0.3077 ' / Capacity=216.58 cfs Outflow=0.00 cfs 0 cf

Pond 26P: CONCEPTUAL STORAGE

Peak Elev=350.73' Storage=59,851 cf Inflow=28.07 cfs 113,282 cf
Discarded=1.65 cfs 113,294 cf Primary=0.00 cfs 0 cf Outflow=1.65 cfs 113,294 cf

Link 21L: Pocantico River Basin

Inflow=3.77 cfs 15,763 cf
Primary=3.77 cfs 15,763 cf

Link 22L: Pocantico Lake

Inflow=27.67 cfs 107,963 cf
Primary=27.67 cfs 107,963 cf

Link 23L: Mapped Wetland / Brook

Inflow=28.37 cfs 155,842 cf
Primary=28.37 cfs 155,842 cf

Link 24L: COMB POST

Inflow=49.08 cfs 279,568 cf
Primary=49.08 cfs 279,568 cf

Total Runoff Area = 1,604,168 sf Runoff Volume = 392,850 cf Average Runoff Depth = 2.94"
80.13% Pervious = 1,285,469 sf 19.87% Impervious = 318,699 sf

Summary for Subcatchment 25S: PDA-2A

Runoff = 28.07 cfs @ 12.20 hrs, Volume= 113,282 cf, Depth= 3.38"

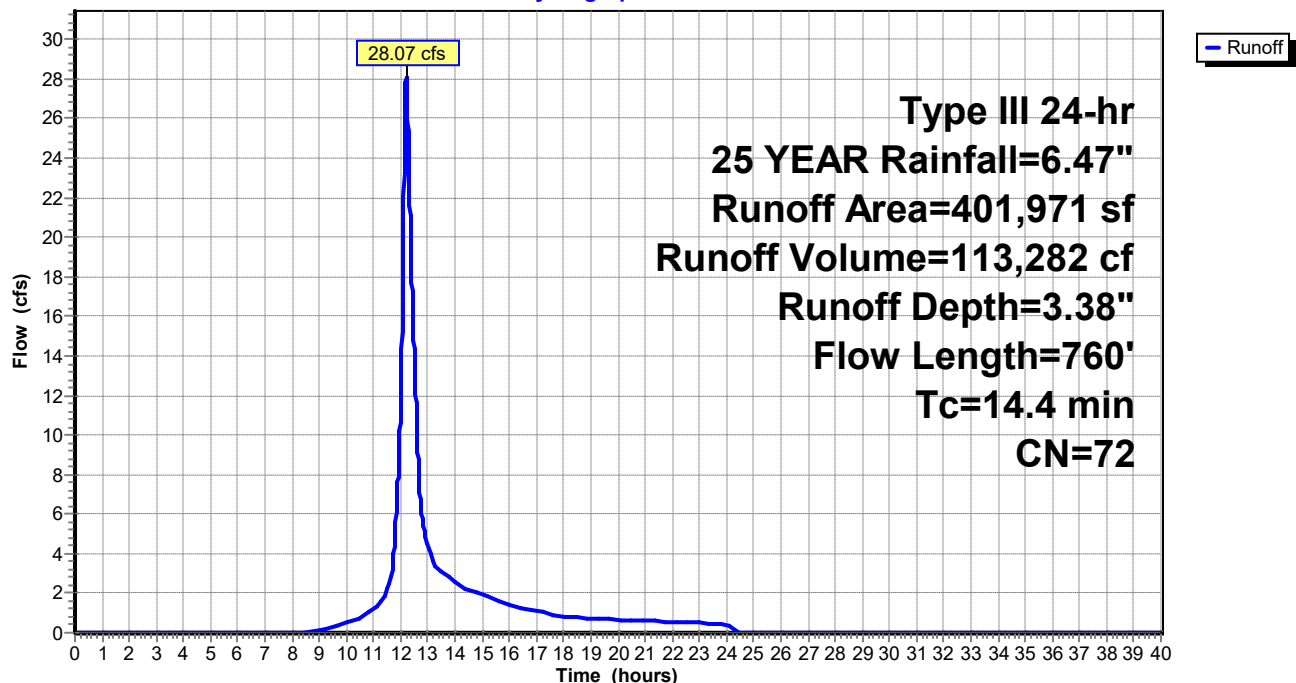
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YEAR Rainfall=6.47"

	Area (sf)	CN	Description
*	120,802	98	PROP IMP Pavement, Rooftops
	228,381	61	>75% Grass cover, Good, HSG B
	52,788	58	Woods/grass comb., Good, HSG B
	401,971	72	Weighted Average
	281,169		69.95% Pervious Area
	120,802		30.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0780	0.21		Sheet Flow, Sheet Flow Lawn Grass: Dense n= 0.240 P2= 3.41"
6.2	450	0.0300	1.21		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
0.2	210	0.0500	18.68	91.72	Pipe Channel, 30" PIPE 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013 Concrete pipe, bends & connections
14.4	760	Total			

Subcatchment 25S: PDA-2A

Hydrograph



Summary for Subcatchment 31S: PDA-1

Runoff = 3.77 cfs @ 12.22 hrs, Volume= 15,763 cf, Depth= 3.08"

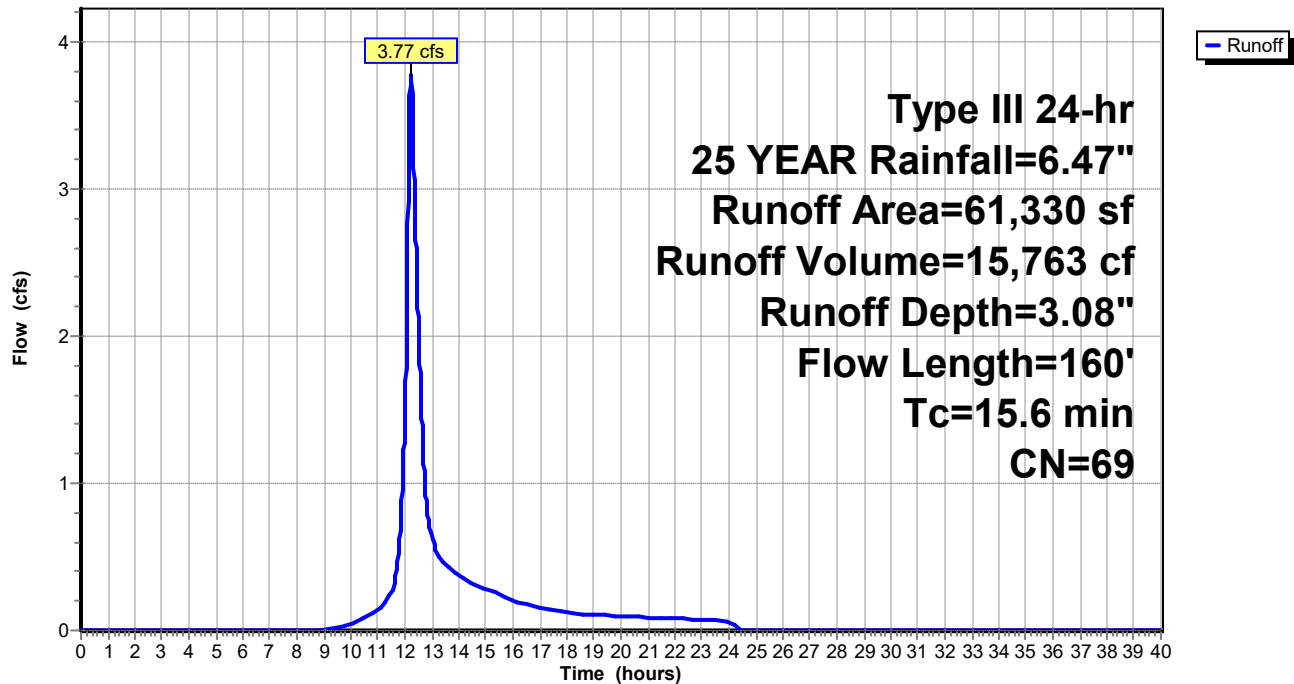
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YEAR Rainfall=6.47"

Area (sf)	CN	Description
27,090	61	>75% Grass cover, Good, HSG B
16,693	74	>75% Grass cover, Good, HSG C
5,935	72	Woods/grass comb., Good, HSG C
4,898	58	Woods/grass comb., Good, HSG B
6,714	98	Paved parking, HSG B
61,330	69	Weighted Average
54,616		89.05% Pervious Area
6,714		10.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	100	0.0450	0.11		Sheet Flow, Wooded Sheet Flow Woods: Light underbrush n= 0.400 P2= 3.41"
0.5	35	0.0550	1.17		Shallow Concentrated Flow, Woods Shallow Conc Flow Woodland Kv= 5.0 fps
0.0	15	0.0667	5.24		Shallow Concentrated Flow, Driveway crossing Paved Kv= 20.3 fps
0.1	10	0.0600	1.71		Shallow Concentrated Flow, Grass Shoulder Short Grass Pasture Kv= 7.0 fps
15.6	160	Total			

Subcatchment 31S: PDA-1

Hydrograph



Summary for Subcatchment 43S: PDA-2

Runoff = 27.67 cfs @ 12.17 hrs, Volume= 107,963 cf, Depth= 2.15"

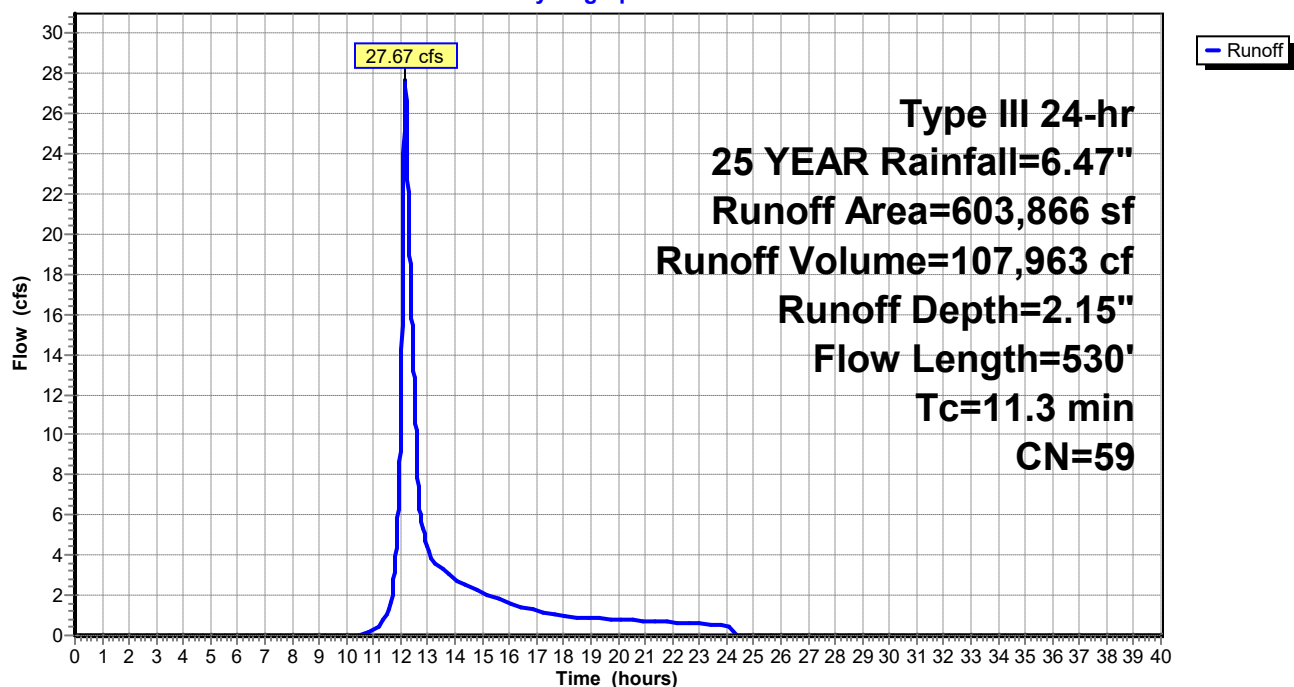
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YEAR Rainfall=6.47"

	Area (sf)	CN	Description
*	11,116	98	EX. IMP Pavement, Rooftops
	57,480	61	>75% Grass cover, Good, HSG B
	535,270	58	Woods/grass comb., Good, HSG B
	603,866	59	Weighted Average
	592,750		98.16% Pervious Area
	11,116		1.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.1800	0.19		Sheet Flow, Sheet Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
2.7	430	0.2840	2.66		Shallow Concentrated Flow, Shallow Woods
					Woodland Kv= 5.0 fps
11.3	530	Total			

Subcatchment 43S: PDA-2

Hydrograph



Summary for Subcatchment 45S: PDA-3

Runoff = 28.37 cfs @ 12.42 hrs, Volume= 155,842 cf, Depth= 3.48"

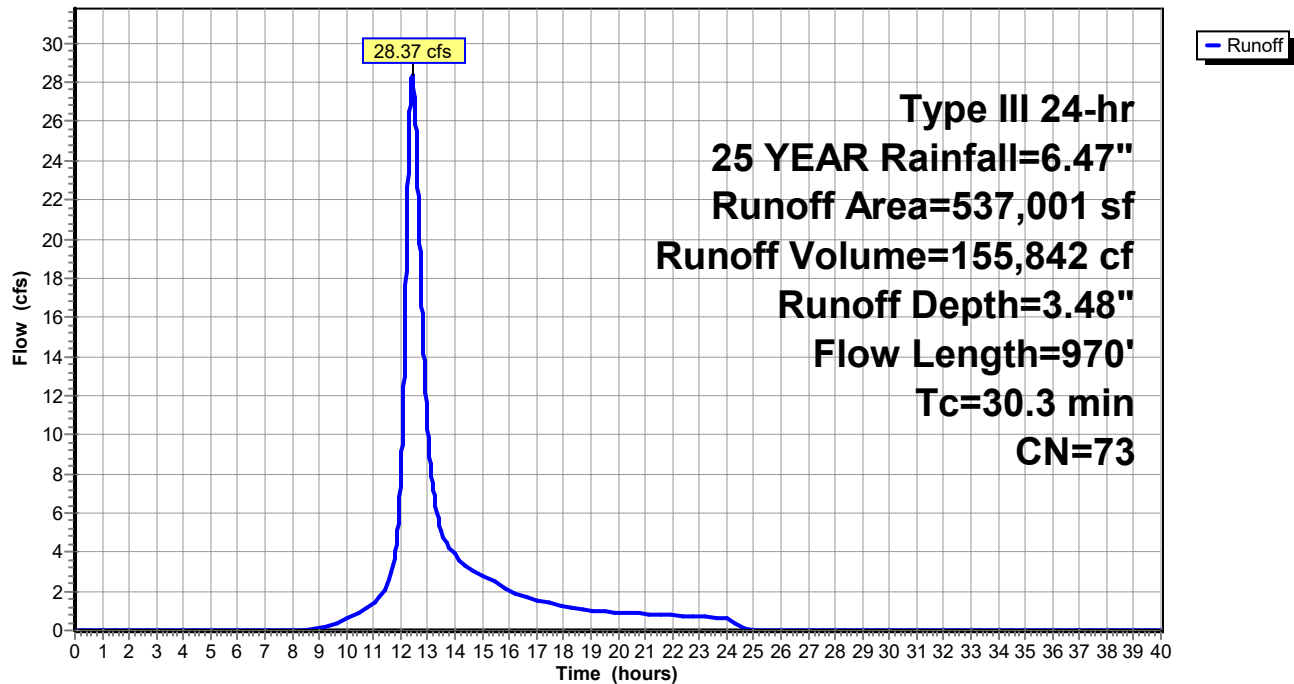
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 25 YEAR Rainfall=6.47"

	Area (sf)	CN	Description
*	5,814	98	Ex. IMP Pavement, Rooftops
	60,762	74	>75% Grass cover, Good, HSG C
	50,551	61	>75% Grass cover, Good, HSG B
	191,609	58	Woods/grass comb., Good, HSG B
	34,183	72	Woods/grass comb., Good, HSG C
	19,829	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	537,001	73	Weighted Average
	356,934		66.47% Pervious Area
	180,067		33.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	50	0.2800	0.20		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
10.9	50	0.1000	0.08		Sheet Flow, Sheet Flow Wetlands Woods: Dense underbrush n= 0.800 P2= 3.41"
4.7	200	0.0800	0.71		Shallow Concentrated Flow, Shallow Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.0	180	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.2	390	0.1000	0.79		Shallow Concentrated Flow, Shallow Conc Wetlands Forest w/Heavy Litter Kv= 2.5 fps
0.3	100	0.1100	6.58	52.64	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.3	970	Total			

Subcatchment 45S: PDA-3

Hydrograph



Summary for Reach 44R: EX. HILLSIDE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 0.00" for 25 YEAR event
 Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
 Avg. Velocity= 0.00 fps, Avg. Travel Time= 0.0 min

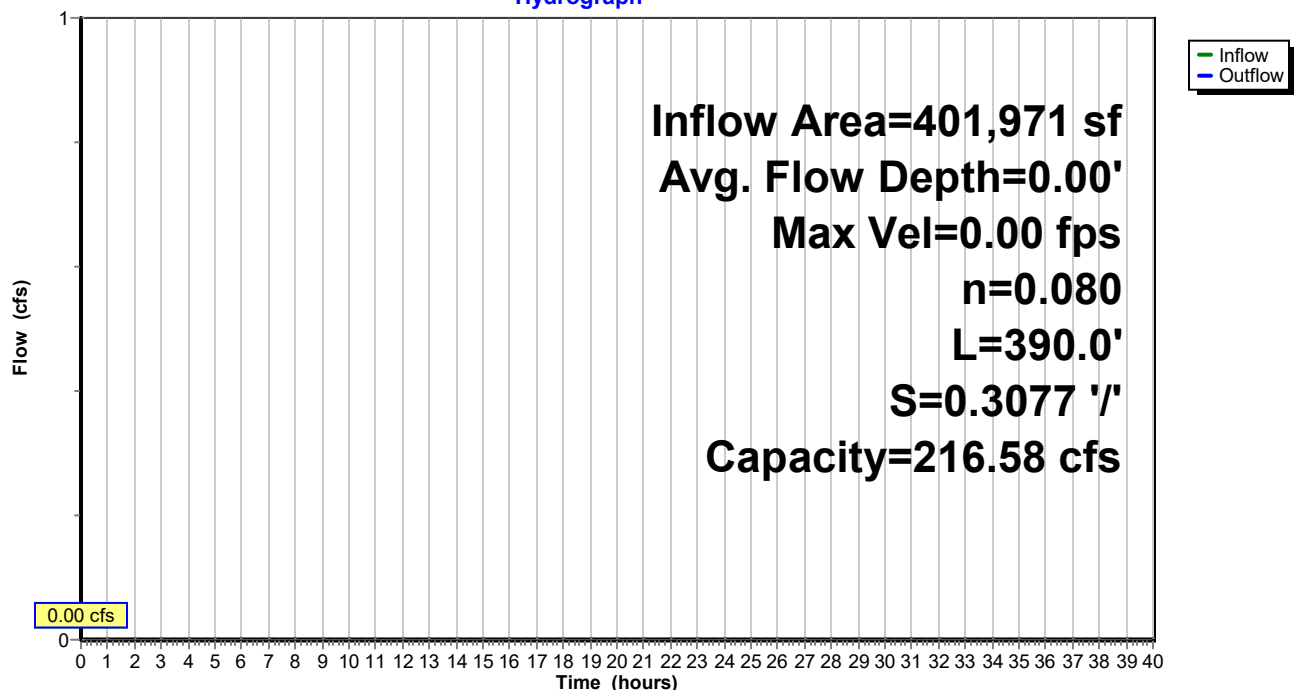
Peak Storage= 0 cf @ 0.00 hrs
 Average Depth at Peak Storage= 0.00'
 Bank-Full Depth= 1.00' Flow Area= 23.0 sf, Capacity= 216.58 cfs

20.00' x 1.00' deep channel, n= 0.080 Earth, long dense weeds
 Side Slope Z-value= 3.0 '/' Top Width= 26.00'
 Length= 390.0' Slope= 0.3077 '/'
 Inlet Invert= 340.00', Outlet Invert= 220.00'



Reach 44R: EX. HILLSIDE

Hydrograph



Summary for Pond 26P: CONCEPTUAL STORAGE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 3.38" for 25 YEAR event
 Inflow = 28.07 cfs @ 12.20 hrs, Volume= 113,282 cf
 Outflow = 1.65 cfs @ 15.50 hrs, Volume= 113,294 cf, Atten= 94%, Lag= 198.2 min
 Discarded = 1.65 cfs @ 15.50 hrs, Volume= 113,294 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 350.73' @ 15.50 hrs Surf.Area= 23,774 sf Storage= 59,851 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 377.4 min (1,215.1 - 837.8)

Volume	Invert	Avail.Storage	Storage Description		
#1	348.00'	174,238 cf	LOT 5-6 BASIN (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
348.00	20,140	650.0	0	0	20,140
350.00	22,790	675.1	42,903	42,903	23,100
352.00	25,542	700.2	48,306	91,209	26,172
354.00	28,392	725.3	53,909	145,117	29,356
355.00	29,855	737.9	29,120	174,238	30,996

Device	Routing	Invert	Outlet Devices											
#1	Discarded	348.00'	3.000 in/hr INFILTRATION over Surface area											
#2	Primary	353.50'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir											
			Head (feet)	0.20	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80	2.00	
				2.50	3.00	3.50	4.00	4.50	5.00	5.50				
			Coef. (English)	2.37	2.51	2.70	2.68	2.68	2.67	2.65	2.65	2.65		
				2.65	2.66	2.66	2.67	2.69	2.72	2.76	2.83			
#3	Primary	348.00'	30.0" Round 30" CULVERT OUT											
			L= 100.0' CPP, square edge headwall, Ke= 0.500											
			Inlet / Outlet Invert= 348.00' / 340.00' S= 0.0800 ' S= 0.0800 ' Cc= 0.900											
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 4.91 sf											
#4	Device 3	353.10'	48.0" W x 12.0" H Vert. 48" VERT ORIFICE C= 0.600											

Discarded OutFlow Max=1.65 cfs @ 15.50 hrs HW=350.73' (Free Discharge)

↑ **1=INFILTRATION** (Exfiltration Controls 1.65 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=348.00' TW=340.00' (Dynamic Tailwater)

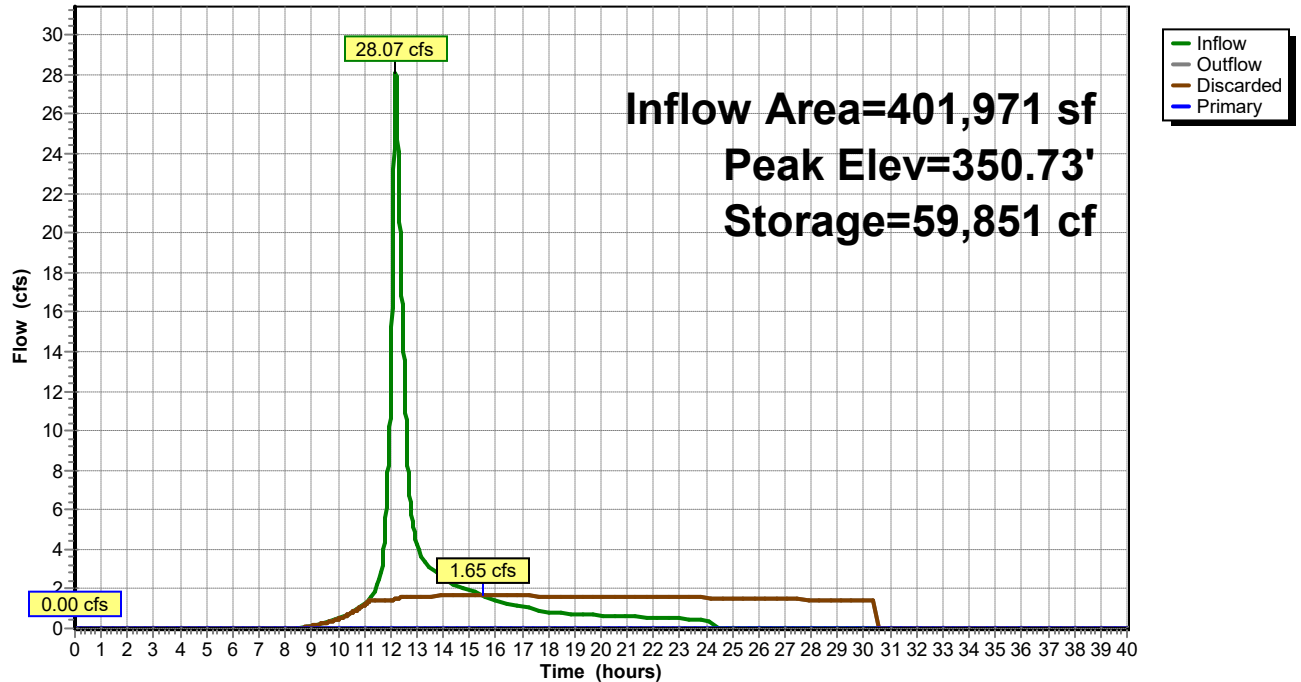
↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

↑ **3=30" CULVERT OUT** (Controls 0.00 cfs)

↑ **4=48" VERT ORIFICE** (Controls 0.00 cfs)

Pond 26P: CONCEPTUAL STORAGE

Hydrograph



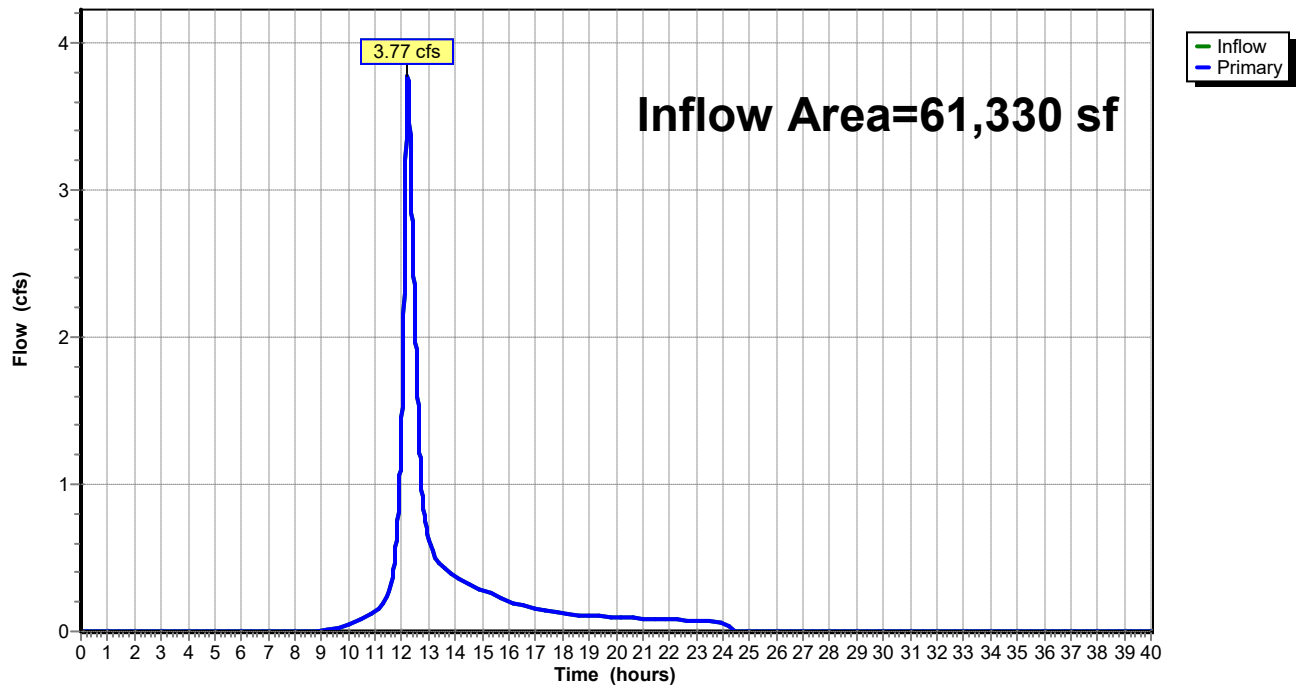
Summary for Link 21L: Pocantico River Basin

Inflow Area = 61,330 sf, 10.95% Impervious, Inflow Depth = 3.08" for 25 YEAR event
 Inflow = 3.77 cfs @ 12.22 hrs, Volume= 15,763 cf
 Primary = 3.77 cfs @ 12.22 hrs, Volume= 15,763 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 21L: Pocantico River Basin

Hydrograph



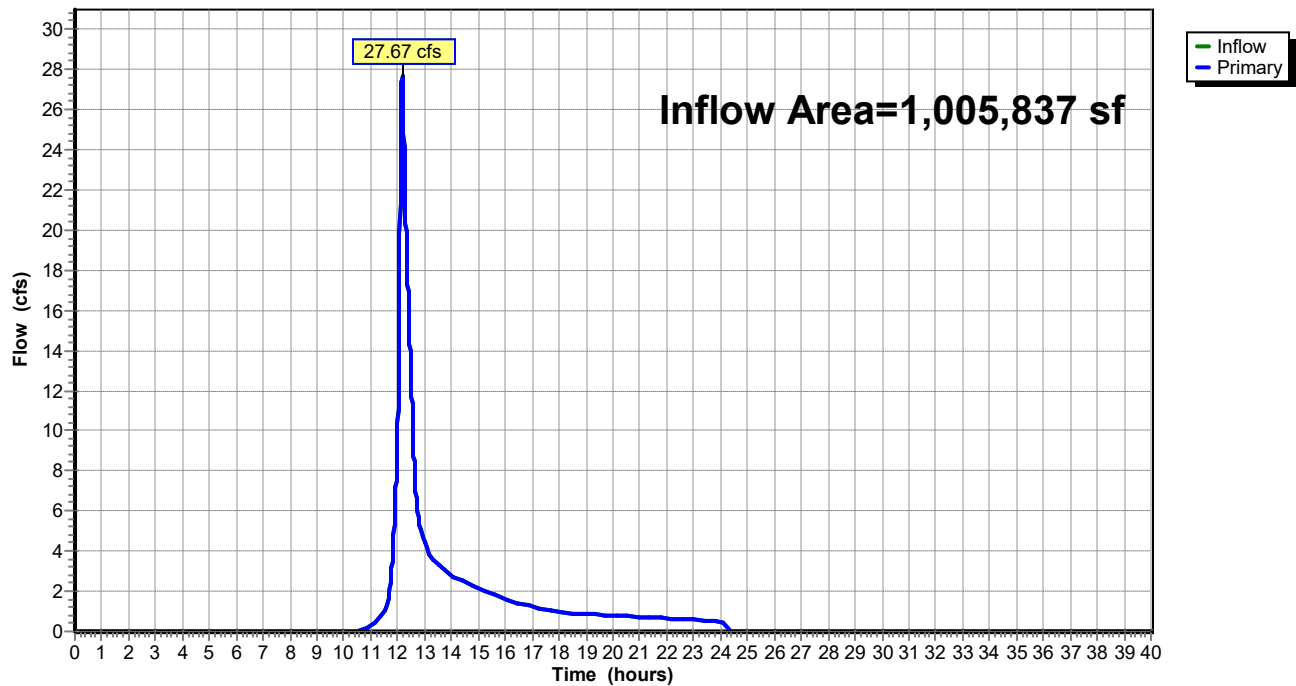
Summary for Link 22L: Pocantico Lake

Inflow Area = 1,005,837 sf, 13.12% Impervious, Inflow Depth = 1.29" for 25 YEAR event
 Inflow = 27.67 cfs @ 12.17 hrs, Volume= 107,963 cf
 Primary = 27.67 cfs @ 12.17 hrs, Volume= 107,963 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 22L: Pocantico Lake

Hydrograph



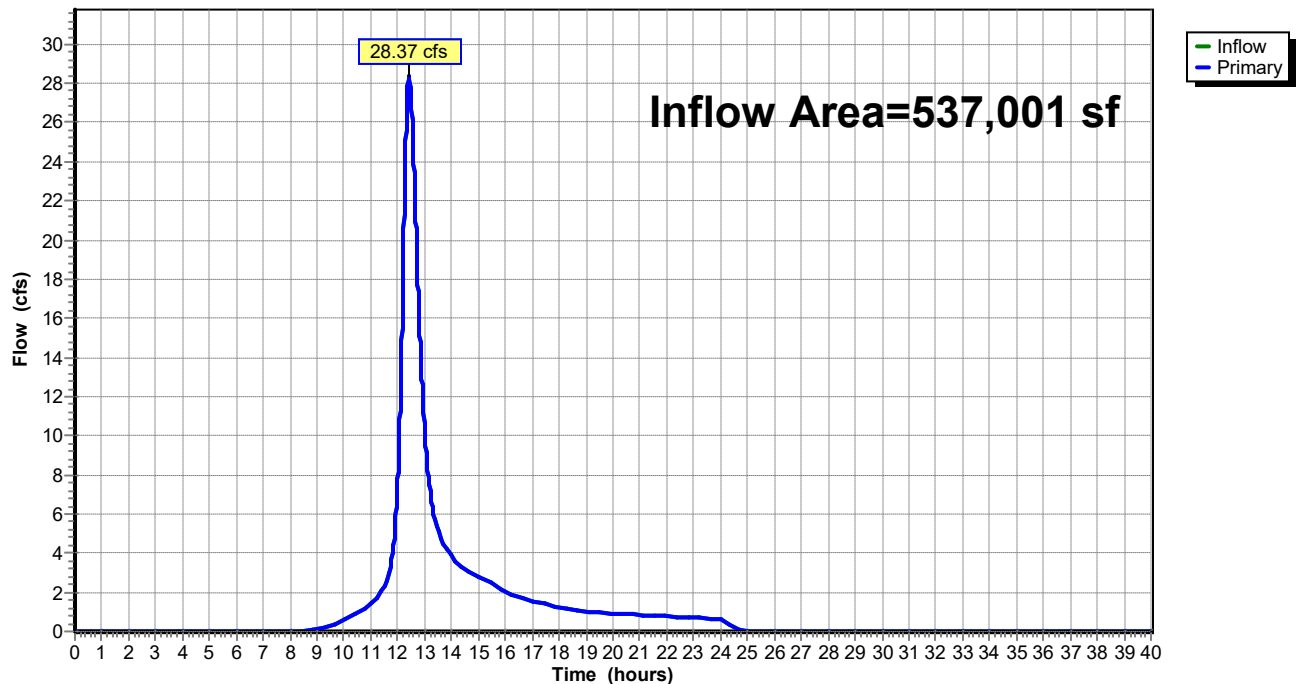
Summary for Link 23L: Mapped Wetland / Brook

Inflow Area = 537,001 sf, 33.53% Impervious, Inflow Depth = 3.48" for 25 YEAR event
 Inflow = 28.37 cfs @ 12.42 hrs, Volume= 155,842 cf
 Primary = 28.37 cfs @ 12.42 hrs, Volume= 155,842 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 23L: Mapped Wetland / Brook

Hydrograph



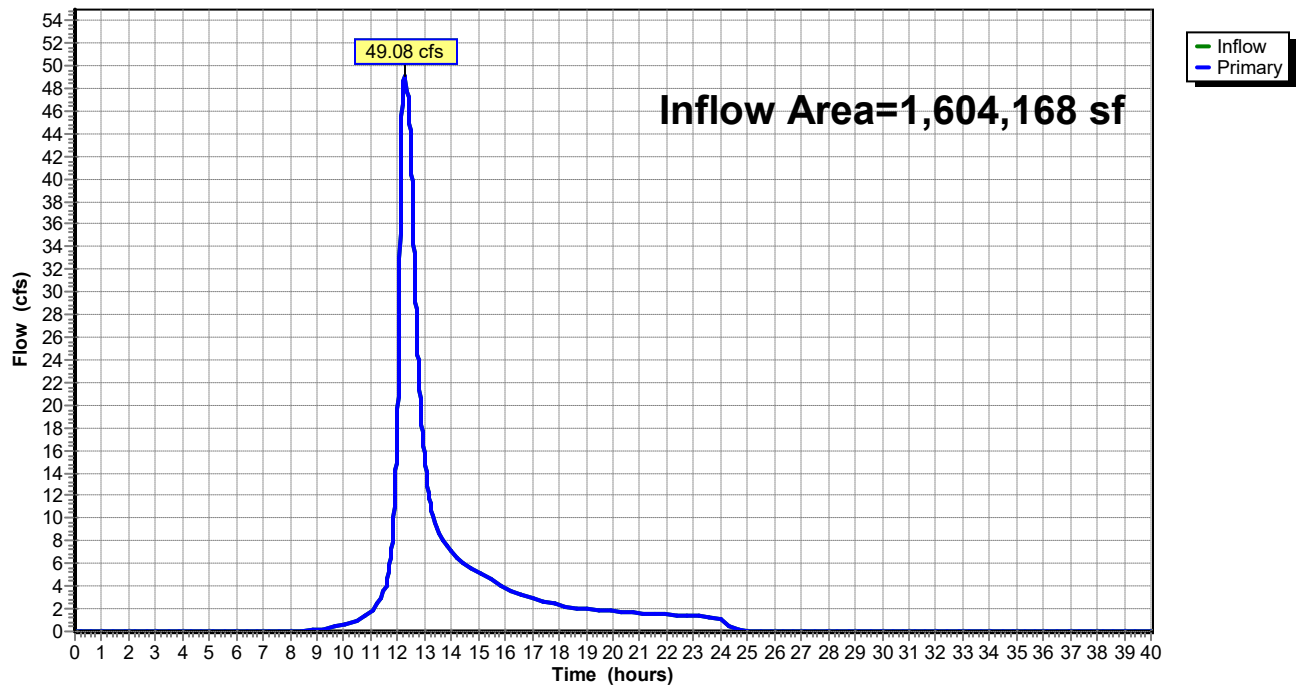
Summary for Link 24L: COMB POST

Inflow Area = 1,604,168 sf, 19.87% Impervious, Inflow Depth = 2.09" for 25 YEAR event
 Inflow = 49.08 cfs @ 12.24 hrs, Volume= 279,568 cf
 Primary = 49.08 cfs @ 12.24 hrs, Volume= 279,568 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 24L: COMB POST

Hydrograph



Meadows Briarcliff_01122022

Type III 24-hr 50 Year Rainfall=7.72"

Prepared by Wasp Engineering Group, PLLC

Printed 1/14/2022

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 25S: PDA-2A

Runoff Area=401,971 sf 30.05% Impervious Runoff Depth=4.45"
Flow Length=760' Tc=14.4 min CN=72 Runoff=37.00 cfs 149,052 cf

Subcatchment 31S: PDA-1

Runoff Area=61,330 sf 10.95% Impervious Runoff Depth=4.11"
Flow Length=160' Tc=15.6 min CN=69 Runoff=5.06 cfs 21,019 cf

Subcatchment 43S: PDA-2

Runoff Area=603,866 sf 1.84% Impervious Runoff Depth=3.02"
Flow Length=530' Tc=11.3 min CN=59 Runoff=40.04 cfs 151,850 cf

Subcatchment 45S: PDA-3

Runoff Area=537,001 sf 33.53% Impervious Runoff Depth=4.56"
Flow Length=970' Tc=30.3 min CN=73 Runoff=37.18 cfs 204,179 cf

Reach 44R: EX. HILLSIDE

Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.080 L=390.0' S=0.3077 ' / Capacity=216.58 cfs Outflow=0.00 cfs 0 cf

Pond 26P: CONCEPTUAL STORAGE

Peak Elev=351.78' Storage=85,694 cf Inflow=37.00 cfs 149,052 cf
Discarded=1.75 cfs 149,057 cf Primary=0.00 cfs 0 cf Outflow=1.75 cfs 149,057 cf

Link 21L: Pocantico River Basin

Inflow=5.06 cfs 21,019 cf
Primary=5.06 cfs 21,019 cf

Link 22L: Pocantico Lake

Inflow=40.04 cfs 151,850 cf
Primary=40.04 cfs 151,850 cf

Link 23L: Mapped Wetland / Brook

Inflow=37.18 cfs 204,179 cf
Primary=37.18 cfs 204,179 cf

Link 24L: COMB POST

Inflow=67.96 cfs 377,049 cf
Primary=67.96 cfs 377,049 cf

Total Runoff Area = 1,604,168 sf Runoff Volume = 526,101 cf Average Runoff Depth = 3.94"
80.13% Pervious = 1,285,469 sf 19.87% Impervious = 318,699 sf

Summary for Subcatchment 25S: PDA-2A

Runoff = 37.00 cfs @ 12.20 hrs, Volume= 149,052 cf, Depth= 4.45"

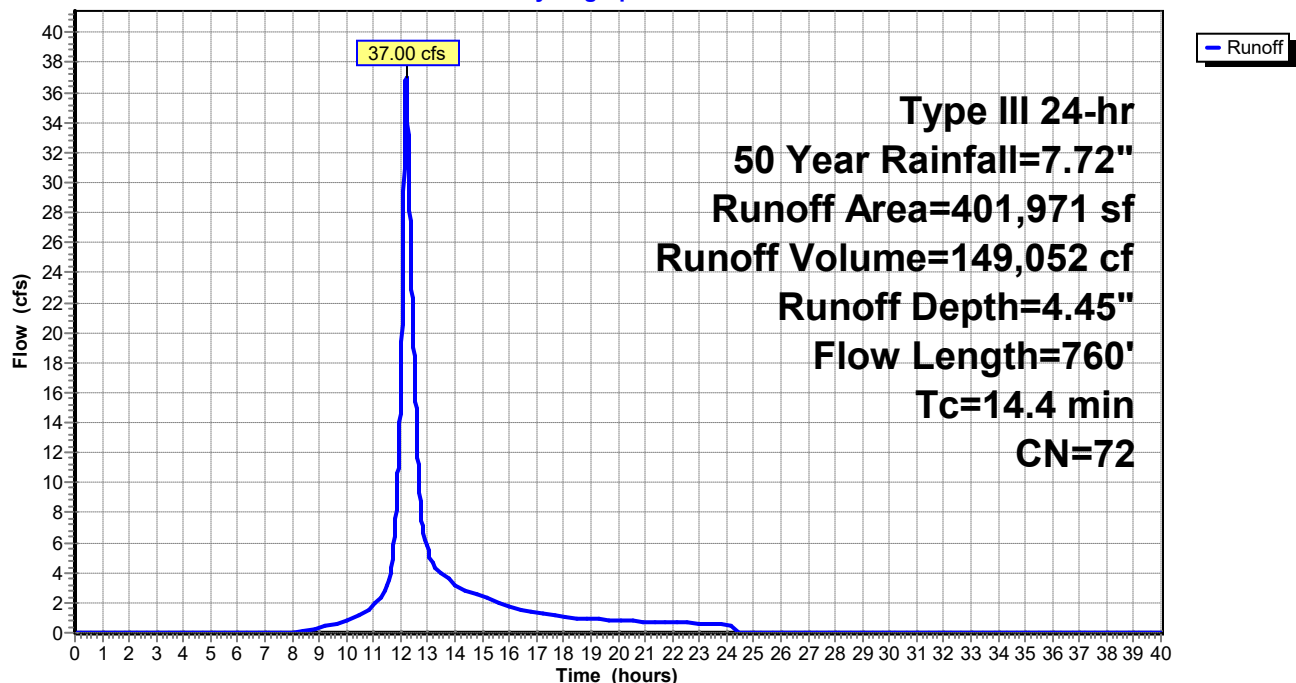
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 Year Rainfall=7.72"

	Area (sf)	CN	Description
*	120,802	98	PROP IMP Pavement, Rooftops
	228,381	61	>75% Grass cover, Good, HSG B
	52,788	58	Woods/grass comb., Good, HSG B
	401,971	72	Weighted Average
	281,169		69.95% Pervious Area
	120,802		30.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0780	0.21		Sheet Flow, Sheet Flow Lawn Grass: Dense n= 0.240 P2= 3.41"
6.2	450	0.0300	1.21		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
0.2	210	0.0500	18.68	91.72	Pipe Channel, 30" PIPE 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013 Concrete pipe, bends & connections
14.4	760	Total			

Subcatchment 25S: PDA-2A

Hydrograph



Summary for Subcatchment 31S: PDA-1

Runoff = 5.06 cfs @ 12.22 hrs, Volume= 21,019 cf, Depth= 4.11"

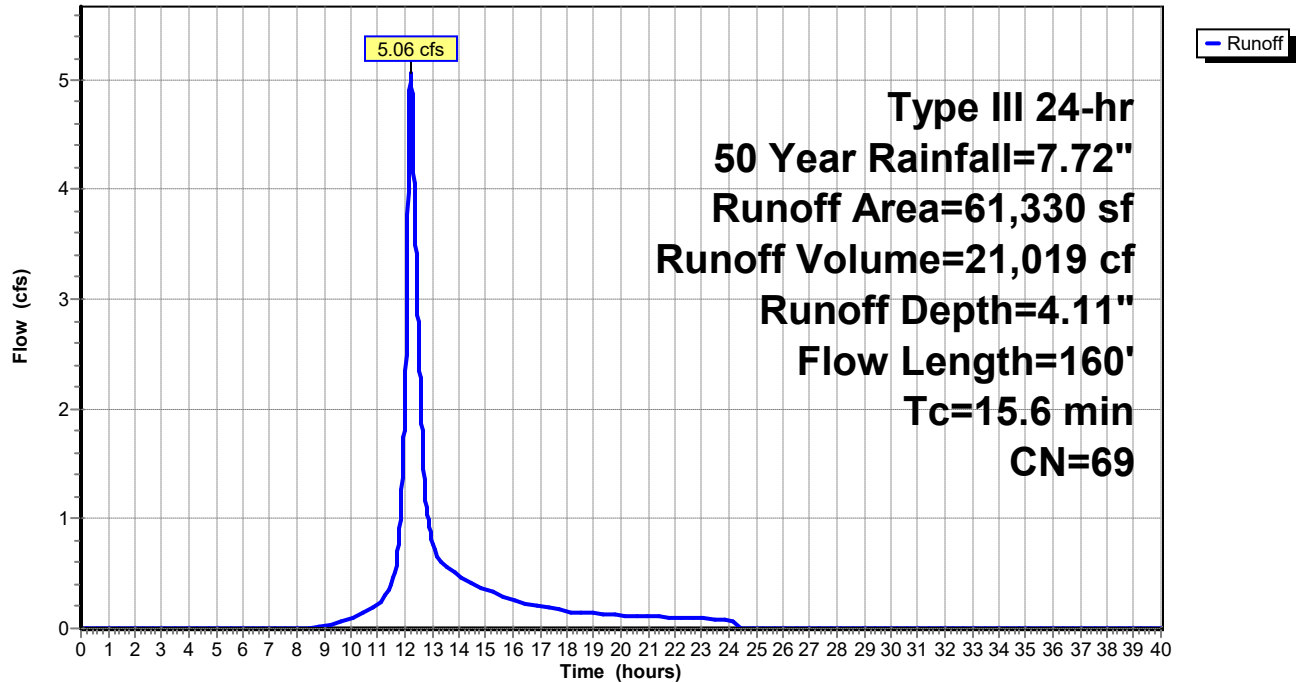
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Type III 24-hr 50 Year Rainfall=7.72"

Area (sf)	CN	Description
27,090	61	>75% Grass cover, Good, HSG B
16,693	74	>75% Grass cover, Good, HSG C
5,935	72	Woods/grass comb., Good, HSG C
4,898	58	Woods/grass comb., Good, HSG B
6,714	98	Paved parking, HSG B
61,330	69	Weighted Average
54,616		89.05% Pervious Area
6,714		10.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	100	0.0450	0.11		Sheet Flow, Wooded Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
0.5	35	0.0550	1.17		Shallow Concentrated Flow, Woods Shallow Conc Flow
					Woodland Kv= 5.0 fps
0.0	15	0.0667	5.24		Shallow Concentrated Flow, Driveway crossing
					Paved Kv= 20.3 fps
0.1	10	0.0600	1.71		Shallow Concentrated Flow, Grass Shoulder
					Short Grass Pasture Kv= 7.0 fps
15.6	160	Total			

Subcatchment 31S: PDA-1

Hydrograph



Summary for Subcatchment 43S: PDA-2

Runoff = 40.04 cfs @ 12.16 hrs, Volume= 151,850 cf, Depth= 3.02"

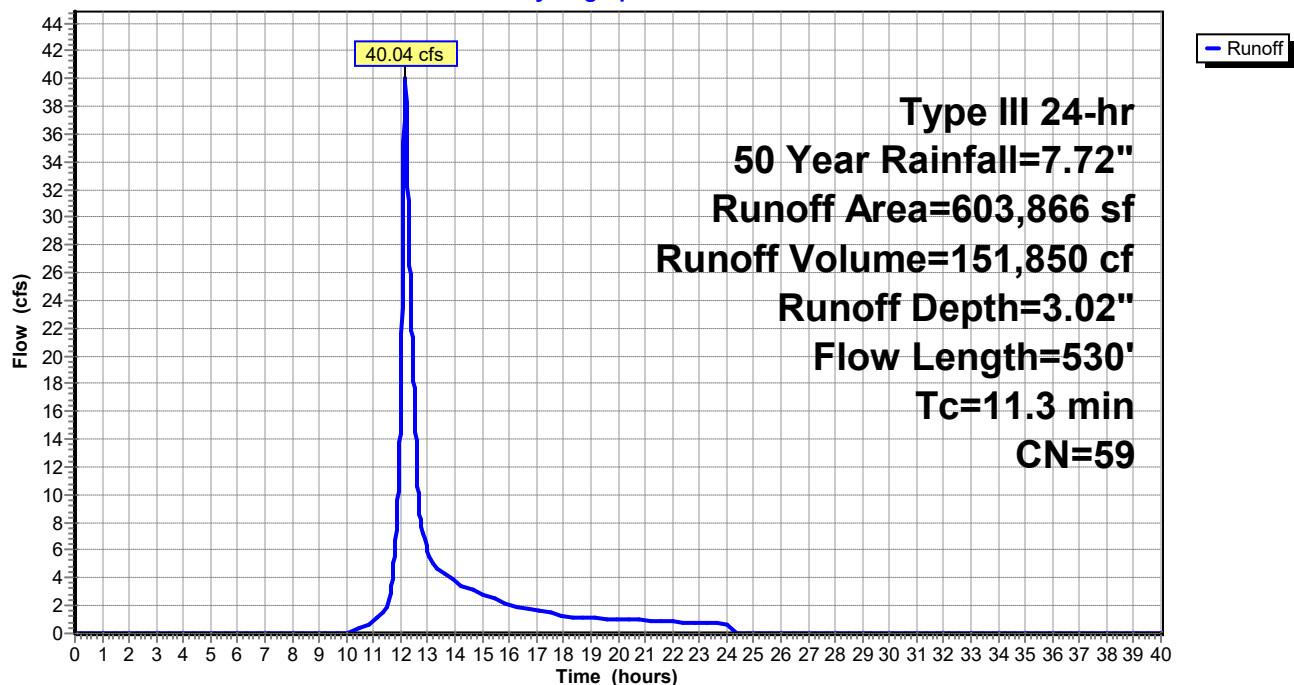
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 Year Rainfall=7.72"

	Area (sf)	CN	Description
*	11,116	98	EX. IMP Pavement, Rooftops
	57,480	61	>75% Grass cover, Good, HSG B
	535,270	58	Woods/grass comb., Good, HSG B
	603,866	59	Weighted Average
	592,750		98.16% Pervious Area
	11,116		1.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.1800	0.19		Sheet Flow, Sheet Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
2.7	430	0.2840	2.66		Shallow Concentrated Flow, Shallow Woods
					Woodland Kv= 5.0 fps
11.3	530	Total			

Subcatchment 43S: PDA-2

Hydrograph



Summary for Subcatchment 45S: PDA-3

Runoff = 37.18 cfs @ 12.42 hrs, Volume= 204,179 cf, Depth= 4.56"

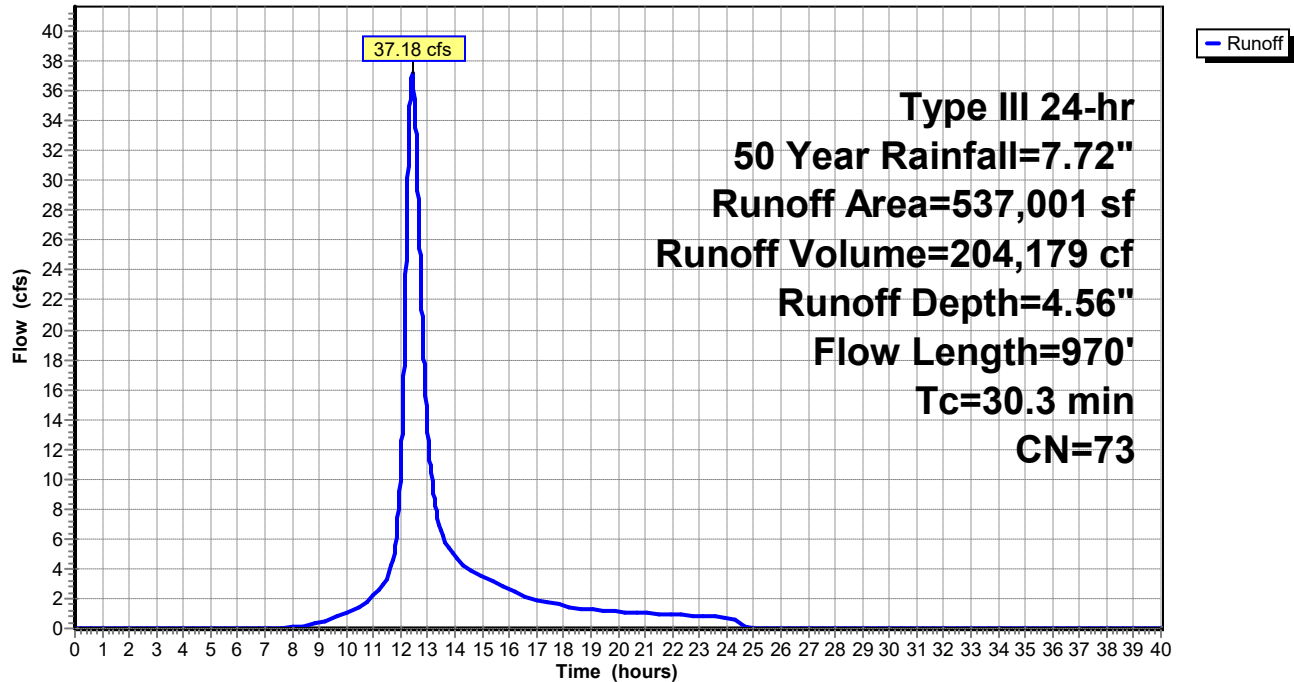
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 Year Rainfall=7.72"

	Area (sf)	CN	Description
*	5,814	98	Ex. IMP Pavement, Rooftops
	60,762	74	>75% Grass cover, Good, HSG C
	50,551	61	>75% Grass cover, Good, HSG B
	191,609	58	Woods/grass comb., Good, HSG B
	34,183	72	Woods/grass comb., Good, HSG C
	19,829	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	537,001	73	Weighted Average
	356,934		66.47% Pervious Area
	180,067		33.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	50	0.2800	0.20		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
10.9	50	0.1000	0.08		Sheet Flow, Sheet Flow Wetlands Woods: Dense underbrush n= 0.800 P2= 3.41"
4.7	200	0.0800	0.71		Shallow Concentrated Flow, Shallow Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.0	180	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.2	390	0.1000	0.79		Shallow Concentrated Flow, Shallow Conc Wetlands Forest w/Heavy Litter Kv= 2.5 fps
0.3	100	0.1100	6.58	52.64	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.3	970	Total			

Subcatchment 45S: PDA-3

Hydrograph



Summary for Reach 44R: EX. HILLSIDE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 0.00" for 50 Year event
 Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
 Avg. Velocity= 0.00 fps, Avg. Travel Time= 0.0 min

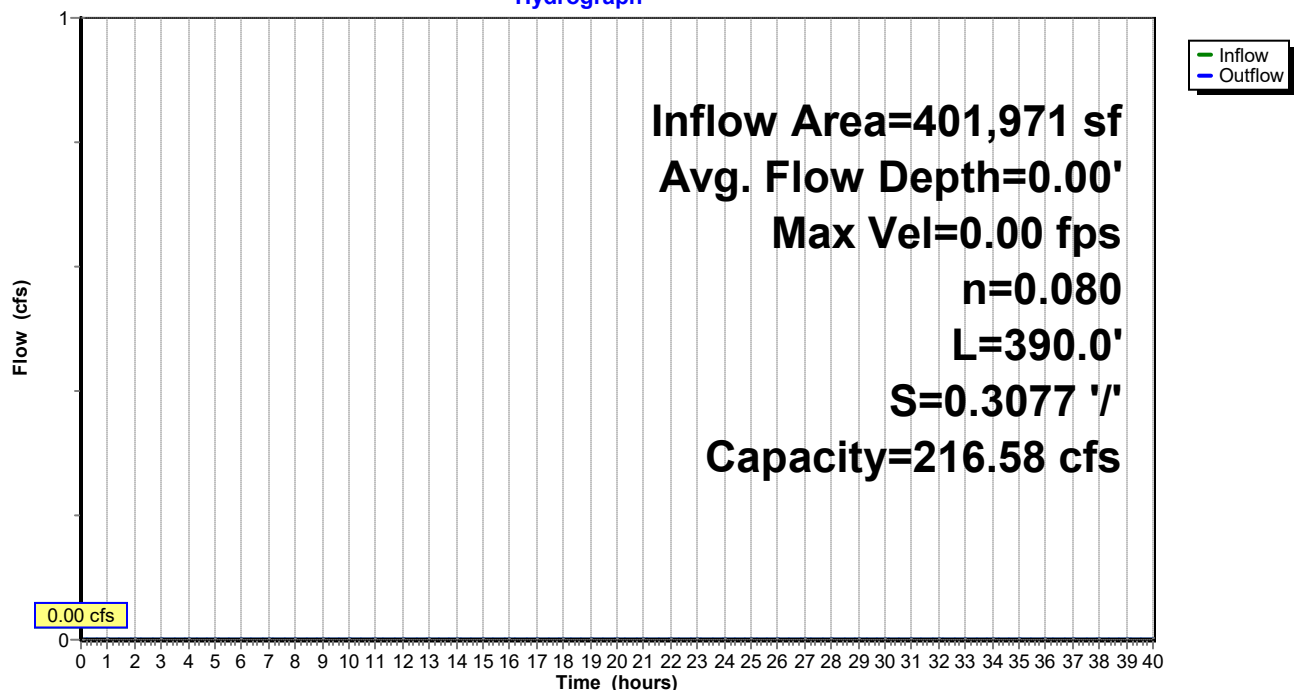
Peak Storage= 0 cf @ 0.00 hrs
 Average Depth at Peak Storage= 0.00'
 Bank-Full Depth= 1.00' Flow Area= 23.0 sf, Capacity= 216.58 cfs

20.00' x 1.00' deep channel, n= 0.080 Earth, long dense weeds
 Side Slope Z-value= 3.0 '/' Top Width= 26.00'
 Length= 390.0' Slope= 0.3077 '/'
 Inlet Invert= 340.00', Outlet Invert= 220.00'



Reach 44R: EX. HILLSIDE

Hydrograph



Summary for Pond 26P: CONCEPTUAL STORAGE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 4.45" for 50 Year event
 Inflow = 37.00 cfs @ 12.20 hrs, Volume= 149,052 cf
 Outflow = 1.75 cfs @ 15.97 hrs, Volume= 149,057 cf, Atten= 95%, Lag= 226.6 min
 Discarded = 1.75 cfs @ 15.97 hrs, Volume= 149,057 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 351.78' @ 15.97 hrs Surf.Area= 25,236 sf Storage= 85,694 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 507.2 min (1,337.1 - 829.9)

Volume	Invert	Avail.Storage	Storage Description		
#1	348.00'	174,238 cf	LOT 5-6 BASIN (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
348.00	20,140	650.0	0	0	20,140
350.00	22,790	675.1	42,903	42,903	23,100
352.00	25,542	700.2	48,306	91,209	26,172
354.00	28,392	725.3	53,909	145,117	29,356
355.00	29,855	737.9	29,120	174,238	30,996

Device	Routing	Invert	Outlet Devices
#1	Discarded	348.00'	3.000 in/hr INFILTRATION over Surface area
#2	Primary	353.50'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83
#3	Primary	348.00'	30.0" Round 30" CULVERT OUT L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 348.00' / 340.00' S= 0.0800 ' S= 0.0800 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 4.91 sf
#4	Device 3	353.10'	48.0" W x 12.0" H Vert. 48" VERT ORIFICE C= 0.600

Discarded OutFlow Max=1.75 cfs @ 15.97 hrs HW=351.78' (Free Discharge)

↑ **1=INFILTRATION** (Exfiltration Controls 1.75 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=348.00' TW=340.00' (Dynamic Tailwater)

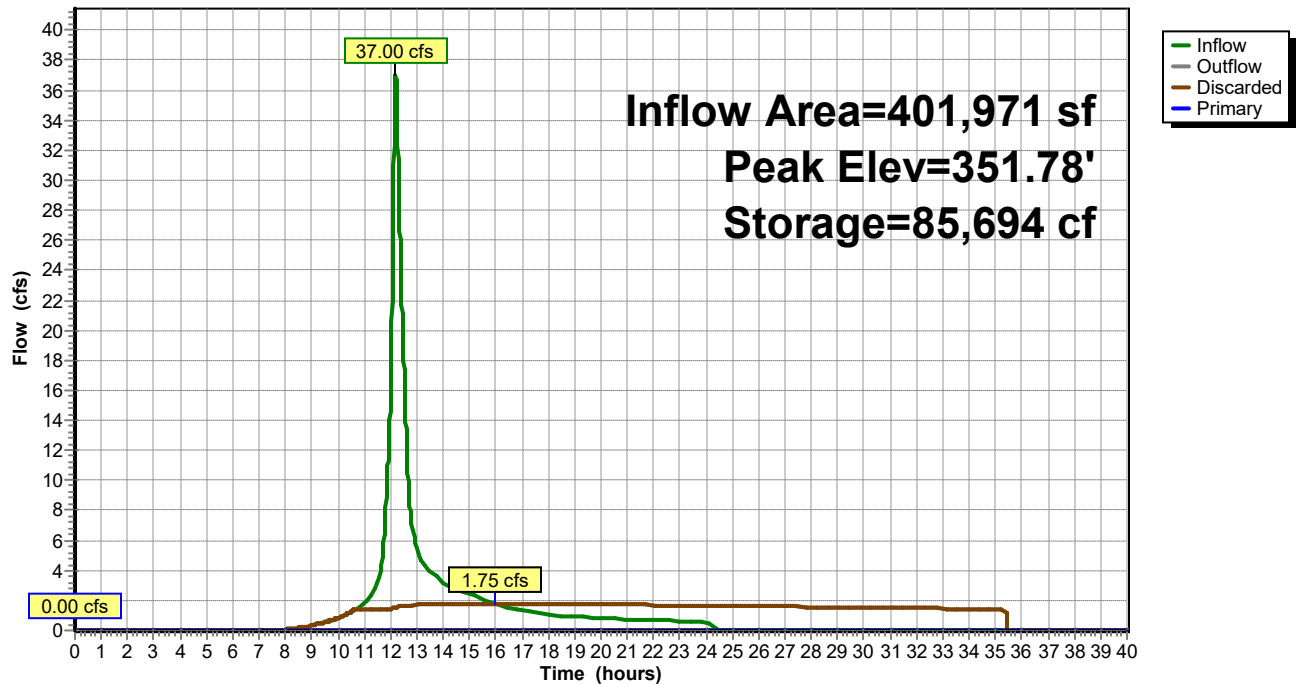
↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

↑ **3=30" CULVERT OUT** (Controls 0.00 cfs)

↑ **4=48" VERT ORIFICE** (Controls 0.00 cfs)

Pond 26P: CONCEPTUAL STORAGE

Hydrograph



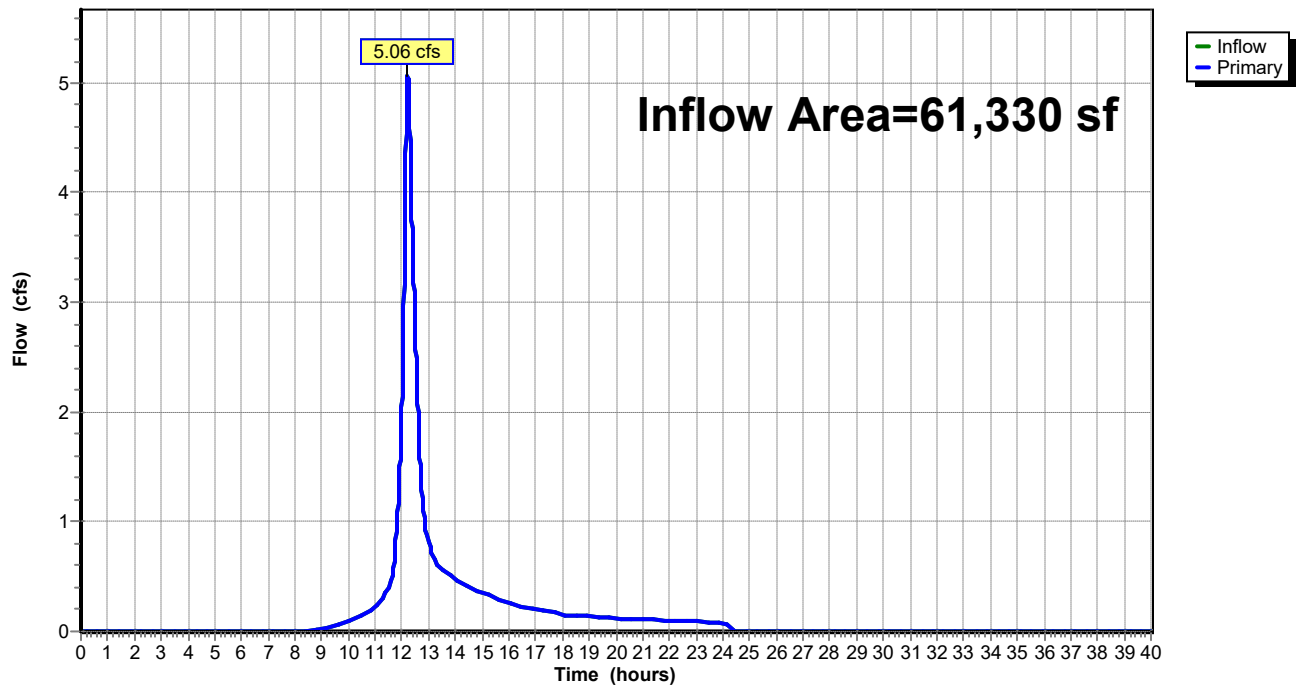
Summary for Link 21L: Pocantico River Basin

Inflow Area = 61,330 sf, 10.95% Impervious, Inflow Depth = 4.11" for 50 Year event
 Inflow = 5.06 cfs @ 12.22 hrs, Volume= 21,019 cf
 Primary = 5.06 cfs @ 12.22 hrs, Volume= 21,019 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 21L: Pocantico River Basin

Hydrograph



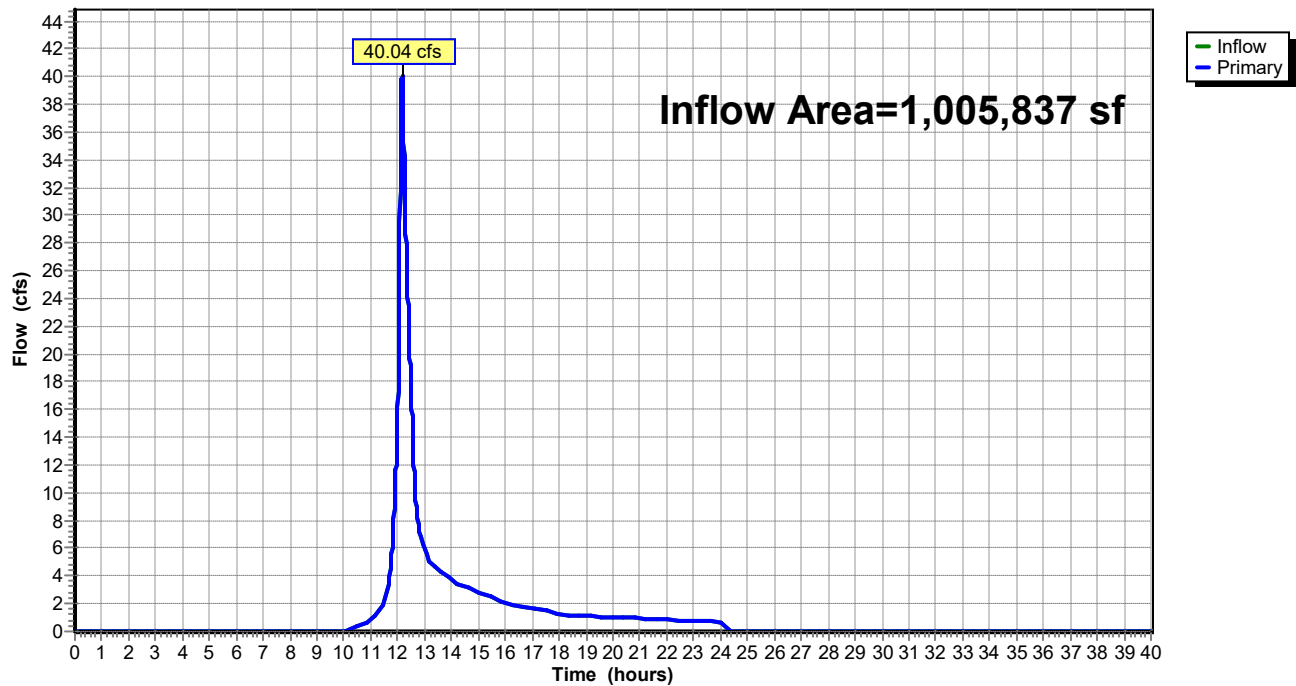
Summary for Link 22L: Pocantico Lake

Inflow Area = 1,005,837 sf, 13.12% Impervious, Inflow Depth = 1.81" for 50 Year event
 Inflow = 40.04 cfs @ 12.16 hrs, Volume= 151,850 cf
 Primary = 40.04 cfs @ 12.16 hrs, Volume= 151,850 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 22L: Pocantico Lake

Hydrograph



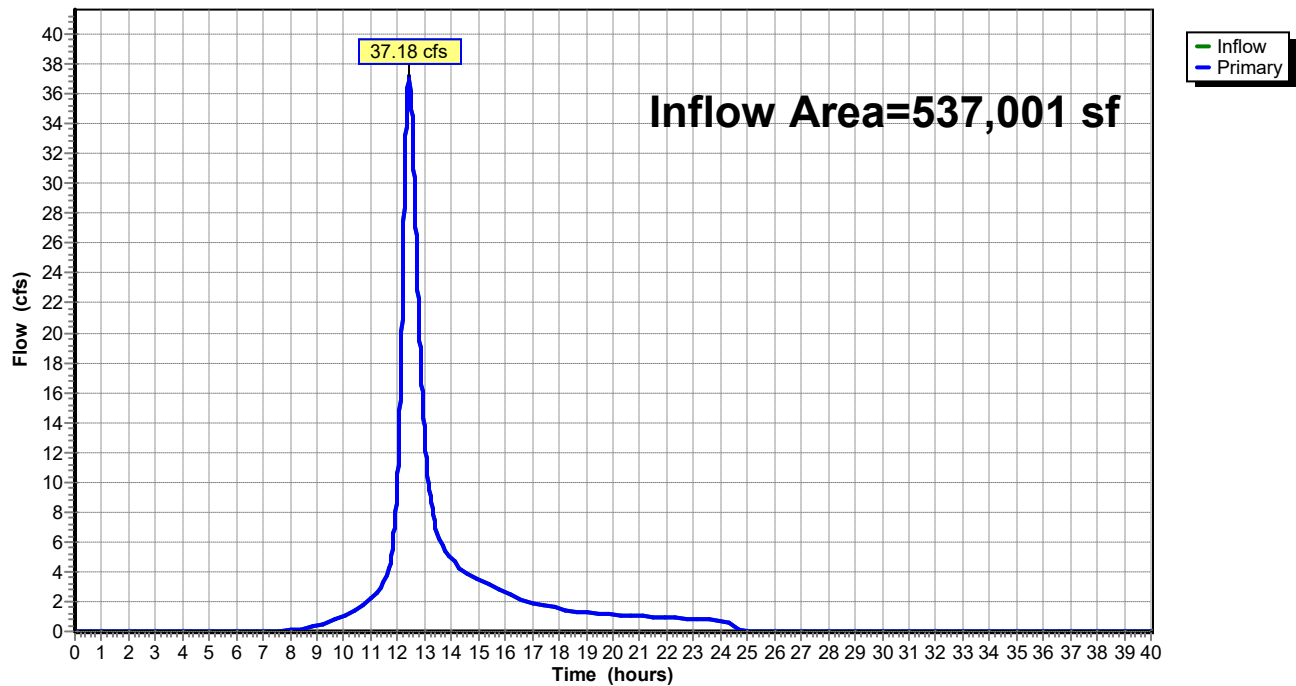
Summary for Link 23L: Mapped Wetland / Brook

Inflow Area = 537,001 sf, 33.53% Impervious, Inflow Depth = 4.56" for 50 Year event
 Inflow = 37.18 cfs @ 12.42 hrs, Volume= 204,179 cf
 Primary = 37.18 cfs @ 12.42 hrs, Volume= 204,179 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 23L: Mapped Wetland / Brook

Hydrograph



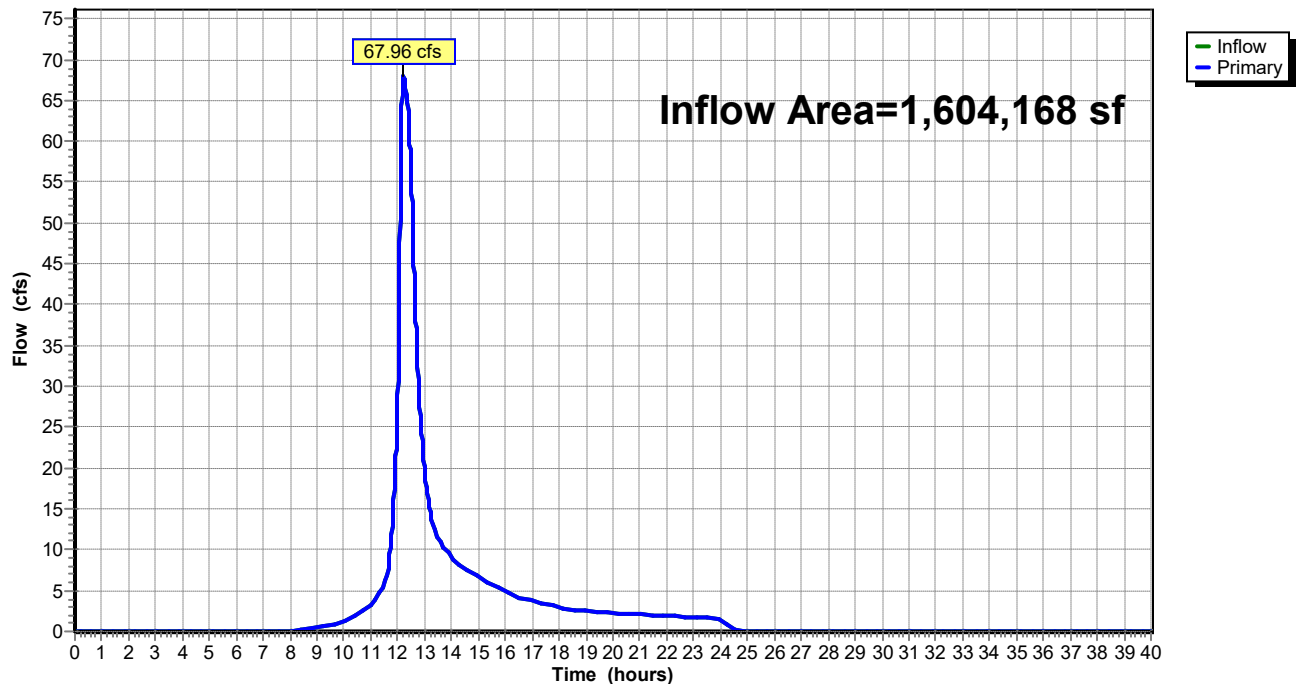
Summary for Link 24L: COMB POST

Inflow Area = 1,604,168 sf, 19.87% Impervious, Inflow Depth = 2.82" for 50 Year event
 Inflow = 67.96 cfs @ 12.21 hrs, Volume= 377,049 cf
 Primary = 67.96 cfs @ 12.21 hrs, Volume= 377,049 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 24L: COMB POST

Hydrograph



Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 25S: PDA-2A

Runoff Area=401,971 sf 30.05% Impervious Runoff Depth=5.78"
Flow Length=760' Tc=14.4 min CN=72 Runoff=47.94 cfs 193,609 cf

Subcatchment 31S: PDA-1

Runoff Area=61,330 sf 10.95% Impervious Runoff Depth=5.40"
Flow Length=160' Tc=15.6 min CN=69 Runoff=6.65 cfs 27,618 cf

Subcatchment 43S: PDA-2

Runoff Area=603,866 sf 1.84% Impervious Runoff Depth=4.15"
Flow Length=530' Tc=11.3 min CN=59 Runoff=55.95 cfs 208,760 cf

Subcatchment 45S: PDA-3

Runoff Area=537,001 sf 33.53% Impervious Runoff Depth=5.90"
Flow Length=970' Tc=30.3 min CN=73 Runoff=47.97 cfs 264,244 cf

Reach 44R: EX. HILLSIDE

Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.080 L=390.0' S=0.3077 ' / Capacity=216.58 cfs Outflow=0.00 cfs 0 cf

Pond 26P: CONCEPTUAL STORAGE

Peak Elev=353.06' Storage=119,148 cf Inflow=47.94 cfs 193,609 cf
Discarded=1.88 cfs 187,668 cf Primary=0.00 cfs 0 cf Outflow=1.88 cfs 187,668 cf

Link 21L: Pocantico River Basin

Inflow=6.65 cfs 27,618 cf
Primary=6.65 cfs 27,618 cf

Link 22L: Pocantico Lake

Inflow=55.95 cfs 208,760 cf
Primary=55.95 cfs 208,760 cf

Link 23L: Mapped Wetland / Brook

Inflow=47.97 cfs 264,244 cf
Primary=47.97 cfs 264,244 cf

Link 24L: COMB POST

Inflow=92.05 cfs 500,622 cf
Primary=92.05 cfs 500,622 cf

Total Runoff Area = 1,604,168 sf Runoff Volume = 694,231 cf Average Runoff Depth = 5.19"
80.13% Pervious = 1,285,469 sf 19.87% Impervious = 318,699 sf

Summary for Subcatchment 25S: PDA-2A

Runoff = 47.94 cfs @ 12.20 hrs, Volume= 193,609 cf, Depth= 5.78"

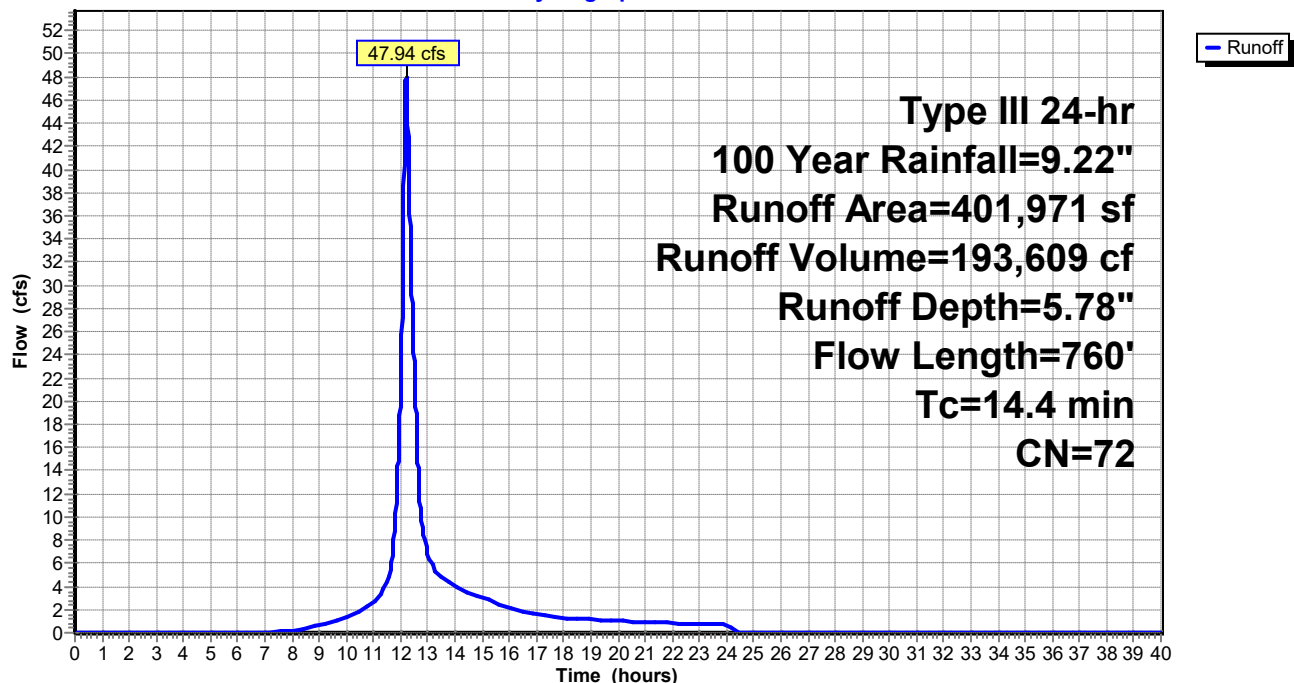
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=9.22"

	Area (sf)	CN	Description
*	120,802	98	PROP IMP Pavement, Rooftops
	228,381	61	>75% Grass cover, Good, HSG B
	52,788	58	Woods/grass comb., Good, HSG B
	401,971	72	Weighted Average
	281,169		69.95% Pervious Area
	120,802		30.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0780	0.21		Sheet Flow, Sheet Flow Lawn Grass: Dense n= 0.240 P2= 3.41"
6.2	450	0.0300	1.21		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
0.2	210	0.0500	18.68	91.72	Pipe Channel, 30" PIPE 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013 Concrete pipe, bends & connections
14.4	760	Total			

Subcatchment 25S: PDA-2A

Hydrograph



Summary for Subcatchment 31S: PDA-1

Runoff = 6.65 cfs @ 12.22 hrs, Volume= 27,618 cf, Depth= 5.40"

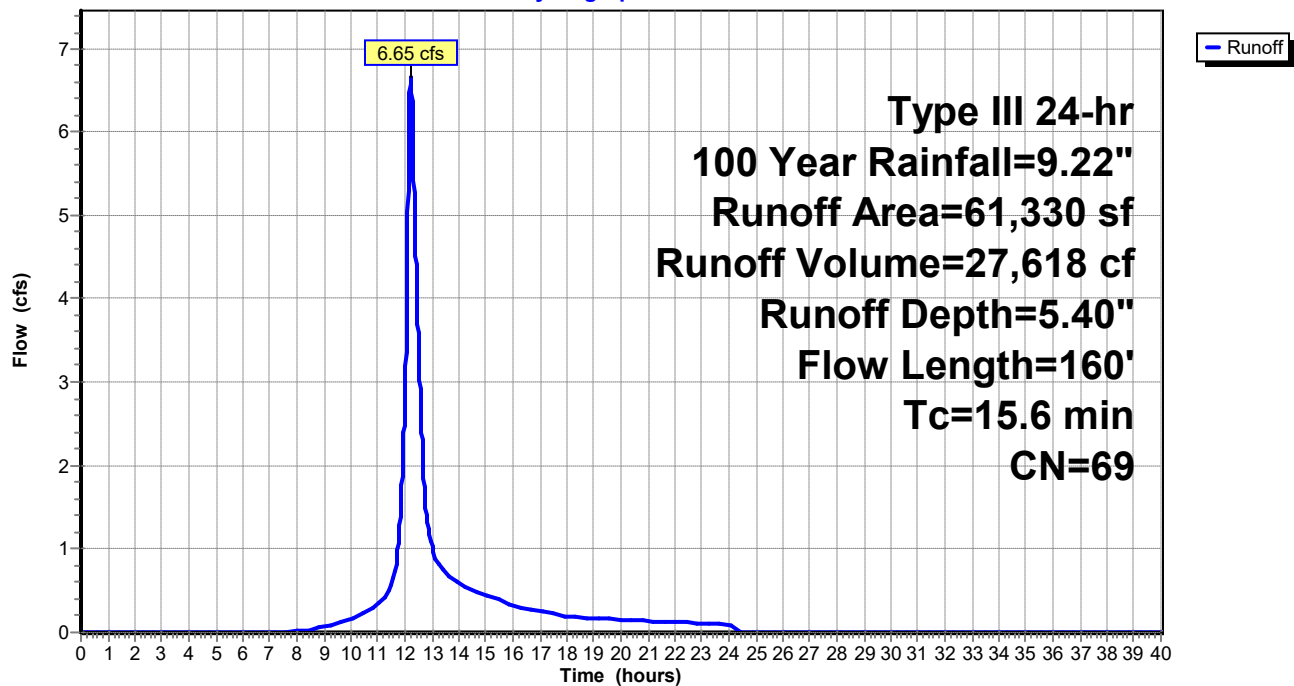
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=9.22"

Area (sf)	CN	Description
27,090	61	>75% Grass cover, Good, HSG B
16,693	74	>75% Grass cover, Good, HSG C
5,935	72	Woods/grass comb., Good, HSG C
4,898	58	Woods/grass comb., Good, HSG B
6,714	98	Paved parking, HSG B
61,330	69	Weighted Average
54,616		89.05% Pervious Area
6,714		10.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	100	0.0450	0.11		Sheet Flow, Wooded Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
0.5	35	0.0550	1.17		Shallow Concentrated Flow, Woods Shallow Conc Flow
					Woodland Kv= 5.0 fps
0.0	15	0.0667	5.24		Shallow Concentrated Flow, Driveway crossing
					Paved Kv= 20.3 fps
0.1	10	0.0600	1.71		Shallow Concentrated Flow, Grass Shoulder
					Short Grass Pasture Kv= 7.0 fps
15.6	160	Total			

Subcatchment 31S: PDA-1

Hydrograph



Summary for Subcatchment 43S: PDA-2

Runoff = 55.95 cfs @ 12.16 hrs, Volume= 208,760 cf, Depth= 4.15"

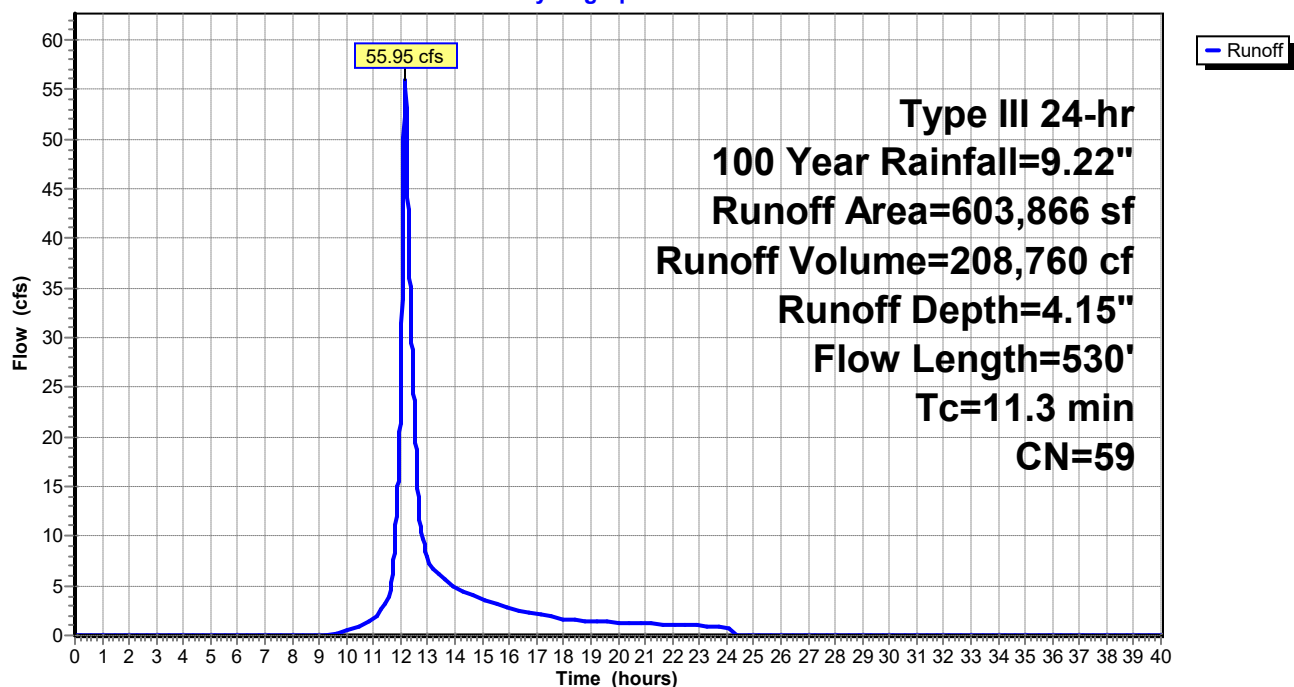
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=9.22"

	Area (sf)	CN	Description
*	11,116	98	EX. IMP Pavement, Rooftops
	57,480	61	>75% Grass cover, Good, HSG B
	535,270	58	Woods/grass comb., Good, HSG B
	603,866	59	Weighted Average
	592,750		98.16% Pervious Area
	11,116		1.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.1800	0.19		Sheet Flow, Sheet Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
2.7	430	0.2840	2.66		Shallow Concentrated Flow, Shallow Woods
					Woodland Kv= 5.0 fps
11.3	530	Total			

Subcatchment 43S: PDA-2

Hydrograph



Summary for Subcatchment 45S: PDA-3

Runoff = 47.97 cfs @ 12.42 hrs, Volume= 264,244 cf, Depth= 5.90"

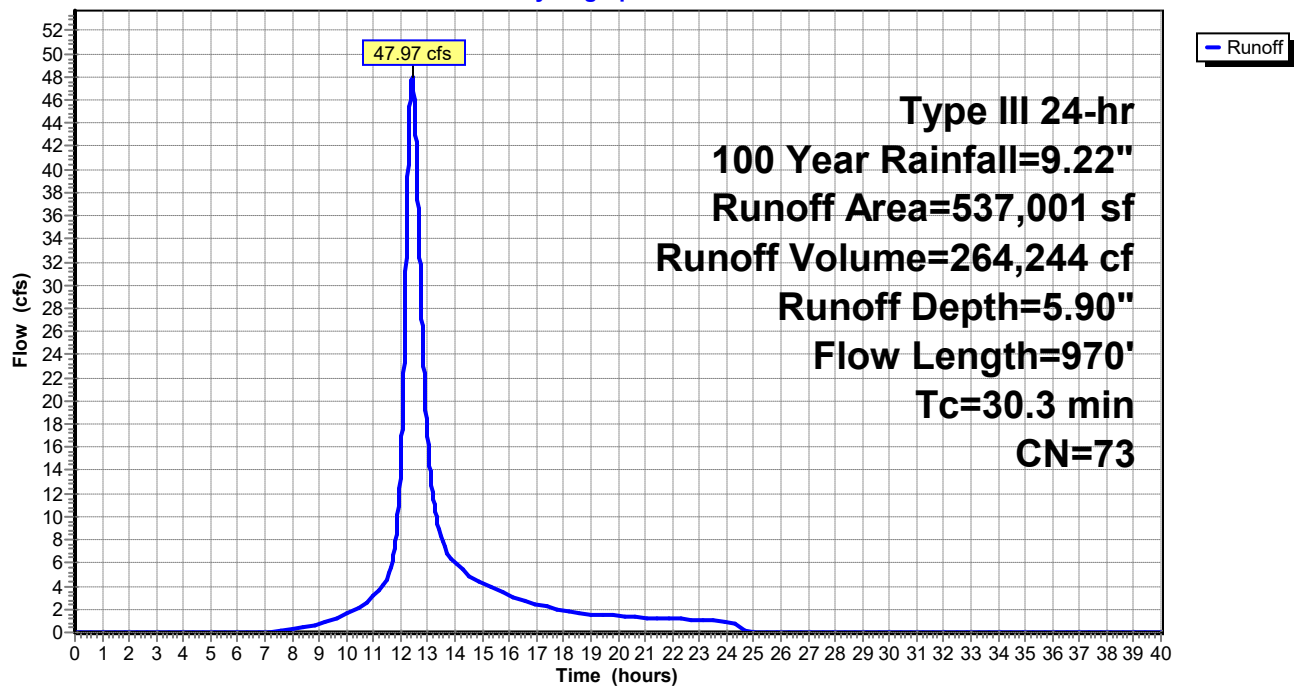
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=9.22"

	Area (sf)	CN	Description
*	5,814	98	Ex. IMP Pavement, Rooftops
	60,762	74	>75% Grass cover, Good, HSG C
	50,551	61	>75% Grass cover, Good, HSG B
	191,609	58	Woods/grass comb., Good, HSG B
	34,183	72	Woods/grass comb., Good, HSG C
	19,829	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	537,001	73	Weighted Average
	356,934		66.47% Pervious Area
	180,067		33.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	50	0.2800	0.20		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
10.9	50	0.1000	0.08		Sheet Flow, Sheet Flow Wetlands Woods: Dense underbrush n= 0.800 P2= 3.41"
4.7	200	0.0800	0.71		Shallow Concentrated Flow, Shallow Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.0	180	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.2	390	0.1000	0.79		Shallow Concentrated Flow, Shallow Conc Wetlands Forest w/Heavy Litter Kv= 2.5 fps
0.3	100	0.1100	6.58	52.64	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.3	970	Total			

Subcatchment 45S: PDA-3

Hydrograph



Summary for Reach 44R: EX. HILLSIDE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 0.00" for 100 Year event
 Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
 Avg. Velocity= 0.00 fps, Avg. Travel Time= 0.0 min

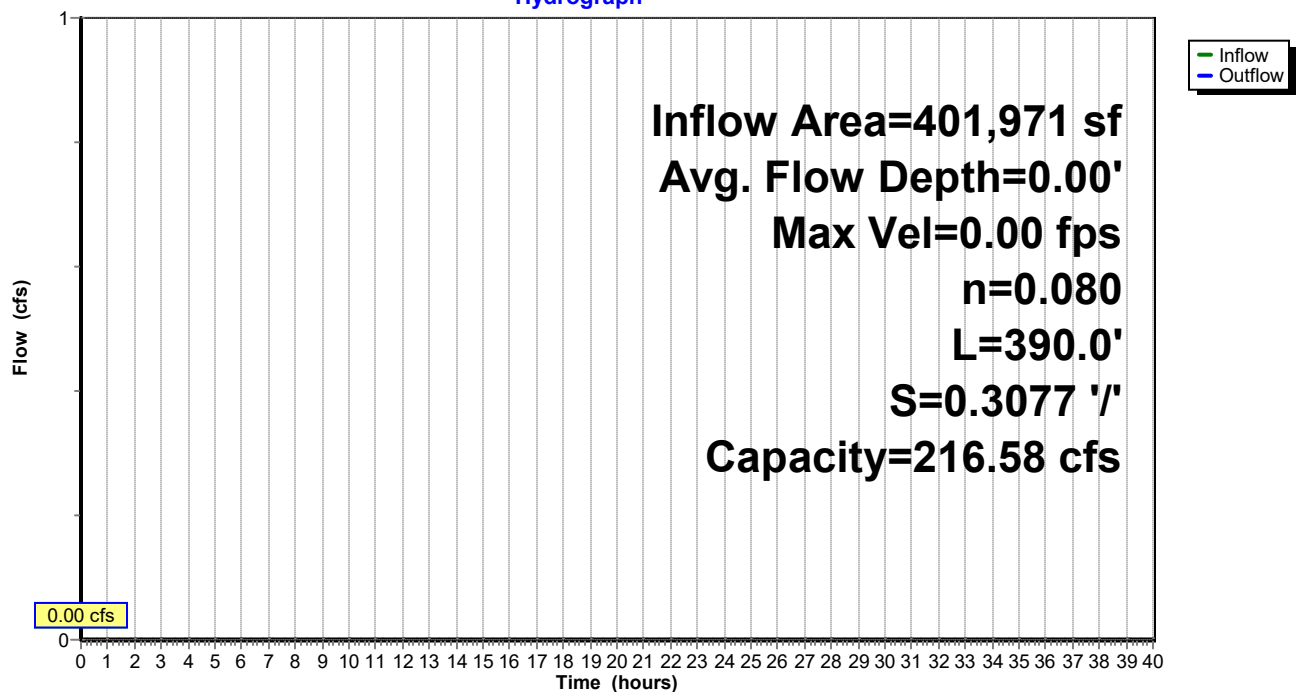
Peak Storage= 0 cf @ 0.00 hrs
 Average Depth at Peak Storage= 0.00'
 Bank-Full Depth= 1.00' Flow Area= 23.0 sf, Capacity= 216.58 cfs

20.00' x 1.00' deep channel, n= 0.080 Earth, long dense weeds
 Side Slope Z-value= 3.0 '/' Top Width= 26.00'
 Length= 390.0' Slope= 0.3077 '/'
 Inlet Invert= 340.00', Outlet Invert= 220.00'



Reach 44R: EX. HILLSIDE

Hydrograph



Summary for Pond 26P: CONCEPTUAL STORAGE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 5.78" for 100 Year event
 Inflow = 47.94 cfs @ 12.20 hrs, Volume= 193,609 cf
 Outflow = 1.88 cfs @ 16.47 hrs, Volume= 187,668 cf, Atten= 96%, Lag= 256.2 min
 Discarded = 1.88 cfs @ 16.47 hrs, Volume= 187,668 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 353.06' @ 16.47 hrs Surf.Area= 27,038 sf Storage= 119,148 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 626.6 min (1,449.0 - 822.4)

Volume	Invert	Avail.Storage	Storage Description		
#1	348.00'	174,238 cf	LOT 5-6 BASIN (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
348.00	20,140	650.0	0	0	20,140
350.00	22,790	675.1	42,903	42,903	23,100
352.00	25,542	700.2	48,306	91,209	26,172
354.00	28,392	725.3	53,909	145,117	29,356
355.00	29,855	737.9	29,120	174,238	30,996

Device	Routing	Invert	Outlet Devices											
#1	Discarded	348.00'	3.000 in/hr INFILTRATION over Surface area											
#2	Primary	353.50'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir											
			Head (feet)	0.20	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80	2.00	
				2.50	3.00	3.50	4.00	4.50	5.00	5.50				
			Coef. (English)	2.37	2.51	2.70	2.68	2.68	2.67	2.65	2.65	2.65		
				2.65	2.66	2.66	2.67	2.69	2.72	2.76	2.83			
#3	Primary	348.00'	30.0" Round 30" CULVERT OUT											
			L= 100.0' CPP, square edge headwall, Ke= 0.500											
			Inlet / Outlet Invert= 348.00' / 340.00' S= 0.0800 ' S= 0.0800 ' Cc= 0.900											
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 4.91 sf											
#4	Device 3	353.10'	48.0" W x 12.0" H Vert. 48" VERT ORIFICE C= 0.600											

Discarded OutFlow Max=1.88 cfs @ 16.47 hrs HW=353.06' (Free Discharge)

↑ **1=INFILTRATION** (Exfiltration Controls 1.88 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=348.00' TW=340.00' (Dynamic Tailwater)

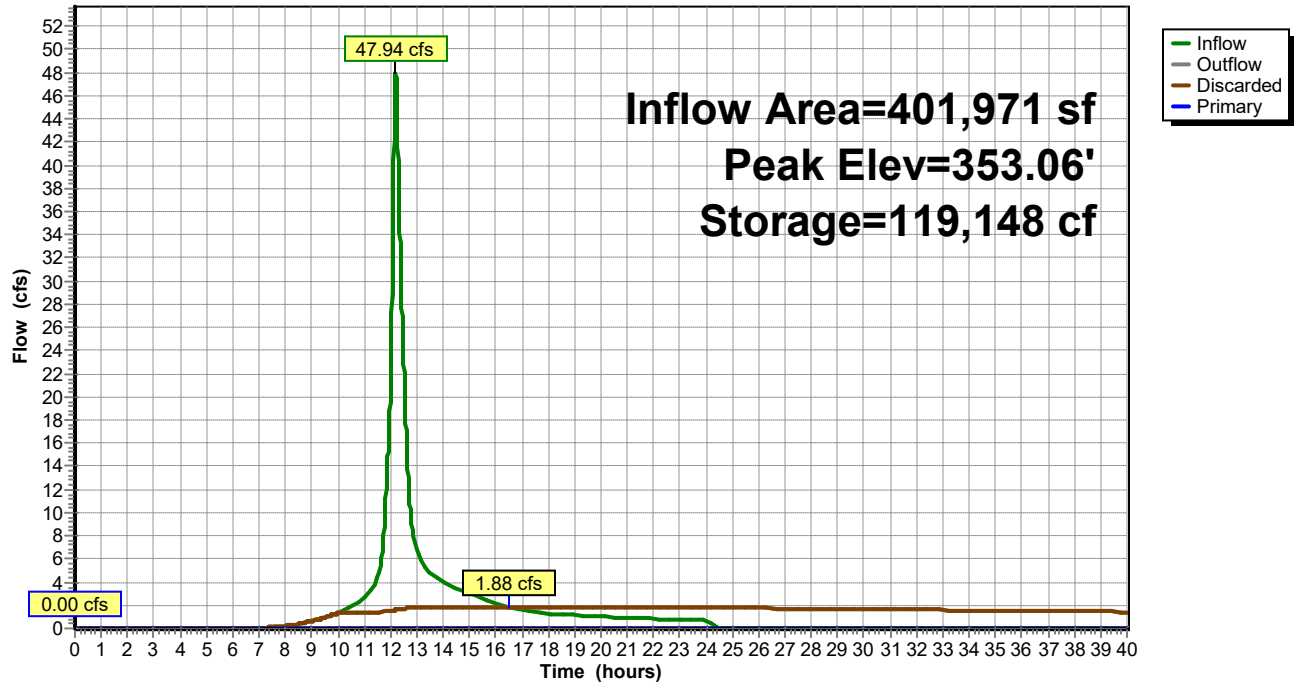
↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

↑ **3=30" CULVERT OUT** (Controls 0.00 cfs)

↑ **4=48" VERT ORIFICE** (Controls 0.00 cfs)

Pond 26P: CONCEPTUAL STORAGE

Hydrograph



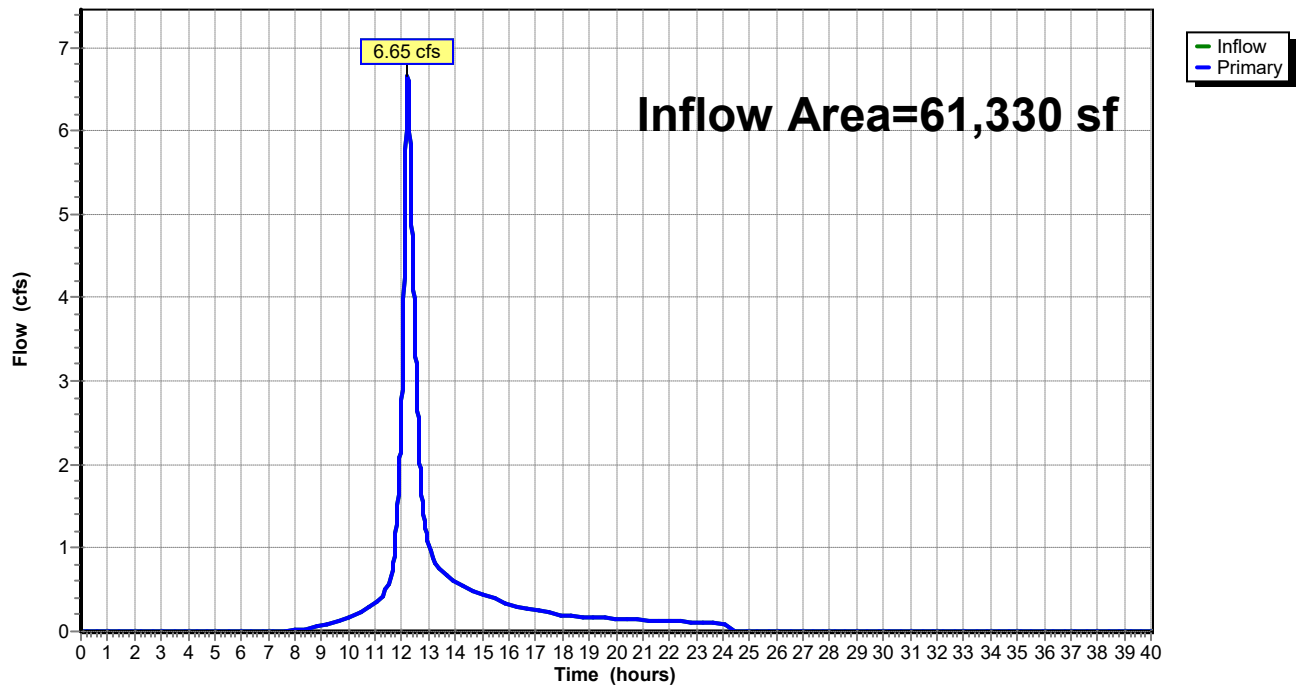
Summary for Link 21L: Pocantico River Basin

Inflow Area = 61,330 sf, 10.95% Impervious, Inflow Depth = 5.40" for 100 Year event
 Inflow = 6.65 cfs @ 12.22 hrs, Volume= 27,618 cf
 Primary = 6.65 cfs @ 12.22 hrs, Volume= 27,618 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 21L: Pocantico River Basin

Hydrograph



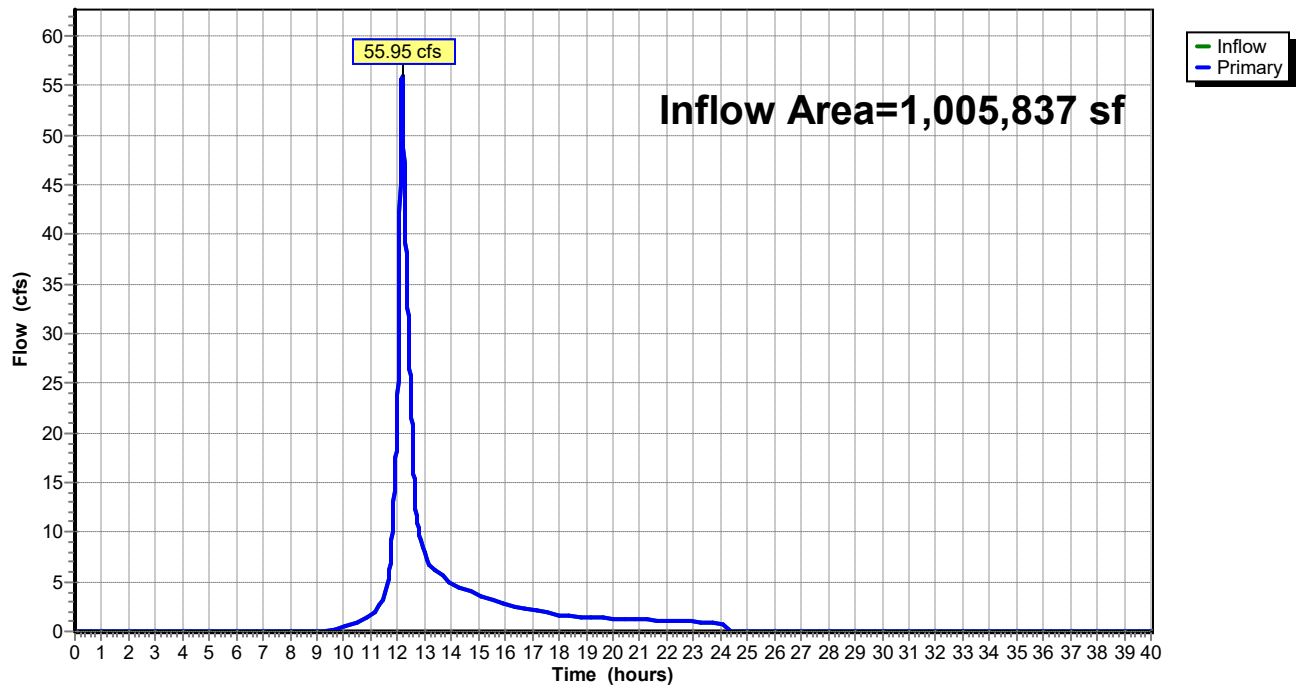
Summary for Link 22L: Pocantico Lake

Inflow Area = 1,005,837 sf, 13.12% Impervious, Inflow Depth = 2.49" for 100 Year event
 Inflow = 55.95 cfs @ 12.16 hrs, Volume= 208,760 cf
 Primary = 55.95 cfs @ 12.16 hrs, Volume= 208,760 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 22L: Pocantico Lake

Hydrograph



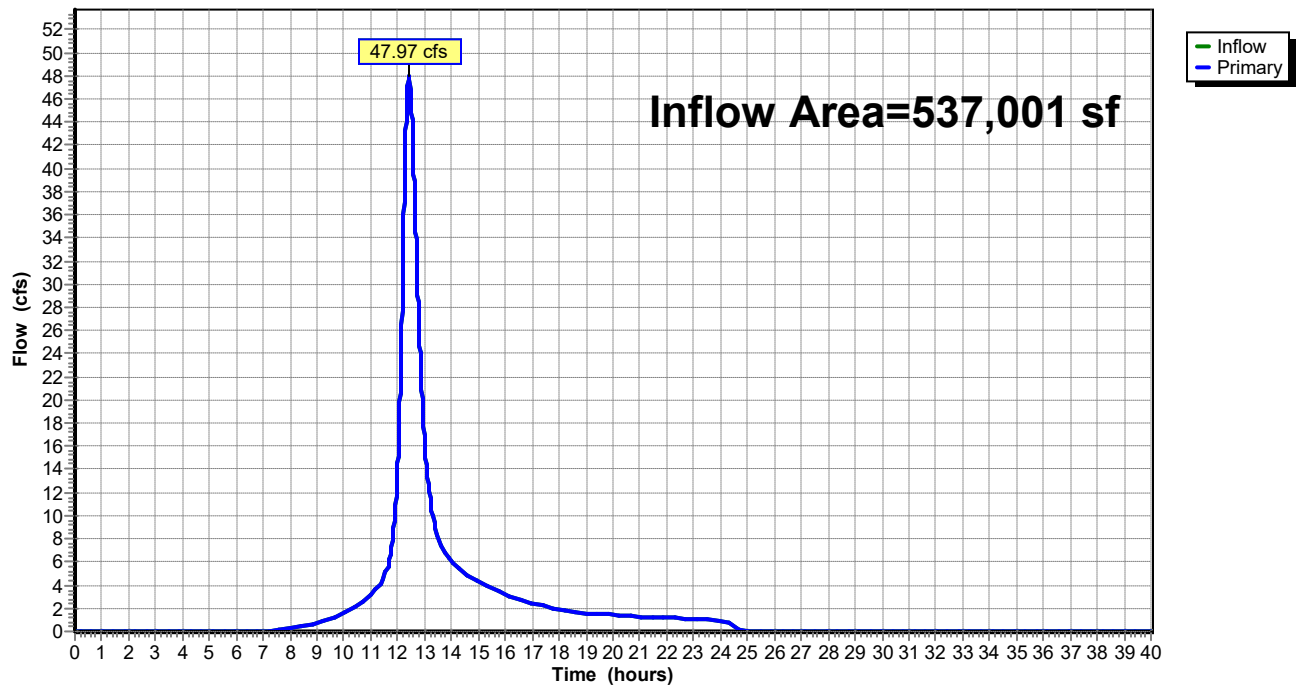
Summary for Link 23L: Mapped Wetland / Brook

Inflow Area = 537,001 sf, 33.53% Impervious, Inflow Depth = 5.90" for 100 Year event
 Inflow = 47.97 cfs @ 12.42 hrs, Volume= 264,244 cf
 Primary = 47.97 cfs @ 12.42 hrs, Volume= 264,244 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 23L: Mapped Wetland / Brook

Hydrograph



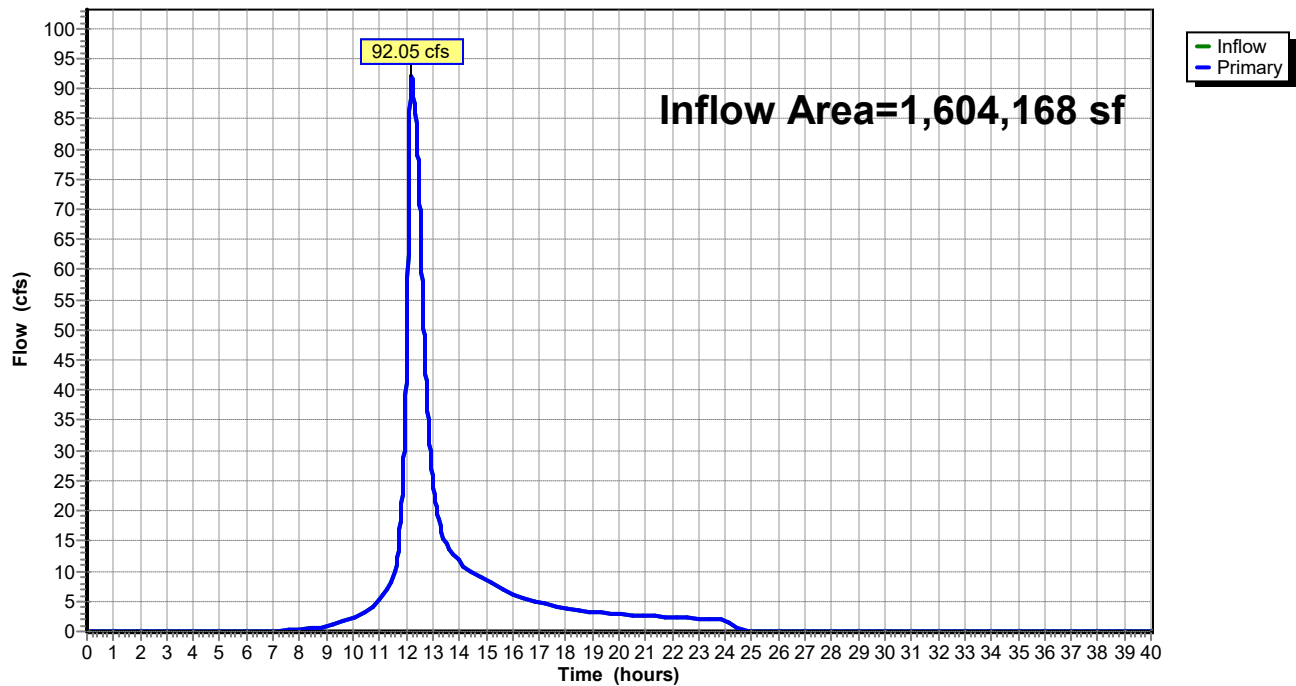
Summary for Link 24L: COMB POST

Inflow Area = 1,604,168 sf, 19.87% Impervious, Inflow Depth = 3.74" for 100 Year event
 Inflow = 92.05 cfs @ 12.20 hrs, Volume= 500,622 cf
 Primary = 92.05 cfs @ 12.20 hrs, Volume= 500,622 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 24L: COMB POST

Hydrograph



Meadows Briarcliff_01122022

Type III 24-hr 500 Year Rainfall=13.99"

Prepared by Wasp Engineering Group, PLLC

Printed 1/14/2022

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 25S: PDA-2A

Runoff Area=401,971 sf 30.05% Impervious Runoff Depth=10.21"
Flow Length=760' Tc=14.4 min CN=72 Runoff=83.33 cfs 341,933 cf

Subcatchment 31S: PDA-1

Runoff Area=61,330 sf 10.95% Impervious Runoff Depth=9.75"
Flow Length=160' Tc=15.6 min CN=69 Runoff=11.86 cfs 49,813 cf

Subcatchment 43S: PDA-2

Runoff Area=603,866 sf 1.84% Impervious Runoff Depth=8.12"
Flow Length=530' Tc=11.3 min CN=59 Runoff=110.70 cfs 408,677 cf

Subcatchment 45S: PDA-3

Runoff Area=537,001 sf 33.53% Impervious Runoff Depth=10.36"
Flow Length=970' Tc=30.3 min CN=73 Runoff=82.73 cfs 463,556 cf

Reach 44R: EX. HILLSIDE

Avg. Flow Depth=0.31' Max Vel=4.57 fps Inflow=29.73 cfs 121,296 cf
n=0.080 L=390.0' S=0.3077 '/' Capacity=216.58 cfs Outflow=29.65 cfs 121,296 cf

Pond 26P: CONCEPTUAL STORAGE

Peak Elev=354.19' Storage=150,563 cf Inflow=83.33 cfs 341,933 cf
Discarded=1.99 cfs 202,225 cf Primary=29.73 cfs 121,296 cf Outflow=31.72 cfs 323,521 cf

Link 21L: Pocantico River Basin

Inflow=11.86 cfs 49,813 cf
Primary=11.86 cfs 49,813 cf

Link 22L: Pocantico Lake

Inflow=110.70 cfs 529,973 cf
Primary=110.70 cfs 529,973 cf

Link 23L: Mapped Wetland / Brook

Inflow=82.73 cfs 463,556 cf
Primary=82.73 cfs 463,556 cf

Link 24L: COMB POST

Inflow=173.79 cfs 1,043,342 cf
Primary=173.79 cfs 1,043,342 cf

Total Runoff Area = 1,604,168 sf Runoff Volume = 1,263,979 cf Average Runoff Depth = 9.46"
80.13% Pervious = 1,285,469 sf 19.87% Impervious = 318,699 sf

Summary for Subcatchment 25S: PDA-2A

Runoff = 83.33 cfs @ 12.19 hrs, Volume= 341,933 cf, Depth=10.21"

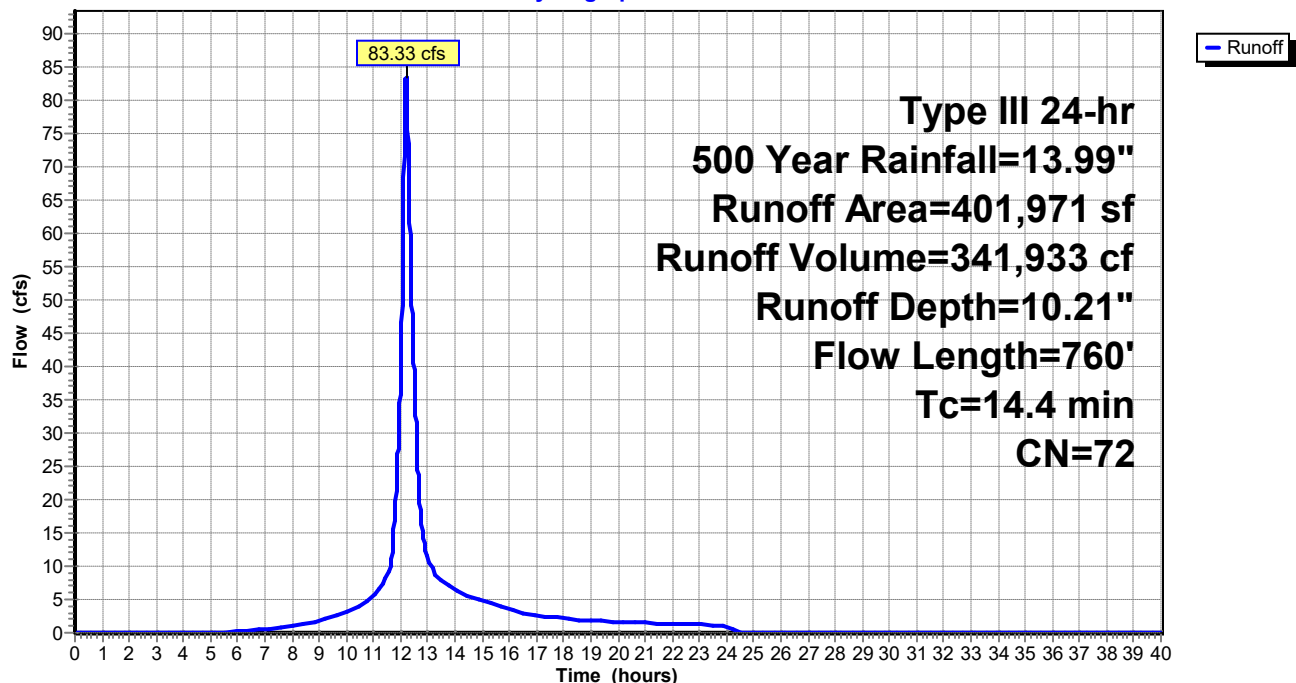
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 500 Year Rainfall=13.99"

	Area (sf)	CN	Description
*	120,802	98	PROP IMP Pavement, Rooftops
	228,381	61	>75% Grass cover, Good, HSG B
	52,788	58	Woods/grass comb., Good, HSG B
	401,971	72	Weighted Average
	281,169		69.95% Pervious Area
	120,802		30.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0780	0.21		Sheet Flow, Sheet Flow Lawn Grass: Dense n= 0.240 P2= 3.41"
6.2	450	0.0300	1.21		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
0.2	210	0.0500	18.68	91.72	Pipe Channel, 30" PIPE 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013 Concrete pipe, bends & connections
14.4	760	Total			

Subcatchment 25S: PDA-2A

Hydrograph



Summary for Subcatchment 31S: PDA-1

Runoff = 11.86 cfs @ 12.21 hrs, Volume= 49,813 cf, Depth= 9.75"

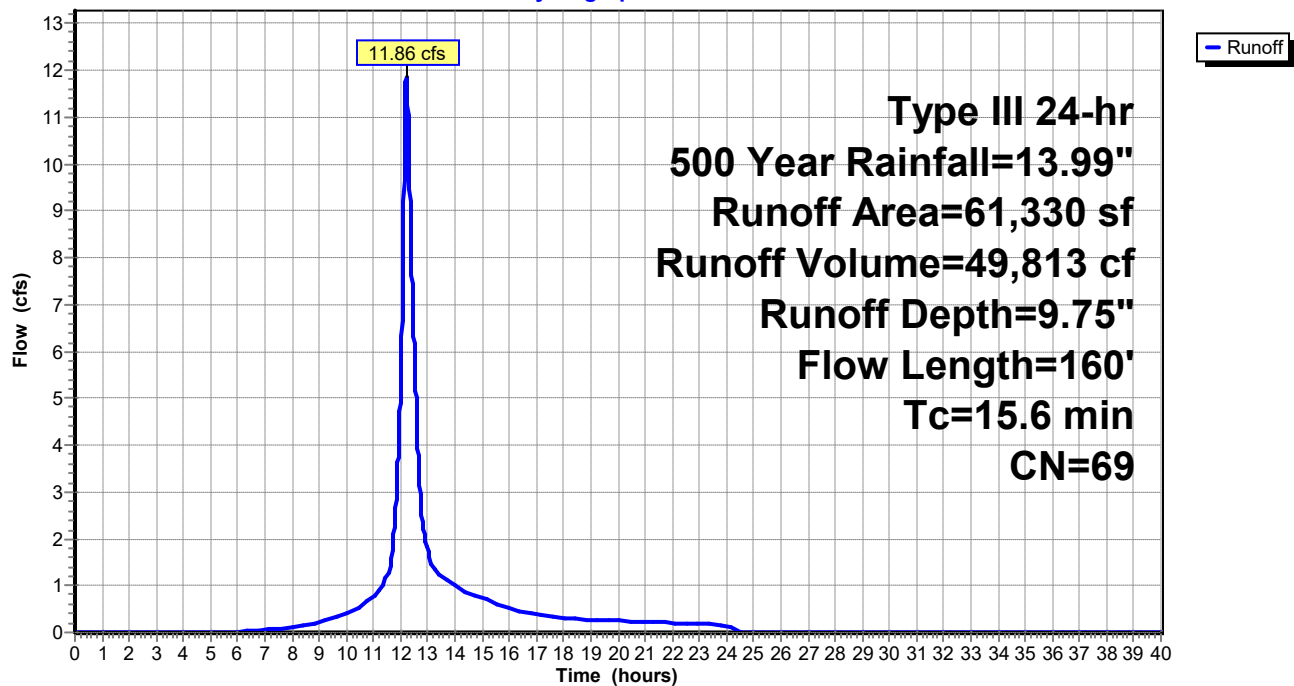
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 500 Year Rainfall=13.99"

Area (sf)	CN	Description
27,090	61	>75% Grass cover, Good, HSG B
16,693	74	>75% Grass cover, Good, HSG C
5,935	72	Woods/grass comb., Good, HSG C
4,898	58	Woods/grass comb., Good, HSG B
6,714	98	Paved parking, HSG B
61,330	69	Weighted Average
54,616		89.05% Pervious Area
6,714		10.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	100	0.0450	0.11		Sheet Flow, Wooded Sheet Flow Woods: Light underbrush n= 0.400 P2= 3.41"
0.5	35	0.0550	1.17		Shallow Concentrated Flow, Woods Shallow Conc Flow Woodland Kv= 5.0 fps
0.0	15	0.0667	5.24		Shallow Concentrated Flow, Driveway crossing Paved Kv= 20.3 fps
0.1	10	0.0600	1.71		Shallow Concentrated Flow, Grass Shoulder Short Grass Pasture Kv= 7.0 fps
15.6	160	Total			

Subcatchment 31S: PDA-1

Hydrograph



Summary for Subcatchment 43S: PDA-2

Runoff = 110.70 cfs @ 12.16 hrs, Volume= 408,677 cf, Depth= 8.12"

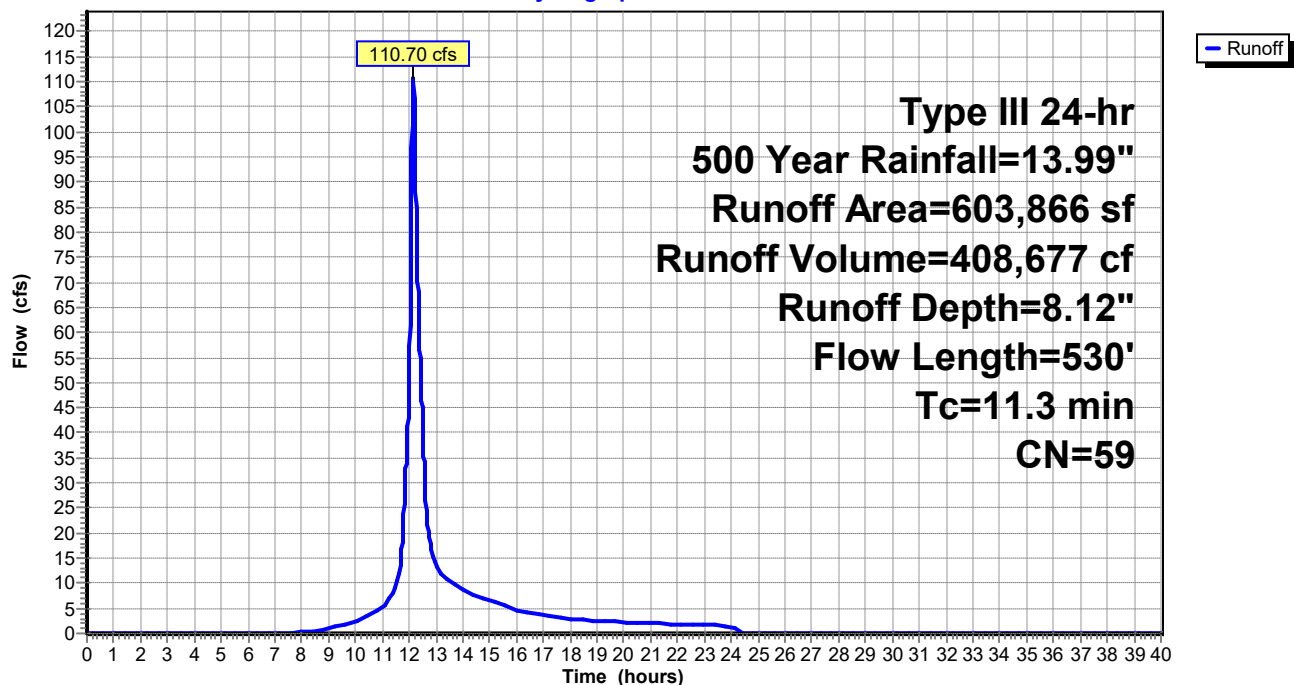
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 500 Year Rainfall=13.99"

	Area (sf)	CN	Description
*	11,116	98	EX. IMP Pavement, Rooftops
	57,480	61	>75% Grass cover, Good, HSG B
	535,270	58	Woods/grass comb., Good, HSG B
	603,866	59	Weighted Average
	592,750		98.16% Pervious Area
	11,116		1.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.1800	0.19		Sheet Flow, Sheet Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
2.7	430	0.2840	2.66		Shallow Concentrated Flow, Shallow Woods
					Woodland Kv= 5.0 fps
11.3	530	Total			

Subcatchment 43S: PDA-2

Hydrograph



Summary for Subcatchment 45S: PDA-3

Runoff = 82.73 cfs @ 12.42 hrs, Volume= 463,556 cf, Depth=10.36"

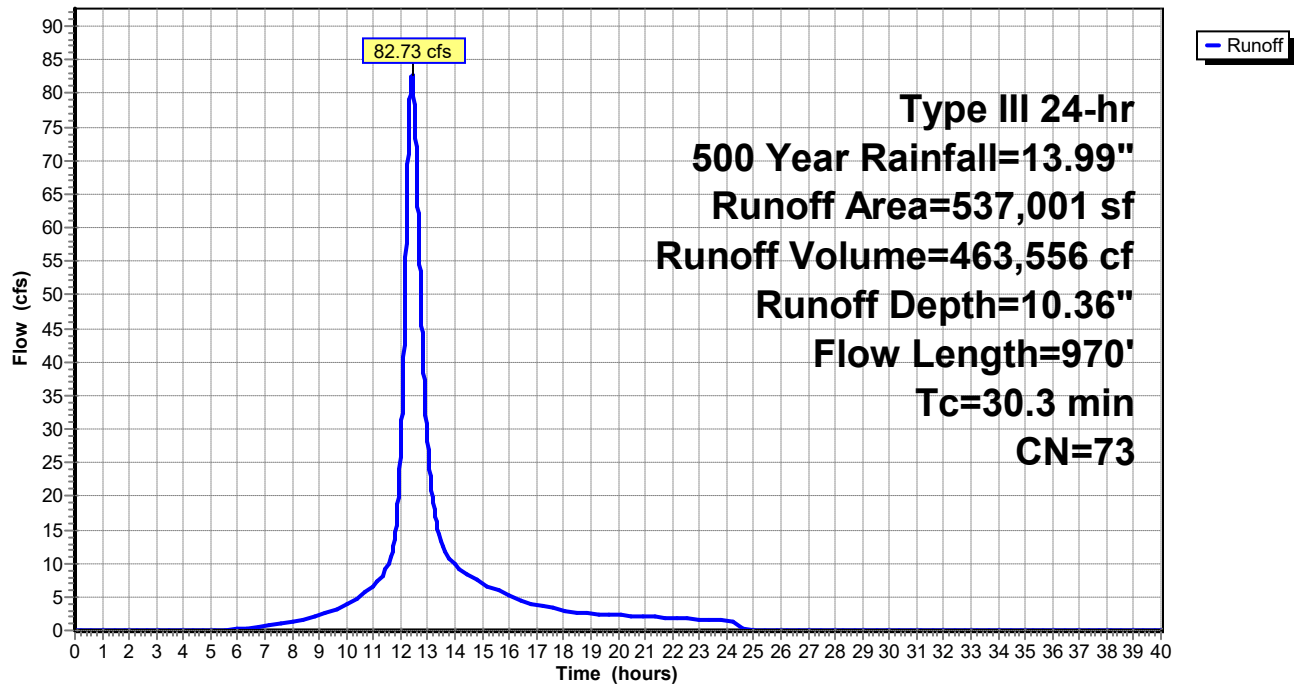
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 500 Year Rainfall=13.99"

	Area (sf)	CN	Description
*	5,814	98	Ex. IMP Pavement, Rooftops
	60,762	74	>75% Grass cover, Good, HSG C
	50,551	61	>75% Grass cover, Good, HSG B
	191,609	58	Woods/grass comb., Good, HSG B
	34,183	72	Woods/grass comb., Good, HSG C
	19,829	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	537,001	73	Weighted Average
	356,934		66.47% Pervious Area
	180,067		33.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	50	0.2800	0.20		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
10.9	50	0.1000	0.08		Sheet Flow, Sheet Flow Wetlands Woods: Dense underbrush n= 0.800 P2= 3.41"
4.7	200	0.0800	0.71		Shallow Concentrated Flow, Shallow Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.0	180	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.2	390	0.1000	0.79		Shallow Concentrated Flow, Shallow Conc Wetlands Forest w/Heavy Litter Kv= 2.5 fps
0.3	100	0.1100	6.58	52.64	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.3	970	Total			

Subcatchment 45S: PDA-3

Hydrograph



Summary for Reach 44R: EX. HILLSIDE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 3.62" for 500 Year event
 Inflow = 29.73 cfs @ 12.56 hrs, Volume= 121,296 cf
 Outflow = 29.65 cfs @ 12.57 hrs, Volume= 121,296 cf, Atten= 0%, Lag= 0.9 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Max. Velocity= 4.57 fps, Min. Travel Time= 1.4 min
 Avg. Velocity= 1.52 fps, Avg. Travel Time= 4.3 min

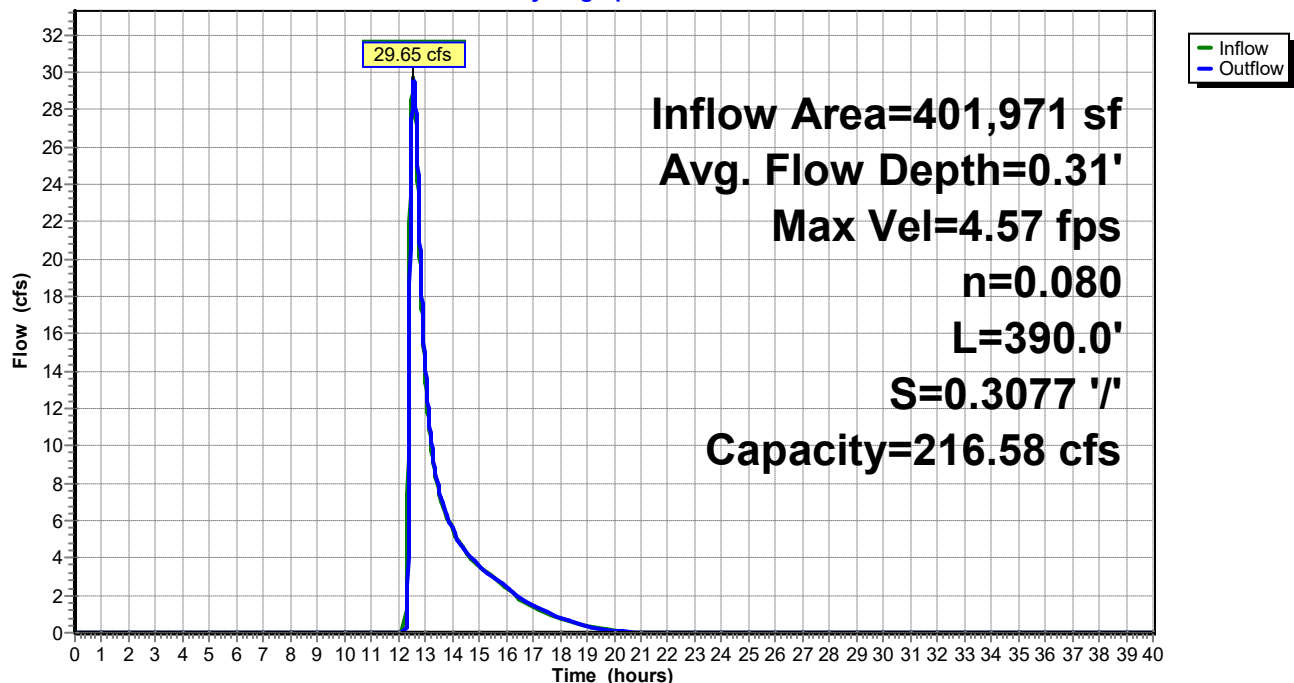
Peak Storage= 2,530 cf @ 12.57 hrs
 Average Depth at Peak Storage= 0.31'
 Bank-Full Depth= 1.00' Flow Area= 23.0 sf, Capacity= 216.58 cfs

20.00' x 1.00' deep channel, n= 0.080 Earth, long dense weeds
 Side Slope Z-value= 3.0 '/' Top Width= 26.00'
 Length= 390.0' Slope= 0.3077 '/'
 Inlet Invert= 340.00', Outlet Invert= 220.00'



Reach 44R: EX. HILLSIDE

Hydrograph



Summary for Pond 26P: CONCEPTUAL STORAGE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 10.21" for 500 Year event
 Inflow = 83.33 cfs @ 12.19 hrs, Volume= 341,933 cf
 Outflow = 31.72 cfs @ 12.56 hrs, Volume= 323,521 cf, Atten= 62%, Lag= 22.0 min
 Discarded = 1.99 cfs @ 12.56 hrs, Volume= 202,225 cf
 Primary = 29.73 cfs @ 12.56 hrs, Volume= 121,296 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 354.19' @ 12.56 hrs Surf.Area= 28,668 sf Storage= 150,563 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 385.6 min (1,192.0 - 806.4)

Volume	Invert	Avail.Storage	Storage Description		
#1	348.00'	174,238 cf	LOT 5-6 BASIN (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
348.00	20,140	650.0	0	0	20,140
350.00	22,790	675.1	42,903	42,903	23,100
352.00	25,542	700.2	48,306	91,209	26,172
354.00	28,392	725.3	53,909	145,117	29,356
355.00	29,855	737.9	29,120	174,238	30,996

Device	Routing	Invert	Outlet Devices												
#1	Discarded	348.00'	3.000 in/hr INFILTRATION over Surface area												
#2	Primary	353.50'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir												
			Head (feet)	0.20	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80	2.00		
				2.50	3.00	3.50	4.00	4.50	5.00	5.50					
			Coef. (English)	2.37	2.51	2.70	2.68	2.68	2.67	2.65	2.65	2.65			
				2.65	2.66	2.66	2.67	2.69	2.72	2.76	2.83				
#3	Primary	348.00'	30.0" Round 30" CULVERT OUT												
			L= 100.0' CPP, square edge headwall, Ke= 0.500												
			Inlet / Outlet Invert= 348.00' / 340.00' S= 0.0800 '/' Cc= 0.900												
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 4.91 sf												
#4	Device 3	353.10'	48.0" W x 12.0" H Vert. 48" VERT ORIFICE C= 0.600												

Discarded OutFlow Max=1.99 cfs @ 12.56 hrs HW=354.19' (Free Discharge)

↑ **1=INFILTRATION** (Exfiltration Controls 1.99 cfs)

Primary OutFlow Max=29.73 cfs @ 12.56 hrs HW=354.19' TW=340.31' (Dynamic Tailwater)

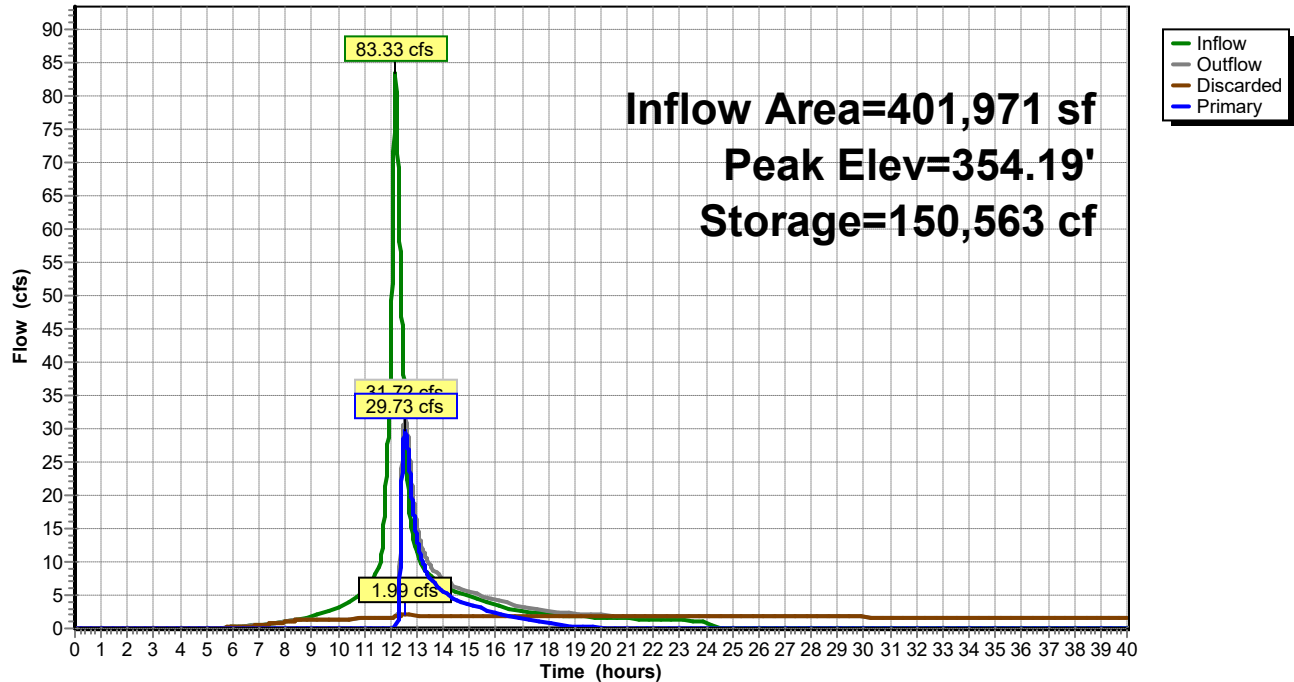
↑ **2=Broad-Crested Rectangular Weir** (Weir Controls 15.45 cfs @ 2.24 fps)

↑ **3=30" CULVERT OUT** (Passes 14.28 cfs of 52.54 cfs potential flow)

↑ **4=48" VERT ORIFICE** (Orifice Controls 14.28 cfs @ 3.57 fps)

Pond 26P: CONCEPTUAL STORAGE

Hydrograph



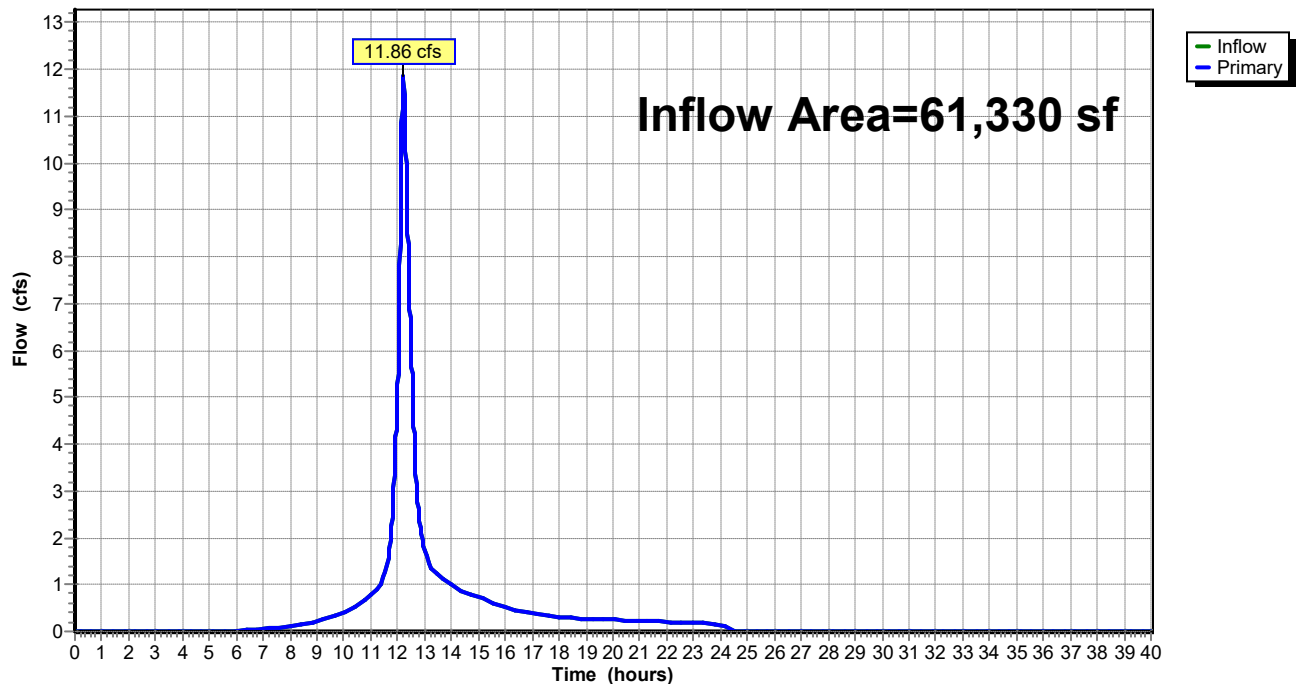
Summary for Link 21L: Pocantico River Basin

Inflow Area = 61,330 sf, 10.95% Impervious, Inflow Depth = 9.75" for 500 Year event
 Inflow = 11.86 cfs @ 12.21 hrs, Volume= 49,813 cf
 Primary = 11.86 cfs @ 12.21 hrs, Volume= 49,813 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 21L: Pocantico River Basin

Hydrograph



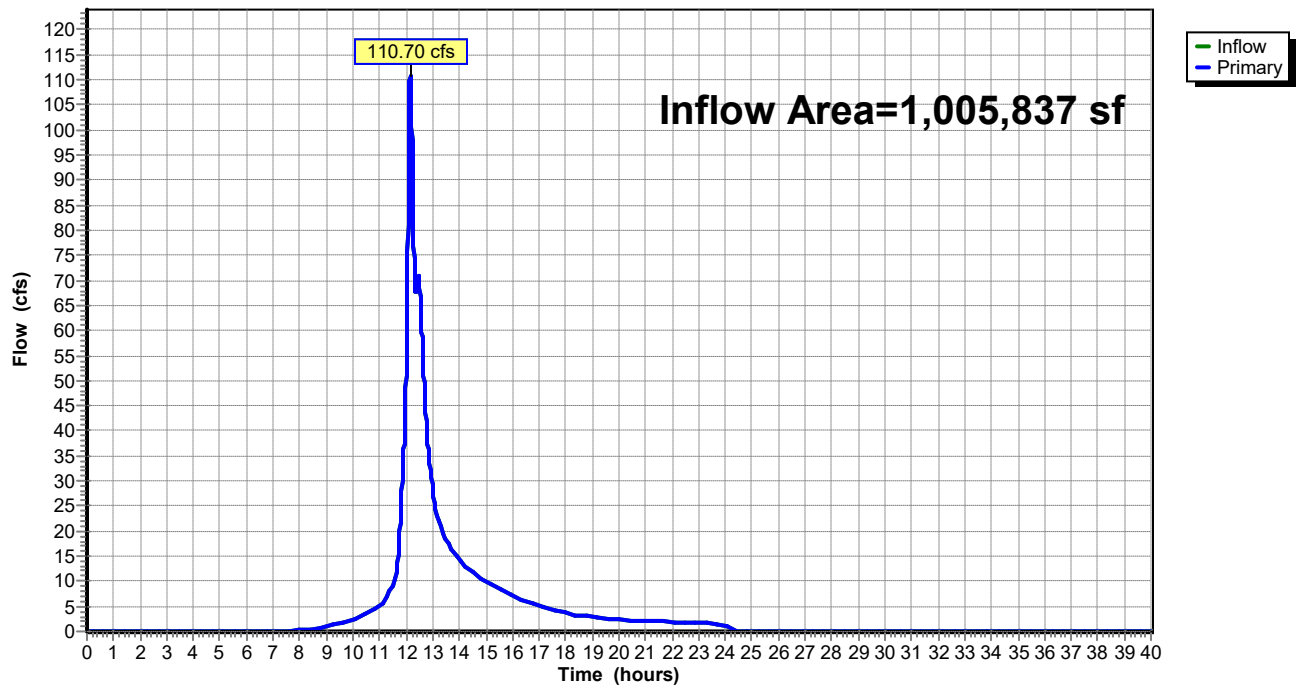
Summary for Link 22L: Pocantico Lake

Inflow Area = 1,005,837 sf, 13.12% Impervious, Inflow Depth = 6.32" for 500 Year event
 Inflow = 110.70 cfs @ 12.16 hrs, Volume= 529,973 cf
 Primary = 110.70 cfs @ 12.16 hrs, Volume= 529,973 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 22L: Pocantico Lake

Hydrograph



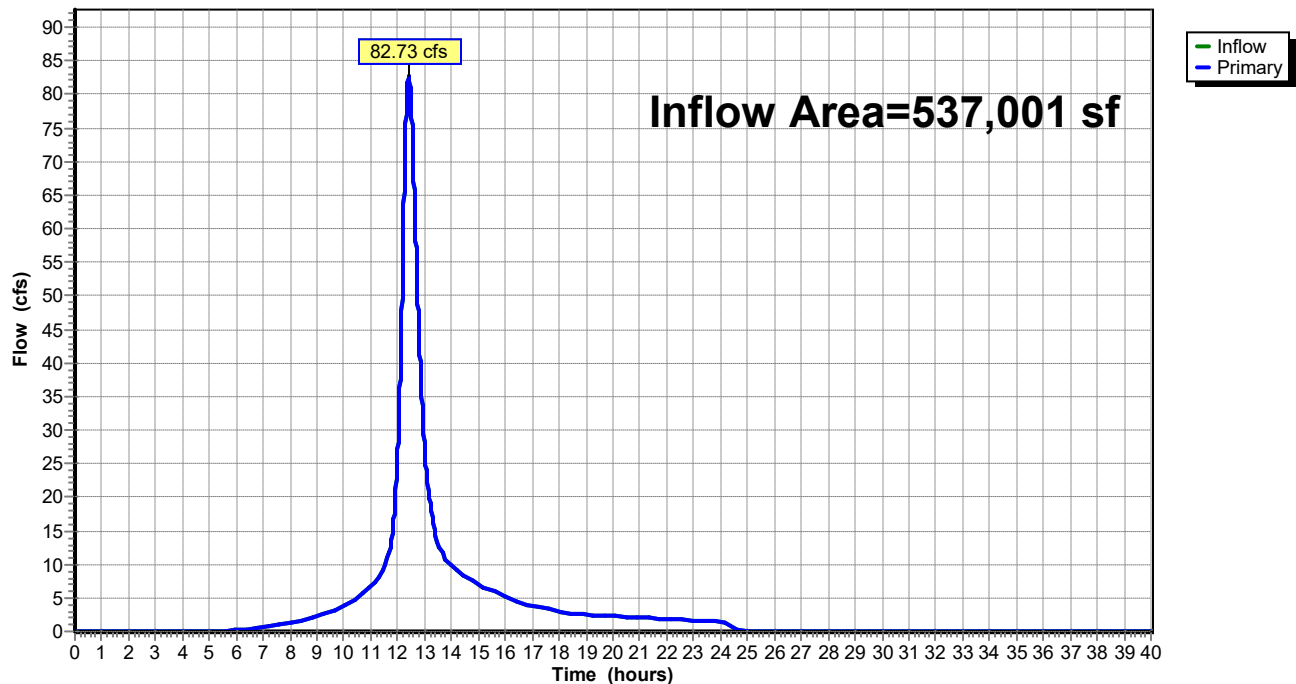
Summary for Link 23L: Mapped Wetland / Brook

Inflow Area = 537,001 sf, 33.53% Impervious, Inflow Depth = 10.36" for 500 Year event
 Inflow = 82.73 cfs @ 12.42 hrs, Volume= 463,556 cf
 Primary = 82.73 cfs @ 12.42 hrs, Volume= 463,556 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 23L: Mapped Wetland / Brook

Hydrograph



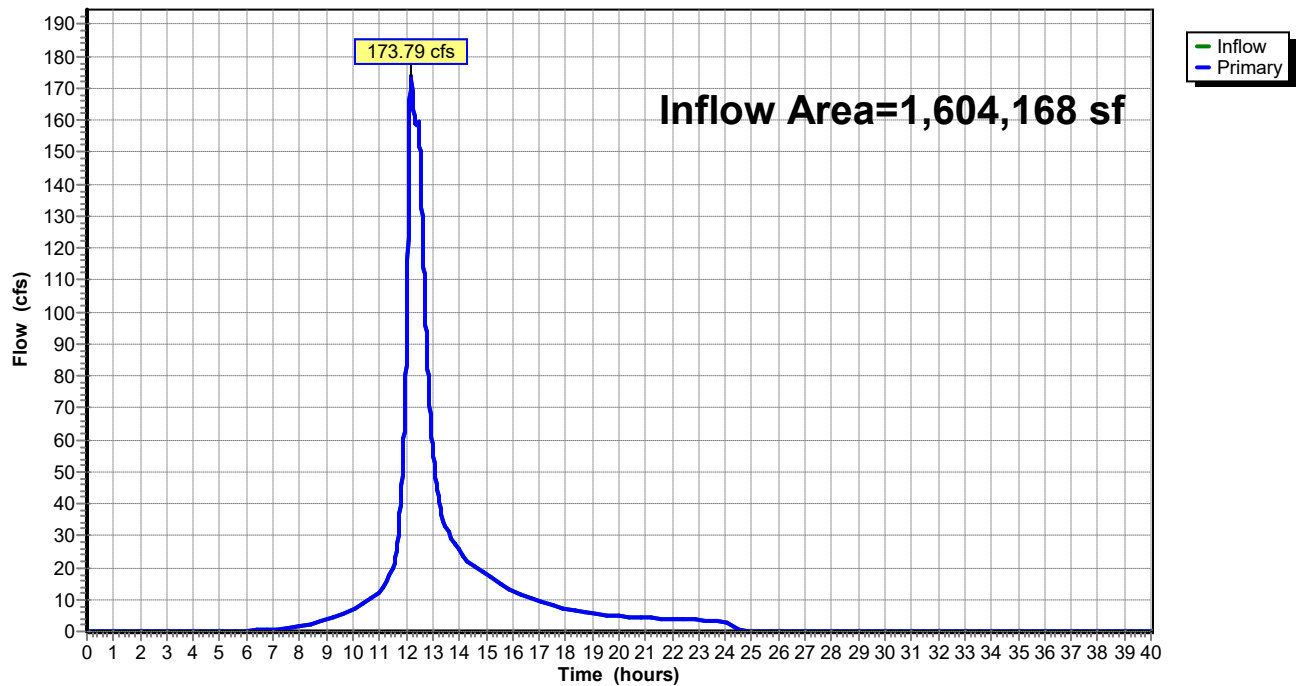
Summary for Link 24L: COMB POST

Inflow Area = 1,604,168 sf, 19.87% Impervious, Inflow Depth = 7.80" for 500 Year event
 Inflow = 173.79 cfs @ 12.19 hrs, Volume= 1,043,342 cf
 Primary = 173.79 cfs @ 12.19 hrs, Volume= 1,043,342 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 24L: COMB POST

Hydrograph



WASP
ENGINEERING GROUP, PLLC

44 Flagler Road
Poughquag, New York 12570
Phone: 914 384 9655

5. NRCC RAINFALL DATA

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	New York
Location	
Longitude	73.837 degrees West
Latitude	41.120 degrees North
Elevation	0 feet
Date/Time	Sat, 03 Apr 2021 22:25:18 -0400

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.33	0.51	0.63	0.83	1.04	1.29	1yr	0.90	1.24	1.49	1.84	2.26	2.78	3.17	1yr	2.46	3.05	3.55	4.26	4.90	1yr
2yr	0.40	0.62	0.77	1.02	1.28	1.60	2yr	1.10	1.49	1.84	2.27	2.79	3.42	3.85	2yr	3.02	3.70	4.27	5.04	5.72	2yr
5yr	0.47	0.73	0.92	1.23	1.57	1.99	5yr	1.36	1.84	2.30	2.85	3.51	4.30	4.89	5yr	3.81	4.70	5.46	6.32	7.08	5yr
10yr	0.53	0.83	1.05	1.42	1.85	2.35	10yr	1.59	2.16	2.73	3.39	4.18	5.13	5.86	10yr	4.54	5.64	6.58	7.49	8.33	10yr
25yr	0.61	0.97	1.24	1.71	2.28	2.94	25yr	1.97	2.67	3.43	4.29	5.29	6.47	7.46	25yr	5.73	7.17	8.42	9.39	10.33	25yr
50yr	0.69	1.11	1.43	2.00	2.69	3.49	50yr	2.32	3.13	4.08	5.11	6.31	7.72	8.96	50yr	6.83	8.61	10.16	11.14	12.15	50yr
100yr	0.78	1.27	1.64	2.32	3.16	4.15	100yr	2.73	3.68	4.86	6.10	7.55	9.22	10.76	100yr	8.16	10.35	12.27	13.22	14.31	100yr
200yr	0.89	1.45	1.88	2.70	3.73	4.93	200yr	3.22	4.34	5.79	7.29	9.02	11.03	12.94	200yr	9.76	12.44	14.81	15.70	16.85	200yr
500yr	1.07	1.76	2.29	3.32	4.65	6.19	500yr	4.02	5.38	7.30	9.22	11.44	13.99	16.52	500yr	12.38	15.89	19.02	19.70	20.93	500yr

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.44	0.53	0.71	0.88	1.15	1yr	0.76	1.12	1.36	1.67	2.17	2.40	2.94	1yr	2.13	2.82	3.30	3.76	4.26	1yr
2yr	0.39	0.60	0.73	0.99	1.23	1.47	2yr	1.06	1.44	1.69	2.17	2.70	3.32	3.73	2yr	2.94	3.59	4.13	4.85	5.53	2yr
5yr	0.43	0.66	0.82	1.13	1.43	1.72	5yr	1.24	1.68	1.97	2.51	3.15	4.04	4.54	5yr	3.57	4.37	5.04	5.89	6.60	5yr
10yr	0.47	0.72	0.89	1.24	1.61	1.92	10yr	1.39	1.87	2.21	2.77	3.54	4.62	5.26	10yr	4.09	5.06	5.86	6.53	7.13	10yr
25yr	0.52	0.79	0.98	1.41	1.85	2.21	25yr	1.60	2.16	2.57	3.14	4.14	5.61	6.43	25yr	4.96	6.18	7.23	7.73	8.08	25yr
50yr	0.56	0.86	1.07	1.53	2.06	2.46	50yr	1.78	2.40	2.90	3.45	4.65	6.50	7.49	50yr	5.75	7.20	8.44	8.77	8.83	50yr
100yr	0.61	0.93	1.16	1.68	2.31	2.74	100yr	1.99	2.68	3.25	3.76	5.23	7.55	8.74	100yr	6.68	8.41	9.85	9.95	9.61	100yr
200yr	0.66	1.00	1.27	1.84	2.56	3.03	200yr	2.21	2.96	3.67	4.11	5.89	8.82	10.23	200yr	7.80	9.84	11.52	11.28	10.40	200yr
500yr	0.74	1.11	1.43	2.07	2.95	3.48	500yr	2.54	3.40	4.31	4.58	6.93	10.83	12.63	500yr	9.59	12.15	14.17	13.32	11.47	500yr

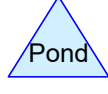
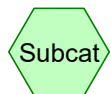
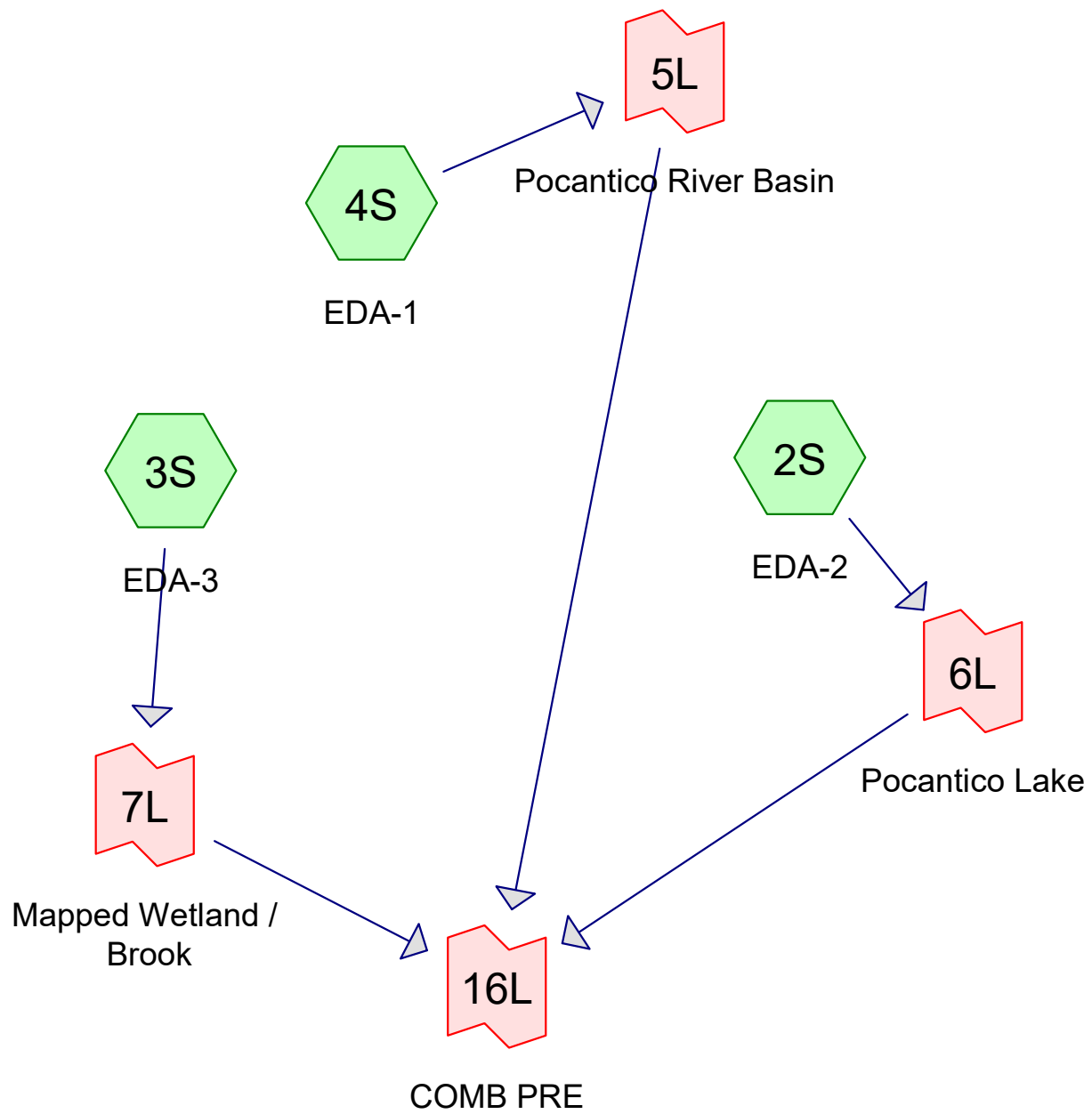
Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.38	0.58	0.71	0.95	1.17	1.41	1yr	1.01	1.37	1.62	2.13	2.53	3.00	3.40	1yr	2.65	3.27	3.87	4.63	5.30	1yr
2yr	0.42	0.65	0.80	1.08	1.33	1.60	2yr	1.15	1.56	1.82	2.36	2.91	3.54	3.99	2yr	3.13	3.83	4.40	5.26	6.05	2yr
5yr	0.51	0.79	0.99	1.35	1.72	2.02	5yr	1.48	1.98	2.34	3.05	3.81	4.60	5.24	5yr	4.07	5.04	5.88	6.71	7.50	5yr
10yr	0.61	0.94	1.17	1.64	2.11	2.44	10yr	1.82	2.39	2.83	3.71	4.66	5.66	6.47	10yr	5.01	6.22	7.32	8.49	9.38	10yr
25yr	0.78	1.19	1.48	2.11	2.77	3.14	25yr	2.39	3.07	3.66	4.88	6.10	7.40	8.55	25yr	6.55	8.22	9.67	11.20	12.17	25yr
50yr	0.93	1.42	1.77	2.55	3.43	3.82	50yr	2.96	3.73	4.44	6.01	7.47	9.06	10.54	50yr	8.02	10.13	12.03	13.80	14.84	50yr
100yr	1.13	1.71	2.15	3.10	4.25	4.64	100yr	3.67	4.53	5.40	7.44	9.15	11.09	12.99	100yr	9.81	12.49	14.97	17.02	18.11	100yr
200yr	1.37	2.07	2.62	3.79	5.29	5.63	200yr	4.56	5.51	6.56	9.20	11.21	13.57	15.98	200yr	12.01	15.37	18.62	20.99	22.13	200yr
500yr	1.80	2.67	3.44	5.00	7.11	7.31	500yr	6.13	7.15	8.49	12.26	14.66	17.71	21.04	500yr	15.67	20.23	24.85	27.73	28.90	500yr

WASP
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6. EXTREME STORM EVENT HYDROCAD MODEL



Meadows Briarcliff_CONV_01032022*Type III 6-hr 8.00 hrs IDA Rainfall=7.50"*

Prepared by Wasp Engineering Group, PLLC

Printed 1/14/2022

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Page 2

Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2S: EDA-2

Runoff Area=872,905 sf 4.09% Impervious Runoff Depth=2.96"
Flow Length=1,000' Tc=22.8 min CN=60 Runoff=51.13 cfs 215,550 cf

Subcatchment 3S: EDA-3

Runoff Area=595,781 sf 30.45% Impervious Runoff Depth=4.26"
Flow Length=1,190' Tc=30.5 min CN=72 Runoff=45.60 cfs 211,432 cf

Subcatchment 4S: EDA-1

Runoff Area=135,489 sf 12.59% Impervious Runoff Depth=3.49"
Flow Length=460' Tc=16.5 min CN=65 Runoff=10.81 cfs 39,450 cf

Link 5L: Pocantico River Basin

Inflow=10.81 cfs 39,450 cf
Primary=10.81 cfs 39,450 cf

Link 6L: Pocantico Lake

Inflow=51.13 cfs 215,550 cf
Primary=51.13 cfs 215,550 cf

Link 7L: Mapped Wetland / Brook

Inflow=45.60 cfs 211,432 cf
Primary=45.60 cfs 211,432 cf

Link 16L: COMB PRE

Inflow=104.02 cfs 466,431 cf
Primary=104.02 cfs 466,431 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 466,431 cf Average Runoff Depth = 3.49"
85.40% Pervious = 1,370,019 sf 14.60% Impervious = 234,156 sf

Summary for Subcatchment 2S: EDA-2

Runoff = 51.13 cfs @ 4.34 hrs, Volume= 215,550 cf, Depth= 2.96"

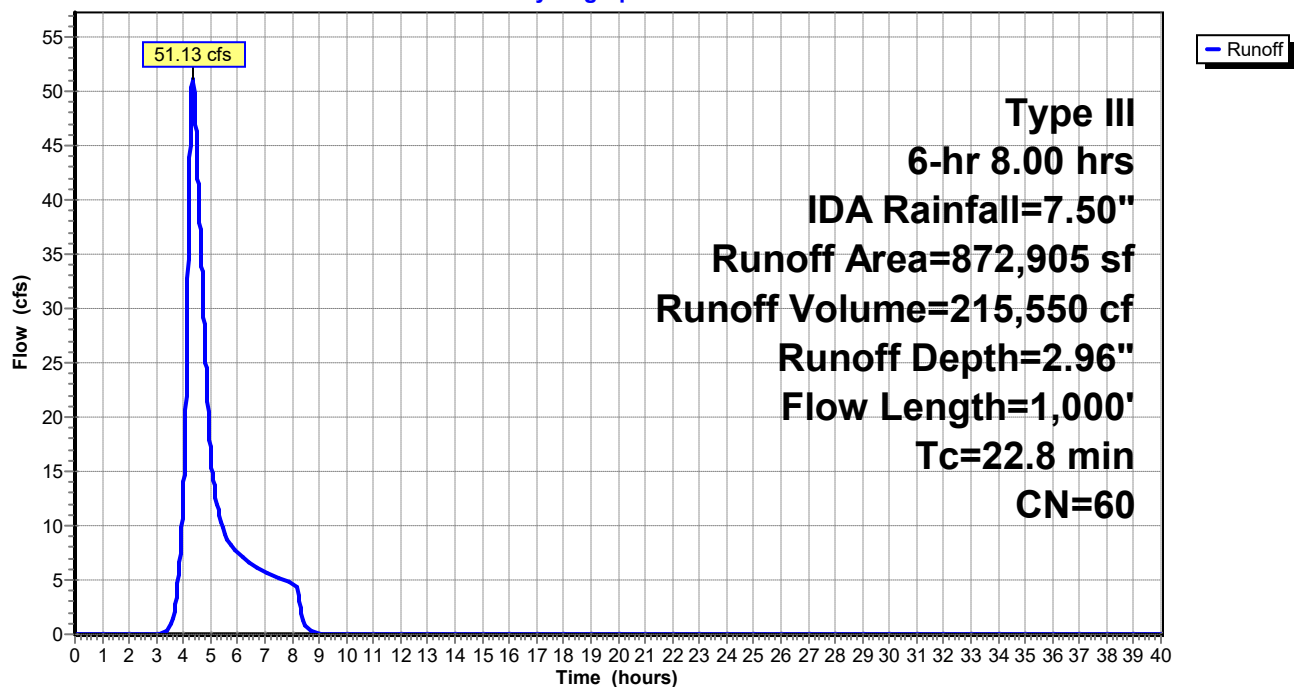
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 6-hr 8.00 hrs IDA Rainfall=7.50"

	Area (sf)	CN	Description
*	35,674	98	Ex. IMP Pavement, Rooftops
	74,836	61	>75% Grass cover, Good, HSG B
	762,395	58	Woods/grass comb., Good, HSG B
	872,905	60	Weighted Average
	837,231		95.91% Pervious Area
	35,674		4.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0520	0.12		Sheet Flow, Shallow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
4.2	280	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
0.1	40	0.0670	5.25		Shallow Concentrated Flow, Driveway Crossing Paved Kv= 20.3 fps
4.3	580	0.2030	2.25		Shallow Concentrated Flow, Shallow Conc. Woodland Woodland Kv= 5.0 fps
22.8	1,000	Total			

Subcatchment 2S: EDA-2

Hydrograph



Summary for Subcatchment 3S: EDA-3

Runoff = 45.60 cfs @ 4.44 hrs, Volume= 211,432 cf, Depth= 4.26"

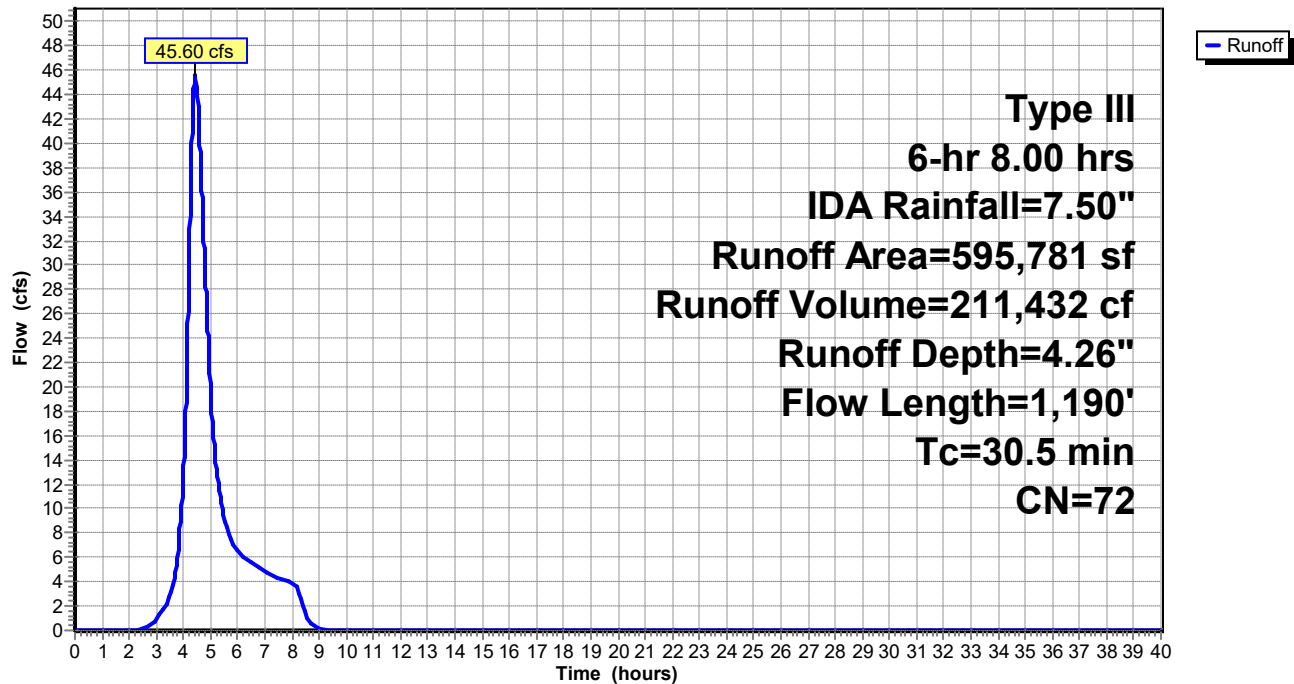
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 6-hr 8.00 hrs IDA Rainfall=7.50"

Area (sf)	CN	Description
* 7,168	98	Ex. IMP Pavement, Rooftops
24,964	61	>75% Grass cover, Good, HSG B
65,870	74	>75% Grass cover, Good, HSG C
260,380	58	Woods/grass comb., Good, HSG B
42,355	72	Woods/grass comb., Good, HSG C
20,791	32	Woods/grass comb., Good, HSG A
* 174,253	98	Wetlands, HSG C
595,781	72	Weighted Average
414,360		69.55% Pervious Area
181,421		30.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
1.7	200	0.1600	2.00		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.9	210	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.2	200	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.1	400	0.1095	0.83		Shallow Concentrated Flow, Shallow Conc. Wetland Forest w/Heavy Litter Kv= 2.5 fps
0.2	80	0.0875	5.87	46.95	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.5	1,190	Total			

Subcatchment 3S: EDA-3

Hydrograph



Summary for Subcatchment 4S: EDA-1

Runoff = 10.81 cfs @ 4.24 hrs, Volume= 39,450 cf, Depth= 3.49"

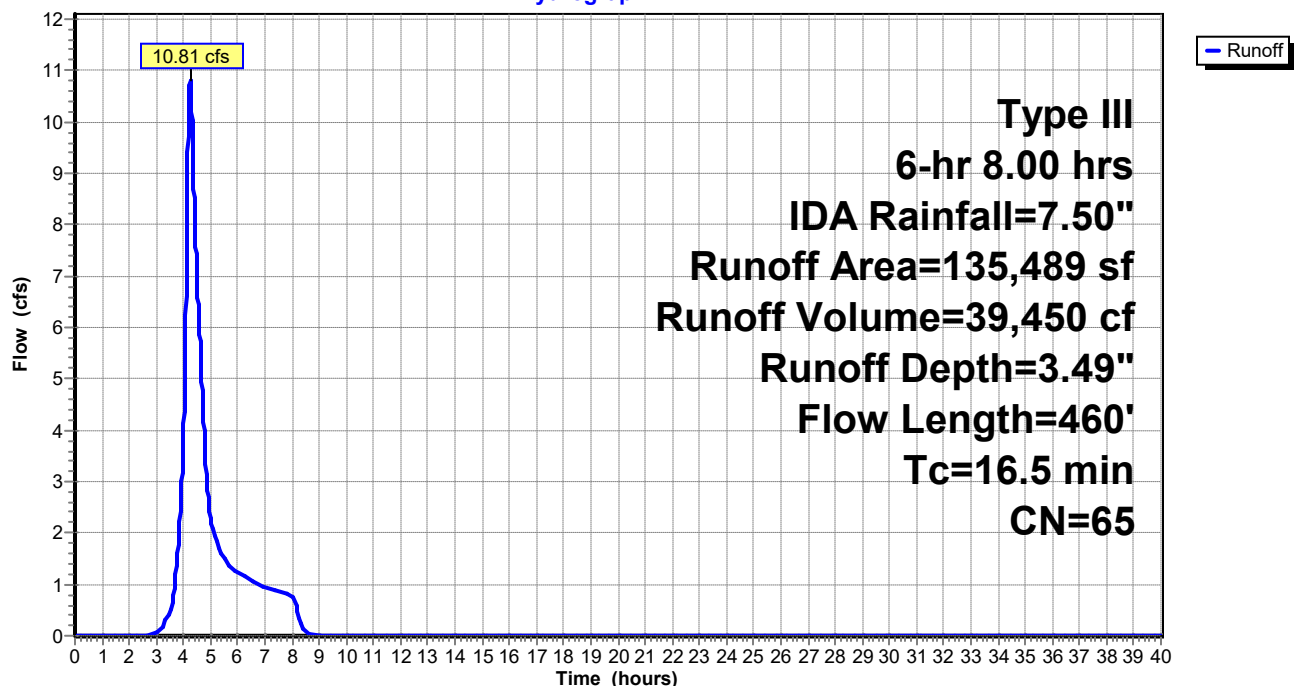
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 6-hr 8.00 hrs IDA Rainfall=7.50"

	Area (sf)	CN	Description
*	17,061	98	Ex. IMP Pavement, Rooftops
	40,462	61	>75% Grass cover, Good, HSG B
	8,644	72	Woods/grass comb., Good, HSG C
	69,322	58	Woods/grass comb., Good, HSG B
	135,489	65	Weighted Average
	118,428		87.41% Pervious Area
	17,061		12.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0640	0.13		Sheet Flow, Woods Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
3.0	230	0.0665	1.29		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
0.4	130	0.0608	5.01		Shallow Concentrated Flow, Driveway Flow
					Paved Kv= 20.3 fps
16.5	460	Total			

Subcatchment 4S: EDA-1

Hydrograph



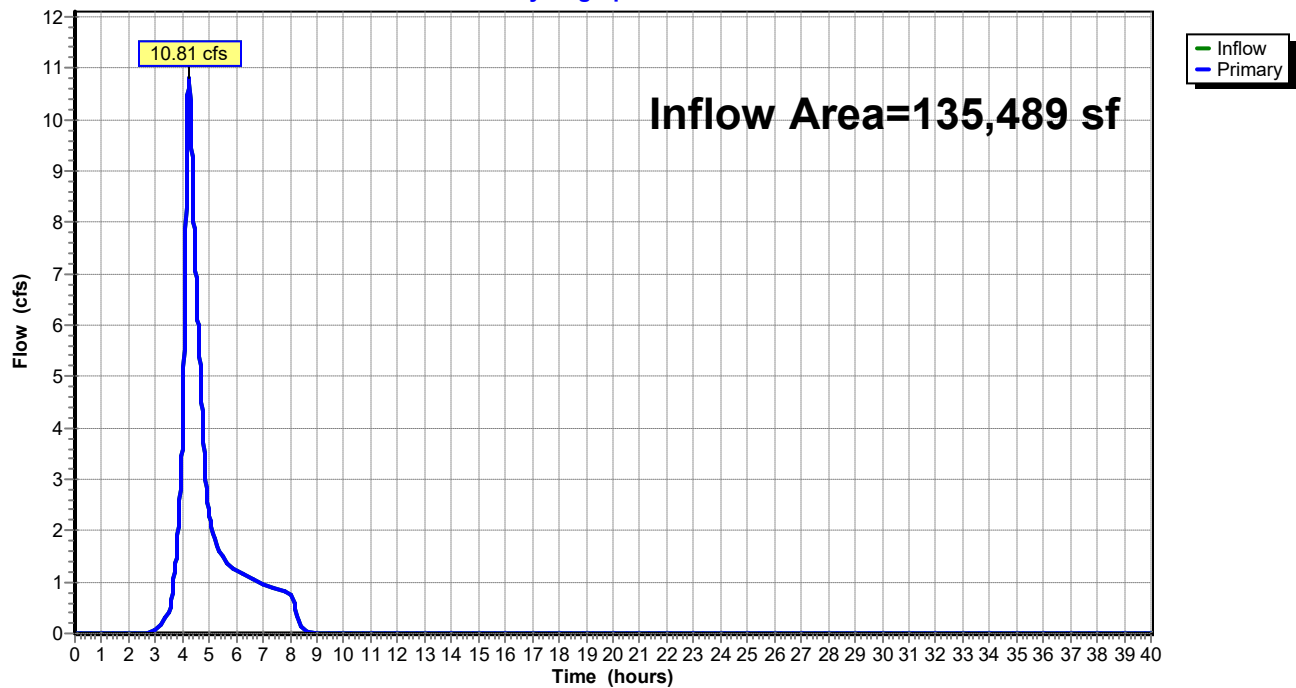
Summary for Link 5L: Pocantico River Basin

Inflow Area = 135,489 sf, 12.59% Impervious, Inflow Depth = 3.49" for IDA event
 Inflow = 10.81 cfs @ 4.24 hrs, Volume= 39,450 cf
 Primary = 10.81 cfs @ 4.24 hrs, Volume= 39,450 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 5L: Pocantico River Basin

Hydrograph



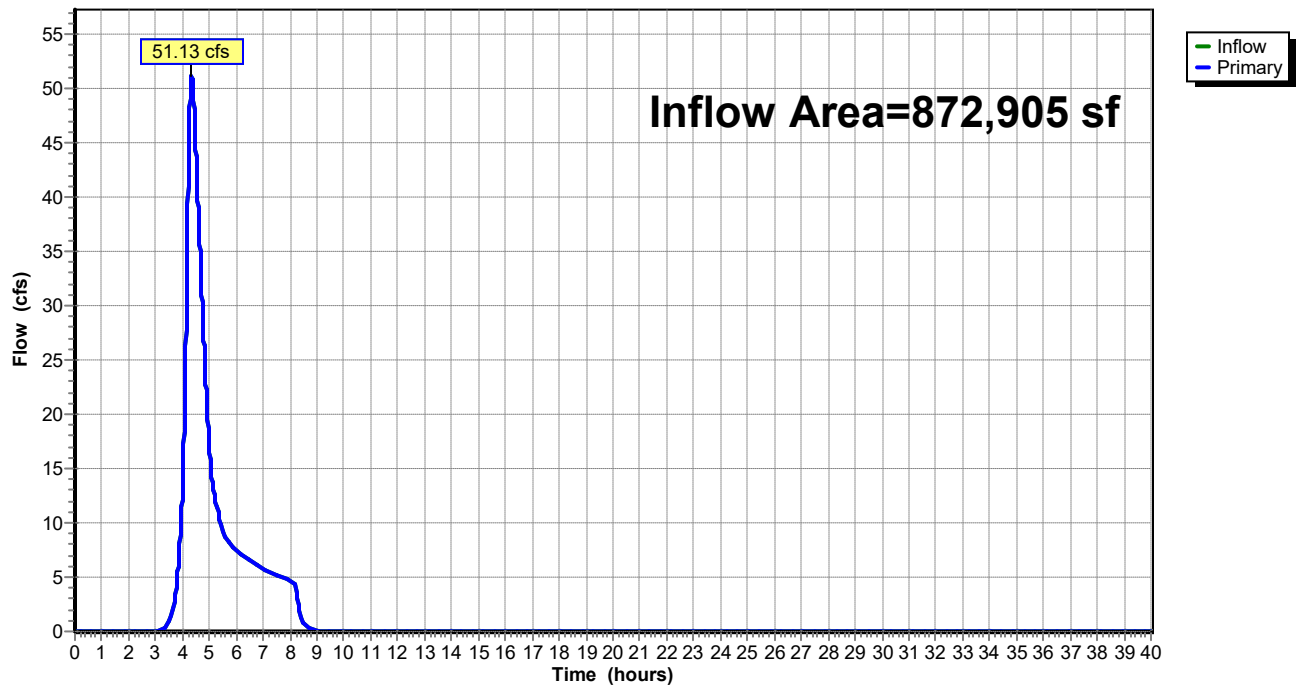
Summary for Link 6L: Pocantico Lake

Inflow Area = 872,905 sf, 4.09% Impervious, Inflow Depth = 2.96" for IDA event
 Inflow = 51.13 cfs @ 4.34 hrs, Volume= 215,550 cf
 Primary = 51.13 cfs @ 4.34 hrs, Volume= 215,550 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 6L: Pocantico Lake

Hydrograph



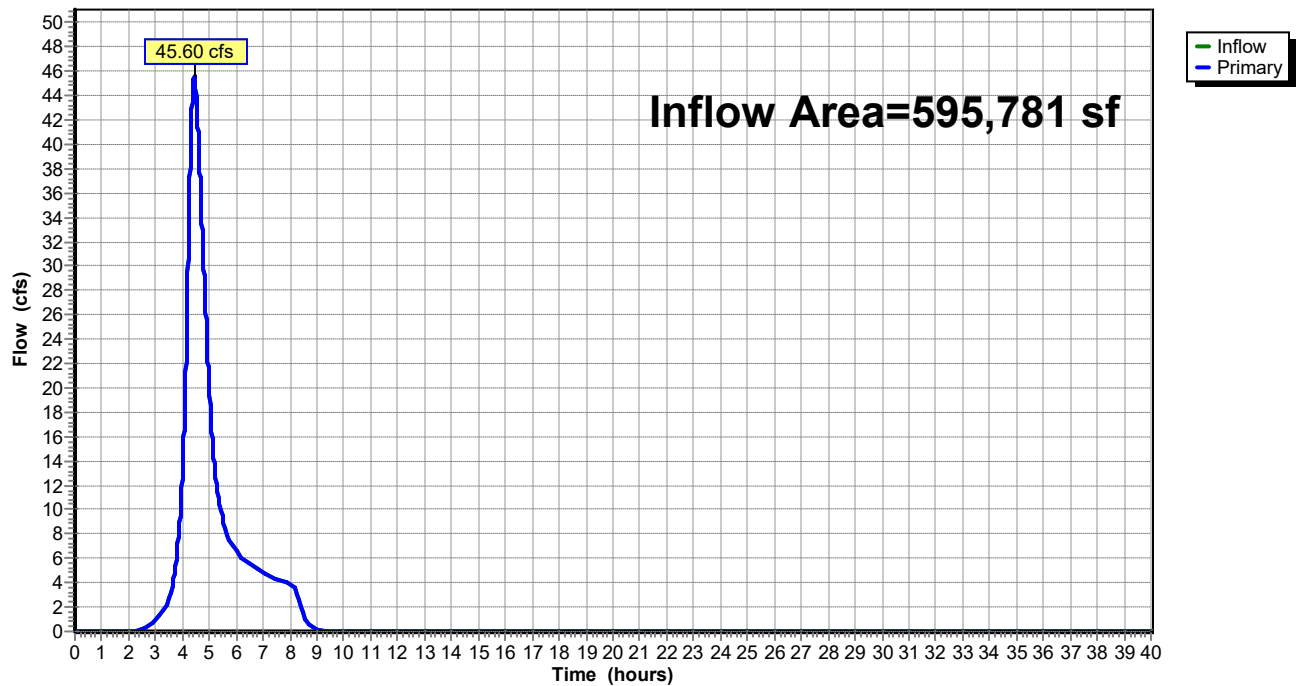
Summary for Link 7L: Mapped Wetland / Brook

Inflow Area = 595,781 sf, 30.45% Impervious, Inflow Depth = 4.26" for IDA event
 Inflow = 45.60 cfs @ 4.44 hrs, Volume= 211,432 cf
 Primary = 45.60 cfs @ 4.44 hrs, Volume= 211,432 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 7L: Mapped Wetland / Brook

Hydrograph



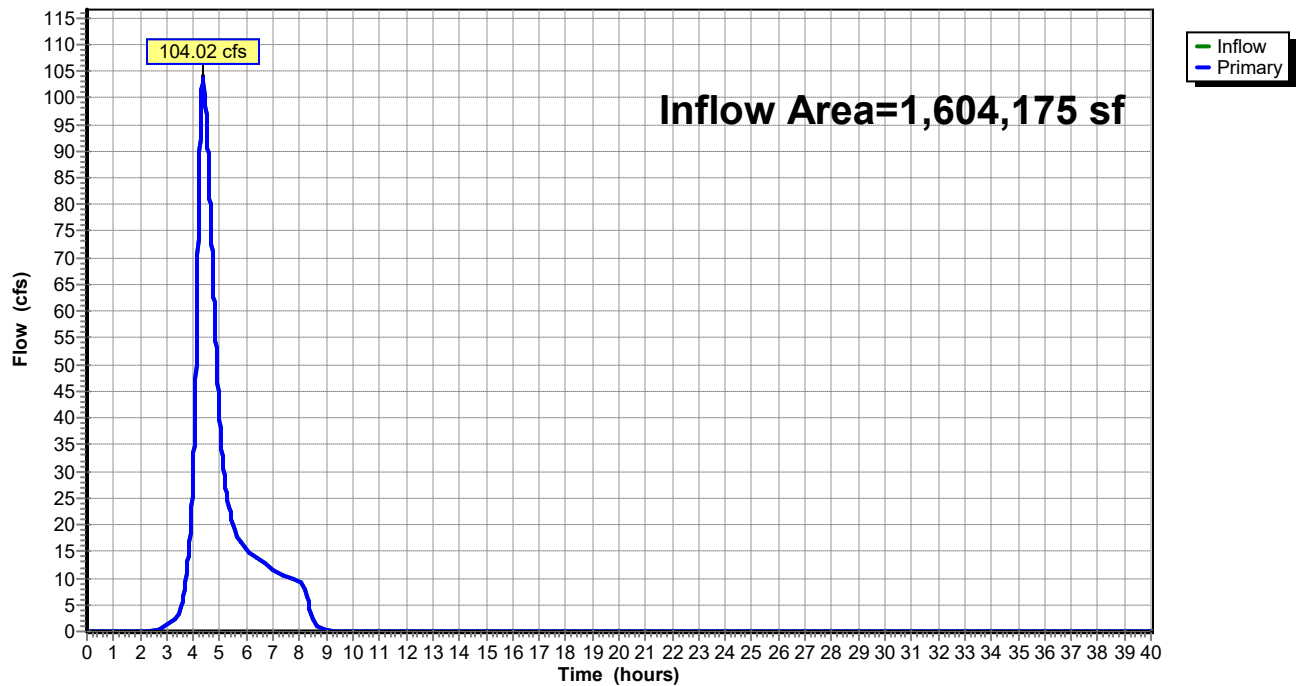
Summary for Link 16L: COMB PRE

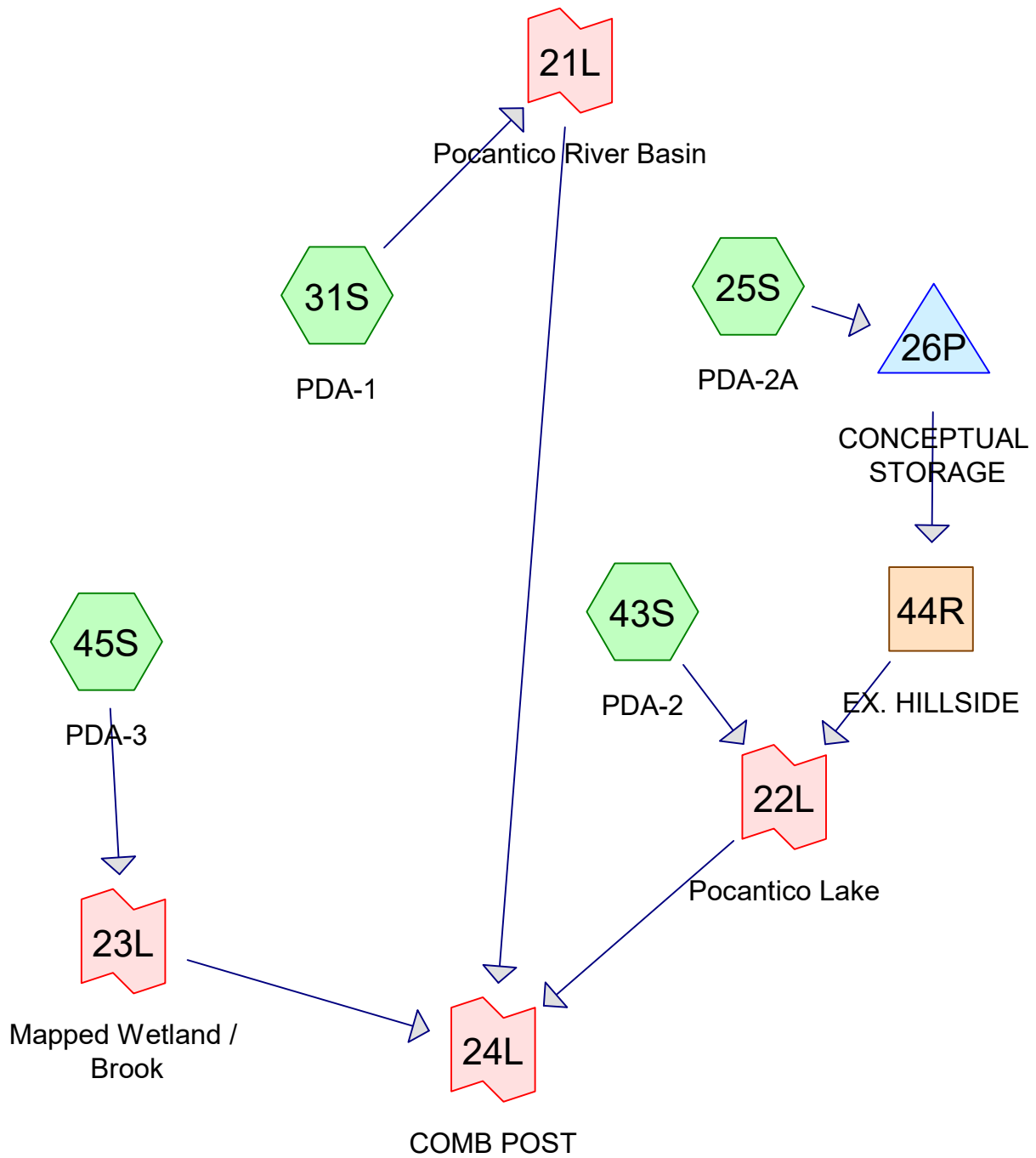
Inflow Area = 1,604,175 sf, 14.60% Impervious, Inflow Depth = 3.49" for IDA event
 Inflow = 104.02 cfs @ 4.37 hrs, Volume= 466,431 cf
 Primary = 104.02 cfs @ 4.37 hrs, Volume= 466,431 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 16L: COMB PRE

Hydrograph





Routing Diagram for Meadows Briarcliff_01122022

Prepared by Wasp Engineering Group, PLLC, Printed 1/13/2022
 HydroCAD® 10.00-22 s/n 10667 © 2018 HydroCAD Software Solutions LLC

Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 25S: PDA-2A

Runoff Area=401,971 sf 30.05% Impervious Runoff Depth=4.26"
Flow Length=760' Tc=14.4 min CN=72 Runoff=41.37 cfs 142,652 cf

Subcatchment 31S: PDA-1

Runoff Area=61,330 sf 10.95% Impervious Runoff Depth=3.93"
Flow Length=160' Tc=15.6 min CN=69 Runoff=5.65 cfs 20,076 cf

Subcatchment 43S: PDA-2

Runoff Area=603,866 sf 1.84% Impervious Runoff Depth=2.86"
Flow Length=530' Tc=11.3 min CN=59 Runoff=43.87 cfs 143,862 cf

Subcatchment 45S: PDA-3

Runoff Area=537,001 sf 33.53% Impervious Runoff Depth=4.37"
Flow Length=970' Tc=30.3 min CN=73 Runoff=42.24 cfs 195,540 cf

Reach 44R: EX. HILLSIDE

Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0 cf
n=0.080 L=390.0' S=0.3077 ' / Capacity=216.58 cfs Outflow=0.00 cfs 0 cf

Pond 26P: CONCEPTUAL STORAGE

Peak Elev=352.69' Storage=109,177 cf Inflow=41.37 cfs 142,652 cf
Discarded=1.84 cfs 142,673 cf Primary=0.00 cfs 0 cf Outflow=1.84 cfs 142,673 cf

Link 21L: Pocantico River Basin

Inflow=5.65 cfs 20,076 cf
Primary=5.65 cfs 20,076 cf

Link 22L: Pocantico Lake

Inflow=43.87 cfs 143,862 cf
Primary=43.87 cfs 143,862 cf

Link 23L: Mapped Wetland / Brook

Inflow=42.24 cfs 195,540 cf
Primary=42.24 cfs 195,540 cf

Link 24L: COMB POST

Inflow=76.99 cfs 359,478 cf
Primary=76.99 cfs 359,478 cf

Total Runoff Area = 1,604,168 sf Runoff Volume = 502,130 cf Average Runoff Depth = 3.76"
80.13% Pervious = 1,285,469 sf 19.87% Impervious = 318,699 sf

Summary for Subcatchment 25S: PDA-2A

Runoff = 41.37 cfs @ 4.21 hrs, Volume= 142,652 cf, Depth= 4.26"

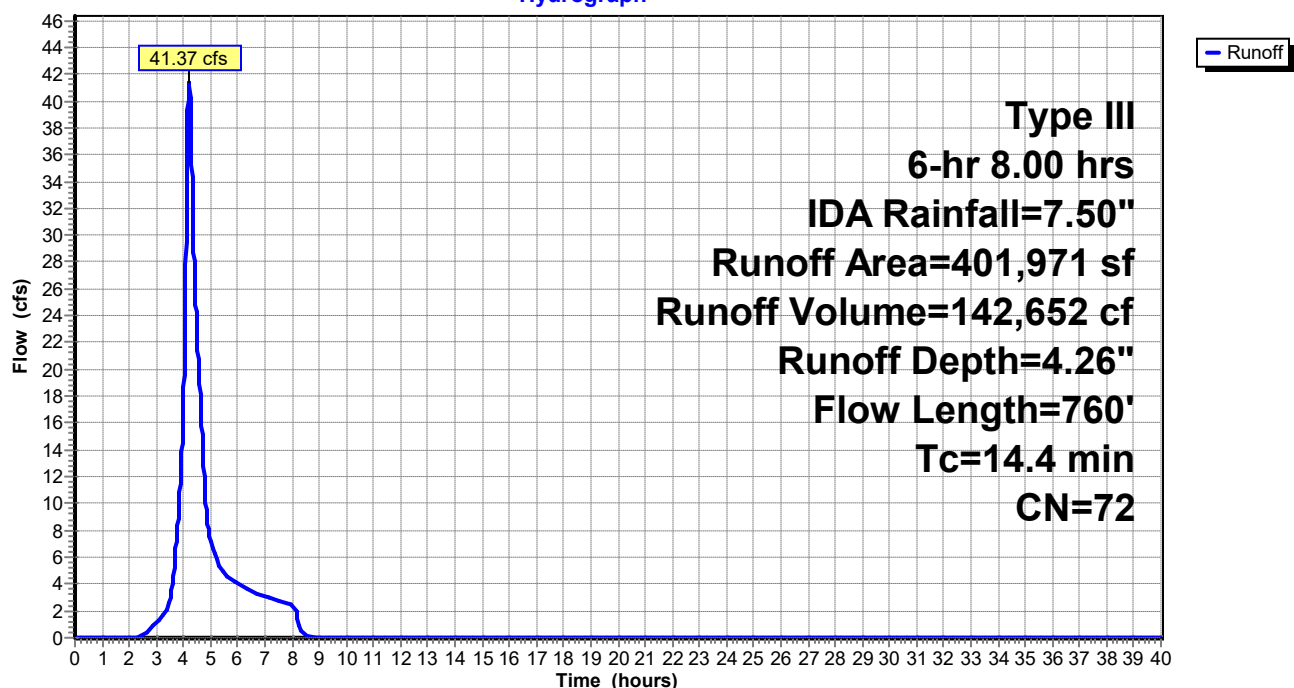
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 6-hr 8.00 hrs IDA Rainfall=7.50"

	Area (sf)	CN	Description
*	120,802	98	PROP IMP Pavement, Rooftops
	228,381	61	>75% Grass cover, Good, HSG B
	52,788	58	Woods/grass comb., Good, HSG B
	401,971	72	Weighted Average
	281,169		69.95% Pervious Area
	120,802		30.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0780	0.21		Sheet Flow, Sheet Flow Lawn Grass: Dense n= 0.240 P2= 3.41"
6.2	450	0.0300	1.21		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
0.2	210	0.0500	18.68	91.72	Pipe Channel, 30" PIPE 30.0" Round Area= 4.9 sf Perim= 7.9' r= 0.63' n= 0.013 Concrete pipe, bends & connections
14.4	760	Total			

Subcatchment 25S: PDA-2A

Hydrograph



Summary for Subcatchment 31S: PDA-1

Runoff = 5.65 cfs @ 4.22 hrs, Volume= 20,076 cf, Depth= 3.93"

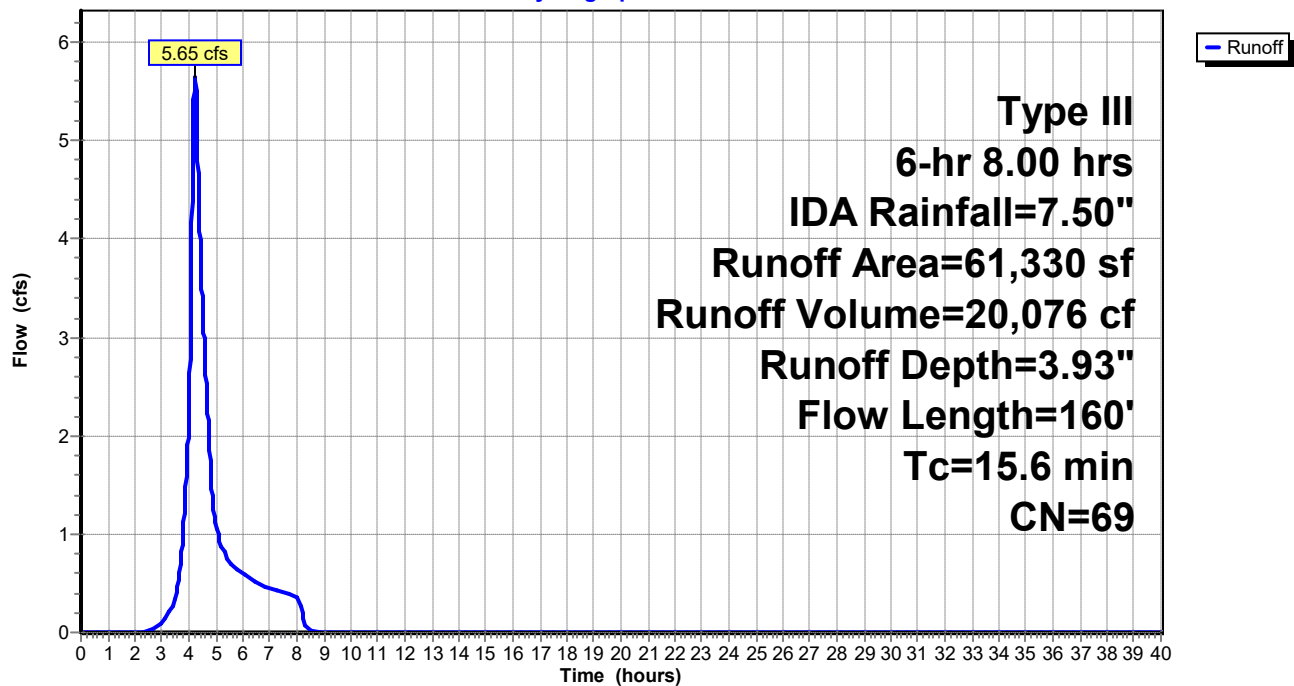
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 6-hr 8.00 hrs IDA Rainfall=7.50"

Area (sf)	CN	Description
27,090	61	>75% Grass cover, Good, HSG B
16,693	74	>75% Grass cover, Good, HSG C
5,935	72	Woods/grass comb., Good, HSG C
4,898	58	Woods/grass comb., Good, HSG B
6,714	98	Paved parking, HSG B
61,330	69	Weighted Average
54,616		89.05% Pervious Area
6,714		10.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	100	0.0450	0.11		Sheet Flow, Wooded Sheet Flow Woods: Light underbrush n= 0.400 P2= 3.41"
0.5	35	0.0550	1.17		Shallow Concentrated Flow, Woods Shallow Conc Flow Woodland Kv= 5.0 fps
0.0	15	0.0667	5.24		Shallow Concentrated Flow, Driveway crossing Paved Kv= 20.3 fps
0.1	10	0.0600	1.71		Shallow Concentrated Flow, Grass Shoulder Short Grass Pasture Kv= 7.0 fps
15.6	160	Total			

Subcatchment 31S: PDA-1

Hydrograph



Summary for Subcatchment 43S: PDA-2

Runoff = 43.87 cfs @ 4.18 hrs, Volume= 143,862 cf, Depth= 2.86"

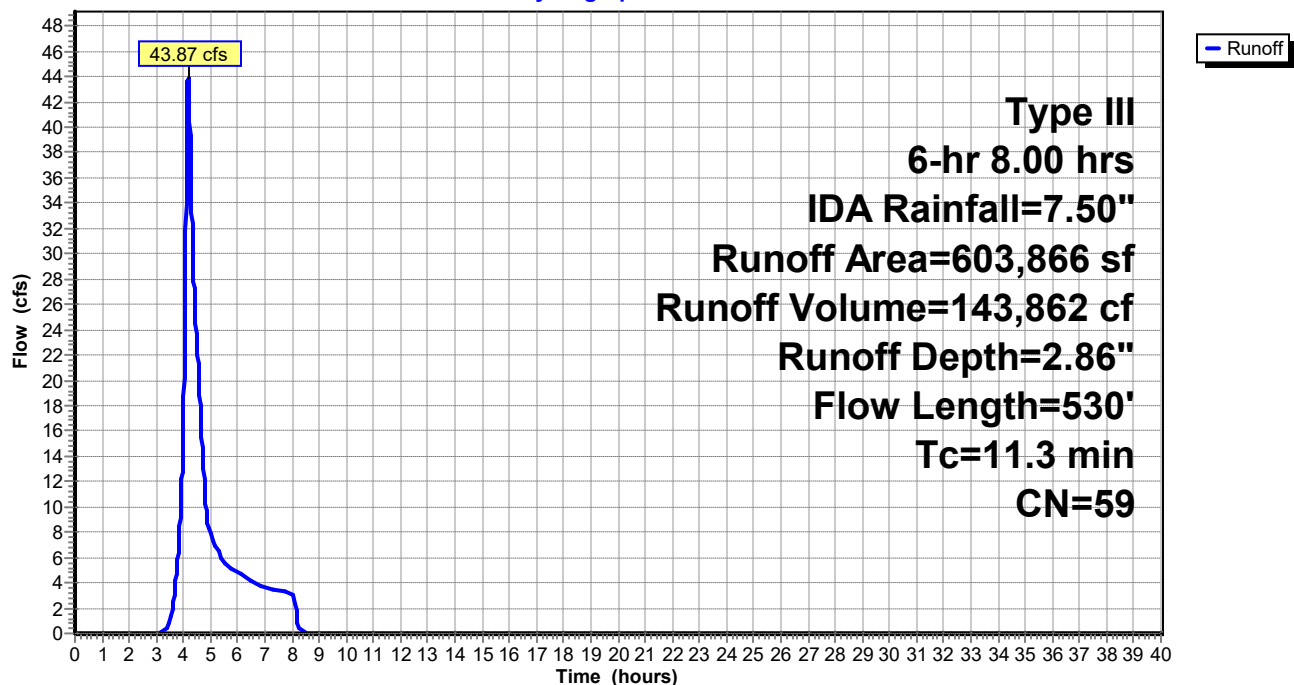
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 6-hr 8.00 hrs IDA Rainfall=7.50"

	Area (sf)	CN	Description
*	11,116	98	EX. IMP Pavement, Rooftops
	57,480	61	>75% Grass cover, Good, HSG B
	535,270	58	Woods/grass comb., Good, HSG B
	603,866	59	Weighted Average
	592,750		98.16% Pervious Area
	11,116		1.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.1800	0.19		Sheet Flow, Sheet Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
2.7	430	0.2840	2.66		Shallow Concentrated Flow, Shallow Woods
					Woodland Kv= 5.0 fps
11.3	530	Total			

Subcatchment 43S: PDA-2

Hydrograph



Summary for Subcatchment 45S: PDA-3

Runoff = 42.24 cfs @ 4.42 hrs, Volume= 195,540 cf, Depth= 4.37"

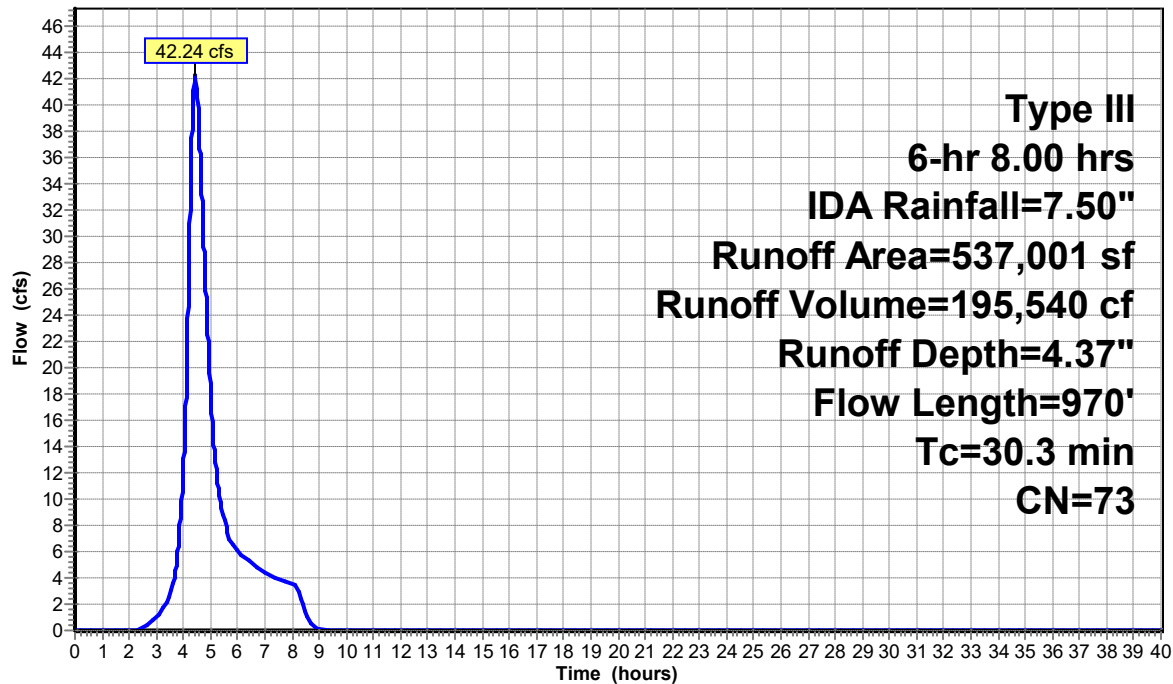
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 6-hr 8.00 hrs IDA Rainfall=7.50"

	Area (sf)	CN	Description
*	5,814	98	Ex. IMP Pavement, Rooftops
	60,762	74	>75% Grass cover, Good, HSG C
	50,551	61	>75% Grass cover, Good, HSG B
	191,609	58	Woods/grass comb., Good, HSG B
	34,183	72	Woods/grass comb., Good, HSG C
	19,829	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	537,001	73	Weighted Average
	356,934		66.47% Pervious Area
	180,067		33.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	50	0.2800	0.20		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
10.9	50	0.1000	0.08		Sheet Flow, Sheet Flow Wetlands Woods: Dense underbrush n= 0.800 P2= 3.41"
4.7	200	0.0800	0.71		Shallow Concentrated Flow, Shallow Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.0	180	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.2	390	0.1000	0.79		Shallow Concentrated Flow, Shallow Conc Wetlands Forest w/Heavy Litter Kv= 2.5 fps
0.3	100	0.1100	6.58	52.64	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.3	970	Total			

Subcatchment 45S: PDA-3

Hydrograph



Summary for Reach 44R: EX. HILLSIDE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 0.00" for IDA event
 Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
 Avg. Velocity= 0.00 fps, Avg. Travel Time= 0.0 min

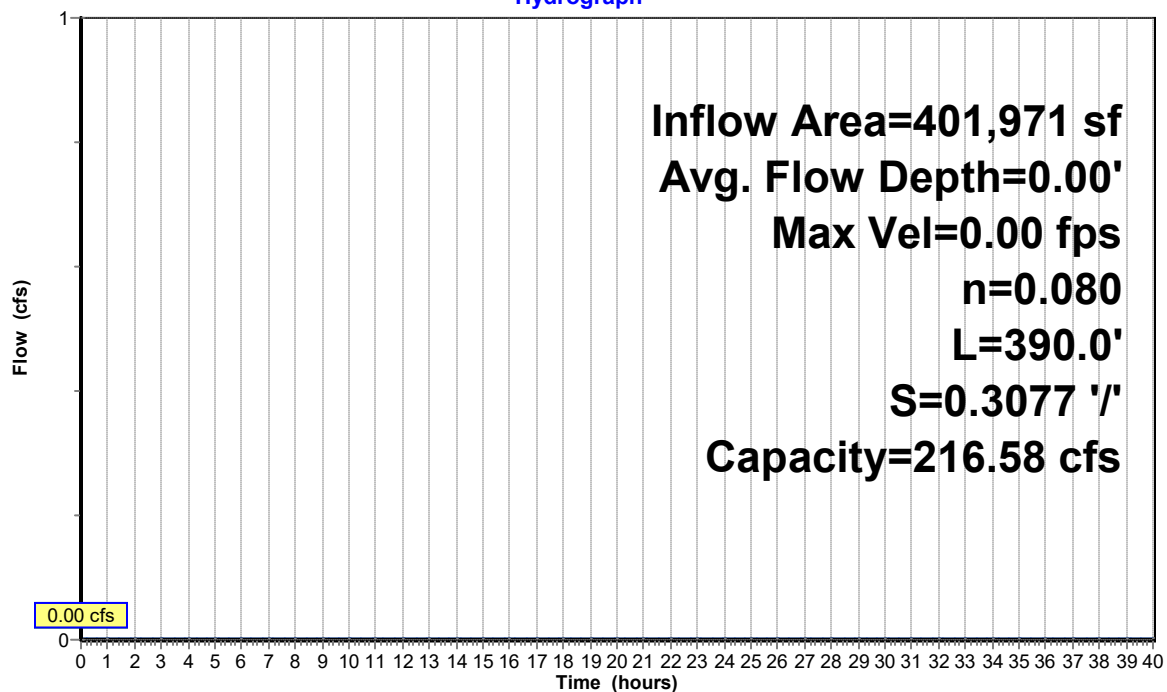
Peak Storage= 0 cf @ 0.00 hrs
 Average Depth at Peak Storage= 0.00'
 Bank-Full Depth= 1.00' Flow Area= 23.0 sf, Capacity= 216.58 cfs

20.00' x 1.00' deep channel, n= 0.080 Earth, long dense weeds
 Side Slope Z-value= 3.0 '/' Top Width= 26.00'
 Length= 390.0' Slope= 0.3077 '/'
 Inlet Invert= 340.00', Outlet Invert= 220.00'



Reach 44R: EX. HILLSIDE

Hydrograph



Summary for Pond 26P: CONCEPTUAL STORAGE

Inflow Area = 401,971 sf, 30.05% Impervious, Inflow Depth = 4.26" for IDA event
 Inflow = 41.37 cfs @ 4.21 hrs, Volume= 142,652 cf
 Outflow = 1.84 cfs @ 8.15 hrs, Volume= 142,673 cf, Atten= 96%, Lag= 236.6 min
 Discarded = 1.84 cfs @ 8.15 hrs, Volume= 142,673 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 352.69' @ 8.15 hrs Surf.Area= 26,509 sf Storage= 109,177 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 577.5 min (870.0 - 292.6)

Volume	Invert	Avail.Storage	Storage Description		
#1	348.00'	174,238 cf	LOT 5-6 BASIN (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
348.00	20,140	650.0	0	0	20,140
350.00	22,790	675.1	42,903	42,903	23,100
352.00	25,542	700.2	48,306	91,209	26,172
354.00	28,392	725.3	53,909	145,117	29,356
355.00	29,855	737.9	29,120	174,238	30,996

Device	Routing	Invert	Outlet Devices											
#1	Discarded	348.00'	3.000 in/hr INFILTRATION over Surface area											
#2	Primary	353.50'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir											
			Head (feet)	0.20	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80	2.00	
				2.50	3.00	3.50	4.00	4.50	5.00	5.50				
			Coef. (English)	2.37	2.51	2.70	2.68	2.68	2.67	2.65	2.65	2.65		
				2.65	2.66	2.66	2.67	2.69	2.72	2.76	2.83			
#3	Primary	348.00'	30.0" Round 30" CULVERT OUT											
			L= 100.0' CPP, square edge headwall, Ke= 0.500											
			Inlet / Outlet Invert= 348.00' / 340.00' S= 0.0800 '/' Cc= 0.900											
			n= 0.013 Corrugated PE, smooth interior, Flow Area= 4.91 sf											
#4	Device 3	353.10'	48.0" W x 12.0" H Vert. 48" VERT ORIFICE C= 0.600											

Discarded OutFlow Max=1.84 cfs @ 8.15 hrs HW=352.69' (Free Discharge)

↑ **1=INFILTRATION** (Exfiltration Controls 1.84 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=348.00' TW=340.00' (Dynamic Tailwater)

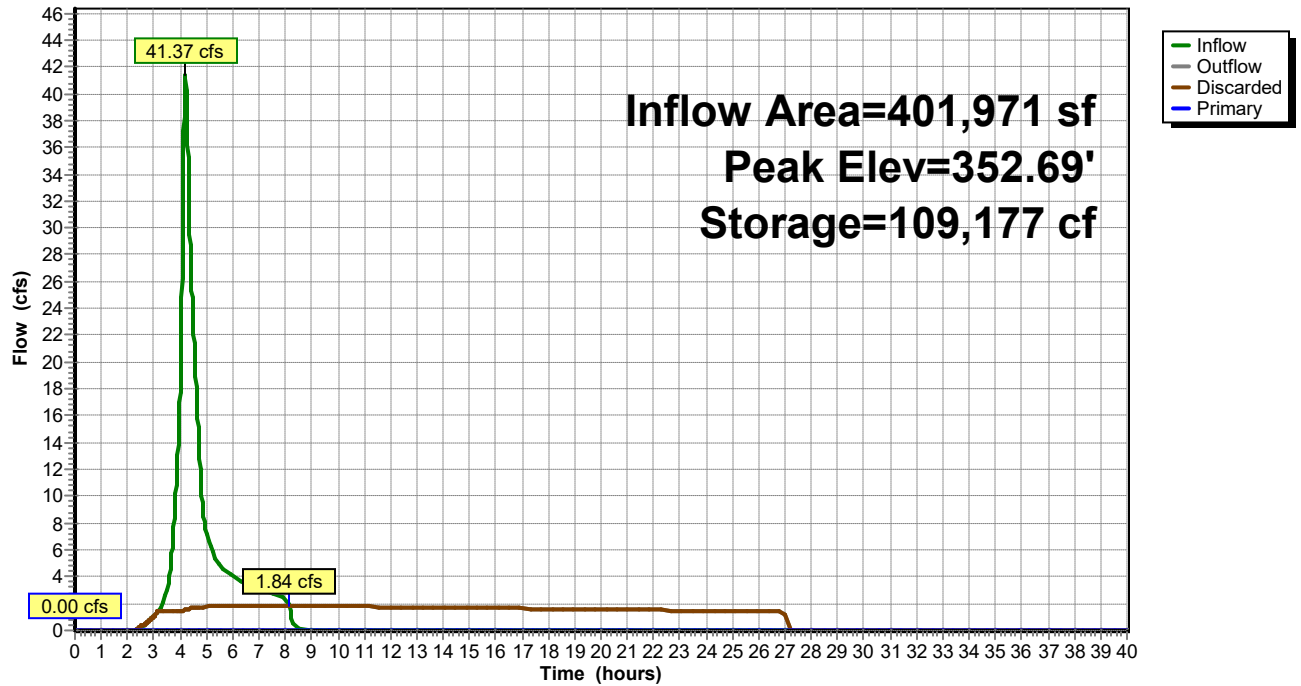
↑ **2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

↑ **3=30" CULVERT OUT** (Controls 0.00 cfs)

↑ **4=48" VERT ORIFICE** (Controls 0.00 cfs)

Pond 26P: CONCEPTUAL STORAGE

Hydrograph



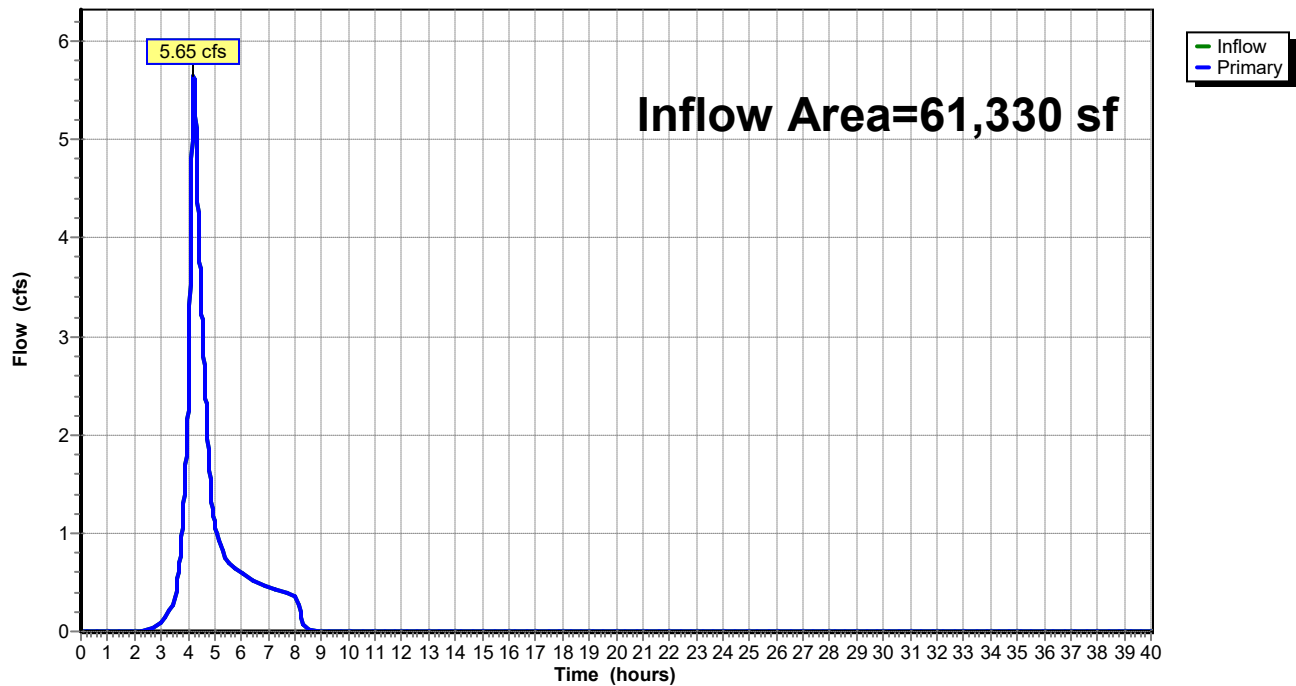
Summary for Link 21L: Pocantico River Basin

Inflow Area = 61,330 sf, 10.95% Impervious, Inflow Depth = 3.93" for IDA event
 Inflow = 5.65 cfs @ 4.22 hrs, Volume= 20,076 cf
 Primary = 5.65 cfs @ 4.22 hrs, Volume= 20,076 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 21L: Pocantico River Basin

Hydrograph



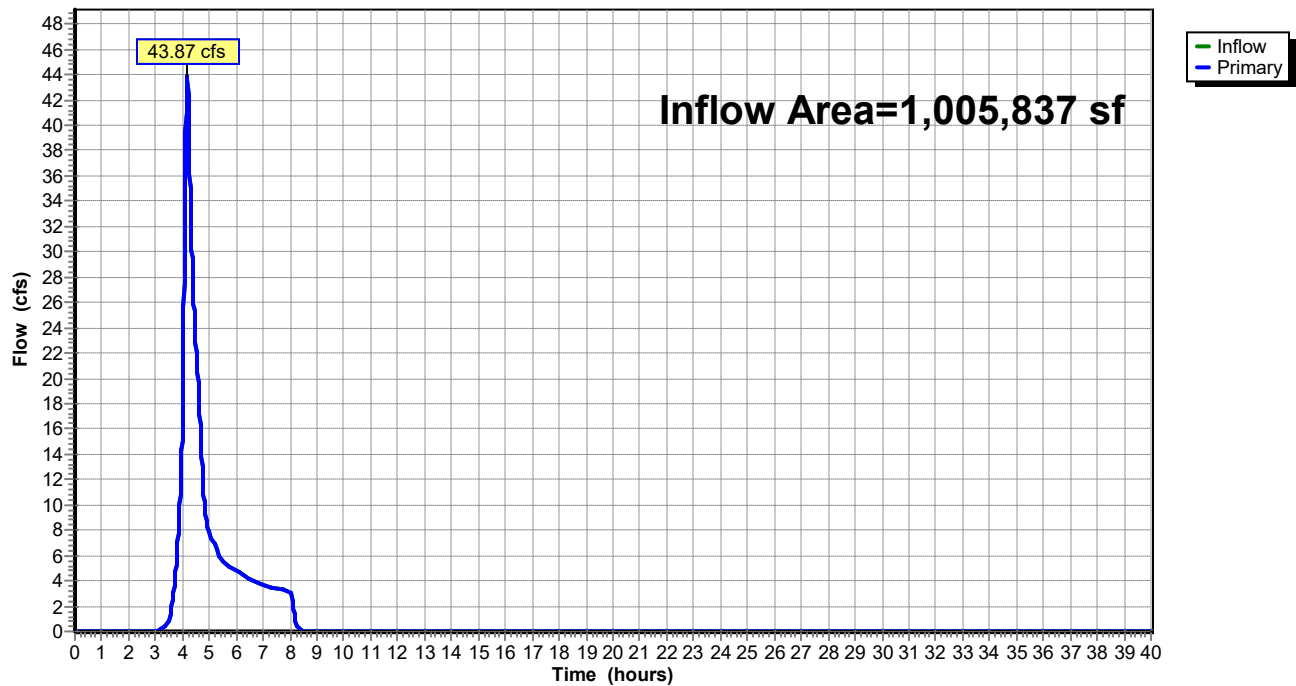
Summary for Link 22L: Pocantico Lake

Inflow Area = 1,005,837 sf, 13.12% Impervious, Inflow Depth = 1.72" for IDA event
 Inflow = 43.87 cfs @ 4.18 hrs, Volume= 143,862 cf
 Primary = 43.87 cfs @ 4.18 hrs, Volume= 143,862 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 22L: Pocantico Lake

Hydrograph



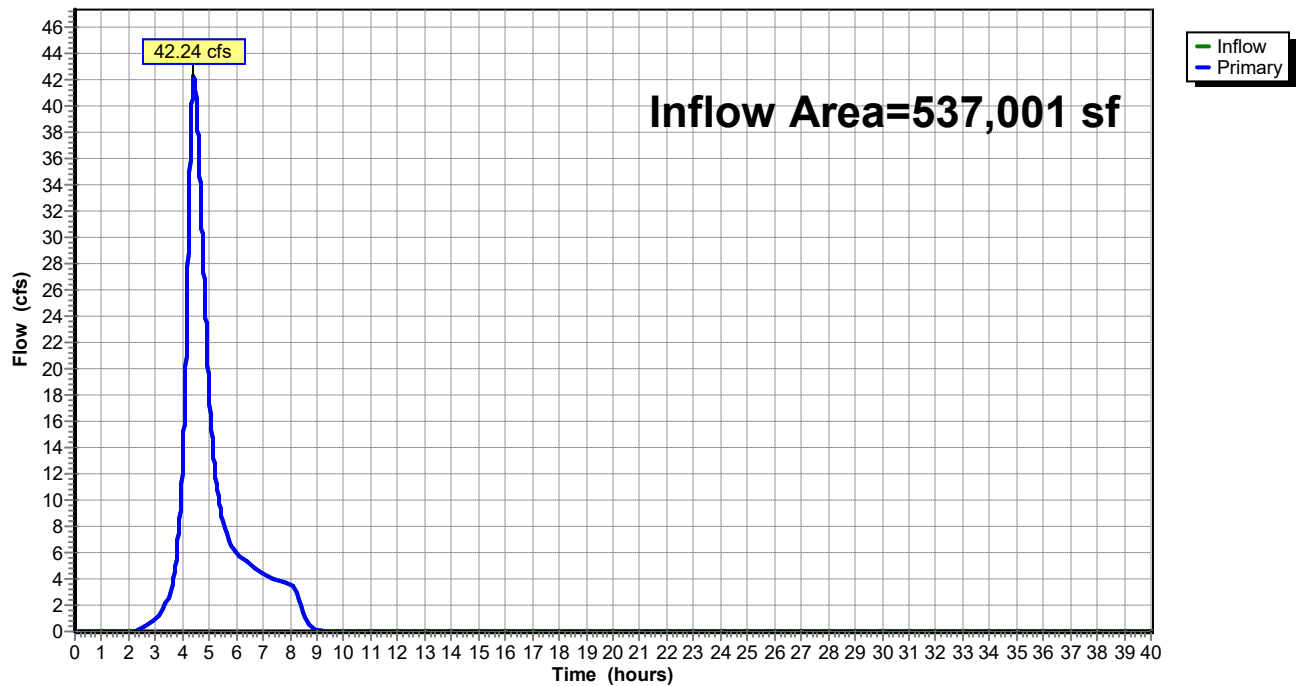
Summary for Link 23L: Mapped Wetland / Brook

Inflow Area = 537,001 sf, 33.53% Impervious, Inflow Depth = 4.37" for IDA event
 Inflow = 42.24 cfs @ 4.42 hrs, Volume= 195,540 cf
 Primary = 42.24 cfs @ 4.42 hrs, Volume= 195,540 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 23L: Mapped Wetland / Brook

Hydrograph



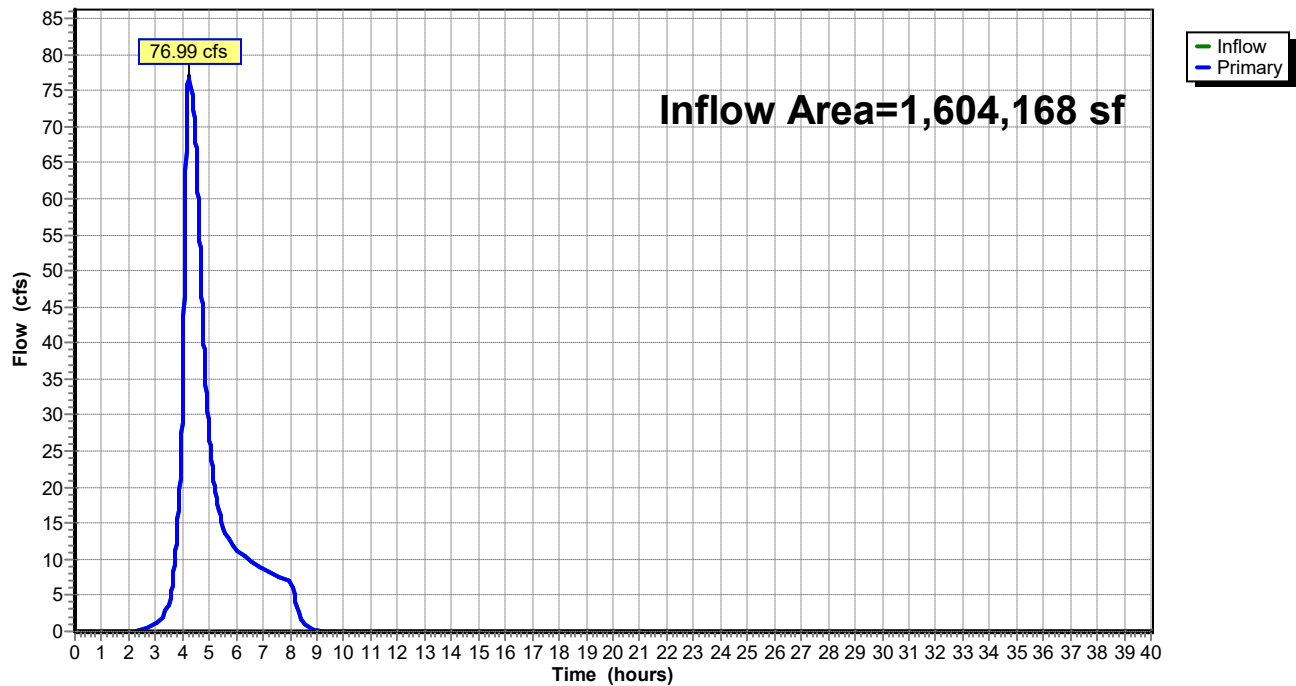
Summary for Link 24L: COMB POST

Inflow Area = 1,604,168 sf, 19.87% Impervious, Inflow Depth = 2.69" for IDA event
 Inflow = 76.99 cfs @ 4.23 hrs, Volume= 359,478 cf
 Primary = 76.99 cfs @ 4.23 hrs, Volume= 359,478 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 24L: COMB POST

Hydrograph



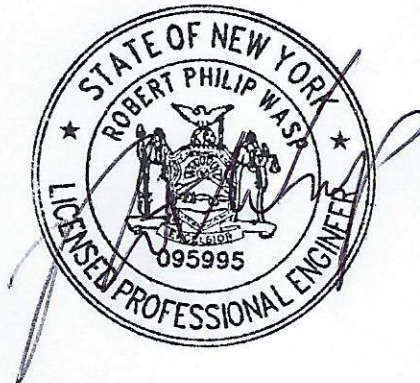
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CONVENTIONAL SUBDIVISION
DRAINAGE ANALYSIS

Meadows at Briarcliff
715 Sleepy Hollow Road
Briarcliff Manor, NY 10510
Section - Block - Lot: (105.17 - 1 - 15)

Pocantico River Basin



May 10, 2021

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1. SUBDIVISION STORMWATER MANAGEMENT DESIGN

Introduction

Wasp Engineering Group, PLLC has been retained by Zappico Real Estate Development (Zappico) to provide watershed hydrologic analysis and stormwater management hydraulic design support in conjunction with the proposed thirty-one (31) lot residential development located on Sleepy Hollow Road in the Town of Mount Pleasant. Subdivision design drawings prepared by Zappico detailing the proposed development layout, existing and proposed topography and utility layout have been utilized as the basis for analysis and design findings summarized in this report.

The development proposes to create 31 new single-family residential lots from the existing residential parcel that measures 36.83 acres. The existing parcel consists of three residential dwellings sited amongst wooded/undeveloped hillside and wetlands. The property is bounded between Sleepy Hollow Road on the west, undeveloped woodland to the north and existing residential development to the south. Pocantico Lake immediately borders the site along the eastern property line. Proposed construction is focused on the upper portion of the lot located in proximity to Sleepy Hollow Road. Downgrade lot areas closer to Pocantico Lake and wetlands are proposed to remain undisturbed.

Stormwater management practices for the new proposed subdivision have been designed to meet and exceed the sizing criteria prescribed by §183 "Stormwater Management and Erosion and Control"; and §A227-25 "Subdivision Regulations – Improvements" of the Mount Pleasant Town Code. Subsequent sections included in this report summarize the design basis and analysis findings that have been prepared.

Existing Conditions

The existing property is comprised of tax Lot 15 (1,604,175 sq. feet) located on the eastern shoulder of Sleepy Hollow Road shown southeast of the intersection of Wilderness Way. Adjoining land use located to the south and west consists of single-family residential dwellings. Additional undeveloped woodland borders the property on the adjoining parcel to the north. Approximately 4 acres are occupied by three residential dwellings surrounded by grass lawn and common driveway. The balance of lot area (32.83 acres) consists of woodland areas situated around the parcel perimeter on its western, southern and eastern boundaries. Locally-regulated wetlands are found in the southwest corner of the property/ Pocantico Lake directly abuts the parcel along on its eastern boundary. Common tree species found on the property include Maple, Oak, Hickory, Wild Cherry, Birch, Ash, Tulip, Beech, Hickory and Pine. The provided survey drawing illustrates utility easement for the Croton Aqueduct traversing the parcel along a north-south orientation within the western portion of the lot.

Existing lot topography includes a drainage divide "high point" along the center of the property. High point elevations along the ridge vary between 344' to a maximum of 376.9'. Three distinct sub-watersheds are described from the site area. Land area to the east of the divide drains directly towards Pocantico Lake. Steep slopes transition on the border with Pocantico Lake located at elevation +/-220'. Property areas to the west of the drainage divide drain towards on-site wetlands area that culminates in mapped watercourse leaving the property near the southwest corner. A small portion of the northwest parcel drains towards an off-site watercourse before eventually entering Pocantico Lake to the north. Characteristics of specific drainage subcatchments are summarized as follows:

EDA-1: 3.11 acres located in northwest corner of site. Area includes existing residential dwelling, common driveway and grass lawns. Time of concentration: 16.5 minutes. CN=65. Mapped soils consist of mostly HSG B with some HSG C group soils. Drains to north towards off-site watercourse tributary to Pocantico Lake.

EDA-2: 20.24 acres composing eastern portion of site. Area includes (2) existing residential dwellings, swimming pool common driveway, grass lawns and undeveloped woodland. Time of concentration: 22.8 minutes. CN = 60. Mapped soils consist of HSG B group soils. Drains to east directly into Pocantico Lake.

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EDA-3: 13.68 acres located in northwest corner of site. Area includes small portion of common driveway but mostly undeveloped woodland and wetland areas. Time of concentration: 30.5 minutes. CN=71. Mapped soils consist of mostly HSG B with small portions of HSG C and HSG A group soils

Please refer to existing subdivision drainage area map “EDA” as enclosed in Report Section 2. Existing site drainage area was calculated were assigned curve numbers based upon mapped soil ratings and surface cover in accordance with the SCS TR-55 drainage methodology.

Proposed Conditions

The project proposes to create thirty-one (31) new individual building lots in accordance with the bulk density requirements for the Town of Mount Pleasant R-40-Zone. Each lot will contain a new residential dwelling, asphalt pavement driveway and walkway area. The layout of conceptual building lots and dwelling envelopes was modeled based upon drawings prepared by Zappico Real Estate Development. Land area immediately surrounding each dwelling is proposed as grass lawn. Total area of development is limited to +/- 21.32 acres. Proposed development avoids steep slope area along the eastern transition to Pocantico Lake and wetland and regulated buffer areas. Proposed topography within the area of disturbance generally follows the existing drainage divide with leveling across portions of building lots.

New drainage collection structures are shown to be constructed as part of new subdivision roadway layout. The conventional subdivision contemplates collection of runoff from individual lot impervious surfaces (i.e. new rooftop and driveways) as part of the drainage collection network. Four (4) conceptual stormwater management areas are sited across the new building lots and are intended to provide for both mitigation of stormwater quality and quantity based controls. Practices are contemplated as stormwater infiltration basins to be designed following all required elements prescribed by Chapter 6 of the NYSDEC Stormwater Management Design Manual. Full capture and infiltration of runoff volume from new development area for storm events up to and including the 100 year – 24 hour event is sized to be feasible based upon conceptual design layout. It can be noted that disconnected lots # 30 and #31 with frontage on Sleepy Hollow Road will be designed with individual lot stormwater management practices. Characteristics of specific proposed drainage subcatchments are summarized as follows:

PDA-1 : 1.98 acres located in northwest corner of site. Area includes rear yards of proposed lots #1 - #4. Time of concentration: 16.5 minutes. CN=65. Mapped soils consist of mostly HSG B with some HSG C group soils. Drains to north towards off-site watercourse tributary to Pocantico Lake.

PDA-2 : 11.27 acres composing eastern portion of site. Area includes the rear steep portions of lots #5 - #15 that will remain undeveloped woodland. Time of concentration: 10.5 minutes. CN = 59. Mapped soils consist of HSG B group soils. Drains to east directly into Pocantico Lake.

PDA-3A: 12.52 acres located centrally to the site. Subcatchment includes all new subdivision roadway and new lot impervious areas with the exception of disconnected Lots #30 & #31. Four (4) stormwater management practice areas are included within PDA-3A for the capture of stormwater runoff. Time of concentration: 11.6 minutes. CN = 75. Mapped soils consist of HSG B Group soils.

PDA-3B: 11.07 acres not captured by subdivision stormwater management practice areas located in the western portion of the site closest to Sleepy Hollow Road. Area includes existing onsite wetland areas and will remain undeveloped woodland except for new Lots #30 & #31. Time of concentration: 11.07 minutes. CN=72. Mapped soils consist of HSG B with portions of HSG C and HSG A group soils

Please refer to existing subdivision drainage area map “PDA” as enclosed in Report Section 2. Proposed site drainage area was calculated were assigned curve numbers based upon mapped soil ratings and surface cover in accordance with the SCS TR-55 drainage methodology.

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Design Basis

Town of Mount Pleasant stormwater code §A227-25 requirements were used as the basis for the subdivision stormwater management design. The proposed subdivision is regulated as a “Major Land Development Activity” and warrants the preparation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with §183. Town code specifies that the proposed impact to runoff conditions resulting from design storm events up to the 50 year-24 hour event must be used as the basis for design. Consideration of the 100 year design storm as required by NYSDEC regulations for peak flow attenuation has been included in this analysis.

Pre-development and post development site conditions were hydrologically modeled and assessed following the SCS Curve Number methodology using HydroCAD V10.22 software. Site specific precipitation data obtained from the Northeast Regional Climate Center was utilized. The following table summarizes design rainfalls modeled for the required storm return periods.

Design Rainfall Depth (Inches)			
1 Year	10 Year	50 Year	100 Year
2.78"	5.13"	7.72"	9.22"
Notes			
1 - Site design rainfall depths obtained through Northeast Regional Climate Center (NRCC) Precip.Net climatology data as endorsed by NYSDEC			

Underground infiltration pipe systems are planned to be provided in conceptual stormwater management areas. Total available storage as presented in the enclosed HydroCAD report has been conceptually modeled considering one node for proposed 60" HDPE pipe infiltration system at a required footprint of approximately 61 feet by 563 feet. Combined footprint area for the four illustrated practice areas significantly exceeds the area necessary to provide the total storage system required in the modeled node. Proposed underground infiltration pipes will fully capture the 100 year storm runoff volume from the portion of the subdivision development captured by centralized drainage. Infiltration systems will be subject to formal design elements based upon the NYSDEC Stormwater Managements Design Manual. Additional individual lot underground infiltration pipe systems are intended to be designed for disconnected lots #30 and #31 that are not modeled towards the total mitigation provided in the conceptual design.

The prepared HydroCAD analysis considers conservative percolation rates of 5 inches per hour that must be confirmed with field testing during the design development process.

Analysis Findings

Detailed HydroCAD analysis reports for both pre-development and post-development site conditions are included in Section 3 of this report. Both conditions evaluate the same total drainage area as reaching the ultimate design point in the Pocantico River basin.

Proposed stormwater infiltration basins lot have been conceptually sited with adequate footprint to mitigate the increase in stormwater runoff created by the new development. The proposed condition HydroCAD report calculates the maximum storage volume from development area “PDA-3A” for the 100 year design storm as approximately 131,500 cubic feet. The total footprint of conceptual stormwater management areas as shown on the drawings measures approximately 90,000 square feet. The required footprint for the modeled pipe system node is limited to only 34,343 sq. feet (61’x563’) by comparison. Further design considering actual pipe system layouts and practice feasibility testing is necessary to assume assumptions used in this analysis. Based upon the limited evaluation however it appears reasonable that all stormwater mitigation requirements necessary for the proposed development can be addressed.

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The following table compares of peak runoff rates leaving the site during pre and post-development conditions. The analysis identifies that the proposed full capture of runoff within subcatchment "PDA-3A" effectively mitigates increased stormwater runoff resulting from the new development. Increased peak flows to individual subcatchment design points as well as the combined site peak flow are mitigated by the proposed concept. It can be noted that additional mitigation to be provided by individual lots #30 and #31 has not been considered in this initial analysis but would further reduce runoff conditions in subcatchment PDA-3B. HydroCAD modeling reports used as the basis for the summary table below can be viewed in Report Section 4.

COMPARISON OF PEAK RUNOFF RATES (C.F.S.)					
Drainage Area	Runoff Condition	Storm Event (Year)			
		1	10	50	100
<i>DA 1</i> <i>North Stream Basin</i>	EDA-1	0.66	4.39	9.70	13.04
	PDA-1	0.23	2.37	5.70	7.86
	Change (%)	-65.15%	-46.01%	-41.24%	-39.72%
<i>DA 2</i> <i>Pocantico Lake</i>	EDA-2	1.75	18.57	45.80	64.00
	PDA-2	0.96	13.12	33.38	46.64
	Change (%)	-45.14%	-29.35%	-27.12%	-27.13%
<i>DA 3</i> <i>On-Site Wetlands</i>	EDA-3	4.64	19.67	39.05	50.82
	PDA-3A	0.00	0.00	0.00	0.00
	PDA-3B	5.36	18.25	33.87	43.14
	Change (%)	15.52%	-7.22%	-13.27%	-15.11%
COMBINED	Existing	6.93	41.20	91.09	122.84
	Proposed	6.45	27.16	57.00	77.38
	Change (%)	-6.93%	-34.08%	-37.42%	-37.01%

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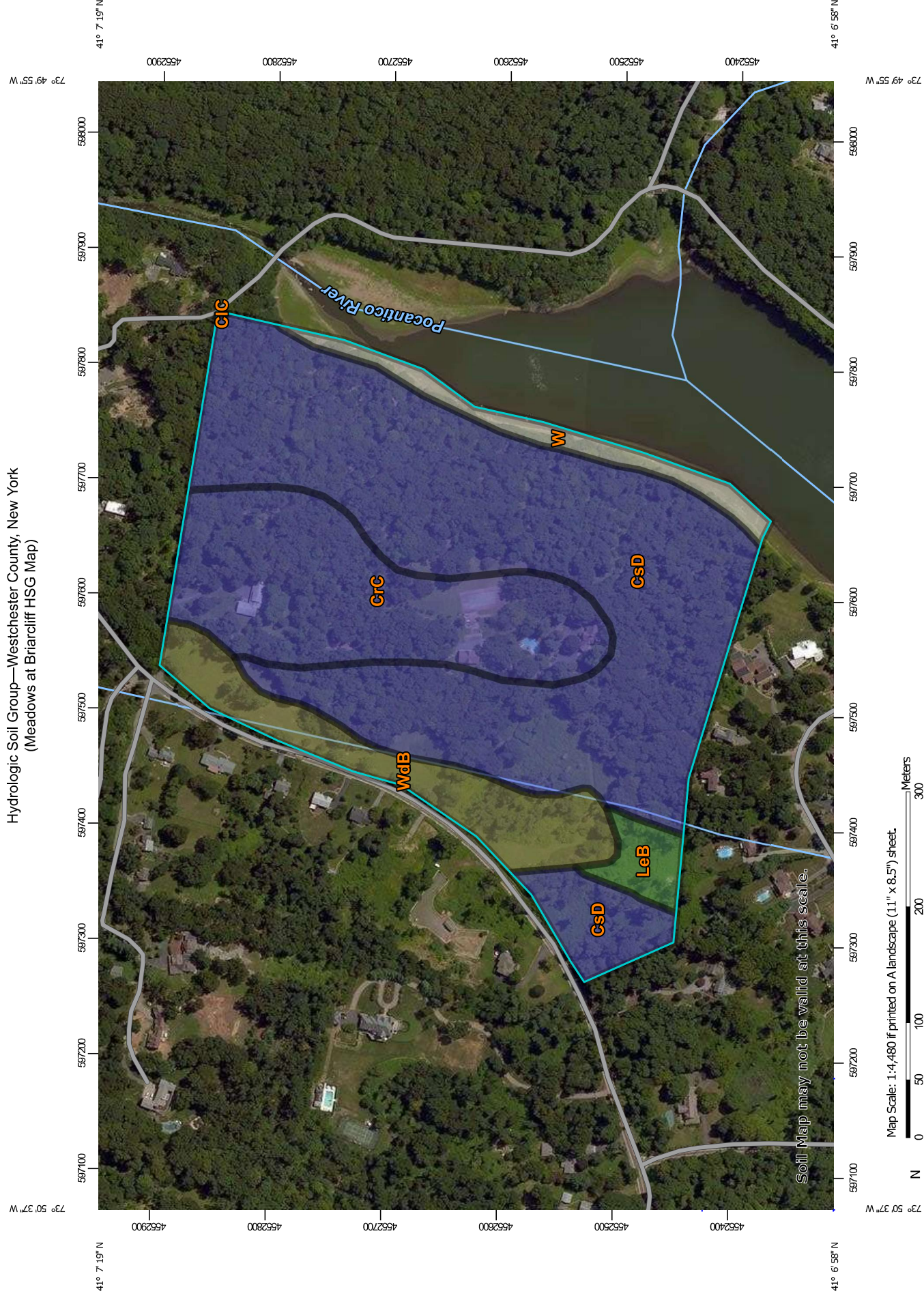
2. SUBDIVISION DRAINAGE AREA MAPS

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3. USDA SOIL MAP

Hydrologic Soil Group—Westchester County, New York (Meadows at Briarcliff HSG Map)



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

C

C/D

D

Not rated or not available

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Westchester County, New York

Survey Area Data: Version 16, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 21, 2014—Aug 27, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CIC	Charlton fine sandy loam, 8 to 15 percent slopes, very stony	B	0.0	0.0%
CrC	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	B	10.0	22.5%
CsD	Chatfield-Charlton complex, 15 to 35 percent slopes, very rocky	B	26.7	60.2%
LeB	Leicester loam, 2 to 8 percent slopes, very stony	A/D	1.1	2.4%
W	Water		1.8	4.1%
WdB	Woodbridge loam, 3 to 8 percent slopes	C/D	4.7	10.7%
Totals for Area of Interest			44.3	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

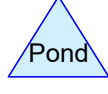
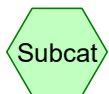
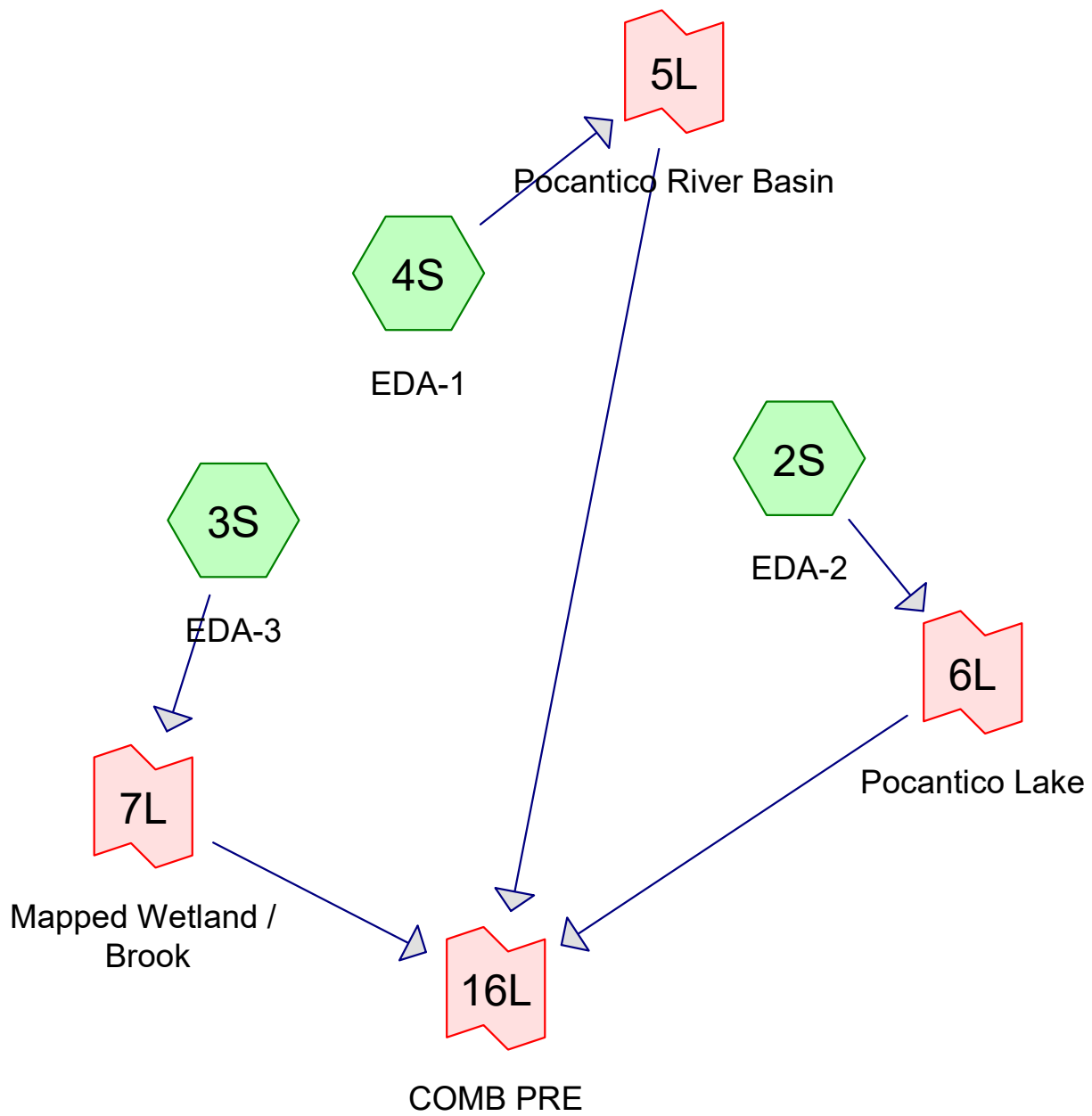
Component Percent Cutoff: None Specified

Tie-break Rule: Higher

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4. SUBDIVISION HYDROCAD REPORTS



Routing Diagram for Meadows Briarcliff_05032021
 Prepared by Wasp Engineering Group, PLLC, Printed 5/3/2021
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Meadows Briarcliff_05032021*Type III 24-hr 1 Year Rainfall=2.72"*

Prepared by Wasp Engineering Group, PLLC

Printed 5/3/2021

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Page 2

Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2S: EDA-2

Runoff Area=872,905 sf 4.09% Impervious Runoff Depth=0.24"
Flow Length=1,000' Tc=22.8 min CN=60 Runoff=1.75 cfs 17,368 cf

Subcatchment 3S: EDA-3

Runoff Area=595,781 sf 30.45% Impervious Runoff Depth=0.60"
Flow Length=1,190' Tc=30.5 min CN=71 Runoff=4.64 cfs 30,031 cf

Subcatchment 4S: EDA-1

Runoff Area=135,489 sf 12.59% Impervious Runoff Depth=0.38"
Flow Length=460' Tc=16.5 min CN=65 Runoff=0.66 cfs 4,337 cf

Link 5L: Pocantico River Basin

Inflow=0.66 cfs 4,337 cf
Primary=0.66 cfs 4,337 cf

Link 6L: Pocantico Lake

Inflow=1.75 cfs 17,368 cf
Primary=1.75 cfs 17,368 cf

Link 7L: Mapped Wetland / Brook

Inflow=4.64 cfs 30,031 cf
Primary=4.64 cfs 30,031 cf

Link 16L: COMB PRE

Inflow=6.93 cfs 51,737 cf
Primary=6.93 cfs 51,737 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 51,737 cf Average Runoff Depth = 0.39"
85.40% Pervious = 1,370,019 sf 14.60% Impervious = 234,156 sf

Summary for Subcatchment 2S: EDA-2

Runoff = 1.75 cfs @ 12.56 hrs, Volume= 17,368 cf, Depth= 0.24"

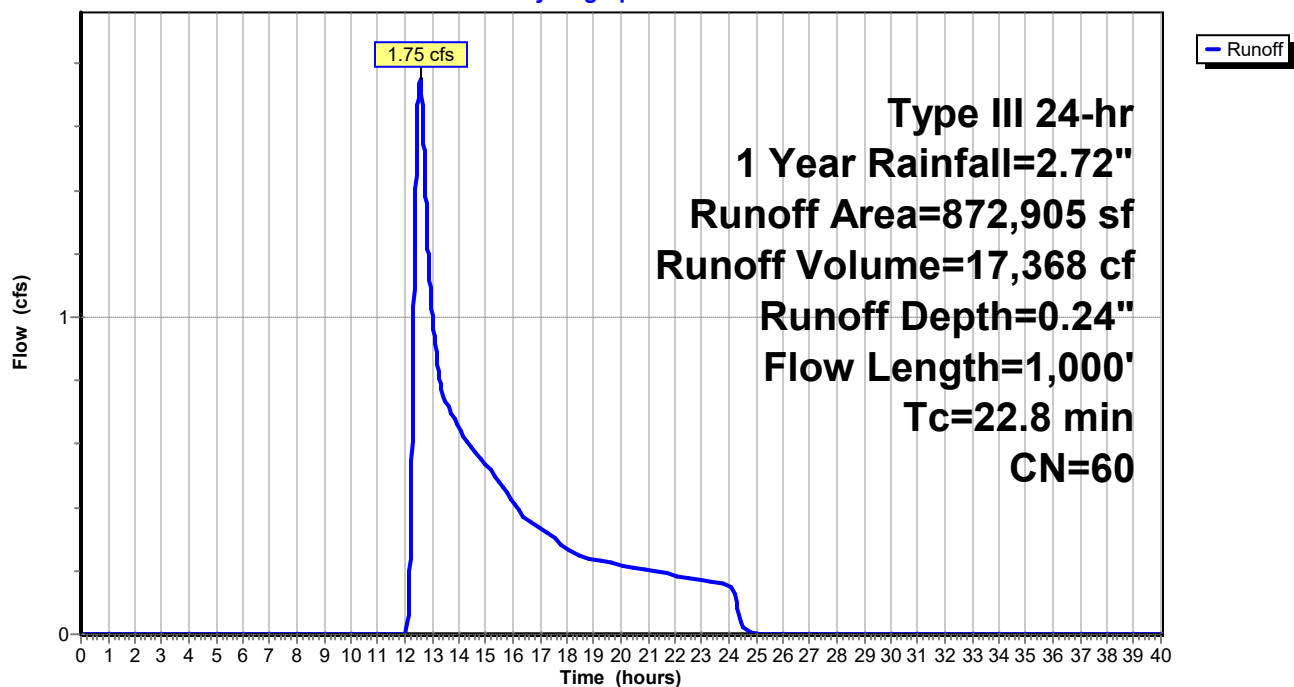
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.72"

	Area (sf)	CN	Description
*	35,674	98	Ex. IMP Pavement, Rooftops
	74,836	61	>75% Grass cover, Good, HSG B
	762,395	58	Woods/grass comb., Good, HSG B
	872,905	60	Weighted Average
	837,231		95.91% Pervious Area
	35,674		4.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0520	0.12		Sheet Flow, Shallow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
4.2	280	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
0.1	40	0.0670	5.25		Shallow Concentrated Flow, Driveway Crossing Paved Kv= 20.3 fps
4.3	580	0.2030	2.25		Shallow Concentrated Flow, Shallow Conc. Woodland Woodland Kv= 5.0 fps
22.8	1,000	Total			

Subcatchment 2S: EDA-2

Hydrograph



Hydrograph for Subcatchment 2S: EDA-2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	2.72	0.24	0.00
0.50	0.01	0.00	0.00	26.50	2.72	0.24	0.00
1.00	0.03	0.00	0.00	27.00	2.72	0.24	0.00
1.50	0.04	0.00	0.00	27.50	2.72	0.24	0.00
2.00	0.05	0.00	0.00	28.00	2.72	0.24	0.00
2.50	0.07	0.00	0.00	28.50	2.72	0.24	0.00
3.00	0.08	0.00	0.00	29.00	2.72	0.24	0.00
3.50	0.10	0.00	0.00	29.50	2.72	0.24	0.00
4.00	0.12	0.00	0.00	30.00	2.72	0.24	0.00
4.50	0.14	0.00	0.00	30.50	2.72	0.24	0.00
5.00	0.15	0.00	0.00	31.00	2.72	0.24	0.00
5.50	0.17	0.00	0.00	31.50	2.72	0.24	0.00
6.00	0.20	0.00	0.00	32.00	2.72	0.24	0.00
6.50	0.22	0.00	0.00	32.50	2.72	0.24	0.00
7.00	0.25	0.00	0.00	33.00	2.72	0.24	0.00
7.50	0.28	0.00	0.00	33.50	2.72	0.24	0.00
8.00	0.31	0.00	0.00	34.00	2.72	0.24	0.00
8.50	0.35	0.00	0.00	34.50	2.72	0.24	0.00
9.00	0.40	0.00	0.00	35.00	2.72	0.24	0.00
9.50	0.45	0.00	0.00	35.50	2.72	0.24	0.00
10.00	0.51	0.00	0.00	36.00	2.72	0.24	0.00
10.50	0.59	0.00	0.00	36.50	2.72	0.24	0.00
11.00	0.68	0.00	0.00	37.00	2.72	0.24	0.00
11.50	0.81	0.00	0.00	37.50	2.72	0.24	0.00
12.00	1.36	0.00	0.00	38.00	2.72	0.24	0.00
12.50	1.91	0.05	1.70	38.50	2.72	0.24	0.00
13.00	2.04	0.07	1.02	39.00	2.72	0.24	0.00
13.50	2.13	0.09	0.74	39.50	2.72	0.24	0.00
14.00	2.21	0.10	0.65	40.00	2.72	0.24	0.00
14.50	2.27	0.12	0.58				
15.00	2.32	0.13	0.53				
15.50	2.37	0.14	0.48				
16.00	2.41	0.15	0.42				
16.50	2.44	0.16	0.36				
17.00	2.47	0.17	0.33				
17.50	2.50	0.17	0.30				
18.00	2.52	0.18	0.27				
18.50	2.55	0.19	0.25				
19.00	2.57	0.19	0.24				
19.50	2.58	0.20	0.23				
20.00	2.60	0.20	0.22				
20.50	2.62	0.21	0.21				
21.00	2.64	0.21	0.20				
21.50	2.65	0.22	0.19				
22.00	2.67	0.22	0.19				
22.50	2.68	0.23	0.18				
23.00	2.70	0.23	0.17				
23.50	2.71	0.24	0.16				
24.00	2.72	0.24	0.15				
24.50	2.72	0.24	0.02				
25.00	2.72	0.24	0.00				
25.50	2.72	0.24	0.00				

Summary for Subcatchment 3S: EDA-3

Runoff = 4.64 cfs @ 12.50 hrs, Volume= 30,031 cf, Depth= 0.60"

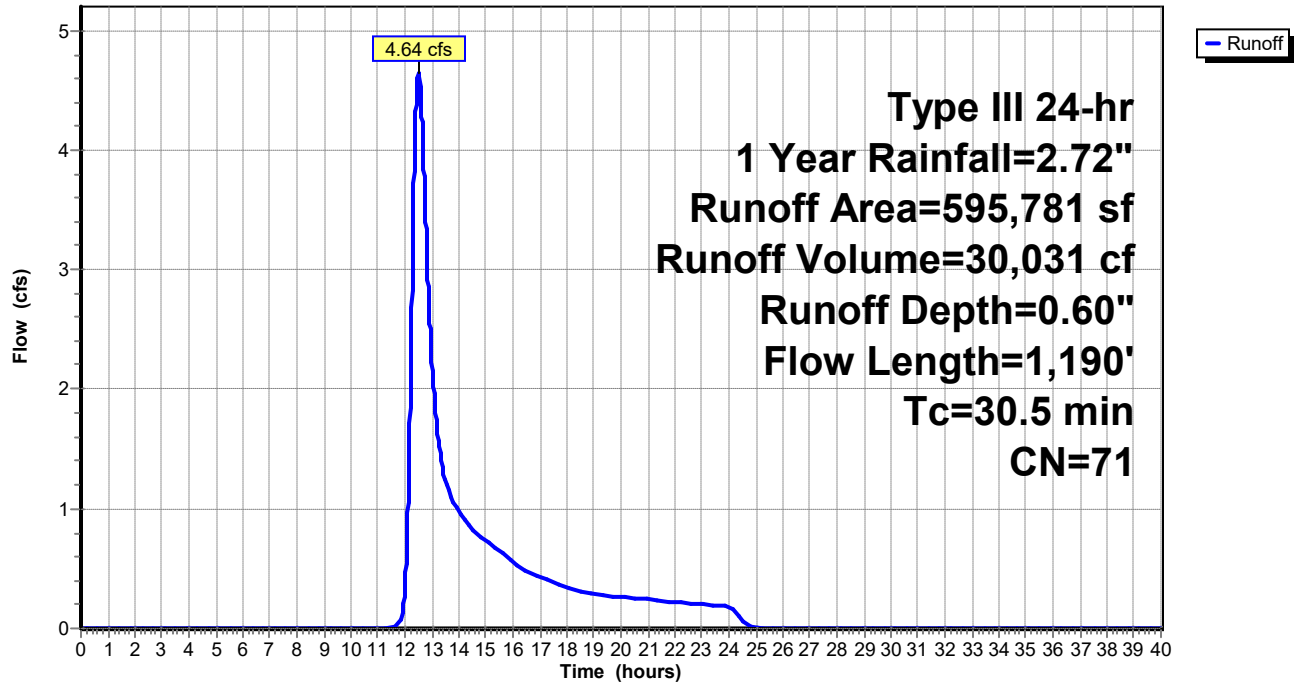
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.72"

Area (sf)	CN	Description
* 7,168	98	Ex. IMP Pavement, Rooftops
90,834	61	>75% Grass cover, Good, HSG B
260,380	58	Woods/grass comb., Good, HSG B
42,355	72	Woods/grass comb., Good, HSG C
20,791	32	Woods/grass comb., Good, HSG A
* 174,253	98	Wetlands, HSG C
595,781	71	Weighted Average
414,360		69.55% Pervious Area
181,421		30.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
1.7	200	0.1600	2.00		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.9	210	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.2	200	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.1	400	0.1095	0.83		Shallow Concentrated Flow, Shallow Conc. Wetland Forest w/Heavy Litter Kv= 2.5 fps
0.2	80	0.0875	5.87	46.95	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.5	1,190	Total			

Subcatchment 3S: EDA-3

Hydrograph



Hydrograph for Subcatchment 3S: EDA-3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	2.72	0.60	0.00
0.50	0.01	0.00	0.00	26.50	2.72	0.60	0.00
1.00	0.03	0.00	0.00	27.00	2.72	0.60	0.00
1.50	0.04	0.00	0.00	27.50	2.72	0.60	0.00
2.00	0.05	0.00	0.00	28.00	2.72	0.60	0.00
2.50	0.07	0.00	0.00	28.50	2.72	0.60	0.00
3.00	0.08	0.00	0.00	29.00	2.72	0.60	0.00
3.50	0.10	0.00	0.00	29.50	2.72	0.60	0.00
4.00	0.12	0.00	0.00	30.00	2.72	0.60	0.00
4.50	0.14	0.00	0.00	30.50	2.72	0.60	0.00
5.00	0.15	0.00	0.00	31.00	2.72	0.60	0.00
5.50	0.17	0.00	0.00	31.50	2.72	0.60	0.00
6.00	0.20	0.00	0.00	32.00	2.72	0.60	0.00
6.50	0.22	0.00	0.00	32.50	2.72	0.60	0.00
7.00	0.25	0.00	0.00	33.00	2.72	0.60	0.00
7.50	0.28	0.00	0.00	33.50	2.72	0.60	0.00
8.00	0.31	0.00	0.00	34.00	2.72	0.60	0.00
8.50	0.35	0.00	0.00	34.50	2.72	0.60	0.00
9.00	0.40	0.00	0.00	35.00	2.72	0.60	0.00
9.50	0.45	0.00	0.00	35.50	2.72	0.60	0.00
10.00	0.51	0.00	0.00	36.00	2.72	0.60	0.00
10.50	0.59	0.00	0.00	36.50	2.72	0.60	0.00
11.00	0.68	0.00	0.00	37.00	2.72	0.60	0.00
11.50	0.81	0.00	0.00	37.50	2.72	0.60	0.00
12.00	1.36	0.06	0.33	38.00	2.72	0.60	0.00
12.50	1.91	0.23	4.64	38.50	2.72	0.60	0.00
13.00	2.04	0.28	2.21	39.00	2.72	0.60	0.00
13.50	2.13	0.32	1.23	39.50	2.72	0.60	0.00
14.00	2.21	0.35	0.97	40.00	2.72	0.60	0.00
14.50	2.27	0.38	0.82				
15.00	2.32	0.41	0.74				
15.50	2.37	0.43	0.65				
16.00	2.41	0.45	0.56				
16.50	2.44	0.46	0.48				
17.00	2.47	0.48	0.43				
17.50	2.50	0.49	0.39				
18.00	2.52	0.50	0.34				
18.50	2.55	0.51	0.31				
19.00	2.57	0.52	0.29				
19.50	2.58	0.53	0.28				
20.00	2.60	0.54	0.26				
20.50	2.62	0.55	0.25				
21.00	2.64	0.56	0.24				
21.50	2.65	0.57	0.23				
22.00	2.67	0.58	0.22				
22.50	2.68	0.58	0.21				
23.00	2.70	0.59	0.20				
23.50	2.71	0.60	0.19				
24.00	2.72	0.60	0.18				
24.50	2.72	0.60	0.06				
25.00	2.72	0.60	0.01				
25.50	2.72	0.60	0.00				

Summary for Subcatchment 4S: EDA-1

Runoff = 0.66 cfs @ 12.33 hrs, Volume= 4,337 cf, Depth= 0.38"

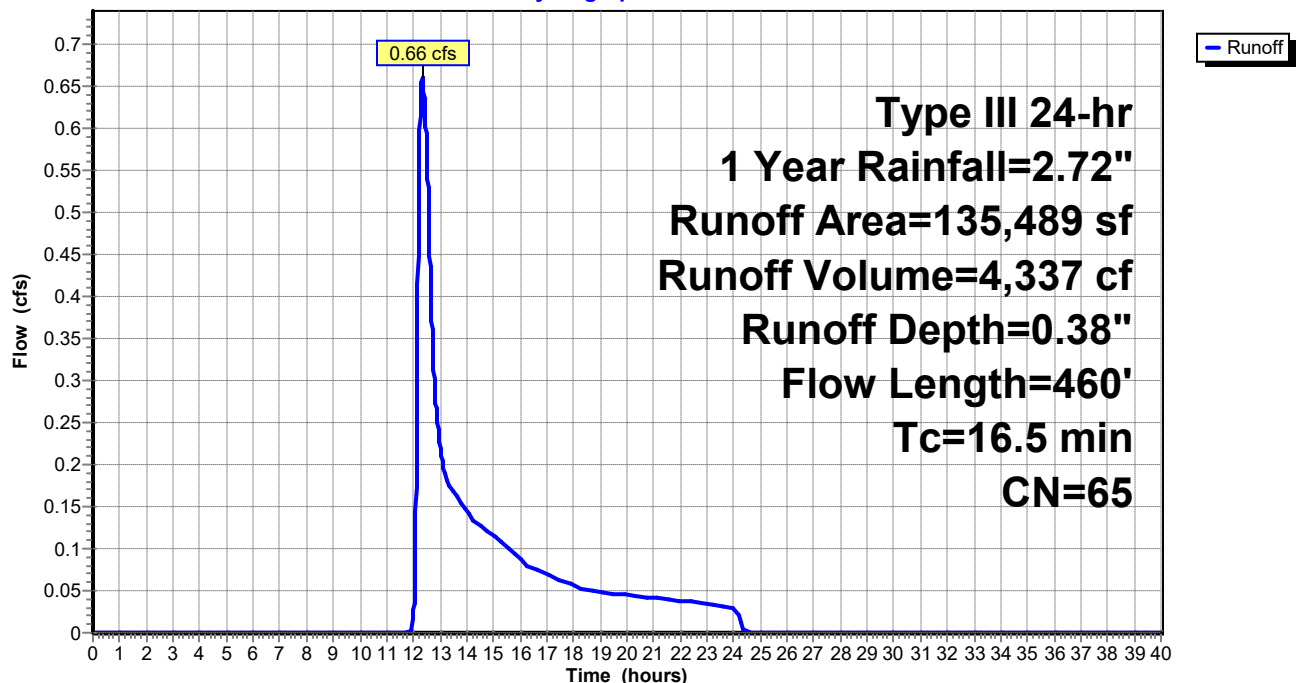
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.72"

Area (sf)	CN	Description
* 17,061	98	Ex. IMP Pavement, Rooftops
40,462	61	>75% Grass cover, Good, HSG B
8,644	72	Woods/grass comb., Good, HSG C
69,322	58	Woods/grass comb., Good, HSG B
135,489	65	Weighted Average
118,428		87.41% Pervious Area
17,061		12.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0640	0.13		Sheet Flow, Woods Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
3.0	230	0.0665	1.29		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
0.4	130	0.0608	5.01		Shallow Concentrated Flow, Driveway Flow
					Paved Kv= 20.3 fps
16.5	460	Total			

Subcatchment 4S: EDA-1

Hydrograph



Hydrograph for Subcatchment 4S: EDA-1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	2.72	0.38	0.00
0.50	0.01	0.00	0.00	26.50	2.72	0.38	0.00
1.00	0.03	0.00	0.00	27.00	2.72	0.38	0.00
1.50	0.04	0.00	0.00	27.50	2.72	0.38	0.00
2.00	0.05	0.00	0.00	28.00	2.72	0.38	0.00
2.50	0.07	0.00	0.00	28.50	2.72	0.38	0.00
3.00	0.08	0.00	0.00	29.00	2.72	0.38	0.00
3.50	0.10	0.00	0.00	29.50	2.72	0.38	0.00
4.00	0.12	0.00	0.00	30.00	2.72	0.38	0.00
4.50	0.14	0.00	0.00	30.50	2.72	0.38	0.00
5.00	0.15	0.00	0.00	31.00	2.72	0.38	0.00
5.50	0.17	0.00	0.00	31.50	2.72	0.38	0.00
6.00	0.20	0.00	0.00	32.00	2.72	0.38	0.00
6.50	0.22	0.00	0.00	32.50	2.72	0.38	0.00
7.00	0.25	0.00	0.00	33.00	2.72	0.38	0.00
7.50	0.28	0.00	0.00	33.50	2.72	0.38	0.00
8.00	0.31	0.00	0.00	34.00	2.72	0.38	0.00
8.50	0.35	0.00	0.00	34.50	2.72	0.38	0.00
9.00	0.40	0.00	0.00	35.00	2.72	0.38	0.00
9.50	0.45	0.00	0.00	35.50	2.72	0.38	0.00
10.00	0.51	0.00	0.00	36.00	2.72	0.38	0.00
10.50	0.59	0.00	0.00	36.50	2.72	0.38	0.00
11.00	0.68	0.00	0.00	37.00	2.72	0.38	0.00
11.50	0.81	0.00	0.00	37.50	2.72	0.38	0.00
12.00	1.36	0.01	0.01	38.00	2.72	0.38	0.00
12.50	1.91	0.11	0.58	38.50	2.72	0.38	0.00
13.00	2.04	0.15	0.23	39.00	2.72	0.38	0.00
13.50	2.13	0.17	0.17	39.50	2.72	0.38	0.00
14.00	2.21	0.20	0.15	40.00	2.72	0.38	0.00
14.50	2.27	0.22	0.13				
15.00	2.32	0.23	0.12				
15.50	2.37	0.25	0.10				
16.00	2.41	0.26	0.09				
16.50	2.44	0.28	0.08				
17.00	2.47	0.29	0.07				
17.50	2.50	0.30	0.06				
18.00	2.52	0.31	0.06				
18.50	2.55	0.31	0.05				
19.00	2.57	0.32	0.05				
19.50	2.58	0.33	0.05				
20.00	2.60	0.34	0.04				
20.50	2.62	0.34	0.04				
21.00	2.64	0.35	0.04				
21.50	2.65	0.36	0.04				
22.00	2.67	0.36	0.04				
22.50	2.68	0.37	0.04				
23.00	2.70	0.37	0.03				
23.50	2.71	0.38	0.03				
24.00	2.72	0.38	0.03				
24.50	2.72	0.38	0.00				
25.00	2.72	0.38	0.00				
25.50	2.72	0.38	0.00				

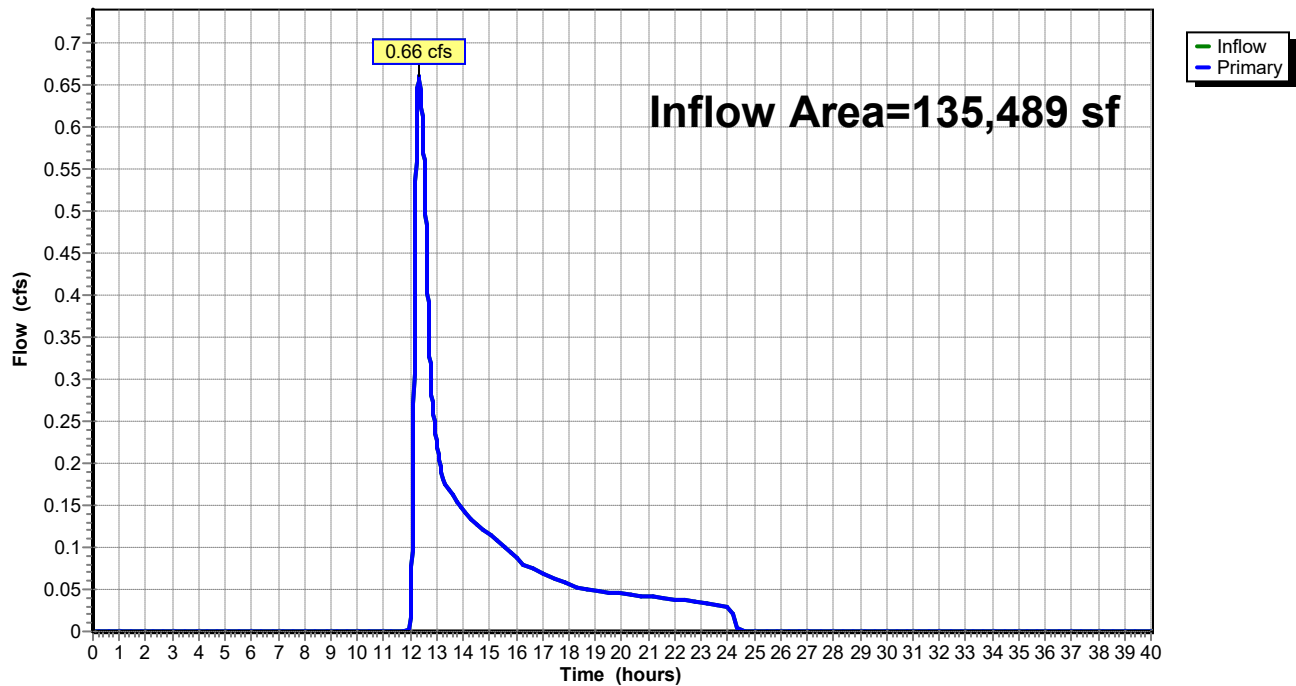
Summary for Link 5L: Pocantico River Basin

Inflow Area = 135,489 sf, 12.59% Impervious, Inflow Depth = 0.38" for 1 Year event
 Inflow = 0.66 cfs @ 12.33 hrs, Volume= 4,337 cf
 Primary = 0.66 cfs @ 12.33 hrs, Volume= 4,337 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 5L: Pocantico River Basin

Hydrograph



Hydrograph for Link 5L: Pocantico River Basin

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00	36.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	36.50	0.00	0.00	0.00
11.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00
11.50	0.00	0.00	0.00	37.50	0.00	0.00	0.00
12.00	0.01	0.00	0.01	38.00	0.00	0.00	0.00
12.50	0.58	0.00	0.58	38.50	0.00	0.00	0.00
13.00	0.23	0.00	0.23	39.00	0.00	0.00	0.00
13.50	0.17	0.00	0.17	39.50	0.00	0.00	0.00
14.00	0.15	0.00	0.15	40.00	0.00	0.00	0.00
14.50	0.13	0.00	0.13				
15.00	0.12	0.00	0.12				
15.50	0.10	0.00	0.10				
16.00	0.09	0.00	0.09				
16.50	0.08	0.00	0.08				
17.00	0.07	0.00	0.07				
17.50	0.06	0.00	0.06				
18.00	0.06	0.00	0.06				
18.50	0.05	0.00	0.05				
19.00	0.05	0.00	0.05				
19.50	0.05	0.00	0.05				
20.00	0.04	0.00	0.04				
20.50	0.04	0.00	0.04				
21.00	0.04	0.00	0.04				
21.50	0.04	0.00	0.04				
22.00	0.04	0.00	0.04				
22.50	0.04	0.00	0.04				
23.00	0.03	0.00	0.03				
23.50	0.03	0.00	0.03				
24.00	0.03	0.00	0.03				
24.50	0.00	0.00	0.00				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

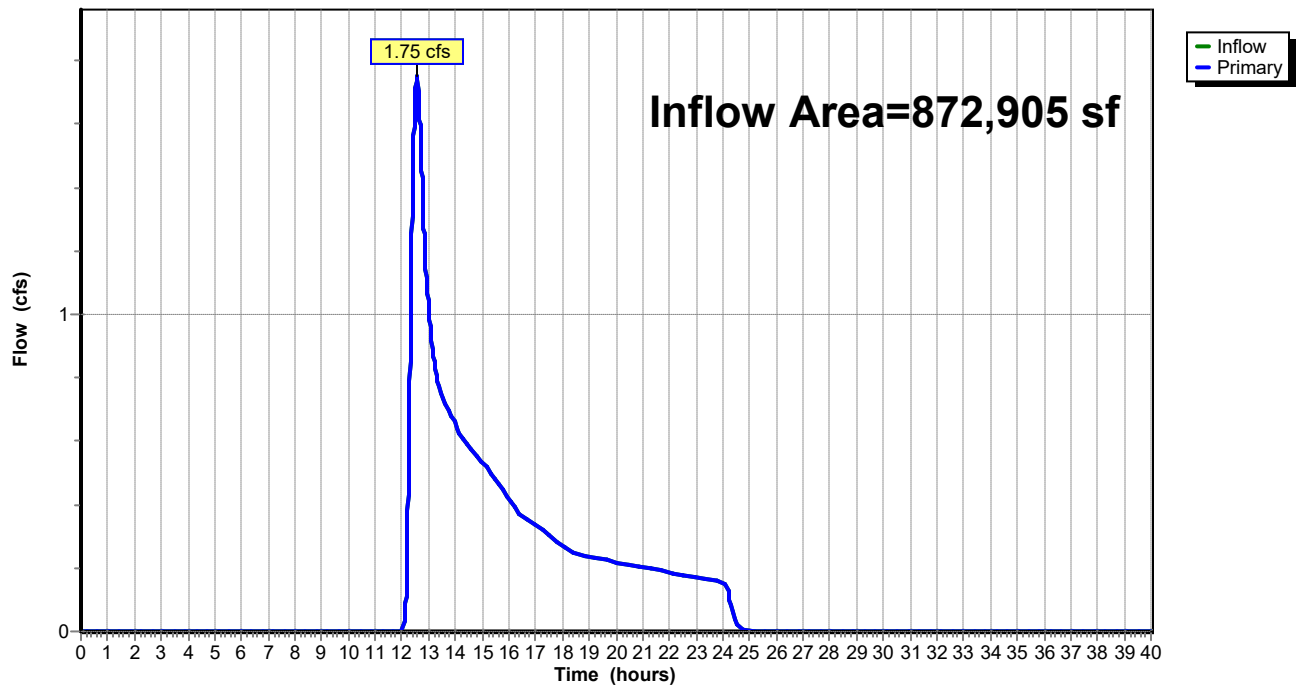
Summary for Link 6L: Pocantico Lake

Inflow Area = 872,905 sf, 4.09% Impervious, Inflow Depth = 0.24" for 1 Year event
 Inflow = 1.75 cfs @ 12.56 hrs, Volume= 17,368 cf
 Primary = 1.75 cfs @ 12.56 hrs, Volume= 17,368 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 6L: Pocantico Lake

Hydrograph



Hydrograph for Link 6L: Pocantico Lake

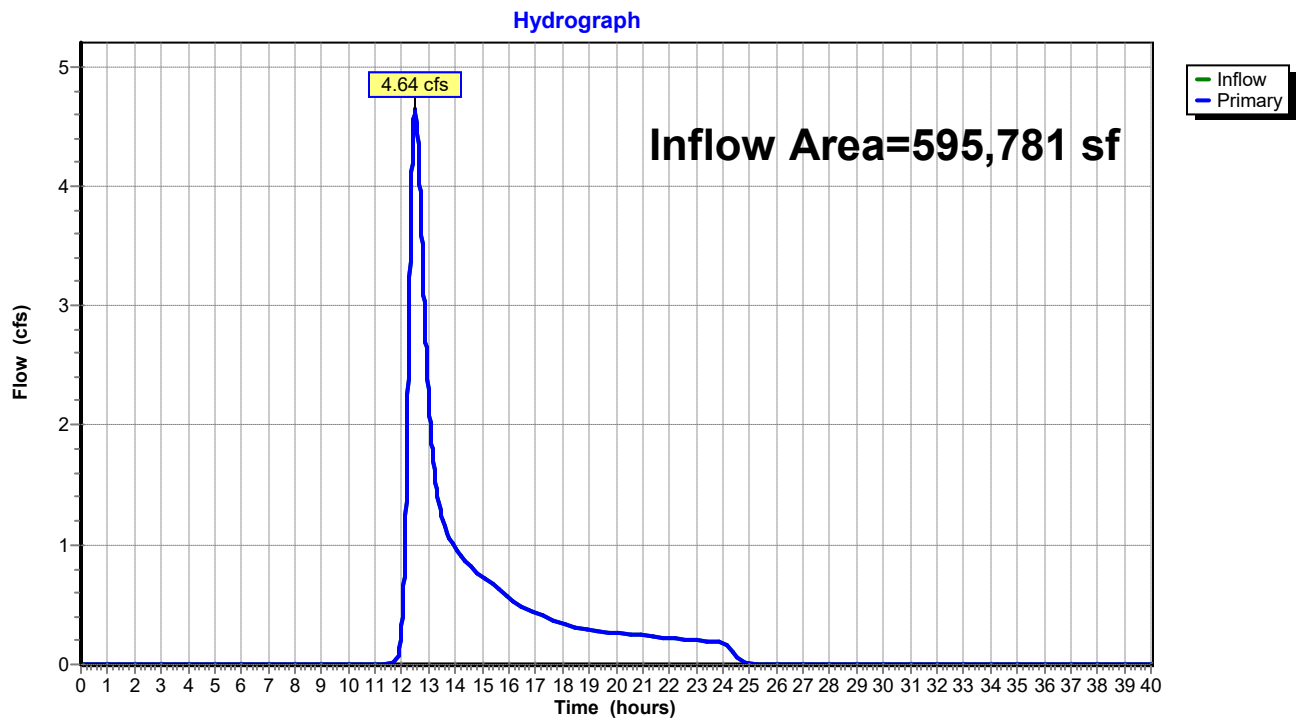
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00	36.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	36.50	0.00	0.00	0.00
11.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00
11.50	0.00	0.00	0.00	37.50	0.00	0.00	0.00
12.00	0.00	0.00	0.00	38.00	0.00	0.00	0.00
12.50	1.70	0.00	1.70	38.50	0.00	0.00	0.00
13.00	1.02	0.00	1.02	39.00	0.00	0.00	0.00
13.50	0.74	0.00	0.74	39.50	0.00	0.00	0.00
14.00	0.65	0.00	0.65	40.00	0.00	0.00	0.00
14.50	0.58	0.00	0.58				
15.00	0.53	0.00	0.53				
15.50	0.48	0.00	0.48				
16.00	0.42	0.00	0.42				
16.50	0.36	0.00	0.36				
17.00	0.33	0.00	0.33				
17.50	0.30	0.00	0.30				
18.00	0.27	0.00	0.27				
18.50	0.25	0.00	0.25				
19.00	0.24	0.00	0.24				
19.50	0.23	0.00	0.23				
20.00	0.22	0.00	0.22				
20.50	0.21	0.00	0.21				
21.00	0.20	0.00	0.20				
21.50	0.19	0.00	0.19				
22.00	0.19	0.00	0.19				
22.50	0.18	0.00	0.18				
23.00	0.17	0.00	0.17				
23.50	0.16	0.00	0.16				
24.00	0.15	0.00	0.15				
24.50	0.02	0.00	0.02				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

Summary for Link 7L: Mapped Wetland / Brook

Inflow Area = 595,781 sf, 30.45% Impervious, Inflow Depth = 0.60" for 1 Year event
 Inflow = 4.64 cfs @ 12.50 hrs, Volume= 30,031 cf
 Primary = 4.64 cfs @ 12.50 hrs, Volume= 30,031 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 7L: Mapped Wetland / Brook



Hydrograph for Link 7L: Mapped Wetland / Brook

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00	36.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	36.50	0.00	0.00	0.00
11.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00
11.50	0.00	0.00	0.00	37.50	0.00	0.00	0.00
12.00	0.33	0.00	0.33	38.00	0.00	0.00	0.00
12.50	4.64	0.00	4.64	38.50	0.00	0.00	0.00
13.00	2.21	0.00	2.21	39.00	0.00	0.00	0.00
13.50	1.23	0.00	1.23	39.50	0.00	0.00	0.00
14.00	0.97	0.00	0.97	40.00	0.00	0.00	0.00
14.50	0.82	0.00	0.82				
15.00	0.74	0.00	0.74				
15.50	0.65	0.00	0.65				
16.00	0.56	0.00	0.56				
16.50	0.48	0.00	0.48				
17.00	0.43	0.00	0.43				
17.50	0.39	0.00	0.39				
18.00	0.34	0.00	0.34				
18.50	0.31	0.00	0.31				
19.00	0.29	0.00	0.29				
19.50	0.28	0.00	0.28				
20.00	0.26	0.00	0.26				
20.50	0.25	0.00	0.25				
21.00	0.24	0.00	0.24				
21.50	0.23	0.00	0.23				
22.00	0.22	0.00	0.22				
22.50	0.21	0.00	0.21				
23.00	0.20	0.00	0.20				
23.50	0.19	0.00	0.19				
24.00	0.18	0.00	0.18				
24.50	0.06	0.00	0.06				
25.00	0.01	0.00	0.01				
25.50	0.00	0.00	0.00				

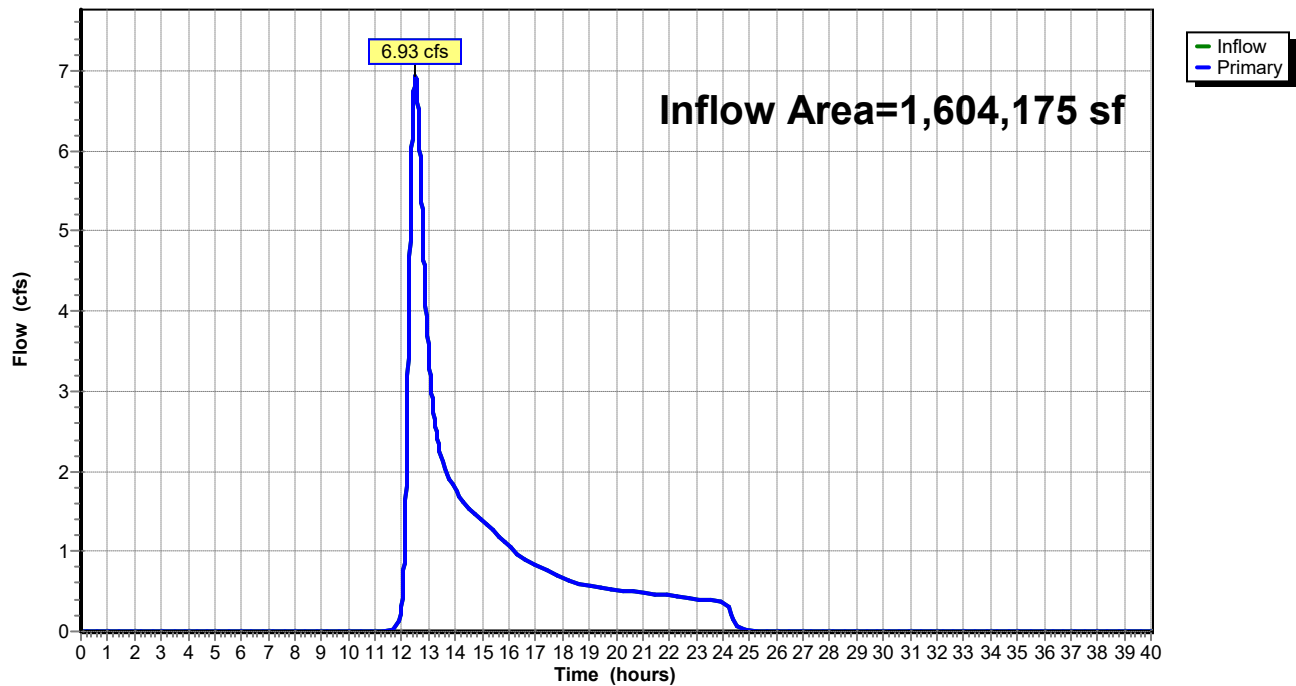
Summary for Link 16L: COMB PRE

Inflow Area = 1,604,175 sf, 14.60% Impervious, Inflow Depth = 0.39" for 1 Year event
 Inflow = 6.93 cfs @ 12.51 hrs, Volume= 51,737 cf
 Primary = 6.93 cfs @ 12.51 hrs, Volume= 51,737 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 16L: COMB PRE

Hydrograph



Hydrograph for Link 16L: COMB PRE

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00	36.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	36.50	0.00	0.00	0.00
11.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00
11.50	0.00	0.00	0.00	37.50	0.00	0.00	0.00
12.00	0.35	0.00	0.35	38.00	0.00	0.00	0.00
12.50	6.93	0.00	6.93	38.50	0.00	0.00	0.00
13.00	3.45	0.00	3.45	39.00	0.00	0.00	0.00
13.50	2.13	0.00	2.13	39.50	0.00	0.00	0.00
14.00	1.77	0.00	1.77	40.00	0.00	0.00	0.00
14.50	1.53	0.00	1.53				
15.00	1.39	0.00	1.39				
15.50	1.23	0.00	1.23				
16.00	1.07	0.00	1.07				
16.50	0.92	0.00	0.92				
17.00	0.83	0.00	0.83				
17.50	0.75	0.00	0.75				
18.00	0.67	0.00	0.67				
18.50	0.60	0.00	0.60				
19.00	0.57	0.00	0.57				
19.50	0.55	0.00	0.55				
20.00	0.53	0.00	0.53				
20.50	0.50	0.00	0.50				
21.00	0.48	0.00	0.48				
21.50	0.47	0.00	0.47				
22.00	0.45	0.00	0.45				
22.50	0.43	0.00	0.43				
23.00	0.41	0.00	0.41				
23.50	0.39	0.00	0.39				
24.00	0.36	0.00	0.36				
24.50	0.09	0.00	0.09				
25.00	0.01	0.00	0.01				
25.50	0.00	0.00	0.00				

Meadows Briarcliff_05032021*Type III 24-hr 10 Year Rainfall=5.13"*

Prepared by Wasp Engineering Group, PLLC

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2S: EDA-2

Runoff Area=872,905 sf 4.09% Impervious Runoff Depth=1.38"
Flow Length=1,000' Tc=22.8 min CN=60 Runoff=18.57 cfs 100,212 cf

Subcatchment 3S: EDA-3

Runoff Area=595,781 sf 30.45% Impervious Runoff Depth=2.22"
Flow Length=1,190' Tc=30.5 min CN=71 Runoff=19.67 cfs 109,984 cf

Subcatchment 4S: EDA-1

Runoff Area=135,489 sf 12.59% Impervious Runoff Depth=1.74"
Flow Length=460' Tc=16.5 min CN=65 Runoff=4.39 cfs 19,653 cf

Link 5L: Pocantico River Basin

Inflow=4.39 cfs 19,653 cf
Primary=4.39 cfs 19,653 cf

Link 6L: Pocantico Lake

Inflow=18.57 cfs 100,212 cf
Primary=18.57 cfs 100,212 cf

Link 7L: Mapped Wetland / Brook

Inflow=19.67 cfs 109,984 cf
Primary=19.67 cfs 109,984 cf

Link 16L: COMB PRE

Inflow=41.20 cfs 229,849 cf
Primary=41.20 cfs 229,849 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 229,849 cf Average Runoff Depth = 1.72"
85.40% Pervious = 1,370,019 sf 14.60% Impervious = 234,156 sf

Summary for Subcatchment 2S: EDA-2

Runoff = 18.57 cfs @ 12.36 hrs, Volume= 100,212 cf, Depth= 1.38"

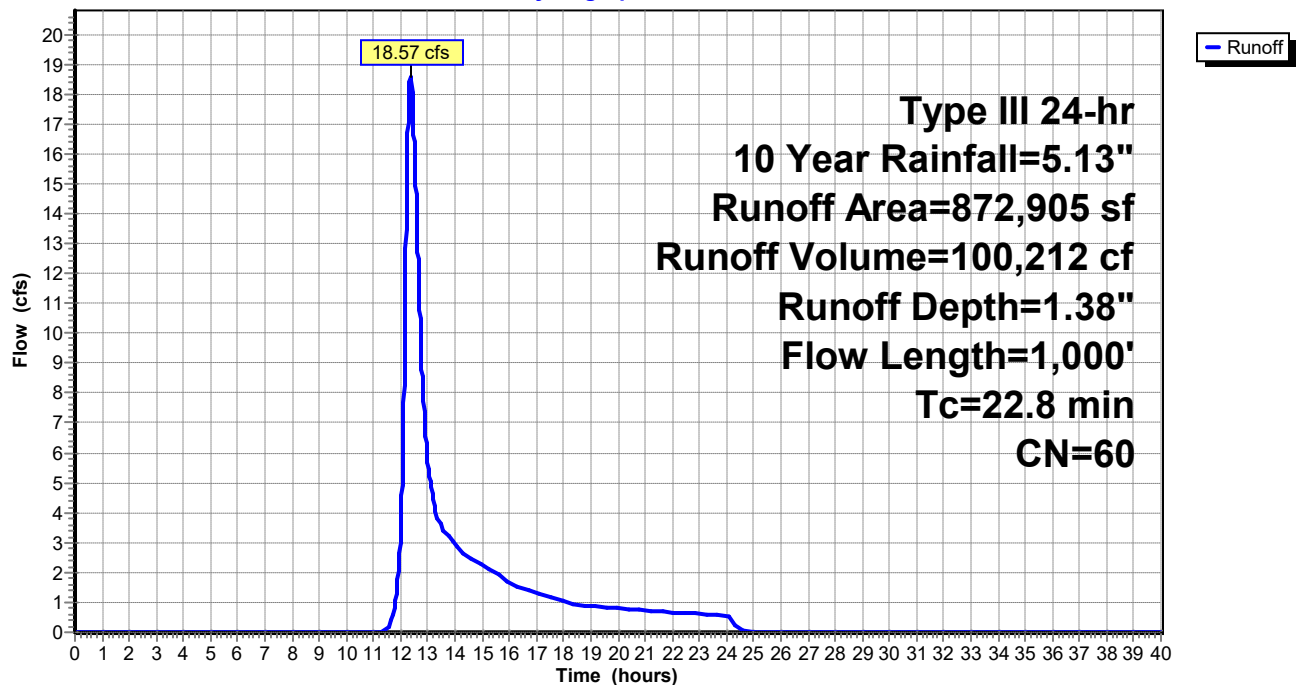
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.13"

	Area (sf)	CN	Description
*	35,674	98	Ex. IMP Pavement, Rooftops
	74,836	61	>75% Grass cover, Good, HSG B
	762,395	58	Woods/grass comb., Good, HSG B
	872,905	60	Weighted Average
	837,231		95.91% Pervious Area
	35,674		4.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0520	0.12		Sheet Flow, Shallow Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
4.2	280	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods
					Woodland Kv= 5.0 fps
0.1	40	0.0670	5.25		Shallow Concentrated Flow, Driveway Crossing
					Paved Kv= 20.3 fps
4.3	580	0.2030	2.25		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
22.8	1,000	Total			

Subcatchment 2S: EDA-2

Hydrograph



Hydrograph for Subcatchment 2S: EDA-2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	5.13	1.38	0.00
0.50	0.03	0.00	0.00	26.50	5.13	1.38	0.00
1.00	0.05	0.00	0.00	27.00	5.13	1.38	0.00
1.50	0.08	0.00	0.00	27.50	5.13	1.38	0.00
2.00	0.10	0.00	0.00	28.00	5.13	1.38	0.00
2.50	0.13	0.00	0.00	28.50	5.13	1.38	0.00
3.00	0.16	0.00	0.00	29.00	5.13	1.38	0.00
3.50	0.19	0.00	0.00	29.50	5.13	1.38	0.00
4.00	0.22	0.00	0.00	30.00	5.13	1.38	0.00
4.50	0.25	0.00	0.00	30.50	5.13	1.38	0.00
5.00	0.29	0.00	0.00	31.00	5.13	1.38	0.00
5.50	0.33	0.00	0.00	31.50	5.13	1.38	0.00
6.00	0.37	0.00	0.00	32.00	5.13	1.38	0.00
6.50	0.41	0.00	0.00	32.50	5.13	1.38	0.00
7.00	0.46	0.00	0.00	33.00	5.13	1.38	0.00
7.50	0.52	0.00	0.00	33.50	5.13	1.38	0.00
8.00	0.58	0.00	0.00	34.00	5.13	1.38	0.00
8.50	0.66	0.00	0.00	34.50	5.13	1.38	0.00
9.00	0.75	0.00	0.00	35.00	5.13	1.38	0.00
9.50	0.85	0.00	0.00	35.50	5.13	1.38	0.00
10.00	0.97	0.00	0.00	36.00	5.13	1.38	0.00
10.50	1.11	0.00	0.00	36.50	5.13	1.38	0.00
11.00	1.28	0.00	0.00	37.00	5.13	1.38	0.00
11.50	1.53	0.01	0.11	37.50	5.13	1.38	0.00
12.00	2.56	0.19	3.49	38.00	5.13	1.38	0.00
12.50	3.60	0.58	16.18	38.50	5.13	1.38	0.00
13.00	3.85	0.69	5.70	39.00	5.13	1.38	0.00
13.50	4.02	0.77	3.54	39.50	5.13	1.38	0.00
14.00	4.16	0.84	2.96	40.00	5.13	1.38	0.00
14.50	4.28	0.90	2.52				
15.00	4.38	0.96	2.25				
15.50	4.47	1.00	1.97				
16.00	4.55	1.04	1.68				
16.50	4.61	1.08	1.44				
17.00	4.67	1.11	1.30				
17.50	4.72	1.14	1.17				
18.00	4.76	1.16	1.03				
18.50	4.80	1.19	0.93				
19.00	4.84	1.21	0.88				
19.50	4.88	1.23	0.85				
20.00	4.91	1.25	0.81				
20.50	4.94	1.27	0.77				
21.00	4.97	1.29	0.74				
21.50	5.00	1.30	0.71				
22.00	5.03	1.32	0.68				
22.50	5.06	1.34	0.64				
23.00	5.08	1.35	0.61				
23.50	5.11	1.36	0.58				
24.00	5.13	1.38	0.55				
24.50	5.13	1.38	0.09				
25.00	5.13	1.38	0.00				
25.50	5.13	1.38	0.00				

Summary for Subcatchment 3S: EDA-3

Runoff = 19.67 cfs @ 12.44 hrs, Volume= 109,984 cf, Depth= 2.22"

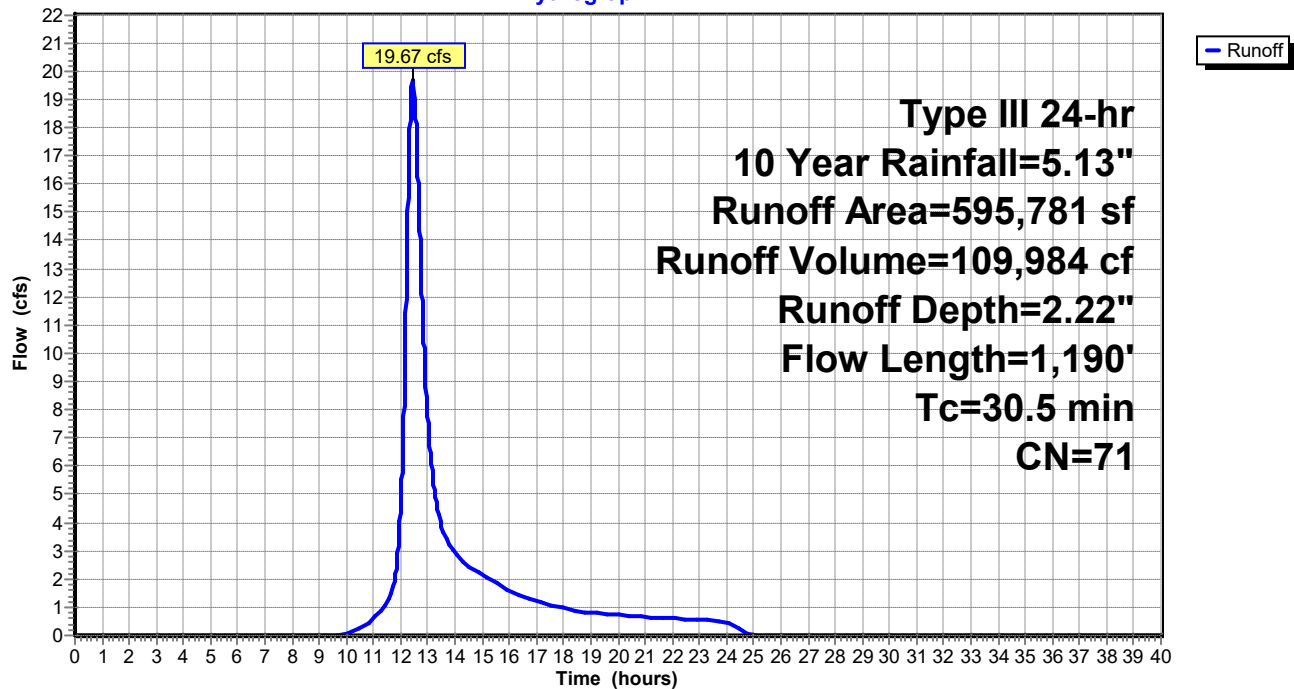
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.13"

	Area (sf)	CN	Description
*	7,168	98	Ex. IMP Pavement, Rooftops
	90,834	61	>75% Grass cover, Good, HSG B
	260,380	58	Woods/grass comb., Good, HSG B
	42,355	72	Woods/grass comb., Good, HSG C
	20,791	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	595,781	71	Weighted Average
	414,360		69.55% Pervious Area
	181,421		30.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
1.7	200	0.1600	2.00		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.9	210	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.2	200	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.1	400	0.1095	0.83		Shallow Concentrated Flow, Shallow Conc. Wetland Forest w/Heavy Litter Kv= 2.5 fps
0.2	80	0.0875	5.87	46.95	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.5	1,190	Total			

Subcatchment 3S: EDA-3

Hydrograph



Hydrograph for Subcatchment 3S: EDA-3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	5.13	2.22	0.00
0.50	0.03	0.00	0.00	26.50	5.13	2.22	0.00
1.00	0.05	0.00	0.00	27.00	5.13	2.22	0.00
1.50	0.08	0.00	0.00	27.50	5.13	2.22	0.00
2.00	0.10	0.00	0.00	28.00	5.13	2.22	0.00
2.50	0.13	0.00	0.00	28.50	5.13	2.22	0.00
3.00	0.16	0.00	0.00	29.00	5.13	2.22	0.00
3.50	0.19	0.00	0.00	29.50	5.13	2.22	0.00
4.00	0.22	0.00	0.00	30.00	5.13	2.22	0.00
4.50	0.25	0.00	0.00	30.50	5.13	2.22	0.00
5.00	0.29	0.00	0.00	31.00	5.13	2.22	0.00
5.50	0.33	0.00	0.00	31.50	5.13	2.22	0.00
6.00	0.37	0.00	0.00	32.00	5.13	2.22	0.00
6.50	0.41	0.00	0.00	32.50	5.13	2.22	0.00
7.00	0.46	0.00	0.00	33.00	5.13	2.22	0.00
7.50	0.52	0.00	0.00	33.50	5.13	2.22	0.00
8.00	0.58	0.00	0.00	34.00	5.13	2.22	0.00
8.50	0.66	0.00	0.00	34.50	5.13	2.22	0.00
9.00	0.75	0.00	0.00	35.00	5.13	2.22	0.00
9.50	0.85	0.00	0.00	35.50	5.13	2.22	0.00
10.00	0.97	0.01	0.07	36.00	5.13	2.22	0.00
10.50	1.11	0.02	0.27	36.50	5.13	2.22	0.00
11.00	1.28	0.05	0.59	37.00	5.13	2.22	0.00
11.50	1.53	0.11	1.16	37.50	5.13	2.22	0.00
12.00	2.56	0.52	4.62	38.00	5.13	2.22	0.00
12.50	3.60	1.13	19.25	38.50	5.13	2.22	0.00
13.00	3.85	1.29	7.56	39.00	5.13	2.22	0.00
13.50	4.02	1.41	3.86	39.50	5.13	2.22	0.00
14.00	4.16	1.50	2.95	40.00	5.13	2.22	0.00
14.50	4.28	1.59	2.45				
15.00	4.38	1.66	2.15				
15.50	4.47	1.73	1.88				
16.00	4.55	1.78	1.60				
16.50	4.61	1.83	1.35				
17.00	4.67	1.87	1.21				
17.50	4.72	1.90	1.08				
18.00	4.76	1.94	0.96				
18.50	4.80	1.97	0.85				
19.00	4.84	2.00	0.80				
19.50	4.88	2.02	0.76				
20.00	4.91	2.05	0.73				
20.50	4.94	2.07	0.69				
21.00	4.97	2.10	0.66				
21.50	5.00	2.12	0.63				
22.00	5.03	2.14	0.60				
22.50	5.06	2.16	0.57				
23.00	5.08	2.18	0.55				
23.50	5.11	2.20	0.52				
24.00	5.13	2.22	0.49				
24.50	5.13	2.22	0.17				
25.00	5.13	2.22	0.01				
25.50	5.13	2.22	0.00				

Summary for Subcatchment 4S: EDA-1

Runoff = 4.39 cfs @ 12.24 hrs, Volume= 19,653 cf, Depth= 1.74"

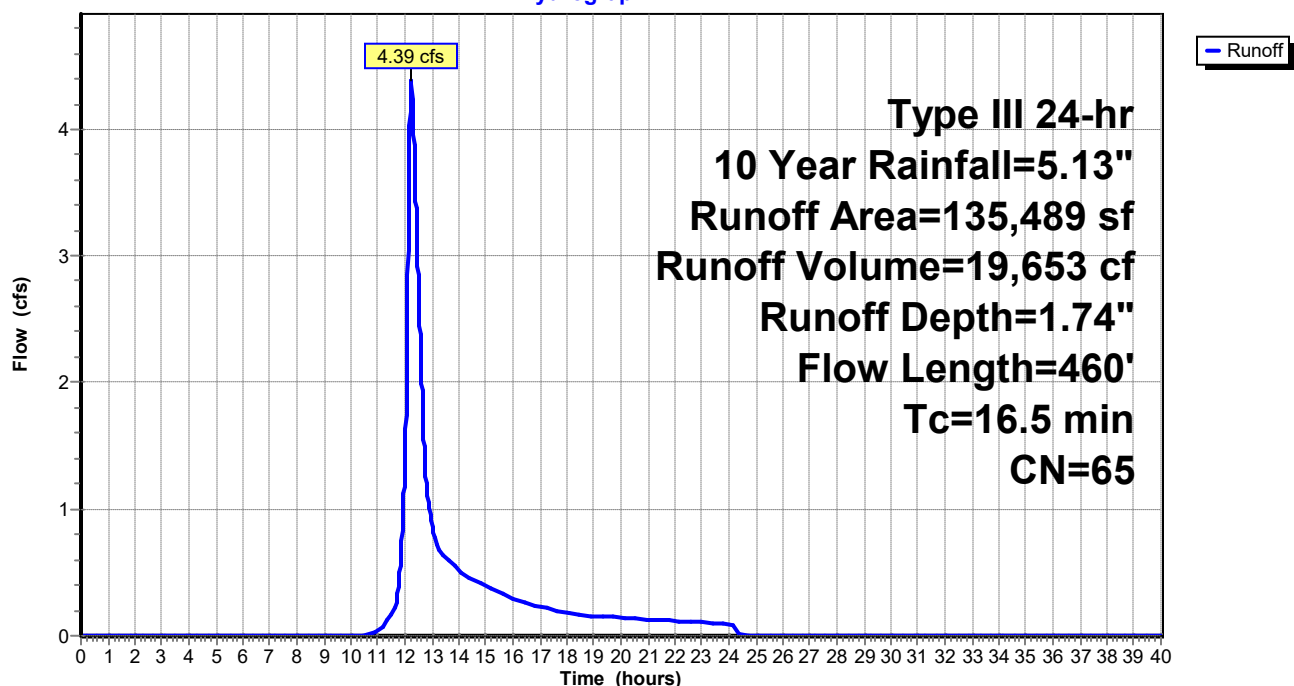
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10 Year Rainfall=5.13"

	Area (sf)	CN	Description
*	17,061	98	Ex. IMP Pavement, Rooftops
	40,462	61	>75% Grass cover, Good, HSG B
	8,644	72	Woods/grass comb., Good, HSG C
	69,322	58	Woods/grass comb., Good, HSG B
	135,489	65	Weighted Average
	118,428		87.41% Pervious Area
	17,061		12.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0640	0.13		Sheet Flow, Woods Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
3.0	230	0.0665	1.29		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
0.4	130	0.0608	5.01		Shallow Concentrated Flow, Driveway Flow
					Paved Kv= 20.3 fps
16.5	460	Total			

Subcatchment 4S: EDA-1

Hydrograph



Hydrograph for Subcatchment 4S: EDA-1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	5.13	1.74	0.00
0.50	0.03	0.00	0.00	26.50	5.13	1.74	0.00
1.00	0.05	0.00	0.00	27.00	5.13	1.74	0.00
1.50	0.08	0.00	0.00	27.50	5.13	1.74	0.00
2.00	0.10	0.00	0.00	28.00	5.13	1.74	0.00
2.50	0.13	0.00	0.00	28.50	5.13	1.74	0.00
3.00	0.16	0.00	0.00	29.00	5.13	1.74	0.00
3.50	0.19	0.00	0.00	29.50	5.13	1.74	0.00
4.00	0.22	0.00	0.00	30.00	5.13	1.74	0.00
4.50	0.25	0.00	0.00	30.50	5.13	1.74	0.00
5.00	0.29	0.00	0.00	31.00	5.13	1.74	0.00
5.50	0.33	0.00	0.00	31.50	5.13	1.74	0.00
6.00	0.37	0.00	0.00	32.00	5.13	1.74	0.00
6.50	0.41	0.00	0.00	32.50	5.13	1.74	0.00
7.00	0.46	0.00	0.00	33.00	5.13	1.74	0.00
7.50	0.52	0.00	0.00	33.50	5.13	1.74	0.00
8.00	0.58	0.00	0.00	34.00	5.13	1.74	0.00
8.50	0.66	0.00	0.00	34.50	5.13	1.74	0.00
9.00	0.75	0.00	0.00	35.00	5.13	1.74	0.00
9.50	0.85	0.00	0.00	35.50	5.13	1.74	0.00
10.00	0.97	0.00	0.00	36.00	5.13	1.74	0.00
10.50	1.11	0.00	0.00	36.50	5.13	1.74	0.00
11.00	1.28	0.01	0.05	37.00	5.13	1.74	0.00
11.50	1.53	0.03	0.17	37.50	5.13	1.74	0.00
12.00	2.56	0.32	1.38	38.00	5.13	1.74	0.00
12.50	3.60	0.81	2.78	38.50	5.13	1.74	0.00
13.00	3.85	0.94	0.89	39.00	5.13	1.74	0.00
13.50	4.02	1.04	0.62	39.50	5.13	1.74	0.00
14.00	4.16	1.12	0.52	40.00	5.13	1.74	0.00
14.50	4.28	1.19	0.45				
15.00	4.38	1.26	0.40				
15.50	4.47	1.31	0.35				
16.00	4.55	1.36	0.29				
16.50	4.61	1.40	0.25				
17.00	4.67	1.44	0.23				
17.50	4.72	1.47	0.20				
18.00	4.76	1.50	0.18				
18.50	4.80	1.52	0.16				
19.00	4.84	1.55	0.16				
19.50	4.88	1.57	0.15				
20.00	4.91	1.59	0.14				
20.50	4.94	1.62	0.14				
21.00	4.97	1.64	0.13				
21.50	5.00	1.66	0.12				
22.00	5.03	1.67	0.12				
22.50	5.06	1.69	0.11				
23.00	5.08	1.71	0.11				
23.50	5.11	1.73	0.10				
24.00	5.13	1.74	0.10				
24.50	5.13	1.74	0.00				
25.00	5.13	1.74	0.00				
25.50	5.13	1.74	0.00				

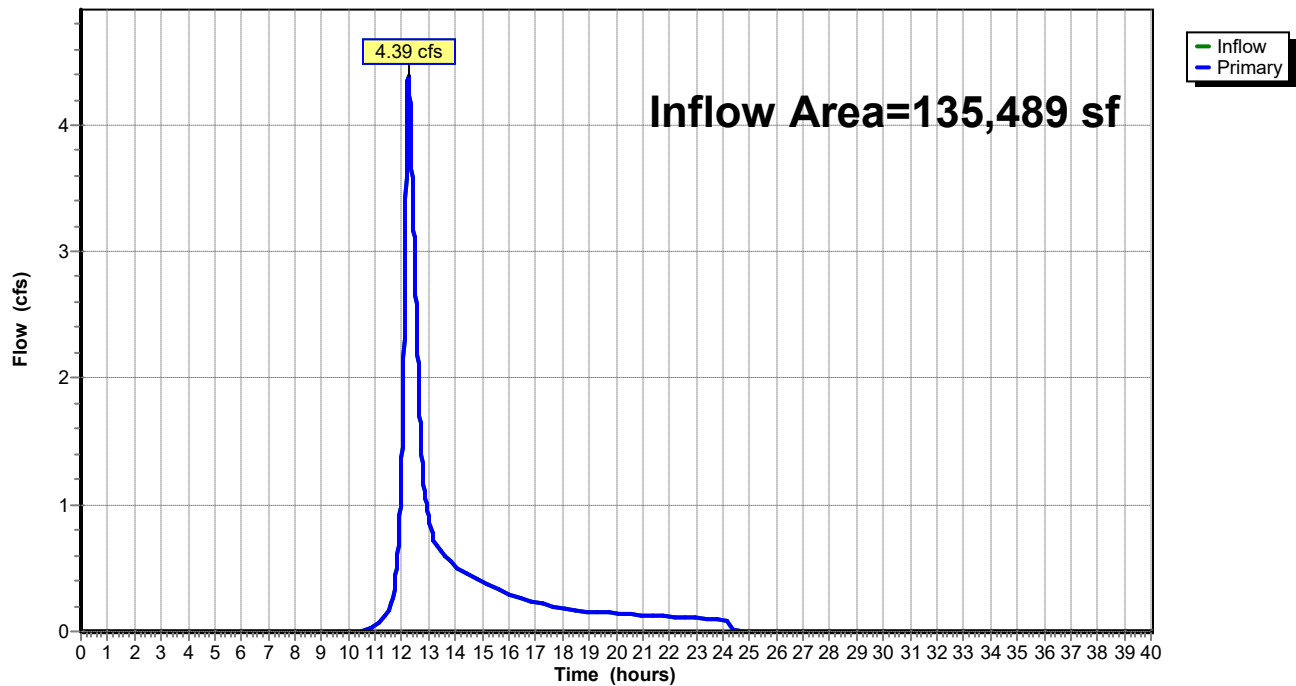
Summary for Link 5L: Pocantico River Basin

Inflow Area = 135,489 sf, 12.59% Impervious, Inflow Depth = 1.74" for 10 Year event
 Inflow = 4.39 cfs @ 12.24 hrs, Volume= 19,653 cf
 Primary = 4.39 cfs @ 12.24 hrs, Volume= 19,653 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 5L: Pocantico River Basin

Hydrograph



Hydrograph for Link 5L: Pocantico River Basin

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00	36.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	36.50	0.00	0.00	0.00
11.00	0.05	0.00	0.05	37.00	0.00	0.00	0.00
11.50	0.17	0.00	0.17	37.50	0.00	0.00	0.00
12.00	1.38	0.00	1.38	38.00	0.00	0.00	0.00
12.50	2.78	0.00	2.78	38.50	0.00	0.00	0.00
13.00	0.89	0.00	0.89	39.00	0.00	0.00	0.00
13.50	0.62	0.00	0.62	39.50	0.00	0.00	0.00
14.00	0.52	0.00	0.52	40.00	0.00	0.00	0.00
14.50	0.45	0.00	0.45				
15.00	0.40	0.00	0.40				
15.50	0.35	0.00	0.35				
16.00	0.29	0.00	0.29				
16.50	0.25	0.00	0.25				
17.00	0.23	0.00	0.23				
17.50	0.20	0.00	0.20				
18.00	0.18	0.00	0.18				
18.50	0.16	0.00	0.16				
19.00	0.16	0.00	0.16				
19.50	0.15	0.00	0.15				
20.00	0.14	0.00	0.14				
20.50	0.14	0.00	0.14				
21.00	0.13	0.00	0.13				
21.50	0.12	0.00	0.12				
22.00	0.12	0.00	0.12				
22.50	0.11	0.00	0.11				
23.00	0.11	0.00	0.11				
23.50	0.10	0.00	0.10				
24.00	0.10	0.00	0.10				
24.50	0.00	0.00	0.00				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

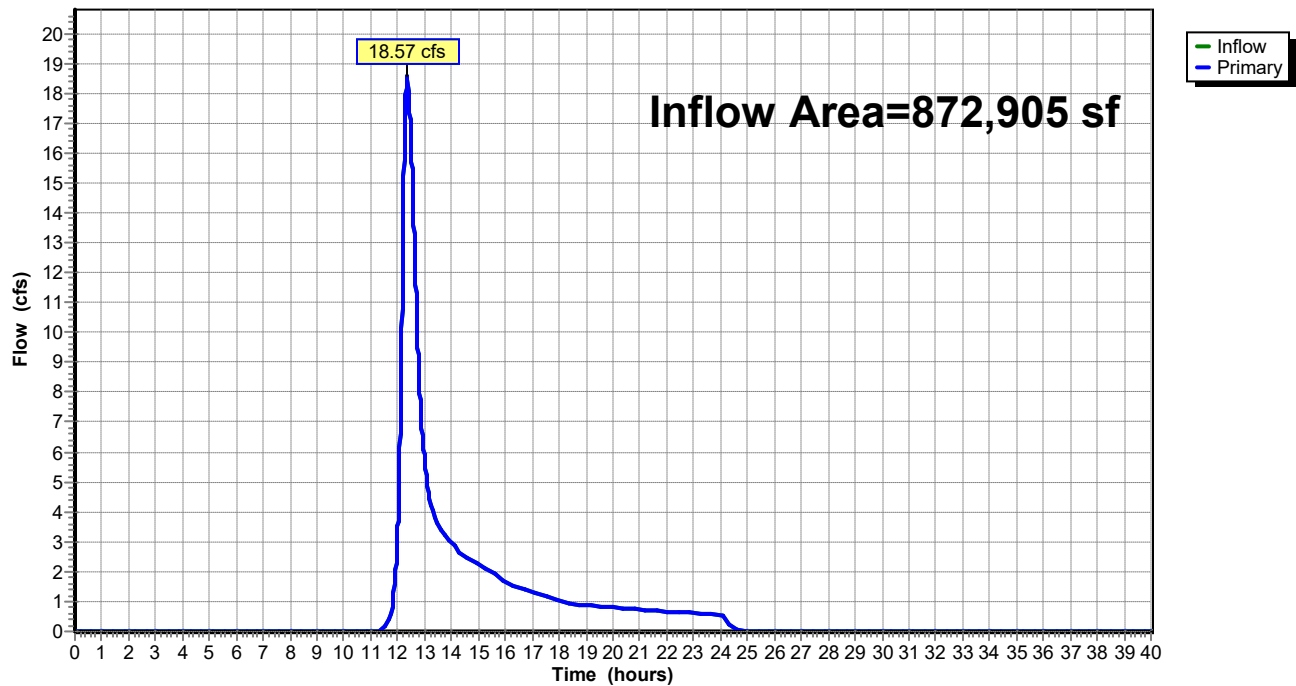
Summary for Link 6L: Pocantico Lake

Inflow Area = 872,905 sf, 4.09% Impervious, Inflow Depth = 1.38" for 10 Year event
 Inflow = 18.57 cfs @ 12.36 hrs, Volume= 100,212 cf
 Primary = 18.57 cfs @ 12.36 hrs, Volume= 100,212 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 6L: Pocantico Lake

Hydrograph



Hydrograph for Link 6L: Pocantico Lake

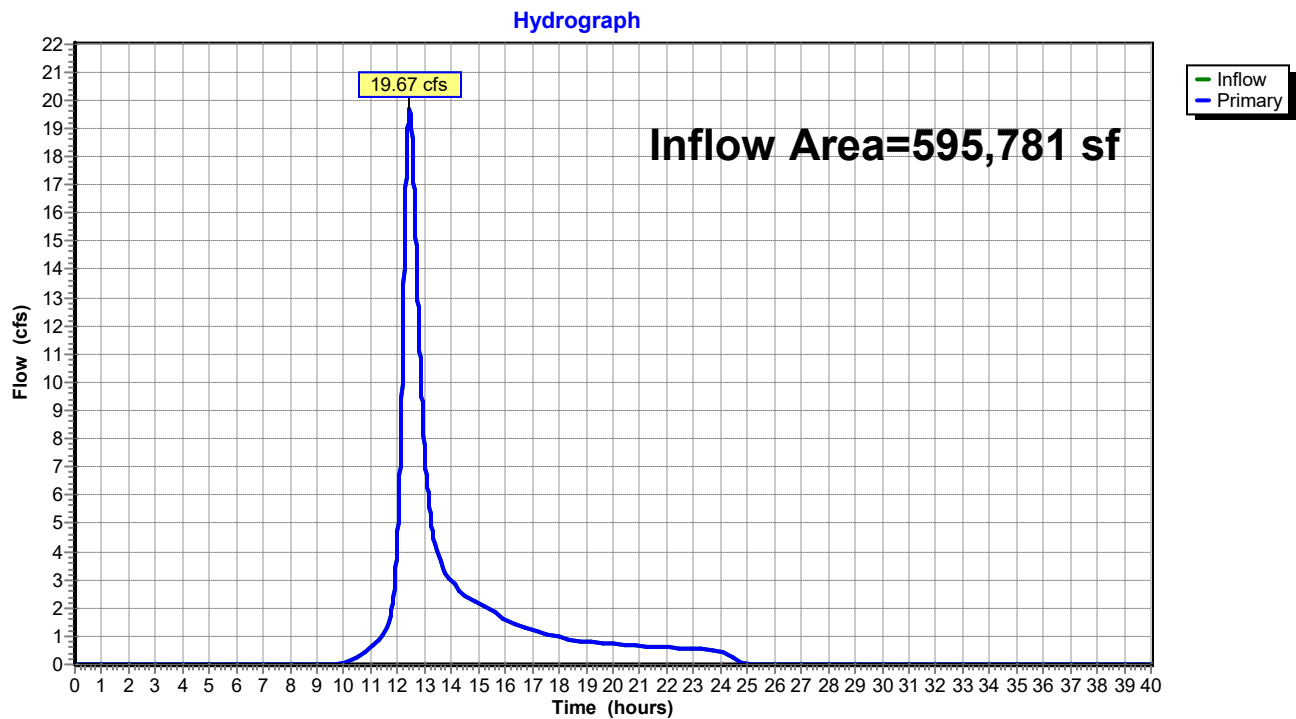
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00	36.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	36.50	0.00	0.00	0.00
11.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00
11.50	0.11	0.00	0.11	37.50	0.00	0.00	0.00
12.00	3.49	0.00	3.49	38.00	0.00	0.00	0.00
12.50	16.18	0.00	16.18	38.50	0.00	0.00	0.00
13.00	5.70	0.00	5.70	39.00	0.00	0.00	0.00
13.50	3.54	0.00	3.54	39.50	0.00	0.00	0.00
14.00	2.96	0.00	2.96	40.00	0.00	0.00	0.00
14.50	2.52	0.00	2.52				
15.00	2.25	0.00	2.25				
15.50	1.97	0.00	1.97				
16.00	1.68	0.00	1.68				
16.50	1.44	0.00	1.44				
17.00	1.30	0.00	1.30				
17.50	1.17	0.00	1.17				
18.00	1.03	0.00	1.03				
18.50	0.93	0.00	0.93				
19.00	0.88	0.00	0.88				
19.50	0.85	0.00	0.85				
20.00	0.81	0.00	0.81				
20.50	0.77	0.00	0.77				
21.00	0.74	0.00	0.74				
21.50	0.71	0.00	0.71				
22.00	0.68	0.00	0.68				
22.50	0.64	0.00	0.64				
23.00	0.61	0.00	0.61				
23.50	0.58	0.00	0.58				
24.00	0.55	0.00	0.55				
24.50	0.09	0.00	0.09				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

Summary for Link 7L: Mapped Wetland / Brook

Inflow Area = 595,781 sf, 30.45% Impervious, Inflow Depth = 2.22" for 10 Year event
 Inflow = 19.67 cfs @ 12.44 hrs, Volume= 109,984 cf
 Primary = 19.67 cfs @ 12.44 hrs, Volume= 109,984 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 7L: Mapped Wetland / Brook



Hydrograph for Link 7L: Mapped Wetland / Brook

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.07	0.00	0.07	36.00	0.00	0.00	0.00
10.50	0.27	0.00	0.27	36.50	0.00	0.00	0.00
11.00	0.59	0.00	0.59	37.00	0.00	0.00	0.00
11.50	1.16	0.00	1.16	37.50	0.00	0.00	0.00
12.00	4.62	0.00	4.62	38.00	0.00	0.00	0.00
12.50	19.25	0.00	19.25	38.50	0.00	0.00	0.00
13.00	7.56	0.00	7.56	39.00	0.00	0.00	0.00
13.50	3.86	0.00	3.86	39.50	0.00	0.00	0.00
14.00	2.95	0.00	2.95	40.00	0.00	0.00	0.00
14.50	2.45	0.00	2.45				
15.00	2.15	0.00	2.15				
15.50	1.88	0.00	1.88				
16.00	1.60	0.00	1.60				
16.50	1.35	0.00	1.35				
17.00	1.21	0.00	1.21				
17.50	1.08	0.00	1.08				
18.00	0.96	0.00	0.96				
18.50	0.85	0.00	0.85				
19.00	0.80	0.00	0.80				
19.50	0.76	0.00	0.76				
20.00	0.73	0.00	0.73				
20.50	0.69	0.00	0.69				
21.00	0.66	0.00	0.66				
21.50	0.63	0.00	0.63				
22.00	0.60	0.00	0.60				
22.50	0.57	0.00	0.57				
23.00	0.55	0.00	0.55				
23.50	0.52	0.00	0.52				
24.00	0.49	0.00	0.49				
24.50	0.17	0.00	0.17				
25.00	0.01	0.00	0.01				
25.50	0.00	0.00	0.00				

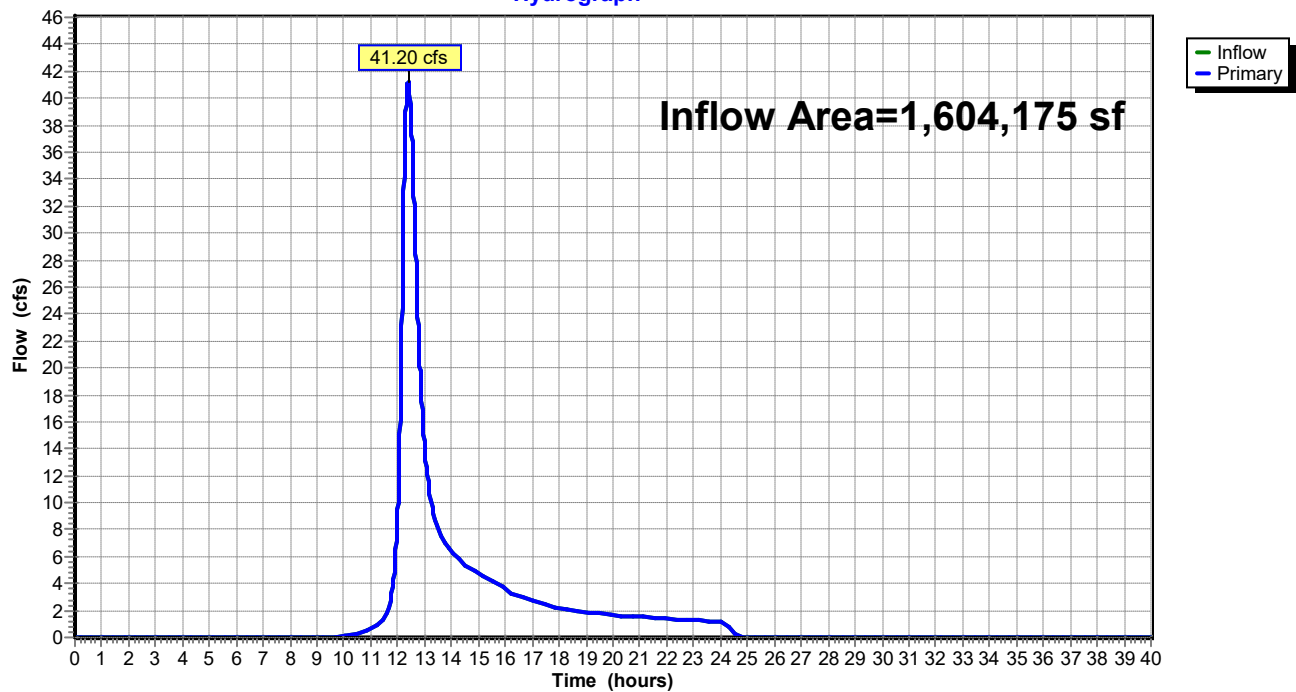
Summary for Link 16L: COMB PRE

Inflow Area = 1,604,175 sf, 14.60% Impervious, Inflow Depth = 1.72" for 10 Year event
 Inflow = 41.20 cfs @ 12.38 hrs, Volume= 229,849 cf
 Primary = 41.20 cfs @ 12.38 hrs, Volume= 229,849 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 16L: COMB PRE

Hydrograph



Hydrograph for Link 16L: COMB PRE

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.07	0.00	0.07	36.00	0.00	0.00	0.00
10.50	0.27	0.00	0.27	36.50	0.00	0.00	0.00
11.00	0.64	0.00	0.64	37.00	0.00	0.00	0.00
11.50	1.44	0.00	1.44	37.50	0.00	0.00	0.00
12.00	9.49	0.00	9.49	38.00	0.00	0.00	0.00
12.50	38.21	0.00	38.21	38.50	0.00	0.00	0.00
13.00	14.14	0.00	14.14	39.00	0.00	0.00	0.00
13.50	8.02	0.00	8.02	39.50	0.00	0.00	0.00
14.00	6.43	0.00	6.43	40.00	0.00	0.00	0.00
14.50	5.41	0.00	5.41				
15.00	4.80	0.00	4.80				
15.50	4.20	0.00	4.20				
16.00	3.58	0.00	3.58				
16.50	3.05	0.00	3.05				
17.00	2.74	0.00	2.74				
17.50	2.46	0.00	2.46				
18.00	2.17	0.00	2.17				
18.50	1.94	0.00	1.94				
19.00	1.84	0.00	1.84				
19.50	1.76	0.00	1.76				
20.00	1.67	0.00	1.67				
20.50	1.59	0.00	1.59				
21.00	1.53	0.00	1.53				
21.50	1.46	0.00	1.46				
22.00	1.40	0.00	1.40				
22.50	1.33	0.00	1.33				
23.00	1.26	0.00	1.26				
23.50	1.20	0.00	1.20				
24.00	1.13	0.00	1.13				
24.50	0.26	0.00	0.26				
25.00	0.02	0.00	0.02				
25.50	0.00	0.00	0.00				

Meadows Briarcliff_05032021*Type III 24-hr 50 Year Rainfall=7.72"*

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2S: EDA-2

Runoff Area=872,905 sf 4.09% Impervious Runoff Depth=3.12"
Flow Length=1,000' Tc=22.8 min CN=60 Runoff=45.80 cfs 227,307 cf

Subcatchment 3S: EDA-3

Runoff Area=595,781 sf 30.45% Impervious Runoff Depth=4.34"
Flow Length=1,190' Tc=30.5 min CN=71 Runoff=39.05 cfs 215,323 cf

Subcatchment 4S: EDA-1

Runoff Area=135,489 sf 12.59% Impervious Runoff Depth=3.67"
Flow Length=460' Tc=16.5 min CN=65 Runoff=9.70 cfs 41,427 cf

Link 5L: Pocantico River Basin

Inflow=9.70 cfs 41,427 cf
Primary=9.70 cfs 41,427 cf

Link 6L: Pocantico Lake

Inflow=45.80 cfs 227,307 cf
Primary=45.80 cfs 227,307 cf

Link 7L: Mapped Wetland / Brook

Inflow=39.05 cfs 215,323 cf
Primary=39.05 cfs 215,323 cf

Link 16L: COMB PRE

Inflow=91.09 cfs 484,057 cf
Primary=91.09 cfs 484,057 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 484,057 cf Average Runoff Depth = 3.62"
85.40% Pervious = 1,370,019 sf 14.60% Impervious = 234,156 sf

Summary for Subcatchment 2S: EDA-2

Runoff = 45.80 cfs @ 12.34 hrs, Volume= 227,307 cf, Depth= 3.12"

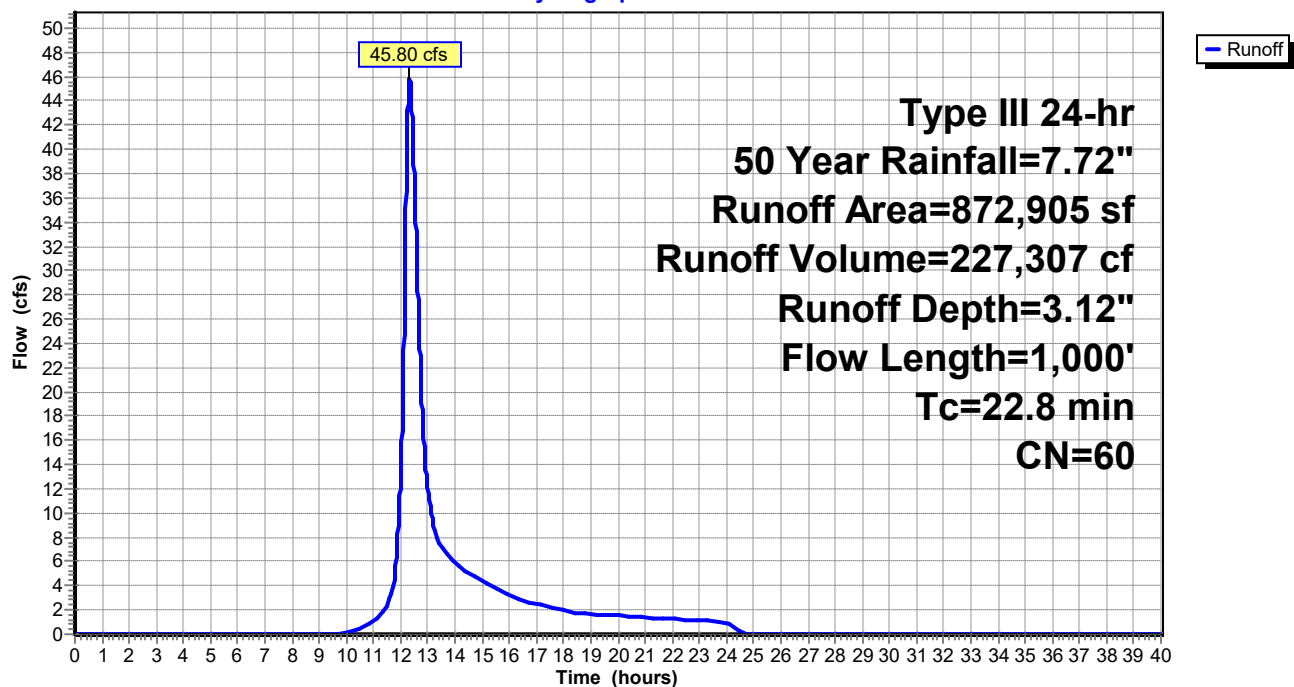
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 Year Rainfall=7.72"

	Area (sf)	CN	Description
*	35,674	98	Ex. IMP Pavement, Rooftops
	74,836	61	>75% Grass cover, Good, HSG B
	762,395	58	Woods/grass comb., Good, HSG B
	872,905	60	Weighted Average
	837,231		95.91% Pervious Area
	35,674		4.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0520	0.12		Sheet Flow, Shallow Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
4.2	280	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods
					Woodland Kv= 5.0 fps
0.1	40	0.0670	5.25		Shallow Concentrated Flow, Driveway Crossing
					Paved Kv= 20.3 fps
4.3	580	0.2030	2.25		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
22.8	1,000	Total			

Subcatchment 2S: EDA-2

Hydrograph



Hydrograph for Subcatchment 2S: EDA-2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	7.72	3.12	0.00
0.50	0.04	0.00	0.00	26.50	7.72	3.12	0.00
1.00	0.08	0.00	0.00	27.00	7.72	3.12	0.00
1.50	0.12	0.00	0.00	27.50	7.72	3.12	0.00
2.00	0.15	0.00	0.00	28.00	7.72	3.12	0.00
2.50	0.19	0.00	0.00	28.50	7.72	3.12	0.00
3.00	0.24	0.00	0.00	29.00	7.72	3.12	0.00
3.50	0.28	0.00	0.00	29.50	7.72	3.12	0.00
4.00	0.33	0.00	0.00	30.00	7.72	3.12	0.00
4.50	0.38	0.00	0.00	30.50	7.72	3.12	0.00
5.00	0.44	0.00	0.00	31.00	7.72	3.12	0.00
5.50	0.50	0.00	0.00	31.50	7.72	3.12	0.00
6.00	0.56	0.00	0.00	32.00	7.72	3.12	0.00
6.50	0.62	0.00	0.00	32.50	7.72	3.12	0.00
7.00	0.70	0.00	0.00	33.00	7.72	3.12	0.00
7.50	0.78	0.00	0.00	33.50	7.72	3.12	0.00
8.00	0.88	0.00	0.00	34.00	7.72	3.12	0.00
8.50	0.99	0.00	0.00	34.50	7.72	3.12	0.00
9.00	1.13	0.00	0.00	35.00	7.72	3.12	0.00
9.50	1.28	0.00	0.00	35.50	7.72	3.12	0.00
10.00	1.46	0.00	0.05	36.00	7.72	3.12	0.00
10.50	1.67	0.02	0.45	36.50	7.72	3.12	0.00
11.00	1.93	0.05	1.15	37.00	7.72	3.12	0.00
11.50	2.30	0.12	2.51	37.50	7.72	3.12	0.00
12.00	3.86	0.69	13.07	38.00	7.72	3.12	0.00
12.50	5.42	1.55	37.31	38.50	7.72	3.12	0.00
13.00	5.79	1.79	11.98	39.00	7.72	3.12	0.00
13.50	6.05	1.95	7.19	39.50	7.72	3.12	0.00
14.00	6.26	2.09	5.92	40.00	7.72	3.12	0.00
14.50	6.44	2.21	4.99				
15.00	6.59	2.32	4.42				
15.50	6.73	2.41	3.85				
16.00	6.84	2.49	3.26				
16.50	6.94	2.56	2.78				
17.00	7.02	2.62	2.51				
17.50	7.10	2.67	2.24				
18.00	7.16	2.72	1.98				
18.50	7.22	2.76	1.77				
19.00	7.28	2.80	1.68				
19.50	7.34	2.84	1.61				
20.00	7.39	2.88	1.53				
20.50	7.44	2.92	1.46				
21.00	7.48	2.95	1.39				
21.50	7.53	2.98	1.33				
22.00	7.57	3.02	1.27				
22.50	7.61	3.05	1.21				
23.00	7.65	3.07	1.15				
23.50	7.69	3.10	1.09				
24.00	7.72	3.12	1.02				
24.50	7.72	3.12	0.16				
25.00	7.72	3.12	0.01				
25.50	7.72	3.12	0.00				

Summary for Subcatchment 3S: EDA-3

Runoff = 39.05 cfs @ 12.43 hrs, Volume= 215,323 cf, Depth= 4.34"

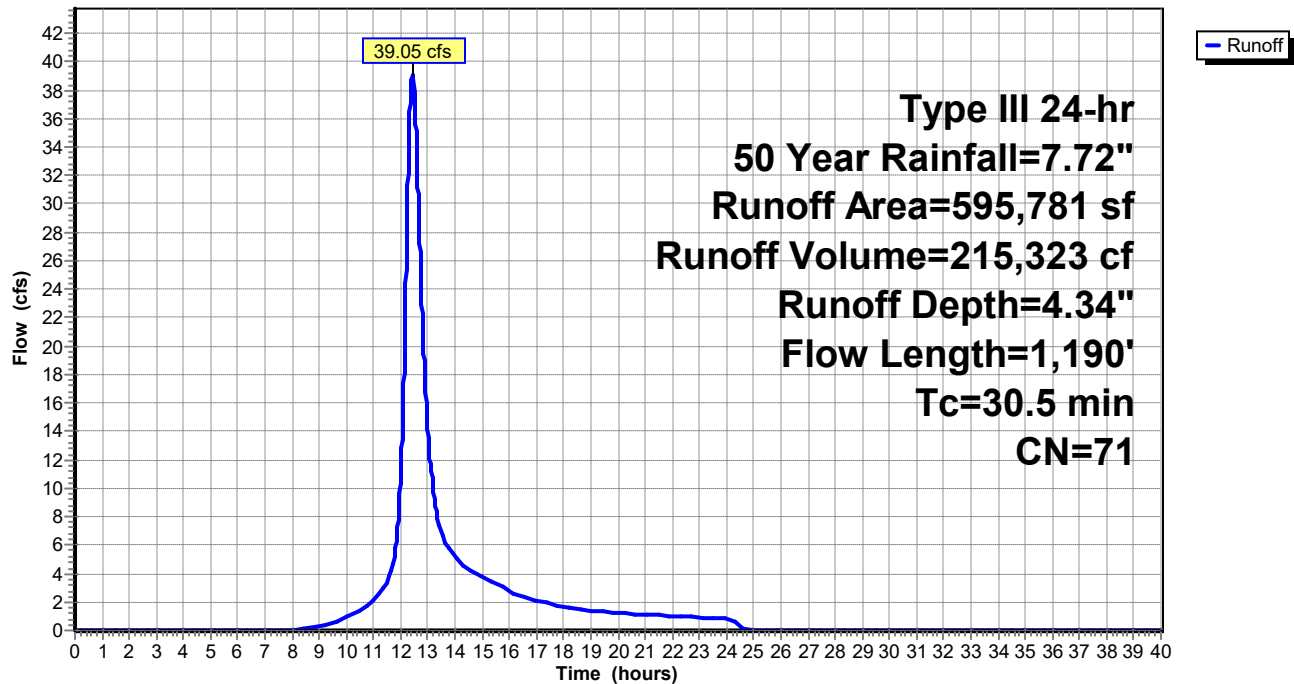
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 Year Rainfall=7.72"

	Area (sf)	CN	Description
*	7,168	98	Ex. IMP Pavement, Rooftops
	90,834	61	>75% Grass cover, Good, HSG B
	260,380	58	Woods/grass comb., Good, HSG B
	42,355	72	Woods/grass comb., Good, HSG C
	20,791	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	595,781	71	Weighted Average
	414,360		69.55% Pervious Area
	181,421		30.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
1.7	200	0.1600	2.00		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.9	210	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.2	200	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.1	400	0.1095	0.83		Shallow Concentrated Flow, Shallow Conc. Wetland Forest w/Heavy Litter Kv= 2.5 fps
0.2	80	0.0875	5.87	46.95	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.5	1,190	Total			

Subcatchment 3S: EDA-3

Hydrograph



Meadows Briarcliff_05032021

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Type III 24-hr 50 Year Rainfall=7.72"

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Hydrograph for Subcatchment 3S: EDA-3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	7.72	4.34	0.00
0.50	0.04	0.00	0.00	26.50	7.72	4.34	0.00
1.00	0.08	0.00	0.00	27.00	7.72	4.34	0.00
1.50	0.12	0.00	0.00	27.50	7.72	4.34	0.00
2.00	0.15	0.00	0.00	28.00	7.72	4.34	0.00
2.50	0.19	0.00	0.00	28.50	7.72	4.34	0.00
3.00	0.24	0.00	0.00	29.00	7.72	4.34	0.00
3.50	0.28	0.00	0.00	29.50	7.72	4.34	0.00
4.00	0.33	0.00	0.00	30.00	7.72	4.34	0.00
4.50	0.38	0.00	0.00	30.50	7.72	4.34	0.00
5.00	0.44	0.00	0.00	31.00	7.72	4.34	0.00
5.50	0.50	0.00	0.00	31.50	7.72	4.34	0.00
6.00	0.56	0.00	0.00	32.00	7.72	4.34	0.00
6.50	0.62	0.00	0.00	32.50	7.72	4.34	0.00
7.00	0.70	0.00	0.00	33.00	7.72	4.34	0.00
7.50	0.78	0.00	0.00	33.50	7.72	4.34	0.00
8.00	0.88	0.00	0.01	34.00	7.72	4.34	0.00
8.50	0.99	0.01	0.10	34.50	7.72	4.34	0.00
9.00	1.13	0.02	0.29	35.00	7.72	4.34	0.00
9.50	1.28	0.05	0.57	35.50	7.72	4.34	0.00
10.00	1.46	0.09	0.92	36.00	7.72	4.34	0.00
10.50	1.67	0.15	1.39	36.50	7.72	4.34	0.00
11.00	1.93	0.24	2.12	37.00	7.72	4.34	0.00
11.50	2.30	0.40	3.37	37.50	7.72	4.34	0.00
12.00	3.86	1.30	10.94	38.00	7.72	4.34	0.00
12.50	5.42	2.44	37.74	38.50	7.72	4.34	0.00
13.00	5.79	2.73	13.98	39.00	7.72	4.34	0.00
13.50	6.05	2.94	6.94	39.50	7.72	4.34	0.00
14.00	6.26	3.11	5.23	40.00	7.72	4.34	0.00
14.50	6.44	3.26	4.31				
15.00	6.59	3.38	3.77				
15.50	6.73	3.50	3.28				
16.00	6.84	3.59	2.78				
16.50	6.94	3.67	2.35				
17.00	7.02	3.74	2.09				
17.50	7.10	3.81	1.87				
18.00	7.16	3.86	1.65				
18.50	7.22	3.91	1.46				
19.00	7.28	3.96	1.38				
19.50	7.34	4.01	1.31				
20.00	7.39	4.05	1.24				
20.50	7.44	4.09	1.18				
21.00	7.48	4.13	1.13				
21.50	7.53	4.17	1.08				
22.00	7.57	4.21	1.03				
22.50	7.61	4.24	0.98				
23.00	7.65	4.28	0.93				
23.50	7.69	4.31	0.88				
24.00	7.72	4.34	0.83				
24.50	7.72	4.34	0.29				
25.00	7.72	4.34	0.03				
25.50	7.72	4.34	0.00				

Summary for Subcatchment 4S: EDA-1

Runoff = 9.70 cfs @ 12.23 hrs, Volume= 41,427 cf, Depth= 3.67"

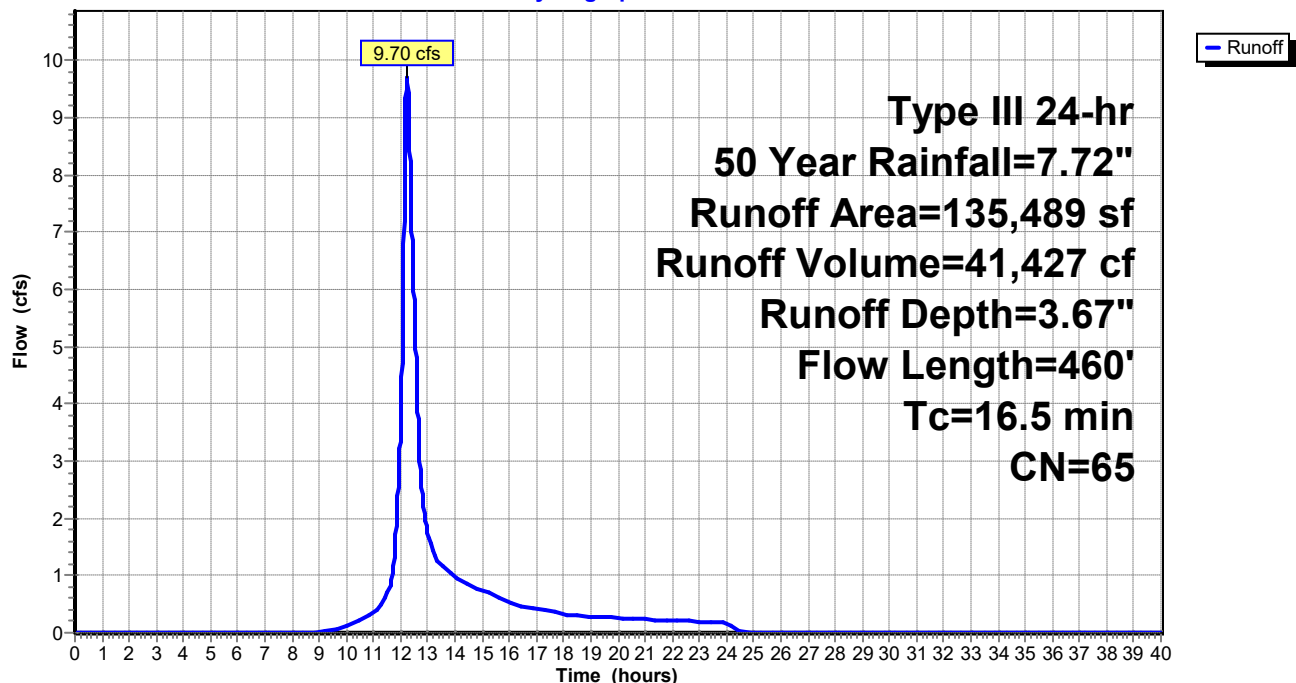
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 Year Rainfall=7.72"

	Area (sf)	CN	Description
*	17,061	98	Ex. IMP Pavement, Rooftops
	40,462	61	>75% Grass cover, Good, HSG B
	8,644	72	Woods/grass comb., Good, HSG C
	69,322	58	Woods/grass comb., Good, HSG B
	135,489	65	Weighted Average
	118,428		87.41% Pervious Area
	17,061		12.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0640	0.13		Sheet Flow, Woods Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
3.0	230	0.0665	1.29		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
0.4	130	0.0608	5.01		Shallow Concentrated Flow, Driveway Flow
					Paved Kv= 20.3 fps
16.5	460	Total			

Subcatchment 4S: EDA-1

Hydrograph



Meadows Briarcliff_05032021

Type III 24-hr 50 Year Rainfall=7.72"

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Hydrograph for Subcatchment 4S: EDA-1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	7.72	3.67	0.00
0.50	0.04	0.00	0.00	26.50	7.72	3.67	0.00
1.00	0.08	0.00	0.00	27.00	7.72	3.67	0.00
1.50	0.12	0.00	0.00	27.50	7.72	3.67	0.00
2.00	0.15	0.00	0.00	28.00	7.72	3.67	0.00
2.50	0.19	0.00	0.00	28.50	7.72	3.67	0.00
3.00	0.24	0.00	0.00	29.00	7.72	3.67	0.00
3.50	0.28	0.00	0.00	29.50	7.72	3.67	0.00
4.00	0.33	0.00	0.00	30.00	7.72	3.67	0.00
4.50	0.38	0.00	0.00	30.50	7.72	3.67	0.00
5.00	0.44	0.00	0.00	31.00	7.72	3.67	0.00
5.50	0.50	0.00	0.00	31.50	7.72	3.67	0.00
6.00	0.56	0.00	0.00	32.00	7.72	3.67	0.00
6.50	0.62	0.00	0.00	32.50	7.72	3.67	0.00
7.00	0.70	0.00	0.00	33.00	7.72	3.67	0.00
7.50	0.78	0.00	0.00	33.50	7.72	3.67	0.00
8.00	0.88	0.00	0.00	34.00	7.72	3.67	0.00
8.50	0.99	0.00	0.00	34.50	7.72	3.67	0.00
9.00	1.13	0.00	0.00	35.00	7.72	3.67	0.00
9.50	1.28	0.01	0.04	35.50	7.72	3.67	0.00
10.00	1.46	0.03	0.11	36.00	7.72	3.67	0.00
10.50	1.67	0.06	0.21	36.50	7.72	3.67	0.00
11.00	1.93	0.12	0.36	37.00	7.72	3.67	0.00
11.50	2.30	0.23	0.68	37.50	7.72	3.67	0.00
12.00	3.86	0.95	3.64	38.00	7.72	3.67	0.00
12.50	5.42	1.94	5.66	38.50	7.72	3.67	0.00
13.00	5.79	2.20	1.71	39.00	7.72	3.67	0.00
13.50	6.05	2.39	1.18	39.50	7.72	3.67	0.00
14.00	6.26	2.54	0.98	40.00	7.72	3.67	0.00
14.50	6.44	2.68	0.83				
15.00	6.59	2.79	0.74				
15.50	6.73	2.89	0.64				
16.00	6.84	2.98	0.54				
16.50	6.94	3.05	0.46				
17.00	7.02	3.12	0.42				
17.50	7.10	3.18	0.37				
18.00	7.16	3.23	0.33				
18.50	7.22	3.28	0.30				
19.00	7.28	3.32	0.28				
19.50	7.34	3.36	0.27				
20.00	7.39	3.41	0.26				
20.50	7.44	3.44	0.24				
21.00	7.48	3.48	0.23				
21.50	7.53	3.52	0.22				
22.00	7.57	3.55	0.21				
22.50	7.61	3.58	0.20				
23.00	7.65	3.61	0.19				
23.50	7.69	3.64	0.18				
24.00	7.72	3.67	0.17				
24.50	7.72	3.67	0.01				
25.00	7.72	3.67	0.00				
25.50	7.72	3.67	0.00				

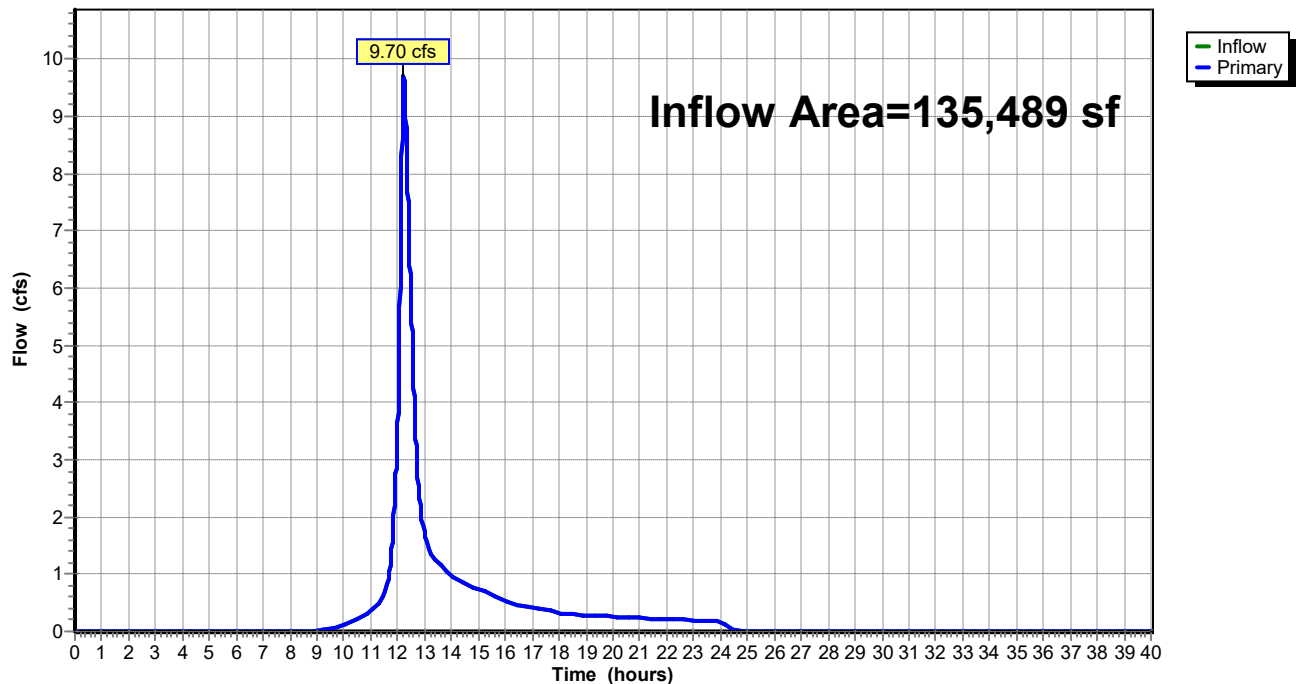
Summary for Link 5L: Pocantico River Basin

Inflow Area = 135,489 sf, 12.59% Impervious, Inflow Depth = 3.67" for 50 Year event
 Inflow = 9.70 cfs @ 12.23 hrs, Volume= 41,427 cf
 Primary = 9.70 cfs @ 12.23 hrs, Volume= 41,427 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 5L: Pocantico River Basin

Hydrograph



Hydrograph for Link 5L: Pocantico River Basin

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.04	0.00	0.04	35.50	0.00	0.00	0.00
10.00	0.11	0.00	0.11	36.00	0.00	0.00	0.00
10.50	0.21	0.00	0.21	36.50	0.00	0.00	0.00
11.00	0.36	0.00	0.36	37.00	0.00	0.00	0.00
11.50	0.68	0.00	0.68	37.50	0.00	0.00	0.00
12.00	3.64	0.00	3.64	38.00	0.00	0.00	0.00
12.50	5.66	0.00	5.66	38.50	0.00	0.00	0.00
13.00	1.71	0.00	1.71	39.00	0.00	0.00	0.00
13.50	1.18	0.00	1.18	39.50	0.00	0.00	0.00
14.00	0.98	0.00	0.98	40.00	0.00	0.00	0.00
14.50	0.83	0.00	0.83				
15.00	0.74	0.00	0.74				
15.50	0.64	0.00	0.64				
16.00	0.54	0.00	0.54				
16.50	0.46	0.00	0.46				
17.00	0.42	0.00	0.42				
17.50	0.37	0.00	0.37				
18.00	0.33	0.00	0.33				
18.50	0.30	0.00	0.30				
19.00	0.28	0.00	0.28				
19.50	0.27	0.00	0.27				
20.00	0.26	0.00	0.26				
20.50	0.24	0.00	0.24				
21.00	0.23	0.00	0.23				
21.50	0.22	0.00	0.22				
22.00	0.21	0.00	0.21				
22.50	0.20	0.00	0.20				
23.00	0.19	0.00	0.19				
23.50	0.18	0.00	0.18				
24.00	0.17	0.00	0.17				
24.50	0.01	0.00	0.01				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

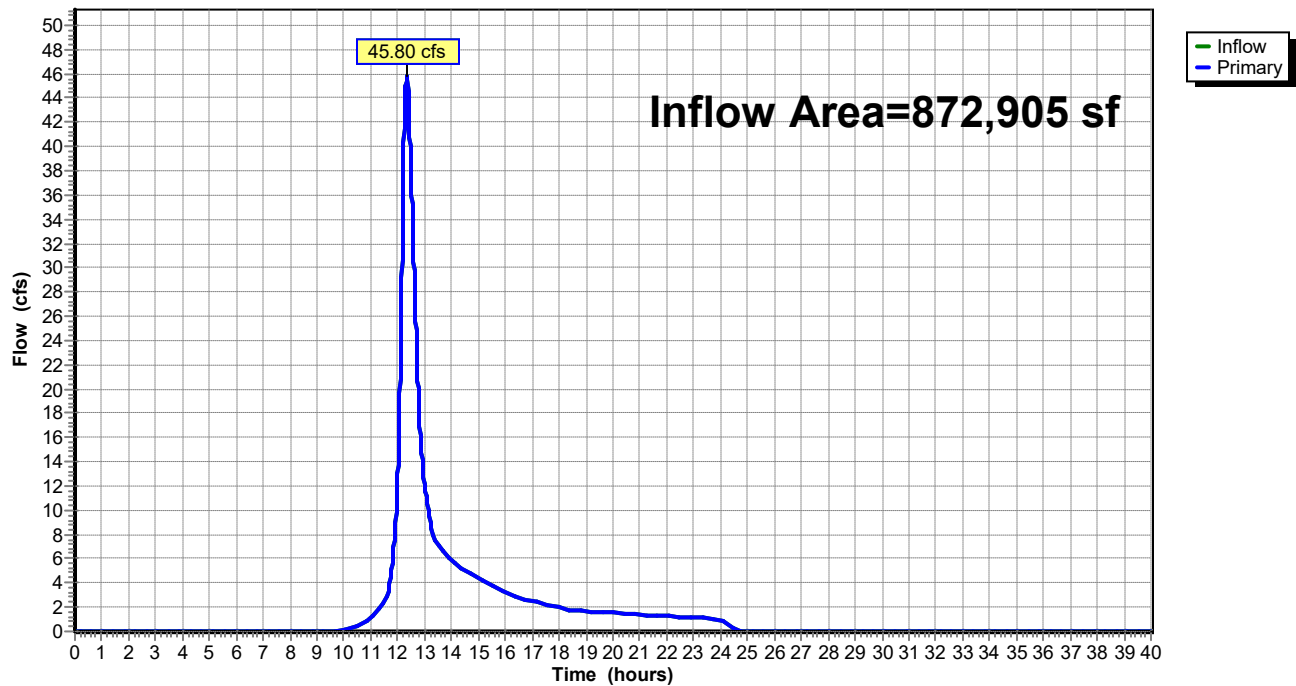
Summary for Link 6L: Pocantico Lake

Inflow Area = 872,905 sf, 4.09% Impervious, Inflow Depth = 3.12" for 50 Year event
 Inflow = 45.80 cfs @ 12.34 hrs, Volume= 227,307 cf
 Primary = 45.80 cfs @ 12.34 hrs, Volume= 227,307 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 6L: Pocantico Lake

Hydrograph



Hydrograph for Link 6L: Pocantico Lake

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.05	0.00	0.05	36.00	0.00	0.00	0.00
10.50	0.45	0.00	0.45	36.50	0.00	0.00	0.00
11.00	1.15	0.00	1.15	37.00	0.00	0.00	0.00
11.50	2.51	0.00	2.51	37.50	0.00	0.00	0.00
12.00	13.07	0.00	13.07	38.00	0.00	0.00	0.00
12.50	37.31	0.00	37.31	38.50	0.00	0.00	0.00
13.00	11.98	0.00	11.98	39.00	0.00	0.00	0.00
13.50	7.19	0.00	7.19	39.50	0.00	0.00	0.00
14.00	5.92	0.00	5.92	40.00	0.00	0.00	0.00
14.50	4.99	0.00	4.99				
15.00	4.42	0.00	4.42				
15.50	3.85	0.00	3.85				
16.00	3.26	0.00	3.26				
16.50	2.78	0.00	2.78				
17.00	2.51	0.00	2.51				
17.50	2.24	0.00	2.24				
18.00	1.98	0.00	1.98				
18.50	1.77	0.00	1.77				
19.00	1.68	0.00	1.68				
19.50	1.61	0.00	1.61				
20.00	1.53	0.00	1.53				
20.50	1.46	0.00	1.46				
21.00	1.39	0.00	1.39				
21.50	1.33	0.00	1.33				
22.00	1.27	0.00	1.27				
22.50	1.21	0.00	1.21				
23.00	1.15	0.00	1.15				
23.50	1.09	0.00	1.09				
24.00	1.02	0.00	1.02				
24.50	0.16	0.00	0.16				
25.00	0.01	0.00	0.01				
25.50	0.00	0.00	0.00				

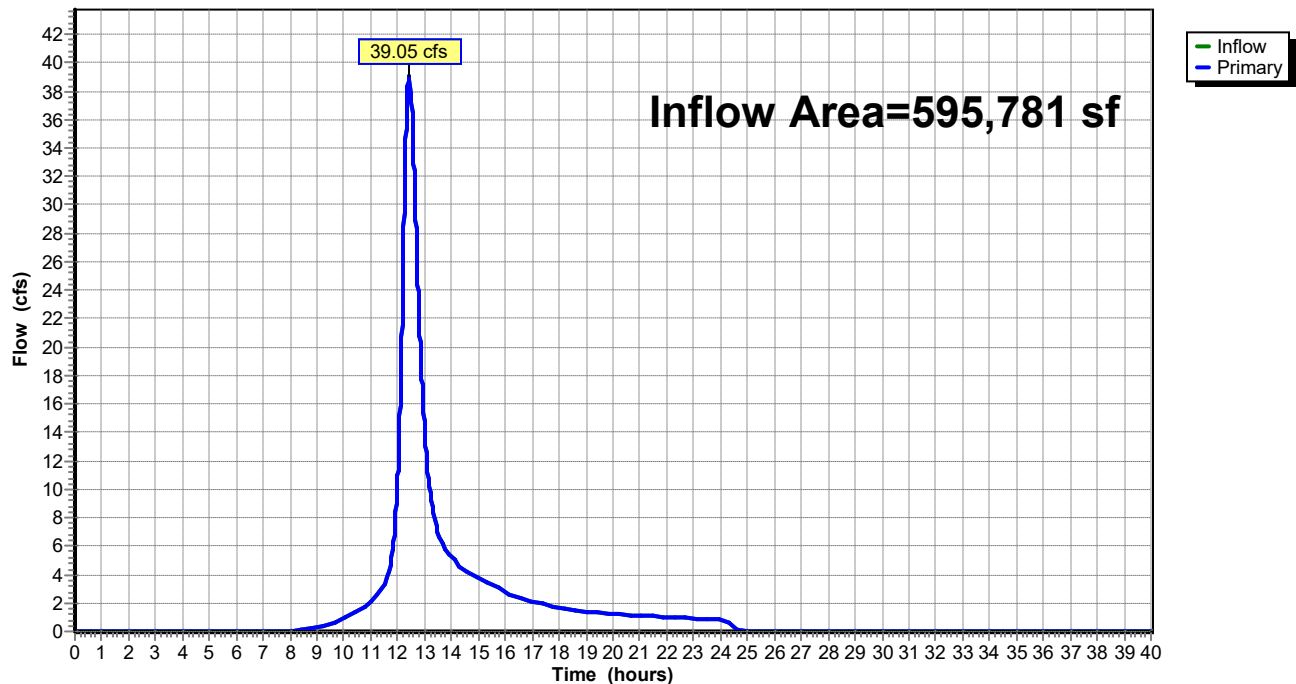
Summary for Link 7L: Mapped Wetland / Brook

Inflow Area = 595,781 sf, 30.45% Impervious, Inflow Depth = 4.34" for 50 Year event
 Inflow = 39.05 cfs @ 12.43 hrs, Volume= 215,323 cf
 Primary = 39.05 cfs @ 12.43 hrs, Volume= 215,323 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 7L: Mapped Wetland / Brook

Hydrograph



Hydrograph for Link 7L: Mapped Wetland / Brook

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.01	0.00	0.01	34.00	0.00	0.00	0.00
8.50	0.10	0.00	0.10	34.50	0.00	0.00	0.00
9.00	0.29	0.00	0.29	35.00	0.00	0.00	0.00
9.50	0.57	0.00	0.57	35.50	0.00	0.00	0.00
10.00	0.92	0.00	0.92	36.00	0.00	0.00	0.00
10.50	1.39	0.00	1.39	36.50	0.00	0.00	0.00
11.00	2.12	0.00	2.12	37.00	0.00	0.00	0.00
11.50	3.37	0.00	3.37	37.50	0.00	0.00	0.00
12.00	10.94	0.00	10.94	38.00	0.00	0.00	0.00
12.50	37.74	0.00	37.74	38.50	0.00	0.00	0.00
13.00	13.98	0.00	13.98	39.00	0.00	0.00	0.00
13.50	6.94	0.00	6.94	39.50	0.00	0.00	0.00
14.00	5.23	0.00	5.23	40.00	0.00	0.00	0.00
14.50	4.31	0.00	4.31				
15.00	3.77	0.00	3.77				
15.50	3.28	0.00	3.28				
16.00	2.78	0.00	2.78				
16.50	2.35	0.00	2.35				
17.00	2.09	0.00	2.09				
17.50	1.87	0.00	1.87				
18.00	1.65	0.00	1.65				
18.50	1.46	0.00	1.46				
19.00	1.38	0.00	1.38				
19.50	1.31	0.00	1.31				
20.00	1.24	0.00	1.24				
20.50	1.18	0.00	1.18				
21.00	1.13	0.00	1.13				
21.50	1.08	0.00	1.08				
22.00	1.03	0.00	1.03				
22.50	0.98	0.00	0.98				
23.00	0.93	0.00	0.93				
23.50	0.88	0.00	0.88				
24.00	0.83	0.00	0.83				
24.50	0.29	0.00	0.29				
25.00	0.03	0.00	0.03				
25.50	0.00	0.00	0.00				

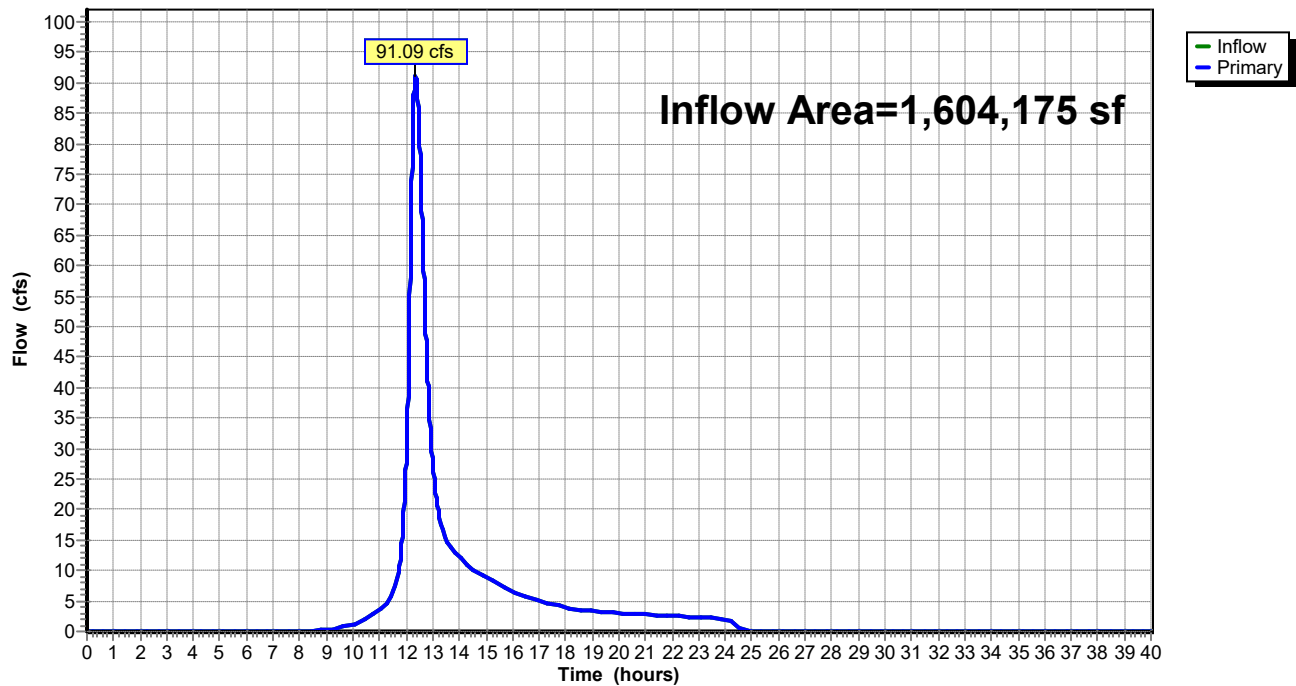
Summary for Link 16L: COMB PRE

Inflow Area = 1,604,175 sf, 14.60% Impervious, Inflow Depth = 3.62" for 50 Year event
 Inflow = 91.09 cfs @ 12.36 hrs, Volume= 484,057 cf
 Primary = 91.09 cfs @ 12.36 hrs, Volume= 484,057 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 16L: COMB PRE

Hydrograph



Hydrograph for Link 16L: COMB PRE

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.01	0.00	0.01	34.00	0.00	0.00	0.00
8.50	0.10	0.00	0.10	34.50	0.00	0.00	0.00
9.00	0.29	0.00	0.29	35.00	0.00	0.00	0.00
9.50	0.61	0.00	0.61	35.50	0.00	0.00	0.00
10.00	1.08	0.00	1.08	36.00	0.00	0.00	0.00
10.50	2.06	0.00	2.06	36.50	0.00	0.00	0.00
11.00	3.63	0.00	3.63	37.00	0.00	0.00	0.00
11.50	6.57	0.00	6.57	37.50	0.00	0.00	0.00
12.00	27.65	0.00	27.65	38.00	0.00	0.00	0.00
12.50	80.70	0.00	80.70	38.50	0.00	0.00	0.00
13.00	27.67	0.00	27.67	39.00	0.00	0.00	0.00
13.50	15.31	0.00	15.31	39.50	0.00	0.00	0.00
14.00	12.14	0.00	12.14	40.00	0.00	0.00	0.00
14.50	10.13	0.00	10.13				
15.00	8.92	0.00	8.92				
15.50	7.77	0.00	7.77				
16.00	6.58	0.00	6.58				
16.50	5.59	0.00	5.59				
17.00	5.02	0.00	5.02				
17.50	4.49	0.00	4.49				
18.00	3.95	0.00	3.95				
18.50	3.53	0.00	3.53				
19.00	3.34	0.00	3.34				
19.50	3.18	0.00	3.18				
20.00	3.02	0.00	3.02				
20.50	2.88	0.00	2.88				
21.00	2.76	0.00	2.76				
21.50	2.64	0.00	2.64				
22.00	2.51	0.00	2.51				
22.50	2.39	0.00	2.39				
23.00	2.27	0.00	2.27				
23.50	2.15	0.00	2.15				
24.00	2.02	0.00	2.02				
24.50	0.46	0.00	0.46				
25.00	0.03	0.00	0.03				
25.50	0.00	0.00	0.00				

Meadows Briarcliff_05032021*Type III 24-hr 100 Year Rainfall=9.22"*

Prepared by Wasp Engineering Group, PLLC

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 2S: EDA-2

Runoff Area=872,905 sf 4.09% Impervious Runoff Depth=4.27"
Flow Length=1,000' Tc=22.8 min CN=60 Runoff=63.47 cfs 310,892 cf

Subcatchment 3S: EDA-3

Runoff Area=595,781 sf 30.45% Impervious Runoff Depth=5.65"
Flow Length=1,190' Tc=30.5 min CN=71 Runoff=50.82 cfs 280,741 cf

Subcatchment 4S: EDA-1

Runoff Area=135,489 sf 12.59% Impervious Runoff Depth=4.90"
Flow Length=460' Tc=16.5 min CN=65 Runoff=13.04 cfs 55,345 cf

Link 5L: Pocantico River Basin

Inflow=13.04 cfs 55,345 cf
Primary=13.04 cfs 55,345 cf

Link 6L: Pocantico Lake

Inflow=63.47 cfs 310,892 cf
Primary=63.47 cfs 310,892 cf

Link 7L: Mapped Wetland / Brook

Inflow=50.82 cfs 280,741 cf
Primary=50.82 cfs 280,741 cf

Link 16L: COMB PRE

Inflow=122.84 cfs 646,978 cf
Primary=122.84 cfs 646,978 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 646,978 cf Average Runoff Depth = 4.84"
85.40% Pervious = 1,370,019 sf 14.60% Impervious = 234,156 sf

Summary for Subcatchment 2S: EDA-2

Runoff = 63.47 cfs @ 12.33 hrs, Volume= 310,892 cf, Depth= 4.27"

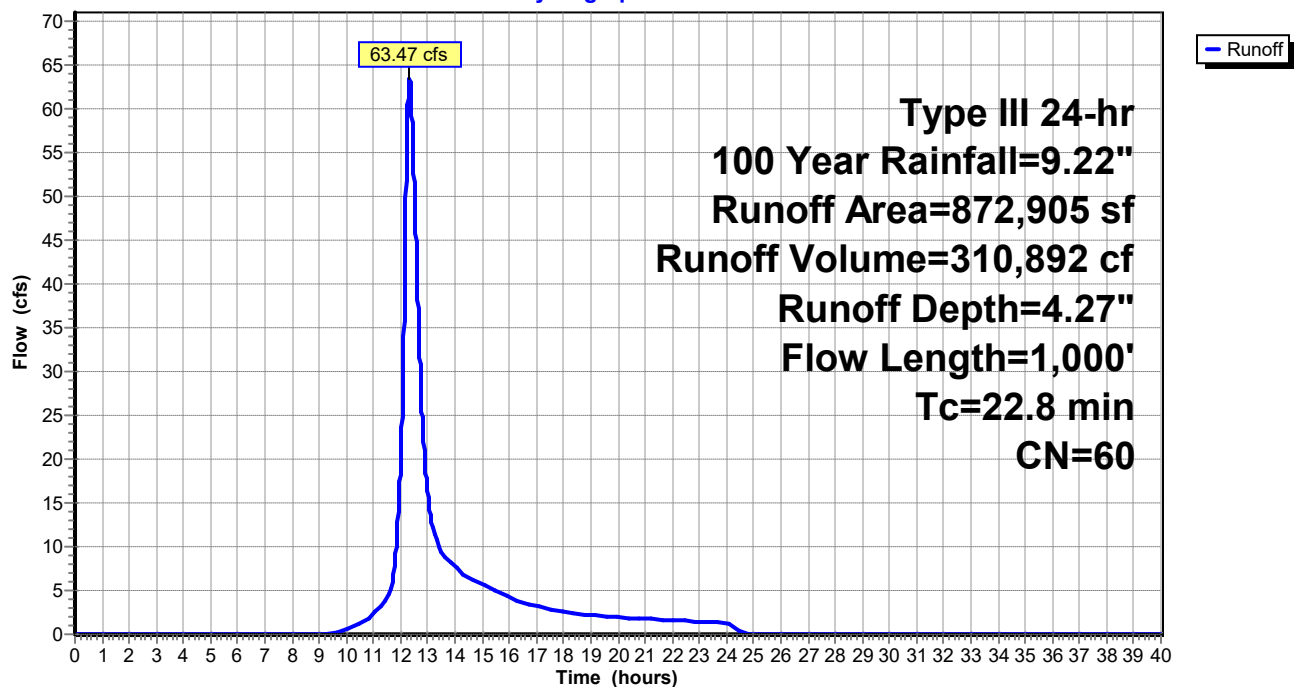
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100 Year Rainfall=9.22"

	Area (sf)	CN	Description
*	35,674	98	Ex. IMP Pavement, Rooftops
	74,836	61	>75% Grass cover, Good, HSG B
	762,395	58	Woods/grass comb., Good, HSG B
	872,905	60	Weighted Average
	837,231		95.91% Pervious Area
	35,674		4.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0520	0.12		Sheet Flow, Shallow Woods
					Woods: Light underbrush n= 0.400 P2= 3.41"
4.2	280	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods
					Woodland Kv= 5.0 fps
0.1	40	0.0670	5.25		Shallow Concentrated Flow, Driveway Crossing
					Paved Kv= 20.3 fps
4.3	580	0.2030	2.25		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
22.8	1,000	Total			

Subcatchment 2S: EDA-2

Hydrograph



Hydrograph for Subcatchment 2S: EDA-2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	9.22	4.27	0.00
0.50	0.05	0.00	0.00	26.50	9.22	4.27	0.00
1.00	0.09	0.00	0.00	27.00	9.22	4.27	0.00
1.50	0.14	0.00	0.00	27.50	9.22	4.27	0.00
2.00	0.18	0.00	0.00	28.00	9.22	4.27	0.00
2.50	0.23	0.00	0.00	28.50	9.22	4.27	0.00
3.00	0.28	0.00	0.00	29.00	9.22	4.27	0.00
3.50	0.34	0.00	0.00	29.50	9.22	4.27	0.00
4.00	0.40	0.00	0.00	30.00	9.22	4.27	0.00
4.50	0.46	0.00	0.00	30.50	9.22	4.27	0.00
5.00	0.52	0.00	0.00	31.00	9.22	4.27	0.00
5.50	0.59	0.00	0.00	31.50	9.22	4.27	0.00
6.00	0.66	0.00	0.00	32.00	9.22	4.27	0.00
6.50	0.74	0.00	0.00	32.50	9.22	4.27	0.00
7.00	0.83	0.00	0.00	33.00	9.22	4.27	0.00
7.50	0.94	0.00	0.00	33.50	9.22	4.27	0.00
8.00	1.05	0.00	0.00	34.00	9.22	4.27	0.00
8.50	1.18	0.00	0.00	34.50	9.22	4.27	0.00
9.00	1.34	0.00	0.00	35.00	9.22	4.27	0.00
9.50	1.53	0.01	0.16	35.50	9.22	4.27	0.00
10.00	1.74	0.02	0.62	36.00	9.22	4.27	0.00
10.50	2.00	0.06	1.29	36.50	9.22	4.27	0.00
11.00	2.30	0.12	2.32	37.00	9.22	4.27	0.00
11.50	2.75	0.25	4.34	37.50	9.22	4.27	0.00
12.00	4.61	1.08	19.72	38.00	9.22	4.27	0.00
12.50	6.47	2.24	50.73	38.50	9.22	4.27	0.00
13.00	6.91	2.54	15.86	39.00	9.22	4.27	0.00
13.50	7.22	2.76	9.42	39.50	9.22	4.27	0.00
14.00	7.48	2.95	7.73	40.00	9.22	4.27	0.00
14.50	7.69	3.10	6.49				
15.00	7.88	3.24	5.73				
15.50	8.04	3.36	4.98				
16.00	8.17	3.46	4.21				
16.50	8.28	3.55	3.59				
17.00	8.39	3.63	3.23				
17.50	8.48	3.69	2.89				
18.00	8.56	3.76	2.54				
18.50	8.63	3.81	2.28				
19.00	8.70	3.86	2.16				
19.50	8.76	3.92	2.06				
20.00	8.82	3.96	1.96				
20.50	8.88	4.01	1.86				
21.00	8.94	4.05	1.79				
21.50	8.99	4.09	1.71				
22.00	9.04	4.13	1.63				
22.50	9.09	4.17	1.55				
23.00	9.14	4.21	1.47				
23.50	9.18	4.24	1.39				
24.00	9.22	4.27	1.31				
24.50	9.22	4.27	0.20				
25.00	9.22	4.27	0.01				
25.50	9.22	4.27	0.00				

Summary for Subcatchment 3S: EDA-3

Runoff = 50.82 cfs @ 12.43 hrs, Volume= 280,741 cf, Depth= 5.65"

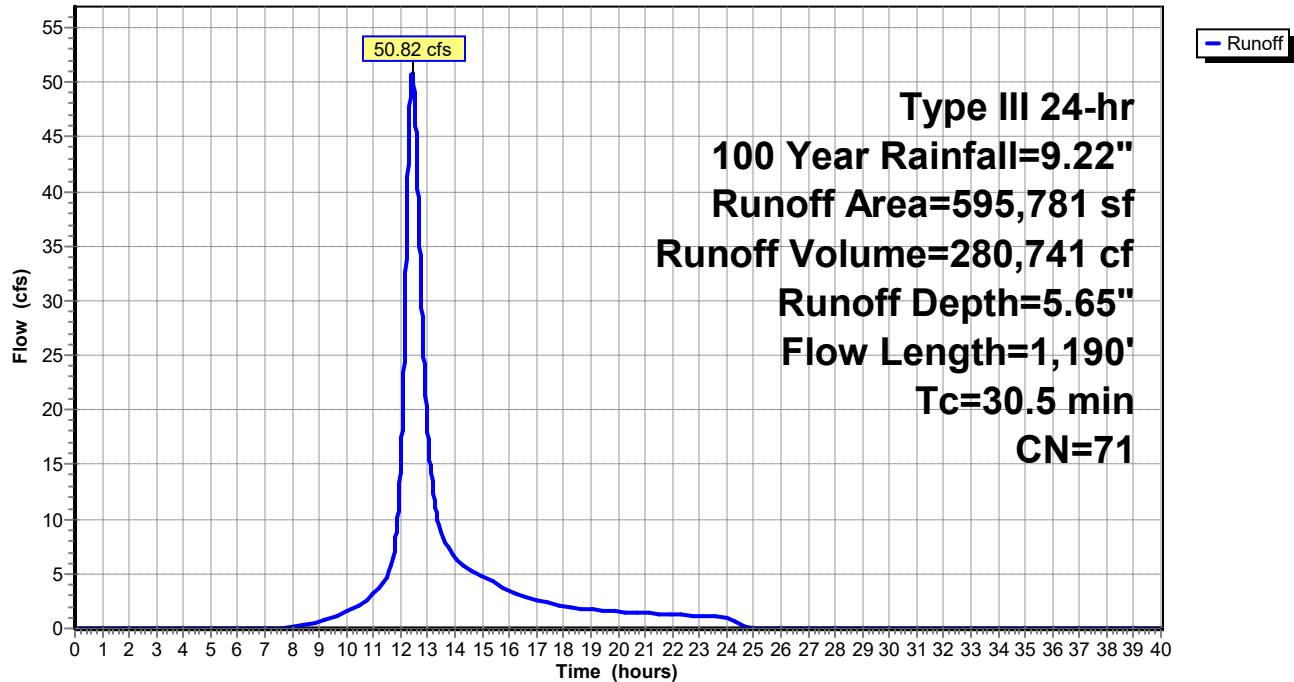
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=9.22"

Area (sf)	CN	Description
* 7,168	98	Ex. IMP Pavement, Rooftops
90,834	61	>75% Grass cover, Good, HSG B
260,380	58	Woods/grass comb., Good, HSG B
42,355	72	Woods/grass comb., Good, HSG C
20,791	32	Woods/grass comb., Good, HSG A
* 174,253	98	Wetlands, HSG C
595,781	71	Weighted Average
414,360		69.55% Pervious Area
181,421		30.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	100	0.0600	0.12		Sheet Flow, Sheet Flow Woods Woods: Light underbrush n= 0.400 P2= 3.41"
1.7	200	0.1600	2.00		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.9	210	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
2.2	200	0.0900	1.50		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
8.1	400	0.1095	0.83		Shallow Concentrated Flow, Shallow Conc. Wetland Forest w/Heavy Litter Kv= 2.5 fps
0.2	80	0.0875	5.87	46.95	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
30.5	1,190	Total			

Subcatchment 3S: EDA-3

Hydrograph



Hydrograph for Subcatchment 3S: EDA-3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	9.22	5.65	0.00
0.50	0.05	0.00	0.00	26.50	9.22	5.65	0.00
1.00	0.09	0.00	0.00	27.00	9.22	5.65	0.00
1.50	0.14	0.00	0.00	27.50	9.22	5.65	0.00
2.00	0.18	0.00	0.00	28.00	9.22	5.65	0.00
2.50	0.23	0.00	0.00	28.50	9.22	5.65	0.00
3.00	0.28	0.00	0.00	29.00	9.22	5.65	0.00
3.50	0.34	0.00	0.00	29.50	9.22	5.65	0.00
4.00	0.40	0.00	0.00	30.00	9.22	5.65	0.00
4.50	0.46	0.00	0.00	30.50	9.22	5.65	0.00
5.00	0.52	0.00	0.00	31.00	9.22	5.65	0.00
5.50	0.59	0.00	0.00	31.50	9.22	5.65	0.00
6.00	0.66	0.00	0.00	32.00	9.22	5.65	0.00
6.50	0.74	0.00	0.00	32.50	9.22	5.65	0.00
7.00	0.83	0.00	0.00	33.00	9.22	5.65	0.00
7.50	0.94	0.00	0.04	33.50	9.22	5.65	0.00
8.00	1.05	0.01	0.18	34.00	9.22	5.65	0.00
8.50	1.18	0.03	0.38	34.50	9.22	5.65	0.00
9.00	1.34	0.06	0.67	35.00	9.22	5.65	0.00
9.50	1.53	0.11	1.06	35.50	9.22	5.65	0.00
10.00	1.74	0.17	1.55	36.00	9.22	5.65	0.00
10.50	2.00	0.26	2.19	36.50	9.22	5.65	0.00
11.00	2.30	0.40	3.17	37.00	9.22	5.65	0.00
11.50	2.75	0.62	4.84	37.50	9.22	5.65	0.00
12.00	4.61	1.83	14.98	38.00	9.22	5.65	0.00
12.50	6.47	3.28	48.91	38.50	9.22	5.65	0.00
13.00	6.91	3.65	17.79	39.00	9.22	5.65	0.00
13.50	7.22	3.91	8.75	39.50	9.22	5.65	0.00
14.00	7.48	4.13	6.56	40.00	9.22	5.65	0.00
14.50	7.69	4.31	5.39				
15.00	7.88	4.47	4.71				
15.50	8.04	4.61	4.09				
16.00	8.17	4.73	3.47				
16.50	8.28	4.83	2.92				
17.00	8.39	4.92	2.60				
17.50	8.48	5.00	2.33				
18.00	8.56	5.07	2.05				
18.50	8.63	5.13	1.81				
19.00	8.70	5.19	1.71				
19.50	8.76	5.25	1.62				
20.00	8.82	5.30	1.54				
20.50	8.88	5.35	1.46				
21.00	8.94	5.40	1.40				
21.50	8.99	5.45	1.34				
22.00	9.04	5.50	1.28				
22.50	9.09	5.54	1.21				
23.00	9.14	5.58	1.15				
23.50	9.18	5.62	1.09				
24.00	9.22	5.65	1.02				
24.50	9.22	5.65	0.36				
25.00	9.22	5.65	0.03				
25.50	9.22	5.65	0.00				

Summary for Subcatchment 4S: EDA-1

Runoff = 13.04 cfs @ 12.23 hrs, Volume= 55,345 cf, Depth= 4.90"

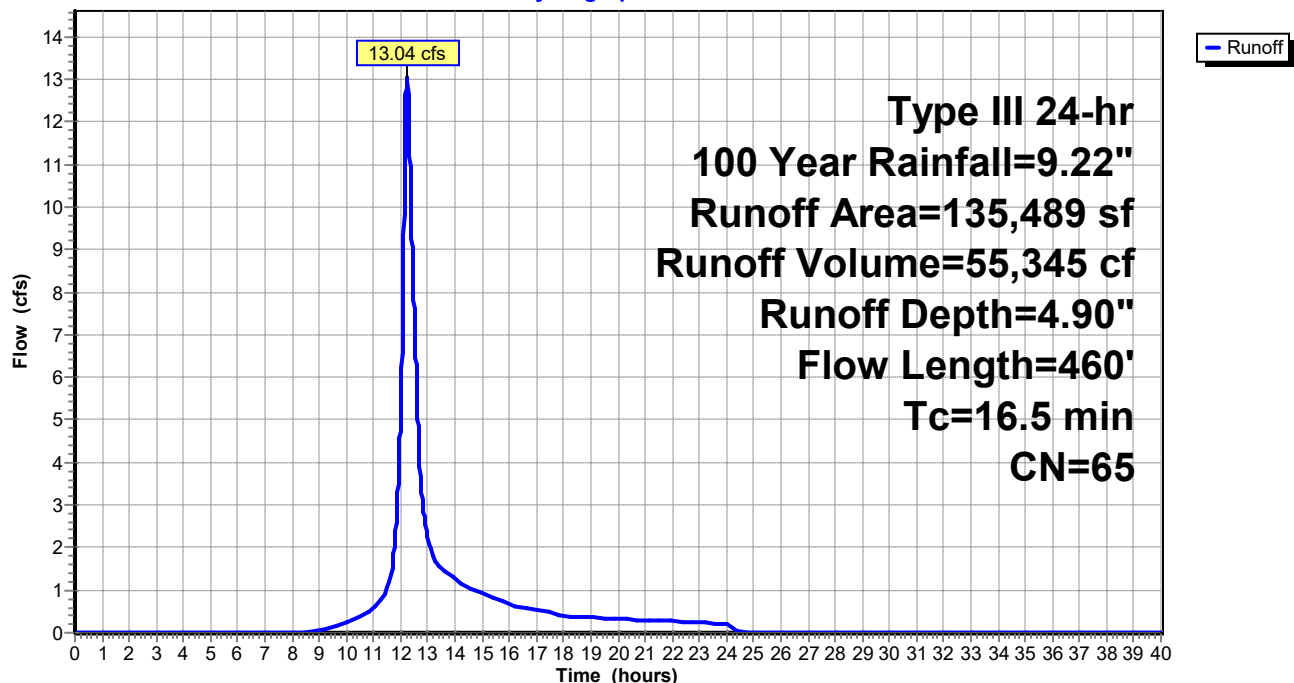
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Type III 24-hr 100 Year Rainfall=9.22"

	Area (sf)	CN	Description
*	17,061	98	Ex. IMP Pavement, Rooftops
	40,462	61	>75% Grass cover, Good, HSG B
	8,644	72	Woods/grass comb., Good, HSG C
	69,322	58	Woods/grass comb., Good, HSG B
	135,489	65	Weighted Average
	118,428		87.41% Pervious Area
	17,061		12.59% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	100	0.0640	0.13		Sheet Flow, Woods Sheet Flow
					Woods: Light underbrush n= 0.400 P2= 3.41"
3.0	230	0.0665	1.29		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
0.4	130	0.0608	5.01		Shallow Concentrated Flow, Driveway Flow
					Paved Kv= 20.3 fps
16.5	460	Total			

Subcatchment 4S: EDA-1

Hydrograph



Hydrograph for Subcatchment 4S: EDA-1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	9.22	4.90	0.00
0.50	0.05	0.00	0.00	26.50	9.22	4.90	0.00
1.00	0.09	0.00	0.00	27.00	9.22	4.90	0.00
1.50	0.14	0.00	0.00	27.50	9.22	4.90	0.00
2.00	0.18	0.00	0.00	28.00	9.22	4.90	0.00
2.50	0.23	0.00	0.00	28.50	9.22	4.90	0.00
3.00	0.28	0.00	0.00	29.00	9.22	4.90	0.00
3.50	0.34	0.00	0.00	29.50	9.22	4.90	0.00
4.00	0.40	0.00	0.00	30.00	9.22	4.90	0.00
4.50	0.46	0.00	0.00	30.50	9.22	4.90	0.00
5.00	0.52	0.00	0.00	31.00	9.22	4.90	0.00
5.50	0.59	0.00	0.00	31.50	9.22	4.90	0.00
6.00	0.66	0.00	0.00	32.00	9.22	4.90	0.00
6.50	0.74	0.00	0.00	32.50	9.22	4.90	0.00
7.00	0.83	0.00	0.00	33.00	9.22	4.90	0.00
7.50	0.94	0.00	0.00	33.50	9.22	4.90	0.00
8.00	1.05	0.00	0.00	34.00	9.22	4.90	0.00
8.50	1.18	0.00	0.01	34.50	9.22	4.90	0.00
9.00	1.34	0.01	0.07	35.00	9.22	4.90	0.00
9.50	1.53	0.04	0.14	35.50	9.22	4.90	0.00
10.00	1.74	0.07	0.24	36.00	9.22	4.90	0.00
10.50	2.00	0.13	0.38	36.50	9.22	4.90	0.00
11.00	2.30	0.23	0.59	37.00	9.22	4.90	0.00
11.50	2.75	0.40	1.04	37.50	9.22	4.90	0.00
12.00	4.61	1.40	5.13	38.00	9.22	4.90	0.00
12.50	6.47	2.70	7.41	38.50	9.22	4.90	0.00
13.00	6.91	3.04	2.20	39.00	9.22	4.90	0.00
13.50	7.22	3.28	1.51	39.50	9.22	4.90	0.00
14.00	7.48	3.48	1.25	40.00	9.22	4.90	0.00
14.50	7.69	3.65	1.06				
15.00	7.88	3.79	0.94				
15.50	8.04	3.92	0.81				
16.00	8.17	4.03	0.68				
16.50	8.28	4.12	0.58				
17.00	8.39	4.21	0.53				
17.50	8.48	4.28	0.47				
18.00	8.56	4.35	0.41				
18.50	8.63	4.41	0.37				
19.00	8.70	4.46	0.36				
19.50	8.76	4.52	0.34				
20.00	8.82	4.57	0.32				
20.50	8.88	4.62	0.31				
21.00	8.94	4.67	0.29				
21.50	8.99	4.71	0.28				
22.00	9.04	4.75	0.27				
22.50	9.09	4.79	0.25				
23.00	9.14	4.83	0.24				
23.50	9.18	4.87	0.23				
24.00	9.22	4.90	0.21				
24.50	9.22	4.90	0.01				
25.00	9.22	4.90	0.00				
25.50	9.22	4.90	0.00				

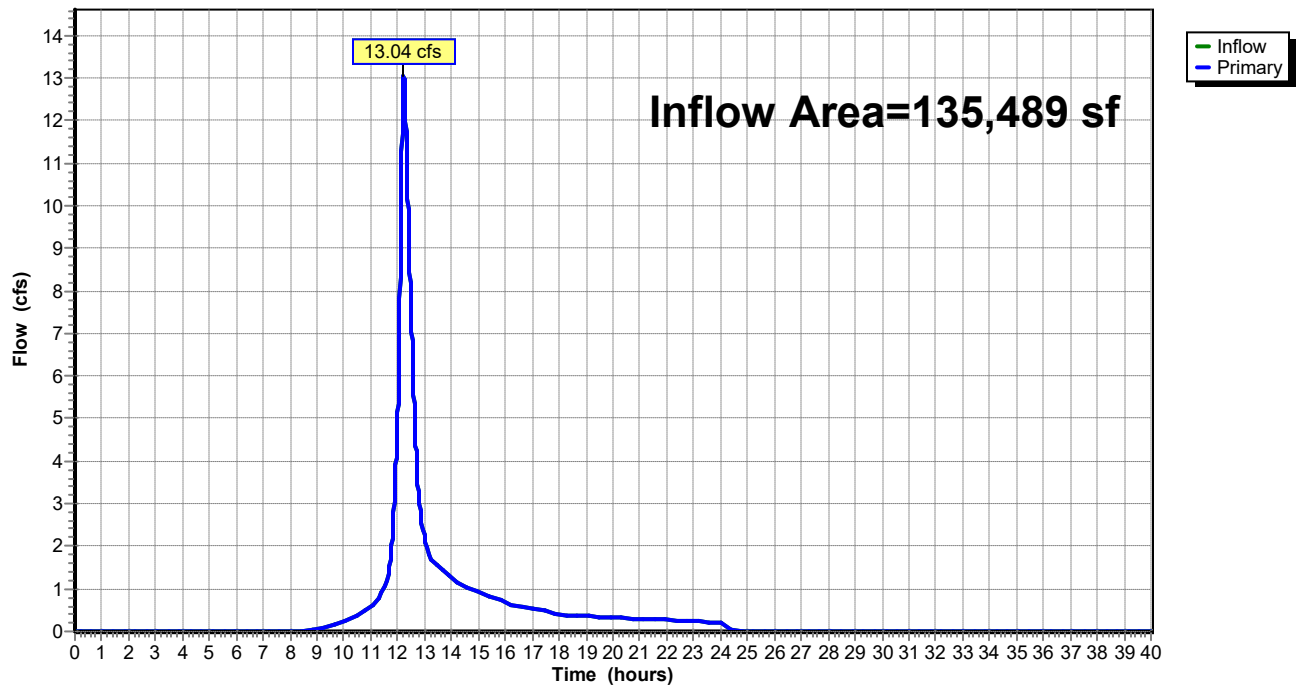
Summary for Link 5L: Pocantico River Basin

Inflow Area = 135,489 sf, 12.59% Impervious, Inflow Depth = 4.90" for 100 Year event
 Inflow = 13.04 cfs @ 12.23 hrs, Volume= 55,345 cf
 Primary = 13.04 cfs @ 12.23 hrs, Volume= 55,345 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 5L: Pocantico River Basin

Hydrograph



Hydrograph for Link 5L: Pocantico River Basin

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.01	0.00	0.01	34.50	0.00	0.00	0.00
9.00	0.07	0.00	0.07	35.00	0.00	0.00	0.00
9.50	0.14	0.00	0.14	35.50	0.00	0.00	0.00
10.00	0.24	0.00	0.24	36.00	0.00	0.00	0.00
10.50	0.38	0.00	0.38	36.50	0.00	0.00	0.00
11.00	0.59	0.00	0.59	37.00	0.00	0.00	0.00
11.50	1.04	0.00	1.04	37.50	0.00	0.00	0.00
12.00	5.13	0.00	5.13	38.00	0.00	0.00	0.00
12.50	7.41	0.00	7.41	38.50	0.00	0.00	0.00
13.00	2.20	0.00	2.20	39.00	0.00	0.00	0.00
13.50	1.51	0.00	1.51	39.50	0.00	0.00	0.00
14.00	1.25	0.00	1.25	40.00	0.00	0.00	0.00
14.50	1.06	0.00	1.06				
15.00	0.94	0.00	0.94				
15.50	0.81	0.00	0.81				
16.00	0.68	0.00	0.68				
16.50	0.58	0.00	0.58				
17.00	0.53	0.00	0.53				
17.50	0.47	0.00	0.47				
18.00	0.41	0.00	0.41				
18.50	0.37	0.00	0.37				
19.00	0.36	0.00	0.36				
19.50	0.34	0.00	0.34				
20.00	0.32	0.00	0.32				
20.50	0.31	0.00	0.31				
21.00	0.29	0.00	0.29				
21.50	0.28	0.00	0.28				
22.00	0.27	0.00	0.27				
22.50	0.25	0.00	0.25				
23.00	0.24	0.00	0.24				
23.50	0.23	0.00	0.23				
24.00	0.21	0.00	0.21				
24.50	0.01	0.00	0.01				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

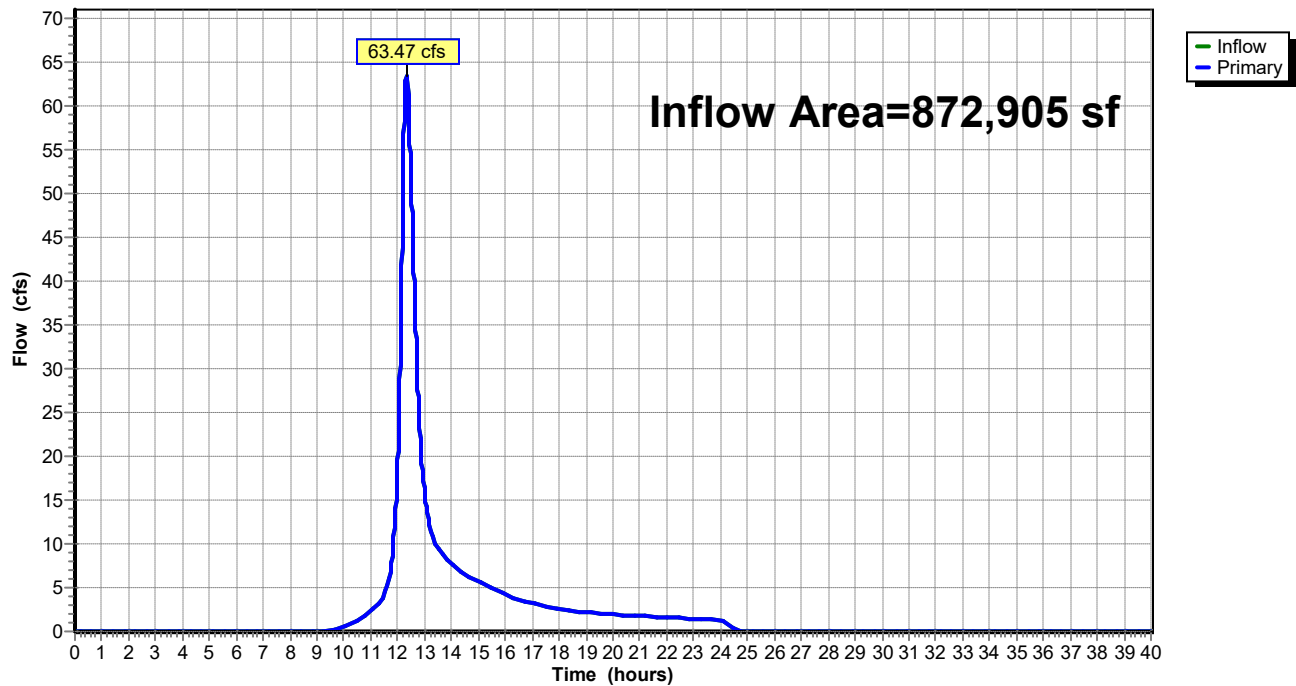
Summary for Link 6L: Pocantico Lake

Inflow Area = 872,905 sf, 4.09% Impervious, Inflow Depth = 4.27" for 100 Year event
 Inflow = 63.47 cfs @ 12.33 hrs, Volume= 310,892 cf
 Primary = 63.47 cfs @ 12.33 hrs, Volume= 310,892 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 6L: Pocantico Lake

Hydrograph



Hydrograph for Link 6L: Pocantico Lake

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.16	0.00	0.16	35.50	0.00	0.00	0.00
10.00	0.62	0.00	0.62	36.00	0.00	0.00	0.00
10.50	1.29	0.00	1.29	36.50	0.00	0.00	0.00
11.00	2.32	0.00	2.32	37.00	0.00	0.00	0.00
11.50	4.34	0.00	4.34	37.50	0.00	0.00	0.00
12.00	19.72	0.00	19.72	38.00	0.00	0.00	0.00
12.50	50.73	0.00	50.73	38.50	0.00	0.00	0.00
13.00	15.86	0.00	15.86	39.00	0.00	0.00	0.00
13.50	9.42	0.00	9.42	39.50	0.00	0.00	0.00
14.00	7.73	0.00	7.73	40.00	0.00	0.00	0.00
14.50	6.49	0.00	6.49				
15.00	5.73	0.00	5.73				
15.50	4.98	0.00	4.98				
16.00	4.21	0.00	4.21				
16.50	3.59	0.00	3.59				
17.00	3.23	0.00	3.23				
17.50	2.89	0.00	2.89				
18.00	2.54	0.00	2.54				
18.50	2.28	0.00	2.28				
19.00	2.16	0.00	2.16				
19.50	2.06	0.00	2.06				
20.00	1.96	0.00	1.96				
20.50	1.86	0.00	1.86				
21.00	1.79	0.00	1.79				
21.50	1.71	0.00	1.71				
22.00	1.63	0.00	1.63				
22.50	1.55	0.00	1.55				
23.00	1.47	0.00	1.47				
23.50	1.39	0.00	1.39				
24.00	1.31	0.00	1.31				
24.50	0.20	0.00	0.20				
25.00	0.01	0.00	0.01				
25.50	0.00	0.00	0.00				

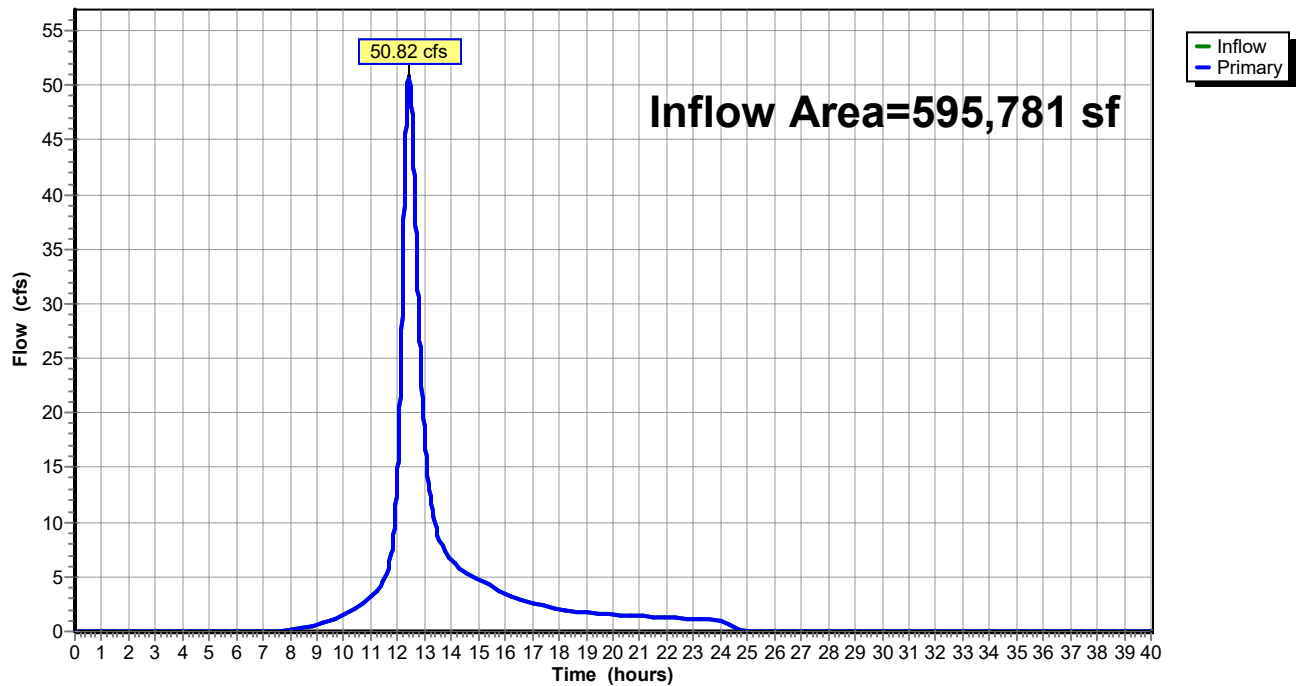
Summary for Link 7L: Mapped Wetland / Brook

Inflow Area = 595,781 sf, 30.45% Impervious, Inflow Depth = 5.65" for 100 Year event
 Inflow = 50.82 cfs @ 12.43 hrs, Volume= 280,741 cf
 Primary = 50.82 cfs @ 12.43 hrs, Volume= 280,741 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 7L: Mapped Wetland / Brook

Hydrograph



Hydrograph for Link 7L: Mapped Wetland / Brook

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.04	0.00	0.04	33.50	0.00	0.00	0.00
8.00	0.18	0.00	0.18	34.00	0.00	0.00	0.00
8.50	0.38	0.00	0.38	34.50	0.00	0.00	0.00
9.00	0.67	0.00	0.67	35.00	0.00	0.00	0.00
9.50	1.06	0.00	1.06	35.50	0.00	0.00	0.00
10.00	1.55	0.00	1.55	36.00	0.00	0.00	0.00
10.50	2.19	0.00	2.19	36.50	0.00	0.00	0.00
11.00	3.17	0.00	3.17	37.00	0.00	0.00	0.00
11.50	4.84	0.00	4.84	37.50	0.00	0.00	0.00
12.00	14.98	0.00	14.98	38.00	0.00	0.00	0.00
12.50	48.91	0.00	48.91	38.50	0.00	0.00	0.00
13.00	17.79	0.00	17.79	39.00	0.00	0.00	0.00
13.50	8.75	0.00	8.75	39.50	0.00	0.00	0.00
14.00	6.56	0.00	6.56	40.00	0.00	0.00	0.00
14.50	5.39	0.00	5.39				
15.00	4.71	0.00	4.71				
15.50	4.09	0.00	4.09				
16.00	3.47	0.00	3.47				
16.50	2.92	0.00	2.92				
17.00	2.60	0.00	2.60				
17.50	2.33	0.00	2.33				
18.00	2.05	0.00	2.05				
18.50	1.81	0.00	1.81				
19.00	1.71	0.00	1.71				
19.50	1.62	0.00	1.62				
20.00	1.54	0.00	1.54				
20.50	1.46	0.00	1.46				
21.00	1.40	0.00	1.40				
21.50	1.34	0.00	1.34				
22.00	1.28	0.00	1.28				
22.50	1.21	0.00	1.21				
23.00	1.15	0.00	1.15				
23.50	1.09	0.00	1.09				
24.00	1.02	0.00	1.02				
24.50	0.36	0.00	0.36				
25.00	0.03	0.00	0.03				
25.50	0.00	0.00	0.00				

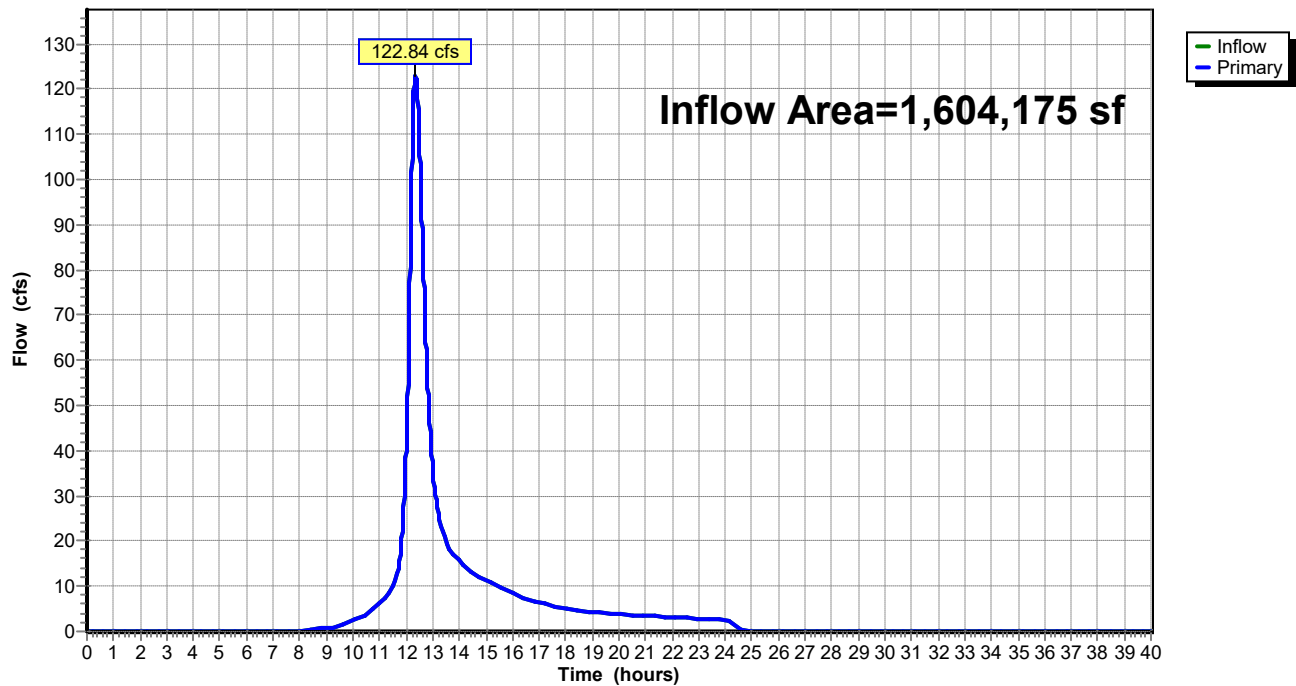
Summary for Link 16L: COMB PRE

Inflow Area = 1,604,175 sf, 14.60% Impervious, Inflow Depth = 4.84" for 100 Year event
 Inflow = 122.84 cfs @ 12.34 hrs, Volume= 646,978 cf
 Primary = 122.84 cfs @ 12.34 hrs, Volume= 646,978 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

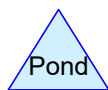
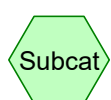
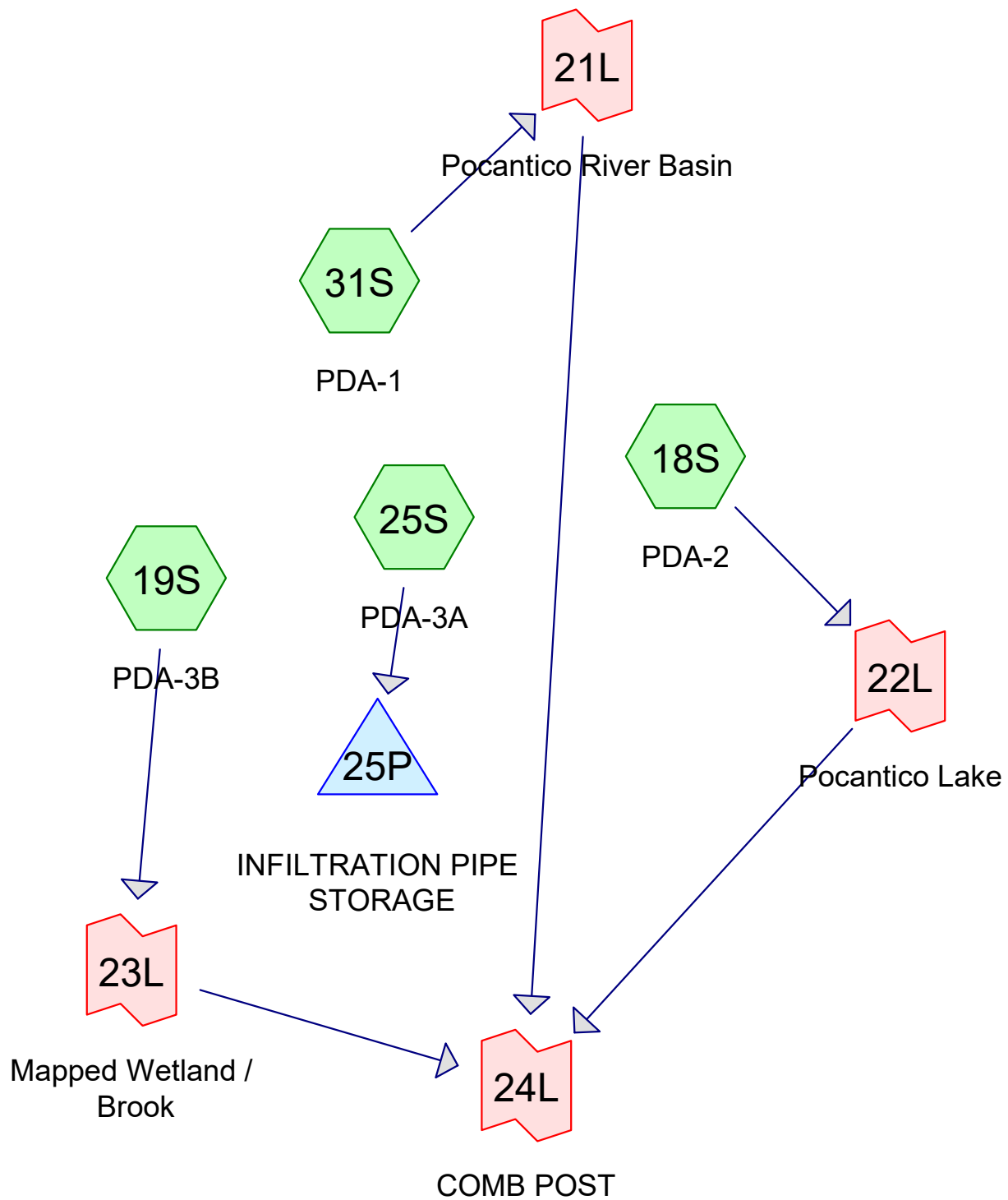
Link 16L: COMB PRE

Hydrograph



Hydrograph for Link 16L: COMB PRE

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.04	0.00	0.04	33.50	0.00	0.00	0.00
8.00	0.18	0.00	0.18	34.00	0.00	0.00	0.00
8.50	0.39	0.00	0.39	34.50	0.00	0.00	0.00
9.00	0.73	0.00	0.73	35.00	0.00	0.00	0.00
9.50	1.36	0.00	1.36	35.50	0.00	0.00	0.00
10.00	2.41	0.00	2.41	36.00	0.00	0.00	0.00
10.50	3.86	0.00	3.86	36.50	0.00	0.00	0.00
11.00	6.08	0.00	6.08	37.00	0.00	0.00	0.00
11.50	10.22	0.00	10.22	37.50	0.00	0.00	0.00
12.00	39.83	0.00	39.83	38.00	0.00	0.00	0.00
12.50	107.06	0.00	107.06	38.50	0.00	0.00	0.00
13.00	35.86	0.00	35.86	39.00	0.00	0.00	0.00
13.50	19.68	0.00	19.68	39.50	0.00	0.00	0.00
14.00	15.54	0.00	15.54	40.00	0.00	0.00	0.00
14.50	12.94	0.00	12.94				
15.00	11.37	0.00	11.37				
15.50	9.88	0.00	9.88				
16.00	8.36	0.00	8.36				
16.50	7.10	0.00	7.10				
17.00	6.36	0.00	6.36				
17.50	5.68	0.00	5.68				
18.00	5.00	0.00	5.00				
18.50	4.46	0.00	4.46				
19.00	4.23	0.00	4.23				
19.50	4.02	0.00	4.02				
20.00	3.82	0.00	3.82				
20.50	3.64	0.00	3.64				
21.00	3.48	0.00	3.48				
21.50	3.32	0.00	3.32				
22.00	3.17	0.00	3.17				
22.50	3.01	0.00	3.01				
23.00	2.86	0.00	2.86				
23.50	2.70	0.00	2.70				
24.00	2.55	0.00	2.55				
24.50	0.58	0.00	0.58				
25.00	0.04	0.00	0.04				
25.50	0.00	0.00	0.00				



Routing Diagram for Meadows Briarcliff_05032021
 Prepared by Wasp Engineering Group, PLLC, Printed 5/9/2021
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Meadows Briarcliff_05032021*Type III 24-hr 1 Year Rainfall=2.72"*

Prepared by Wasp Engineering Group, PLLC

Printed 5/9/2021

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Page 2

Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 18S: PDA-2

Runoff Area=490,859 sf 0.00% Impervious Runoff Depth=0.21"
Flow Length=435' Tc=10.5 min CN=59 Runoff=0.96 cfs 8,742 cf

Subcatchment 19S: PDA-3B

Runoff Area=482,021 sf 39.25% Impervious Runoff Depth=0.83"
Flow Length=1,330' Tc=34.1 min CN=76 Runoff=5.36 cfs 33,394 cf

Subcatchment 25S: PDA-3A

Runoff Area=545,177 sf 28.83% Impervious Runoff Depth=0.65"
Flow Length=240' Tc=11.6 min CN=72 Runoff=6.79 cfs 29,390 cf

Subcatchment 31S: PDA-1

Runoff Area=86,118 sf 0.00% Impervious Runoff Depth=0.27"
Flow Length=145' Tc=14.0 min CN=61 Runoff=0.23 cfs 1,903 cf

Pond 25P: INFILTRATION PIPE STORAGE Peak Elev=320.15' Storage=2,060 cf Inflow=6.79 cfs 29,390 cf
Outflow=3.98 cfs 29,398 cf

Link 21L: Pocantico River Basin

Inflow=0.23 cfs 1,903 cf
Primary=0.23 cfs 1,903 cf

Link 22L: Pocantico Lake

Inflow=0.96 cfs 8,742 cf
Primary=0.96 cfs 8,742 cf

Link 23L: Mapped Wetland / Brook

Inflow=5.36 cfs 33,394 cf
Primary=5.36 cfs 33,394 cf

Link 24L: COMB POST

Inflow=6.45 cfs 44,038 cf
Primary=6.45 cfs 44,038 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 73,429 cf Average Runoff Depth = 0.55"
78.41% Pervious = 1,257,830 sf 21.59% Impervious = 346,345 sf

Summary for Subcatchment 18S: PDA-2

Runoff = 0.96 cfs @ 12.40 hrs, Volume= 8,742 cf, Depth= 0.21"

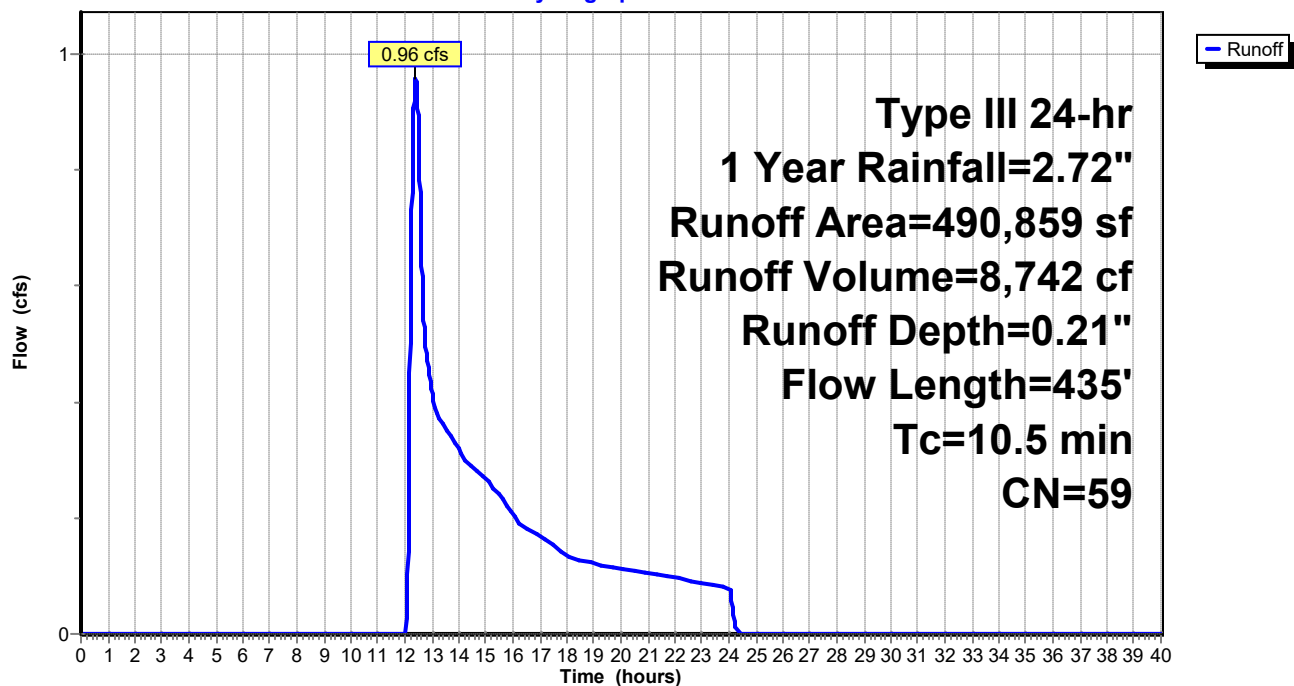
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.72"

Area (sf)	CN	Description
* 0	98	Ex. IMP Pavement, Rooftops
151,101	61	>75% Grass cover, Good, HSG B
339,758	58	Woods/grass comb., Good, HSG B
490,859	59	Weighted Average
490,859		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.0650	0.19		Sheet Flow, Sheet Lawn Grass: Dense n= 0.240 P2= 3.41"
0.7	115	0.1520	2.73		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
1.2	220	0.4050	3.18		Shallow Concentrated Flow, Shallow Conc. Woodland Woodland Kv= 5.0 fps
10.5	435	Total			

Subcatchment 18S: PDA-2

Hydrograph



Hydrograph for Subcatchment 18S: PDA-2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	2.72	0.21	0.00
0.50	0.01	0.00	0.00	26.50	2.72	0.21	0.00
1.00	0.03	0.00	0.00	27.00	2.72	0.21	0.00
1.50	0.04	0.00	0.00	27.50	2.72	0.21	0.00
2.00	0.05	0.00	0.00	28.00	2.72	0.21	0.00
2.50	0.07	0.00	0.00	28.50	2.72	0.21	0.00
3.00	0.08	0.00	0.00	29.00	2.72	0.21	0.00
3.50	0.10	0.00	0.00	29.50	2.72	0.21	0.00
4.00	0.12	0.00	0.00	30.00	2.72	0.21	0.00
4.50	0.14	0.00	0.00	30.50	2.72	0.21	0.00
5.00	0.15	0.00	0.00	31.00	2.72	0.21	0.00
5.50	0.17	0.00	0.00	31.50	2.72	0.21	0.00
6.00	0.20	0.00	0.00	32.00	2.72	0.21	0.00
6.50	0.22	0.00	0.00	32.50	2.72	0.21	0.00
7.00	0.25	0.00	0.00	33.00	2.72	0.21	0.00
7.50	0.28	0.00	0.00	33.50	2.72	0.21	0.00
8.00	0.31	0.00	0.00	34.00	2.72	0.21	0.00
8.50	0.35	0.00	0.00	34.50	2.72	0.21	0.00
9.00	0.40	0.00	0.00	35.00	2.72	0.21	0.00
9.50	0.45	0.00	0.00	35.50	2.72	0.21	0.00
10.00	0.51	0.00	0.00	36.00	2.72	0.21	0.00
10.50	0.59	0.00	0.00	36.50	2.72	0.21	0.00
11.00	0.68	0.00	0.00	37.00	2.72	0.21	0.00
11.50	0.81	0.00	0.00	37.50	2.72	0.21	0.00
12.00	1.36	0.00	0.00	38.00	2.72	0.21	0.00
12.50	1.91	0.04	0.88	38.50	2.72	0.21	0.00
13.00	2.04	0.06	0.42	39.00	2.72	0.21	0.00
13.50	2.13	0.07	0.36	39.50	2.72	0.21	0.00
14.00	2.21	0.09	0.32	40.00	2.72	0.21	0.00
14.50	2.27	0.10	0.29				
15.00	2.32	0.11	0.27				
15.50	2.37	0.12	0.24				
16.00	2.41	0.13	0.20				
16.50	2.44	0.14	0.18				
17.00	2.47	0.15	0.17				
17.50	2.50	0.15	0.15				
18.00	2.52	0.16	0.13				
18.50	2.55	0.16	0.13				
19.00	2.57	0.17	0.12				
19.50	2.58	0.18	0.12				
20.00	2.60	0.18	0.11				
20.50	2.62	0.19	0.11				
21.00	2.64	0.19	0.10				
21.50	2.65	0.19	0.10				
22.00	2.67	0.20	0.10				
22.50	2.68	0.20	0.09				
23.00	2.70	0.21	0.09				
23.50	2.71	0.21	0.08				
24.00	2.72	0.21	0.08				
24.50	2.72	0.21	0.00				
25.00	2.72	0.21	0.00				
25.50	2.72	0.21	0.00				

Summary for Subcatchment 19S: PDA-3B

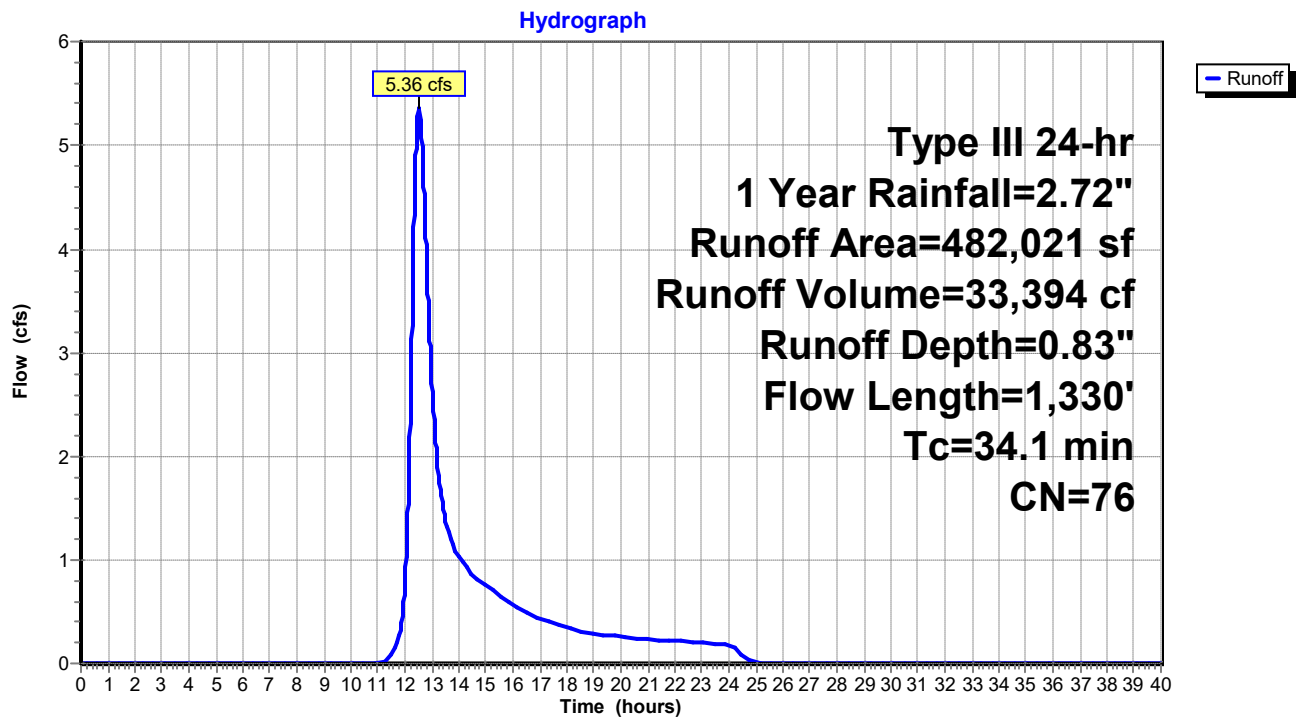
Runoff = 5.36 cfs @ 12.53 hrs, Volume= 33,394 cf, Depth= 0.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.72"

	Area (sf)	CN	Description
*	14,931	98	Ex. IMP Pavement, Rooftops
	75,129	74	>75% Grass cover, Good, HSG C
	67,015	61	>75% Grass cover, Good, HSG B
	100,430	58	Woods/grass comb., Good, HSG B
	30,434	72	Woods/grass comb., Good, HSG C
	19,829	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	482,021	76	Weighted Average
	292,837		60.75% Pervious Area
	189,184		39.25% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.5	100	0.0150	0.11		Sheet Flow, Sheet Flow Lawn Grass: Dense n= 0.240 P2= 3.41"
1.0	80	0.0400	1.40		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
3.6	240	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
5.9	250	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
3.1	300	0.1067	1.63		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.7	230	0.1043	0.81		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
0.3	130	0.1000	6.27	50.19	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
34.1	1,330	Total			

Subcatchment 19S: PDA-3B



Hydrograph for Subcatchment 19S: PDA-3B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	2.72	0.83	0.00
0.50	0.01	0.00	0.00	26.50	2.72	0.83	0.00
1.00	0.03	0.00	0.00	27.00	2.72	0.83	0.00
1.50	0.04	0.00	0.00	27.50	2.72	0.83	0.00
2.00	0.05	0.00	0.00	28.00	2.72	0.83	0.00
2.50	0.07	0.00	0.00	28.50	2.72	0.83	0.00
3.00	0.08	0.00	0.00	29.00	2.72	0.83	0.00
3.50	0.10	0.00	0.00	29.50	2.72	0.83	0.00
4.00	0.12	0.00	0.00	30.00	2.72	0.83	0.00
4.50	0.14	0.00	0.00	30.50	2.72	0.83	0.00
5.00	0.15	0.00	0.00	31.00	2.72	0.83	0.00
5.50	0.17	0.00	0.00	31.50	2.72	0.83	0.00
6.00	0.20	0.00	0.00	32.00	2.72	0.83	0.00
6.50	0.22	0.00	0.00	32.50	2.72	0.83	0.00
7.00	0.25	0.00	0.00	33.00	2.72	0.83	0.00
7.50	0.28	0.00	0.00	33.50	2.72	0.83	0.00
8.00	0.31	0.00	0.00	34.00	2.72	0.83	0.00
8.50	0.35	0.00	0.00	34.50	2.72	0.83	0.00
9.00	0.40	0.00	0.00	35.00	2.72	0.83	0.00
9.50	0.45	0.00	0.00	35.50	2.72	0.83	0.00
10.00	0.51	0.00	0.00	36.00	2.72	0.83	0.00
10.50	0.59	0.00	0.00	36.50	2.72	0.83	0.00
11.00	0.68	0.00	0.00	37.00	2.72	0.83	0.00
11.50	0.81	0.01	0.08	37.50	2.72	0.83	0.00
12.00	1.36	0.14	0.76	38.00	2.72	0.83	0.00
12.50	1.91	0.37	5.35	38.50	2.72	0.83	0.00
13.00	2.04	0.43	2.69	39.00	2.72	0.83	0.00
13.50	2.13	0.48	1.37	39.50	2.72	0.83	0.00
14.00	2.21	0.52	1.03	40.00	2.72	0.83	0.00
14.50	2.27	0.56	0.85				
15.00	2.32	0.59	0.75				
15.50	2.37	0.62	0.66				
16.00	2.41	0.64	0.57				
16.50	2.44	0.66	0.48				
17.00	2.47	0.68	0.43				
17.50	2.50	0.69	0.39				
18.00	2.52	0.71	0.34				
18.50	2.55	0.72	0.30				
19.00	2.57	0.73	0.28				
19.50	2.58	0.75	0.27				
20.00	2.60	0.76	0.26				
20.50	2.62	0.77	0.25				
21.00	2.64	0.78	0.24				
21.50	2.65	0.79	0.23				
22.00	2.67	0.80	0.22				
22.50	2.68	0.81	0.21				
23.00	2.70	0.82	0.20				
23.50	2.71	0.82	0.19				
24.00	2.72	0.83	0.18				
24.50	2.72	0.83	0.08				
25.00	2.72	0.83	0.01				
25.50	2.72	0.83	0.00				

Summary for Subcatchment 25S: PDA-3A

Runoff = 6.79 cfs @ 12.18 hrs, Volume= 29,390 cf, Depth= 0.65"

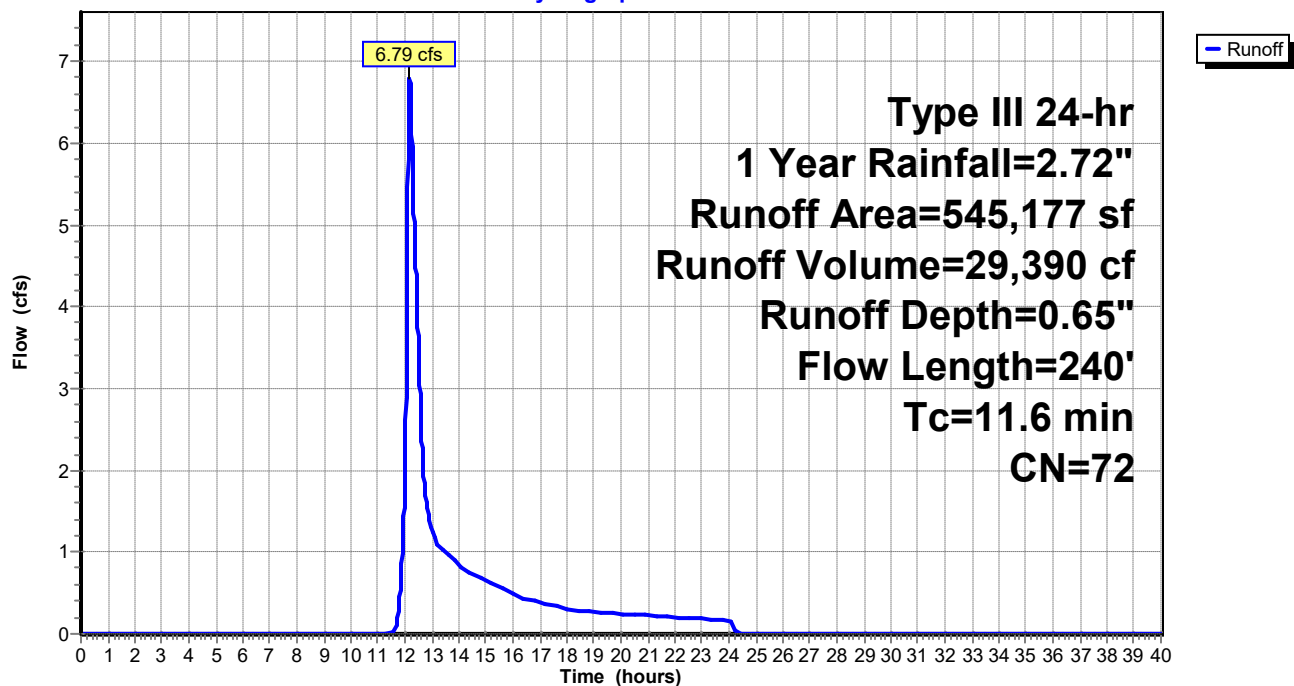
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Type III 24-hr 1 Year Rainfall=2.72"

	Area (sf)	CN	Description
*	157,161	98	Ex. IMP Pavement, Rooftops
	388,016	61	>75% Grass cover, Good, HSG B
	545,177	72	Weighted Average
	388,016		71.17% Pervious Area
	157,161		28.83% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.5	100	0.0400	0.16		Sheet Flow, Sheet Flow Woods
					Grass: Dense n= 0.240 P2= 3.41"
1.1	140	0.1000	2.21		Shallow Concentrated Flow, Shallow Conc. Lawn
					Short Grass Pasture Kv= 7.0 fps
11.6	240	Total			

Subcatchment 25S: PDA-3A

Hydrograph



Hydrograph for Subcatchment 25S: PDA-3A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	2.72	0.65	0.00
0.50	0.01	0.00	0.00	26.50	2.72	0.65	0.00
1.00	0.03	0.00	0.00	27.00	2.72	0.65	0.00
1.50	0.04	0.00	0.00	27.50	2.72	0.65	0.00
2.00	0.05	0.00	0.00	28.00	2.72	0.65	0.00
2.50	0.07	0.00	0.00	28.50	2.72	0.65	0.00
3.00	0.08	0.00	0.00	29.00	2.72	0.65	0.00
3.50	0.10	0.00	0.00	29.50	2.72	0.65	0.00
4.00	0.12	0.00	0.00	30.00	2.72	0.65	0.00
4.50	0.14	0.00	0.00	30.50	2.72	0.65	0.00
5.00	0.15	0.00	0.00	31.00	2.72	0.65	0.00
5.50	0.17	0.00	0.00	31.50	2.72	0.65	0.00
6.00	0.20	0.00	0.00	32.00	2.72	0.65	0.00
6.50	0.22	0.00	0.00	32.50	2.72	0.65	0.00
7.00	0.25	0.00	0.00	33.00	2.72	0.65	0.00
7.50	0.28	0.00	0.00	33.50	2.72	0.65	0.00
8.00	0.31	0.00	0.00	34.00	2.72	0.65	0.00
8.50	0.35	0.00	0.00	34.50	2.72	0.65	0.00
9.00	0.40	0.00	0.00	35.00	2.72	0.65	0.00
9.50	0.45	0.00	0.00	35.50	2.72	0.65	0.00
10.00	0.51	0.00	0.00	36.00	2.72	0.65	0.00
10.50	0.59	0.00	0.00	36.50	2.72	0.65	0.00
11.00	0.68	0.00	0.00	37.00	2.72	0.65	0.00
11.50	0.81	0.00	0.00	37.50	2.72	0.65	0.00
12.00	1.36	0.08	1.96	38.00	2.72	0.65	0.00
12.50	1.91	0.26	3.54	38.50	2.72	0.65	0.00
13.00	2.04	0.31	1.30	39.00	2.72	0.65	0.00
13.50	2.13	0.35	0.99	39.50	2.72	0.65	0.00
14.00	2.21	0.38	0.84	40.00	2.72	0.65	0.00
14.50	2.27	0.41	0.74				
15.00	2.32	0.44	0.66				
15.50	2.37	0.46	0.57				
16.00	2.41	0.48	0.48				
16.50	2.44	0.50	0.43				
17.00	2.47	0.52	0.39				
17.50	2.50	0.53	0.34				
18.00	2.52	0.54	0.30				
18.50	2.55	0.55	0.28				
19.00	2.57	0.56	0.27				
19.50	2.58	0.57	0.26				
20.00	2.60	0.58	0.24				
20.50	2.62	0.59	0.23				
21.00	2.64	0.60	0.22				
21.50	2.65	0.61	0.21				
22.00	2.67	0.62	0.21				
22.50	2.68	0.63	0.20				
23.00	2.70	0.63	0.19				
23.50	2.71	0.64	0.18				
24.00	2.72	0.65	0.17				
24.50	2.72	0.65	0.00				
25.00	2.72	0.65	0.00				
25.50	2.72	0.65	0.00				

Summary for Subcatchment 31S: PDA-1

Runoff = 0.23 cfs @ 12.40 hrs, Volume= 1,903 cf, Depth= 0.27"

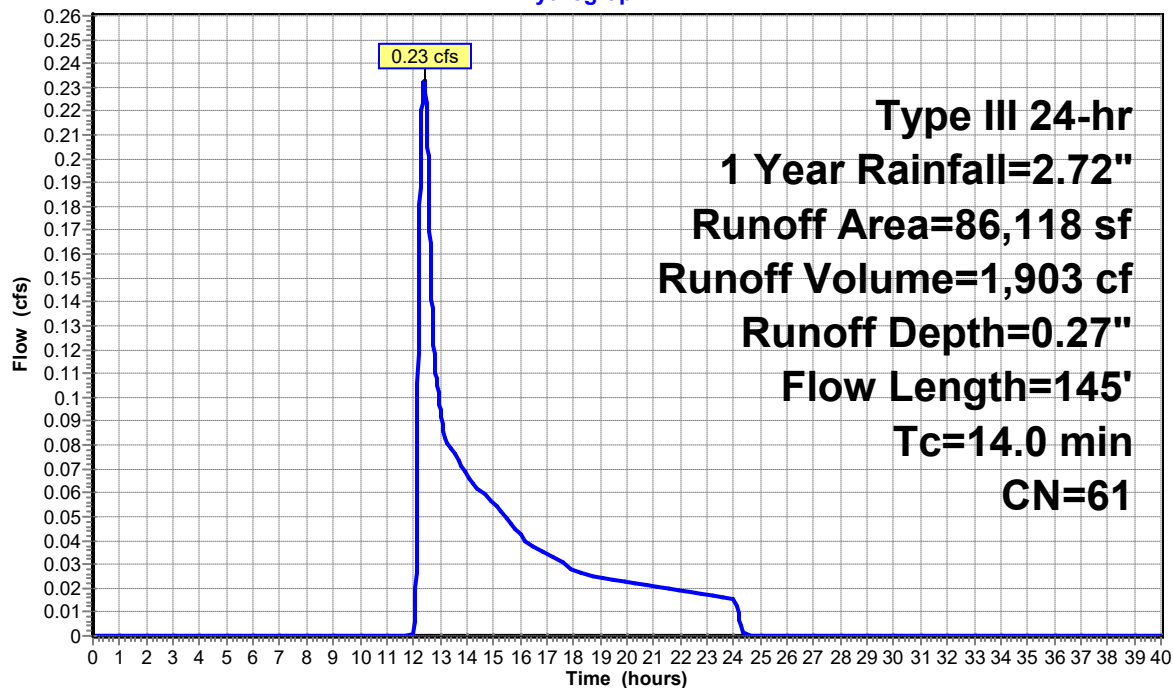
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 1 Year Rainfall=2.72"

Area (sf)	CN	Description
50,108	61	>75% Grass cover, Good, HSG B
8,316	72	Woods/grass comb., Good, HSG C
27,694	58	Woods/grass comb., Good, HSG B
86,118	61	Weighted Average
86,118		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0200	0.12		Sheet Flow, Grass Lawn Sheet Flow
					Grass: Dense n= 0.240 P2= 3.41"
0.2	45	0.4440	4.66		Shallow Concentrated Flow, Grass Shallow Conc Flow
					Short Grass Pasture Kv= 7.0 fps
14.0	145	Total			

Subcatchment 31S: PDA-1

Hydrograph



Runoff

Hydrograph for Subcatchment 31S: PDA-1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	2.72	0.27	0.00
0.50	0.01	0.00	0.00	26.50	2.72	0.27	0.00
1.00	0.03	0.00	0.00	27.00	2.72	0.27	0.00
1.50	0.04	0.00	0.00	27.50	2.72	0.27	0.00
2.00	0.05	0.00	0.00	28.00	2.72	0.27	0.00
2.50	0.07	0.00	0.00	28.50	2.72	0.27	0.00
3.00	0.08	0.00	0.00	29.00	2.72	0.27	0.00
3.50	0.10	0.00	0.00	29.50	2.72	0.27	0.00
4.00	0.12	0.00	0.00	30.00	2.72	0.27	0.00
4.50	0.14	0.00	0.00	30.50	2.72	0.27	0.00
5.00	0.15	0.00	0.00	31.00	2.72	0.27	0.00
5.50	0.17	0.00	0.00	31.50	2.72	0.27	0.00
6.00	0.20	0.00	0.00	32.00	2.72	0.27	0.00
6.50	0.22	0.00	0.00	32.50	2.72	0.27	0.00
7.00	0.25	0.00	0.00	33.00	2.72	0.27	0.00
7.50	0.28	0.00	0.00	33.50	2.72	0.27	0.00
8.00	0.31	0.00	0.00	34.00	2.72	0.27	0.00
8.50	0.35	0.00	0.00	34.50	2.72	0.27	0.00
9.00	0.40	0.00	0.00	35.00	2.72	0.27	0.00
9.50	0.45	0.00	0.00	35.50	2.72	0.27	0.00
10.00	0.51	0.00	0.00	36.00	2.72	0.27	0.00
10.50	0.59	0.00	0.00	36.50	2.72	0.27	0.00
11.00	0.68	0.00	0.00	37.00	2.72	0.27	0.00
11.50	0.81	0.00	0.00	37.50	2.72	0.27	0.00
12.00	1.36	0.00	0.00	38.00	2.72	0.27	0.00
12.50	1.91	0.06	0.22	38.50	2.72	0.27	0.00
13.00	2.04	0.08	0.10	39.00	2.72	0.27	0.00
13.50	2.13	0.10	0.08	39.50	2.72	0.27	0.00
14.00	2.21	0.12	0.07	40.00	2.72	0.27	0.00
14.50	2.27	0.13	0.06				
15.00	2.32	0.15	0.06				
15.50	2.37	0.16	0.05				
16.00	2.41	0.17	0.04				
16.50	2.44	0.18	0.04				
17.00	2.47	0.19	0.03				
17.50	2.50	0.20	0.03				
18.00	2.52	0.20	0.03				
18.50	2.55	0.21	0.03				
19.00	2.57	0.22	0.02				
19.50	2.58	0.22	0.02				
20.00	2.60	0.23	0.02				
20.50	2.62	0.23	0.02				
21.00	2.64	0.24	0.02				
21.50	2.65	0.24	0.02				
22.00	2.67	0.25	0.02				
22.50	2.68	0.25	0.02				
23.00	2.70	0.26	0.02				
23.50	2.71	0.26	0.02				
24.00	2.72	0.27	0.02				
24.50	2.72	0.27	0.00				
25.00	2.72	0.27	0.00				
25.50	2.72	0.27	0.00				

Summary for Pond 25P: INFILTRATION PIPE STORAGE

Inflow Area = 545,177 sf, 28.83% Impervious, Inflow Depth = 0.65" for 1 Year event
 Inflow = 6.79 cfs @ 12.18 hrs, Volume= 29,390 cf
 Outflow = 3.98 cfs @ 12.21 hrs, Volume= 29,398 cf, Atten= 41%, Lag= 1.7 min
 Discarded = 3.98 cfs @ 12.21 hrs, Volume= 29,398 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 320.15' @ 12.45 hrs Surf.Area= 34,392 sf Storage= 2,060 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 2.1 min (888.1 - 886.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	320.00'	49,499 cf	61.09'W x 563.00'L x 6.58'H Field A 226,432 cf Overall - 102,685 cf Embedded = 123,747 cf x 40.0% Voids
#2A	320.50'	86,464 cf	ADS N-12 60" x 224 Inside #1 Inside= 59.5"W x 59.5"H => 19.30 sf x 20.00'L = 386.0 cf Outside= 67.0"W x 67.0"H => 22.92 sf x 20.00'L = 458.4 cf 8 Rows of 28 Chambers
		135,963 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	320.00'	5.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=3.98 cfs @ 12.21 hrs HW=320.07' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 3.98 cfs)

Pond 25P: INFILTRATION PIPE STORAGE - Chamber Wizard Field A

Chamber Model = ADS N-12 60" (ADS N-12® Pipe)

Inside= 59.5"W x 59.5"H => 19.30 sf x 20.00'L = 386.0 cf

Outside= 67.0"W x 67.0"H => 22.92 sf x 20.00'L = 458.4 cf

67.0" Wide + 23.0" Spacing = 90.0" C-C Row Spacing

28 Chambers/Row x 20.00' Long = 560.00' Row Length +18.0" End Stone x 2 = 563.00' Base Length

8 Rows x 67.0" Wide + 23.0" Spacing x 7 + 18.0" Side Stone x 2 = 61.09' Base Width

6.0" Base + 67.0" Chamber Height + 6.0" Cover = 6.58' Field Height

224 Chambers x 386.0 cf = 86,463.9 cf Chamber Storage

224 Chambers x 458.4 cf = 102,685.4 cf Displacement

226,432.3 cf Field - 102,685.4 cf Chambers = 123,746.9 cf Stone x 40.0% Voids = 49,498.8 cf Stone Storage

Chamber Storage + Stone Storage = 135,962.7 cf = 3.121 af

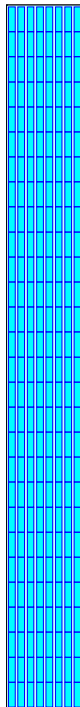
Overall Storage Efficiency = 60.0%

Overall System Size = 563.00' x 61.09' x 6.58'

224 Chambers

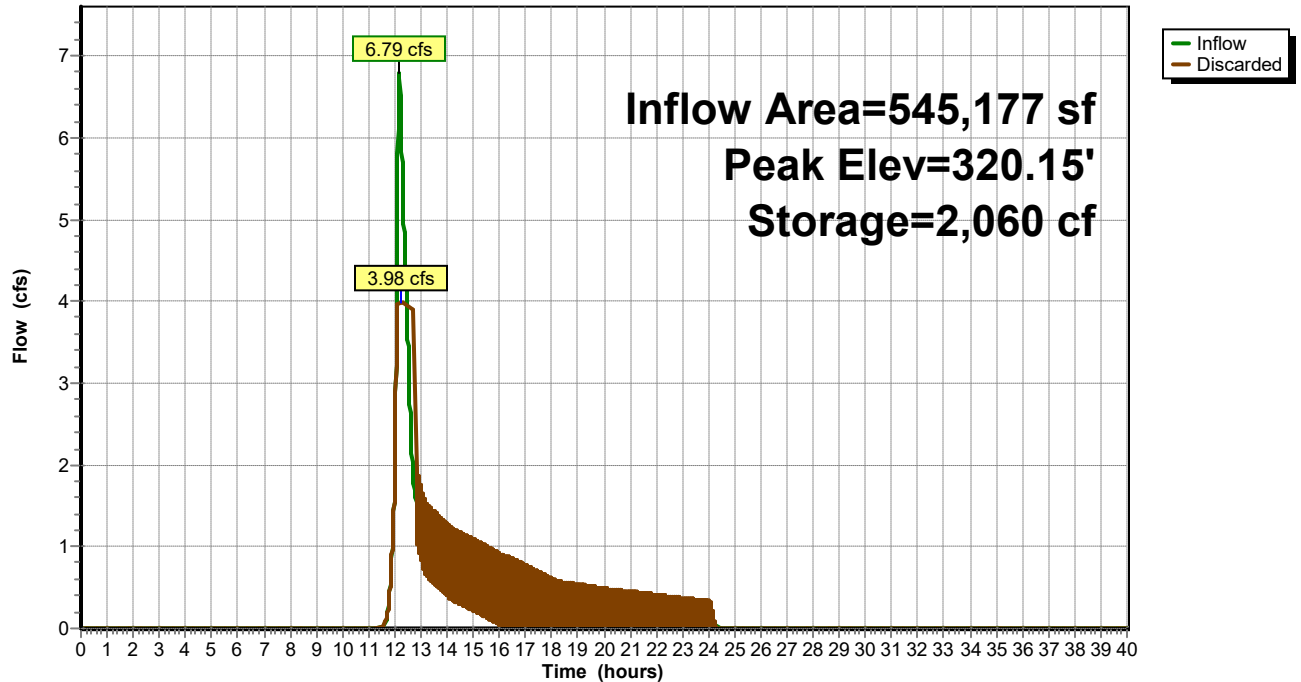
8,386.4 cy Field

4,583.2 cy Stone



Pond 25P: INFILTRATION PIPE STORAGE

Hydrograph



Hydrograph for Pond 25P: INFILTRATION PIPE STORAGE

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	320.00	0.00
1.00	0.00	0	320.00	0.00
2.00	0.00	0	320.00	0.00
3.00	0.00	0	320.00	0.00
4.00	0.00	0	320.00	0.00
5.00	0.00	0	320.00	0.00
6.00	0.00	0	320.00	0.00
7.00	0.00	0	320.00	0.00
8.00	0.00	0	320.00	0.00
9.00	0.00	0	320.00	0.00
10.00	0.00	0	320.00	0.00
11.00	0.00	0	320.00	0.00
12.00	1.96	0	320.00	1.96
13.00	1.30	0	320.00	1.73
14.00	0.84	0	320.00	1.27
15.00	0.66	0	320.00	1.09
16.00	0.48	0	320.00	0.92
17.00	0.39	0	320.00	0.77
18.00	0.30	0	320.00	0.61
19.00	0.27	0	320.00	0.54
20.00	0.24	0	320.00	0.49
21.00	0.22	0	320.00	0.45
22.00	0.21	0	320.00	0.41
23.00	0.19	0	320.00	0.37
24.00	0.17	0	320.00	0.33
25.00	0.00	0	320.00	0.00
26.00	0.00	0	320.00	0.00
27.00	0.00	0	320.00	0.00
28.00	0.00	0	320.00	0.00
29.00	0.00	0	320.00	0.00
30.00	0.00	0	320.00	0.00
31.00	0.00	0	320.00	0.00
32.00	0.00	0	320.00	0.00
33.00	0.00	0	320.00	0.00
34.00	0.00	0	320.00	0.00
35.00	0.00	0	320.00	0.00
36.00	0.00	0	320.00	0.00
37.00	0.00	0	320.00	0.00
38.00	0.00	0	320.00	0.00
39.00	0.00	0	320.00	0.00
40.00	0.00	0	320.00	0.00

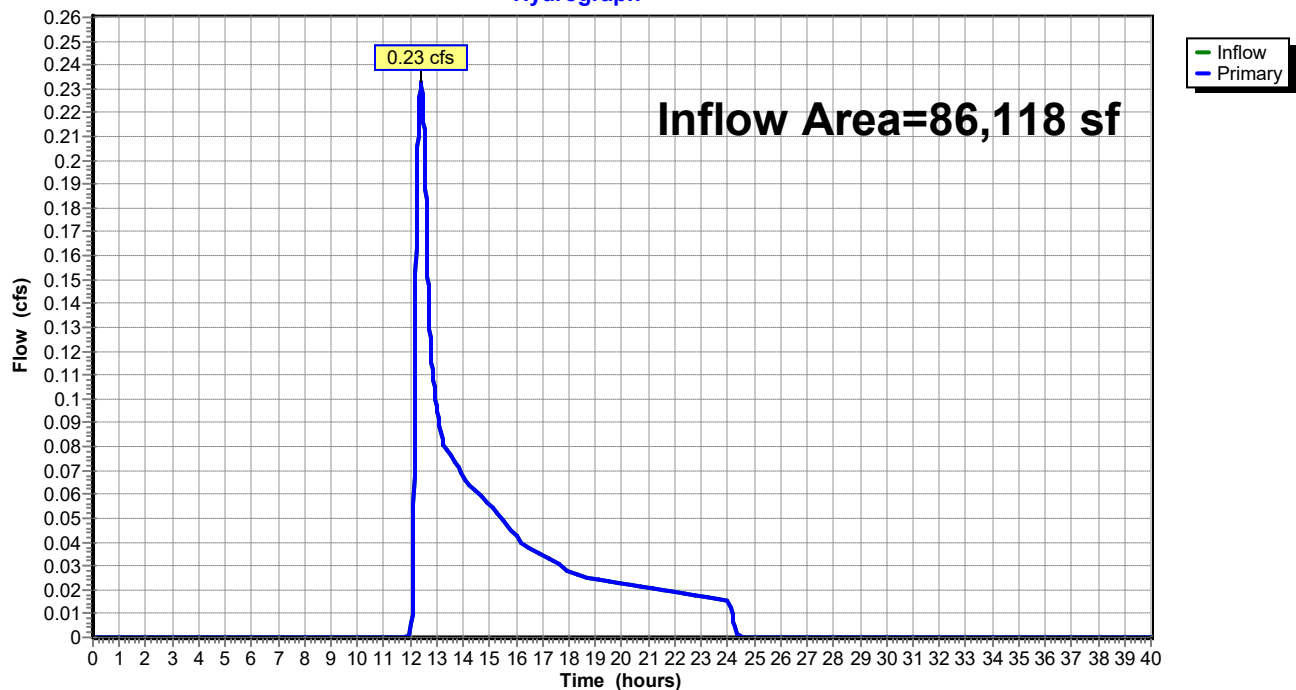
Summary for Link 21L: Pocantico River Basin

Inflow Area = 86,118 sf, 0.00% Impervious, Inflow Depth = 0.27" for 1 Year event
 Inflow = 0.23 cfs @ 12.40 hrs, Volume= 1,903 cf
 Primary = 0.23 cfs @ 12.40 hrs, Volume= 1,903 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 21L: Pocantico River Basin

Hydrograph



Hydrograph for Link 21L: Pocantico River Basin

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00	36.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	36.50	0.00	0.00	0.00
11.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00
11.50	0.00	0.00	0.00	37.50	0.00	0.00	0.00
12.00	0.00	0.00	0.00	38.00	0.00	0.00	0.00
12.50	0.22	0.00	0.22	38.50	0.00	0.00	0.00
13.00	0.10	0.00	0.10	39.00	0.00	0.00	0.00
13.50	0.08	0.00	0.08	39.50	0.00	0.00	0.00
14.00	0.07	0.00	0.07	40.00	0.00	0.00	0.00
14.50	0.06	0.00	0.06				
15.00	0.06	0.00	0.06				
15.50	0.05	0.00	0.05				
16.00	0.04	0.00	0.04				
16.50	0.04	0.00	0.04				
17.00	0.03	0.00	0.03				
17.50	0.03	0.00	0.03				
18.00	0.03	0.00	0.03				
18.50	0.03	0.00	0.03				
19.00	0.02	0.00	0.02				
19.50	0.02	0.00	0.02				
20.00	0.02	0.00	0.02				
20.50	0.02	0.00	0.02				
21.00	0.02	0.00	0.02				
21.50	0.02	0.00	0.02				
22.00	0.02	0.00	0.02				
22.50	0.02	0.00	0.02				
23.00	0.02	0.00	0.02				
23.50	0.02	0.00	0.02				
24.00	0.02	0.00	0.02				
24.50	0.00	0.00	0.00				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

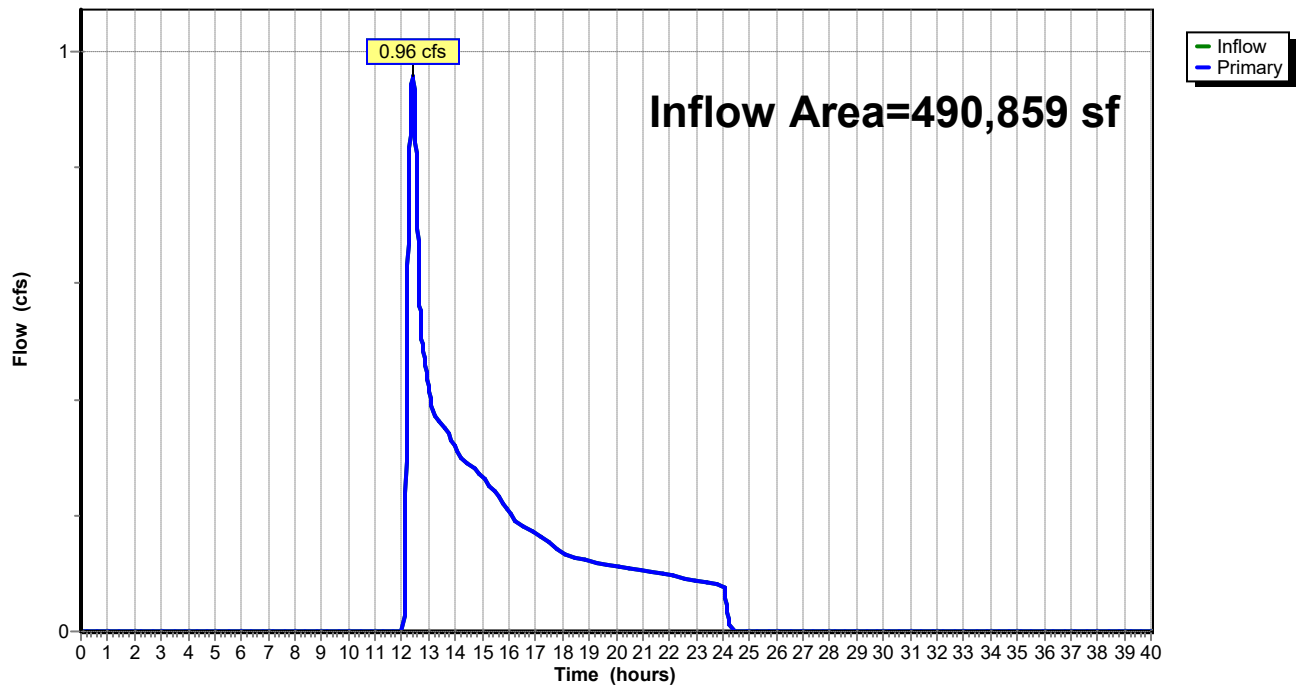
Summary for Link 22L: Pocantico Lake

Inflow Area = 490,859 sf, 0.00% Impervious, Inflow Depth = 0.21" for 1 Year event
 Inflow = 0.96 cfs @ 12.40 hrs, Volume= 8,742 cf
 Primary = 0.96 cfs @ 12.40 hrs, Volume= 8,742 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 22L: Pocantico Lake

Hydrograph



Hydrograph for Link 22L: Pocantico Lake

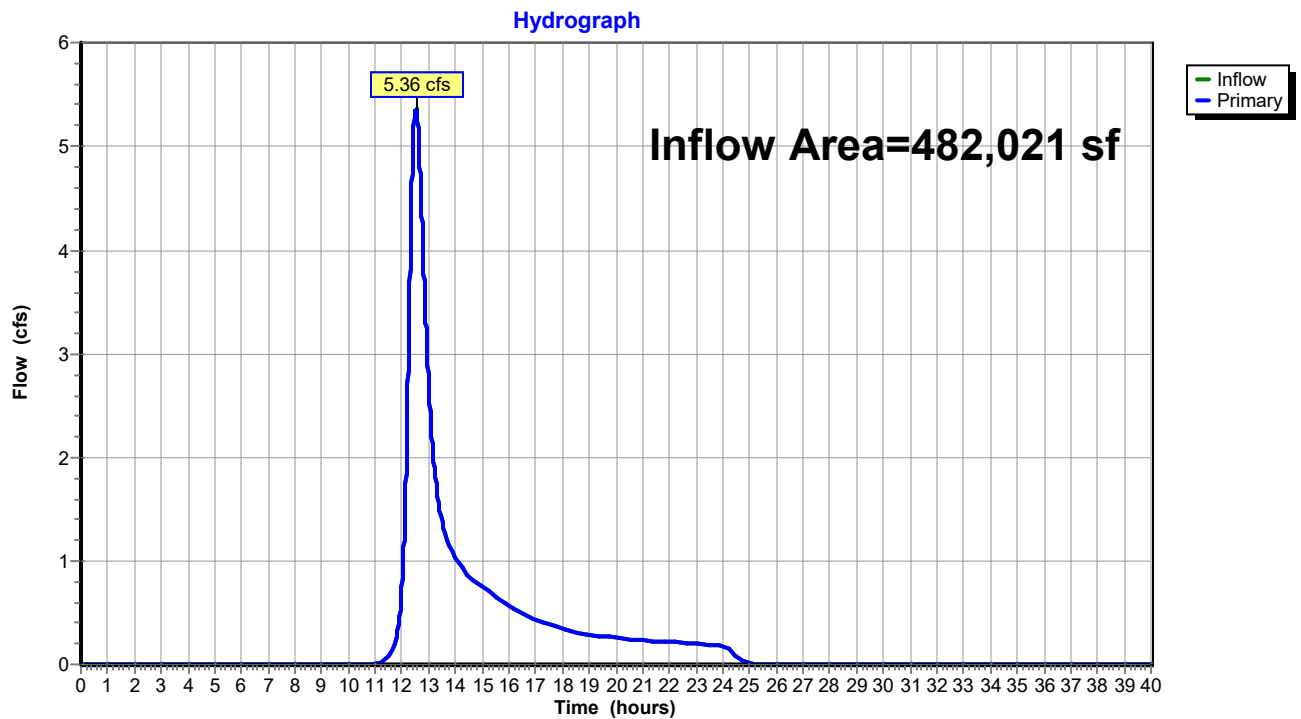
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00	36.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	36.50	0.00	0.00	0.00
11.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00
11.50	0.00	0.00	0.00	37.50	0.00	0.00	0.00
12.00	0.00	0.00	0.00	38.00	0.00	0.00	0.00
12.50	0.88	0.00	0.88	38.50	0.00	0.00	0.00
13.00	0.42	0.00	0.42	39.00	0.00	0.00	0.00
13.50	0.36	0.00	0.36	39.50	0.00	0.00	0.00
14.00	0.32	0.00	0.32	40.00	0.00	0.00	0.00
14.50	0.29	0.00	0.29				
15.00	0.27	0.00	0.27				
15.50	0.24	0.00	0.24				
16.00	0.20	0.00	0.20				
16.50	0.18	0.00	0.18				
17.00	0.17	0.00	0.17				
17.50	0.15	0.00	0.15				
18.00	0.13	0.00	0.13				
18.50	0.13	0.00	0.13				
19.00	0.12	0.00	0.12				
19.50	0.12	0.00	0.12				
20.00	0.11	0.00	0.11				
20.50	0.11	0.00	0.11				
21.00	0.10	0.00	0.10				
21.50	0.10	0.00	0.10				
22.00	0.10	0.00	0.10				
22.50	0.09	0.00	0.09				
23.00	0.09	0.00	0.09				
23.50	0.08	0.00	0.08				
24.00	0.08	0.00	0.08				
24.50	0.00	0.00	0.00				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

Summary for Link 23L: Mapped Wetland / Brook

Inflow Area = 482,021 sf, 39.25% Impervious, Inflow Depth = 0.83" for 1 Year event
 Inflow = 5.36 cfs @ 12.53 hrs, Volume= 33,394 cf
 Primary = 5.36 cfs @ 12.53 hrs, Volume= 33,394 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 23L: Mapped Wetland / Brook



Hydrograph for Link 23L: Mapped Wetland / Brook

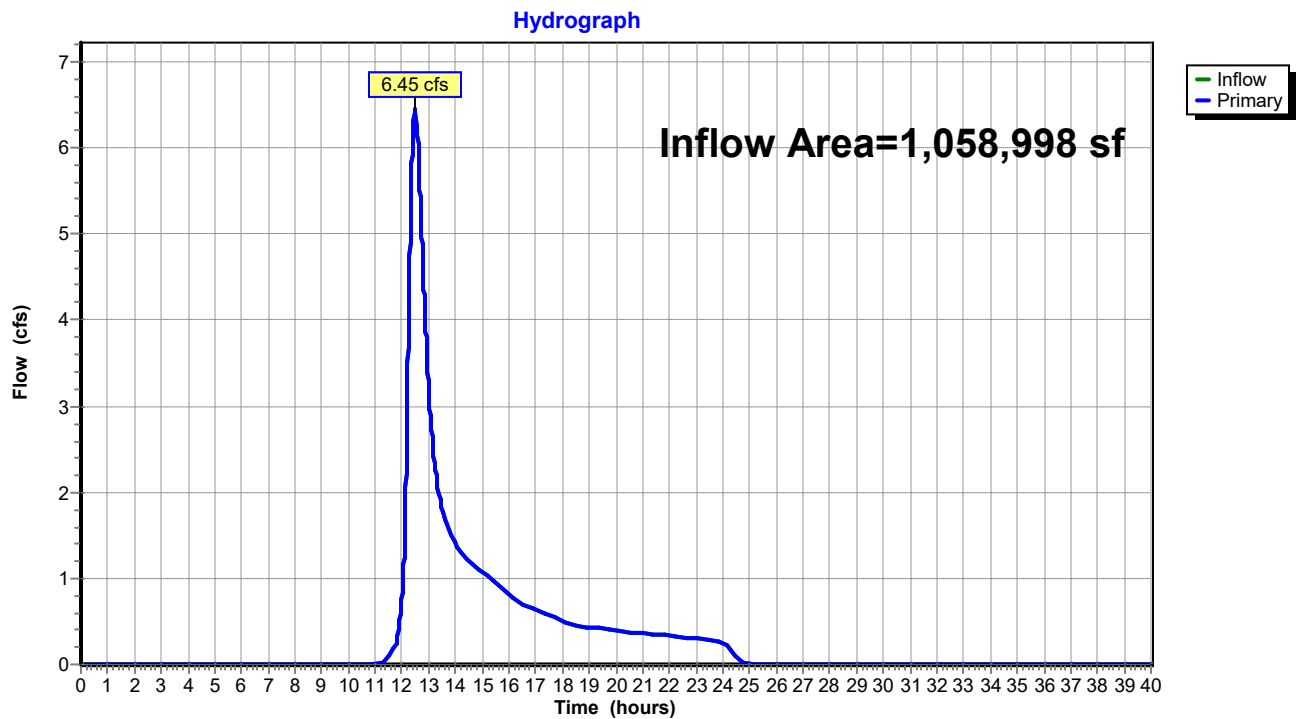
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00	36.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	36.50	0.00	0.00	0.00
11.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00
11.50	0.08	0.00	0.08	37.50	0.00	0.00	0.00
12.00	0.76	0.00	0.76	38.00	0.00	0.00	0.00
12.50	5.35	0.00	5.35	38.50	0.00	0.00	0.00
13.00	2.69	0.00	2.69	39.00	0.00	0.00	0.00
13.50	1.37	0.00	1.37	39.50	0.00	0.00	0.00
14.00	1.03	0.00	1.03	40.00	0.00	0.00	0.00
14.50	0.85	0.00	0.85				
15.00	0.75	0.00	0.75				
15.50	0.66	0.00	0.66				
16.00	0.57	0.00	0.57				
16.50	0.48	0.00	0.48				
17.00	0.43	0.00	0.43				
17.50	0.39	0.00	0.39				
18.00	0.34	0.00	0.34				
18.50	0.30	0.00	0.30				
19.00	0.28	0.00	0.28				
19.50	0.27	0.00	0.27				
20.00	0.26	0.00	0.26				
20.50	0.25	0.00	0.25				
21.00	0.24	0.00	0.24				
21.50	0.23	0.00	0.23				
22.00	0.22	0.00	0.22				
22.50	0.21	0.00	0.21				
23.00	0.20	0.00	0.20				
23.50	0.19	0.00	0.19				
24.00	0.18	0.00	0.18				
24.50	0.08	0.00	0.08				
25.00	0.01	0.00	0.01				
25.50	0.00	0.00	0.00				

Summary for Link 24L: COMB POST

Inflow Area = 1,058,998 sf, 17.86% Impervious, Inflow Depth = 0.50" for 1 Year event
 Inflow = 6.45 cfs @ 12.49 hrs, Volume= 44,038 cf
 Primary = 6.45 cfs @ 12.49 hrs, Volume= 44,038 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 24L: COMB POST



Hydrograph for Link 24L: COMB POST

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00	36.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	36.50	0.00	0.00	0.00
11.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00
11.50	0.08	0.00	0.08	37.50	0.00	0.00	0.00
12.00	0.76	0.00	0.76	38.00	0.00	0.00	0.00
12.50	6.45	0.00	6.45	38.50	0.00	0.00	0.00
13.00	3.20	0.00	3.20	39.00	0.00	0.00	0.00
13.50	1.81	0.00	1.81	39.50	0.00	0.00	0.00
14.00	1.41	0.00	1.41	40.00	0.00	0.00	0.00
14.50	1.20	0.00	1.20				
15.00	1.07	0.00	1.07				
15.50	0.95	0.00	0.95				
16.00	0.81	0.00	0.81				
16.50	0.70	0.00	0.70				
17.00	0.63	0.00	0.63				
17.50	0.57	0.00	0.57				
18.00	0.50	0.00	0.50				
18.50	0.45	0.00	0.45				
19.00	0.43	0.00	0.43				
19.50	0.41	0.00	0.41				
20.00	0.39	0.00	0.39				
20.50	0.38	0.00	0.38				
21.00	0.36	0.00	0.36				
21.50	0.35	0.00	0.35				
22.00	0.33	0.00	0.33				
22.50	0.32	0.00	0.32				
23.00	0.30	0.00	0.30				
23.50	0.29	0.00	0.29				
24.00	0.27	0.00	0.27				
24.50	0.08	0.00	0.08				
25.00	0.01	0.00	0.01				
25.50	0.00	0.00	0.00				

Meadows Briarcliff_05032021

Type III 24-hr 10 Year Rainfall=5.13"

Prepared by Wasp Engineering Group, PLLC

Printed 5/9/2021

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 18S: PDA-2

Runoff Area=490,859 sf 0.00% Impervious Runoff Depth=1.31"
Flow Length=435' Tc=10.5 min CN=59 Runoff=13.12 cfs 53,531 cf

Subcatchment 19S: PDA-3B

Runoff Area=482,021 sf 39.25% Impervious Runoff Depth=2.64"
Flow Length=1,330' Tc=34.1 min CN=76 Runoff=18.25 cfs 106,166 cf

Subcatchment 25S: PDA-3A

Runoff Area=545,177 sf 28.83% Impervious Runoff Depth=2.30"
Flow Length=240' Tc=11.6 min CN=72 Runoff=27.72 cfs 104,422 cf

Subcatchment 31S: PDA-1

Runoff Area=86,118 sf 0.00% Impervious Runoff Depth=1.45"
Flow Length=145' Tc=14.0 min CN=61 Runoff=2.37 cfs 10,390 cf

Pond 25P: INFILTRATION PIPE

Peak Elev=322.01' Storage=34,742 cf Inflow=27.72 cfs 104,422 cf
Outflow=3.98 cfs 104,472 cf

Link 21L: Pocantico River Basin

Inflow=2.37 cfs 10,390 cf
Primary=2.37 cfs 10,390 cf

Link 22L: Pocantico Lake

Inflow=13.12 cfs 53,531 cf
Primary=13.12 cfs 53,531 cf

Link 23L: Mapped Wetland / Brook

Inflow=18.25 cfs 106,166 cf
Primary=18.25 cfs 106,166 cf

Link 24L: COMB POST

Inflow=27.16 cfs 170,088 cf
Primary=27.16 cfs 170,088 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 274,510 cf Average Runoff Depth = 2.05"
78.41% Pervious = 1,257,830 sf 21.59% Impervious = 346,345 sf

Summary for Subcatchment 18S: PDA-2

Runoff = 13.12 cfs @ 12.16 hrs, Volume= 53,531 cf, Depth= 1.31"

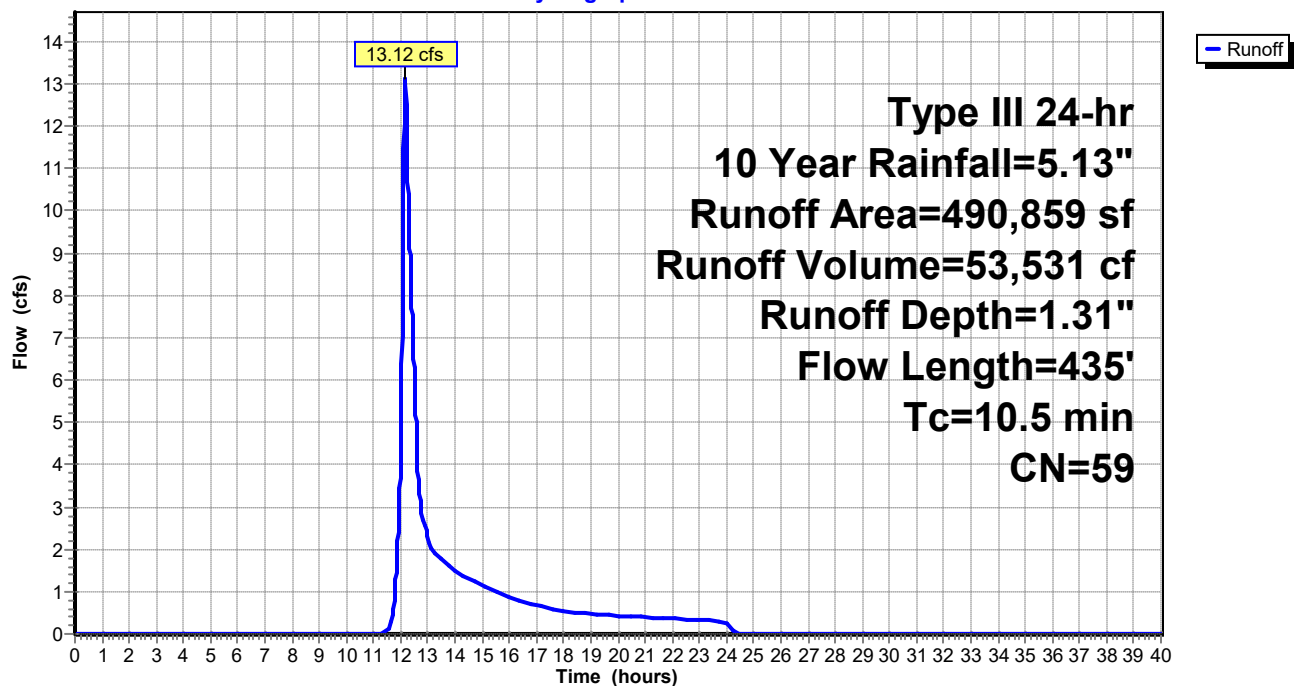
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.13"

Area (sf)	CN	Description
* 0	98	Ex. IMP Pavement, Rooftops
151,101	61	>75% Grass cover, Good, HSG B
339,758	58	Woods/grass comb., Good, HSG B
490,859	59	Weighted Average
490,859		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.0650	0.19		Sheet Flow, Sheet Lawn
					Grass: Dense n= 0.240 P2= 3.41"
0.7	115	0.1520	2.73		Shallow Concentrated Flow, Shallow Conc. Lawn
					Short Grass Pasture Kv= 7.0 fps
1.2	220	0.4050	3.18		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
10.5	435	Total			

Subcatchment 18S: PDA-2

Hydrograph



Hydrograph for Subcatchment 18S: PDA-2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	5.13	1.31	0.00
0.50	0.03	0.00	0.00	26.50	5.13	1.31	0.00
1.00	0.05	0.00	0.00	27.00	5.13	1.31	0.00
1.50	0.08	0.00	0.00	27.50	5.13	1.31	0.00
2.00	0.10	0.00	0.00	28.00	5.13	1.31	0.00
2.50	0.13	0.00	0.00	28.50	5.13	1.31	0.00
3.00	0.16	0.00	0.00	29.00	5.13	1.31	0.00
3.50	0.19	0.00	0.00	29.50	5.13	1.31	0.00
4.00	0.22	0.00	0.00	30.00	5.13	1.31	0.00
4.50	0.25	0.00	0.00	30.50	5.13	1.31	0.00
5.00	0.29	0.00	0.00	31.00	5.13	1.31	0.00
5.50	0.33	0.00	0.00	31.50	5.13	1.31	0.00
6.00	0.37	0.00	0.00	32.00	5.13	1.31	0.00
6.50	0.41	0.00	0.00	32.50	5.13	1.31	0.00
7.00	0.46	0.00	0.00	33.00	5.13	1.31	0.00
7.50	0.52	0.00	0.00	33.50	5.13	1.31	0.00
8.00	0.58	0.00	0.00	34.00	5.13	1.31	0.00
8.50	0.66	0.00	0.00	34.50	5.13	1.31	0.00
9.00	0.75	0.00	0.00	35.00	5.13	1.31	0.00
9.50	0.85	0.00	0.00	35.50	5.13	1.31	0.00
10.00	0.97	0.00	0.00	36.00	5.13	1.31	0.00
10.50	1.11	0.00	0.00	36.50	5.13	1.31	0.00
11.00	1.28	0.00	0.00	37.00	5.13	1.31	0.00
11.50	1.53	0.00	0.09	37.50	5.13	1.31	0.00
12.00	2.56	0.17	4.32	38.00	5.13	1.31	0.00
12.50	3.60	0.53	6.13	38.50	5.13	1.31	0.00
13.00	3.85	0.64	2.29	39.00	5.13	1.31	0.00
13.50	4.02	0.72	1.77	39.50	5.13	1.31	0.00
14.00	4.16	0.79	1.49	40.00	5.13	1.31	0.00
14.50	4.28	0.85	1.31				
15.00	4.38	0.90	1.17				
15.50	4.47	0.95	1.01				
16.00	4.55	0.99	0.85				
16.50	4.61	1.02	0.75				
17.00	4.67	1.05	0.68				
17.50	4.72	1.08	0.61				
18.00	4.76	1.10	0.53				
18.50	4.80	1.12	0.50				
19.00	4.84	1.14	0.47				
19.50	4.88	1.16	0.45				
20.00	4.91	1.18	0.43				
20.50	4.94	1.20	0.41				
21.00	4.97	1.22	0.40				
21.50	5.00	1.24	0.38				
22.00	5.03	1.25	0.36				
22.50	5.06	1.27	0.35				
23.00	5.08	1.28	0.33				
23.50	5.11	1.30	0.31				
24.00	5.13	1.31	0.29				
24.50	5.13	1.31	0.00				
25.00	5.13	1.31	0.00				
25.50	5.13	1.31	0.00				

Summary for Subcatchment 19S: PDA-3B

Runoff = 18.25 cfs @ 12.47 hrs, Volume= 106,166 cf, Depth= 2.64"

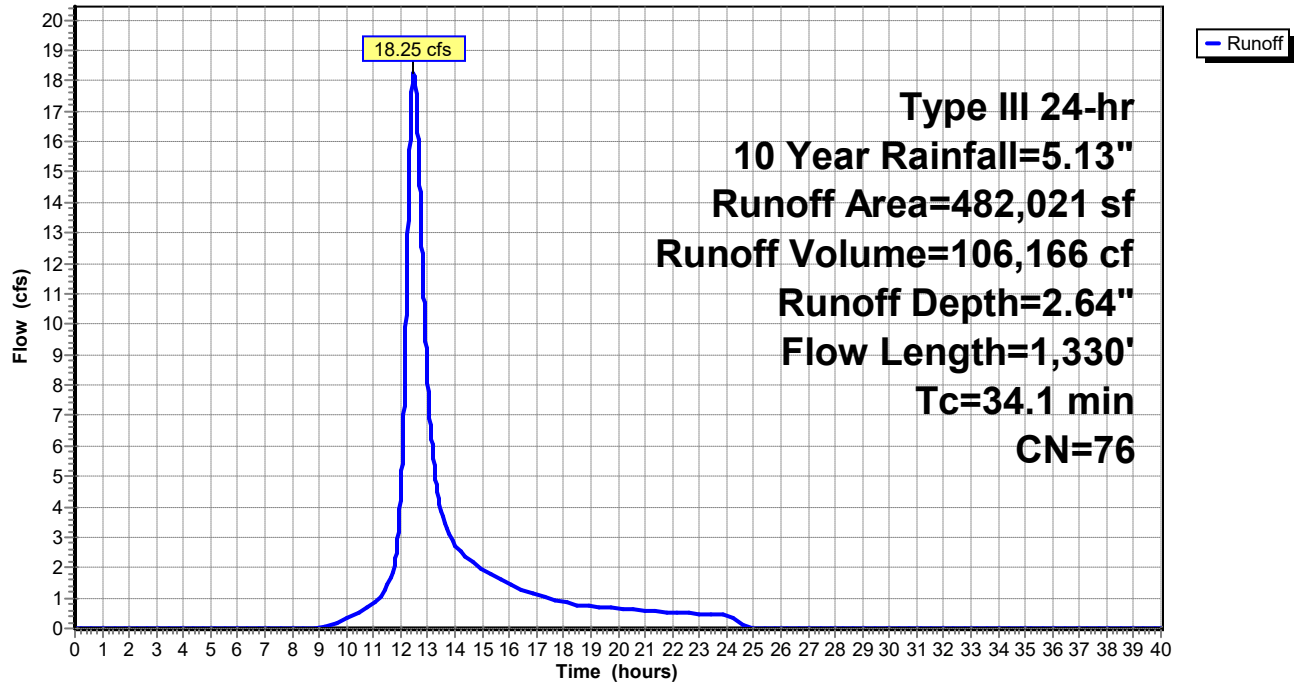
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.13"

	Area (sf)	CN	Description
*	14,931	98	Ex. IMP Pavement, Rooftops
	75,129	74	>75% Grass cover, Good, HSG C
	67,015	61	>75% Grass cover, Good, HSG B
	100,430	58	Woods/grass comb., Good, HSG B
	30,434	72	Woods/grass comb., Good, HSG C
	19,829	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	482,021	76	Weighted Average
	292,837		60.75% Pervious Area
	189,184		39.25% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.5	100	0.0150	0.11		Sheet Flow, Sheet Flow Lawn Grass: Dense n= 0.240 P2= 3.41"
1.0	80	0.0400	1.40		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
3.6	240	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
5.9	250	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
3.1	300	0.1067	1.63		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.7	230	0.1043	0.81		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
0.3	130	0.1000	6.27	50.19	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
34.1	1,330	Total			

Subcatchment 19S: PDA-3B

Hydrograph



Hydrograph for Subcatchment 19S: PDA-3B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	5.13	2.64	0.00
0.50	0.03	0.00	0.00	26.50	5.13	2.64	0.00
1.00	0.05	0.00	0.00	27.00	5.13	2.64	0.00
1.50	0.08	0.00	0.00	27.50	5.13	2.64	0.00
2.00	0.10	0.00	0.00	28.00	5.13	2.64	0.00
2.50	0.13	0.00	0.00	28.50	5.13	2.64	0.00
3.00	0.16	0.00	0.00	29.00	5.13	2.64	0.00
3.50	0.19	0.00	0.00	29.50	5.13	2.64	0.00
4.00	0.22	0.00	0.00	30.00	5.13	2.64	0.00
4.50	0.25	0.00	0.00	30.50	5.13	2.64	0.00
5.00	0.29	0.00	0.00	31.00	5.13	2.64	0.00
5.50	0.33	0.00	0.00	31.50	5.13	2.64	0.00
6.00	0.37	0.00	0.00	32.00	5.13	2.64	0.00
6.50	0.41	0.00	0.00	32.50	5.13	2.64	0.00
7.00	0.46	0.00	0.00	33.00	5.13	2.64	0.00
7.50	0.52	0.00	0.00	33.50	5.13	2.64	0.00
8.00	0.58	0.00	0.00	34.00	5.13	2.64	0.00
8.50	0.66	0.00	0.00	34.50	5.13	2.64	0.00
9.00	0.75	0.00	0.04	35.00	5.13	2.64	0.00
9.50	0.85	0.01	0.15	35.50	5.13	2.64	0.00
10.00	0.97	0.03	0.31	36.00	5.13	2.64	0.00
10.50	1.11	0.06	0.52	36.50	5.13	2.64	0.00
11.00	1.28	0.11	0.85	37.00	5.13	2.64	0.00
11.50	1.53	0.20	1.40	37.50	5.13	2.64	0.00
12.00	2.56	0.73	4.44	38.00	5.13	2.64	0.00
12.50	3.60	1.44	18.18	38.50	5.13	2.64	0.00
13.00	3.85	1.62	7.99	39.00	5.13	2.64	0.00
13.50	4.02	1.75	3.82	39.50	5.13	2.64	0.00
14.00	4.16	1.86	2.76	40.00	5.13	2.64	0.00
14.50	4.28	1.95	2.25				
15.00	4.38	2.04	1.96				
15.50	4.47	2.11	1.71				
16.00	4.55	2.17	1.46				
16.50	4.61	2.22	1.23				
17.00	4.67	2.26	1.09				
17.50	4.72	2.30	0.98				
18.00	4.76	2.34	0.86				
18.50	4.80	2.37	0.76				
19.00	4.84	2.40	0.71				
19.50	4.88	2.43	0.68				
20.00	4.91	2.46	0.65				
20.50	4.94	2.49	0.61				
21.00	4.97	2.51	0.59				
21.50	5.00	2.54	0.56				
22.00	5.03	2.56	0.54				
22.50	5.06	2.58	0.51				
23.00	5.08	2.60	0.48				
23.50	5.11	2.62	0.46				
24.00	5.13	2.64	0.43				
24.50	5.13	2.64	0.19				
25.00	5.13	2.64	0.02				
25.50	5.13	2.64	0.00				

Summary for Subcatchment 25S: PDA-3A

Runoff = 27.72 cfs @ 12.16 hrs, Volume= 104,422 cf, Depth= 2.30"

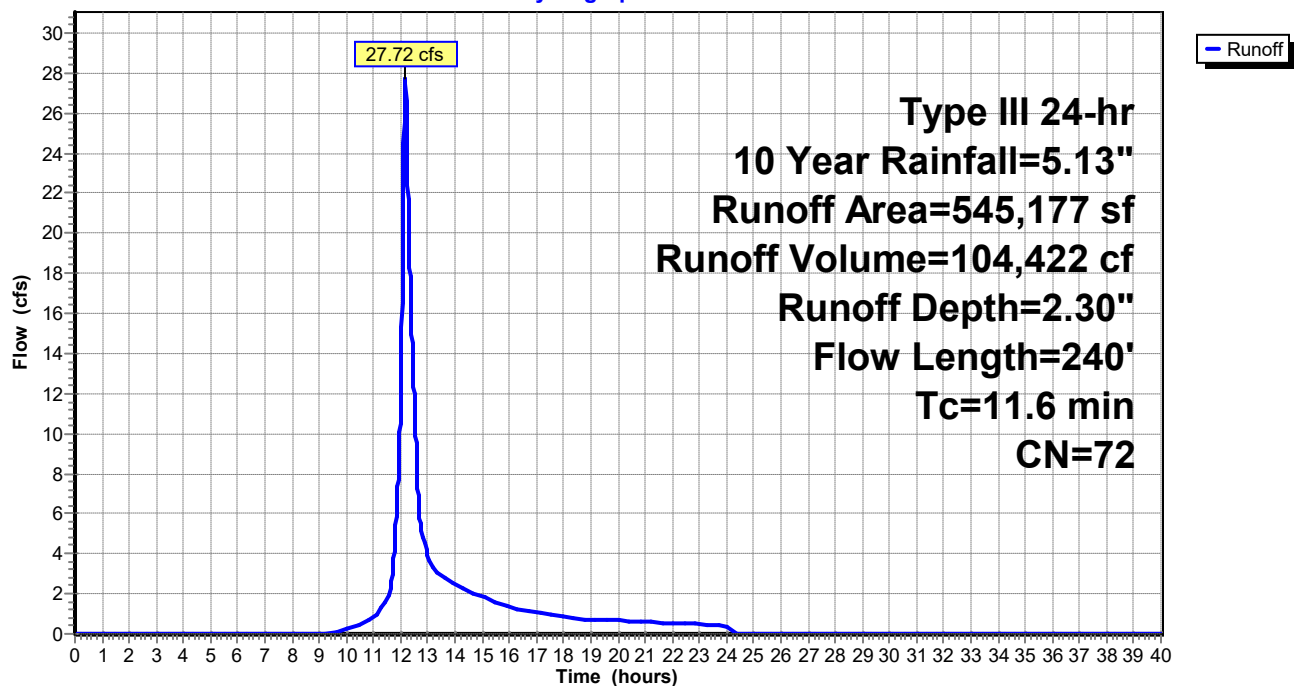
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Type III 24-hr 10 Year Rainfall=5.13"

	Area (sf)	CN	Description
*	157,161	98	Ex. IMP Pavement, Rooftops
	388,016	61	>75% Grass cover, Good, HSG B
	545,177	72	Weighted Average
	388,016		71.17% Pervious Area
	157,161		28.83% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.5	100	0.0400	0.16		Sheet Flow, Sheet Flow Woods
					Grass: Dense n= 0.240 P2= 3.41"
1.1	140	0.1000	2.21		Shallow Concentrated Flow, Shallow Conc. Lawn
					Short Grass Pasture Kv= 7.0 fps
11.6	240	Total			

Subcatchment 25S: PDA-3A

Hydrograph



Hydrograph for Subcatchment 25S: PDA-3A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	5.13	2.30	0.00
0.50	0.03	0.00	0.00	26.50	5.13	2.30	0.00
1.00	0.05	0.00	0.00	27.00	5.13	2.30	0.00
1.50	0.08	0.00	0.00	27.50	5.13	2.30	0.00
2.00	0.10	0.00	0.00	28.00	5.13	2.30	0.00
2.50	0.13	0.00	0.00	28.50	5.13	2.30	0.00
3.00	0.16	0.00	0.00	29.00	5.13	2.30	0.00
3.50	0.19	0.00	0.00	29.50	5.13	2.30	0.00
4.00	0.22	0.00	0.00	30.00	5.13	2.30	0.00
4.50	0.25	0.00	0.00	30.50	5.13	2.30	0.00
5.00	0.29	0.00	0.00	31.00	5.13	2.30	0.00
5.50	0.33	0.00	0.00	31.50	5.13	2.30	0.00
6.00	0.37	0.00	0.00	32.00	5.13	2.30	0.00
6.50	0.41	0.00	0.00	32.50	5.13	2.30	0.00
7.00	0.46	0.00	0.00	33.00	5.13	2.30	0.00
7.50	0.52	0.00	0.00	33.50	5.13	2.30	0.00
8.00	0.58	0.00	0.00	34.00	5.13	2.30	0.00
8.50	0.66	0.00	0.00	34.50	5.13	2.30	0.00
9.00	0.75	0.00	0.00	35.00	5.13	2.30	0.00
9.50	0.85	0.00	0.05	35.50	5.13	2.30	0.00
10.00	0.97	0.01	0.22	36.00	5.13	2.30	0.00
10.50	1.11	0.03	0.48	36.50	5.13	2.30	0.00
11.00	1.28	0.06	0.86	37.00	5.13	2.30	0.00
11.50	1.53	0.12	1.77	37.50	5.13	2.30	0.00
12.00	2.56	0.56	11.66	38.00	5.13	2.30	0.00
12.50	3.60	1.19	11.64	38.50	5.13	2.30	0.00
13.00	3.85	1.35	3.95	39.00	5.13	2.30	0.00
13.50	4.02	1.47	2.95	39.50	5.13	2.30	0.00
14.00	4.16	1.57	2.45	40.00	5.13	2.30	0.00
14.50	4.28	1.66	2.11				
15.00	4.38	1.73	1.86				
15.50	4.47	1.80	1.61				
16.00	4.55	1.85	1.35				
16.50	4.61	1.90	1.18				
17.00	4.67	1.94	1.06				
17.50	4.72	1.98	0.94				
18.00	4.76	2.02	0.83				
18.50	4.80	2.05	0.76				
19.00	4.84	2.07	0.73				
19.50	4.88	2.10	0.69				
20.00	4.91	2.13	0.66				
20.50	4.94	2.15	0.63				
21.00	4.97	2.18	0.60				
21.50	5.00	2.20	0.57				
22.00	5.03	2.22	0.55				
22.50	5.06	2.24	0.52				
23.00	5.08	2.26	0.49				
23.50	5.11	2.28	0.47				
24.00	5.13	2.30	0.44				
24.50	5.13	2.30	0.00				
25.00	5.13	2.30	0.00				
25.50	5.13	2.30	0.00				

Summary for Subcatchment 31S: PDA-1

Runoff = 2.37 cfs @ 12.21 hrs, Volume= 10,390 cf, Depth= 1.45"

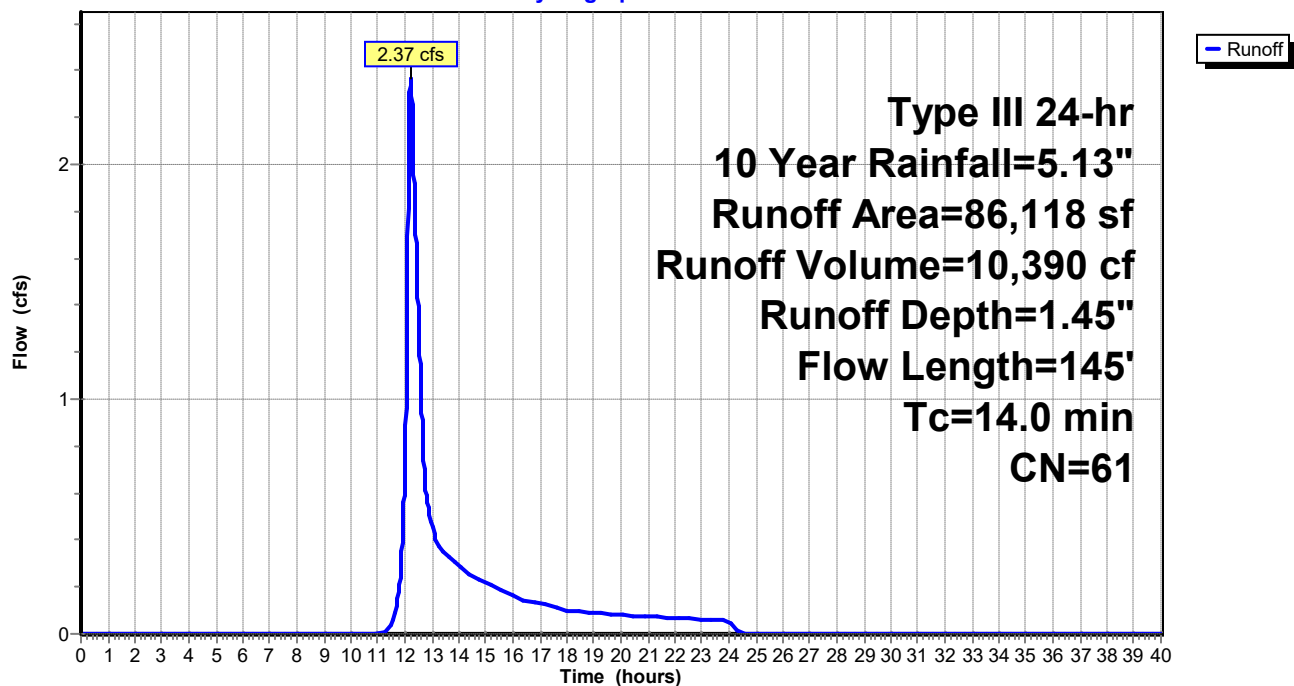
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Rainfall=5.13"

Area (sf)	CN	Description
50,108	61	>75% Grass cover, Good, HSG B
8,316	72	Woods/grass comb., Good, HSG C
27,694	58	Woods/grass comb., Good, HSG B
86,118	61	Weighted Average
86,118		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0200	0.12		Sheet Flow, Grass Lawn Sheet Flow
					Grass: Dense n= 0.240 P2= 3.41"
0.2	45	0.4440	4.66		Shallow Concentrated Flow, Grass Shallow Conc Flow
					Short Grass Pasture Kv= 7.0 fps
14.0	145	Total			

Subcatchment 31S: PDA-1

Hydrograph



Hydrograph for Subcatchment 31S: PDA-1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	5.13	1.45	0.00
0.50	0.03	0.00	0.00	26.50	5.13	1.45	0.00
1.00	0.05	0.00	0.00	27.00	5.13	1.45	0.00
1.50	0.08	0.00	0.00	27.50	5.13	1.45	0.00
2.00	0.10	0.00	0.00	28.00	5.13	1.45	0.00
2.50	0.13	0.00	0.00	28.50	5.13	1.45	0.00
3.00	0.16	0.00	0.00	29.00	5.13	1.45	0.00
3.50	0.19	0.00	0.00	29.50	5.13	1.45	0.00
4.00	0.22	0.00	0.00	30.00	5.13	1.45	0.00
4.50	0.25	0.00	0.00	30.50	5.13	1.45	0.00
5.00	0.29	0.00	0.00	31.00	5.13	1.45	0.00
5.50	0.33	0.00	0.00	31.50	5.13	1.45	0.00
6.00	0.37	0.00	0.00	32.00	5.13	1.45	0.00
6.50	0.41	0.00	0.00	32.50	5.13	1.45	0.00
7.00	0.46	0.00	0.00	33.00	5.13	1.45	0.00
7.50	0.52	0.00	0.00	33.50	5.13	1.45	0.00
8.00	0.58	0.00	0.00	34.00	5.13	1.45	0.00
8.50	0.66	0.00	0.00	34.50	5.13	1.45	0.00
9.00	0.75	0.00	0.00	35.00	5.13	1.45	0.00
9.50	0.85	0.00	0.00	35.50	5.13	1.45	0.00
10.00	0.97	0.00	0.00	36.00	5.13	1.45	0.00
10.50	1.11	0.00	0.00	36.50	5.13	1.45	0.00
11.00	1.28	0.00	0.00	37.00	5.13	1.45	0.00
11.50	1.53	0.01	0.04	37.50	5.13	1.45	0.00
12.00	2.56	0.22	0.71	38.00	5.13	1.45	0.00
12.50	3.60	0.62	1.36	38.50	5.13	1.45	0.00
13.00	3.85	0.74	0.46	39.00	5.13	1.45	0.00
13.50	4.02	0.82	0.34	39.50	5.13	1.45	0.00
14.00	4.16	0.90	0.29	40.00	5.13	1.45	0.00
14.50	4.28	0.96	0.25				
15.00	4.38	1.01	0.22				
15.50	4.47	1.06	0.19				
16.00	4.55	1.10	0.16				
16.50	4.61	1.14	0.14				
17.00	4.67	1.17	0.13				
17.50	4.72	1.20	0.12				
18.00	4.76	1.23	0.10				
18.50	4.80	1.25	0.09				
19.00	4.84	1.27	0.09				
19.50	4.88	1.29	0.08				
20.00	4.91	1.32	0.08				
20.50	4.94	1.33	0.08				
21.00	4.97	1.35	0.07				
21.50	5.00	1.37	0.07				
22.00	5.03	1.39	0.07				
22.50	5.06	1.40	0.06				
23.00	5.08	1.42	0.06				
23.50	5.11	1.43	0.06				
24.00	5.13	1.45	0.05				
24.50	5.13	1.45	0.00				
25.00	5.13	1.45	0.00				
25.50	5.13	1.45	0.00				

Summary for Pond 25P: INFILTRATION PIPE STORAGE

Inflow Area = 545,177 sf, 28.83% Impervious, Inflow Depth = 2.30" for 10 Year event
 Inflow = 27.72 cfs @ 12.16 hrs, Volume= 104,422 cf
 Outflow = 3.98 cfs @ 11.90 hrs, Volume= 104,472 cf, Atten= 86%, Lag= 0.0 min
 Discarded = 3.98 cfs @ 11.90 hrs, Volume= 104,472 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 322.01' @ 12.99 hrs Surf.Area= 34,392 sf Storage= 34,742 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 69.4 min (915.8 - 846.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	320.00'	49,499 cf	61.09'W x 563.00'L x 6.58'H Field A 226,432 cf Overall - 102,685 cf Embedded = 123,747 cf x 40.0% Voids
#2A	320.50'	86,464 cf	ADS N-12 60" x 224 Inside #1 Inside= 59.5"W x 59.5"H => 19.30 sf x 20.00'L = 386.0 cf Outside= 67.0"W x 67.0"H => 22.92 sf x 20.00'L = 458.4 cf 8 Rows of 28 Chambers
		135,963 cf	Total Available Storage

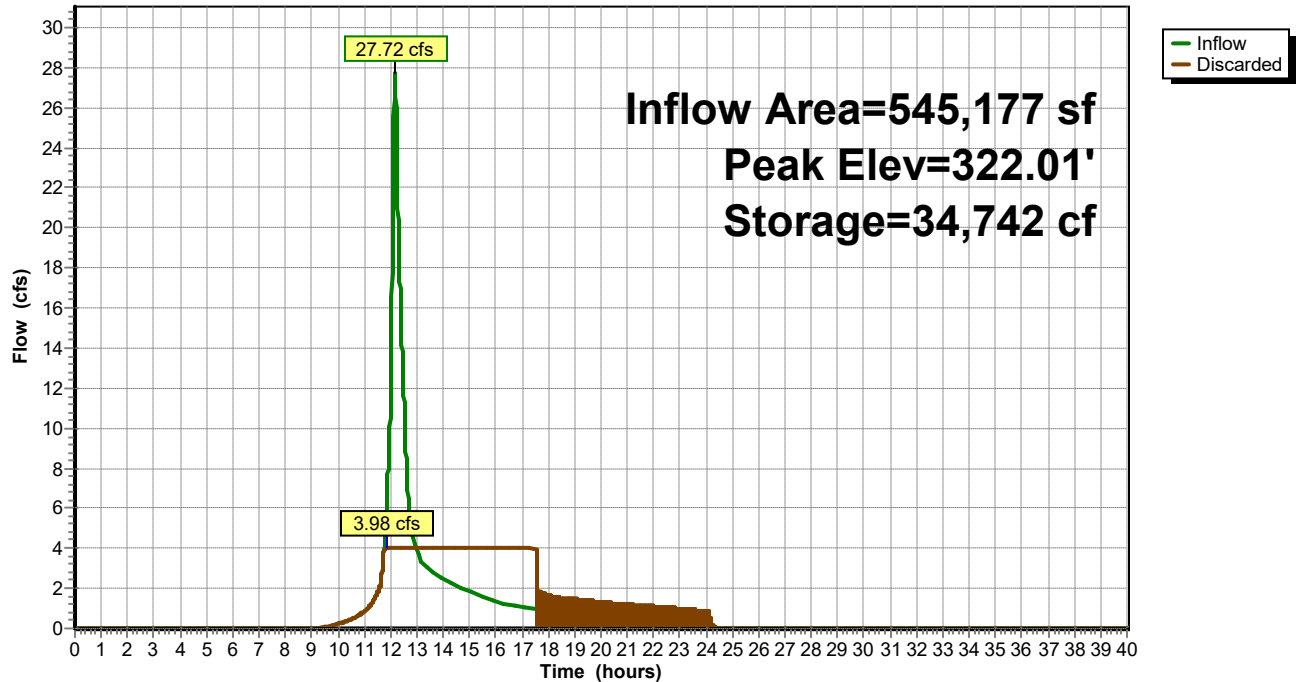
Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	320.00'	5.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=3.98 cfs @ 11.90 hrs HW=320.07' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 3.98 cfs)

Pond 25P: INFILTRATION PIPE STORAGE

Hydrograph



Hydrograph for Pond 25P: INFILTRATION PIPE STORAGE

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	320.00	0.00
1.00	0.00	0	320.00	0.00
2.00	0.00	0	320.00	0.00
3.00	0.00	0	320.00	0.00
4.00	0.00	0	320.00	0.00
5.00	0.00	0	320.00	0.00
6.00	0.00	0	320.00	0.00
7.00	0.00	0	320.00	0.00
8.00	0.00	0	320.00	0.00
9.00	0.00	0	320.00	0.00
10.00	0.22	0	320.00	0.22
11.00	0.86	0	320.00	0.86
12.00	11.66	2,882	320.21	3.98
13.00	3.95	34,741	322.01	3.98
14.00	2.45	31,218	321.86	3.98
15.00	1.86	24,525	321.57	3.98
16.00	1.35	15,981	321.17	3.98
17.00	1.06	5,906	320.43	3.98
18.00	0.83	0	320.00	0.00
19.00	0.73	0	320.00	0.00
20.00	0.66	0	320.00	0.00
21.00	0.60	0	320.00	0.00
22.00	0.55	0	320.00	0.00
23.00	0.49	0	320.00	0.00
24.00	0.44	0	320.00	0.00
25.00	0.00	0	320.00	0.00
26.00	0.00	0	320.00	0.00
27.00	0.00	0	320.00	0.00
28.00	0.00	0	320.00	0.00
29.00	0.00	0	320.00	0.00
30.00	0.00	0	320.00	0.00
31.00	0.00	0	320.00	0.00
32.00	0.00	0	320.00	0.00
33.00	0.00	0	320.00	0.00
34.00	0.00	0	320.00	0.00
35.00	0.00	0	320.00	0.00
36.00	0.00	0	320.00	0.00
37.00	0.00	0	320.00	0.00
38.00	0.00	0	320.00	0.00
39.00	0.00	0	320.00	0.00
40.00	0.00	0	320.00	0.00

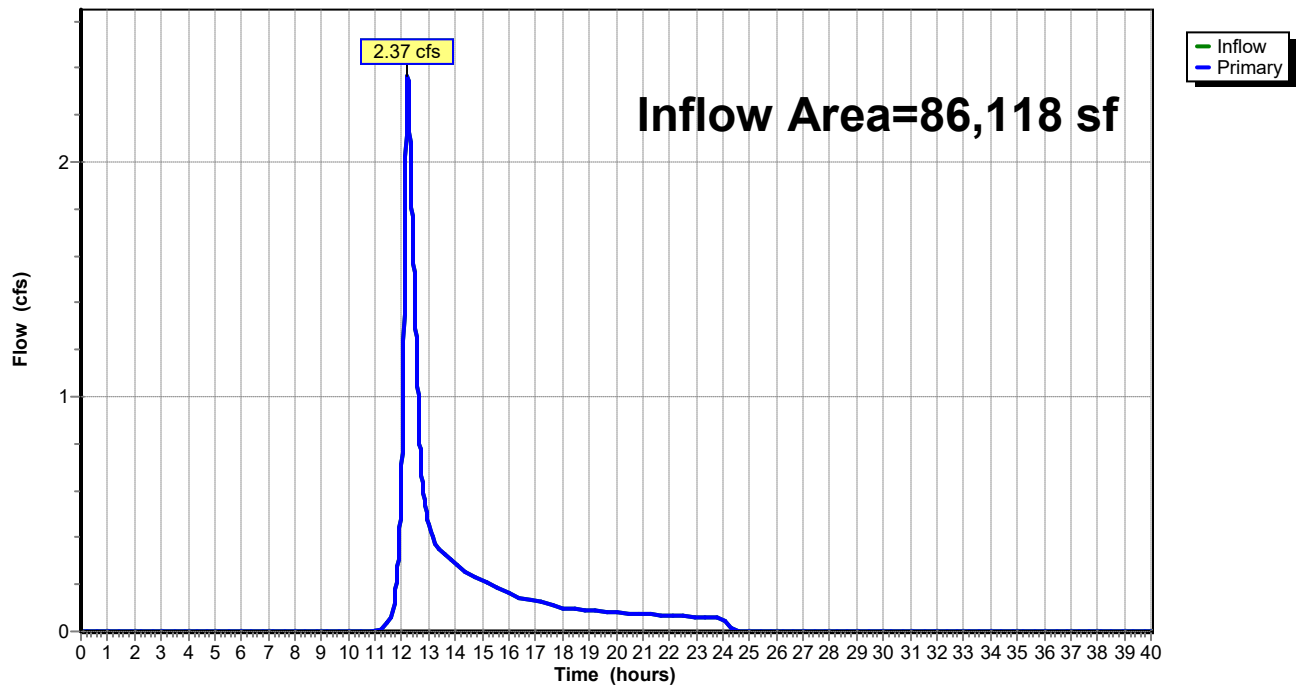
Summary for Link 21L: Pocantico River Basin

Inflow Area = 86,118 sf, 0.00% Impervious, Inflow Depth = 1.45" for 10 Year event
 Inflow = 2.37 cfs @ 12.21 hrs, Volume= 10,390 cf
 Primary = 2.37 cfs @ 12.21 hrs, Volume= 10,390 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 21L: Pocantico River Basin

Hydrograph



Hydrograph for Link 21L: Pocantico River Basin

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00	36.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	36.50	0.00	0.00	0.00
11.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00
11.50	0.04	0.00	0.04	37.50	0.00	0.00	0.00
12.00	0.71	0.00	0.71	38.00	0.00	0.00	0.00
12.50	1.36	0.00	1.36	38.50	0.00	0.00	0.00
13.00	0.46	0.00	0.46	39.00	0.00	0.00	0.00
13.50	0.34	0.00	0.34	39.50	0.00	0.00	0.00
14.00	0.29	0.00	0.29	40.00	0.00	0.00	0.00
14.50	0.25	0.00	0.25				
15.00	0.22	0.00	0.22				
15.50	0.19	0.00	0.19				
16.00	0.16	0.00	0.16				
16.50	0.14	0.00	0.14				
17.00	0.13	0.00	0.13				
17.50	0.12	0.00	0.12				
18.00	0.10	0.00	0.10				
18.50	0.09	0.00	0.09				
19.00	0.09	0.00	0.09				
19.50	0.08	0.00	0.08				
20.00	0.08	0.00	0.08				
20.50	0.08	0.00	0.08				
21.00	0.07	0.00	0.07				
21.50	0.07	0.00	0.07				
22.00	0.07	0.00	0.07				
22.50	0.06	0.00	0.06				
23.00	0.06	0.00	0.06				
23.50	0.06	0.00	0.06				
24.00	0.05	0.00	0.05				
24.50	0.00	0.00	0.00				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

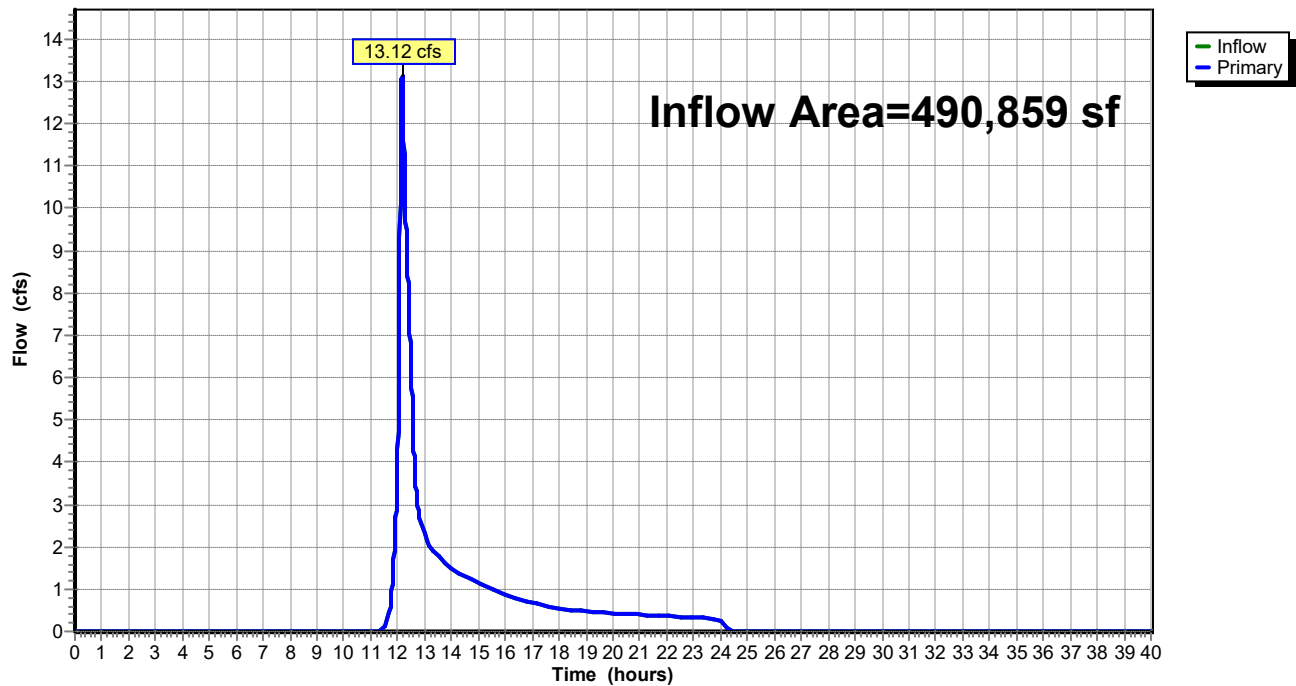
Summary for Link 22L: Pocantico Lake

Inflow Area = 490,859 sf, 0.00% Impervious, Inflow Depth = 1.31" for 10 Year event
 Inflow = 13.12 cfs @ 12.16 hrs, Volume= 53,531 cf
 Primary = 13.12 cfs @ 12.16 hrs, Volume= 53,531 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 22L: Pocantico Lake

Hydrograph



Hydrograph for Link 22L: Pocantico Lake

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.00	0.00	0.00	36.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	36.50	0.00	0.00	0.00
11.00	0.00	0.00	0.00	37.00	0.00	0.00	0.00
11.50	0.09	0.00	0.09	37.50	0.00	0.00	0.00
12.00	4.32	0.00	4.32	38.00	0.00	0.00	0.00
12.50	6.13	0.00	6.13	38.50	0.00	0.00	0.00
13.00	2.29	0.00	2.29	39.00	0.00	0.00	0.00
13.50	1.77	0.00	1.77	39.50	0.00	0.00	0.00
14.00	1.49	0.00	1.49	40.00	0.00	0.00	0.00
14.50	1.31	0.00	1.31				
15.00	1.17	0.00	1.17				
15.50	1.01	0.00	1.01				
16.00	0.85	0.00	0.85				
16.50	0.75	0.00	0.75				
17.00	0.68	0.00	0.68				
17.50	0.61	0.00	0.61				
18.00	0.53	0.00	0.53				
18.50	0.50	0.00	0.50				
19.00	0.47	0.00	0.47				
19.50	0.45	0.00	0.45				
20.00	0.43	0.00	0.43				
20.50	0.41	0.00	0.41				
21.00	0.40	0.00	0.40				
21.50	0.38	0.00	0.38				
22.00	0.36	0.00	0.36				
22.50	0.35	0.00	0.35				
23.00	0.33	0.00	0.33				
23.50	0.31	0.00	0.31				
24.00	0.29	0.00	0.29				
24.50	0.00	0.00	0.00				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

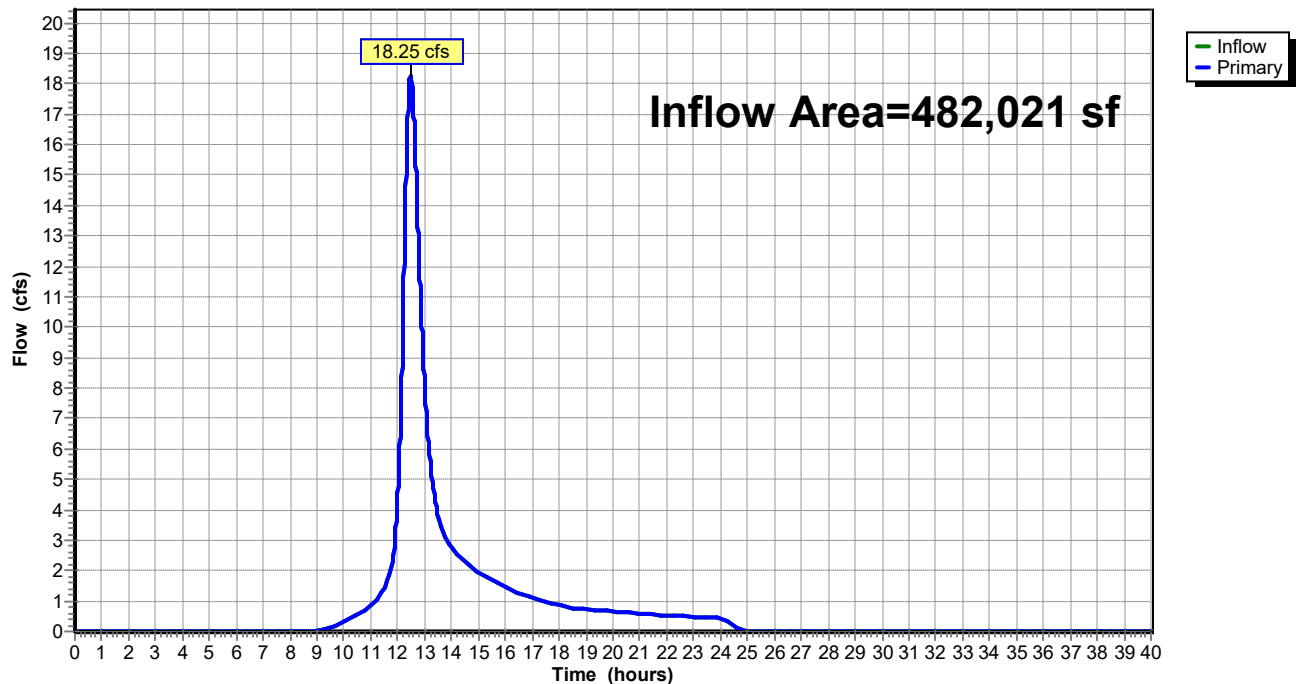
Summary for Link 23L: Mapped Wetland / Brook

Inflow Area = 482,021 sf, 39.25% Impervious, Inflow Depth = 2.64" for 10 Year event
 Inflow = 18.25 cfs @ 12.47 hrs, Volume= 106,166 cf
 Primary = 18.25 cfs @ 12.47 hrs, Volume= 106,166 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 23L: Mapped Wetland / Brook

Hydrograph



Hydrograph for Link 23L: Mapped Wetland / Brook

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.04	0.00	0.04	35.00	0.00	0.00	0.00
9.50	0.15	0.00	0.15	35.50	0.00	0.00	0.00
10.00	0.31	0.00	0.31	36.00	0.00	0.00	0.00
10.50	0.52	0.00	0.52	36.50	0.00	0.00	0.00
11.00	0.85	0.00	0.85	37.00	0.00	0.00	0.00
11.50	1.40	0.00	1.40	37.50	0.00	0.00	0.00
12.00	4.44	0.00	4.44	38.00	0.00	0.00	0.00
12.50	18.18	0.00	18.18	38.50	0.00	0.00	0.00
13.00	7.99	0.00	7.99	39.00	0.00	0.00	0.00
13.50	3.82	0.00	3.82	39.50	0.00	0.00	0.00
14.00	2.76	0.00	2.76	40.00	0.00	0.00	0.00
14.50	2.25	0.00	2.25				
15.00	1.96	0.00	1.96				
15.50	1.71	0.00	1.71				
16.00	1.46	0.00	1.46				
16.50	1.23	0.00	1.23				
17.00	1.09	0.00	1.09				
17.50	0.98	0.00	0.98				
18.00	0.86	0.00	0.86				
18.50	0.76	0.00	0.76				
19.00	0.71	0.00	0.71				
19.50	0.68	0.00	0.68				
20.00	0.65	0.00	0.65				
20.50	0.61	0.00	0.61				
21.00	0.59	0.00	0.59				
21.50	0.56	0.00	0.56				
22.00	0.54	0.00	0.54				
22.50	0.51	0.00	0.51				
23.00	0.48	0.00	0.48				
23.50	0.46	0.00	0.46				
24.00	0.43	0.00	0.43				
24.50	0.19	0.00	0.19				
25.00	0.02	0.00	0.02				
25.50	0.00	0.00	0.00				

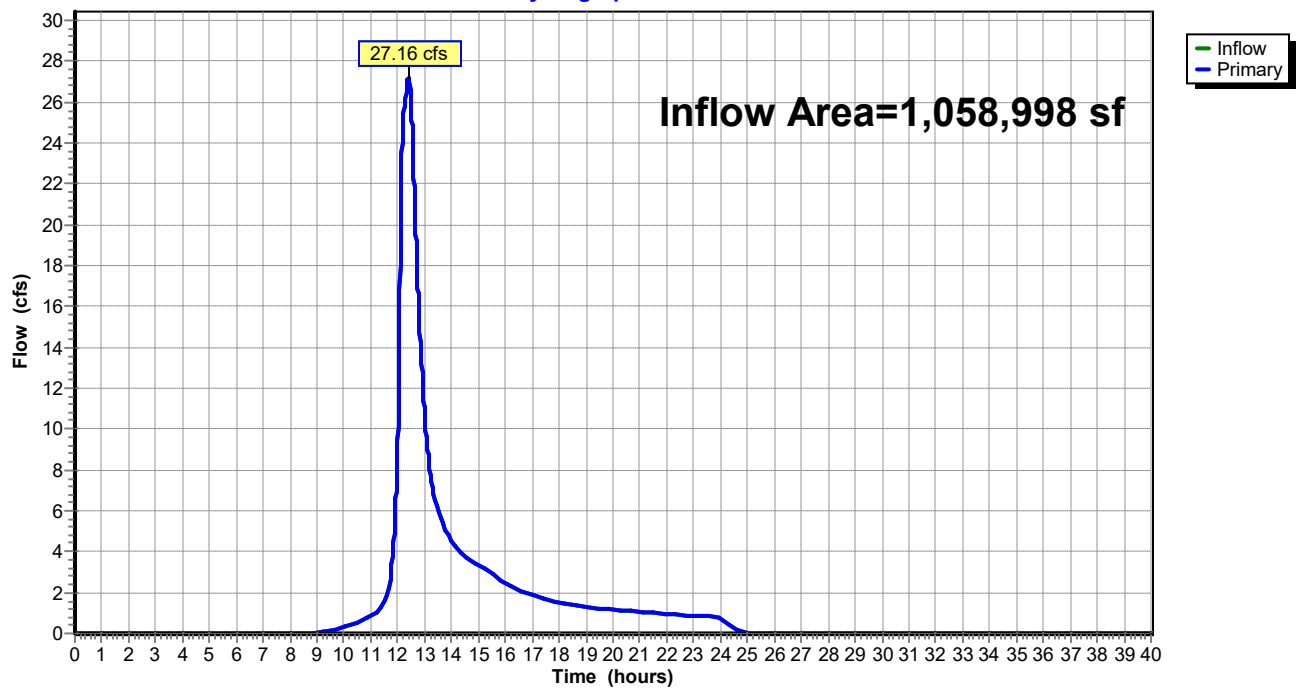
Summary for Link 24L: COMB POST

Inflow Area = 1,058,998 sf, 17.86% Impervious, Inflow Depth = 1.93" for 10 Year event
 Inflow = 27.16 cfs @ 12.39 hrs, Volume= 170,088 cf
 Primary = 27.16 cfs @ 12.39 hrs, Volume= 170,088 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 24L: COMB POST

Hydrograph



Hydrograph for Link 24L: COMB POST

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.04	0.00	0.04	35.00	0.00	0.00	0.00
9.50	0.15	0.00	0.15	35.50	0.00	0.00	0.00
10.00	0.31	0.00	0.31	36.00	0.00	0.00	0.00
10.50	0.52	0.00	0.52	36.50	0.00	0.00	0.00
11.00	0.85	0.00	0.85	37.00	0.00	0.00	0.00
11.50	1.54	0.00	1.54	37.50	0.00	0.00	0.00
12.00	9.47	0.00	9.47	38.00	0.00	0.00	0.00
12.50	25.67	0.00	25.67	38.50	0.00	0.00	0.00
13.00	10.74	0.00	10.74	39.00	0.00	0.00	0.00
13.50	5.93	0.00	5.93	39.50	0.00	0.00	0.00
14.00	4.54	0.00	4.54	40.00	0.00	0.00	0.00
14.50	3.81	0.00	3.81				
15.00	3.35	0.00	3.35				
15.50	2.92	0.00	2.92				
16.00	2.48	0.00	2.48				
16.50	2.12	0.00	2.12				
17.00	1.90	0.00	1.90				
17.50	1.70	0.00	1.70				
18.00	1.50	0.00	1.50				
18.50	1.35	0.00	1.35				
19.00	1.28	0.00	1.28				
19.50	1.22	0.00	1.22				
20.00	1.16	0.00	1.16				
20.50	1.10	0.00	1.10				
21.00	1.06	0.00	1.06				
21.50	1.01	0.00	1.01				
22.00	0.97	0.00	0.97				
22.50	0.92	0.00	0.92				
23.00	0.87	0.00	0.87				
23.50	0.82	0.00	0.82				
24.00	0.78	0.00	0.78				
24.50	0.20	0.00	0.20				
25.00	0.02	0.00	0.02				
25.50	0.00	0.00	0.00				

Meadows Briarcliff_05032021

Type III 24-hr 50 Year Rainfall=7.72"

Prepared by Wasp Engineering Group, PLLC

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 18S: PDA-2

Runoff Area=490,859 sf 0.00% Impervious Runoff Depth=3.02"
Flow Length=435' Tc=10.5 min CN=59 Runoff=33.38 cfs 123,433 cf

Subcatchment 19S: PDA-3B

Runoff Area=482,021 sf 39.25% Impervious Runoff Depth=4.90"
Flow Length=1,330' Tc=34.1 min CN=76 Runoff=33.87 cfs 196,977 cf

Subcatchment 25S: PDA-3A

Runoff Area=545,177 sf 28.83% Impervious Runoff Depth=4.45"
Flow Length=240' Tc=11.6 min CN=72 Runoff=54.30 cfs 202,153 cf

Subcatchment 31S: PDA-1

Runoff Area=86,118 sf 0.00% Impervious Runoff Depth=3.23"
Flow Length=145' Tc=14.0 min CN=61 Runoff=5.70 cfs 23,199 cf

Pond 25P: INFILTRATION PIPE

Peak Elev=324.17' Storage=91,156 cf Inflow=54.30 cfs 202,153 cf
Outflow=3.98 cfs 202,201 cf

Link 21L: Pocantico River Basin

Inflow=5.70 cfs 23,199 cf
Primary=5.70 cfs 23,199 cf

Link 22L: Pocantico Lake

Inflow=33.38 cfs 123,433 cf
Primary=33.38 cfs 123,433 cf

Link 23L: Mapped Wetland / Brook

Inflow=33.87 cfs 196,977 cf
Primary=33.87 cfs 196,977 cf

Link 24L: COMB POST

Inflow=57.00 cfs 343,609 cf
Primary=57.00 cfs 343,609 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 545,762 cf Average Runoff Depth = 4.08"
78.41% Pervious = 1,257,830 sf 21.59% Impervious = 346,345 sf

Summary for Subcatchment 18S: PDA-2

Runoff = 33.38 cfs @ 12.15 hrs, Volume= 123,433 cf, Depth= 3.02"

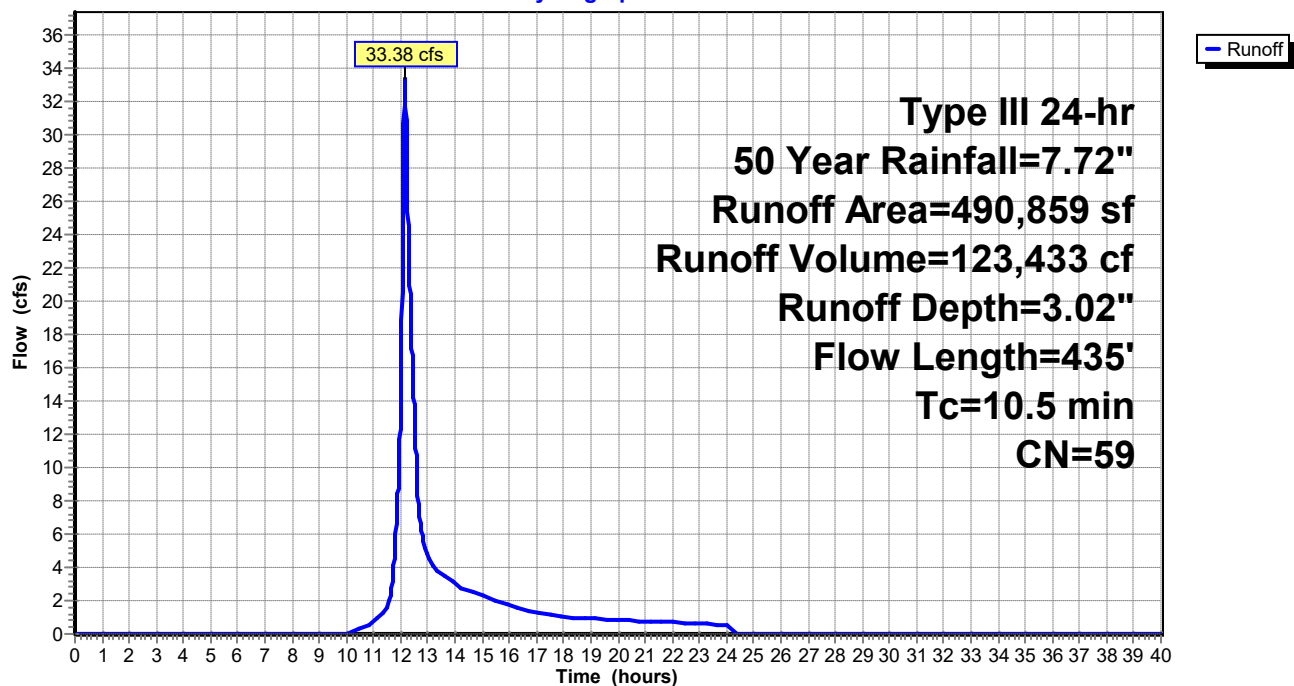
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 Year Rainfall=7.72"

Area (sf)	CN	Description
* 0	98	Ex. IMP Pavement, Rooftops
151,101	61	>75% Grass cover, Good, HSG B
339,758	58	Woods/grass comb., Good, HSG B
490,859	59	Weighted Average
490,859		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.0650	0.19		Sheet Flow, Sheet Lawn
					Grass: Dense n= 0.240 P2= 3.41"
0.7	115	0.1520	2.73		Shallow Concentrated Flow, Shallow Conc. Lawn
					Short Grass Pasture Kv= 7.0 fps
1.2	220	0.4050	3.18		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
10.5	435	Total			

Subcatchment 18S: PDA-2

Hydrograph



Hydrograph for Subcatchment 18S: PDA-2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	7.72	3.02	0.00
0.50	0.04	0.00	0.00	26.50	7.72	3.02	0.00
1.00	0.08	0.00	0.00	27.00	7.72	3.02	0.00
1.50	0.12	0.00	0.00	27.50	7.72	3.02	0.00
2.00	0.15	0.00	0.00	28.00	7.72	3.02	0.00
2.50	0.19	0.00	0.00	28.50	7.72	3.02	0.00
3.00	0.24	0.00	0.00	29.00	7.72	3.02	0.00
3.50	0.28	0.00	0.00	29.50	7.72	3.02	0.00
4.00	0.33	0.00	0.00	30.00	7.72	3.02	0.00
4.50	0.38	0.00	0.00	30.50	7.72	3.02	0.00
5.00	0.44	0.00	0.00	31.00	7.72	3.02	0.00
5.50	0.50	0.00	0.00	31.50	7.72	3.02	0.00
6.00	0.56	0.00	0.00	32.00	7.72	3.02	0.00
6.50	0.62	0.00	0.00	32.50	7.72	3.02	0.00
7.00	0.70	0.00	0.00	33.00	7.72	3.02	0.00
7.50	0.78	0.00	0.00	33.50	7.72	3.02	0.00
8.00	0.88	0.00	0.00	34.00	7.72	3.02	0.00
8.50	0.99	0.00	0.00	34.50	7.72	3.02	0.00
9.00	1.13	0.00	0.00	35.00	7.72	3.02	0.00
9.50	1.28	0.00	0.00	35.50	7.72	3.02	0.00
10.00	1.46	0.00	0.02	36.00	7.72	3.02	0.00
10.50	1.67	0.01	0.29	36.50	7.72	3.02	0.00
11.00	1.93	0.04	0.72	37.00	7.72	3.02	0.00
11.50	2.30	0.11	1.74	37.50	7.72	3.02	0.00
12.00	3.86	0.65	13.87	38.00	7.72	3.02	0.00
12.50	5.42	1.48	13.37	38.50	7.72	3.02	0.00
13.00	5.79	1.71	4.77	39.00	7.72	3.02	0.00
13.50	6.05	1.87	3.63	39.50	7.72	3.02	0.00
14.00	6.26	2.01	3.02	40.00	7.72	3.02	0.00
14.50	6.44	2.12	2.62				
15.00	6.59	2.23	2.31				
15.50	6.73	2.32	2.00				
16.00	6.84	2.40	1.67				
16.50	6.94	2.46	1.47				
17.00	7.02	2.52	1.33				
17.50	7.10	2.57	1.18				
18.00	7.16	2.62	1.03				
18.50	7.22	2.66	0.96				
19.00	7.28	2.70	0.91				
19.50	7.34	2.74	0.87				
20.00	7.39	2.78	0.83				
20.50	7.44	2.81	0.79				
21.00	7.48	2.85	0.76				
21.50	7.53	2.88	0.72				
22.00	7.57	2.91	0.69				
22.50	7.61	2.94	0.66				
23.00	7.65	2.97	0.62				
23.50	7.69	2.99	0.59				
24.00	7.72	3.02	0.55				
24.50	7.72	3.02	0.00				
25.00	7.72	3.02	0.00				
25.50	7.72	3.02	0.00				

Summary for Subcatchment 19S: PDA-3B

Runoff = 33.87 cfs @ 12.47 hrs, Volume= 196,977 cf, Depth= 4.90"

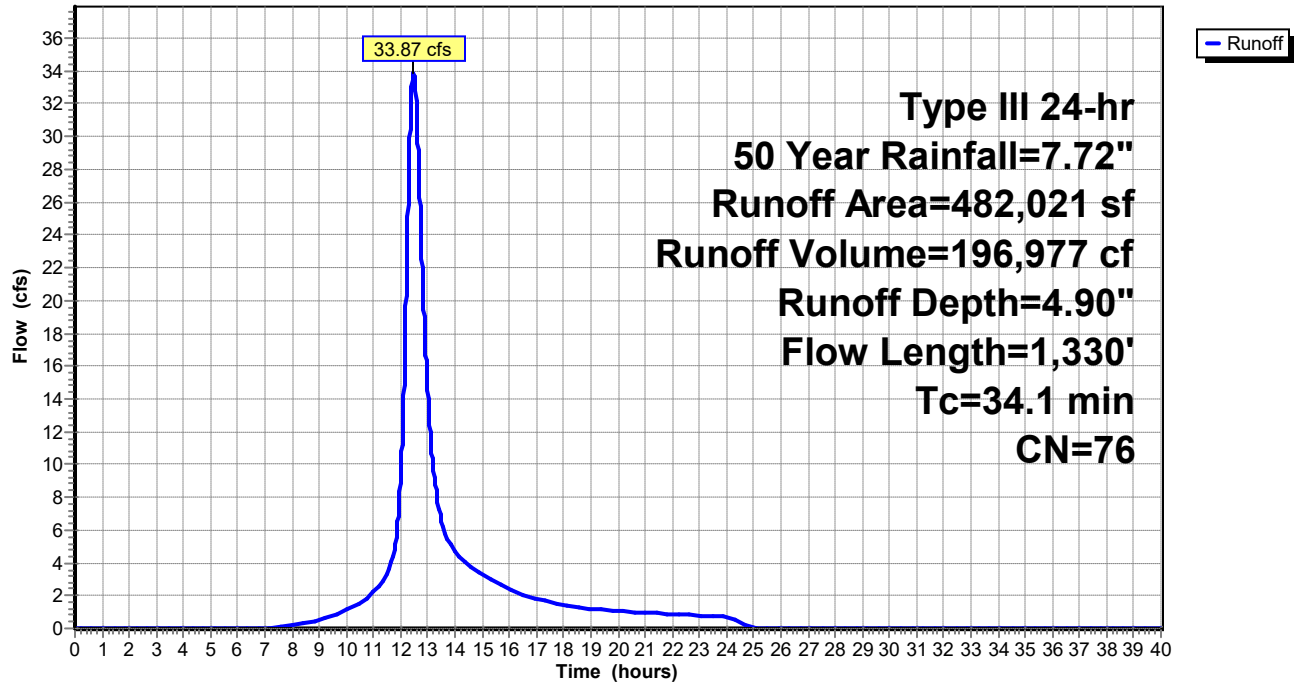
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 Year Rainfall=7.72"

	Area (sf)	CN	Description
*	14,931	98	Ex. IMP Pavement, Rooftops
	75,129	74	>75% Grass cover, Good, HSG C
	67,015	61	>75% Grass cover, Good, HSG B
	100,430	58	Woods/grass comb., Good, HSG B
	30,434	72	Woods/grass comb., Good, HSG C
	19,829	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	482,021	76	Weighted Average
	292,837		60.75% Pervious Area
	189,184		39.25% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.5	100	0.0150	0.11		Sheet Flow, Sheet Flow Lawn Grass: Dense n= 0.240 P2= 3.41"
1.0	80	0.0400	1.40		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
3.6	240	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
5.9	250	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
3.1	300	0.1067	1.63		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.7	230	0.1043	0.81		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
0.3	130	0.1000	6.27	50.19	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
34.1	1,330	Total			

Subcatchment 19S: PDA-3B

Hydrograph



Hydrograph for Subcatchment 19S: PDA-3B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	7.72	4.90	0.00
0.50	0.04	0.00	0.00	26.50	7.72	4.90	0.00
1.00	0.08	0.00	0.00	27.00	7.72	4.90	0.00
1.50	0.12	0.00	0.00	27.50	7.72	4.90	0.00
2.00	0.15	0.00	0.00	28.00	7.72	4.90	0.00
2.50	0.19	0.00	0.00	28.50	7.72	4.90	0.00
3.00	0.24	0.00	0.00	29.00	7.72	4.90	0.00
3.50	0.28	0.00	0.00	29.50	7.72	4.90	0.00
4.00	0.33	0.00	0.00	30.00	7.72	4.90	0.00
4.50	0.38	0.00	0.00	30.50	7.72	4.90	0.00
5.00	0.44	0.00	0.00	31.00	7.72	4.90	0.00
5.50	0.50	0.00	0.00	31.50	7.72	4.90	0.00
6.00	0.56	0.00	0.00	32.00	7.72	4.90	0.00
6.50	0.62	0.00	0.00	32.50	7.72	4.90	0.00
7.00	0.70	0.00	0.01	33.00	7.72	4.90	0.00
7.50	0.78	0.01	0.07	33.50	7.72	4.90	0.00
8.00	0.88	0.02	0.18	34.00	7.72	4.90	0.00
8.50	0.99	0.04	0.32	34.50	7.72	4.90	0.00
9.00	1.13	0.07	0.53	35.00	7.72	4.90	0.00
9.50	1.28	0.11	0.81	35.50	7.72	4.90	0.00
10.00	1.46	0.17	1.15	36.00	7.72	4.90	0.00
10.50	1.67	0.26	1.59	36.50	7.72	4.90	0.00
11.00	1.93	0.38	2.26	37.00	7.72	4.90	0.00
11.50	2.30	0.58	3.35	37.50	7.72	4.90	0.00
12.00	3.86	1.63	9.39	38.00	7.72	4.90	0.00
12.50	5.42	2.89	33.59	38.50	7.72	4.90	0.00
13.00	5.79	3.20	14.11	39.00	7.72	4.90	0.00
13.50	6.05	3.42	6.57	39.50	7.72	4.90	0.00
14.00	6.26	3.61	4.68	40.00	7.72	4.90	0.00
14.50	6.44	3.76	3.80				
15.00	6.59	3.90	3.29				
15.50	6.73	4.02	2.87				
16.00	6.84	4.12	2.44				
16.50	6.94	4.20	2.05				
17.00	7.02	4.28	1.81				
17.50	7.10	4.34	1.62				
18.00	7.16	4.40	1.43				
18.50	7.22	4.46	1.26				
19.00	7.28	4.51	1.18				
19.50	7.34	4.56	1.12				
20.00	7.39	4.60	1.07				
20.50	7.44	4.65	1.01				
21.00	7.48	4.69	0.97				
21.50	7.53	4.73	0.92				
22.00	7.57	4.77	0.88				
22.50	7.61	4.81	0.84				
23.00	7.65	4.84	0.80				
23.50	7.69	4.87	0.75				
24.00	7.72	4.90	0.71				
24.50	7.72	4.90	0.32				
25.00	7.72	4.90	0.04				
25.50	7.72	4.90	0.00				

Summary for Subcatchment 25S: PDA-3A

Runoff = 54.30 cfs @ 12.16 hrs, Volume= 202,153 cf, Depth= 4.45"

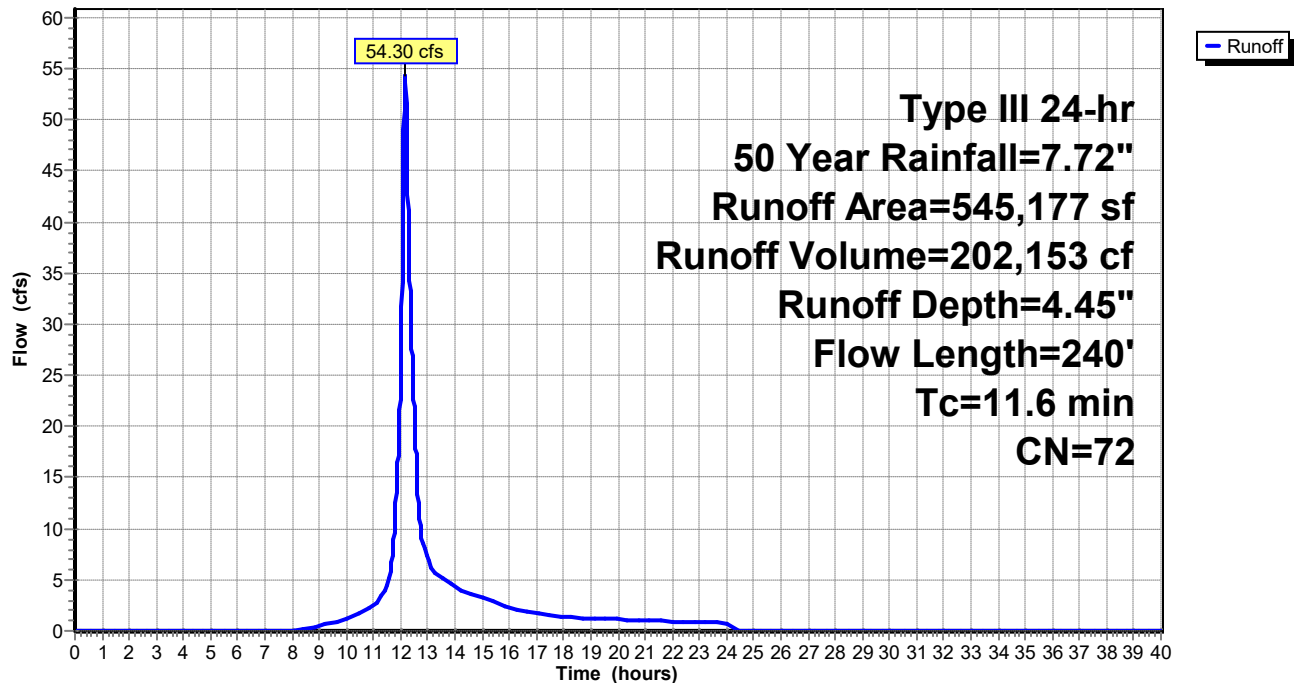
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 Year Rainfall=7.72"

	Area (sf)	CN	Description
*	157,161	98	Ex. IMP Pavement, Rooftops
	388,016	61	>75% Grass cover, Good, HSG B
	545,177	72	Weighted Average
	388,016		71.17% Pervious Area
	157,161		28.83% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.5	100	0.0400	0.16		Sheet Flow, Sheet Flow Woods
					Grass: Dense n= 0.240 P2= 3.41"
1.1	140	0.1000	2.21		Shallow Concentrated Flow, Shallow Conc. Lawn
					Short Grass Pasture Kv= 7.0 fps
11.6	240	Total			

Subcatchment 25S: PDA-3A

Hydrograph



Hydrograph for Subcatchment 25S: PDA-3A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	7.72	4.45	0.00
0.50	0.04	0.00	0.00	26.50	7.72	4.45	0.00
1.00	0.08	0.00	0.00	27.00	7.72	4.45	0.00
1.50	0.12	0.00	0.00	27.50	7.72	4.45	0.00
2.00	0.15	0.00	0.00	28.00	7.72	4.45	0.00
2.50	0.19	0.00	0.00	28.50	7.72	4.45	0.00
3.00	0.24	0.00	0.00	29.00	7.72	4.45	0.00
3.50	0.28	0.00	0.00	29.50	7.72	4.45	0.00
4.00	0.33	0.00	0.00	30.00	7.72	4.45	0.00
4.50	0.38	0.00	0.00	30.50	7.72	4.45	0.00
5.00	0.44	0.00	0.00	31.00	7.72	4.45	0.00
5.50	0.50	0.00	0.00	31.50	7.72	4.45	0.00
6.00	0.56	0.00	0.00	32.00	7.72	4.45	0.00
6.50	0.62	0.00	0.00	32.50	7.72	4.45	0.00
7.00	0.70	0.00	0.00	33.00	7.72	4.45	0.00
7.50	0.78	0.00	0.00	33.50	7.72	4.45	0.00
8.00	0.88	0.00	0.08	34.00	7.72	4.45	0.00
8.50	0.99	0.01	0.24	34.50	7.72	4.45	0.00
9.00	1.13	0.03	0.47	35.00	7.72	4.45	0.00
9.50	1.28	0.06	0.78	35.50	7.72	4.45	0.00
10.00	1.46	0.10	1.16	36.00	7.72	4.45	0.00
10.50	1.67	0.17	1.75	36.50	7.72	4.45	0.00
11.00	1.93	0.26	2.55	37.00	7.72	4.45	0.00
11.50	2.30	0.43	4.54	37.50	7.72	4.45	0.00
12.00	3.86	1.36	24.78	38.00	7.72	4.45	0.00
12.50	5.42	2.53	21.24	38.50	7.72	4.45	0.00
13.00	5.79	2.82	7.03	39.00	7.72	4.45	0.00
13.50	6.05	3.03	5.19	39.50	7.72	4.45	0.00
14.00	6.26	3.21	4.28	40.00	7.72	4.45	0.00
14.50	6.44	3.36	3.68				
15.00	6.59	3.49	3.23				
15.50	6.73	3.60	2.78				
16.00	6.84	3.69	2.31				
16.50	6.94	3.77	2.02				
17.00	7.02	3.85	1.82				
17.50	7.10	3.91	1.61				
18.00	7.16	3.97	1.41				
18.50	7.22	4.02	1.30				
19.00	7.28	4.07	1.24				
19.50	7.34	4.12	1.18				
20.00	7.39	4.16	1.11				
20.50	7.44	4.20	1.06				
21.00	7.48	4.24	1.02				
21.50	7.53	4.28	0.97				
22.00	7.57	4.32	0.93				
22.50	7.61	4.36	0.88				
23.00	7.65	4.39	0.83				
23.50	7.69	4.42	0.79				
24.00	7.72	4.45	0.74				
24.50	7.72	4.45	0.00				
25.00	7.72	4.45	0.00				
25.50	7.72	4.45	0.00				

Summary for Subcatchment 31S: PDA-1

Runoff = 5.70 cfs @ 12.20 hrs, Volume= 23,199 cf, Depth= 3.23"

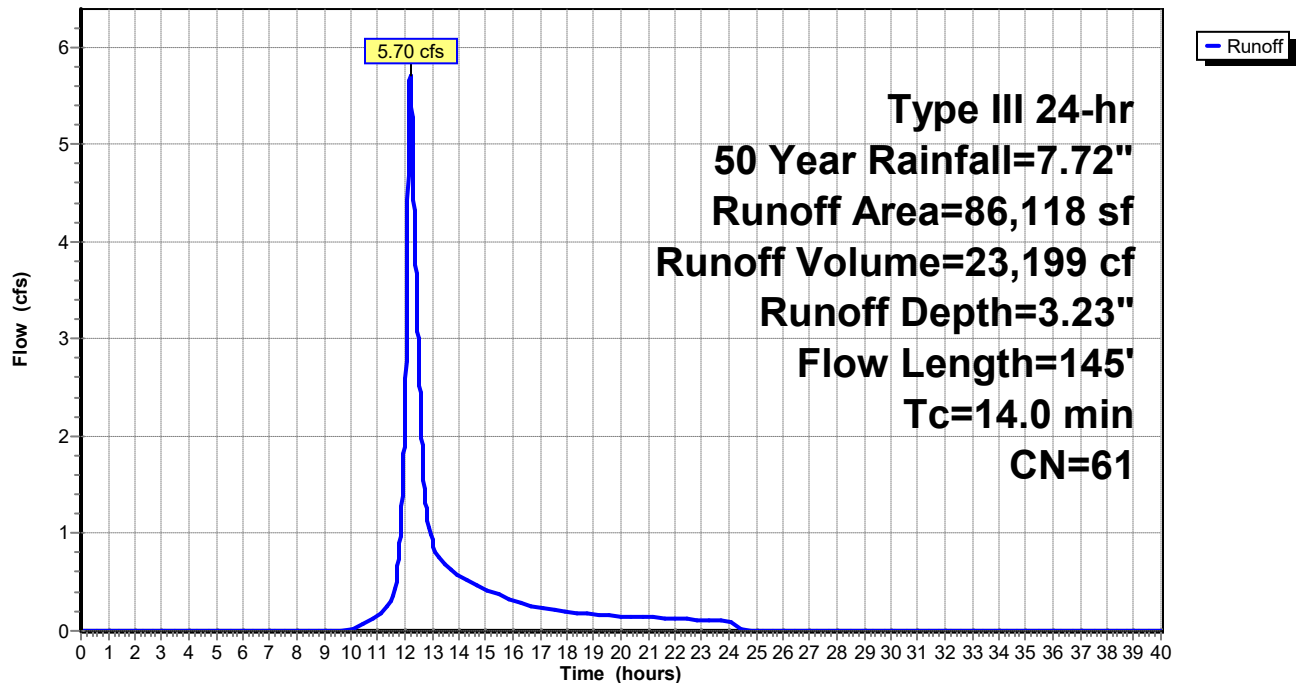
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 50 Year Rainfall=7.72"

Area (sf)	CN	Description
50,108	61	>75% Grass cover, Good, HSG B
8,316	72	Woods/grass comb., Good, HSG C
27,694	58	Woods/grass comb., Good, HSG B
86,118	61	Weighted Average
86,118		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0200	0.12		Sheet Flow, Grass Lawn Sheet Flow
					Grass: Dense n= 0.240 P2= 3.41"
0.2	45	0.4440	4.66		Shallow Concentrated Flow, Grass Shallow Conc Flow
					Short Grass Pasture Kv= 7.0 fps
14.0	145	Total			

Subcatchment 31S: PDA-1

Hydrograph



Hydrograph for Subcatchment 31S: PDA-1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	7.72	3.23	0.00
0.50	0.04	0.00	0.00	26.50	7.72	3.23	0.00
1.00	0.08	0.00	0.00	27.00	7.72	3.23	0.00
1.50	0.12	0.00	0.00	27.50	7.72	3.23	0.00
2.00	0.15	0.00	0.00	28.00	7.72	3.23	0.00
2.50	0.19	0.00	0.00	28.50	7.72	3.23	0.00
3.00	0.24	0.00	0.00	29.00	7.72	3.23	0.00
3.50	0.28	0.00	0.00	29.50	7.72	3.23	0.00
4.00	0.33	0.00	0.00	30.00	7.72	3.23	0.00
4.50	0.38	0.00	0.00	30.50	7.72	3.23	0.00
5.00	0.44	0.00	0.00	31.00	7.72	3.23	0.00
5.50	0.50	0.00	0.00	31.50	7.72	3.23	0.00
6.00	0.56	0.00	0.00	32.00	7.72	3.23	0.00
6.50	0.62	0.00	0.00	32.50	7.72	3.23	0.00
7.00	0.70	0.00	0.00	33.00	7.72	3.23	0.00
7.50	0.78	0.00	0.00	33.50	7.72	3.23	0.00
8.00	0.88	0.00	0.00	34.00	7.72	3.23	0.00
8.50	0.99	0.00	0.00	34.50	7.72	3.23	0.00
9.00	1.13	0.00	0.00	35.00	7.72	3.23	0.00
9.50	1.28	0.00	0.00	35.50	7.72	3.23	0.00
10.00	1.46	0.00	0.02	36.00	7.72	3.23	0.00
10.50	1.67	0.02	0.07	36.50	7.72	3.23	0.00
11.00	1.93	0.06	0.16	37.00	7.72	3.23	0.00
11.50	2.30	0.14	0.34	37.50	7.72	3.23	0.00
12.00	3.86	0.74	2.18	38.00	7.72	3.23	0.00
12.50	5.42	1.63	2.92	38.50	7.72	3.23	0.00
13.00	5.79	1.87	0.94	39.00	7.72	3.23	0.00
13.50	6.05	2.04	0.68	39.50	7.72	3.23	0.00
14.00	6.26	2.18	0.57	40.00	7.72	3.23	0.00
14.50	6.44	2.30	0.49				
15.00	6.59	2.41	0.43				
15.50	6.73	2.51	0.37				
16.00	6.84	2.59	0.31				
16.50	6.94	2.66	0.27				
17.00	7.02	2.72	0.25				
17.50	7.10	2.77	0.22				
18.00	7.16	2.82	0.19				
18.50	7.22	2.87	0.18				
19.00	7.28	2.91	0.17				
19.50	7.34	2.95	0.16				
20.00	7.39	2.99	0.15				
20.50	7.44	3.02	0.14				
21.00	7.48	3.06	0.14				
21.50	7.53	3.09	0.13				
22.00	7.57	3.12	0.13				
22.50	7.61	3.15	0.12				
23.00	7.65	3.18	0.11				
23.50	7.69	3.21	0.11				
24.00	7.72	3.23	0.10				
24.50	7.72	3.23	0.00				
25.00	7.72	3.23	0.00				
25.50	7.72	3.23	0.00				

Summary for Pond 25P: INFILTRATION PIPE STORAGE

Inflow Area = 545,177 sf, 28.83% Impervious, Inflow Depth = 4.45" for 50 Year event
 Inflow = 54.30 cfs @ 12.16 hrs, Volume= 202,153 cf
 Outflow = 3.98 cfs @ 11.68 hrs, Volume= 202,201 cf, Atten= 93%, Lag= 0.0 min
 Discarded = 3.98 cfs @ 11.68 hrs, Volume= 202,201 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 324.17' @ 14.18 hrs Surf.Area= 34,392 sf Storage= 91,156 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 216.4 min (1,043.7 - 827.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	320.00'	49,499 cf	61.09'W x 563.00'L x 6.58'H Field A 226,432 cf Overall - 102,685 cf Embedded = 123,747 cf x 40.0% Voids
#2A	320.50'	86,464 cf	ADS N-12 60" x 224 Inside #1 Inside= 59.5"W x 59.5"H => 19.30 sf x 20.00'L = 386.0 cf Outside= 67.0"W x 67.0"H => 22.92 sf x 20.00'L = 458.4 cf 8 Rows of 28 Chambers
		135,963 cf	Total Available Storage

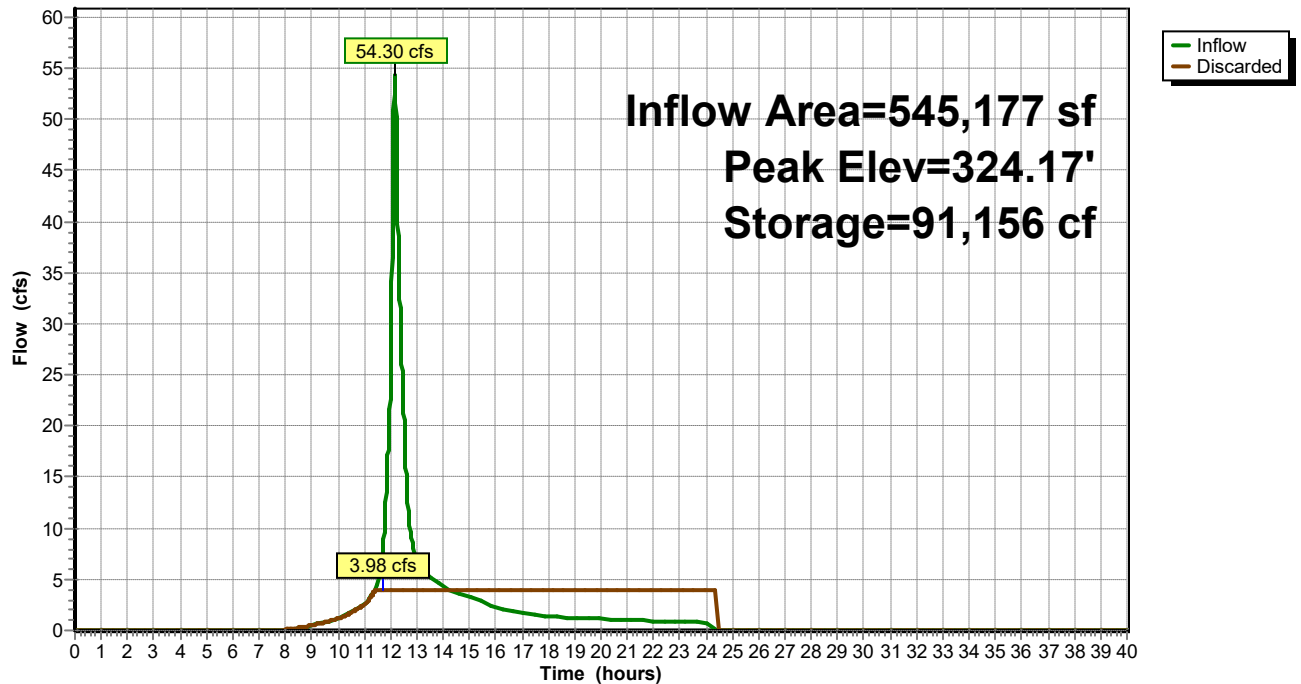
Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	320.00'	5.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=3.98 cfs @ 11.68 hrs HW=320.07' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 3.98 cfs)

Pond 25P: INFILTRATION PIPE STORAGE

Hydrograph



Hydrograph for Pond 25P: INFILTRATION PIPE STORAGE

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	320.00	0.00
1.00	0.00	0	320.00	0.00
2.00	0.00	0	320.00	0.00
3.00	0.00	0	320.00	0.00
4.00	0.00	0	320.00	0.00
5.00	0.00	0	320.00	0.00
6.00	0.00	0	320.00	0.00
7.00	0.00	0	320.00	0.00
8.00	0.08	0	320.00	0.08
9.00	0.47	0	320.00	0.47
10.00	1.16	0	320.00	1.16
11.00	2.55	0	320.00	2.55
12.00	24.78	12,842	320.99	3.98
13.00	7.03	86,343	323.99	3.98
14.00	4.28	91,062	324.17	3.98
15.00	3.23	90,018	324.13	3.98
16.00	2.31	85,673	323.96	3.98
17.00	1.82	78,645	323.69	3.98
18.00	1.41	70,125	323.37	3.98
19.00	1.24	60,484	323.01	3.98
20.00	1.11	50,387	322.63	3.98
21.00	1.02	39,887	322.22	3.98
22.00	0.93	29,055	321.77	3.98
23.00	0.83	17,888	321.26	3.98
24.00	0.74	6,384	320.46	3.98
25.00	0.00	0	320.00	0.00
26.00	0.00	0	320.00	0.00
27.00	0.00	0	320.00	0.00
28.00	0.00	0	320.00	0.00
29.00	0.00	0	320.00	0.00
30.00	0.00	0	320.00	0.00
31.00	0.00	0	320.00	0.00
32.00	0.00	0	320.00	0.00
33.00	0.00	0	320.00	0.00
34.00	0.00	0	320.00	0.00
35.00	0.00	0	320.00	0.00
36.00	0.00	0	320.00	0.00
37.00	0.00	0	320.00	0.00
38.00	0.00	0	320.00	0.00
39.00	0.00	0	320.00	0.00
40.00	0.00	0	320.00	0.00

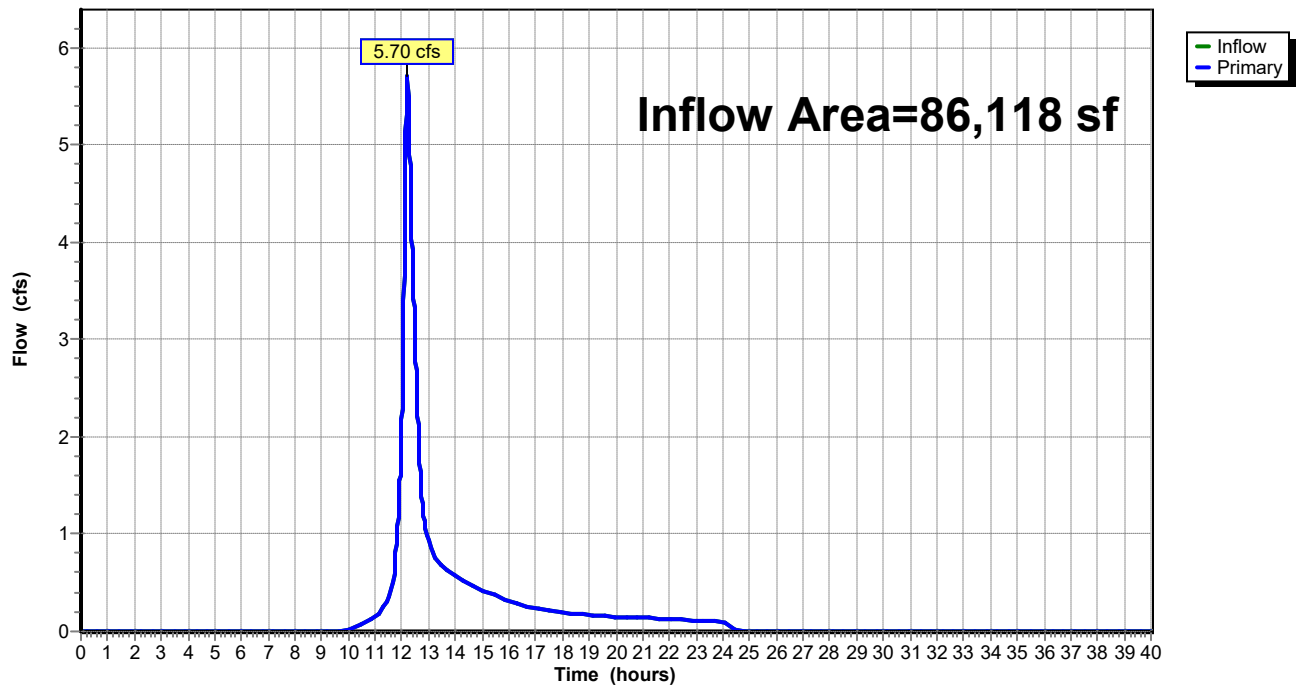
Summary for Link 21L: Pocantico River Basin

Inflow Area = 86,118 sf, 0.00% Impervious, Inflow Depth = 3.23" for 50 Year event
 Inflow = 5.70 cfs @ 12.20 hrs, Volume= 23,199 cf
 Primary = 5.70 cfs @ 12.20 hrs, Volume= 23,199 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 21L: Pocantico River Basin

Hydrograph



Hydrograph for Link 21L: Pocantico River Basin

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.02	0.00	0.02	36.00	0.00	0.00	0.00
10.50	0.07	0.00	0.07	36.50	0.00	0.00	0.00
11.00	0.16	0.00	0.16	37.00	0.00	0.00	0.00
11.50	0.34	0.00	0.34	37.50	0.00	0.00	0.00
12.00	2.18	0.00	2.18	38.00	0.00	0.00	0.00
12.50	2.92	0.00	2.92	38.50	0.00	0.00	0.00
13.00	0.94	0.00	0.94	39.00	0.00	0.00	0.00
13.50	0.68	0.00	0.68	39.50	0.00	0.00	0.00
14.00	0.57	0.00	0.57	40.00	0.00	0.00	0.00
14.50	0.49	0.00	0.49				
15.00	0.43	0.00	0.43				
15.50	0.37	0.00	0.37				
16.00	0.31	0.00	0.31				
16.50	0.27	0.00	0.27				
17.00	0.25	0.00	0.25				
17.50	0.22	0.00	0.22				
18.00	0.19	0.00	0.19				
18.50	0.18	0.00	0.18				
19.00	0.17	0.00	0.17				
19.50	0.16	0.00	0.16				
20.00	0.15	0.00	0.15				
20.50	0.14	0.00	0.14				
21.00	0.14	0.00	0.14				
21.50	0.13	0.00	0.13				
22.00	0.13	0.00	0.13				
22.50	0.12	0.00	0.12				
23.00	0.11	0.00	0.11				
23.50	0.11	0.00	0.11				
24.00	0.10	0.00	0.10				
24.50	0.00	0.00	0.00				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

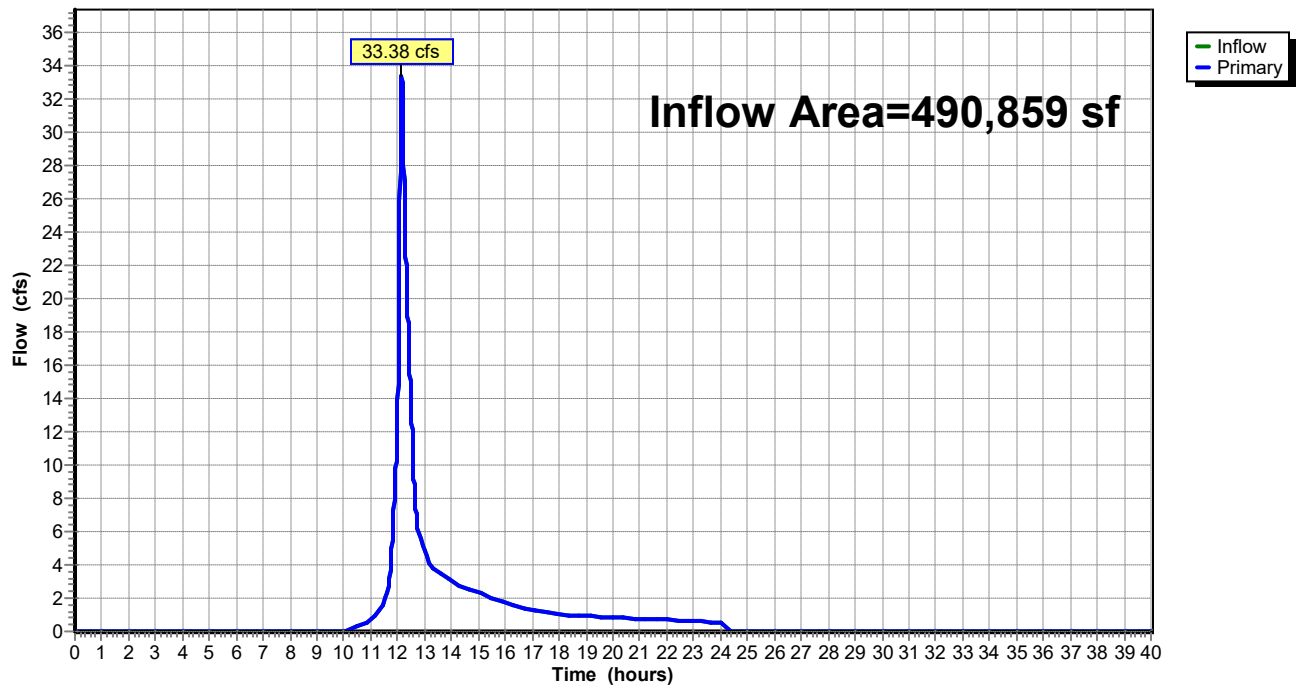
Summary for Link 22L: Pocantico Lake

Inflow Area = 490,859 sf, 0.00% Impervious, Inflow Depth = 3.02" for 50 Year event
 Inflow = 33.38 cfs @ 12.15 hrs, Volume= 123,433 cf
 Primary = 33.38 cfs @ 12.15 hrs, Volume= 123,433 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 22L: Pocantico Lake

Hydrograph



Hydrograph for Link 22L: Pocantico Lake

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.00	0.00	0.00	35.50	0.00	0.00	0.00
10.00	0.02	0.00	0.02	36.00	0.00	0.00	0.00
10.50	0.29	0.00	0.29	36.50	0.00	0.00	0.00
11.00	0.72	0.00	0.72	37.00	0.00	0.00	0.00
11.50	1.74	0.00	1.74	37.50	0.00	0.00	0.00
12.00	13.87	0.00	13.87	38.00	0.00	0.00	0.00
12.50	13.37	0.00	13.37	38.50	0.00	0.00	0.00
13.00	4.77	0.00	4.77	39.00	0.00	0.00	0.00
13.50	3.63	0.00	3.63	39.50	0.00	0.00	0.00
14.00	3.02	0.00	3.02	40.00	0.00	0.00	0.00
14.50	2.62	0.00	2.62				
15.00	2.31	0.00	2.31				
15.50	2.00	0.00	2.00				
16.00	1.67	0.00	1.67				
16.50	1.47	0.00	1.47				
17.00	1.33	0.00	1.33				
17.50	1.18	0.00	1.18				
18.00	1.03	0.00	1.03				
18.50	0.96	0.00	0.96				
19.00	0.91	0.00	0.91				
19.50	0.87	0.00	0.87				
20.00	0.83	0.00	0.83				
20.50	0.79	0.00	0.79				
21.00	0.76	0.00	0.76				
21.50	0.72	0.00	0.72				
22.00	0.69	0.00	0.69				
22.50	0.66	0.00	0.66				
23.00	0.62	0.00	0.62				
23.50	0.59	0.00	0.59				
24.00	0.55	0.00	0.55				
24.50	0.00	0.00	0.00				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

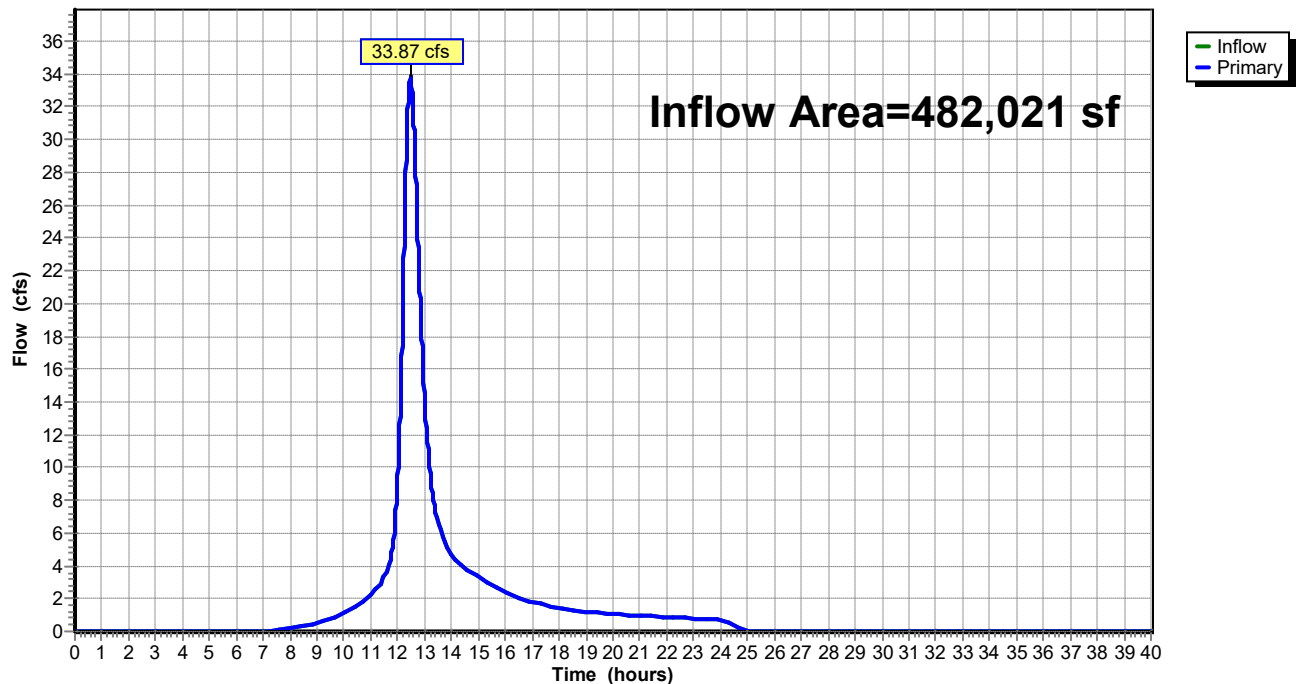
Summary for Link 23L: Mapped Wetland / Brook

Inflow Area = 482,021 sf, 39.25% Impervious, Inflow Depth = 4.90" for 50 Year event
 Inflow = 33.87 cfs @ 12.47 hrs, Volume= 196,977 cf
 Primary = 33.87 cfs @ 12.47 hrs, Volume= 196,977 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 23L: Mapped Wetland / Brook

Hydrograph



Hydrograph for Link 23L: Mapped Wetland / Brook

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.01	0.00	0.01	33.00	0.00	0.00	0.00
7.50	0.07	0.00	0.07	33.50	0.00	0.00	0.00
8.00	0.18	0.00	0.18	34.00	0.00	0.00	0.00
8.50	0.32	0.00	0.32	34.50	0.00	0.00	0.00
9.00	0.53	0.00	0.53	35.00	0.00	0.00	0.00
9.50	0.81	0.00	0.81	35.50	0.00	0.00	0.00
10.00	1.15	0.00	1.15	36.00	0.00	0.00	0.00
10.50	1.59	0.00	1.59	36.50	0.00	0.00	0.00
11.00	2.26	0.00	2.26	37.00	0.00	0.00	0.00
11.50	3.35	0.00	3.35	37.50	0.00	0.00	0.00
12.00	9.39	0.00	9.39	38.00	0.00	0.00	0.00
12.50	33.59	0.00	33.59	38.50	0.00	0.00	0.00
13.00	14.11	0.00	14.11	39.00	0.00	0.00	0.00
13.50	6.57	0.00	6.57	39.50	0.00	0.00	0.00
14.00	4.68	0.00	4.68	40.00	0.00	0.00	0.00
14.50	3.80	0.00	3.80				
15.00	3.29	0.00	3.29				
15.50	2.87	0.00	2.87				
16.00	2.44	0.00	2.44				
16.50	2.05	0.00	2.05				
17.00	1.81	0.00	1.81				
17.50	1.62	0.00	1.62				
18.00	1.43	0.00	1.43				
18.50	1.26	0.00	1.26				
19.00	1.18	0.00	1.18				
19.50	1.12	0.00	1.12				
20.00	1.07	0.00	1.07				
20.50	1.01	0.00	1.01				
21.00	0.97	0.00	0.97				
21.50	0.92	0.00	0.92				
22.00	0.88	0.00	0.88				
22.50	0.84	0.00	0.84				
23.00	0.80	0.00	0.80				
23.50	0.75	0.00	0.75				
24.00	0.71	0.00	0.71				
24.50	0.32	0.00	0.32				
25.00	0.04	0.00	0.04				
25.50	0.00	0.00	0.00				

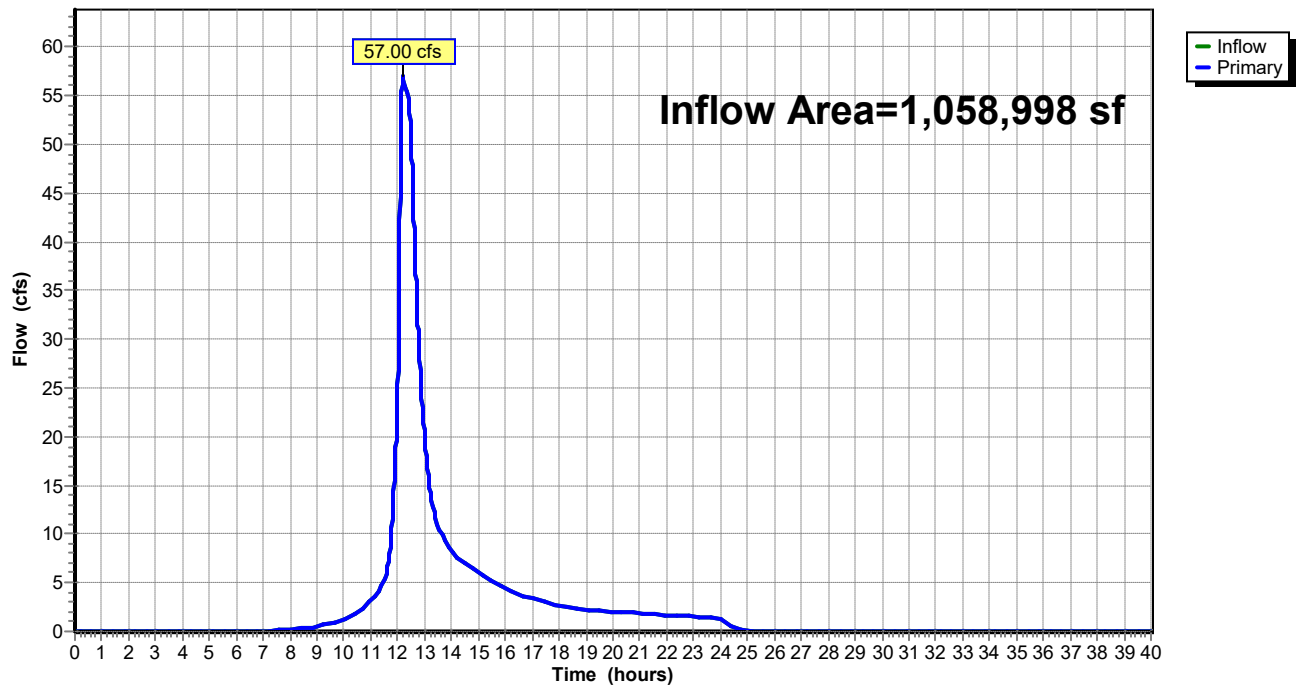
Summary for Link 24L: COMB POST

Inflow Area = 1,058,998 sf, 17.86% Impervious, Inflow Depth = 3.89" for 50 Year event
 Inflow = 57.00 cfs @ 12.19 hrs, Volume= 343,609 cf
 Primary = 57.00 cfs @ 12.19 hrs, Volume= 343,609 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 24L: COMB POST

Hydrograph



Hydrograph for Link 24L: COMB POST

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.01	0.00	0.01	33.00	0.00	0.00	0.00
7.50	0.07	0.00	0.07	33.50	0.00	0.00	0.00
8.00	0.18	0.00	0.18	34.00	0.00	0.00	0.00
8.50	0.32	0.00	0.32	34.50	0.00	0.00	0.00
9.00	0.53	0.00	0.53	35.00	0.00	0.00	0.00
9.50	0.81	0.00	0.81	35.50	0.00	0.00	0.00
10.00	1.19	0.00	1.19	36.00	0.00	0.00	0.00
10.50	1.95	0.00	1.95	36.50	0.00	0.00	0.00
11.00	3.13	0.00	3.13	37.00	0.00	0.00	0.00
11.50	5.43	0.00	5.43	37.50	0.00	0.00	0.00
12.00	25.44	0.00	25.44	38.00	0.00	0.00	0.00
12.50	49.88	0.00	49.88	38.50	0.00	0.00	0.00
13.00	19.81	0.00	19.81	39.00	0.00	0.00	0.00
13.50	10.88	0.00	10.88	39.50	0.00	0.00	0.00
14.00	8.26	0.00	8.26	40.00	0.00	0.00	0.00
14.50	6.90	0.00	6.90				
15.00	6.04	0.00	6.04				
15.50	5.24	0.00	5.24				
16.00	4.42	0.00	4.42				
16.50	3.79	0.00	3.79				
17.00	3.39	0.00	3.39				
17.50	3.02	0.00	3.02				
18.00	2.66	0.00	2.66				
18.50	2.39	0.00	2.39				
19.00	2.26	0.00	2.26				
19.50	2.15	0.00	2.15				
20.00	2.04	0.00	2.04				
20.50	1.95	0.00	1.95				
21.00	1.86	0.00	1.86				
21.50	1.78	0.00	1.78				
22.00	1.70	0.00	1.70				
22.50	1.61	0.00	1.61				
23.00	1.53	0.00	1.53				
23.50	1.45	0.00	1.45				
24.00	1.36	0.00	1.36				
24.50	0.32	0.00	0.32				
25.00	0.04	0.00	0.04				
25.50	0.00	0.00	0.00				

Meadows Briarcliff_05032021*Type III 24-hr 100 Year Rainfall=9.22"*

Prepared by Wasp Engineering Group, PLLC

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Time span=0.00-40.00 hrs, dt=0.01 hrs, 4001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 18S: PDA-2

Runoff Area=490,859 sf 0.00% Impervious Runoff Depth=4.15"
Flow Length=435' Tc=10.5 min CN=59 Runoff=46.64 cfs 169,693 cf

Subcatchment 19S: PDA-3B

Runoff Area=482,021 sf 39.25% Impervious Runoff Depth=6.28"
Flow Length=1,330' Tc=34.1 min CN=76 Runoff=43.14 cfs 252,238 cf

Subcatchment 25S: PDA-3A

Runoff Area=545,177 sf 28.83% Impervious Runoff Depth=5.78"
Flow Length=240' Tc=11.6 min CN=72 Runoff=70.36 cfs 262,584 cf

Subcatchment 31S: PDA-1

Runoff Area=86,118 sf 0.00% Impervious Runoff Depth=4.40"
Flow Length=145' Tc=14.0 min CN=61 Runoff=7.86 cfs 31,572 cf

Pond 25P: INFILTRATION PIPE

Peak Elev=326.26' Storage=131,476 cf Inflow=70.36 cfs 262,584 cf
Outflow=3.98 cfs 262,611 cf

Link 21L: Pocantico River Basin

Inflow=7.86 cfs 31,572 cf
Primary=7.86 cfs 31,572 cf

Link 22L: Pocantico Lake

Inflow=46.64 cfs 169,693 cf
Primary=46.64 cfs 169,693 cf

Link 23L: Mapped Wetland / Brook

Inflow=43.14 cfs 252,238 cf
Primary=43.14 cfs 252,238 cf

Link 24L: COMB POST

Inflow=77.38 cfs 453,503 cf
Primary=77.38 cfs 453,503 cf

Total Runoff Area = 1,604,175 sf Runoff Volume = 716,086 cf Average Runoff Depth = 5.36"
78.41% Pervious = 1,257,830 sf 21.59% Impervious = 346,345 sf

Summary for Subcatchment 18S: PDA-2

Runoff = 46.64 cfs @ 12.15 hrs, Volume= 169,693 cf, Depth= 4.15"

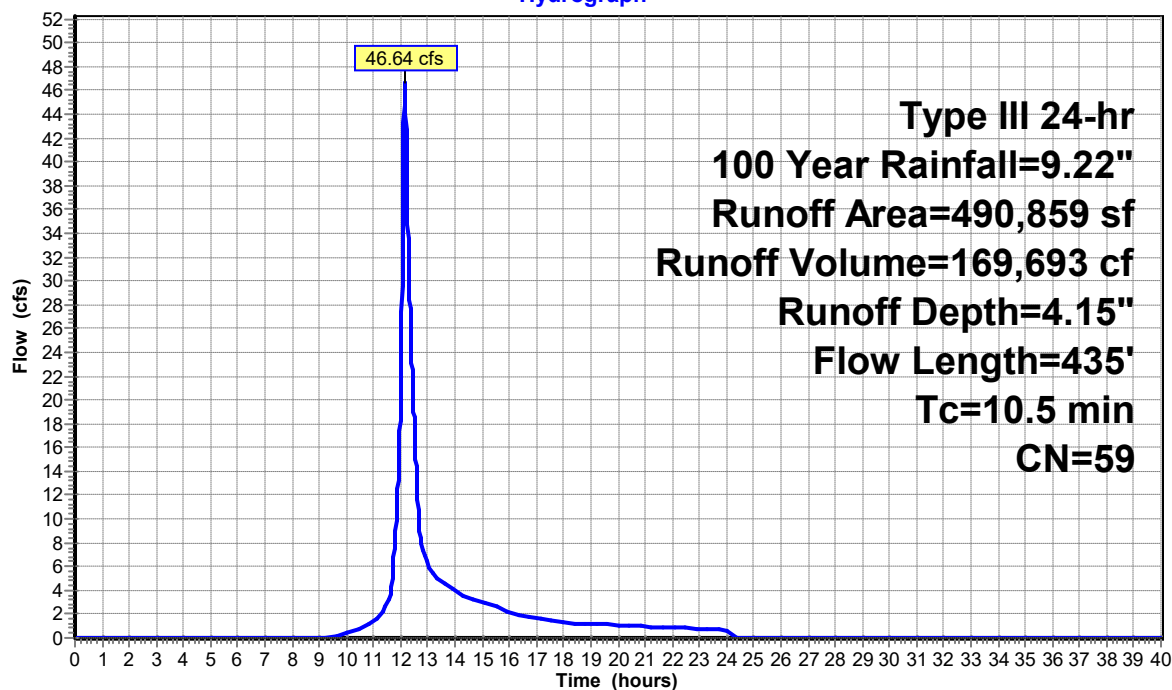
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=9.22"

Area (sf)	CN	Description
* 0	98	Ex. IMP Pavement, Rooftops
151,101	61	>75% Grass cover, Good, HSG B
339,758	58	Woods/grass comb., Good, HSG B
490,859	59	Weighted Average
490,859		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.6	100	0.0650	0.19		Sheet Flow, Sheet Lawn
					Grass: Dense n= 0.240 P2= 3.41"
0.7	115	0.1520	2.73		Shallow Concentrated Flow, Shallow Conc. Lawn
					Short Grass Pasture Kv= 7.0 fps
1.2	220	0.4050	3.18		Shallow Concentrated Flow, Shallow Conc. Woodland
					Woodland Kv= 5.0 fps
10.5	435	Total			

Subcatchment 18S: PDA-2

Hydrograph



Hydrograph for Subcatchment 18S: PDA-2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	9.22	4.15	0.00
0.50	0.05	0.00	0.00	26.50	9.22	4.15	0.00
1.00	0.09	0.00	0.00	27.00	9.22	4.15	0.00
1.50	0.14	0.00	0.00	27.50	9.22	4.15	0.00
2.00	0.18	0.00	0.00	28.00	9.22	4.15	0.00
2.50	0.23	0.00	0.00	28.50	9.22	4.15	0.00
3.00	0.28	0.00	0.00	29.00	9.22	4.15	0.00
3.50	0.34	0.00	0.00	29.50	9.22	4.15	0.00
4.00	0.40	0.00	0.00	30.00	9.22	4.15	0.00
4.50	0.46	0.00	0.00	30.50	9.22	4.15	0.00
5.00	0.52	0.00	0.00	31.00	9.22	4.15	0.00
5.50	0.59	0.00	0.00	31.50	9.22	4.15	0.00
6.00	0.66	0.00	0.00	32.00	9.22	4.15	0.00
6.50	0.74	0.00	0.00	32.50	9.22	4.15	0.00
7.00	0.83	0.00	0.00	33.00	9.22	4.15	0.00
7.50	0.94	0.00	0.00	33.50	9.22	4.15	0.00
8.00	1.05	0.00	0.00	34.00	9.22	4.15	0.00
8.50	1.18	0.00	0.00	34.50	9.22	4.15	0.00
9.00	1.34	0.00	0.00	35.00	9.22	4.15	0.00
9.50	1.53	0.00	0.10	35.50	9.22	4.15	0.00
10.00	1.74	0.02	0.38	36.00	9.22	4.15	0.00
10.50	2.00	0.05	0.80	36.50	9.22	4.15	0.00
11.00	2.30	0.11	1.43	37.00	9.22	4.15	0.00
11.50	2.75	0.22	2.97	37.50	9.22	4.15	0.00
12.00	4.61	1.02	20.37	38.00	9.22	4.15	0.00
12.50	6.47	2.15	17.89	38.50	9.22	4.15	0.00
13.00	6.91	2.45	6.30	39.00	9.22	4.15	0.00
13.50	7.22	2.66	4.76	39.50	9.22	4.15	0.00
14.00	7.48	2.84	3.95	40.00	9.22	4.15	0.00
14.50	7.69	3.00	3.41				
15.00	7.88	3.13	3.01				
15.50	8.04	3.25	2.60				
16.00	8.17	3.35	2.17				
16.50	8.28	3.43	1.90				
17.00	8.39	3.51	1.72				
17.50	8.48	3.58	1.52				
18.00	8.56	3.64	1.33				
18.50	8.63	3.69	1.23				
19.00	8.70	3.75	1.18				
19.50	8.76	3.79	1.12				
20.00	8.82	3.84	1.06				
20.50	8.88	3.89	1.02				
21.00	8.94	3.93	0.97				
21.50	8.99	3.97	0.93				
22.00	9.04	4.01	0.89				
22.50	9.09	4.05	0.84				
23.00	9.14	4.08	0.80				
23.50	9.18	4.12	0.75				
24.00	9.22	4.15	0.71				
24.50	9.22	4.15	0.00				
25.00	9.22	4.15	0.00				
25.50	9.22	4.15	0.00				

Summary for Subcatchment 19S: PDA-3B

Runoff = 43.14 cfs @ 12.47 hrs, Volume= 252,238 cf, Depth= 6.28"

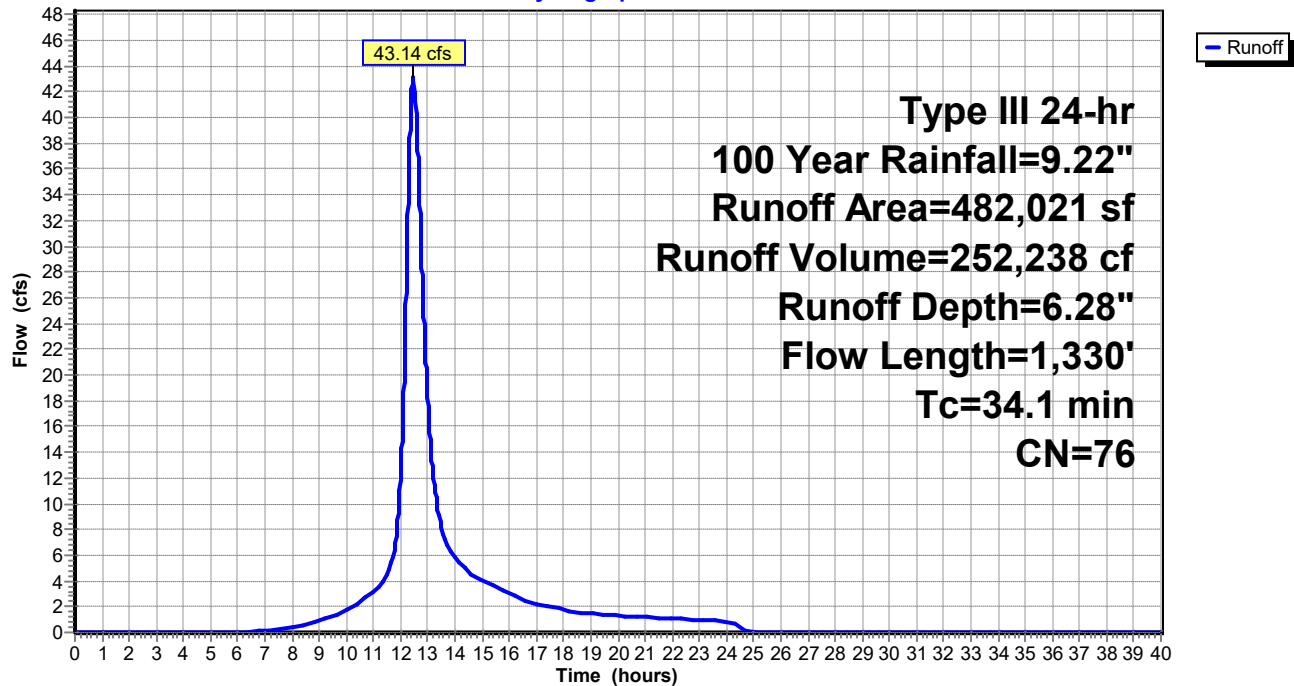
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=9.22"

	Area (sf)	CN	Description
*	14,931	98	Ex. IMP Pavement, Rooftops
	75,129	74	>75% Grass cover, Good, HSG C
	67,015	61	>75% Grass cover, Good, HSG B
	100,430	58	Woods/grass comb., Good, HSG B
	30,434	72	Woods/grass comb., Good, HSG C
	19,829	32	Woods/grass comb., Good, HSG A
*	174,253	98	Wetlands, HSG C
	482,021	76	Weighted Average
	292,837		60.75% Pervious Area
	189,184		39.25% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.5	100	0.0150	0.11		Sheet Flow, Sheet Flow Lawn Grass: Dense n= 0.240 P2= 3.41"
1.0	80	0.0400	1.40		Shallow Concentrated Flow, Shallow Conc. Lawn Short Grass Pasture Kv= 7.0 fps
3.6	240	0.0500	1.12		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
5.9	250	0.0800	0.71		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
3.1	300	0.1067	1.63		Shallow Concentrated Flow, Shallow Conc. Woods Woodland Kv= 5.0 fps
4.7	230	0.1043	0.81		Shallow Concentrated Flow, Shallow Conc. Wetlands Forest w/Heavy Litter Kv= 2.5 fps
0.3	130	0.1000	6.27	50.19	Channel Flow, Stream Channel Area= 8.0 sf Perim= 20.5' r= 0.39' n= 0.040 Earth, cobble bottom, clean sides
34.1	1,330	Total			

Subcatchment 19S: PDA-3B

Hydrograph



Hydrograph for Subcatchment 19S: PDA-3B

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	9.22	6.28	0.00
0.50	0.05	0.00	0.00	26.50	9.22	6.28	0.00
1.00	0.09	0.00	0.00	27.00	9.22	6.28	0.00
1.50	0.14	0.00	0.00	27.50	9.22	6.28	0.00
2.00	0.18	0.00	0.00	28.00	9.22	6.28	0.00
2.50	0.23	0.00	0.00	28.50	9.22	6.28	0.00
3.00	0.28	0.00	0.00	29.00	9.22	6.28	0.00
3.50	0.34	0.00	0.00	29.50	9.22	6.28	0.00
4.00	0.40	0.00	0.00	30.00	9.22	6.28	0.00
4.50	0.46	0.00	0.00	30.50	9.22	6.28	0.00
5.00	0.52	0.00	0.00	31.00	9.22	6.28	0.00
5.50	0.59	0.00	0.00	31.50	9.22	6.28	0.00
6.00	0.66	0.00	0.00	32.00	9.22	6.28	0.00
6.50	0.74	0.00	0.04	32.50	9.22	6.28	0.00
7.00	0.83	0.01	0.13	33.00	9.22	6.28	0.00
7.50	0.94	0.03	0.25	33.50	9.22	6.28	0.00
8.00	1.05	0.05	0.40	34.00	9.22	6.28	0.00
8.50	1.18	0.08	0.60	34.50	9.22	6.28	0.00
9.00	1.34	0.13	0.89	35.00	9.22	6.28	0.00
9.50	1.53	0.20	1.28	35.50	9.22	6.28	0.00
10.00	1.74	0.29	1.73	36.00	9.22	6.28	0.00
10.50	2.00	0.41	2.31	36.50	9.22	6.28	0.00
11.00	2.30	0.58	3.19	37.00	9.22	6.28	0.00
11.50	2.75	0.85	4.60	37.50	9.22	6.28	0.00
12.00	4.61	2.22	12.45	38.00	9.22	6.28	0.00
12.50	6.47	3.79	42.72	38.50	9.22	6.28	0.00
13.00	6.91	4.18	17.68	39.00	9.22	6.28	0.00
13.50	7.22	4.46	8.17	39.50	9.22	6.28	0.00
14.00	7.48	4.68	5.79	40.00	9.22	6.28	0.00
14.50	7.69	4.88	4.69				
15.00	7.88	5.05	4.06				
15.50	8.04	5.19	3.53				
16.00	8.17	5.31	3.00				
16.50	8.28	5.42	2.52				
17.00	8.39	5.51	2.23				
17.50	8.48	5.59	1.99				
18.00	8.56	5.67	1.76				
18.50	8.63	5.73	1.55				
19.00	8.70	5.80	1.45				
19.50	8.76	5.86	1.38				
20.00	8.82	5.91	1.31				
20.50	8.88	5.97	1.24				
21.00	8.94	6.02	1.18				
21.50	8.99	6.07	1.13				
22.00	9.04	6.12	1.08				
22.50	9.09	6.16	1.03				
23.00	9.14	6.20	0.97				
23.50	9.18	6.24	0.92				
24.00	9.22	6.28	0.87				
24.50	9.22	6.28	0.39				
25.00	9.22	6.28	0.04				
25.50	9.22	6.28	0.00				

Summary for Subcatchment 25S: PDA-3A

Runoff = 70.36 cfs @ 12.16 hrs, Volume= 262,584 cf, Depth= 5.78"

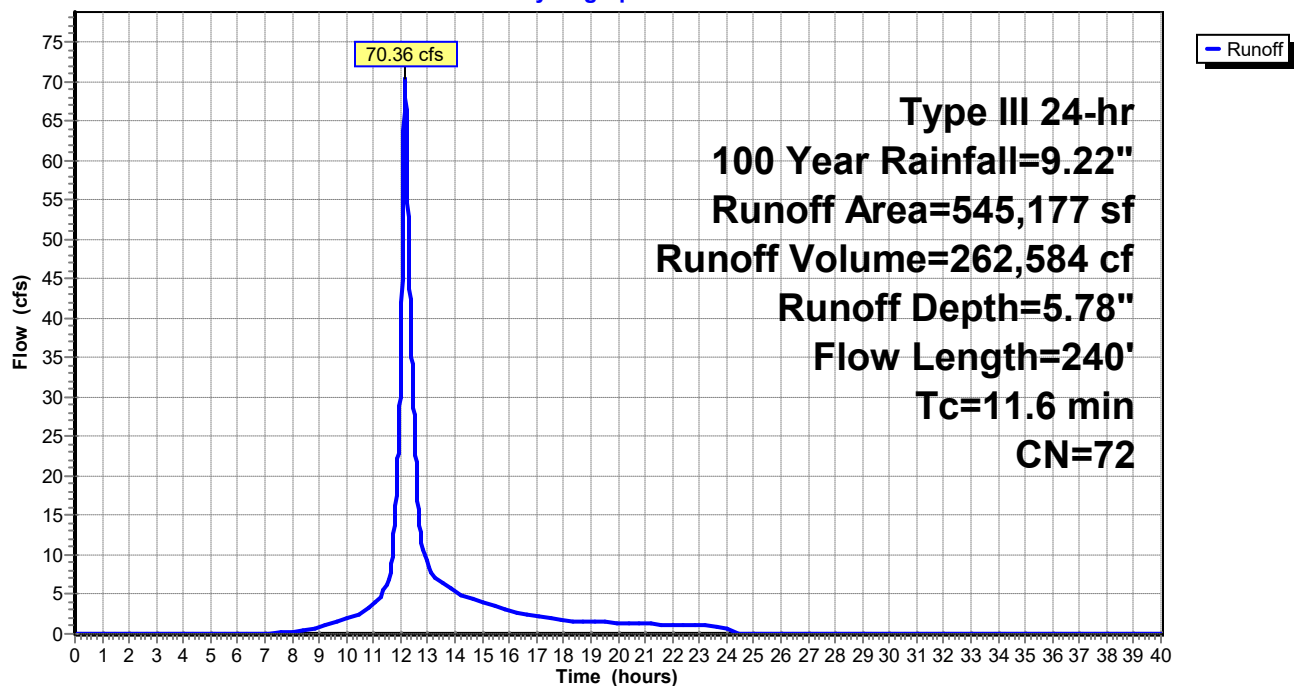
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=9.22"

	Area (sf)	CN	Description
*	157,161	98	Ex. IMP Pavement, Rooftops
	388,016	61	>75% Grass cover, Good, HSG B
	545,177	72	Weighted Average
	388,016		71.17% Pervious Area
	157,161		28.83% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.5	100	0.0400	0.16		Sheet Flow, Sheet Flow Woods
					Grass: Dense n= 0.240 P2= 3.41"
1.1	140	0.1000	2.21		Shallow Concentrated Flow, Shallow Conc. Lawn
					Short Grass Pasture Kv= 7.0 fps
11.6	240	Total			

Subcatchment 25S: PDA-3A

Hydrograph



Hydrograph for Subcatchment 25S: PDA-3A

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	9.22	5.78	0.00
0.50	0.05	0.00	0.00	26.50	9.22	5.78	0.00
1.00	0.09	0.00	0.00	27.00	9.22	5.78	0.00
1.50	0.14	0.00	0.00	27.50	9.22	5.78	0.00
2.00	0.18	0.00	0.00	28.00	9.22	5.78	0.00
2.50	0.23	0.00	0.00	28.50	9.22	5.78	0.00
3.00	0.28	0.00	0.00	29.00	9.22	5.78	0.00
3.50	0.34	0.00	0.00	29.50	9.22	5.78	0.00
4.00	0.40	0.00	0.00	30.00	9.22	5.78	0.00
4.50	0.46	0.00	0.00	30.50	9.22	5.78	0.00
5.00	0.52	0.00	0.00	31.00	9.22	5.78	0.00
5.50	0.59	0.00	0.00	31.50	9.22	5.78	0.00
6.00	0.66	0.00	0.00	32.00	9.22	5.78	0.00
6.50	0.74	0.00	0.00	32.50	9.22	5.78	0.00
7.00	0.83	0.00	0.03	33.00	9.22	5.78	0.00
7.50	0.94	0.01	0.16	33.50	9.22	5.78	0.00
8.00	1.05	0.02	0.32	34.00	9.22	5.78	0.00
8.50	1.18	0.04	0.56	34.50	9.22	5.78	0.00
9.00	1.34	0.07	0.90	35.00	9.22	5.78	0.00
9.50	1.53	0.12	1.33	35.50	9.22	5.78	0.00
10.00	1.74	0.19	1.84	36.00	9.22	5.78	0.00
10.50	2.00	0.29	2.63	36.50	9.22	5.78	0.00
11.00	2.30	0.43	3.69	37.00	9.22	5.78	0.00
11.50	2.75	0.66	6.34	37.50	9.22	5.78	0.00
12.00	4.61	1.90	32.91	38.00	9.22	5.78	0.00
12.50	6.47	3.38	26.90	38.50	9.22	5.78	0.00
13.00	6.91	3.76	8.82	39.00	9.22	5.78	0.00
13.50	7.22	4.02	6.50	39.50	9.22	5.78	0.00
14.00	7.48	4.24	5.35	40.00	9.22	5.78	0.00
14.50	7.69	4.42	4.58				
15.00	7.88	4.59	4.02				
15.50	8.04	4.73	3.45				
16.00	8.17	4.84	2.87				
16.50	8.28	4.94	2.50				
17.00	8.39	5.03	2.26				
17.50	8.48	5.12	2.00				
18.00	8.56	5.19	1.75				
18.50	8.63	5.25	1.61				
19.00	8.70	5.31	1.53				
19.50	8.76	5.37	1.46				
20.00	8.82	5.42	1.38				
20.50	8.88	5.48	1.32				
21.00	8.94	5.53	1.26				
21.50	8.99	5.57	1.20				
22.00	9.04	5.62	1.14				
22.50	9.09	5.66	1.09				
23.00	9.14	5.70	1.03				
23.50	9.18	5.74	0.97				
24.00	9.22	5.78	0.91				
24.50	9.22	5.78	0.01				
25.00	9.22	5.78	0.00				
25.50	9.22	5.78	0.00				

Summary for Subcatchment 31S: PDA-1

Runoff = 7.86 cfs @ 12.20 hrs, Volume= 31,572 cf, Depth= 4.40"

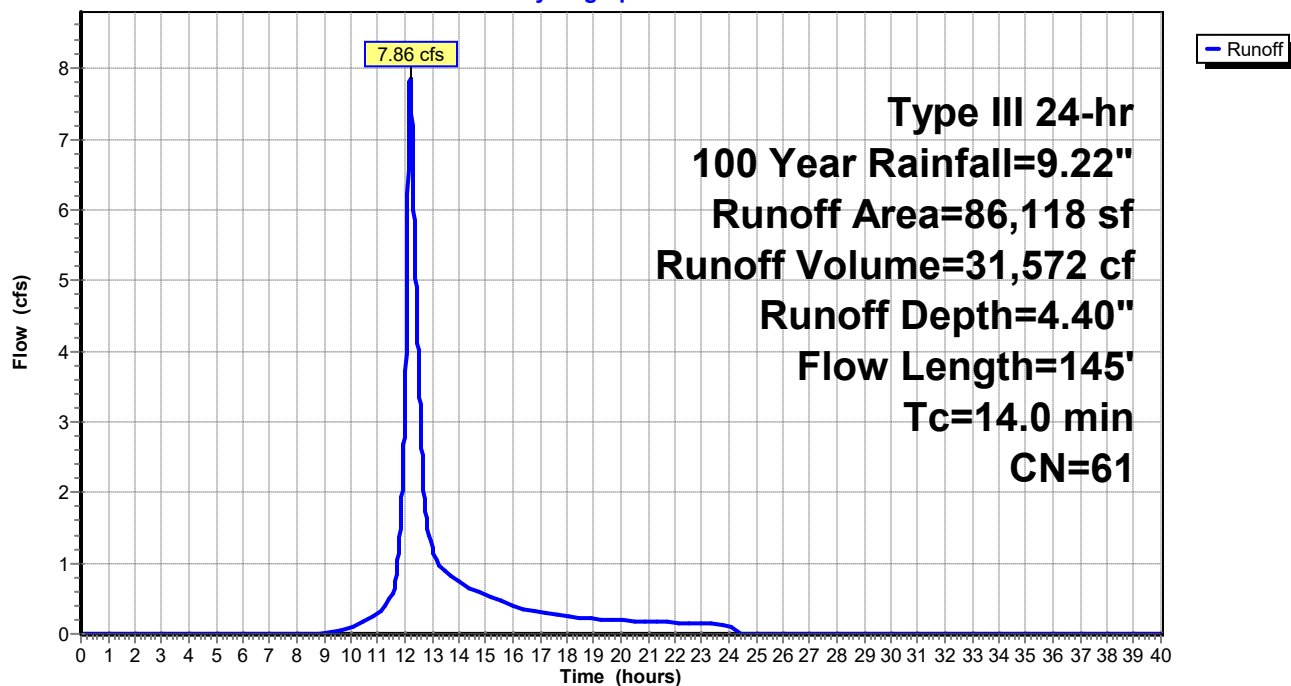
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Rainfall=9.22"

Area (sf)	CN	Description
50,108	61	>75% Grass cover, Good, HSG B
8,316	72	Woods/grass comb., Good, HSG C
27,694	58	Woods/grass comb., Good, HSG B
86,118	61	Weighted Average
86,118		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0200	0.12		Sheet Flow, Grass Lawn Sheet Flow
					Grass: Dense n= 0.240 P2= 3.41"
0.2	45	0.4440	4.66		Shallow Concentrated Flow, Grass Shallow Conc Flow
					Short Grass Pasture Kv= 7.0 fps
14.0	145	Total			

Subcatchment 31S: PDA-1

Hydrograph



Hydrograph for Subcatchment 31S: PDA-1

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	26.00	9.22	4.40	0.00
0.50	0.05	0.00	0.00	26.50	9.22	4.40	0.00
1.00	0.09	0.00	0.00	27.00	9.22	4.40	0.00
1.50	0.14	0.00	0.00	27.50	9.22	4.40	0.00
2.00	0.18	0.00	0.00	28.00	9.22	4.40	0.00
2.50	0.23	0.00	0.00	28.50	9.22	4.40	0.00
3.00	0.28	0.00	0.00	29.00	9.22	4.40	0.00
3.50	0.34	0.00	0.00	29.50	9.22	4.40	0.00
4.00	0.40	0.00	0.00	30.00	9.22	4.40	0.00
4.50	0.46	0.00	0.00	30.50	9.22	4.40	0.00
5.00	0.52	0.00	0.00	31.00	9.22	4.40	0.00
5.50	0.59	0.00	0.00	31.50	9.22	4.40	0.00
6.00	0.66	0.00	0.00	32.00	9.22	4.40	0.00
6.50	0.74	0.00	0.00	32.50	9.22	4.40	0.00
7.00	0.83	0.00	0.00	33.00	9.22	4.40	0.00
7.50	0.94	0.00	0.00	33.50	9.22	4.40	0.00
8.00	1.05	0.00	0.00	34.00	9.22	4.40	0.00
8.50	1.18	0.00	0.00	34.50	9.22	4.40	0.00
9.00	1.34	0.00	0.00	35.00	9.22	4.40	0.00
9.50	1.53	0.01	0.04	35.50	9.22	4.40	0.00
10.00	1.74	0.03	0.09	36.00	9.22	4.40	0.00
10.50	2.00	0.07	0.17	36.50	9.22	4.40	0.00
11.00	2.30	0.14	0.29	37.00	9.22	4.40	0.00
11.50	2.75	0.27	0.55	37.50	9.22	4.40	0.00
12.00	4.61	1.14	3.17	38.00	9.22	4.40	0.00
12.50	6.47	2.33	3.89	38.50	9.22	4.40	0.00
13.00	6.91	2.64	1.23	39.00	9.22	4.40	0.00
13.50	7.22	2.86	0.88	39.50	9.22	4.40	0.00
14.00	7.48	3.05	0.73	40.00	9.22	4.40	0.00
14.50	7.69	3.21	0.63				
15.00	7.88	3.35	0.55				
15.50	8.04	3.47	0.48				
16.00	8.17	3.57	0.40				
16.50	8.28	3.66	0.35				
17.00	8.39	3.74	0.31				
17.50	8.48	3.81	0.28				
18.00	8.56	3.87	0.25				
18.50	8.63	3.93	0.22				
19.00	8.70	3.98	0.21				
19.50	8.76	4.04	0.20				
20.00	8.82	4.08	0.19				
20.50	8.88	4.13	0.18				
21.00	8.94	4.17	0.18				
21.50	8.99	4.22	0.17				
22.00	9.04	4.26	0.16				
22.50	9.09	4.30	0.15				
23.00	9.14	4.33	0.14				
23.50	9.18	4.37	0.14				
24.00	9.22	4.40	0.13				
24.50	9.22	4.40	0.00				
25.00	9.22	4.40	0.00				
25.50	9.22	4.40	0.00				

Summary for Pond 25P: INFILTRATION PIPE STORAGE

Inflow Area = 545,177 sf, 28.83% Impervious, Inflow Depth = 5.78" for 100 Year event
 Inflow = 70.36 cfs @ 12.16 hrs, Volume= 262,584 cf
 Outflow = 3.98 cfs @ 11.43 hrs, Volume= 262,611 cf, Atten= 94%, Lag= 0.0 min
 Discarded = 3.98 cfs @ 11.43 hrs, Volume= 262,611 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs
 Peak Elev= 326.26' @ 15.03 hrs Surf.Area= 34,392 sf Storage= 131,476 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 316.9 min (1,136.7 - 819.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	320.00'	49,499 cf	61.09'W x 563.00'L x 6.58'H Field A 226,432 cf Overall - 102,685 cf Embedded = 123,747 cf x 40.0% Voids
#2A	320.50'	86,464 cf	ADS N-12 60" x 224 Inside #1 Inside= 59.5"W x 59.5"H => 19.30 sf x 20.00'L = 386.0 cf Outside= 67.0"W x 67.0"H => 22.92 sf x 20.00'L = 458.4 cf 8 Rows of 28 Chambers
		135,963 cf	Total Available Storage

Storage Group A created with Chamber Wizard

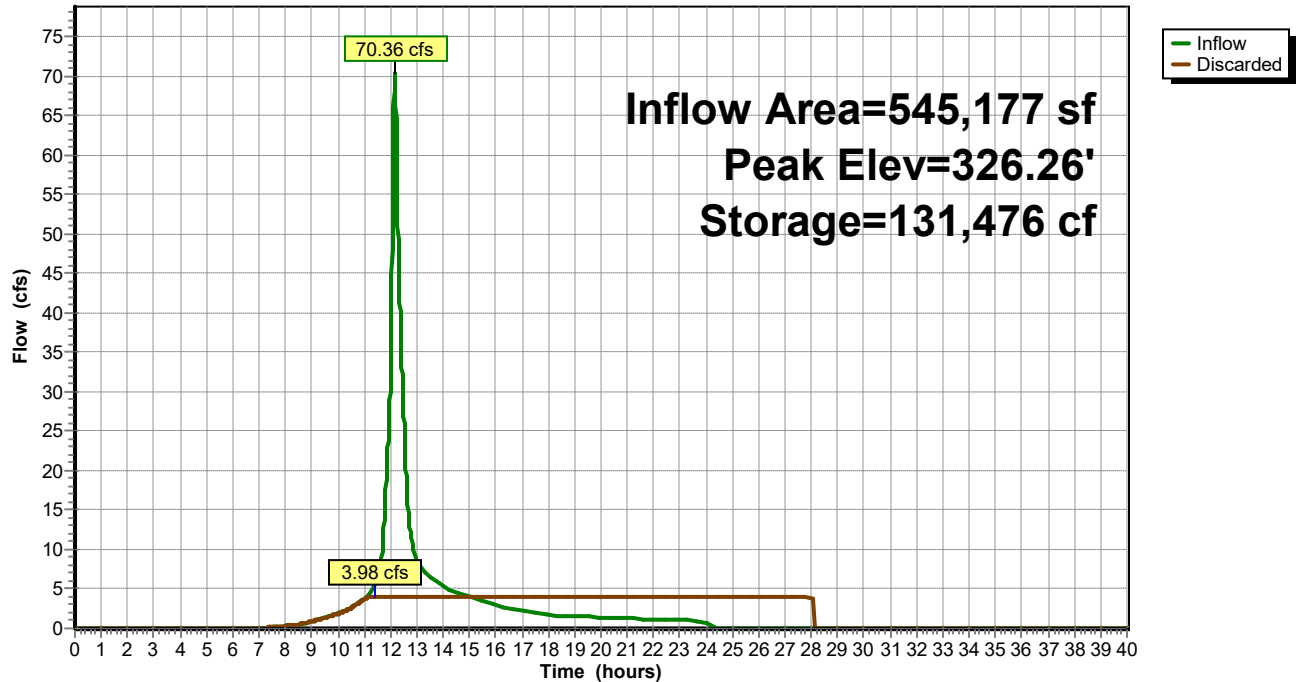
Device	Routing	Invert	Outlet Devices
#1	Discarded	320.00'	5.000 in/hr Exfiltration over Surface area

Discarded OutFlow Max=3.98 cfs @ 11.43 hrs HW=320.07' (Free Discharge)

↑ **1=Exfiltration** (Exfiltration Controls 3.98 cfs)

Pond 25P: INFILTRATION PIPE STORAGE

Hydrograph



Hydrograph for Pond 25P: INFILTRATION PIPE STORAGE

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	320.00	0.00
1.00	0.00	0	320.00	0.00
2.00	0.00	0	320.00	0.00
3.00	0.00	0	320.00	0.00
4.00	0.00	0	320.00	0.00
5.00	0.00	0	320.00	0.00
6.00	0.00	0	320.00	0.00
7.00	0.03	0	320.00	0.03
8.00	0.32	0	320.00	0.32
9.00	0.90	0	320.00	0.90
10.00	1.84	0	320.00	1.84
11.00	3.69	1	320.00	3.69
12.00	32.91	21,309	321.43	3.98
13.00	8.82	119,714	325.40	3.98
14.00	5.35	129,236	326.09	3.98
15.00	4.02	131,474	326.26	3.98
16.00	2.87	129,561	326.12	3.98
17.00	2.26	124,297	325.67	3.98
18.00	1.75	117,171	325.28	3.98
19.00	1.53	108,650	324.89	3.98
20.00	1.38	99,560	324.51	3.98
21.00	1.26	89,968	324.13	3.98
22.00	1.14	79,961	323.74	3.98
23.00	1.03	69,540	323.35	3.98
24.00	0.91	58,701	322.94	3.98
25.00	0.00	44,954	322.42	3.98
26.00	0.00	30,624	321.84	3.98
27.00	0.00	16,294	321.18	3.98
28.00	0.00	1,964	320.14	3.98
29.00	0.00	0	320.00	0.00
30.00	0.00	0	320.00	0.00
31.00	0.00	0	320.00	0.00
32.00	0.00	0	320.00	0.00
33.00	0.00	0	320.00	0.00
34.00	0.00	0	320.00	0.00
35.00	0.00	0	320.00	0.00
36.00	0.00	0	320.00	0.00
37.00	0.00	0	320.00	0.00
38.00	0.00	0	320.00	0.00
39.00	0.00	0	320.00	0.00
40.00	0.00	0	320.00	0.00

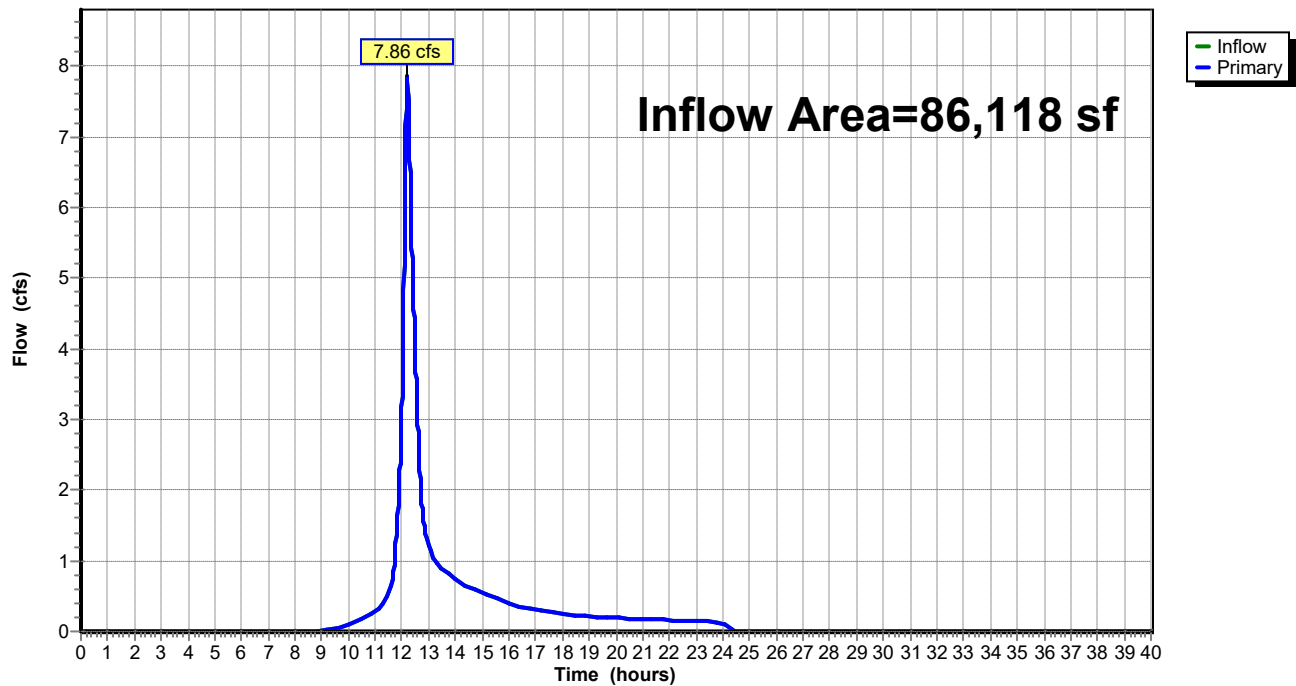
Summary for Link 21L: Pocantico River Basin

Inflow Area = 86,118 sf, 0.00% Impervious, Inflow Depth = 4.40" for 100 Year event
 Inflow = 7.86 cfs @ 12.20 hrs, Volume= 31,572 cf
 Primary = 7.86 cfs @ 12.20 hrs, Volume= 31,572 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 21L: Pocantico River Basin

Hydrograph



Hydrograph for Link 21L: Pocantico River Basin

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.04	0.00	0.04	35.50	0.00	0.00	0.00
10.00	0.09	0.00	0.09	36.00	0.00	0.00	0.00
10.50	0.17	0.00	0.17	36.50	0.00	0.00	0.00
11.00	0.29	0.00	0.29	37.00	0.00	0.00	0.00
11.50	0.55	0.00	0.55	37.50	0.00	0.00	0.00
12.00	3.17	0.00	3.17	38.00	0.00	0.00	0.00
12.50	3.89	0.00	3.89	38.50	0.00	0.00	0.00
13.00	1.23	0.00	1.23	39.00	0.00	0.00	0.00
13.50	0.88	0.00	0.88	39.50	0.00	0.00	0.00
14.00	0.73	0.00	0.73	40.00	0.00	0.00	0.00
14.50	0.63	0.00	0.63				
15.00	0.55	0.00	0.55				
15.50	0.48	0.00	0.48				
16.00	0.40	0.00	0.40				
16.50	0.35	0.00	0.35				
17.00	0.31	0.00	0.31				
17.50	0.28	0.00	0.28				
18.00	0.25	0.00	0.25				
18.50	0.22	0.00	0.22				
19.00	0.21	0.00	0.21				
19.50	0.20	0.00	0.20				
20.00	0.19	0.00	0.19				
20.50	0.18	0.00	0.18				
21.00	0.18	0.00	0.18				
21.50	0.17	0.00	0.17				
22.00	0.16	0.00	0.16				
22.50	0.15	0.00	0.15				
23.00	0.14	0.00	0.14				
23.50	0.14	0.00	0.14				
24.00	0.13	0.00	0.13				
24.50	0.00	0.00	0.00				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

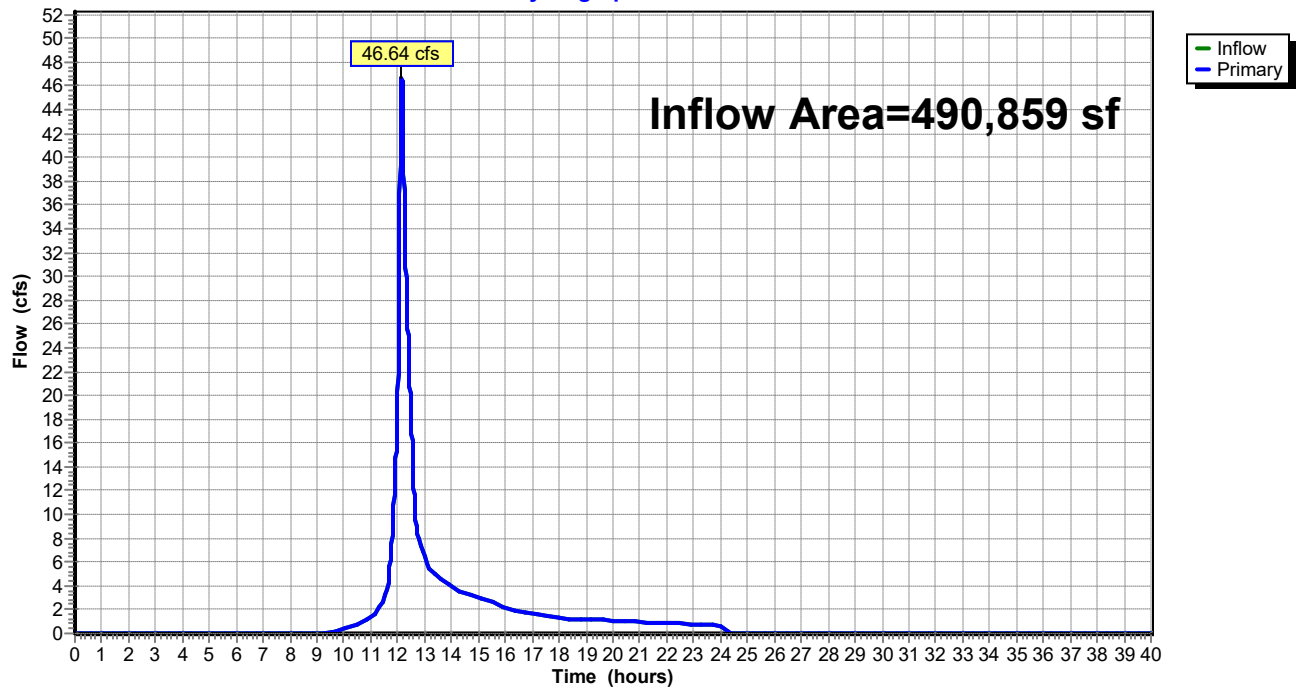
Summary for Link 22L: Pocantico Lake

Inflow Area = 490,859 sf, 0.00% Impervious, Inflow Depth = 4.15" for 100 Year event
 Inflow = 46.64 cfs @ 12.15 hrs, Volume= 169,693 cf
 Primary = 46.64 cfs @ 12.15 hrs, Volume= 169,693 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 22L: Pocantico Lake

Hydrograph



Hydrograph for Link 22L: Pocantico Lake

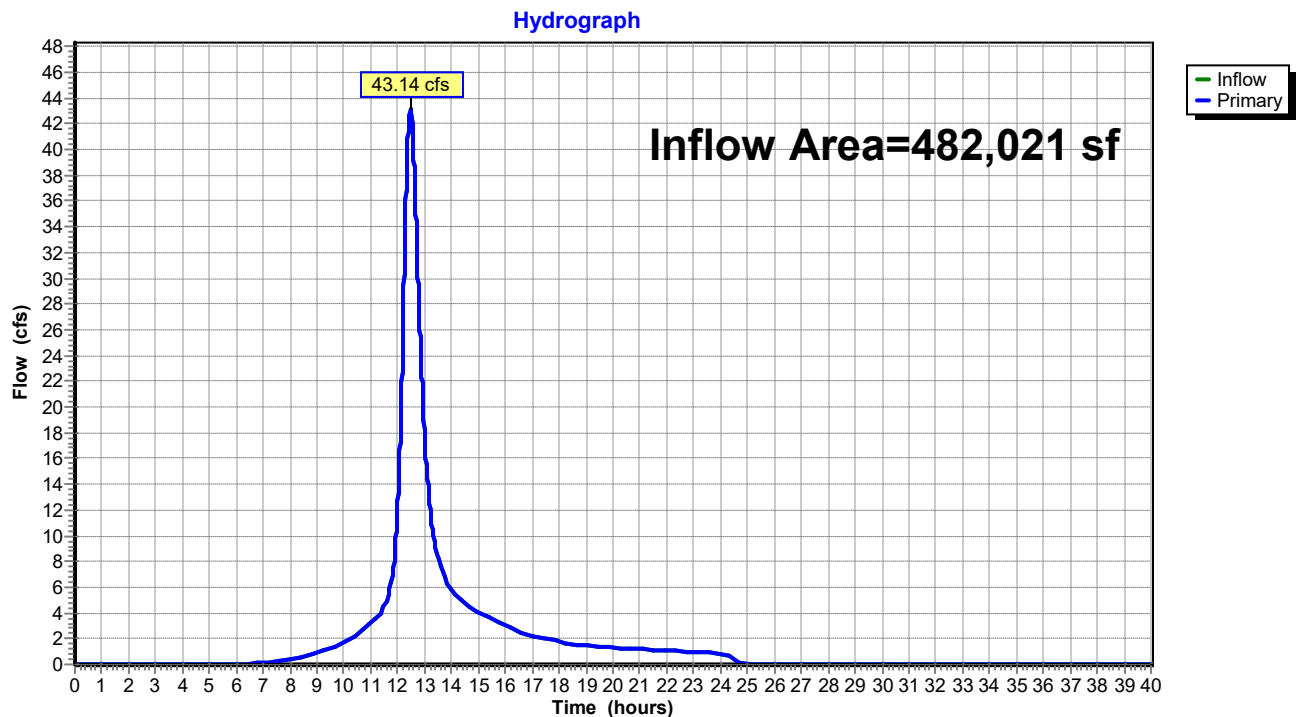
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	32.50	0.00	0.00	0.00
7.00	0.00	0.00	0.00	33.00	0.00	0.00	0.00
7.50	0.00	0.00	0.00	33.50	0.00	0.00	0.00
8.00	0.00	0.00	0.00	34.00	0.00	0.00	0.00
8.50	0.00	0.00	0.00	34.50	0.00	0.00	0.00
9.00	0.00	0.00	0.00	35.00	0.00	0.00	0.00
9.50	0.10	0.00	0.10	35.50	0.00	0.00	0.00
10.00	0.38	0.00	0.38	36.00	0.00	0.00	0.00
10.50	0.80	0.00	0.80	36.50	0.00	0.00	0.00
11.00	1.43	0.00	1.43	37.00	0.00	0.00	0.00
11.50	2.97	0.00	2.97	37.50	0.00	0.00	0.00
12.00	20.37	0.00	20.37	38.00	0.00	0.00	0.00
12.50	17.89	0.00	17.89	38.50	0.00	0.00	0.00
13.00	6.30	0.00	6.30	39.00	0.00	0.00	0.00
13.50	4.76	0.00	4.76	39.50	0.00	0.00	0.00
14.00	3.95	0.00	3.95	40.00	0.00	0.00	0.00
14.50	3.41	0.00	3.41				
15.00	3.01	0.00	3.01				
15.50	2.60	0.00	2.60				
16.00	2.17	0.00	2.17				
16.50	1.90	0.00	1.90				
17.00	1.72	0.00	1.72				
17.50	1.52	0.00	1.52				
18.00	1.33	0.00	1.33				
18.50	1.23	0.00	1.23				
19.00	1.18	0.00	1.18				
19.50	1.12	0.00	1.12				
20.00	1.06	0.00	1.06				
20.50	1.02	0.00	1.02				
21.00	0.97	0.00	0.97				
21.50	0.93	0.00	0.93				
22.00	0.89	0.00	0.89				
22.50	0.84	0.00	0.84				
23.00	0.80	0.00	0.80				
23.50	0.75	0.00	0.75				
24.00	0.71	0.00	0.71				
24.50	0.00	0.00	0.00				
25.00	0.00	0.00	0.00				
25.50	0.00	0.00	0.00				

Summary for Link 23L: Mapped Wetland / Brook

Inflow Area = 482,021 sf, 39.25% Impervious, Inflow Depth = 6.28" for 100 Year event
 Inflow = 43.14 cfs @ 12.47 hrs, Volume= 252,238 cf
 Primary = 43.14 cfs @ 12.47 hrs, Volume= 252,238 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 23L: Mapped Wetland / Brook



Hydrograph for Link 23L: Mapped Wetland / Brook

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.04	0.00	0.04	32.50	0.00	0.00	0.00
7.00	0.13	0.00	0.13	33.00	0.00	0.00	0.00
7.50	0.25	0.00	0.25	33.50	0.00	0.00	0.00
8.00	0.40	0.00	0.40	34.00	0.00	0.00	0.00
8.50	0.60	0.00	0.60	34.50	0.00	0.00	0.00
9.00	0.89	0.00	0.89	35.00	0.00	0.00	0.00
9.50	1.28	0.00	1.28	35.50	0.00	0.00	0.00
10.00	1.73	0.00	1.73	36.00	0.00	0.00	0.00
10.50	2.31	0.00	2.31	36.50	0.00	0.00	0.00
11.00	3.19	0.00	3.19	37.00	0.00	0.00	0.00
11.50	4.60	0.00	4.60	37.50	0.00	0.00	0.00
12.00	12.45	0.00	12.45	38.00	0.00	0.00	0.00
12.50	42.72	0.00	42.72	38.50	0.00	0.00	0.00
13.00	17.68	0.00	17.68	39.00	0.00	0.00	0.00
13.50	8.17	0.00	8.17	39.50	0.00	0.00	0.00
14.00	5.79	0.00	5.79	40.00	0.00	0.00	0.00
14.50	4.69	0.00	4.69				
15.00	4.06	0.00	4.06				
15.50	3.53	0.00	3.53				
16.00	3.00	0.00	3.00				
16.50	2.52	0.00	2.52				
17.00	2.23	0.00	2.23				
17.50	1.99	0.00	1.99				
18.00	1.76	0.00	1.76				
18.50	1.55	0.00	1.55				
19.00	1.45	0.00	1.45				
19.50	1.38	0.00	1.38				
20.00	1.31	0.00	1.31				
20.50	1.24	0.00	1.24				
21.00	1.18	0.00	1.18				
21.50	1.13	0.00	1.13				
22.00	1.08	0.00	1.08				
22.50	1.03	0.00	1.03				
23.00	0.97	0.00	0.97				
23.50	0.92	0.00	0.92				
24.00	0.87	0.00	0.87				
24.50	0.39	0.00	0.39				
25.00	0.04	0.00	0.04				
25.50	0.00	0.00	0.00				

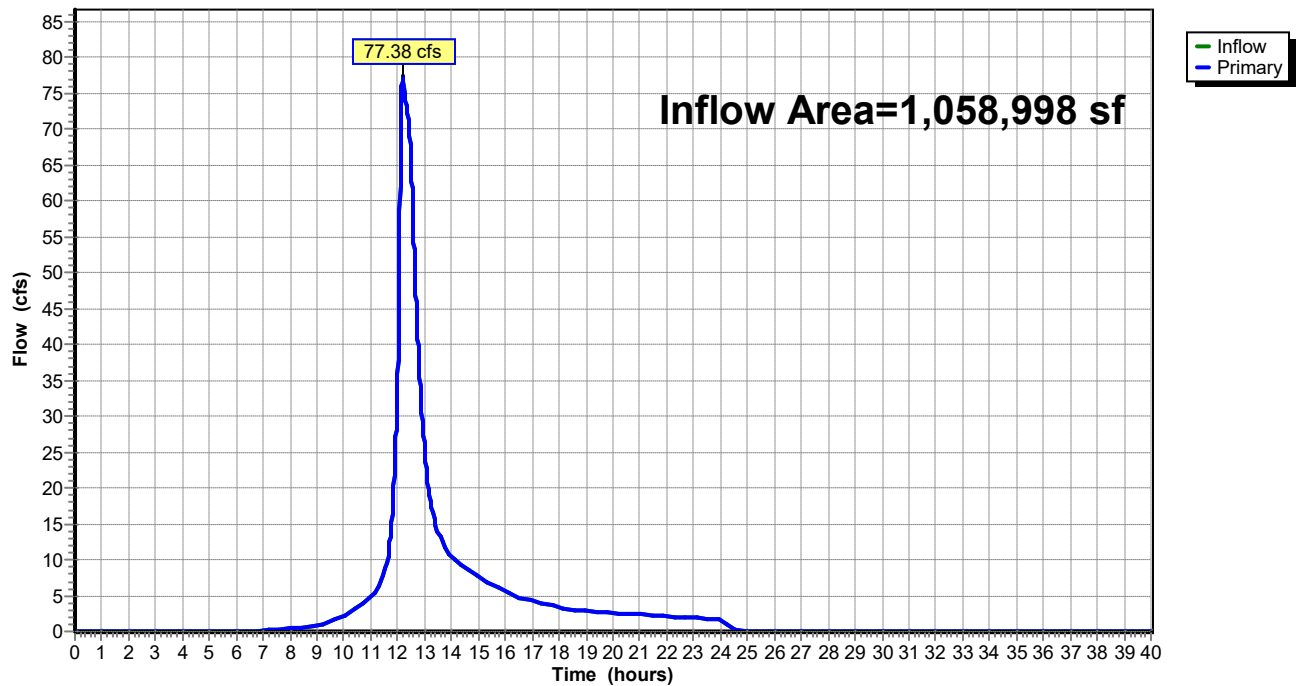
Summary for Link 24L: COMB POST

Inflow Area = 1,058,998 sf, 17.86% Impervious, Inflow Depth = 5.14" for 100 Year event
 Inflow = 77.38 cfs @ 12.18 hrs, Volume= 453,503 cf
 Primary = 77.38 cfs @ 12.18 hrs, Volume= 453,503 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.01 hrs

Link 24L: COMB POST

Hydrograph



Hydrograph for Link 24L: COMB POST

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.00	0.00	26.00	0.00	0.00	0.00
0.50	0.00	0.00	0.00	26.50	0.00	0.00	0.00
1.00	0.00	0.00	0.00	27.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	27.50	0.00	0.00	0.00
2.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	28.50	0.00	0.00	0.00
3.00	0.00	0.00	0.00	29.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	29.50	0.00	0.00	0.00
4.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	30.50	0.00	0.00	0.00
5.00	0.00	0.00	0.00	31.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	31.50	0.00	0.00	0.00
6.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00
6.50	0.04	0.00	0.04	32.50	0.00	0.00	0.00
7.00	0.13	0.00	0.13	33.00	0.00	0.00	0.00
7.50	0.25	0.00	0.25	33.50	0.00	0.00	0.00
8.00	0.40	0.00	0.40	34.00	0.00	0.00	0.00
8.50	0.60	0.00	0.60	34.50	0.00	0.00	0.00
9.00	0.89	0.00	0.89	35.00	0.00	0.00	0.00
9.50	1.41	0.00	1.41	35.50	0.00	0.00	0.00
10.00	2.20	0.00	2.20	36.00	0.00	0.00	0.00
10.50	3.28	0.00	3.28	36.50	0.00	0.00	0.00
11.00	4.91	0.00	4.91	37.00	0.00	0.00	0.00
11.50	8.12	0.00	8.12	37.50	0.00	0.00	0.00
12.00	35.99	0.00	35.99	38.00	0.00	0.00	0.00
12.50	64.50	0.00	64.50	38.50	0.00	0.00	0.00
13.00	25.20	0.00	25.20	39.00	0.00	0.00	0.00
13.50	13.81	0.00	13.81	39.50	0.00	0.00	0.00
14.00	10.47	0.00	10.47	40.00	0.00	0.00	0.00
14.50	8.74	0.00	8.74				
15.00	7.63	0.00	7.63				
15.50	6.61	0.00	6.61				
16.00	5.57	0.00	5.57				
16.50	4.77	0.00	4.77				
17.00	4.26	0.00	4.26				
17.50	3.80	0.00	3.80				
18.00	3.34	0.00	3.34				
18.50	3.01	0.00	3.01				
19.00	2.84	0.00	2.84				
19.50	2.70	0.00	2.70				
20.00	2.56	0.00	2.56				
20.50	2.44	0.00	2.44				
21.00	2.33	0.00	2.33				
21.50	2.23	0.00	2.23				
22.00	2.13	0.00	2.13				
22.50	2.02	0.00	2.02				
23.00	1.92	0.00	1.92				
23.50	1.81	0.00	1.81				
24.00	1.70	0.00	1.70				
24.50	0.39	0.00	0.39				
25.00	0.04	0.00	0.04				
25.50	0.00	0.00	0.00				

WASP
ENGINEERING GROUP, PLLC

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Poughquag, New York 12570
Phone: 914 384 9655

5. NRCC RAINFALL DATA

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	New York
Location	
Longitude	73.837 degrees West
Latitude	41.120 degrees North
Elevation	0 feet
Date/Time	Sat, 03 Apr 2021 22:25:18 -0400

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.33	0.51	0.63	0.83	1.04	1.29	1yr	0.90	1.24	1.49	1.84	2.26	2.78	3.17	1yr	2.46	3.05	3.55	4.26	4.90	1yr
2yr	0.40	0.62	0.77	1.02	1.28	1.60	2yr	1.10	1.49	1.84	2.27	2.79	3.42	3.85	2yr	3.02	3.70	4.27	5.04	5.72	2yr
5yr	0.47	0.73	0.92	1.23	1.57	1.99	5yr	1.36	1.84	2.30	2.85	3.51	4.30	4.89	5yr	3.81	4.70	5.46	6.32	7.08	5yr
10yr	0.53	0.83	1.05	1.42	1.85	2.35	10yr	1.59	2.16	2.73	3.39	4.18	5.13	5.86	10yr	4.54	5.64	6.58	7.49	8.33	10yr
25yr	0.61	0.97	1.24	1.71	2.28	2.94	25yr	1.97	2.67	3.43	4.29	5.29	6.47	7.46	25yr	5.73	7.17	8.42	9.39	10.33	25yr
50yr	0.69	1.11	1.43	2.00	2.69	3.49	50yr	2.32	3.13	4.08	5.11	6.31	7.72	8.96	50yr	6.83	8.61	10.16	11.14	12.15	50yr
100yr	0.78	1.27	1.64	2.32	3.16	4.15	100yr	2.73	3.68	4.86	6.10	7.55	9.22	10.76	100yr	8.16	10.35	12.27	13.22	14.31	100yr
200yr	0.89	1.45	1.88	2.70	3.73	4.93	200yr	3.22	4.34	5.79	7.29	9.02	11.03	12.94	200yr	9.76	12.44	14.81	15.70	16.85	200yr
500yr	1.07	1.76	2.29	3.32	4.65	6.19	500yr	4.02	5.38	7.30	9.22	11.44	13.99	16.52	500yr	12.38	15.89	19.02	19.70	20.93	500yr

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.44	0.53	0.71	0.88	1.15	1yr	0.76	1.12	1.36	1.67	2.17	2.40	2.94	1yr	2.13	2.82	3.30	3.76	4.26	1yr
2yr	0.39	0.60	0.73	0.99	1.23	1.47	2yr	1.06	1.44	1.69	2.17	2.70	3.32	3.73	2yr	2.94	3.59	4.13	4.85	5.53	2yr
5yr	0.43	0.66	0.82	1.13	1.43	1.72	5yr	1.24	1.68	1.97	2.51	3.15	4.04	4.54	5yr	3.57	4.37	5.04	5.89	6.60	5yr
10yr	0.47	0.72	0.89	1.24	1.61	1.92	10yr	1.39	1.87	2.21	2.77	3.54	4.62	5.26	10yr	4.09	5.06	5.86	6.53	7.13	10yr
25yr	0.52	0.79	0.98	1.41	1.85	2.21	25yr	1.60	2.16	2.57	3.14	4.14	5.61	6.43	25yr	4.96	6.18	7.23	7.73	8.08	25yr
50yr	0.56	0.86	1.07	1.53	2.06	2.46	50yr	1.78	2.40	2.90	3.45	4.65	6.50	7.49	50yr	5.75	7.20	8.44	8.77	8.83	50yr
100yr	0.61	0.93	1.16	1.68	2.31	2.74	100yr	1.99	2.68	3.25	3.76	5.23	7.55	8.74	100yr	6.68	8.41	9.85	9.95	9.61	100yr
200yr	0.66	1.00	1.27	1.84	2.56	3.03	200yr	2.21	2.96	3.67	4.11	5.89	8.82	10.23	200yr	7.80	9.84	11.52	11.28	10.40	200yr
500yr	0.74	1.11	1.43	2.07	2.95	3.48	500yr	2.54	3.40	4.31	4.58	6.93	10.83	12.63	500yr	9.59	12.15	14.17	13.32	11.47	500yr

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.38	0.58	0.71	0.95	1.17	1.41	1yr	1.01	1.37	1.62	2.13	2.53	3.00	3.40	1yr	2.65	3.27	3.87	4.63	5.30	1yr
2yr	0.42	0.65	0.80	1.08	1.33	1.60	2yr	1.15	1.56	1.82	2.36	2.91	3.54	3.99	2yr	3.13	3.83	4.40	5.26	6.05	2yr
5yr	0.51	0.79	0.99	1.35	1.72	2.02	5yr	1.48	1.98	2.34	3.05	3.81	4.60	5.24	5yr	4.07	5.04	5.88	6.71	7.50	5yr
10yr	0.61	0.94	1.17	1.64	2.11	2.44	10yr	1.82	2.39	2.83	3.71	4.66	5.66	6.47	10yr	5.01	6.22	7.32	8.49	9.38	10yr
25yr	0.78	1.19	1.48	2.11	2.77	3.14	25yr	2.39	3.07	3.66	4.88	6.10	7.40	8.55	25yr	6.55	8.22	9.67	11.20	12.17	25yr
50yr	0.93	1.42	1.77	2.55	3.43	3.82	50yr	2.96	3.73	4.44	6.01	7.47	9.06	10.54	50yr	8.02	10.13	12.03	13.80	14.84	50yr
100yr	1.13	1.71	2.15	3.10	4.25	4.64	100yr	3.67	4.53	5.40	7.44	9.15	11.09	12.99	100yr	9.81	12.49	14.97	17.02	18.11	100yr
200yr	1.37	2.07	2.62	3.79	5.29	5.63	200yr	4.56	5.51	6.56	9.20	11.21	13.57	15.98	200yr	12.01	15.37	18.62	20.99	22.13	200yr
500yr	1.80	2.67	3.44	5.00	7.11	7.31	500yr	6.13	7.15	8.49	12.26	14.66	17.71	21.04	500yr	15.67	20.23	24.85	27.73	28.90	500yr