STORMWATER REPORT

Radiant Meadows Solar

Fawn Meadow Lane
Woodbury, Connecticut

PREPARED FOR

Greenskies Clean Energy, LLC
127 Washington Ave
West Building, Lower Level
North Haven, CT 06473

PREPARED BY

100 Great Meadow Road
Suite 200
Wethersfield, Connecticut
860.807.4300

May 2024

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Project Summary

Project Description

The Petitioner is proposing to construct a ±4.6 MW solar farm on undeveloped farmland along with all associated utilities, access paths, fencing, and landscaping to support this use (the Project). When the Project reaches the end of its life cycle, the improvements constructed as part of this Project will be removed and the land will be restored in accordance with the decommissioning plan.

Site Description

The Project Site will be comprised on approximately ±19 acres on Fawn Meadow Lane, west of Orchard Ave, (ID 029-018D in Woodbury, Connecticut (see Figure 1). The total parcel area is 36.6 acres. The site is bounded by residential properties to the south and east, and by woodland to the north and west.

Under existing conditions, the majority of runoff from the project area generally flows overland to east and west in the farm field from a central break in the topography. There are 6 delineated on-site wetland systems in proximity to the development area. Wetland system 1 is located off the edge of the road on Fawn Meadow Lane just south of the proposed access road entrance. Wetland system 2 and 3 are located northeast of the development area and are very close to one another. Wetland system 4 and 5 are located at the southeast corner of the property boundary at the edge of a clearing. The last wetland system, wetland 6 is located at the northwest of the site along the property line.

According to available soil mapping[1], the majority of soils that exist within the development footprint represent Hydrologic Soil Groups C. See Appendix B for NRCS Web Soil Survey output.

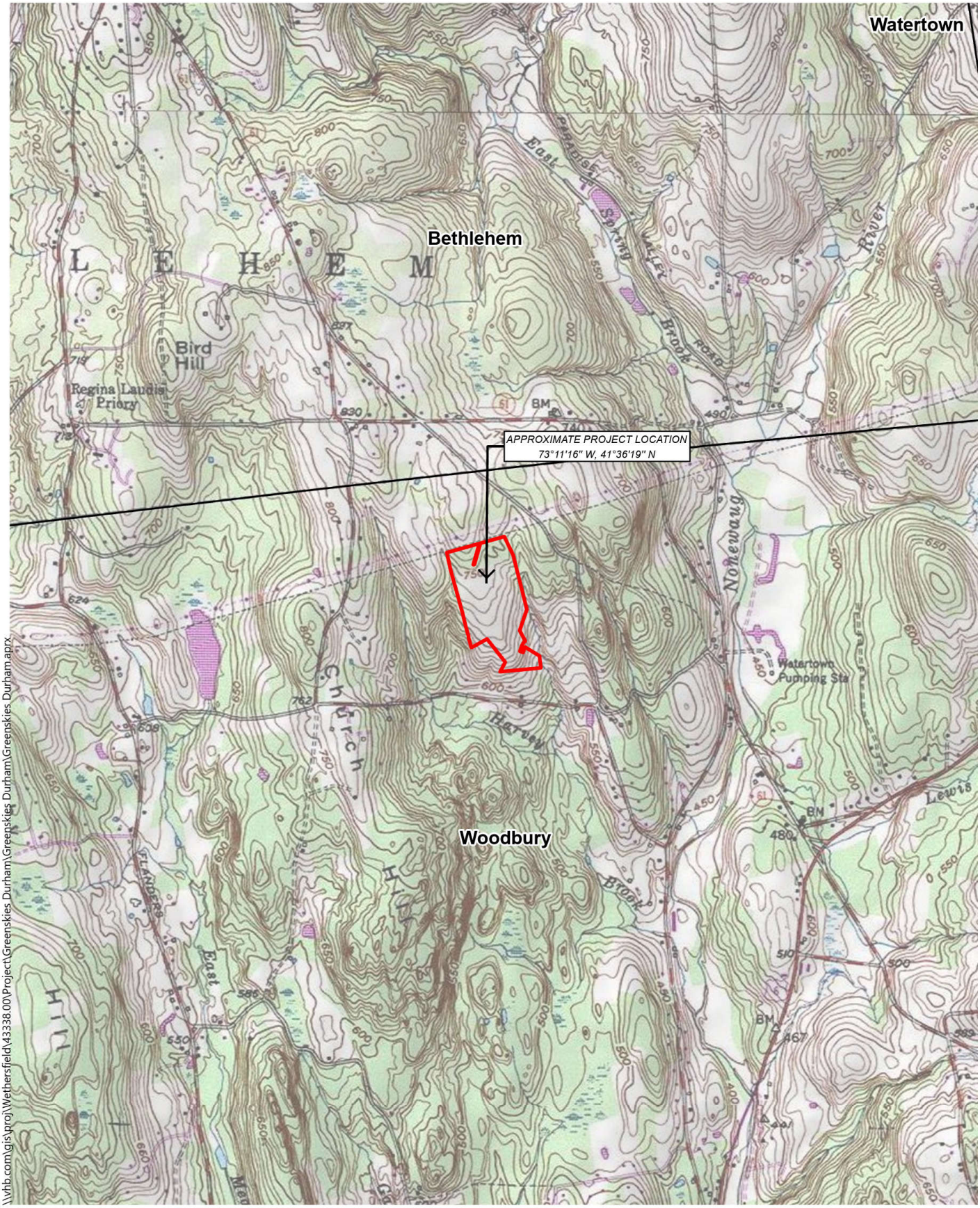
[1] https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

According to available CTDEEP Groundwater Classification maps, groundwater at the site is GA (see Appendix A). According to CTDEEP Aquifer Protection Area maps, the site is not listed as an Aquifer Protection Area (see Appendix A).

Methodology

The Project was designed to incorporate measures provided in the Connecticut Stormwater Quality Manual (CTDEEP 2023) as well as the CTDEEP Stormwater General Permit effective November 25, 2022 or amended. The conclusion of this analysis is that the proposed improvements will not increase the post-development peak runoff rates in comparison to existing predevelopment rates at any of the critical design points analyzed and stormwater quality leaving the site will be improved from existing conditions.

Figure 1: Site Location Map



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Greenskies Solar | Woodbury, Connecticut

USGS Locus Map

Source: VHB. CTDEEP, ESRI

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Existing Drainage Conditions

Summary

Under existing conditions, the majority of runoff from the project area generally flows overland to the east and west sides of the site, prior to discharging to the south. The Site is generally at its highest elevation in the north-central section of the development area. The majority of the Project area is comprised of active farm fields ranging in slopes between 5% and 15%.

Hydrologic Information

For the existing conditions hydrologic analysis, the Site was divided into six (6) subwatershed areas and two (2) design points. Table 1 provides a summary of the existing conditions hydrologic data. Figure 2 illustrates the existing drainage patterns on the Site. All portions of the Project area have been considered in the hydrologic analysis. Design Point 1 is the wetland corridor that passes under Fawn Meadow Lane to the east of the development. Design Point 2 is the wetland corridor to the west of the development. Both design points combine south of Church Hill Road within Harvey Brook.

Drainage Area 1A - This ±4.2-acre area is the eastern portion of the site. Untreated stormwater in this area generally flows to the east towards an existing swale which conveys stormwater runoff towards Fawn Meadow Lane.

Drainage Area 1B - This ±1.1-acre area contains the northeastern portion of the site. Untreated stormwater in this area generally flows to the east towards the northeastern wetland.

Drainage Area 1C - This ±4.9-acre area contains the southeastern portion of the proposed development area. Untreated stormwater in this area generally flows to the east and is either tributary to the stormwater basin constructed for the subdivision or to the road which hydraulically drains to the same basin.

Drainage Area 2A - This ±3.9-acre area contains the northwestern portion of the site. Untreated stormwater in this area generally flows to the west and south through the woods within residential property abutting Church Hill Road.

Drainage Area 2B - This ±3.4-acre area contains the western portion of the site. Untreated stormwater in this area generally flows to the west and south through the woods within residential property abutting Church Hill Road.

Drainage Area 2C - This ±0.9-acre area contains the southwestern portion of the site. Untreated stormwater in this area generally flows to the south through the woods within residential property abutting Church Hill Road.

Table 1 summarizes the key hydrologic parameters for each drainage area used in the existing conditions analysis.

Table 1 Existing Conditions Hydrologic Data

Drainage Area	*Discharge Location*	*Area (acres)*	*Curve Number*	*Time of Concentration (min)*
1A	Eastern Wetlands	4.2	86	10
1B	Eastern Wetlands	1.1	77	10
1C	Eastern Stormwater Basin	4.9	86	10
2A	Western Woodland	3.9	84	10
2B	Western Woodland	3.4	85	10
2C	Western Woodland	0.9	86	10

Figure 2: Existing Drainage Areas

Legend

SYMBOLS

X — DESIGN POINT

X — **DRAINAGE AREA DESIGNATION**

LINETYPES

DRAINAGE AREA BOUNDARY

HSG BOUNDARY

WETLAND BOUNDARY

0 100 200 400Feet

vhb

Existing Drainage Conditions
Radiant Meadows Solar
Fawn Meadow Lane
Woodbury, CT

Figure 2

5/1/2024

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Proposed Drainage Conditions

Summary

The Site has been designed to maintain existing topography and mimic existing drainage patterns to the maximum extents feasible. Across the majority of the proposed development areas, the Project proposes to install permanent turf-forming grasses to help stabilize the topsoil from erosion, sequester nutrients and pollutants, and lower runoff rates from the facility to the surrounding discharge points. Mature vegetation will be preserved to the maximum extents practicable and tree clearing is not proposed as part of this project. As a result, the Project will have minimal impact to surrounding ecologically sensitive areas.

The only impervious surfaces proposed to be constructed are a very minor amount of gravel turnaround and small concrete pads for utility equipment. Once operational, vehicular access to the Project will be limited to infrequent maintenance visits. The vegetated buffers created between the project and wetlands or offsite areas will provide adequate residence time and treatment capabilities for the de minimis amount of imperviousness of the project.

In accordance with CTDEEP Stormwater General Permit, it is not proposed to install solar panels within 100 feet any delineated wetlands, nor is it proposed to perform any land disturbance (i.e. tree clearing, grading, swales, stormwater basins, fences) within 50 feet of these systems.

Hydrologic Information

Natural drainage patterns will be maintained throughout the Site so that the proposed hydrologic conditions will closely match existing conditions. The proposed conditions analysis utilizes watersheds tributary to the proposed stormwater basins as well as drainage points that naturally occur. This results in the modelling of six (6) total subwatersheds to the previously defined two (2) design points. In accordance with CTDEEP Stormwater General Permit, a reduction in Hydrologic Soil Group of half a step has been considered in the proposed conditions hydrologic model for

developed portions of the site. No grading over a two-foot change is proposed that would require reducing HSG by a full step.

Drainage Area 1A - This ±4.2-acre area is the eastern portion of the proposed site. Stormwater will continue to flow to the eastern wetland.

Drainage Area 1B - This ±1.1-acre area contains the northeastern portion of the proposed project. Stormwater will continue to flow to the eastern wetland.

Drainage Area 1C - This ±4.9-acre area contains the southeastern portion of the proposed array. Stormwater in this area will continue to drain towards the in-place stormwater basin and constructed portion of Fawn Meadow Lane.

Drainage Area 2A - This ±3.9 -acre area contains the northwestern portion of the proposed array. Stormwater in this area will continue to flow to the west off the site to the western wetland.

Drainage Area 2B - This ±3.4-acre area contains the western portion of the proposed array. Stormwater in this area will continue to flow to the west off the site to the western wetland.

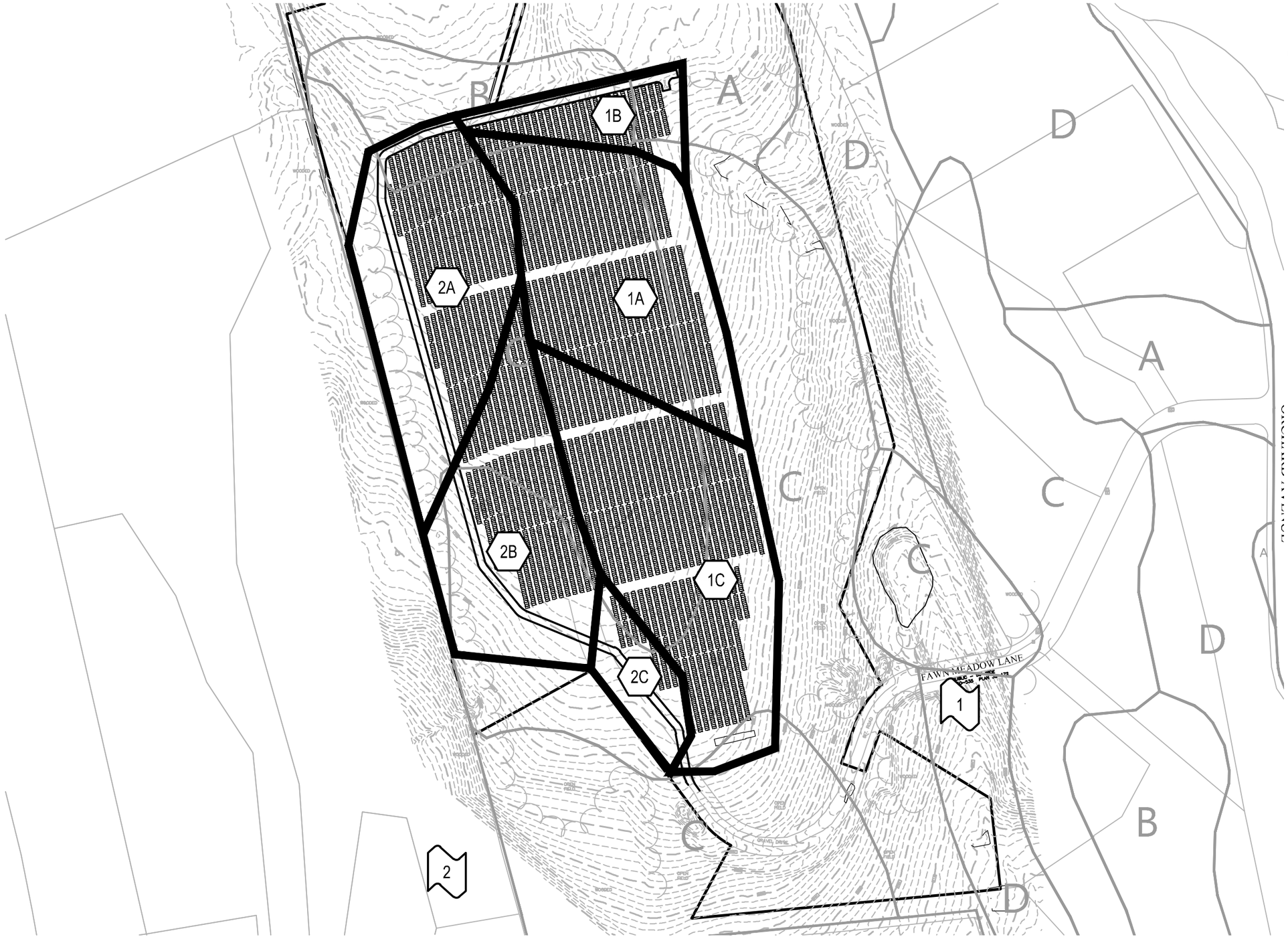
Drainage Area 2C - This ±0.9-acre area contains the southwestern portion of the proposed array. Stormwater in this area will continue to flow to the south off the site.

Table 2 summarizes the key hydrologic parameters for each drainage area used in the proposed conditions analysis. Only areas of the Site that are proposed to be disturbed by construction have been included in this drainage analysis, while portions of the Site and offsite areas unaffected by construction have been excluded.

Table 2 Proposed Conditions Hydrologic Data

Drainage Area	*Discharge Location*	*Area (acres)*	*Curve Number*	*Time of Concentration (min)*
1A	Eastern Wetlands	4.2	81	10
1B	Eastern Wetlands	1.1	75	10
1C	Eastern Stormwater Basin	4.9	81	10
2A	Western Woodland	3.9	81	10
2B	Western Woodland	3.4	82	10
2C	Western Woodland	0.9	83	10

Figure 3: Proposed Drainage Areas



Legend

SYMBOLS

X — DESIGN POINT

X — **DRAINAGE AREA DESIGNATION**

LINETYPES

DRAINAGE AREA BOUNDARY

HSG BOUNDARY

WETLAND BOUNDARY

0 100 200 400Feet

vhb

Proposed Drainage Conditions
Radiant Meadows Solar
Fawn Meadow Lane
Woodbury, CT

Figure 3

5/1/2024

4

Hydrologic Analysis

Hydrologic Analysis

The rainfall-runoff was evaluated for the 2-, 25-, 50-, and 100-year storm recurrence. Rainfall volumes used for this analysis were based on the National Weather Service NOAA Hydrometeorological Design Studies Center, Type D storm event for the Site. Rainfall depths were 3.54, 6.95, 7.91, and 8.97 inches respectively. Runoff coefficients for the pre- and post- development conditions provided in the tables below were determined using NRCS Technical Release 55 (TR-55) methodology as provided in the HydroCAD reports found in Appendix D.

In accordance with the guidance of CTDEEP Stormwater General Permit, the proposed conditions for development areas have been modelled with a loss of one-half class of Hydrologic Soil Group to conservatively estimate the effects of compaction during construction. The results of the pre- and post-development hydrologic models indicate that peak runoff rates from the Site will be reduced within all watersheds for all design storms by reducing curve numbers.

Table 3 presents a summary of the existing and proposed conditions peak discharge rates.

Table 3 Peak Discharge Rates (cfs*)

Design Point	2-year	25-year	50-year	100-year
Design Point 1				
Existing	22.6	50.1	57.9	65.9
Proposed	18.5	45.9	53.7	61.9
Design Point 2				
Existing	17.6	39.5	45.7	52.1
Proposed	15.5	37.3	43.6	50.0

* Expressed in cubic feet per second

Floodplain Information / Analysis

Based upon the most recent Federal Emergency Management Agency (FEMA) mapping (FEMA Flood Insurance Rate Map No. 0901330001A dated January 5, 1978), the site does not contain listed Flood Hazard Areas (1% Annual Chance or greater, and floodway). No portions of the Project are proposed within a flood hazard area. This mapping is included in Appendix A.

Water Quality Volume

Water Quality Volume (WQV) is based upon the first inch of rainfall, or a 1.3-inch rainfall event, over the acreage of proposed impervious surfaces for the development. Neither the solar panels nor the concrete equipment pads will be subject to vehicular access nor will they produce any pollutants to stormwater runoff. The site will have vehicular travel infrequently upon completion of construction, proposes a de minimis amount of gravel surface (the majority of which are placed atop existing farm roads), and the meadowy buffer areas will provide residence and treatment time. The tracking panel array has an average ground coverage ratio less than 50%.

Water Quality Flow

Water Quality Flow (WQF) is a rate of stormwater runoff based upon the first inch of rainfall, or a 1.3-inch rainfall event. This regulation is generally followed for "flow-through" treatment devices. As the proposed development does not incorporate any "flow-through" water quality treatment devices, WQF is not applicable to this project.

Appendix A:

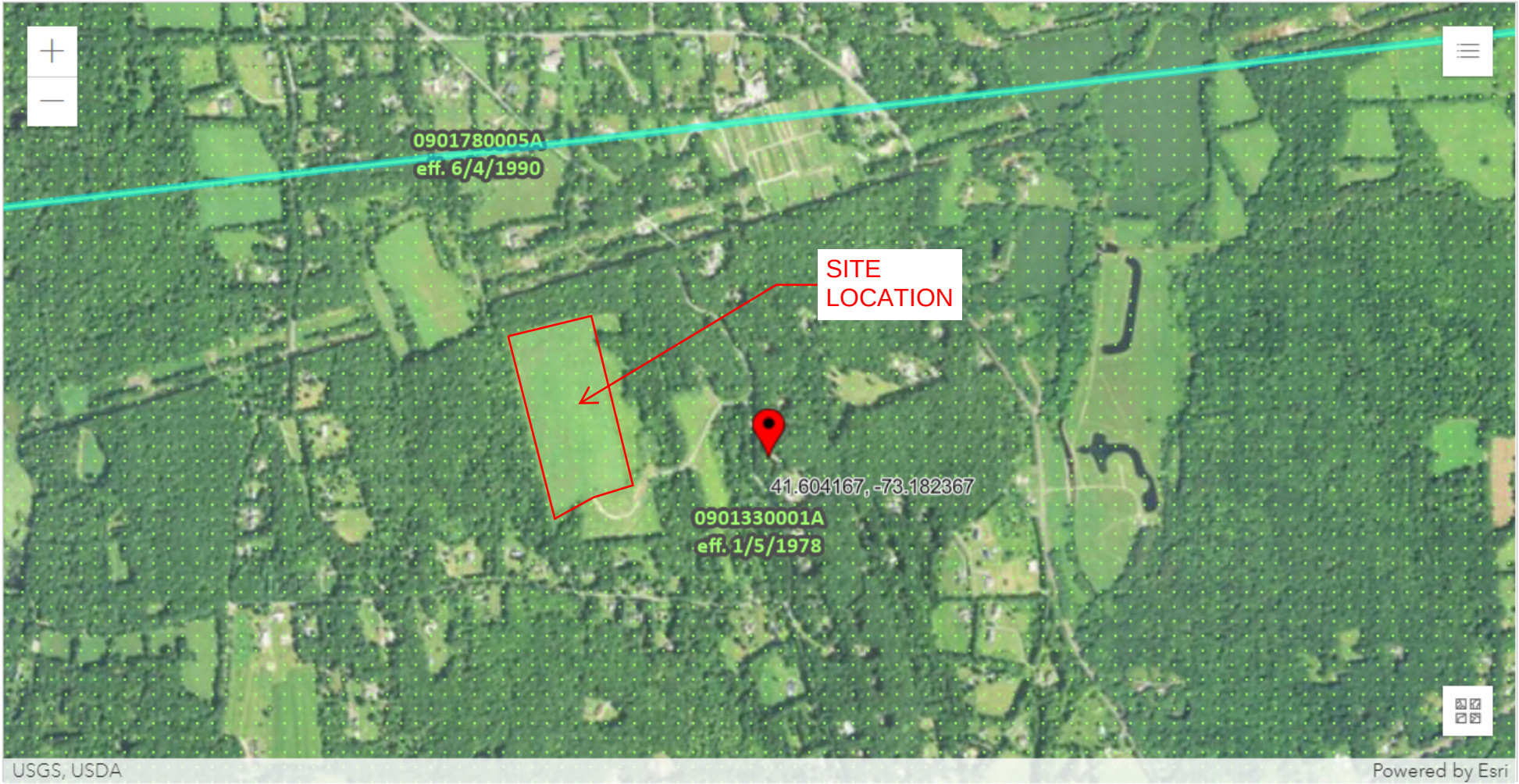
FEMA Flood Insurance Rate Map

NOAA Rainfall Depth Estimates

CTDEEP Groundwater Classification Map

Aquifer Protection Area Map

FEMA Flood Insurance Rate Map



PIN

Approximate location based on user input and does not represent an authoritative property location

Selected FloodMap Boundary

Digital Data Available

No Digital Data Available

SPECIAL FLOOD HAZARD AREAS

Without Base Flood Elevation (BFE) Zone A, V, A99

With BFE or Depth

Regulatory Floodway Zone AE, AO, AH, VE, AR

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X

OTHER

20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

NOAA Rainfall Depth Estimates

NOAA Atlas 14, Volume 10, Version 3
Location name: Woodbury, Connecticut, USA*
Latitude: 41.6041°, Longitude: -73.1876°
Elevation: 718 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.363** (0.276-0.478)	**0.430** (0.326-0.566)	**0.540** (0.408-0.713)	**0.631** (0.475-0.837)	**0.756** (0.552-1.04)	**0.851** (0.611-1.19)	**0.949** (0.662-1.37)	**1.05** (0.705-1.56)	**1.20** (0.774-1.83)	**1.31** (0.830-2.05)
10-min	**0.515** (0.391-0.677)	**0.610** (0.462-0.802)	**0.765** (0.578-1.01)	**0.894** (0.672-1.19)	**1.07** (0.783-1.48)	**1.21** (0.864-1.69)	**1.34** (0.938-1.94)	**1.49** (0.998-2.21)	**1.70** (1.10-2.60)	**1.86** (1.18-2.90)
15-min	**0.605** (0.459-0.796)	**0.717** (0.544-0.944)	**0.900** (0.680-1.19)	**1.05** (0.791-1.40)	**1.26** (0.921-1.74)	**1.42** (1.02-1.99)	**1.58** (1.10-2.29)	**1.76** (1.18-2.60)	**2.00** (1.29-3.06)	**2.19** (1.38-3.41)
30-min	**0.824** (0.625-1.08)	**0.976** (0.740-1.28)	**1.22** (0.926-1.62)	**1.43** (1.08-1.90)	**1.72** (1.25-2.36)	**1.93** (1.39-2.71)	**2.16** (1.50-3.12)	**2.39** (1.60-3.55)	**2.72** (1.76-4.16)	**2.98** (1.89-4.65)
60-min	**1.04** (0.791-1.37)	**1.24** (0.937-1.63)	**1.55** (1.17-2.05)	**1.81** (1.36-2.41)	**2.17** (1.59-2.99)	**2.45** (1.76-3.43)	**2.73** (1.90-3.95)	**3.03** (2.03-4.49)	**3.45** (2.23-5.28)	**3.78** (2.39-5.89)
2-hr	**1.38** (1.06-1.80)	**1.62** (1.24-2.12)	**2.01** (1.53-2.63)	**2.33** (1.76-3.07)	**2.77** (2.04-3.79)	**3.11** (2.24-4.34)	**3.45** (2.43-4.98)	**3.83** (2.57-5.65)	**4.36** (2.83-6.64)	**4.79** (3.04-7.43)
3-hr	**1.60** (1.23-2.09)	**1.88** (1.44-2.45)	**2.33** (1.78-3.05)	**2.71** (2.06-3.56)	**3.22** (2.38-4.40)	**3.61** (2.62-5.03)	**4.02** (2.84-5.78)	**4.47** (3.01-6.57)	**5.11** (3.32-7.76)	**5.64** (3.58-8.72)
6-hr	**2.01** (1.56-2.60)	**2.39** (1.84-3.10)	**3.01** (2.32-3.91)	**3.53** (2.70-4.60)	**4.23** (3.15-5.76)	**4.76** (3.48-6.62)	**5.32** (3.80-7.68)	**5.98** (4.04-8.75)	**6.95** (4.53-10.5)	**7.76** (4.95-11.9)
12-hr	**2.44** (1.89-3.13)	**2.97** (2.31-3.82)	**3.84** (2.98-4.96)	**4.57** (3.52-5.93)	**5.57** (4.18-7.56)	**6.30** (4.65-8.76)	**7.11** (5.13-10.3)	**8.08** (5.47-11.8)	**9.57** (6.25-14.4)	**10.8** (6.94-16.6)
24-hr	**2.83** (2.22-3.62)	**3.54** (2.76-4.52)	**4.68** (3.65-6.01)	**5.64** (4.37-7.27)	**6.95** (5.25-9.42)	**7.91** (5.88-11.0)	**8.97** (6.54-13.0)	**10.3** (7.00-14.9)	**12.4** (8.13-18.6)	**14.2** (9.14-21.7)
2-day	**3.21** (2.53-4.07)	**4.06** (3.19-5.15)	**5.44** (4.27-6.93)	**6.59** (5.14-8.44)	**8.17** (6.22-11.0)	**9.32** (6.99-12.9)	**10.6** (7.81-15.4)	**12.3** (8.37-17.7)	**15.0** (9.84-22.3)	**17.4** (11.2-26.3)
3-day	**3.50** (2.76-4.42)	**4.42** (3.49-5.59)	**5.94** (4.67-7.53)	**7.19** (5.63-9.17)	**8.92** (6.82-12.0)	**10.2** (7.67-14.1)	**11.6** (8.58-16.8)	**13.4** (9.18-19.3)	**16.5** (10.8-24.4)	**19.1** (12.3-28.9)
4-day	**3.75** (2.98-4.73)	**4.74** (3.75-5.98)	**6.35** (5.01-8.03)	**7.68** (6.03-9.77)	**9.52** (7.30-12.8)	**10.9** (8.20-15.0)	**12.4** (9.16-17.8)	**14.3** (9.80-20.5)	**17.5** (11.6-26.0)	**20.4** (13.2-30.7)
7-day	**4.46** (3.56-5.60)	**5.56** (4.43-6.98)	**7.36** (5.84-9.27)	**8.86** (6.99-11.2)	**10.9** (8.39-14.5)	**12.4** (9.39-17.0)	**14.1** (10.4-20.1)	**16.2** (11.1-23.1)	**19.6** (13.0-28.9)	**22.6** (14.7-34.0)
10-day	**5.18** (4.14-6.47)	**6.34** (5.07-7.92)	**8.23** (6.56-10.3)	**9.80** (7.76-12.4)	**12.0** (9.22-15.9)	**13.6** (10.3-18.4)	**15.3** (11.3-21.7)	**17.5** (12.1-24.9)	**20.9** (13.9-30.7)	**23.9** (15.5-35.8)
20-day	**7.42** (5.98-9.21)	**8.64** (6.96-10.7)	**10.6** (8.52-13.2)	**12.3** (9.79-15.4)	**14.6** (11.2-19.0)	**16.2** (12.3-21.7)	**18.1** (13.3-25.1)	**20.2** (14.0-28.5)	**23.3** (15.5-34.0)	**26.0** (16.9-38.6)
30-day	**9.30** (7.53-11.5)	**10.5** (8.52-13.0)	**12.6** (10.1-15.6)	**14.3** (11.4-17.8)	**16.6** (12.8-21.5)	**18.3** (13.9-24.3)	**20.1** (14.8-27.6)	**22.2** (15.4-31.2)	**25.1** (16.8-36.5)	**27.5** (17.9-40.8)
45-day	**11.6** (9.45-14.3)	**12.9** (10.5-15.9)	**15.0** (12.1-18.5)	**16.7** (13.5-20.8)	**19.1** (14.8-24.6)	**20.9** (15.9-27.5)	**22.8** (16.7-31.0)	**24.8** (17.3-34.7)	**27.5** (18.4-39.8)	**29.6** (19.4-43.8)
60-day	**13.6** (11.0-16.6)	**14.9** (12.1-18.3)	**17.0** (13.8-21.0)	**18.8** (15.2-23.4)	**21.3** (16.6-27.4)	**23.2** (17.6-30.4)	**25.1** (18.4-33.9)	**27.1** (19.0-37.8)	**29.7** (20.0-42.9)	**31.8** (20.8-46.8)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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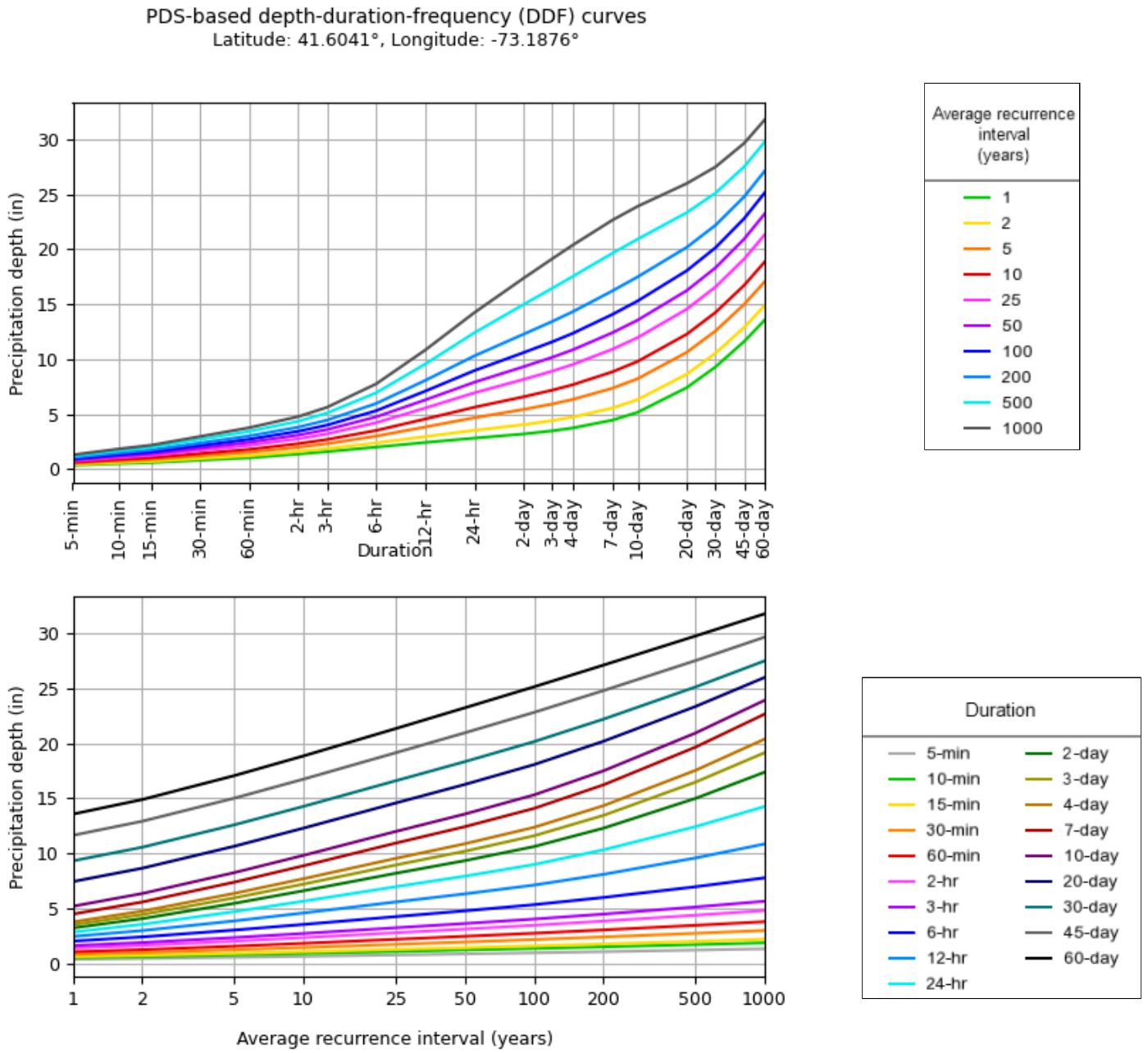
PF graphical



NOAA Atlas 14, Volume 10, Version 3

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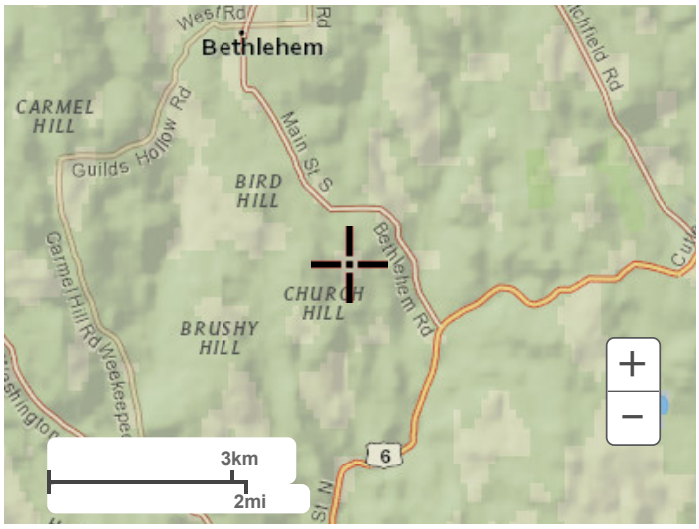
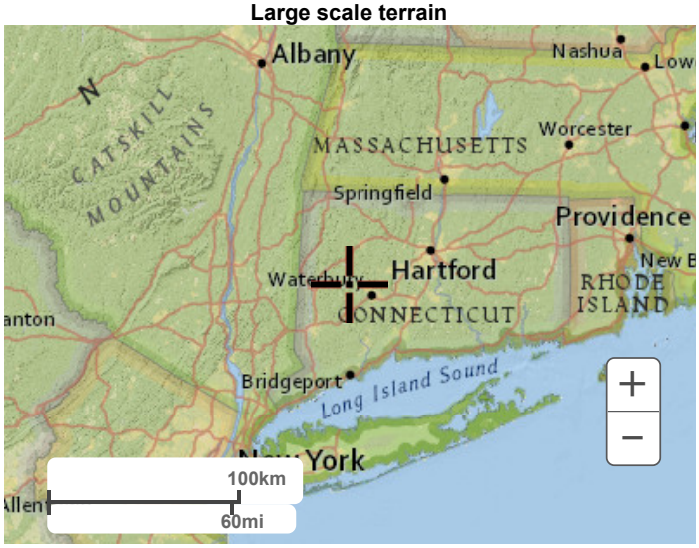
Maps & aerials

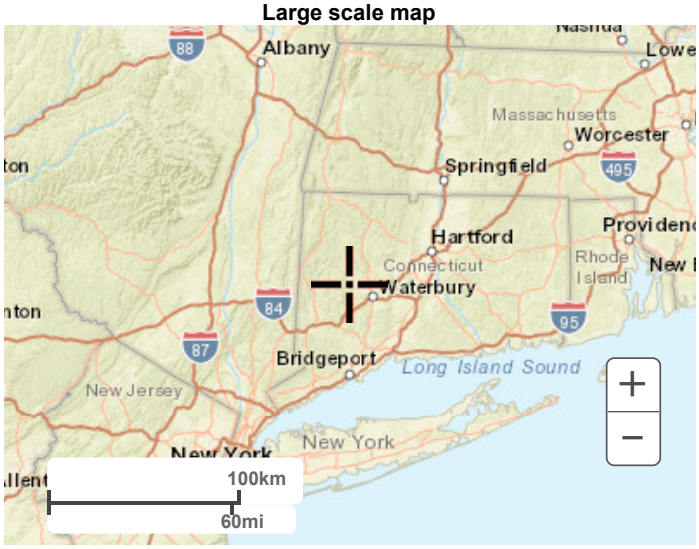
Small scale terrain



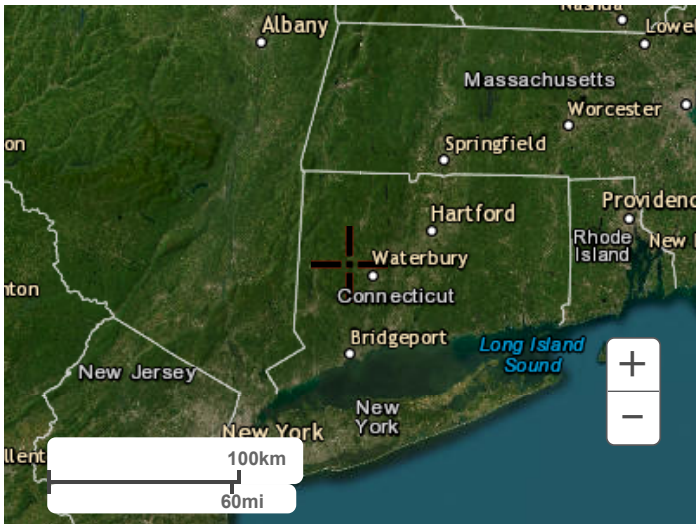
Large scale terrain



Large scale map



Large scale aerial



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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

CTDEEP Groundwater Classification Map

WATER QUALITY CLASSIFICATIONS
WOODBURY, CT

SURFACE WATER QUALITY CLASSES

A	A
AA	AA
B, B*	B, B*
SA	SA
SB	SB

NOTES:
Surface Water Classifications beginning with S refer to Coastal and Marine Surface Water.
B* is a subset of Class B where no direct wastewater discharges are allowed other than those consistent with Class AA, A and SA surface waters.

GROUND WATER QUALITY CLASSES

GA (white background)

GAA, GAAs

GA, GAA may not meet current standards

GB

GC

Area of Contribution to Public Supply Well

Final Aquifer Protection Area (Level A)

Major Basin Boundary

EXPLANATION

WATER QUALITY CLASSIFICATIONS (WQC) MAPS are one of the elements of the Water Quality Standards (WQS) for the State of Connecticut. The WQS are a part of Connecticut's clean water program and are essential for protecting and improving water quality. The WQS follow the principles of Connecticut's Clean Water Act which is in Chapter 446K of the Connecticut General Statutes. The WQS provide policy guidance in many areas, for example decisions on acceptable discharges to water resources, siting of landfills, remediation or prioritization of municipal sewerage system projects. The first two elements of the WQS are the Standards, which set an overall policy for management of water quality, and the Criteria, which are descriptive and numerical standards that describe the allowable parameters and goals for various water quality classifications. A discussion of these two elements is found in the Water Quality Standards document available on the CT DEEP website. The third element is the Classifications and the Water Quality Classification Maps which show the Classification assigned to each surface and groundwater resource throughout the State. The WQS are adopted using a public participation process. The WQC maps are also adopted using a public participation process but go through hearings separately from the Standards and Criteria hearings. Revision and adoption of the WQC data occurs in accordance with the public participation procedures contained in Section 22a-426 of the Connecticut General Statutes. Ground WQC is subject to Connecticut regulation and changes must be reviewed and adopted. All changes to the Surface WQC require an adoption process which is subject to federal review and approval in addition to CT regulation. The adoption dates for the WQC by major drainage basin are: Housatonic River, Hudson River and Southwest Coastal Basins - March 1999; Connecticut River and South Central Coastal Basins - February 1993; Thames River, Pawcatuck River and Southeast Coastal Basins - December 1986. Surface Water Classifications do not change after the adoption date until the next major revision. Ground Water Classifications may change after the adoption date under specific circumstances. The map may have more than one WQC adoption date because a town may be in more than one major drainage basin.

SURFACE WATERS in Connecticut are divided into freshwater classified as AA, A, B or B* and saline waters classified as SA or SB. Class AA designated uses are existing or proposed drinking water supplies; habitat for fish and other aquatic life and wildlife; recreation; and water supply for industry and agriculture. Class A designated uses are habitat for fish and other aquatic life and wildlife; potential drinking water supplies; recreation; navigation; and water supply for industry and agriculture. Class SA designated uses are habitat for marine fish, other aquatic life and wildlife; shellfish harvesting for direct human consumption; recreation; industrial water supply; and navigation. Class B designated uses are habitat for fish and aquatic life and wildlife; recreation; navigation; and industrial and agricultural water supply. Class B*, applicable to Candlewood Lake, is a subset of Class B and is identical in all ways to the designated uses, criteria and standards for Class B waters except for the restriction on direct discharges. Class SB designated uses are habitat for marine fish and aquatic life and wildlife; commercial shellfish harvesting; recreation; industrial water supply; and navigation.

Surface waters which are not specifically classified shall be considered as Class A or Class AA. Surface waters in GA ground water areas are assumed Class A or Class SA unless otherwise indicated. Surface waters in GAA ground water areas are assumed Class AA unless otherwise indicated.

On the WQC map a surface water quality goal of A is represented by blue colored water bodies. Surface water quality goal of AA is represented by purple colored water bodies. Surface water quality goal of B is represented by gold colored water bodies.

GROUND WATERS in Connecticut are classified as GAA, GA, GB and GC. Class GAA designated uses are existing or potential public supply of water suitable for drinking without treatment and baseflow for hydraulically-connected surface water bodies. The Class GAAs is a subclass of GAA for ground water that is tributary to a public water supply reservoir. The area of contribution to a public water supply well is represented by a 500-foot radius around the well and is assumed to be Class GAA unless otherwise classified. Class GA designated uses are existing private and potential public or private supplies of water suitable for drinking without treatment and baseflow for hydraulically-connected surface water bodies. All ground waters not specifically classified are considered as Class GA. Class GB designated uses are industrial process water and cooling waters and baseflow for hydraulically-connected water bodies and is presumed not suitable for human consumption without treatment. Class GC designated uses are assimilation of discharges authorized by the Commissioner pursuant to Section 22a-430 of the General Statutes.

On the WQC map GA is represented by white colored land areas. Class GAA and class GAAs are represented by blue colored land areas. The area of contribution to a public water supply well is shown by a blue cross-hatch overprint. A notation of GAA followed by a state abbreviation indicates a watershed that contributes to the public water supply for a state other than Connecticut. Class GA or Class GAA areas that currently may not be meeting the GA or GAA standards are represented on the WQC maps by tan colored land areas. Class GB is represented by green colored land areas. Class GC is represented by magenta colored land areas.

FINAL AQUIFER PROTECTION AREAS (Level A) are included on the WQC maps for informational purposes. These areas are anticipated to be reclassified GAA during the next major basin updates, subject to public participation. The Aquifer Protection Program helps protect Connecticut's public drinking water resources by delineating aquifer protection areas (also called wellhead protection areas) for public supply wells and establishing land use regulations within these areas. These areas represent the land area contributing ground water to active public water supply wells or well fields that serve more than 1000 people and are set in sand and gravel aquifers (stratified drift deposits).

DATA SOURCES

WATER QUALITY CLASSIFICATIONS DATA – Water quality classifications shown on this map are based on information from the following digital spatial datasets that are typically shown together – Ground Water Quality Classifications Poly, Surface Water Quality Classifications Line, and Surface Water Quality Classifications Poly. The map legend above reflects the content of these three data sources. These WQC data were initially compiled on 1:24,000-scale 7.5 minute USGS topographic quadrangle maps and later digitized at 1:24,000 scale. For example, the Surface Water Quality Classifications Line and Surface Water Quality Classifications Poly digital data assigns surface water quality classifications to water bodies such as rivers, streams, reservoirs, lakes, ponds and coves found in 1:24,000-scale hydrography data available from CT DEEP. The hydrography may not include all the waterbodies in Connecticut. The Ground Water Quality Classifications Poly data assigns ground water quality classifications, at 1:24,000 scale, to the remaining land areas in Connecticut.

AQUIFER PROTECTION AREA DATA – Aquifer Protection Areas shown on this map are from the Aquifer Protection Area digital dataset which contains polygon data intended to be used at 1:24,000 scale. The dataset contains regulated areas classified as Level A Aquifer Protection Area (Final) and Level B Aquifer Protection Area (Preliminary). The Level B areas are not shown on the WQC maps. The data was collected from 1991 to the present and is actively updated as Final area mapping replaces earlier Preliminary areas. The Aquifer Protection Areas are delineated by the individual water companies owning the well fields and submitted to the CT DEEP for approval. Preliminary mapping provides a general estimate of the area contributing ground water to the well field. Final mapping is based on extensive, site-specific, detailed modeling of the ground water flow system. CT DEEP may adjust Final area boundaries to be consistent with 1:24,000 scale topography and base map data where appropriate during the approval process.

MAJOR DRAINAGE BASIN DATA – Major drainage basins shown on this map are from Major Basin Line data developed by CT DEEP and intended to be used at 1:24,000 scale.

BASE MAP DATA - Based on data originally from 1:24,000-scale USGS 7.5 minute topographic quadrangle maps published between 1969 and 1992. It includes political boundaries, railroads, airports, hydrography, geographic names and geographic places. Streets and street names are from Tele Atlas® copyrighted data. Base map information is neither current nor complete.

RELATED INFORMATION

This map is intended to be printed at its original dimensions in order to maintain the 1:24,000 scale (1 inch = 2000 feet).
WATER QUALITY STANDARDS - Go to the CT DEEP website for a summary and the full text of the "Water Quality Standards" and for other information on water quality.
AQUIFER PROTECTION AREAS - Go to the CT DEEP website for more information.

ADOPTED DATES

Water Quality Standards
February 25, 2011

Thames River, Pawcatuck River and Southeast Coastal Basins: December 1986

Connecticut River and South Central Coastal Basins: February 1993

Housatonic River, Hudson River and Southwest Coastal Basins: March 1999

MAJOR BASINS

1 Pawcatuck
2 Southeast Coast
3 Thames
4 Connecticut
5 South Central Coast
6 Housatonic
7 Southwest Coast
8 Hudson

MAP LOCATION

State Plane Coordinate System of 1983, Zone 3526
Lambert Conformal Conic Projection
North American Datum of 1983

0 0.5 1 Miles
0 500 1000 2000 3000 4000 5000 6000 7000 Feet
0 0.5 0 1 Kilometers

SCALE 1:24,000 (1 inch = 2000 feet) when map is printed at original size

STATE OF CONNECTICUT
DEPARTMENT OF
ENERGY & ENVIRONMENTAL PROTECTION
79 Elm Street
Hartford, CT 06106-5127

Map created by CT DEEP
October 2018

Map is not colorfast
Protect from light and moisture

Aquifer Protection Area Map

AQUIFER PROTECTION AREAS

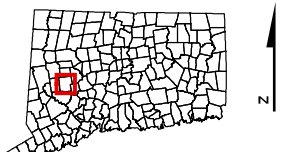
Woodbury, CT

December 23, 2021

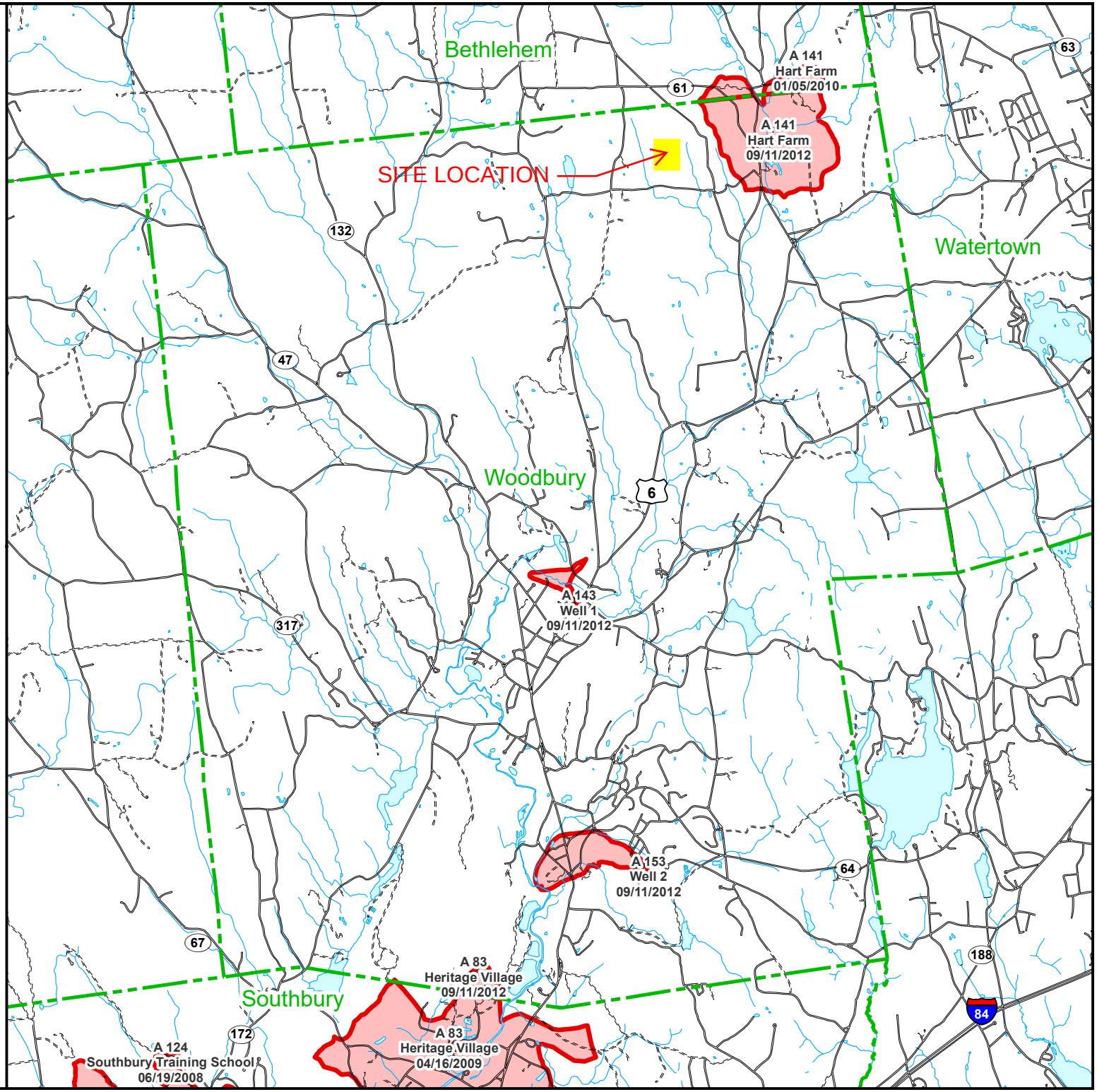
- Level A APA (Final Adopted)
- Level A APA (Final)
- Level B APA (Preliminary)
- Town Boundary

NOTE: The Aquifer Protection Areas were delineated through Connecitcut's Level A and Level B Mapping Processes. Aquifer Protection Areas are delineated for active public water supply wells in stratified drift that serve more than 1000 people, in accordance with Sections 22a-354c and 22a-354z of the Connecticut General Statutes. Level B Mapping delineates a preliminary aquifer protection area, providing an estimate of the land area from which the well draws its water. Level A Mapping delineates the final Aquifer Protection Area, which becomes the regulatory boundary for land use controls designed to protect the well from contamination. As Level A Mapping is completed for each well field and approved by DEEP, it replaces the Level B Mapping. Final Adopted Level A Areas are those where towns have land use regulations for them. Masschusetts and Rhode Island Wellhead Protection Areas may be shown for informational purposes.

QUESTIONS:
Bureau of Water Protection and Land Reuse
Planning and Standards Division
Phone: (860) 424-3020
www.ct.gov/deep/aquiferprotection



STATE OF CONNECTICUT
DEPARTMENT OF
ENERGY & ENVIRONMENTAL PROTECTION
79 Elm Street
Hartford, CT 06106-5127

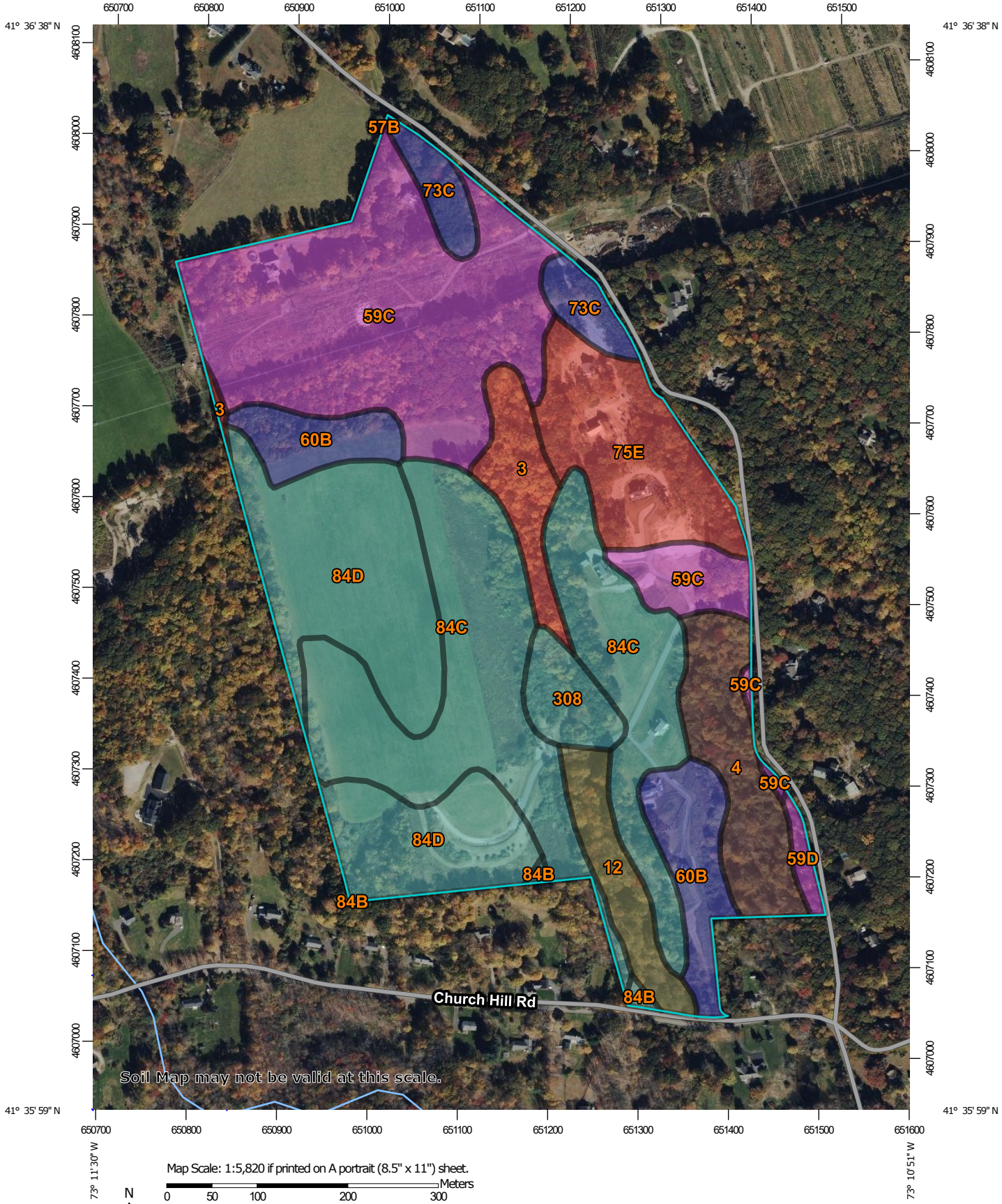


Appendix B:

NRCS Soil Survey Information

NRCS Soil Survey Information

Hydrologic Soil Group—State of Connecticut
(NRCS AOI)



Map Scale: 1:5,820 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 50 100 200 300

Feet
0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

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
C
C/D
D
Not rated or not available

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

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: State of Connecticut
Survey Area Data: Version 22, Sep 12, 2022

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

Date(s) aerial images were photographed: Oct 21, 2022—Oct 27, 2022

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
3	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	D	3.5	3.6%
4	Leicester fine sandy loam	B/D	5.9	6.0%
12	Raypol silt loam	C/D	3.4	3.5%
57B	Gloucester gravelly sandy loam, 3 to 8 percent slopes	A	0.0	0.0%
59C	Gloucester gravelly sandy loam, 3 to 15 percent slopes, extremely stony	A	23.8	24.1%
59D	Gloucester gravelly sandy loam, 15 to 35 percent slopes, extremely stony	A	0.6	0.6%
60B	Canton and Charlton fine sandy loams, 3 to 8 percent slopes	B	6.6	6.7%
73C	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	B	3.1	3.2%
75E	Hollis-Chatfield-Rock outcrop complex, 15 to 45 percent slopes	D	8.2	8.3%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	C	0.3	0.3%
84C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes	C	23.4	23.7%
84D	Paxton and Montauk fine sandy loams, 15 to 25 percent slopes	C	17.4	17.7%
308	Udorthents, smoothed	C	2.4	2.4%
Totals for Area of Interest			**98.8**	**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

Appendix C:

Erosion and Sedimentation Control Checklist
Long Term Stormwater Operation and Maintenance Measures

Erosion and Sedimentation Control Checklist

GCE Solar – Woodbury, CT – Fawn Meadow Ln

Best Management Practices – Maintenance/ Evaluation Checklist

Construction Practices

Best Management Practice	Inspection Frequency	Date Inspected	Inspector	Minimum Maintenance and Key Items to Check	Cleaning/Repair Needed ☐yes ☐no (List Items)	Date of Cleaning/Repair	Performed by
Silt Fencing	Once per week or after a 0.5″ or greater storm event						
Compost Filter Sock	Once per week or after a 0.5″ or greater storm event						
Straw Wattles	Once per week or after a 0.5″ or greater storm event						
Stabilized Construction Exit	Once per week or after a 0.5″ or greater storm event						
Temporary Sediment Trap & Diversion Swales	Once per week or after a 0.5″ or greater storm event						
Vegetated Slope Stabilization	Once per week or after a 0.5″ or greater storm event						
Energy Dissipators	Once per week or after a 0.5″ or greater storm event						

Stormwater Control Manager _____

Long Term Stormwater Operation and Maintenance Measures

GCE Solar – Woodbury, CT – Fawn Meadow Ln

Best Management Practices – Maintenance/ Evaluation Checklist

Long Term Practices

Best Management Practice	Inspection Frequency	Date Inspected	Inspector	Minimum Maintenance and Key Items to Check	Cleaning/Repair Needed ☐yes ☐no (List Items)	Date of Cleaning/Repair	Performed by
Trash/Litter	Routinely pick up and remove litter from entire property as required.						
Vegetated Areas	Inspect bi-annually. Replant bare areas upon identification.						

Stormwater Control Manager _____

Project Information

Site

Project Name:	Radiant Meadows Solar
Address or Locus:	Fawn Meadow Lane
City, State & Zip:	Woodbury, CT 06798

Developer

Client Name:	Greenskies Clean Energy, LLC
Client Address:	127 Washington Avenue, West Building, Lower Level
Client City, State & Zip:	North Haven, CT 06473
Client Telephone No.:	(860) 398-5408
Client Cell Phone:	
Client E-Mail:	

Site Supervisor

Site Manager Name:	To be determined
Site Manager Address:	
Site Manager City, State & Zip:	
Site Manager Telephone No.:	
Site Manager Cell Phone:	
Site Manager E-Mail:	

Appendix D:

Sediment Trap Sizing
HydroCAD: Existing Conditions
HydroCAD: Proposed Conditions

Sediment Trap Sizing

Sediment Trap Sizing
Radiant Meadows Solar
May 2024

TST #	Tributary Acreage, ac	*(134 cy / acre)** Volume Required Below Top of Spillway, cf	Volume Provided in Permanent Basin Below Top of Spillway, cf
1A	3.1	11,130	12,283
2A	2.6	9,552	10,149
2B	2.0	7,226	9,060

* Per 2024 Connecticut Guidelines for Soil Erosion and Sediment Control

Summary for Pond 1A: (new Pond)

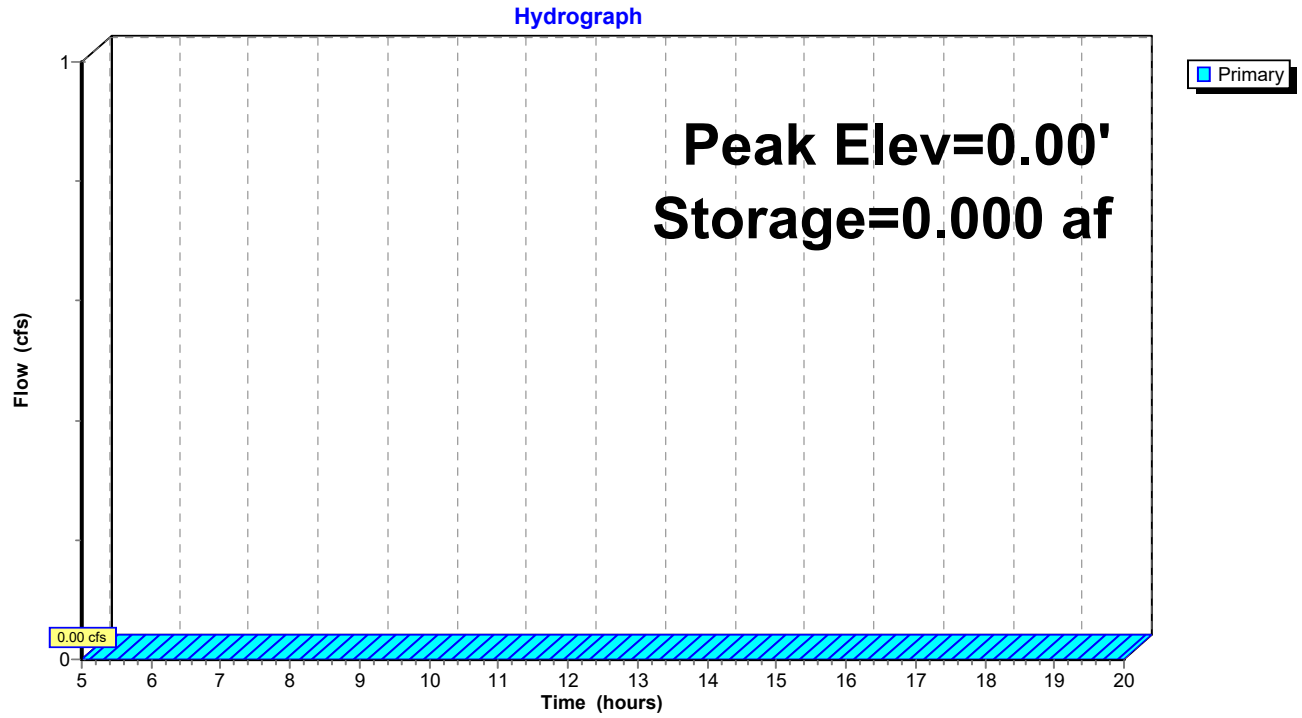
[43] Hint: Has no inflow (Outflow=Zero)

Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	0.282 af	**100.00'W x 15.00'L x 4.00'H Prismatoid Z=3.0**

Device	Routing	Invert	Outlet Devices
#1	Primary	698.50'	**12.0' long + 1.0 '/' SideZ x 5.0' 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=0.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1A: (new Pond)



Summary for Pond 2A: (new Pond)

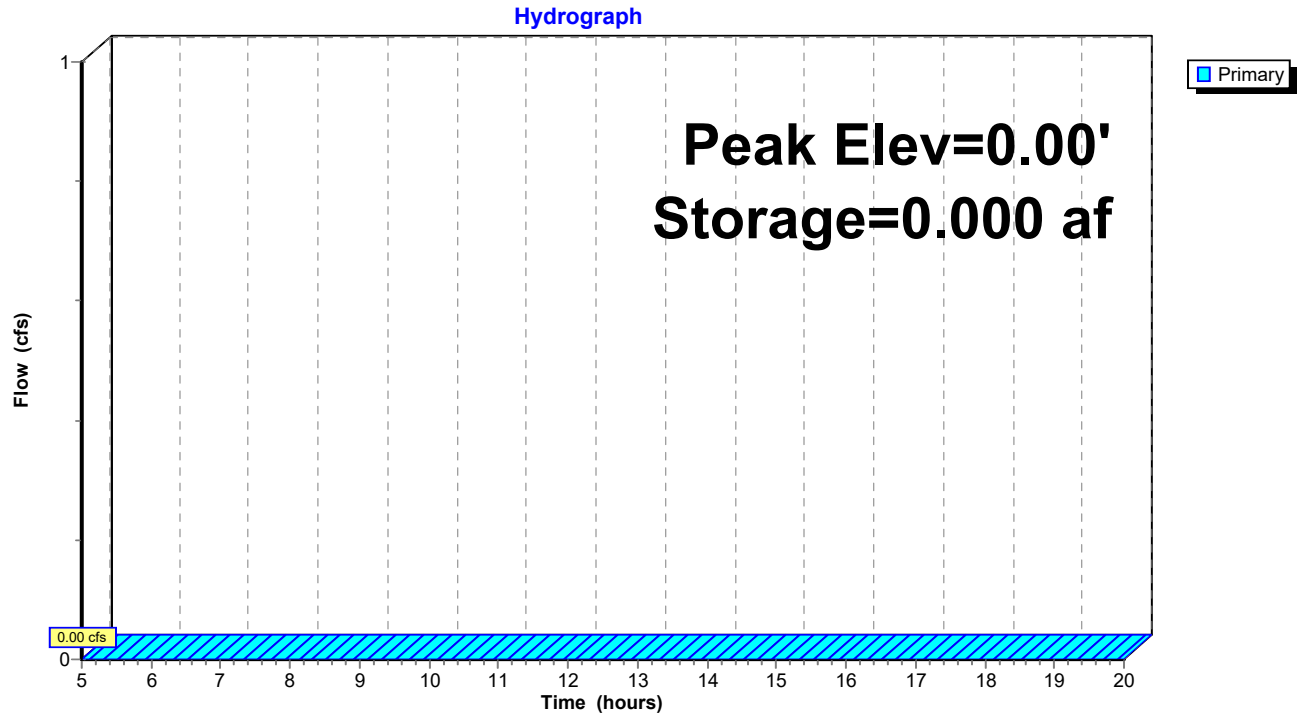
[43] Hint: Has no inflow (Outflow=Zero)

Volume	Invert	Avail.Storage	Storage Description
#1	724.00'	0.205 af	**40.00'W x 30.00'L x 4.00'H Prismatoid Z=3.0**

Device	Routing	Invert	Outlet Devices
#1	Primary	726.50'	**12.0' long + 1.0 '/' SideZ x 5.0' 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=0.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 2A: (new Pond)



Summary for Pond 2B: (new Pond)

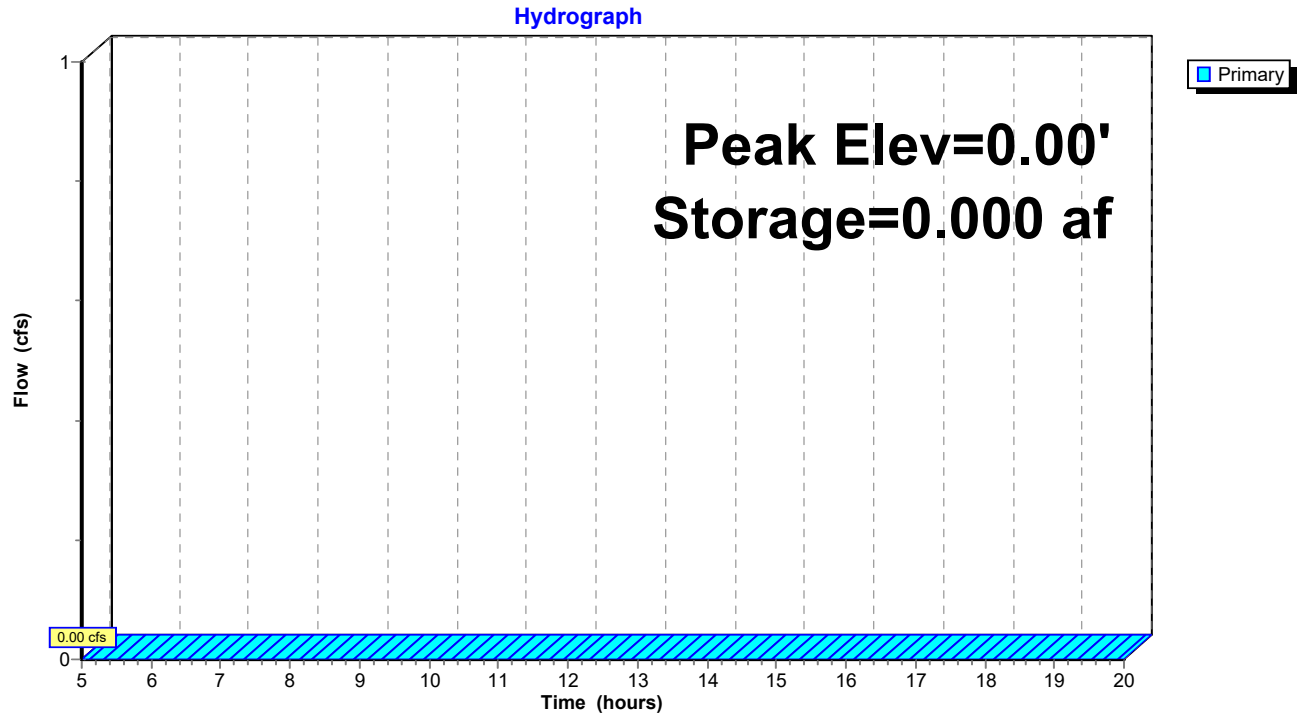
[43] Hint: Has no inflow (Outflow=Zero)

Volume	Invert	Avail.Storage	Storage Description
#1	700.00'	0.208 af	**70.00'W x 15.00'L x 4.00'H Prismatoid Z=3.0**

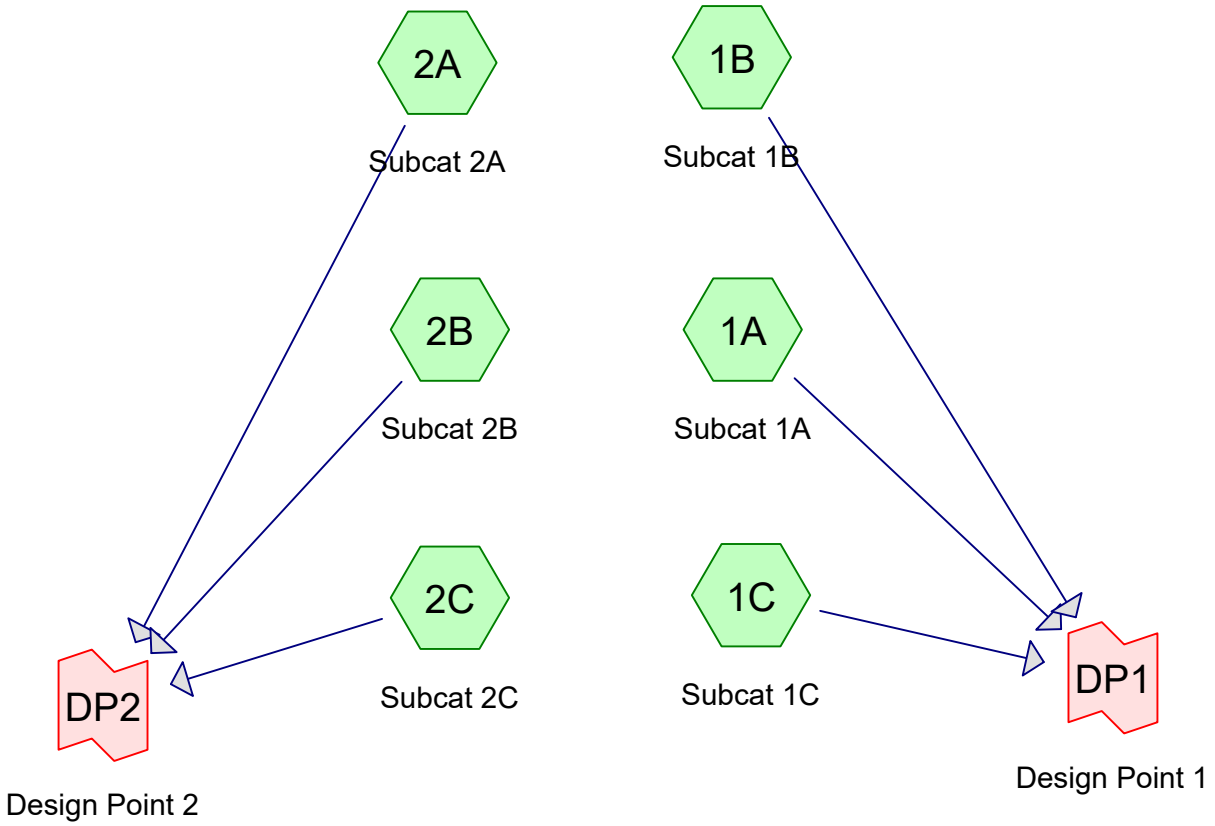
Device	Routing	Invert	Outlet Devices
#1	Primary	702.50'	**12.0' long + 1.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=0.00' (Free Discharge)
└**1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 2B: (new Pond)



HydroCAD Analysis: Existing Conditions



Subcat Reach Pond Link

Routing Diagram for EX Conditions
Prepared by VHB, Inc, Printed 5/1/2024

Project Notes

Defined 4 rainfall events from CT-Woodbury IDF
Copied 10 events from CT-Woodbury 24-hr S1 storm

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-yr	CT-Woodbury 24-hr S1	2-yr	Default	24.00	1	3.54	2
2	25-yr	CT-Woodbury 24-hr S1	25-yr	Default	24.00	1	6.95	2
3	50-yr	CT-Woodbury 24-hr S1	50-yr	Default	24.00	1	7.91	2
4	100-yr	CT-Woodbury 24-hr S1	100-yr	Default	24.00	1	8.97	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.322	68	<50% Grass cover, Poor, HSG A (1B)
1.127	79	<50% Grass cover, Poor, HSG B (1A, 1B, 2A)
16.450	86	<50% Grass cover, Poor, HSG C (1A, 1B, 1C, 2A, 2B, 2C)
0.594	73	Woods, Fair, HSG C (2A, 2B)
18.493	**85**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.322	HSG A	1B
1.127	HSG B	1A, 1B, 2A
17.044	HSG C	1A, 1B, 1C, 2A, 2B, 2C
0.000	HSG D	
0.000	Other	
18.493		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.322	1.127	16.450	0.000	0.000	17.899	<50% Grass cover, Poor	1A, 1B, 1C, 2A, 2B, 2C
0.000	0.000	0.594	0.000	0.000	0.594	Woods, Fair	2A, 2B
0.322	**1.127**	**17.044**	**0.000**	**0.000**	**18.493**	**TOTAL AREA**	

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: Subcat 1A Runoff Area=4.221 ac 0.00% Impervious Runoff Depth=2.13"
Tc=10.0 min CN=86 Runoff=9.61 cfs 0.751 af

Subcatchment1B: Subcat 1B Runoff Area=1.143 ac 0.00% Impervious Runoff Depth=1.46"
Tc=10.0 min CN=77 Runoff=1.74 cfs 0.139 af

Subcatchment1C: Subcat 1C Runoff Area=4.953 ac 0.00% Impervious Runoff Depth=2.13"
Tc=10.0 min CN=86 Runoff=11.28 cfs 0.881 af

Subcatchment2A: Subcat 2A Runoff Area=3.902 ac 0.00% Impervious Runoff Depth=1.97"
Tc=10.0 min CN=84 Runoff=8.20 cfs 0.641 af

Subcatchment2B: Subcat 2B Runoff Area=3.420 ac 0.00% Impervious Runoff Depth=2.05"
Tc=10.0 min CN=85 Runoff=7.49 cfs 0.585 af

Subcatchment2C: Subcat 2C Runoff Area=0.854 ac 0.00% Impervious Runoff Depth=2.13"
Tc=10.0 min CN=86 Runoff=1.94 cfs 0.152 af

Link DP1: Design Point 1 Inflow=22.62 cfs 1.770 af
Primary=22.62 cfs 1.770 af

Link DP2: Design Point 2 Inflow=17.64 cfs 1.377 af
Primary=17.64 cfs 1.377 af

Total Runoff Area = 18.493 ac Runoff Volume = 3.148 af Average Runoff Depth = 2.04"
100.00% Pervious = 18.493 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1A: Subcat 1A

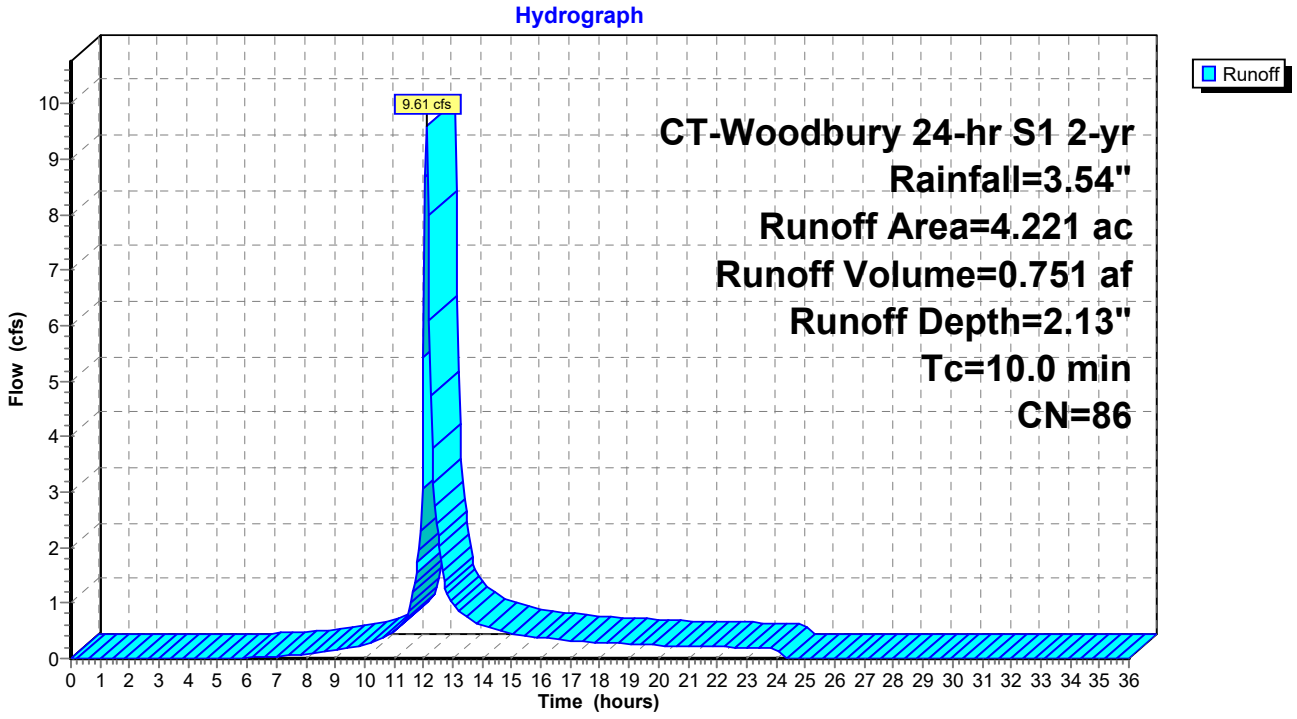
Runoff = 9.61 cfs @ 12.09 hrs, Volume= 0.751 af, Depth= 2.13"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 2-yr Rainfall=3.54"

Area (ac)	CN	Description
0.071	79	<50% Grass cover, Poor, HSG B
4.150	86	<50% Grass cover, Poor, HSG C
4.221	86	Weighted Average
4.221		100.00% Pervious Area

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

Subcatchment 1A: Subcat 1A



Summary for Subcatchment 1B: Subcat 1B

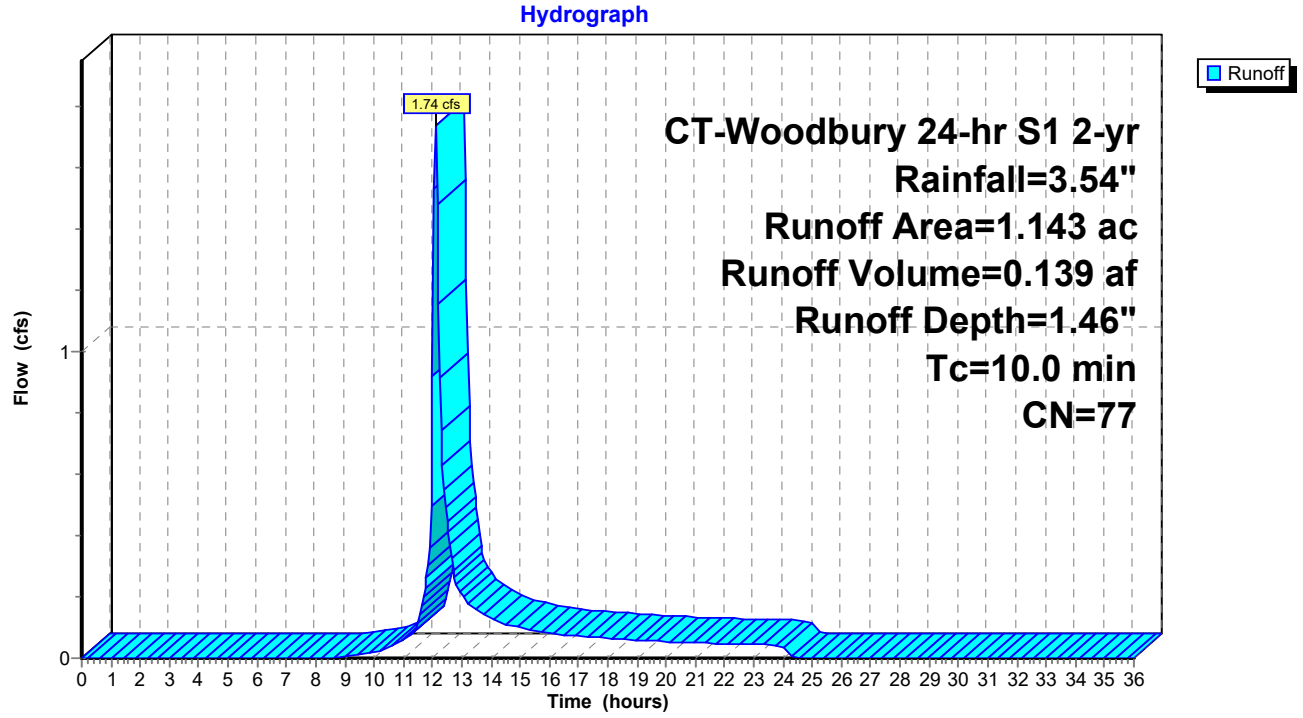
Runoff = 1.74 cfs @ 12.10 hrs, Volume= 0.139 af, Depth= 1.46"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 2-yr Rainfall=3.54"

Area (ac)	CN	Description
0.322	68	<50% Grass cover, Poor, HSG A
0.678	79	<50% Grass cover, Poor, HSG B
0.143	86	<50% Grass cover, Poor, HSG C
1.143	77	Weighted Average
1.143		100.00% Pervious Area

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

Subcatchment 1B: Subcat 1B



Summary for Subcatchment 1C: Subcat 1C

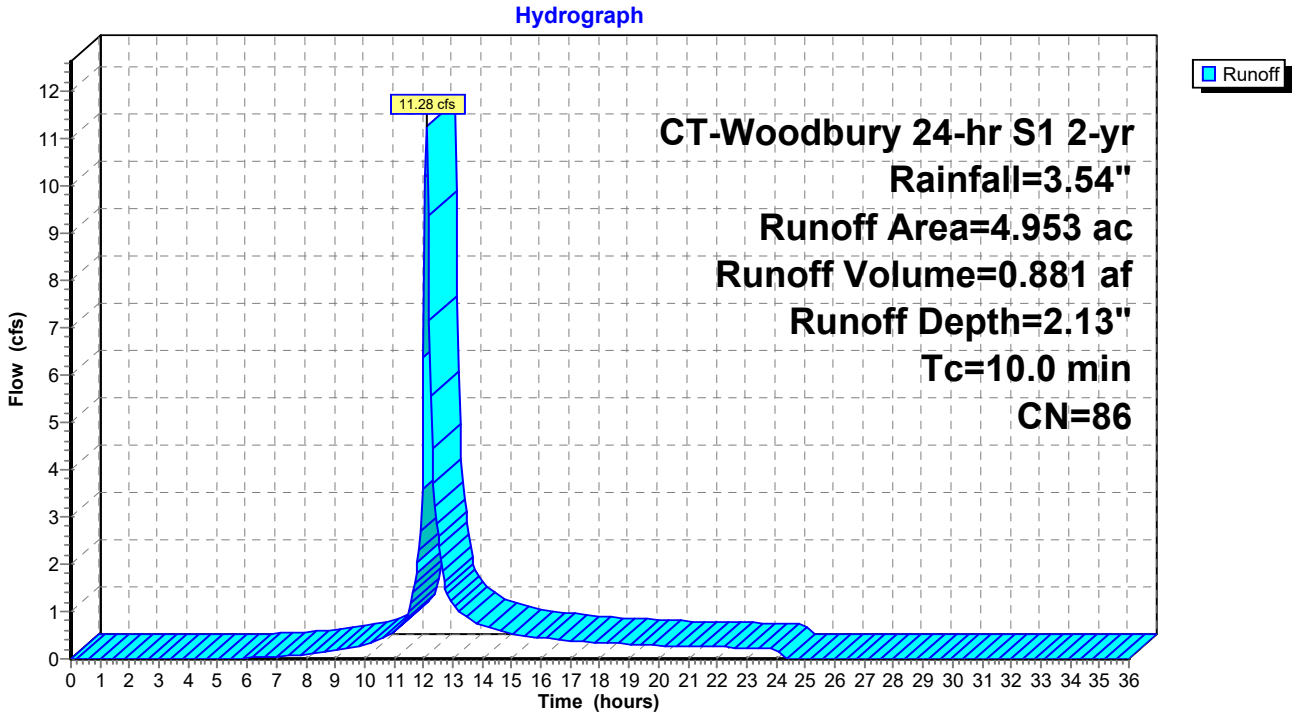
Runoff = 11.28 cfs @ 12.09 hrs, Volume= 0.881 af, Depth= 2.13"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 2-yr Rainfall=3.54"

Area (ac)	CN	Description
4.953	86	<50% Grass cover, Poor, HSG C
4.953		100.00% Pervious Area

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

Subcatchment 1C: Subcat 1C



Summary for Subcatchment 2A: Subcat 2A

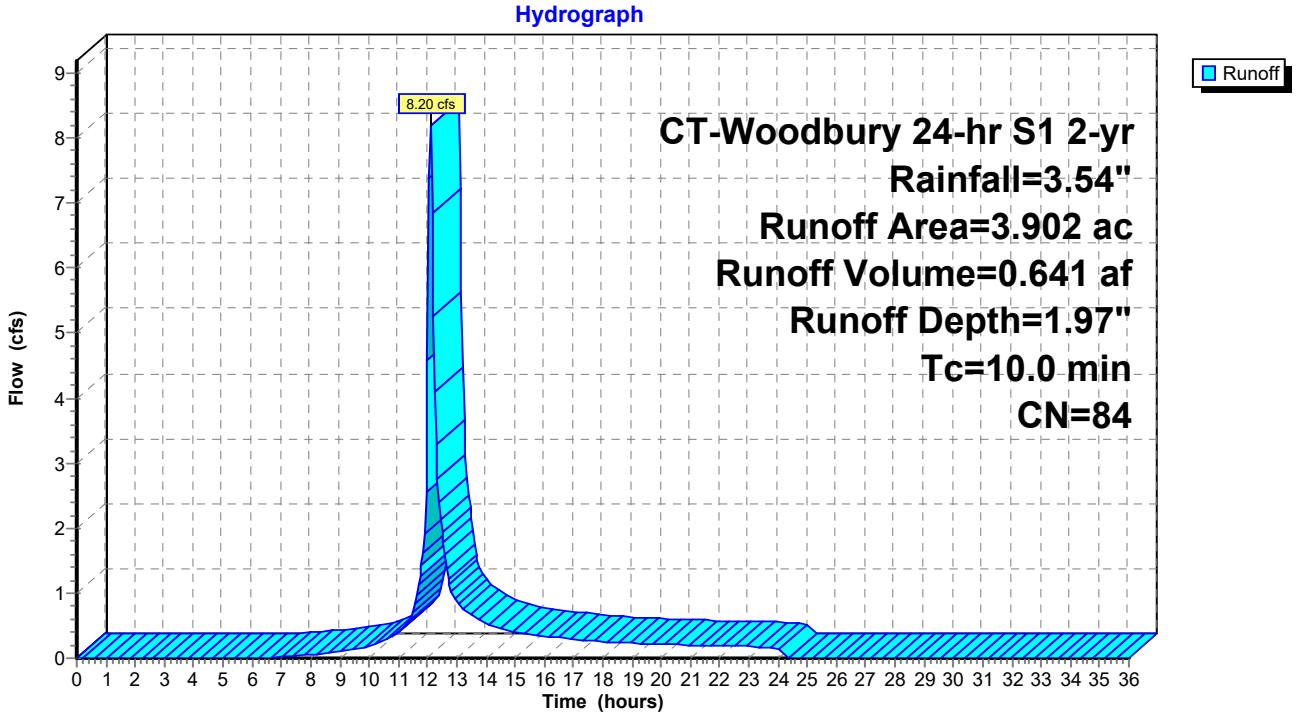
Runoff = 8.20 cfs @ 12.09 hrs, Volume= 0.641 af, Depth= 1.97"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 2-yr Rainfall=3.54"

Area (ac)	CN	Description
0.436	73	Woods, Fair, HSG C
0.378	79	<50% Grass cover, Poor, HSG B
3.088	86	<50% Grass cover, Poor, HSG C
3.902	84	Weighted Average
3.902		100.00% Pervious Area

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

Subcatchment 2A: Subcat 2A



Summary for Subcatchment 2B: Subcat 2B

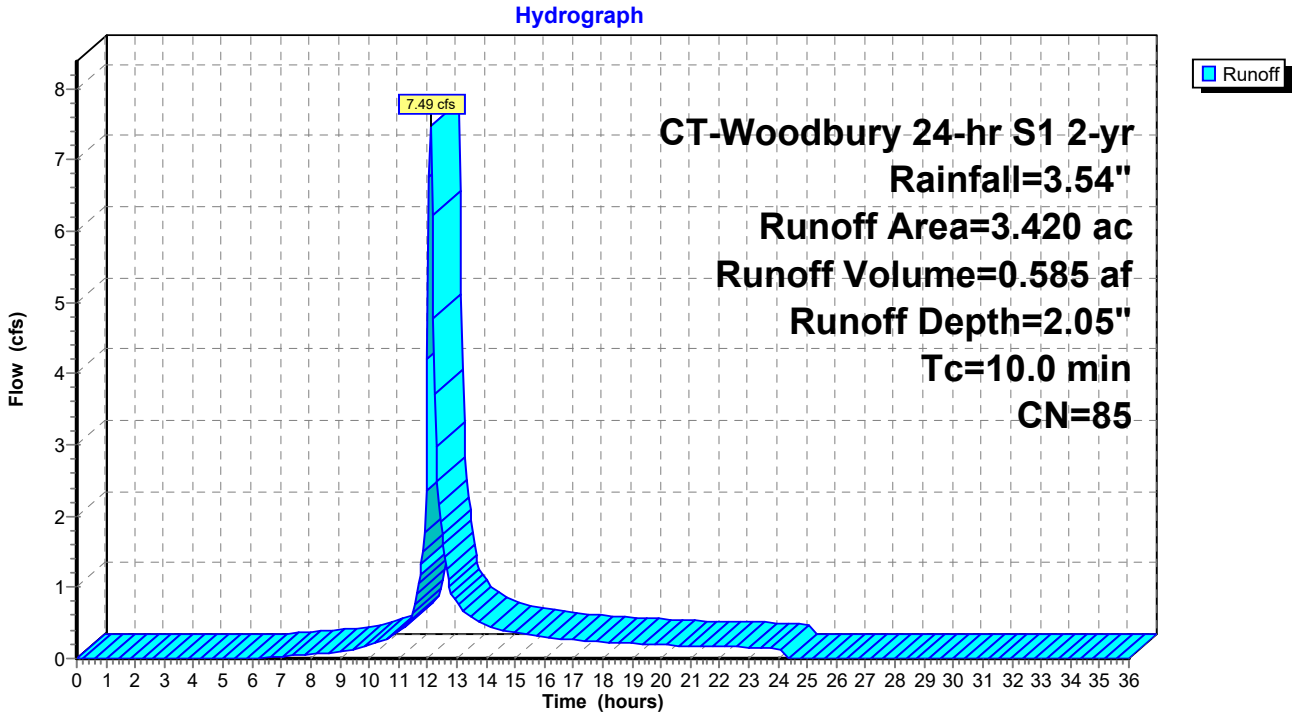
Runoff = 7.49 cfs @ 12.09 hrs, Volume= 0.585 af, Depth= 2.05"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 2-yr Rainfall=3.54"

Area (ac)	CN	Description
0.158	73	Woods, Fair, HSG C
3.262	86	<50% Grass cover, Poor, HSG C
3.420	85	Weighted Average
3.420		100.00% Pervious Area

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

Subcatchment 2B: Subcat 2B



Summary for Subcatchment 2C: Subcat 2C

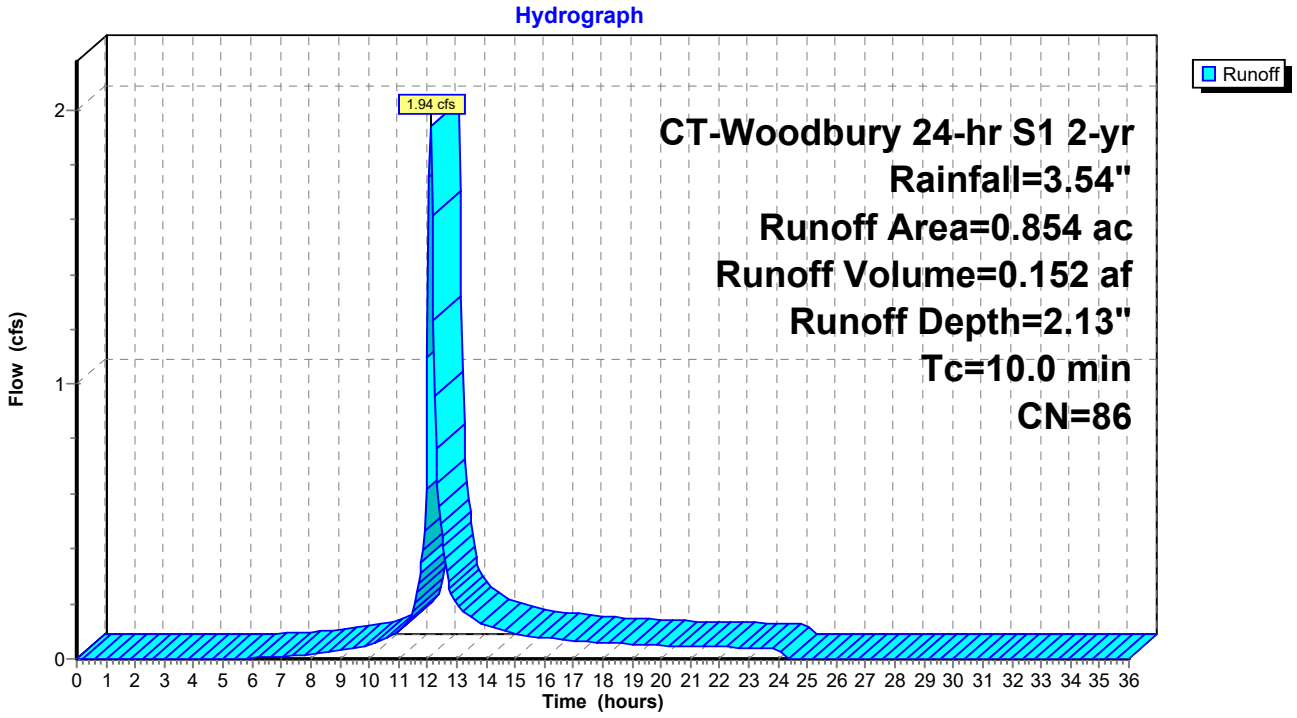
Runoff = 1.94 cfs @ 12.09 hrs, Volume= 0.152 af, Depth= 2.13"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 2-yr Rainfall=3.54"

Area (ac)	CN	Description
0.854	86	<50% Grass cover, Poor, HSG C
0.854		100.00% Pervious Area

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

Subcatchment 2C: Subcat 2C

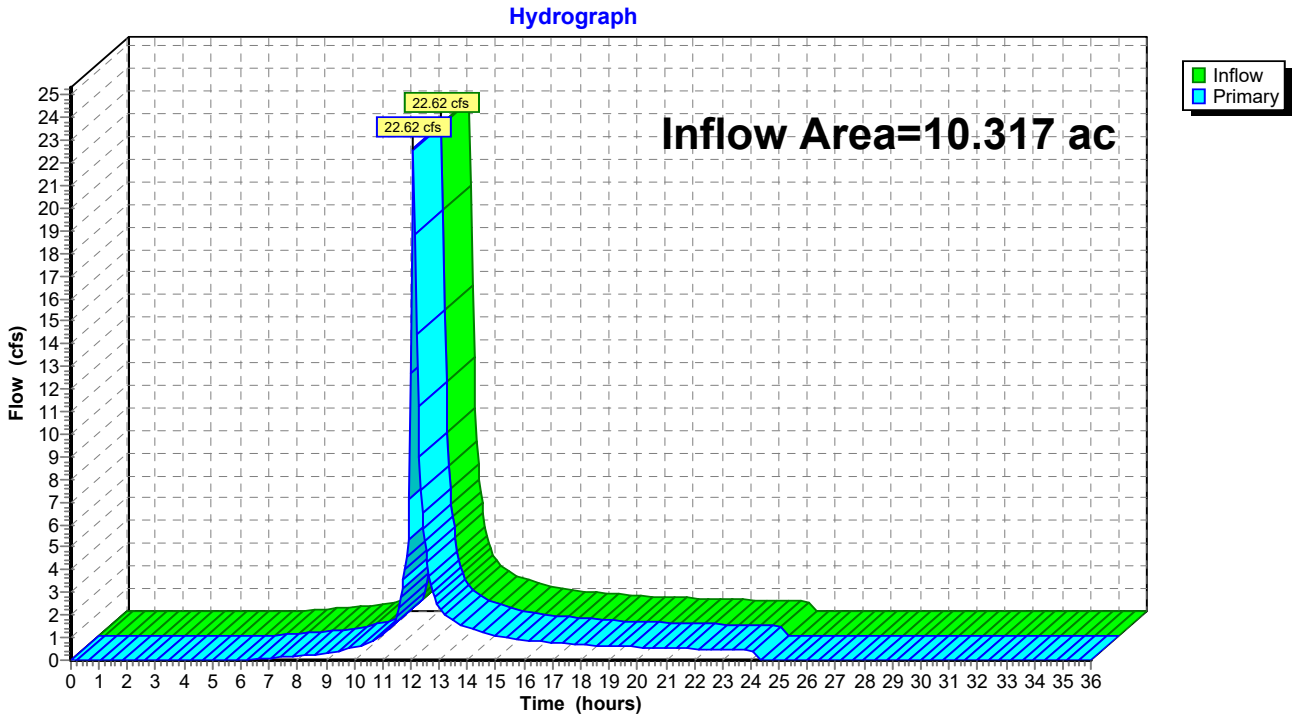


Summary for Link DP1: Design Point 1

Inflow Area = 10.317 ac, 0.00% Impervious, Inflow Depth = 2.06" for 2-yr event
Inflow = 22.62 cfs @ 12.09 hrs, Volume= 1.770 af
Primary = 22.62 cfs @ 12.09 hrs, Volume= 1.770 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP1: Design Point 1

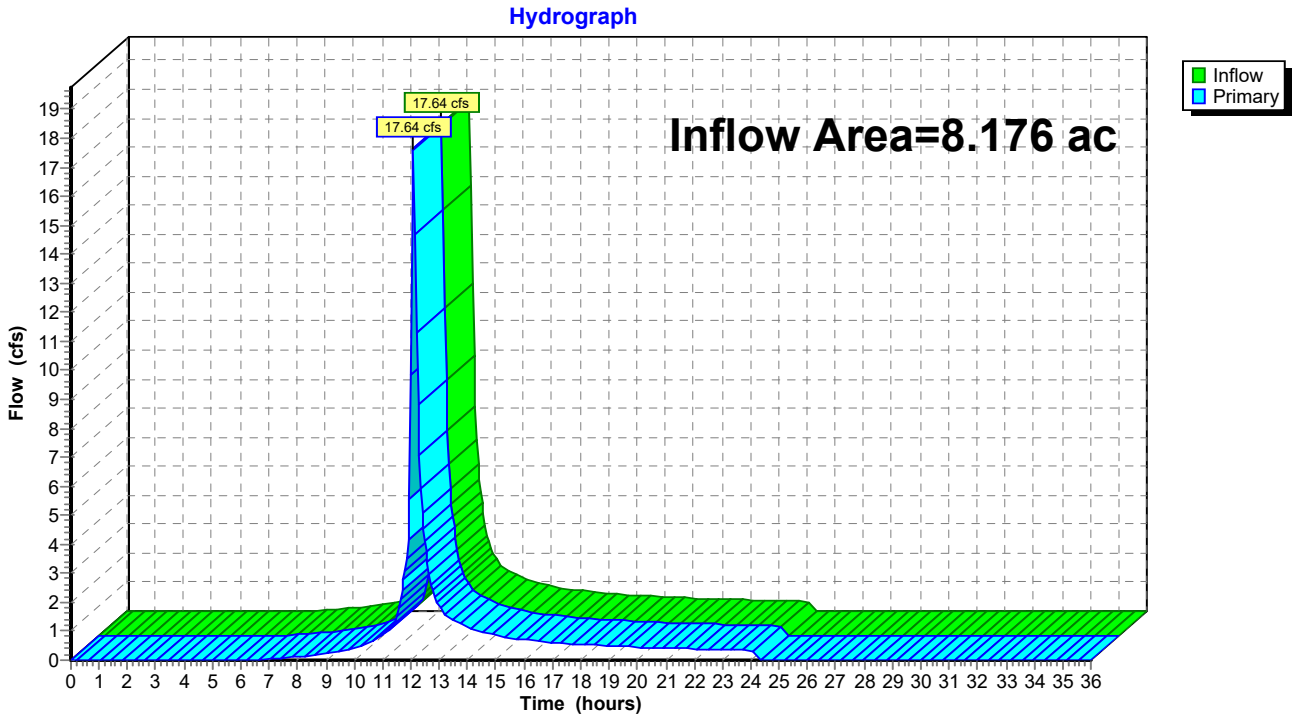


Summary for Link DP2: Design Point 2

Inflow Area = 8.176 ac, 0.00% Impervious, Inflow Depth = 2.02" for 2-yr event
Inflow = 17.64 cfs @ 12.09 hrs, Volume= 1.377 af
Primary = 17.64 cfs @ 12.09 hrs, Volume= 1.377 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP2: Design Point 2



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: Subcat 1A Runoff Area=4.221 ac 0.00% Impervious Runoff Depth=5.32"
Tc=10.0 min CN=86 Runoff=20.90 cfs 1.870 af

Subcatchment1B: Subcat 1B Runoff Area=1.143 ac 0.00% Impervious Runoff Depth=4.32"
Tc=10.0 min CN=77 Runoff=4.72 cfs 0.412 af

Subcatchment1C: Subcat 1C Runoff Area=4.953 ac 0.00% Impervious Runoff Depth=5.32"
Tc=10.0 min CN=86 Runoff=24.52 cfs 2.195 af

Subcatchment2A: Subcat 2A Runoff Area=3.902 ac 0.00% Impervious Runoff Depth=5.09"
Tc=10.0 min CN=84 Runoff=18.66 cfs 1.656 af

Subcatchment2B: Subcat 2B Runoff Area=3.420 ac 0.00% Impervious Runoff Depth=5.20"
Tc=10.0 min CN=85 Runoff=16.65 cfs 1.483 af

Subcatchment2C: Subcat 2C Runoff Area=0.854 ac 0.00% Impervious Runoff Depth=5.32"
Tc=10.0 min CN=86 Runoff=4.23 cfs 0.378 af

Link DP1: Design Point 1 Inflow=50.13 cfs 4.477 af
Primary=50.13 cfs 4.477 af

Link DP2: Design Point 2 Inflow=39.54 cfs 3.518 af
Primary=39.54 cfs 3.518 af

Total Runoff Area = 18.493 ac Runoff Volume = 7.995 af Average Runoff Depth = 5.19"
100.00% Pervious = 18.493 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1A: Subcat 1A

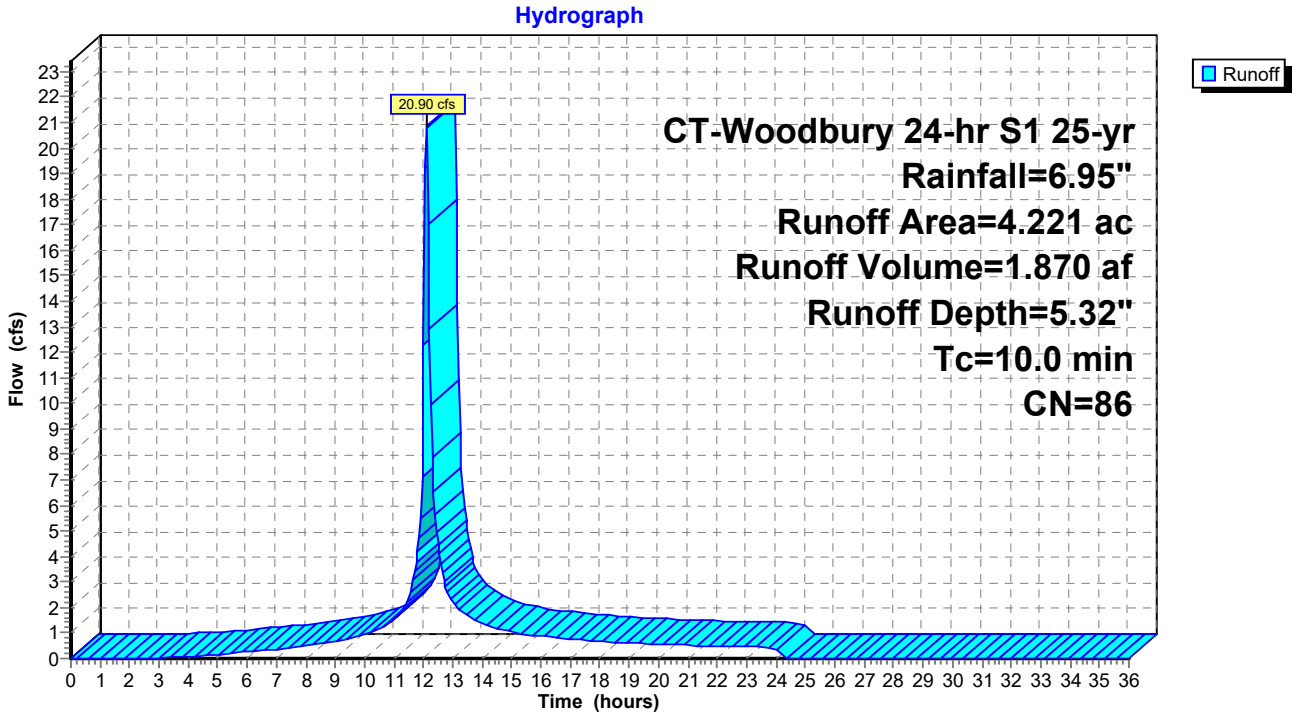
Runoff = 20.90 cfs @ 12.09 hrs, Volume= 1.870 af, Depth= 5.32"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 25-yr Rainfall=6.95"

Area (ac)	CN	Description
0.071	79	<50% Grass cover, Poor, HSG B
4.150	86	<50% Grass cover, Poor, HSG C
4.221	86	Weighted Average
4.221		100.00% Pervious Area

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

Subcatchment 1A: Subcat 1A



Summary for Subcatchment 1B: Subcat 1B

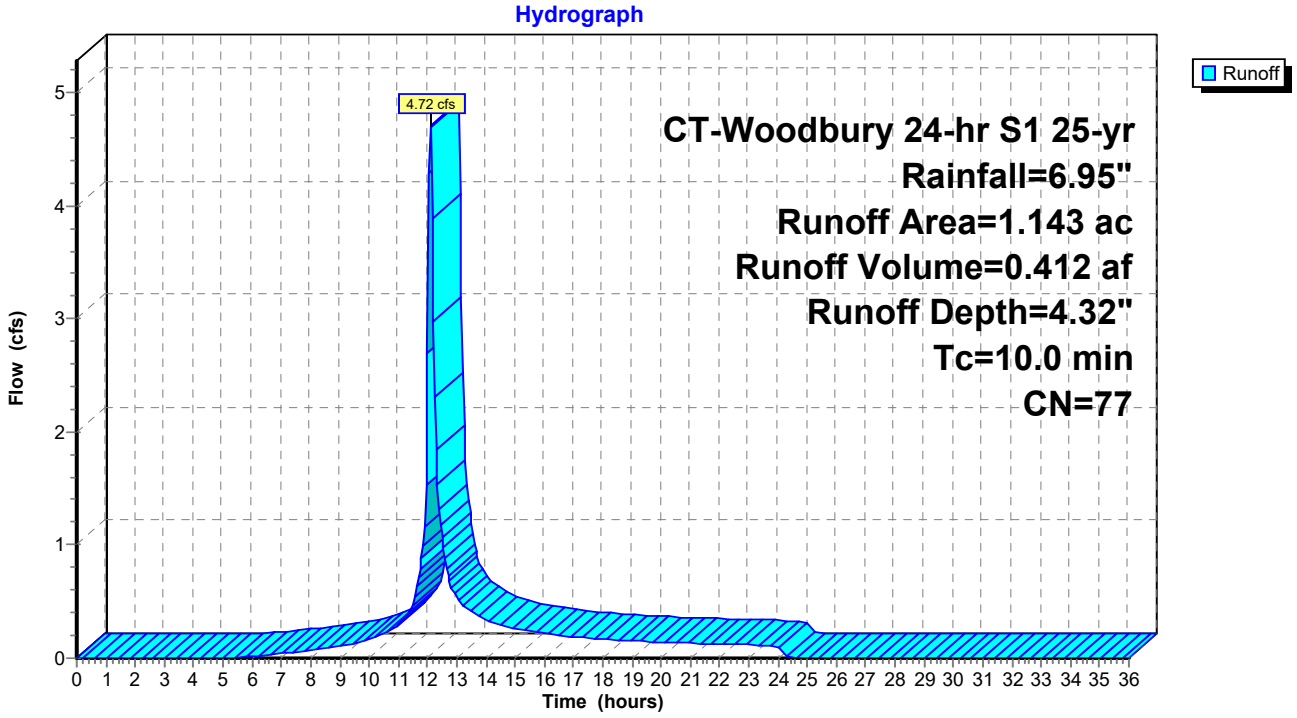
Runoff = 4.72 cfs @ 12.09 hrs, Volume= 0.412 af, Depth= 4.32"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 25-yr Rainfall=6.95"

Area (ac)	CN	Description
0.322	68	<50% Grass cover, Poor, HSG A
0.678	79	<50% Grass cover, Poor, HSG B
0.143	86	<50% Grass cover, Poor, HSG C
1.143	77	Weighted Average
1.143		100.00% Pervious Area

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

Subcatchment 1B: Subcat 1B



Summary for Subcatchment 1C: Subcat 1C

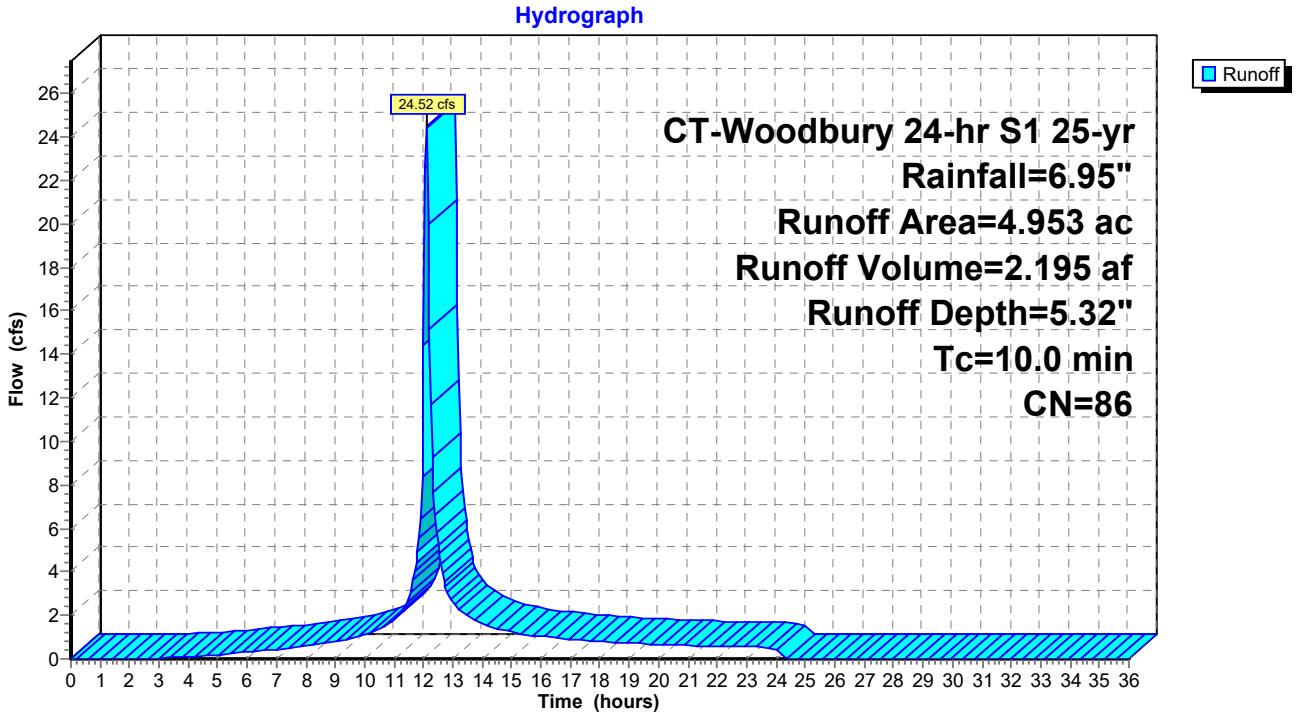
Runoff = 24.52 cfs @ 12.09 hrs, Volume= 2.195 af, Depth= 5.32"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 25-yr Rainfall=6.95"

Area (ac)	CN	Description
4.953	86	<50% Grass cover, Poor, HSG C
4.953		100.00% Pervious Area

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

Subcatchment 1C: Subcat 1C



Summary for Subcatchment 2A: Subcat 2A

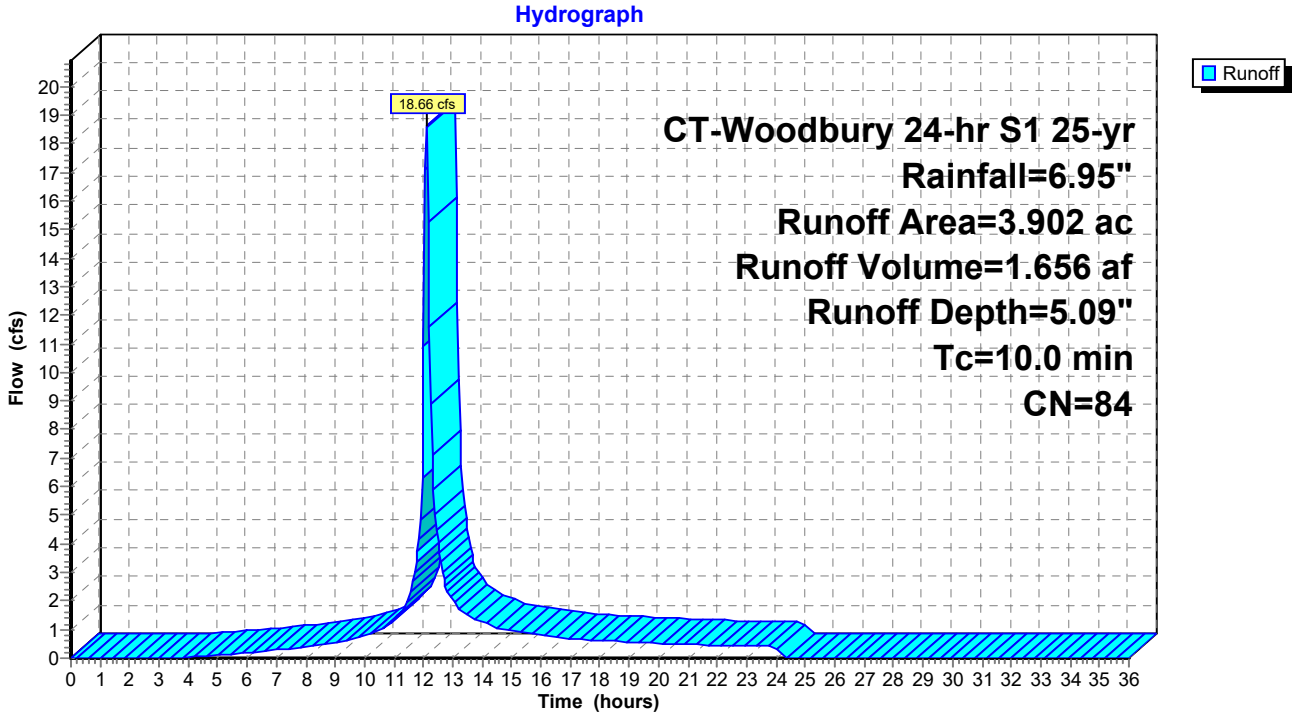
Runoff = 18.66 cfs @ 12.09 hrs, Volume= 1.656 af, Depth= 5.09"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 25-yr Rainfall=6.95"

Area (ac)	CN	Description
0.436	73	Woods, Fair, HSG C
0.378	79	<50% Grass cover, Poor, HSG B
3.088	86	<50% Grass cover, Poor, HSG C
3.902	84	Weighted Average
3.902		100.00% Pervious Area

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

Subcatchment 2A: Subcat 2A



Summary for Subcatchment 2B: Subcat 2B

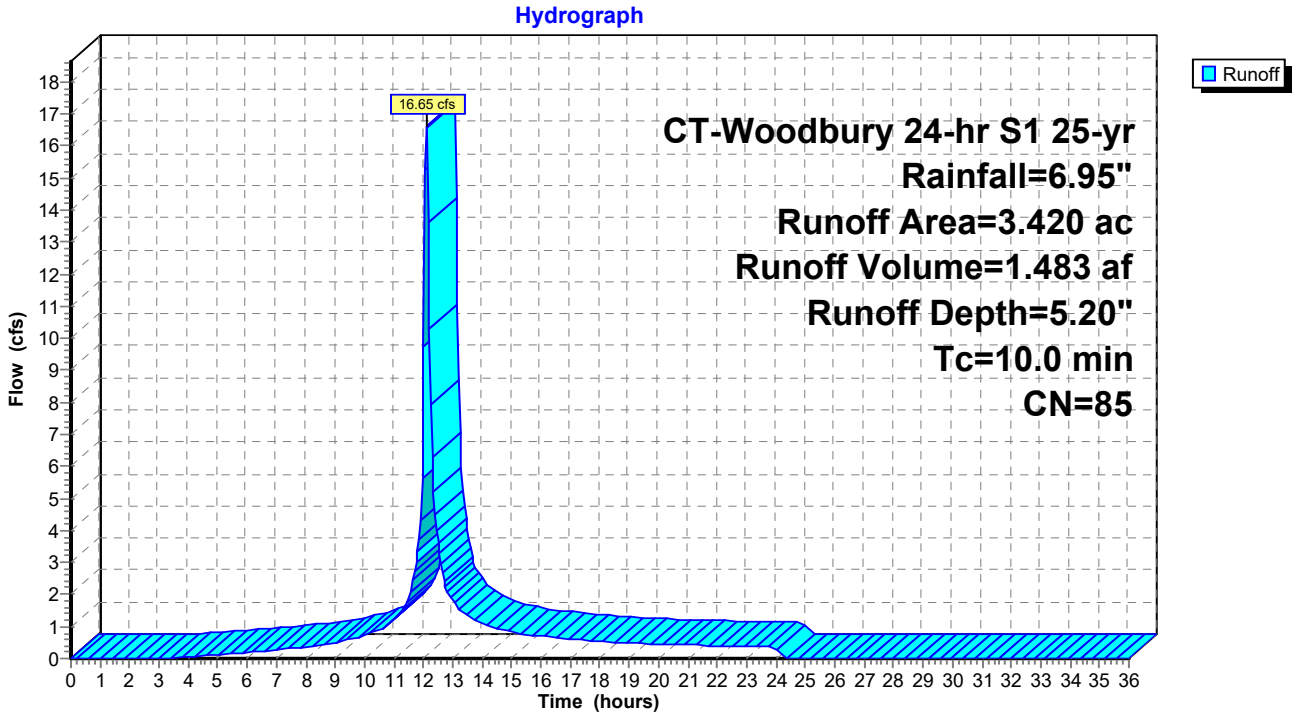
Runoff = 16.65 cfs @ 12.09 hrs, Volume= 1.483 af, Depth= 5.20"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 25-yr Rainfall=6.95"

Area (ac)	CN	Description
0.158	73	Woods, Fair, HSG C
3.262	86	<50% Grass cover, Poor, HSG C
3.420	85	Weighted Average
3.420		100.00% Pervious Area

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

Subcatchment 2B: Subcat 2B



Summary for Subcatchment 2C: Subcat 2C

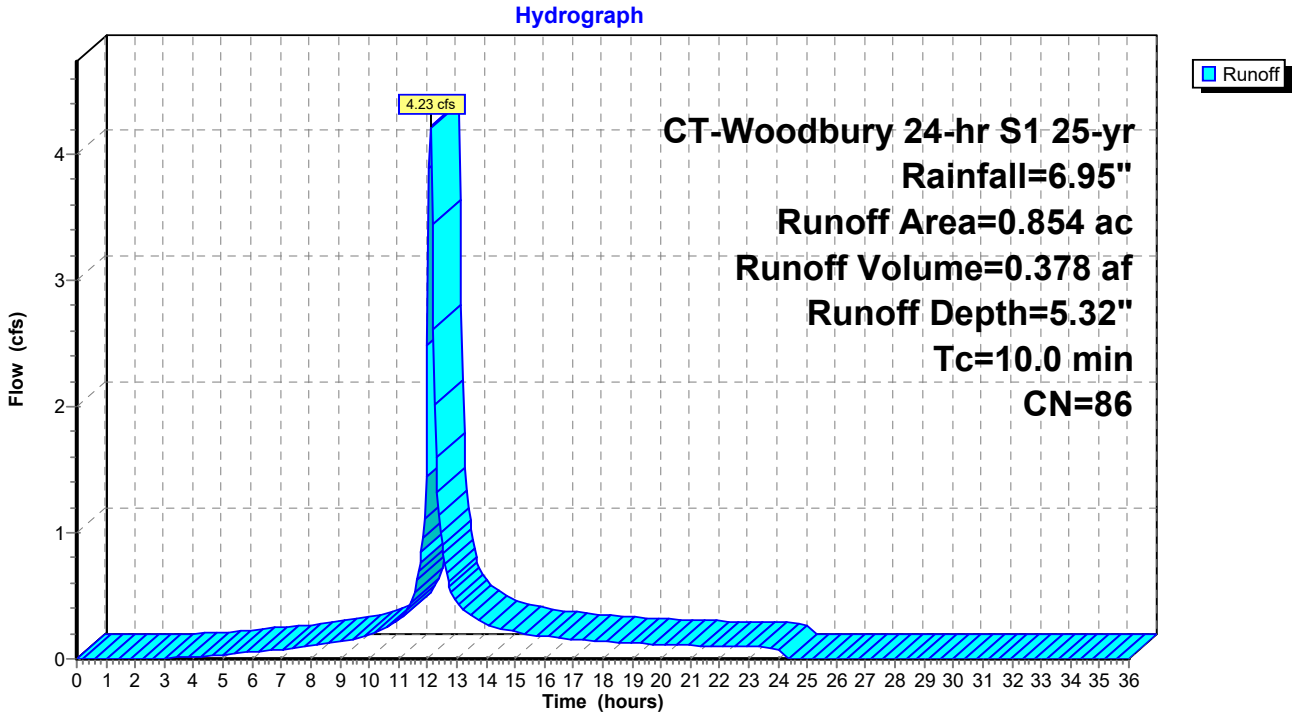
Runoff = 4.23 cfs @ 12.09 hrs, Volume= 0.378 af, Depth= 5.32"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 25-yr Rainfall=6.95"

Area (ac)	CN	Description
0.854	86	<50% Grass cover, Poor, HSG C
0.854		100.00% Pervious Area

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

Subcatchment 2C: Subcat 2C

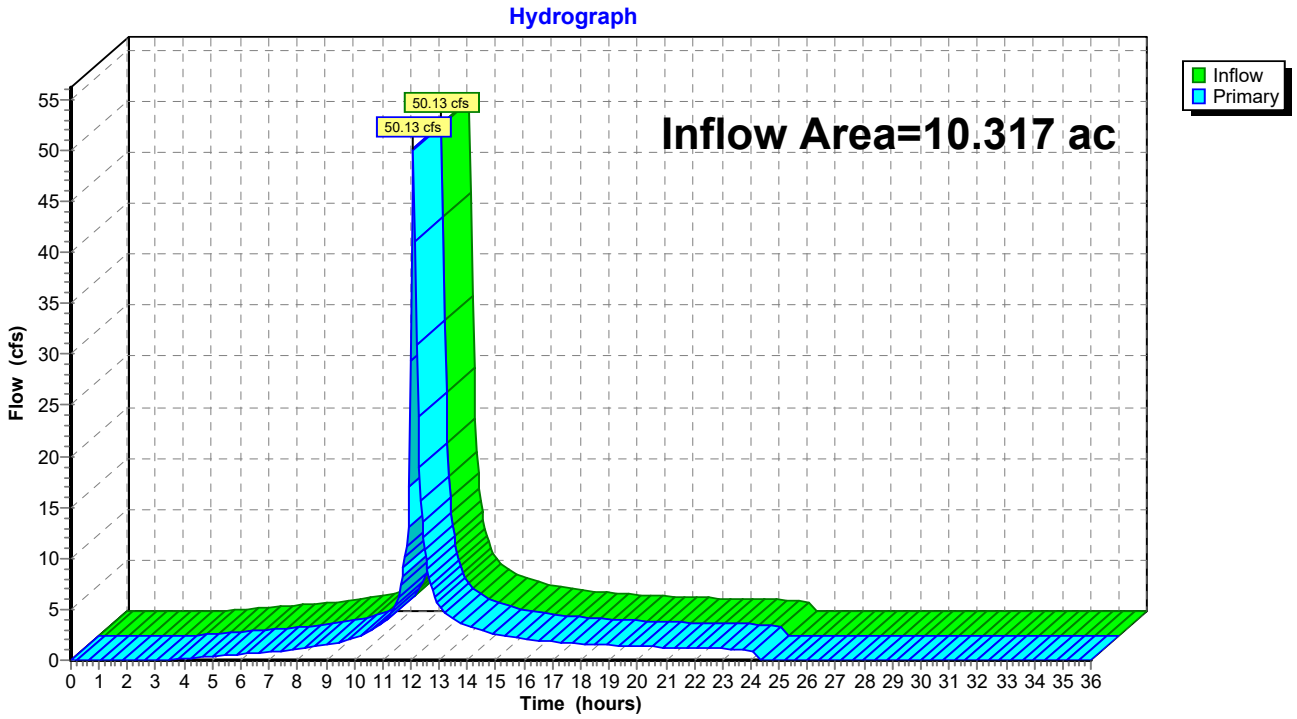


Summary for Link DP1: Design Point 1

Inflow Area = 10.317 ac, 0.00% Impervious, Inflow Depth = 5.21" for 25-yr event
Inflow = 50.13 cfs @ 12.09 hrs, Volume= 4.477 af
Primary = 50.13 cfs @ 12.09 hrs, Volume= 4.477 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP1: Design Point 1

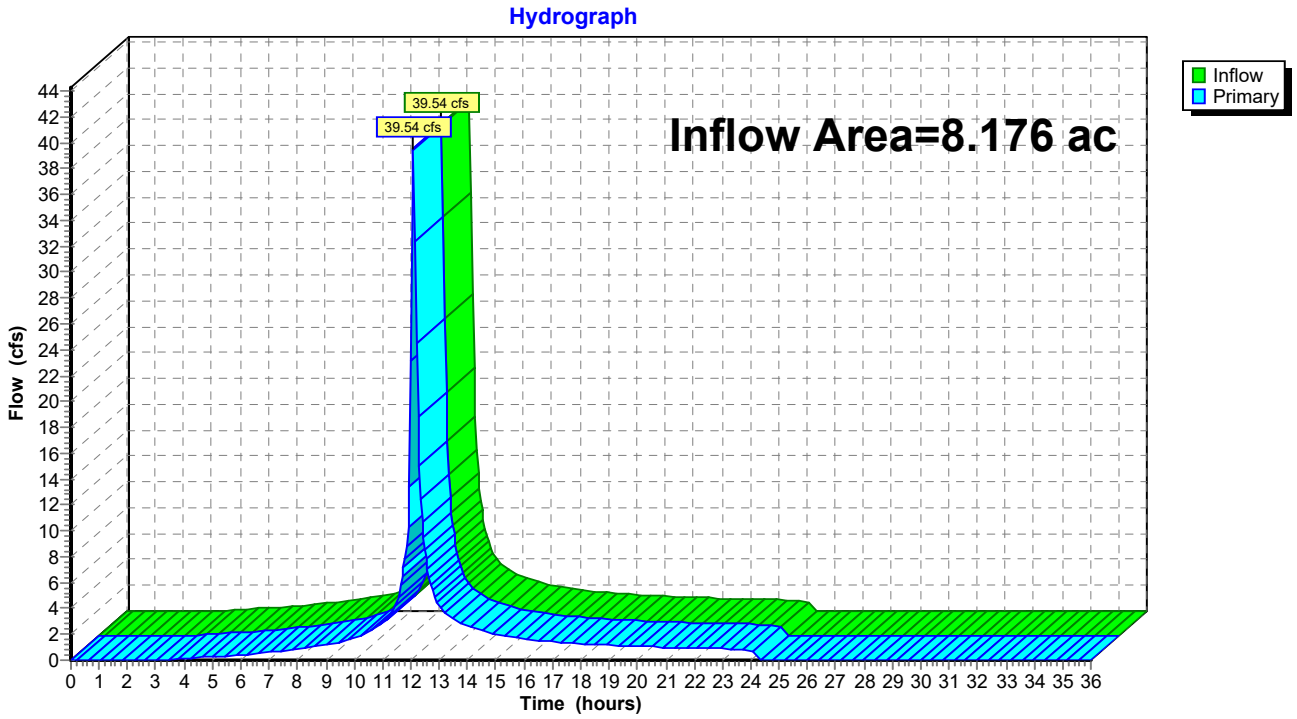


Summary for Link DP2: Design Point 2

Inflow Area = 8.176 ac, 0.00% Impervious, Inflow Depth = 5.16" for 25-yr event
Inflow = 39.54 cfs @ 12.09 hrs, Volume= 3.518 af
Primary = 39.54 cfs @ 12.09 hrs, Volume= 3.518 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP2: Design Point 2



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: Subcat 1A Runoff Area=4.221 ac 0.00% Impervious Runoff Depth=6.24"
Tc=10.0 min CN=86 Runoff=24.08 cfs 2.196 af

Subcatchment1B: Subcat 1B Runoff Area=1.143 ac 0.00% Impervious Runoff Depth=5.19"
Tc=10.0 min CN=77 Runoff=5.59 cfs 0.495 af

Subcatchment1C: Subcat 1C Runoff Area=4.953 ac 0.00% Impervious Runoff Depth=6.24"
Tc=10.0 min CN=86 Runoff=28.25 cfs 2.577 af

Subcatchment2A: Subcat 2A Runoff Area=3.902 ac 0.00% Impervious Runoff Depth=6.01"
Tc=10.0 min CN=84 Runoff=21.62 cfs 1.954 af

Subcatchment2B: Subcat 2B Runoff Area=3.420 ac 0.00% Impervious Runoff Depth=6.13"
Tc=10.0 min CN=85 Runoff=19.24 cfs 1.746 af

Subcatchment2C: Subcat 2C Runoff Area=0.854 ac 0.00% Impervious Runoff Depth=6.24"
Tc=10.0 min CN=86 Runoff=4.87 cfs 0.444 af

Link DP1: Design Point 1 Inflow=57.92 cfs 5.268 af
Primary=57.92 cfs 5.268 af

Link DP2: Design Point 2 Inflow=45.73 cfs 4.144 af
Primary=45.73 cfs 4.144 af

Total Runoff Area = 18.493 ac Runoff Volume = 9.412 af Average Runoff Depth = 6.11"
100.00% Pervious = 18.493 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1A: Subcat 1A

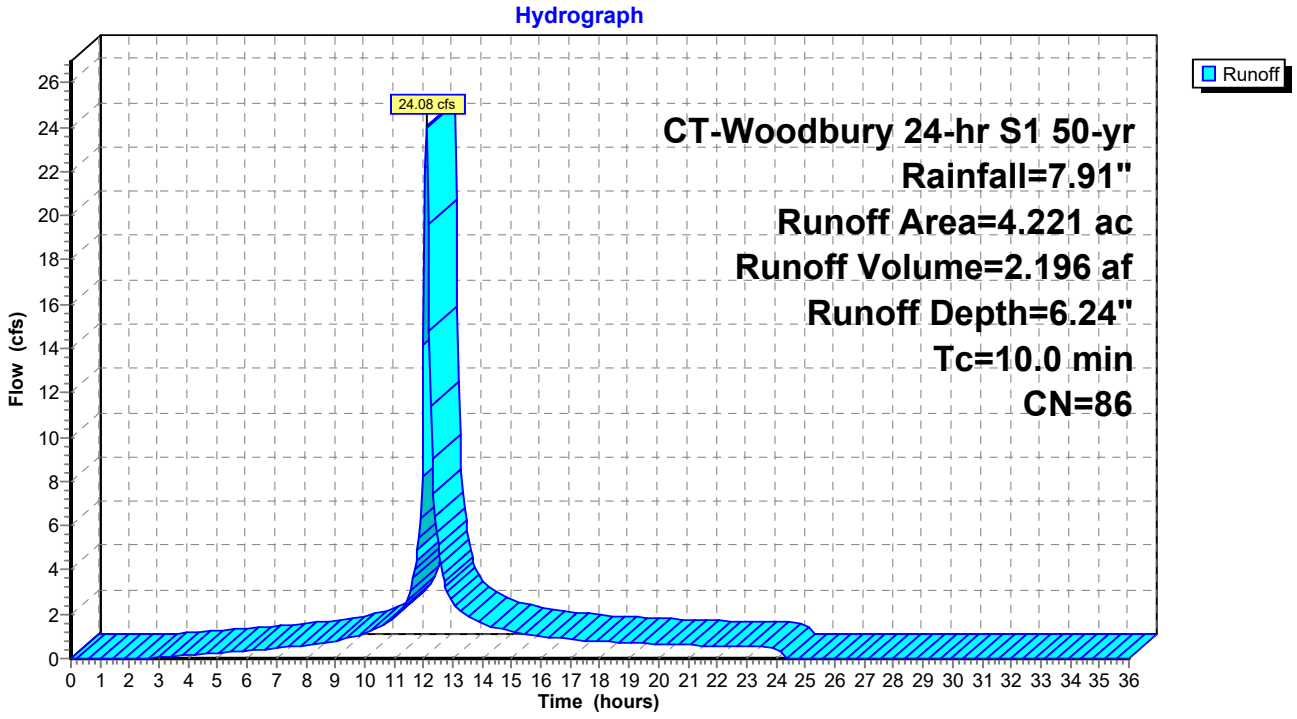
Runoff = 24.08 cfs @ 12.09 hrs, Volume= 2.196 af, Depth= 6.24"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 50-yr Rainfall=7.91"

Area (ac)	CN	Description
0.071	79	<50% Grass cover, Poor, HSG B
4.150	86	<50% Grass cover, Poor, HSG C
4.221	86	Weighted Average
4.221		100.00% Pervious Area

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

Subcatchment 1A: Subcat 1A



Summary for Subcatchment 1B: Subcat 1B

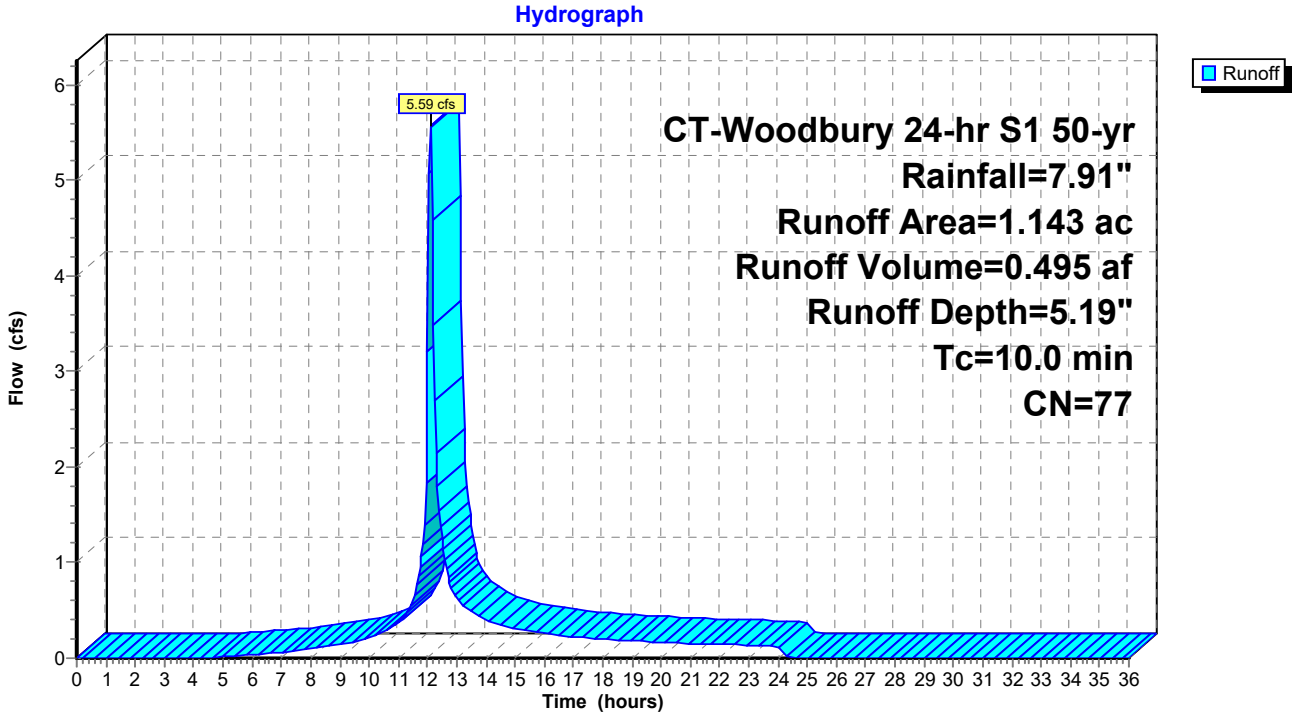
Runoff = 5.59 cfs @ 12.09 hrs, Volume= 0.495 af, Depth= 5.19"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 50-yr Rainfall=7.91"

Area (ac)	CN	Description
0.322	68	<50% Grass cover, Poor, HSG A
0.678	79	<50% Grass cover, Poor, HSG B
0.143	86	<50% Grass cover, Poor, HSG C
1.143	77	Weighted Average
1.143		100.00% Pervious Area

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

Subcatchment 1B: Subcat 1B



Summary for Subcatchment 1C: Subcat 1C

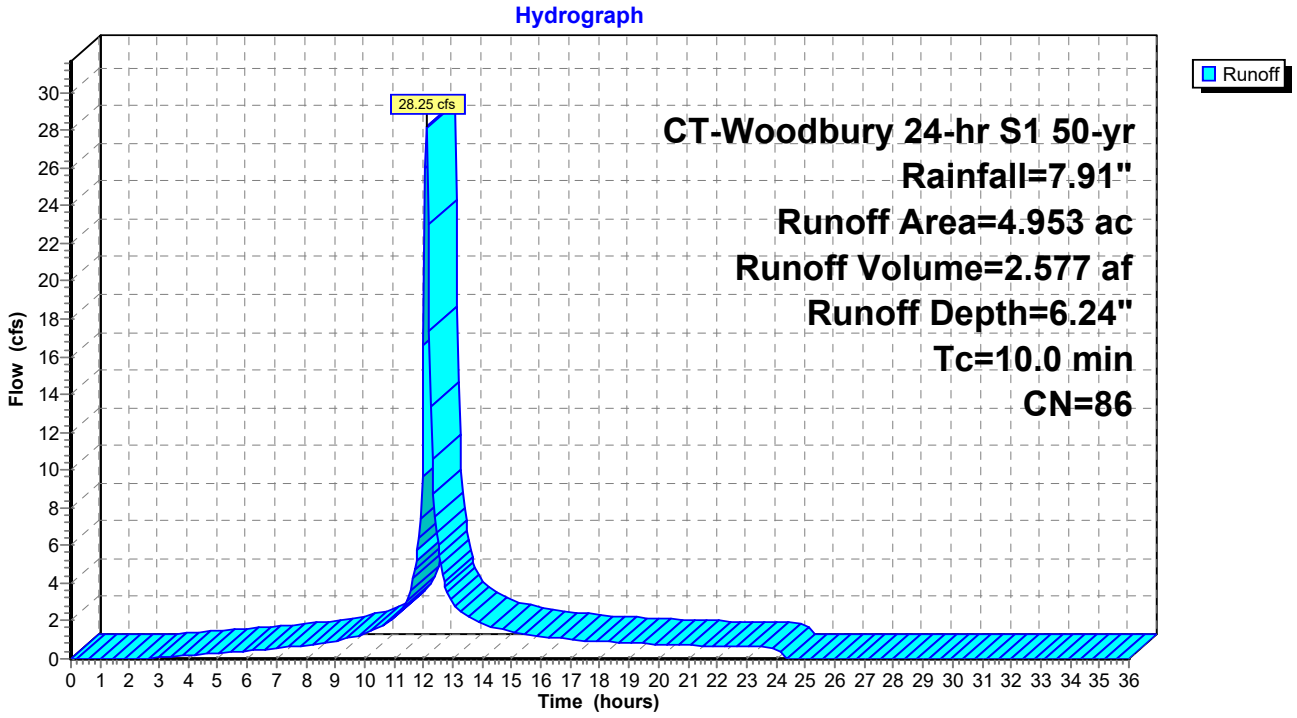
Runoff = 28.25 cfs @ 12.09 hrs, Volume= 2.577 af, Depth= 6.24"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 50-yr Rainfall=7.91"

Area (ac)	CN	Description
4.953	86	<50% Grass cover, Poor, HSG C
4.953		100.00% Pervious Area

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

Subcatchment 1C: Subcat 1C



Summary for Subcatchment 2A: Subcat 2A

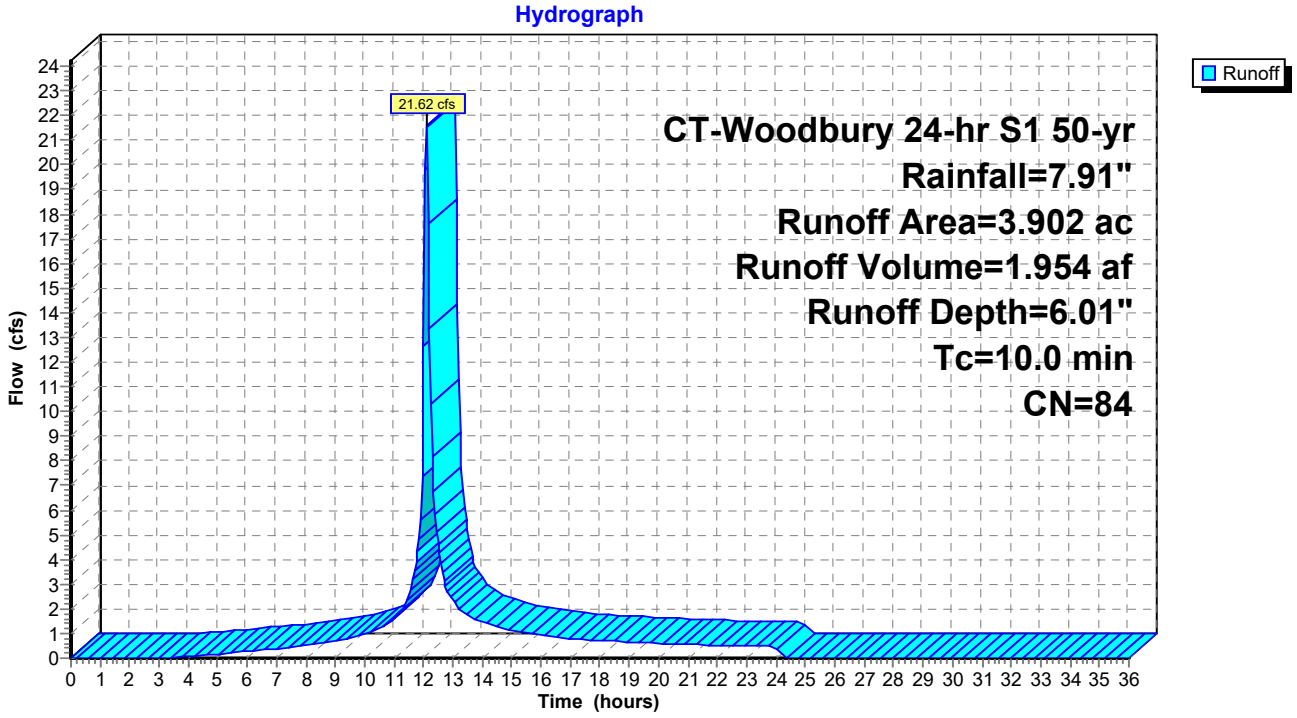
Runoff = 21.62 cfs @ 12.09 hrs, Volume= 1.954 af, Depth= 6.01"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 50-yr Rainfall=7.91"

Area (ac)	CN	Description
0.436	73	Woods, Fair, HSG C
0.378	79	<50% Grass cover, Poor, HSG B
3.088	86	<50% Grass cover, Poor, HSG C
3.902	84	Weighted Average
3.902		100.00% Pervious Area

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

Subcatchment 2A: Subcat 2A



Summary for Subcatchment 2B: Subcat 2B

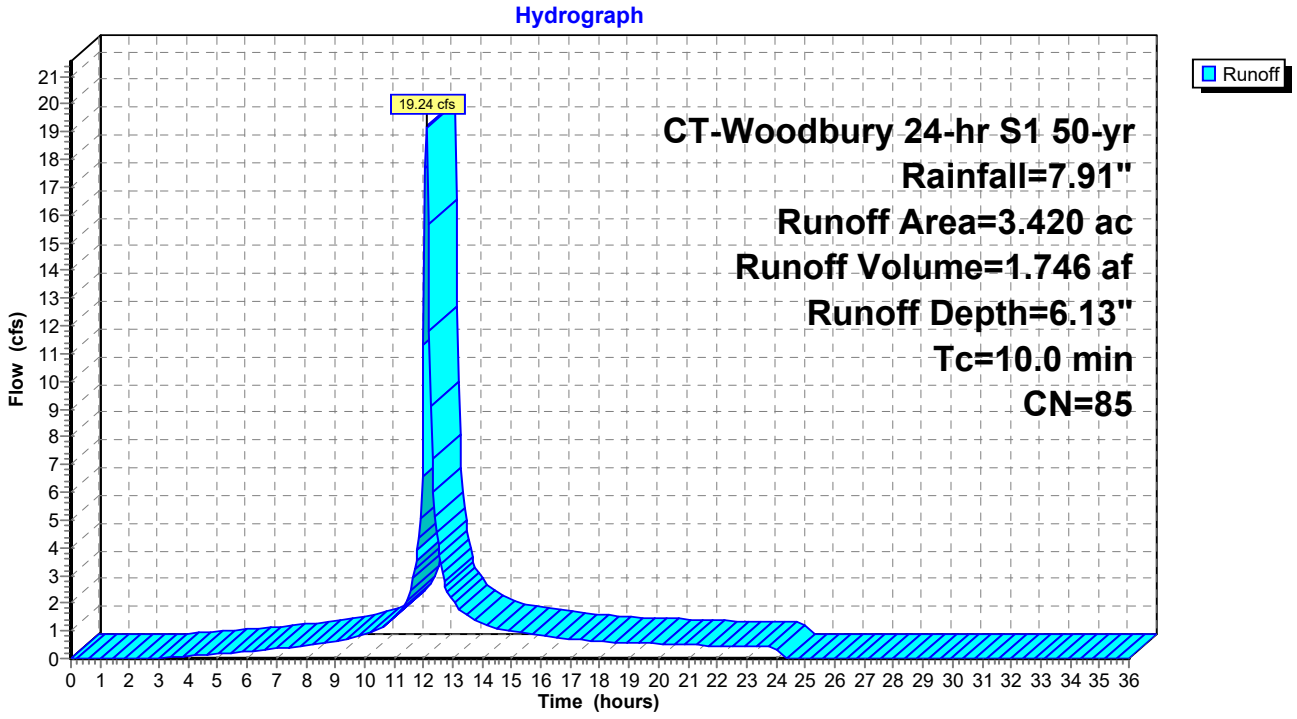
Runoff = 19.24 cfs @ 12.09 hrs, Volume= 1.746 af, Depth= 6.13"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 50-yr Rainfall=7.91"

Area (ac)	CN	Description
0.158	73	Woods, Fair, HSG C
3.262	86	<50% Grass cover, Poor, HSG C
3.420	85	Weighted Average
3.420		100.00% Pervious Area

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

Subcatchment 2B: Subcat 2B



Summary for Subcatchment 2C: Subcat 2C

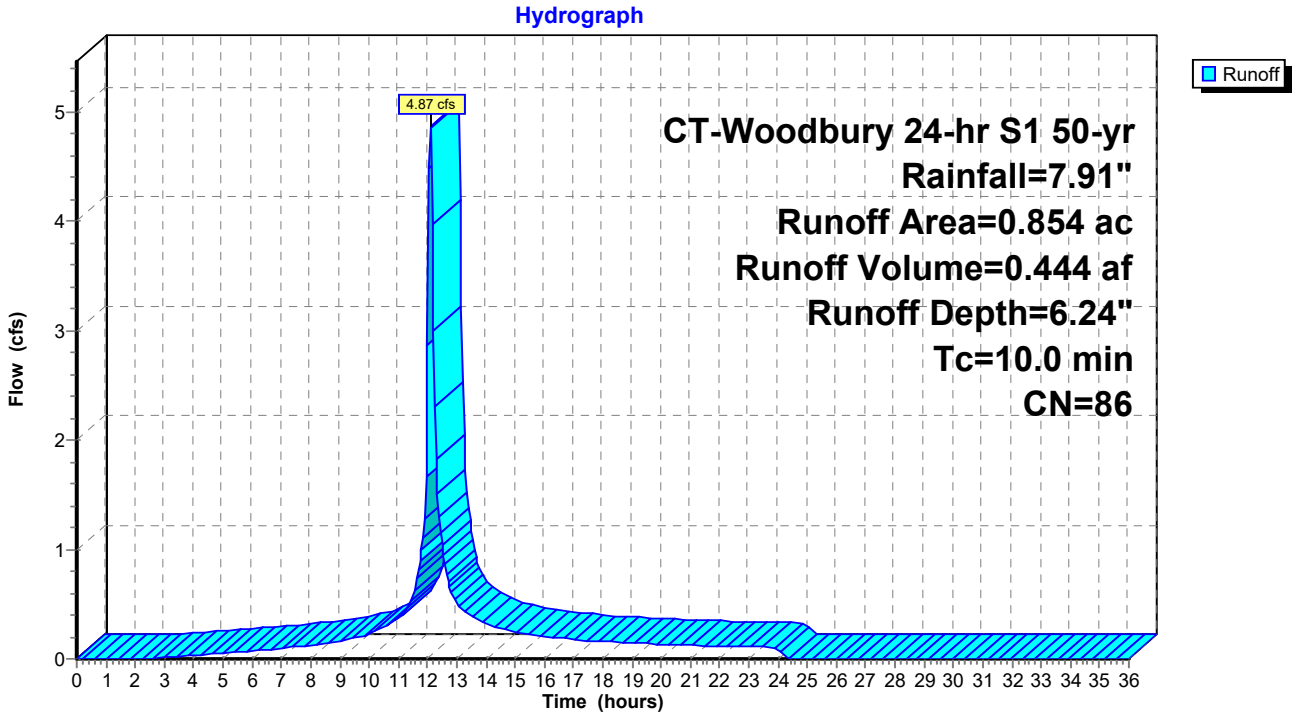
Runoff = 4.87 cfs @ 12.09 hrs, Volume= 0.444 af, Depth= 6.24"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 50-yr Rainfall=7.91"

Area (ac)	CN	Description
0.854	86	<50% Grass cover, Poor, HSG C
0.854		100.00% Pervious Area

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

Subcatchment 2C: Subcat 2C

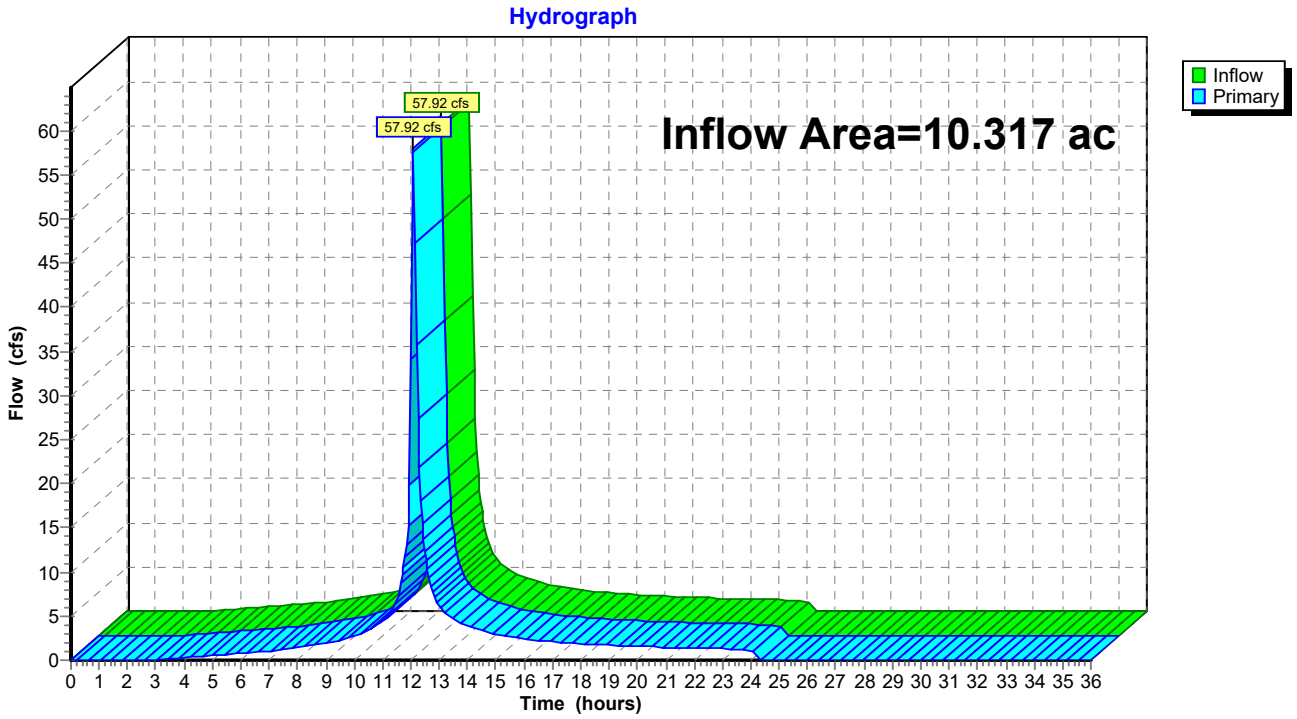


Summary for Link DP1: Design Point 1

Inflow Area = 10.317 ac, 0.00% Impervious, Inflow Depth = 6.13" for 50-yr event
Inflow = 57.92 cfs @ 12.09 hrs, Volume= 5.268 af
Primary = 57.92 cfs @ 12.09 hrs, Volume= 5.268 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP1: Design Point 1

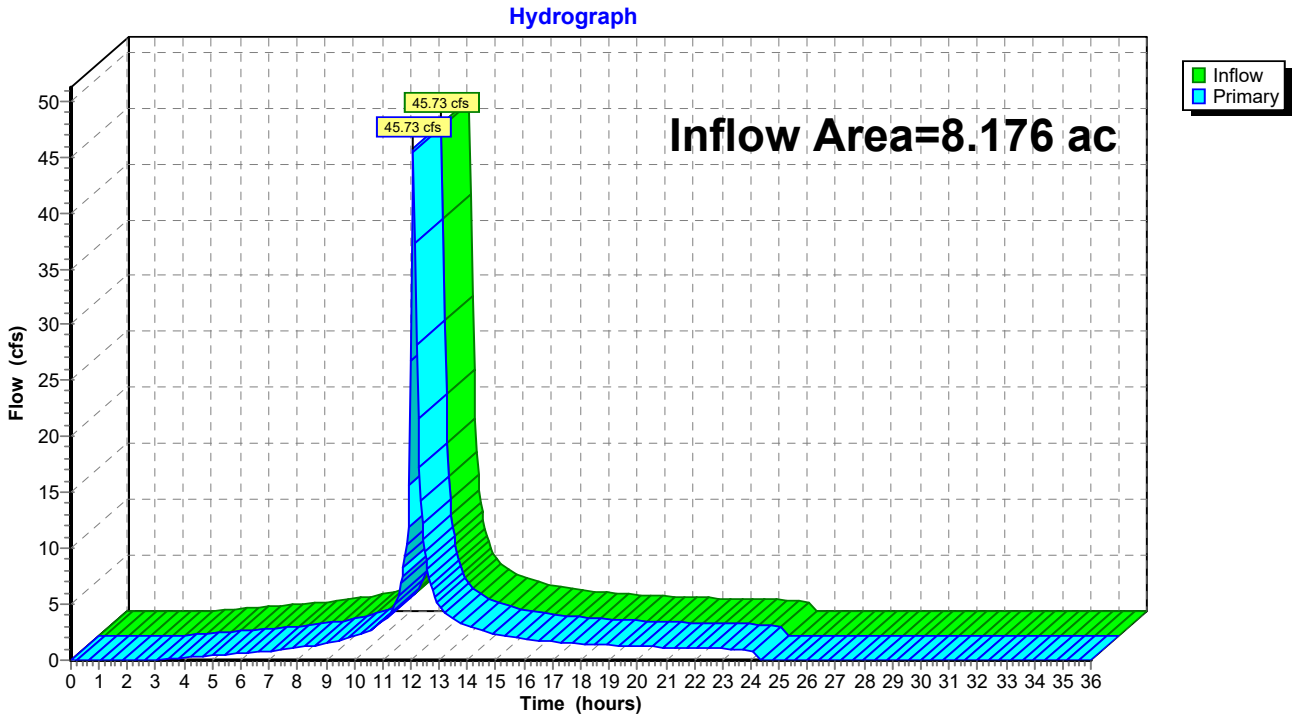


Summary for Link DP2: Design Point 2

Inflow Area = 8.176 ac, 0.00% Impervious, Inflow Depth = 6.08" for 50-yr event
Inflow = 45.73 cfs @ 12.09 hrs, Volume= 4.144 af
Primary = 45.73 cfs @ 12.09 hrs, Volume= 4.144 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP2: Design Point 2



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: Subcat 1A Runoff Area=4.221 ac 0.00% Impervious Runoff Depth=7.27"
Tc=10.0 min CN=86 Runoff=27.34 cfs 2.559 af

Subcatchment1B: Subcat 1B Runoff Area=1.143 ac 0.00% Impervious Runoff Depth=6.17"
Tc=10.0 min CN=77 Runoff=6.49 cfs 0.588 af

Subcatchment1C: Subcat 1C Runoff Area=4.953 ac 0.00% Impervious Runoff Depth=7.27"
Tc=10.0 min CN=86 Runoff=32.08 cfs 3.003 af

Subcatchment2A: Subcat 2A Runoff Area=3.902 ac 0.00% Impervious Runoff Depth=7.03"
Tc=10.0 min CN=84 Runoff=24.67 cfs 2.286 af

Subcatchment2B: Subcat 2B Runoff Area=3.420 ac 0.00% Impervious Runoff Depth=7.15"
Tc=10.0 min CN=85 Runoff=21.89 cfs 2.038 af

Subcatchment2C: Subcat 2C Runoff Area=0.854 ac 0.00% Impervious Runoff Depth=7.27"
Tc=10.0 min CN=86 Runoff=5.53 cfs 0.518 af

Link DP1: Design Point 1 Inflow=65.92 cfs 6.149 af
Primary=65.92 cfs 6.149 af

Link DP2: Design Point 2 Inflow=52.09 cfs 4.842 af
Primary=52.09 cfs 4.842 af

Total Runoff Area = 18.493 ac Runoff Volume = 10.991 af Average Runoff Depth = 7.13"
100.00% Pervious = 18.493 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1A: Subcat 1A

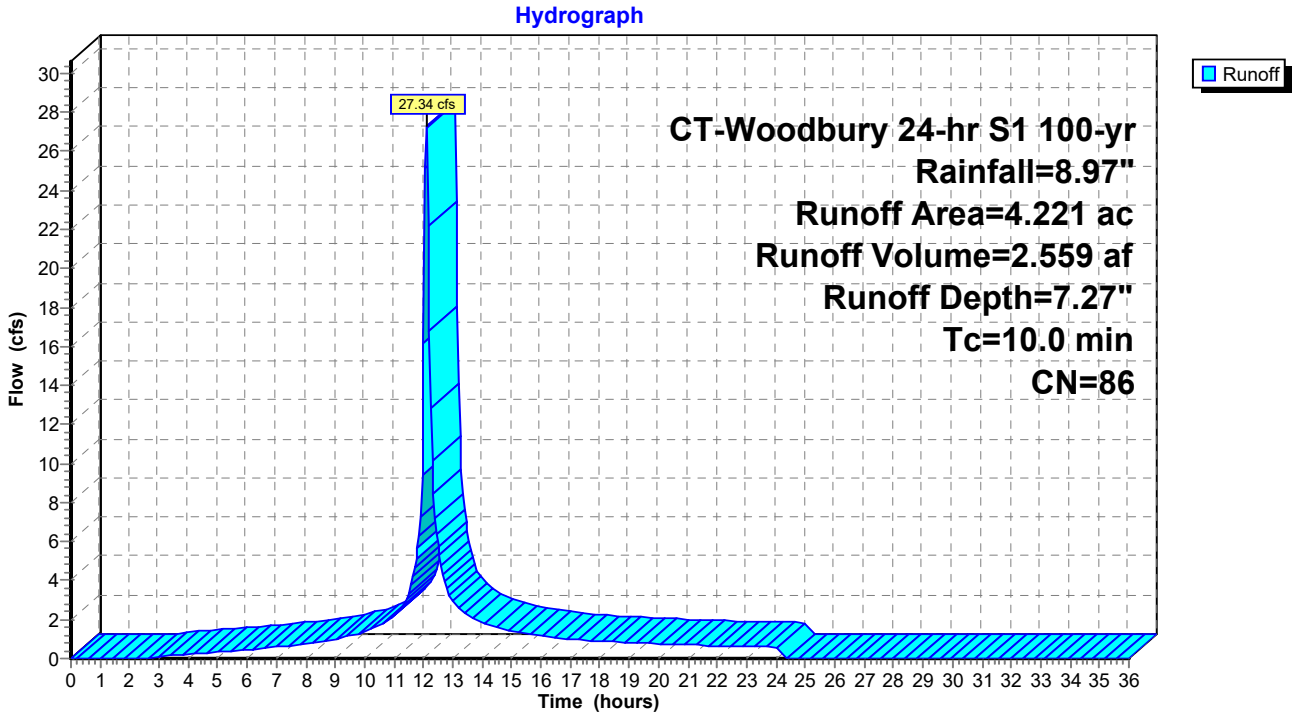
Runoff = 27.34 cfs @ 12.09 hrs, Volume= 2.559 af, Depth= 7.27"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 100-yr Rainfall=8.97"

Area (ac)	CN	Description
0.071	79	<50% Grass cover, Poor, HSG B
4.150	86	<50% Grass cover, Poor, HSG C
4.221	86	Weighted Average
4.221		100.00% Pervious Area

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

Subcatchment 1A: Subcat 1A



Summary for Subcatchment 1B: Subcat 1B

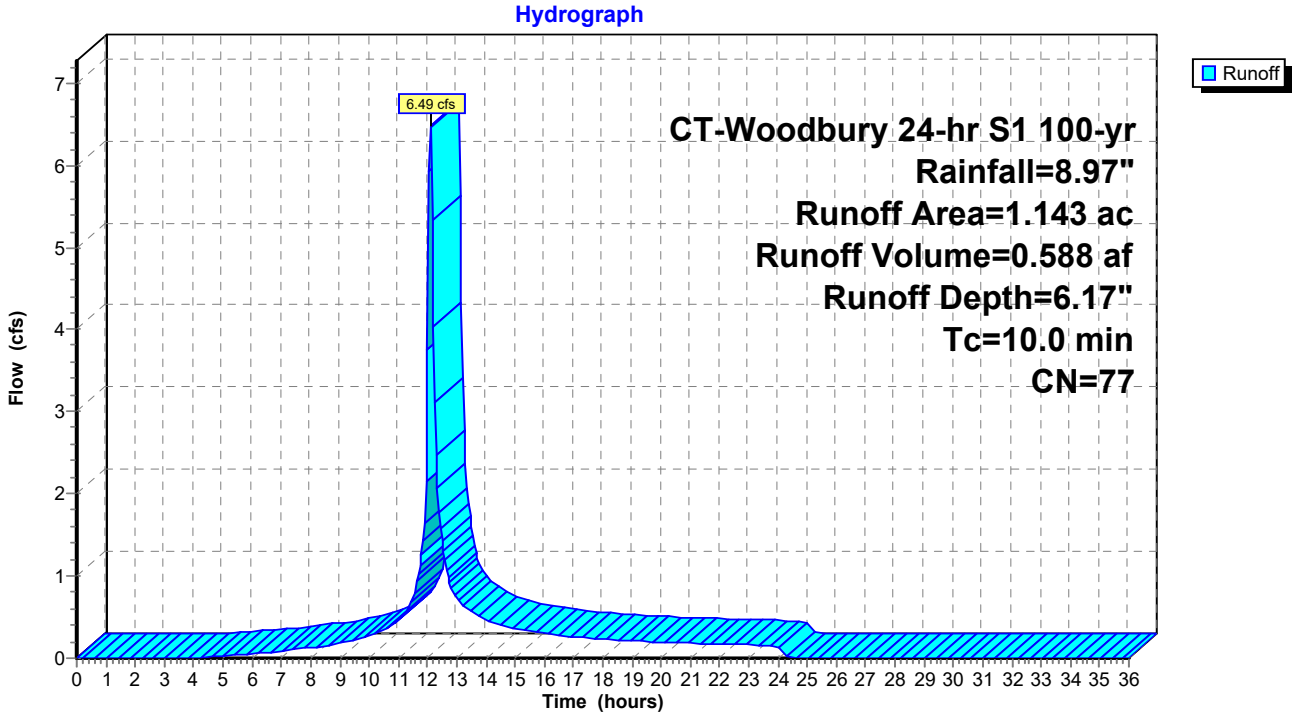
Runoff = 6.49 cfs @ 12.09 hrs, Volume= 0.588 af, Depth= 6.17"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 100-yr Rainfall=8.97"

Area (ac)	CN	Description
0.322	68	<50% Grass cover, Poor, HSG A
0.678	79	<50% Grass cover, Poor, HSG B
0.143	86	<50% Grass cover, Poor, HSG C
1.143	77	Weighted Average
1.143		100.00% Pervious Area

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

Subcatchment 1B: Subcat 1B



Summary for Subcatchment 1C: Subcat 1C

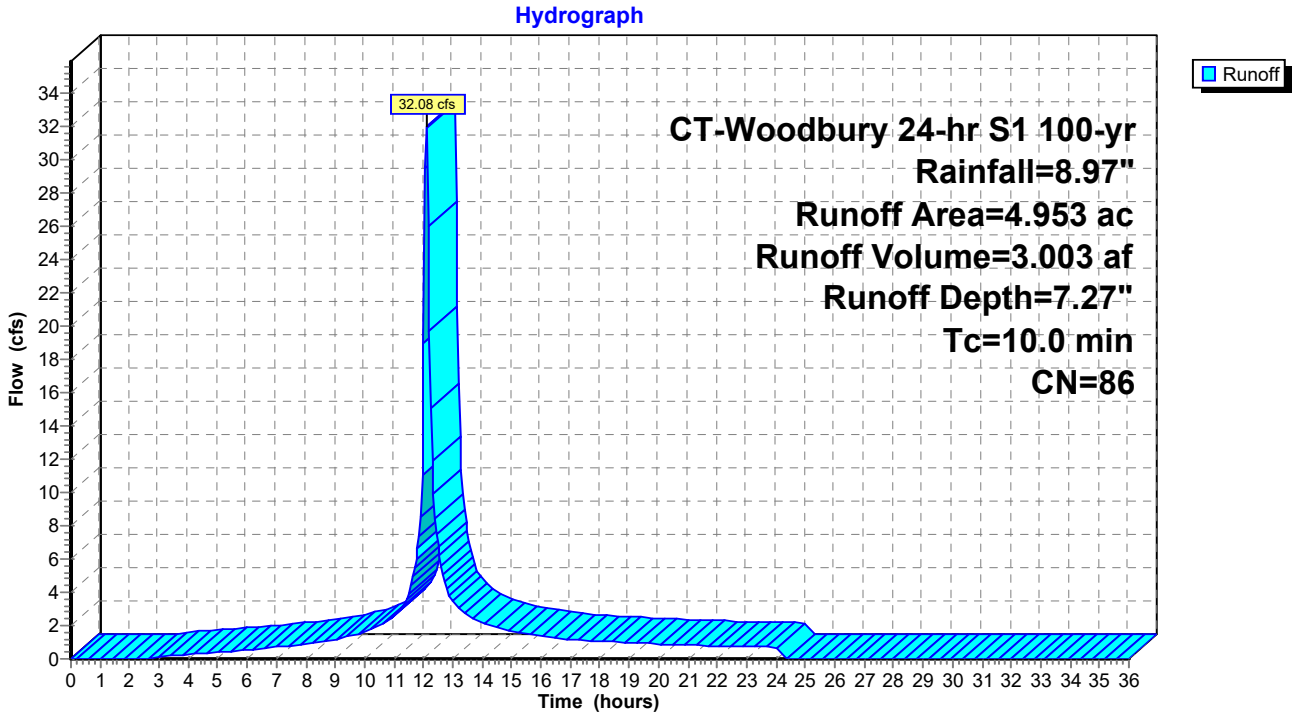
Runoff = 32.08 cfs @ 12.09 hrs, Volume= 3.003 af, Depth= 7.27"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 100-yr Rainfall=8.97"

Area (ac)	CN	Description
4.953	86	<50% Grass cover, Poor, HSG C
4.953		100.00% Pervious Area

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

Subcatchment 1C: Subcat 1C



Summary for Subcatchment 2A: Subcat 2A

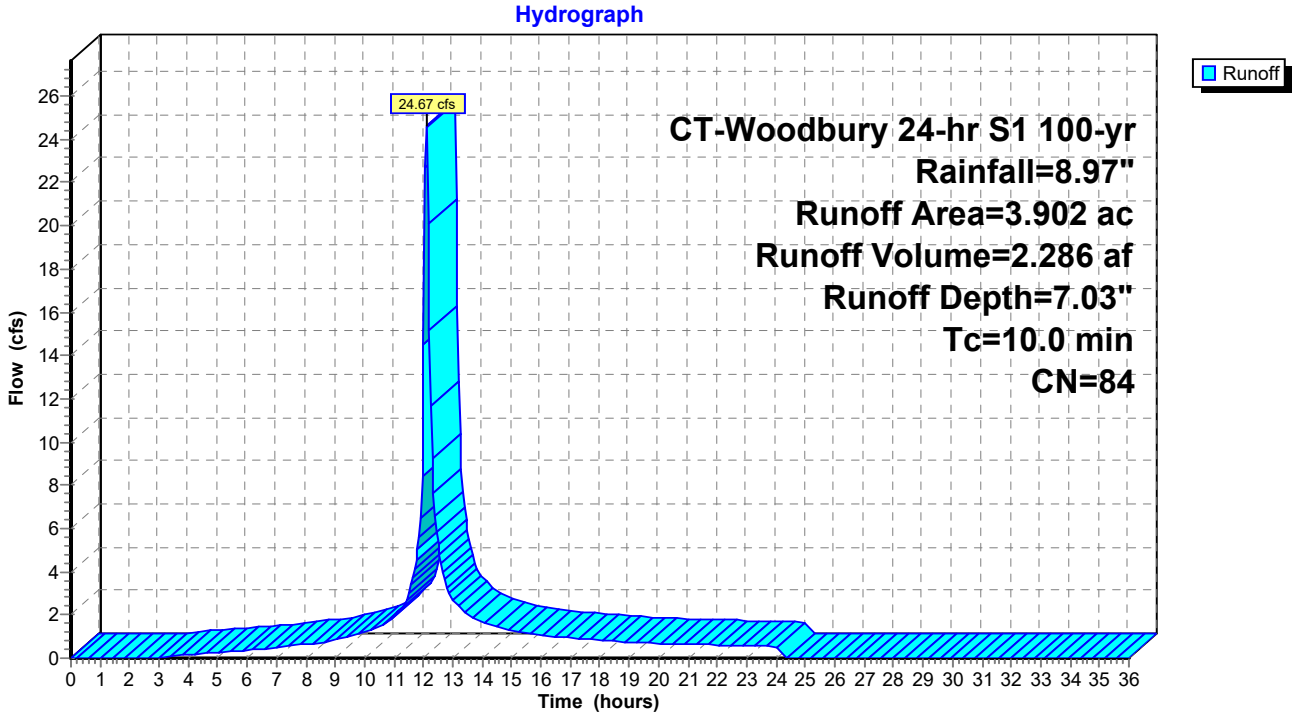
Runoff = 24.67 cfs @ 12.09 hrs, Volume= 2.286 af, Depth= 7.03"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 100-yr Rainfall=8.97"

Area (ac)	CN	Description
0.436	73	Woods, Fair, HSG C
0.378	79	<50% Grass cover, Poor, HSG B
3.088	86	<50% Grass cover, Poor, HSG C
3.902	84	Weighted Average
3.902		100.00% Pervious Area

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

Subcatchment 2A: Subcat 2A



Summary for Subcatchment 2B: Subcat 2B

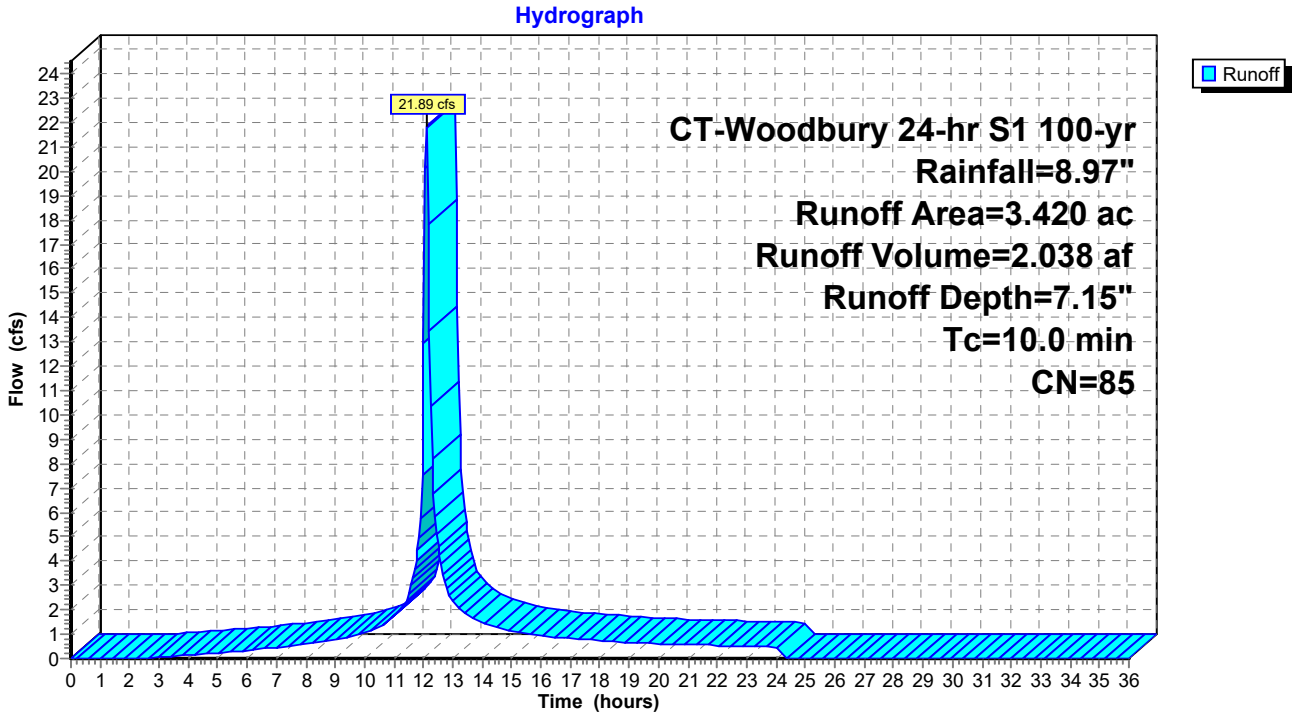
Runoff = 21.89 cfs @ 12.09 hrs, Volume= 2.038 af, Depth= 7.15"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 100-yr Rainfall=8.97"

Area (ac)	CN	Description
0.158	73	Woods, Fair, HSG C
3.262	86	<50% Grass cover, Poor, HSG C
3.420	85	Weighted Average
3.420		100.00% Pervious Area

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

Subcatchment 2B: Subcat 2B



Summary for Subcatchment 2C: Subcat 2C

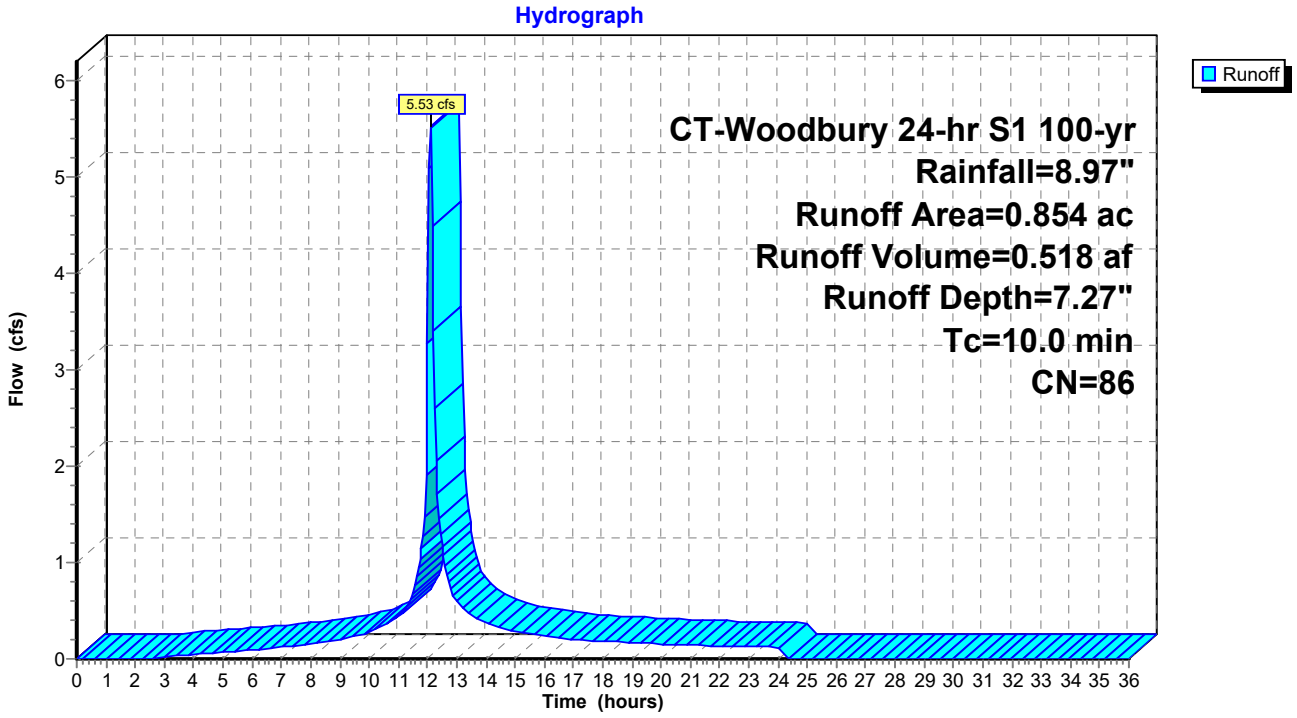
Runoff = 5.53 cfs @ 12.09 hrs, Volume= 0.518 af, Depth= 7.27"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 100-yr Rainfall=8.97"

Area (ac)	CN	Description
0.854	86	<50% Grass cover, Poor, HSG C
0.854		100.00% Pervious Area

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

Subcatchment 2C: Subcat 2C

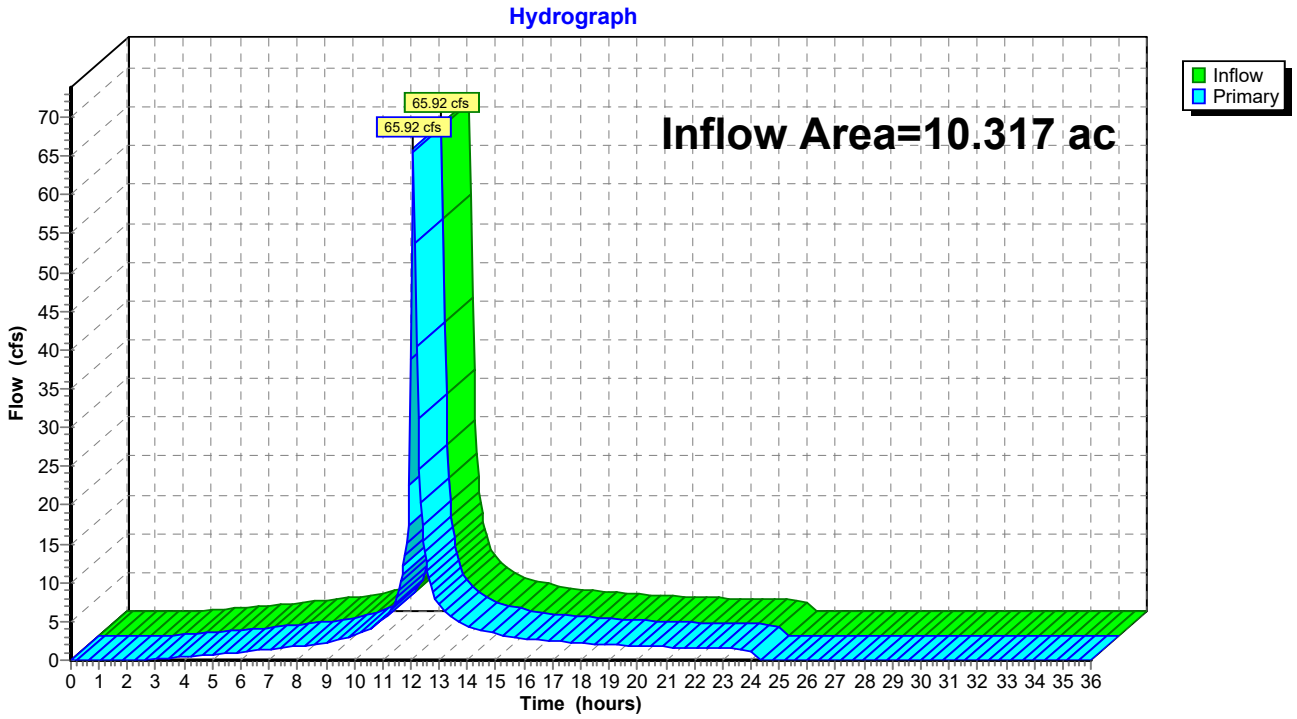


Summary for Link DP1: Design Point 1

Inflow Area = 10.317 ac, 0.00% Impervious, Inflow Depth = 7.15" for 100-yr event
Inflow = 65.92 cfs @ 12.09 hrs, Volume= 6.149 af
Primary = 65.92 cfs @ 12.09 hrs, Volume= 6.149 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP1: Design Point 1

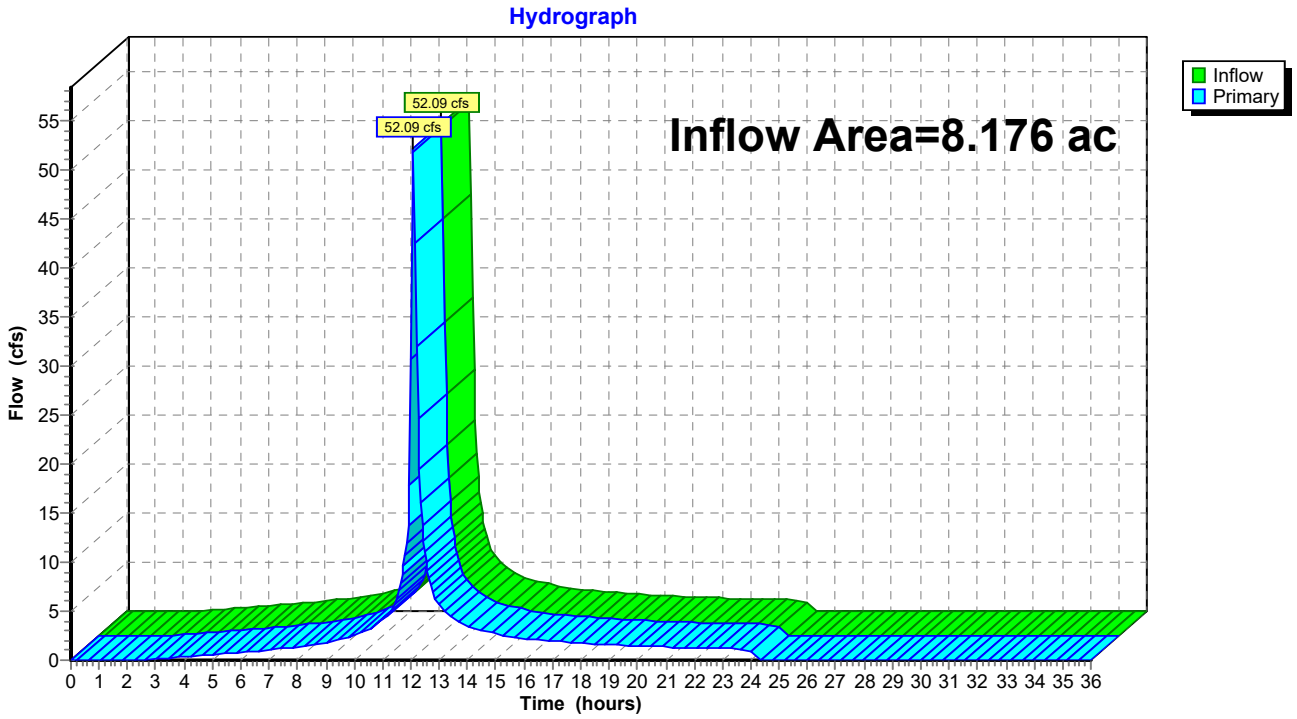


Summary for Link DP2: Design Point 2

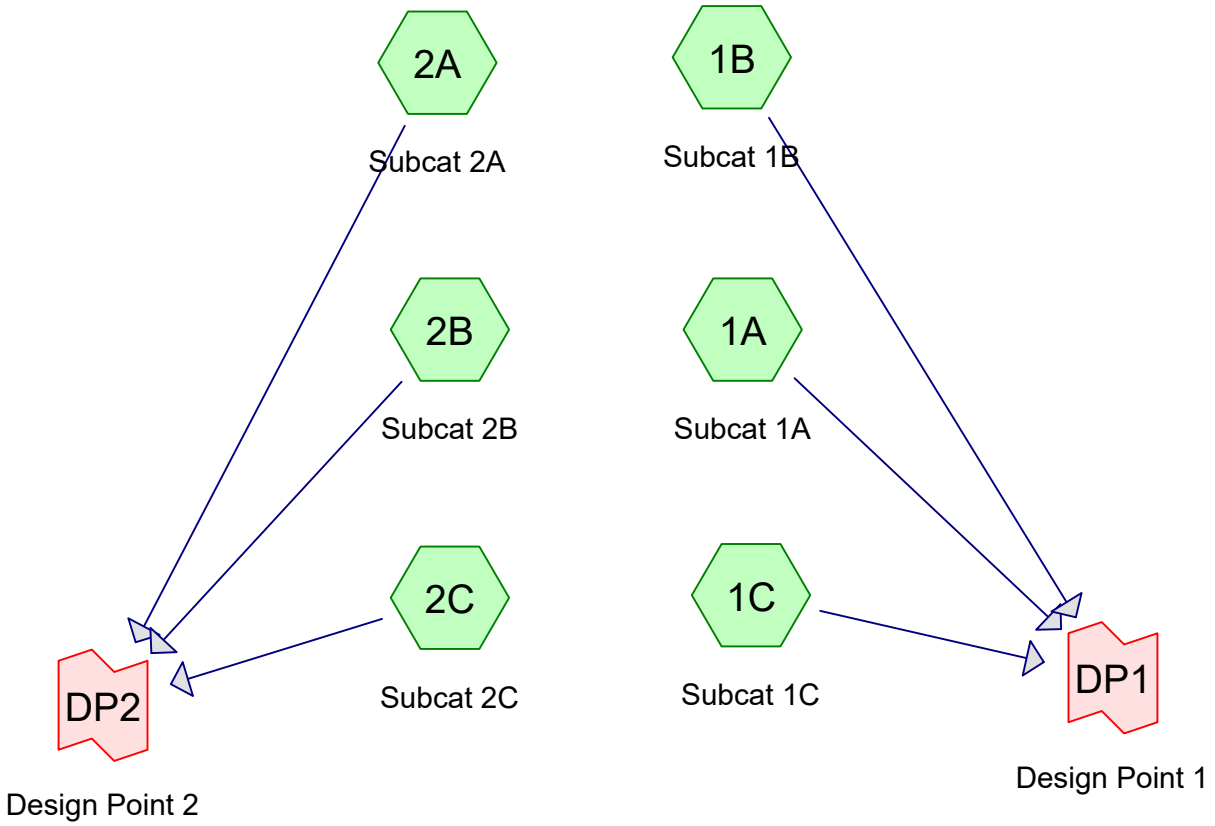
Inflow Area = 8.176 ac, 0.00% Impervious, Inflow Depth = 7.11" for 100-yr event
Inflow = 52.09 cfs @ 12.09 hrs, Volume= 4.842 af
Primary = 52.09 cfs @ 12.09 hrs, Volume= 4.842 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP2: Design Point 2



HydroCAD Analysis: Proposed Conditions



Subcat Reach Pond Link

Routing Diagram for PR Conditions
Prepared by VHB, Inc, Printed 5/1/2024

Project Notes

Defined 4 rainfall events from CT-Woodbury IDF
Copied 10 events from CT-Woodbury 24-hr S1 storm

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-yr	CT-Woodbury 24-hr S1	2-yr	Default	24.00	1	3.54	2
2	25-yr	CT-Woodbury 24-hr S1	25-yr	Default	24.00	1	6.95	2
3	50-yr	CT-Woodbury 24-hr S1	50-yr	Default	24.00	1	7.91	2
4	100-yr	CT-Woodbury 24-hr S1	100-yr	Default	24.00	1	8.97	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.241	59	50-75% Grass cover, Fair, HSG A-B (1B)
0.856	74	50-75% Grass cover, Fair, HSG B-C (1A, 1B, 2A)
16.395	81	50-75% Grass cover, Fair, HSG C-D (1A, 1C, 2A, 2B, 2C)
0.270	79	50-75% Grass cover, Fair, HSG C-D (1B)
0.024	98	Equipment pad (1C)
0.702	96	Gravel surface (1B, 1C, 2A, 2B, 2C)
18.488	**81**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.241	HSG A	1B
0.856	HSG B	1A, 1B, 2A
16.665	HSG C	1A, 1B, 1C, 2A, 2B, 2C
0.000	HSG D	
0.726	Other	1B, 1C, 2A, 2B, 2C
18.488		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.241	0.856	16.665	0.000	0.000	17.762	50-75% Grass cover, Fair	1A, 1B, 1C, 2A, 2B, 2C
0.000	0.000	0.000	0.000	0.024	0.024	Equipment pad	1C
0.000	0.000	0.000	0.000	0.702	0.702	Gravel surface	1B, 1C, 2A, 2B, 2C
0.241	**0.856**	**16.665**	**0.000**	**0.726**	**18.488**	**TOTAL AREA**	

Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: Subcat 1A Runoff Area=4.221 ac 0.00% Impervious Runoff Depth=1.74"
Tc=10.0 min CN=81 Runoff=7.79 cfs 0.612 af

Subcatchment1B: Subcat 1B Runoff Area=1.143 ac 0.00% Impervious Runoff Depth=1.33"
Tc=10.0 min CN=75 Runoff=1.56 cfs 0.127 af

Subcatchment1C: Subcat 1C Runoff Area=4.953 ac 0.48% Impervious Runoff Depth=1.74"
Tc=10.0 min CN=81 Runoff=9.14 cfs 0.719 af

Subcatchment2A: Subcat 2A Runoff Area=3.902 ac 0.00% Impervious Runoff Depth=1.74"
Tc=10.0 min CN=81 Runoff=7.20 cfs 0.566 af

Subcatchment2B: Subcat 2B Runoff Area=3.415 ac 0.00% Impervious Runoff Depth=1.82"
Tc=10.0 min CN=82 Runoff=6.59 cfs 0.517 af

Subcatchment2C: Subcat 2C Runoff Area=0.854 ac 0.00% Impervious Runoff Depth=1.89"
Tc=10.0 min CN=83 Runoff=1.72 cfs 0.135 af

Link DP1: Design Point 1 Inflow=18.49 cfs 1.458 af
Primary=18.49 cfs 1.458 af

Link DP2: Design Point 2 Inflow=15.52 cfs 1.217 af
Primary=15.52 cfs 1.217 af

Total Runoff Area = 18.488 ac Runoff Volume = 2.675 af Average Runoff Depth = 1.74"
99.87% Pervious = 18.464 ac 0.13% Impervious = 0.024 ac

Summary for Subcatchment 1A: Subcat 1A

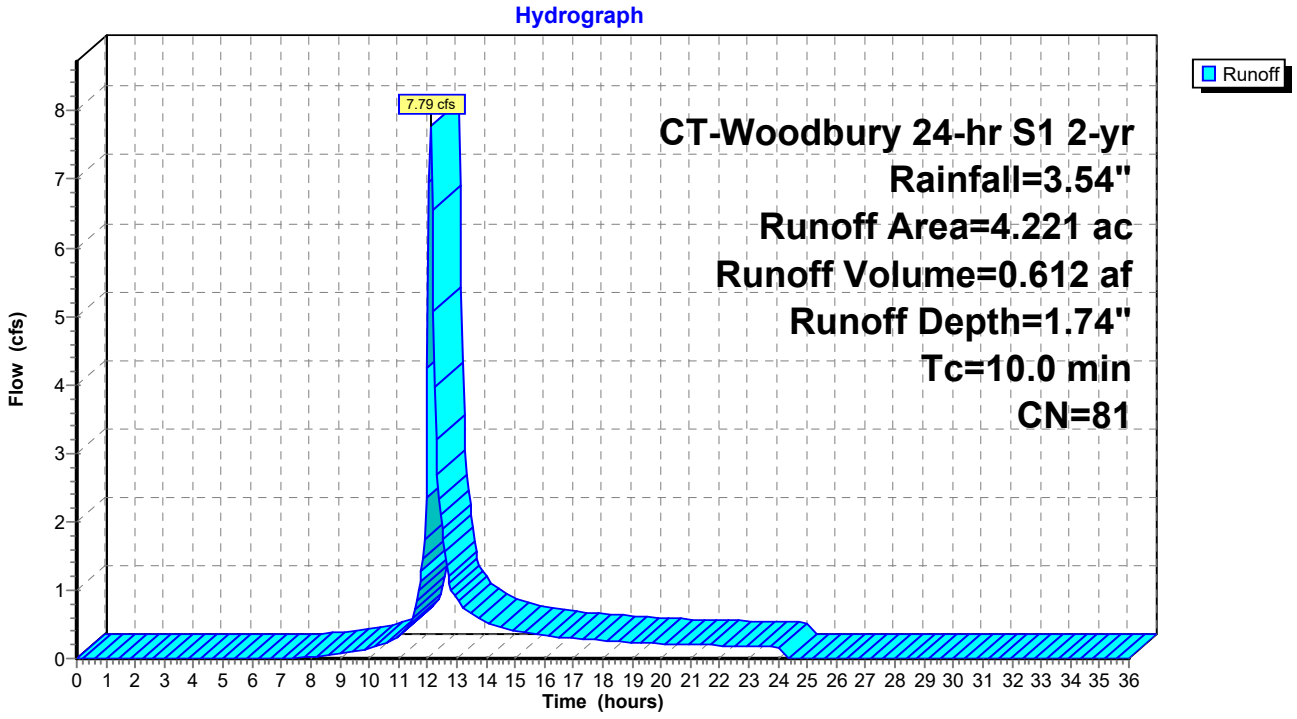
Runoff = 7.79 cfs @ 12.10 hrs, Volume= 0.612 af, Depth= 1.74"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 2-yr Rainfall=3.54"

	Area (ac)	CN	Description
*	0.071	74	50-75% Grass cover, Fair, HSG B-C
*	4.150	81	50-75% Grass cover, Fair, HSG C-D
	4.221	81	Weighted Average
	4.221		100.00% Pervious Area

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

Subcatchment 1A: Subcat 1A



Summary for Subcatchment 1B: Subcat 1B

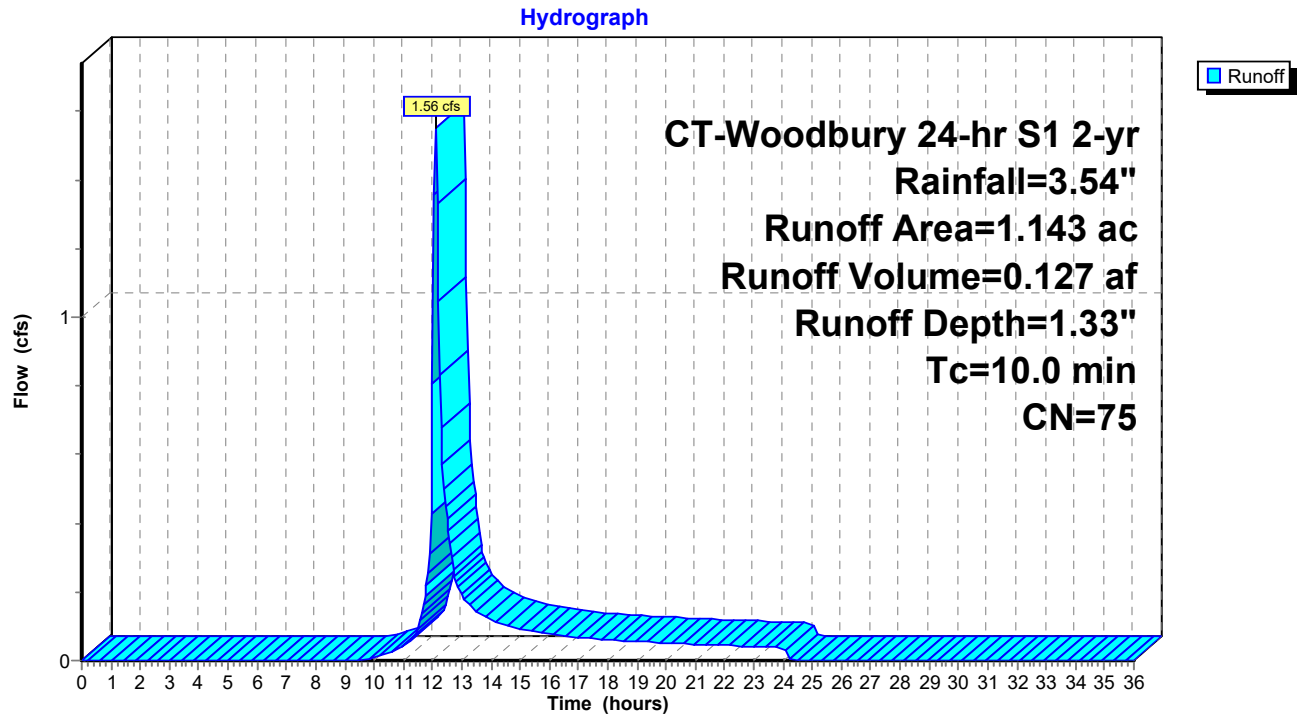
Runoff = 1.56 cfs @ 12.10 hrs, Volume= 0.127 af, Depth= 1.33"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 2-yr Rainfall=3.54"

	Area (ac)	CN	Description
*	0.156	96	Gravel surface
*	0.241	59	50-75% Grass cover, Fair, HSG A-B
*	0.476	74	50-75% Grass cover, Fair, HSG B-C
*	0.270	79	50-75% Grass cover, Fair, HSG C-D
	1.143	75	Weighted Average
	1.143		100.00% Pervious Area

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

Subcatchment 1B: Subcat 1B



Summary for Subcatchment 1C: Subcat 1C

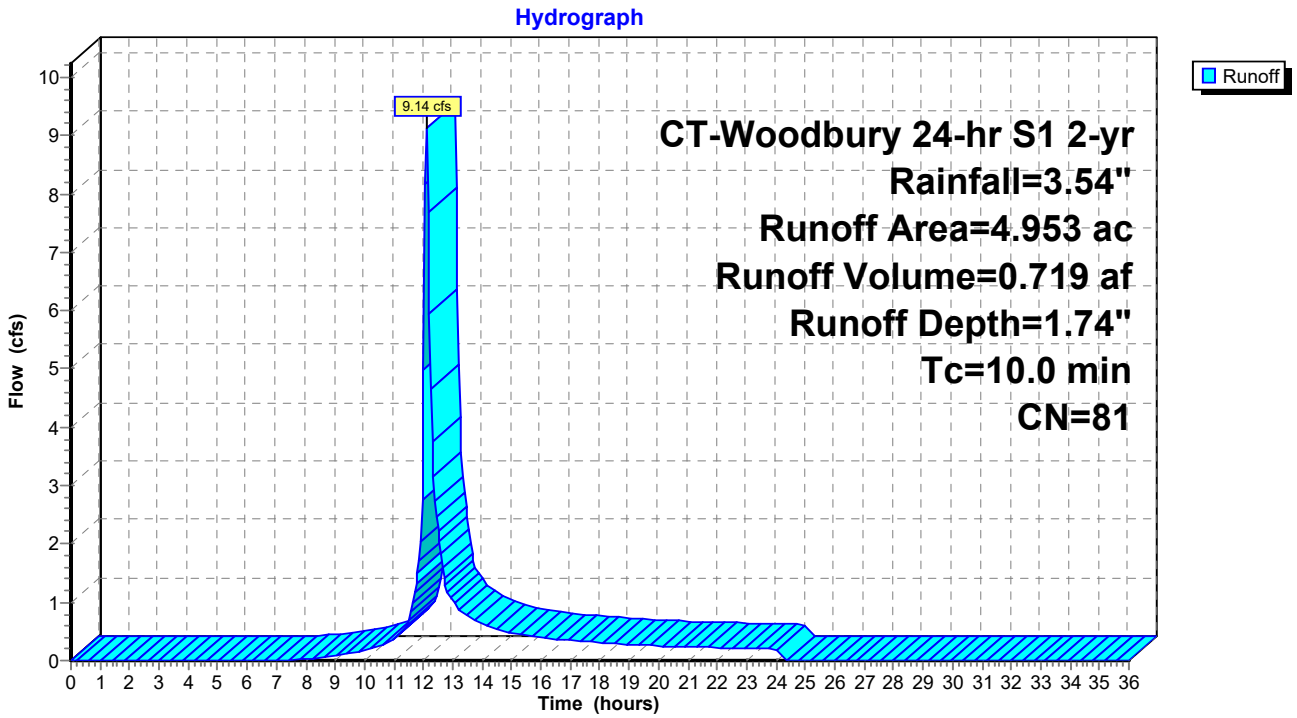
Runoff = 9.14 cfs @ 12.10 hrs, Volume= 0.719 af, Depth= 1.74"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 2-yr Rainfall=3.54"

	Area (ac)	CN	Description
*	0.012	96	Gravel surface
*	0.024	98	Equipment pad
*	4.917	81	50-75% Grass cover, Fair, HSG C-D
	4.953	81	Weighted Average
	4.929		99.52% Pervious Area
	0.024		0.48% Impervious Area

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

Subcatchment 1C: Subcat 1C



Summary for Subcatchment 2A: Subcat 2A

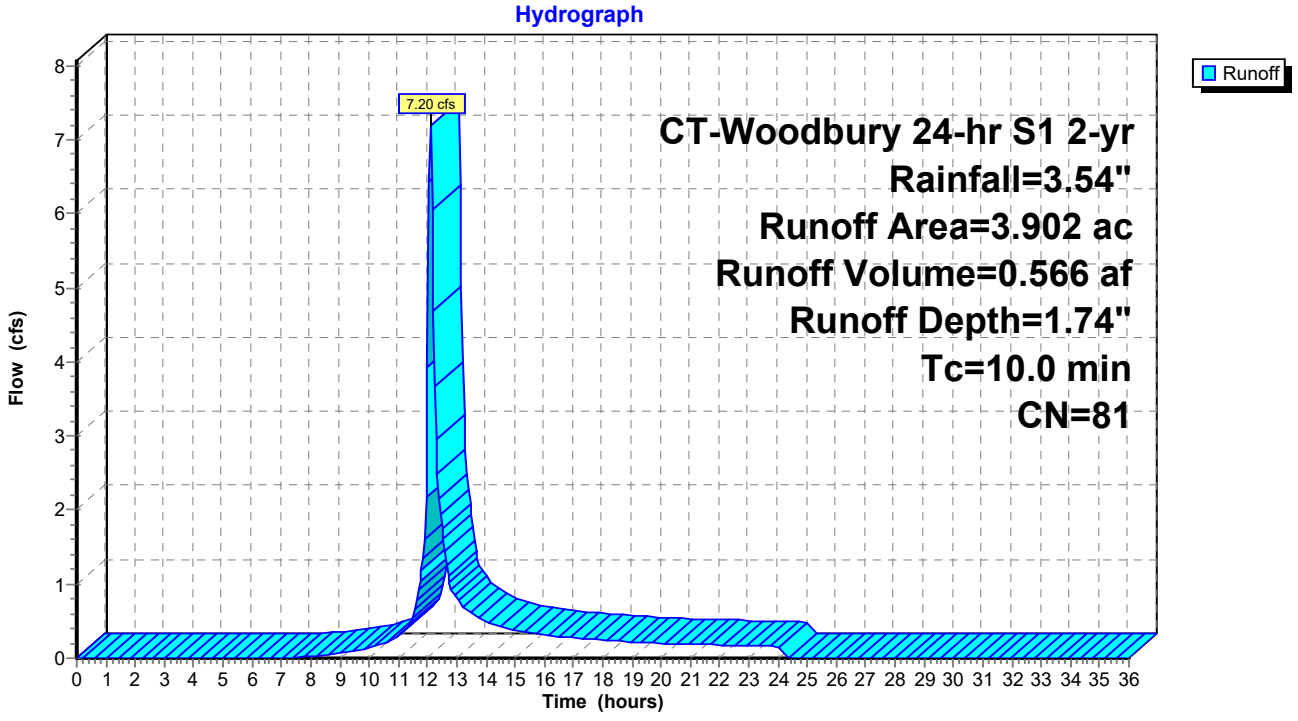
Runoff = 7.20 cfs @ 12.10 hrs, Volume= 0.566 af, Depth= 1.74"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 2-yr Rainfall=3.54"

	Area (ac)	CN	Description
*	0.273	96	Gravel surface
*	0.309	74	50-75% Grass cover, Fair, HSG B-C
*	3.320	81	50-75% Grass cover, Fair, HSG C-D
	3.902	81	Weighted Average
	3.902		100.00% Pervious Area

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

Subcatchment 2A: Subcat 2A



Summary for Subcatchment 2B: Subcat 2B

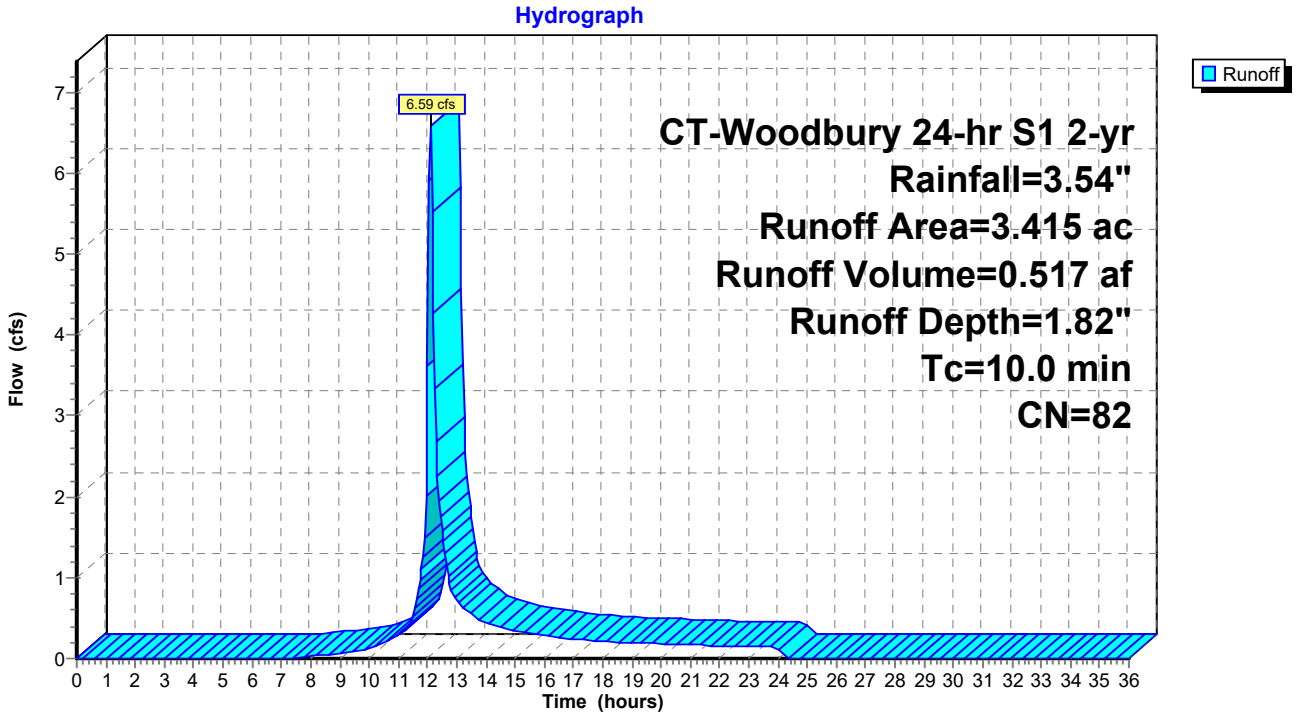
Runoff = 6.59 cfs @ 12.09 hrs, Volume= 0.517 af, Depth= 1.82"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 2-yr Rainfall=3.54"

	Area (ac)	CN	Description
*	0.163	96	Gravel surface
*	3.252	81	50-75% Grass cover, Fair, HSG C-D
	3.415	82	Weighted Average
	3.415		100.00% Pervious Area

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

Subcatchment 2B: Subcat 2B



Summary for Subcatchment 2C: Subcat 2C

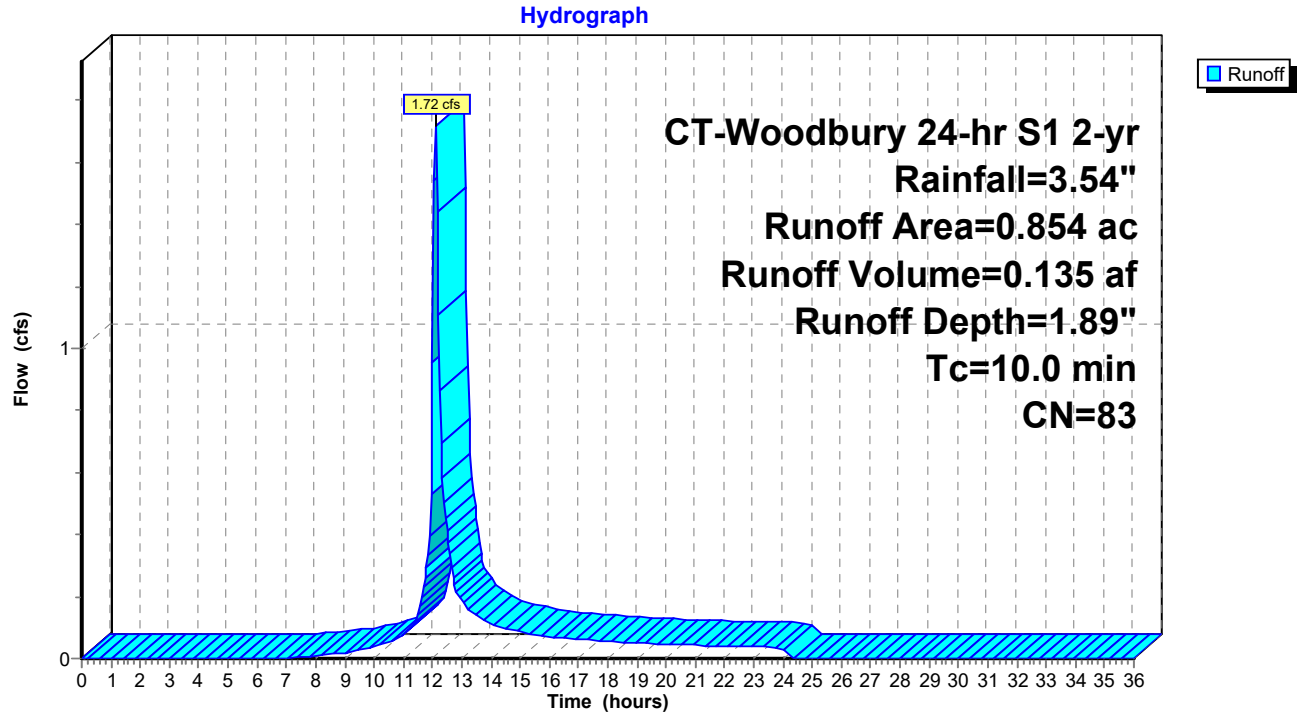
Runoff = 1.72 cfs @ 12.09 hrs, Volume= 0.135 af, Depth= 1.89"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 2-yr Rainfall=3.54"

	Area (ac)	CN	Description
*	0.098	96	Gravel surface
*	0.756	81	50-75% Grass cover, Fair, HSG C-D
	0.854	83	Weighted Average
	0.854		100.00% Pervious Area

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

Subcatchment 2C: Subcat 2C

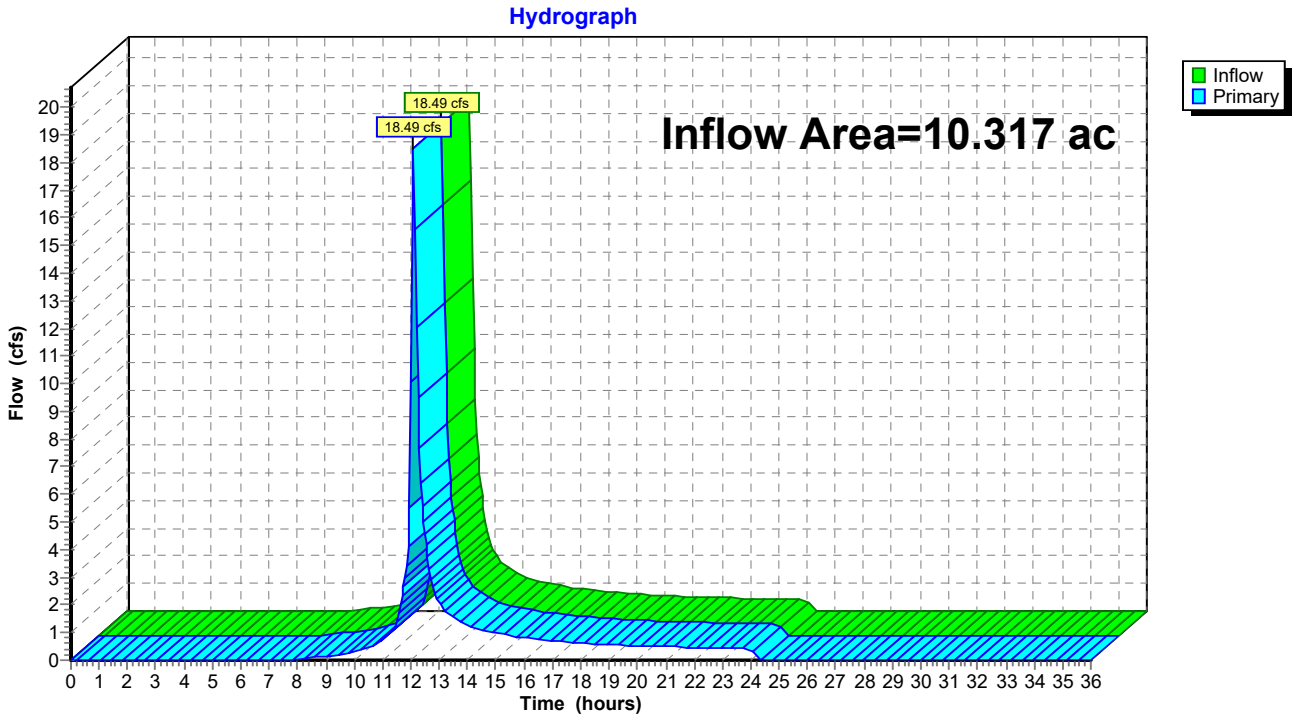


Summary for Link DP1: Design Point 1

Inflow Area = 10.317 ac, 0.23% Impervious, Inflow Depth = 1.70" for 2-yr event
Inflow = 18.49 cfs @ 12.10 hrs, Volume= 1.458 af
Primary = 18.49 cfs @ 12.10 hrs, Volume= 1.458 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP1: Design Point 1

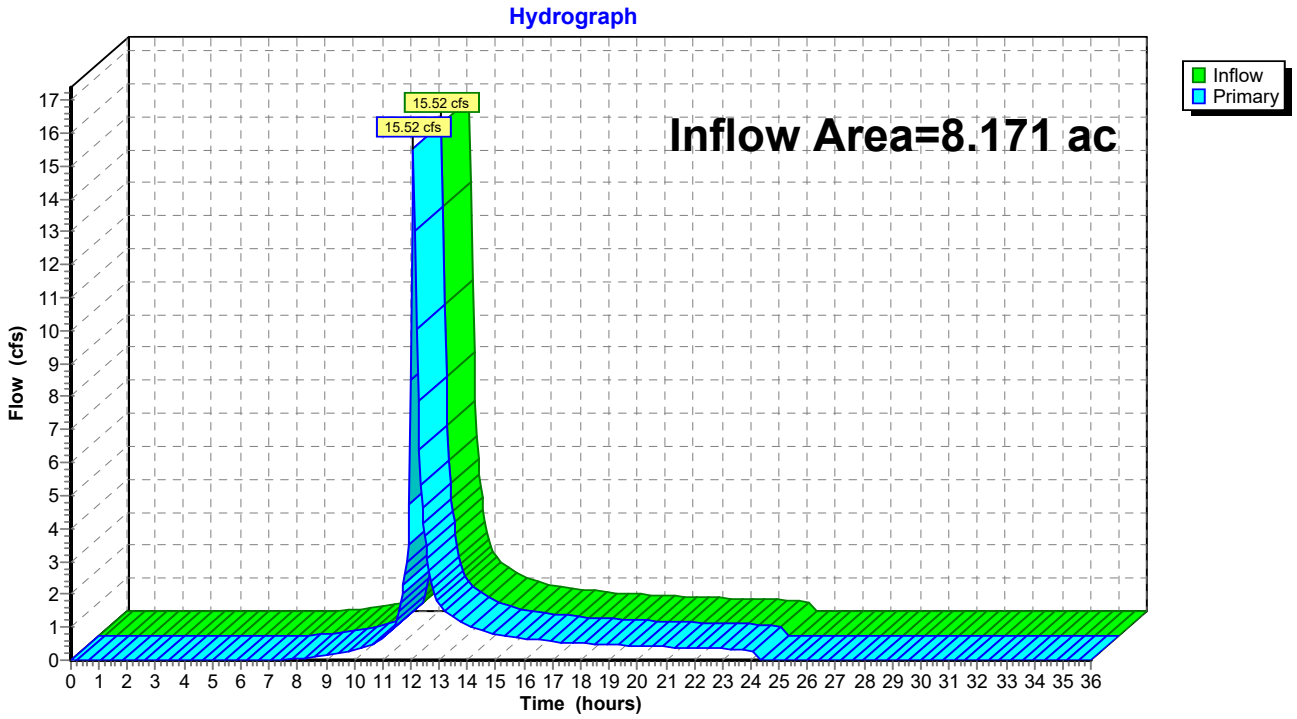


Summary for Link DP2: Design Point 2

Inflow Area = 8.171 ac, 0.00% Impervious, Inflow Depth = 1.79" for 2-yr event
Inflow = 15.52 cfs @ 12.09 hrs, Volume= 1.217 af
Primary = 15.52 cfs @ 12.09 hrs, Volume= 1.217 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP2: Design Point 2



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: Subcat 1A Runoff Area=4.221 ac 0.00% Impervious Runoff Depth=4.76"
Tc=10.0 min CN=81 Runoff=19.04 cfs 1.674 af

Subcatchment1B: Subcat 1B Runoff Area=1.143 ac 0.00% Impervious Runoff Depth=4.11"
Tc=10.0 min CN=75 Runoff=4.49 cfs 0.391 af

Subcatchment1C: Subcat 1C Runoff Area=4.953 ac 0.48% Impervious Runoff Depth=4.76"
Tc=10.0 min CN=81 Runoff=22.35 cfs 1.964 af

Subcatchment2A: Subcat 2A Runoff Area=3.902 ac 0.00% Impervious Runoff Depth=4.76"
Tc=10.0 min CN=81 Runoff=17.60 cfs 1.547 af

Subcatchment2B: Subcat 2B Runoff Area=3.415 ac 0.00% Impervious Runoff Depth=4.87"
Tc=10.0 min CN=82 Runoff=15.72 cfs 1.386 af

Subcatchment2C: Subcat 2C Runoff Area=0.854 ac 0.00% Impervious Runoff Depth=4.98"
Tc=10.0 min CN=83 Runoff=4.01 cfs 0.354 af

Link DP1: Design Point 1 Inflow=45.87 cfs 4.029 af
Primary=45.87 cfs 4.029 af

Link DP2: Design Point 2 Inflow=37.33 cfs 3.288 af
Primary=37.33 cfs 3.288 af

Total Runoff Area = 18.488 ac Runoff Volume = 7.316 af Average Runoff Depth = 4.75"
99.87% Pervious = 18.464 ac 0.13% Impervious = 0.024 ac

Summary for Subcatchment 1A: Subcat 1A

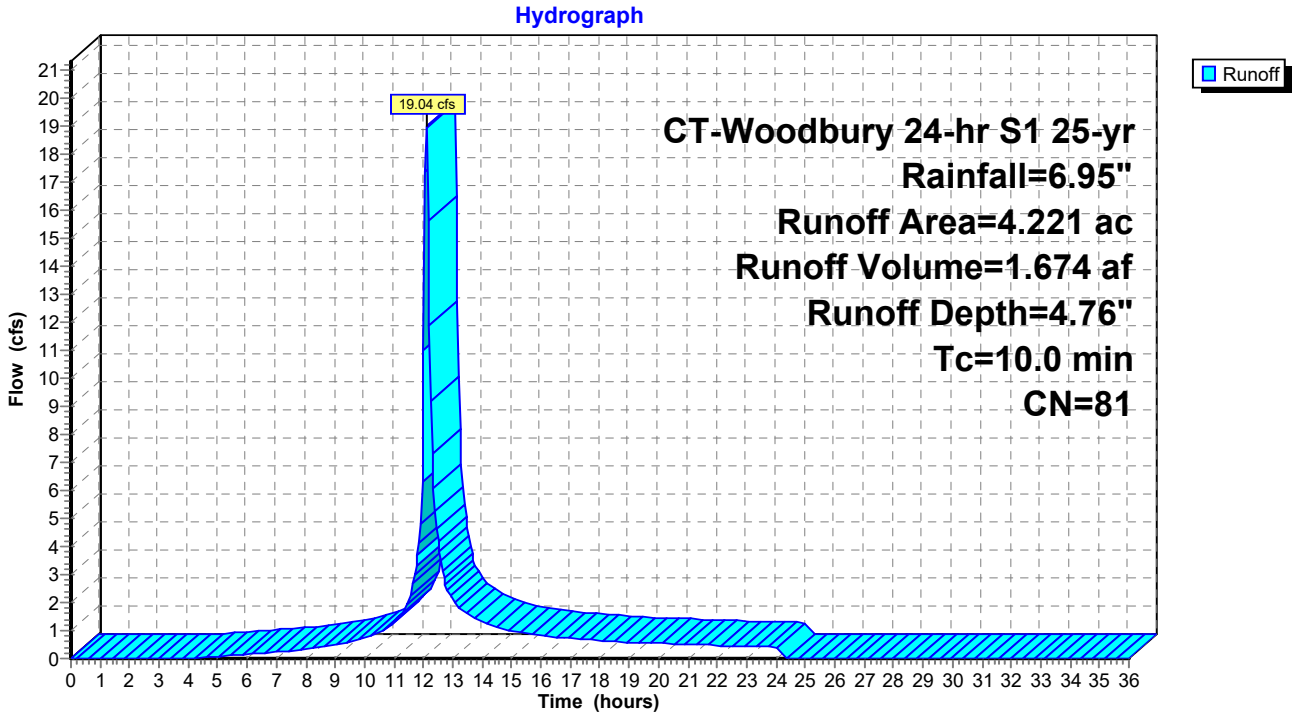
Runoff = 19.04 cfs @ 12.09 hrs, Volume= 1.674 af, Depth= 4.76"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 25-yr Rainfall=6.95"

	Area (ac)	CN	Description
*	0.071	74	50-75% Grass cover, Fair, HSG B-C
*	4.150	81	50-75% Grass cover, Fair, HSG C-D
	4.221	81	Weighted Average
	4.221		100.00% Pervious Area

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

Subcatchment 1A: Subcat 1A



Summary for Subcatchment 1B: Subcat 1B

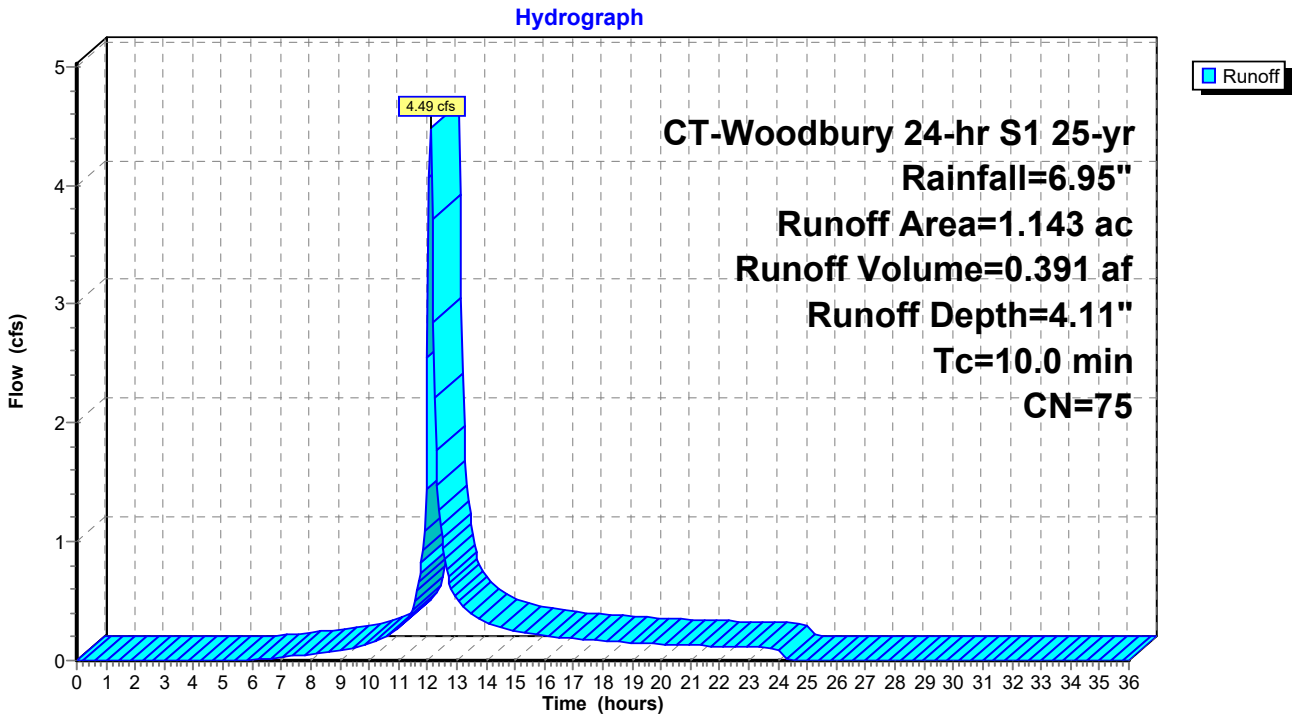
Runoff = 4.49 cfs @ 12.09 hrs, Volume= 0.391 af, Depth= 4.11"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 25-yr Rainfall=6.95"

	Area (ac)	CN	Description
*	0.156	96	Gravel surface
*	0.241	59	50-75% Grass cover, Fair, HSG A-B
*	0.476	74	50-75% Grass cover, Fair, HSG B-C
*	0.270	79	50-75% Grass cover, Fair, HSG C-D
	1.143	75	Weighted Average
	1.143		100.00% Pervious Area

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

Subcatchment 1B: Subcat 1B



Summary for Subcatchment 1C: Subcat 1C

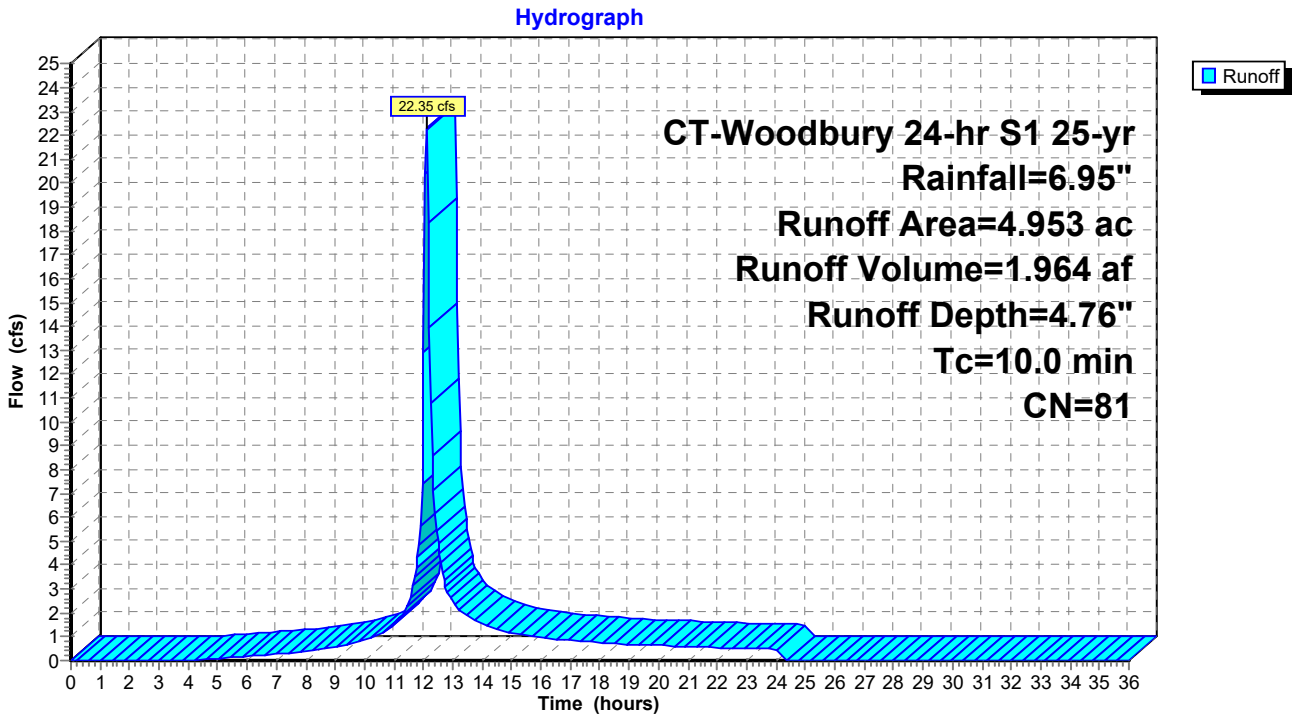
Runoff = 22.35 cfs @ 12.09 hrs, Volume= 1.964 af, Depth= 4.76"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 25-yr Rainfall=6.95"

	Area (ac)	CN	Description
*	0.012	96	Gravel surface
*	0.024	98	Equipment pad
*	4.917	81	50-75% Grass cover, Fair, HSG C-D
	4.953	81	Weighted Average
	4.929		99.52% Pervious Area
	0.024		0.48% Impervious Area

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

Subcatchment 1C: Subcat 1C



Summary for Subcatchment 2A: Subcat 2A

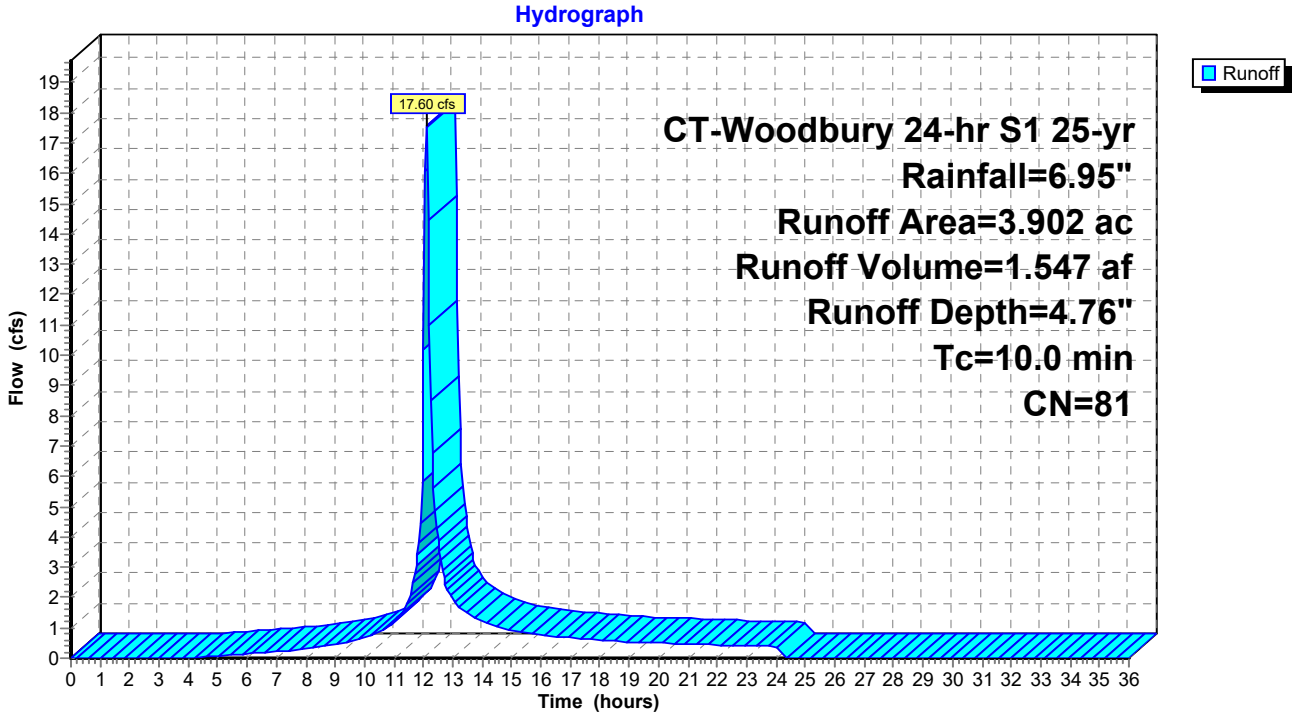
Runoff = 17.60 cfs @ 12.09 hrs, Volume= 1.547 af, Depth= 4.76"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 25-yr Rainfall=6.95"

	Area (ac)	CN	Description
*	0.273	96	Gravel surface
*	0.309	74	50-75% Grass cover, Fair, HSG B-C
*	3.320	81	50-75% Grass cover, Fair, HSG C-D
	3.902	81	Weighted Average
	3.902		100.00% Pervious Area

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

Subcatchment 2A: Subcat 2A



Summary for Subcatchment 2B: Subcat 2B

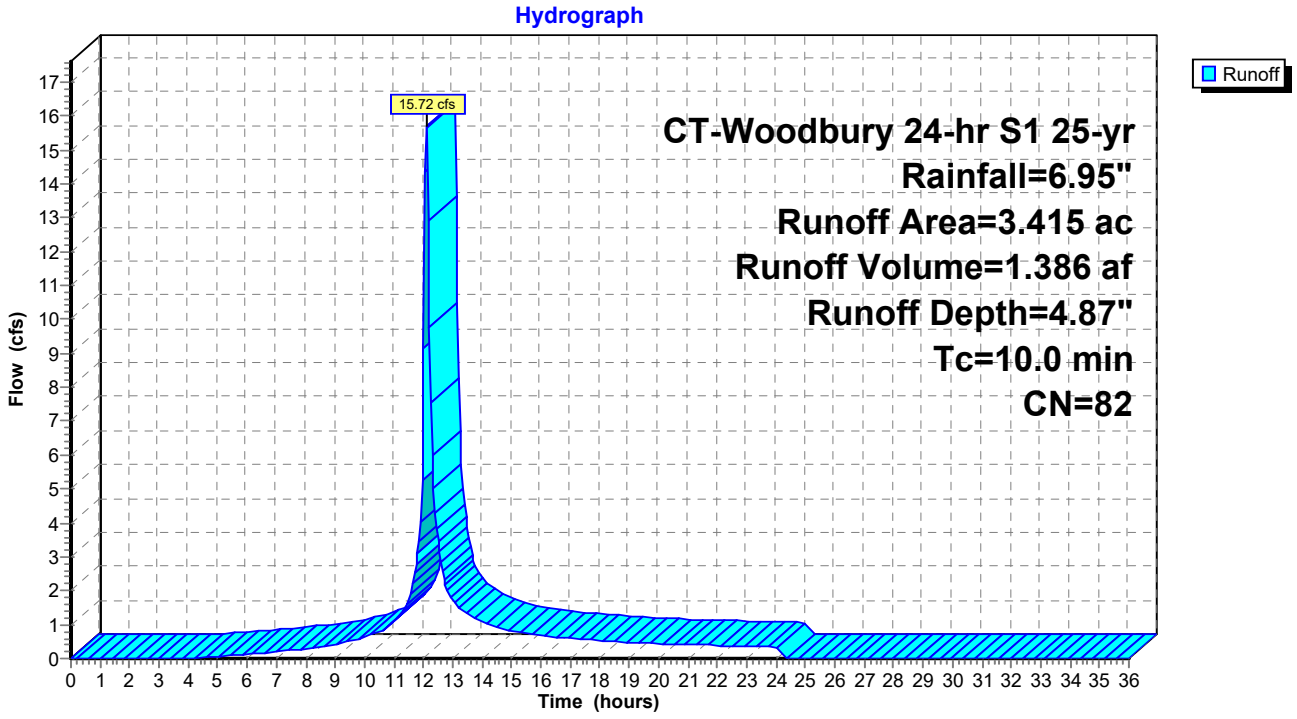
Runoff = 15.72 cfs @ 12.09 hrs, Volume= 1.386 af, Depth= 4.87"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 25-yr Rainfall=6.95"

	Area (ac)	CN	Description
*	0.163	96	Gravel surface
*	3.252	81	50-75% Grass cover, Fair, HSG C-D
	3.415	82	Weighted Average
	3.415		100.00% Pervious Area

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

Subcatchment 2B: Subcat 2B



Summary for Subcatchment 2C: Subcat 2C

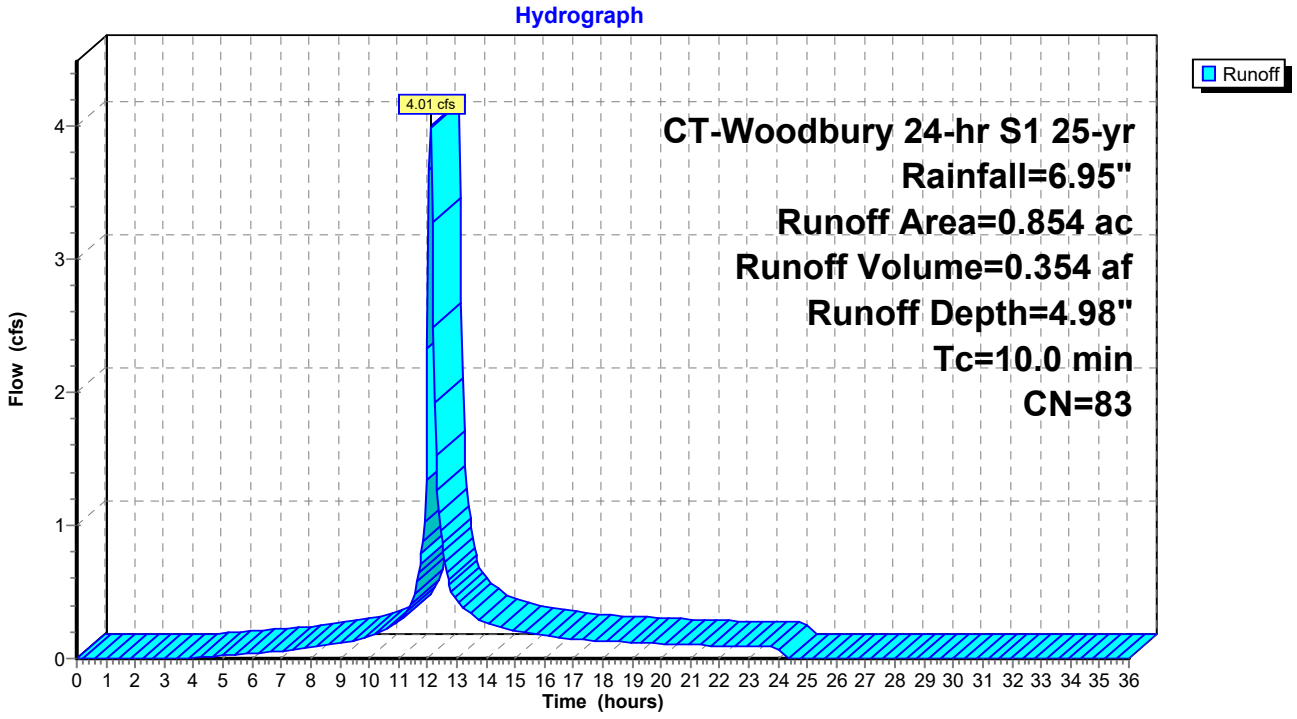
Runoff = 4.01 cfs @ 12.09 hrs, Volume= 0.354 af, Depth= 4.98"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 25-yr Rainfall=6.95"

	Area (ac)	CN	Description
*	0.098	96	Gravel surface
*	0.756	81	50-75% Grass cover, Fair, HSG C-D
	0.854	83	Weighted Average
	0.854		100.00% Pervious Area

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

Subcatchment 2C: Subcat 2C

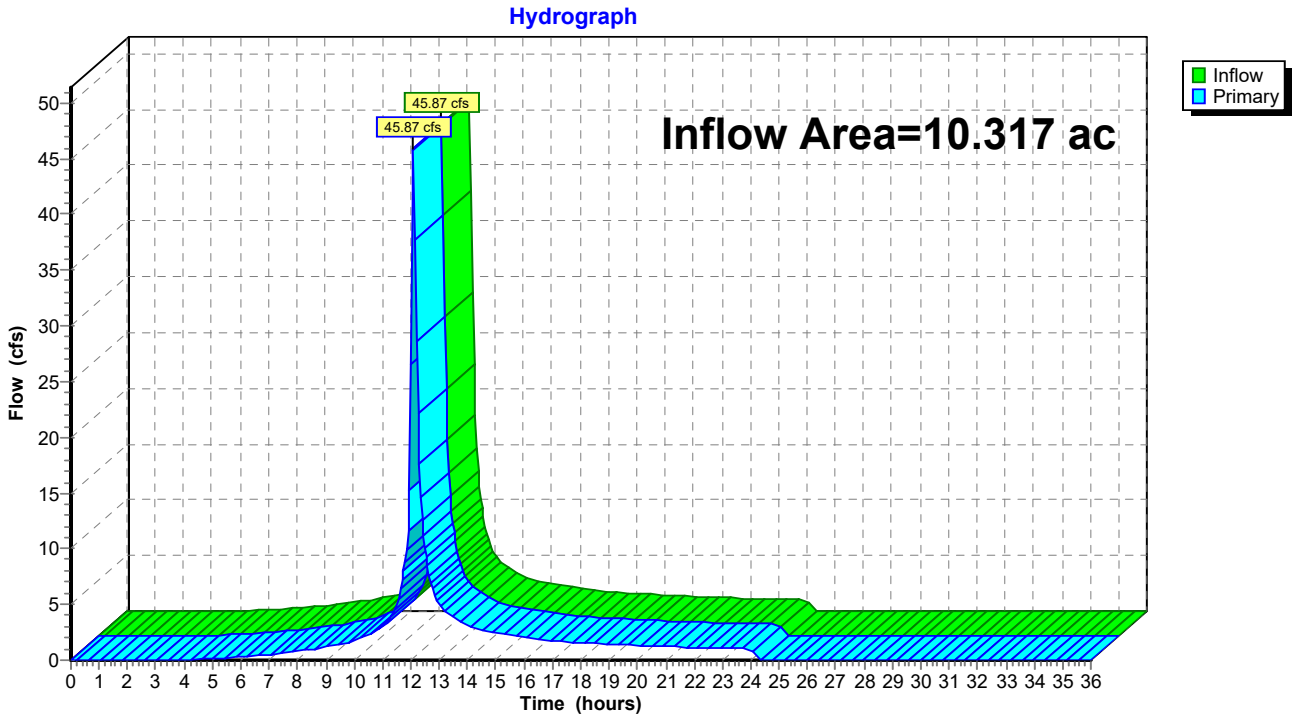


Summary for Link DP1: Design Point 1

Inflow Area = 10.317 ac, 0.23% Impervious, Inflow Depth = 4.69" for 25-yr event
Inflow = 45.87 cfs @ 12.09 hrs, Volume= 4.029 af
Primary = 45.87 cfs @ 12.09 hrs, Volume= 4.029 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP1: Design Point 1

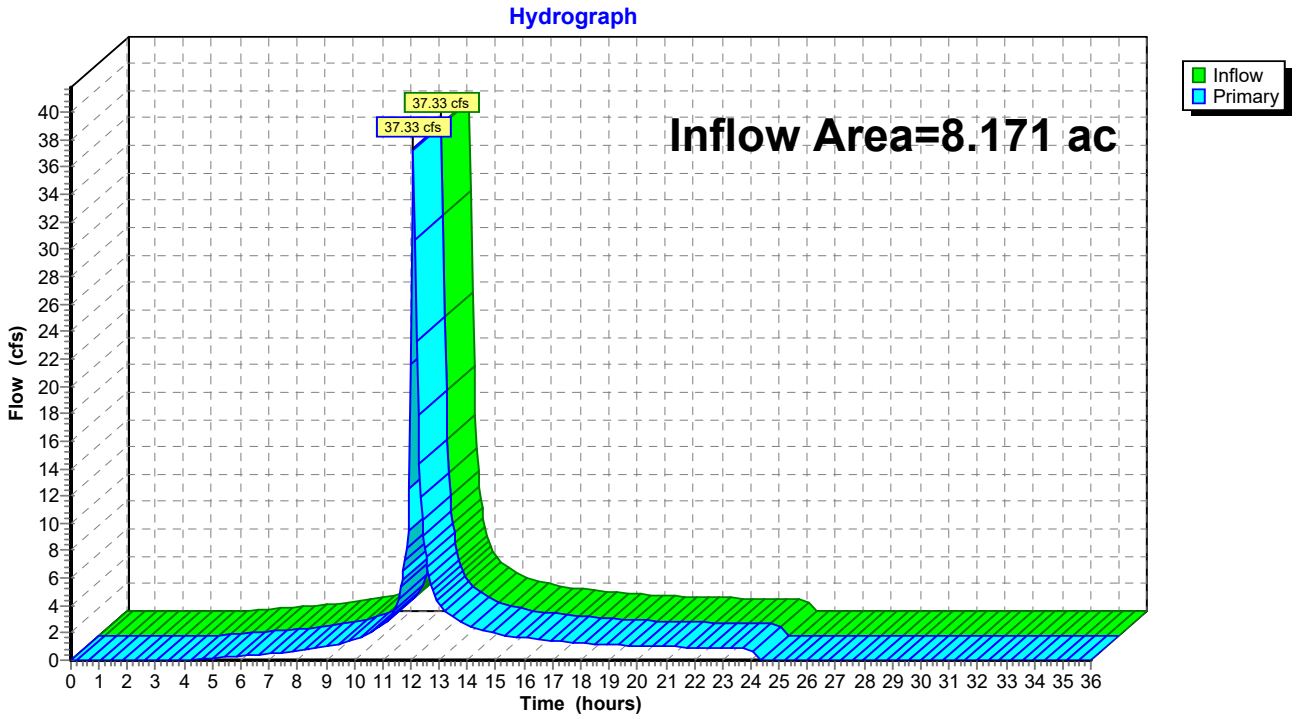


Summary for Link DP2: Design Point 2

Inflow Area = 8.171 ac, 0.00% Impervious, Inflow Depth = 4.83" for 25-yr event
Inflow = 37.33 cfs @ 12.09 hrs, Volume= 3.288 af
Primary = 37.33 cfs @ 12.09 hrs, Volume= 3.288 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP2: Design Point 2



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: Subcat 1A Runoff Area=4.221 ac 0.00% Impervious Runoff Depth=5.66"
Tc=10.0 min CN=81 Runoff=22.26 cfs 1.990 af

Subcatchment1B: Subcat 1B Runoff Area=1.143 ac 0.00% Impervious Runoff Depth=4.96"
Tc=10.0 min CN=75 Runoff=5.35 cfs 0.472 af

Subcatchment1C: Subcat 1C Runoff Area=4.953 ac 0.48% Impervious Runoff Depth=5.66"
Tc=10.0 min CN=81 Runoff=26.13 cfs 2.335 af

Subcatchment2A: Subcat 2A Runoff Area=3.902 ac 0.00% Impervious Runoff Depth=5.66"
Tc=10.0 min CN=81 Runoff=20.58 cfs 1.840 af

Subcatchment2B: Subcat 2B Runoff Area=3.415 ac 0.00% Impervious Runoff Depth=5.77"
Tc=10.0 min CN=82 Runoff=18.33 cfs 1.643 af

Subcatchment2C: Subcat 2C Runoff Area=0.854 ac 0.00% Impervious Runoff Depth=5.89"
Tc=10.0 min CN=83 Runoff=4.66 cfs 0.419 af

Link DP1: Design Point 1 Inflow=53.74 cfs 4.798 af
Primary=53.74 cfs 4.798 af

Link DP2: Design Point 2 Inflow=43.57 cfs 3.902 af
Primary=43.57 cfs 3.902 af

Total Runoff Area = 18.488 ac Runoff Volume = 8.700 af Average Runoff Depth = 5.65"
99.87% Pervious = 18.464 ac 0.13% Impervious = 0.024 ac

Summary for Subcatchment 1A: Subcat 1A

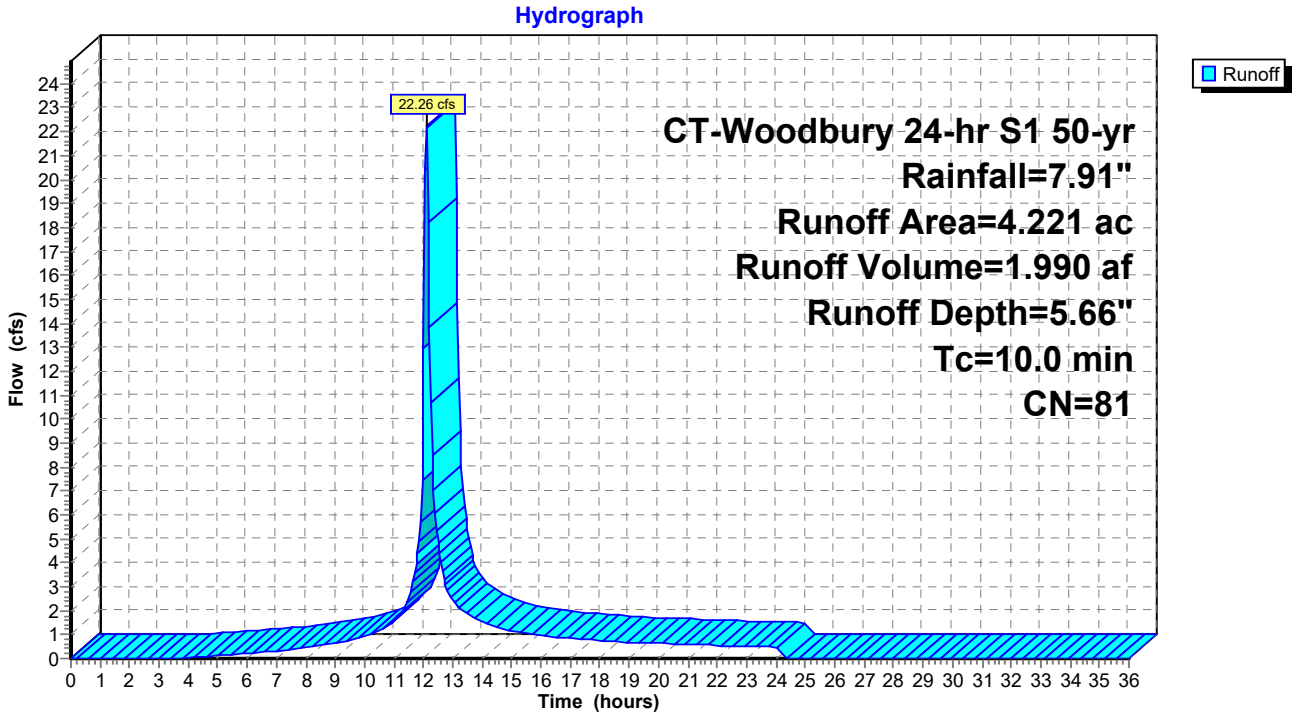
Runoff = 22.26 cfs @ 12.09 hrs, Volume= 1.990 af, Depth= 5.66"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 50-yr Rainfall=7.91"

	Area (ac)	CN	Description
*	0.071	74	50-75% Grass cover, Fair, HSG B-C
*	4.150	81	50-75% Grass cover, Fair, HSG C-D
	4.221	81	Weighted Average
	4.221		100.00% Pervious Area

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

Subcatchment 1A: Subcat 1A



Summary for Subcatchment 1B: Subcat 1B

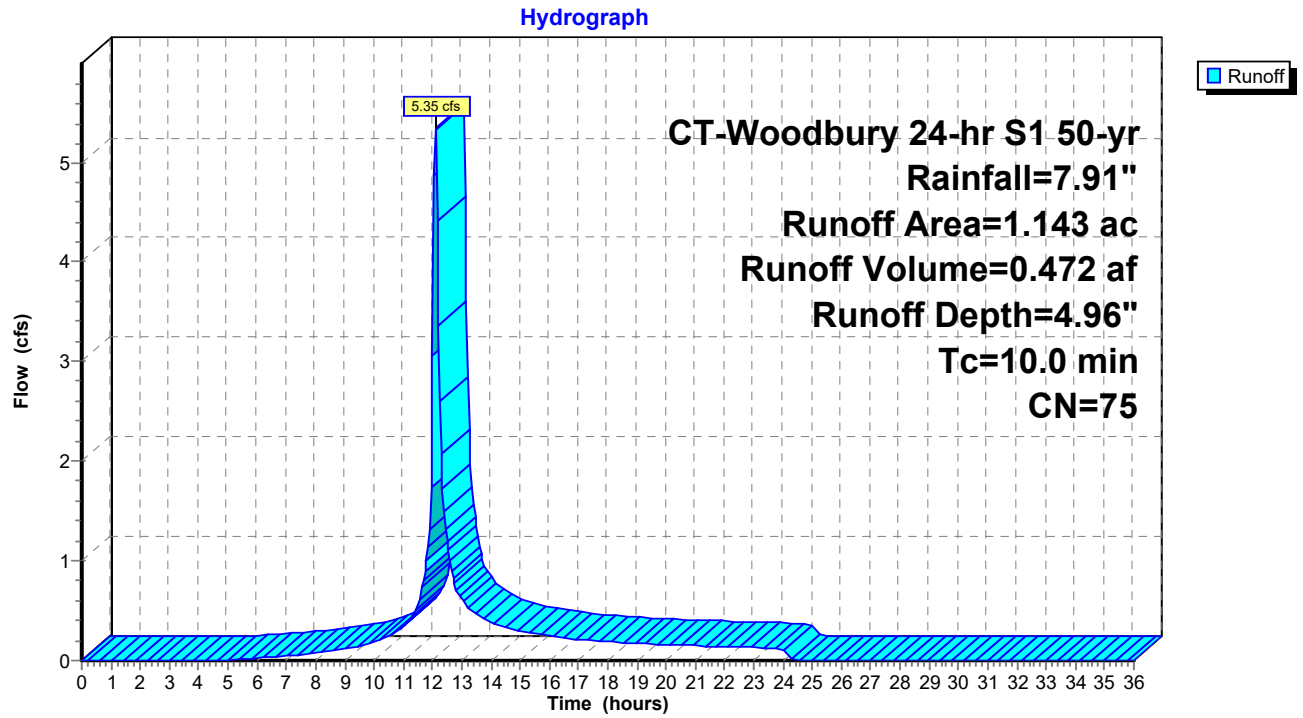
Runoff = 5.35 cfs @ 12.09 hrs, Volume= 0.472 af, Depth= 4.96"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 50-yr Rainfall=7.91"

	Area (ac)	CN	Description
*	0.156	96	Gravel surface
*	0.241	59	50-75% Grass cover, Fair, HSG A-B
*	0.476	74	50-75% Grass cover, Fair, HSG B-C
*	0.270	79	50-75% Grass cover, Fair, HSG C-D
	1.143	75	Weighted Average
	1.143		100.00% Pervious Area

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

Subcatchment 1B: Subcat 1B



Summary for Subcatchment 1C: Subcat 1C

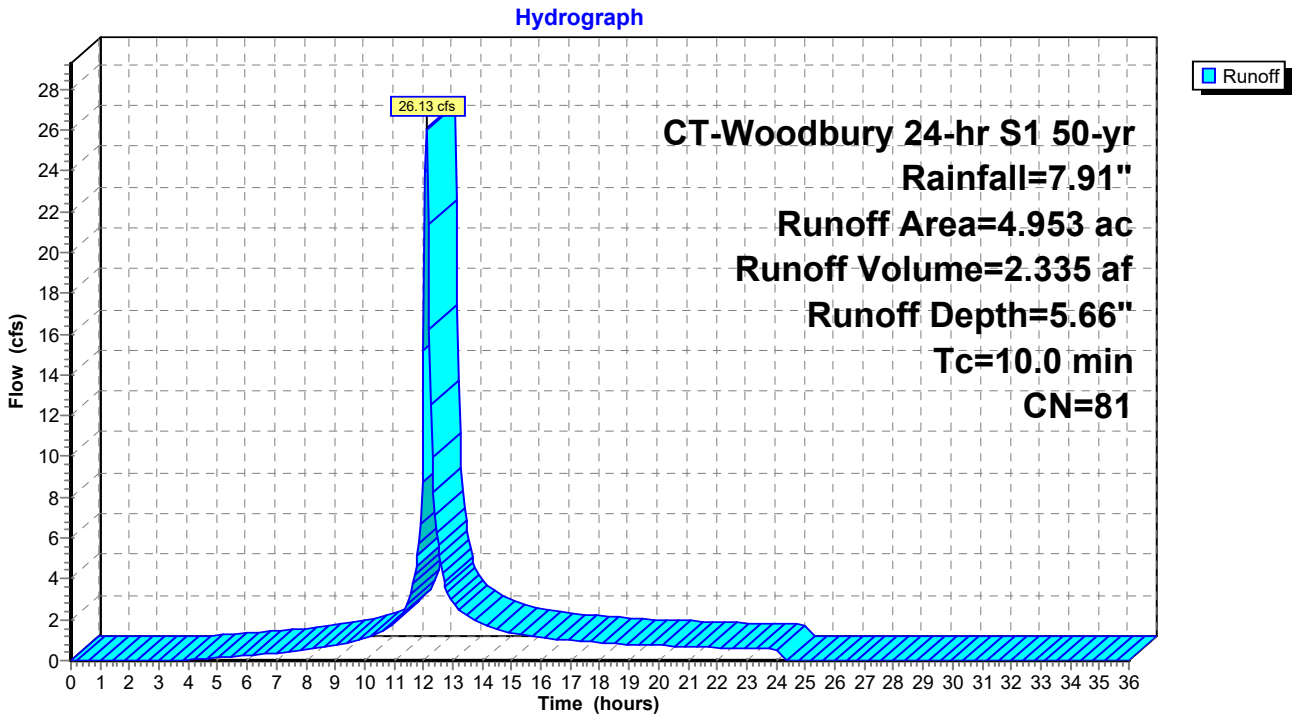
Runoff = 26.13 cfs @ 12.09 hrs, Volume= 2.335 af, Depth= 5.66"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 50-yr Rainfall=7.91"

	Area (ac)	CN	Description
*	0.012	96	Gravel surface
*	0.024	98	Equipment pad
*	4.917	81	50-75% Grass cover, Fair, HSG C-D
	4.953	81	Weighted Average
	4.929		99.52% Pervious Area
	0.024		0.48% Impervious Area

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

Subcatchment 1C: Subcat 1C



Summary for Subcatchment 2A: Subcat 2A

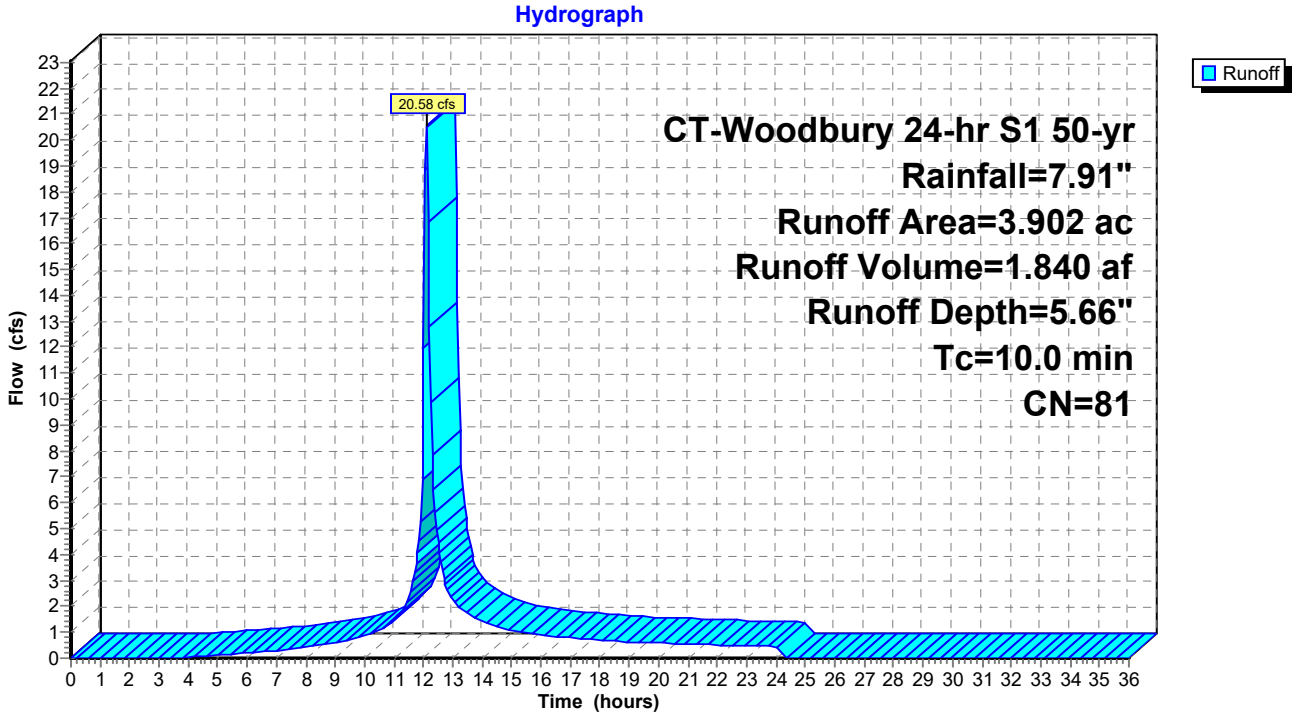
Runoff = 20.58 cfs @ 12.09 hrs, Volume= 1.840 af, Depth= 5.66"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 50-yr Rainfall=7.91"

	Area (ac)	CN	Description
*	0.273	96	Gravel surface
*	0.309	74	50-75% Grass cover, Fair, HSG B-C
*	3.320	81	50-75% Grass cover, Fair, HSG C-D
	3.902	81	Weighted Average
	3.902		100.00% Pervious Area

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

Subcatchment 2A: Subcat 2A



Summary for Subcatchment 2B: Subcat 2B

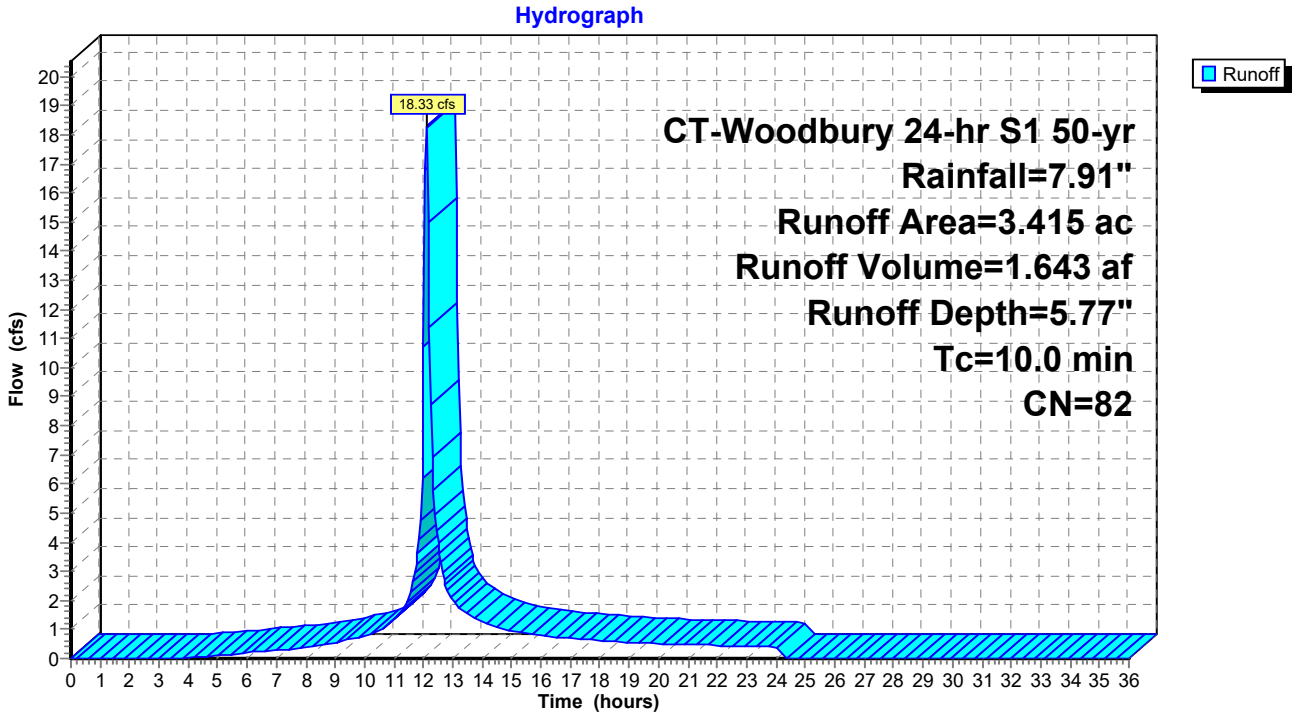
Runoff = 18.33 cfs @ 12.09 hrs, Volume= 1.643 af, Depth= 5.77"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 50-yr Rainfall=7.91"

	Area (ac)	CN	Description
*	0.163	96	Gravel surface
*	3.252	81	50-75% Grass cover, Fair, HSG C-D
	3.415	82	Weighted Average
	3.415		100.00% Pervious Area

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

Subcatchment 2B: Subcat 2B



Summary for Subcatchment 2C: Subcat 2C

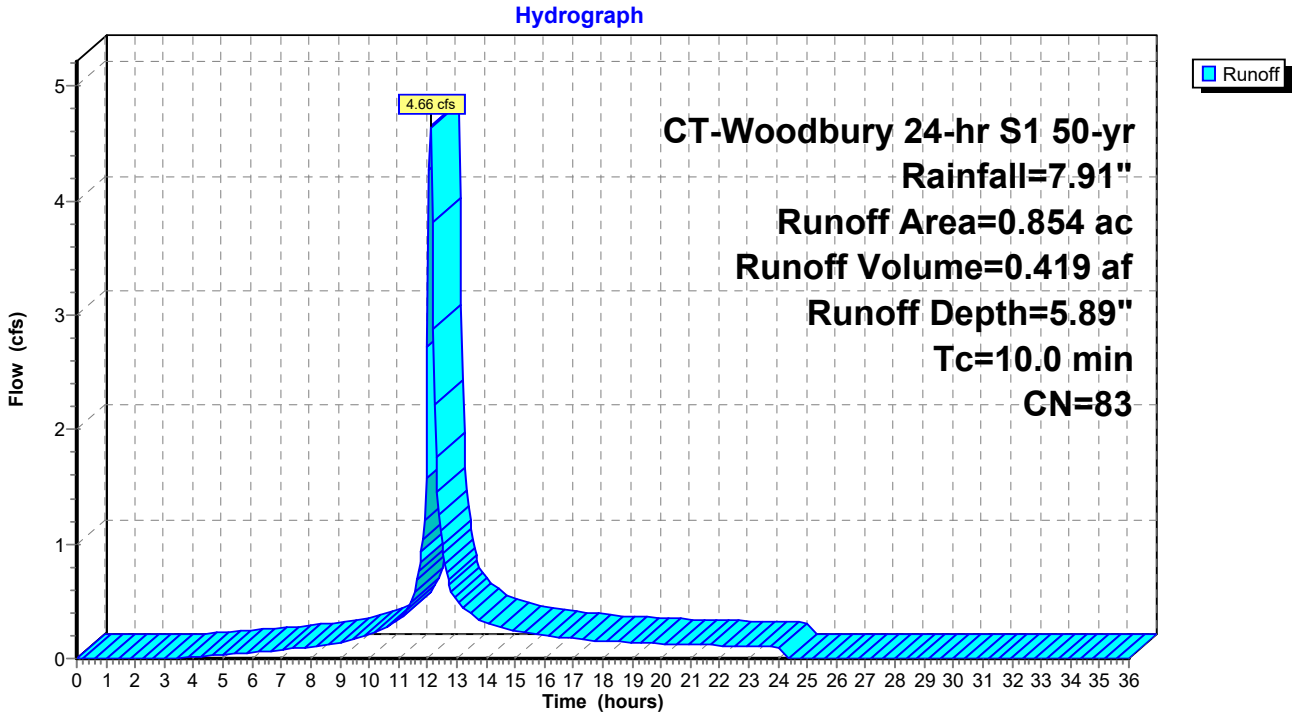
Runoff = 4.66 cfs @ 12.09 hrs, Volume= 0.419 af, Depth= 5.89"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 50-yr Rainfall=7.91"

	Area (ac)	CN	Description
*	0.098	96	Gravel surface
*	0.756	81	50-75% Grass cover, Fair, HSG C-D
	0.854	83	Weighted Average
	0.854		100.00% Pervious Area

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

Subcatchment 2C: Subcat 2C

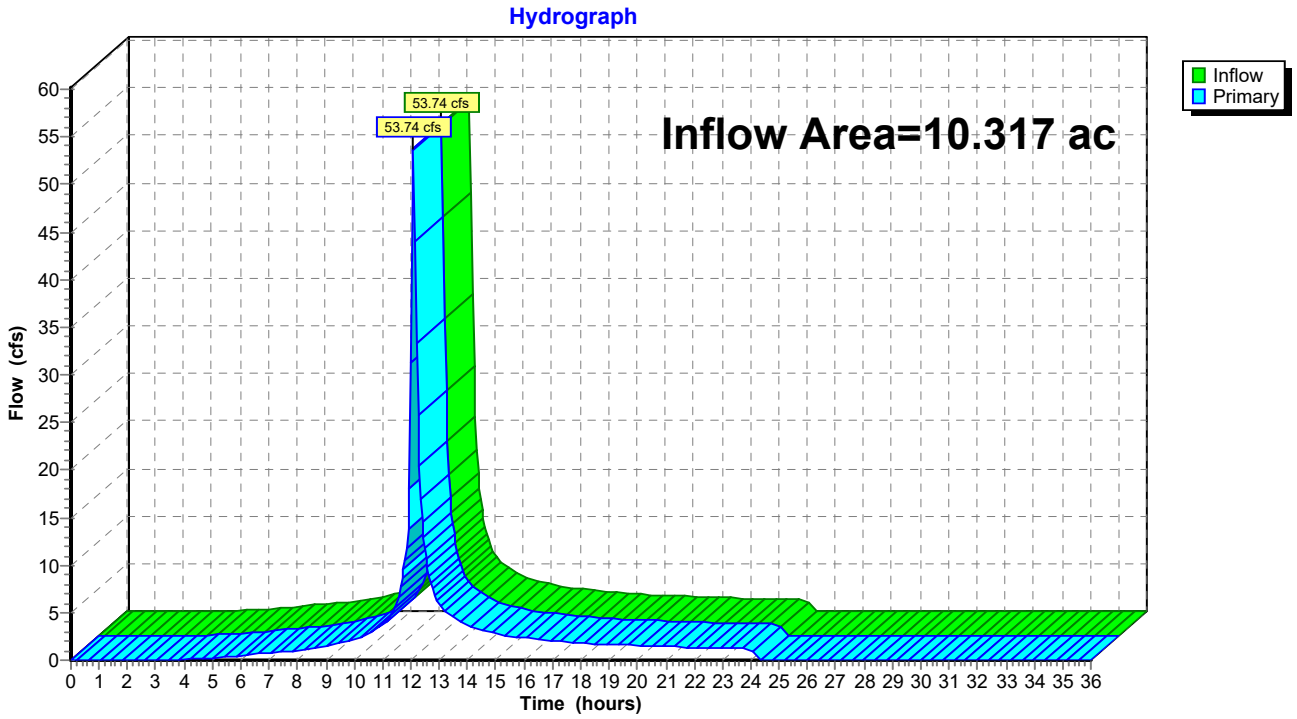


Summary for Link DP1: Design Point 1

Inflow Area = 10.317 ac, 0.23% Impervious, Inflow Depth = 5.58" for 50-yr event
Inflow = 53.74 cfs @ 12.09 hrs, Volume= 4.798 af
Primary = 53.74 cfs @ 12.09 hrs, Volume= 4.798 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP1: Design Point 1

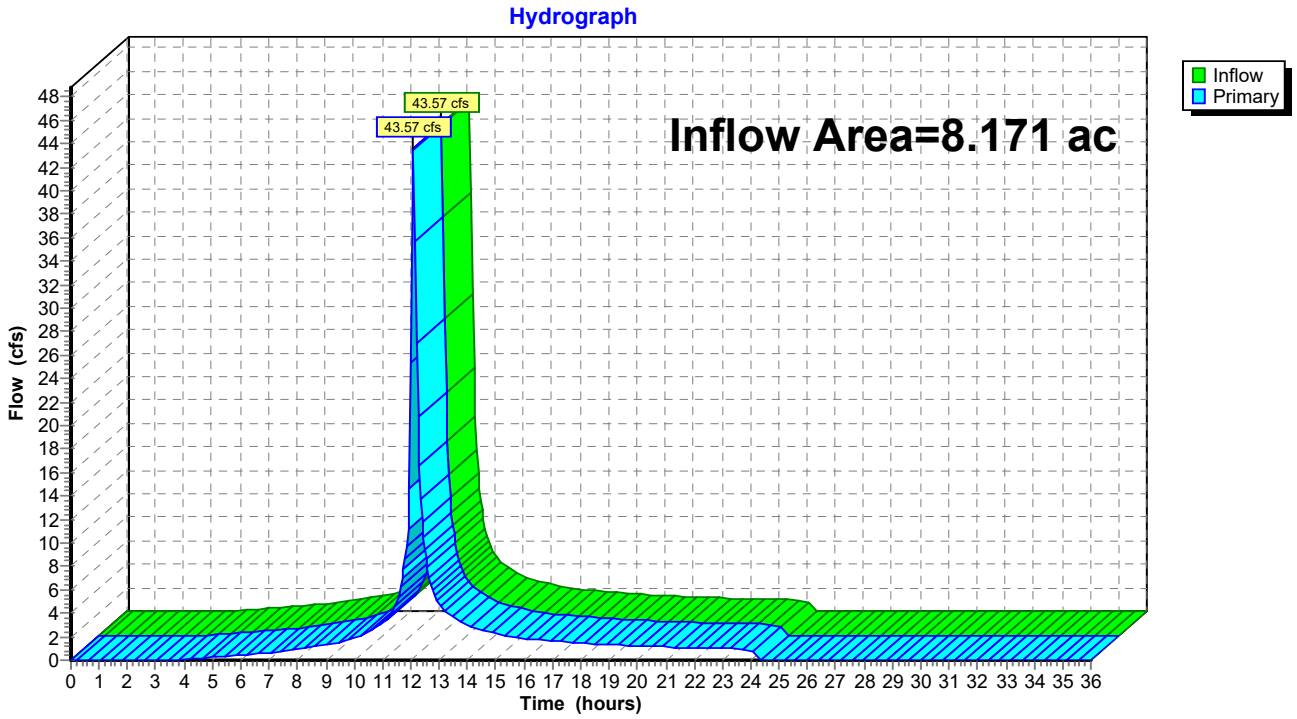


Summary for Link DP2: Design Point 2

Inflow Area = 8.171 ac, 0.00% Impervious, Inflow Depth = 5.73" for 50-yr event
Inflow = 43.57 cfs @ 12.09 hrs, Volume= 3.902 af
Primary = 43.57 cfs @ 12.09 hrs, Volume= 3.902 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP2: Design Point 2



Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1A: Subcat 1A Runoff Area=4.221 ac 0.00% Impervious Runoff Depth=6.66"
Tc=10.0 min CN=81 Runoff=25.59 cfs 2.344 af

Subcatchment1B: Subcat 1B Runoff Area=1.143 ac 0.00% Impervious Runoff Depth=5.92"
Tc=10.0 min CN=75 Runoff=6.26 cfs 0.564 af

Subcatchment1C: Subcat 1C Runoff Area=4.953 ac 0.48% Impervious Runoff Depth=6.66"
Tc=10.0 min CN=81 Runoff=30.03 cfs 2.750 af

Subcatchment2A: Subcat 2A Runoff Area=3.902 ac 0.00% Impervious Runoff Depth=6.66"
Tc=10.0 min CN=81 Runoff=23.66 cfs 2.166 af

Subcatchment2B: Subcat 2B Runoff Area=3.415 ac 0.00% Impervious Runoff Depth=6.79"
Tc=10.0 min CN=82 Runoff=21.01 cfs 1.931 af

Subcatchment2C: Subcat 2C Runoff Area=0.854 ac 0.00% Impervious Runoff Depth=6.91"
Tc=10.0 min CN=83 Runoff=5.33 cfs 0.492 af

Link DP1: Design Point 1 Inflow=61.89 cfs 5.658 af
Primary=61.89 cfs 5.658 af

Link DP2: Design Point 2 Inflow=50.00 cfs 4.589 af
Primary=50.00 cfs 4.589 af

Total Runoff Area = 18.488 ac Runoff Volume = 10.247 af Average Runoff Depth = 6.65"
99.87% Pervious = 18.464 ac 0.13% Impervious = 0.024 ac

Summary for Subcatchment 1A: Subcat 1A

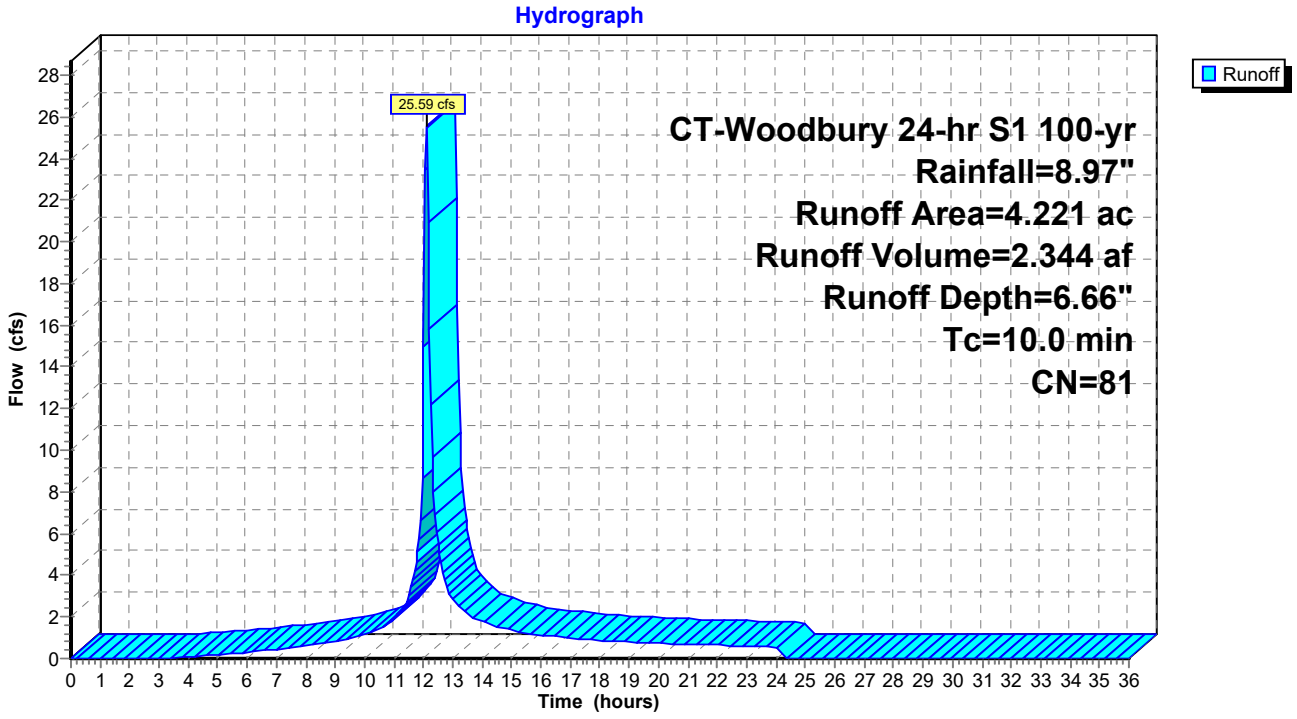
Runoff = 25.59 cfs @ 12.09 hrs, Volume= 2.344 af, Depth= 6.66"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 100-yr Rainfall=8.97"

	Area (ac)	CN	Description
*	0.071	74	50-75% Grass cover, Fair, HSG B-C
*	4.150	81	50-75% Grass cover, Fair, HSG C-D
	4.221	81	Weighted Average
	4.221		100.00% Pervious Area

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

Subcatchment 1A: Subcat 1A



Summary for Subcatchment 1B: Subcat 1B

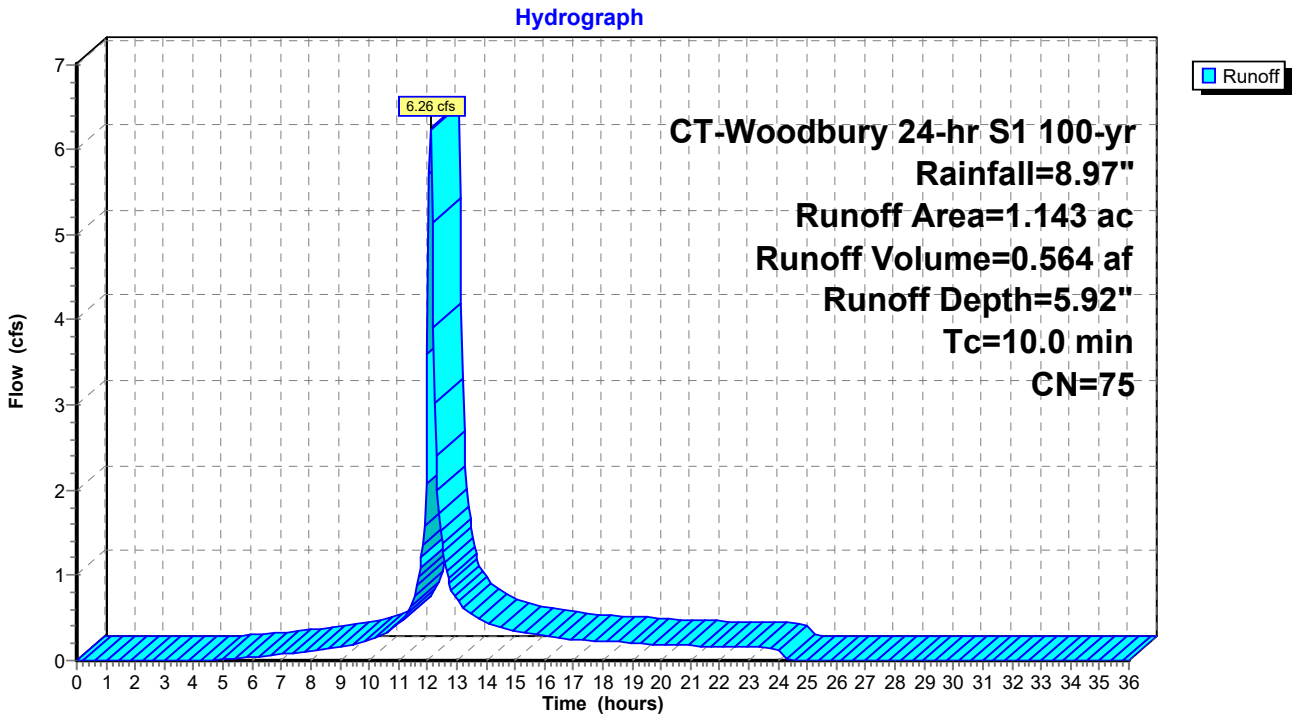
Runoff = 6.26 cfs @ 12.09 hrs, Volume= 0.564 af, Depth= 5.92"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 100-yr Rainfall=8.97"

	Area (ac)	CN	Description
*	0.156	96	Gravel surface
*	0.241	59	50-75% Grass cover, Fair, HSG A-B
*	0.476	74	50-75% Grass cover, Fair, HSG B-C
*	0.270	79	50-75% Grass cover, Fair, HSG C-D
	1.143	75	Weighted Average
	1.143		100.00% Pervious Area

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

Subcatchment 1B: Subcat 1B



Summary for Subcatchment 1C: Subcat 1C

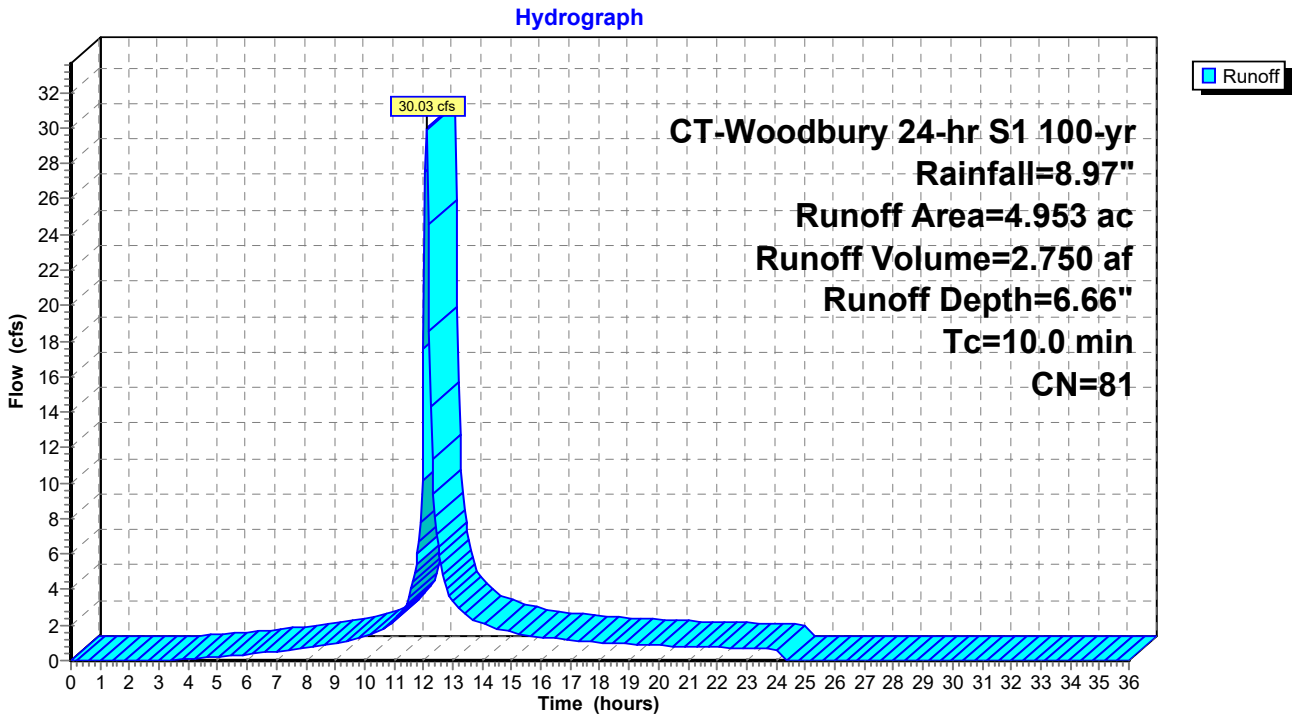
Runoff = 30.03 cfs @ 12.09 hrs, Volume= 2.750 af, Depth= 6.66"
Routed to Link DP1 : Design Point 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 100-yr Rainfall=8.97"

	Area (ac)	CN	Description
*	0.012	96	Gravel surface
*	0.024	98	Equipment pad
*	4.917	81	50-75% Grass cover, Fair, HSG C-D
	4.953	81	Weighted Average
	4.929		99.52% Pervious Area
	0.024		0.48% Impervious Area

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

Subcatchment 1C: Subcat 1C



Summary for Subcatchment 2A: Subcat 2A

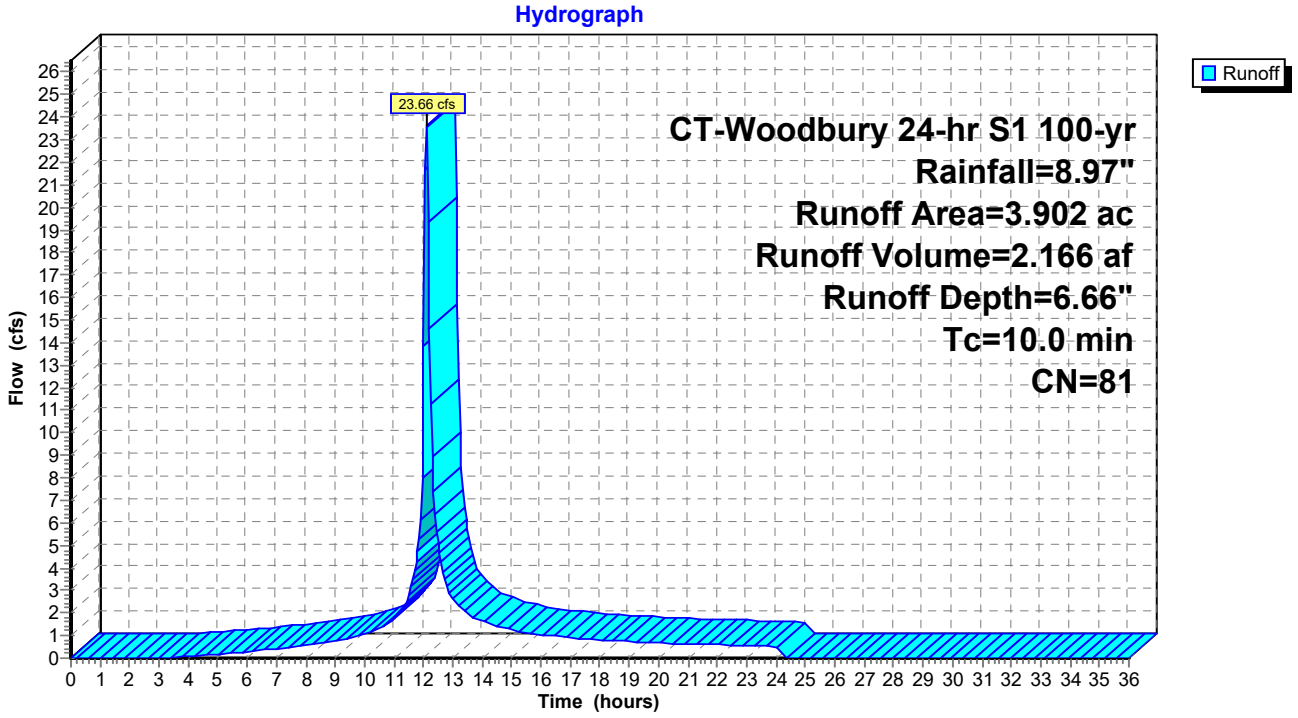
Runoff = 23.66 cfs @ 12.09 hrs, Volume= 2.166 af, Depth= 6.66"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 100-yr Rainfall=8.97"

	Area (ac)	CN	Description
*	0.273	96	Gravel surface
*	0.309	74	50-75% Grass cover, Fair, HSG B-C
*	3.320	81	50-75% Grass cover, Fair, HSG C-D
	3.902	81	Weighted Average
	3.902		100.00% Pervious Area

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

Subcatchment 2A: Subcat 2A



Summary for Subcatchment 2B: Subcat 2B

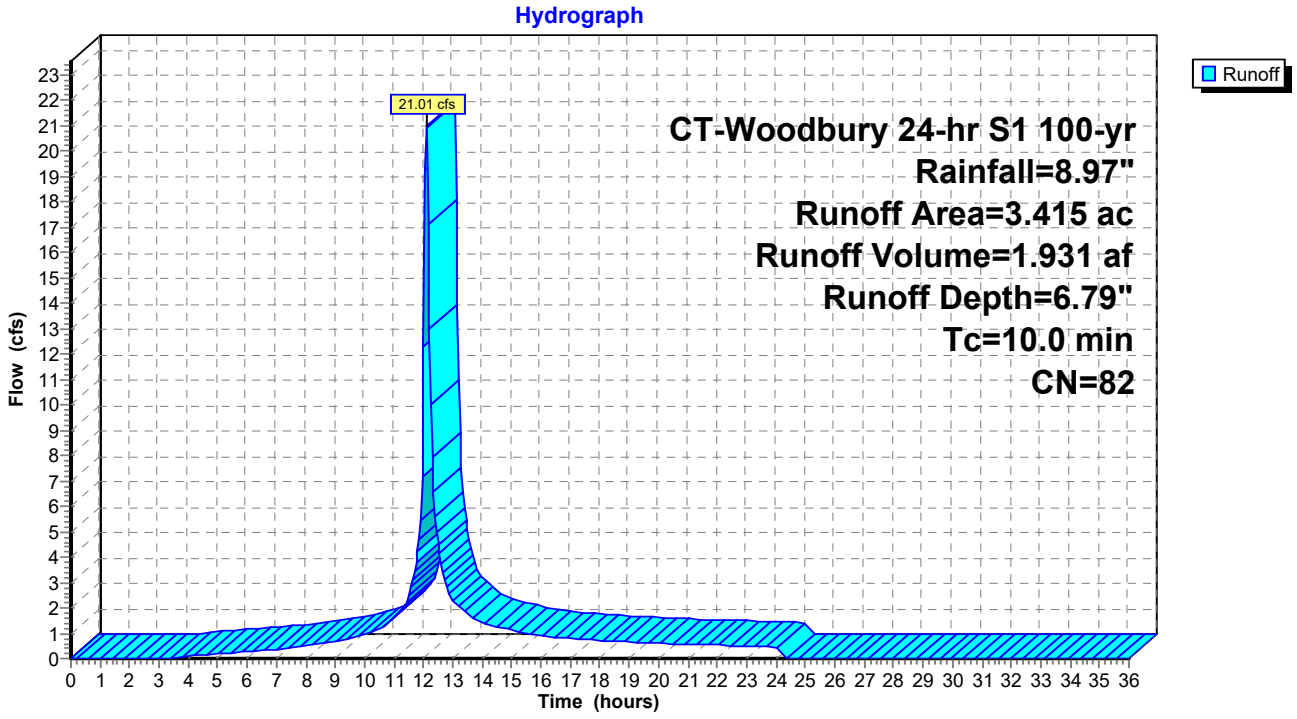
Runoff = 21.01 cfs @ 12.09 hrs, Volume= 1.931 af, Depth= 6.79"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 100-yr Rainfall=8.97"

	Area (ac)	CN	Description
*	0.163	96	Gravel surface
*	3.252	81	50-75% Grass cover, Fair, HSG C-D
	3.415	82	Weighted Average
	3.415		100.00% Pervious Area

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

Subcatchment 2B: Subcat 2B



Summary for Subcatchment 2C: Subcat 2C

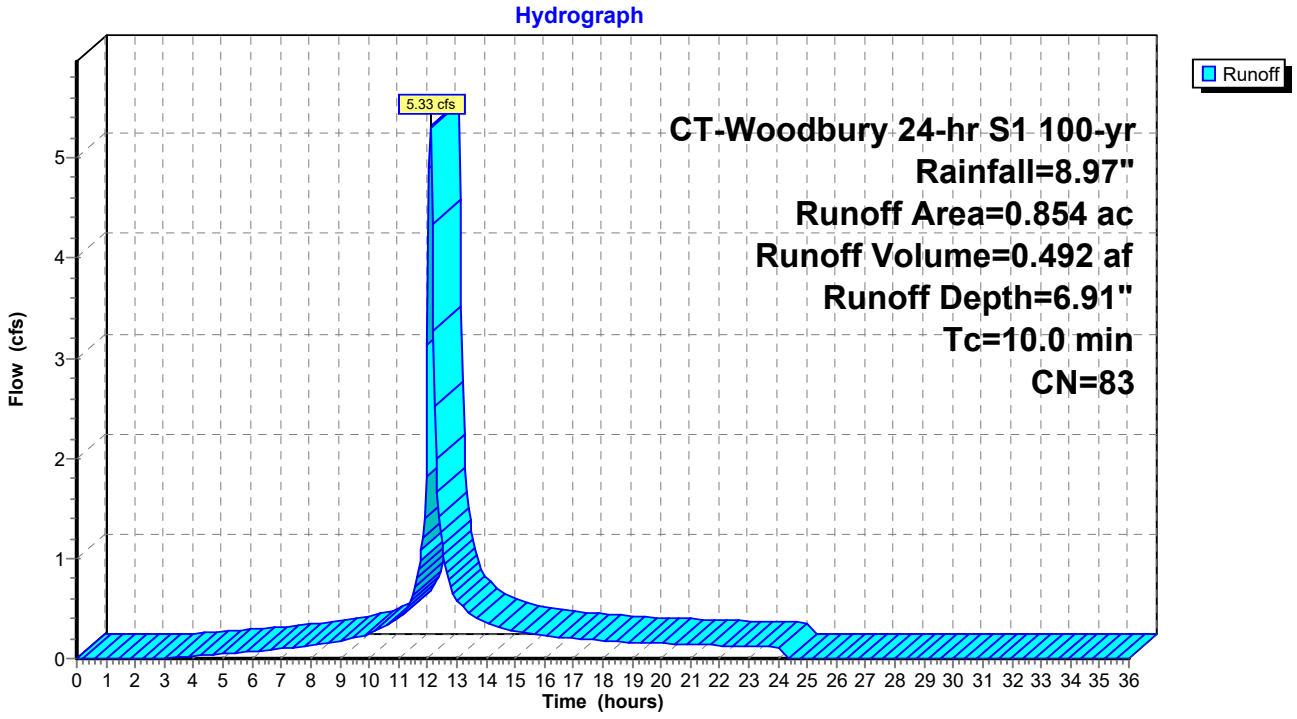
Runoff = 5.33 cfs @ 12.09 hrs, Volume= 0.492 af, Depth= 6.91"
Routed to Link DP2 : Design Point 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
CT-Woodbury 24-hr S1 100-yr Rainfall=8.97"

	Area (ac)	CN	Description
*	0.098	96	Gravel surface
*	0.756	81	50-75% Grass cover, Fair, HSG C-D
	0.854	83	Weighted Average
	0.854		100.00% Pervious Area

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

Subcatchment 2C: Subcat 2C

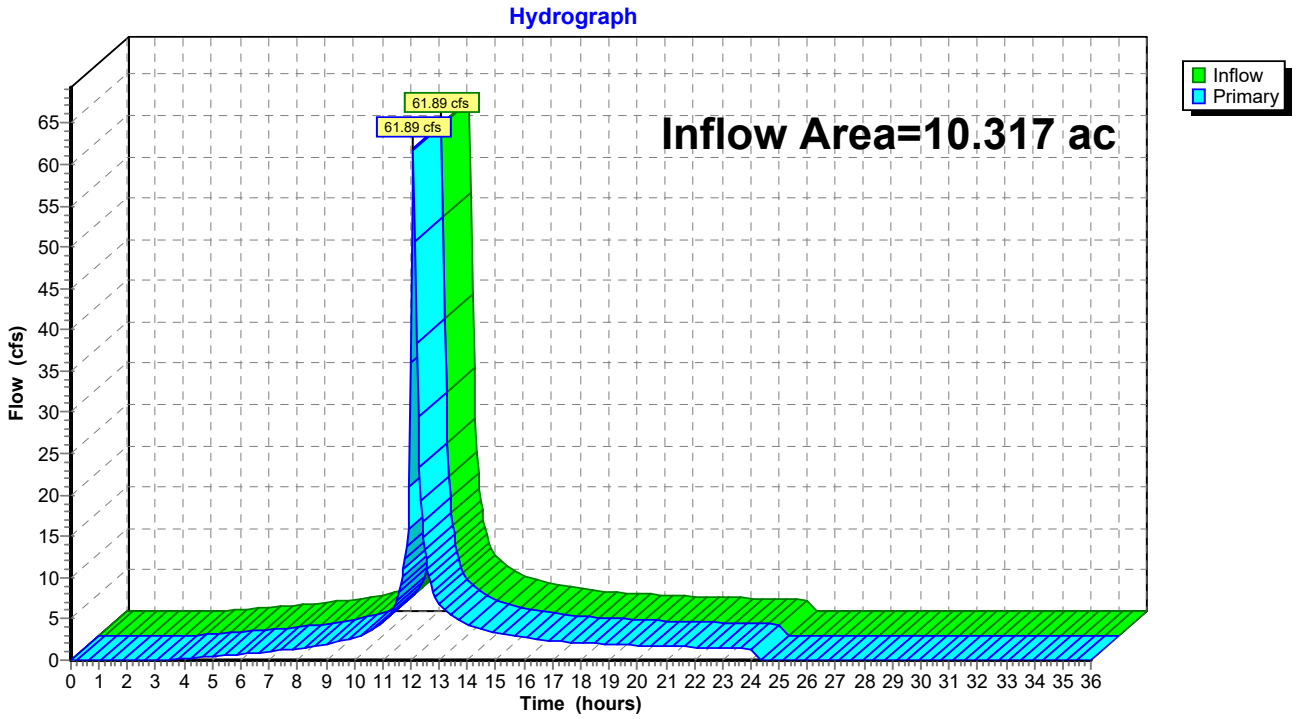


Summary for Link DP1: Design Point 1

Inflow Area = 10.317 ac, 0.23% Impervious, Inflow Depth = 6.58" for 100-yr event
Inflow = 61.89 cfs @ 12.09 hrs, Volume= 5.658 af
Primary = 61.89 cfs @ 12.09 hrs, Volume= 5.658 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP1: Design Point 1



Summary for Link DP2: Design Point 2

Inflow Area = 8.171 ac, 0.00% Impervious, Inflow Depth = 6.74" for 100-yr event
Inflow = 50.00 cfs @ 12.09 hrs, Volume= 4.589 af
Primary = 50.00 cfs @ 12.09 hrs, Volume= 4.589 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs

Link DP2: Design Point 2