Woodstock Solar One

11 Castle Rock Road
Woodstock, Connecticut

PREPARED FOR

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February 2024

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Project Summary

Project Description

The Petitioner is proposing to construct a ±3 MW solar farm on an undeveloped farm field 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 petition will be removed and the land will be restored in accordance with the decommissioning plan.

Site Description

The Project Site will be located on ±19 acres of an approximately 38-acre parcel on Castle Rock Road, (Map, Block, Lot: 6395/64-08) in Woodstock, Connecticut. The site is bounded by woodland to the north and west, owned by Woodstock Academy, and residential properties to the east. Castle Rock Road is to the south.

The project area under existing conditions the site generally drains to the north, typically flowing to the wetlands either central to the overall project area, or to the eastern wetland. There is one delineated on-site wetland system that continues from the north of the site and has two wetland corridors within the site. There is one design point that the water flows towards: all flow paths sheet flow across farm fields to the north where they are collected offsite and subsequently discharge to Little Brook.

Based on the hydrologic soil group confirmation, the west portion of on-Site soils within the Project area belong to the Hydrologic Soil Group "C" and "D", indicating that the soils have a slow infiltration rate when thoroughly wet, and that there are the likely presence of wetland soils. See Appendix B for NRCS Web Soil Survey output.

According to available CTDEEP Groundwater Classification maps, groundwater at the site is GA (see Appendix A). The CTDEEP Aquifer Protection Areas Mapping website does not show the property as being within an Aquifer Protection Area. Woodstock does not contain any CTDEEP-listed Aquifer Protection Areas.

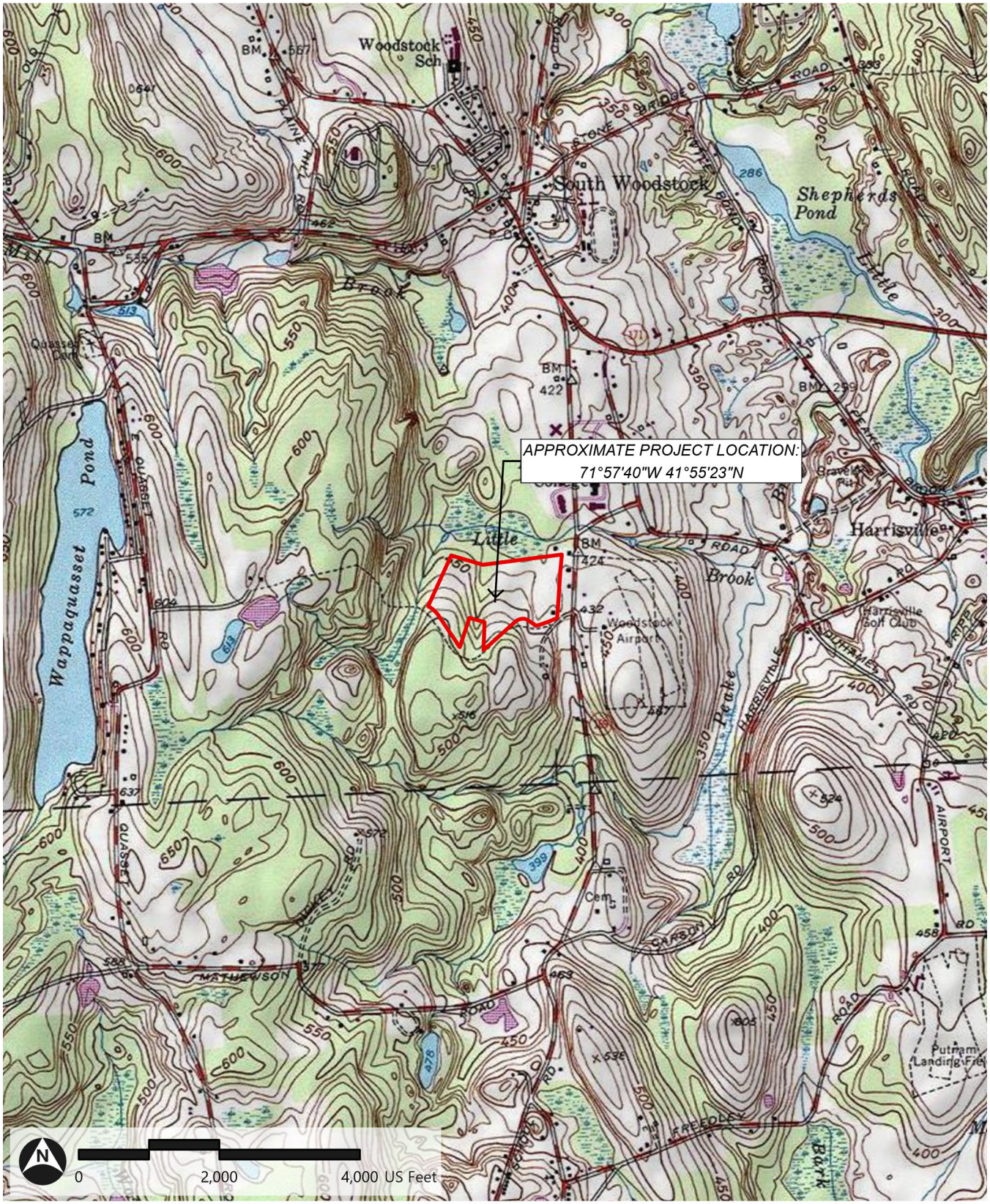
Methodology

The Project was designed to incorporate measures provided in the Connecticut Stormwater Quality Manual (CTDEEP 2023) as well as the CTDEEP Stormwater General Permit. The conclusion of this analysis is that the proposed improvements will not increase the post-development peak runoff rates in comparison to existing pre-development rates at any of the critical design points analyzed and the quality of stormwater runoff leaving the Site will be improved prior to discharge from the Site.

Figure 1: Site Location Map

Figure 1: USGS Site Location Map

Verogy Woodstock | Woodstock, CT



Project Site

Source: USGS, VHB

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Existing Drainage Conditions

Summary

Under existing conditions, runoff from the project area generally flows to the brook to the north of the property. There is one design point that the water flows towards: multiple paths sheet flow across farm fields where they are collected within the onsite wetlands and flow to Little Brook.

The Site is generally at its highest elevation in the south, but more specifically in the central portion of each farm field. The entirety of the Project area is comprised of actively-farmed fields. Terrain slopes in the Project area range from 3% to approximately 8% with no slopes exceeding 15% existing slope.

Hydrologic Information

For the existing conditions hydrologic analysis, the Site has been divided into five (5) drainage areas, which have been identified as areas within the project that discharge to various locations. 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 site have been considered in the hydrologic analysis discharging to the Design Point.

Drainage Area 1A - This ±4.0-acre area is located at the westernmost point of the Site. Untreated stormwater in this area generally flows to the northwest towards the tree line at the edge of the farm fields. Overland runoff ultimately travels through the tree line and to Little Brook. (Design Point 1)

Drainage Area 1B - This ±4.3 acre area is located at the eastern portion of the western farm field. Stormwater in this area flows untreated to the wetlands in between the onsite farm fields and then enters Little Brook. (Design Point 1)

Drainage Area 1C - This ±2.5-acre area is located at the western portion of the eastern farm field. Stormwater in this area flows untreated to the wetlands in between the onsite farm fields and then enters Little Brook. (Design Point 1)

Drainage Area 1D - This ±3.3-acre area is located at the northern portion of the eastern farm field. Stormwater in this area flows untreated generally to the wetlands to the north and subsequently to Little Brook. (Design Point 1)

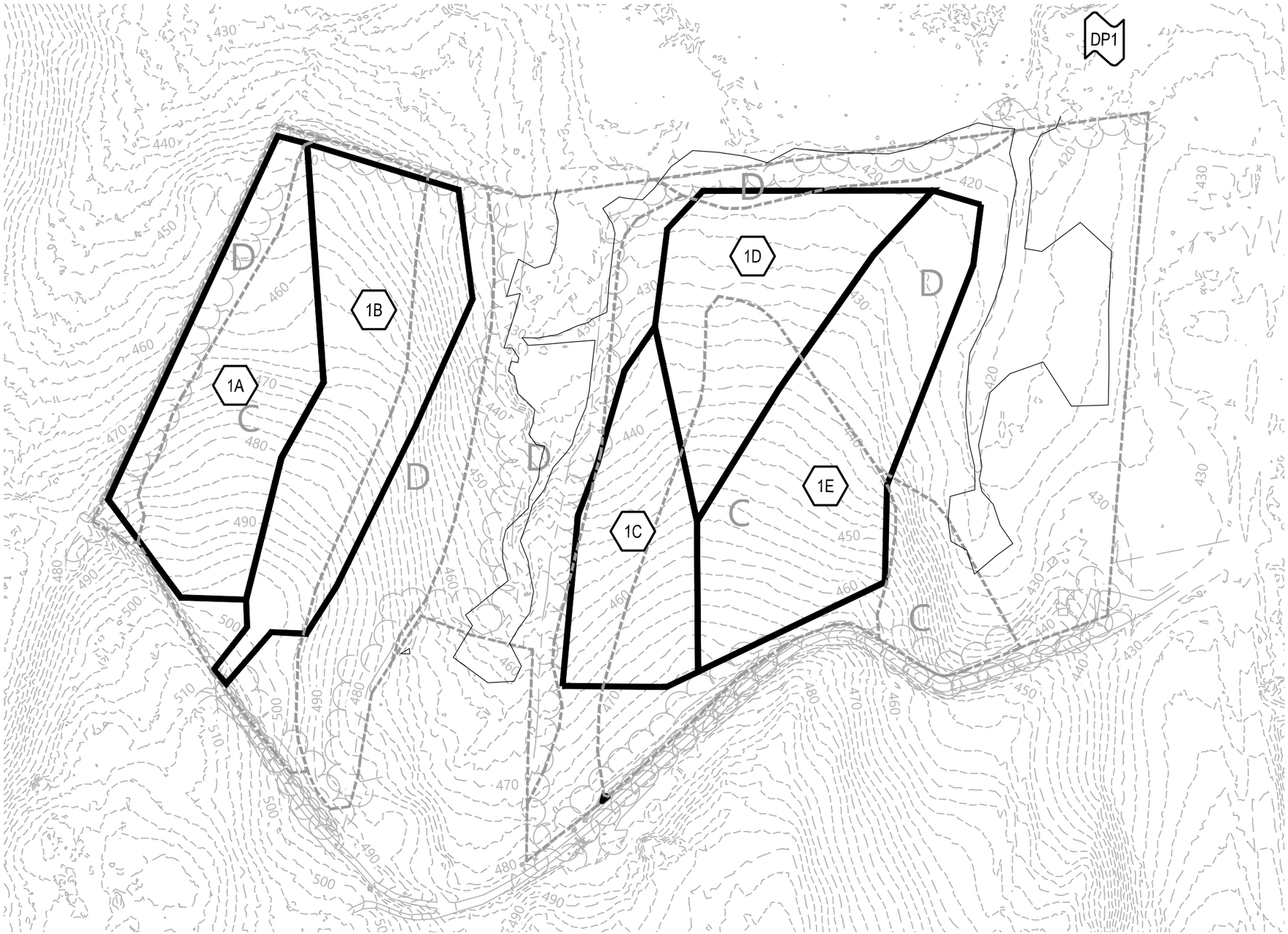
Drainage Area 1E - This ±4.7-acre area is located at the eastern portion of the eastern farm field. Stormwater in this area flows untreated generally to the east to the wetlands and subsequently to Little Brook. (Design Point 1)

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	Little Brook	4.0	83	10
1B	Little Brook	4.3	83	10
1C	Little Brook	2.5	84	10
1D	Little Brook	3.3	84	10
1E	Little Brook	4.7	82	10

Figure 2: Existing Drainage Areas



Legend

SYMBOLS

- DESIGN POINT (X)
- DRAINAGE AREA DESIGNATION (X)
- PERMANENT STORMWATER BASIN (XP)

LINETYPES

- DRAINAGE AREA BOUNDARY
- HSG BOUNDARY
- WETLAND BOUNDARY
- TIME OF CONCENTRATION

0 100 200 400 Feet

Existing Drainage Conditions
Woodstock Solar One
11 Castle Rock Road
Woodstock, Connecticut

Figure 1

February 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. In the majority of the on-Site 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 has been preserved to the maximum extents practicable and no tree clearing is proposed. As a result, the Project will have minimal impact to surrounding ecologically sensitive areas.

The only impervious surfaces proposed to be constructed are access roads and small concrete pads for utility equipment. Once operational, vehicular access to the Project will be limited to infrequent maintenance visits. The vegetated buffers will provide water quality treatment in all portions of the Site.

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 the same five (5) drainage areas from existing conditions. In accordance with the 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 that are classified as Hydrologic Soil Group 'C'.

Drainage Area 1A - This ±4.0-acre area is located at the westernmost point of the Site. Stormwater in this area will generally flow under the solar panels towards the western woodland and then to Little Brook. The introduction of permanent meadowy vegetation and grass will serve to improve water quality from the active farming under existing conditions.

Drainage Area 1B - This ±4.3 acre area is located at the eastern portion of the western farm field. Stormwater in this area will generally flow under the solar panels towards the northern wetlands and then to Little Brook. The introduction of permanent meadowy vegetation and grass will serve to improve water quality from the active farming under existing conditions.

Drainage Area 1C - This ±2.5-acre area is located at the western portion of the eastern farm field. Stormwater in this area will generally flow under the solar panels towards the wetlands and then to Little Brook. The introduction of permanent meadowy vegetation and grass will serve to improve water quality from the active farming under existing conditions.

Drainage Area 1D - This ±3.3-acre area is located at the northern portion of the eastern farm field. Stormwater in this area will generally flow under the solar panels towards the wetlands and then to Little Brook. The introduction of permanent meadowy vegetation and grass will serve to improve water quality from the active farming under existing conditions.

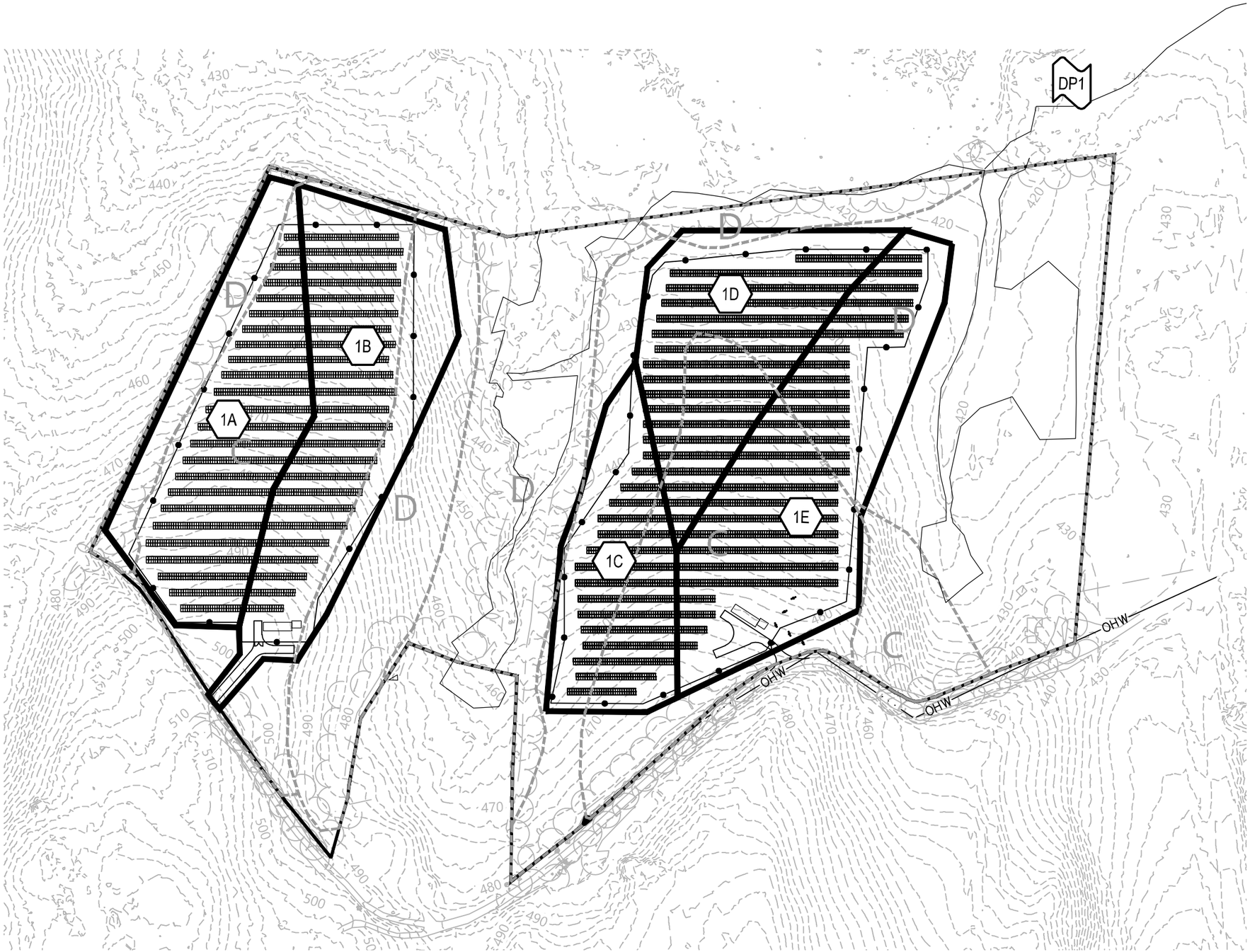
Drainage Area 1E - This ±4.7-acre area is located at the eastern portion of the eastern farm field. Stormwater in this area will generally flow under the solar panels to the east to the wetlands and then to Little Brook. The introduction of permanent meadowy vegetation and grass will serve to improve water quality from the active farming under existing conditions.

Table 2 summarizes the key hydrologic parameters for each drainage area used in the proposed conditions analysis.

Table 2 Proposed Conditions Hydrologic Data

Drainage Area	*Discharge Location*	*Area (acres)*	*Curve Number*	*Time of Concentration (min)*
1A	Little Brook	4.0	82	10
1B	Little Brook	4.3	82	10
1C	Little Brook	2.5	82	10
1D	Little Brook	3.3	83	10
1E	Little Brook	4.7	81	10

Figure 3: Proposed Drainage Areas



Legend

SYMBOLS

- X — **DESIGN POINT**
- X — **DRAINAGE AREA DESIGNATION**
- XP — **PERMANENT STORMWATER BASIN**

LINETYPES

- **DRAINAGE AREA BOUNDARY**
- **HSG BOUNDARY**
- **WETLAND BOUNDARY**
- **TIME OF CONCENTRATION**

0 100 200 400 Feet

Proposed Drainage Conditions
Woodstock Solar One
11 Castle Rock Road
Woodstock, Connecticut

Figure 2

February 2024

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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 3.37, 6.22, 7.02, 7.90 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's Stormwater General Permit, the proposed conditions 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 at all design points for all design storms with the implementation of the proposed permanent stormwater basins.

Table 3 presents a summary of the existing and proposed conditions peak discharge rates where stormwater basins are proposed.

Table 3 Peak Discharge Rates (cfs*)

Watershed	2-year	25-year	50-year	100-year
Design Point 1				
Existing	34.3	80.3	93.6	107.5
Proposed	33.2	78.9	92.3	106.2

* Expressed in cubic feet per second

Floodplain Information / Analysis

No portions of the Site lie within any Federal Emergency Management Agency (FEMA) mapped Special Flood Hazard Areas as shown on the FEMA Flood Insurance Rate Map No. 0901200027B, dated November 1, 1984 (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 gravel access paths will be trafficked infrequently and the grassy meadows downstream of the paths will provide residence time of stormwater runoff to remove the small amount of sediment from runoff. The ground coverage ratio of the solar panel array is less than 50% and therefore does not require water quality treatment per CTDEEP Stormwater General Permit.

Water Quality Flow

Water Quality Flow (WQF) is a rate of stormwater runoff based upon the first inch of rainfall, or a 1-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.

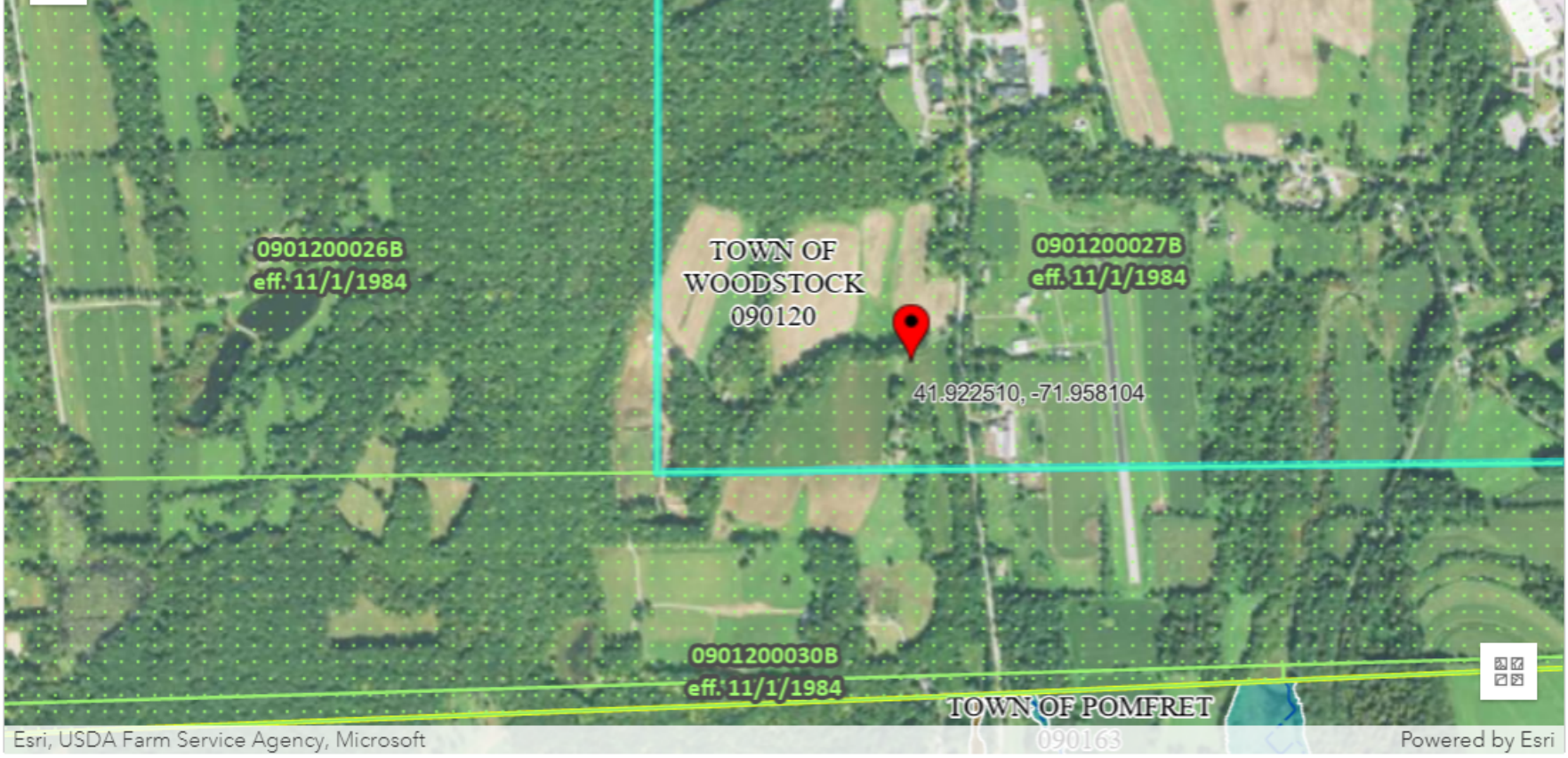
Appendix A:

FEMA Flood Insurance Rate Map

NOAA Rainfall Depth Estimates

CTDEEP Groundwater Classification Map

FEMA Flood Insurance Rate Map



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

MAP PANELS
Selected FloodMap Boundary
Digital Data Available
No Digital Data Available
Unmapped

OTHER AREAS
NO SCREEN Area of Minimal Flood Hazard Zone X
Effective LOMRs
Area of Undetermined Flood Hazard Zone D
Otherwise Protected Area
Coastal Barrier Resource System Area

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

OTHER AREAS OF FLOOD HAZARD
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
Future Conditions 1% Annual Chance Flood Hazard Zone X
Area with Reduced Flood Risk due to Levee. See Notes. Zone X
Area with Flood Risk due to Levee Zone D

OTHER FEATURES
20.2 Cross Sections with 1% Annual Chance
17.5 Water Surface Elevation
Coastal Transect
513 Base Flood Elevation Line (BFE)
Limit of Study
Jurisdiction Boundary
Coastal Transect Baseline
Profile Baseline
Hydrographic Feature

GENERAL STRUCTURES
Channel, Culvert, or Storm Sewer
Levee, Dike, or Floodwall

NOAA Rainfall Depth Estimates

NOAA Atlas 14, Volume 10, Version 3
Location name: Woodstock, Connecticut, USA*
Latitude: 41.923°, Longitude: -71.9617°
Elevation: 447 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	0.333 (0.260-0.423)	0.395 (0.308-0.503)	0.497 (0.386-0.635)	0.581 (0.449-0.747)	0.698 (0.521-0.934)	0.787 (0.575-1.07)	0.878 (0.622-1.24)	0.977 (0.659-1.41)	1.12 (0.723-1.67)	1.23 (0.776-1.87)
10-min	0.471 (0.368-0.600)	0.560 (0.436-0.713)	0.705 (0.547-0.901)	0.824 (0.636-1.06)	0.989 (0.739-1.32)	1.12 (0.815-1.52)	1.24 (0.881-1.75)	1.38 (0.934-2.00)	1.58 (1.02-2.36)	1.74 (1.10-2.65)
15-min	0.554 (0.433-0.705)	0.658 (0.513-0.839)	0.828 (0.644-1.06)	0.970 (0.749-1.25)	1.16 (0.869-1.56)	1.31 (0.959-1.79)	1.46 (1.04-2.06)	1.63 (1.10-2.36)	1.86 (1.21-2.78)	2.04 (1.29-3.12)
30-min	0.775 (0.605-0.986)	0.920 (0.717-1.17)	1.16 (0.899-1.48)	1.36 (1.05-1.74)	1.63 (1.22-2.18)	1.83 (1.34-2.50)	2.04 (1.45-2.88)	2.27 (1.53-3.29)	2.60 (1.68-3.88)	2.85 (1.81-4.36)
60-min	0.996 (0.777-1.27)	1.18 (0.922-1.51)	1.49 (1.16-1.90)	1.74 (1.34-2.24)	2.09 (1.56-2.79)	2.35 (1.72-3.21)	2.62 (1.86-3.70)	2.92 (1.97-4.23)	3.33 (2.16-4.99)	3.66 (2.32-5.59)
2-hr	1.28 (1.00-1.61)	1.50 (1.18-1.91)	1.88 (1.47-2.39)	2.20 (1.70-2.80)	2.62 (1.98-3.51)	2.94 (2.18-4.02)	3.29 (2.37-4.68)	3.70 (2.50-5.33)	4.34 (2.82-6.45)	4.88 (3.10-7.40)
3-hr	1.47 (1.16-1.85)	1.73 (1.36-2.19)	2.16 (1.70-2.74)	2.52 (1.97-3.21)	3.02 (2.29-4.03)	3.38 (2.51-4.62)	3.78 (2.74-5.39)	4.28 (2.90-6.14)	5.06 (3.30-7.51)	5.74 (3.65-8.68)
6-hr	1.87 (1.48-2.34)	2.21 (1.75-2.78)	2.78 (2.19-3.50)	3.25 (2.55-4.11)	3.89 (2.97-5.17)	4.37 (3.27-5.94)	4.89 (3.57-6.94)	5.56 (3.77-7.92)	6.61 (4.31-9.74)	7.53 (4.80-11.3)
12-hr	2.34 (1.87-2.92)	2.81 (2.23-3.50)	3.56 (2.82-4.45)	4.18 (3.30-5.26)	5.04 (3.86-6.64)	5.68 (4.26-7.65)	6.37 (4.66-8.95)	7.22 (4.93-10.2)	8.54 (5.60-12.5)	9.68 (6.20-14.4)
24-hr	2.79 (2.24-3.45)	3.37 (2.70-4.18)	4.33 (3.45-5.38)	5.12 (4.06-6.40)	6.22 (4.77-8.12)	7.02 (5.29-9.39)	7.90 (5.78-11.0)	8.95 (6.13-12.6)	10.5 (6.93-15.3)	11.9 (7.64-17.6)
2-day	3.14 (2.54-3.86)	3.84 (3.09-4.72)	4.97 (3.99-6.13)	5.91 (4.72-7.33)	7.21 (5.57-9.37)	8.17 (6.18-10.9)	9.21 (6.78-12.7)	10.5 (7.19-14.6)	12.4 (8.15-17.8)	14.0 (9.00-20.6)
3-day	3.41 (2.76-4.17)	4.16 (3.36-5.10)	5.40 (4.34-6.63)	6.42 (5.14-7.93)	7.83 (6.06-10.1)	8.87 (6.73-11.8)	10.0 (7.38-13.8)	11.4 (7.84-15.8)	13.5 (8.90-19.4)	15.2 (9.83-22.3)
4-day	3.64 (2.96-4.45)	4.45 (3.60-5.43)	5.76 (4.65-7.06)	6.85 (5.49-8.44)	8.34 (6.48-10.8)	9.45 (7.19-12.5)	10.7 (7.88-14.7)	12.1 (8.36-16.8)	14.4 (9.50-20.6)	16.3 (10.5-23.8)
7-day	4.31 (3.51-5.23)	5.22 (4.24-6.34)	6.70 (5.43-8.16)	7.92 (6.38-9.71)	9.62 (7.50-12.4)	10.9 (8.30-14.3)	12.2 (9.08-16.7)	13.9 (9.61-19.2)	16.4 (10.9-23.4)	18.6 (12.0-27.0)
10-day	4.99 (4.08-6.04)	5.95 (4.86-7.21)	7.53 (6.12-9.15)	8.83 (7.14-10.8)	10.6 (8.31-13.6)	12.0 (9.16-15.6)	13.4 (9.96-18.2)	15.1 (10.5-20.8)	17.8 (11.8-25.2)	20.0 (13.0-28.9)
20-day	7.16 (5.89-8.61)	8.19 (6.73-9.86)	9.87 (8.08-11.9)	11.3 (9.16-13.7)	13.2 (10.3-16.6)	14.6 (11.2-18.8)	16.2 (11.9-21.5)	17.8 (12.4-24.3)	20.1 (13.5-28.4)	22.0 (14.3-31.6)
30-day	9.00 (7.43-10.8)	10.0 (8.28-12.0)	11.8 (9.66-14.2)	13.2 (10.8-16.0)	15.2 (11.9-19.0)	16.7 (12.8-21.2)	18.2 (13.4-23.8)	19.7 (13.8-26.7)	21.7 (14.6-30.4)	23.2 (15.1-33.2)
45-day	11.3 (9.34-13.4)	12.4 (10.2-14.7)	14.1 (11.6-16.9)	15.6 (12.8-18.8)	17.6 (13.8-21.8)	19.2 (14.7-24.2)	20.7 (15.2-26.8)	22.1 (15.5-29.8)	23.7 (16.0-33.1)	24.9 (16.2-35.5)
60-day	13.2 (10.9-15.7)	14.3 (11.8-17.0)	16.1 (13.3-19.2)	17.6 (14.4-21.1)	19.6 (15.5-24.2)	21.3 (16.3-26.7)	22.8 (16.7-29.3)	24.1 (17.0-32.4)	25.6 (17.3-35.6)	26.5 (17.4-37.7)

[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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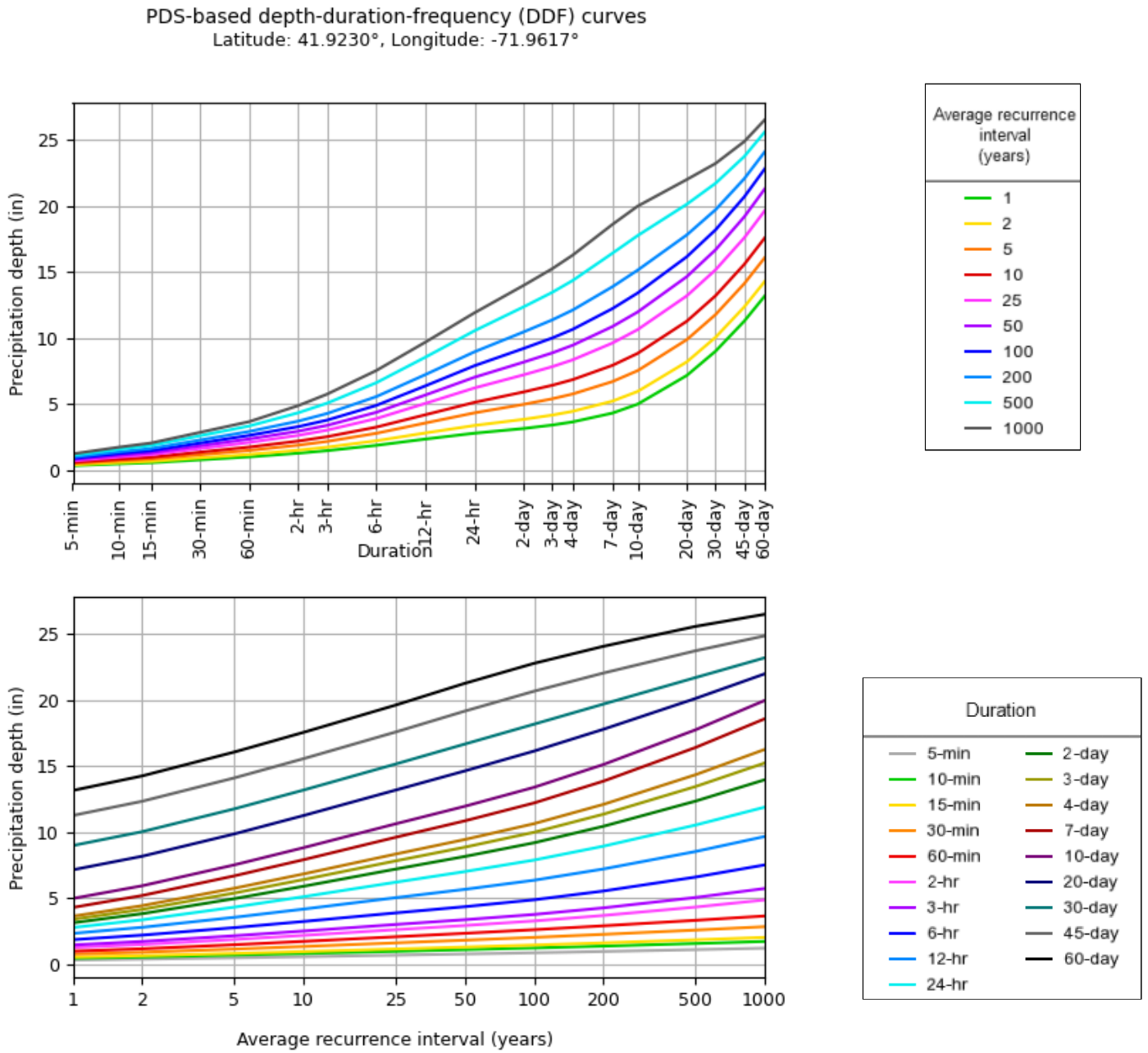
PF graphical



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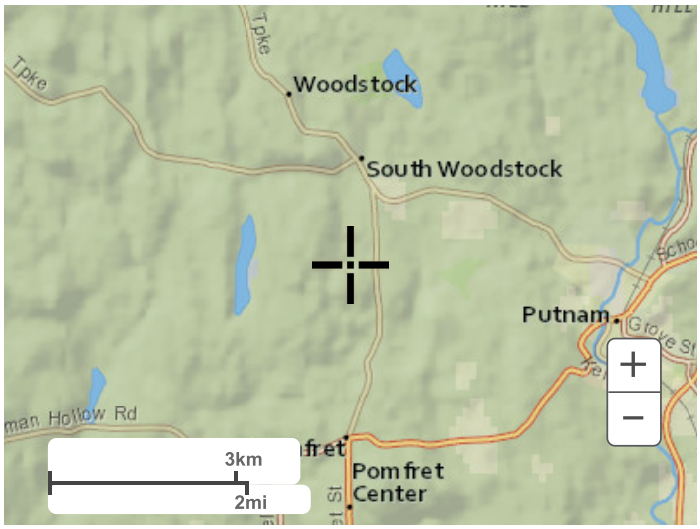
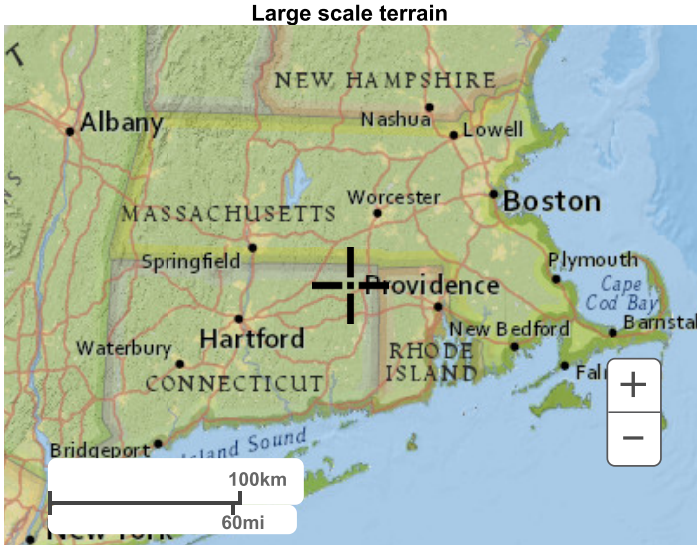
Maps & aerials

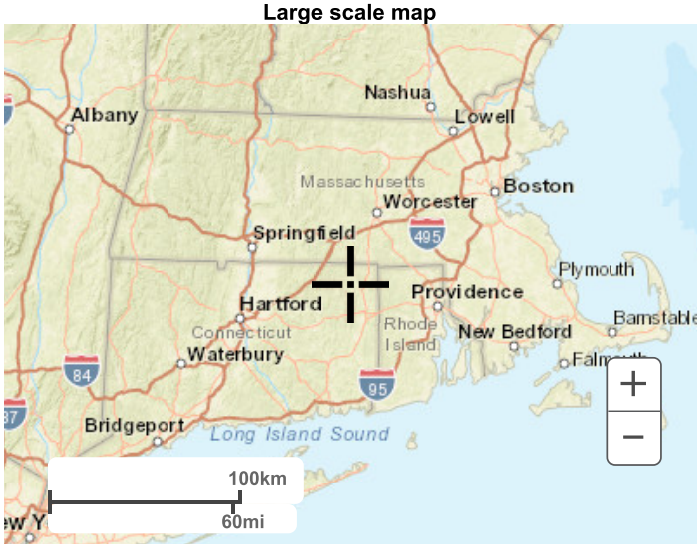
Small scale terrain



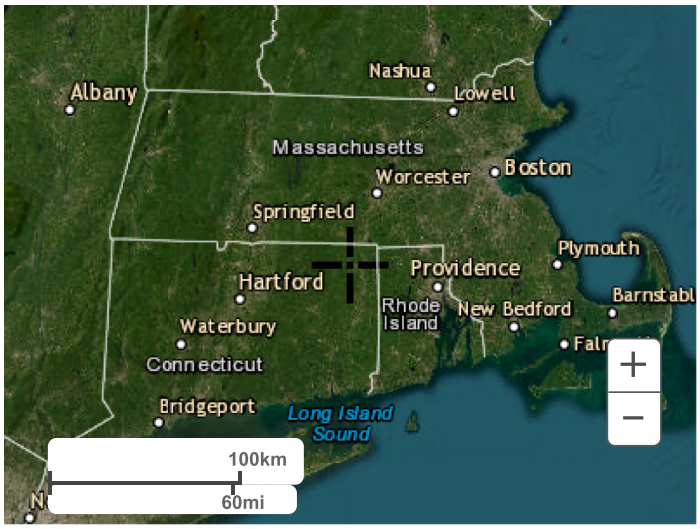
Large scale terrain



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
WOODSTOCK, CT

SURFACE WATER QUALITY CLASSES

Polygon	Line
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

MAP LOCATION

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

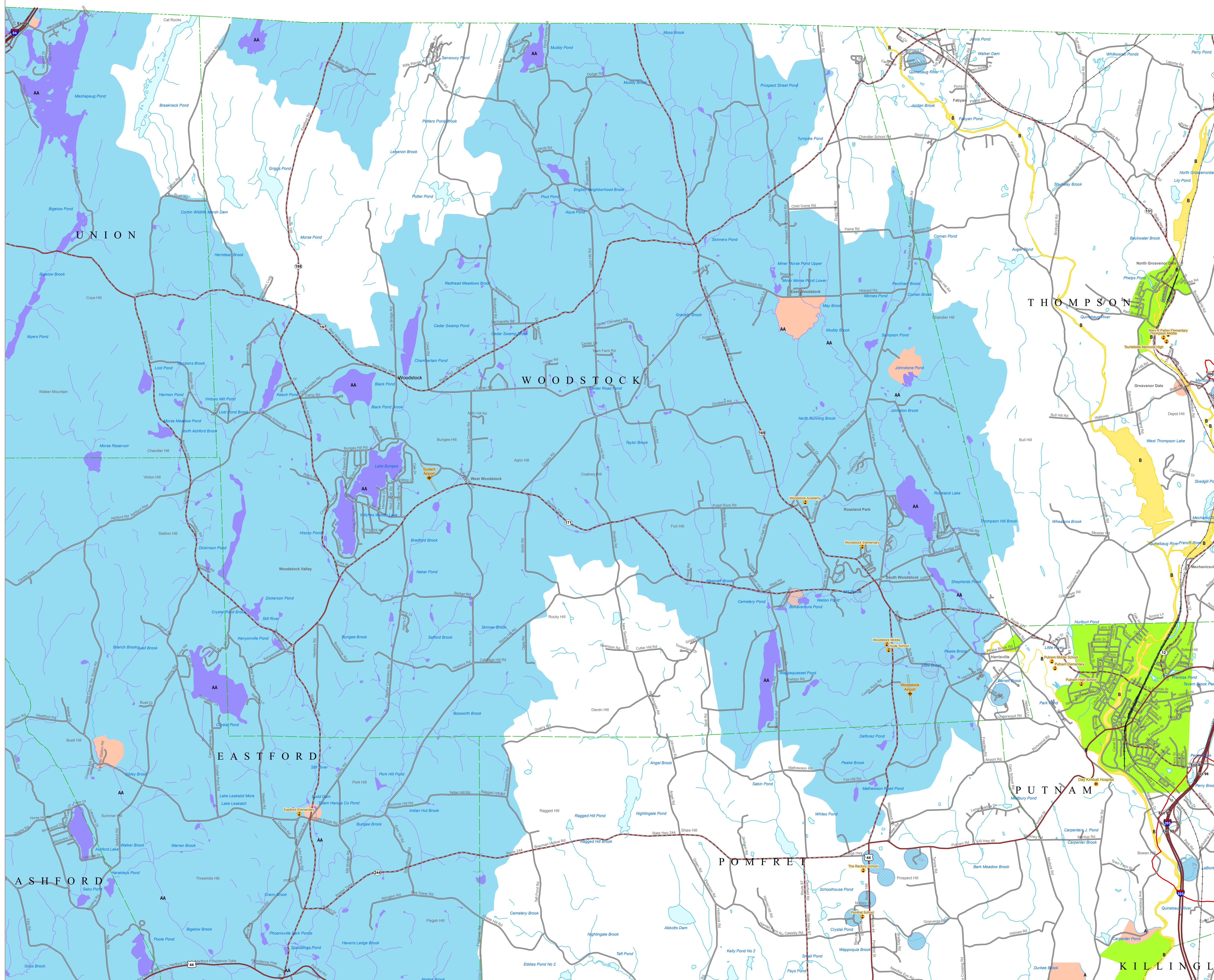
State Plane Coordinate System of 1983, Zone 3526
Lambert Conformal Conic Projection
North American Datum of 1983

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

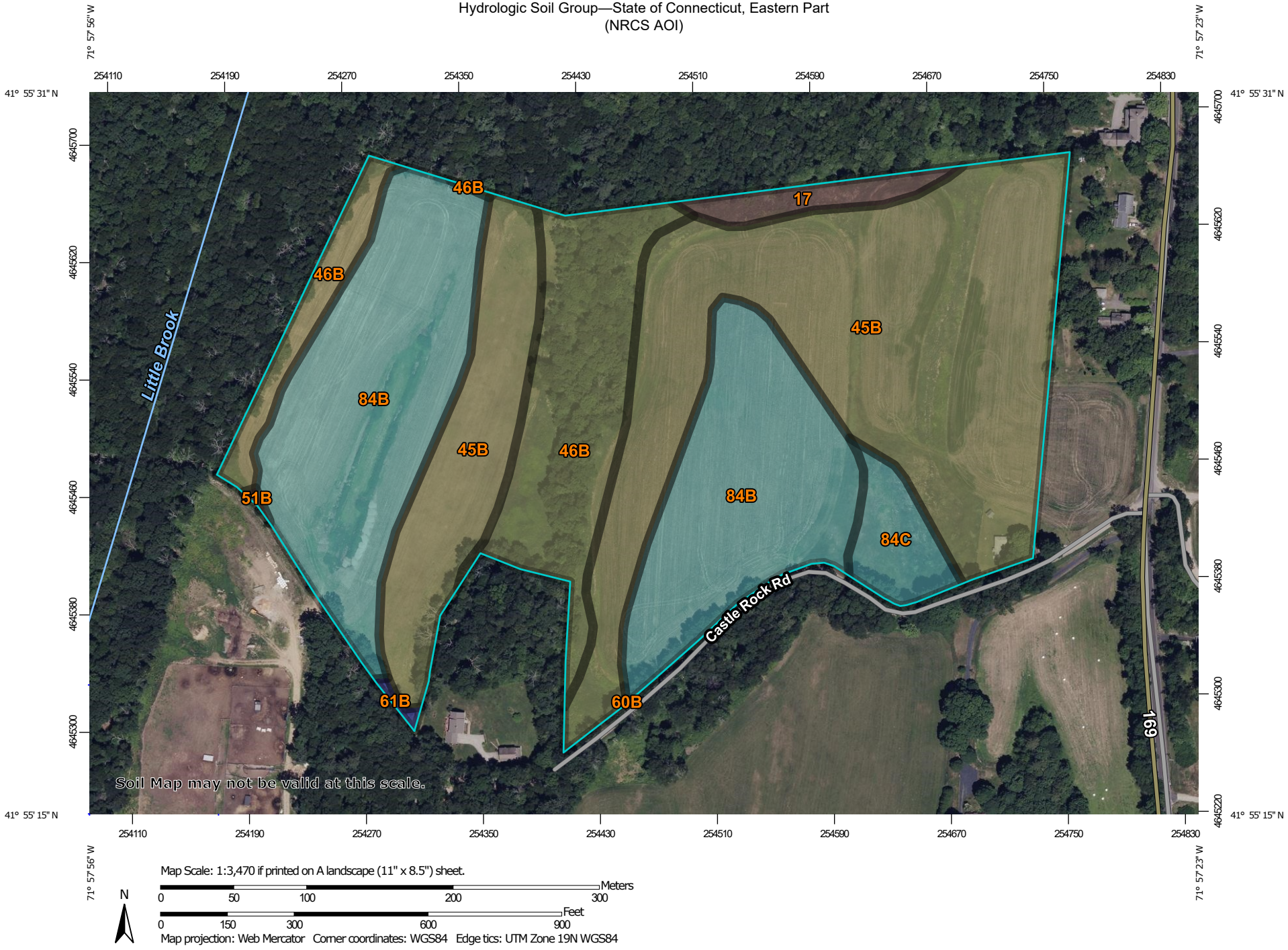


Appendix B:

NRCS Soil Survey Information

NRCS Soil Survey Information

Hydrologic Soil Group—State of Connecticut, Eastern Part
(NRCS AOI)



Map Scale: 1:3,470 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N 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, Eastern Part
Survey Area Data: Version 1, Sep 15, 2023

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

Date(s) aerial images were photographed: Jun 14, 2022—Jul 1, 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
17	Timakwa and Natchaug soils, 0 to 2 percent slopes	B/D	0.8	2.1%
45B	Woodbridge fine sandy loam, 3 to 8 percent slopes	C/D	17.6	45.8%
46B	Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony	C/D	6.0	15.5%
51B	Sutton fine sandy loam, 0 to 8 percent slopes, very stony	B/D	0.0	0.1%
60B	Canton and Charlton fine sandy loams, 3 to 8 percent slopes	B	0.0	0.0%
61B	Canton and Charlton fine sandy loams, 0 to 8 percent slopes, very stony	B	0.1	0.2%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	C	12.7	33.2%
84C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes	C	1.2	3.1%
Totals for Area of Interest			**38.3**	**100.0%**

Appendix C:

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

Erosion and Sedimentation Control Checklist

Woodstock Solar One – Woodstock, CT – 11 Castle Rock Rd

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

Woodstock Solar One – Woodstock, CT – 11 Castle Rock Rd

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:	Woodstock Solar One
Address or Locus:	11 Castle Rock Road
City, State & Zip:	Woodstock, CT 06281

Developer

Client Name:	Woodstock Solar One, LLC
Client Address:	124 LaSalle Road, 2nd Floor
Client City, State & Zip:	West Hartford, CT 06107
Client Telephone No.:	(860) 288-7215
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:

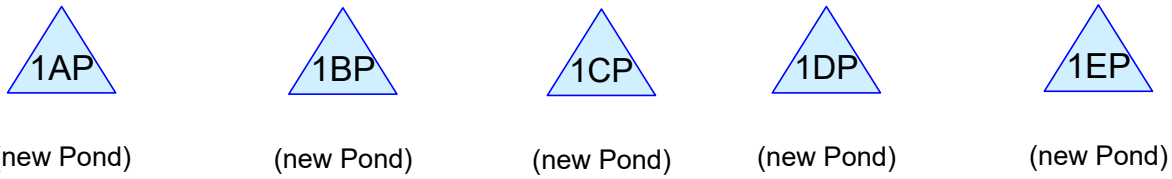
Sediment Trap Sizing
HydroCAD: Existing Conditions
HydroCAD: Proposed Conditions

Sediment Trap Sizing

Sediment Trap Sizing
Woodstock Solar One
February 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	2.5	9,136	9,583
1B	3.0	10,798	11,195
1C	2.5	9,136	9,583
1D	3.3	11,960	17,163
1E	3.6	12,874	13,373

* Per 2002 Connecticut Guidelines for Soil Erosion and Sediment Control



Subcat Reach Pond Link

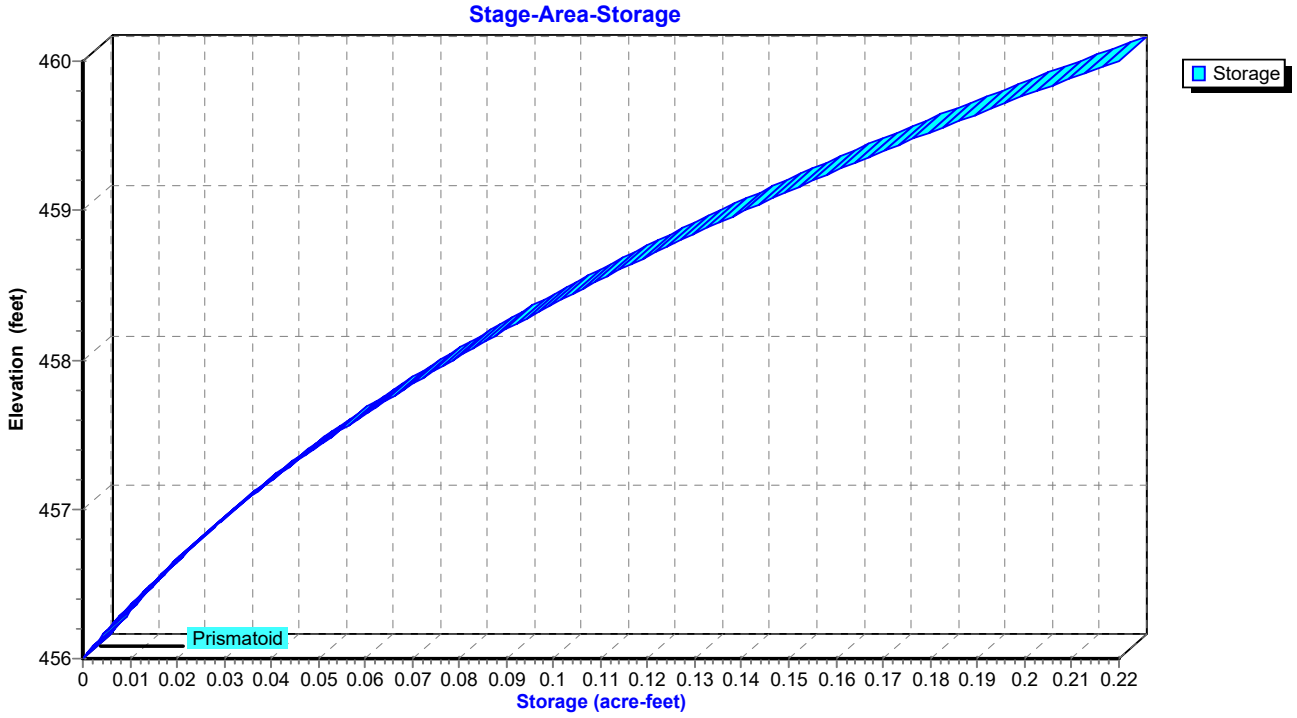
Routing Diagram for TST Sizing
Prepared by VHB, Inc, Printed 2/23/2024

Summary for Pond 1AP: (new Pond)

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

Volume	Invert	Avail.Storage	Storage Description
#1	456.00'	0.220 af	**75.00'W x 15.00'L x 4.00'H Prismatoid Z=3.0**

Pond 1AP: (new Pond)

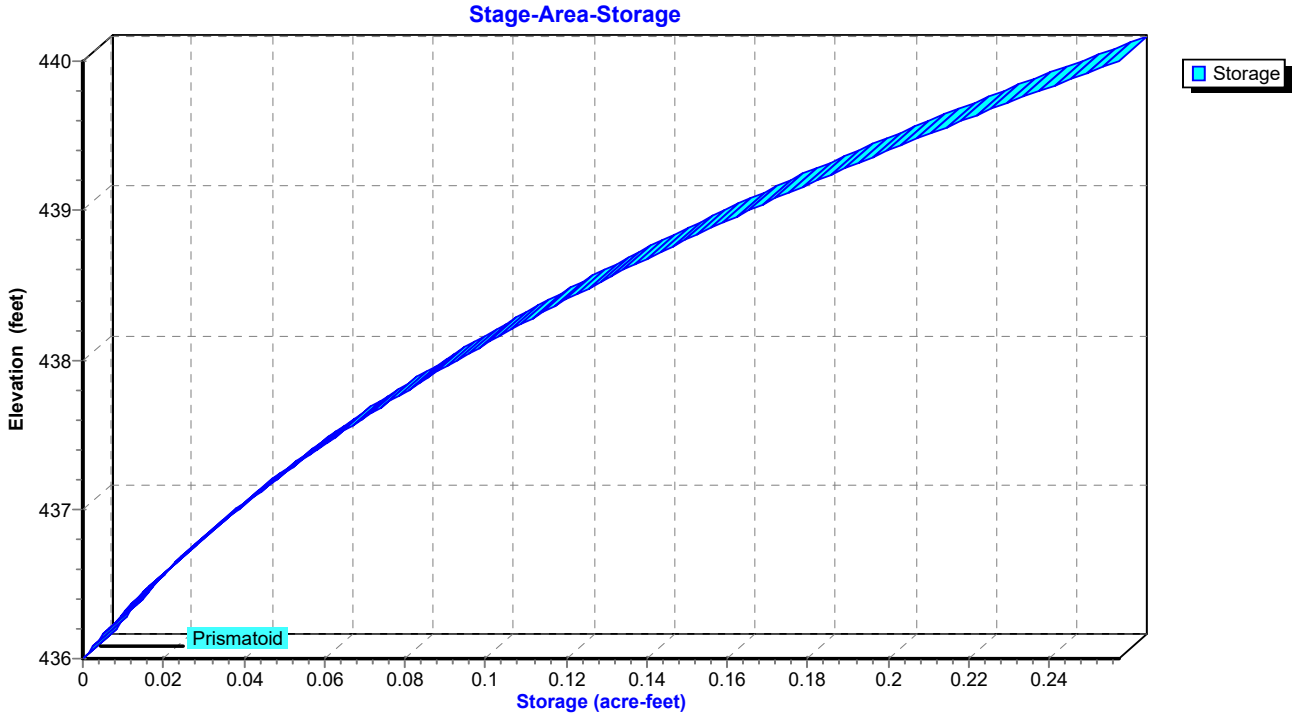


Summary for Pond 1BP: (new Pond)

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

Volume	Invert	Avail.Storage	Storage Description
#1	436.00'	0.257 af	**90.00'W x 15.00'L x 4.00'H Prismatoid Z=3.0**

Pond 1BP: (new Pond)

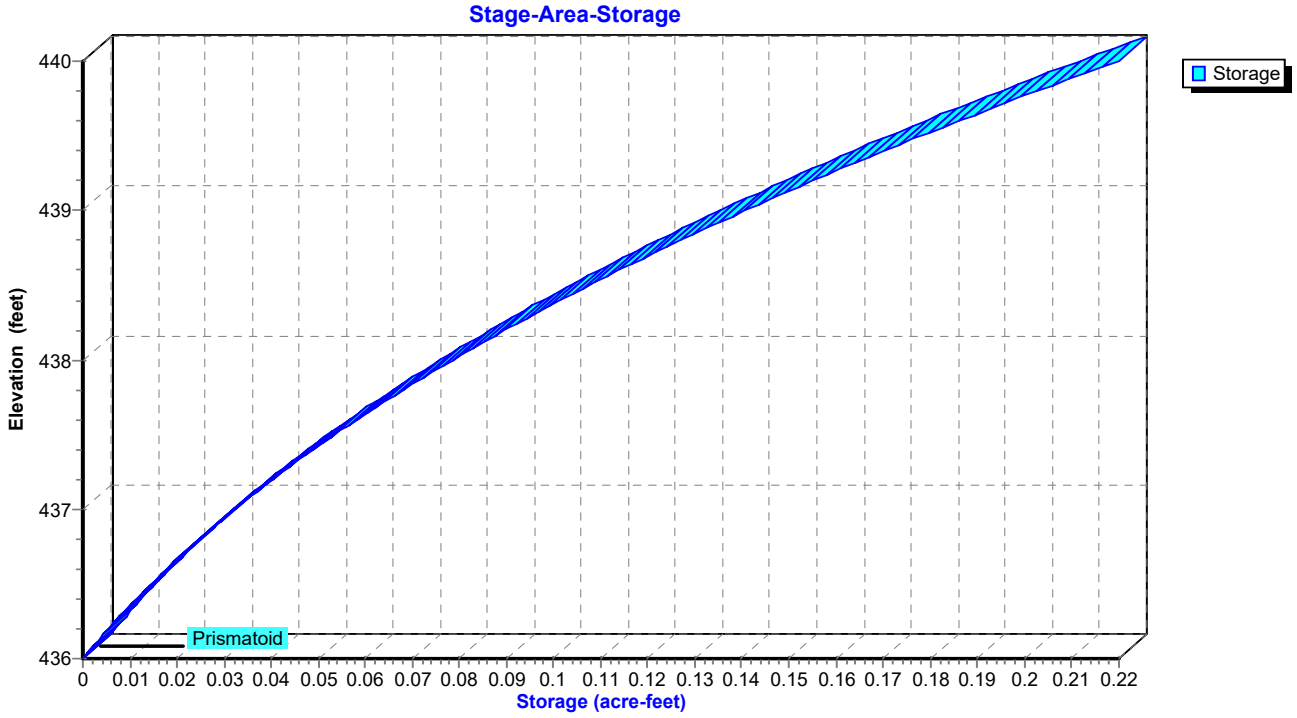


Summary for Pond 1CP: (new Pond)

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

Volume	Invert	Avail.Storage	Storage Description
#1	436.00'	0.220 af	**75.00'W x 15.00'L x 4.00'H Prismatoid Z=3.0**

Pond 1CP: (new Pond)

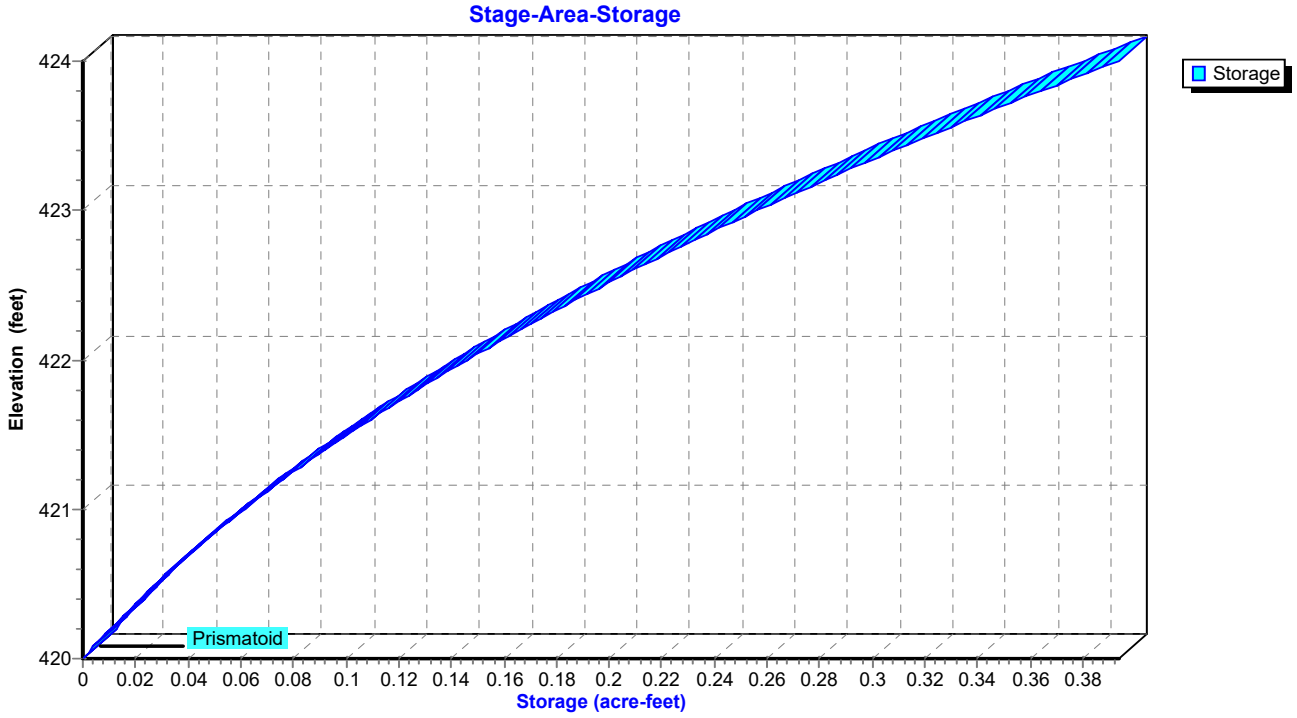


Summary for Pond 1DP: (new Pond)

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

Volume	Invert	Avail.Storage	Storage Description
#1	420.00'	0.394 af	**145.00'W x 15.00'L x 4.00'H Prismatoid Z=3.0**

Pond 1DP: (new Pond)

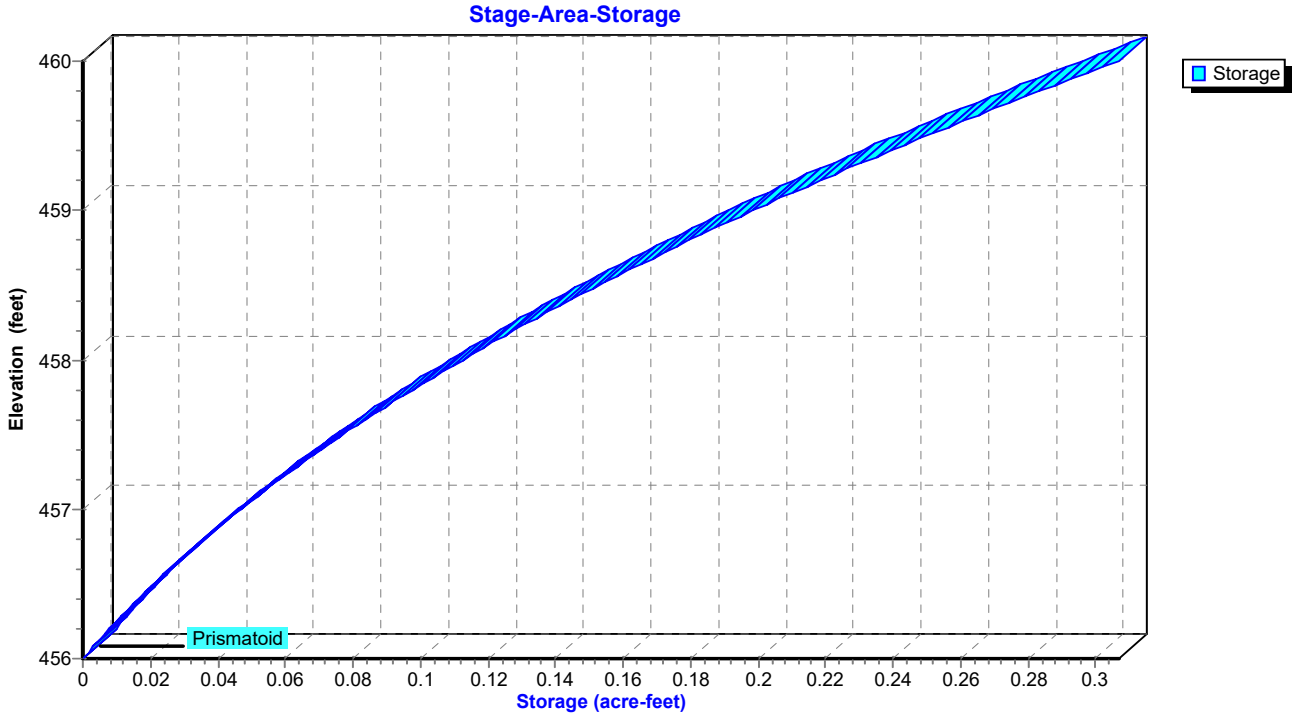


Summary for Pond 1EP: (new Pond)

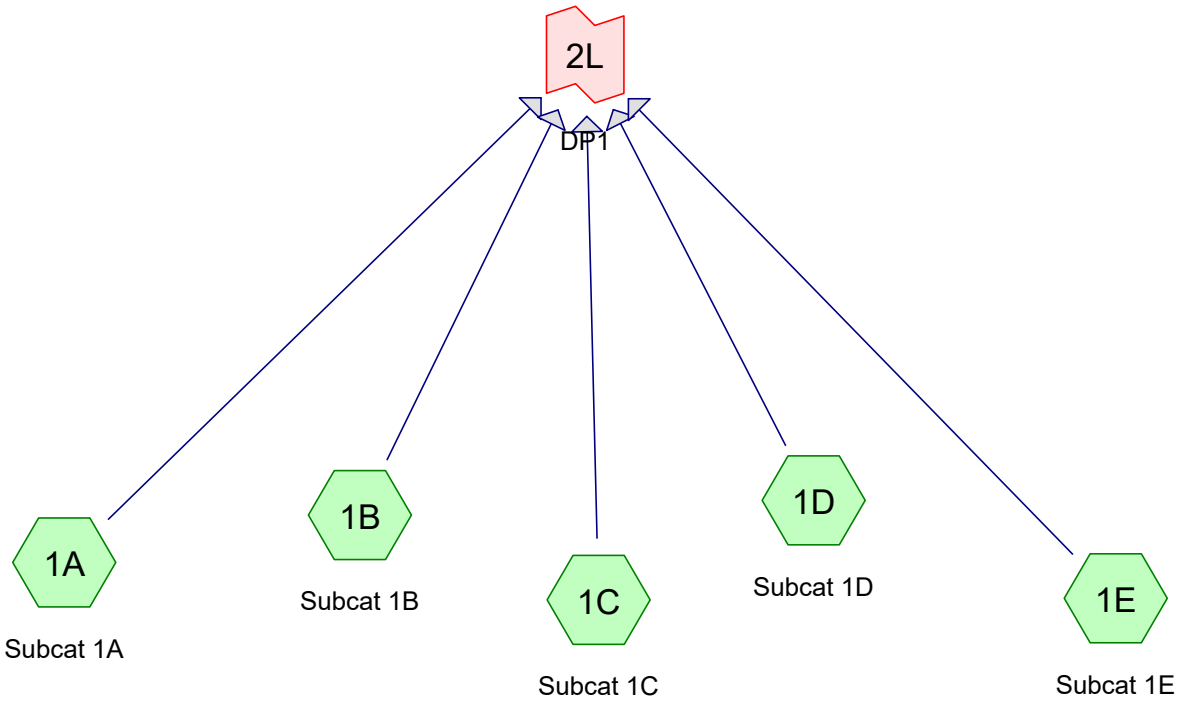
[43] Hint: Has no inflow (Outflow=Zero)

Volume	Invert	Avail.Storage	Storage Description
#1	456.00'	0.307 af	**110.00'W x 15.00'L x 4.00'H Prismatoid Z=3.0**

Pond 1EP: (new Pond)



HydroCAD Analysis: Existing Conditions



Subcat Reach Pond Link

Routing Diagram for EX_Drainage
Prepared by VHB, Inc, Printed 2/26/2024

Project Notes

Copied 10 events from CT-Woodstock 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-Woodstock 24-hr S1	2-yr	Default	24.00	1	3.37	2
2	25-yr	CT-Woodstock 24-hr S1	25-yr	Default	24.00	1	6.22	2
3	50-yr	CT-Woodstock 24-hr S1	50-yr	Default	24.00	1	7.02	2
4	100-yr	CT-Woodstock 24-hr S1	100-yr	Default	24.00	1	7.90	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.353	70	Brush, Fair, HSG C (1E)
0.153	77	Brush, Fair, HSG D (1E)
0.326	87	Dirt roads, HSG C (1A, 1B, 1E)
0.225	89	Dirt roads, HSG D (1A, 1B)
10.284	82	Row crops, SR + CR, Good, HSG C (1A, 1B, 1C, 1D, 1E)
6.963	85	Row crops, SR + CR, Good, HSG D (1A, 1B, 1C, 1D, 1E)
0.004	82	Woods/grass comb., Poor, HSG C (1A)
0.560	86	Woods/grass comb., Poor, HSG D (1A, 1D)
18.869	**83**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
10.967	HSG C	1A, 1B, 1C, 1D, 1E
7.902	HSG D	1A, 1B, 1C, 1D, 1E
0.000	Other	
18.869		**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
0.000	0.000	0.353	0.153	0.000	0.506	Brush, Fair	1E
0.000	0.000	0.326	0.225	0.000	0.551	Dirt roads	1A, 1B, 1E
0.000	0.000	10.284	6.963	0.000	17.248	Row crops, SR + CR, Good	1A, 1B, 1C, 1D, 1E
0.000	0.000	0.004	0.560	0.000	0.564	Woods/grass comb., Poor	1A, 1D
0.000	**0.000**	**10.967**	**7.902**	**0.000**	**18.869**	**TOTAL AREA**	

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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=3.981 ac 0.00% Impervious Runoff Depth>1.57"
Tc=10.0 min CN=83 Runoff=7.22 cfs 0.521 af

Subcatchment1B: Subcat 1B Runoff Area=4.337 ac 0.00% Impervious Runoff Depth>1.57"
Tc=10.0 min CN=83 Runoff=7.87 cfs 0.567 af

Subcatchment1C: Subcat 1C Runoff Area=2.529 ac 0.00% Impervious Runoff Depth>1.64"
Tc=10.0 min CN=84 Runoff=4.80 cfs 0.346 af

Subcatchment1D: Subcat 1D Runoff Area=3.315 ac 0.00% Impervious Runoff Depth>1.64"
Tc=10.0 min CN=84 Runoff=6.29 cfs 0.453 af

Subcatchment1E: Subcat 1E Runoff Area=4.708 ac 0.00% Impervious Runoff Depth>1.50"
Tc=10.0 min CN=82 Runoff=8.16 cfs 0.588 af

Link 2L: DP1 Inflow=34.34 cfs 2.475 af
Primary=34.34 cfs 2.475 af

Total Runoff Area = 18.869 ac Runoff Volume = 2.475 af Average Runoff Depth = 1.57"
100.00% Pervious = 18.869 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1A: Subcat 1A

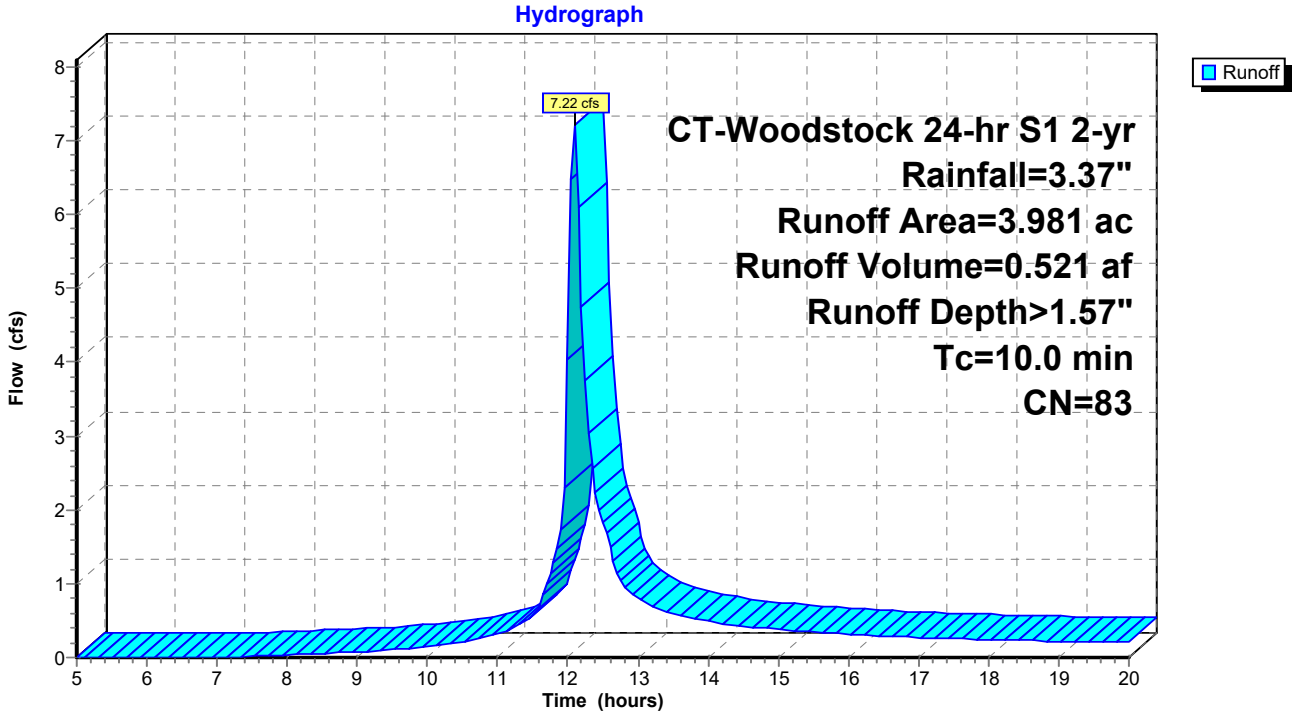
Runoff = 7.22 cfs @ 12.09 hrs, Volume= 0.521 af, Depth> 1.57"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 2-yr Rainfall=3.37"

Area (ac)	CN	Description
0.038	87	Dirt roads, HSG C
0.178	89	Dirt roads, HSG D
2.973	82	Row crops, SR + CR, Good, HSG C
0.470	85	Row crops, SR + CR, Good, HSG D
0.004	82	Woods/grass comb., Poor, HSG C
0.317	86	Woods/grass comb., Poor, HSG D
3.981	83	Weighted Average
3.981		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

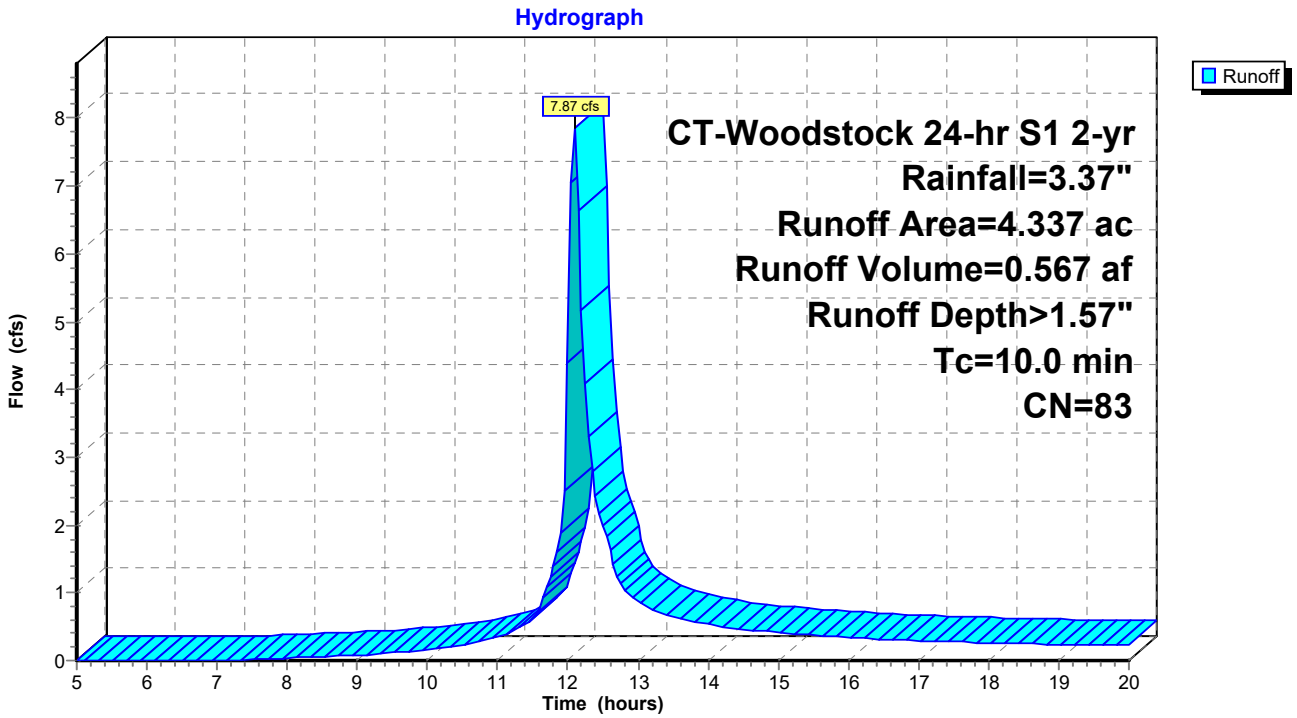
Runoff = 7.87 cfs @ 12.09 hrs, Volume= 0.567 af, Depth> 1.57"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 2-yr Rainfall=3.37"

Area (ac)	CN	Description
0.193	87	Dirt roads, HSG C
0.047	89	Dirt roads, HSG D
3.019	82	Row crops, SR + CR, Good, HSG C
1.078	85	Row crops, SR + CR, Good, HSG D
4.337	83	Weighted Average
4.337		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

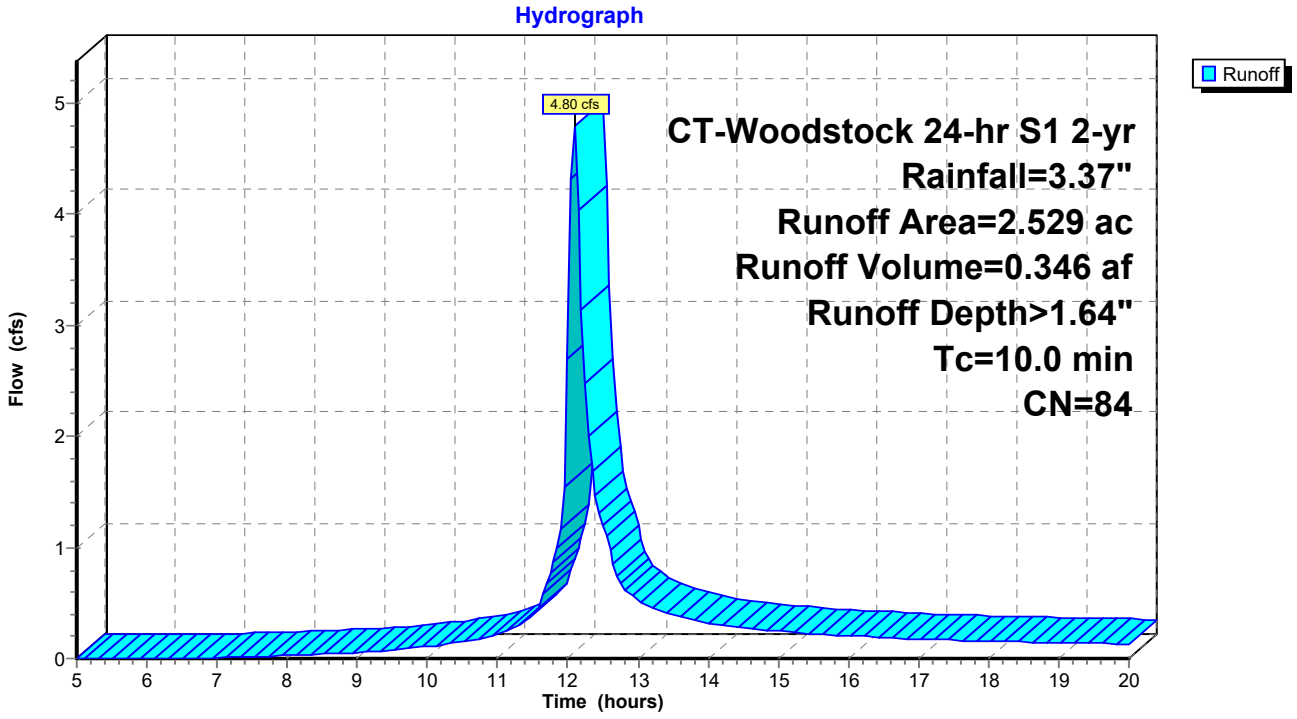
Runoff = 4.80 cfs @ 12.09 hrs, Volume= 0.346 af, Depth> 1.64"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 2-yr Rainfall=3.37"

Area (ac)	CN	Description
0.947	82	Row crops, SR + CR, Good, HSG C
1.582	85	Row crops, SR + CR, Good, HSG D
2.529	84	Weighted Average
2.529		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 1D: Subcat 1D

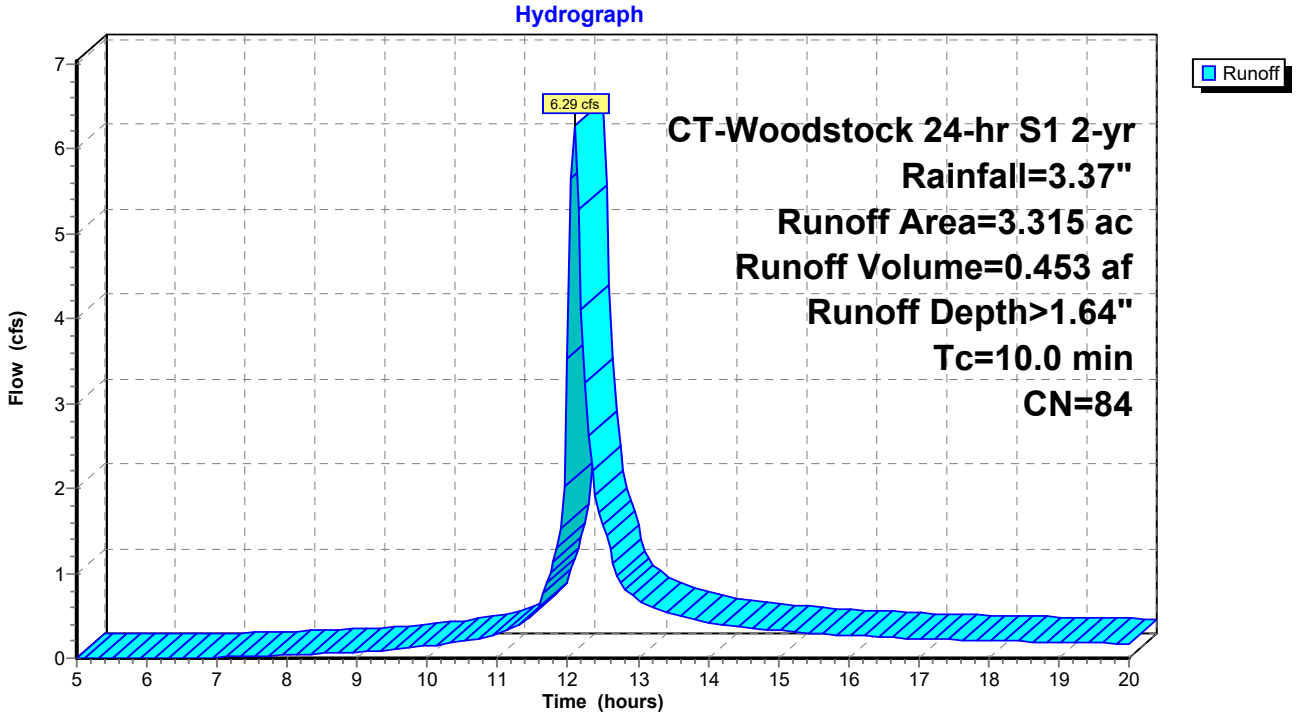
Runoff = 6.29 cfs @ 12.09 hrs, Volume= 0.453 af, Depth> 1.64"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 2-yr Rainfall=3.37"

Area (ac)	CN	Description
0.983	82	Row crops, SR + CR, Good, HSG C
2.088	85	Row crops, SR + CR, Good, HSG D
0.243	86	Woods/grass comb., Poor, HSG D
3.315	84	Weighted Average
3.315		100.00% Pervious Area

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

Subcatchment 1D: Subcat 1D



Summary for Subcatchment 1E: Subcat 1E

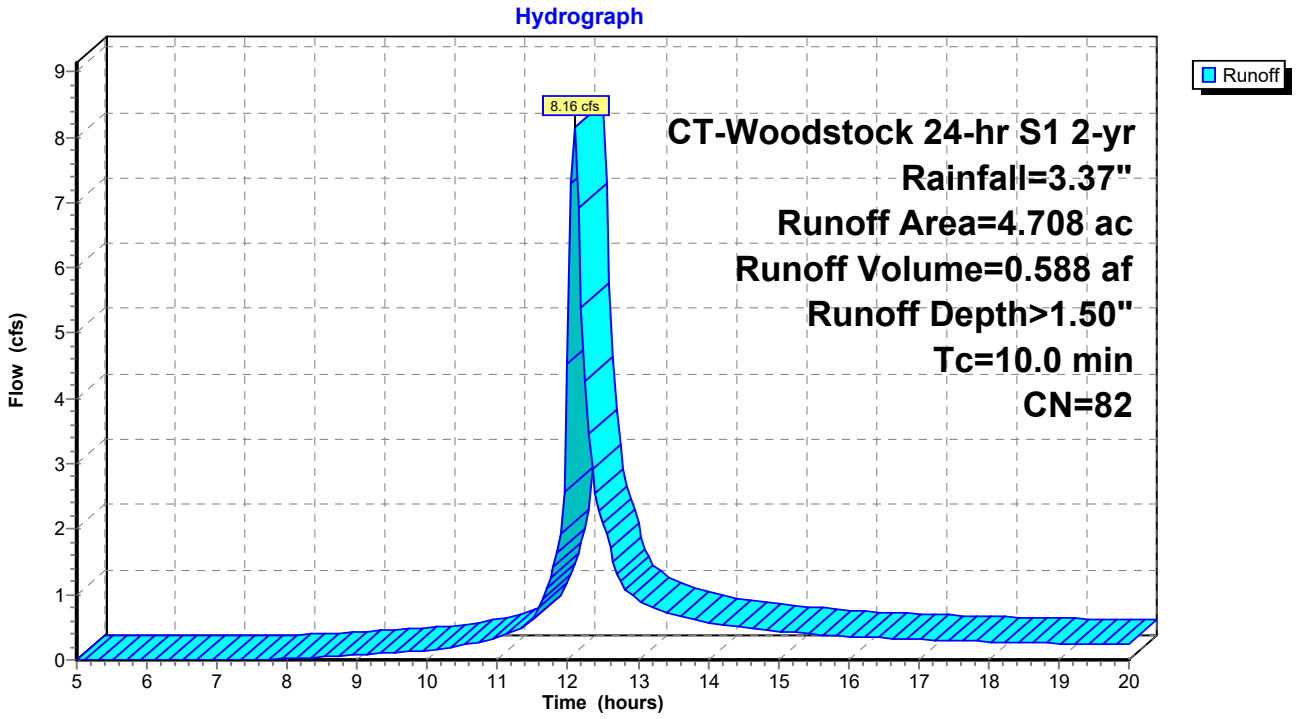
Runoff = 8.16 cfs @ 12.10 hrs, Volume= 0.588 af, Depth> 1.50"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 2-yr Rainfall=3.37"

Area (ac)	CN	Description
0.353	70	Brush, Fair, HSG C
0.153	77	Brush, Fair, HSG D
0.095	87	Dirt roads, HSG C
2.362	82	Row crops, SR + CR, Good, HSG C
1.746	85	Row crops, SR + CR, Good, HSG D
4.708	82	Weighted Average
4.708		100.00% Pervious Area

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

Subcatchment 1E: Subcat 1E

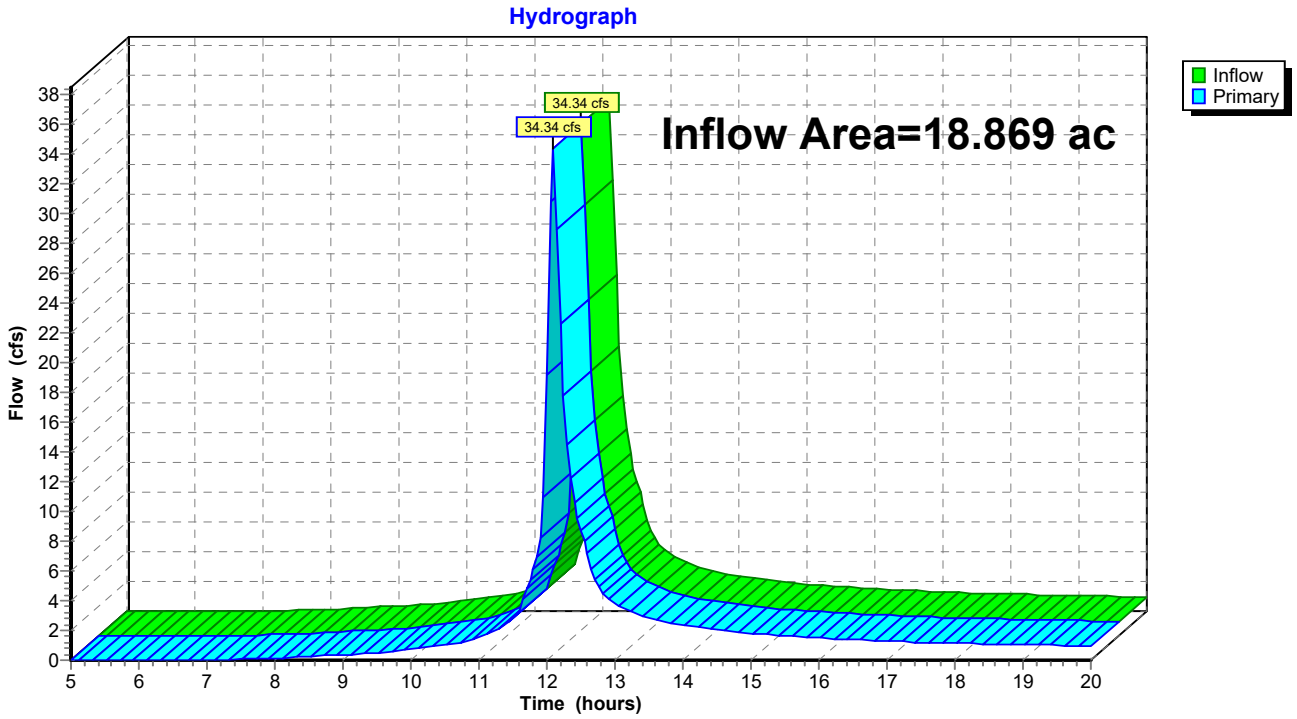


Summary for Link 2L: DP1

Inflow Area = 18.869 ac, 0.00% Impervious, Inflow Depth > 1.57" for 2-yr event
Inflow = 34.34 cfs @ 12.09 hrs, Volume= 2.475 af
Primary = 34.34 cfs @ 12.09 hrs, Volume= 2.475 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 2L: DP1



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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=3.981 ac 0.00% Impervious Runoff Depth>3.90"
Tc=10.0 min CN=83 Runoff=16.91 cfs 1.295 af

Subcatchment1B: Subcat 1B Runoff Area=4.337 ac 0.00% Impervious Runoff Depth>3.90"
Tc=10.0 min CN=83 Runoff=18.42 cfs 1.411 af

Subcatchment1C: Subcat 1C Runoff Area=2.529 ac 0.00% Impervious Runoff Depth>4.00"
Tc=10.0 min CN=84 Runoff=10.98 cfs 0.844 af

Subcatchment1D: Subcat 1D Runoff Area=3.315 ac 0.00% Impervious Runoff Depth>4.00"
Tc=10.0 min CN=84 Runoff=14.39 cfs 1.106 af

Subcatchment1E: Subcat 1E Runoff Area=4.708 ac 0.00% Impervious Runoff Depth>3.80"
Tc=10.0 min CN=82 Runoff=19.56 cfs 1.492 af

Link 2L: DP1 Inflow=80.26 cfs 6.147 af
Primary=80.26 cfs 6.147 af

Total Runoff Area = 18.869 ac Runoff Volume = 6.147 af Average Runoff Depth = 3.91"
100.00% Pervious = 18.869 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1A: Subcat 1A

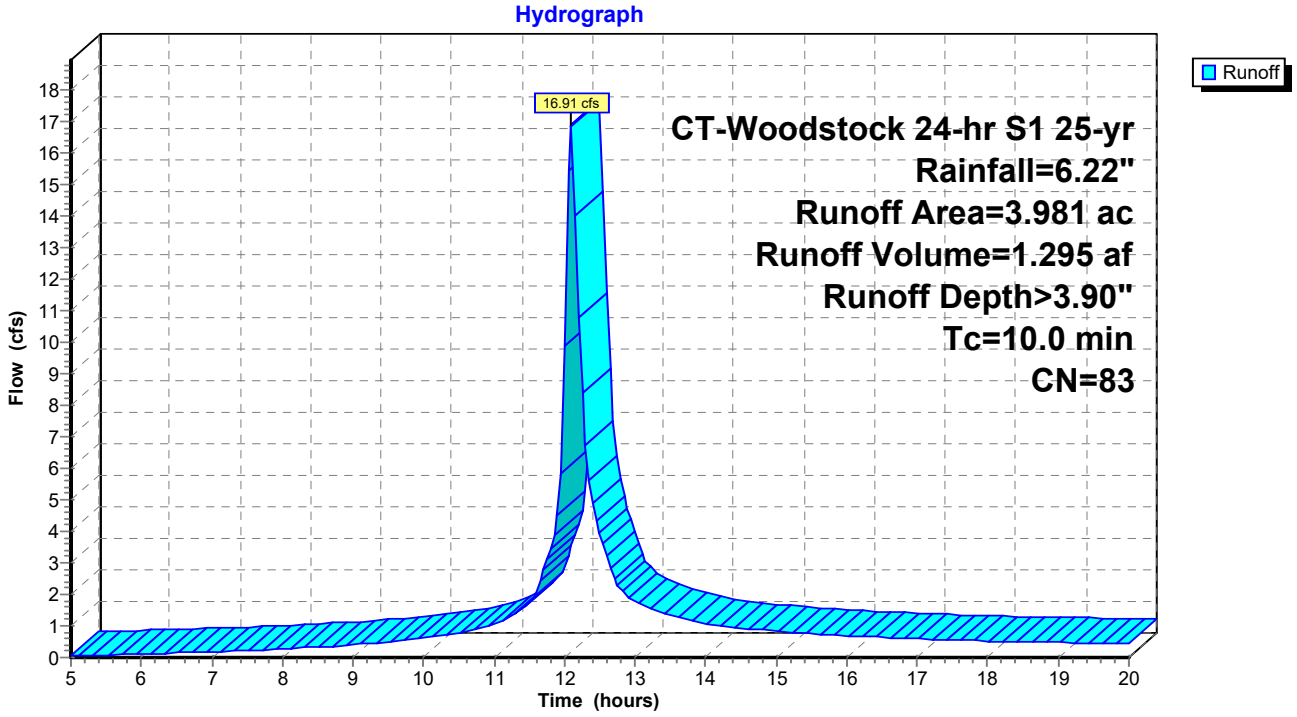
Runoff = 16.91 cfs @ 12.09 hrs, Volume= 1.295 af, Depth> 3.90"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 25-yr Rainfall=6.22"

Area (ac)	CN	Description
0.038	87	Dirt roads, HSG C
0.178	89	Dirt roads, HSG D
2.973	82	Row crops, SR + CR, Good, HSG C
0.470	85	Row crops, SR + CR, Good, HSG D
0.004	82	Woods/grass comb., Poor, HSG C
0.317	86	Woods/grass comb., Poor, HSG D
3.981	83	Weighted Average
3.981		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

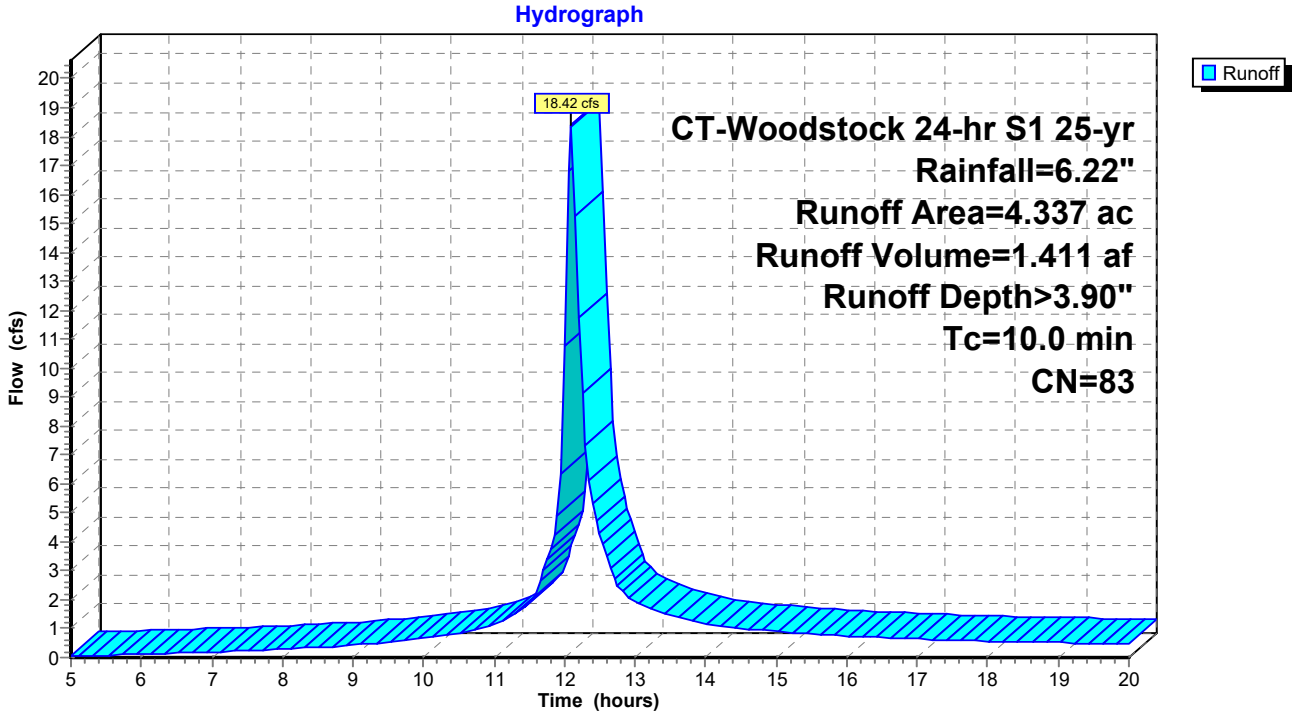
Runoff = 18.42 cfs @ 12.09 hrs, Volume= 1.411 af, Depth> 3.90"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 25-yr Rainfall=6.22"

Area (ac)	CN	Description
0.193	87	Dirt roads, HSG C
0.047	89	Dirt roads, HSG D
3.019	82	Row crops, SR + CR, Good, HSG C
1.078	85	Row crops, SR + CR, Good, HSG D
4.337	83	Weighted Average
4.337		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

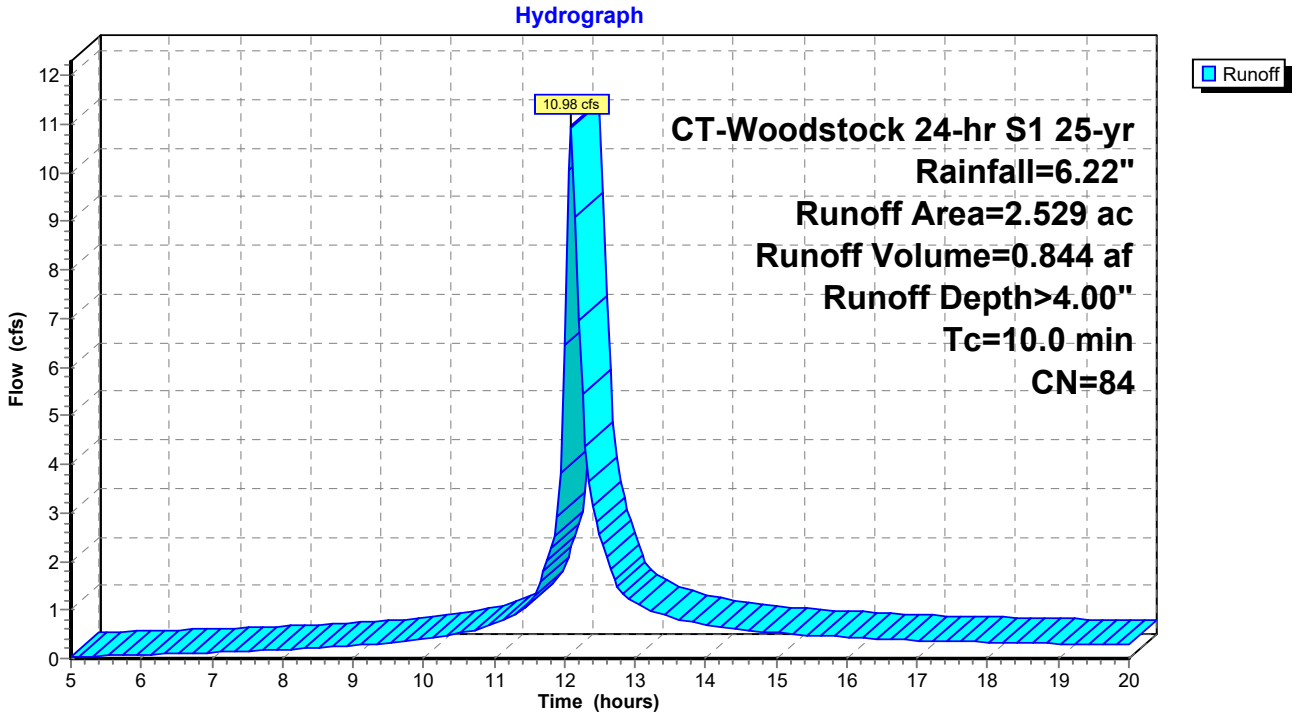
Runoff = 10.98 cfs @ 12.09 hrs, Volume= 0.844 af, Depth> 4.00"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 25-yr Rainfall=6.22"

Area (ac)	CN	Description
0.947	82	Row crops, SR + CR, Good, HSG C
1.582	85	Row crops, SR + CR, Good, HSG D
2.529	84	Weighted Average
2.529		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 1D: Subcat 1D

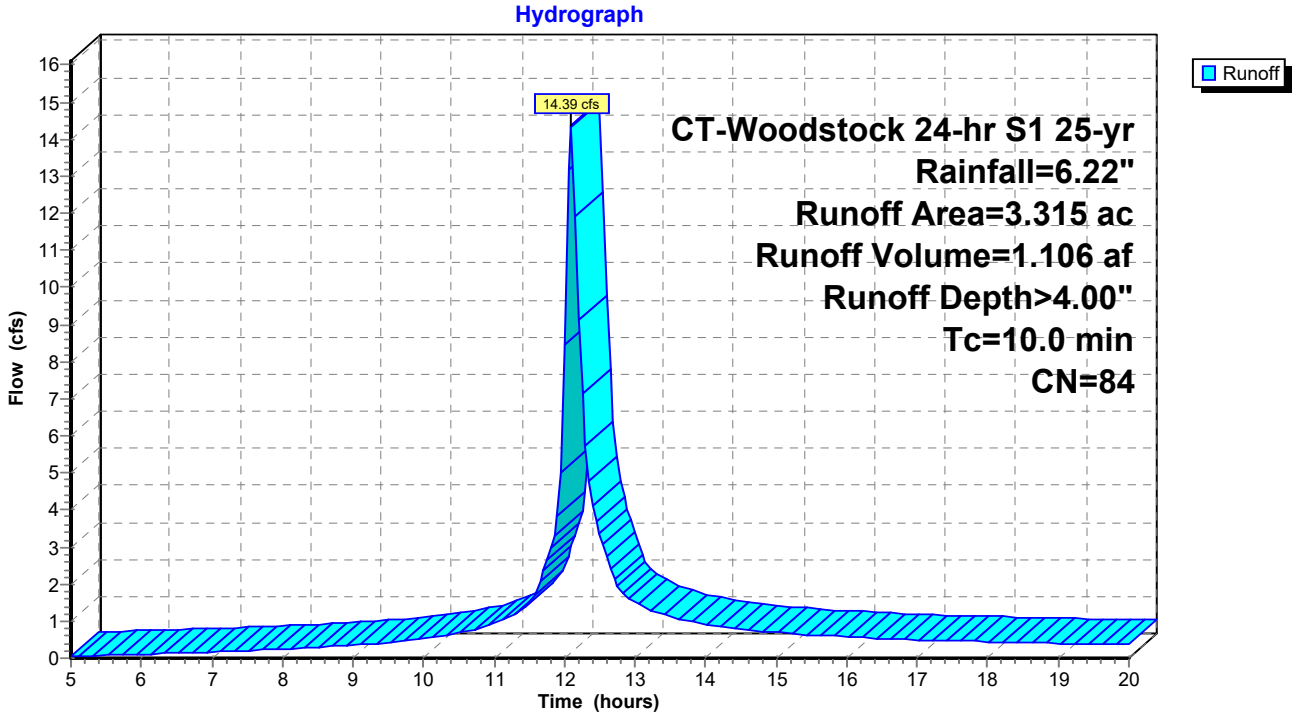
Runoff = 14.39 cfs @ 12.09 hrs, Volume= 1.106 af, Depth> 4.00"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 25-yr Rainfall=6.22"

Area (ac)	CN	Description
0.983	82	Row crops, SR + CR, Good, HSG C
2.088	85	Row crops, SR + CR, Good, HSG D
0.243	86	Woods/grass comb., Poor, HSG D
3.315	84	Weighted Average
3.315		100.00% Pervious Area

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

Subcatchment 1D: Subcat 1D



Summary for Subcatchment 1E: Subcat 1E

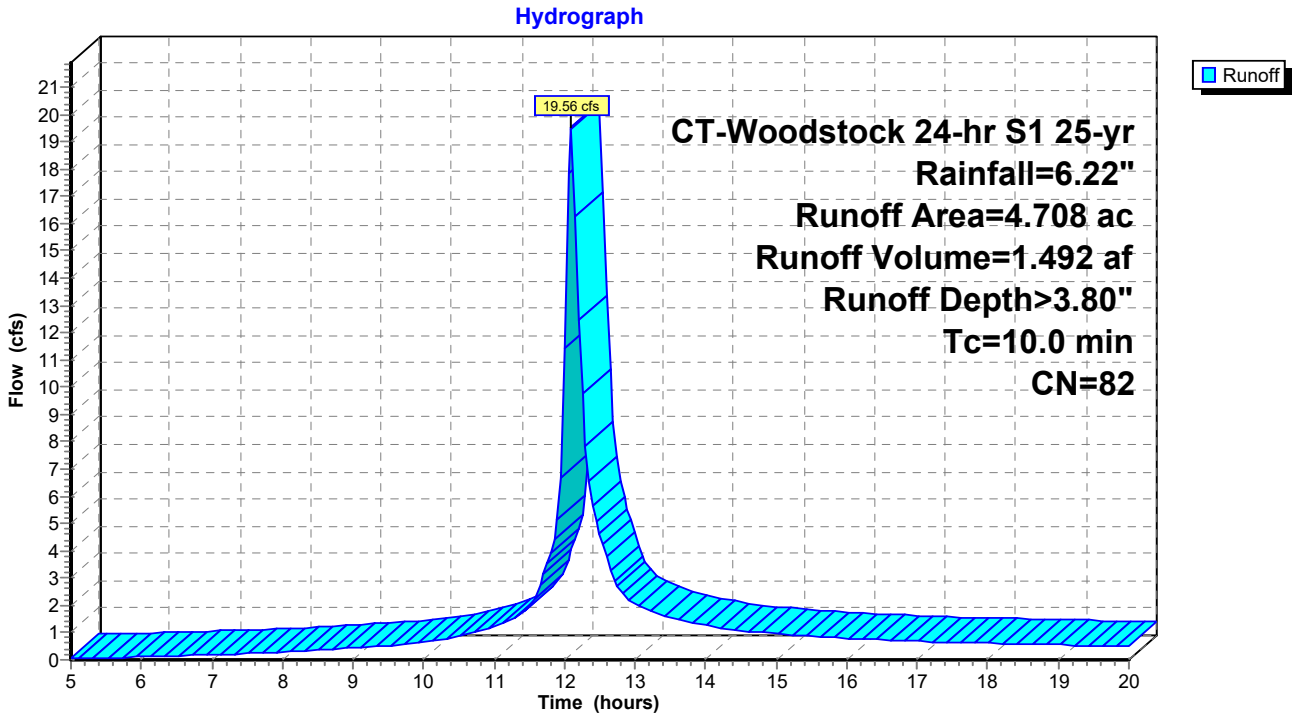
Runoff = 19.56 cfs @ 12.09 hrs, Volume= 1.492 af, Depth> 3.80"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 25-yr Rainfall=6.22"

Area (ac)	CN	Description
0.353	70	Brush, Fair, HSG C
0.153	77	Brush, Fair, HSG D
0.095	87	Dirt roads, HSG C
2.362	82	Row crops, SR + CR, Good, HSG C
1.746	85	Row crops, SR + CR, Good, HSG D
4.708	82	Weighted Average
4.708		100.00% Pervious Area

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

Subcatchment 1E: Subcat 1E

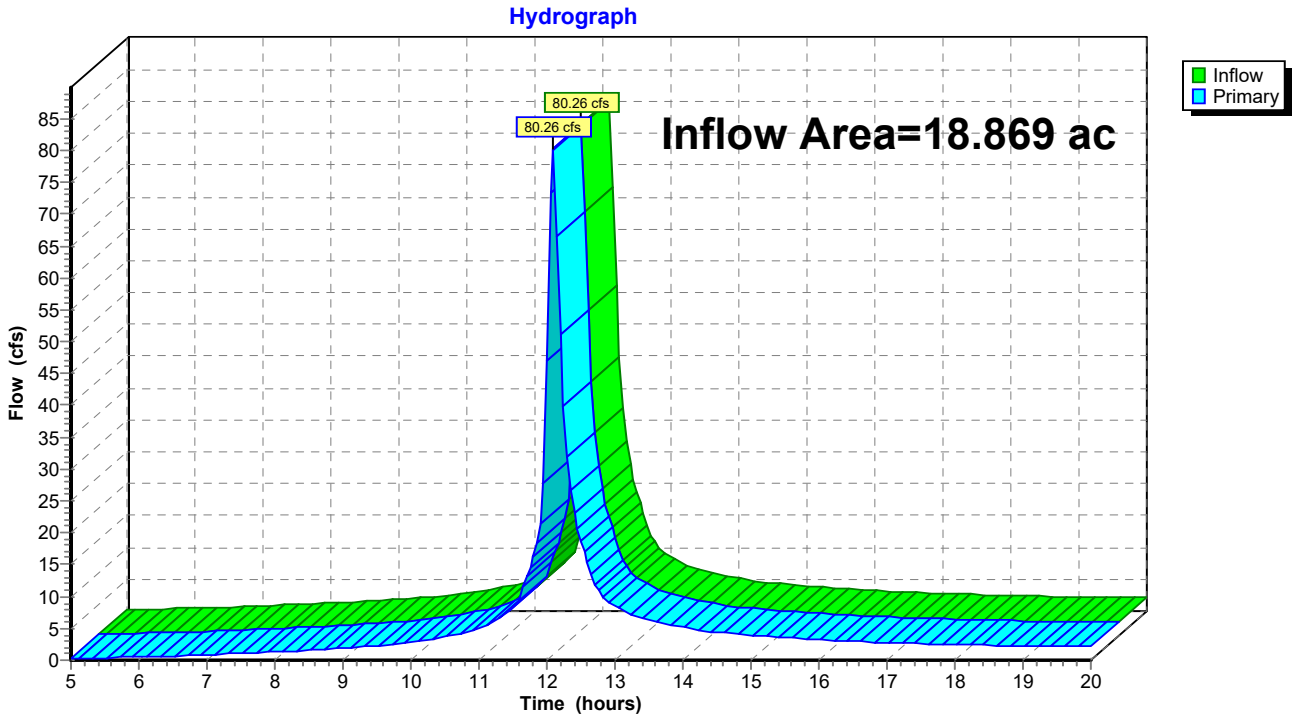


Summary for Link 2L: DP1

Inflow Area = 18.869 ac, 0.00% Impervious, Inflow Depth > 3.91" for 25-yr event
Inflow = 80.26 cfs @ 12.09 hrs, Volume= 6.147 af
Primary = 80.26 cfs @ 12.09 hrs, Volume= 6.147 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 2L: DP1



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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=3.981 ac 0.00% Impervious Runoff Depth>4.59"
Tc=10.0 min CN=83 Runoff=19.73 cfs 1.522 af

Subcatchment1B: Subcat 1B Runoff Area=4.337 ac 0.00% Impervious Runoff Depth>4.59"
Tc=10.0 min CN=83 Runoff=21.49 cfs 1.658 af

Subcatchment1C: Subcat 1C Runoff Area=2.529 ac 0.00% Impervious Runoff Depth>4.69"
Tc=10.0 min CN=84 Runoff=12.77 cfs 0.989 af

Subcatchment1D: Subcat 1D Runoff Area=3.315 ac 0.00% Impervious Runoff Depth>4.69"
Tc=10.0 min CN=84 Runoff=16.73 cfs 1.296 af

Subcatchment1E: Subcat 1E Runoff Area=4.708 ac 0.00% Impervious Runoff Depth>4.49"
Tc=10.0 min CN=82 Runoff=22.89 cfs 1.760 af

Link 2L: DP1 Inflow=93.60 cfs 7.226 af
Primary=93.60 cfs 7.226 af

Total Runoff Area = 18.869 ac Runoff Volume = 7.226 af Average Runoff Depth = 4.60"
100.00% Pervious = 18.869 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1A: Subcat 1A

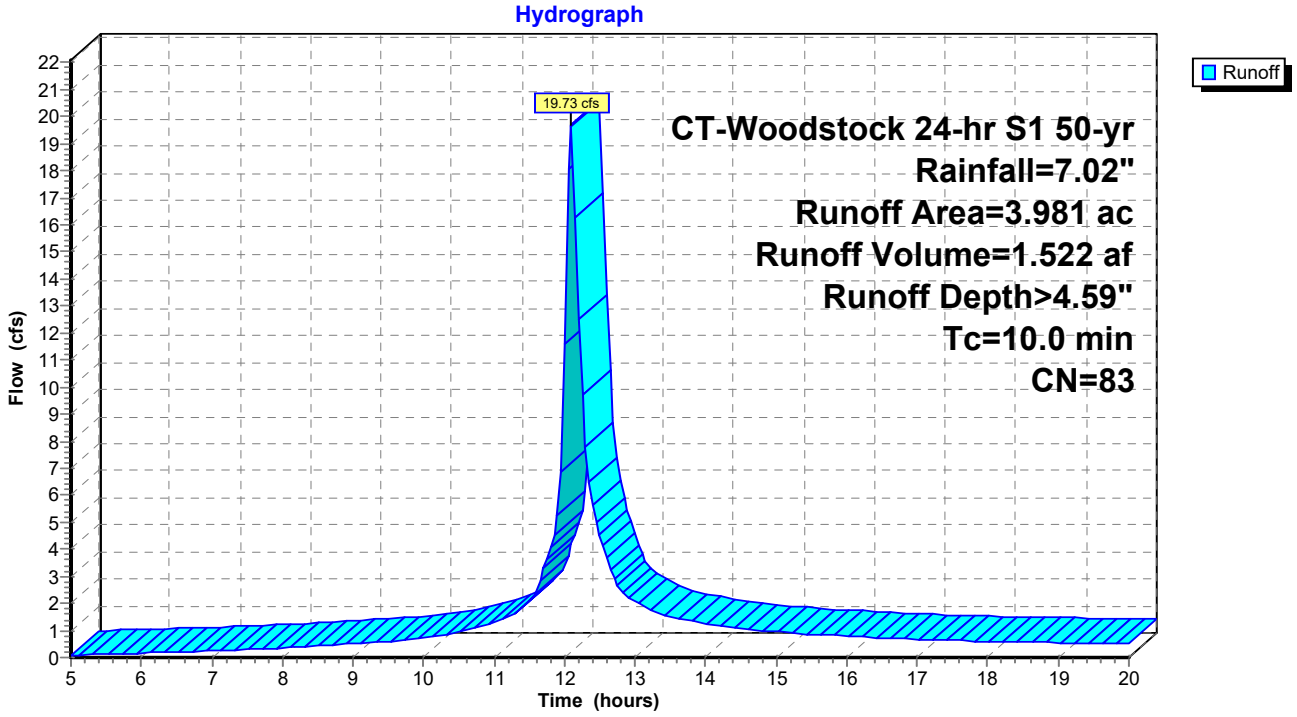
Runoff = 19.73 cfs @ 12.09 hrs, Volume= 1.522 af, Depth> 4.59"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 50-yr Rainfall=7.02"

Area (ac)	CN	Description
0.038	87	Dirt roads, HSG C
0.178	89	Dirt roads, HSG D
2.973	82	Row crops, SR + CR, Good, HSG C
0.470	85	Row crops, SR + CR, Good, HSG D
0.004	82	Woods/grass comb., Poor, HSG C
0.317	86	Woods/grass comb., Poor, HSG D
3.981	83	Weighted Average
3.981		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

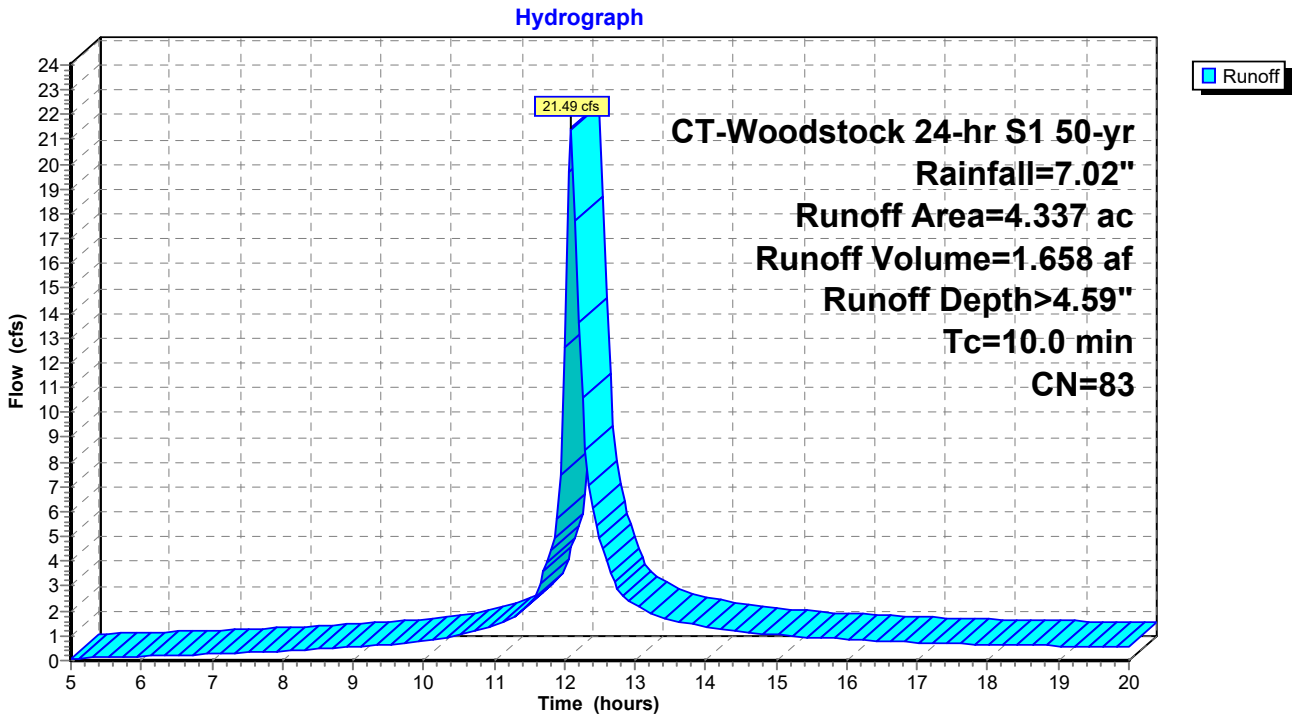
Runoff = 21.49 cfs @ 12.09 hrs, Volume= 1.658 af, Depth> 4.59"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 50-yr Rainfall=7.02"

Area (ac)	CN	Description
0.193	87	Dirt roads, HSG C
0.047	89	Dirt roads, HSG D
3.019	82	Row crops, SR + CR, Good, HSG C
1.078	85	Row crops, SR + CR, Good, HSG D
4.337	83	Weighted Average
4.337		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

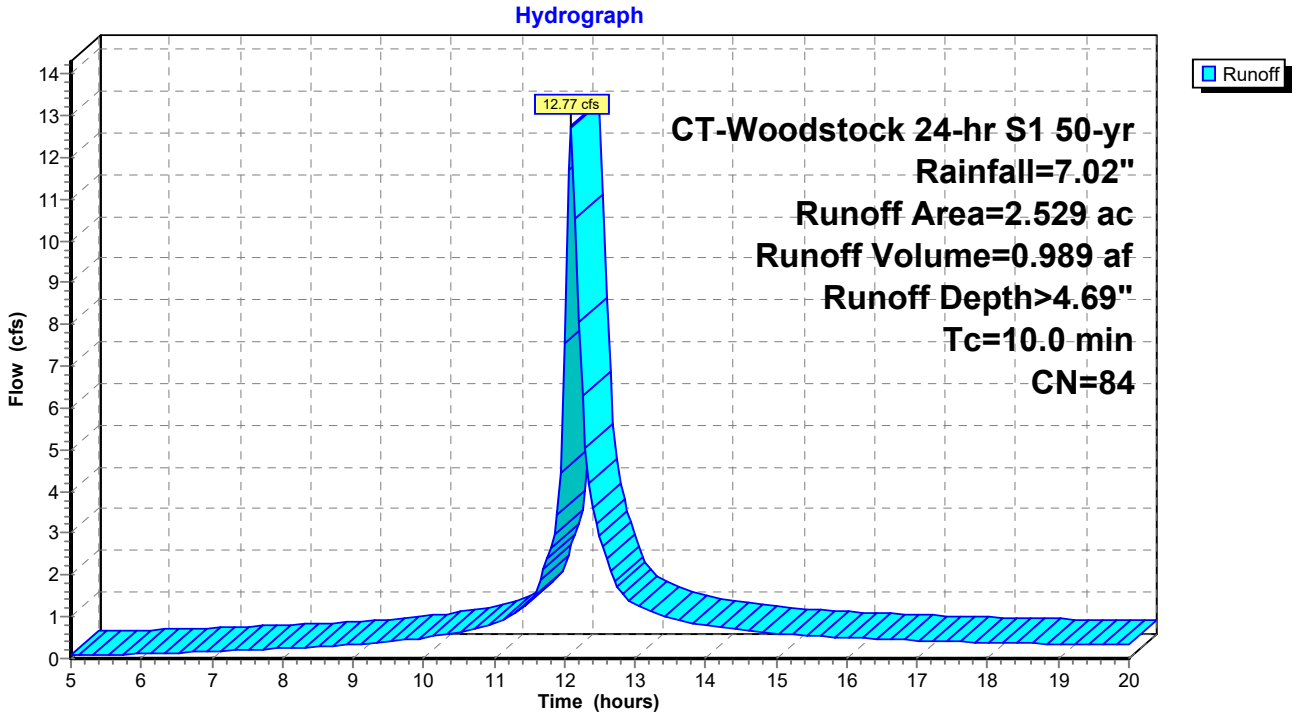
Runoff = 12.77 cfs @ 12.09 hrs, Volume= 0.989 af, Depth> 4.69"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 50-yr Rainfall=7.02"

Area (ac)	CN	Description
0.947	82	Row crops, SR + CR, Good, HSG C
1.582	85	Row crops, SR + CR, Good, HSG D
2.529	84	Weighted Average
2.529		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 1D: Subcat 1D

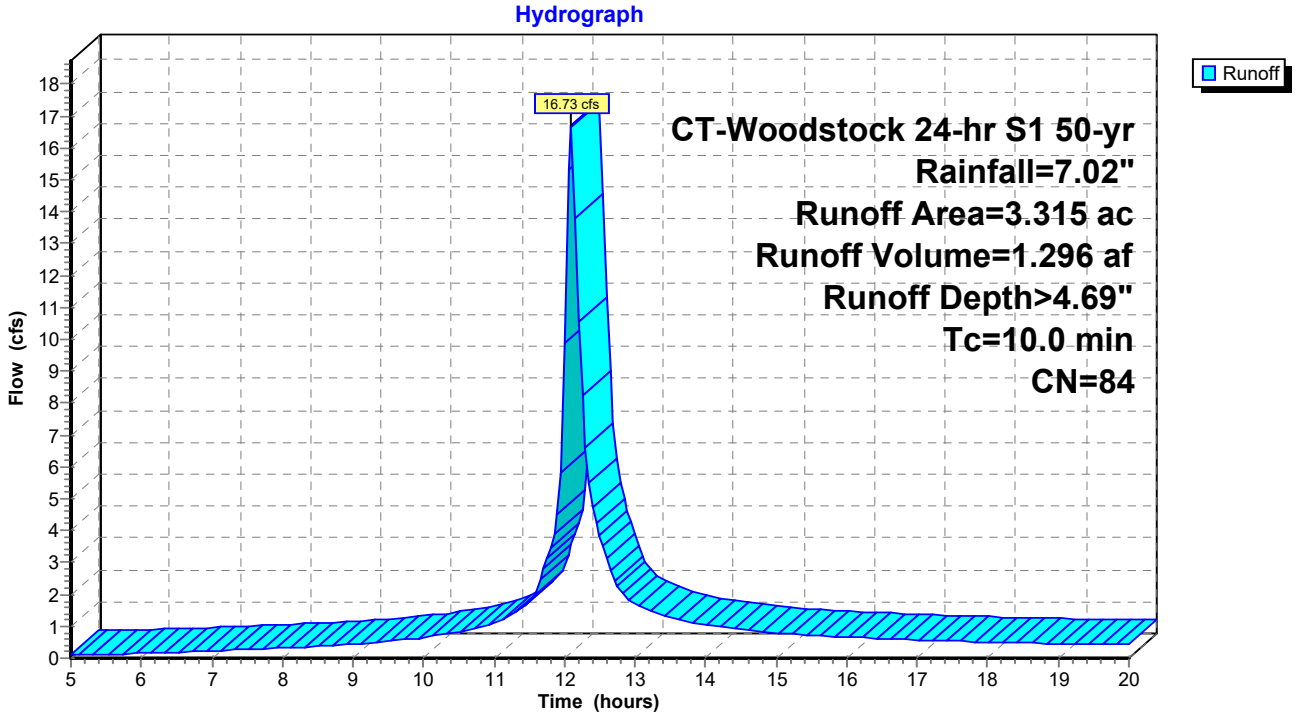
Runoff = 16.73 cfs @ 12.09 hrs, Volume= 1.296 af, Depth> 4.69"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 50-yr Rainfall=7.02"

Area (ac)	CN	Description
0.983	82	Row crops, SR + CR, Good, HSG C
2.088	85	Row crops, SR + CR, Good, HSG D
0.243	86	Woods/grass comb., Poor, HSG D
3.315	84	Weighted Average
3.315		100.00% Pervious Area

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

Subcatchment 1D: Subcat 1D



Summary for Subcatchment 1E: Subcat 1E

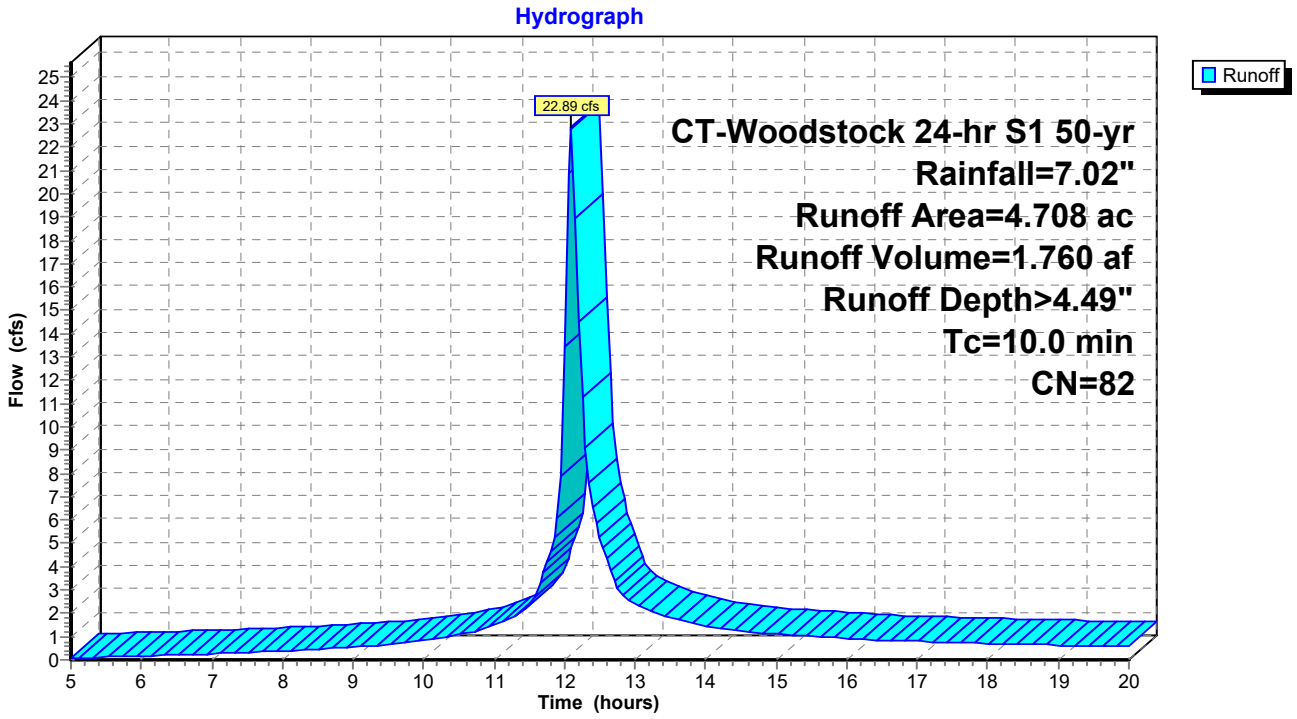
Runoff = 22.89 cfs @ 12.09 hrs, Volume= 1.760 af, Depth> 4.49"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 50-yr Rainfall=7.02"

Area (ac)	CN	Description
0.353	70	Brush, Fair, HSG C
0.153	77	Brush, Fair, HSG D
0.095	87	Dirt roads, HSG C
2.362	82	Row crops, SR + CR, Good, HSG C
1.746	85	Row crops, SR + CR, Good, HSG D
4.708	82	Weighted Average
4.708		100.00% Pervious Area

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

Subcatchment 1E: Subcat 1E

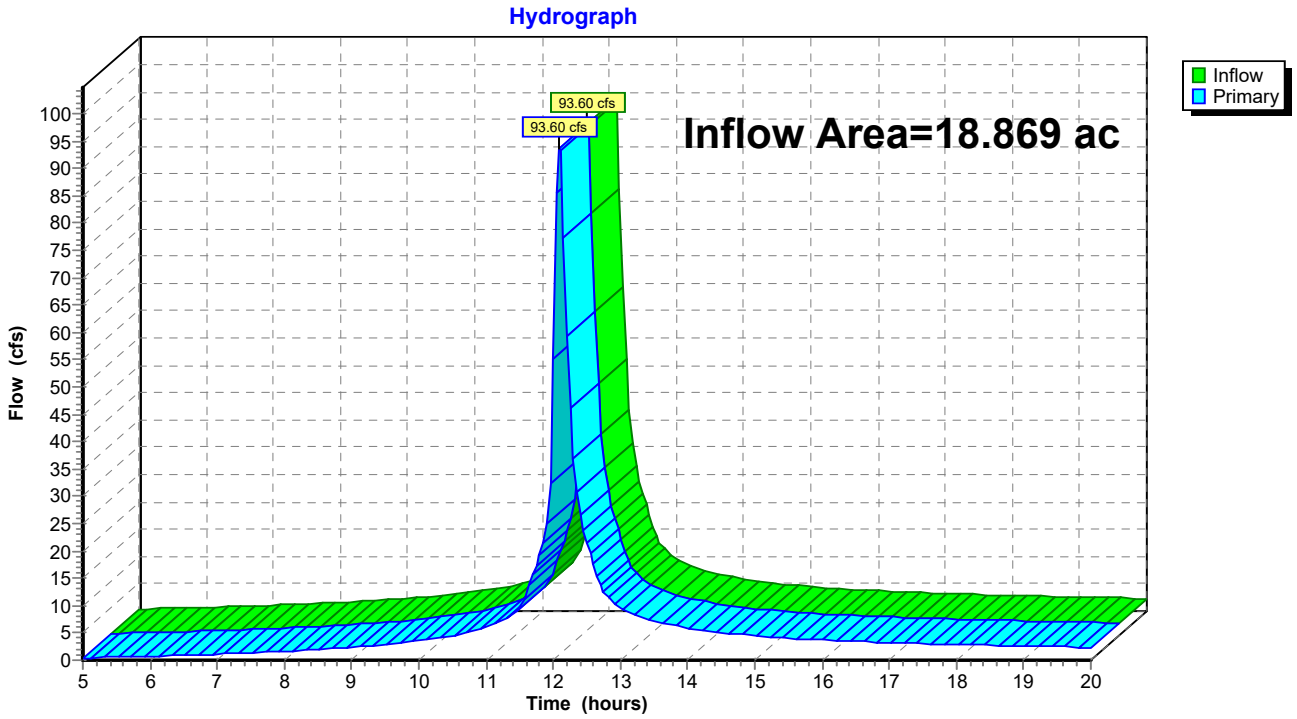


Summary for Link 2L: DP1

Inflow Area = 18.869 ac, 0.00% Impervious, Inflow Depth > 4.60" for 50-yr event
Inflow = 93.60 cfs @ 12.09 hrs, Volume= 7.226 af
Primary = 93.60 cfs @ 12.09 hrs, Volume= 7.226 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 2L: DP1



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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=3.981 ac 0.00% Impervious Runoff Depth>5.35"
Tc=10.0 min CN=83 Runoff=22.65 cfs 1.773 af

Subcatchment1B: Subcat 1B Runoff Area=4.337 ac 0.00% Impervious Runoff Depth>5.35"
Tc=10.0 min CN=83 Runoff=24.68 cfs 1.932 af

Subcatchment1C: Subcat 1C Runoff Area=2.529 ac 0.00% Impervious Runoff Depth>5.45"
Tc=10.0 min CN=84 Runoff=14.62 cfs 1.149 af

Subcatchment1D: Subcat 1D Runoff Area=3.315 ac 0.00% Impervious Runoff Depth>5.45"
Tc=10.0 min CN=84 Runoff=19.16 cfs 1.506 af

Subcatchment1E: Subcat 1E Runoff Area=4.708 ac 0.00% Impervious Runoff Depth>5.24"
Tc=10.0 min CN=82 Runoff=26.36 cfs 2.056 af

Link 2L: DP1 Inflow=107.48 cfs 8.416 af
Primary=107.48 cfs 8.416 af

Total Runoff Area = 18.869 ac Runoff Volume = 8.416 af Average Runoff Depth = 5.35"
100.00% Pervious = 18.869 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1A: Subcat 1A

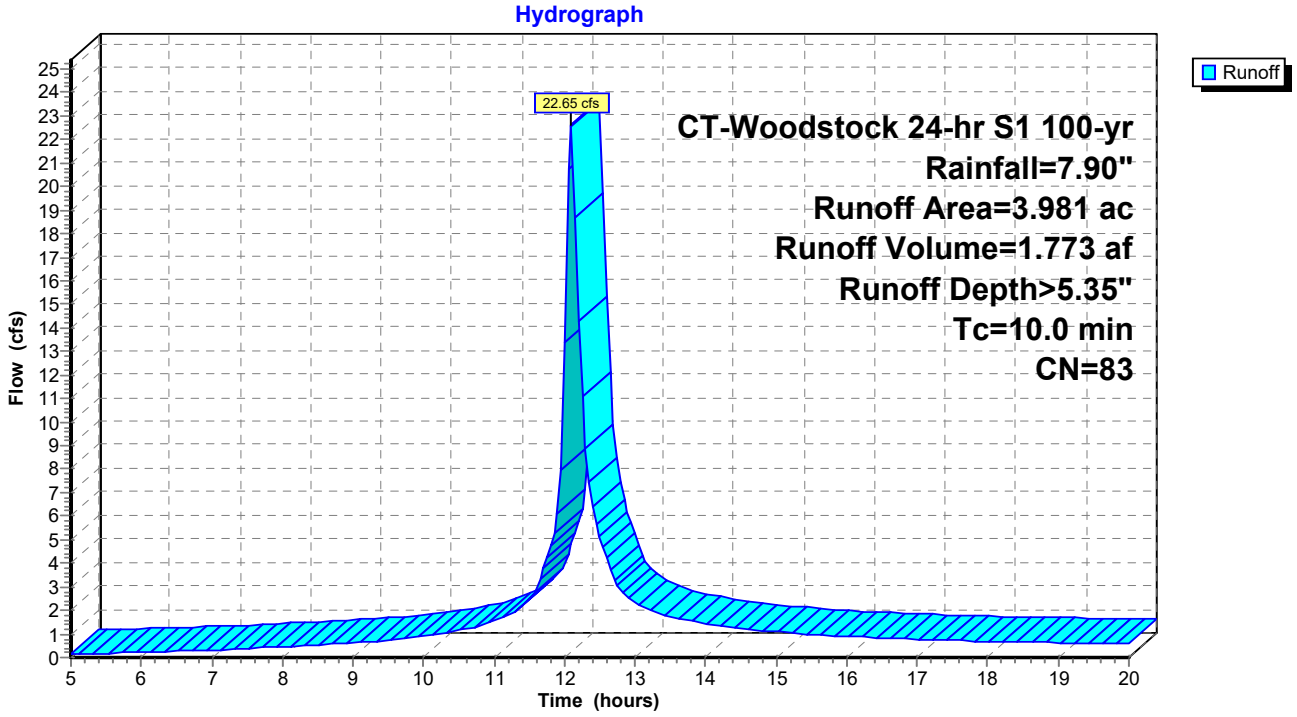
Runoff = 22.65 cfs @ 12.09 hrs, Volume= 1.773 af, Depth> 5.35"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 100-yr Rainfall=7.90"

Area (ac)	CN	Description
0.038	87	Dirt roads, HSG C
0.178	89	Dirt roads, HSG D
2.973	82	Row crops, SR + CR, Good, HSG C
0.470	85	Row crops, SR + CR, Good, HSG D
0.004	82	Woods/grass comb., Poor, HSG C
0.317	86	Woods/grass comb., Poor, HSG D
3.981	83	Weighted Average
3.981		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

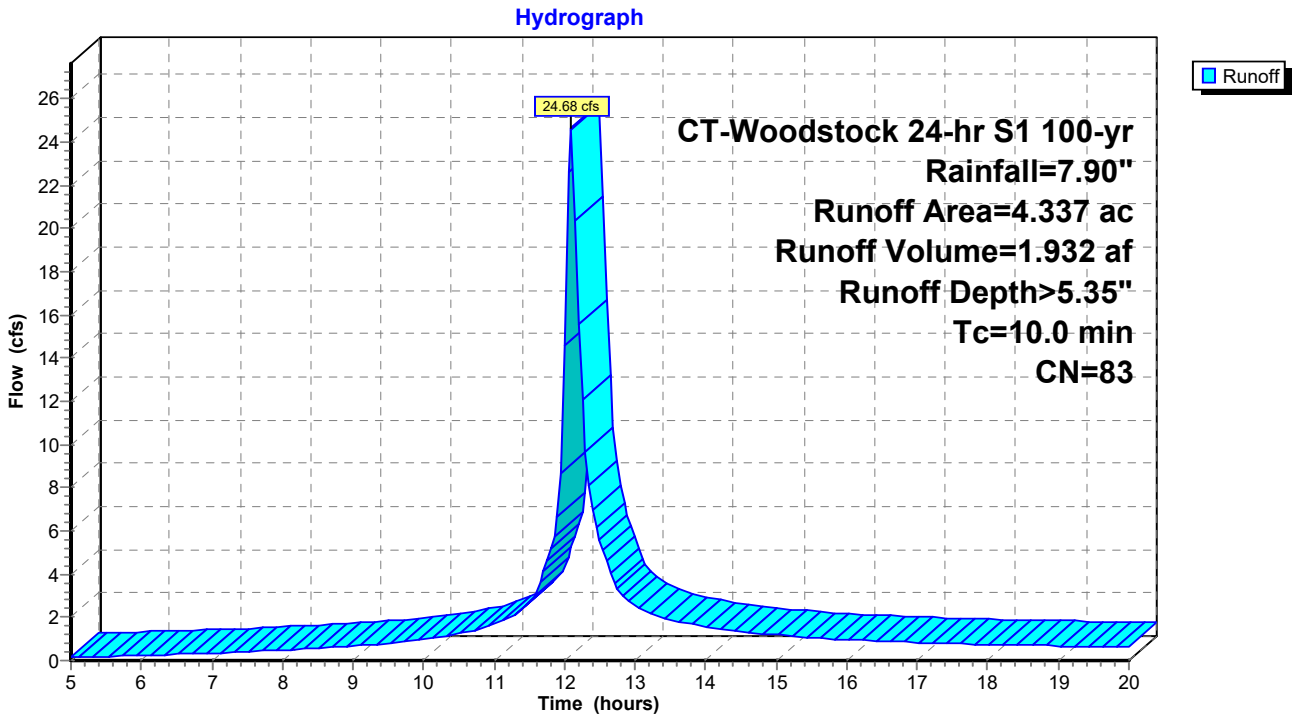
Runoff = 24.68 cfs @ 12.09 hrs, Volume= 1.932 af, Depth> 5.35"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 100-yr Rainfall=7.90"

Area (ac)	CN	Description
0.193	87	Dirt roads, HSG C
0.047	89	Dirt roads, HSG D
3.019	82	Row crops, SR + CR, Good, HSG C
1.078	85	Row crops, SR + CR, Good, HSG D
4.337	83	Weighted Average
4.337		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

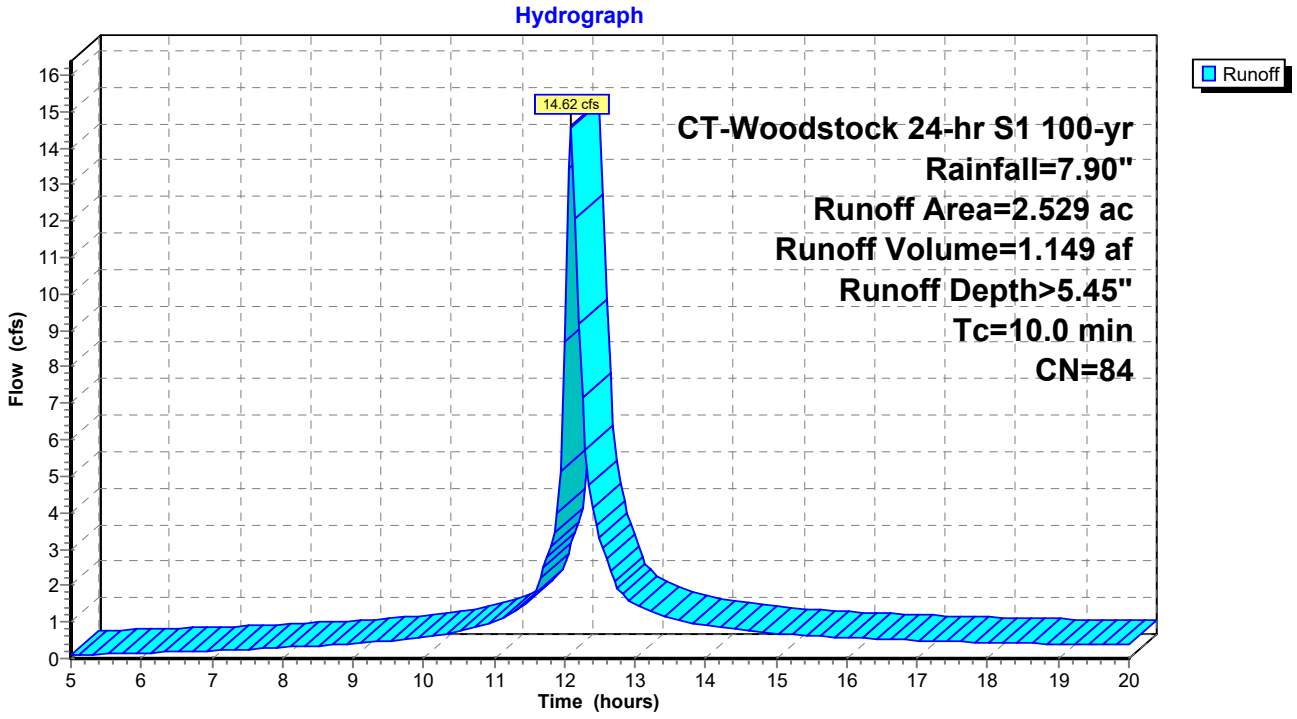
Runoff = 14.62 cfs @ 12.09 hrs, Volume= 1.149 af, Depth> 5.45"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 100-yr Rainfall=7.90"

Area (ac)	CN	Description
0.947	82	Row crops, SR + CR, Good, HSG C
1.582	85	Row crops, SR + CR, Good, HSG D
2.529	84	Weighted Average
2.529		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 1D: Subcat 1D

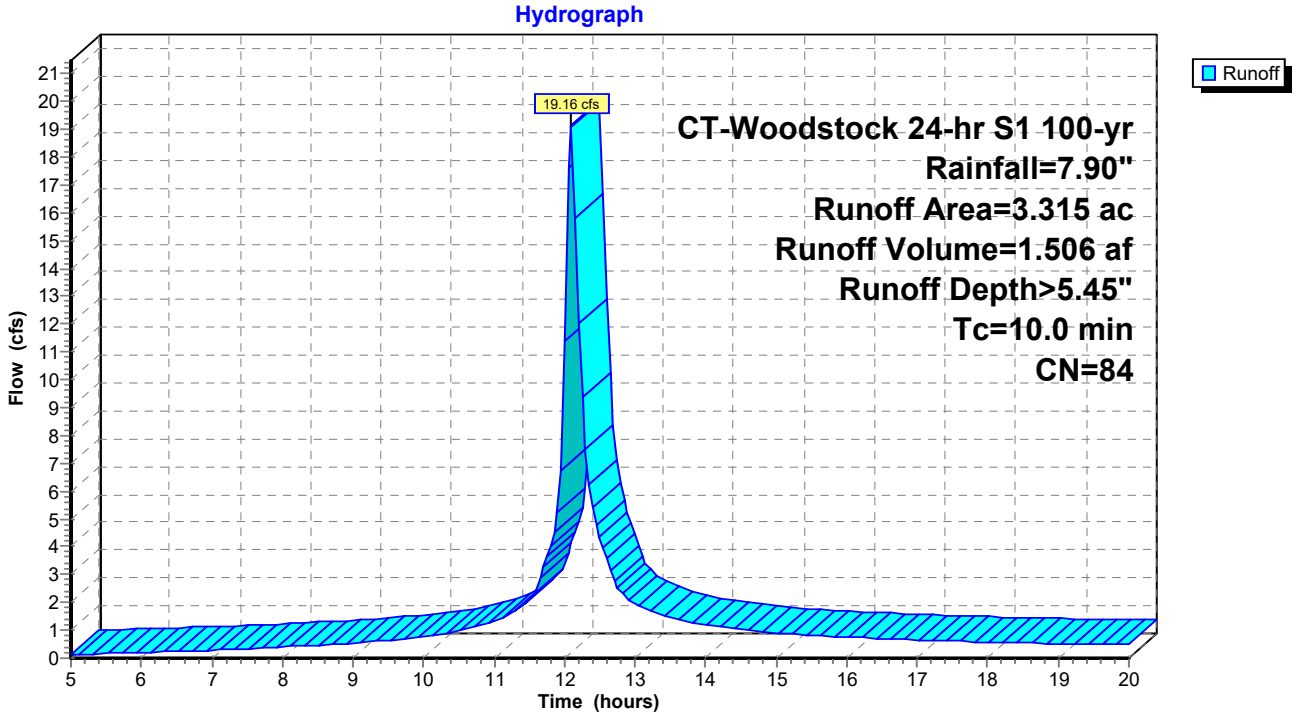
Runoff = 19.16 cfs @ 12.09 hrs, Volume= 1.506 af, Depth> 5.45"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 100-yr Rainfall=7.90"

Area (ac)	CN	Description
0.983	82	Row crops, SR + CR, Good, HSG C
2.088	85	Row crops, SR + CR, Good, HSG D
0.243	86	Woods/grass comb., Poor, HSG D
3.315	84	Weighted Average
3.315		100.00% Pervious Area

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

Subcatchment 1D: Subcat 1D



Summary for Subcatchment 1E: Subcat 1E

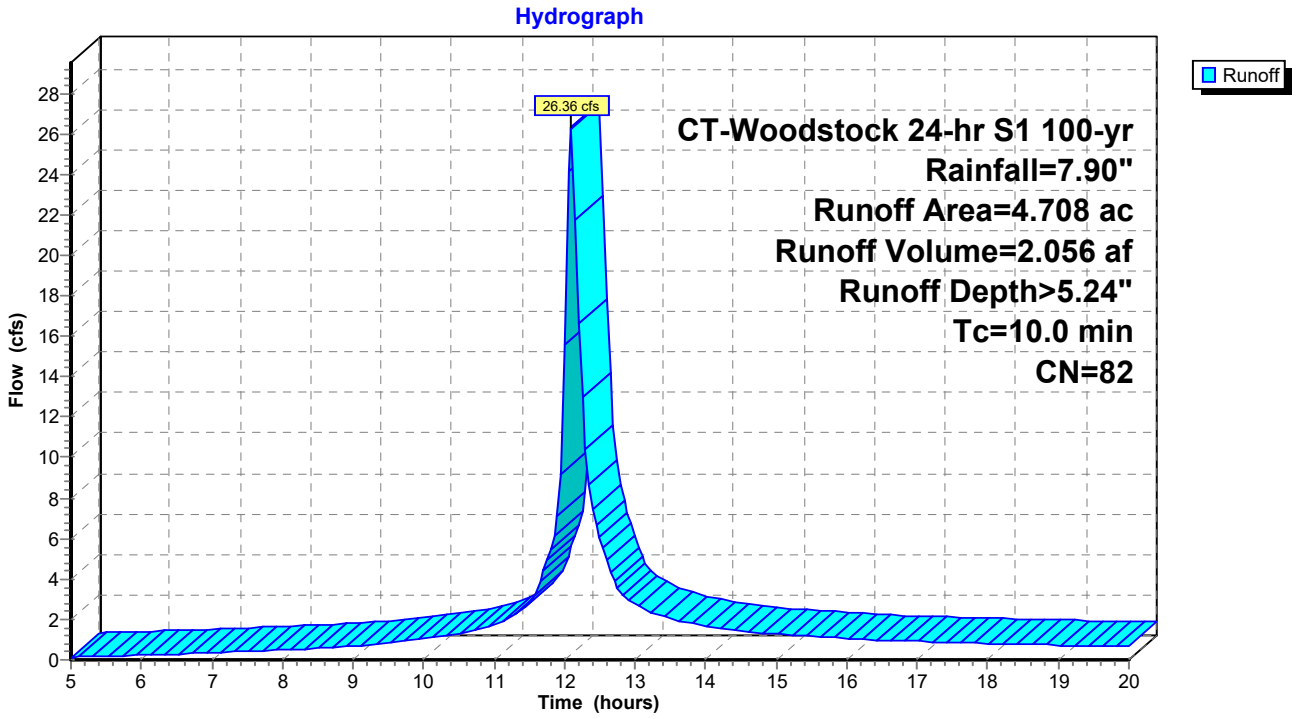
Runoff = 26.36 cfs @ 12.09 hrs, Volume= 2.056 af, Depth> 5.24"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 100-yr Rainfall=7.90"

Area (ac)	CN	Description
0.353	70	Brush, Fair, HSG C
0.153	77	Brush, Fair, HSG D
0.095	87	Dirt roads, HSG C
2.362	82	Row crops, SR + CR, Good, HSG C
1.746	85	Row crops, SR + CR, Good, HSG D
4.708	82	Weighted Average
4.708		100.00% Pervious Area

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

Subcatchment 1E: Subcat 1E

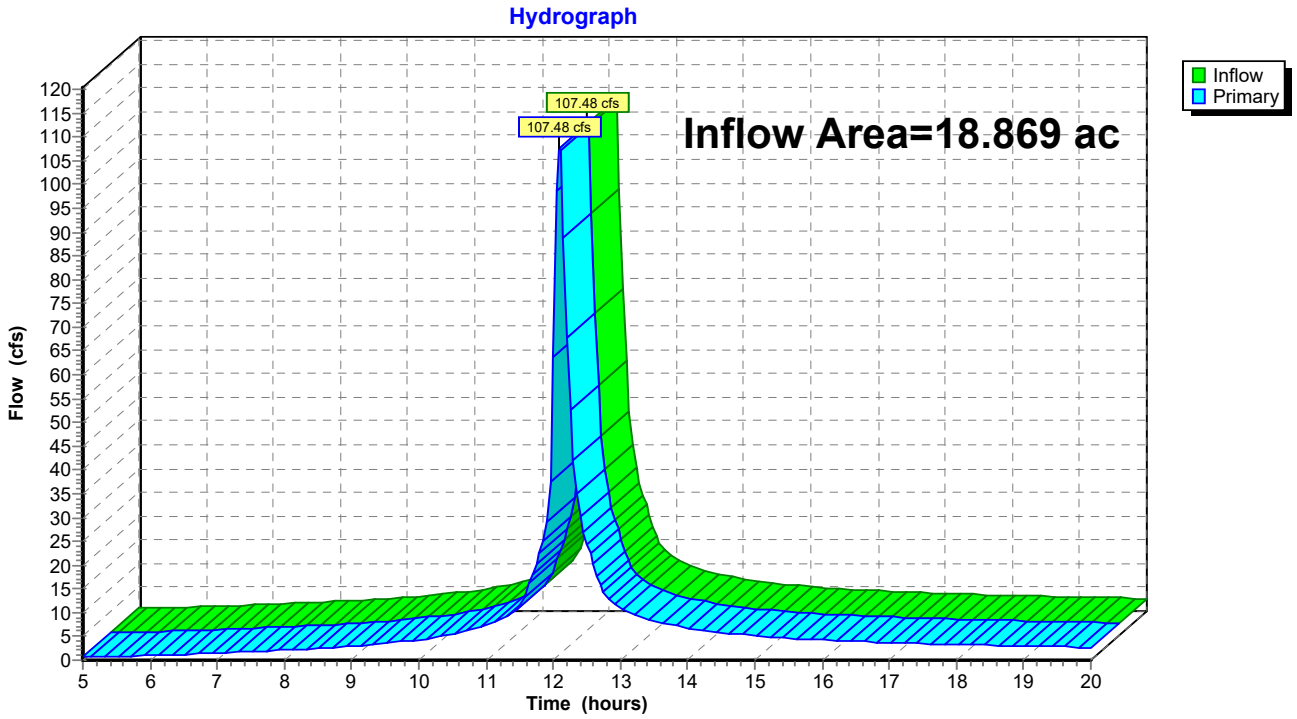


Summary for Link 2L: DP1

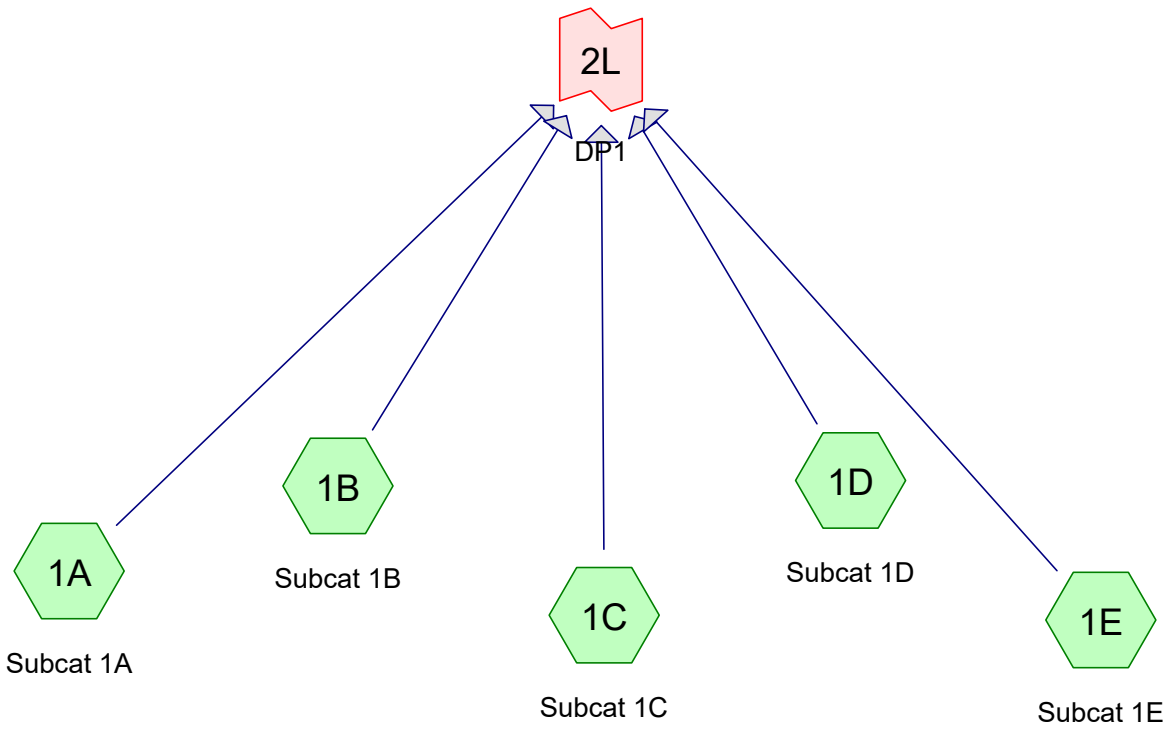
Inflow Area = 18.869 ac, 0.00% Impervious, Inflow Depth > 5.35" for 100-yr event
Inflow = 107.48 cfs @ 12.09 hrs, Volume= 8.416 af
Primary = 107.48 cfs @ 12.09 hrs, Volume= 8.416 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 2L: DP1



HydroCAD Analysis: Proposed Conditions



Subcat Reach Pond Link

Routing Diagram for PR_Drainage
Prepared by VHB, Inc, Printed 2/26/2024

Project Notes

Defined 5 rainfall events from CT-Woodstock IDF
Copied 10 events from CT-Woodstock 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-Woodstock 24-hr S1	2-yr	Default	24.00	1	3.37	2
2	25-yr	CT-Woodstock 24-hr S1	25-yr	Default	24.00	1	6.22	2
3	50-yr	CT-Woodstock 24-hr S1	50-yr	Default	24.00	1	7.02	2
4	100-yr	CT-Woodstock 24-hr S1	100-yr	Default	24.00	1	7.90	2
5	200-yr	CT-Woodstock 24-hr S1	200-yr	Default	24.00	1	8.95	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
10.176	81	50-75% Grass cover, Fair, HSG C-D (1A, 1B, 1C, 1D, 1E)
6.964	84	50-75% Grass cover, Fair, HSG D (1A, 1B, 1C, 1D, 1E)
0.254	70	Brush, Fair, HSG C (1E)
0.153	77	Brush, Fair, HSG D (1E)
0.532	87	Dirt roads, HSG C (1A, 1B, 1E)
0.225	89	Dirt roads, HSG D (1A, 1B)
0.004	82	Woods/grass comb., Poor, HSG C (1A)
0.561	86	Woods/grass comb., Poor, HSG D (1A, 1D)
18.869	**82**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
10.966	HSG C	1A, 1B, 1C, 1D, 1E
7.903	HSG D	1A, 1B, 1C, 1D, 1E
0.000	Other	
18.869		**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
0.000	0.000	10.176	6.964	0.000	17.140	50-75% Grass cover, Fair	1A, 1B, 1C, 1D, 1E
0.000	0.000	0.254	0.153	0.000	0.407	Brush, Fair	1E
0.000	0.000	0.532	0.225	0.000	0.757	Dirt roads	1A, 1B, 1E
0.000	0.000	0.004	0.561	0.000	0.565	Woods/grass comb., Poor	1A, 1D
0.000	**0.000**	**10.966**	**7.903**	**0.000**	**18.869**	**TOTAL AREA**	

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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=3.980 ac 0.00% Impervious Runoff Depth>1.50"
Tc=10.0 min CN=82 Runoff=6.90 cfs 0.497 af

Subcatchment1B: Subcat 1B Runoff Area=4.337 ac 0.00% Impervious Runoff Depth>1.50"
Tc=10.0 min CN=82 Runoff=7.52 cfs 0.542 af

Subcatchment1C: Subcat 1C Runoff Area=2.529 ac 0.00% Impervious Runoff Depth>1.57"
Tc=10.0 min CN=83 Runoff=4.59 cfs 0.331 af

Subcatchment1D: Subcat 1D Runoff Area=3.315 ac 0.00% Impervious Runoff Depth>1.57"
Tc=10.0 min CN=83 Runoff=6.02 cfs 0.434 af

Subcatchment1E: Subcat 1E Runoff Area=4.708 ac 0.00% Impervious Runoff Depth>1.50"
Tc=10.0 min CN=82 Runoff=8.16 cfs 0.588 af

Link 2L: DP1 Inflow=33.18 cfs 2.391 af
Primary=33.18 cfs 2.391 af

Total Runoff Area = 18.869 ac Runoff Volume = 2.391 af Average Runoff Depth = 1.52"
100.00% Pervious = 18.869 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1A: Subcat 1A

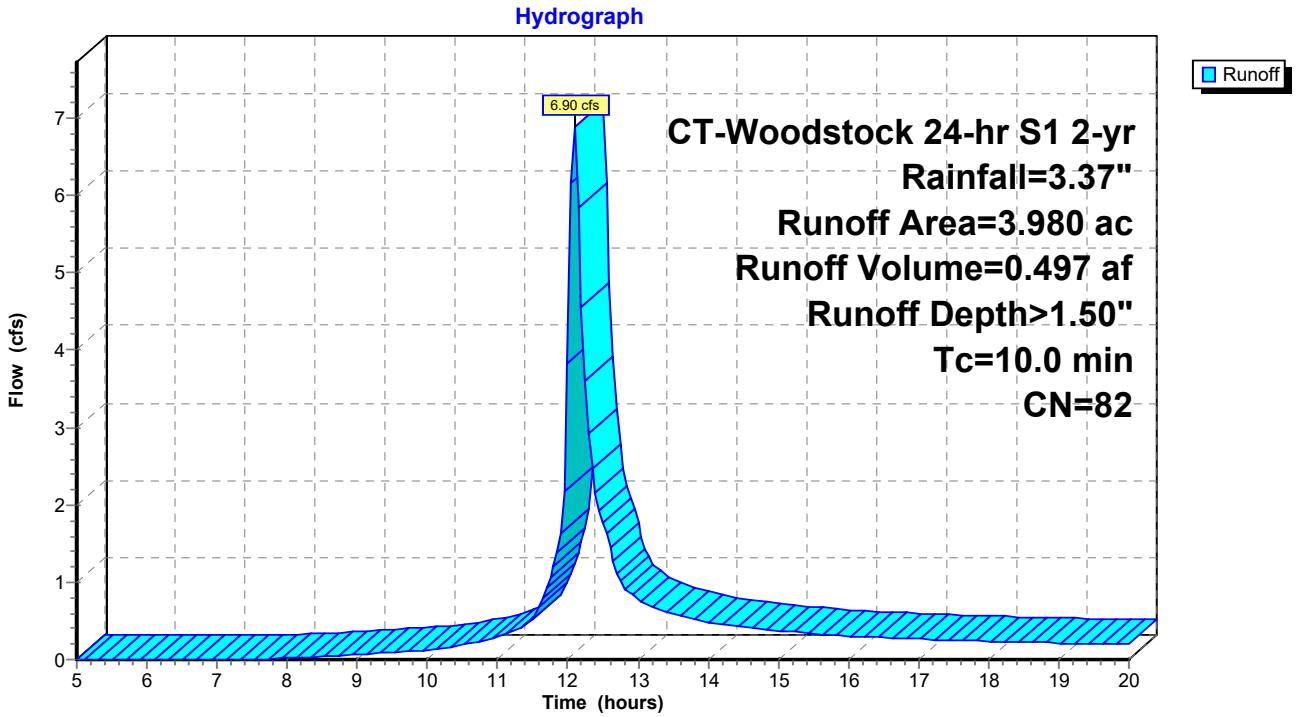
Runoff = 6.90 cfs @ 12.10 hrs, Volume= 0.497 af, Depth> 1.50"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 2-yr Rainfall=3.37"

	Area (ac)	CN	Description
*	2.973	81	50-75% Grass cover, Fair, HSG C-D
	0.001	82	Woods/grass comb., Poor, HSG C
	0.003	82	Woods/grass comb., Poor, HSG C
	0.003	87	Dirt roads, HSG C
	0.035	87	Dirt roads, HSG C
	0.178	89	Dirt roads, HSG D
	0.470	84	50-75% Grass cover, Fair, HSG D
	0.317	86	Woods/grass comb., Poor, HSG D
	3.980	82	Weighted Average
	3.980		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

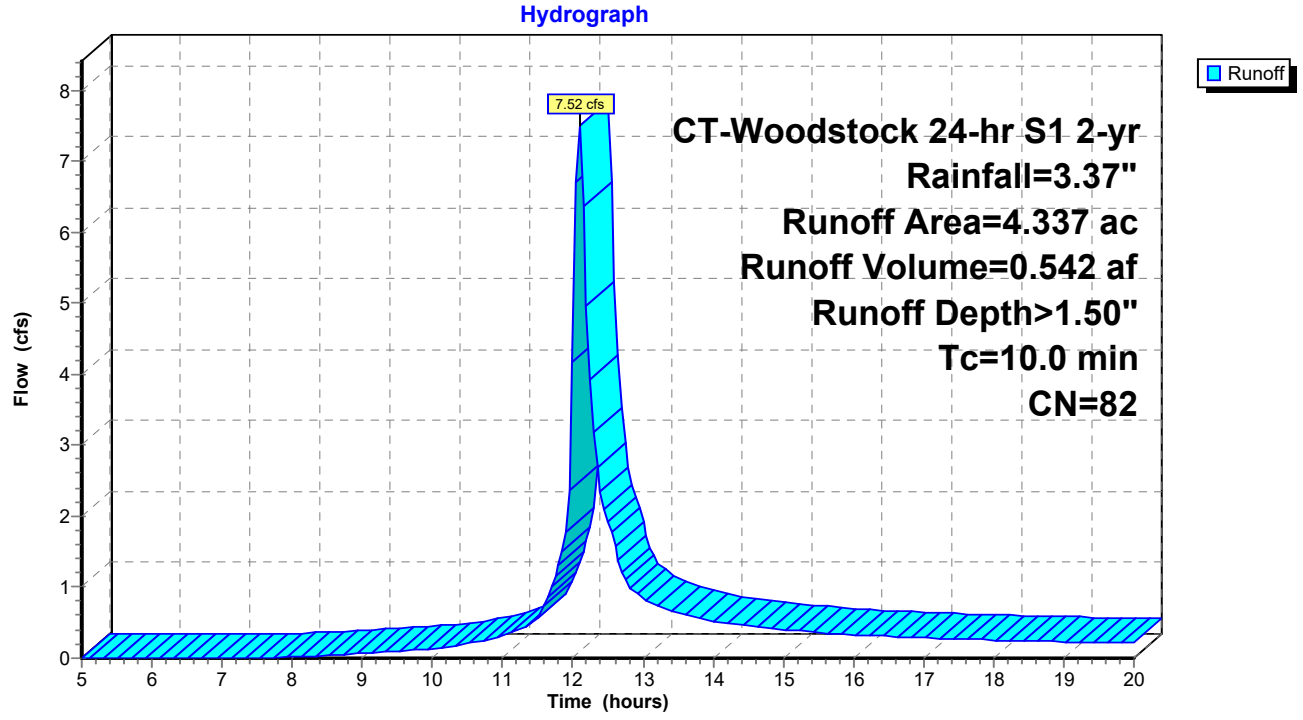
Runoff = 7.52 cfs @ 12.10 hrs, Volume= 0.542 af, Depth> 1.50"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 2-yr Rainfall=3.37"

	Area (ac)	CN	Description
	0.047	89	Dirt roads, HSG D
	0.046	84	50-75% Grass cover, Fair, HSG D
	1.032	84	50-75% Grass cover, Fair, HSG D
	0.116	87	Dirt roads, HSG C
	0.181	87	Dirt roads, HSG C
*	1.706	81	50-75% Grass cover, Fair, HSG C-D
*	0.288	81	50-75% Grass cover, Fair, HSG C-D
*	0.875	81	50-75% Grass cover, Fair, HSG C-D
*	0.046	81	50-75% Grass cover, Fair, HSG C-D
	0.000	84	50-75% Grass cover, Fair, HSG D
	4.337	82	Weighted Average
	4.337		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

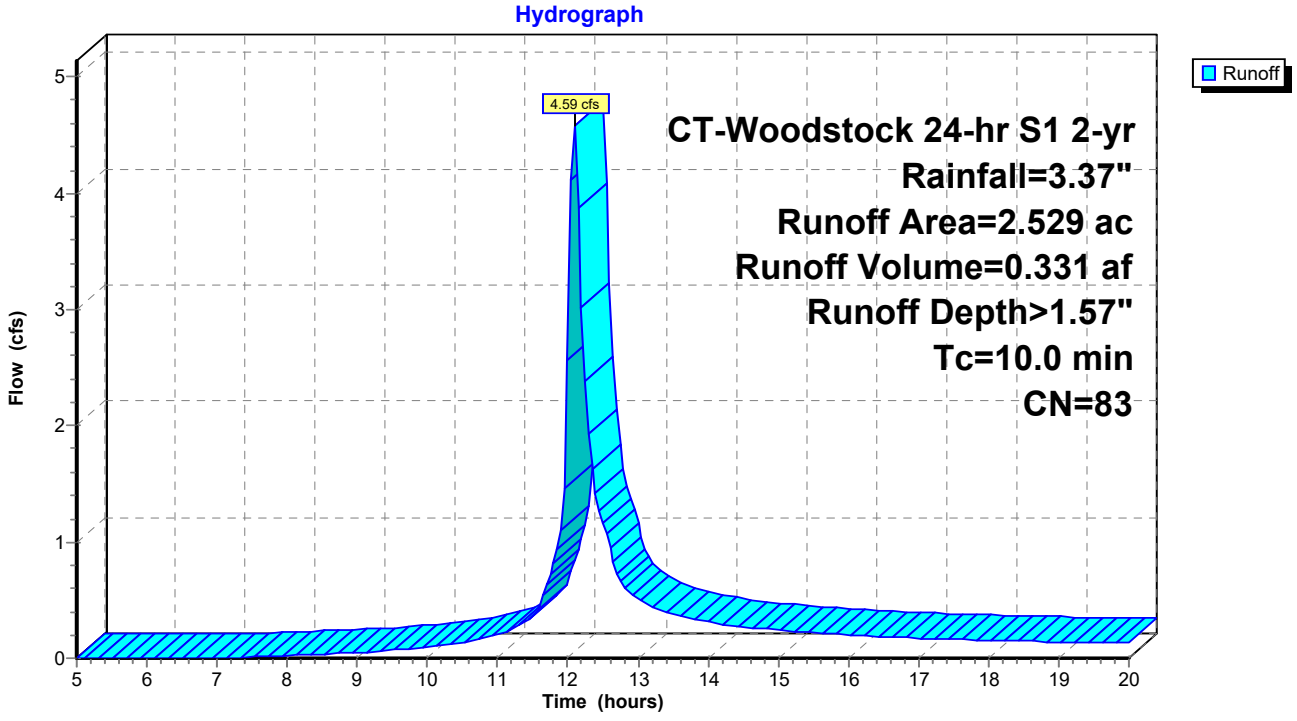
Runoff = 4.59 cfs @ 12.09 hrs, Volume= 0.331 af, Depth> 1.57"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 2-yr Rainfall=3.37"

	Area (ac)	CN	Description
	1.552	84	50-75% Grass cover, Fair, HSG D
*	0.947	81	50-75% Grass cover, Fair, HSG C-D
	0.030	84	50-75% Grass cover, Fair, HSG D
	2.529	83	Weighted Average
	2.529		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 1D: Subcat 1D

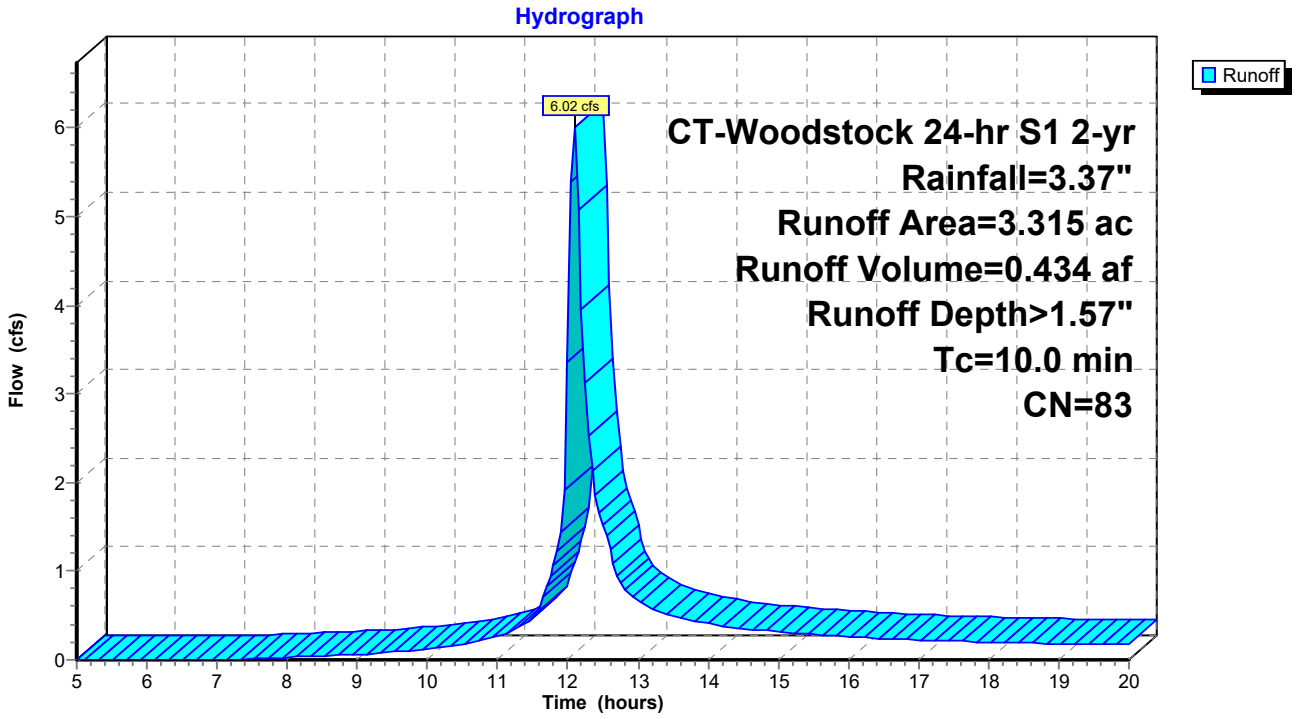
Runoff = 6.02 cfs @ 12.09 hrs, Volume= 0.434 af, Depth> 1.57"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 2-yr Rainfall=3.37"

	Area (ac)	CN	Description
	0.018	84	50-75% Grass cover, Fair, HSG D
	0.085	86	Woods/grass comb., Poor, HSG D
	2.070	84	50-75% Grass cover, Fair, HSG D
	0.159	86	Woods/grass comb., Poor, HSG D
*	0.983	81	50-75% Grass cover, Fair, HSG C-D
	3.315	83	Weighted Average
	3.315		100.00% Pervious Area

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

Subcatchment 1D: Subcat 1D



Summary for Subcatchment 1E: Subcat 1E

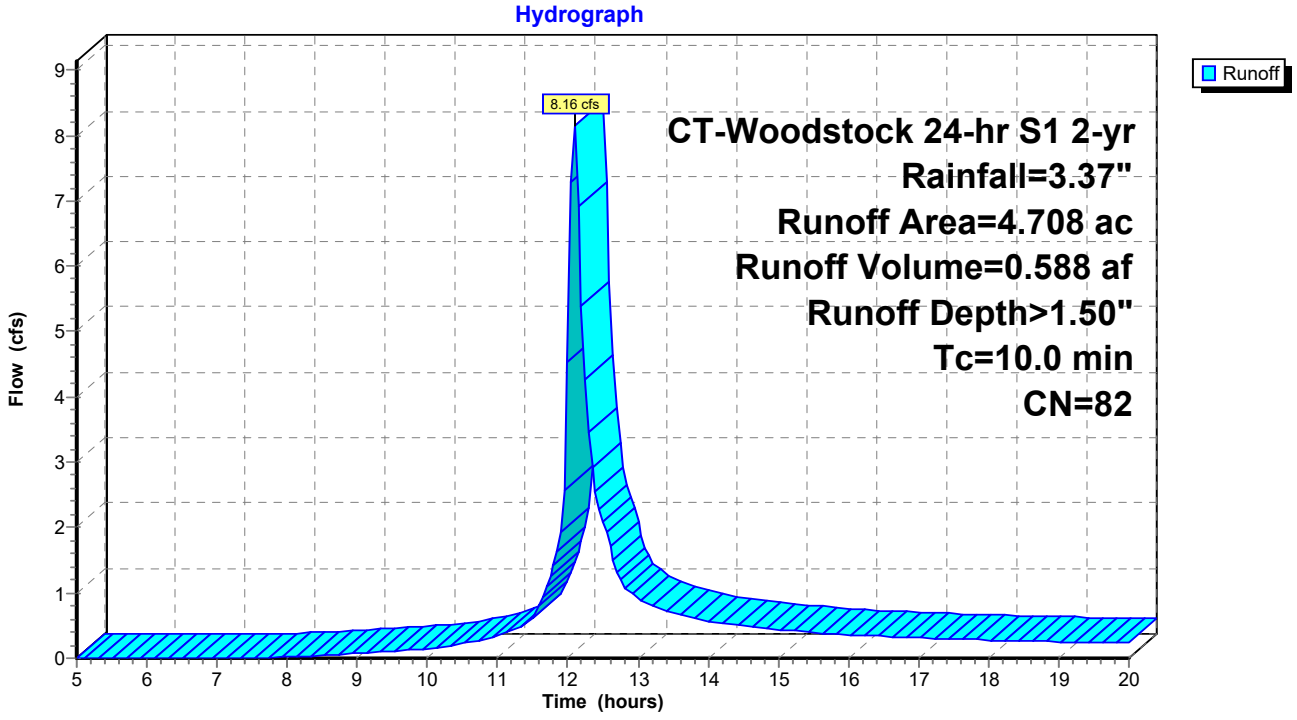
Runoff = 8.16 cfs @ 12.10 hrs, Volume= 0.588 af, Depth> 1.50"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 2-yr Rainfall=3.37"

	Area (ac)	CN	Description
	1.746	84	50-75% Grass cover, Fair, HSG D
	0.153	77	Brush, Fair, HSG D
	0.005	70	Brush, Fair, HSG C
	0.015	87	Dirt roads, HSG C
	0.025	87	Dirt roads, HSG C
	0.047	87	Dirt roads, HSG C
	0.004	87	Dirt roads, HSG C
	0.106	87	Dirt roads, HSG C
*	2.358	81	50-75% Grass cover, Fair, HSG C-D
	0.249	70	Brush, Fair, HSG C
	4.708	82	Weighted Average
	4.708		100.00% Pervious Area

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

Subcatchment 1E: Subcat 1E

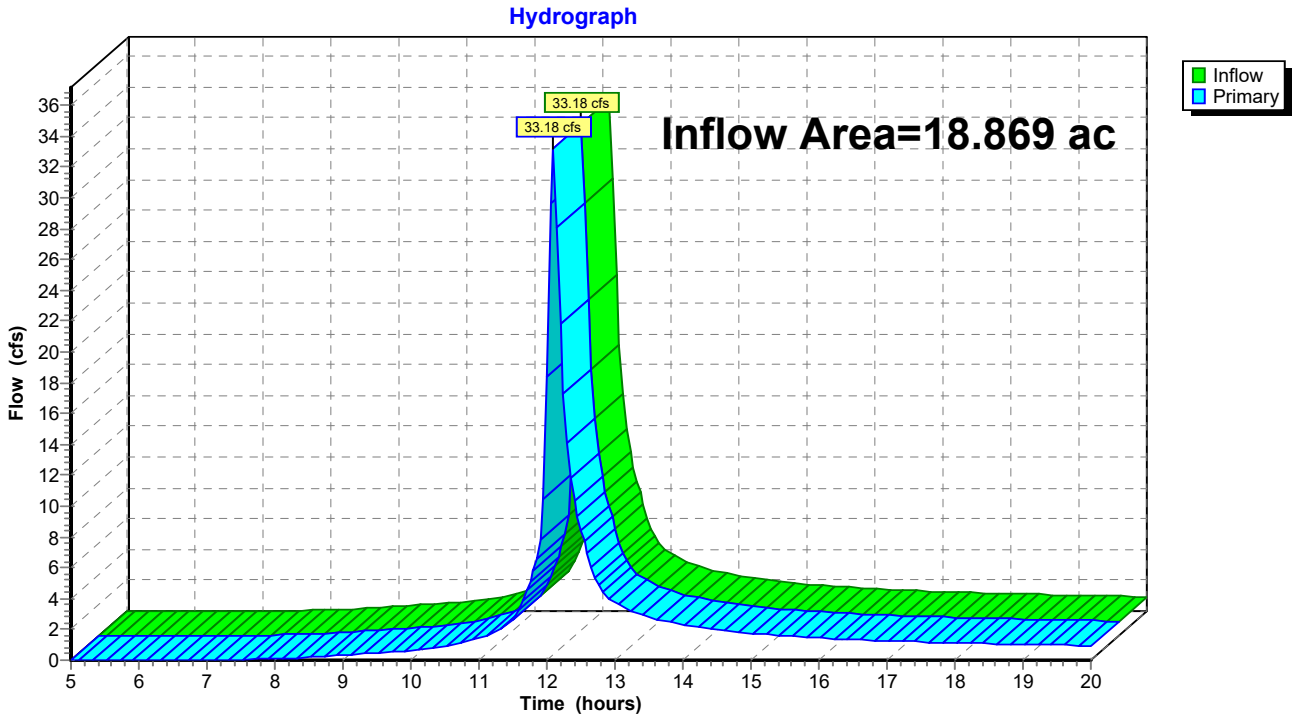


Summary for Link 2L: DP1

Inflow Area = 18.869 ac, 0.00% Impervious, Inflow Depth > 1.52" for 2-yr event
Inflow = 33.18 cfs @ 12.10 hrs, Volume= 2.391 af
Primary = 33.18 cfs @ 12.10 hrs, Volume= 2.391 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 2L: DP1



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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=3.980 ac 0.00% Impervious Runoff Depth>3.80"
Tc=10.0 min CN=82 Runoff=16.53 cfs 1.261 af

Subcatchment1B: Subcat 1B Runoff Area=4.337 ac 0.00% Impervious Runoff Depth>3.80"
Tc=10.0 min CN=82 Runoff=18.02 cfs 1.375 af

Subcatchment1C: Subcat 1C Runoff Area=2.529 ac 0.00% Impervious Runoff Depth>3.90"
Tc=10.0 min CN=83 Runoff=10.74 cfs 0.823 af

Subcatchment1D: Subcat 1D Runoff Area=3.315 ac 0.00% Impervious Runoff Depth>3.90"
Tc=10.0 min CN=83 Runoff=14.08 cfs 1.078 af

Subcatchment1E: Subcat 1E Runoff Area=4.708 ac 0.00% Impervious Runoff Depth>3.80"
Tc=10.0 min CN=82 Runoff=19.56 cfs 1.492 af

Link 2L: DP1 Inflow=78.93 cfs 6.029 af
Primary=78.93 cfs 6.029 af

Total Runoff Area = 18.869 ac Runoff Volume = 6.029 af Average Runoff Depth = 3.83"
100.00% Pervious = 18.869 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1A: Subcat 1A

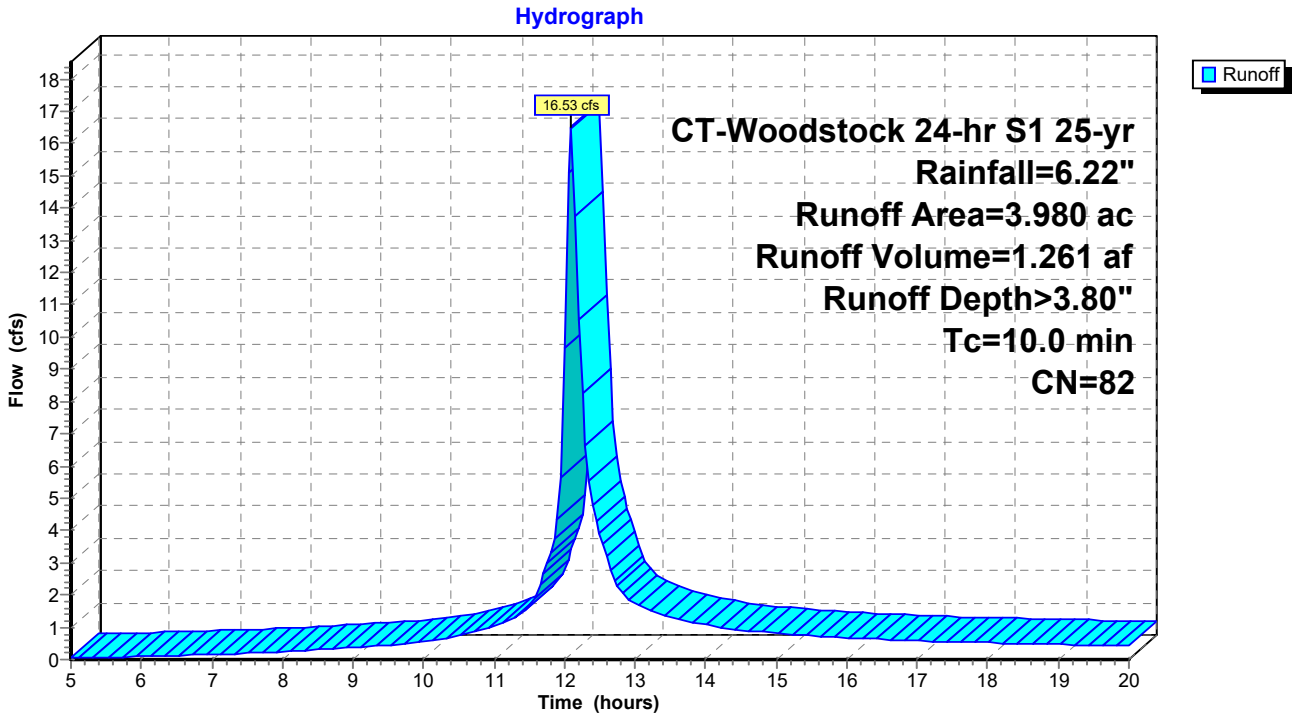
Runoff = 16.53 cfs @ 12.09 hrs, Volume= 1.261 af, Depth> 3.80"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 25-yr Rainfall=6.22"

	Area (ac)	CN	Description
*	2.973	81	50-75% Grass cover, Fair, HSG C-D
	0.001	82	Woods/grass comb., Poor, HSG C
	0.003	82	Woods/grass comb., Poor, HSG C
	0.003	87	Dirt roads, HSG C
	0.035	87	Dirt roads, HSG C
	0.178	89	Dirt roads, HSG D
	0.470	84	50-75% Grass cover, Fair, HSG D
	0.317	86	Woods/grass comb., Poor, HSG D
	3.980	82	Weighted Average
	3.980		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

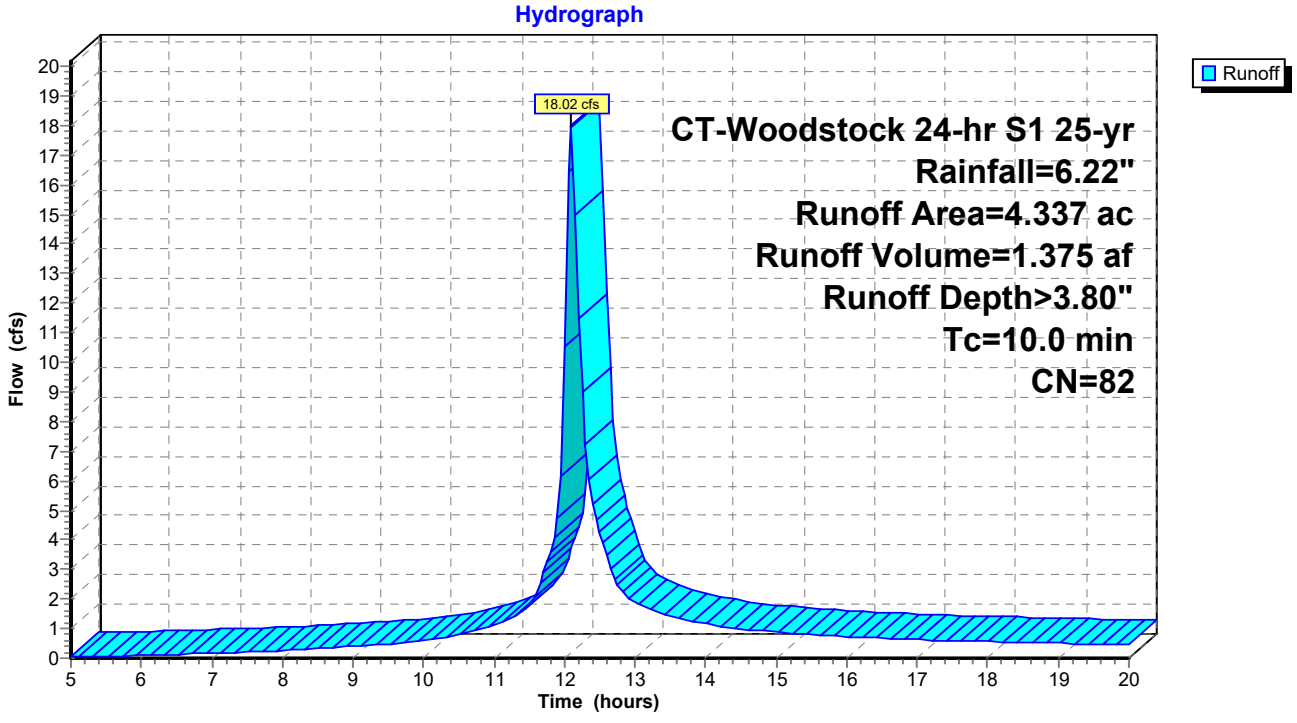
Runoff = 18.02 cfs @ 12.09 hrs, Volume= 1.375 af, Depth> 3.80"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 25-yr Rainfall=6.22"

	Area (ac)	CN	Description
	0.047	89	Dirt roads, HSG D
	0.046	84	50-75% Grass cover, Fair, HSG D
	1.032	84	50-75% Grass cover, Fair, HSG D
	0.116	87	Dirt roads, HSG C
	0.181	87	Dirt roads, HSG C
*	1.706	81	50-75% Grass cover, Fair, HSG C-D
*	0.288	81	50-75% Grass cover, Fair, HSG C-D
*	0.875	81	50-75% Grass cover, Fair, HSG C-D
*	0.046	81	50-75% Grass cover, Fair, HSG C-D
	0.000	84	50-75% Grass cover, Fair, HSG D
	4.337	82	Weighted Average
	4.337		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

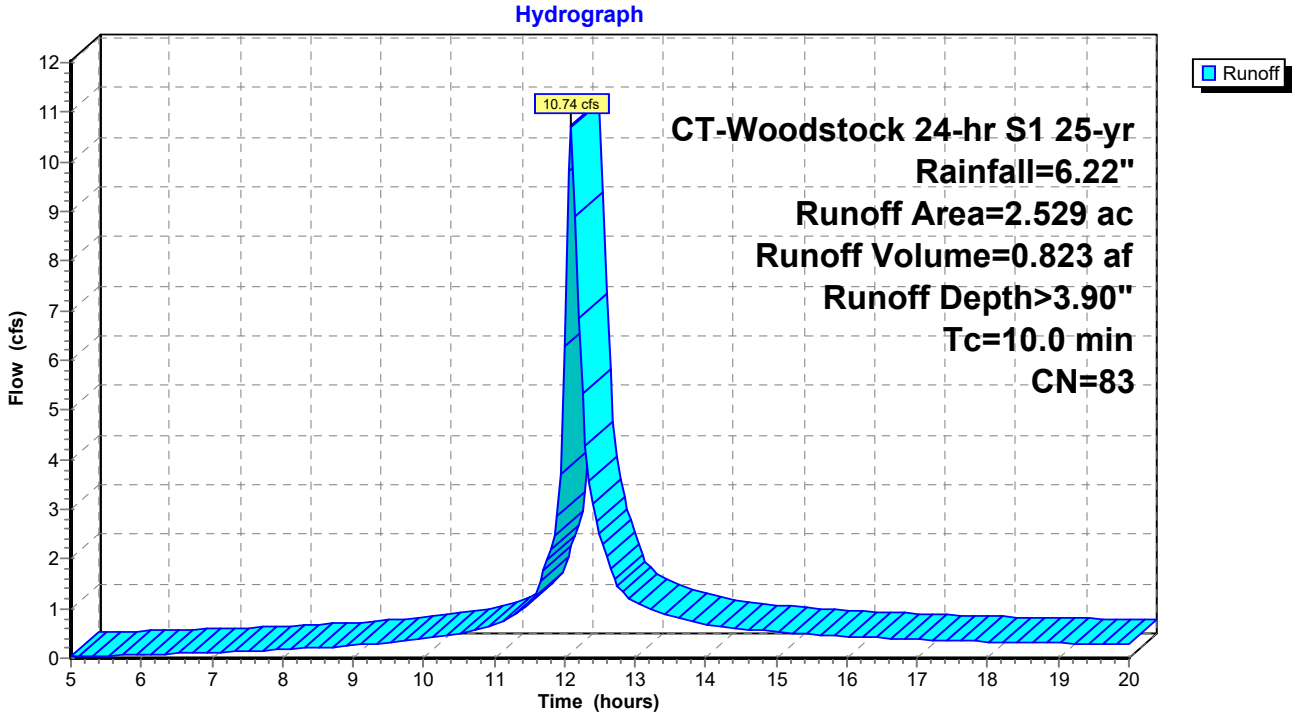
Runoff = 10.74 cfs @ 12.09 hrs, Volume= 0.823 af, Depth> 3.90"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 25-yr Rainfall=6.22"

	Area (ac)	CN	Description
	1.552	84	50-75% Grass cover, Fair, HSG D
*	0.947	81	50-75% Grass cover, Fair, HSG C-D
	0.030	84	50-75% Grass cover, Fair, HSG D
	2.529	83	Weighted Average
	2.529		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 1D: Subcat 1D

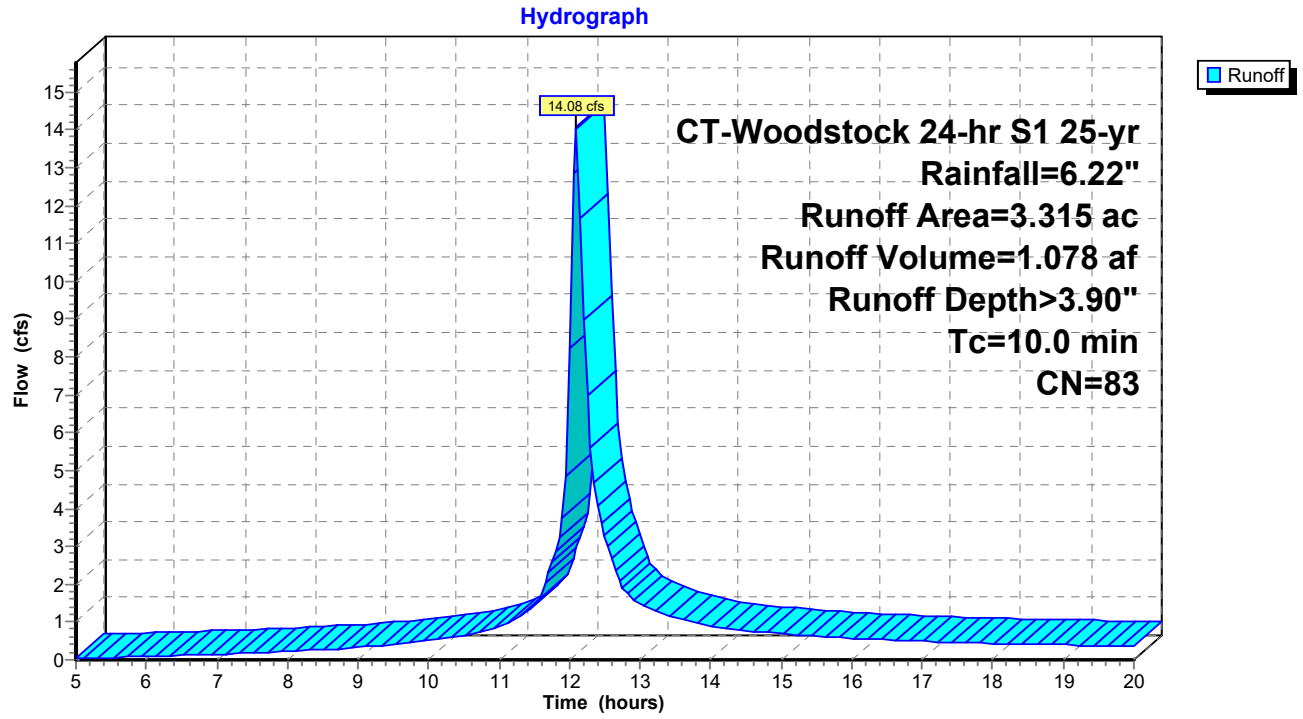
Runoff = 14.08 cfs @ 12.09 hrs, Volume= 1.078 af, Depth> 3.90"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 25-yr Rainfall=6.22"

	Area (ac)	CN	Description
	0.018	84	50-75% Grass cover, Fair, HSG D
	0.085	86	Woods/grass comb., Poor, HSG D
	2.070	84	50-75% Grass cover, Fair, HSG D
	0.159	86	Woods/grass comb., Poor, HSG D
*	0.983	81	50-75% Grass cover, Fair, HSG C-D
	3.315	83	Weighted Average
	3.315		100.00% Pervious Area

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

Subcatchment 1D: Subcat 1D



Summary for Subcatchment 1E: Subcat 1E

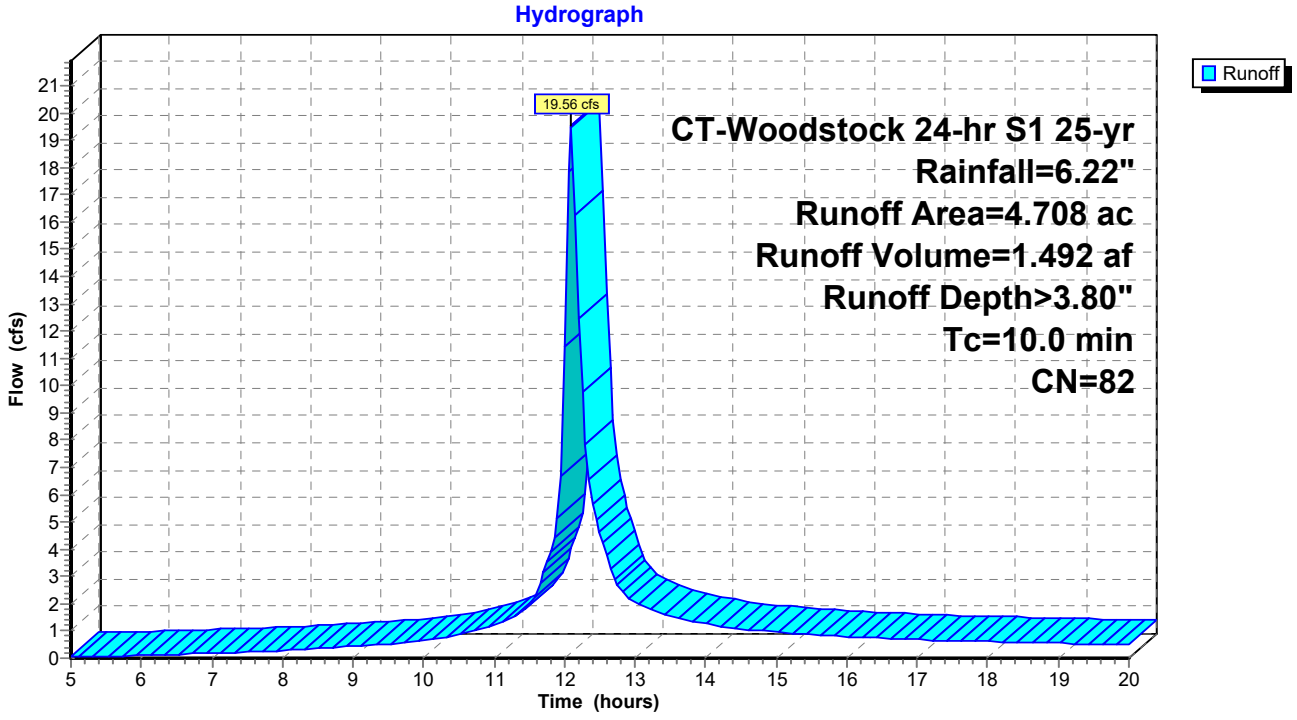
Runoff = 19.56 cfs @ 12.09 hrs, Volume= 1.492 af, Depth> 3.80"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 25-yr Rainfall=6.22"

	Area (ac)	CN	Description
	1.746	84	50-75% Grass cover, Fair, HSG D
	0.153	77	Brush, Fair, HSG D
	0.005	70	Brush, Fair, HSG C
	0.015	87	Dirt roads, HSG C
	0.025	87	Dirt roads, HSG C
	0.047	87	Dirt roads, HSG C
	0.004	87	Dirt roads, HSG C
	0.106	87	Dirt roads, HSG C
*	2.358	81	50-75% Grass cover, Fair, HSG C-D
	0.249	70	Brush, Fair, HSG C
	4.708	82	Weighted Average
	4.708		100.00% Pervious Area

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

Subcatchment 1E: Subcat 1E

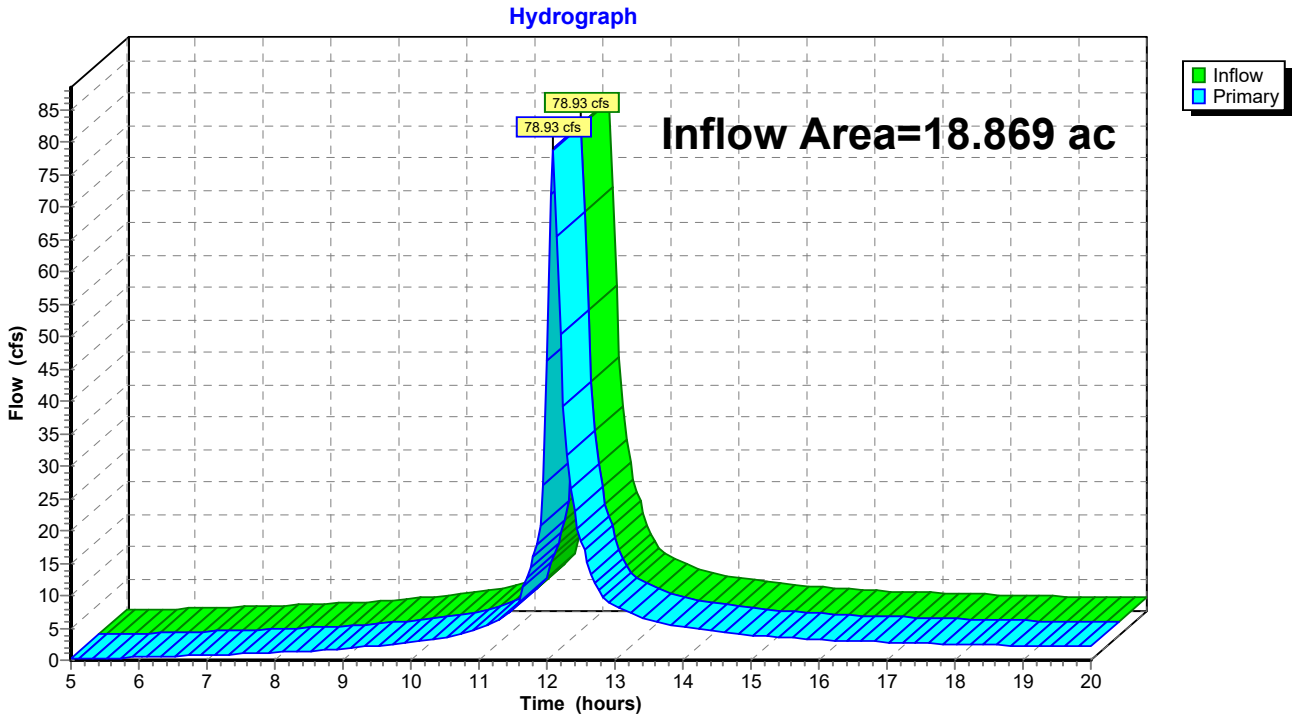


Summary for Link 2L: DP1

Inflow Area = 18.869 ac, 0.00% Impervious, Inflow Depth > 3.83" for 25-yr event
Inflow = 78.93 cfs @ 12.09 hrs, Volume= 6.029 af
Primary = 78.93 cfs @ 12.09 hrs, Volume= 6.029 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 2L: DP1



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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=3.980 ac 0.00% Impervious Runoff Depth>4.49"
Tc=10.0 min CN=82 Runoff=19.35 cfs 1.488 af

Subcatchment1B: Subcat 1B Runoff Area=4.337 ac 0.00% Impervious Runoff Depth>4.49"
Tc=10.0 min CN=82 Runoff=21.08 cfs 1.621 af

Subcatchment1C: Subcat 1C Runoff Area=2.529 ac 0.00% Impervious Runoff Depth>4.59"
Tc=10.0 min CN=83 Runoff=12.53 cfs 0.967 af

Subcatchment1D: Subcat 1D Runoff Area=3.315 ac 0.00% Impervious Runoff Depth>4.59"
Tc=10.0 min CN=83 Runoff=16.43 cfs 1.268 af

Subcatchment1E: Subcat 1E Runoff Area=4.708 ac 0.00% Impervious Runoff Depth>4.49"
Tc=10.0 min CN=82 Runoff=22.89 cfs 1.760 af

Link 2L: DP1 Inflow=92.28 cfs 7.103 af
Primary=92.28 cfs 7.103 af

Total Runoff Area = 18.869 ac Runoff Volume = 7.103 af Average Runoff Depth = 4.52"
100.00% Pervious = 18.869 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1A: Subcat 1A

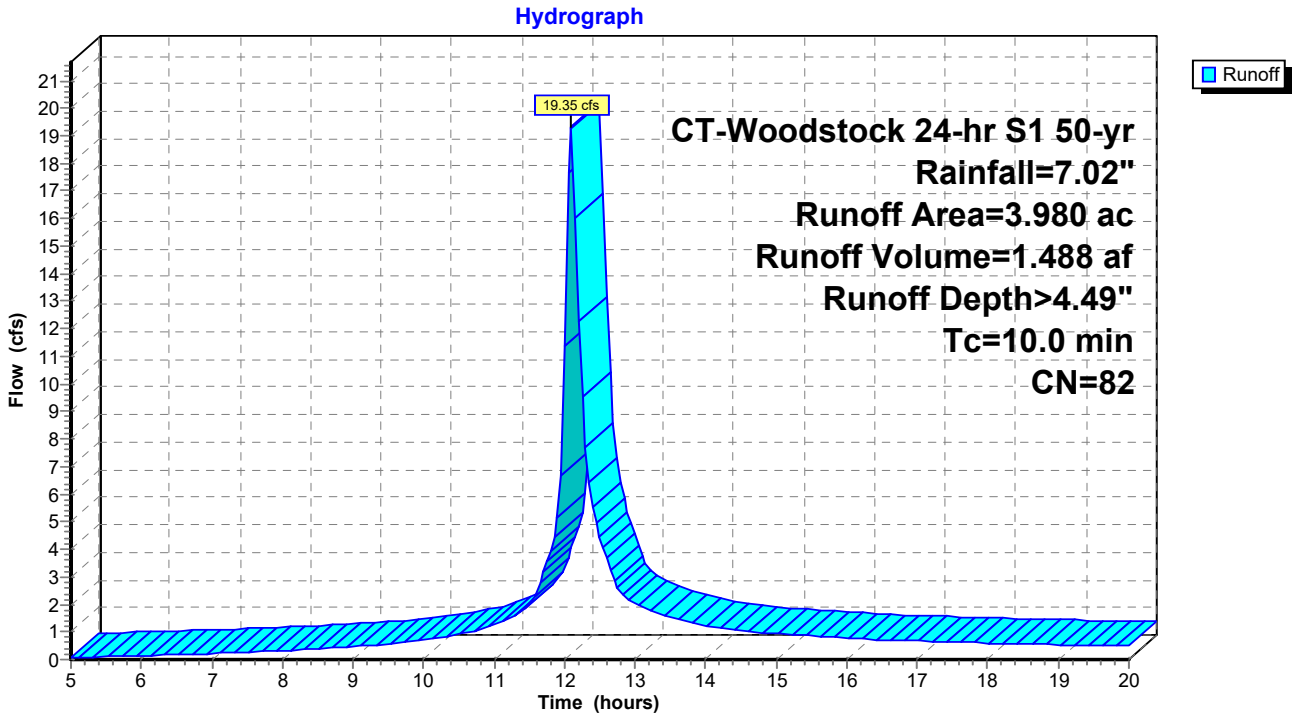
Runoff = 19.35 cfs @ 12.09 hrs, Volume= 1.488 af, Depth> 4.49"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 50-yr Rainfall=7.02"

	Area (ac)	CN	Description
*	2.973	81	50-75% Grass cover, Fair, HSG C-D
	0.001	82	Woods/grass comb., Poor, HSG C
	0.003	82	Woods/grass comb., Poor, HSG C
	0.003	87	Dirt roads, HSG C
	0.035	87	Dirt roads, HSG C
	0.178	89	Dirt roads, HSG D
	0.470	84	50-75% Grass cover, Fair, HSG D
	0.317	86	Woods/grass comb., Poor, HSG D
	3.980	82	Weighted Average
	3.980		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

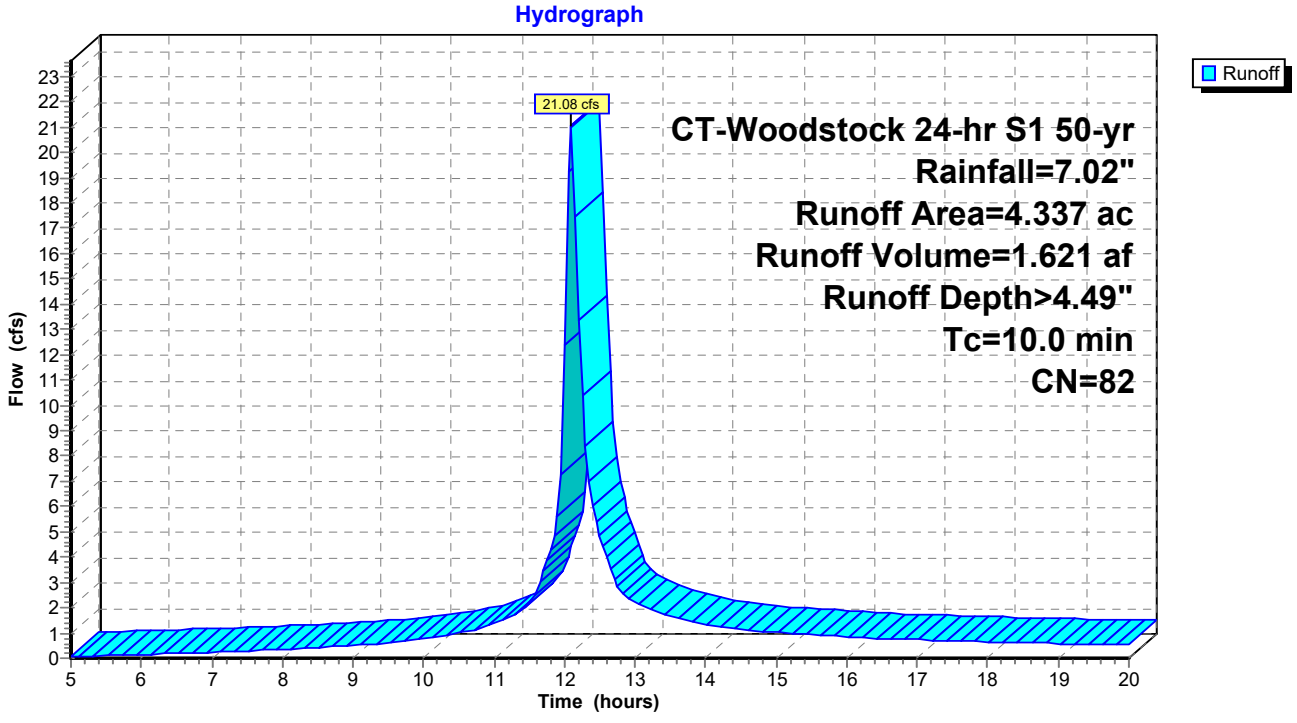
Runoff = 21.08 cfs @ 12.09 hrs, Volume= 1.621 af, Depth> 4.49"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 50-yr Rainfall=7.02"

	Area (ac)	CN	Description
	0.047	89	Dirt roads, HSG D
	0.046	84	50-75% Grass cover, Fair, HSG D
	1.032	84	50-75% Grass cover, Fair, HSG D
	0.116	87	Dirt roads, HSG C
	0.181	87	Dirt roads, HSG C
*	1.706	81	50-75% Grass cover, Fair, HSG C-D
*	0.288	81	50-75% Grass cover, Fair, HSG C-D
*	0.875	81	50-75% Grass cover, Fair, HSG C-D
*	0.046	81	50-75% Grass cover, Fair, HSG C-D
	0.000	84	50-75% Grass cover, Fair, HSG D
	4.337	82	Weighted Average
	4.337		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

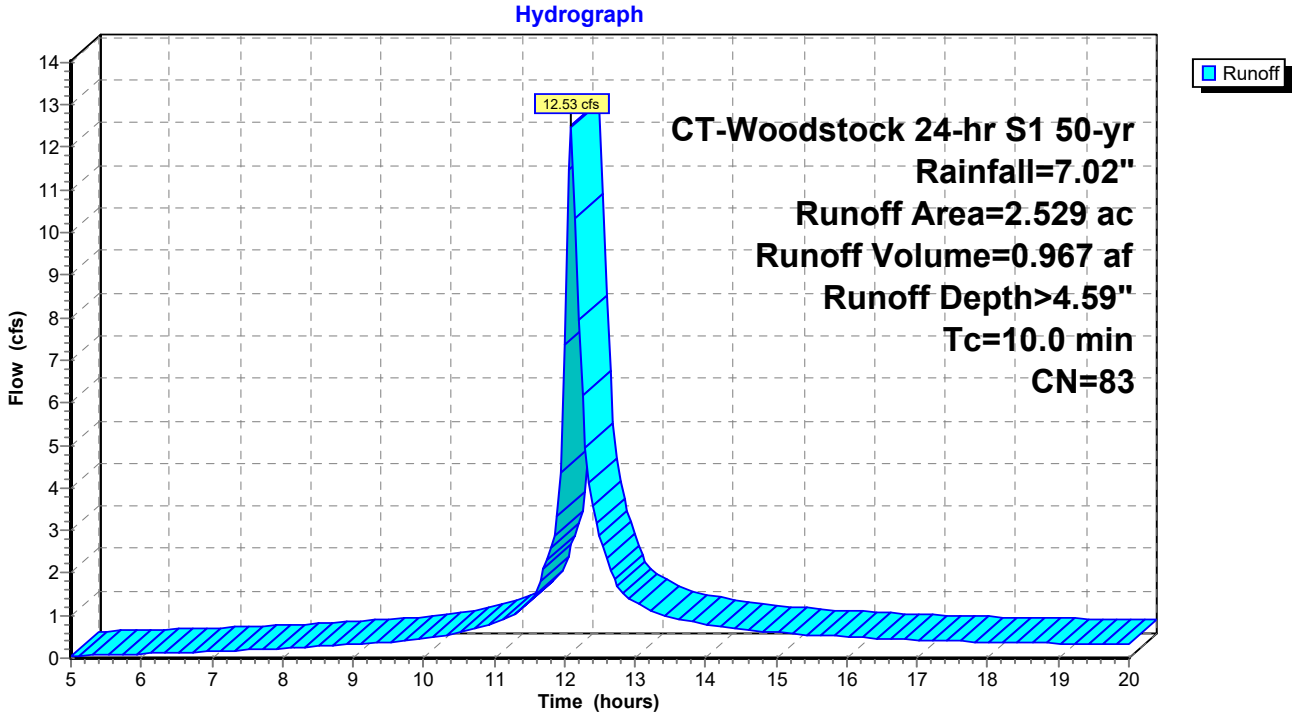
Runoff = 12.53 cfs @ 12.09 hrs, Volume= 0.967 af, Depth> 4.59"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 50-yr Rainfall=7.02"

	Area (ac)	CN	Description
	1.552	84	50-75% Grass cover, Fair, HSG D
*	0.947	81	50-75% Grass cover, Fair, HSG C-D
	0.030	84	50-75% Grass cover, Fair, HSG D
	2.529	83	Weighted Average
	2.529		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 1D: Subcat 1D

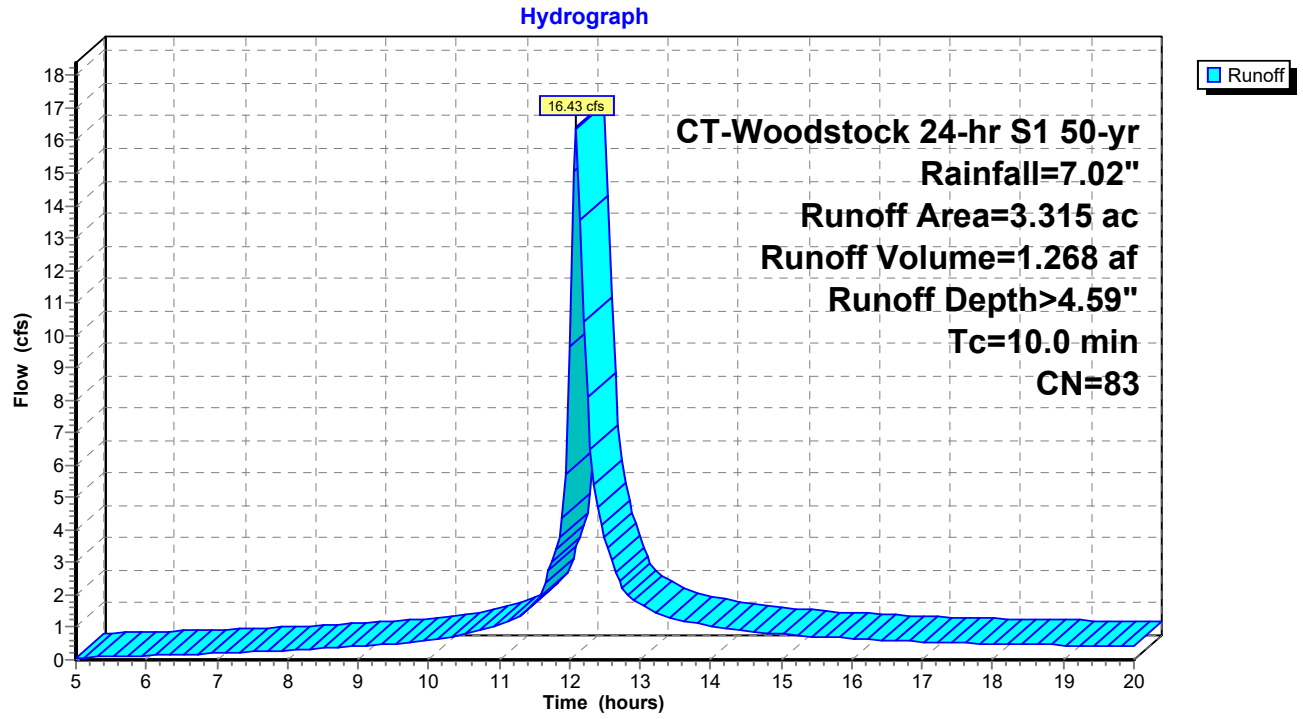
Runoff = 16.43 cfs @ 12.09 hrs, Volume= 1.268 af, Depth> 4.59"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 50-yr Rainfall=7.02"

	Area (ac)	CN	Description
	0.018	84	50-75% Grass cover, Fair, HSG D
	0.085	86	Woods/grass comb., Poor, HSG D
	2.070	84	50-75% Grass cover, Fair, HSG D
	0.159	86	Woods/grass comb., Poor, HSG D
*	0.983	81	50-75% Grass cover, Fair, HSG C-D
	3.315	83	Weighted Average
	3.315		100.00% Pervious Area

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

Subcatchment 1D: Subcat 1D



Summary for Subcatchment 1E: Subcat 1E

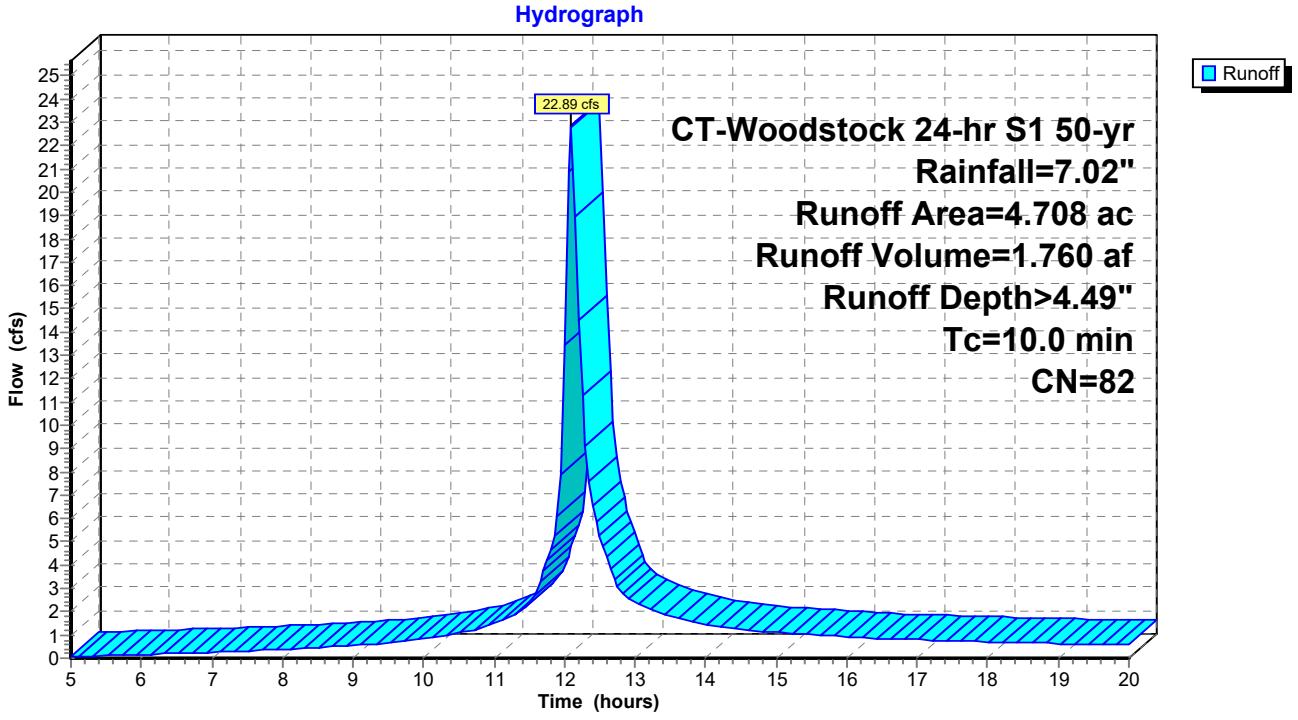
Runoff = 22.89 cfs @ 12.09 hrs, Volume= 1.760 af, Depth> 4.49"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 50-yr Rainfall=7.02"

	Area (ac)	CN	Description
	1.746	84	50-75% Grass cover, Fair, HSG D
	0.153	77	Brush, Fair, HSG D
	0.005	70	Brush, Fair, HSG C
	0.015	87	Dirt roads, HSG C
	0.025	87	Dirt roads, HSG C
	0.047	87	Dirt roads, HSG C
	0.004	87	Dirt roads, HSG C
	0.106	87	Dirt roads, HSG C
*	2.358	81	50-75% Grass cover, Fair, HSG C-D
	0.249	70	Brush, Fair, HSG C
	4.708	82	Weighted Average
	4.708		100.00% Pervious Area

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

Subcatchment 1E: Subcat 1E

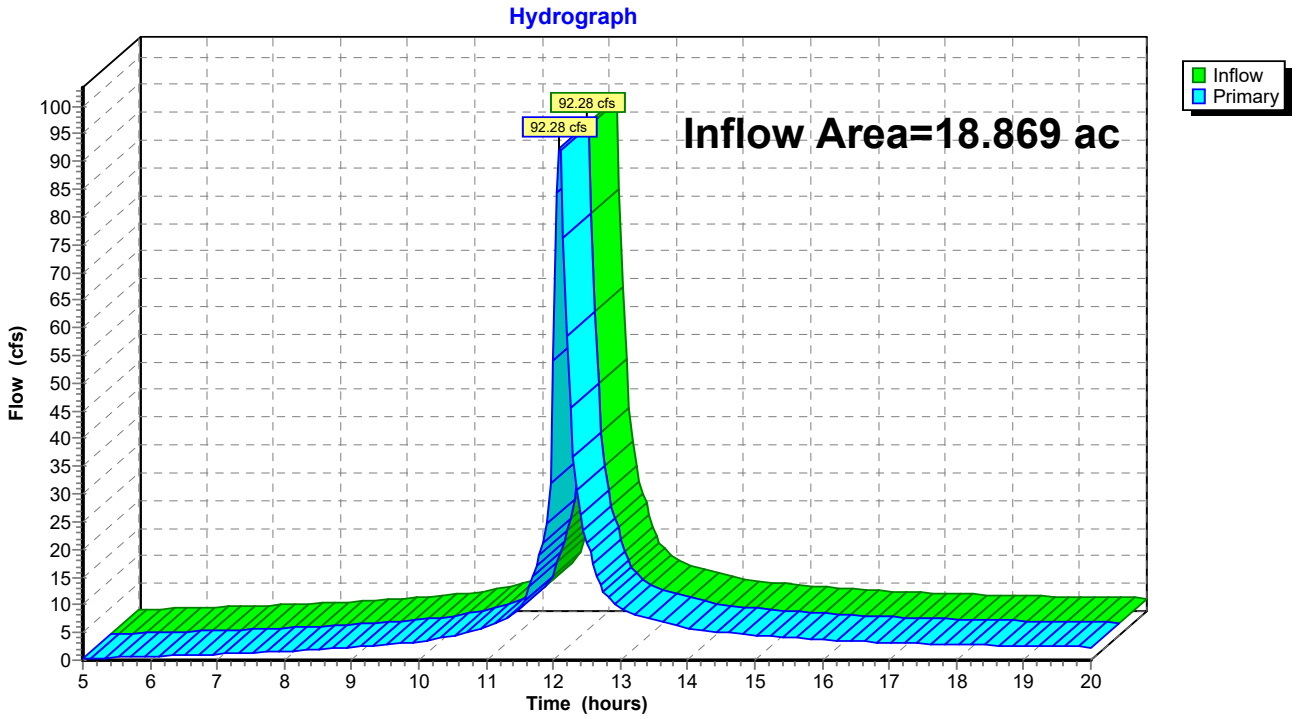


Summary for Link 2L: DP1

Inflow Area = 18.869 ac, 0.00% Impervious, Inflow Depth > 4.52" for 50-yr event
Inflow = 92.28 cfs @ 12.09 hrs, Volume= 7.103 af
Primary = 92.28 cfs @ 12.09 hrs, Volume= 7.103 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 2L: DP1



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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=3.980 ac 0.00% Impervious Runoff Depth>5.24"
Tc=10.0 min CN=82 Runoff=22.28 cfs 1.738 af

Subcatchment1B: Subcat 1B Runoff Area=4.337 ac 0.00% Impervious Runoff Depth>5.24"
Tc=10.0 min CN=82 Runoff=24.28 cfs 1.893 af

Subcatchment1C: Subcat 1C Runoff Area=2.529 ac 0.00% Impervious Runoff Depth>5.35"
Tc=10.0 min CN=83 Runoff=14.39 cfs 1.127 af

Subcatchment1D: Subcat 1D Runoff Area=3.315 ac 0.00% Impervious Runoff Depth>5.35"
Tc=10.0 min CN=83 Runoff=18.87 cfs 1.477 af

Subcatchment1E: Subcat 1E Runoff Area=4.708 ac 0.00% Impervious Runoff Depth>5.24"
Tc=10.0 min CN=82 Runoff=26.36 cfs 2.055 af

Link 2L: DP1 Inflow=106.17 cfs 8.290 af
Primary=106.17 cfs 8.290 af

Total Runoff Area = 18.869 ac Runoff Volume = 8.290 af Average Runoff Depth = 5.27"
100.00% Pervious = 18.869 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1A: Subcat 1A

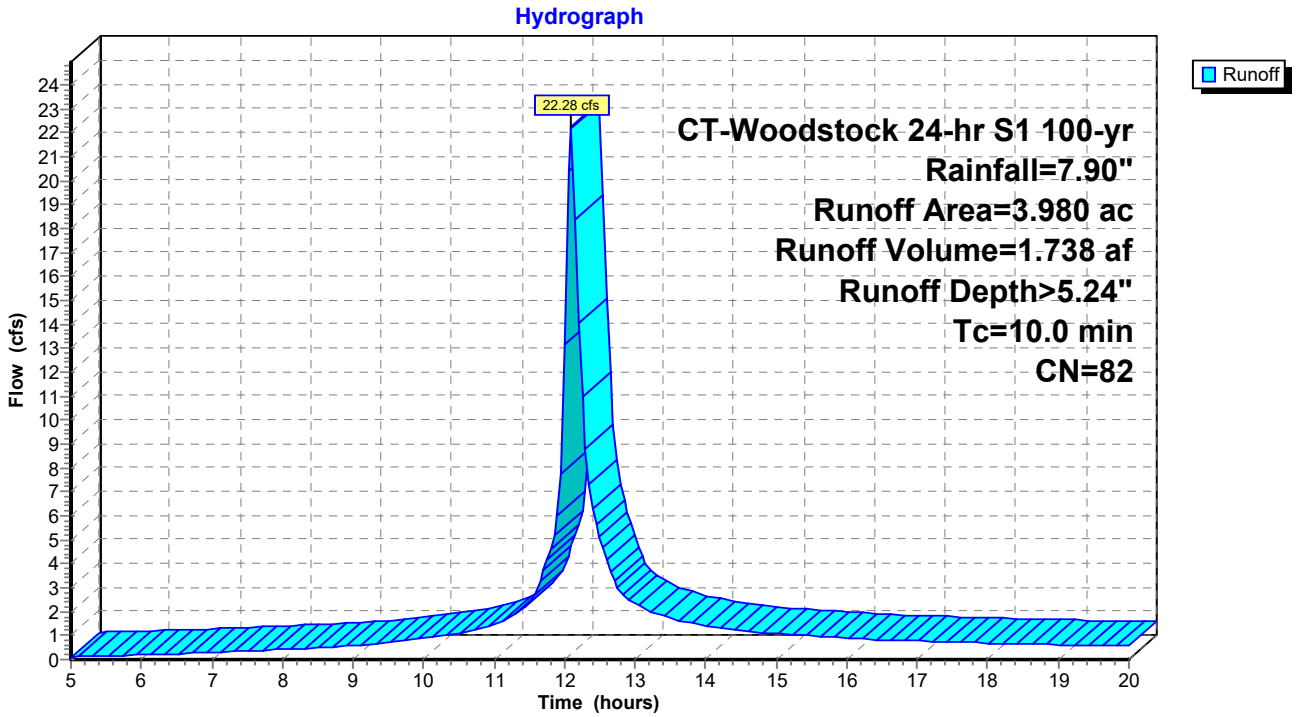
Runoff = 22.28 cfs @ 12.09 hrs, Volume= 1.738 af, Depth> 5.24"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 100-yr Rainfall=7.90"

	Area (ac)	CN	Description
*	2.973	81	50-75% Grass cover, Fair, HSG C-D
	0.001	82	Woods/grass comb., Poor, HSG C
	0.003	82	Woods/grass comb., Poor, HSG C
	0.003	87	Dirt roads, HSG C
	0.035	87	Dirt roads, HSG C
	0.178	89	Dirt roads, HSG D
	0.470	84	50-75% Grass cover, Fair, HSG D
	0.317	86	Woods/grass comb., Poor, HSG D
	3.980	82	Weighted Average
	3.980		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

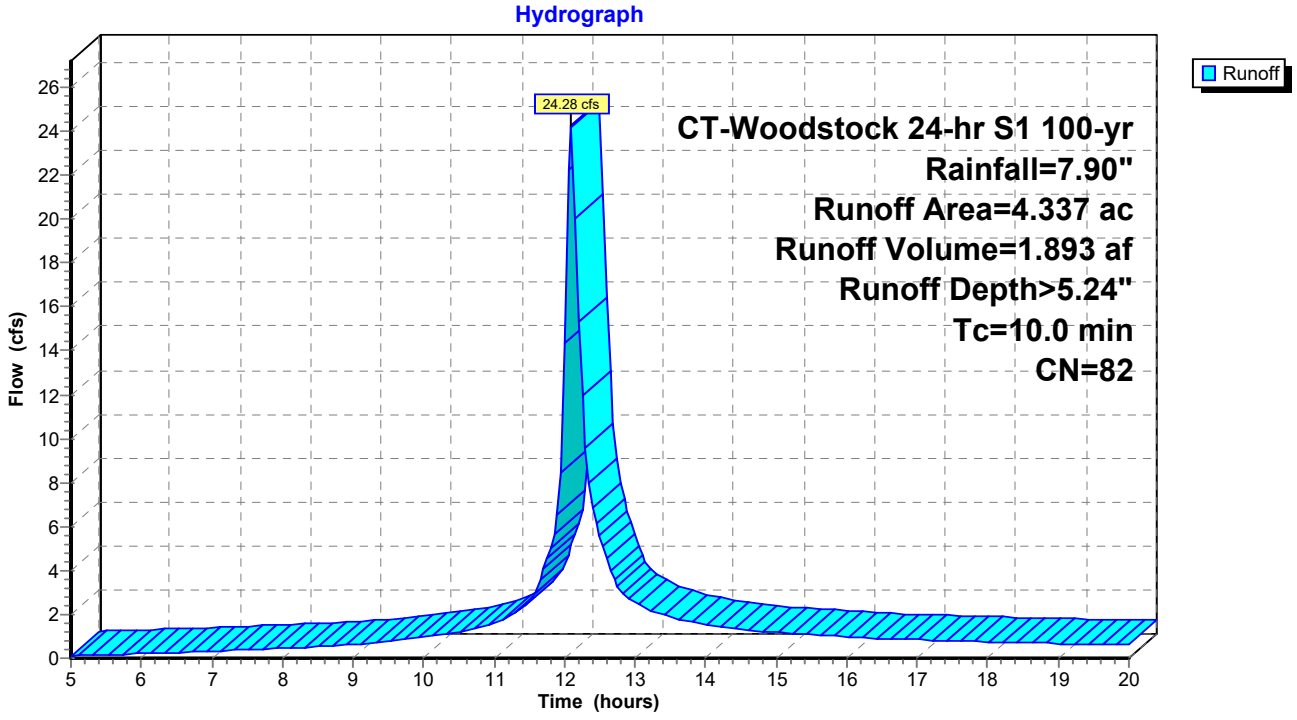
Runoff = 24.28 cfs @ 12.09 hrs, Volume= 1.893 af, Depth> 5.24"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 100-yr Rainfall=7.90"

	Area (ac)	CN	Description
	0.047	89	Dirt roads, HSG D
	0.046	84	50-75% Grass cover, Fair, HSG D
	1.032	84	50-75% Grass cover, Fair, HSG D
	0.116	87	Dirt roads, HSG C
	0.181	87	Dirt roads, HSG C
*	1.706	81	50-75% Grass cover, Fair, HSG C-D
*	0.288	81	50-75% Grass cover, Fair, HSG C-D
*	0.875	81	50-75% Grass cover, Fair, HSG C-D
*	0.046	81	50-75% Grass cover, Fair, HSG C-D
	0.000	84	50-75% Grass cover, Fair, HSG D
	4.337	82	Weighted Average
	4.337		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

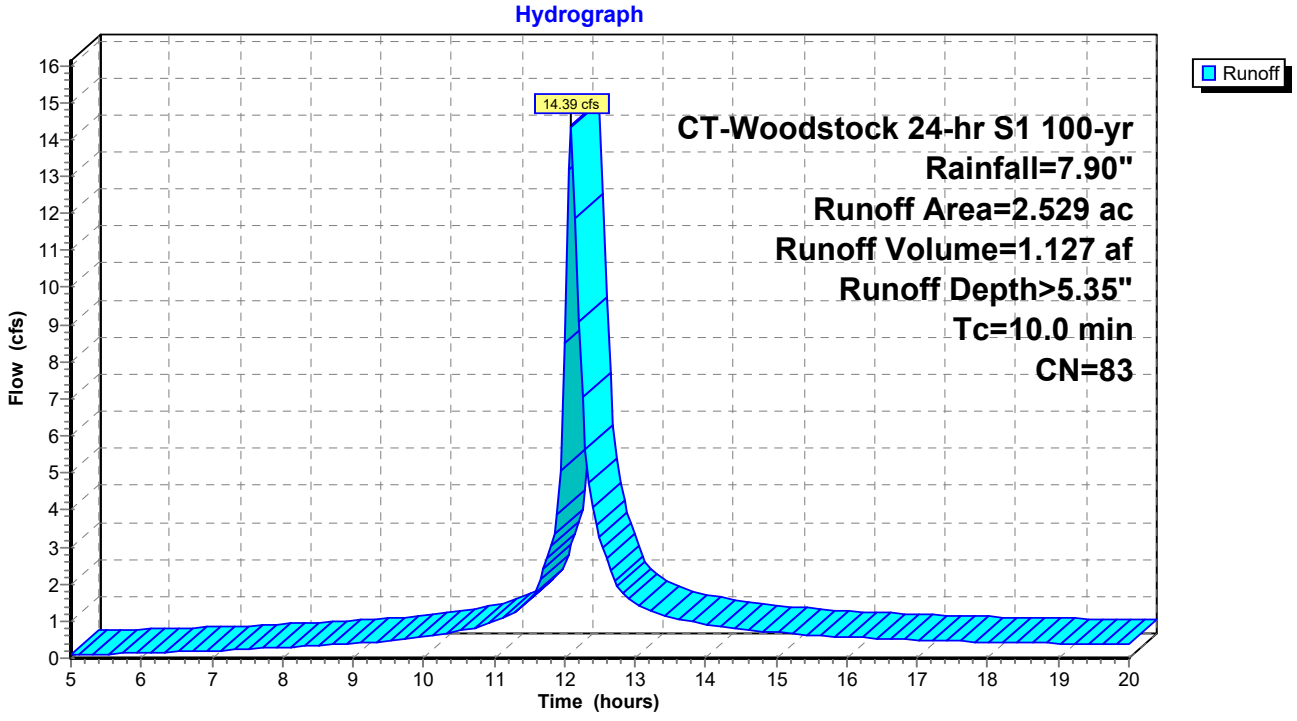
Runoff = 14.39 cfs @ 12.09 hrs, Volume= 1.127 af, Depth> 5.35"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 100-yr Rainfall=7.90"

	Area (ac)	CN	Description
	1.552	84	50-75% Grass cover, Fair, HSG D
*	0.947	81	50-75% Grass cover, Fair, HSG C-D
	0.030	84	50-75% Grass cover, Fair, HSG D
	2.529	83	Weighted Average
	2.529		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 1D: Subcat 1D

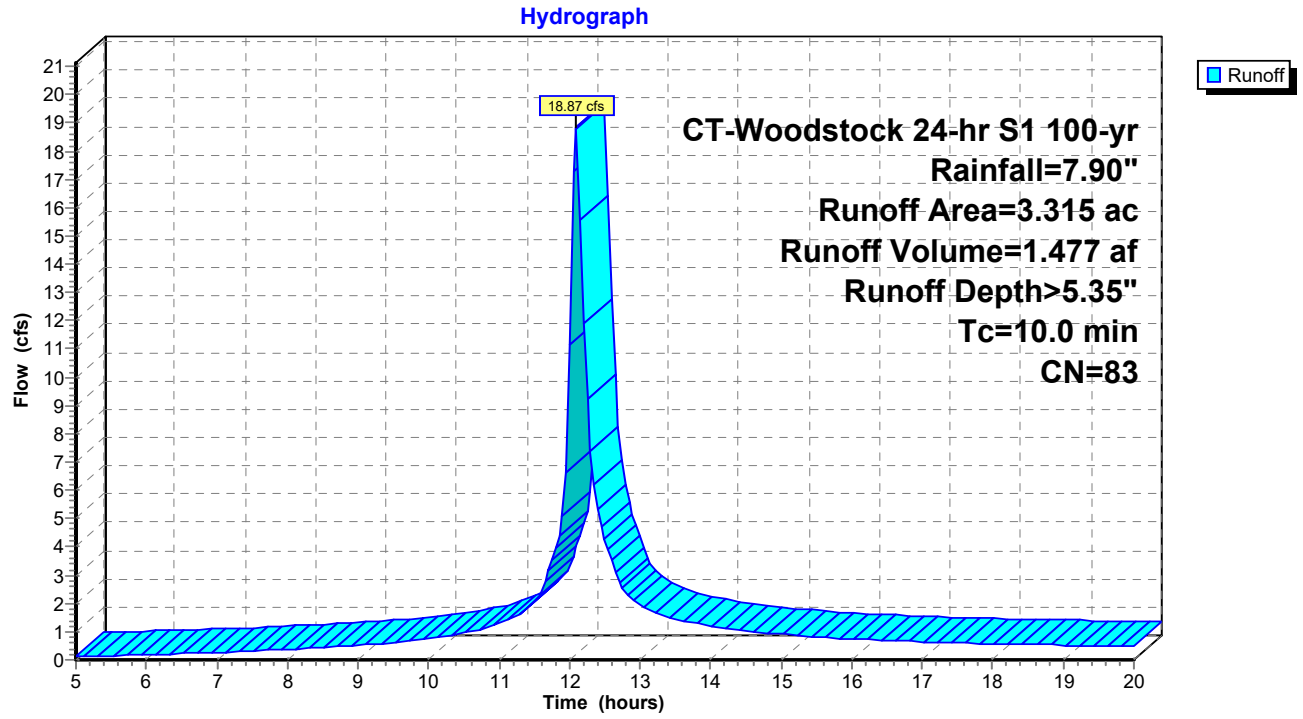
Runoff = 18.87 cfs @ 12.09 hrs, Volume= 1.477 af, Depth> 5.35"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 100-yr Rainfall=7.90"

	Area (ac)	CN	Description
	0.018	84	50-75% Grass cover, Fair, HSG D
	0.085	86	Woods/grass comb., Poor, HSG D
	2.070	84	50-75% Grass cover, Fair, HSG D
	0.159	86	Woods/grass comb., Poor, HSG D
*	0.983	81	50-75% Grass cover, Fair, HSG C-D
	3.315	83	Weighted Average
	3.315		100.00% Pervious Area

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

Subcatchment 1D: Subcat 1D



Summary for Subcatchment 1E: Subcat 1E

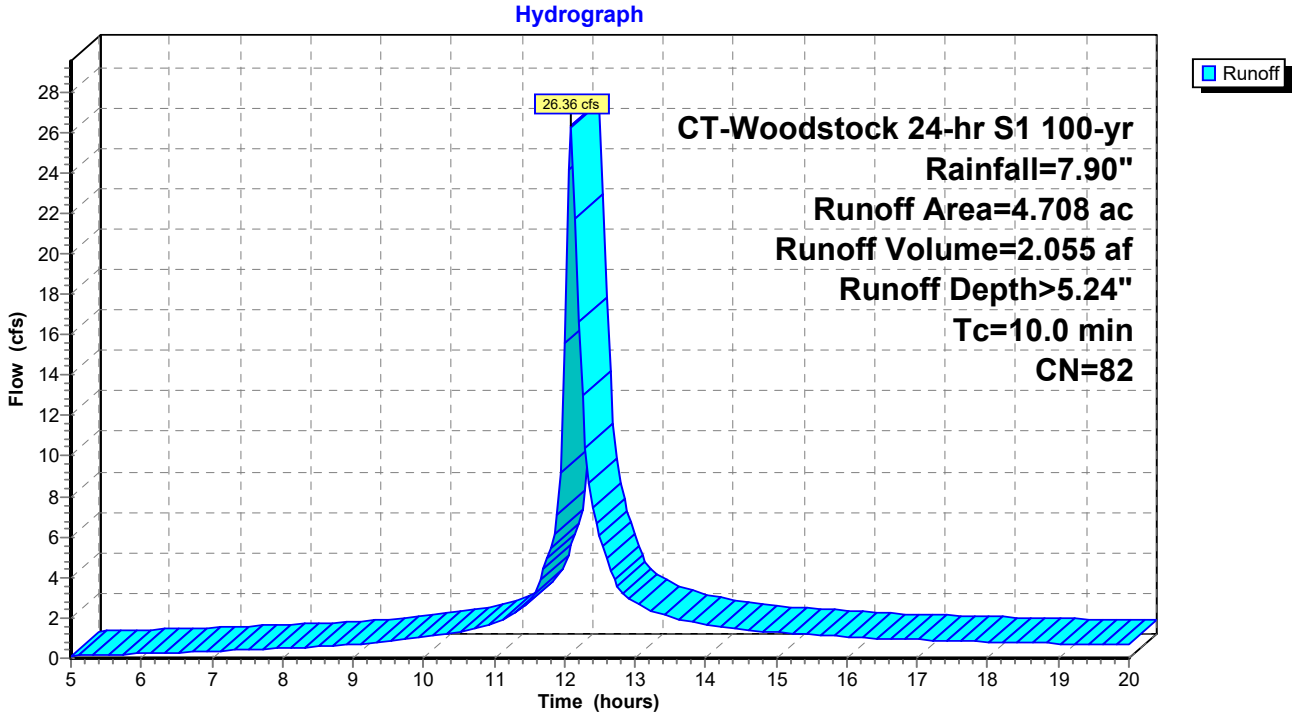
Runoff = 26.36 cfs @ 12.09 hrs, Volume= 2.055 af, Depth> 5.24"
Routed to Link 2L : DP1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
CT-Woodstock 24-hr S1 100-yr Rainfall=7.90"

	Area (ac)	CN	Description
	1.746	84	50-75% Grass cover, Fair, HSG D
	0.153	77	Brush, Fair, HSG D
	0.005	70	Brush, Fair, HSG C
	0.015	87	Dirt roads, HSG C
	0.025	87	Dirt roads, HSG C
	0.047	87	Dirt roads, HSG C
	0.004	87	Dirt roads, HSG C
	0.106	87	Dirt roads, HSG C
*	2.358	81	50-75% Grass cover, Fair, HSG C-D
	0.249	70	Brush, Fair, HSG C
	4.708	82	Weighted Average
	4.708		100.00% Pervious Area

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

Subcatchment 1E: Subcat 1E



Summary for Link 2L: DP1

Inflow Area = 18.869 ac, 0.00% Impervious, Inflow Depth > 5.27" for 100-yr event
Inflow = 106.17 cfs @ 12.09 hrs, Volume= 8.290 af
Primary = 106.17 cfs @ 12.09 hrs, Volume= 8.290 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 2L: DP1