
APPENDIX G – DESIGN CALCULATIONS

VIRGINIA STORMWATER
DESIGN SPECIFICATION No. 2

**SHEET FLOW TO A VEGETATED
FILTER STRIP OR
CONSERVED OPEN SPACE**

VERSION 2.0

January 1, 2013



SECTION 1. DESCRIPTION

Filter strips are vegetated areas that treat sheet flow delivered from adjacent impervious and managed turf areas by slowing runoff velocities and allowing sediment and attached pollutants to settle and/or be filtered by the vegetation. The two design variants of filter strips are (1) *Conserved Open Space* and (2) designed *Vegetated Filter Strips*. The design, installation, and management of these design variants are quite different, as outlined in this specification.

In both instances, stormwater must enter the Vegetated Filter Strip or Conserved Open Space as sheet flow. A typical configuration consists of the stormwater runoff from the paved area uniformly entering the practice along a linear edge (such as the edge of a road or parking lot) and draining across the length of the Filter Strip or Open Space) (parallel to the flow). This configuration would be accompanied by a gravel diaphragm or other “pre-treatment” practice to establish a non-erosive transition between the pavement and the filter strip or open space. If the inflow to the filter strip is from a pipe or channel, an engineered Level Spreader (ELS) must be designed in accordance with the criteria contained herein to convert the concentrated flow to sheet flow.

SECTION 2. PERFORMANCE

With proper design and maintenance, these practices can provide relatively high runoff reduction as shown in **Table 2.1**.

Table 2.1: Summary of Stormwater Functions Provided by Filter Strips ¹

Stormwater Function	Conservation Area		Vegetated Filter Strip	
	HSG Soils A and B	HSG Soils C and D	HSG Soils A	HSG Soils B ⁴ , C and D
	Assume no CA ² in Conservation Area		No CA ³	With CA ²
Annual Runoff Vol. Reduction (RR)	75%	50%	50%	50%
Total Phosphorus (TP) EMC Reduction ⁵ by BMP Treatment Process	0		0	
Total Phosphorus (TP) Mass Load Removal	75%	50%	50%	50%
Total Nitrogen (TN) EMC Reduction by BMP Treatment Process	0		0	
Total Nitrogen (TN) Mass Load Removal	75%	50%	50%	50%
Channel Protection and Flood Mitigation	Partial. Designers can use the VRRM Compliance spreadsheet to adjust curve number for each design storm for the contributing drainage area; <i>and</i> designers can account for a lengthened Time-of-Concentration flow path in computing peak discharge.			
¹ CWP and CSN (2008); CWP (2007) ² CA = Compost Amended Soils (see Design Specification No. 4) ³ Compost amendments are generally not applicable for undisturbed A soils, although it may be advisable to incorporate them on mass-graded A or B soils and/or filter strips on B soils, in order to maintain runoff reduction rates. ⁴ The plan approving authority may waive the requirement for compost amended soils for filter strips on B soils under certain conditions (see Section 6.2 below) ⁵ There is insufficient monitoring data to assign a nutrient removal rate for filter strips at this time.				

Leadership in Energy and Environmental Design (LEED®). The LEED® point credit system designed by the U.S. Green Building Council (USGBC) and implemented by the Green Building Certification Institute (GBCI) awards points related to site design and stormwater management. Several categories of points are potentially available for new development and redevelopment projects. **Chapter 6** of the *Virginia Stormwater Management Handbook* (2nd Edition, 2013) provides a more thorough discussion of the site planning process and design considerations as related to the environmental site design and potential LEED credits. However, the Virginia Department of Environmental Quality is not affiliated with the USGBC or GBCI and any information on applicable points provided here is based only on basic compatibility. **Designers should research and verify scoring criteria and applicability of points as related to the specific project being considered through USGBC LEED resources.**

Table 2.2. Potential LEED® Credits for Sheet Flow to Conserved Open Space or Vegetated Filter Strip¹

Credit Category	Credit No.	Credit Description
Sustainable Sites	SS5.1	Site Development: Protect or Restore Habitat ²
Sustainable Sites	SS5.2	Site Development: Maximize Open Space
Sustainable Sites	SS6.1	Stormwater Design: Quantity Control
Sustainable Sites	SS6.2	Stormwater Design: Quality Control
Sustainable Sites	SS7.1	Heat Island Effect: Non-Roof ³
Water Efficiency	WE1.1	Water Efficient Landscaping: Reduce by 50% ⁴
Water Efficiency	WE1.2	Water Efficient Landscaping: No Potable Water Use or No Irrigation ⁴
<p>¹ Actual site design and/or BMP configuration may not qualify for the credits listed. Alternatively, the project may actually qualify for credits not listed here. Designers should consult with a qualified individual (LEED AP) to verify credit applicability.</p> <p>² Not applicable for <i>turf</i> Vegetated Filter Strips, since turf grass is not considered native, adaptive, or biodiverse.</p> <p>³ Applied if reforestation canopy covers hardscape areas.</p> <p>⁴ Filter Strips and Conserved Open Spaces are typically not irrigated beyond first year establishment.</p>		

SECTION 3. DESIGN TABLE

Conserved Open Space and Vegetated Filter Strips do not have two levels of design. Instead, each must meet the appropriate minimum criteria outlined in **Table 2.3** (next page) and **Section 6** (below) to qualify for the indicated level of runoff reduction. In addition, designers must conduct a site reconnaissance prior to design to confirm topography and soil conditions.

SECTION 4. TYPICAL DETAILS

Figure 2.1 shows a typical approach for sheet flow to a Conserved Open Space (adapted from Capiella *et al.*, 2006). **Figure 2.2a-c** illustrates the gravel diaphragm providing pre-treatment, and **Figure 2.3a-c** details an ELS with a rigid and a vegetated overflow lip. **Figure 2.4** illustrates a outfall pipe “energy dissipater” (adapted from Henrico County’s *Environmental Program Manual*; Chapter 9, Minimum Design Standard 9.01, <http://www.co.henrico.va.us/works/eesd/>.) **Figure 2.5** Illustrates the combination of simple disconnection (Design Specification No. 1) to Conserved Open Space as the downstream practice.

Table 2.3. Filter Strip Design Criteria

Design Issue	Conserved Open Space	Vegetated Filter Strip
Soil and Vegetative Cover (Sections 6.1 and 6.2)	Undisturbed soils and native vegetation	Amended soils and dense turf cover or landscaped with herbaceous cover, shrubs, and trees
Overall Slope and length (parallel to the flow) (Section 5)	0.5% to 3% Slope – Minimum 35 ft length 3% to 6% Slope – Minimum 50 ft length The first 10 ft. of filter must be 2% or less in all cases ²	1% ¹ to 4% Slope – Minimum 35 ft. length 4% to 6% Slope – Minimum 50 ft. length 6% to 8% Slope – Minimum 65 ft. length The first 10 ft. of filter must be 2% or less in all cases
Contributing Area of Sheet Flow (Section 5)	Maximum flow length of 150 ft. from adjacent pervious areas; Maximum flow length of 75 ft. from adjacent impervious areas	
Level Spreader for dispersing Concentrated Flow (Section 6.3)	Length of ELS ⁶ Lip = 13 lin. ft. per each 1 cfs of inflow if area has 90% Cover ³ Length = 40 lin. ft. per 1 cfs for forested or re-forested Areas ⁴ (ELS ⁶ length = 13 lin.ft. min; 130 lin.ft. max.)	Length of ELS ⁶ Lip = 13 lin.ft. per each 1 cfs of inflow (13 lin.ft. min; 130 lin.ft. max.)
Construction Stage (Section 8)	Located outside the limits of disturbance and protected by ESC controls	Prevent soil compaction by heavy equipment
Typical Applications (Section 5)	Adjacent to stream or wetland buffer or forest conservation area	Treat small areas of IC (e.g., 5,000 sf) and/or turf-intensive land uses (sports fields, golf courses) close to source
Compost Amendments (Section 6.1)	No	Yes (B, C, and D soils) ⁵
Boundary Spreader (Section 6.3)	GD ⁶ at top of filter	GD ⁶ at top of filter PB ⁶ at toe of filter
¹ A minimum of 1% is recommended to ensure positive drainage. ² For Conservation Areas with a varying slope, a pro-rated length may be computed only if the first 10 ft. is 2% or less. ³ Vegetative cover is described in Section 6.2 . ⁴ Where the Conserved Open Space is a mixture of native grasses, herbaceous cover and forest (or re-forested area), the length of the ELS ⁶ Lip can be established by computing a weighted average of the lengths required for each vegetation type. Refer to Section 6.3 for design criteria ⁵ The plan approving authority may waive the requirement for compost amended soils for filter strips on B soils under certain conditions (see Section 6.1). ⁶ ELS = Engineered Level Spreader; GD = Gravel Diaphragm; PB = Permeable Berm.		

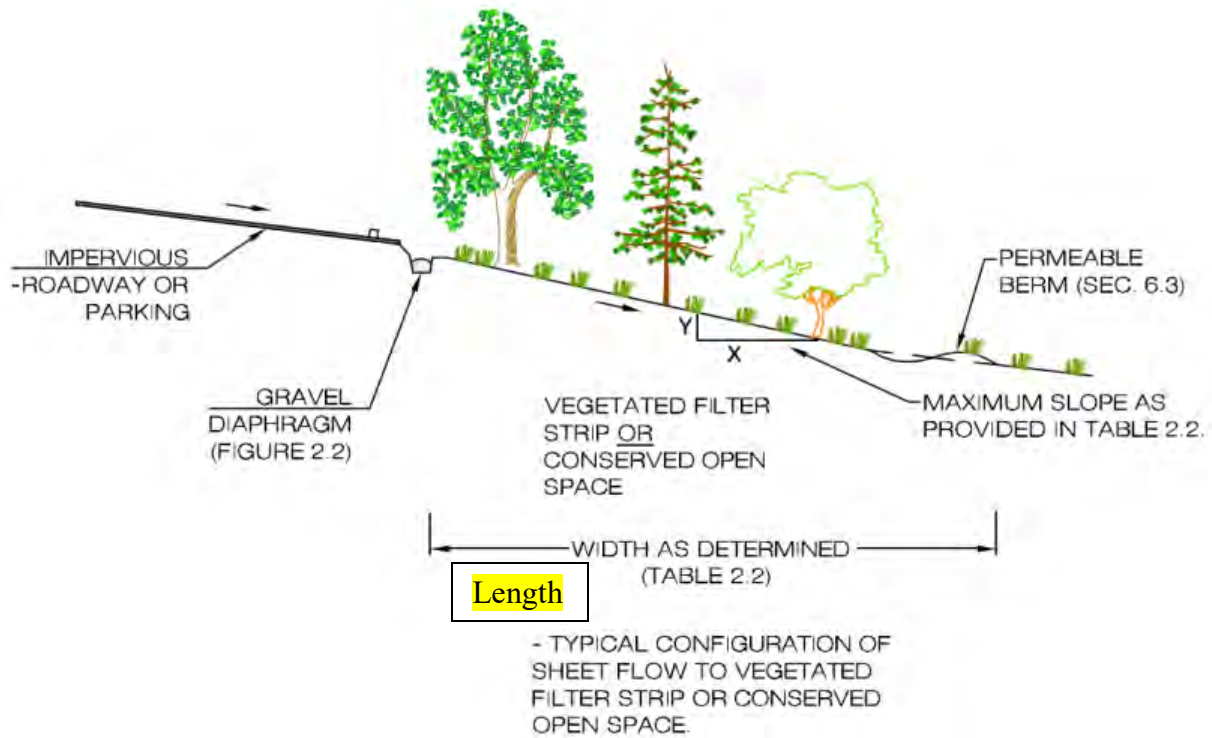


Figure 2.1. Typical Configuration of Sheet Flow to Filter Strip or Conserved Open Space

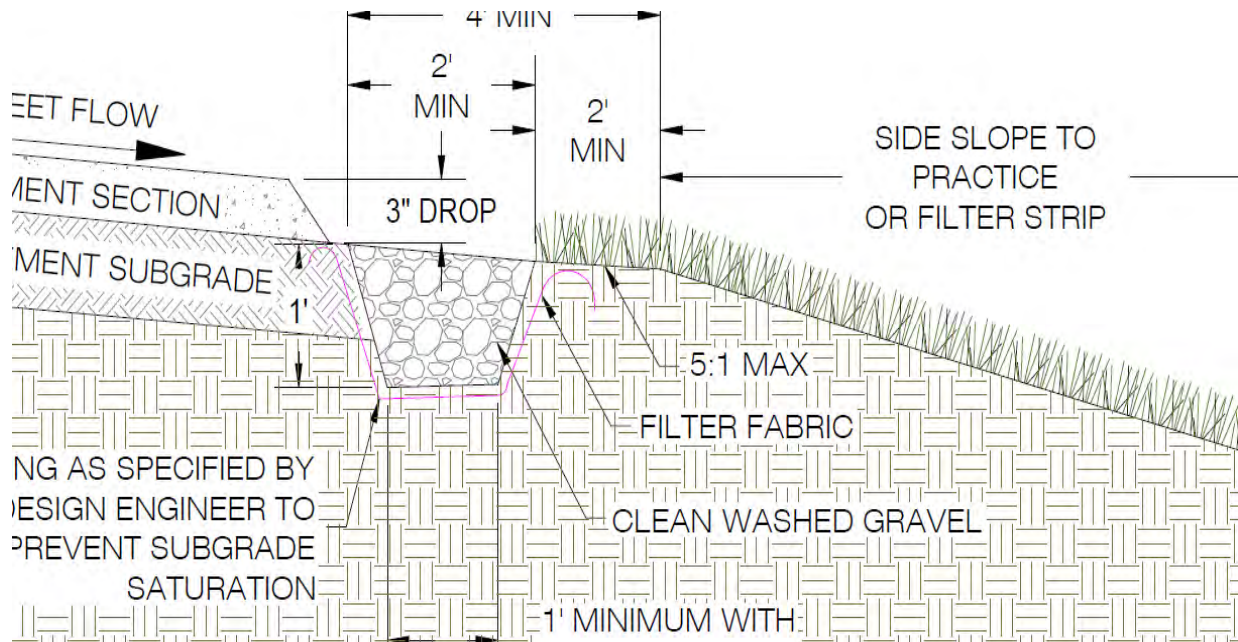


Figure 2.2a. Gravel Diaphragm – Sheet Flow Pre-treatment



Figure 2.2b. Lack of Gravel Diaphragm



Fig 2.2c. Gravel Diaphragm

(Photo: BAE Stormwater Engineering Group, NCSU)

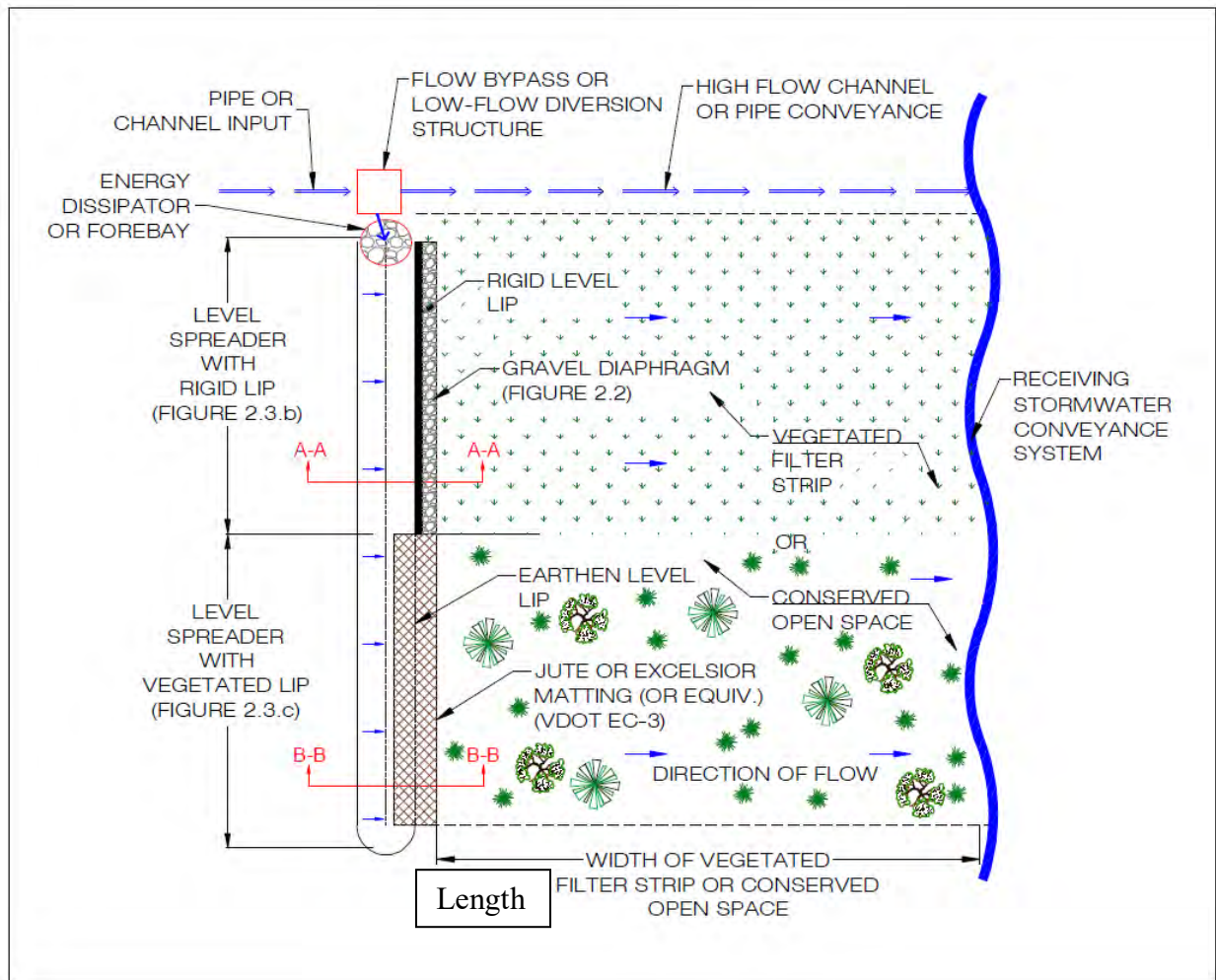


Figure 2.3a: Plan View – Level Spreaders (Rigid Lip – top; & Earthen Lip – bottom)

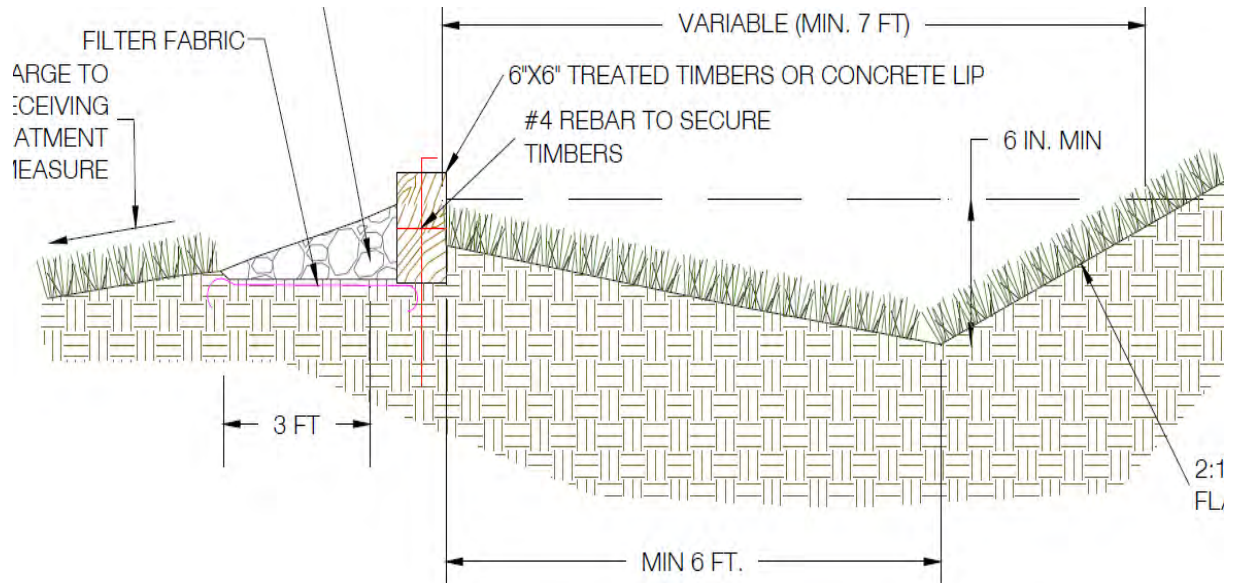


Figure 2.3b: Section – Level Spreader with Rigid Lip

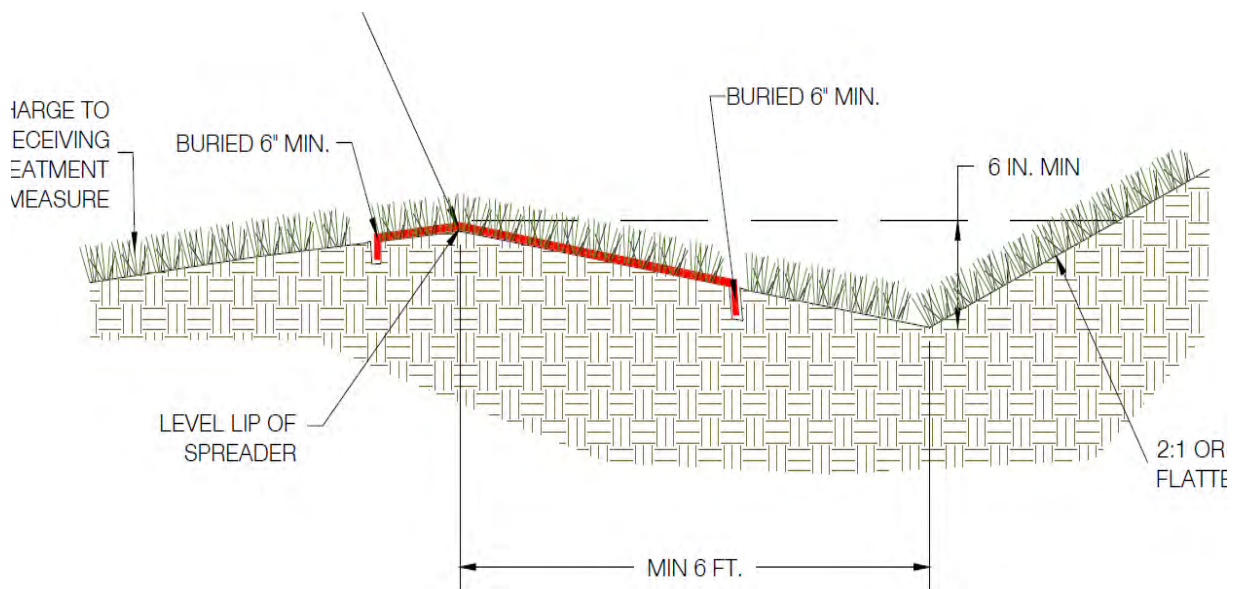


Figure 2.3c: Section – Level Spreader with Vegetated Lip

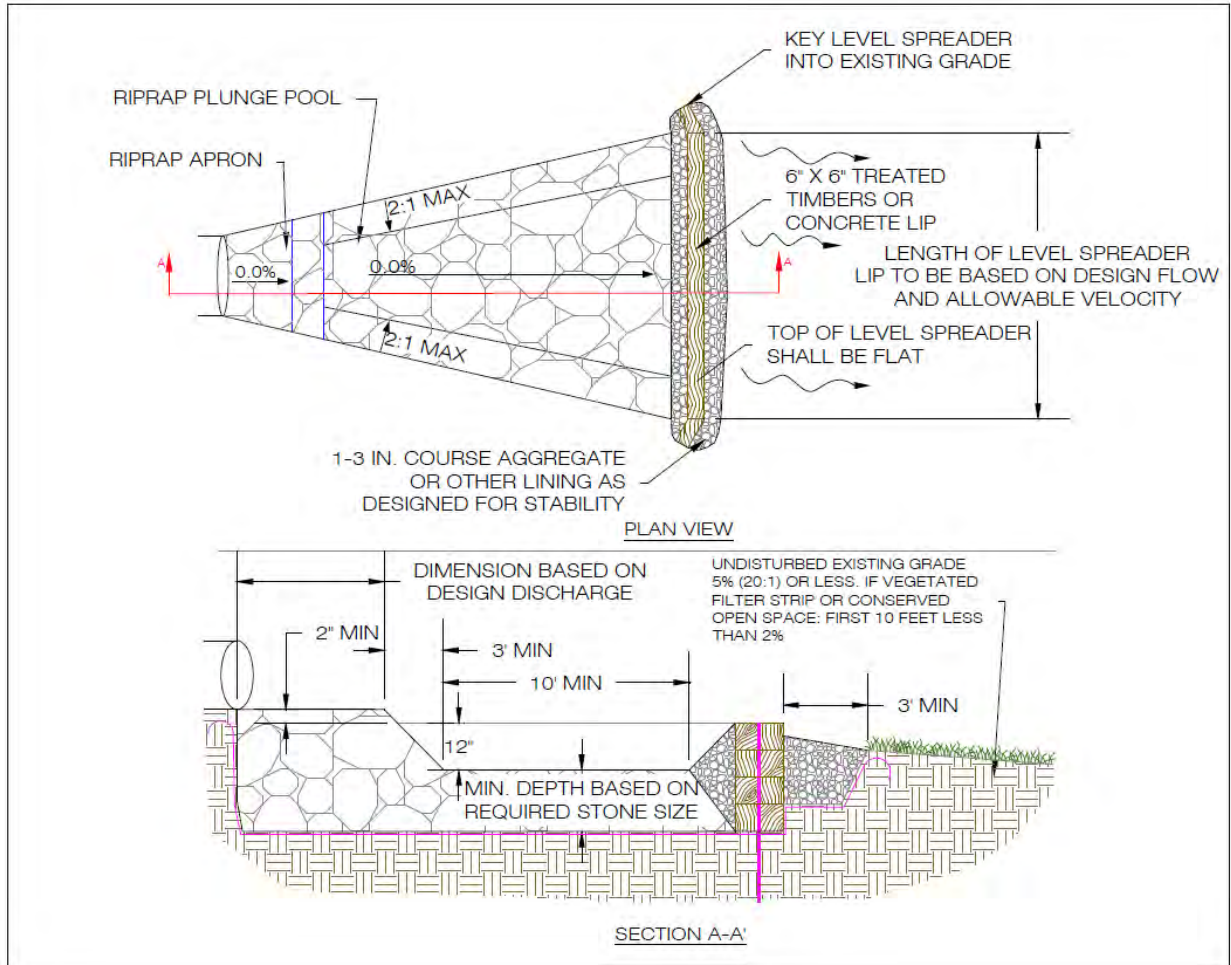


Figure 2.4: Level Spreader: Pipe or Channel Flow to Filter Strip or Conserved Open Space

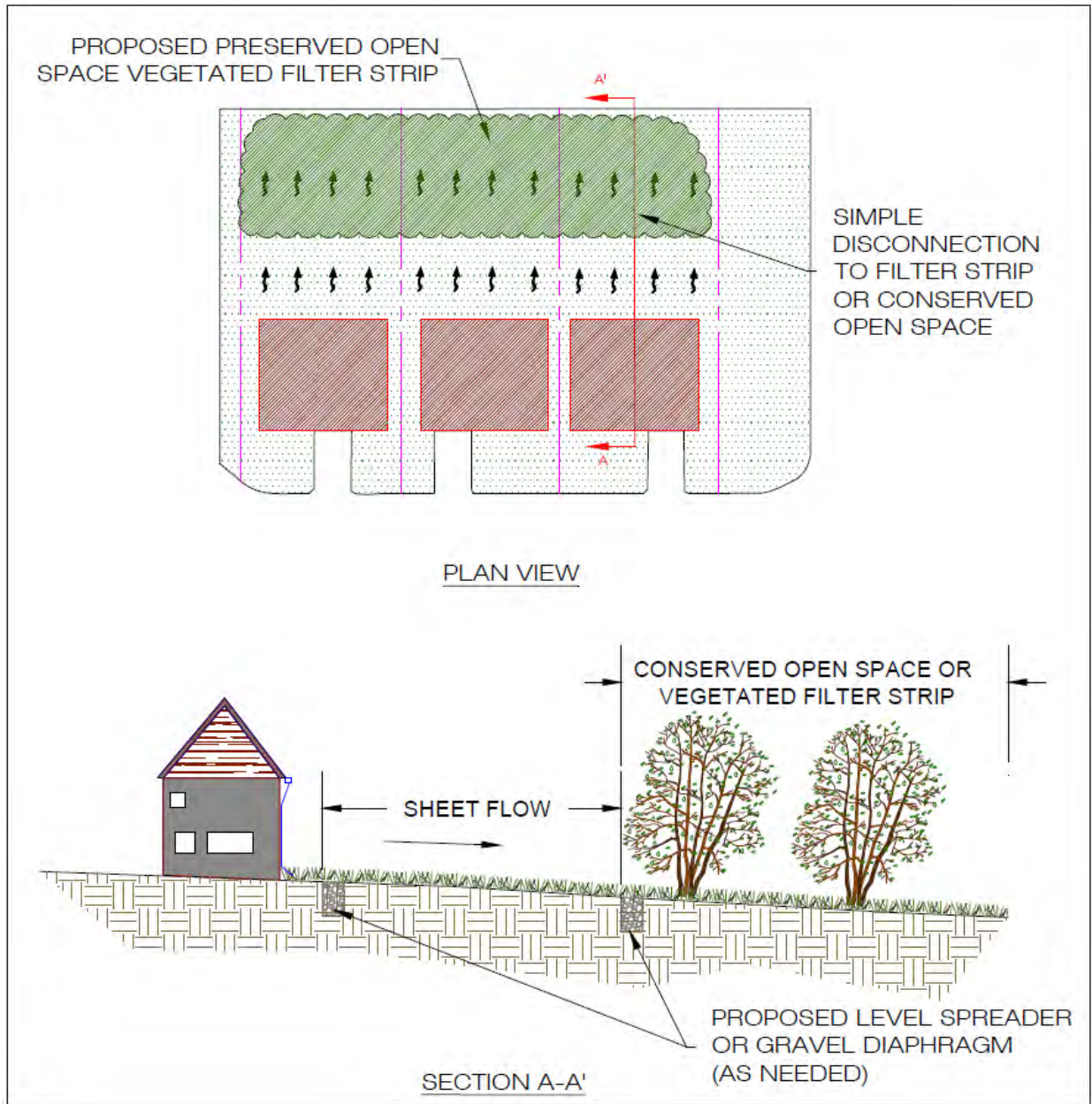


Figure 2.5: Simple Disconnection to downstream Conserved Open Space or Vegetated Filter Strip

SECTION 5. PHYSICAL FEASIBILITY & DESIGN APPLICATIONS

5.1 Conserved Open Space

The most common design applications of Conserved Open Space are on sites that are hydrologically connected to a protected stream buffer, wetland buffer, floodplain, forest conservation area, or other protected lands. Conserved Open Space is an ideal component of the "outer zone" of a stream buffer, such as a Resource Protection Area (as is required in some parts of the state), which normally receives runoff as sheet flow. Care should be taken to locate all energy dissipaters or flow spreading devices outside of the protected area.

Designers may apply a runoff reduction credit to any impervious or managed turf cover that is hydrologically connected and effectively treated by a protected Conserved Open Space that meets the following eligibility criteria:

- The goal of establishing Conserved Open Space is to protect a vegetated area contiguous to a receiving system, such as a stream or natural channel, for treating stormwater runoff. Establishing isolated Conserved Open Space pockets on a development site may not achieve this goal unless they effectively serve to connect the surface runoff to the receiving system. **Therefore, a locality may choose to establish goals for minimum acreage to be conserved (in terms of total acreage or percentage of the total project site), and the physical location (adjacent to a stream, or other criteria) in order for the cumulative Conserved Open Space to qualify for the runoff reduction credit.**
- No major disturbance shall occur within the Conserved Open Space during or after construction (i.e., no clearing or grading is allowed except temporary disturbances associated with incidental utility construction, restoration operations, or management of nuisance vegetation). The Conserved Open Space area shall not be stripped of topsoil. Some light grading may be needed at the boundary to establish a level entry into the Conserved Open Space. This shall be accomplished using tracked vehicles to prevent compaction.
- The limits of disturbance shall be clearly shown on all construction drawings and protected by acceptable signage and erosion control measures.
- A long term vegetation management plan must be prepared to maintain the Conserved Open Space in a natural vegetative condition. Generally, Conserved Open Space management plans do not encourage or even allow any active management. However, a specific plan should be developed to manage the unintended consequences of passive recreation, control invasive species, provide for tree and understory maintenance, etc. Managed turf is not considered an acceptable form of vegetative management, and only the passive recreation areas of dedicated parkland are eligible for the practice (e.g., the actively used portions of ball fields and golf courses are not eligible), although conservation areas can be ideal treatment practices at the edges of turf-intensive land uses.
- The Conserved Open Space must be protected by a perpetual easement or deed restriction that assigns the responsible party to ensure that no future development, disturbance, or clearing may occur within the area.
- The practice does *not* apply to jurisdictional wetlands that are sensitive to increased inputs of stormwater runoff (e.g., bogs and fens).

5.2 Vegetated Filter Strips

Vegetated Filter Strips are best suited to treat runoff from small segments of impervious cover (usually less than 5,000 sq. ft.) adjacent to road shoulders, small parking lots and rooftops. Vegetated Filter Strips may also be used as pretreatment for another stormwater practice such as a dry swale, bioretention, or infiltration areas. If sufficient pervious area is available at the site, larger areas of impervious cover can be treated by vegetated filter strips, using an ELS to recreate sheet flow. Vegetated Filter Strips are also well suited to treat runoff from turf-intensive land uses, such as the managed turf areas of sports fields, golf courses, and parkland.

Conserved Open Space and Vegetated Filter Strips can be used in a variety of situations; however there are several constraints to their use:

- Soil compaction or disturbance in the area of a proposed Vegetated Filter Strip should be minimized to the extent practical. If this is unavoidable, the area should be restored by tilling or otherwise re-establishing the soil permeability. The plan approving authority may require the applicant to verify the restoration of the soils, either through compost amendments or other means sufficient to achieve the goal of treating runoff from up-gradient areas.
- The proposed vegetated filter strip shall be shown on the erosion and sediment control plan.
- A vegetation management plan should be developed to maintain the vegetation density of the filter strip. Turf grass should be managed to the extent necessary to maintain a healthy grass cover. However, any fertilizing or other maintenance, such as mowing, should be identified in a management plan as part of the long term BMP operation and maintenance plan (**Section 9**).
- The Vegetated Filter Strip should be identified and protected in a perpetual easement, deed restriction, or other accepted mechanism that assigns the responsible party to ensure that no future development, disturbance or clearing may occur within the area, except as stipulated in the vegetation maintenance plan.

5.3 Feasibility Criteria for Conserved Open Space and Vegetated Filter Strips

- **Filter Slopes and Lengths.** Maximum slopes for Conserved Open Space and Vegetated Filter Strips are 6% and 8% respectively, in order to maintain sheet flow through the practice. In addition, the overall contributing drainage area must likewise be relatively flat to ensure sheet flow draining into the filter. Where this is not possible, alternative measures, such as an ELS, can be used. Minimum lengths (flow path) for Conserved Open Space and Vegetated Filter Strips are dependent on slope, as specified in **Table 2.3** above.
- **Soils.** Vegetated Filter Strips are appropriate for all soil types, except fill soils. The runoff reduction rate, however, is dependent on the underlying Hydrologic Soil Groups and whether soils receive compost amendments (see **Table 2.1** above).
- **Contributing Flow Path to Filter.** Vegetated Filter Strips are used to treat very small drainage areas of a few acres or less. The limiting design factor is the length of flow directed to the filter. As a rule, flow tends to concentrate after 75 feet of flow length from impervious surfaces, and 150 feet from pervious surfaces (Claytor, 1996). When flow concentrates, it moves too rapidly to be effectively treated by a Vegetated Filter Strip, unless an ELS is used. When the existing flow at a site is concentrated, a vegetated swale should be used instead of a Vegetated Filter Strip (Lantin and Barrett, 2005).

- **Hotspot Land Uses.** Vegetated Filter Strips should not receive hotspot runoff, since the infiltrated runoff could cause groundwater contamination.
- **Turf-Intensive Land Uses.** Both Conserved Open Space and Vegetated Filter Strips are appropriate to treat managed turf and the actively-used areas of sports fields, golf courses, parkland, and other turf-intensive land uses.
- **Proximity of Underground Utilities.** Underground pipes and conduits that cross the Vegetated Filter Strip are acceptable.

SECTION 6. DESIGN CRITERIA

6.1. Compost Soil Amendments

Compost soil amendments will enhance the runoff reduction capability of a Vegetated Filter Strip when located on hydrologic soil groups B, C, and D, subject to the following design requirements:

- The compost amendments should extend over the full length and width of the filter strip.
- The amount of approved compost material and the depth to which it must be incorporated is outlined in **Stormwater Design Specification No. 4**.
- The amended area will be raked to achieve the most level slope possible without using heavy construction equipment, and it will be stabilized rapidly with perennial grass and/or herbaceous species.
- If slopes exceed 3%, a protective biodegradable fabric or matting (e.g., EC-2) should be installed to stabilize the site prior to runoff discharge.
- Compost amendments should not be incorporated until the gravel diaphragm and/or ELS are installed (see **Section 6.3**).
- The local plan approval authority may waive the requirement for compost amendments on HSG-B soils in order to receive credit as a filter strip if (1) the designer can provide verification of the adequacy of the on-site soil type, texture, and profile to function as a filter strip, and (2) the area designated for the filter strip will not be disturbed during construction.

6.2. Planting and Vegetation Management

Conserved Open Space. No grading or clearing of native vegetation is allowed within the Conserved Open Space. An invasive species management plan should be developed and approved by the local plan approval authority.

Reforested Conserved Open Space. At some sites, the proposed Conserved Open Space may be in turf or meadow cover, or overrun with invasive plants and vines. In these situations, a landscape architect or horticulturalist should prepare a reforestation or restoration plan for the Conserved Open Space. The entire area can be planted with native trees and shrubs or planted to achieve a gradual transition from turf to meadow to shrub and forest. Trees and shrubs with deep rooting capabilities are recommended for planting to maximize soil infiltration capacity (PWD, 2007). Over-plant with seedlings for fast establishment and to account for mortality. Plant larger stock at desired spacing intervals (25 to 40 feet for large trees) using random spacing (Cappiella *et al.*, 2006). Plant ground cover or a herbaceous layer to ensure rapid vegetative cover of the

surface area.

Vegetated Filter Strips. Vegetated Filter Strips should be planted at such a density to achieve a 90% grass/herbaceous cover after the second growing season. Vegetated Filter Strips should be seeded, not sodded. Seeding establishes deeper roots, and sod may have muck soil that is not conducive to infiltration (Wisconsin DNR, 2007). The filter strip vegetation may consist of turf grasses, meadow grasses, other herbaceous plants, shrubs, and trees, as long as the primary goal of at least 90% coverage with grasses and/or other herbaceous plants is achieved. Designers should choose vegetation that stabilizes the soil and is salt tolerant. Vegetation at the toe of the filter, where temporary ponding may occur behind the permeable berm, should be able to withstand both wet and dry periods. The planting areas can be divided into zones to account for differences in inundation and slope.

6.3. Diaphragms, Berms and Level Spreaders

Gravel Diaphragms: A pea gravel diaphragm at the top of the slope is required for both Conserved Open Space and Vegetated Filter Strips that receive sheet flow. The pea gravel diaphragm is created by excavating a 2-foot wide and 1-foot deep trench that runs on the same contour at the top of the filter strip. The diaphragm serves two purposes. First, it acts as a pre-treatment device, settling out sediment particles before they reach the practice. Second, it acts as a Level Spreader, maintaining sheet flow as runoff flows over the Filter Strip. Refer to **Figure 2.2a-c**.

- The flow should travel over the impervious area and to the practice as sheet flow and then drop at least 2 inches onto the gravel diaphragm. The drop helps to prevent runoff from running laterally along the pavement edge, where grit and debris tend to build up (thus allowing by-pass of the Filter Strip).
- A layer of filter fabric should be placed between the gravel and the underlying soil trench.
- If the contributing drainage area is steep (6% slope or greater), then larger stone (clean bank-run gravel that meets VDOT #57 grade) should be used in the diaphragm.
- If the contributing drainage area is solely turf (e.g., sports field), then the gravel diaphragm may be eliminated.

Permeable Berm: Vegetated Filter Strips should be designed with a permeable berm at the toe of the Filter Strip to create a shallow ponding area. Runoff ponds behind the berm and gradually flows through outlet pipes in the berm or through a gravel lens in the berm with a perforated pipe. During larger storms, runoff may overtop the berm (Cappiella *et al.*, 2006). The permeable berm should have the following properties:

- A wide and shallow trench, 6 to 12 inches deep, should be excavated at the upstream toe of the berm, parallel with the contours.
- Media for the berm should consist of 40% excavated soil, 40% sand, and 20% pea gravel.
- The berm 6 to 12 inches high should be located down gradient of the excavated depression and should have gentle side slopes to promote easy mowing (Cappiella *et al.*, 2006).
- Stone may be needed to armor the top of berm to handle extreme storm events.
- A permeable berm is not needed when Vegetated Filter Strips are used as pretreatment to another stormwater practice.

Engineered Level Spreaders. The design of an ELS should conform to the following design criteria, or a locally approved standard that meets the intent of these criteria, in order to ensure non-erosive sheet flow into the vegetated buffer area. **Figure 2.3** above represents a configuration that includes a bypass structure that diverts the design storm to the Level Spreader, and bypasses the larger storm events around the Conserved Open Space or Vegetated Filter Strip through an improved channel.

An alternative approach is that used by Henrico County, where pipe or channels discharge at the landward edge of a floodplain or stream (Resource Protection Area or RPA) buffer. The entire flow is directed through a stilling basin energy dissipater and then a Level Spreader such that the entire design storm for the conveyance system (typically a 10-year frequency storm) is discharged as sheet flow through the buffer. (Refer to Henrico County's *Environmental Program Manual*; Chapter 9, Minimum Design Standard 9.01 "Energy Dissipator": <http://www.co.henrico.va.us/works/eesd/>.)

Key design elements of the ELS, as provided in **Figures 2.3 and 2.4**, include the following:

- High Flow Bypass provides safe passage for larger design storms through the filter strip. The bypass channel should accommodate all peak flows greater than the water quality design flow.
- A forebay should have a minimum depth of 12 inches (**Figure 2.4**). The forebay is sized such that the surface area is a minimum of 0.2% of the contributing impervious area. (A forebay is not necessary if the concentrated flow is from the outlet of an extended detention basin or similar practice).
- The length of the Level Spreader should be determined by the type of filter area and the design flow:
 - 13 feet of Level Spreader length per every 1 cubic foot per second (cfs) of inflow for discharges to a Vegetated Filter Strip or Conserved Open Space consisting of native grasses or thick ground cover;
 - 40 feet of Level Spreader length per every 1 cfs of inflow when the spreader discharges to a Conserved Open Space consisting of forested or reforested buffer (Hathaway and Hunt, 2006).
 - Where the Conserved Open Space is a mix of grass and forest (or re-forested), establish the Level Spreader length by computing a weighted average of the lengths required for each vegetation type.
 - The minimum Level Spreader length is 13 feet and the maximum is 130 feet.
 - For the purposes of determining the Level Spreader length, the peak discharge shall be determined using the computational procedure outlined in **Section 11.5.3 (Water Quality Design Tv Peak Flow Rate)** of **Chapter 5** of the *Virginia Stormwater Management Handbook* (2nd Edition, 2013).
- The Level Spreader lip should be concrete, wood, pre-fabricated metal, or other durable non-erodible material with a well-anchored footer..
- The ends of the Level Spreader section should be tied back into the slope to avoid scouring around the ends of the Level Spreader; otherwise, short-circuiting of the facility could create erosion.

- The width of the Level Spreader channel on the up-stream side of the level lip should be three times the diameter of the inflow pipe, and the depth should be 9 inches or one-half the culvert diameter, whichever is greater.
- The Level Spreader lip should be placed 3 to 6 inches above the downstream natural grade elevation to avoid blockage due to turf buildup. In order to prevent grade drops that re-concentrate the flows, a 3-foot wide section of VDOT # 3 stone, underlain by filter fabric, should be installed just below the spreader to transition from the level spreader to natural grade.
- Vegetated receiving areas down-gradient from the Level Spreader must be able to withstand the force of the flow coming over the lip of the device. It may be necessary to stabilize this area with a soil stabilization mat (VDOT EC-3) in accordance with the calculated velocity (on-line system peak, or diverted off-line peak) and material specifications, along with seeding and stabilization in conformance with the Virginia Erosion and Sediment Control Handbook.

6.4. Filter Design Material Specifications

Table 2.4 describes materials specifications for the primary treatment within filter strips.

Table 2.4. Vegetated Filter Strip Materials Specifications

Material	Specification	Quantity
Gravel Diaphragm	Pea Gravel (#8 or ASTM equivalent) or where steep (6% +) use clean bank-run VDOT #57 or ASTM equivalent (1-inch maximum).	Diaphragm should be 2 feet wide, 1 foot deep, and at least 2 inches below the edge of pavement.
Permeable Berm	40% excavated soil, 40% sand, and 20% pea gravel to serve as the media for the berm.	
Filter Fabric	Geotextile material appropriately selected for placement under rip rap or gravel to effectively separate the stone from the ground below.	
Engineered Level Spreader	Level Spreader lip should be concrete, metal, timber, or other rigid material; Reinforced channel on upstream of lip: VDOT EC-3. See Hathaway and Hunt (2006) or Henrico County Program Manual for alternate designs.	
Erosion Control Fabric or Matting	Where flow velocities dictate, use woven biodegradable erosion control fabric or mats that are durable enough to last at least 2 growing seasons. (e.g., VDOT Erosion Control matting EC-3).	
Topsoil	If existing topsoil is inadequate to support dense turf growth, imported top soil (loamy sand or sandy loam texture), with less than 5% clay content, corrected pH at 6 to 7, a soluble salt content not exceeding 500 ppm, and an organic matter content of at least 2% shall be used. Topsoil shall be uniformly distributed and lightly compacted to a minimum depth of 6 to 8 inches	
Compost	Compost shall be derived from plant material and provided by a member of the U.S. Composting Seal of Testing Assurance (STA) program, as outlined in Stormwater Design Specification No. 4.	

SECTION 7: REGIONAL & SPECIAL CASE DESIGN ADAPTATIONS

7.1. Karst Terrain

Conserved Open Space areas are highly recommended in karst terrain, particularly when storm flow discharges to the outer boundary of a karst protection area (see CSN, 2009).

Vegetated Filter Strips can also be used to treat runoff from small areas of impervious cover (e.g., less than 5,000 square feet). Some communities use wide grass filter strips to treat runoff from the roadway shoulder.

In no case should the use of a Conserved Open Space or Vegetated Filter Strip be considered as a replacement for an adequate receiving system for developed-condition stormwater discharges, unless the adequacy of the design has been demonstrated consistent with the Virginia Stormwater Management Handbook.

7.2. Coastal Plain

The use of Conserved Open Space areas and Vegetated Filter Strips are highly recommended in the coastal plain, particularly when sheet flow (or concentrated flow with an appropriately-sized Level Spreader) discharges to the outer boundary of a shoreline, stream or wetland buffer. Vegetated Filter Strips can also be used to treat runoff from small areas of impervious cover (e.g., less than 5,000 square feet). In both cases, however, the designer must consider the depth to the water table. In general, shallow water tables may inhibit the function of vegetated filter strips.

7.3. Linear Highway Sites

Vegetated Filter Strips are highly recommended to treat highway runoff if the median and/or road shoulder is wide enough to provide an adequate flow path.

SECTION 8: CONSTRUCTION

8.1. Construction Sequence for Conserved Open Space Areas

The Conserved Open Space must be fully protected during the construction stage of development and kept outside the limits of disturbance on the Erosion and Sediment (E&S) Control Plan.

- No clearing, grading or heavy equipment access is allowed except temporary disturbances associated with incidental utility construction, restoration operations or management of nuisance vegetation.
- The perimeter of the Conserved Open Space shall be protected from construction sediment by super silt fence, since the area is down gradient from areas of construction.
- The limits of disturbance should be clearly shown on all construction drawings and identified and protected in the field by acceptable signage, and chain link fence, orange safety fence,

snow fence or other protective barrier to keep unnecessary construction activity out of the area.

- Construction of the gravel diaphragm or ELS shall not commence until the contributing drainage area has been stabilized and perimeter E&S controls have been removed and cleaned out.
- Some light grading may be needed at the Conserved Open Space boundary; this should be done with tracked vehicles to prevent compaction.
- Stormwater should not be diverted into the Conserved Open Space until the gravel diaphragm and/or Level Spreader are installed and stabilized.

8.2. Construction Sequence for Vegetated Filter Strips

Vegetated Filter Strips can be within the limits of disturbance during construction. The following procedures should be followed during construction:

- Before site work begins, Vegetated Filter Strip boundaries should be clearly marked.
- Only vehicular traffic used for filter strip construction should be allowed within 10 feet of the Vegetated Filter Strip boundary (City of Portland, 2004).
- If existing topsoil is stripped during grading, it shall be stockpiled for later use.
- Construction runoff should be directed away from the proposed filter strip site using appropriate erosion control measures and a diversion dike or other measure.
- Construction of the gravel diaphragm or ELS shall not commence until the contributing drainage area has been stabilized and perimeter E&S controls have been removed and cleaned out.
- Vegetated Filter Strips require light grading to achieve desired elevations and slopes. This should be done with tracked vehicles to prevent compaction. Topsoil and or compost amendments should be incorporated evenly across the filter strip area, stabilized with seed, and protected by biodegradable erosion control matting or blankets.
- Stormwater should not be diverted into the Filter Strip until the turf cover is dense and well established.

8.3. Construction Inspection

Construction inspection is critical to obtain adequate spot elevations, to ensure the gravel diaphragm or ELS is completely level, on the same contour, and constructed to the correct design elevation. As-built surveys should be required to ensure compliance with design standards. Inspectors should evaluate the performance of the filter strip after the first big storm to look for evidence of gullies, outflanking, undercutting or sparse vegetative cover. Spot repairs should be made, as needed.

The GPS coordinates should be logged for all filter strips and Conserved Open Spaces, upon acceptance, and submitted for entry into the local BMP maintenance tracking database.

An example construction phase inspection checklist for sheet flow to a filter strip or Conserved Open Space can be found at the end of this specification.

SECTION 9. MAINTENANCE

9.1. Maintenance Agreements

The Virginia Stormwater Management regulations (**4 VAC 50-60-112**) specify the circumstances under which a maintenance agreement must be executed between the owner and the VSMP authority, and sets forth inspection requirements, compliance procedures if maintenance is neglected, notification of the local program upon transfer of ownership, and right-of-entry for local program personnel.

- All Vegetated Filter Strips must be covered by a long term maintenance agreement and drainage easement consistent with the provisions of the VSMP regulations to allow inspection and maintenance.
- **[Note: Aren't these three covered sufficiently by the last two bullets?]**
-
- Conserved Open Space shall be protected by a perpetual easement, deed restriction, or other mechanism enforceable by the VSMP Authority that assigns the responsible party to ensure that no future development, disturbance or clearing may occur within the area, except as stipulated in the vegetation maintenance plan.
- The existence and purpose of the open space shall be noted on the deed of record, and the owners shall be provided a simple document that explains the purpose of the open space and routine maintenance needs.

In cases of both Vegetated Filter Strips and Conserved Open Space, the protective mechanism for ensuring maintenance should, if possible, grant authority for local agencies to access the property for inspection or corrective action.

9.2. Maintenance Inspections

Annual inspections are used to trigger maintenance operations such as sediment removal, spot-vegetation and Level Spreader repair. Ideally, inspections should be conducted in the non-growing season when it is easier to see the flow path.

Inspections should check to ensure that:

- Flows through the Vegetated Filter Strip do not short-circuit the overflow control section;
- Debris and sediment does not build up at the top of the Vegetated Filter Strip;
- Foot or vehicular traffic does not compromise the gravel diaphragm;
- Scour and erosion do not occur within the filter strip;
- Sediments are cleaned out of Level Spreader forebays and flow splitters; and
- Vegetative density exceeds a 90% cover in the boundary zone or grass filter.

Example maintenance inspection checklists for Sheet Flow to a Vegetated Filter Strip or Conserved Open Space areas can be accessed in Appendix C of Chapter 9 of the *Virginia Stormwater Management Handbook* (2nd Edition, 2013).

9.3. Ongoing Maintenance

Once established, Vegetated Filter Strips have minimal maintenance needs outside of the spring cleanup, periodic mowing, repair of check dams and other measures to maintain the hydraulic efficiency of the strip and a dense, healthy grass cover. Vegetated Filter Strips that consist of grass/turf cover should be mowed at least twice a year to prevent woody growth.

Sample Construction Inspection Checklist for Sheet Flow to Vegetated Filter Strip or Conserved Open Space: The following checklist provides a basic outline of the anticipated items for the construction inspection of sheet flow practices. Users of this information may wish to incorporate these items into a VSMP Authority Construction Checklist format consistent with the format used for erosion and sediment control and BMP construction inspections.

Sheet Flow to Conserved Open Space Areas

- Pre-construction meeting with the contractor designated to install the sheet flow practice has been conducted.
- Impervious cover has been constructed/installed and area is free of construction equipment, vehicles, material storage, etc.
- All pervious areas of the contributing drainage areas have been adequately stabilized and erosion control measures have been removed.
- Area of the Conserved Open Space has been clearly marked and protected from construction traffic with adequate signage and fencing, and is in good condition (undisturbed – other than for pruning or other vegetation management needs).
- Area of the Conserved Open Space has been clearly marked and protected from construction runoff and sediment with appropriate sediment control measures (super silt fence, berms, etc.).
- Stormwater has been diverted for the construction of the inflow (Level Spreader or gravel diaphragm).
- Any light grading required to establish the upper boundary of the Conserved Open Space has been performed with light equipment and minimal impact to the existing vegetation.
- Construction of engineered Level Spreader for concentrated inflow or a gravel diaphragm or other pretreatment measure for sheet flow has been completed and the area stabilized as needed.
- Stormwater runoff directed into Conserved Open Space after the area at the upper boundary has been stabilized.
- All erosion and sediment control practices have been removed.
- Follow-up inspection and as-built survey/certification has been scheduled.
- GPS coordinates have been documented for all Conserved Open Spaces on the parcel.

Sheet Flow to Vegetated Filter Strips

- Pre-construction meeting with the contractor designated to install the sheet flow practice has been conducted.
- Impervious cover has been constructed/installed and area is free of construction equipment, vehicles, material storage, etc.
- All pervious areas of the contributing drainage areas have been adequately stabilized and erosion control measures have been removed.
- Area of the Vegetated Filter Strip has been clearly marked and protected from construction traffic with adequate signage and fencing, and is in good condition; or
- Area of the Vegetated Filter Strip has been previously (temporarily) stripped of topsoil during construction is scheduled for restoration and soil amendments (if required).
- Topsoil and/or soil amendments are nearby and certified as meeting the design specifications
- Proper grades have been achieved with light equipment to avoid compaction to provide the required geometry of the disconnection practice: length and width, and slope, and prepare the upper boundary has been performed.
- Stormwater has been diverted for the construction of the inflow measures (Level Spreader or gravel diaphragm).
- Soil amendments, if specified, have been incorporated as specified (thickness of compost material and incorporated to the required depth).
- Construction of engineered Level Spreader for concentrated inflow or a gravel diaphragm or other pretreatment measure for sheet flow has been completed.
- The entire area of the Vegetated Filter Strip has been stabilized and achieved a dense turf cover prior to diverting runoff into the practice.
- All erosion and sediment control practices have been removed.
- Follow-up inspection and as-built survey/certification has been scheduled.
- GPS coordinates have been documented for all Vegetated Filter Strips on the parcel.

SECTION 10. REFERENCES

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Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 1
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	0.20	0.06	30%	0.32	232	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	0.20	0.06	30%	0.32	232	Subtotal 1
Total	0.20	0.06	30%	0.32	232	Initial WQv

0.01 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	<i>minimum 10,000 sf</i>
Riparian Buffers	0.00	0.00	<i>maximum contributing length 75 feet to</i>
Filter Strips	0.20	0.06	
Tree Planting	0.00	0.00	<i>Up to 100 sf directly connected impervious</i>
Total	0.20	0.06	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	0.20	0.06	30%	0.32	232
Subtract Area	-0.20	-0.06			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					232

0.00 af
0.01 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	0.20	0.06		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	0.20	0.06	232	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	0.20	0.06	232	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.45	40%
C	1070.69	30%
D	4.00	20%
Total Area	1215.14	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.06	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	66	<i>ft3</i>
	0.00	<i>af</i>

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	232	0.005
30	Total RRV Provided	232	0.005
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	66	0.002
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	232	0.005
34	Sum of Volume Reduced and Treated	232	0.005
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>C_p</i>	
37	Overbank	<i>Q_p</i>	
37	Extreme Flood Control	<i>Q_f</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Filter Strip

Design Point:	1						
Enter Site Data For Drainage Area to be Treated by Practice							
Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Precipitation (in)	Description
1	0.20	0.06	0.30	0.32	232.32	1.00	Filter Strips
Design Elements							
Is another area based practice applied to this area?			No	Y/N			
Amended Soils & Dense Turf Cover?			Yes	Y/N			
Is area protected from compaction from heavy equipment during construction?			Yes	Y/N			
Small Area of Impervious Area & close to source?			Yes	Y/N			
Composte Amendments?			Yes	Y/N			
Boundary Spreader?			Yes	Y/N	Gravel Diaphragm at top		
Boundary Zone?			Yes	Y/N	25 feet of level grass		
Specify how sheet flow will be ensured.			Sheet Flow from pavement		level spreader shall be used for buffer slopes ranging from 3-15%		
Average contributing slope			1.9	%	3% maximum unless a level spreader is used.		
Slope of first 10 feet of Filter Strip			0.1	%	2% maximum		
Overall Slope			1.9	%	8% maximum		
Contributing Length of Pervious Areas (PC)			150	ft	150 ft maximum		
Contributing Length of Impervious areas (IC)			20	ft	75 ft maximum		
Maximum PC Contributing Length for combination of PC & IC			130	ft			
Soil Group (HSG)			D				
Filter Strip Width			35	ft	50 ft minimum for slopes 0-8% 75 ft minimum for slopes 8-12% 100 ft minimum for slopes 12-15% HSG C or D increase by 15-20%		
Are All Criteria for Filter Strips in Section 5.3.2 met?			Yes				
Area Reduction Adjustments							
Subtract			0.20	Acres from total Area			
Subtract			0.06	Acres from total Impervious Area			

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 2
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description		
1	44.33	0.98	2%	0.07	11,248	Filter Strips		
2								
3								
4								
5								
6								
7								
8								
9								
10								
Subtotal (1-30)	44.33	0.98	2%	0.07	11,248	Subtotal 1		
Total	44.33	0.98	2%	0.07	11,248	Initial WQv	0.26	af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	<i>minimum 10,000 sf</i>
Riparian Buffers	0.00	0.00	<i>maximum contributing length 75 feet to</i>
Filter Strips	44.33	0.98	
Tree Planting	0.00	0.00	<i>Up to 100 sf directly connected impervious</i>
Total	44.33	0.98	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)		
"<<Initial WQv"	44.33	0.98	2%	0.07	11,248		
Subtract Area	-44.33	-0.98					
WQv adjusted after Area	0.00	0.00	0%	0.05	0		
Disconnection of Rooftops		0.00					
Adjusted WQv after Area	0.00	0.00	0%	0.05	0	0.00	af
WQv reduced by Area					11,248	0.26	af

Runoff Reduction Volume and Treated volumes

	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	44.33	0.98		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	44.33	0.98	11248	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	44.33	0.98	11,248	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.98	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	1,072	<i>ft3</i>
	0.02	<i>af</i>

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	11248	0.258
30	Total RRV Provided	11248	0.258
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	1072	0.025
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	11248	0.258
34	Sum of Volume Reduced and Treated	11248	0.258
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>Cpv</i>	
37	Overbank	<i>Qp</i>	
37	Extreme Flood Control	<i>Qf</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 3
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	13.27	0.55	4%	0.09	4,205	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	13.27	0.55	4%	0.09	4,205	Subtotal 1
Total	13.27	0.55	4%	0.09	4,205	Initial WQv

0.10 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	minimum 10,000 sf
Riparian Buffers	0.00	0.00	maximum contributing length 75 feet to
Filter Strips	13.27	0.55	
Tree Planting	0.00	0.00	Up to 100 sf directly connected impervious
Total	13.27	0.55	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	13.27	0.55	4%	0.09	4,205
Subtract Area	-13.27	-0.55			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					4,205

0.00 af
0.10 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	13.27	0.55		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	13.27	0.55	4205	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	13.27	0.55	4,205	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.55	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	602	<i>ft3</i>
	0.01	af

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	4205	0.097
30	Total RRV Provided	4205	0.097
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	602	0.014
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	4205	0.097
34	Sum of Volume Reduced and Treated	4205	0.097
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>C_p</i>	
37	Overbank	<i>Q_p</i>	
37	Extreme Flood Control	<i>Q_f</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 4
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	11.51	0.21	2%	0.07	2,775	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	11.51	0.21	2%	0.07	2,775	Subtotal 1
Total	11.51	0.21	2%	0.07	2,775	Initial WQv

0.06 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	<i>minimum 10,000 sf</i>
Riparian Buffers	0.00	0.00	<i>maximum contributing length 75 feet to</i>
Filter Strips	11.51	0.21	
Tree Planting	0.00	0.00	<i>Up to 100 sf directly connected impervious</i>
Total	11.51	0.21	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	11.51	0.21	2%	0.07	2,775
Subtract Area	-11.51	-0.21			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					2,775

0.00 af
0.06 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	11.51	0.21		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	11.51	0.21	2775	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	11.51	0.21	2,775	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.21	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	230	<i>ft3</i>
	0.01	<i>af</i>

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	2775	0.064
30	Total RRV Provided	2775	0.064
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	230	0.005
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	2775	0.064
34	Sum of Volume Reduced and Treated	2775	0.064
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>C_p</i>	
37	Overbank	<i>Q_p</i>	
37	Extreme Flood Control	<i>Q_f</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 5
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	11.51	0.92	8%	0.12	5,095	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	11.51	0.92	8%	0.12	5,095	Subtotal 1
Total	11.51	0.92	8%	0.12	5,095	Initial WQv

0.12 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	minimum 10,000 sf
Riparian Buffers	0.00	0.00	maximum contributing length 75 feet to
Filter Strips	11.51	0.92	
Tree Planting	0.00	0.00	Up to 100 sf directly connected impervious
Total	11.51	0.92	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	11.51	0.92	8%	0.12	5,095
Subtract Area	-11.51	-0.92			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					5,095

0.00 af
0.12 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	11.51	0.92		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRV Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	11.51	0.92	5095	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	11.51	0.92	5,095	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.92	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	1,006	<i>ft3</i>
	0.02	<i>af</i>

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	5095	0.117
30	Total RRV Provided	5095	0.117
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	1006	0.023
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	5095	0.117
34	Sum of Volume Reduced and Treated	5095	0.117
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>C_p</i>	
37	Overbank	<i>Q_p</i>	
37	Extreme Flood Control	<i>Q_f</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 6
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments						
Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	4.18	0.34	8%	0.12	1,869	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	4.18	0.34	8%	0.12	1,869	Subtotal 1
Total	4.18	0.34	8%	0.12	1,869	Initial WQv

0.04 af

Identify Runoff Reduction Techniques By Area			
Technique	Total Contributing Area	Contributing Impervious Area	Notes
	(Acre)	(Acre)	
Conservation of Natural Areas	0.00	0.00	<i>minimum 10,000 sf</i>
Riparian Buffers	0.00	0.00	<i>maximum contributing length 75 feet to</i>
Filter Strips	4.18	0.34	
Tree Planting	0.00	0.00	<i>Up to 100 sf directly connected impervious</i>
Total	4.18	0.34	

Recalculate WQv after application of Area Reduction Techniques						
	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)	
"<<Initial WQv"	4.18	0.34	8%	0.12	1,869	
Subtract Area	-4.18	-0.34				
WQv adjusted after Area	0.00	0.00	0%	0.05	0	
Disconnection of Rooftops		0.00				
Adjusted WQv after Area	0.00	0.00	0%	0.05	0	0.00 af
WQv reduced by Area					1,869	0.04 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	4.18	0.34		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	4.18	0.34	1869	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	4.18	0.34	1,869	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.34	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	372	<i>ft3</i>
	0.01	af

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	1869	0.043
30	Total RRV Provided	1869	0.043
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	372	0.009
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	1869	0.043
34	Sum of Volume Reduced and Treated	1869	0.043
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>Cpv</i>	
37	Overbank	<i>Qp</i>	
37	Extreme Flood Control	<i>Qf</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: **7**
 P= **1.00** *inch* Manually enter P, Total Area and Impervious Cover.

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	0.16	0.13	81%	0.78	454	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	0.16	0.13	81%	0.78	454	Subtotal 1
Total	0.16	0.13	81%	0.78	454	Initial WQv

0.01 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	<i>minimum 10,000 sf</i>
Riparian Buffers	0.00	0.00	<i>maximum contributing length 75 feet to</i>
Filter Strips	0.16	0.13	
Tree Planting	0.00	0.00	<i>Up to 100 sf directly connected impervious</i>
Total	0.16	0.13	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	0.16	0.13	81%	0.78	454
Subtract Area	-0.16	-0.13			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					454

0.00 af
0.01 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	0.16	0.13		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	0.16	0.13	454	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	0.16	0.13	454	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.13	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	142	<i>ft3</i>
	0.00	af

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	454	0.010
30	Total RRV Provided	454	0.010
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	142	0.003
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	454	0.010
34	Sum of Volume Reduced and Treated	454	0.010
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>C_p</i>	
37	Overbank	<i>Q_p</i>	
37	Extreme Flood Control	<i>Q_f</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: **8**
 P= **1.00** *inch* Manually enter P, Total Area and Impervious Cover.

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	0.26	0.10	38%	0.40	374	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	0.26	0.10	38%	0.40	374	Subtotal 1
Total	0.26	0.10	38%	0.40	374	Initial WQv

0.01 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	<i>minimum 10,000 sf</i>
Riparian Buffers	0.00	0.00	<i>maximum contributing length 75 feet to</i>
Filter Strips	0.26	0.10	
Tree Planting	0.00	0.00	<i>Up to 100 sf directly connected impervious</i>
Total	0.26	0.10	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	0.26	0.10	38%	0.40	374
Subtract Area	-0.26	-0.10			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					374

0.00 af
0.01 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	0.26	0.10		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	0.26	0.10	374	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	0.26	0.10	374	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.10	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	109	<i>ft3</i>
	0.00	af

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	374	0.009
30	Total RRV Provided	374	0.009
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	109	0.003
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	374	0.009
34	Sum of Volume Reduced and Treated	374	0.009
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>C_p</i>	
37	Overbank	<i>Q_p</i>	
37	Extreme Flood Control	<i>Q_f</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 9
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	1.30	0.71	55%	0.54	2,556	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	1.30	0.71	55%	0.54	2,556	Subtotal 1
Total	1.30	0.71	55%	0.54	2,556	Initial WQv

0.06 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	<i>minimum 10,000 sf</i>
Riparian Buffers	0.00	0.00	<i>maximum contributing length 75 feet to</i>
Filter Strips	1.30	0.71	
Tree Planting	0.00	0.00	<i>Up to 100 sf directly connected impervious</i>
Total	1.30	0.71	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	1.30	0.71	55%	0.54	2,556
Subtract Area	-1.30	-0.71			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					2,556

0.00 af
0.06 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	1.30	0.71		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRV Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	1.30	0.71	2556	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	1.30	0.71	2,556	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.71	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	777	<i>ft3</i>
	0.02	<i>af</i>

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	2556	0.059
30	Total RRV Provided	2556	0.059
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	777	0.018
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	2556	0.059
34	Sum of Volume Reduced and Treated	2556	0.059
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>Cpv</i>	
37	Overbank	<i>Qp</i>	
37	Extreme Flood Control	<i>Qf</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 10
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	0.23	0.21	91%	0.87	728	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	0.23	0.21	91%	0.87	728	Subtotal 1
Total	0.23	0.21	91%	0.87	728	Initial WQv

0.02 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	minimum 10,000 sf
Riparian Buffers	0.00	0.00	maximum contributing length 75 feet to
Filter Strips	0.23	0.21	
Tree Planting	0.00	0.00	Up to 100 sf directly connected impervious
Total	0.23	0.21	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	0.23	0.21	91%	0.87	728
Subtract Area	-0.23	-0.21			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					728

0.00 af
0.02 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	0.23	0.21		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRV Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	0.23	0.21	728	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	0.23	0.21	728	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.21	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	230	<i>ft3</i>
	0.01	af

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	728	0.017
30	Total RRV Provided	728	0.017
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	230	0.005
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	728	0.017
34	Sum of Volume Reduced and Treated	728	0.017
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>C_p</i>	
37	Overbank	<i>Q_p</i>	
37	Extreme Flood Control	<i>Q_f</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 11
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	2.96	0.50	17%	0.20	2,171	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	2.96	0.50	17%	0.20	2,171	Subtotal 1
Total	2.96	0.50	17%	0.20	2,171	Initial WQv

0.05 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	<i>minimum 10,000 sf</i>
Riparian Buffers	0.00	0.00	<i>maximum contributing length 75 feet to</i>
Filter Strips	2.96	0.50	
Tree Planting	0.00	0.00	<i>Up to 100 sf directly connected impervious</i>
Total	2.96	0.50	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	2.96	0.50	17%	0.20	2,171
Subtract Area	-2.96	-0.50			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					2,171

0.00 af
0.05 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	2.96	0.50		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	2.96	0.50	2171	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	2.96	0.50	2,171	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.50	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	547	<i>ft3</i>
	0.01	<i>af</i>

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	2171	0.050
30	Total RRV Provided	2171	0.050
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	547	0.013
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	2171	0.050
34	Sum of Volume Reduced and Treated	2171	0.050
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>Cpv</i>	
37	Overbank	<i>Qp</i>	
37	Extreme Flood Control	<i>Qf</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 12
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	1.80	0.31	17%	0.21	1,339	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	1.80	0.31	17%	0.21	1,339	Subtotal 1

Total 1.80 0.31 17% 0.21 **1,339** **Initial WQv** **0.03** **af**

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	<i>minimum 10,000 sf</i>
Riparian Buffers	0.00	0.00	<i>maximum contributing length 75 feet to</i>
Filter Strips	1.80	0.31	
Tree Planting	0.00	0.00	<i>Up to 100 sf directly connected impervious</i>
Total	1.80	0.31	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	1.80	0.31	17%	0.21	1,339
Subtract Area	-1.80	-0.31			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					1,339

0.00 **af**
0.03 **af**

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	1.80	0.31		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	1.80	0.31	1339	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	1.80	0.31	1,339	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.31	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	339	<i>ft3</i>
	0.01	af

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	1339	0.031
30	Total RRV Provided	1339	0.031
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	339	0.008
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	1339	0.031
34	Sum of Volume Reduced and Treated	1339	0.031
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>Cpv</i>	
37	Overbank	<i>Qp</i>	
37	Extreme Flood Control	<i>Qf</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 13
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	8.13	0.09	1%	0.06	1,770	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	8.13	0.09	1%	0.06	1,770	Subtotal 1
Total	8.13	0.09	1%	0.06	1,770	Initial WQv

0.04 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	minimum 10,000 sf
Riparian Buffers	0.00	0.00	maximum contributing length 75 feet to
Filter Strips	8.13	0.09	
Tree Planting	0.00	0.00	Up to 100 sf directly connected impervious
Total	8.13	0.09	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	8.13	0.09	1%	0.06	1,770
Subtract Area	-8.13	-0.09			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					1,770

0.00 af
0.04 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	8.13	0.09		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	8.13	0.09	1770	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	8.13	0.09	1,770	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.09	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	98	<i>ft3</i>
	0.00	af

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	1770	0.041
30	Total RRV Provided	1770	0.041
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	98	0.002
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	1770	0.041
34	Sum of Volume Reduced and Treated	1770	0.041
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>C_p</i>	
37	Overbank	<i>Q_p</i>	
37	Extreme Flood Control	<i>Q_f</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 14
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	0.85	0.66	78%	0.75	2,310	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	0.85	0.66	78%	0.75	2,310	Subtotal 1
Total	0.85	0.66	78%	0.75	2,310	Initial WQv

0.05 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	<i>minimum 10,000 sf</i>
Riparian Buffers	0.00	0.00	<i>maximum contributing length 75 feet to</i>
Filter Strips	0.85	0.66	
Tree Planting	0.00	0.00	<i>Up to 100 sf directly connected impervious</i>
Total	0.85	0.66	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	0.85	0.66	78%	0.75	2,310
Subtract Area	-0.85	-0.66			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					2,310

0.00 af
0.05 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	0.85	0.66		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	0.85	0.66	2310	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	0.85	0.66	2,310	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.66	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	722	<i>ft3</i>
	0.02	af

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	2310	0.053
30	Total RRV Provided	2310	0.053
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	722	0.017
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	2310	0.053
34	Sum of Volume Reduced and Treated	2310	0.053
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>C_p</i>	
37	Overbank	<i>Q_p</i>	
37	Extreme Flood Control	<i>Q_f</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 15
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	15.86	1.24	8%	0.12	6,930	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	15.86	1.24	8%	0.12	6,930	Subtotal 1
Total	15.86	1.24	8%	0.12	6,930	Initial WQv

0.16 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	<i>minimum 10,000 sf</i>
Riparian Buffers	0.00	0.00	<i>maximum contributing length 75 feet to</i>
Filter Strips	15.86	1.24	
Tree Planting	0.00	0.00	<i>Up to 100 sf directly connected impervious</i>
Total	15.86	1.24	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	15.86	1.24	8%	0.12	6,930
Subtract Area	-15.86	-1.24			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					6,930

0.00 af
0.16 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	15.86	1.24		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
	Wet Swale (O-2)	O-2				
	Totals by Area Reduction	→	15.86	1.24	6930	
	Totals by Volume Reduction	→	0.00	0.00	0	
	Totals by Standard SMP w/RRV	→	0.00	0.00	0	0
	Totals by Standard SMP	→	0.00	0.00		0
	Totals (Area + Volume + all SMPs)	→	15.86	1.24	6,930	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	1.24	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	1,356	<i>ft3</i>
	0.03	<i>af</i>

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	6930	0.159
30	Total RRV Provided	6930	0.159
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	1356	0.031
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	6930	0.159
34	Sum of Volume Reduced and Treated	6930	0.159
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>C_p</i>	
37	Overbank	<i>Q_p</i>	
37	Extreme Flood Control	<i>Q_f</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 16
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	15.52	0.97	6%	0.11	5,986	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	15.52	0.97	6%	0.11	5,986	Subtotal 1
Total	15.52	0.97	6%	0.11	5,986	Initial WQv

0.14 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	minimum 10,000 sf
Riparian Buffers	0.00	0.00	maximum contributing length 75 feet to
Filter Strips	15.52	0.97	
Tree Planting	0.00	0.00	Up to 100 sf directly connected impervious
Total	15.52	0.97	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	15.52	0.97	6%	0.11	5,986
Subtract Area	-15.52	-0.97			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					5,986

0.00 af
0.14 af

Runoff Reduction Volume and Treated volumes							
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated	
			(acres)	(acres)	cf	cf	
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00			
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	15.52	0.97			
	Tree Planting/Tree Pit	RR-3	0.00	0.00			
	Disconnection of Rooftop Runoff	RR-4		0.00			
		Vegetated Swale	RR-5	0.00	0.00	0	
		Rain Garden	RR-6	0.00	0.00	0	
		Stormwater Planter	RR-7	0.00	0.00	0	
		Rain Barrel/Cistern	RR-8	0.00	0.00	0	
		Porous Pavement	RR-9	0.00	0.00	0	
		Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0	
	Infiltration Basin	I-2	0.00	0.00	0	0	
	Dry Well	I-3	0.00	0.00	0	0	
	Underground Infiltration System	I-4					
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0	
	Dry swale	O-1	0.00	0.00	0	0	
Standard SMPs	Micropool Extended Detention (P-1)	P-1					
	Wet Pond (P-2)	P-2					
	Wet Extended Detention (P-3)	P-3					
	Multiple Pond system (P-4)	P-4					
	Pocket Pond (p-5)	P-5					
	Surface Sand filter (F-1)	F-1					
	Underground Sand filter (F-2)	F-2					
	Perimeter Sand Filter (F-3)	F-3					
	Organic Filter (F-4)	F-4					
	Shallow Wetland (W-1)	W-1					
	Extended Detention Wetland (W-2)	W-2					
	Pond/Wetland System (W-3)	W-3					
	Pocket Wetland (W-4)	W-4					
	Wet Swale (O-2)	O-2					
	Totals by Area Reduction	→	15.52	0.97	5986		
	Totals by Volume Reduction	→	0.00	0.00	0		
	Totals by Standard SMP w/RRV	→	0.00	0.00	0	0	
	Totals by Standard SMP	→	0.00	0.00		0	
	Totals (Area + Volume + all SMPs)	→	15.52	0.97	5,986	0	
	Impervious Cover v	okay					
	Total Area v	okay					

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.97	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	1,061	<i>ft3</i>
	0.02	af

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	5986	0.137
30	Total RRV Provided	5986	0.137
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	1061	0.024
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	5986	0.137
34	Sum of Volume Reduced and Treated	5986	0.137
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>C_p</i>	
37	Overbank	<i>Q_p</i>	
37	Extreme Flood Control	<i>Q_f</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 17
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description		
1	24.45	1.89	8%	0.12	10,612	Filter Strips		
2								
3								
4								
5								
6								
7								
8								
9								
10								
Subtotal (1-30)	24.45	1.89	8%	0.12	10,612	Subtotal 1		
Total	24.45	1.89	8%	0.12	10,612	Initial WQv	0.24	af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	<i>minimum 10,000 sf</i>
Riparian Buffers	0.00	0.00	<i>maximum contributing length 75 feet to</i>
Filter Strips	24.45	1.89	
Tree Planting	0.00	0.00	<i>Up to 100 sf directly connected impervious</i>
Total	24.45	1.89	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)		
"<<Initial WQv"	24.45	1.89	8%	0.12	10,612		
Subtract Area	-24.45	-1.89					
WQv adjusted after Area	0.00	0.00	0%	0.05	0		
Disconnection of Rooftops		0.00					
Adjusted WQv after Area	0.00	0.00	0%	0.05	0	0.00	af
WQv reduced by Area					10,612	0.24	af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	24.45	1.89		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	24.45	1.89	10612	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	24.45	1.89	10,612	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	1.89	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	2,067	<i>ft3</i>
	0.05	af

NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	10612	0.244
30	Total RRV Provided	10612	0.244
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	2067	0.047
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	10612	0.244
34	Sum of Volume Reduced and Treated	10612	0.244
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>C_p</i>	
37	Overbank	<i>Q_p</i>	
37	Extreme Flood Control	<i>Q_f</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?..... **No**

Design Point: 18
 P= 1.00 inch *Manually enter P, Total Area and Impervious Cover.*

Breakdown of Subcatchments

Catchment Number	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Rv	WQv (ft ³)	Description
1	9.15	0.59	6%	0.11	3,588	Filter Strips
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	9.15	0.59	6%	0.11	3,588	Subtotal 1
Total	9.15	0.59	6%	0.11	3,588	Initial WQv

0.08 af

Identify Runoff Reduction Techniques By Area

Technique	Total Contributing Area (Acre)	Contributing Impervious Area (Acre)	Notes
Conservation of Natural Areas	0.00	0.00	minimum 10,000 sf
Riparian Buffers	0.00	0.00	maximum contributing length 75 feet to
Filter Strips	9.15	0.59	
Tree Planting	0.00	0.00	Up to 100 sf directly connected impervious
Total	9.15	0.59	

Recalculate WQv after application of Area Reduction Techniques

	Total Area (Acres)	Impervious Area (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft ³)
"<<Initial WQv"	9.15	0.59	6%	0.11	3,588
Subtract Area	-9.15	-0.59			
WQv adjusted after Area	0.00	0.00	0%	0.05	0
Disconnection of Rooftops		0.00			
Adjusted WQv after Area	0.00	0.00	0%	0.05	0
WQv reduced by Area					3,588

0.00 af
0.08 af

Runoff Reduction Volume and Treated volumes						
	Runoff Reduction Techniques/Standard SMPs		Total Contributing Area	Total Contributing Impervious Area	WQv Reduced (RRv)	WQv Treated
			(acres)	(acres)	cf	cf
Area/Volume Reduction	Conservation of Natural Areas	RR-1	0.00	0.00		
	Sheetflow to Riparian Buffers/Filter Strips	RR-2	9.15	0.59		
	Tree Planting/Tree Pit	RR-3	0.00	0.00		
	Disconnection of Rooftop Runoff	RR-4		0.00		
	Vegetated Swale	RR-5	0.00	0.00	0	
	Rain Garden	RR-6	0.00	0.00	0	
	Stormwater Planter	RR-7	0.00	0.00	0	
	Rain Barrel/Cistern	RR-8	0.00	0.00	0	
	Porous Pavement	RR-9	0.00	0.00	0	
	Green Roof (Intensive & Extensive)	RR-10	0.00	0.00	0	
Standard SMPs w/RRv Capacity	Infiltration Trench	I-1	0.00	0.00	0	0
	Infiltration Basin	I-2	0.00	0.00	0	0
	Dry Well	I-3	0.00	0.00	0	0
	Underground Infiltration System	I-4				
	Bioretention & Infiltration Bioretention	F-5	0.00	0.00	0	0
	Dry swale	O-1	0.00	0.00	0	0
Standard SMPs	Micropool Extended Detention (P-1)	P-1				
	Wet Pond (P-2)	P-2				
	Wet Extended Detention (P-3)	P-3				
	Multiple Pond system (P-4)	P-4				
	Pocket Pond (p-5)	P-5				
	Surface Sand filter (F-1)	F-1				
	Underground Sand filter (F-2)	F-2				
	Perimeter Sand Filter (F-3)	F-3				
	Organic Filter (F-4)	F-4				
	Shallow Wetland (W-1)	W-1				
	Extended Detention Wetland (W-2)	W-2				
	Pond/Wetland System (W-3)	W-3				
	Pocket Wetland (W-4)	W-4				
Wet Swale (O-2)	O-2					
Totals by Area Reduction		→	9.15	0.59	3588	
Totals by Volume Reduction		→	0.00	0.00	0	
Totals by Standard SMP w/RRV		→	0.00	0.00	0	0
Totals by Standard SMP		→	0.00	0.00		0
Totals (Area + Volume + all SMPs)		→	9.15	0.59	3,588	0
	Impervious Cover v	okay				
	Total Area v	okay				

Minimum RRv

Enter the Soils Data for the site

Soil Group	Acres	S
A	48.00	55%
B	92.50	40%
C	1071.00	30%
D	4.00	20%
Total Area	1215.5	

Calculate the Minimum RRv

S =	0.32	
Impervious =	0.59	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
Minimum RRv	645	<i>ft3</i>
	0.01	af

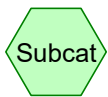
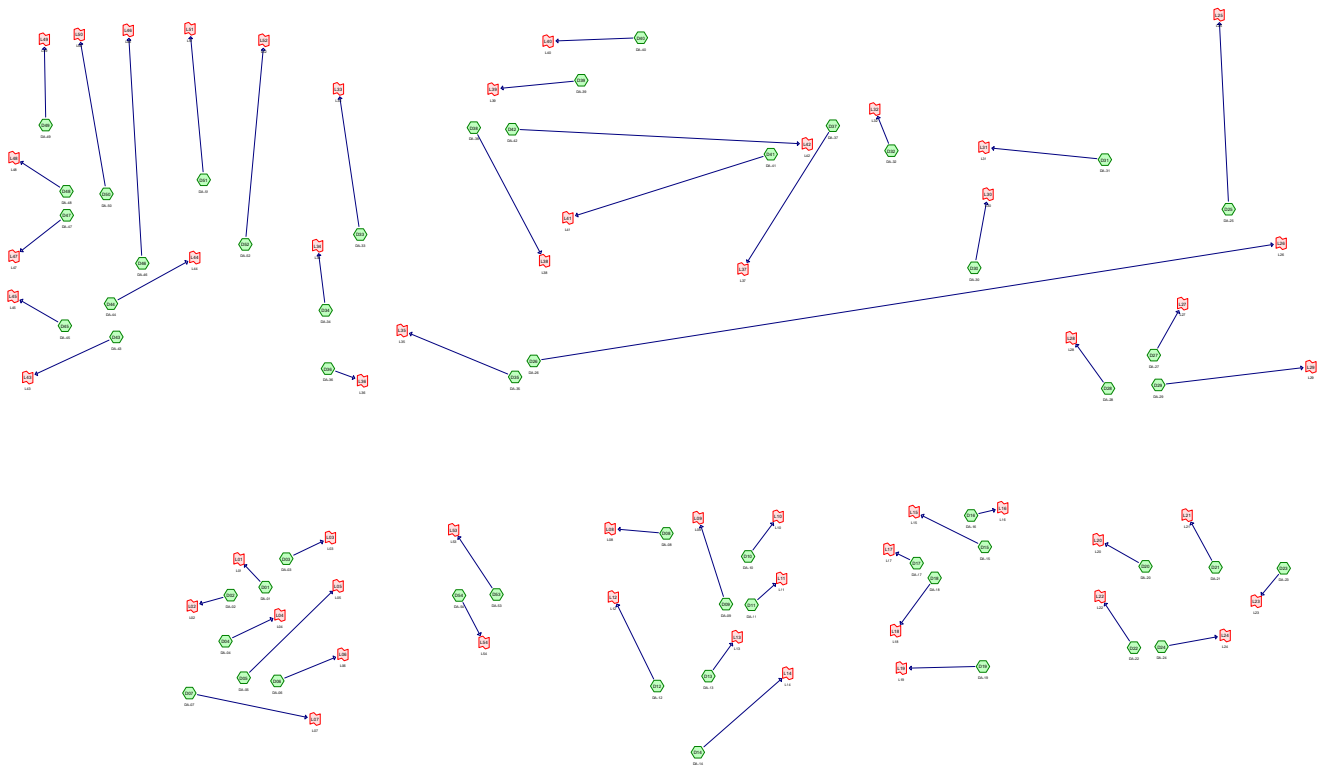
NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	3588	0.082
30	Total RRV Provided	3588	0.082
31	Is RRV Provided \geq WQv Required?	Yes	
32	Minimum RRV	645	0.015
32a	Is RRV Provided \geq Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	3588	0.082
34	Sum of Volume Reduced and Treated	3588	0.082
35	Is Sum RRV Provided and WQv Provided \geq WQv Required?	Yes	

100.00%

Apply Peak Flow Attenuation			
36	Channel Protection	<i>Cpv</i>	
37	Overbank	<i>Qp</i>	
37	Extreme Flood Control	<i>Qf</i>	
	Are Quantity Control requirements met?	Yes	Plan Completed

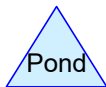
APPENDIX H – PRE-DEVELOPMENT ANALYSIS



Subcat



Reach



Pond



Link

Routing Diagram for Somerset Pre-Dev_Rev4
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Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-yr	Type II 24-hr		Default	24.00	1	1.74	2
2	10-yr	Type II 24-hr		Default	24.00	1	2.96	2
3	100-yr	Type II 24-hr		Default	24.00	1	4.88	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.090	61	>75% Grass cover, Good, HSG B (D41)
3.490	74	>75% Grass cover, Good, HSG C (D33, D39, D40, D41)
81.400	98	Capped Area (D26, D27, D28, D29, D41)
3.250	96	Gravel surface, HSG C (D26, D27, D28, D29, D30, D32, D35)
23.730	58	Legumes, straight row, Good, HSG A (D05, D06, D14, D44, D45, D46, D47, D48, D50, D51)
46.990	72	Legumes, straight row, Good, HSG B (D05, D06, D12, D13, D14, D25, D26, D46, D50, D54)
301.310	81	Legumes, straight row, Good, HSG C (D05, D06, D07, D09, D10, D11, D12, D13, D14, D15, D17, D18, D19, D20, D21, D22, D24, D25, D26, D44, D45, D46, D47, D48, D49, D50, D51, D53, D54)
4.770	30	Meadow, non-grazed, HSG A (D34, D35, D36, D44, D46)
4.180	58	Meadow, non-grazed, HSG B (D32, D43, D44, D45)
226.850	71	Meadow, non-grazed, HSG C (D01, D03, D15, D16, D17, D26, D27, D28, D30, D31, D32, D33, D34, D35, D36, D37, D38, D42, D43, D44, D45, D46, D53)
1.490	39	Pasture/grassland/range, Good, HSG A (D44)
3.640	74	Pasture/grassland/range, Good, HSG C (D29, D44)
0.340	98	Roofs, HSG C (D01)
41.560	98	Unconnected pavement, HSG C (D03, D26, D30, D31, D32, D33, D34, D35, D36, D37, D38, D39, D40, D42, D44, D52)
5.010	98	Water Surface, HSG C (D30, D32, D37, D38, D39, D41, D42)
16.930	30	Woods, Good, HSG A (D02, D04, D05, D26, D29, D48, D49, D50)
30.570	55	Woods, Good, HSG B (D05, D06, D12, D13, D25, D26, D46, D50, D54)
151.020	70	Woods, Good, HSG C (D01, D02, D03, D04, D06, D07, D13, D15, D16, D19, D20, D25, D26, D29, D31, D44, D46, D48, D49, D50, D54)
1.080	32	Woods/grass comb., Good, HSG A (D01, D02, D45, D51)
10.620	58	Woods/grass comb., Good, HSG B (D08, D14, D43, D51, D53)
252.820	72	Woods/grass comb., Good, HSG C (D01, D02, D05, D08, D09, D10, D12, D14, D20, D21, D22, D23, D24, D26, D29, D31, D33, D35, D43, D45, D51, D52, D53)
4.000	79	Woods/grass comb., Good, HSG D (D26)
1,215.140	75	TOTAL AREA

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
48.000	HSG A	D01, D02, D04, D05, D06, D14, D26, D29, D34, D35, D36, D44, D45, D46, D47, D48, D49, D50, D51
92.450	HSG B	D05, D06, D08, D12, D13, D14, D25, D26, D32, D41, D43, D44, D45, D46, D50, D51, D53, D54
989.290	HSG C	D01, D02, D03, D04, D05, D06, D07, D08, D09, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, D30, D31, D32, D33, D34, D35, D36, D37, D38, D39, D40, D41, D42, D43, D44, D45, D46, D47, D48, D49, D50, D51, D52, D53, D54
4.000	HSG D	D26
81.400	Other	D26, D27, D28, D29, D41
1,215.140		TOTAL AREA

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.090	3.490	0.000	0.000	3.580	>75% Grass cover, Good	D3 3, D3 9, D4 0, D4 1
0.000	0.000	0.000	0.000	81.400	81.400	Capped Area	D2 6, D2 7, D2 8, D2 9, D4 1
0.000	0.000	3.250	0.000	0.000	3.250	Gravel surface	D2 6, D2 7, D2 8, D2 9, D3 0, D3 2, D3 5
23.730	46.990	301.310	0.000	0.000	372.030	Legumes, straight row, Good	D0 5, D0 6, D0 7, D0 9, D1 0, D1 1, D1 2,

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Ground Covers (all nodes) (continued)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
4.770	4.180	226.850	0.000	0.000	235.800	Meadow, non-grazed	D0 1, D0 3, D1 5, D1 6, D1 7, D2 6, D2 7, D2 8, D3 0, D3 1, D3 2, D3 3, D3 4, D3 5, D3 6, D3 7, D3 8, D4 2, D4 3, D4 4, D4 5, D4 6, D5 3

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Ground Covers (all nodes) (continued)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
1.490	0.000	3.640	0.000	0.000	5.130	Pasture/grassland/range, Good	D2 9, D4 4
0.000	0.000	0.340	0.000	0.000	0.340	Roofs	D0 1
0.000	0.000	41.560	0.000	0.000	41.560	Unconnected pavement	D0 3, D2 6, D3 0, D3 1, D3 2, D3 3, D3 4, D3 5, D3 6, D3 7, D3 8, D3 9, D4 0, D4 2, D4 4, D5 2
0.000	0.000	5.010	0.000	0.000	5.010	Water Surface	D3 0, D3 2, D3 7, D3 8,

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Ground Covers (all nodes) (continued)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
16.930	30.570	151.020	0.000	0.000	198.520	Woods, Good	D0 1, D0 2, D0 3, D0 4, D0 5, D0 6, D0 7, D1 2, D1 3, D1 5, D1 6, D1 9, D2 0, D2 5, D2 6, D2 9, D3 1, D4 4, D4 6, D4 8, D4 9, D5 0, D5 4

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Ground Covers (all nodes) (continued)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
1.080	10.620	252.820	4.000	0.000	268.520	Woods/grass comb., Good	D0 1, D0 2, D0 5, D0 8, D0 9, D1 0, D1 2, D1 4, D2 0, D2 1, D2 2, D2 3, D2 4, D2 6, D2 9, D3 1, D3 3, D3 5, D4 3, D4 5, D5 1, D5 2, D5 3

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Ground Covers (all nodes) (continued)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
48.000	92.450	989.290	4.000	81.400	1,215.140	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

Subcatchment D01: DA-01	Runoff Area=3.670 ac 9.26% Impervious Runoff Depth>0.14" Flow Length=596' Tc=35.6 min CN=71 Runoff=0.23 cfs 0.043 af
Subcatchment D02: DA-02	Runoff Area=1.970 ac 0.00% Impervious Runoff Depth=0.00" Flow Length=351' Tc=43.2 min CN=36 Runoff=0.00 cfs 0.000 af
Subcatchment D03: DA-03	Runoff Area=1.390 ac 7.91% Impervious Runoff Depth>0.14" Flow Length=675' Tc=45.3 min UI Adjusted CN=71 Runoff=0.08 cfs 0.016 af
Subcatchment D04: DA-04	Runoff Area=6.950 ac 0.00% Impervious Runoff Depth>0.10" Flow Length=840' Tc=46.6 min CN=69 Runoff=0.24 cfs 0.061 af
Subcatchment D05: DA-05	Runoff Area=44.470 ac 0.00% Impervious Runoff Depth>0.19" Flow Length=2,768' Tc=104.8 min CN=74 Runoff=2.48 cfs 0.695 af
Subcatchment D06: DA-06	Runoff Area=13.270 ac 0.00% Impervious Runoff Depth>0.24" Flow Length=1,118' Tc=51.3 min CN=76 Runoff=1.61 cfs 0.269 af
Subcatchment D07: DA-07	Runoff Area=28.270 ac 0.00% Impervious Runoff Depth>0.17" Flow Length=1,885' Tc=115.9 min CN=73 Runoff=1.27 cfs 0.389 af
Subcatchment D08: DA-08	Runoff Area=4.020 ac 0.00% Impervious Runoff Depth>0.12" Flow Length=456' Tc=23.1 min CN=70 Runoff=0.26 cfs 0.041 af
Subcatchment D09: DA-09	Runoff Area=12.190 ac 0.00% Impervious Runoff Depth>0.36" Flow Length=1,053' Tc=27.4 min CN=80 Runoff=3.91 cfs 0.366 af
Subcatchment D10: DA-10	Runoff Area=2.630 ac 0.00% Impervious Runoff Depth>0.23" Flow Length=329' Tc=11.7 min CN=75 Runoff=0.74 cfs 0.049 af
Subcatchment D11: DA-11	Runoff Area=2.930 ac 0.00% Impervious Runoff Depth>0.40" Flow Length=355' Tc=10.4 min CN=81 Runoff=1.83 cfs 0.097 af
Subcatchment D12: DA-12	Runoff Area=31.830 ac 0.00% Impervious Runoff Depth>0.24" Flow Length=2,231' Tc=90.6 min CN=76 Runoff=2.60 cfs 0.625 af
Subcatchment D13: DA-13	Runoff Area=12.780 ac 0.00% Impervious Runoff Depth>0.27" Flow Length=1,166' Tc=45.3 min CN=77 Runoff=1.95 cfs 0.287 af
Subcatchment D14: DA-14	Runoff Area=47.390 ac 0.00% Impervious Runoff Depth>0.13" Flow Length=2,408' Tc=188.8 min CN=72 Runoff=1.35 cfs 0.526 af
Subcatchment D15: DA-15	Runoff Area=8.620 ac 0.00% Impervious Runoff Depth>0.36" Flow Length=880' Tc=24.7 min CN=80 Runoff=2.97 cfs 0.260 af
Subcatchment D16: DA-16	Runoff Area=0.540 ac 0.00% Impervious Runoff Depth>0.14" Flow Length=207' Tc=27.7 min CN=71 Runoff=0.04 cfs 0.006 af

Subcatchment D17: DA-17	Runoff Area=2.980 ac 0.00% Impervious Runoff Depth>0.40" Flow Length=201' Tc=10.3 min CN=81 Runoff=1.87 cfs 0.099 af
Subcatchment D18: DA-18	Runoff Area=19.860 ac 0.00% Impervious Runoff Depth>0.39" Flow Length=1,487' Tc=57.5 min CN=81 Runoff=4.16 cfs 0.641 af
Subcatchment D19: DA-19	Runoff Area=5.280 ac 0.00% Impervious Runoff Depth>0.36" Flow Length=911' Tc=26.2 min CN=80 Runoff=1.74 cfs 0.159 af
Subcatchment D20: DA-20	Runoff Area=14.890 ac 0.00% Impervious Runoff Depth>0.19" Flow Length=1,167' Tc=69.3 min CN=74 Runoff=1.09 cfs 0.240 af
Subcatchment D21: DA-21	Runoff Area=23.340 ac 0.00% Impervious Runoff Depth>0.15" Flow Length=1,815' Tc=95.3 min CN=72 Runoff=1.01 cfs 0.291 af
Subcatchment D22: DA-22	Runoff Area=17.210 ac 0.00% Impervious Runoff Depth>0.30" Flow Length=1,503' Tc=45.9 min CN=78 Runoff=2.97 cfs 0.426 af
Subcatchment D23: DA-23	Runoff Area=7.490 ac 0.00% Impervious Runoff Depth>0.16" Flow Length=653' Tc=40.4 min CN=72 Runoff=0.54 cfs 0.098 af
Subcatchment D24: DA-24	Runoff Area=13.490 ac 0.00% Impervious Runoff Depth>0.20" Flow Length=1,284' Tc=40.1 min CN=74 Runoff=1.41 cfs 0.223 af
Subcatchment D25: DA-25	Runoff Area=52.450 ac 0.00% Impervious Runoff Depth>0.20" Flow Length=2,323' Tc=42.4 min CN=74 Runoff=5.31 cfs 0.865 af
Subcatchment D26: DA-26	Runoff Area=193.480 ac 2.41% Impervious Runoff Depth>0.08" Flow Length=9,755' Tc=373.9 min CN=71 Runoff=3.22 cfs 1.249 af
Subcatchment D27: DA-27	Runoff Area=32.140 ac 50.87% Impervious Runoff Depth>0.54" Flow Length=2,563' Tc=57.3 min CN=85 Runoff=10.13 cfs 1.445 af
Subcatchment D28: DA-28	Runoff Area=9.480 ac 67.30% Impervious Runoff Depth>0.80" Flow Length=902' Tc=21.9 min CN=90 Runoff=8.71 cfs 0.634 af
Subcatchment D29: DA-29	Runoff Area=69.530 ac 10.00% Impervious Runoff Depth>0.13" Flow Length=2,977' Tc=290.4 min CN=73 Runoff=1.76 cfs 0.732 af
Subcatchment D30: DA-30	Runoff Area=36.190 ac 5.11% Impervious Runoff Depth>0.17" Flow Length=2,420' Tc=65.9 min CN=73 Runoff=2.32 cfs 0.522 af
Subcatchment D31: DA-31	Runoff Area=14.390 ac 6.74% Impervious Runoff Depth>0.16" Flow Length=1,071' Tc=30.5 min UI Adjusted CN=72 Runoff=1.25 cfs 0.190 af
Subcatchment D32: DA-32	Runoff Area=4.520 ac 9.29% Impervious Runoff Depth>0.07" Flow Length=284' Tc=25.8 min UI Adjusted CN=66 Runoff=0.08 cfs 0.025 af
Subcatchment D33: DA-33	Runoff Area=29.830 ac 18.91% Impervious Runoff Depth>0.20" Flow Length=2,004' Tc=50.3 min UI Adjusted CN=74 Runoff=2.68 cfs 0.489 af

Subcatchment D34: DA-34	Runoff Area=22.850 ac 37.33% Impervious Runoff Depth>0.33" Flow Length=1,029' Tc=33.2 min CN=79 Runoff=5.66 cfs 0.626 af
Subcatchment D35: DA-35	Runoff Area=55.090 ac 6.23% Impervious Runoff Depth>0.11" Flow Length=2,529' Tc=122.6 min UI Adjusted CN=70 Runoff=1.40 cfs 0.510 af
Subcatchment D36: DA-36	Runoff Area=4.070 ac 1.72% Impervious Runoff Depth>0.12" Flow Length=467' Tc=22.4 min CN=70 Runoff=0.27 cfs 0.042 af
Subcatchment D37: DA-37	Runoff Area=14.450 ac 76.06% Impervious Runoff Depth>0.91" Flow Length=2,155' Tc=64.8 min CN=92 Runoff=7.33 cfs 1.100 af
Subcatchment D38: DA-38	Runoff Area=4.350 ac 69.20% Impervious Runoff Depth>0.80" Flow Length=839' Tc=31.3 min CN=90 Runoff=3.19 cfs 0.290 af
Subcatchment D39: DA-39	Runoff Area=3.260 ac 88.04% Impervious Runoff Depth>1.15" Flow Length=839' Tc=37.9 min CN=95 Runoff=2.97 cfs 0.311 af
Subcatchment D40: DA-40	Runoff Area=2.160 ac 75.46% Impervious Runoff Depth>0.92" Flow Length=441' Tc=48.7 min CN=92 Runoff=1.35 cfs 0.165 af
Subcatchment D41: DA-41	Runoff Area=52.860 ac 97.14% Impervious Runoff Depth>1.30" Flow Length=2,424' Tc=99.8 min CN=97 Runoff=26.87 cfs 5.706 af
Subcatchment D42: DA-42	Runoff Area=47.920 ac 2.19% Impervious Runoff Depth>0.12" Flow Length=4,144' Tc=158.8 min UI Adjusted CN=71 Runoff=1.26 cfs 0.486 af
Subcatchment D43: DA-43	Runoff Area=5.930 ac 0.00% Impervious Runoff Depth>0.09" Flow Length=843' Tc=42.2 min CN=68 Runoff=0.16 cfs 0.045 af
Subcatchment D44: DA-44	Runoff Area=38.190 ac 2.78% Impervious Runoff Depth>0.19" Flow Length=1,750' Tc=81.3 min CN=74 Runoff=2.49 cfs 0.610 af
Subcatchment D45: DA-45	Runoff Area=6.170 ac 0.00% Impervious Runoff Depth>0.16" Flow Length=1,039' Tc=46.8 min CN=72 Runoff=0.41 cfs 0.080 af
Subcatchment D46: DA-46	Runoff Area=72.670 ac 0.00% Impervious Runoff Depth>0.26" Flow Length=3,781' Tc=70.7 min CN=77 Runoff=8.01 cfs 1.605 af
Subcatchment D47: DA-47	Runoff Area=6.430 ac 0.00% Impervious Runoff Depth>0.33" Flow Length=780' Tc=19.9 min CN=79 Runoff=2.28 cfs 0.177 af
Subcatchment D48: DA-48	Runoff Area=6.050 ac 0.00% Impervious Runoff Depth>0.08" Flow Length=774' Tc=12.6 min CN=67 Runoff=0.20 cfs 0.040 af
Subcatchment D49: DA-49	Runoff Area=12.320 ac 0.00% Impervious Runoff Depth=0.00" Flow Length=1,625' Tc=45.1 min CN=41 Runoff=0.00 cfs 0.000 af
Subcatchment D50: DA-50	Runoff Area=28.120 ac 0.00% Impervious Runoff Depth>0.05" Flow Length=2,221' Tc=32.6 min CN=65 Runoff=0.32 cfs 0.127 af

Subcatchment D51: DA-51	Runoff Area=11.550 ac 0.00% Impervious Runoff Depth>0.20" Flow Length=2,083' Tc=146.9 min CN=75 Runoff=0.59 cfs 0.194 af
Subcatchment D52: DA-52	Runoff Area=16.010 ac 4.06% Impervious Runoff Depth>0.18" Flow Length=2,531' Tc=38.7 min CN=73 Runoff=1.44 cfs 0.236 af
Subcatchment D53: DA-53	Runoff Area=32.350 ac 0.00% Impervious Runoff Depth>0.26" Flow Length=1,955' Tc=100.4 min CN=77 Runoff=2.81 cfs 0.698 af
Subcatchment D54: DA-54	Runoff Area=2.870 ac 0.00% Impervious Runoff Depth>0.25" Flow Length=393' Tc=11.9 min CN=76 Runoff=0.93 cfs 0.060 af
Link L01: L01	Inflow=0.23 cfs 0.043 af Primary=0.23 cfs 0.043 af
Link L02: L02	Inflow=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af
Link L03: L03	Inflow=0.08 cfs 0.016 af Primary=0.08 cfs 0.016 af
Link L04: L04	Inflow=0.24 cfs 0.061 af Primary=0.24 cfs 0.061 af
Link L05: L05	Inflow=2.48 cfs 0.695 af Primary=2.48 cfs 0.695 af
Link L06: L06	Inflow=1.61 cfs 0.269 af Primary=1.61 cfs 0.269 af
Link L07: L07	Inflow=1.27 cfs 0.389 af Primary=1.27 cfs 0.389 af
Link L08: L08	Inflow=0.26 cfs 0.041 af Primary=0.26 cfs 0.041 af
Link L09: L09	Inflow=3.91 cfs 0.366 af Primary=3.91 cfs 0.366 af
Link L10: L10	Inflow=0.74 cfs 0.049 af Primary=0.74 cfs 0.049 af
Link L11: L11	Inflow=1.83 cfs 0.097 af Primary=1.83 cfs 0.097 af
Link L12: L12	Inflow=2.60 cfs 0.625 af Primary=2.60 cfs 0.625 af
Link L13: L13	Inflow=1.95 cfs 0.287 af Primary=1.95 cfs 0.287 af

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Type II 24-hr 1-yr Rainfall=1.74"

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Link L14: L14	Inflow=1.35 cfs 0.526 af Primary=1.35 cfs 0.526 af
Link L15: L15	Inflow=2.97 cfs 0.260 af Primary=2.97 cfs 0.260 af
Link L16: L16	Inflow=0.04 cfs 0.006 af Primary=0.04 cfs 0.006 af
Link L17: L17	Inflow=1.87 cfs 0.099 af Primary=1.87 cfs 0.099 af
Link L18: L18	Inflow=4.16 cfs 0.641 af Primary=4.16 cfs 0.641 af
Link L19: L19	Inflow=1.74 cfs 0.159 af Primary=1.74 cfs 0.159 af
Link L20: L20	Inflow=1.09 cfs 0.240 af Primary=1.09 cfs 0.240 af
Link L21: L21	Inflow=1.01 cfs 0.291 af Primary=1.01 cfs 0.291 af
Link L22: L22	Inflow=2.97 cfs 0.426 af Primary=2.97 cfs 0.426 af
Link L23: L23	Inflow=0.54 cfs 0.098 af Primary=0.54 cfs 0.098 af
Link L24: L24	Inflow=1.41 cfs 0.223 af Primary=1.41 cfs 0.223 af
Link L25: L25	Inflow=5.31 cfs 0.865 af Primary=5.31 cfs 0.865 af
Link L26: L26	Inflow=3.22 cfs 1.249 af Primary=3.22 cfs 1.249 af
Link L27: L27	Inflow=10.13 cfs 1.445 af Primary=10.13 cfs 1.445 af
Link L28: L28	Inflow=8.71 cfs 0.634 af Primary=8.71 cfs 0.634 af
Link L29: L29	Inflow=1.76 cfs 0.732 af Primary=1.76 cfs 0.732 af
Link L30: L30	Inflow=2.32 cfs 0.522 af Primary=2.32 cfs 0.522 af

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Type II 24-hr 1-yr Rainfall=1.74"

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Link L31: L31	Inflow=1.25 cfs 0.190 af Primary=1.25 cfs 0.190 af
Link L32: L32	Inflow=0.08 cfs 0.025 af Primary=0.08 cfs 0.025 af
Link L33: L33	Inflow=2.68 cfs 0.489 af Primary=2.68 cfs 0.489 af
Link L34: L34	Inflow=5.66 cfs 0.626 af Primary=5.66 cfs 0.626 af
Link L35: L35	Inflow=1.40 cfs 0.510 af Primary=1.40 cfs 0.510 af
Link L36: L36	Inflow=0.27 cfs 0.042 af Primary=0.27 cfs 0.042 af
Link L37: L37	Inflow=7.33 cfs 1.100 af Primary=7.33 cfs 1.100 af
Link L38: L38	Inflow=3.19 cfs 0.290 af Primary=3.19 cfs 0.290 af
Link L39: L39	Inflow=2.97 cfs 0.311 af Primary=2.97 cfs 0.311 af
Link L40: L40	Inflow=1.35 cfs 0.165 af Primary=1.35 cfs 0.165 af
Link L41: L41	Inflow=26.87 cfs 5.706 af Primary=26.87 cfs 5.706 af
Link L42: L42	Inflow=1.26 cfs 0.486 af Primary=1.26 cfs 0.486 af
Link L43: L43	Inflow=0.16 cfs 0.045 af Primary=0.16 cfs 0.045 af
Link L44: L44	Inflow=2.49 cfs 0.610 af Primary=2.49 cfs 0.610 af
Link L45: L45	Inflow=0.41 cfs 0.080 af Primary=0.41 cfs 0.080 af
Link L46: L46	Inflow=8.01 cfs 1.605 af Primary=8.01 cfs 1.605 af
Link L47: L47	Inflow=2.28 cfs 0.177 af Primary=2.28 cfs 0.177 af

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Link L48: L48	Inflow=0.20 cfs 0.040 af
	Primary=0.20 cfs 0.040 af
Link L49: L49	Inflow=0.00 cfs 0.000 af
	Primary=0.00 cfs 0.000 af
Link L50: L50	Inflow=0.32 cfs 0.127 af
	Primary=0.32 cfs 0.127 af
Link L51: L51	Inflow=0.59 cfs 0.194 af
	Primary=0.59 cfs 0.194 af
Link L52: L52	Inflow=1.44 cfs 0.236 af
	Primary=1.44 cfs 0.236 af
Link L53: L53	Inflow=2.81 cfs 0.698 af
	Primary=2.81 cfs 0.698 af
Link L54: L54	Inflow=0.93 cfs 0.060 af
	Primary=0.93 cfs 0.060 af

Total Runoff Area = 1,215.140 ac Runoff Volume = 25.165 af Average Runoff Depth = 0.25"
89.44% Pervious = 1,086.830 ac 10.56% Impervious = 128.310 ac

Summary for Subcatchment D01: DA-01

Runoff = 0.23 cfs @ 12.46 hrs, Volume= 0.043 af, Depth> 0.14"
 Routed to Link L01 : L01

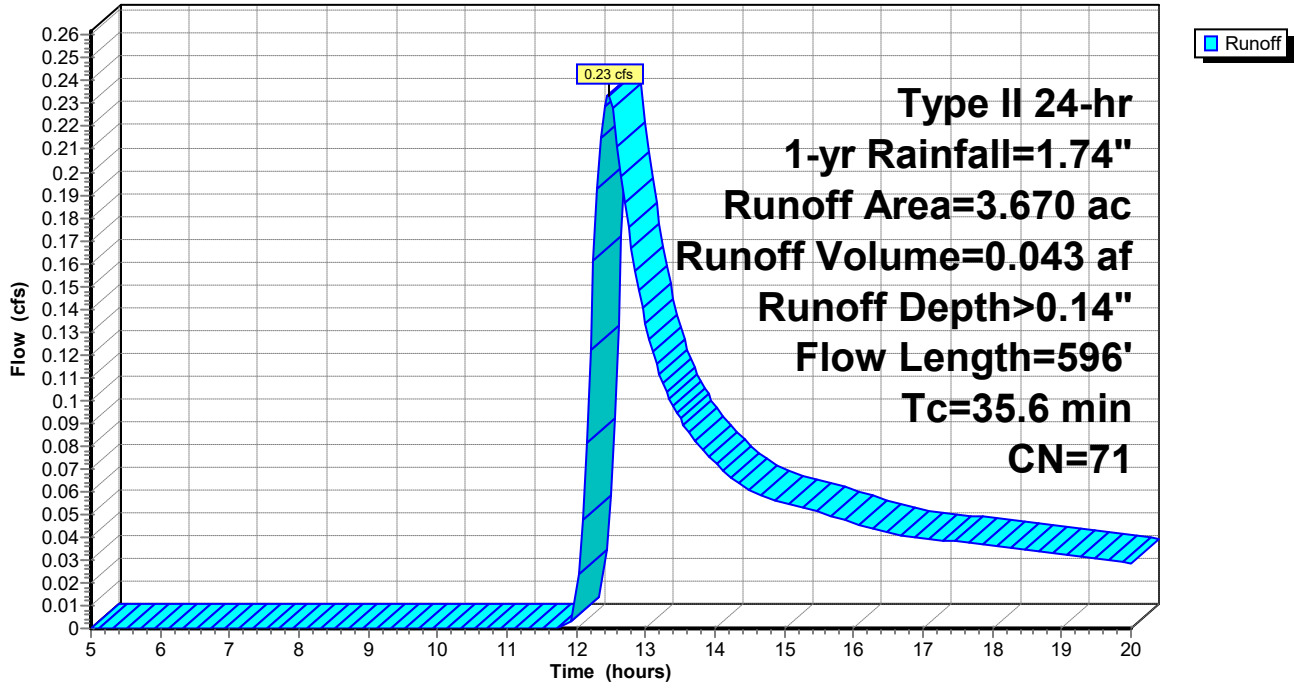
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.290	32	Woods/grass comb., Good, HSG A
1.040	72	Woods/grass comb., Good, HSG C
0.460	70	Woods, Good, HSG C
1.540	71	Meadow, non-grazed, HSG C
0.340	98	Roofs, HSG C
3.670	71	Weighted Average
3.330		90.74% Pervious Area
0.340		9.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.1	100	0.0230	0.07		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
4.2	170	0.0180	0.67		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
6.3	326	0.0150	0.86		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
35.6	596	Total			

Subcatchment D01: DA-01

Hydrograph



Summary for Subcatchment D02: DA-02

[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
 Routed to Link L02 : L02

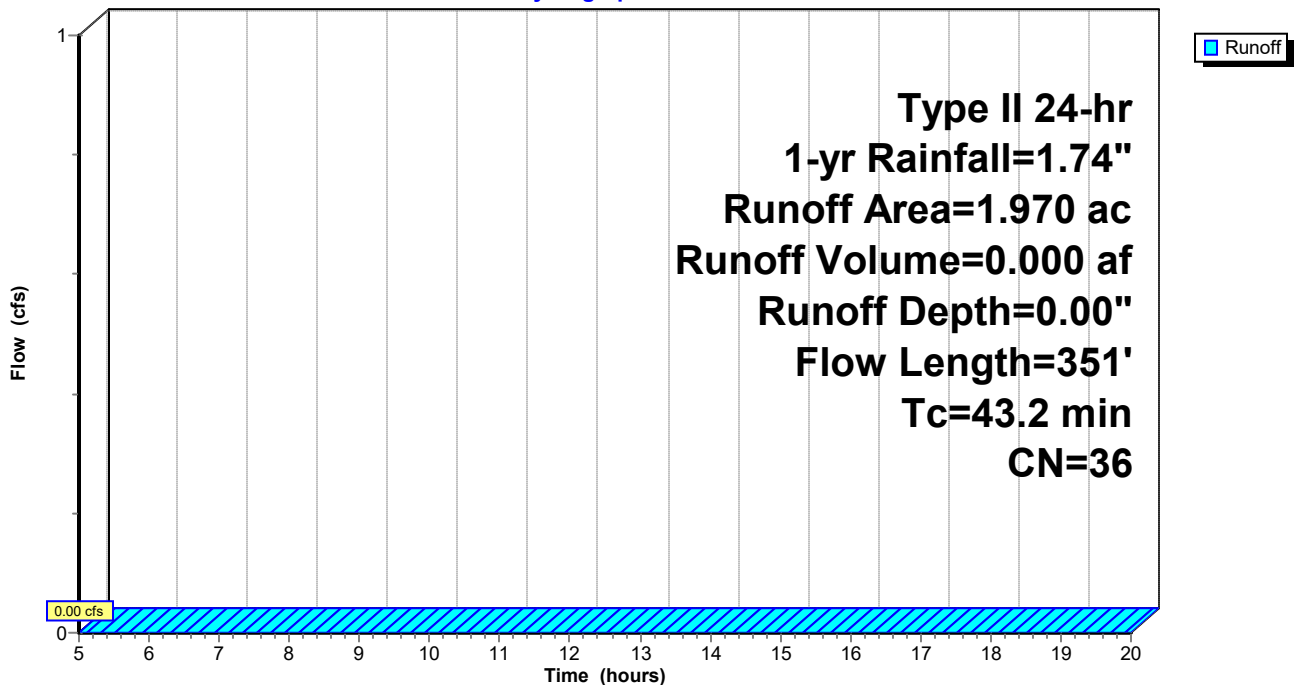
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.610	32	Woods/grass comb., Good, HSG A
0.140	72	Woods/grass comb., Good, HSG C
1.110	30	Woods, Good, HSG A
0.110	70	Woods, Good, HSG C
1.970	36	Weighted Average
1.970		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
36.6	100	0.0090	0.05		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
6.6	251	0.0160	0.63		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
43.2	351	Total			

Subcatchment D02: DA-02

Hydrograph



Summary for Subcatchment D03: DA-03

Runoff = 0.08 cfs @ 12.62 hrs, Volume= 0.016 af, Depth> 0.14"
 Routed to Link L03 : L03

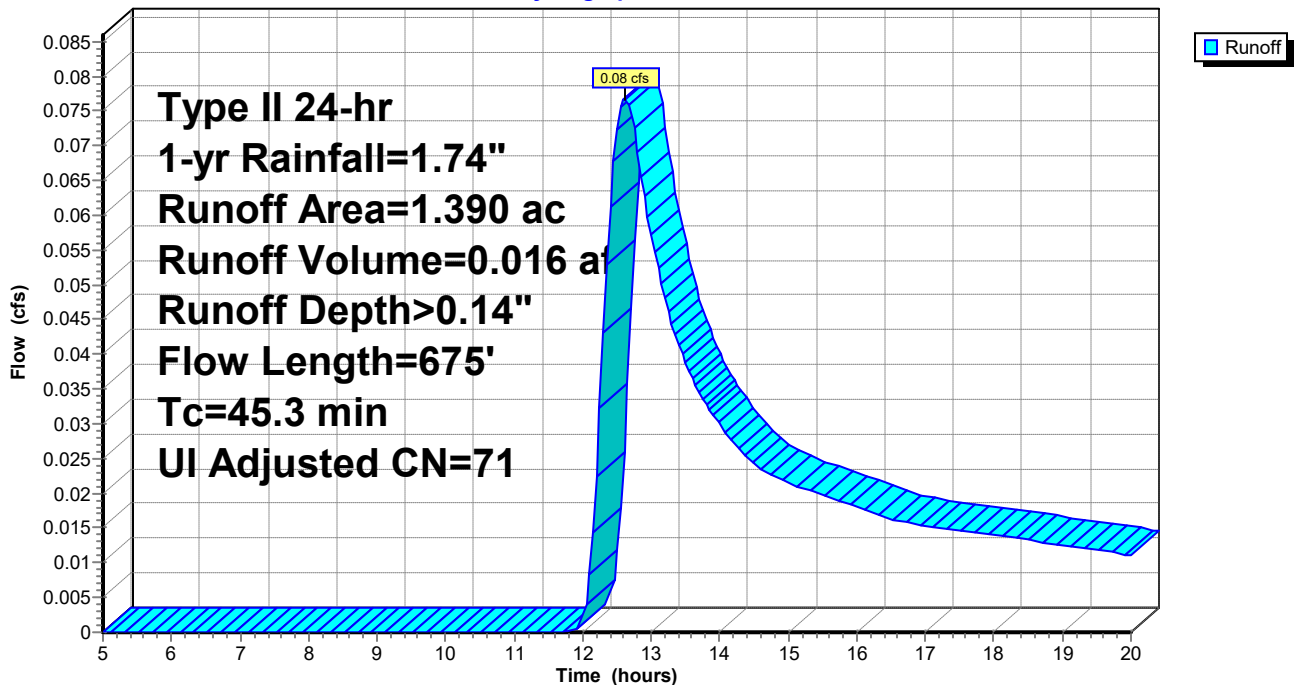
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Adj	Description
0.960	70		Woods, Good, HSG C
0.320	71		Meadow, non-grazed, HSG C
0.110	98		Unconnected pavement, HSG C
1.390	72	71	Weighted Average, UI Adjusted
1.280			92.09% Pervious Area
0.110			7.91% Impervious Area
0.110			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
35.1	100	0.0400	0.05		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 2.09"
4.4	203	0.0240	0.77		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
5.8	372	0.0050	1.06		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
45.3	675	Total			

Subcatchment D03: DA-03

Hydrograph



Summary for Subcatchment D04: DA-04

Runoff = 0.24 cfs @ 12.71 hrs, Volume= 0.061 af, Depth> 0.10"
 Routed to Link L04 : L04

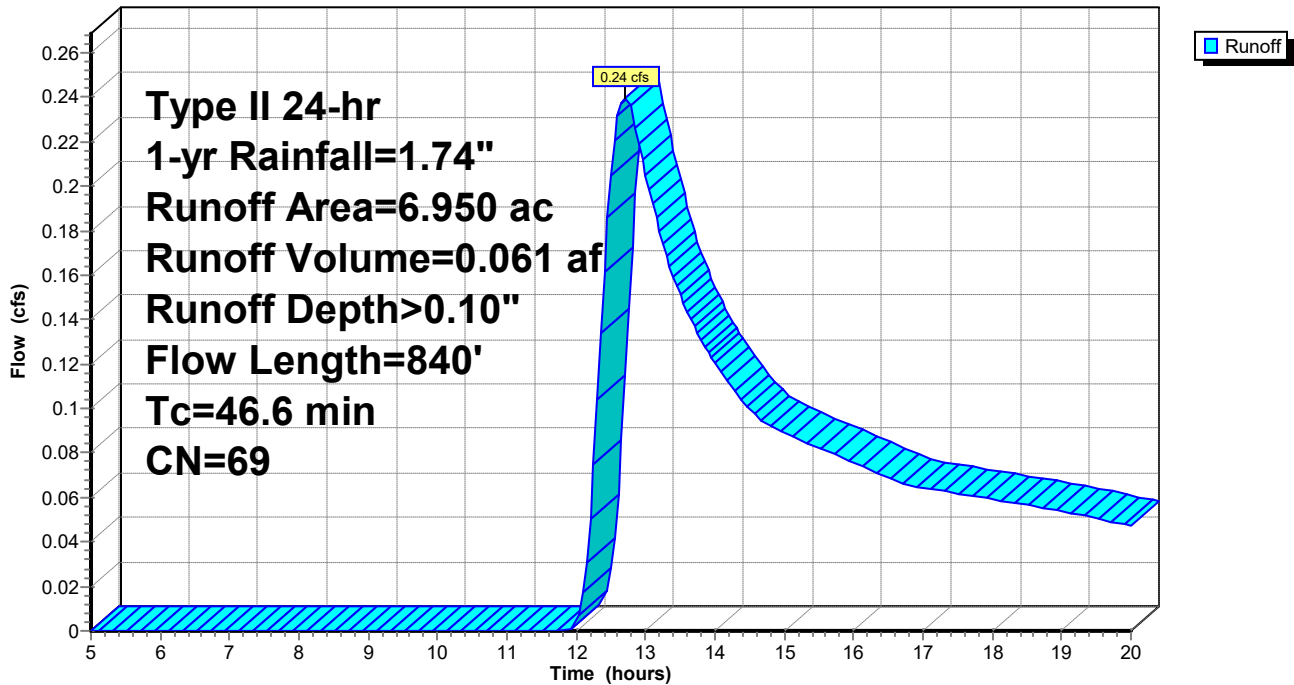
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.230	30	Woods, Good, HSG A
6.720	70	Woods, Good, HSG C
6.950	69	Weighted Average
6.950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.1	100	0.0190	0.06		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
19.5	740	0.0160	0.63		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
46.6	840	Total			

Subcatchment D04: DA-04

Hydrograph



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Type II 24-hr 1-yr Rainfall=1.74"

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Summary for Subcatchment D05: DA-05

Runoff = 2.48 cfs @ 13.50 hrs, Volume= 0.695 af, Depth> 0.19"
 Routed to Link L05 : L05

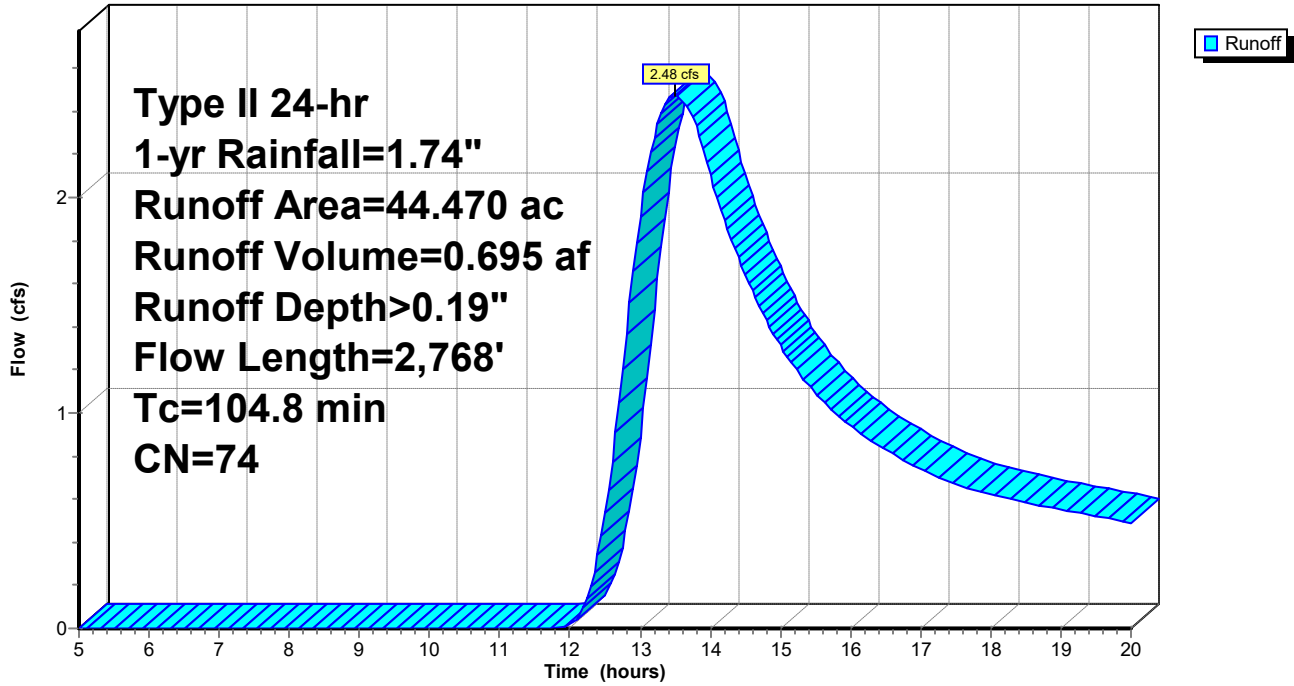
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.400	30	Woods, Good, HSG A
0.610	55	Woods, Good, HSG B
27.210	72	Woods/grass comb., Good, HSG C
1.230	58	Legumes, straight row, Good, HSG A
1.580	72	Legumes, straight row, Good, HSG B
13.440	81	Legumes, straight row, Good, HSG C
44.470	74	Weighted Average
44.470		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0070	0.19		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
29.4	1,123	0.0050	0.64		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
66.5	1,545	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
104.8	2,768	Total			

Subcatchment D05: DA-05

Hydrograph



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Type II 24-hr 1-yr Rainfall=1.74"

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Summary for Subcatchment D06: DA-06

Runoff = 1.61 cfs @ 12.62 hrs, Volume= 0.269 af, Depth> 0.24"
 Routed to Link L06 : L06

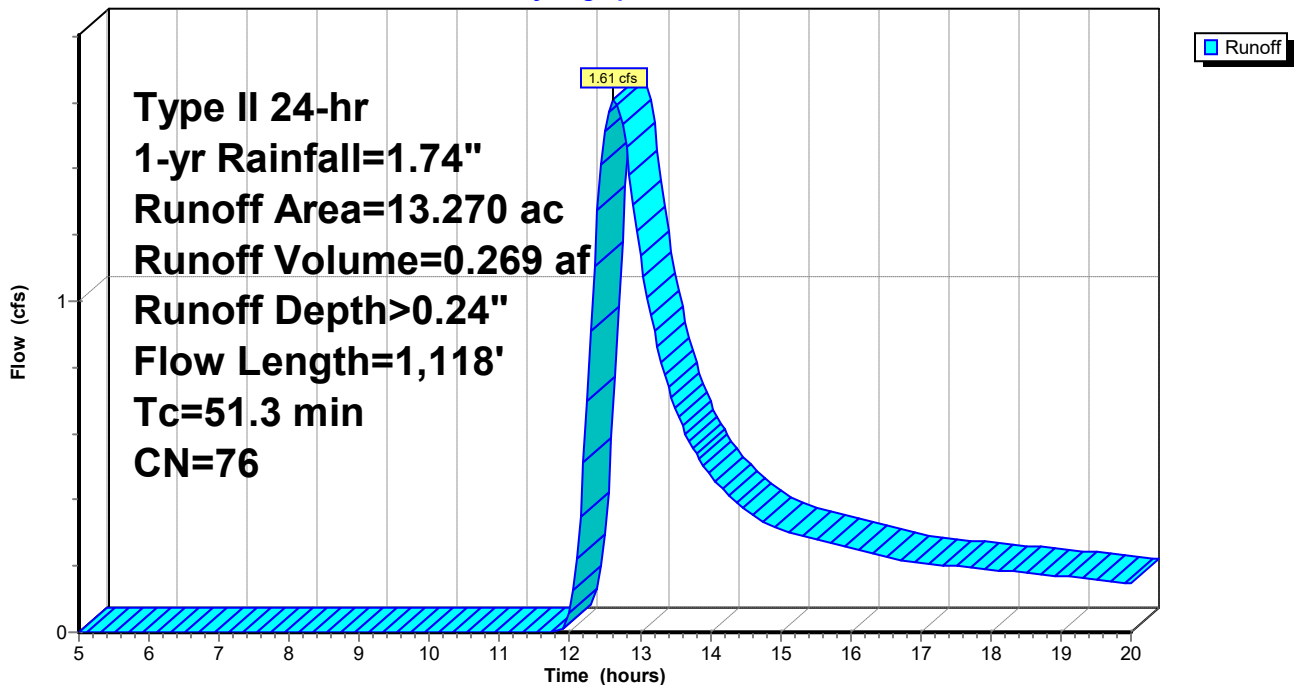
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.420	55	Woods, Good, HSG B
1.900	70	Woods, Good, HSG C
1.160	58	Legumes, straight row, Good, HSG A
0.950	72	Legumes, straight row, Good, HSG B
8.840	81	Legumes, straight row, Good, HSG C
13.270	76	Weighted Average
13.270		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.5	100	0.0005	0.07		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
23.9	1,000	0.0060	0.70		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.9	18	0.0010	0.16		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
51.3	1,118	Total			

Subcatchment D06: DA-06

Hydrograph



Summary for Subcatchment D07: DA-07

Runoff = 1.27 cfs @ 13.74 hrs, Volume= 0.389 af, Depth> 0.17"
 Routed to Link L07 : L07

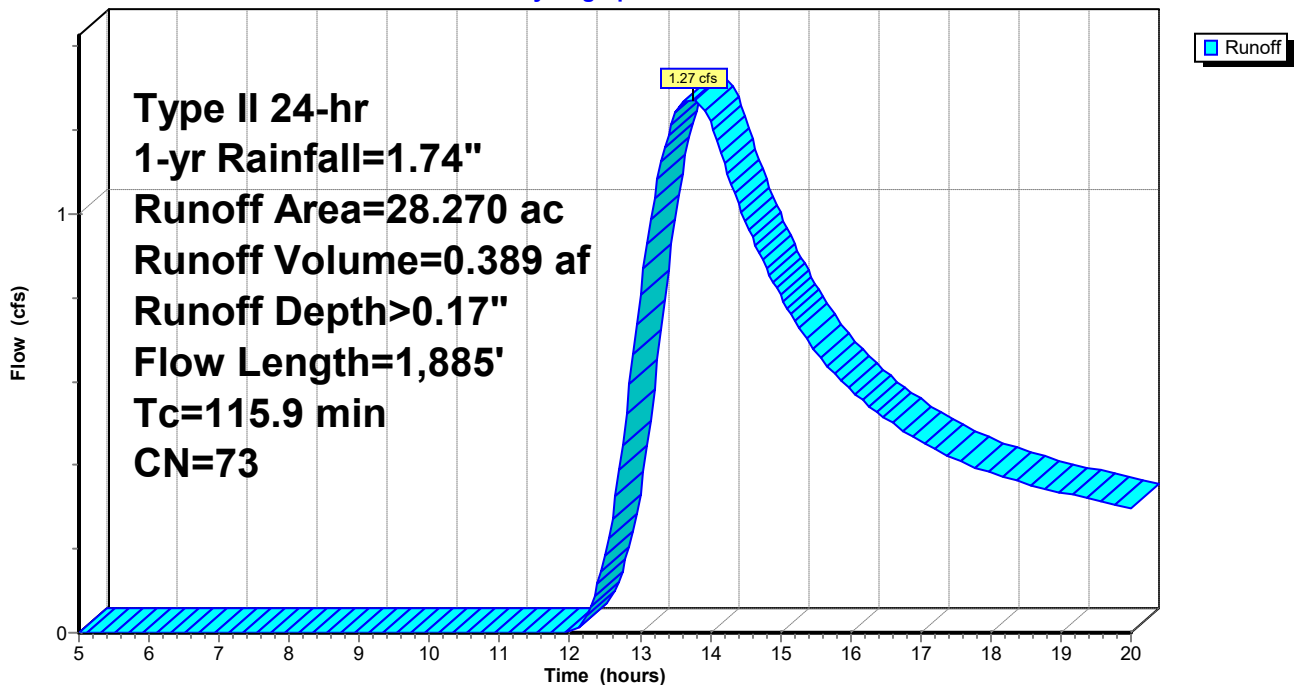
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
20.280	70	Woods, Good, HSG C
7.990	81	Legumes, straight row, Good, HSG C
28.270	73	Weighted Average
28.270		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	100	0.0050	0.16		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
8.9	371	0.0060	0.70		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
20.6	390	0.0040	0.32		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
76.3	1,024	0.0020	0.22		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
115.9	1,885	Total			

Subcatchment D07: DA-07

Hydrograph



Summary for Subcatchment D08: DA-08

Runoff = 0.26 cfs @ 12.27 hrs, Volume= 0.041 af, Depth> 0.12"
 Routed to Link L08 : L08

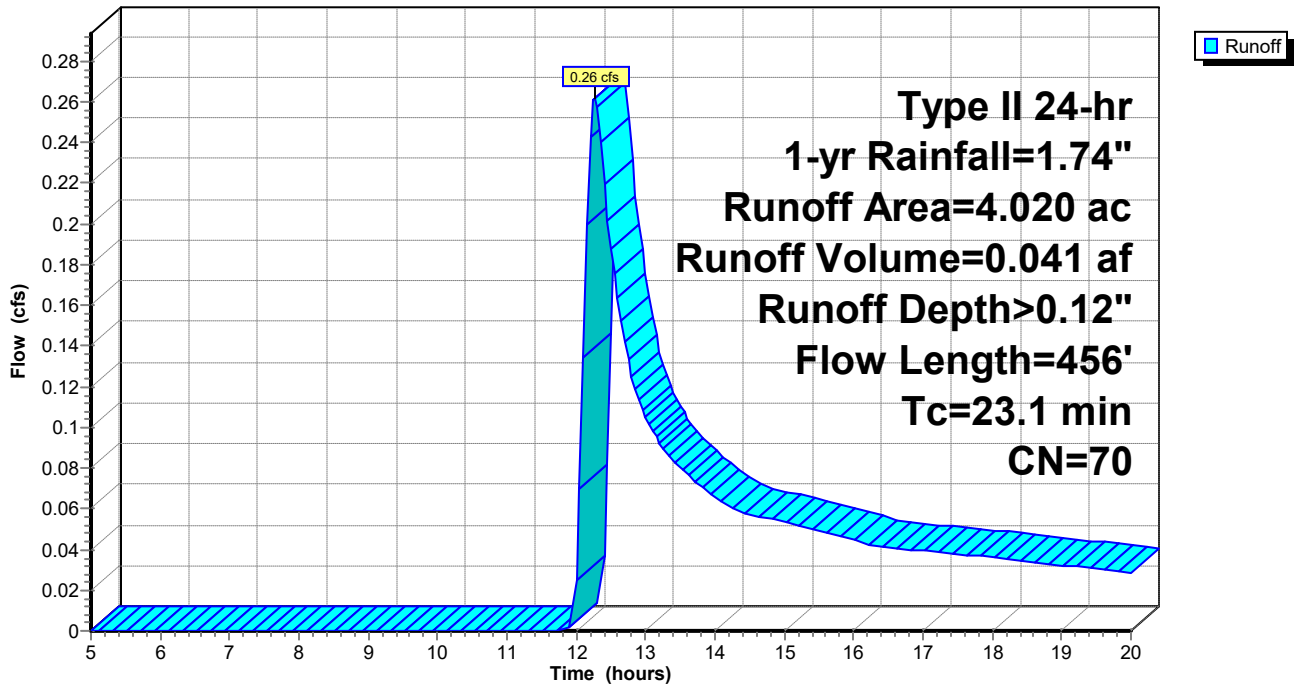
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.680	58	Woods/grass comb., Good, HSG B
3.340	72	Woods/grass comb., Good, HSG C
4.020	70	Weighted Average
4.020		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.3	100	0.0340	0.12		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
8.8	356	0.0180	0.67		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
23.1	456	Total			

Subcatchment D08: DA-08

Hydrograph



Summary for Subcatchment D09: DA-09

Runoff = 3.91 cfs @ 12.25 hrs, Volume= 0.366 af, Depth> 0.36"
 Routed to Link L09 : L09

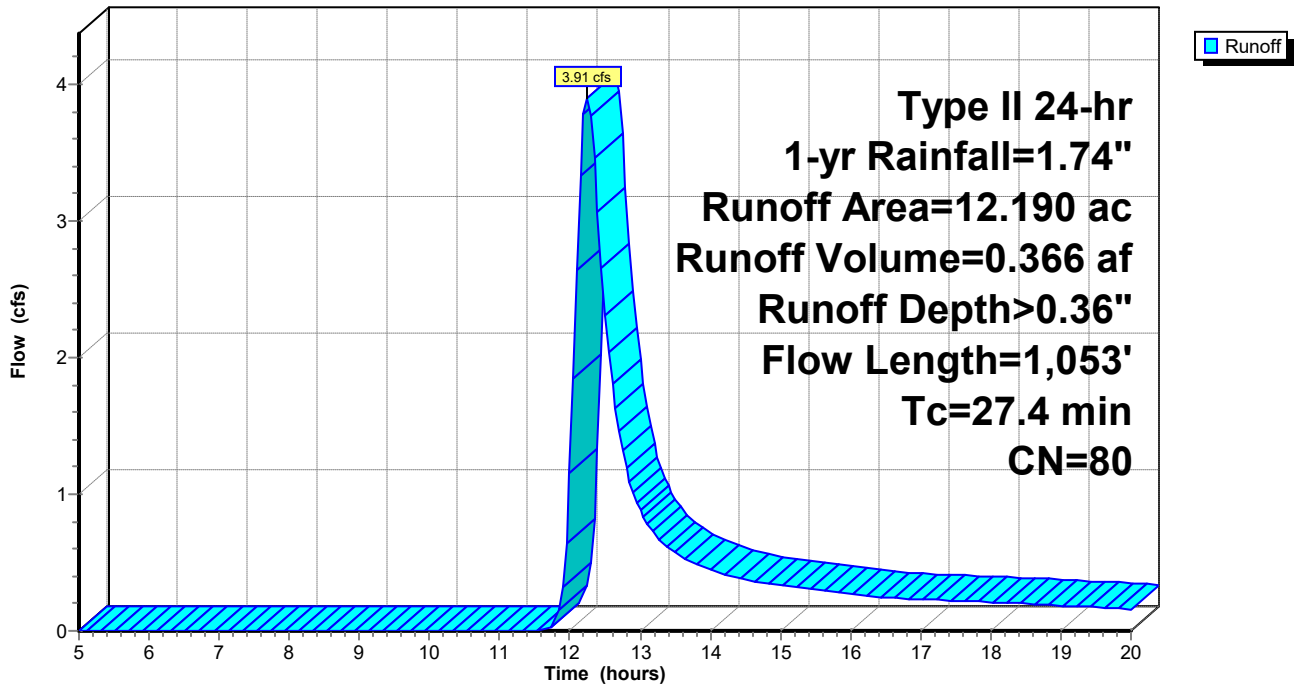
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
1.710	72	Woods/grass comb., Good, HSG C
10.480	81	Legumes, straight row, Good, HSG C
12.190	80	Weighted Average
12.190		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.0100	0.22		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
19.7	953	0.0080	0.80		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
27.4	1,053	Total			

Subcatchment D09: DA-09

Hydrograph



Summary for Subcatchment D10: DA-10

Runoff = 0.74 cfs @ 12.07 hrs, Volume= 0.049 af, Depth> 0.23"
 Routed to Link L10 : L10

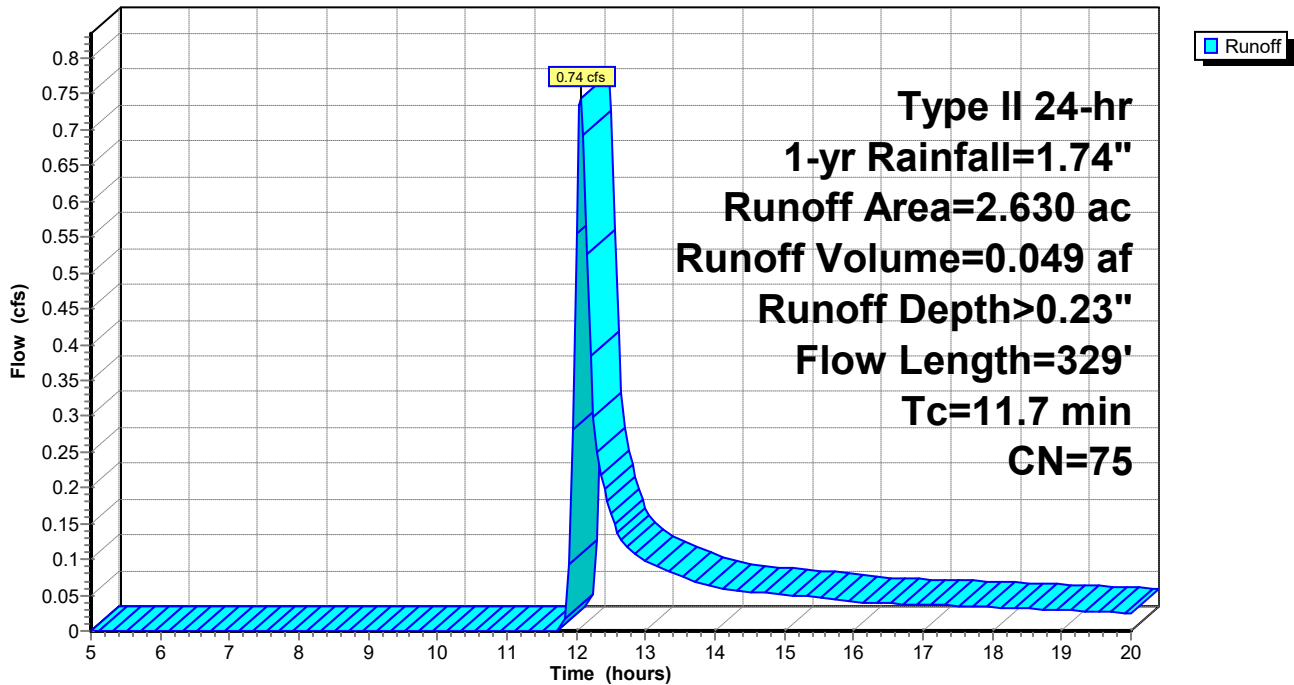
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
1.840	72	Woods/grass comb., Good, HSG C
0.790	81	Legumes, straight row, Good, HSG C
2.630	75	Weighted Average
2.630		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.4	100	0.0080	0.20		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
2.2	186	0.0250	1.42		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.1	43	0.0170	0.65		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
11.7	329	Total			

Subcatchment D10: DA-10

Hydrograph



Summary for Subcatchment D11: DA-11

Runoff = 1.83 cfs @ 12.04 hrs, Volume= 0.097 af, Depth> 0.40"
 Routed to Link L11 : L11

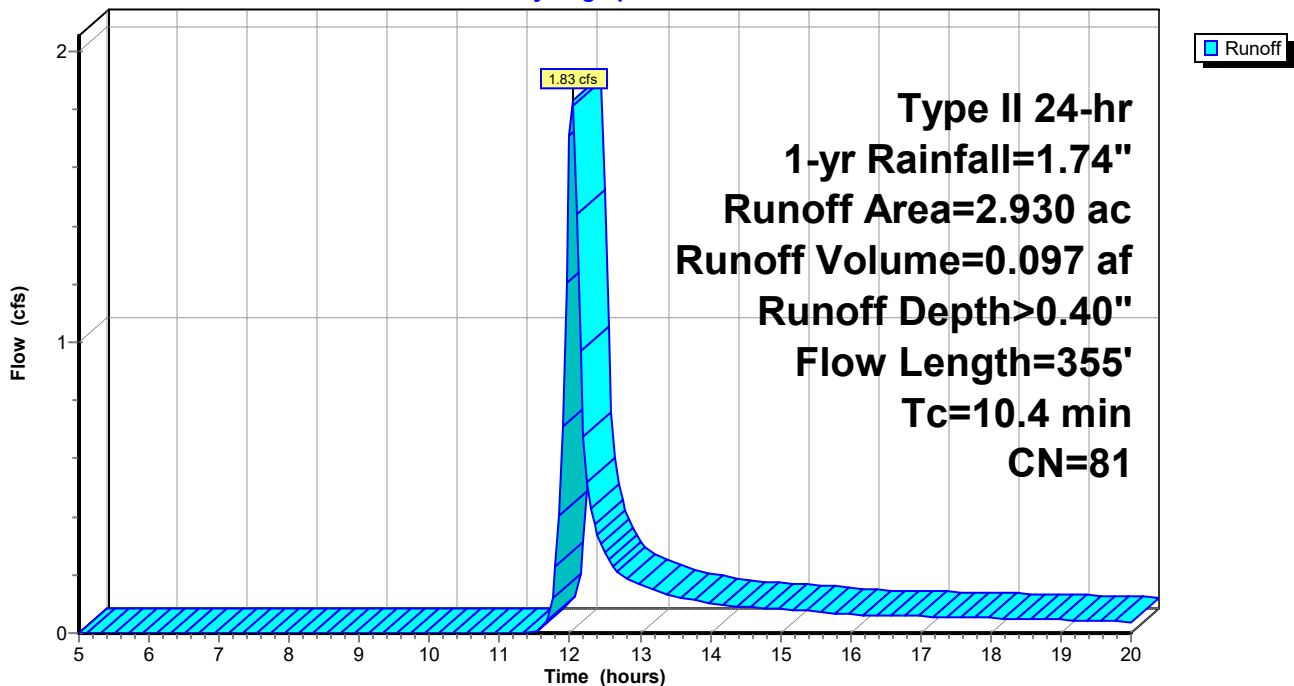
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
2.930	81	Legumes, straight row, Good, HSG C
2.930		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.9	100	0.0130	0.24		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
3.5	255	0.0180	1.21		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
10.4	355	Total			

Subcatchment D11: DA-11

Hydrograph



Summary for Subcatchment D12: DA-12

Runoff = 2.60 cfs @ 13.21 hrs, Volume= 0.625 af, Depth> 0.24"
 Routed to Link L12 : L12

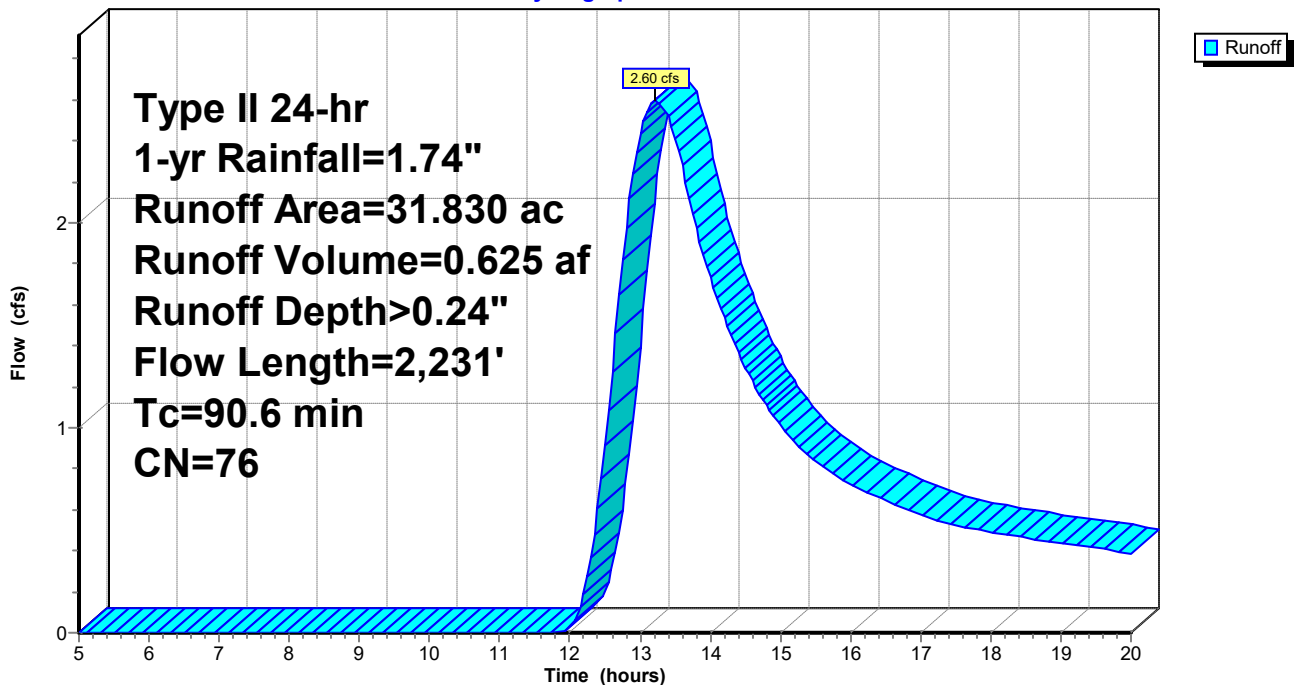
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
1.770	72	Woods/grass comb., Good, HSG C
5.290	55	Woods, Good, HSG B
0.150	72	Legumes, straight row, Good, HSG B
24.620	81	Legumes, straight row, Good, HSG C
31.830	76	Weighted Average
31.830		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.5	100	0.0005	0.07		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
24.7	1,193	0.0080	0.80		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
40.4	938	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
90.6	2,231	Total			

Subcatchment D12: DA-12

Hydrograph



Summary for Subcatchment D13: DA-13

Runoff = 1.95 cfs @ 12.53 hrs, Volume= 0.287 af, Depth> 0.27"
 Routed to Link L13 : L13

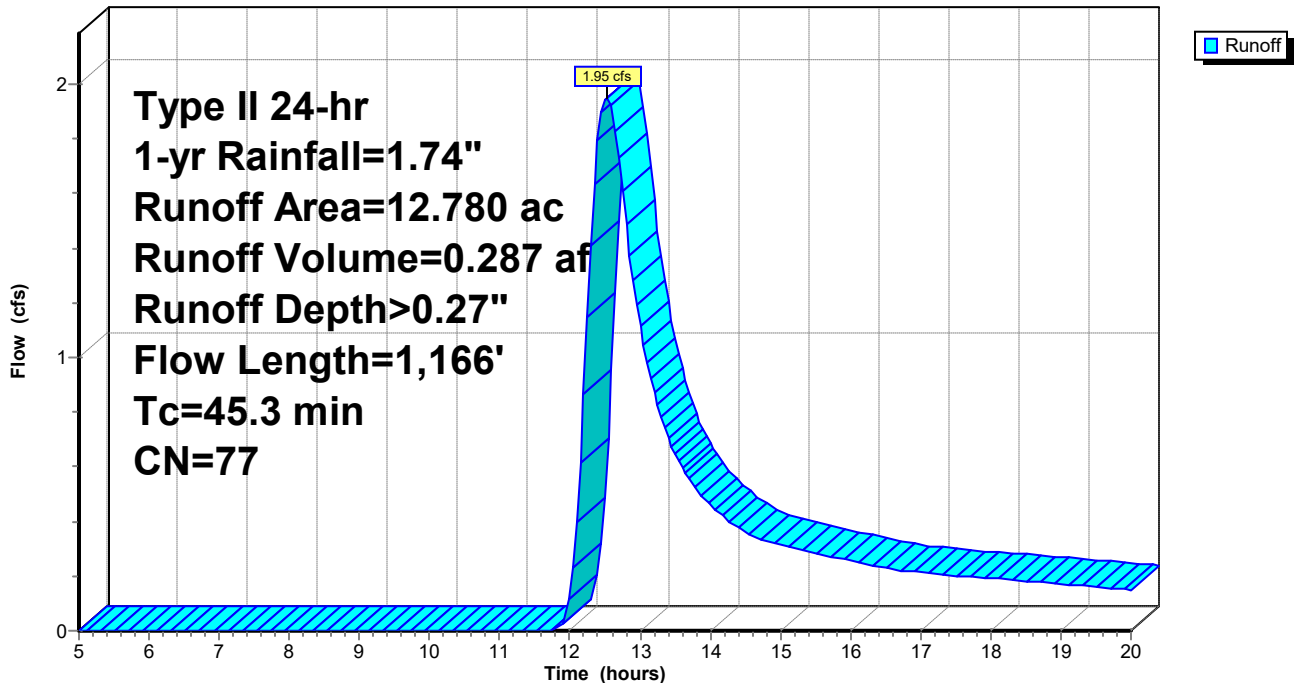
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
1.730	55	Woods, Good, HSG B
0.960	70	Woods, Good, HSG C
0.180	72	Legumes, straight row, Good, HSG B
9.910	81	Legumes, straight row, Good, HSG C
12.780	77	Weighted Average
12.780		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.0100	0.22		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
6.8	350	0.0090	0.85		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
30.8	716	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
45.3	1,166	Total			

Subcatchment D13: DA-13

Hydrograph



Summary for Subcatchment D14: DA-14

Runoff = 1.35 cfs @ 14.92 hrs, Volume= 0.526 af, Depth> 0.13"
 Routed to Link L14 : L14

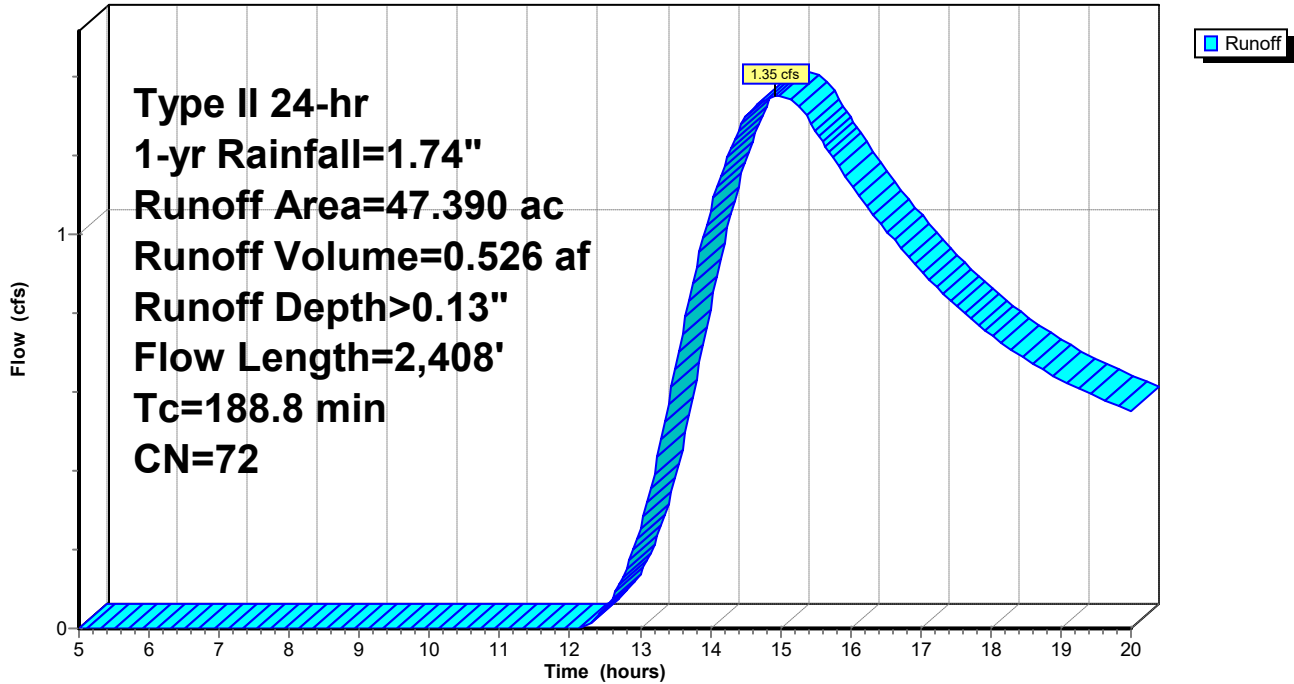
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
9.270	58	Woods/grass comb., Good, HSG B
17.240	72	Woods/grass comb., Good, HSG C
1.100	58	Legumes, straight row, Good, HSG A
1.340	72	Legumes, straight row, Good, HSG B
18.440	81	Legumes, straight row, Good, HSG C
47.390	72	Weighted Average
47.390		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	100	0.0170	0.27		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
11.8	607	0.0090	0.85		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
36.7	697	0.0040	0.32		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
92.8	880	0.0010	0.16		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
41.3	124	0.0001	0.05		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
188.8	2,408	Total			

Subcatchment D14: DA-14

Hydrograph



Summary for Subcatchment D15: DA-15

Runoff = 2.97 cfs @ 12.21 hrs, Volume= 0.260 af, Depth> 0.36"
 Routed to Link L15 : L15

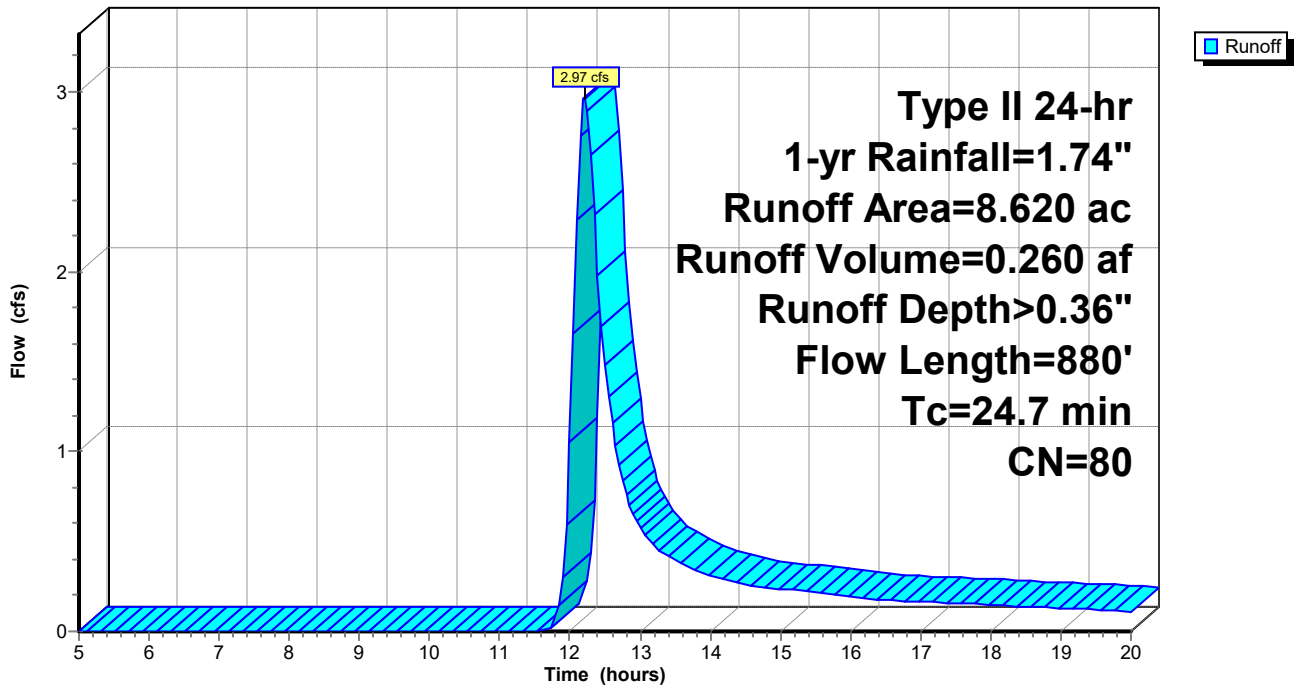
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.820	70	Woods, Good, HSG C
0.240	71	Meadow, non-grazed, HSG C
7.560	81	Legumes, straight row, Good, HSG C
8.620	80	Weighted Average
8.620		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	100	0.0110	0.23		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
17.3	780	0.0070	0.75		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
24.7	880	Total			

Subcatchment D15: DA-15

Hydrograph



Summary for Subcatchment D16: DA-16

Runoff = 0.04 cfs @ 12.33 hrs, Volume= 0.006 af, Depth> 0.14"
 Routed to Link L16 : L16

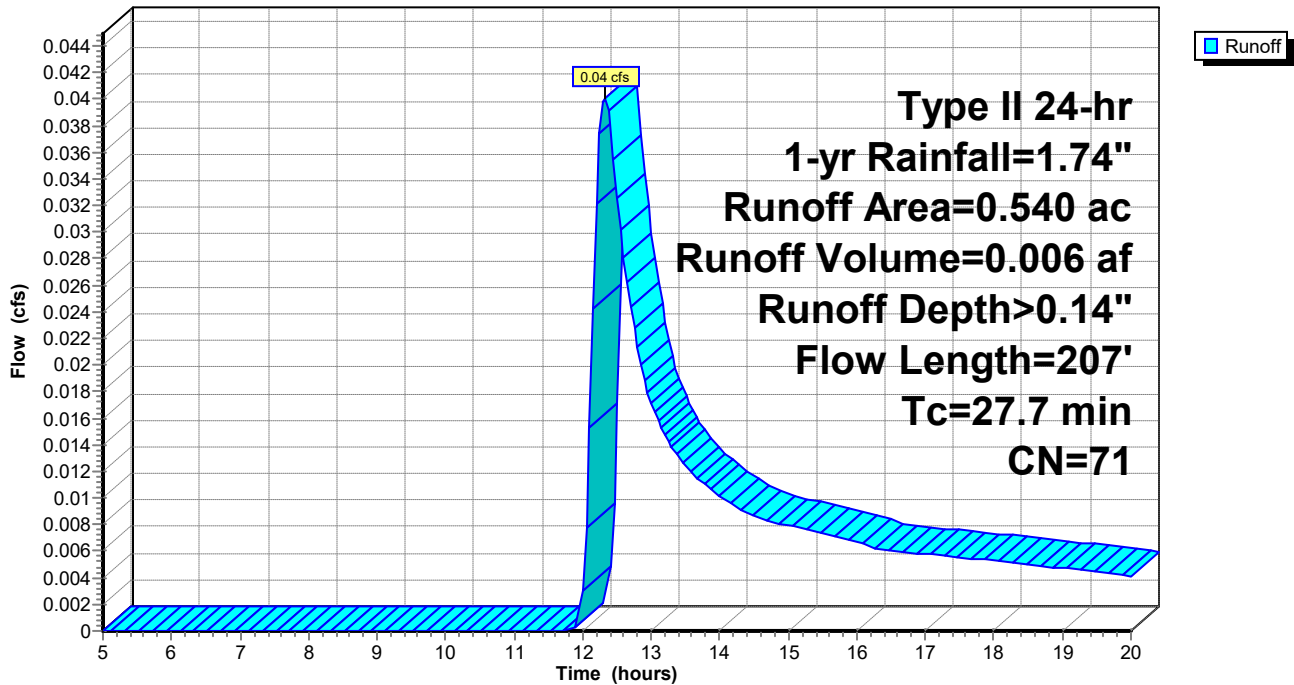
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.250	70	Woods, Good, HSG C
0.290	71	Meadow, non-grazed, HSG C
0.540	71	Weighted Average
0.540		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.4	60	0.0240	0.06		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
9.3	40	0.0160	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
2.0	107	0.0170	0.91		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
27.7	207	Total			

Subcatchment D16: DA-16

Hydrograph



Summary for Subcatchment D17: DA-17

Runoff = 1.87 cfs @ 12.03 hrs, Volume= 0.099 af, Depth> 0.40"
 Routed to Link L17 : L17

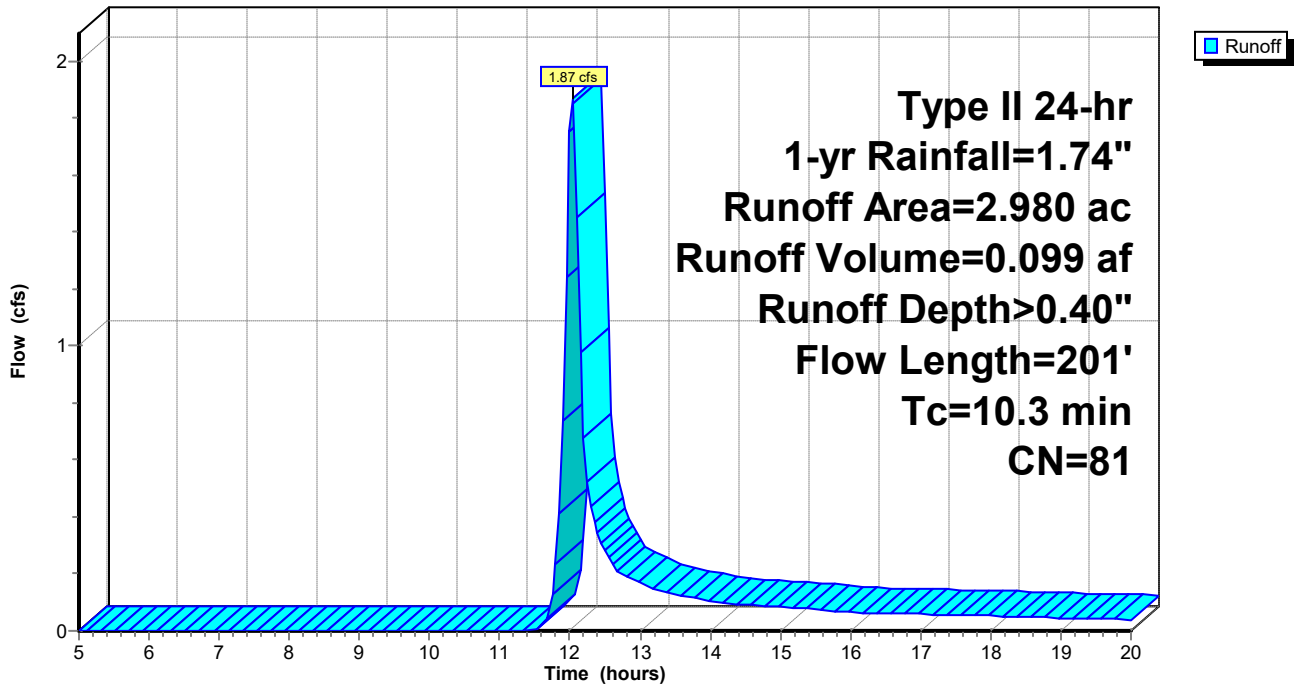
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.080	71	Meadow, non-grazed, HSG C
2.900	81	Legumes, straight row, Good, HSG C
2.980	81	Weighted Average
2.980		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0070	0.19		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
1.4	101	0.0170	1.17		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
10.3	201	Total			

Subcatchment D17: DA-17

Hydrograph



Summary for Subcatchment D18: DA-18

Runoff = 4.16 cfs @ 12.67 hrs, Volume= 0.641 af, Depth> 0.39"
 Routed to Link L18 : L18

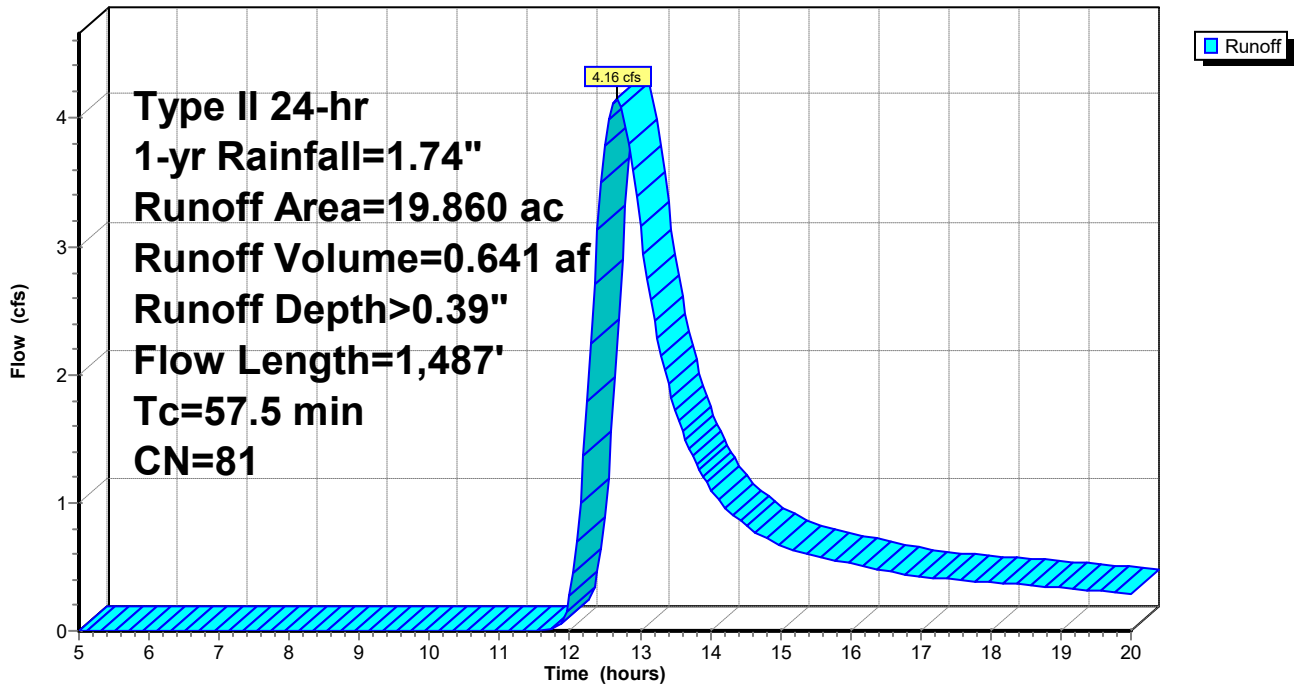
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
19.860	81	Legumes, straight row, Good, HSG C
19.860		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0070	0.19		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
10.2	460	0.0070	0.75		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
38.4	927	0.0020	0.40		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
57.5	1,487	Total			

Subcatchment D18: DA-18

Hydrograph



Summary for Subcatchment D19: DA-19

Runoff = 1.74 cfs @ 12.23 hrs, Volume= 0.159 af, Depth> 0.36"
 Routed to Link L19 : L19

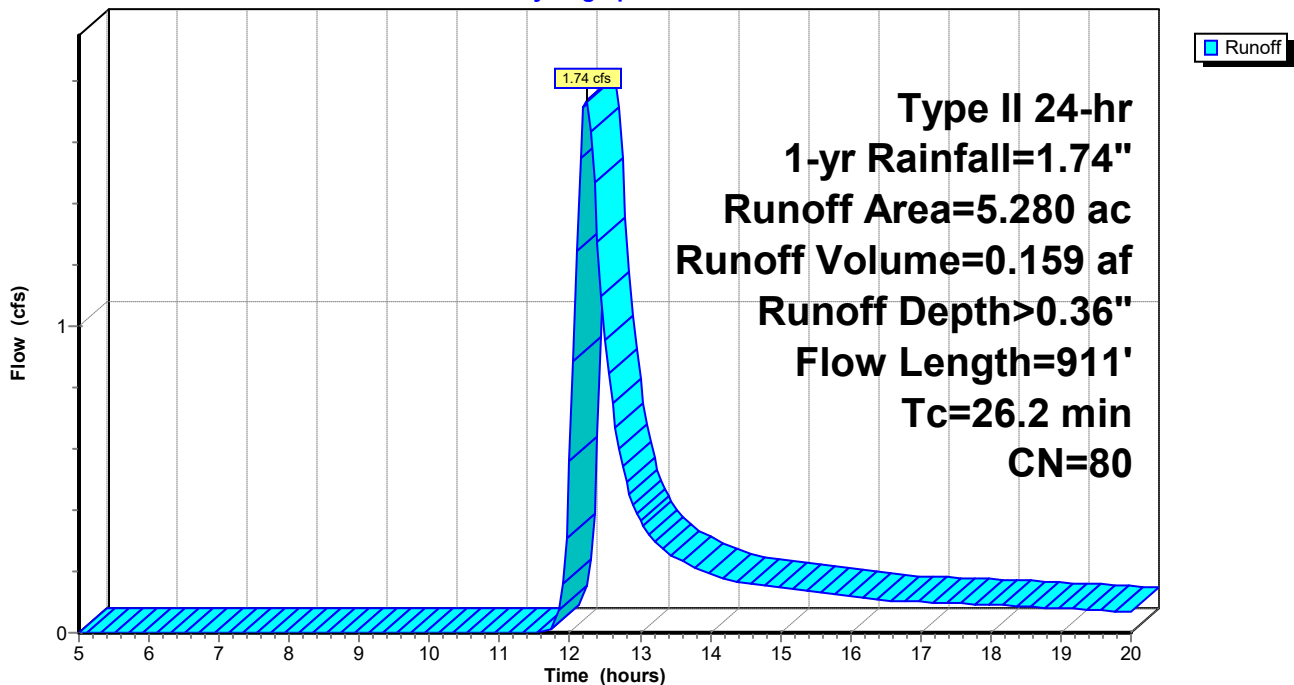
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.400	70	Woods, Good, HSG C
4.880	81	Legumes, straight row, Good, HSG C
5.280	80	Weighted Average
5.280		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.0100	0.22		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
4.7	241	0.0090	0.85		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
3.5	104	0.0100	0.50		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
10.3	466	0.0070	0.75		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
26.2	911	Total			

Subcatchment D19: DA-19

Hydrograph



Summary for Subcatchment D20: DA-20

Runoff = 1.09 cfs @ 12.93 hrs, Volume= 0.240 af, Depth> 0.19"
 Routed to Link L20 : L20

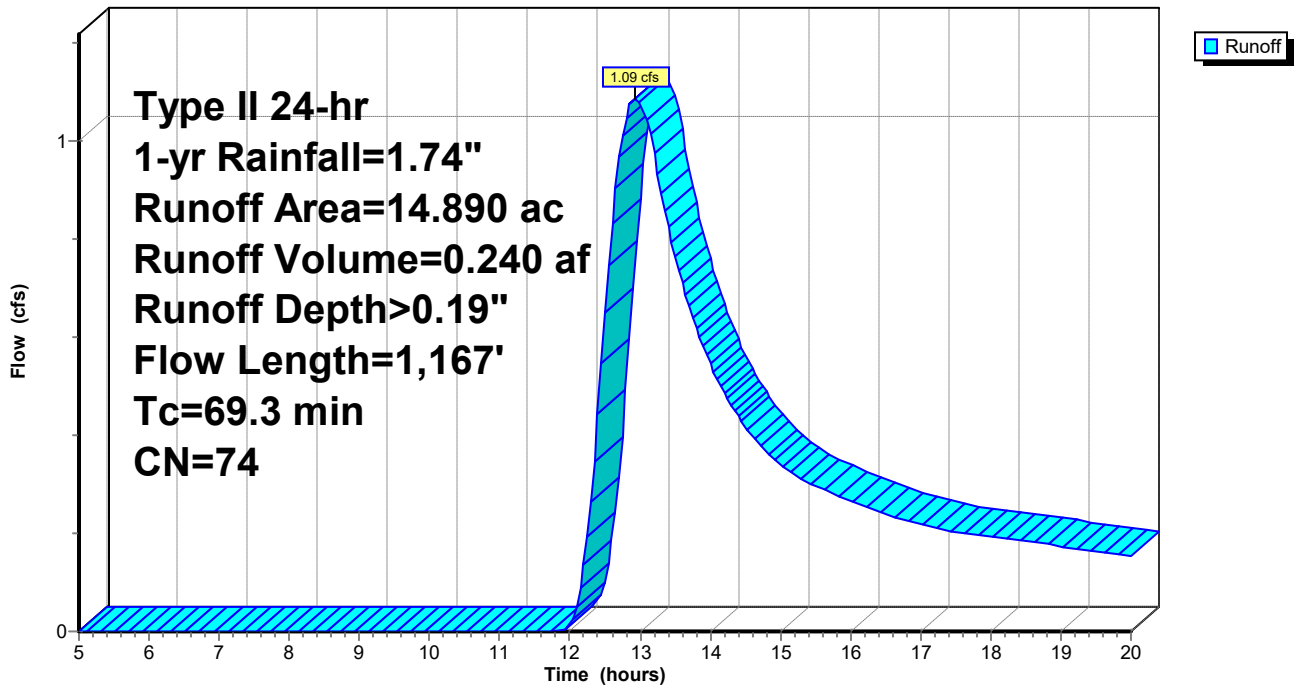
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
3.910	72	Woods/grass comb., Good, HSG C
6.900	70	Woods, Good, HSG C
4.080	81	Legumes, straight row, Good, HSG C
14.890	74	Weighted Average
14.890		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.8	100	0.0510	0.05		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 2.09"
37.5	1,067	0.0090	0.47		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
69.3	1,167	Total			

Subcatchment D20: DA-20

Hydrograph



Summary for Subcatchment D21: DA-21

Runoff = 1.01 cfs @ 13.44 hrs, Volume= 0.291 af, Depth> 0.15"
 Routed to Link L21 : L21

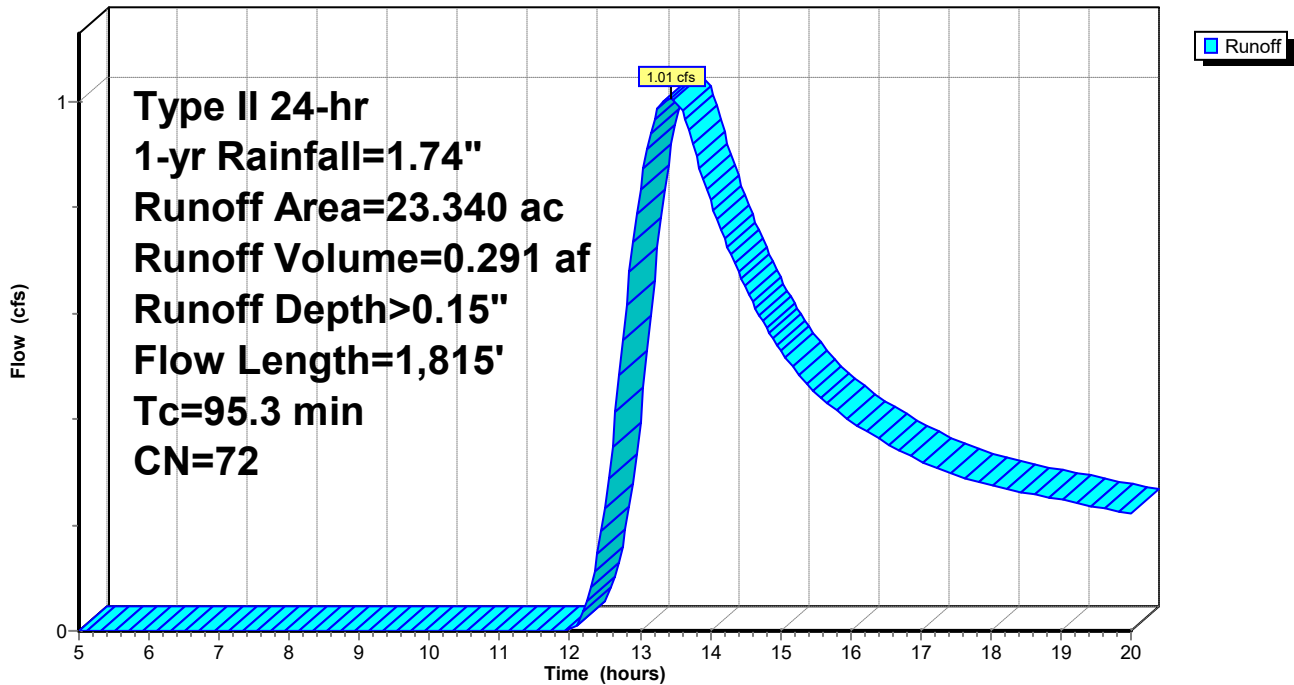
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
22.270	72	Woods/grass comb., Good, HSG C
1.070	81	Legumes, straight row, Good, HSG C
23.340	72	Weighted Average
23.340		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.5	100	0.0340	0.08		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
73.8	1,715	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
95.3	1,815	Total			

Subcatchment D21: DA-21

Hydrograph



Summary for Subcatchment D22: DA-22

Runoff = 2.97 cfs @ 12.52 hrs, Volume= 0.426 af, Depth> 0.30"
 Routed to Link L22 : L22

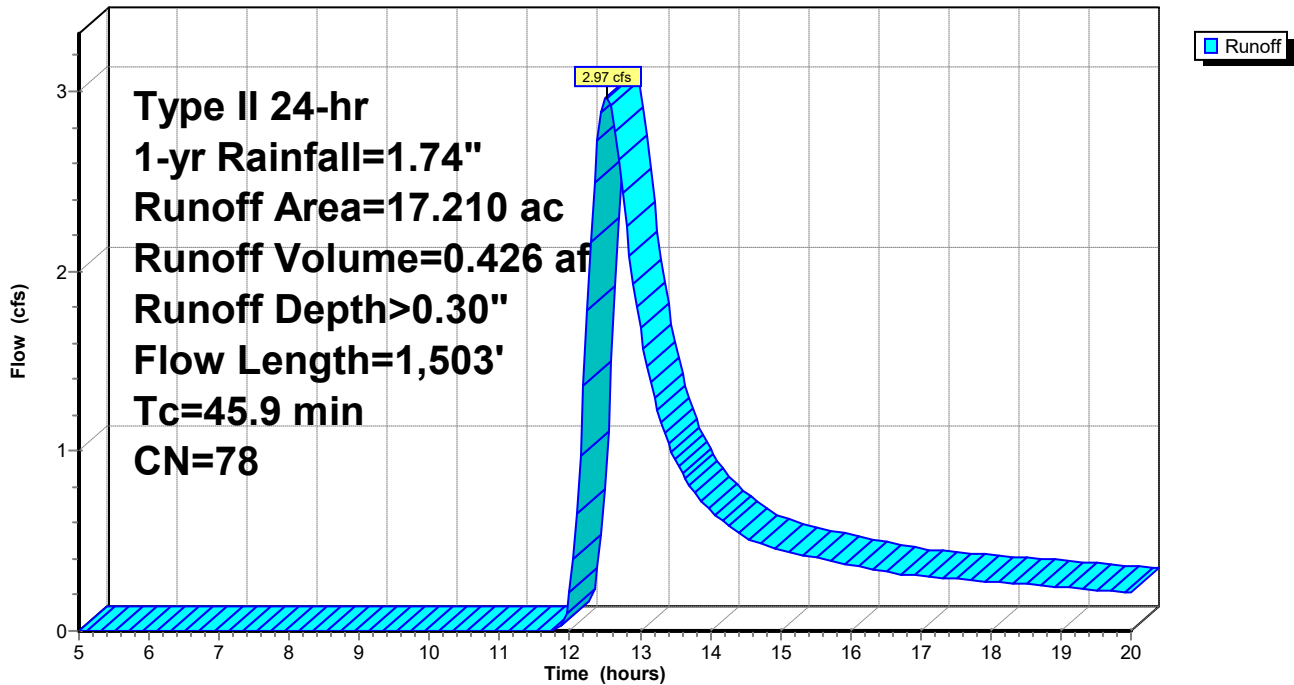
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
6.190	72	Woods/grass comb., Good, HSG C
11.020	81	Legumes, straight row, Good, HSG C
17.210	78	Weighted Average
17.210		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0120	0.23		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
32.5	1,361	0.0060	0.70		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
6.3	42	0.0005	0.11		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
45.9	1,503	Total			

Subcatchment D22: DA-22

Hydrograph



Summary for Subcatchment D23: DA-23

Runoff = 0.54 cfs @ 12.52 hrs, Volume= 0.098 af, Depth> 0.16"
 Routed to Link L23 : L23

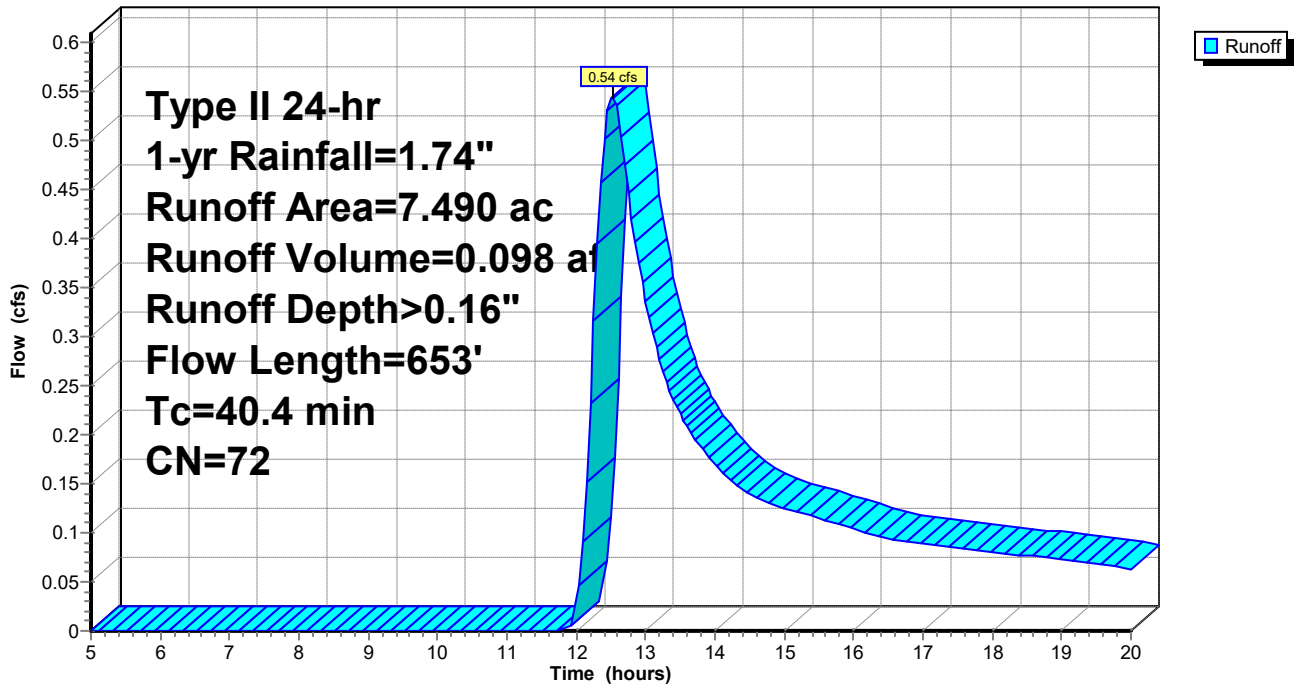
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
7.490	72	Woods/grass comb., Good, HSG C
7.490		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	100	0.0120	0.08		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
1.0	48	0.0140	0.83		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
17.7	505	0.0090	0.47		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
40.4	653	Total			

Subcatchment D23: DA-23

Hydrograph



Summary for Subcatchment D24: DA-24

Runoff = 1.41 cfs @ 12.48 hrs, Volume= 0.223 af, Depth> 0.20"
 Routed to Link L24 : L24

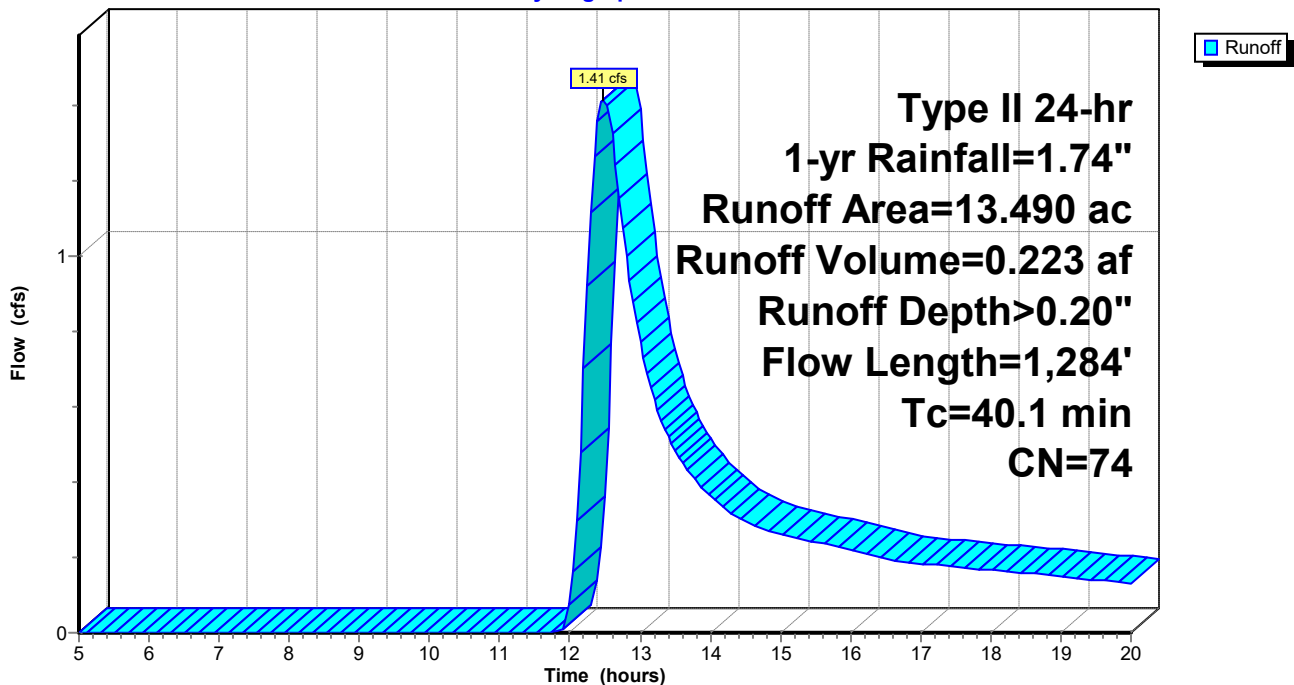
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
9.860	72	Woods/grass comb., Good, HSG C
3.630	81	Legumes, straight row, Good, HSG C
13.490	74	Weighted Average
13.490		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.4	100	0.0160	0.26		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
7.9	405	0.0090	0.85		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
7.7	263	0.0130	0.57		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
18.1	516	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
40.1	1,284	Total			

Subcatchment D24: DA-24

Hydrograph



Summary for Subcatchment D25: DA-25

Runoff = 5.31 cfs @ 12.52 hrs, Volume= 0.865 af, Depth> 0.20"
 Routed to Link L25 : L25

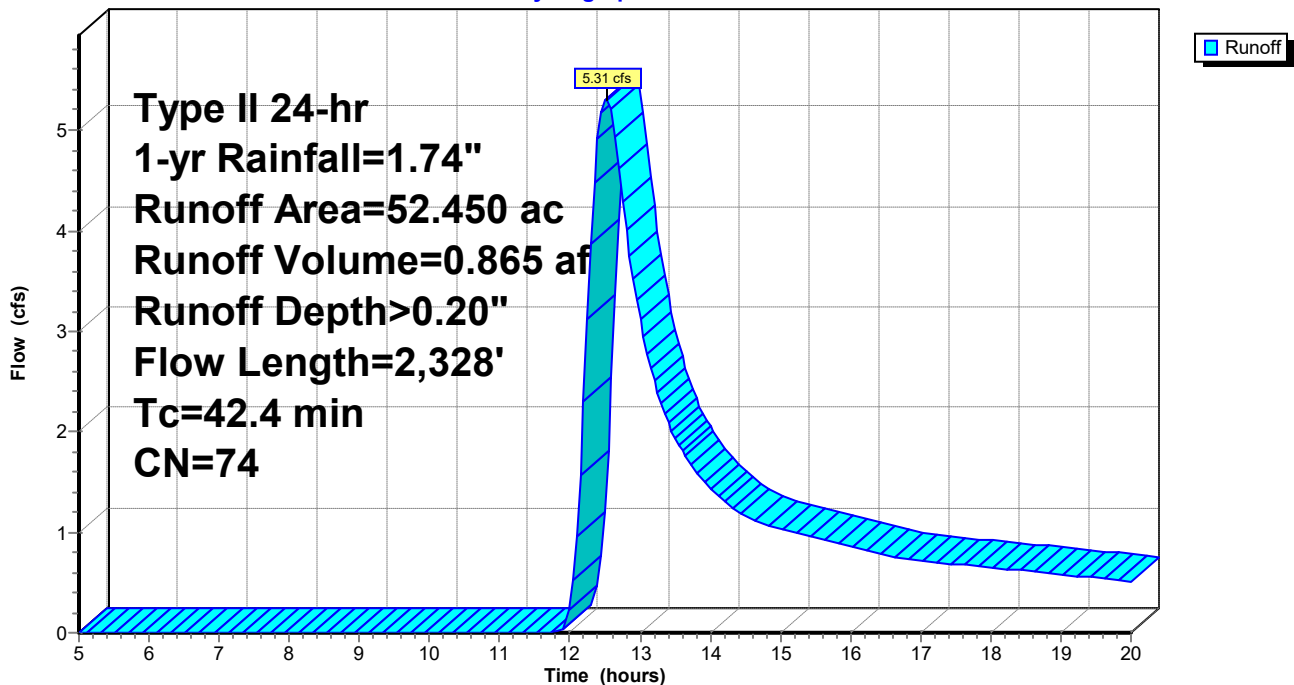
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
3.260	55	Woods, Good, HSG B
4.050	70	Woods, Good, HSG C
27.410	72	Legumes, straight row, Good, HSG B
17.730	81	Legumes, straight row, Good, HSG C
52.450	74	Weighted Average
52.450		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	100	0.0110	0.23		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
17.1	1,130	0.0150	1.10		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
17.9	1,098	0.0420	1.02		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
42.4	2,328	Total			

Subcatchment D25: DA-25

Hydrograph



Summary for Subcatchment D26: DA-26

Runoff = 3.22 cfs @ 18.25 hrs, Volume= 1.249 af, Depth> 0.08"
 Routed to Link L26 : L26

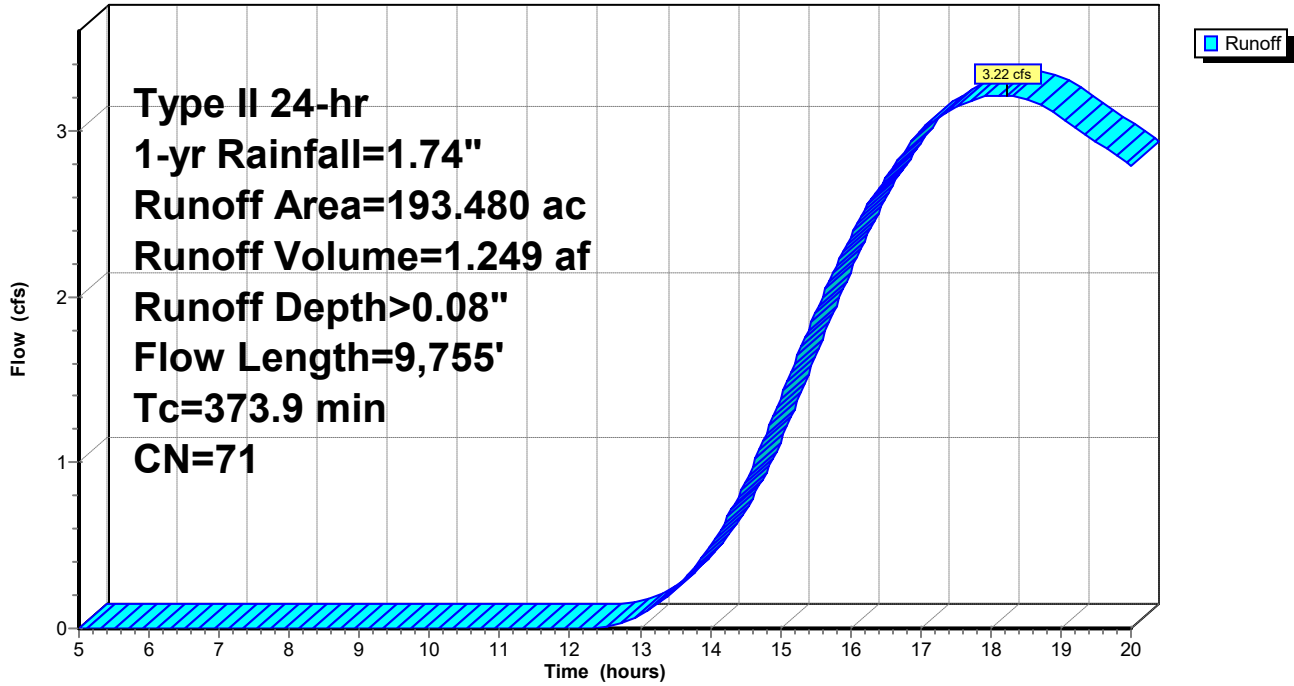
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.890	30	Woods, Good, HSG A
17.490	55	Woods, Good, HSG B
56.230	70	Woods, Good, HSG C
61.660	72	Woods/grass comb., Good, HSG C
4.000	79	Woods/grass comb., Good, HSG D
30.500	71	Meadow, non-grazed, HSG C
5.620	72	Legumes, straight row, Good, HSG B
10.650	81	Legumes, straight row, Good, HSG C
1.500	98	Unconnected pavement, HSG C
* 3.160	98	Capped Area
1.780	96	Gravel surface, HSG C
193.480	71	Weighted Average
188.820		97.59% Pervious Area
4.660		2.41% Impervious Area
1.500		32.19% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.1	100	0.0210	0.06		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
4.2	253	0.0400	1.00		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
213.2	6,067	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
19.3	174	0.0001	0.15		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
111.1	3,161	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
373.9	9,755	Total			

Subcatchment D26: DA-26

Hydrograph



Summary for Subcatchment D27: DA-27

Runoff = 10.13 cfs @ 12.63 hrs, Volume= 1.445 af, Depth> 0.54"
 Routed to Link L27 : L27

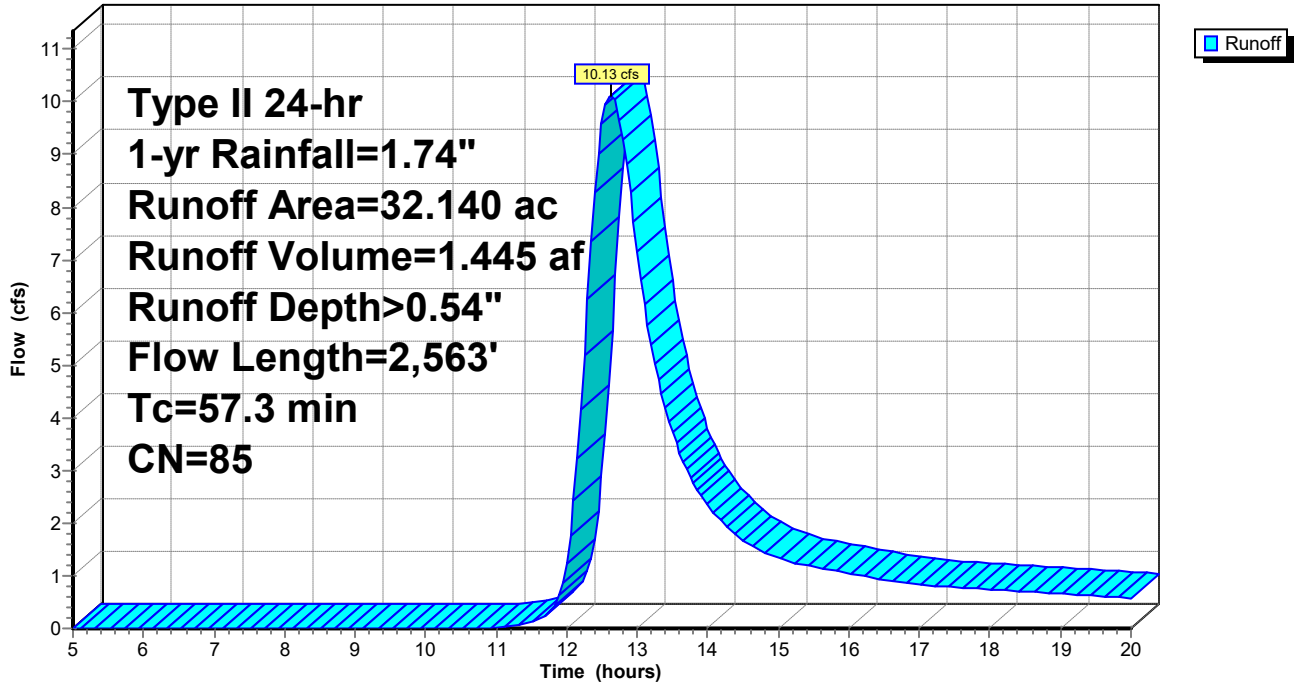
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
15.650	71	Meadow, non-grazed, HSG C
* 16.350	98	Capped Area
0.140	96	Gravel surface, HSG C
32.140	85	Weighted Average
15.790		49.13% Pervious Area
16.350		50.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.6	100	0.0150	0.12		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
10.2	1,087	0.0650	1.78		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	40	0.2970	3.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
12.6	948	0.0070	1.25		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
20.7	388	0.0020	0.31		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
57.3	2,563	Total			

Subcatchment D27: DA-27

Hydrograph



Summary for Subcatchment D28: DA-28

Runoff = 8.71 cfs @ 12.15 hrs, Volume= 0.634 af, Depth> 0.80"
 Routed to Link L28 : L28

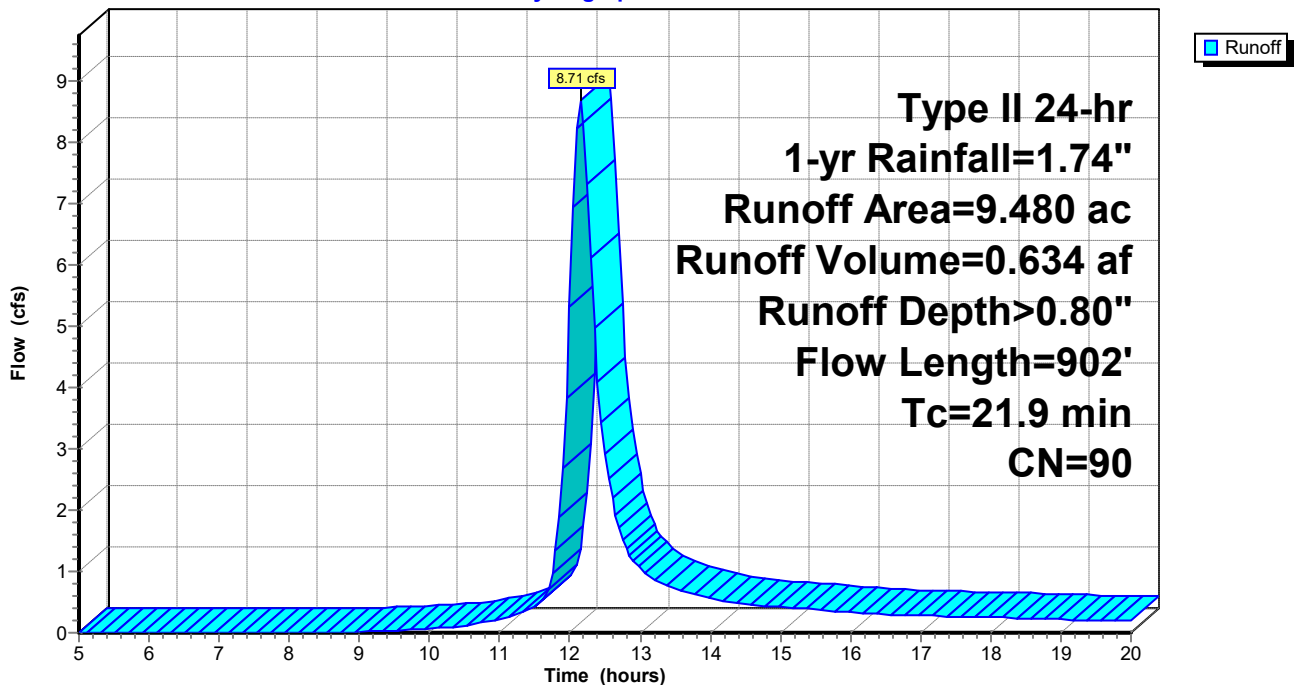
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
2.930	71	Meadow, non-grazed, HSG C
0.170	96	Gravel surface, HSG C
* 6.380	98	Capped Area
9.480	90	Weighted Average
3.100		32.70% Pervious Area
6.380		67.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0430	0.19		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
2.8	352	0.0880	2.08		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
10.2	450	0.0110	0.73		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
21.9	902	Total			

Subcatchment D28: DA-28

Hydrograph



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Type II 24-hr 1-yr Rainfall=1.74"

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Summary for Subcatchment D29: DA-29

Runoff = 1.76 cfs @ 16.47 hrs, Volume= 0.732 af, Depth> 0.13"
 Routed to Link L29 : L29

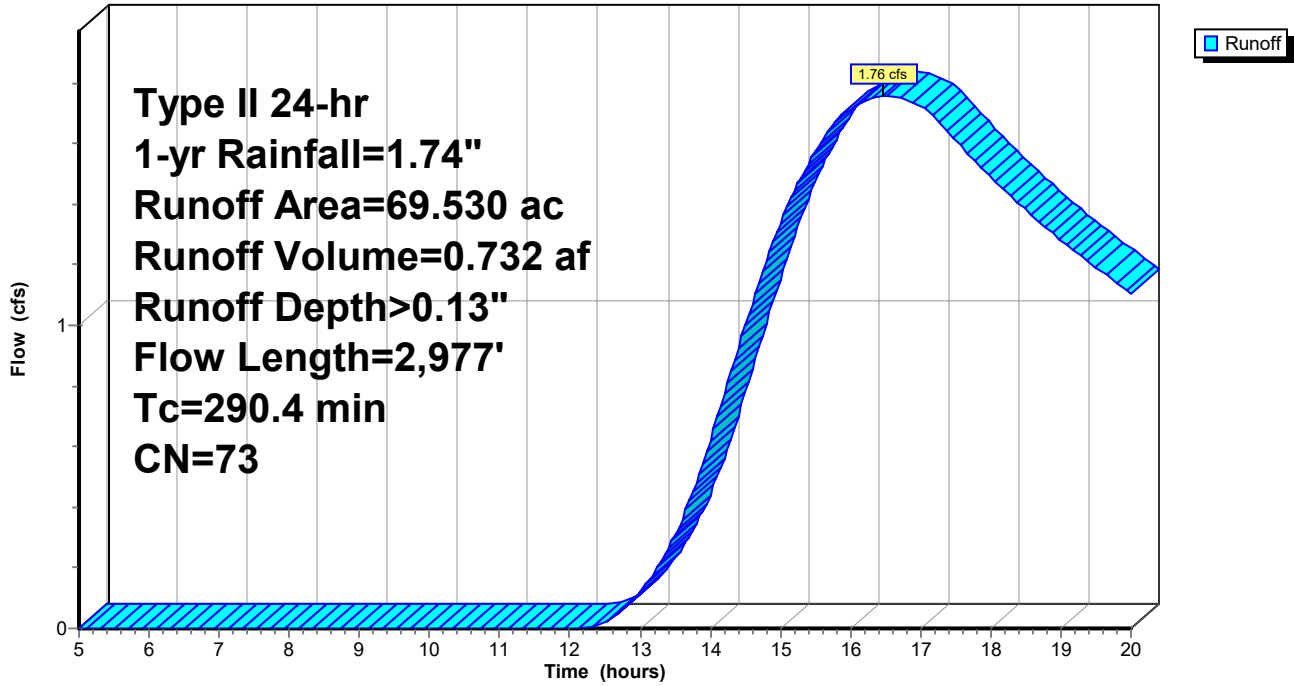
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.500	30	Woods, Good, HSG A
41.070	70	Woods, Good, HSG C
18.820	72	Woods/grass comb., Good, HSG C
1.890	74	Pasture/grassland/range, Good, HSG C
0.300	96	Gravel surface, HSG C
* 6.950	98	Capped Area
69.530	73	Weighted Average
62.580		90.00% Pervious Area
6.950		10.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.4	100	0.2460	0.38		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
11.3	1,087	0.0520	1.60		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.0	215	0.0150	1.84		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
56.4	926	0.0030	0.27		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
216.3	649	0.0001	0.05		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
290.4	2,977	Total			

Subcatchment D29: DA-29

Hydrograph



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Type II 24-hr 1-yr Rainfall=1.74"

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Summary for Subcatchment D30: DA-30

Runoff = 2.32 cfs @ 12.91 hrs, Volume= 0.522 af, Depth> 0.17"
 Routed to Link L30 : L30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

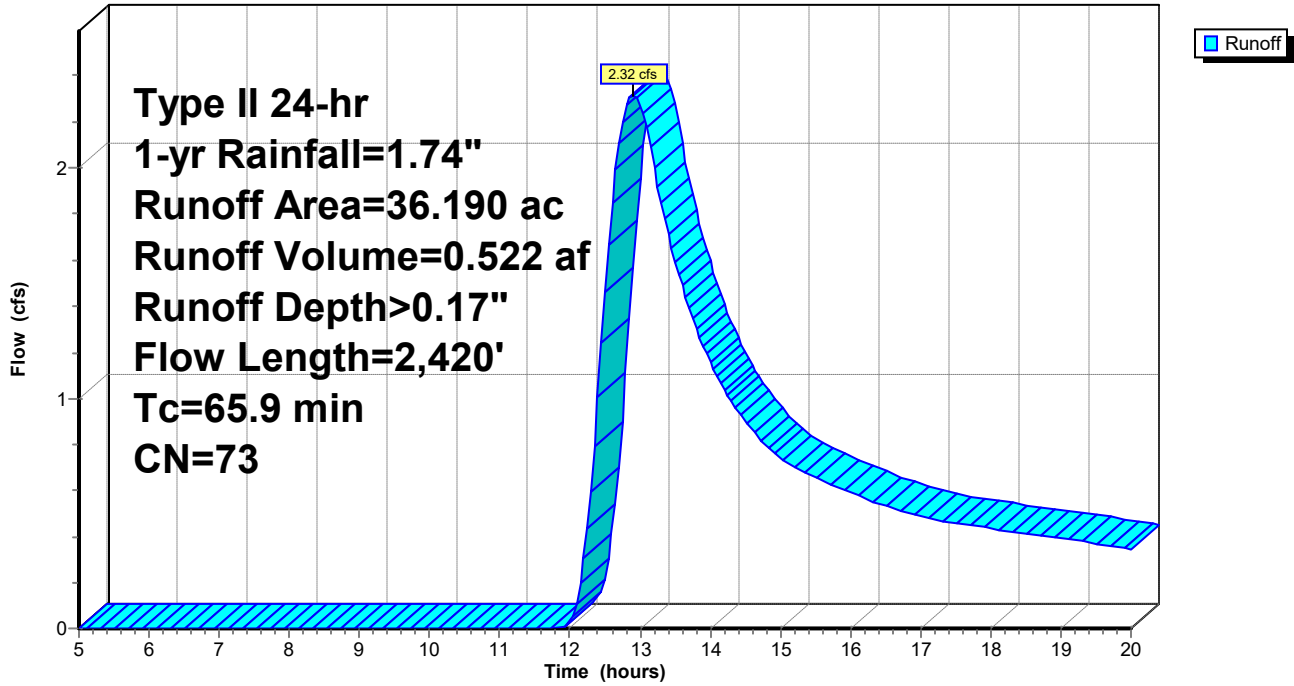
Area (ac)	CN	Description
33.590	71	Meadow, non-grazed, HSG C
0.870	98	Unconnected pavement, HSG C
0.750	96	Gravel surface, HSG C
0.980	98	Water Surface, HSG C

36.190	73	Weighted Average
34.340		94.89% Pervious Area
1.850		5.11% Impervious Area
0.870		47.03% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.4	100	0.0180	0.09		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
8.4	512	0.0210	1.01		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.3	574	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
19.0	764	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
5.8	470	0.0080	1.34		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
65.9	2,420	Total			

Subcatchment D30: DA-30

Hydrograph



Summary for Subcatchment D31: DA-31

Runoff = 1.25 cfs @ 12.36 hrs, Volume= 0.190 af, Depth> 0.16"
 Routed to Link L31 : L31

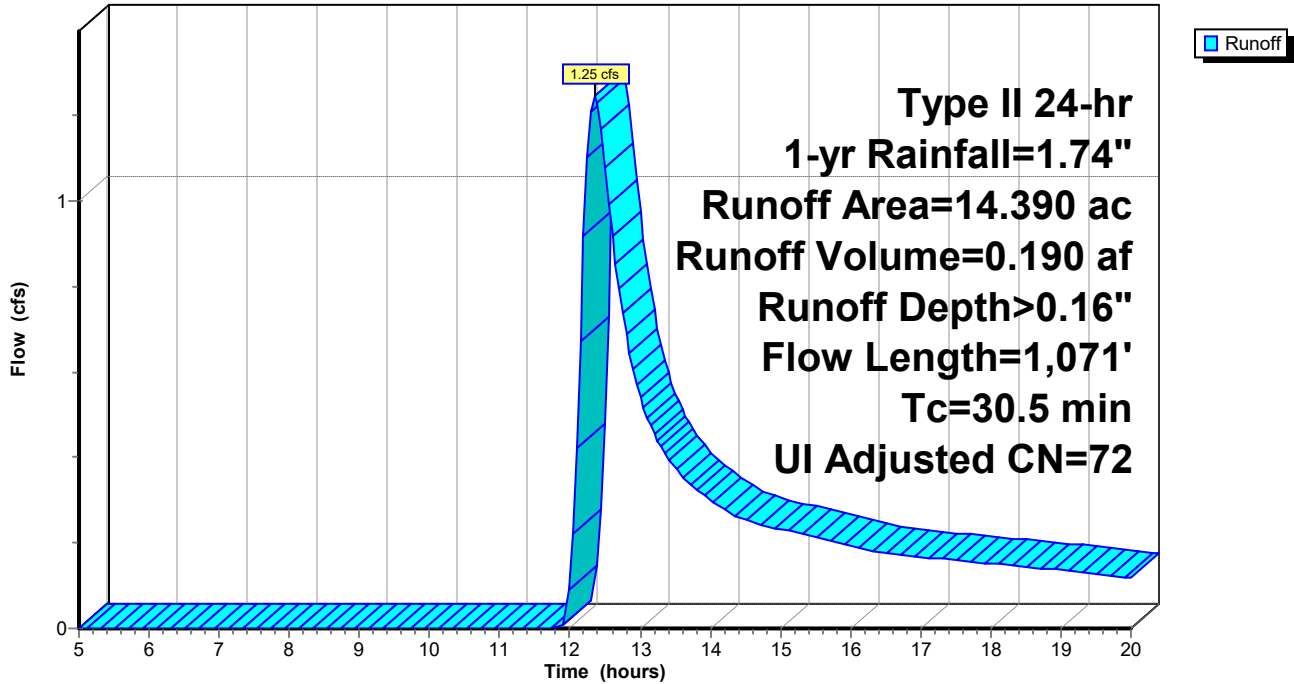
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Adj	Description
10.580	71		Meadow, non-grazed, HSG C
1.100	70		Woods, Good, HSG C
1.740	72		Woods/grass comb., Good, HSG C
0.970	98		Unconnected pavement, HSG C
14.390	73	72	Weighted Average, UI Adjusted
13.420			93.26% Pervious Area
0.970			6.74% Impervious Area
0.970			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	13	0.0100	0.56		Sheet Flow, Smooth surfaces n= 0.011 P2= 2.09"
14.0	87	0.0270	0.10		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
9.3	647	0.0060	1.16		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
6.4	296	0.0120	0.77		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.4	28	0.0670	1.29		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
30.5	1,071	Total			

Subcatchment D31: DA-31

Hydrograph



Summary for Subcatchment D32: DA-32

Runoff = 0.08 cfs @ 12.57 hrs, Volume= 0.025 af, Depth> 0.07"
 Routed to Link L32 : L32

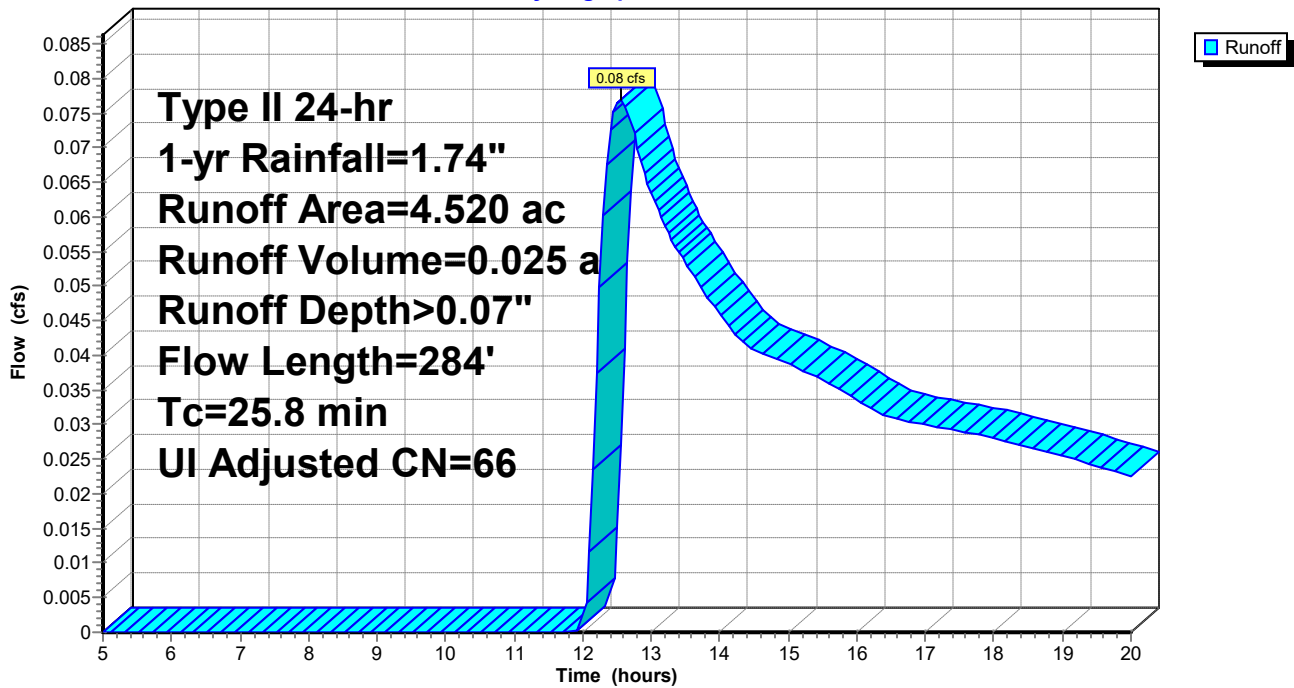
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Adj	Description
2.330	58		Meadow, non-grazed, HSG B
1.730	71		Meadow, non-grazed, HSG C
0.220	98		Unconnected pavement, HSG C
0.040	96		Gravel surface, HSG C
0.200	98		Water Surface, HSG C
4.520	67	66	Weighted Average, UI Adjusted
4.100			90.71% Pervious Area
0.420			9.29% Impervious Area
0.220			52.38% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.3	100	0.0100	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
2.5	184	0.0310	1.23		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
25.8	284	Total			

Subcatchment D32: DA-32

Hydrograph



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Type II 24-hr 1-yr Rainfall=1.74"

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Summary for Subcatchment D33: DA-33

Runoff = 2.68 cfs @ 12.64 hrs, Volume= 0.489 af, Depth> 0.20"
 Routed to Link L33 : L33

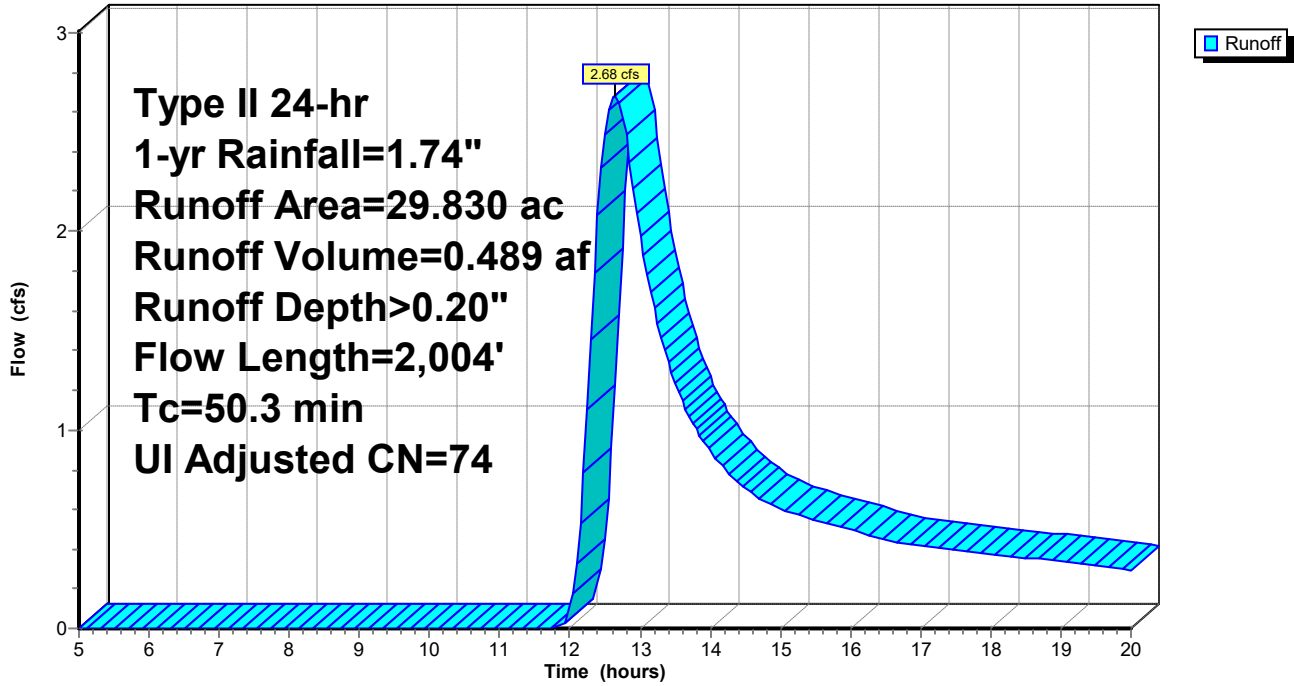
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Adj	Description
5.740	72		Woods/grass comb., Good, HSG C
17.300	71		Meadow, non-grazed, HSG C
1.150	74		>75% Grass cover, Good, HSG C
5.640	98		Unconnected pavement, HSG C
29.830	76	74	Weighted Average, UI Adjusted
24.190			81.09% Pervious Area
5.640			18.91% Impervious Area
5.640			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.4	100	0.0110	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
7.4	219	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
10.3	655	0.0050	1.06		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
4.9	341	0.0060	1.16		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
5.3	689	0.0210	2.17		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
50.3	2,004	Total			

Subcatchment D33: DA-33

Hydrograph



Summary for Subcatchment D34: DA-34

Runoff = 5.66 cfs @ 12.33 hrs, Volume= 0.626 af, Depth> 0.33"
 Routed to Link L34 : L34

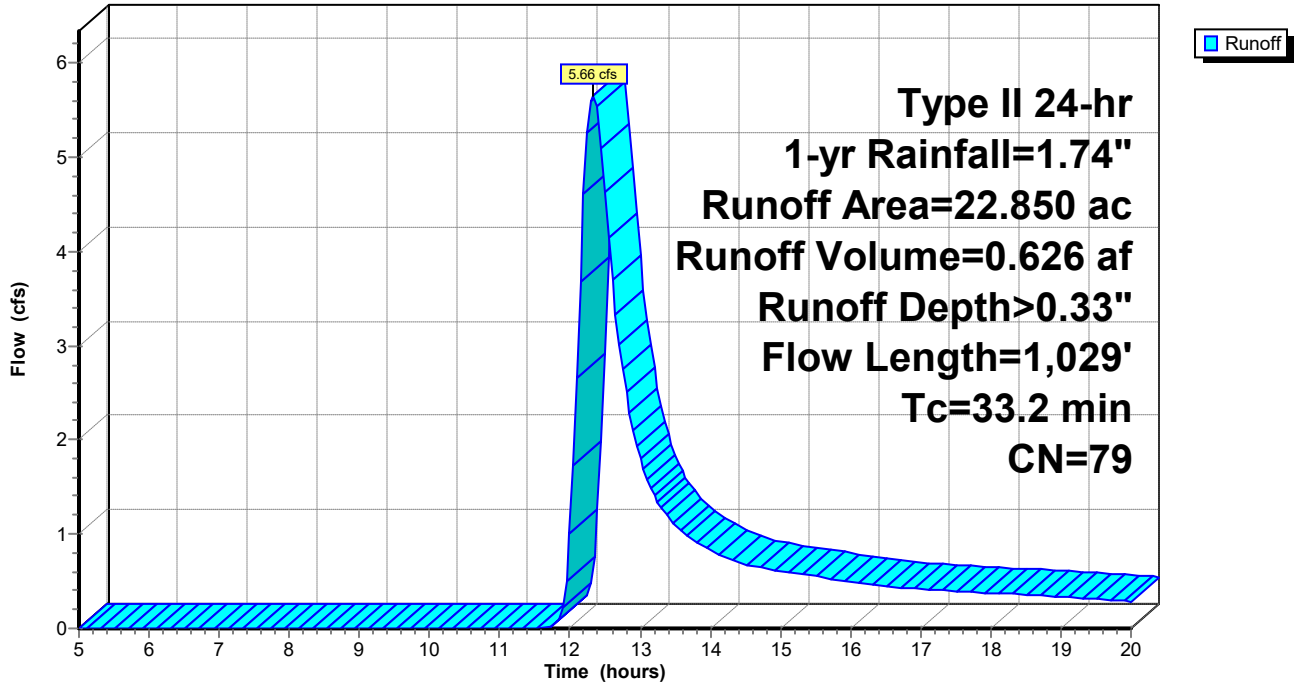
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
1.010	30	Meadow, non-grazed, HSG A
13.310	71	Meadow, non-grazed, HSG C
8.530	98	Unconnected pavement, HSG C
22.850	79	Weighted Average
14.320		62.67% Pervious Area
8.530		37.33% Impervious Area
8.530		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	100	0.0120	0.08		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
2.9	199	0.0270	1.15		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
5.3	518	0.0120	1.64		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
3.3	212	0.0050	1.06		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.2	1,029	Total			

Subcatchment D34: DA-34

Hydrograph



Summary for Subcatchment D35: DA-35

Runoff = 1.40 cfs @ 13.96 hrs, Volume= 0.510 af, Depth> 0.11"
 Routed to Link L35 : L35

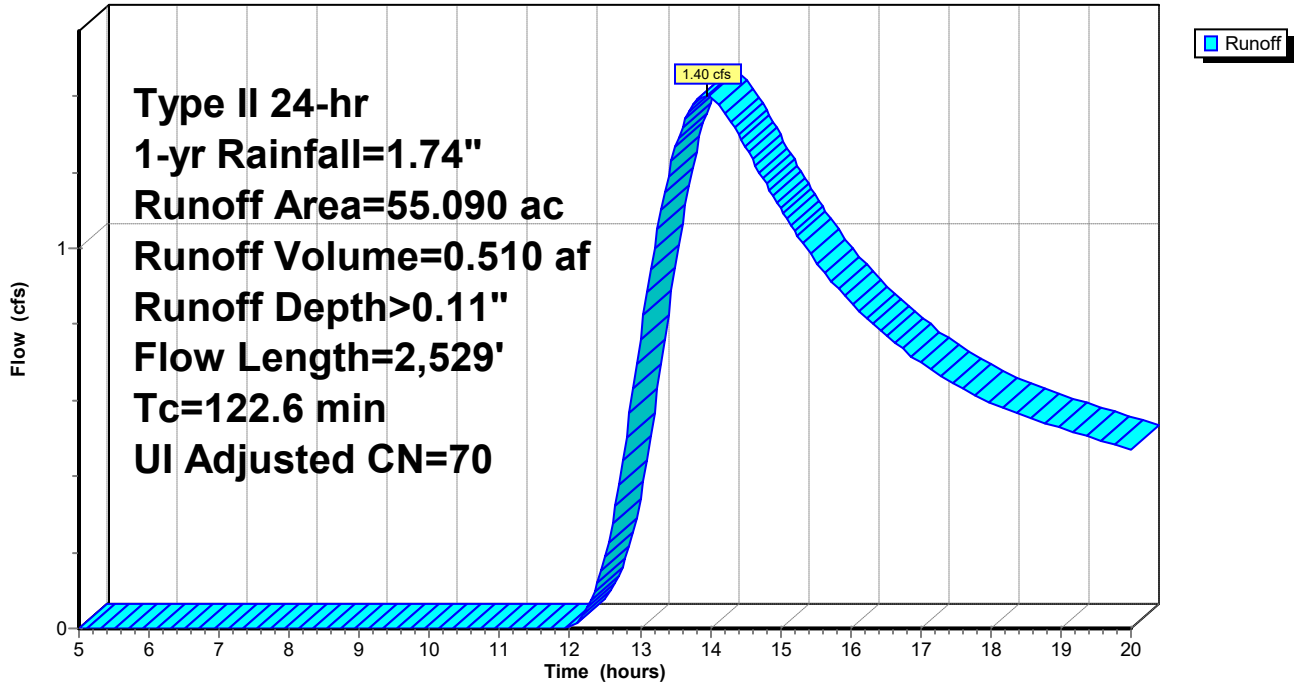
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Adj	Description
2.880	30		Meadow, non-grazed, HSG A
27.080	71		Meadow, non-grazed, HSG C
21.630	72		Woods/grass comb., Good, HSG C
3.430	98		Unconnected pavement, HSG C
0.070	96		Gravel surface, HSG C
55.090	71	70	Weighted Average, UI Adjusted
51.660			93.77% Pervious Area
3.430			6.23% Impervious Area
3.430			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
58.5	100	0.0010	0.03		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
21.4	610	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
1.4	98	0.0060	1.16		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
40.4	1,628	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.9	93	0.0140	1.77		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
122.6	2,529	Total			

Subcatchment D35: DA-35

Hydrograph



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Type II 24-hr 1-yr Rainfall=1.74"

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Summary for Subcatchment D36: DA-36

Runoff = 0.27 cfs @ 12.26 hrs, Volume= 0.042 af, Depth> 0.12"
 Routed to Link L36 : L36

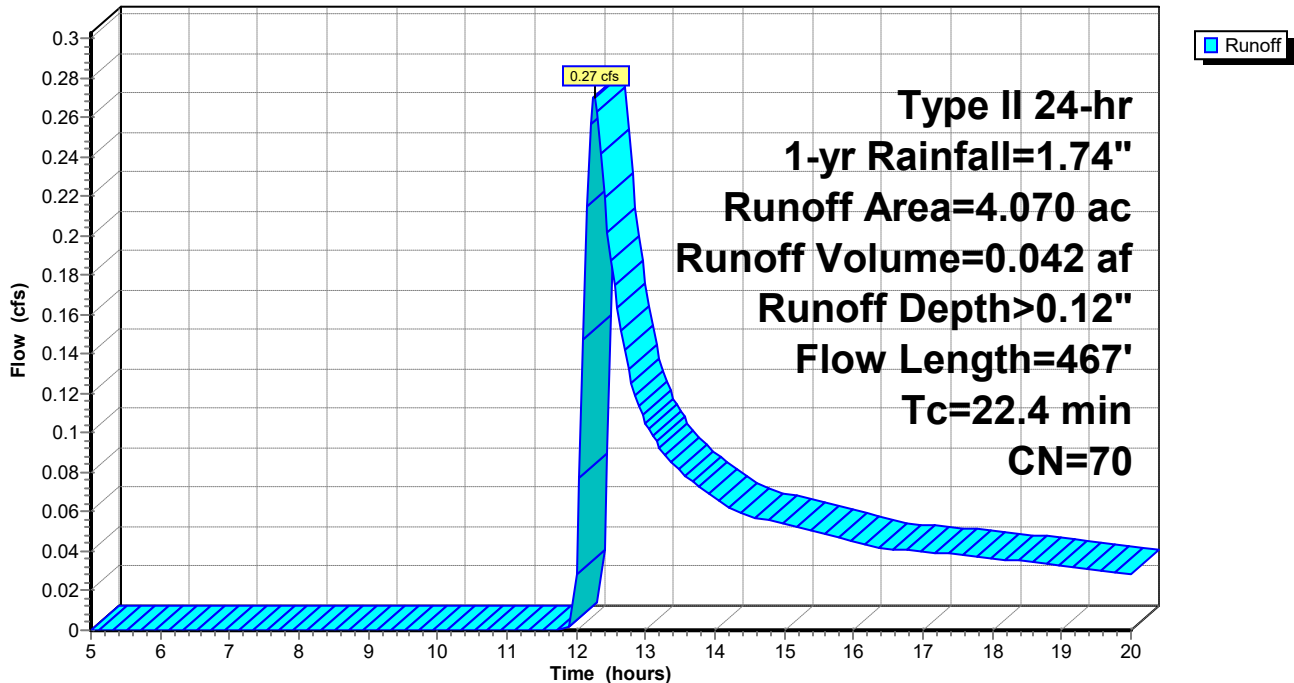
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.100	30	Meadow, non-grazed, HSG A
3.900	71	Meadow, non-grazed, HSG C
0.070	98	Unconnected pavement, HSG C
4.070	70	Weighted Average
4.000		98.28% Pervious Area
0.070		1.72% Impervious Area
0.070		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.3	100	0.0410	0.13		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
6.7	266	0.0090	0.66		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.4	101	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
22.4	467	Total			

Subcatchment D36: DA-36

Hydrograph



Summary for Subcatchment D37: DA-37

Runoff = 7.33 cfs @ 12.69 hrs, Volume= 1.100 af, Depth> 0.91"
 Routed to Link L37 : L37

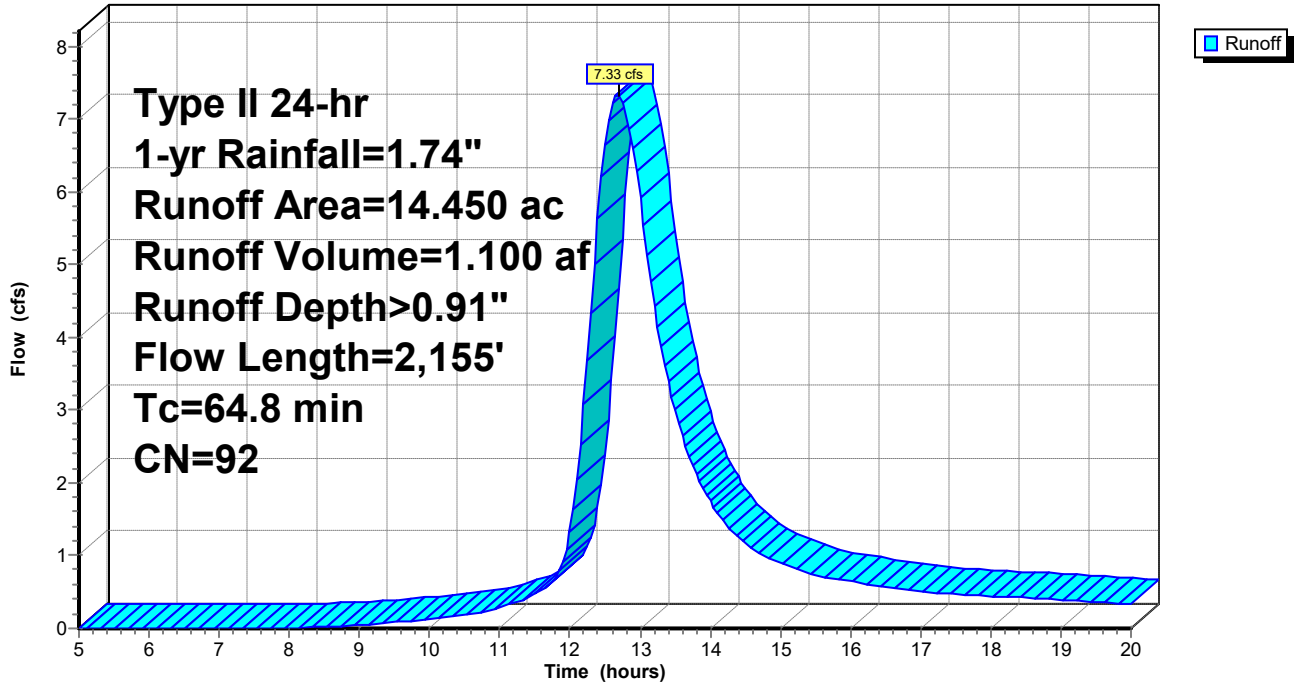
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
3.460	71	Meadow, non-grazed, HSG C
10.380	98	Unconnected pavement, HSG C
0.610	98	Water Surface, HSG C
14.450	92	Weighted Average
3.460		23.94% Pervious Area
10.990		76.06% Impervious Area
10.380		94.45% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.3	100	0.0090	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
31.8	1,279	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.9	73	0.0090	1.42		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
7.8	703	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
64.8	2,155	Total			

Subcatchment D37: DA-37

Hydrograph



Summary for Subcatchment D38: DA-38

Runoff = 3.19 cfs @ 12.26 hrs, Volume= 0.290 af, Depth> 0.80"
 Routed to Link L38 : L38

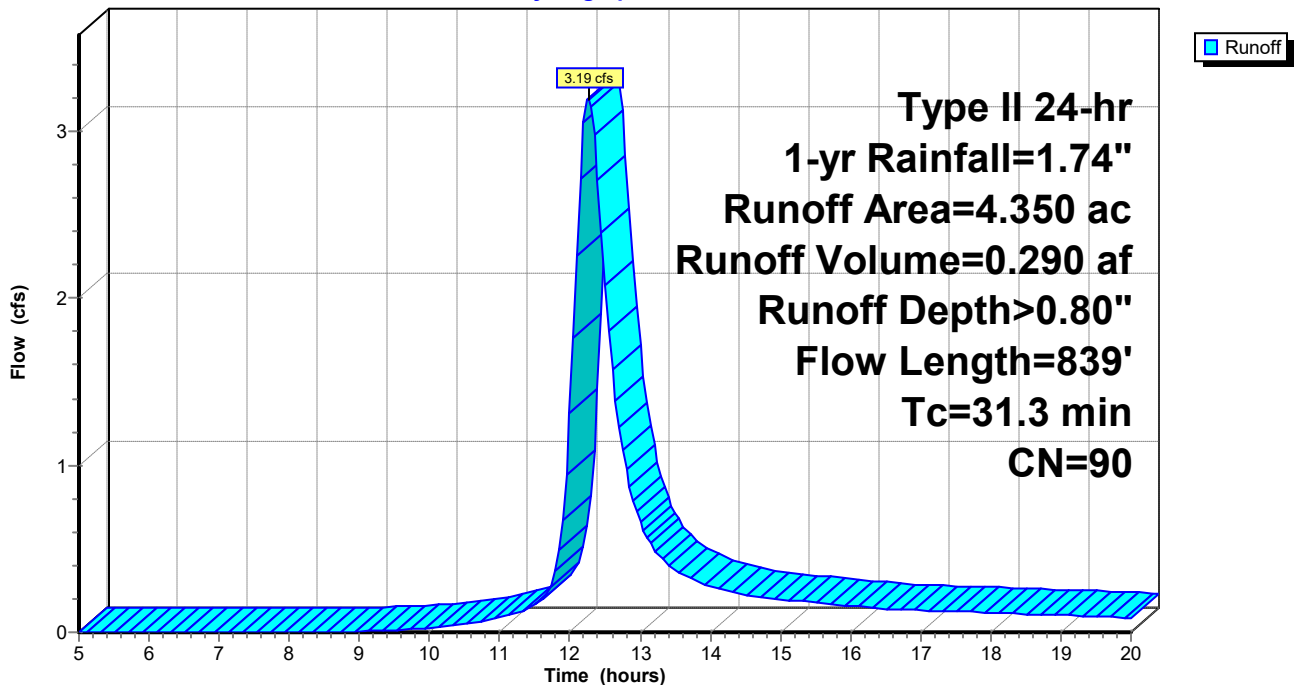
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
1.340	71	Meadow, non-grazed, HSG C
2.740	98	Unconnected pavement, HSG C
0.270	98	Water Surface, HSG C
4.350	90	Weighted Average
1.340		30.80% Pervious Area
3.010		69.20% Impervious Area
2.740		91.03% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.3	100	0.0160	0.09		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
11.8	674	0.0040	0.95		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.2	65	0.0900	4.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
31.3	839	Total			

Subcatchment D38: DA-38

Hydrograph



Summary for Subcatchment D39: DA-39

Runoff = 2.97 cfs @ 12.33 hrs, Volume= 0.311 af, Depth> 1.15"
 Routed to Link L39 : L39

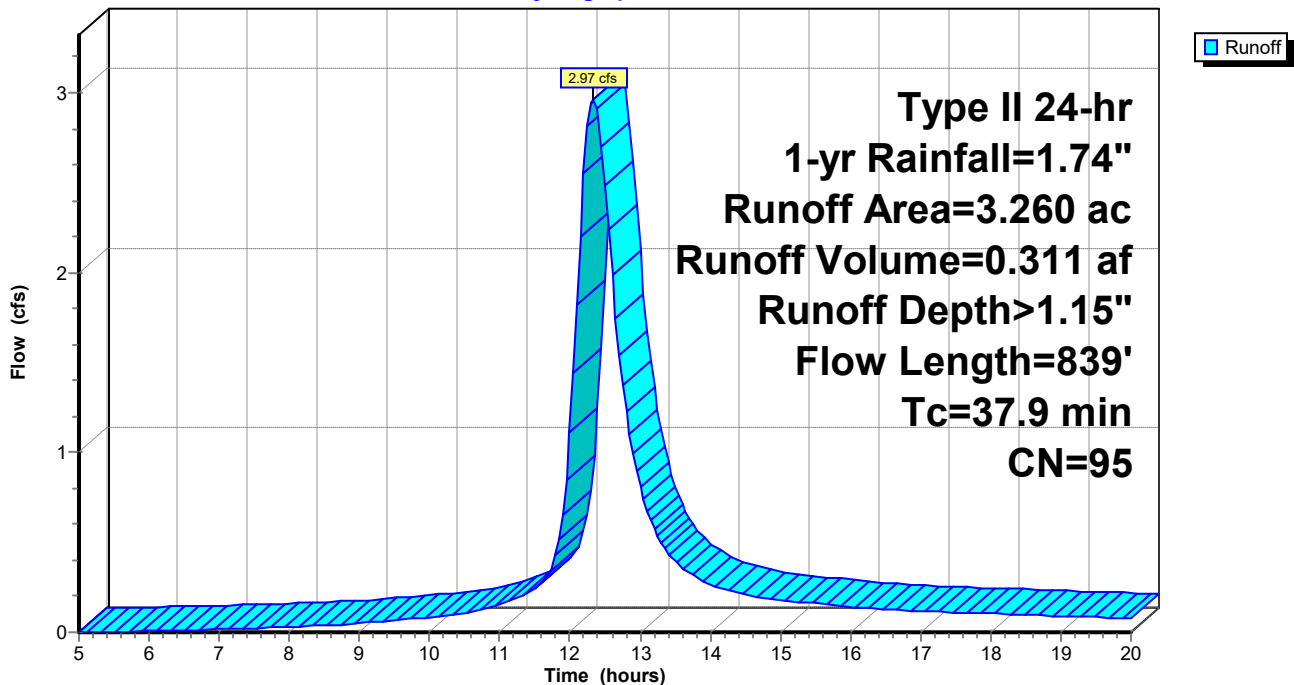
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.390	74	>75% Grass cover, Good, HSG C
2.770	98	Unconnected pavement, HSG C
0.100	98	Water Surface, HSG C
3.260	95	Weighted Average
0.390		11.96% Pervious Area
2.870		88.04% Impervious Area
2.770		96.52% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.9	100	0.0030	0.06		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
11.8	674	0.0040	0.95		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.2	65	0.0900	4.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
37.9	839	Total			

Subcatchment D39: DA-39

Hydrograph



Summary for Subcatchment D40: DA-40

Runoff = 1.35 cfs @ 12.48 hrs, Volume= 0.165 af, Depth> 0.92"
 Routed to Link L40 : L40

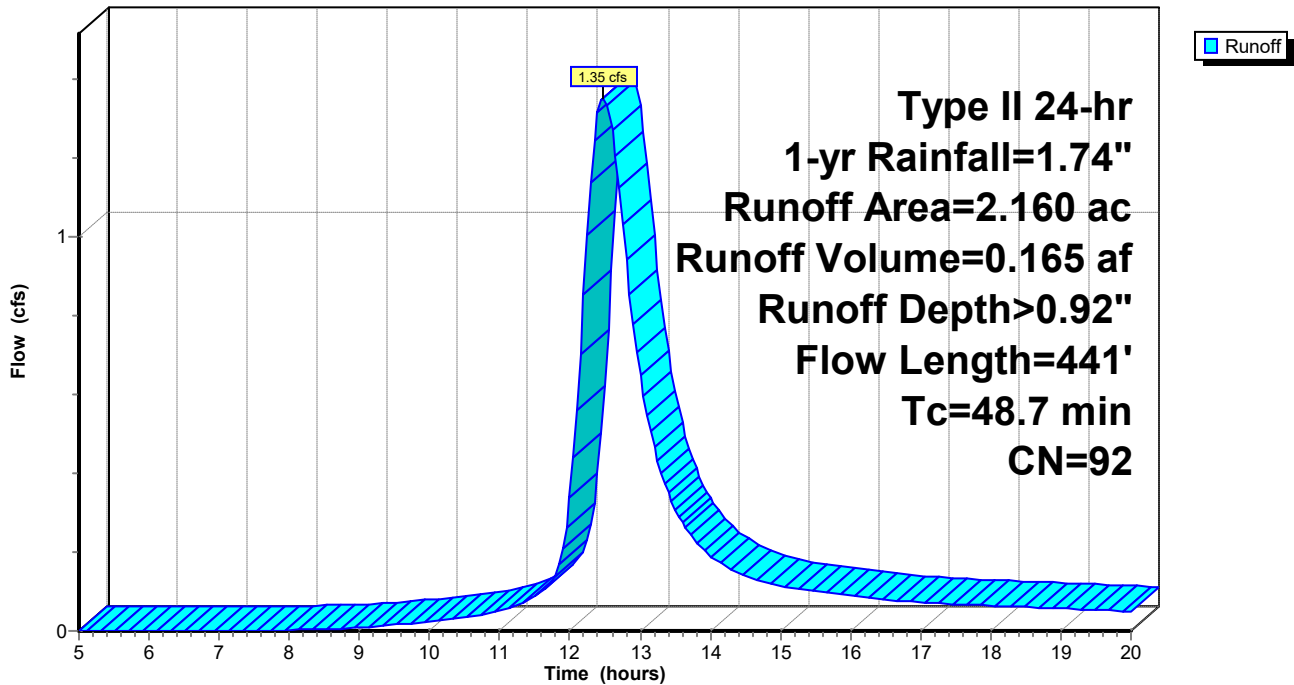
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.530	74	>75% Grass cover, Good, HSG C
1.630	98	Unconnected pavement, HSG C
2.160	92	Weighted Average
0.530		24.54% Pervious Area
1.630		75.46% Impervious Area
1.630		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.2	100	0.0010	0.04		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
8.5	341	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
48.7	441	Total			

Subcatchment D40: DA-40

Hydrograph



Somerset Pre-Dev_Rev4

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Type II 24-hr 1-yr Rainfall=1.74"

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Summary for Subcatchment D41: DA-41

Runoff = 26.87 cfs @ 13.10 hrs, Volume= 5.706 af, Depth> 1.30"
 Routed to Link L41 : L41

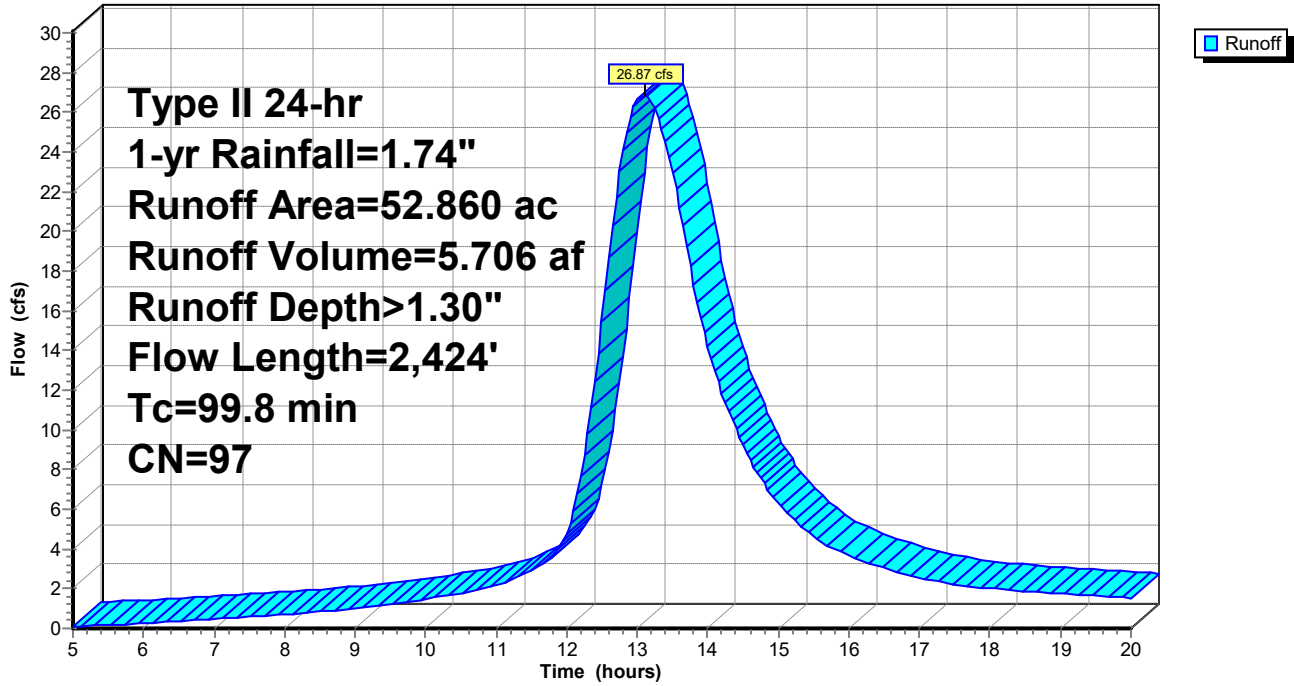
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.090	61	>75% Grass cover, Good, HSG B
1.420	74	>75% Grass cover, Good, HSG C
* 48.560	98	Capped Area
2.790	98	Water Surface, HSG C
52.860	97	Weighted Average
1.510		2.86% Pervious Area
51.350		97.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
44.4	100	0.0020	0.04		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
15.6	626	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
39.0	1,571	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.8	127	0.0290	2.55		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
99.8	2,424	Total			

Subcatchment D41: DA-41

Hydrograph



Summary for Subcatchment D42: DA-42

Runoff = 1.26 cfs @ 14.48 hrs, Volume= 0.486 af, Depth> 0.12"
 Routed to Link L42 : L42

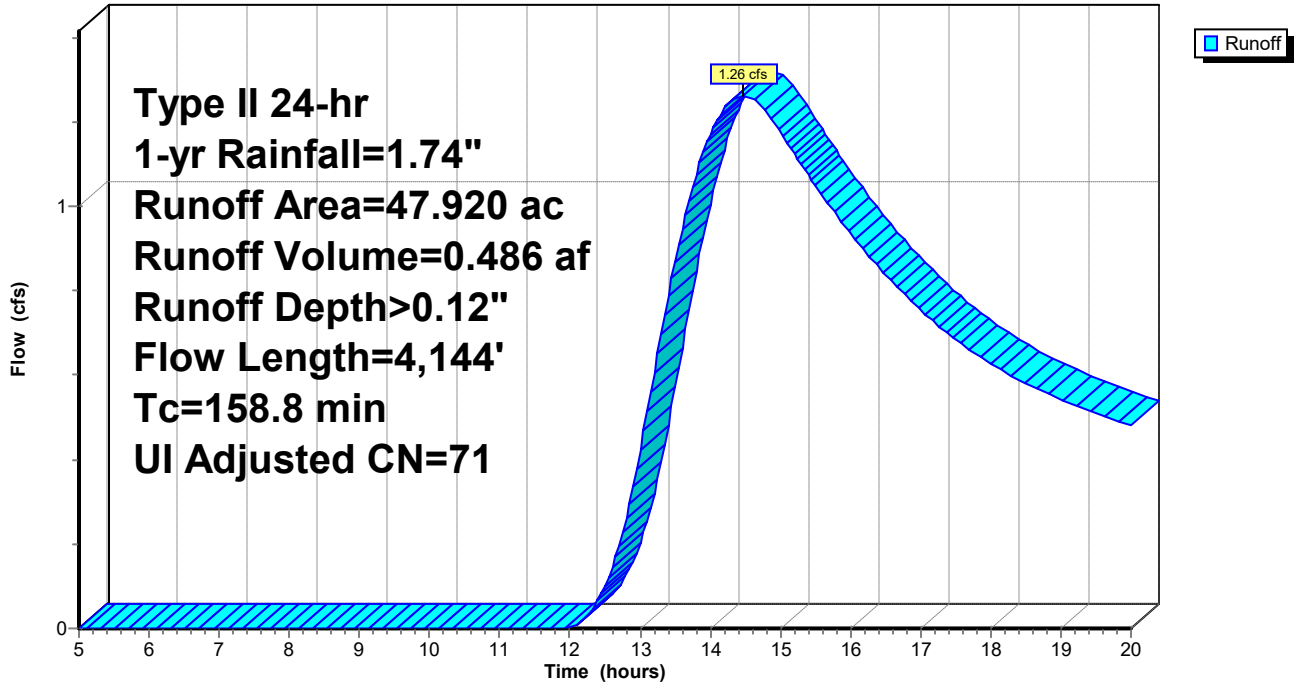
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Adj	Description
46.870	71		Meadow, non-grazed, HSG C
0.990	98		Unconnected pavement, HSG C
0.060	98		Water Surface, HSG C
47.920	72	71	Weighted Average, UI Adjusted
46.870			97.81% Pervious Area
1.050			2.19% Impervious Area
0.990			94.29% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.6	100	0.0060	0.06		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
15.3	436	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
17.2	694	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
28.5	810	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
11.4	459	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
17.7	505	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
40.1	1,140	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
158.8	4,144	Total			

Subcatchment D42: DA-42

Hydrograph



Summary for Subcatchment D43: DA-43

Runoff = 0.16 cfs @ 12.67 hrs, Volume= 0.045 af, Depth> 0.09"
 Routed to Link L43 : L43

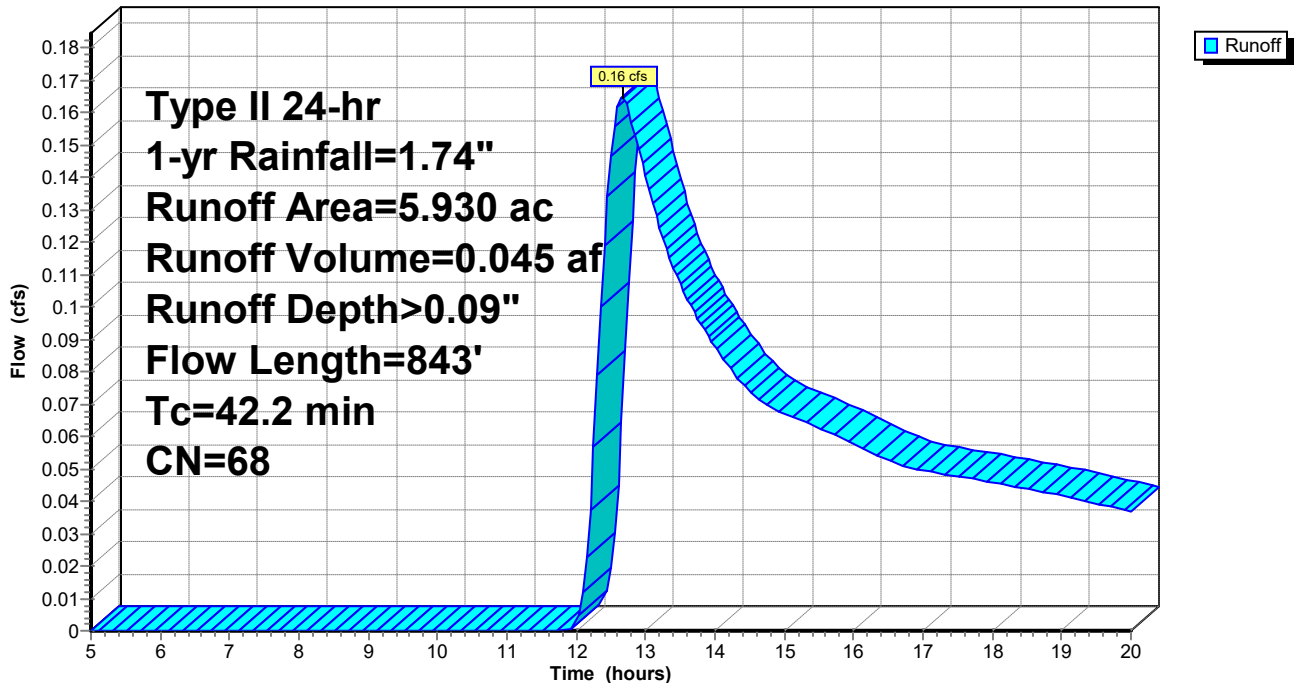
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.360	58	Woods/grass comb., Good, HSG B
3.450	72	Woods/grass comb., Good, HSG C
1.050	58	Meadow, non-grazed, HSG B
1.070	71	Meadow, non-grazed, HSG C
5.930	68	Weighted Average
5.930		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	100	0.0120	0.08		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
9.5	380	0.0090	0.66		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
11.0	363	0.0120	0.55		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
42.2	843	Total			

Subcatchment D43: DA-43

Hydrograph



Summary for Subcatchment D44: DA-44

Runoff = 2.49 cfs @ 13.12 hrs, Volume= 0.610 af, Depth> 0.19"
 Routed to Link L44 : L44

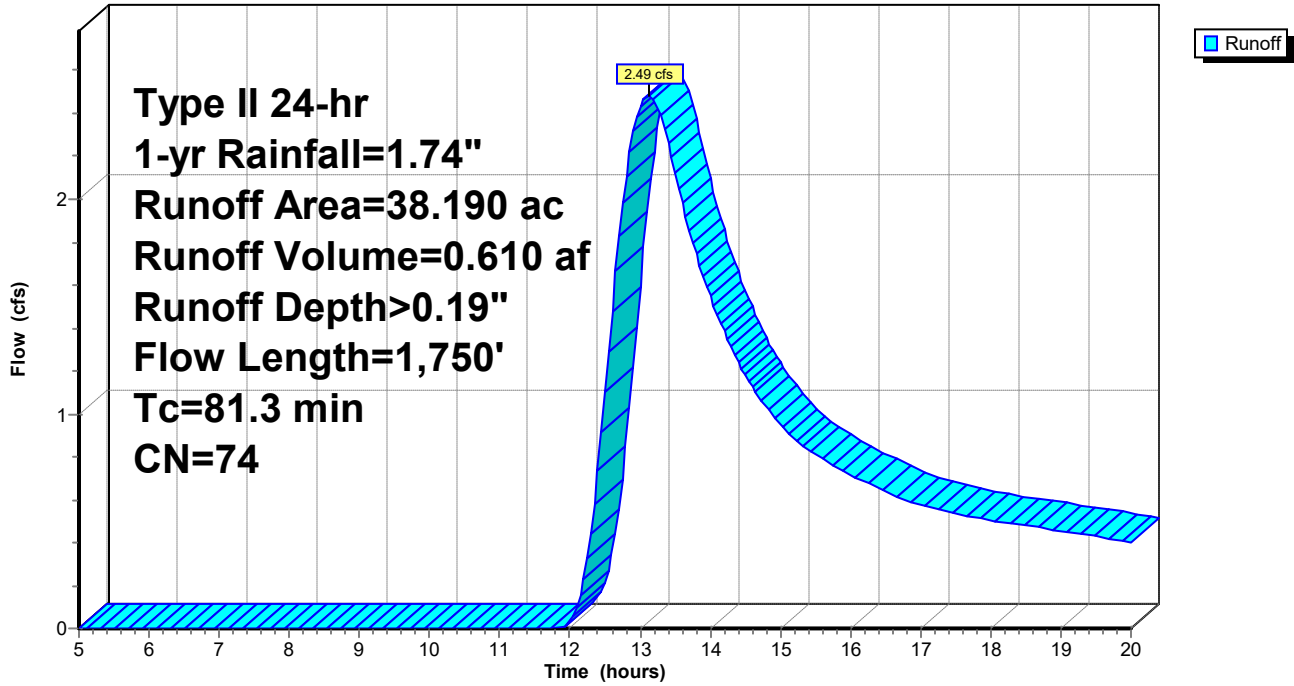
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
1.490	39	Pasture/grassland/range, Good, HSG A
1.750	74	Pasture/grassland/range, Good, HSG C
0.290	30	Meadow, non-grazed, HSG A
0.780	58	Meadow, non-grazed, HSG B
12.520	71	Meadow, non-grazed, HSG C
2.110	58	Legumes, straight row, Good, HSG A
17.900	81	Legumes, straight row, Good, HSG C
0.290	70	Woods, Good, HSG C
1.060	98	Unconnected pavement, HSG C
38.190	74	Weighted Average
37.130		97.22% Pervious Area
1.060		2.78% Impervious Area
1.060		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.7	100	0.0200	0.09		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
6.2	58	0.0005	0.16		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.8	17	0.0005	0.36		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
8.7	399	0.0120	0.77		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.2	183	0.0030	0.49		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
13.0	299	0.0030	0.38		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
28.7	694	0.0020	0.40		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
81.3	1,750	Total			

Subcatchment D44: DA-44

Hydrograph



Summary for Subcatchment D45: DA-45

Runoff = 0.41 cfs @ 12.63 hrs, Volume= 0.080 af, Depth> 0.16"
 Routed to Link L45 : L45

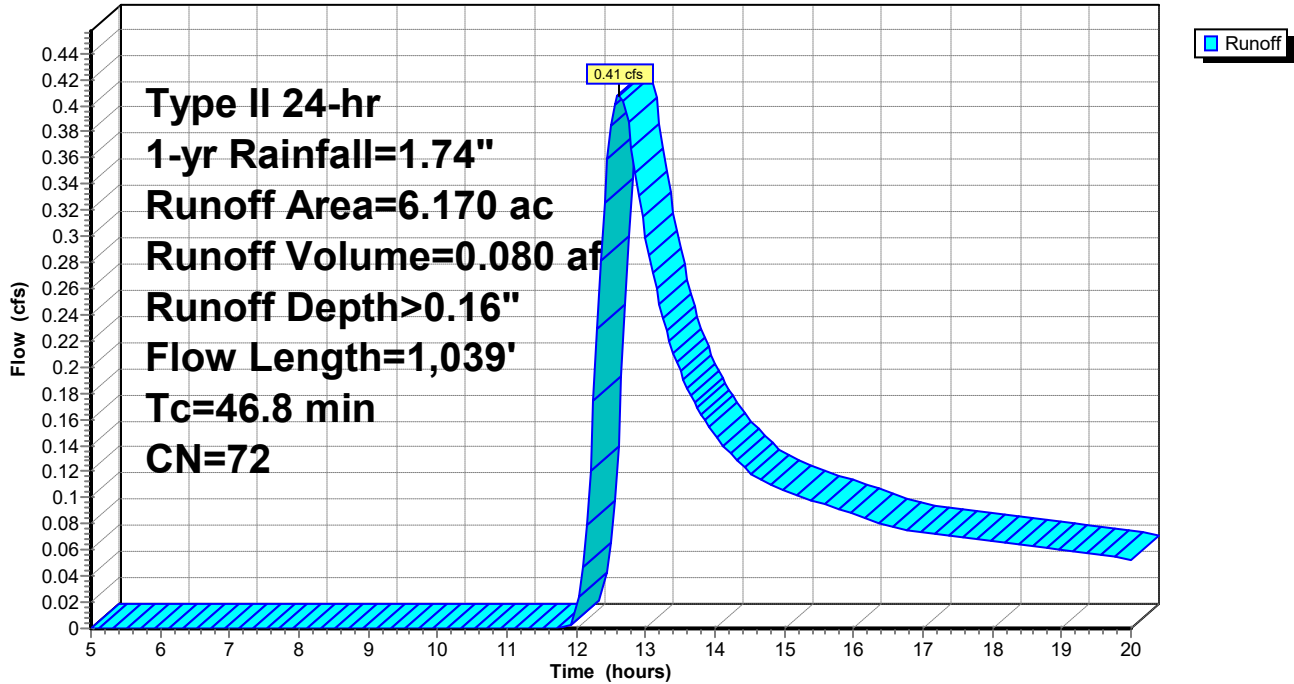
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.120	32	Woods/grass comb., Good, HSG A
1.590	72	Woods/grass comb., Good, HSG C
0.020	58	Meadow, non-grazed, HSG B
1.960	71	Meadow, non-grazed, HSG C
0.660	58	Legumes, straight row, Good, HSG A
1.820	81	Legumes, straight row, Good, HSG C
6.170	72	Weighted Average
6.170		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	100	0.0150	0.08		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
7.5	314	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
11.1	425	0.0050	0.64		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.2	29	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.1	63	0.0030	0.49		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
5.1	108	0.0050	0.35		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
46.8	1,039	Total			

Subcatchment D45: DA-45

Hydrograph



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Type II 24-hr 1-yr Rainfall=1.74"

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Summary for Subcatchment D46: DA-46

Runoff = 8.01 cfs @ 12.90 hrs, Volume= 1.605 af, Depth> 0.26"
 Routed to Link L46 : L46

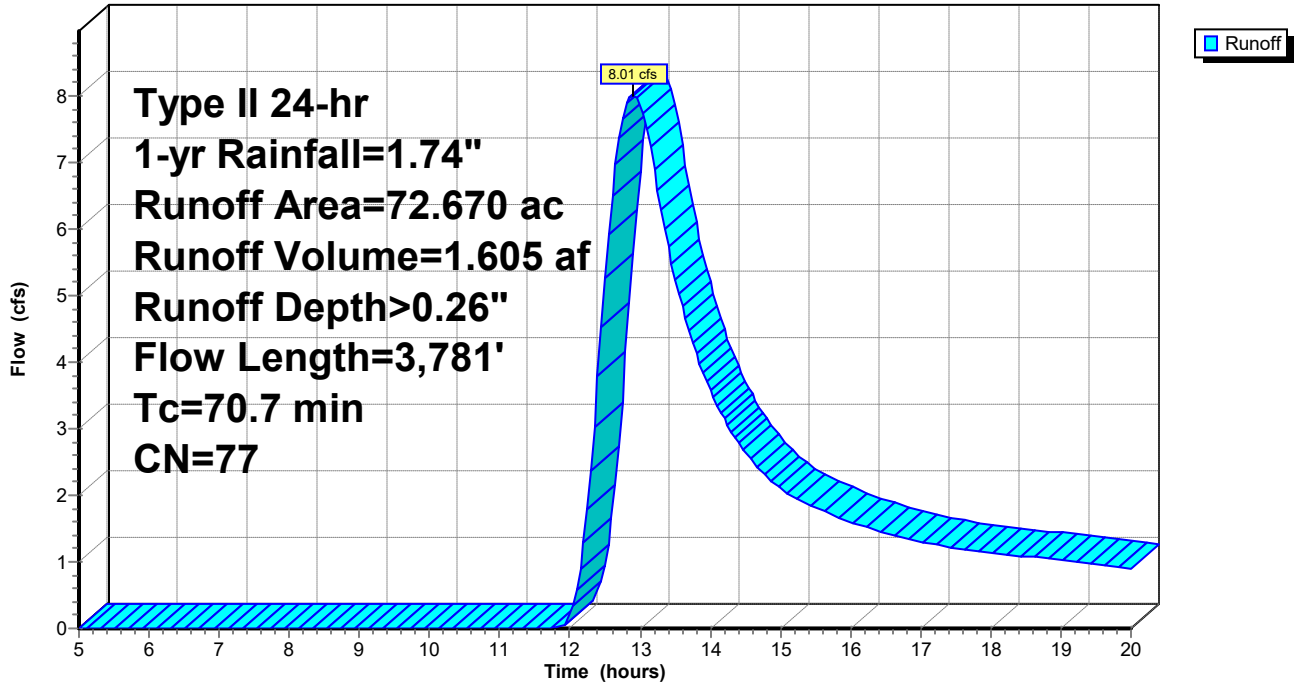
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.030	55	Woods, Good, HSG B
1.300	70	Woods, Good, HSG C
0.490	30	Meadow, non-grazed, HSG A
0.130	71	Meadow, non-grazed, HSG C
8.290	58	Legumes, straight row, Good, HSG A
5.460	72	Legumes, straight row, Good, HSG B
56.970	81	Legumes, straight row, Good, HSG C
72.670	77	Weighted Average
72.670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	76	0.0460	0.12		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
1.6	24	0.0300	0.25		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
57.7	3,553	0.0130	1.03		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.2	128	0.1190	1.72		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
70.7	3,781	Total			

Subcatchment D46: DA-46

Hydrograph



Summary for Subcatchment D47: DA-47

Runoff = 2.28 cfs @ 12.16 hrs, Volume= 0.177 af, Depth> 0.33"
 Routed to Link L47 : L47

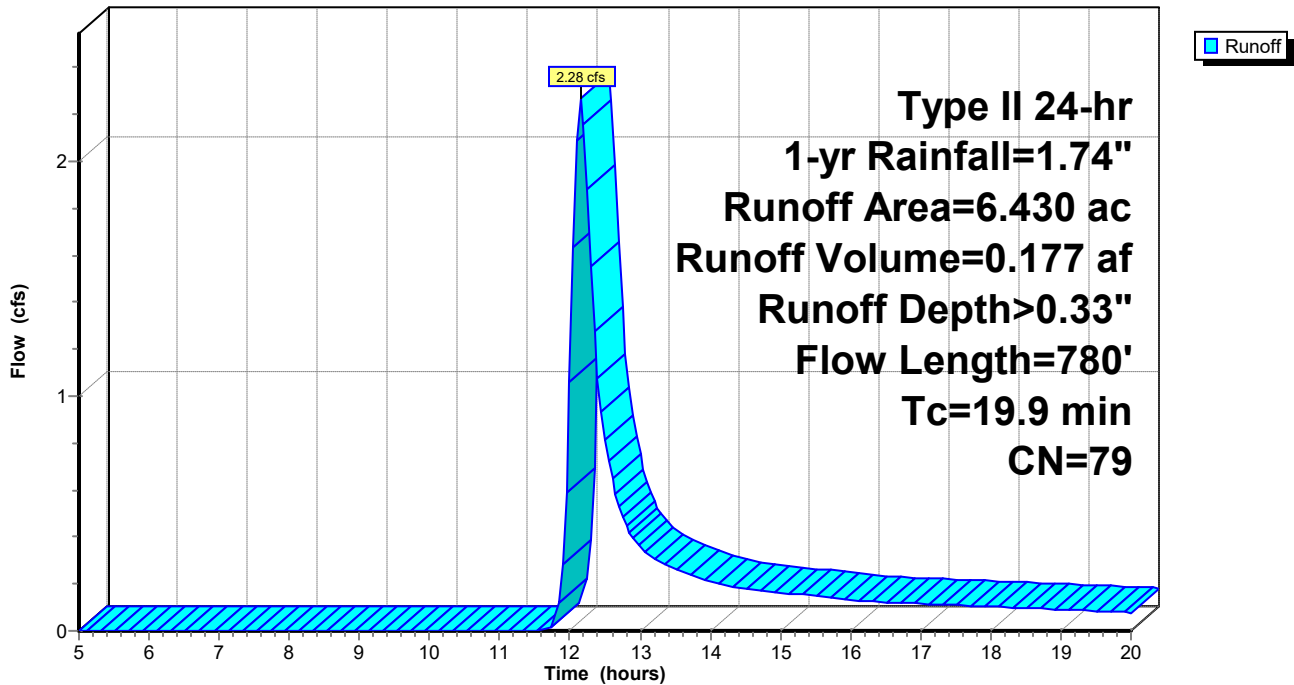
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.640	58	Legumes, straight row, Good, HSG A
5.790	81	Legumes, straight row, Good, HSG C
6.430	79	Weighted Average
6.430		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	100	0.0200	0.29		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
14.1	680	0.0080	0.80		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
19.9	780	Total			

Subcatchment D47: DA-47

Hydrograph



Summary for Subcatchment D48: DA-48

Runoff = 0.20 cfs @ 12.15 hrs, Volume= 0.040 af, Depth> 0.08"
 Routed to Link L48 : L48

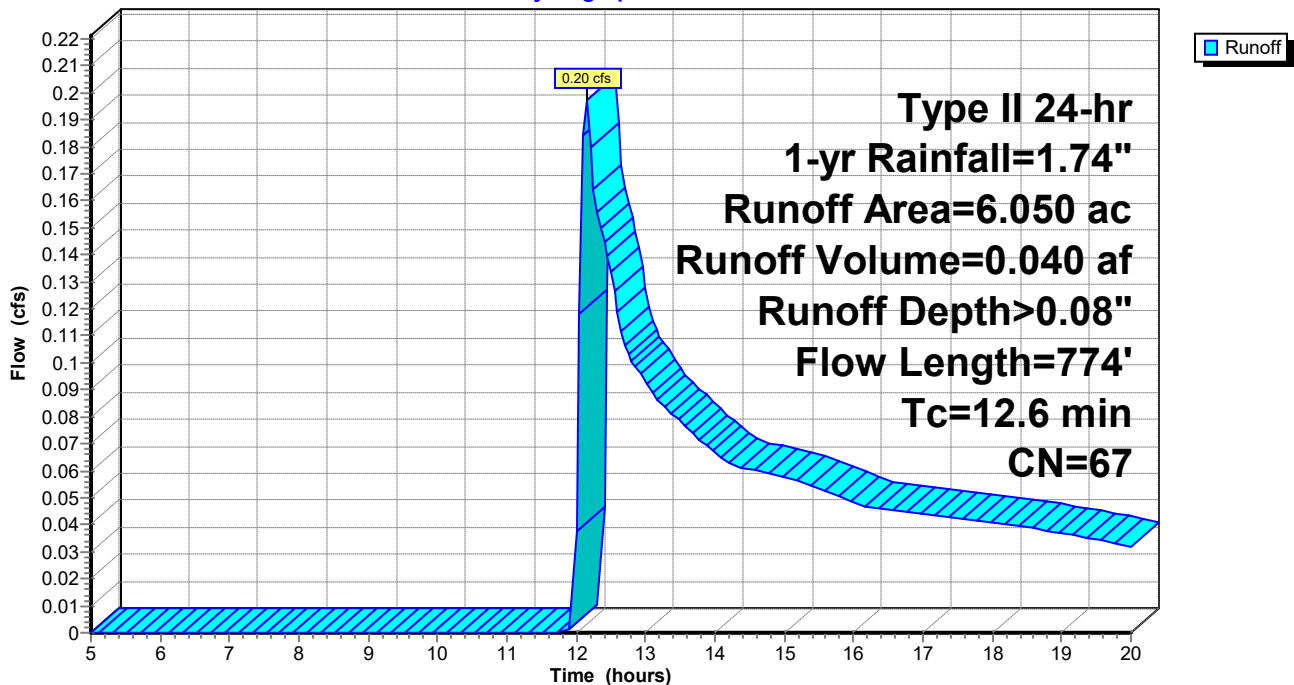
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.830	30	Woods, Good, HSG A
0.510	70	Woods, Good, HSG C
1.520	58	Legumes, straight row, Good, HSG A
3.190	81	Legumes, straight row, Good, HSG C
6.050	67	Weighted Average
6.050		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	100	0.0340	0.35		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
6.2	614	0.0340	1.66		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.7	60	0.0140	0.59		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.6	774	Total			

Subcatchment D48: DA-48

Hydrograph



Summary for Subcatchment D49: DA-49

[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
 Routed to Link L49 : L49

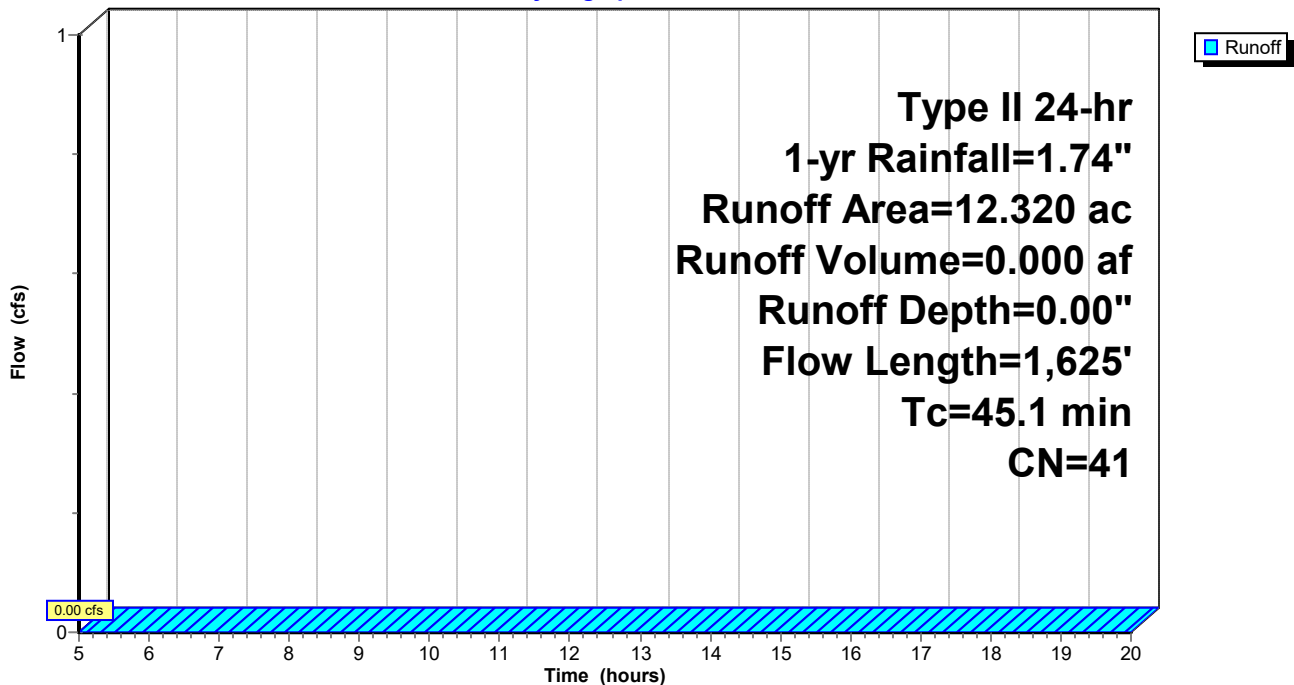
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
9.000	30	Woods, Good, HSG A
3.250	70	Woods, Good, HSG C
0.070	81	Legumes, straight row, Good, HSG C
12.320	41	Weighted Average
12.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.7	31	0.0400	0.30		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
13.0	67	0.0540	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
30.4	1,527	0.0280	0.84		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
45.1	1,625	Total			

Subcatchment D49: DA-49

Hydrograph



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Type II 24-hr 1-yr Rainfall=1.74"

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Summary for Subcatchment D50: DA-50

Runoff = 0.32 cfs @ 12.81 hrs, Volume= 0.127 af, Depth> 0.05"
 Routed to Link L50 : L50

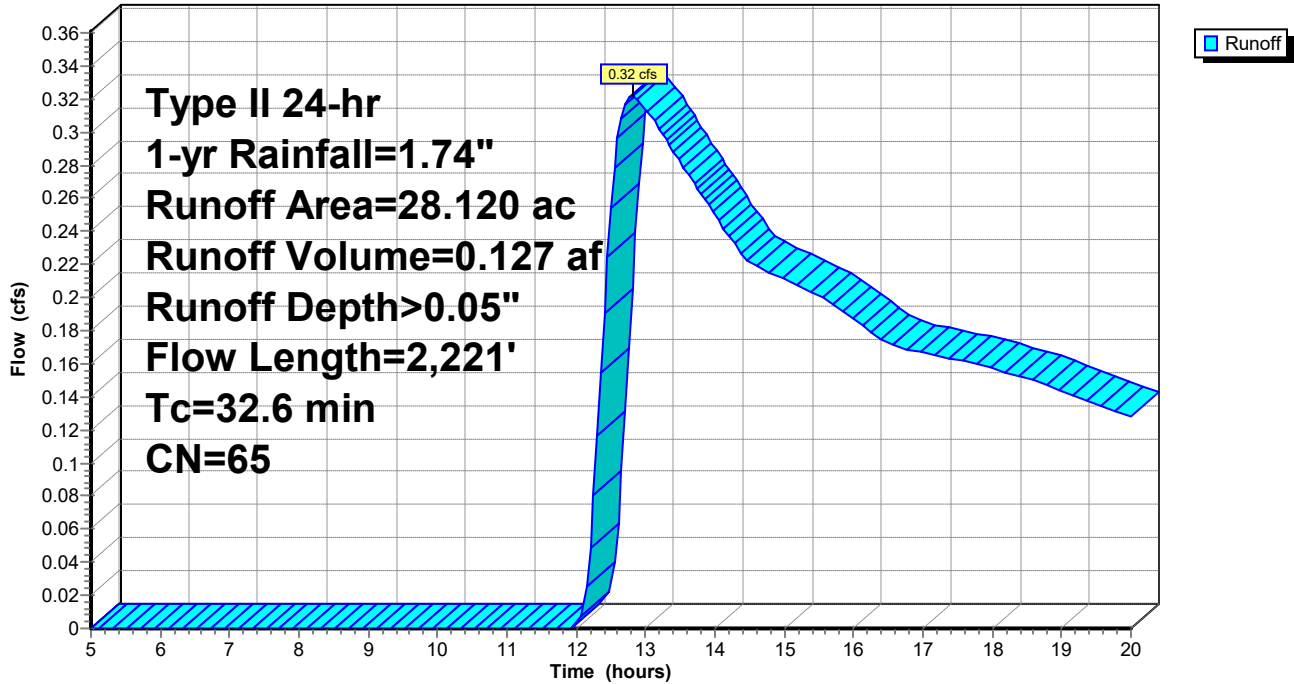
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
3.970	30	Woods, Good, HSG A
1.280	55	Woods, Good, HSG B
3.380	70	Woods, Good, HSG C
6.010	58	Legumes, straight row, Good, HSG A
4.080	72	Legumes, straight row, Good, HSG B
9.400	81	Legumes, straight row, Good, HSG C
28.120	65	Weighted Average
28.120		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	100	0.0260	0.32		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
26.8	2,043	0.0200	1.27		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
0.6	78	0.2190	2.34		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
32.6	2,221	Total			

Subcatchment D50: DA-50

Hydrograph



Summary for Subcatchment D51: DA-51

Runoff = 0.59 cfs @ 14.17 hrs, Volume= 0.194 af, Depth> 0.20"
 Routed to Link L51 : L51

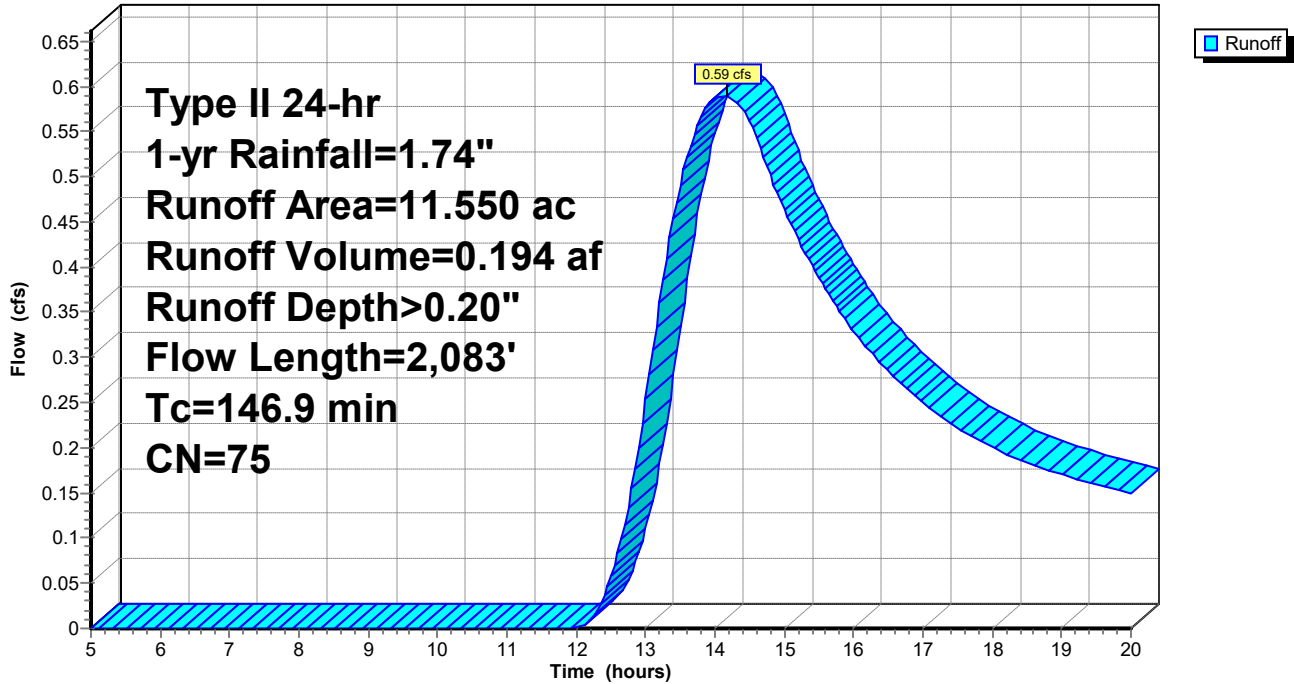
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.060	32	Woods/grass comb., Good, HSG A
0.110	58	Woods/grass comb., Good, HSG B
4.370	72	Woods/grass comb., Good, HSG C
1.010	58	Legumes, straight row, Good, HSG A
6.000	81	Legumes, straight row, Good, HSG C
11.550	75	Weighted Average
11.550		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
116.2	100	0.0005	0.01		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
9.9	440	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.4	1,477	0.0180	1.21		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
0.4	66	0.2820	2.66		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
146.9	2,083	Total			

Subcatchment D51: DA-51

Hydrograph



Summary for Subcatchment D52: DA-52

Runoff = 1.44 cfs @ 12.47 hrs, Volume= 0.236 af, Depth> 0.18"
 Routed to Link L52 : L52

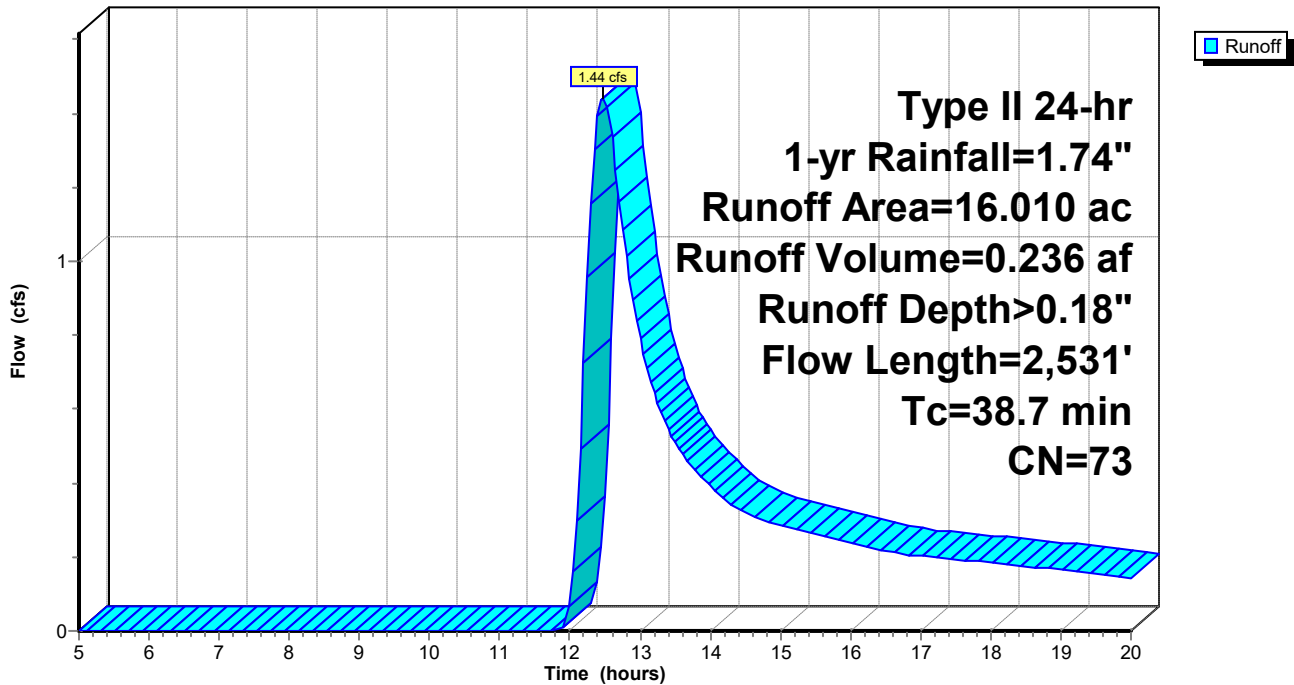
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
15.360	72	Woods/grass comb., Good, HSG C
0.650	98	Unconnected pavement, HSG C
16.010	73	Weighted Average
15.360		95.94% Pervious Area
0.650		4.06% Impervious Area
0.650		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.3	100	0.0210	0.10		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
21.4	2,431	0.0160	1.90		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
38.7	2,531	Total			

Subcatchment D52: DA-52

Hydrograph



Summary for Subcatchment D53: DA-53

Runoff = 2.81 cfs @ 13.32 hrs, Volume= 0.698 af, Depth> 0.26"
 Routed to Link L53 : L53

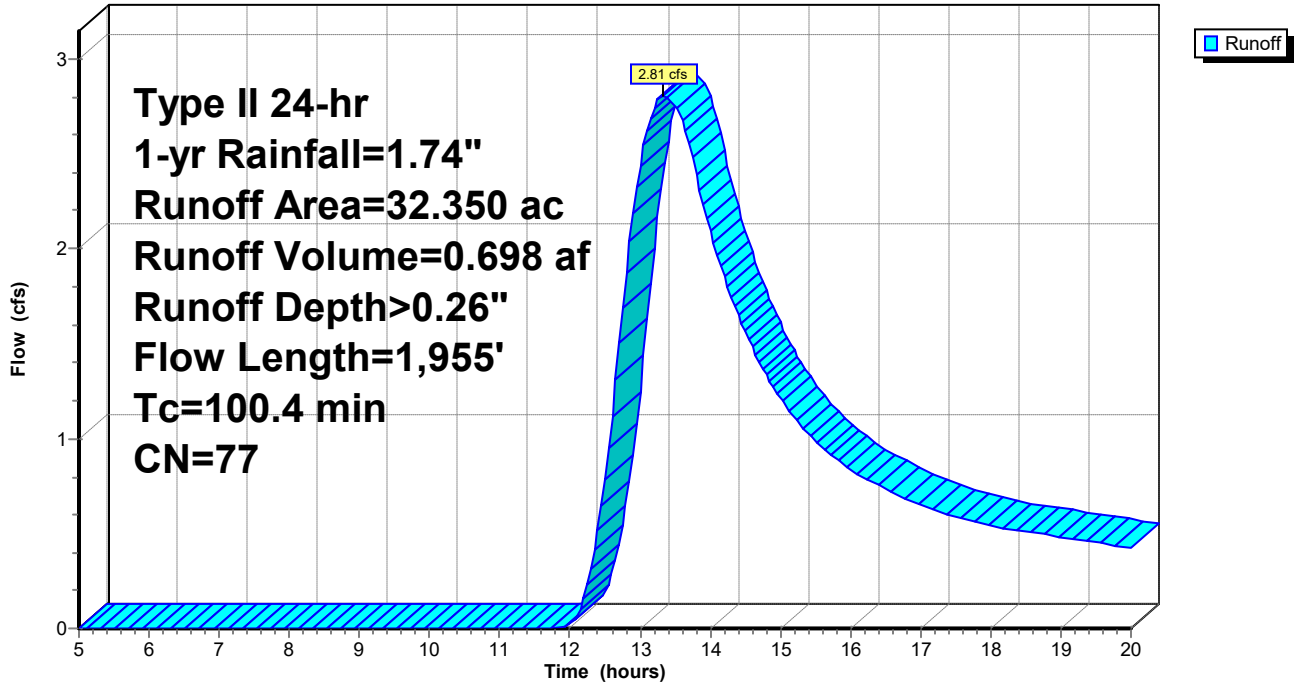
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.200	58	Woods/grass comb., Good, HSG B
14.450	72	Woods/grass comb., Good, HSG C
17.240	81	Legumes, straight row, Good, HSG C
0.460	71	Meadow, non-grazed, HSG C
32.350	77	Weighted Average
32.350		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0070	0.19		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
15.4	743	0.0080	0.80		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
27.3	513	0.0020	0.31		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
16.0	304	0.0040	0.32		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
32.8	295	0.0001	0.15		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
100.4	1,955	Total			

Subcatchment D53: DA-53

Hydrograph



Summary for Subcatchment D54: DA-54

Runoff = 0.93 cfs @ 12.06 hrs, Volume= 0.060 af, Depth> 0.25"
 Routed to Link L54 : L54

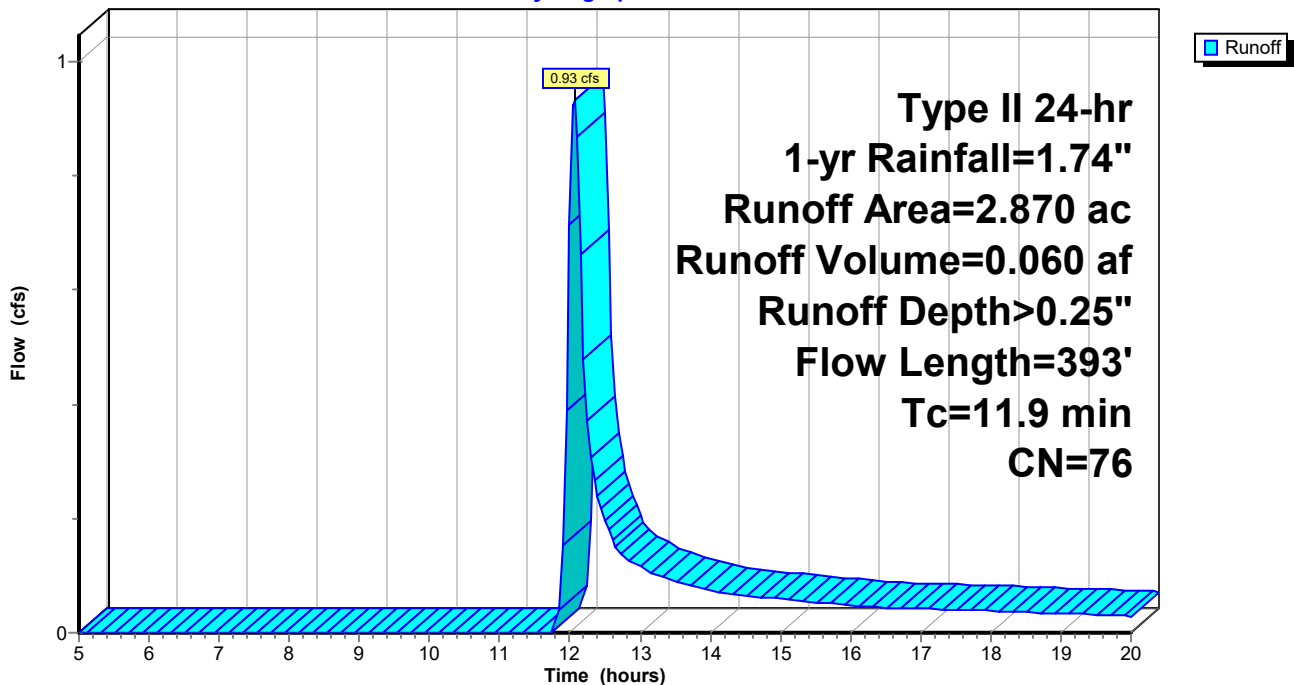
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 1-yr Rainfall=1.74"

Area (ac)	CN	Description
0.460	55	Woods, Good, HSG B
0.080	70	Woods, Good, HSG C
0.220	72	Legumes, straight row, Good, HSG B
2.110	81	Legumes, straight row, Good, HSG C
2.870	76	Weighted Average
2.870		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	100	0.0170	0.27		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
4.4	250	0.0110	0.94		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.3	43	0.0130	0.57		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
11.9	393	Total			

Subcatchment D54: DA-54

Hydrograph



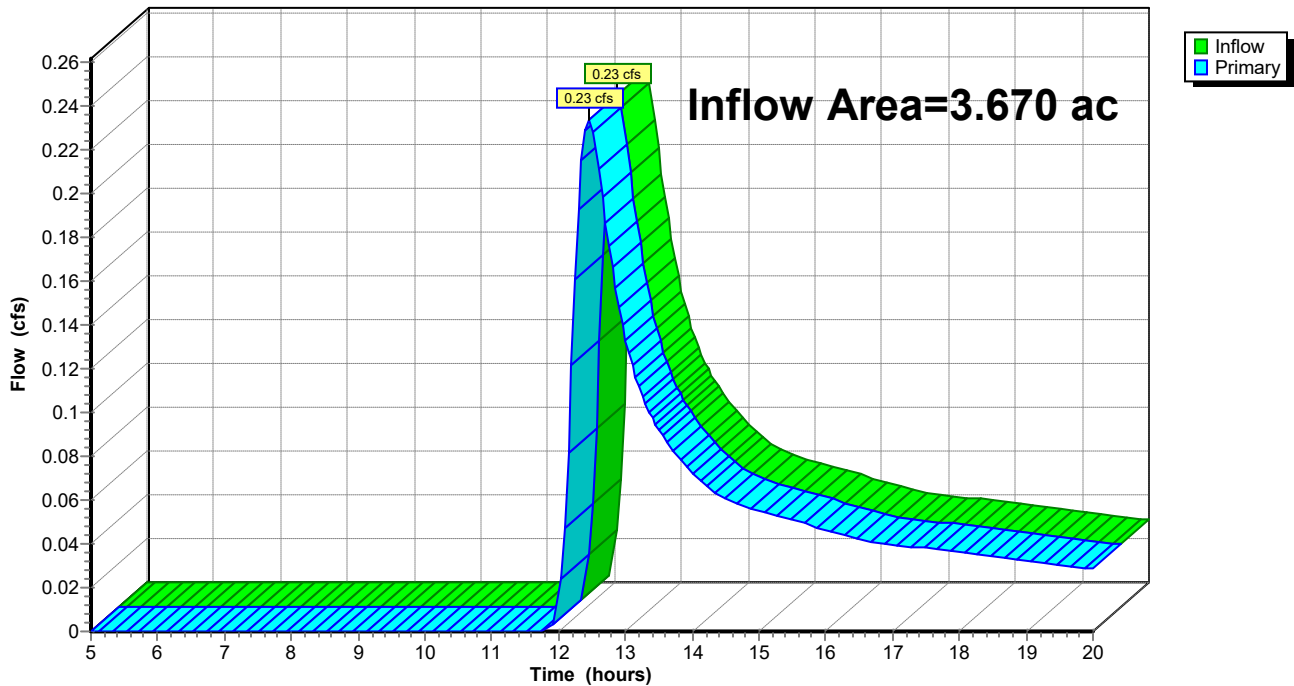
Summary for Link L01: L01

Inflow Area = 3.670 ac, 9.26% Impervious, Inflow Depth > 0.14" for 1-yr event
Inflow = 0.23 cfs @ 12.46 hrs, Volume= 0.043 af
Primary = 0.23 cfs @ 12.46 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min

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

Link L01: L01

Hydrograph



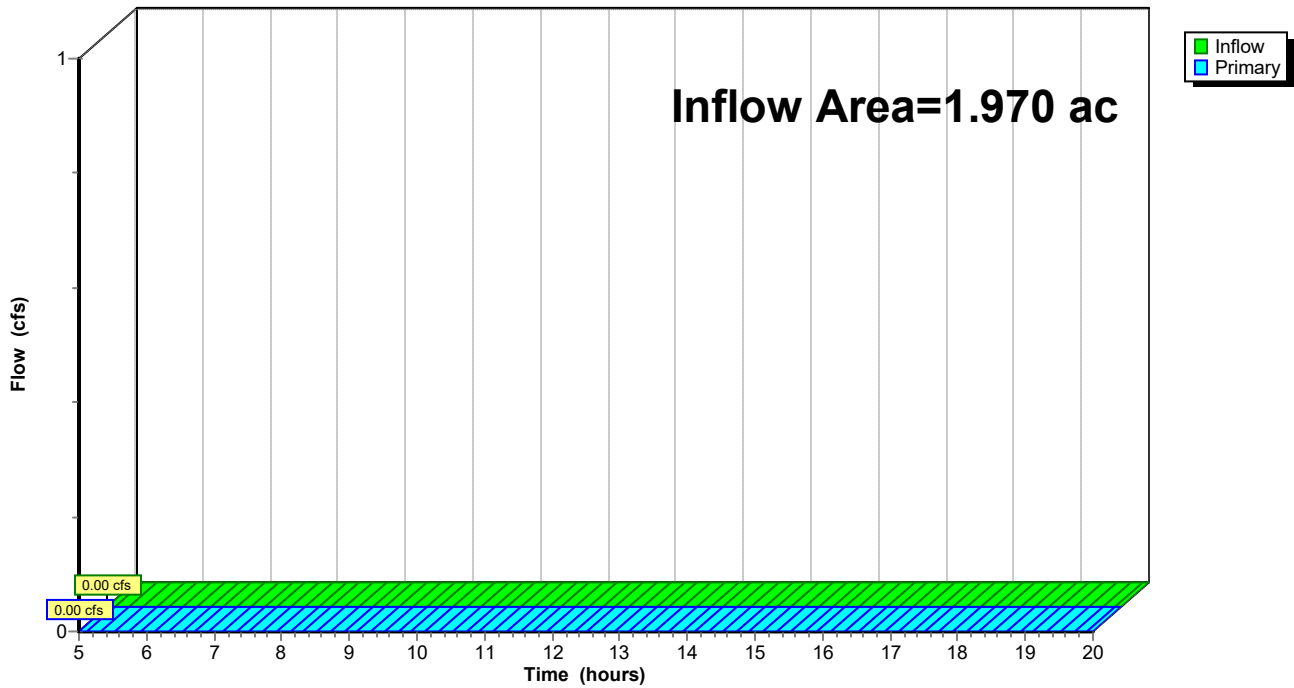
Summary for Link L02: L02

Inflow Area = 1.970 ac, 0.00% Impervious, Inflow Depth = 0.00" for 1-yr event
Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

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

Link L02: L02

Hydrograph



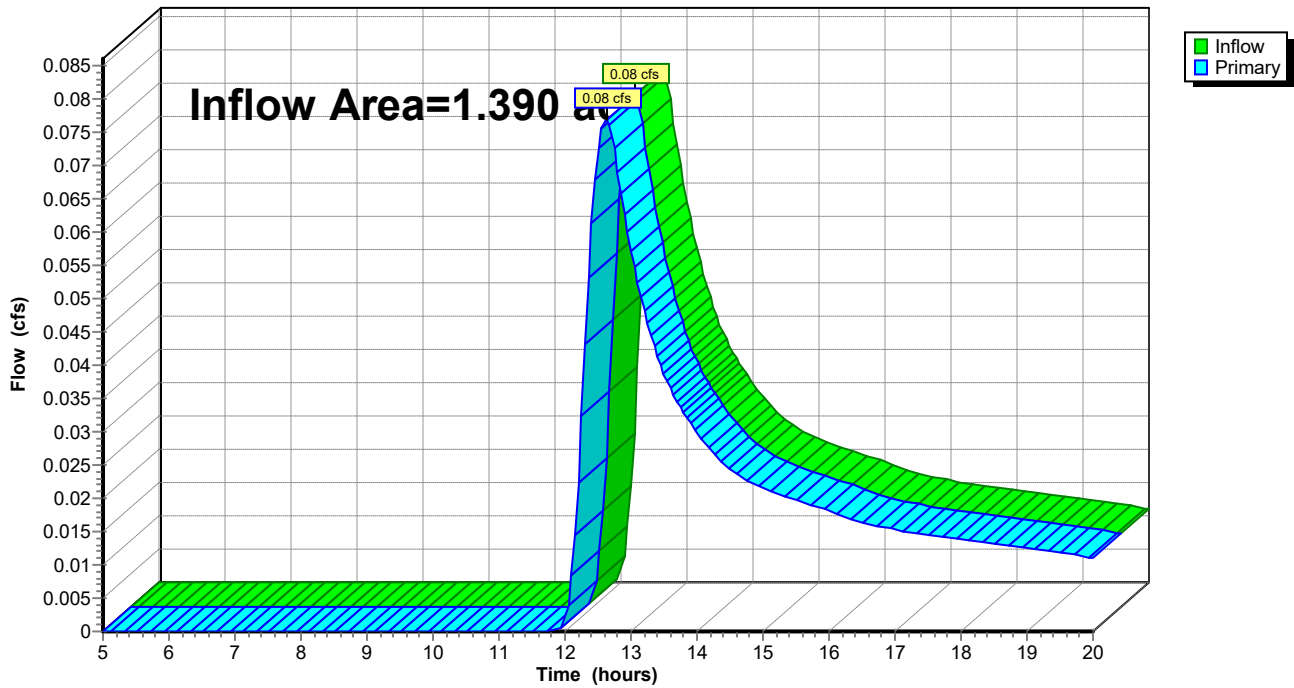
Summary for Link L03: L03

Inflow Area = 1.390 ac, 7.91% Impervious, Inflow Depth > 0.14" for 1-yr event
Inflow = 0.08 cfs @ 12.62 hrs, Volume= 0.016 af
Primary = 0.08 cfs @ 12.62 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.0 min

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

Link L03: L03

Hydrograph



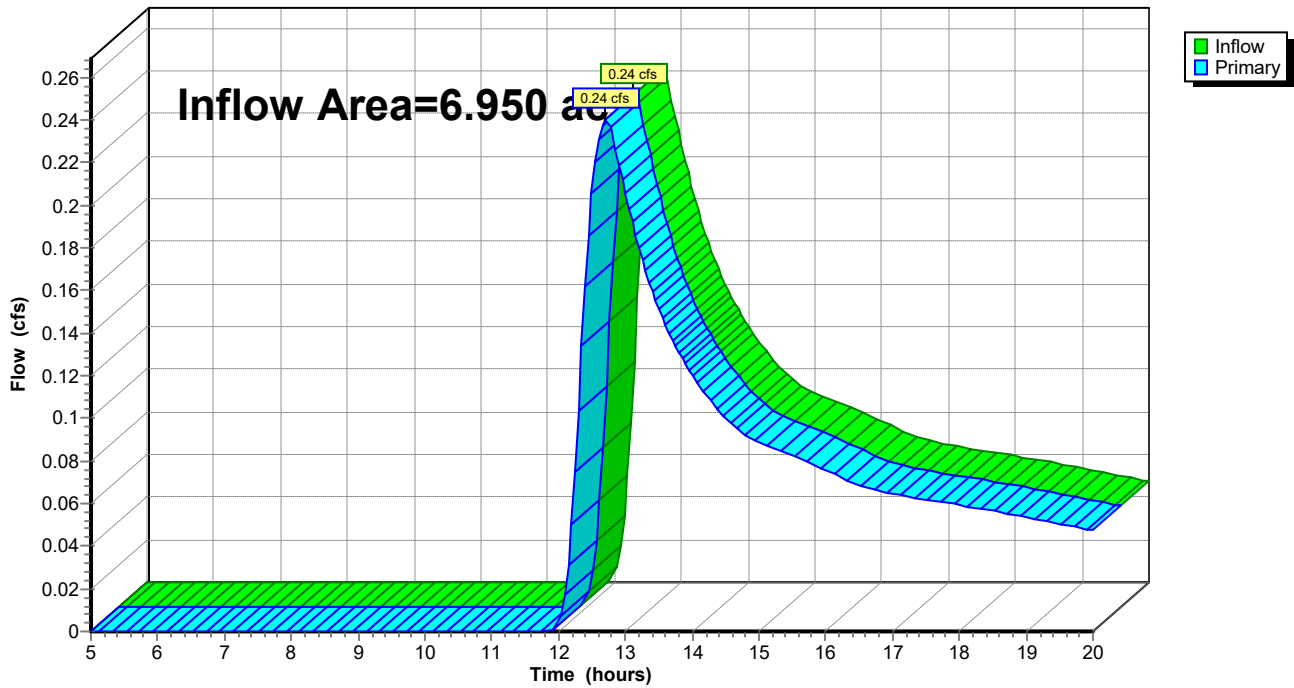
Summary for Link L04: L04

Inflow Area = 6.950 ac, 0.00% Impervious, Inflow Depth > 0.10" for 1-yr event
Inflow = 0.24 cfs @ 12.71 hrs, Volume= 0.061 af
Primary = 0.24 cfs @ 12.71 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min

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

Link L04: L04

Hydrograph



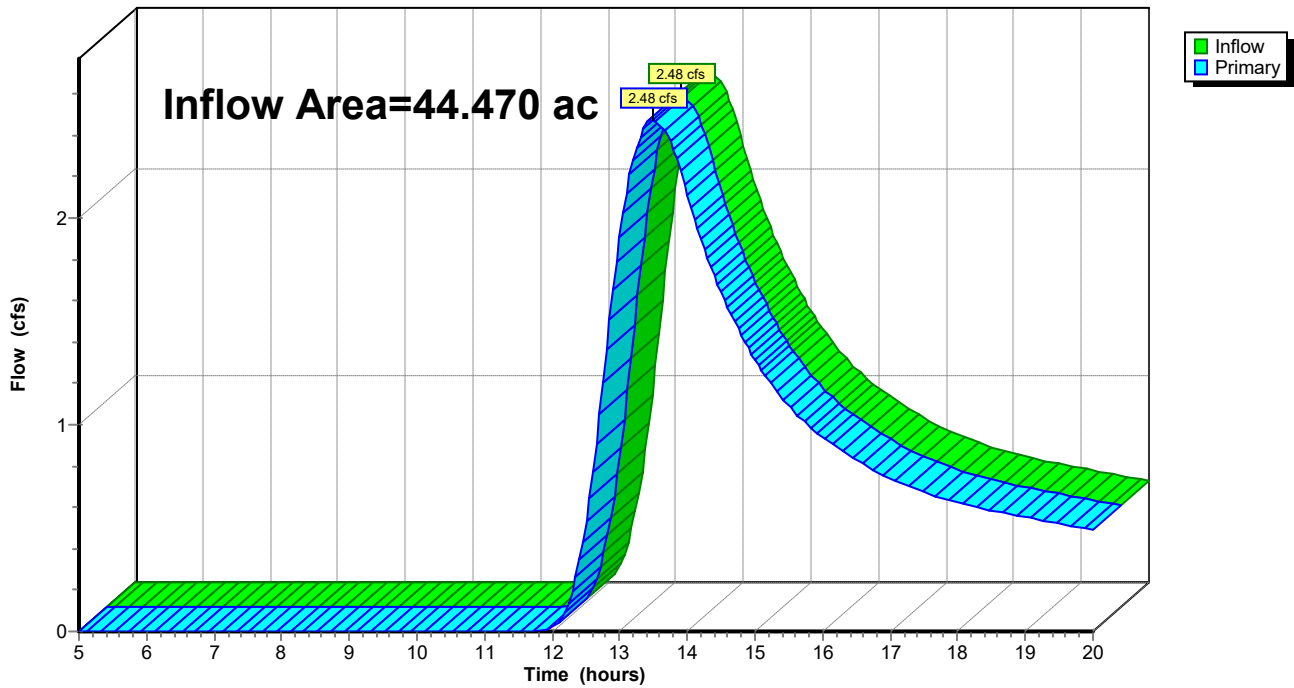
Summary for Link L05: L05

Inflow Area = 44.470 ac, 0.00% Impervious, Inflow Depth > 0.19" for 1-yr event
Inflow = 2.48 cfs @ 13.50 hrs, Volume= 0.695 af
Primary = 2.48 cfs @ 13.50 hrs, Volume= 0.695 af, Atten= 0%, Lag= 0.0 min

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

Link L05: L05

Hydrograph



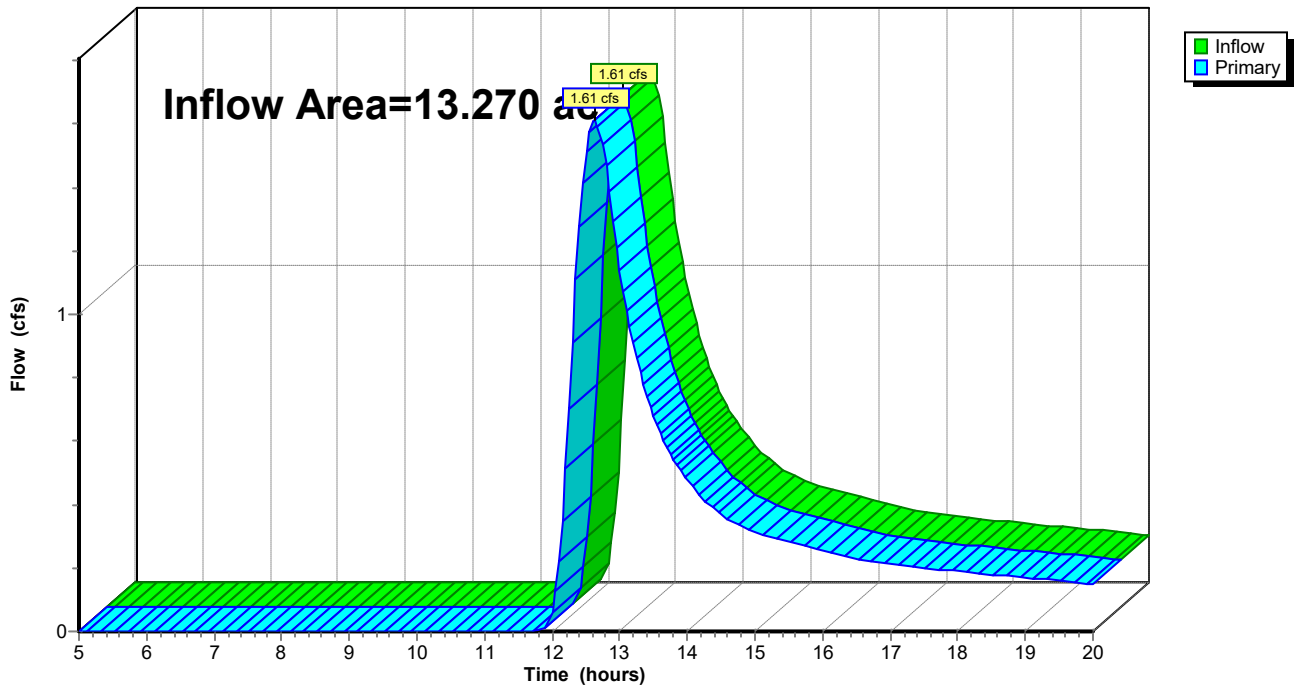
Summary for Link L06: L06

Inflow Area = 13.270 ac, 0.00% Impervious, Inflow Depth > 0.24" for 1-yr event
Inflow = 1.61 cfs @ 12.62 hrs, Volume= 0.269 af
Primary = 1.61 cfs @ 12.62 hrs, Volume= 0.269 af, Atten= 0%, Lag= 0.0 min

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

Link L06: L06

Hydrograph



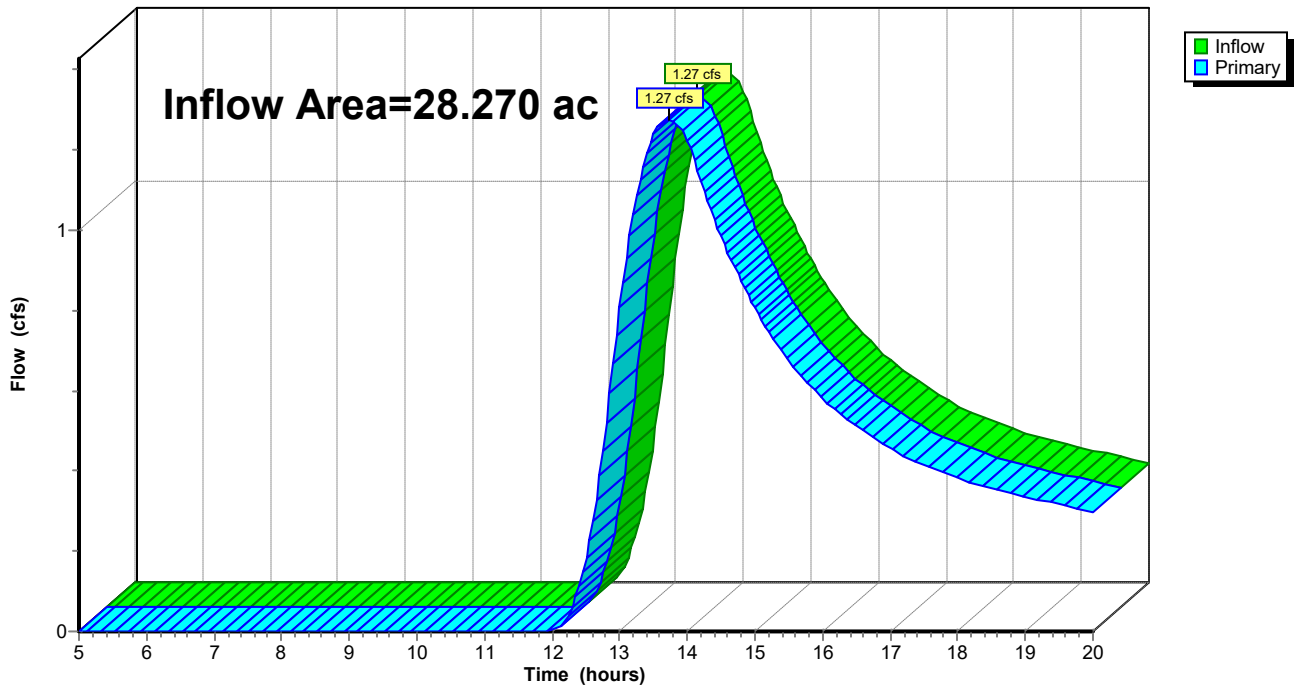
Summary for Link L07: L07

Inflow Area = 28.270 ac, 0.00% Impervious, Inflow Depth > 0.17" for 1-yr event
Inflow = 1.27 cfs @ 13.74 hrs, Volume= 0.389 af
Primary = 1.27 cfs @ 13.74 hrs, Volume= 0.389 af, Atten= 0%, Lag= 0.0 min

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

Link L07: L07

Hydrograph



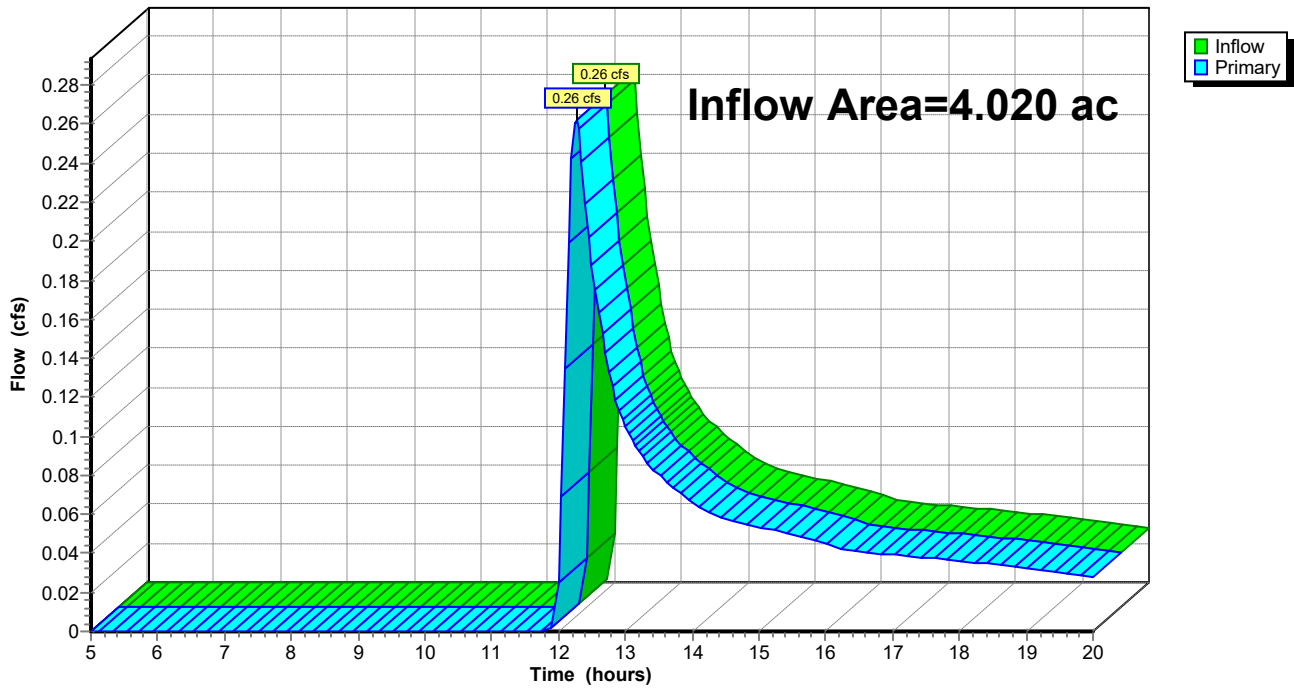
Summary for Link L08: L08

Inflow Area = 4.020 ac, 0.00% Impervious, Inflow Depth > 0.12" for 1-yr event
Inflow = 0.26 cfs @ 12.27 hrs, Volume= 0.041 af
Primary = 0.26 cfs @ 12.27 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min

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

Link L08: L08

Hydrograph



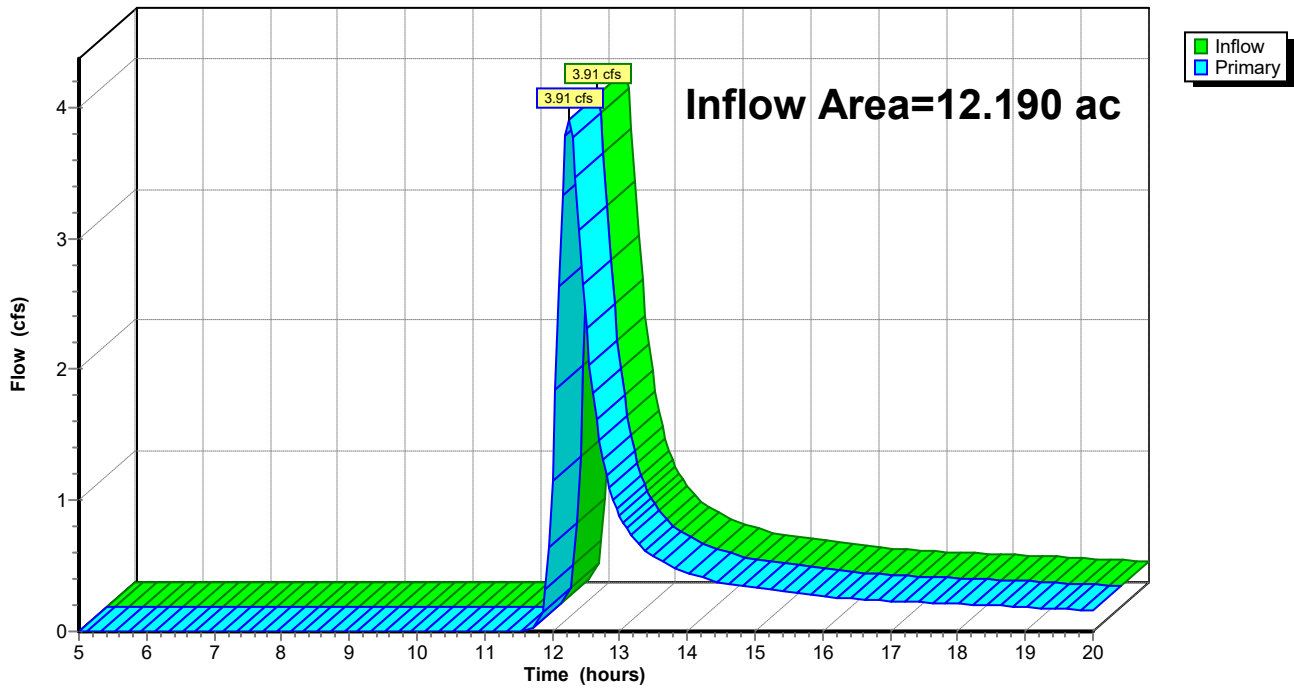
Summary for Link L09: L09

Inflow Area = 12.190 ac, 0.00% Impervious, Inflow Depth > 0.36" for 1-yr event
Inflow = 3.91 cfs @ 12.25 hrs, Volume= 0.366 af
Primary = 3.91 cfs @ 12.25 hrs, Volume= 0.366 af, Atten= 0%, Lag= 0.0 min

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

Link L09: L09

Hydrograph



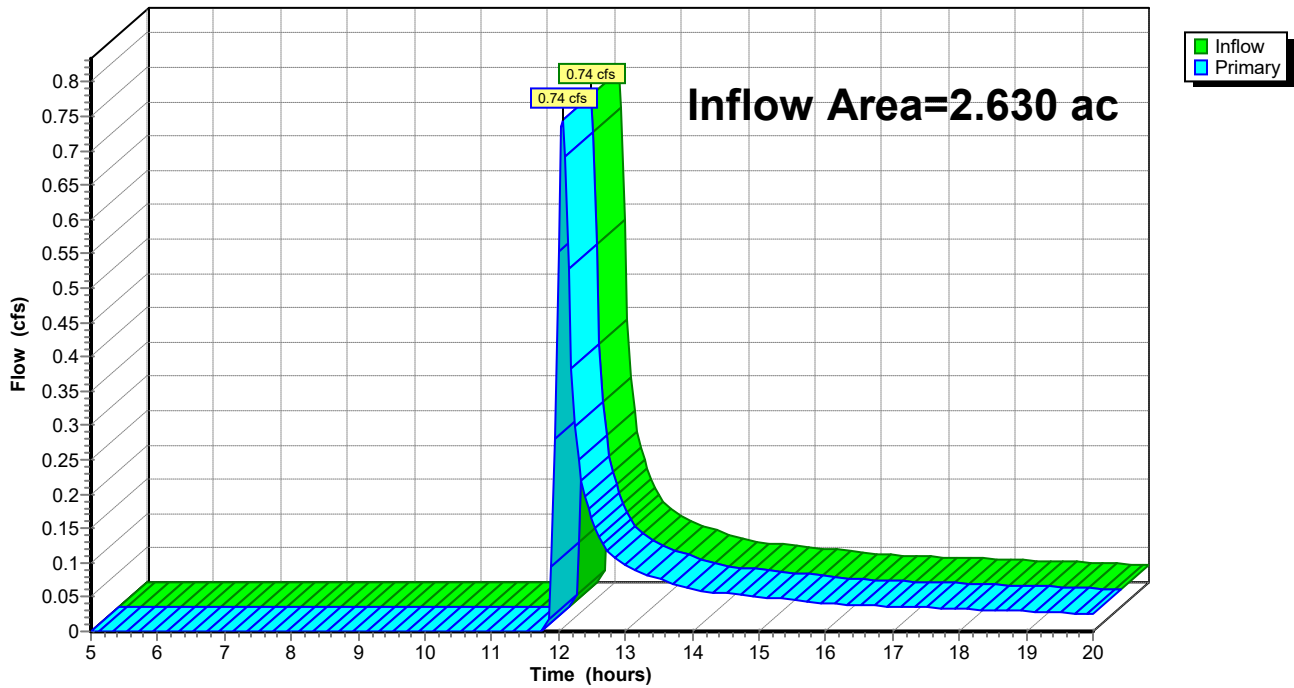
Summary for Link L10: L10

Inflow Area = 2.630 ac, 0.00% Impervious, Inflow Depth > 0.23" for 1-yr event
Inflow = 0.74 cfs @ 12.07 hrs, Volume= 0.049 af
Primary = 0.74 cfs @ 12.07 hrs, Volume= 0.049 af, Atten= 0%, Lag= 0.0 min

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

Link L10: L10

Hydrograph



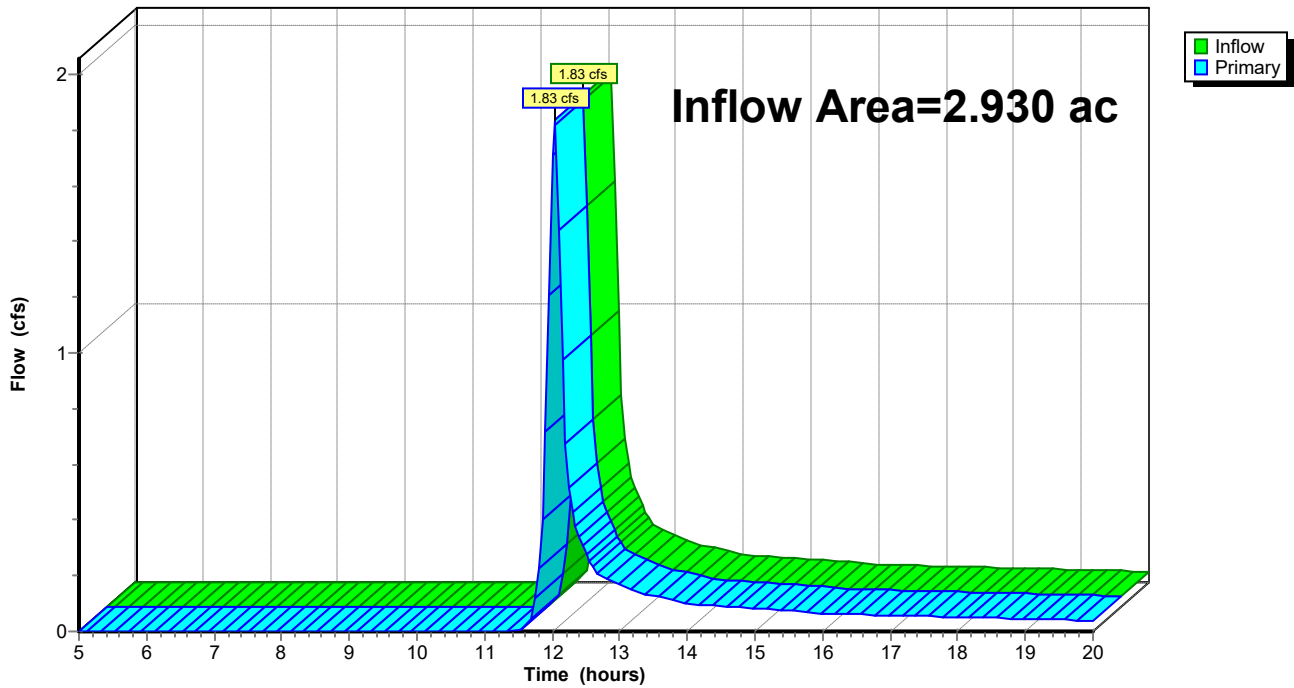
Summary for Link L11: L11

Inflow Area = 2.930 ac, 0.00% Impervious, Inflow Depth > 0.40" for 1-yr event
Inflow = 1.83 cfs @ 12.04 hrs, Volume= 0.097 af
Primary = 1.83 cfs @ 12.04 hrs, Volume= 0.097 af, Atten= 0%, Lag= 0.0 min

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

Link L11: L11

Hydrograph



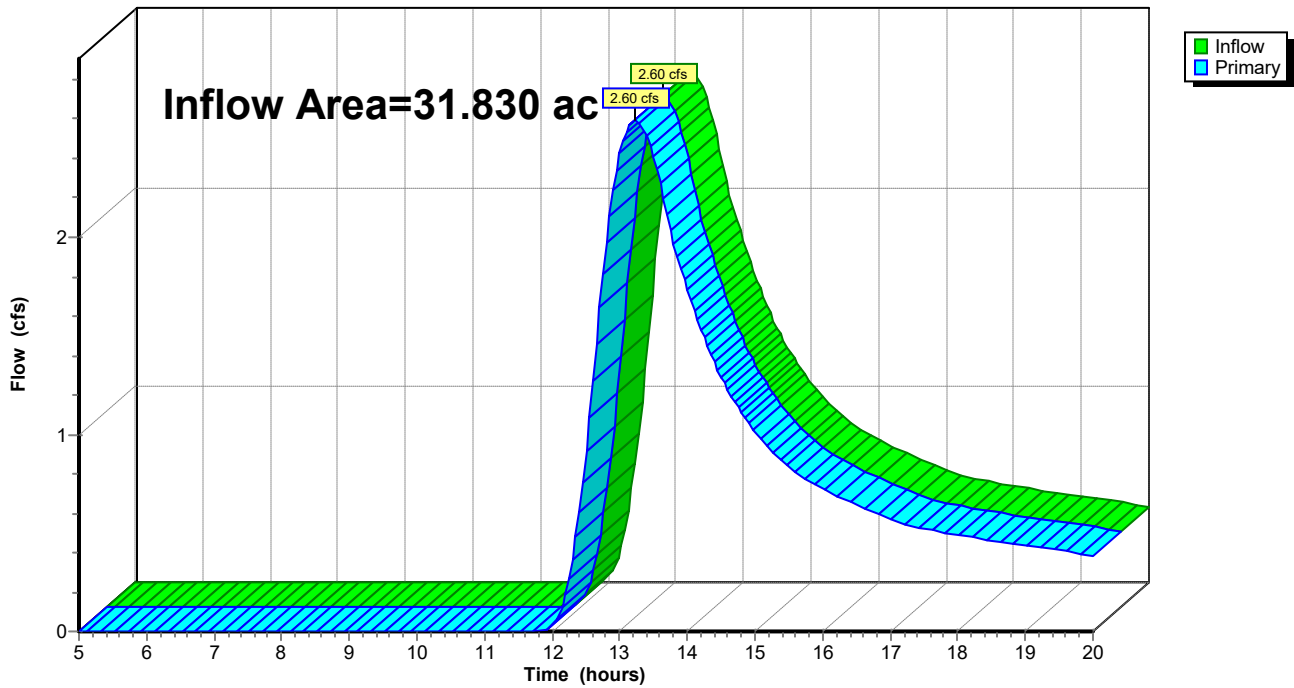
Summary for Link L12: L12

Inflow Area = 31.830 ac, 0.00% Impervious, Inflow Depth > 0.24" for 1-yr event
Inflow = 2.60 cfs @ 13.21 hrs, Volume= 0.625 af
Primary = 2.60 cfs @ 13.21 hrs, Volume= 0.625 af, Atten= 0%, Lag= 0.0 min

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

Link L12: L12

Hydrograph



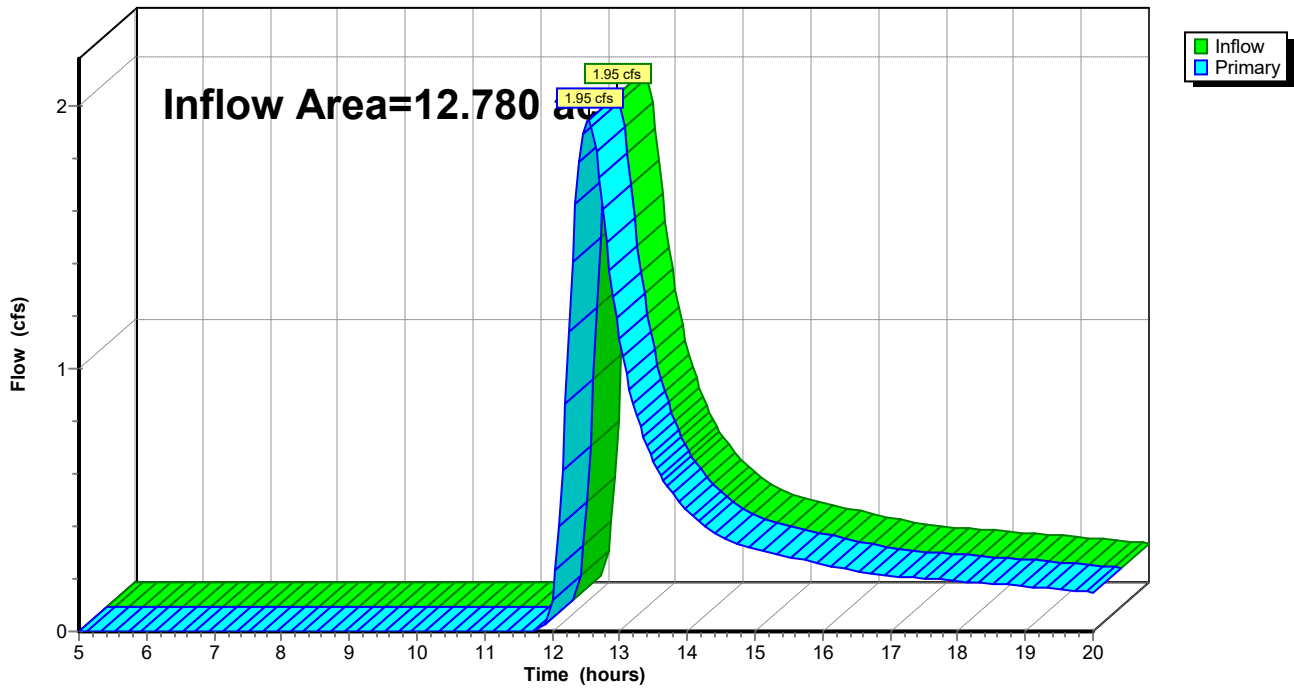
Summary for Link L13: L13

Inflow Area = 12.780 ac, 0.00% Impervious, Inflow Depth > 0.27" for 1-yr event
Inflow = 1.95 cfs @ 12.53 hrs, Volume= 0.287 af
Primary = 1.95 cfs @ 12.53 hrs, Volume= 0.287 af, Atten= 0%, Lag= 0.0 min

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

Link L13: L13

Hydrograph



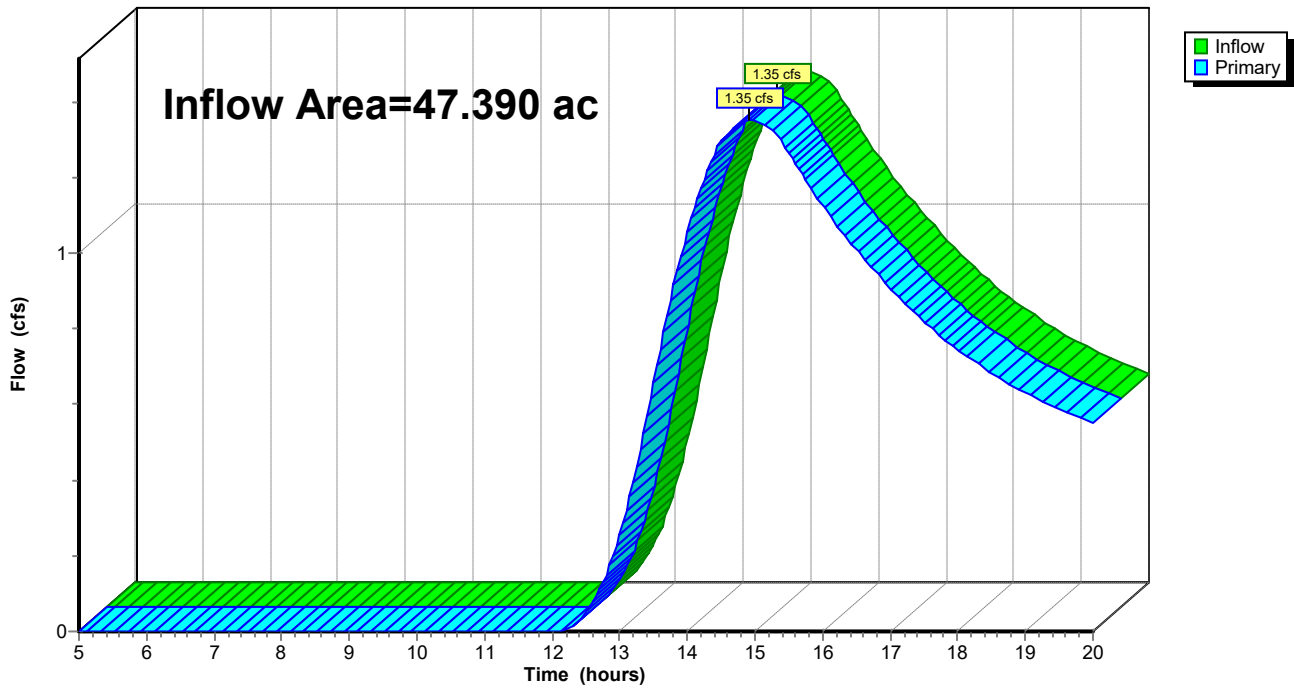
Summary for Link L14: L14

Inflow Area = 47.390 ac, 0.00% Impervious, Inflow Depth > 0.13" for 1-yr event
Inflow = 1.35 cfs @ 14.92 hrs, Volume= 0.526 af
Primary = 1.35 cfs @ 14.92 hrs, Volume= 0.526 af, Atten= 0%, Lag= 0.0 min

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

Link L14: L14

Hydrograph



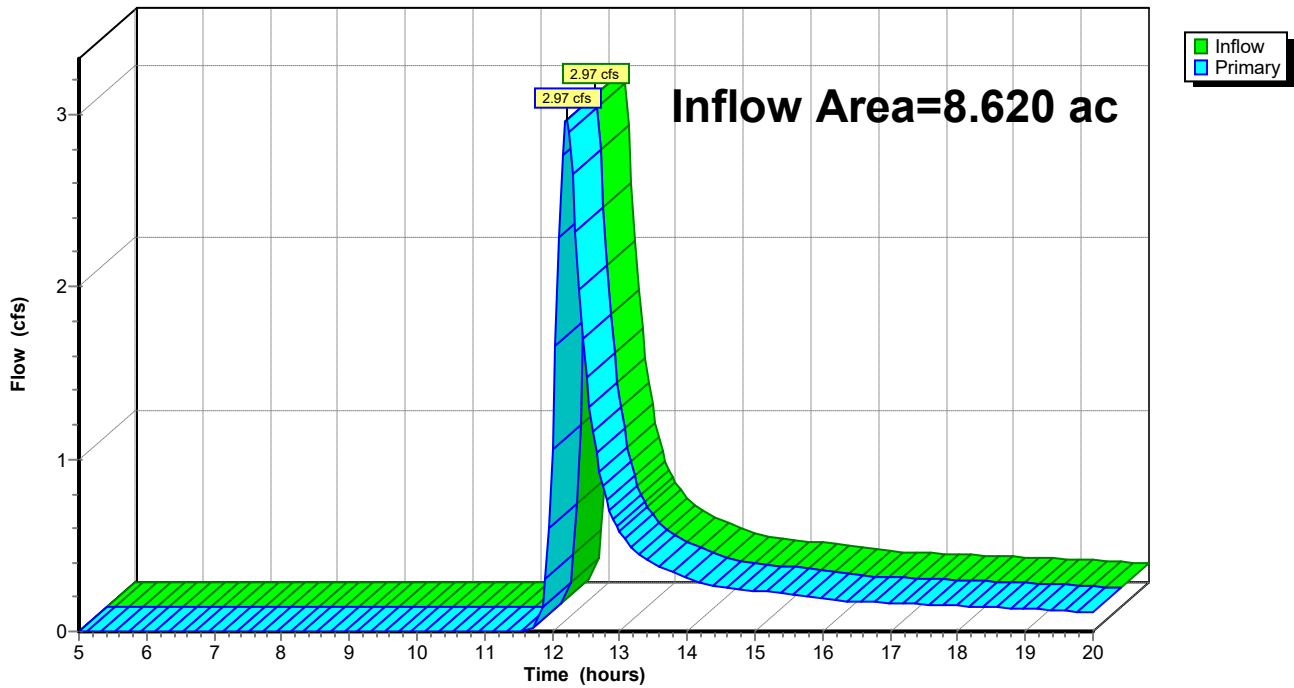
Summary for Link L15: L15

Inflow Area = 8.620 ac, 0.00% Impervious, Inflow Depth > 0.36" for 1-yr event
Inflow = 2.97 cfs @ 12.21 hrs, Volume= 0.260 af
Primary = 2.97 cfs @ 12.21 hrs, Volume= 0.260 af, Atten= 0%, Lag= 0.0 min

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

Link L15: L15

Hydrograph



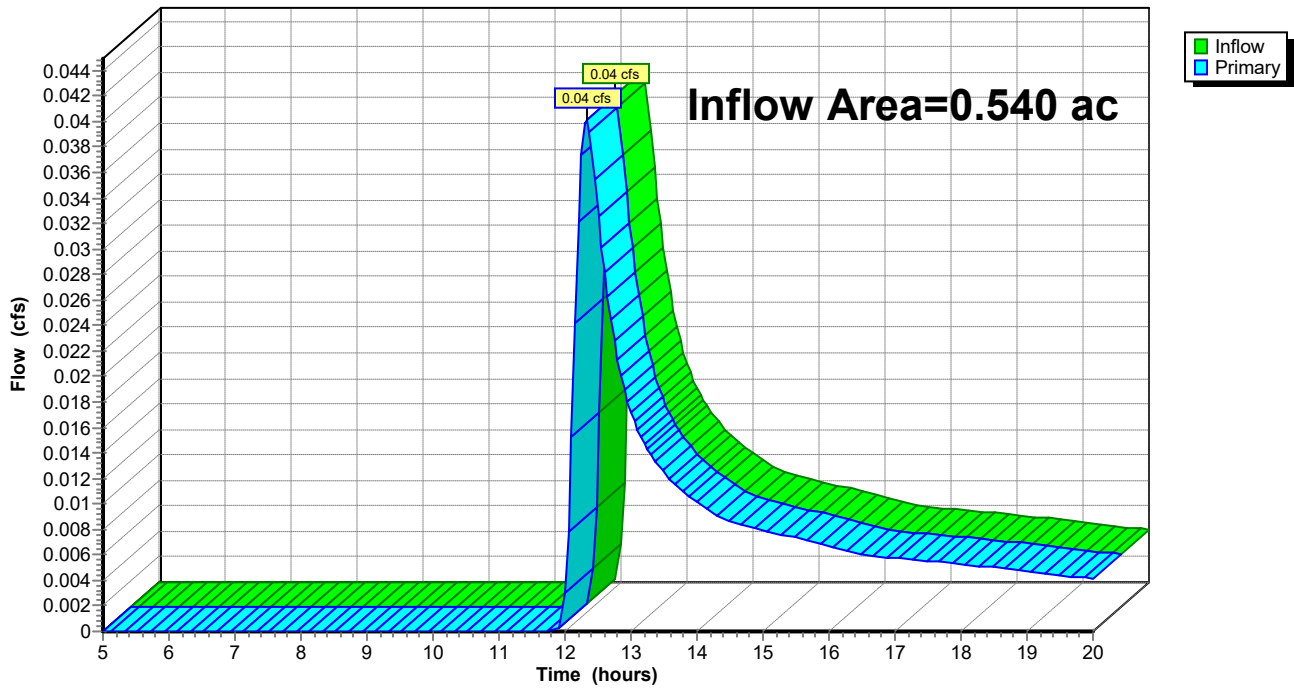
Summary for Link L16: L16

Inflow Area = 0.540 ac, 0.00% Impervious, Inflow Depth > 0.14" for 1-yr event
Inflow = 0.04 cfs @ 12.33 hrs, Volume= 0.006 af
Primary = 0.04 cfs @ 12.33 hrs, Volume= 0.006 af, Atten= 0%, Lag= 0.0 min

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

Link L16: L16

Hydrograph



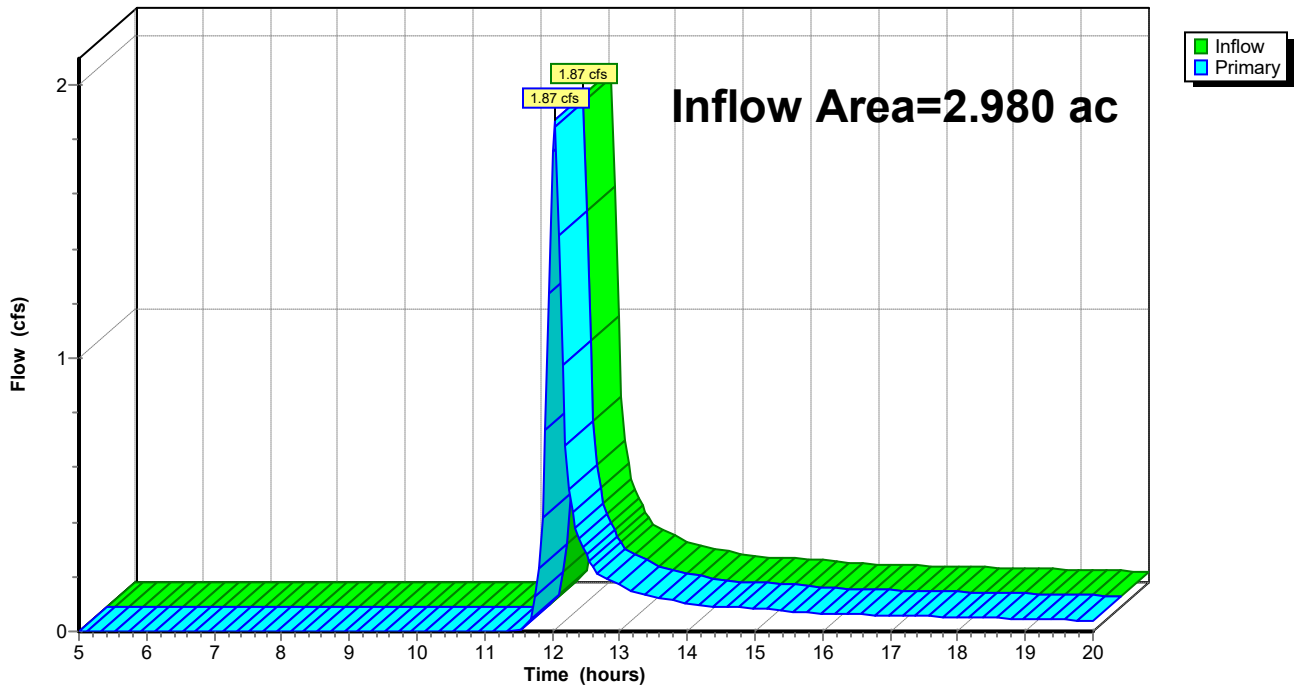
Summary for Link L17: L17

Inflow Area = 2.980 ac, 0.00% Impervious, Inflow Depth > 0.40" for 1-yr event
Inflow = 1.87 cfs @ 12.03 hrs, Volume= 0.099 af
Primary = 1.87 cfs @ 12.03 hrs, Volume= 0.099 af, Atten= 0%, Lag= 0.0 min

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

Link L17: L17

Hydrograph



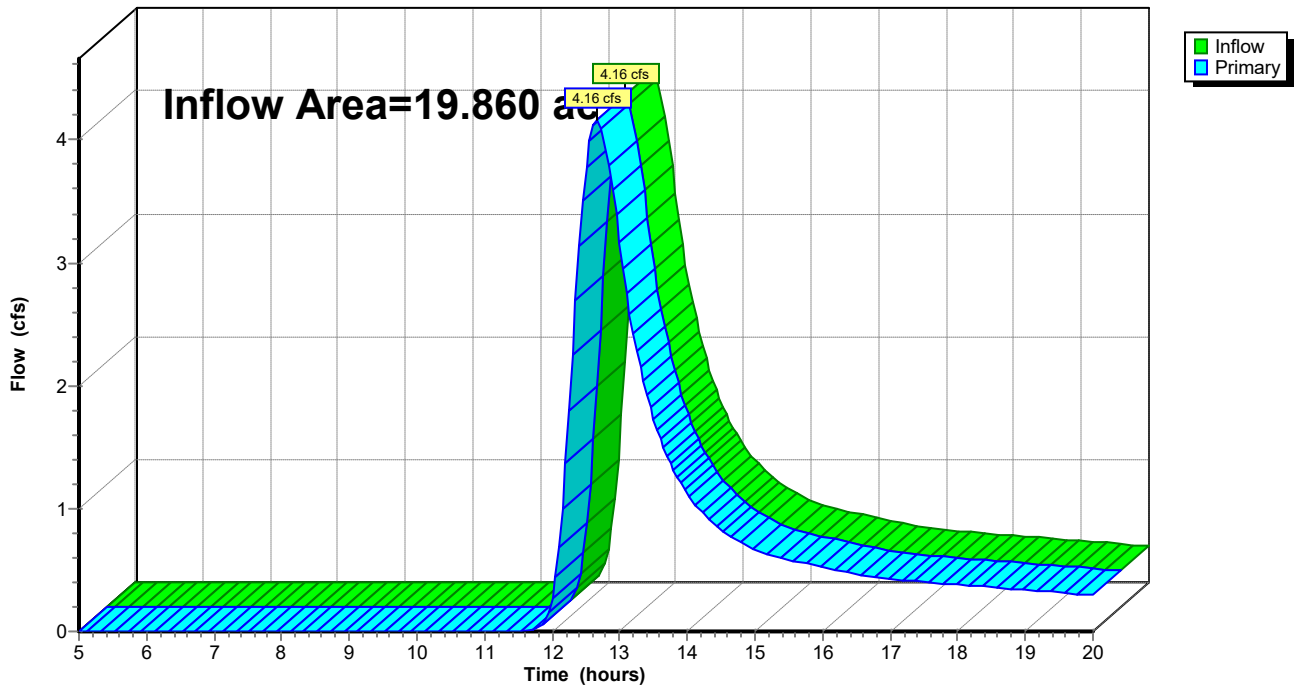
Summary for Link L18: L18

Inflow Area = 19.860 ac, 0.00% Impervious, Inflow Depth > 0.39" for 1-yr event
Inflow = 4.16 cfs @ 12.67 hrs, Volume= 0.641 af
Primary = 4.16 cfs @ 12.67 hrs, Volume= 0.641 af, Atten= 0%, Lag= 0.0 min

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

Link L18: L18

Hydrograph



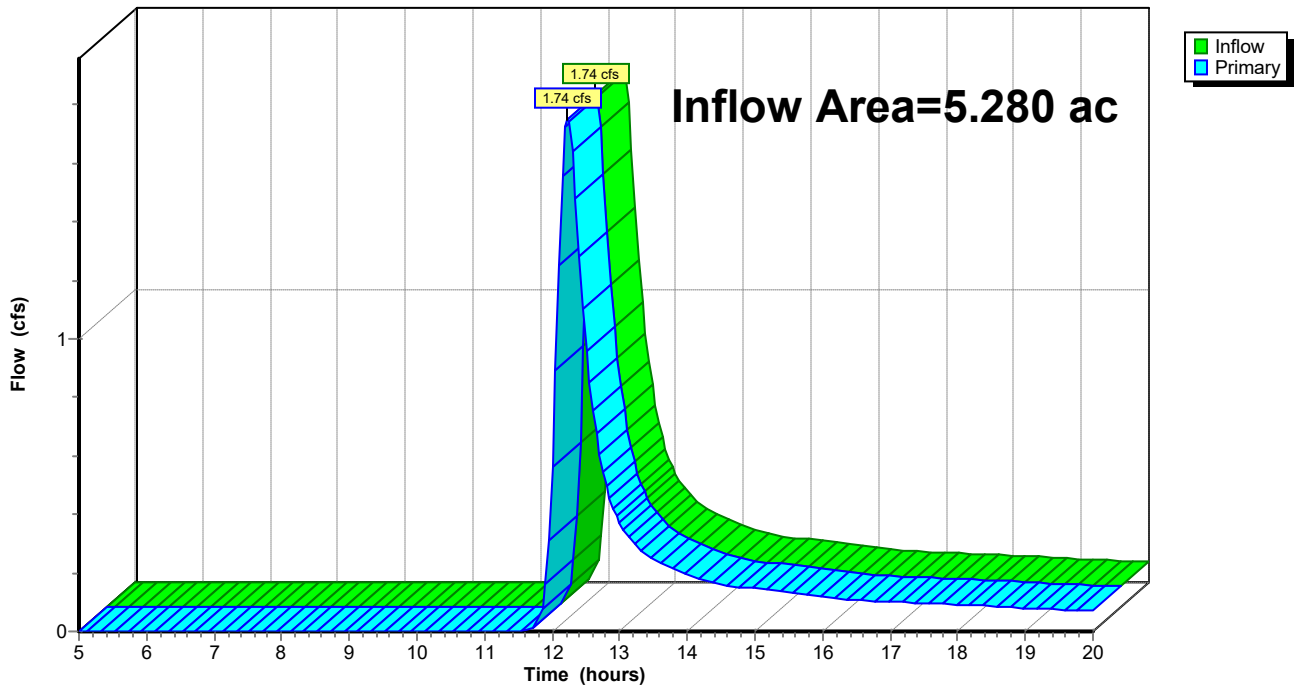
Summary for Link L19: L19

Inflow Area = 5.280 ac, 0.00% Impervious, Inflow Depth > 0.36" for 1-yr event
Inflow = 1.74 cfs @ 12.23 hrs, Volume= 0.159 af
Primary = 1.74 cfs @ 12.23 hrs, Volume= 0.159 af, Atten= 0%, Lag= 0.0 min

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

Link L19: L19

Hydrograph



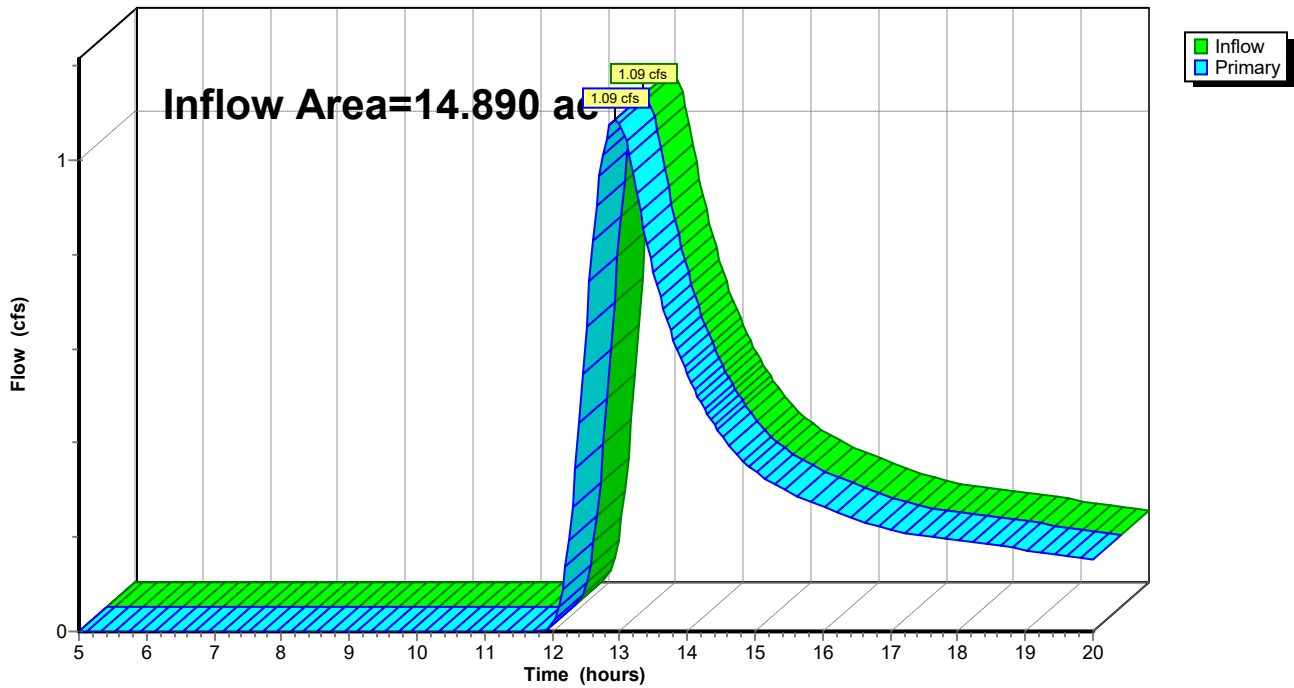
Summary for Link L20: L20

Inflow Area = 14.890 ac, 0.00% Impervious, Inflow Depth > 0.19" for 1-yr event
Inflow = 1.09 cfs @ 12.93 hrs, Volume= 0.240 af
Primary = 1.09 cfs @ 12.93 hrs, Volume= 0.240 af, Atten= 0%, Lag= 0.0 min

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

Link L20: L20

Hydrograph



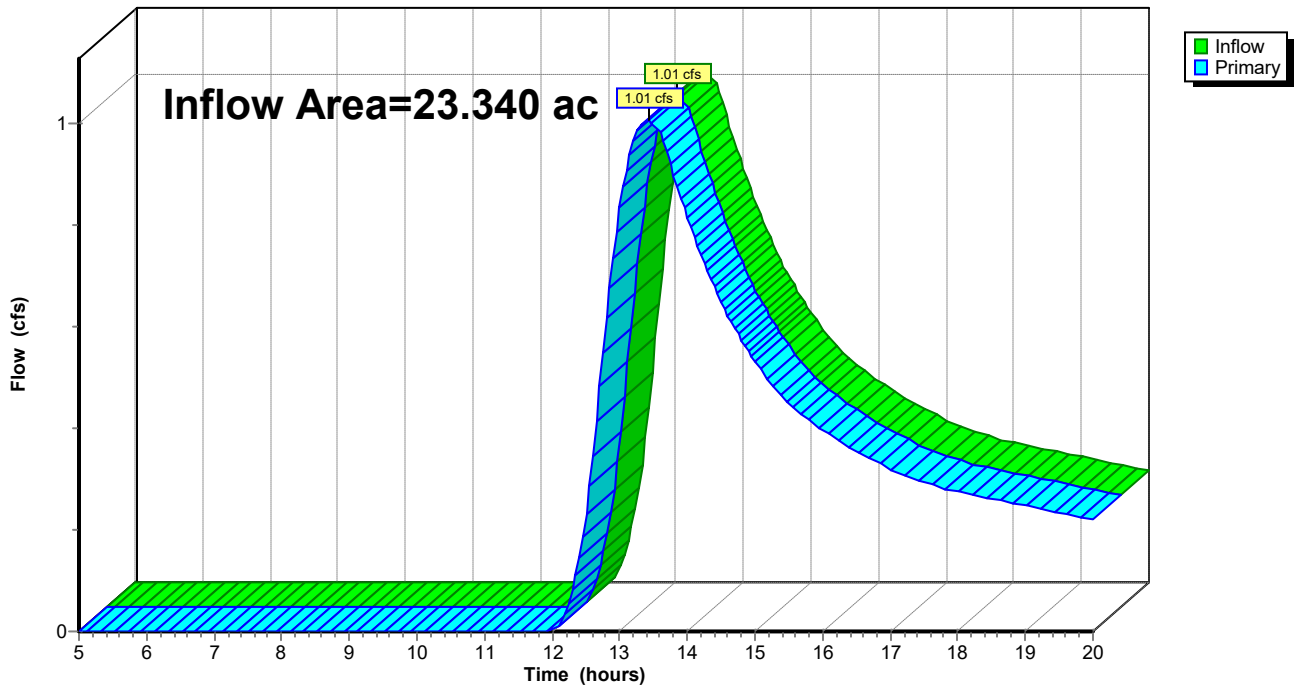
Summary for Link L21: L21

Inflow Area = 23.340 ac, 0.00% Impervious, Inflow Depth > 0.15" for 1-yr event
Inflow = 1.01 cfs @ 13.44 hrs, Volume= 0.291 af
Primary = 1.01 cfs @ 13.44 hrs, Volume= 0.291 af, Atten= 0%, Lag= 0.0 min

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

Link L21: L21

Hydrograph



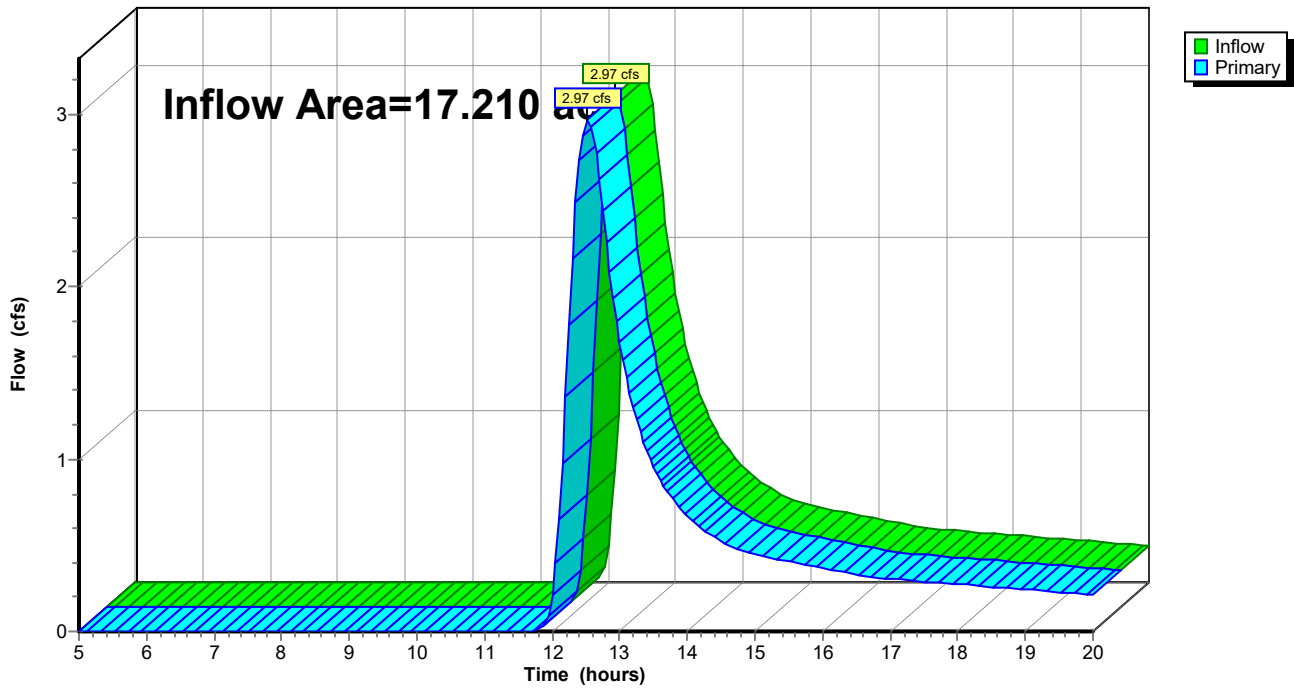
Summary for Link L22: L22

Inflow Area = 17.210 ac, 0.00% Impervious, Inflow Depth > 0.30" for 1-yr event
Inflow = 2.97 cfs @ 12.52 hrs, Volume= 0.426 af
Primary = 2.97 cfs @ 12.52 hrs, Volume= 0.426 af, Atten= 0%, Lag= 0.0 min

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

Link L22: L22

Hydrograph



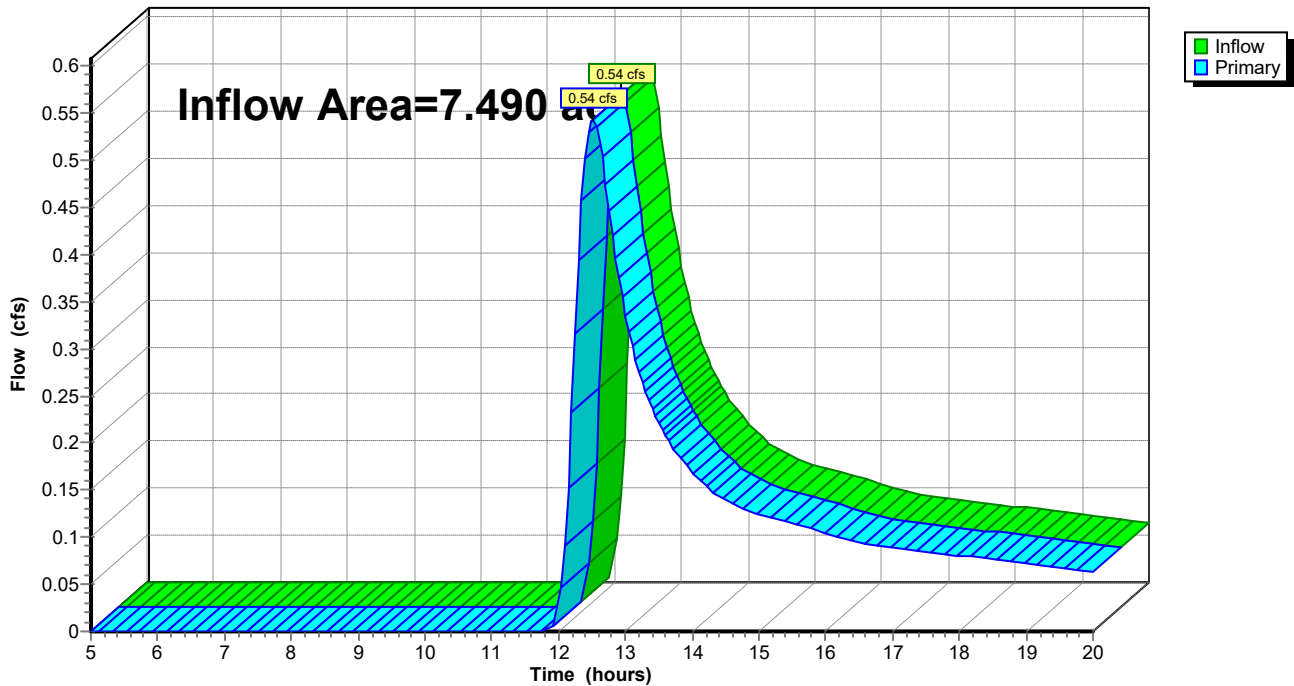
Summary for Link L23: L23

Inflow Area = 7.490 ac, 0.00% Impervious, Inflow Depth > 0.16" for 1-yr event
Inflow = 0.54 cfs @ 12.52 hrs, Volume= 0.098 af
Primary = 0.54 cfs @ 12.52 hrs, Volume= 0.098 af, Atten= 0%, Lag= 0.0 min

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

Link L23: L23

Hydrograph



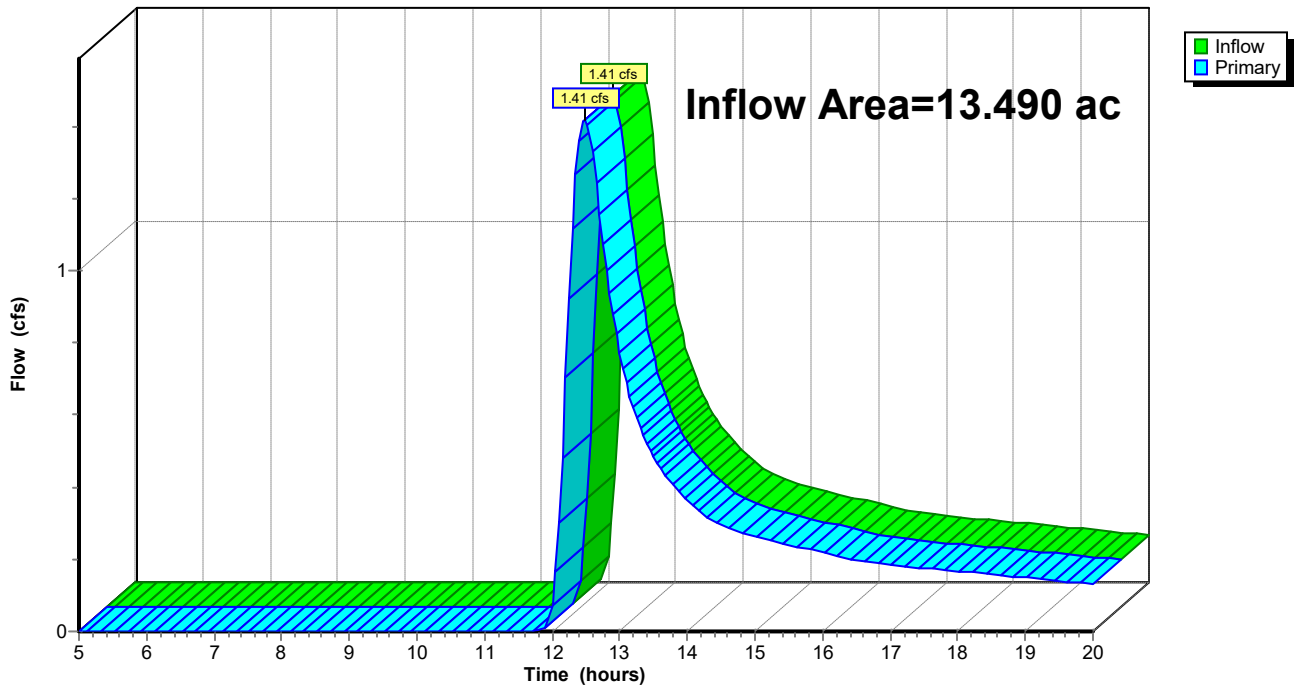
Summary for Link L24: L24

Inflow Area = 13.490 ac, 0.00% Impervious, Inflow Depth > 0.20" for 1-yr event
Inflow = 1.41 cfs @ 12.48 hrs, Volume= 0.223 af
Primary = 1.41 cfs @ 12.48 hrs, Volume= 0.223 af, Atten= 0%, Lag= 0.0 min

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

Link L24: L24

Hydrograph



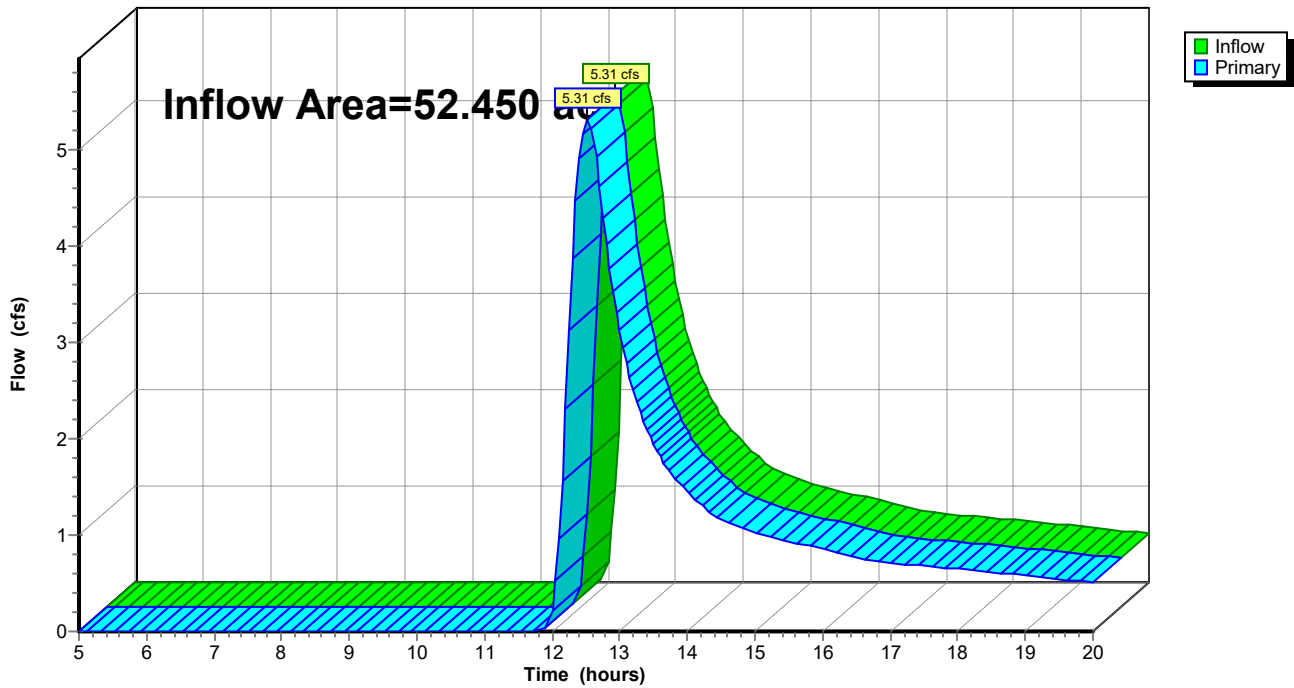
Summary for Link L25: L25

Inflow Area = 52.450 ac, 0.00% Impervious, Inflow Depth > 0.20" for 1-yr event
Inflow = 5.31 cfs @ 12.52 hrs, Volume= 0.865 af
Primary = 5.31 cfs @ 12.52 hrs, Volume= 0.865 af, Atten= 0%, Lag= 0.0 min

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

Link L25: L25

Hydrograph



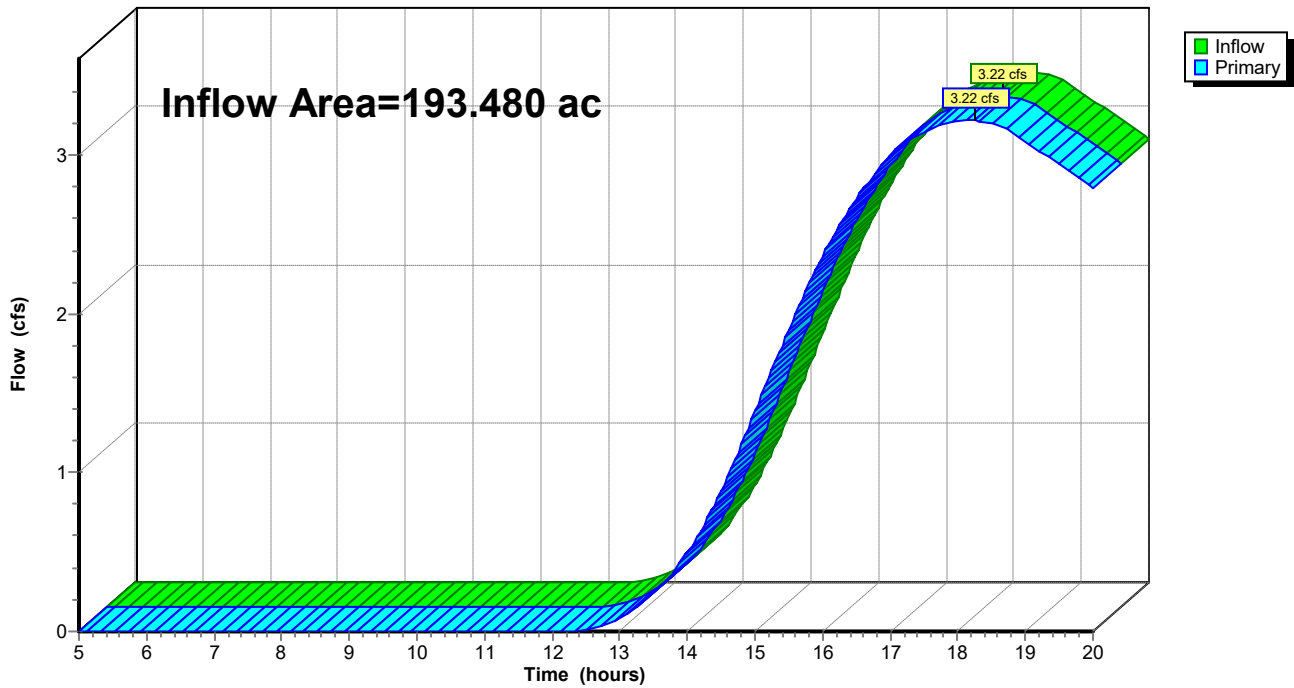
Summary for Link L26: L26

Inflow Area = 193.480 ac, 2.41% Impervious, Inflow Depth > 0.08" for 1-yr event
Inflow = 3.22 cfs @ 18.25 hrs, Volume= 1.249 af
Primary = 3.22 cfs @ 18.25 hrs, Volume= 1.249 af, Atten= 0%, Lag= 0.0 min

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

Link L26: L26

Hydrograph



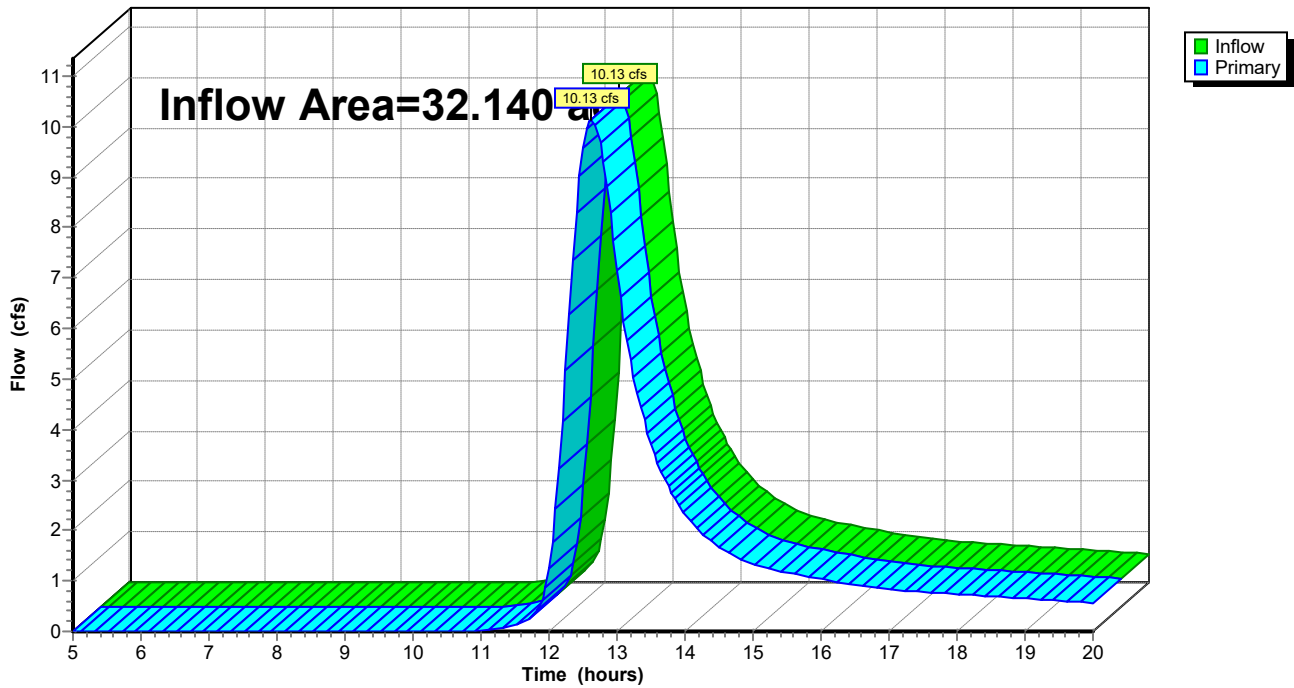
Summary for Link L27: L27

Inflow Area = 32.140 ac, 50.87% Impervious, Inflow Depth > 0.54" for 1-yr event
Inflow = 10.13 cfs @ 12.63 hrs, Volume= 1.445 af
Primary = 10.13 cfs @ 12.63 hrs, Volume= 1.445 af, Atten= 0%, Lag= 0.0 min

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

Link L27: L27

Hydrograph



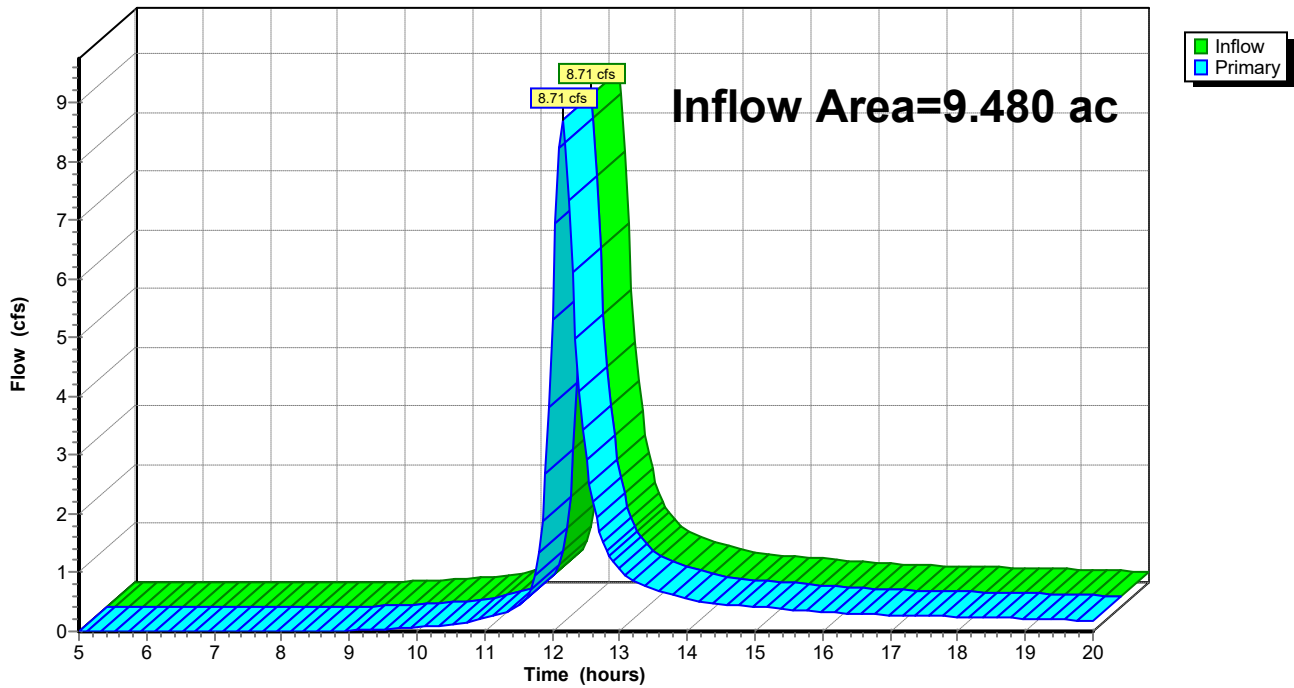
Summary for Link L28: L28

Inflow Area = 9.480 ac, 67.30% Impervious, Inflow Depth > 0.80" for 1-yr event
Inflow = 8.71 cfs @ 12.15 hrs, Volume= 0.634 af
Primary = 8.71 cfs @ 12.15 hrs, Volume= 0.634 af, Atten= 0%, Lag= 0.0 min

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

Link L28: L28

Hydrograph



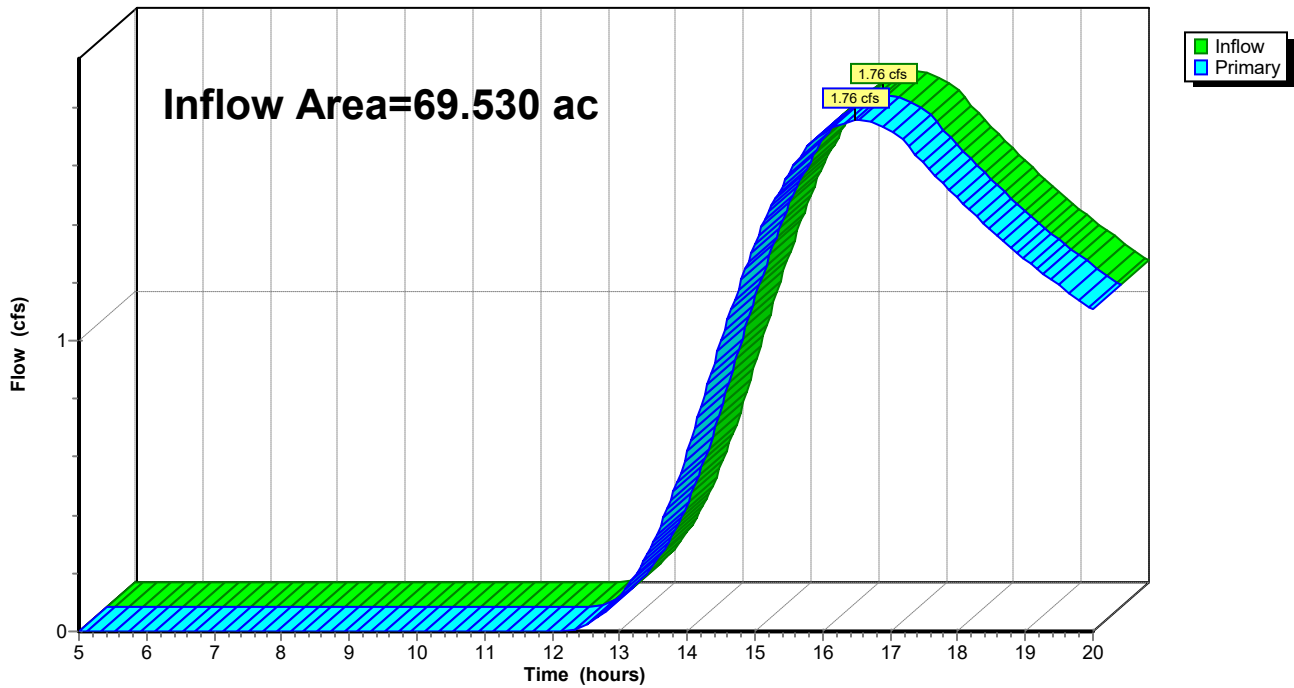
Summary for Link L29: L29

Inflow Area = 69.530 ac, 10.00% Impervious, Inflow Depth > 0.13" for 1-yr event
Inflow = 1.76 cfs @ 16.47 hrs, Volume= 0.732 af
Primary = 1.76 cfs @ 16.47 hrs, Volume= 0.732 af, Atten= 0%, Lag= 0.0 min

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

Link L29: L29

Hydrograph



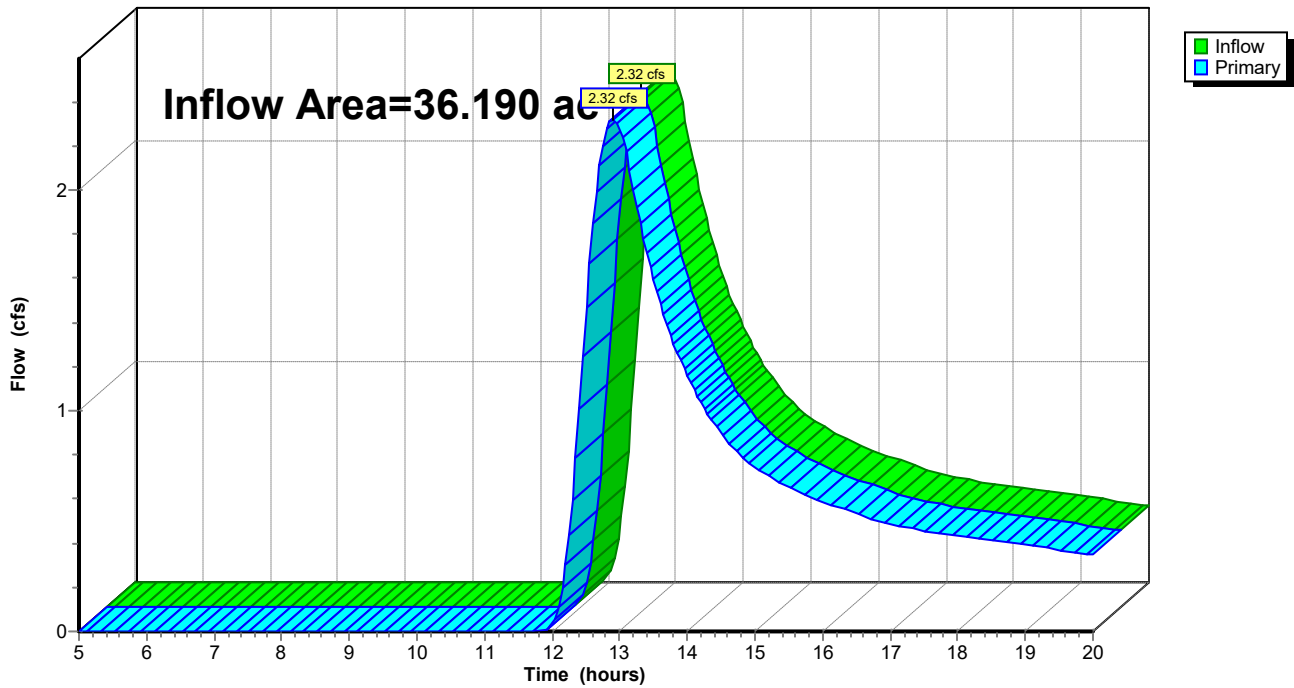
Summary for Link L30: L30

Inflow Area = 36.190 ac, 5.11% Impervious, Inflow Depth > 0.17" for 1-yr event
Inflow = 2.32 cfs @ 12.91 hrs, Volume= 0.522 af
Primary = 2.32 cfs @ 12.91 hrs, Volume= 0.522 af, Atten= 0%, Lag= 0.0 min

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

Link L30: L30

Hydrograph



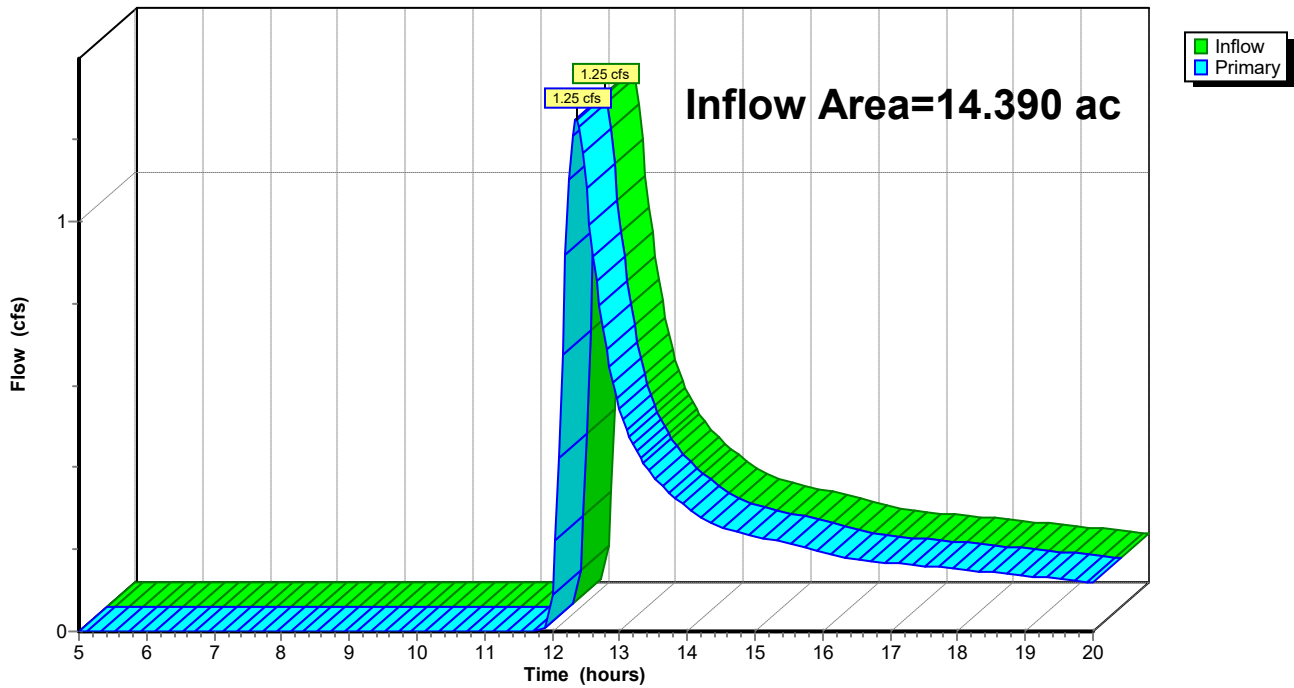
Summary for Link L31: L31

Inflow Area = 14.390 ac, 6.74% Impervious, Inflow Depth > 0.16" for 1-yr event
Inflow = 1.25 cfs @ 12.36 hrs, Volume= 0.190 af
Primary = 1.25 cfs @ 12.36 hrs, Volume= 0.190 af, Atten= 0%, Lag= 0.0 min

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

Link L31: L31

Hydrograph



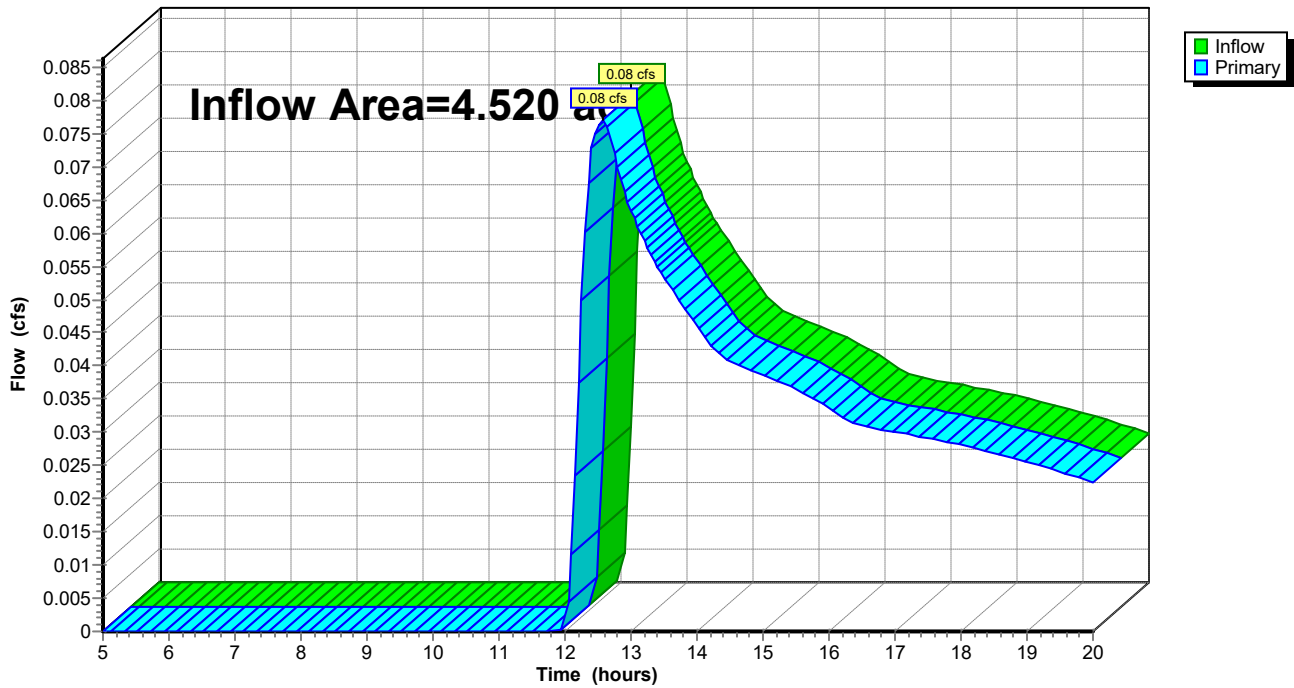
Summary for Link L32: L32

Inflow Area = 4.520 ac, 9.29% Impervious, Inflow Depth > 0.07" for 1-yr event
Inflow = 0.08 cfs @ 12.57 hrs, Volume= 0.025 af
Primary = 0.08 cfs @ 12.57 hrs, Volume= 0.025 af, Atten= 0%, Lag= 0.0 min

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

Link L32: L32

Hydrograph



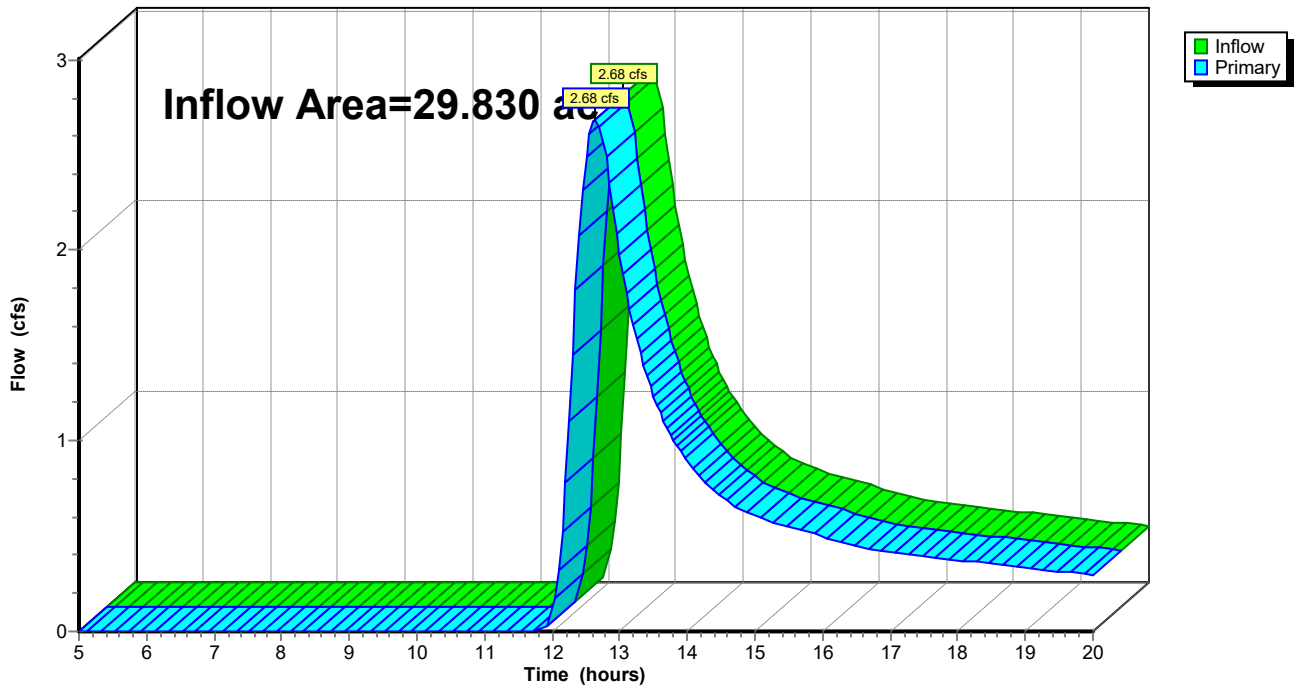
Summary for Link L33: L33

Inflow Area = 29.830 ac, 18.91% Impervious, Inflow Depth > 0.20" for 1-yr event
Inflow = 2.68 cfs @ 12.64 hrs, Volume= 0.489 af
Primary = 2.68 cfs @ 12.64 hrs, Volume= 0.489 af, Atten= 0%, Lag= 0.0 min

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

Link L33: L33

Hydrograph



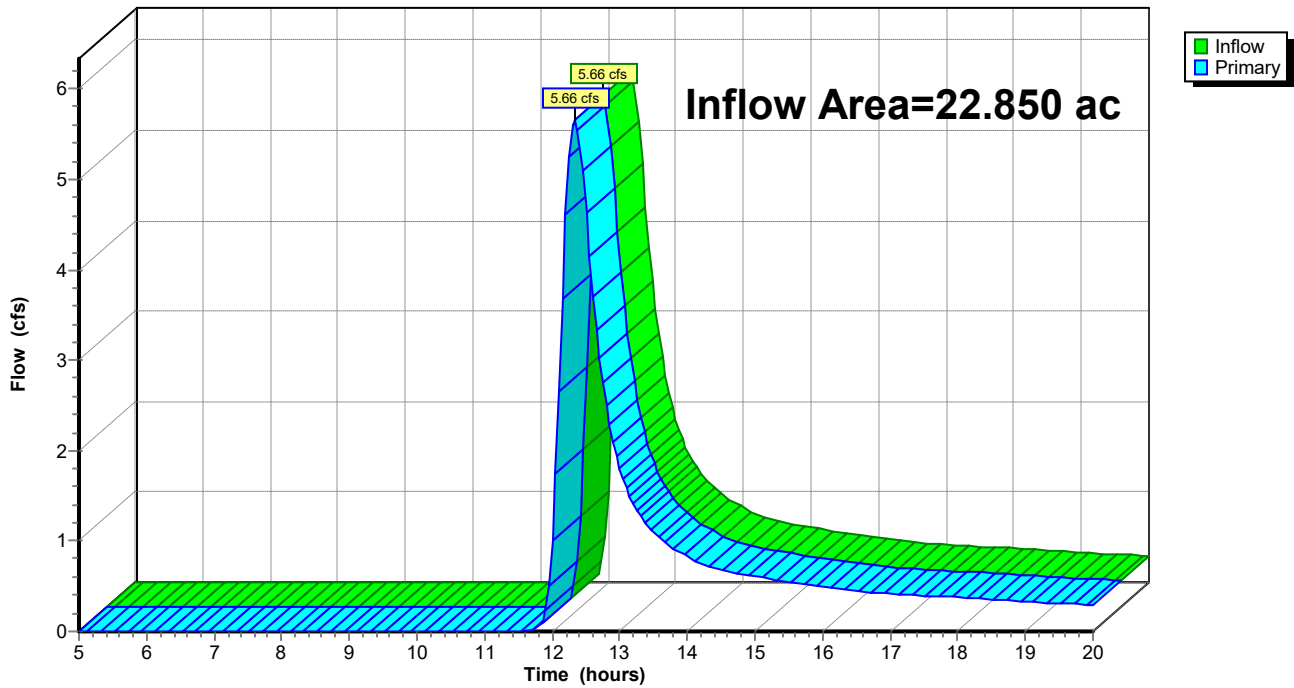
Summary for Link L34: L34

Inflow Area = 22.850 ac, 37.33% Impervious, Inflow Depth > 0.33" for 1-yr event
Inflow = 5.66 cfs @ 12.33 hrs, Volume= 0.626 af
Primary = 5.66 cfs @ 12.33 hrs, Volume= 0.626 af, Atten= 0%, Lag= 0.0 min

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

Link L34: L34

Hydrograph



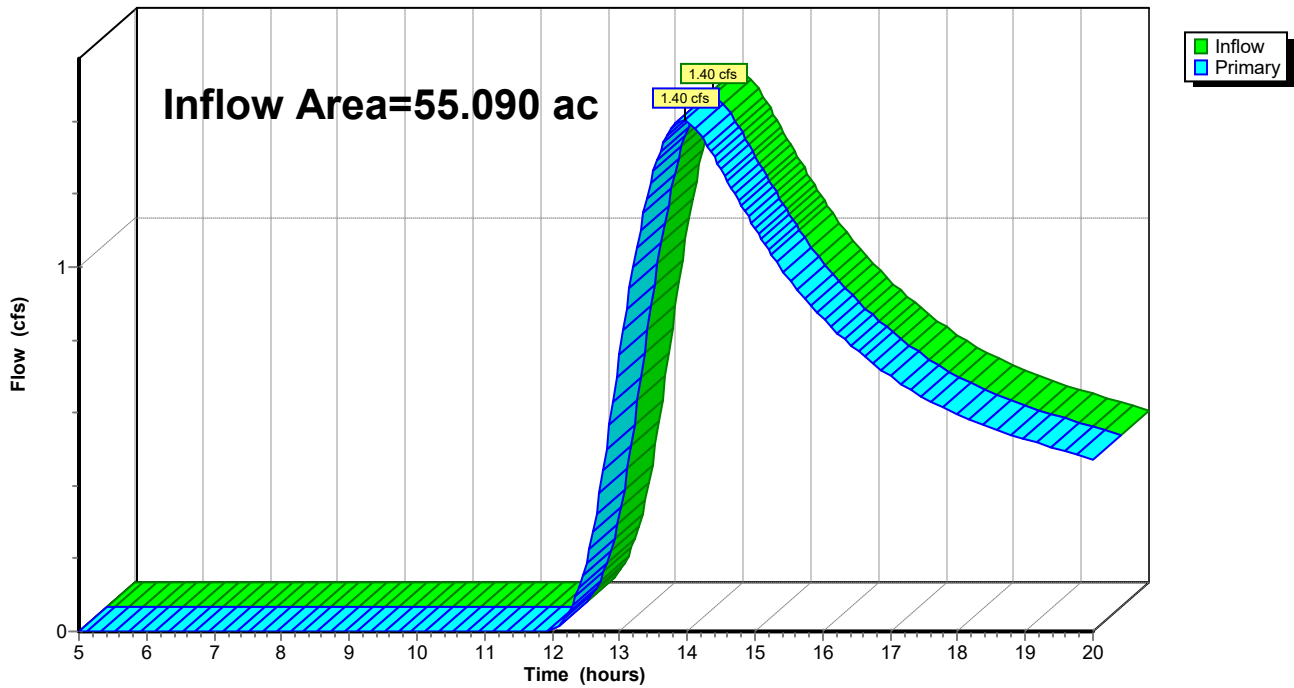
Summary for Link L35: L35

Inflow Area = 55.090 ac, 6.23% Impervious, Inflow Depth > 0.11" for 1-yr event
Inflow = 1.40 cfs @ 13.96 hrs, Volume= 0.510 af
Primary = 1.40 cfs @ 13.96 hrs, Volume= 0.510 af, Atten= 0%, Lag= 0.0 min

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

Link L35: L35

Hydrograph



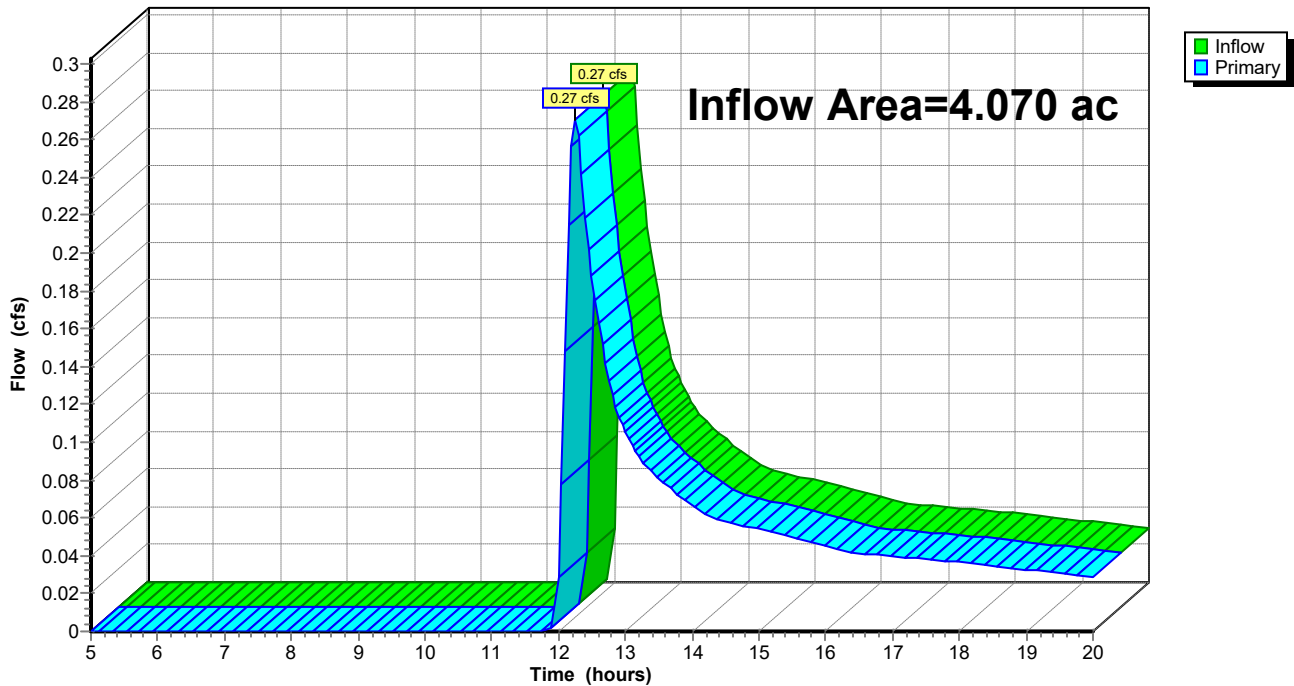
Summary for Link L36: L36

Inflow Area = 4.070 ac, 1.72% Impervious, Inflow Depth > 0.12" for 1-yr event
Inflow = 0.27 cfs @ 12.26 hrs, Volume= 0.042 af
Primary = 0.27 cfs @ 12.26 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min

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

Link L36: L36

Hydrograph



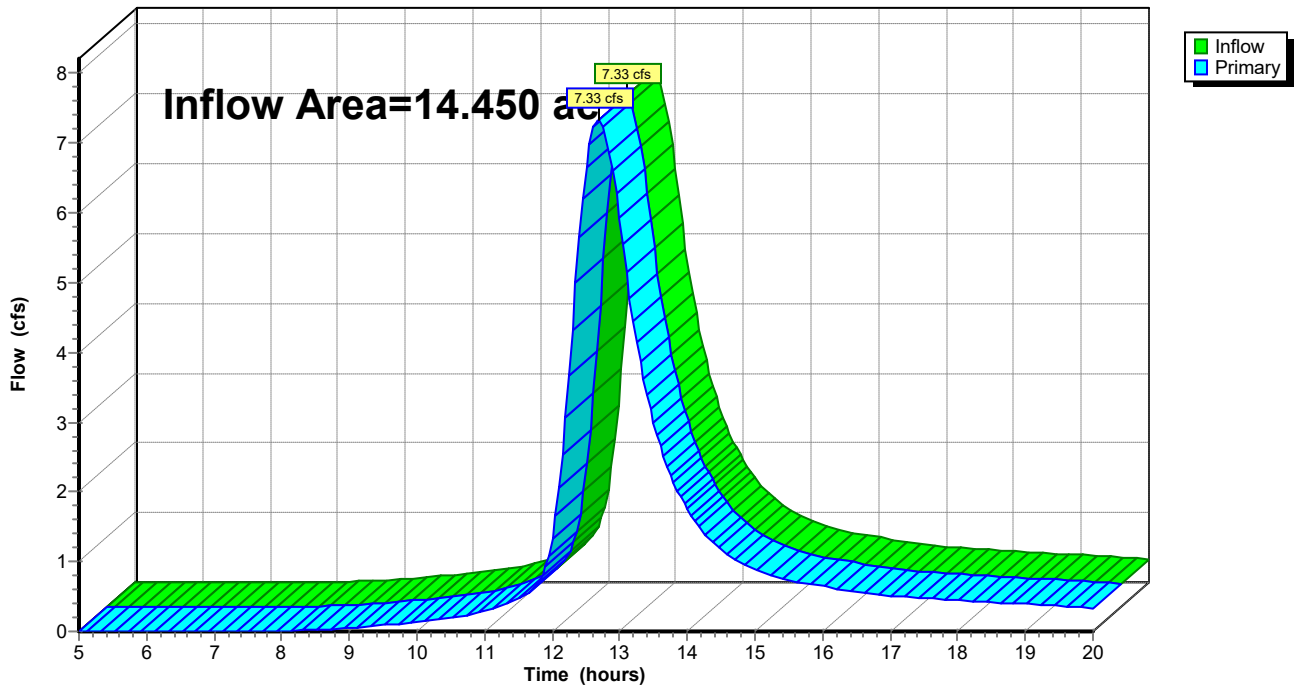
Summary for Link L37: L37

Inflow Area = 14.450 ac, 76.06% Impervious, Inflow Depth > 0.91" for 1-yr event
Inflow = 7.33 cfs @ 12.69 hrs, Volume= 1.100 af
Primary = 7.33 cfs @ 12.69 hrs, Volume= 1.100 af, Atten= 0%, Lag= 0.0 min

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

Link L37: L37

Hydrograph



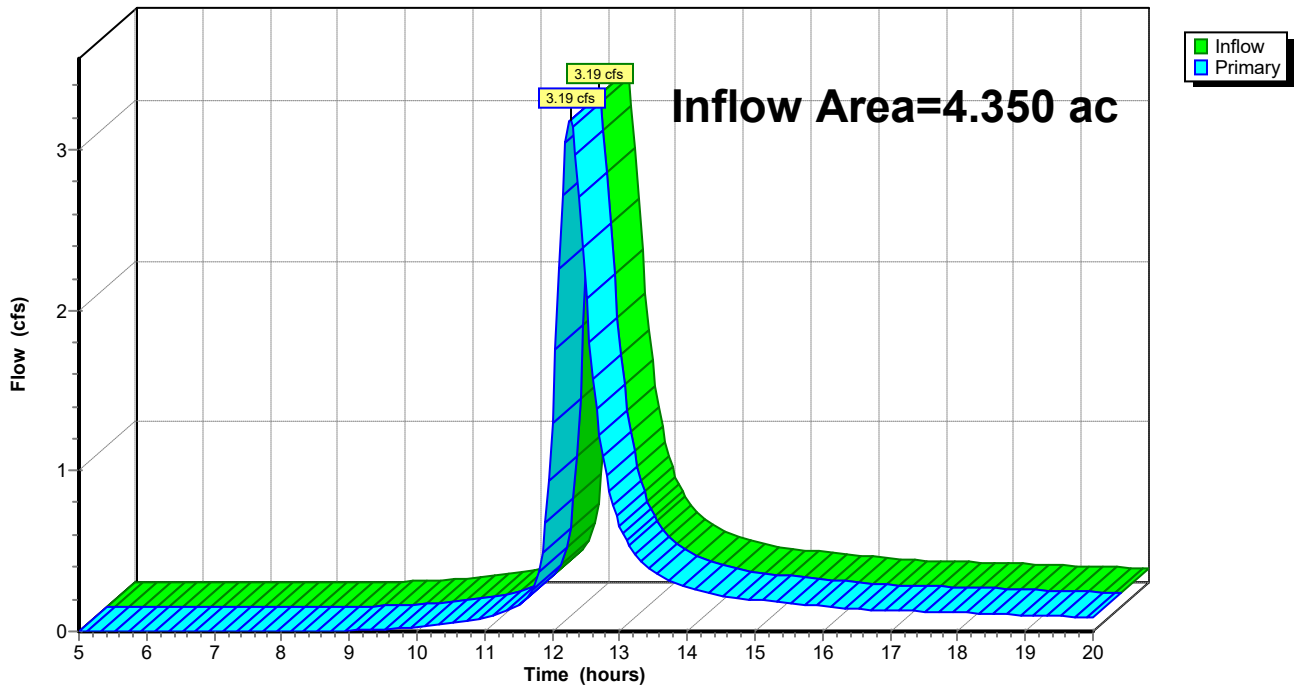
Summary for Link L38: L38

Inflow Area = 4.350 ac, 69.20% Impervious, Inflow Depth > 0.80" for 1-yr event
Inflow = 3.19 cfs @ 12.26 hrs, Volume= 0.290 af
Primary = 3.19 cfs @ 12.26 hrs, Volume= 0.290 af, Atten= 0%, Lag= 0.0 min

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

Link L38: L38

Hydrograph



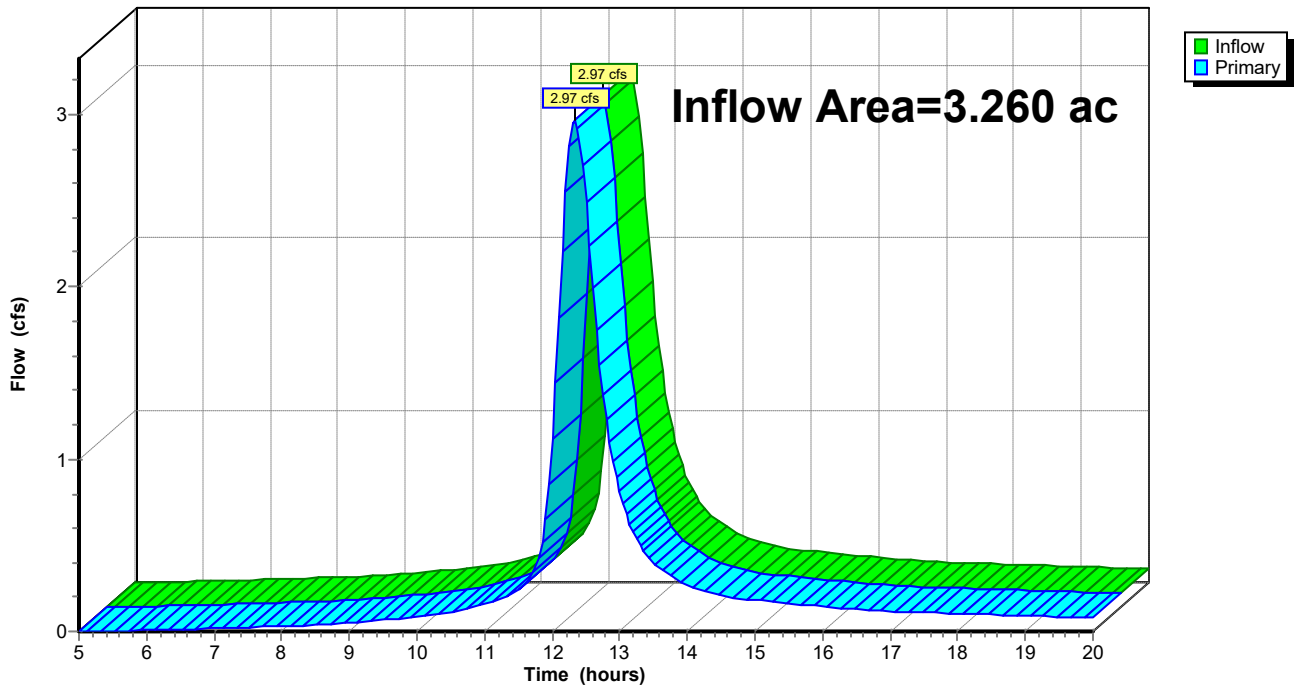
Summary for Link L39: L39

Inflow Area = 3.260 ac, 88.04% Impervious, Inflow Depth > 1.15" for 1-yr event
Inflow = 2.97 cfs @ 12.33 hrs, Volume= 0.311 af
Primary = 2.97 cfs @ 12.33 hrs, Volume= 0.311 af, Atten= 0%, Lag= 0.0 min

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

Link L39: L39

Hydrograph



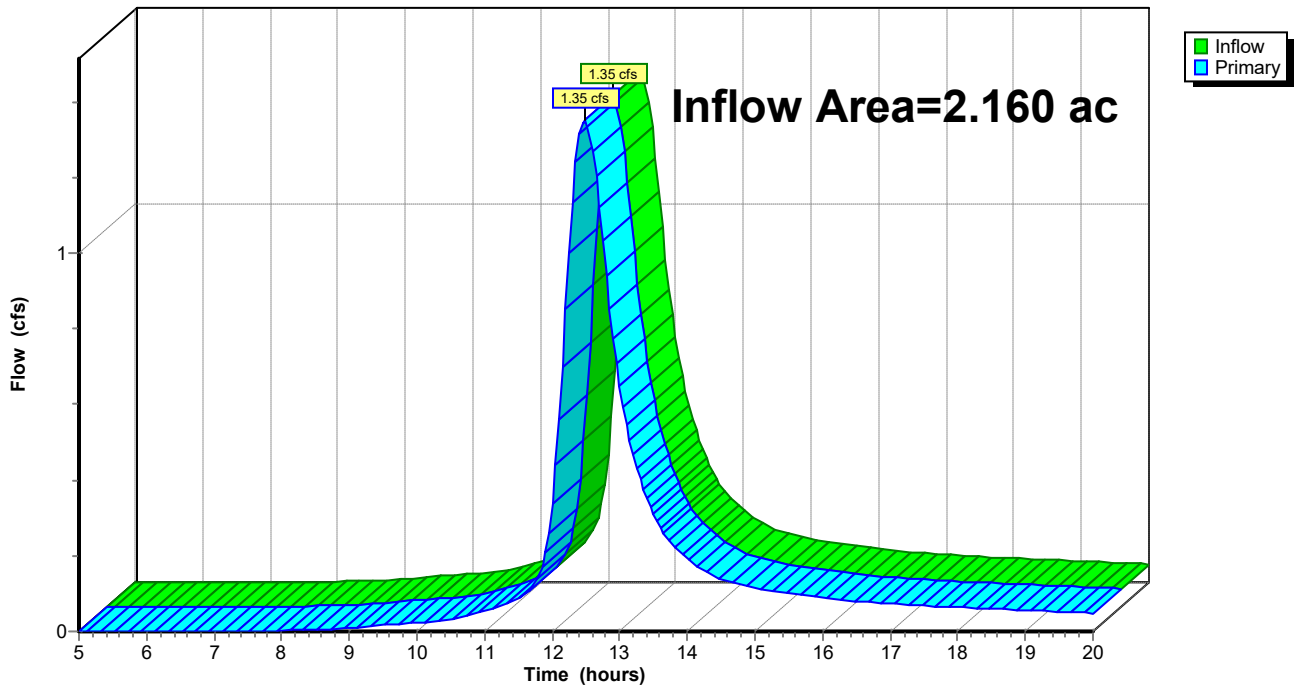
Summary for Link L40: L40

Inflow Area = 2.160 ac, 75.46% Impervious, Inflow Depth > 0.92" for 1-yr event
Inflow = 1.35 cfs @ 12.48 hrs, Volume= 0.165 af
Primary = 1.35 cfs @ 12.48 hrs, Volume= 0.165 af, Atten= 0%, Lag= 0.0 min

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

Link L40: L40

Hydrograph



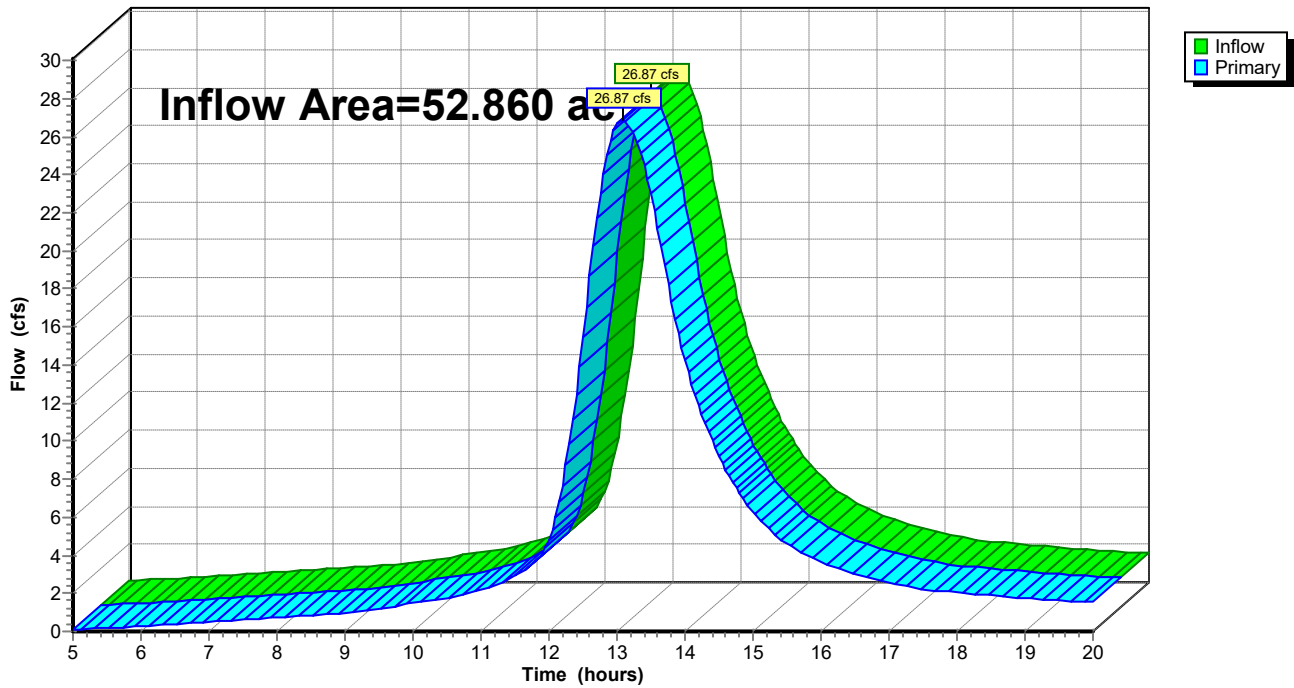
Summary for Link L41: L41

Inflow Area = 52.860 ac, 97.14% Impervious, Inflow Depth > 1.30" for 1-yr event
Inflow = 26.87 cfs @ 13.10 hrs, Volume= 5.706 af
Primary = 26.87 cfs @ 13.10 hrs, Volume= 5.706 af, Atten= 0%, Lag= 0.0 min

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

Link L41: L41

Hydrograph



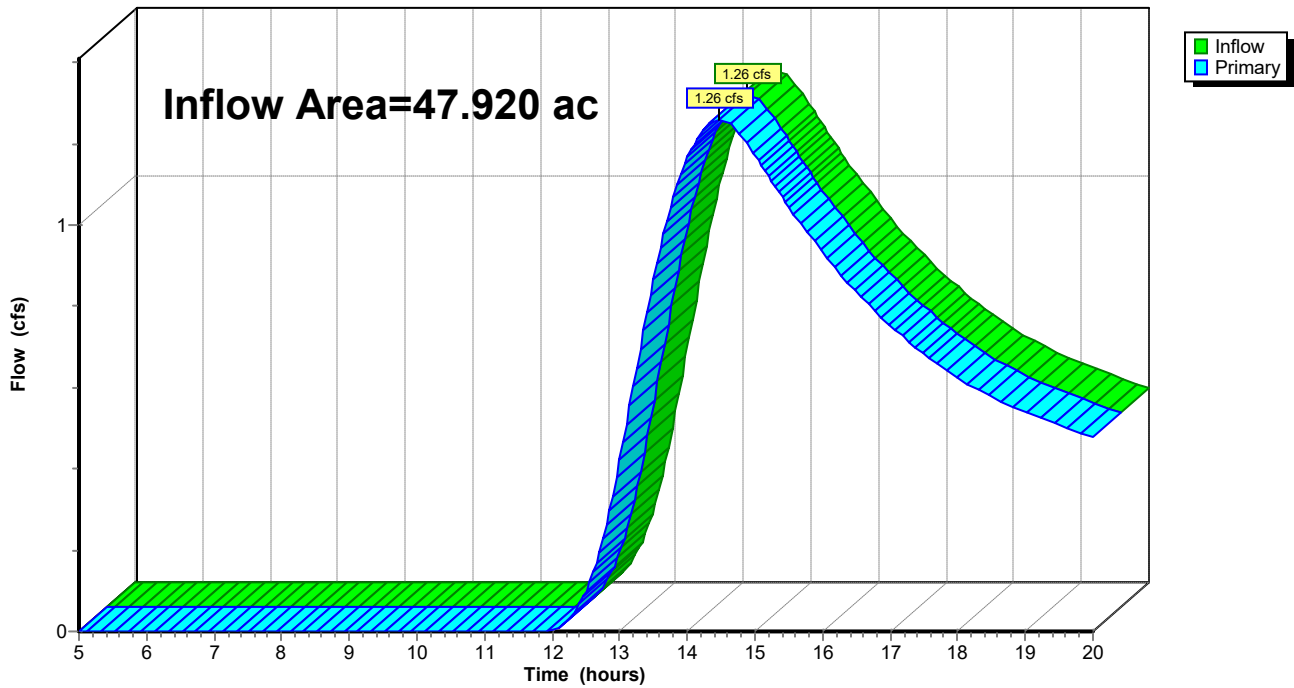
Summary for Link L42: L42

Inflow Area = 47.920 ac, 2.19% Impervious, Inflow Depth > 0.12" for 1-yr event
Inflow = 1.26 cfs @ 14.48 hrs, Volume= 0.486 af
Primary = 1.26 cfs @ 14.48 hrs, Volume= 0.486 af, Atten= 0%, Lag= 0.0 min

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

Link L42: L42

Hydrograph



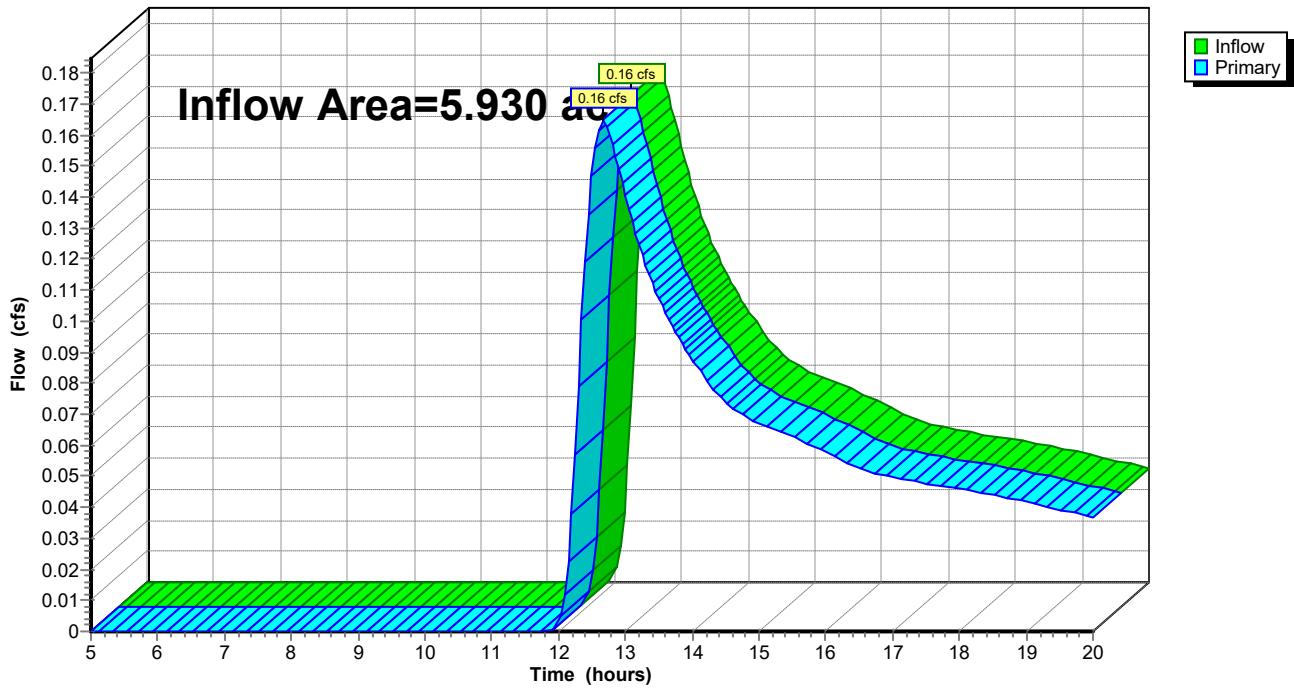
Summary for Link L43: L43

Inflow Area = 5.930 ac, 0.00% Impervious, Inflow Depth > 0.09" for 1-yr event
Inflow = 0.16 cfs @ 12.67 hrs, Volume= 0.045 af
Primary = 0.16 cfs @ 12.67 hrs, Volume= 0.045 af, Atten= 0%, Lag= 0.0 min

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

Link L43: L43

Hydrograph



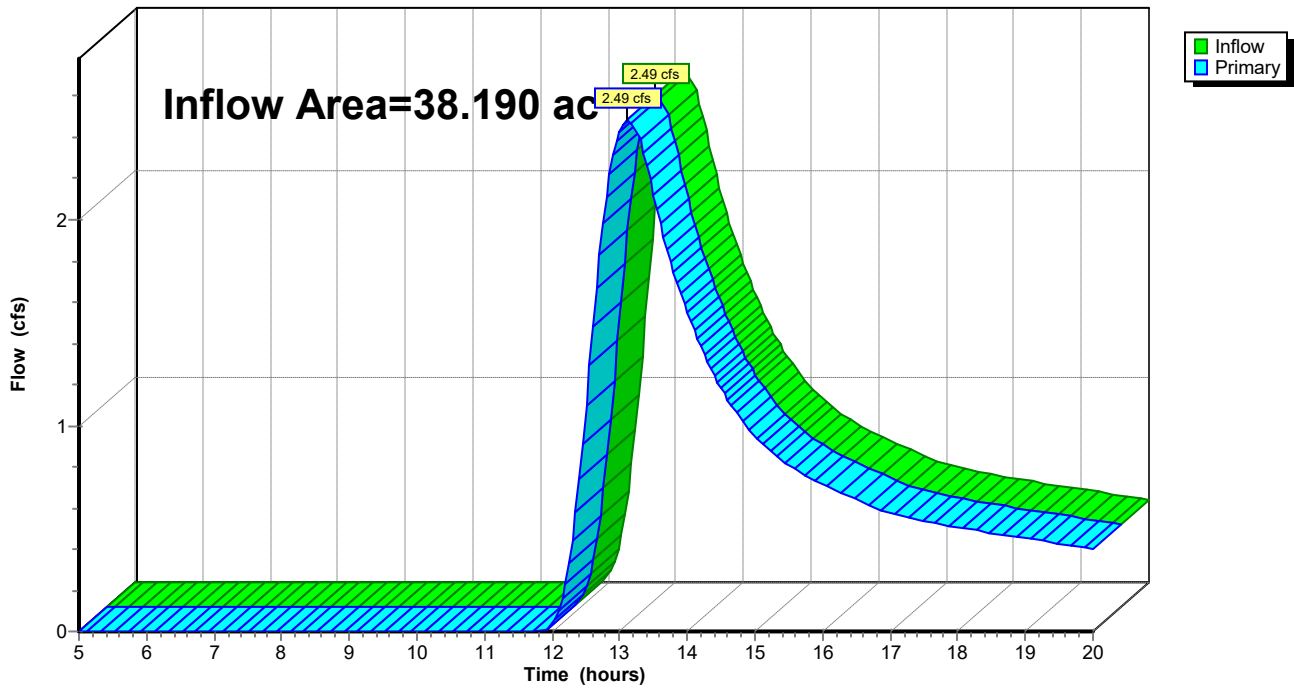
Summary for Link L44: L44

Inflow Area = 38.190 ac, 2.78% Impervious, Inflow Depth > 0.19" for 1-yr event
Inflow = 2.49 cfs @ 13.12 hrs, Volume= 0.610 af
Primary = 2.49 cfs @ 13.12 hrs, Volume= 0.610 af, Atten= 0%, Lag= 0.0 min

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

Link L44: L44

Hydrograph



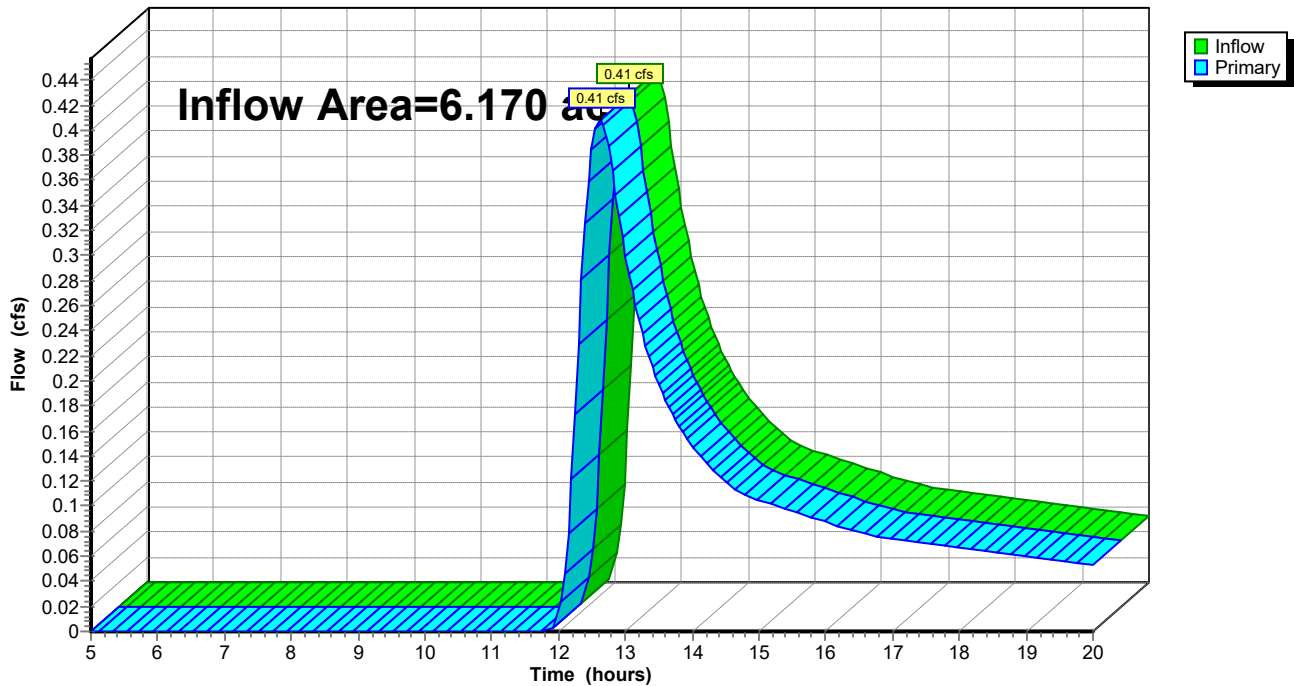
Summary for Link L45: L45

Inflow Area = 6.170 ac, 0.00% Impervious, Inflow Depth > 0.16" for 1-yr event
Inflow = 0.41 cfs @ 12.63 hrs, Volume= 0.080 af
Primary = 0.41 cfs @ 12.63 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min

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

Link L45: L45

Hydrograph



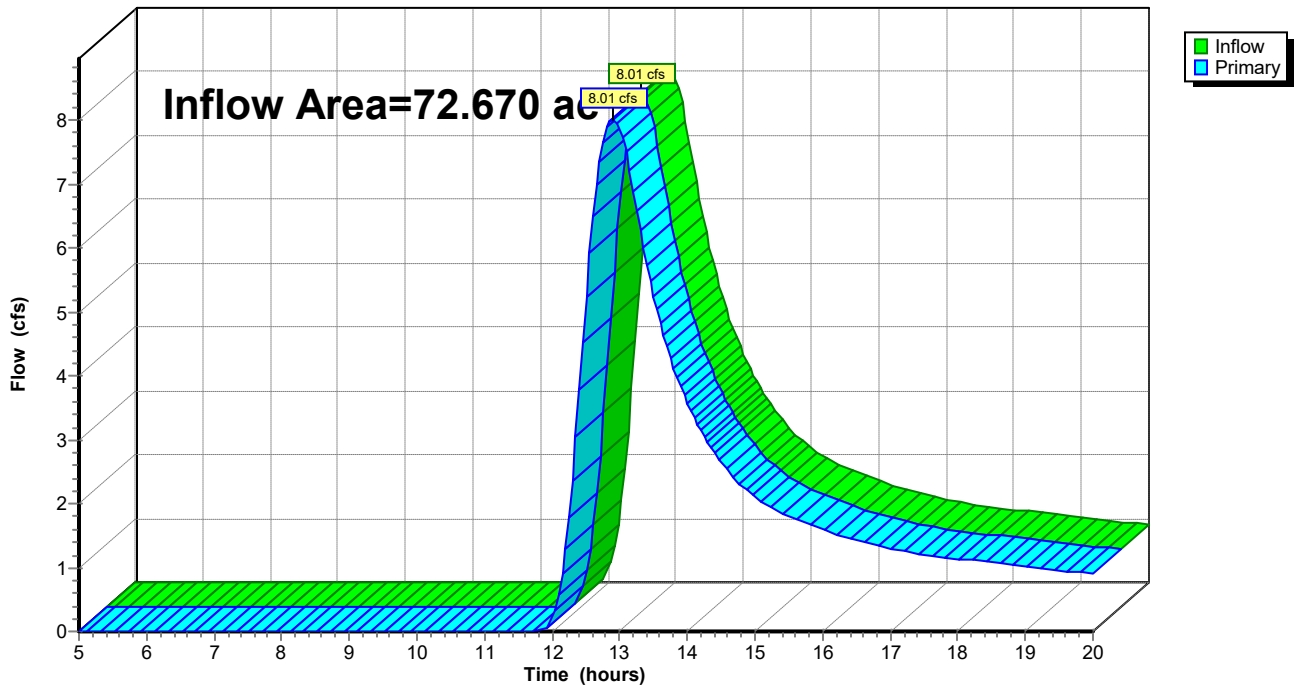
Summary for Link L46: L46

Inflow Area = 72.670 ac, 0.00% Impervious, Inflow Depth > 0.26" for 1-yr event
Inflow = 8.01 cfs @ 12.90 hrs, Volume= 1.605 af
Primary = 8.01 cfs @ 12.90 hrs, Volume= 1.605 af, Atten= 0%, Lag= 0.0 min

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

Link L46: L46

Hydrograph



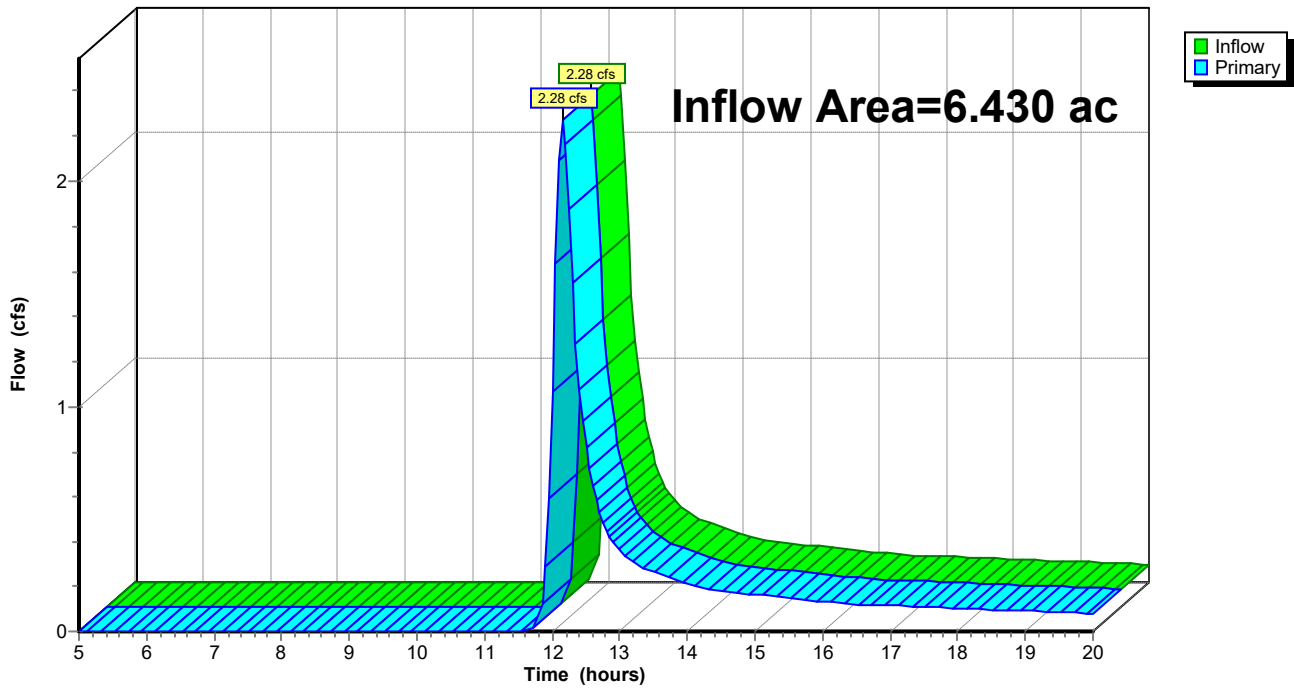
Summary for Link L47: L47

Inflow Area = 6.430 ac, 0.00% Impervious, Inflow Depth > 0.33" for 1-yr event
Inflow = 2.28 cfs @ 12.16 hrs, Volume= 0.177 af
Primary = 2.28 cfs @ 12.16 hrs, Volume= 0.177 af, Atten= 0%, Lag= 0.0 min

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

Link L47: L47

Hydrograph



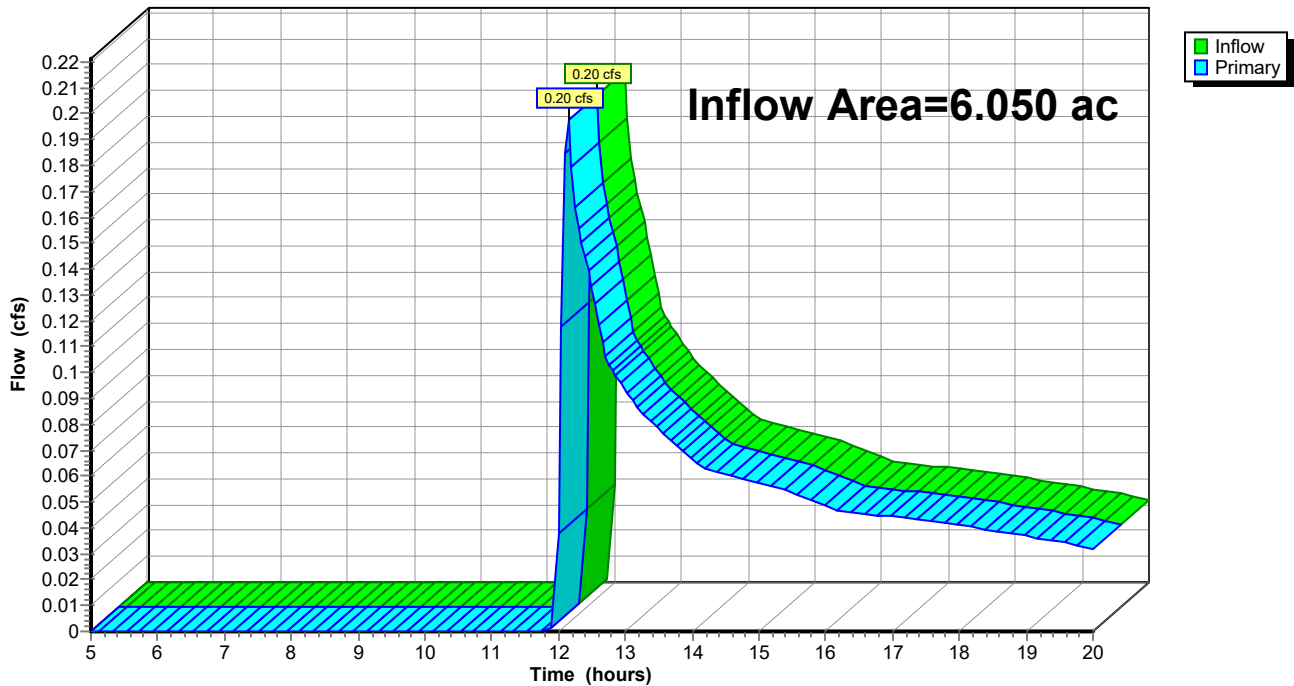
Summary for Link L48: L48

Inflow Area = 6.050 ac, 0.00% Impervious, Inflow Depth > 0.08" for 1-yr event
Inflow = 0.20 cfs @ 12.15 hrs, Volume= 0.040 af
Primary = 0.20 cfs @ 12.15 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min

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

Link L48: L48

Hydrograph



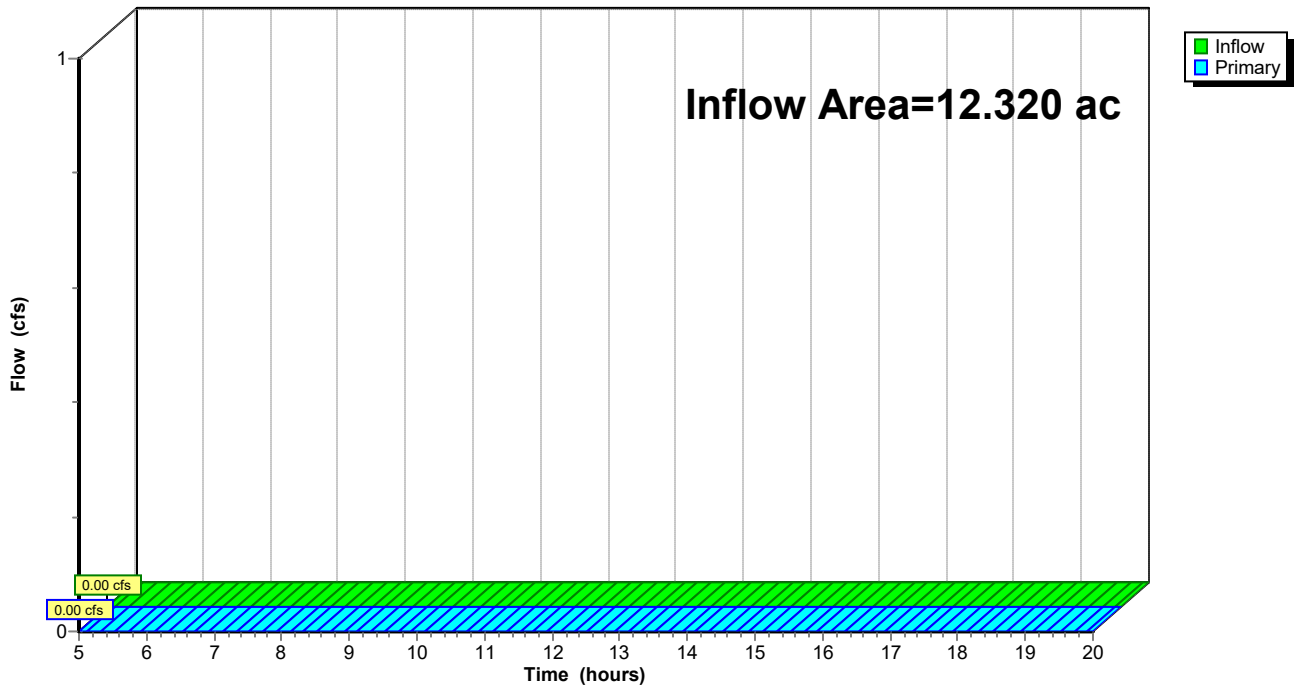
Summary for Link L49: L49

Inflow Area = 12.320 ac, 0.00% Impervious, Inflow Depth = 0.00" for 1-yr event
Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

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

Link L49: L49

Hydrograph



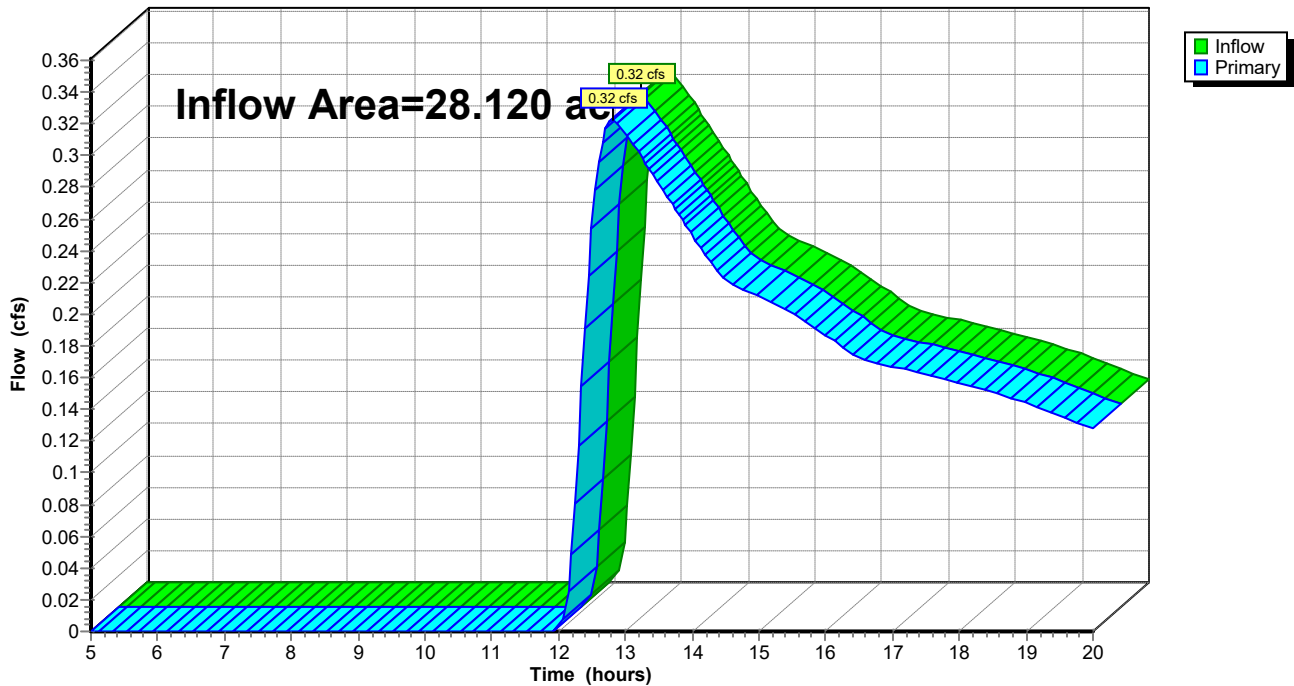
Summary for Link L50: L50

Inflow Area = 28.120 ac, 0.00% Impervious, Inflow Depth > 0.05" for 1-yr event
Inflow = 0.32 cfs @ 12.81 hrs, Volume= 0.127 af
Primary = 0.32 cfs @ 12.81 hrs, Volume= 0.127 af, Atten= 0%, Lag= 0.0 min

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

Link L50: L50

Hydrograph



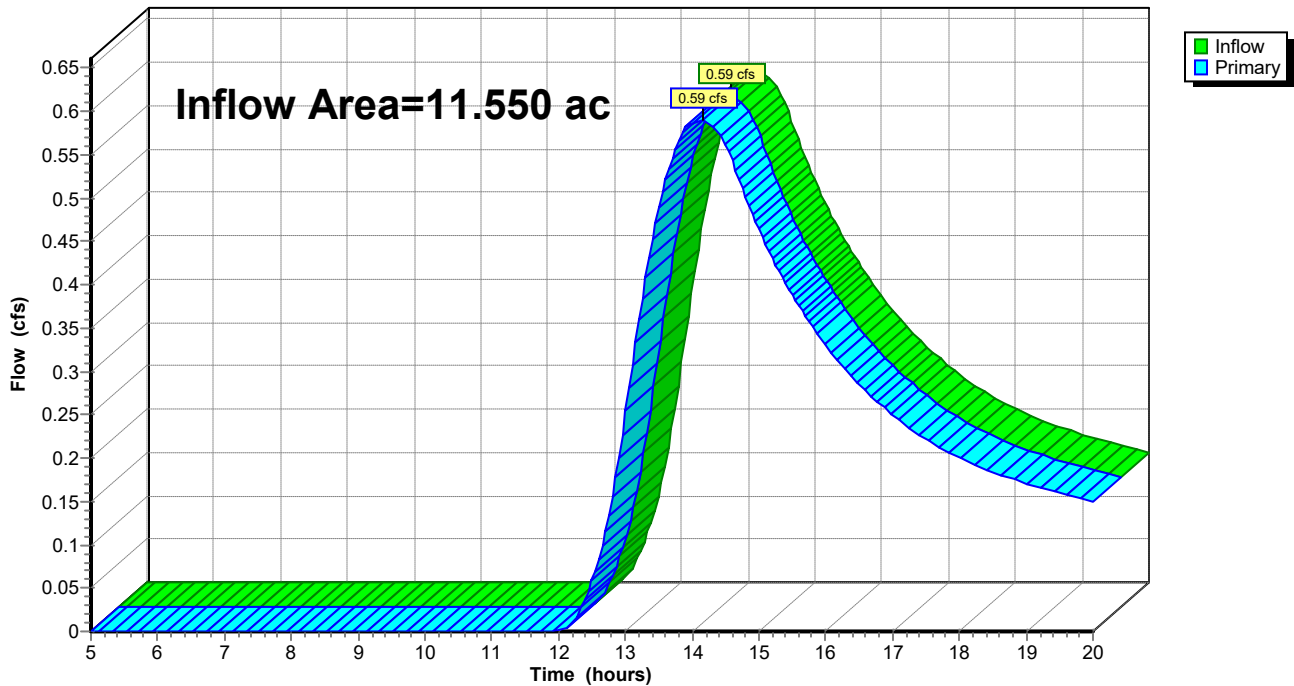
Summary for Link L51: L51

Inflow Area = 11.550 ac, 0.00% Impervious, Inflow Depth > 0.20" for 1-yr event
Inflow = 0.59 cfs @ 14.17 hrs, Volume= 0.194 af
Primary = 0.59 cfs @ 14.17 hrs, Volume= 0.194 af, Atten= 0%, Lag= 0.0 min

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

Link L51: L51

Hydrograph



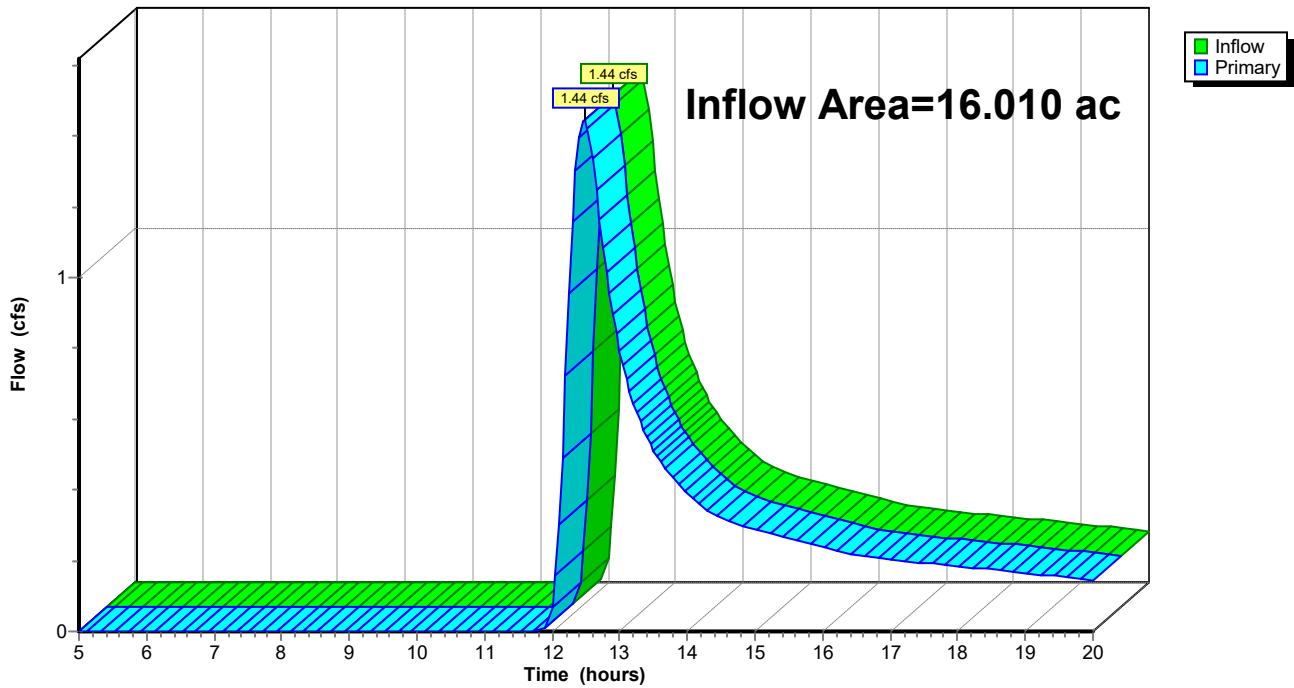
Summary for Link L52: L52

Inflow Area = 16.010 ac, 4.06% Impervious, Inflow Depth > 0.18" for 1-yr event
Inflow = 1.44 cfs @ 12.47 hrs, Volume= 0.236 af
Primary = 1.44 cfs @ 12.47 hrs, Volume= 0.236 af, Atten= 0%, Lag= 0.0 min

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

Link L52: L52

Hydrograph



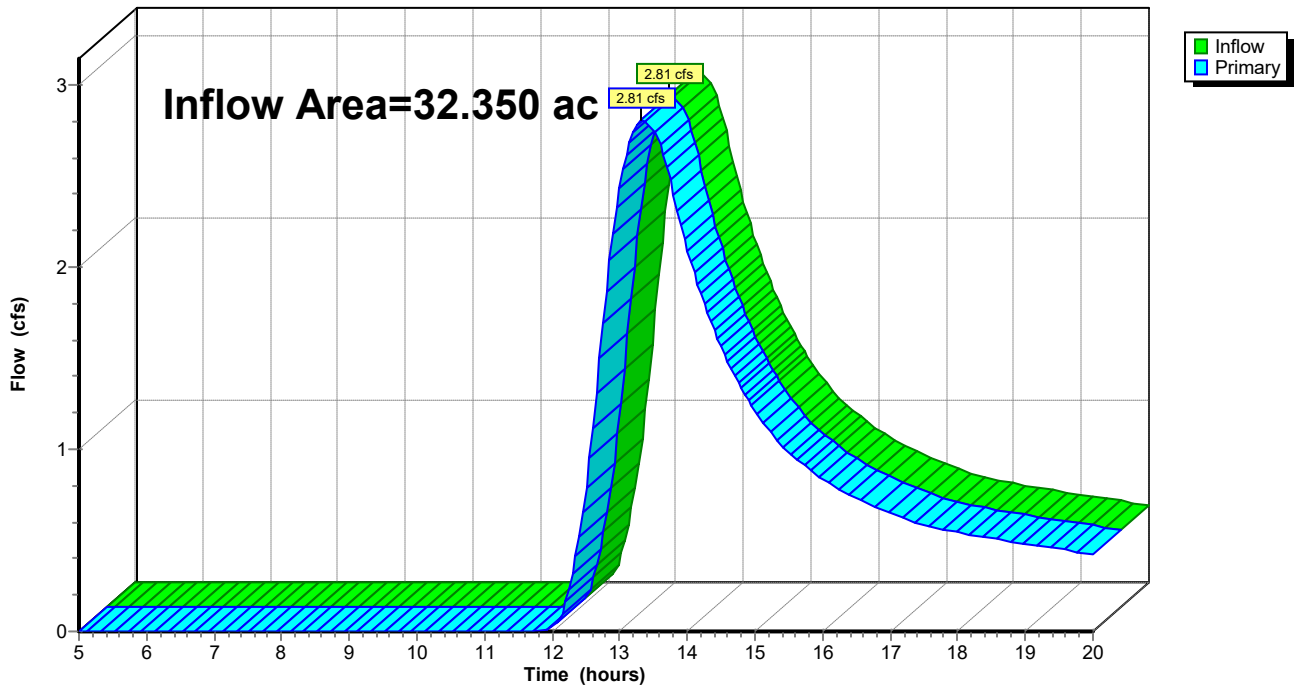
Summary for Link L53: L53

Inflow Area = 32.350 ac, 0.00% Impervious, Inflow Depth > 0.26" for 1-yr event
Inflow = 2.81 cfs @ 13.32 hrs, Volume= 0.698 af
Primary = 2.81 cfs @ 13.32 hrs, Volume= 0.698 af, Atten= 0%, Lag= 0.0 min

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

Link L53: L53

Hydrograph



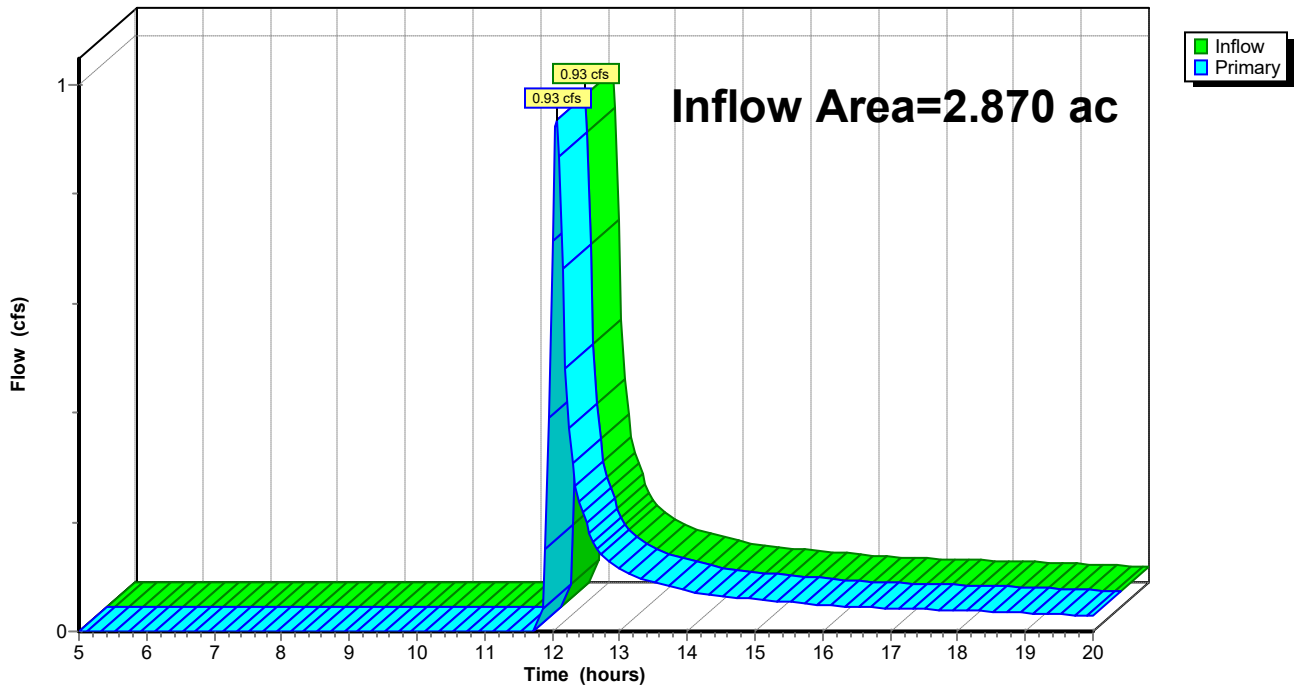
Summary for Link L54: L54

Inflow Area = 2.870 ac, 0.00% Impervious, Inflow Depth > 0.25" for 1-yr event
Inflow = 0.93 cfs @ 12.06 hrs, Volume= 0.060 af
Primary = 0.93 cfs @ 12.06 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min

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

Link L54: L54

Hydrograph



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

Subcatchment D01: DA-01	Runoff Area=3.670 ac 9.26% Impervious Runoff Depth>0.65" Flow Length=596' Tc=35.6 min CN=71 Runoff=1.78 cfs 0.198 af
Subcatchment D02: DA-02	Runoff Area=1.970 ac 0.00% Impervious Runoff Depth=0.00" Flow Length=351' Tc=43.2 min CN=36 Runoff=0.00 cfs 0.000 af
Subcatchment D03: DA-03	Runoff Area=1.390 ac 7.91% Impervious Runoff Depth>0.64" Flow Length=675' Tc=45.3 min UI Adjusted CN=71 Runoff=0.57 cfs 0.074 af
Subcatchment D04: DA-04	Runoff Area=6.950 ac 0.00% Impervious Runoff Depth>0.56" Flow Length=840' Tc=46.6 min CN=69 Runoff=2.32 cfs 0.324 af
Subcatchment D05: DA-05	Runoff Area=44.470 ac 0.00% Impervious Runoff Depth>0.75" Flow Length=2,768' Tc=104.8 min CN=74 Runoff=12.28 cfs 2.782 af
Subcatchment D06: DA-06	Runoff Area=13.270 ac 0.00% Impervious Runoff Depth>0.87" Flow Length=1,118' Tc=51.3 min CN=76 Runoff=7.25 cfs 0.966 af
Subcatchment D07: DA-07	Runoff Area=28.270 ac 0.00% Impervious Runoff Depth>0.70" Flow Length=1,885' Tc=115.9 min CN=73 Runoff=6.76 cfs 1.648 af
Subcatchment D08: DA-08	Runoff Area=4.020 ac 0.00% Impervious Runoff Depth>0.61" Flow Length=456' Tc=23.1 min CN=70 Runoff=2.42 cfs 0.204 af
Subcatchment D09: DA-09	Runoff Area=12.190 ac 0.00% Impervious Runoff Depth>1.10" Flow Length=1,053' Tc=27.4 min CN=80 Runoff=13.33 cfs 1.121 af
Subcatchment D10: DA-10	Runoff Area=2.630 ac 0.00% Impervious Runoff Depth>0.84" Flow Length=329' Tc=11.7 min CN=75 Runoff=3.41 cfs 0.184 af
Subcatchment D11: DA-11	Runoff Area=2.930 ac 0.00% Impervious Runoff Depth>1.17" Flow Length=355' Tc=10.4 min CN=81 Runoff=5.59 cfs 0.286 af
Subcatchment D12: DA-12	Runoff Area=31.830 ac 0.00% Impervious Runoff Depth>0.85" Flow Length=2,231' Tc=90.6 min CN=76 Runoff=11.32 cfs 2.267 af
Subcatchment D13: DA-13	Runoff Area=12.780 ac 0.00% Impervious Runoff Depth>0.93" Flow Length=1,166' Tc=45.3 min CN=77 Runoff=8.19 cfs 0.988 af
Subcatchment D14: DA-14	Runoff Area=47.390 ac 0.00% Impervious Runoff Depth>0.62" Flow Length=2,408' Tc=188.8 min CN=72 Runoff=7.29 cfs 2.430 af
Subcatchment D15: DA-15	Runoff Area=8.620 ac 0.00% Impervious Runoff Depth>1.10" Flow Length=880' Tc=24.7 min CN=80 Runoff=10.05 cfs 0.794 af
Subcatchment D16: DA-16	Runoff Area=0.540 ac 0.00% Impervious Runoff Depth>0.65" Flow Length=207' Tc=27.7 min CN=71 Runoff=0.31 cfs 0.029 af

Subcatchment D17: DA-17	Runoff Area=2.980 ac 0.00% Impervious Runoff Depth>1.17" Flow Length=201' Tc=10.3 min CN=81 Runoff=5.71 cfs 0.291 af
Subcatchment D18: DA-18	Runoff Area=19.860 ac 0.00% Impervious Runoff Depth>1.15" Flow Length=1,487' Tc=57.5 min CN=81 Runoff=13.65 cfs 1.900 af
Subcatchment D19: DA-19	Runoff Area=5.280 ac 0.00% Impervious Runoff Depth>1.10" Flow Length=911' Tc=26.2 min CN=80 Runoff=5.94 cfs 0.486 af
Subcatchment D20: DA-20	Runoff Area=14.890 ac 0.00% Impervious Runoff Depth>0.77" Flow Length=1,167' Tc=69.3 min CN=74 Runoff=5.65 cfs 0.952 af
Subcatchment D21: DA-21	Runoff Area=23.340 ac 0.00% Impervious Runoff Depth>0.67" Flow Length=1,815' Tc=95.3 min CN=72 Runoff=5.97 cfs 1.294 af
Subcatchment D22: DA-22	Runoff Area=17.210 ac 0.00% Impervious Runoff Depth>0.98" Flow Length=1,503' Tc=45.9 min CN=78 Runoff=11.62 cfs 1.408 af
Subcatchment D23: DA-23	Runoff Area=7.490 ac 0.00% Impervious Runoff Depth>0.69" Flow Length=653' Tc=40.4 min CN=72 Runoff=3.61 cfs 0.429 af
Subcatchment D24: DA-24	Runoff Area=13.490 ac 0.00% Impervious Runoff Depth>0.78" Flow Length=1,284' Tc=40.1 min CN=74 Runoff=7.64 cfs 0.877 af
Subcatchment D25: DA-25	Runoff Area=52.450 ac 0.00% Impervious Runoff Depth>0.78" Flow Length=2,328' Tc=42.4 min CN=74 Runoff=28.55 cfs 3.405 af
Subcatchment D26: DA-26	Runoff Area=193.480 ac 2.41% Impervious Runoff Depth>0.41" Flow Length=9,755' Tc=373.9 min CN=71 Runoff=16.69 cfs 6.685 af
Subcatchment D27: DA-27	Runoff Area=32.140 ac 50.87% Impervious Runoff Depth>1.41" Flow Length=2,563' Tc=57.3 min CN=85 Runoff=27.41 cfs 3.767 af
Subcatchment D28: DA-28	Runoff Area=9.480 ac 67.30% Impervious Runoff Depth>1.81" Flow Length=902' Tc=21.9 min CN=90 Runoff=19.30 cfs 1.427 af
Subcatchment D29: DA-29	Runoff Area=69.530 ac 10.00% Impervious Runoff Depth>0.57" Flow Length=2,977' Tc=290.4 min CN=73 Runoff=8.31 cfs 3.306 af
Subcatchment D30: DA-30	Runoff Area=36.190 ac 5.11% Impervious Runoff Depth>0.72" Flow Length=2,420' Tc=65.9 min CN=73 Runoff=13.21 cfs 2.179 af
Subcatchment D31: DA-31	Runoff Area=14.390 ac 6.74% Impervious Runoff Depth>0.69" Flow Length=1,071' Tc=30.5 min UI Adjusted CN=72 Runoff=8.50 cfs 0.829 af
Subcatchment D32: DA-32	Runoff Area=4.520 ac 9.29% Impervious Runoff Depth>0.45" Flow Length=284' Tc=25.8 min UI Adjusted CN=66 Runoff=1.69 cfs 0.171 af
Subcatchment D33: DA-33	Runoff Area=29.830 ac 18.91% Impervious Runoff Depth>0.78" Flow Length=2,004' Tc=50.3 min UI Adjusted CN=74 Runoff=14.34 cfs 1.928 af

Subcatchment D34: DA-34	Runoff Area=22.850 ac 37.33% Impervious Runoff Depth>1.04" Flow Length=1,029' Tc=33.2 min CN=79 Runoff=20.66 cfs 1.986 af
Subcatchment D35: DA-35	Runoff Area=55.090 ac 6.23% Impervious Runoff Depth>0.57" Flow Length=2,529' Tc=122.6 min UI Adjusted CN=70 Runoff=9.79 cfs 2.615 af
Subcatchment D36: DA-36	Runoff Area=4.070 ac 1.72% Impervious Runoff Depth>0.61" Flow Length=467' Tc=22.4 min CN=70 Runoff=2.51 cfs 0.206 af
Subcatchment D37: DA-37	Runoff Area=14.450 ac 76.06% Impervious Runoff Depth>1.95" Flow Length=2,155' Tc=64.8 min CN=92 Runoff=15.42 cfs 2.348 af
Subcatchment D38: DA-38	Runoff Area=4.350 ac 69.20% Impervious Runoff Depth>1.80" Flow Length=839' Tc=31.3 min CN=90 Runoff=7.11 cfs 0.653 af
Subcatchment D39: DA-39	Runoff Area=3.260 ac 88.04% Impervious Runoff Depth>2.24" Flow Length=839' Tc=37.9 min CN=95 Runoff=5.64 cfs 0.610 af
Subcatchment D40: DA-40	Runoff Area=2.160 ac 75.46% Impervious Runoff Depth>1.96" Flow Length=441' Tc=48.7 min CN=92 Runoff=2.83 cfs 0.353 af
Subcatchment D41: DA-41	Runoff Area=52.860 ac 97.14% Impervious Runoff Depth>2.40" Flow Length=2,424' Tc=99.8 min CN=97 Runoff=48.46 cfs 10.567 af
Subcatchment D42: DA-42	Runoff Area=47.920 ac 2.19% Impervious Runoff Depth>0.59" Flow Length=4,144' Tc=158.8 min UI Adjusted CN=71 Runoff=7.62 cfs 2.365 af
Subcatchment D43: DA-43	Runoff Area=5.930 ac 0.00% Impervious Runoff Depth>0.52" Flow Length=843' Tc=42.2 min CN=68 Runoff=1.93 cfs 0.258 af
Subcatchment D44: DA-44	Runoff Area=38.190 ac 2.78% Impervious Runoff Depth>0.76" Flow Length=1,750' Tc=81.3 min CN=74 Runoff=12.77 cfs 2.425 af
Subcatchment D45: DA-45	Runoff Area=6.170 ac 0.00% Impervious Runoff Depth>0.69" Flow Length=1,039' Tc=46.8 min CN=72 Runoff=2.67 cfs 0.352 af
Subcatchment D46: DA-46	Runoff Area=72.670 ac 0.00% Impervious Runoff Depth>0.92" Flow Length=3,781' Tc=70.7 min CN=77 Runoff=33.51 cfs 5.547 af
Subcatchment D47: DA-47	Runoff Area=6.430 ac 0.00% Impervious Runoff Depth>1.05" Flow Length=780' Tc=19.9 min CN=79 Runoff=8.08 cfs 0.562 af
Subcatchment D48: DA-48	Runoff Area=6.050 ac 0.00% Impervious Runoff Depth>0.49" Flow Length=774' Tc=12.6 min CN=67 Runoff=4.00 cfs 0.249 af
Subcatchment D49: DA-49	Runoff Area=12.320 ac 0.00% Impervious Runoff Depth=0.00" Flow Length=1,625' Tc=45.1 min CN=41 Runoff=0.00 cfs 0.000 af
Subcatchment D50: DA-50	Runoff Area=28.120 ac 0.00% Impervious Runoff Depth>0.42" Flow Length=2,221' Tc=32.6 min CN=65 Runoff=7.94 cfs 0.977 af

Subcatchment D51: DA-51

Runoff Area=11.550 ac 0.00% Impervious Runoff Depth>0.78"
Flow Length=2,083' Tc=146.9 min CN=75 Runoff=2.67 cfs 0.746 af

Subcatchment D52: DA-52

Runoff Area=16.010 ac 4.06% Impervious Runoff Depth>0.73"
Flow Length=2,531' Tc=38.7 min CN=73 Runoff=8.63 cfs 0.979 af

Subcatchment D53: DA-53

Runoff Area=32.350 ac 0.00% Impervious Runoff Depth>0.90"
Flow Length=1,955' Tc=100.4 min CN=77 Runoff=11.44 cfs 2.428 af

Subcatchment D54: DA-54

Runoff Area=2.870 ac 0.00% Impervious Runoff Depth>0.89"
Flow Length=393' Tc=11.9 min CN=76 Runoff=3.94 cfs 0.213 af

Link L01: L01

Inflow=1.78 cfs 0.198 af
Primary=1.78 cfs 0.198 af

Link L02: L02

Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link L03: L03

Inflow=0.57 cfs 0.074 af
Primary=0.57 cfs 0.074 af

Link L04: L04

Inflow=2.32 cfs 0.324 af
Primary=2.32 cfs 0.324 af

Link L05: L05

Inflow=12.28 cfs 2.782 af
Primary=12.28 cfs 2.782 af

Link L06: L06

Inflow=7.25 cfs 0.966 af
Primary=7.25 cfs 0.966 af

Link L07: L07

Inflow=6.76 cfs 1.648 af
Primary=6.76 cfs 1.648 af

Link L08: L08

Inflow=2.42 cfs 0.204 af
Primary=2.42 cfs 0.204 af

Link L09: L09

Inflow=13.33 cfs 1.121 af
Primary=13.33 cfs 1.121 af

Link L10: L10

Inflow=3.41 cfs 0.184 af
Primary=3.41 cfs 0.184 af

Link L11: L11

Inflow=5.59 cfs 0.286 af
Primary=5.59 cfs 0.286 af

Link L12: L12

Inflow=11.32 cfs 2.267 af
Primary=11.32 cfs 2.267 af

Link L13: L13

Inflow=8.19 cfs 0.988 af
Primary=8.19 cfs 0.988 af

Somerset Pre-Dev_Rev4

Prepared by Tetra Tech

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Type II 24-hr 10-yr Rainfall=2.96"

Printed 3/13/2023

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Link L14: L14	Inflow=7.29 cfs 2.430 af Primary=7.29 cfs 2.430 af
Link L15: L15	Inflow=10.05 cfs 0.794 af Primary=10.05 cfs 0.794 af
Link L16: L16	Inflow=0.31 cfs 0.029 af Primary=0.31 cfs 0.029 af
Link L17: L17	Inflow=5.71 cfs 0.291 af Primary=5.71 cfs 0.291 af
Link L18: L18	Inflow=13.65 cfs 1.900 af Primary=13.65 cfs 1.900 af
Link L19: L19	Inflow=5.94 cfs 0.486 af Primary=5.94 cfs 0.486 af
Link L20: L20	Inflow=5.65 cfs 0.952 af Primary=5.65 cfs 0.952 af
Link L21: L21	Inflow=5.97 cfs 1.294 af Primary=5.97 cfs 1.294 af
Link L22: L22	Inflow=11.62 cfs 1.408 af Primary=11.62 cfs 1.408 af
Link L23: L23	Inflow=3.61 cfs 0.429 af Primary=3.61 cfs 0.429 af
Link L24: L24	Inflow=7.64 cfs 0.877 af Primary=7.64 cfs 0.877 af
Link L25: L25	Inflow=28.55 cfs 3.405 af Primary=28.55 cfs 3.405 af
Link L26: L26	Inflow=16.69 cfs 6.685 af Primary=16.69 cfs 6.685 af
Link L27: L27	Inflow=27.41 cfs 3.767 af Primary=27.41 cfs 3.767 af
Link L28: L28	Inflow=19.30 cfs 1.427 af Primary=19.30 cfs 1.427 af
Link L29: L29	Inflow=8.31 cfs 3.306 af Primary=8.31 cfs 3.306 af
Link L30: L30	Inflow=13.21 cfs 2.179 af Primary=13.21 cfs 2.179 af

Somerset Pre-Dev_Rev4

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Type II 24-hr 10-yr Rainfall=2.96"

Printed 3/13/2023

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Link L31: L31	Inflow=8.50 cfs 0.829 af Primary=8.50 cfs 0.829 af
Link L32: L32	Inflow=1.69 cfs 0.171 af Primary=1.69 cfs 0.171 af
Link L33: L33	Inflow=14.34 cfs 1.928 af Primary=14.34 cfs 1.928 af
Link L34: L34	Inflow=20.66 cfs 1.986 af Primary=20.66 cfs 1.986 af
Link L35: L35	Inflow=9.79 cfs 2.615 af Primary=9.79 cfs 2.615 af
Link L36: L36	Inflow=2.51 cfs 0.206 af Primary=2.51 cfs 0.206 af
Link L37: L37	Inflow=15.42 cfs 2.348 af Primary=15.42 cfs 2.348 af
Link L38: L38	Inflow=7.11 cfs 0.653 af Primary=7.11 cfs 0.653 af
Link L39: L39	Inflow=5.64 cfs 0.610 af Primary=5.64 cfs 0.610 af
Link L40: L40	Inflow=2.83 cfs 0.353 af Primary=2.83 cfs 0.353 af
Link L41: L41	Inflow=48.46 cfs 10.567 af Primary=48.46 cfs 10.567 af
Link L42: L42	Inflow=7.62 cfs 2.365 af Primary=7.62 cfs 2.365 af
Link L43: L43	Inflow=1.93 cfs 0.258 af Primary=1.93 cfs 0.258 af
Link L44: L44	Inflow=12.77 cfs 2.425 af Primary=12.77 cfs 2.425 af
Link L45: L45	Inflow=2.67 cfs 0.352 af Primary=2.67 cfs 0.352 af
Link L46: L46	Inflow=33.51 cfs 5.547 af Primary=33.51 cfs 5.547 af
Link L47: L47	Inflow=8.08 cfs 0.562 af Primary=8.08 cfs 0.562 af

Somerset Pre-Dev_Rev4

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Type II 24-hr 10-yr Rainfall=2.96"

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Link L48: L48	Inflow=4.00 cfs 0.249 af
	Primary=4.00 cfs 0.249 af
Link L49: L49	Inflow=0.00 cfs 0.000 af
	Primary=0.00 cfs 0.000 af
Link L50: L50	Inflow=7.94 cfs 0.977 af
	Primary=7.94 cfs 0.977 af
Link L51: L51	Inflow=2.67 cfs 0.746 af
	Primary=2.67 cfs 0.746 af
Link L52: L52	Inflow=8.63 cfs 0.979 af
	Primary=8.63 cfs 0.979 af
Link L53: L53	Inflow=11.44 cfs 2.428 af
	Primary=11.44 cfs 2.428 af
Link L54: L54	Inflow=3.94 cfs 0.213 af
	Primary=3.94 cfs 0.213 af

Total Runoff Area = 1,215.140 ac Runoff Volume = 82.071 af Average Runoff Depth = 0.81"
89.44% Pervious = 1,086.830 ac 10.56% Impervious = 128.310 ac

Summary for Subcatchment D01: DA-01

Runoff = 1.78 cfs @ 12.36 hrs, Volume= 0.198 af, Depth> 0.65"
 Routed to Link L01 : L01

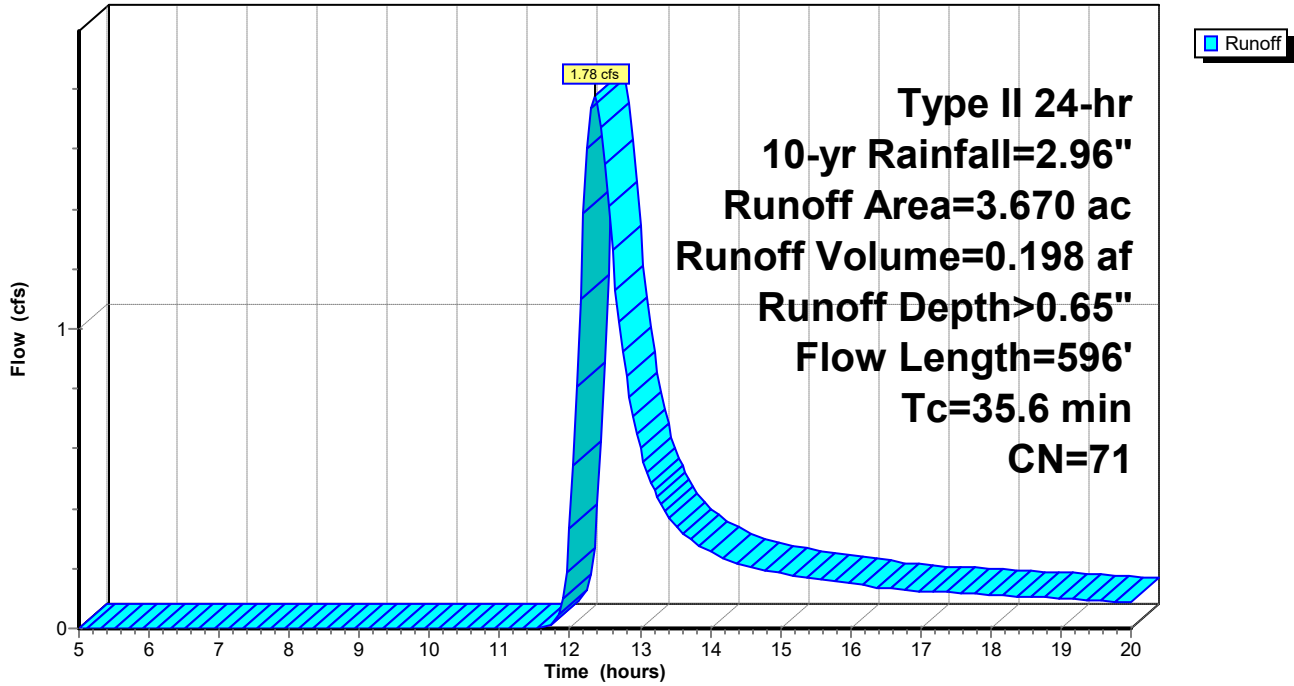
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.290	32	Woods/grass comb., Good, HSG A
1.040	72	Woods/grass comb., Good, HSG C
0.460	70	Woods, Good, HSG C
1.540	71	Meadow, non-grazed, HSG C
0.340	98	Roofs, HSG C
3.670	71	Weighted Average
3.330		90.74% Pervious Area
0.340		9.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.1	100	0.0230	0.07		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
4.2	170	0.0180	0.67		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
6.3	326	0.0150	0.86		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
35.6	596	Total			

Subcatchment D01: DA-01

Hydrograph



Summary for Subcatchment D02: DA-02

[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
 Routed to Link L02 : L02

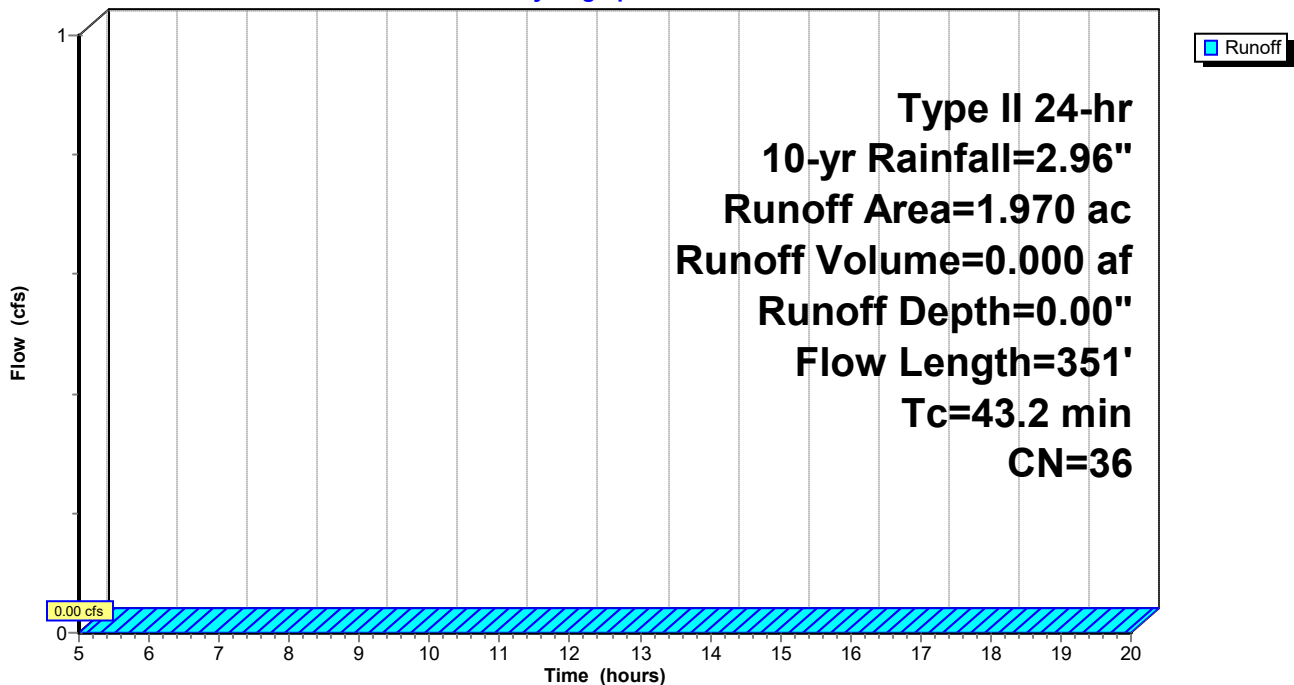
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.610	32	Woods/grass comb., Good, HSG A
0.140	72	Woods/grass comb., Good, HSG C
1.110	30	Woods, Good, HSG A
0.110	70	Woods, Good, HSG C
1.970	36	Weighted Average
1.970		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
36.6	100	0.0090	0.05		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
6.6	251	0.0160	0.63		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
43.2	351	Total			

Subcatchment D02: DA-02

Hydrograph



Summary for Subcatchment D03: DA-03

Runoff = 0.57 cfs @ 12.49 hrs, Volume= 0.074 af, Depth> 0.64"
 Routed to Link L03 : L03

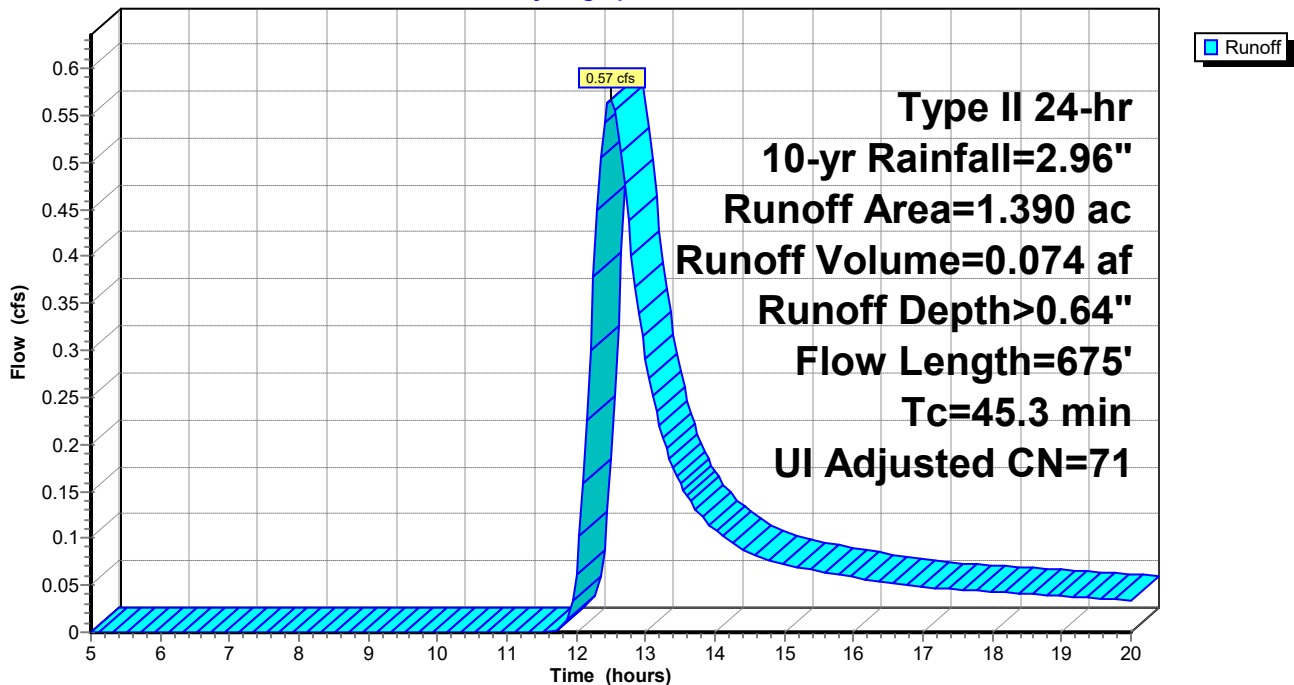
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Adj	Description
0.960	70		Woods, Good, HSG C
0.320	71		Meadow, non-grazed, HSG C
0.110	98		Unconnected pavement, HSG C
1.390	72	71	Weighted Average, UI Adjusted
1.280			92.09% Pervious Area
0.110			7.91% Impervious Area
0.110			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
35.1	100	0.0400	0.05		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 2.09"
4.4	203	0.0240	0.77		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
5.8	372	0.0050	1.06		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
45.3	675	Total			

Subcatchment D03: DA-03

Hydrograph



Summary for Subcatchment D04: DA-04

Runoff = 2.32 cfs @ 12.52 hrs, Volume= 0.324 af, Depth> 0.56"
 Routed to Link L04 : L04

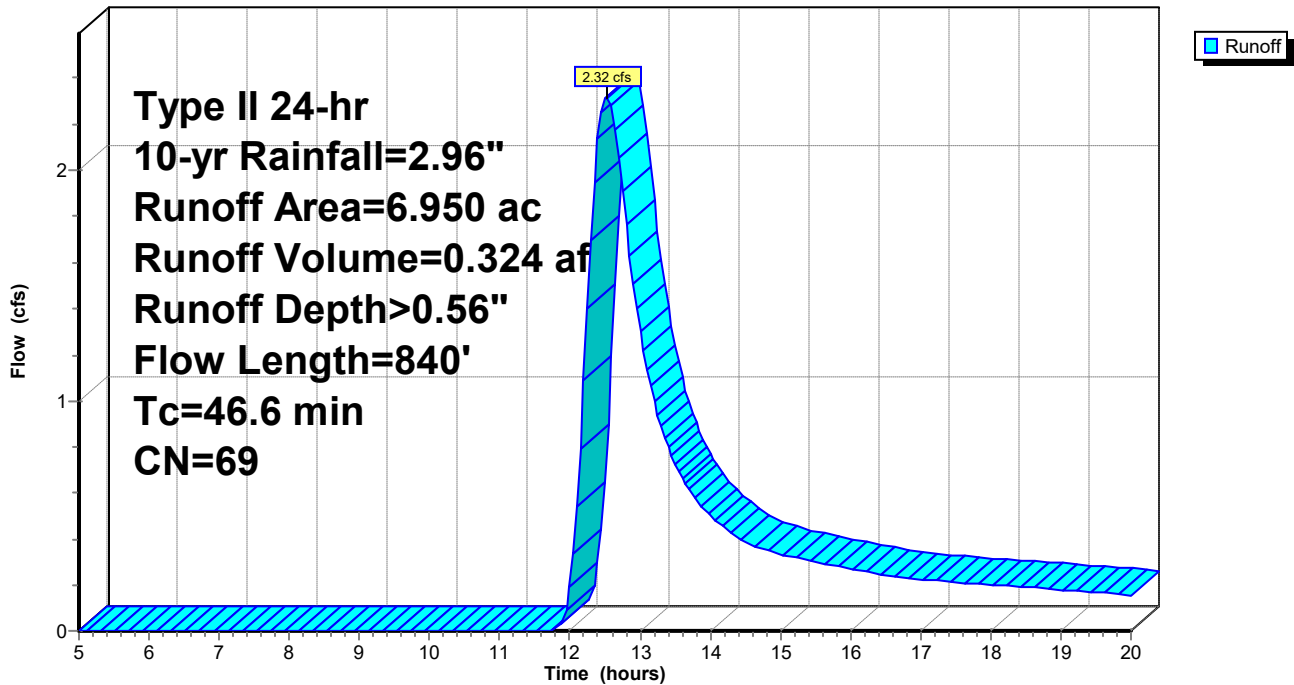
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.230	30	Woods, Good, HSG A
6.720	70	Woods, Good, HSG C
6.950	69	Weighted Average
6.950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.1	100	0.0190	0.06		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
19.5	740	0.0160	0.63		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
46.6	840	Total			

Subcatchment D04: DA-04

Hydrograph



Summary for Subcatchment D05: DA-05

Runoff = 12.28 cfs @ 13.34 hrs, Volume= 2.782 af, Depth> 0.75"
 Routed to Link L05 : L05

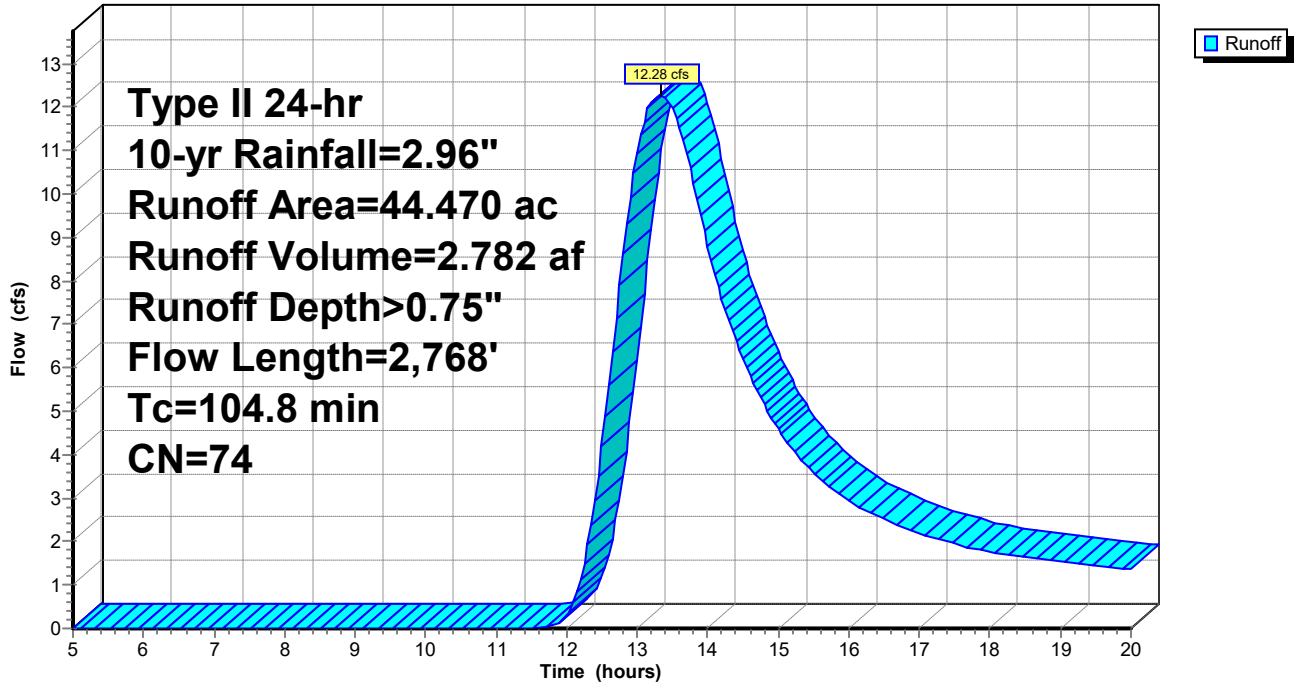
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.400	30	Woods, Good, HSG A
0.610	55	Woods, Good, HSG B
27.210	72	Woods/grass comb., Good, HSG C
1.230	58	Legumes, straight row, Good, HSG A
1.580	72	Legumes, straight row, Good, HSG B
13.440	81	Legumes, straight row, Good, HSG C
44.470	74	Weighted Average
44.470		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0070	0.19		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
29.4	1,123	0.0050	0.64		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
66.5	1,545	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
104.8	2,768	Total			

Subcatchment D05: DA-05

Hydrograph



Summary for Subcatchment D06: DA-06

Runoff = 7.25 cfs @ 12.55 hrs, Volume= 0.966 af, Depth> 0.87"
 Routed to Link L06 : L06

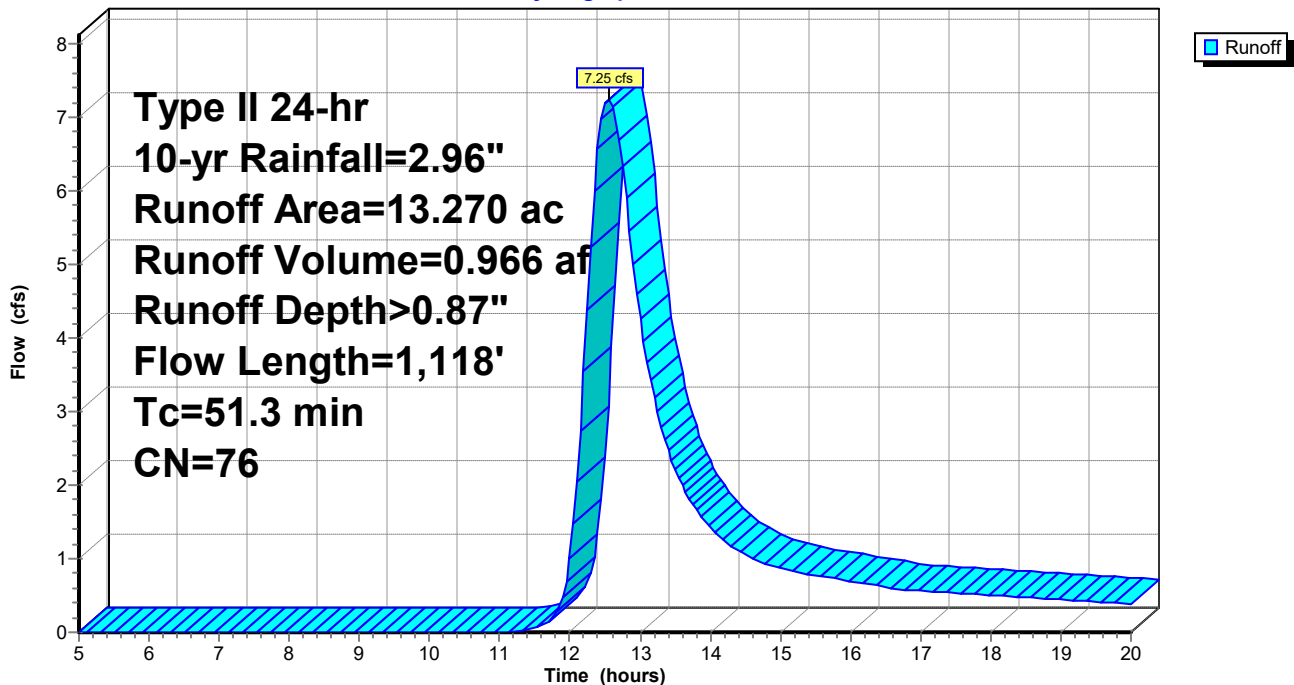
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.420	55	Woods, Good, HSG B
1.900	70	Woods, Good, HSG C
1.160	58	Legumes, straight row, Good, HSG A
0.950	72	Legumes, straight row, Good, HSG B
8.840	81	Legumes, straight row, Good, HSG C
13.270	76	Weighted Average
13.270		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.5	100	0.0005	0.07		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
23.9	1,000	0.0060	0.70		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.9	18	0.0010	0.16		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
51.3	1,118	Total			

Subcatchment D06: DA-06

Hydrograph



Summary for Subcatchment D07: DA-07

Runoff = 6.76 cfs @ 13.51 hrs, Volume= 1.648 af, Depth> 0.70"
 Routed to Link L07 : L07

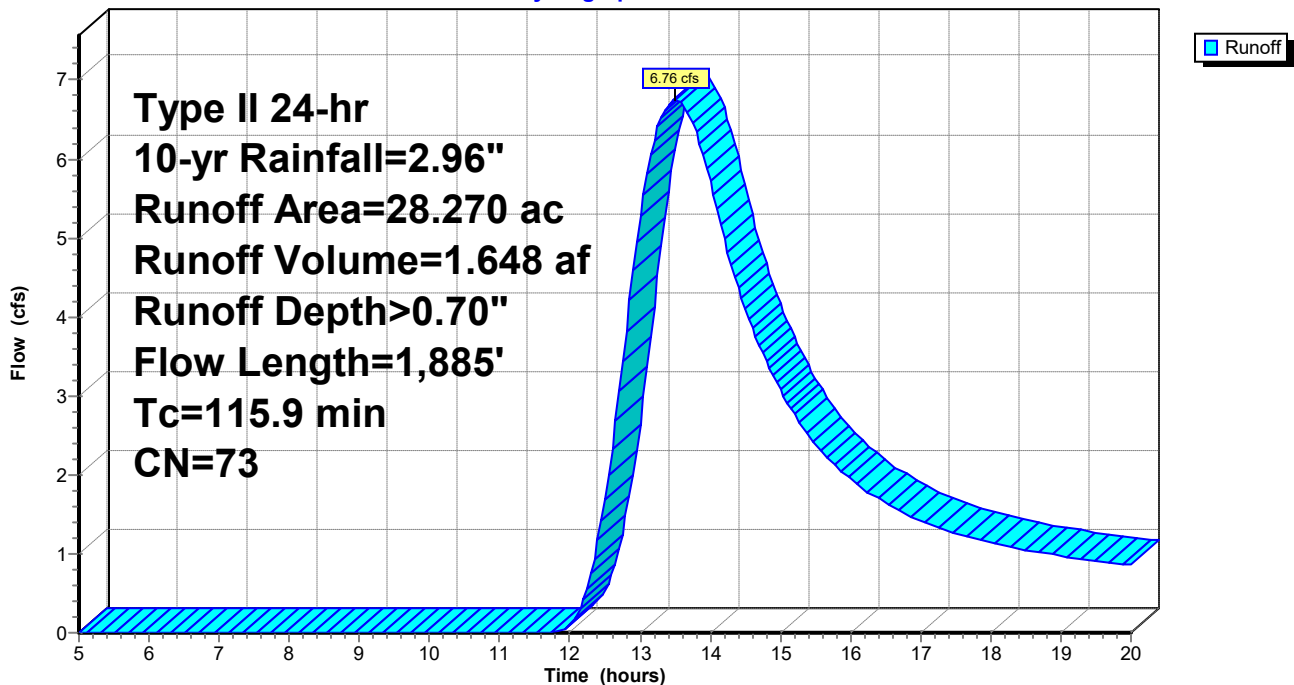
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
20.280	70	Woods, Good, HSG C
7.990	81	Legumes, straight row, Good, HSG C
28.270	73	Weighted Average
28.270		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	100	0.0050	0.16		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
8.9	371	0.0060	0.70		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
20.6	390	0.0040	0.32		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
76.3	1,024	0.0020	0.22		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
115.9	1,885	Total			

Subcatchment D07: DA-07

Hydrograph



Summary for Subcatchment D08: DA-08

Runoff = 2.42 cfs @ 12.19 hrs, Volume= 0.204 af, Depth> 0.61"
 Routed to Link L08 : L08

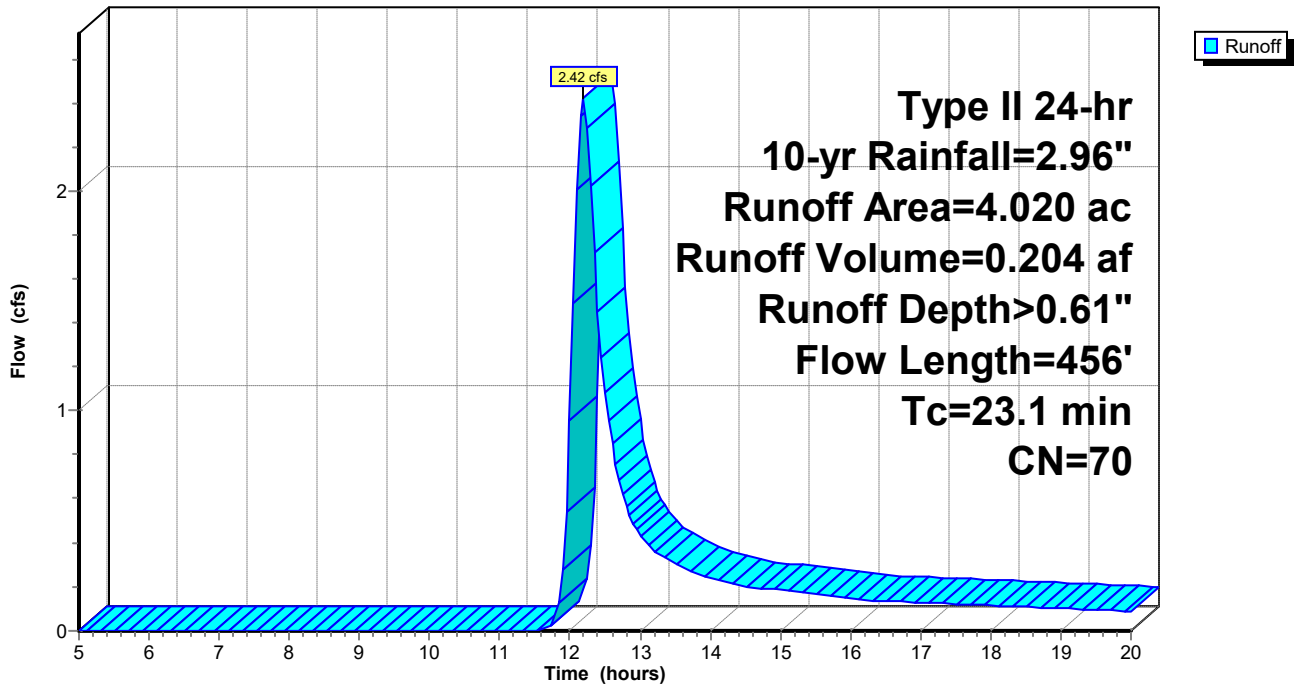
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.680	58	Woods/grass comb., Good, HSG B
3.340	72	Woods/grass comb., Good, HSG C
4.020	70	Weighted Average
4.020		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.3	100	0.0340	0.12		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
8.8	356	0.0180	0.67		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
23.1	456	Total			

Subcatchment D08: DA-08

Hydrograph



Summary for Subcatchment D09: DA-09

Runoff = 13.33 cfs @ 12.22 hrs, Volume= 1.121 af, Depth> 1.10"
 Routed to Link L09 : L09

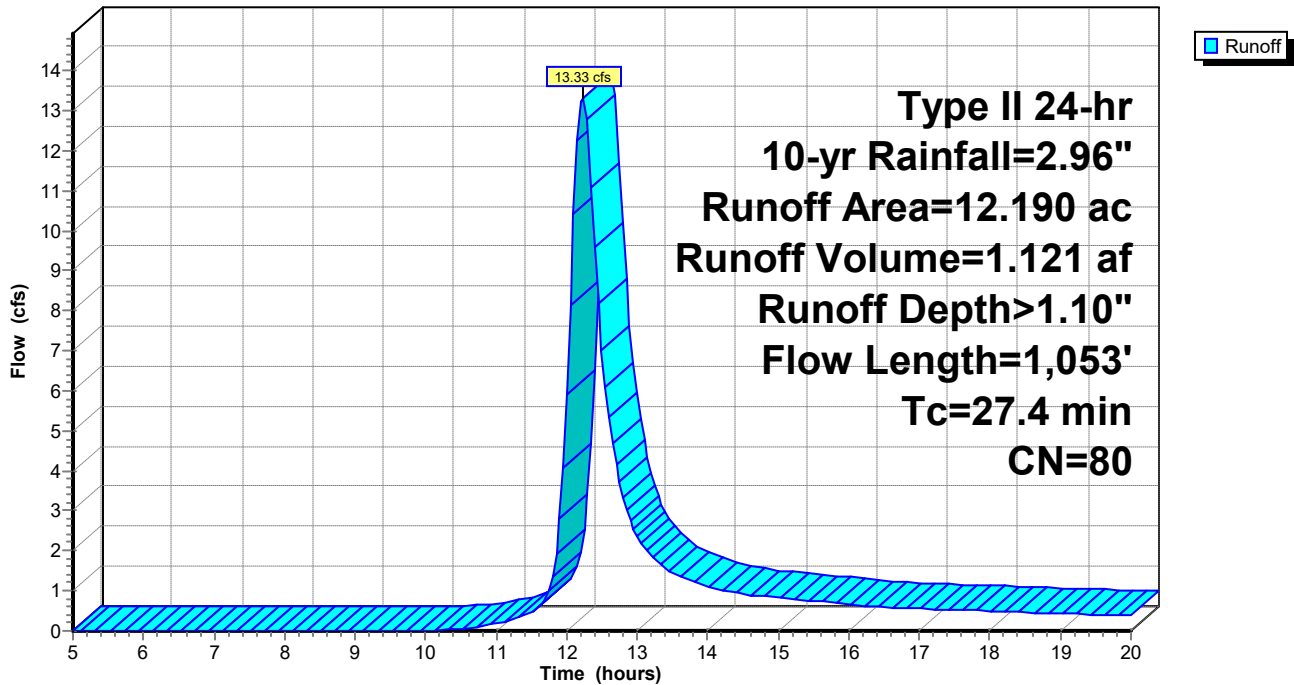
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
1.710	72	Woods/grass comb., Good, HSG C
10.480	81	Legumes, straight row, Good, HSG C
12.190	80	Weighted Average
12.190		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.0100	0.22		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
19.7	953	0.0080	0.80		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
27.4	1,053	Total			

Subcatchment D09: DA-09

Hydrograph



Summary for Subcatchment D10: DA-10

Runoff = 3.41 cfs @ 12.05 hrs, Volume= 0.184 af, Depth> 0.84"
 Routed to Link L10 : L10

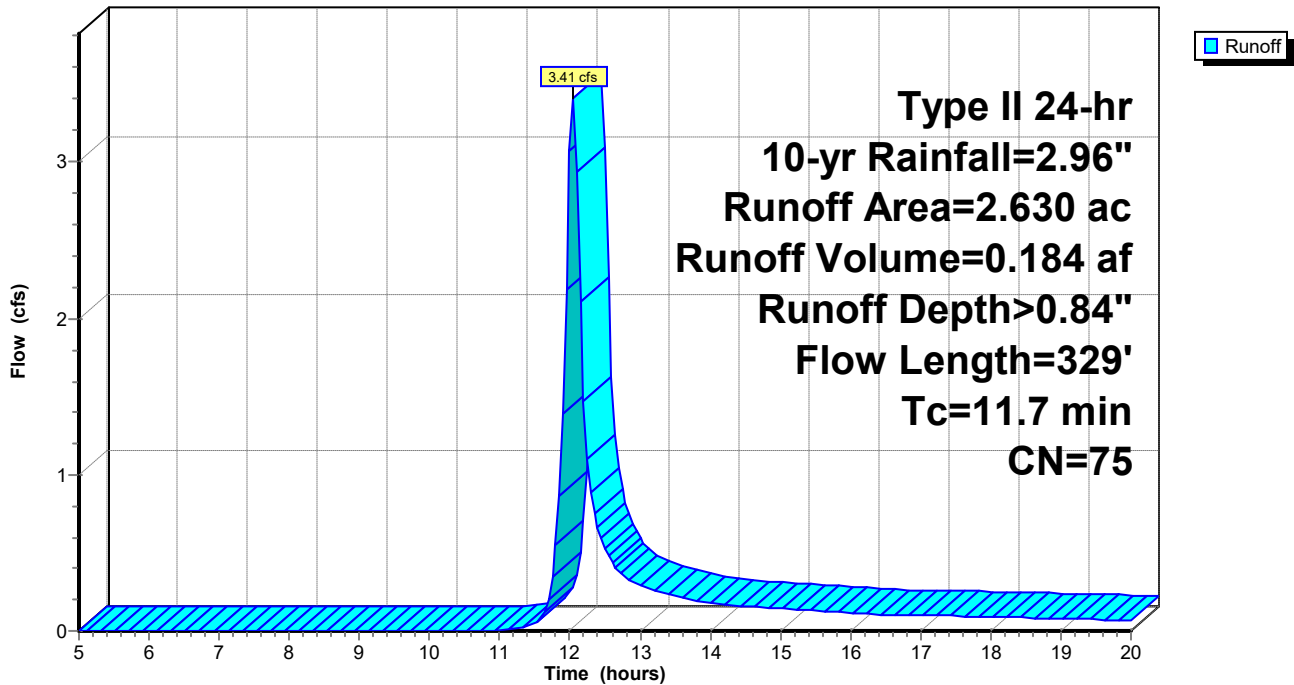
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
1.840	72	Woods/grass comb., Good, HSG C
0.790	81	Legumes, straight row, Good, HSG C
2.630	75	Weighted Average
2.630		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.4	100	0.0080	0.20		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
2.2	186	0.0250	1.42		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.1	43	0.0170	0.65		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
11.7	329	Total			

Subcatchment D10: DA-10

Hydrograph



Summary for Subcatchment D11: DA-11

Runoff = 5.59 cfs @ 12.02 hrs, Volume= 0.286 af, Depth> 1.17"
 Routed to Link L11 : L11

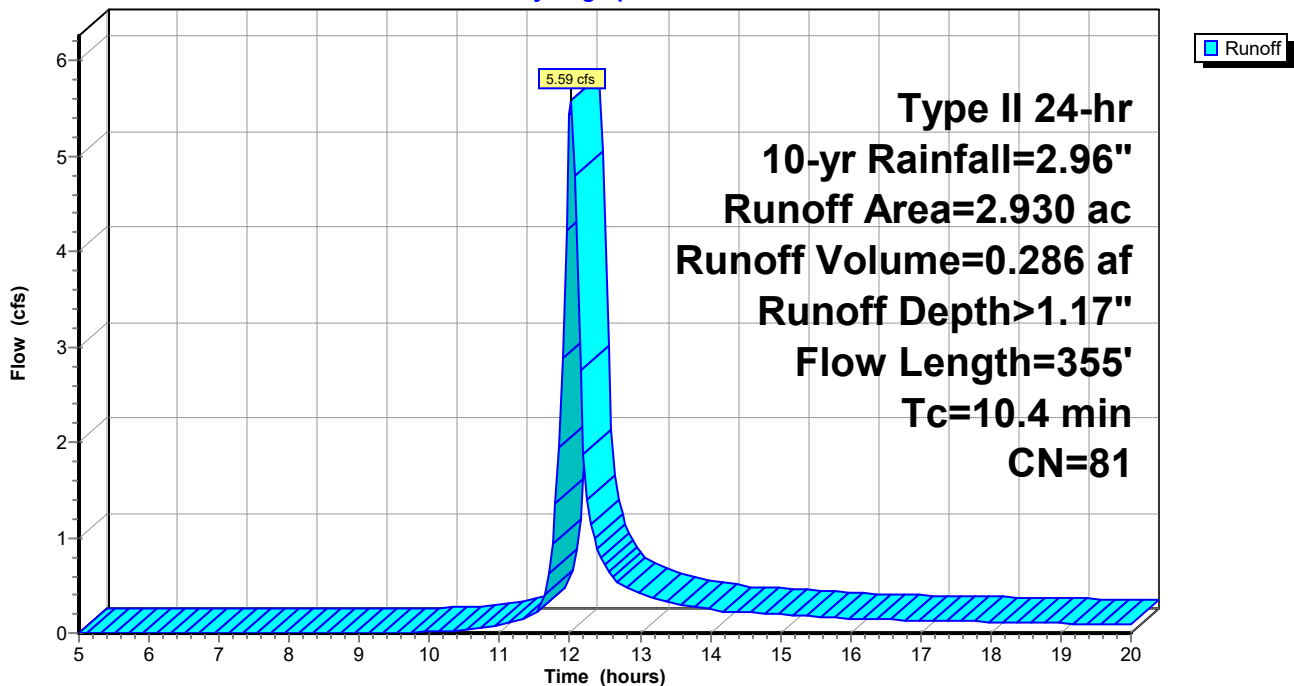
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
2.930	81	Legumes, straight row, Good, HSG C
2.930		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.9	100	0.0130	0.24		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
3.5	255	0.0180	1.21		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
10.4	355	Total			

Subcatchment D11: DA-11

Hydrograph



Summary for Subcatchment D12: DA-12

Runoff = 11.32 cfs @ 13.11 hrs, Volume= 2.267 af, Depth> 0.85"
 Routed to Link L12 : L12

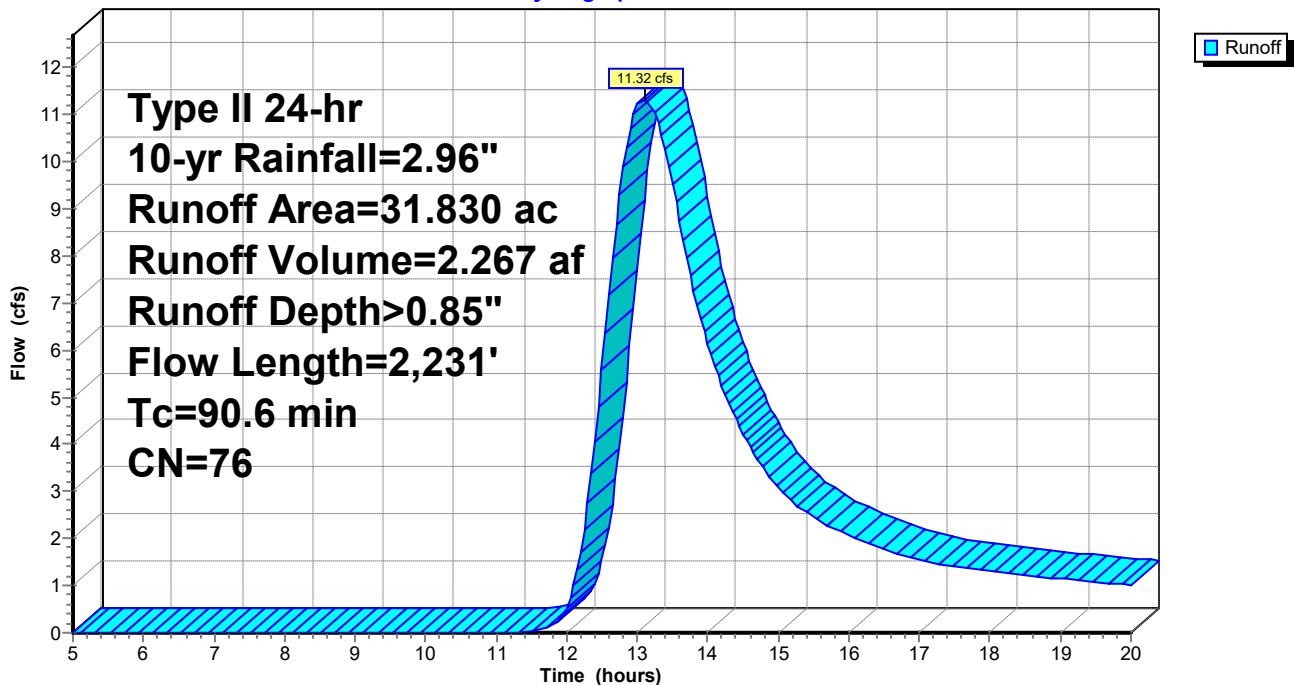
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
1.770	72	Woods/grass comb., Good, HSG C
5.290	55	Woods, Good, HSG B
0.150	72	Legumes, straight row, Good, HSG B
24.620	81	Legumes, straight row, Good, HSG C
31.830	76	Weighted Average
31.830		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.5	100	0.0005	0.07		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
24.7	1,193	0.0080	0.80		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
40.4	938	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
90.6	2,231	Total			

Subcatchment D12: DA-12

Hydrograph



Summary for Subcatchment D13: DA-13

Runoff = 8.19 cfs @ 12.46 hrs, Volume= 0.988 af, Depth> 0.93"
 Routed to Link L13 : L13

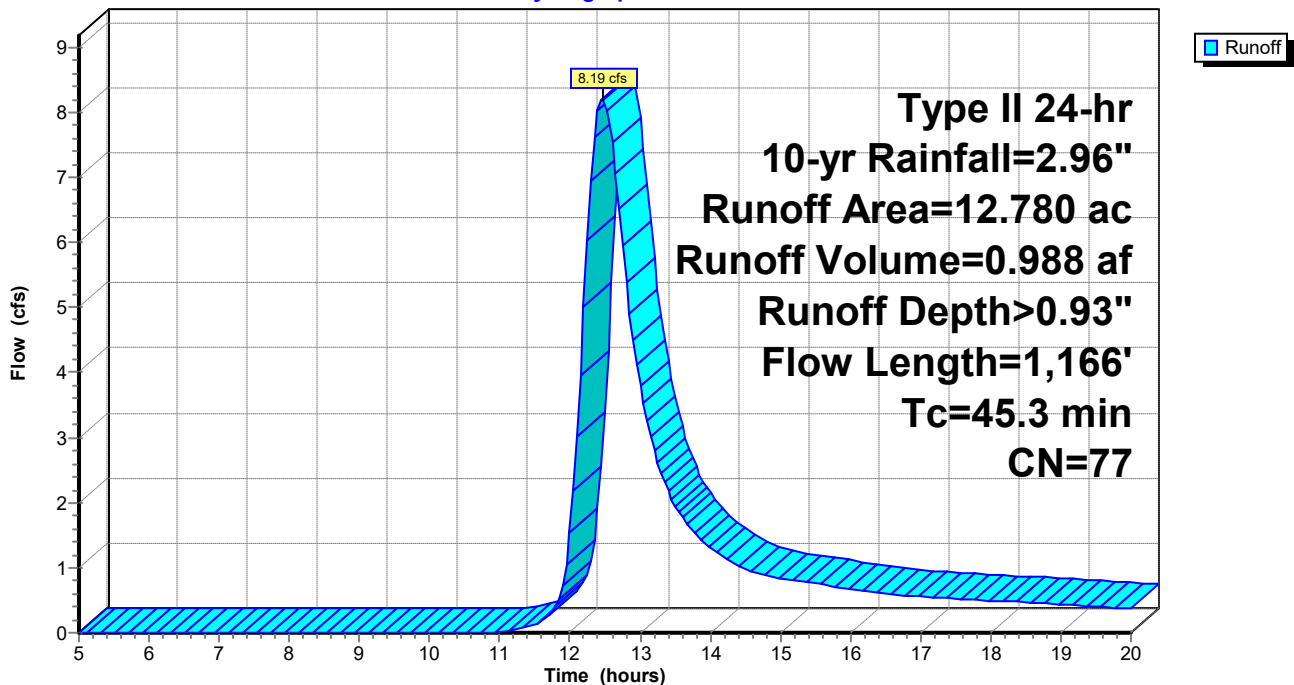
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
1.730	55	Woods, Good, HSG B
0.960	70	Woods, Good, HSG C
0.180	72	Legumes, straight row, Good, HSG B
9.910	81	Legumes, straight row, Good, HSG C
12.780	77	Weighted Average
12.780		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.0100	0.22		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
6.8	350	0.0090	0.85		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
30.8	716	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
45.3	1,166	Total			

Subcatchment D13: DA-13

Hydrograph



Summary for Subcatchment D14: DA-14

Runoff = 7.29 cfs @ 14.51 hrs, Volume= 2.430 af, Depth> 0.62"
 Routed to Link L14 : L14

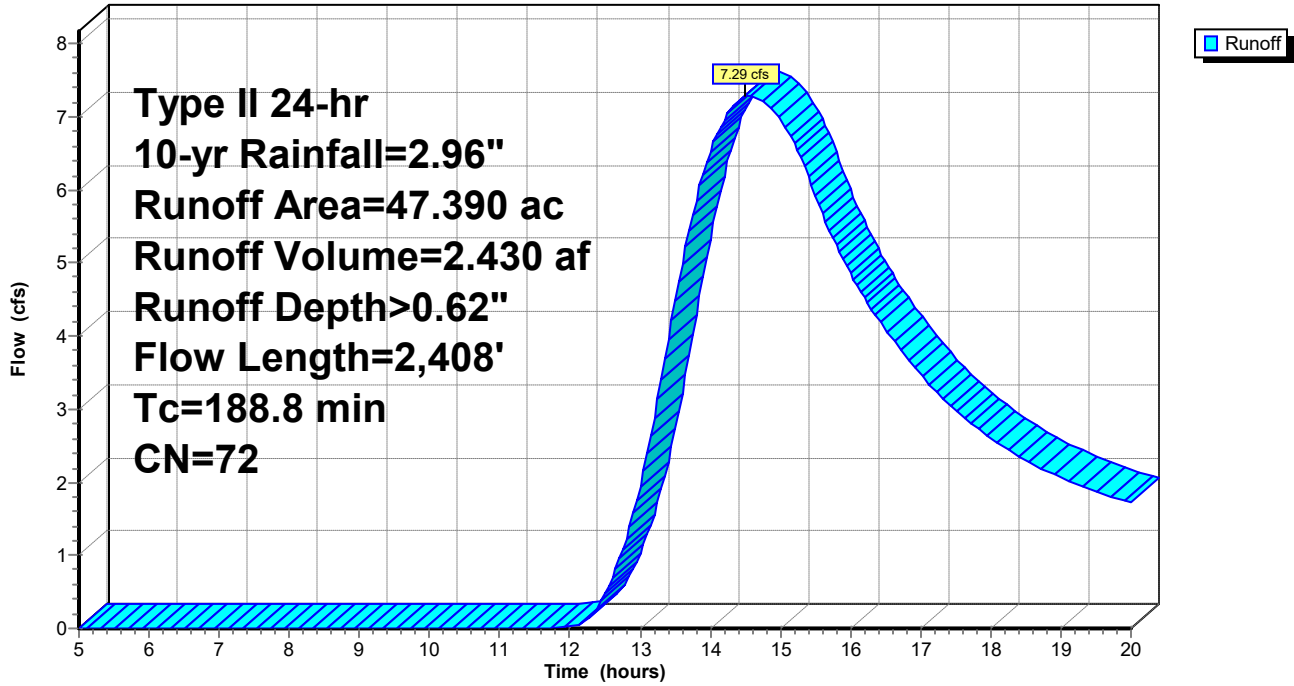
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
9.270	58	Woods/grass comb., Good, HSG B
17.240	72	Woods/grass comb., Good, HSG C
1.100	58	Legumes, straight row, Good, HSG A
1.340	72	Legumes, straight row, Good, HSG B
18.440	81	Legumes, straight row, Good, HSG C
47.390	72	Weighted Average
47.390		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	100	0.0170	0.27		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
11.8	607	0.0090	0.85		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
36.7	697	0.0040	0.32		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
92.8	880	0.0010	0.16		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
41.3	124	0.0001	0.05		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
188.8	2,408	Total			

Subcatchment D14: DA-14

Hydrograph



Summary for Subcatchment D15: DA-15

Runoff = 10.05 cfs @ 12.19 hrs, Volume= 0.794 af, Depth> 1.10"
 Routed to Link L15 : L15

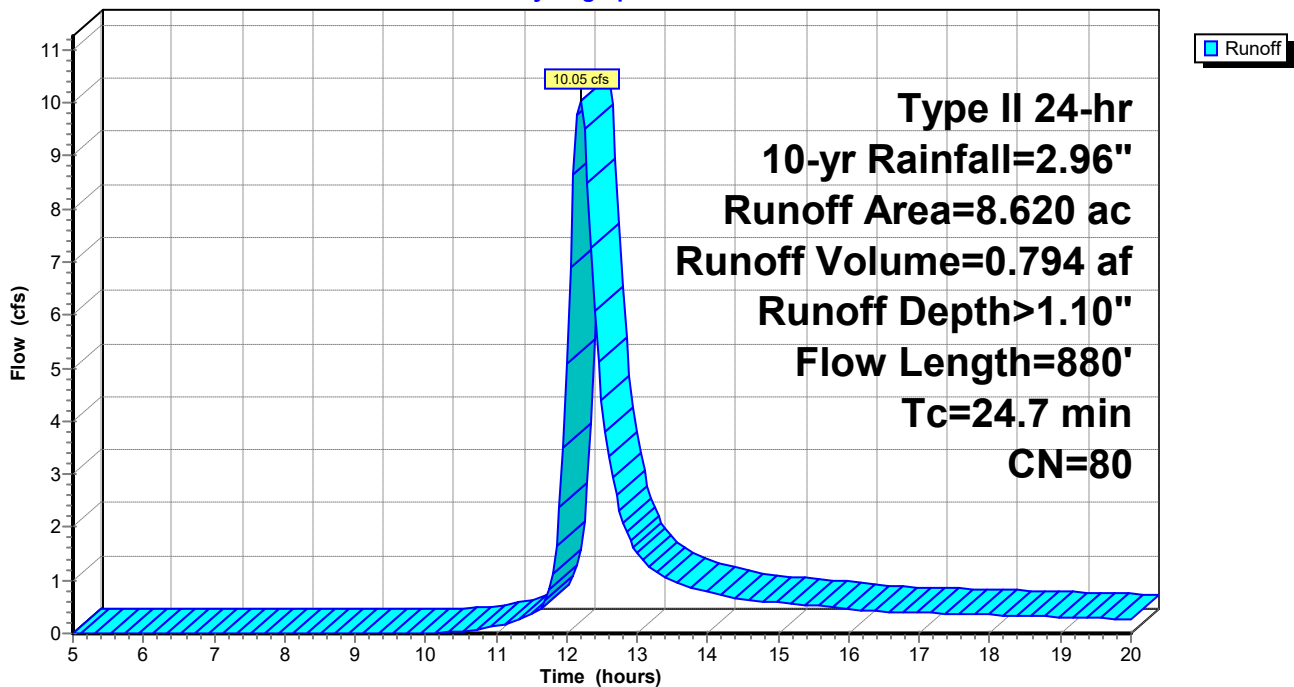
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.820	70	Woods, Good, HSG C
0.240	71	Meadow, non-grazed, HSG C
7.560	81	Legumes, straight row, Good, HSG C
8.620	80	Weighted Average
8.620		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	100	0.0110	0.23		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
17.3	780	0.0070	0.75		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
24.7	880	Total			

Subcatchment D15: DA-15

Hydrograph



Summary for Subcatchment D16: DA-16

Runoff = 0.31 cfs @ 12.25 hrs, Volume= 0.029 af, Depth> 0.65"
 Routed to Link L16 : L16

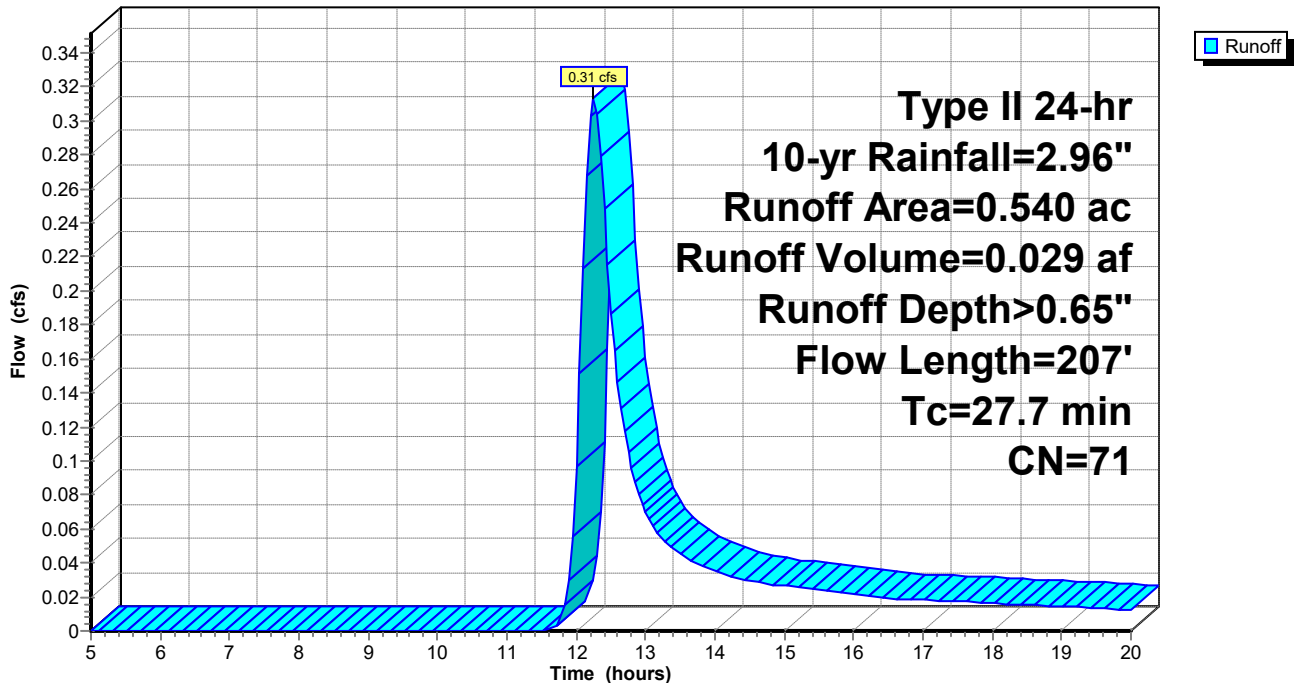
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.250	70	Woods, Good, HSG C
0.290	71	Meadow, non-grazed, HSG C
0.540	71	Weighted Average
0.540		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.4	60	0.0240	0.06		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
9.3	40	0.0160	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
2.0	107	0.0170	0.91		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
27.7	207	Total			

Subcatchment D16: DA-16

Hydrograph



Summary for Subcatchment D17: DA-17

Runoff = 5.71 cfs @ 12.02 hrs, Volume= 0.291 af, Depth> 1.17"
 Routed to Link L17 : L17

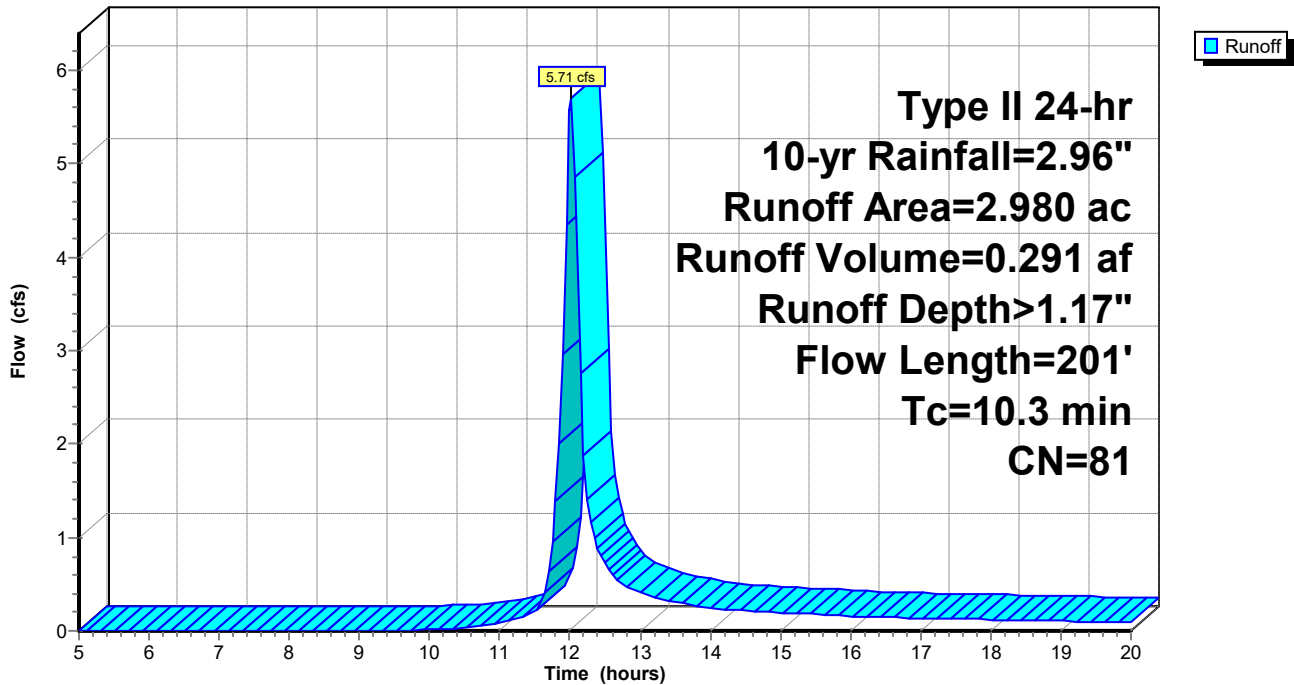
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.080	71	Meadow, non-grazed, HSG C
2.900	81	Legumes, straight row, Good, HSG C
2.980	81	Weighted Average
2.980		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0070	0.19		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
1.4	101	0.0170	1.17		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
10.3	201	Total			

Subcatchment D17: DA-17

Hydrograph



Summary for Subcatchment D18: DA-18

Runoff = 13.65 cfs @ 12.61 hrs, Volume= 1.900 af, Depth> 1.15"
 Routed to Link L18 : L18

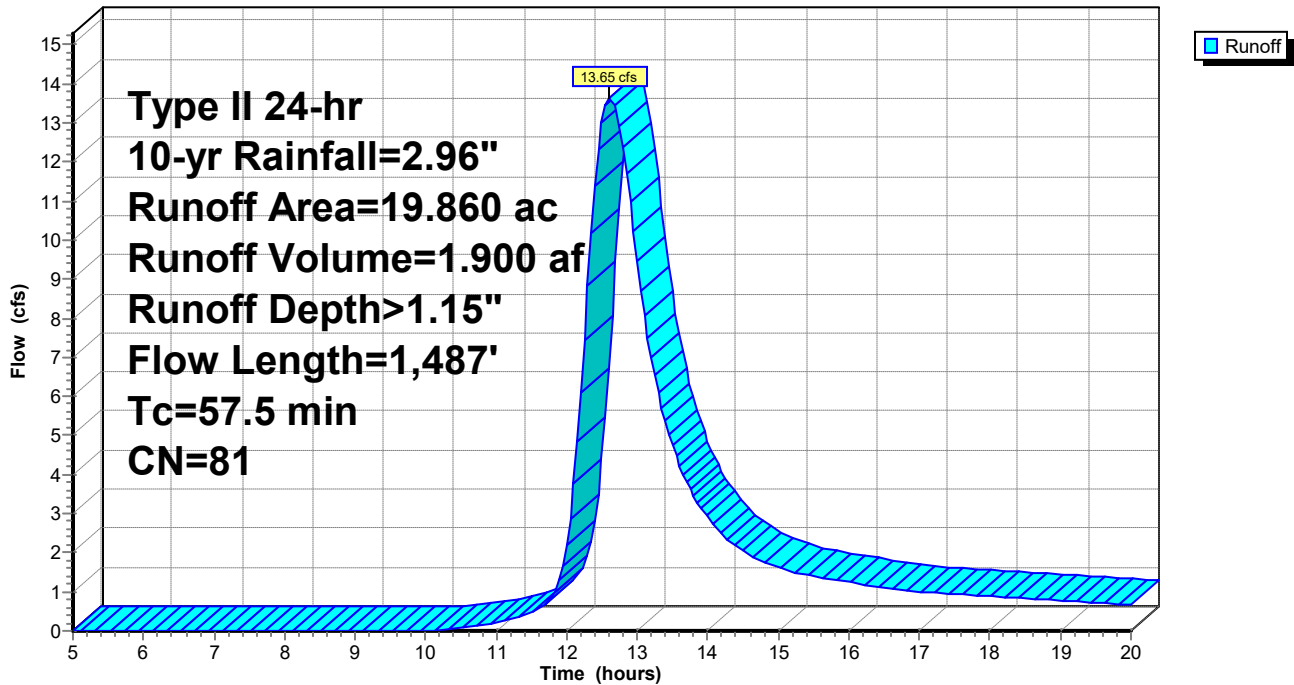
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
19.860	81	Legumes, straight row, Good, HSG C
19.860		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0070	0.19		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
10.2	460	0.0070	0.75		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
38.4	927	0.0020	0.40		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
57.5	1,487	Total			

Subcatchment D18: DA-18

Hydrograph



Summary for Subcatchment D19: DA-19

Runoff = 5.94 cfs @ 12.21 hrs, Volume= 0.486 af, Depth> 1.10"
 Routed to Link L19 : L19

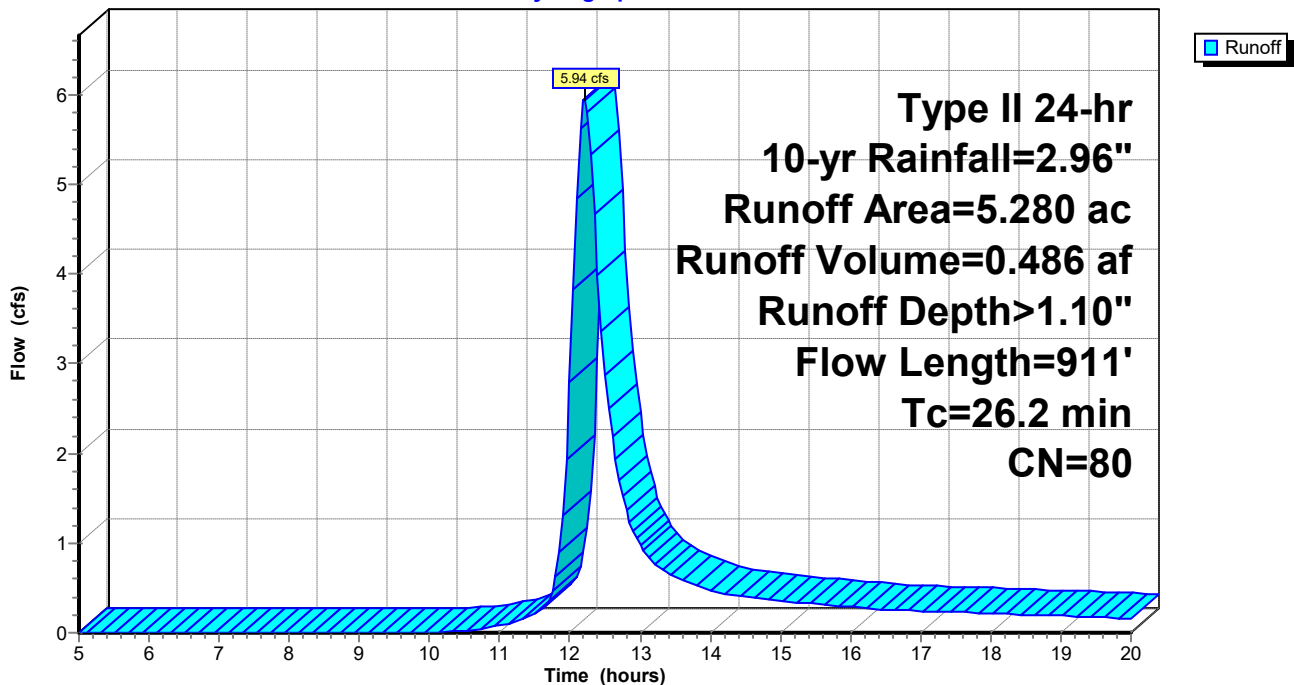
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.400	70	Woods, Good, HSG C
4.880	81	Legumes, straight row, Good, HSG C
5.280	80	Weighted Average
5.280		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.0100	0.22		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
4.7	241	0.0090	0.85		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
3.5	104	0.0100	0.50		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
10.3	466	0.0070	0.75		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
26.2	911	Total			

Subcatchment D19: DA-19

Hydrograph



Summary for Subcatchment D20: DA-20

Runoff = 5.65 cfs @ 12.83 hrs, Volume= 0.952 af, Depth> 0.77"
 Routed to Link L20 : L20

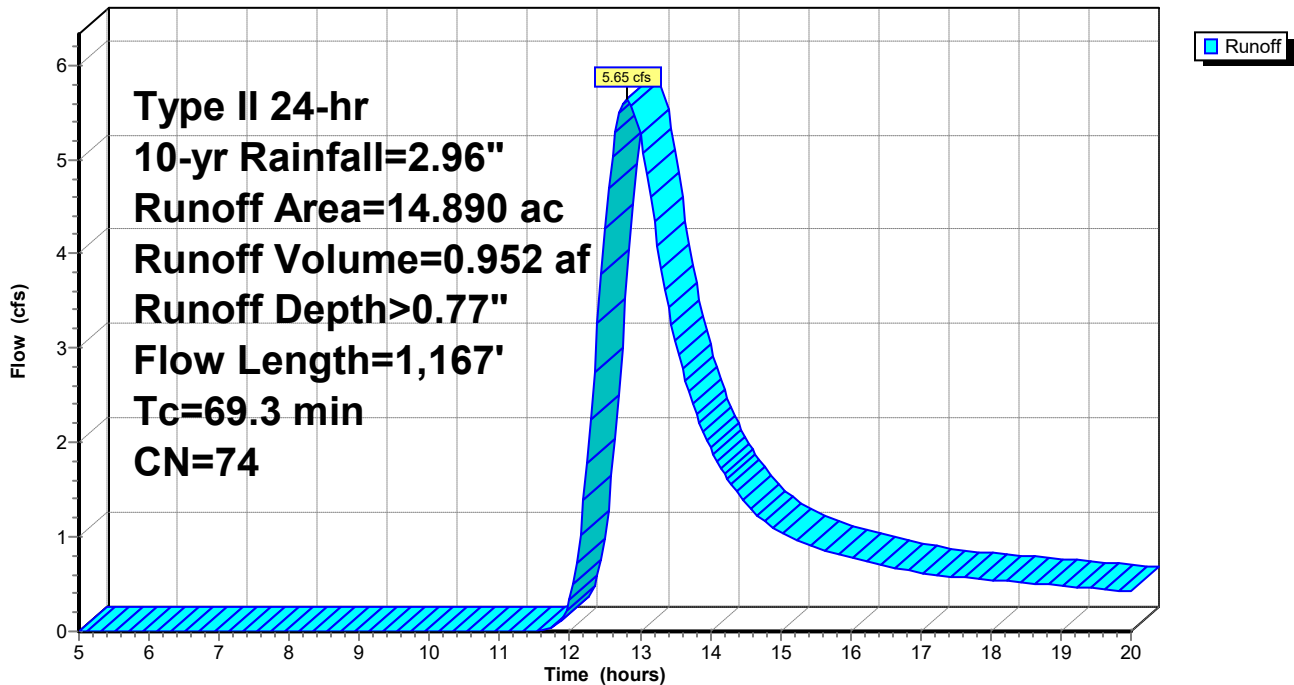
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
3.910	72	Woods/grass comb., Good, HSG C
6.900	70	Woods, Good, HSG C
4.080	81	Legumes, straight row, Good, HSG C
14.890	74	Weighted Average
14.890		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.8	100	0.0510	0.05		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 2.09"
37.5	1,067	0.0090	0.47		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
69.3	1,167	Total			

Subcatchment D20: DA-20

Hydrograph



Summary for Subcatchment D21: DA-21

Runoff = 5.97 cfs @ 13.23 hrs, Volume= 1.294 af, Depth> 0.67"
 Routed to Link L21 : L21

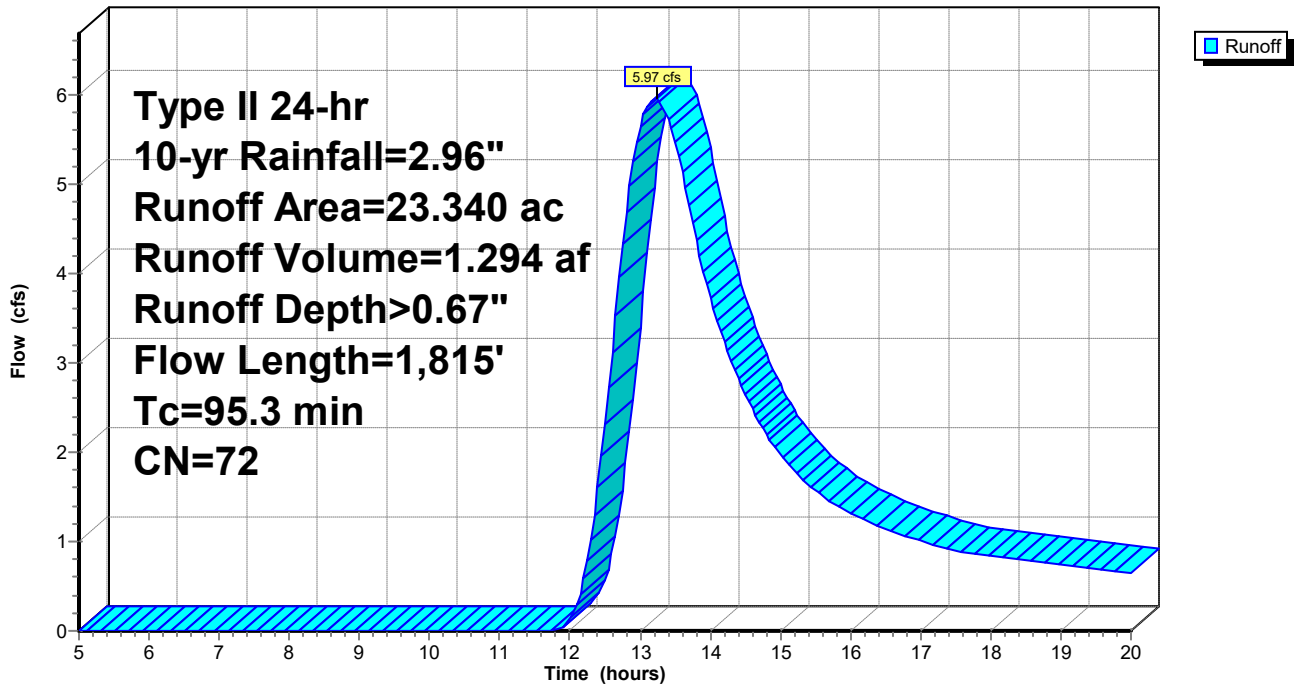
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
22.270	72	Woods/grass comb., Good, HSG C
1.070	81	Legumes, straight row, Good, HSG C
23.340	72	Weighted Average
23.340		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.5	100	0.0340	0.08		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
73.8	1,715	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
95.3	1,815	Total			

Subcatchment D21: DA-21

Hydrograph



Summary for Subcatchment D22: DA-22

Runoff = 11.62 cfs @ 12.47 hrs, Volume= 1.408 af, Depth> 0.98"
 Routed to Link L22 : L22

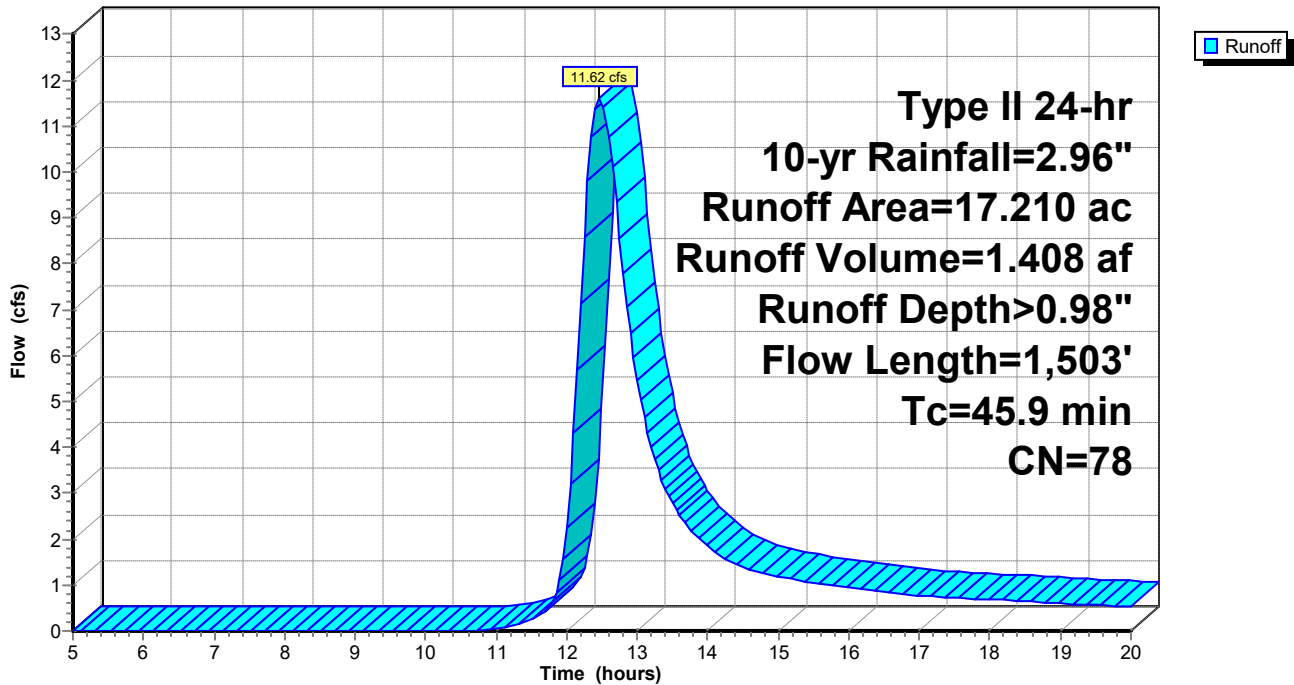
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
6.190	72	Woods/grass comb., Good, HSG C
11.020	81	Legumes, straight row, Good, HSG C
17.210	78	Weighted Average
17.210		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0120	0.23		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
32.5	1,361	0.0060	0.70		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
6.3	42	0.0005	0.11		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
45.9	1,503	Total			

Subcatchment D22: DA-22

Hydrograph



Summary for Subcatchment D23: DA-23

Runoff = 3.61 cfs @ 12.42 hrs, Volume= 0.429 af, Depth> 0.69"
 Routed to Link L23 : L23

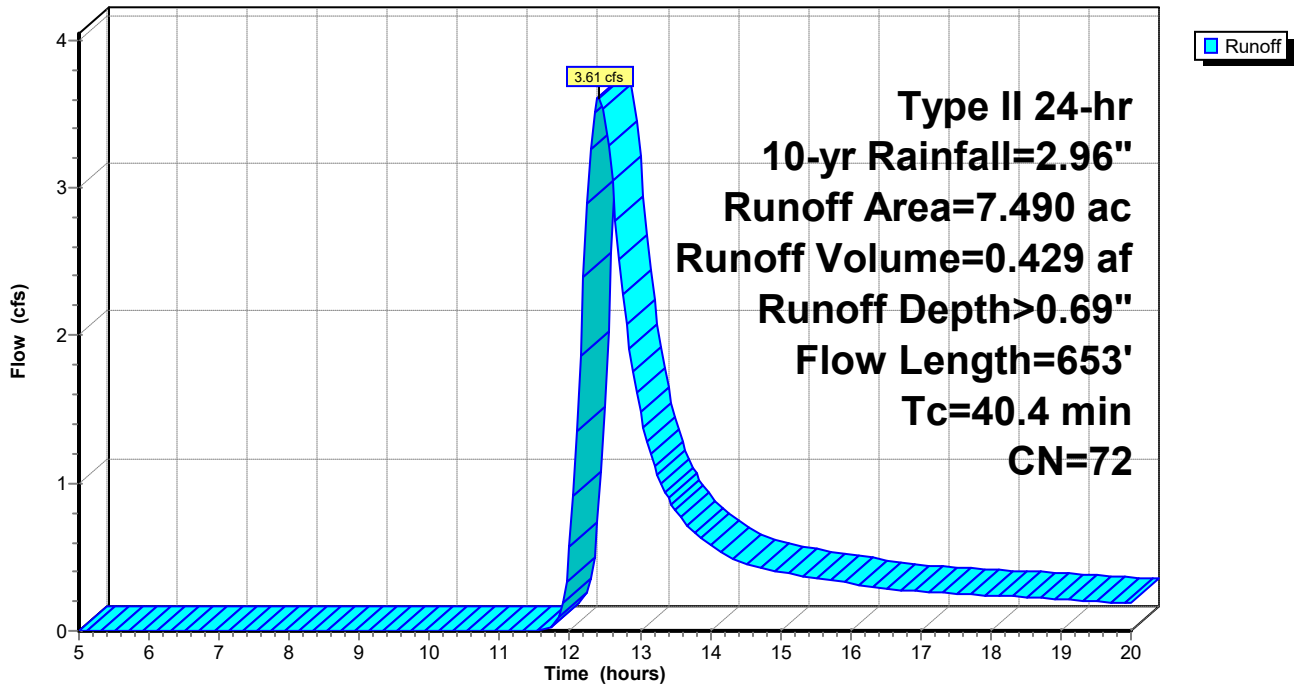
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
7.490	72	Woods/grass comb., Good, HSG C
7.490		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	100	0.0120	0.08		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
1.0	48	0.0140	0.83		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
17.7	505	0.0090	0.47		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
40.4	653	Total			

Subcatchment D23: DA-23

Hydrograph



Summary for Subcatchment D24: DA-24

Runoff = 7.64 cfs @ 12.41 hrs, Volume= 0.877 af, Depth> 0.78"
 Routed to Link L24 : L24

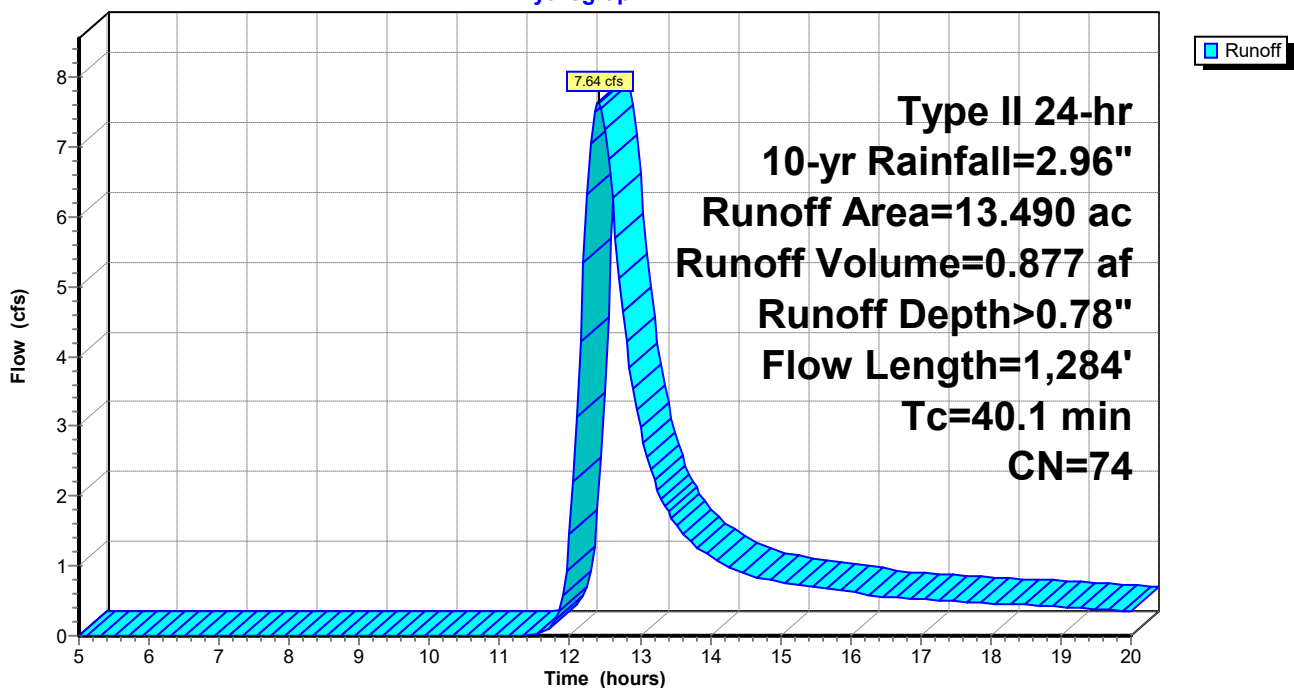
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
9.860	72	Woods/grass comb., Good, HSG C
3.630	81	Legumes, straight row, Good, HSG C
13.490	74	Weighted Average
13.490		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.4	100	0.0160	0.26		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
7.9	405	0.0090	0.85		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
7.7	263	0.0130	0.57		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
18.1	516	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
40.1	1,284	Total			

Subcatchment D24: DA-24

Hydrograph



Summary for Subcatchment D25: DA-25

Runoff = 28.55 cfs @ 12.43 hrs, Volume= 3.405 af, Depth> 0.78"
 Routed to Link L25 : L25

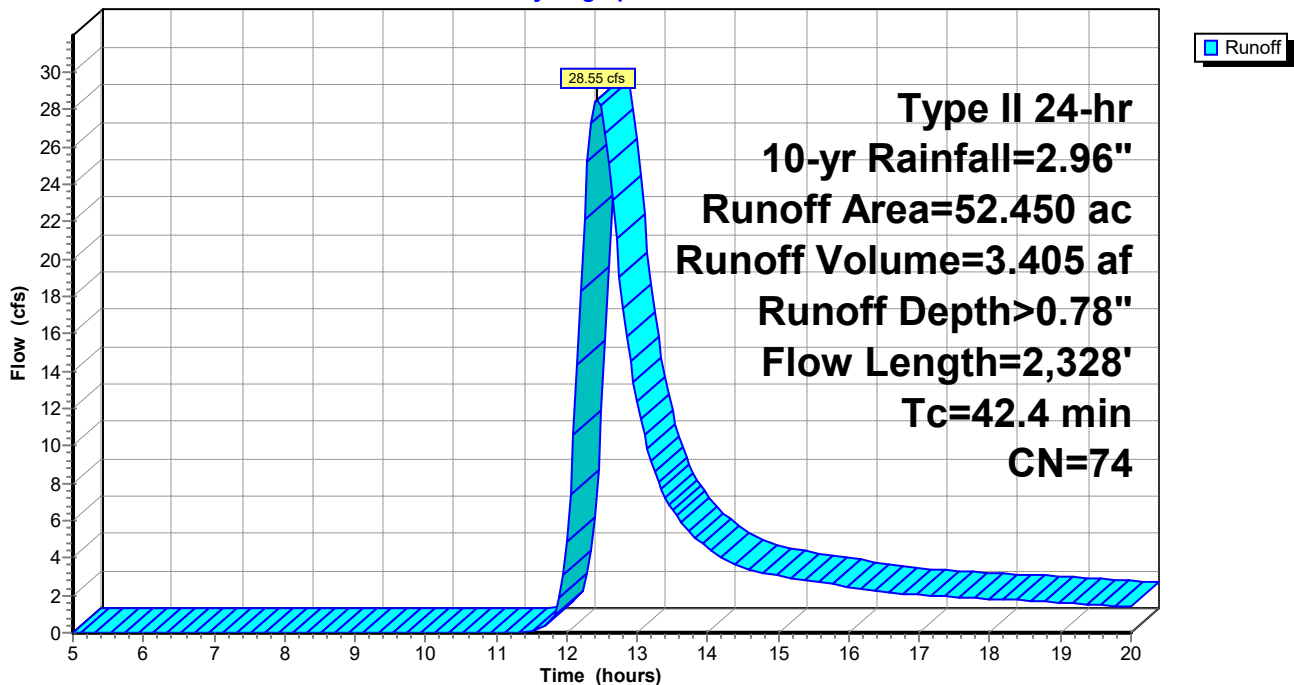
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
3.260	55	Woods, Good, HSG B
4.050	70	Woods, Good, HSG C
27.410	72	Legumes, straight row, Good, HSG B
17.730	81	Legumes, straight row, Good, HSG C
52.450	74	Weighted Average
52.450		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	100	0.0110	0.23		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
17.1	1,130	0.0150	1.10		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
17.9	1,098	0.0420	1.02		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
42.4	2,328	Total			

Subcatchment D25: DA-25

Hydrograph



Summary for Subcatchment D26: DA-26

Runoff = 16.69 cfs @ 17.10 hrs, Volume= 6.685 af, Depth> 0.41"
 Routed to Link L26 : L26

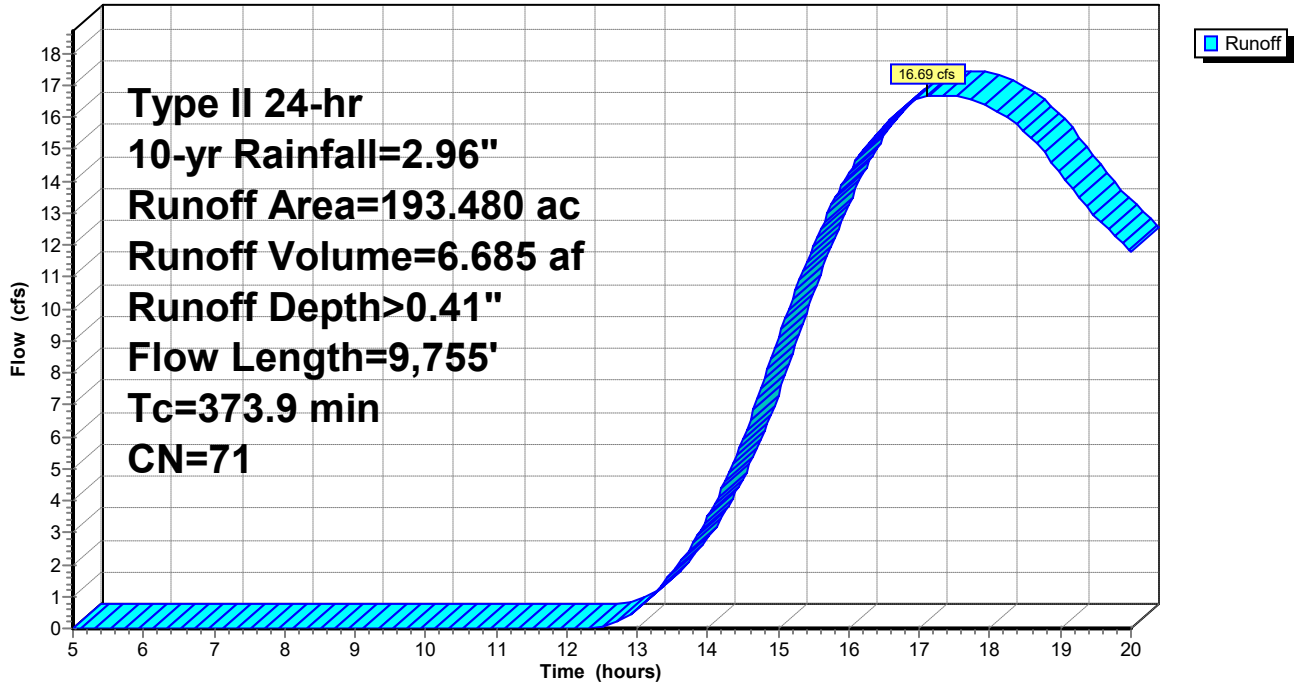
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.890	30	Woods, Good, HSG A
17.490	55	Woods, Good, HSG B
56.230	70	Woods, Good, HSG C
61.660	72	Woods/grass comb., Good, HSG C
4.000	79	Woods/grass comb., Good, HSG D
30.500	71	Meadow, non-grazed, HSG C
5.620	72	Legumes, straight row, Good, HSG B
10.650	81	Legumes, straight row, Good, HSG C
1.500	98	Unconnected pavement, HSG C
* 3.160	98	Capped Area
1.780	96	Gravel surface, HSG C
193.480	71	Weighted Average
188.820		97.59% Pervious Area
4.660		2.41% Impervious Area
1.500		32.19% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.1	100	0.0210	0.06		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
4.2	253	0.0400	1.00		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
213.2	6,067	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
19.3	174	0.0001	0.15		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
111.1	3,161	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
373.9	9,755	Total			

Subcatchment D26: DA-26

Hydrograph



Summary for Subcatchment D27: DA-27

Runoff = 27.41 cfs @ 12.59 hrs, Volume= 3.767 af, Depth> 1.41"
 Routed to Link L27 : L27

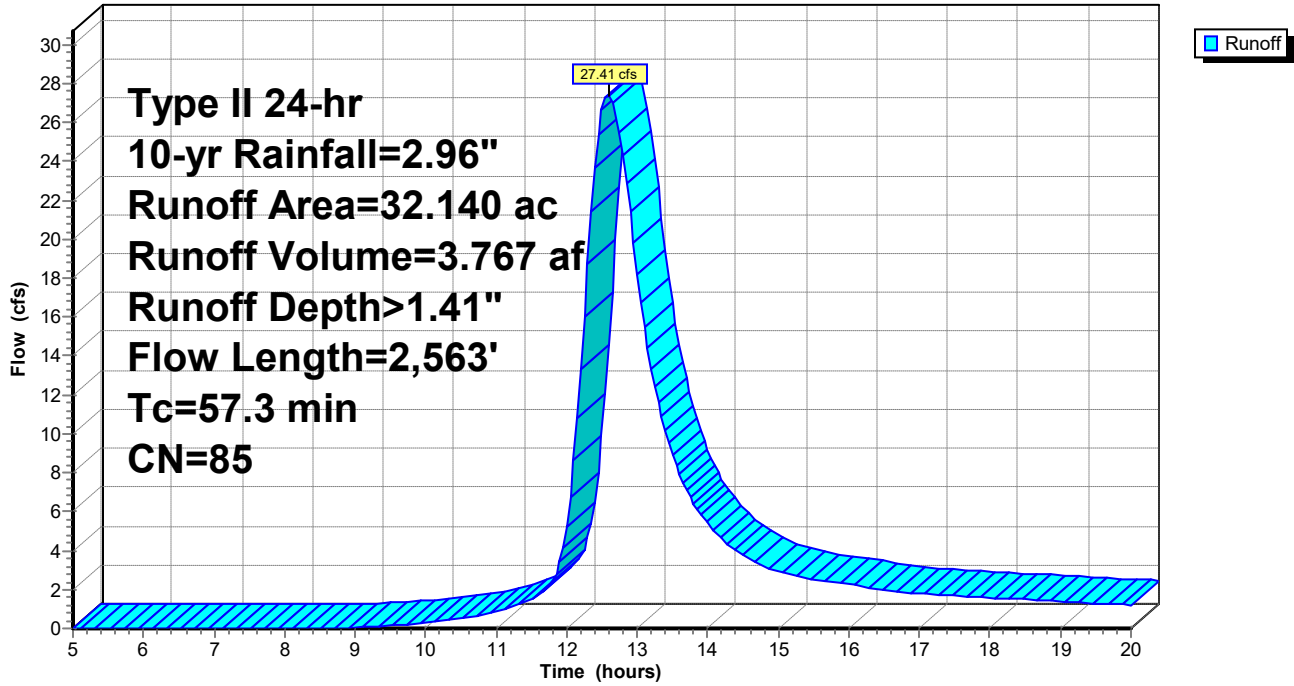
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
15.650	71	Meadow, non-grazed, HSG C
* 16.350	98	Capped Area
0.140	96	Gravel surface, HSG C
32.140	85	Weighted Average
15.790		49.13% Pervious Area
16.350		50.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.6	100	0.0150	0.12		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
10.2	1,087	0.0650	1.78		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	40	0.2970	3.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
12.6	948	0.0070	1.25		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
20.7	388	0.0020	0.31		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
57.3	2,563	Total			

Subcatchment D27: DA-27

Hydrograph



Summary for Subcatchment D28: DA-28

Runoff = 19.30 cfs @ 12.15 hrs, Volume= 1.427 af, Depth> 1.81"
 Routed to Link L28 : L28

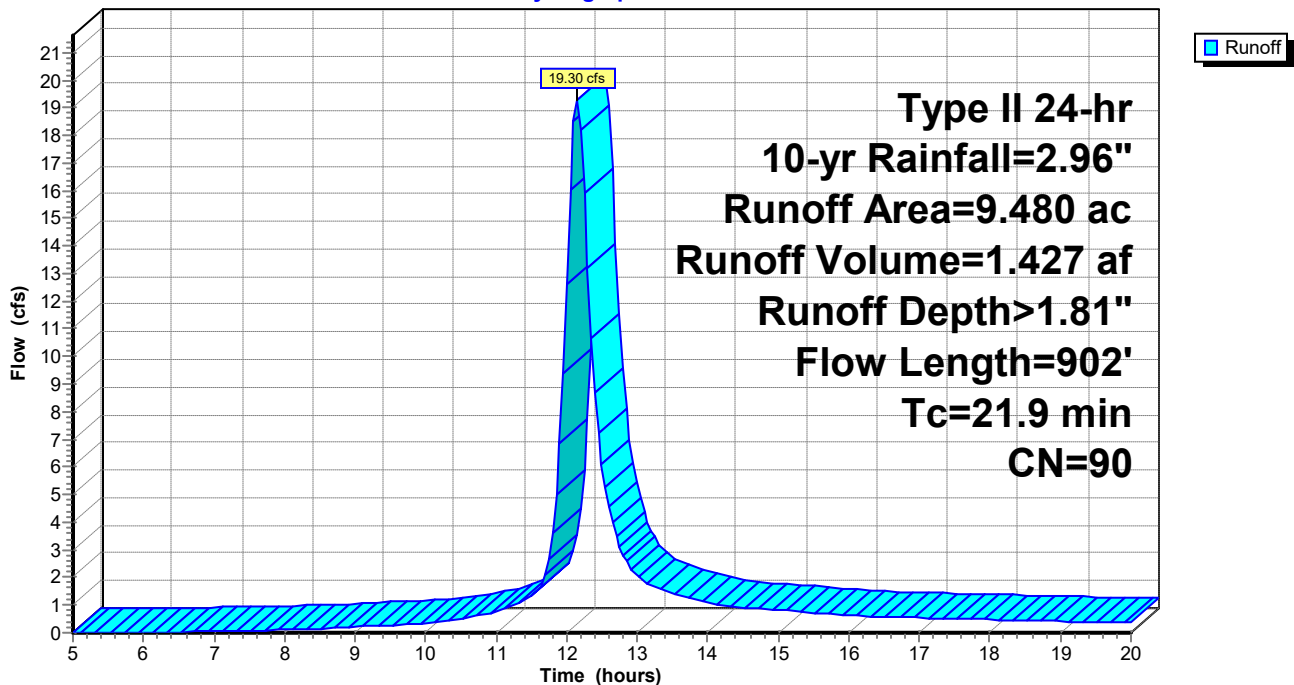
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
2.930	71	Meadow, non-grazed, HSG C
0.170	96	Gravel surface, HSG C
* 6.380	98	Capped Area
9.480	90	Weighted Average
3.100		32.70% Pervious Area
6.380		67.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0430	0.19		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
2.8	352	0.0880	2.08		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
10.2	450	0.0110	0.73		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
21.9	902	Total			

Subcatchment D28: DA-28

Hydrograph



Summary for Subcatchment D29: DA-29

Runoff = 8.31 cfs @ 15.86 hrs, Volume= 3.306 af, Depth> 0.57"
 Routed to Link L29 : L29

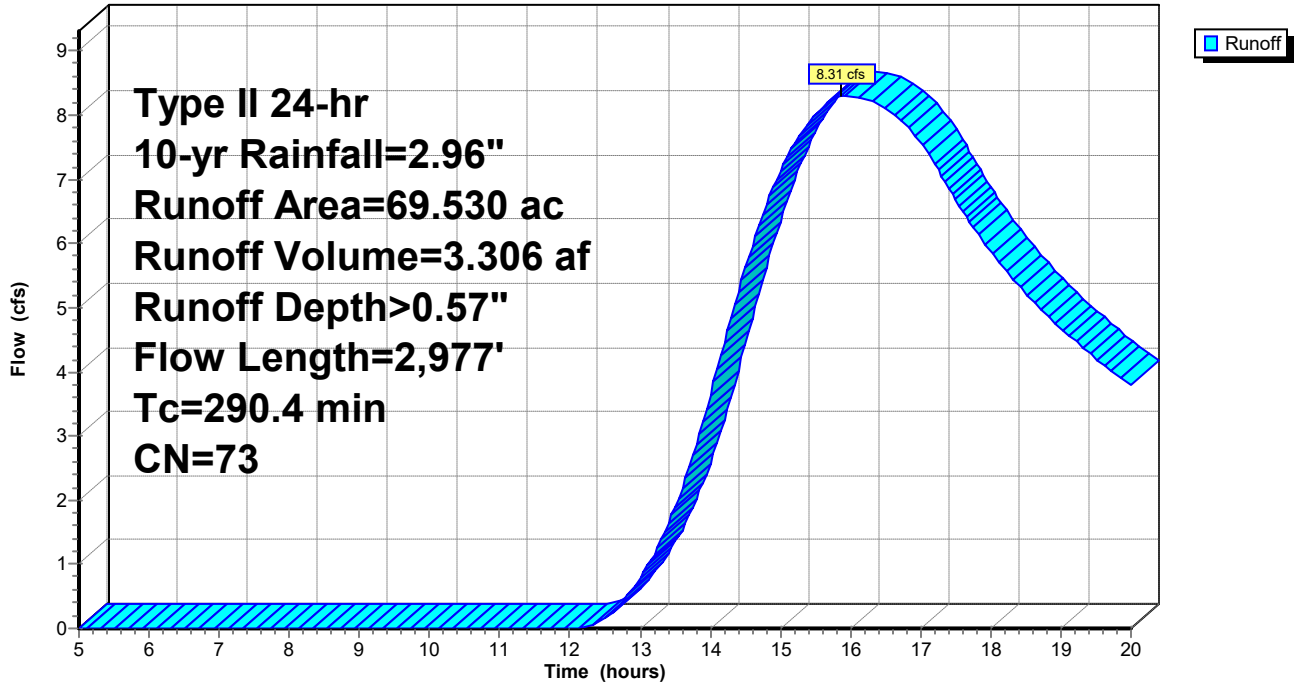
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.500	30	Woods, Good, HSG A
41.070	70	Woods, Good, HSG C
18.820	72	Woods/grass comb., Good, HSG C
1.890	74	Pasture/grassland/range, Good, HSG C
0.300	96	Gravel surface, HSG C
* 6.950	98	Capped Area
69.530	73	Weighted Average
62.580		90.00% Pervious Area
6.950		10.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.4	100	0.2460	0.38		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
11.3	1,087	0.0520	1.60		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.0	215	0.0150	1.84		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
56.4	926	0.0030	0.27		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
216.3	649	0.0001	0.05		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
290.4	2,977	Total			

Subcatchment D29: DA-29

Hydrograph



Summary for Subcatchment D30: DA-30

Runoff = 13.21 cfs @ 12.78 hrs, Volume= 2.179 af, Depth> 0.72"
 Routed to Link L30 : L30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

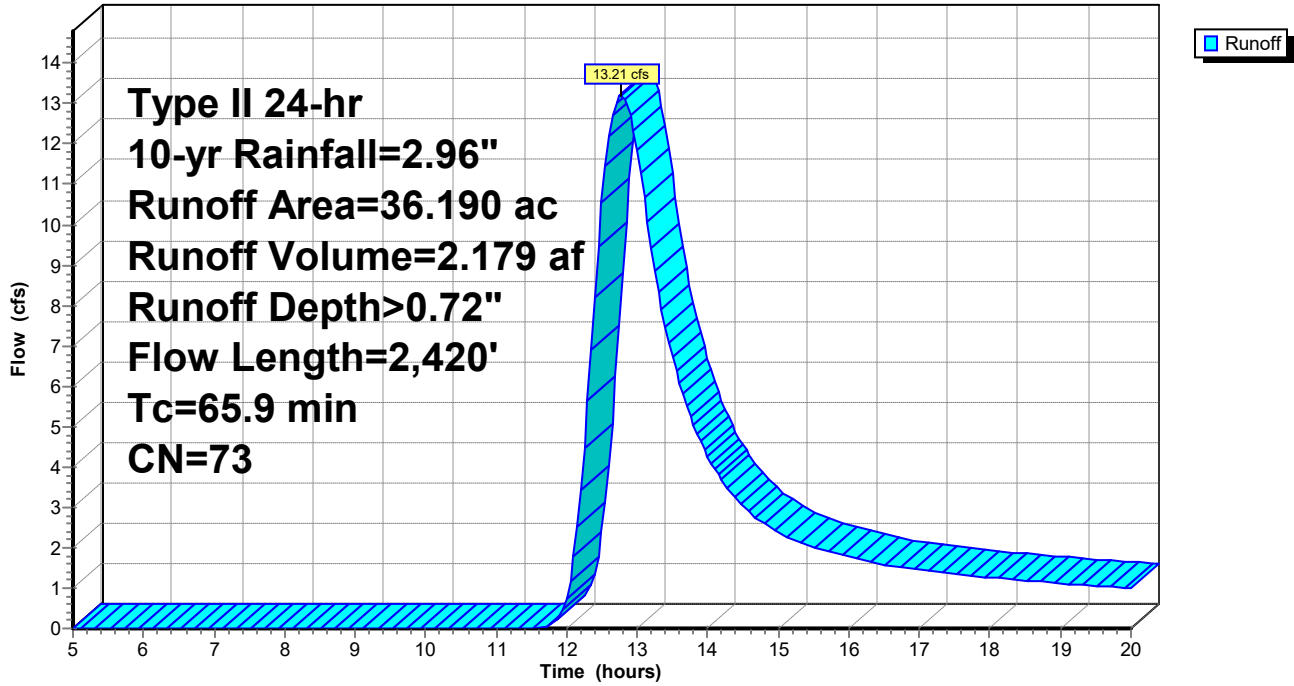
Area (ac)	CN	Description
33.590	71	Meadow, non-grazed, HSG C
0.870	98	Unconnected pavement, HSG C
0.750	96	Gravel surface, HSG C
0.980	98	Water Surface, HSG C

36.190	73	Weighted Average
34.340		94.89% Pervious Area
1.850		5.11% Impervious Area
0.870		47.03% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.4	100	0.0180	0.09		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
8.4	512	0.0210	1.01		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.3	574	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
19.0	764	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
5.8	470	0.0080	1.34		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
65.9	2,420	Total			

Subcatchment D30: DA-30

Hydrograph



Summary for Subcatchment D31: DA-31

Runoff = 8.50 cfs @ 12.28 hrs, Volume= 0.829 af, Depth> 0.69"
 Routed to Link L31 : L31

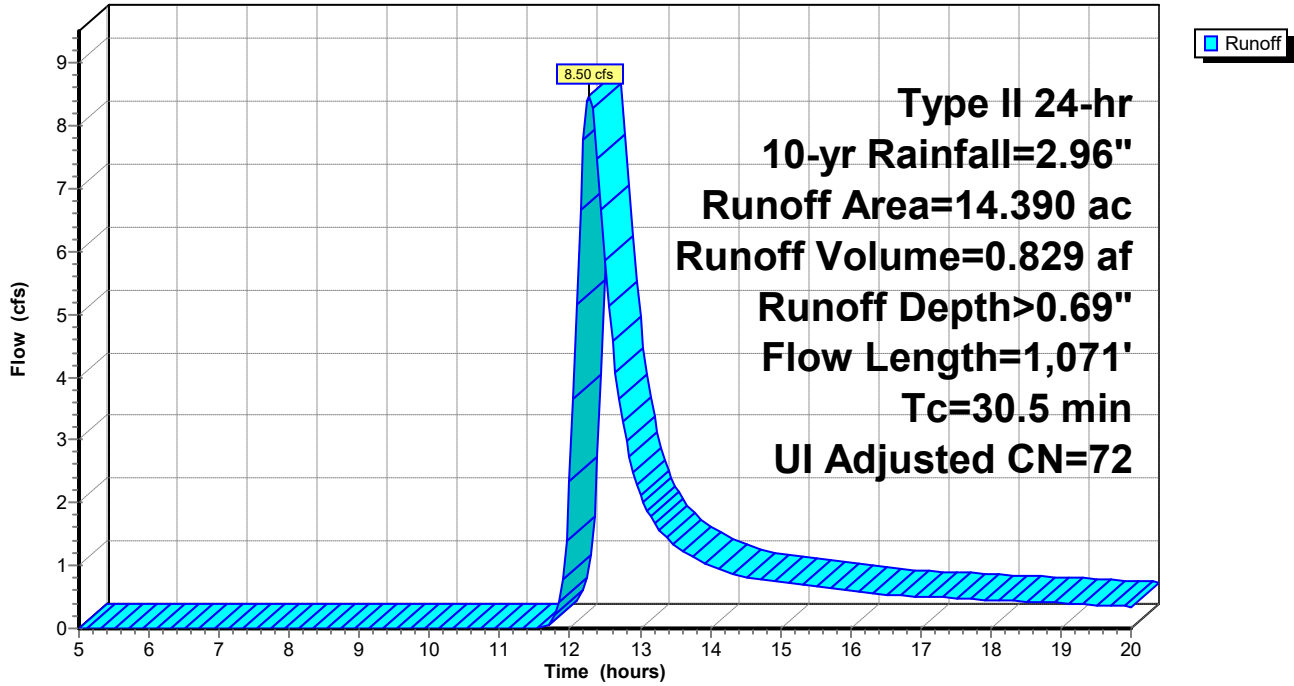
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Adj	Description
10.580	71		Meadow, non-grazed, HSG C
1.100	70		Woods, Good, HSG C
1.740	72		Woods/grass comb., Good, HSG C
0.970	98		Unconnected pavement, HSG C
14.390	73	72	Weighted Average, UI Adjusted
13.420			93.26% Pervious Area
0.970			6.74% Impervious Area
0.970			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	13	0.0100	0.56		Sheet Flow, Smooth surfaces n= 0.011 P2= 2.09"
14.0	87	0.0270	0.10		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
9.3	647	0.0060	1.16		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
6.4	296	0.0120	0.77		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.4	28	0.0670	1.29		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
30.5	1,071	Total			

Subcatchment D31: DA-31

Hydrograph



Summary for Subcatchment D32: DA-32

Runoff = 1.69 cfs @ 12.25 hrs, Volume= 0.171 af, Depth> 0.45"
 Routed to Link L32 : L32

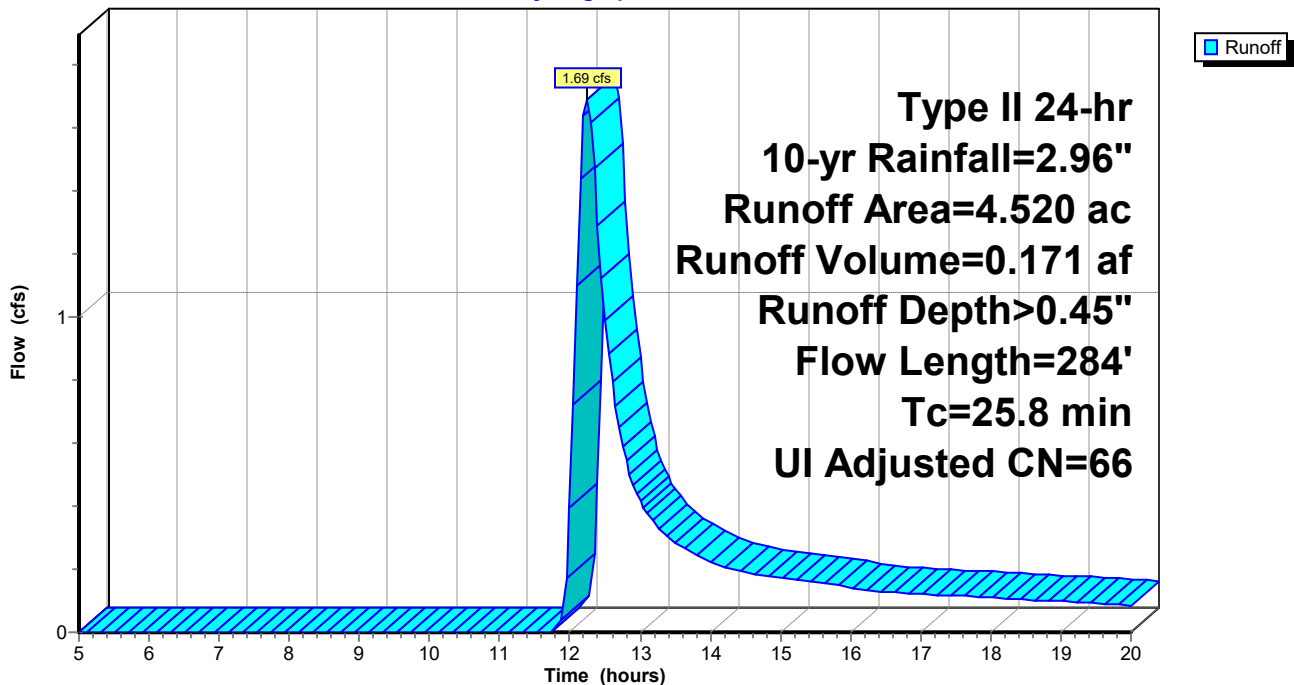
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Adj	Description
2.330	58		Meadow, non-grazed, HSG B
1.730	71		Meadow, non-grazed, HSG C
0.220	98		Unconnected pavement, HSG C
0.040	96		Gravel surface, HSG C
0.200	98		Water Surface, HSG C
4.520	67	66	Weighted Average, UI Adjusted
4.100			90.71% Pervious Area
0.420			9.29% Impervious Area
0.220			52.38% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.3	100	0.0100	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
2.5	184	0.0310	1.23		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
25.8	284	Total			

Subcatchment D32: DA-32

Hydrograph



Summary for Subcatchment D33: DA-33

Runoff = 14.34 cfs @ 12.55 hrs, Volume= 1.928 af, Depth> 0.78"
 Routed to Link L33 : L33

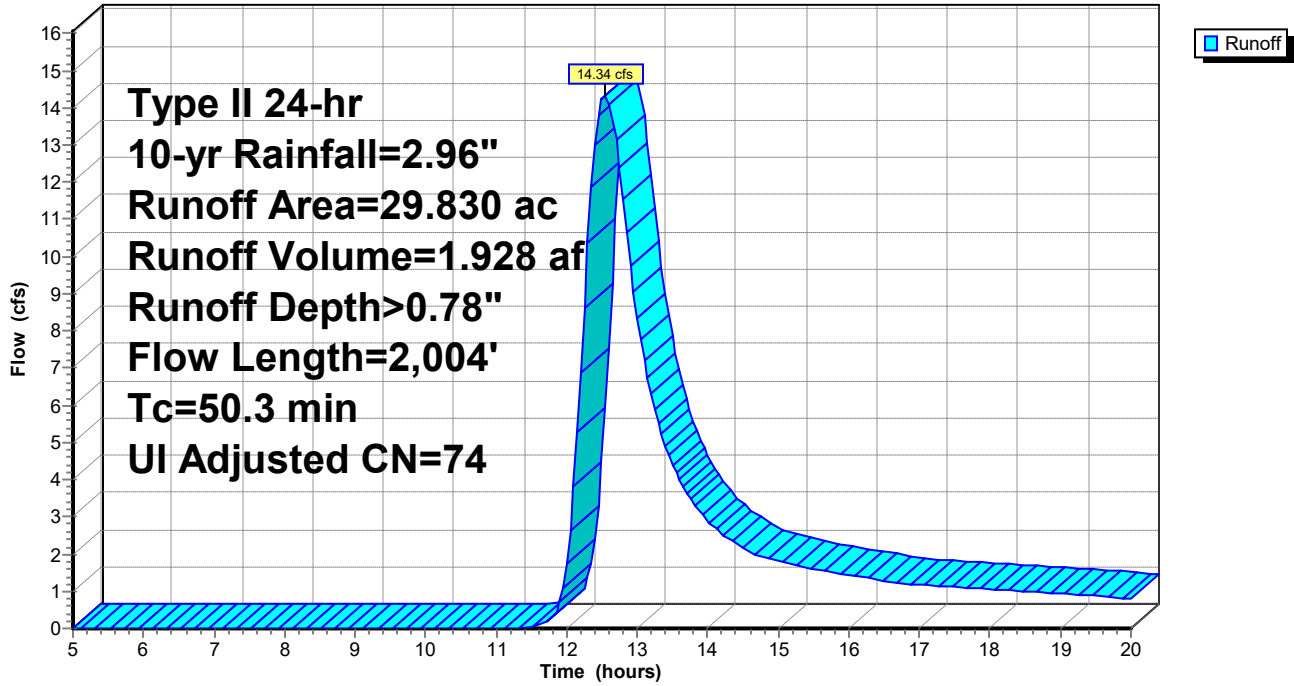
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Adj	Description
5.740	72		Woods/grass comb., Good, HSG C
17.300	71		Meadow, non-grazed, HSG C
1.150	74		>75% Grass cover, Good, HSG C
5.640	98		Unconnected pavement, HSG C
29.830	76	74	Weighted Average, UI Adjusted
24.190			81.09% Pervious Area
5.640			18.91% Impervious Area
5.640			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.4	100	0.0110	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
7.4	219	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
10.3	655	0.0050	1.06		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
4.9	341	0.0060	1.16		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
5.3	689	0.0210	2.17		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
50.3	2,004	Total			

Subcatchment D33: DA-33

Hydrograph



Summary for Subcatchment D34: DA-34

Runoff = 20.66 cfs @ 12.30 hrs, Volume= 1.986 af, Depth> 1.04"
 Routed to Link L34 : L34

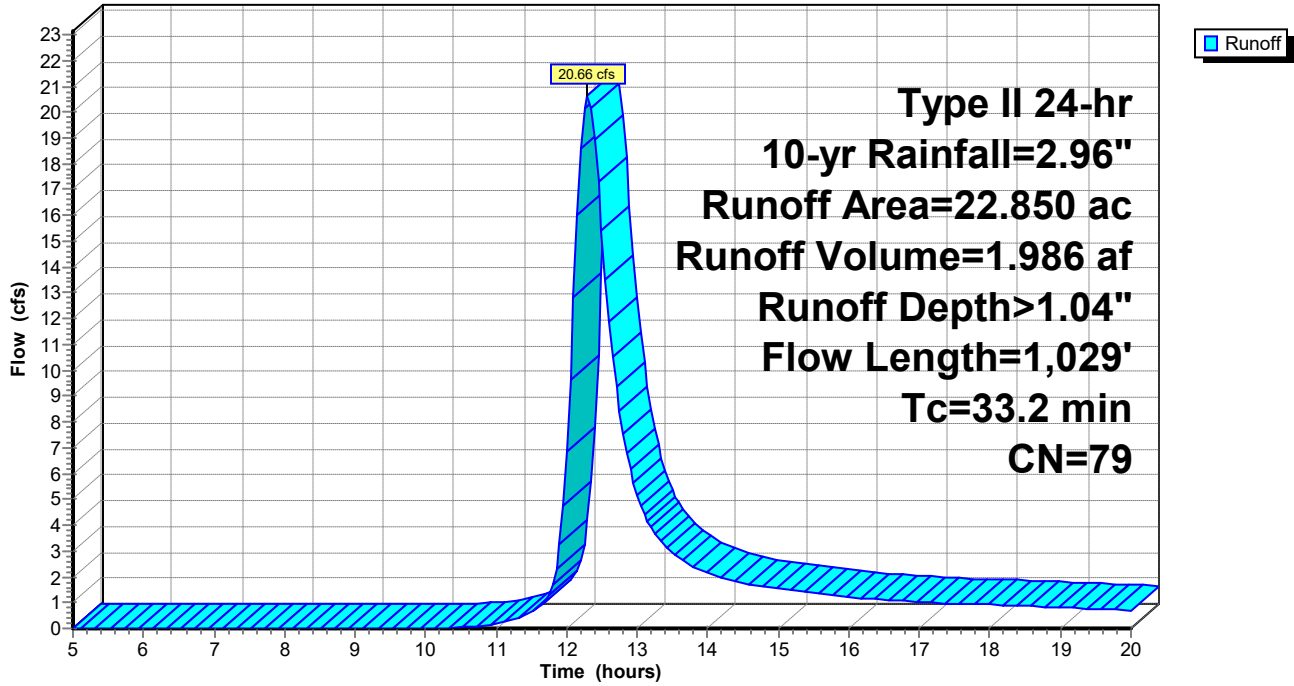
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
1.010	30	Meadow, non-grazed, HSG A
13.310	71	Meadow, non-grazed, HSG C
8.530	98	Unconnected pavement, HSG C
22.850	79	Weighted Average
14.320		62.67% Pervious Area
8.530		37.33% Impervious Area
8.530		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	100	0.0120	0.08		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
2.9	199	0.0270	1.15		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
5.3	518	0.0120	1.64		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
3.3	212	0.0050	1.06		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.2	1,029	Total			

Subcatchment D34: DA-34

Hydrograph



Summary for Subcatchment D35: DA-35

Runoff = 9.79 cfs @ 13.58 hrs, Volume= 2.615 af, Depth> 0.57"
 Routed to Link L35 : L35

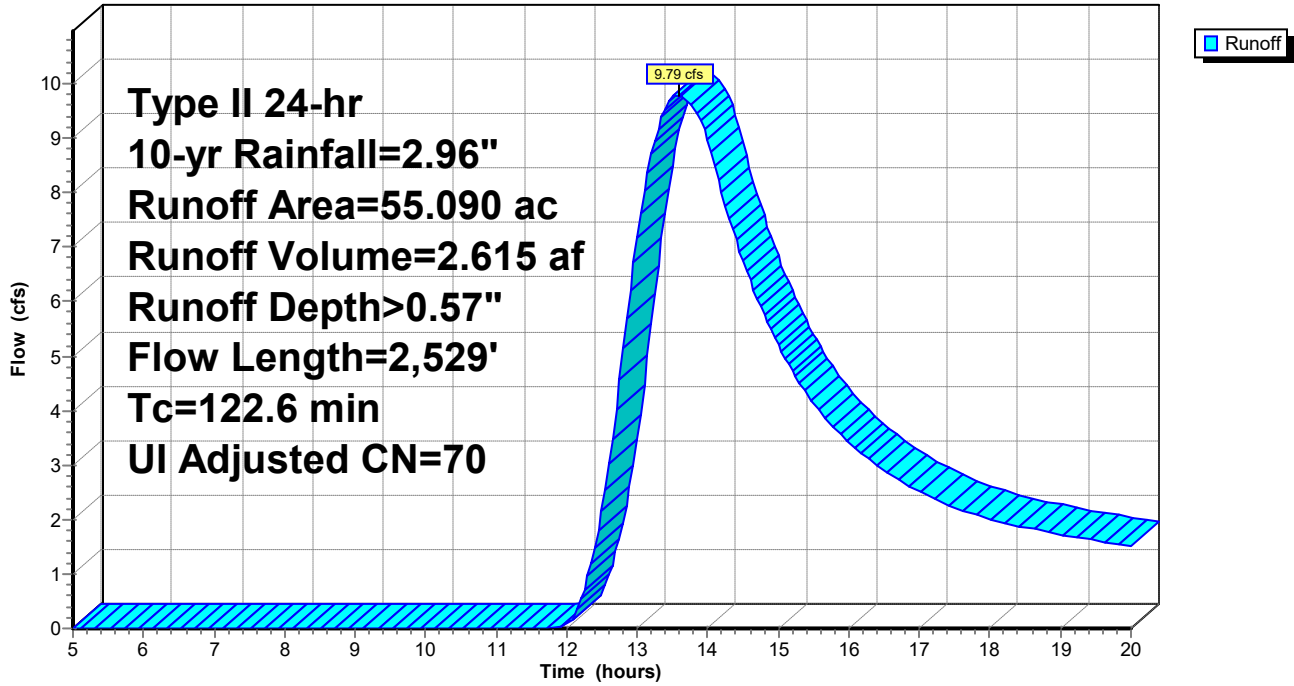
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Adj	Description
2.880	30		Meadow, non-grazed, HSG A
27.080	71		Meadow, non-grazed, HSG C
21.630	72		Woods/grass comb., Good, HSG C
3.430	98		Unconnected pavement, HSG C
0.070	96		Gravel surface, HSG C
55.090	71	70	Weighted Average, UI Adjusted
51.660			93.77% Pervious Area
3.430			6.23% Impervious Area
3.430			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
58.5	100	0.0010	0.03		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
21.4	610	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
1.4	98	0.0060	1.16		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
40.4	1,628	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.9	93	0.0140	1.77		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
122.6	2,529	Total			

Subcatchment D35: DA-35

Hydrograph



Summary for Subcatchment D36: DA-36

Runoff = 2.51 cfs @ 12.18 hrs, Volume= 0.206 af, Depth> 0.61"
 Routed to Link L36 : L36

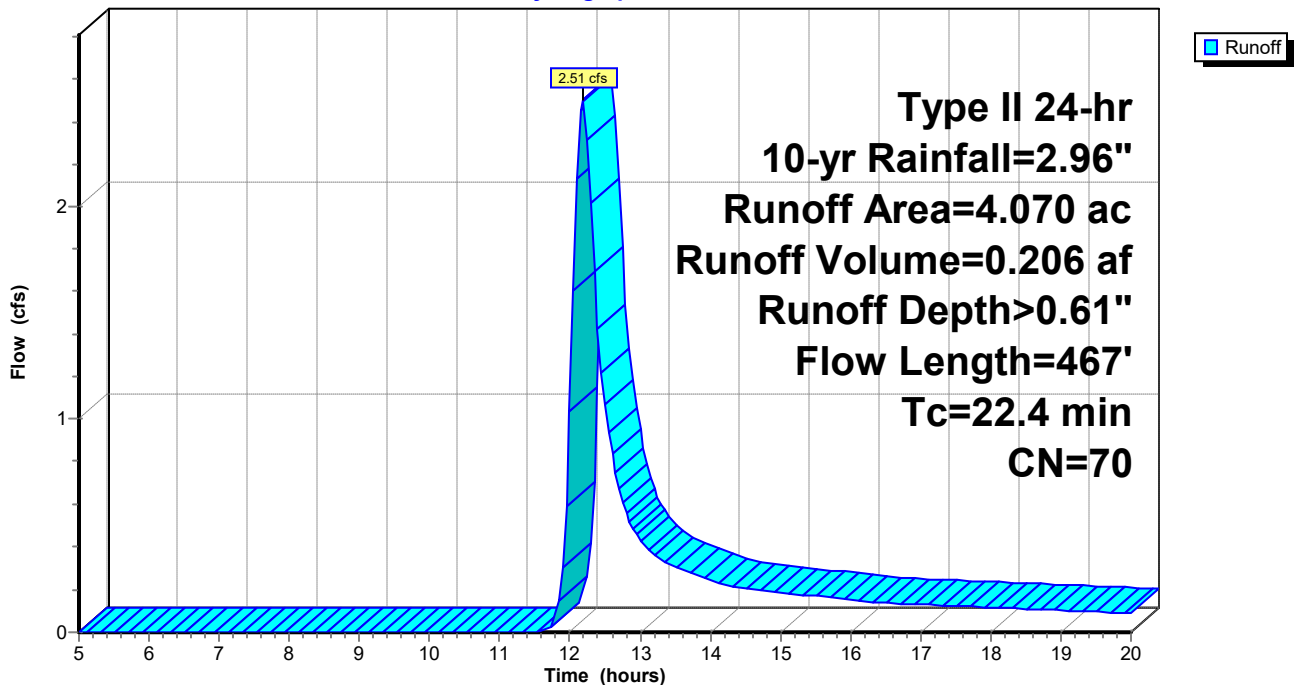
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.100	30	Meadow, non-grazed, HSG A
3.900	71	Meadow, non-grazed, HSG C
0.070	98	Unconnected pavement, HSG C
4.070	70	Weighted Average
4.000		98.28% Pervious Area
0.070		1.72% Impervious Area
0.070		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.3	100	0.0410	0.13		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
6.7	266	0.0090	0.66		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.4	101	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
22.4	467	Total			

Subcatchment D36: DA-36

Hydrograph



Summary for Subcatchment D37: DA-37

Runoff = 15.42 cfs @ 12.67 hrs, Volume= 2.348 af, Depth> 1.95"
 Routed to Link L37 : L37

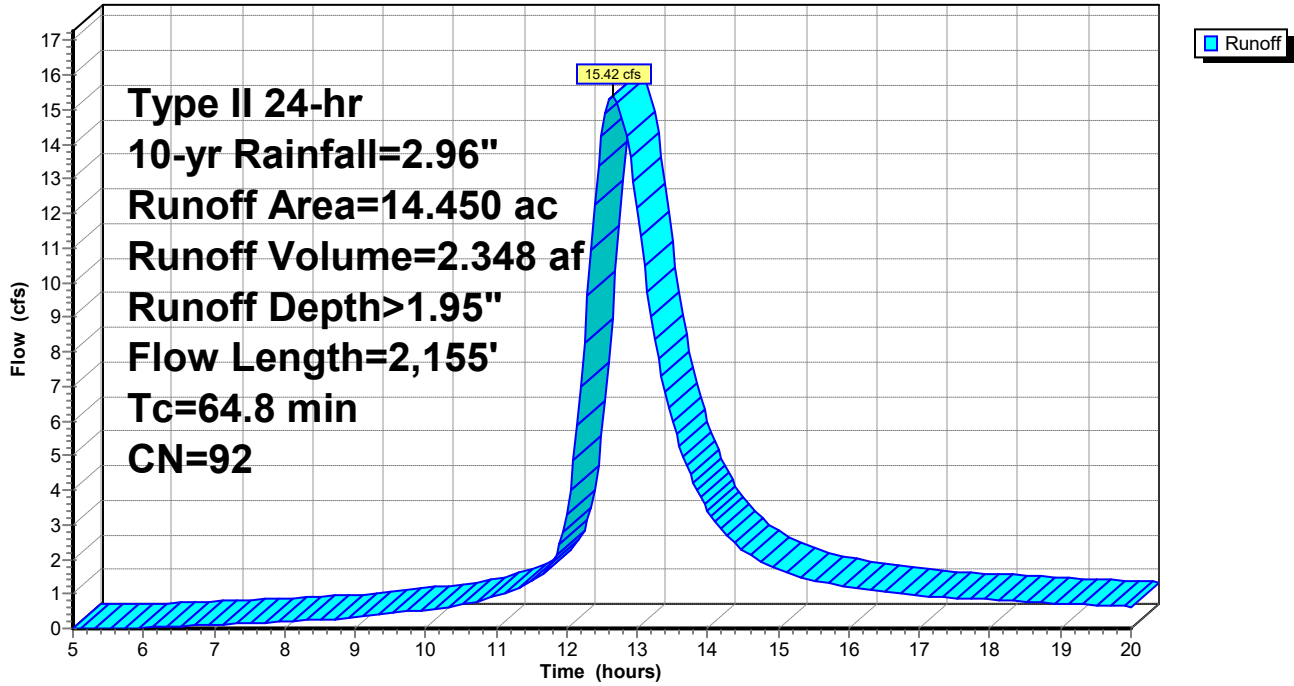
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
3.460	71	Meadow, non-grazed, HSG C
10.380	98	Unconnected pavement, HSG C
0.610	98	Water Surface, HSG C
14.450	92	Weighted Average
3.460		23.94% Pervious Area
10.990		76.06% Impervious Area
10.380		94.45% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.3	100	0.0090	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
31.8	1,279	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.9	73	0.0090	1.42		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
7.8	703	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
64.8	2,155	Total			

Subcatchment D37: DA-37

Hydrograph



Summary for Subcatchment D38: DA-38

Runoff = 7.11 cfs @ 12.25 hrs, Volume= 0.653 af, Depth> 1.80"
 Routed to Link L38 : L38

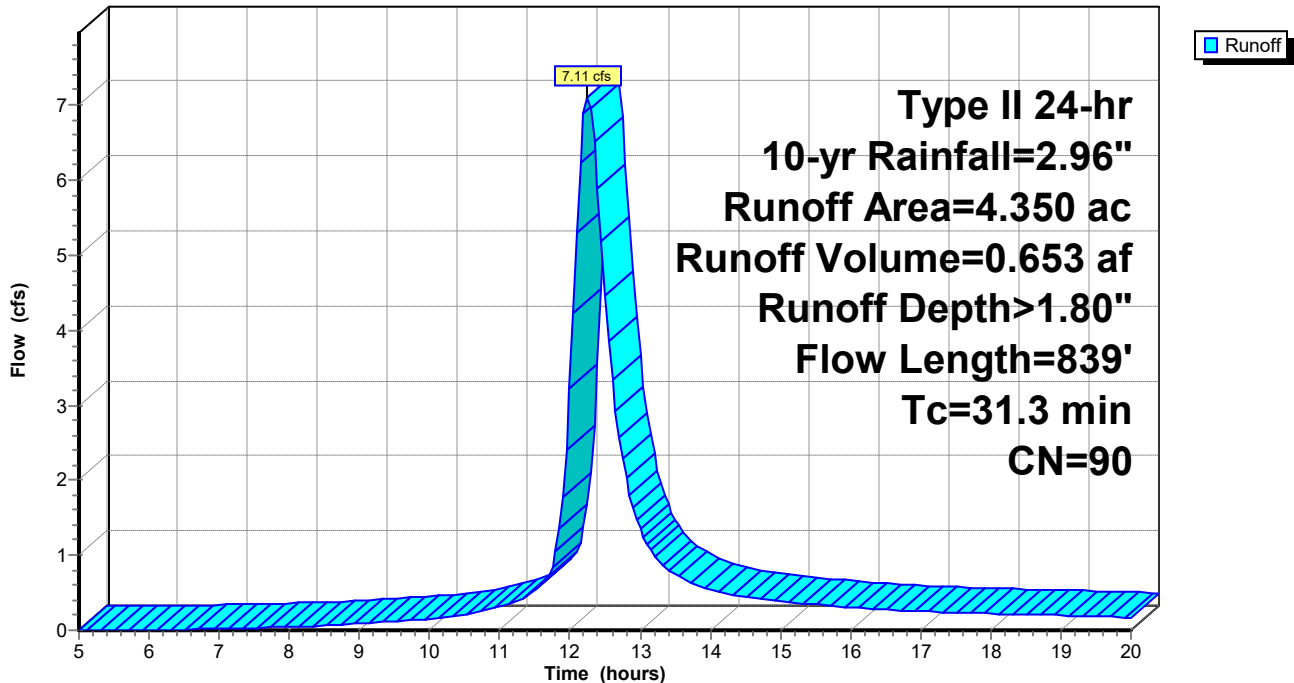
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
1.340	71	Meadow, non-grazed, HSG C
2.740	98	Unconnected pavement, HSG C
0.270	98	Water Surface, HSG C
4.350	90	Weighted Average
1.340		30.80% Pervious Area
3.010		69.20% Impervious Area
2.740		91.03% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.3	100	0.0160	0.09		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
11.8	674	0.0040	0.95		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.2	65	0.0900	4.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
31.3	839	Total			

Subcatchment D38: DA-38

Hydrograph



Summary for Subcatchment D39: DA-39

Runoff = 5.64 cfs @ 12.33 hrs, Volume= 0.610 af, Depth> 2.24"
 Routed to Link L39 : L39

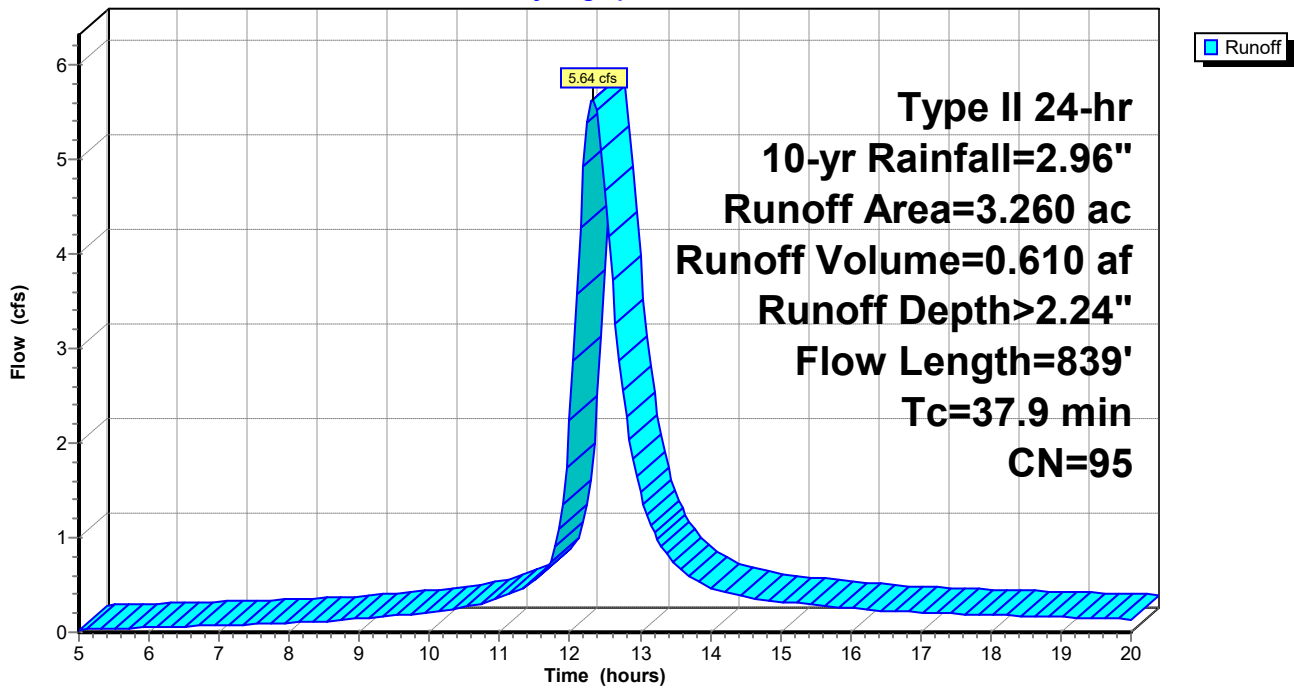
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.390	74	>75% Grass cover, Good, HSG C
2.770	98	Unconnected pavement, HSG C
0.100	98	Water Surface, HSG C
3.260	95	Weighted Average
0.390		11.96% Pervious Area
2.870		88.04% Impervious Area
2.770		96.52% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.9	100	0.0030	0.06		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
11.8	674	0.0040	0.95		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.2	65	0.0900	4.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
37.9	839	Total			

Subcatchment D39: DA-39

Hydrograph



Summary for Subcatchment D40: DA-40

Runoff = 2.83 cfs @ 12.47 hrs, Volume= 0.353 af, Depth> 1.96"
 Routed to Link L40 : L40

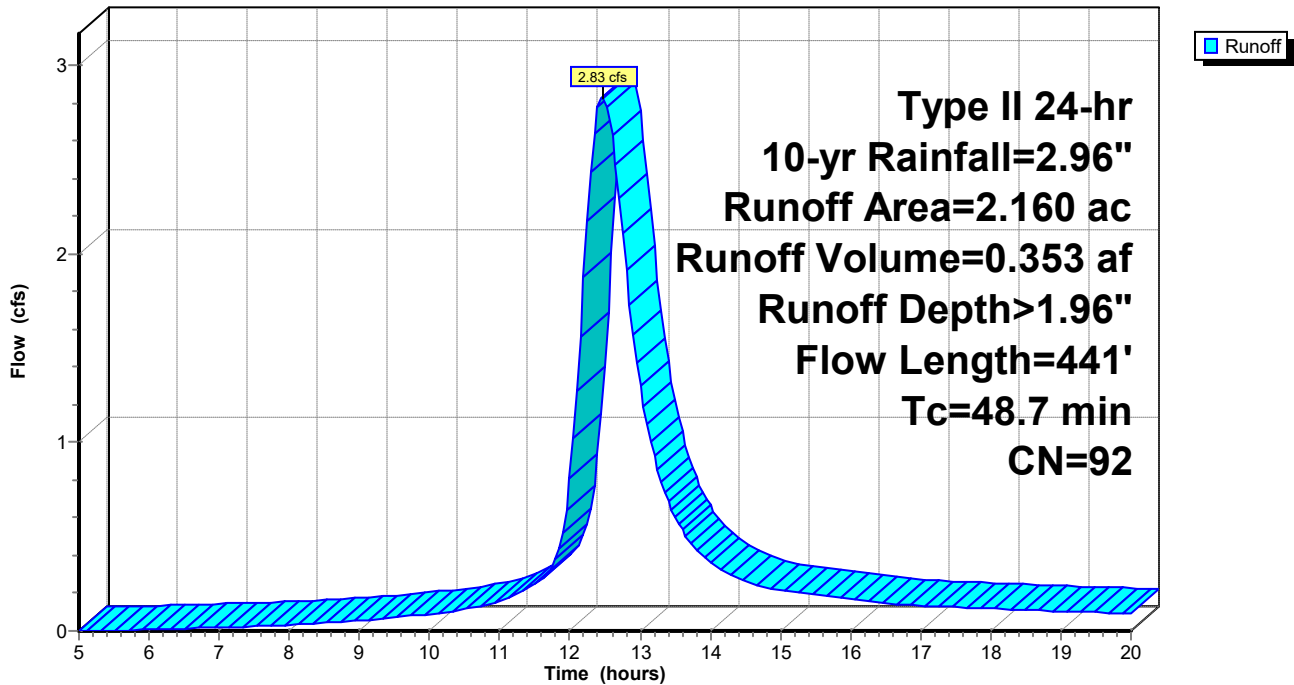
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.530	74	>75% Grass cover, Good, HSG C
1.630	98	Unconnected pavement, HSG C
2.160	92	Weighted Average
0.530		24.54% Pervious Area
1.630		75.46% Impervious Area
1.630		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.2	100	0.0010	0.04		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
8.5	341	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
48.7	441	Total			

Subcatchment D40: DA-40

Hydrograph



Summary for Subcatchment D41: DA-41

Runoff = 48.46 cfs @ 13.09 hrs, Volume= 10.567 af, Depth> 2.40"
 Routed to Link L41 : L41

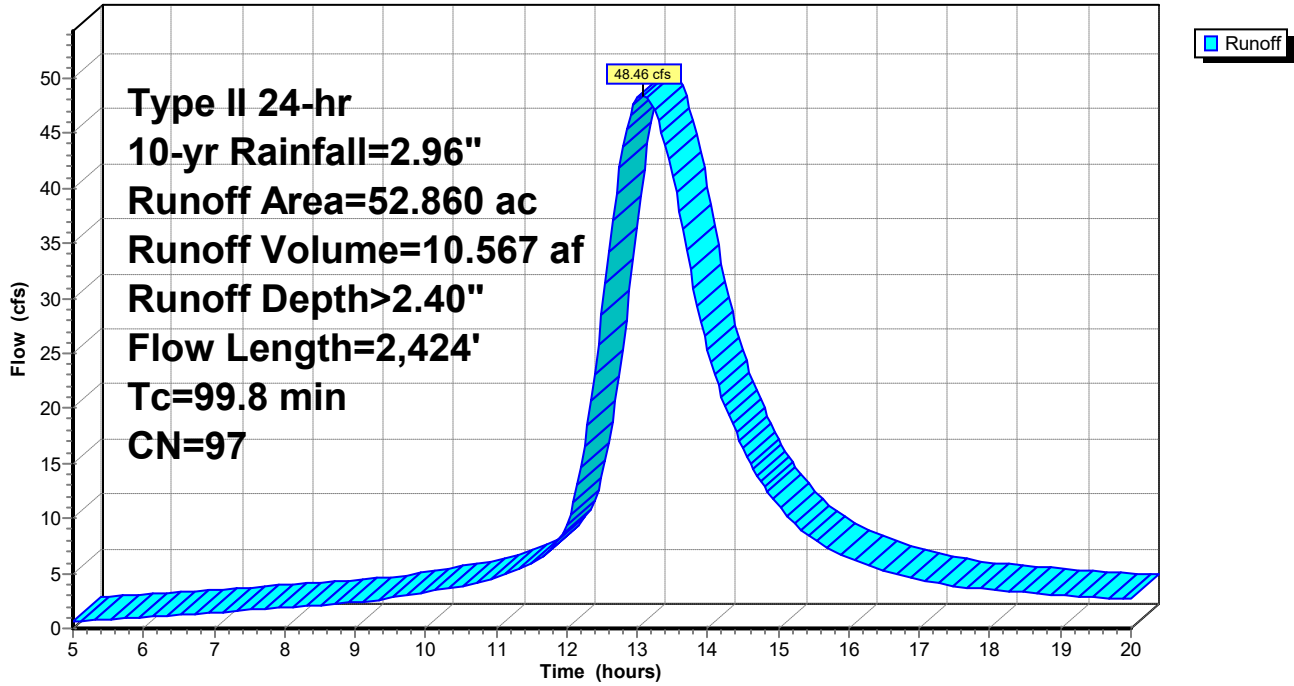
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.090	61	>75% Grass cover, Good, HSG B
1.420	74	>75% Grass cover, Good, HSG C
* 48.560	98	Capped Area
2.790	98	Water Surface, HSG C
52.860	97	Weighted Average
1.510		2.86% Pervious Area
51.350		97.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
44.4	100	0.0020	0.04		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
15.6	626	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
39.0	1,571	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.8	127	0.0290	2.55		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
99.8	2,424	Total			

Subcatchment D41: DA-41

Hydrograph



Summary for Subcatchment D42: DA-42

Runoff = 7.62 cfs @ 14.09 hrs, Volume= 2.365 af, Depth> 0.59"
 Routed to Link L42 : L42

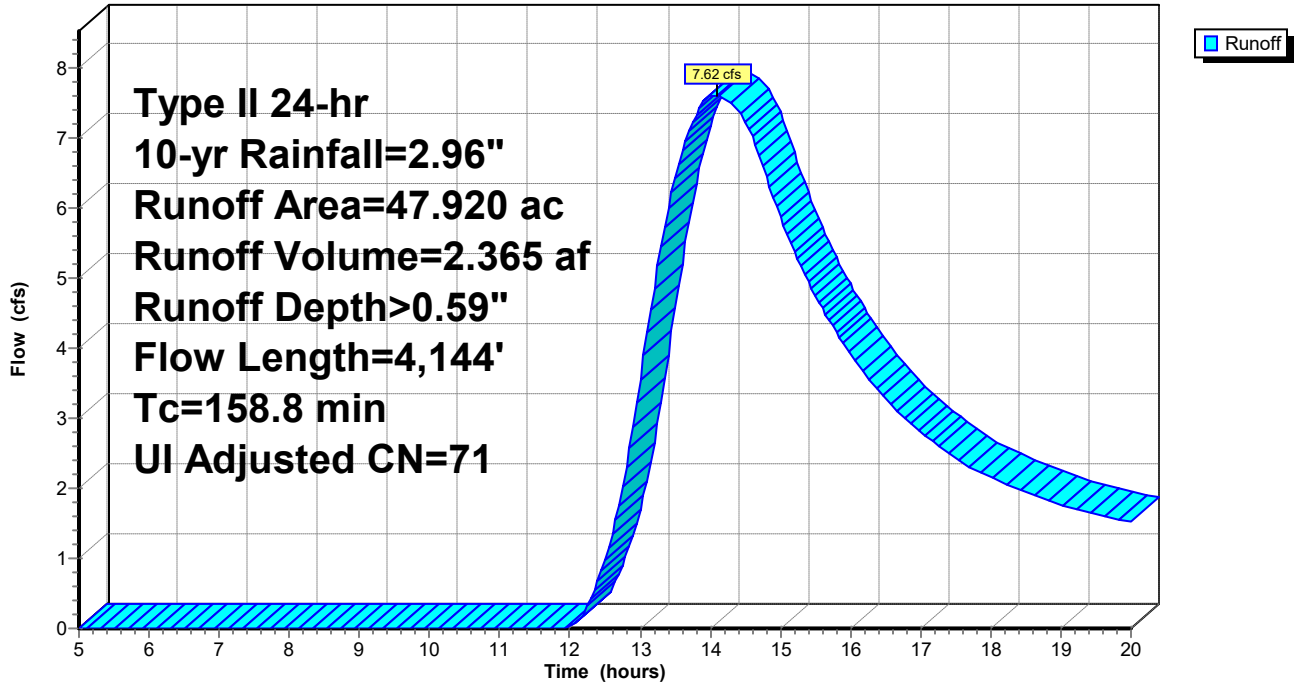
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Adj	Description
46.870	71		Meadow, non-grazed, HSG C
0.990	98		Unconnected pavement, HSG C
0.060	98		Water Surface, HSG C
47.920	72	71	Weighted Average, UI Adjusted
46.870			97.81% Pervious Area
1.050			2.19% Impervious Area
0.990			94.29% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.6	100	0.0060	0.06		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
15.3	436	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
17.2	694	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
28.5	810	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
11.4	459	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
17.7	505	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
40.1	1,140	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
158.8	4,144	Total			

Subcatchment D42: DA-42

Hydrograph



Summary for Subcatchment D43: DA-43

Runoff = 1.93 cfs @ 12.47 hrs, Volume= 0.258 af, Depth> 0.52"
 Routed to Link L43 : L43

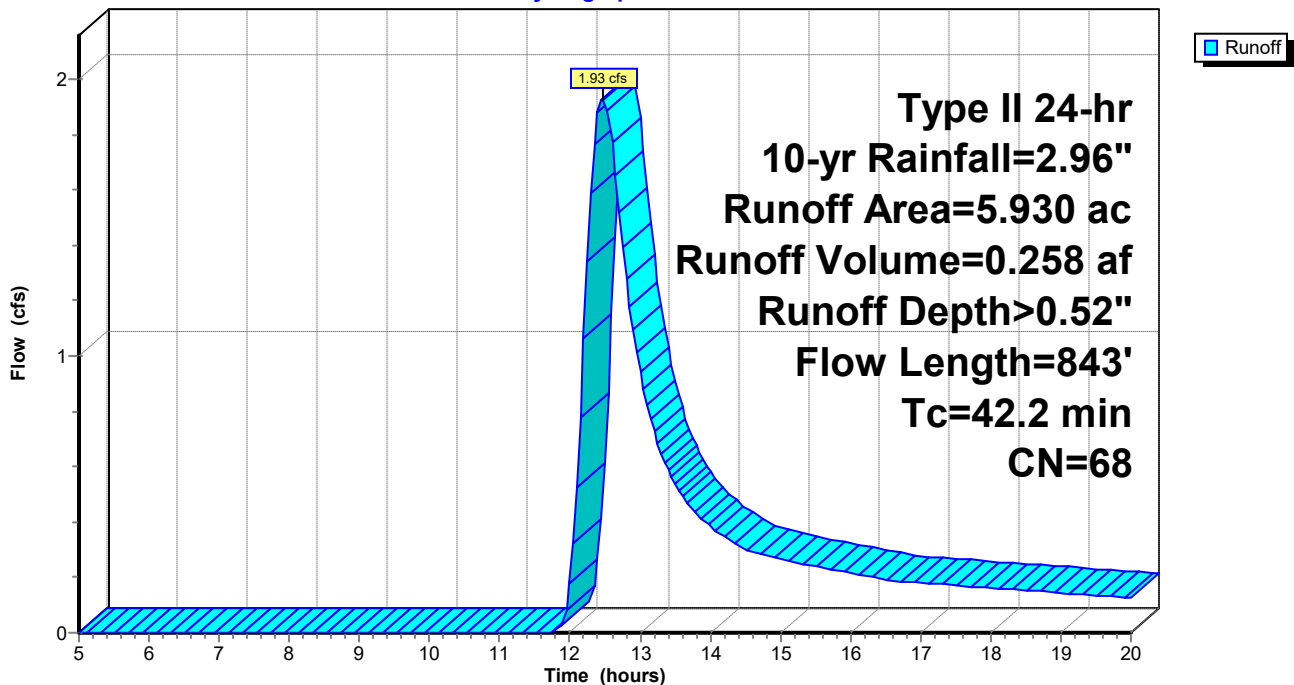
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.360	58	Woods/grass comb., Good, HSG B
3.450	72	Woods/grass comb., Good, HSG C
1.050	58	Meadow, non-grazed, HSG B
1.070	71	Meadow, non-grazed, HSG C
5.930	68	Weighted Average
5.930		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	100	0.0120	0.08		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
9.5	380	0.0090	0.66		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
11.0	363	0.0120	0.55		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
42.2	843	Total			

Subcatchment D43: DA-43

Hydrograph



Summary for Subcatchment D44: DA-44

Runoff = 12.77 cfs @ 12.96 hrs, Volume= 2.425 af, Depth> 0.76"
 Routed to Link L44 : L44

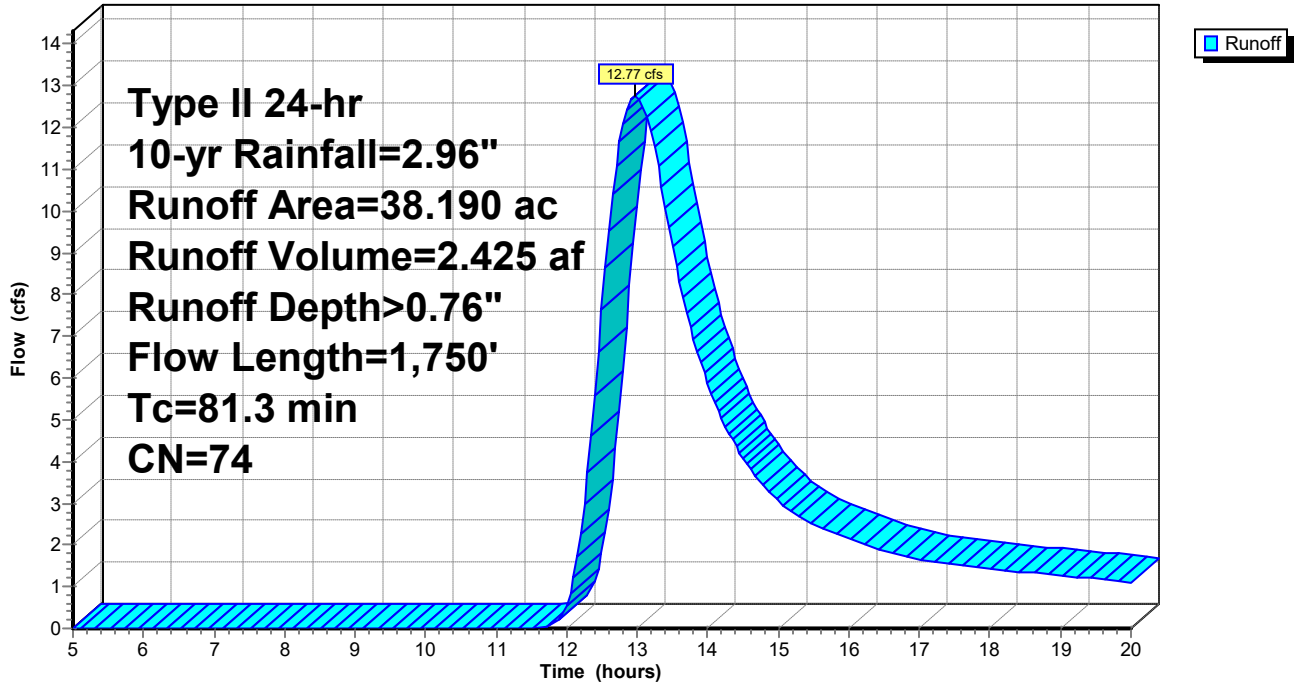
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
1.490	39	Pasture/grassland/range, Good, HSG A
1.750	74	Pasture/grassland/range, Good, HSG C
0.290	30	Meadow, non-grazed, HSG A
0.780	58	Meadow, non-grazed, HSG B
12.520	71	Meadow, non-grazed, HSG C
2.110	58	Legumes, straight row, Good, HSG A
17.900	81	Legumes, straight row, Good, HSG C
0.290	70	Woods, Good, HSG C
1.060	98	Unconnected pavement, HSG C
38.190	74	Weighted Average
37.130		97.22% Pervious Area
1.060		2.78% Impervious Area
1.060		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.7	100	0.0200	0.09		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
6.2	58	0.0005	0.16		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.8	17	0.0005	0.36		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
8.7	399	0.0120	0.77		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.2	183	0.0030	0.49		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
13.0	299	0.0030	0.38		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
28.7	694	0.0020	0.40		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
81.3	1,750	Total			

Subcatchment D44: DA-44

Hydrograph



Summary for Subcatchment D45: DA-45

Runoff = 2.67 cfs @ 12.51 hrs, Volume= 0.352 af, Depth> 0.69"
 Routed to Link L45 : L45

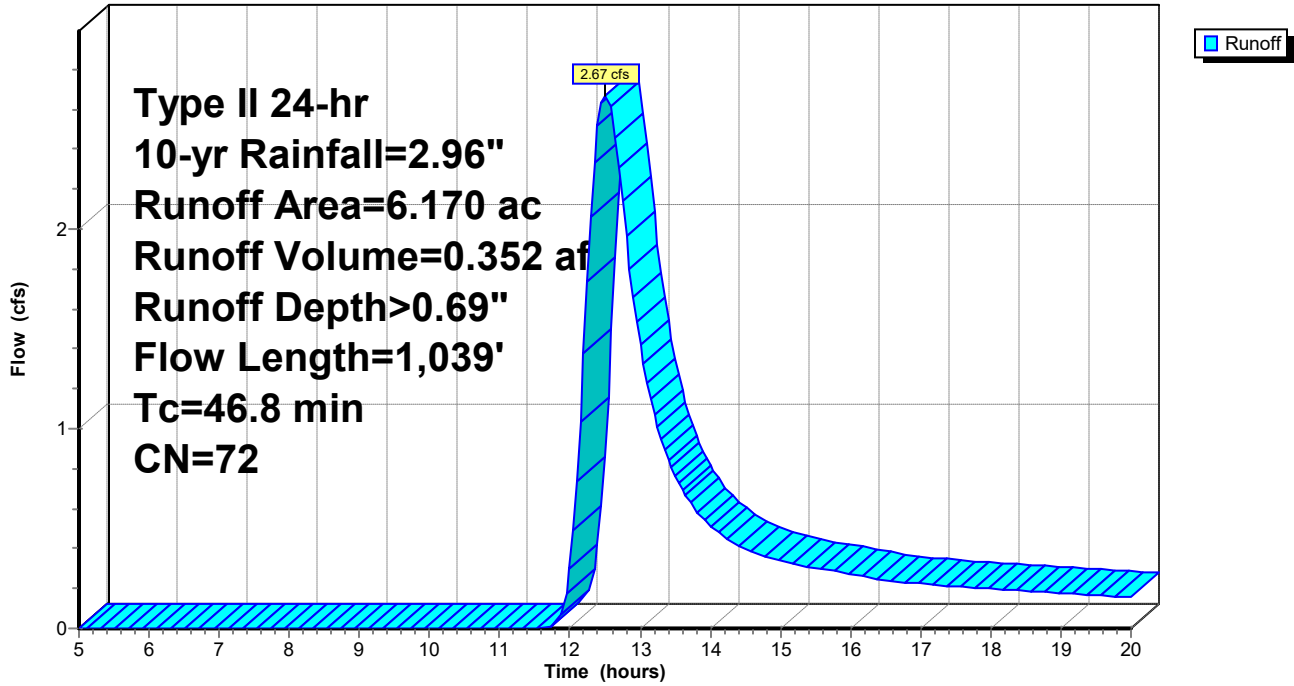
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.120	32	Woods/grass comb., Good, HSG A
1.590	72	Woods/grass comb., Good, HSG C
0.020	58	Meadow, non-grazed, HSG B
1.960	71	Meadow, non-grazed, HSG C
0.660	58	Legumes, straight row, Good, HSG A
1.820	81	Legumes, straight row, Good, HSG C
6.170	72	Weighted Average
6.170		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	100	0.0150	0.08		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
7.5	314	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
11.1	425	0.0050	0.64		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.2	29	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.1	63	0.0030	0.49		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
5.1	108	0.0050	0.35		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
46.8	1,039	Total			

Subcatchment D45: DA-45

Hydrograph



Summary for Subcatchment D46: DA-46

Runoff = 33.51 cfs @ 12.80 hrs, Volume= 5.547 af, Depth> 0.92"
 Routed to Link L46 : L46

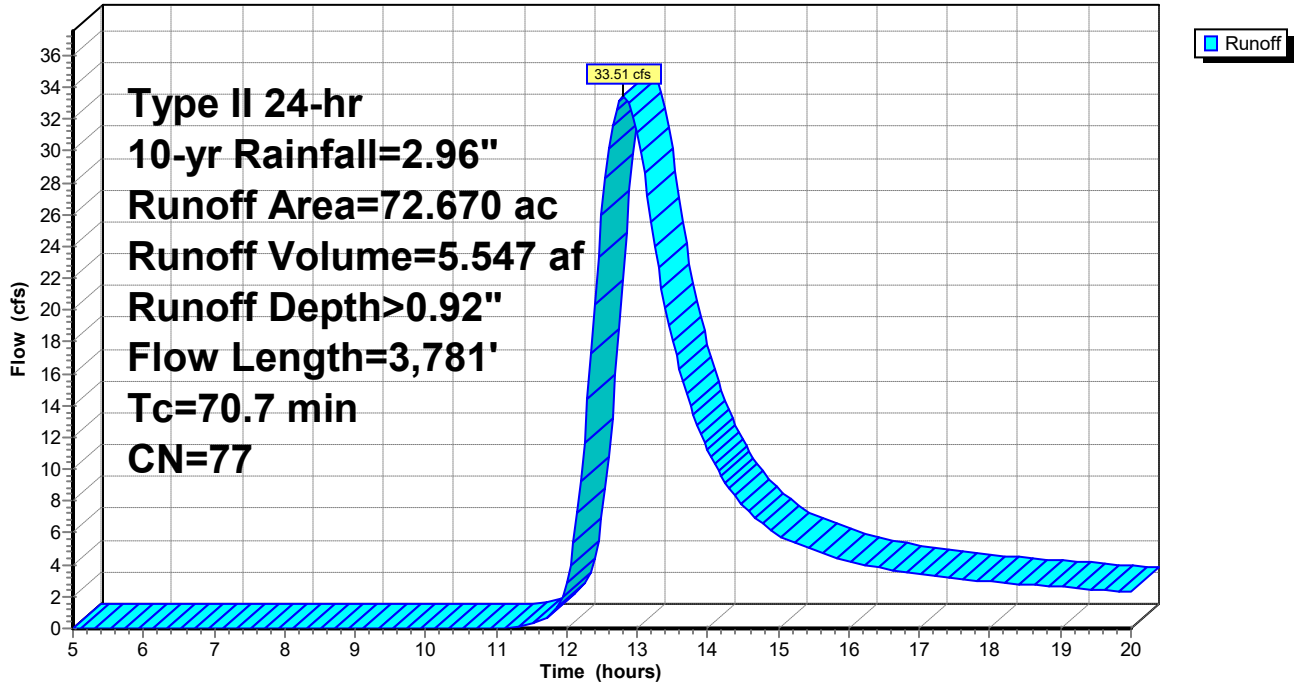
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.030	55	Woods, Good, HSG B
1.300	70	Woods, Good, HSG C
0.490	30	Meadow, non-grazed, HSG A
0.130	71	Meadow, non-grazed, HSG C
8.290	58	Legumes, straight row, Good, HSG A
5.460	72	Legumes, straight row, Good, HSG B
56.970	81	Legumes, straight row, Good, HSG C
72.670	77	Weighted Average
72.670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	76	0.0460	0.12		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
1.6	24	0.0300	0.25		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
57.7	3,553	0.0130	1.03		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.2	128	0.1190	1.72		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
70.7	3,781	Total			

Subcatchment D46: DA-46

Hydrograph



Summary for Subcatchment D47: DA-47

Runoff = 8.08 cfs @ 12.14 hrs, Volume= 0.562 af, Depth> 1.05"
 Routed to Link L47 : L47

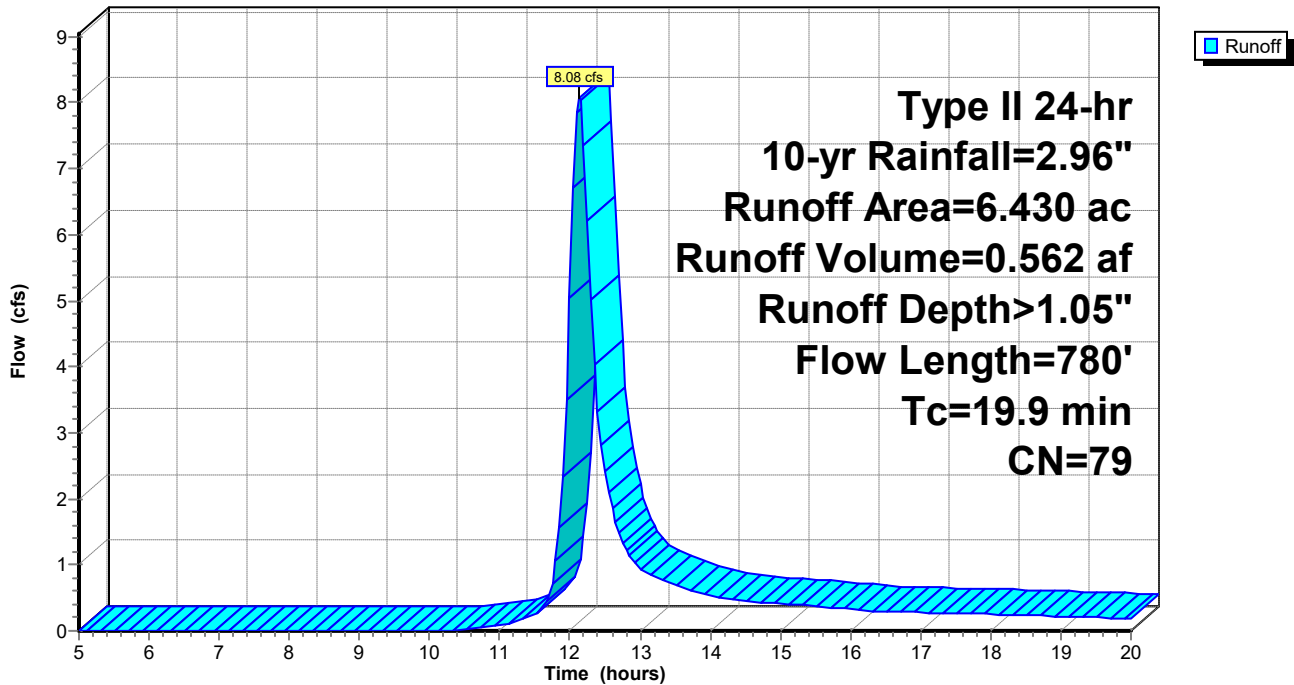
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.640	58	Legumes, straight row, Good, HSG A
5.790	81	Legumes, straight row, Good, HSG C
6.430	79	Weighted Average
6.430		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	100	0.0200	0.29		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
14.1	680	0.0080	0.80		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
19.9	780	Total			

Subcatchment D47: DA-47

Hydrograph



Summary for Subcatchment D48: DA-48

Runoff = 4.00 cfs @ 12.07 hrs, Volume= 0.249 af, Depth> 0.49"
 Routed to Link L48 : L48

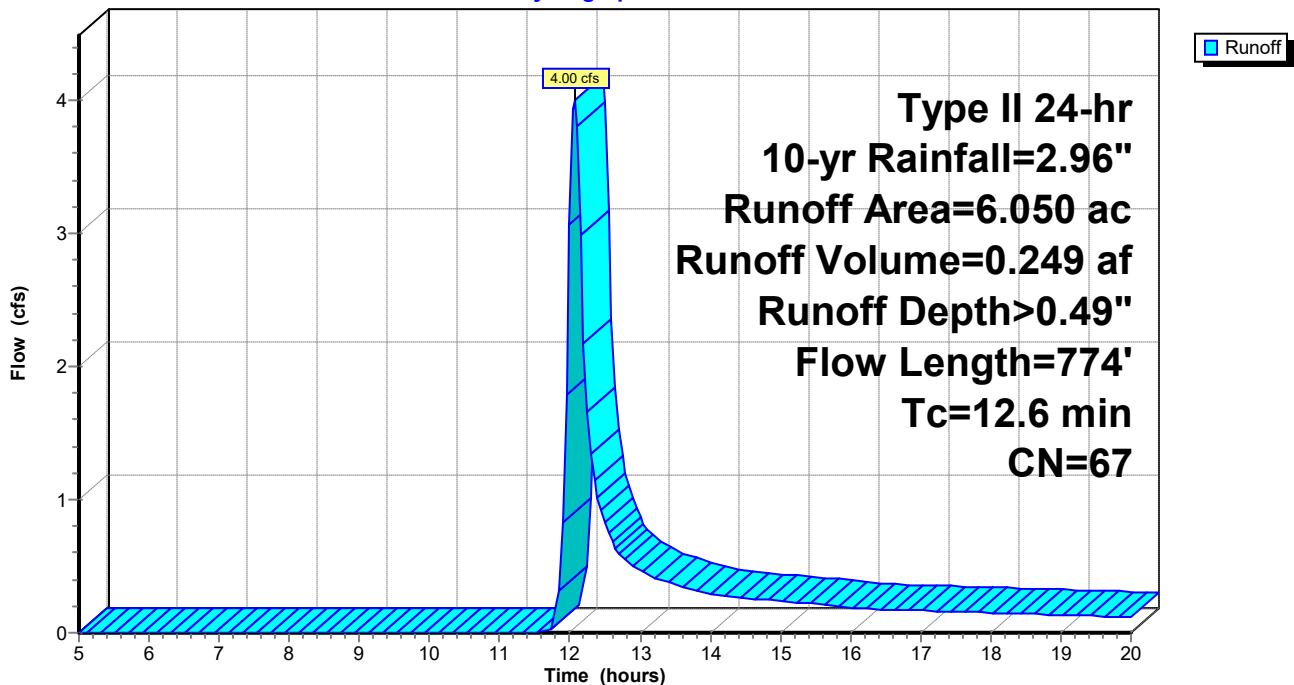
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.830	30	Woods, Good, HSG A
0.510	70	Woods, Good, HSG C
1.520	58	Legumes, straight row, Good, HSG A
3.190	81	Legumes, straight row, Good, HSG C
6.050	67	Weighted Average
6.050		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	100	0.0340	0.35		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
6.2	614	0.0340	1.66		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.7	60	0.0140	0.59		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.6	774	Total			

Subcatchment D48: DA-48

Hydrograph



Summary for Subcatchment D49: DA-49

[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
 Routed to Link L49 : L49

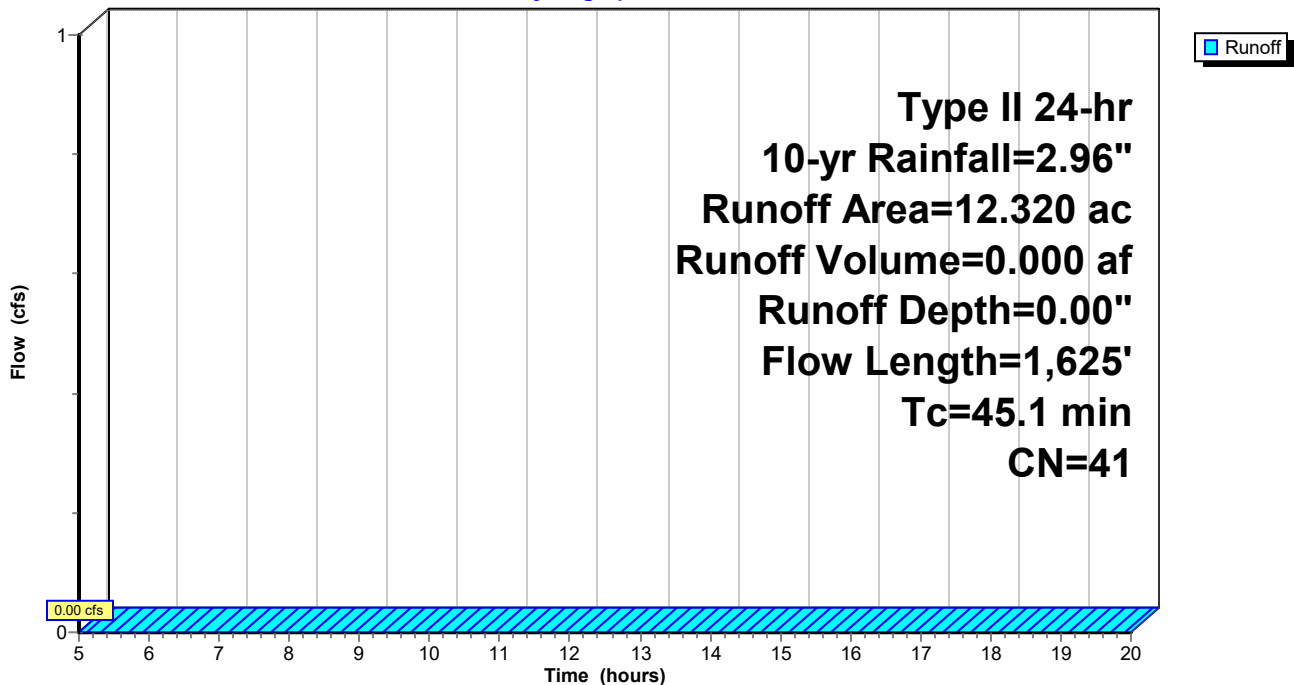
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
9.000	30	Woods, Good, HSG A
3.250	70	Woods, Good, HSG C
0.070	81	Legumes, straight row, Good, HSG C
12.320	41	Weighted Average
12.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.7	31	0.0400	0.30		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
13.0	67	0.0540	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
30.4	1,527	0.0280	0.84		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
45.1	1,625	Total			

Subcatchment D49: DA-49

Hydrograph



Summary for Subcatchment D50: DA-50

Runoff = 7.94 cfs @ 12.35 hrs, Volume= 0.977 af, Depth> 0.42"
 Routed to Link L50 : L50

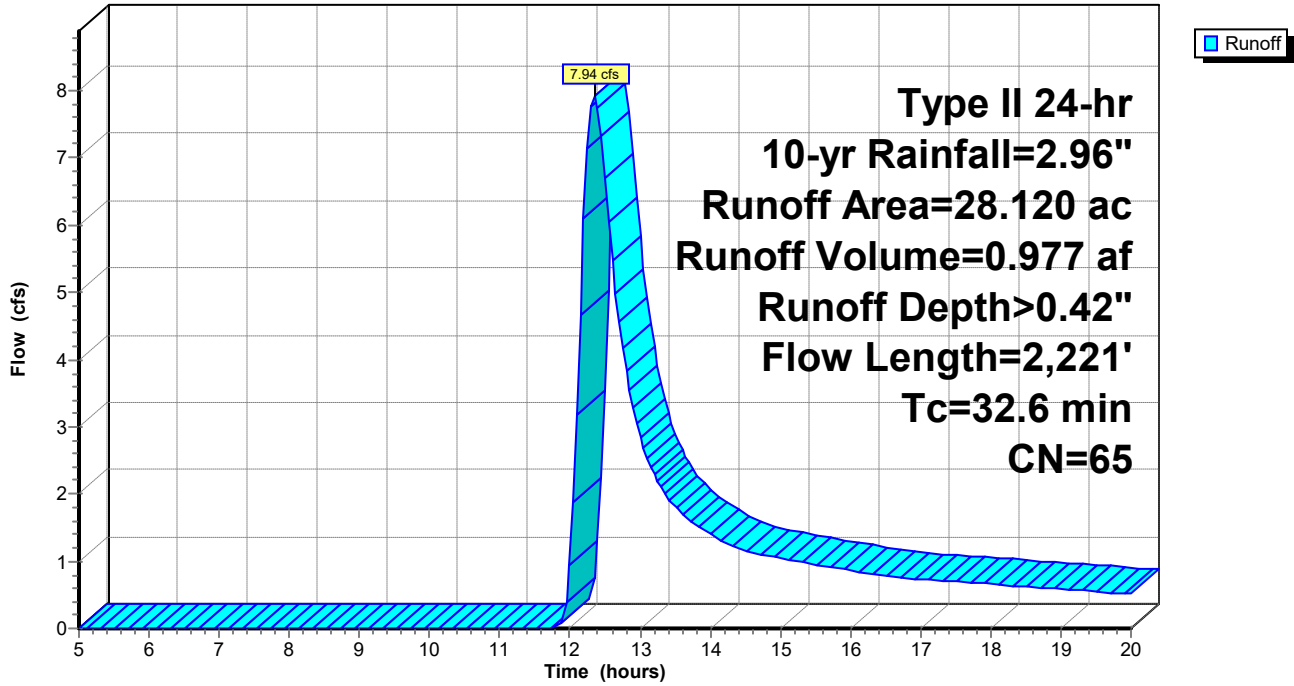
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
3.970	30	Woods, Good, HSG A
1.280	55	Woods, Good, HSG B
3.380	70	Woods, Good, HSG C
6.010	58	Legumes, straight row, Good, HSG A
4.080	72	Legumes, straight row, Good, HSG B
9.400	81	Legumes, straight row, Good, HSG C
28.120	65	Weighted Average
28.120		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	100	0.0260	0.32		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
26.8	2,043	0.0200	1.27		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
0.6	78	0.2190	2.34		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
32.6	2,221	Total			

Subcatchment D50: DA-50

Hydrograph



Summary for Subcatchment D51: DA-51

Runoff = 2.67 cfs @ 13.89 hrs, Volume= 0.746 af, Depth> 0.78"
 Routed to Link L51 : L51

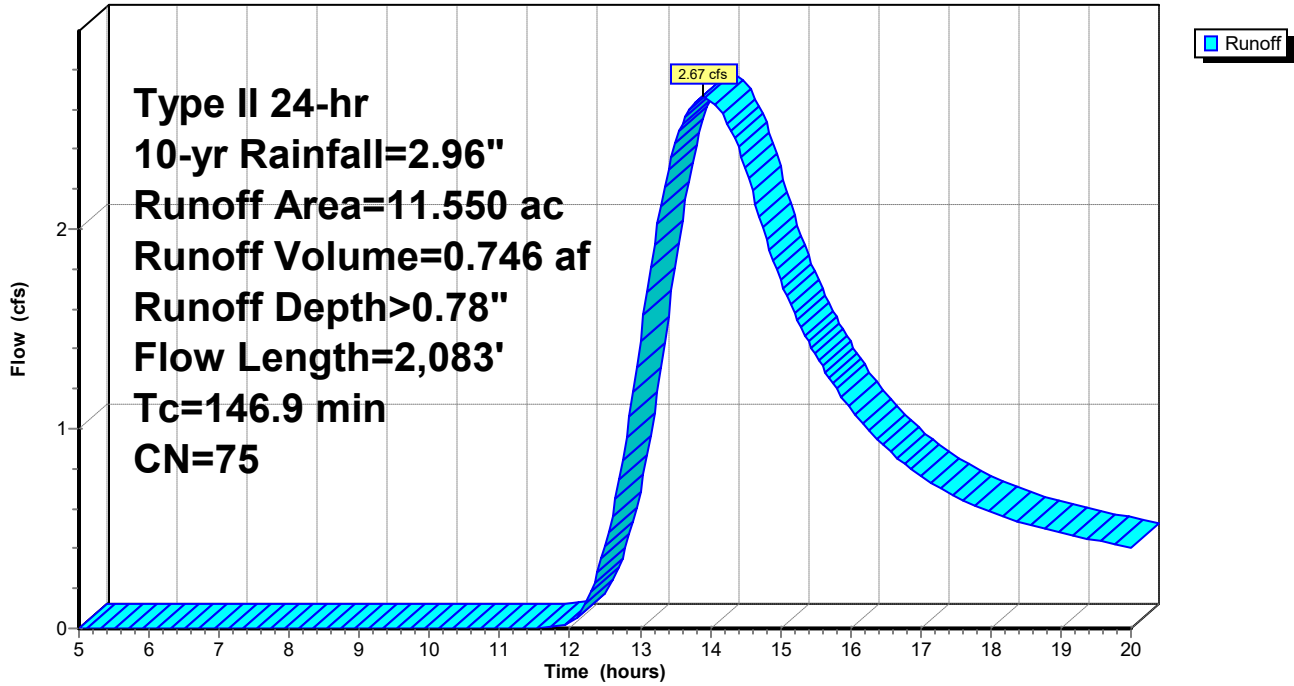
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.060	32	Woods/grass comb., Good, HSG A
0.110	58	Woods/grass comb., Good, HSG B
4.370	72	Woods/grass comb., Good, HSG C
1.010	58	Legumes, straight row, Good, HSG A
6.000	81	Legumes, straight row, Good, HSG C
11.550	75	Weighted Average
11.550		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
116.2	100	0.0005	0.01		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
9.9	440	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.4	1,477	0.0180	1.21		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
0.4	66	0.2820	2.66		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
146.9	2,083	Total			

Subcatchment D51: DA-51

Hydrograph



Summary for Subcatchment D52: DA-52

Runoff = 8.63 cfs @ 12.39 hrs, Volume= 0.979 af, Depth> 0.73"
 Routed to Link L52 : L52

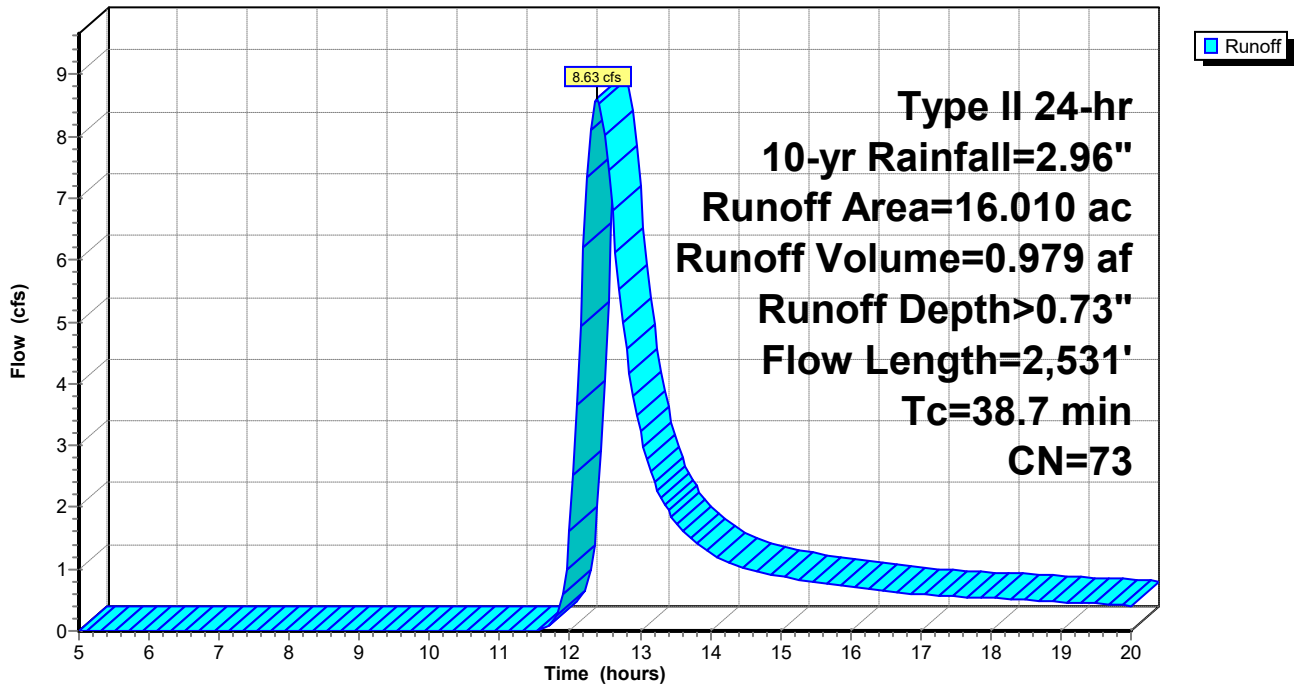
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
15.360	72	Woods/grass comb., Good, HSG C
0.650	98	Unconnected pavement, HSG C
16.010	73	Weighted Average
15.360		95.94% Pervious Area
0.650		4.06% Impervious Area
0.650		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.3	100	0.0210	0.10		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
21.4	2,431	0.0160	1.90		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
38.7	2,531	Total			

Subcatchment D52: DA-52

Hydrograph



Summary for Subcatchment D53: DA-53

Runoff = 11.44 cfs @ 13.25 hrs, Volume= 2.428 af, Depth> 0.90"
 Routed to Link L53 : L53

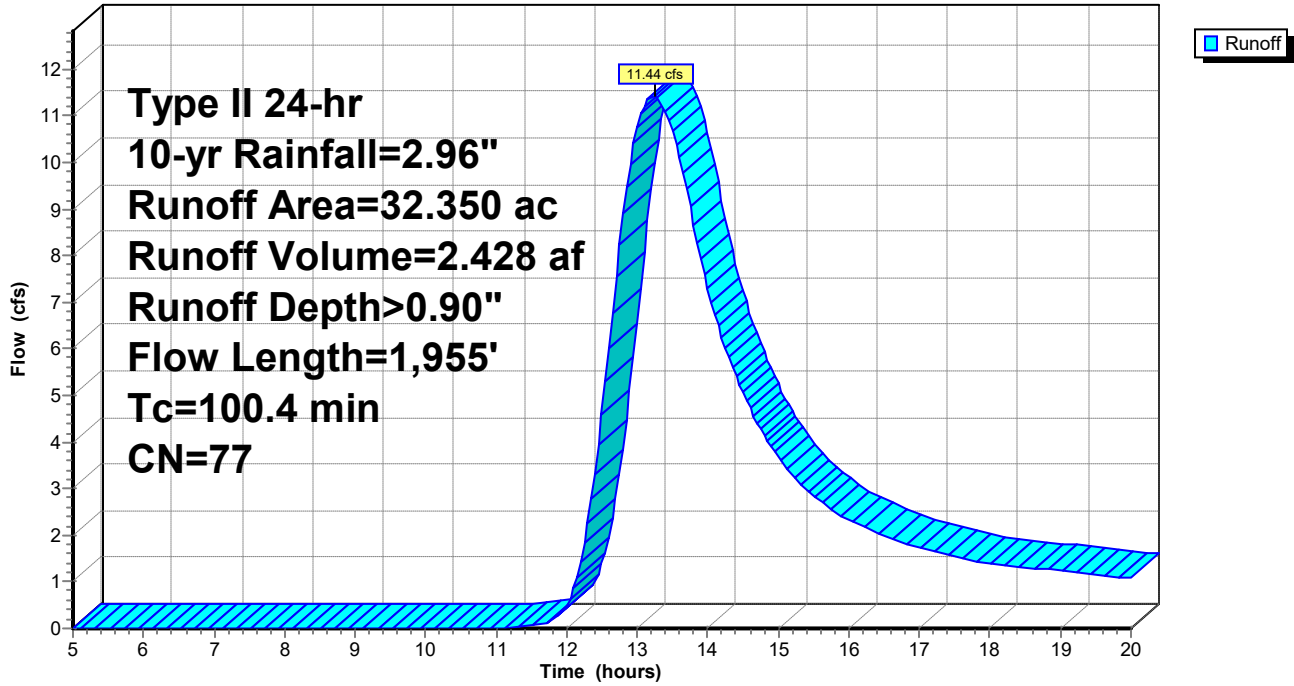
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.200	58	Woods/grass comb., Good, HSG B
14.450	72	Woods/grass comb., Good, HSG C
17.240	81	Legumes, straight row, Good, HSG C
0.460	71	Meadow, non-grazed, HSG C
32.350	77	Weighted Average
32.350		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0070	0.19		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
15.4	743	0.0080	0.80		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
27.3	513	0.0020	0.31		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
16.0	304	0.0040	0.32		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
32.8	295	0.0001	0.15		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
100.4	1,955	Total			

Subcatchment D53: DA-53

Hydrograph



Summary for Subcatchment D54: DA-54

Runoff = 3.94 cfs @ 12.05 hrs, Volume= 0.213 af, Depth> 0.89"
 Routed to Link L54 : L54

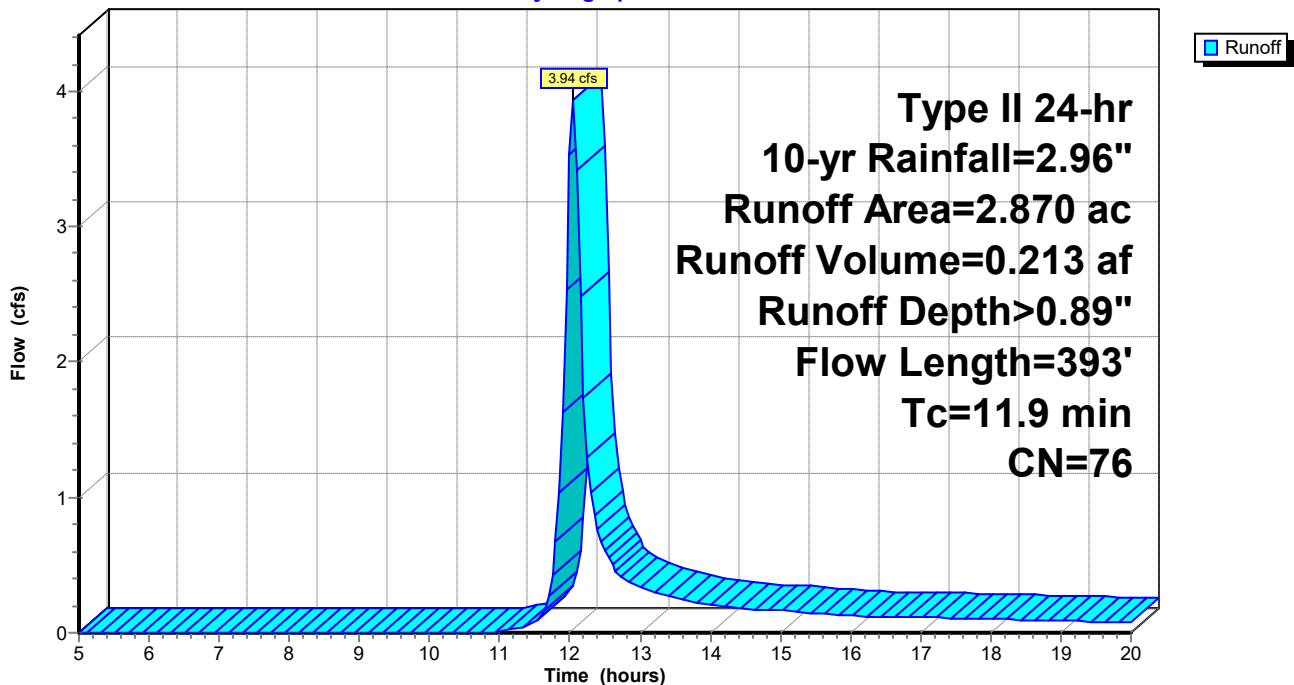
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 10-yr Rainfall=2.96"

Area (ac)	CN	Description
0.460	55	Woods, Good, HSG B
0.080	70	Woods, Good, HSG C
0.220	72	Legumes, straight row, Good, HSG B
2.110	81	Legumes, straight row, Good, HSG C
2.870	76	Weighted Average
2.870		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	100	0.0170	0.27		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
4.4	250	0.0110	0.94		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.3	43	0.0130	0.57		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
11.9	393	Total			

Subcatchment D54: DA-54

Hydrograph



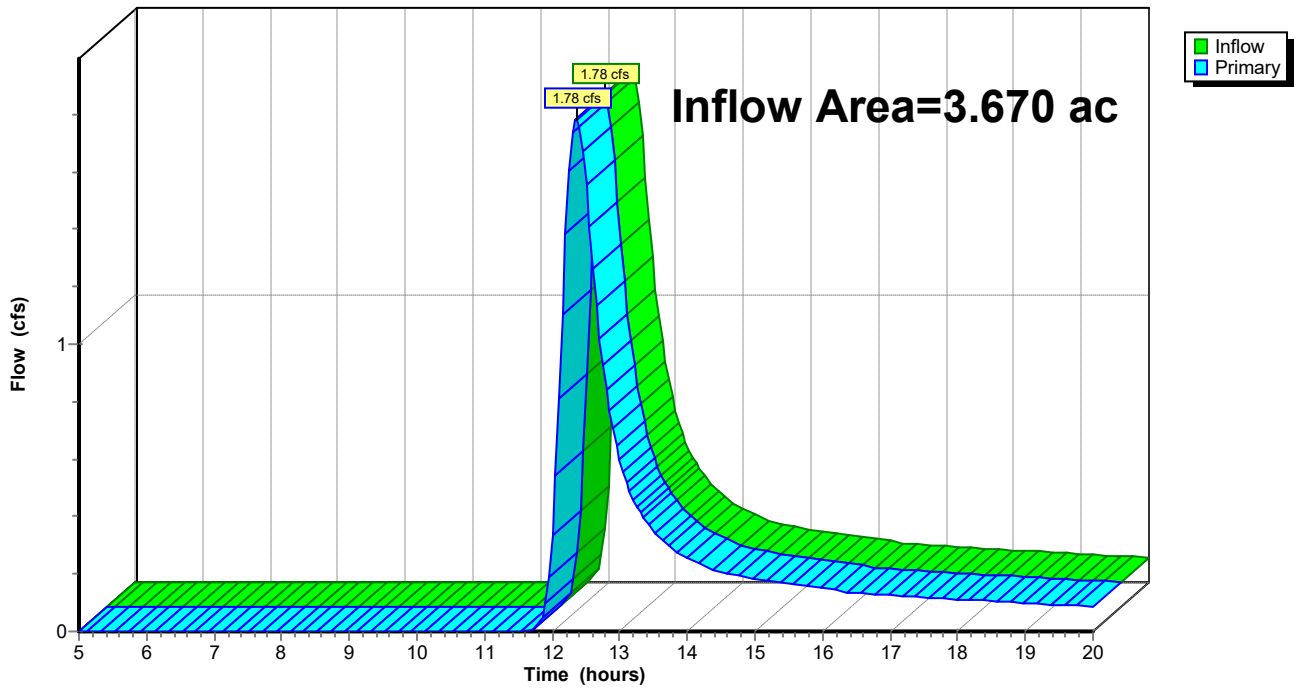
Summary for Link L01: L01

Inflow Area = 3.670 ac, 9.26% Impervious, Inflow Depth > 0.65" for 10-yr event
Inflow = 1.78 cfs @ 12.36 hrs, Volume= 0.198 af
Primary = 1.78 cfs @ 12.36 hrs, Volume= 0.198 af, Atten= 0%, Lag= 0.0 min

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

Link L01: L01

Hydrograph



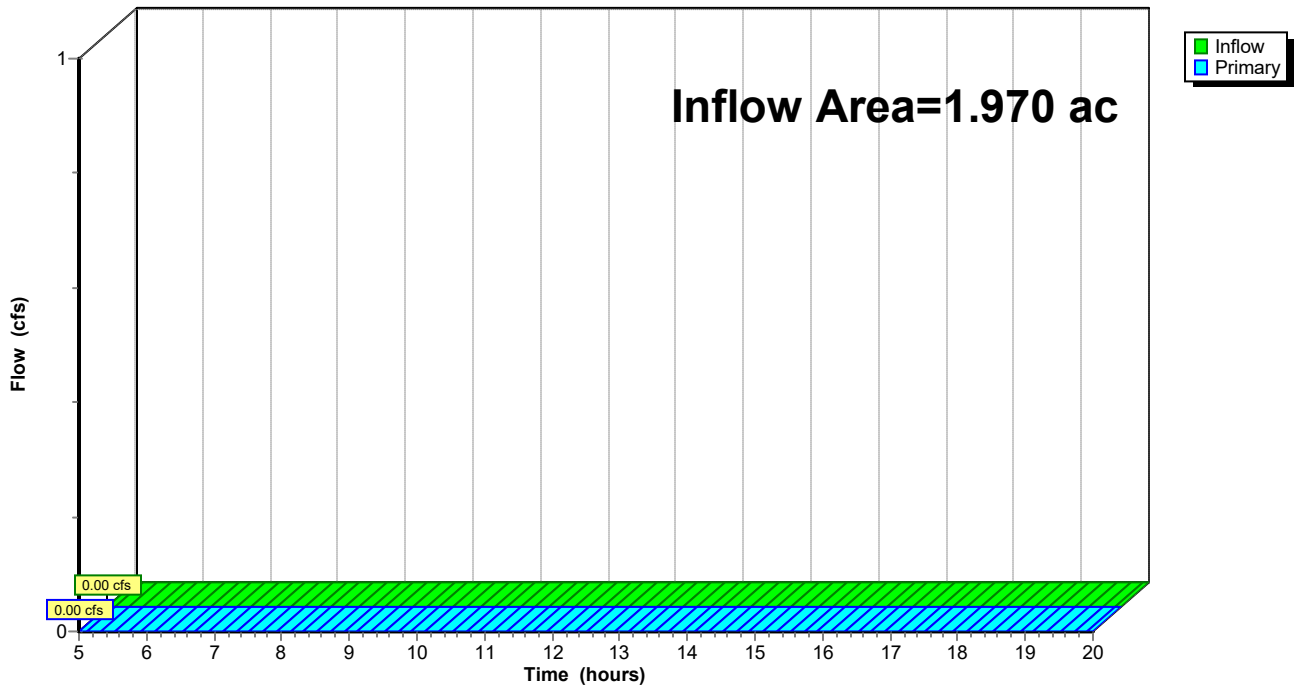
Summary for Link L02: L02

Inflow Area = 1.970 ac, 0.00% Impervious, Inflow Depth = 0.00" for 10-yr event
Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

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

Link L02: L02

Hydrograph



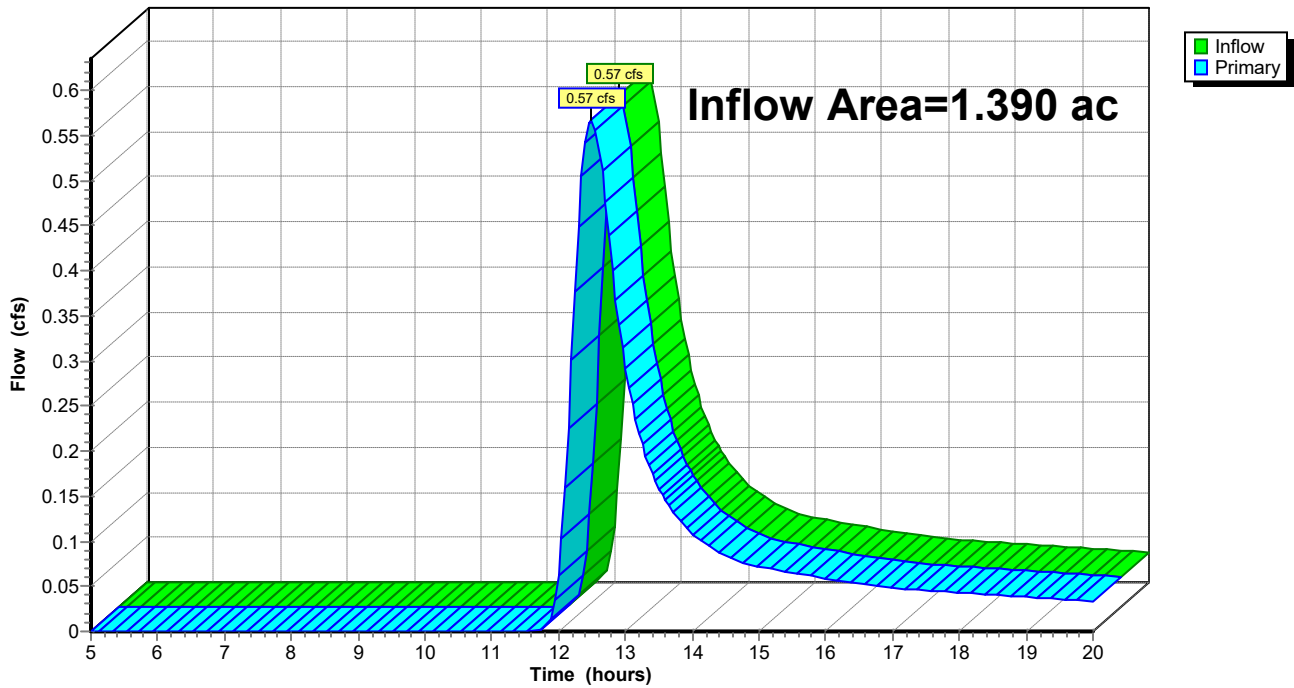
Summary for Link L03: L03

Inflow Area = 1.390 ac, 7.91% Impervious, Inflow Depth > 0.64" for 10-yr event
Inflow = 0.57 cfs @ 12.49 hrs, Volume= 0.074 af
Primary = 0.57 cfs @ 12.49 hrs, Volume= 0.074 af, Atten= 0%, Lag= 0.0 min

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

Link L03: L03

Hydrograph



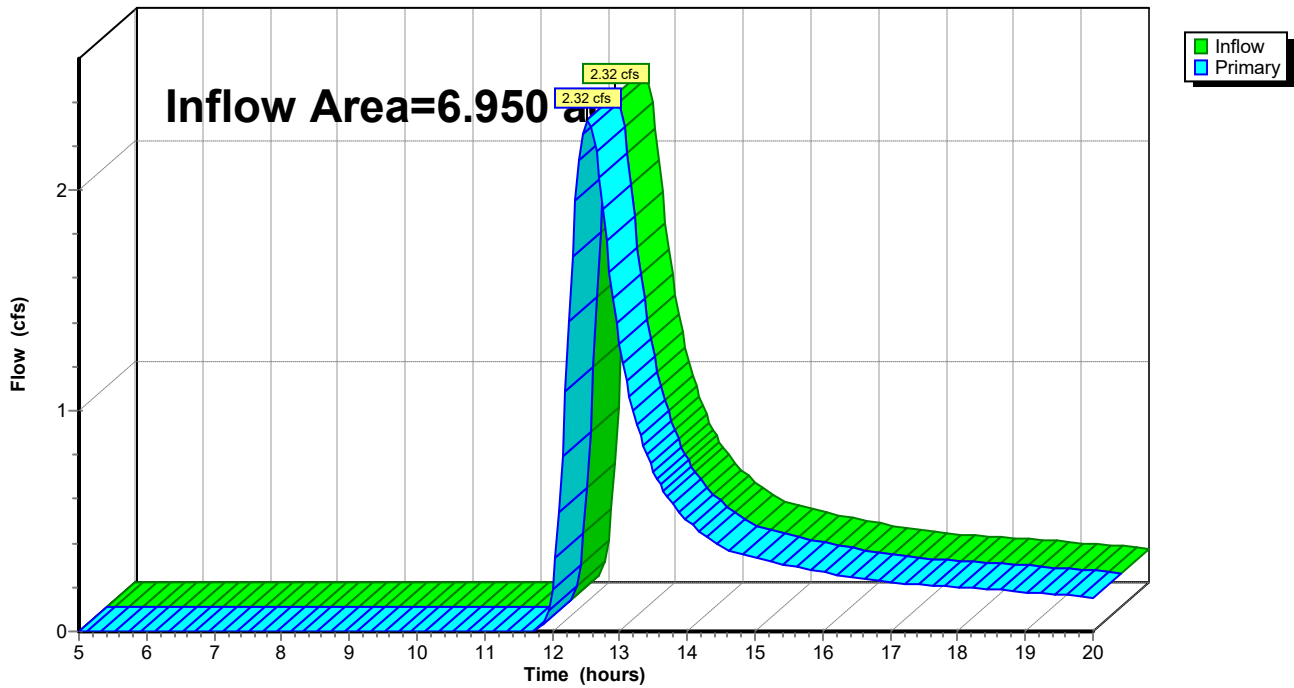
Summary for Link L04: L04

Inflow Area = 6.950 ac, 0.00% Impervious, Inflow Depth > 0.56" for 10-yr event
Inflow = 2.32 cfs @ 12.52 hrs, Volume= 0.324 af
Primary = 2.32 cfs @ 12.52 hrs, Volume= 0.324 af, Atten= 0%, Lag= 0.0 min

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

Link L04: L04

Hydrograph



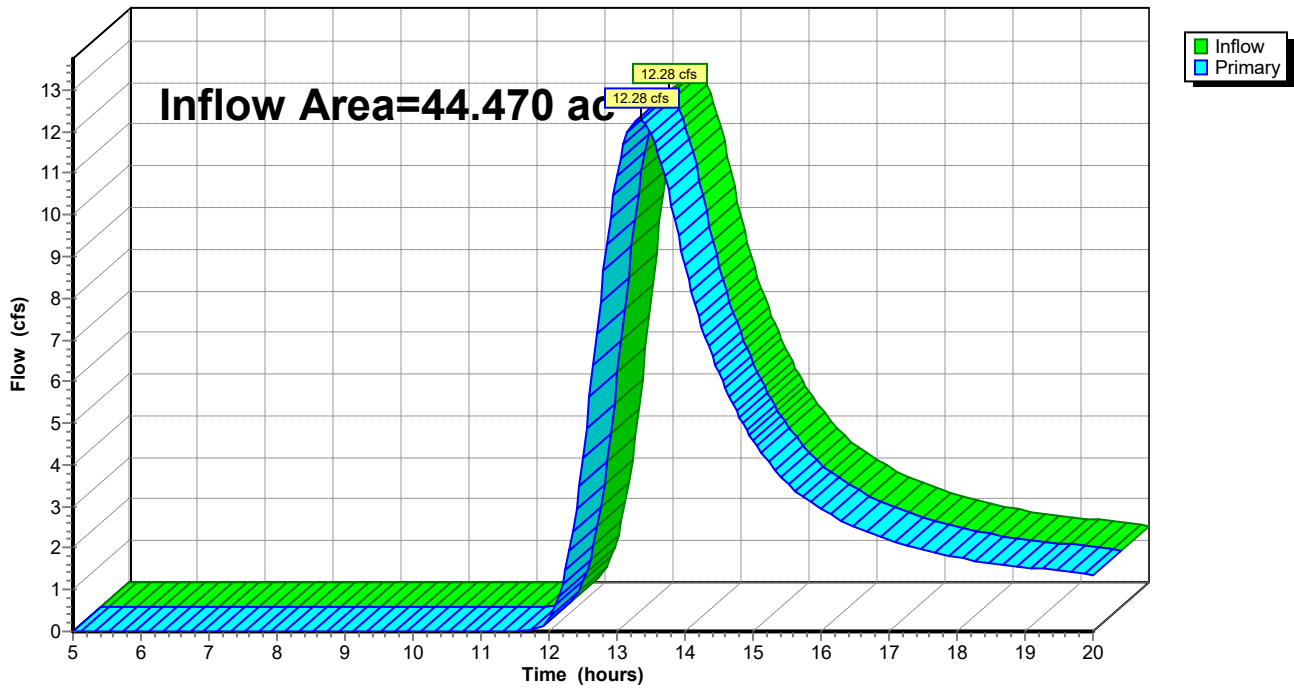
Summary for Link L05: L05

Inflow Area = 44.470 ac, 0.00% Impervious, Inflow Depth > 0.75" for 10-yr event
Inflow = 12.28 cfs @ 13.34 hrs, Volume= 2.782 af
Primary = 12.28 cfs @ 13.34 hrs, Volume= 2.782 af, Atten= 0%, Lag= 0.0 min

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

Link L05: L05

Hydrograph



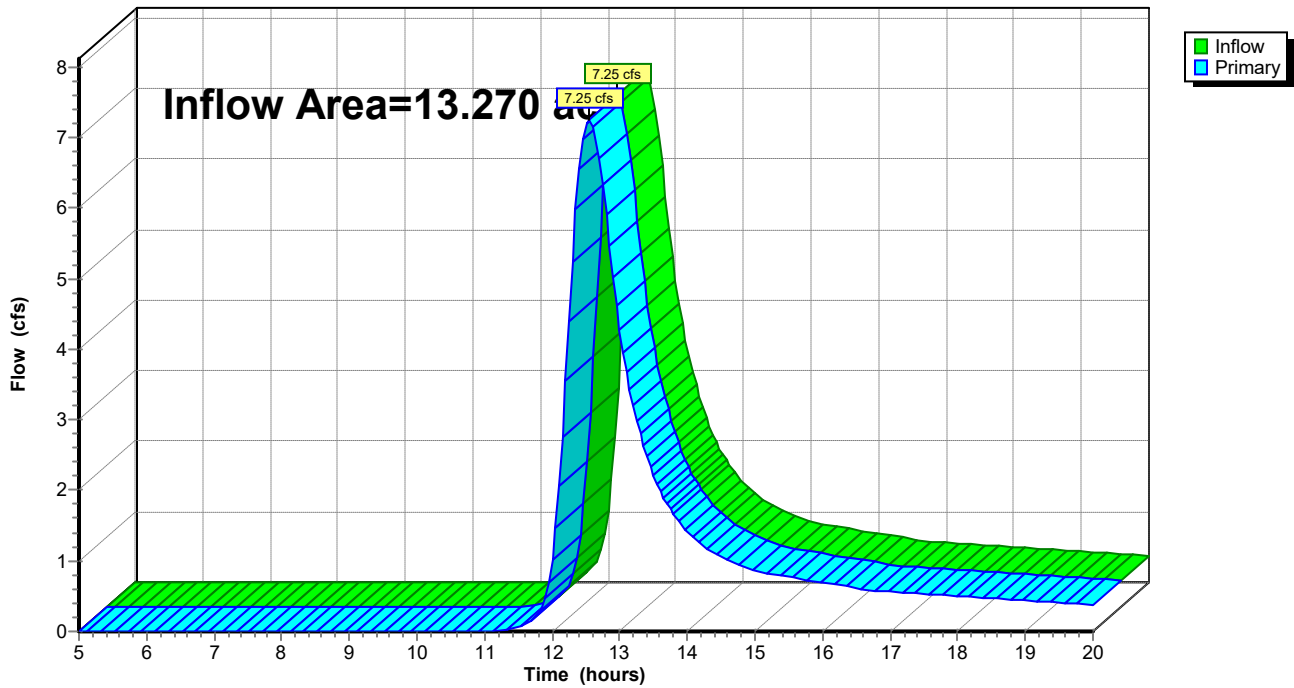
Summary for Link L06: L06

Inflow Area = 13.270 ac, 0.00% Impervious, Inflow Depth > 0.87" for 10-yr event
Inflow = 7.25 cfs @ 12.55 hrs, Volume= 0.966 af
Primary = 7.25 cfs @ 12.55 hrs, Volume= 0.966 af, Atten= 0%, Lag= 0.0 min

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

Link L06: L06

Hydrograph



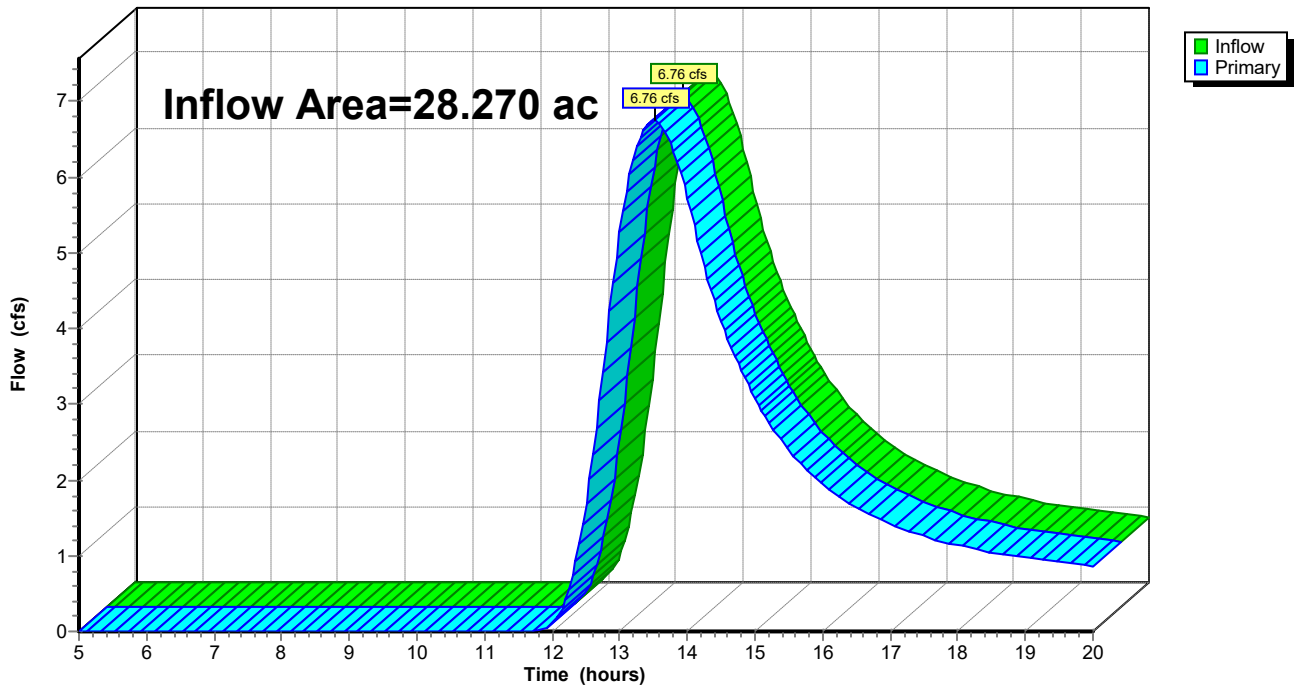
Summary for Link L07: L07

Inflow Area = 28.270 ac, 0.00% Impervious, Inflow Depth > 0.70" for 10-yr event
Inflow = 6.76 cfs @ 13.51 hrs, Volume= 1.648 af
Primary = 6.76 cfs @ 13.51 hrs, Volume= 1.648 af, Atten= 0%, Lag= 0.0 min

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

Link L07: L07

Hydrograph



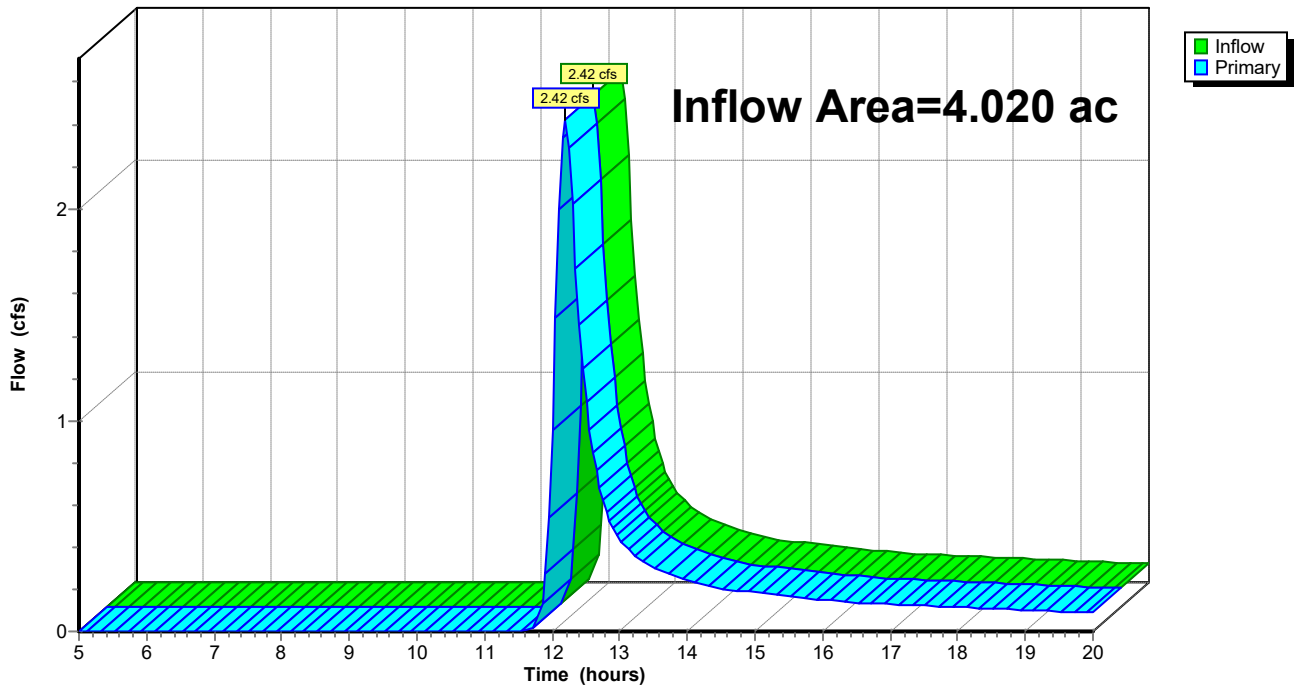
Summary for Link L08: L08

Inflow Area = 4.020 ac, 0.00% Impervious, Inflow Depth > 0.61" for 10-yr event
Inflow = 2.42 cfs @ 12.19 hrs, Volume= 0.204 af
Primary = 2.42 cfs @ 12.19 hrs, Volume= 0.204 af, Atten= 0%, Lag= 0.0 min

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

Link L08: L08

Hydrograph



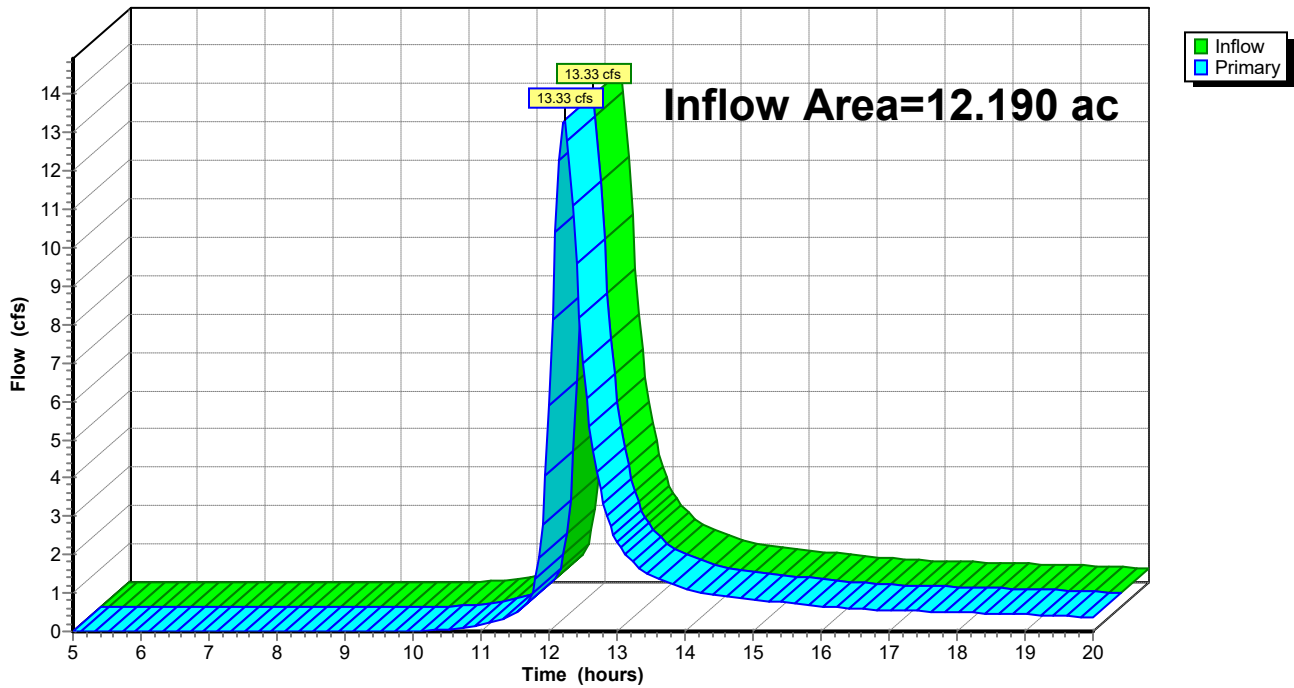
Summary for Link L09: L09

Inflow Area = 12.190 ac, 0.00% Impervious, Inflow Depth > 1.10" for 10-yr event
Inflow = 13.33 cfs @ 12.22 hrs, Volume= 1.121 af
Primary = 13.33 cfs @ 12.22 hrs, Volume= 1.121 af, Atten= 0%, Lag= 0.0 min

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

Link L09: L09

Hydrograph



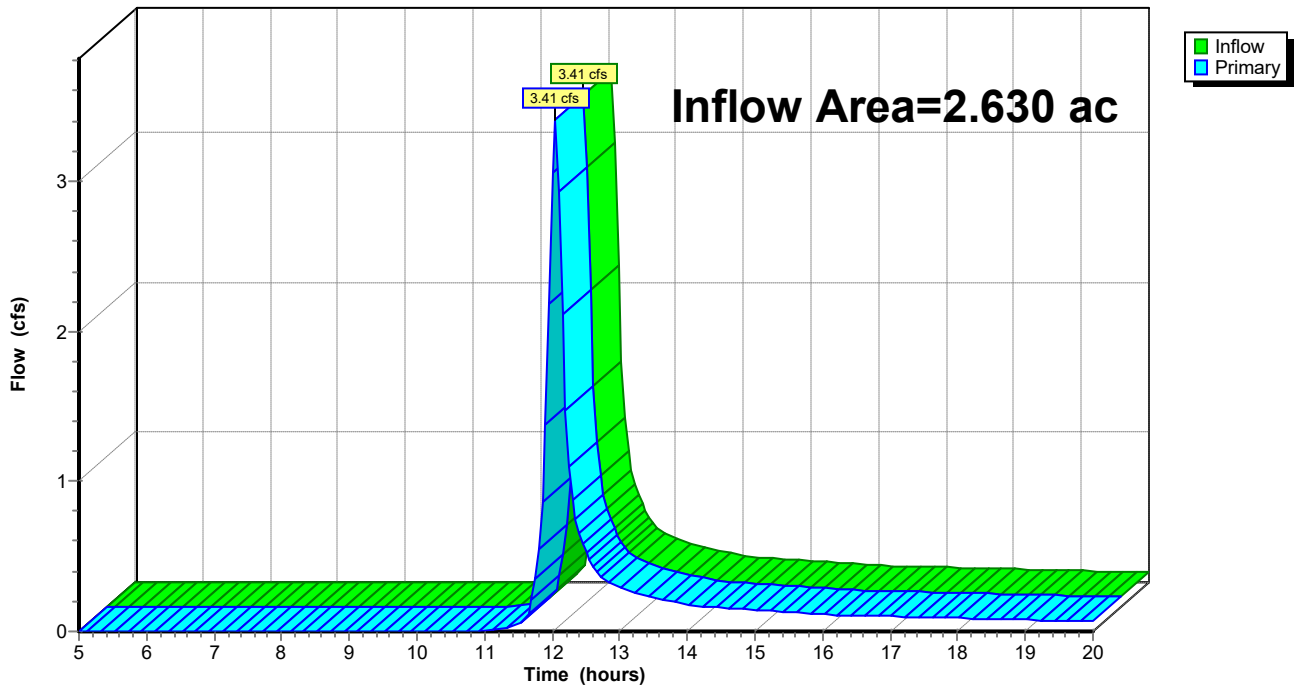
Summary for Link L10: L10

Inflow Area = 2.630 ac, 0.00% Impervious, Inflow Depth > 0.84" for 10-yr event
Inflow = 3.41 cfs @ 12.05 hrs, Volume= 0.184 af
Primary = 3.41 cfs @ 12.05 hrs, Volume= 0.184 af, Atten= 0%, Lag= 0.0 min

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

Link L10: L10

Hydrograph



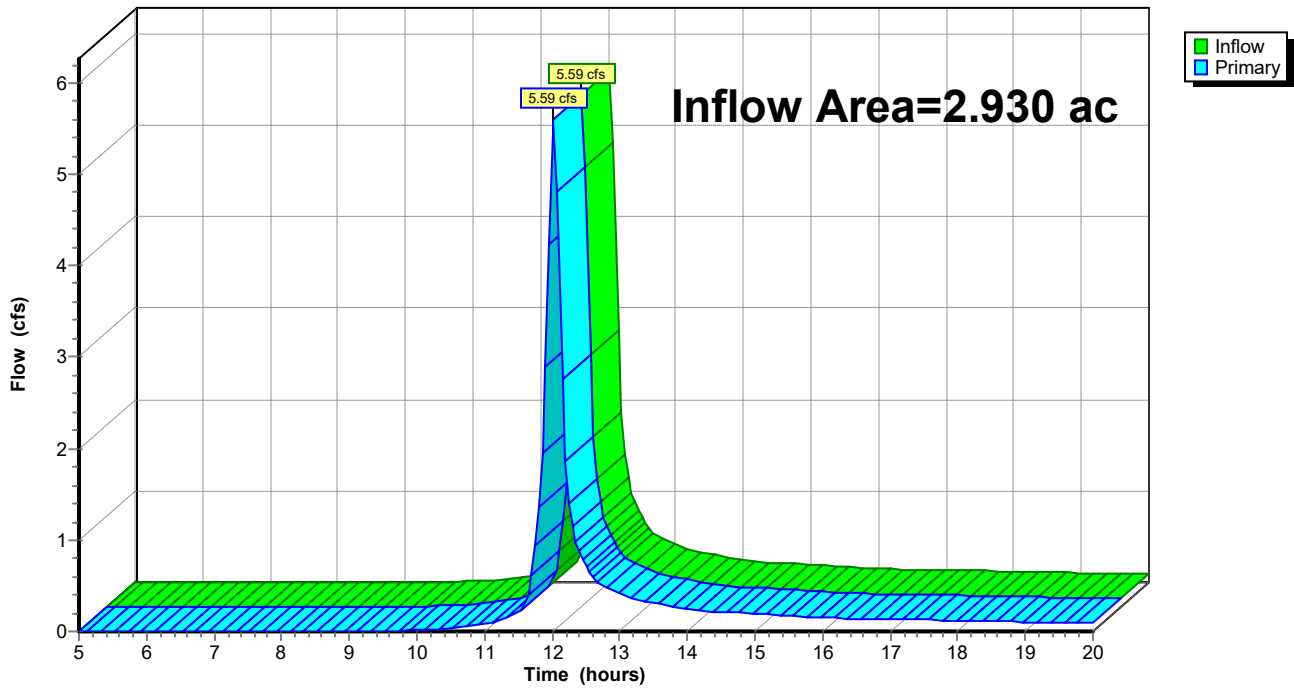
Summary for Link L11: L11

Inflow Area = 2.930 ac, 0.00% Impervious, Inflow Depth > 1.17" for 10-yr event
Inflow = 5.59 cfs @ 12.02 hrs, Volume= 0.286 af
Primary = 5.59 cfs @ 12.02 hrs, Volume= 0.286 af, Atten= 0%, Lag= 0.0 min

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

Link L11: L11

Hydrograph



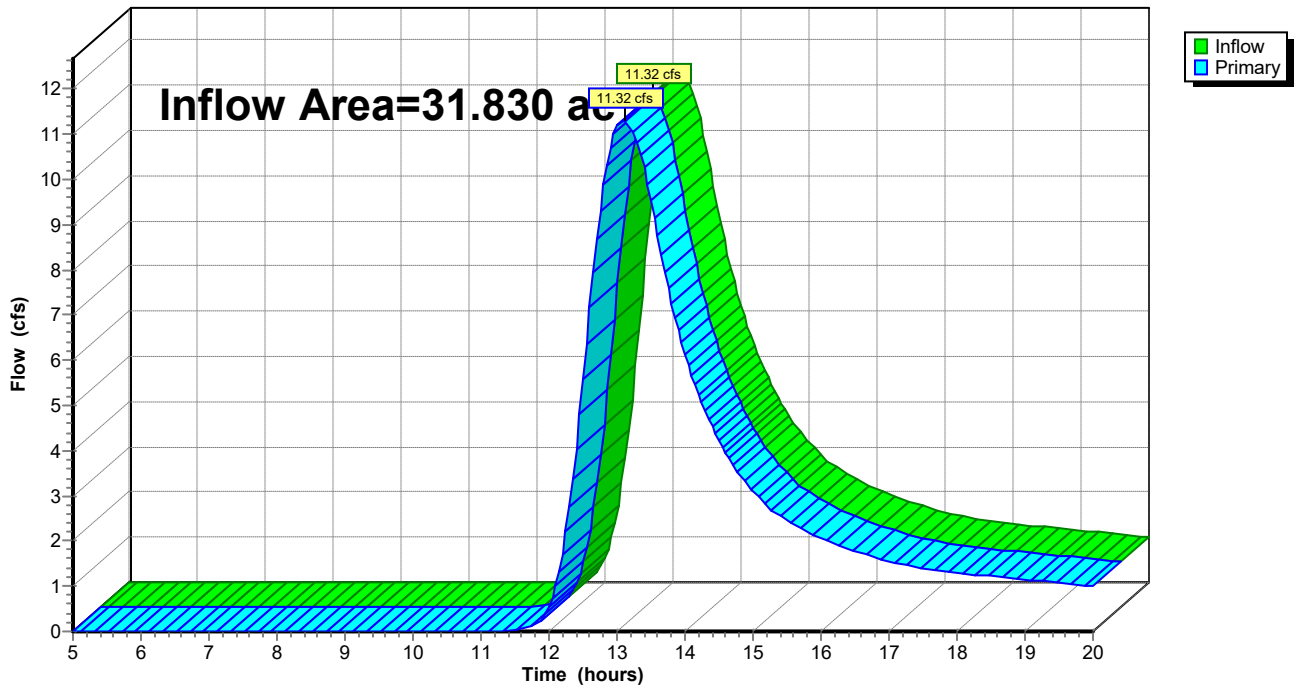
Summary for Link L12: L12

Inflow Area = 31.830 ac, 0.00% Impervious, Inflow Depth > 0.85" for 10-yr event
Inflow = 11.32 cfs @ 13.11 hrs, Volume= 2.267 af
Primary = 11.32 cfs @ 13.11 hrs, Volume= 2.267 af, Atten= 0%, Lag= 0.0 min

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

Link L12: L12

Hydrograph



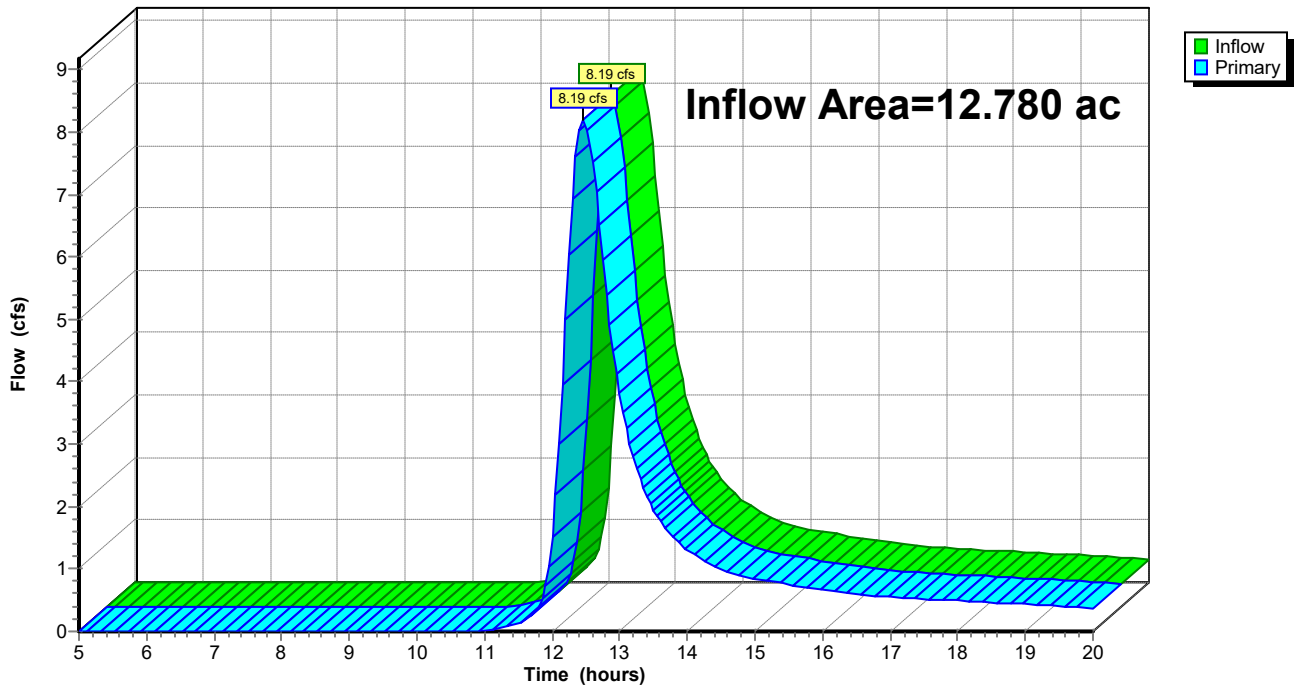
Summary for Link L13: L13

Inflow Area = 12.780 ac, 0.00% Impervious, Inflow Depth > 0.93" for 10-yr event
Inflow = 8.19 cfs @ 12.46 hrs, Volume= 0.988 af
Primary = 8.19 cfs @ 12.46 hrs, Volume= 0.988 af, Atten= 0%, Lag= 0.0 min

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

Link L13: L13

Hydrograph



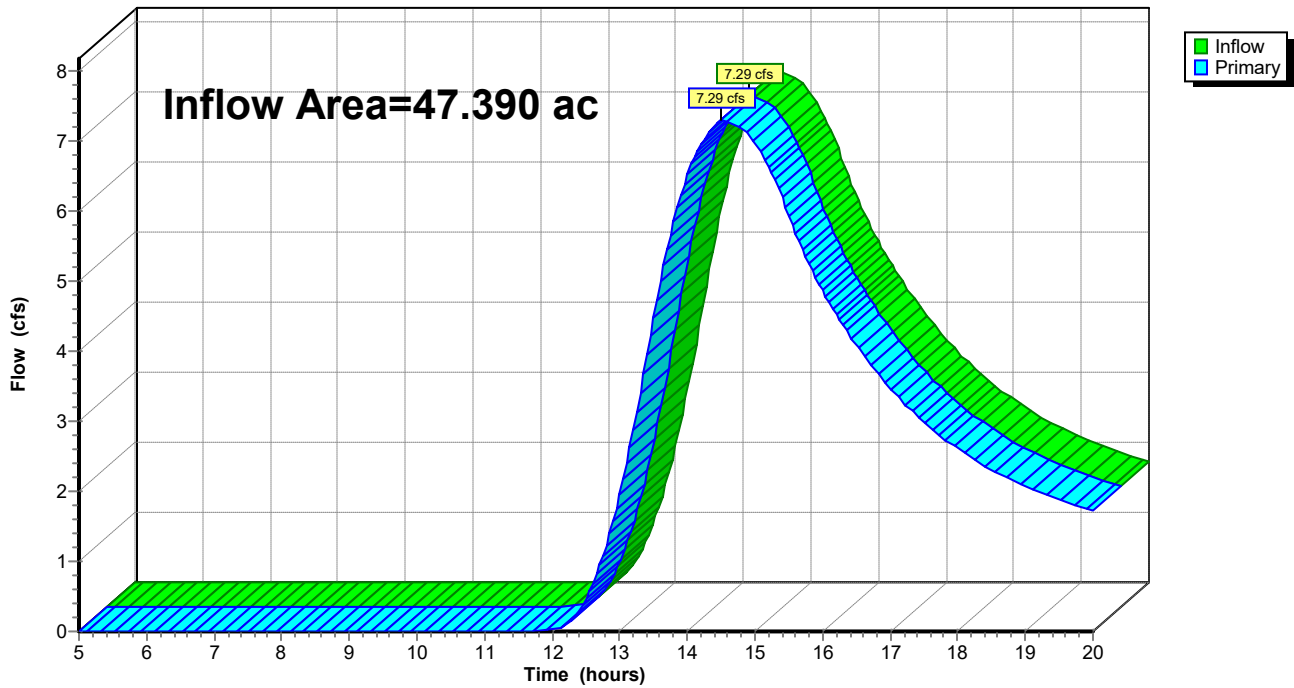
Summary for Link L14: L14

Inflow Area = 47.390 ac, 0.00% Impervious, Inflow Depth > 0.62" for 10-yr event
Inflow = 7.29 cfs @ 14.51 hrs, Volume= 2.430 af
Primary = 7.29 cfs @ 14.51 hrs, Volume= 2.430 af, Atten= 0%, Lag= 0.0 min

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

Link L14: L14

Hydrograph



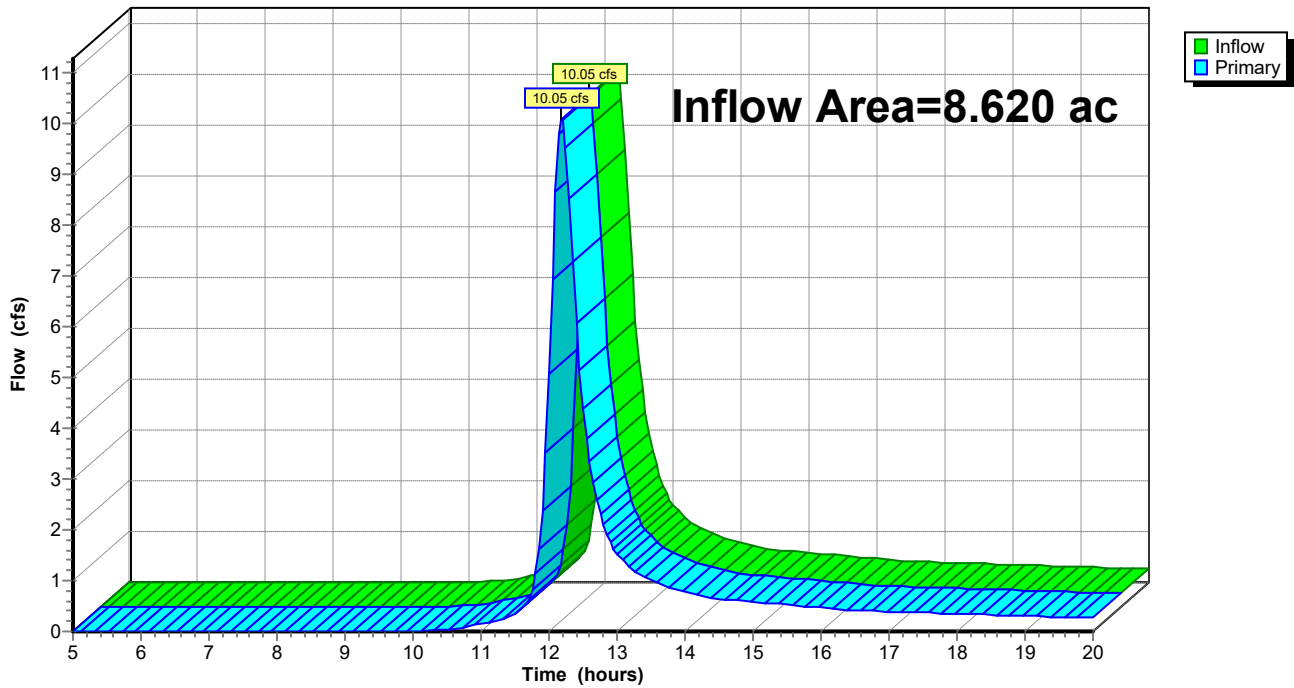
Summary for Link L15: L15

Inflow Area = 8.620 ac, 0.00% Impervious, Inflow Depth > 1.10" for 10-yr event
Inflow = 10.05 cfs @ 12.19 hrs, Volume= 0.794 af
Primary = 10.05 cfs @ 12.19 hrs, Volume= 0.794 af, Atten= 0%, Lag= 0.0 min

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

Link L15: L15

Hydrograph



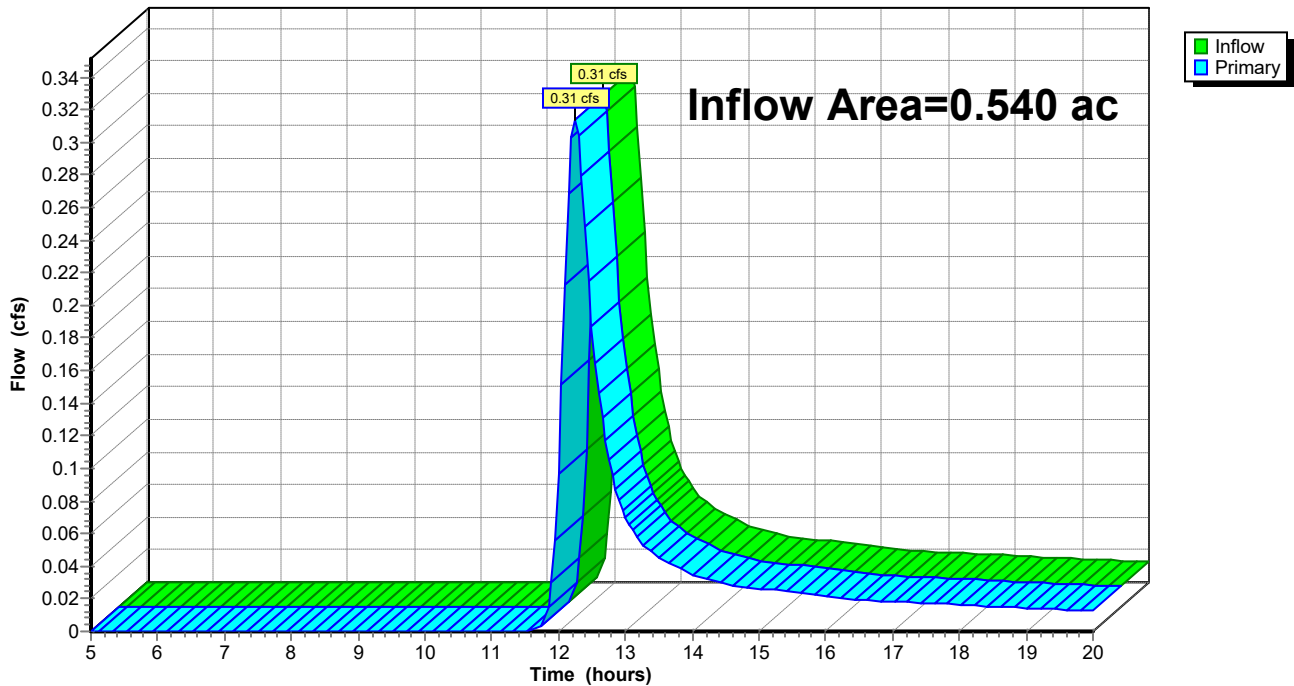
Summary for Link L16: L16

Inflow Area = 0.540 ac, 0.00% Impervious, Inflow Depth > 0.65" for 10-yr event
Inflow = 0.31 cfs @ 12.25 hrs, Volume= 0.029 af
Primary = 0.31 cfs @ 12.25 hrs, Volume= 0.029 af, Atten= 0%, Lag= 0.0 min

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

Link L16: L16

Hydrograph



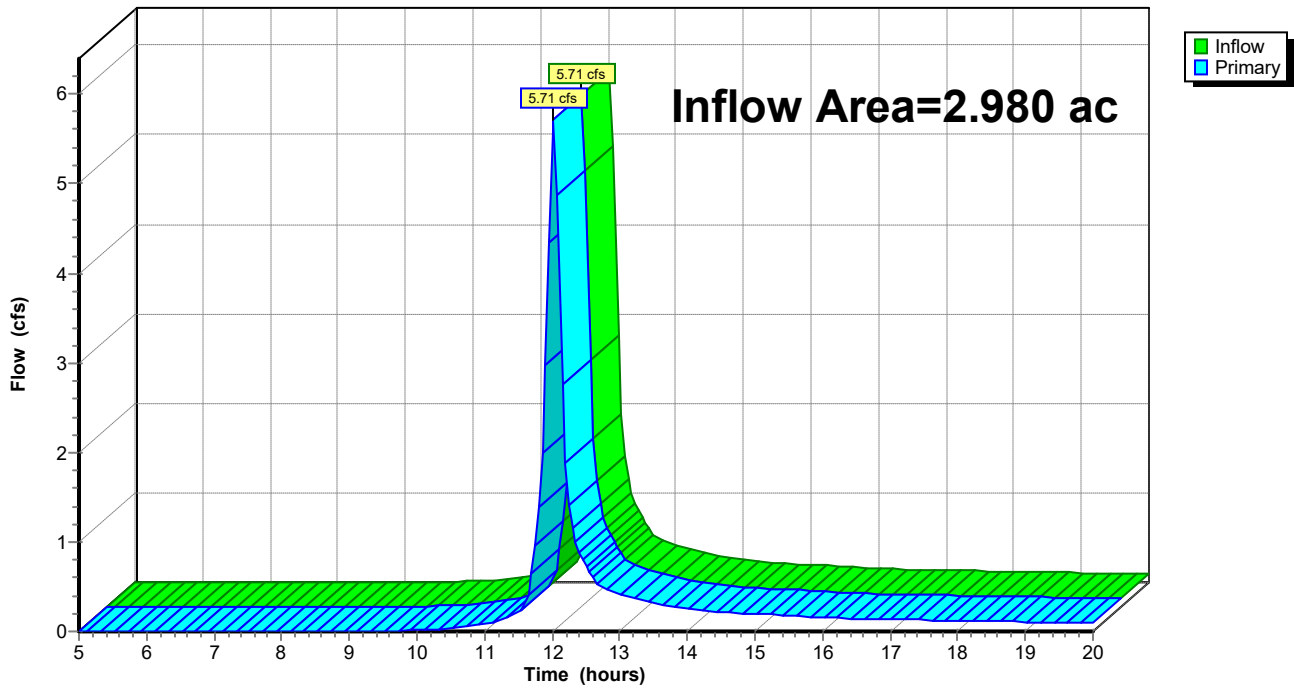
Summary for Link L17: L17

Inflow Area = 2.980 ac, 0.00% Impervious, Inflow Depth > 1.17" for 10-yr event
Inflow = 5.71 cfs @ 12.02 hrs, Volume= 0.291 af
Primary = 5.71 cfs @ 12.02 hrs, Volume= 0.291 af, Atten= 0%, Lag= 0.0 min

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

Link L17: L17

Hydrograph



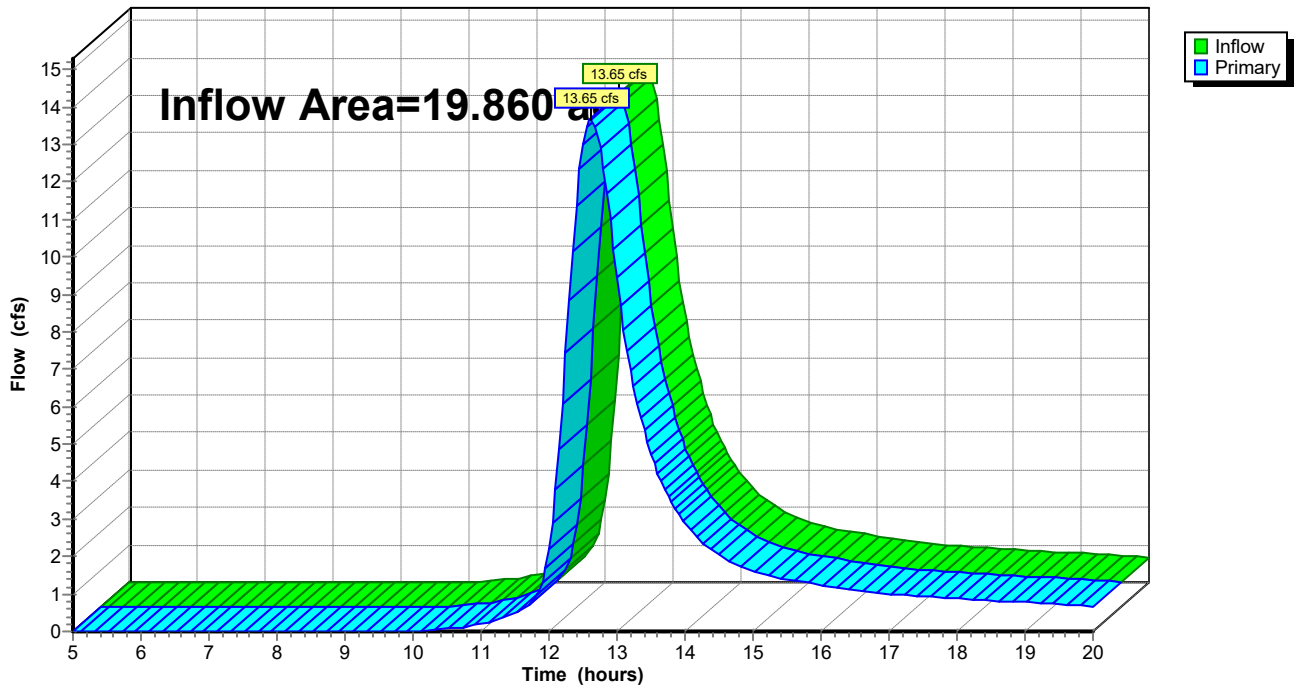
Summary for Link L18: L18

Inflow Area = 19.860 ac, 0.00% Impervious, Inflow Depth > 1.15" for 10-yr event
Inflow = 13.65 cfs @ 12.61 hrs, Volume= 1.900 af
Primary = 13.65 cfs @ 12.61 hrs, Volume= 1.900 af, Atten= 0%, Lag= 0.0 min

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

Link L18: L18

Hydrograph



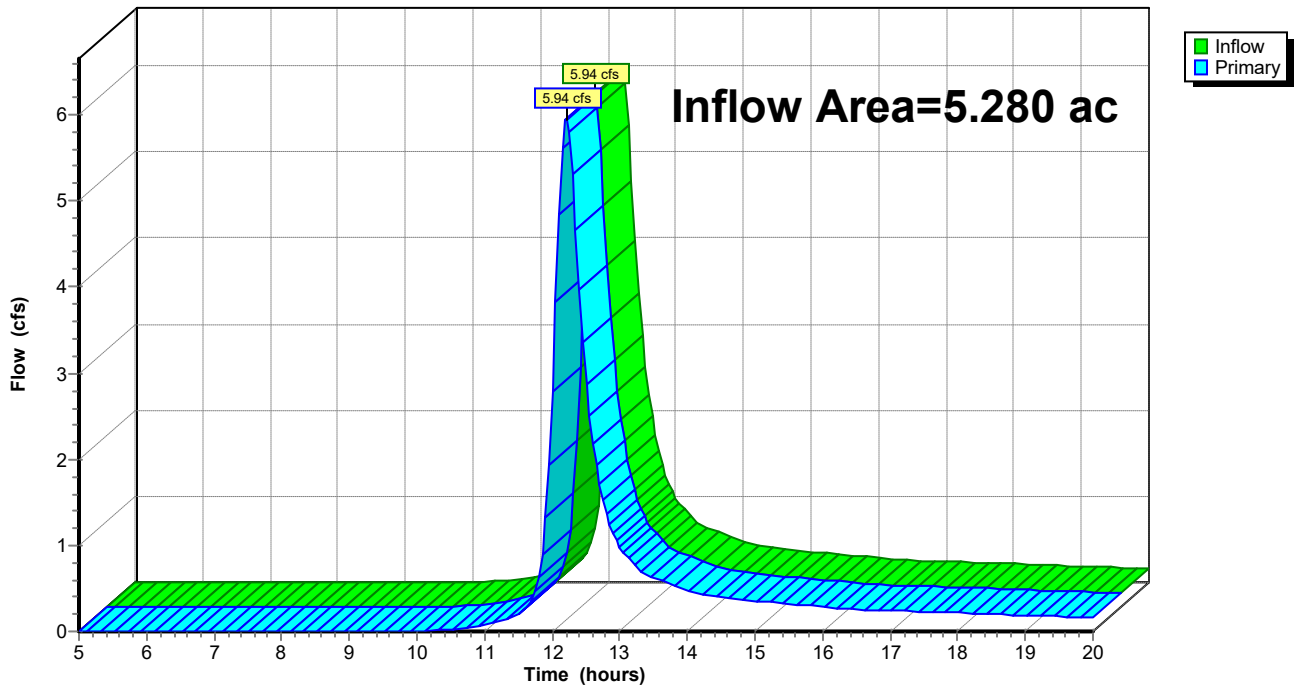
Summary for Link L19: L19

Inflow Area = 5.280 ac, 0.00% Impervious, Inflow Depth > 1.10" for 10-yr event
Inflow = 5.94 cfs @ 12.21 hrs, Volume= 0.486 af
Primary = 5.94 cfs @ 12.21 hrs, Volume= 0.486 af, Atten= 0%, Lag= 0.0 min

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

Link L19: L19

Hydrograph



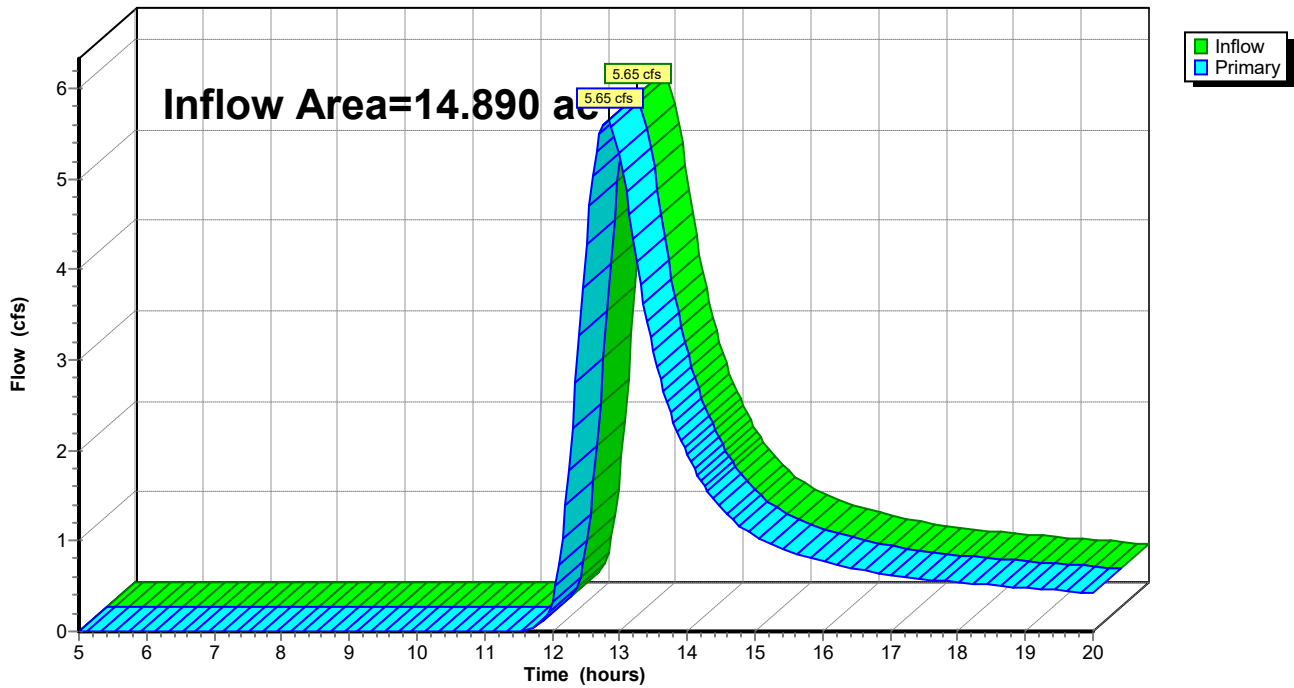
Summary for Link L20: L20

Inflow Area = 14.890 ac, 0.00% Impervious, Inflow Depth > 0.77" for 10-yr event
Inflow = 5.65 cfs @ 12.83 hrs, Volume= 0.952 af
Primary = 5.65 cfs @ 12.83 hrs, Volume= 0.952 af, Atten= 0%, Lag= 0.0 min

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

Link L20: L20

Hydrograph



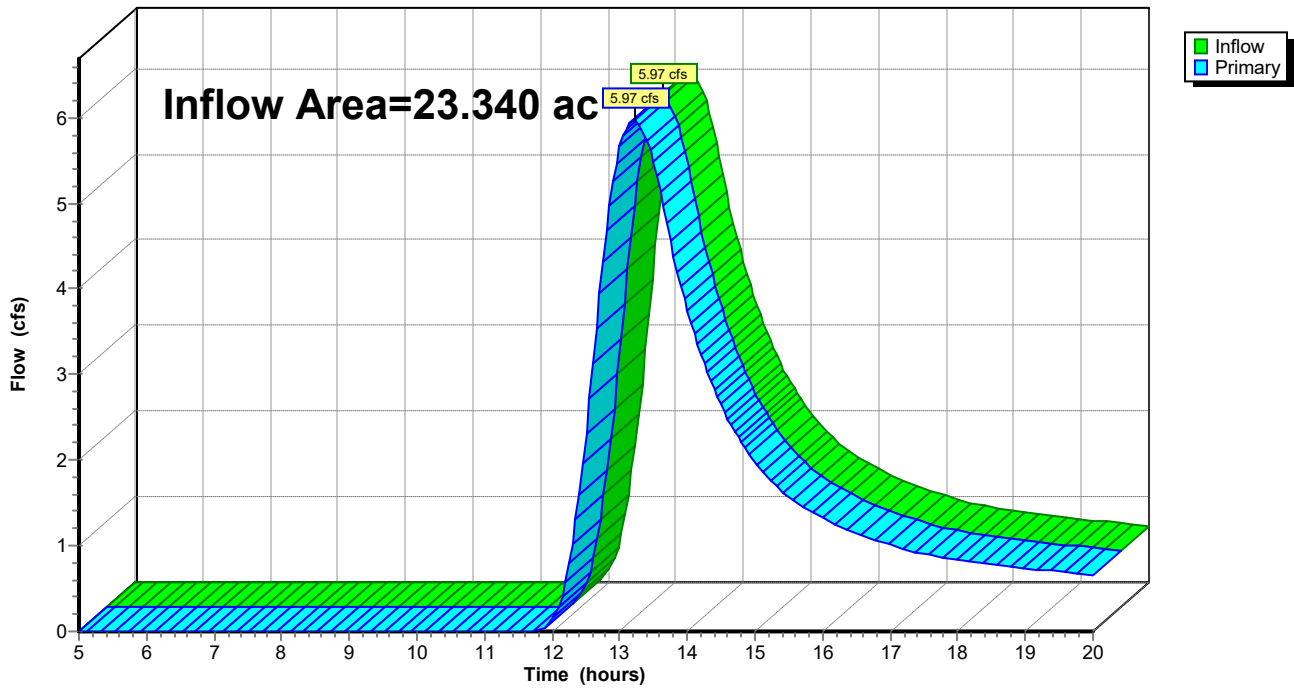
Summary for Link L21: L21

Inflow Area = 23.340 ac, 0.00% Impervious, Inflow Depth > 0.67" for 10-yr event
Inflow = 5.97 cfs @ 13.23 hrs, Volume= 1.294 af
Primary = 5.97 cfs @ 13.23 hrs, Volume= 1.294 af, Atten= 0%, Lag= 0.0 min

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

Link L21: L21

Hydrograph



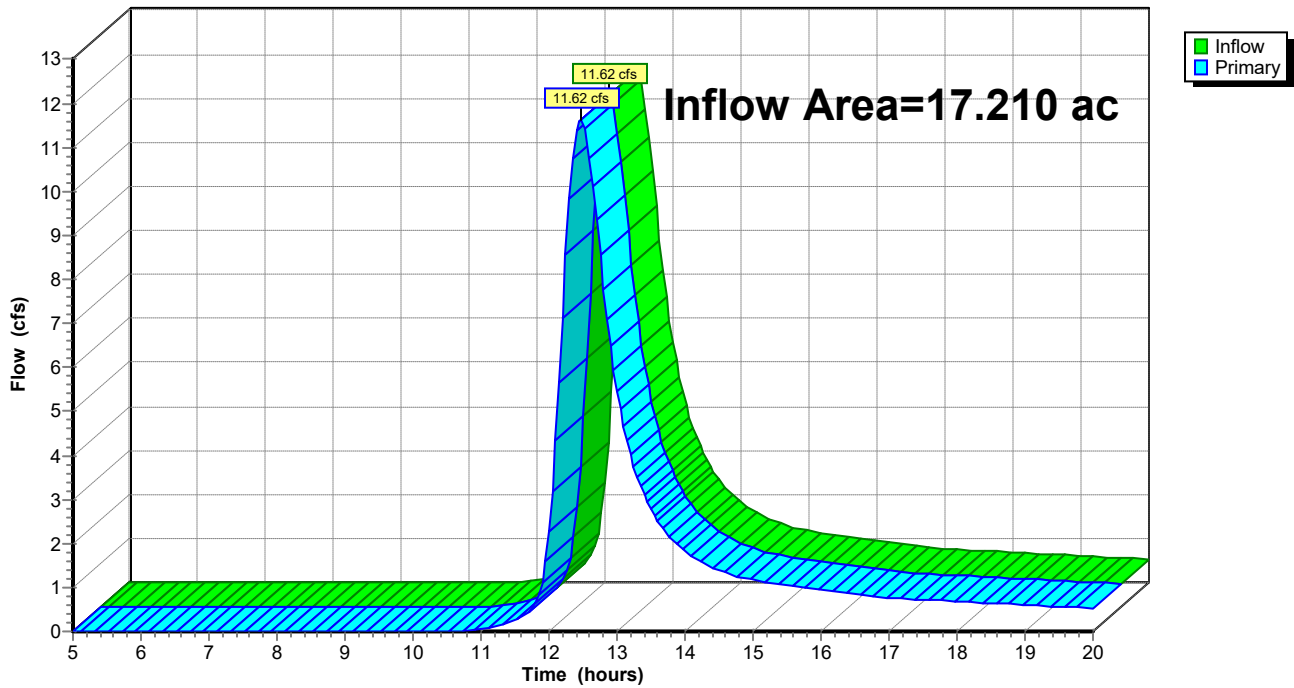
Summary for Link L22: L22

Inflow Area = 17.210 ac, 0.00% Impervious, Inflow Depth > 0.98" for 10-yr event
Inflow = 11.62 cfs @ 12.47 hrs, Volume= 1.408 af
Primary = 11.62 cfs @ 12.47 hrs, Volume= 1.408 af, Atten= 0%, Lag= 0.0 min

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

Link L22: L22

Hydrograph



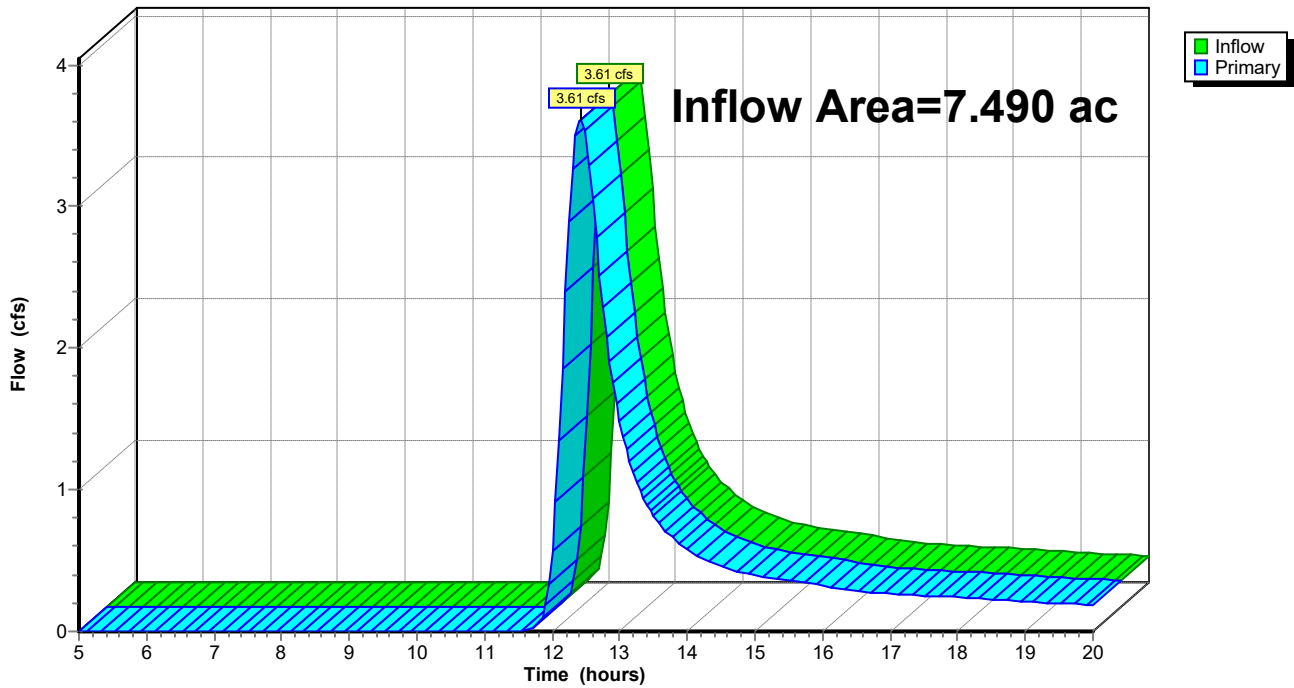
Summary for Link L23: L23

Inflow Area = 7.490 ac, 0.00% Impervious, Inflow Depth > 0.69" for 10-yr event
Inflow = 3.61 cfs @ 12.42 hrs, Volume= 0.429 af
Primary = 3.61 cfs @ 12.42 hrs, Volume= 0.429 af, Atten= 0%, Lag= 0.0 min

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

Link L23: L23

Hydrograph



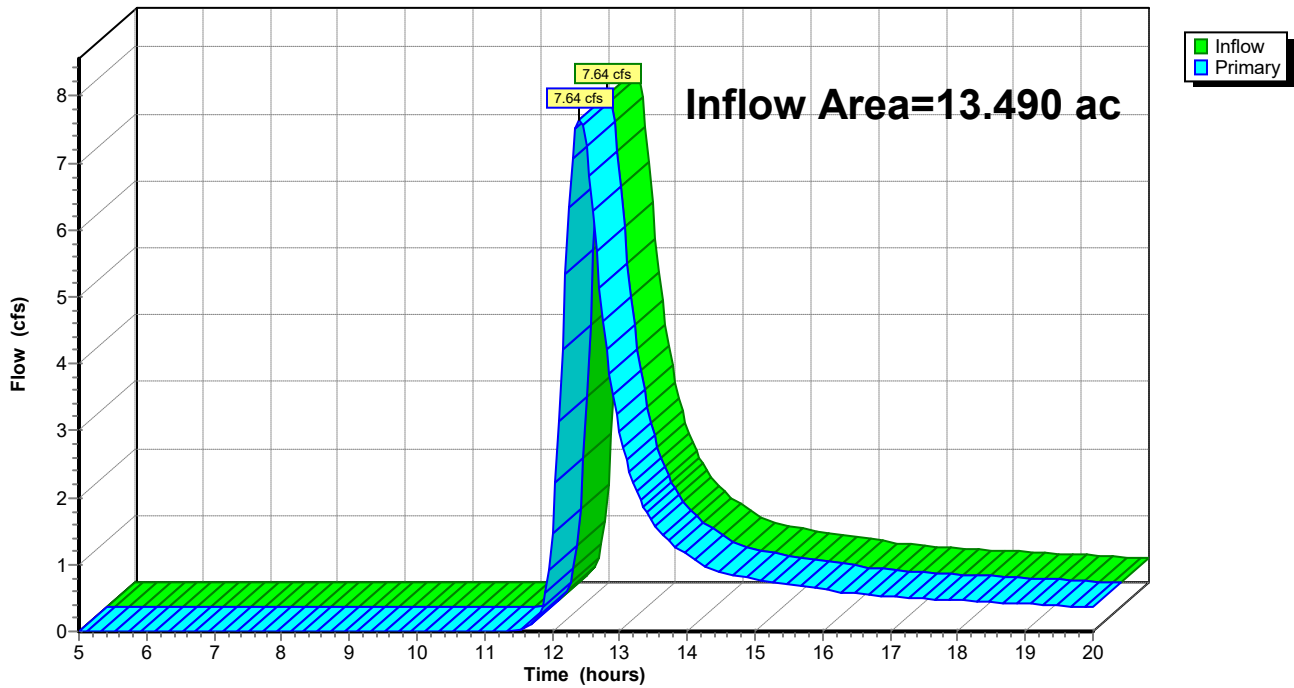
Summary for Link L24: L24

Inflow Area = 13.490 ac, 0.00% Impervious, Inflow Depth > 0.78" for 10-yr event
Inflow = 7.64 cfs @ 12.41 hrs, Volume= 0.877 af
Primary = 7.64 cfs @ 12.41 hrs, Volume= 0.877 af, Atten= 0%, Lag= 0.0 min

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

Link L24: L24

Hydrograph



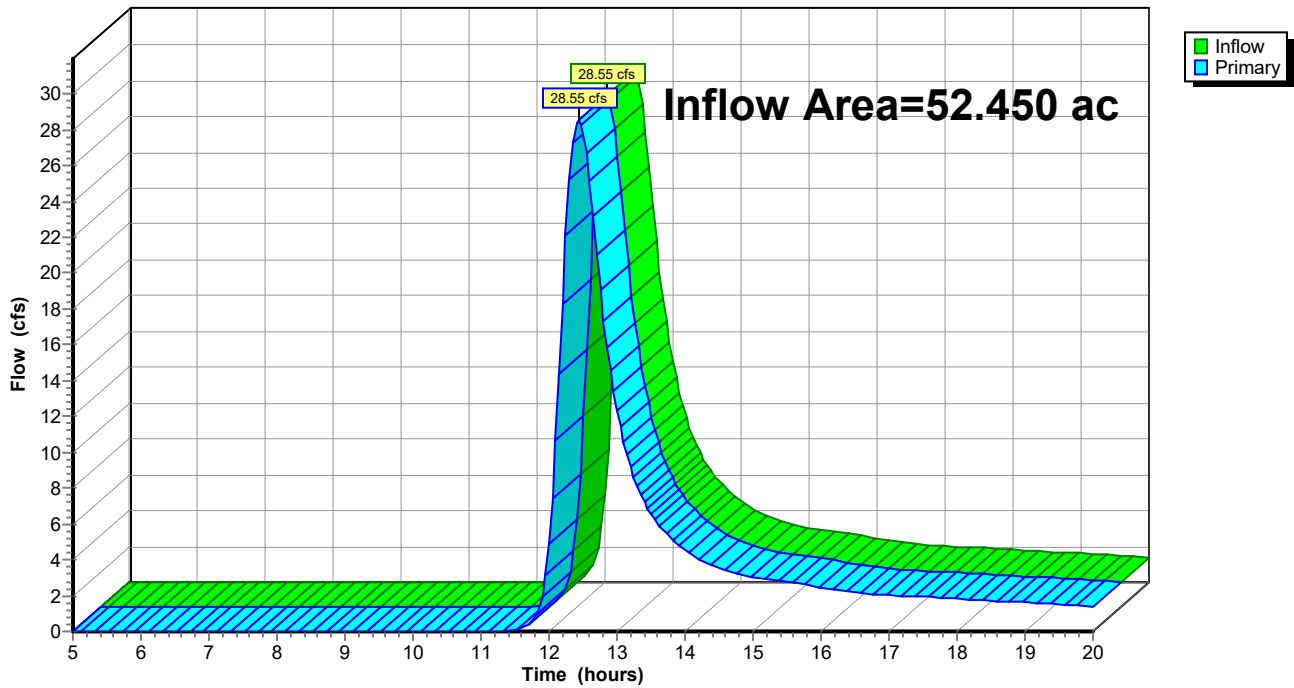
Summary for Link L25: L25

Inflow Area = 52.450 ac, 0.00% Impervious, Inflow Depth > 0.78" for 10-yr event
Inflow = 28.55 cfs @ 12.43 hrs, Volume= 3.405 af
Primary = 28.55 cfs @ 12.43 hrs, Volume= 3.405 af, Atten= 0%, Lag= 0.0 min

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

Link L25: L25

Hydrograph



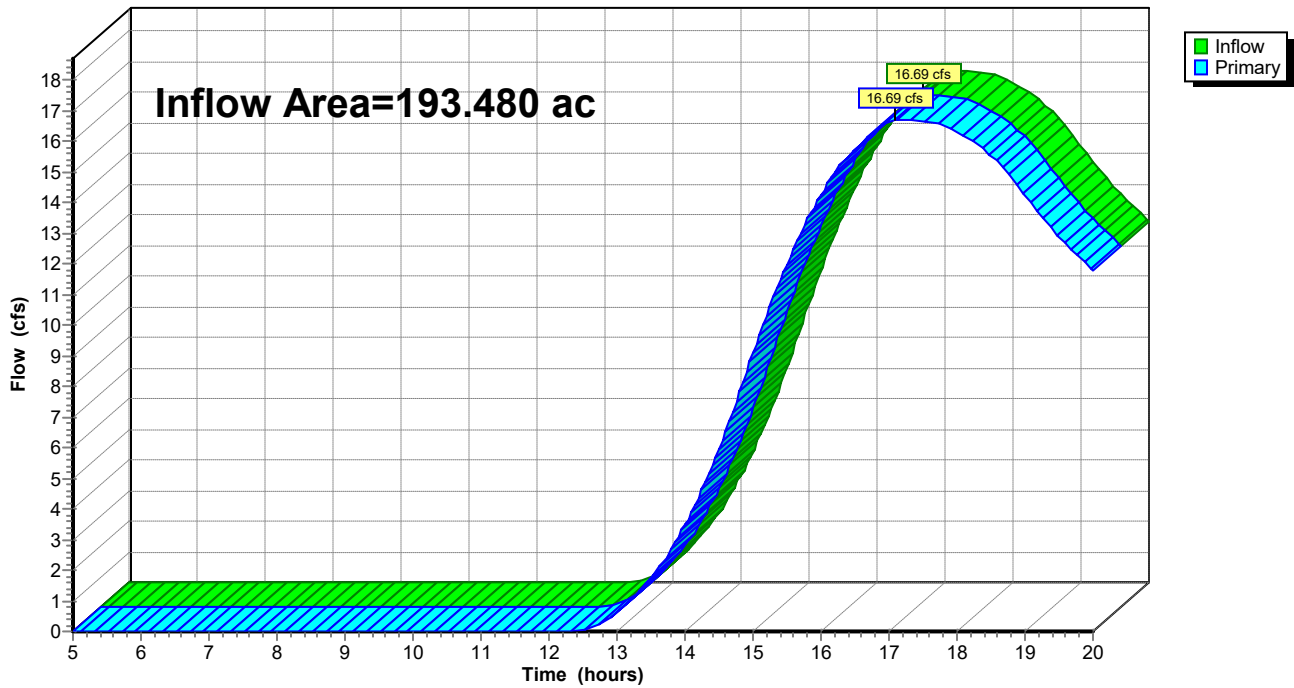
Summary for Link L26: L26

Inflow Area = 193.480 ac, 2.41% Impervious, Inflow Depth > 0.41" for 10-yr event
Inflow = 16.69 cfs @ 17.10 hrs, Volume= 6.685 af
Primary = 16.69 cfs @ 17.10 hrs, Volume= 6.685 af, Atten= 0%, Lag= 0.0 min

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

Link L26: L26

Hydrograph



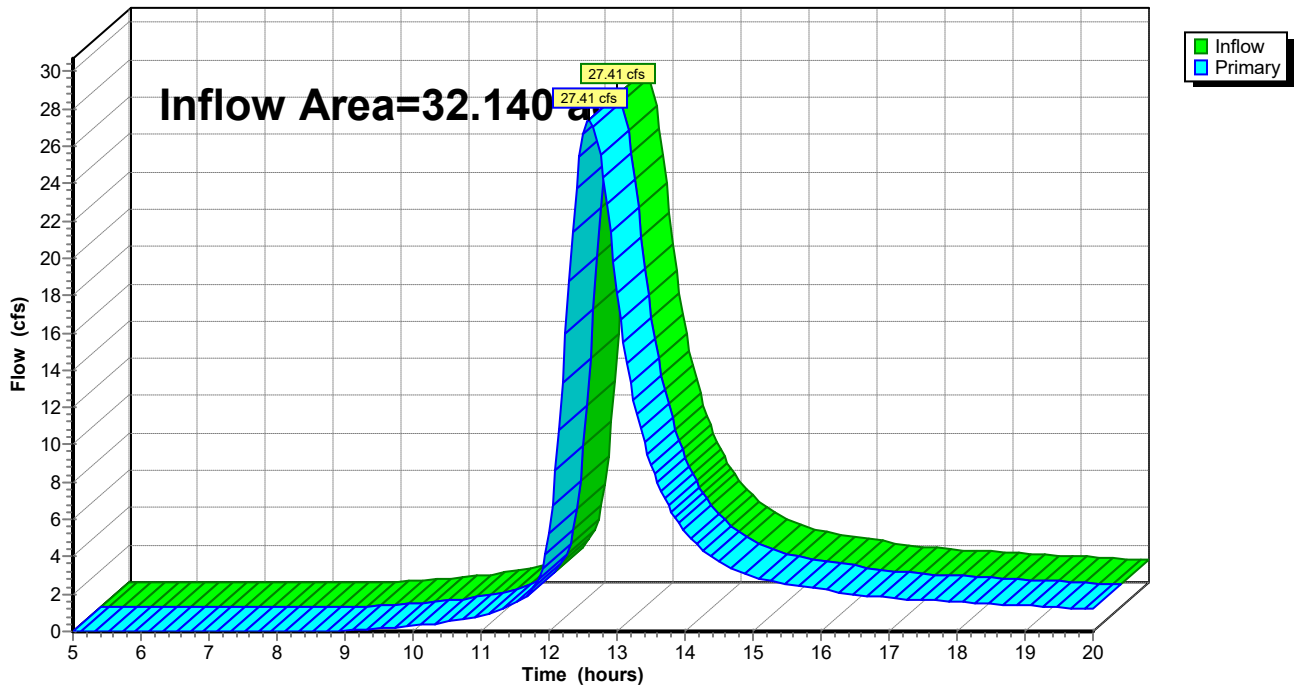
Summary for Link L27: L27

Inflow Area = 32.140 ac, 50.87% Impervious, Inflow Depth > 1.41" for 10-yr event
Inflow = 27.41 cfs @ 12.59 hrs, Volume= 3.767 af
Primary = 27.41 cfs @ 12.59 hrs, Volume= 3.767 af, Atten= 0%, Lag= 0.0 min

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

Link L27: L27

Hydrograph



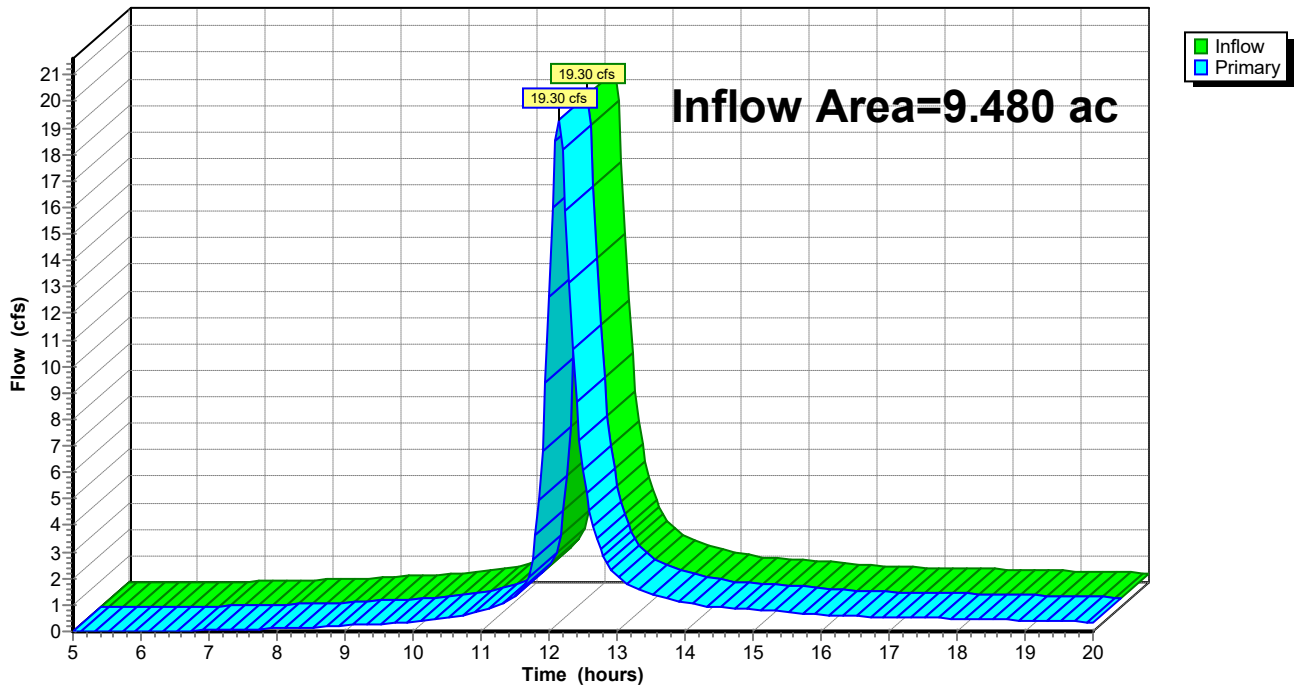
Summary for Link L28: L28

Inflow Area = 9.480 ac, 67.30% Impervious, Inflow Depth > 1.81" for 10-yr event
Inflow = 19.30 cfs @ 12.15 hrs, Volume= 1.427 af
Primary = 19.30 cfs @ 12.15 hrs, Volume= 1.427 af, Atten= 0%, Lag= 0.0 min

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

Link L28: L28

Hydrograph



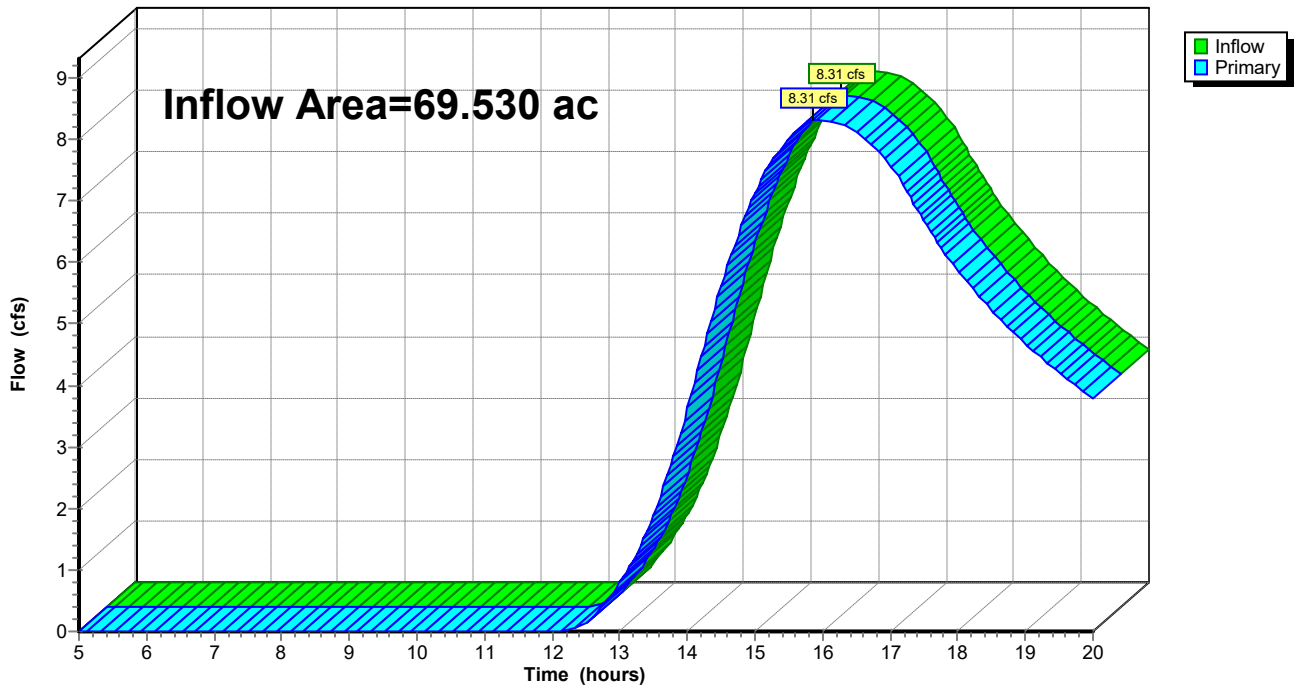
Summary for Link L29: L29

Inflow Area = 69.530 ac, 10.00% Impervious, Inflow Depth > 0.57" for 10-yr event
Inflow = 8.31 cfs @ 15.86 hrs, Volume= 3.306 af
Primary = 8.31 cfs @ 15.86 hrs, Volume= 3.306 af, Atten= 0%, Lag= 0.0 min

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

Link L29: L29

Hydrograph



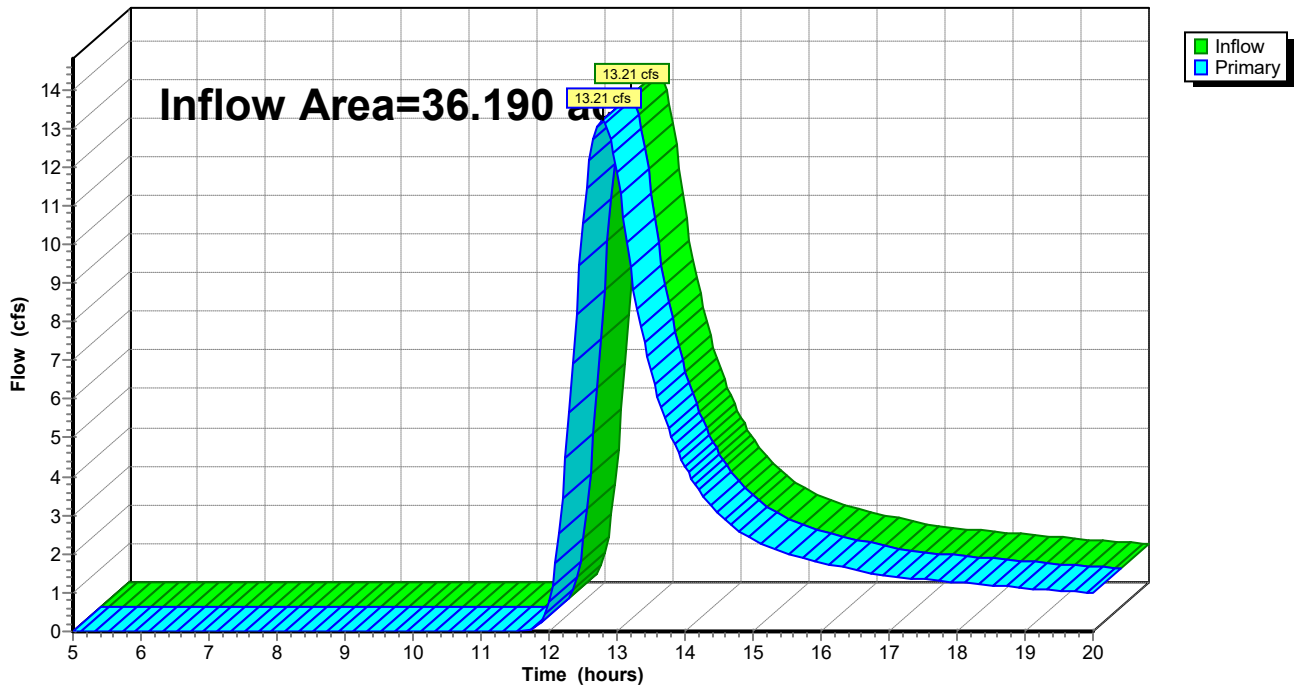
Summary for Link L30: L30

Inflow Area = 36.190 ac, 5.11% Impervious, Inflow Depth > 0.72" for 10-yr event
Inflow = 13.21 cfs @ 12.78 hrs, Volume= 2.179 af
Primary = 13.21 cfs @ 12.78 hrs, Volume= 2.179 af, Atten= 0%, Lag= 0.0 min

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

Link L30: L30

Hydrograph



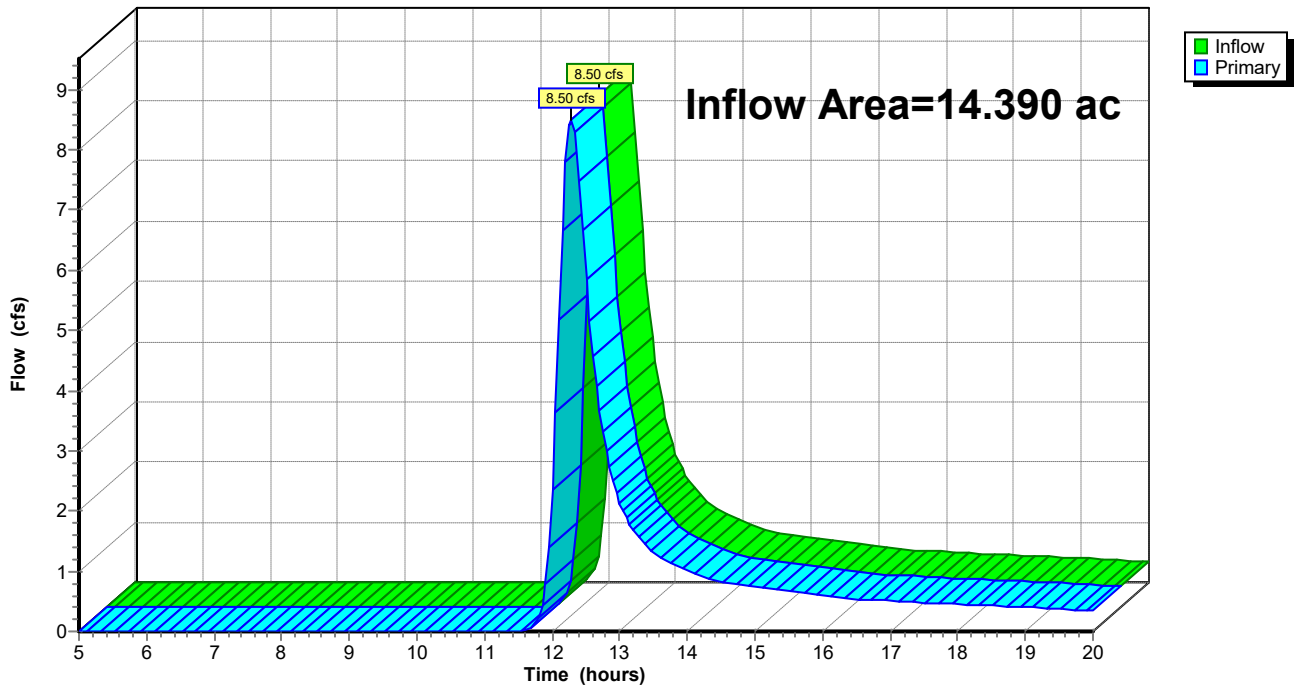
Summary for Link L31: L31

Inflow Area = 14.390 ac, 6.74% Impervious, Inflow Depth > 0.69" for 10-yr event
Inflow = 8.50 cfs @ 12.28 hrs, Volume= 0.829 af
Primary = 8.50 cfs @ 12.28 hrs, Volume= 0.829 af, Atten= 0%, Lag= 0.0 min

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

Link L31: L31

Hydrograph



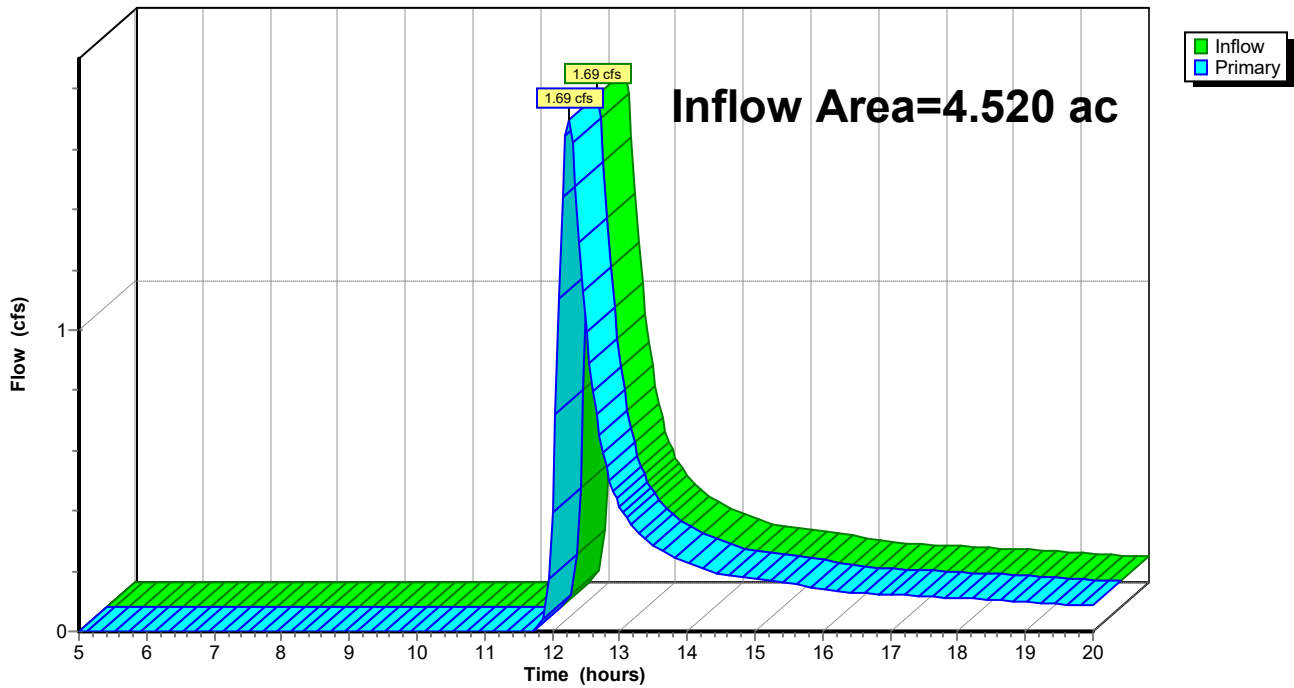
Summary for Link L32: L32

Inflow Area = 4.520 ac, 9.29% Impervious, Inflow Depth > 0.45" for 10-yr event
Inflow = 1.69 cfs @ 12.25 hrs, Volume= 0.171 af
Primary = 1.69 cfs @ 12.25 hrs, Volume= 0.171 af, Atten= 0%, Lag= 0.0 min

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

Link L32: L32

Hydrograph



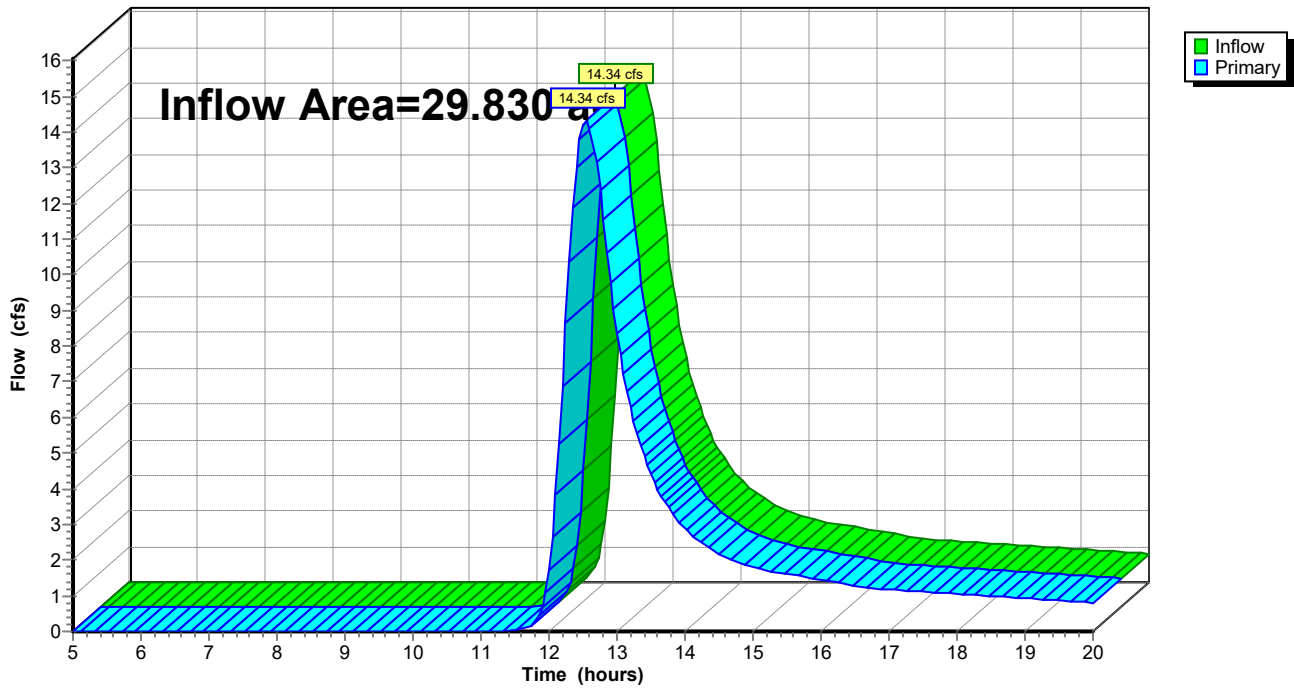
Summary for Link L33: L33

Inflow Area = 29.830 ac, 18.91% Impervious, Inflow Depth > 0.78" for 10-yr event
Inflow = 14.34 cfs @ 12.55 hrs, Volume= 1.928 af
Primary = 14.34 cfs @ 12.55 hrs, Volume= 1.928 af, Atten= 0%, Lag= 0.0 min

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

Link L33: L33

Hydrograph



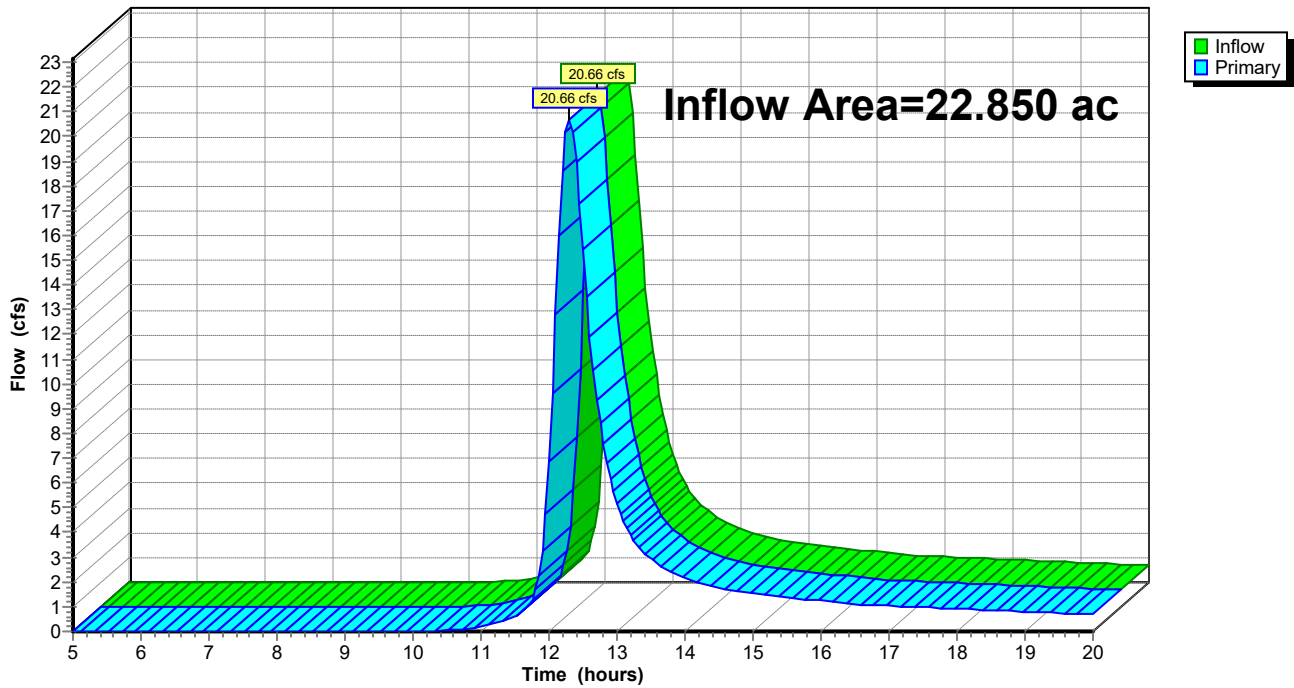
Summary for Link L34: L34

Inflow Area = 22.850 ac, 37.33% Impervious, Inflow Depth > 1.04" for 10-yr event
Inflow = 20.66 cfs @ 12.30 hrs, Volume= 1.986 af
Primary = 20.66 cfs @ 12.30 hrs, Volume= 1.986 af, Atten= 0%, Lag= 0.0 min

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

Link L34: L34

Hydrograph



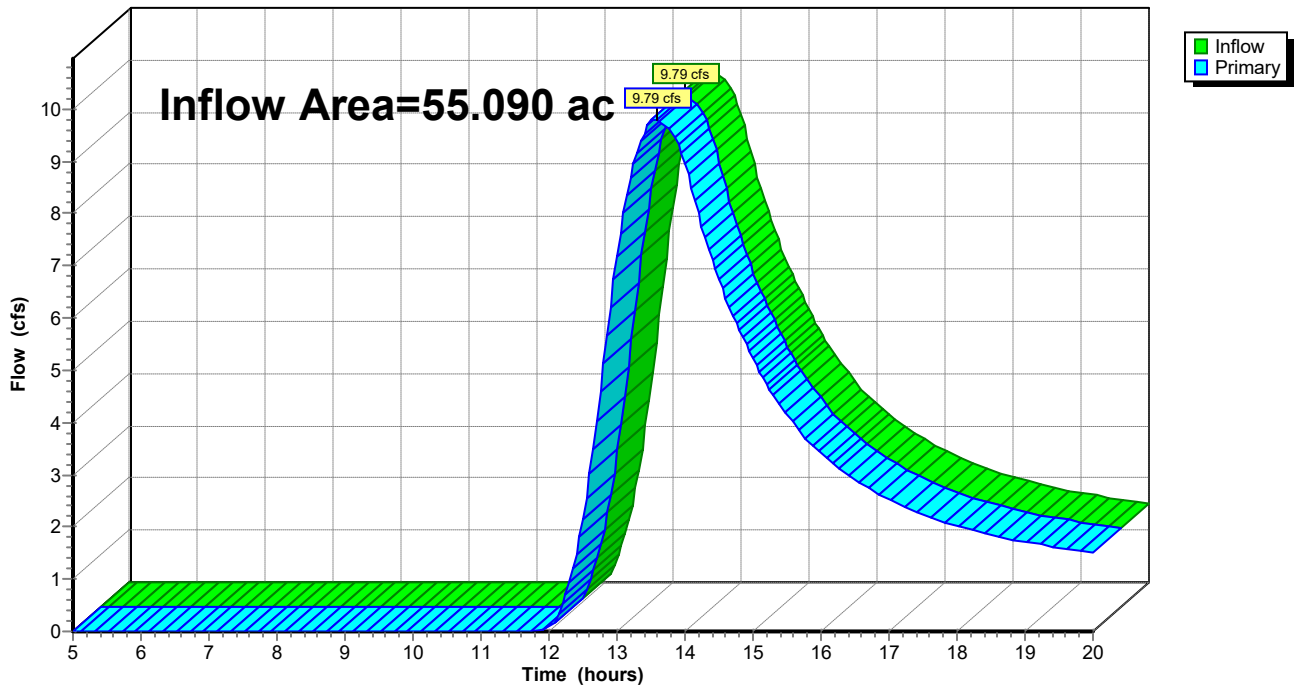
Summary for Link L35: L35

Inflow Area = 55.090 ac, 6.23% Impervious, Inflow Depth > 0.57" for 10-yr event
Inflow = 9.79 cfs @ 13.58 hrs, Volume= 2.615 af
Primary = 9.79 cfs @ 13.58 hrs, Volume= 2.615 af, Atten= 0%, Lag= 0.0 min

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

Link L35: L35

Hydrograph



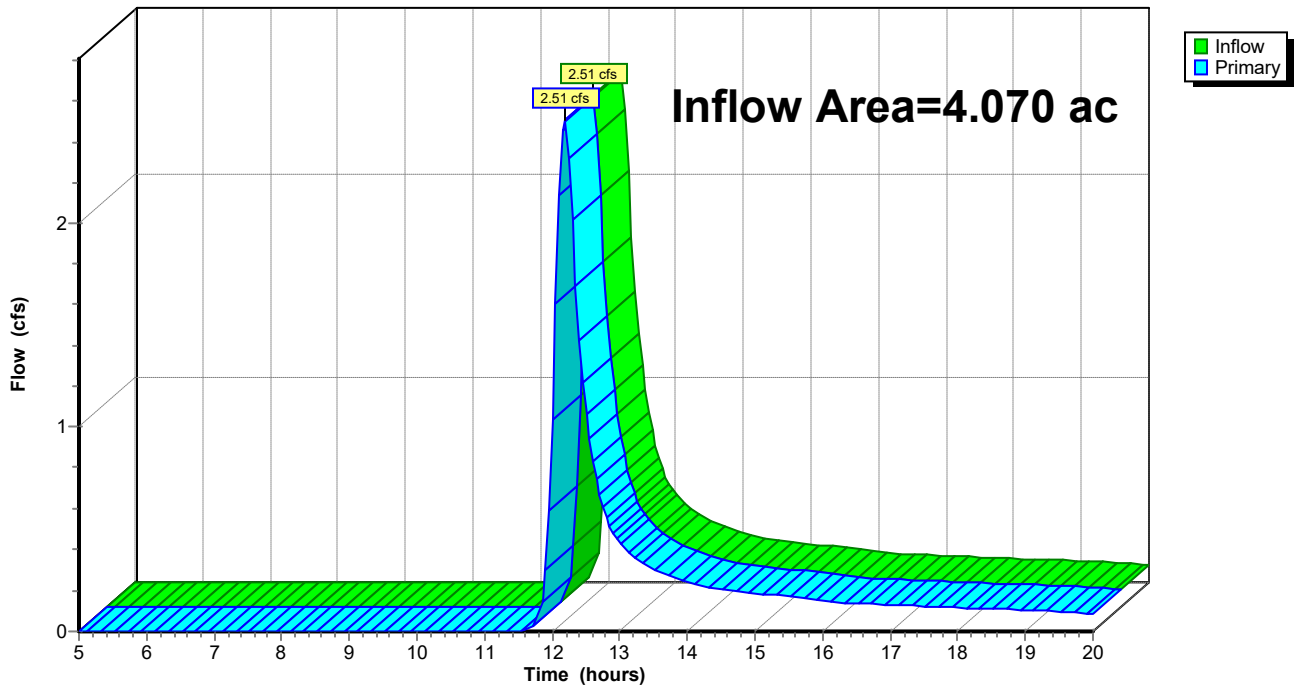
Summary for Link L36: L36

Inflow Area = 4.070 ac, 1.72% Impervious, Inflow Depth > 0.61" for 10-yr event
Inflow = 2.51 cfs @ 12.18 hrs, Volume= 0.206 af
Primary = 2.51 cfs @ 12.18 hrs, Volume= 0.206 af, Atten= 0%, Lag= 0.0 min

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

Link L36: L36

Hydrograph



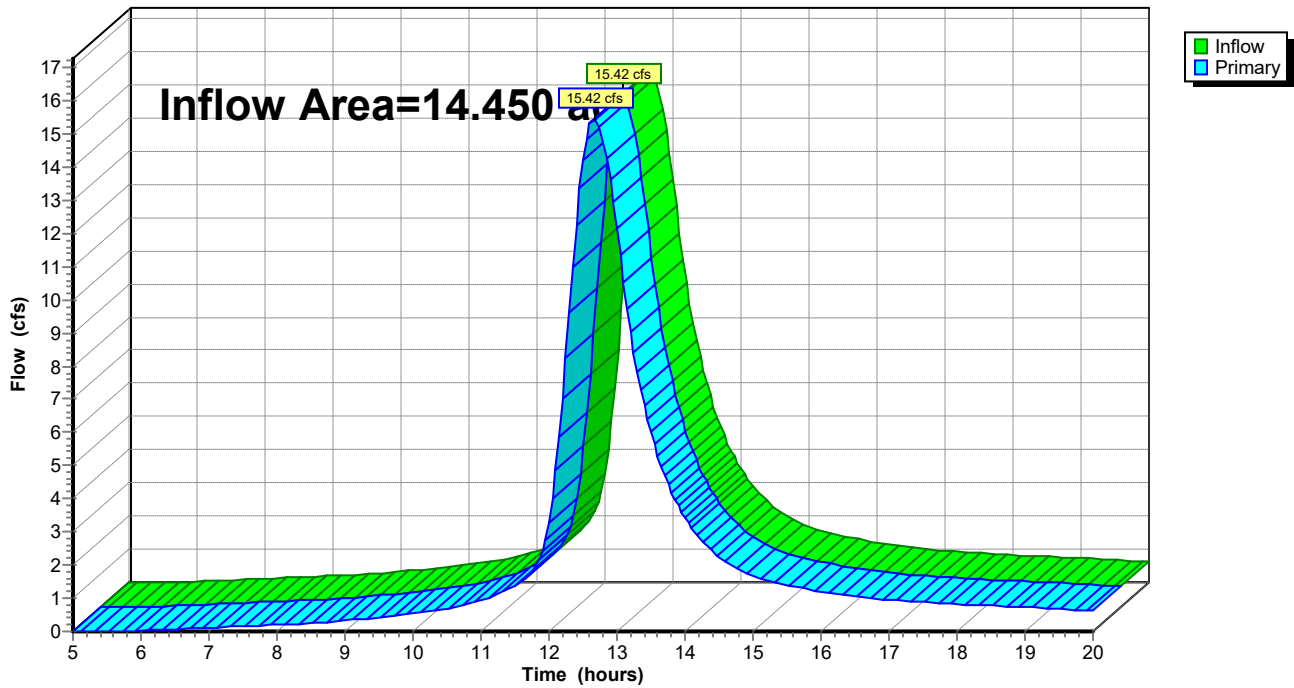
Summary for Link L37: L37

Inflow Area = 14.450 ac, 76.06% Impervious, Inflow Depth > 1.95" for 10-yr event
Inflow = 15.42 cfs @ 12.67 hrs, Volume= 2.348 af
Primary = 15.42 cfs @ 12.67 hrs, Volume= 2.348 af, Atten= 0%, Lag= 0.0 min

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

Link L37: L37

Hydrograph



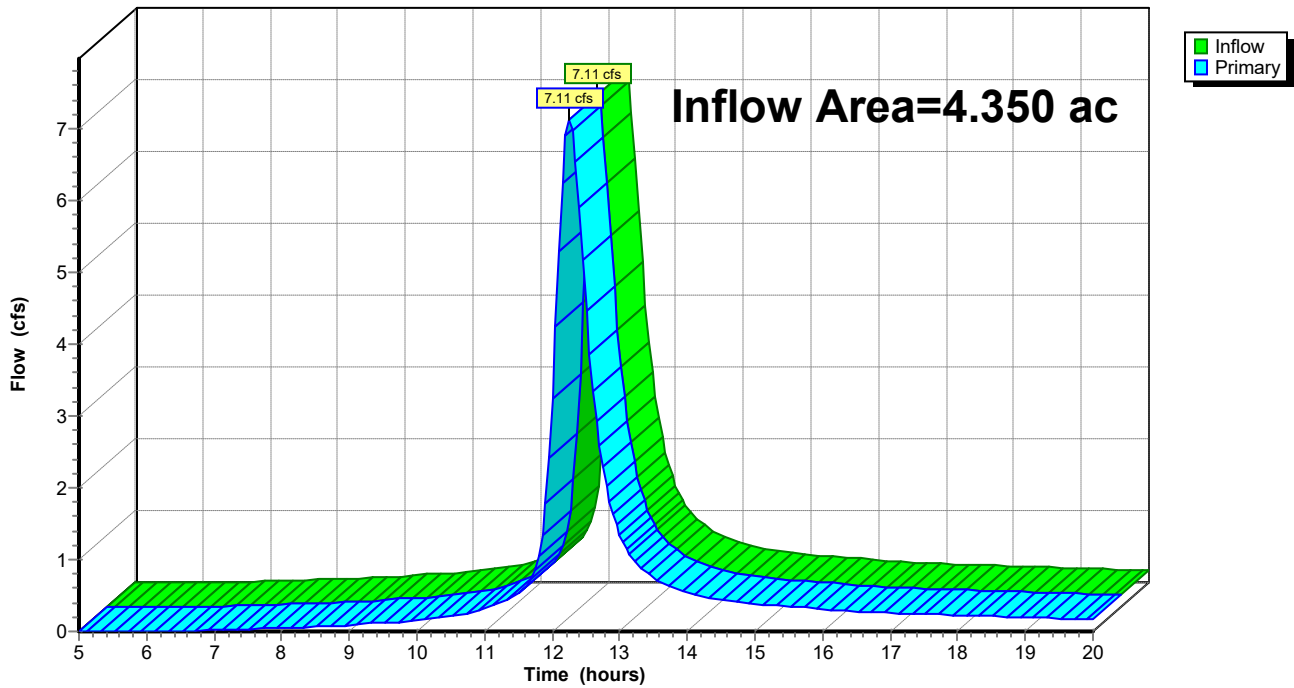
Summary for Link L38: L38

Inflow Area = 4.350 ac, 69.20% Impervious, Inflow Depth > 1.80" for 10-yr event
Inflow = 7.11 cfs @ 12.25 hrs, Volume= 0.653 af
Primary = 7.11 cfs @ 12.25 hrs, Volume= 0.653 af, Atten= 0%, Lag= 0.0 min

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

Link L38: L38

Hydrograph



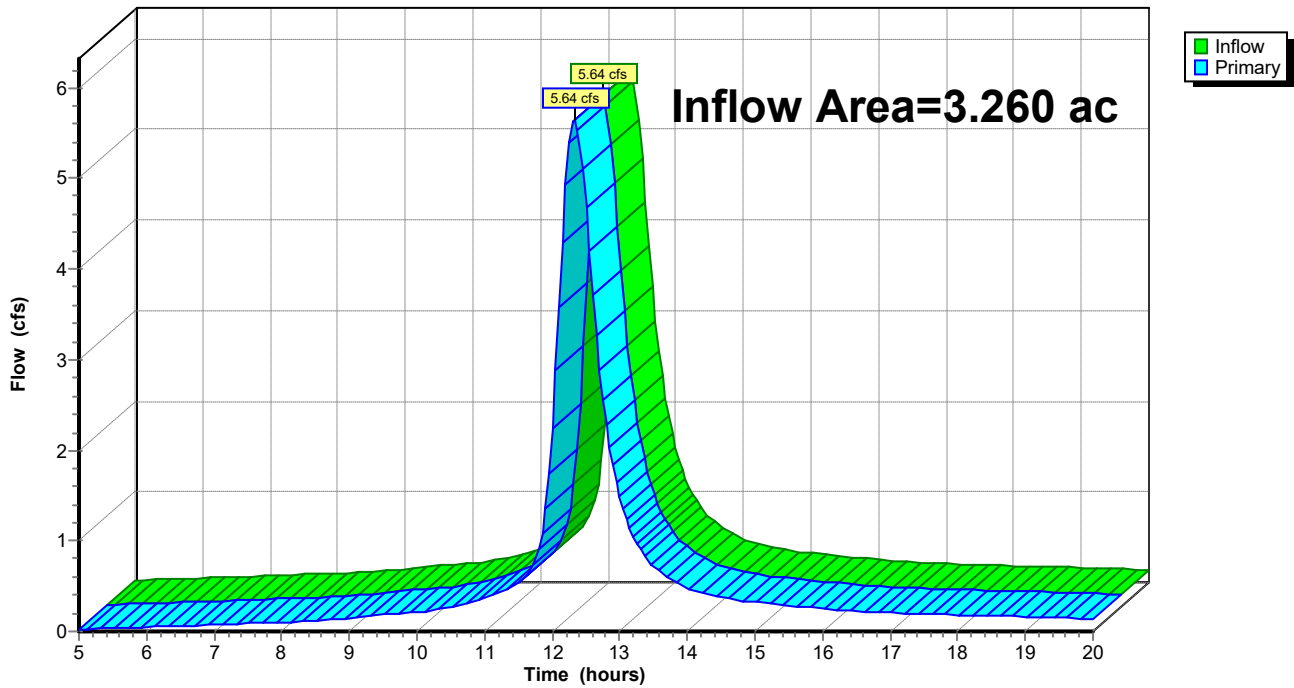
Summary for Link L39: L39

Inflow Area = 3.260 ac, 88.04% Impervious, Inflow Depth > 2.24" for 10-yr event
Inflow = 5.64 cfs @ 12.33 hrs, Volume= 0.610 af
Primary = 5.64 cfs @ 12.33 hrs, Volume= 0.610 af, Atten= 0%, Lag= 0.0 min

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

Link L39: L39

Hydrograph



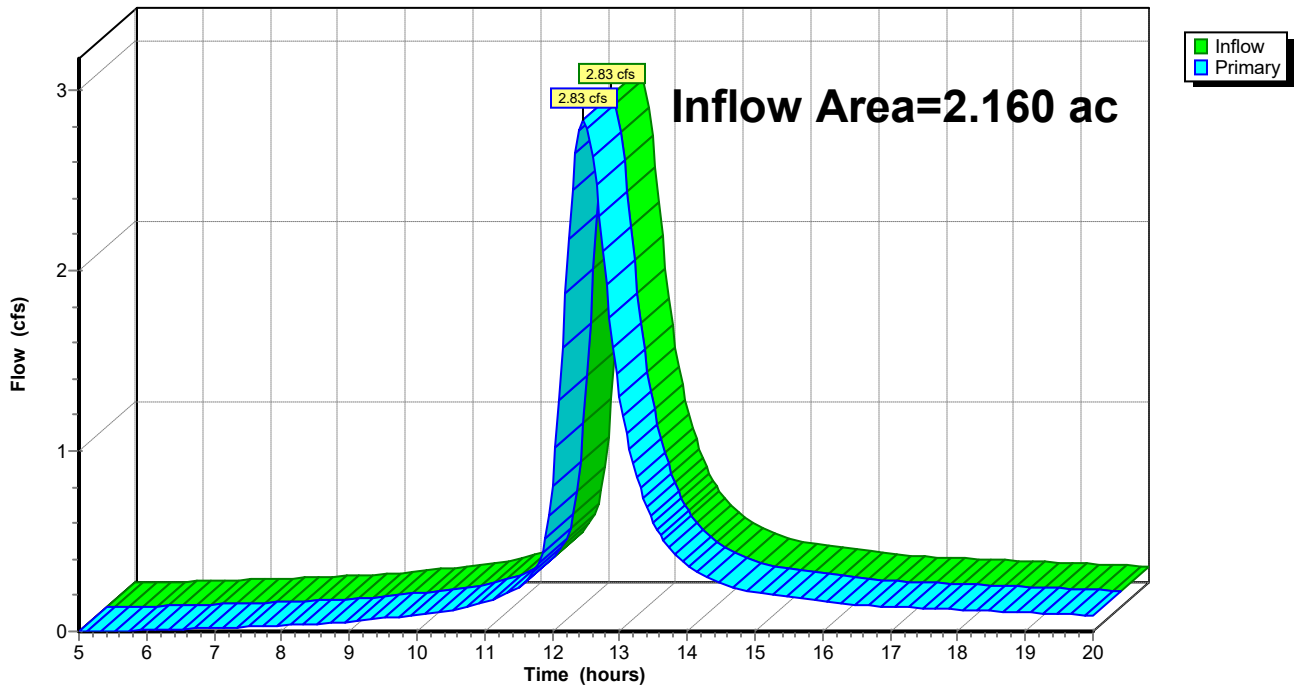
Summary for Link L40: L40

Inflow Area = 2.160 ac, 75.46% Impervious, Inflow Depth > 1.96" for 10-yr event
Inflow = 2.83 cfs @ 12.47 hrs, Volume= 0.353 af
Primary = 2.83 cfs @ 12.47 hrs, Volume= 0.353 af, Atten= 0%, Lag= 0.0 min

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

Link L40: L40

Hydrograph



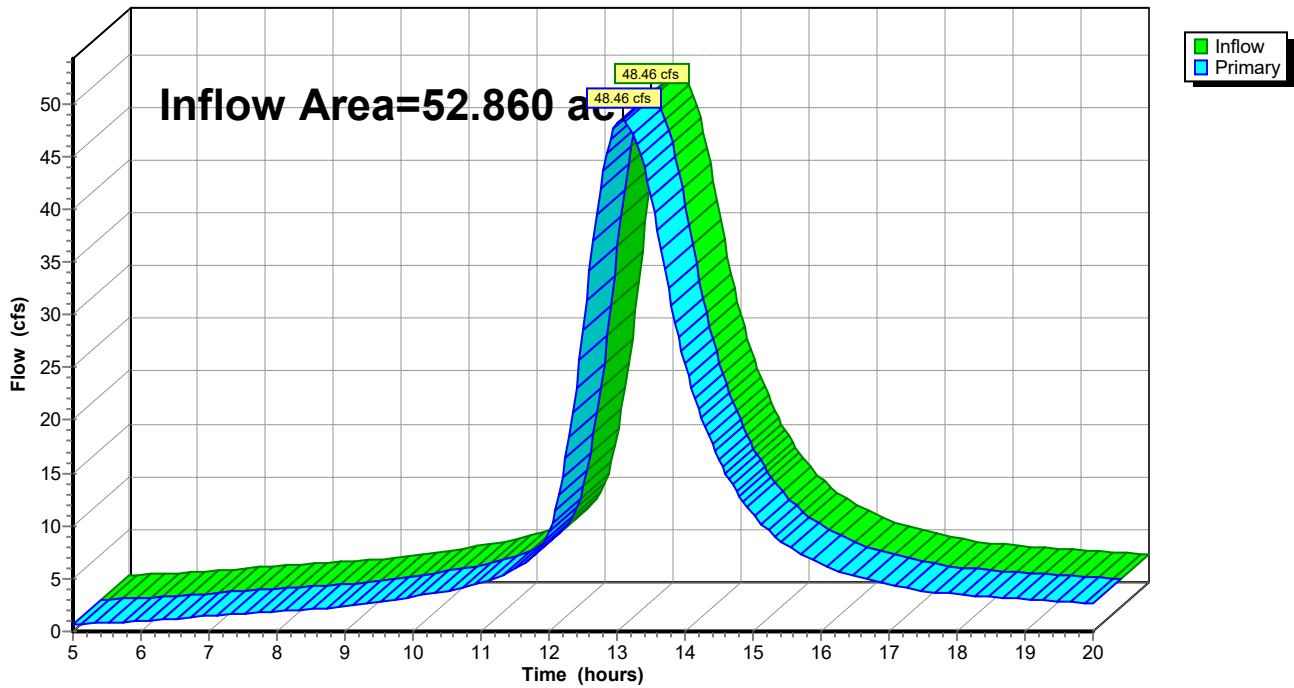
Summary for Link L41: L41

Inflow Area = 52.860 ac, 97.14% Impervious, Inflow Depth > 2.40" for 10-yr event
Inflow = 48.46 cfs @ 13.09 hrs, Volume= 10.567 af
Primary = 48.46 cfs @ 13.09 hrs, Volume= 10.567 af, Atten= 0%, Lag= 0.0 min

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

Link L41: L41

Hydrograph



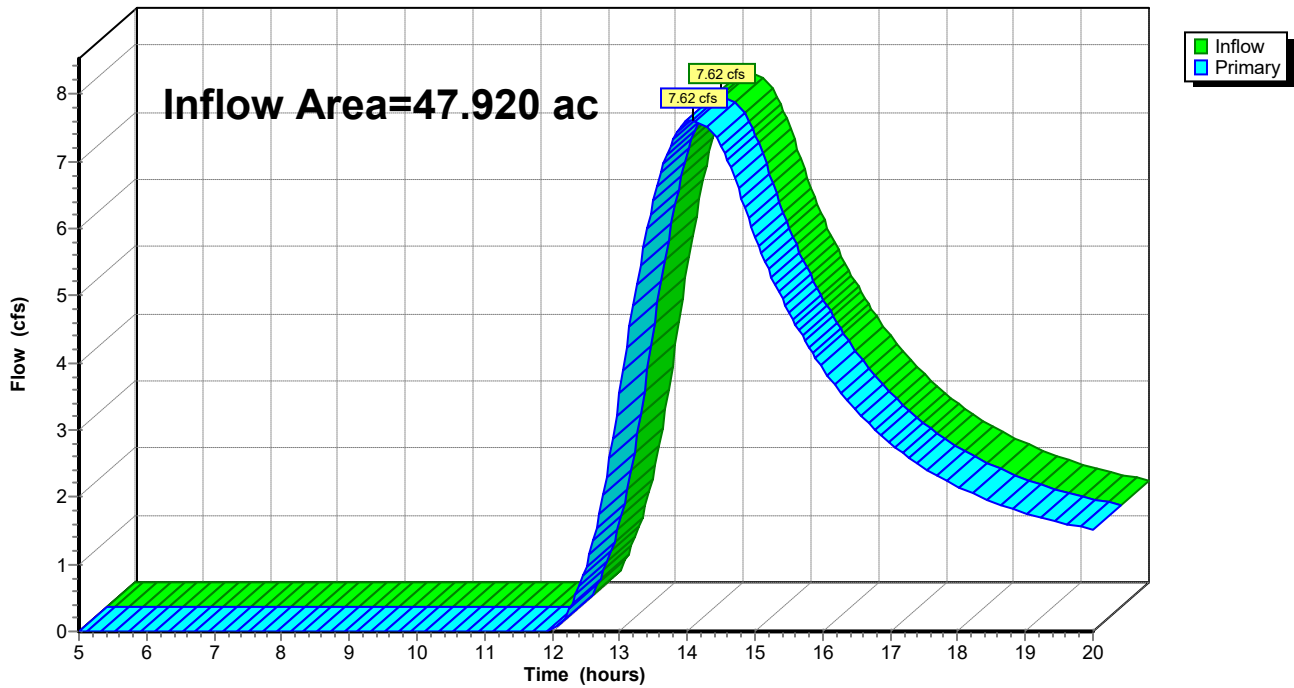
Summary for Link L42: L42

Inflow Area = 47.920 ac, 2.19% Impervious, Inflow Depth > 0.59" for 10-yr event
Inflow = 7.62 cfs @ 14.09 hrs, Volume= 2.365 af
Primary = 7.62 cfs @ 14.09 hrs, Volume= 2.365 af, Atten= 0%, Lag= 0.0 min

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

Link L42: L42

Hydrograph



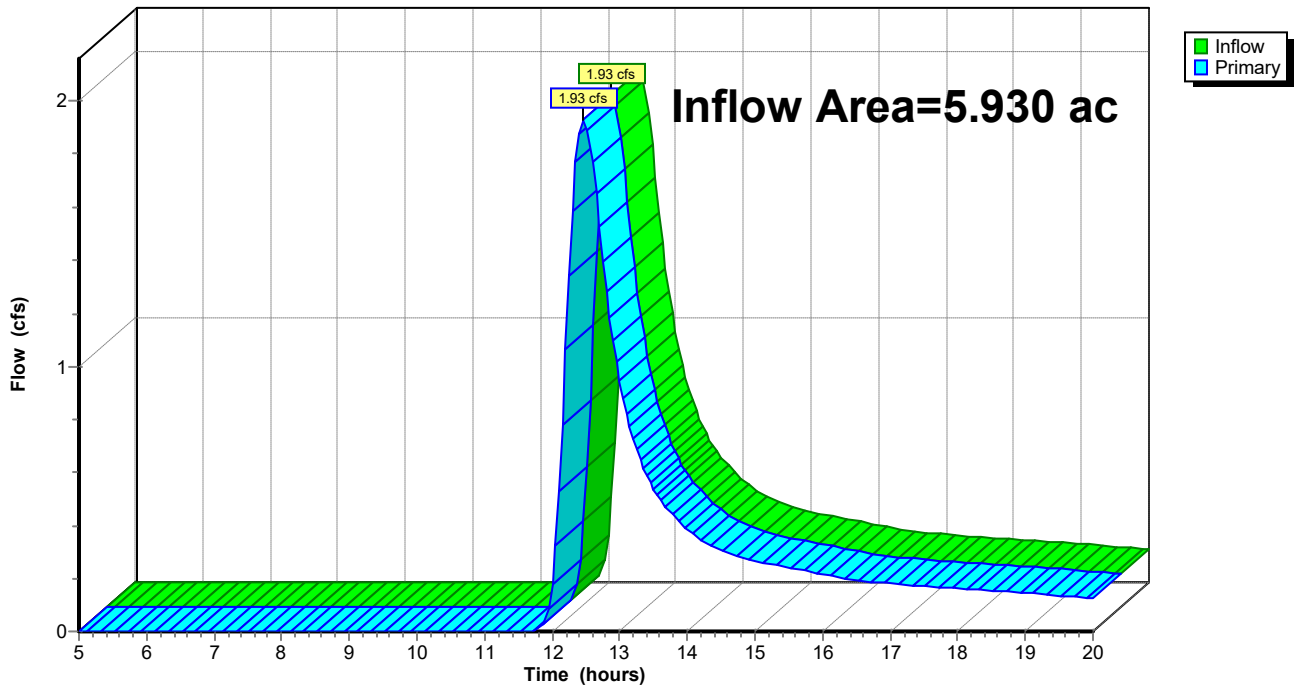
Summary for Link L43: L43

Inflow Area = 5.930 ac, 0.00% Impervious, Inflow Depth > 0.52" for 10-yr event
Inflow = 1.93 cfs @ 12.47 hrs, Volume= 0.258 af
Primary = 1.93 cfs @ 12.47 hrs, Volume= 0.258 af, Atten= 0%, Lag= 0.0 min

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

Link L43: L43

Hydrograph



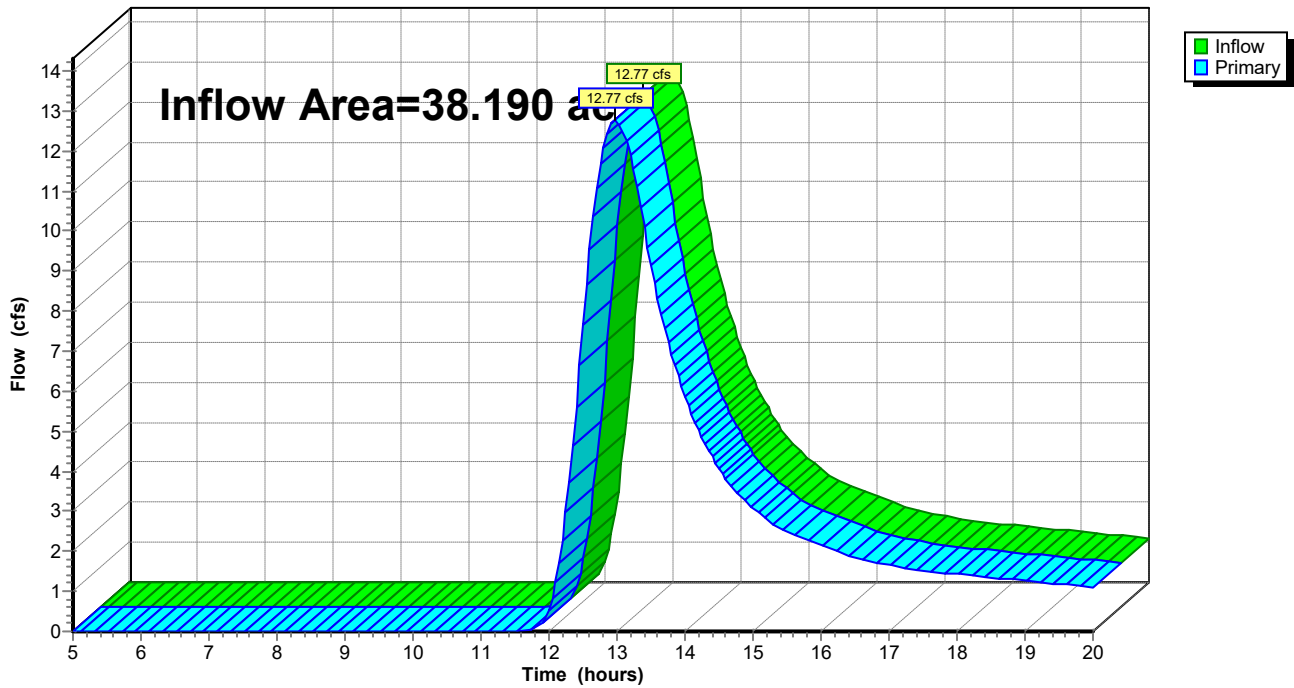
Summary for Link L44: L44

Inflow Area = 38.190 ac, 2.78% Impervious, Inflow Depth > 0.76" for 10-yr event
Inflow = 12.77 cfs @ 12.96 hrs, Volume= 2.425 af
Primary = 12.77 cfs @ 12.96 hrs, Volume= 2.425 af, Atten= 0%, Lag= 0.0 min

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

Link L44: L44

Hydrograph



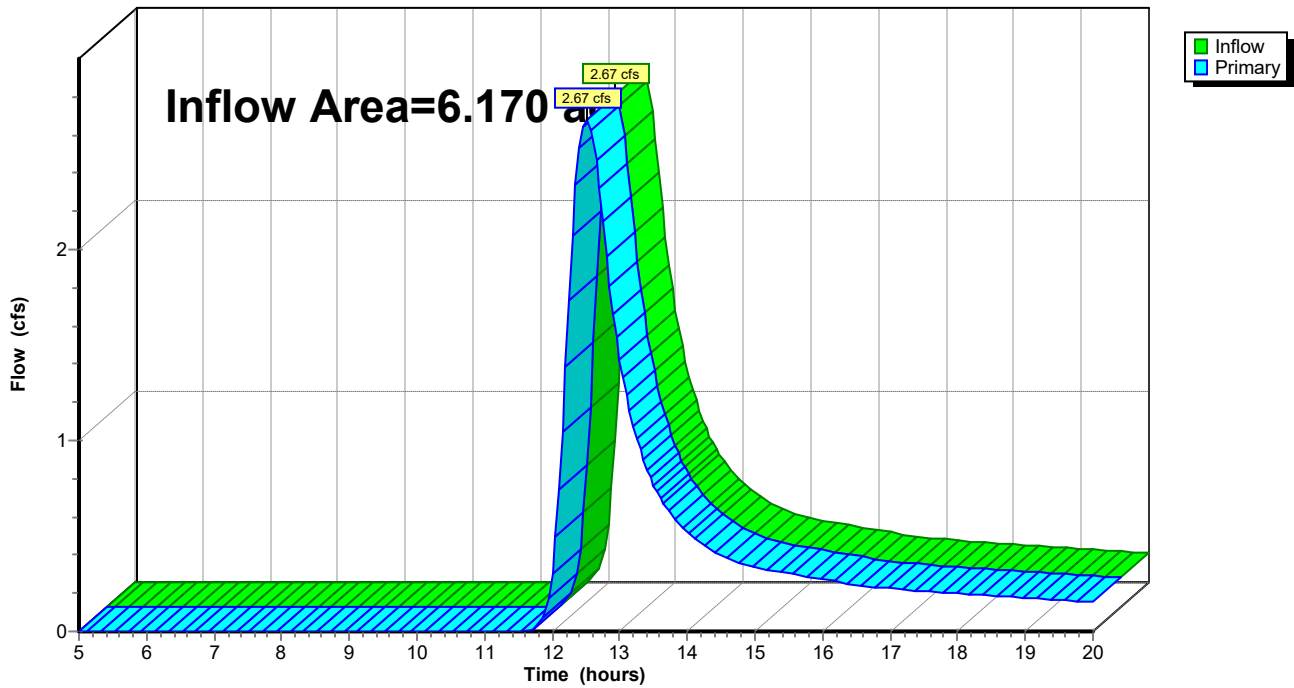
Summary for Link L45: L45

Inflow Area = 6.170 ac, 0.00% Impervious, Inflow Depth > 0.69" for 10-yr event
Inflow = 2.67 cfs @ 12.51 hrs, Volume= 0.352 af
Primary = 2.67 cfs @ 12.51 hrs, Volume= 0.352 af, Atten= 0%, Lag= 0.0 min

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

Link L45: L45

Hydrograph



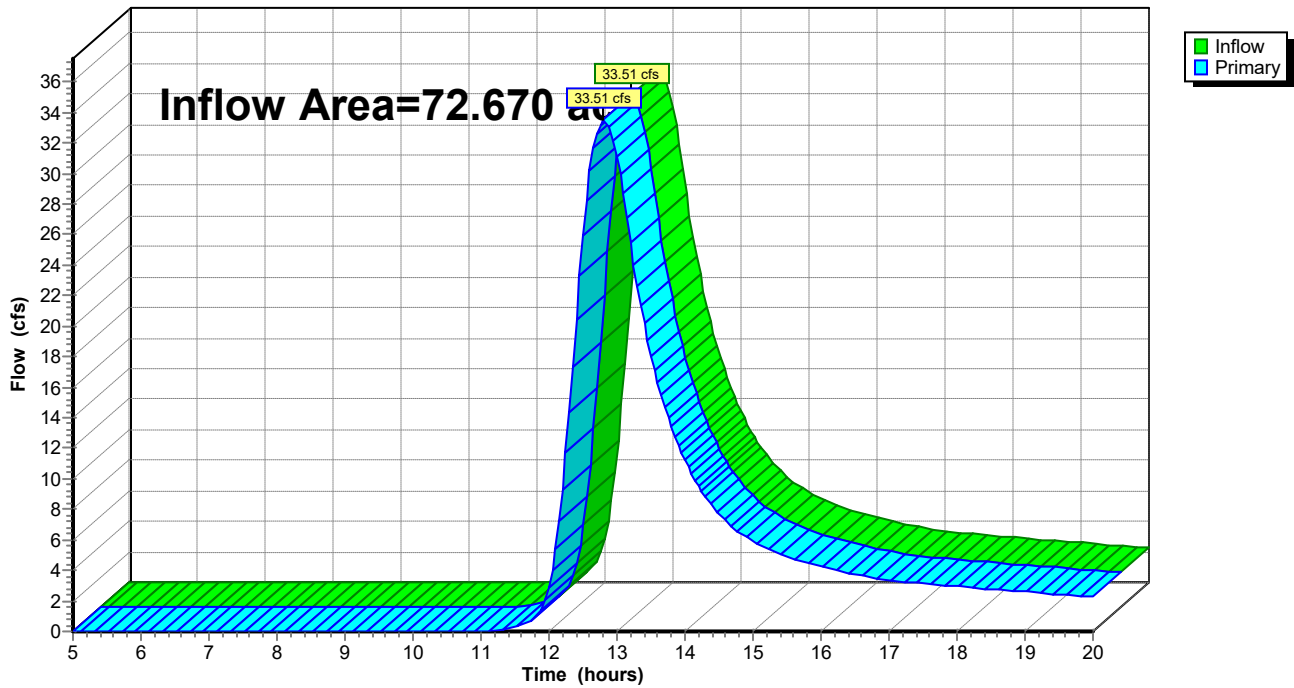
Summary for Link L46: L46

Inflow Area = 72.670 ac, 0.00% Impervious, Inflow Depth > 0.92" for 10-yr event
Inflow = 33.51 cfs @ 12.80 hrs, Volume= 5.547 af
Primary = 33.51 cfs @ 12.80 hrs, Volume= 5.547 af, Atten= 0%, Lag= 0.0 min

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

Link L46: L46

Hydrograph



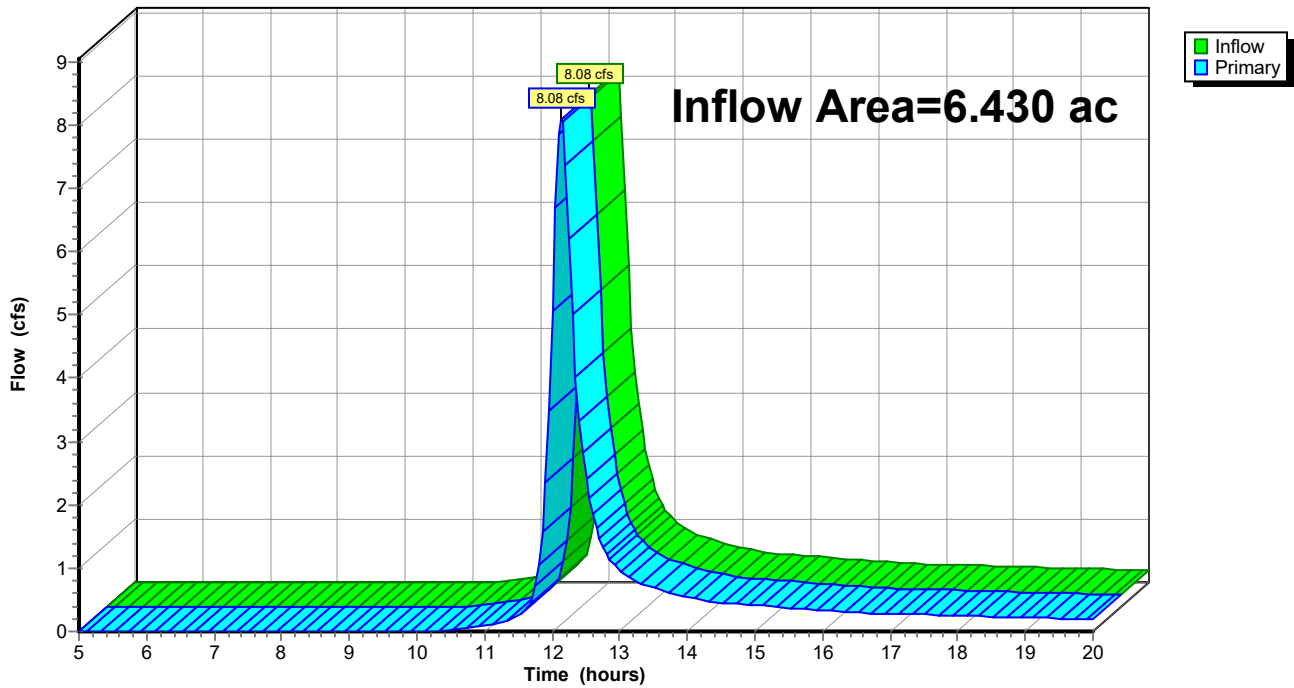
Summary for Link L47: L47

Inflow Area = 6.430 ac, 0.00% Impervious, Inflow Depth > 1.05" for 10-yr event
Inflow = 8.08 cfs @ 12.14 hrs, Volume= 0.562 af
Primary = 8.08 cfs @ 12.14 hrs, Volume= 0.562 af, Atten= 0%, Lag= 0.0 min

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

Link L47: L47

Hydrograph



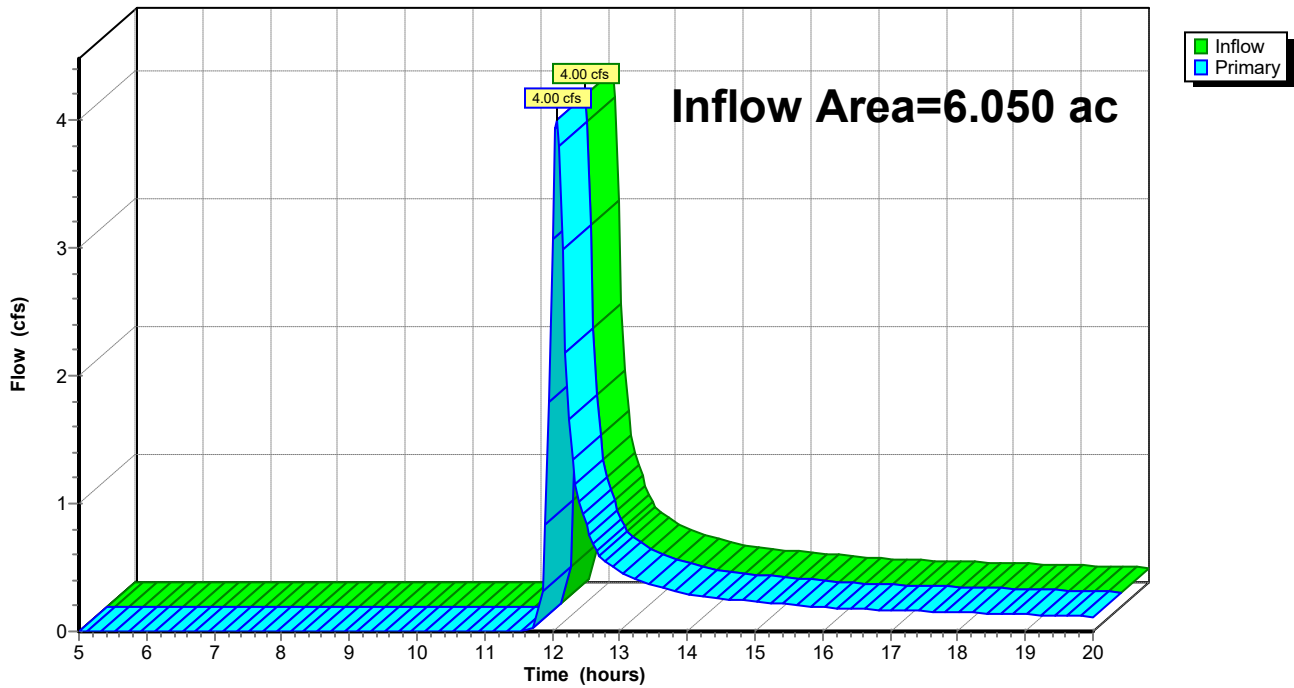
Summary for Link L48: L48

Inflow Area = 6.050 ac, 0.00% Impervious, Inflow Depth > 0.49" for 10-yr event
Inflow = 4.00 cfs @ 12.07 hrs, Volume= 0.249 af
Primary = 4.00 cfs @ 12.07 hrs, Volume= 0.249 af, Atten= 0%, Lag= 0.0 min

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

Link L48: L48

Hydrograph



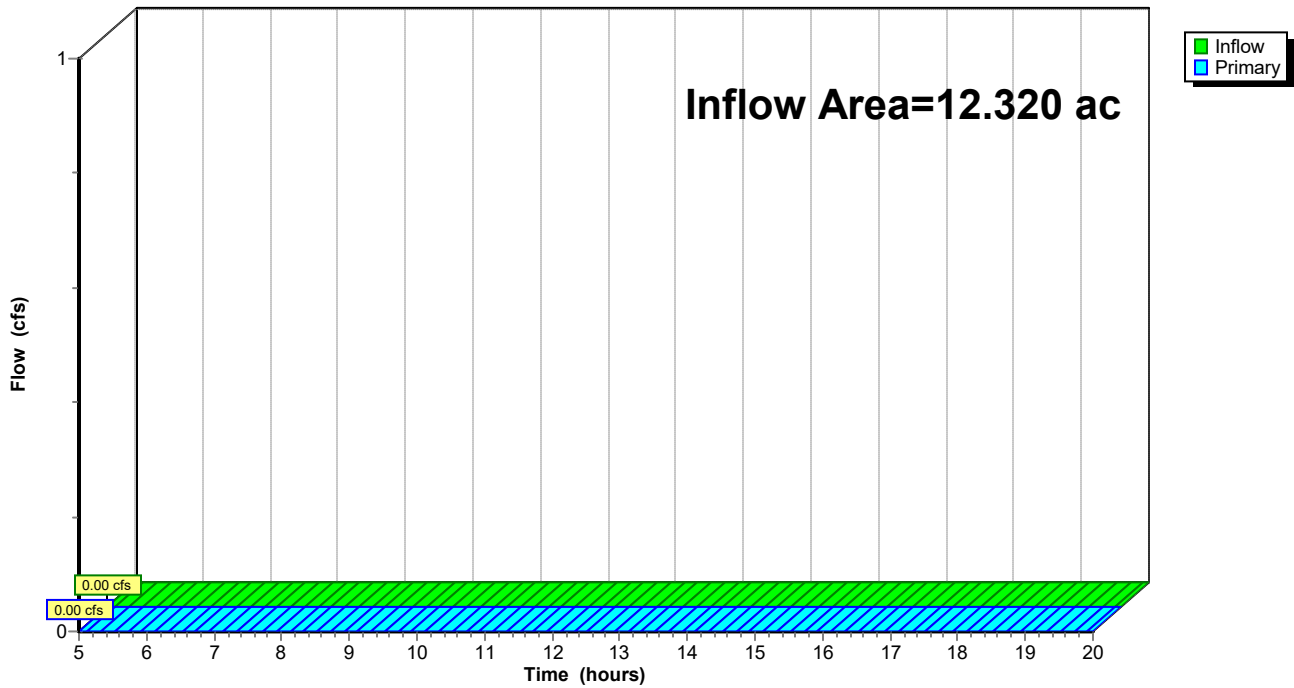
Summary for Link L49: L49

Inflow Area = 12.320 ac, 0.00% Impervious, Inflow Depth = 0.00" for 10-yr event
Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

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

Link L49: L49

Hydrograph



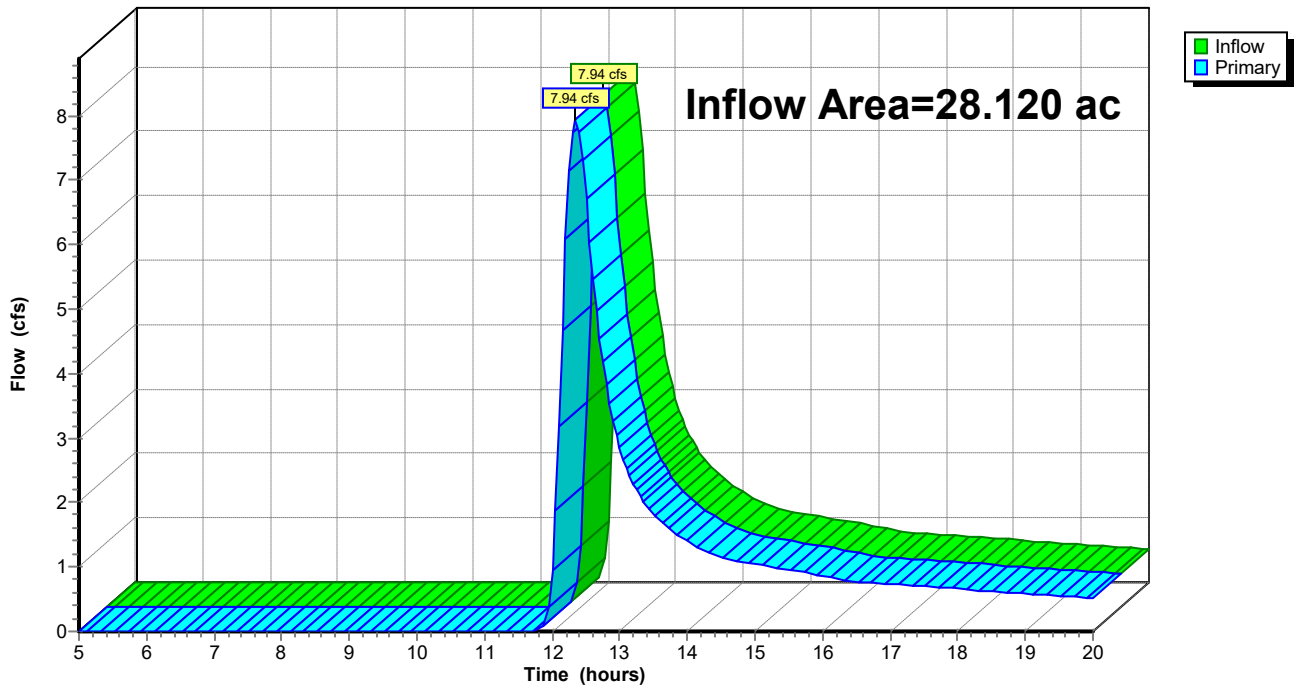
Summary for Link L50: L50

Inflow Area = 28.120 ac, 0.00% Impervious, Inflow Depth > 0.42" for 10-yr event
Inflow = 7.94 cfs @ 12.35 hrs, Volume= 0.977 af
Primary = 7.94 cfs @ 12.35 hrs, Volume= 0.977 af, Atten= 0%, Lag= 0.0 min

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

Link L50: L50

Hydrograph



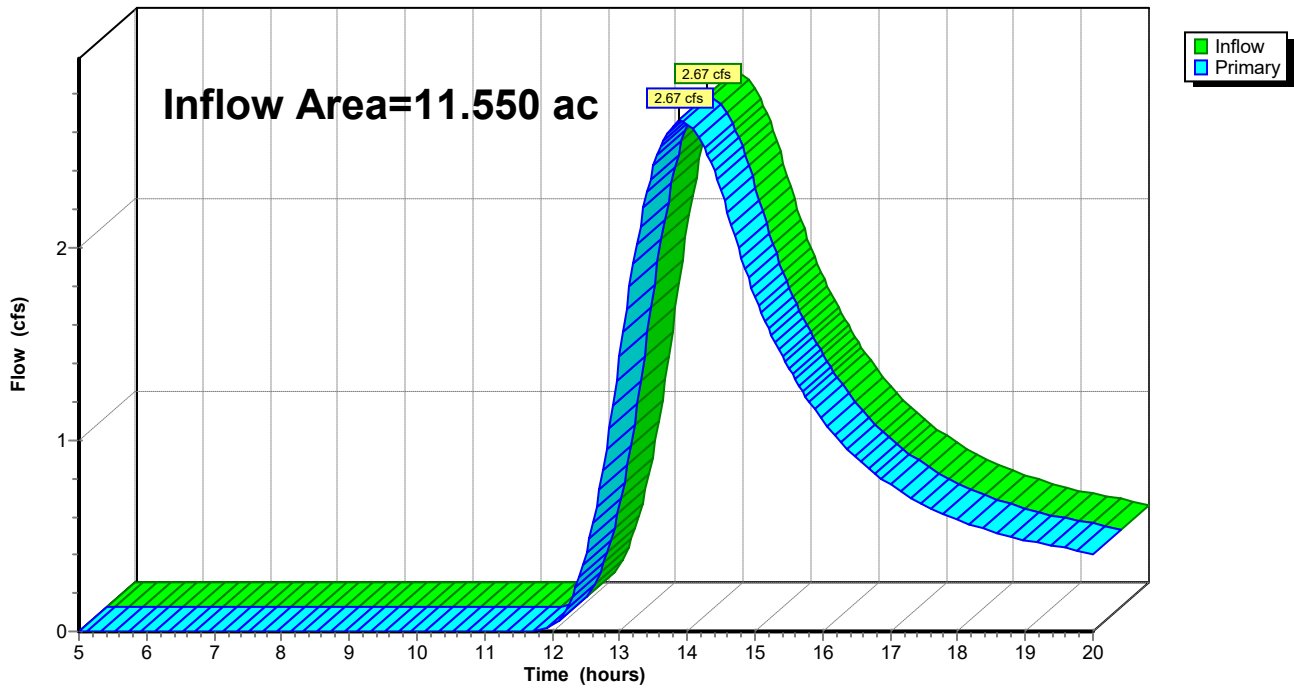
Summary for Link L51: L51

Inflow Area = 11.550 ac, 0.00% Impervious, Inflow Depth > 0.78" for 10-yr event
Inflow = 2.67 cfs @ 13.89 hrs, Volume= 0.746 af
Primary = 2.67 cfs @ 13.89 hrs, Volume= 0.746 af, Atten= 0%, Lag= 0.0 min

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

Link L51: L51

Hydrograph



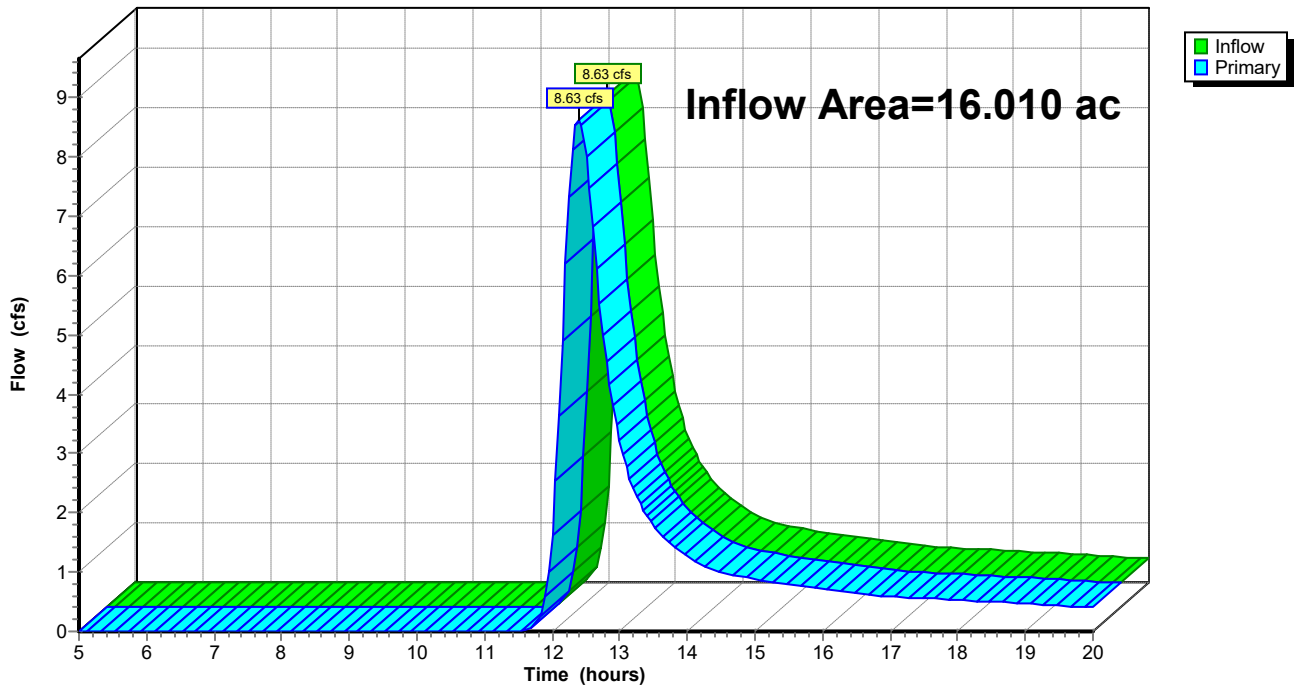
Summary for Link L52: L52

Inflow Area = 16.010 ac, 4.06% Impervious, Inflow Depth > 0.73" for 10-yr event
Inflow = 8.63 cfs @ 12.39 hrs, Volume= 0.979 af
Primary = 8.63 cfs @ 12.39 hrs, Volume= 0.979 af, Atten= 0%, Lag= 0.0 min

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

Link L52: L52

Hydrograph



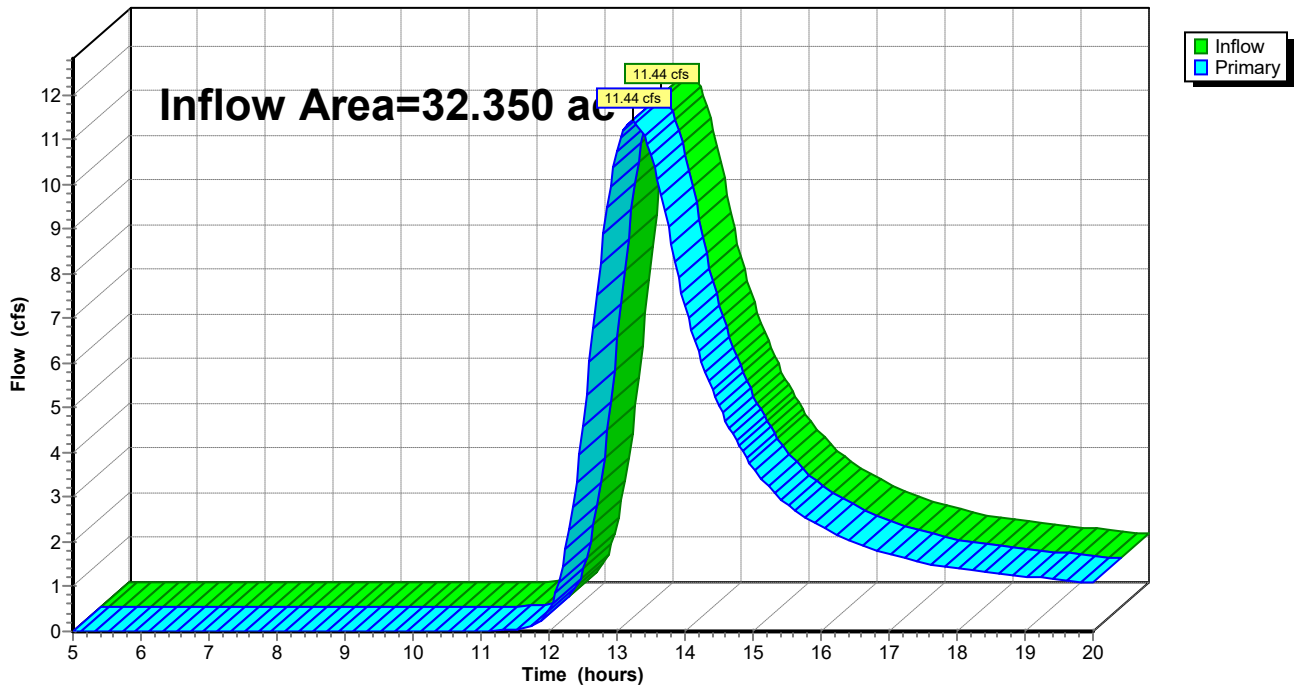
Summary for Link L53: L53

Inflow Area = 32.350 ac, 0.00% Impervious, Inflow Depth > 0.90" for 10-yr event
Inflow = 11.44 cfs @ 13.25 hrs, Volume= 2.428 af
Primary = 11.44 cfs @ 13.25 hrs, Volume= 2.428 af, Atten= 0%, Lag= 0.0 min

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

Link L53: L53

Hydrograph



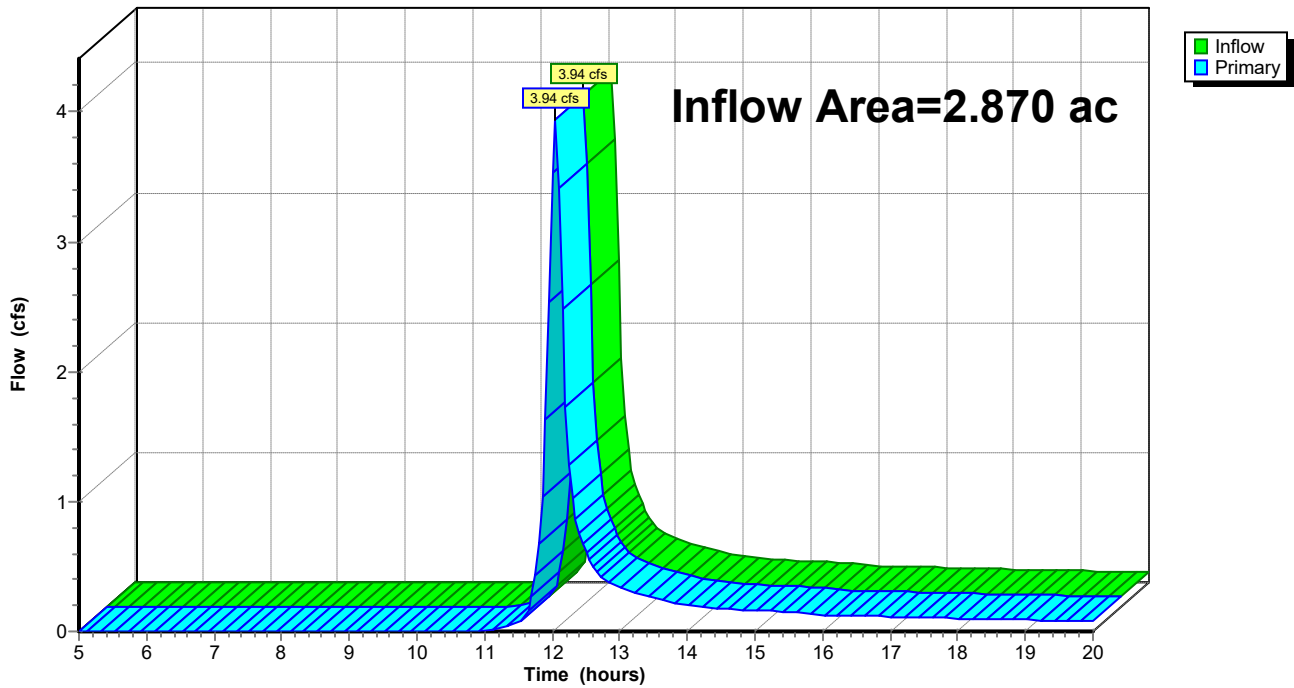
Summary for Link L54: L54

Inflow Area = 2.870 ac, 0.00% Impervious, Inflow Depth > 0.89" for 10-yr event
Inflow = 3.94 cfs @ 12.05 hrs, Volume= 0.213 af
Primary = 3.94 cfs @ 12.05 hrs, Volume= 0.213 af, Atten= 0%, Lag= 0.0 min

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

Link L54: L54

Hydrograph



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

Subcatchment D01: DA-01	Runoff Area=3.670 ac 9.26% Impervious Runoff Depth>1.83" Flow Length=596' Tc=35.6 min CN=71 Runoff=5.58 cfs 0.559 af
Subcatchment D02: DA-02	Runoff Area=1.970 ac 0.00% Impervious Runoff Depth>0.06" Flow Length=351' Tc=43.2 min CN=36 Runoff=0.02 cfs 0.010 af
Subcatchment D03: DA-03	Runoff Area=1.390 ac 7.91% Impervious Runoff Depth>1.82" Flow Length=675' Tc=45.3 min UI Adjusted CN=71 Runoff=1.78 cfs 0.211 af
Subcatchment D04: DA-04	Runoff Area=6.950 ac 0.00% Impervious Runoff Depth>1.67" Flow Length=840' Tc=46.6 min CN=69 Runoff=7.94 cfs 0.968 af
Subcatchment D05: DA-05	Runoff Area=44.470 ac 0.00% Impervious Runoff Depth>1.99" Flow Length=2,768' Tc=104.8 min CN=74 Runoff=34.54 cfs 7.382 af
Subcatchment D06: DA-06	Runoff Area=13.270 ac 0.00% Impervious Runoff Depth>2.20" Flow Length=1,118' Tc=51.3 min CN=76 Runoff=19.18 cfs 2.437 af
Subcatchment D07: DA-07	Runoff Area=28.270 ac 0.00% Impervious Runoff Depth>1.90" Flow Length=1,885' Tc=115.9 min CN=73 Runoff=19.53 cfs 4.484 af
Subcatchment D08: DA-08	Runoff Area=4.020 ac 0.00% Impervious Runoff Depth>1.76" Flow Length=456' Tc=23.1 min CN=70 Runoff=7.78 cfs 0.590 af
Subcatchment D09: DA-09	Runoff Area=12.190 ac 0.00% Impervious Runoff Depth>2.56" Flow Length=1,053' Tc=27.4 min CN=80 Runoff=31.24 cfs 2.604 af
Subcatchment D10: DA-10	Runoff Area=2.630 ac 0.00% Impervious Runoff Depth>2.16" Flow Length=329' Tc=11.7 min CN=75 Runoff=8.87 cfs 0.473 af
Subcatchment D11: DA-11	Runoff Area=2.930 ac 0.00% Impervious Runoff Depth>2.67" Flow Length=355' Tc=10.4 min CN=81 Runoff=12.51 cfs 0.651 af
Subcatchment D12: DA-12	Runoff Area=31.830 ac 0.00% Impervious Runoff Depth>2.17" Flow Length=2,231' Tc=90.6 min CN=76 Runoff=30.02 cfs 5.743 af
Subcatchment D13: DA-13	Runoff Area=12.780 ac 0.00% Impervious Runoff Depth>2.29" Flow Length=1,166' Tc=45.3 min CN=77 Runoff=20.97 cfs 2.441 af
Subcatchment D14: DA-14	Runoff Area=47.390 ac 0.00% Impervious Runoff Depth>1.74" Flow Length=2,408' Tc=188.8 min CN=72 Runoff=21.65 cfs 6.858 af
Subcatchment D15: DA-15	Runoff Area=8.620 ac 0.00% Impervious Runoff Depth>2.57" Flow Length=880' Tc=24.7 min CN=80 Runoff=23.49 cfs 1.843 af
Subcatchment D16: DA-16	Runoff Area=0.540 ac 0.00% Impervious Runoff Depth>1.83" Flow Length=207' Tc=27.7 min CN=71 Runoff=0.97 cfs 0.082 af

Subcatchment D17: DA-17	Runoff Area=2.980 ac 0.00% Impervious Runoff Depth>2.67" Flow Length=201' Tc=10.3 min CN=81 Runoff=12.77 cfs 0.662 af
Subcatchment D18: DA-18	Runoff Area=19.860 ac 0.00% Impervious Runoff Depth>2.62" Flow Length=1,487' Tc=57.5 min CN=81 Runoff=31.54 cfs 4.339 af
Subcatchment D19: DA-19	Runoff Area=5.280 ac 0.00% Impervious Runoff Depth>2.56" Flow Length=911' Tc=26.2 min CN=80 Runoff=13.90 cfs 1.128 af
Subcatchment D20: DA-20	Runoff Area=14.890 ac 0.00% Impervious Runoff Depth>2.03" Flow Length=1,167' Tc=69.3 min CN=74 Runoff=15.88 cfs 2.515 af
Subcatchment D21: DA-21	Runoff Area=23.340 ac 0.00% Impervious Runoff Depth>1.85" Flow Length=1,815' Tc=95.3 min CN=72 Runoff=17.93 cfs 3.596 af
Subcatchment D22: DA-22	Runoff Area=17.210 ac 0.00% Impervious Runoff Depth>2.37" Flow Length=1,503' Tc=45.9 min CN=78 Runoff=28.93 cfs 3.406 af
Subcatchment D23: DA-23	Runoff Area=7.490 ac 0.00% Impervious Runoff Depth>1.90" Flow Length=653' Tc=40.4 min CN=72 Runoff=10.88 cfs 1.185 af
Subcatchment D24: DA-24	Runoff Area=13.490 ac 0.00% Impervious Runoff Depth>2.05" Flow Length=1,284' Tc=40.1 min CN=74 Runoff=21.43 cfs 2.309 af
Subcatchment D25: DA-25	Runoff Area=52.450 ac 0.00% Impervious Runoff Depth>2.05" Flow Length=2,328' Tc=42.4 min CN=74 Runoff=80.28 cfs 8.968 af
Subcatchment D26: DA-26	Runoff Area=193.480 ac 2.41% Impervious Runoff Depth>1.25" Flow Length=9,755' Tc=373.9 min CN=71 Runoff=49.88 cfs 20.079 af
Subcatchment D27: DA-27	Runoff Area=32.140 ac 50.87% Impervious Runoff Depth>2.99" Flow Length=2,563' Tc=57.3 min CN=85 Runoff=57.95 cfs 8.001 af
Subcatchment D28: DA-28	Runoff Area=9.480 ac 67.30% Impervious Runoff Depth>3.51" Flow Length=902' Tc=21.9 min CN=90 Runoff=36.42 cfs 2.775 af
Subcatchment D29: DA-29	Runoff Area=69.530 ac 10.00% Impervious Runoff Depth>1.60" Flow Length=2,977' Tc=290.4 min CN=73 Runoff=23.74 cfs 9.265 af
Subcatchment D30: DA-30	Runoff Area=36.190 ac 5.11% Impervious Runoff Depth>1.95" Flow Length=2,420' Tc=65.9 min CN=73 Runoff=38.45 cfs 5.889 af
Subcatchment D31: DA-31	Runoff Area=14.390 ac 6.74% Impervious Runoff Depth>1.91" Flow Length=1,071' Tc=30.5 min UI Adjusted CN=72 Runoff=25.44 cfs 2.286 af
Subcatchment D32: DA-32	Runoff Area=4.520 ac 9.29% Impervious Runoff Depth>1.47" Flow Length=284' Tc=25.8 min UI Adjusted CN=66 Runoff=6.71 cfs 0.556 af
Subcatchment D33: DA-33	Runoff Area=29.830 ac 18.91% Impervious Runoff Depth>2.04" Flow Length=2,004' Tc=50.3 min UI Adjusted CN=74 Runoff=40.32 cfs 5.083 af

Subcatchment D34: DA-34	Runoff Area=22.850 ac 37.33% Impervious Runoff Depth>2.47" Flow Length=1,029' Tc=33.2 min CN=79 Runoff=49.82 cfs 4.706 af
Subcatchment D35: DA-35	Runoff Area=55.090 ac 6.23% Impervious Runoff Depth>1.67" Flow Length=2,529' Tc=122.6 min UI Adjusted CN=70 Runoff=31.96 cfs 7.687 af
Subcatchment D36: DA-36	Runoff Area=4.070 ac 1.72% Impervious Runoff Depth>1.76" Flow Length=467' Tc=22.4 min CN=70 Runoff=8.04 cfs 0.598 af
Subcatchment D37: DA-37	Runoff Area=14.450 ac 76.06% Impervious Runoff Depth>3.67" Flow Length=2,155' Tc=64.8 min CN=92 Runoff=28.30 cfs 4.421 af
Subcatchment D38: DA-38	Runoff Area=4.350 ac 69.20% Impervious Runoff Depth>3.50" Flow Length=839' Tc=31.3 min CN=90 Runoff=13.48 cfs 1.270 af
Subcatchment D39: DA-39	Runoff Area=3.260 ac 88.04% Impervious Runoff Depth>3.99" Flow Length=839' Tc=37.9 min CN=95 Runoff=9.80 cfs 1.085 af
Subcatchment D40: DA-40	Runoff Area=2.160 ac 75.46% Impervious Runoff Depth>3.69" Flow Length=441' Tc=48.7 min CN=92 Runoff=5.18 cfs 0.664 af
Subcatchment D41: DA-41	Runoff Area=52.860 ac 97.14% Impervious Runoff Depth>4.14" Flow Length=2,424' Tc=99.8 min CN=97 Runoff=81.93 cfs 18.223 af
Subcatchment D42: DA-42	Runoff Area=47.920 ac 2.19% Impervious Runoff Depth>1.71" Flow Length=4,144' Tc=158.8 min UI Adjusted CN=71 Runoff=23.81 cfs 6.814 af
Subcatchment D43: DA-43	Runoff Area=5.930 ac 0.00% Impervious Runoff Depth>1.60" Flow Length=843' Tc=42.2 min CN=68 Runoff=6.93 cfs 0.792 af
Subcatchment D44: DA-44	Runoff Area=38.190 ac 2.78% Impervious Runoff Depth>2.02" Flow Length=1,750' Tc=81.3 min CN=74 Runoff=36.15 cfs 6.415 af
Subcatchment D45: DA-45	Runoff Area=6.170 ac 0.00% Impervious Runoff Depth>1.89" Flow Length=1,039' Tc=46.8 min CN=72 Runoff=8.08 cfs 0.973 af
Subcatchment D46: DA-46	Runoff Area=72.670 ac 0.00% Impervious Runoff Depth>2.27" Flow Length=3,781' Tc=70.7 min CN=77 Runoff=86.08 cfs 13.729 af
Subcatchment D47: DA-47	Runoff Area=6.430 ac 0.00% Impervious Runoff Depth>2.48" Flow Length=780' Tc=19.9 min CN=79 Runoff=19.23 cfs 1.331 af
Subcatchment D48: DA-48	Runoff Area=6.050 ac 0.00% Impervious Runoff Depth>1.55" Flow Length=774' Tc=12.6 min CN=67 Runoff=14.18 cfs 0.783 af
Subcatchment D49: DA-49	Runoff Area=12.320 ac 0.00% Impervious Runoff Depth>0.18" Flow Length=1,625' Tc=45.1 min CN=41 Runoff=0.53 cfs 0.189 af
Subcatchment D50: DA-50	Runoff Area=28.120 ac 0.00% Impervious Runoff Depth>1.40" Flow Length=2,221' Tc=32.6 min CN=65 Runoff=33.61 cfs 3.286 af

Subcatchment D51: DA-51

Runoff Area=11.550 ac 0.00% Impervious Runoff Depth>2.02"
Flow Length=2,083' Tc=146.9 min CN=75 Runoff=7.26 cfs 1.947 af

Subcatchment D52: DA-52

Runoff Area=16.010 ac 4.06% Impervious Runoff Depth>1.98"
Flow Length=2,531' Tc=38.7 min CN=73 Runoff=25.06 cfs 2.637 af

Subcatchment D53: DA-53

Runoff Area=32.350 ac 0.00% Impervious Runoff Depth>2.24"
Flow Length=1,955' Tc=100.4 min CN=77 Runoff=29.33 cfs 6.028 af

Subcatchment D54: DA-54

Runoff Area=2.870 ac 0.00% Impervious Runoff Depth>2.24"
Flow Length=393' Tc=11.9 min CN=76 Runoff=9.96 cfs 0.535 af

Link L01: L01

Inflow=5.58 cfs 0.559 af
Primary=5.58 cfs 0.559 af

Link L02: L02

Inflow=0.02 cfs 0.010 af
Primary=0.02 cfs 0.010 af

Link L03: L03

Inflow=1.78 cfs 0.211 af
Primary=1.78 cfs 0.211 af

Link L04: L04

Inflow=7.94 cfs 0.968 af
Primary=7.94 cfs 0.968 af

Link L05: L05

Inflow=34.54 cfs 7.382 af
Primary=34.54 cfs 7.382 af

Link L06: L06

Inflow=19.18 cfs 2.437 af
Primary=19.18 cfs 2.437 af

Link L07: L07

Inflow=19.53 cfs 4.484 af
Primary=19.53 cfs 4.484 af

Link L08: L08

Inflow=7.78 cfs 0.590 af
Primary=7.78 cfs 0.590 af

Link L09: L09

Inflow=31.24 cfs 2.604 af
Primary=31.24 cfs 2.604 af

Link L10: L10

Inflow=8.87 cfs 0.473 af
Primary=8.87 cfs 0.473 af

Link L11: L11

Inflow=12.51 cfs 0.651 af
Primary=12.51 cfs 0.651 af

Link L12: L12

Inflow=30.02 cfs 5.743 af
Primary=30.02 cfs 5.743 af

Link L13: L13

Inflow=20.97 cfs 2.441 af
Primary=20.97 cfs 2.441 af

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Type II 24-hr 100-yr Rainfall=4.88"

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Link L14: L14	Inflow=21.65 cfs 6.858 af Primary=21.65 cfs 6.858 af
Link L15: L15	Inflow=23.49 cfs 1.843 af Primary=23.49 cfs 1.843 af
Link L16: L16	Inflow=0.97 cfs 0.082 af Primary=0.97 cfs 0.082 af
Link L17: L17	Inflow=12.77 cfs 0.662 af Primary=12.77 cfs 0.662 af
Link L18: L18	Inflow=31.54 cfs 4.339 af Primary=31.54 cfs 4.339 af
Link L19: L19	Inflow=13.90 cfs 1.128 af Primary=13.90 cfs 1.128 af
Link L20: L20	Inflow=15.88 cfs 2.515 af Primary=15.88 cfs 2.515 af
Link L21: L21	Inflow=17.93 cfs 3.596 af Primary=17.93 cfs 3.596 af
Link L22: L22	Inflow=28.93 cfs 3.406 af Primary=28.93 cfs 3.406 af
Link L23: L23	Inflow=10.88 cfs 1.185 af Primary=10.88 cfs 1.185 af
Link L24: L24	Inflow=21.43 cfs 2.309 af Primary=21.43 cfs 2.309 af
Link L25: L25	Inflow=80.28 cfs 8.968 af Primary=80.28 cfs 8.968 af
Link L26: L26	Inflow=49.88 cfs 20.079 af Primary=49.88 cfs 20.079 af
Link L27: L27	Inflow=57.95 cfs 8.001 af Primary=57.95 cfs 8.001 af
Link L28: L28	Inflow=36.42 cfs 2.775 af Primary=36.42 cfs 2.775 af
Link L29: L29	Inflow=23.74 cfs 9.265 af Primary=23.74 cfs 9.265 af
Link L30: L30	Inflow=38.45 cfs 5.889 af Primary=38.45 cfs 5.889 af

Link L31: L31	Inflow=25.44 cfs 2.286 af Primary=25.44 cfs 2.286 af
Link L32: L32	Inflow=6.71 cfs 0.556 af Primary=6.71 cfs 0.556 af
Link L33: L33	Inflow=40.32 cfs 5.083 af Primary=40.32 cfs 5.083 af
Link L34: L34	Inflow=49.82 cfs 4.706 af Primary=49.82 cfs 4.706 af
Link L35: L35	Inflow=31.96 cfs 7.687 af Primary=31.96 cfs 7.687 af
Link L36: L36	Inflow=8.04 cfs 0.598 af Primary=8.04 cfs 0.598 af
Link L37: L37	Inflow=28.30 cfs 4.421 af Primary=28.30 cfs 4.421 af
Link L38: L38	Inflow=13.48 cfs 1.270 af Primary=13.48 cfs 1.270 af
Link L39: L39	Inflow=9.80 cfs 1.085 af Primary=9.80 cfs 1.085 af
Link L40: L40	Inflow=5.18 cfs 0.664 af Primary=5.18 cfs 0.664 af
Link L41: L41	Inflow=81.93 cfs 18.223 af Primary=81.93 cfs 18.223 af
Link L42: L42	Inflow=23.81 cfs 6.814 af Primary=23.81 cfs 6.814 af
Link L43: L43	Inflow=6.93 cfs 0.792 af Primary=6.93 cfs 0.792 af
Link L44: L44	Inflow=36.15 cfs 6.415 af Primary=36.15 cfs 6.415 af
Link L45: L45	Inflow=8.08 cfs 0.973 af Primary=8.08 cfs 0.973 af
Link L46: L46	Inflow=86.08 cfs 13.729 af Primary=86.08 cfs 13.729 af
Link L47: L47	Inflow=19.23 cfs 1.331 af Primary=19.23 cfs 1.331 af

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Type II 24-hr 100-yr Rainfall=4.88"

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Link L48: L48	Inflow=14.18 cfs 0.783 af Primary=14.18 cfs 0.783 af
Link L49: L49	Inflow=0.53 cfs 0.189 af Primary=0.53 cfs 0.189 af
Link L50: L50	Inflow=33.61 cfs 3.286 af Primary=33.61 cfs 3.286 af
Link L51: L51	Inflow=7.26 cfs 1.947 af Primary=7.26 cfs 1.947 af
Link L52: L52	Inflow=25.06 cfs 2.637 af Primary=25.06 cfs 2.637 af
Link L53: L53	Inflow=29.33 cfs 6.028 af Primary=29.33 cfs 6.028 af
Link L54: L54	Inflow=9.96 cfs 0.535 af Primary=9.96 cfs 0.535 af

**Total Runoff Area = 1,215.140 ac Runoff Volume = 203.491 af Average Runoff Depth = 2.01"
89.44% Pervious = 1,086.830 ac 10.56% Impervious = 128.310 ac**

Summary for Subcatchment D01: DA-01

Runoff = 5.58 cfs @ 12.32 hrs, Volume= 0.559 af, Depth> 1.83"
 Routed to Link L01 : L01

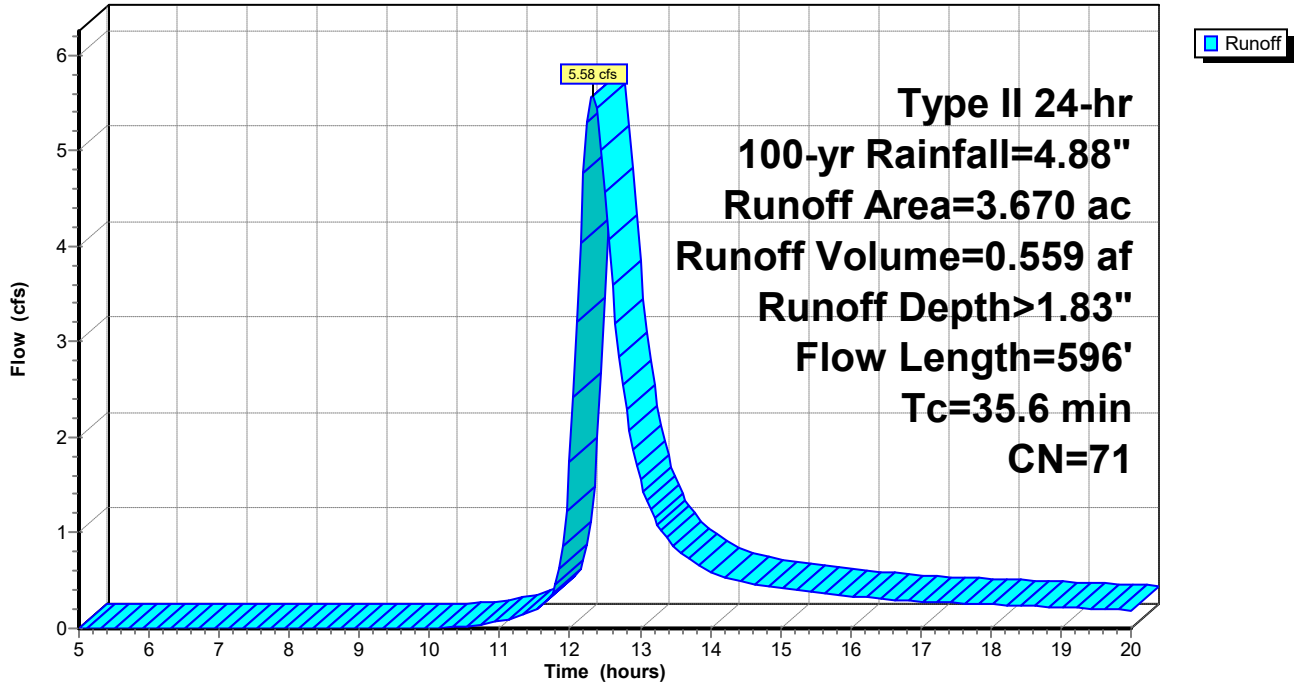
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.290	32	Woods/grass comb., Good, HSG A
1.040	72	Woods/grass comb., Good, HSG C
0.460	70	Woods, Good, HSG C
1.540	71	Meadow, non-grazed, HSG C
0.340	98	Roofs, HSG C
3.670	71	Weighted Average
3.330		90.74% Pervious Area
0.340		9.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.1	100	0.0230	0.07		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
4.2	170	0.0180	0.67		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
6.3	326	0.0150	0.86		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
35.6	596	Total			

Subcatchment D01: DA-01

Hydrograph



Summary for Subcatchment D02: DA-02

Runoff = 0.02 cfs @ 15.61 hrs, Volume= 0.010 af, Depth> 0.06"
 Routed to Link L02 : L02

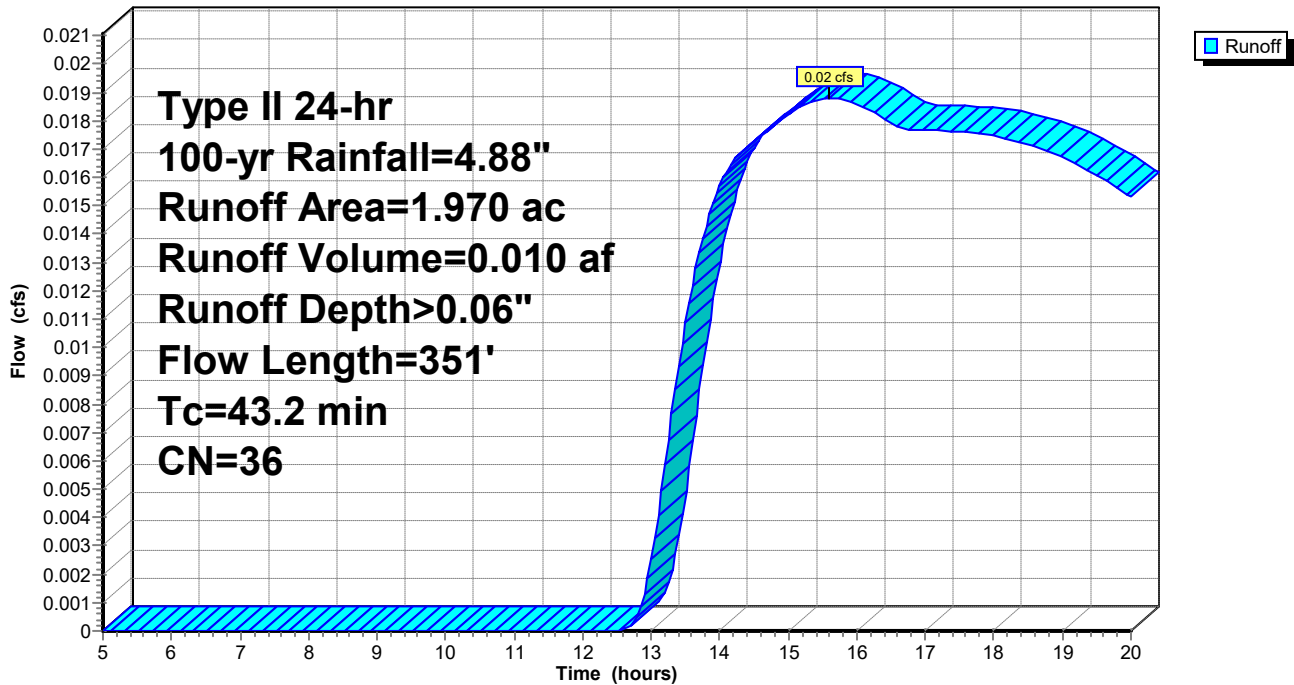
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.610	32	Woods/grass comb., Good, HSG A
0.140	72	Woods/grass comb., Good, HSG C
1.110	30	Woods, Good, HSG A
0.110	70	Woods, Good, HSG C
1.970	36	Weighted Average
1.970		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
36.6	100	0.0090	0.05		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
6.6	251	0.0160	0.63		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
43.2	351	Total			

Subcatchment D02: DA-02

Hydrograph



Summary for Subcatchment D03: DA-03

Runoff = 1.78 cfs @ 12.45 hrs, Volume= 0.211 af, Depth> 1.82"
 Routed to Link L03 : L03

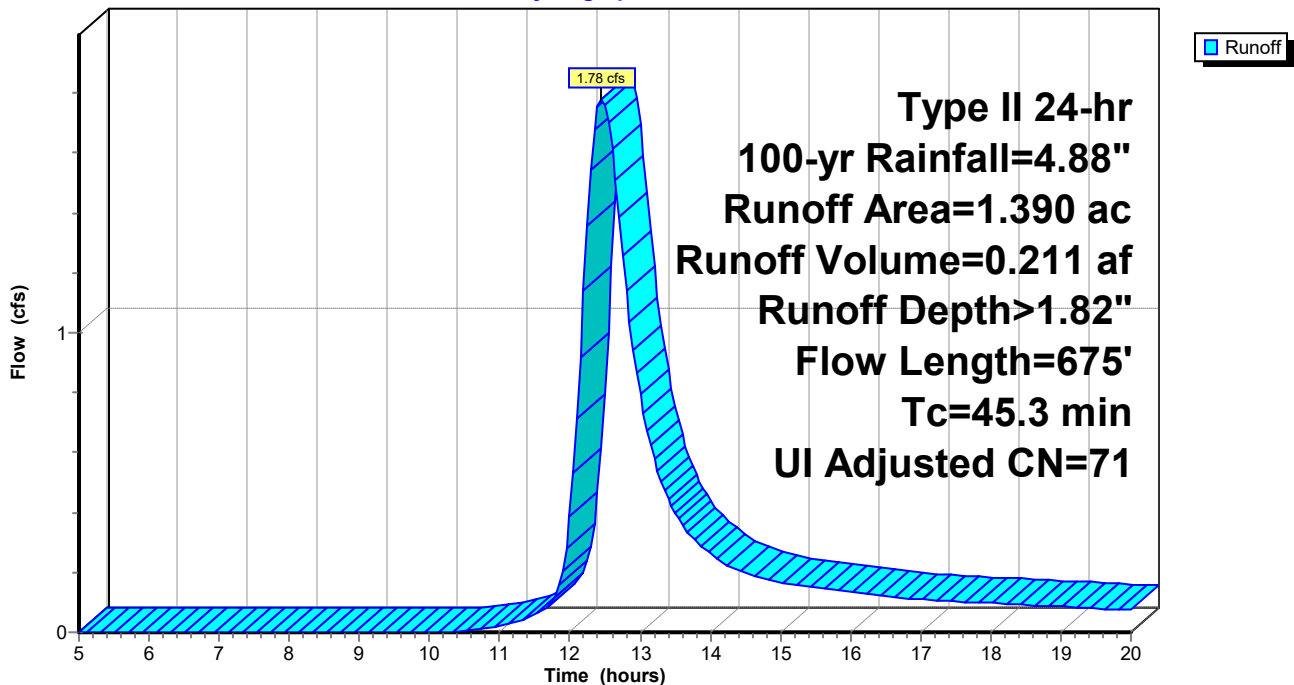
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Adj	Description
0.960	70		Woods, Good, HSG C
0.320	71		Meadow, non-grazed, HSG C
0.110	98		Unconnected pavement, HSG C
1.390	72	71	Weighted Average, UI Adjusted
1.280			92.09% Pervious Area
0.110			7.91% Impervious Area
0.110			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
35.1	100	0.0400	0.05		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 2.09"
4.4	203	0.0240	0.77		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
5.8	372	0.0050	1.06		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
45.3	675	Total			

Subcatchment D03: DA-03

Hydrograph



Summary for Subcatchment D04: DA-04

Runoff = 7.94 cfs @ 12.48 hrs, Volume= 0.968 af, Depth> 1.67"
 Routed to Link L04 : L04

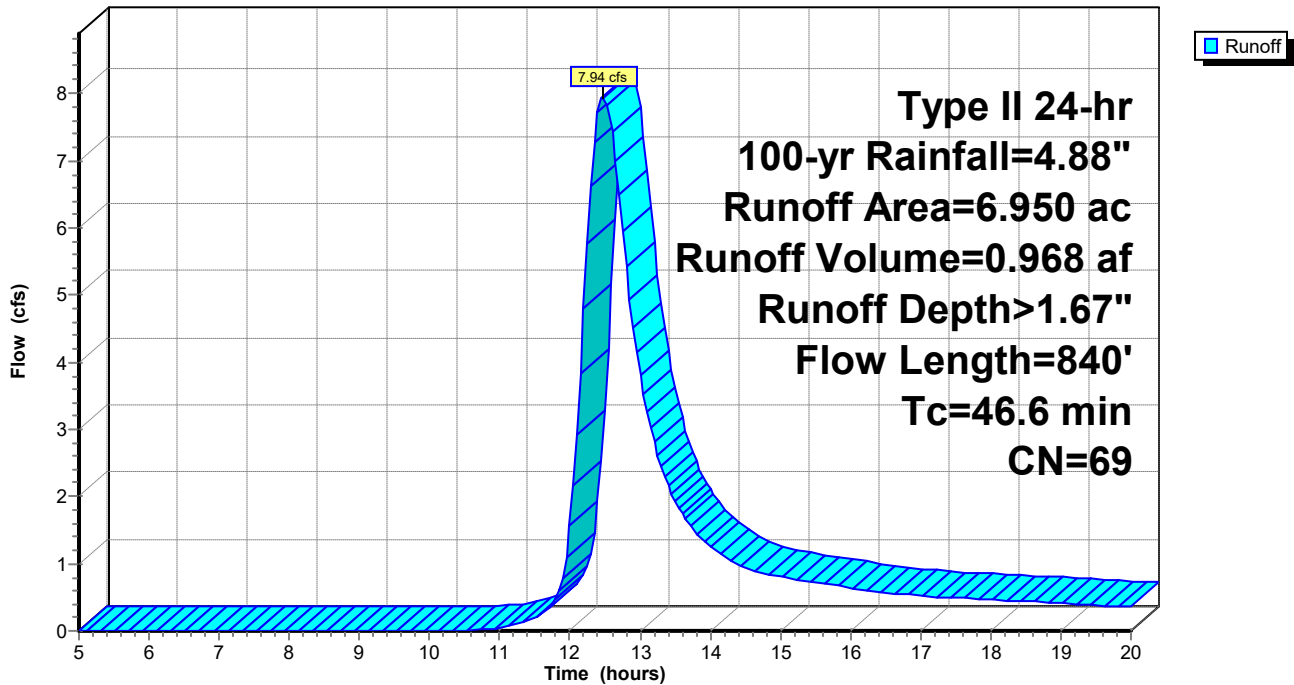
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.230	30	Woods, Good, HSG A
6.720	70	Woods, Good, HSG C
6.950	69	Weighted Average
6.950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.1	100	0.0190	0.06		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
19.5	740	0.0160	0.63		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
46.6	840	Total			

Subcatchment D04: DA-04

Hydrograph



Somerset Pre-Dev_Rev4

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Type II 24-hr 100-yr Rainfall=4.88"

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Summary for Subcatchment D05: DA-05

Runoff = 34.54 cfs @ 13.23 hrs, Volume= 7.382 af, Depth> 1.99"
 Routed to Link L05 : L05

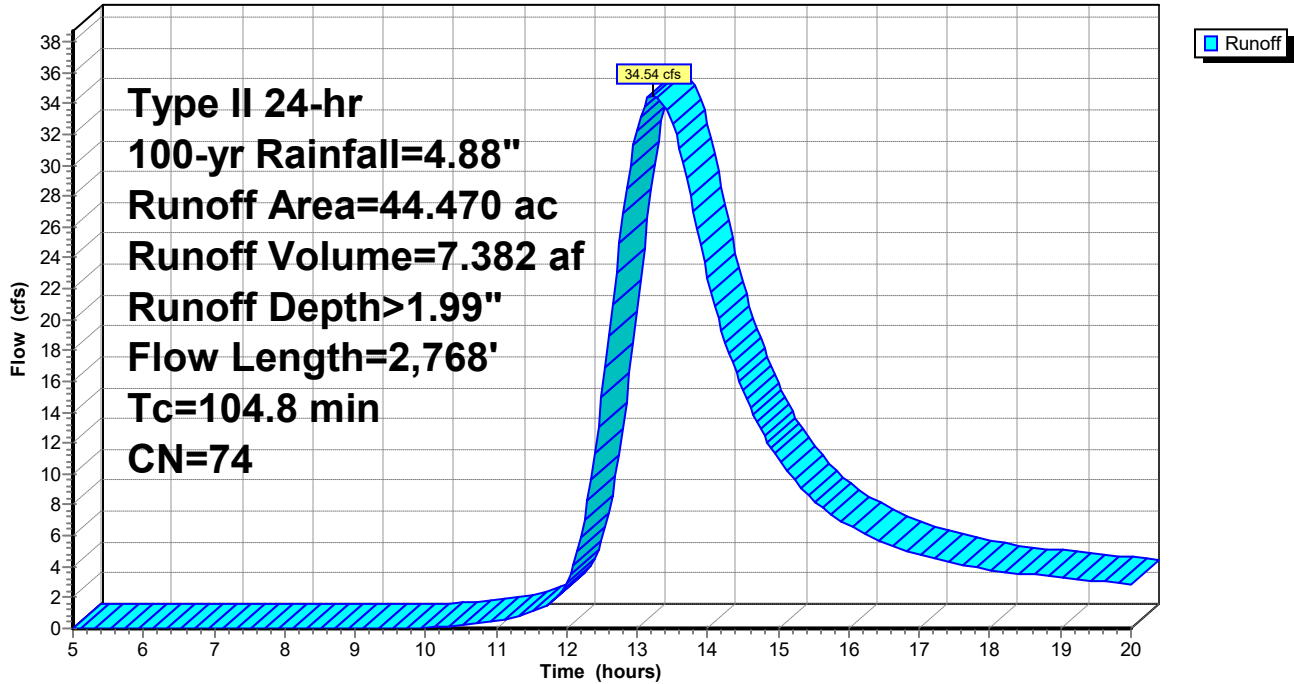
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.400	30	Woods, Good, HSG A
0.610	55	Woods, Good, HSG B
27.210	72	Woods/grass comb., Good, HSG C
1.230	58	Legumes, straight row, Good, HSG A
1.580	72	Legumes, straight row, Good, HSG B
13.440	81	Legumes, straight row, Good, HSG C
44.470	74	Weighted Average
44.470		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0070	0.19		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
29.4	1,123	0.0050	0.64		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
66.5	1,545	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
104.8	2,768	Total			

Subcatchment D05: DA-05

Hydrograph



Summary for Subcatchment D06: DA-06

Runoff = 19.18 cfs @ 12.52 hrs, Volume= 2.437 af, Depth> 2.20"
 Routed to Link L06 : L06

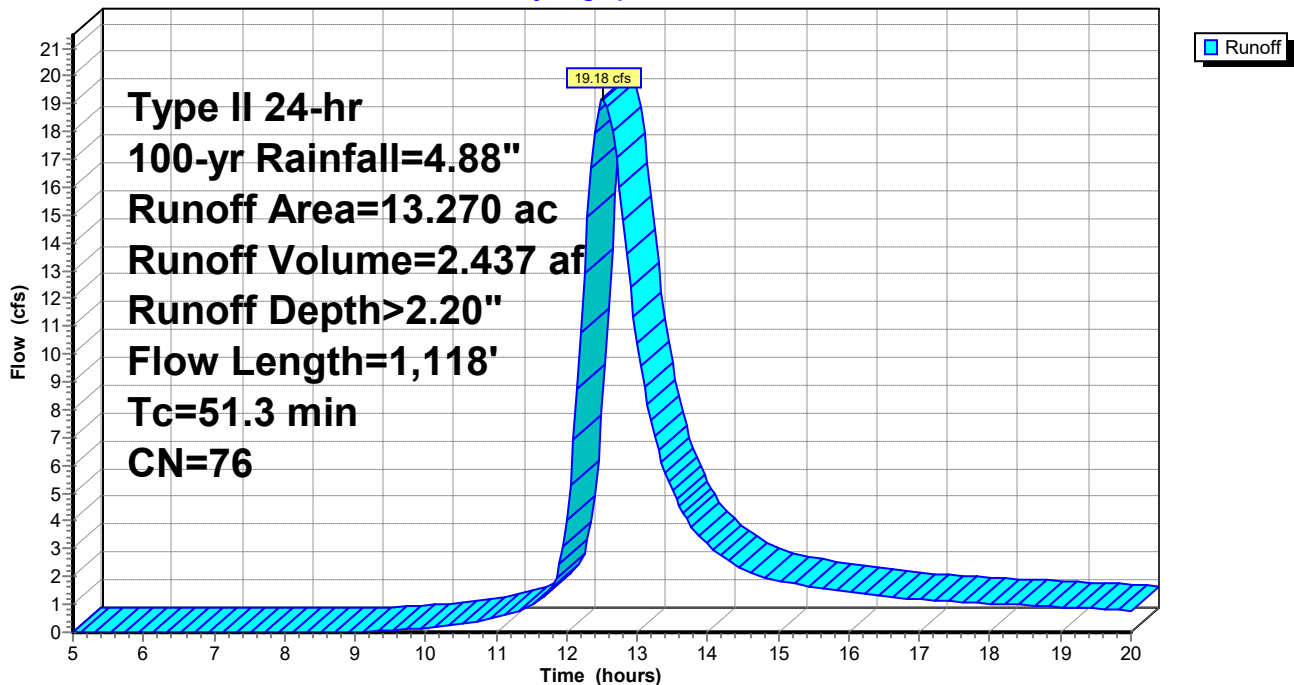
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.420	55	Woods, Good, HSG B
1.900	70	Woods, Good, HSG C
1.160	58	Legumes, straight row, Good, HSG A
0.950	72	Legumes, straight row, Good, HSG B
8.840	81	Legumes, straight row, Good, HSG C
13.270	76	Weighted Average
13.270		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.5	100	0.0005	0.07		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
23.9	1,000	0.0060	0.70		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.9	18	0.0010	0.16		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
51.3	1,118	Total			

Subcatchment D06: DA-06

Hydrograph



Summary for Subcatchment D07: DA-07

Runoff = 19.53 cfs @ 13.41 hrs, Volume= 4.484 af, Depth> 1.90"
 Routed to Link L07 : L07

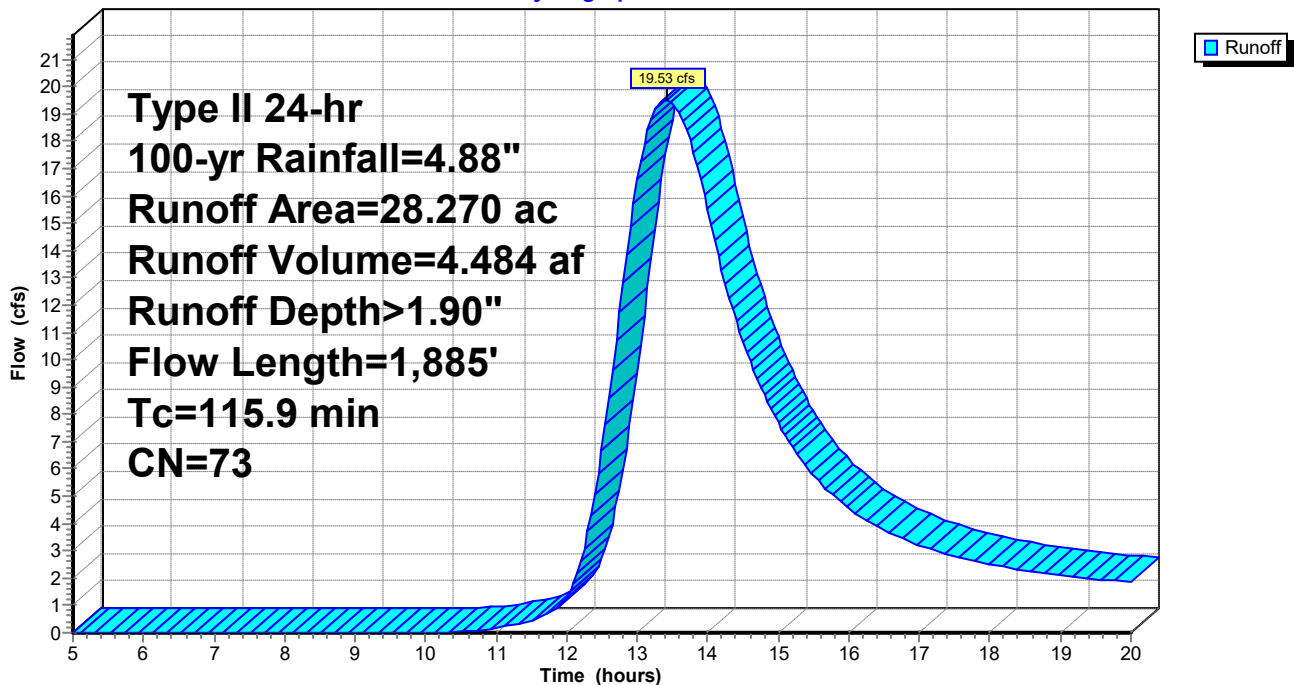
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
20.280	70	Woods, Good, HSG C
7.990	81	Legumes, straight row, Good, HSG C
28.270	73	Weighted Average
28.270		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	100	0.0050	0.16		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
8.9	371	0.0060	0.70		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
20.6	390	0.0040	0.32		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
76.3	1,024	0.0020	0.22		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
115.9	1,885	Total			

Subcatchment D07: DA-07

Hydrograph



Summary for Subcatchment D08: DA-08

Runoff = 7.78 cfs @ 12.17 hrs, Volume= 0.590 af, Depth> 1.76"
 Routed to Link L08 : L08

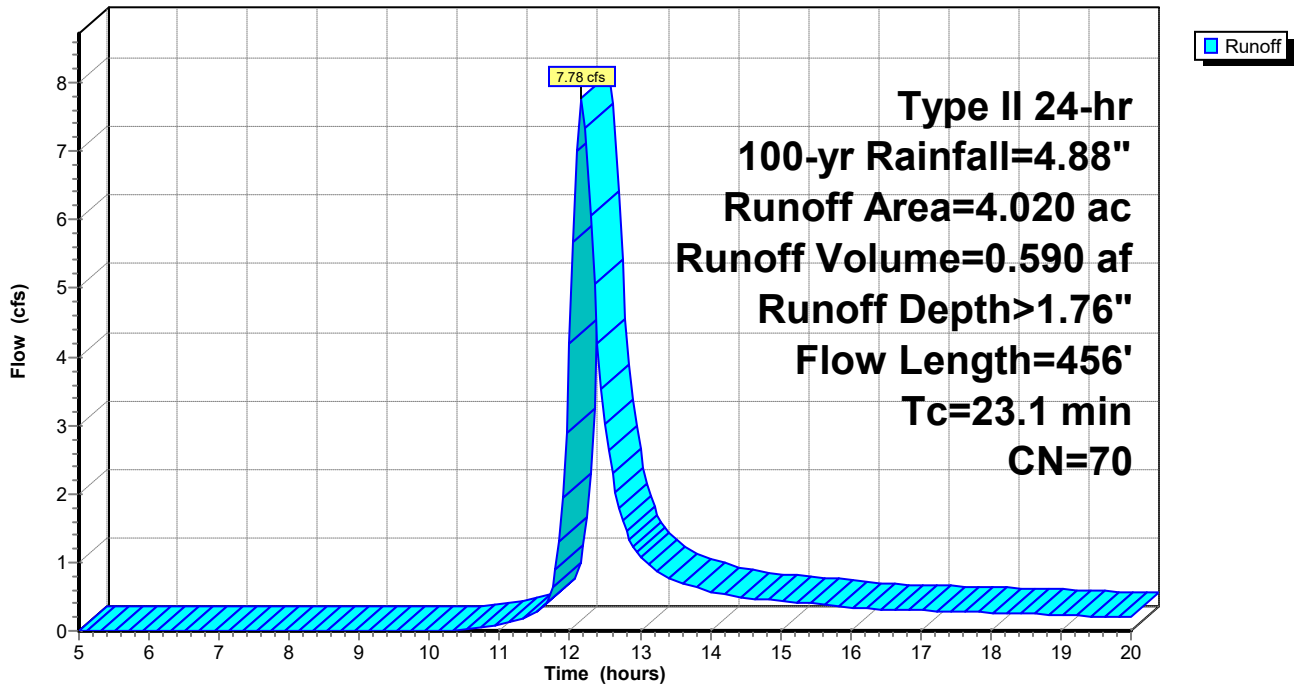
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.680	58	Woods/grass comb., Good, HSG B
3.340	72	Woods/grass comb., Good, HSG C
4.020	70	Weighted Average
4.020		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.3	100	0.0340	0.12		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
8.8	356	0.0180	0.67		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
23.1	456	Total			

Subcatchment D08: DA-08

Hydrograph



Summary for Subcatchment D09: DA-09

Runoff = 31.24 cfs @ 12.21 hrs, Volume= 2.604 af, Depth> 2.56"
 Routed to Link L09 : L09

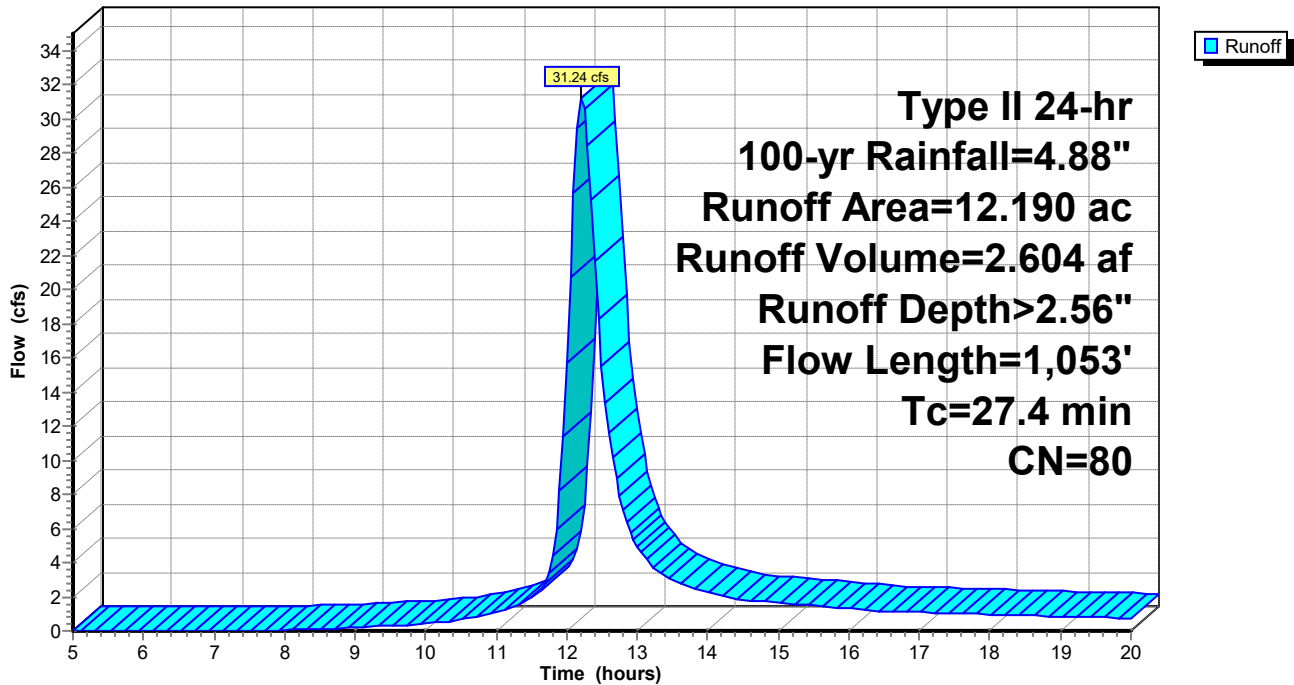
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
1.710	72	Woods/grass comb., Good, HSG C
10.480	81	Legumes, straight row, Good, HSG C
12.190	80	Weighted Average
12.190		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.0100	0.22		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
19.7	953	0.0080	0.80		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
27.4	1,053	Total			

Subcatchment D09: DA-09

Hydrograph



Summary for Subcatchment D10: DA-10

Runoff = 8.87 cfs @ 12.04 hrs, Volume= 0.473 af, Depth> 2.16"
 Routed to Link L10 : L10

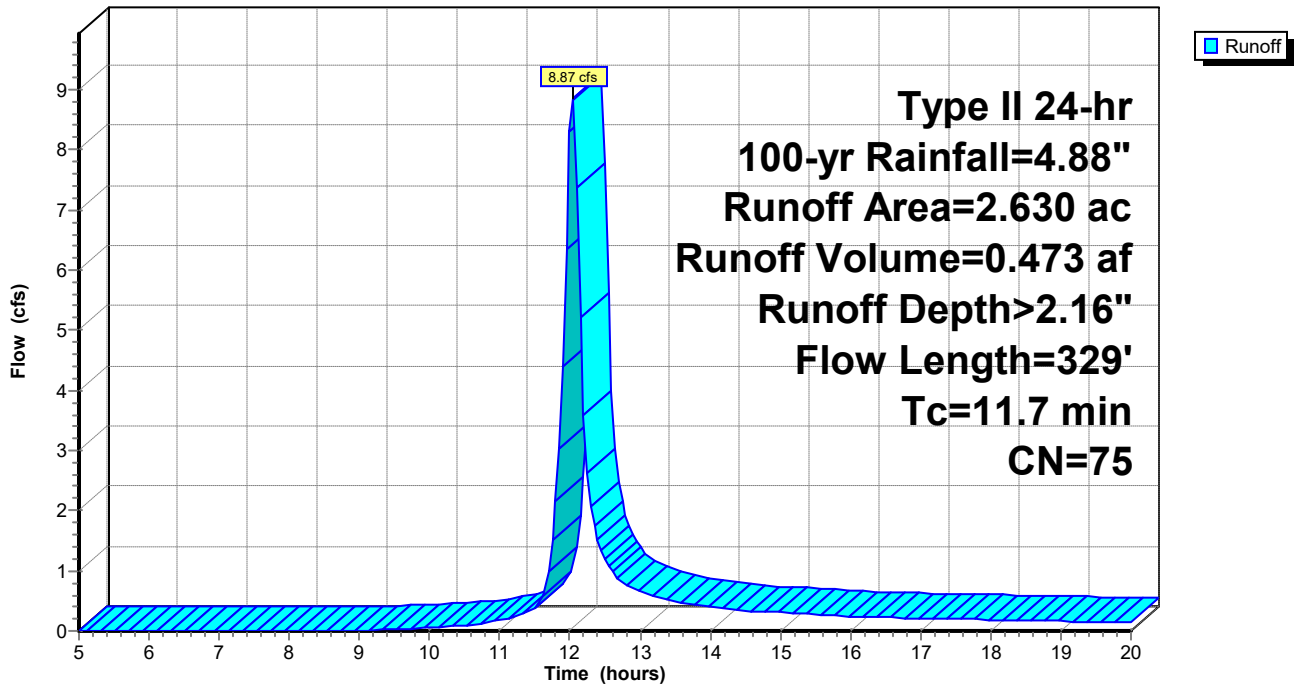
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
1.840	72	Woods/grass comb., Good, HSG C
0.790	81	Legumes, straight row, Good, HSG C
2.630	75	Weighted Average
2.630		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.4	100	0.0080	0.20		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
2.2	186	0.0250	1.42		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.1	43	0.0170	0.65		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
11.7	329	Total			

Subcatchment D10: DA-10

Hydrograph



Summary for Subcatchment D11: DA-11

Runoff = 12.51 cfs @ 12.02 hrs, Volume= 0.651 af, Depth> 2.67"
 Routed to Link L11 : L11

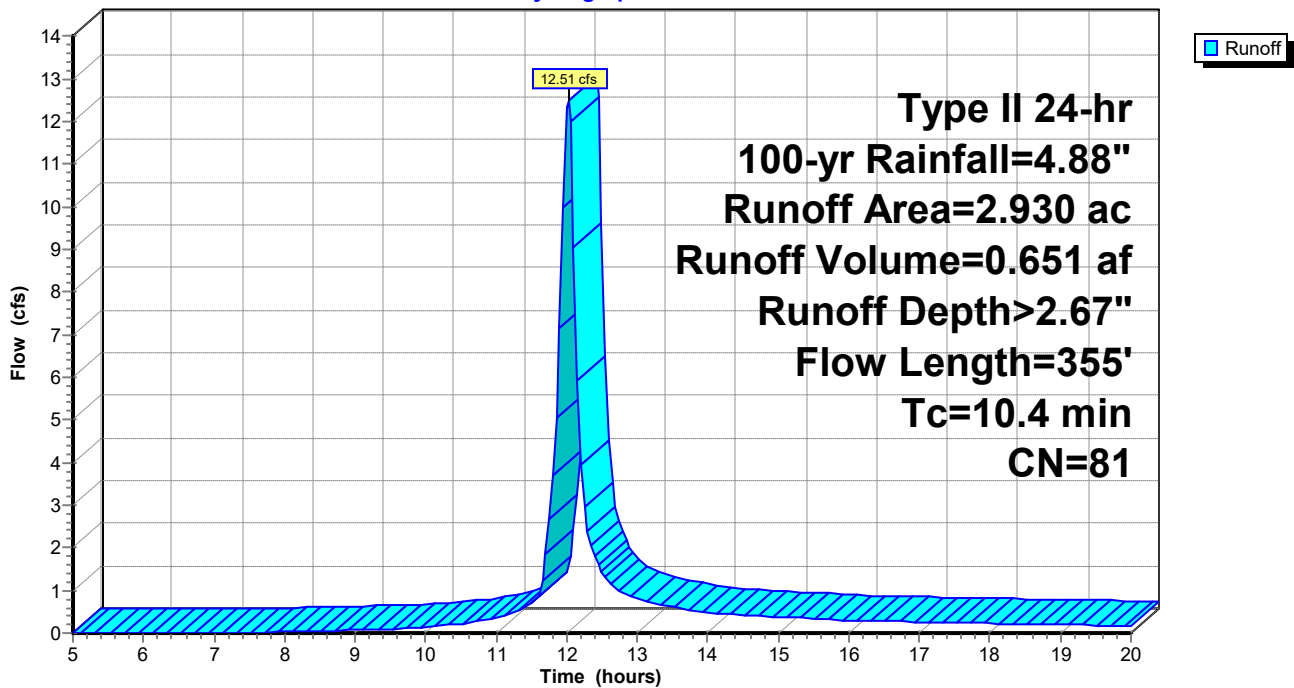
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
2.930	81	Legumes, straight row, Good, HSG C
2.930		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.9	100	0.0130	0.24		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
3.5	255	0.0180	1.21		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
10.4	355	Total			

Subcatchment D11: DA-11

Hydrograph



Summary for Subcatchment D12: DA-12

Runoff = 30.02 cfs @ 13.02 hrs, Volume= 5.743 af, Depth> 2.17"
 Routed to Link L12 : L12

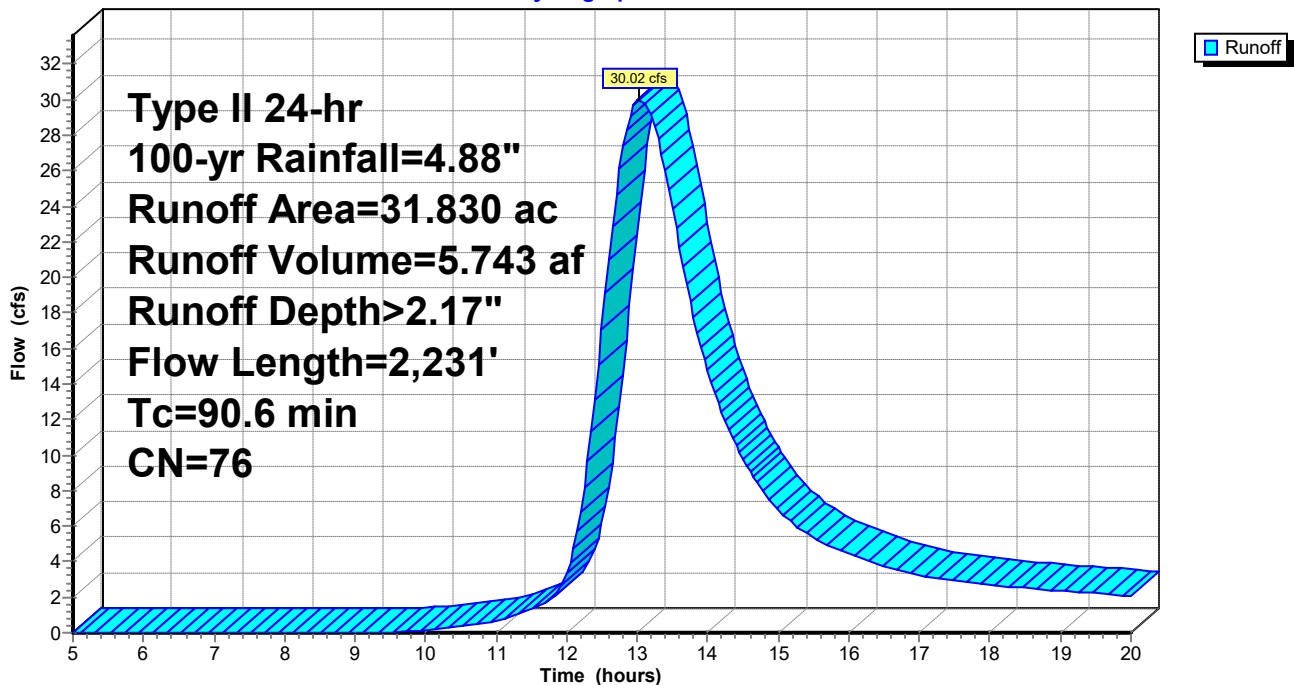
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
1.770	72	Woods/grass comb., Good, HSG C
5.290	55	Woods, Good, HSG B
0.150	72	Legumes, straight row, Good, HSG B
24.620	81	Legumes, straight row, Good, HSG C
31.830	76	Weighted Average
31.830		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.5	100	0.0005	0.07		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
24.7	1,193	0.0080	0.80		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
40.4	938	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
90.6	2,231	Total			

Subcatchment D12: DA-12

Hydrograph



Summary for Subcatchment D13: DA-13

Runoff = 20.97 cfs @ 12.44 hrs, Volume= 2.441 af, Depth> 2.29"
 Routed to Link L13 : L13

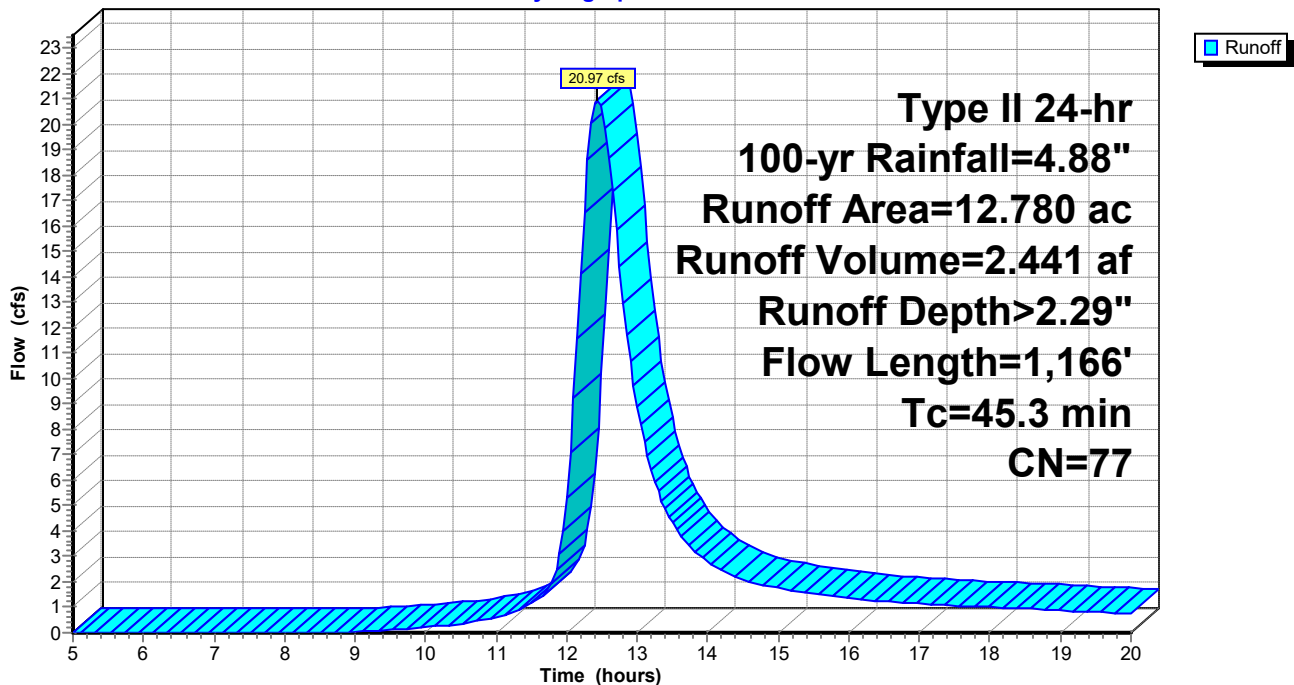
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
1.730	55	Woods, Good, HSG B
0.960	70	Woods, Good, HSG C
0.180	72	Legumes, straight row, Good, HSG B
9.910	81	Legumes, straight row, Good, HSG C
12.780	77	Weighted Average
12.780		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.0100	0.22		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
6.8	350	0.0090	0.85		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
30.8	716	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
45.3	1,166	Total			

Subcatchment D13: DA-13

Hydrograph



Summary for Subcatchment D14: DA-14

Runoff = 21.65 cfs @ 14.46 hrs, Volume= 6.858 af, Depth> 1.74"
 Routed to Link L14 : L14

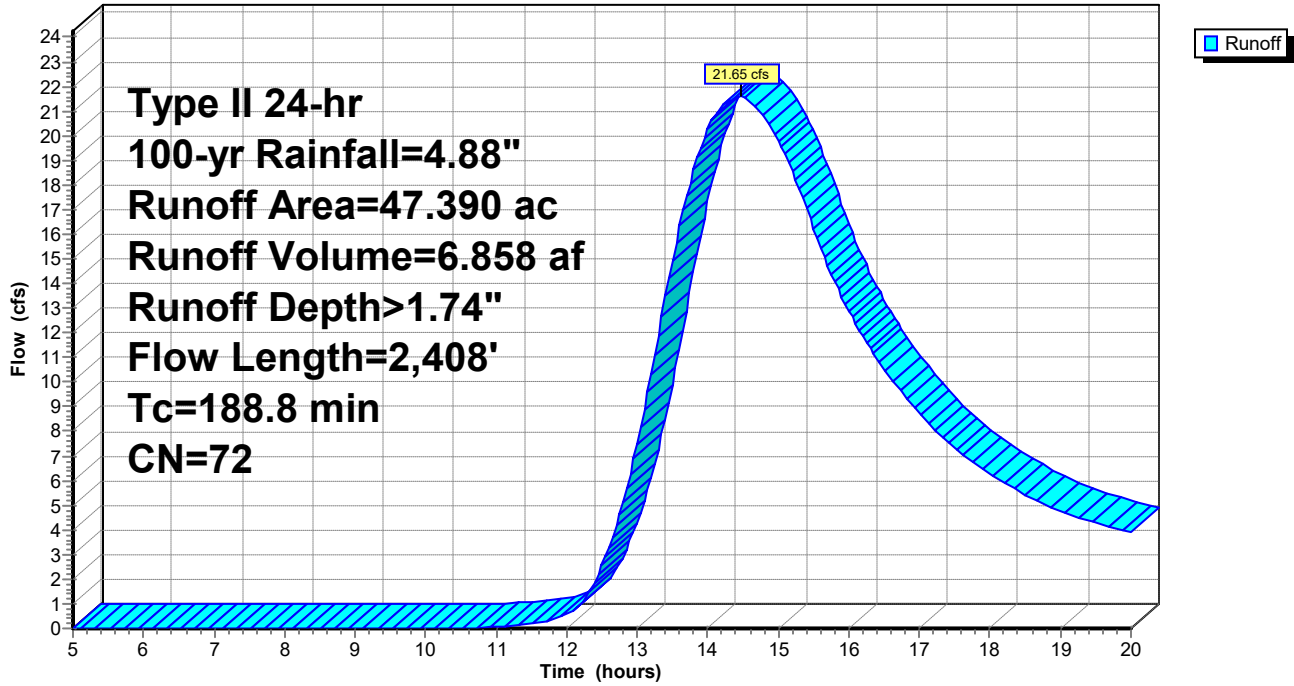
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
9.270	58	Woods/grass comb., Good, HSG B
17.240	72	Woods/grass comb., Good, HSG C
1.100	58	Legumes, straight row, Good, HSG A
1.340	72	Legumes, straight row, Good, HSG B
18.440	81	Legumes, straight row, Good, HSG C
47.390	72	Weighted Average
47.390		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	100	0.0170	0.27		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
11.8	607	0.0090	0.85		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
36.7	697	0.0040	0.32		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
92.8	880	0.0010	0.16		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
41.3	124	0.0001	0.05		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
188.8	2,408	Total			

Subcatchment D14: DA-14

Hydrograph



Summary for Subcatchment D15: DA-15

Runoff = 23.49 cfs @ 12.18 hrs, Volume= 1.843 af, Depth> 2.57"
 Routed to Link L15 : L15

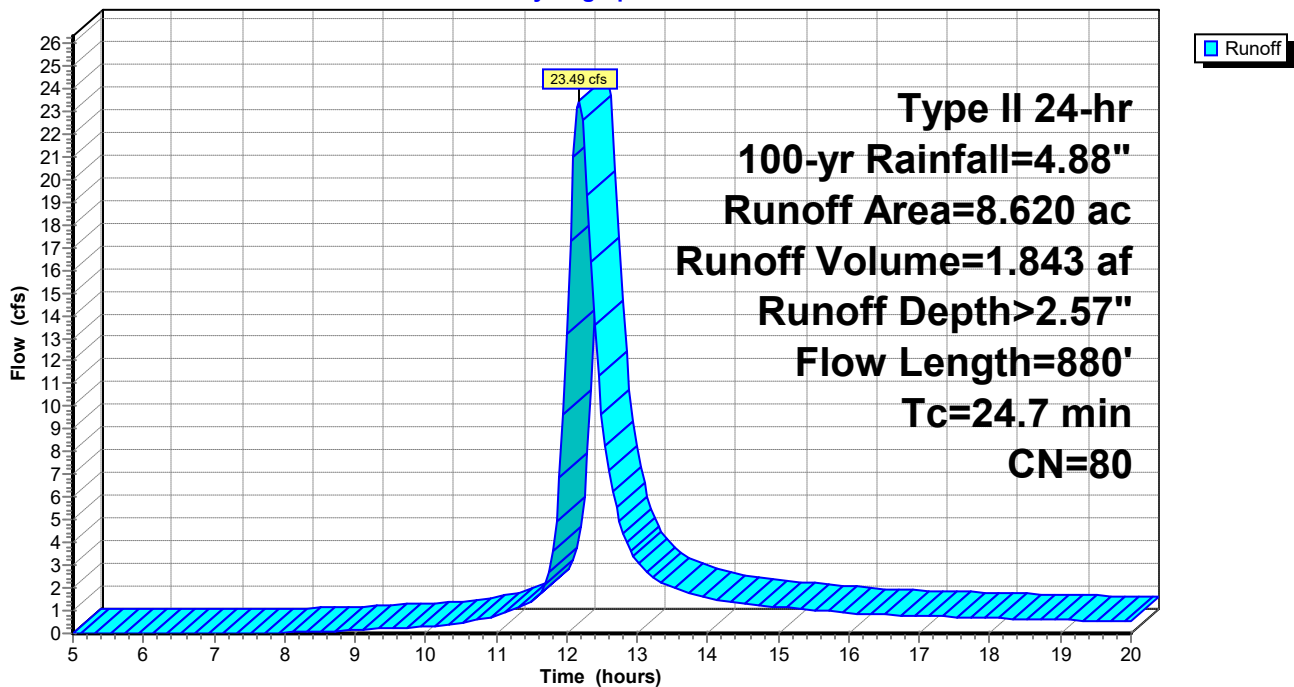
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.820	70	Woods, Good, HSG C
0.240	71	Meadow, non-grazed, HSG C
7.560	81	Legumes, straight row, Good, HSG C
8.620	80	Weighted Average
8.620		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	100	0.0110	0.23		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
17.3	780	0.0070	0.75		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
24.7	880	Total			

Subcatchment D15: DA-15

Hydrograph



Summary for Subcatchment D16: DA-16

Runoff = 0.97 cfs @ 12.23 hrs, Volume= 0.082 af, Depth> 1.83"
 Routed to Link L16 : L16

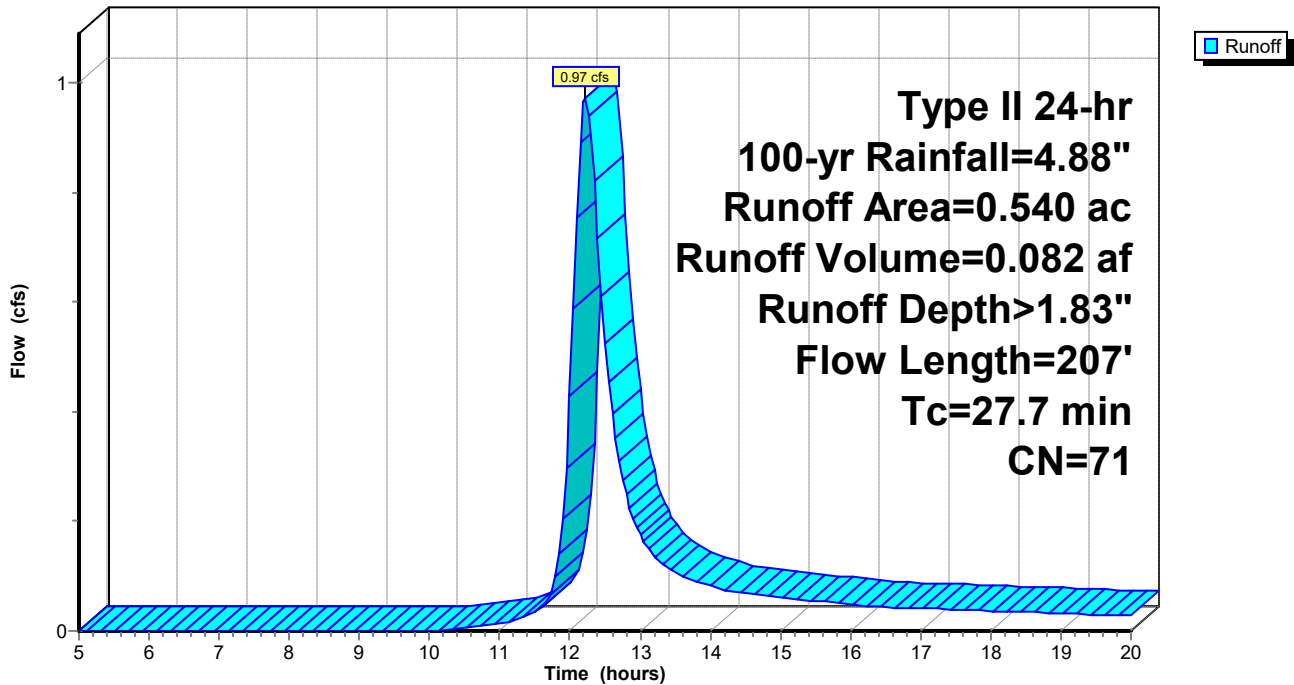
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.250	70	Woods, Good, HSG C
0.290	71	Meadow, non-grazed, HSG C
0.540	71	Weighted Average
0.540		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.4	60	0.0240	0.06		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
9.3	40	0.0160	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
2.0	107	0.0170	0.91		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
27.7	207	Total			

Subcatchment D16: DA-16

Hydrograph



Summary for Subcatchment D17: DA-17

Runoff = 12.77 cfs @ 12.02 hrs, Volume= 0.662 af, Depth> 2.67"
 Routed to Link L17 : L17

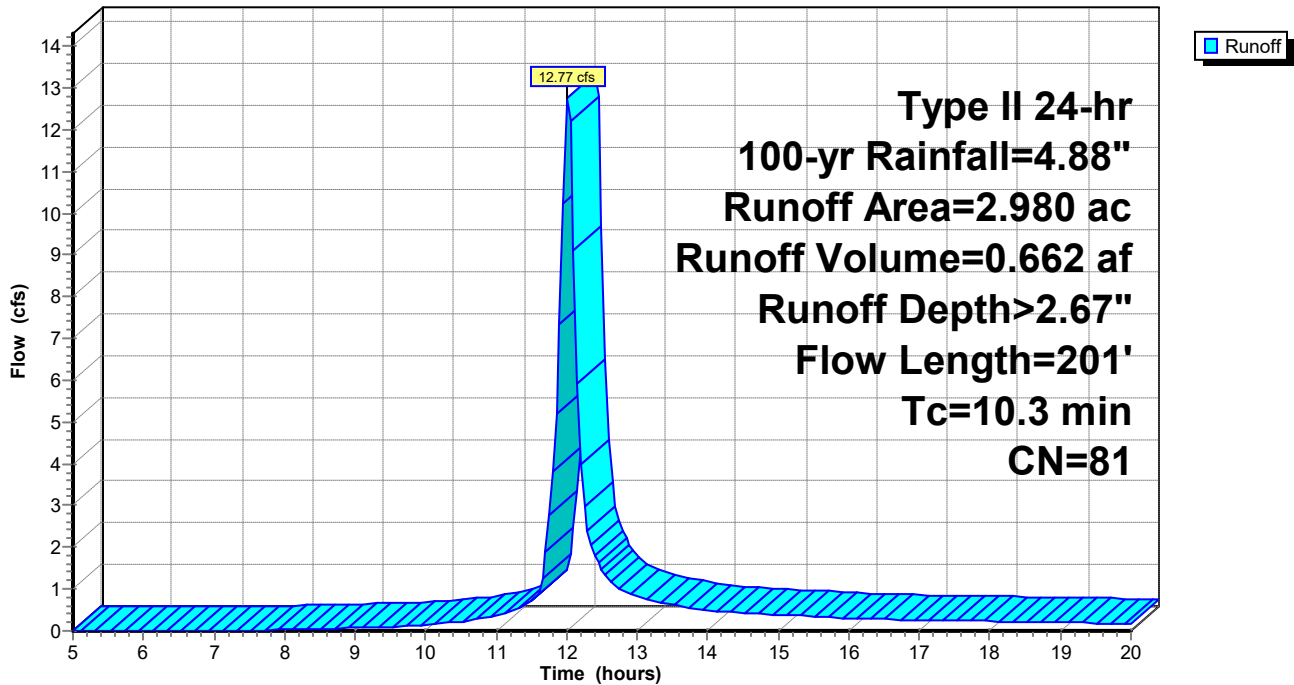
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.080	71	Meadow, non-grazed, HSG C
2.900	81	Legumes, straight row, Good, HSG C
2.980	81	Weighted Average
2.980		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0070	0.19		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
1.4	101	0.0170	1.17		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
10.3	201	Total			

Subcatchment D17: DA-17

Hydrograph



Summary for Subcatchment D18: DA-18

Runoff = 31.54 cfs @ 12.59 hrs, Volume= 4.339 af, Depth> 2.62"
 Routed to Link L18 : L18

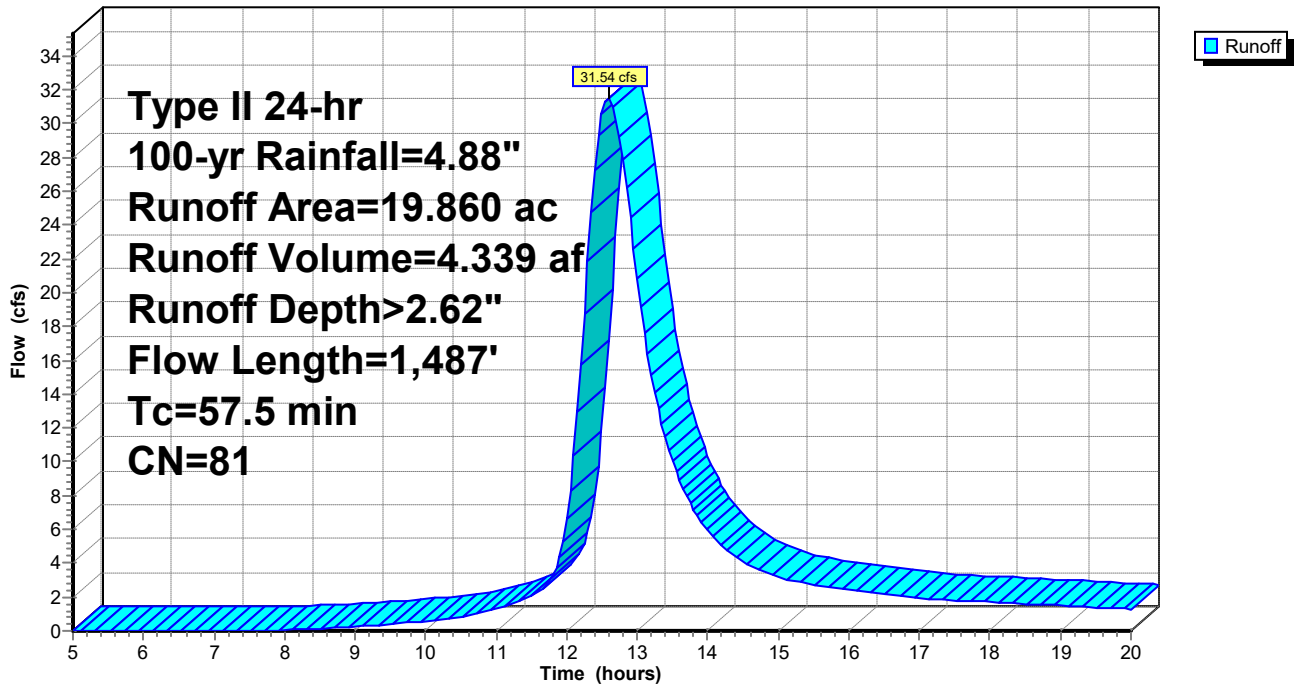
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
19.860	81	Legumes, straight row, Good, HSG C
19.860		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0070	0.19		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
10.2	460	0.0070	0.75		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
38.4	927	0.0020	0.40		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
57.5	1,487	Total			

Subcatchment D18: DA-18

Hydrograph



Summary for Subcatchment D19: DA-19

Runoff = 13.90 cfs @ 12.20 hrs, Volume= 1.128 af, Depth> 2.56"
 Routed to Link L19 : L19

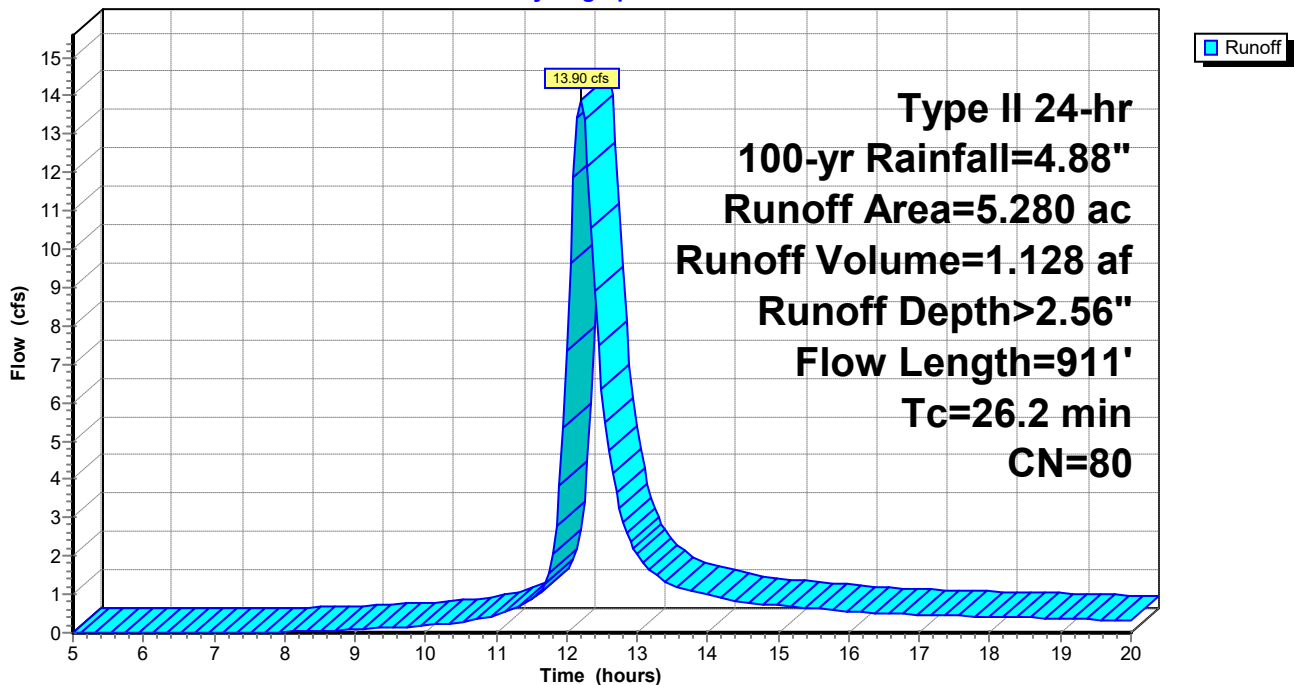
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.400	70	Woods, Good, HSG C
4.880	81	Legumes, straight row, Good, HSG C
5.280	80	Weighted Average
5.280		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.0100	0.22		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
4.7	241	0.0090	0.85		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
3.5	104	0.0100	0.50		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
10.3	466	0.0070	0.75		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
26.2	911	Total			

Subcatchment D19: DA-19

Hydrograph



Summary for Subcatchment D20: DA-20

Runoff = 15.88 cfs @ 12.76 hrs, Volume= 2.515 af, Depth> 2.03"
 Routed to Link L20 : L20

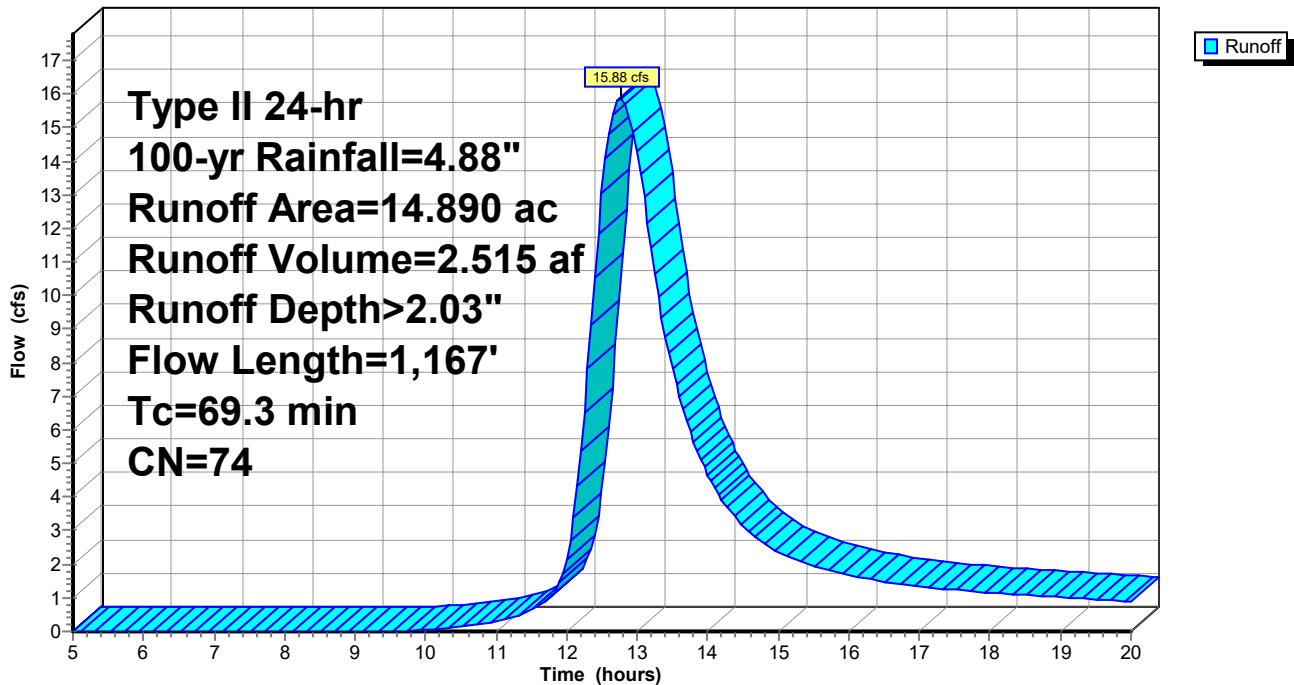
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
3.910	72	Woods/grass comb., Good, HSG C
6.900	70	Woods, Good, HSG C
4.080	81	Legumes, straight row, Good, HSG C
14.890	74	Weighted Average
14.890		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.8	100	0.0510	0.05		Sheet Flow, Woods: Dense underbrush n= 0.800 P2= 2.09"
37.5	1,067	0.0090	0.47		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
69.3	1,167	Total			

Subcatchment D20: DA-20

Hydrograph



Summary for Subcatchment D21: DA-21

Runoff = 17.93 cfs @ 13.13 hrs, Volume= 3.596 af, Depth> 1.85"
 Routed to Link L21 : L21

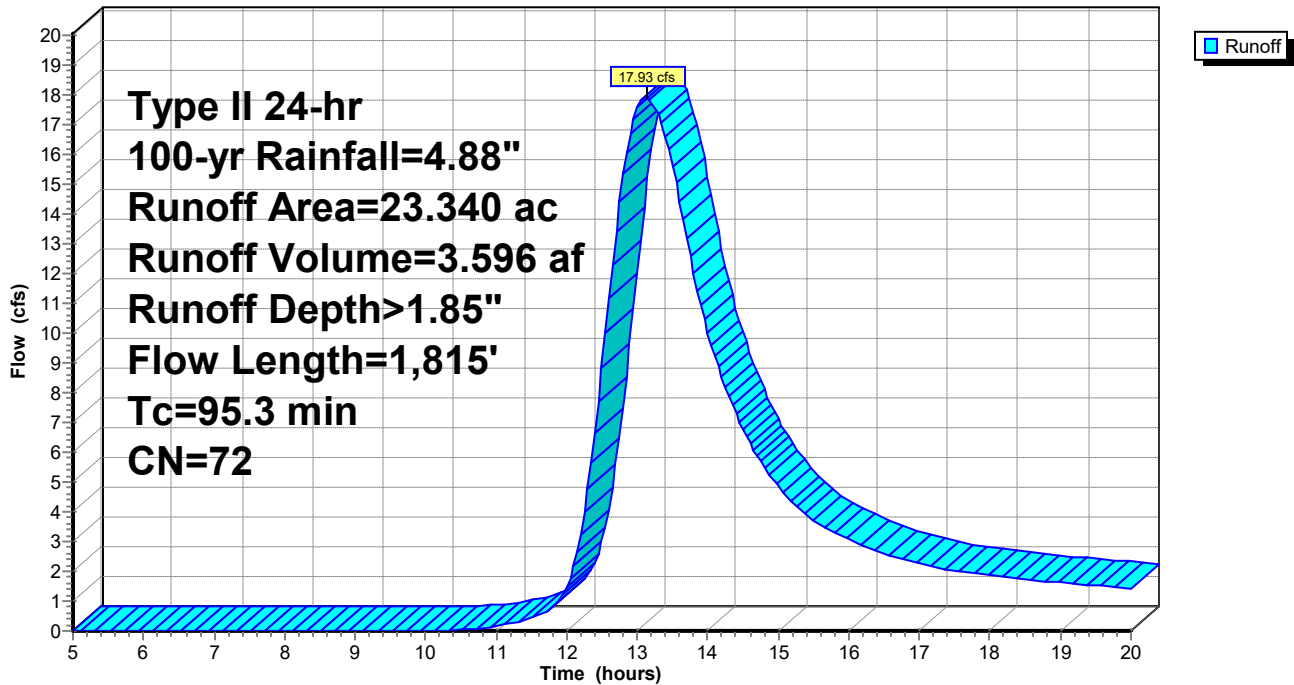
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
22.270	72	Woods/grass comb., Good, HSG C
1.070	81	Legumes, straight row, Good, HSG C
23.340	72	Weighted Average
23.340		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.5	100	0.0340	0.08		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
73.8	1,715	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
95.3	1,815	Total			

Subcatchment D21: DA-21

Hydrograph



Summary for Subcatchment D22: DA-22

Runoff = 28.93 cfs @ 12.45 hrs, Volume= 3.406 af, Depth> 2.37"
 Routed to Link L22 : L22

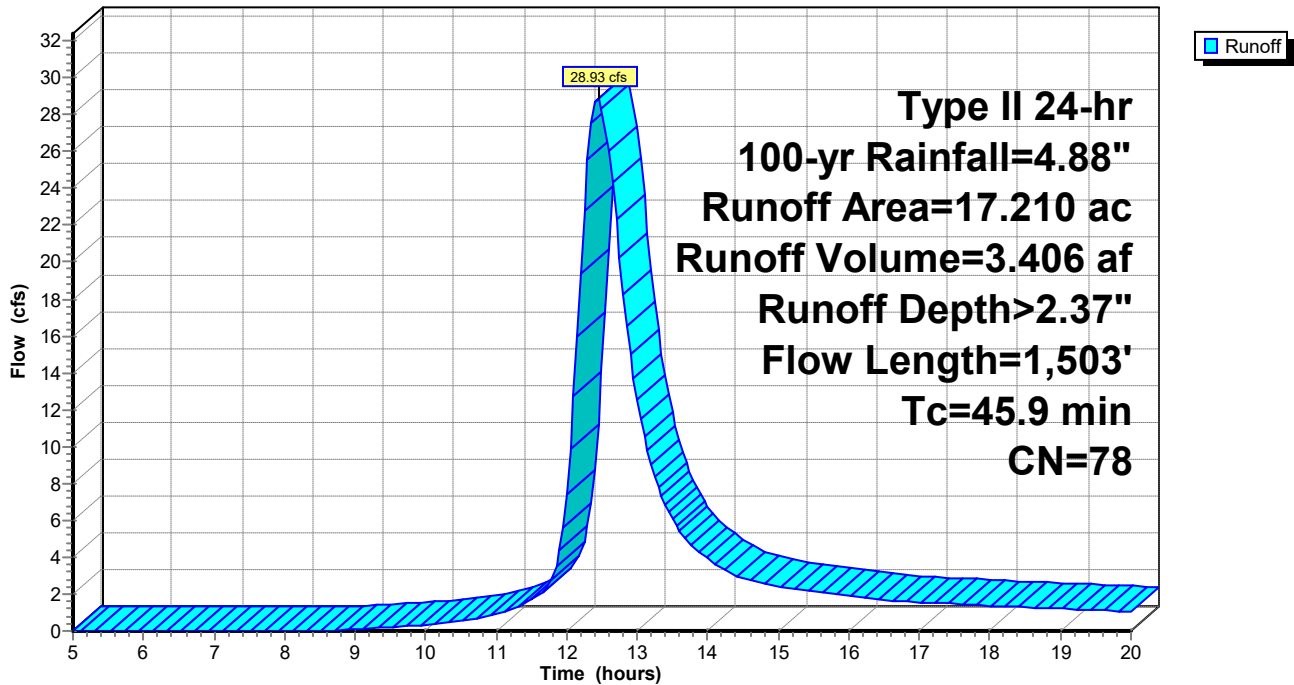
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
6.190	72	Woods/grass comb., Good, HSG C
11.020	81	Legumes, straight row, Good, HSG C
17.210	78	Weighted Average
17.210		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0120	0.23		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
32.5	1,361	0.0060	0.70		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
6.3	42	0.0005	0.11		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
45.9	1,503	Total			

Subcatchment D22: DA-22

Hydrograph



Summary for Subcatchment D23: DA-23

Runoff = 10.88 cfs @ 12.38 hrs, Volume= 1.185 af, Depth> 1.90"
 Routed to Link L23 : L23

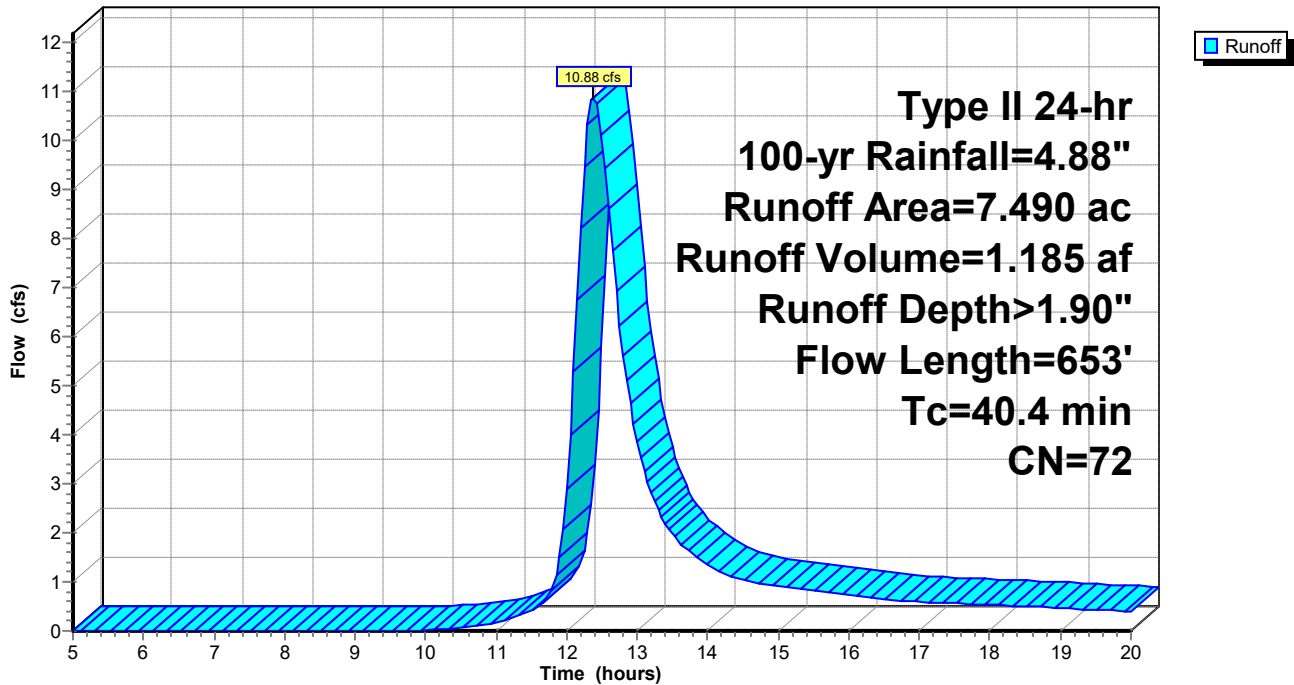
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
7.490	72	Woods/grass comb., Good, HSG C
7.490		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	100	0.0120	0.08		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
1.0	48	0.0140	0.83		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
17.7	505	0.0090	0.47		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
40.4	653	Total			

Subcatchment D23: DA-23

Hydrograph



Summary for Subcatchment D24: DA-24

Runoff = 21.43 cfs @ 12.38 hrs, Volume= 2.309 af, Depth> 2.05"
 Routed to Link L24 : L24

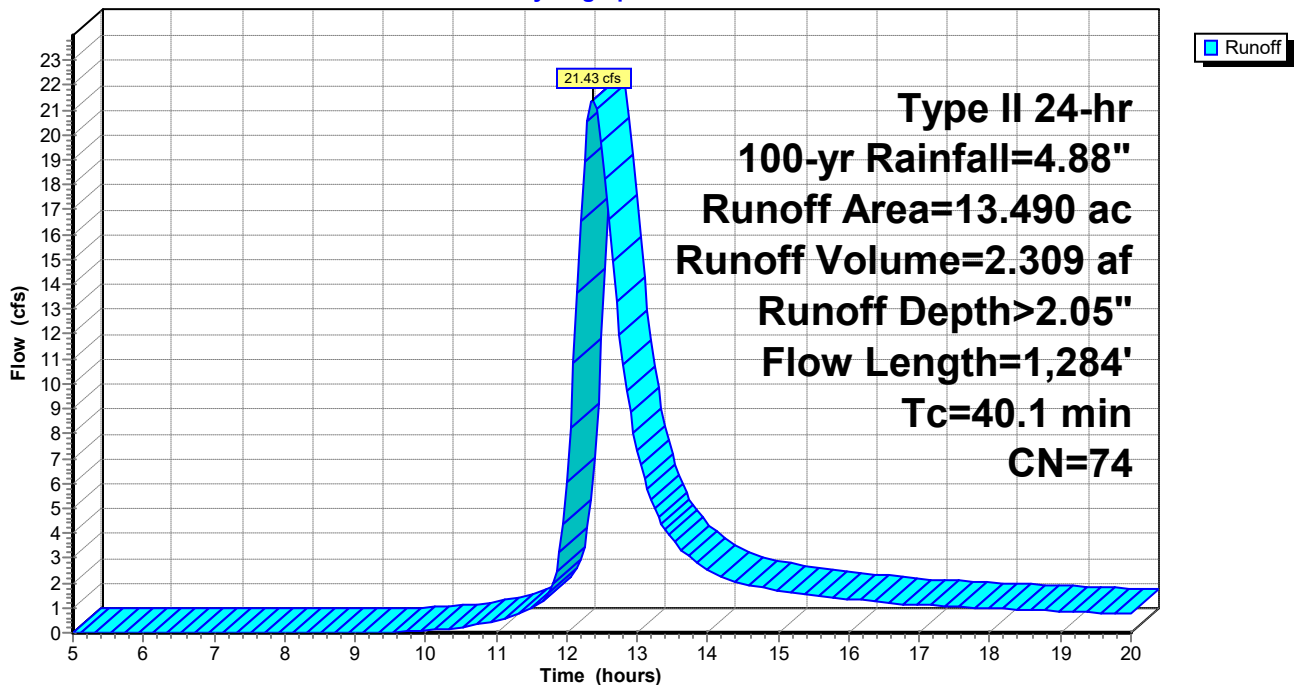
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
9.860	72	Woods/grass comb., Good, HSG C
3.630	81	Legumes, straight row, Good, HSG C
13.490	74	Weighted Average
13.490		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.4	100	0.0160	0.26		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
7.9	405	0.0090	0.85		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
7.7	263	0.0130	0.57		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
18.1	516	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
40.1	1,284	Total			

Subcatchment D24: DA-24

Hydrograph



Summary for Subcatchment D25: DA-25

Runoff = 80.28 cfs @ 12.41 hrs, Volume= 8.968 af, Depth> 2.05"
 Routed to Link L25 : L25

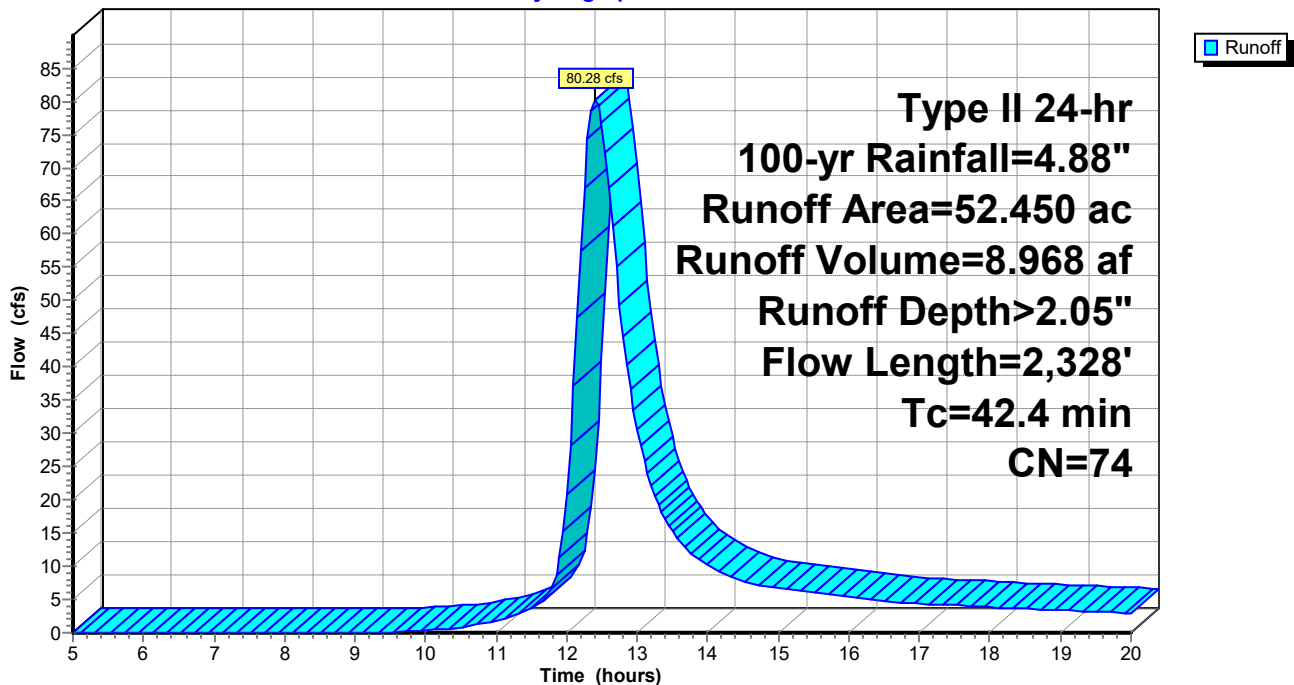
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
3.260	55	Woods, Good, HSG B
4.050	70	Woods, Good, HSG C
27.410	72	Legumes, straight row, Good, HSG B
17.730	81	Legumes, straight row, Good, HSG C
52.450	74	Weighted Average
52.450		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	100	0.0110	0.23		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
17.1	1,130	0.0150	1.10		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
17.9	1,098	0.0420	1.02		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
42.4	2,328	Total			

Subcatchment D25: DA-25

Hydrograph



Summary for Subcatchment D26: DA-26

Runoff = 49.88 cfs @ 17.05 hrs, Volume= 20.079 af, Depth> 1.25"
 Routed to Link L26 : L26

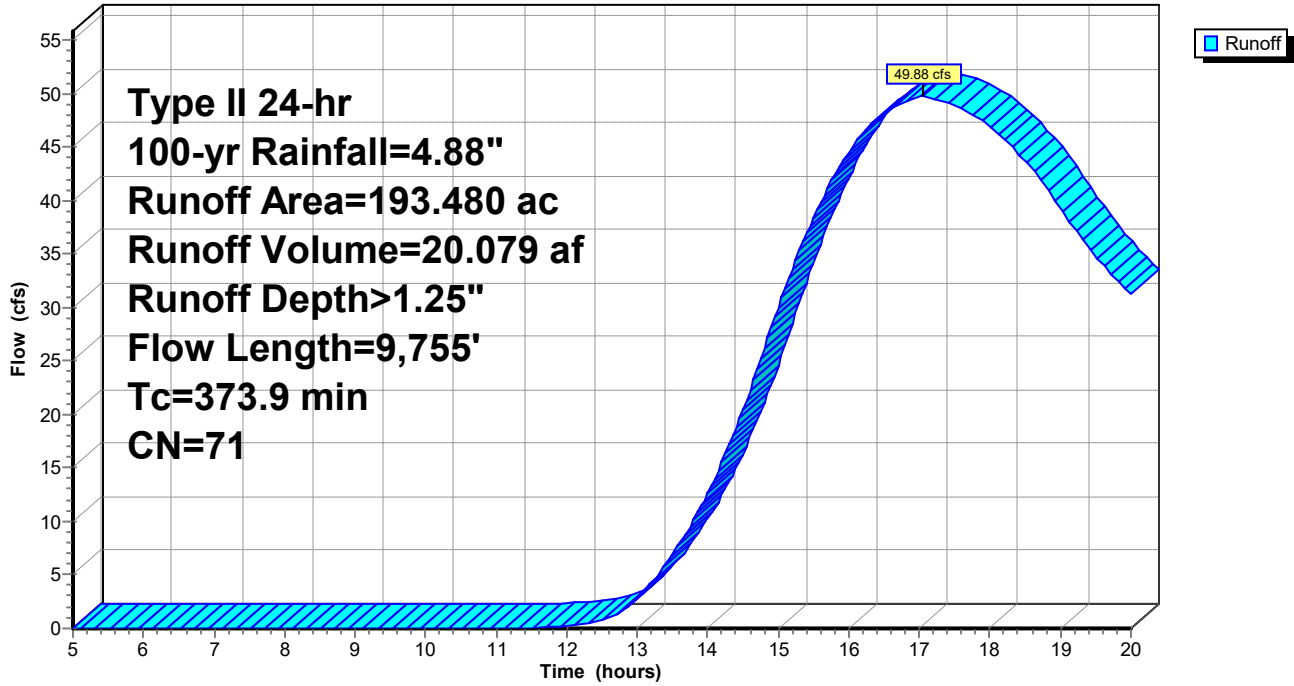
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.890	30	Woods, Good, HSG A
17.490	55	Woods, Good, HSG B
56.230	70	Woods, Good, HSG C
61.660	72	Woods/grass comb., Good, HSG C
4.000	79	Woods/grass comb., Good, HSG D
30.500	71	Meadow, non-grazed, HSG C
5.620	72	Legumes, straight row, Good, HSG B
10.650	81	Legumes, straight row, Good, HSG C
1.500	98	Unconnected pavement, HSG C
* 3.160	98	Capped Area
1.780	96	Gravel surface, HSG C
193.480	71	Weighted Average
188.820		97.59% Pervious Area
4.660		2.41% Impervious Area
1.500		32.19% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.1	100	0.0210	0.06		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
4.2	253	0.0400	1.00		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
213.2	6,067	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
19.3	174	0.0001	0.15		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
111.1	3,161	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
373.9	9,755	Total			

Subcatchment D26: DA-26

Hydrograph



Summary for Subcatchment D27: DA-27

Runoff = 57.95 cfs @ 12.57 hrs, Volume= 8.001 af, Depth> 2.99"
 Routed to Link L27 : L27

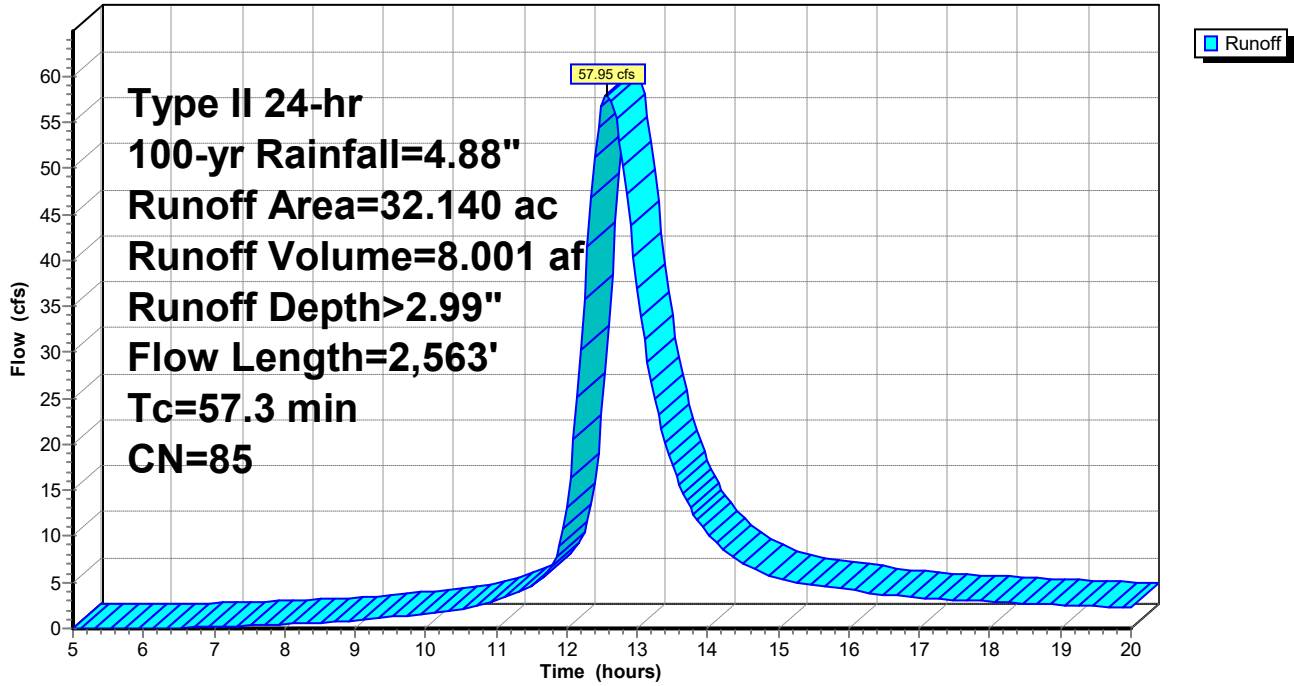
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
15.650	71	Meadow, non-grazed, HSG C
* 16.350	98	Capped Area
0.140	96	Gravel surface, HSG C
32.140	85	Weighted Average
15.790		49.13% Pervious Area
16.350		50.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.6	100	0.0150	0.12		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
10.2	1,087	0.0650	1.78		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.2	40	0.2970	3.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
12.6	948	0.0070	1.25		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
20.7	388	0.0020	0.31		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
57.3	2,563	Total			

Subcatchment D27: DA-27

Hydrograph



Summary for Subcatchment D28: DA-28

Runoff = 36.42 cfs @ 12.14 hrs, Volume= 2.775 af, Depth> 3.51"
 Routed to Link L28 : L28

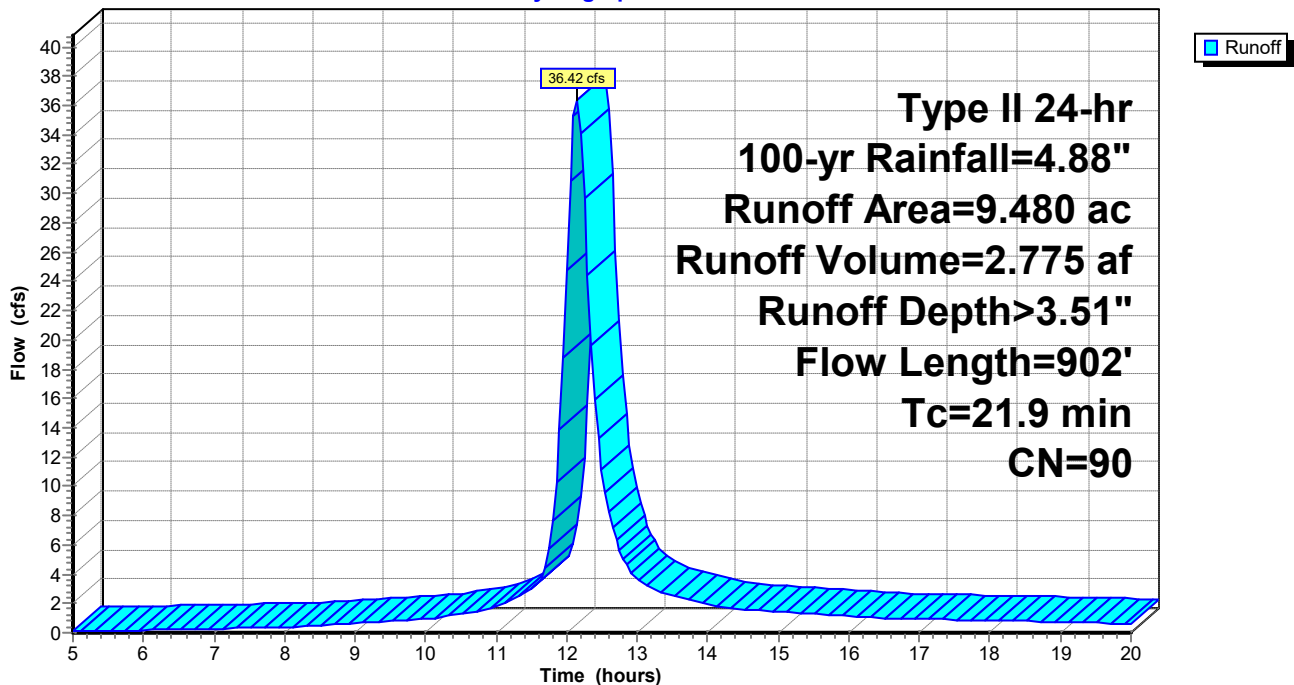
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
2.930	71	Meadow, non-grazed, HSG C
0.170	96	Gravel surface, HSG C
* 6.380	98	Capped Area
9.480	90	Weighted Average
3.100		32.70% Pervious Area
6.380		67.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0430	0.19		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
2.8	352	0.0880	2.08		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
10.2	450	0.0110	0.73		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
21.9	902	Total			

Subcatchment D28: DA-28

Hydrograph



Summary for Subcatchment D29: DA-29

Runoff = 23.74 cfs @ 15.81 hrs, Volume= 9.265 af, Depth> 1.60"
 Routed to Link L29 : L29

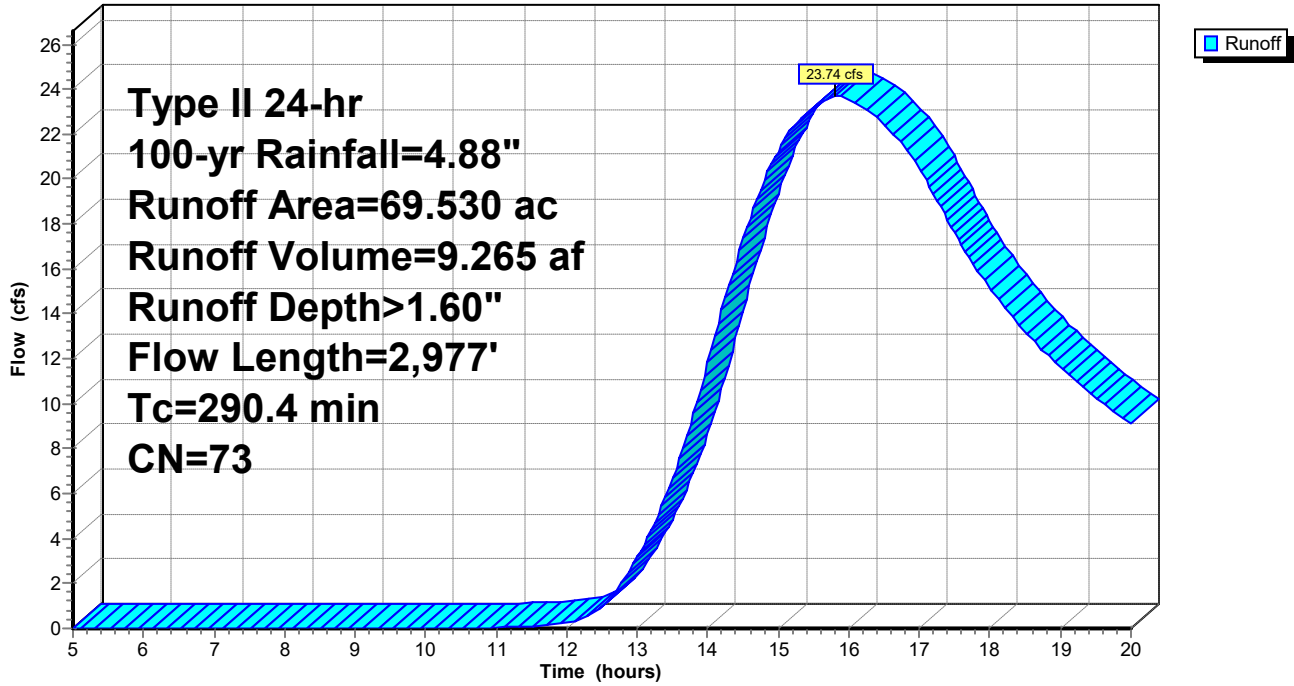
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.500	30	Woods, Good, HSG A
41.070	70	Woods, Good, HSG C
18.820	72	Woods/grass comb., Good, HSG C
1.890	74	Pasture/grassland/range, Good, HSG C
0.300	96	Gravel surface, HSG C
* 6.950	98	Capped Area
69.530	73	Weighted Average
62.580		90.00% Pervious Area
6.950		10.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.4	100	0.2460	0.38		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
11.3	1,087	0.0520	1.60		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.0	215	0.0150	1.84		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
56.4	926	0.0030	0.27		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
216.3	649	0.0001	0.05		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
290.4	2,977	Total			

Subcatchment D29: DA-29

Hydrograph



Summary for Subcatchment D30: DA-30

Runoff = 38.45 cfs @ 12.72 hrs, Volume= 5.889 af, Depth> 1.95"
 Routed to Link L30 : L30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

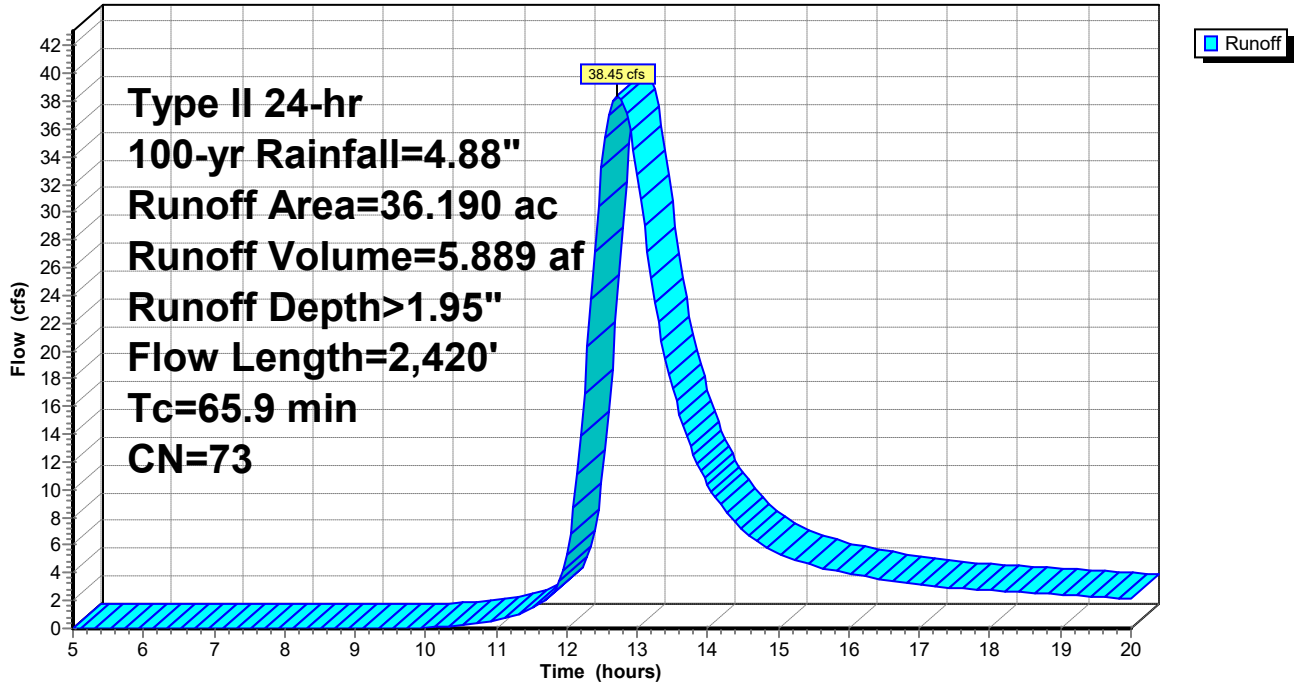
Area (ac)	CN	Description
33.590	71	Meadow, non-grazed, HSG C
0.870	98	Unconnected pavement, HSG C
0.750	96	Gravel surface, HSG C
0.980	98	Water Surface, HSG C

36.190	73	Weighted Average
34.340		94.89% Pervious Area
1.850		5.11% Impervious Area
0.870		47.03% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.4	100	0.0180	0.09		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
8.4	512	0.0210	1.01		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
14.3	574	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
19.0	764	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
5.8	470	0.0080	1.34		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
65.9	2,420	Total			

Subcatchment D30: DA-30

Hydrograph



Summary for Subcatchment D31: DA-31

Runoff = 25.44 cfs @ 12.26 hrs, Volume= 2.286 af, Depth> 1.91"
 Routed to Link L31 : L31

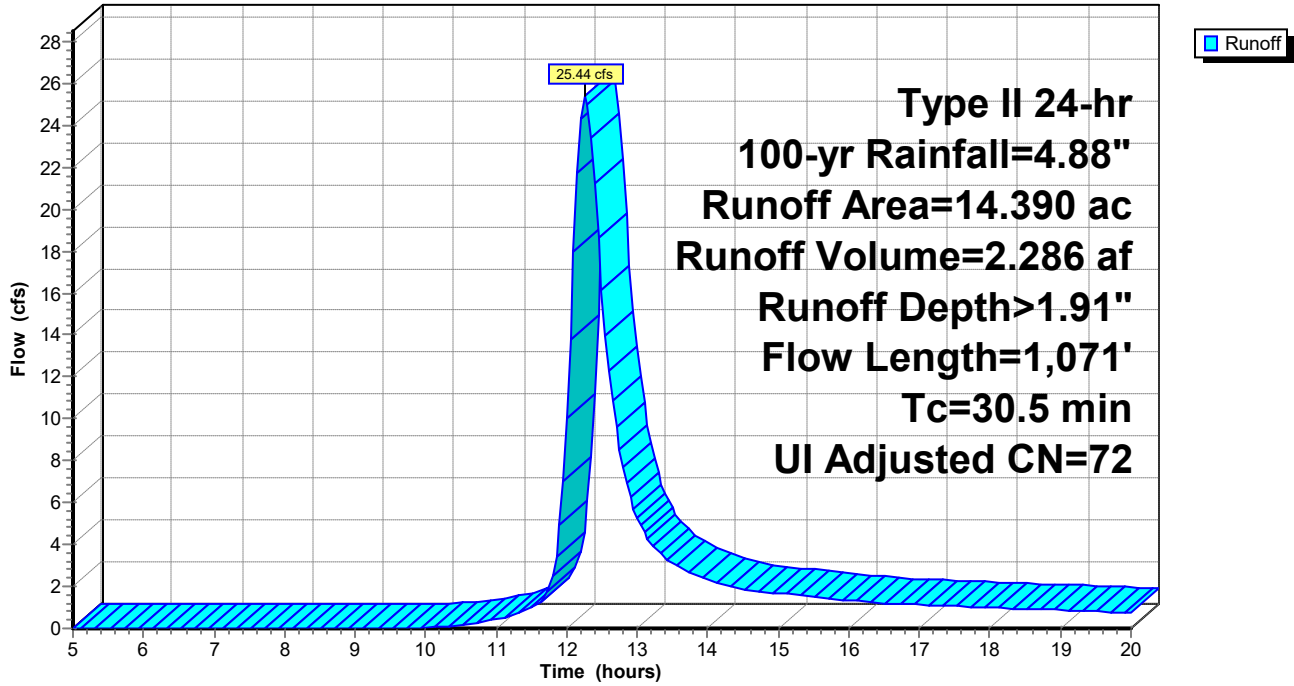
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Adj	Description
10.580	71		Meadow, non-grazed, HSG C
1.100	70		Woods, Good, HSG C
1.740	72		Woods/grass comb., Good, HSG C
0.970	98		Unconnected pavement, HSG C
14.390	73	72	Weighted Average, UI Adjusted
13.420			93.26% Pervious Area
0.970			6.74% Impervious Area
0.970			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	13	0.0100	0.56		Sheet Flow, Smooth surfaces n= 0.011 P2= 2.09"
14.0	87	0.0270	0.10		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
9.3	647	0.0060	1.16		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
6.4	296	0.0120	0.77		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.4	28	0.0670	1.29		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
30.5	1,071	Total			

Subcatchment D31: DA-31

Hydrograph



Summary for Subcatchment D32: DA-32

Runoff = 6.71 cfs @ 12.21 hrs, Volume= 0.556 af, Depth> 1.47"
 Routed to Link L32 : L32

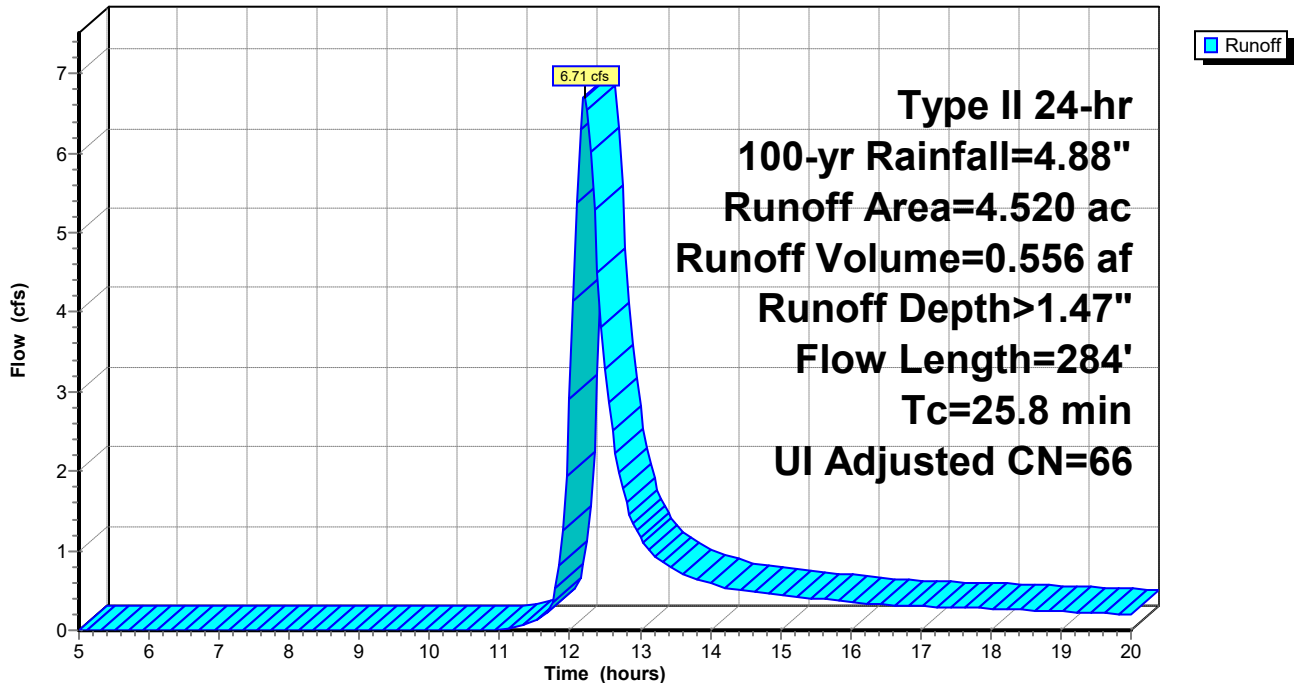
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Adj	Description
2.330	58		Meadow, non-grazed, HSG B
1.730	71		Meadow, non-grazed, HSG C
0.220	98		Unconnected pavement, HSG C
0.040	96		Gravel surface, HSG C
0.200	98		Water Surface, HSG C
4.520	67	66	Weighted Average, UI Adjusted
4.100			90.71% Pervious Area
0.420			9.29% Impervious Area
0.220			52.38% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.3	100	0.0100	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
2.5	184	0.0310	1.23		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
25.8	284	Total			

Subcatchment D32: DA-32

Hydrograph



Summary for Subcatchment D33: DA-33

Runoff = 40.32 cfs @ 12.51 hrs, Volume= 5.083 af, Depth> 2.04"
 Routed to Link L33 : L33

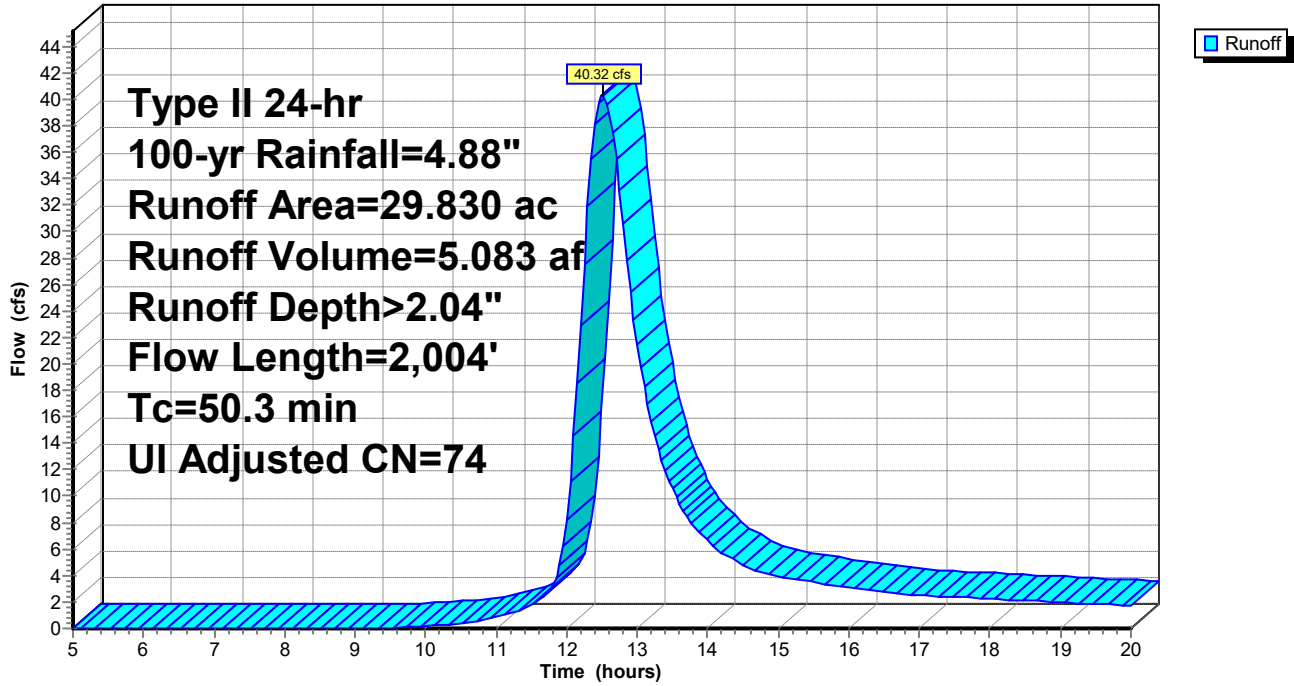
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Adj	Description
5.740	72		Woods/grass comb., Good, HSG C
17.300	71		Meadow, non-grazed, HSG C
1.150	74		>75% Grass cover, Good, HSG C
5.640	98		Unconnected pavement, HSG C
29.830	76	74	Weighted Average, UI Adjusted
24.190			81.09% Pervious Area
5.640			18.91% Impervious Area
5.640			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.4	100	0.0110	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
7.4	219	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
10.3	655	0.0050	1.06		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
4.9	341	0.0060	1.16		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
5.3	689	0.0210	2.17		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
50.3	2,004	Total			

Subcatchment D33: DA-33

Hydrograph



Summary for Subcatchment D34: DA-34

Runoff = 49.82 cfs @ 12.29 hrs, Volume= 4.706 af, Depth> 2.47"
 Routed to Link L34 : L34

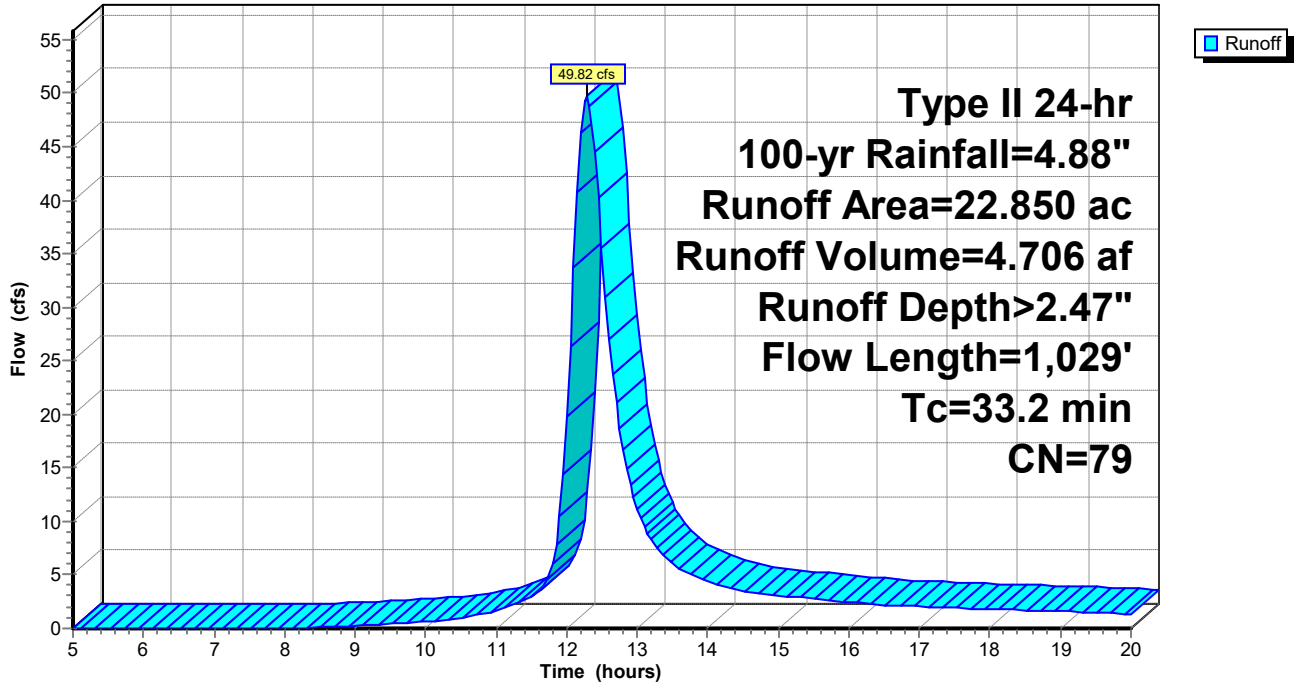
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
1.010	30	Meadow, non-grazed, HSG A
13.310	71	Meadow, non-grazed, HSG C
8.530	98	Unconnected pavement, HSG C
22.850	79	Weighted Average
14.320		62.67% Pervious Area
8.530		37.33% Impervious Area
8.530		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	100	0.0120	0.08		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
2.9	199	0.0270	1.15		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
5.3	518	0.0120	1.64		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
3.3	212	0.0050	1.06		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.2	1,029	Total			

Subcatchment D34: DA-34

Hydrograph



Summary for Subcatchment D35: DA-35

Runoff = 31.96 cfs @ 13.49 hrs, Volume= 7.687 af, Depth> 1.67"
 Routed to Link L35 : L35

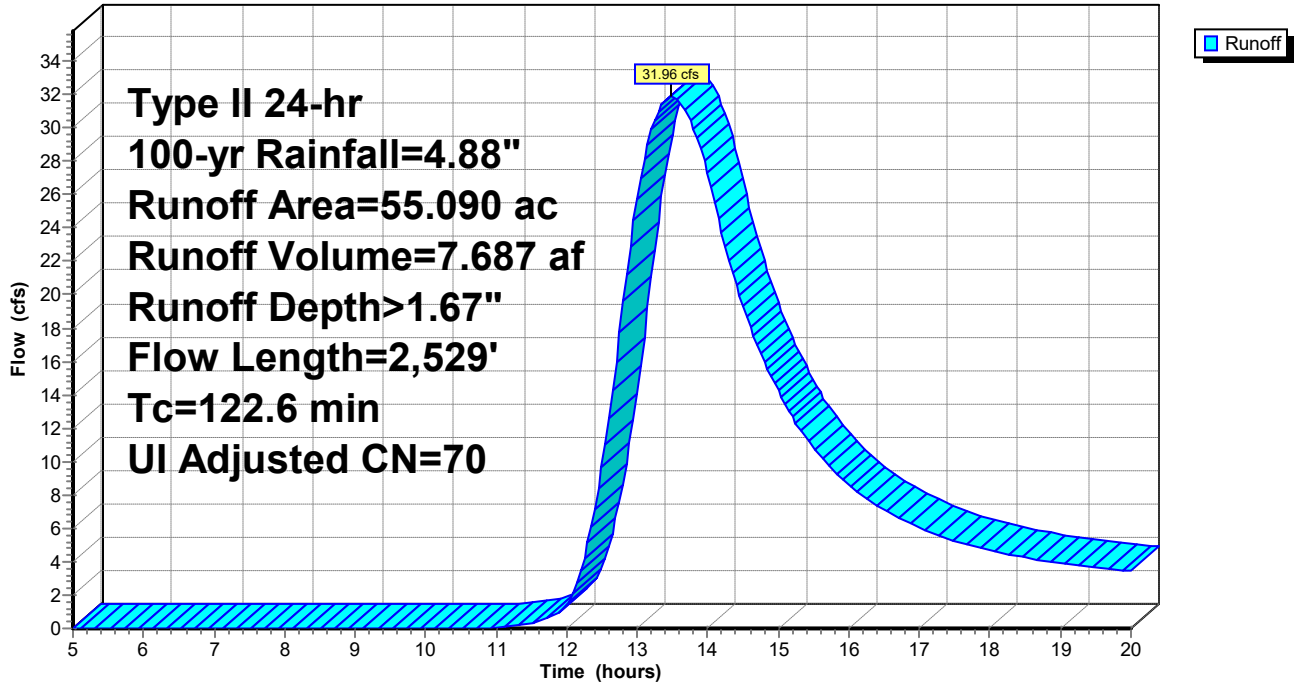
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Adj	Description
2.880	30		Meadow, non-grazed, HSG A
27.080	71		Meadow, non-grazed, HSG C
21.630	72		Woods/grass comb., Good, HSG C
3.430	98		Unconnected pavement, HSG C
0.070	96		Gravel surface, HSG C
55.090	71	70	Weighted Average, UI Adjusted
51.660			93.77% Pervious Area
3.430			6.23% Impervious Area
3.430			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
58.5	100	0.0010	0.03		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
21.4	610	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
1.4	98	0.0060	1.16		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
40.4	1,628	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.9	93	0.0140	1.77		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
122.6	2,529	Total			

Subcatchment D35: DA-35

Hydrograph



Summary for Subcatchment D36: DA-36

Runoff = 8.04 cfs @ 12.16 hrs, Volume= 0.598 af, Depth> 1.76"
 Routed to Link L36 : L36

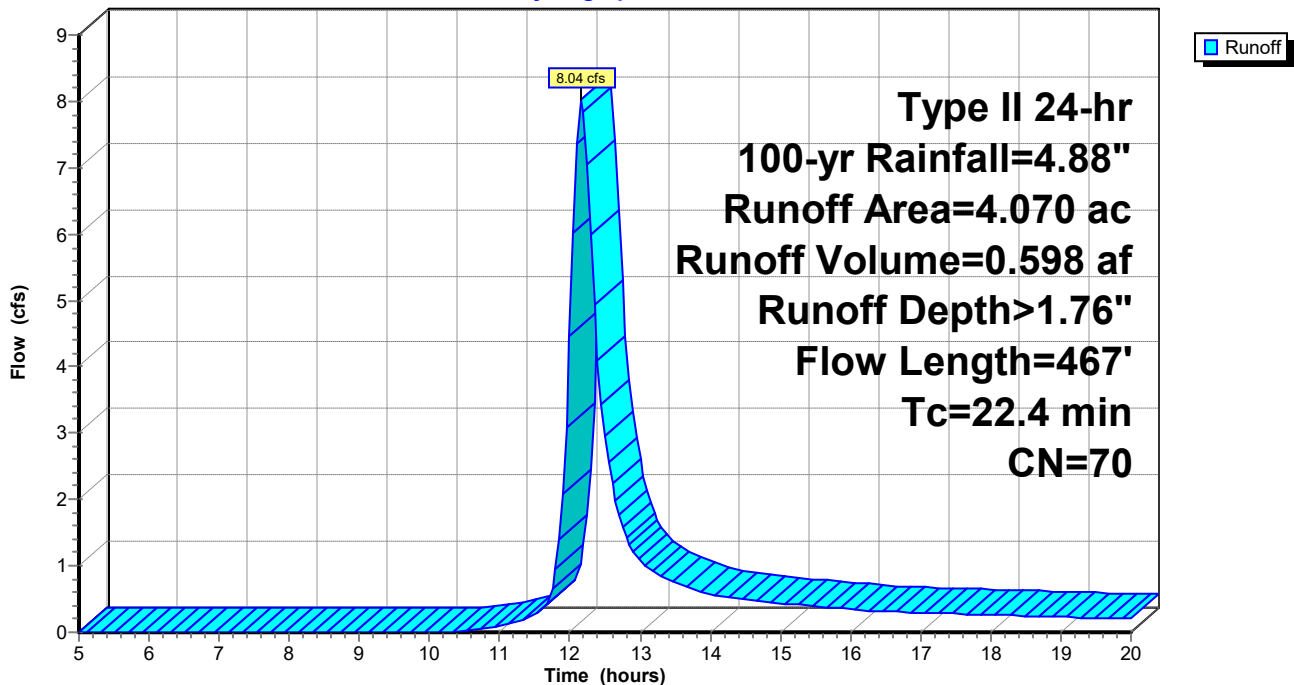
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.100	30	Meadow, non-grazed, HSG A
3.900	71	Meadow, non-grazed, HSG C
0.070	98	Unconnected pavement, HSG C
4.070	70	Weighted Average
4.000		98.28% Pervious Area
0.070		1.72% Impervious Area
0.070		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.3	100	0.0410	0.13		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
6.7	266	0.0090	0.66		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
2.4	101	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
22.4	467	Total			

Subcatchment D36: DA-36

Hydrograph



Summary for Subcatchment D37: DA-37

Runoff = 28.30 cfs @ 12.65 hrs, Volume= 4.421 af, Depth> 3.67"
 Routed to Link L37 : L37

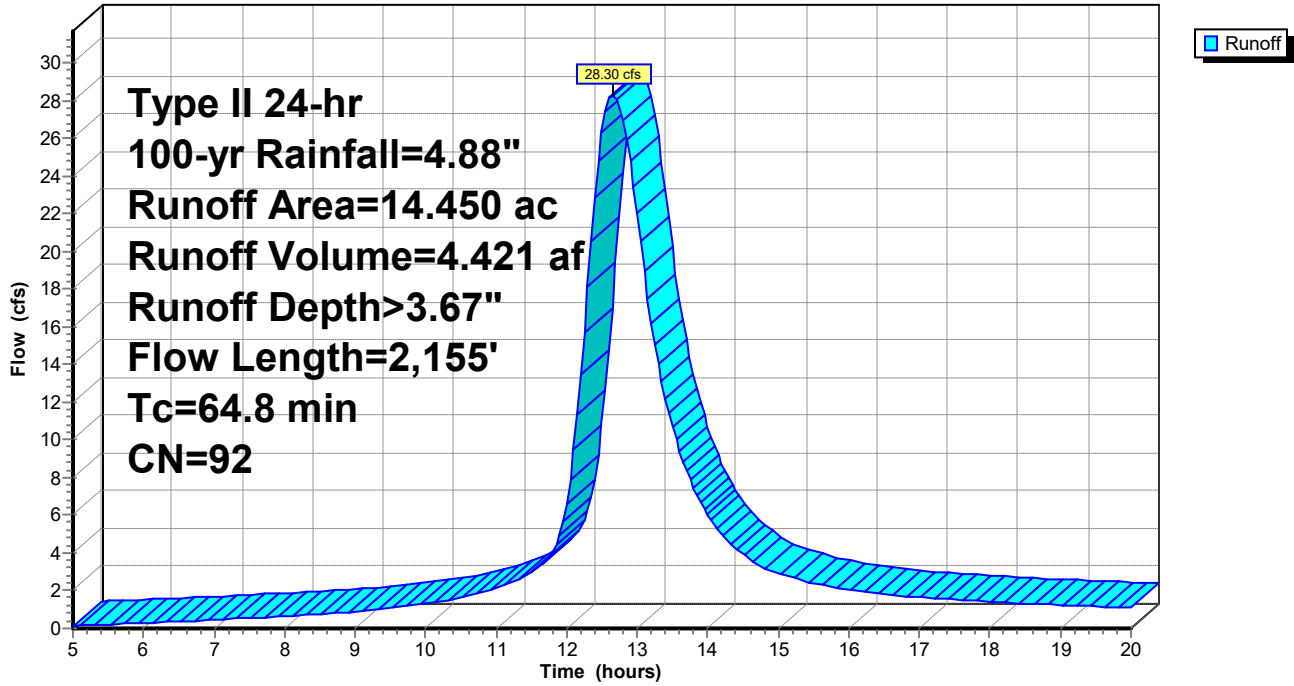
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
3.460	71	Meadow, non-grazed, HSG C
10.380	98	Unconnected pavement, HSG C
0.610	98	Water Surface, HSG C
14.450	92	Weighted Average
3.460		23.94% Pervious Area
10.990		76.06% Impervious Area
10.380		94.45% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.3	100	0.0090	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
31.8	1,279	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.9	73	0.0090	1.42		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
7.8	703	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
64.8	2,155	Total			

Subcatchment D37: DA-37

Hydrograph



Summary for Subcatchment D38: DA-38

Runoff = 13.48 cfs @ 12.25 hrs, Volume= 1.270 af, Depth> 3.50"
 Routed to Link L38 : L38

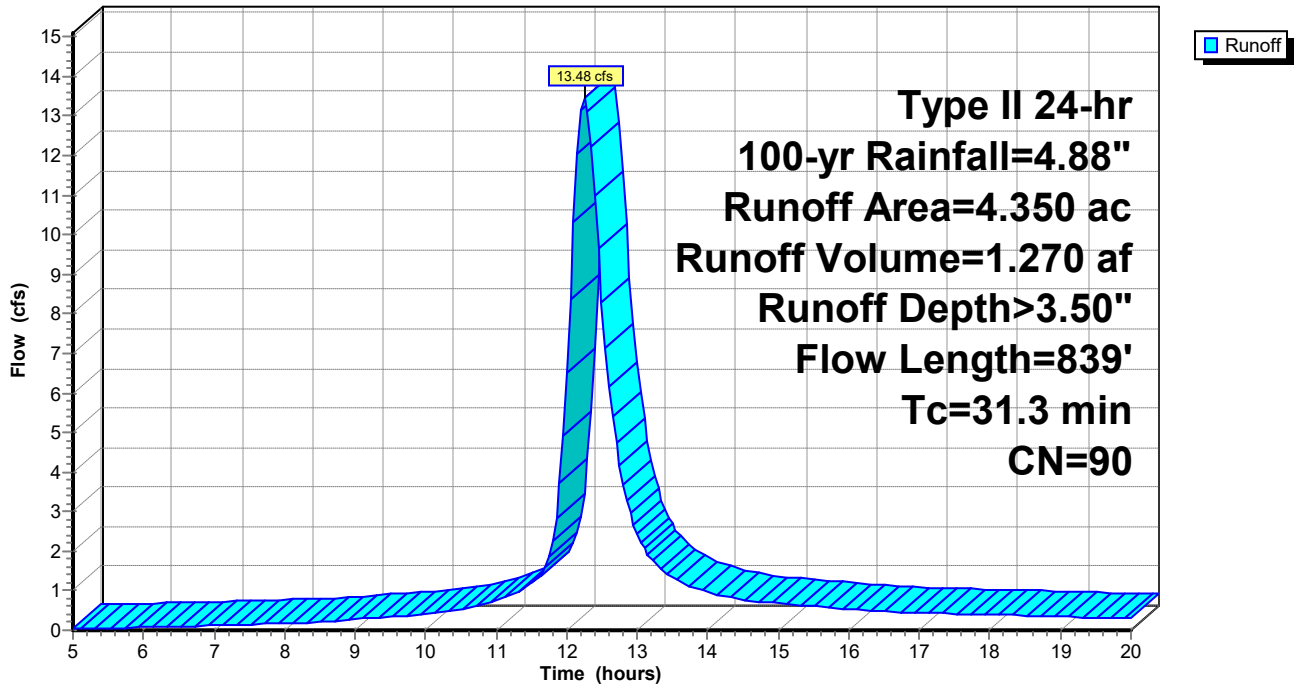
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
1.340	71	Meadow, non-grazed, HSG C
2.740	98	Unconnected pavement, HSG C
0.270	98	Water Surface, HSG C
4.350	90	Weighted Average
1.340		30.80% Pervious Area
3.010		69.20% Impervious Area
2.740		91.03% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.3	100	0.0160	0.09		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
11.8	674	0.0040	0.95		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.2	65	0.0900	4.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
31.3	839	Total			

Subcatchment D38: DA-38

Hydrograph



Summary for Subcatchment D39: DA-39

Runoff = 9.80 cfs @ 12.32 hrs, Volume= 1.085 af, Depth> 3.99"
 Routed to Link L39 : L39

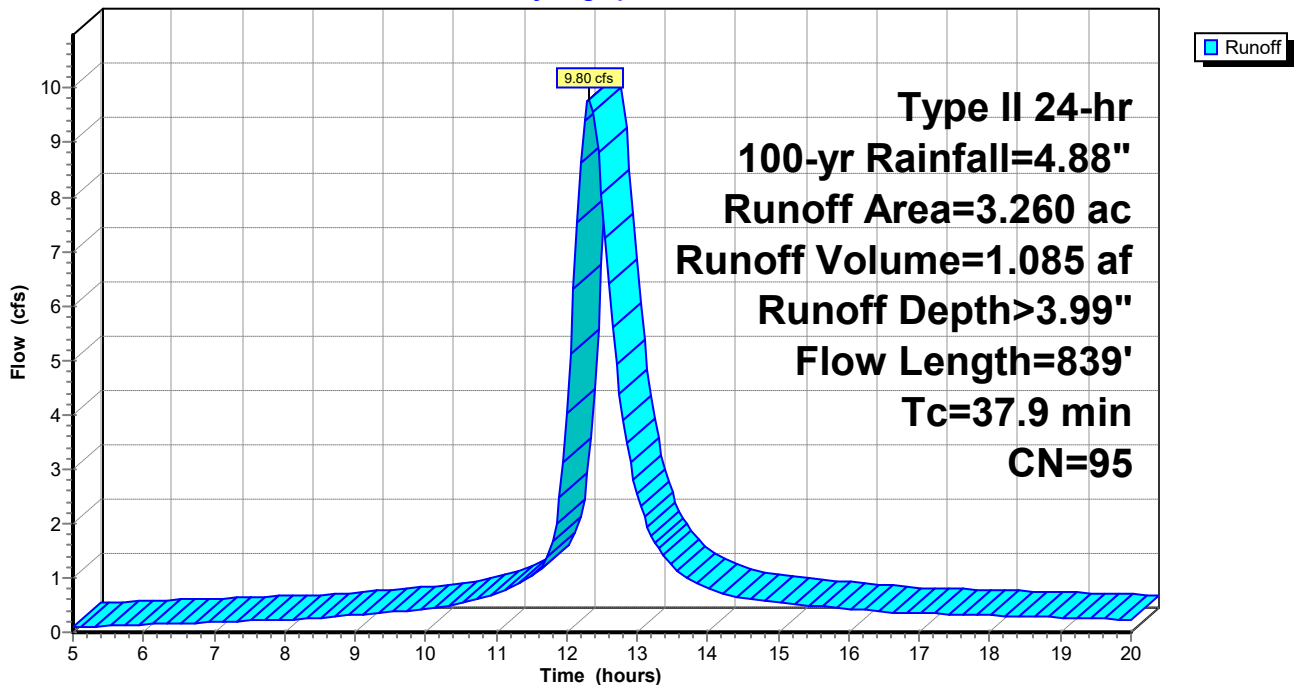
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.390	74	>75% Grass cover, Good, HSG C
2.770	98	Unconnected pavement, HSG C
0.100	98	Water Surface, HSG C
3.260	95	Weighted Average
0.390		11.96% Pervious Area
2.870		88.04% Impervious Area
2.770		96.52% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.9	100	0.0030	0.06		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
11.8	674	0.0040	0.95		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.2	65	0.0900	4.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
37.9	839	Total			

Subcatchment D39: DA-39

Hydrograph



Summary for Subcatchment D40: DA-40

Runoff = 5.18 cfs @ 12.46 hrs, Volume= 0.664 af, Depth> 3.69"
 Routed to Link L40 : L40

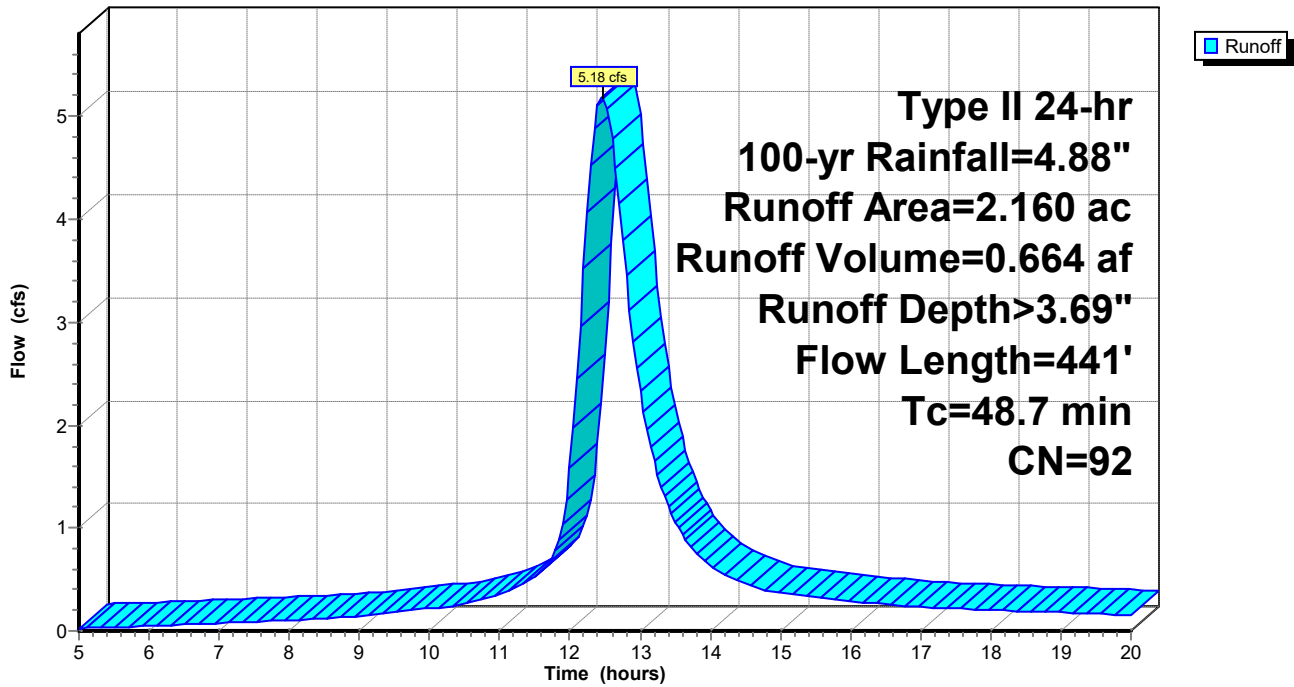
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.530	74	>75% Grass cover, Good, HSG C
1.630	98	Unconnected pavement, HSG C
2.160	92	Weighted Average
0.530		24.54% Pervious Area
1.630		75.46% Impervious Area
1.630		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.2	100	0.0010	0.04		Sheet Flow, Grass: Short n= 0.150 P2= 2.09"
8.5	341	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
48.7	441	Total			

Subcatchment D40: DA-40

Hydrograph



Summary for Subcatchment D41: DA-41

Runoff = 81.93 cfs @ 13.08 hrs, Volume= 18.223 af, Depth> 4.14"
 Routed to Link L41 : L41

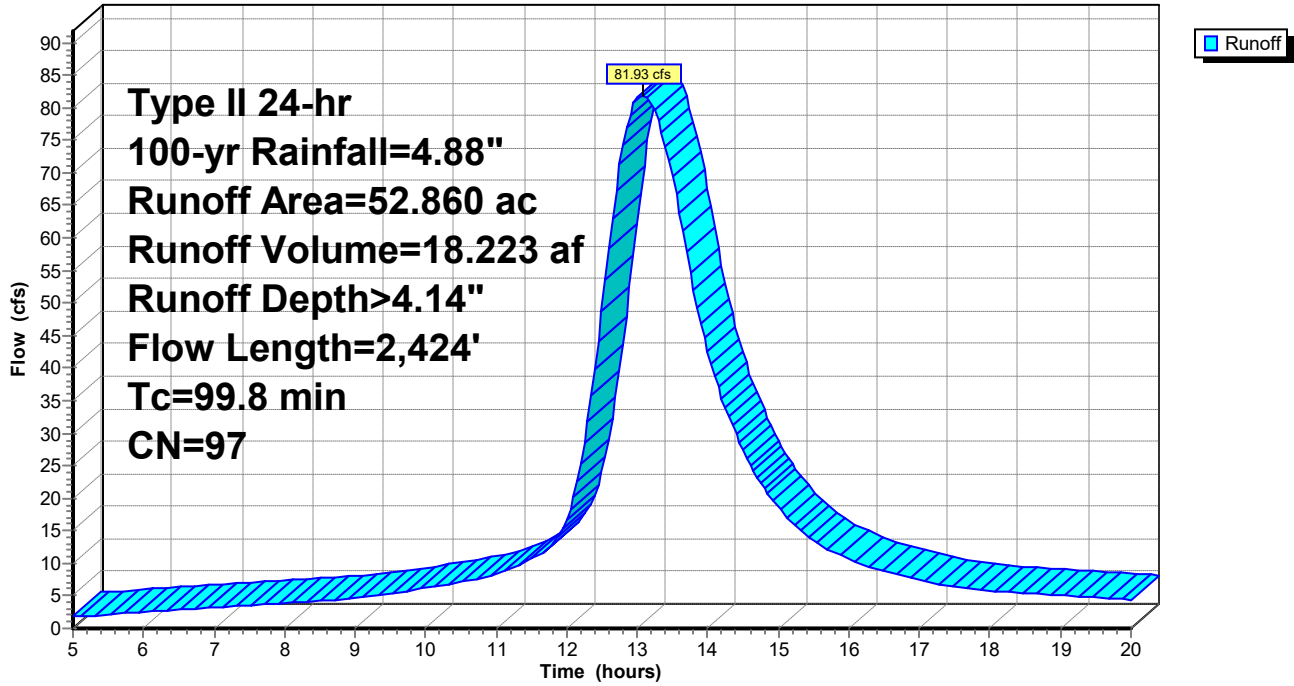
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.090	61	>75% Grass cover, Good, HSG B
1.420	74	>75% Grass cover, Good, HSG C
* 48.560	98	Capped Area
2.790	98	Water Surface, HSG C
52.860	97	Weighted Average
1.510		2.86% Pervious Area
51.350		97.14% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
44.4	100	0.0020	0.04		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
15.6	626	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
39.0	1,571	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
0.8	127	0.0290	2.55		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
99.8	2,424	Total			

Subcatchment D41: DA-41

Hydrograph



Summary for Subcatchment D42: DA-42

Runoff = 23.81 cfs @ 13.95 hrs, Volume= 6.814 af, Depth> 1.71"
 Routed to Link L42 : L42

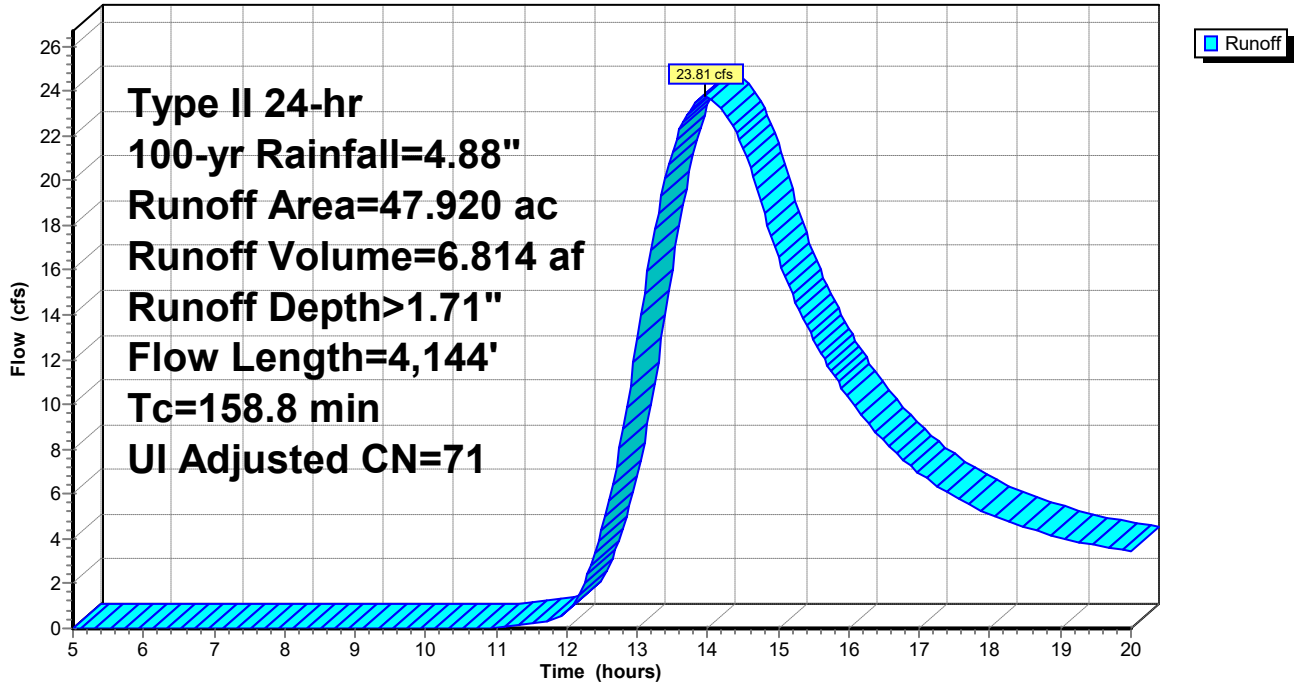
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Adj	Description
46.870	71		Meadow, non-grazed, HSG C
0.990	98		Unconnected pavement, HSG C
0.060	98		Water Surface, HSG C
47.920	72	71	Weighted Average, UI Adjusted
46.870			97.81% Pervious Area
1.050			2.19% Impervious Area
0.990			94.29% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.6	100	0.0060	0.06		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
15.3	436	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
17.2	694	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
28.5	810	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
11.4	459	0.0020	0.67		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
17.7	505	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
40.1	1,140	0.0010	0.47		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
158.8	4,144	Total			

Subcatchment D42: DA-42

Hydrograph



Somerset Pre-Dev_Rev4

Prepared by Tetra Tech

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Type II 24-hr 100-yr Rainfall=4.88"

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Summary for Subcatchment D43: DA-43

Runoff = 6.93 cfs @ 12.42 hrs, Volume= 0.792 af, Depth> 1.60"
 Routed to Link L43 : L43

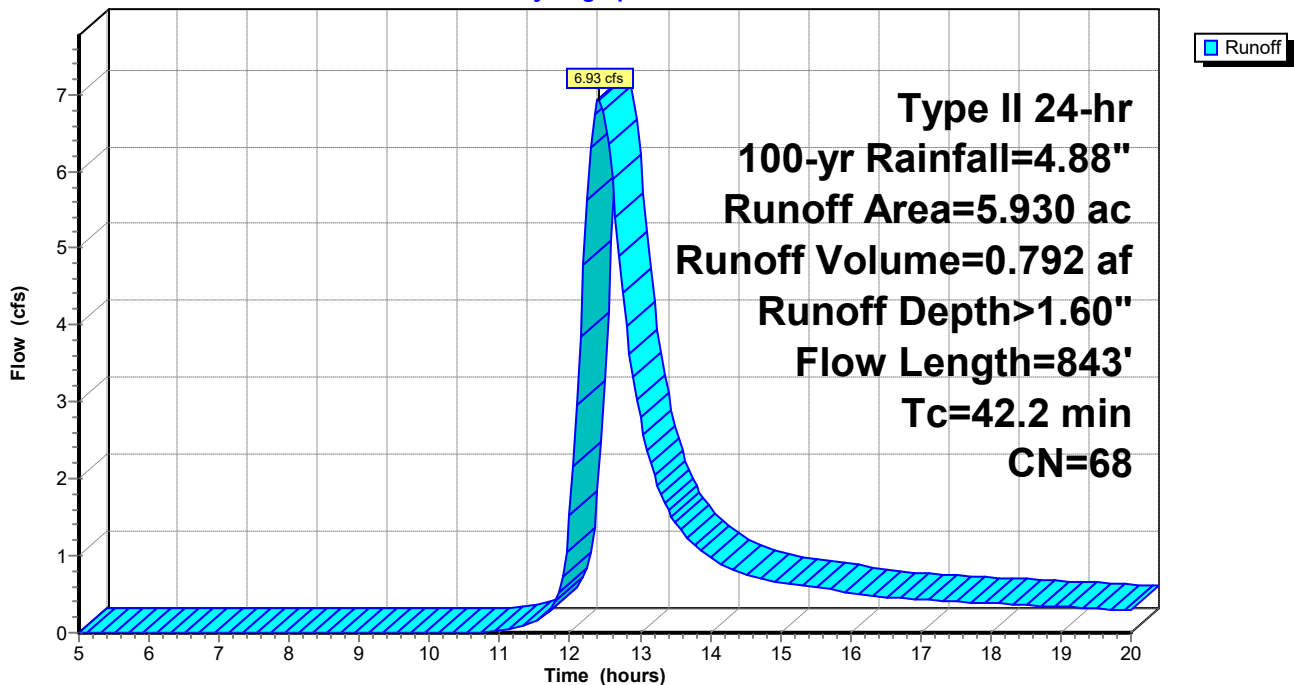
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.360	58	Woods/grass comb., Good, HSG B
3.450	72	Woods/grass comb., Good, HSG C
1.050	58	Meadow, non-grazed, HSG B
1.070	71	Meadow, non-grazed, HSG C
5.930	68	Weighted Average
5.930		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	100	0.0120	0.08		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
9.5	380	0.0090	0.66		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
11.0	363	0.0120	0.55		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
42.2	843	Total			

Subcatchment D43: DA-43

Hydrograph



Summary for Subcatchment D44: DA-44

Runoff = 36.15 cfs @ 12.92 hrs, Volume= 6.415 af, Depth> 2.02"
 Routed to Link L44 : L44

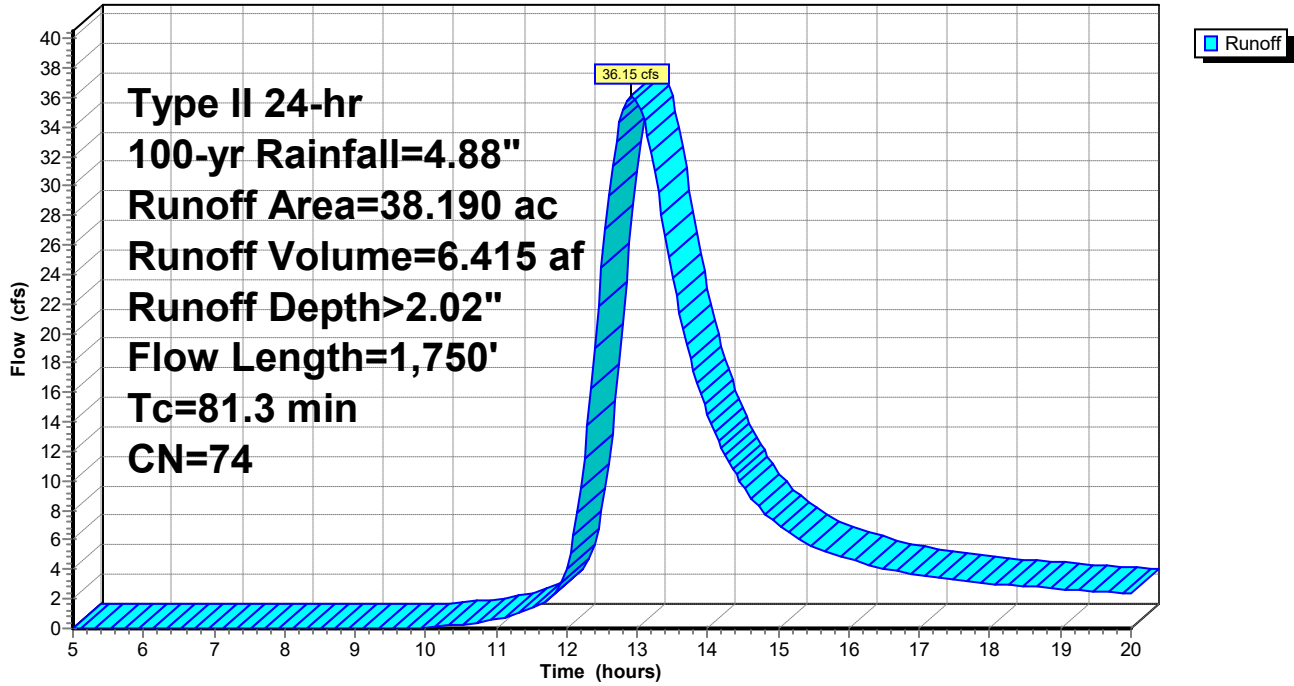
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
1.490	39	Pasture/grassland/range, Good, HSG A
1.750	74	Pasture/grassland/range, Good, HSG C
0.290	30	Meadow, non-grazed, HSG A
0.780	58	Meadow, non-grazed, HSG B
12.520	71	Meadow, non-grazed, HSG C
2.110	58	Legumes, straight row, Good, HSG A
17.900	81	Legumes, straight row, Good, HSG C
0.290	70	Woods, Good, HSG C
1.060	98	Unconnected pavement, HSG C
38.190	74	Weighted Average
37.130		97.22% Pervious Area
1.060		2.78% Impervious Area
1.060		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.7	100	0.0200	0.09		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
6.2	58	0.0005	0.16		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.8	17	0.0005	0.36		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
8.7	399	0.0120	0.77		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.2	183	0.0030	0.49		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
13.0	299	0.0030	0.38		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
28.7	694	0.0020	0.40		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
81.3	1,750	Total			

Subcatchment D44: DA-44

Hydrograph



Summary for Subcatchment D45: DA-45

Runoff = 8.08 cfs @ 12.47 hrs, Volume= 0.973 af, Depth> 1.89"
 Routed to Link L45 : L45

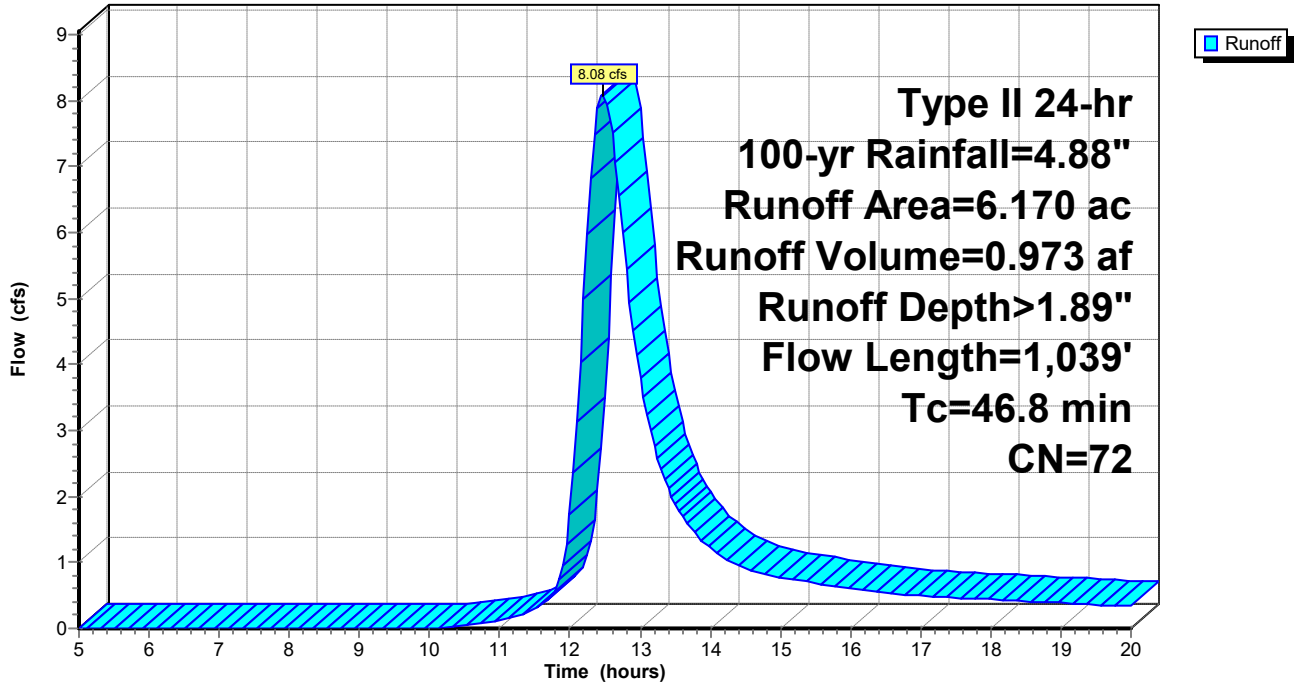
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.120	32	Woods/grass comb., Good, HSG A
1.590	72	Woods/grass comb., Good, HSG C
0.020	58	Meadow, non-grazed, HSG B
1.960	71	Meadow, non-grazed, HSG C
0.660	58	Legumes, straight row, Good, HSG A
1.820	81	Legumes, straight row, Good, HSG C
6.170	72	Weighted Average
6.170		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	100	0.0150	0.08		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
7.5	314	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
11.1	425	0.0050	0.64		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.2	29	0.0060	0.39		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
2.1	63	0.0030	0.49		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
5.1	108	0.0050	0.35		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
46.8	1,039	Total			

Subcatchment D45: DA-45

Hydrograph



Summary for Subcatchment D46: DA-46

Runoff = 86.08 cfs @ 12.78 hrs, Volume= 13.729 af, Depth> 2.27"
 Routed to Link L46 : L46

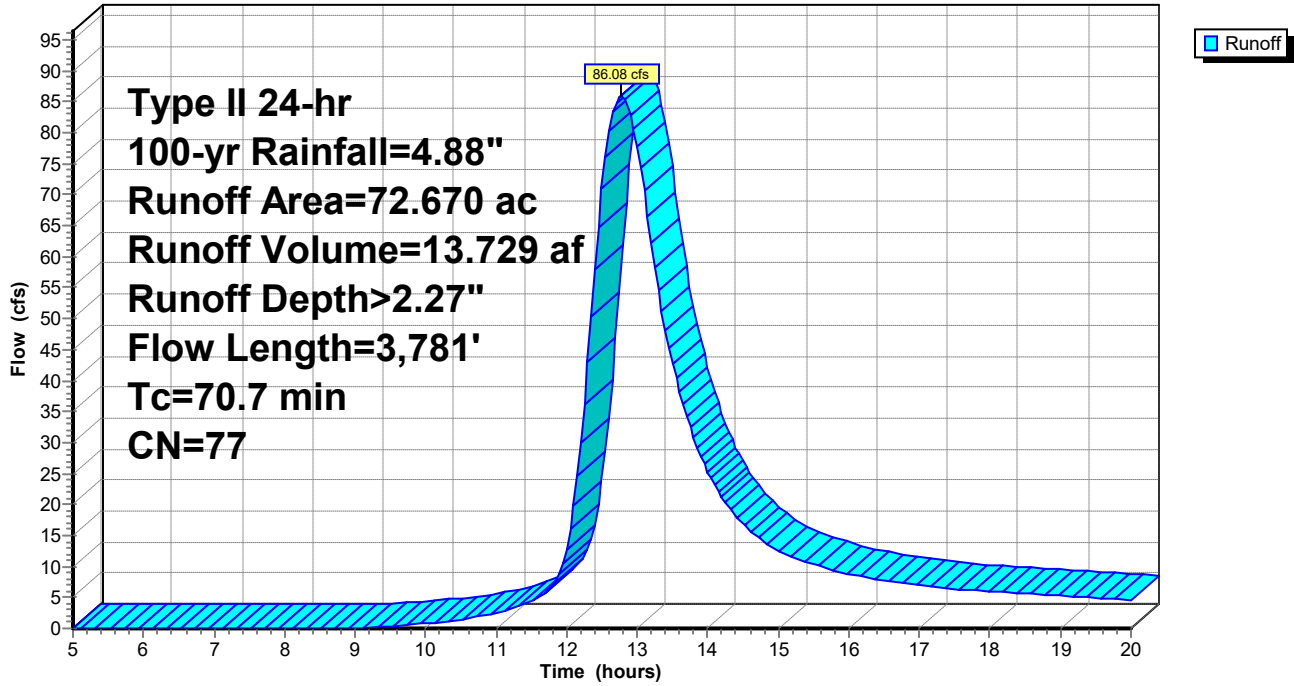
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.030	55	Woods, Good, HSG B
1.300	70	Woods, Good, HSG C
0.490	30	Meadow, non-grazed, HSG A
0.130	71	Meadow, non-grazed, HSG C
8.290	58	Legumes, straight row, Good, HSG A
5.460	72	Legumes, straight row, Good, HSG B
56.970	81	Legumes, straight row, Good, HSG C
72.670	77	Weighted Average
72.670		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	76	0.0460	0.12		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
1.6	24	0.0300	0.25		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
57.7	3,553	0.0130	1.03		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.2	128	0.1190	1.72		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
70.7	3,781	Total			

Subcatchment D46: DA-46

Hydrograph



Summary for Subcatchment D47: DA-47

Runoff = 19.23 cfs @ 12.13 hrs, Volume= 1.331 af, Depth> 2.48"
 Routed to Link L47 : L47

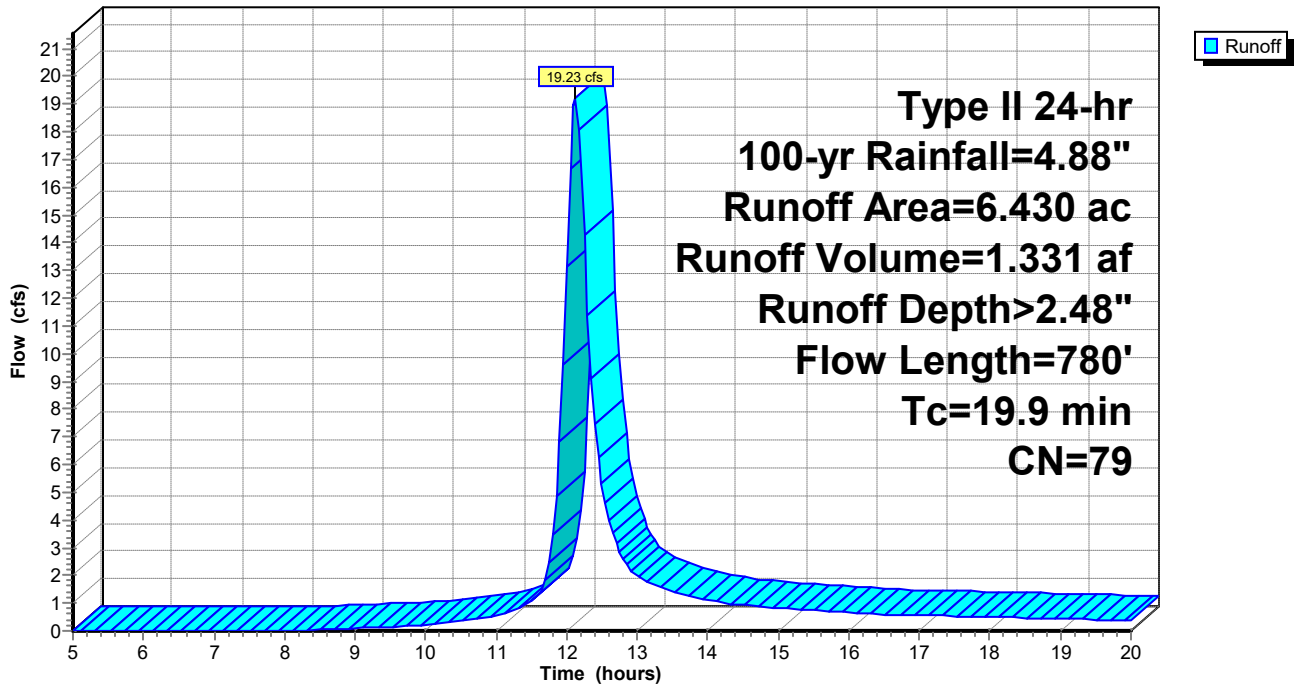
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.640	58	Legumes, straight row, Good, HSG A
5.790	81	Legumes, straight row, Good, HSG C
6.430	79	Weighted Average
6.430		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.8	100	0.0200	0.29		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
14.1	680	0.0080	0.80		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
19.9	780	Total			

Subcatchment D47: DA-47

Hydrograph



Summary for Subcatchment D48: DA-48

Runoff = 14.18 cfs @ 12.05 hrs, Volume= 0.783 af, Depth> 1.55"
 Routed to Link L48 : L48

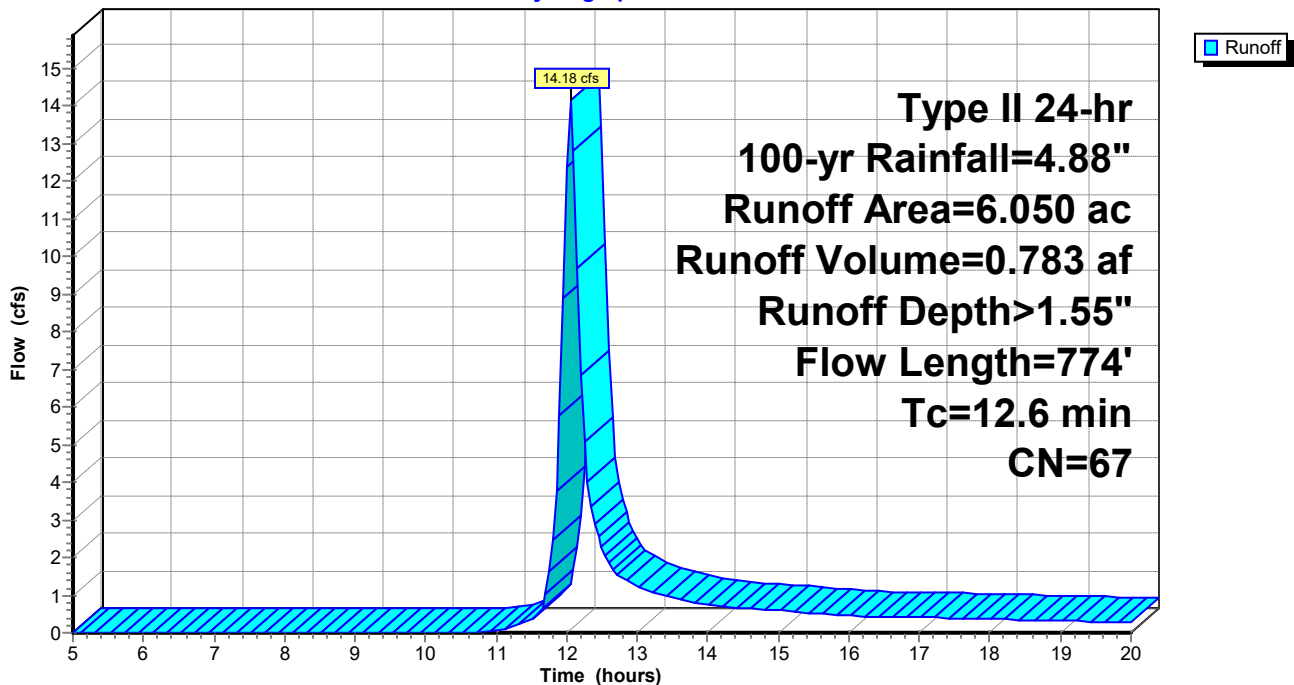
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.830	30	Woods, Good, HSG A
0.510	70	Woods, Good, HSG C
1.520	58	Legumes, straight row, Good, HSG A
3.190	81	Legumes, straight row, Good, HSG C
6.050	67	Weighted Average
6.050		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	100	0.0340	0.35		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
6.2	614	0.0340	1.66		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.7	60	0.0140	0.59		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
12.6	774	Total			

Subcatchment D48: DA-48

Hydrograph



Summary for Subcatchment D49: DA-49

Runoff = 0.53 cfs @ 12.89 hrs, Volume= 0.189 af, Depth> 0.18"
 Routed to Link L49 : L49

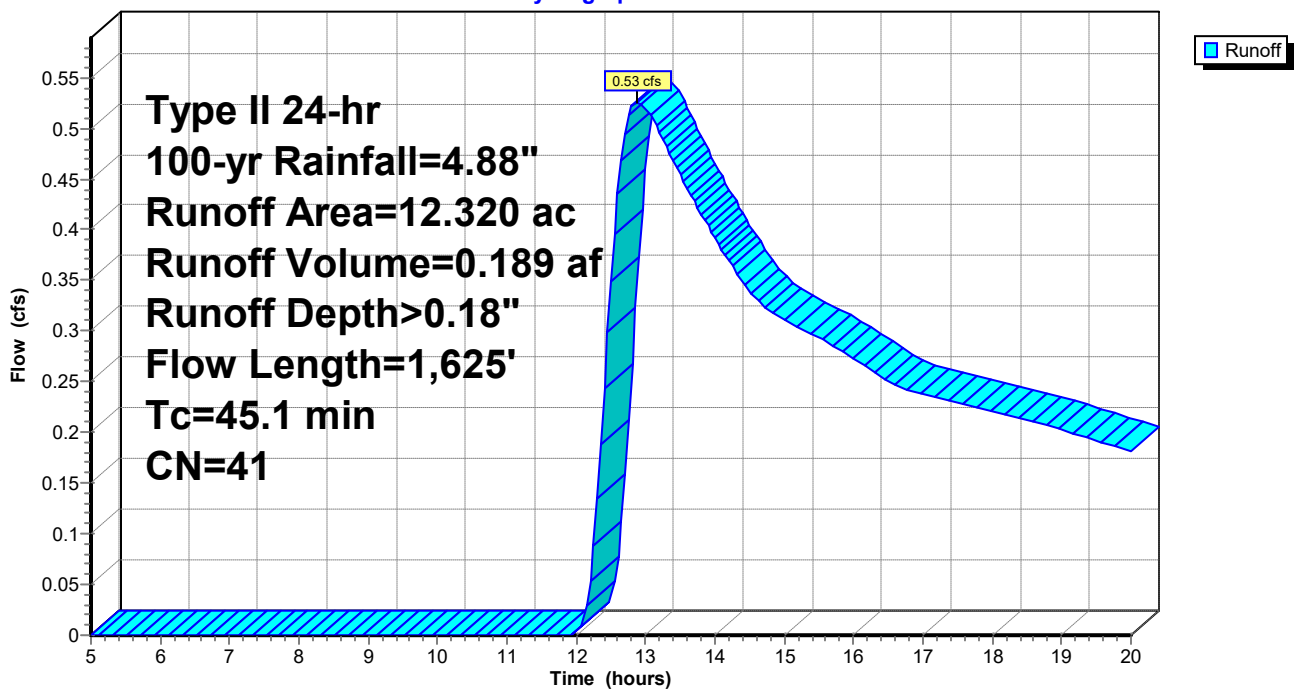
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
9.000	30	Woods, Good, HSG A
3.250	70	Woods, Good, HSG C
0.070	81	Legumes, straight row, Good, HSG C
12.320	41	Weighted Average
12.320		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.7	31	0.0400	0.30		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
13.0	67	0.0540	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
30.4	1,527	0.0280	0.84		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
45.1	1,625	Total			

Subcatchment D49: DA-49

Hydrograph



Summary for Subcatchment D50: DA-50

Runoff = 33.61 cfs @ 12.30 hrs, Volume= 3.286 af, Depth> 1.40"
 Routed to Link L50 : L50

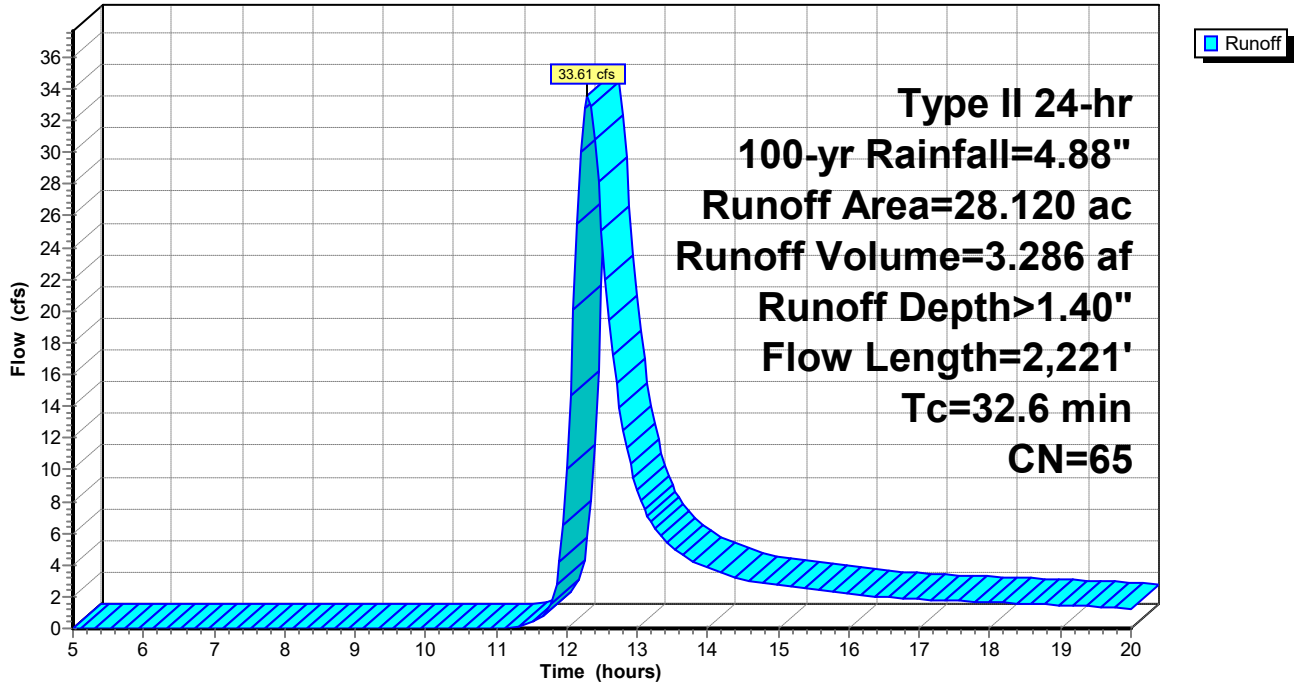
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
3.970	30	Woods, Good, HSG A
1.280	55	Woods, Good, HSG B
3.380	70	Woods, Good, HSG C
6.010	58	Legumes, straight row, Good, HSG A
4.080	72	Legumes, straight row, Good, HSG B
9.400	81	Legumes, straight row, Good, HSG C
28.120	65	Weighted Average
28.120		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	100	0.0260	0.32		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
26.8	2,043	0.0200	1.27		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
0.6	78	0.2190	2.34		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
32.6	2,221	Total			

Subcatchment D50: DA-50

Hydrograph



Summary for Subcatchment D51: DA-51

Runoff = 7.26 cfs @ 13.85 hrs, Volume= 1.947 af, Depth> 2.02"
 Routed to Link L51 : L51

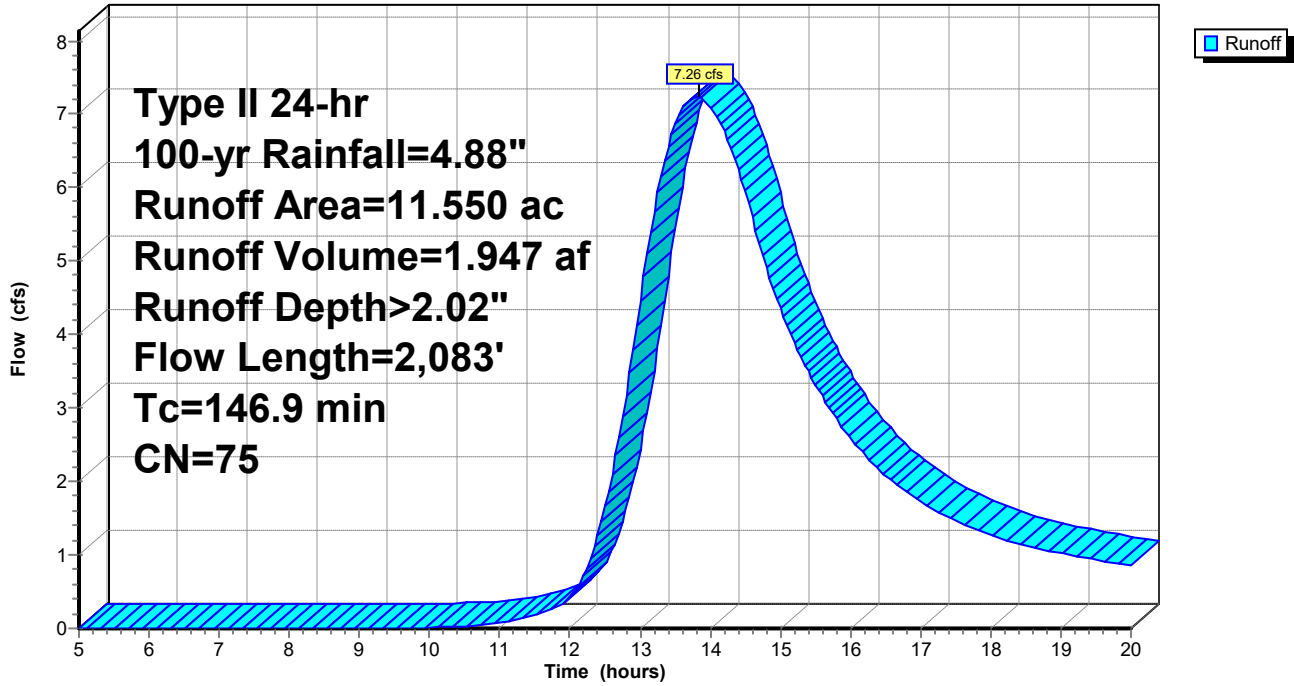
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.060	32	Woods/grass comb., Good, HSG A
0.110	58	Woods/grass comb., Good, HSG B
4.370	72	Woods/grass comb., Good, HSG C
1.010	58	Legumes, straight row, Good, HSG A
6.000	81	Legumes, straight row, Good, HSG C
11.550	75	Weighted Average
11.550		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
116.2	100	0.0005	0.01		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 2.09"
9.9	440	0.0220	0.74		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.4	1,477	0.0180	1.21		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
0.4	66	0.2820	2.66		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
146.9	2,083	Total			

Subcatchment D51: DA-51

Hydrograph



Summary for Subcatchment D52: DA-52

Runoff = 25.06 cfs @ 12.36 hrs, Volume= 2.637 af, Depth> 1.98"
 Routed to Link L52 : L52

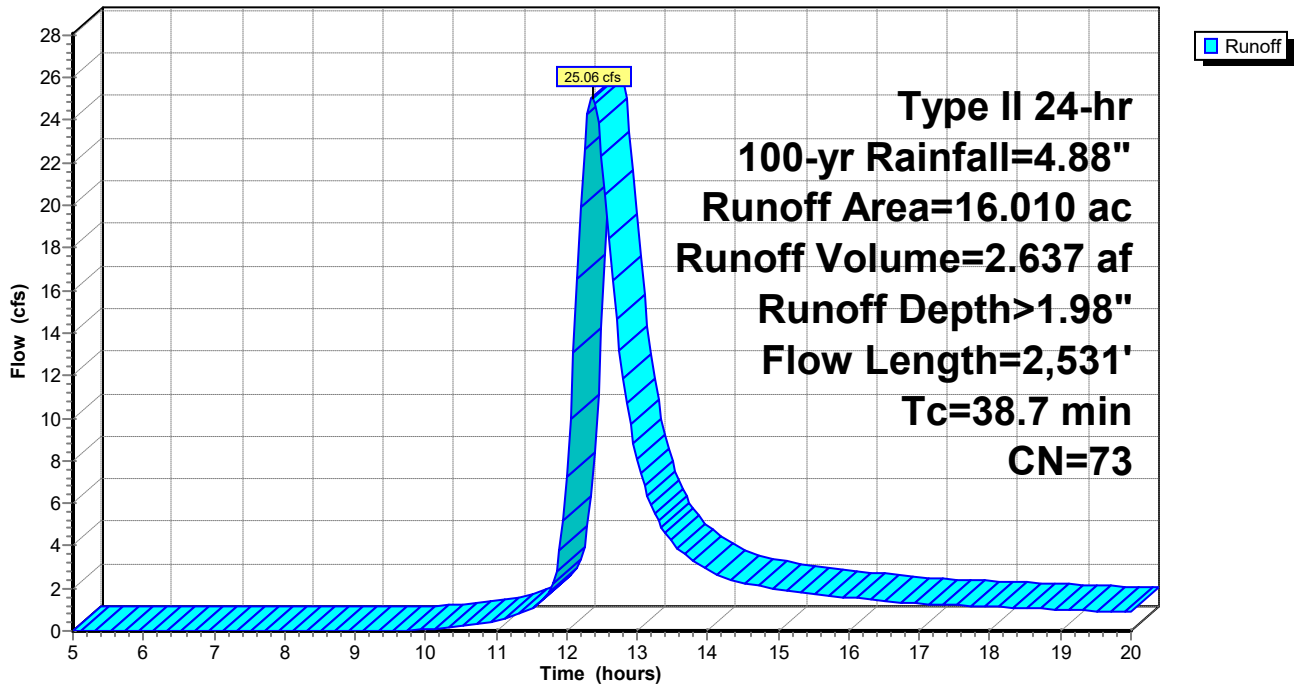
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
15.360	72	Woods/grass comb., Good, HSG C
0.650	98	Unconnected pavement, HSG C
16.010	73	Weighted Average
15.360		95.94% Pervious Area
0.650		4.06% Impervious Area
0.650		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.3	100	0.0210	0.10		Sheet Flow, Grass: Dense n= 0.240 P2= 2.09"
21.4	2,431	0.0160	1.90		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
38.7	2,531	Total			

Subcatchment D52: DA-52

Hydrograph



Summary for Subcatchment D53: DA-53

Runoff = 29.33 cfs @ 13.17 hrs, Volume= 6.028 af, Depth> 2.24"
 Routed to Link L53 : L53

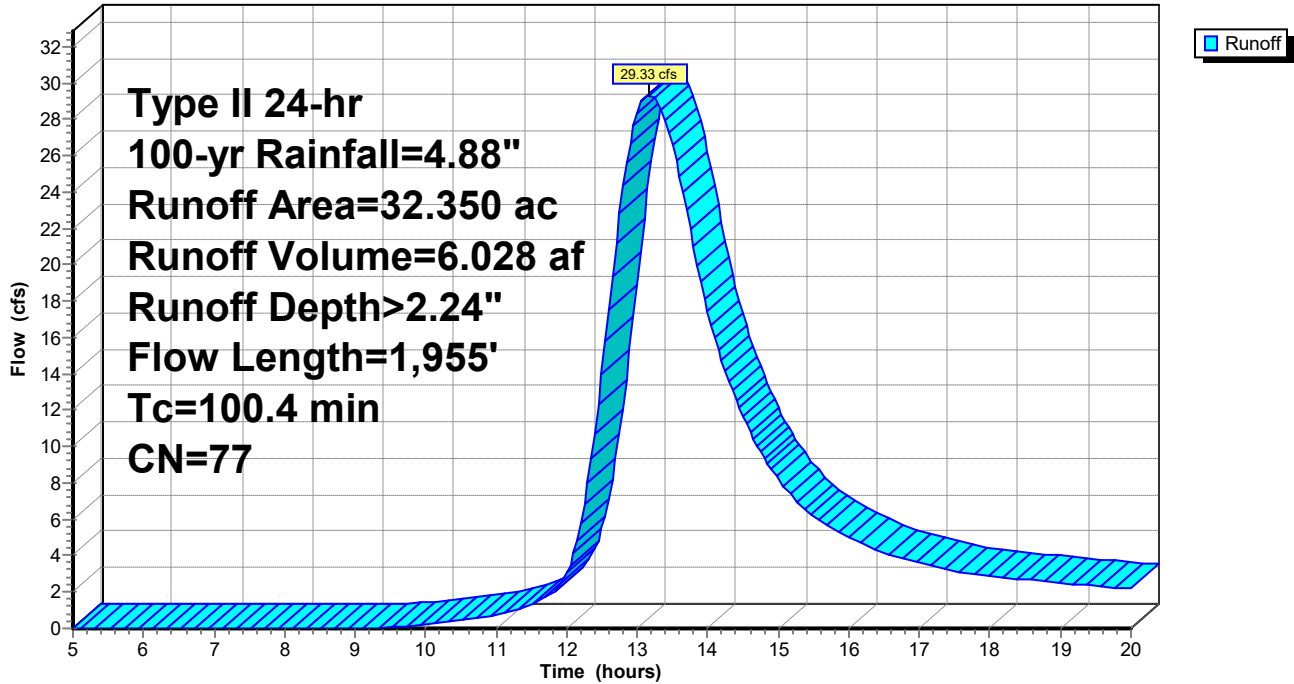
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.200	58	Woods/grass comb., Good, HSG B
14.450	72	Woods/grass comb., Good, HSG C
17.240	81	Legumes, straight row, Good, HSG C
0.460	71	Meadow, non-grazed, HSG C
32.350	77	Weighted Average
32.350		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.9	100	0.0070	0.19		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
15.4	743	0.0080	0.80		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
27.3	513	0.0020	0.31		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
16.0	304	0.0040	0.32		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
32.8	295	0.0001	0.15		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
100.4	1,955	Total			

Subcatchment D53: DA-53

Hydrograph



Somerset Pre-Dev_Rev4

Prepared by Tetra Tech

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Type II 24-hr 100-yr Rainfall=4.88"

Printed 3/13/2023

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Summary for Subcatchment D54: DA-54

Runoff = 9.96 cfs @ 12.04 hrs, Volume= 0.535 af, Depth> 2.24"
 Routed to Link L54 : L54

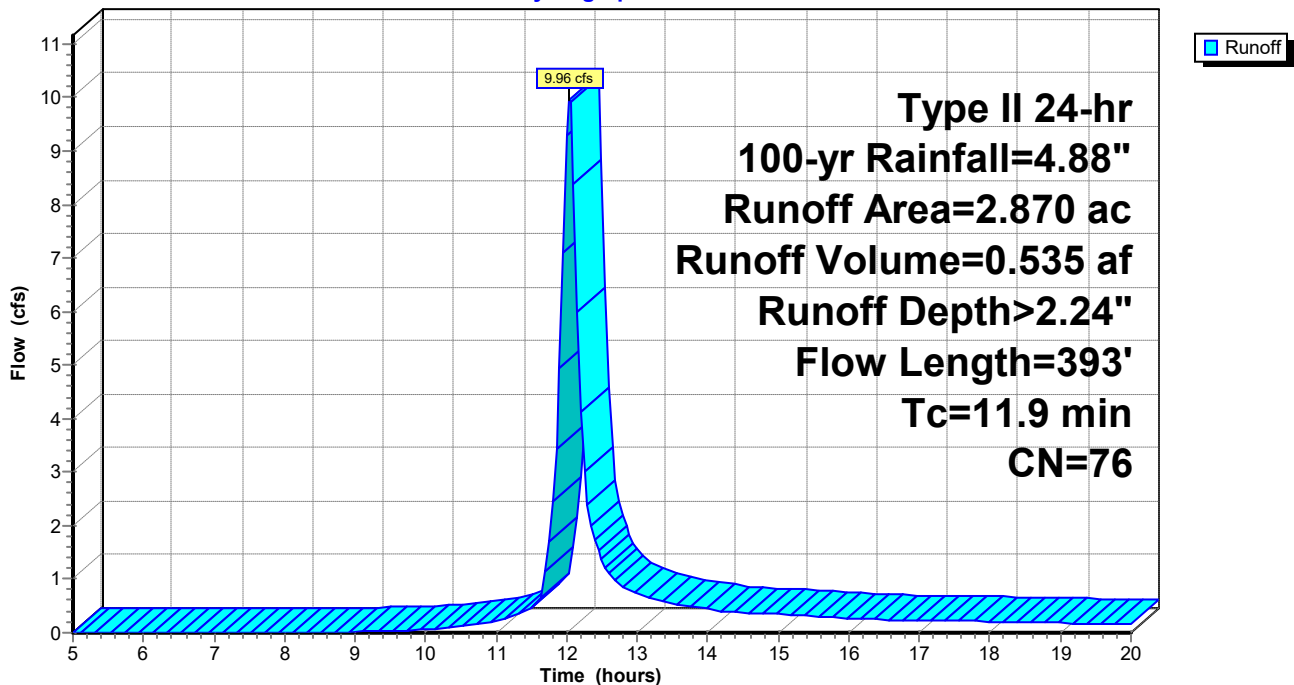
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type II 24-hr 100-yr Rainfall=4.88"

Area (ac)	CN	Description
0.460	55	Woods, Good, HSG B
0.080	70	Woods, Good, HSG C
0.220	72	Legumes, straight row, Good, HSG B
2.110	81	Legumes, straight row, Good, HSG C
2.870	76	Weighted Average
2.870		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.2	100	0.0170	0.27		Sheet Flow, Cultivated: Residue<=20% n= 0.060 P2= 2.09"
4.4	250	0.0110	0.94		Shallow Concentrated Flow, Cultivated Straight Rows Kv= 9.0 fps
1.3	43	0.0130	0.57		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
11.9	393	Total			

Subcatchment D54: DA-54

Hydrograph



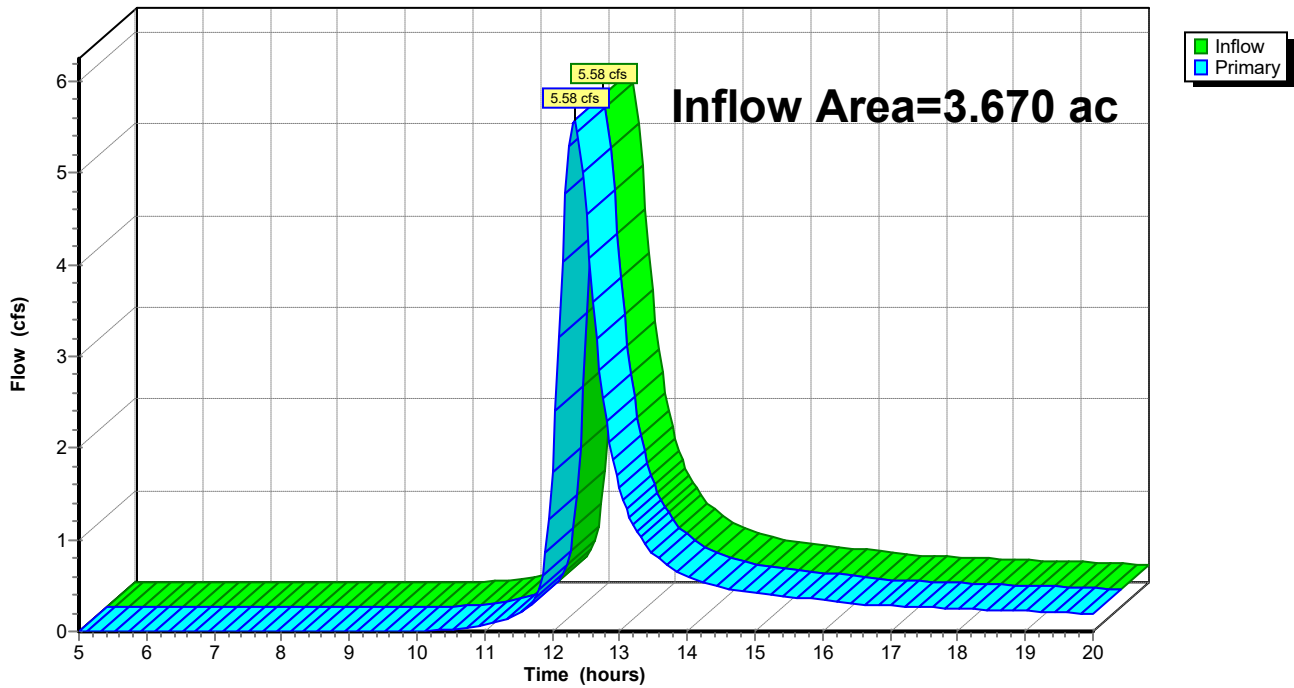
Summary for Link L01: L01

Inflow Area = 3.670 ac, 9.26% Impervious, Inflow Depth > 1.83" for 100-yr event
Inflow = 5.58 cfs @ 12.32 hrs, Volume= 0.559 af
Primary = 5.58 cfs @ 12.32 hrs, Volume= 0.559 af, Atten= 0%, Lag= 0.0 min

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

Link L01: L01

Hydrograph



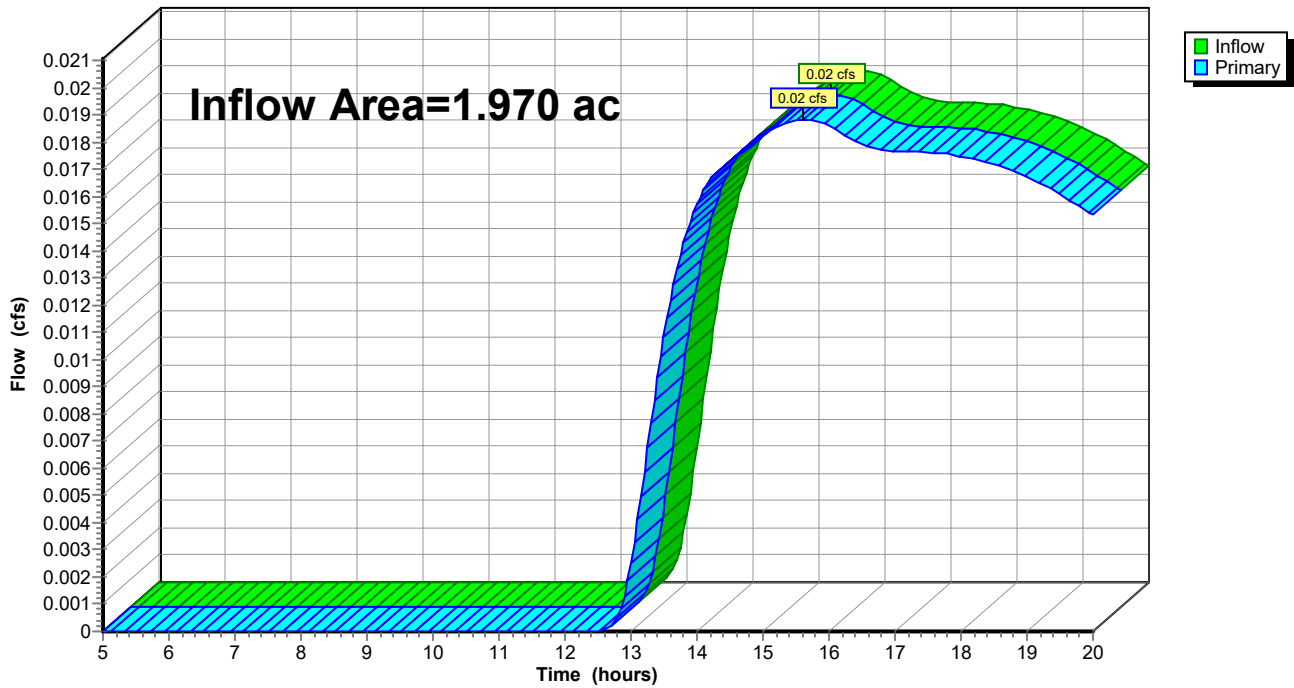
Summary for Link L02: L02

Inflow Area = 1.970 ac, 0.00% Impervious, Inflow Depth > 0.06" for 100-yr event
Inflow = 0.02 cfs @ 15.61 hrs, Volume= 0.010 af
Primary = 0.02 cfs @ 15.61 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.0 min

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

Link L02: L02

Hydrograph



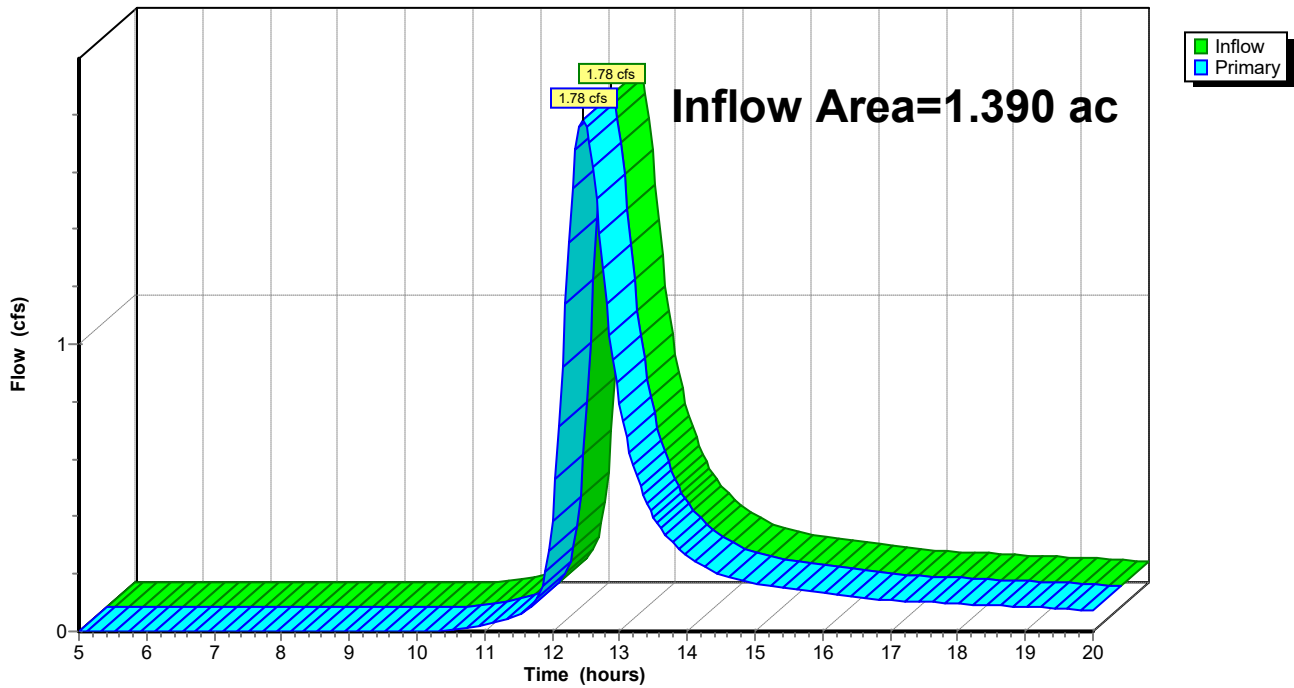
Summary for Link L03: L03

Inflow Area = 1.390 ac, 7.91% Impervious, Inflow Depth > 1.82" for 100-yr event
Inflow = 1.78 cfs @ 12.45 hrs, Volume= 0.211 af
Primary = 1.78 cfs @ 12.45 hrs, Volume= 0.211 af, Atten= 0%, Lag= 0.0 min

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

Link L03: L03

Hydrograph



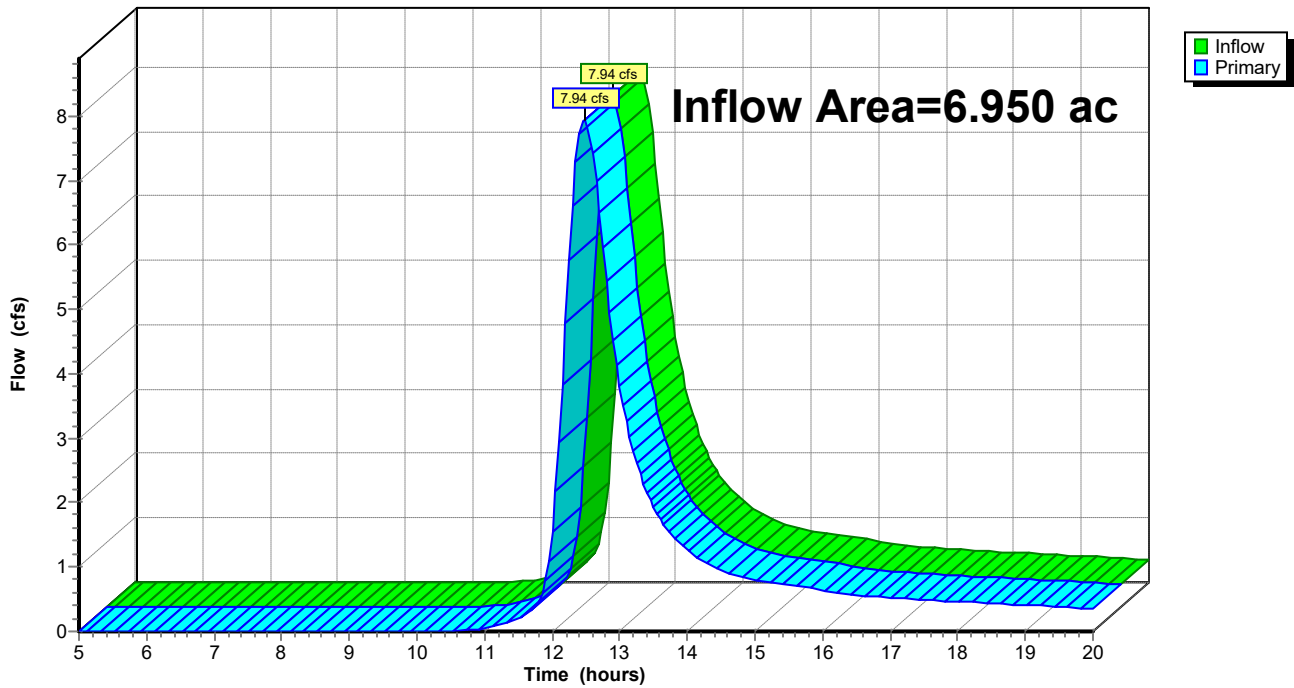
Summary for Link L04: L04

Inflow Area = 6.950 ac, 0.00% Impervious, Inflow Depth > 1.67" for 100-yr event
Inflow = 7.94 cfs @ 12.48 hrs, Volume= 0.968 af
Primary = 7.94 cfs @ 12.48 hrs, Volume= 0.968 af, Atten= 0%, Lag= 0.0 min

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

Link L04: L04

Hydrograph



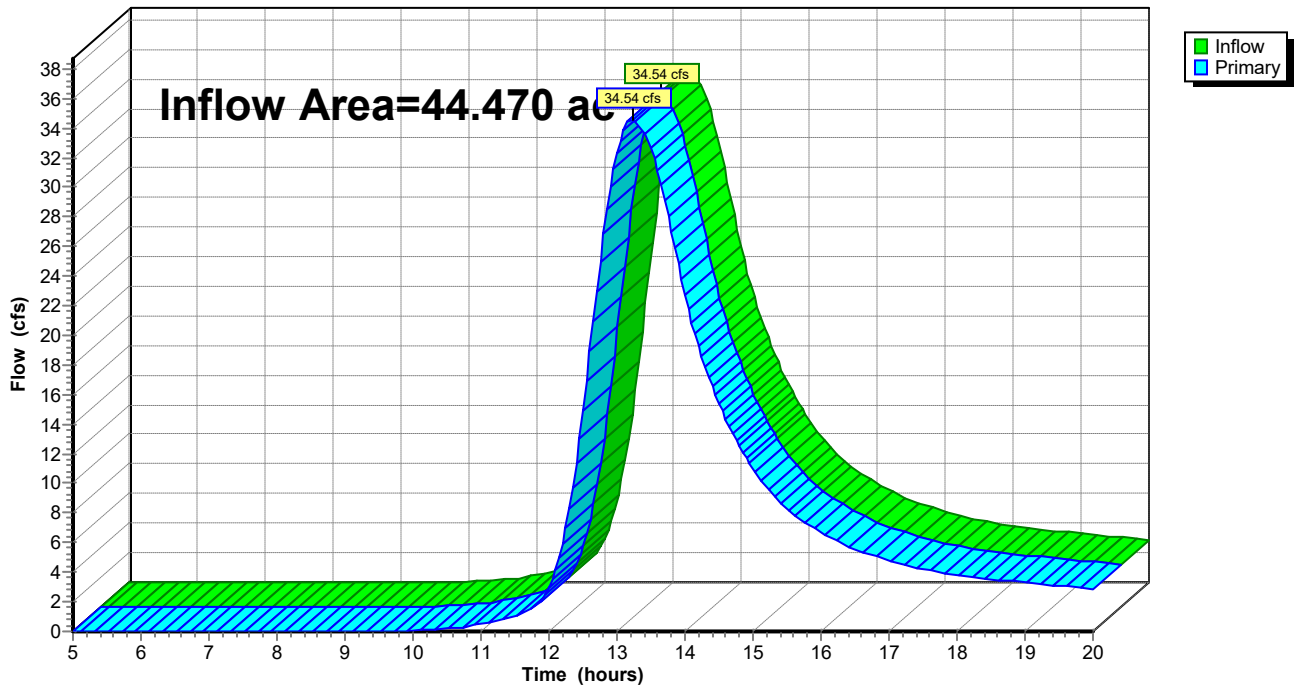
Summary for Link L05: L05

Inflow Area = 44.470 ac, 0.00% Impervious, Inflow Depth > 1.99" for 100-yr event
Inflow = 34.54 cfs @ 13.23 hrs, Volume= 7.382 af
Primary = 34.54 cfs @ 13.23 hrs, Volume= 7.382 af, Atten= 0%, Lag= 0.0 min

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

Link L05: L05

Hydrograph



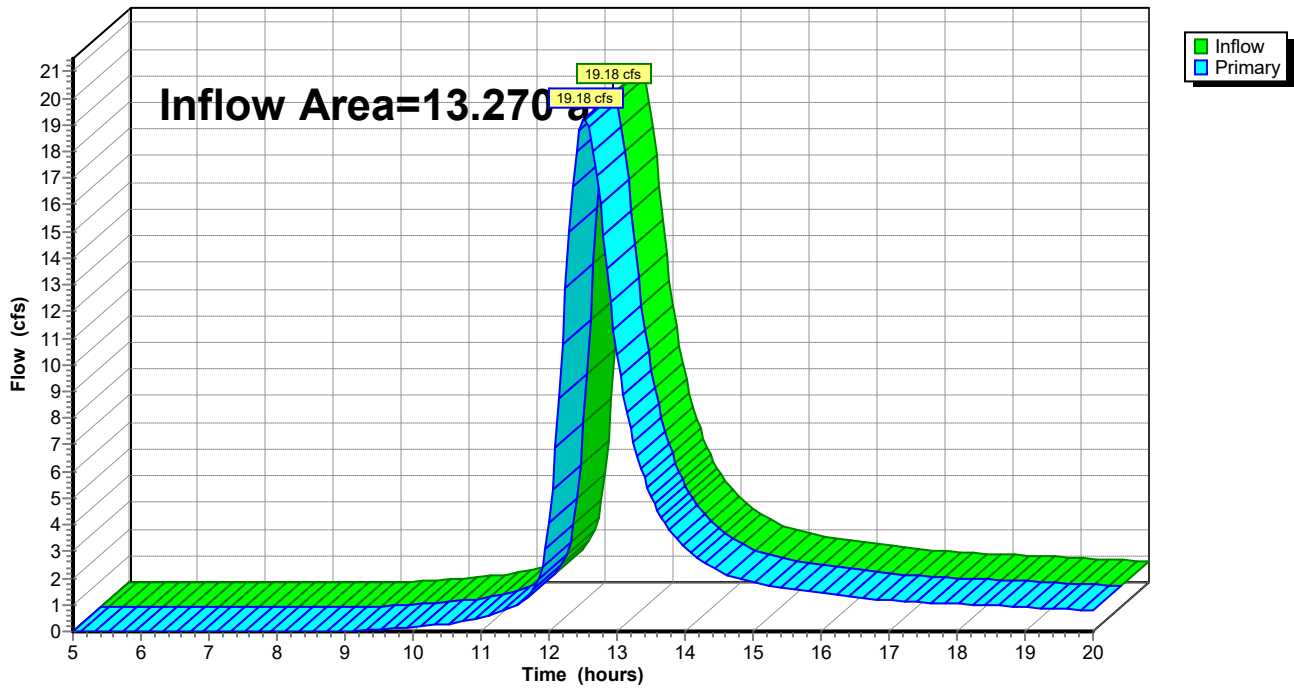
Summary for Link L06: L06

Inflow Area = 13.270 ac, 0.00% Impervious, Inflow Depth > 2.20" for 100-yr event
Inflow = 19.18 cfs @ 12.52 hrs, Volume= 2.437 af
Primary = 19.18 cfs @ 12.52 hrs, Volume= 2.437 af, Atten= 0%, Lag= 0.0 min

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

Link L06: L06

Hydrograph



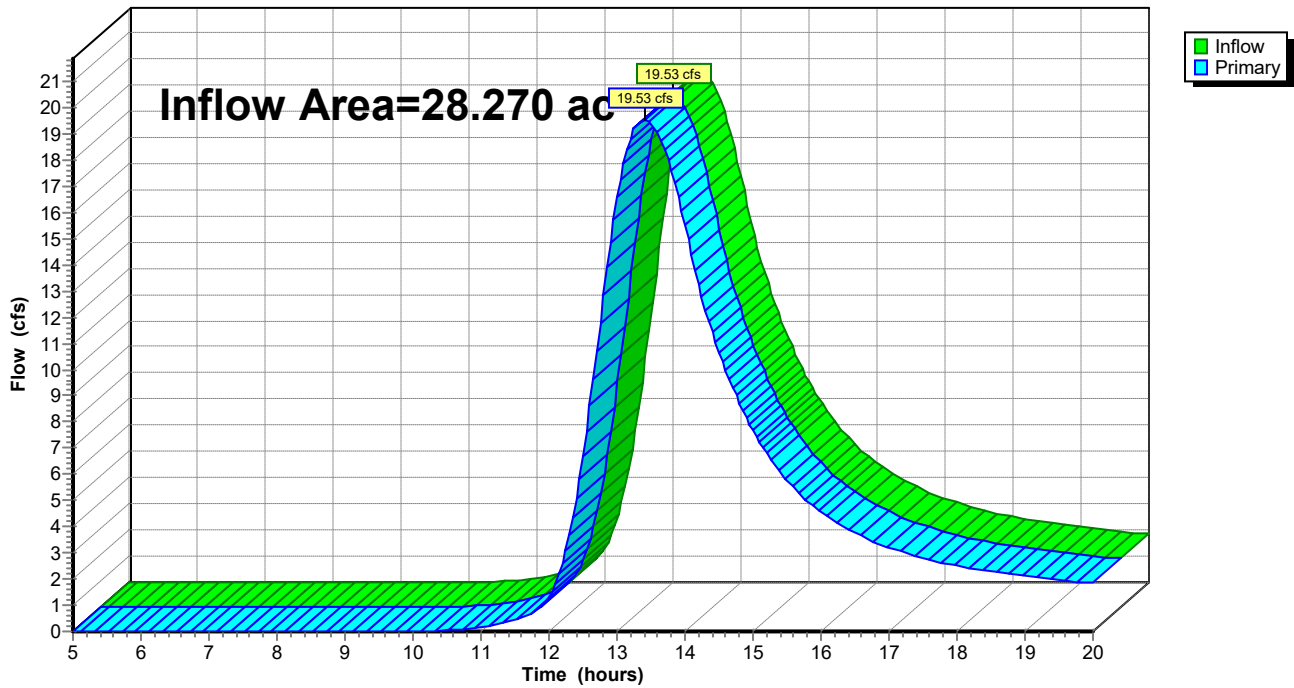
Summary for Link L07: L07

Inflow Area = 28.270 ac, 0.00% Impervious, Inflow Depth > 1.90" for 100-yr event
Inflow = 19.53 cfs @ 13.41 hrs, Volume= 4.484 af
Primary = 19.53 cfs @ 13.41 hrs, Volume= 4.484 af, Atten= 0%, Lag= 0.0 min

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

Link L07: L07

Hydrograph



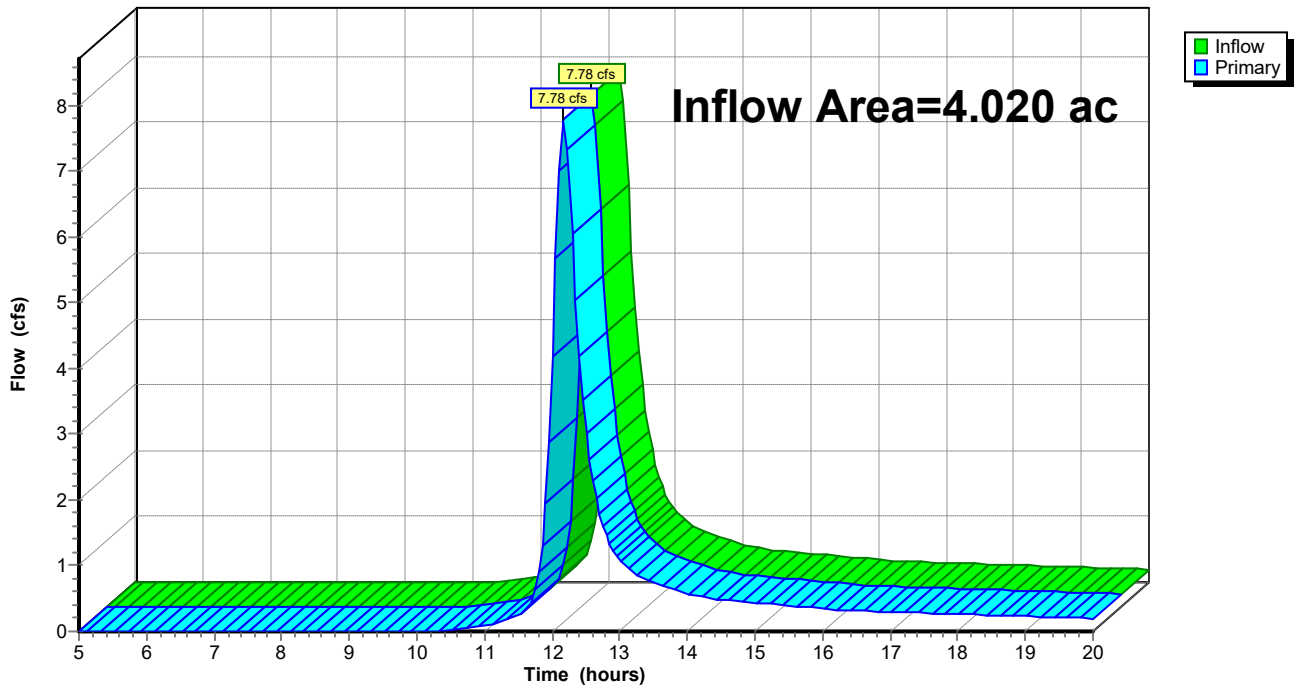
Summary for Link L08: L08

Inflow Area = 4.020 ac, 0.00% Impervious, Inflow Depth > 1.76" for 100-yr event
Inflow = 7.78 cfs @ 12.17 hrs, Volume= 0.590 af
Primary = 7.78 cfs @ 12.17 hrs, Volume= 0.590 af, Atten= 0%, Lag= 0.0 min

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

Link L08: L08

Hydrograph



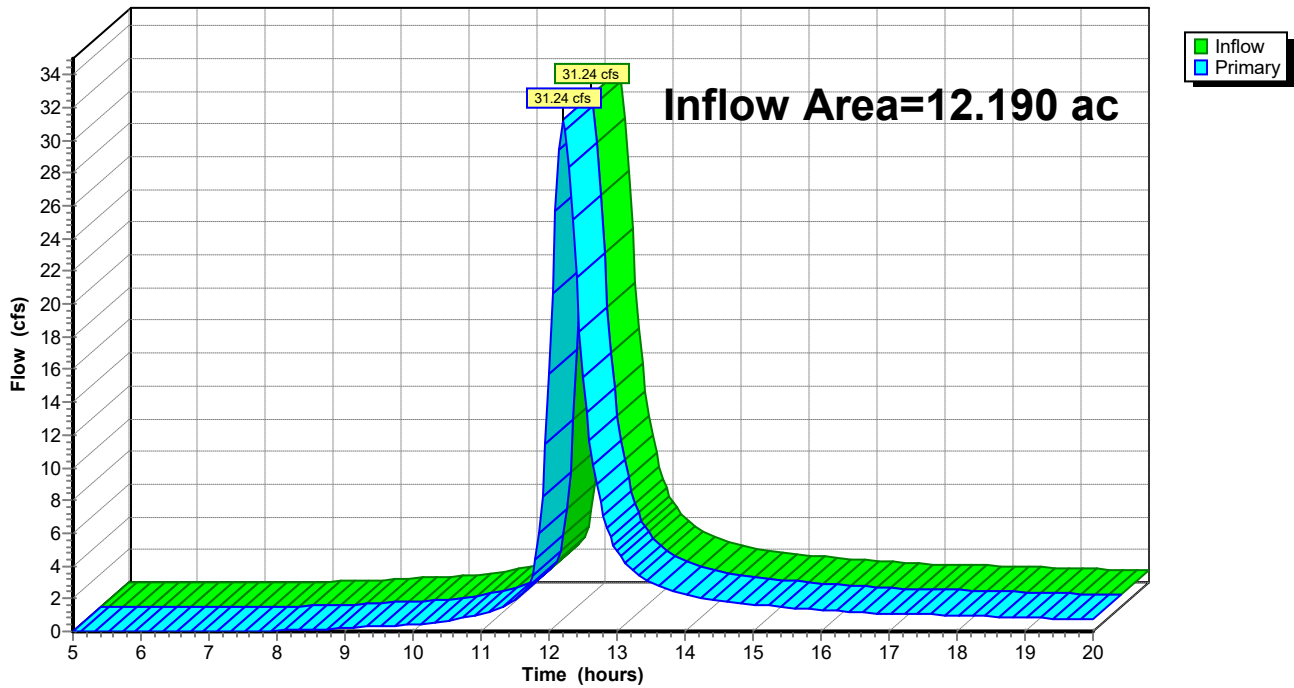
Summary for Link L09: L09

Inflow Area = 12.190 ac, 0.00% Impervious, Inflow Depth > 2.56" for 100-yr event
Inflow = 31.24 cfs @ 12.21 hrs, Volume= 2.604 af
Primary = 31.24 cfs @ 12.21 hrs, Volume= 2.604 af, Atten= 0%, Lag= 0.0 min

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

Link L09: L09

Hydrograph



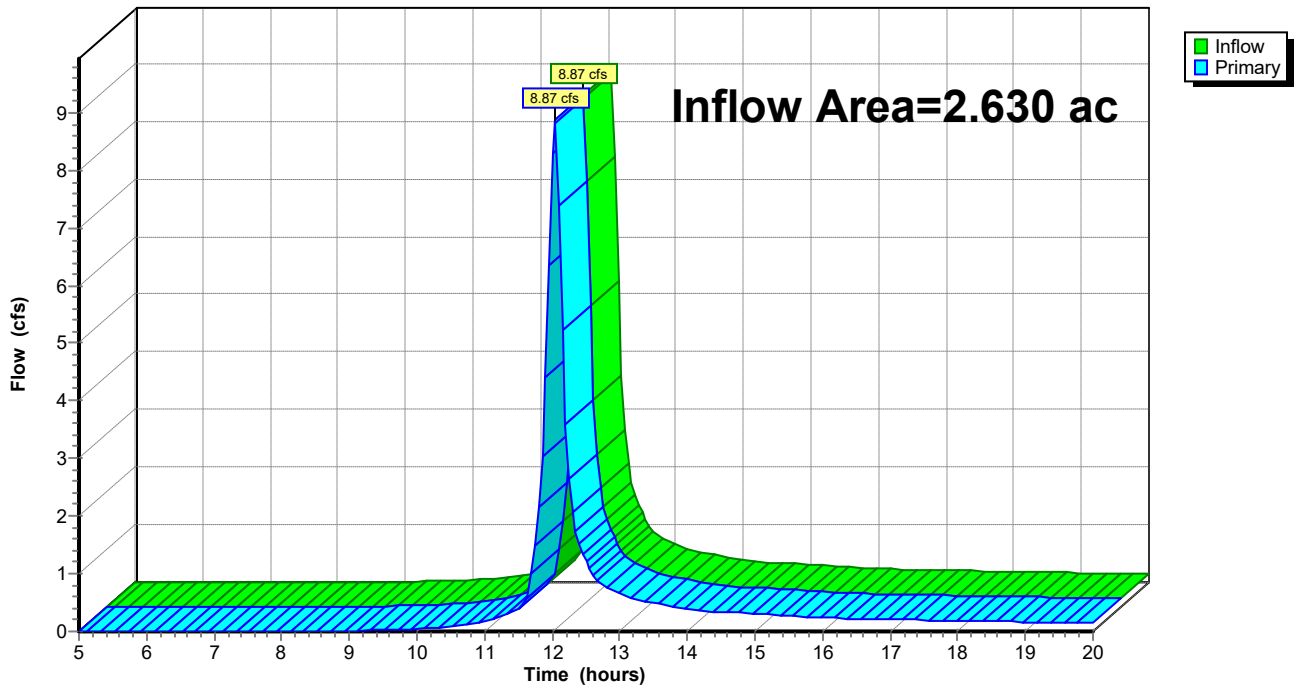
Summary for Link L10: L10

Inflow Area = 2.630 ac, 0.00% Impervious, Inflow Depth > 2.16" for 100-yr event
Inflow = 8.87 cfs @ 12.04 hrs, Volume= 0.473 af
Primary = 8.87 cfs @ 12.04 hrs, Volume= 0.473 af, Atten= 0%, Lag= 0.0 min

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

Link L10: L10

Hydrograph



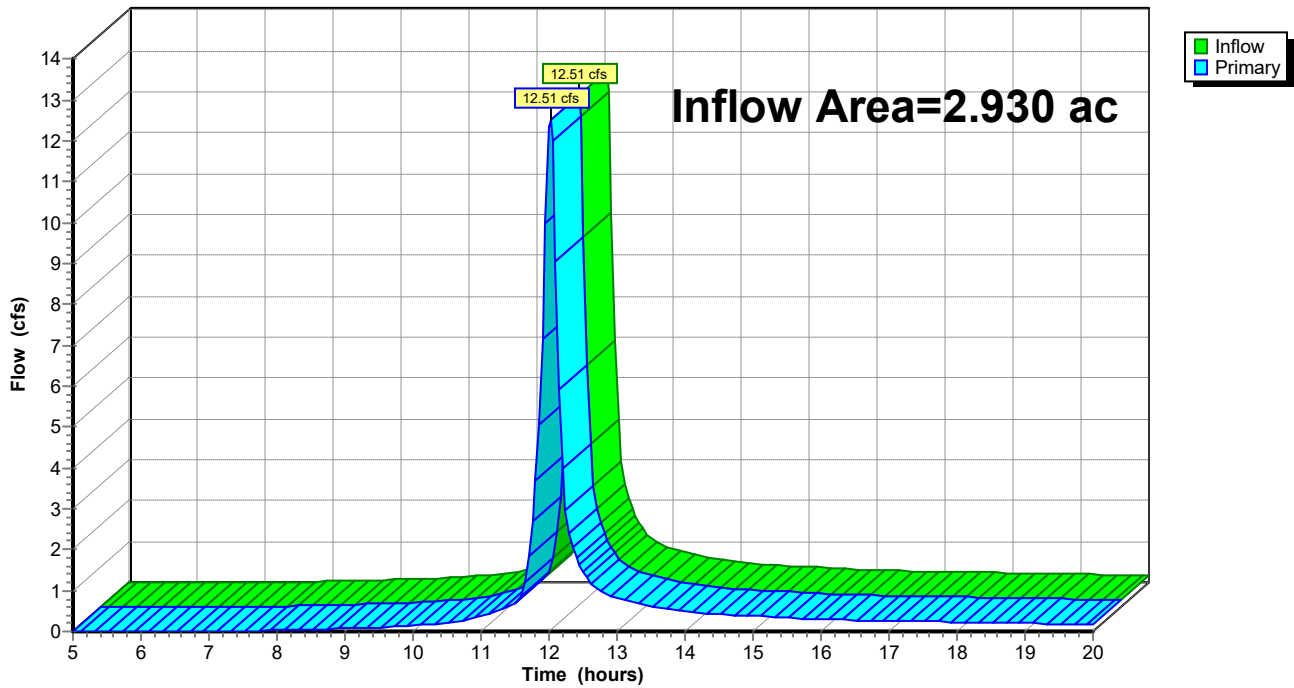
Summary for Link L11: L11

Inflow Area = 2.930 ac, 0.00% Impervious, Inflow Depth > 2.67" for 100-yr event
Inflow = 12.51 cfs @ 12.02 hrs, Volume= 0.651 af
Primary = 12.51 cfs @ 12.02 hrs, Volume= 0.651 af, Atten= 0%, Lag= 0.0 min

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

Link L11: L11

Hydrograph



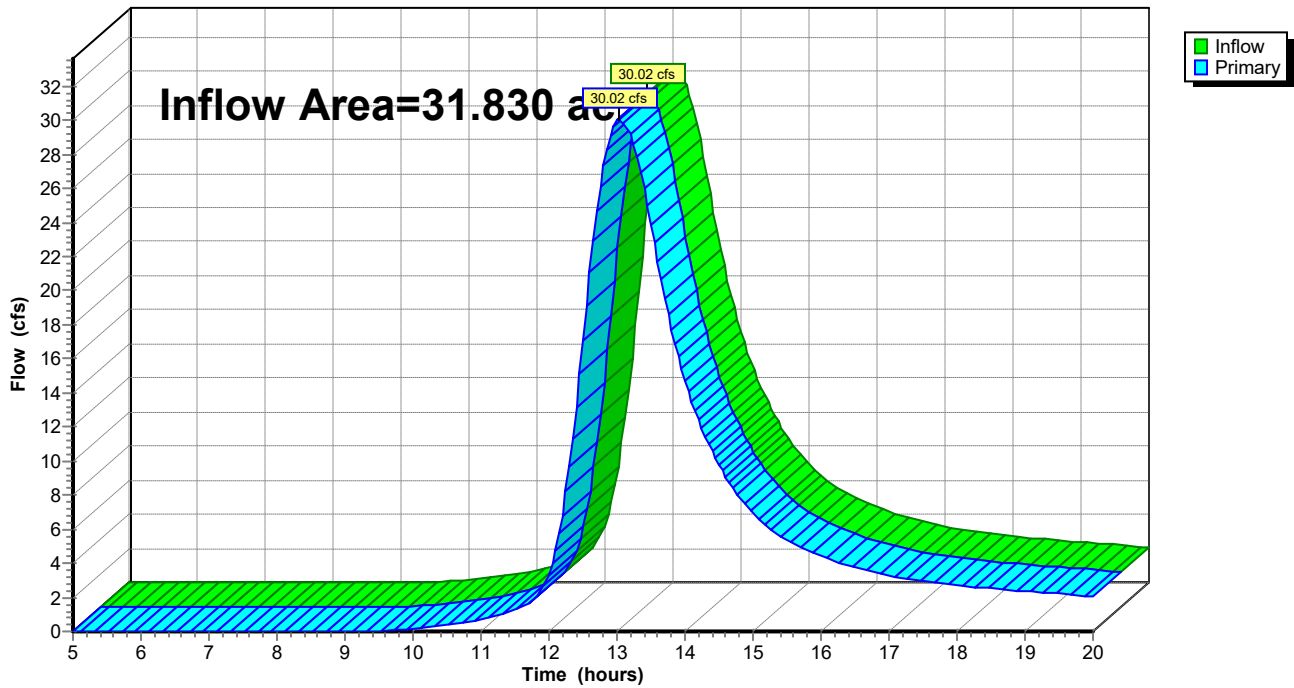
Summary for Link L12: L12

Inflow Area = 31.830 ac, 0.00% Impervious, Inflow Depth > 2.17" for 100-yr event
Inflow = 30.02 cfs @ 13.02 hrs, Volume= 5.743 af
Primary = 30.02 cfs @ 13.02 hrs, Volume= 5.743 af, Atten= 0%, Lag= 0.0 min

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

Link L12: L12

Hydrograph



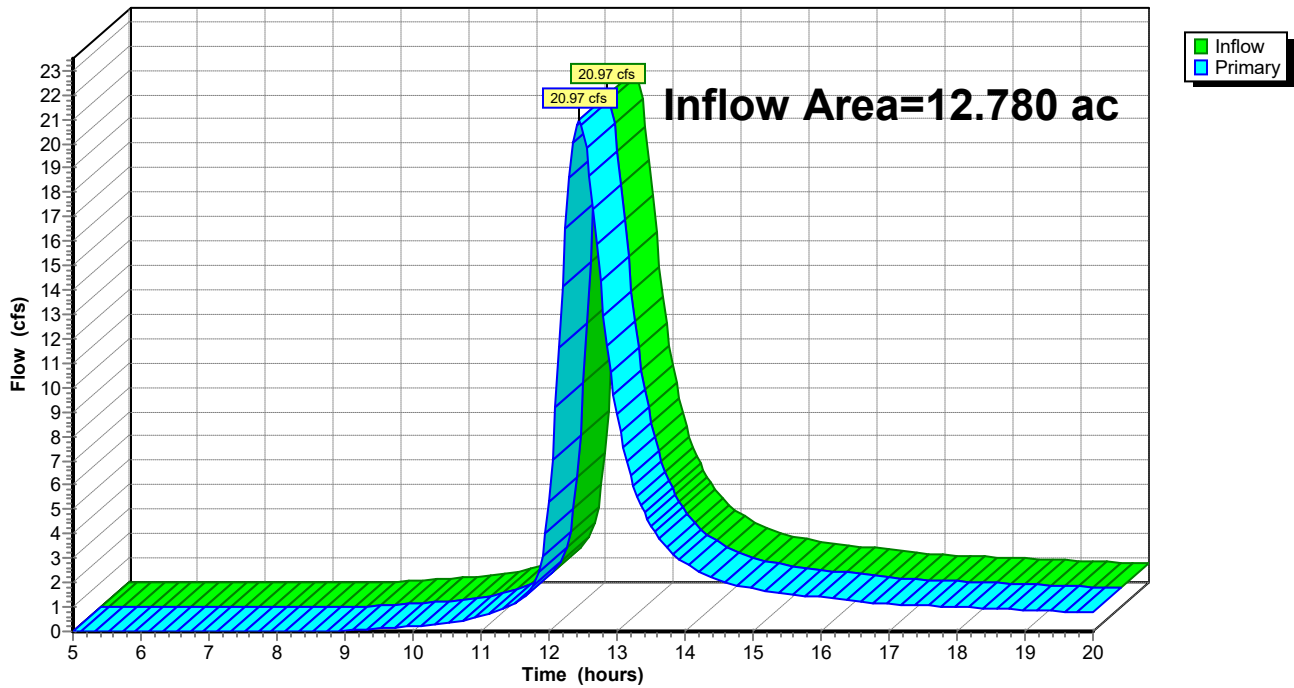
Summary for Link L13: L13

Inflow Area = 12.780 ac, 0.00% Impervious, Inflow Depth > 2.29" for 100-yr event
Inflow = 20.97 cfs @ 12.44 hrs, Volume= 2.441 af
Primary = 20.97 cfs @ 12.44 hrs, Volume= 2.441 af, Atten= 0%, Lag= 0.0 min

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

Link L13: L13

Hydrograph



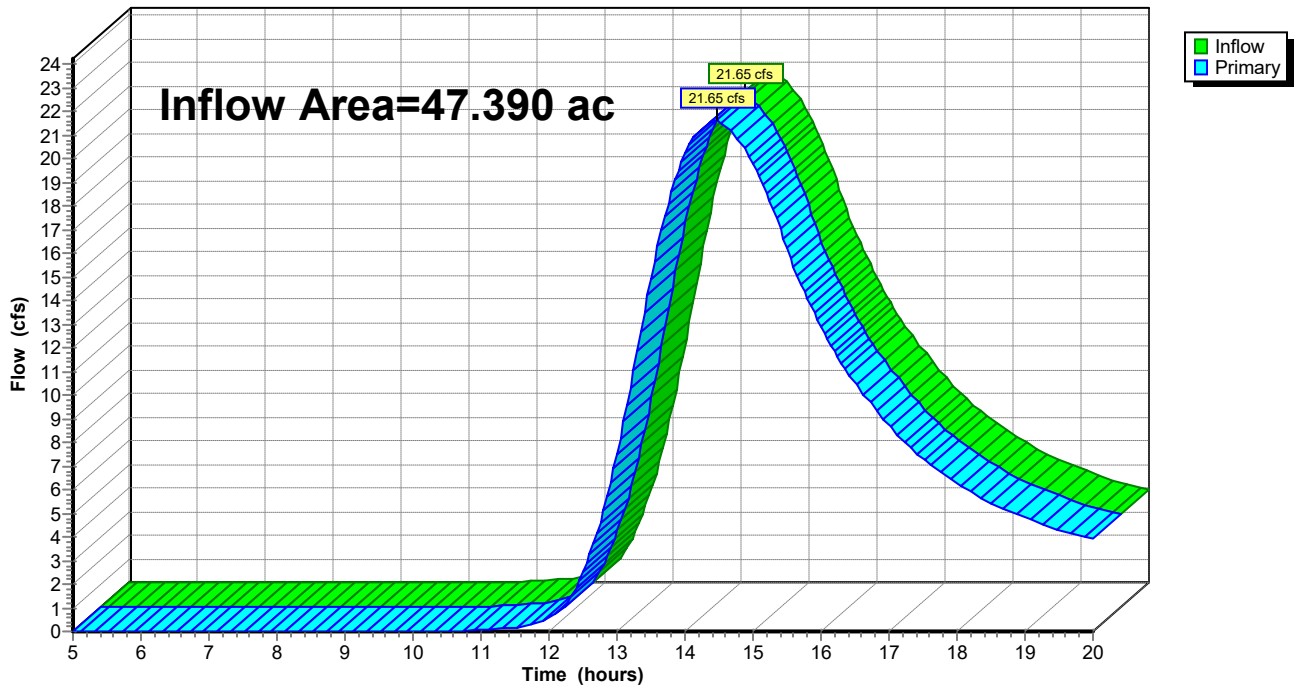
Summary for Link L14: L14

Inflow Area = 47.390 ac, 0.00% Impervious, Inflow Depth > 1.74" for 100-yr event
Inflow = 21.65 cfs @ 14.46 hrs, Volume= 6.858 af
Primary = 21.65 cfs @ 14.46 hrs, Volume= 6.858 af, Atten= 0%, Lag= 0.0 min

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

Link L14: L14

Hydrograph



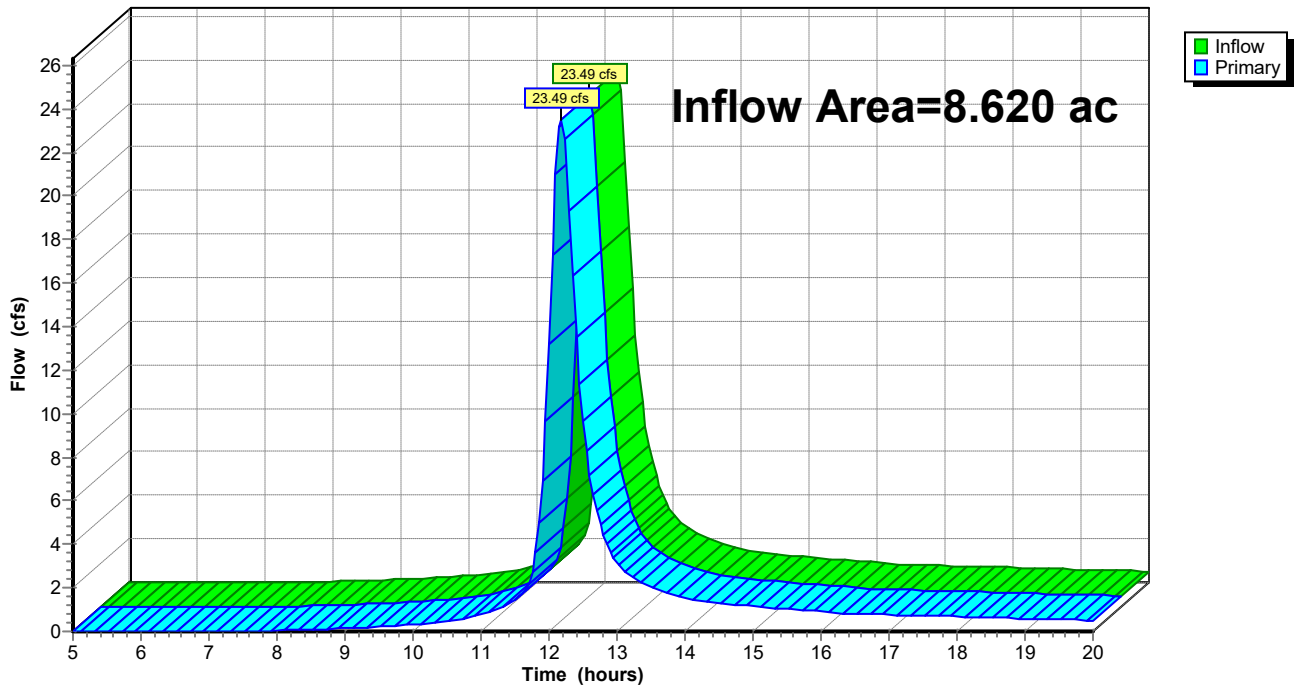
Summary for Link L15: L15

Inflow Area = 8.620 ac, 0.00% Impervious, Inflow Depth > 2.57" for 100-yr event
Inflow = 23.49 cfs @ 12.18 hrs, Volume= 1.843 af
Primary = 23.49 cfs @ 12.18 hrs, Volume= 1.843 af, Atten= 0%, Lag= 0.0 min

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

Link L15: L15

Hydrograph



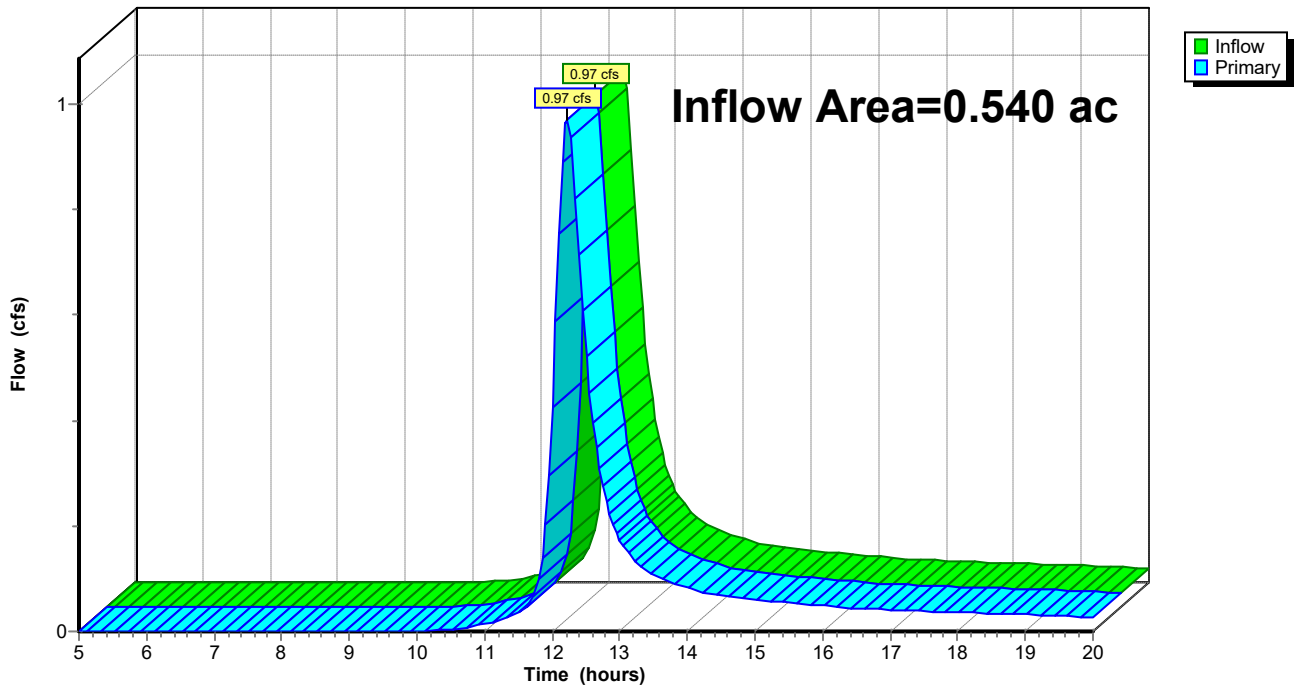
Summary for Link L16: L16

Inflow Area = 0.540 ac, 0.00% Impervious, Inflow Depth > 1.83" for 100-yr event
Inflow = 0.97 cfs @ 12.23 hrs, Volume= 0.082 af
Primary = 0.97 cfs @ 12.23 hrs, Volume= 0.082 af, Atten= 0%, Lag= 0.0 min

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

Link L16: L16

Hydrograph



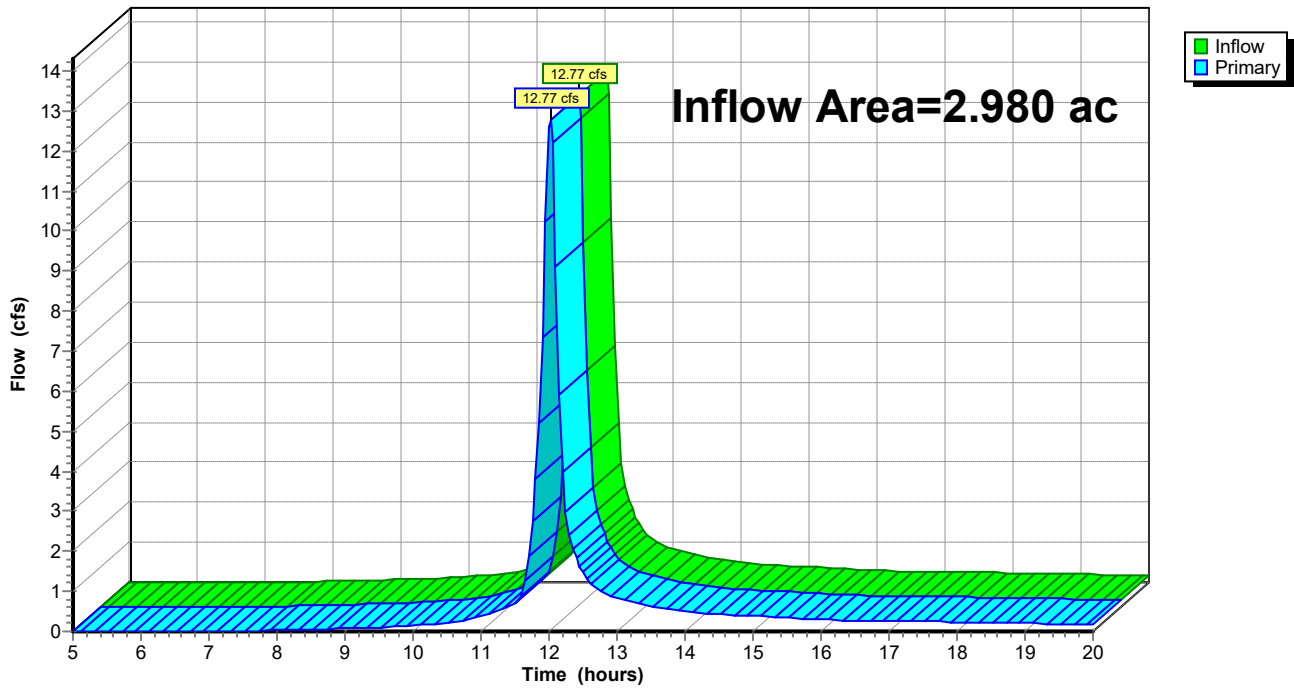
Summary for Link L17: L17

Inflow Area = 2.980 ac, 0.00% Impervious, Inflow Depth > 2.67" for 100-yr event
Inflow = 12.77 cfs @ 12.02 hrs, Volume= 0.662 af
Primary = 12.77 cfs @ 12.02 hrs, Volume= 0.662 af, Atten= 0%, Lag= 0.0 min

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

Link L17: L17

Hydrograph



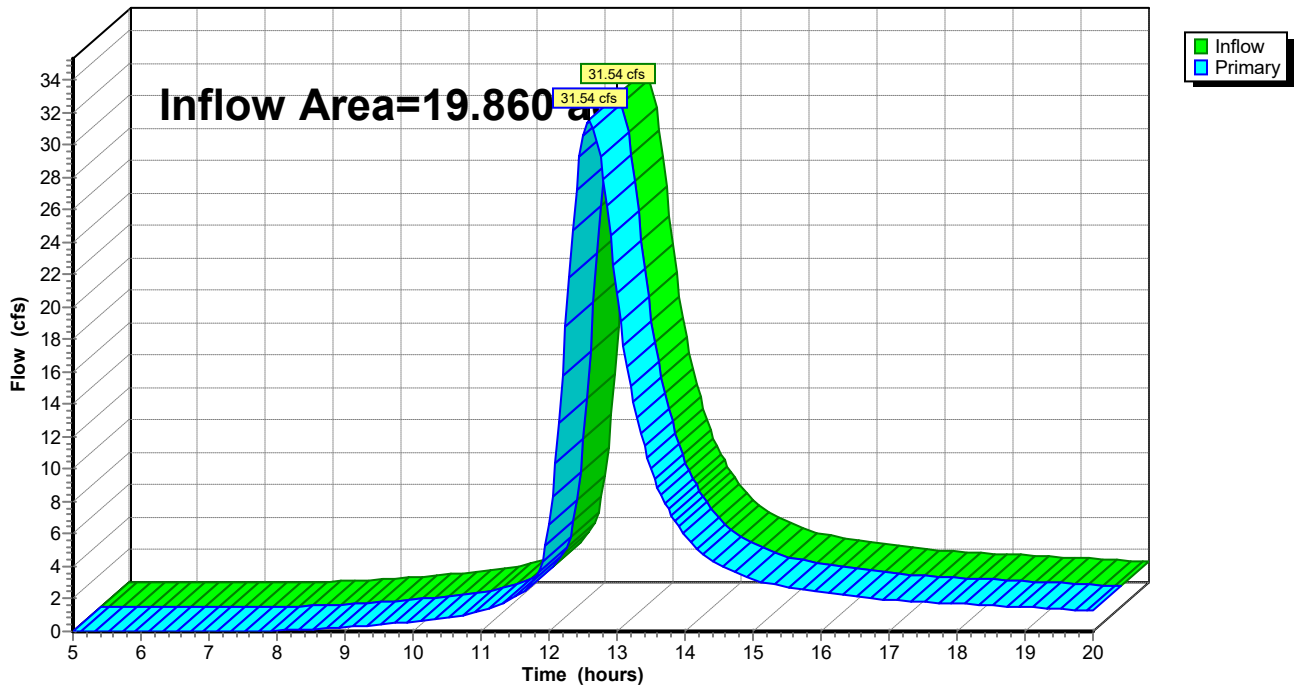
Summary for Link L18: L18

Inflow Area = 19.860 ac, 0.00% Impervious, Inflow Depth > 2.62" for 100-yr event
Inflow = 31.54 cfs @ 12.59 hrs, Volume= 4.339 af
Primary = 31.54 cfs @ 12.59 hrs, Volume= 4.339 af, Atten= 0%, Lag= 0.0 min

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

Link L18: L18

Hydrograph



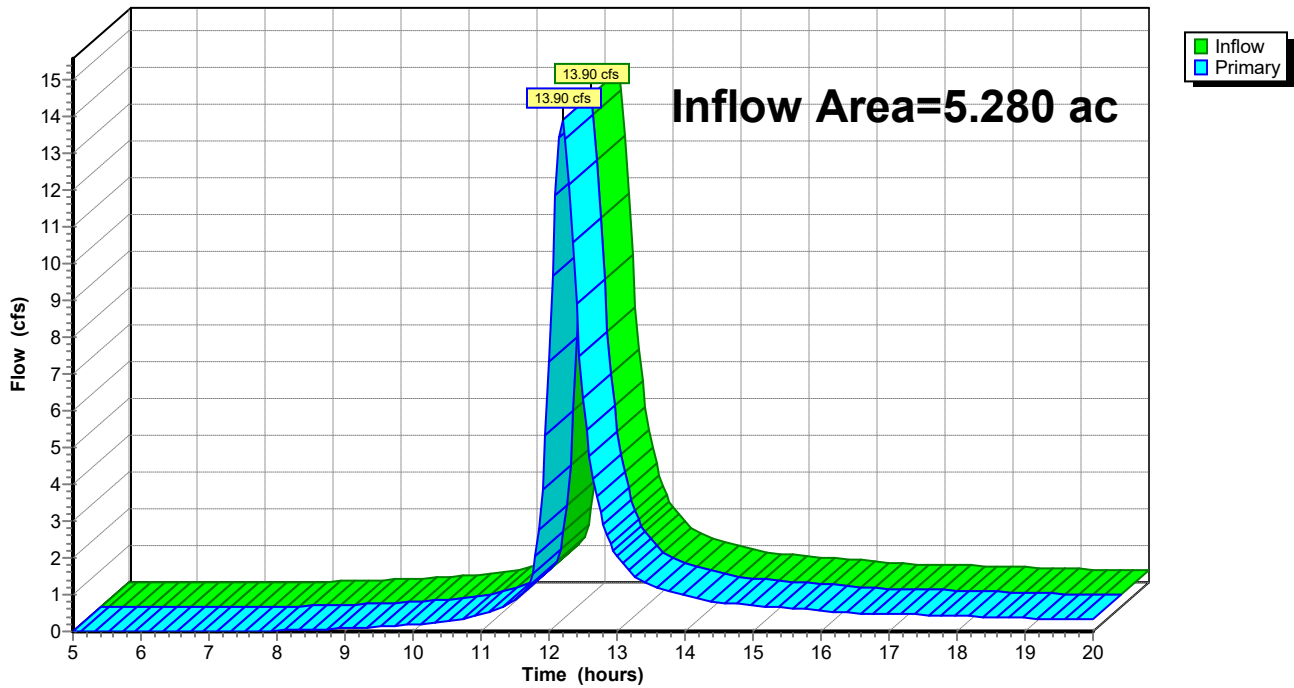
Summary for Link L19: L19

Inflow Area = 5.280 ac, 0.00% Impervious, Inflow Depth > 2.56" for 100-yr event
Inflow = 13.90 cfs @ 12.20 hrs, Volume= 1.128 af
Primary = 13.90 cfs @ 12.20 hrs, Volume= 1.128 af, Atten= 0%, Lag= 0.0 min

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

Link L19: L19

Hydrograph



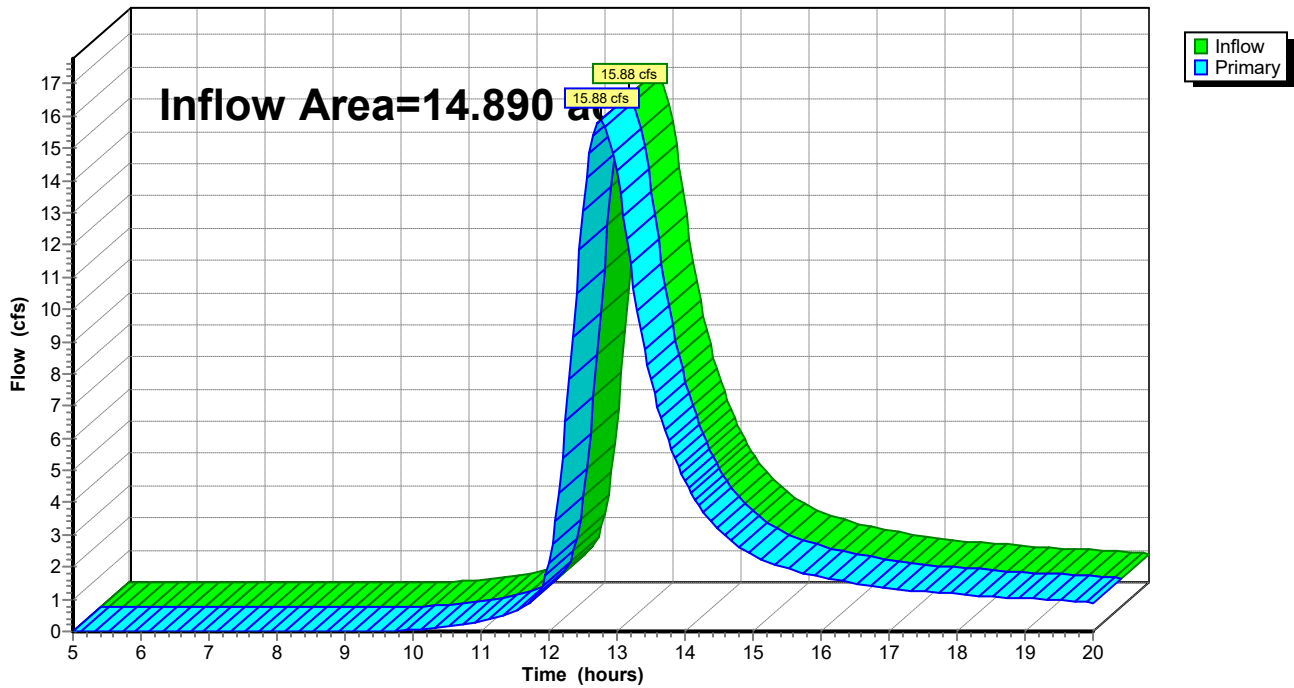
Summary for Link L20: L20

Inflow Area = 14.890 ac, 0.00% Impervious, Inflow Depth > 2.03" for 100-yr event
Inflow = 15.88 cfs @ 12.76 hrs, Volume= 2.515 af
Primary = 15.88 cfs @ 12.76 hrs, Volume= 2.515 af, Atten= 0%, Lag= 0.0 min

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

Link L20: L20

Hydrograph



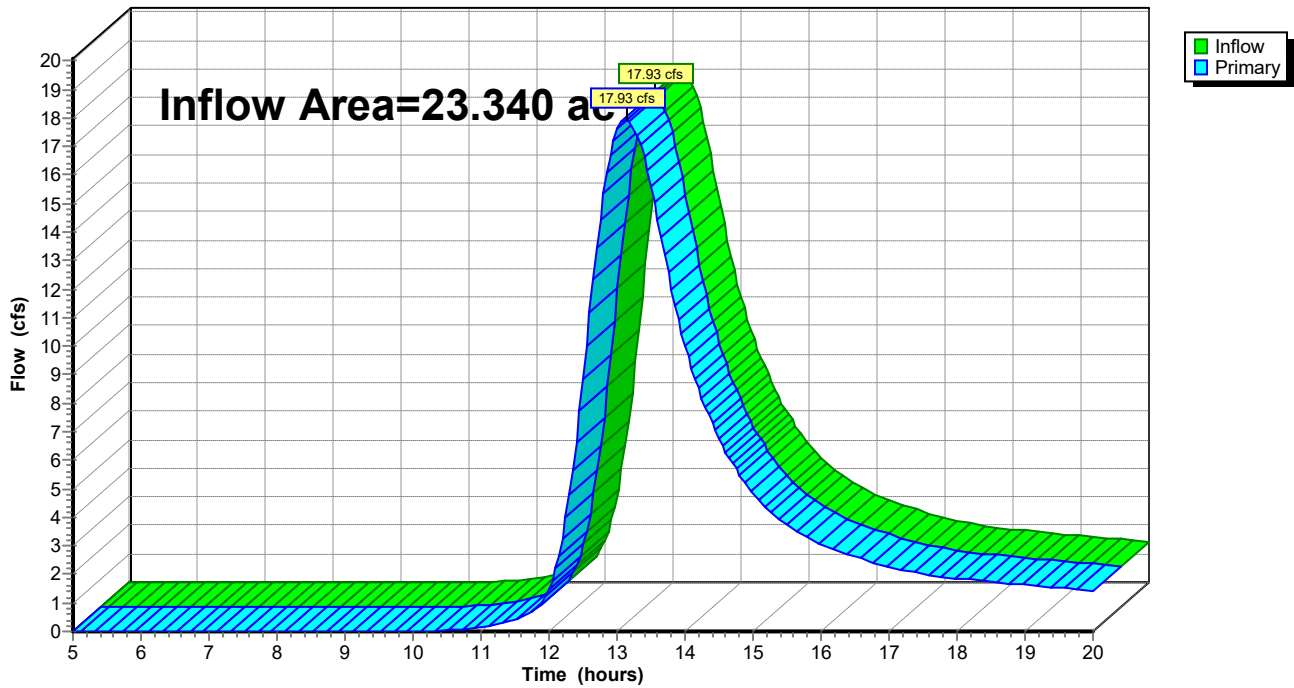
Summary for Link L21: L21

Inflow Area = 23.340 ac, 0.00% Impervious, Inflow Depth > 1.85" for 100-yr event
Inflow = 17.93 cfs @ 13.13 hrs, Volume= 3.596 af
Primary = 17.93 cfs @ 13.13 hrs, Volume= 3.596 af, Atten= 0%, Lag= 0.0 min

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

Link L21: L21

Hydrograph



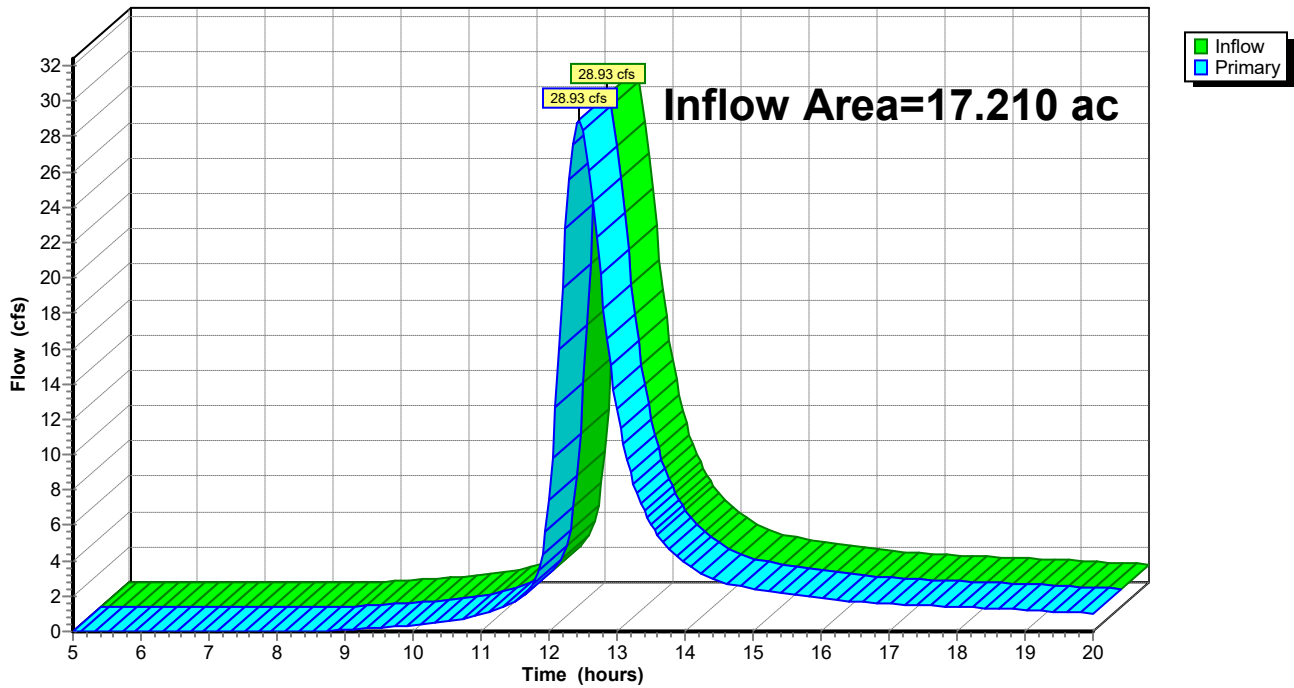
Summary for Link L22: L22

Inflow Area = 17.210 ac, 0.00% Impervious, Inflow Depth > 2.37" for 100-yr event
Inflow = 28.93 cfs @ 12.45 hrs, Volume= 3.406 af
Primary = 28.93 cfs @ 12.45 hrs, Volume= 3.406 af, Atten= 0%, Lag= 0.0 min

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

Link L22: L22

Hydrograph



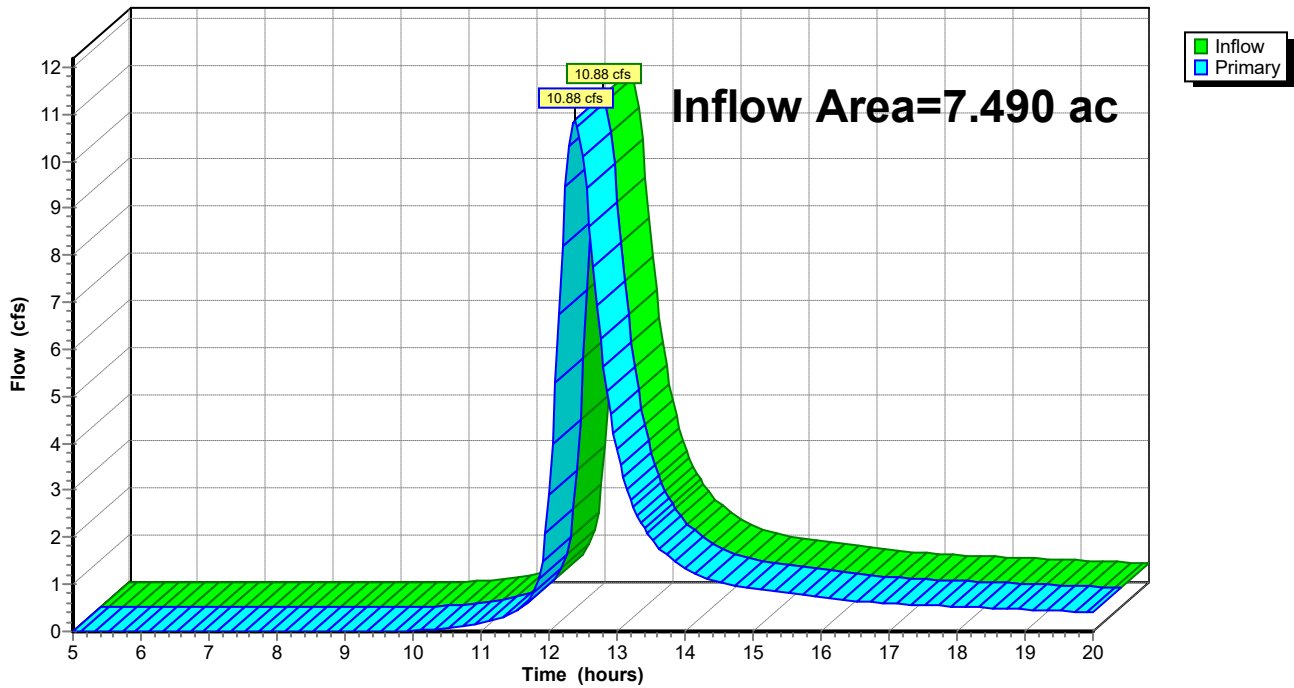
Summary for Link L23: L23

Inflow Area = 7.490 ac, 0.00% Impervious, Inflow Depth > 1.90" for 100-yr event
Inflow = 10.88 cfs @ 12.38 hrs, Volume= 1.185 af
Primary = 10.88 cfs @ 12.38 hrs, Volume= 1.185 af, Atten= 0%, Lag= 0.0 min

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

Link L23: L23

Hydrograph



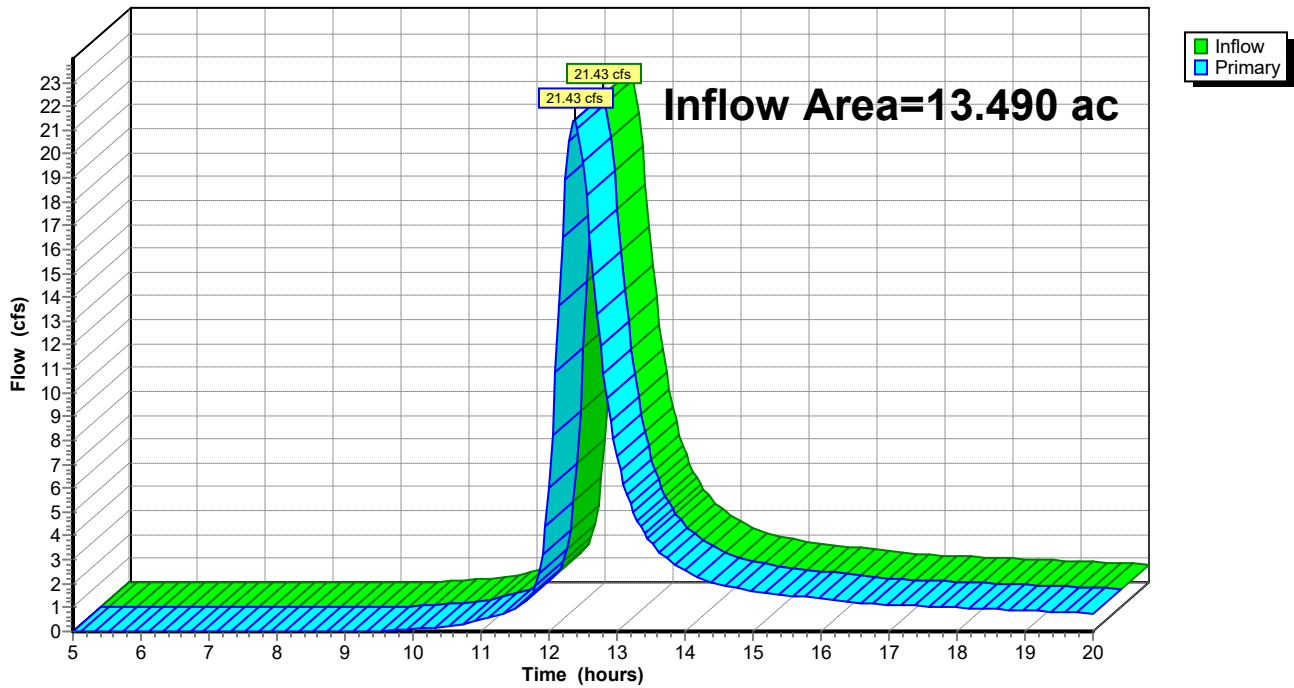
Summary for Link L24: L24

Inflow Area = 13.490 ac, 0.00% Impervious, Inflow Depth > 2.05" for 100-yr event
Inflow = 21.43 cfs @ 12.38 hrs, Volume= 2.309 af
Primary = 21.43 cfs @ 12.38 hrs, Volume= 2.309 af, Atten= 0%, Lag= 0.0 min

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

Link L24: L24

Hydrograph



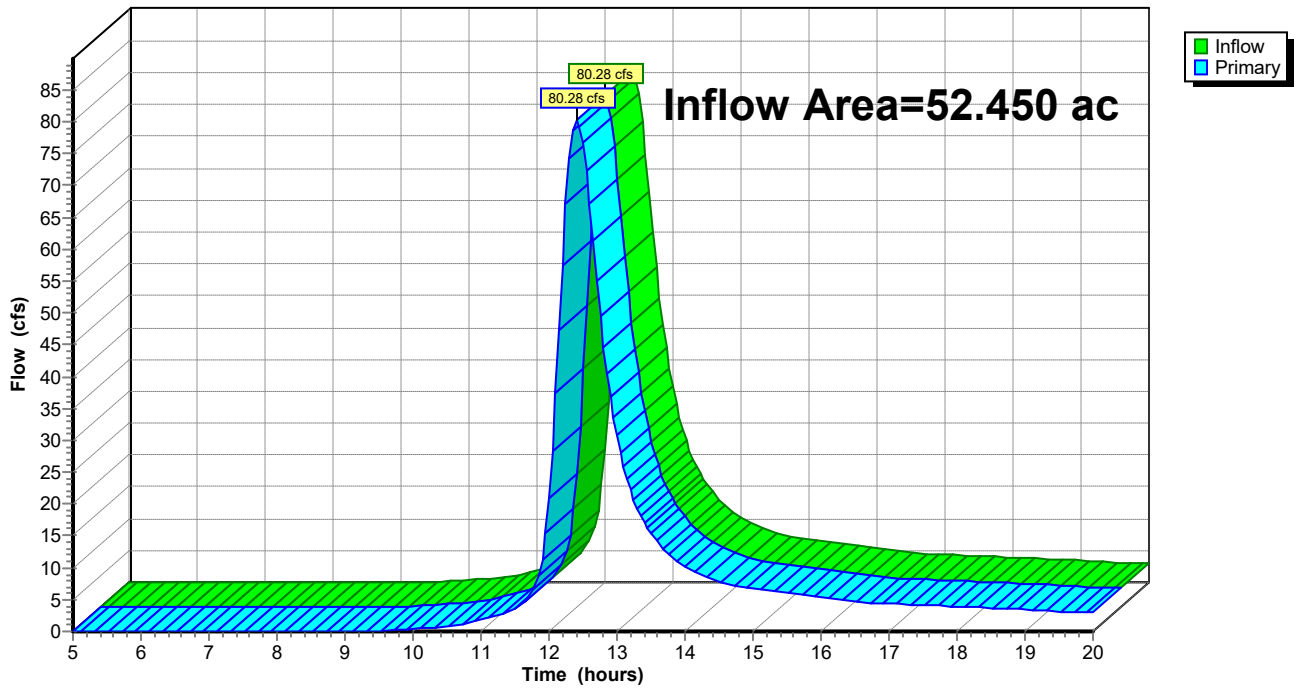
Summary for Link L25: L25

Inflow Area = 52.450 ac, 0.00% Impervious, Inflow Depth > 2.05" for 100-yr event
Inflow = 80.28 cfs @ 12.41 hrs, Volume= 8.968 af
Primary = 80.28 cfs @ 12.41 hrs, Volume= 8.968 af, Atten= 0%, Lag= 0.0 min

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

Link L25: L25

Hydrograph



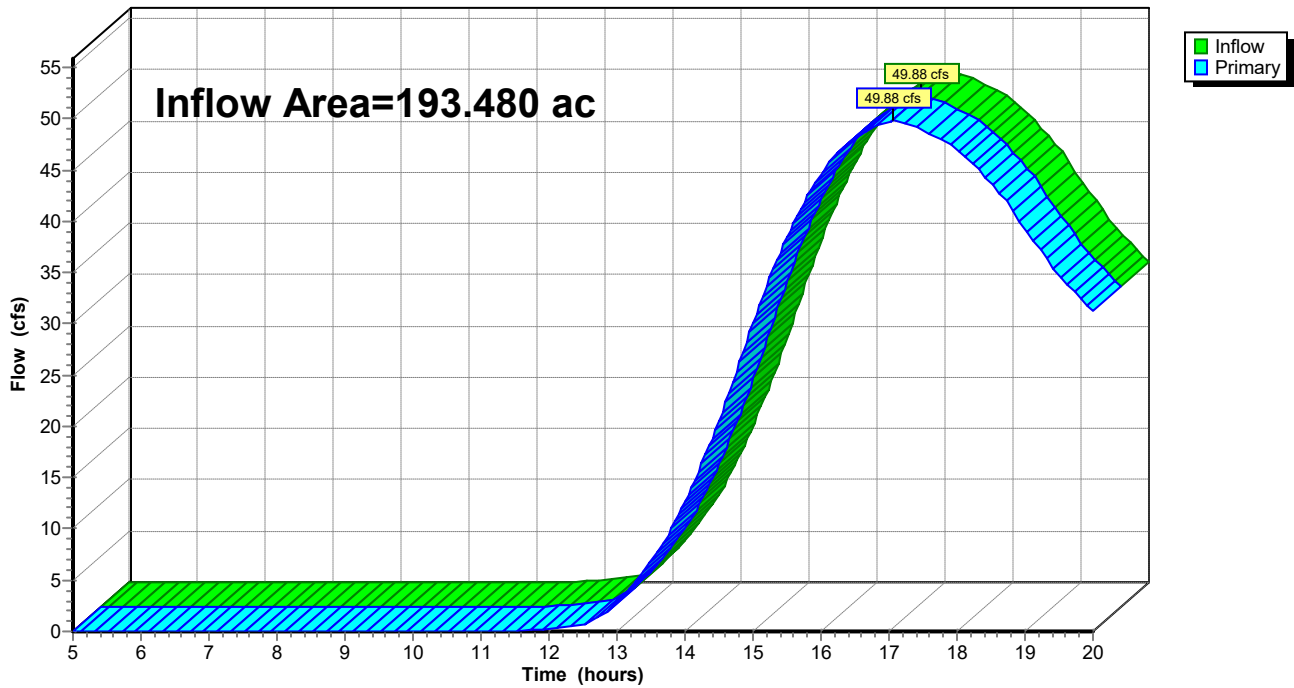
Summary for Link L26: L26

Inflow Area = 193.480 ac, 2.41% Impervious, Inflow Depth > 1.25" for 100-yr event
Inflow = 49.88 cfs @ 17.05 hrs, Volume= 20.079 af
Primary = 49.88 cfs @ 17.05 hrs, Volume= 20.079 af, Atten= 0%, Lag= 0.0 min

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

Link L26: L26

Hydrograph



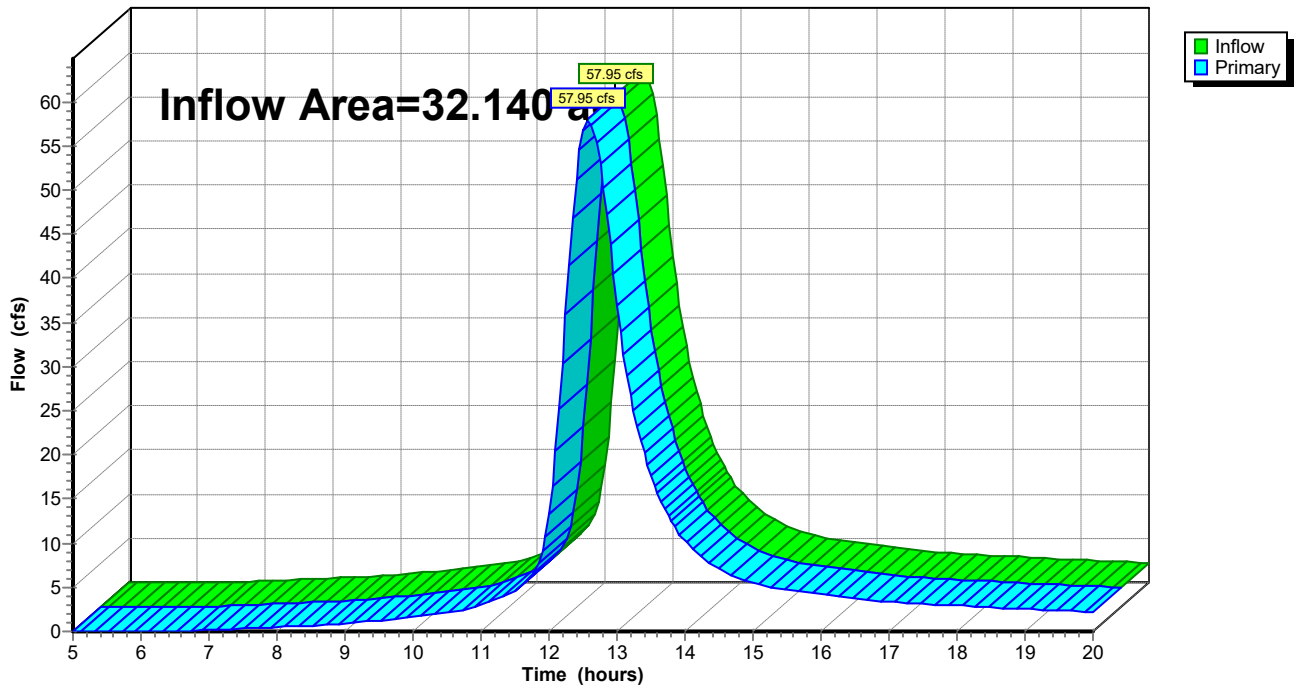
Summary for Link L27: L27

Inflow Area = 32.140 ac, 50.87% Impervious, Inflow Depth > 2.99" for 100-yr event
Inflow = 57.95 cfs @ 12.57 hrs, Volume= 8.001 af
Primary = 57.95 cfs @ 12.57 hrs, Volume= 8.001 af, Atten= 0%, Lag= 0.0 min

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

Link L27: L27

Hydrograph



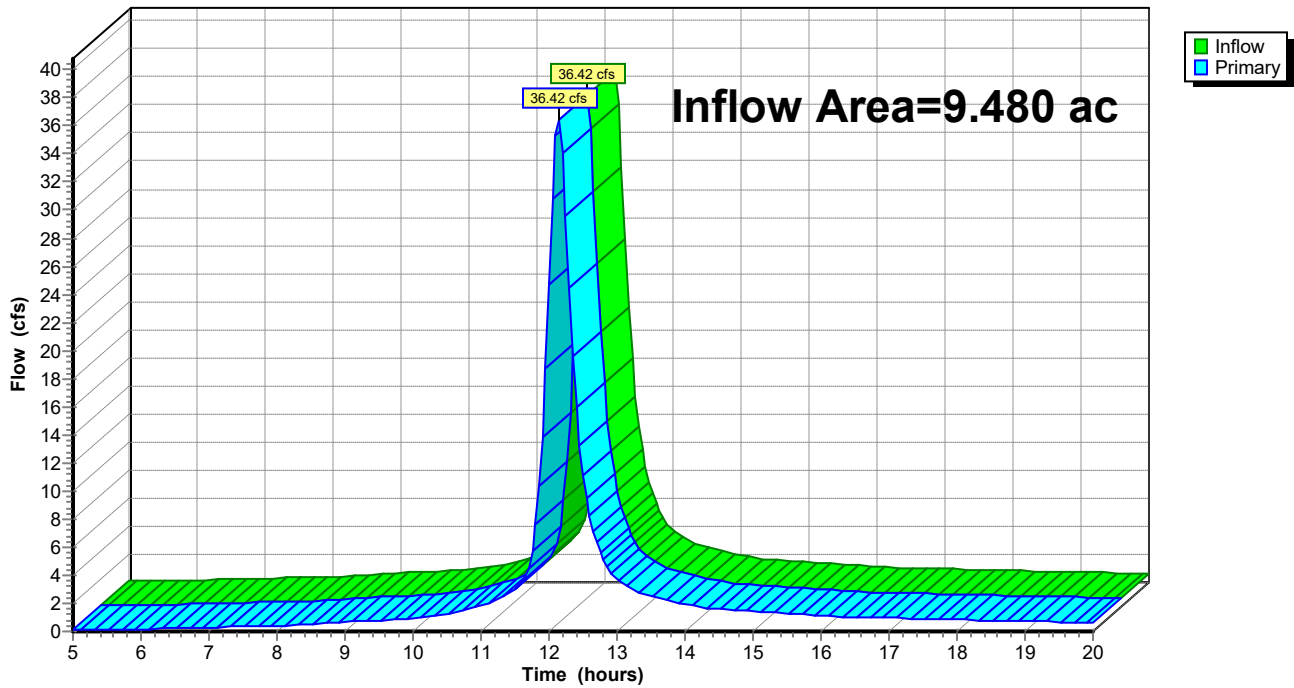
Summary for Link L28: L28

Inflow Area = 9.480 ac, 67.30% Impervious, Inflow Depth > 3.51" for 100-yr event
Inflow = 36.42 cfs @ 12.14 hrs, Volume= 2.775 af
Primary = 36.42 cfs @ 12.14 hrs, Volume= 2.775 af, Atten= 0%, Lag= 0.0 min

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

Link L28: L28

Hydrograph



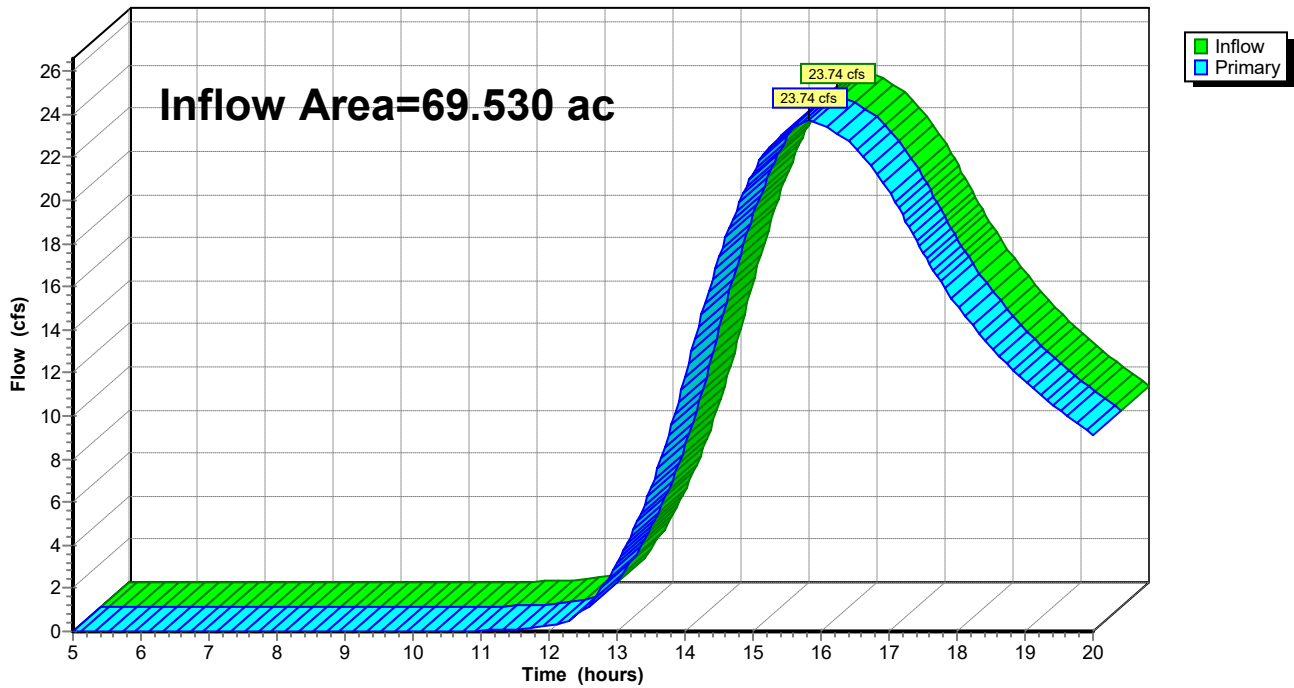
Summary for Link L29: L29

Inflow Area = 69.530 ac, 10.00% Impervious, Inflow Depth > 1.60" for 100-yr event
Inflow = 23.74 cfs @ 15.81 hrs, Volume= 9.265 af
Primary = 23.74 cfs @ 15.81 hrs, Volume= 9.265 af, Atten= 0%, Lag= 0.0 min

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

Link L29: L29

Hydrograph



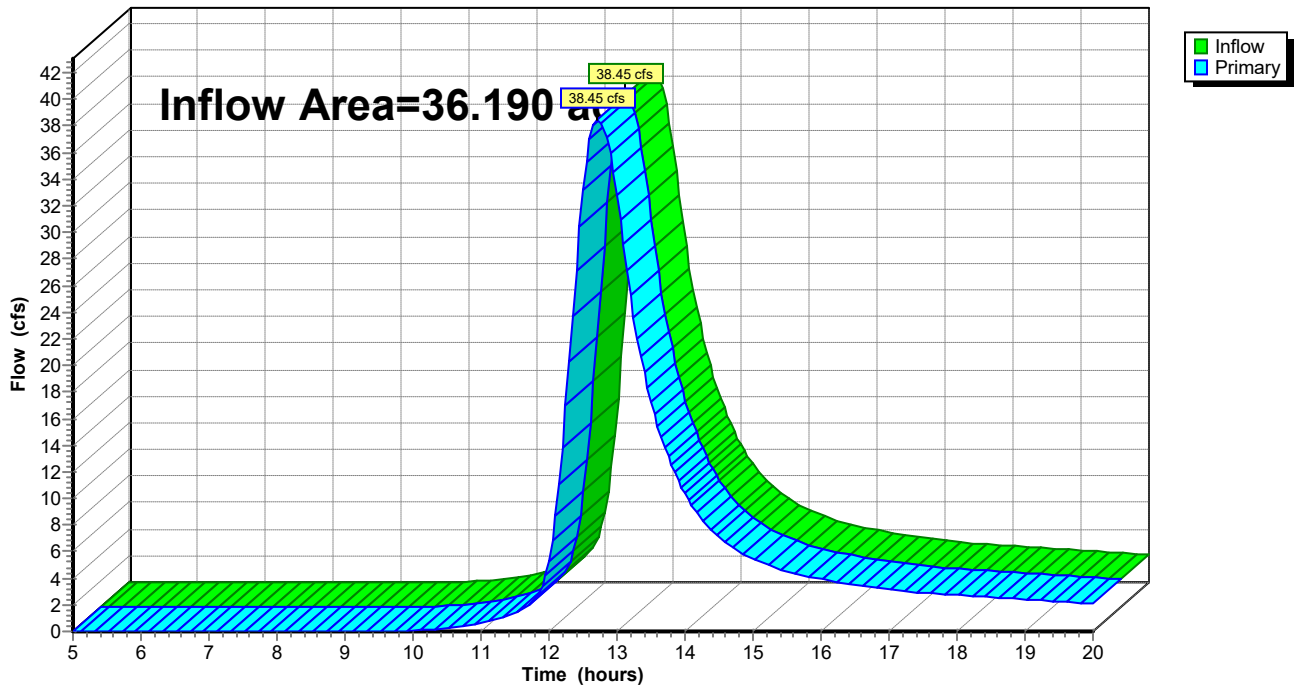
Summary for Link L30: L30

Inflow Area = 36.190 ac, 5.11% Impervious, Inflow Depth > 1.95" for 100-yr event
Inflow = 38.45 cfs @ 12.72 hrs, Volume= 5.889 af
Primary = 38.45 cfs @ 12.72 hrs, Volume= 5.889 af, Atten= 0%, Lag= 0.0 min

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

Link L30: L30

Hydrograph



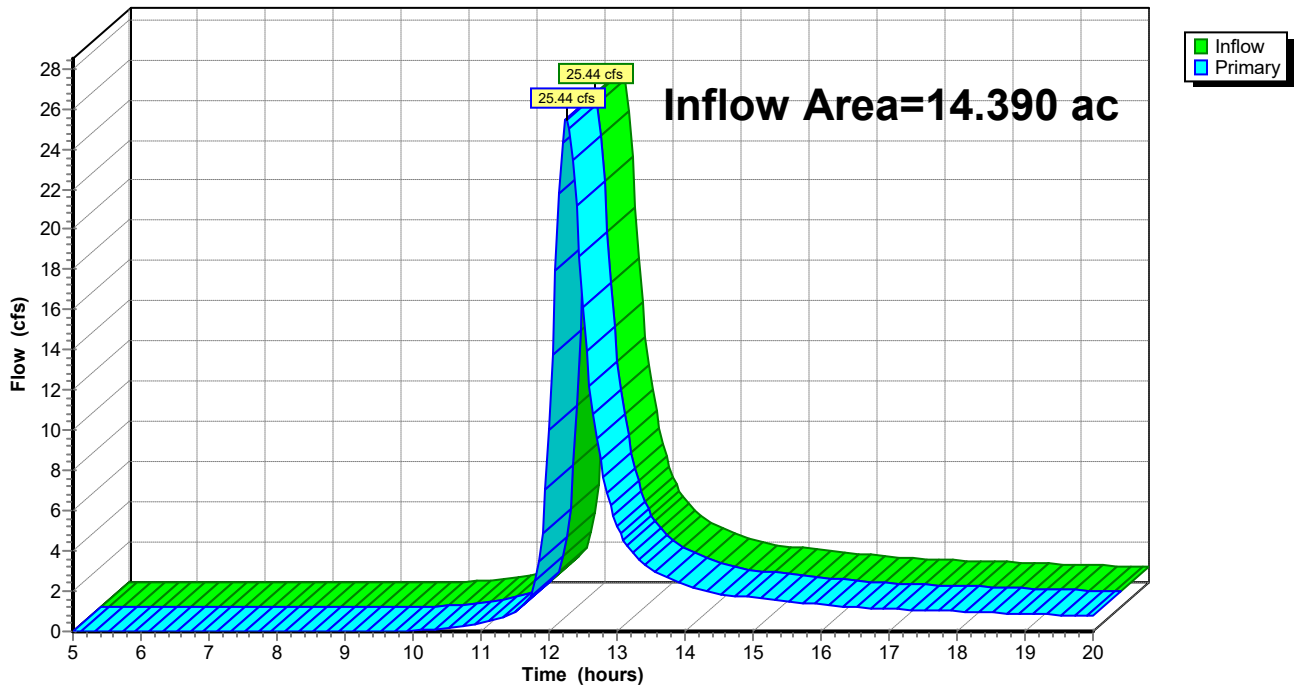
Summary for Link L31: L31

Inflow Area = 14.390 ac, 6.74% Impervious, Inflow Depth > 1.91" for 100-yr event
Inflow = 25.44 cfs @ 12.26 hrs, Volume= 2.286 af
Primary = 25.44 cfs @ 12.26 hrs, Volume= 2.286 af, Atten= 0%, Lag= 0.0 min

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

Link L31: L31

Hydrograph



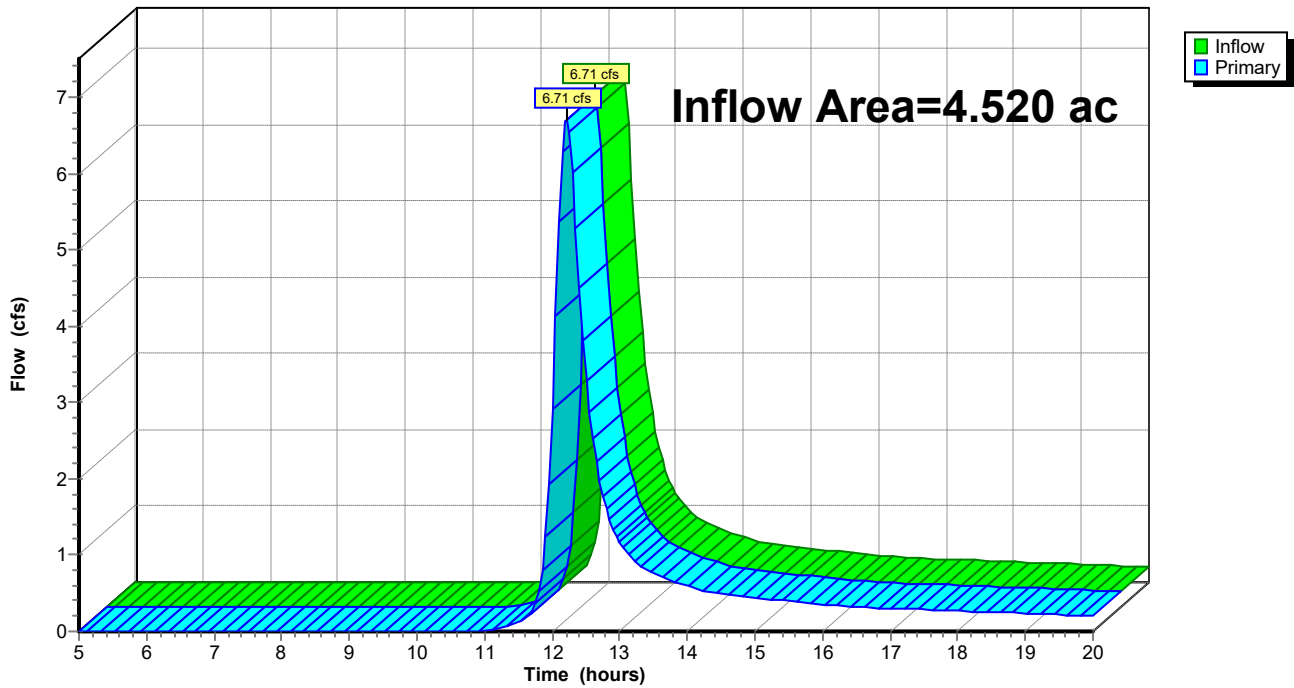
Summary for Link L32: L32

Inflow Area = 4.520 ac, 9.29% Impervious, Inflow Depth > 1.47" for 100-yr event
Inflow = 6.71 cfs @ 12.21 hrs, Volume= 0.556 af
Primary = 6.71 cfs @ 12.21 hrs, Volume= 0.556 af, Atten= 0%, Lag= 0.0 min

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

Link L32: L32

Hydrograph



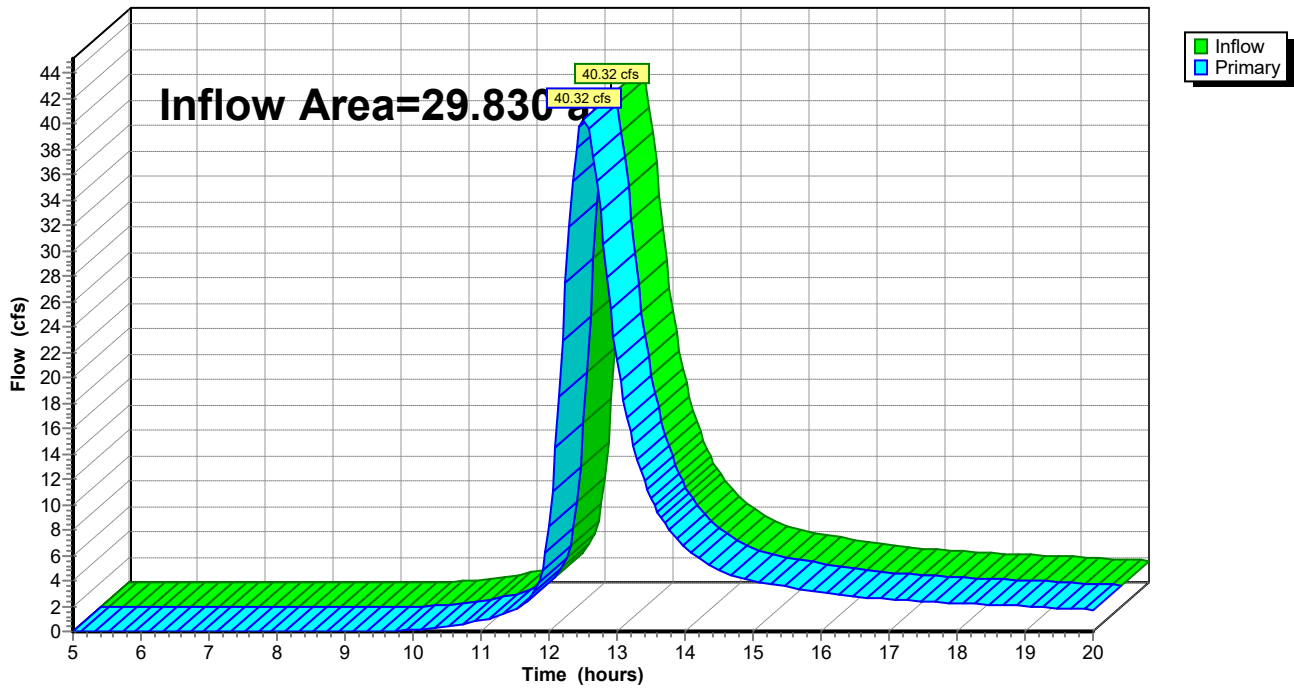
Summary for Link L33: L33

Inflow Area = 29.830 ac, 18.91% Impervious, Inflow Depth > 2.04" for 100-yr event
Inflow = 40.32 cfs @ 12.51 hrs, Volume= 5.083 af
Primary = 40.32 cfs @ 12.51 hrs, Volume= 5.083 af, Atten= 0%, Lag= 0.0 min

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

Link L33: L33

Hydrograph



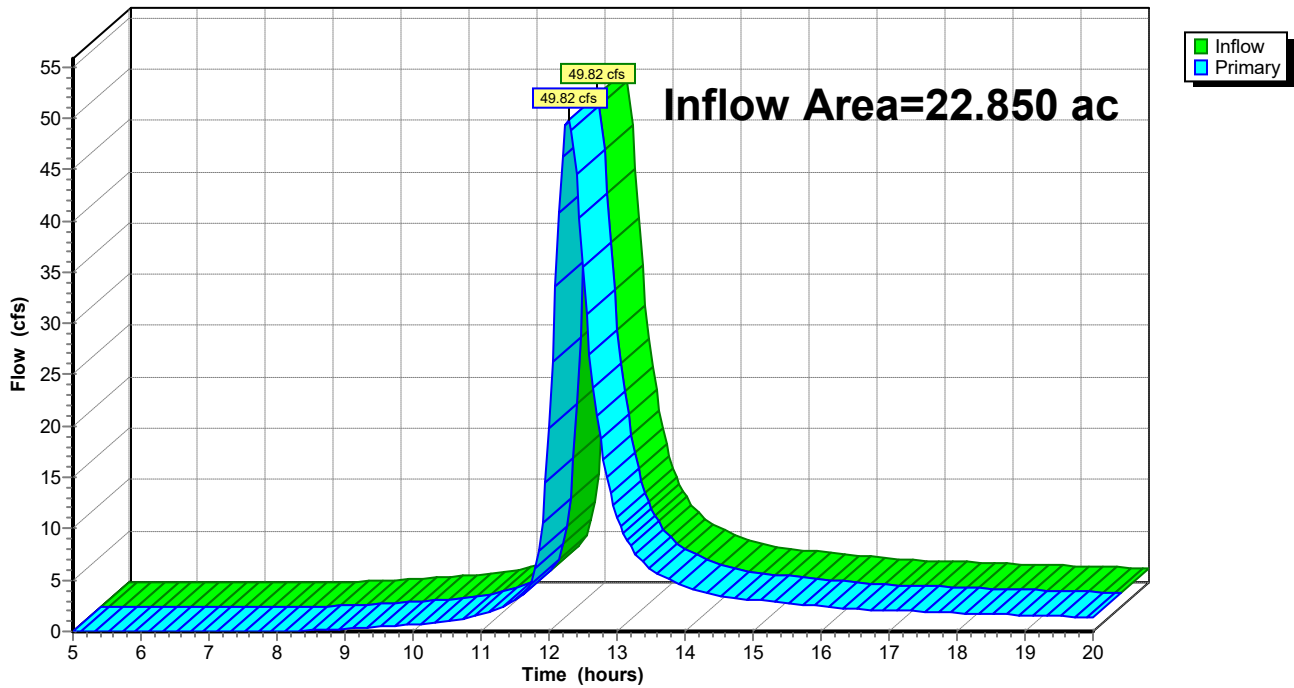
Summary for Link L34: L34

Inflow Area = 22.850 ac, 37.33% Impervious, Inflow Depth > 2.47" for 100-yr event
Inflow = 49.82 cfs @ 12.29 hrs, Volume= 4.706 af
Primary = 49.82 cfs @ 12.29 hrs, Volume= 4.706 af, Atten= 0%, Lag= 0.0 min

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

Link L34: L34

Hydrograph



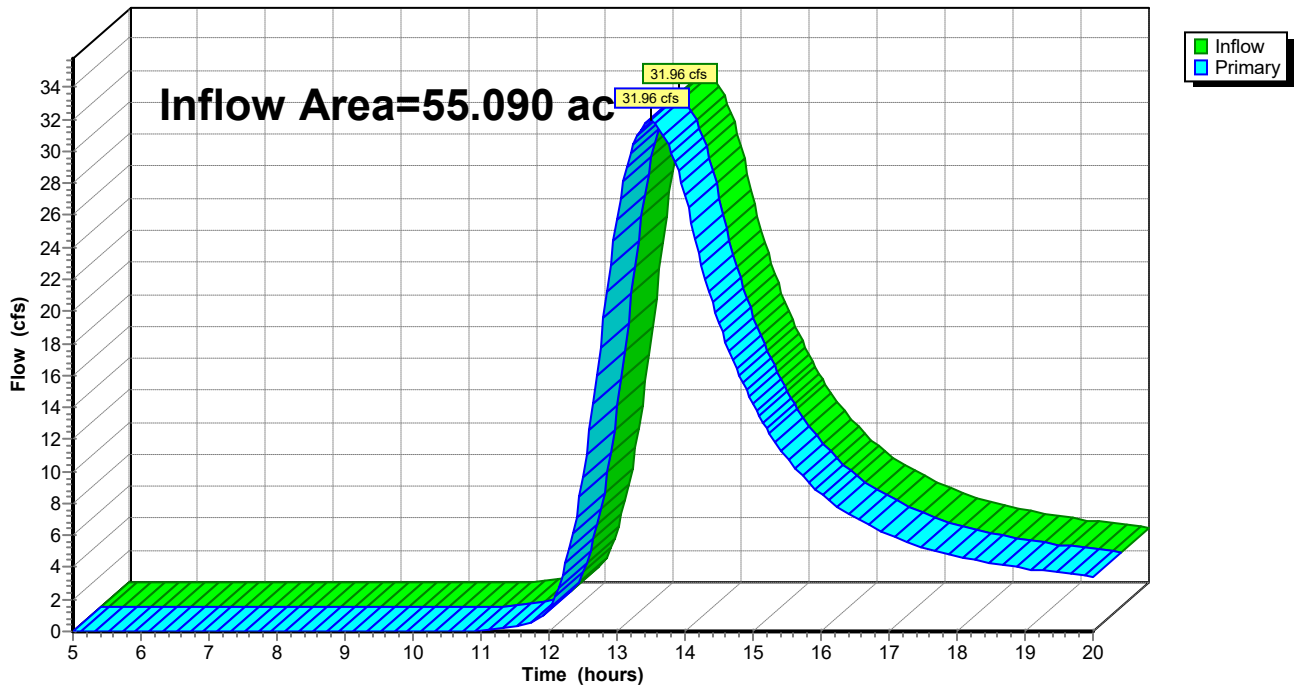
Summary for Link L35: L35

Inflow Area = 55.090 ac, 6.23% Impervious, Inflow Depth > 1.67" for 100-yr event
Inflow = 31.96 cfs @ 13.49 hrs, Volume= 7.687 af
Primary = 31.96 cfs @ 13.49 hrs, Volume= 7.687 af, Atten= 0%, Lag= 0.0 min

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

Link L35: L35

Hydrograph



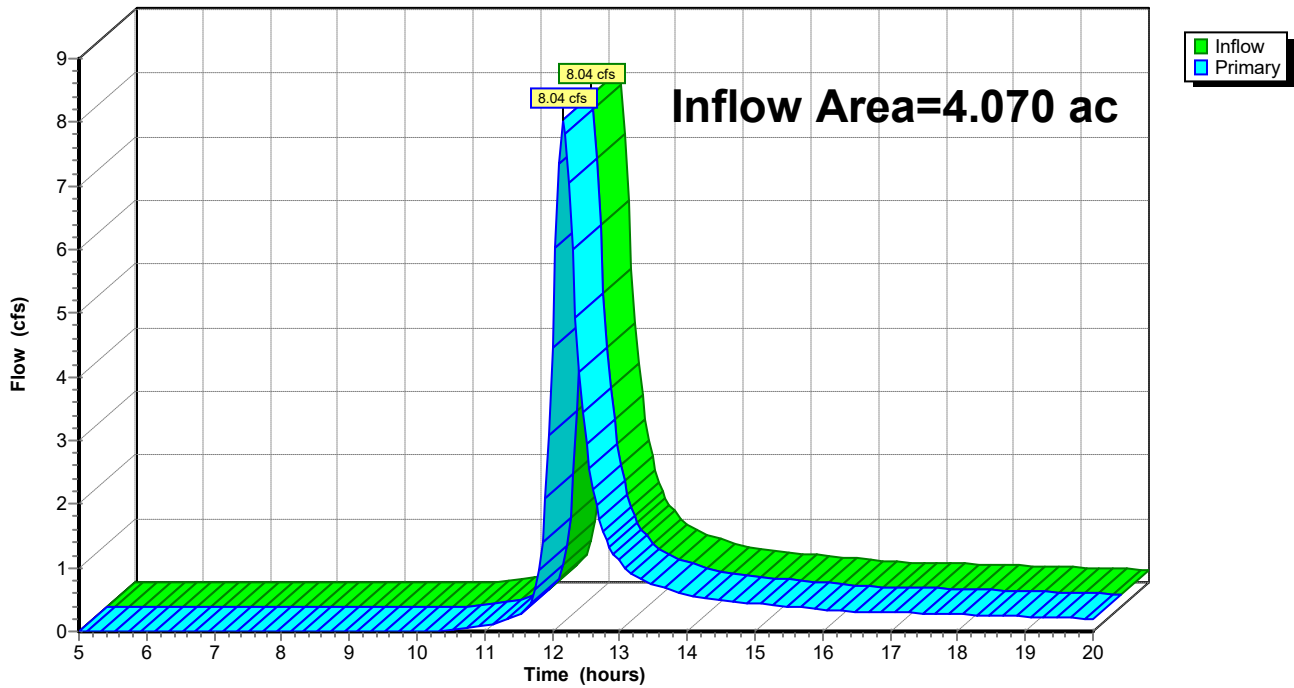
Summary for Link L36: L36

Inflow Area = 4.070 ac, 1.72% Impervious, Inflow Depth > 1.76" for 100-yr event
Inflow = 8.04 cfs @ 12.16 hrs, Volume= 0.598 af
Primary = 8.04 cfs @ 12.16 hrs, Volume= 0.598 af, Atten= 0%, Lag= 0.0 min

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

Link L36: L36

Hydrograph



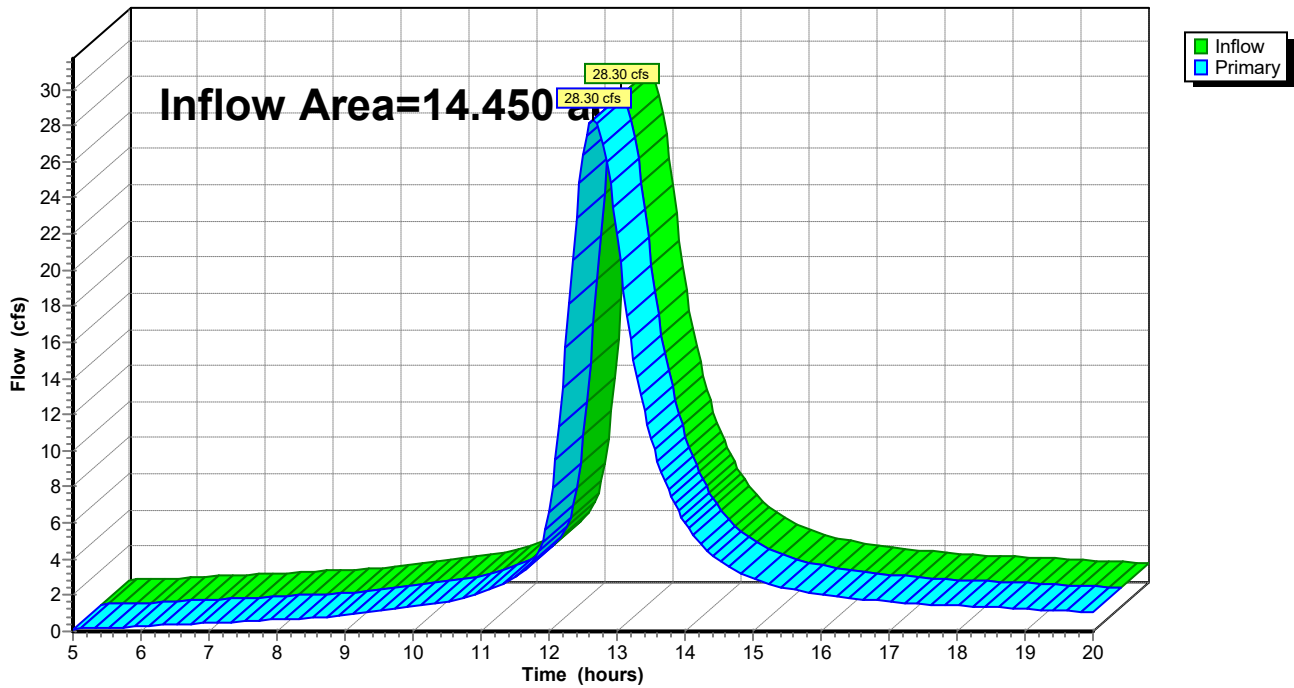
Summary for Link L37: L37

Inflow Area = 14.450 ac, 76.06% Impervious, Inflow Depth > 3.67" for 100-yr event
Inflow = 28.30 cfs @ 12.65 hrs, Volume= 4.421 af
Primary = 28.30 cfs @ 12.65 hrs, Volume= 4.421 af, Atten= 0%, Lag= 0.0 min

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

Link L37: L37

Hydrograph



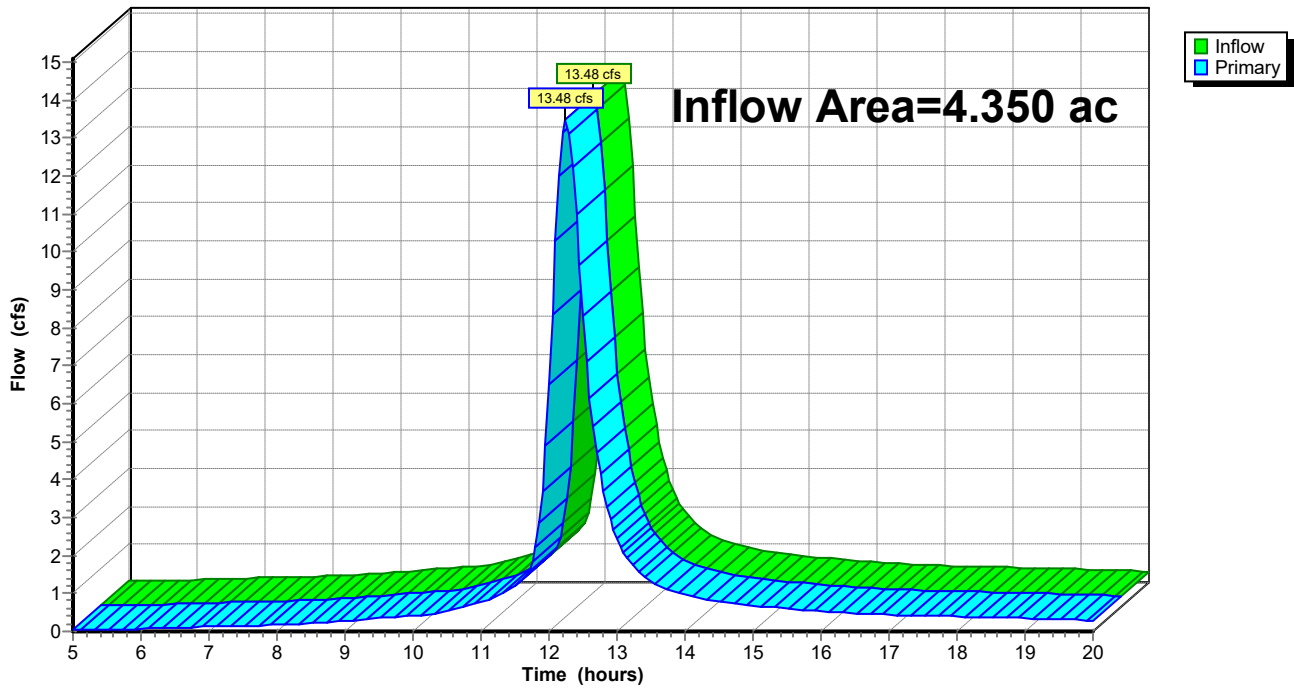
Summary for Link L38: L38

Inflow Area = 4.350 ac, 69.20% Impervious, Inflow Depth > 3.50" for 100-yr event
Inflow = 13.48 cfs @ 12.25 hrs, Volume= 1.270 af
Primary = 13.48 cfs @ 12.25 hrs, Volume= 1.270 af, Atten= 0%, Lag= 0.0 min

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

Link L38: L38

Hydrograph



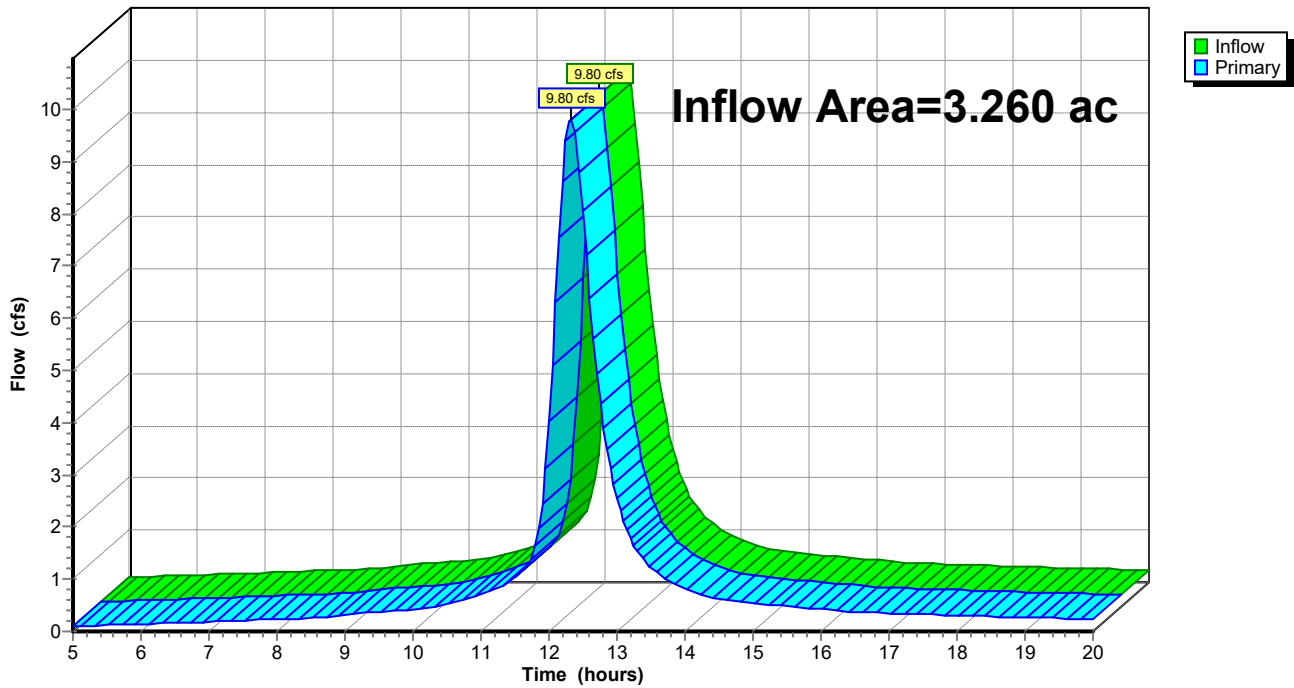
Summary for Link L39: L39

Inflow Area = 3.260 ac, 88.04% Impervious, Inflow Depth > 3.99" for 100-yr event
Inflow = 9.80 cfs @ 12.32 hrs, Volume= 1.085 af
Primary = 9.80 cfs @ 12.32 hrs, Volume= 1.085 af, Atten= 0%, Lag= 0.0 min

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

Link L39: L39

Hydrograph



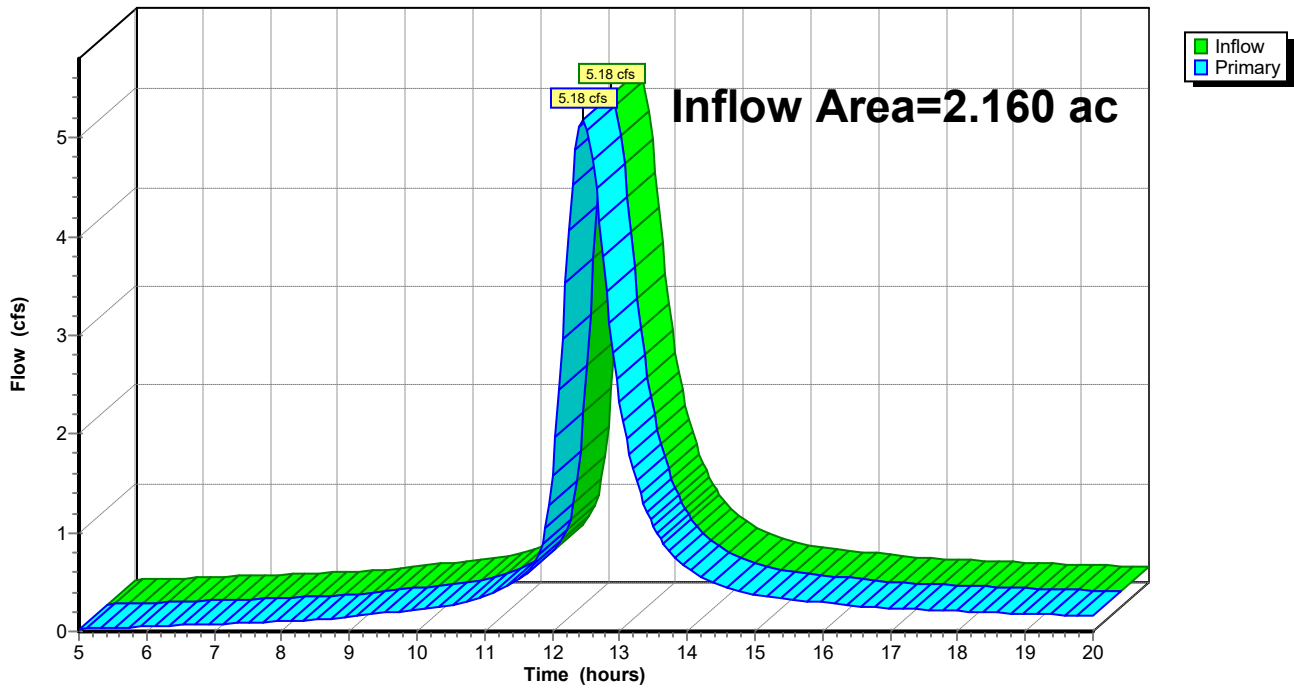
Summary for Link L40: L40

Inflow Area = 2.160 ac, 75.46% Impervious, Inflow Depth > 3.69" for 100-yr event
Inflow = 5.18 cfs @ 12.46 hrs, Volume= 0.664 af
Primary = 5.18 cfs @ 12.46 hrs, Volume= 0.664 af, Atten= 0%, Lag= 0.0 min

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

Link L40: L40

Hydrograph



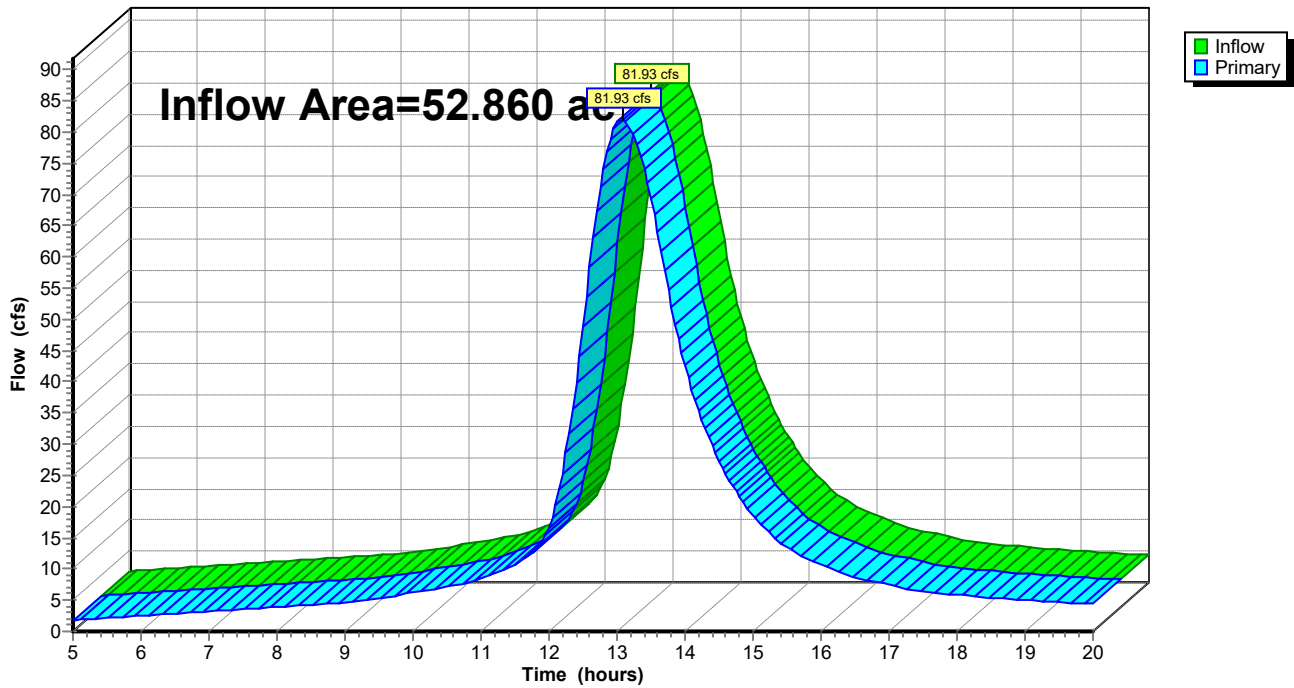
Summary for Link L41: L41

Inflow Area = 52.860 ac, 97.14% Impervious, Inflow Depth > 4.14" for 100-yr event
Inflow = 81.93 cfs @ 13.08 hrs, Volume= 18.223 af
Primary = 81.93 cfs @ 13.08 hrs, Volume= 18.223 af, Atten= 0%, Lag= 0.0 min

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

Link L41: L41

Hydrograph



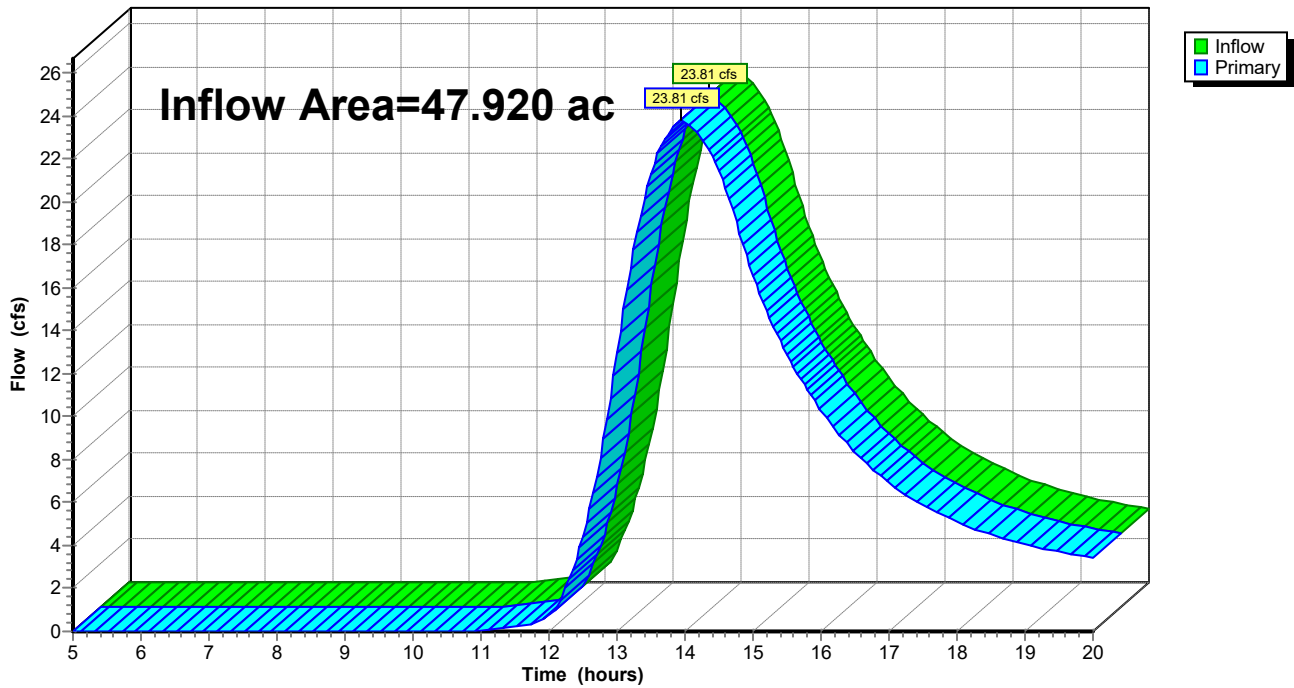
Summary for Link L42: L42

Inflow Area = 47.920 ac, 2.19% Impervious, Inflow Depth > 1.71" for 100-yr event
Inflow = 23.81 cfs @ 13.95 hrs, Volume= 6.814 af
Primary = 23.81 cfs @ 13.95 hrs, Volume= 6.814 af, Atten= 0%, Lag= 0.0 min

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

Link L42: L42

Hydrograph



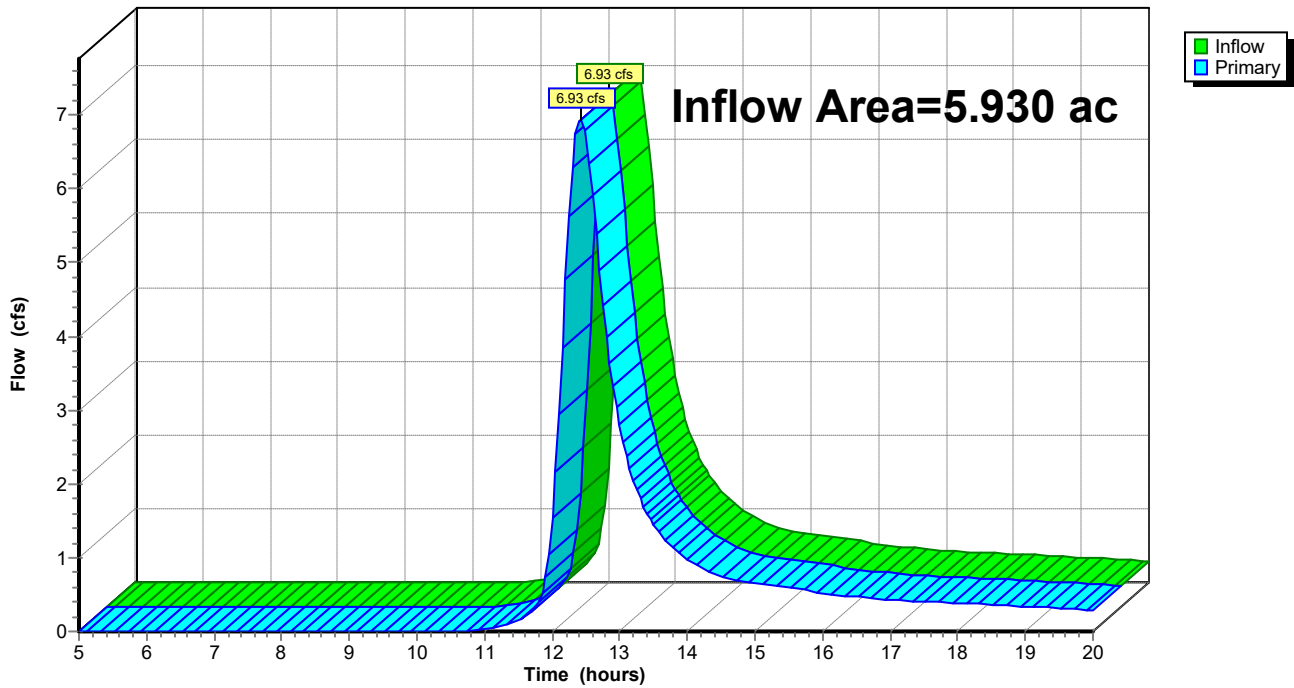
Summary for Link L43: L43

Inflow Area = 5.930 ac, 0.00% Impervious, Inflow Depth > 1.60" for 100-yr event
Inflow = 6.93 cfs @ 12.42 hrs, Volume= 0.792 af
Primary = 6.93 cfs @ 12.42 hrs, Volume= 0.792 af, Atten= 0%, Lag= 0.0 min

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

Link L43: L43

Hydrograph



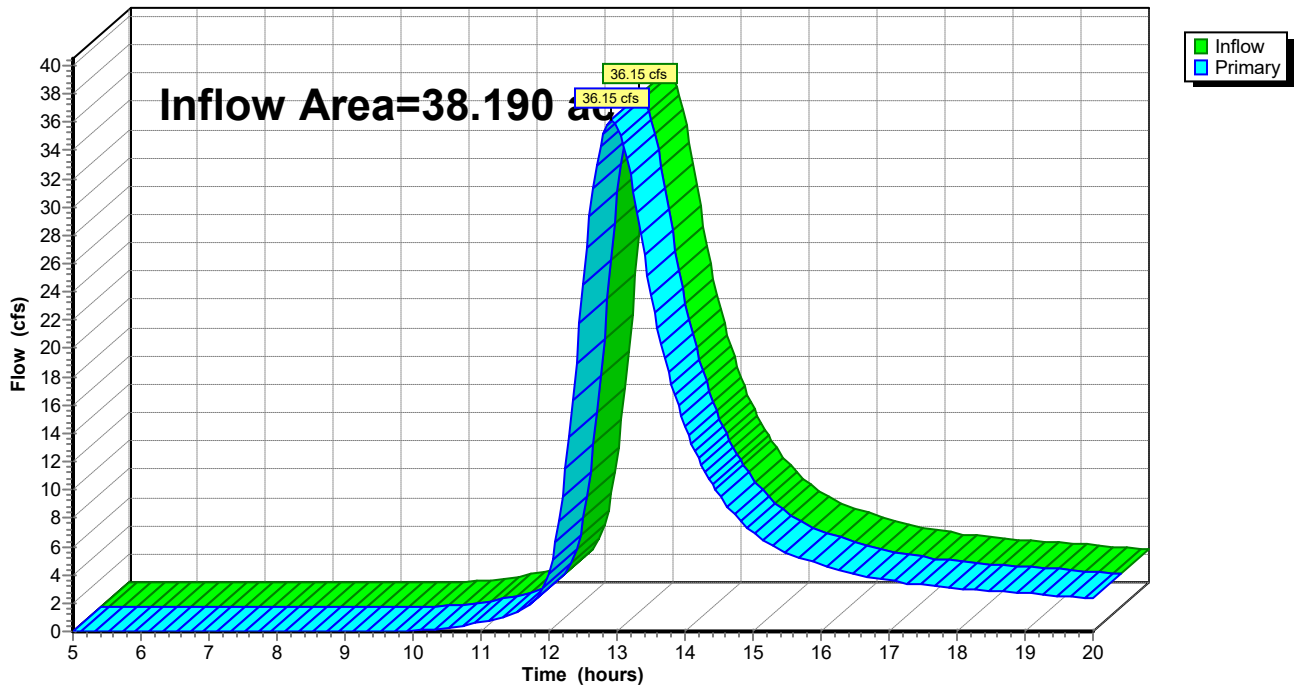
Summary for Link L44: L44

Inflow Area = 38.190 ac, 2.78% Impervious, Inflow Depth > 2.02" for 100-yr event
Inflow = 36.15 cfs @ 12.92 hrs, Volume= 6.415 af
Primary = 36.15 cfs @ 12.92 hrs, Volume= 6.415 af, Atten= 0%, Lag= 0.0 min

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

Link L44: L44

Hydrograph



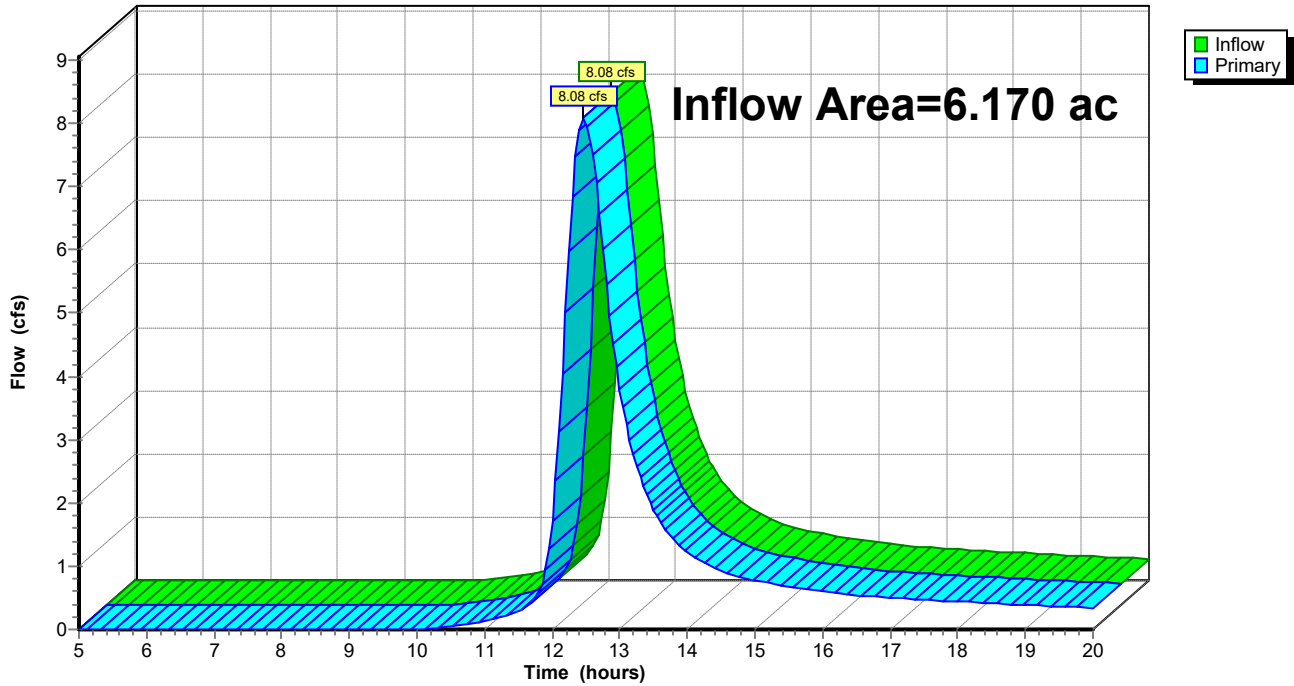
Summary for Link L45: L45

Inflow Area = 6.170 ac, 0.00% Impervious, Inflow Depth > 1.89" for 100-yr event
Inflow = 8.08 cfs @ 12.47 hrs, Volume= 0.973 af
Primary = 8.08 cfs @ 12.47 hrs, Volume= 0.973 af, Atten= 0%, Lag= 0.0 min

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

Link L45: L45

Hydrograph



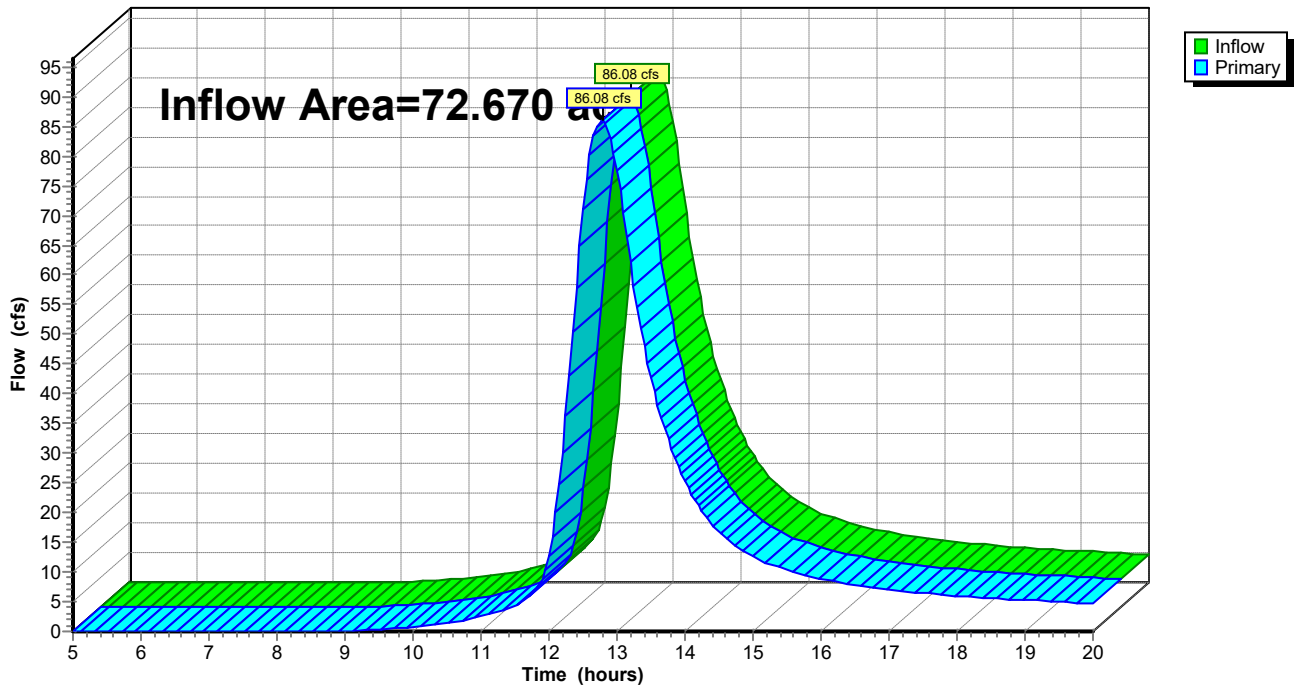
Summary for Link L46: L46

Inflow Area = 72.670 ac, 0.00% Impervious, Inflow Depth > 2.27" for 100-yr event
Inflow = 86.08 cfs @ 12.78 hrs, Volume= 13.729 af
Primary = 86.08 cfs @ 12.78 hrs, Volume= 13.729 af, Atten= 0%, Lag= 0.0 min

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

Link L46: L46

Hydrograph



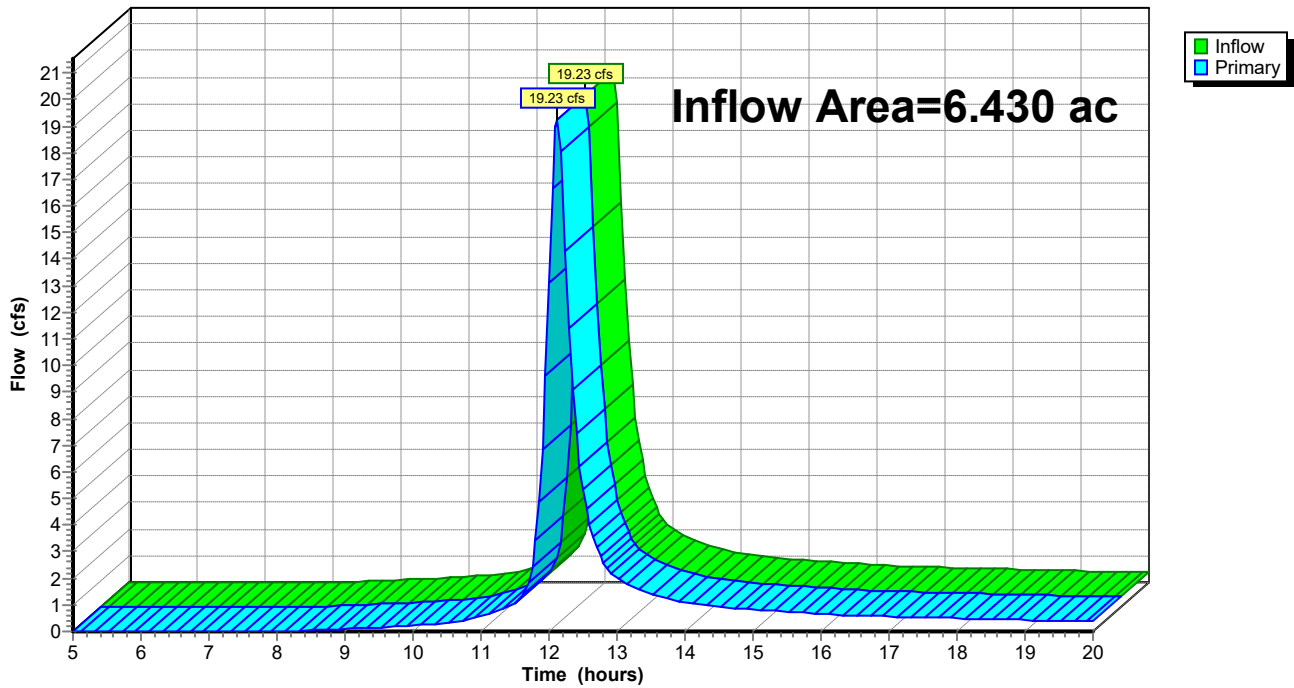
Summary for Link L47: L47

Inflow Area = 6.430 ac, 0.00% Impervious, Inflow Depth > 2.48" for 100-yr event
Inflow = 19.23 cfs @ 12.13 hrs, Volume= 1.331 af
Primary = 19.23 cfs @ 12.13 hrs, Volume= 1.331 af, Atten= 0%, Lag= 0.0 min

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

Link L47: L47

Hydrograph



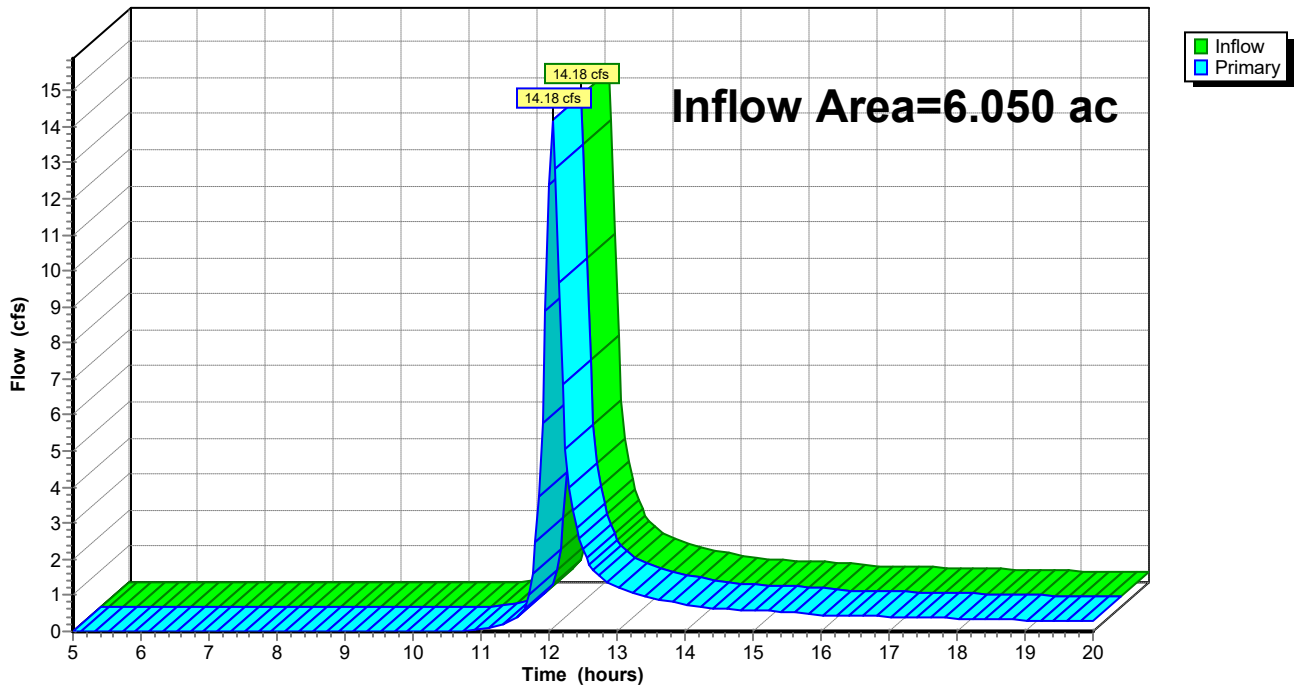
Summary for Link L48: L48

Inflow Area = 6.050 ac, 0.00% Impervious, Inflow Depth > 1.55" for 100-yr event
Inflow = 14.18 cfs @ 12.05 hrs, Volume= 0.783 af
Primary = 14.18 cfs @ 12.05 hrs, Volume= 0.783 af, Atten= 0%, Lag= 0.0 min

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

Link L48: L48

Hydrograph



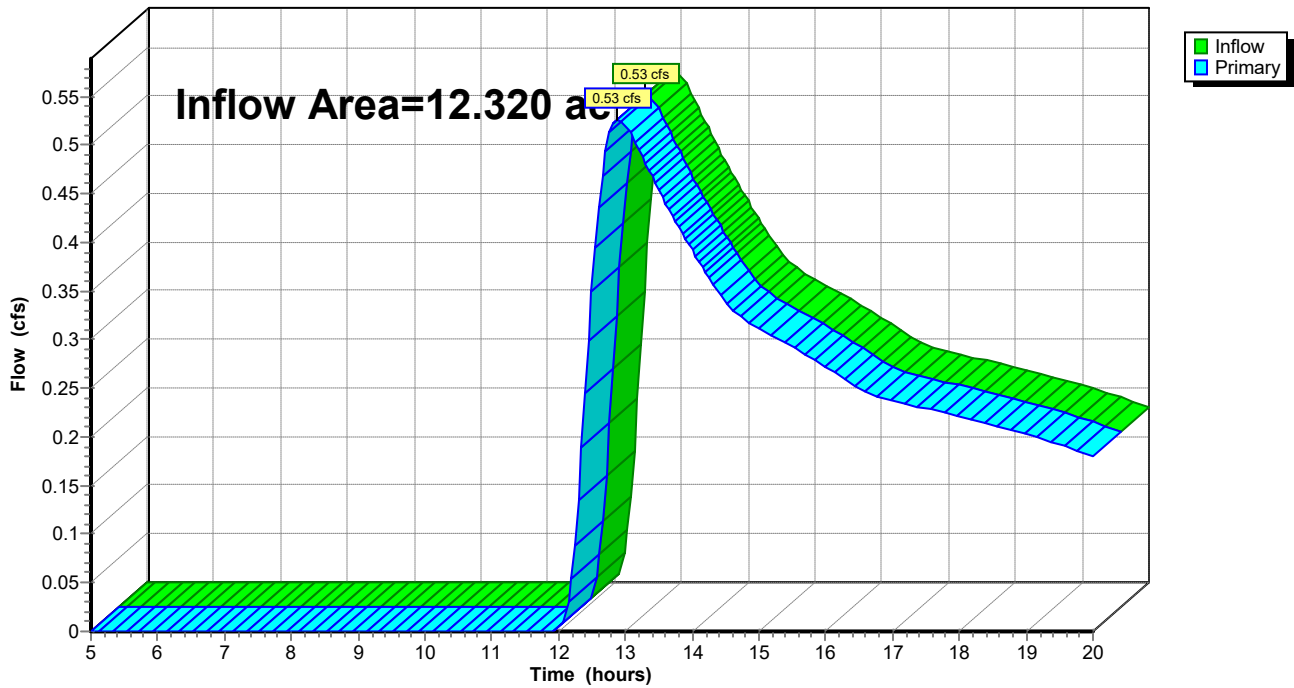
Summary for Link L49: L49

Inflow Area = 12.320 ac, 0.00% Impervious, Inflow Depth > 0.18" for 100-yr event
Inflow = 0.53 cfs @ 12.89 hrs, Volume= 0.189 af
Primary = 0.53 cfs @ 12.89 hrs, Volume= 0.189 af, Atten= 0%, Lag= 0.0 min

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

Link L49: L49

Hydrograph



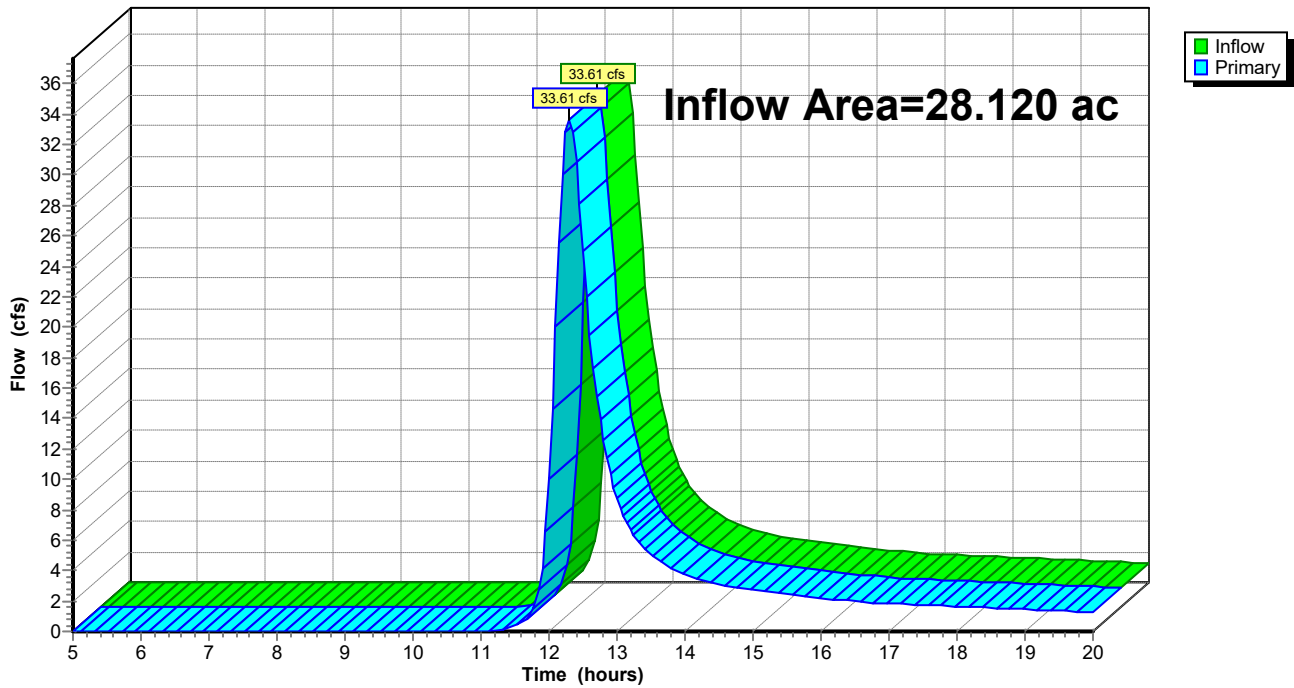
Summary for Link L50: L50

Inflow Area = 28.120 ac, 0.00% Impervious, Inflow Depth > 1.40" for 100-yr event
Inflow = 33.61 cfs @ 12.30 hrs, Volume= 3.286 af
Primary = 33.61 cfs @ 12.30 hrs, Volume= 3.286 af, Atten= 0%, Lag= 0.0 min

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

Link L50: L50

Hydrograph



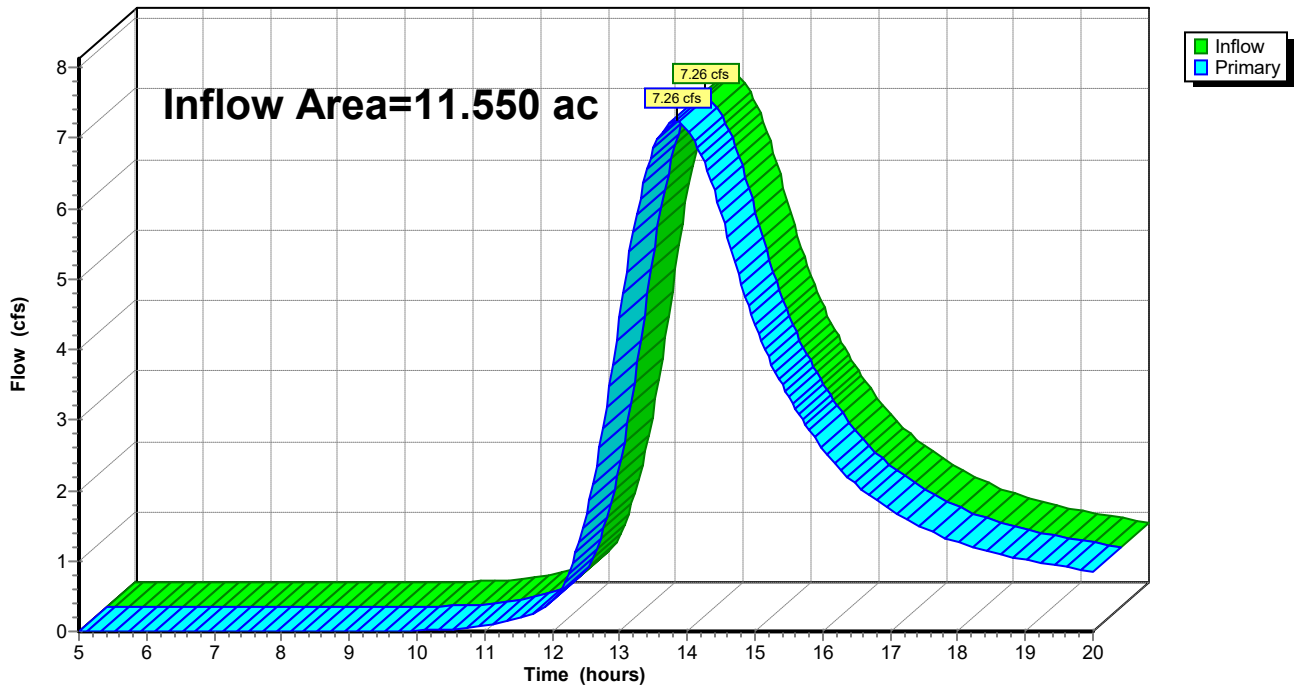
Summary for Link L51: L51

Inflow Area = 11.550 ac, 0.00% Impervious, Inflow Depth > 2.02" for 100-yr event
Inflow = 7.26 cfs @ 13.85 hrs, Volume= 1.947 af
Primary = 7.26 cfs @ 13.85 hrs, Volume= 1.947 af, Atten= 0%, Lag= 0.0 min

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

Link L51: L51

Hydrograph



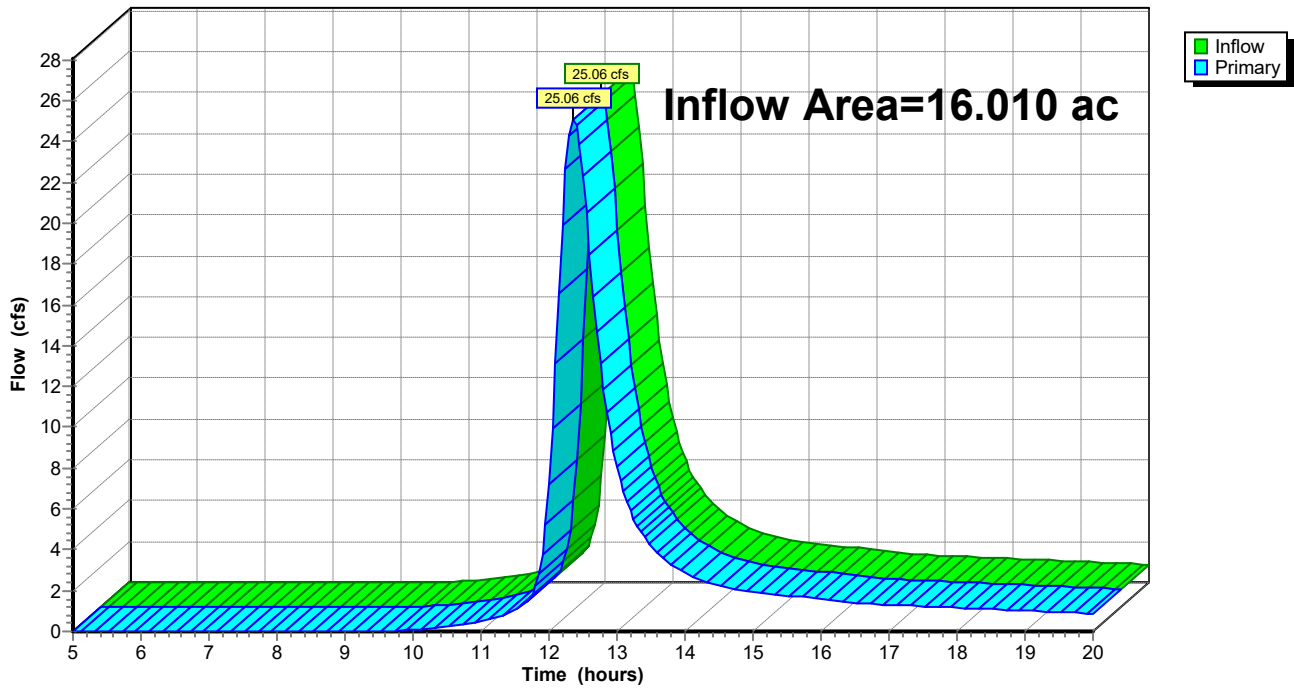
Summary for Link L52: L52

Inflow Area = 16.010 ac, 4.06% Impervious, Inflow Depth > 1.98" for 100-yr event
Inflow = 25.06 cfs @ 12.36 hrs, Volume= 2.637 af
Primary = 25.06 cfs @ 12.36 hrs, Volume= 2.637 af, Atten= 0%, Lag= 0.0 min

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

Link L52: L52

Hydrograph



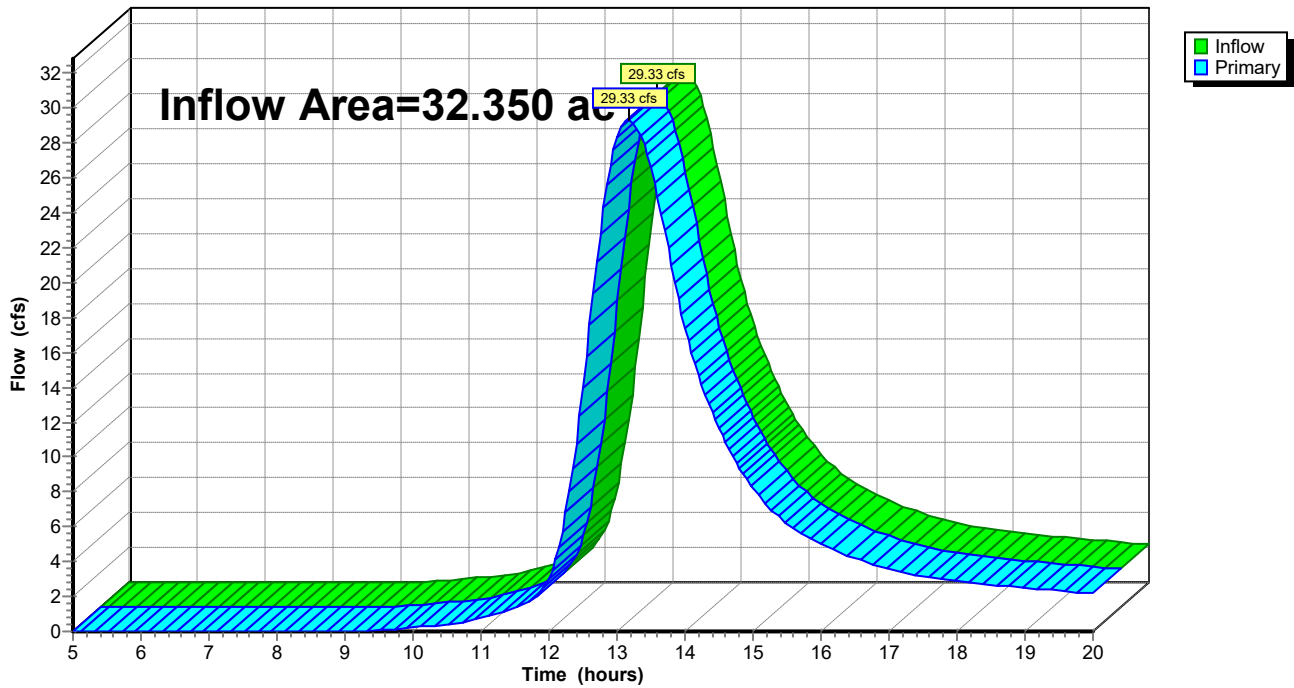
Summary for Link L53: L53

Inflow Area = 32.350 ac, 0.00% Impervious, Inflow Depth > 2.24" for 100-yr event
Inflow = 29.33 cfs @ 13.17 hrs, Volume= 6.028 af
Primary = 29.33 cfs @ 13.17 hrs, Volume= 6.028 af, Atten= 0%, Lag= 0.0 min

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

Link L53: L53

Hydrograph



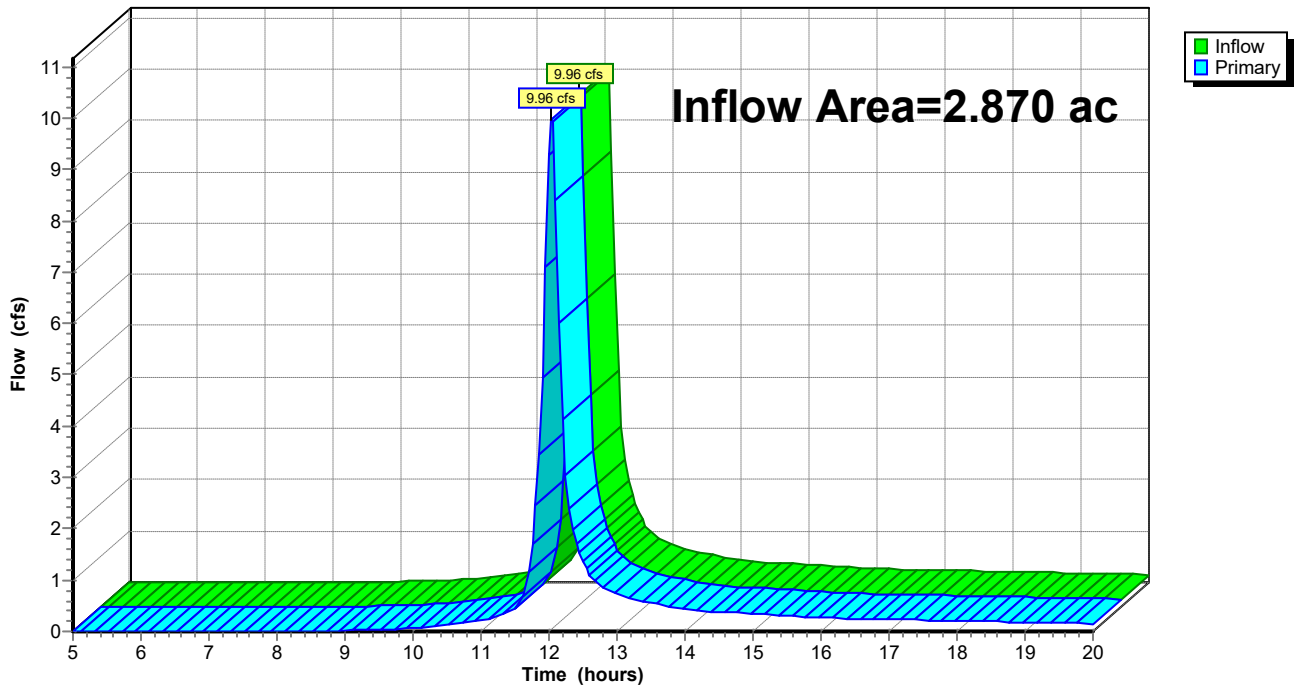
Summary for Link L54: L54

Inflow Area = 2.870 ac, 0.00% Impervious, Inflow Depth > 2.24" for 100-yr event
Inflow = 9.96 cfs @ 12.04 hrs, Volume= 0.535 af
Primary = 9.96 cfs @ 12.04 hrs, Volume= 0.535 af, Atten= 0%, Lag= 0.0 min

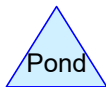
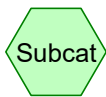
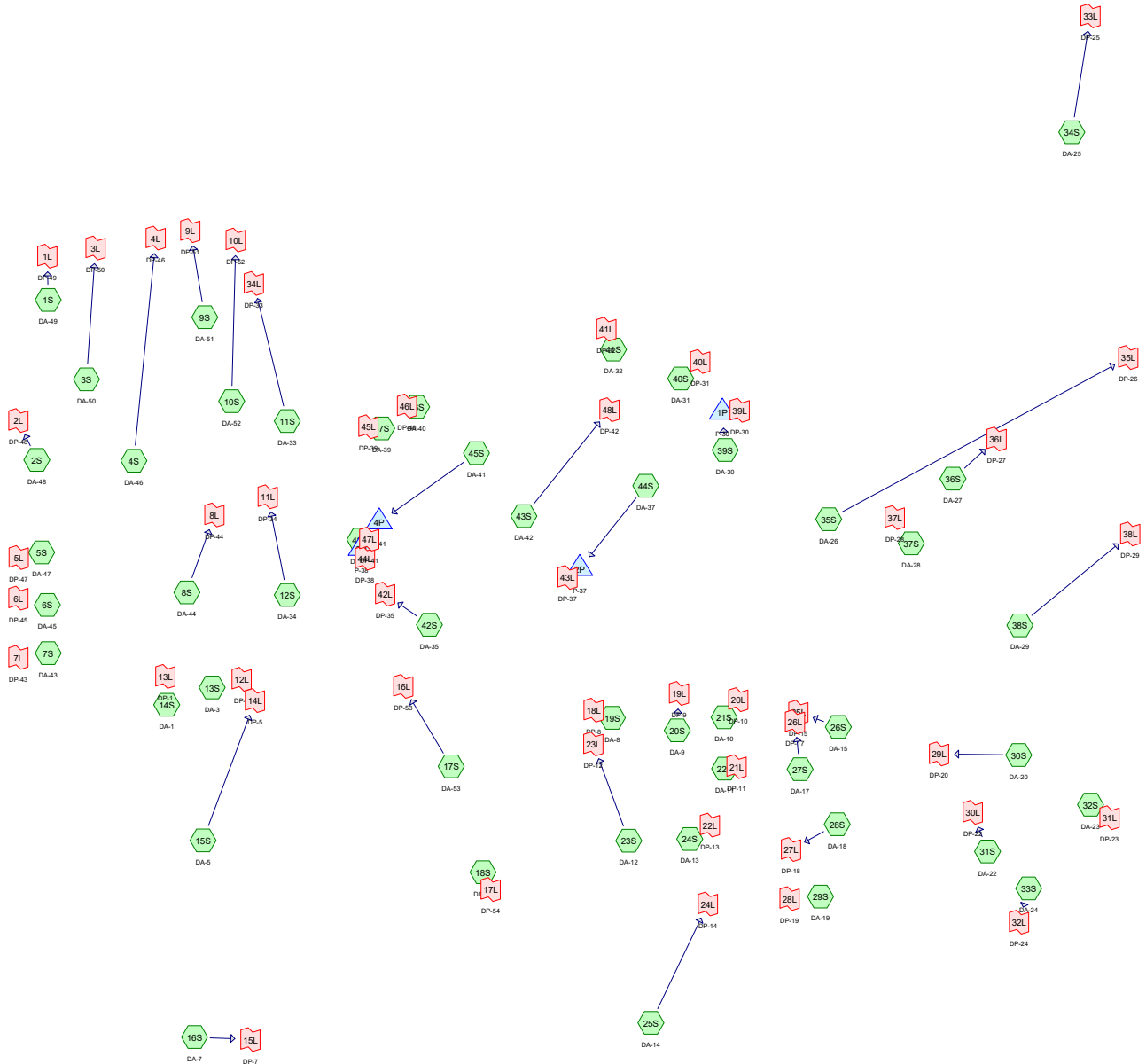
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link L54: L54

Hydrograph



APPENDIX I – POST-DEVELOPMENT ANALYSIS



Routing Diagram for Somerset_Proposed_Rev7
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Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1 Year	Type II 24-hr		Default	24.00	1	1.74	2
2	10 Year	Type II 24-hr		Default	24.00	1	2.96	2
3	100 Year	Type II 24-hr		Default	24.00	1	4.88	2

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
115.647	77	(1S, 21S, 30S, 38S)
139.127	80	(2S, 17S, 23S, 31S, 34S)
21.323	74	(3S)
110.925	82	(4S, 36S)
52.816	84	(5S, 22S, 27S, 29S, 39S)
260.369	81	(6S, 18S, 25S, 35S, 37S, 41S)
7.285	76	(7S, 13S)
111.557	83	(8S, 9S, 11S, 20S, 24S, 26S)
118.579	85	(10S, 16S, 28S, 43S, 48S)
39.905	79	(12S)
5.219	64	(14S)
119.315	75	(15S, 33S, 42S)
4.025	72	(19S)
7.493	71	(32S)
14.388	78	(40S)
14.519	86	(44S)
52.858	94	(45S)
2.160	93	(46S)
3.534	92	(47S)
1,201.044	81	TOTAL AREA

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
1,201.044	Other	1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S, 9S, 10S, 11S, 12S, 13S, 14S, 15S, 16S, 17S, 18S, 19S, 20S, 21S, 22S, 23S, 24S, 25S, 26S, 27S, 28S, 29S, 30S, 31S, 32S, 33S, 34S, 35S, 36S, 37S, 38S, 39S, 40S, 41S, 42S, 43S, 44S, 45S, 46S, 47S, 48S
1,201.044		TOTAL AREA

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	1,201.044	1,201.044		1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S, 9S, 10S, 11S, 12S, 13S, 14S, 15S, 16S, 17S, 18S, 19S, 20S, 21S, 22S, 23S, 24S, 25S, 26S, 27S, 28S, 29S, 30S, 31S, 32S, 33S, 34S, 35S, 36S, 37S, 38S, 39S, 40S, 41S, 42S, 43S, 44S, 45S, 46S, 47S, 48S
0.000	0.000	0.000	0.000	1,201.044	1,201.044	TOTAL AREA	

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Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)
1	1P	290.00	288.00	40.0	0.0500	0.015	0.0	15.0	0.0
2	2P	290.00	288.00	40.0	0.0500	0.015	0.0	15.0	0.0
3	3P	292.00	90.00	40.0	5.0500	0.015	0.0	15.0	0.0
4	4P	290.00	288.00	40.0	0.0500	0.015	0.0	15.0	0.0

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Type II 24-hr 1 Year Rainfall=1.74"

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Time span=0.00-72.00 hrs, dt=0.08 hrs, 901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: DA-49	Runoff Area=5.251 ac 0.00% Impervious Runoff Depth=0.32" Flow Length=1,007' Tc=35.2 min CN=77 Runoff=0.95 cfs 0.138 af
Subcatchment 2S: DA-48	Runoff Area=7.372 ac 0.00% Impervious Runoff Depth=0.41" Flow Length=991' Tc=58.2 min CN=80 Runoff=1.36 cfs 0.253 af
Subcatchment 3S: DA-50	Runoff Area=21.323 ac 0.00% Impervious Runoff Depth=0.24" Flow Length=2,117' Tc=52.9 min CN=74 Runoff=1.86 cfs 0.420 af
Subcatchment 4S: DA-46	Runoff Area=78.787 ac 0.00% Impervious Runoff Depth=0.48" Flow Length=2,635' Tc=73.8 min CN=82 Runoff=15.30 cfs 3.179 af
Subcatchment 5S: DA-47	Runoff Area=5.601 ac 0.00% Impervious Runoff Depth=0.57" Flow Length=669' Tc=54.8 min CN=84 Runoff=1.66 cfs 0.264 af
Subcatchment 6S: DA-45	Runoff Area=2.612 ac 0.00% Impervious Runoff Depth=0.45" Tc=54.5 min CN=81 Runoff=0.57 cfs 0.097 af
Subcatchment 7S: DA-43	Runoff Area=5.478 ac 0.00% Impervious Runoff Depth=0.29" Flow Length=703' Tc=56.1 min CN=76 Runoff=0.62 cfs 0.131 af
Subcatchment 8S: DA-44	Runoff Area=35.511 ac 0.00% Impervious Runoff Depth=0.52" Flow Length=2,451' Tc=127.6 min CN=83 Runoff=4.99 cfs 1.550 af
Subcatchment 9S: DA-51	Runoff Area=11.972 ac 0.00% Impervious Runoff Depth=0.52" Tc=72.0 min CN=83 Runoff=2.63 cfs 0.523 af
Subcatchment 10S: DA-52	Runoff Area=17.191 ac 0.00% Impervious Runoff Depth=0.61" Tc=85.0 min CN=85 Runoff=4.01 cfs 0.874 af
Subcatchment 11S: DA-33	Runoff Area=29.770 ac 0.00% Impervious Runoff Depth=0.52" Flow Length=2,805' Tc=344.6 min CN=83 Runoff=1.98 cfs 1.300 af
Subcatchment 12S: DA-34	Runoff Area=39.905 ac 0.00% Impervious Runoff Depth>0.34" Flow Length=2,300' Slope=0.0000 '/' Tc=2,213.2 min CN=79 Runoff=0.45 cfs 1.142 af
Subcatchment 13S: DA-3	Runoff Area=1.807 ac 0.00% Impervious Runoff Depth=0.29" Tc=37.8 min CN=76 Runoff=0.27 cfs 0.043 af
Subcatchment 14S: DA-1	Runoff Area=5.219 ac 0.00% Impervious Runoff Depth=0.06" Flow Length=468' Tc=27.7 min CN=64 Runoff=0.04 cfs 0.026 af
Subcatchment 15S: DA-5	Runoff Area=61.624 ac 0.00% Impervious Runoff Depth=0.26" Flow Length=2,903' Tc=150.6 min CN=75 Runoff=3.08 cfs 1.343 af
Subcatchment 16S: DA-7	Runoff Area=30.438 ac 0.00% Impervious Runoff Depth=0.61" Tc=143.5 min CN=85 Runoff=4.79 cfs 1.548 af

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Type II 24-hr 1 Year Rainfall=1.74"

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Subcatchment 17S: DA-53	Runoff Area=32.347 ac 0.00% Impervious Runoff Depth=0.41" Tc=133.6 min CN=80 Runoff=3.24 cfs 1.108 af
Subcatchment 18S: DA-54	Runoff Area=2.872 ac 0.00% Impervious Runoff Depth=0.45" Tc=46.5 min CN=81 Runoff=0.70 cfs 0.107 af
Subcatchment 19S: DA-8	Runoff Area=4.025 ac 0.00% Impervious Runoff Depth=0.19" Flow Length=616' Tc=37.2 min CN=72 Runoff=0.31 cfs 0.064 af
Subcatchment 20S: DA-9	Runoff Area=12.359 ac 0.00% Impervious Runoff Depth=0.52" Flow Length=1,049' Tc=59.7 min CN=83 Runoff=3.11 cfs 0.540 af
Subcatchment 21S: DA-10	Runoff Area=2.629 ac 0.00% Impervious Runoff Depth=0.32" Tc=32.9 min CN=77 Runoff=0.50 cfs 0.069 af
Subcatchment 22S: DA-11	Runoff Area=2.766 ac 0.00% Impervious Runoff Depth=0.57" Tc=37.5 min CN=84 Runoff=1.07 cfs 0.130 af
Subcatchment 23S: DA-12	Runoff Area=31.832 ac 0.00% Impervious Runoff Depth=0.41" Tc=102.2 min CN=80 Runoff=3.91 cfs 1.091 af
Subcatchment 24S: DA-13	Runoff Area=12.785 ac 0.00% Impervious Runoff Depth=0.52" Tc=65.8 min CN=83 Runoff=3.00 cfs 0.558 af
Subcatchment 25S: DA-14	Runoff Area=47.394 ac 0.00% Impervious Runoff Depth=0.45" Flow Length=2,799' Tc=165.4 min CN=81 Runoff=4.54 cfs 1.764 af
Subcatchment 26S: DA-15	Runoff Area=9.159 ac 0.00% Impervious Runoff Depth=0.52" Flow Length=1,010' Tc=81.5 min CN=83 Runoff=1.83 cfs 0.400 af
Subcatchment 27S: DA-17	Runoff Area=2.980 ac 0.00% Impervious Runoff Depth=0.57" Tc=560.9 min CN=84 Runoff=0.15 cfs 0.141 af
Subcatchment 28S: DA-18	Runoff Area=19.855 ac 0.00% Impervious Runoff Depth=0.61" Flow Length=1,429' Tc=93.9 min CN=85 Runoff=4.28 cfs 1.010 af
Subcatchment 29S: DA-19	Runoff Area=5.282 ac 0.00% Impervious Runoff Depth=0.57" Tc=56.1 min CN=84 Runoff=1.54 cfs 0.249 af
Subcatchment 30S: DA-20	Runoff Area=38.236 ac 0.00% Impervious Runoff Depth=0.32" Tc=131.1 min CN=77 Runoff=2.70 cfs 1.007 af
Subcatchment 31S: DA-22	Runoff Area=17.209 ac 0.00% Impervious Runoff Depth=0.41" Tc=70.8 min CN=80 Runoff=2.75 cfs 0.590 af
Subcatchment 32S: DA-23	Runoff Area=7.493 ac 0.00% Impervious Runoff Depth=0.17" Flow Length=520' Tc=38.6 min CN=71 Runoff=0.45 cfs 0.106 af
Subcatchment 33S: DA-24	Runoff Area=13.493 ac 0.00% Impervious Runoff Depth=0.26" Flow Length=1,209' Tc=86.8 min CN=75 Runoff=0.97 cfs 0.294 af

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Subcatchment 34S: DA-25	Runoff Area=50.368 ac 0.00% Impervious Runoff Depth=0.41" Tc=67.4 min CN=80 Runoff=8.40 cfs 1.726 af
Subcatchment 35S: DA-26	Runoff Area=193.467 ac 0.00% Impervious Runoff Depth>0.44" Tc=1,355.2 min CN=81 Runoff=3.85 cfs 7.149 af
Subcatchment 36S: DA-27	Runoff Area=32.137 ac 0.00% Impervious Runoff Depth=0.48" Tc=587.6 min CN=82 Runoff=1.34 cfs 1.297 af
Subcatchment 37S: DA-28	Runoff Area=9.475 ac 0.00% Impervious Runoff Depth=0.45" Tc=36.0 min CN=81 Runoff=2.80 cfs 0.353 af
Subcatchment 38S: DA-29	Runoff Area=69.531 ac 0.00% Impervious Runoff Depth=0.32" Tc=76.2 min CN=77 Runoff=7.34 cfs 1.832 af
Subcatchment 39S: DA-30	Runoff Area=36.187 ac 0.00% Impervious Runoff Depth=0.57" Flow Length=2,420' Tc=77.5 min CN=84 Runoff=8.25 cfs 1.707 af
Subcatchment 40S: DA-31	Runoff Area=14.388 ac 0.00% Impervious Runoff Depth=0.35" Tc=25.7 min CN=78 Runoff=3.75 cfs 0.415 af
Subcatchment 41S: DA-32	Runoff Area=4.549 ac 0.00% Impervious Runoff Depth=0.45" Flow Length=100' Tc=155.5 min CN=81 Runoff=0.46 cfs 0.169 af
Subcatchment 42S: DA-35	Runoff Area=44.199 ac 0.00% Impervious Runoff Depth=0.26" Tc=241.8 min CN=75 Runoff=1.65 cfs 0.963 af
Subcatchment 43S: DA-42	Runoff Area=47.848 ac 0.00% Impervious Runoff Depth=0.61" Tc=183.8 min CN=85 Runoff=6.20 cfs 2.434 af
Subcatchment 44S: DA-37	Runoff Area=14.519 ac 0.00% Impervious Runoff Depth=0.66" Flow Length=2,143' Tc=166.2 min CN=86 Runoff=2.23 cfs 0.796 af
Subcatchment 45S: DA-41	Runoff Area=52.858 ac 0.00% Impervious Runoff Depth=1.16" Tc=107.9 min CN=94 Runoff=21.08 cfs 5.088 af
Subcatchment 46S: DA-40	Runoff Area=2.160 ac 0.00% Impervious Runoff Depth=1.08" Flow Length=441' Slope=0.0000 '/' Tc=470.7 min CN=93 Runoff=0.26 cfs 0.194 af
Subcatchment 47S: DA-39	Runoff Area=3.534 ac 0.00% Impervious Runoff Depth=1.01" Tc=467.1 min CN=92 Runoff=0.39 cfs 0.297 af
Subcatchment 48S: DA-38	Runoff Area=3.246 ac 0.00% Impervious Runoff Depth=0.61" Tc=14.6 min CN=85 Runoff=2.48 cfs 0.165 af
Pond 1P: P-30	Peak Elev=290.77' Storage=0.705 af Inflow=8.25 cfs 1.707 af Outflow=2.63 cfs 1.680 af
Pond 2P: P-37	Peak Elev=290.52' Storage=0.263 af Inflow=2.23 cfs 0.796 af Outflow=1.34 cfs 0.794 af

Somerset_Proposed_Rev7

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Type II 24-hr 1 Year Rainfall=1.74"

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Pond 3P: P-38	Peak Elev=292.35' Storage=0.058 af	Inflow=2.48 cfs 0.165 af	Outflow=0.64 cfs 0.165 af
Pond 4P: P-41	Peak Elev=291.72' Storage=2.123 af	Inflow=21.08 cfs 5.088 af	Outflow=6.85 cfs 5.088 af
Link 1L: DP-49		Inflow=0.95 cfs 0.138 af	Primary=0.95 cfs 0.138 af
Link 2L: DP-48		Inflow=1.36 cfs 0.253 af	Primary=1.36 cfs 0.253 af
Link 3L: DP-50		Inflow=1.86 cfs 0.420 af	Primary=1.86 cfs 0.420 af
Link 4L: DP-46		Inflow=15.30 cfs 3.179 af	Primary=15.30 cfs 3.179 af
Link 5L: DP-47		Inflow=1.66 cfs 0.264 af	Primary=1.66 cfs 0.264 af
Link 6L: DP-45		Inflow=0.57 cfs 0.097 af	Primary=0.57 cfs 0.097 af
Link 7L: DP-43		Inflow=0.62 cfs 0.131 af	Primary=0.62 cfs 0.131 af
Link 8L: DP-44		Inflow=4.99 cfs 1.550 af	Primary=4.99 cfs 1.550 af
Link 9L: DP-51		Inflow=2.63 cfs 0.523 af	Primary=2.63 cfs 0.523 af
Link 10L: DP-52		Inflow=4.01 cfs 0.874 af	Primary=4.01 cfs 0.874 af
Link 11L: DP-34		Inflow=0.45 cfs 1.142 af	Primary=0.45 cfs 1.142 af
Link 12L: DP-3		Inflow=0.27 cfs 0.043 af	Primary=0.27 cfs 0.043 af
Link 13L: DP-1		Inflow=0.04 cfs 0.026 af	Primary=0.04 cfs 0.026 af
Link 14L: DP-5		Inflow=3.08 cfs 1.343 af	Primary=3.08 cfs 1.343 af
Link 15L: DP-7		Inflow=4.79 cfs 1.548 af	Primary=4.79 cfs 1.548 af

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Type II 24-hr 1 Year Rainfall=1.74"

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Link 16L: DP-53	Inflow=3.24 cfs 1.108 af Primary=3.24 cfs 1.108 af
Link 17L: DP-54	Inflow=0.70 cfs 0.107 af Primary=0.70 cfs 0.107 af
Link 18L: DP-8	Primary=0.00 cfs 0.000 af
Link 19L: DP-9	Inflow=3.11 cfs 0.540 af Primary=3.11 cfs 0.540 af
Link 20L: DP-10	Inflow=0.50 cfs 0.069 af Primary=0.50 cfs 0.069 af
Link 21L: DP-11	Inflow=1.07 cfs 0.130 af Primary=1.07 cfs 0.130 af
Link 22L: DP-13	Inflow=3.00 cfs 0.558 af Primary=3.00 cfs 0.558 af
Link 23L: DP-12	Inflow=3.91 cfs 1.091 af Primary=3.91 cfs 1.091 af
Link 24L: DP-14	Inflow=4.54 cfs 1.764 af Primary=4.54 cfs 1.764 af
Link 25L: DP-15	Inflow=1.83 cfs 0.400 af Primary=1.83 cfs 0.400 af
Link 26L: DP-17	Inflow=0.15 cfs 0.141 af Primary=0.15 cfs 0.141 af
Link 27L: DP-18	Inflow=4.28 cfs 1.010 af Primary=4.28 cfs 1.010 af
Link 28L: DP-19	Inflow=1.54 cfs 0.249 af Primary=1.54 cfs 0.249 af
Link 29L: DP-20	Inflow=2.70 cfs 1.007 af Primary=2.70 cfs 1.007 af
Link 30L: DP-22	Inflow=2.75 cfs 0.590 af Primary=2.75 cfs 0.590 af
Link 31L: DP-23	Inflow=0.45 cfs 0.106 af Primary=0.45 cfs 0.106 af
Link 32L: DP-24	Inflow=0.97 cfs 0.294 af Primary=0.97 cfs 0.294 af

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Type II 24-hr 1 Year Rainfall=1.74"

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Link 33L: DP-25	Inflow=8.40 cfs 1.726 af Primary=8.40 cfs 1.726 af
Link 34L: DP-33	Inflow=1.98 cfs 1.300 af Primary=1.98 cfs 1.300 af
Link 35L: DP-26	Inflow=3.85 cfs 7.149 af Primary=3.85 cfs 7.149 af
Link 36L: DP-27	Inflow=1.34 cfs 1.297 af Primary=1.34 cfs 1.297 af
Link 37L: DP-28	Inflow=2.80 cfs 0.353 af Primary=2.80 cfs 0.353 af
Link 38L: DP-29	Inflow=7.34 cfs 1.832 af Primary=7.34 cfs 1.832 af
Link 39L: DP-30	Inflow=2.63 cfs 1.680 af Primary=2.63 cfs 1.680 af
Link 40L: DP-31	Inflow=3.75 cfs 0.415 af Primary=3.75 cfs 0.415 af
Link 41L: DP-32	Inflow=0.46 cfs 0.169 af Primary=0.46 cfs 0.169 af
Link 42L: DP-35	Inflow=1.65 cfs 0.963 af Primary=1.65 cfs 0.963 af
Link 43L: DP-37	Inflow=1.34 cfs 0.794 af Primary=1.34 cfs 0.794 af
Link 44L: DP-38	Inflow=0.64 cfs 0.165 af Primary=0.64 cfs 0.165 af
Link 45L: DP-39	Inflow=0.39 cfs 0.297 af Primary=0.39 cfs 0.297 af
Link 46L: DP-40	Inflow=0.26 cfs 0.194 af Primary=0.26 cfs 0.194 af
Link 47L: DP-41	Inflow=6.85 cfs 5.088 af Primary=6.85 cfs 5.088 af
Link 48L: DP-42	Inflow=6.20 cfs 2.434 af Primary=6.20 cfs 2.434 af

Total Runoff Area = 1,201.044 ac Runoff Volume = 46.642 af Average Runoff Depth = 0.47"
100.00% Pervious = 1,201.044 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: DA-49

Runoff = 0.95 cfs @ 12.38 hrs, Volume= 0.138 af, Depth= 0.32"
 Routed to Link 1L : DP-49

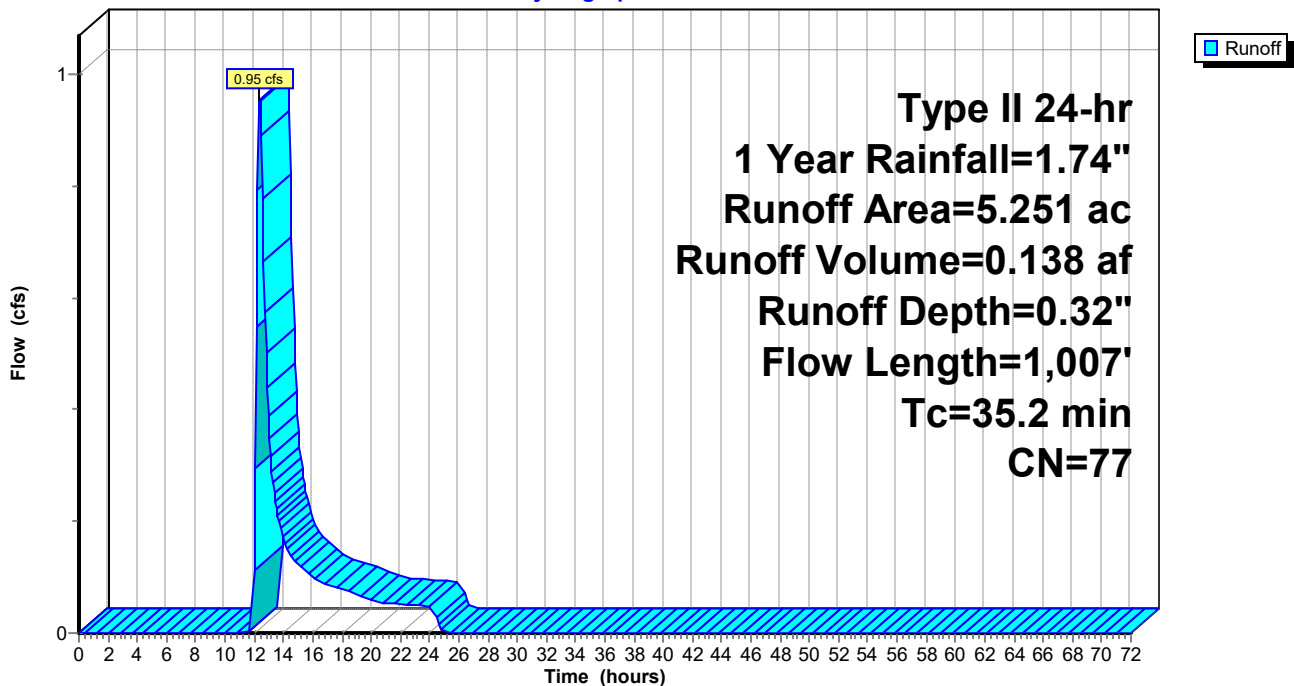
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 5.251	77	
5.251		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.9	100	0.0292	0.07		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
12.3	907	0.0309	1.23		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
35.2	1,007	Total			

Subcatchment 1S: DA-49

Hydrograph



Summary for Subcatchment 2S: DA-48

Runoff = 1.36 cfs @ 12.69 hrs, Volume= 0.253 af, Depth= 0.41"
 Routed to Link 2L : DP-48

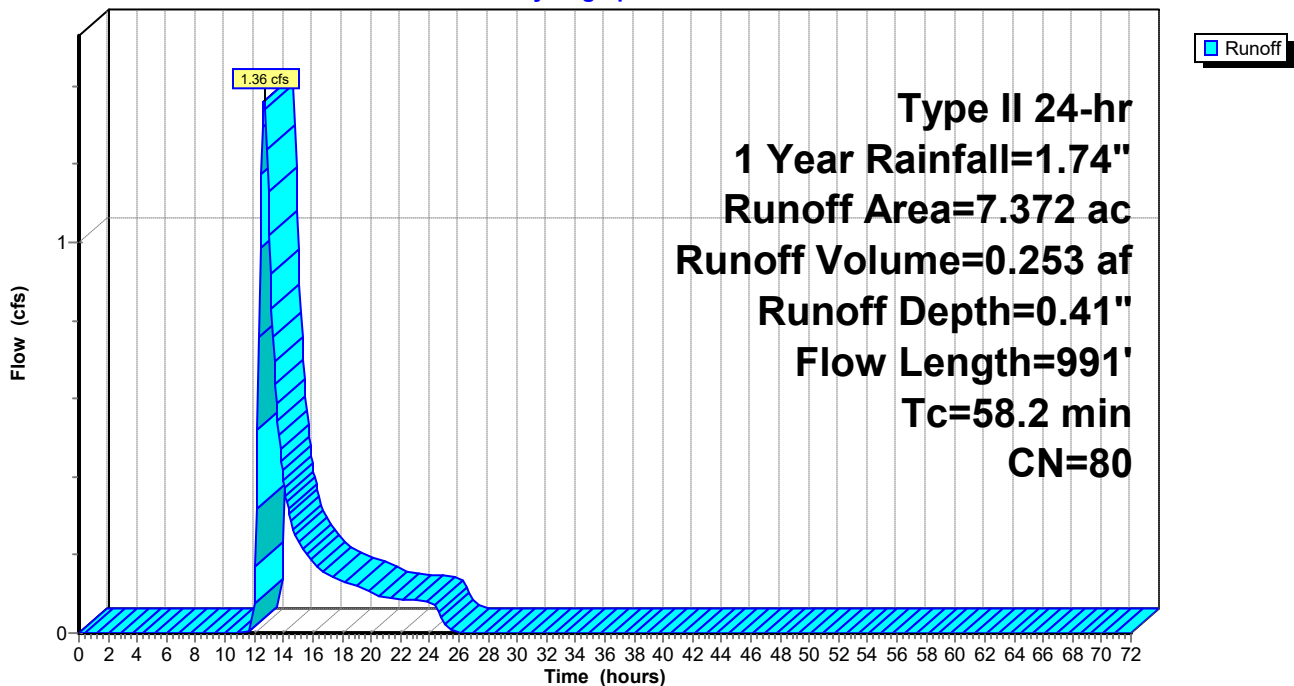
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 7.372	80	
7.372		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
44.5	100	0.0056	0.04		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
13.7	891	0.0241	1.09		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
58.2	991	Total			

Subcatchment 2S: DA-48

Hydrograph



Summary for Subcatchment 3S: DA-50

Runoff = 1.86 cfs @ 12.68 hrs, Volume= 0.420 af, Depth= 0.24"
 Routed to Link 3L : DP-50

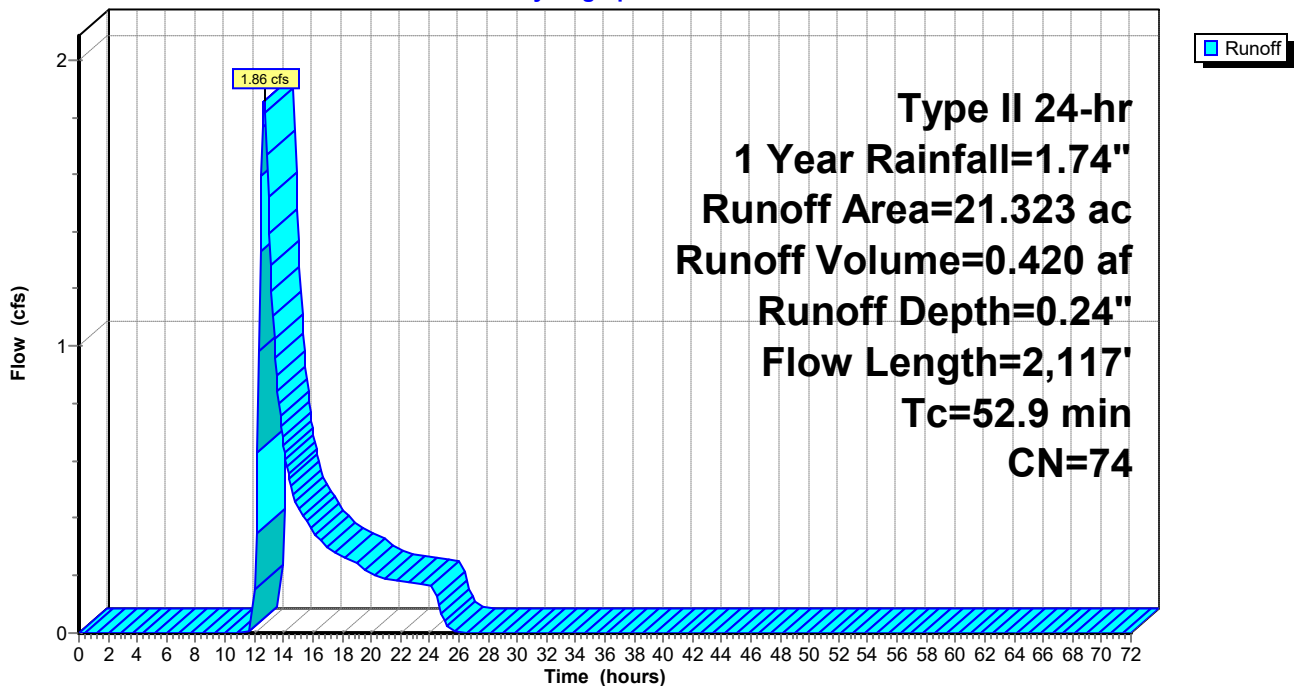
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 21.323	74	
21.323		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.3	100	0.0280	0.07		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
29.6	2,017	0.0263	1.13		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
52.9	2,117	Total			

Subcatchment 3S: DA-50

Hydrograph



Summary for Subcatchment 4S: DA-46

Runoff = 15.30 cfs @ 12.88 hrs, Volume= 3.179 af, Depth= 0.48"
 Routed to Link 4L : DP-46

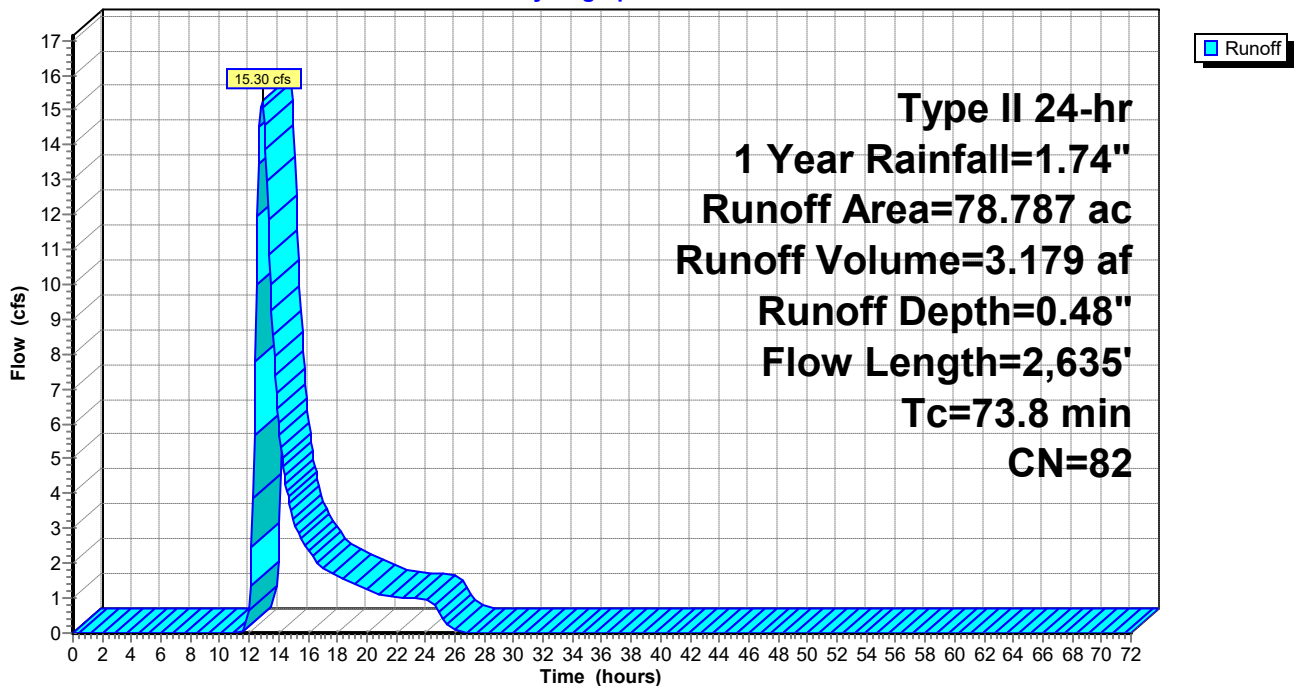
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 78.787	82	
78.787		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.2	100	0.0125	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
41.6	2,535	0.0210	1.02		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
73.8	2,635	Total			

Subcatchment 4S: DA-46

Hydrograph



Summary for Subcatchment 5S: DA-47

Runoff = 1.66 cfs @ 12.60 hrs, Volume= 0.264 af, Depth= 0.57"
 Routed to Link 5L : DP-47

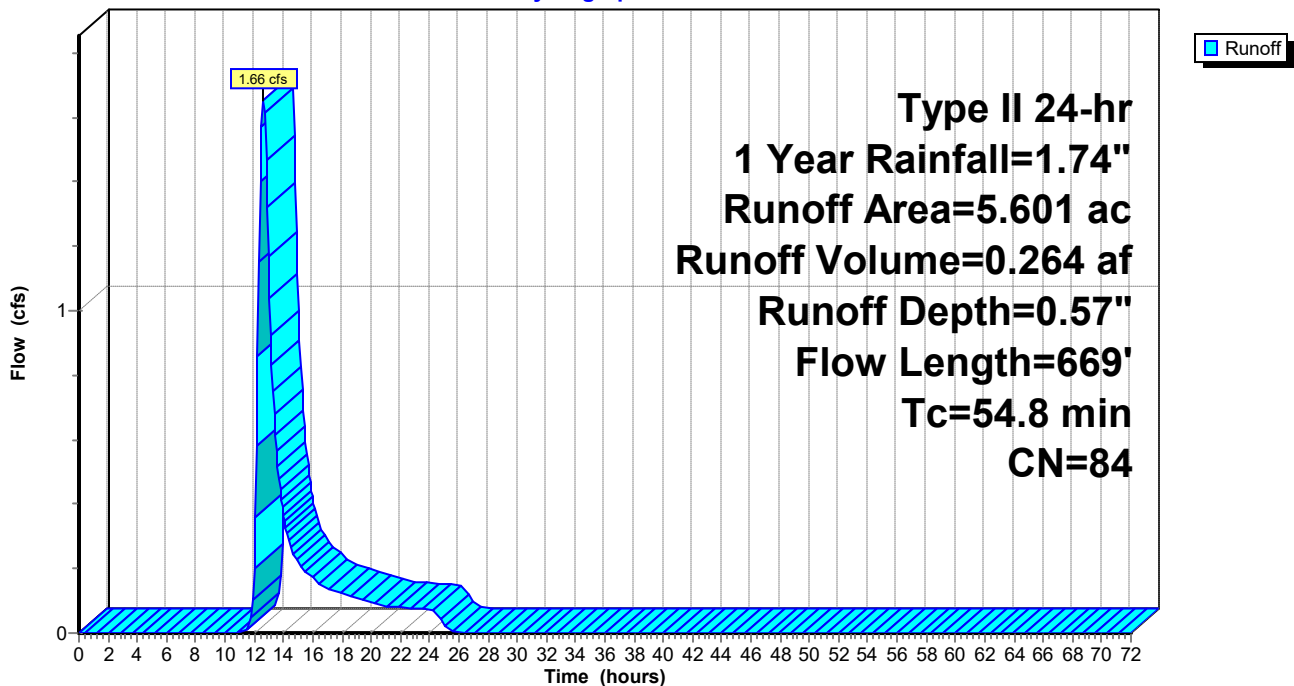
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 5.601	84	
5.601		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
36.4	100	0.0092	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
18.4	569	0.0054	0.52		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
54.8	669	Total			

Subcatchment 5S: DA-47

Hydrograph



Summary for Subcatchment 6S: DA-45

Runoff = 0.57 cfs @ 12.62 hrs, Volume= 0.097 af, Depth= 0.45"
 Routed to Link 6L : DP-45

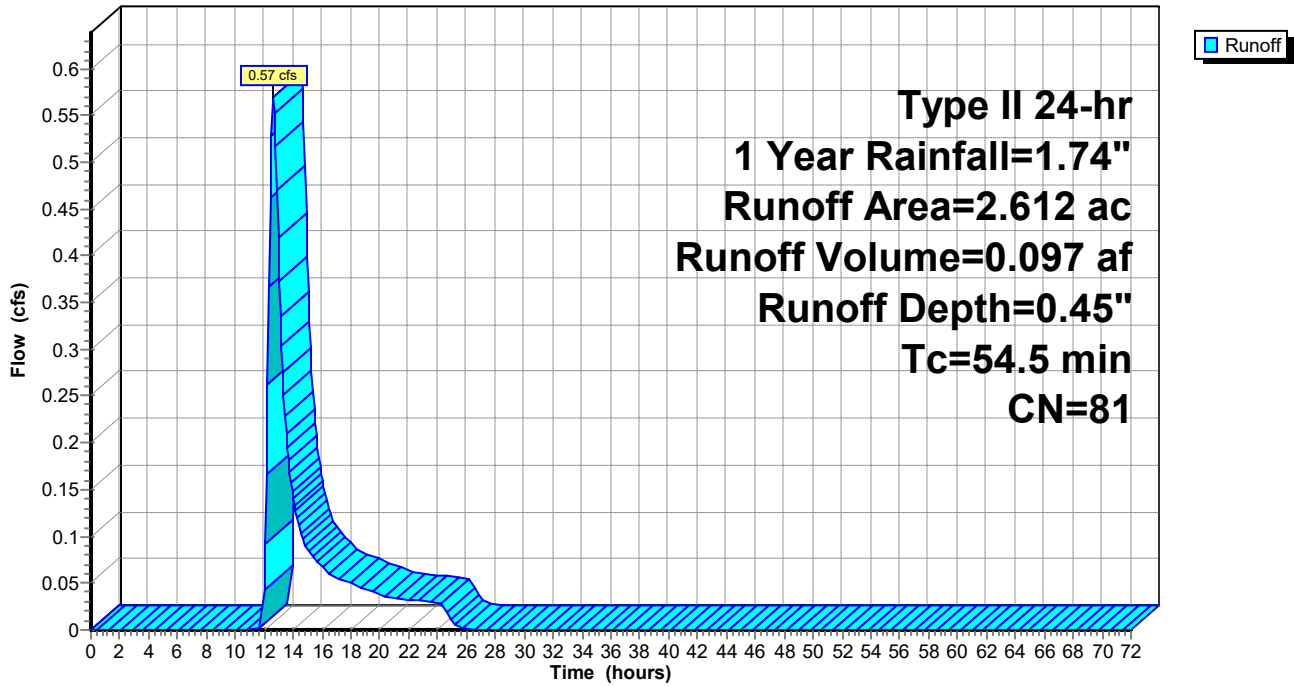
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 2.612	81	
2.612		100.00% Pervious Area

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

Subcatchment 6S: DA-45

Hydrograph



Summary for Subcatchment 7S: DA-43

Runoff = 0.62 cfs @ 12.70 hrs, Volume= 0.131 af, Depth= 0.29"
 Routed to Link 7L : DP-43

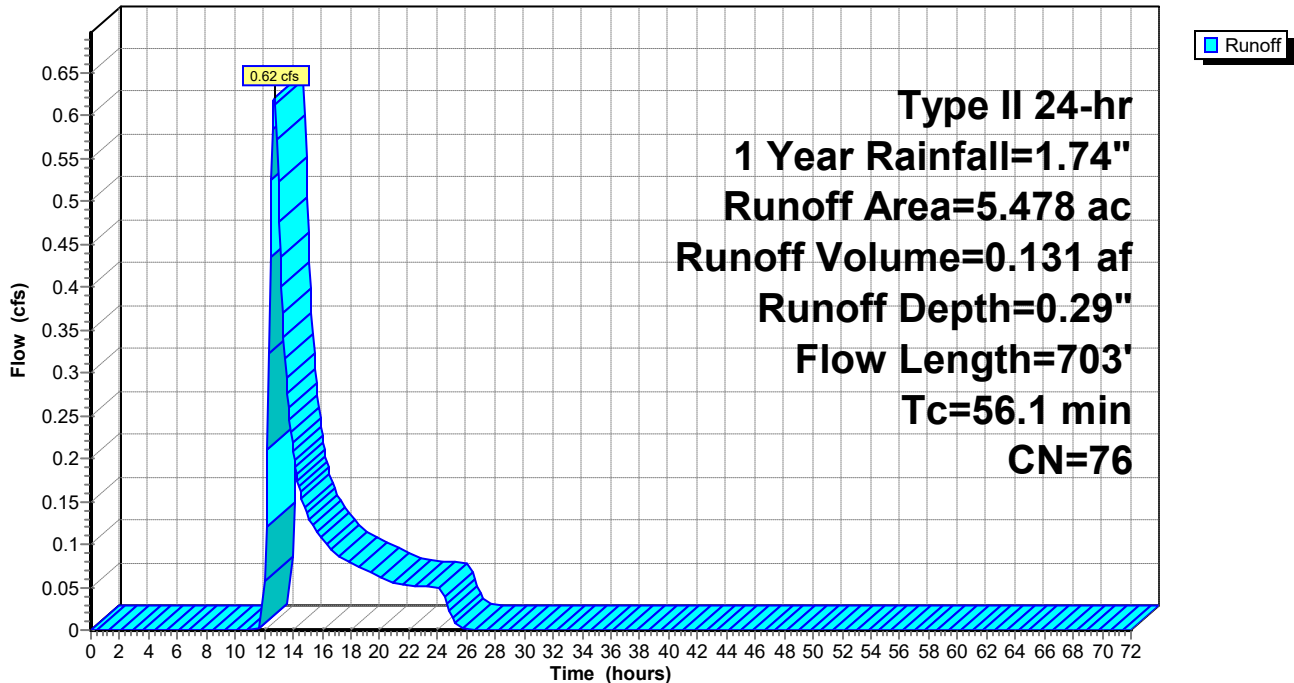
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 5.478	76	
5.478		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.8	100	0.0069	0.04		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
15.3	603	0.0088	0.66		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
56.1	703	Total			

Subcatchment 7S: DA-43

Hydrograph



Summary for Subcatchment 8S: DA-44

Runoff = 4.99 cfs @ 13.63 hrs, Volume= 1.550 af, Depth= 0.52"
 Routed to Link 8L : DP-44

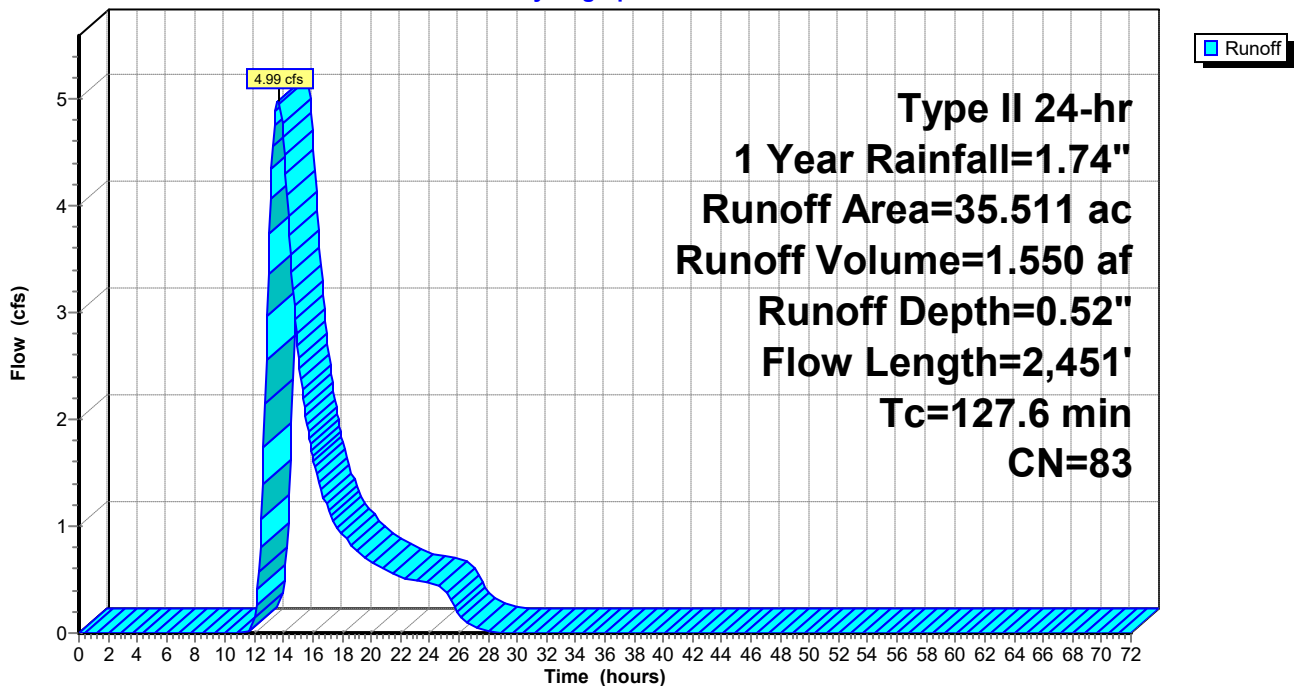
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 35.511	83	
35.511		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
34.8	100	0.0103	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
92.8	2,351	0.0036	0.42		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
127.6	2,451	Total			

Subcatchment 8S: DA-44

Hydrograph



Summary for Subcatchment 9S: DA-51

Runoff = 2.63 cfs @ 12.85 hrs, Volume= 0.523 af, Depth= 0.52"
 Routed to Link 9L : DP-51

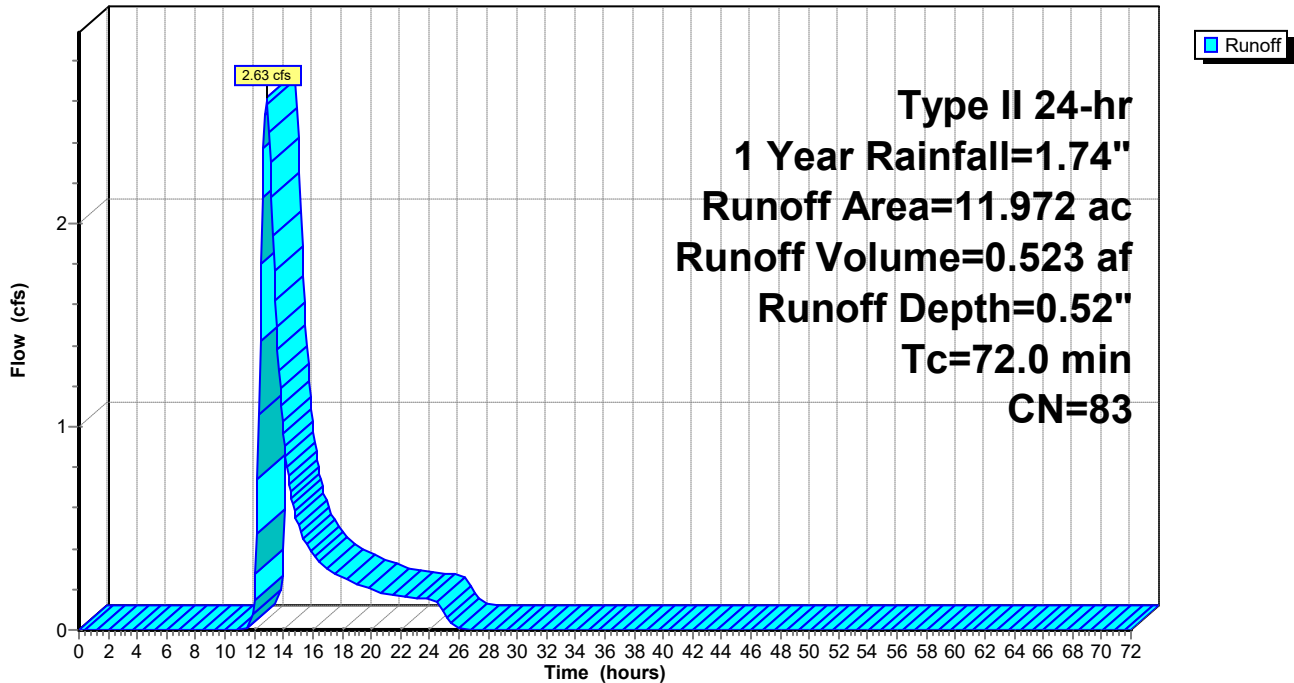
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 11.972	83	
11.972		100.00% Pervious Area

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

Subcatchment 9S: DA-51

Hydrograph



Summary for Subcatchment 10S: DA-52

Runoff = 4.01 cfs @ 13.00 hrs, Volume= 0.874 af, Depth= 0.61"
 Routed to Link 10L : DP-52

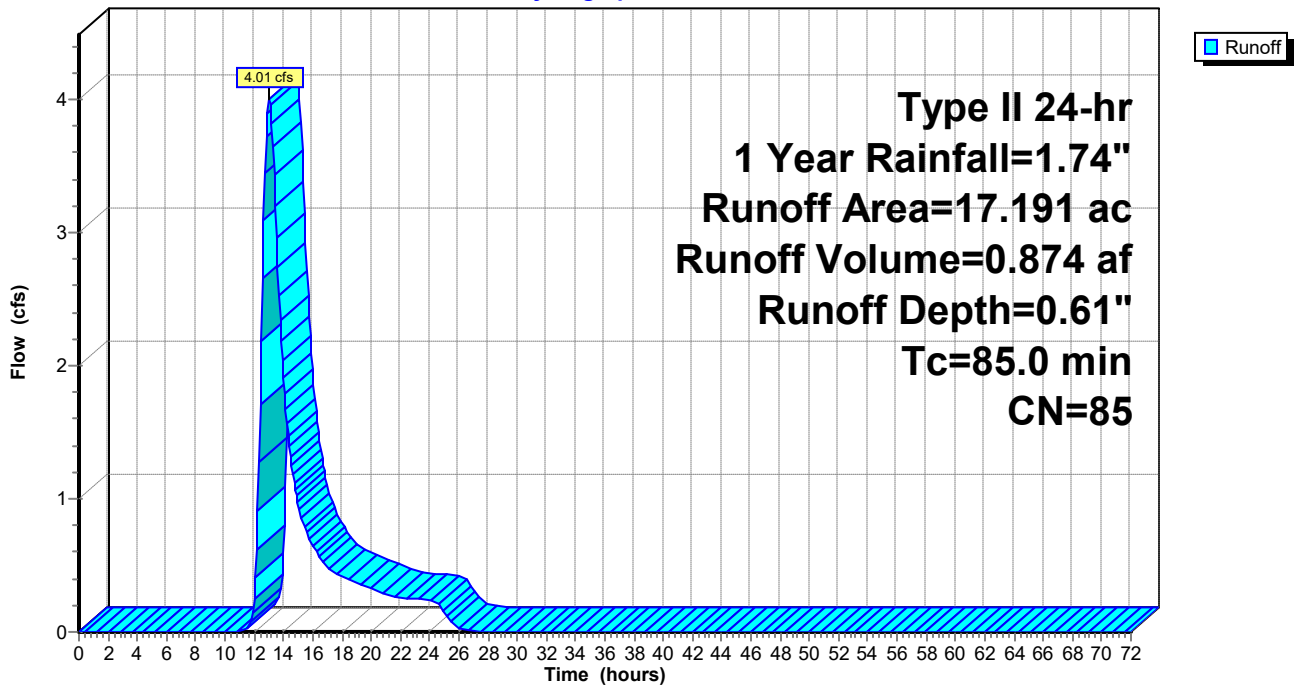
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 17.191	85	
17.191		100.00% Pervious Area

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

Subcatchment 10S: DA-52

Hydrograph



Summary for Subcatchment 11S: DA-33

Runoff = 1.98 cfs @ 16.56 hrs, Volume= 1.300 af, Depth= 0.52"
 Routed to Link 34L : DP-33

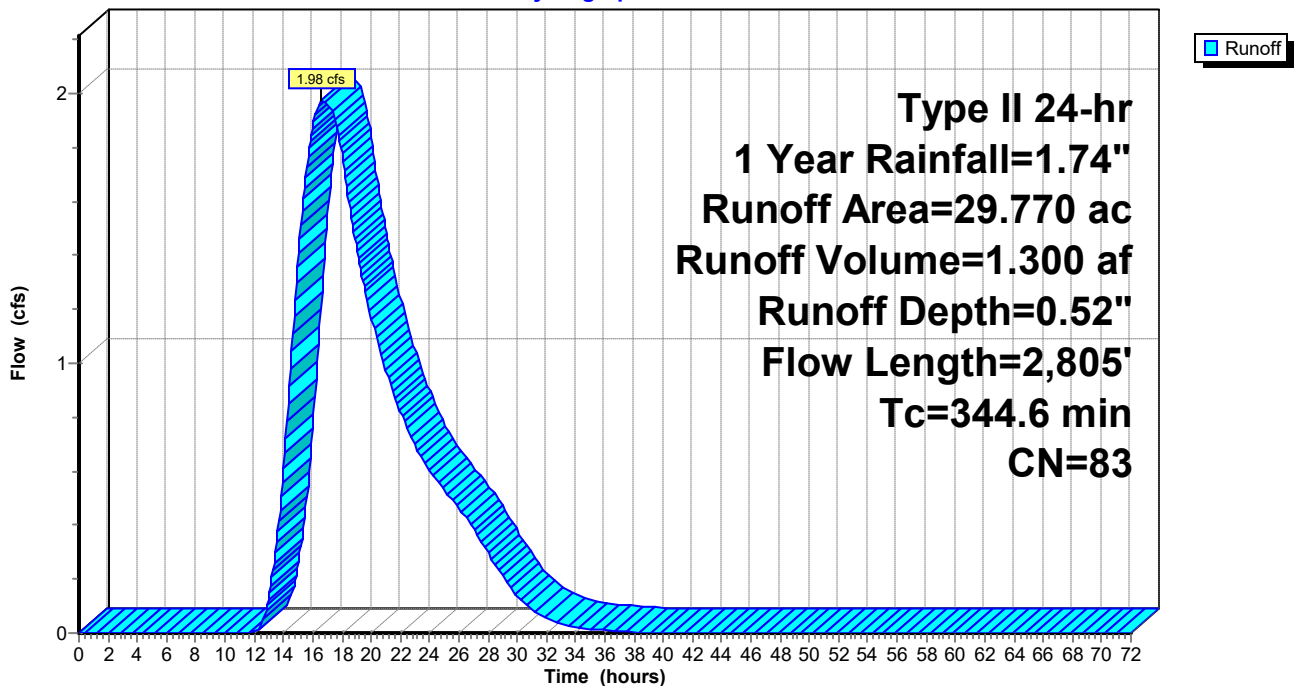
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 29.770	83	
29.770		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
278.9	100	0.0001	0.01		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
65.7	2,705	0.0096	0.69		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
344.6	2,805	Total			

Subcatchment 11S: DA-33

Hydrograph



Summary for Subcatchment 12S: DA-34

Runoff = 0.45 cfs @ 41.81 hrs, Volume= 1.142 af, Depth> 0.34"
 Routed to Link 11L : DP-34

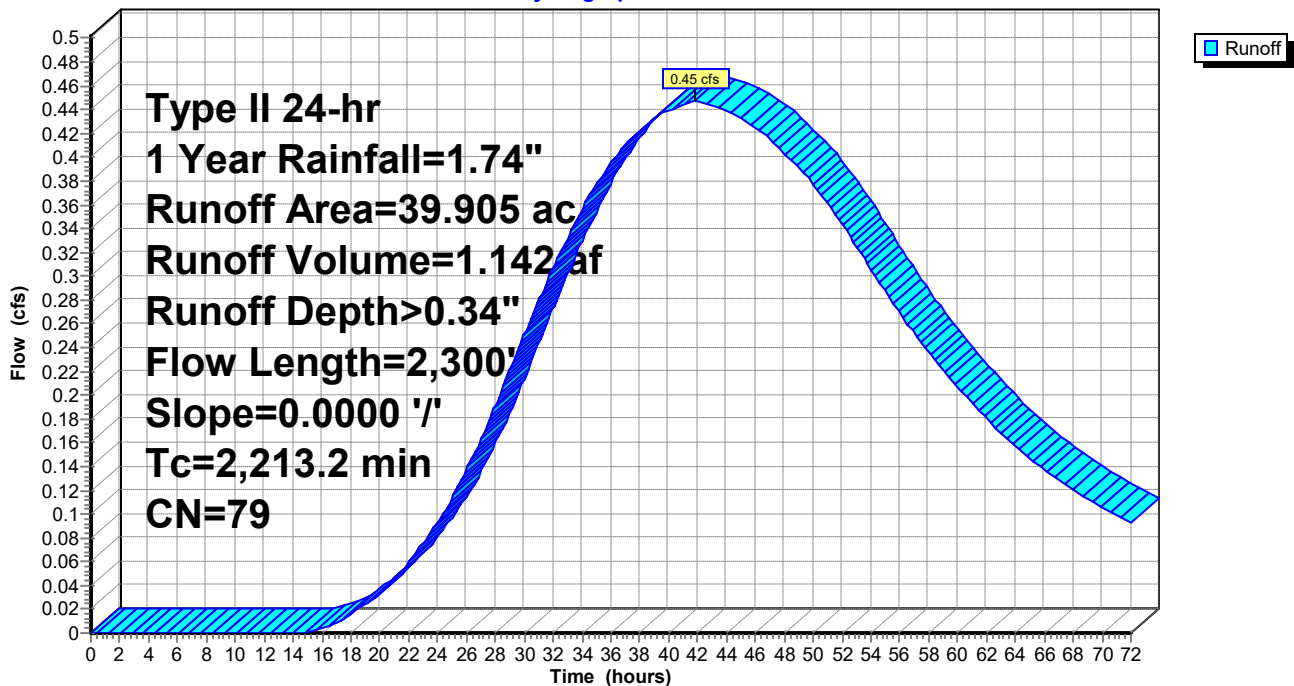
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 39.905	79	
39.905		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
557.0	100	0.0000	0.00		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
1,656.2	2,200	0.0000	0.02		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
2,213.2	2,300	Total			

Subcatchment 12S: DA-34

Hydrograph



Summary for Subcatchment 13S: DA-3

Runoff = 0.27 cfs @ 12.43 hrs, Volume= 0.043 af, Depth= 0.29"
 Routed to Link 12L : DP-3

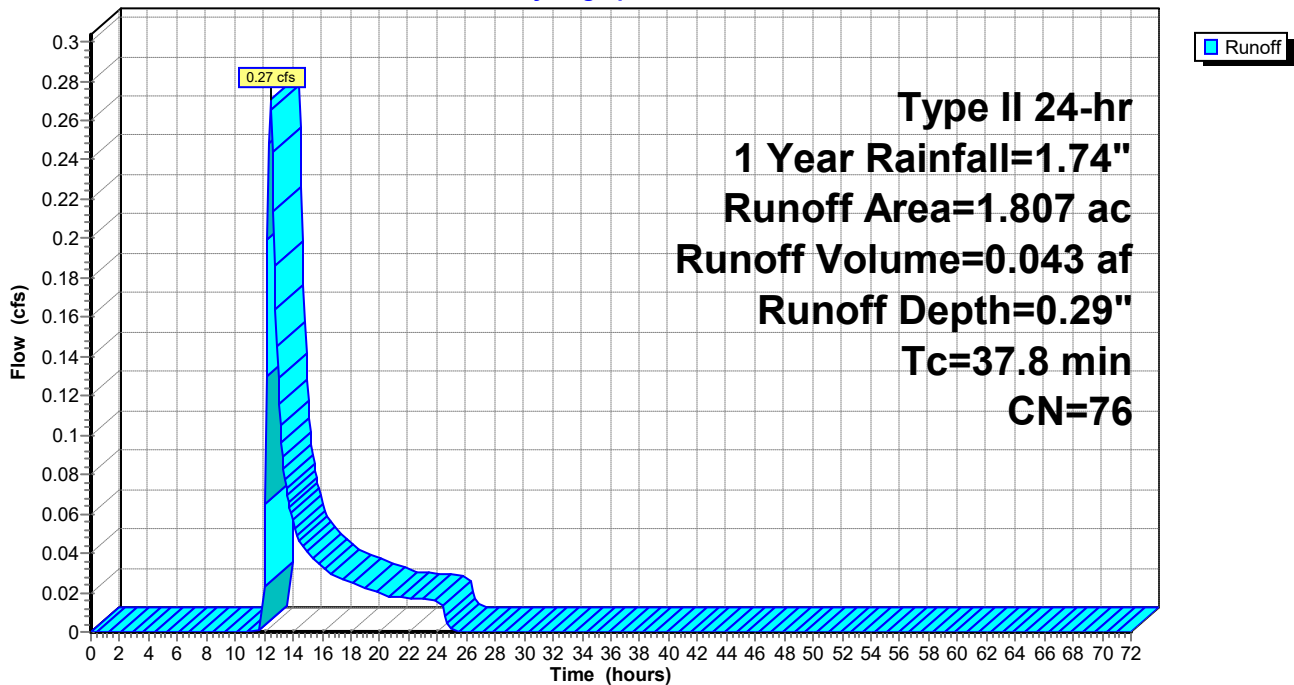
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 1.807	76	
1.807		100.00% Pervious Area

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

Subcatchment 13S: DA-3

Hydrograph



Summary for Subcatchment 14S: DA-1

Runoff = 0.04 cfs @ 13.07 hrs, Volume= 0.026 af, Depth= 0.06"
 Routed to Link 13L : DP-1

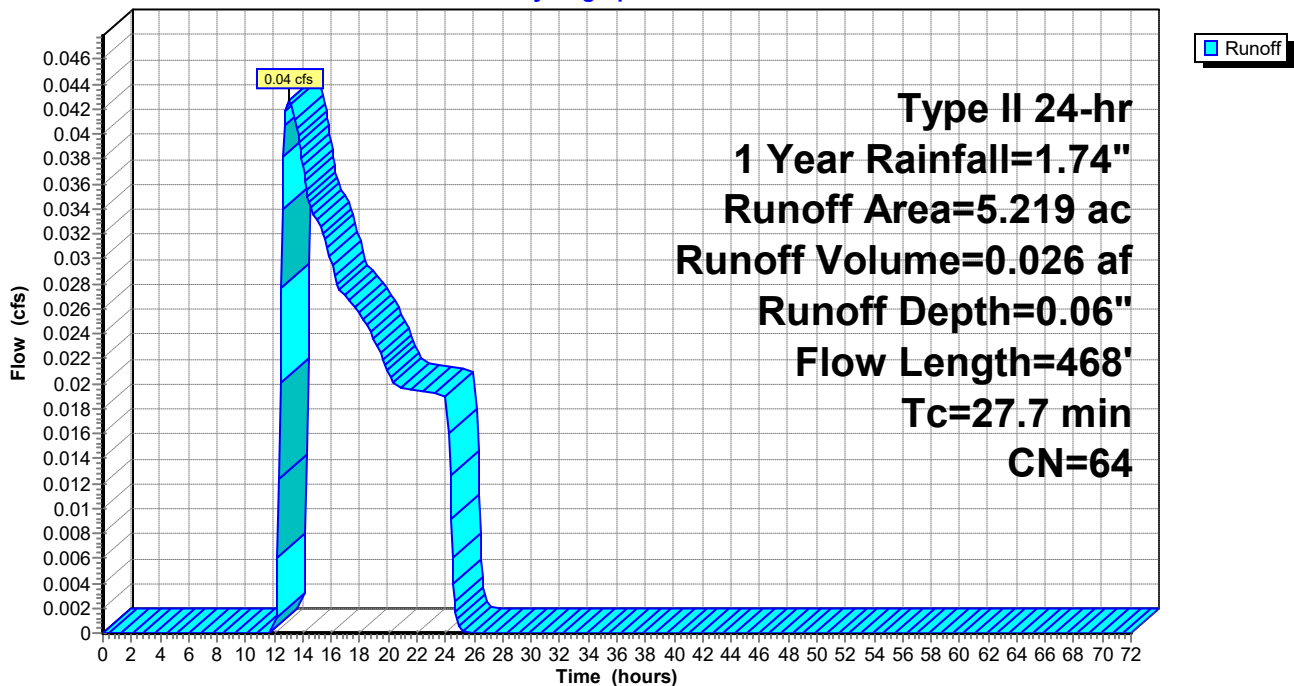
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 5.219	64	
5.219		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.7	100	0.0424	0.08		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
8.0	368	0.0121	0.77		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
27.7	468	Total			

Subcatchment 14S: DA-1

Hydrograph



Summary for Subcatchment 15S: DA-5

Runoff = 3.08 cfs @ 14.20 hrs, Volume= 1.343 af, Depth= 0.26"
 Routed to Link 14L : DP-5

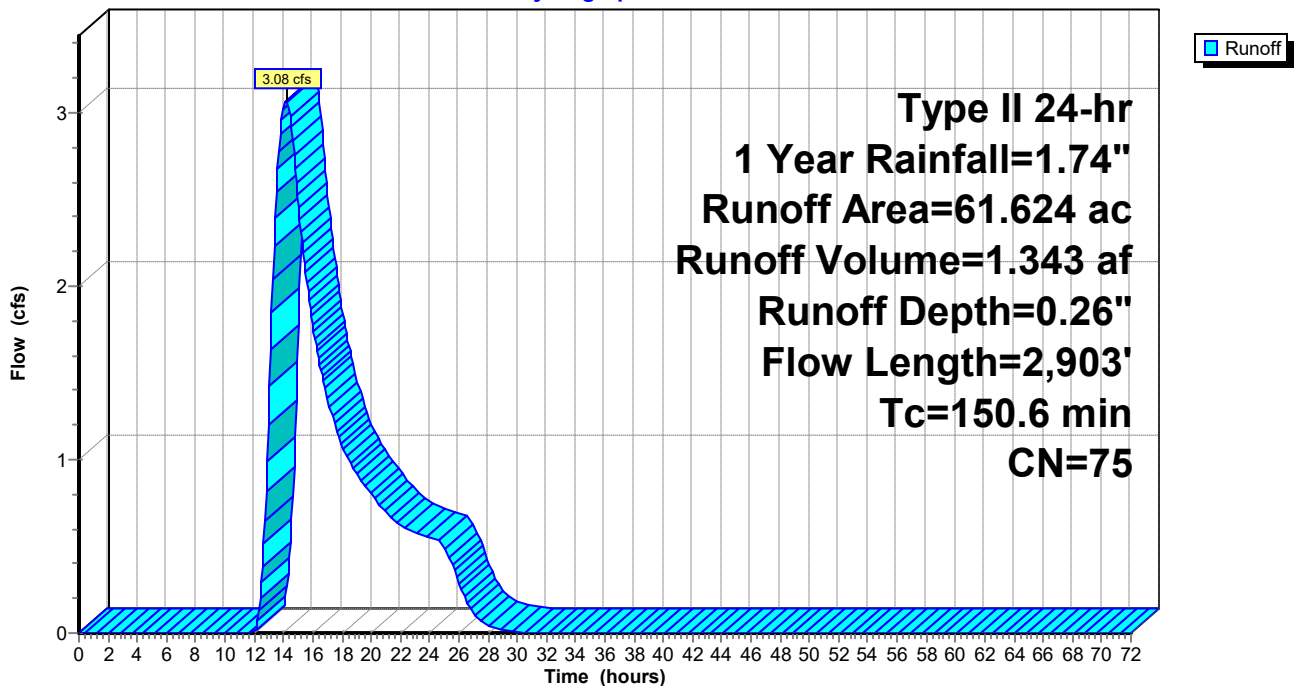
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 61.624	75	
61.624		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
55.1	100	0.0033	0.03		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
95.5	2,803	0.0049	0.49		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
150.6	2,903	Total			

Subcatchment 15S: DA-5

Hydrograph



Summary for Subcatchment 16S: DA-7

Runoff = 4.79 cfs @ 13.85 hrs, Volume= 1.548 af, Depth= 0.61"
 Routed to Link 15L : DP-7

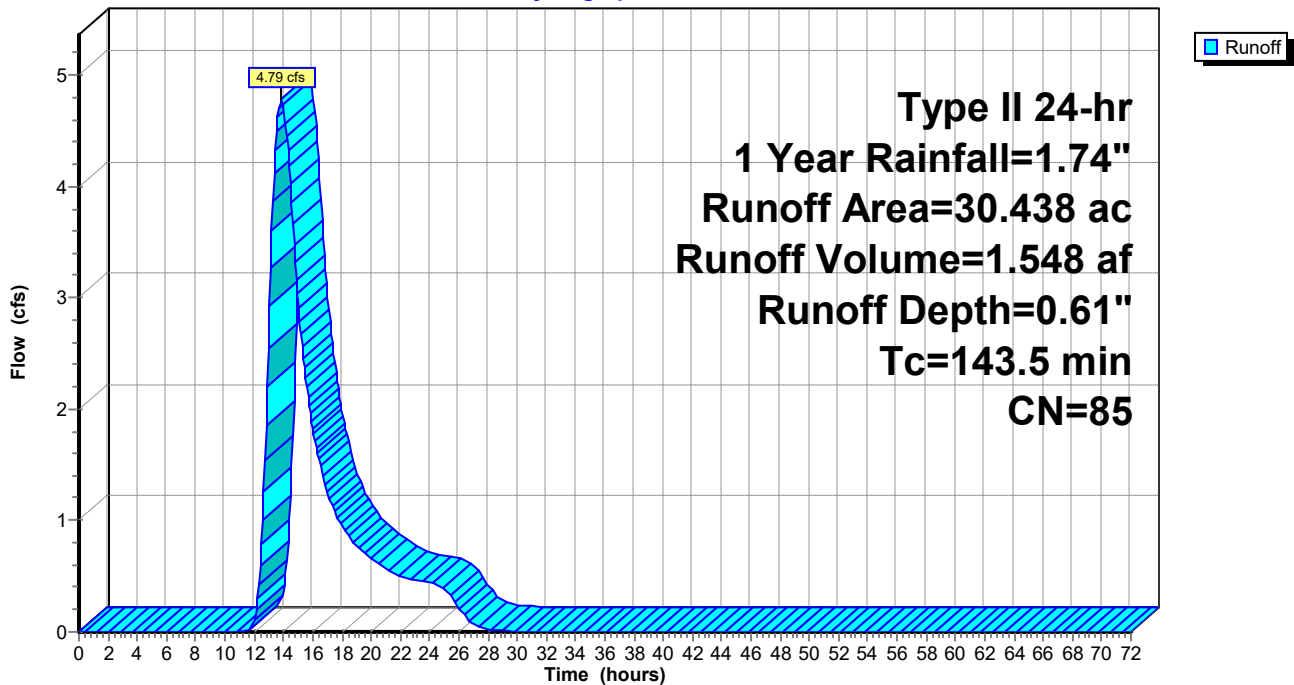
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 30.438	85	
30.438		100.00% Pervious Area

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

Subcatchment 16S: DA-7

Hydrograph



Summary for Subcatchment 17S: DA-53

Runoff = 3.24 cfs @ 13.81 hrs, Volume= 1.108 af, Depth= 0.41"
 Routed to Link 16L : DP-53

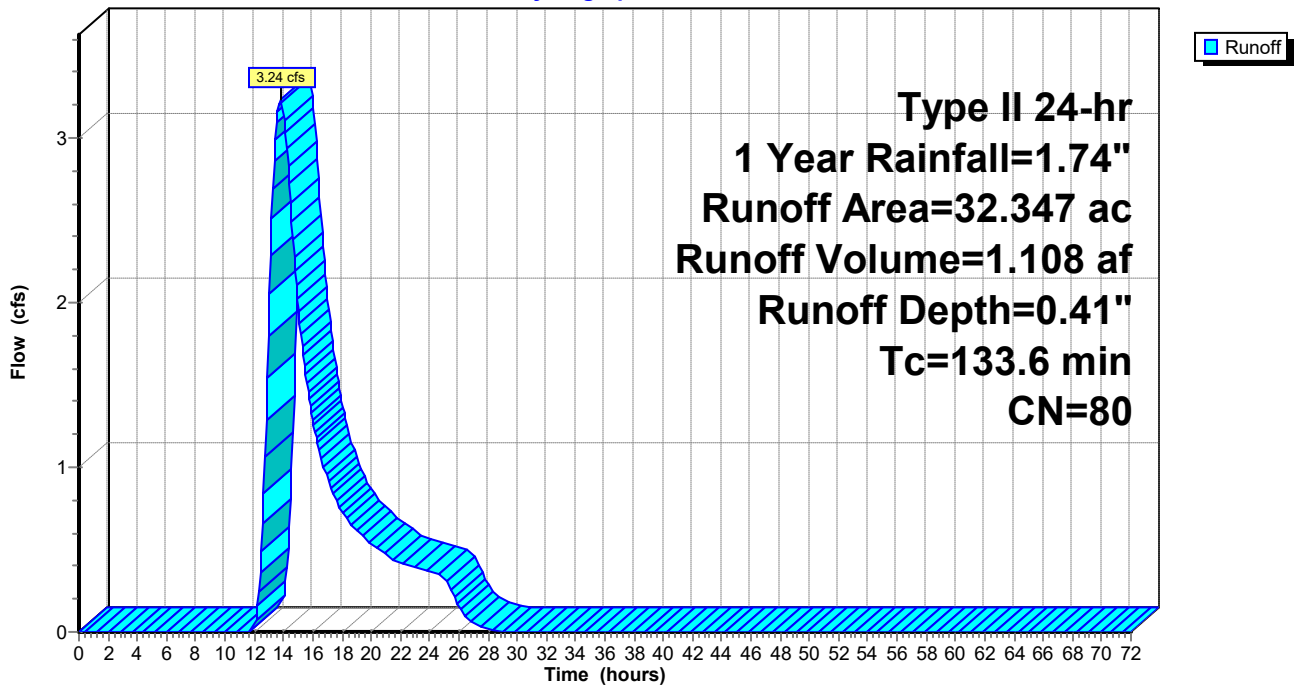
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 32.347	80	
32.347		100.00% Pervious Area

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

Subcatchment 17S: DA-53

Hydrograph



Summary for Subcatchment 18S: DA-54

Runoff = 0.70 cfs @ 12.51 hrs, Volume= 0.107 af, Depth= 0.45"
 Routed to Link 17L : DP-54

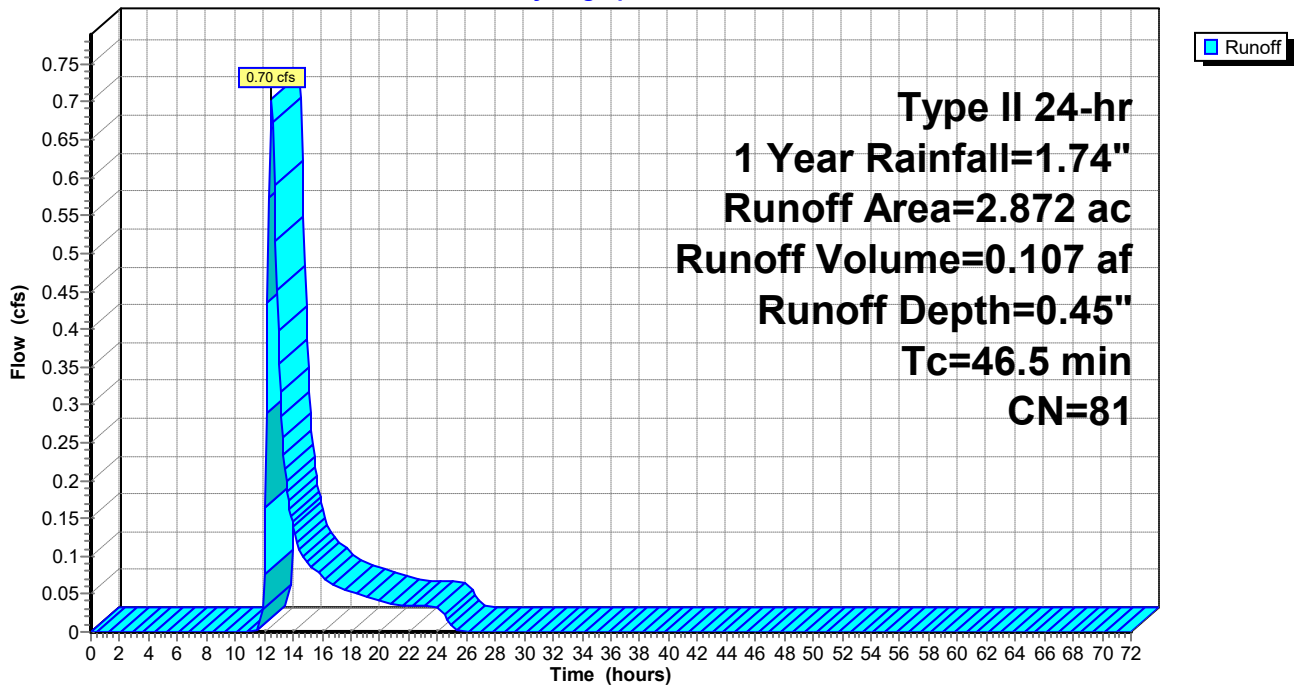
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 2.872	81	
2.872		100.00% Pervious Area

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

Subcatchment 18S: DA-54

Hydrograph



Summary for Subcatchment 19S: DA-8

Runoff = 0.31 cfs @ 12.47 hrs, Volume= 0.064 af, Depth= 0.19"

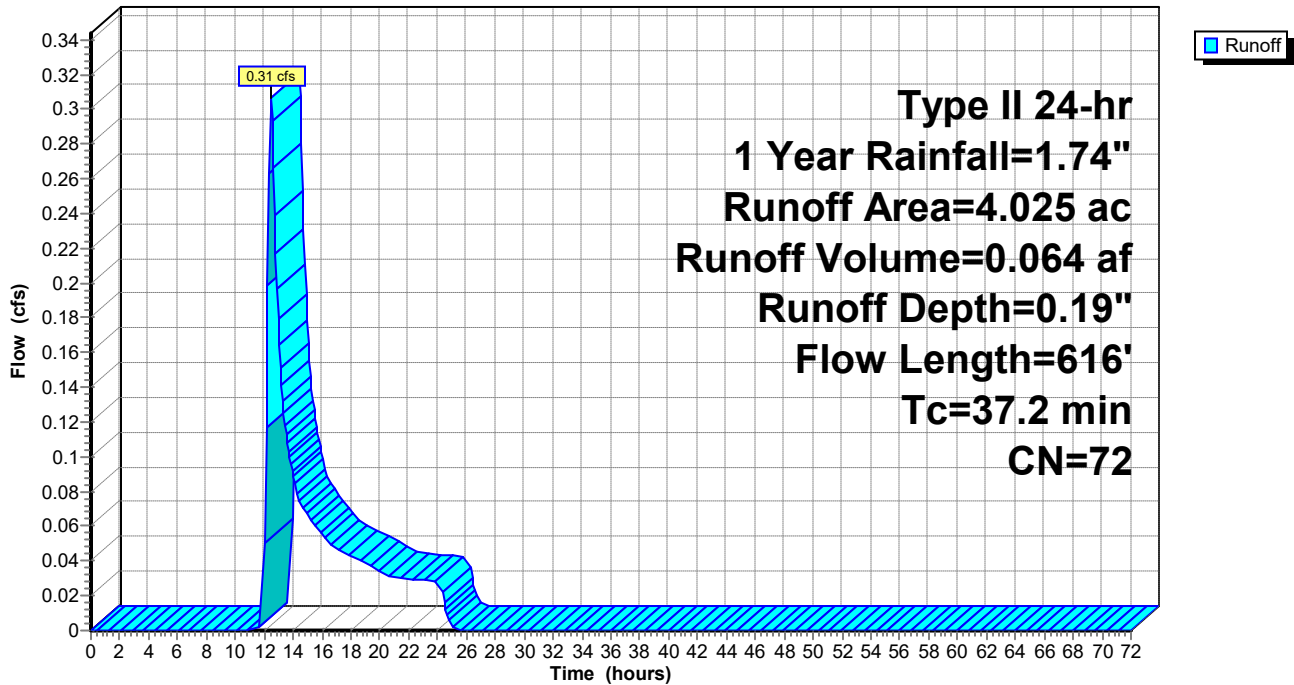
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 4.025	72	
4.025		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.7	100	0.0241	0.07		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
12.5	516	0.0097	0.69		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
37.2	616	Total			

Subcatchment 19S: DA-8

Hydrograph



Summary for Subcatchment 20S: DA-9

Runoff = 3.11 cfs @ 12.67 hrs, Volume= 0.540 af, Depth= 0.52"
 Routed to Link 19L : DP-9

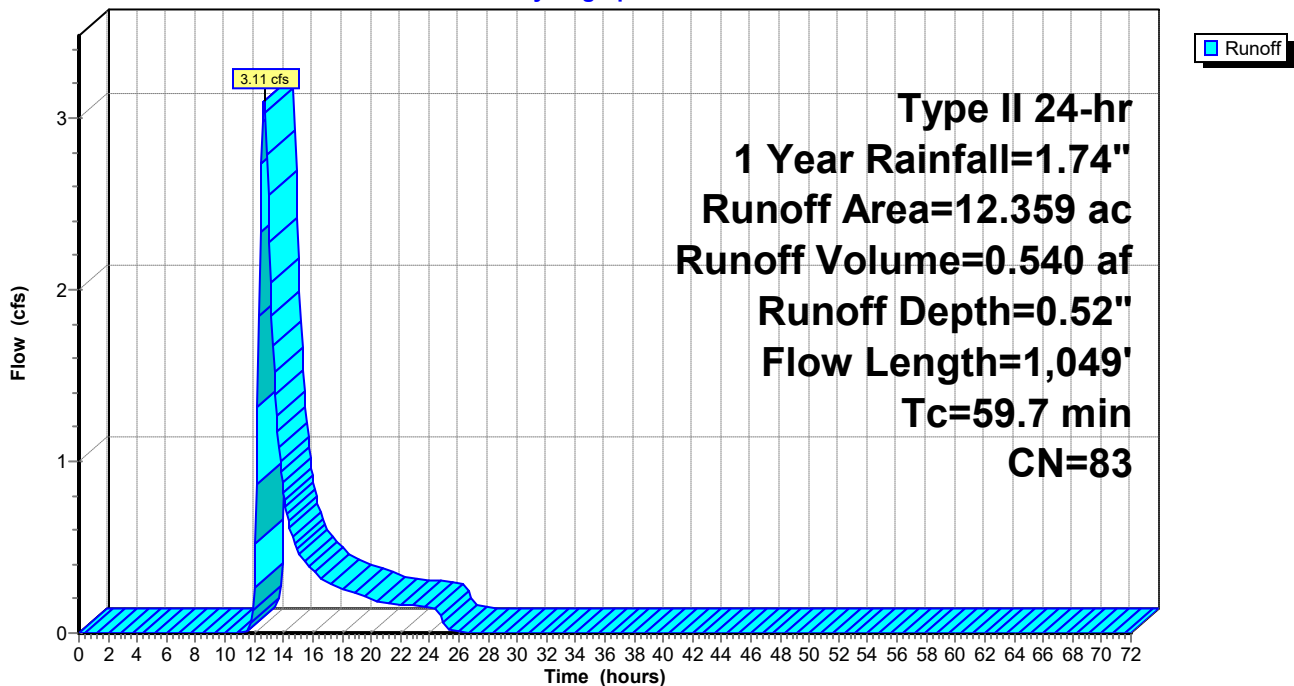
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 12.359	83	
12.359		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.4	100	0.0114	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
26.3	949	0.0074	0.60		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
59.7	1,049	Total			

Subcatchment 20S: DA-9

Hydrograph



Summary for Subcatchment 21S: DA-10

Runoff = 0.50 cfs @ 12.35 hrs, Volume= 0.069 af, Depth= 0.32"
 Routed to Link 20L : DP-10

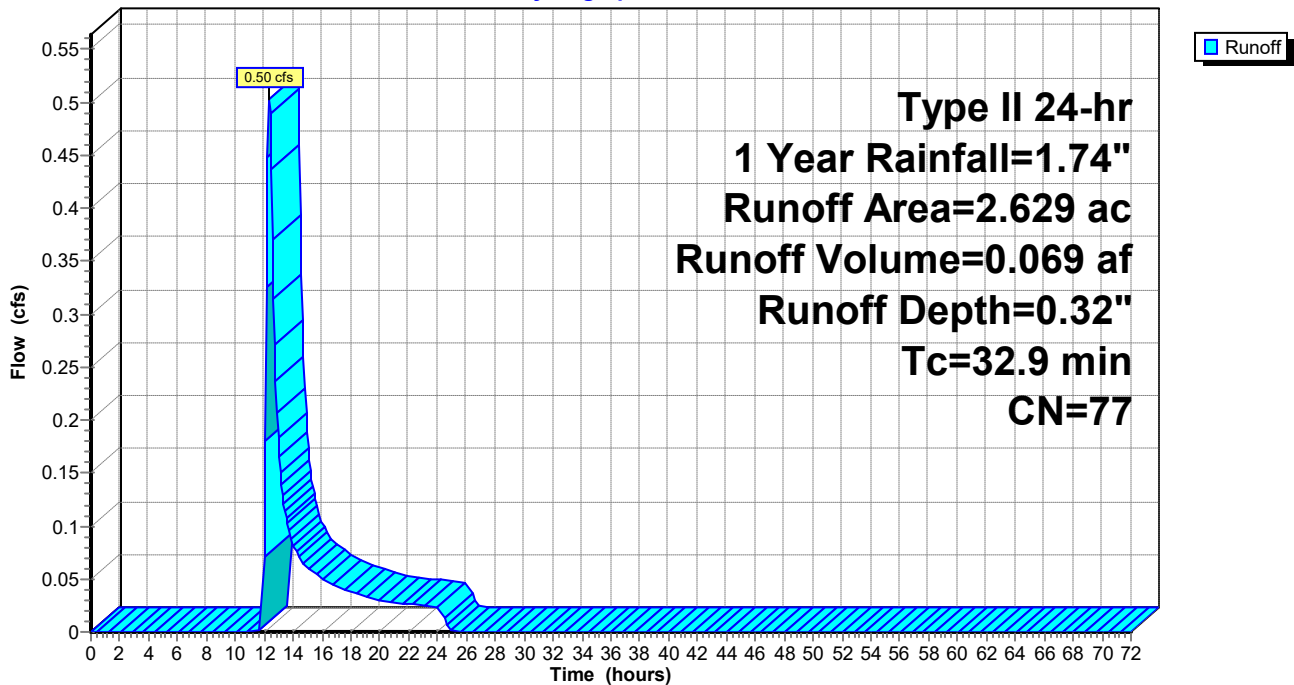
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 2.629	77	
2.629		100.00% Pervious Area

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

Subcatchment 21S: DA-10

Hydrograph



Summary for Subcatchment 22S: DA-11

Runoff = 1.07 cfs @ 12.36 hrs, Volume= 0.130 af, Depth= 0.57"
 Routed to Link 21L : DP-11

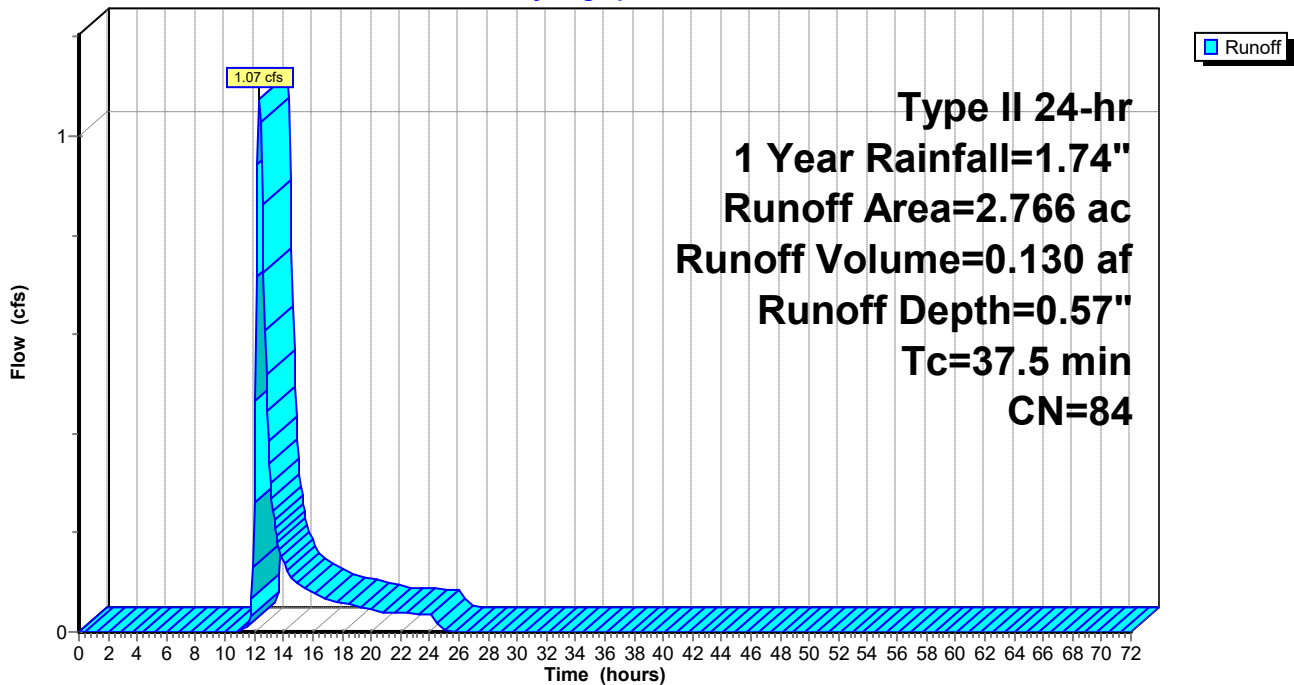
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 2.766	84	
2.766		100.00% Pervious Area

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

Subcatchment 22S: DA-11

Hydrograph



Summary for Subcatchment 23S: DA-12

Runoff = 3.91 cfs @ 13.31 hrs, Volume= 1.091 af, Depth= 0.41"
 Routed to Link 23L : DP-12

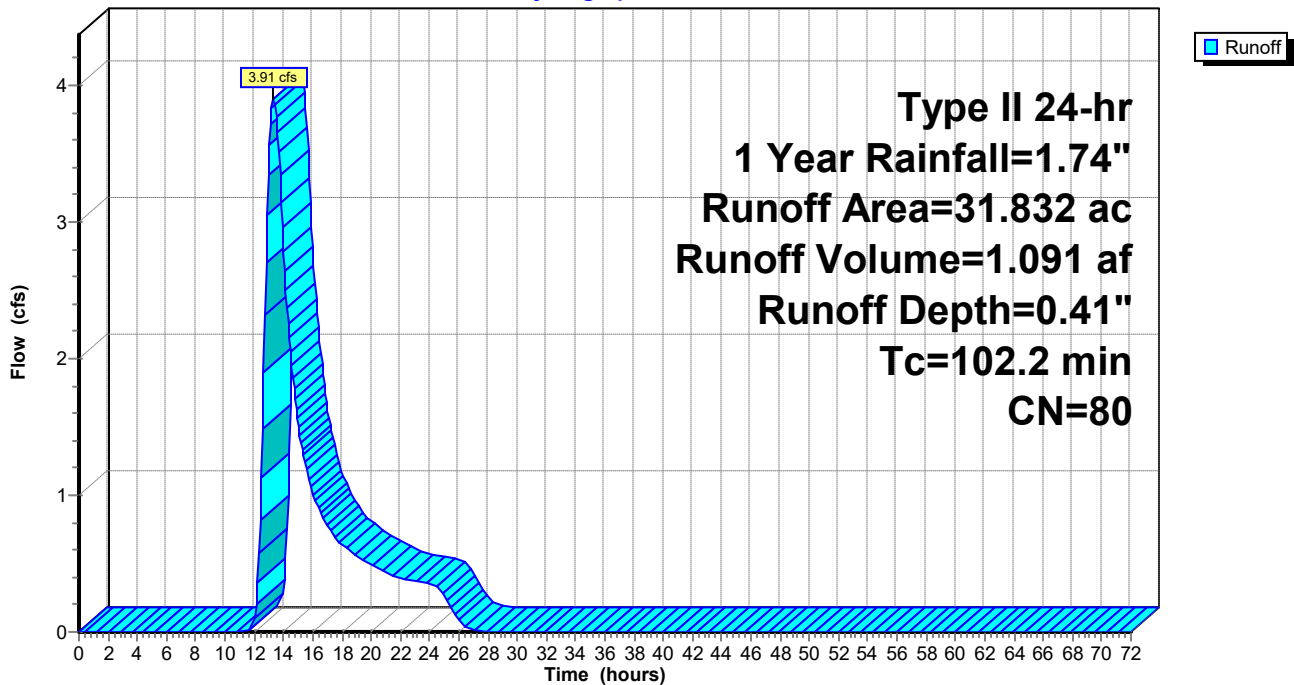
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 31.832	80	
31.832		100.00% Pervious Area

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

Subcatchment 23S: DA-12

Hydrograph



Summary for Subcatchment 24S: DA-13

Runoff = 3.00 cfs @ 12.77 hrs, Volume= 0.558 af, Depth= 0.52"
 Routed to Link 22L : DP-13

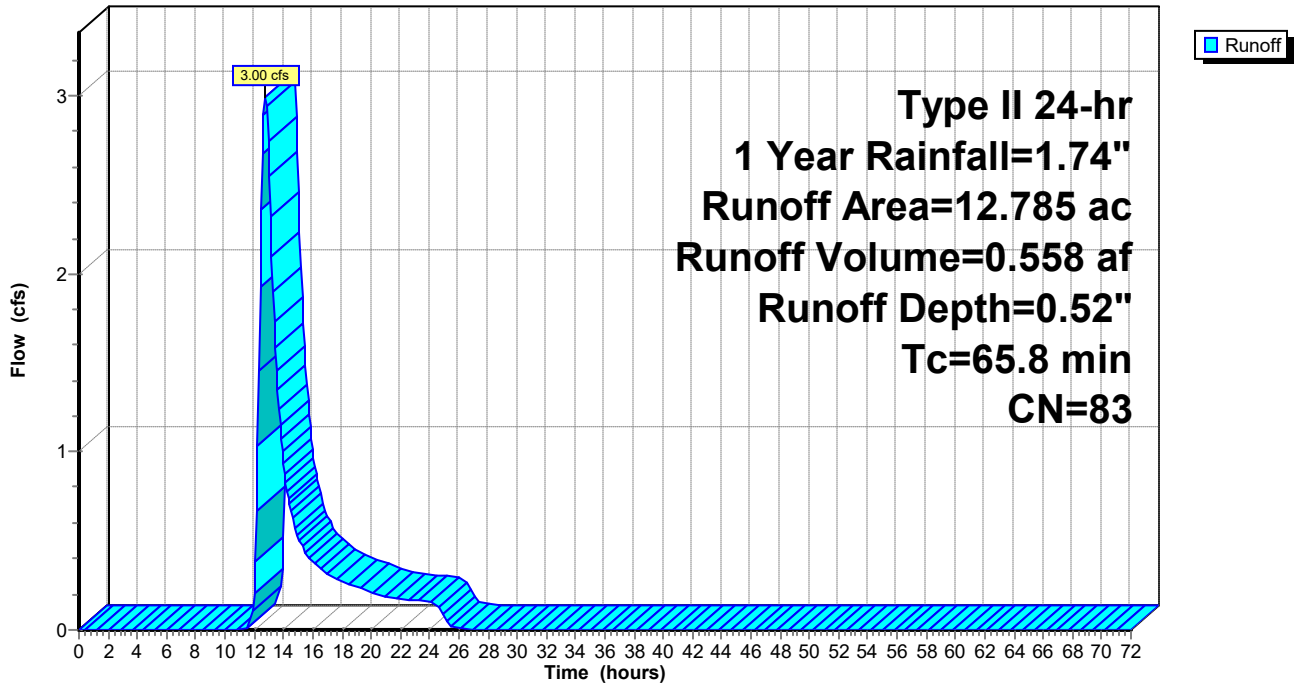
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 12.785	83	
12.785		100.00% Pervious Area

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

Subcatchment 24S: DA-13

Hydrograph



Summary for Subcatchment 25S: DA-14

Runoff = 4.54 cfs @ 14.19 hrs, Volume= 1.764 af, Depth= 0.45"
 Routed to Link 24L : DP-14

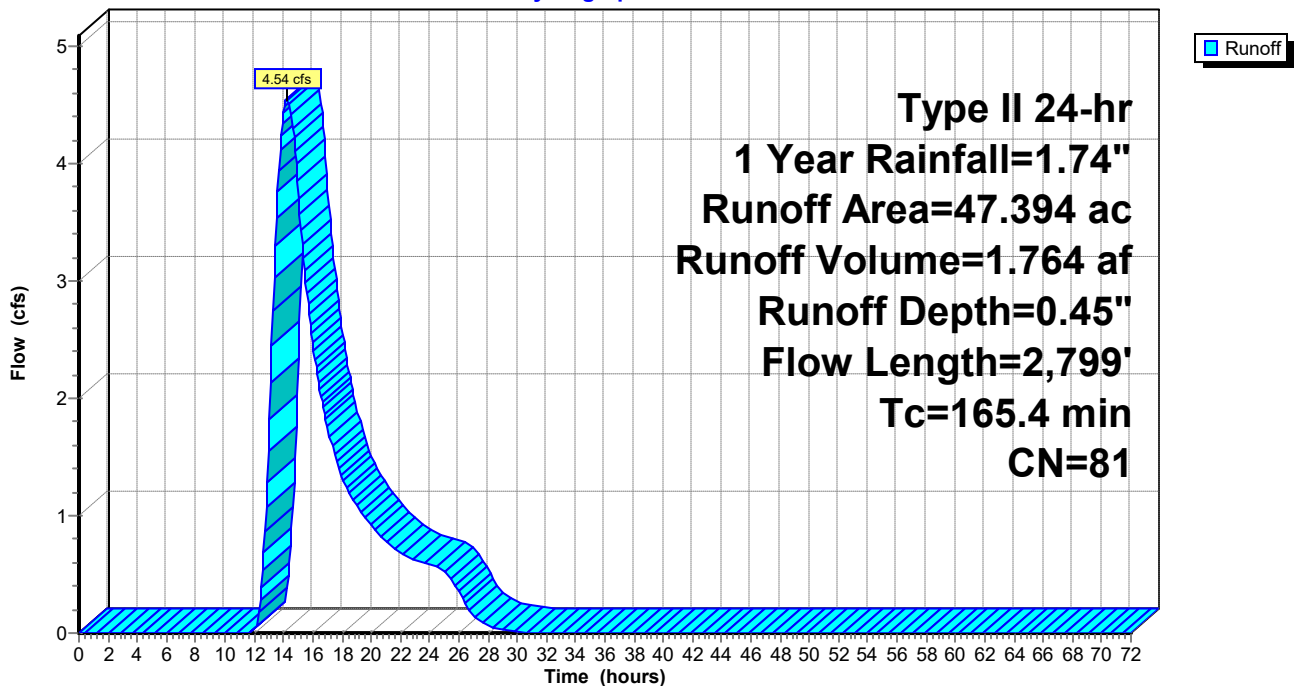
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 47.394	81	
47.394		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.1	100	0.0211	0.06		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
139.3	2,699	0.0021	0.32		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
165.4	2,799	Total			

Subcatchment 25S: DA-14

Hydrograph



Summary for Subcatchment 26S: DA-15

Runoff = 1.83 cfs @ 12.97 hrs, Volume= 0.400 af, Depth= 0.52"
 Routed to Link 25L : DP-15

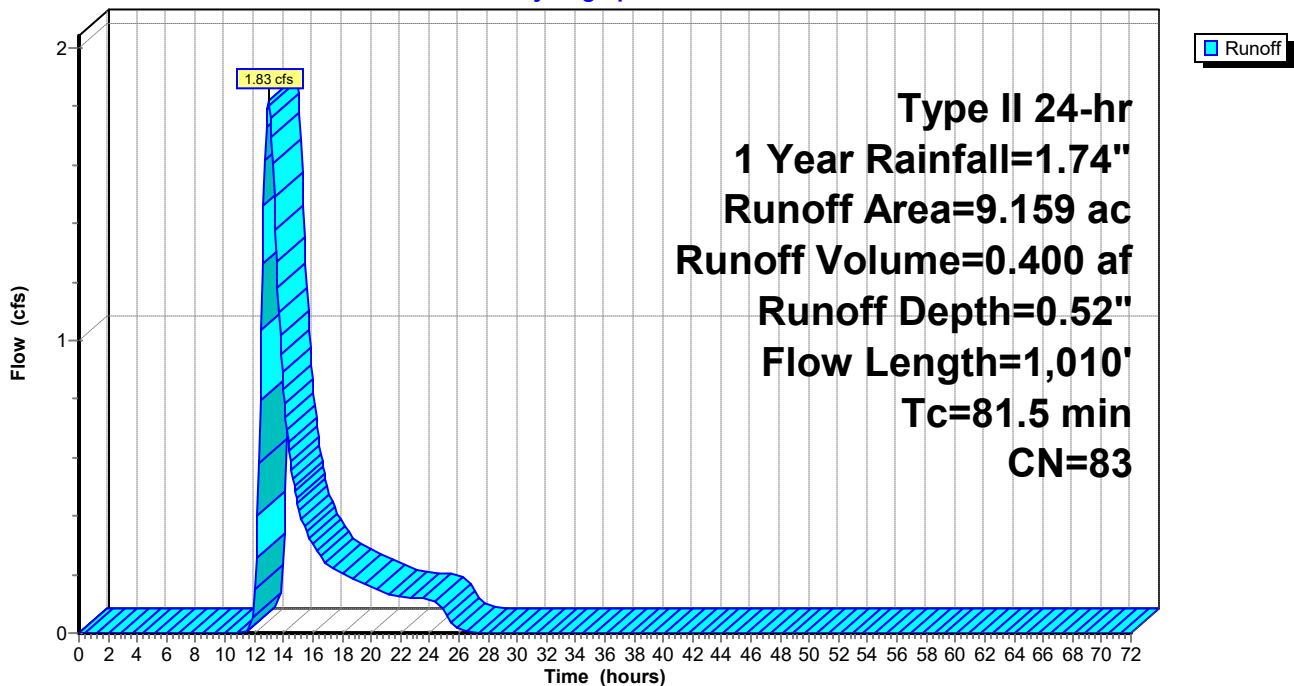
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 9.159	83	
9.159		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.6	100	0.0112	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
47.9	910	0.0020	0.32		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
81.5	1,010	Total			

Subcatchment 26S: DA-15

Hydrograph



Summary for Subcatchment 27S: DA-17

Runoff = 0.15 cfs @ 19.92 hrs, Volume= 0.141 af, Depth= 0.57"
 Routed to Link 26L : DP-17

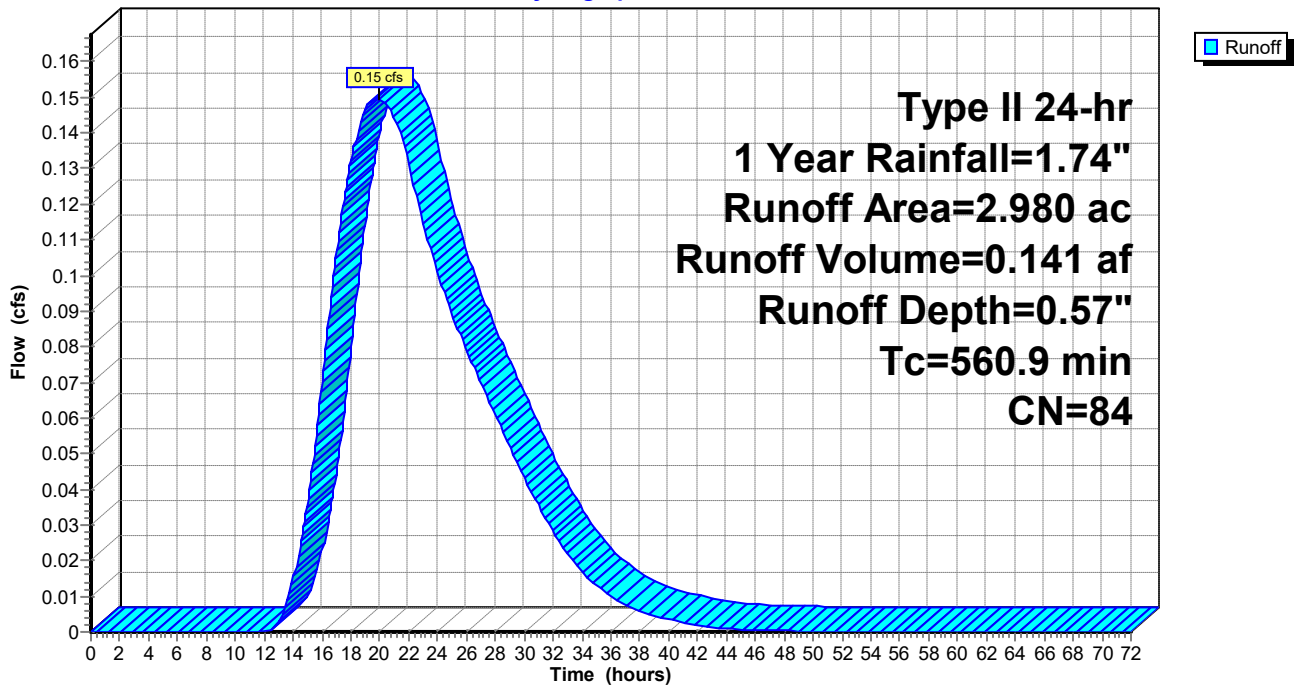
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 2.980	84	
2.980		100.00% Pervious Area

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

Subcatchment 27S: DA-17

Hydrograph



Summary for Subcatchment 28S: DA-18

Runoff = 4.28 cfs @ 13.13 hrs, Volume= 1.010 af, Depth= 0.61"
 Routed to Link 27L : DP-18

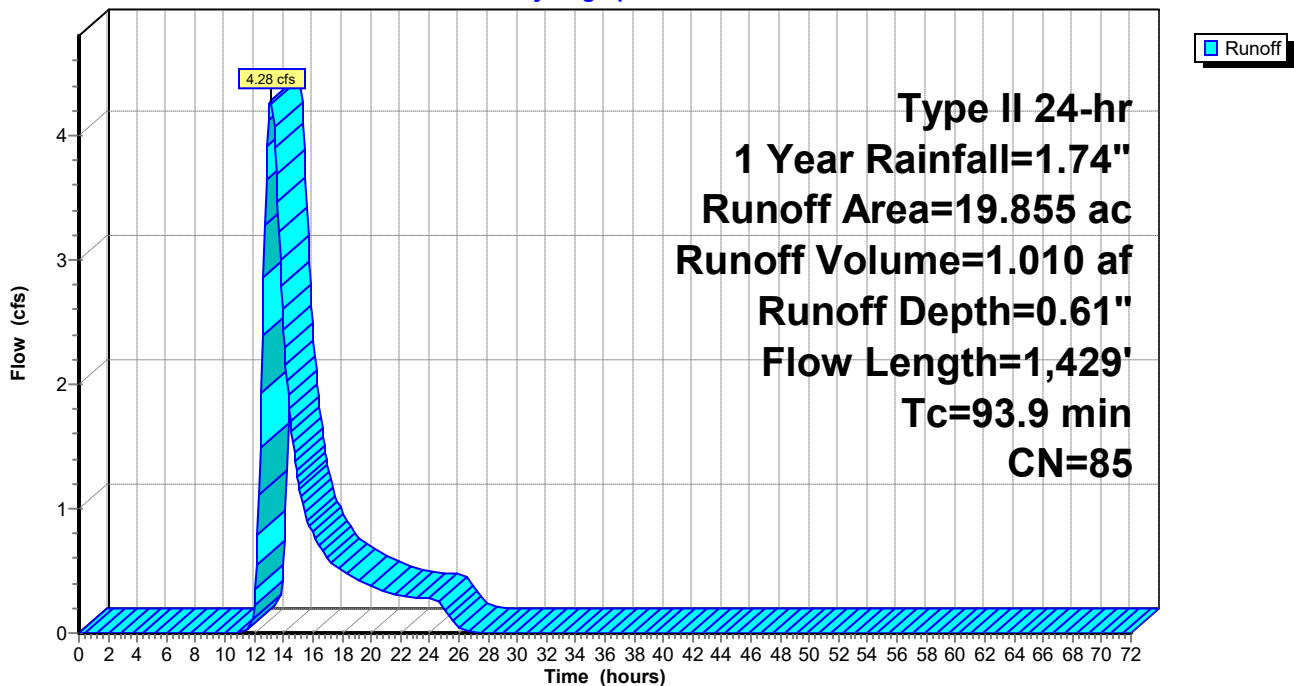
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 19.855	85	
19.855		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
42.3	100	0.0063	0.04		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
51.6	1,329	0.0038	0.43		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
93.9	1,429	Total			

Subcatchment 28S: DA-18

Hydrograph



Summary for Subcatchment 29S: DA-19

Runoff = 1.54 cfs @ 12.62 hrs, Volume= 0.249 af, Depth= 0.57"
 Routed to Link 28L : DP-19

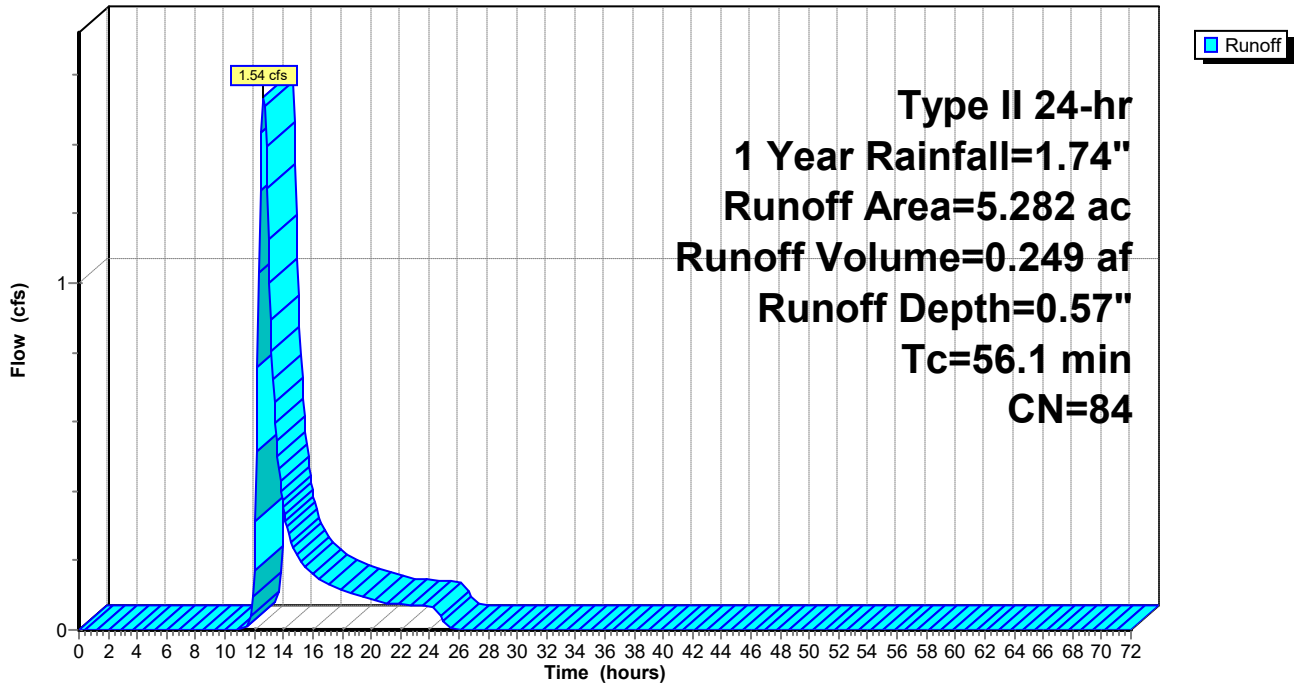
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 5.282	84	
5.282		100.00% Pervious Area

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

Subcatchment 29S: DA-19

Hydrograph



Summary for Subcatchment 30S: DA-20

Runoff = 2.70 cfs @ 13.82 hrs, Volume= 1.007 af, Depth= 0.32"
 Routed to Link 29L : DP-20

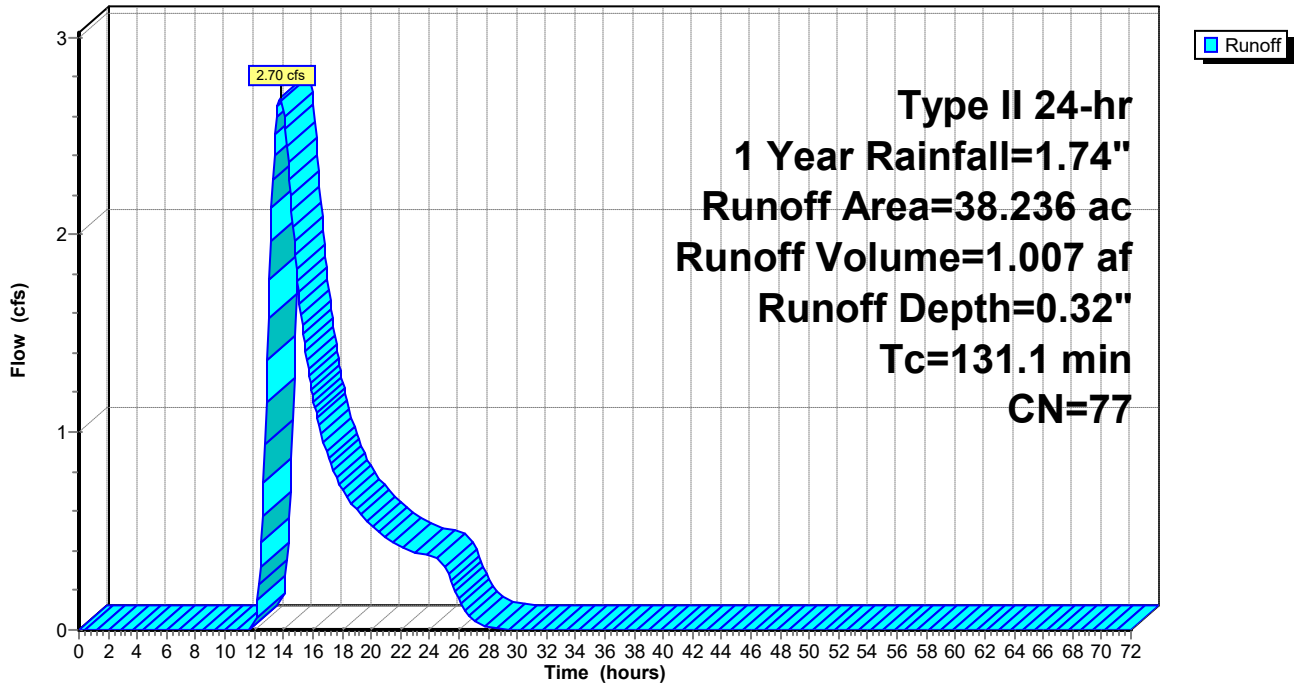
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 38.236	77	
38.236		100.00% Pervious Area

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

Subcatchment 30S: DA-20

Hydrograph



Summary for Subcatchment 31S: DA-22

Runoff = 2.75 cfs @ 12.85 hrs, Volume= 0.590 af, Depth= 0.41"
 Routed to Link 30L : DP-22

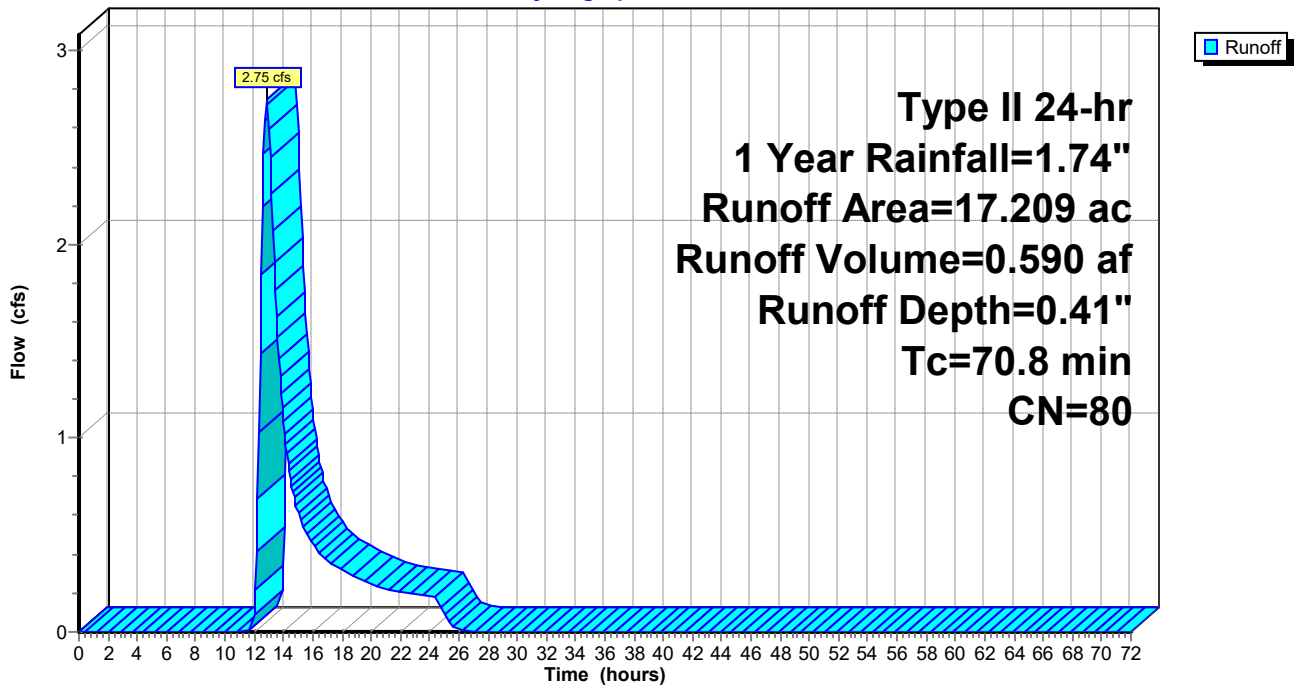
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 17.209	80	
17.209		100.00% Pervious Area

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

Subcatchment 31S: DA-22

Hydrograph



Summary for Subcatchment 32S: DA-23

Runoff = 0.45 cfs @ 12.51 hrs, Volume= 0.106 af, Depth= 0.17"
 Routed to Link 31L : DP-23

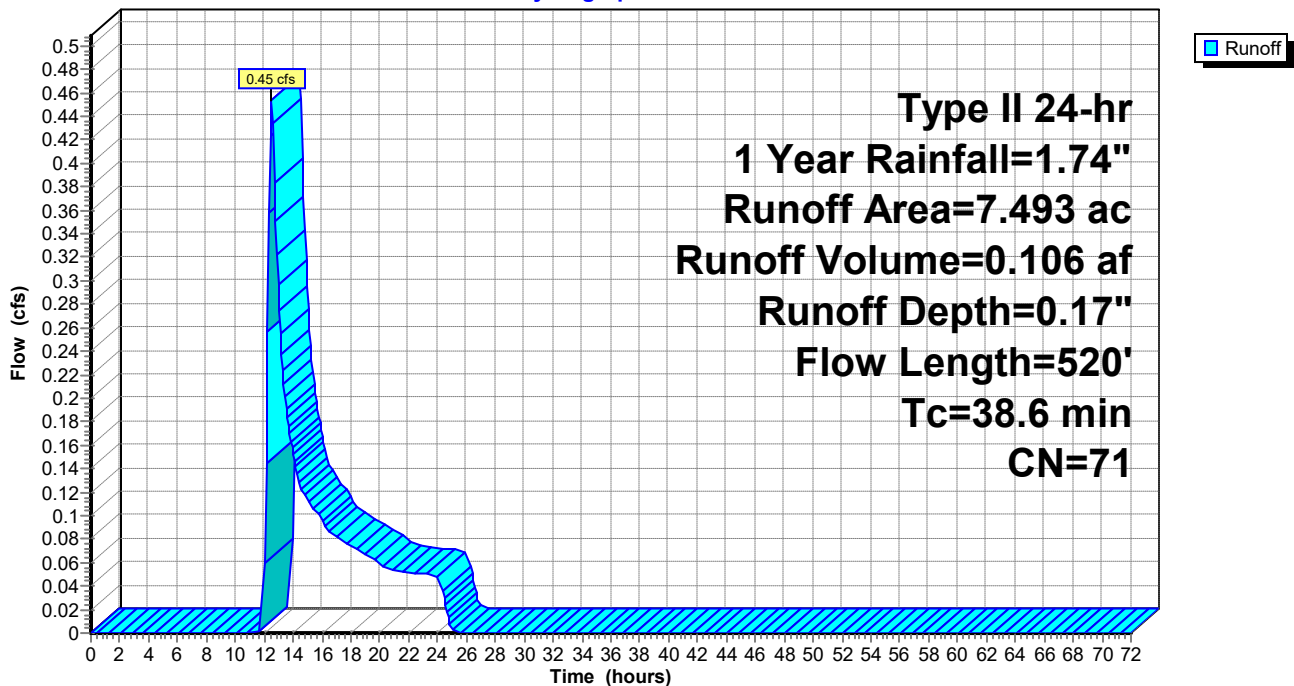
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 7.493	71	
7.493		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.6	100	0.0200	0.06		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
12.0	420	0.0070	0.59		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
38.6	520	Total			

Subcatchment 32S: DA-23

Hydrograph



Summary for Subcatchment 33S: DA-24

Runoff = 0.97 cfs @ 13.18 hrs, Volume= 0.294 af, Depth= 0.26"
 Routed to Link 32L : DP-24

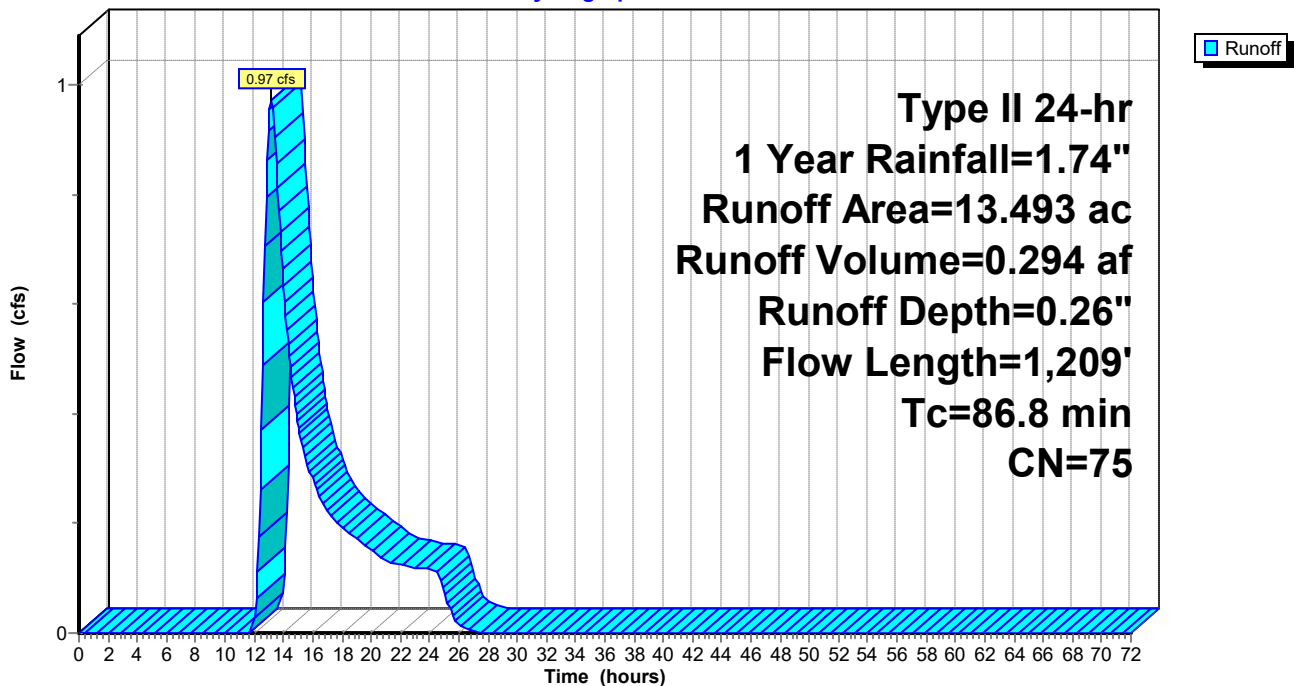
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 13.493	75	
13.493		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
37.0	100	0.0088	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
49.8	1,109	0.0028	0.37		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
86.8	1,209	Total			

Subcatchment 33S: DA-24

Hydrograph



Summary for Subcatchment 34S: DA-25

Runoff = 8.40 cfs @ 12.81 hrs, Volume= 1.726 af, Depth= 0.41"
 Routed to Link 33L : DP-25

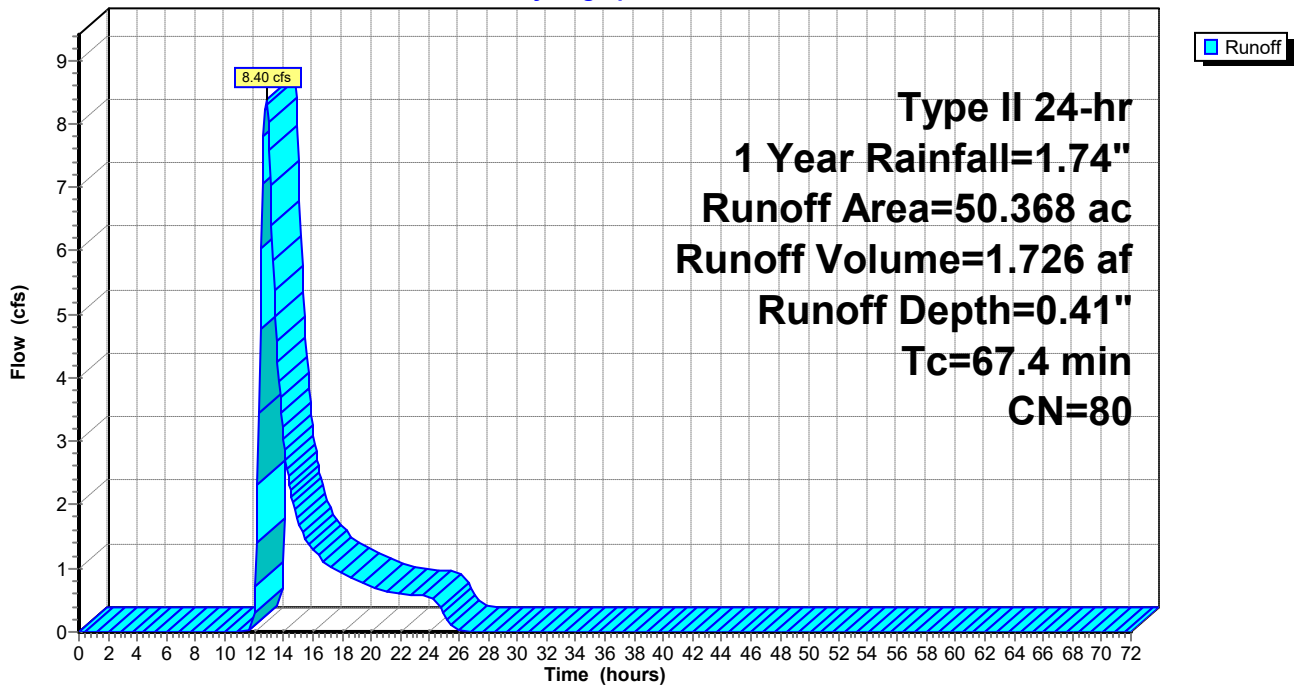
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 50.368	80	
50.368		100.00% Pervious Area

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

Subcatchment 34S: DA-25

Hydrograph



Summary for Subcatchment 35S: DA-26

Runoff = 3.85 cfs @ 31.59 hrs, Volume= 7.149 af, Depth> 0.44"
 Routed to Link 35L : DP-26

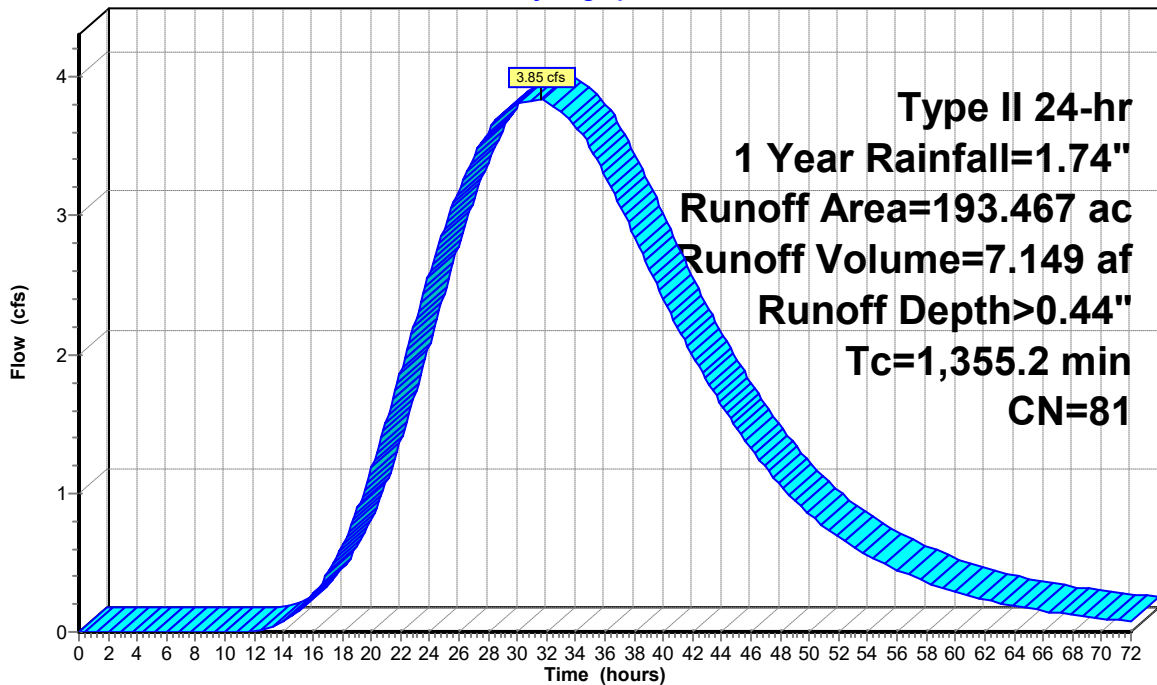
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 193.467	81	
193.467		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1,355.2					Direct Entry,

Subcatchment 35S: DA-26

Hydrograph



Runoff

**Type II 24-hr
 1 Year Rainfall=1.74"
 Runoff Area=193.467 ac
 Runoff Volume=7.149 af
 Runoff Depth>0.44"
 Tc=1,355.2 min
 CN=81**

Summary for Subcatchment 36S: DA-27

Runoff = 1.34 cfs @ 20.28 hrs, Volume= 1.297 af, Depth= 0.48"
 Routed to Link 36L : DP-27

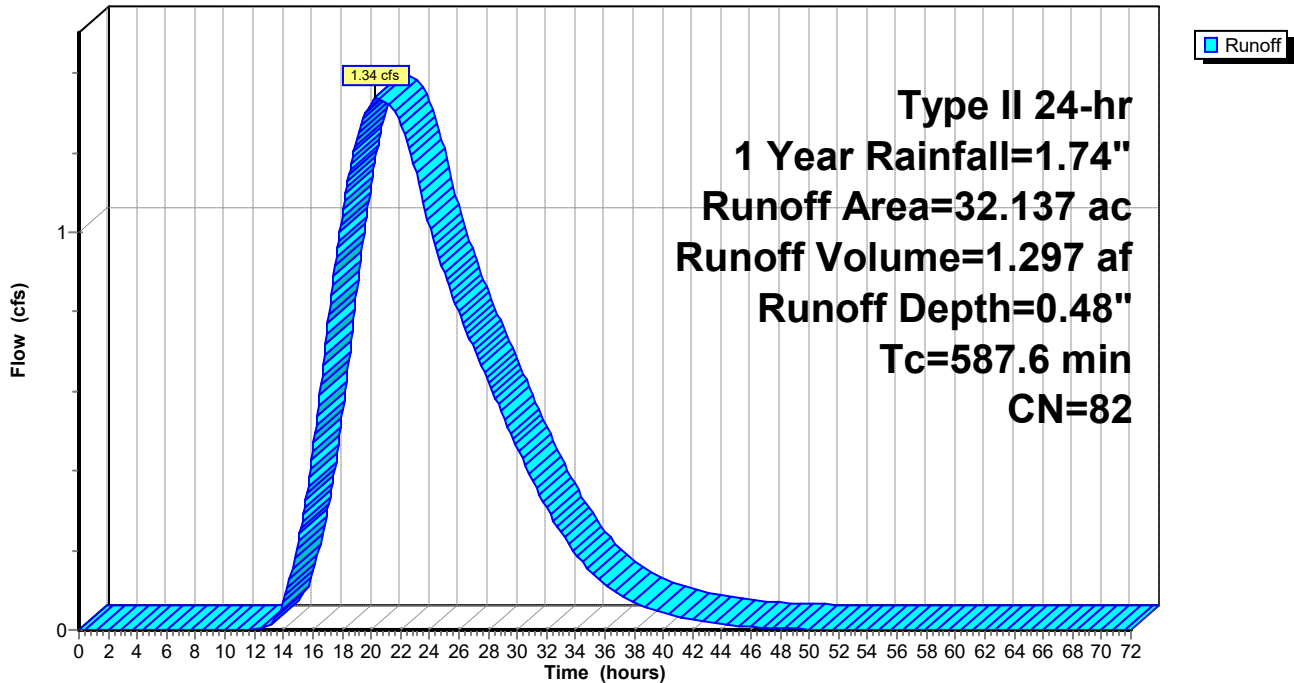
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 32.137	82	
32.137		100.00% Pervious Area

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

Subcatchment 36S: DA-27

Hydrograph



Summary for Subcatchment 37S: DA-28

Runoff = 2.80 cfs @ 12.36 hrs, Volume= 0.353 af, Depth= 0.45"
 Routed to Link 37L : DP-28

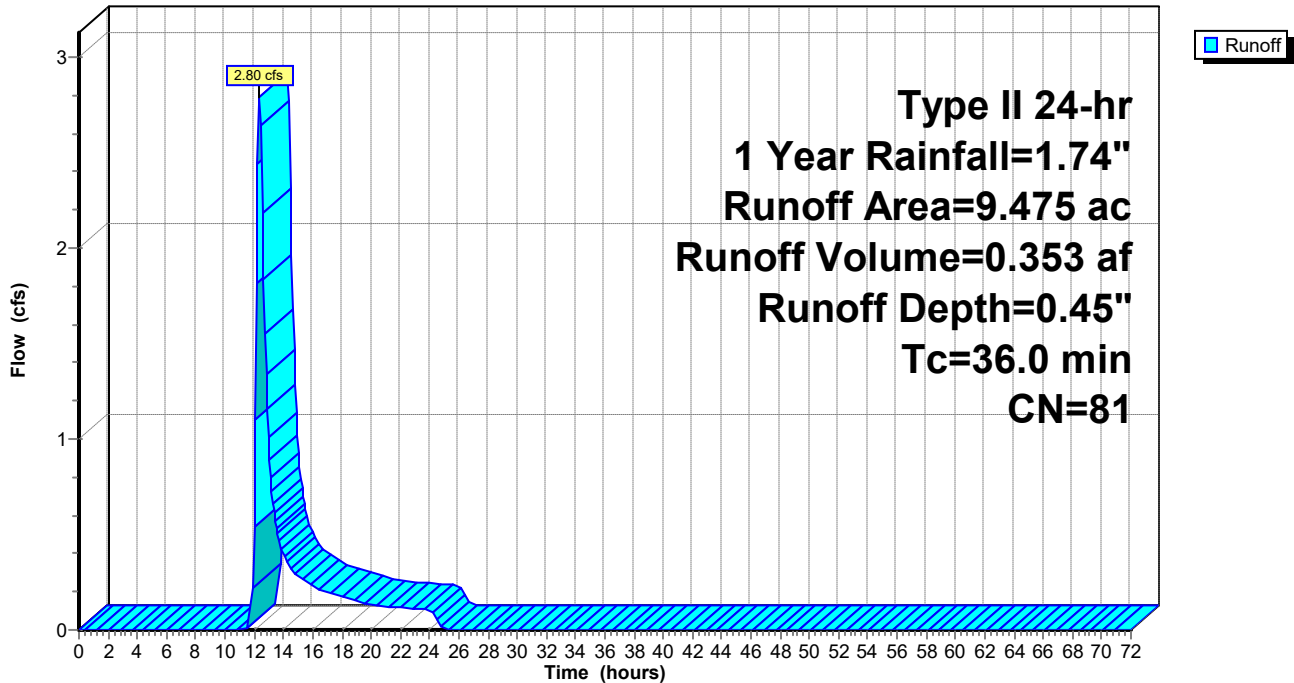
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 9.475	81	
9.475		100.00% Pervious Area

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

Subcatchment 37S: DA-28

Hydrograph



Summary for Subcatchment 38S: DA-29

Runoff = 7.34 cfs @ 12.98 hrs, Volume= 1.832 af, Depth= 0.32"
 Routed to Link 38L : DP-29

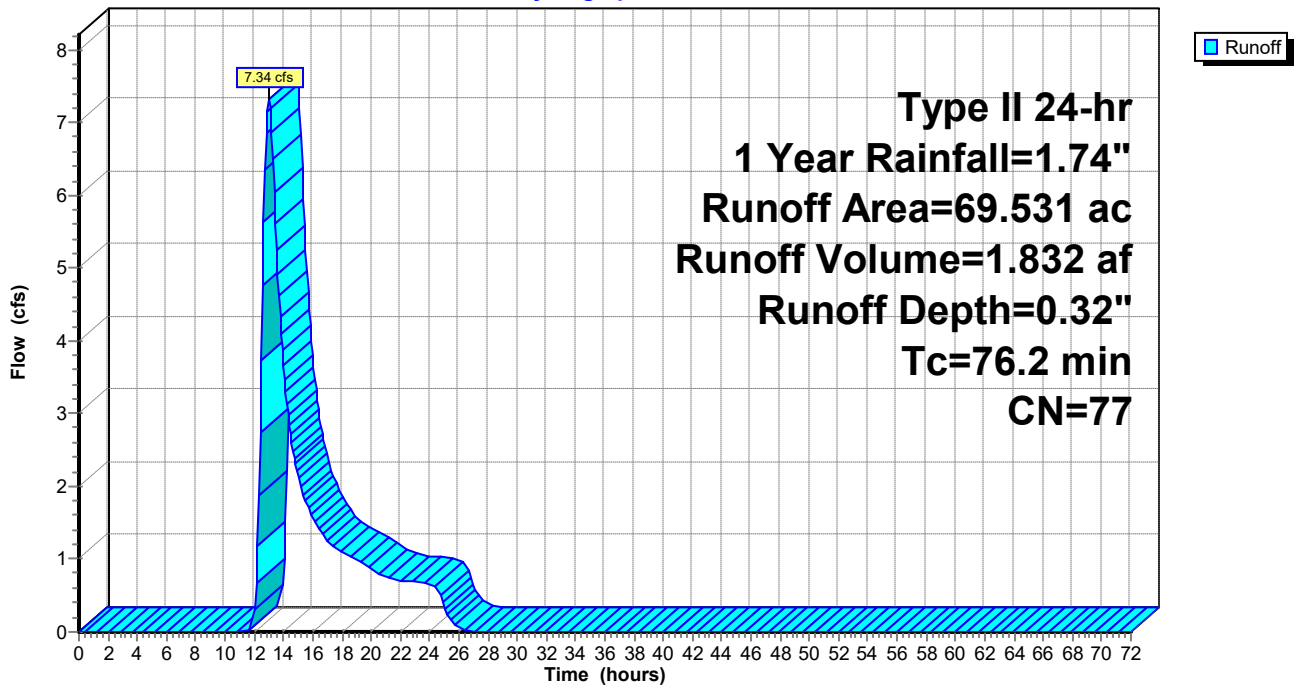
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 69.531	77	
69.531		100.00% Pervious Area

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

Subcatchment 38S: DA-29

Hydrograph



Summary for Subcatchment 39S: DA-30

Runoff = 8.25 cfs @ 12.92 hrs, Volume= 1.707 af, Depth= 0.57"
 Routed to Pond 1P : P-30

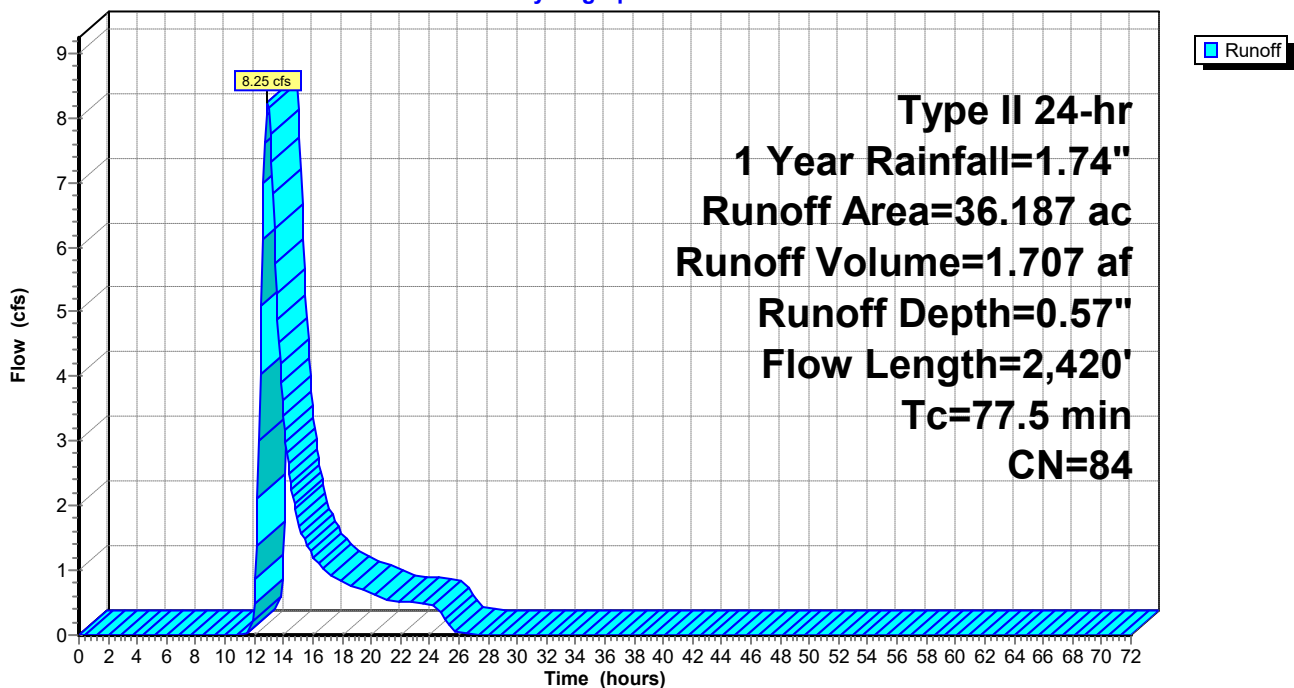
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 36.187	84	
36.187		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	20	0.0332	0.06		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
71.5	2,400	0.0064	0.56		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
77.5	2,420	Total			

Subcatchment 39S: DA-30

Hydrograph



Summary for Subcatchment 40S: DA-31

Runoff = 3.75 cfs @ 12.24 hrs, Volume= 0.415 af, Depth= 0.35"
 Routed to Link 40L : DP-31

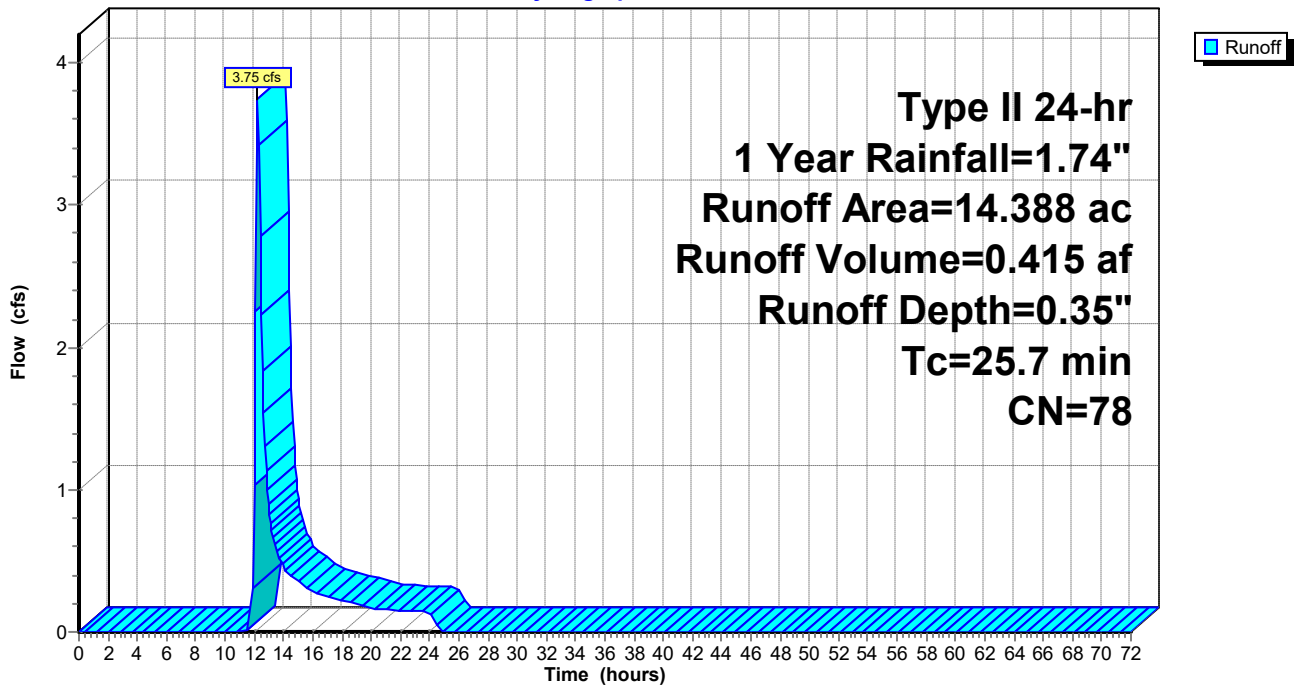
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 14.388	78	
14.388		100.00% Pervious Area

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

Subcatchment 40S: DA-31

Hydrograph



Summary for Subcatchment 41S: DA-32

Runoff = 0.46 cfs @ 14.03 hrs, Volume= 0.169 af, Depth= 0.45"
 Routed to Link 41L : DP-32

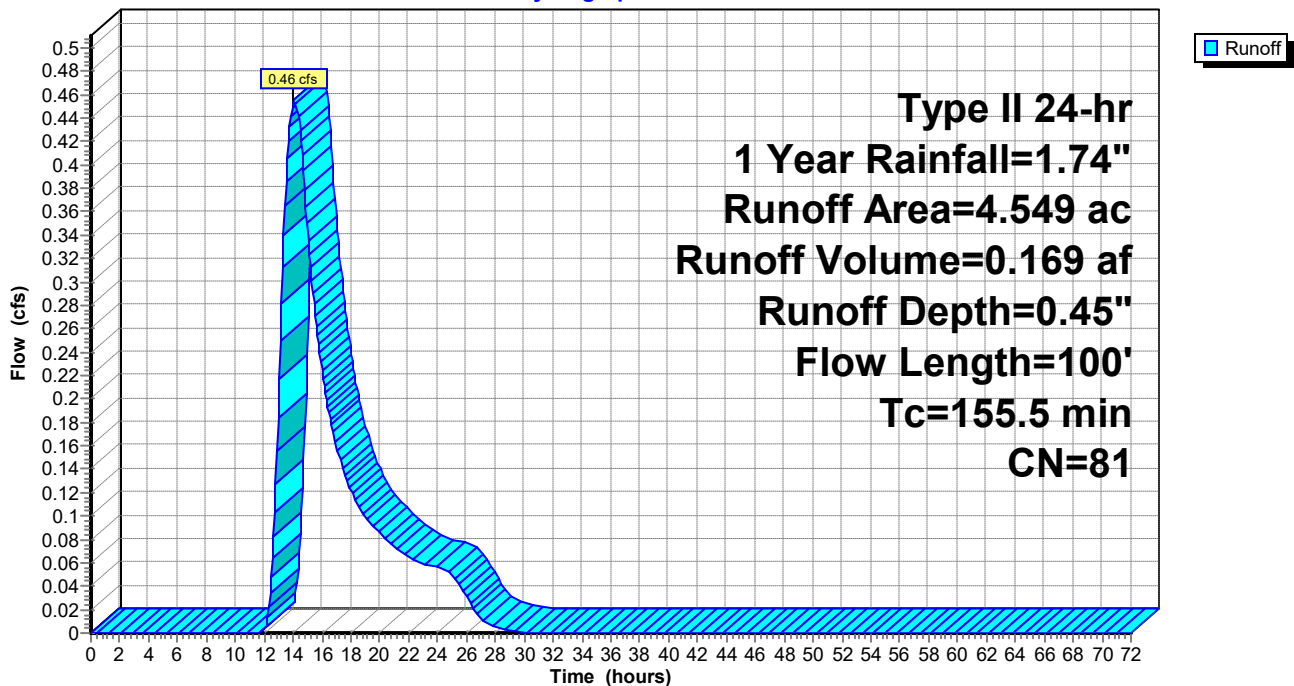
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 4.549	81	
4.549		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
153.7	20	0.0000	0.00		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
1.8	80	0.0116	0.75		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
155.5	100	Total			

Subcatchment 41S: DA-32

Hydrograph



Summary for Subcatchment 42S: DA-35

Runoff = 1.65 cfs @ 15.62 hrs, Volume= 0.963 af, Depth= 0.26"
 Routed to Link 42L : DP-35

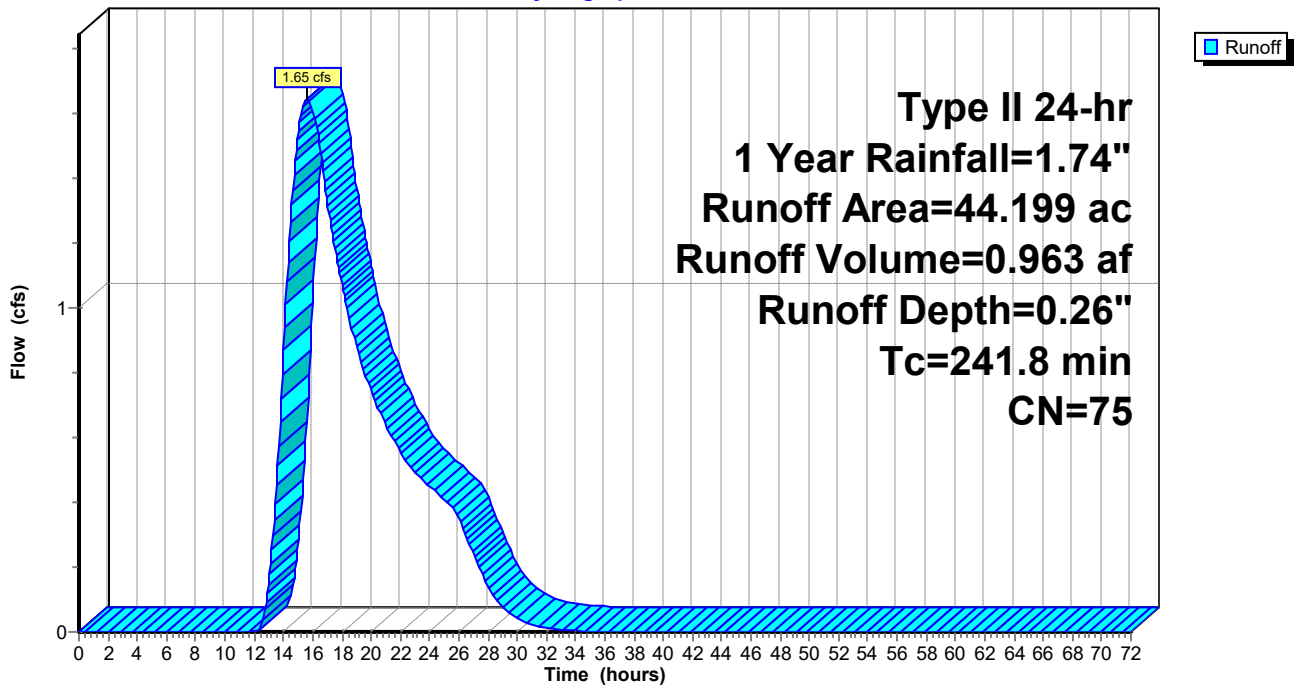
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 44.199	75	
44.199		100.00% Pervious Area

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

Subcatchment 42S: DA-35

Hydrograph



Summary for Subcatchment 43S: DA-42

Runoff = 6.20 cfs @ 14.47 hrs, Volume= 2.434 af, Depth= 0.61"
 Routed to Link 48L : DP-42

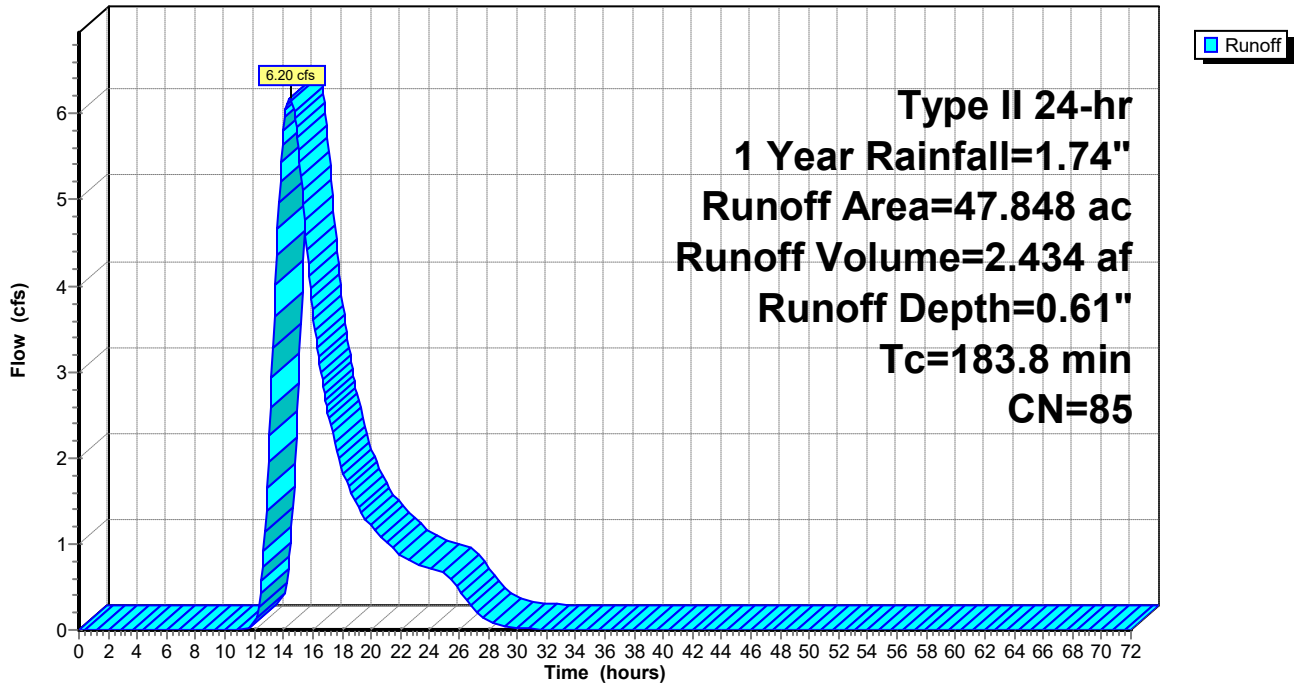
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 47.848	85	
47.848		100.00% Pervious Area

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

Subcatchment 43S: DA-42

Hydrograph



Summary for Subcatchment 44S: DA-37

Runoff = 2.23 cfs @ 14.20 hrs, Volume= 0.796 af, Depth= 0.66"
 Routed to Pond 2P : P-37

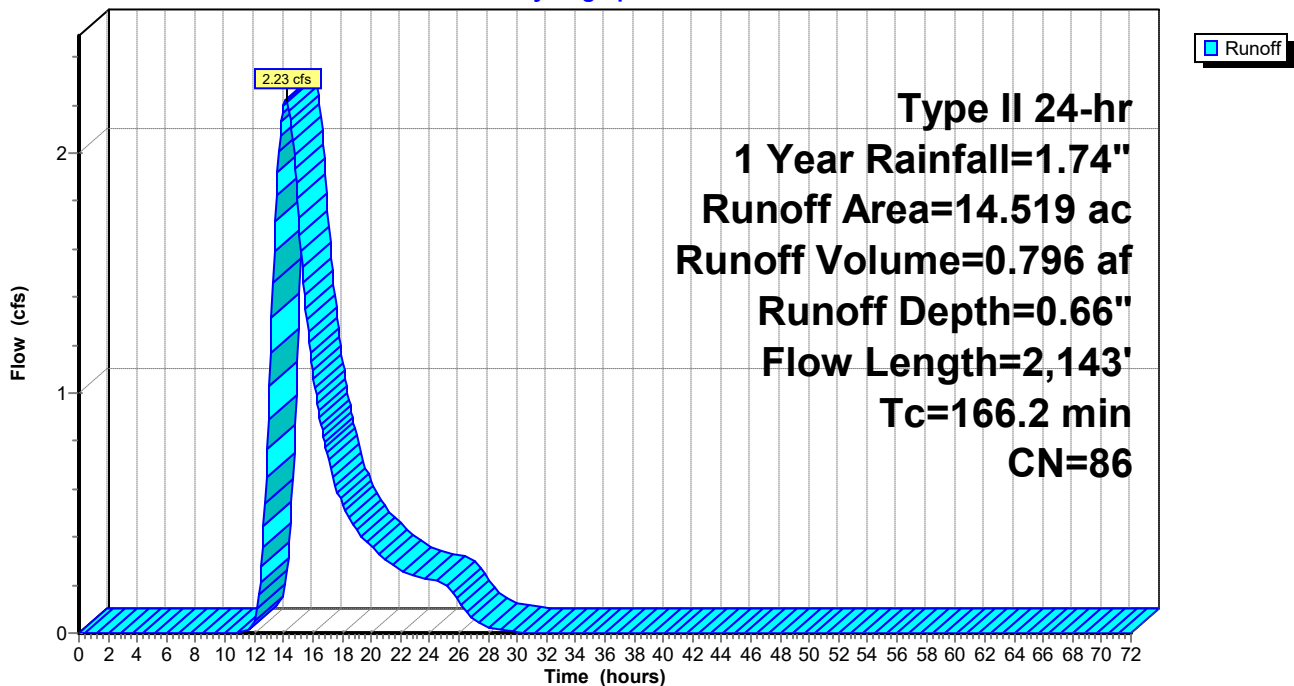
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 14.519	86	
14.519		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
80.9	20	0.0000	0.00		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
85.3	2,123	0.0035	0.41		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
166.2	2,143	Total			

Subcatchment 44S: DA-37

Hydrograph



Summary for Subcatchment 45S: DA-41

Runoff = 21.08 cfs @ 13.24 hrs, Volume= 5.088 af, Depth= 1.16"
 Routed to Pond 4P : P-41

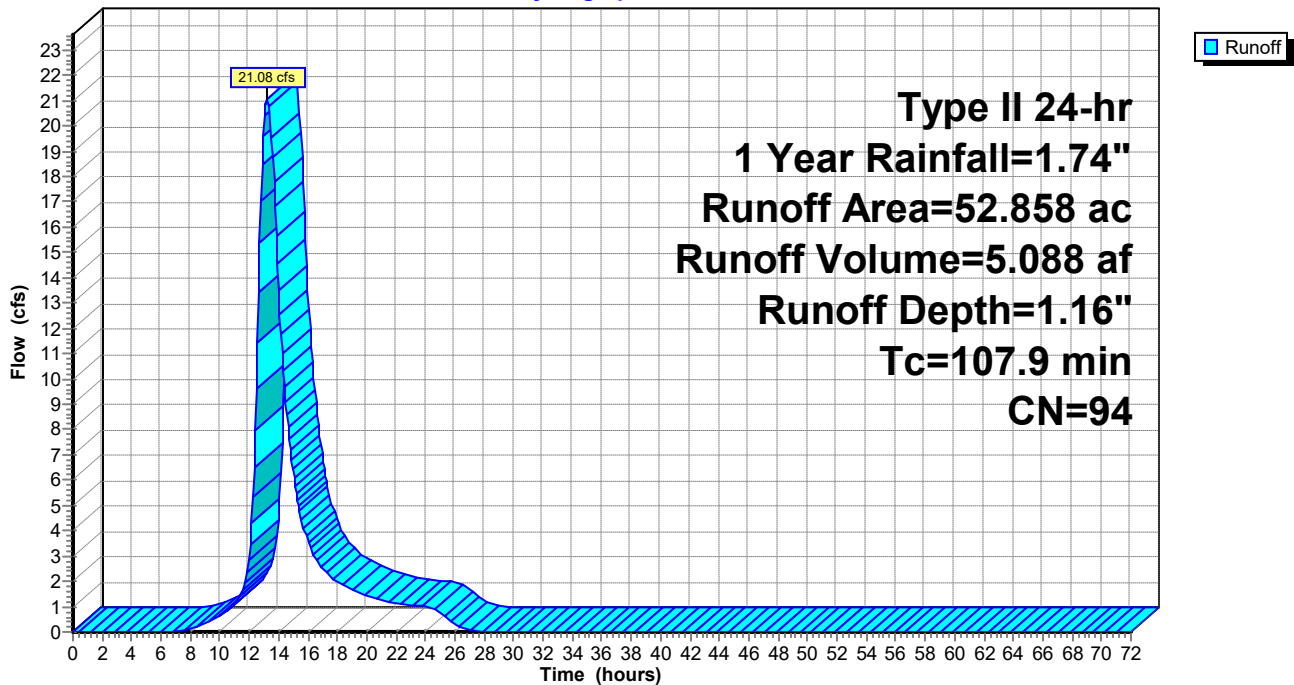
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 52.858	94	
52.858		100.00% Pervious Area

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

Subcatchment 45S: DA-41

Hydrograph



Summary for Subcatchment 46S: DA-40

Runoff = 0.26 cfs @ 18.29 hrs, Volume= 0.194 af, Depth= 1.08"
 Routed to Link 46L : DP-40

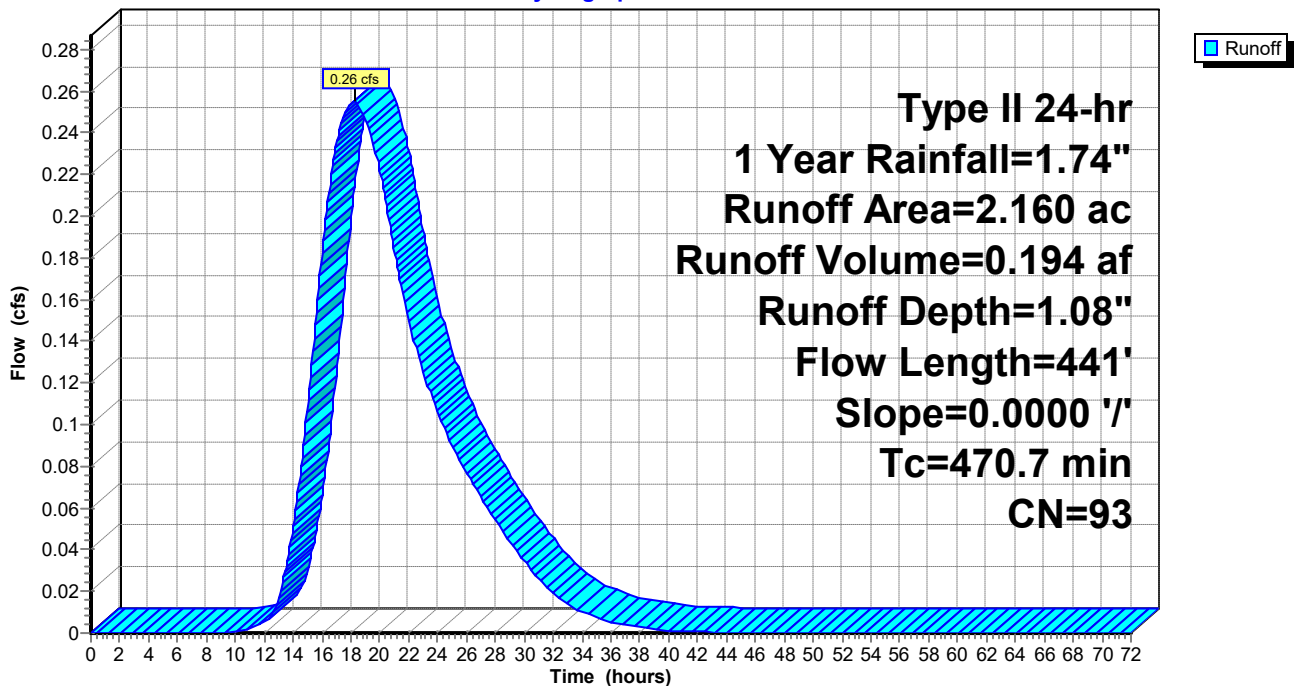
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 2.160	93	
2.160		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
153.7	20	0.0000	0.00		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
317.0	421	0.0000	0.02		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
470.7	441	Total			

Subcatchment 46S: DA-40

Hydrograph



Summary for Subcatchment 47S: DA-39

Runoff = 0.39 cfs @ 18.16 hrs, Volume= 0.297 af, Depth= 1.01"
 Routed to Link 45L : DP-39

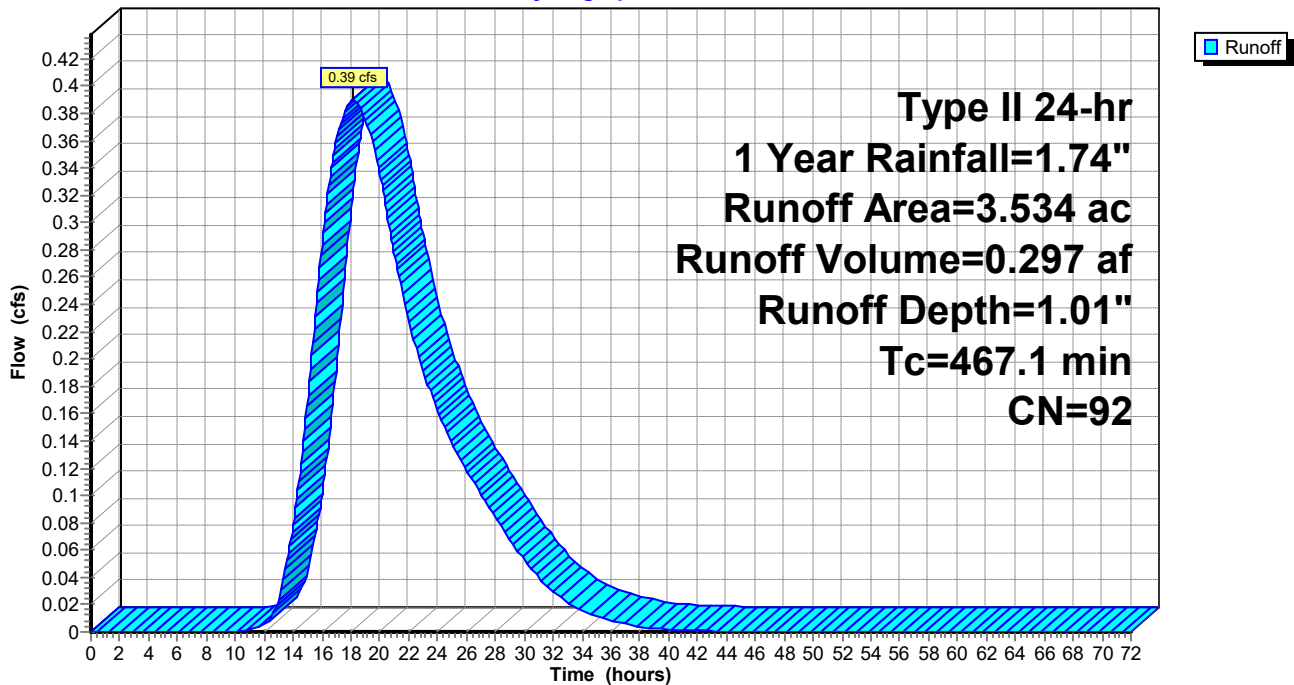
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 3.534	92	
3.534		100.00% Pervious Area

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

Subcatchment 47S: DA-39

Hydrograph



Summary for Subcatchment 48S: DA-38

Runoff = 2.48 cfs @ 12.08 hrs, Volume= 0.165 af, Depth= 0.61"
 Routed to Pond 3P : P-38

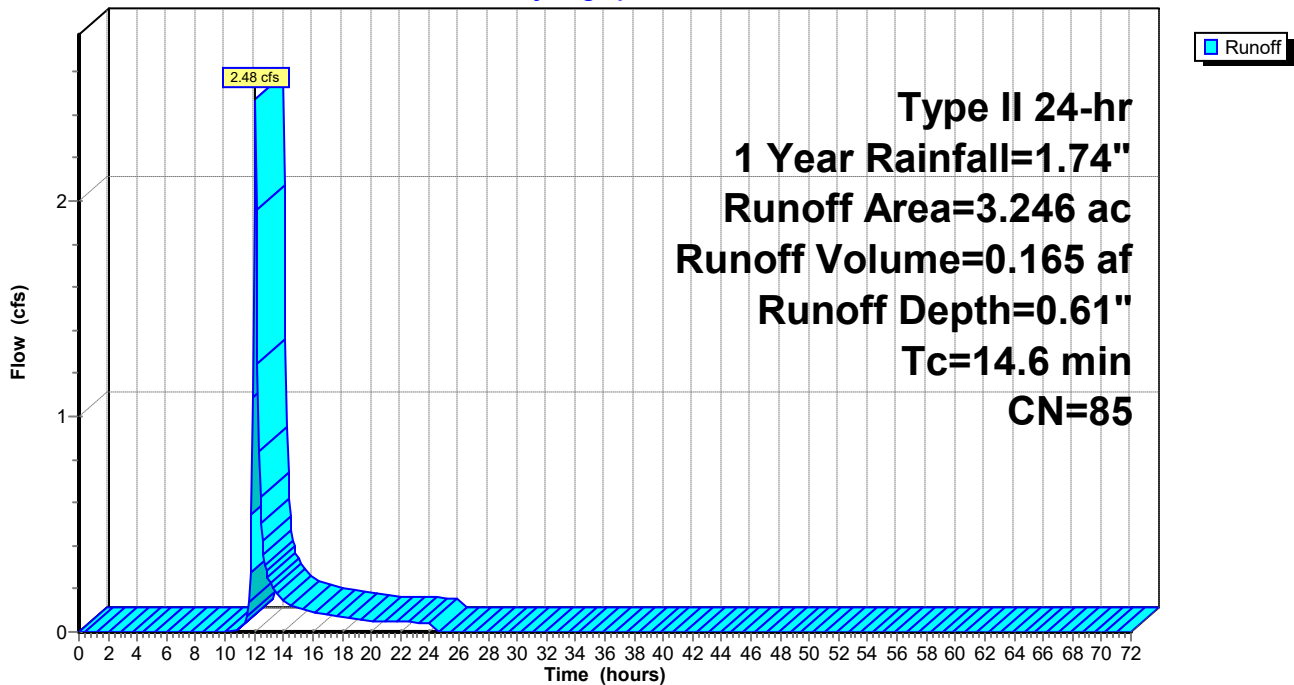
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 1 Year Rainfall=1.74"

Area (ac)	CN	Description
* 3.246	85	
3.246		100.00% Pervious Area

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

Subcatchment 48S: DA-38

Hydrograph



Summary for Pond 1P: P-30

Inflow Area = 36.187 ac, 0.00% Impervious, Inflow Depth = 0.57" for 1 Year event
 Inflow = 8.25 cfs @ 12.92 hrs, Volume= 1.707 af
 Outflow = 2.63 cfs @ 14.33 hrs, Volume= 1.680 af, Atten= 68%, Lag= 84.5 min
 Primary = 2.63 cfs @ 14.33 hrs, Volume= 1.680 af
 Routed to Link 39L : DP-30

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Starting Elev= 290.00' Surf.Area= 0.871 ac Storage= 0.000 af
 Peak Elev= 290.77' @ 14.33 hrs Surf.Area= 0.960 ac Storage= 0.705 af

Plug-Flow detention time= 295.4 min calculated for 1.678 af (98% of inflow)
 Center-of-Mass det. time= 288.9 min (1,213.8 - 925.0)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	6.283 af	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
290.00	0.871	0.000	0.000
291.00	0.986	0.928	0.928
292.00	1.033	1.009	1.938
293.00	1.065	1.049	2.987
294.00	1.092	1.078	4.065
295.00	1.110	1.101	5.166
296.00	1.124	1.117	6.283

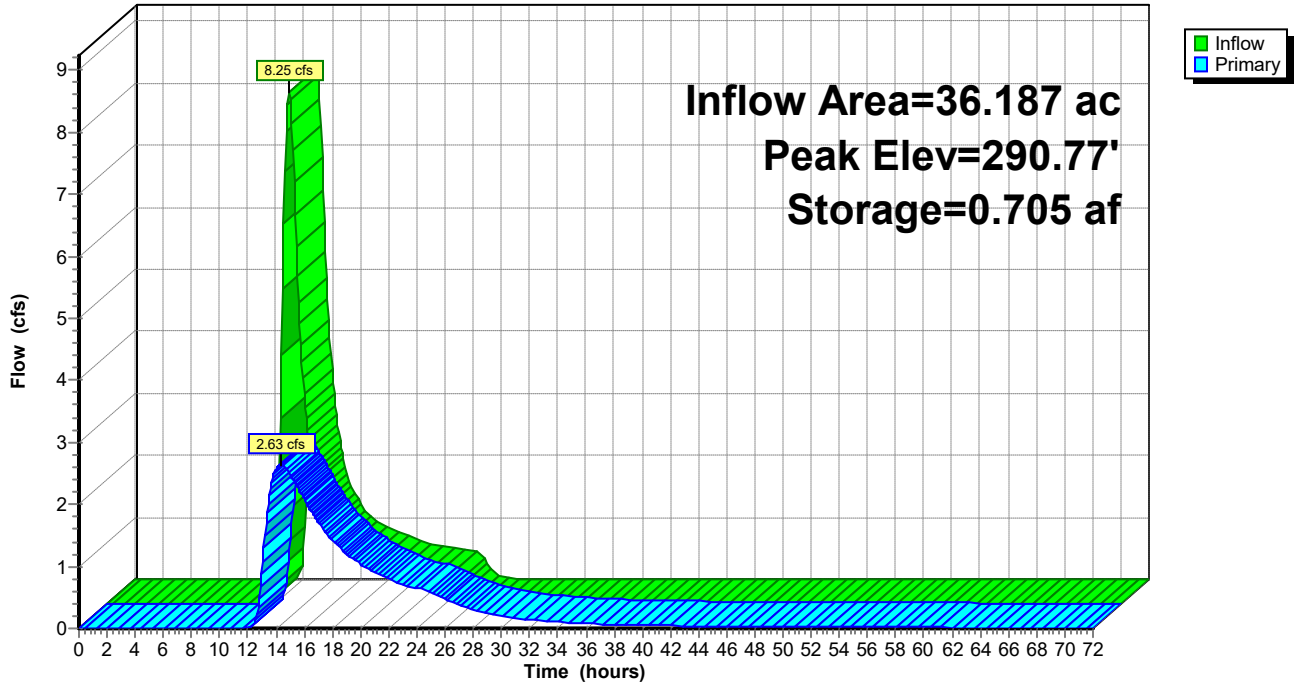
Device	Routing	Invert	Outlet Devices
#1	Primary	290.00'	15.0" Round Culvert L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 290.00' / 288.00' S= 0.0500 '/' Cc= 1.000 n= 0.015, Flow Area= 1.23 sf
#2	Primary	294.00'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) Coef. (English)

Primary OutFlow Max=2.63 cfs @ 14.33 hrs HW=290.77' (Free Discharge)

- 1=Culvert (Inlet Controls 2.63 cfs @ 3.32 fps)
- 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 1P: P-30

Hydrograph



Summary for Pond 2P: P-37

Inflow Area = 14.519 ac, 0.00% Impervious, Inflow Depth = 0.66" for 1 Year event
 Inflow = 2.23 cfs @ 14.20 hrs, Volume= 0.796 af
 Outflow = 1.34 cfs @ 15.55 hrs, Volume= 0.794 af, Atten= 40%, Lag= 81.3 min
 Primary = 1.34 cfs @ 15.55 hrs, Volume= 0.794 af
 Routed to Link 43L : DP-37

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Starting Elev= 290.00' Surf.Area= 0.491 ac Storage= 0.000 af
 Peak Elev= 290.52' @ 15.55 hrs Surf.Area= 0.513 ac Storage= 0.263 af

Plug-Flow detention time= 233.3 min calculated for 0.793 af (100% of inflow)
 Center-of-Mass det. time= 234.2 min (1,232.8 - 998.6)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	6.076 af	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
290.00	0.491	0.000	0.000
290.50	0.512	0.251	0.251
291.00	0.534	0.261	0.512
291.50	0.554	0.272	0.784
292.00	0.574	0.282	1.066
292.50	0.594	0.292	1.358
293.00	0.614	0.302	1.660
293.50	0.634	0.312	1.972
294.00	0.653	0.322	2.294
294.50	0.672	0.331	2.625
295.00	0.690	0.340	2.966
295.50	0.705	0.349	3.314
296.00	0.719	0.356	3.670
296.50	0.732	0.363	4.033
297.00	0.745	0.369	4.402
297.50	0.758	0.376	4.778
298.00	0.769	0.382	5.160
298.50	0.777	0.386	5.546
299.00	0.779	0.389	5.935
299.18	0.779	0.140	6.076

Device	Routing	Invert	Outlet Devices
#1	Primary	290.00'	15.0" Round Culvert L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 290.00' / 288.00' S= 0.0500 '/' Cc= 1.000 n= 0.015, Flow Area= 1.23 sf
#2	Primary	298.00'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) Coef. (English)

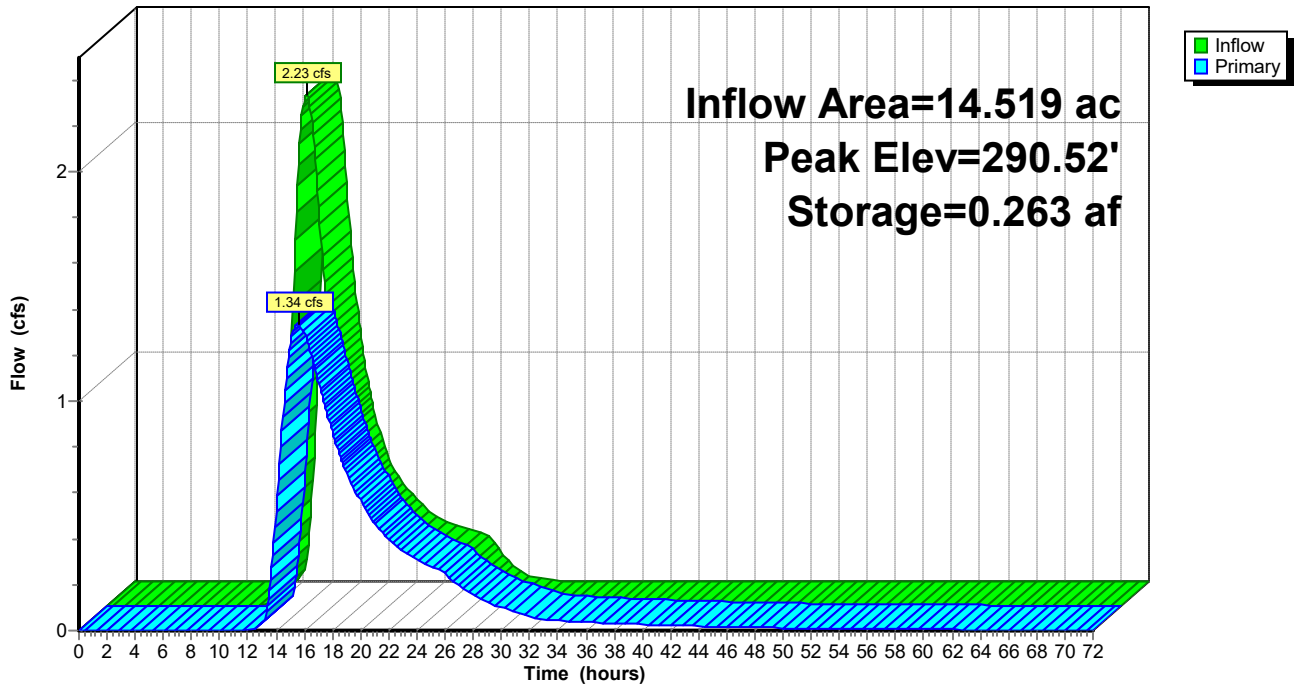
Primary OutFlow Max=1.33 cfs @ 15.55 hrs HW=290.52' (Free Discharge)

1=Culvert (Inlet Controls 1.33 cfs @ 2.74 fps)

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

Pond 2P: P-37

Hydrograph



Summary for Pond 3P: P-38

Inflow Area = 3.246 ac, 0.00% Impervious, Inflow Depth = 0.61" for 1 Year event
 Inflow = 2.48 cfs @ 12.08 hrs, Volume= 0.165 af
 Outflow = 0.64 cfs @ 12.41 hrs, Volume= 0.165 af, Atten= 74%, Lag= 19.6 min
 Primary = 0.64 cfs @ 12.41 hrs, Volume= 0.165 af
 Routed to Link 44L : DP-38

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Starting Elev= 292.00' Surf.Area= 0.161 ac Storage= 0.000 af
 Peak Elev= 292.35' @ 12.41 hrs Surf.Area= 0.168 ac Storage= 0.058 af

Plug-Flow detention time= 134.8 min calculated for 0.165 af (100% of inflow)
 Center-of-Mass det. time= 134.3 min (996.1 - 861.8)

Volume	Invert	Avail.Storage	Storage Description
#1	292.00'	1.609 af	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
292.00	0.161	0.000	0.000
292.50	0.171	0.083	0.083
293.00	0.181	0.088	0.171
293.50	0.191	0.093	0.264
294.00	0.201	0.098	0.362
294.50	0.211	0.103	0.465
295.00	0.221	0.108	0.573
295.50	0.232	0.113	0.686
296.00	0.243	0.119	0.805
296.50	0.254	0.124	0.929
297.00	0.262	0.129	1.058
297.50	0.268	0.132	1.191
298.00	0.271	0.135	1.325
298.50	0.273	0.136	1.461
299.00	0.274	0.137	1.598
299.04	0.274	0.011	1.609

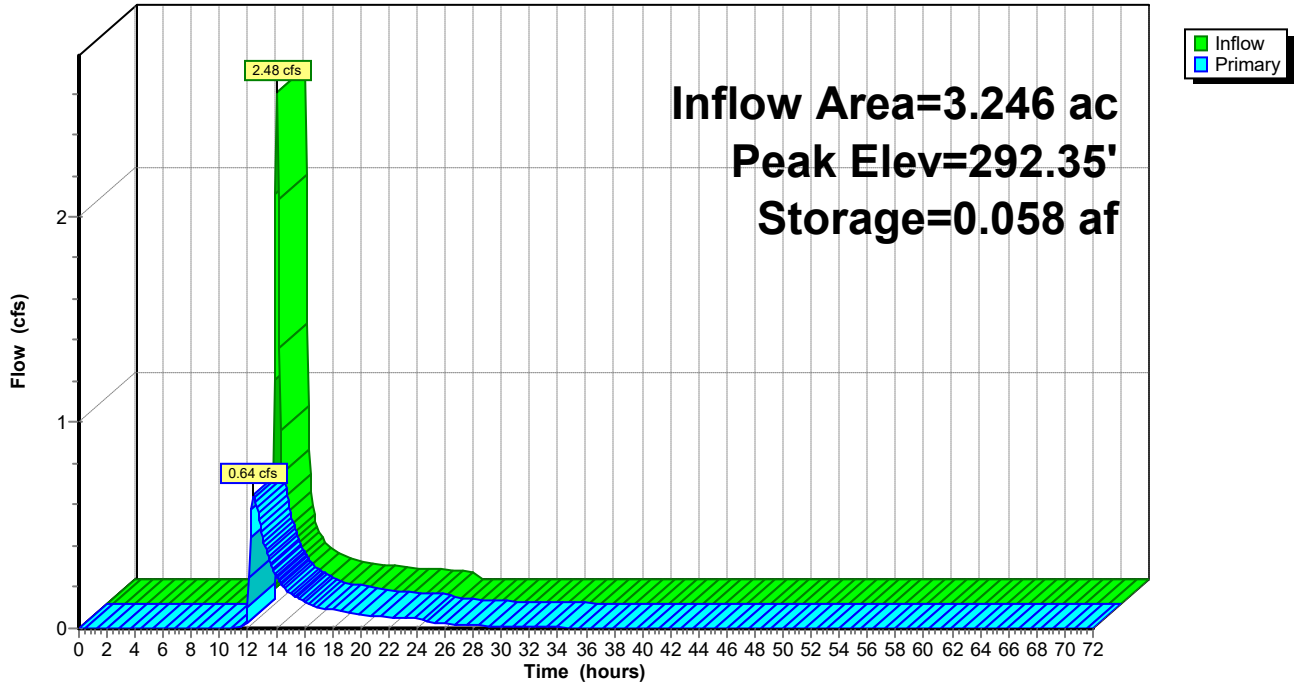
Device	Routing	Invert	Outlet Devices
#1	Primary	292.00'	15.0" Round Culvert L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 292.00' / 90.00' S= 5.0500 '/ Cc= 1.000 n= 0.015, Flow Area= 1.23 sf
#2	Primary	298.00'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) Coef. (English)

Primary OutFlow Max=0.64 cfs @ 12.41 hrs HW=292.35' (Free Discharge)

- 1=Culvert (Inlet Controls 0.64 cfs @ 2.25 fps)
- 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 3P: P-38

Hydrograph



Summary for Pond 4P: P-41

Inflow Area = 52.858 ac, 0.00% Impervious, Inflow Depth = 1.16" for 1 Year event
 Inflow = 21.08 cfs @ 13.24 hrs, Volume= 5.088 af
 Outflow = 6.85 cfs @ 14.87 hrs, Volume= 5.088 af, Atten= 67%, Lag= 97.4 min
 Primary = 6.85 cfs @ 14.87 hrs, Volume= 5.088 af
 Routed to Link 47L : DP-41

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Starting Elev= 290.00' Surf.Area= 0.009 ac Storage= 0.000 af
 Peak Elev= 291.72' @ 14.87 hrs Surf.Area= 1.944 ac Storage= 2.123 af

Plug-Flow detention time= 168.6 min calculated for 5.088 af (100% of inflow)
 Center-of-Mass det. time= 167.6 min (1,067.8 - 900.3)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	21.186 af	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
290.00	0.009	0.000	0.000
290.50	0.576	0.146	0.146
291.00	1.873	0.612	0.758
291.50	1.922	0.949	1.707
292.00	1.972	0.973	2.681
292.50	2.018	0.997	3.678
293.00	2.063	1.020	4.698
293.50	2.107	1.042	5.741
294.00	2.150	1.064	6.805
294.50	2.191	1.085	7.890
295.00	2.232	1.106	8.996
295.50	2.272	1.126	10.122
296.00	2.313	1.146	11.268
296.50	2.353	1.166	12.435
297.00	2.394	1.187	13.622
297.50	2.435	1.207	14.829
298.00	2.476	1.228	16.057
298.50	2.520	1.249	17.306
299.00	2.563	1.271	18.576
299.50	2.610	1.293	19.870
300.00	2.657	1.317	21.186

Device	Routing	Invert	Outlet Devices
#1	Primary	290.00'	15.0" Round Culvert L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 290.00' / 288.00' S= 0.0500 '/' Cc= 1.000 n= 0.015, Flow Area= 1.23 sf
#2	Primary	298.00'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) Coef. (English)

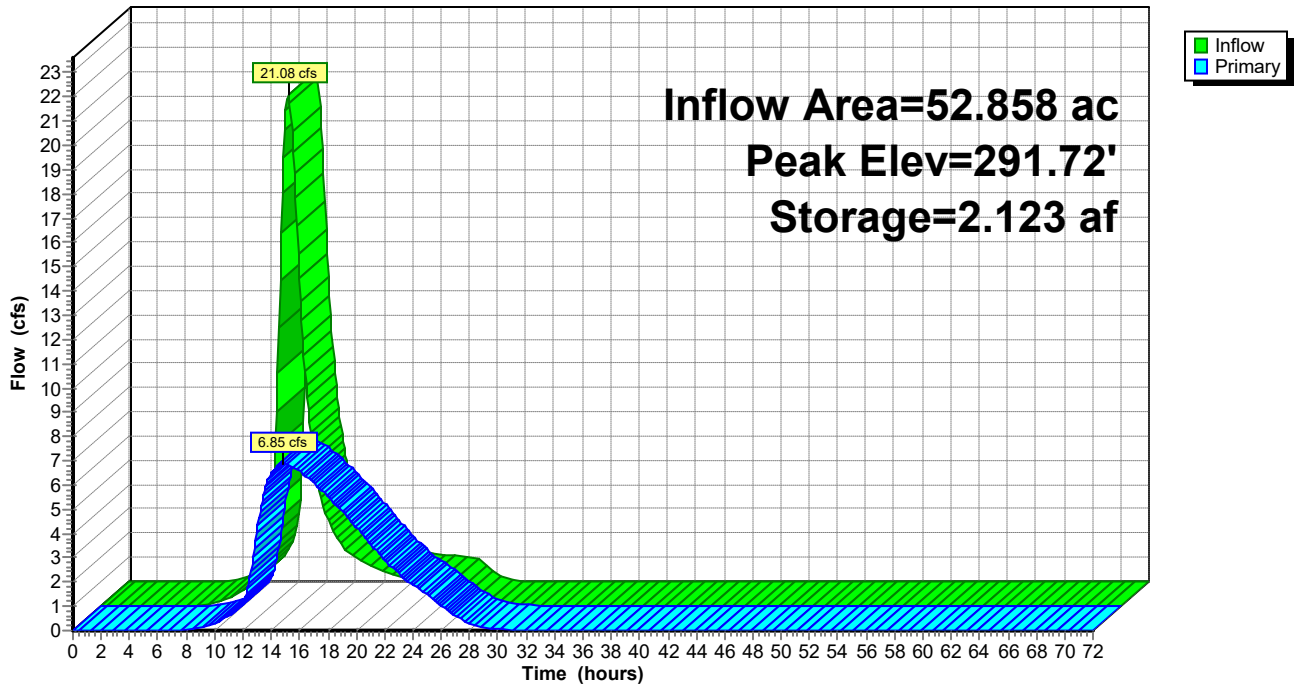
Primary OutFlow Max=6.85 cfs @ 14.87 hrs HW=291.72' (Free Discharge)

1=Culvert (Inlet Controls 6.85 cfs @ 5.59 fps)

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

Pond 4P: P-41

Hydrograph



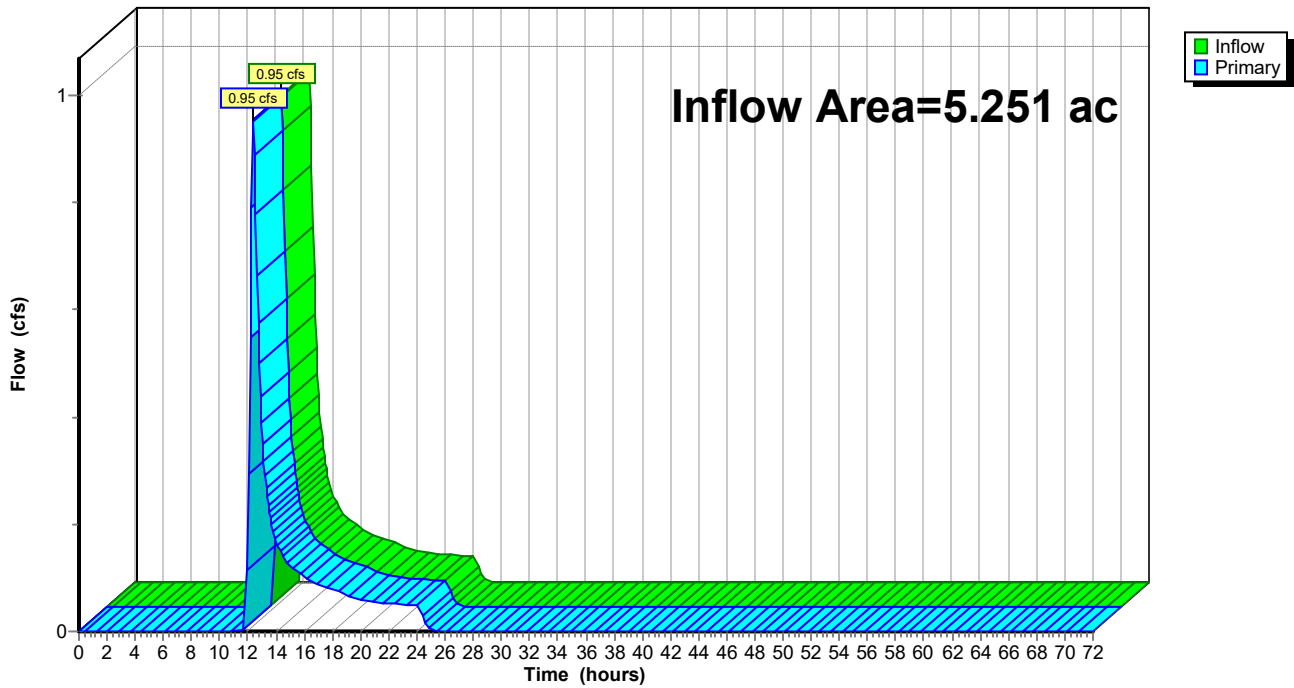
Summary for Link 1L: DP-49

Inflow Area = 5.251 ac, 0.00% Impervious, Inflow Depth = 0.32" for 1 Year event
Inflow = 0.95 cfs @ 12.38 hrs, Volume= 0.138 af
Primary = 0.95 cfs @ 12.38 hrs, Volume= 0.138 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 1L: DP-49

Hydrograph



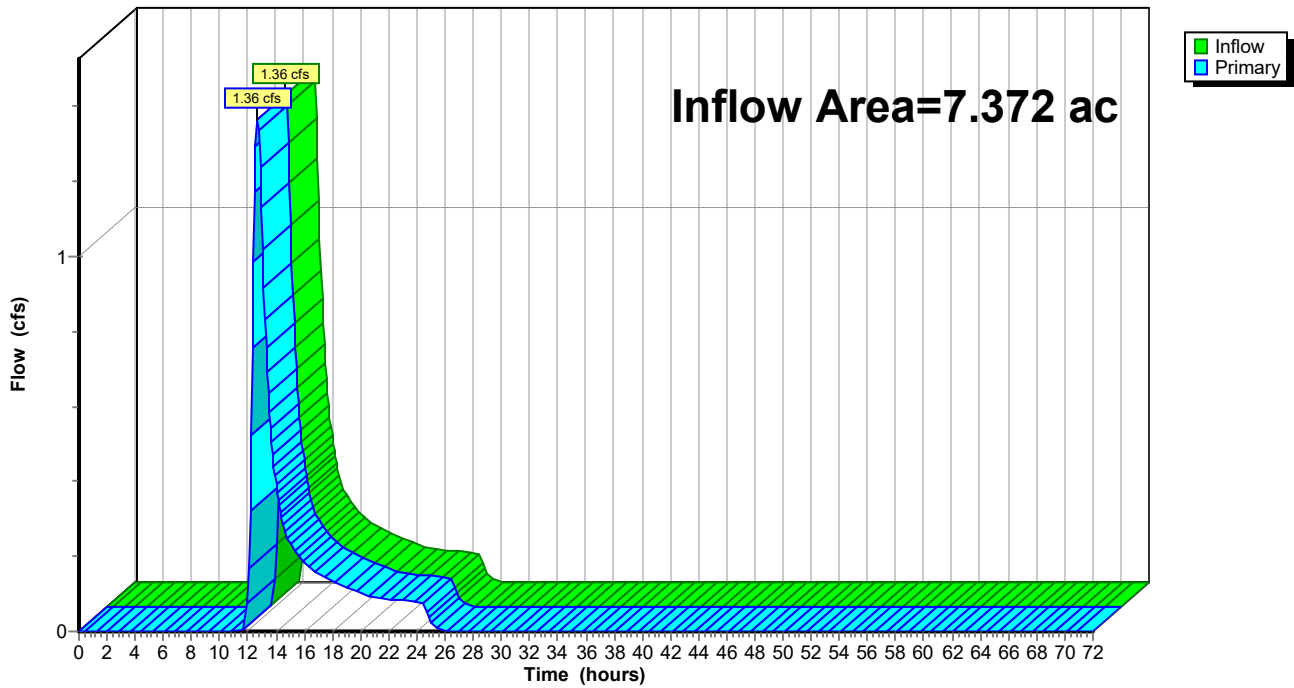
Summary for Link 2L: DP-48

Inflow Area = 7.372 ac, 0.00% Impervious, Inflow Depth = 0.41" for 1 Year event
Inflow = 1.36 cfs @ 12.69 hrs, Volume= 0.253 af
Primary = 1.36 cfs @ 12.69 hrs, Volume= 0.253 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 2L: DP-48

Hydrograph



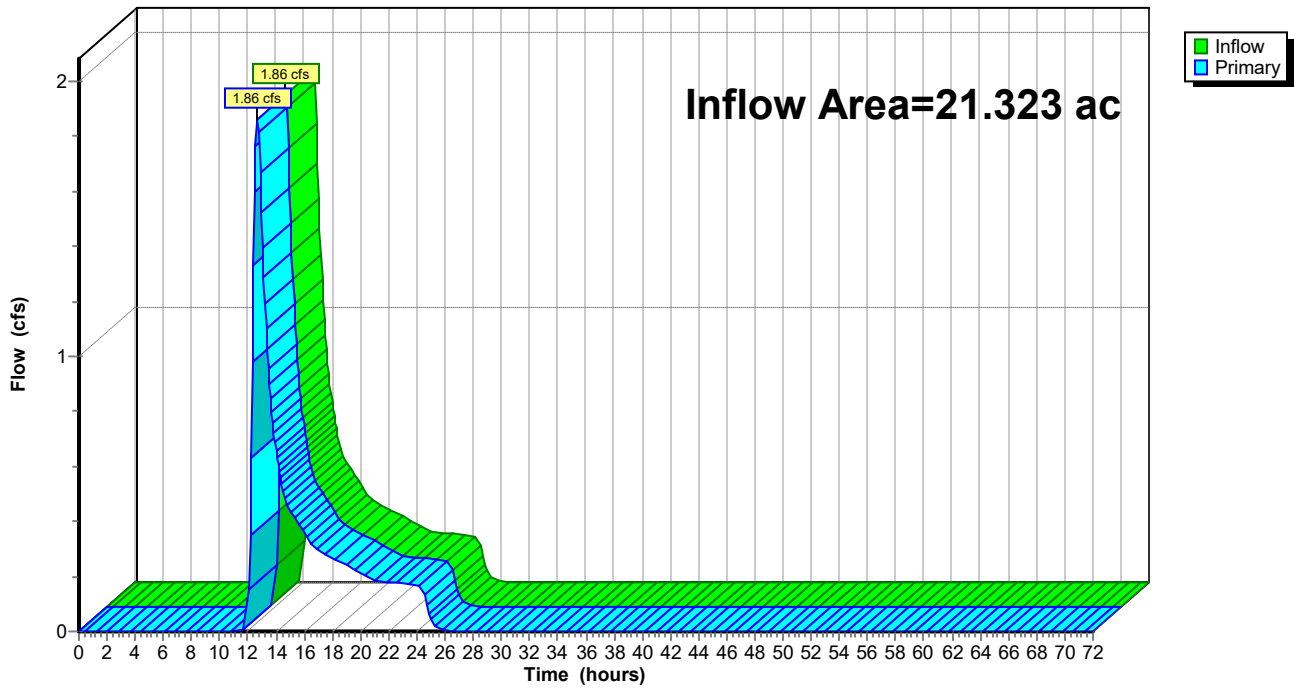
Summary for Link 3L: DP-50

Inflow Area = 21.323 ac, 0.00% Impervious, Inflow Depth = 0.24" for 1 Year event
Inflow = 1.86 cfs @ 12.68 hrs, Volume= 0.420 af
Primary = 1.86 cfs @ 12.68 hrs, Volume= 0.420 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 3L: DP-50

Hydrograph



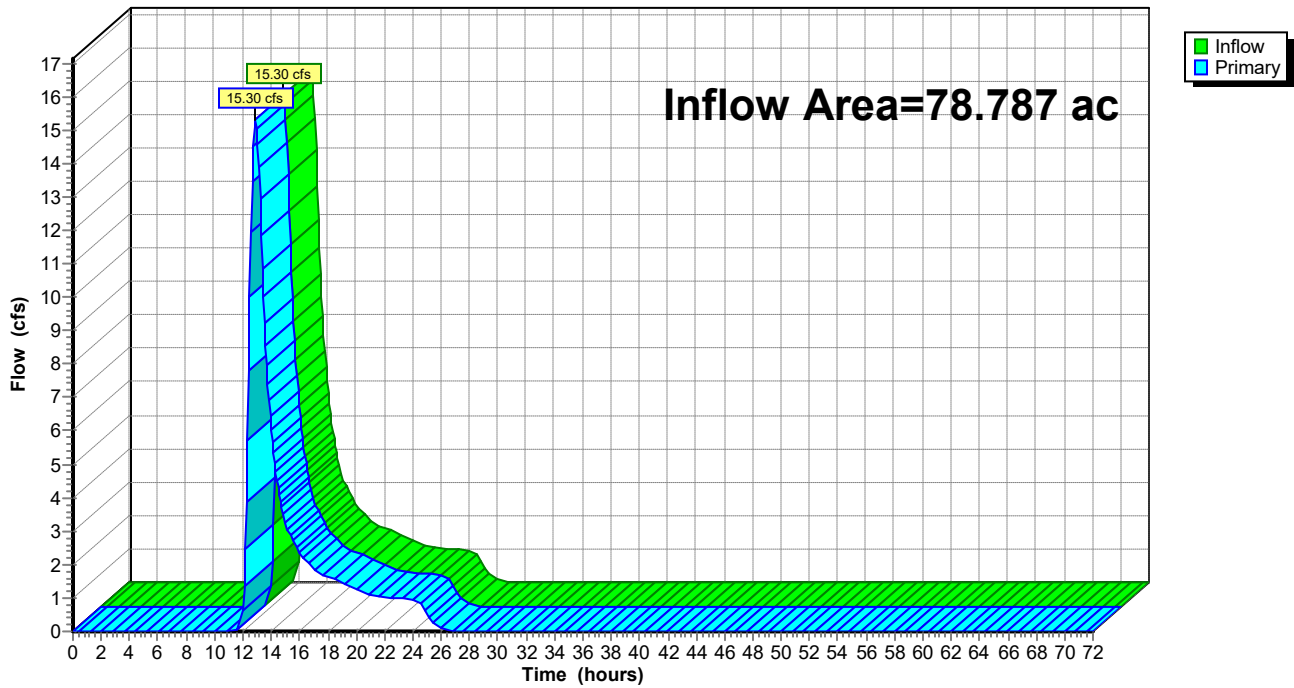
Summary for Link 4L: DP-46

Inflow Area = 78.787 ac, 0.00% Impervious, Inflow Depth = 0.48" for 1 Year event
Inflow = 15.30 cfs @ 12.88 hrs, Volume= 3.179 af
Primary = 15.30 cfs @ 12.88 hrs, Volume= 3.179 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 4L: DP-46

Hydrograph



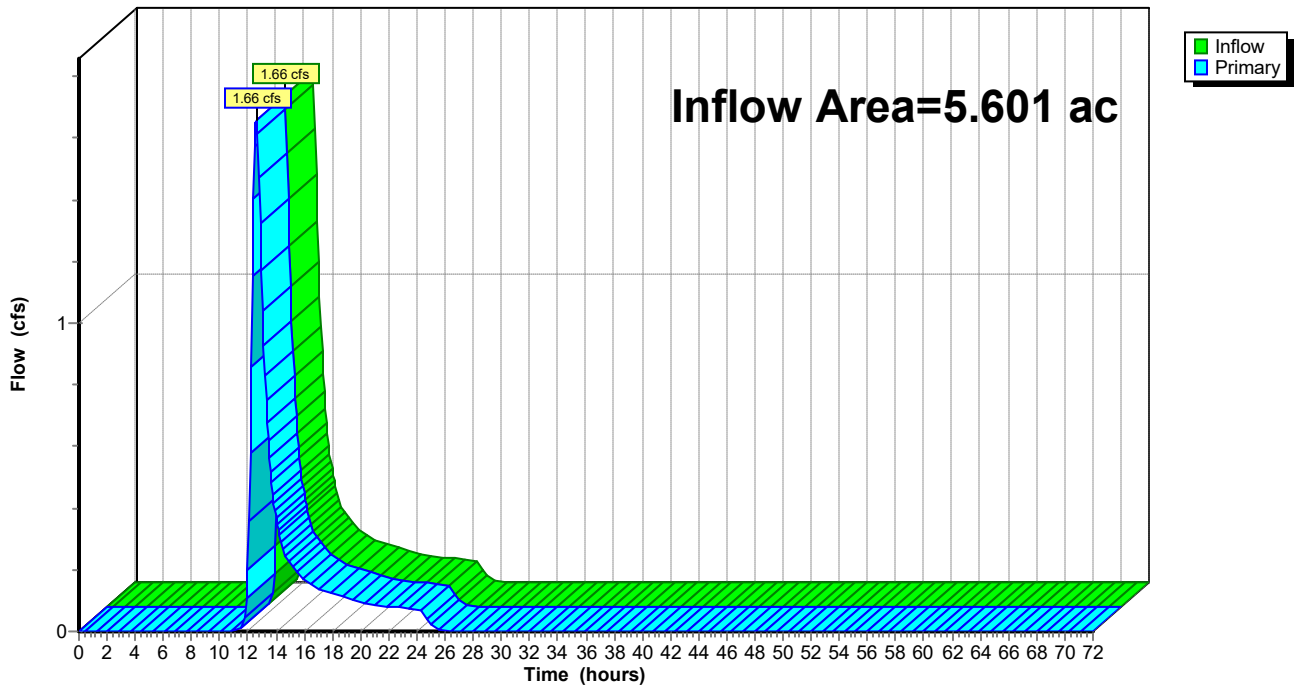
Summary for Link 5L: DP-47

Inflow Area = 5.601 ac, 0.00% Impervious, Inflow Depth = 0.57" for 1 Year event
Inflow = 1.66 cfs @ 12.60 hrs, Volume= 0.264 af
Primary = 1.66 cfs @ 12.60 hrs, Volume= 0.264 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 5L: DP-47

Hydrograph



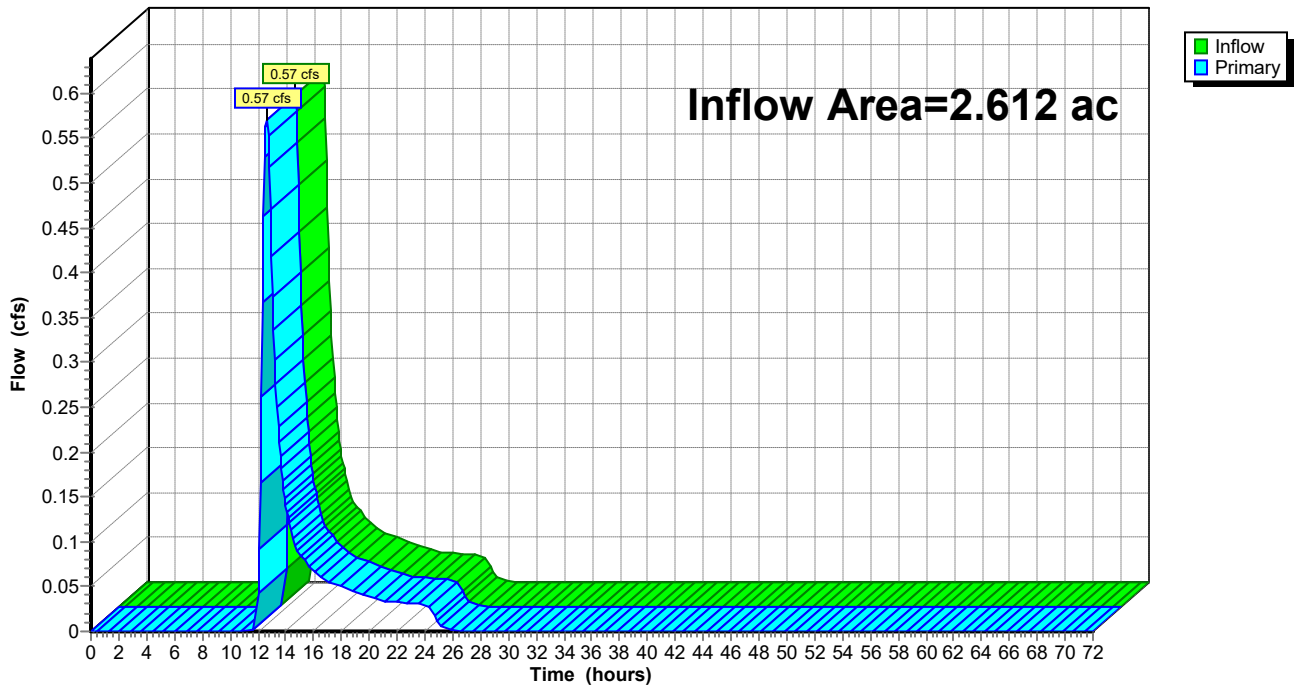
Summary for Link 6L: DP-45

Inflow Area = 2.612 ac, 0.00% Impervious, Inflow Depth = 0.45" for 1 Year event
Inflow = 0.57 cfs @ 12.62 hrs, Volume= 0.097 af
Primary = 0.57 cfs @ 12.62 hrs, Volume= 0.097 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 6L: DP-45

Hydrograph



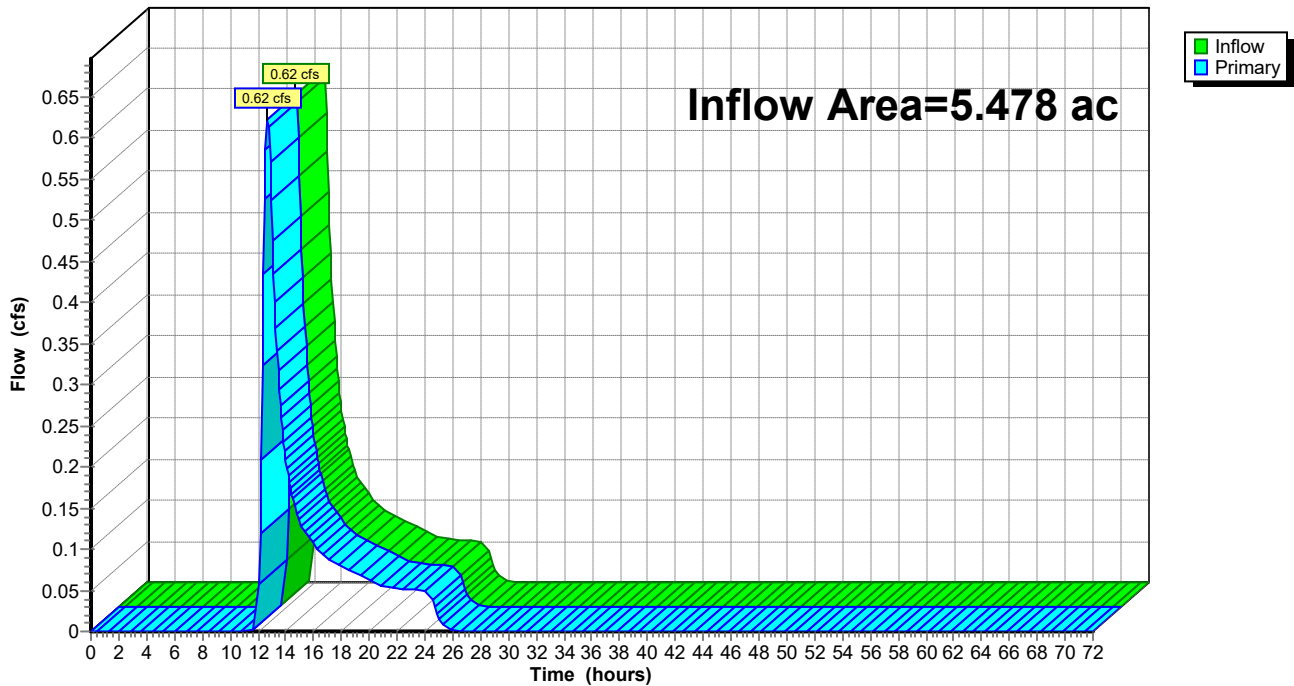
Summary for Link 7L: DP-43

Inflow Area = 5.478 ac, 0.00% Impervious, Inflow Depth = 0.29" for 1 Year event
Inflow = 0.62 cfs @ 12.70 hrs, Volume= 0.131 af
Primary = 0.62 cfs @ 12.70 hrs, Volume= 0.131 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 7L: DP-43

Hydrograph



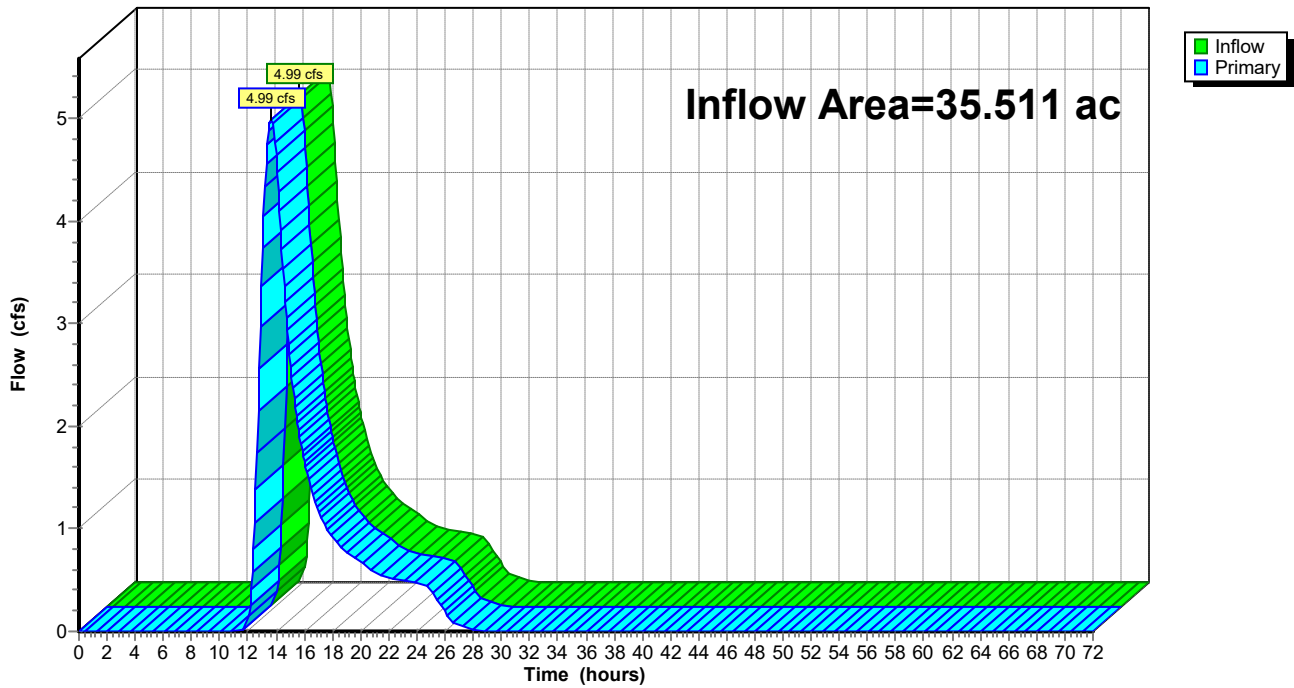
Summary for Link 8L: DP-44

Inflow Area = 35.511 ac, 0.00% Impervious, Inflow Depth = 0.52" for 1 Year event
Inflow = 4.99 cfs @ 13.63 hrs, Volume= 1.550 af
Primary = 4.99 cfs @ 13.63 hrs, Volume= 1.550 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 8L: DP-44

Hydrograph



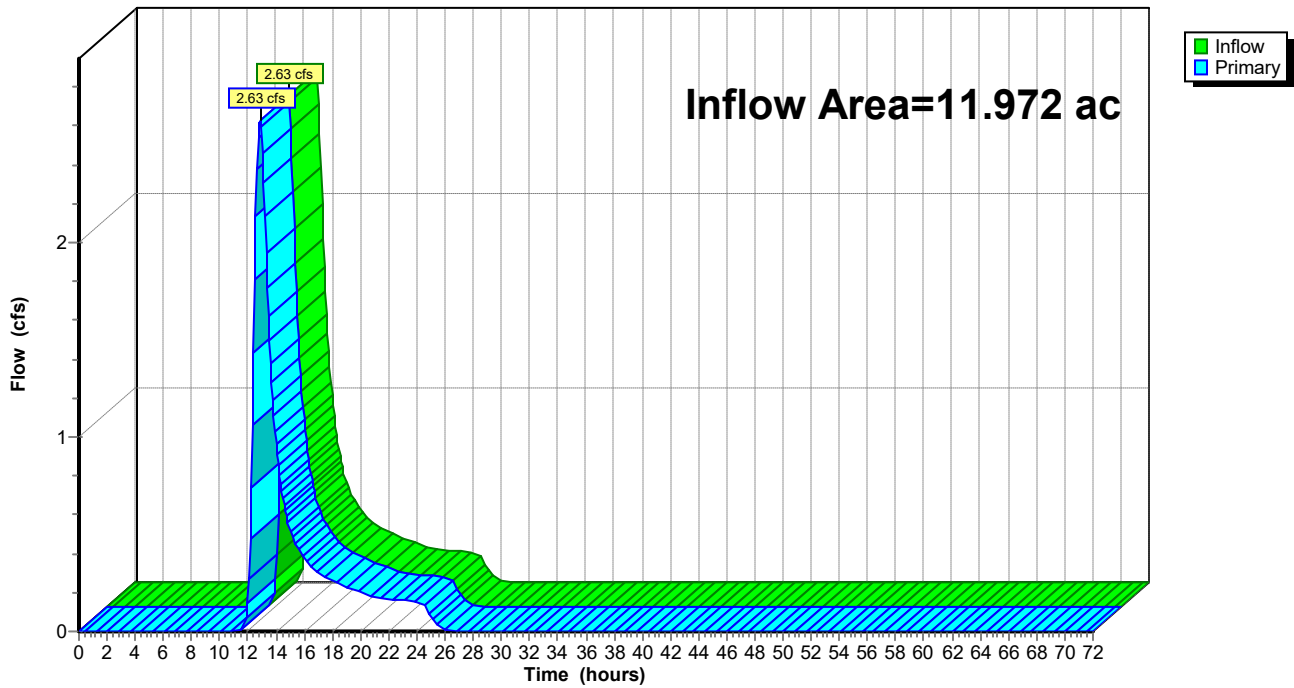
Summary for Link 9L: DP-51

Inflow Area = 11.972 ac, 0.00% Impervious, Inflow Depth = 0.52" for 1 Year event
Inflow = 2.63 cfs @ 12.85 hrs, Volume= 0.523 af
Primary = 2.63 cfs @ 12.85 hrs, Volume= 0.523 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 9L: DP-51

Hydrograph



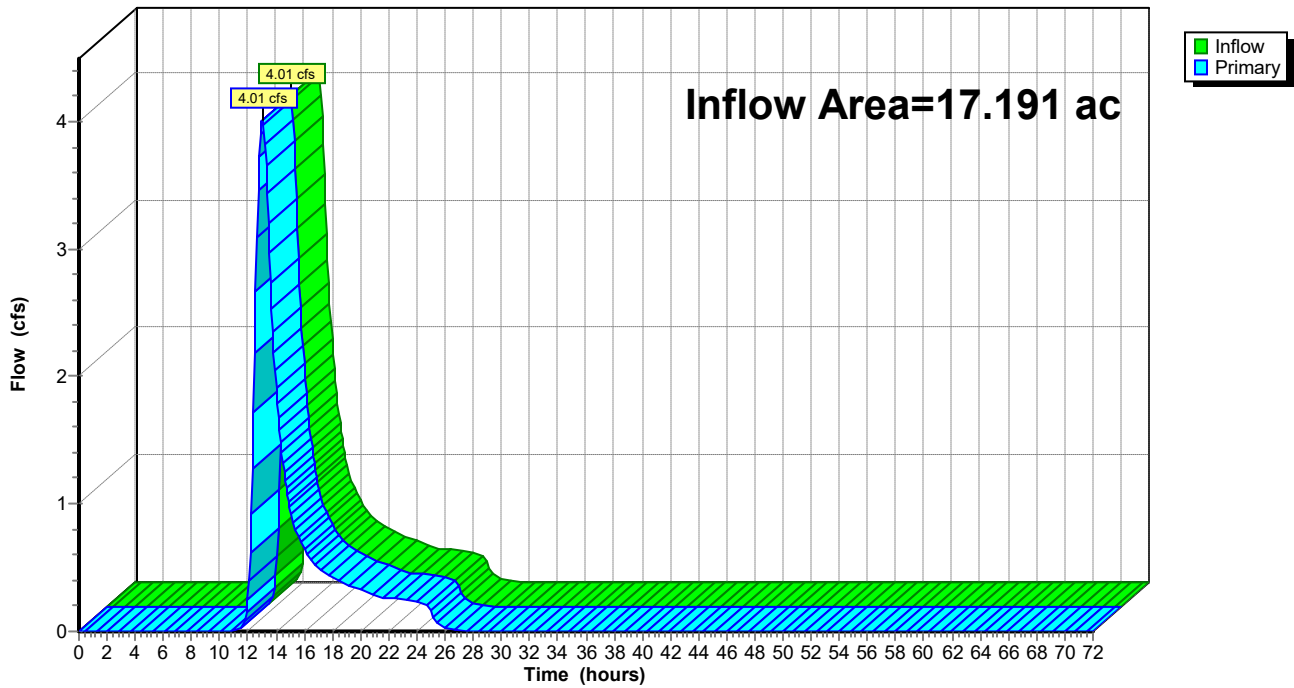
Summary for Link 10L: DP-52

Inflow Area = 17.191 ac, 0.00% Impervious, Inflow Depth = 0.61" for 1 Year event
Inflow = 4.01 cfs @ 13.00 hrs, Volume= 0.874 af
Primary = 4.01 cfs @ 13.00 hrs, Volume= 0.874 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 10L: DP-52

Hydrograph



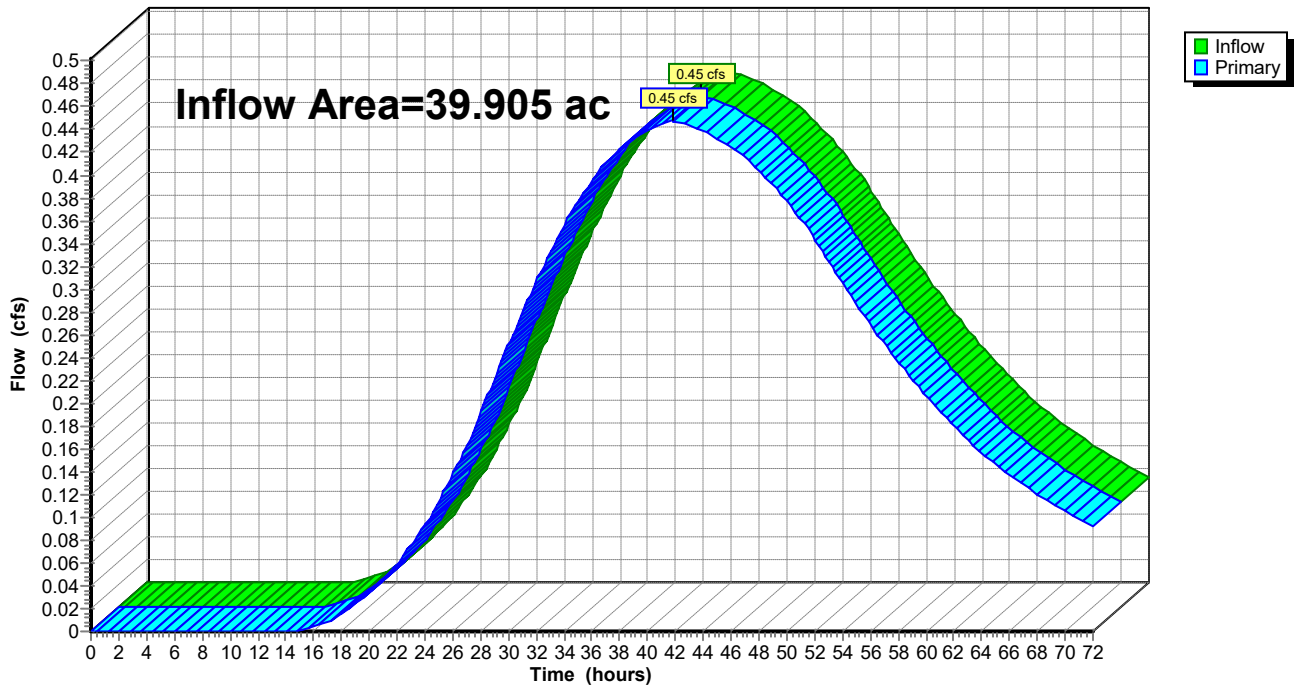
Summary for Link 11L: DP-34

Inflow Area = 39.905 ac, 0.00% Impervious, Inflow Depth > 0.34" for 1 Year event
Inflow = 0.45 cfs @ 41.81 hrs, Volume= 1.142 af
Primary = 0.45 cfs @ 41.81 hrs, Volume= 1.142 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 11L: DP-34

Hydrograph



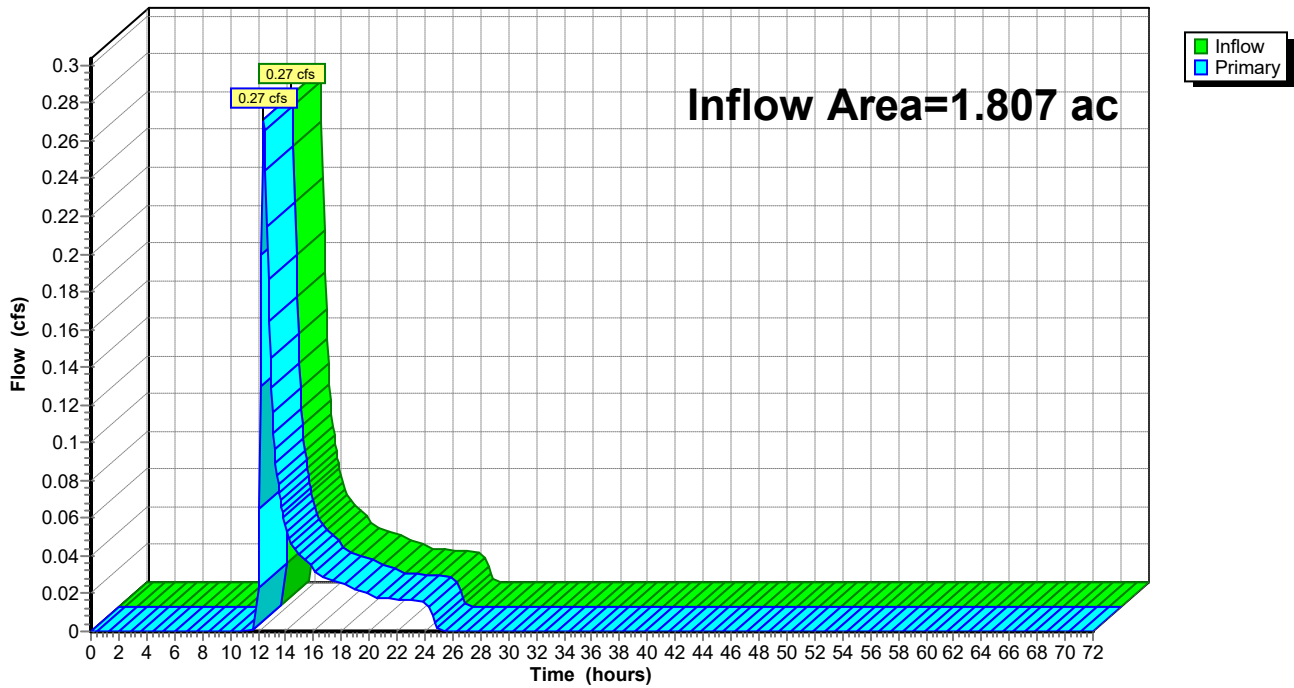
Summary for Link 12L: DP-3

Inflow Area = 1.807 ac, 0.00% Impervious, Inflow Depth = 0.29" for 1 Year event
Inflow = 0.27 cfs @ 12.43 hrs, Volume= 0.043 af
Primary = 0.27 cfs @ 12.43 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 12L: DP-3

Hydrograph



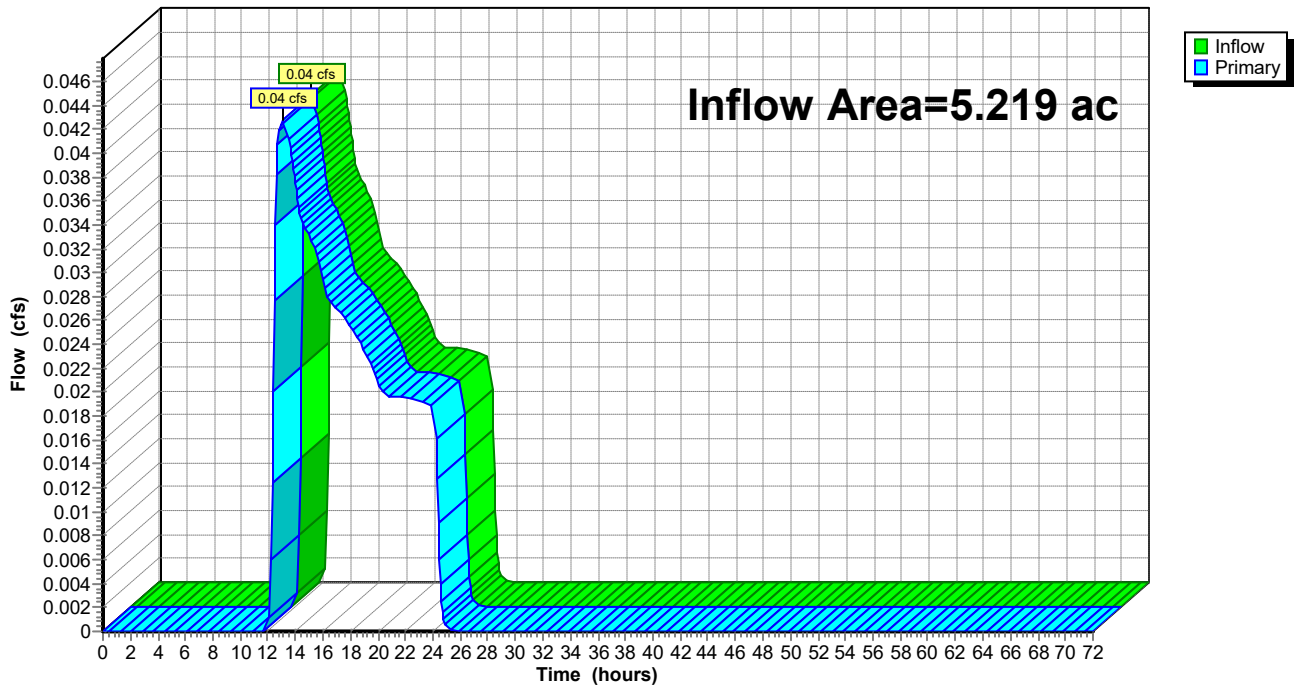
Summary for Link 13L: DP-1

Inflow Area = 5.219 ac, 0.00% Impervious, Inflow Depth = 0.06" for 1 Year event
Inflow = 0.04 cfs @ 13.07 hrs, Volume= 0.026 af
Primary = 0.04 cfs @ 13.07 hrs, Volume= 0.026 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 13L: DP-1

Hydrograph



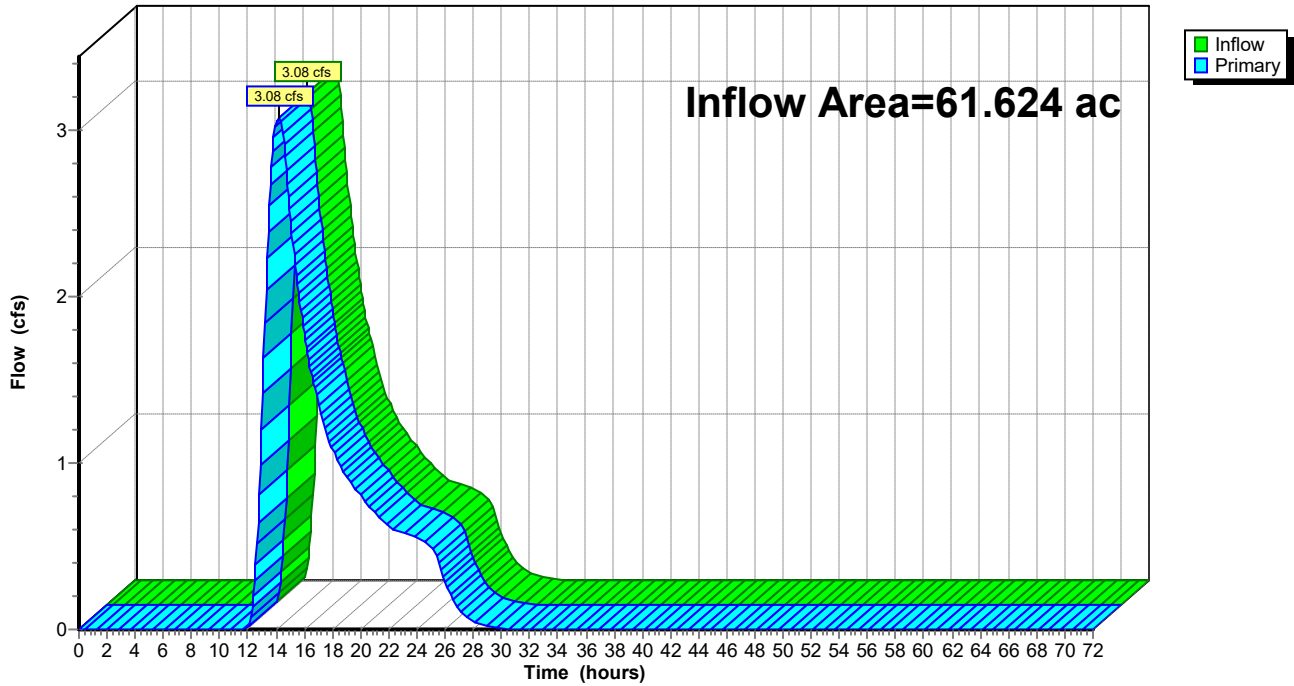
Summary for Link 14L: DP-5

Inflow Area = 61.624 ac, 0.00% Impervious, Inflow Depth = 0.26" for 1 Year event
Inflow = 3.08 cfs @ 14.20 hrs, Volume= 1.343 af
Primary = 3.08 cfs @ 14.20 hrs, Volume= 1.343 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 14L: DP-5

Hydrograph



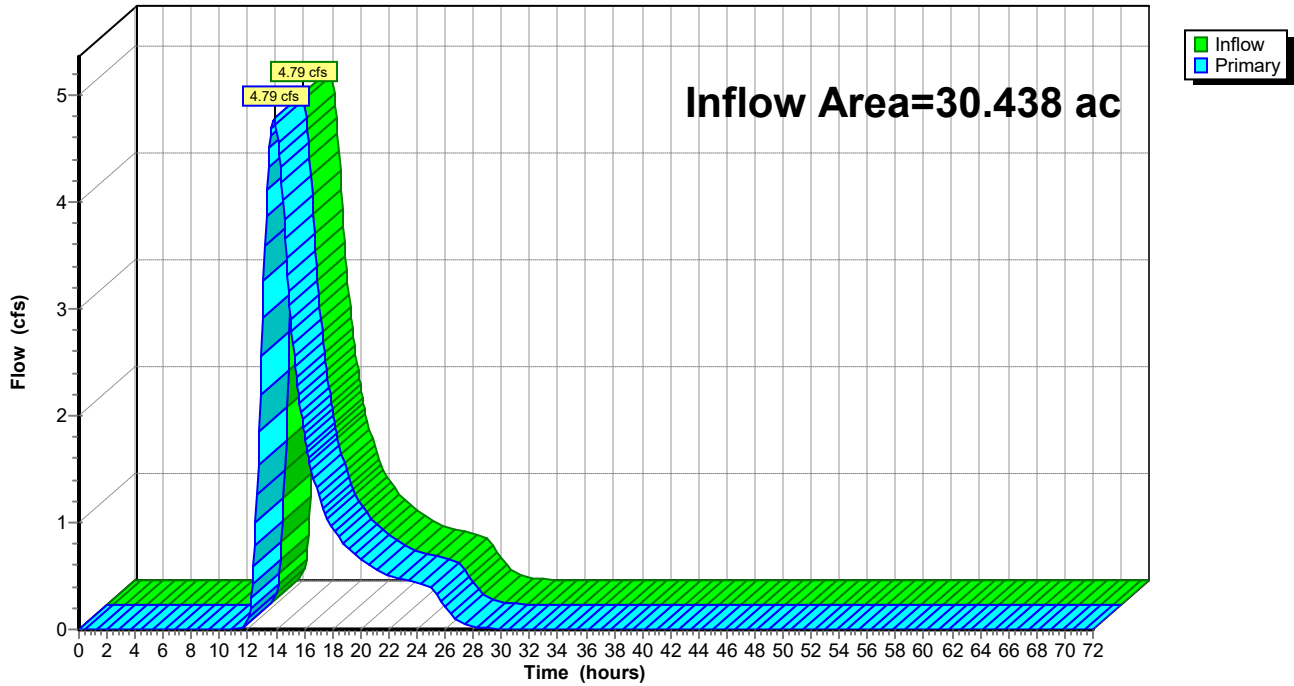
Summary for Link 15L: DP-7

Inflow Area = 30.438 ac, 0.00% Impervious, Inflow Depth = 0.61" for 1 Year event
Inflow = 4.79 cfs @ 13.85 hrs, Volume= 1.548 af
Primary = 4.79 cfs @ 13.85 hrs, Volume= 1.548 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 15L: DP-7

Hydrograph



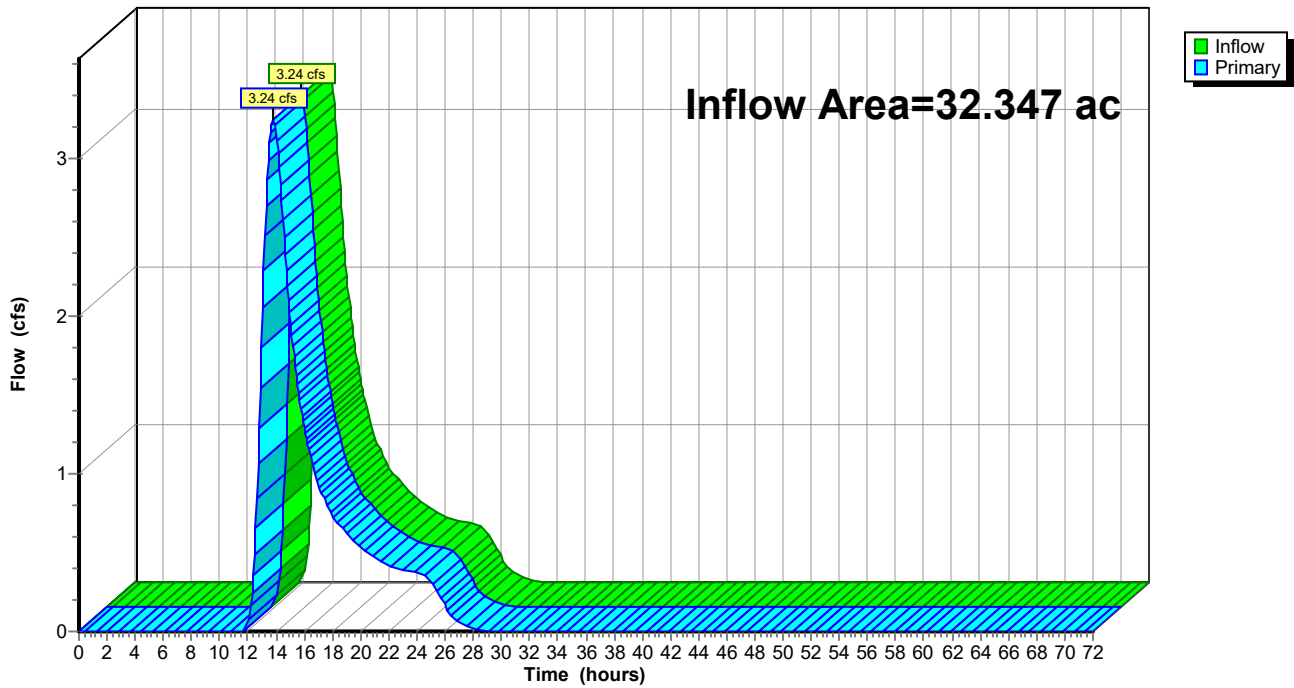
Summary for Link 16L: DP-53

Inflow Area = 32.347 ac, 0.00% Impervious, Inflow Depth = 0.41" for 1 Year event
Inflow = 3.24 cfs @ 13.81 hrs, Volume= 1.108 af
Primary = 3.24 cfs @ 13.81 hrs, Volume= 1.108 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 16L: DP-53

Hydrograph



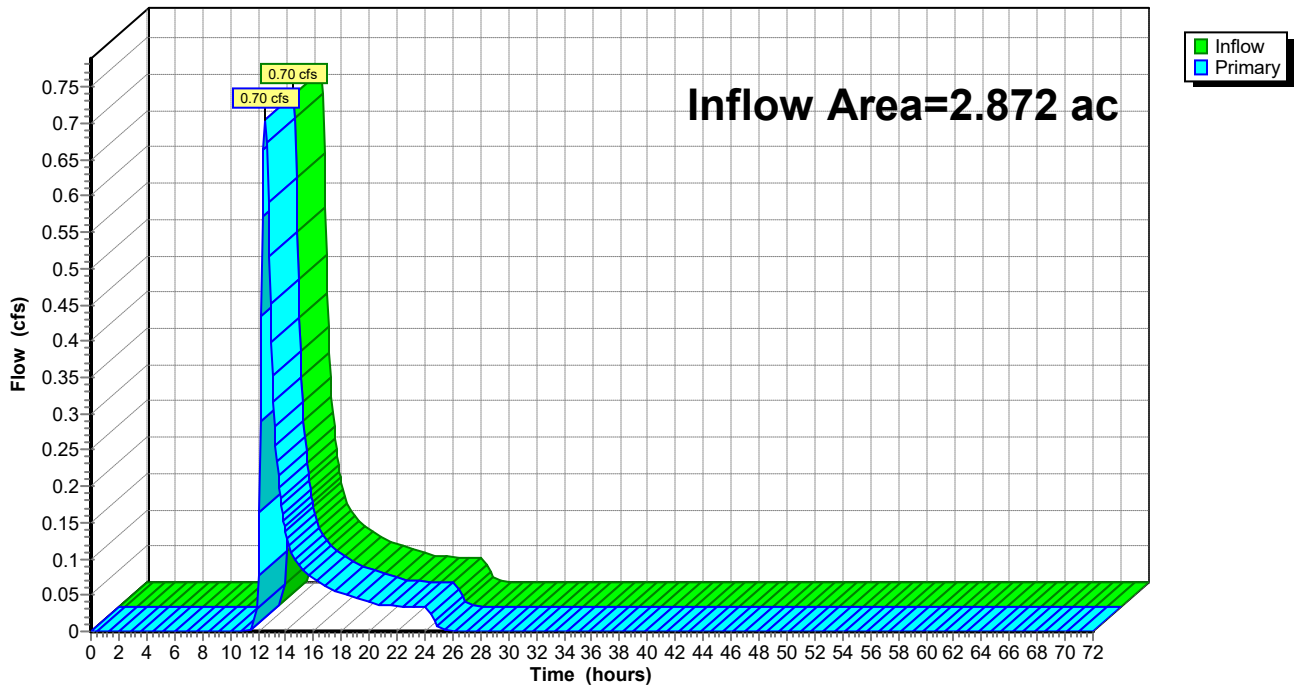
Summary for Link 17L: DP-54

Inflow Area = 2.872 ac, 0.00% Impervious, Inflow Depth = 0.45" for 1 Year event
Inflow = 0.70 cfs @ 12.51 hrs, Volume= 0.107 af
Primary = 0.70 cfs @ 12.51 hrs, Volume= 0.107 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 17L: DP-54

Hydrograph



Summary for Link 18L: DP-8

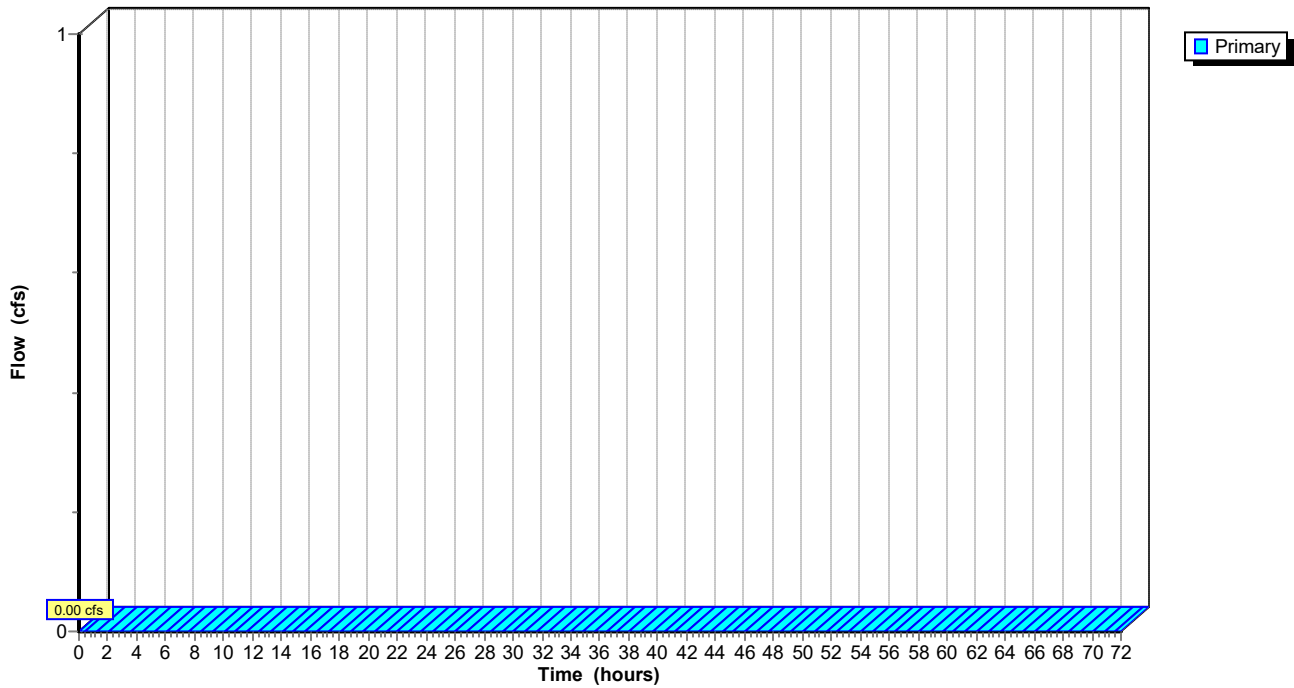
[43] Hint: Has no inflow (Outflow=Zero)

Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 18L: DP-8

Hydrograph



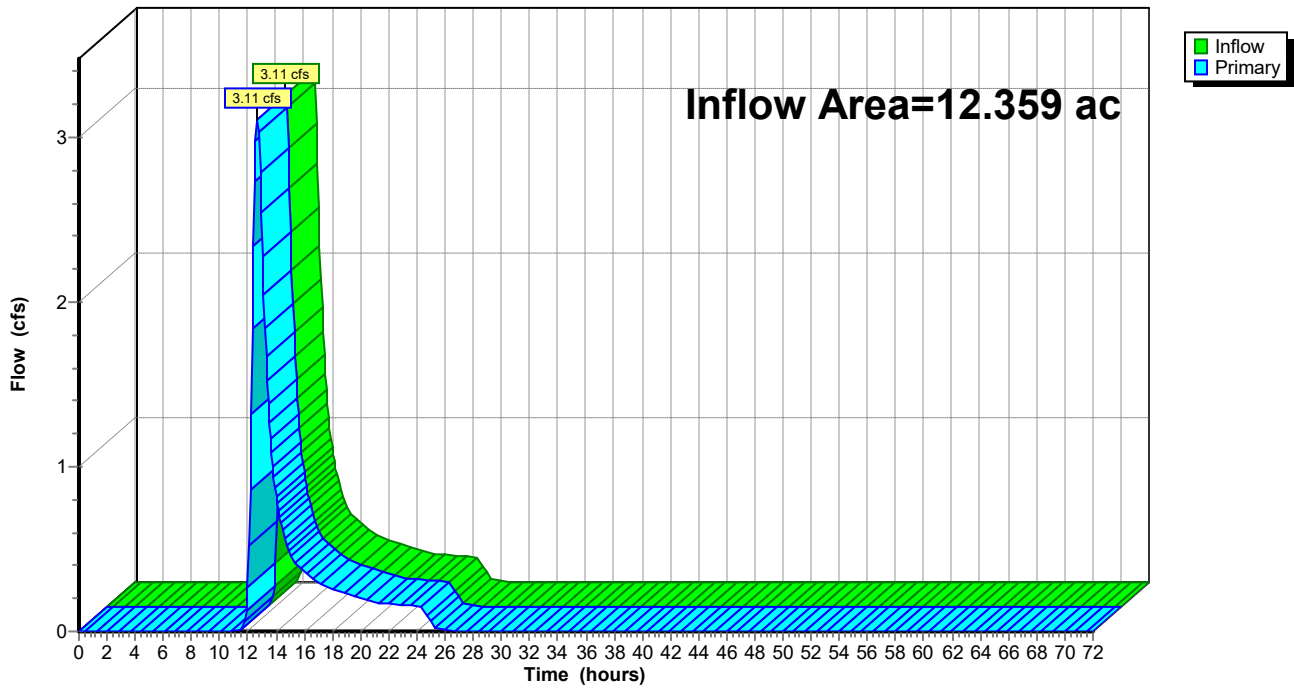
Summary for Link 19L: DP-9

Inflow Area = 12.359 ac, 0.00% Impervious, Inflow Depth = 0.52" for 1 Year event
Inflow = 3.11 cfs @ 12.67 hrs, Volume= 0.540 af
Primary = 3.11 cfs @ 12.67 hrs, Volume= 0.540 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 19L: DP-9

Hydrograph



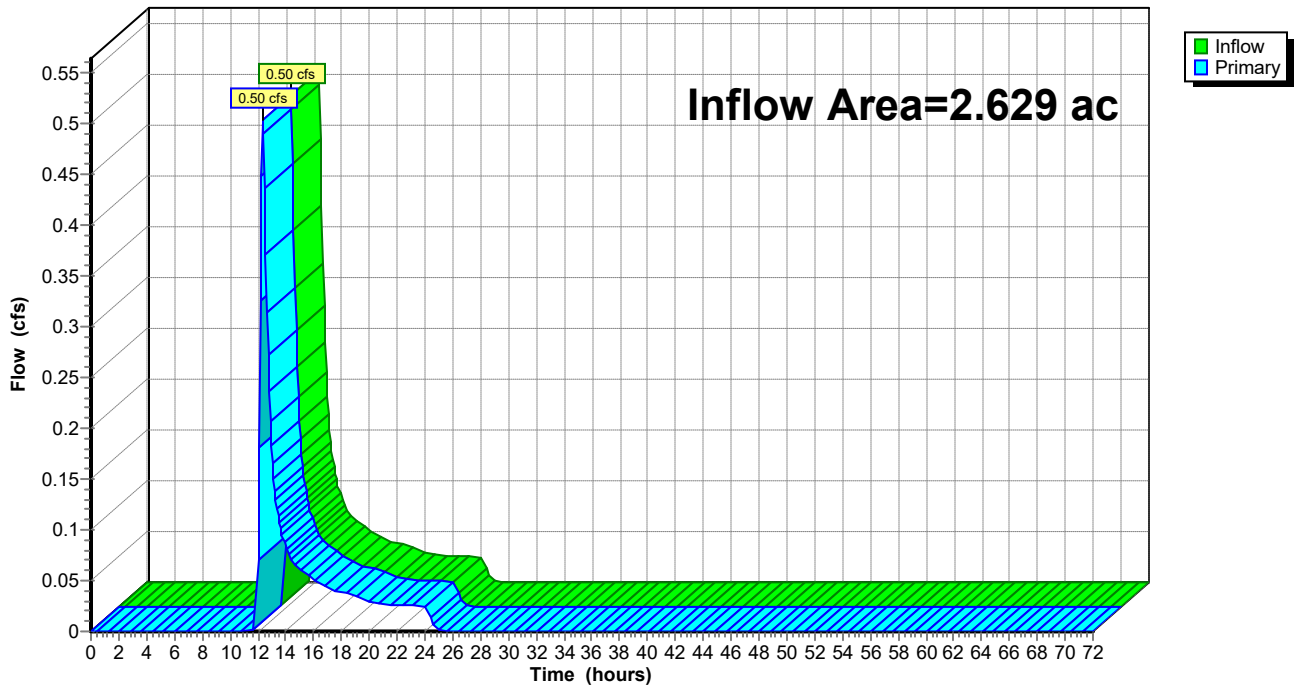
Summary for Link 20L: DP-10

Inflow Area = 2.629 ac, 0.00% Impervious, Inflow Depth = 0.32" for 1 Year event
Inflow = 0.50 cfs @ 12.35 hrs, Volume= 0.069 af
Primary = 0.50 cfs @ 12.35 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 20L: DP-10

Hydrograph



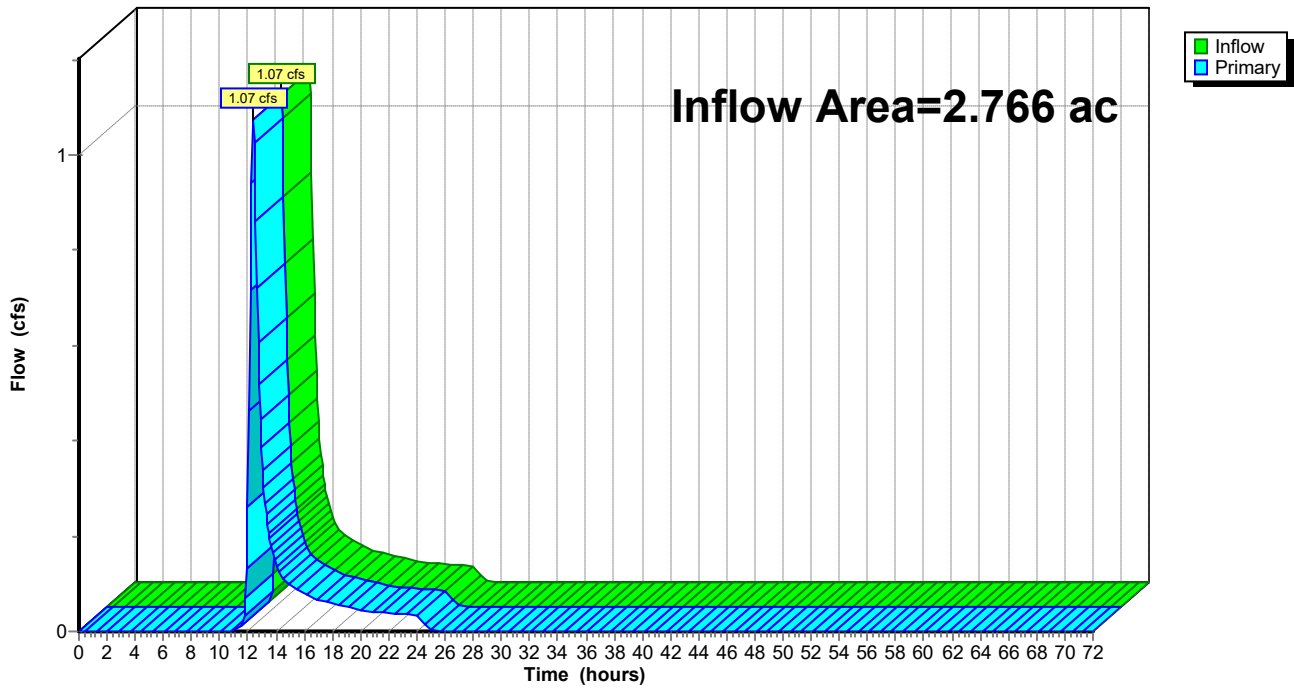
Summary for Link 21L: DP-11

Inflow Area = 2.766 ac, 0.00% Impervious, Inflow Depth = 0.57" for 1 Year event
Inflow = 1.07 cfs @ 12.36 hrs, Volume= 0.130 af
Primary = 1.07 cfs @ 12.36 hrs, Volume= 0.130 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 21L: DP-11

Hydrograph



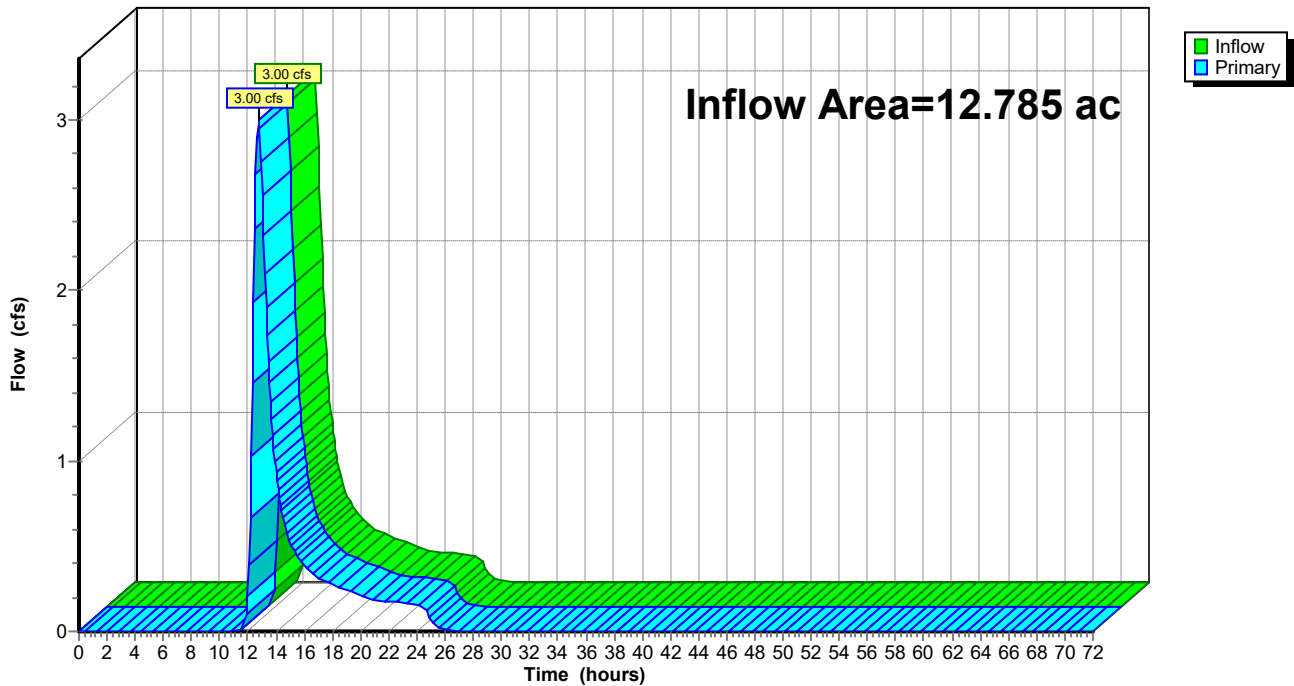
Summary for Link 22L: DP-13

Inflow Area = 12.785 ac, 0.00% Impervious, Inflow Depth = 0.52" for 1 Year event
Inflow = 3.00 cfs @ 12.77 hrs, Volume= 0.558 af
Primary = 3.00 cfs @ 12.77 hrs, Volume= 0.558 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 22L: DP-13

Hydrograph



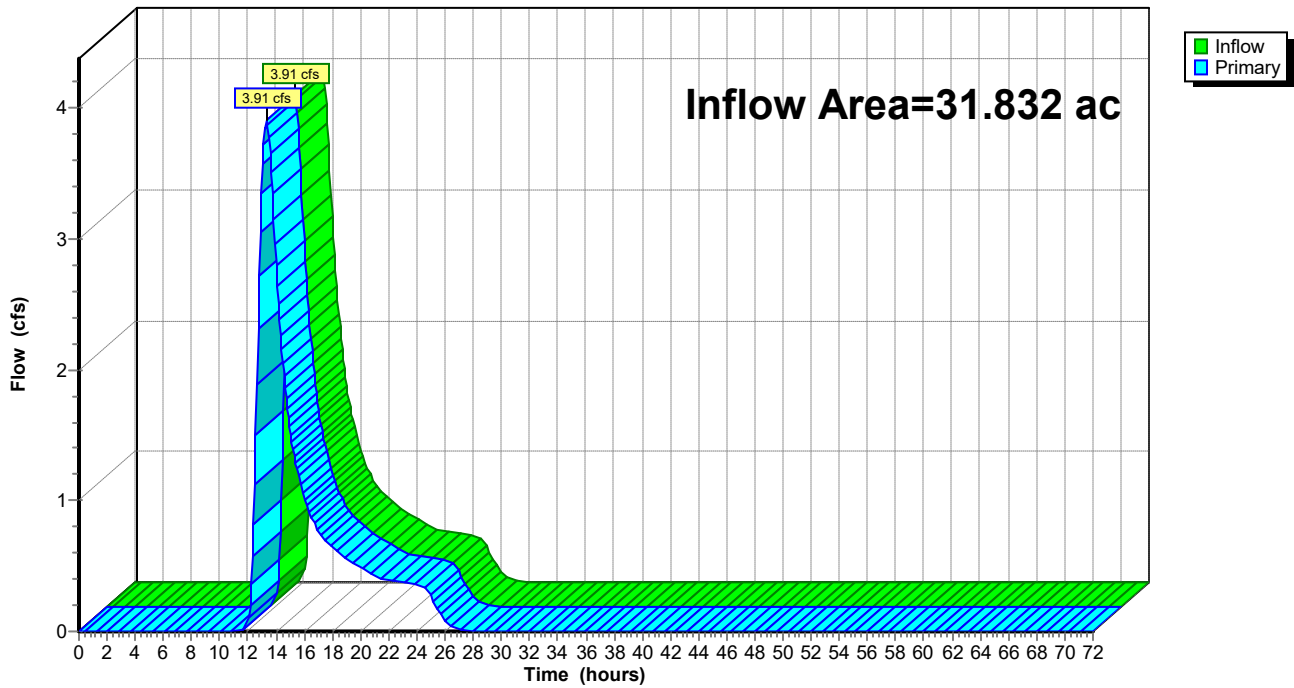
Summary for Link 23L: DP-12

Inflow Area = 31.832 ac, 0.00% Impervious, Inflow Depth = 0.41" for 1 Year event
Inflow = 3.91 cfs @ 13.31 hrs, Volume= 1.091 af
Primary = 3.91 cfs @ 13.31 hrs, Volume= 1.091 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 23L: DP-12

Hydrograph



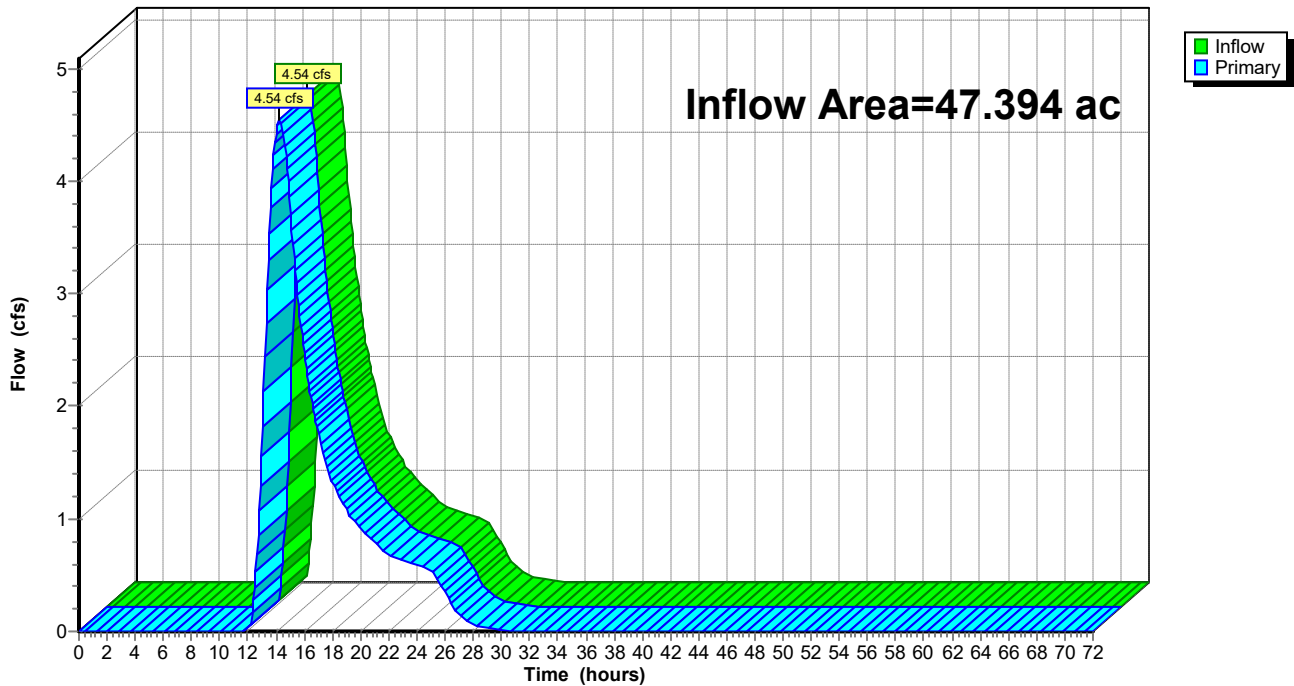
Summary for Link 24L: DP-14

Inflow Area = 47.394 ac, 0.00% Impervious, Inflow Depth = 0.45" for 1 Year event
Inflow = 4.54 cfs @ 14.19 hrs, Volume= 1.764 af
Primary = 4.54 cfs @ 14.19 hrs, Volume= 1.764 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 24L: DP-14

Hydrograph



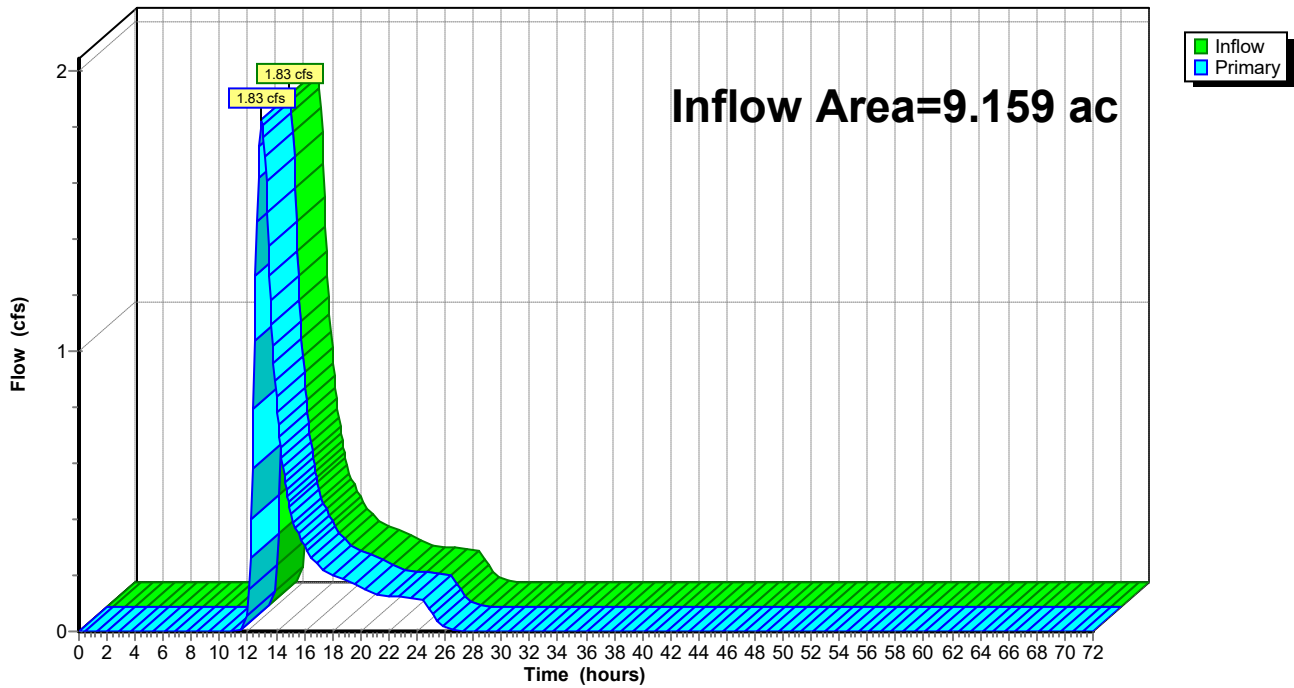
Summary for Link 25L: DP-15

Inflow Area = 9.159 ac, 0.00% Impervious, Inflow Depth = 0.52" for 1 Year event
Inflow = 1.83 cfs @ 12.97 hrs, Volume= 0.400 af
Primary = 1.83 cfs @ 12.97 hrs, Volume= 0.400 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 25L: DP-15

Hydrograph



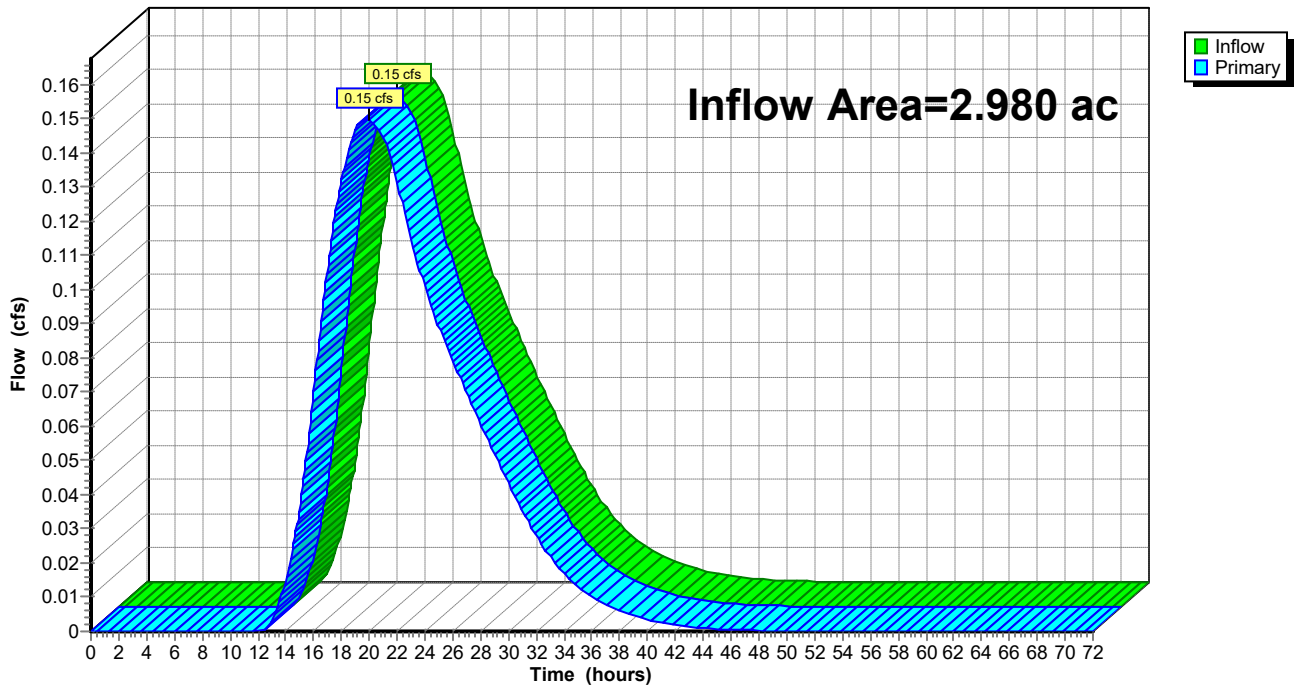
Summary for Link 26L: DP-17

Inflow Area = 2.980 ac, 0.00% Impervious, Inflow Depth = 0.57" for 1 Year event
Inflow = 0.15 cfs @ 19.92 hrs, Volume= 0.141 af
Primary = 0.15 cfs @ 19.92 hrs, Volume= 0.141 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 26L: DP-17

Hydrograph



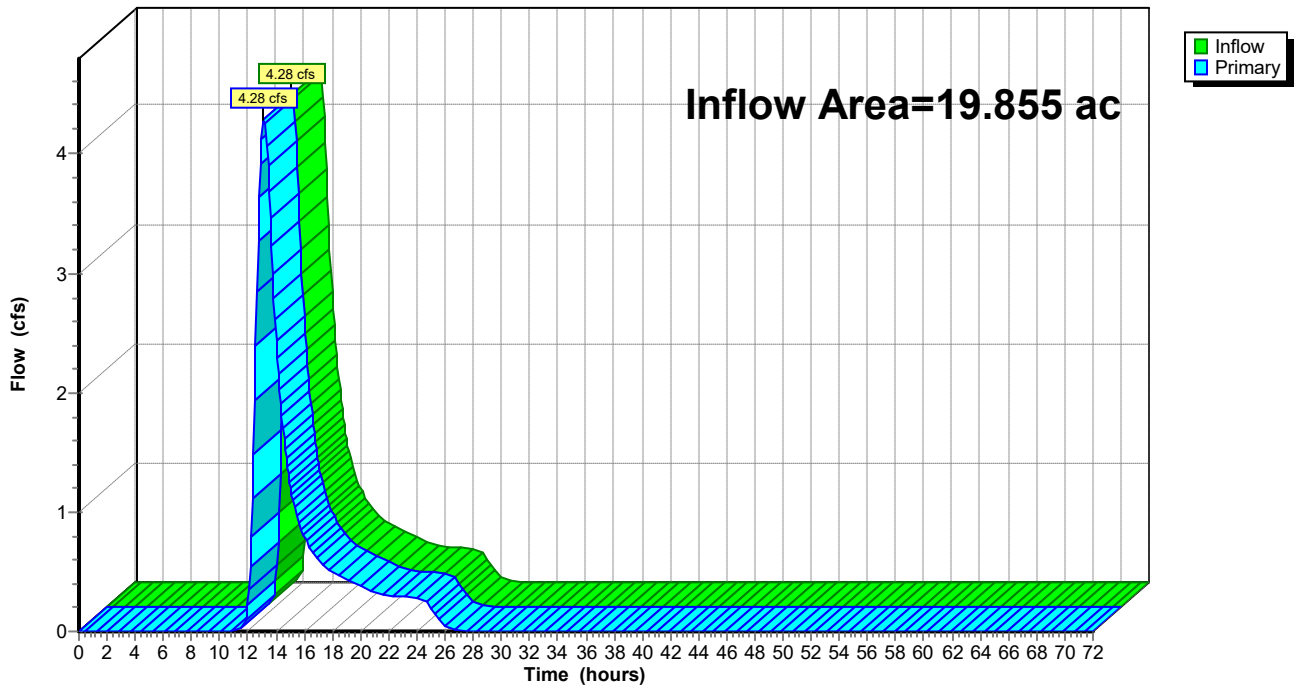
Summary for Link 27L: DP-18

Inflow Area = 19.855 ac, 0.00% Impervious, Inflow Depth = 0.61" for 1 Year event
Inflow = 4.28 cfs @ 13.13 hrs, Volume= 1.010 af
Primary = 4.28 cfs @ 13.13 hrs, Volume= 1.010 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 27L: DP-18

Hydrograph



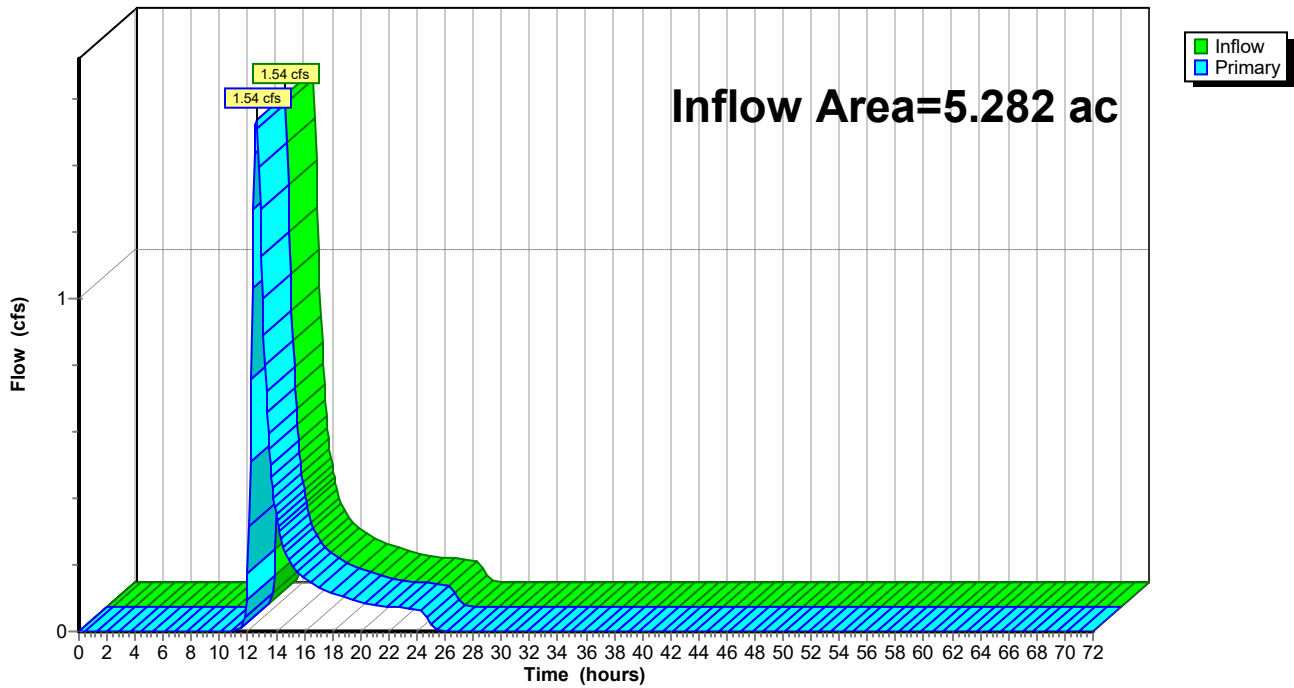
Summary for Link 28L: DP-19

Inflow Area = 5.282 ac, 0.00% Impervious, Inflow Depth = 0.57" for 1 Year event
Inflow = 1.54 cfs @ 12.62 hrs, Volume= 0.249 af
Primary = 1.54 cfs @ 12.62 hrs, Volume= 0.249 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 28L: DP-19

Hydrograph



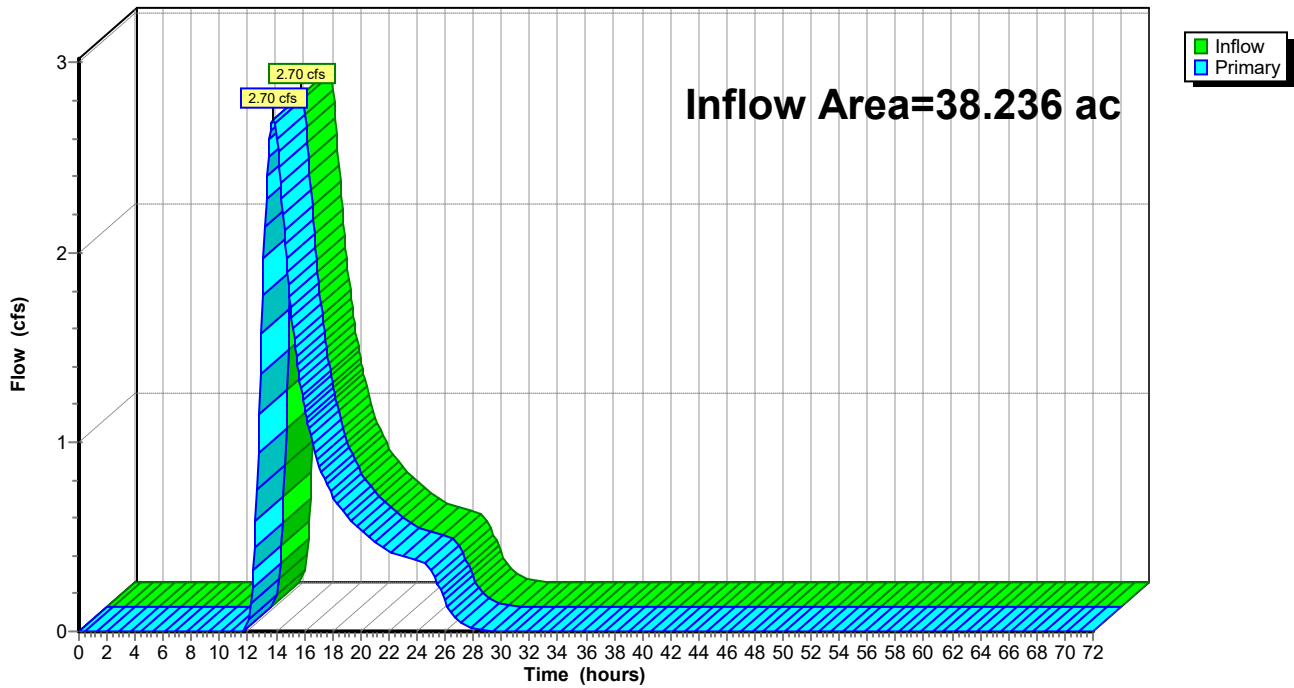
Summary for Link 29L: DP-20

Inflow Area = 38.236 ac, 0.00% Impervious, Inflow Depth = 0.32" for 1 Year event
Inflow = 2.70 cfs @ 13.82 hrs, Volume= 1.007 af
Primary = 2.70 cfs @ 13.82 hrs, Volume= 1.007 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 29L: DP-20

Hydrograph



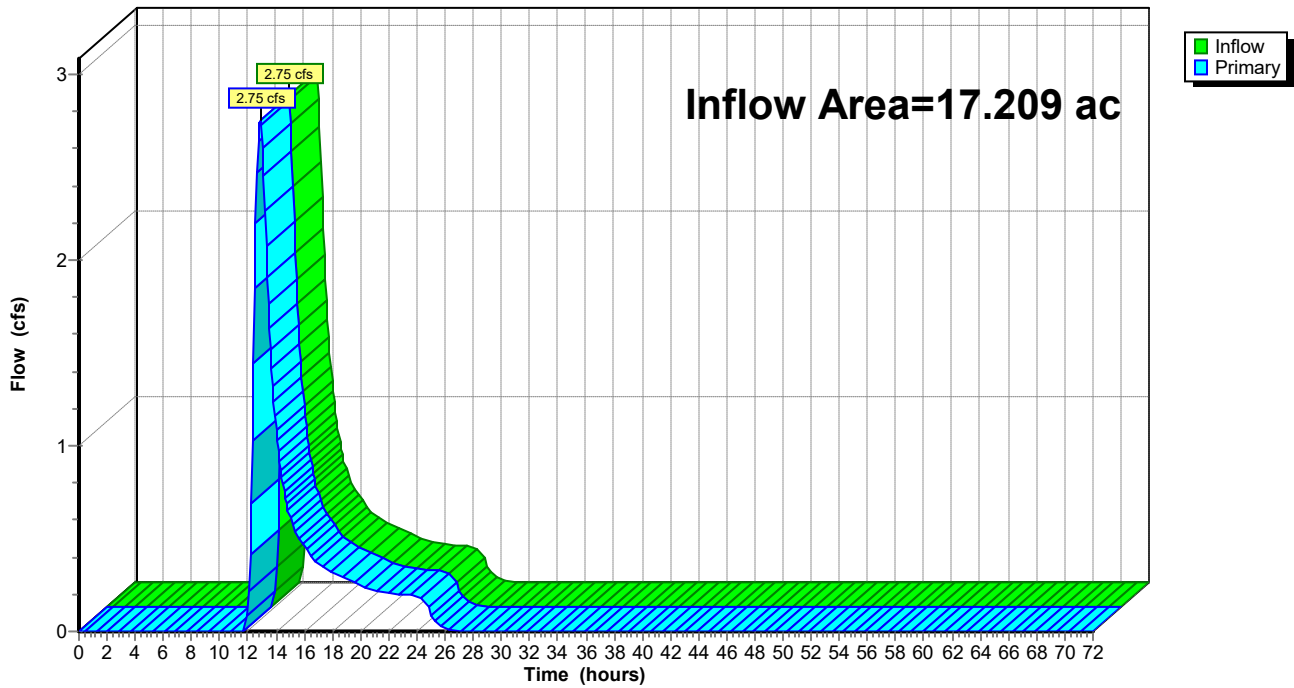
Summary for Link 30L: DP-22

Inflow Area = 17.209 ac, 0.00% Impervious, Inflow Depth = 0.41" for 1 Year event
Inflow = 2.75 cfs @ 12.85 hrs, Volume= 0.590 af
Primary = 2.75 cfs @ 12.85 hrs, Volume= 0.590 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 30L: DP-22

Hydrograph



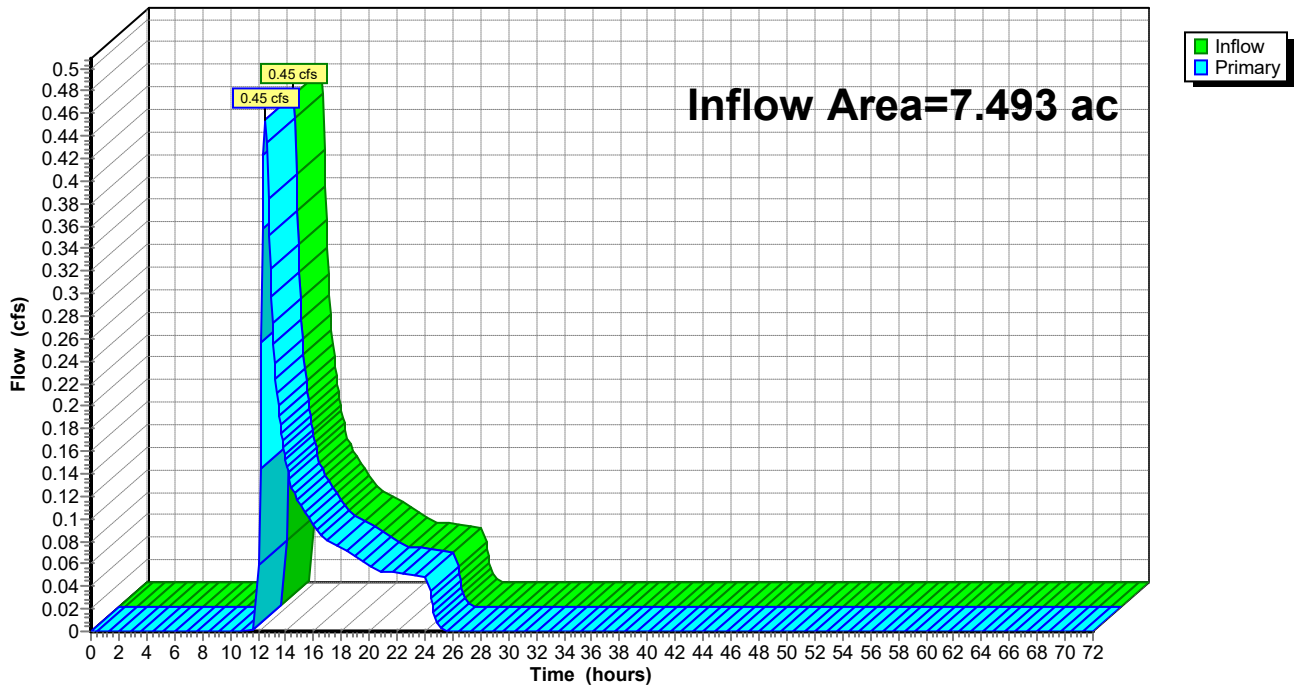
Summary for Link 31L: DP-23

Inflow Area = 7.493 ac, 0.00% Impervious, Inflow Depth = 0.17" for 1 Year event
Inflow = 0.45 cfs @ 12.51 hrs, Volume= 0.106 af
Primary = 0.45 cfs @ 12.51 hrs, Volume= 0.106 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 31L: DP-23

Hydrograph



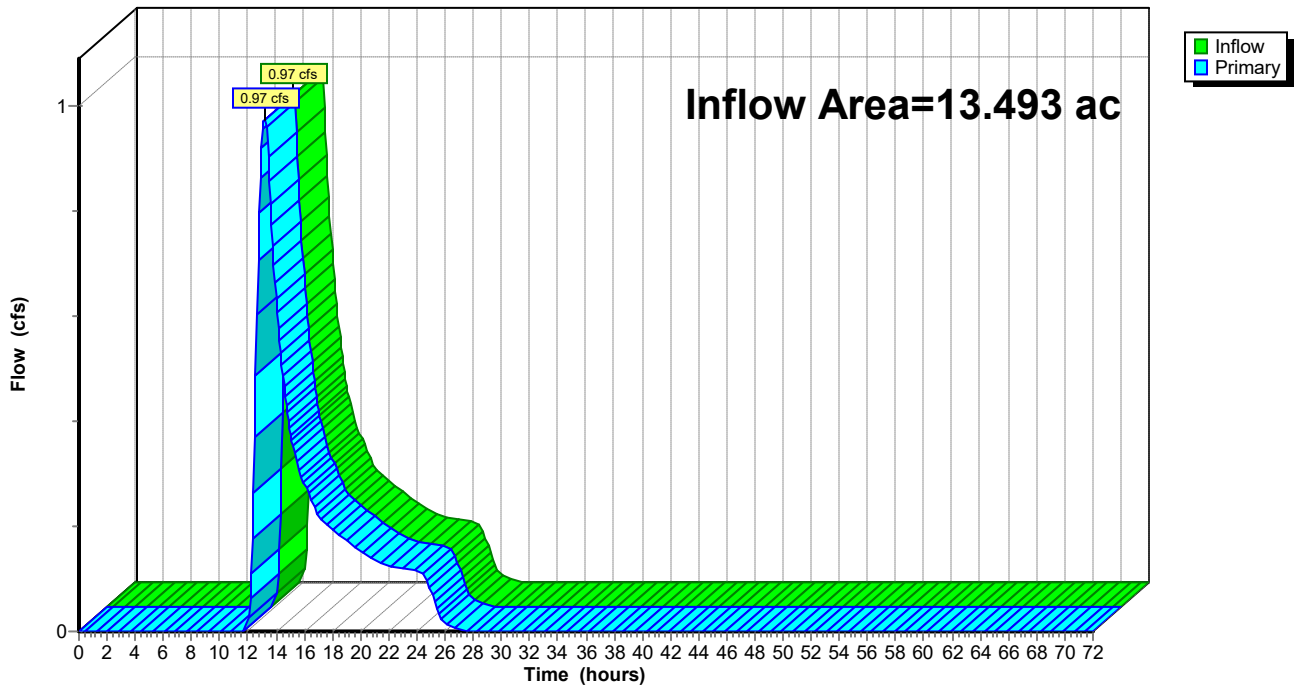
Summary for Link 32L: DP-24

Inflow Area = 13.493 ac, 0.00% Impervious, Inflow Depth = 0.26" for 1 Year event
Inflow = 0.97 cfs @ 13.18 hrs, Volume= 0.294 af
Primary = 0.97 cfs @ 13.18 hrs, Volume= 0.294 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 32L: DP-24

Hydrograph



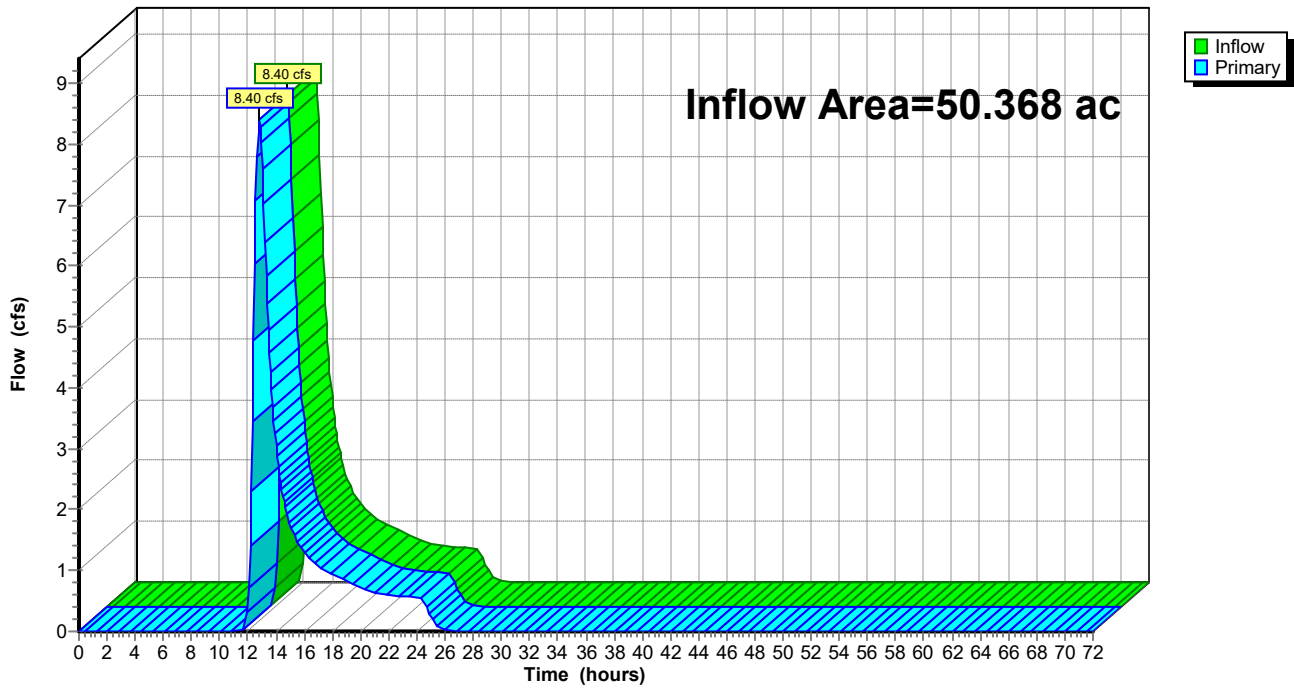
Summary for Link 33L: DP-25

Inflow Area = 50.368 ac, 0.00% Impervious, Inflow Depth = 0.41" for 1 Year event
Inflow = 8.40 cfs @ 12.81 hrs, Volume= 1.726 af
Primary = 8.40 cfs @ 12.81 hrs, Volume= 1.726 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 33L: DP-25

Hydrograph



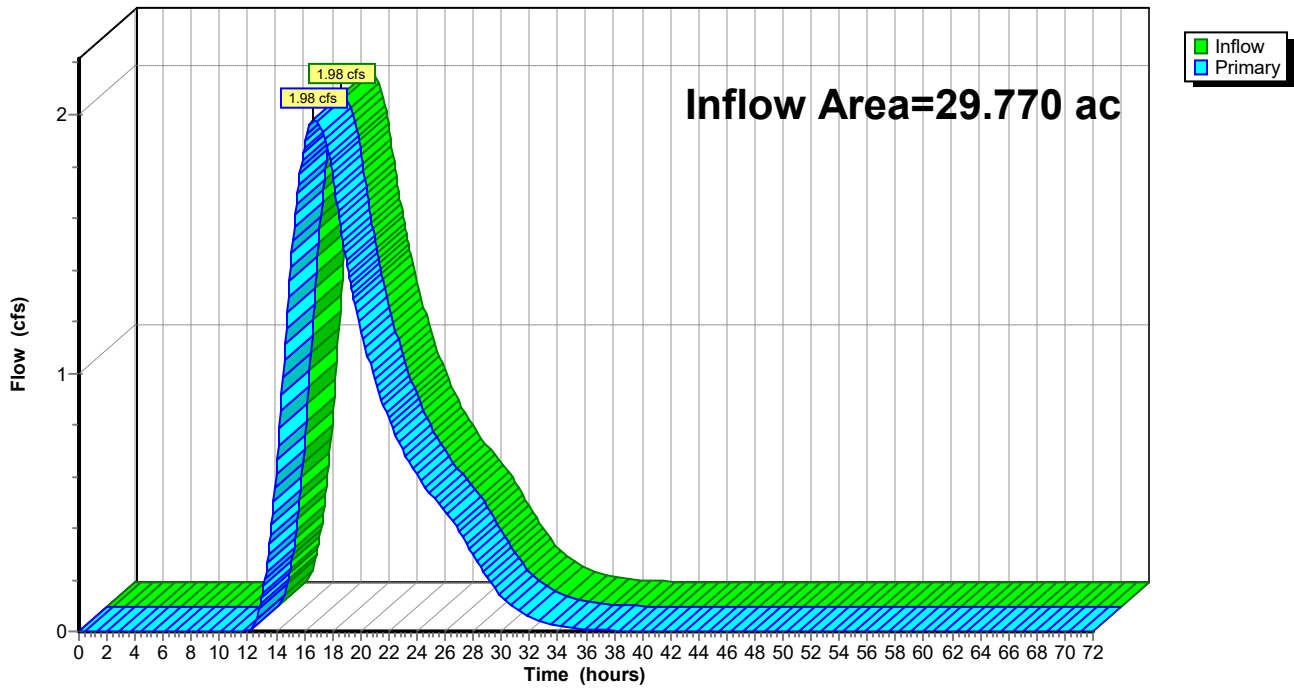
Summary for Link 34L: DP-33

Inflow Area = 29.770 ac, 0.00% Impervious, Inflow Depth = 0.52" for 1 Year event
Inflow = 1.98 cfs @ 16.56 hrs, Volume= 1.300 af
Primary = 1.98 cfs @ 16.56 hrs, Volume= 1.300 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 34L: DP-33

Hydrograph



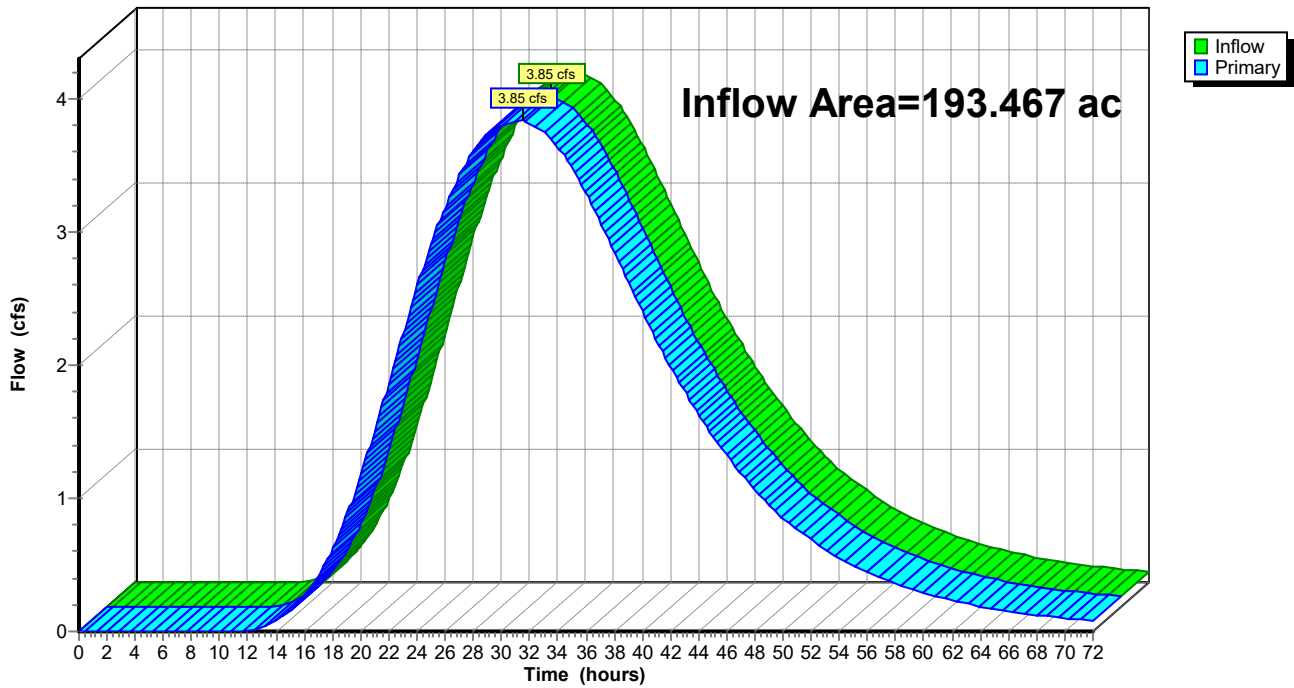
Summary for Link 35L: DP-26

Inflow Area = 193.467 ac, 0.00% Impervious, Inflow Depth > 0.44" for 1 Year event
Inflow = 3.85 cfs @ 31.59 hrs, Volume= 7.149 af
Primary = 3.85 cfs @ 31.59 hrs, Volume= 7.149 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 35L: DP-26

Hydrograph



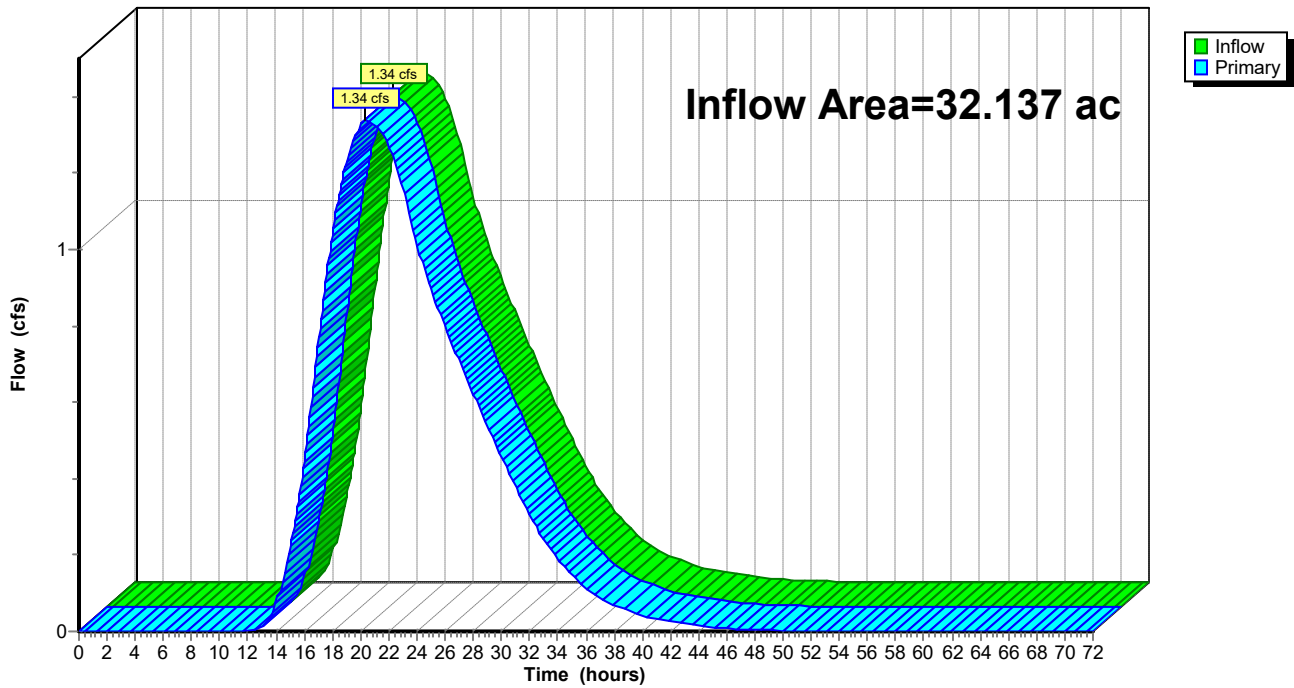
Summary for Link 36L: DP-27

Inflow Area = 32.137 ac, 0.00% Impervious, Inflow Depth = 0.48" for 1 Year event
Inflow = 1.34 cfs @ 20.28 hrs, Volume= 1.297 af
Primary = 1.34 cfs @ 20.28 hrs, Volume= 1.297 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 36L: DP-27

Hydrograph



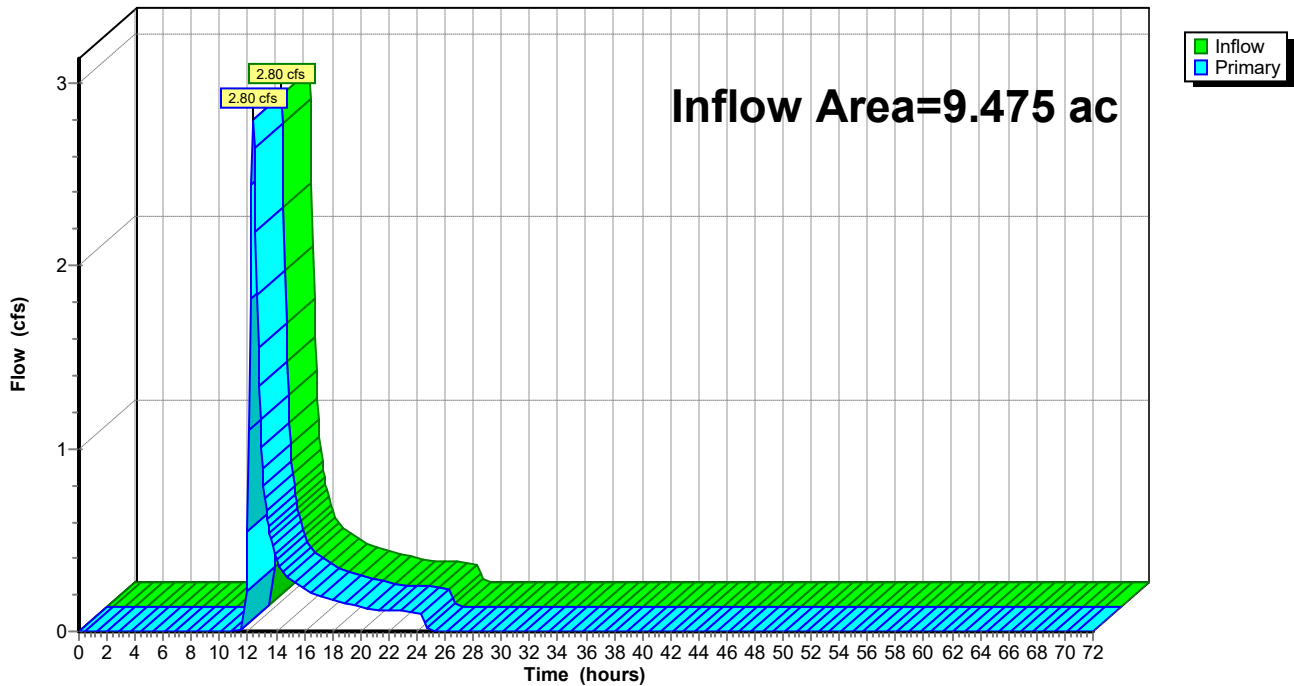
Summary for Link 37L: DP-28

Inflow Area = 9.475 ac, 0.00% Impervious, Inflow Depth = 0.45" for 1 Year event
Inflow = 2.80 cfs @ 12.36 hrs, Volume= 0.353 af
Primary = 2.80 cfs @ 12.36 hrs, Volume= 0.353 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 37L: DP-28

Hydrograph



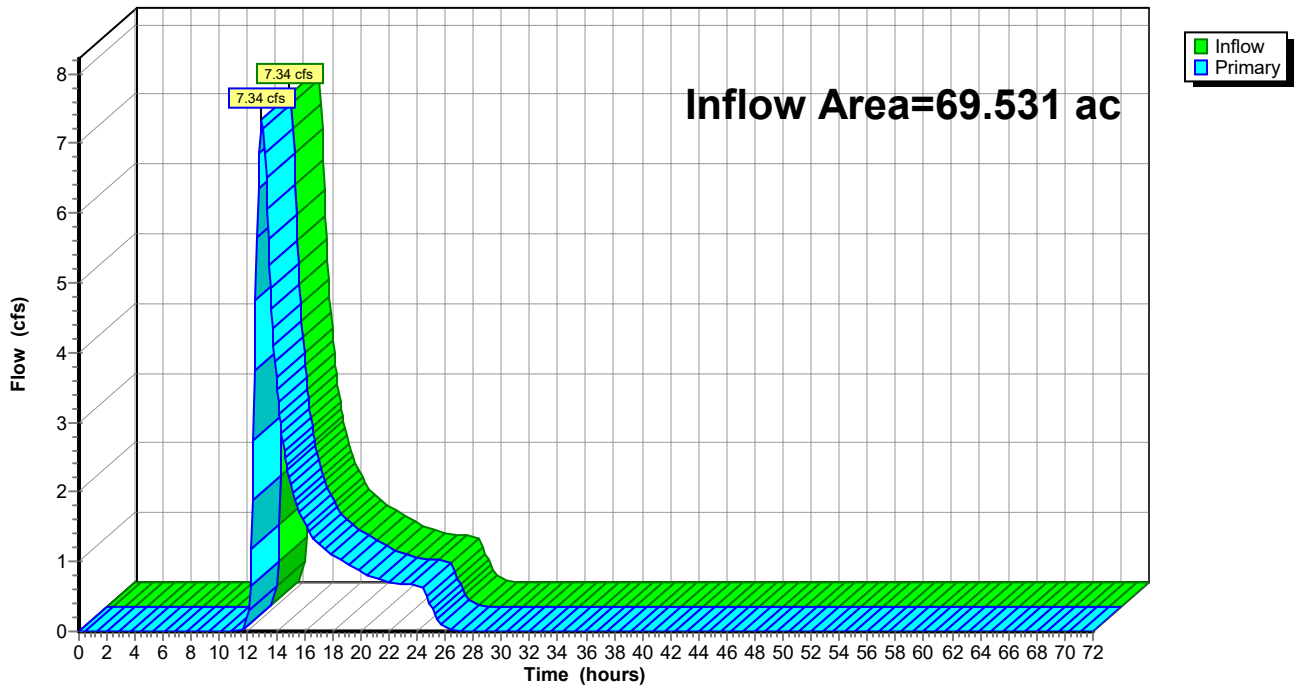
Summary for Link 38L: DP-29

Inflow Area = 69.531 ac, 0.00% Impervious, Inflow Depth = 0.32" for 1 Year event
Inflow = 7.34 cfs @ 12.98 hrs, Volume= 1.832 af
Primary = 7.34 cfs @ 12.98 hrs, Volume= 1.832 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 38L: DP-29

Hydrograph



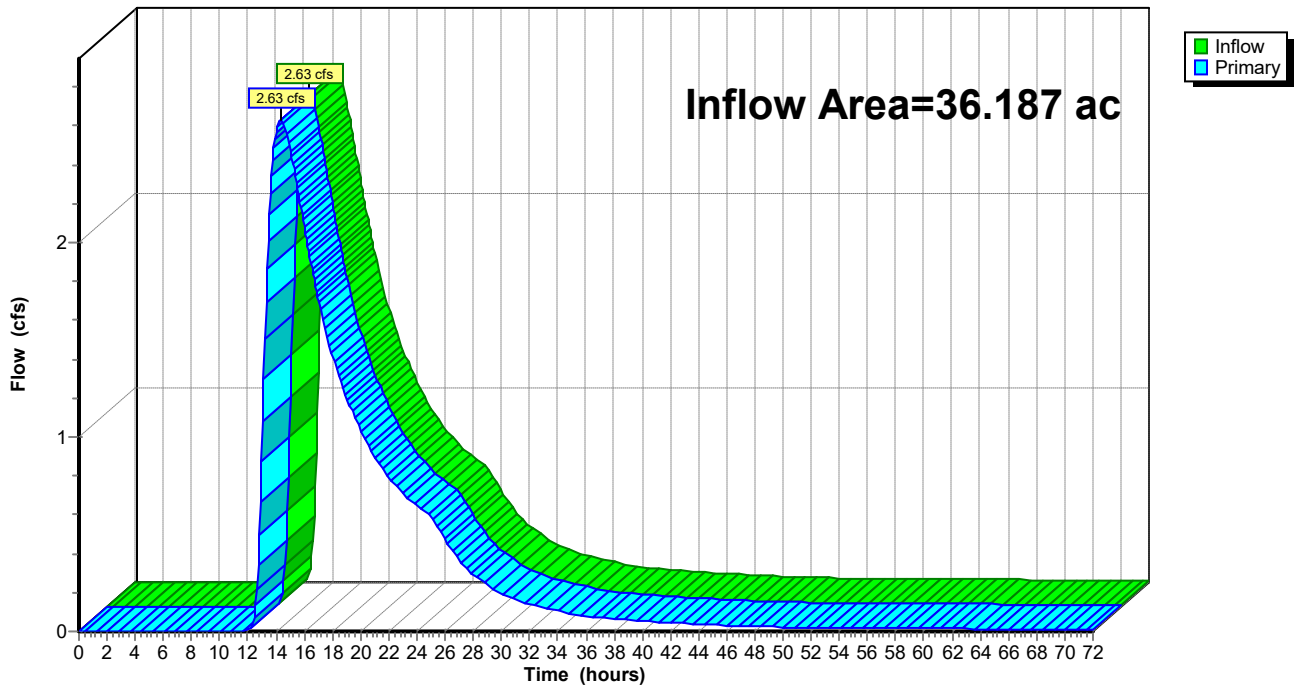
Summary for Link 39L: DP-30

Inflow Area = 36.187 ac, 0.00% Impervious, Inflow Depth > 0.56" for 1 Year event
Inflow = 2.63 cfs @ 14.33 hrs, Volume= 1.680 af
Primary = 2.63 cfs @ 14.33 hrs, Volume= 1.680 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 39L: DP-30

Hydrograph



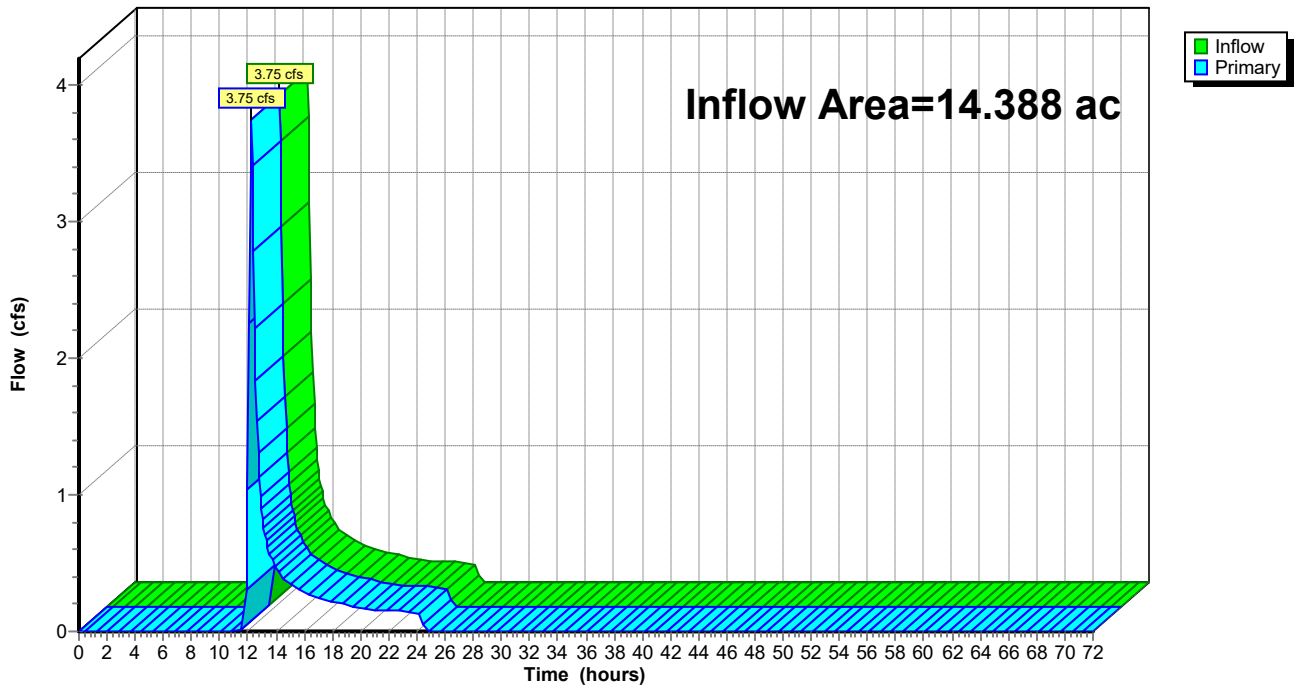
Summary for Link 40L: DP-31

Inflow Area = 14.388 ac, 0.00% Impervious, Inflow Depth = 0.35" for 1 Year event
Inflow = 3.75 cfs @ 12.24 hrs, Volume= 0.415 af
Primary = 3.75 cfs @ 12.24 hrs, Volume= 0.415 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 40L: DP-31

Hydrograph



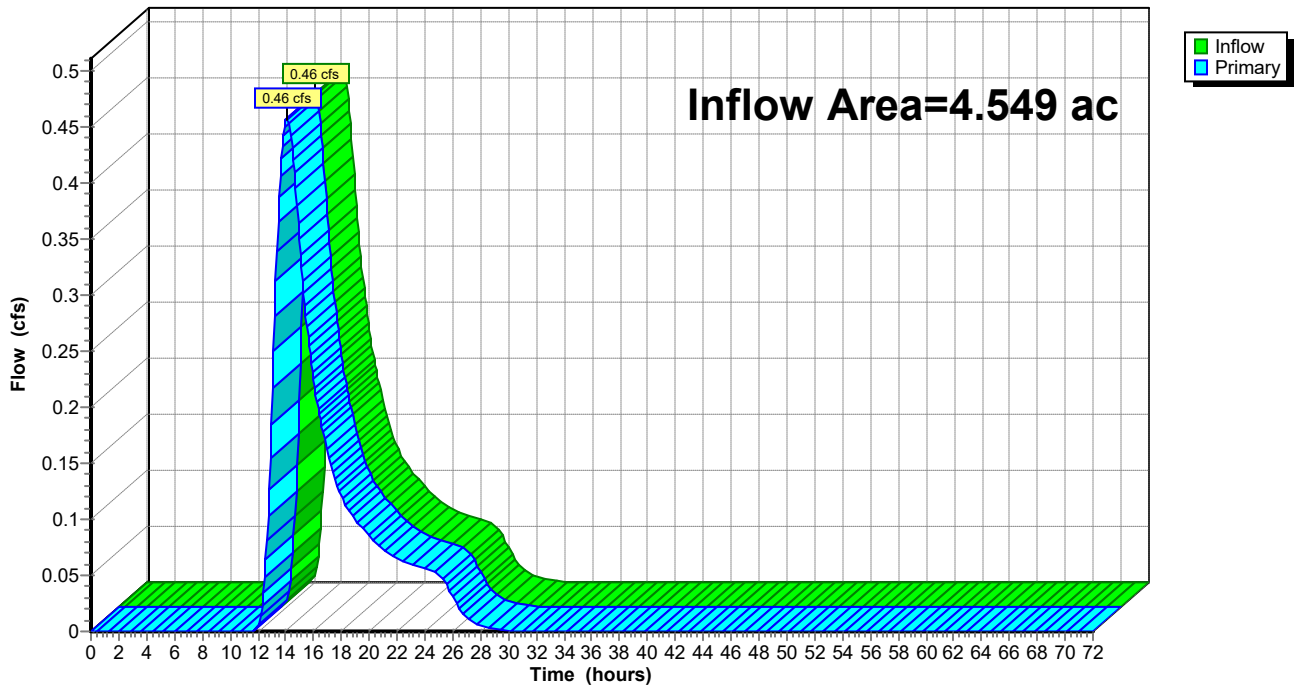
Summary for Link 41L: DP-32

Inflow Area = 4.549 ac, 0.00% Impervious, Inflow Depth = 0.45" for 1 Year event
Inflow = 0.46 cfs @ 14.03 hrs, Volume= 0.169 af
Primary = 0.46 cfs @ 14.03 hrs, Volume= 0.169 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 41L: DP-32

Hydrograph



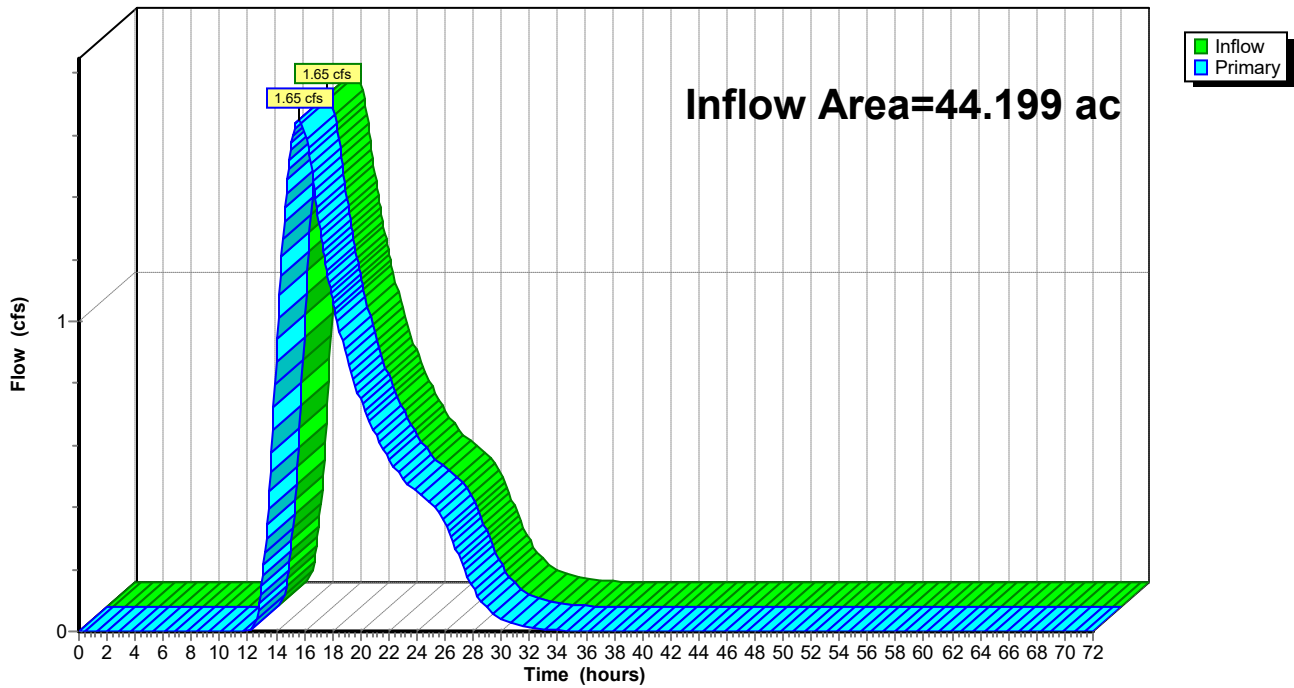
Summary for Link 42L: DP-35

Inflow Area = 44.199 ac, 0.00% Impervious, Inflow Depth = 0.26" for 1 Year event
Inflow = 1.65 cfs @ 15.62 hrs, Volume= 0.963 af
Primary = 1.65 cfs @ 15.62 hrs, Volume= 0.963 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 42L: DP-35

Hydrograph



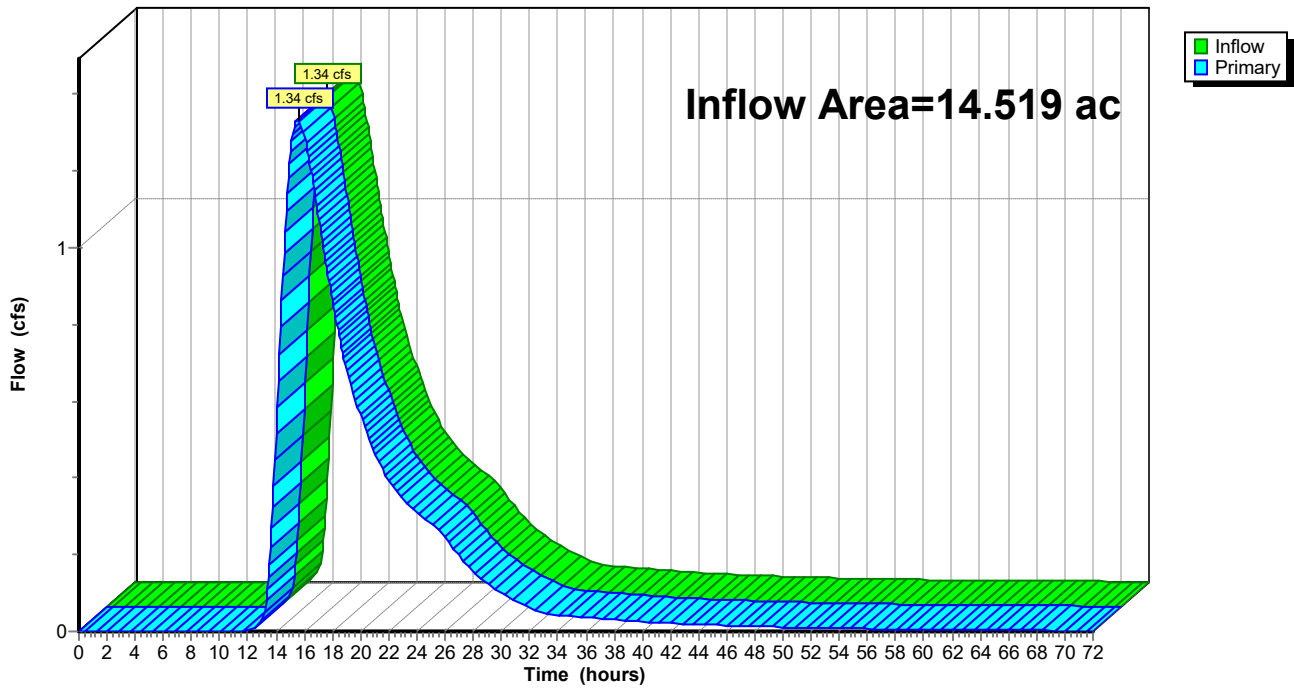
Summary for Link 43L: DP-37

Inflow Area = 14.519 ac, 0.00% Impervious, Inflow Depth > 0.66" for 1 Year event
Inflow = 1.34 cfs @ 15.55 hrs, Volume= 0.794 af
Primary = 1.34 cfs @ 15.55 hrs, Volume= 0.794 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 43L: DP-37

Hydrograph



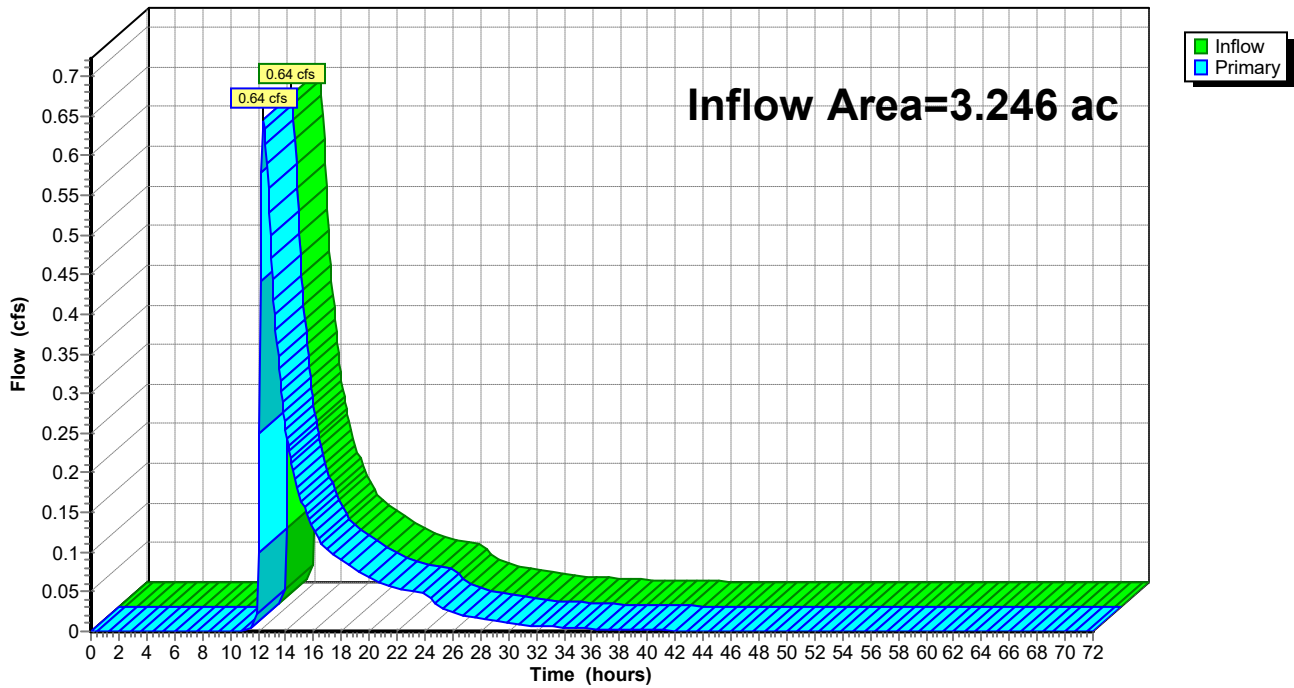
Summary for Link 44L: DP-38

Inflow Area = 3.246 ac, 0.00% Impervious, Inflow Depth = 0.61" for 1 Year event
Inflow = 0.64 cfs @ 12.41 hrs, Volume= 0.165 af
Primary = 0.64 cfs @ 12.41 hrs, Volume= 0.165 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 44L: DP-38

Hydrograph



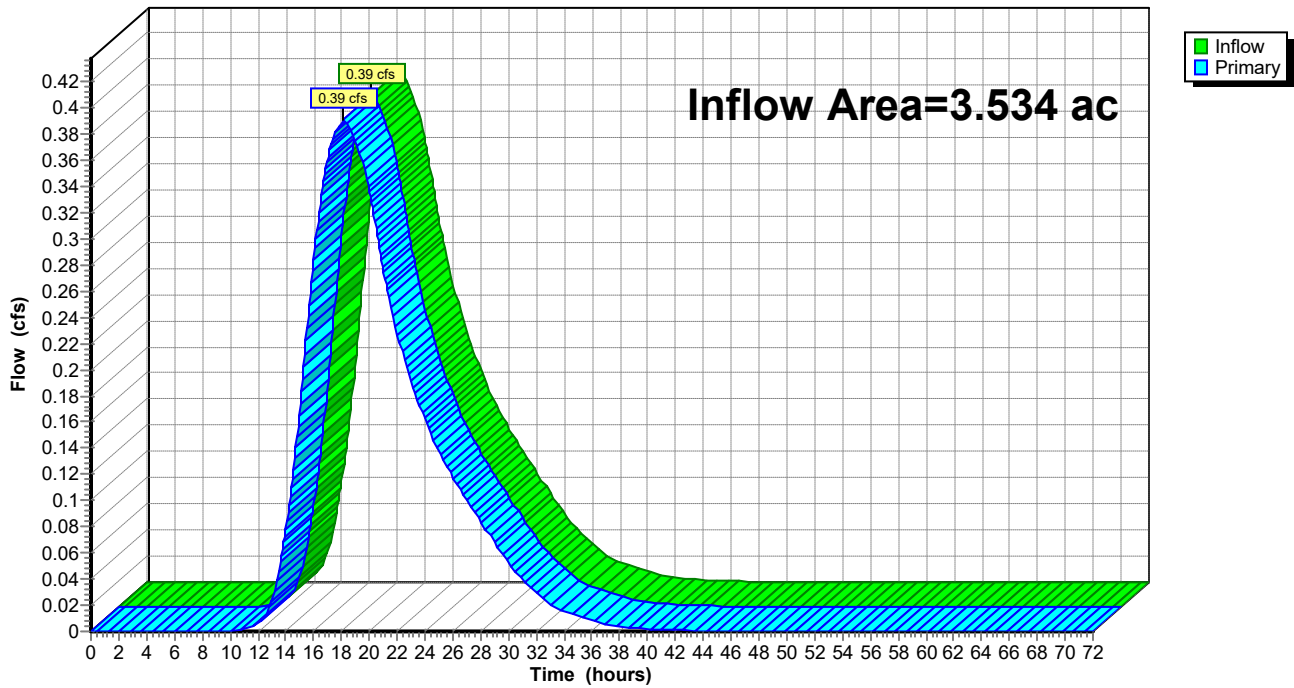
Summary for Link 45L: DP-39

Inflow Area = 3.534 ac, 0.00% Impervious, Inflow Depth = 1.01" for 1 Year event
Inflow = 0.39 cfs @ 18.16 hrs, Volume= 0.297 af
Primary = 0.39 cfs @ 18.16 hrs, Volume= 0.297 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 45L: DP-39

Hydrograph



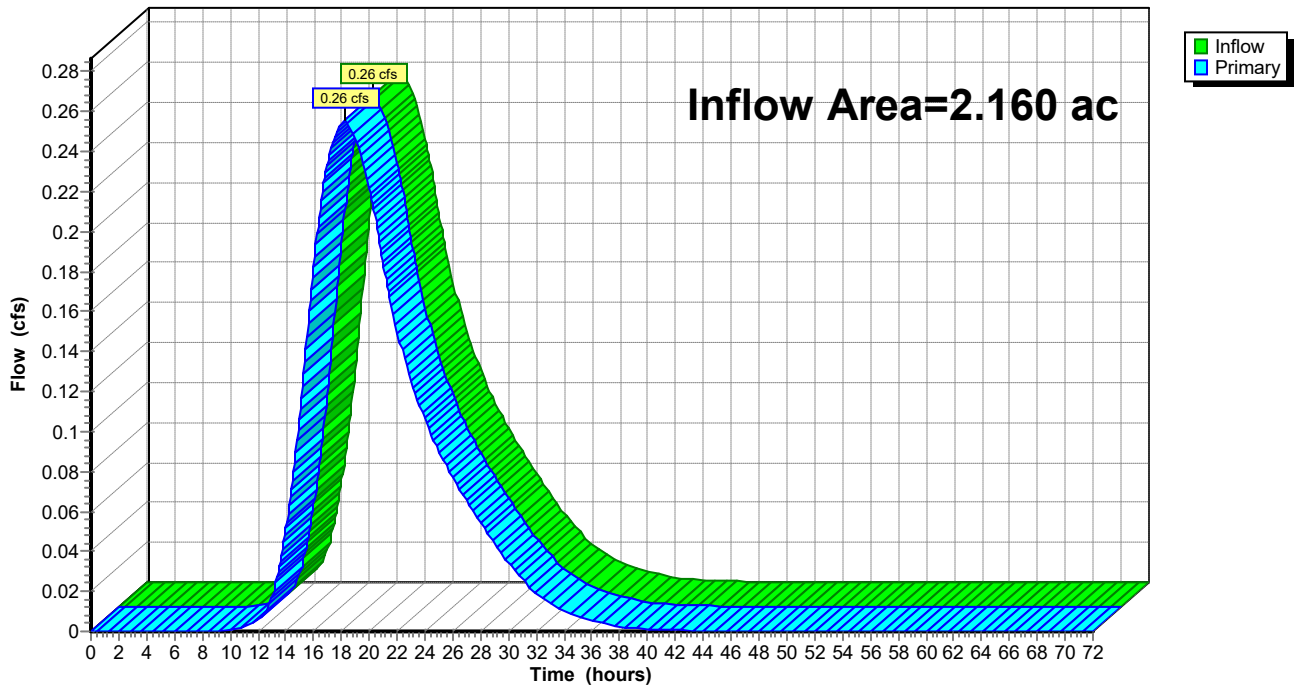
Summary for Link 46L: DP-40

Inflow Area = 2.160 ac, 0.00% Impervious, Inflow Depth = 1.08" for 1 Year event
Inflow = 0.26 cfs @ 18.29 hrs, Volume= 0.194 af
Primary = 0.26 cfs @ 18.29 hrs, Volume= 0.194 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 46L: DP-40

Hydrograph



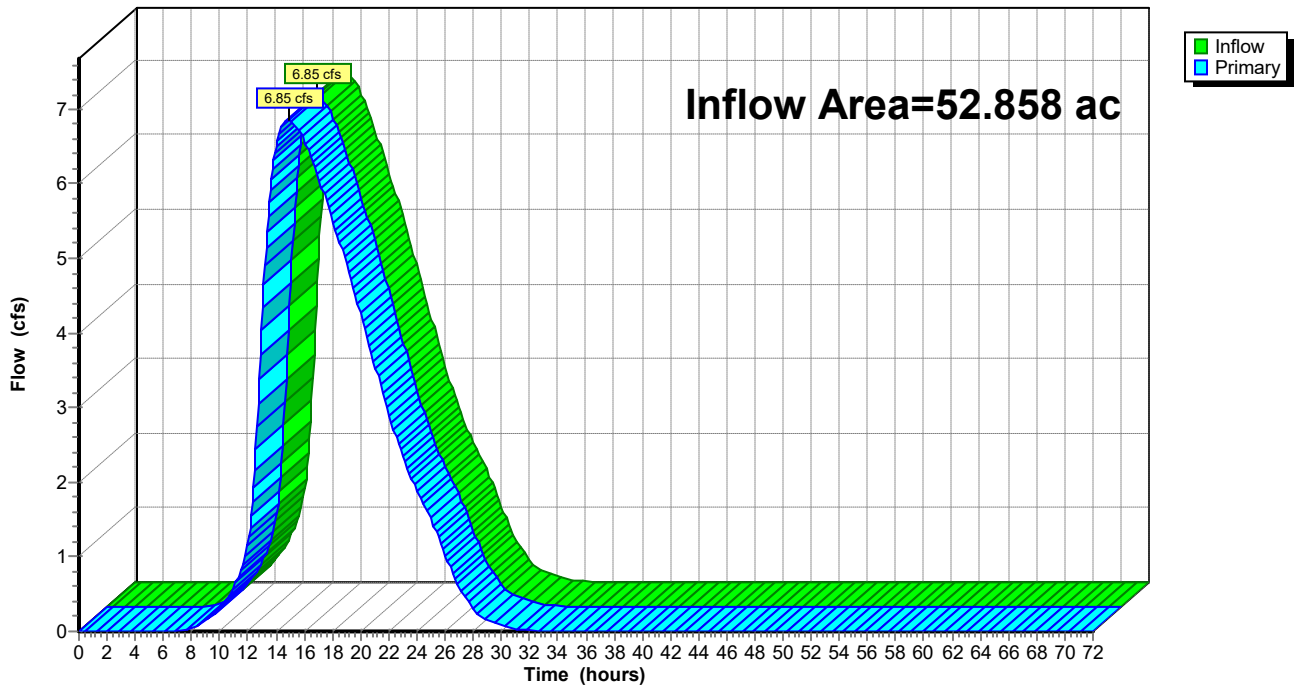
Summary for Link 47L: DP-41

Inflow Area = 52.858 ac, 0.00% Impervious, Inflow Depth = 1.16" for 1 Year event
Inflow = 6.85 cfs @ 14.87 hrs, Volume= 5.088 af
Primary = 6.85 cfs @ 14.87 hrs, Volume= 5.088 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 47L: DP-41

Hydrograph



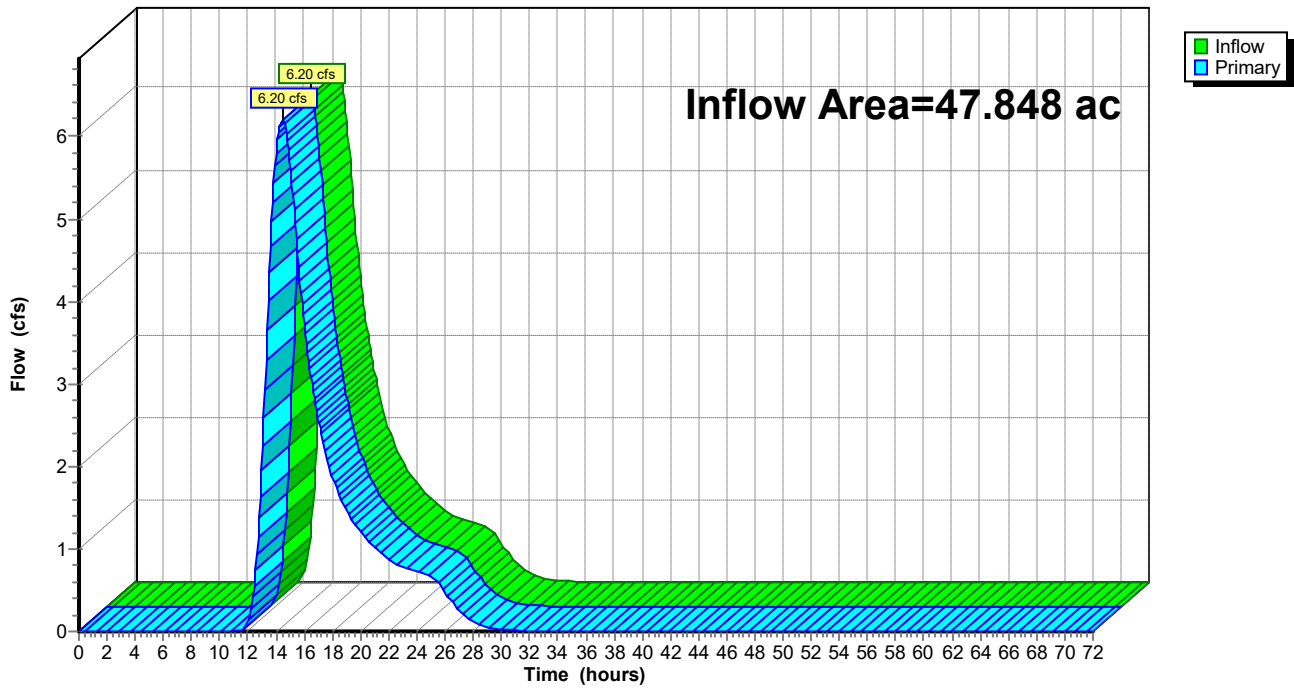
Summary for Link 48L: DP-42

Inflow Area = 47.848 ac, 0.00% Impervious, Inflow Depth = 0.61" for 1 Year event
Inflow = 6.20 cfs @ 14.47 hrs, Volume= 2.434 af
Primary = 6.20 cfs @ 14.47 hrs, Volume= 2.434 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 48L: DP-42

Hydrograph



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Time span=0.00-72.00 hrs, dt=0.08 hrs, 901 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: DA-49	Runoff Area=5.251 ac 0.00% Impervious Runoff Depth=1.04" Flow Length=1,007' Tc=35.2 min CN=77 Runoff=4.02 cfs 0.457 af
Subcatchment 2S: DA-48	Runoff Area=7.372 ac 0.00% Impervious Runoff Depth=1.22" Flow Length=991' Tc=58.2 min CN=80 Runoff=4.73 cfs 0.749 af
Subcatchment 3S: DA-50	Runoff Area=21.323 ac 0.00% Impervious Runoff Depth=0.88" Flow Length=2,117' Tc=52.9 min CN=74 Runoff=9.88 cfs 1.569 af
Subcatchment 4S: DA-46	Runoff Area=78.787 ac 0.00% Impervious Runoff Depth=1.35" Flow Length=2,635' Tc=73.8 min CN=82 Runoff=47.51 cfs 8.848 af
Subcatchment 5S: DA-47	Runoff Area=5.601 ac 0.00% Impervious Runoff Depth=1.48" Flow Length=669' Tc=54.8 min CN=84 Runoff=4.68 cfs 0.692 af
Subcatchment 6S: DA-45	Runoff Area=2.612 ac 0.00% Impervious Runoff Depth=1.28" Tc=54.5 min CN=81 Runoff=1.87 cfs 0.279 af
Subcatchment 7S: DA-43	Runoff Area=5.478 ac 0.00% Impervious Runoff Depth=0.99" Flow Length=703' Tc=56.1 min CN=76 Runoff=2.80 cfs 0.451 af
Subcatchment 8S: DA-44	Runoff Area=35.511 ac 0.00% Impervious Runoff Depth=1.41" Flow Length=2,451' Tc=127.6 min CN=83 Runoff=14.82 cfs 4.186 af
Subcatchment 9S: DA-51	Runoff Area=11.972 ac 0.00% Impervious Runoff Depth=1.41" Tc=72.0 min CN=83 Runoff=7.76 cfs 1.411 af
Subcatchment 10S: DA-52	Runoff Area=17.191 ac 0.00% Impervious Runoff Depth=1.55" Tc=85.0 min CN=85 Runoff=10.91 cfs 2.227 af
Subcatchment 11S: DA-33	Runoff Area=29.770 ac 0.00% Impervious Runoff Depth=1.41" Flow Length=2,805' Tc=344.6 min CN=83 Runoff=5.77 cfs 3.509 af
Subcatchment 12S: DA-34	Runoff Area=39.905 ac 0.00% Impervious Runoff Depth>1.06" Flow Length=2,300' Slope=0.0000 '/' Tc=2,213.2 min CN=79 Runoff=1.38 cfs 3.519 af
Subcatchment 13S: DA-3	Runoff Area=1.807 ac 0.00% Impervious Runoff Depth=0.99" Tc=37.8 min CN=76 Runoff=1.23 cfs 0.149 af
Subcatchment 14S: DA-1	Runoff Area=5.219 ac 0.00% Impervious Runoff Depth=0.45" Flow Length=468' Tc=27.7 min CN=64 Runoff=1.45 cfs 0.196 af
Subcatchment 15S: DA-5	Runoff Area=61.624 ac 0.00% Impervious Runoff Depth=0.93" Flow Length=2,903' Tc=150.6 min CN=75 Runoff=13.93 cfs 4.800 af
Subcatchment 16S: DA-7	Runoff Area=30.438 ac 0.00% Impervious Runoff Depth=1.55" Tc=143.5 min CN=85 Runoff=12.96 cfs 3.943 af

Subcatchment 17S: DA-53	Runoff Area=32.347 ac 0.00% Impervious Runoff Depth=1.22" Tc=133.6 min CN=80 Runoff=10.99 cfs 3.289 af
Subcatchment 18S: DA-54	Runoff Area=2.872 ac 0.00% Impervious Runoff Depth=1.28" Tc=46.5 min CN=81 Runoff=2.30 cfs 0.307 af
Subcatchment 19S: DA-8	Runoff Area=4.025 ac 0.00% Impervious Runoff Depth=0.78" Flow Length=616' Tc=37.2 min CN=72 Runoff=2.05 cfs 0.263 af
Subcatchment 20S: DA-9	Runoff Area=12.359 ac 0.00% Impervious Runoff Depth=1.41" Flow Length=1,049' Tc=59.7 min CN=83 Runoff=9.21 cfs 1.457 af
Subcatchment 21S: DA-10	Runoff Area=2.629 ac 0.00% Impervious Runoff Depth=1.04" Tc=32.9 min CN=77 Runoff=2.10 cfs 0.229 af
Subcatchment 22S: DA-11	Runoff Area=2.766 ac 0.00% Impervious Runoff Depth=1.48" Tc=37.5 min CN=84 Runoff=3.03 cfs 0.342 af
Subcatchment 23S: DA-12	Runoff Area=31.832 ac 0.00% Impervious Runoff Depth=1.22" Tc=102.2 min CN=80 Runoff=13.40 cfs 3.236 af
Subcatchment 24S: DA-13	Runoff Area=12.785 ac 0.00% Impervious Runoff Depth=1.41" Tc=65.8 min CN=83 Runoff=8.87 cfs 1.507 af
Subcatchment 25S: DA-14	Runoff Area=47.394 ac 0.00% Impervious Runoff Depth=1.28" Flow Length=2,799' Tc=165.4 min CN=81 Runoff=14.61 cfs 5.066 af
Subcatchment 26S: DA-15	Runoff Area=9.159 ac 0.00% Impervious Runoff Depth=1.41" Flow Length=1,010' Tc=81.5 min CN=83 Runoff=5.42 cfs 1.080 af
Subcatchment 27S: DA-17	Runoff Area=2.980 ac 0.00% Impervious Runoff Depth=1.48" Tc=560.9 min CN=84 Runoff=0.41 cfs 0.368 af
Subcatchment 28S: DA-18	Runoff Area=19.855 ac 0.00% Impervious Runoff Depth=1.55" Flow Length=1,429' Tc=93.9 min CN=85 Runoff=11.68 cfs 2.572 af
Subcatchment 29S: DA-19	Runoff Area=5.282 ac 0.00% Impervious Runoff Depth=1.48" Tc=56.1 min CN=84 Runoff=4.35 cfs 0.653 af
Subcatchment 30S: DA-20	Runoff Area=38.236 ac 0.00% Impervious Runoff Depth=1.04" Tc=131.1 min CN=77 Runoff=10.91 cfs 3.325 af
Subcatchment 31S: DA-22	Runoff Area=17.209 ac 0.00% Impervious Runoff Depth=1.22" Tc=70.8 min CN=80 Runoff=9.55 cfs 1.750 af
Subcatchment 32S: DA-23	Runoff Area=7.493 ac 0.00% Impervious Runoff Depth=0.74" Flow Length=520' Tc=38.6 min CN=71 Runoff=3.43 cfs 0.461 af
Subcatchment 33S: DA-24	Runoff Area=13.493 ac 0.00% Impervious Runoff Depth=0.93" Flow Length=1,209' Tc=86.8 min CN=75 Runoff=4.64 cfs 1.051 af

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Subcatchment 34S: DA-25	Runoff Area=50.368 ac 0.00% Impervious Runoff Depth=1.22" Tc=67.4 min CN=80 Runoff=29.00 cfs 5.121 af
Subcatchment 35S: DA-26	Runoff Area=193.467 ac 0.00% Impervious Runoff Depth>1.27" Tc=1,355.2 min CN=81 Runoff=11.11 cfs 20.547 af
Subcatchment 36S: DA-27	Runoff Area=32.137 ac 0.00% Impervious Runoff Depth=1.35" Tc=587.6 min CN=82 Runoff=3.90 cfs 3.609 af
Subcatchment 37S: DA-28	Runoff Area=9.475 ac 0.00% Impervious Runoff Depth=1.28" Tc=36.0 min CN=81 Runoff=9.09 cfs 1.013 af
Subcatchment 38S: DA-29	Runoff Area=69.531 ac 0.00% Impervious Runoff Depth=1.04" Tc=76.2 min CN=77 Runoff=30.22 cfs 6.046 af
Subcatchment 39S: DA-30	Runoff Area=36.187 ac 0.00% Impervious Runoff Depth=1.48" Flow Length=2,420' Tc=77.5 min CN=84 Runoff=23.36 cfs 4.473 af
Subcatchment 40S: DA-31	Runoff Area=14.388 ac 0.00% Impervious Runoff Depth=1.10" Tc=25.7 min CN=78 Runoff=14.40 cfs 1.319 af
Subcatchment 41S: DA-32	Runoff Area=4.549 ac 0.00% Impervious Runoff Depth=1.28" Flow Length=100' Tc=155.5 min CN=81 Runoff=1.47 cfs 0.486 af
Subcatchment 42S: DA-35	Runoff Area=44.199 ac 0.00% Impervious Runoff Depth=0.93" Tc=241.8 min CN=75 Runoff=6.99 cfs 3.443 af
Subcatchment 43S: DA-42	Runoff Area=47.848 ac 0.00% Impervious Runoff Depth=1.55" Tc=183.8 min CN=85 Runoff=16.71 cfs 6.199 af
Subcatchment 44S: DA-37	Runoff Area=14.519 ac 0.00% Impervious Runoff Depth=1.63" Flow Length=2,143' Tc=166.2 min CN=86 Runoff=5.78 cfs 1.970 af
Subcatchment 45S: DA-41	Runoff Area=52.858 ac 0.00% Impervious Runoff Depth=2.31" Tc=107.9 min CN=94 Runoff=41.64 cfs 10.182 af
Subcatchment 46S: DA-40	Runoff Area=2.160 ac 0.00% Impervious Runoff Depth=2.22" Flow Length=441' Slope=0.0000 '/' Tc=470.7 min CN=93 Runoff=0.53 cfs 0.399 af
Subcatchment 47S: DA-39	Runoff Area=3.534 ac 0.00% Impervious Runoff Depth=2.12" Tc=467.1 min CN=92 Runoff=0.83 cfs 0.625 af
Subcatchment 48S: DA-38	Runoff Area=3.246 ac 0.00% Impervious Runoff Depth=1.55" Tc=14.6 min CN=85 Runoff=6.48 cfs 0.421 af
Pond 1P: P-30	Peak Elev=291.95' Storage=1.887 af Inflow=23.36 cfs 4.473 af Outflow=7.56 cfs 4.445 af
Pond 2P: P-37	Peak Elev=291.04' Storage=0.535 af Inflow=5.78 cfs 1.970 af Outflow=4.21 cfs 1.968 af

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Pond 3P: P-38	Peak Elev=292.81' Storage=0.138 af Inflow=6.48 cfs 0.421 af Outflow=2.89 cfs 0.421 af
Pond 4P: P-41	Peak Elev=293.09' Storage=4.884 af Inflow=41.64 cfs 10.182 af Outflow=10.31 cfs 10.182 af
Link 1L: DP-49	Inflow=4.02 cfs 0.457 af Primary=4.02 cfs 0.457 af
Link 2L: DP-48	Inflow=4.73 cfs 0.749 af Primary=4.73 cfs 0.749 af
Link 3L: DP-50	Inflow=9.88 cfs 1.569 af Primary=9.88 cfs 1.569 af
Link 4L: DP-46	Inflow=47.51 cfs 8.848 af Primary=47.51 cfs 8.848 af
Link 5L: DP-47	Inflow=4.68 cfs 0.692 af Primary=4.68 cfs 0.692 af
Link 6L: DP-45	Inflow=1.87 cfs 0.279 af Primary=1.87 cfs 0.279 af
Link 7L: DP-43	Inflow=2.80 cfs 0.451 af Primary=2.80 cfs 0.451 af
Link 8L: DP-44	Inflow=14.82 cfs 4.186 af Primary=14.82 cfs 4.186 af
Link 9L: DP-51	Inflow=7.76 cfs 1.411 af Primary=7.76 cfs 1.411 af
Link 10L: DP-52	Inflow=10.91 cfs 2.227 af Primary=10.91 cfs 2.227 af
Link 11L: DP-34	Inflow=1.38 cfs 3.519 af Primary=1.38 cfs 3.519 af
Link 12L: DP-3	Inflow=1.23 cfs 0.149 af Primary=1.23 cfs 0.149 af
Link 13L: DP-1	Inflow=1.45 cfs 0.196 af Primary=1.45 cfs 0.196 af
Link 14L: DP-5	Inflow=13.93 cfs 4.800 af Primary=13.93 cfs 4.800 af
Link 15L: DP-7	Inflow=12.96 cfs 3.943 af Primary=12.96 cfs 3.943 af

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Link 16L: DP-53	Inflow=10.99 cfs 3.289 af Primary=10.99 cfs 3.289 af
Link 17L: DP-54	Inflow=2.30 cfs 0.307 af Primary=2.30 cfs 0.307 af
Link 18L: DP-8	Primary=0.00 cfs 0.000 af
Link 19L: DP-9	Inflow=9.21 cfs 1.457 af Primary=9.21 cfs 1.457 af
Link 20L: DP-10	Inflow=2.10 cfs 0.229 af Primary=2.10 cfs 0.229 af
Link 21L: DP-11	Inflow=3.03 cfs 0.342 af Primary=3.03 cfs 0.342 af
Link 22L: DP-13	Inflow=8.87 cfs 1.507 af Primary=8.87 cfs 1.507 af
Link 23L: DP-12	Inflow=13.40 cfs 3.236 af Primary=13.40 cfs 3.236 af
Link 24L: DP-14	Inflow=14.61 cfs 5.066 af Primary=14.61 cfs 5.066 af
Link 25L: DP-15	Inflow=5.42 cfs 1.080 af Primary=5.42 cfs 1.080 af
Link 26L: DP-17	Inflow=0.41 cfs 0.368 af Primary=0.41 cfs 0.368 af
Link 27L: DP-18	Inflow=11.68 cfs 2.572 af Primary=11.68 cfs 2.572 af
Link 28L: DP-19	Inflow=4.35 cfs 0.653 af Primary=4.35 cfs 0.653 af
Link 29L: DP-20	Inflow=10.91 cfs 3.325 af Primary=10.91 cfs 3.325 af
Link 30L: DP-22	Inflow=9.55 cfs 1.750 af Primary=9.55 cfs 1.750 af
Link 31L: DP-23	Inflow=3.43 cfs 0.461 af Primary=3.43 cfs 0.461 af
Link 32L: DP-24	Inflow=4.64 cfs 1.051 af Primary=4.64 cfs 1.051 af

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Link 33L: DP-25	Inflow=29.00 cfs 5.121 af Primary=29.00 cfs 5.121 af
Link 34L: DP-33	Inflow=5.77 cfs 3.509 af Primary=5.77 cfs 3.509 af
Link 35L: DP-26	Inflow=11.11 cfs 20.547 af Primary=11.11 cfs 20.547 af
Link 36L: DP-27	Inflow=3.90 cfs 3.609 af Primary=3.90 cfs 3.609 af
Link 37L: DP-28	Inflow=9.09 cfs 1.013 af Primary=9.09 cfs 1.013 af
Link 38L: DP-29	Inflow=30.22 cfs 6.046 af Primary=30.22 cfs 6.046 af
Link 39L: DP-30	Inflow=7.56 cfs 4.445 af Primary=7.56 cfs 4.445 af
Link 40L: DP-31	Inflow=14.40 cfs 1.319 af Primary=14.40 cfs 1.319 af
Link 41L: DP-32	Inflow=1.47 cfs 0.486 af Primary=1.47 cfs 0.486 af
Link 42L: DP-35	Inflow=6.99 cfs 3.443 af Primary=6.99 cfs 3.443 af
Link 43L: DP-37	Inflow=4.21 cfs 1.968 af Primary=4.21 cfs 1.968 af
Link 44L: DP-38	Inflow=2.89 cfs 0.421 af Primary=2.89 cfs 0.421 af
Link 45L: DP-39	Inflow=0.83 cfs 0.625 af Primary=0.83 cfs 0.625 af
Link 46L: DP-40	Inflow=0.53 cfs 0.399 af Primary=0.53 cfs 0.399 af
Link 47L: DP-41	Inflow=10.31 cfs 10.182 af Primary=10.31 cfs 10.182 af
Link 48L: DP-42	Inflow=16.71 cfs 6.199 af Primary=16.71 cfs 6.199 af

Total Runoff Area = 1,201.044 ac Runoff Volume = 129.795 af Average Runoff Depth = 1.30"
100.00% Pervious = 1,201.044 ac 0.00% Impervious = 0.000 ac

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Summary for Subcatchment 1S: DA-49

Runoff = 4.02 cfs @ 12.33 hrs, Volume= 0.457 af, Depth= 1.04"
 Routed to Link 1L : DP-49

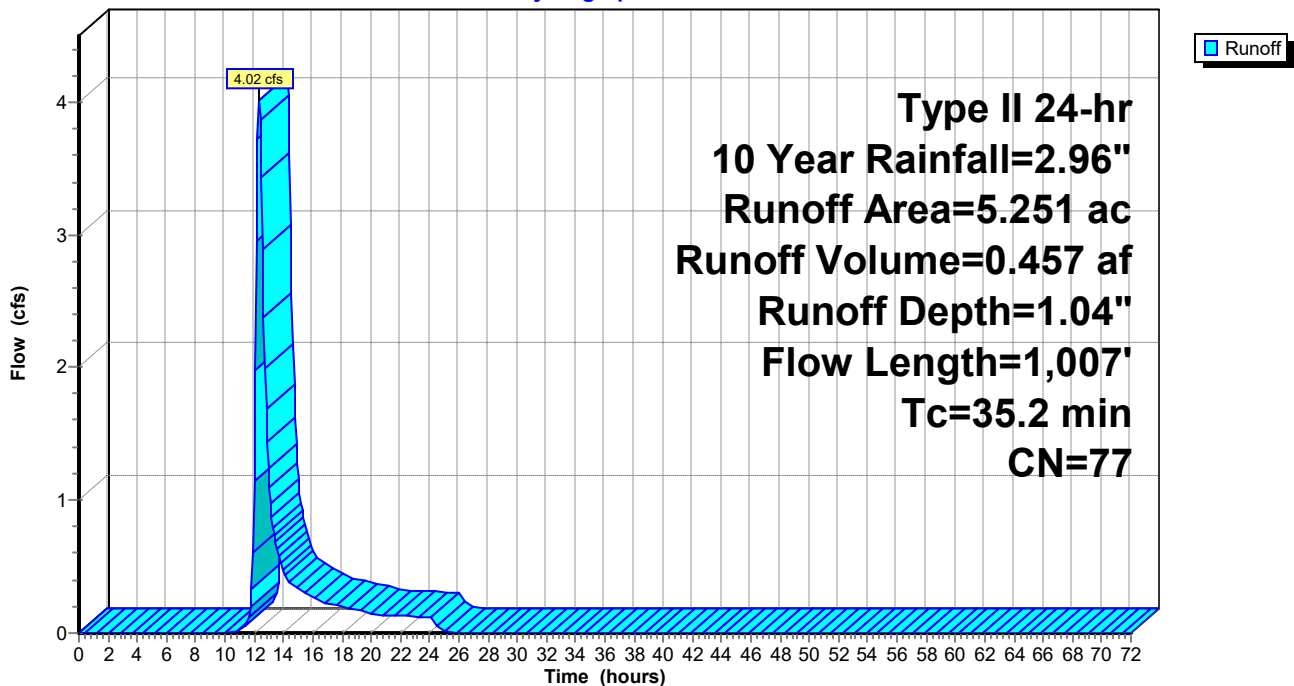
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 5.251	77	
5.251		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.9	100	0.0292	0.07		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
12.3	907	0.0309	1.23		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
35.2	1,007	Total			

Subcatchment 1S: DA-49

Hydrograph



Summary for Subcatchment 2S: DA-48

Runoff = 4.73 cfs @ 12.63 hrs, Volume= 0.749 af, Depth= 1.22"
 Routed to Link 2L : DP-48

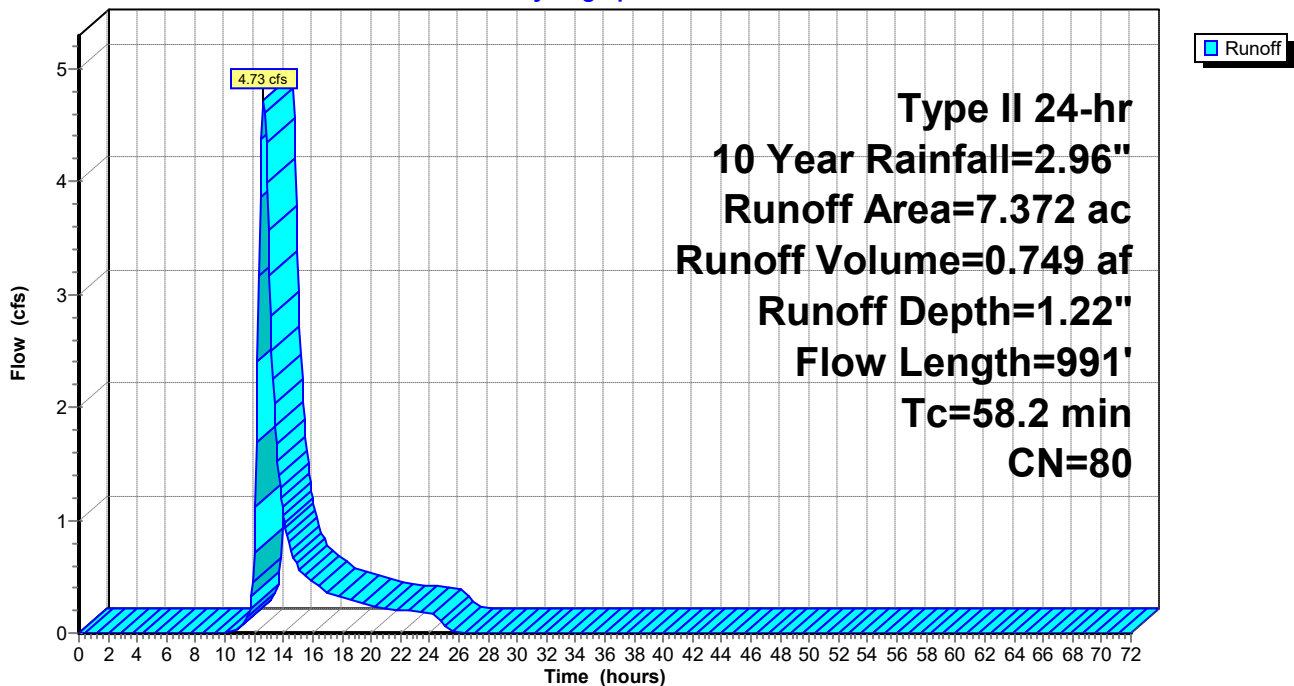
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 7.372	80	
7.372		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
44.5	100	0.0056	0.04		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
13.7	891	0.0241	1.09		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
58.2	991	Total			

Subcatchment 2S: DA-48

Hydrograph



Summary for Subcatchment 3S: DA-50

Runoff = 9.88 cfs @ 12.58 hrs, Volume= 1.569 af, Depth= 0.88"
 Routed to Link 3L : DP-50

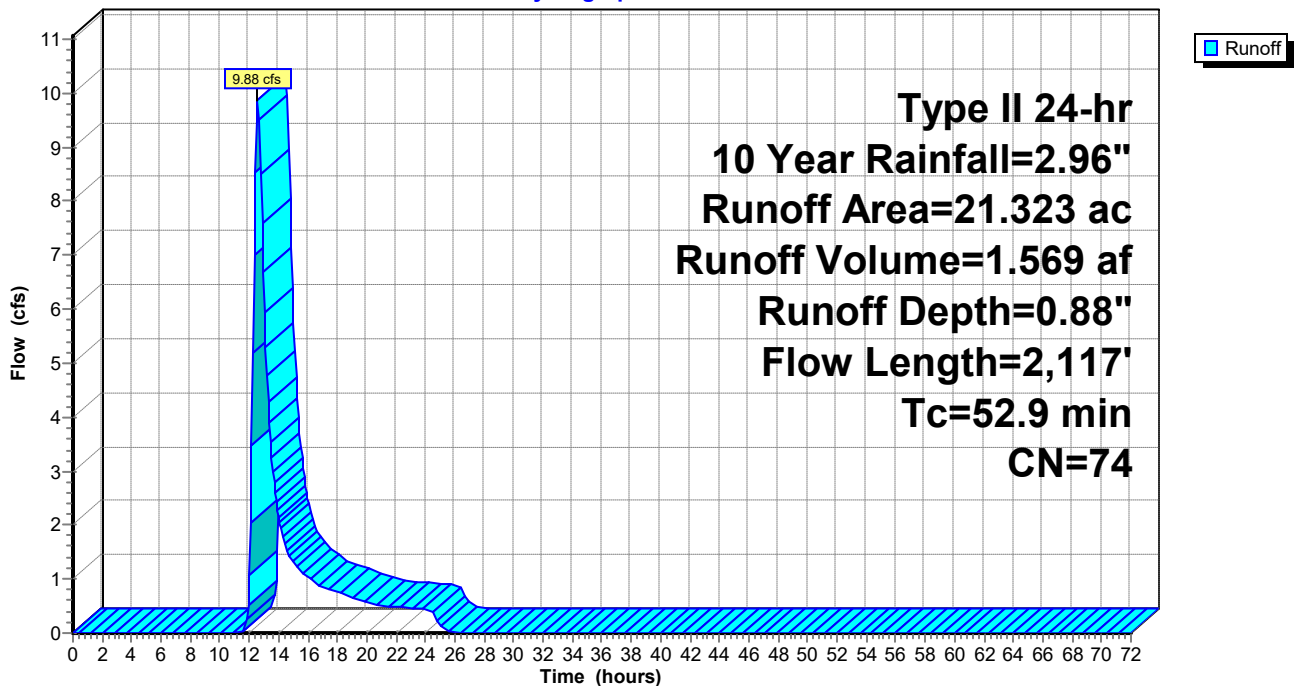
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 21.323	74	
21.323		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.3	100	0.0280	0.07		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
29.6	2,017	0.0263	1.13		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
52.9	2,117	Total			

Subcatchment 3S: DA-50

Hydrograph



Summary for Subcatchment 4S: DA-46

Runoff = 47.51 cfs @ 12.83 hrs, Volume= 8.848 af, Depth= 1.35"
 Routed to Link 4L : DP-46

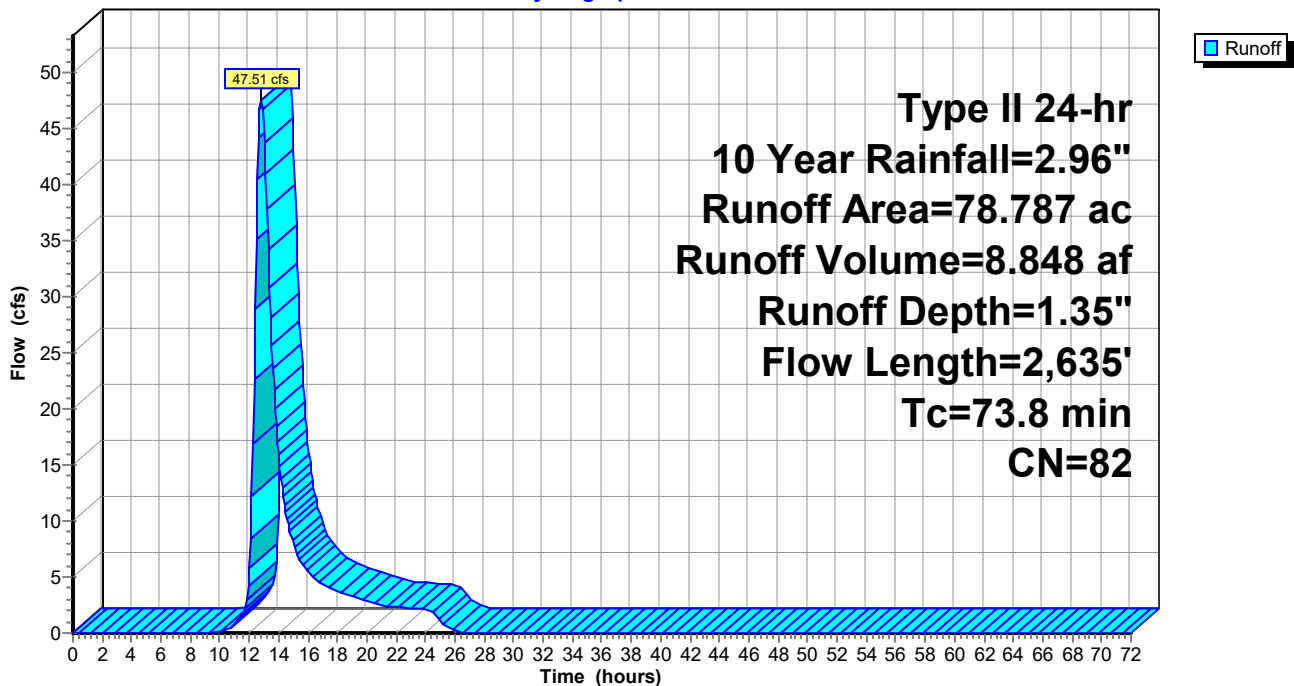
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 78.787	82	
78.787		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.2	100	0.0125	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
41.6	2,535	0.0210	1.02		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
73.8	2,635	Total			

Subcatchment 4S: DA-46

Hydrograph



Summary for Subcatchment 5S: DA-47

Runoff = 4.68 cfs @ 12.57 hrs, Volume= 0.692 af, Depth= 1.48"
 Routed to Link 5L : DP-47

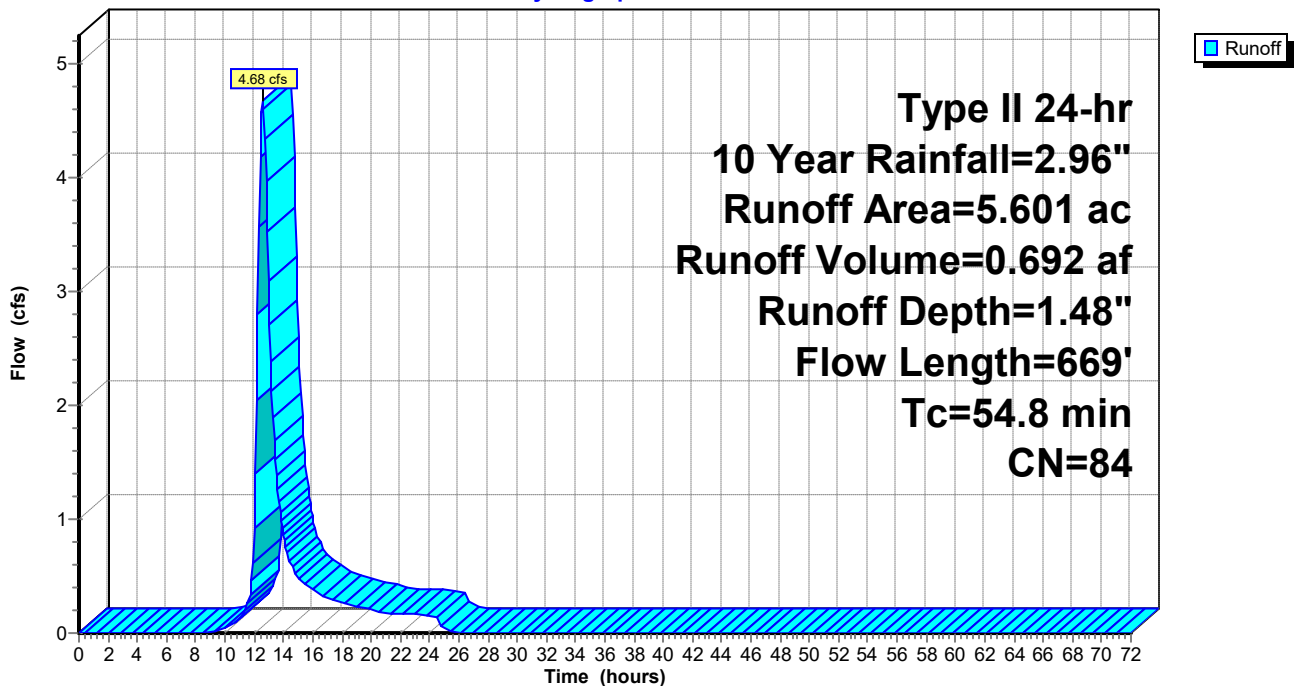
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 5.601	84	
5.601		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
36.4	100	0.0092	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
18.4	569	0.0054	0.52		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
54.8	669	Total			

Subcatchment 5S: DA-47

Hydrograph



Summary for Subcatchment 6S: DA-45

Runoff = 1.87 cfs @ 12.57 hrs, Volume= 0.279 af, Depth= 1.28"
 Routed to Link 6L : DP-45

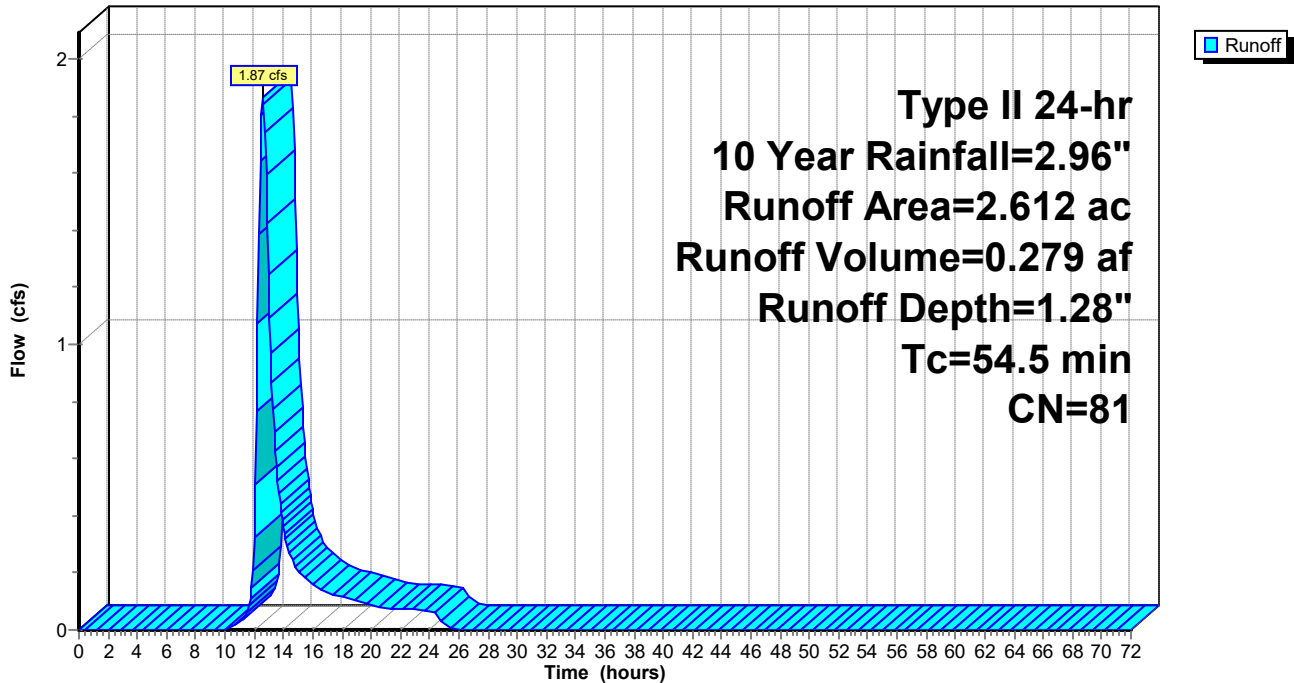
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 2.612	81	
2.612		100.00% Pervious Area

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

Subcatchment 6S: DA-45

Hydrograph



Summary for Subcatchment 7S: DA-43

Runoff = 2.80 cfs @ 12.62 hrs, Volume= 0.451 af, Depth= 0.99"
 Routed to Link 7L : DP-43

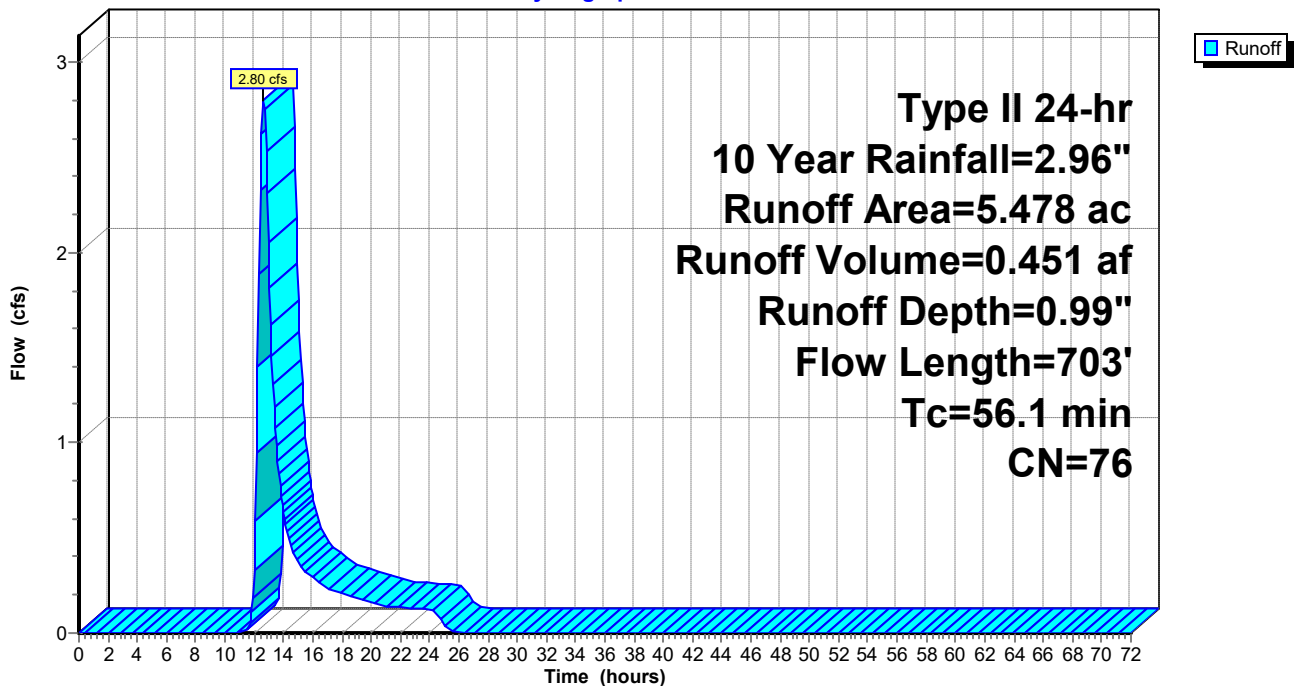
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 5.478	76	
5.478		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.8	100	0.0069	0.04		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
15.3	603	0.0088	0.66		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
56.1	703	Total			

Subcatchment 7S: DA-43

Hydrograph



Summary for Subcatchment 8S: DA-44

Runoff = 14.82 cfs @ 13.52 hrs, Volume= 4.186 af, Depth= 1.41"
 Routed to Link 8L : DP-44

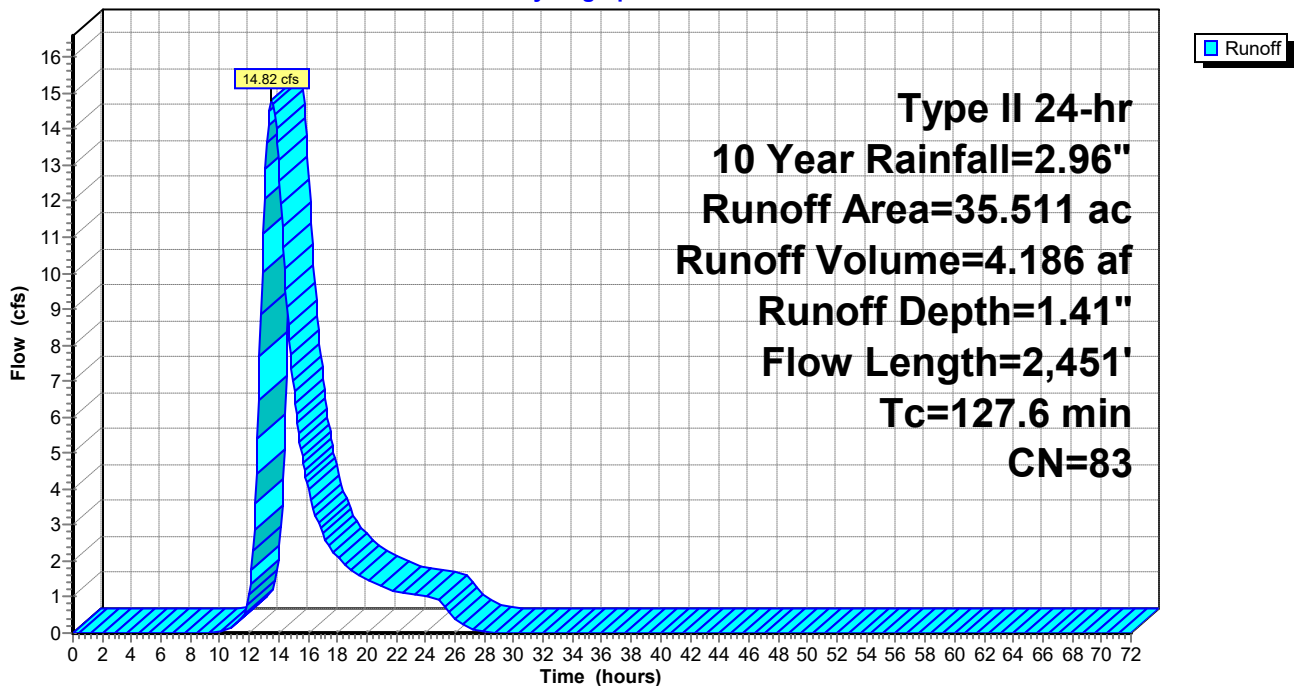
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 35.511	83	
35.511		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
34.8	100	0.0103	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
92.8	2,351	0.0036	0.42		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
127.6	2,451	Total			

Subcatchment 8S: DA-44

Hydrograph



Summary for Subcatchment 9S: DA-51

Runoff = 7.76 cfs @ 12.80 hrs, Volume= 1.411 af, Depth= 1.41"
 Routed to Link 9L : DP-51

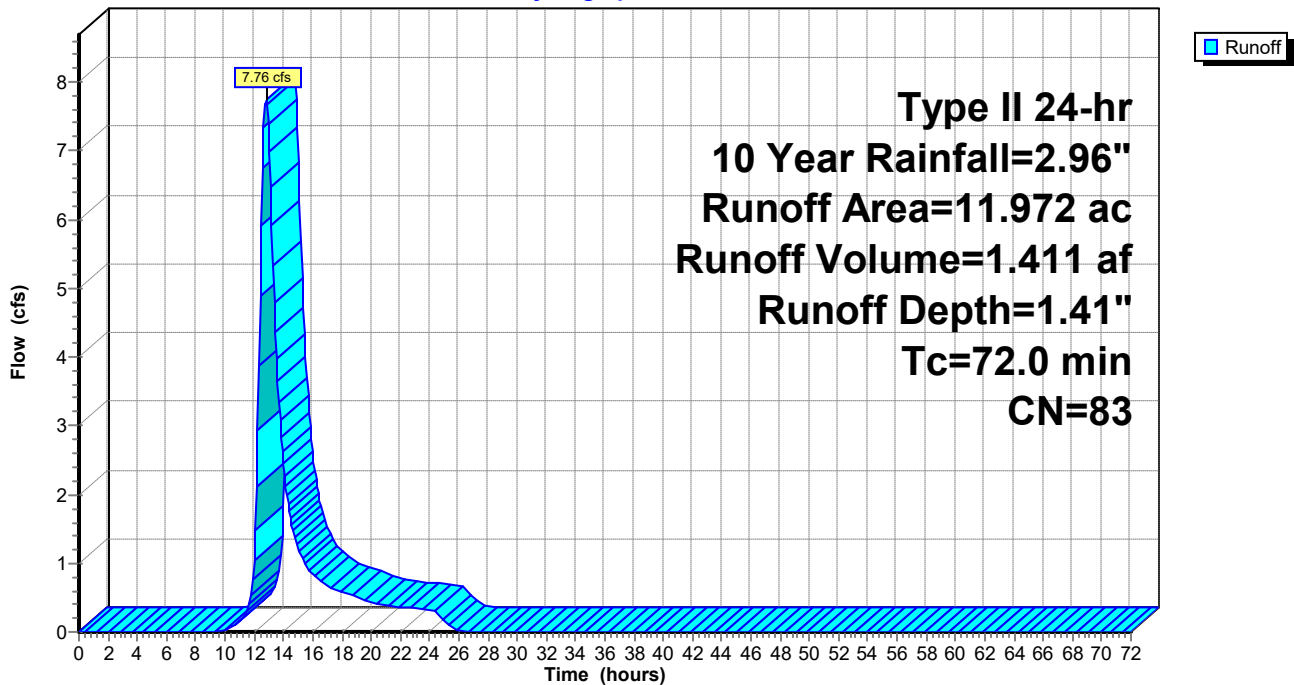
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 11.972	83	
11.972		100.00% Pervious Area

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

Subcatchment 9S: DA-51

Hydrograph



Summary for Subcatchment 10S: DA-52

Runoff = 10.91 cfs @ 12.96 hrs, Volume= 2.227 af, Depth= 1.55"
 Routed to Link 10L : DP-52

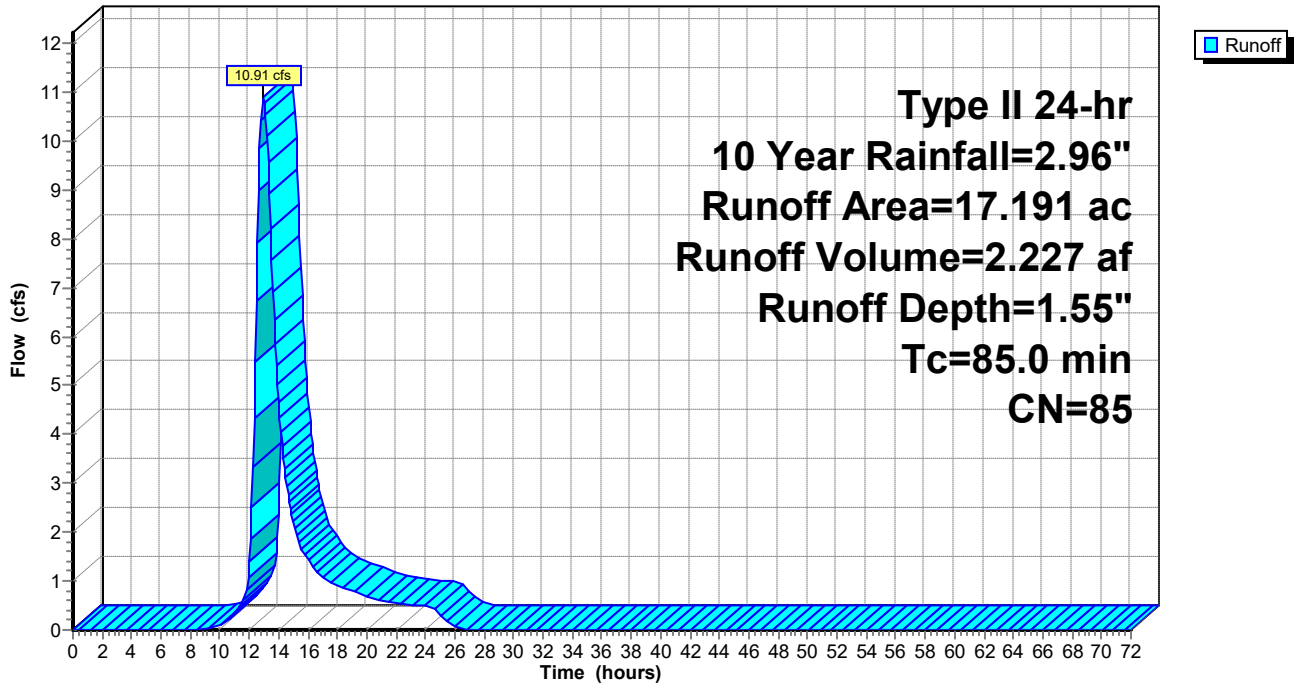
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 17.191	85	
17.191		100.00% Pervious Area

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

Subcatchment 10S: DA-52

Hydrograph



Summary for Subcatchment 11S: DA-33

Runoff = 5.77 cfs @ 16.48 hrs, Volume= 3.509 af, Depth= 1.41"
 Routed to Link 34L : DP-33

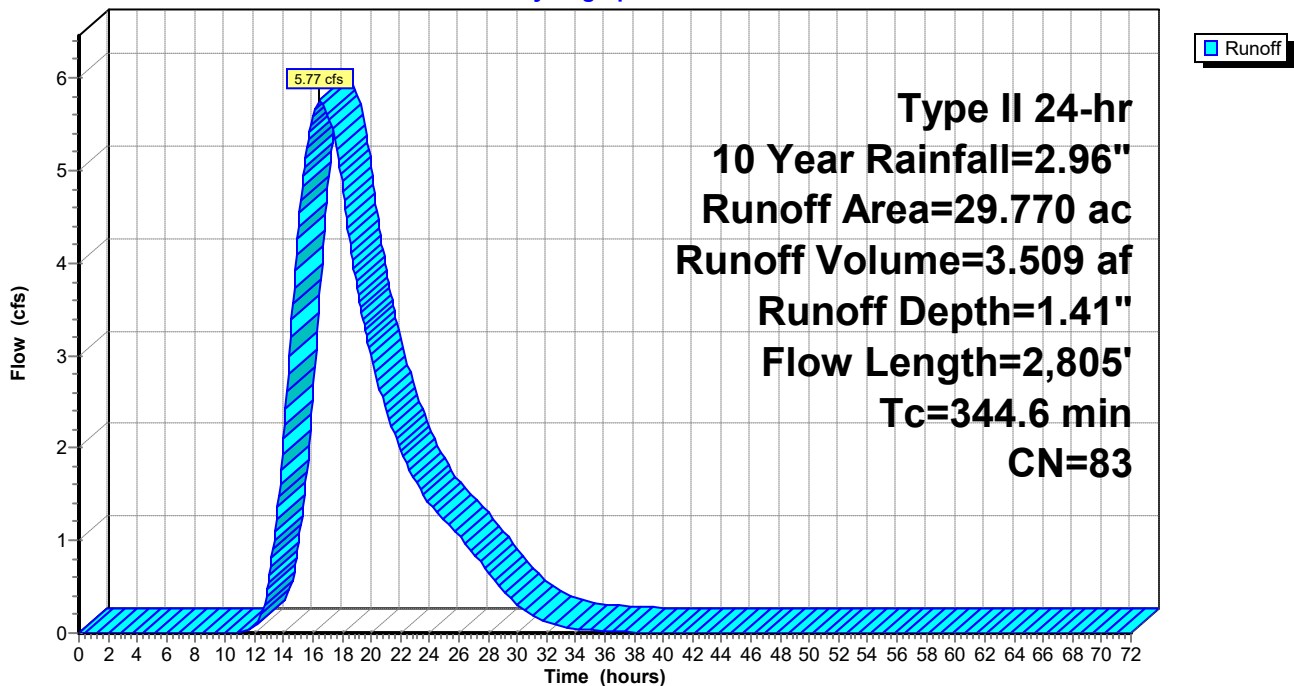
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 29.770	83	
29.770		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
278.9	100	0.0001	0.01		Sheet Flow, Smooth surfaces
					Smooth surfaces n= 0.400 P2= 2.08"
65.7	2,705	0.0096	0.69		Shallow Concentrated Flow, Short Grass Pasture
					Short Grass Pasture Kv= 7.0 fps
344.6	2,805	Total			

Subcatchment 11S: DA-33

Hydrograph



Summary for Subcatchment 12S: DA-34

Runoff = 1.38 cfs @ 41.79 hrs, Volume= 3.519 af, Depth> 1.06"
 Routed to Link 11L : DP-34

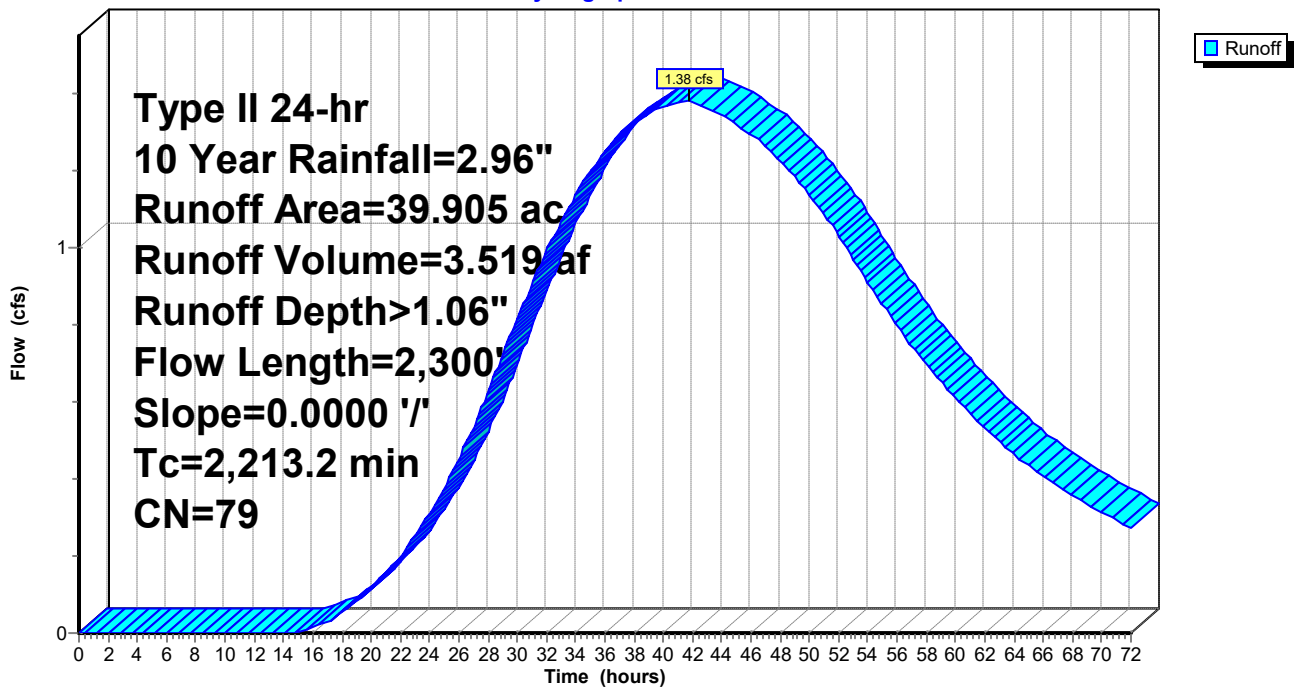
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 39.905	79	
39.905		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
557.0	100	0.0000	0.00		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
1,656.2	2,200	0.0000	0.02		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
2,213.2	2,300	Total			

Subcatchment 12S: DA-34

Hydrograph



Summary for Subcatchment 13S: DA-3

Runoff = 1.23 cfs @ 12.37 hrs, Volume= 0.149 af, Depth= 0.99"
 Routed to Link 12L : DP-3

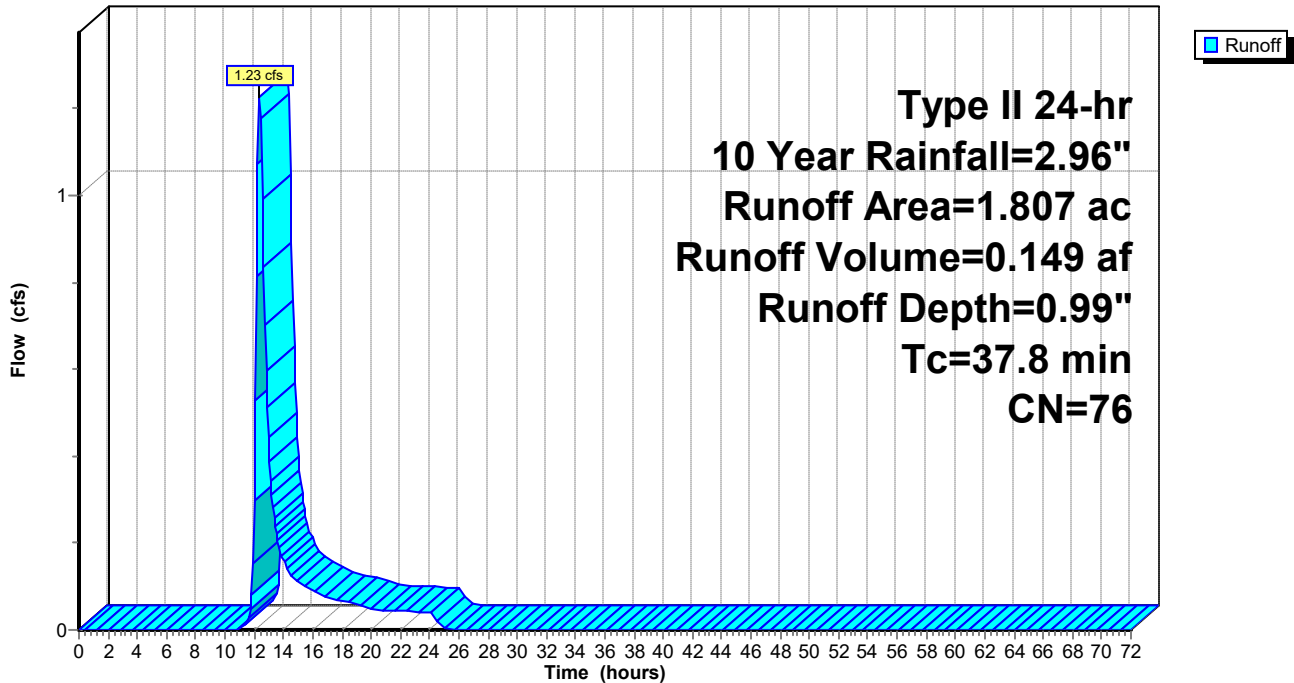
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 1.807	76	
1.807		100.00% Pervious Area

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

Subcatchment 13S: DA-3

Hydrograph



Summary for Subcatchment 14S: DA-1

Runoff = 1.45 cfs @ 12.29 hrs, Volume= 0.196 af, Depth= 0.45"
 Routed to Link 13L : DP-1

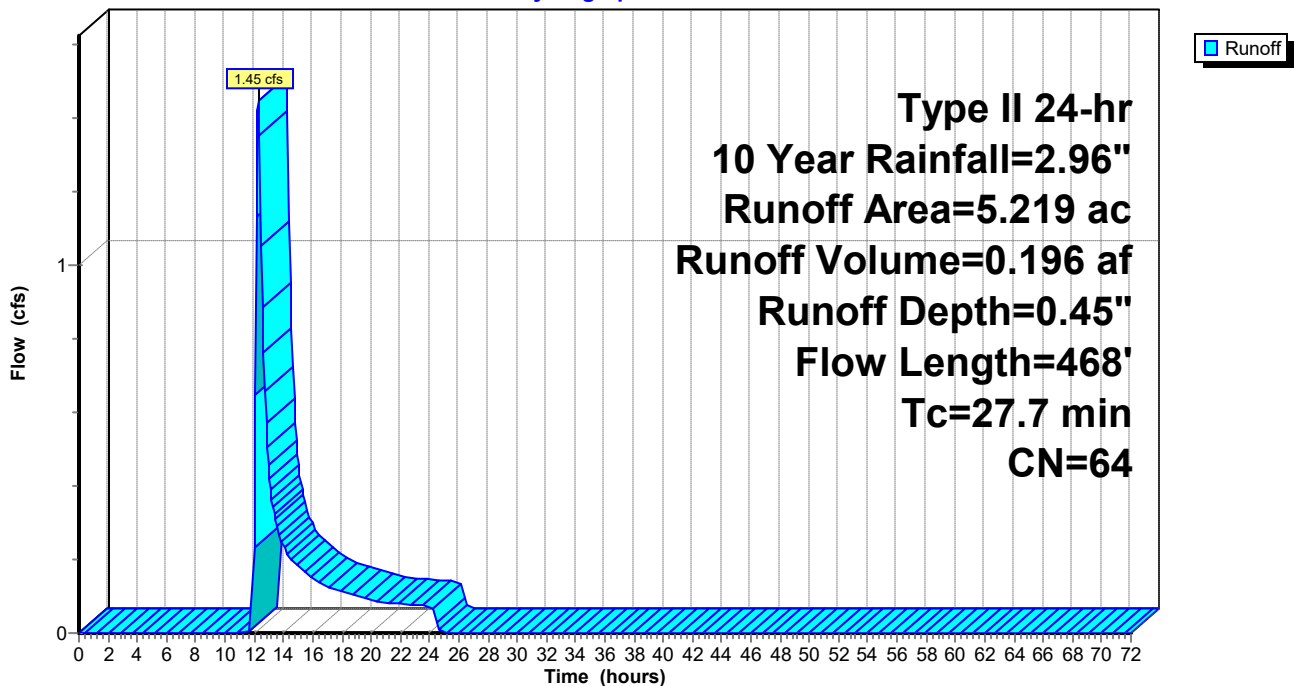
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 5.219	64	
5.219		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.7	100	0.0424	0.08		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
8.0	368	0.0121	0.77		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
27.7	468	Total			

Subcatchment 14S: DA-1

Hydrograph



Summary for Subcatchment 15S: DA-5

Runoff = 13.93 cfs @ 13.92 hrs, Volume= 4.800 af, Depth= 0.93"
 Routed to Link 14L : DP-5

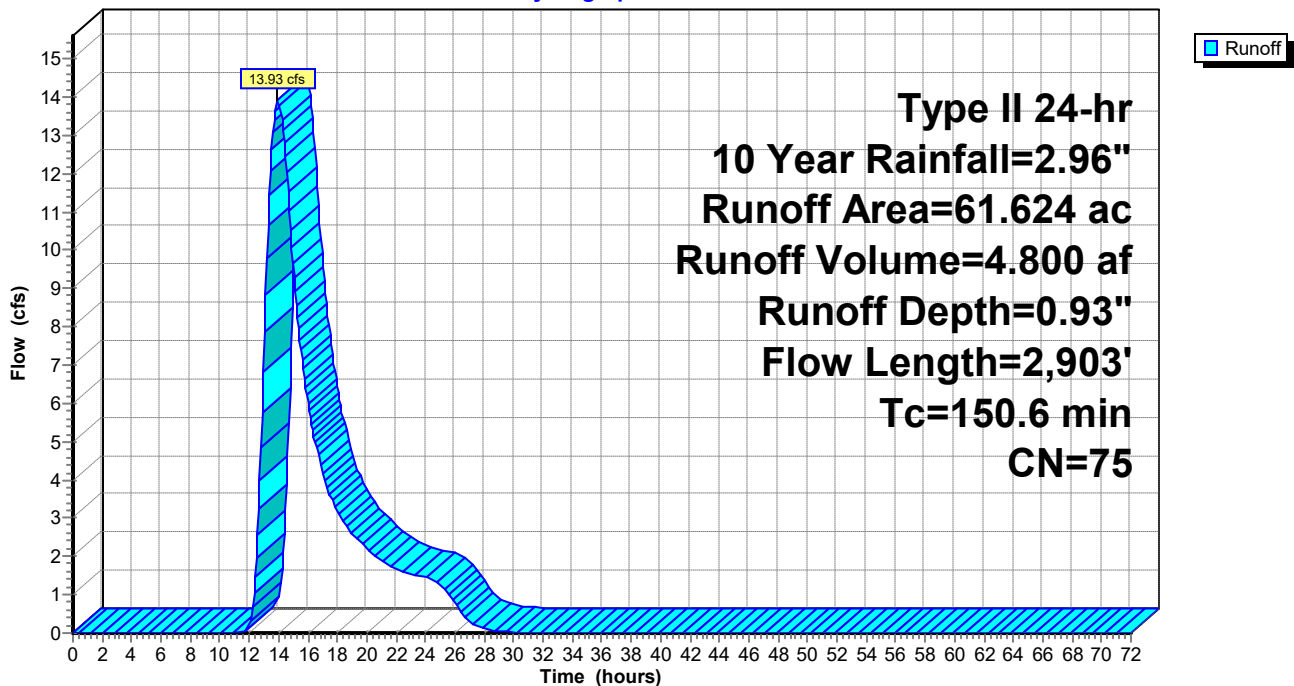
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 61.624	75	
61.624		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
55.1	100	0.0033	0.03		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
95.5	2,803	0.0049	0.49		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
150.6	2,903	Total			

Subcatchment 15S: DA-5

Hydrograph



Summary for Subcatchment 16S: DA-7

Runoff = 12.96 cfs @ 13.80 hrs, Volume= 3.943 af, Depth= 1.55"
 Routed to Link 15L : DP-7

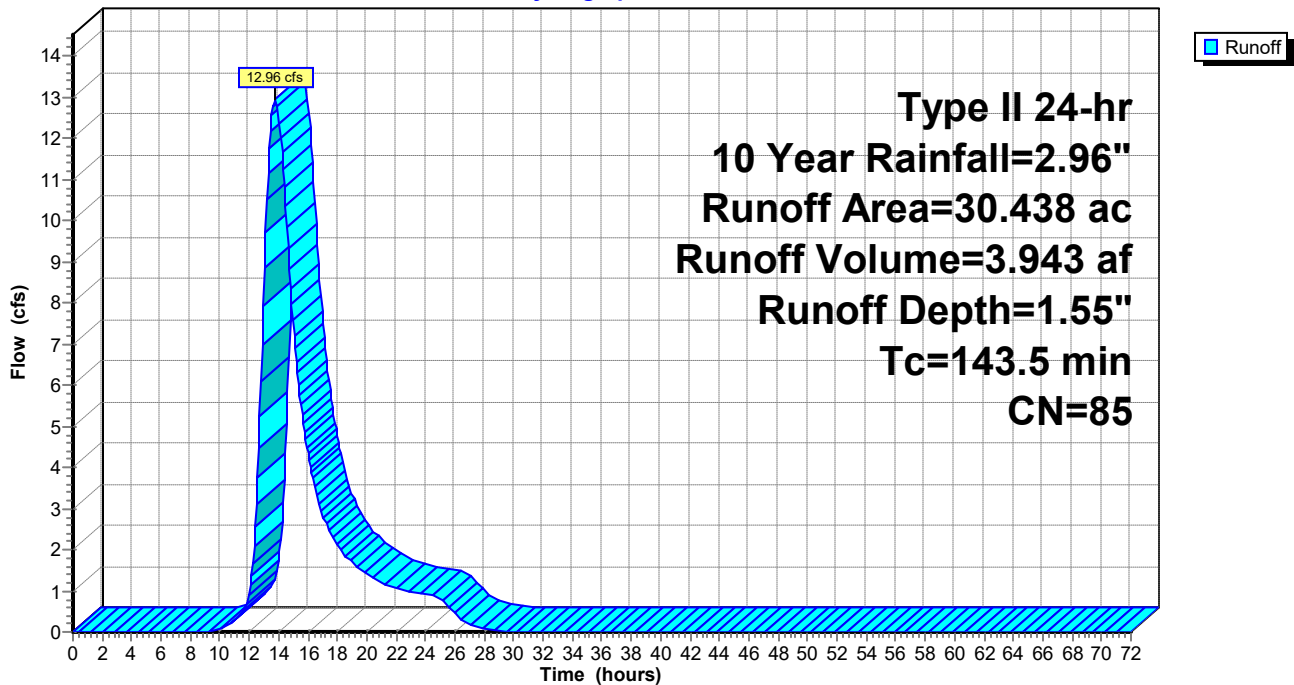
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 30.438	85	
30.438		100.00% Pervious Area

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

Subcatchment 16S: DA-7

Hydrograph



Summary for Subcatchment 17S: DA-53

Runoff = 10.99 cfs @ 13.67 hrs, Volume= 3.289 af, Depth= 1.22"
 Routed to Link 16L : DP-53

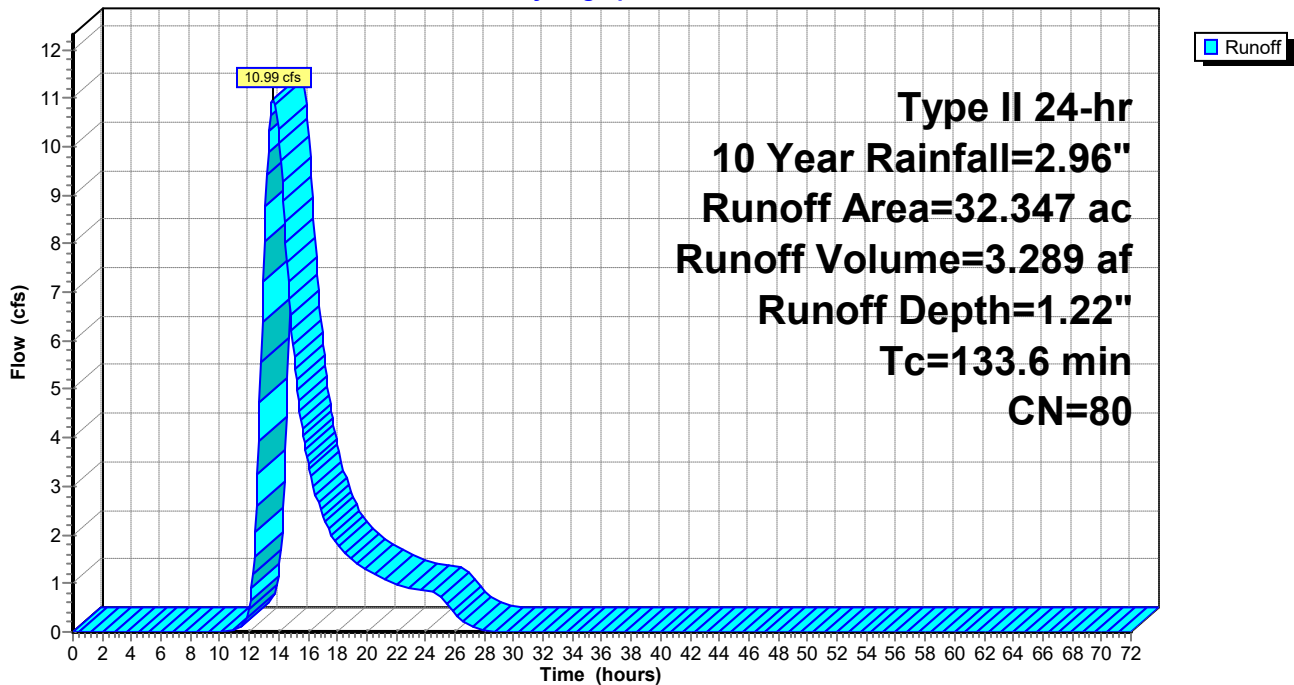
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 32.347	80	
32.347		100.00% Pervious Area

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

Subcatchment 17S: DA-53

Hydrograph



Summary for Subcatchment 18S: DA-54

Runoff = 2.30 cfs @ 12.47 hrs, Volume= 0.307 af, Depth= 1.28"
 Routed to Link 17L : DP-54

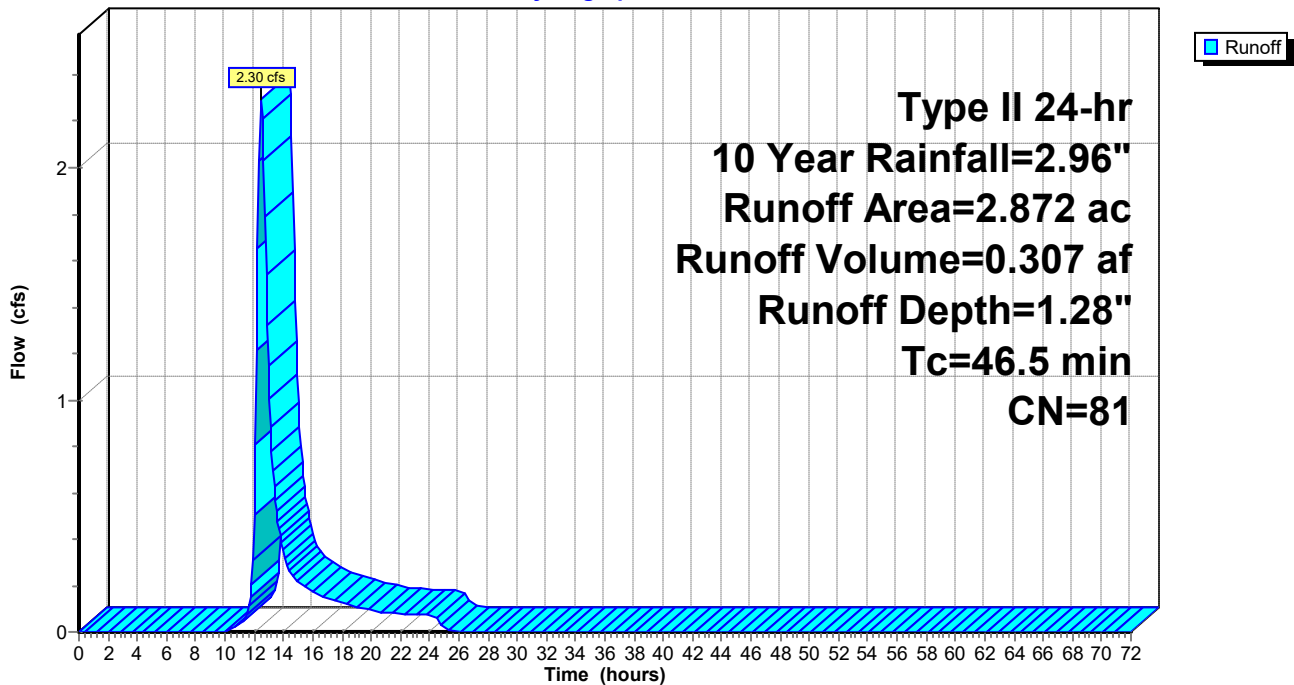
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 2.872	81	
2.872		100.00% Pervious Area

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

Subcatchment 18S: DA-54

Hydrograph



Summary for Subcatchment 19S: DA-8

Runoff = 2.05 cfs @ 12.38 hrs, Volume= 0.263 af, Depth= 0.78"

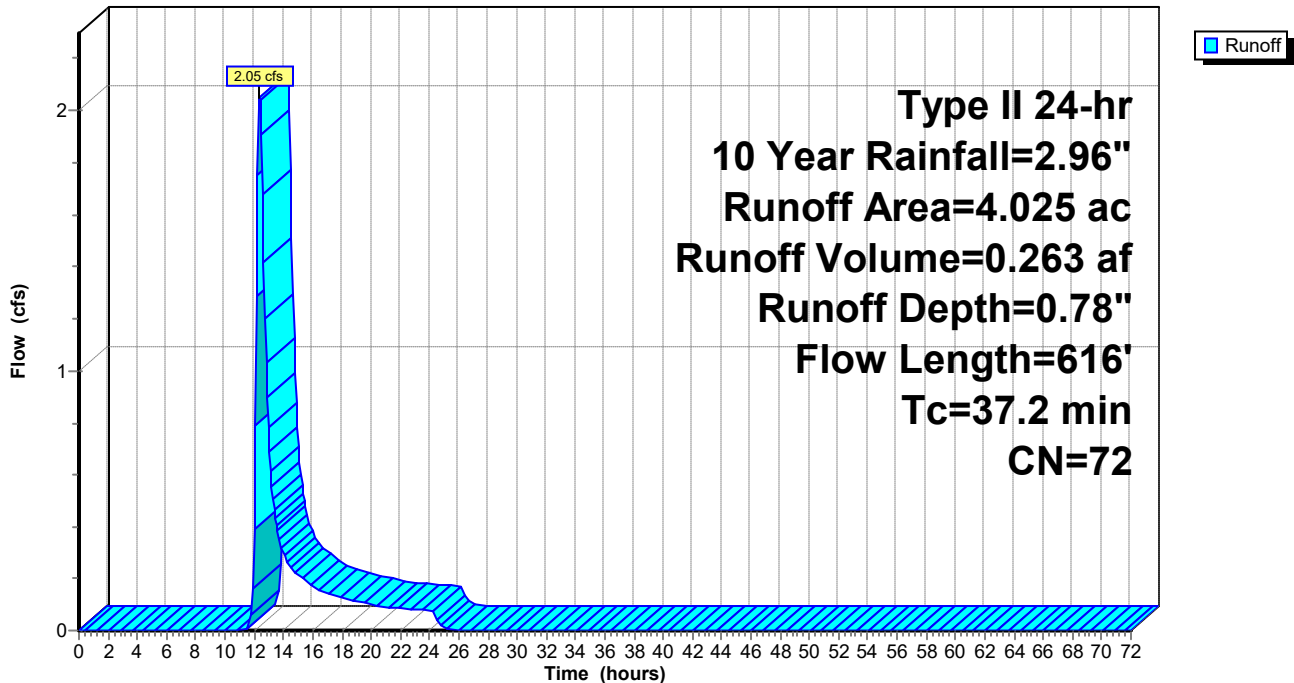
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 4.025	72	
4.025		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.7	100	0.0241	0.07		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
12.5	516	0.0097	0.69		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
37.2	616	Total			

Subcatchment 19S: DA-8

Hydrograph



Summary for Subcatchment 20S: DA-9

Runoff = 9.21 cfs @ 12.63 hrs, Volume= 1.457 af, Depth= 1.41"
 Routed to Link 19L : DP-9

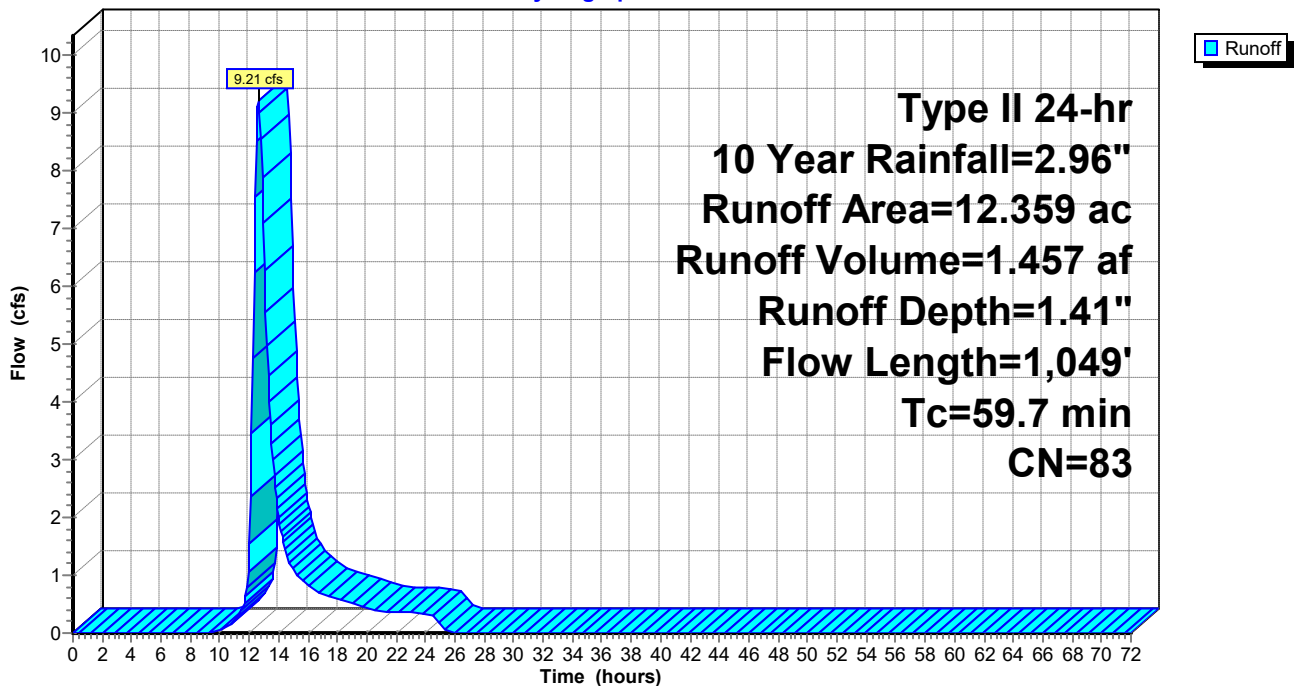
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 12.359	83	
12.359		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.4	100	0.0114	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
26.3	949	0.0074	0.60		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
59.7	1,049	Total			

Subcatchment 20S: DA-9

Hydrograph



Summary for Subcatchment 21S: DA-10

Runoff = 2.10 cfs @ 12.30 hrs, Volume= 0.229 af, Depth= 1.04"
 Routed to Link 20L : DP-10

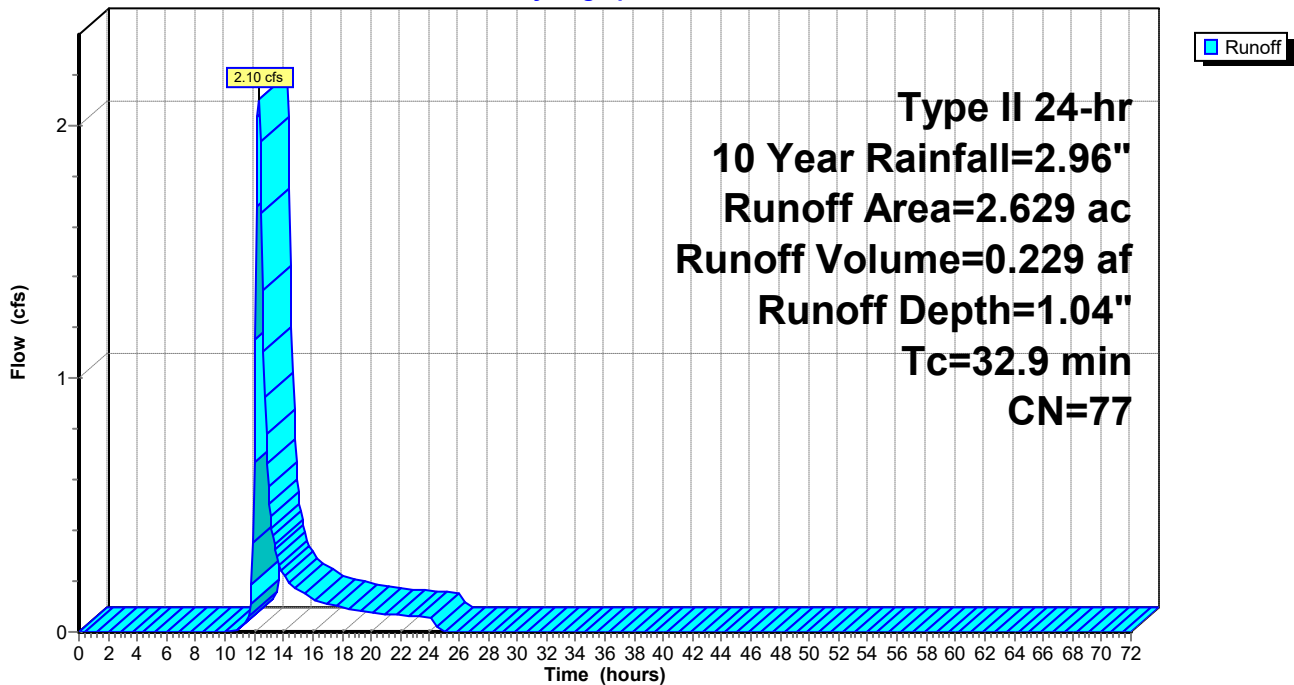
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 2.629	77	
2.629		100.00% Pervious Area

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

Subcatchment 21S: DA-10

Hydrograph



Summary for Subcatchment 22S: DA-11

Runoff = 3.03 cfs @ 12.34 hrs, Volume= 0.342 af, Depth= 1.48"
 Routed to Link 21L : DP-11

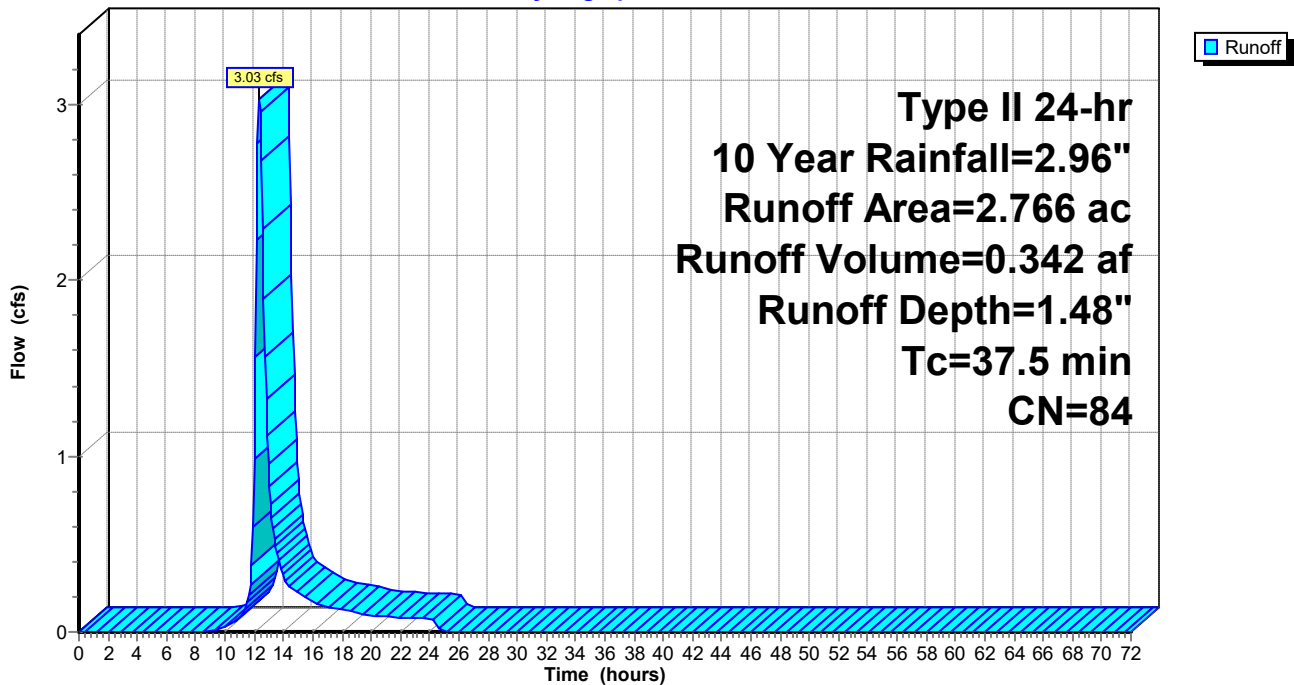
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 2.766	84	
2.766		100.00% Pervious Area

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

Subcatchment 22S: DA-11

Hydrograph



Summary for Subcatchment 23S: DA-12

Runoff = 13.40 cfs @ 13.25 hrs, Volume= 3.236 af, Depth= 1.22"
 Routed to Link 23L : DP-12

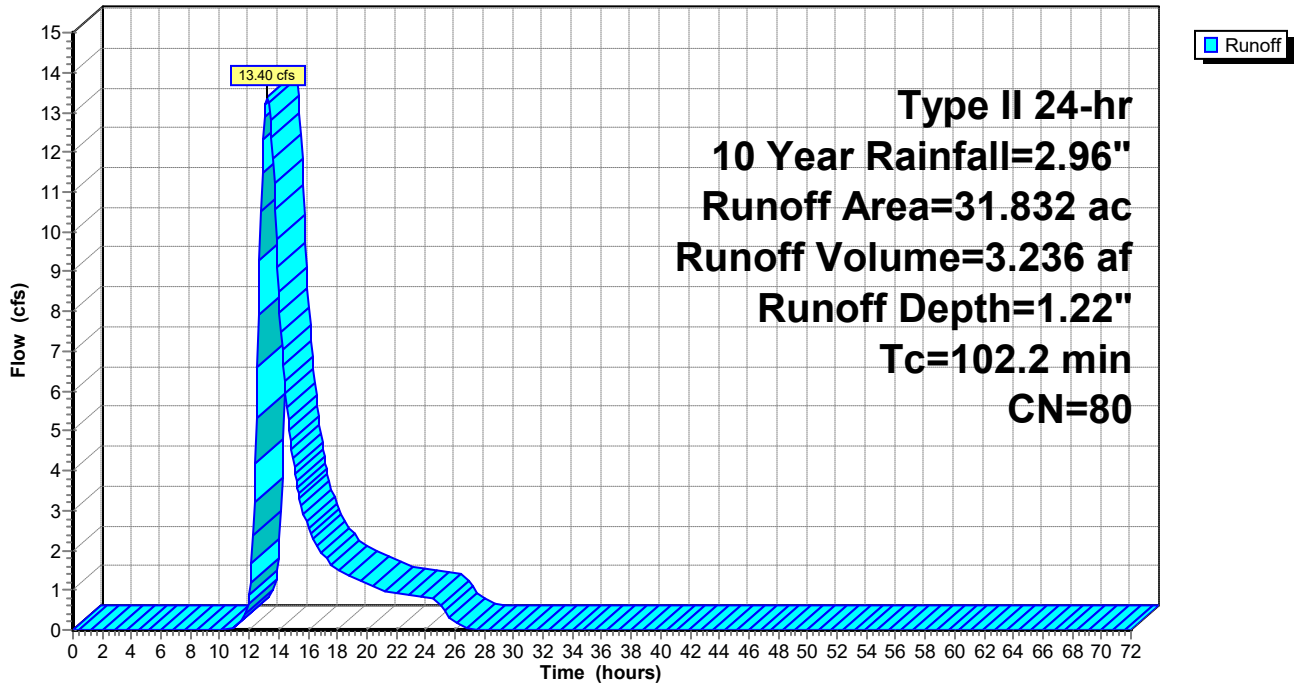
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 31.832	80	
31.832		100.00% Pervious Area

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

Subcatchment 23S: DA-12

Hydrograph



Summary for Subcatchment 24S: DA-13

Runoff = 8.87 cfs @ 12.71 hrs, Volume= 1.507 af, Depth= 1.41"
 Routed to Link 22L : DP-13

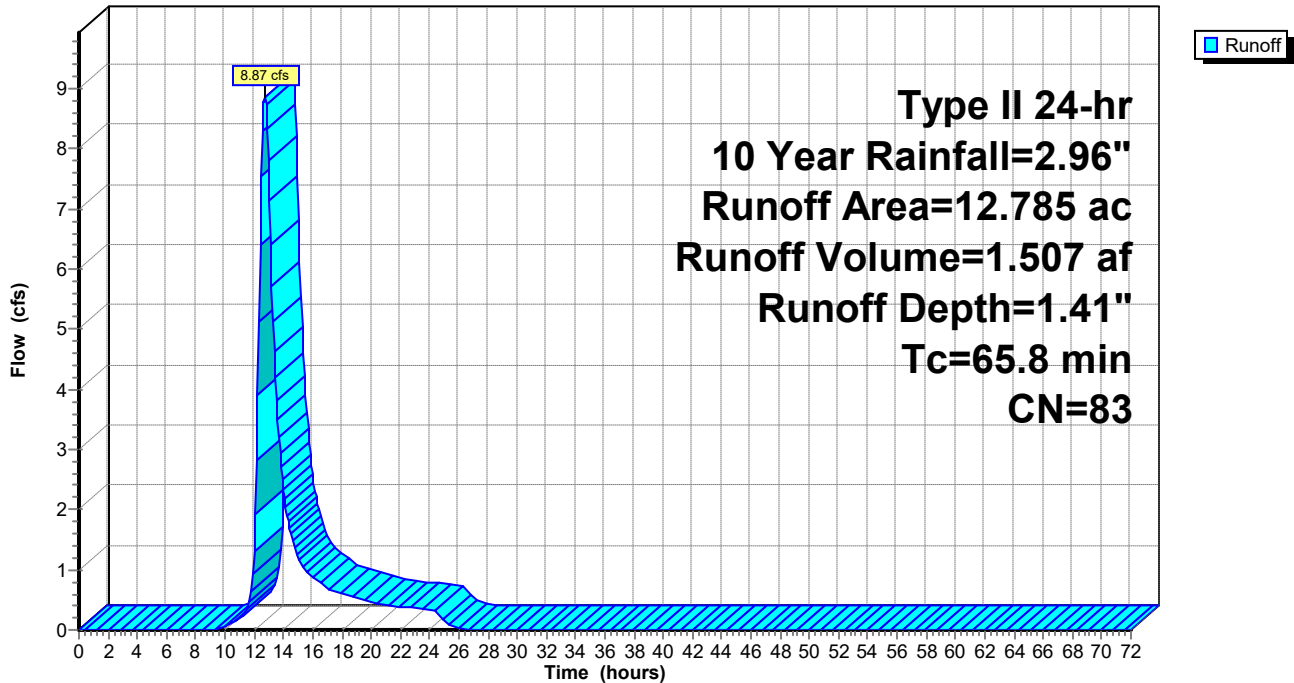
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 12.785	83	
12.785		100.00% Pervious Area

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

Subcatchment 24S: DA-13

Hydrograph



Summary for Subcatchment 25S: DA-14

Runoff = 14.61 cfs @ 14.14 hrs, Volume= 5.066 af, Depth= 1.28"
 Routed to Link 24L : DP-14

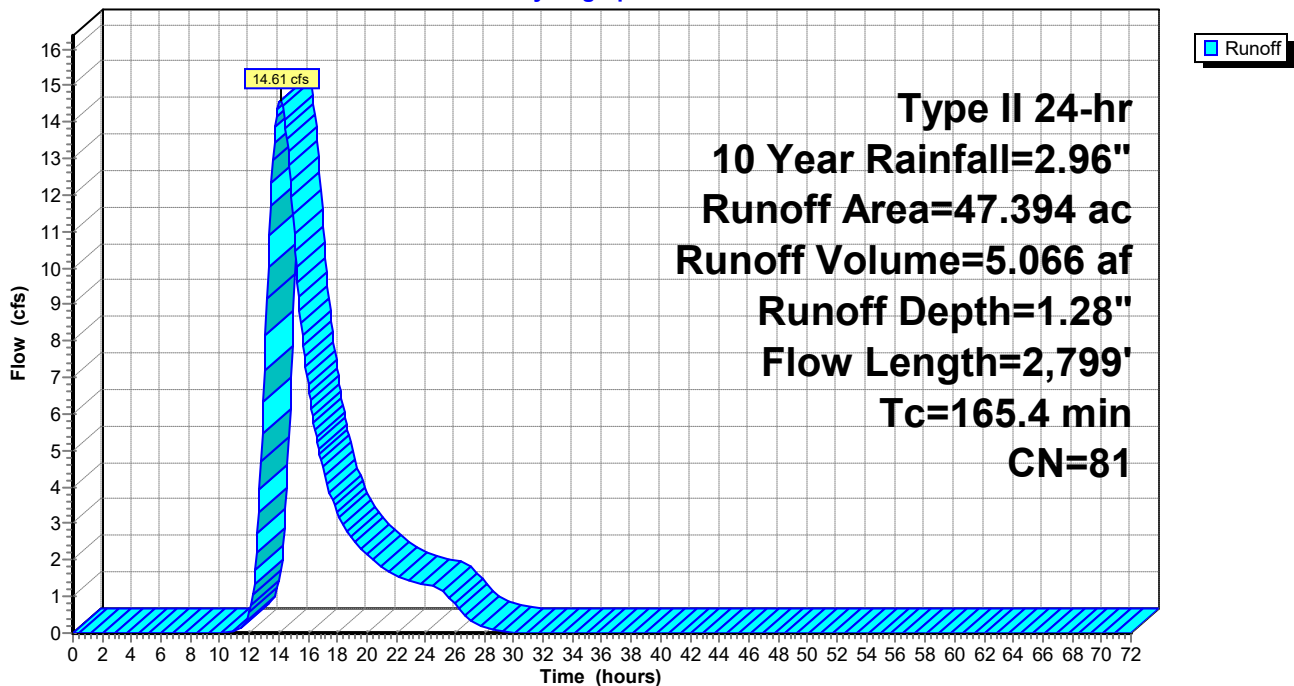
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 47.394	81	
47.394		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.1	100	0.0211	0.06		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
139.3	2,699	0.0021	0.32		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
165.4	2,799	Total			

Subcatchment 25S: DA-14

Hydrograph



Summary for Subcatchment 26S: DA-15

Runoff = 5.42 cfs @ 12.93 hrs, Volume= 1.080 af, Depth= 1.41"
 Routed to Link 25L : DP-15

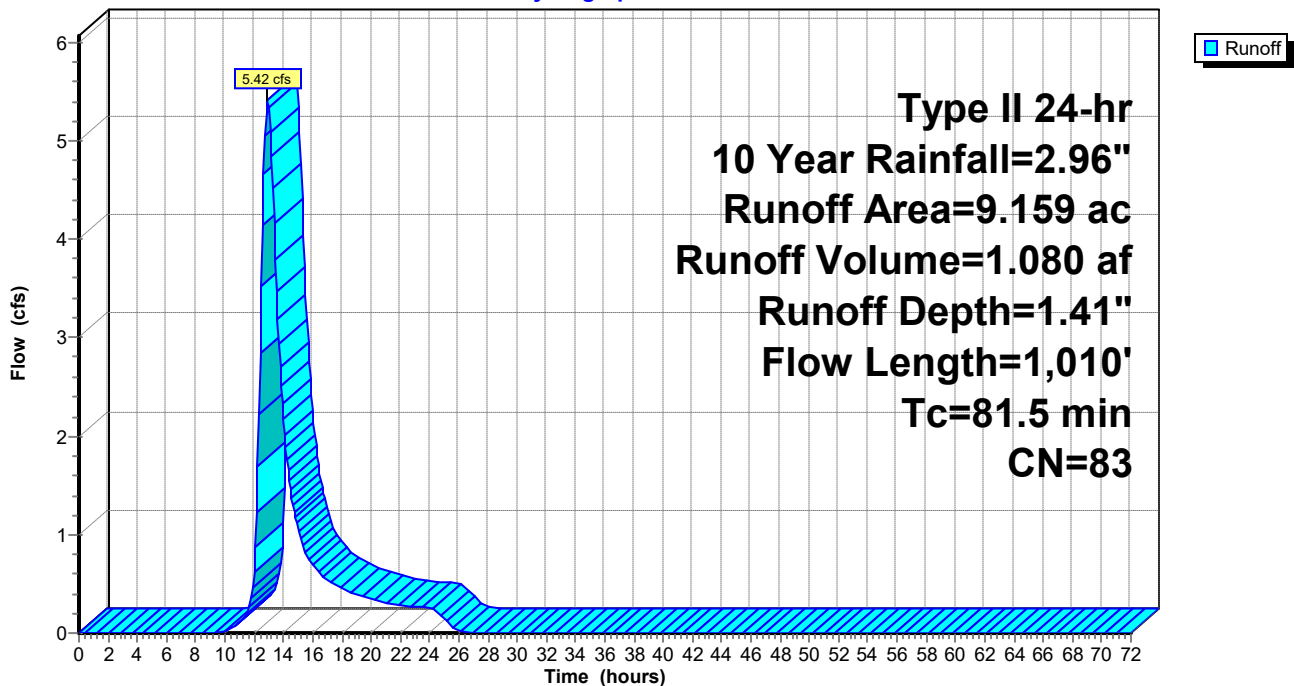
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 9.159	83	
9.159		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.6	100	0.0112	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
47.9	910	0.0020	0.32		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
81.5	1,010	Total			

Subcatchment 26S: DA-15

Hydrograph



Summary for Subcatchment 27S: DA-17

Runoff = 0.41 cfs @ 19.35 hrs, Volume= 0.368 af, Depth= 1.48"
 Routed to Link 26L : DP-17

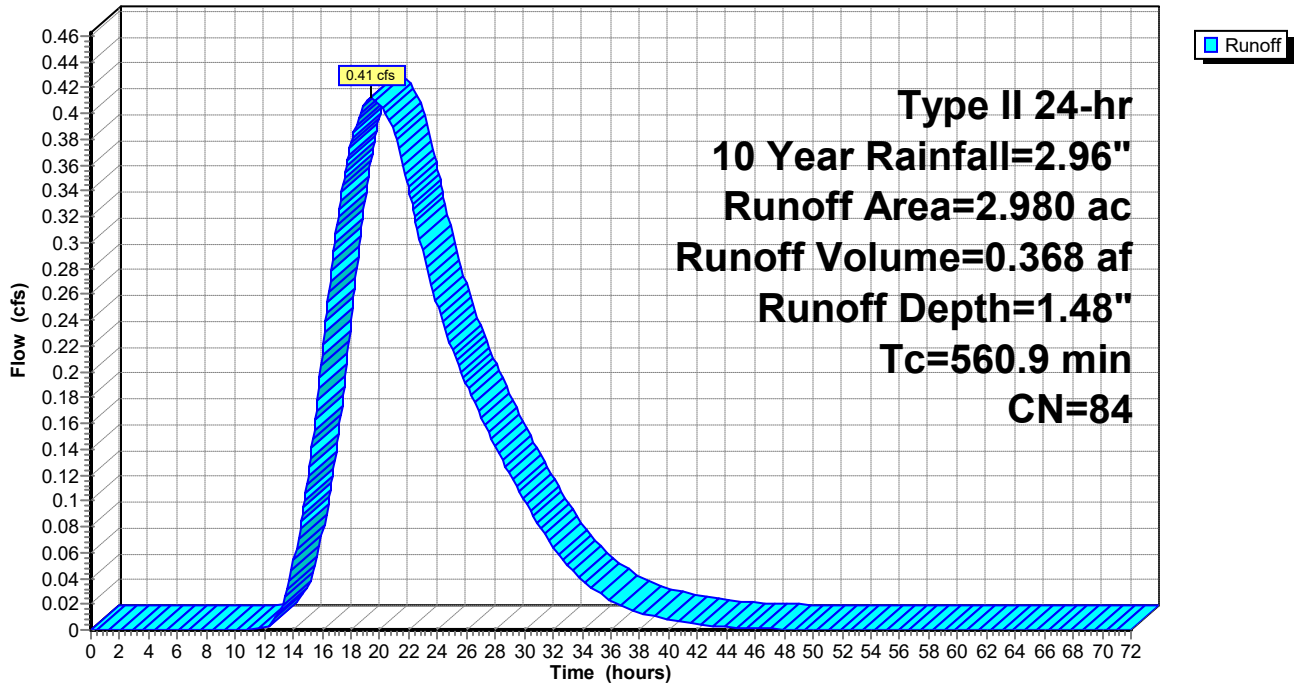
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 2.980	84	
2.980		100.00% Pervious Area

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

Subcatchment 27S: DA-17

Hydrograph



Summary for Subcatchment 28S: DA-18

Runoff = 11.68 cfs @ 13.07 hrs, Volume= 2.572 af, Depth= 1.55"
 Routed to Link 27L : DP-18

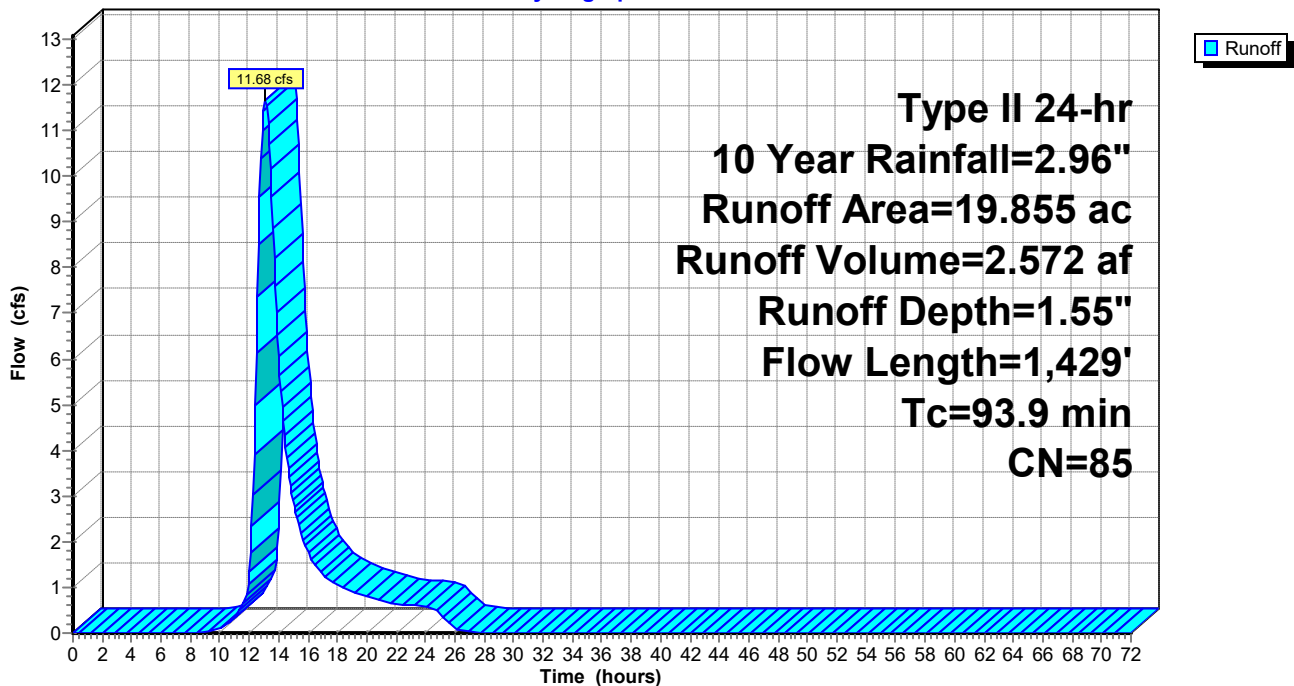
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 19.855	85	
19.855		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
42.3	100	0.0063	0.04		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
51.6	1,329	0.0038	0.43		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
93.9	1,429	Total			

Subcatchment 28S: DA-18

Hydrograph



Summary for Subcatchment 29S: DA-19

Runoff = 4.35 cfs @ 12.58 hrs, Volume= 0.653 af, Depth= 1.48"
 Routed to Link 28L : DP-19

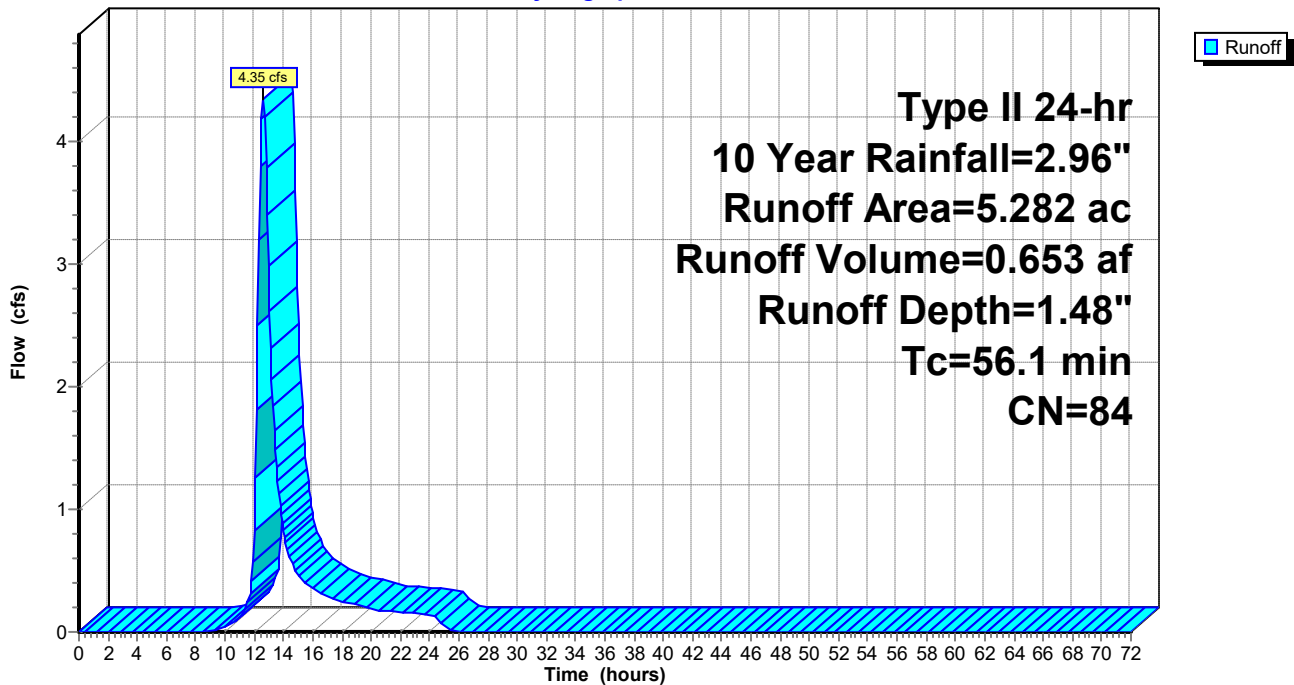
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 5.282	84	
5.282		100.00% Pervious Area

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

Subcatchment 29S: DA-19

Hydrograph



Summary for Subcatchment 30S: DA-20

Runoff = 10.91 cfs @ 13.61 hrs, Volume= 3.325 af, Depth= 1.04"
 Routed to Link 29L : DP-20

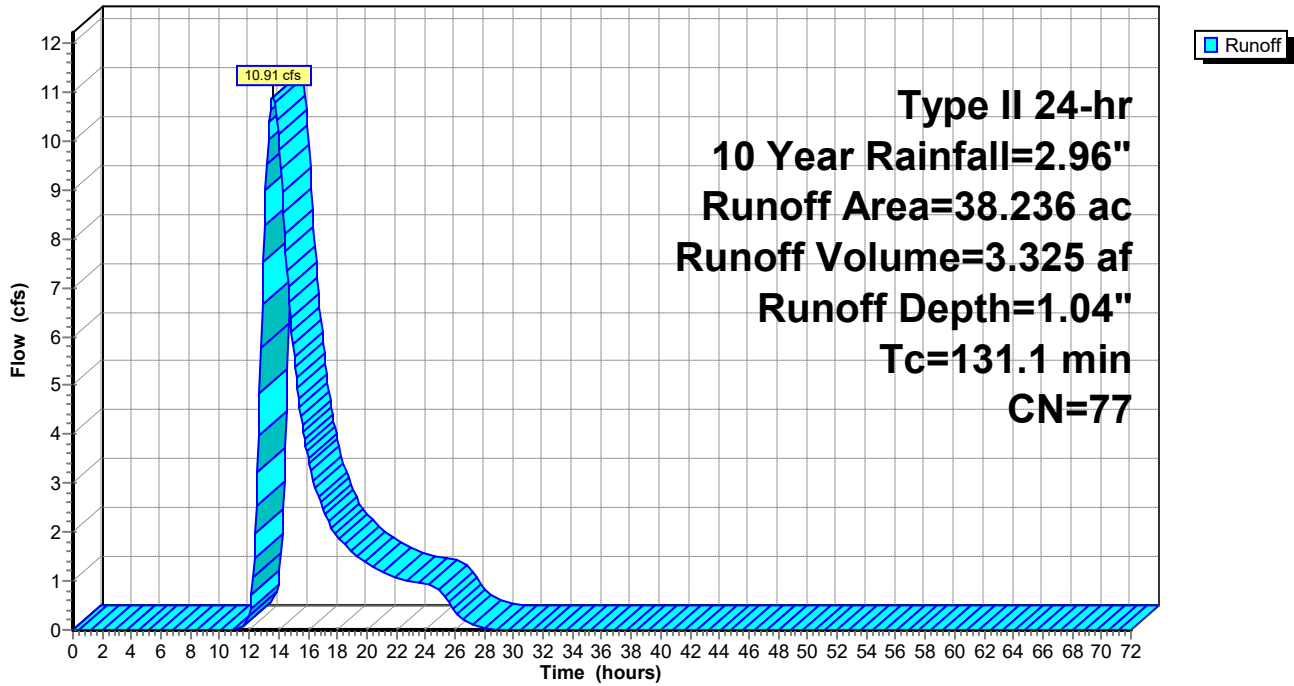
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 38.236	77	
38.236		100.00% Pervious Area

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

Subcatchment 30S: DA-20

Hydrograph



Summary for Subcatchment 31S: DA-22

Runoff = 9.55 cfs @ 12.79 hrs, Volume= 1.750 af, Depth= 1.22"
 Routed to Link 30L : DP-22

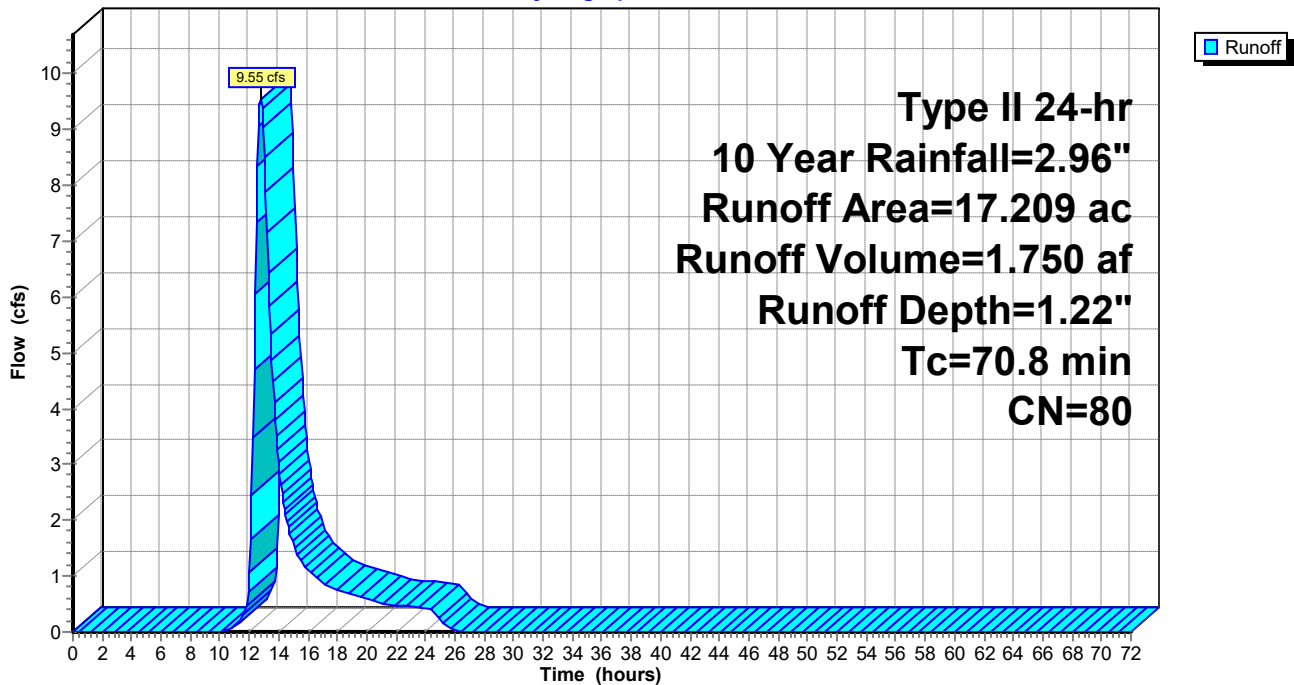
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 17.209	80	
17.209		100.00% Pervious Area

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

Subcatchment 31S: DA-22

Hydrograph



Summary for Subcatchment 32S: DA-23

Runoff = 3.43 cfs @ 12.40 hrs, Volume= 0.461 af, Depth= 0.74"
 Routed to Link 31L : DP-23

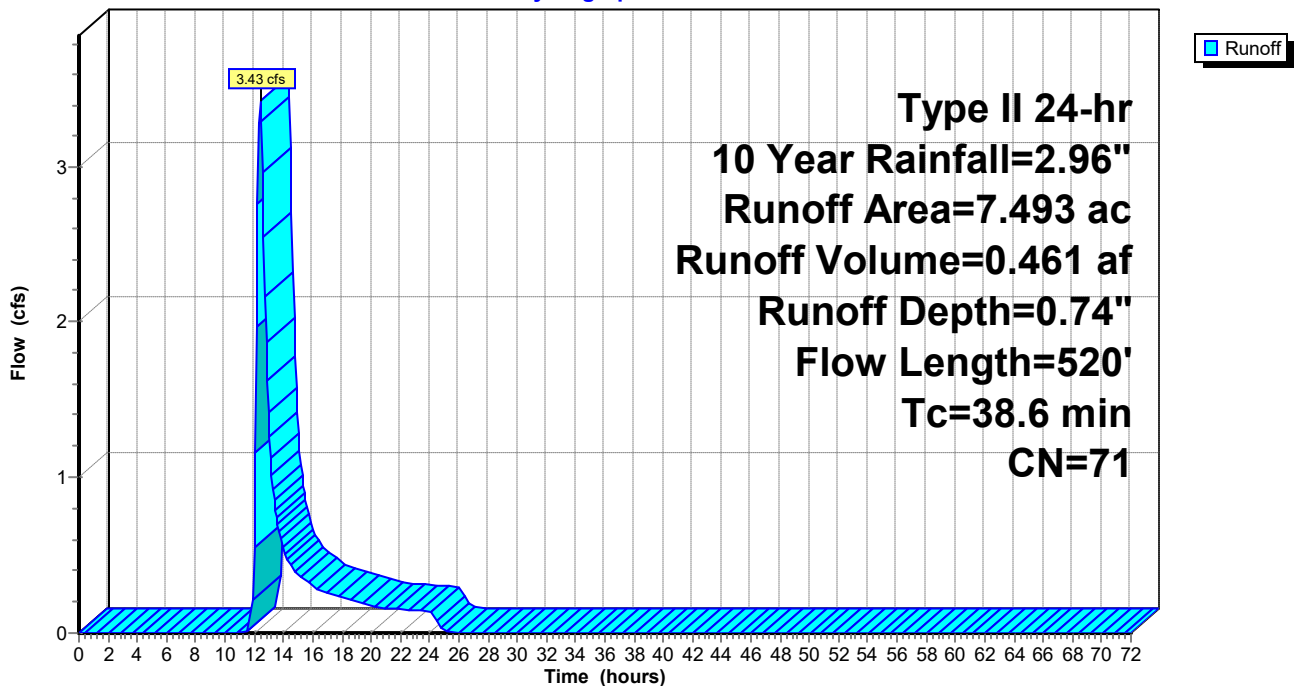
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 7.493	71	
7.493		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.6	100	0.0200	0.06		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
12.0	420	0.0070	0.59		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
38.6	520	Total			

Subcatchment 32S: DA-23

Hydrograph



Summary for Subcatchment 33S: DA-24

Runoff = 4.64 cfs @ 13.04 hrs, Volume= 1.051 af, Depth= 0.93"
 Routed to Link 32L : DP-24

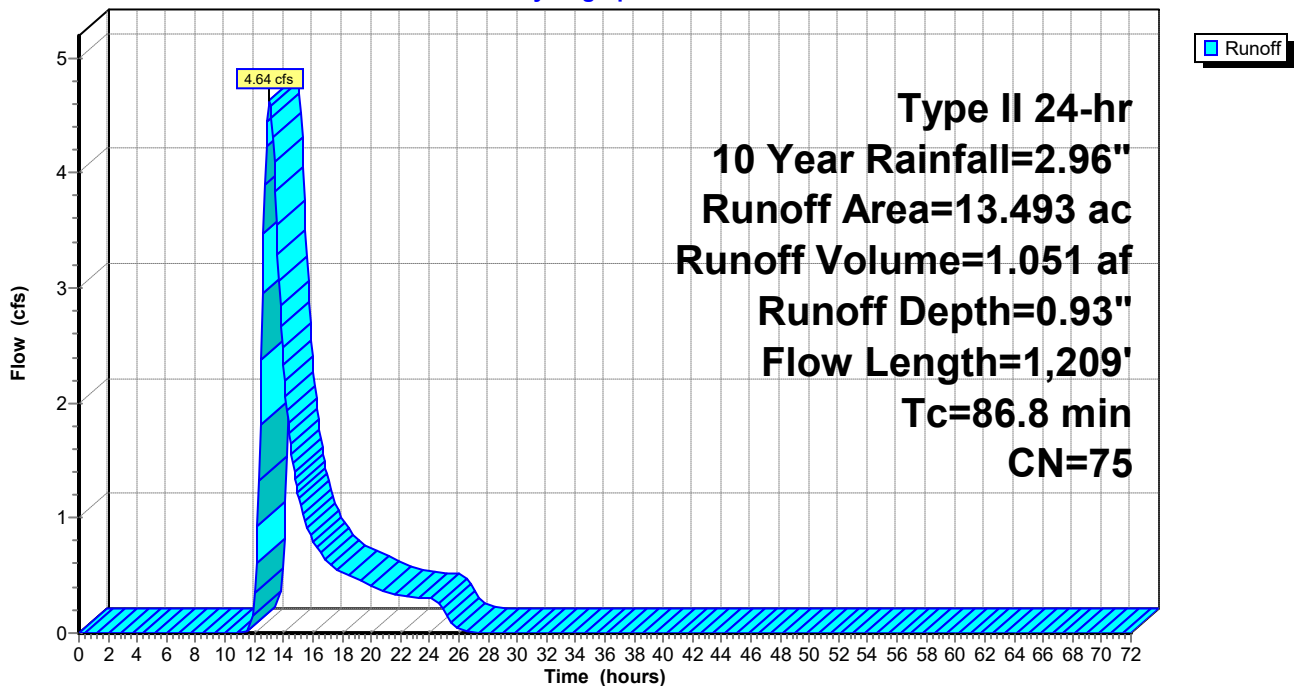
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 13.493	75	
13.493		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
37.0	100	0.0088	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
49.8	1,109	0.0028	0.37		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
86.8	1,209	Total			

Subcatchment 33S: DA-24

Hydrograph



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Type II 24-hr 10 Year Rainfall=2.96"

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Summary for Subcatchment 34S: DA-25

Runoff = 29.00 cfs @ 12.75 hrs, Volume= 5.121 af, Depth= 1.22"
Routed to Link 33L : DP-25

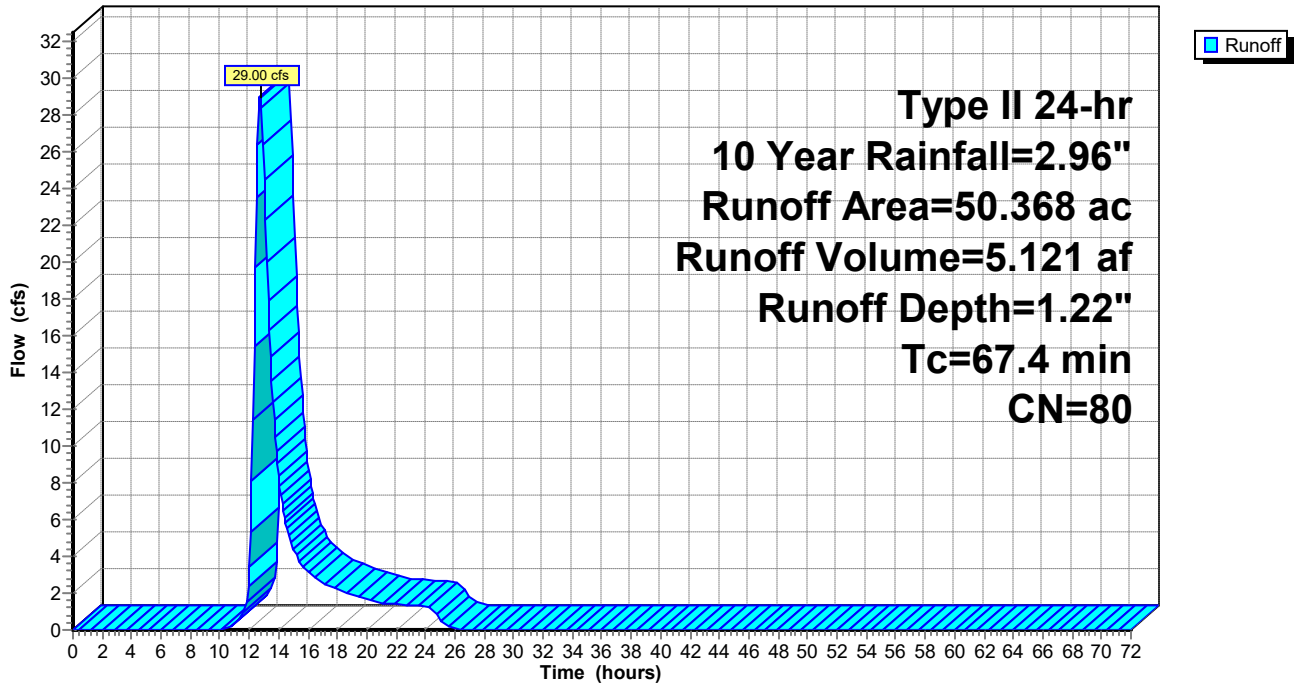
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 50.368	80	
50.368		100.00% Pervious Area

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

Subcatchment 34S: DA-25

Hydrograph



Summary for Subcatchment 35S: DA-26

Runoff = 11.11 cfs @ 30.12 hrs, Volume= 20.547 af, Depth> 1.27"
 Routed to Link 35L : DP-26

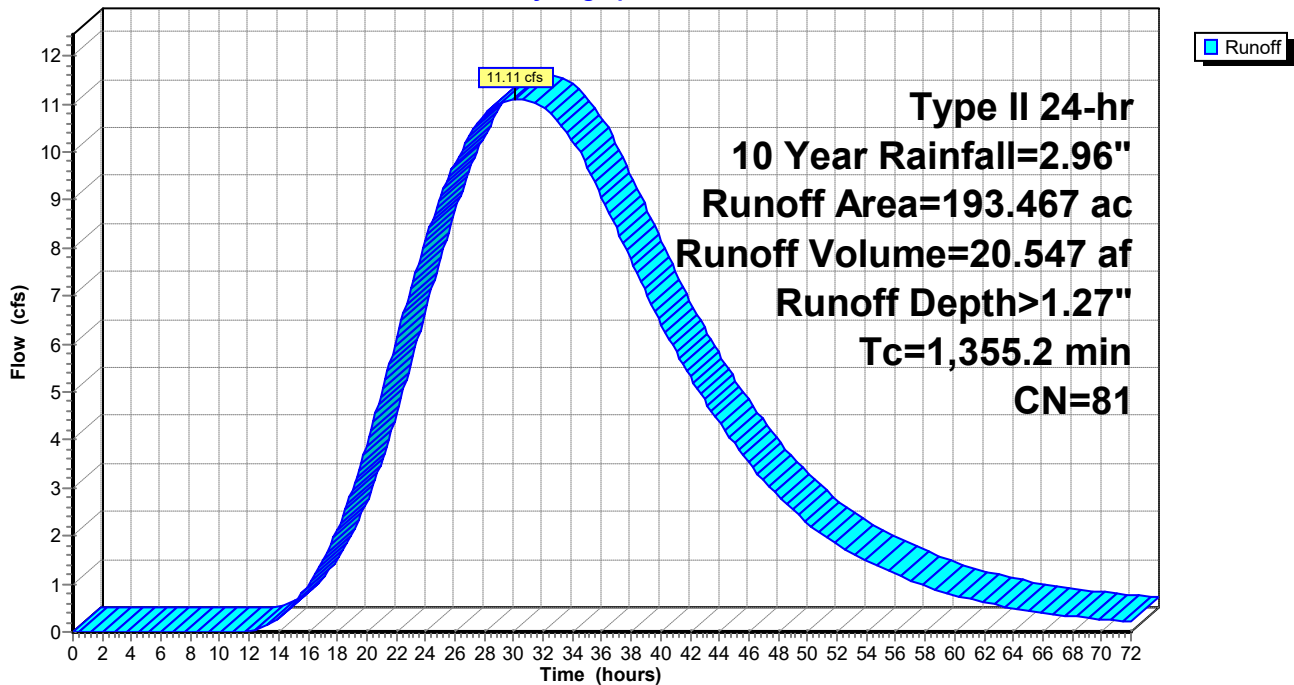
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 193.467	81	
193.467		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1,355.2					Direct Entry,

Subcatchment 35S: DA-26

Hydrograph



Summary for Subcatchment 36S: DA-27

Runoff = 3.90 cfs @ 20.23 hrs, Volume= 3.609 af, Depth= 1.35"
 Routed to Link 36L : DP-27

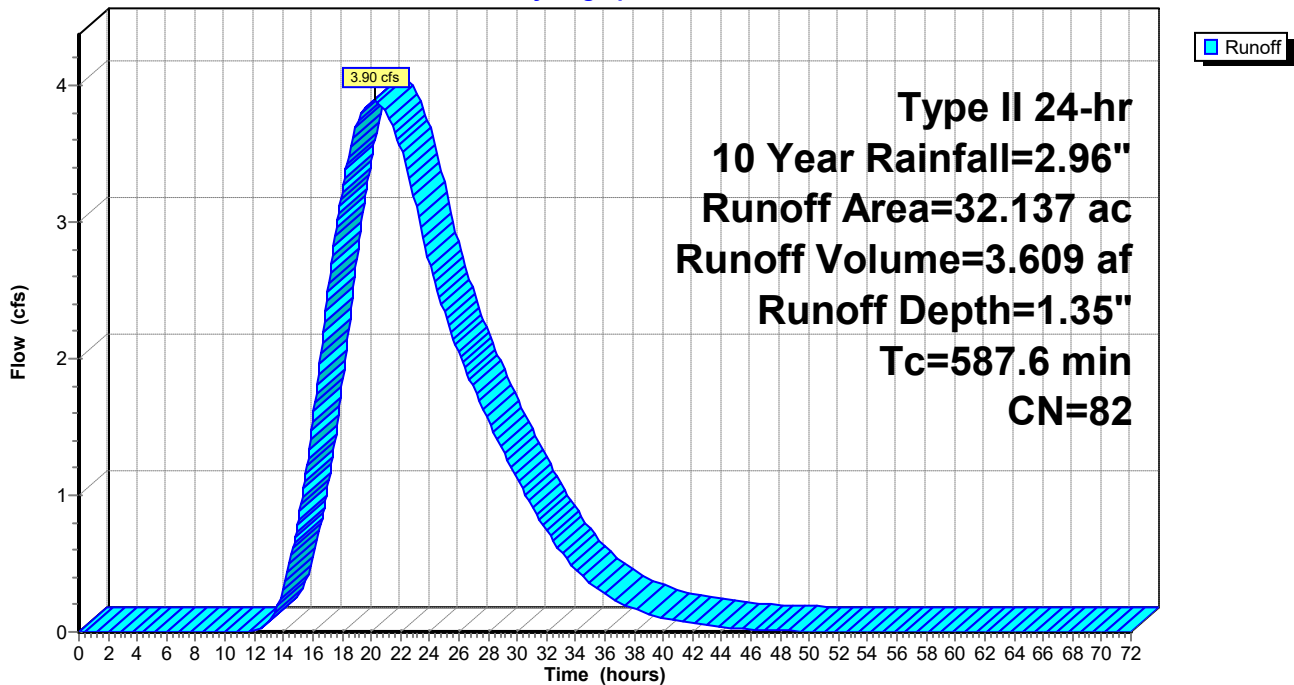
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 32.137	82	
32.137		100.00% Pervious Area

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

Subcatchment 36S: DA-27

Hydrograph



Summary for Subcatchment 37S: DA-28

Runoff = 9.09 cfs @ 12.33 hrs, Volume= 1.013 af, Depth= 1.28"
 Routed to Link 37L : DP-28

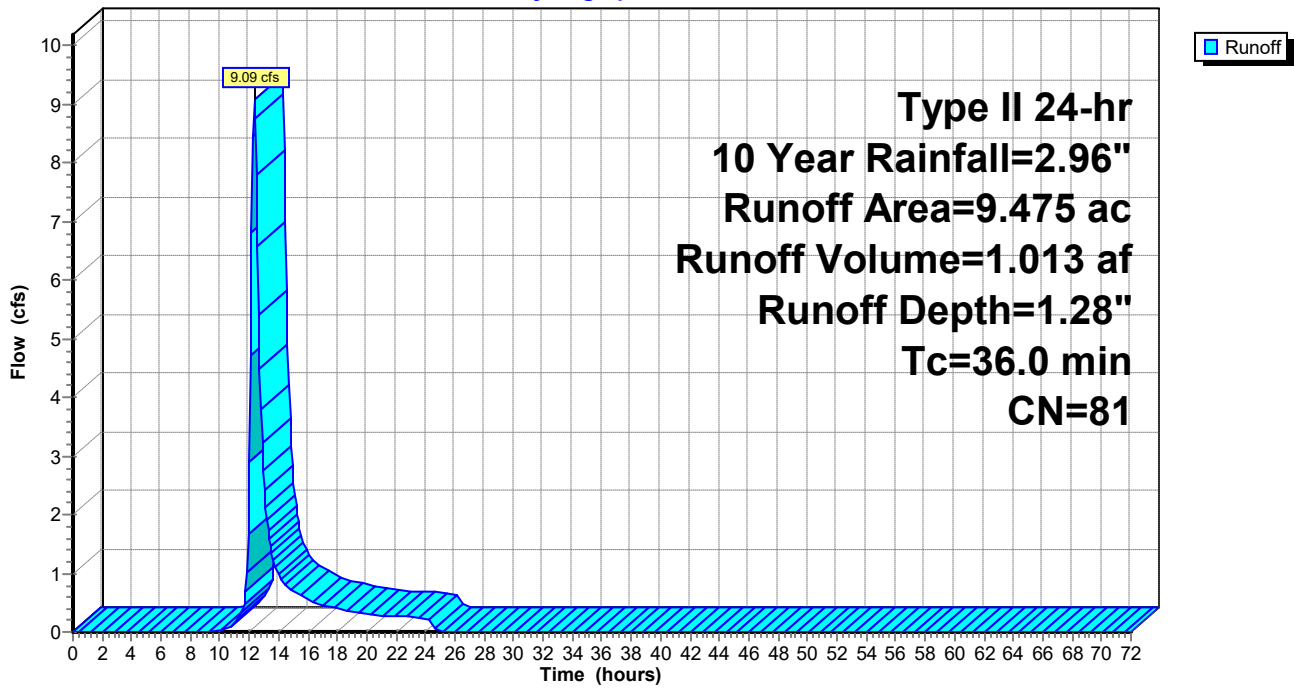
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 9.475	81	
9.475		100.00% Pervious Area

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

Subcatchment 37S: DA-28

Hydrograph



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Type II 24-hr 10 Year Rainfall=2.96"

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Summary for Subcatchment 38S: DA-29

Runoff = 30.22 cfs @ 12.90 hrs, Volume= 6.046 af, Depth= 1.04"
Routed to Link 38L : DP-29

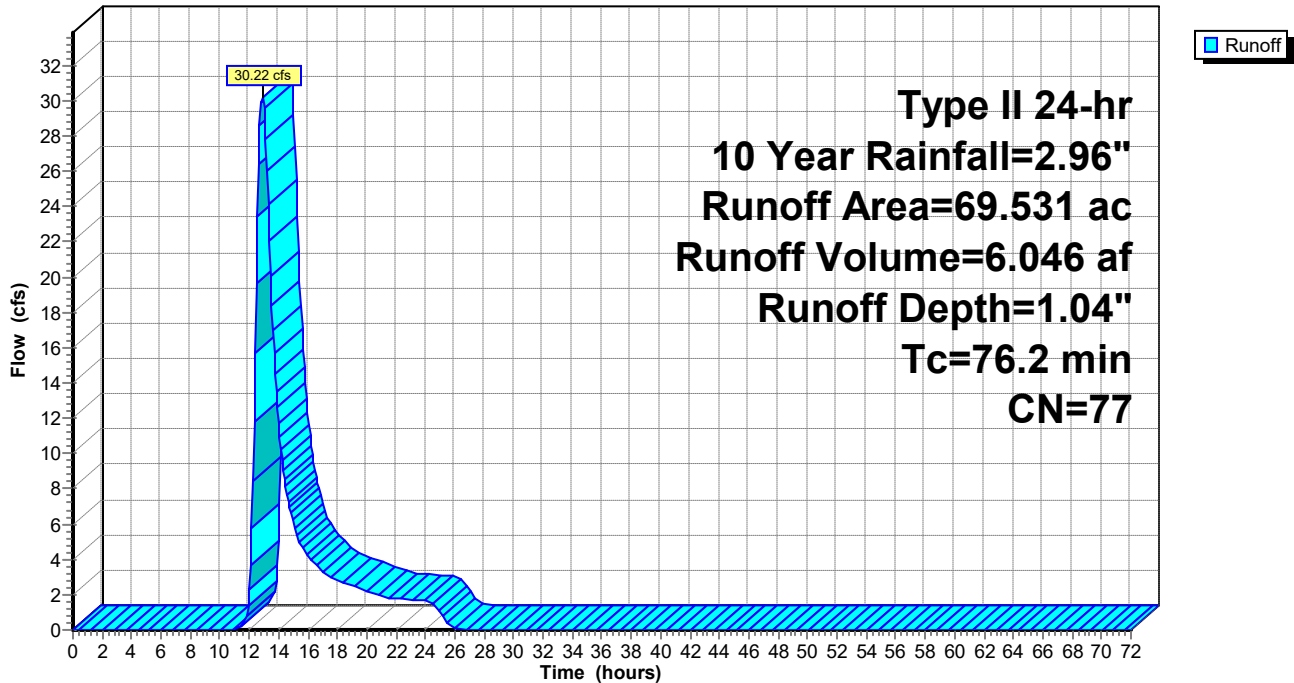
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 69.531	77	
69.531		100.00% Pervious Area

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

Subcatchment 38S: DA-29

Hydrograph



Summary for Subcatchment 39S: DA-30

Runoff = 23.36 cfs @ 12.87 hrs, Volume= 4.473 af, Depth= 1.48"
 Routed to Pond 1P : P-30

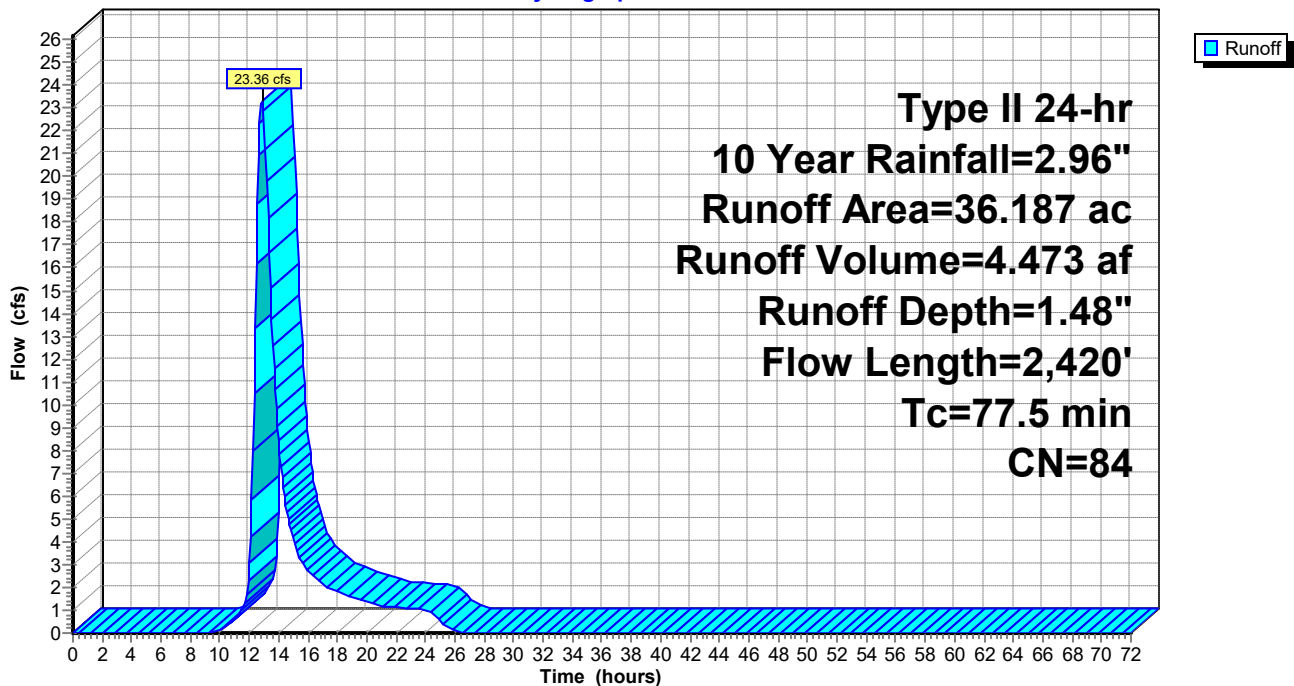
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 36.187	84	
36.187		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	20	0.0332	0.06		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
71.5	2,400	0.0064	0.56		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
77.5	2,420	Total			

Subcatchment 39S: DA-30

Hydrograph



Summary for Subcatchment 40S: DA-31

Runoff = 14.40 cfs @ 12.21 hrs, Volume= 1.319 af, Depth= 1.10"
 Routed to Link 40L : DP-31

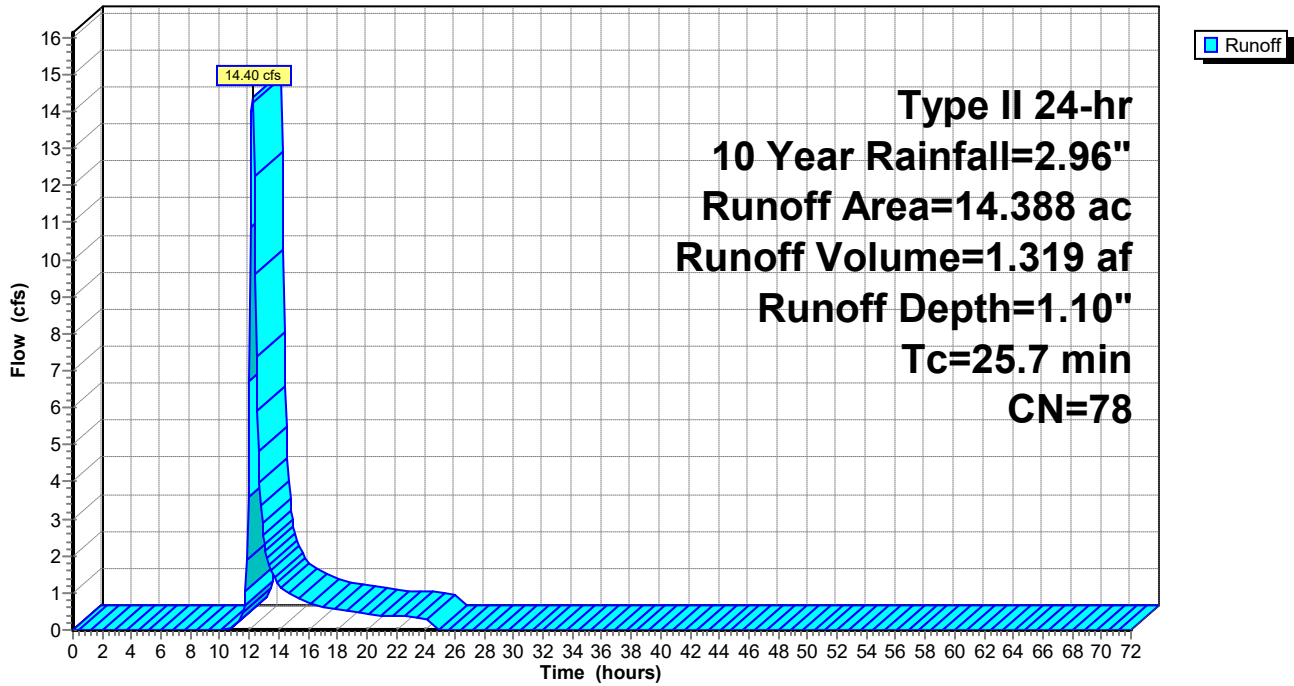
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 14.388	78	
14.388		100.00% Pervious Area

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

Subcatchment 40S: DA-31

Hydrograph



Summary for Subcatchment 41S: DA-32

Runoff = 1.47 cfs @ 13.98 hrs, Volume= 0.486 af, Depth= 1.28"
 Routed to Link 41L : DP-32

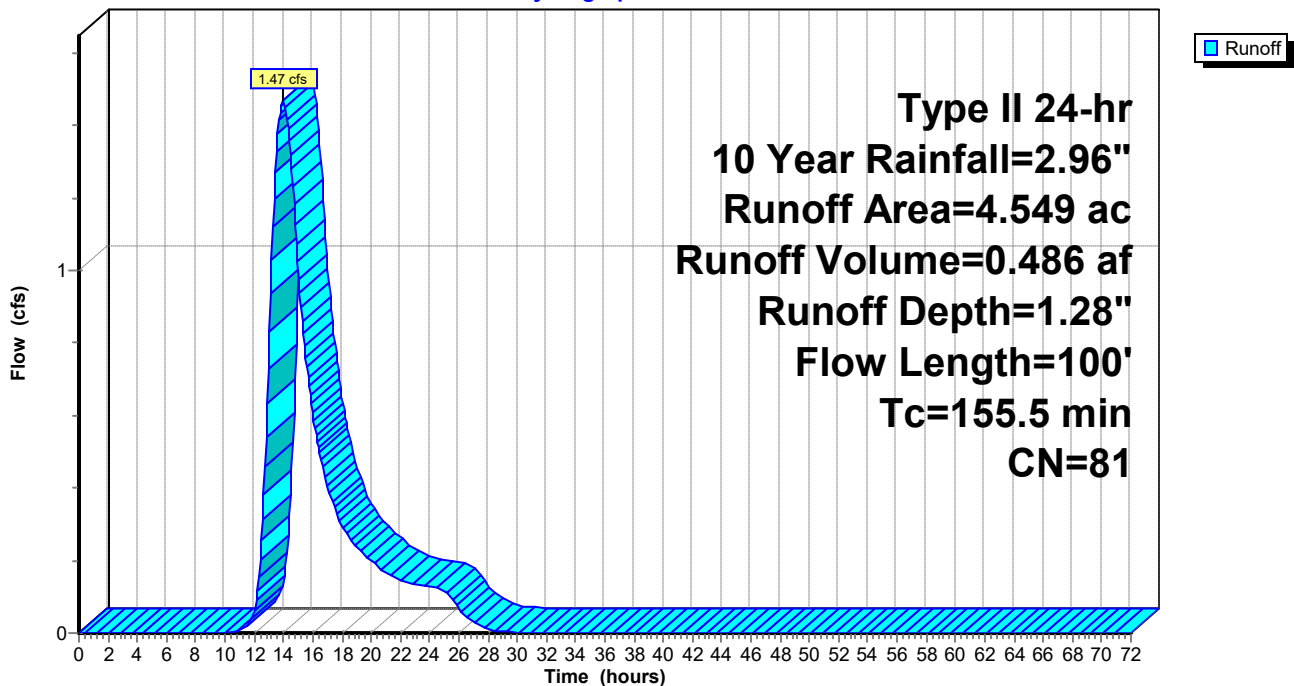
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 4.549	81	
4.549		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
153.7	20	0.0000	0.00		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
1.8	80	0.0116	0.75		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
155.5	100	Total			

Subcatchment 41S: DA-32

Hydrograph



Summary for Subcatchment 42S: DA-35

Runoff = 6.99 cfs @ 15.31 hrs, Volume= 3.443 af, Depth= 0.93"
 Routed to Link 42L : DP-35

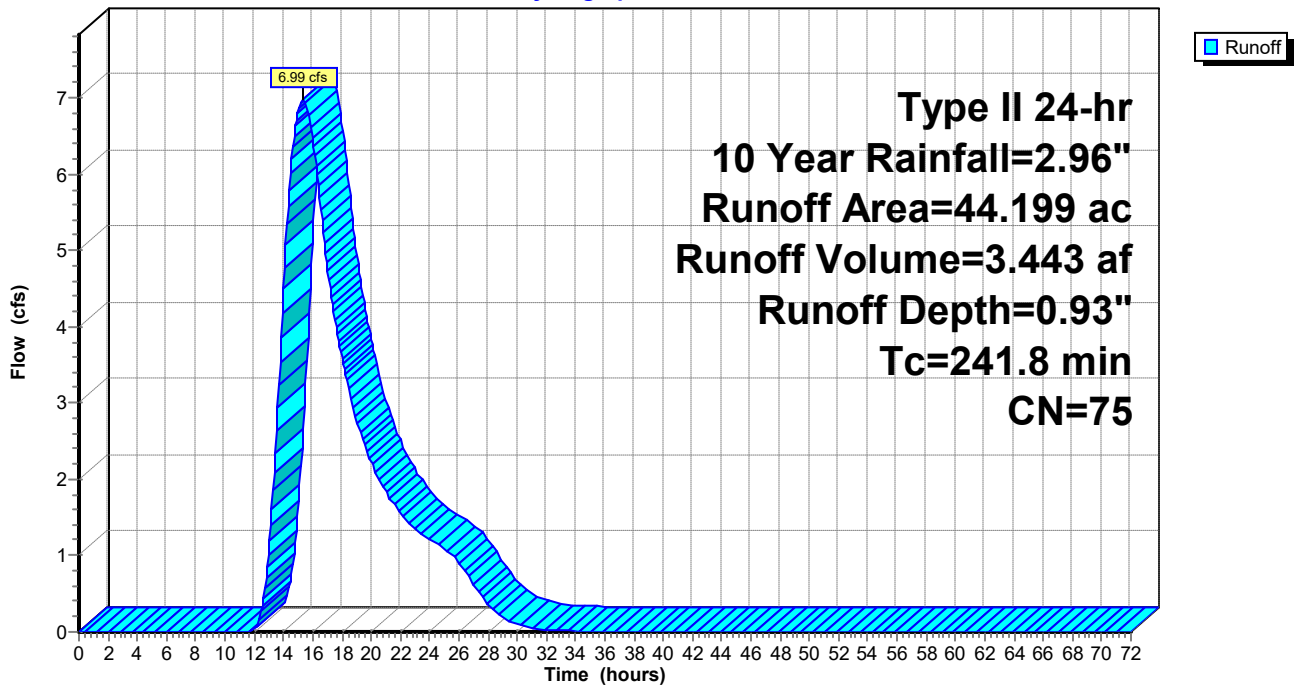
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 44.199	75	
44.199		100.00% Pervious Area

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

Subcatchment 42S: DA-35

Hydrograph



Summary for Subcatchment 43S: DA-42

Runoff = 16.71 cfs @ 14.32 hrs, Volume= 6.199 af, Depth= 1.55"
 Routed to Link 48L : DP-42

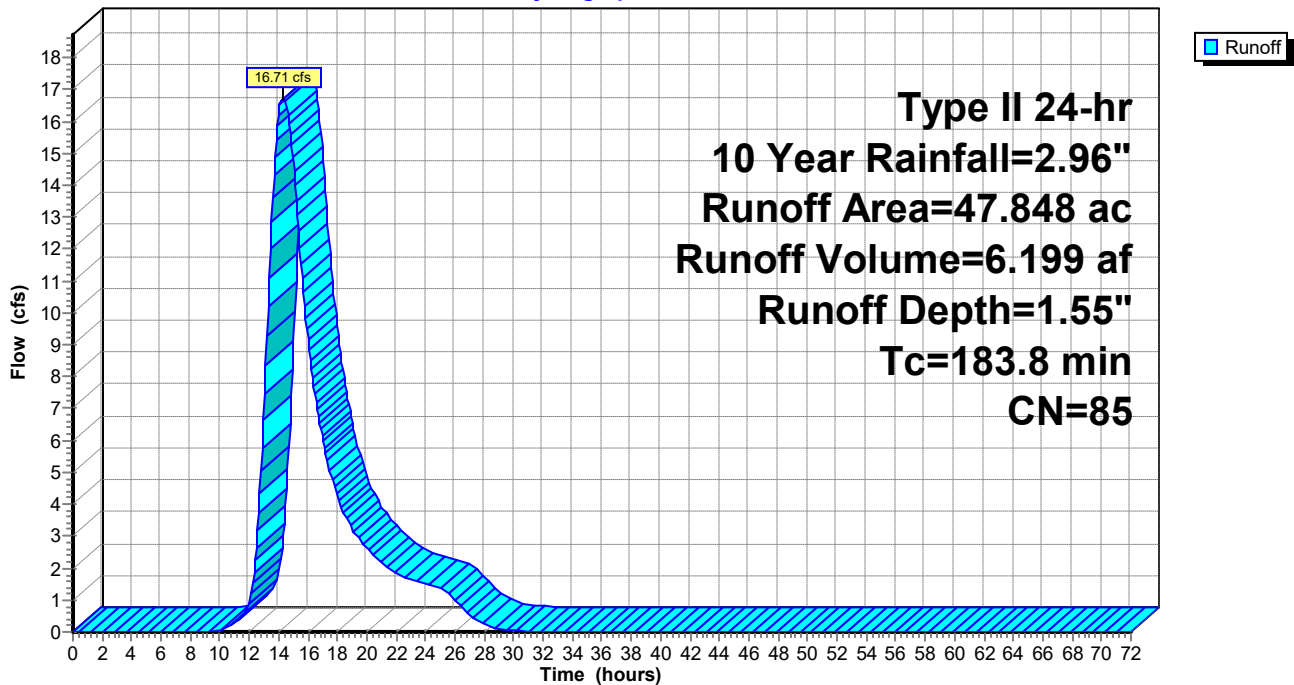
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 47.848	85	
47.848		100.00% Pervious Area

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

Subcatchment 43S: DA-42

Hydrograph



Summary for Subcatchment 44S: DA-37

Runoff = 5.78 cfs @ 14.08 hrs, Volume= 1.970 af, Depth= 1.63"
 Routed to Pond 2P : P-37

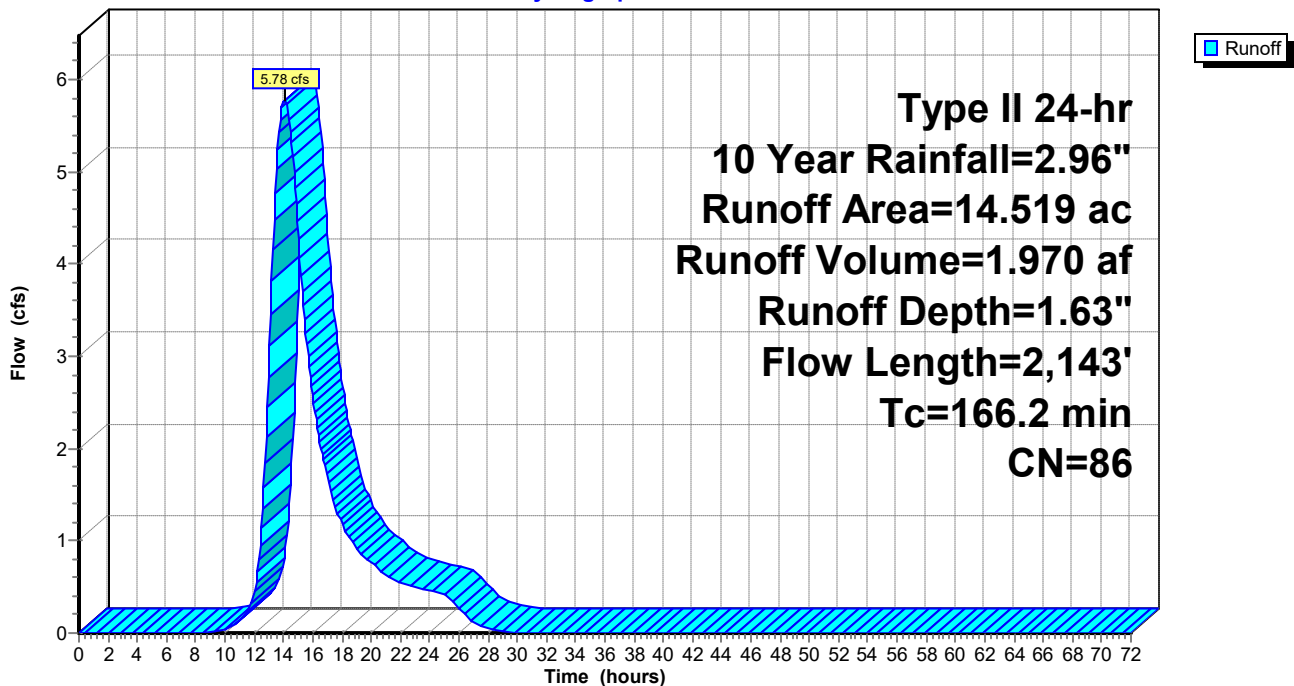
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 14.519	86	
14.519		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
80.9	20	0.0000	0.00		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
85.3	2,123	0.0035	0.41		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
166.2	2,143	Total			

Subcatchment 44S: DA-37

Hydrograph



Summary for Subcatchment 45S: DA-41

Runoff = 41.64 cfs @ 13.21 hrs, Volume= 10.182 af, Depth= 2.31"
 Routed to Pond 4P : P-41

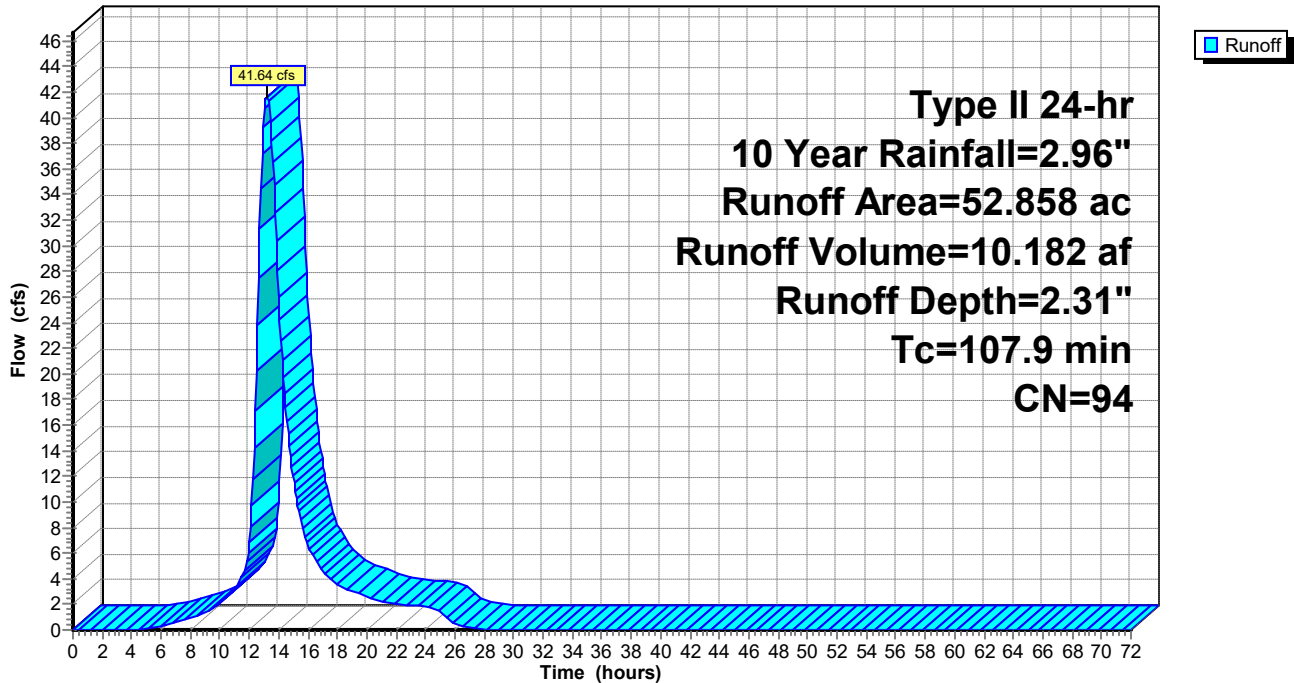
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 52.858	94	
52.858		100.00% Pervious Area

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

Subcatchment 45S: DA-41

Hydrograph



Summary for Subcatchment 46S: DA-40

Runoff = 0.53 cfs @ 18.26 hrs, Volume= 0.399 af, Depth= 2.22"
 Routed to Link 46L : DP-40

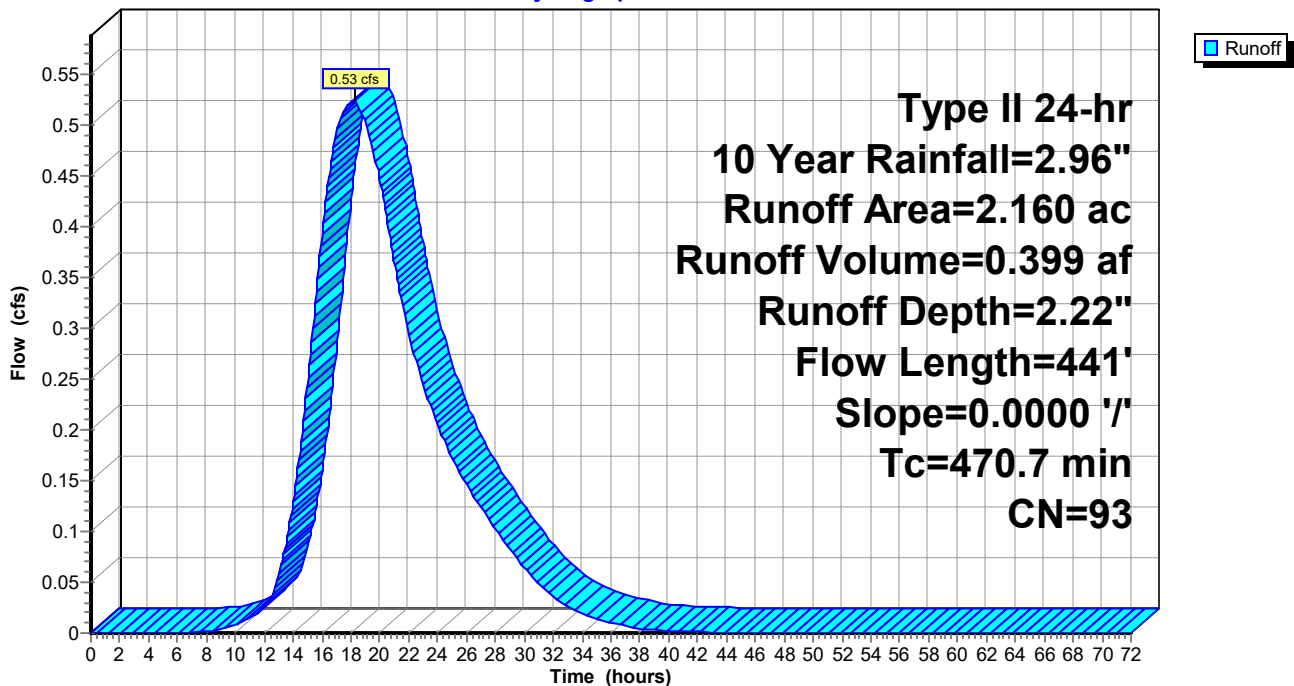
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 2.160	93	
2.160		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
153.7	20	0.0000	0.00		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
317.0	421	0.0000	0.02		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
470.7	441	Total			

Subcatchment 46S: DA-40

Hydrograph



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Type II 24-hr 10 Year Rainfall=2.96"

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Summary for Subcatchment 47S: DA-39

Runoff = 0.83 cfs @ 18.14 hrs, Volume= 0.625 af, Depth= 2.12"
Routed to Link 45L : DP-39

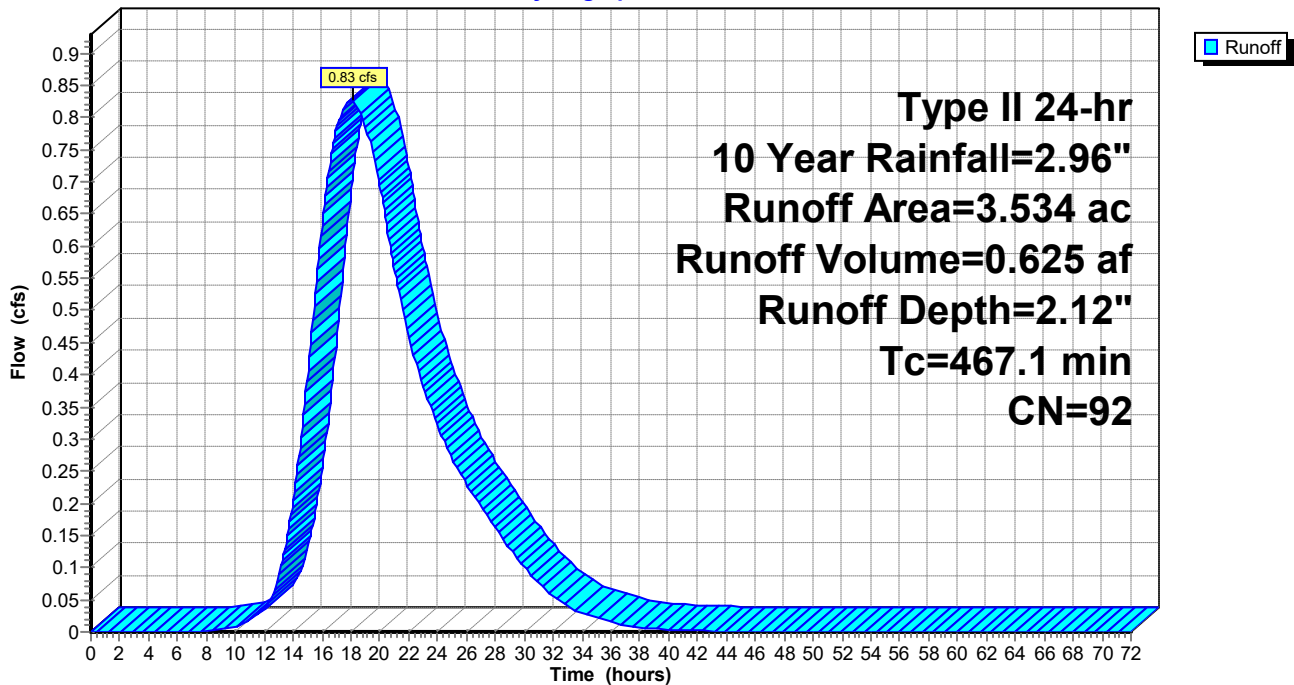
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 3.534	92	
3.534		100.00% Pervious Area

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

Subcatchment 47S: DA-39

Hydrograph



Summary for Subcatchment 48S: DA-38

Runoff = 6.48 cfs @ 12.07 hrs, Volume= 0.421 af, Depth= 1.55"
 Routed to Pond 3P : P-38

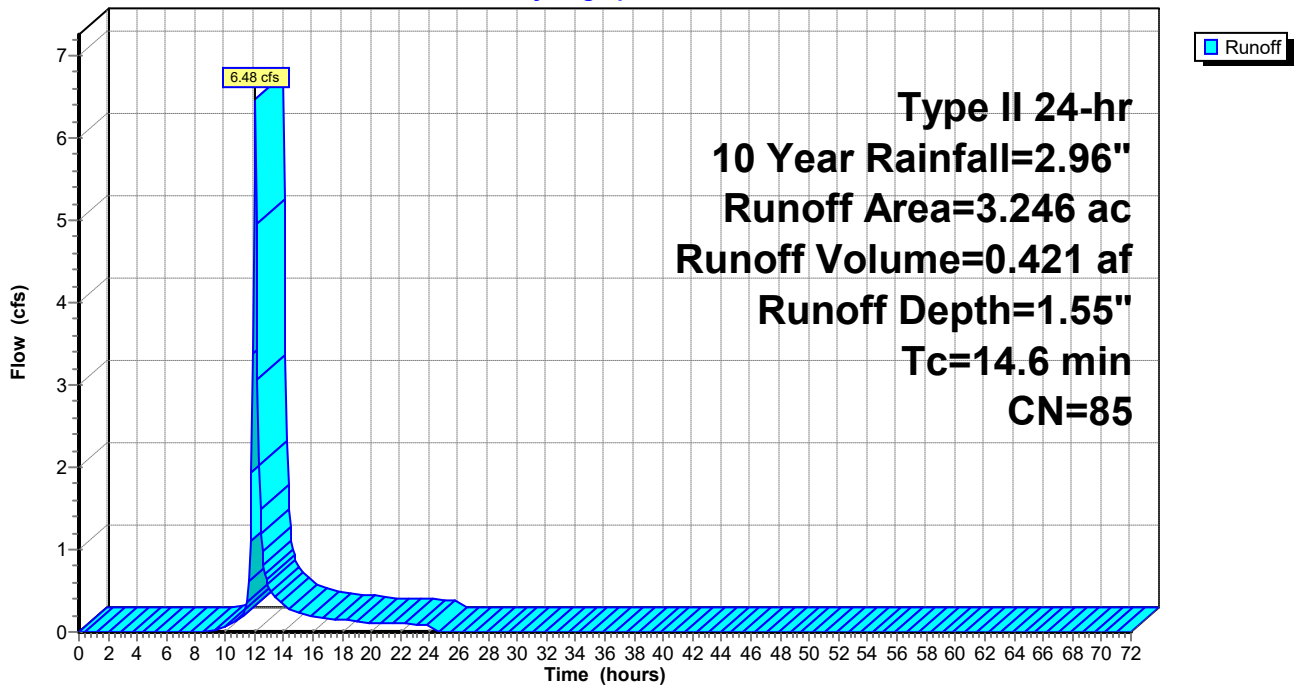
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 10 Year Rainfall=2.96"

Area (ac)	CN	Description
* 3.246	85	
3.246		100.00% Pervious Area

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

Subcatchment 48S: DA-38

Hydrograph



Summary for Pond 1P: P-30

Inflow Area = 36.187 ac, 0.00% Impervious, Inflow Depth = 1.48" for 10 Year event
 Inflow = 23.36 cfs @ 12.87 hrs, Volume= 4.473 af
 Outflow = 7.56 cfs @ 14.12 hrs, Volume= 4.445 af, Atten= 68%, Lag= 75.1 min
 Primary = 7.56 cfs @ 14.12 hrs, Volume= 4.445 af
 Routed to Link 39L : DP-30

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Starting Elev= 290.00' Surf.Area= 0.871 ac Storage= 0.000 af
 Peak Elev= 291.95' @ 14.12 hrs Surf.Area= 1.031 ac Storage= 1.887 af

Plug-Flow detention time= 211.1 min calculated for 4.445 af (99% of inflow)
 Center-of-Mass det. time= 207.1 min (1,103.5 - 896.4)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	6.283 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
290.00	0.871	0.000	0.000
291.00	0.986	0.928	0.928
292.00	1.033	1.009	1.938
293.00	1.065	1.049	2.987
294.00	1.092	1.078	4.065
295.00	1.110	1.101	5.166
296.00	1.124	1.117	6.283

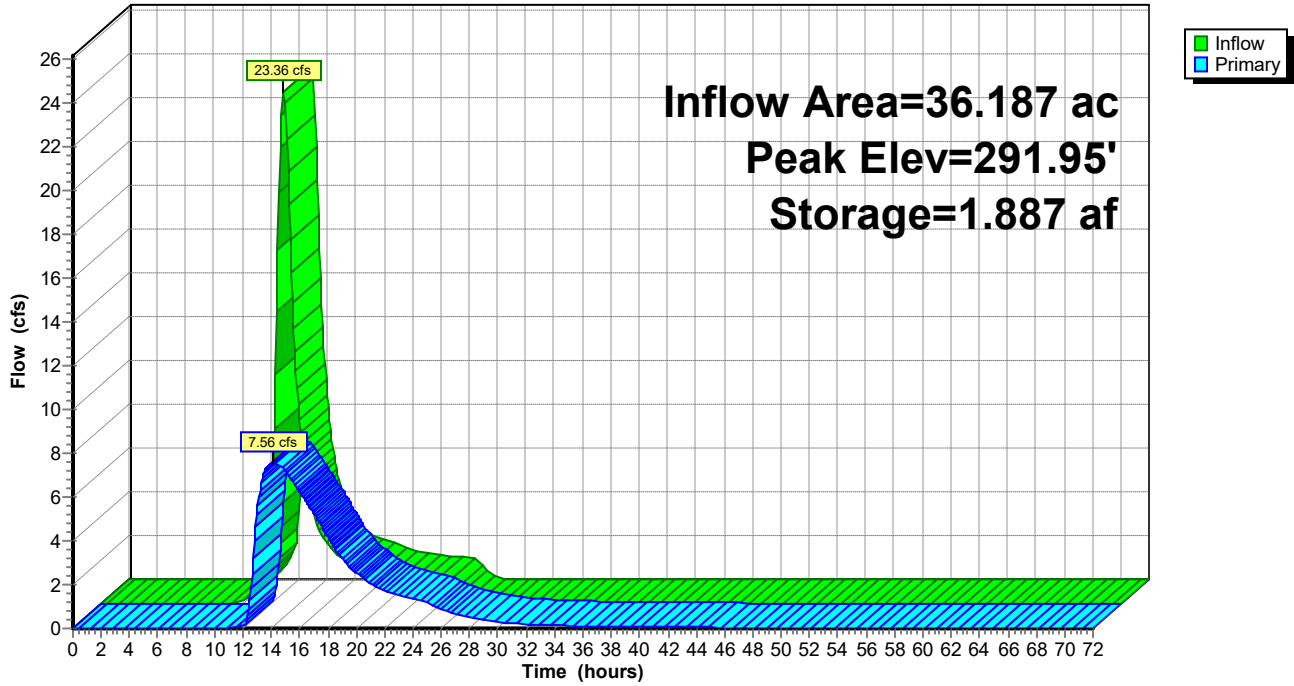
Device	Routing	Invert	Outlet Devices
#1	Primary	290.00'	15.0" Round Culvert L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 290.00' / 288.00' S= 0.0500 '/' Cc= 1.000 n= 0.015, Flow Area= 1.23 sf
#2	Primary	294.00'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) Coef. (English)

Primary OutFlow Max=7.56 cfs @ 14.12 hrs HW=291.95' (Free Discharge)

- 1=Culvert (Inlet Controls 7.56 cfs @ 6.16 fps)
- 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 1P: P-30

Hydrograph



Summary for Pond 2P: P-37

Inflow Area = 14.519 ac, 0.00% Impervious, Inflow Depth = 1.63" for 10 Year event
 Inflow = 5.78 cfs @ 14.08 hrs, Volume= 1.970 af
 Outflow = 4.21 cfs @ 15.06 hrs, Volume= 1.968 af, Atten= 27%, Lag= 58.8 min
 Primary = 4.21 cfs @ 15.06 hrs, Volume= 1.968 af
 Routed to Link 43L : DP-37

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Starting Elev= 290.00' Surf.Area= 0.491 ac Storage= 0.000 af
 Peak Elev= 291.04' @ 15.06 hrs Surf.Area= 0.536 ac Storage= 0.535 af

Plug-Flow detention time= 148.2 min calculated for 1.966 af (100% of inflow)
 Center-of-Mass det. time= 149.8 min (1,122.0 - 972.2)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	6.076 af	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
290.00	0.491	0.000	0.000
290.50	0.512	0.251	0.251
291.00	0.534	0.261	0.512
291.50	0.554	0.272	0.784
292.00	0.574	0.282	1.066
292.50	0.594	0.292	1.358
293.00	0.614	0.302	1.660
293.50	0.634	0.312	1.972
294.00	0.653	0.322	2.294
294.50	0.672	0.331	2.625
295.00	0.690	0.340	2.966
295.50	0.705	0.349	3.314
296.00	0.719	0.356	3.670
296.50	0.732	0.363	4.033
297.00	0.745	0.369	4.402
297.50	0.758	0.376	4.778
298.00	0.769	0.382	5.160
298.50	0.777	0.386	5.546
299.00	0.779	0.389	5.935
299.18	0.779	0.140	6.076

Device	Routing	Invert	Outlet Devices
#1	Primary	290.00'	15.0" Round Culvert L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 290.00' / 288.00' S= 0.0500 '/' Cc= 1.000 n= 0.015, Flow Area= 1.23 sf
#2	Primary	298.00'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) Coef. (English)

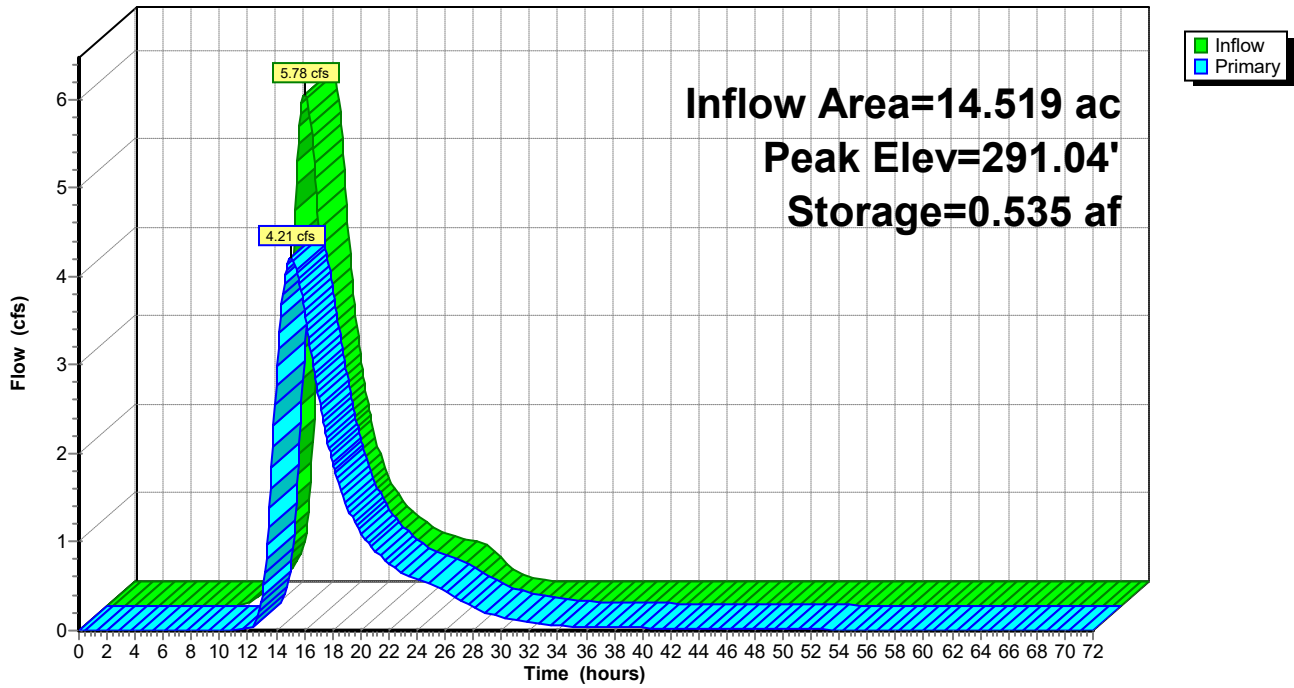
Primary OutFlow Max=4.22 cfs @ 15.06 hrs HW=291.04' (Free Discharge)

1=Culvert (Inlet Controls 4.22 cfs @ 3.86 fps)

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

Pond 2P: P-37

Hydrograph



Summary for Pond 3P: P-38

Inflow Area = 3.246 ac, 0.00% Impervious, Inflow Depth = 1.55" for 10 Year event
 Inflow = 6.48 cfs @ 12.07 hrs, Volume= 0.421 af
 Outflow = 2.89 cfs @ 12.27 hrs, Volume= 0.421 af, Atten= 55%, Lag= 11.7 min
 Primary = 2.89 cfs @ 12.27 hrs, Volume= 0.421 af
 Routed to Link 44L : DP-38

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Starting Elev= 292.00' Surf.Area= 0.161 ac Storage= 0.000 af
 Peak Elev= 292.81' @ 12.27 hrs Surf.Area= 0.177 ac Storage= 0.138 af

Plug-Flow detention time= 82.7 min calculated for 0.420 af (100% of inflow)
 Center-of-Mass det. time= 84.2 min (918.6 - 834.5)

Volume	Invert	Avail.Storage	Storage Description
#1	292.00'	1.609 af	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
292.00	0.161	0.000	0.000
292.50	0.171	0.083	0.083
293.00	0.181	0.088	0.171
293.50	0.191	0.093	0.264
294.00	0.201	0.098	0.362
294.50	0.211	0.103	0.465
295.00	0.221	0.108	0.573
295.50	0.232	0.113	0.686
296.00	0.243	0.119	0.805
296.50	0.254	0.124	0.929
297.00	0.262	0.129	1.058
297.50	0.268	0.132	1.191
298.00	0.271	0.135	1.325
298.50	0.273	0.136	1.461
299.00	0.274	0.137	1.598
299.04	0.274	0.011	1.609

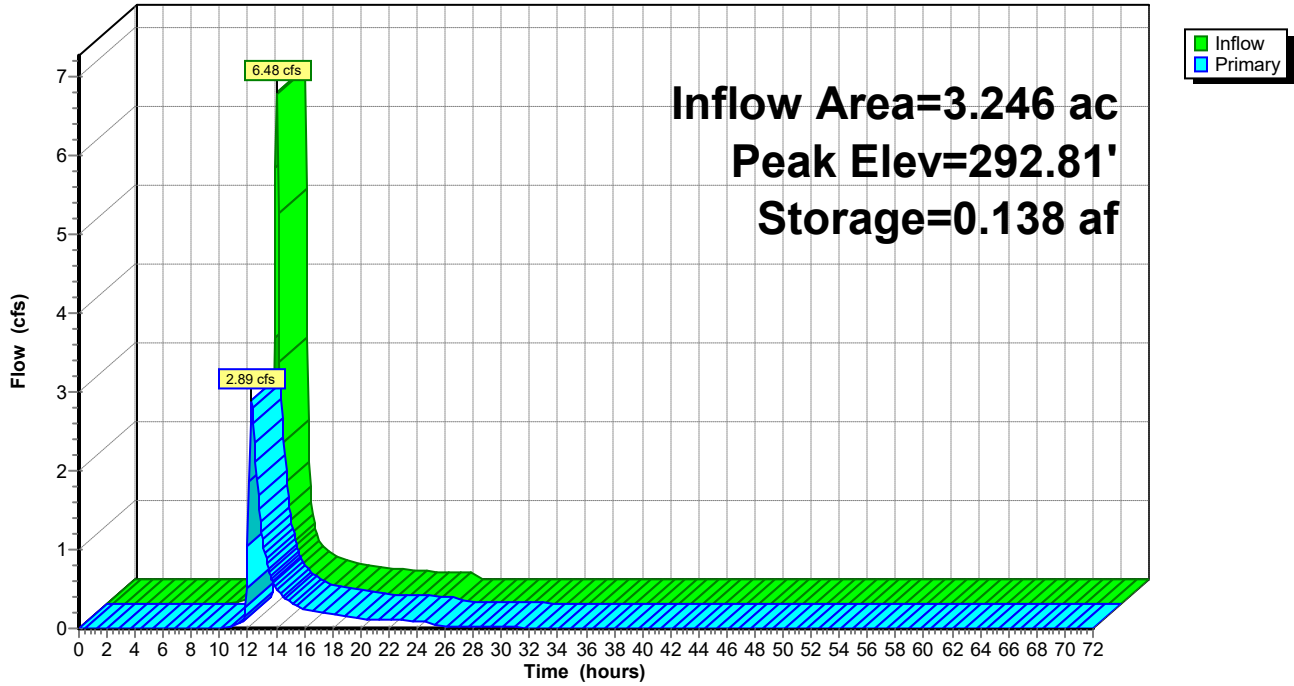
Device	Routing	Invert	Outlet Devices
#1	Primary	292.00'	15.0" Round Culvert L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 292.00' / 90.00' S= 5.0500 '/ Cc= 1.000 n= 0.015, Flow Area= 1.23 sf
#2	Primary	298.00'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) Coef. (English)

Primary OutFlow Max=2.85 cfs @ 12.27 hrs HW=292.81' (Free Discharge)

- 1=Culvert (Inlet Controls 2.85 cfs @ 3.40 fps)
- 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 3P: P-38

Hydrograph



Summary for Pond 4P: P-41

Inflow Area = 52.858 ac, 0.00% Impervious, Inflow Depth = 2.31" for 10 Year event
 Inflow = 41.64 cfs @ 13.21 hrs, Volume= 10.182 af
 Outflow = 10.31 cfs @ 15.20 hrs, Volume= 10.182 af, Atten= 75%, Lag= 119.0 min
 Primary = 10.31 cfs @ 15.20 hrs, Volume= 10.182 af
 Routed to Link 47L : DP-41

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Starting Elev= 290.00' Surf.Area= 0.009 ac Storage= 0.000 af
 Peak Elev= 293.09' @ 15.20 hrs Surf.Area= 2.071 ac Storage= 4.884 af

Plug-Flow detention time= 249.5 min calculated for 10.170 af (100% of inflow)
 Center-of-Mass det. time= 249.7 min (1,130.5 - 880.8)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	21.186 af	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
290.00	0.009	0.000	0.000
290.50	0.576	0.146	0.146
291.00	1.873	0.612	0.758
291.50	1.922	0.949	1.707
292.00	1.972	0.973	2.681
292.50	2.018	0.997	3.678
293.00	2.063	1.020	4.698
293.50	2.107	1.042	5.741
294.00	2.150	1.064	6.805
294.50	2.191	1.085	7.890
295.00	2.232	1.106	8.996
295.50	2.272	1.126	10.122
296.00	2.313	1.146	11.268
296.50	2.353	1.166	12.435
297.00	2.394	1.187	13.622
297.50	2.435	1.207	14.829
298.00	2.476	1.228	16.057
298.50	2.520	1.249	17.306
299.00	2.563	1.271	18.576
299.50	2.610	1.293	19.870
300.00	2.657	1.317	21.186

Device	Routing	Invert	Outlet Devices
#1	Primary	290.00'	15.0" Round Culvert L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 290.00' / 288.00' S= 0.0500 '/' Cc= 1.000 n= 0.015, Flow Area= 1.23 sf
#2	Primary	298.00'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) Coef. (English)

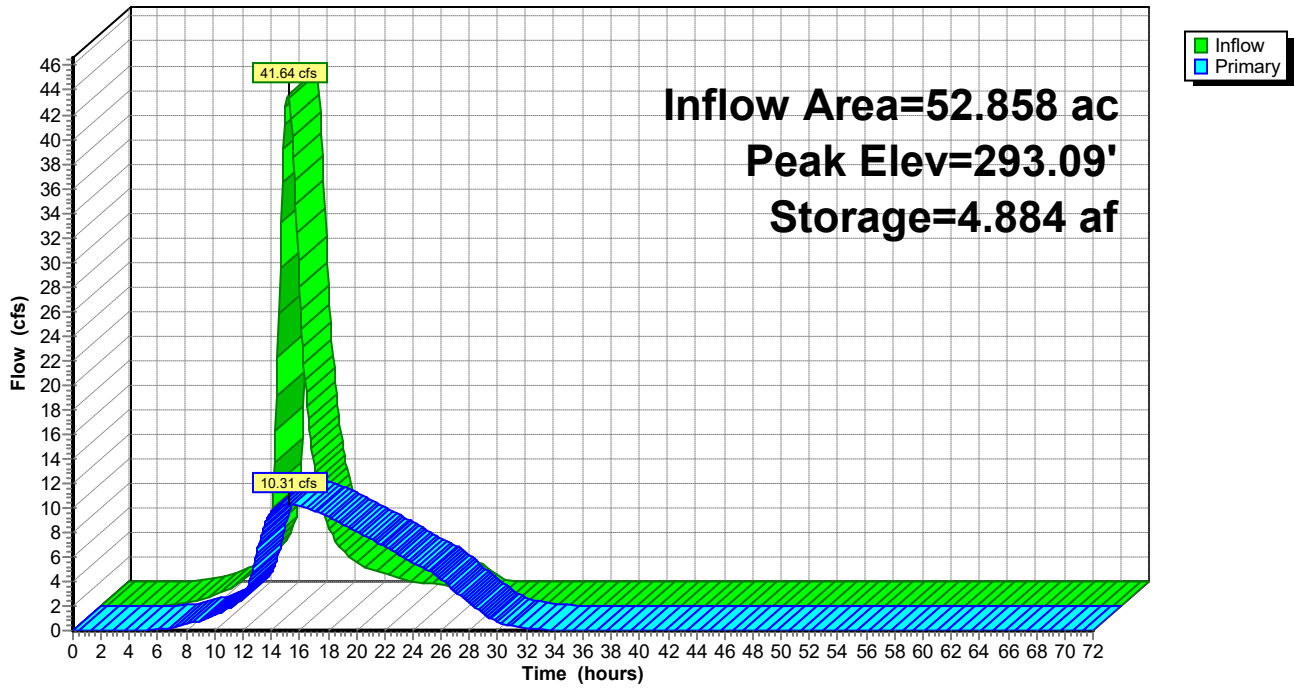
Primary OutFlow Max=10.31 cfs @ 15.20 hrs HW=293.09' (Free Discharge)

1=Culvert (Inlet Controls 10.31 cfs @ 8.40 fps)

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

Pond 4P: P-41

Hydrograph



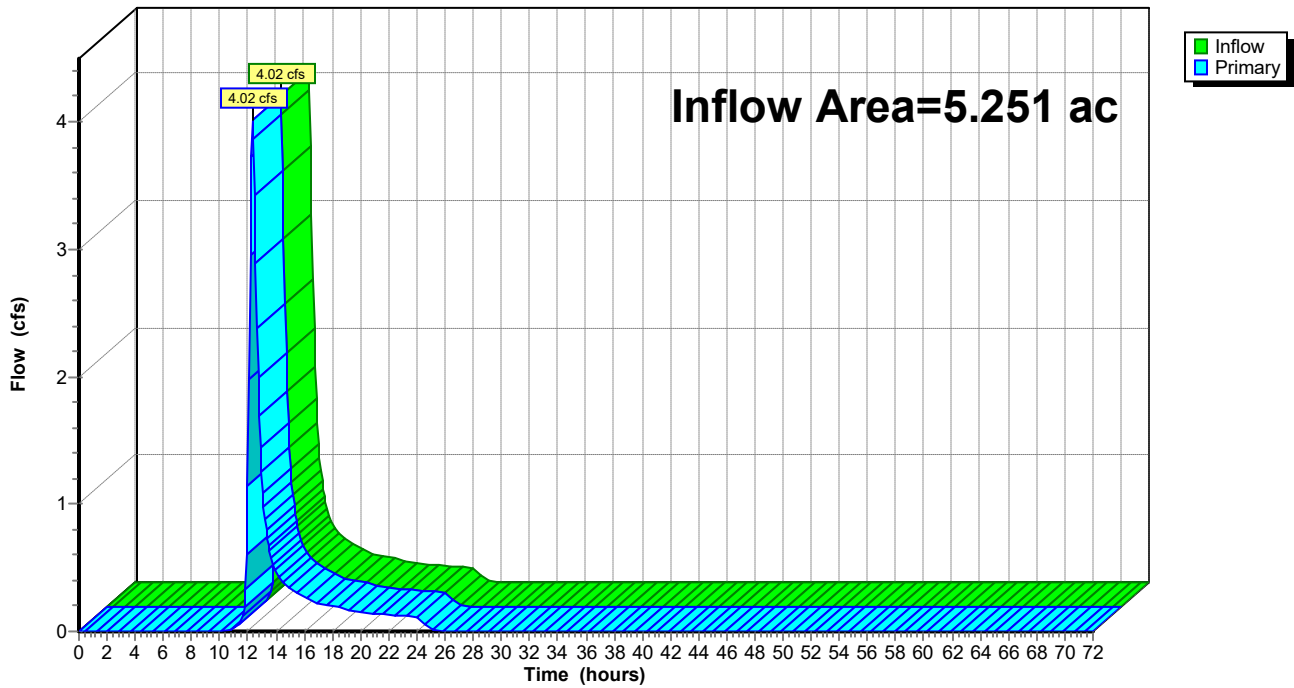
Summary for Link 1L: DP-49

Inflow Area = 5.251 ac, 0.00% Impervious, Inflow Depth = 1.04" for 10 Year event
Inflow = 4.02 cfs @ 12.33 hrs, Volume= 0.457 af
Primary = 4.02 cfs @ 12.33 hrs, Volume= 0.457 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 1L: DP-49

Hydrograph



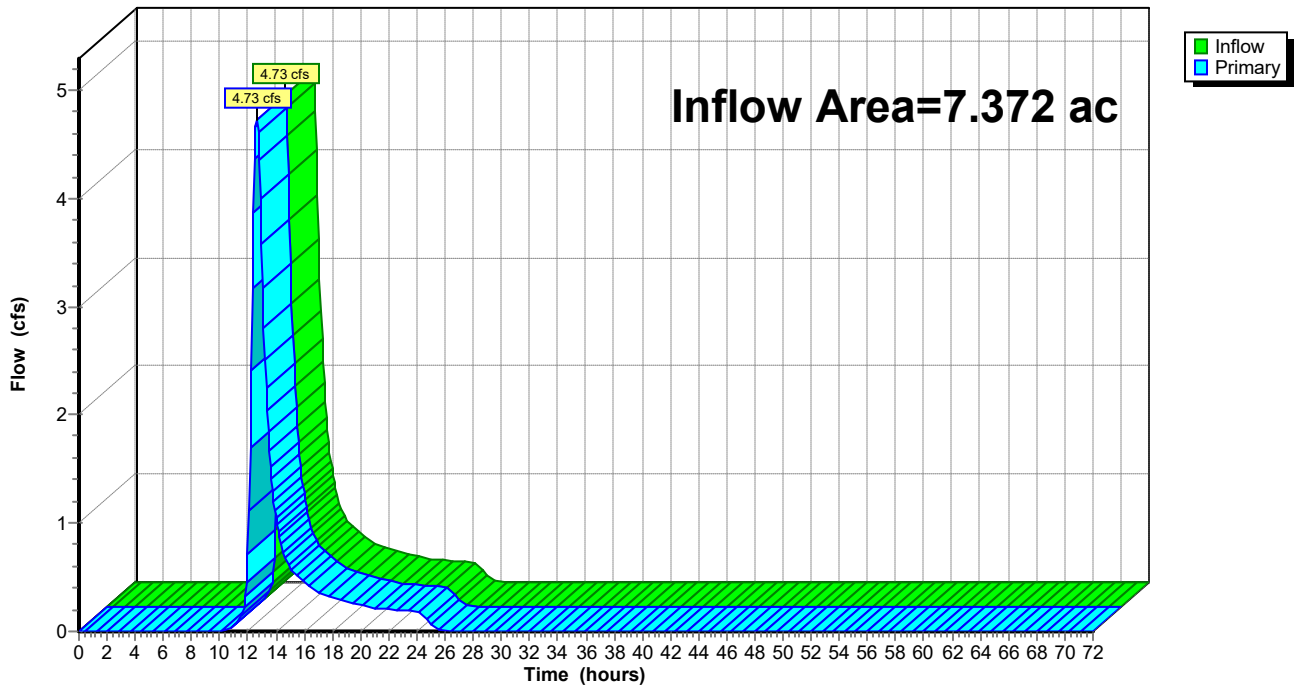
Summary for Link 2L: DP-48

Inflow Area = 7.372 ac, 0.00% Impervious, Inflow Depth = 1.22" for 10 Year event
Inflow = 4.73 cfs @ 12.63 hrs, Volume= 0.749 af
Primary = 4.73 cfs @ 12.63 hrs, Volume= 0.749 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 2L: DP-48

Hydrograph



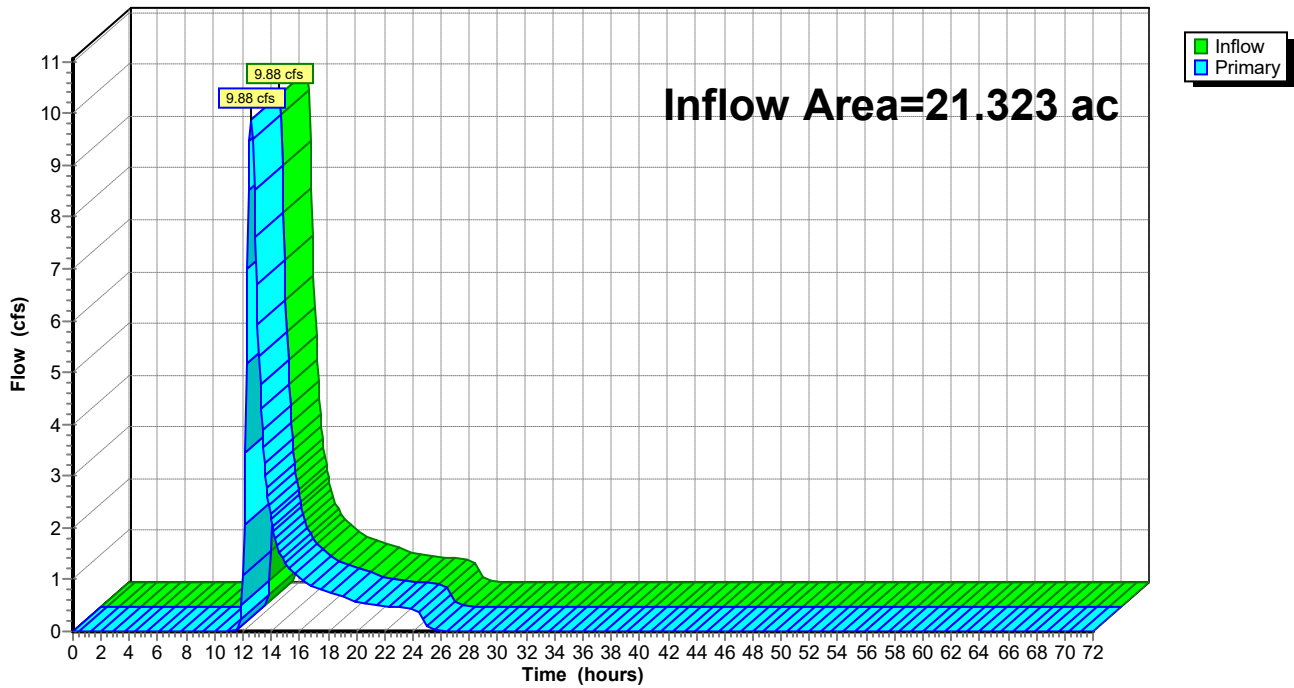
Summary for Link 3L: DP-50

Inflow Area = 21.323 ac, 0.00% Impervious, Inflow Depth = 0.88" for 10 Year event
Inflow = 9.88 cfs @ 12.58 hrs, Volume= 1.569 af
Primary = 9.88 cfs @ 12.58 hrs, Volume= 1.569 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 3L: DP-50

Hydrograph



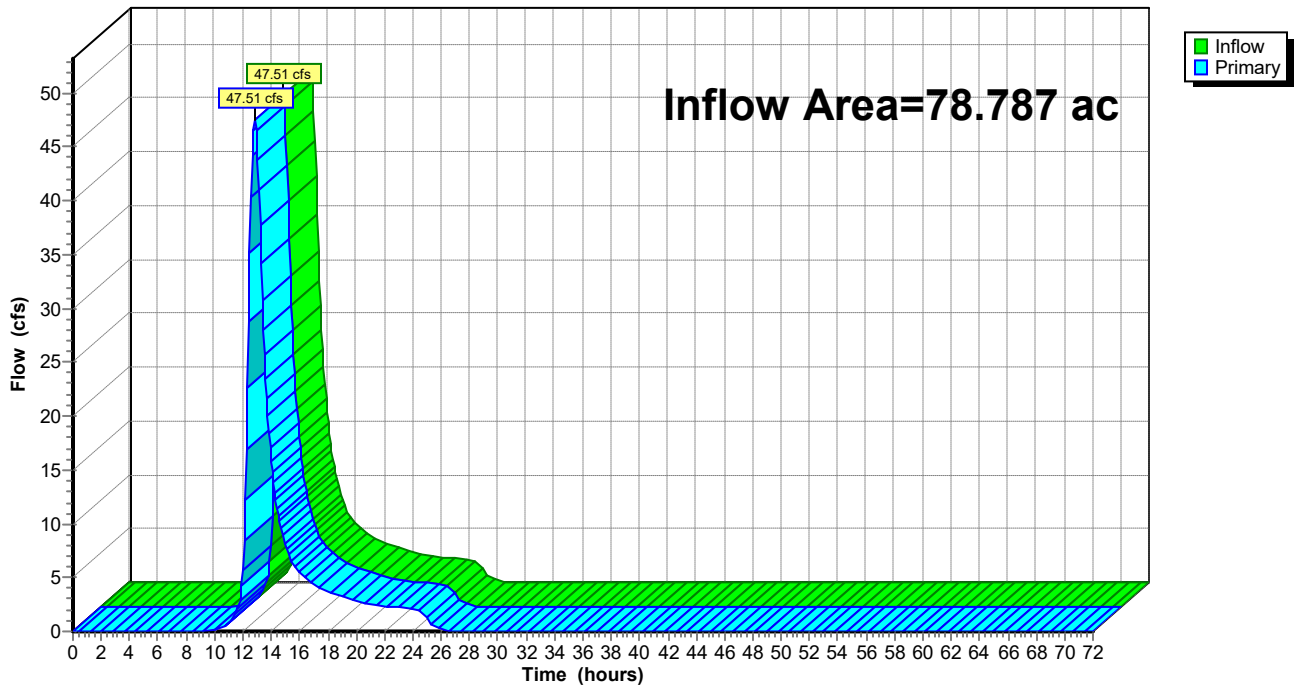
Summary for Link 4L: DP-46

Inflow Area = 78.787 ac, 0.00% Impervious, Inflow Depth = 1.35" for 10 Year event
Inflow = 47.51 cfs @ 12.83 hrs, Volume= 8.848 af
Primary = 47.51 cfs @ 12.83 hrs, Volume= 8.848 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 4L: DP-46

Hydrograph



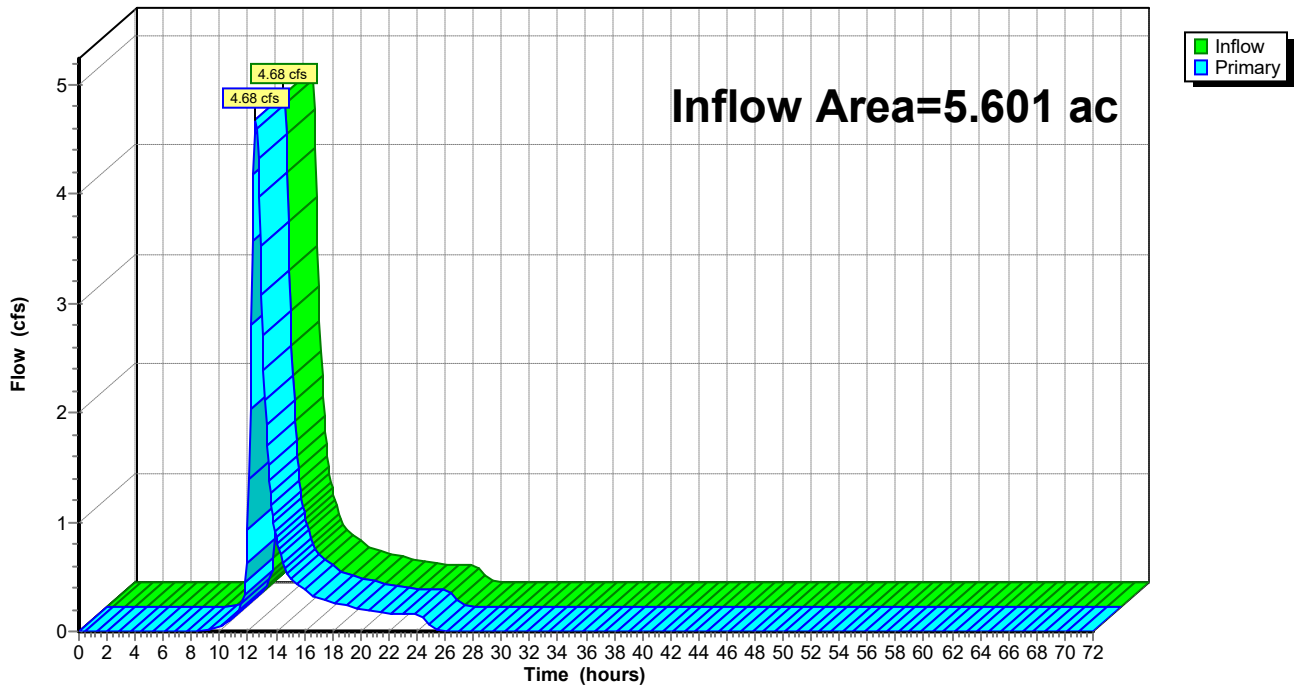
Summary for Link 5L: DP-47

Inflow Area = 5.601 ac, 0.00% Impervious, Inflow Depth = 1.48" for 10 Year event
Inflow = 4.68 cfs @ 12.57 hrs, Volume= 0.692 af
Primary = 4.68 cfs @ 12.57 hrs, Volume= 0.692 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 5L: DP-47

Hydrograph



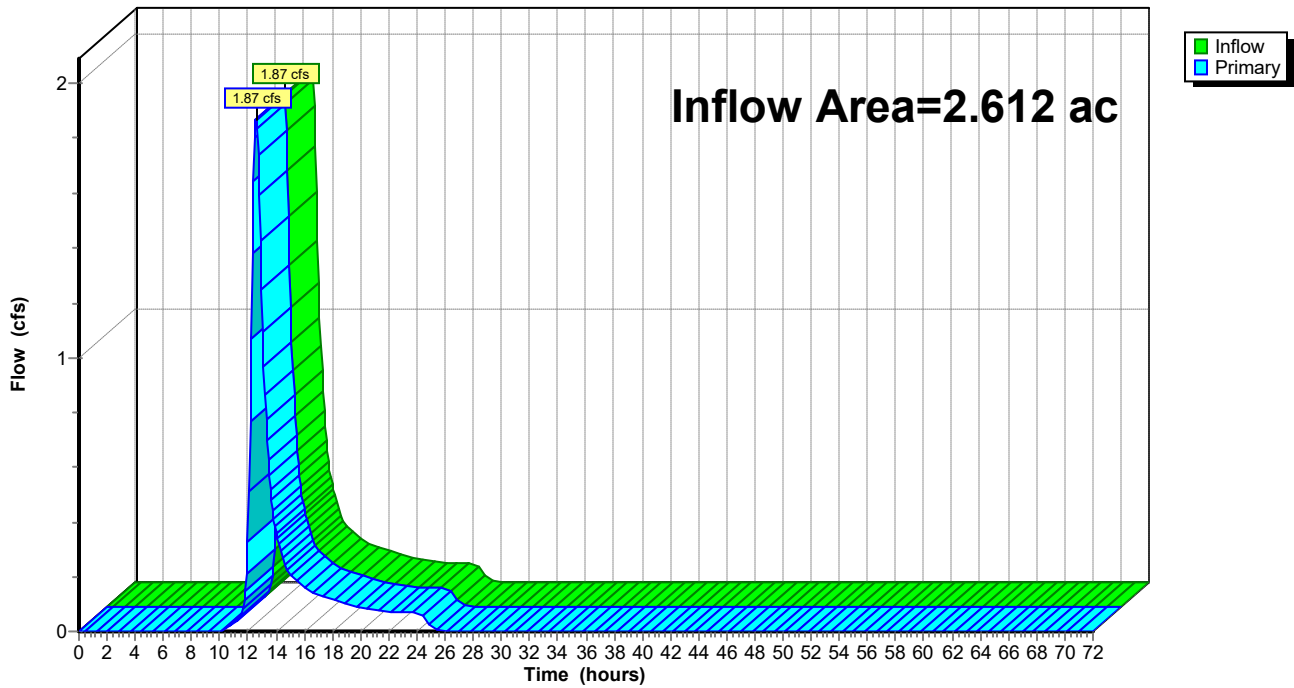
Summary for Link 6L: DP-45

Inflow Area = 2.612 ac, 0.00% Impervious, Inflow Depth = 1.28" for 10 Year event
Inflow = 1.87 cfs @ 12.57 hrs, Volume= 0.279 af
Primary = 1.87 cfs @ 12.57 hrs, Volume= 0.279 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 6L: DP-45

Hydrograph



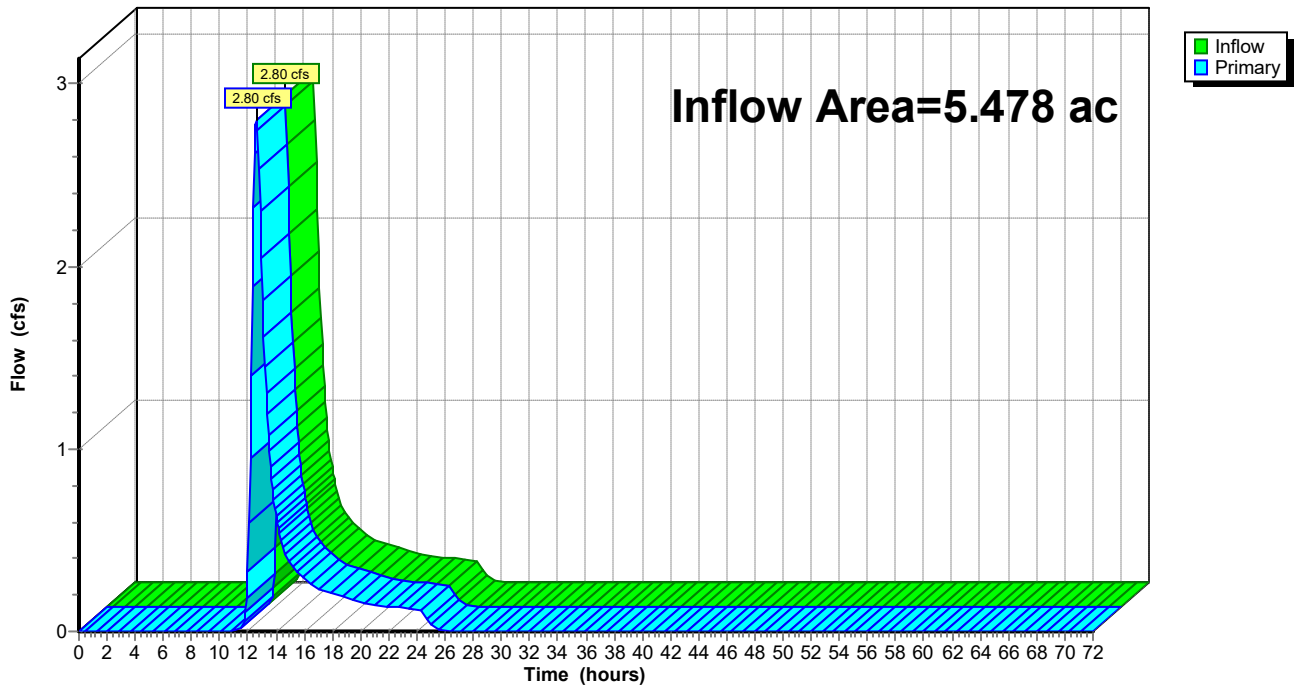
Summary for Link 7L: DP-43

Inflow Area = 5.478 ac, 0.00% Impervious, Inflow Depth = 0.99" for 10 Year event
Inflow = 2.80 cfs @ 12.62 hrs, Volume= 0.451 af
Primary = 2.80 cfs @ 12.62 hrs, Volume= 0.451 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 7L: DP-43

Hydrograph



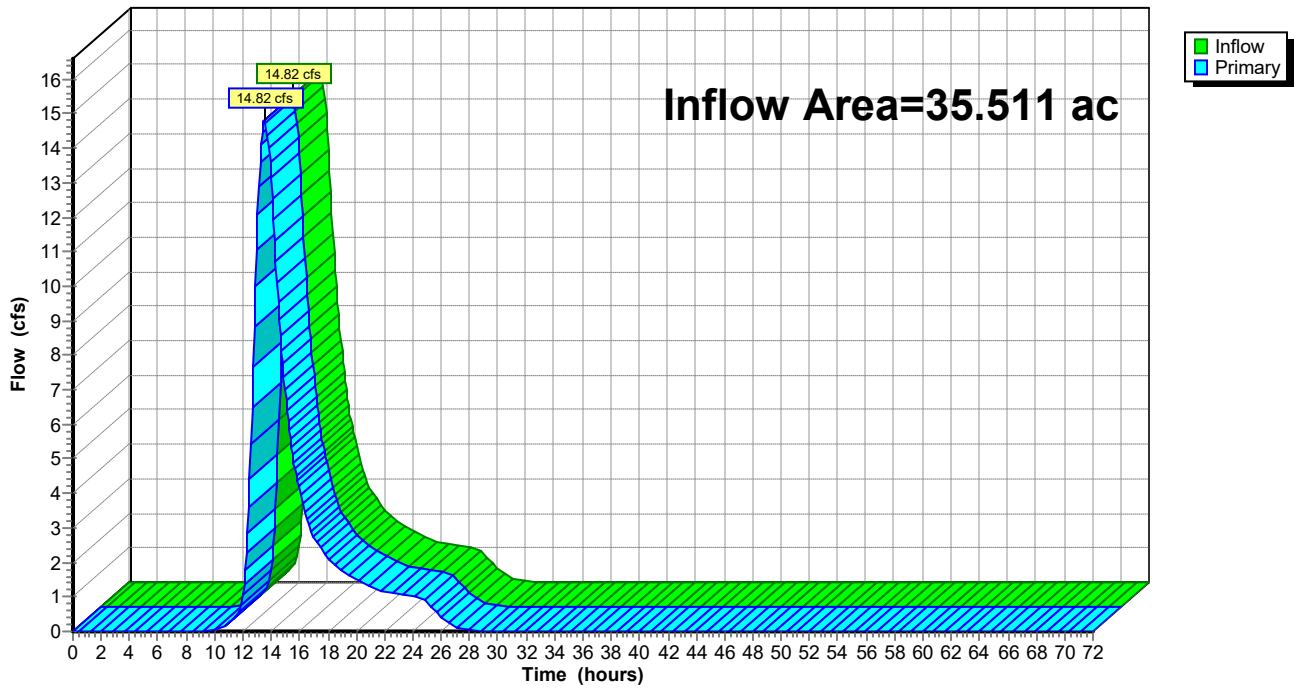
Summary for Link 8L: DP-44

Inflow Area = 35.511 ac, 0.00% Impervious, Inflow Depth = 1.41" for 10 Year event
Inflow = 14.82 cfs @ 13.52 hrs, Volume= 4.186 af
Primary = 14.82 cfs @ 13.52 hrs, Volume= 4.186 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 8L: DP-44

Hydrograph



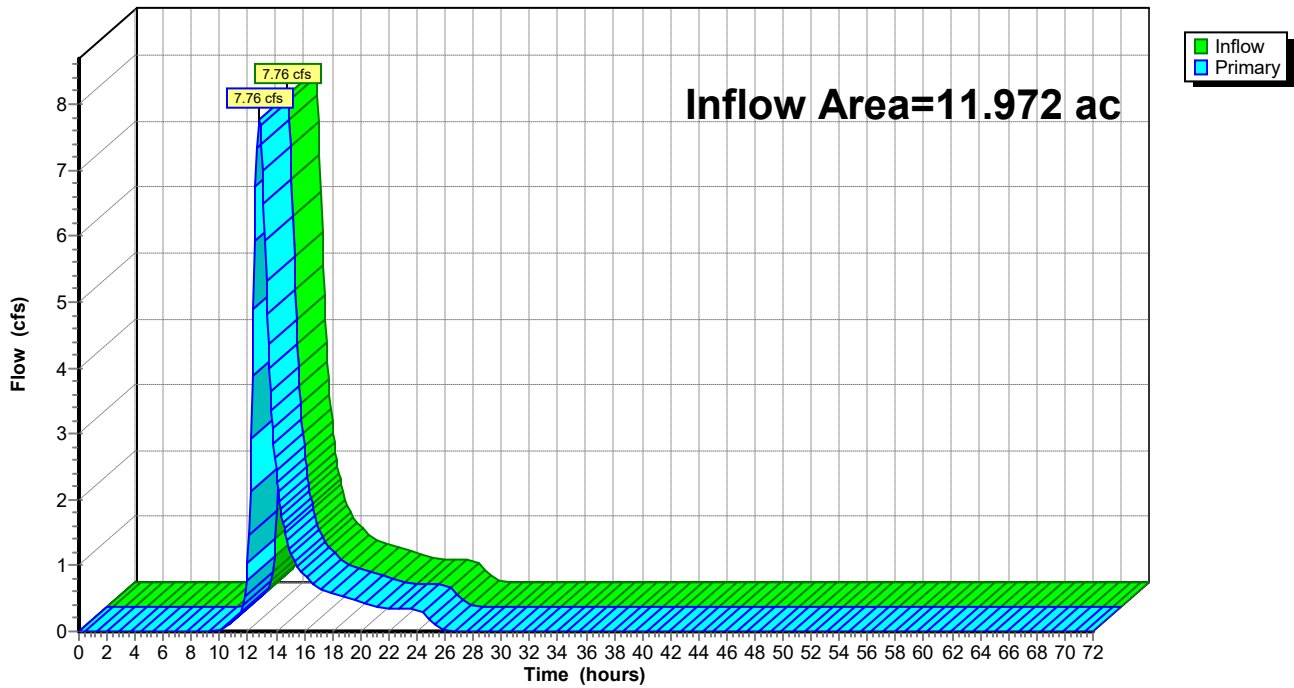
Summary for Link 9L: DP-51

Inflow Area = 11.972 ac, 0.00% Impervious, Inflow Depth = 1.41" for 10 Year event
Inflow = 7.76 cfs @ 12.80 hrs, Volume= 1.411 af
Primary = 7.76 cfs @ 12.80 hrs, Volume= 1.411 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 9L: DP-51

Hydrograph



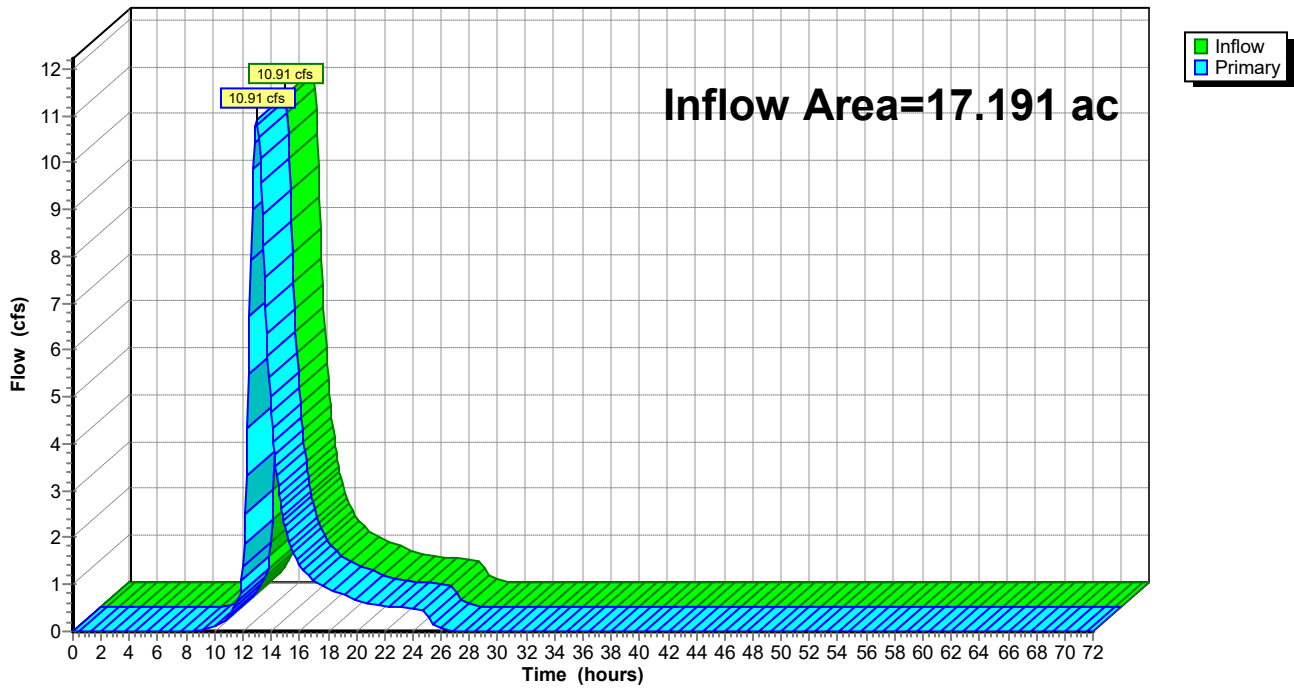
Summary for Link 10L: DP-52

Inflow Area = 17.191 ac, 0.00% Impervious, Inflow Depth = 1.55" for 10 Year event
Inflow = 10.91 cfs @ 12.96 hrs, Volume= 2.227 af
Primary = 10.91 cfs @ 12.96 hrs, Volume= 2.227 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 10L: DP-52

Hydrograph



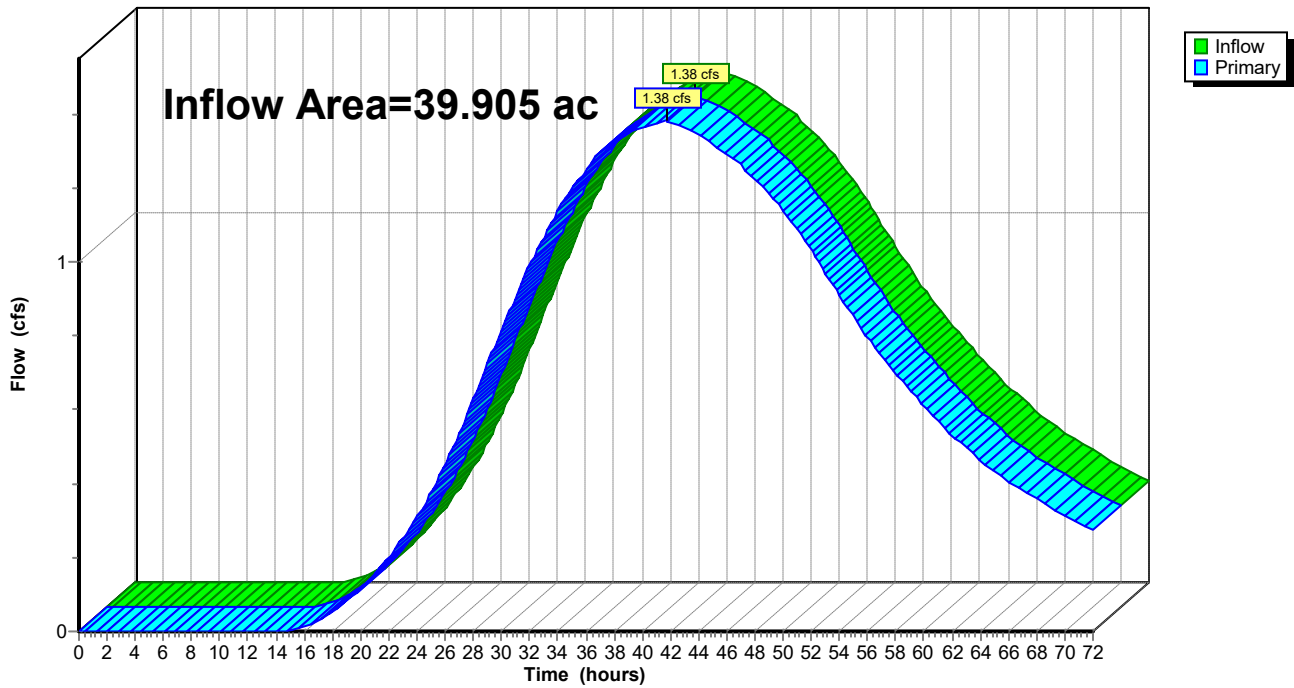
Summary for Link 11L: DP-34

Inflow Area = 39.905 ac, 0.00% Impervious, Inflow Depth > 1.06" for 10 Year event
Inflow = 1.38 cfs @ 41.79 hrs, Volume= 3.519 af
Primary = 1.38 cfs @ 41.79 hrs, Volume= 3.519 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 11L: DP-34

Hydrograph



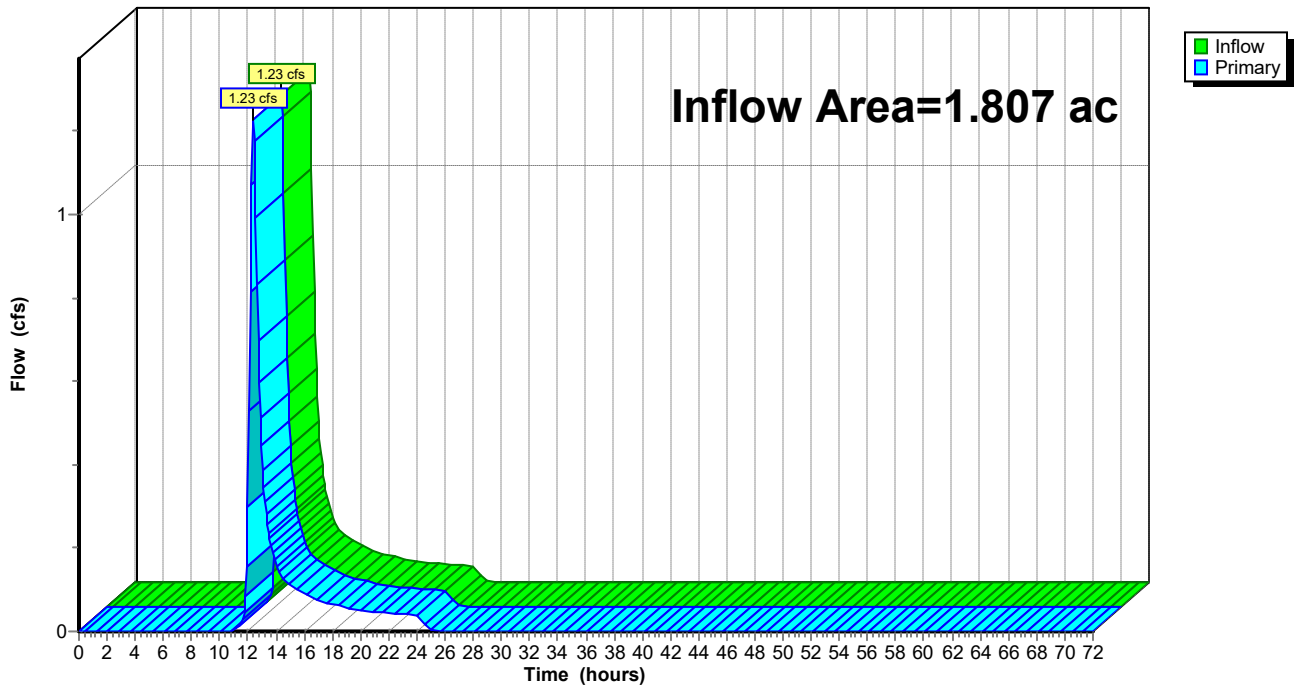
Summary for Link 12L: DP-3

Inflow Area = 1.807 ac, 0.00% Impervious, Inflow Depth = 0.99" for 10 Year event
Inflow = 1.23 cfs @ 12.37 hrs, Volume= 0.149 af
Primary = 1.23 cfs @ 12.37 hrs, Volume= 0.149 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 12L: DP-3

Hydrograph



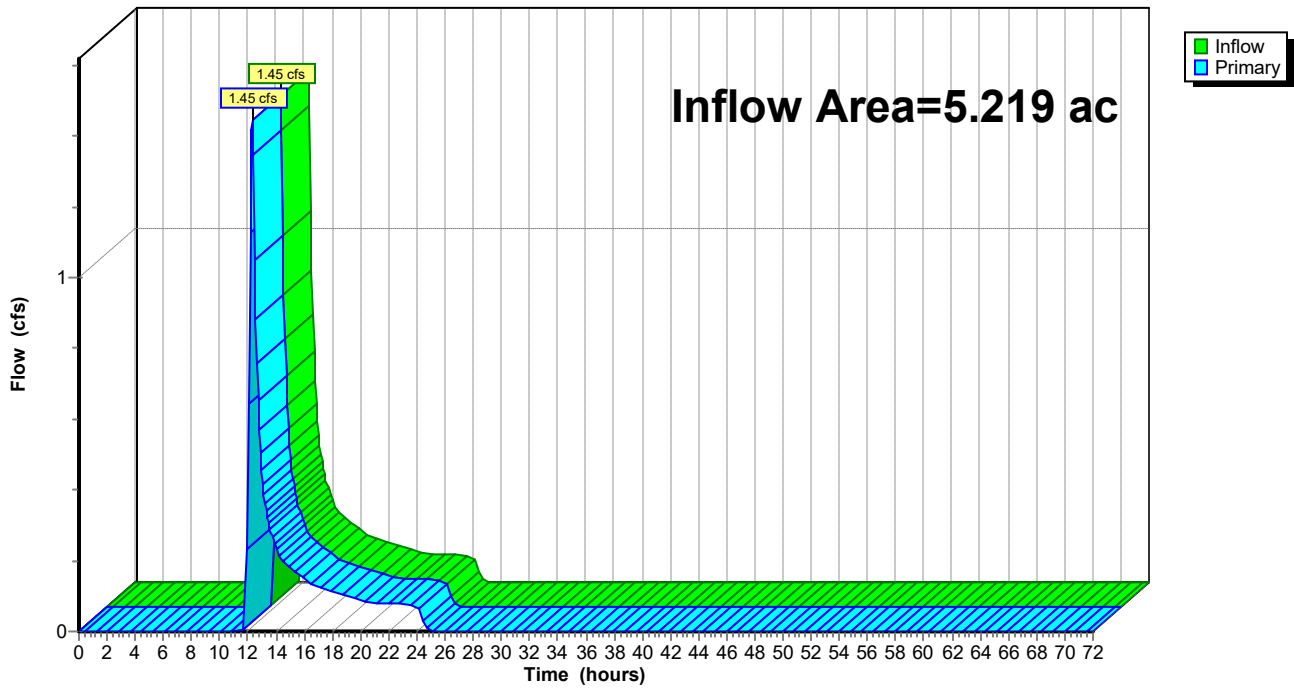
Summary for Link 13L: DP-1

Inflow Area = 5.219 ac, 0.00% Impervious, Inflow Depth = 0.45" for 10 Year event
Inflow = 1.45 cfs @ 12.29 hrs, Volume= 0.196 af
Primary = 1.45 cfs @ 12.29 hrs, Volume= 0.196 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 13L: DP-1

Hydrograph



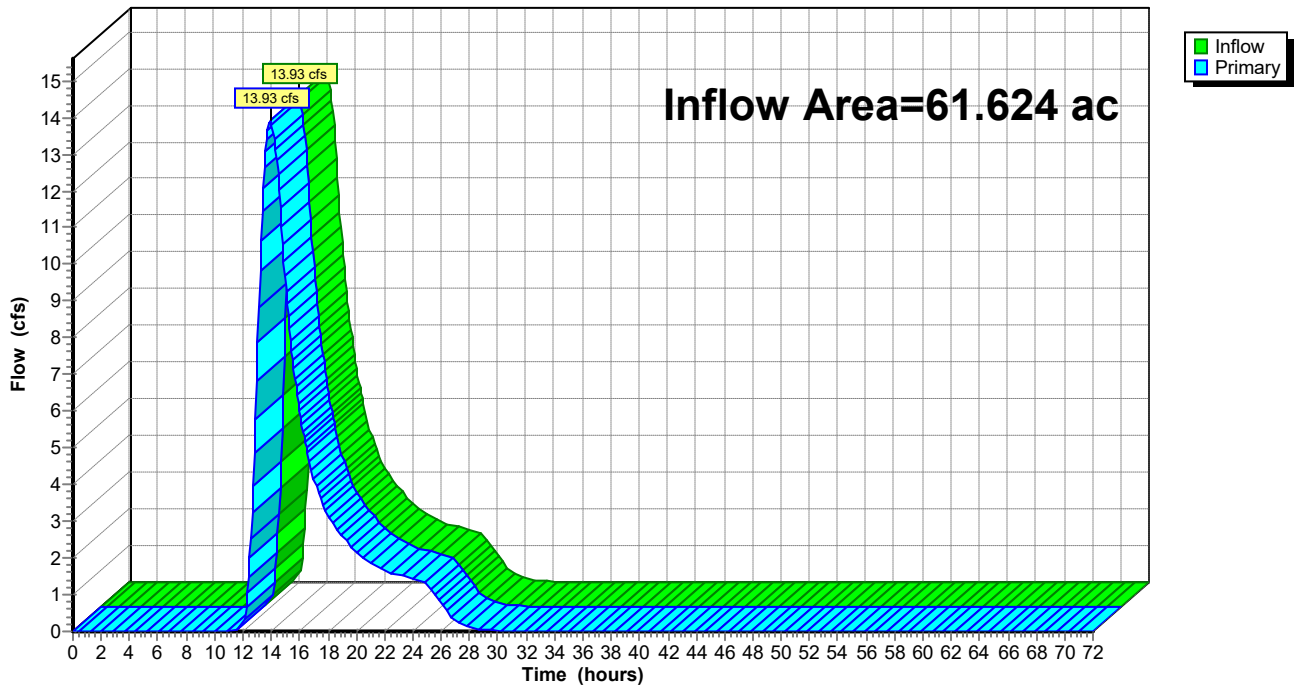
Summary for Link 14L: DP-5

Inflow Area = 61.624 ac, 0.00% Impervious, Inflow Depth = 0.93" for 10 Year event
Inflow = 13.93 cfs @ 13.92 hrs, Volume= 4.800 af
Primary = 13.93 cfs @ 13.92 hrs, Volume= 4.800 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 14L: DP-5

Hydrograph



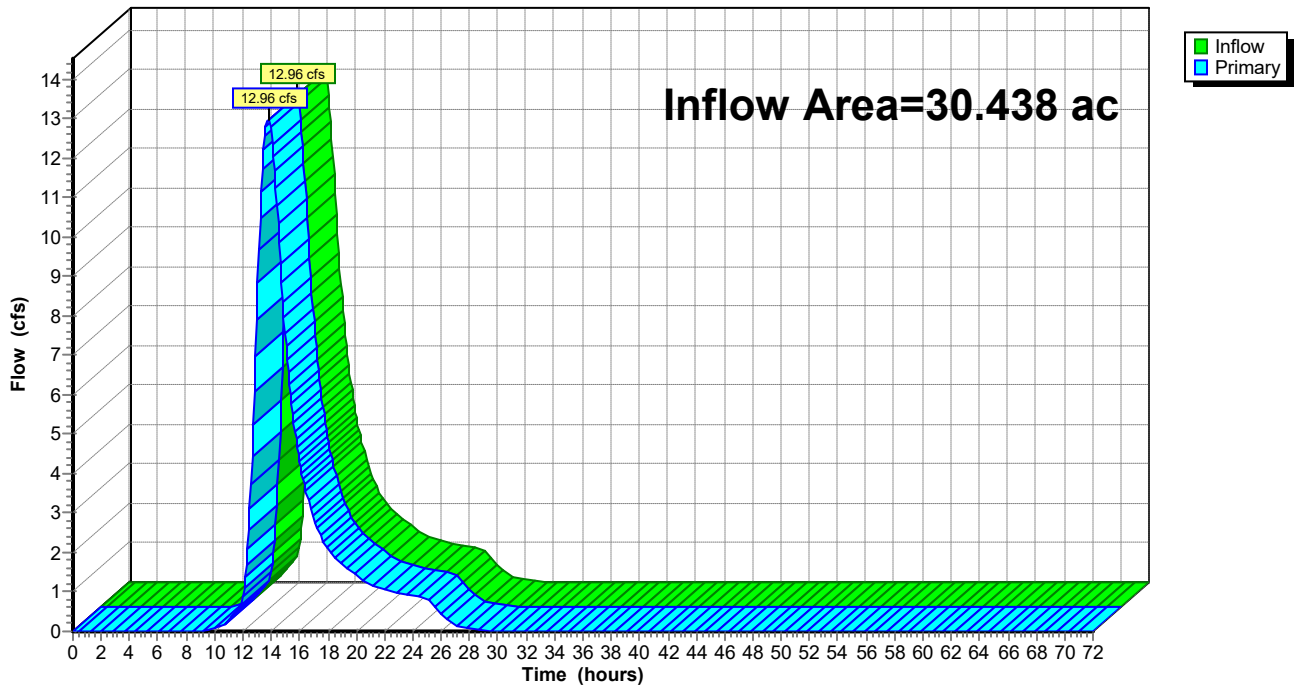
Summary for Link 15L: DP-7

Inflow Area = 30.438 ac, 0.00% Impervious, Inflow Depth = 1.55" for 10 Year event
Inflow = 12.96 cfs @ 13.80 hrs, Volume= 3.943 af
Primary = 12.96 cfs @ 13.80 hrs, Volume= 3.943 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 15L: DP-7

Hydrograph



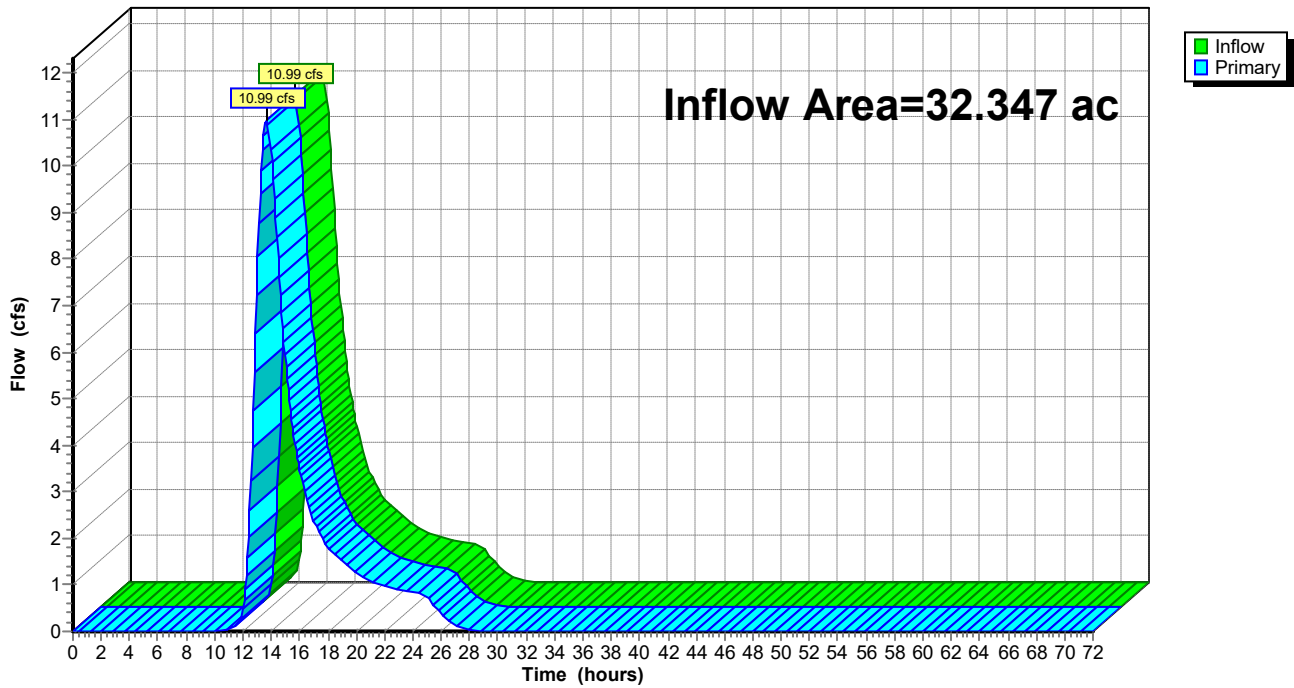
Summary for Link 16L: DP-53

Inflow Area = 32.347 ac, 0.00% Impervious, Inflow Depth = 1.22" for 10 Year event
Inflow = 10.99 cfs @ 13.67 hrs, Volume= 3.289 af
Primary = 10.99 cfs @ 13.67 hrs, Volume= 3.289 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 16L: DP-53

Hydrograph



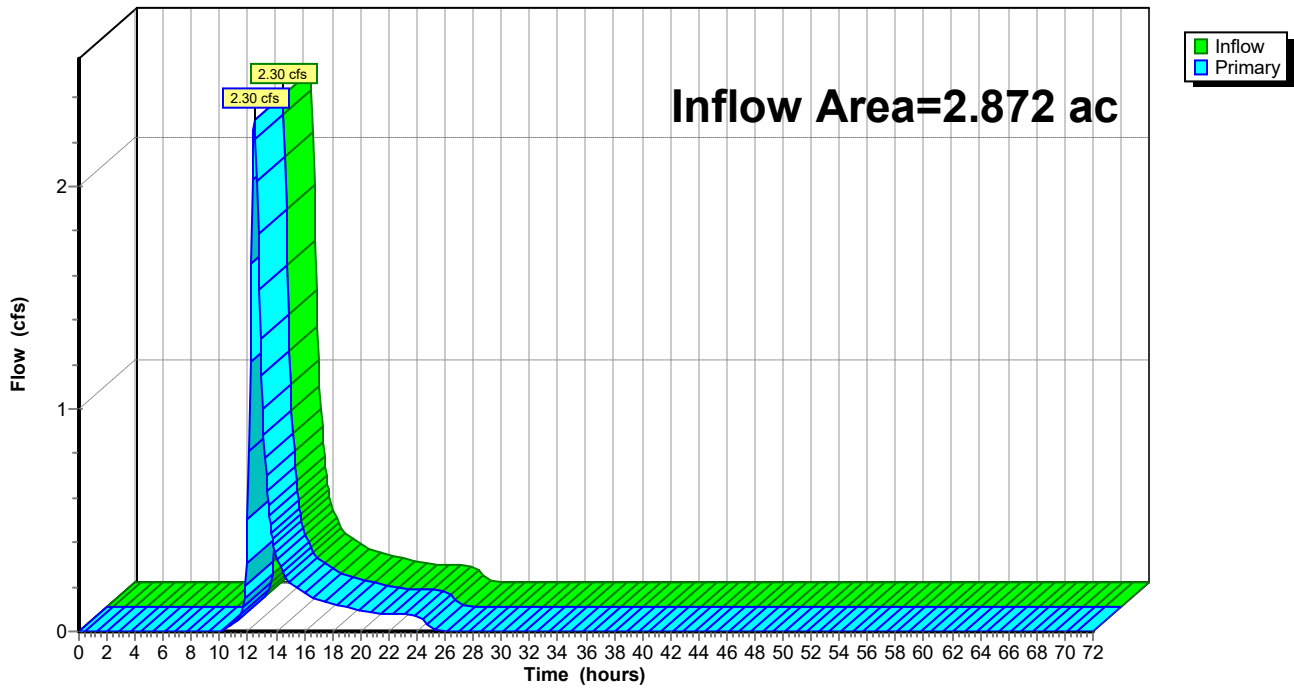
Summary for Link 17L: DP-54

Inflow Area = 2.872 ac, 0.00% Impervious, Inflow Depth = 1.28" for 10 Year event
Inflow = 2.30 cfs @ 12.47 hrs, Volume= 0.307 af
Primary = 2.30 cfs @ 12.47 hrs, Volume= 0.307 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 17L: DP-54

Hydrograph



Summary for Link 18L: DP-8

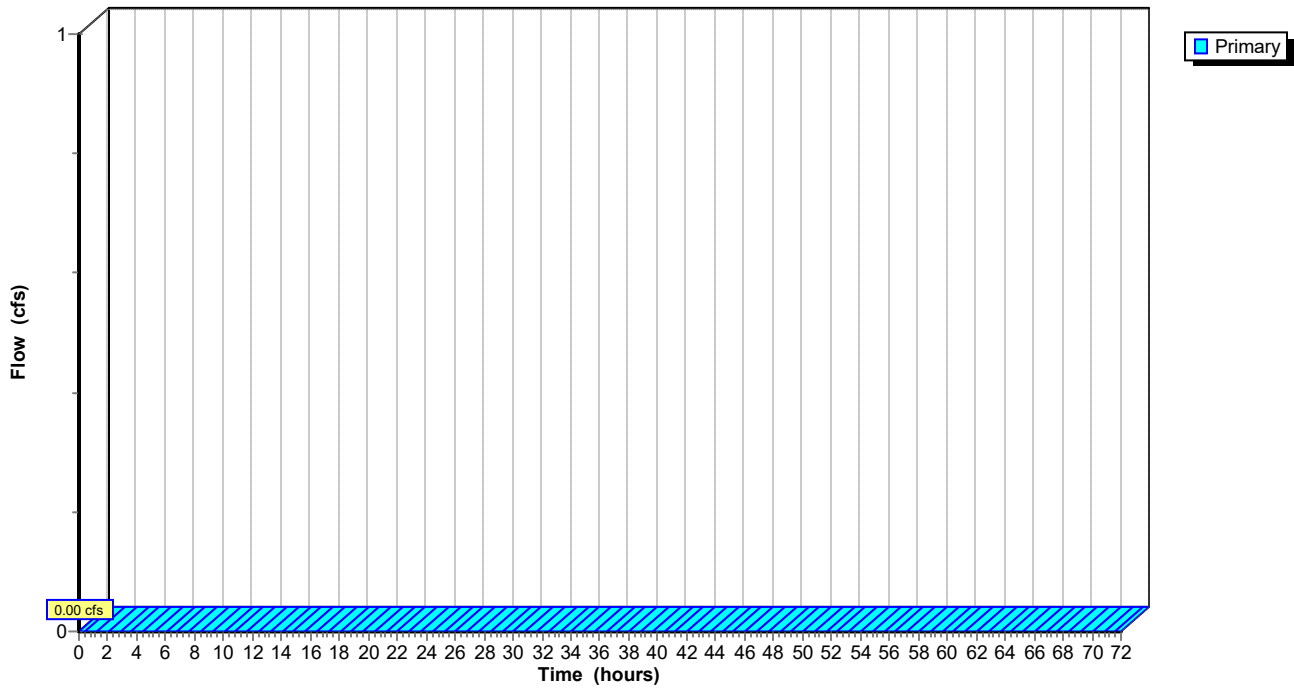
[43] Hint: Has no inflow (Outflow=Zero)

Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 18L: DP-8

Hydrograph



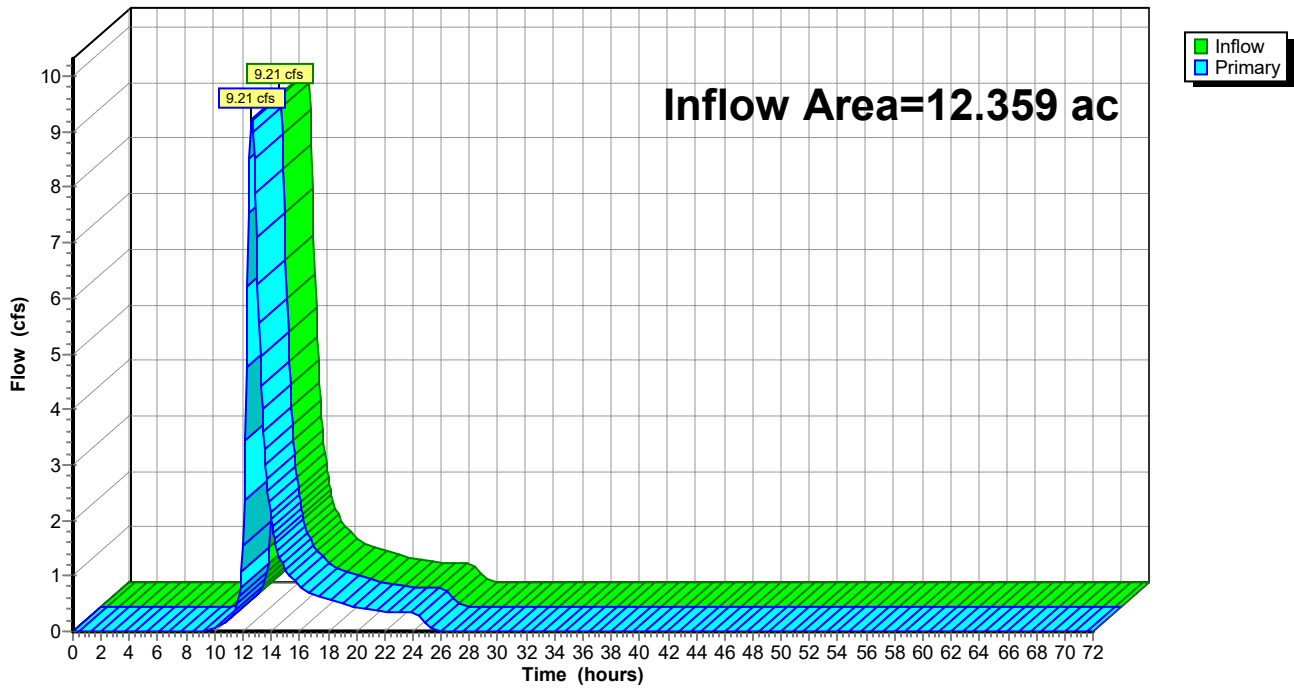
Summary for Link 19L: DP-9

Inflow Area = 12.359 ac, 0.00% Impervious, Inflow Depth = 1.41" for 10 Year event
Inflow = 9.21 cfs @ 12.63 hrs, Volume= 1.457 af
Primary = 9.21 cfs @ 12.63 hrs, Volume= 1.457 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 19L: DP-9

Hydrograph



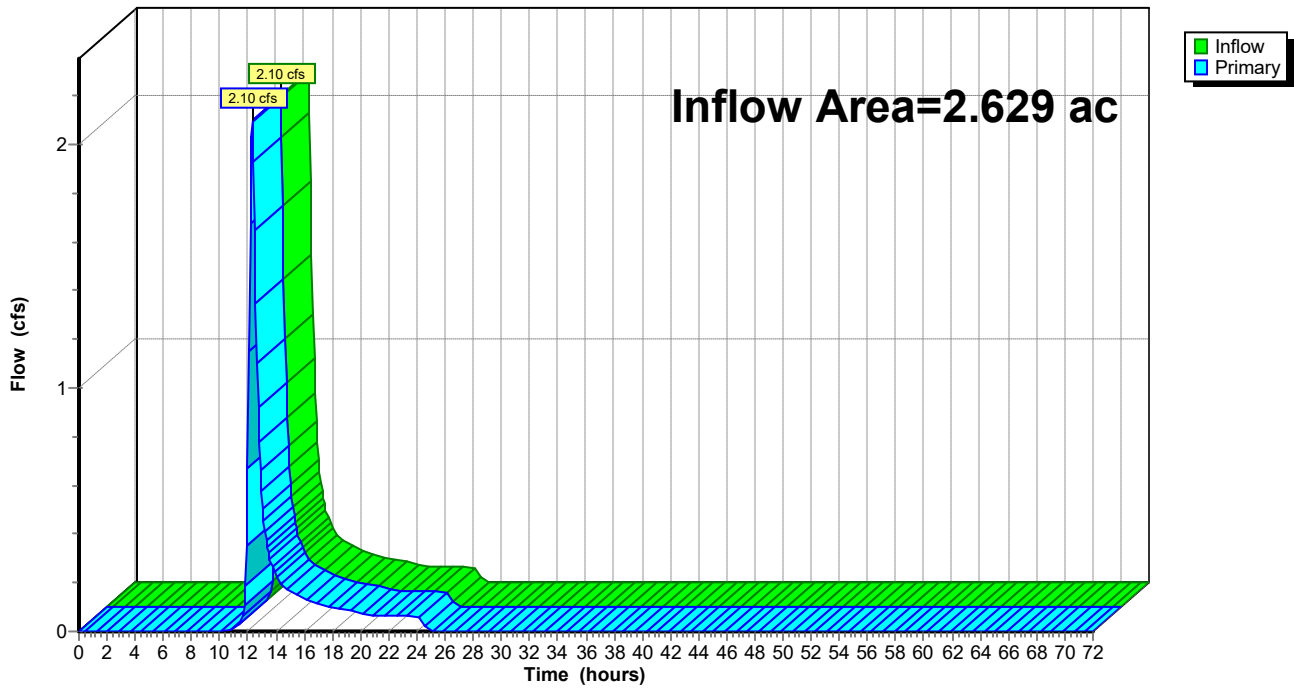
Summary for Link 20L: DP-10

Inflow Area = 2.629 ac, 0.00% Impervious, Inflow Depth = 1.04" for 10 Year event
Inflow = 2.10 cfs @ 12.30 hrs, Volume= 0.229 af
Primary = 2.10 cfs @ 12.30 hrs, Volume= 0.229 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 20L: DP-10

Hydrograph



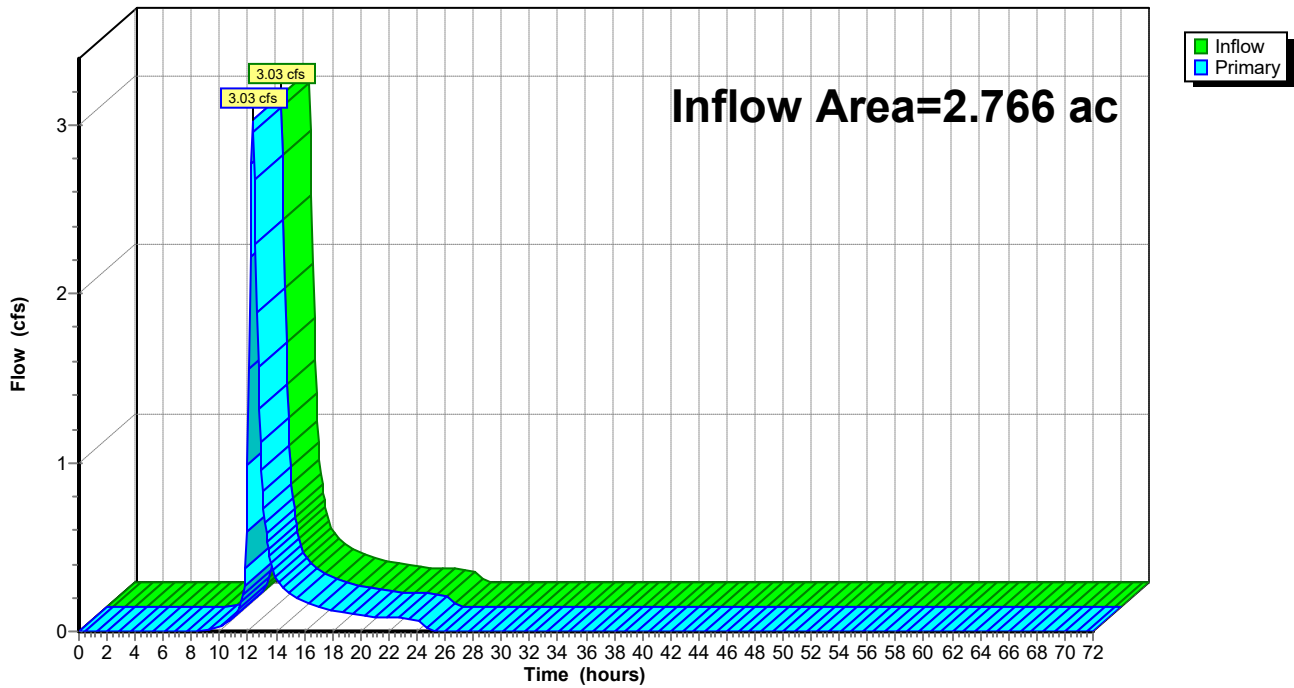
Summary for Link 21L: DP-11

Inflow Area = 2.766 ac, 0.00% Impervious, Inflow Depth = 1.48" for 10 Year event
Inflow = 3.03 cfs @ 12.34 hrs, Volume= 0.342 af
Primary = 3.03 cfs @ 12.34 hrs, Volume= 0.342 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 21L: DP-11

Hydrograph



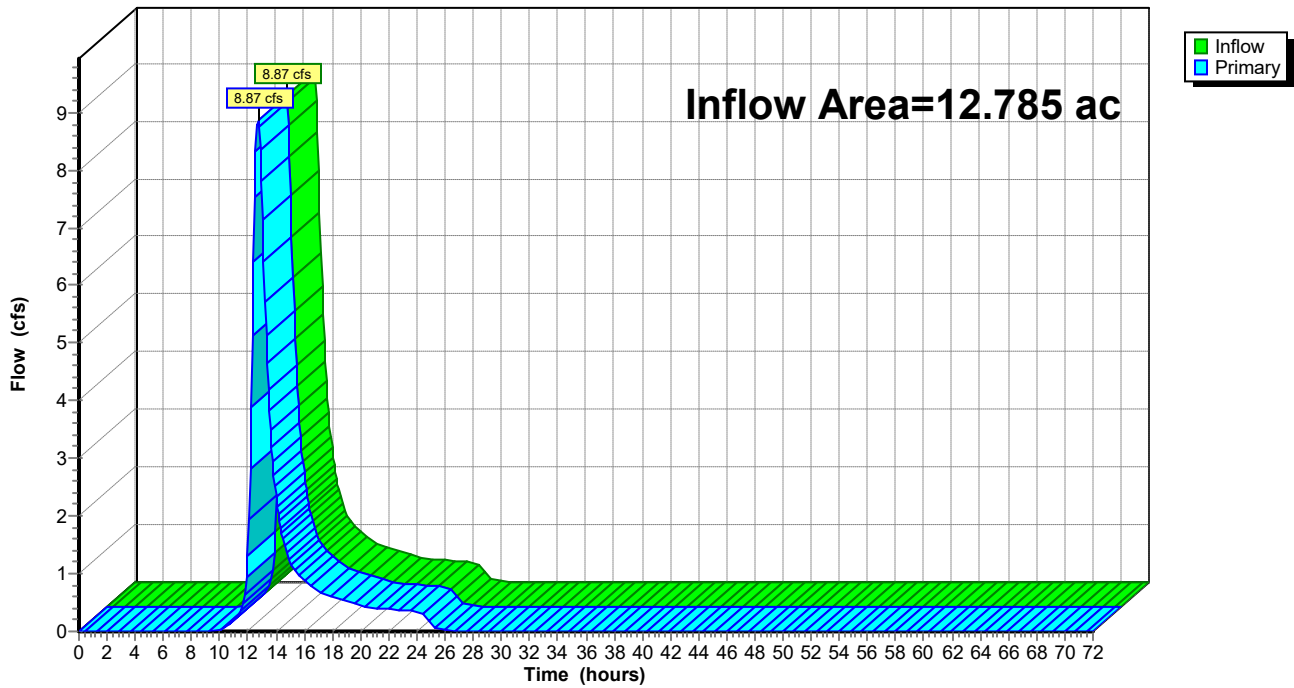
Summary for Link 22L: DP-13

Inflow Area = 12.785 ac, 0.00% Impervious, Inflow Depth = 1.41" for 10 Year event
Inflow = 8.87 cfs @ 12.71 hrs, Volume= 1.507 af
Primary = 8.87 cfs @ 12.71 hrs, Volume= 1.507 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 22L: DP-13

Hydrograph



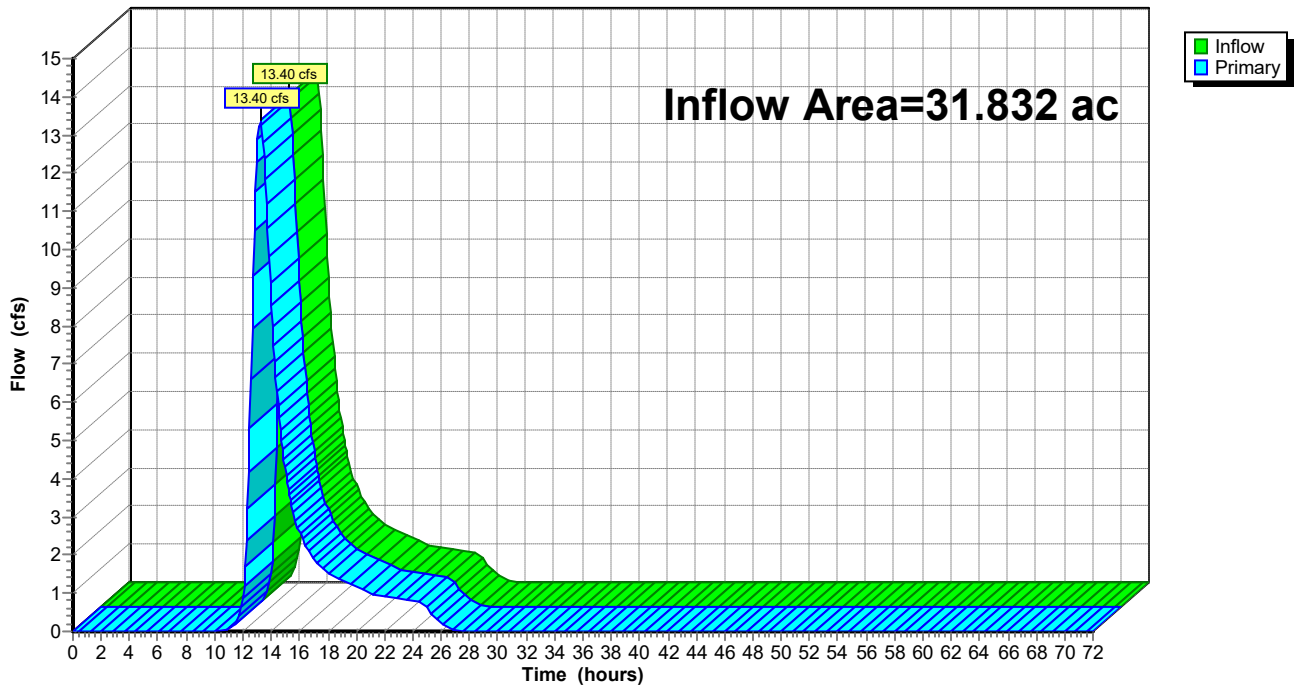
Summary for Link 23L: DP-12

Inflow Area = 31.832 ac, 0.00% Impervious, Inflow Depth = 1.22" for 10 Year event
Inflow = 13.40 cfs @ 13.25 hrs, Volume= 3.236 af
Primary = 13.40 cfs @ 13.25 hrs, Volume= 3.236 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 23L: DP-12

Hydrograph



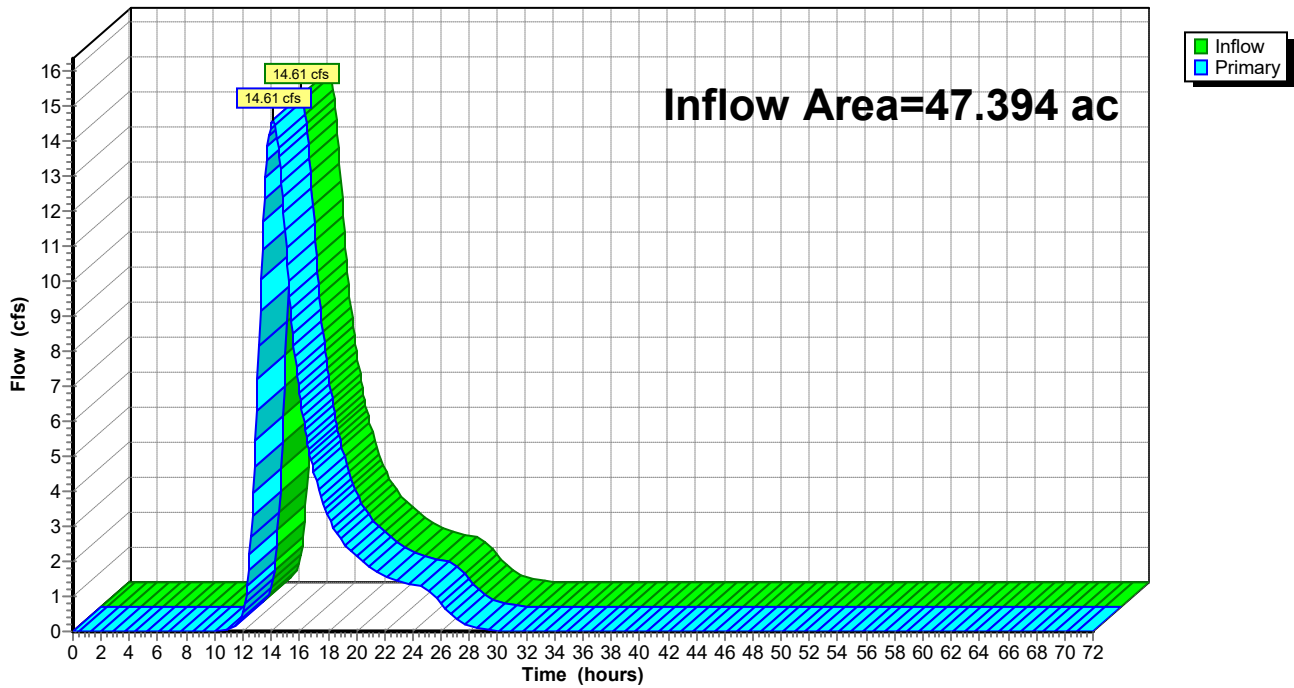
Summary for Link 24L: DP-14

Inflow Area = 47.394 ac, 0.00% Impervious, Inflow Depth = 1.28" for 10 Year event
Inflow = 14.61 cfs @ 14.14 hrs, Volume= 5.066 af
Primary = 14.61 cfs @ 14.14 hrs, Volume= 5.066 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 24L: DP-14

Hydrograph



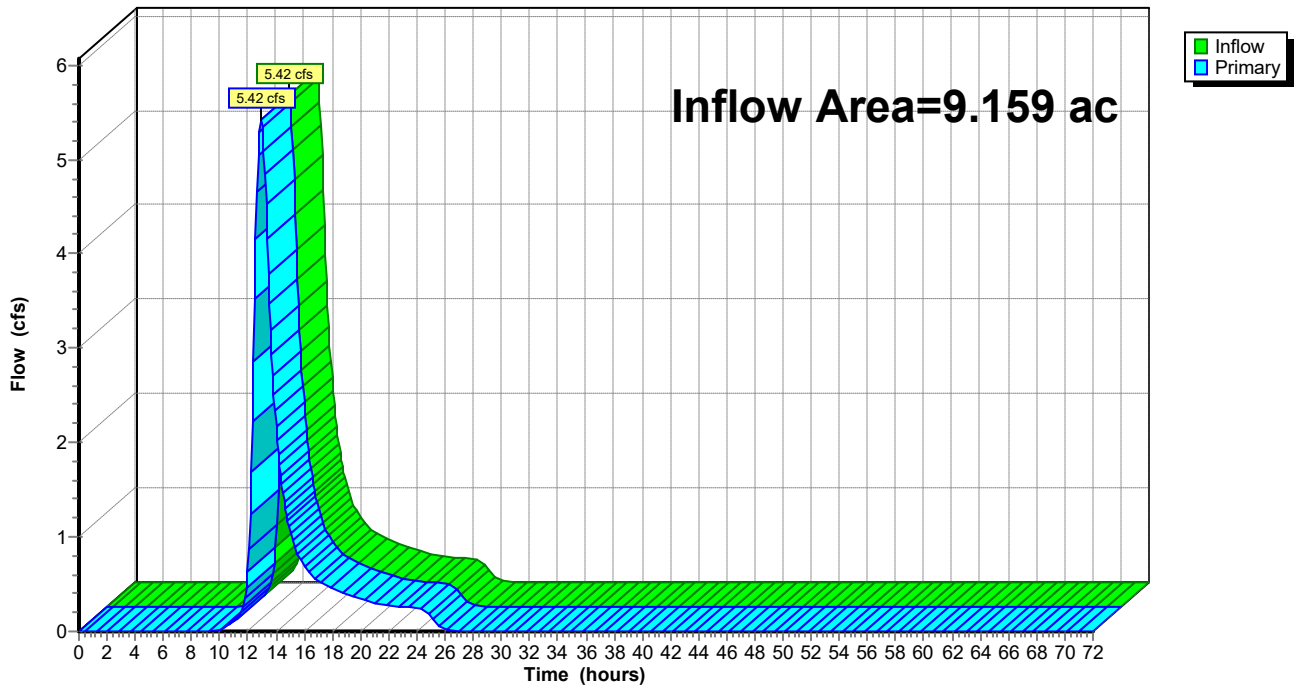
Summary for Link 25L: DP-15

Inflow Area = 9.159 ac, 0.00% Impervious, Inflow Depth = 1.41" for 10 Year event
Inflow = 5.42 cfs @ 12.93 hrs, Volume= 1.080 af
Primary = 5.42 cfs @ 12.93 hrs, Volume= 1.080 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 25L: DP-15

Hydrograph



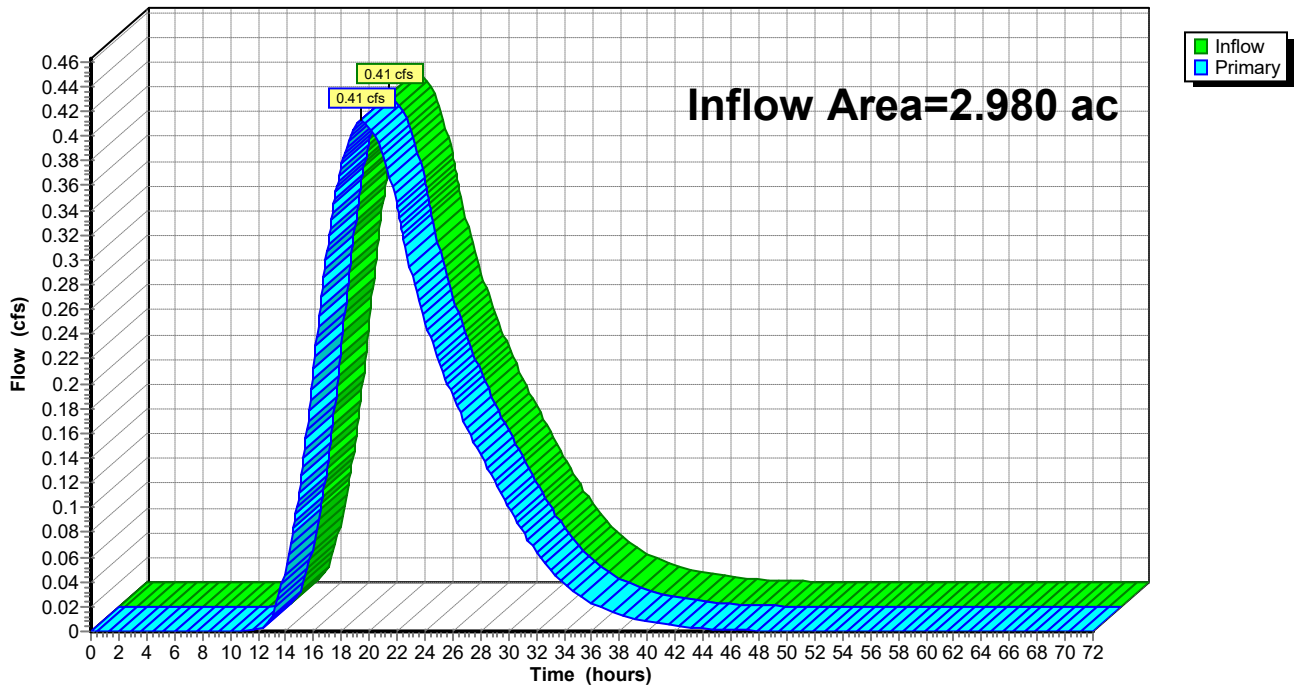
Summary for Link 26L: DP-17

Inflow Area = 2.980 ac, 0.00% Impervious, Inflow Depth = 1.48" for 10 Year event
Inflow = 0.41 cfs @ 19.35 hrs, Volume= 0.368 af
Primary = 0.41 cfs @ 19.35 hrs, Volume= 0.368 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 26L: DP-17

Hydrograph



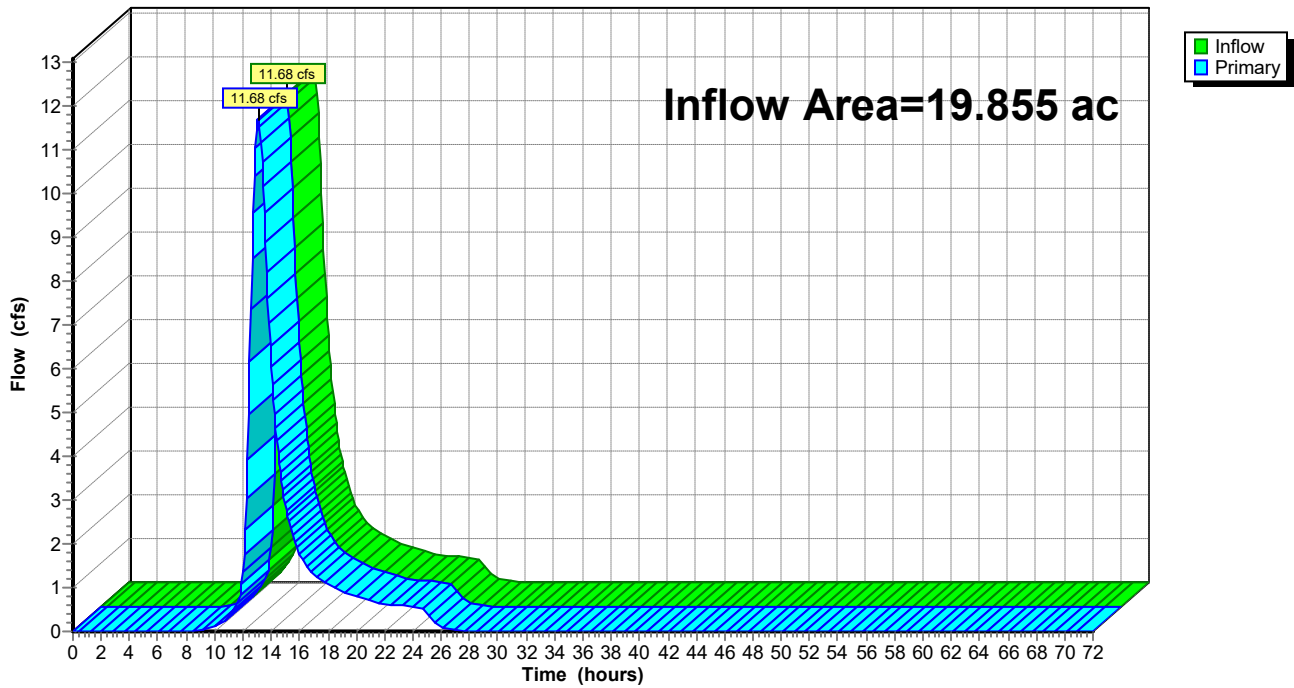
Summary for Link 27L: DP-18

Inflow Area = 19.855 ac, 0.00% Impervious, Inflow Depth = 1.55" for 10 Year event
Inflow = 11.68 cfs @ 13.07 hrs, Volume= 2.572 af
Primary = 11.68 cfs @ 13.07 hrs, Volume= 2.572 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 27L: DP-18

Hydrograph



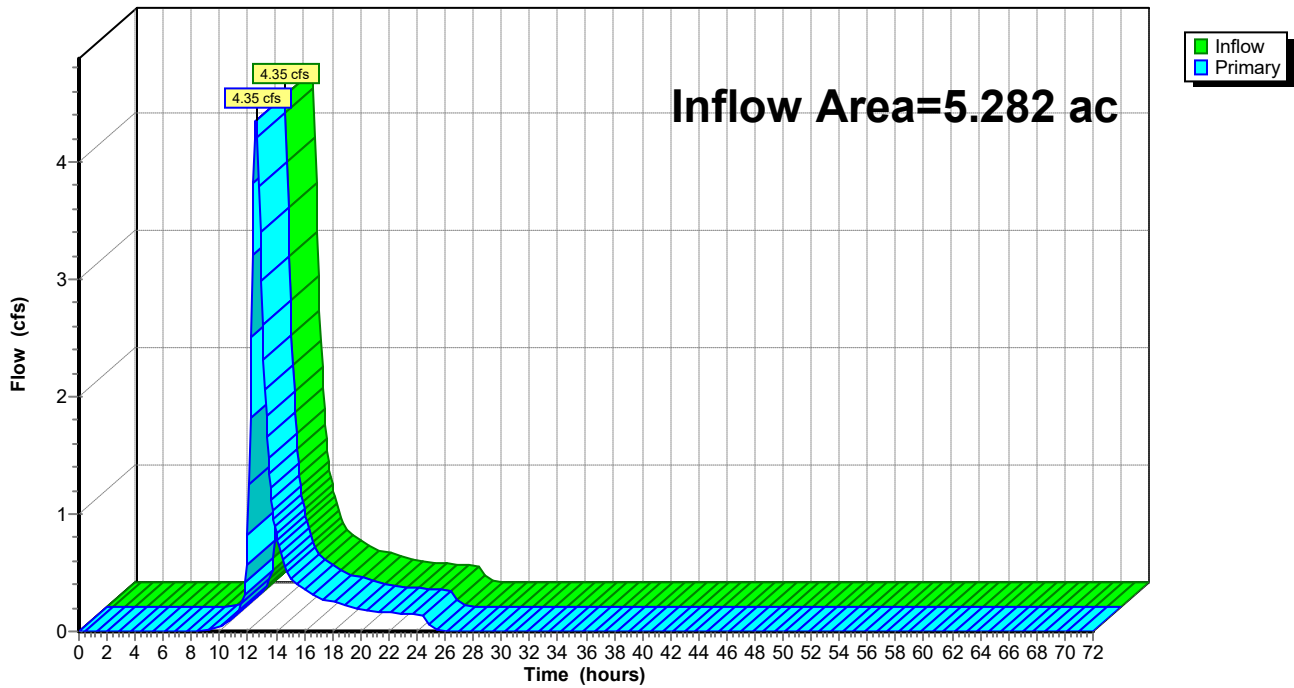
Summary for Link 28L: DP-19

Inflow Area = 5.282 ac, 0.00% Impervious, Inflow Depth = 1.48" for 10 Year event
Inflow = 4.35 cfs @ 12.58 hrs, Volume= 0.653 af
Primary = 4.35 cfs @ 12.58 hrs, Volume= 0.653 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 28L: DP-19

Hydrograph



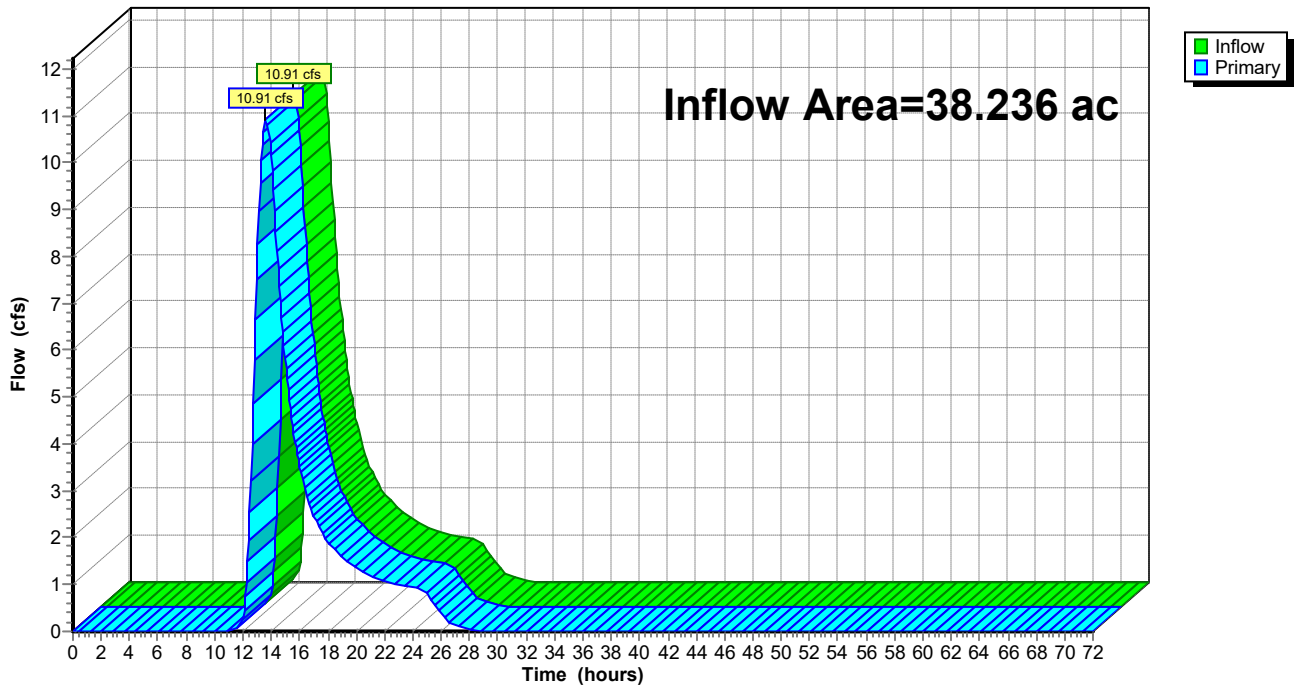
Summary for Link 29L: DP-20

Inflow Area = 38.236 ac, 0.00% Impervious, Inflow Depth = 1.04" for 10 Year event
Inflow = 10.91 cfs @ 13.61 hrs, Volume= 3.325 af
Primary = 10.91 cfs @ 13.61 hrs, Volume= 3.325 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 29L: DP-20

Hydrograph



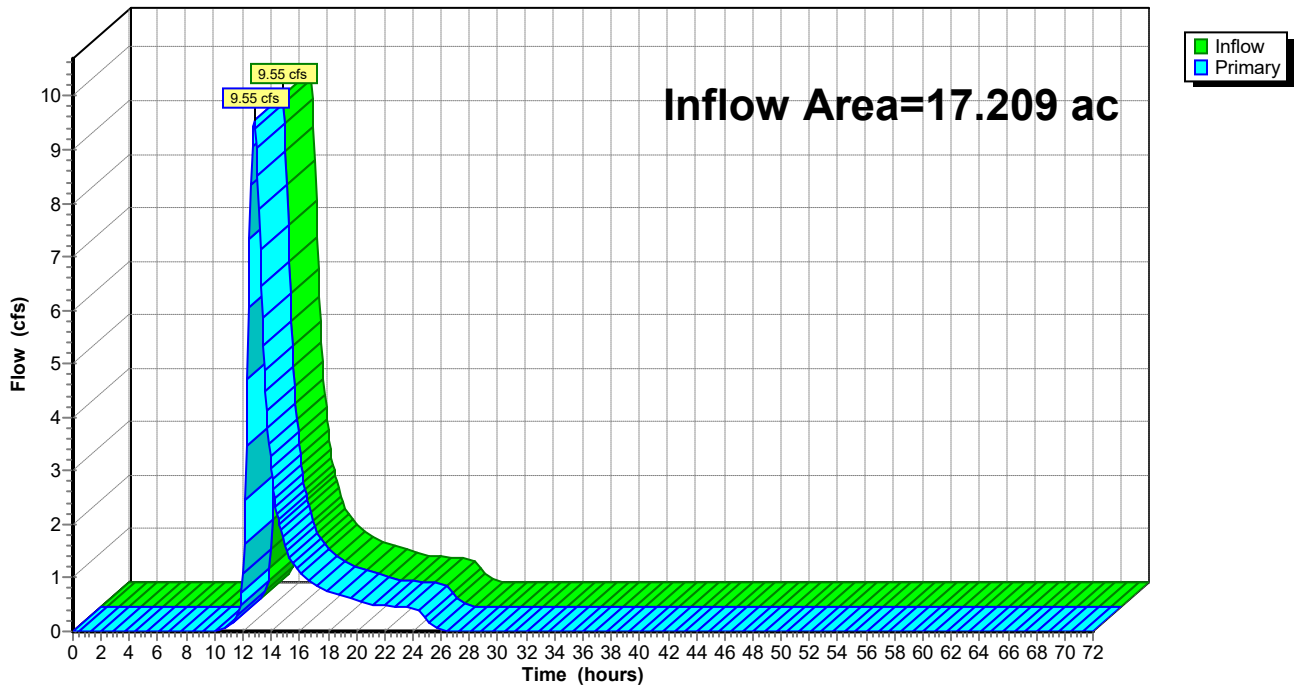
Summary for Link 30L: DP-22

Inflow Area = 17.209 ac, 0.00% Impervious, Inflow Depth = 1.22" for 10 Year event
Inflow = 9.55 cfs @ 12.79 hrs, Volume= 1.750 af
Primary = 9.55 cfs @ 12.79 hrs, Volume= 1.750 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 30L: DP-22

Hydrograph



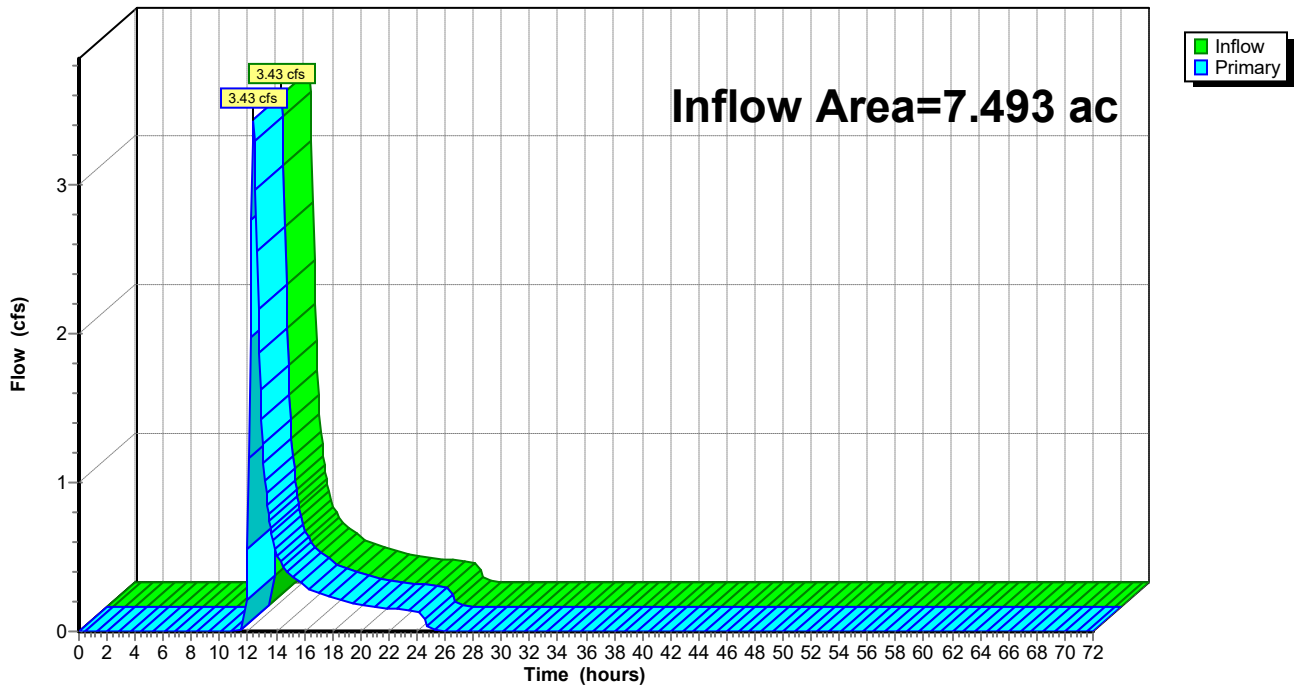
Summary for Link 31L: DP-23

Inflow Area = 7.493 ac, 0.00% Impervious, Inflow Depth = 0.74" for 10 Year event
Inflow = 3.43 cfs @ 12.40 hrs, Volume= 0.461 af
Primary = 3.43 cfs @ 12.40 hrs, Volume= 0.461 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 31L: DP-23

Hydrograph



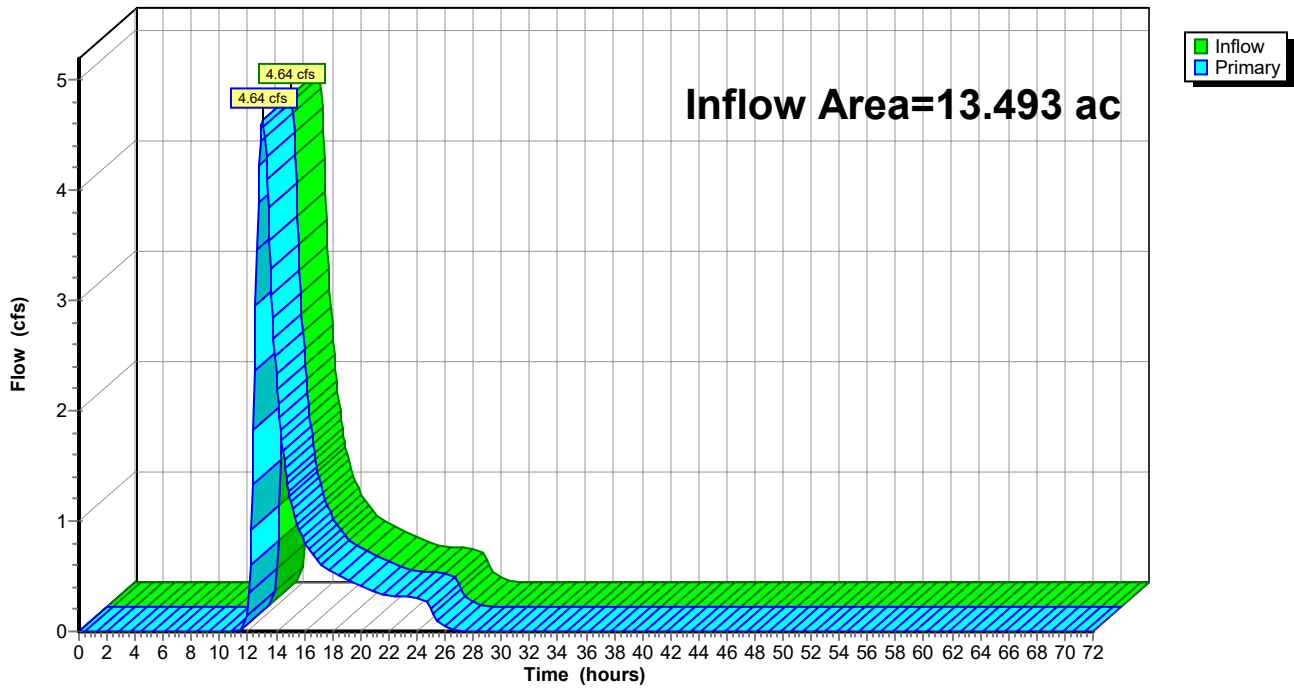
Summary for Link 32L: DP-24

Inflow Area = 13.493 ac, 0.00% Impervious, Inflow Depth = 0.93" for 10 Year event
Inflow = 4.64 cfs @ 13.04 hrs, Volume= 1.051 af
Primary = 4.64 cfs @ 13.04 hrs, Volume= 1.051 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 32L: DP-24

Hydrograph



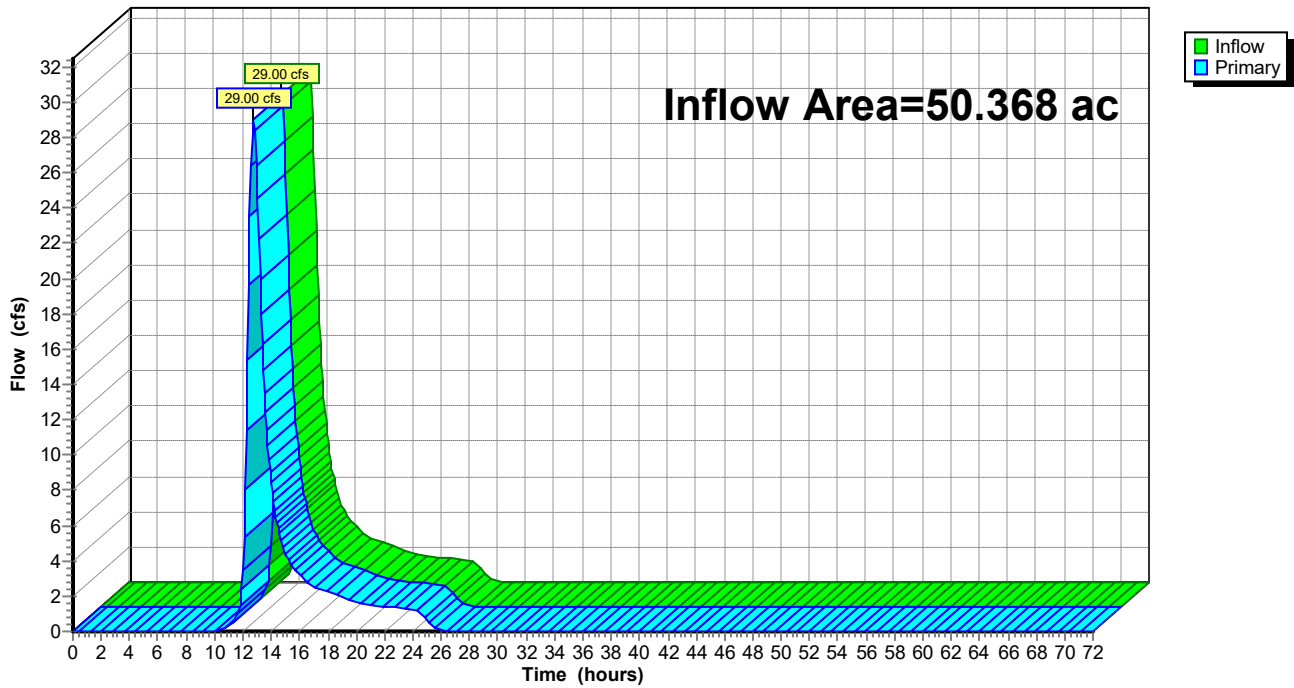
Summary for Link 33L: DP-25

Inflow Area = 50.368 ac, 0.00% Impervious, Inflow Depth = 1.22" for 10 Year event
Inflow = 29.00 cfs @ 12.75 hrs, Volume= 5.121 af
Primary = 29.00 cfs @ 12.75 hrs, Volume= 5.121 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 33L: DP-25

Hydrograph



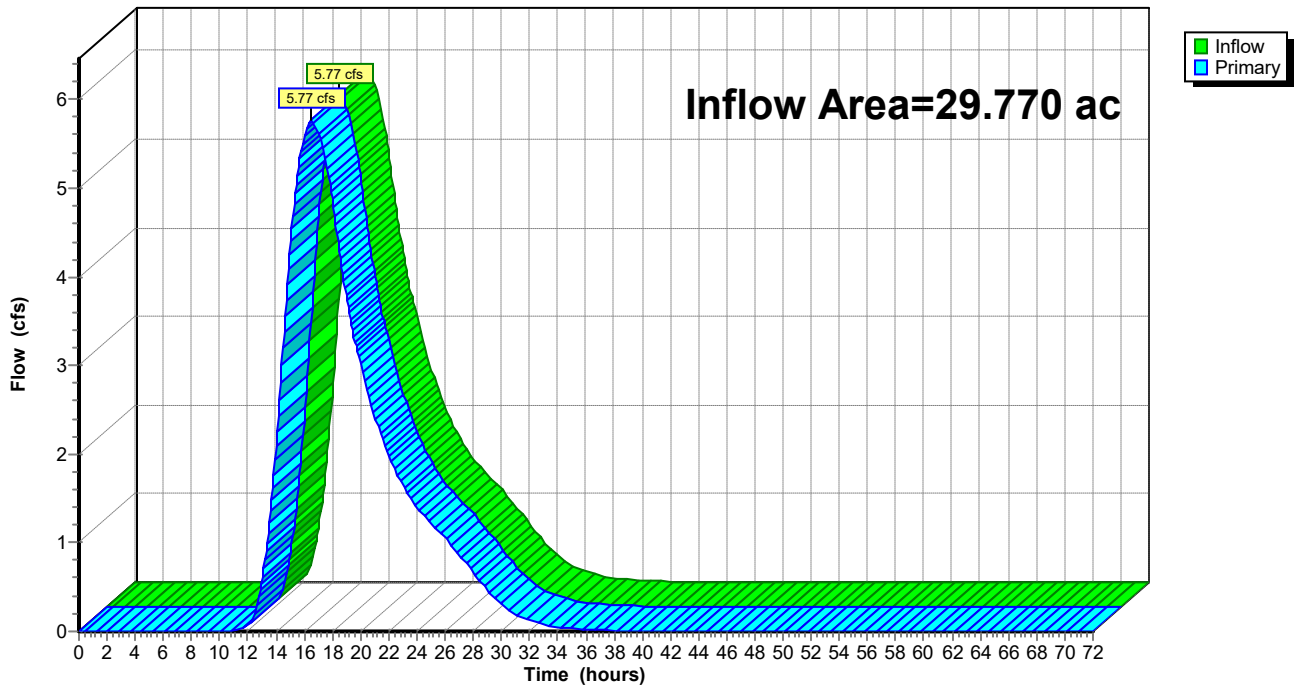
Summary for Link 34L: DP-33

Inflow Area = 29.770 ac, 0.00% Impervious, Inflow Depth = 1.41" for 10 Year event
Inflow = 5.77 cfs @ 16.48 hrs, Volume= 3.509 af
Primary = 5.77 cfs @ 16.48 hrs, Volume= 3.509 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 34L: DP-33

Hydrograph



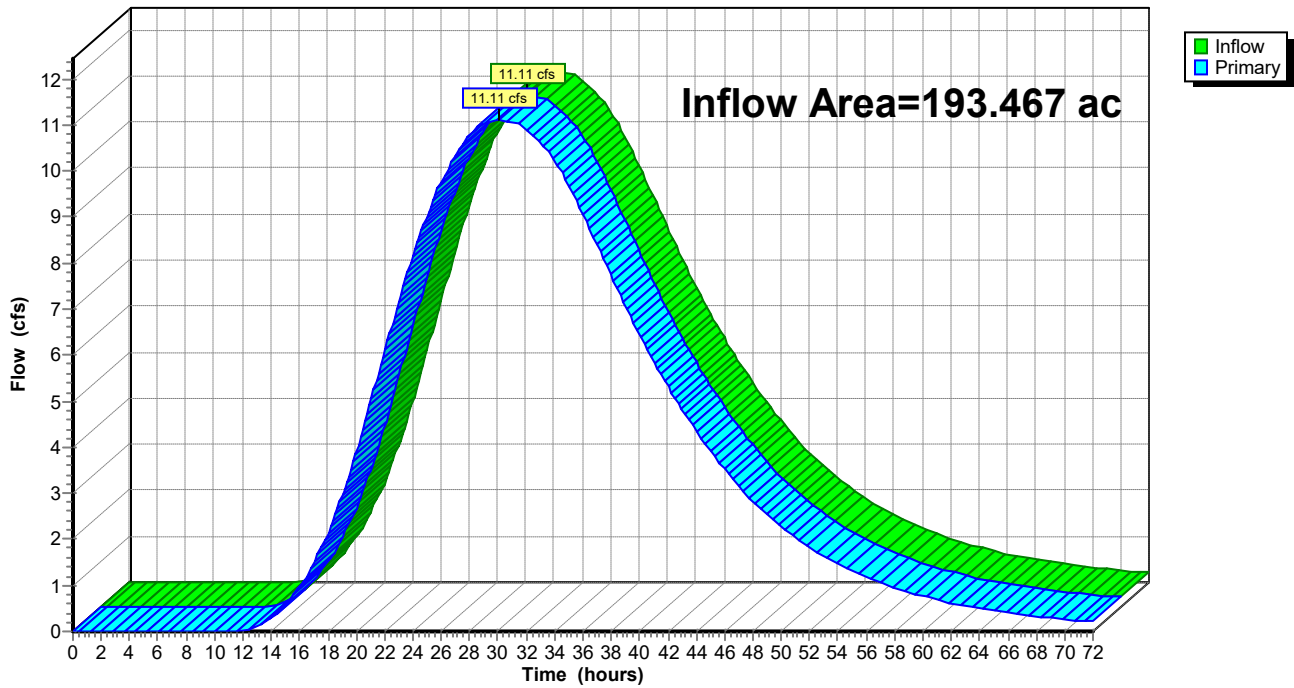
Summary for Link 35L: DP-26

Inflow Area = 193.467 ac, 0.00% Impervious, Inflow Depth > 1.27" for 10 Year event
Inflow = 11.11 cfs @ 30.12 hrs, Volume= 20.547 af
Primary = 11.11 cfs @ 30.12 hrs, Volume= 20.547 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 35L: DP-26

Hydrograph



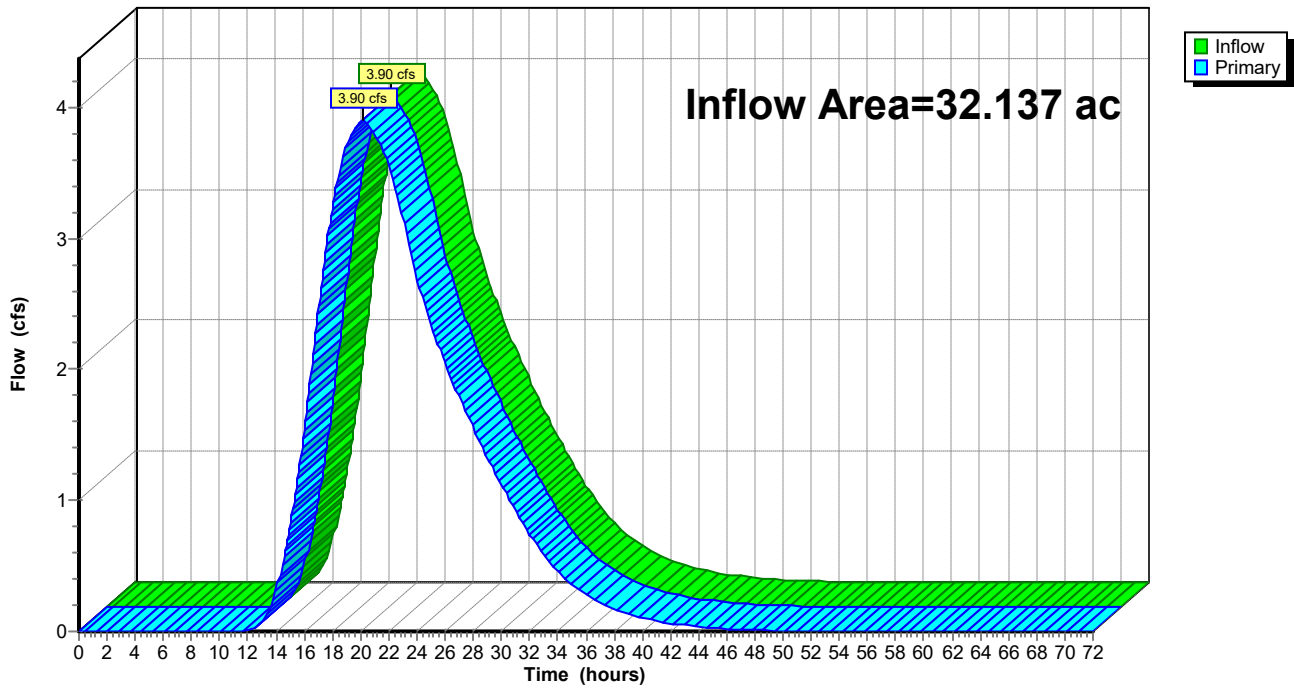
Summary for Link 36L: DP-27

Inflow Area = 32.137 ac, 0.00% Impervious, Inflow Depth = 1.35" for 10 Year event
Inflow = 3.90 cfs @ 20.23 hrs, Volume= 3.609 af
Primary = 3.90 cfs @ 20.23 hrs, Volume= 3.609 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 36L: DP-27

Hydrograph



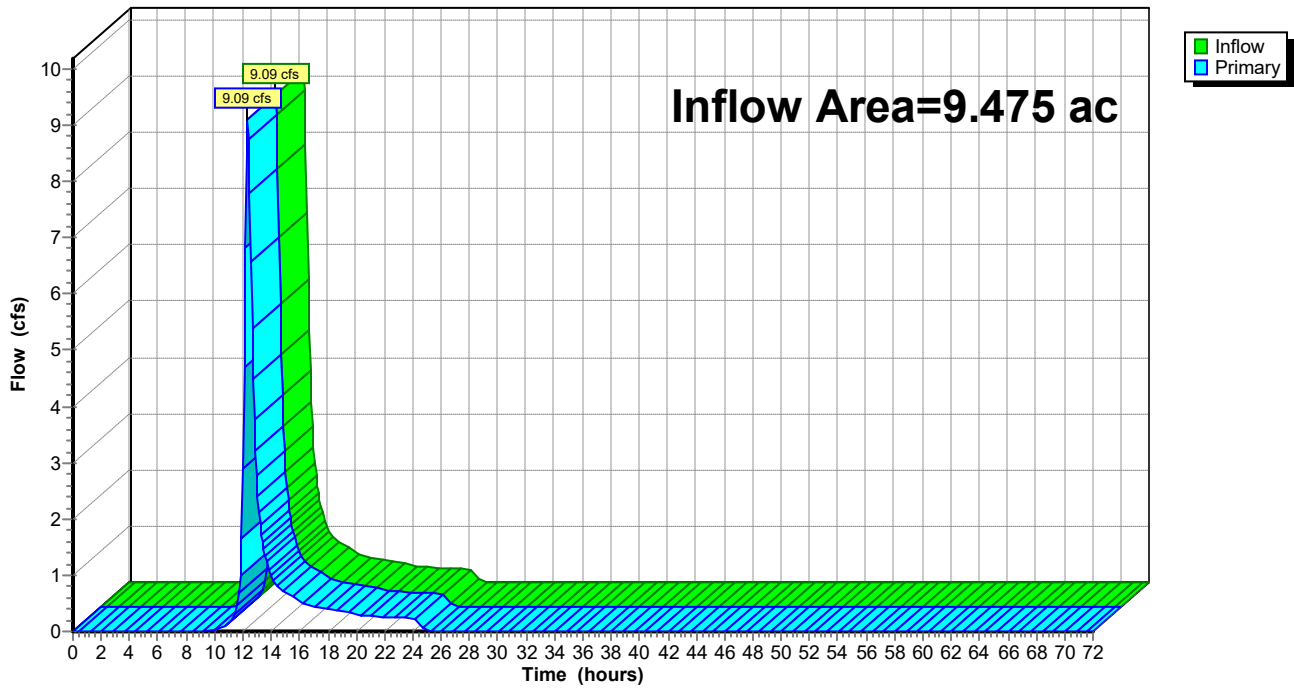
Summary for Link 37L: DP-28

Inflow Area = 9.475 ac, 0.00% Impervious, Inflow Depth = 1.28" for 10 Year event
Inflow = 9.09 cfs @ 12.33 hrs, Volume= 1.013 af
Primary = 9.09 cfs @ 12.33 hrs, Volume= 1.013 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 37L: DP-28

Hydrograph



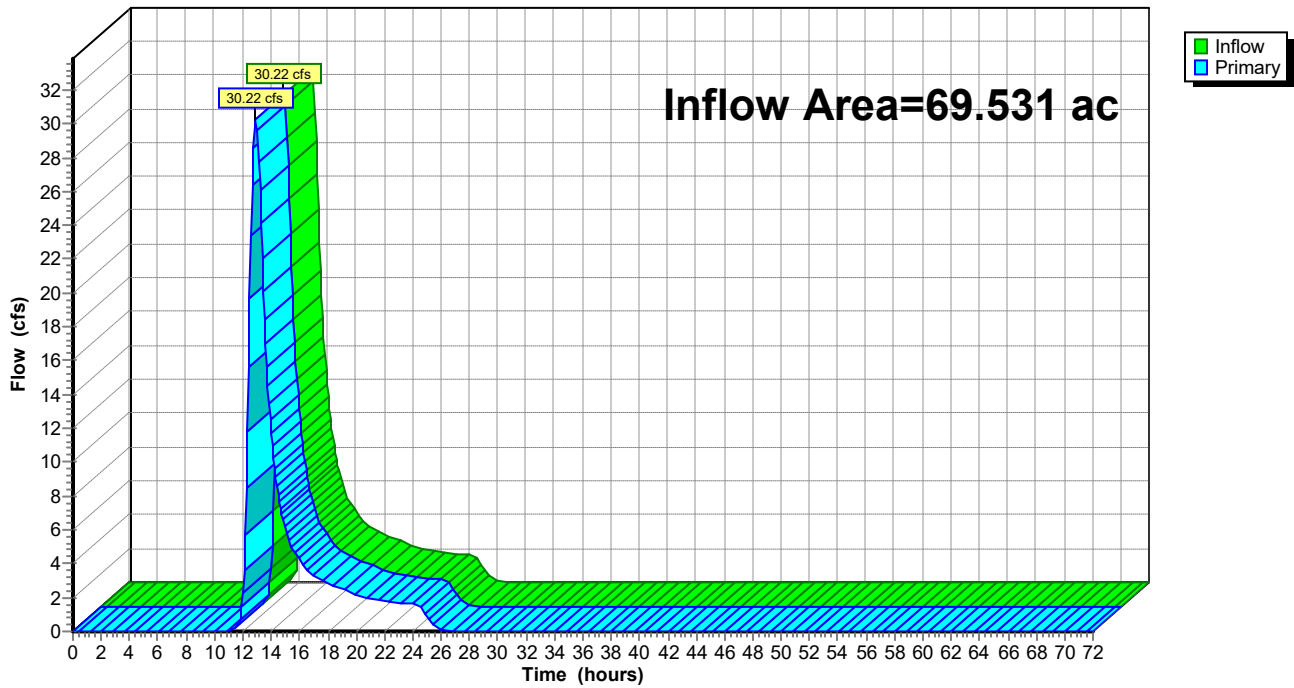
Summary for Link 38L: DP-29

Inflow Area = 69.531 ac, 0.00% Impervious, Inflow Depth = 1.04" for 10 Year event
Inflow = 30.22 cfs @ 12.90 hrs, Volume= 6.046 af
Primary = 30.22 cfs @ 12.90 hrs, Volume= 6.046 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 38L: DP-29

Hydrograph



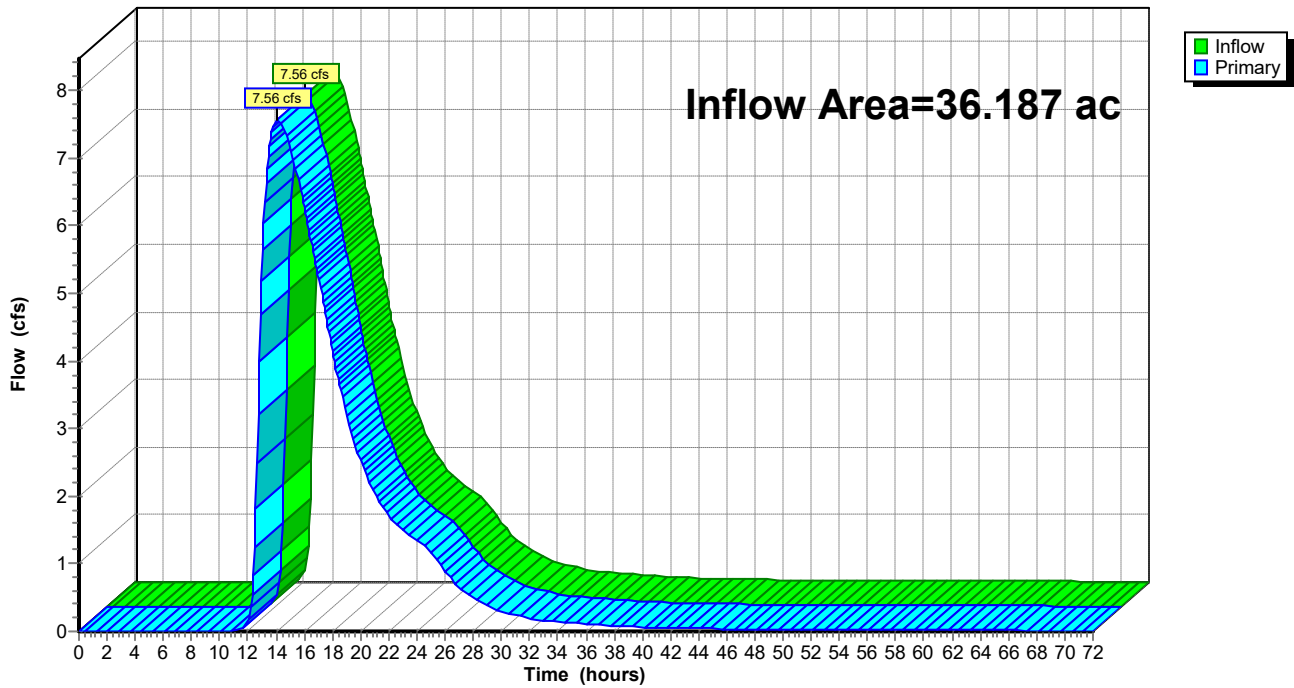
Summary for Link 39L: DP-30

Inflow Area = 36.187 ac, 0.00% Impervious, Inflow Depth > 1.47" for 10 Year event
Inflow = 7.56 cfs @ 14.12 hrs, Volume= 4.445 af
Primary = 7.56 cfs @ 14.12 hrs, Volume= 4.445 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 39L: DP-30

Hydrograph



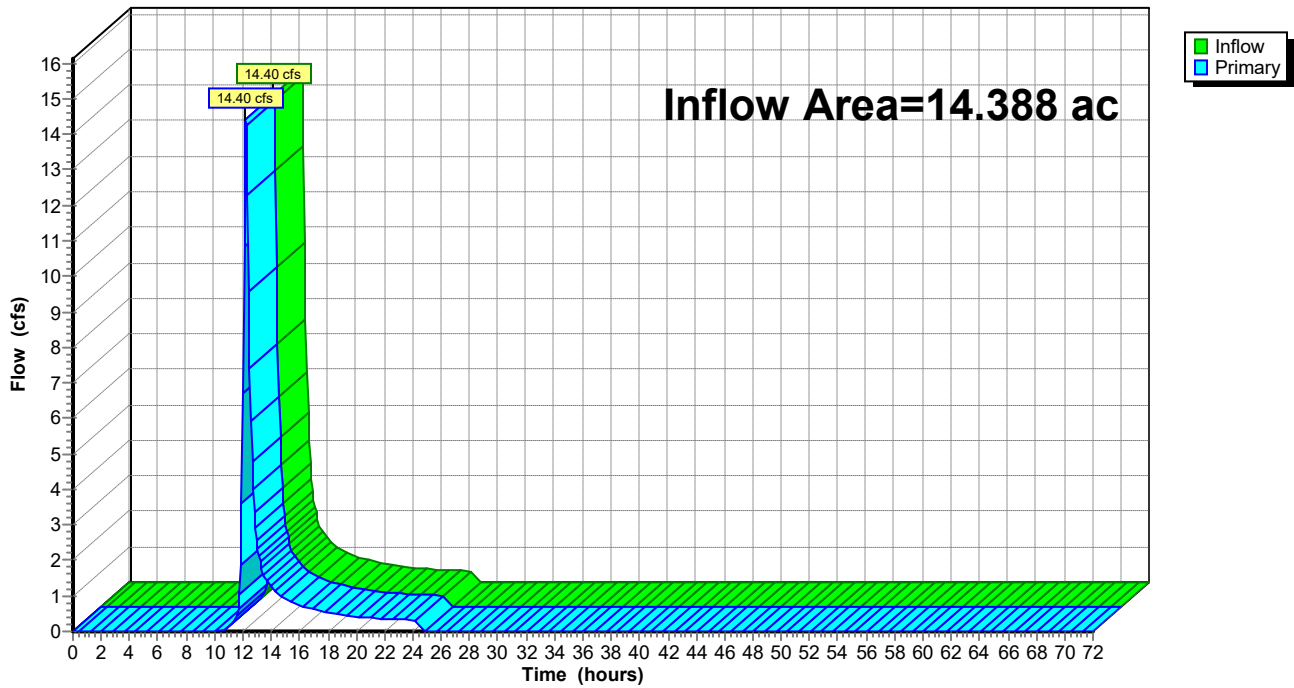
Summary for Link 40L: DP-31

Inflow Area = 14.388 ac, 0.00% Impervious, Inflow Depth = 1.10" for 10 Year event
Inflow = 14.40 cfs @ 12.21 hrs, Volume= 1.319 af
Primary = 14.40 cfs @ 12.21 hrs, Volume= 1.319 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 40L: DP-31

Hydrograph



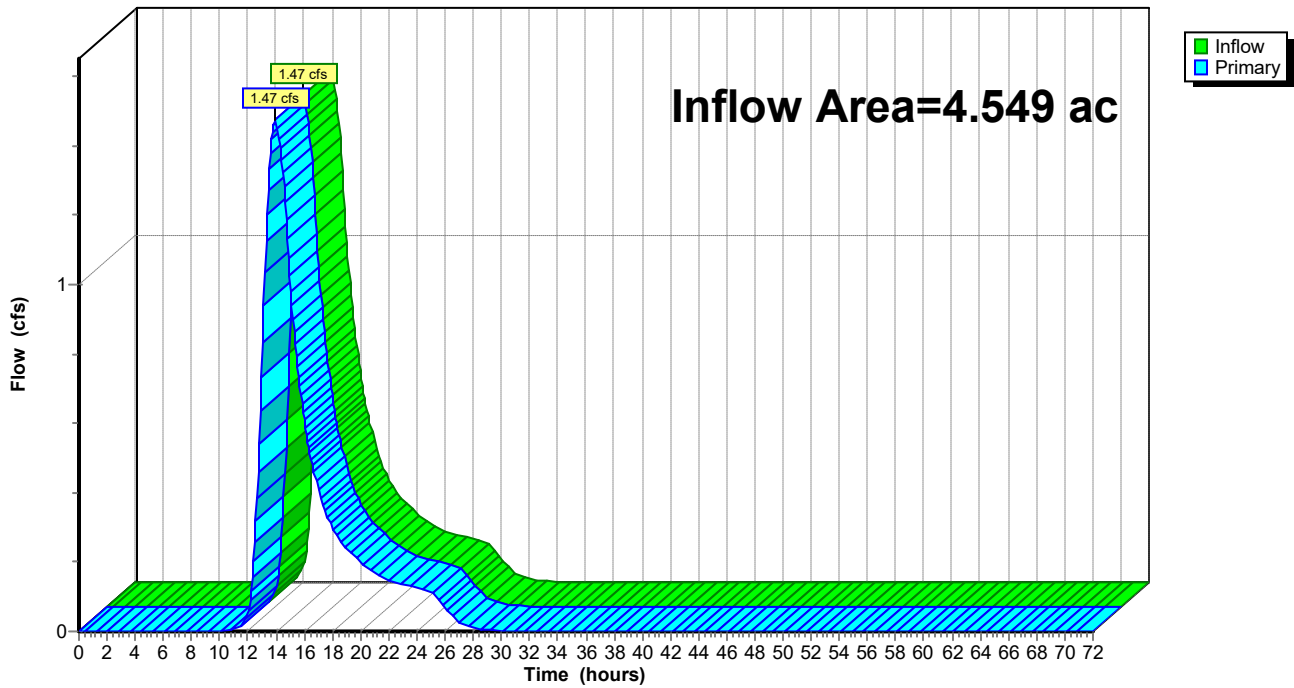
Summary for Link 41L: DP-32

Inflow Area = 4.549 ac, 0.00% Impervious, Inflow Depth = 1.28" for 10 Year event
Inflow = 1.47 cfs @ 13.98 hrs, Volume= 0.486 af
Primary = 1.47 cfs @ 13.98 hrs, Volume= 0.486 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 41L: DP-32

Hydrograph



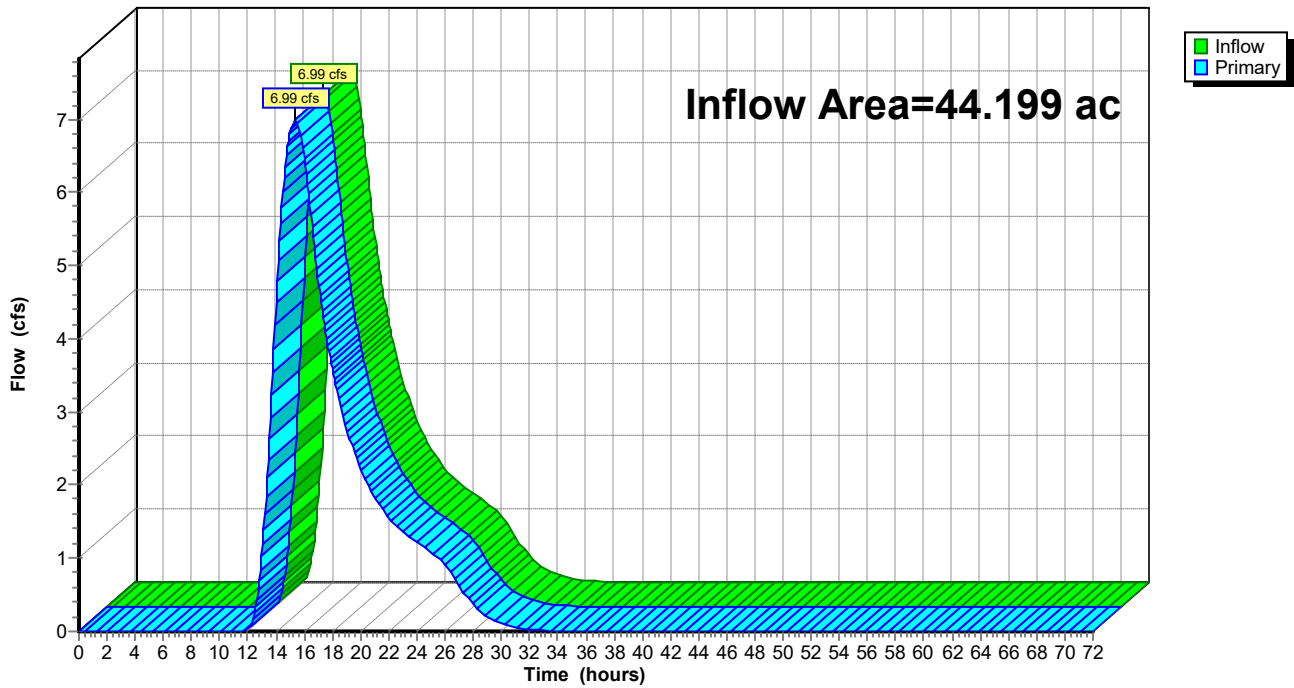
Summary for Link 42L: DP-35

Inflow Area = 44.199 ac, 0.00% Impervious, Inflow Depth = 0.93" for 10 Year event
Inflow = 6.99 cfs @ 15.31 hrs, Volume= 3.443 af
Primary = 6.99 cfs @ 15.31 hrs, Volume= 3.443 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 42L: DP-35

Hydrograph



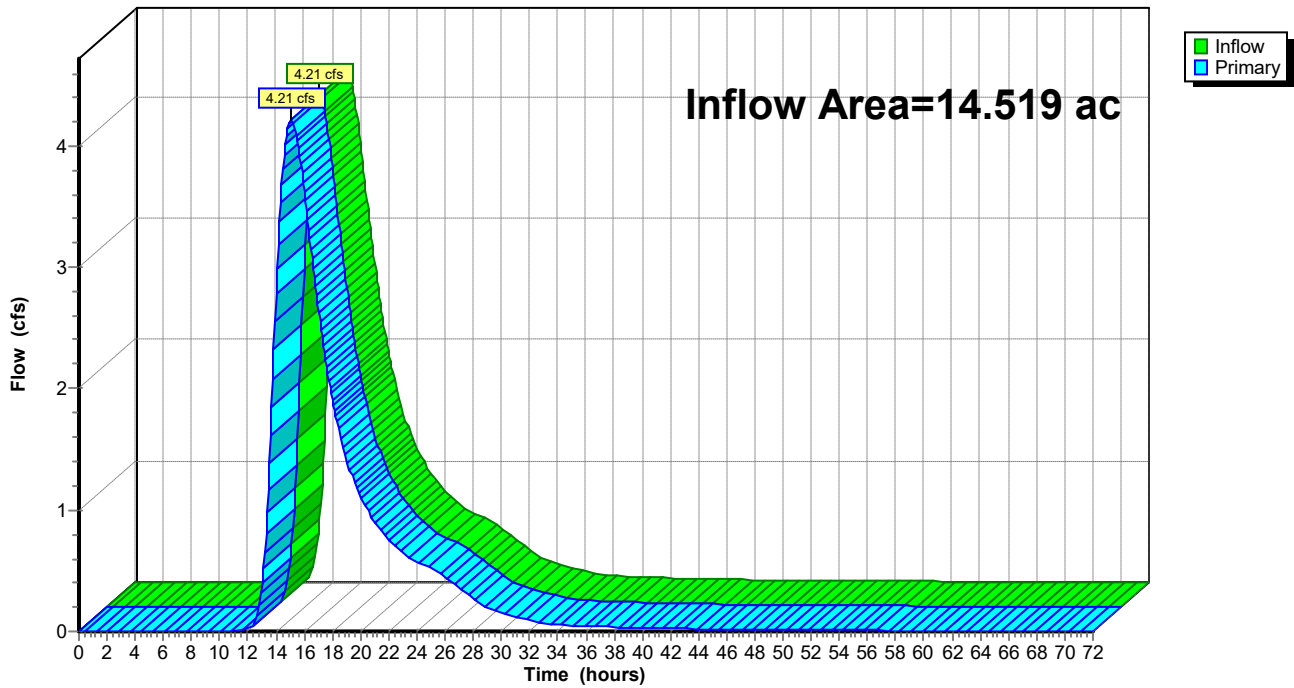
Summary for Link 43L: DP-37

Inflow Area = 14.519 ac, 0.00% Impervious, Inflow Depth > 1.63" for 10 Year event
Inflow = 4.21 cfs @ 15.06 hrs, Volume= 1.968 af
Primary = 4.21 cfs @ 15.06 hrs, Volume= 1.968 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 43L: DP-37

Hydrograph



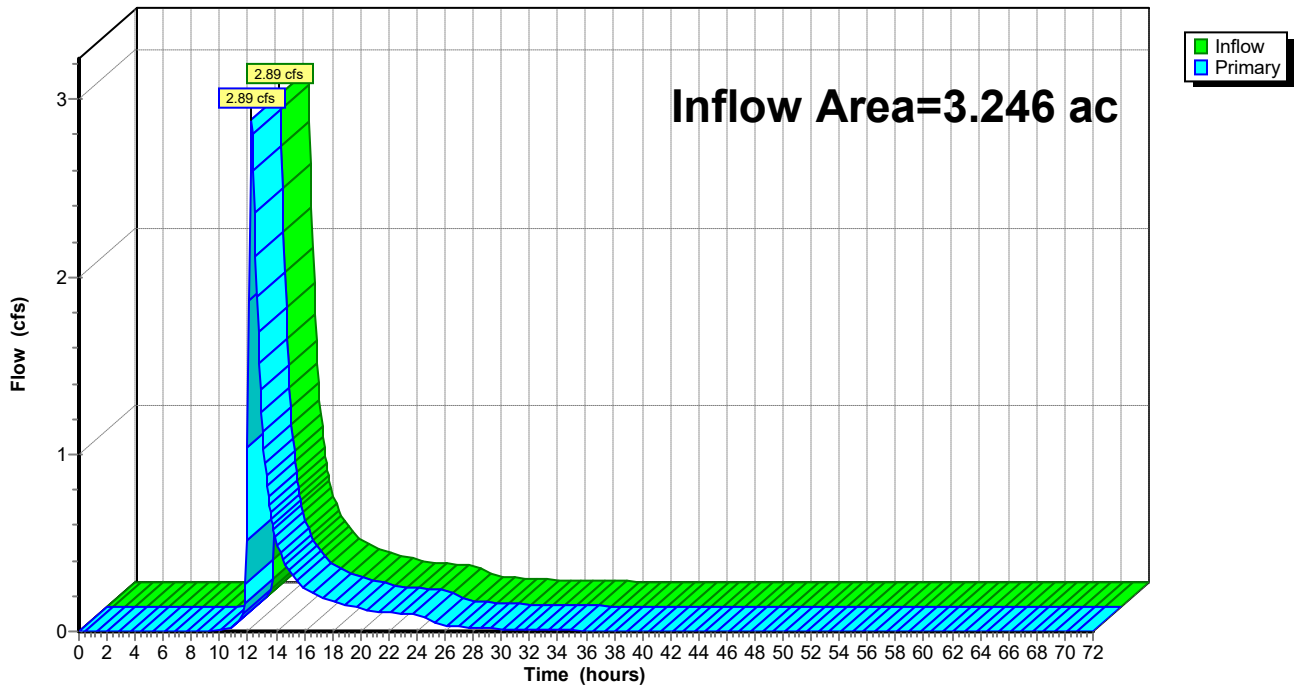
Summary for Link 44L: DP-38

Inflow Area = 3.246 ac, 0.00% Impervious, Inflow Depth = 1.55" for 10 Year event
Inflow = 2.89 cfs @ 12.27 hrs, Volume= 0.421 af
Primary = 2.89 cfs @ 12.27 hrs, Volume= 0.421 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 44L: DP-38

Hydrograph



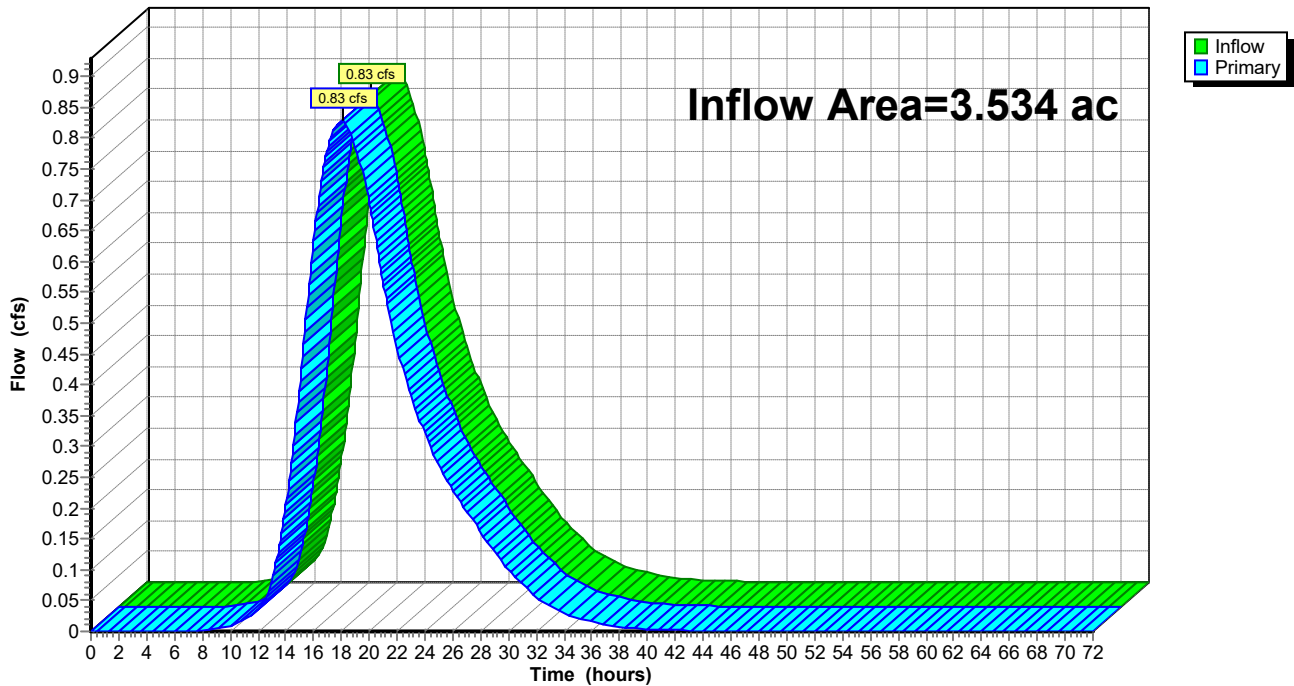
Summary for Link 45L: DP-39

Inflow Area = 3.534 ac, 0.00% Impervious, Inflow Depth = 2.12" for 10 Year event
Inflow = 0.83 cfs @ 18.14 hrs, Volume= 0.625 af
Primary = 0.83 cfs @ 18.14 hrs, Volume= 0.625 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 45L: DP-39

Hydrograph



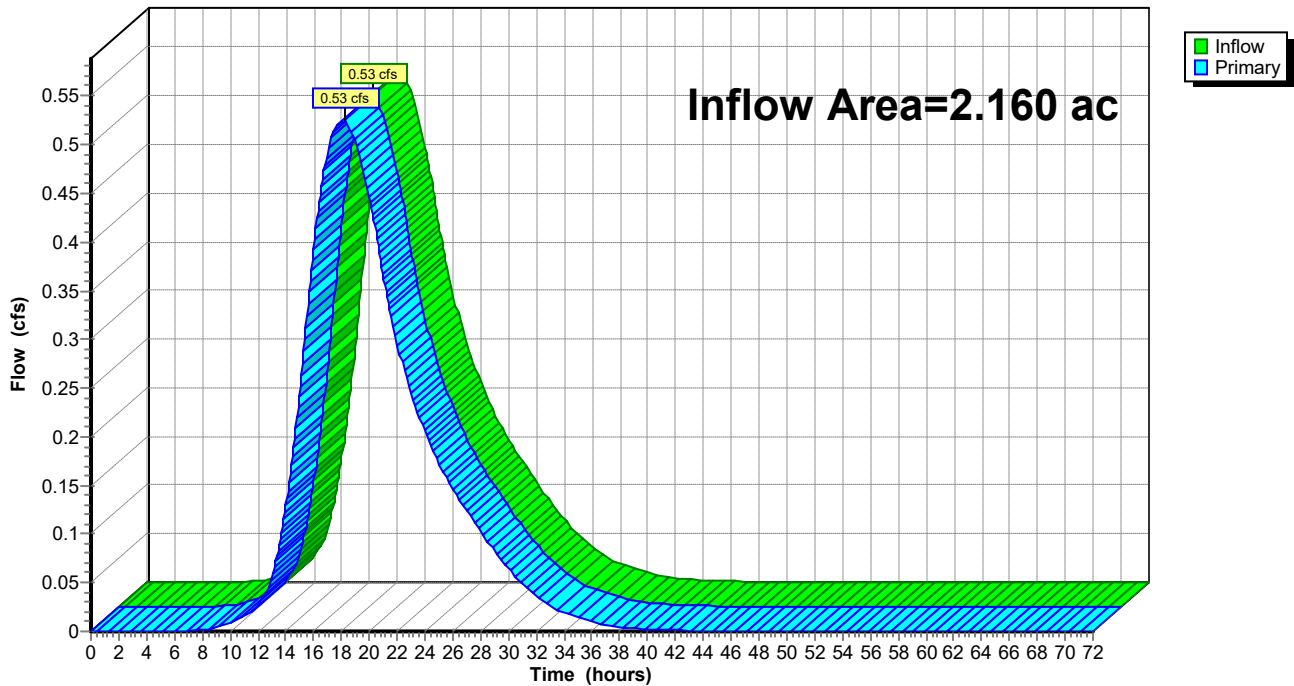
Summary for Link 46L: DP-40

Inflow Area = 2.160 ac, 0.00% Impervious, Inflow Depth = 2.22" for 10 Year event
Inflow = 0.53 cfs @ 18.26 hrs, Volume= 0.399 af
Primary = 0.53 cfs @ 18.26 hrs, Volume= 0.399 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 46L: DP-40

Hydrograph



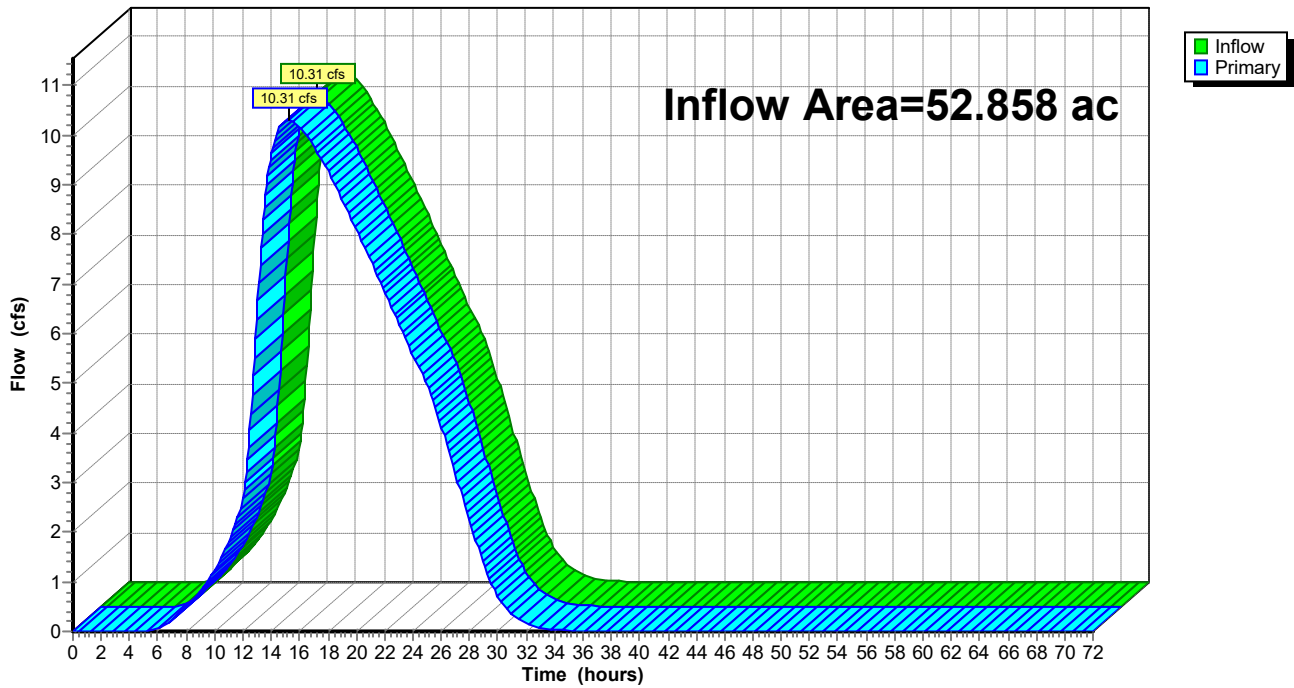
Summary for Link 47L: DP-41

Inflow Area = 52.858 ac, 0.00% Impervious, Inflow Depth = 2.31" for 10 Year event
Inflow = 10.31 cfs @ 15.20 hrs, Volume= 10.182 af
Primary = 10.31 cfs @ 15.20 hrs, Volume= 10.182 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 47L: DP-41

Hydrograph



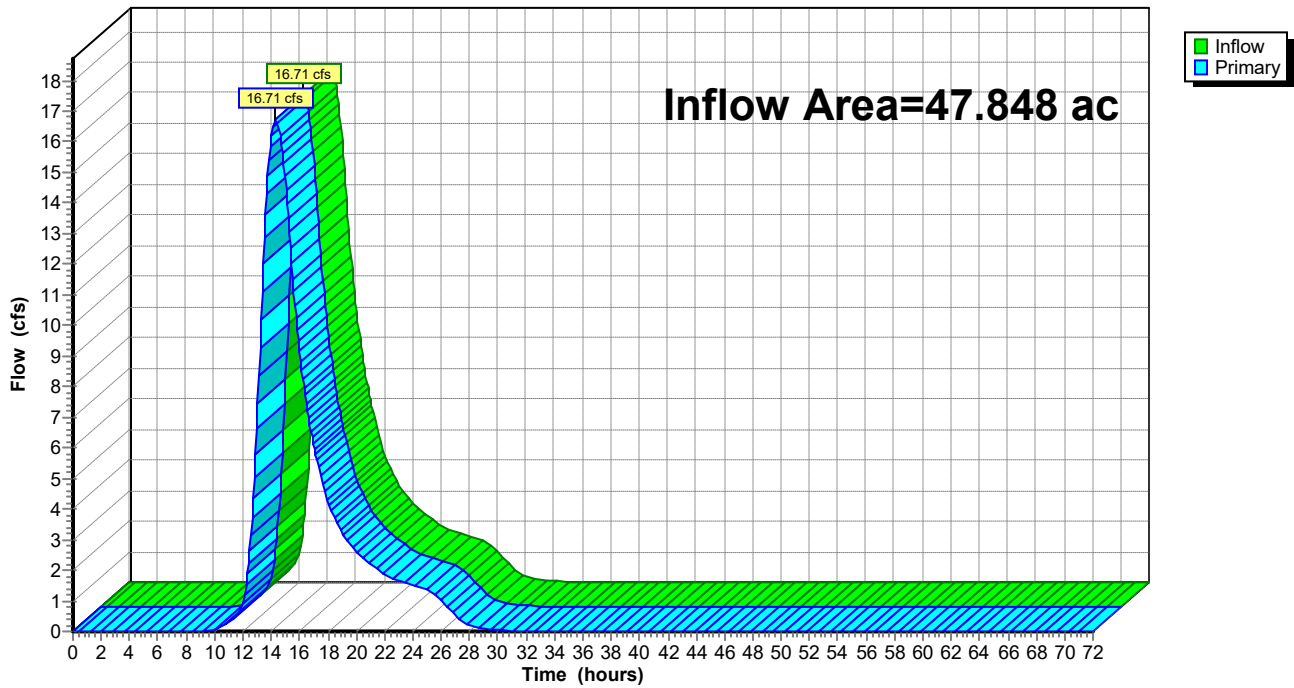
Summary for Link 48L: DP-42

Inflow Area = 47.848 ac, 0.00% Impervious, Inflow Depth = 1.55" for 10 Year event
Inflow = 16.71 cfs @ 14.32 hrs, Volume= 6.199 af
Primary = 16.71 cfs @ 14.32 hrs, Volume= 6.199 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 48L: DP-42

Hydrograph



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Time span=0.00-72.00 hrs, dt=0.08 hrs, 901 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: DA-49	Runoff Area=5.251 ac 0.00% Impervious Runoff Depth=2.52" Flow Length=1,007' Tc=35.2 min CN=77 Runoff=10.23 cfs 1.104 af
Subcatchment 2S: DA-48	Runoff Area=7.372 ac 0.00% Impervious Runoff Depth=2.79" Flow Length=991' Tc=58.2 min CN=80 Runoff=11.18 cfs 1.713 af
Subcatchment 3S: DA-50	Runoff Area=21.323 ac 0.00% Impervious Runoff Depth=2.27" Flow Length=2,117' Tc=52.9 min CN=74 Runoff=27.77 cfs 4.032 af
Subcatchment 4S: DA-46	Runoff Area=78.787 ac 0.00% Impervious Runoff Depth=2.97" Flow Length=2,635' Tc=73.8 min CN=82 Runoff=107.34 cfs 19.513 af
Subcatchment 5S: DA-47	Runoff Area=5.601 ac 0.00% Impervious Runoff Depth=3.16" Flow Length=669' Tc=54.8 min CN=84 Runoff=10.09 cfs 1.475 af
Subcatchment 6S: DA-45	Runoff Area=2.612 ac 0.00% Impervious Runoff Depth=2.88" Tc=54.5 min CN=81 Runoff=4.31 cfs 0.627 af
Subcatchment 7S: DA-43	Runoff Area=5.478 ac 0.00% Impervious Runoff Depth=2.44" Flow Length=703' Tc=56.1 min CN=76 Runoff=7.41 cfs 1.112 af
Subcatchment 8S: DA-44	Runoff Area=35.511 ac 0.00% Impervious Runoff Depth=3.07" Flow Length=2,451' Tc=127.6 min CN=83 Runoff=32.91 cfs 9.072 af
Subcatchment 9S: DA-51	Runoff Area=11.972 ac 0.00% Impervious Runoff Depth=3.07" Tc=72.0 min CN=83 Runoff=17.14 cfs 3.059 af
Subcatchment 10S: DA-52	Runoff Area=17.191 ac 0.00% Impervious Runoff Depth=3.26" Tc=85.0 min CN=85 Runoff=23.07 cfs 4.666 af
Subcatchment 11S: DA-33	Runoff Area=29.770 ac 0.00% Impervious Runoff Depth=3.07" Flow Length=2,805' Tc=344.6 min CN=83 Runoff=12.80 cfs 7.606 af
Subcatchment 12S: DA-34	Runoff Area=39.905 ac 0.00% Impervious Runoff Depth>2.47" Flow Length=2,300' Slope=0.0000 '/' Tc=2,213.2 min CN=79 Runoff=3.22 cfs 8.210 af
Subcatchment 13S: DA-3	Runoff Area=1.807 ac 0.00% Impervious Runoff Depth=2.44" Tc=37.8 min CN=76 Runoff=3.23 cfs 0.367 af
Subcatchment 14S: DA-1	Runoff Area=5.219 ac 0.00% Impervious Runoff Depth=1.50" Flow Length=468' Tc=27.7 min CN=64 Runoff=6.57 cfs 0.654 af
Subcatchment 15S: DA-5	Runoff Area=61.624 ac 0.00% Impervious Runoff Depth=2.35" Flow Length=2,903' Tc=150.6 min CN=75 Runoff=37.93 cfs 12.080 af
Subcatchment 16S: DA-7	Runoff Area=30.438 ac 0.00% Impervious Runoff Depth=3.26" Tc=143.5 min CN=85 Runoff=27.41 cfs 8.262 af

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Subcatchment 17S: DA-53	Runoff Area=32.347 ac 0.00% Impervious Runoff Depth=2.79" Tc=133.6 min CN=80 Runoff=26.19 cfs 7.517 af
Subcatchment 18S: DA-54	Runoff Area=2.872 ac 0.00% Impervious Runoff Depth=2.88" Tc=46.5 min CN=81 Runoff=5.30 cfs 0.689 af
Subcatchment 19S: DA-8	Runoff Area=4.025 ac 0.00% Impervious Runoff Depth=2.11" Flow Length=616' Tc=37.2 min CN=72 Runoff=6.20 cfs 0.706 af
Subcatchment 20S: DA-9	Runoff Area=12.359 ac 0.00% Impervious Runoff Depth=3.07" Flow Length=1,049' Tc=59.7 min CN=83 Runoff=20.32 cfs 3.157 af
Subcatchment 21S: DA-10	Runoff Area=2.629 ac 0.00% Impervious Runoff Depth=2.52" Tc=32.9 min CN=77 Runoff=5.35 cfs 0.553 af
Subcatchment 22S: DA-11	Runoff Area=2.766 ac 0.00% Impervious Runoff Depth=3.16" Tc=37.5 min CN=84 Runoff=6.51 cfs 0.728 af
Subcatchment 23S: DA-12	Runoff Area=31.832 ac 0.00% Impervious Runoff Depth=2.79" Tc=102.2 min CN=80 Runoff=31.73 cfs 7.397 af
Subcatchment 24S: DA-13	Runoff Area=12.785 ac 0.00% Impervious Runoff Depth=3.07" Tc=65.8 min CN=83 Runoff=19.57 cfs 3.266 af
Subcatchment 25S: DA-14	Runoff Area=47.394 ac 0.00% Impervious Runoff Depth=2.88" Flow Length=2,799' Tc=165.4 min CN=81 Runoff=33.76 cfs 11.373 af
Subcatchment 26S: DA-15	Runoff Area=9.159 ac 0.00% Impervious Runoff Depth=3.07" Flow Length=1,010' Tc=81.5 min CN=83 Runoff=11.96 cfs 2.340 af
Subcatchment 27S: DA-17	Runoff Area=2.980 ac 0.00% Impervious Runoff Depth=3.16" Tc=560.9 min CN=84 Runoff=0.90 cfs 0.785 af
Subcatchment 28S: DA-18	Runoff Area=19.855 ac 0.00% Impervious Runoff Depth=3.26" Flow Length=1,429' Tc=93.9 min CN=85 Runoff=24.72 cfs 5.390 af
Subcatchment 29S: DA-19	Runoff Area=5.282 ac 0.00% Impervious Runoff Depth=3.16" Tc=56.1 min CN=84 Runoff=9.37 cfs 1.391 af
Subcatchment 30S: DA-20	Runoff Area=38.236 ac 0.00% Impervious Runoff Depth=2.52" Tc=131.1 min CN=77 Runoff=28.21 cfs 8.039 af
Subcatchment 31S: DA-22	Runoff Area=17.209 ac 0.00% Impervious Runoff Depth=2.79" Tc=70.8 min CN=80 Runoff=22.65 cfs 3.999 af
Subcatchment 32S: DA-23	Runoff Area=7.493 ac 0.00% Impervious Runoff Depth=2.03" Flow Length=520' Tc=38.6 min CN=71 Runoff=10.72 cfs 1.265 af
Subcatchment 33S: DA-24	Runoff Area=13.493 ac 0.00% Impervious Runoff Depth=2.35" Flow Length=1,209' Tc=86.8 min CN=75 Runoff=12.66 cfs 2.645 af

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Subcatchment 34S: DA-25	Runoff Area=50.368 ac 0.00% Impervious Runoff Depth=2.79" Tc=67.4 min CN=80 Runoff=68.72 cfs 11.704 af
Subcatchment 35S: DA-26	Runoff Area=193.467 ac 0.00% Impervious Runoff Depth>2.86" Tc=1,355.2 min CN=81 Runoff=25.10 cfs 46.140 af
Subcatchment 36S: DA-27	Runoff Area=32.137 ac 0.00% Impervious Runoff Depth=2.97" Tc=587.6 min CN=82 Runoff=8.73 cfs 7.959 af
Subcatchment 37S: DA-28	Runoff Area=9.475 ac 0.00% Impervious Runoff Depth=2.88" Tc=36.0 min CN=81 Runoff=20.88 cfs 2.274 af
Subcatchment 38S: DA-29	Runoff Area=69.531 ac 0.00% Impervious Runoff Depth=2.52" Tc=76.2 min CN=77 Runoff=77.65 cfs 14.618 af
Subcatchment 39S: DA-30	Runoff Area=36.187 ac 0.00% Impervious Runoff Depth=3.16" Flow Length=2,420' Tc=77.5 min CN=84 Runoff=50.47 cfs 9.532 af
Subcatchment 40S: DA-31	Runoff Area=14.388 ac 0.00% Impervious Runoff Depth=2.61" Tc=25.7 min CN=78 Runoff=35.67 cfs 3.130 af
Subcatchment 41S: DA-32	Runoff Area=4.549 ac 0.00% Impervious Runoff Depth=2.88" Flow Length=100' Tc=155.5 min CN=81 Runoff=3.40 cfs 1.092 af
Subcatchment 42S: DA-35	Runoff Area=44.199 ac 0.00% Impervious Runoff Depth=2.35" Tc=241.8 min CN=75 Runoff=18.73 cfs 8.664 af
Subcatchment 43S: DA-42	Runoff Area=47.848 ac 0.00% Impervious Runoff Depth=3.26" Tc=183.8 min CN=85 Runoff=35.46 cfs 12.988 af
Subcatchment 44S: DA-37	Runoff Area=14.519 ac 0.00% Impervious Runoff Depth=3.36" Flow Length=2,143' Tc=166.2 min CN=86 Runoff=12.00 cfs 4.059 af
Subcatchment 45S: DA-41	Runoff Area=52.858 ac 0.00% Impervious Runoff Depth=4.19" Tc=107.9 min CN=94 Runoff=73.89 cfs 18.455 af
Subcatchment 46S: DA-40	Runoff Area=2.160 ac 0.00% Impervious Runoff Depth=4.08" Flow Length=441' Slope=0.0000 '/' Tc=470.7 min CN=93 Runoff=0.96 cfs 0.734 af
Subcatchment 47S: DA-39	Runoff Area=3.534 ac 0.00% Impervious Runoff Depth=3.97" Tc=467.1 min CN=92 Runoff=1.54 cfs 1.170 af
Subcatchment 48S: DA-38	Runoff Area=3.246 ac 0.00% Impervious Runoff Depth=3.26" Tc=14.6 min CN=85 Runoff=13.38 cfs 0.881 af
Pond 1P: P-30	Peak Elev=294.42' Storage=4.528 af Inflow=50.47 cfs 9.532 af Outflow=12.79 cfs 9.501 af
Pond 2P: P-37	Peak Elev=292.07' Storage=1.109 af Inflow=12.00 cfs 4.059 af Outflow=7.90 cfs 4.057 af

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Pond 3P: P-38	Peak Elev=293.51' Storage=0.266 af Inflow=13.38 cfs 0.881 af Outflow=6.18 cfs 0.881 af
Pond 4P: P-41	Peak Elev=295.35' Storage=9.778 af Inflow=73.89 cfs 18.455 af Outflow=14.27 cfs 18.455 af
Link 1L: DP-49	Inflow=10.23 cfs 1.104 af Primary=10.23 cfs 1.104 af
Link 2L: DP-48	Inflow=11.18 cfs 1.713 af Primary=11.18 cfs 1.713 af
Link 3L: DP-50	Inflow=27.77 cfs 4.032 af Primary=27.77 cfs 4.032 af
Link 4L: DP-46	Inflow=107.34 cfs 19.513 af Primary=107.34 cfs 19.513 af
Link 5L: DP-47	Inflow=10.09 cfs 1.475 af Primary=10.09 cfs 1.475 af
Link 6L: DP-45	Inflow=4.31 cfs 0.627 af Primary=4.31 cfs 0.627 af
Link 7L: DP-43	Inflow=7.41 cfs 1.112 af Primary=7.41 cfs 1.112 af
Link 8L: DP-44	Inflow=32.91 cfs 9.072 af Primary=32.91 cfs 9.072 af
Link 9L: DP-51	Inflow=17.14 cfs 3.059 af Primary=17.14 cfs 3.059 af
Link 10L: DP-52	Inflow=23.07 cfs 4.666 af Primary=23.07 cfs 4.666 af
Link 11L: DP-34	Inflow=3.22 cfs 8.210 af Primary=3.22 cfs 8.210 af
Link 12L: DP-3	Inflow=3.23 cfs 0.367 af Primary=3.23 cfs 0.367 af
Link 13L: DP-1	Inflow=6.57 cfs 0.654 af Primary=6.57 cfs 0.654 af
Link 14L: DP-5	Inflow=37.93 cfs 12.080 af Primary=37.93 cfs 12.080 af
Link 15L: DP-7	Inflow=27.41 cfs 8.262 af Primary=27.41 cfs 8.262 af

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Link 16L: DP-53	Inflow=26.19 cfs 7.517 af Primary=26.19 cfs 7.517 af
Link 17L: DP-54	Inflow=5.30 cfs 0.689 af Primary=5.30 cfs 0.689 af
Link 18L: DP-8	Primary=0.00 cfs 0.000 af
Link 19L: DP-9	Inflow=20.32 cfs 3.157 af Primary=20.32 cfs 3.157 af
Link 20L: DP-10	Inflow=5.35 cfs 0.553 af Primary=5.35 cfs 0.553 af
Link 21L: DP-11	Inflow=6.51 cfs 0.728 af Primary=6.51 cfs 0.728 af
Link 22L: DP-13	Inflow=19.57 cfs 3.266 af Primary=19.57 cfs 3.266 af
Link 23L: DP-12	Inflow=31.73 cfs 7.397 af Primary=31.73 cfs 7.397 af
Link 24L: DP-14	Inflow=33.76 cfs 11.373 af Primary=33.76 cfs 11.373 af
Link 25L: DP-15	Inflow=11.96 cfs 2.340 af Primary=11.96 cfs 2.340 af
Link 26L: DP-17	Inflow=0.90 cfs 0.785 af Primary=0.90 cfs 0.785 af
Link 27L: DP-18	Inflow=24.72 cfs 5.390 af Primary=24.72 cfs 5.390 af
Link 28L: DP-19	Inflow=9.37 cfs 1.391 af Primary=9.37 cfs 1.391 af
Link 29L: DP-20	Inflow=28.21 cfs 8.039 af Primary=28.21 cfs 8.039 af
Link 30L: DP-22	Inflow=22.65 cfs 3.999 af Primary=22.65 cfs 3.999 af
Link 31L: DP-23	Inflow=10.72 cfs 1.265 af Primary=10.72 cfs 1.265 af
Link 32L: DP-24	Inflow=12.66 cfs 2.645 af Primary=12.66 cfs 2.645 af

Somerset_Proposed_Rev7

Prepared by Tetra Tech

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Type II 24-hr 100 Year Rainfall=4.88"

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Link 33L: DP-25	Inflow=68.72 cfs 11.704 af Primary=68.72 cfs 11.704 af
Link 34L: DP-33	Inflow=12.80 cfs 7.606 af Primary=12.80 cfs 7.606 af
Link 35L: DP-26	Inflow=25.10 cfs 46.140 af Primary=25.10 cfs 46.140 af
Link 36L: DP-27	Inflow=8.73 cfs 7.959 af Primary=8.73 cfs 7.959 af
Link 37L: DP-28	Inflow=20.88 cfs 2.274 af Primary=20.88 cfs 2.274 af
Link 38L: DP-29	Inflow=77.65 cfs 14.618 af Primary=77.65 cfs 14.618 af
Link 39L: DP-30	Inflow=12.79 cfs 9.501 af Primary=12.79 cfs 9.501 af
Link 40L: DP-31	Inflow=35.67 cfs 3.130 af Primary=35.67 cfs 3.130 af
Link 41L: DP-32	Inflow=3.40 cfs 1.092 af Primary=3.40 cfs 1.092 af
Link 42L: DP-35	Inflow=18.73 cfs 8.664 af Primary=18.73 cfs 8.664 af
Link 43L: DP-37	Inflow=7.90 cfs 4.057 af Primary=7.90 cfs 4.057 af
Link 44L: DP-38	Inflow=6.18 cfs 0.881 af Primary=6.18 cfs 0.881 af
Link 45L: DP-39	Inflow=1.54 cfs 1.170 af Primary=1.54 cfs 1.170 af
Link 46L: DP-40	Inflow=0.96 cfs 0.734 af Primary=0.96 cfs 0.734 af
Link 47L: DP-41	Inflow=14.27 cfs 18.455 af Primary=14.27 cfs 18.455 af
Link 48L: DP-42	Inflow=35.46 cfs 12.988 af Primary=35.46 cfs 12.988 af

Total Runoff Area = 1,201.044 ac Runoff Volume = 288.192 af Average Runoff Depth = 2.88"
100.00% Pervious = 1,201.044 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 1S: DA-49

Runoff = 10.23 cfs @ 12.32 hrs, Volume= 1.104 af, Depth= 2.52"
 Routed to Link 1L : DP-49

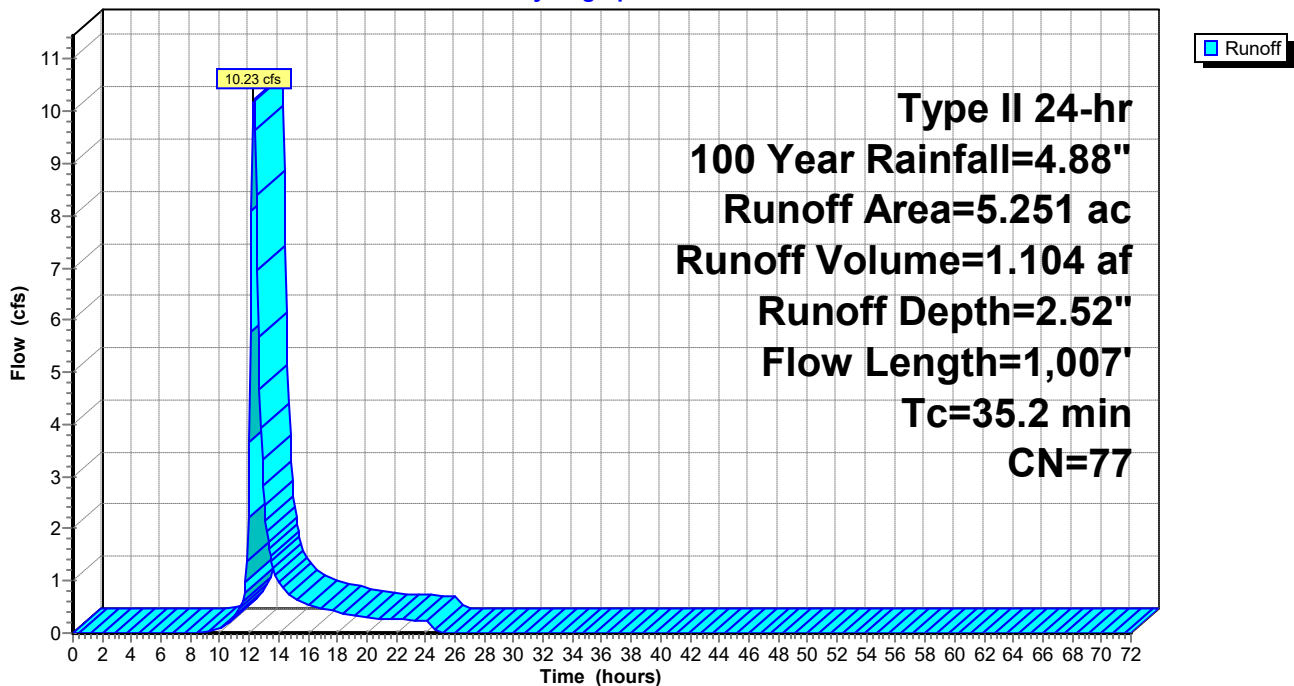
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 5.251	77	
5.251		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.9	100	0.0292	0.07		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
12.3	907	0.0309	1.23		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
35.2	1,007	Total			

Subcatchment 1S: DA-49

Hydrograph



Summary for Subcatchment 2S: DA-48

Runoff = 11.18 cfs @ 12.60 hrs, Volume= 1.713 af, Depth= 2.79"
 Routed to Link 2L : DP-48

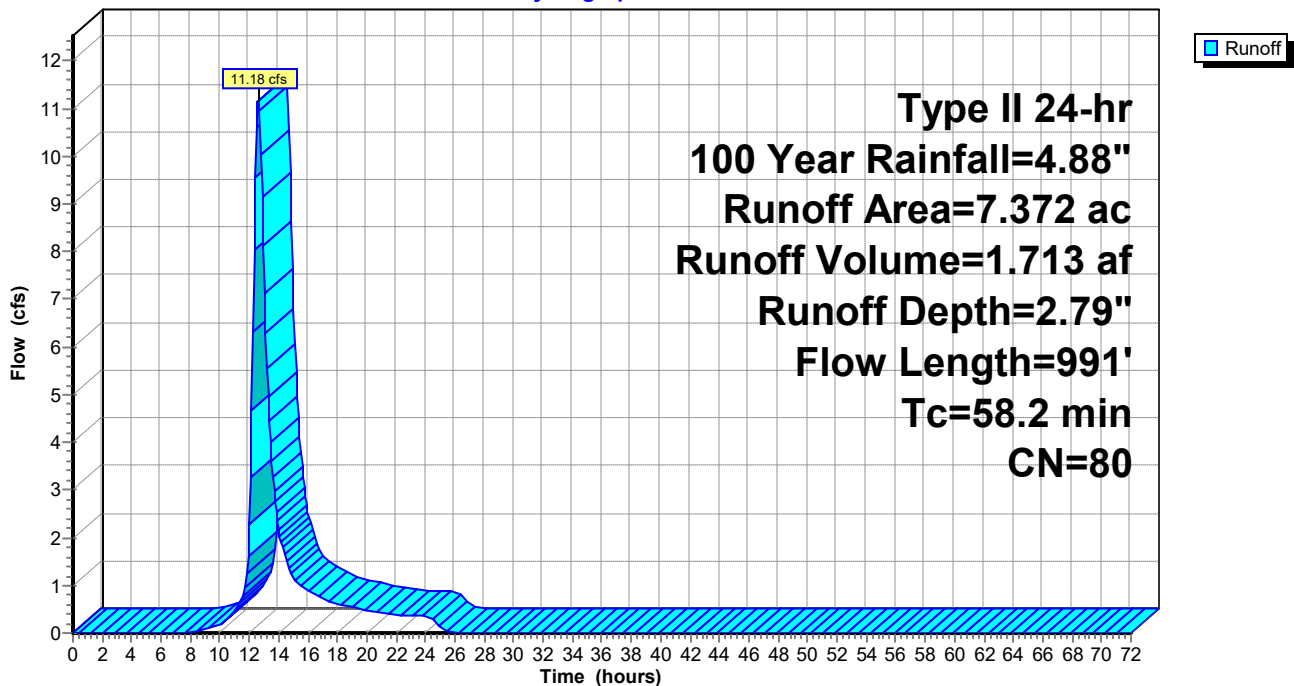
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 7.372	80	
7.372		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
44.5	100	0.0056	0.04		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
13.7	891	0.0241	1.09		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
58.2	991	Total			

Subcatchment 2S: DA-48

Hydrograph



Summary for Subcatchment 3S: DA-50

Runoff = 27.77 cfs @ 12.55 hrs, Volume= 4.032 af, Depth= 2.27"
 Routed to Link 3L : DP-50

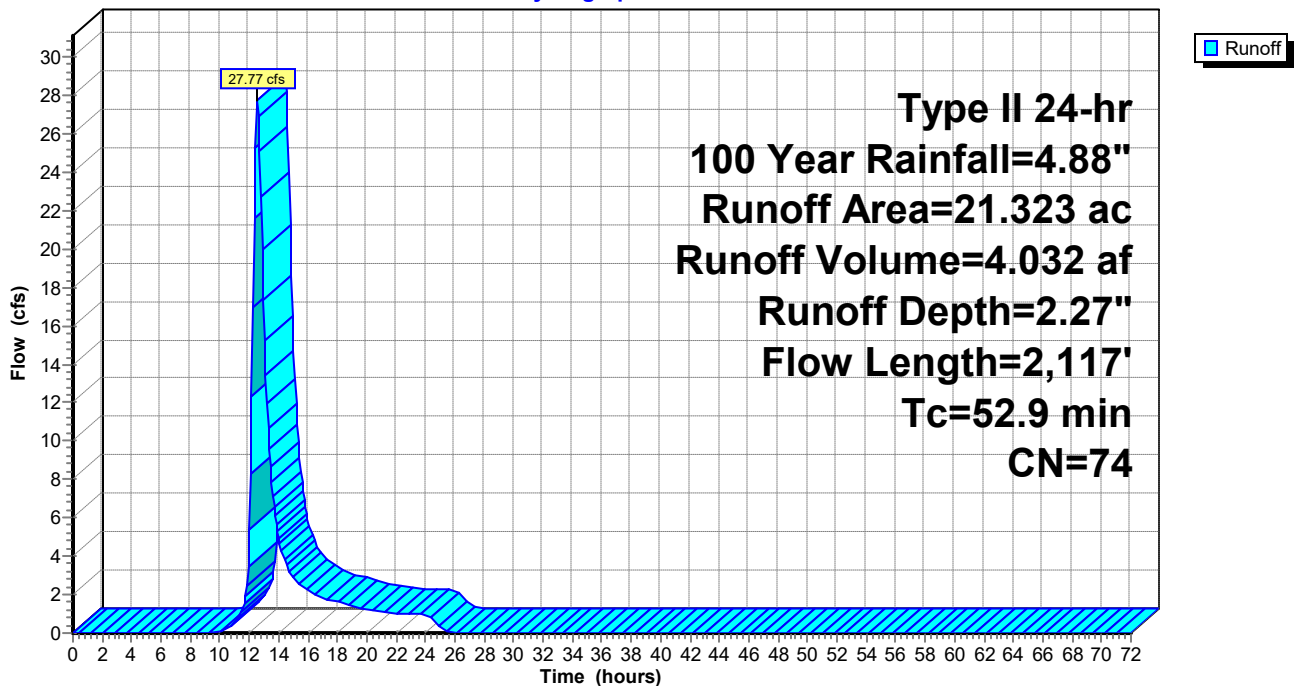
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 21.323	74	
21.323		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.3	100	0.0280	0.07		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
29.6	2,017	0.0263	1.13		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
52.9	2,117	Total			

Subcatchment 3S: DA-50

Hydrograph



Summary for Subcatchment 4S: DA-46

Runoff = 107.34 cfs @ 12.80 hrs, Volume= 19.513 af, Depth= 2.97"
 Routed to Link 4L : DP-46

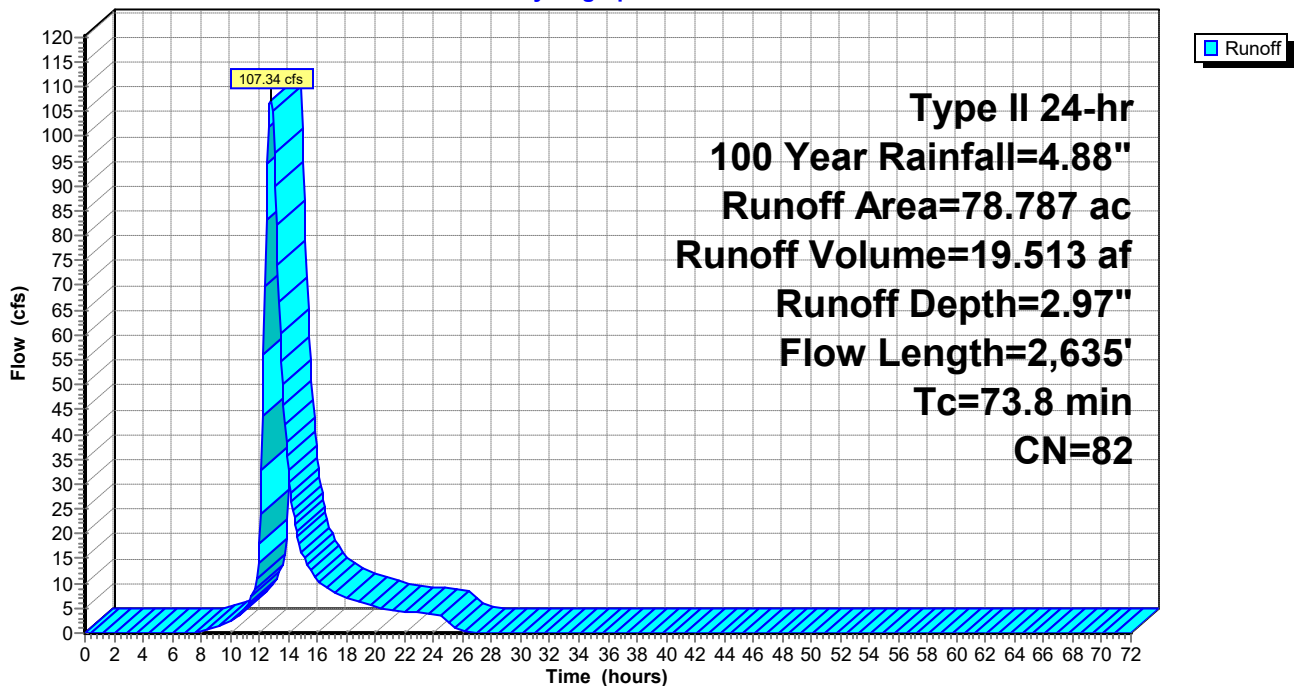
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 78.787	82	
78.787		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.2	100	0.0125	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
41.6	2,535	0.0210	1.02		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
73.8	2,635	Total			

Subcatchment 4S: DA-46

Hydrograph



Summary for Subcatchment 5S: DA-47

Runoff = 10.09 cfs @ 12.55 hrs, Volume= 1.475 af, Depth= 3.16"
 Routed to Link 5L : DP-47

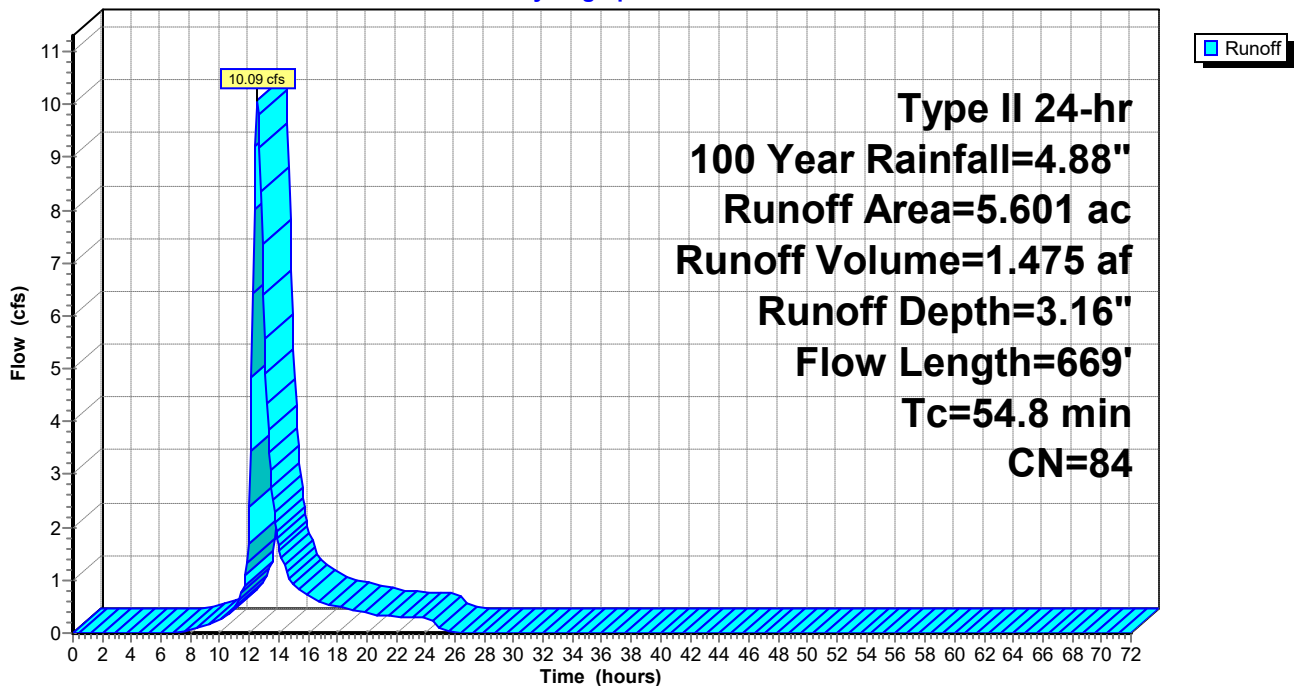
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 5.601	84	
5.601		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
36.4	100	0.0092	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
18.4	569	0.0054	0.52		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
54.8	669	Total			

Subcatchment 5S: DA-47

Hydrograph



Summary for Subcatchment 6S: DA-45

Runoff = 4.31 cfs @ 12.55 hrs, Volume= 0.627 af, Depth= 2.88"
 Routed to Link 6L : DP-45

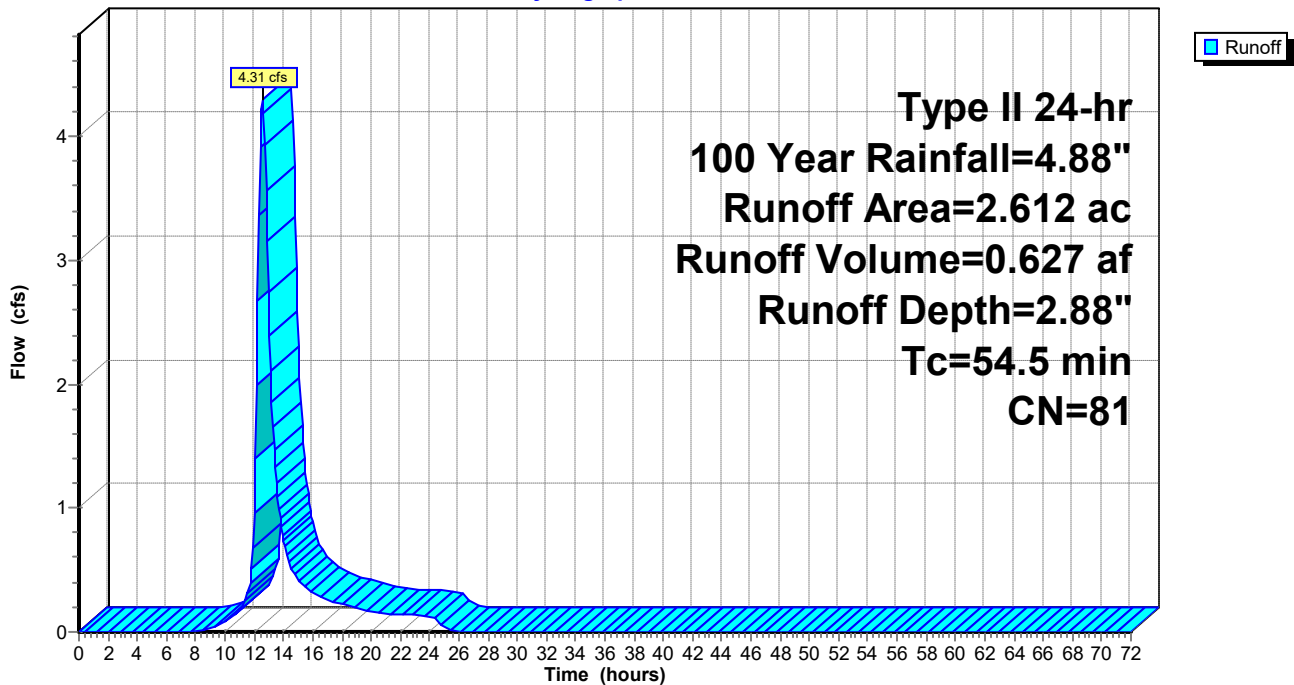
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 2.612	81	
2.612		100.00% Pervious Area

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

Subcatchment 6S: DA-45

Hydrograph



Summary for Subcatchment 7S: DA-43

Runoff = 7.41 cfs @ 12.58 hrs, Volume= 1.112 af, Depth= 2.44"
 Routed to Link 7L : DP-43

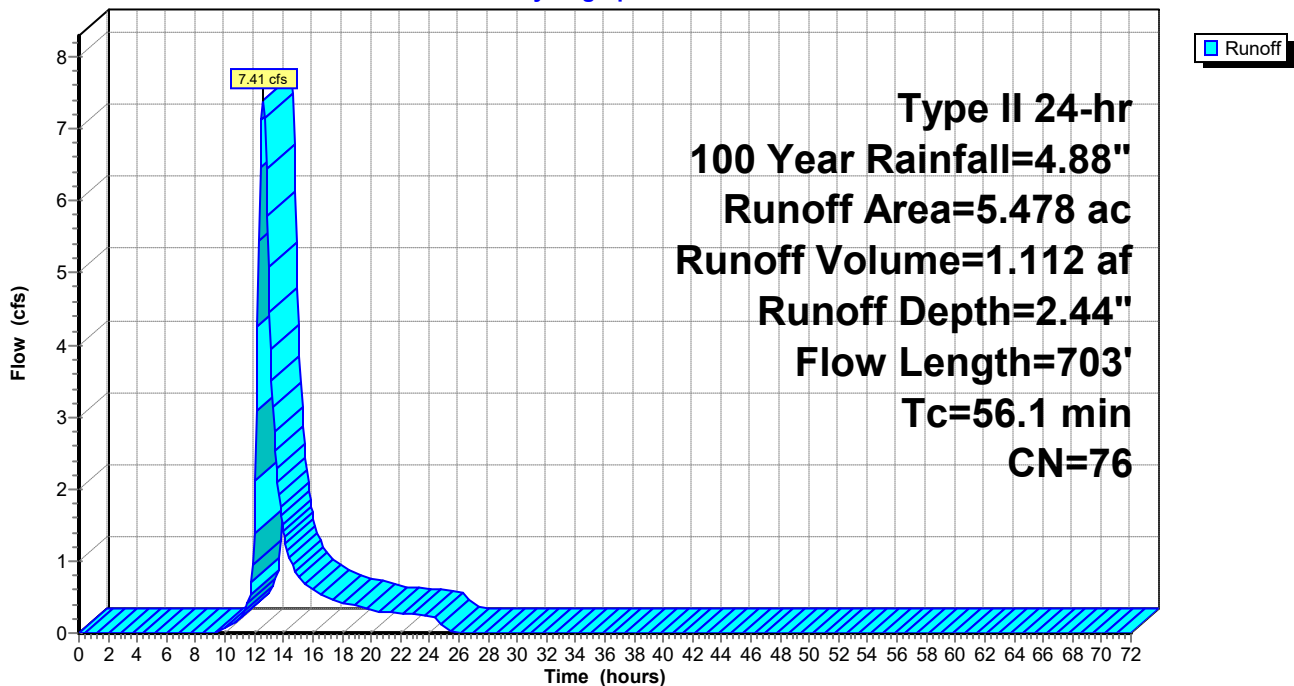
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 5.478	76	
5.478		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.8	100	0.0069	0.04		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
15.3	603	0.0088	0.66		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
56.1	703	Total			

Subcatchment 7S: DA-43

Hydrograph



Summary for Subcatchment 8S: DA-44

Runoff = 32.91 cfs @ 13.48 hrs, Volume= 9.072 af, Depth= 3.07"
 Routed to Link 8L : DP-44

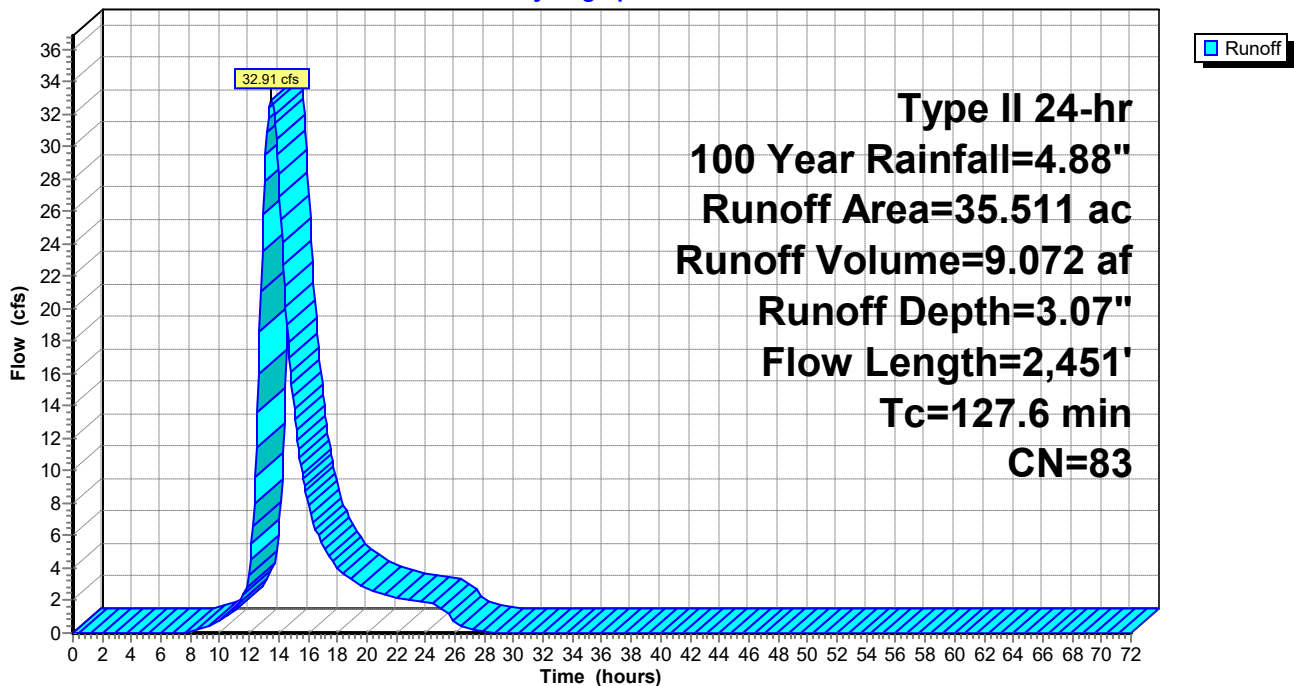
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 35.511	83	
35.511		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
34.8	100	0.0103	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
92.8	2,351	0.0036	0.42		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
127.6	2,451	Total			

Subcatchment 8S: DA-44

Hydrograph



Summary for Subcatchment 9S: DA-51

Runoff = 17.14 cfs @ 12.77 hrs, Volume= 3.059 af, Depth= 3.07"
 Routed to Link 9L : DP-51

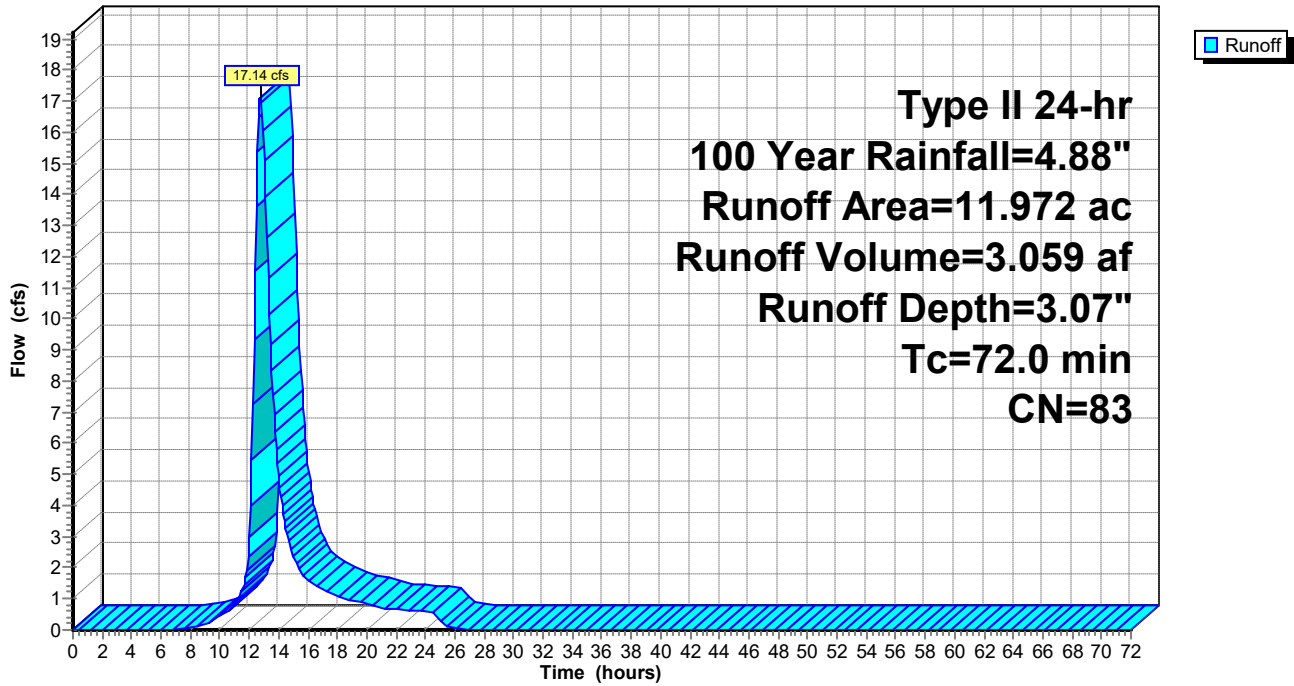
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 11.972	83	
11.972		100.00% Pervious Area

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

Subcatchment 9S: DA-51

Hydrograph



Summary for Subcatchment 10S: DA-52

Runoff = 23.07 cfs @ 12.94 hrs, Volume= 4.666 af, Depth= 3.26"
 Routed to Link 10L : DP-52

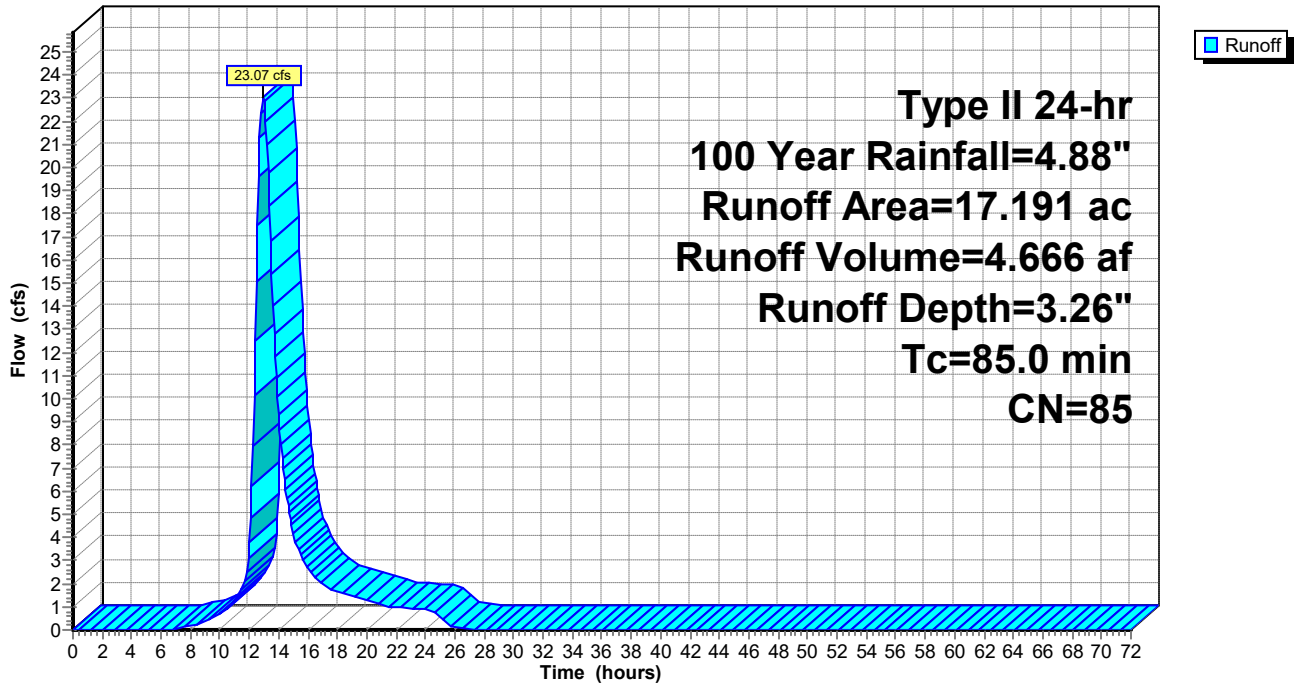
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 17.191	85	
17.191		100.00% Pervious Area

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

Subcatchment 10S: DA-52

Hydrograph



Summary for Subcatchment 11S: DA-33

Runoff = 12.80 cfs @ 16.46 hrs, Volume= 7.606 af, Depth= 3.07"
 Routed to Link 34L : DP-33

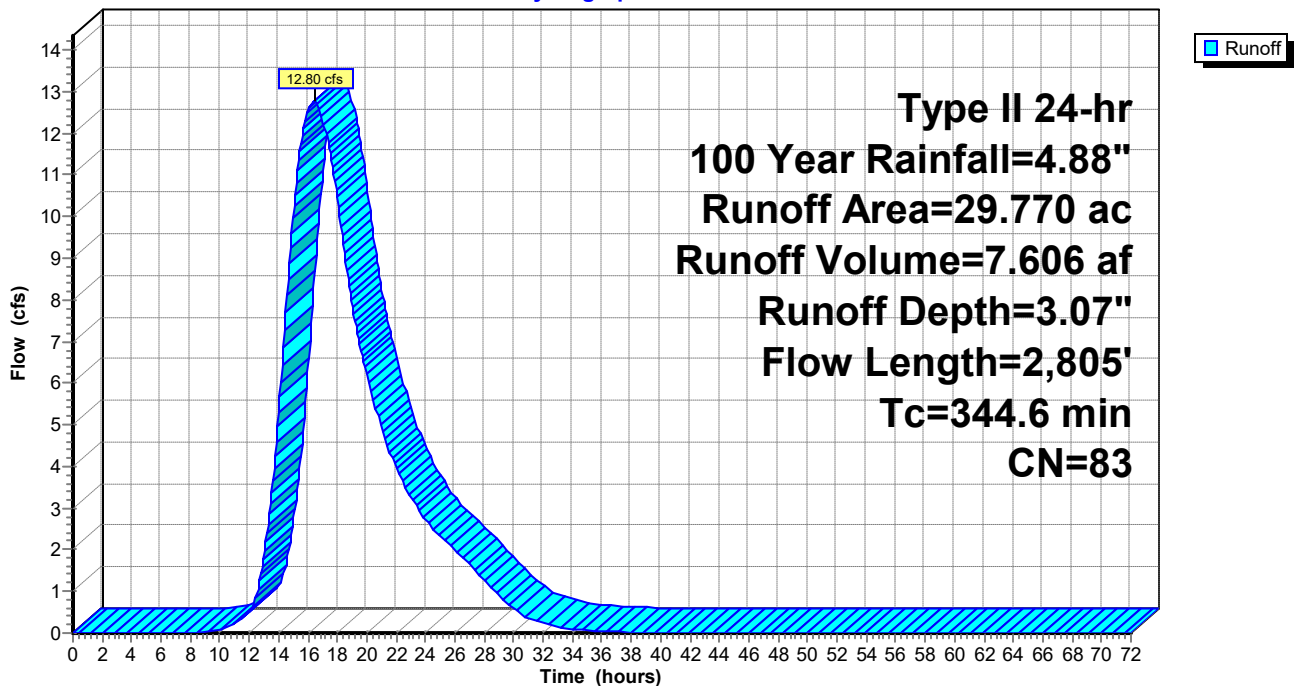
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 29.770	83	
29.770		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
278.9	100	0.0001	0.01		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
65.7	2,705	0.0096	0.69		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
344.6	2,805	Total			

Subcatchment 11S: DA-33

Hydrograph



Summary for Subcatchment 12S: DA-34

Runoff = 3.22 cfs @ 41.77 hrs, Volume= 8.210 af, Depth> 2.47"
 Routed to Link 11L : DP-34

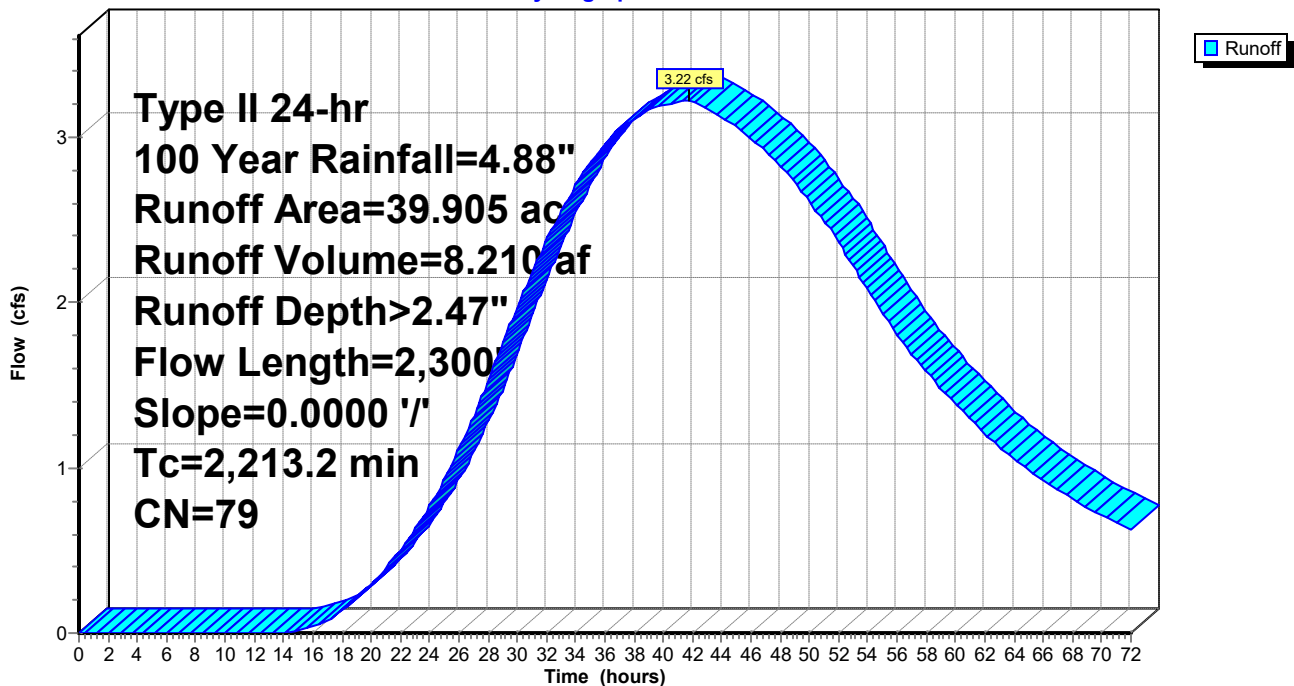
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 39.905	79	
39.905		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
557.0	100	0.0000	0.00		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
1,656.2	2,200	0.0000	0.02		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
2,213.2	2,300	Total			

Subcatchment 12S: DA-34

Hydrograph



Summary for Subcatchment 13S: DA-3

Runoff = 3.23 cfs @ 12.35 hrs, Volume= 0.367 af, Depth= 2.44"
 Routed to Link 12L : DP-3

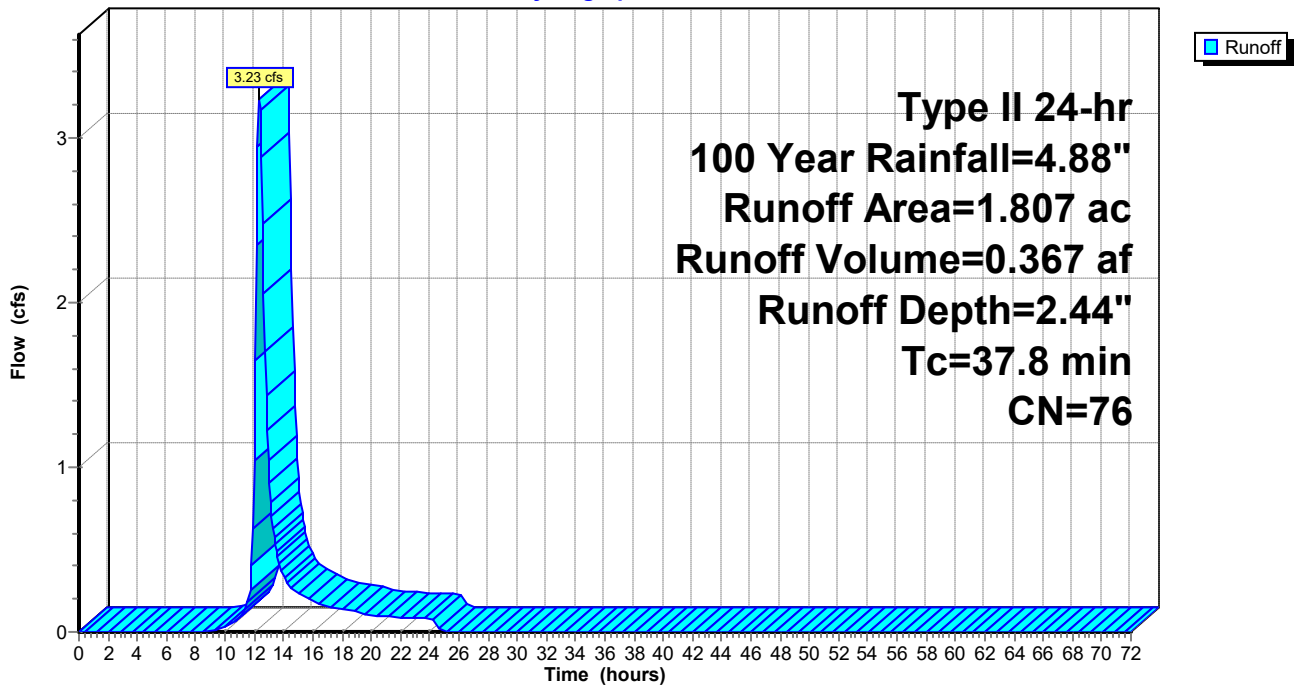
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 1.807	76	
1.807		100.00% Pervious Area

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

Subcatchment 13S: DA-3

Hydrograph



Summary for Subcatchment 14S: DA-1

Runoff = 6.57 cfs @ 12.24 hrs, Volume= 0.654 af, Depth= 1.50"
 Routed to Link 13L : DP-1

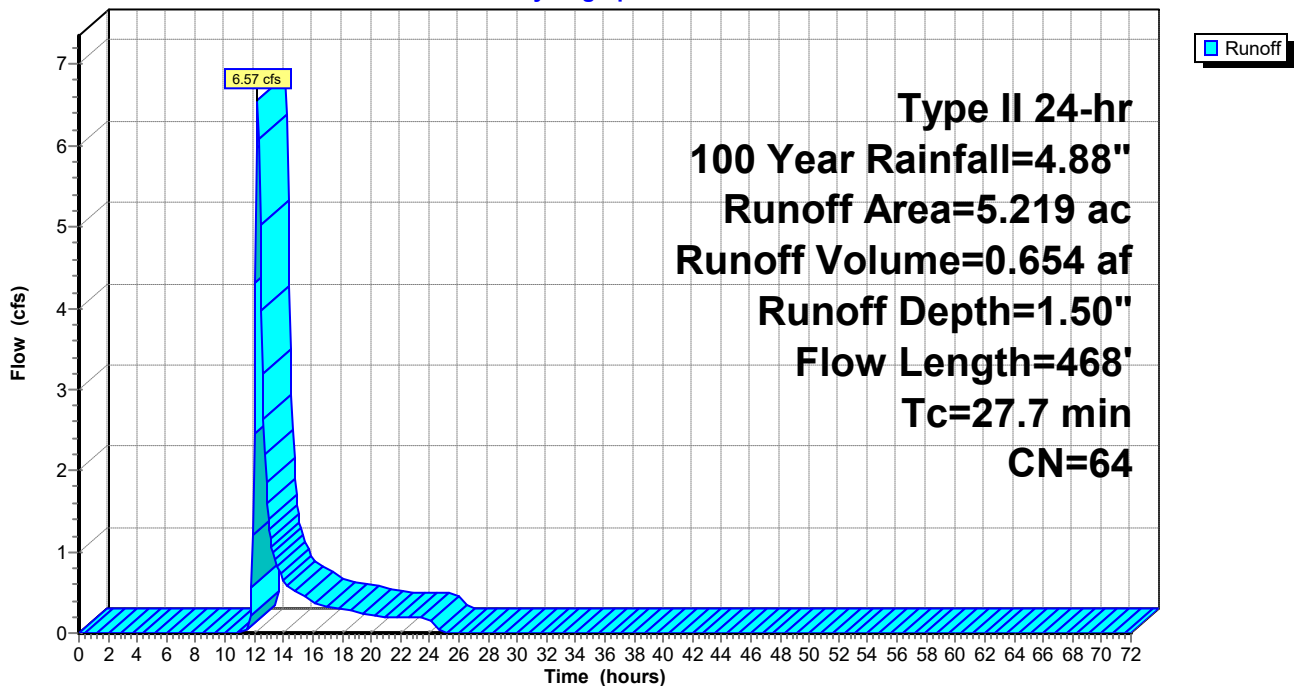
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 5.219	64	
5.219		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.7	100	0.0424	0.08		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
8.0	368	0.0121	0.77		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
27.7	468	Total			

Subcatchment 14S: DA-1

Hydrograph



Summary for Subcatchment 15S: DA-5

Runoff = 37.93 cfs @ 13.87 hrs, Volume= 12.080 af, Depth= 2.35"
 Routed to Link 14L : DP-5

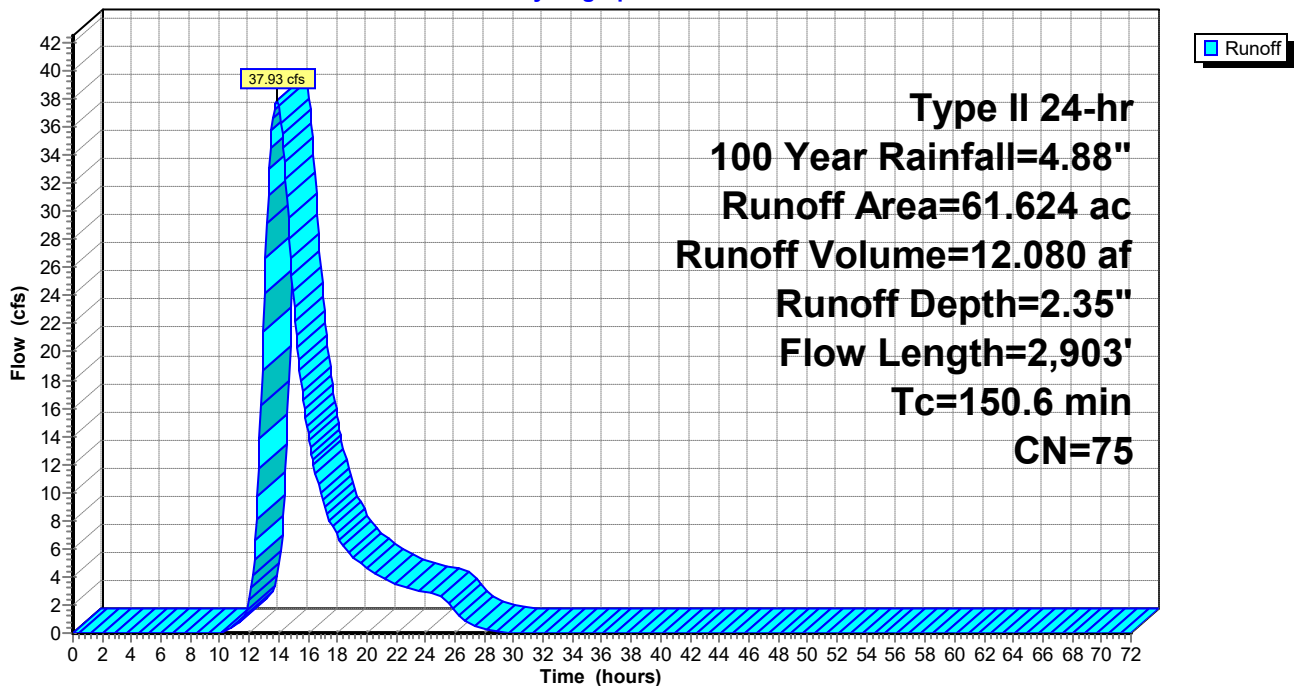
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 61.624	75	
61.624		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
55.1	100	0.0033	0.03		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
95.5	2,803	0.0049	0.49		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
150.6	2,903	Total			

Subcatchment 15S: DA-5

Hydrograph



Summary for Subcatchment 16S: DA-7

Runoff = 27.41 cfs @ 13.71 hrs, Volume= 8.262 af, Depth= 3.26"
 Routed to Link 15L : DP-7

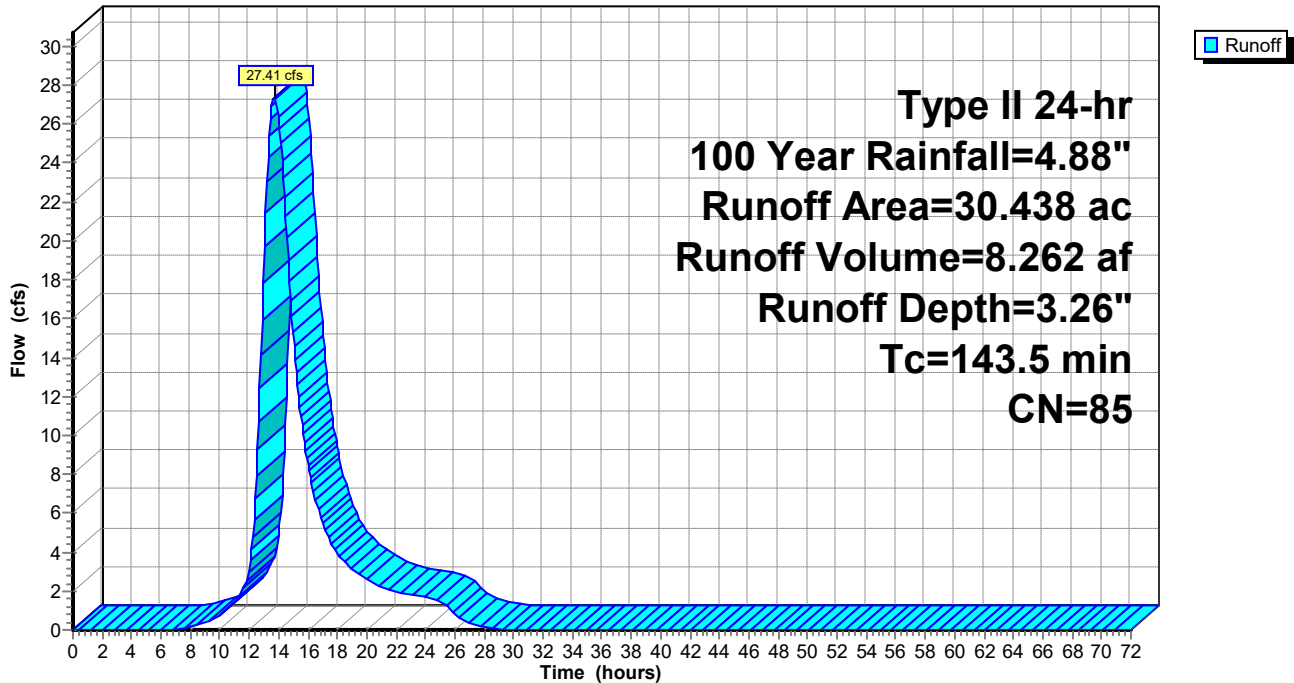
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 30.438	85	
30.438		100.00% Pervious Area

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

Subcatchment 16S: DA-7

Hydrograph



Summary for Subcatchment 17S: DA-53

Runoff = 26.19 cfs @ 13.56 hrs, Volume= 7.517 af, Depth= 2.79"
 Routed to Link 16L : DP-53

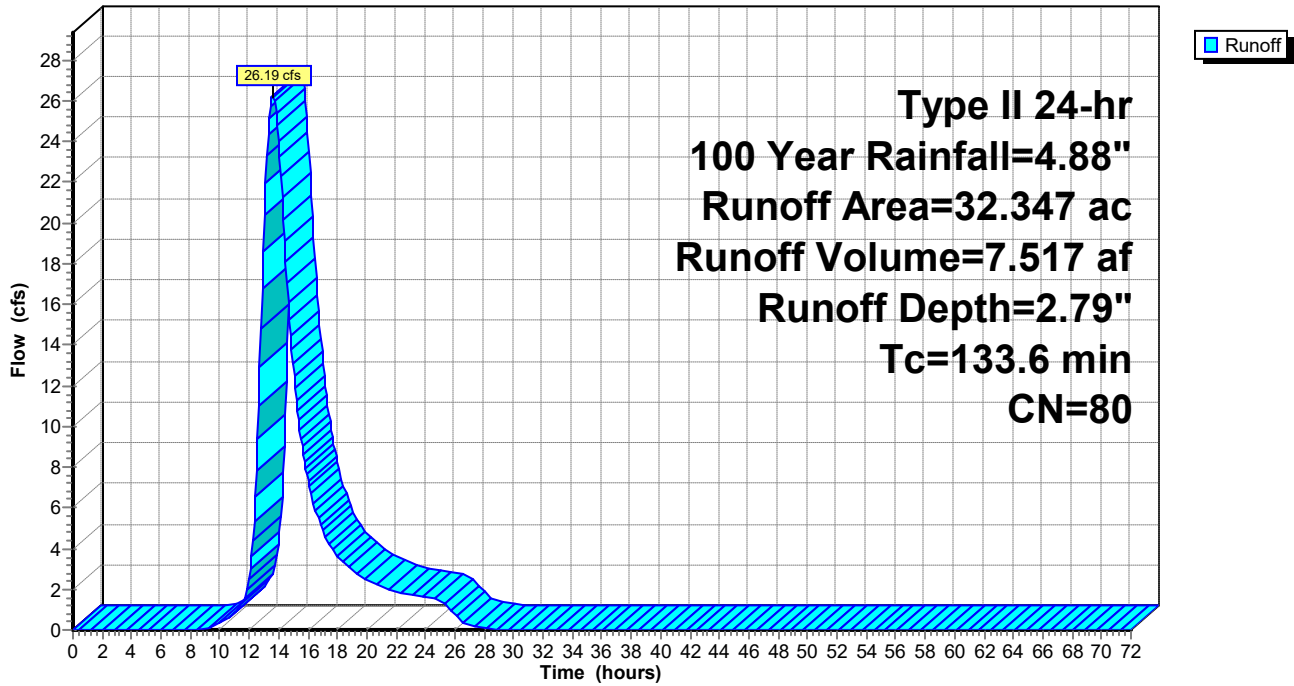
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 32.347	80	
32.347		100.00% Pervious Area

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

Subcatchment 17S: DA-53

Hydrograph



Summary for Subcatchment 18S: DA-54

Runoff = 5.30 cfs @ 12.45 hrs, Volume= 0.689 af, Depth= 2.88"
 Routed to Link 17L : DP-54

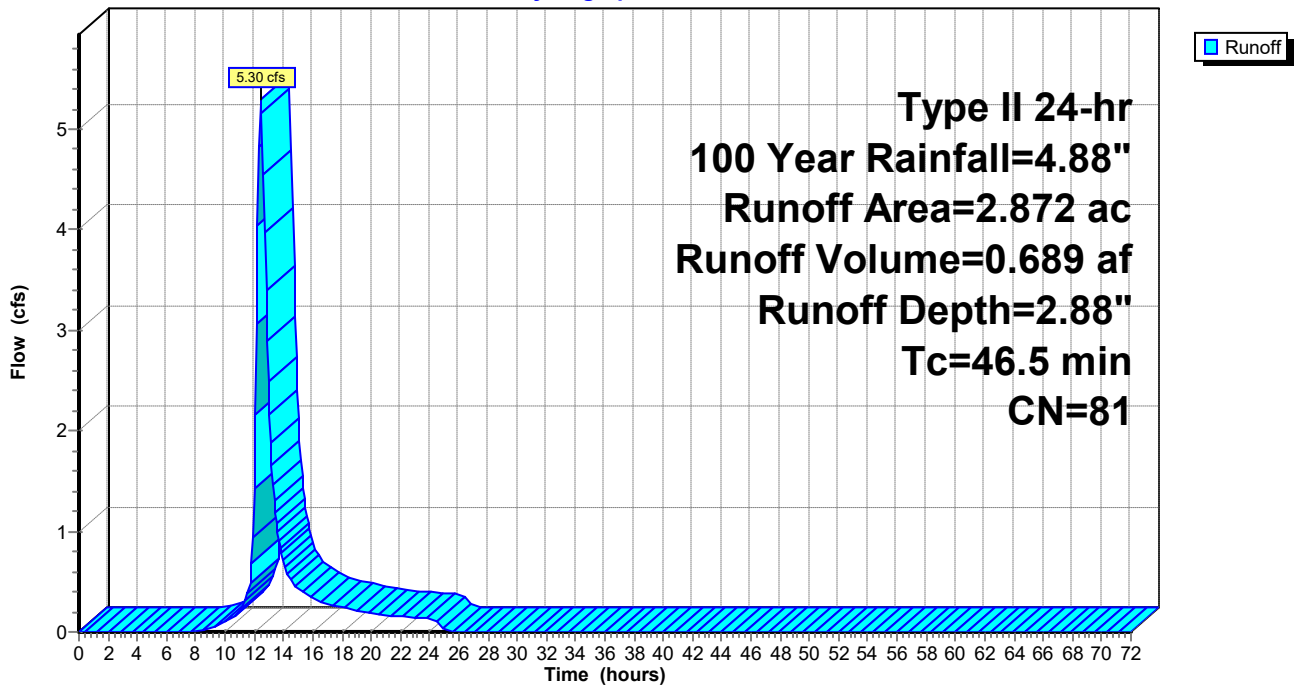
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 2.872	81	
2.872		100.00% Pervious Area

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

Subcatchment 18S: DA-54

Hydrograph



Summary for Subcatchment 19S: DA-8

Runoff = 6.20 cfs @ 12.35 hrs, Volume= 0.706 af, Depth= 2.11"

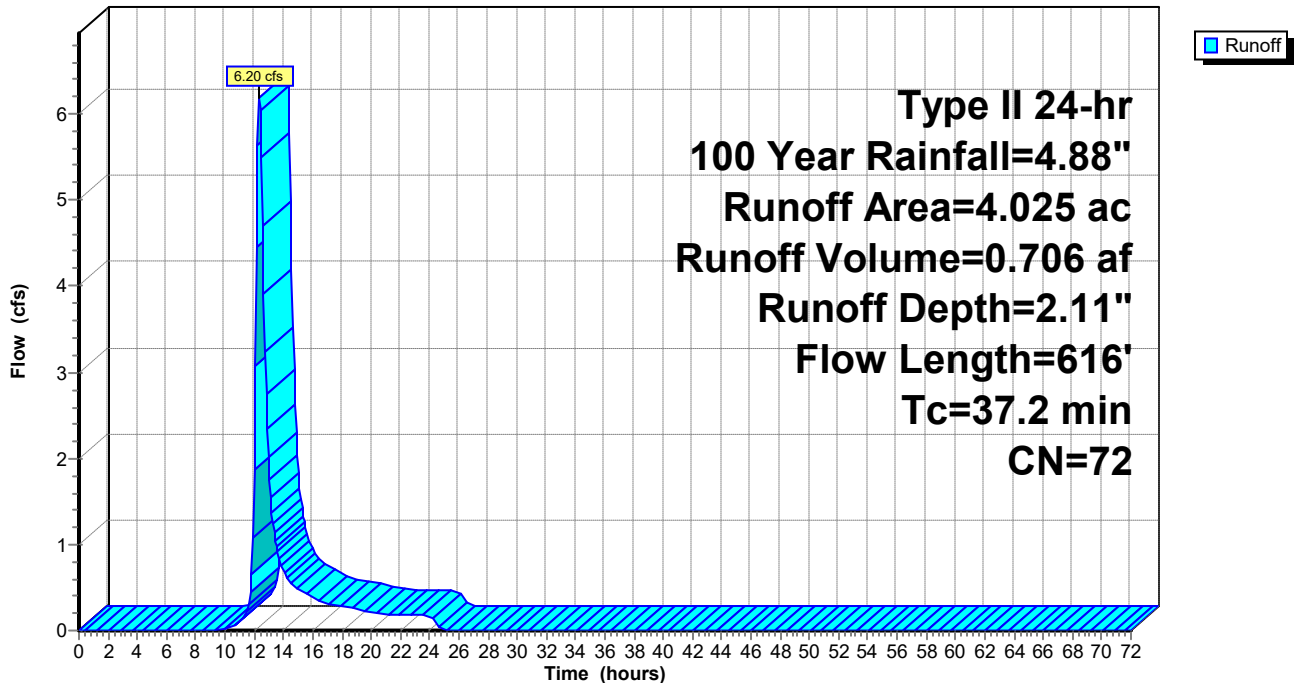
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 4.025	72	
4.025		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.7	100	0.0241	0.07		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
12.5	516	0.0097	0.69		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
37.2	616	Total			

Subcatchment 19S: DA-8

Hydrograph



Summary for Subcatchment 20S: DA-9

Runoff = 20.32 cfs @ 12.61 hrs, Volume= 3.157 af, Depth= 3.07"
 Routed to Link 19L : DP-9

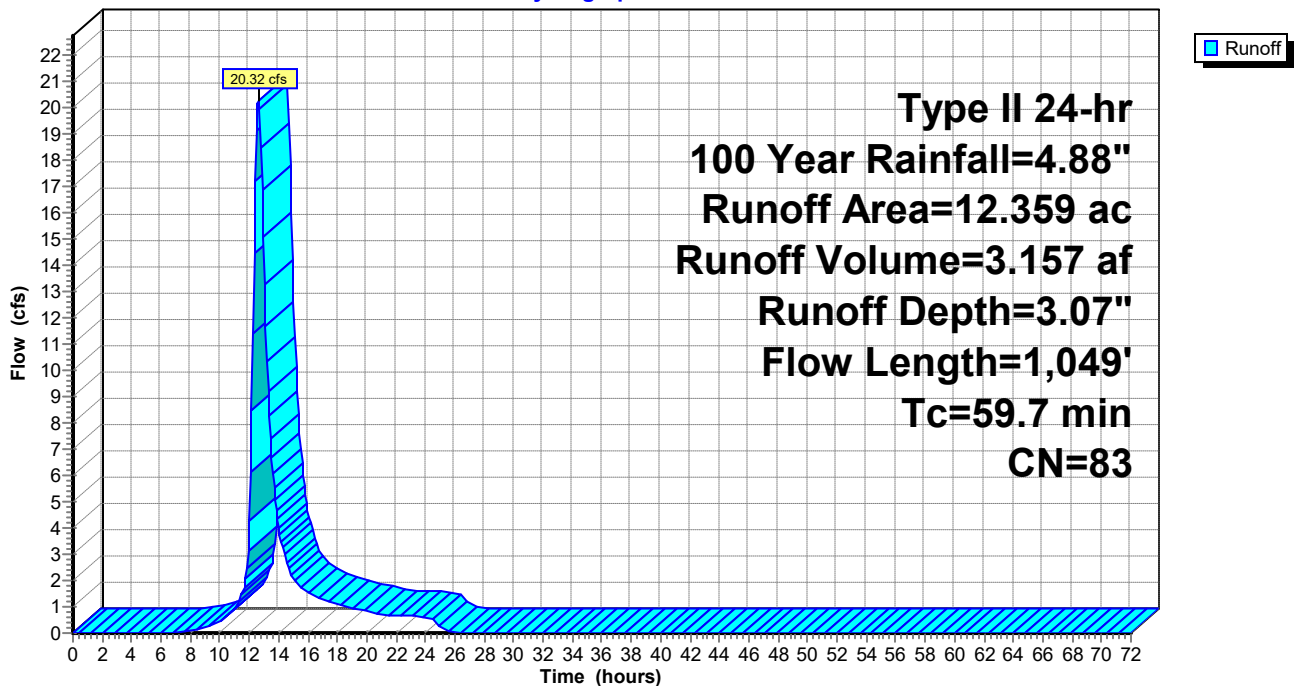
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 12.359	83	
12.359		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.4	100	0.0114	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
26.3	949	0.0074	0.60		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
59.7	1,049	Total			

Subcatchment 20S: DA-9

Hydrograph



Summary for Subcatchment 21S: DA-10

Runoff = 5.35 cfs @ 12.28 hrs, Volume= 0.553 af, Depth= 2.52"
 Routed to Link 20L : DP-10

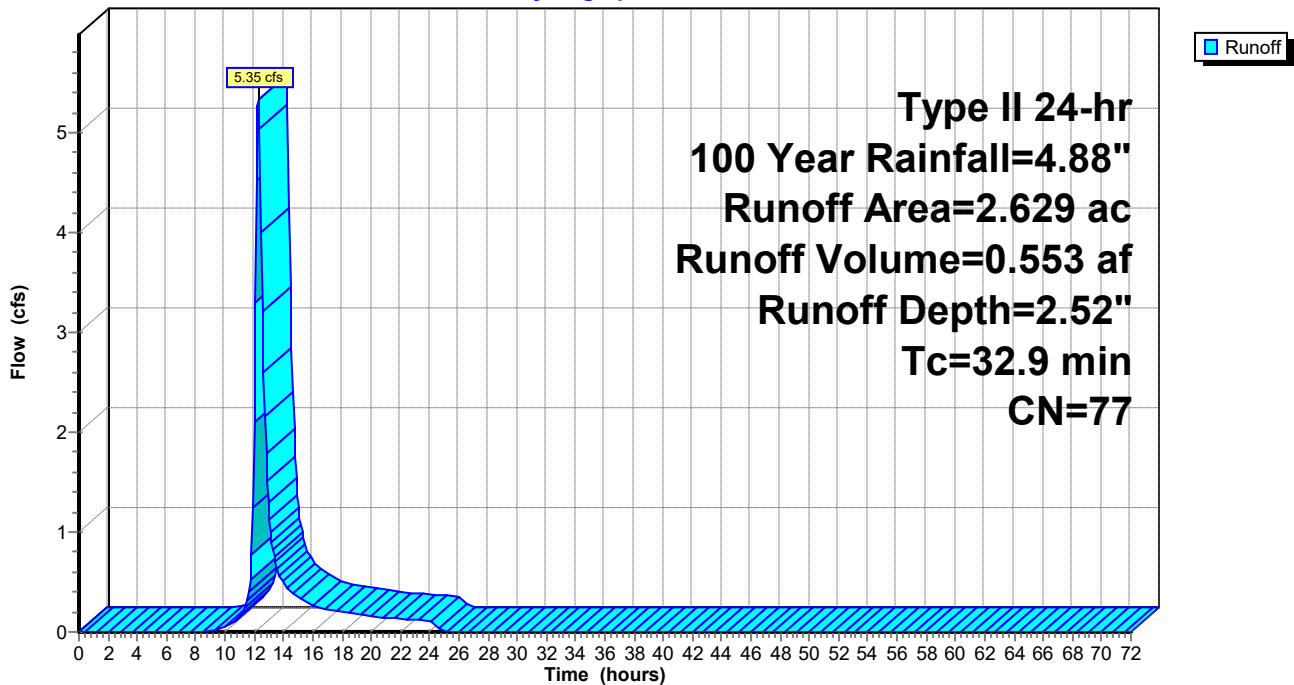
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 2.629	77	
2.629		100.00% Pervious Area

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

Subcatchment 21S: DA-10

Hydrograph



Summary for Subcatchment 22S: DA-11

Runoff = 6.51 cfs @ 12.33 hrs, Volume= 0.728 af, Depth= 3.16"
 Routed to Link 21L : DP-11

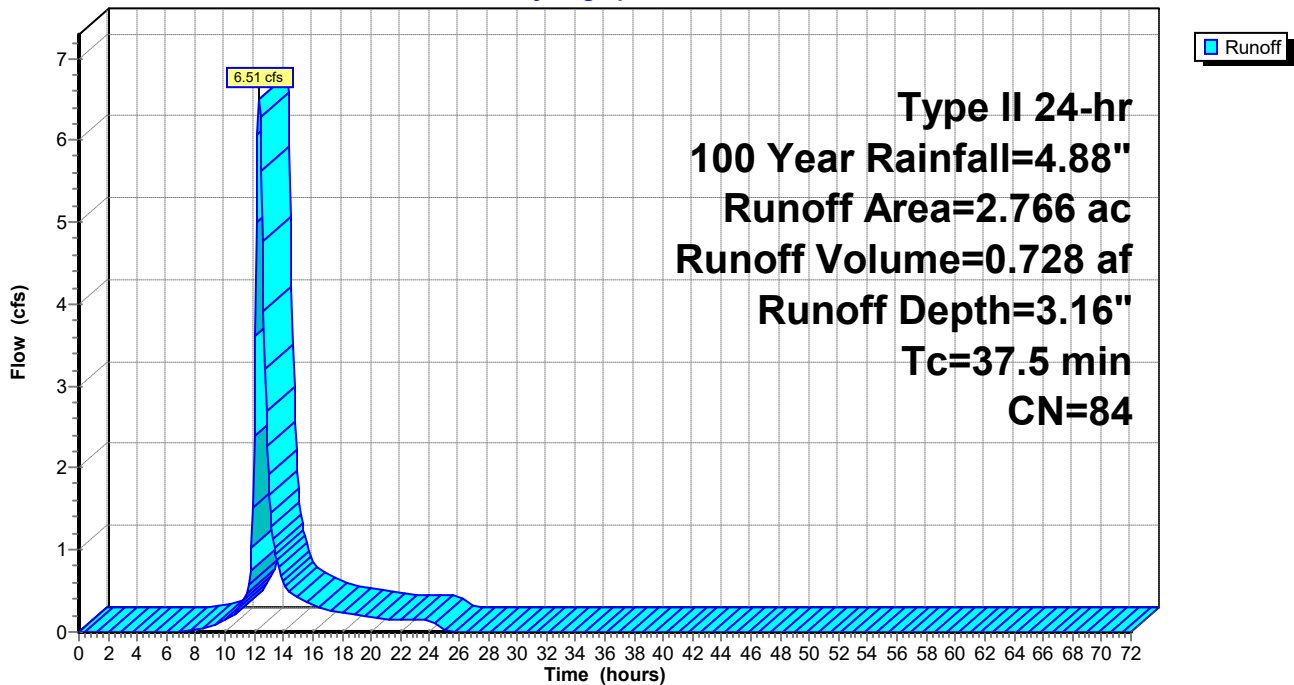
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 2.766	84	
2.766		100.00% Pervious Area

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

Subcatchment 22S: DA-11

Hydrograph



Summary for Subcatchment 23S: DA-12

Runoff = 31.73 cfs @ 13.19 hrs, Volume= 7.397 af, Depth= 2.79"
 Routed to Link 23L : DP-12

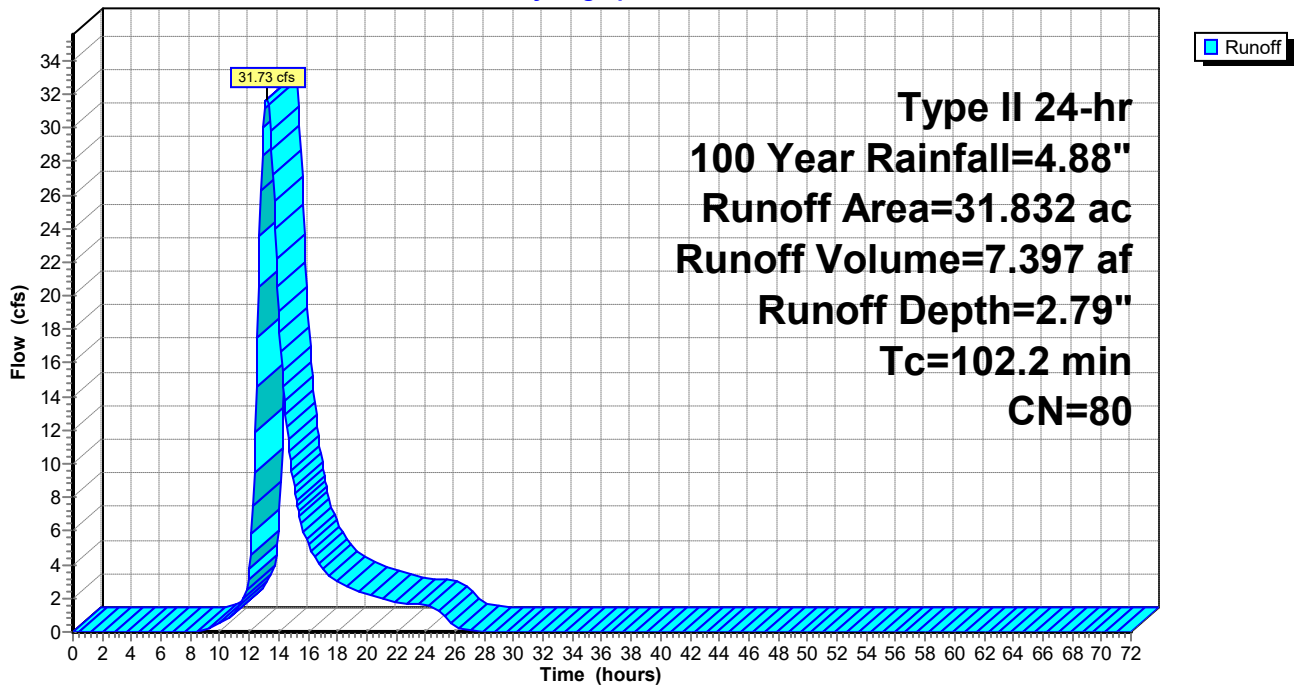
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 31.832	80	
31.832		100.00% Pervious Area

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

Subcatchment 23S: DA-12

Hydrograph



Summary for Subcatchment 24S: DA-13

Runoff = 19.57 cfs @ 12.69 hrs, Volume= 3.266 af, Depth= 3.07"
 Routed to Link 22L : DP-13

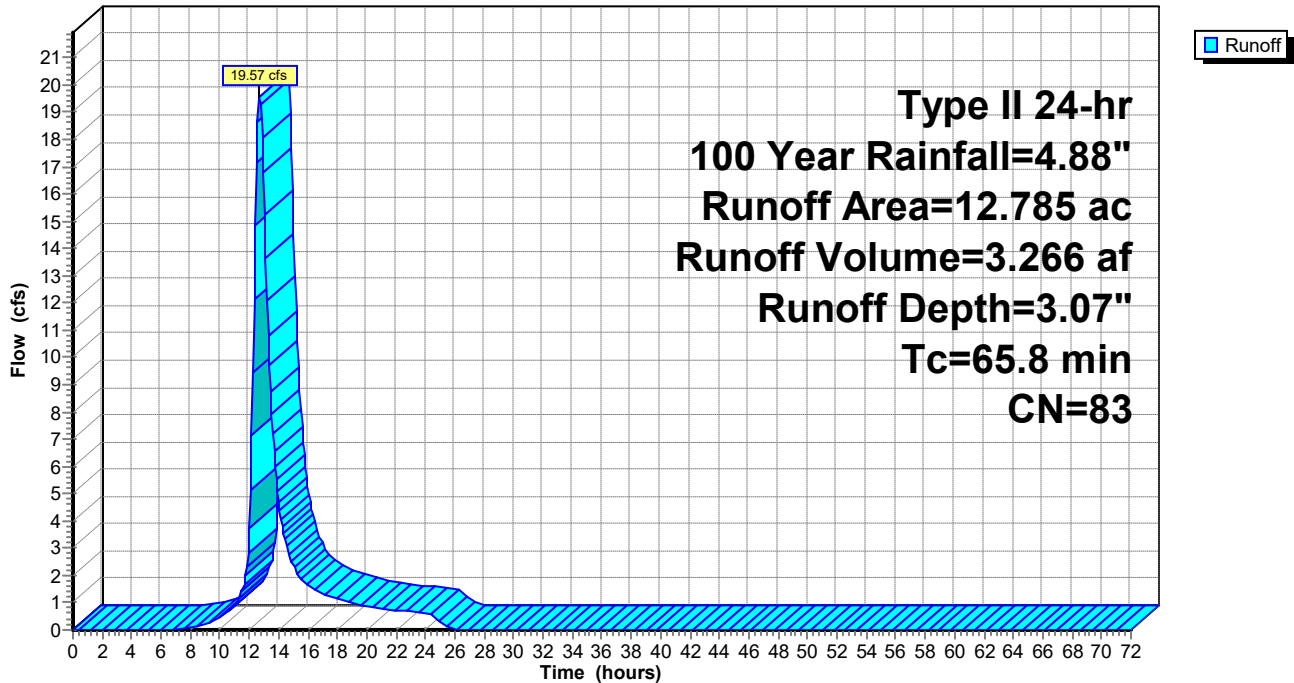
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 12.785	83	
12.785		100.00% Pervious Area

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

Subcatchment 24S: DA-13

Hydrograph



Summary for Subcatchment 25S: DA-14

Runoff = 33.76 cfs @ 14.06 hrs, Volume= 11.373 af, Depth= 2.88"
 Routed to Link 24L : DP-14

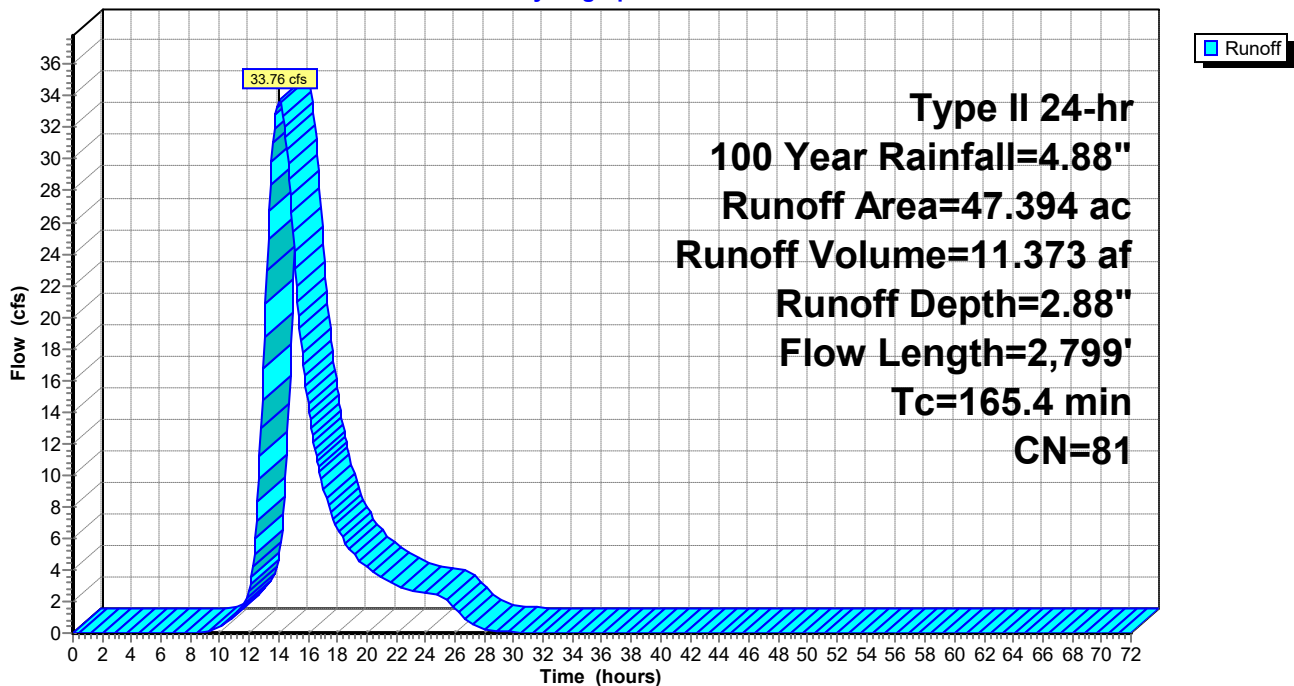
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 47.394	81	
47.394		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.1	100	0.0211	0.06		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
139.3	2,699	0.0021	0.32		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
165.4	2,799	Total			

Subcatchment 25S: DA-14

Hydrograph



Summary for Subcatchment 26S: DA-15

Runoff = 11.96 cfs @ 12.90 hrs, Volume= 2.340 af, Depth= 3.07"
 Routed to Link 25L : DP-15

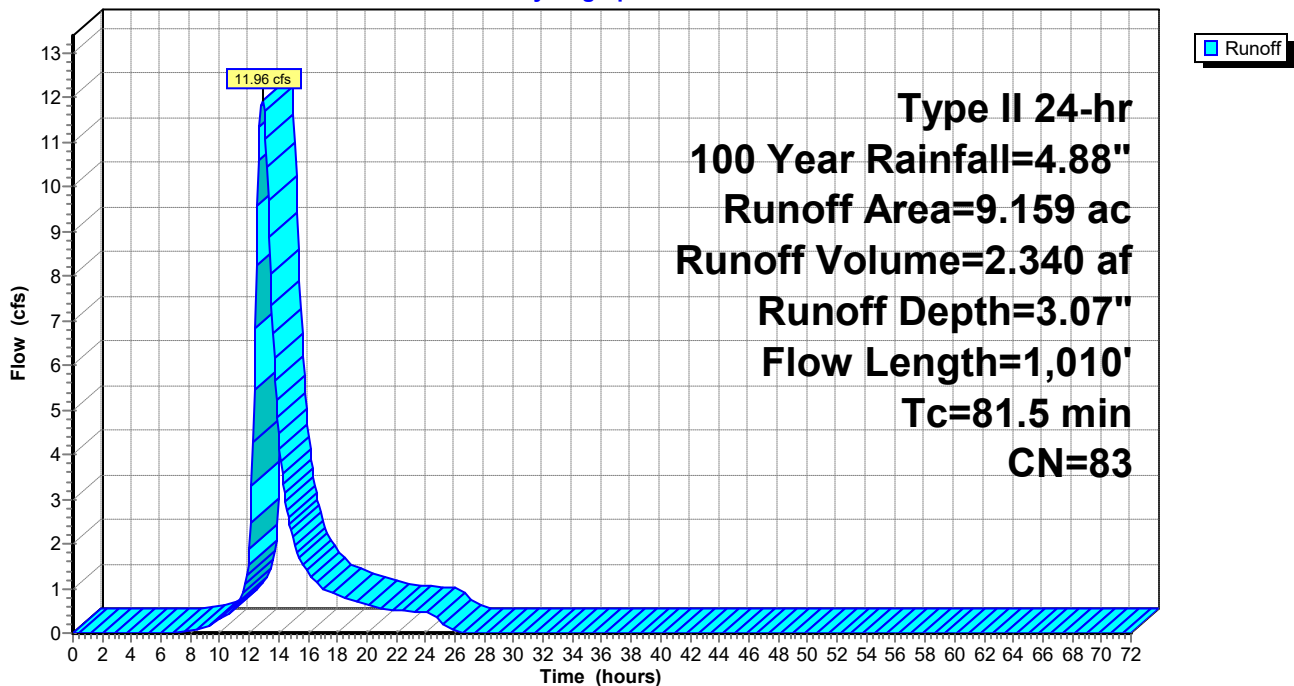
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 9.159	83	
9.159		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
33.6	100	0.0112	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
47.9	910	0.0020	0.32		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
81.5	1,010	Total			

Subcatchment 26S: DA-15

Hydrograph



Summary for Subcatchment 27S: DA-17

Runoff = 0.90 cfs @ 19.31 hrs, Volume= 0.785 af, Depth= 3.16"
 Routed to Link 26L : DP-17

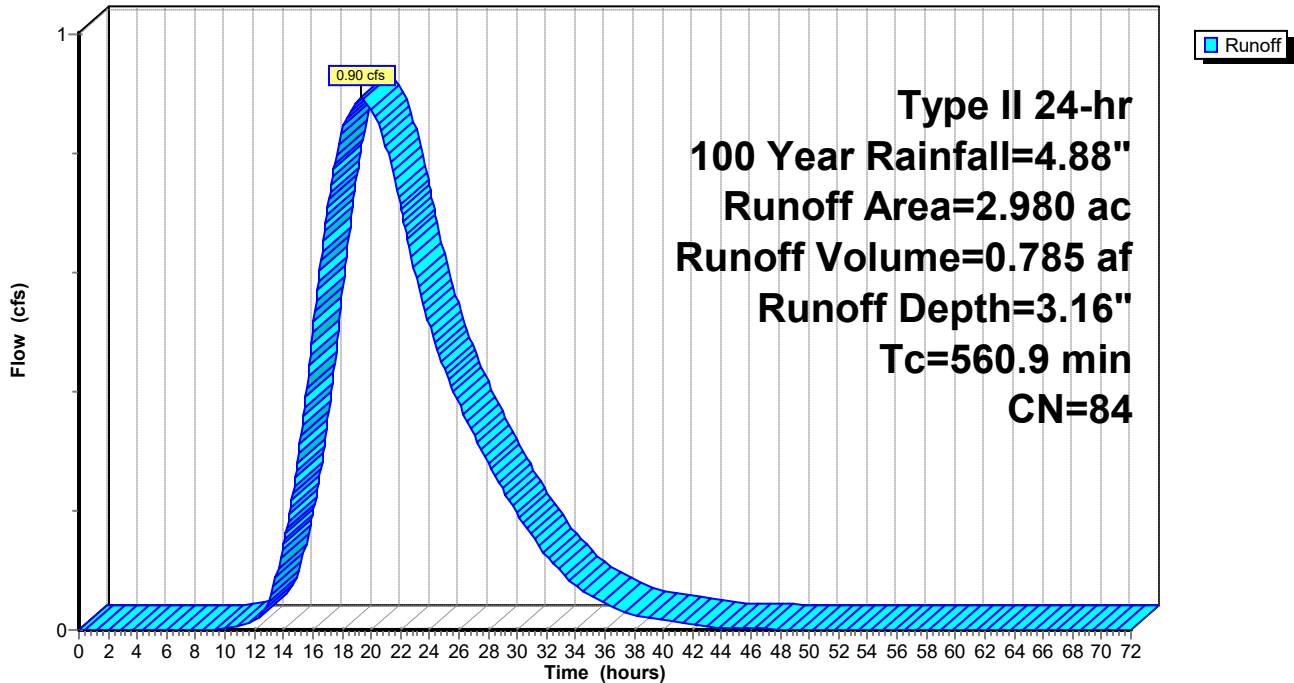
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 2.980	84	
2.980		100.00% Pervious Area

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

Subcatchment 27S: DA-17

Hydrograph



Summary for Subcatchment 28S: DA-18

Runoff = 24.72 cfs @ 13.05 hrs, Volume= 5.390 af, Depth= 3.26"
 Routed to Link 27L : DP-18

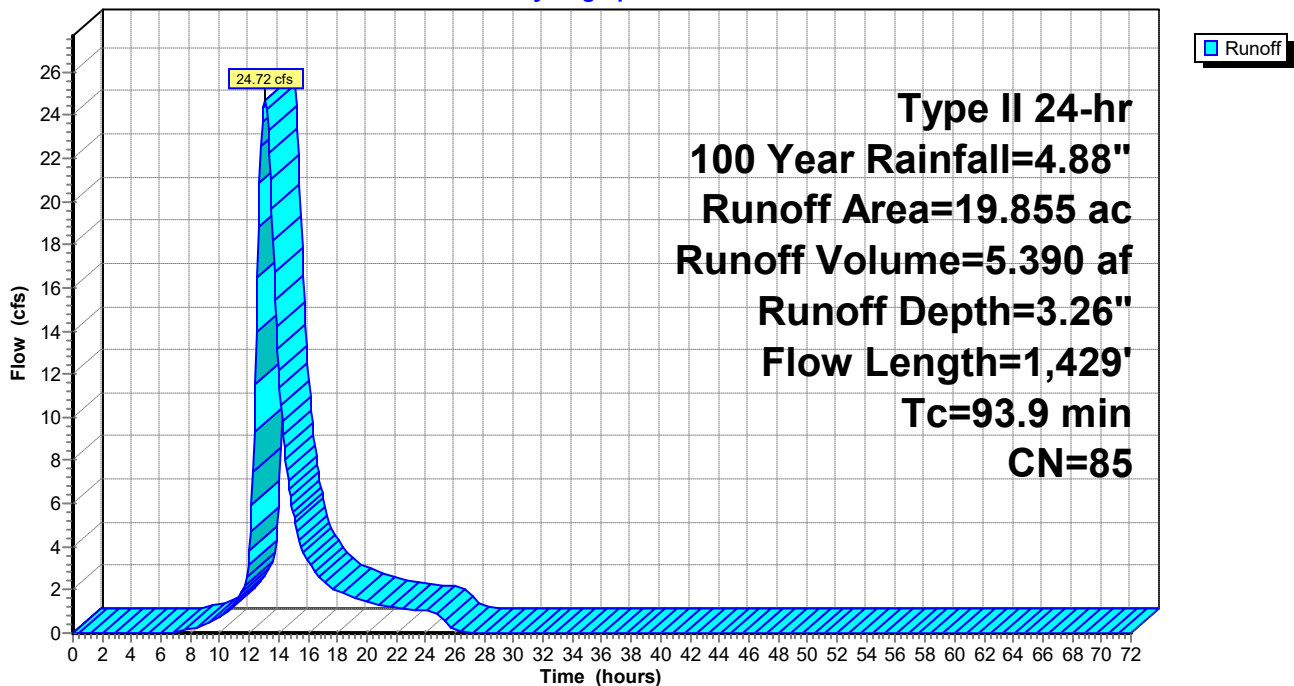
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 19.855	85	
19.855		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
42.3	100	0.0063	0.04		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
51.6	1,329	0.0038	0.43		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
93.9	1,429	Total			

Subcatchment 28S: DA-18

Hydrograph



Summary for Subcatchment 29S: DA-19

Runoff = 9.37 cfs @ 12.57 hrs, Volume= 1.391 af, Depth= 3.16"
 Routed to Link 28L : DP-19

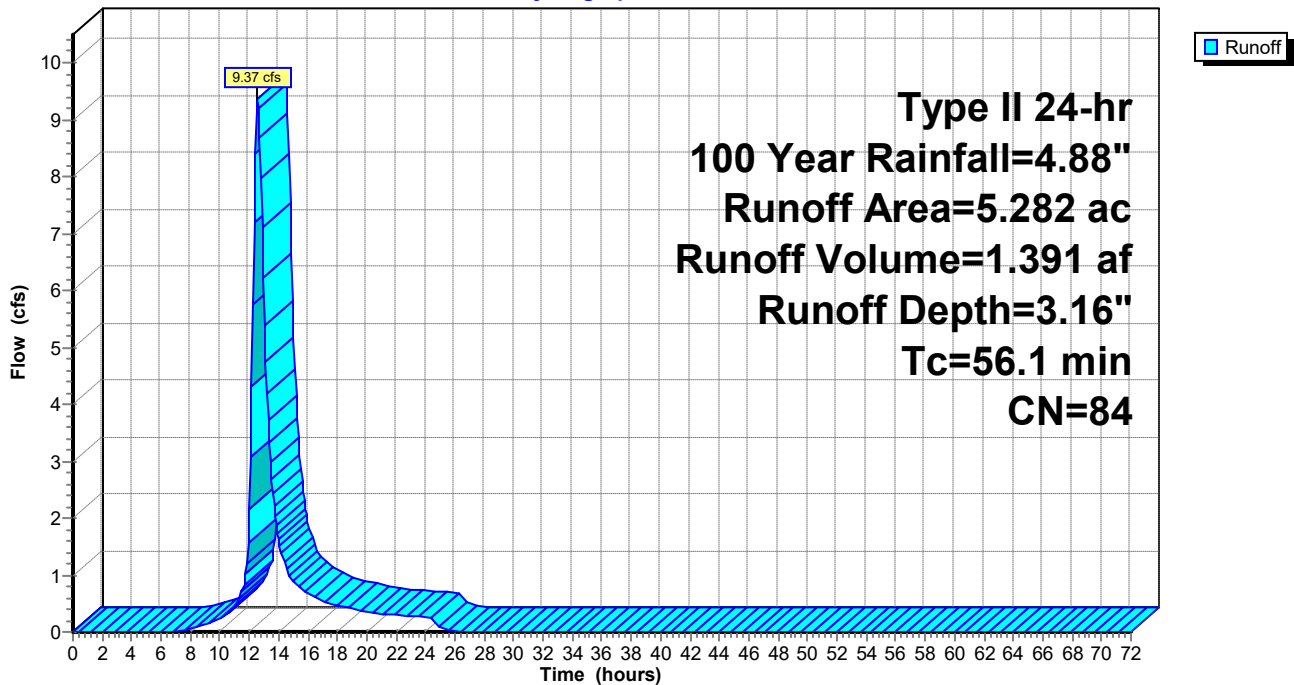
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 5.282	84	
5.282		100.00% Pervious Area

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

Subcatchment 29S: DA-19

Hydrograph



Summary for Subcatchment 30S: DA-20

Runoff = 28.21 cfs @ 13.55 hrs, Volume= 8.039 af, Depth= 2.52"
 Routed to Link 29L : DP-20

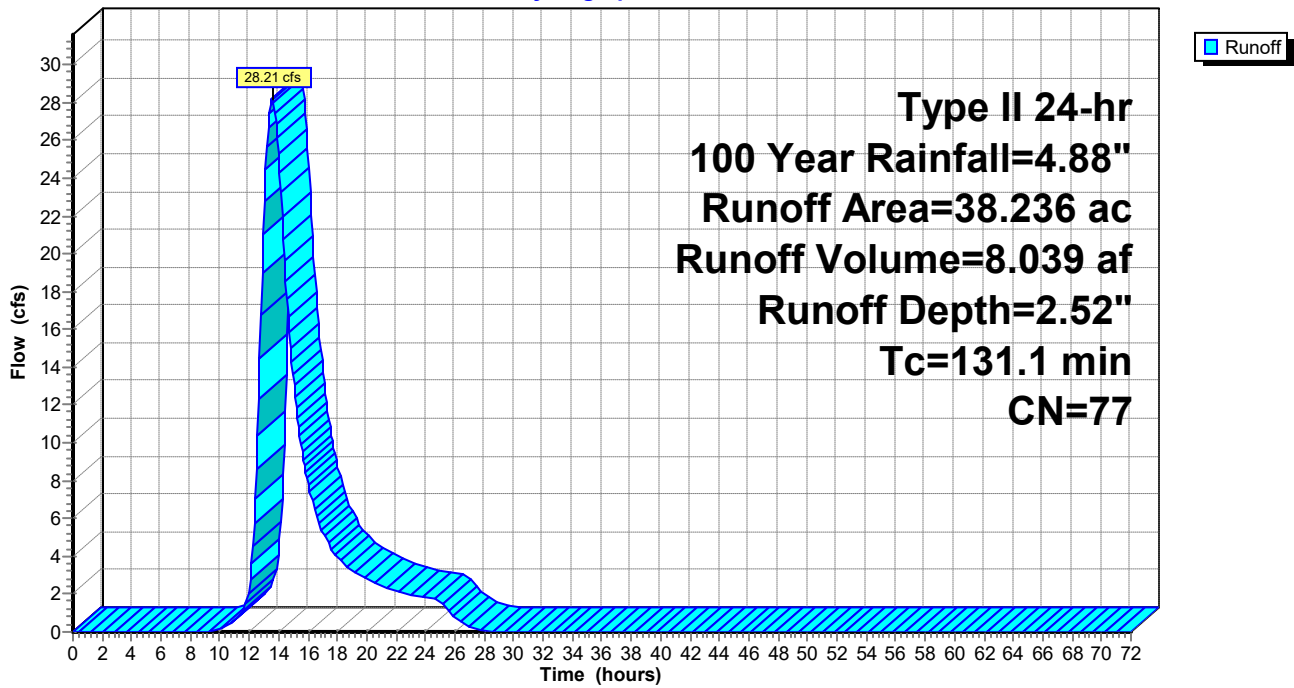
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 38.236	77	
38.236		100.00% Pervious Area

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

Subcatchment 30S: DA-20

Hydrograph



Summary for Subcatchment 31S: DA-22

Runoff = 22.65 cfs @ 12.77 hrs, Volume= 3.999 af, Depth= 2.79"
 Routed to Link 30L : DP-22

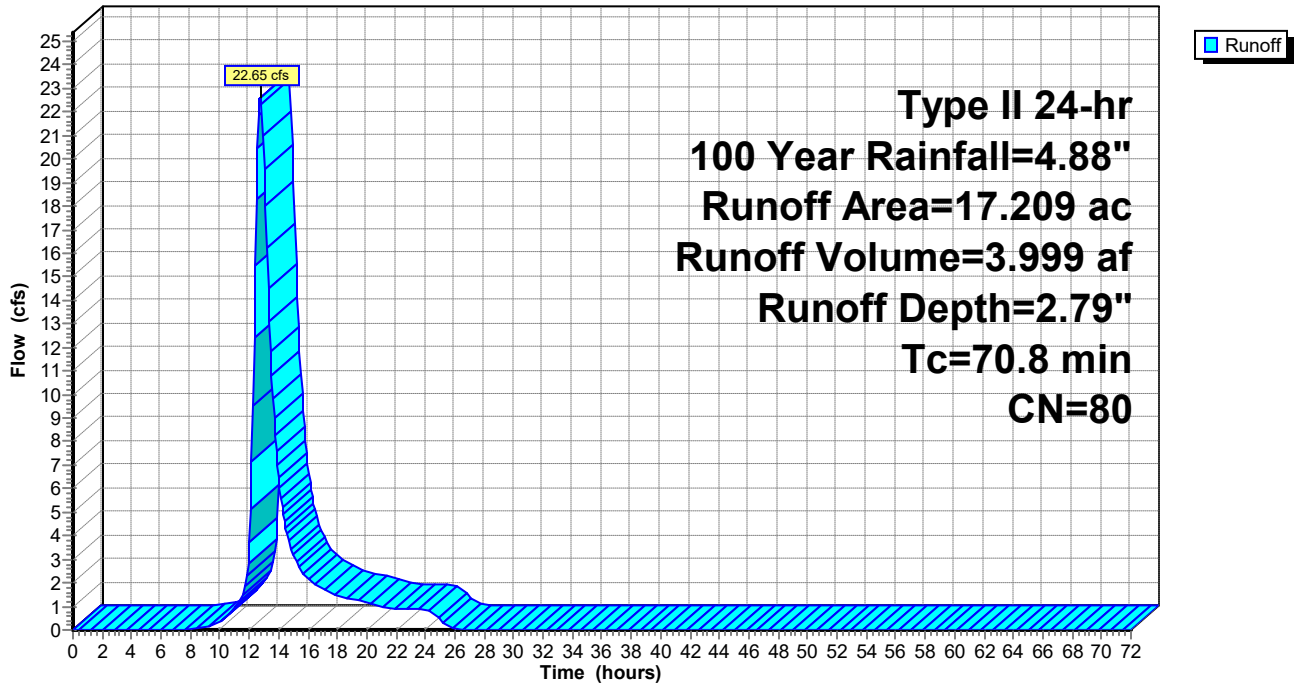
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 17.209	80	
17.209		100.00% Pervious Area

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

Subcatchment 31S: DA-22

Hydrograph



Summary for Subcatchment 32S: DA-23

Runoff = 10.72 cfs @ 12.37 hrs, Volume= 1.265 af, Depth= 2.03"
 Routed to Link 31L : DP-23

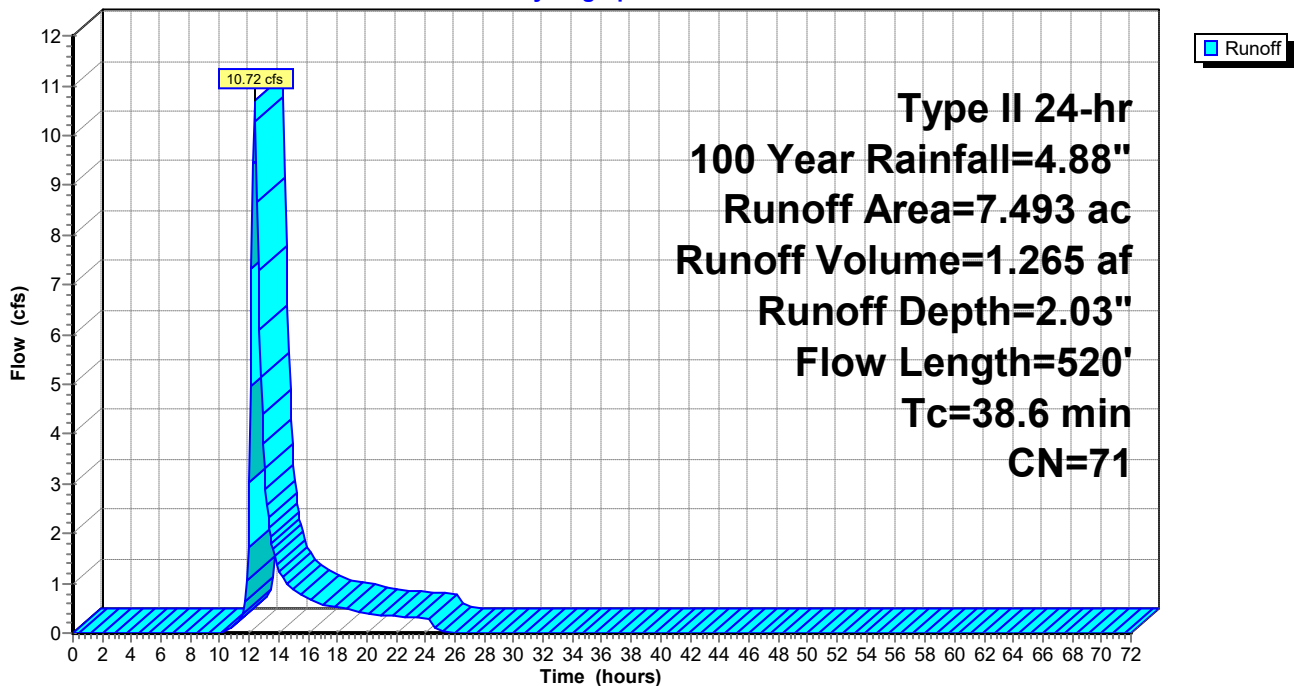
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 7.493	71	
7.493		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.6	100	0.0200	0.06		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
12.0	420	0.0070	0.59		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
38.6	520	Total			

Subcatchment 32S: DA-23

Hydrograph



Summary for Subcatchment 33S: DA-24

Runoff = 12.66 cfs @ 13.00 hrs, Volume= 2.645 af, Depth= 2.35"
 Routed to Link 32L : DP-24

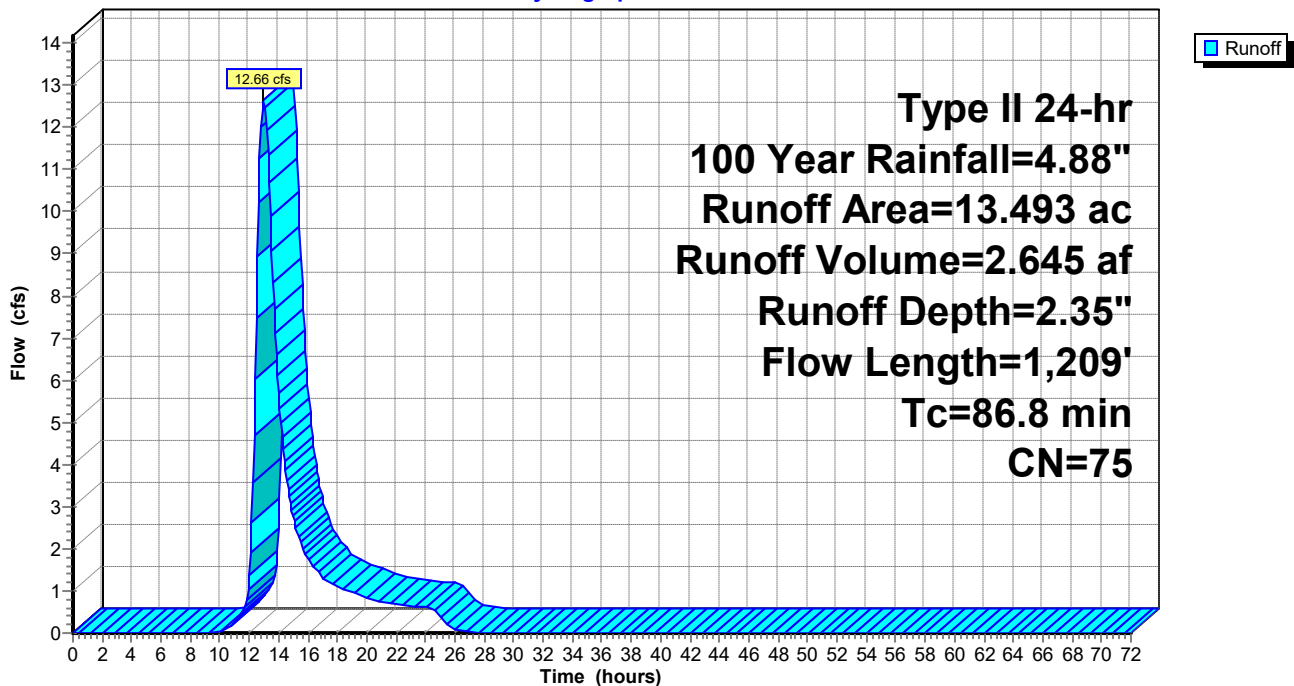
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 13.493	75	
13.493		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
37.0	100	0.0088	0.05		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
49.8	1,109	0.0028	0.37		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
86.8	1,209	Total			

Subcatchment 33S: DA-24

Hydrograph



Summary for Subcatchment 34S: DA-25

Runoff = 68.72 cfs @ 12.72 hrs, Volume= 11.704 af, Depth= 2.79"
 Routed to Link 33L : DP-25

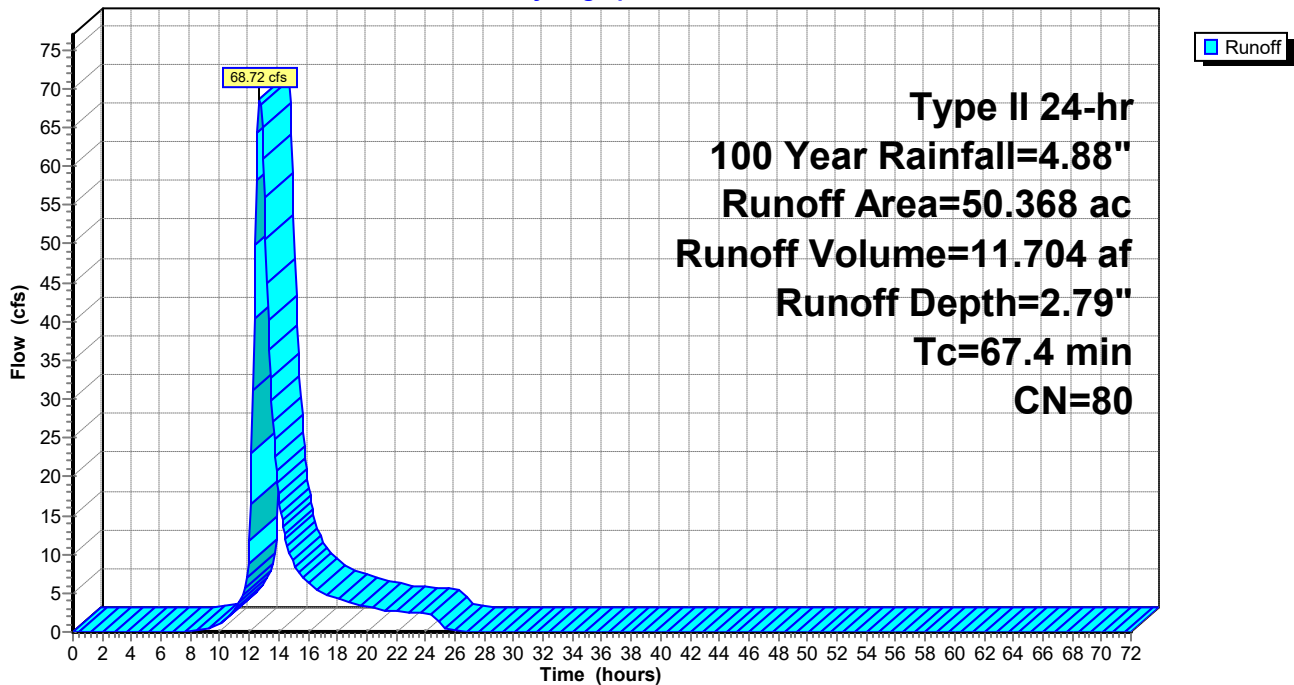
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 50.368	80	
50.368		100.00% Pervious Area

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

Subcatchment 34S: DA-25

Hydrograph



Summary for Subcatchment 35S: DA-26

Runoff = 25.10 cfs @ 28.64 hrs, Volume= 46.140 af, Depth> 2.86"
 Routed to Link 35L : DP-26

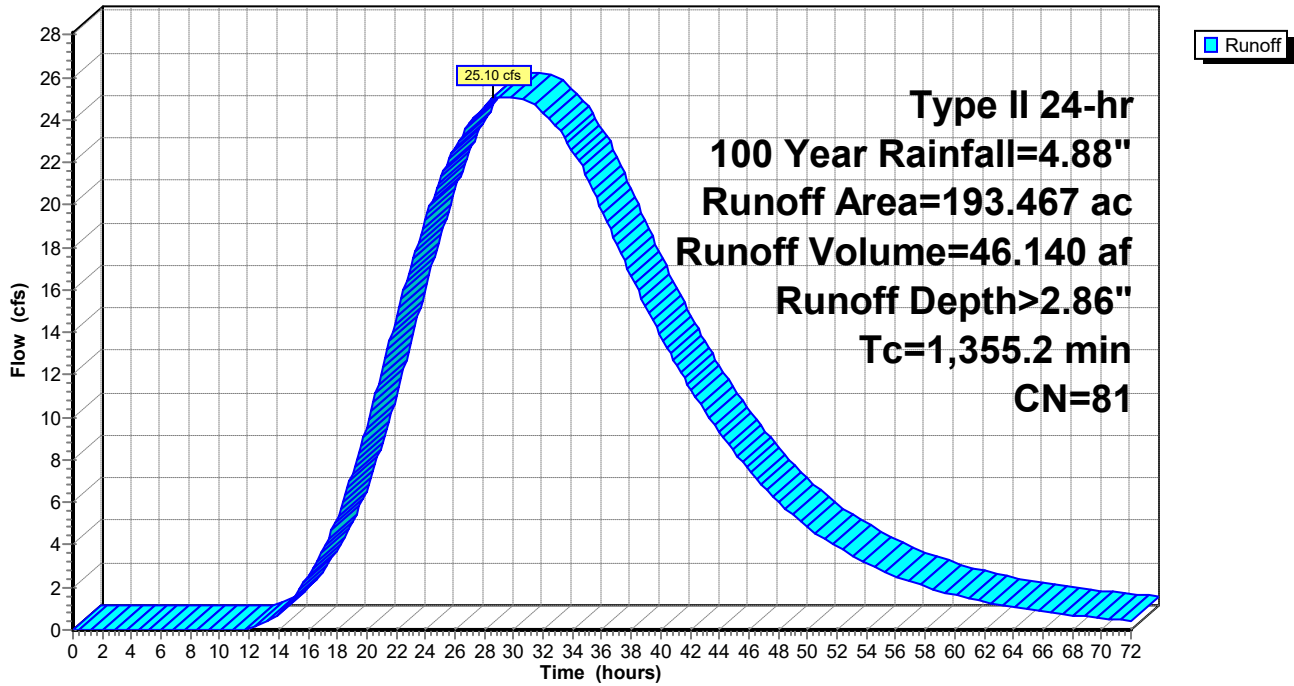
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 193.467	81	
193.467		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1,355.2					Direct Entry,

Subcatchment 35S: DA-26

Hydrograph



Somerset_Proposed_Rev7

Prepared by Tetra Tech

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Type II 24-hr 100 Year Rainfall=4.88"

Printed 3/13/2023

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Summary for Subcatchment 36S: DA-27

Runoff = 8.73 cfs @ 20.20 hrs, Volume= 7.959 af, Depth= 2.97"
Routed to Link 36L : DP-27

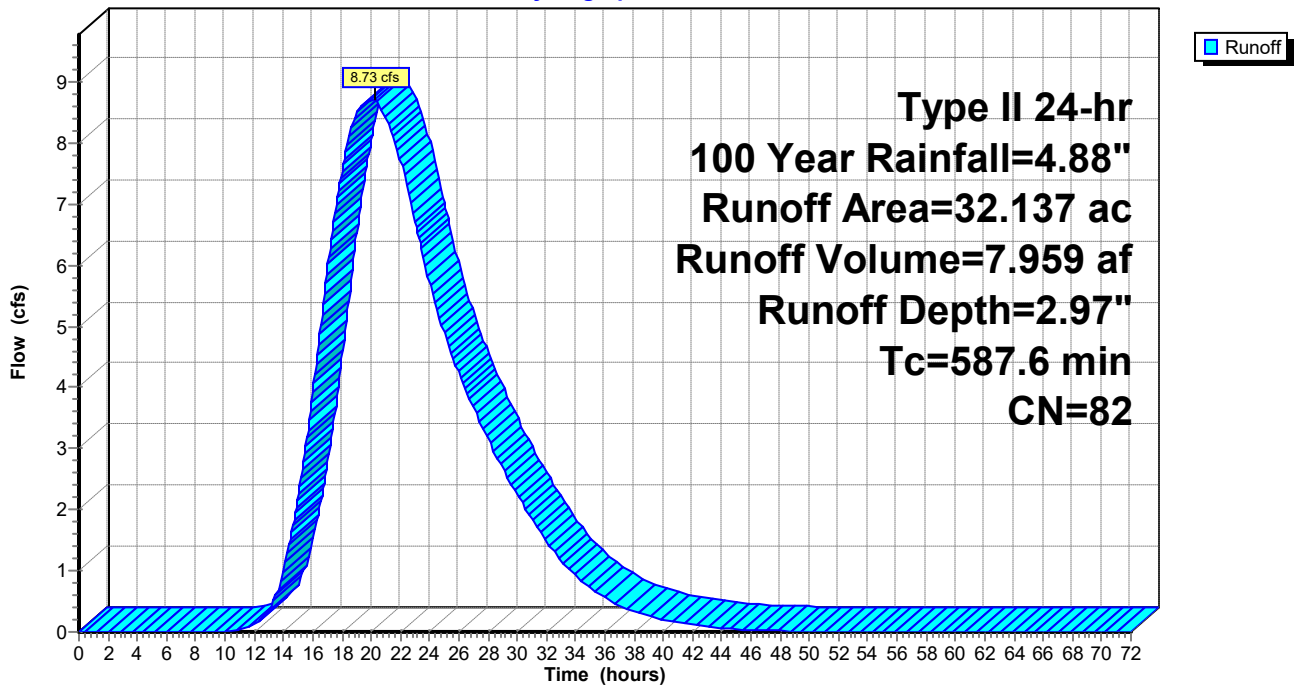
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 32.137	82	
32.137		100.00% Pervious Area

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

Subcatchment 36S: DA-27

Hydrograph



Summary for Subcatchment 37S: DA-28

Runoff = 20.88 cfs @ 12.32 hrs, Volume= 2.274 af, Depth= 2.88"
 Routed to Link 37L : DP-28

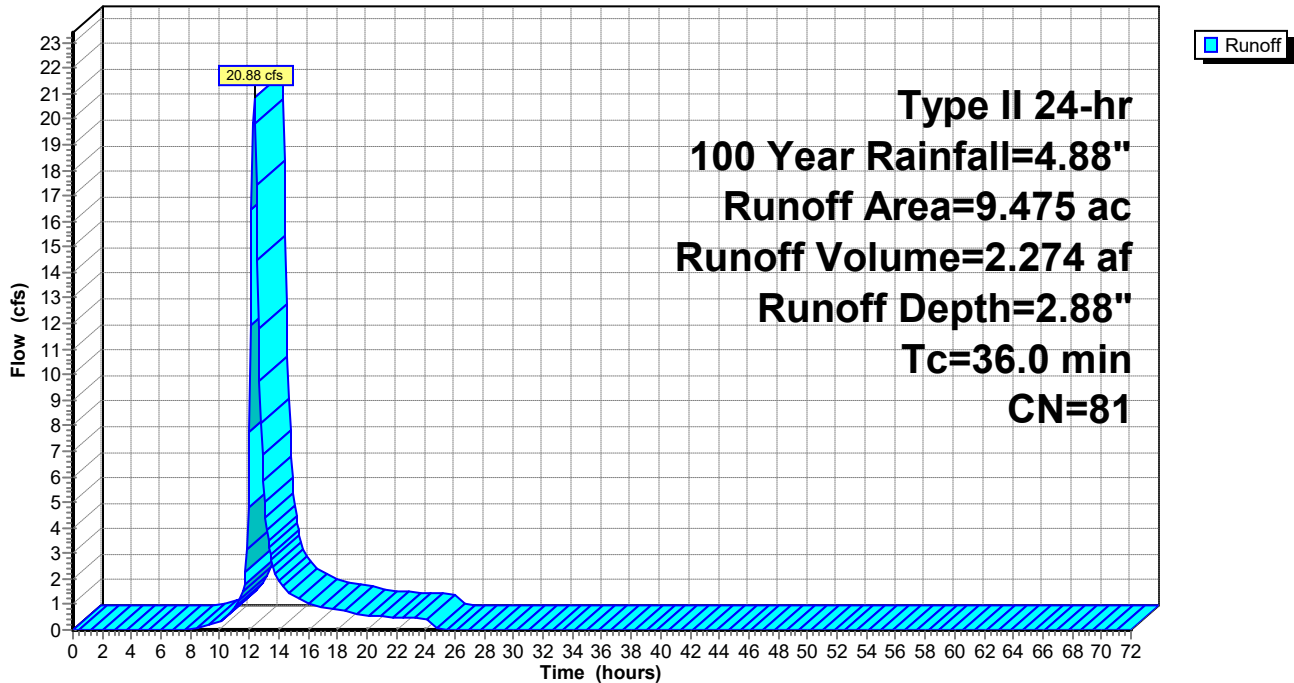
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 9.475	81	
9.475		100.00% Pervious Area

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

Subcatchment 37S: DA-28

Hydrograph



Summary for Subcatchment 38S: DA-29

Runoff = 77.65 cfs @ 12.84 hrs, Volume= 14.618 af, Depth= 2.52"
 Routed to Link 38L : DP-29

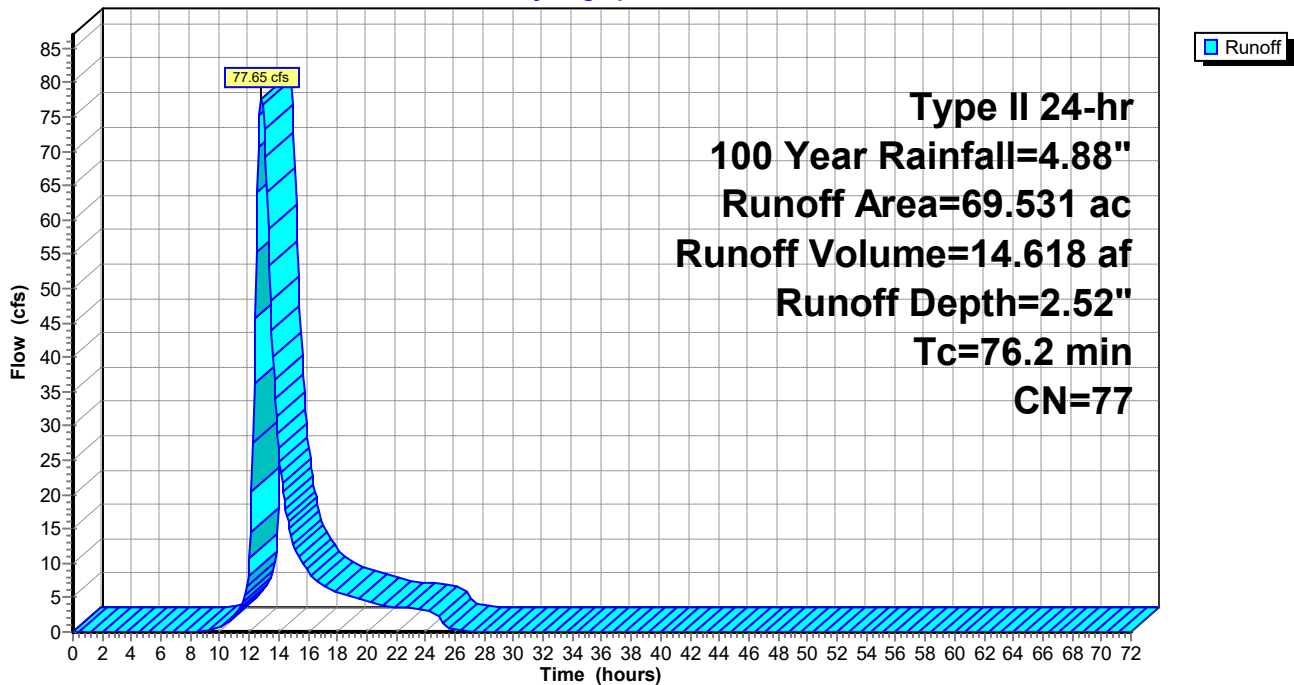
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 69.531	77	
69.531		100.00% Pervious Area

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

Subcatchment 38S: DA-29

Hydrograph



Summary for Subcatchment 39S: DA-30

Runoff = 50.47 cfs @ 12.84 hrs, Volume= 9.532 af, Depth= 3.16"
 Routed to Pond 1P : P-30

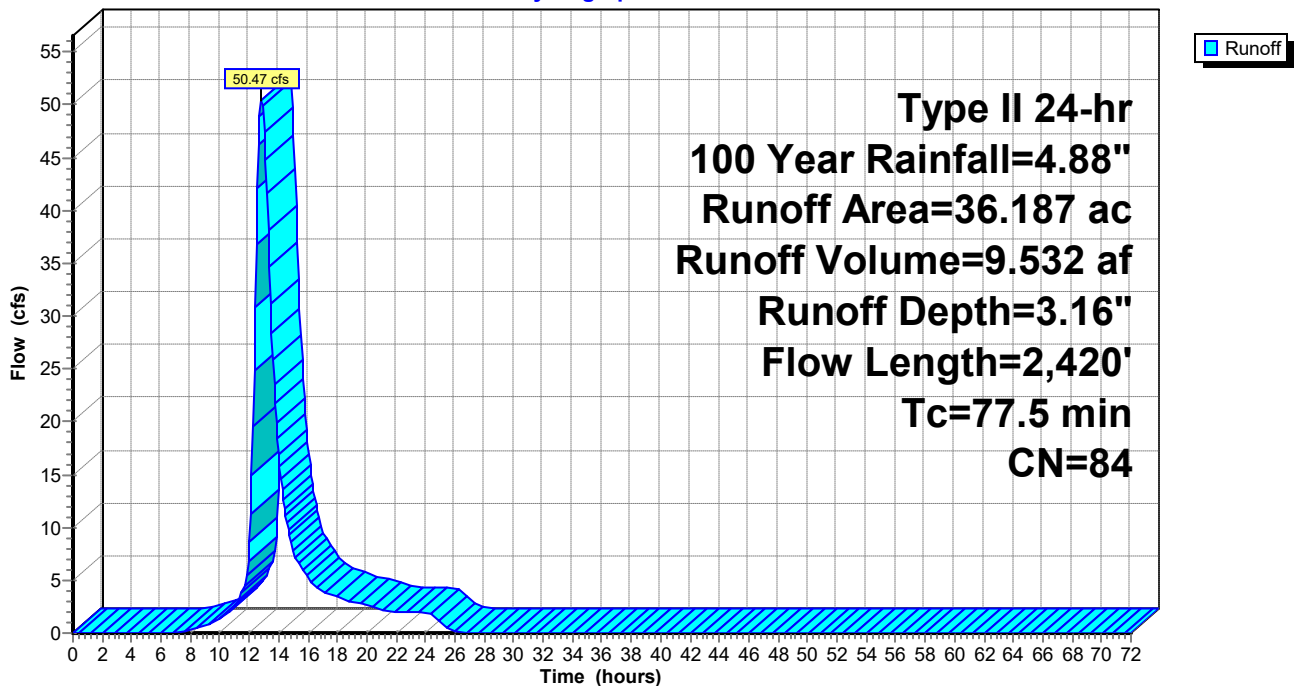
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 36.187	84	
36.187		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	20	0.0332	0.06		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
71.5	2,400	0.0064	0.56		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
77.5	2,420	Total			

Subcatchment 39S: DA-30

Hydrograph



Summary for Subcatchment 40S: DA-31

Runoff = 35.67 cfs @ 12.20 hrs, Volume= 3.130 af, Depth= 2.61"
 Routed to Link 40L : DP-31

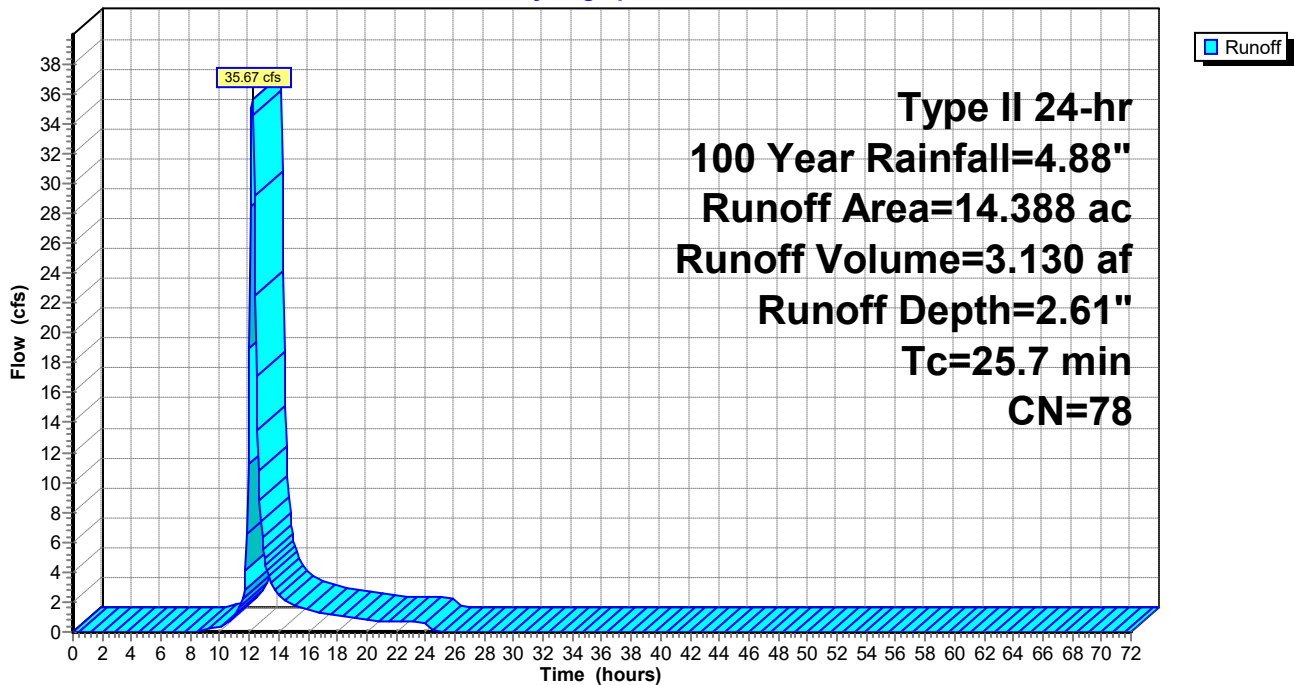
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 14.388	78	
14.388		100.00% Pervious Area

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

Subcatchment 40S: DA-31

Hydrograph



Summary for Subcatchment 41S: DA-32

Runoff = 3.40 cfs @ 13.93 hrs, Volume= 1.092 af, Depth= 2.88"
 Routed to Link 41L : DP-32

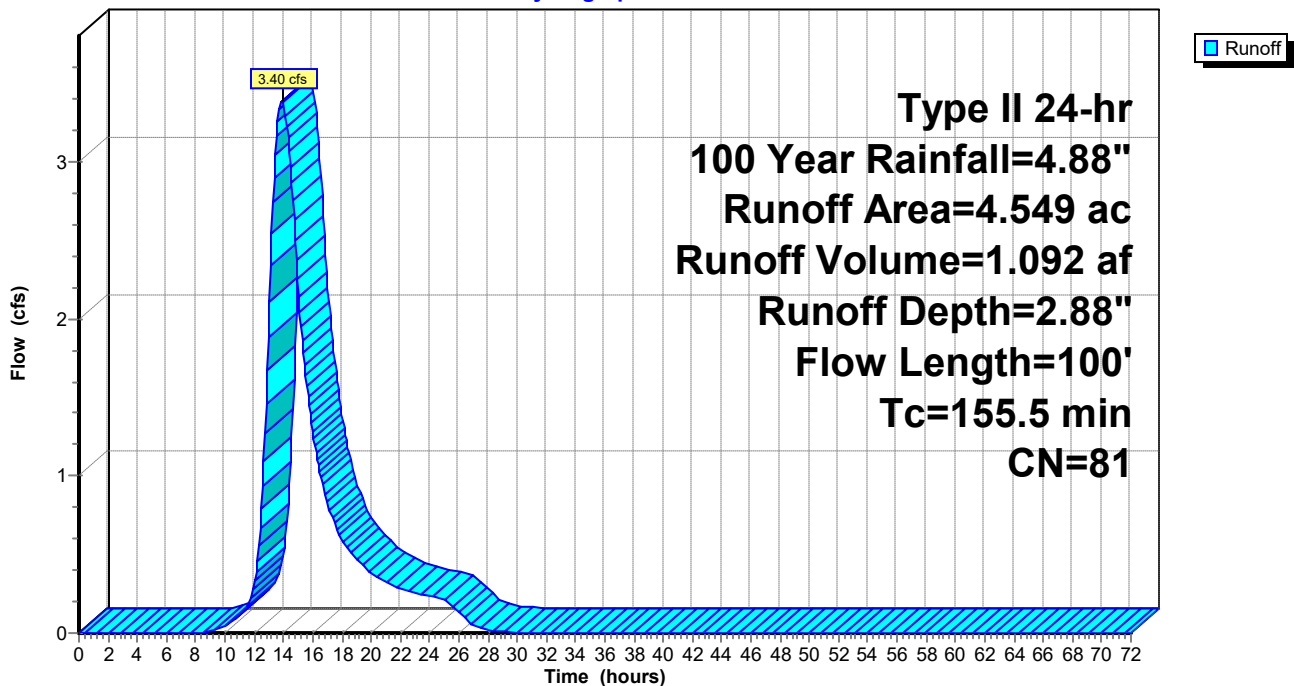
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 4.549	81	
4.549		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
153.7	20	0.0000	0.00		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
1.8	80	0.0116	0.75		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
155.5	100	Total			

Subcatchment 41S: DA-32

Hydrograph



Summary for Subcatchment 42S: DA-35

Runoff = 18.73 cfs @ 15.25 hrs, Volume= 8.664 af, Depth= 2.35"
 Routed to Link 42L : DP-35

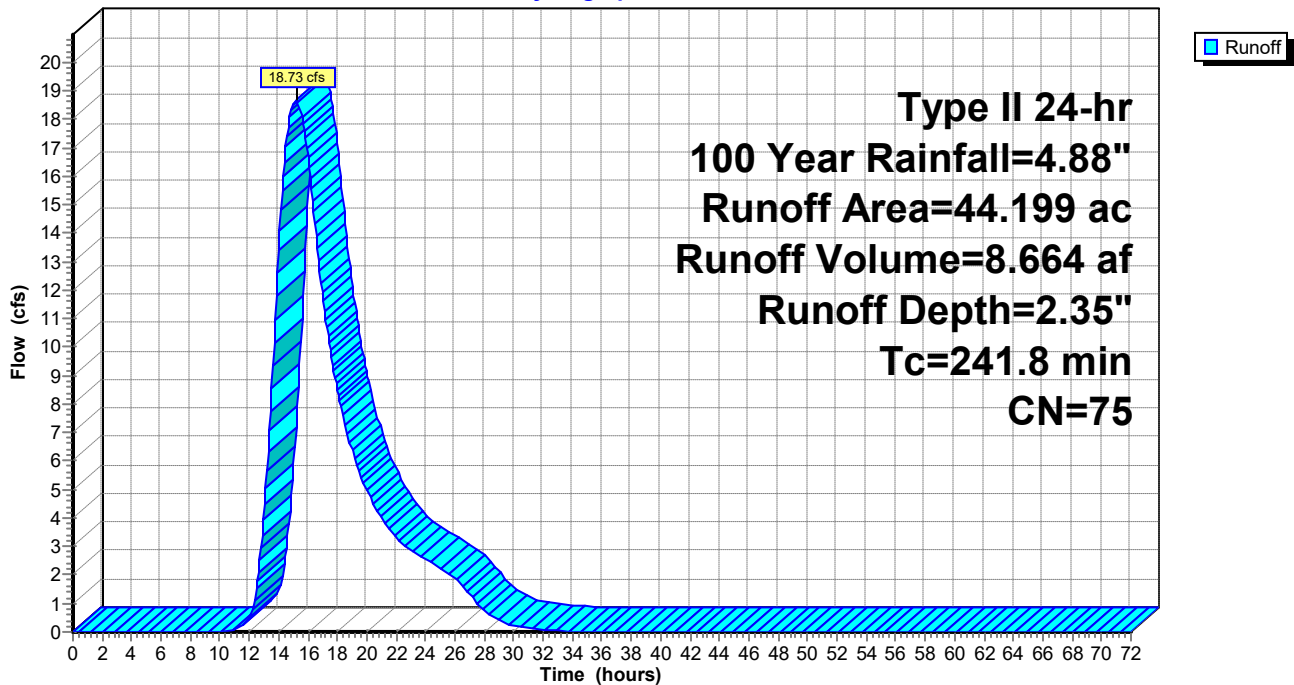
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 44.199	75	
44.199		100.00% Pervious Area

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

Subcatchment 42S: DA-35

Hydrograph



Summary for Subcatchment 43S: DA-42

Runoff = 35.46 cfs @ 14.22 hrs, Volume= 12.988 af, Depth= 3.26"
 Routed to Link 48L : DP-42

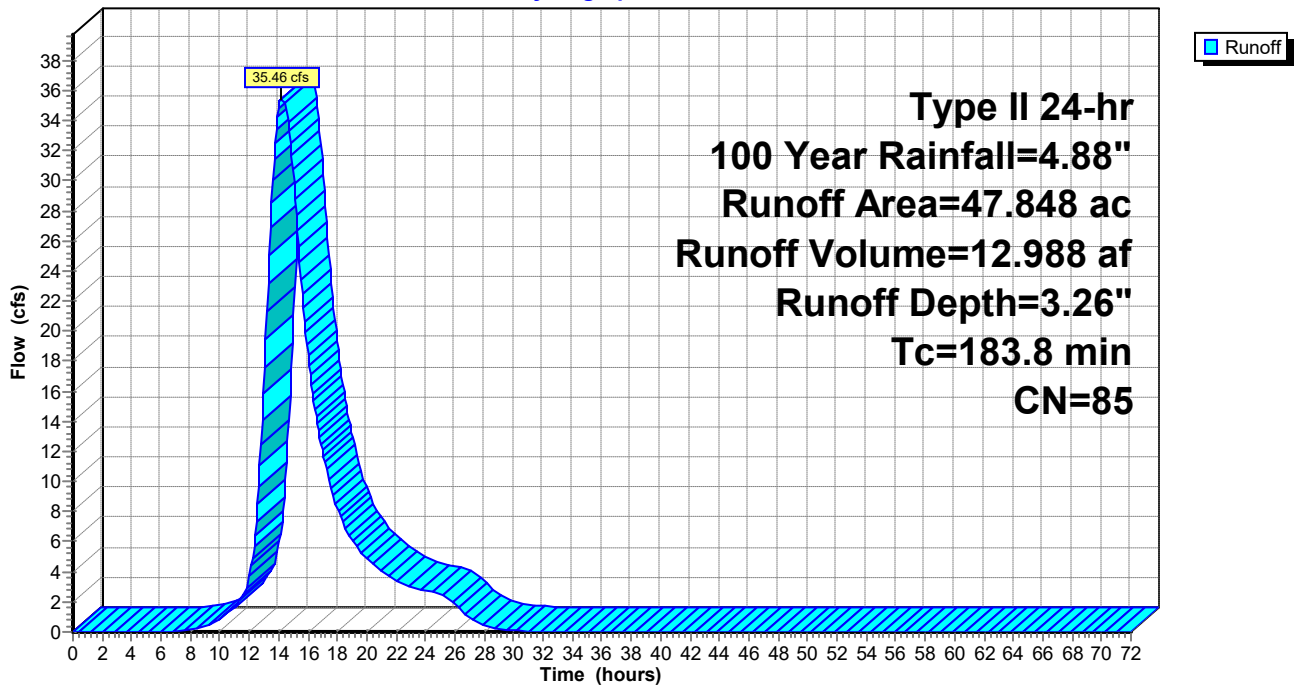
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 47.848	85	
47.848		100.00% Pervious Area

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

Subcatchment 43S: DA-42

Hydrograph



Summary for Subcatchment 44S: DA-37

Runoff = 12.00 cfs @ 14.00 hrs, Volume= 4.059 af, Depth= 3.36"
 Routed to Pond 2P : P-37

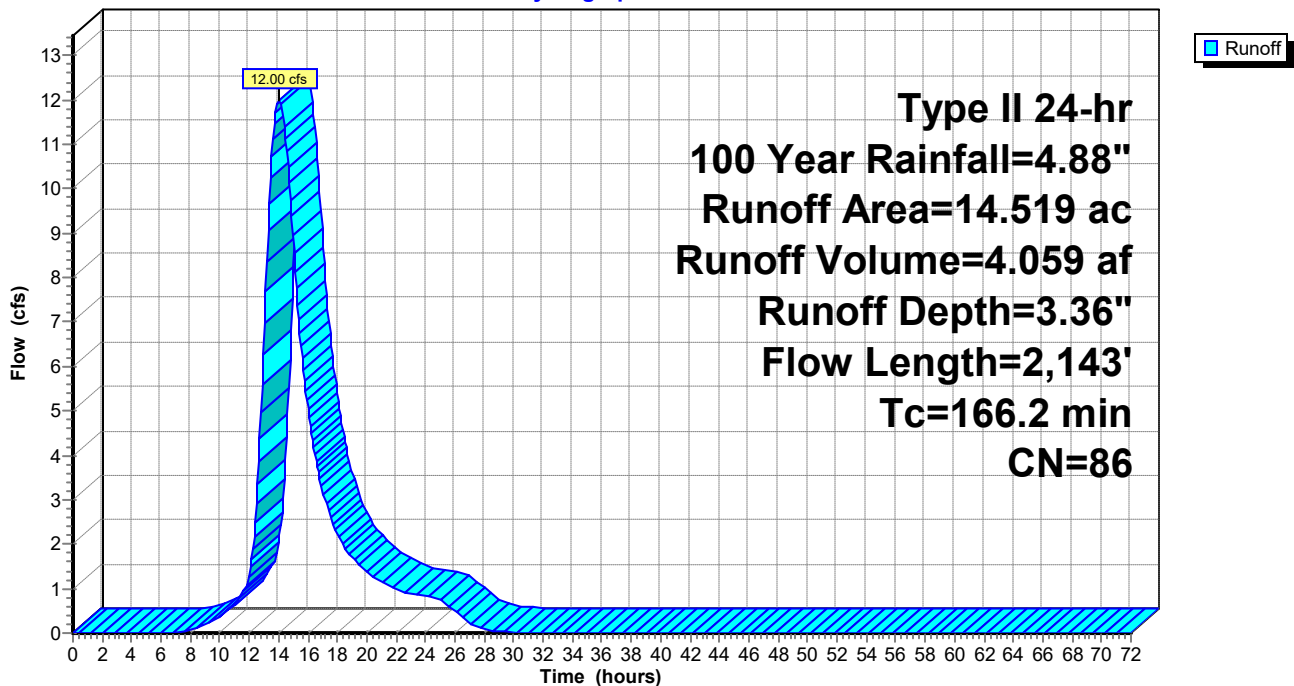
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 14.519	86	
14.519		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
80.9	20	0.0000	0.00		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
85.3	2,123	0.0035	0.41		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
166.2	2,143	Total			

Subcatchment 44S: DA-37

Hydrograph



Summary for Subcatchment 45S: DA-41

Runoff = 73.89 cfs @ 13.20 hrs, Volume= 18.455 af, Depth= 4.19"
 Routed to Pond 4P : P-41

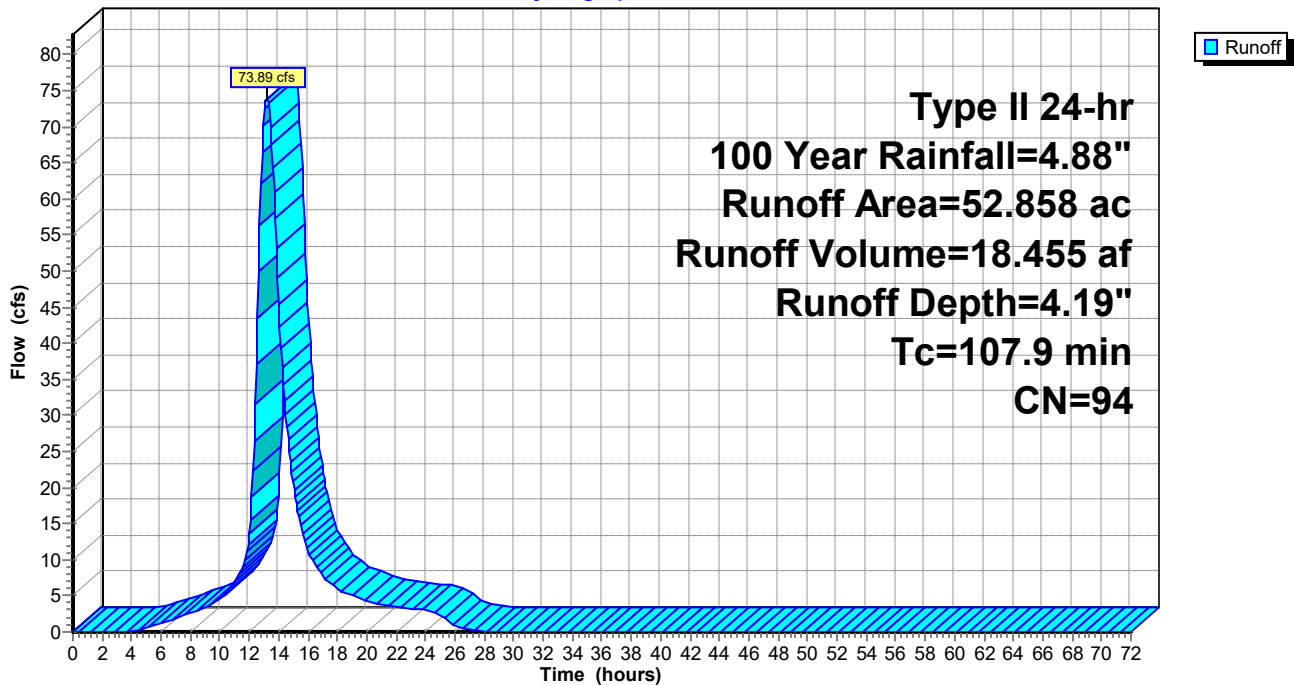
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 52.858	94	
52.858		100.00% Pervious Area

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

Subcatchment 45S: DA-41

Hydrograph



Summary for Subcatchment 46S: DA-40

Runoff = 0.96 cfs @ 18.22 hrs, Volume= 0.734 af, Depth= 4.08"
 Routed to Link 46L : DP-40

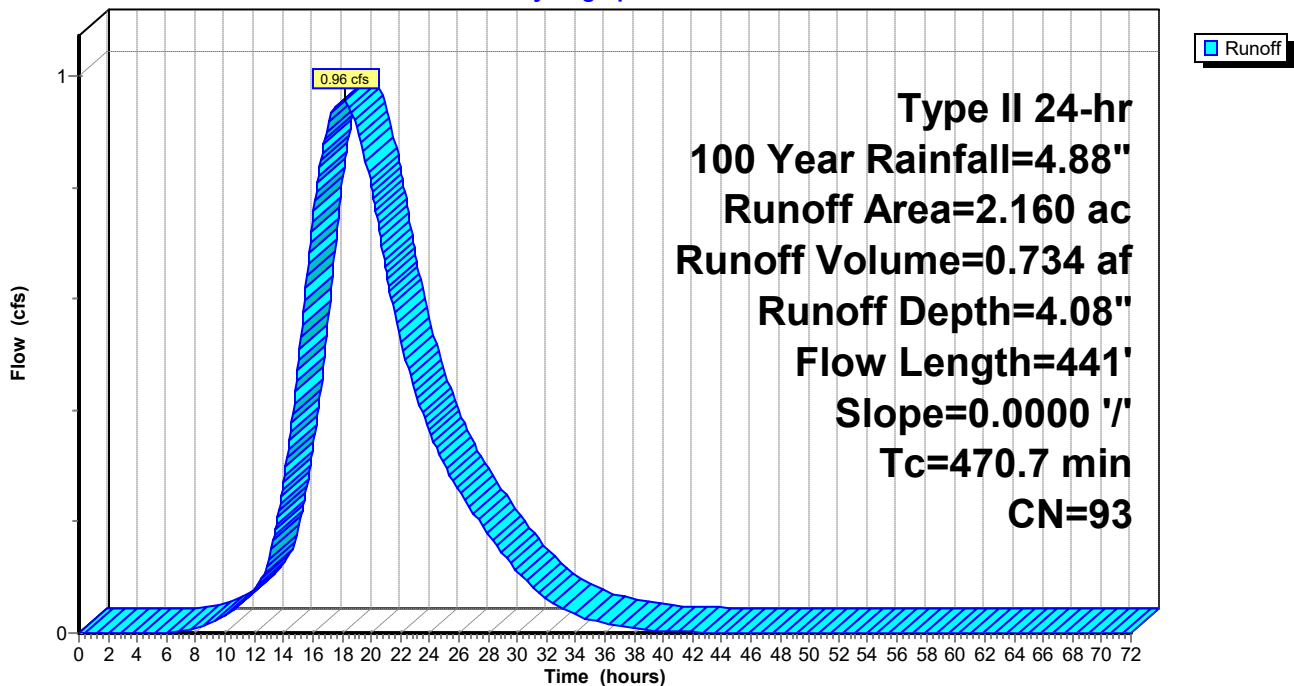
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 2.160	93	
2.160		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
153.7	20	0.0000	0.00		Sheet Flow, Smooth surfaces Smooth surfaces n= 0.400 P2= 2.08"
317.0	421	0.0000	0.02		Shallow Concentrated Flow, Short Grass Pasture Short Grass Pasture Kv= 7.0 fps
470.7	441	Total			

Subcatchment 46S: DA-40

Hydrograph



Summary for Subcatchment 47S: DA-39

Runoff = 1.54 cfs @ 18.12 hrs, Volume= 1.170 af, Depth= 3.97"
 Routed to Link 45L : DP-39

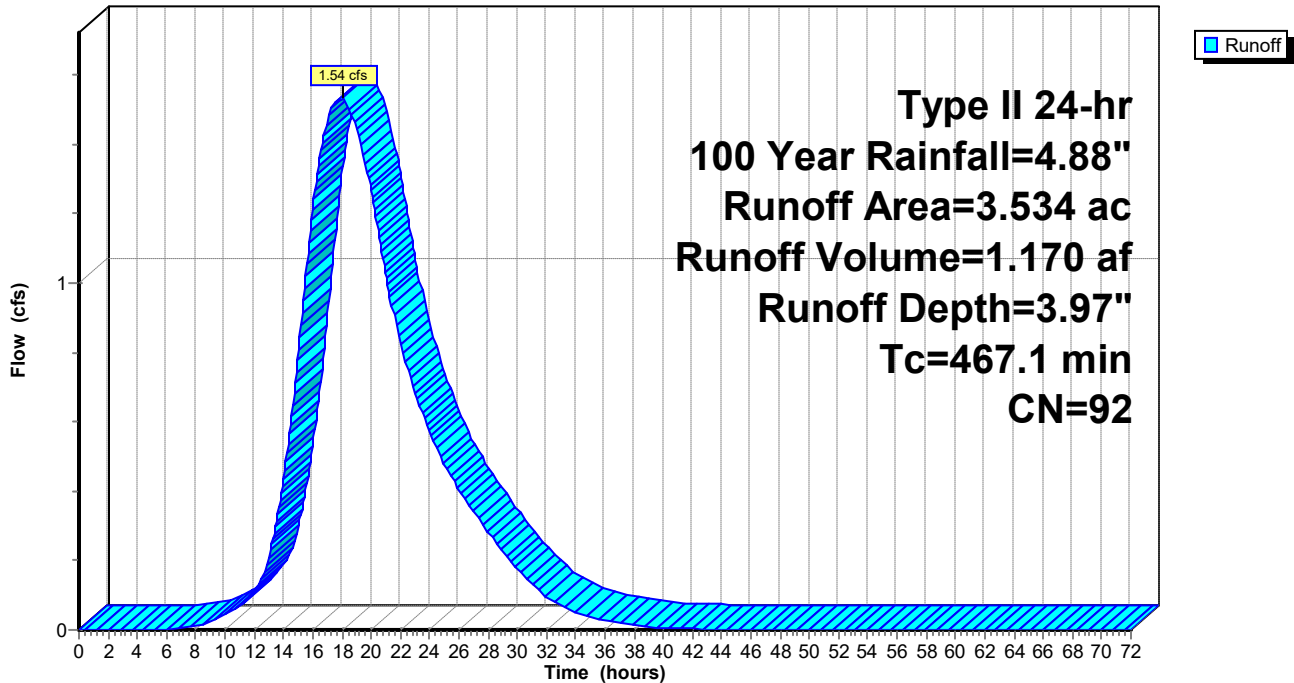
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 3.534	92	
3.534		100.00% Pervious Area

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

Subcatchment 47S: DA-39

Hydrograph



Summary for Subcatchment 48S: DA-38

Runoff = 13.38 cfs @ 12.07 hrs, Volume= 0.881 af, Depth= 3.26"
 Routed to Pond 3P : P-38

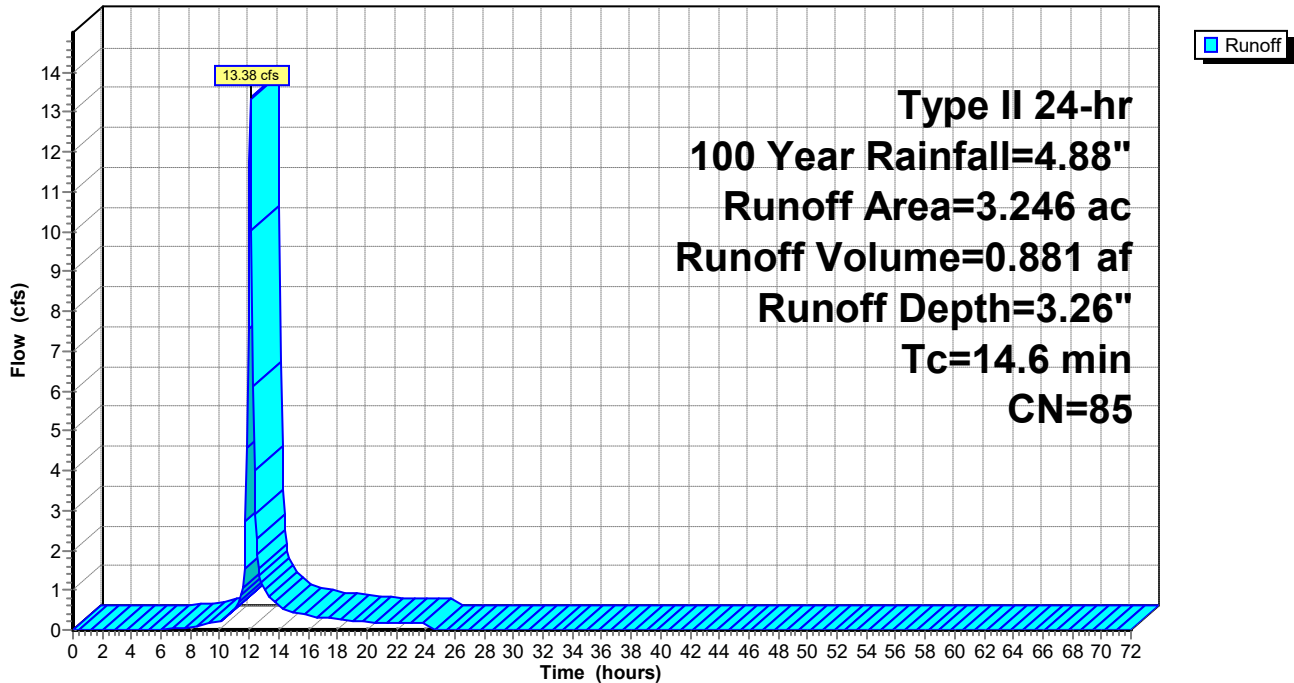
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Type II 24-hr 100 Year Rainfall=4.88"

Area (ac)	CN	Description
* 3.246	85	
3.246		100.00% Pervious Area

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

Subcatchment 48S: DA-38

Hydrograph



Summary for Pond 1P: P-30

Inflow Area = 36.187 ac, 0.00% Impervious, Inflow Depth = 3.16" for 100 Year event
 Inflow = 50.47 cfs @ 12.84 hrs, Volume= 9.532 af
 Outflow = 12.79 cfs @ 14.31 hrs, Volume= 9.501 af, Atten= 75%, Lag= 88.1 min
 Primary = 12.79 cfs @ 14.31 hrs, Volume= 9.501 af
 Routed to Link 39L : DP-30

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Starting Elev= 290.00' Surf.Area= 0.871 ac Storage= 0.000 af
 Peak Elev= 294.42' @ 14.31 hrs Surf.Area= 1.100 ac Storage= 4.528 af

Plug-Flow detention time= 225.7 min calculated for 9.501 af (100% of inflow)
 Center-of-Mass det. time= 223.5 min (1,098.4 - 874.8)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	6.283 af	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
290.00	0.871	0.000	0.000
291.00	0.986	0.928	0.928
292.00	1.033	1.009	1.938
293.00	1.065	1.049	2.987
294.00	1.092	1.078	4.065
295.00	1.110	1.101	5.166
296.00	1.124	1.117	6.283

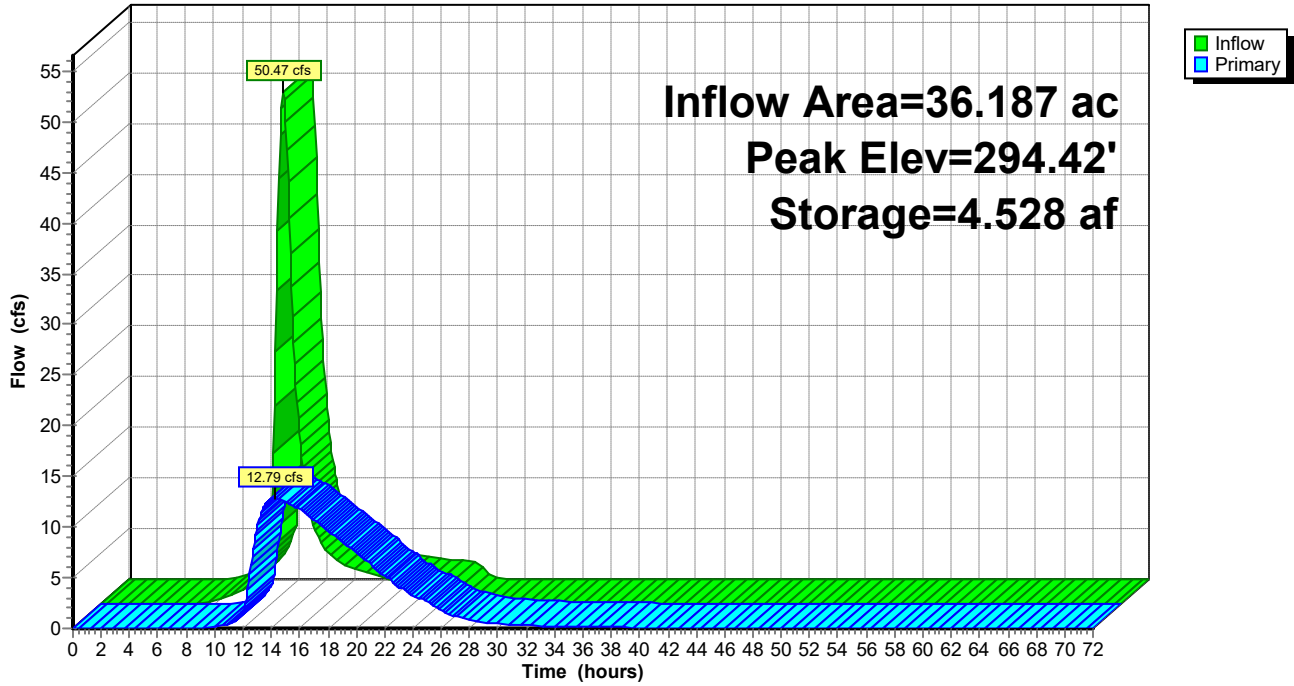
Device	Routing	Invert	Outlet Devices
#1	Primary	290.00'	15.0" Round Culvert L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 290.00' / 288.00' S= 0.0500 '/' Cc= 1.000 n= 0.015, Flow Area= 1.23 sf
#2	Primary	294.00'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) Coef. (English)

Primary OutFlow Max=12.79 cfs @ 14.31 hrs HW=294.42' (Free Discharge)

- 1=Culvert (Inlet Controls 12.79 cfs @ 10.42 fps)
- 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 1P: P-30

Hydrograph



Summary for Pond 2P: P-37

Inflow Area = 14.519 ac, 0.00% Impervious, Inflow Depth = 3.36" for 100 Year event
 Inflow = 12.00 cfs @ 14.00 hrs, Volume= 4.059 af
 Outflow = 7.90 cfs @ 15.17 hrs, Volume= 4.057 af, Atten= 34%, Lag= 70.0 min
 Primary = 7.90 cfs @ 15.17 hrs, Volume= 4.057 af
 Routed to Link 43L : DP-37

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Starting Elev= 290.00' Surf.Area= 0.491 ac Storage= 0.000 af
 Peak Elev= 292.07' @ 15.17 hrs Surf.Area= 0.577 ac Storage= 1.109 af

Plug-Flow detention time= 122.7 min calculated for 4.057 af (100% of inflow)
 Center-of-Mass det. time= 122.2 min (1,073.8 - 951.6)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	6.076 af	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
290.00	0.491	0.000	0.000
290.50	0.512	0.251	0.251
291.00	0.534	0.261	0.512
291.50	0.554	0.272	0.784
292.00	0.574	0.282	1.066
292.50	0.594	0.292	1.358
293.00	0.614	0.302	1.660
293.50	0.634	0.312	1.972
294.00	0.653	0.322	2.294
294.50	0.672	0.331	2.625
295.00	0.690	0.340	2.966
295.50	0.705	0.349	3.314
296.00	0.719	0.356	3.670
296.50	0.732	0.363	4.033
297.00	0.745	0.369	4.402
297.50	0.758	0.376	4.778
298.00	0.769	0.382	5.160
298.50	0.777	0.386	5.546
299.00	0.779	0.389	5.935
299.18	0.779	0.140	6.076

Device	Routing	Invert	Outlet Devices
#1	Primary	290.00'	15.0" Round Culvert L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 290.00' / 288.00' S= 0.0500 '/' Cc= 1.000 n= 0.015, Flow Area= 1.23 sf
#2	Primary	298.00'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) Coef. (English)

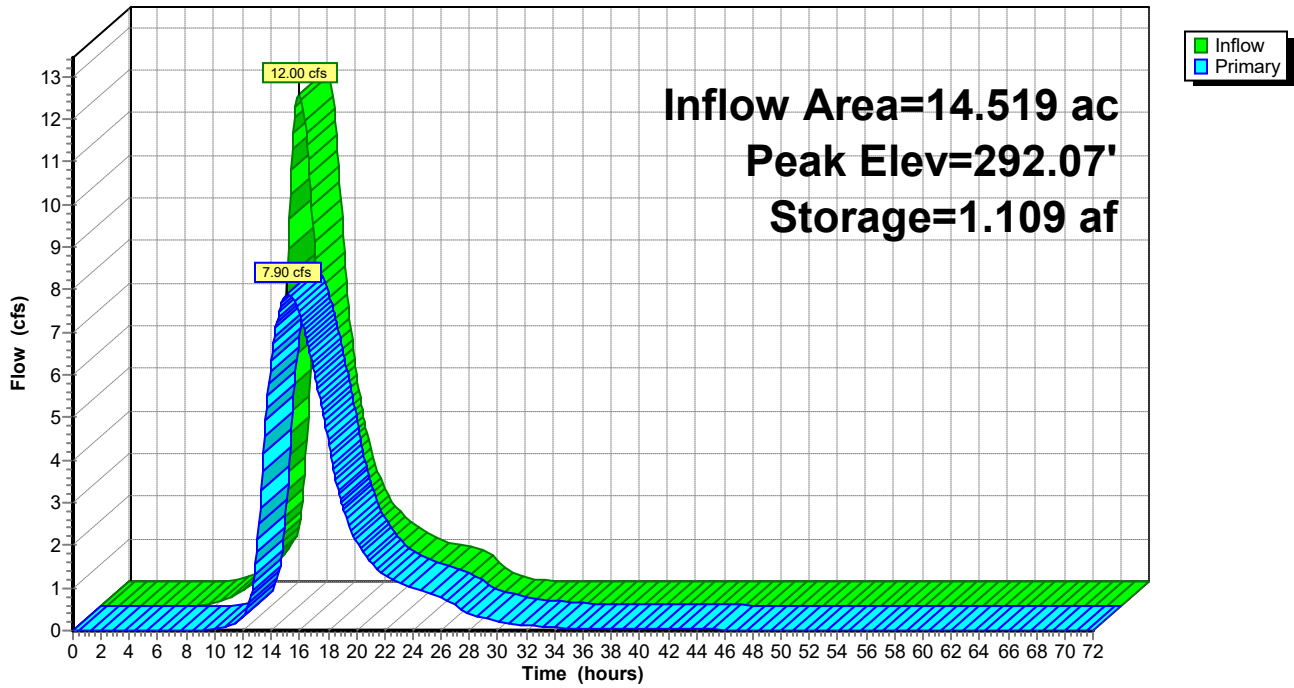
Primary OutFlow Max=7.90 cfs @ 15.17 hrs HW=292.07' (Free Discharge)

1=Culvert (Inlet Controls 7.90 cfs @ 6.44 fps)

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

Pond 2P: P-37

Hydrograph



Summary for Pond 3P: P-38

Inflow Area = 3.246 ac, 0.00% Impervious, Inflow Depth = 3.26" for 100 Year event
 Inflow = 13.38 cfs @ 12.07 hrs, Volume= 0.881 af
 Outflow = 6.18 cfs @ 12.25 hrs, Volume= 0.881 af, Atten= 54%, Lag= 11.2 min
 Primary = 6.18 cfs @ 12.25 hrs, Volume= 0.881 af
 Routed to Link 44L : DP-38

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Starting Elev= 292.00' Surf.Area= 0.161 ac Storage= 0.000 af
 Peak Elev= 293.51' @ 12.25 hrs Surf.Area= 0.191 ac Storage= 0.266 af

Plug-Flow detention time= 62.6 min calculated for 0.881 af (100% of inflow)
 Center-of-Mass det. time= 61.8 min (875.2 - 813.4)

Volume	Invert	Avail.Storage	Storage Description
#1	292.00'	1.609 af	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
292.00	0.161	0.000	0.000
292.50	0.171	0.083	0.083
293.00	0.181	0.088	0.171
293.50	0.191	0.093	0.264
294.00	0.201	0.098	0.362
294.50	0.211	0.103	0.465
295.00	0.221	0.108	0.573
295.50	0.232	0.113	0.686
296.00	0.243	0.119	0.805
296.50	0.254	0.124	0.929
297.00	0.262	0.129	1.058
297.50	0.268	0.132	1.191
298.00	0.271	0.135	1.325
298.50	0.273	0.136	1.461
299.00	0.274	0.137	1.598
299.04	0.274	0.011	1.609

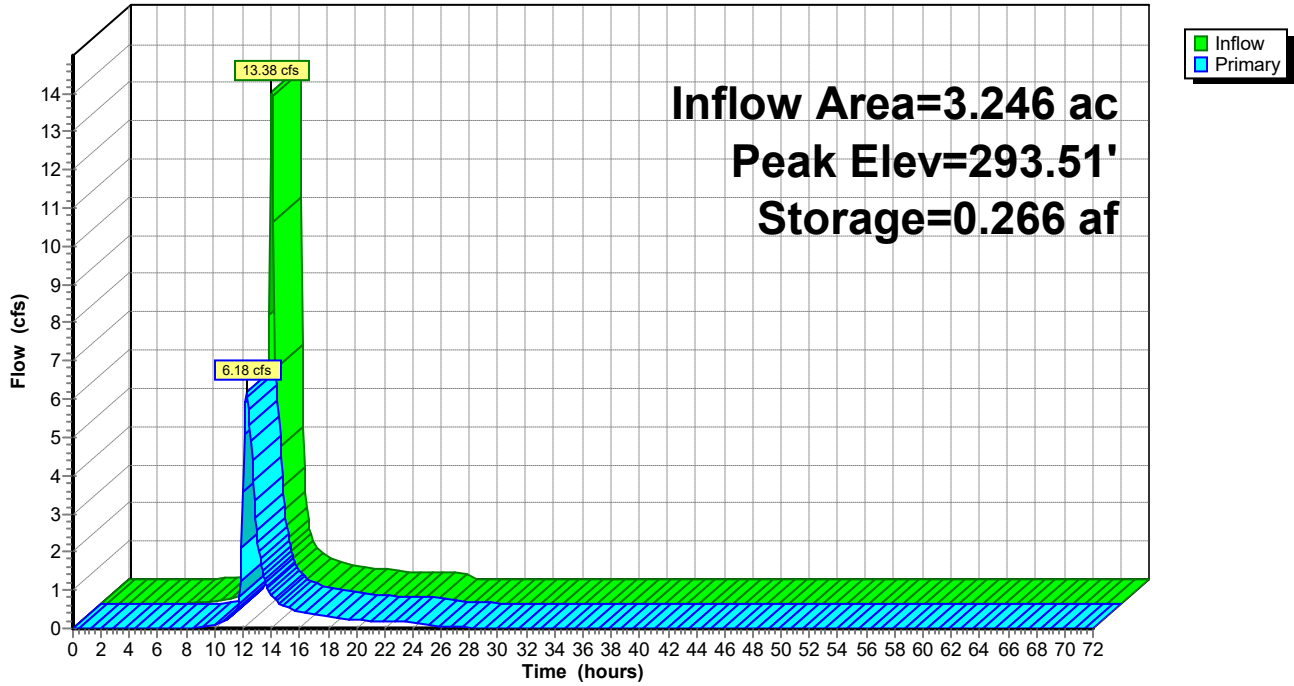
Device	Routing	Invert	Outlet Devices
#1	Primary	292.00'	15.0" Round Culvert L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 292.00' / 90.00' S= 5.0500 '/ Cc= 1.000 n= 0.015, Flow Area= 1.23 sf
#2	Primary	298.00'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) Coef. (English)

Primary OutFlow Max=6.16 cfs @ 12.25 hrs HW=293.51' (Free Discharge)

- 1=Culvert (Inlet Controls 6.16 cfs @ 5.02 fps)
- 2=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 3P: P-38

Hydrograph



Summary for Pond 4P: P-41

Inflow Area = 52.858 ac, 0.00% Impervious, Inflow Depth = 4.19" for 100 Year event
 Inflow = 73.89 cfs @ 13.20 hrs, Volume= 18.455 af
 Outflow = 14.27 cfs @ 15.55 hrs, Volume= 18.455 af, Atten= 81%, Lag= 141.4 min
 Primary = 14.27 cfs @ 15.55 hrs, Volume= 18.455 af
 Routed to Link 47L : DP-41

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs
 Starting Elev= 290.00' Surf.Area= 0.009 ac Storage= 0.000 af
 Peak Elev= 295.35' @ 15.55 hrs Surf.Area= 2.260 ac Storage= 9.778 af

Plug-Flow detention time= 355.9 min calculated for 18.455 af (100% of inflow)
 Center-of-Mass det. time= 354.9 min (1,220.0 - 865.0)

Volume	Invert	Avail.Storage	Storage Description
#1	290.00'	21.186 af	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
290.00	0.009	0.000	0.000
290.50	0.576	0.146	0.146
291.00	1.873	0.612	0.758
291.50	1.922	0.949	1.707
292.00	1.972	0.973	2.681
292.50	2.018	0.997	3.678
293.00	2.063	1.020	4.698
293.50	2.107	1.042	5.741
294.00	2.150	1.064	6.805
294.50	2.191	1.085	7.890
295.00	2.232	1.106	8.996
295.50	2.272	1.126	10.122
296.00	2.313	1.146	11.268
296.50	2.353	1.166	12.435
297.00	2.394	1.187	13.622
297.50	2.435	1.207	14.829
298.00	2.476	1.228	16.057
298.50	2.520	1.249	17.306
299.00	2.563	1.271	18.576
299.50	2.610	1.293	19.870
300.00	2.657	1.317	21.186

Device	Routing	Invert	Outlet Devices
#1	Primary	290.00'	15.0" Round Culvert L= 40.0' Ke= 0.500 Inlet / Outlet Invert= 290.00' / 288.00' S= 0.0500 '/' Cc= 1.000 n= 0.015, Flow Area= 1.23 sf
#2	Primary	298.00'	10.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) Coef. (English)

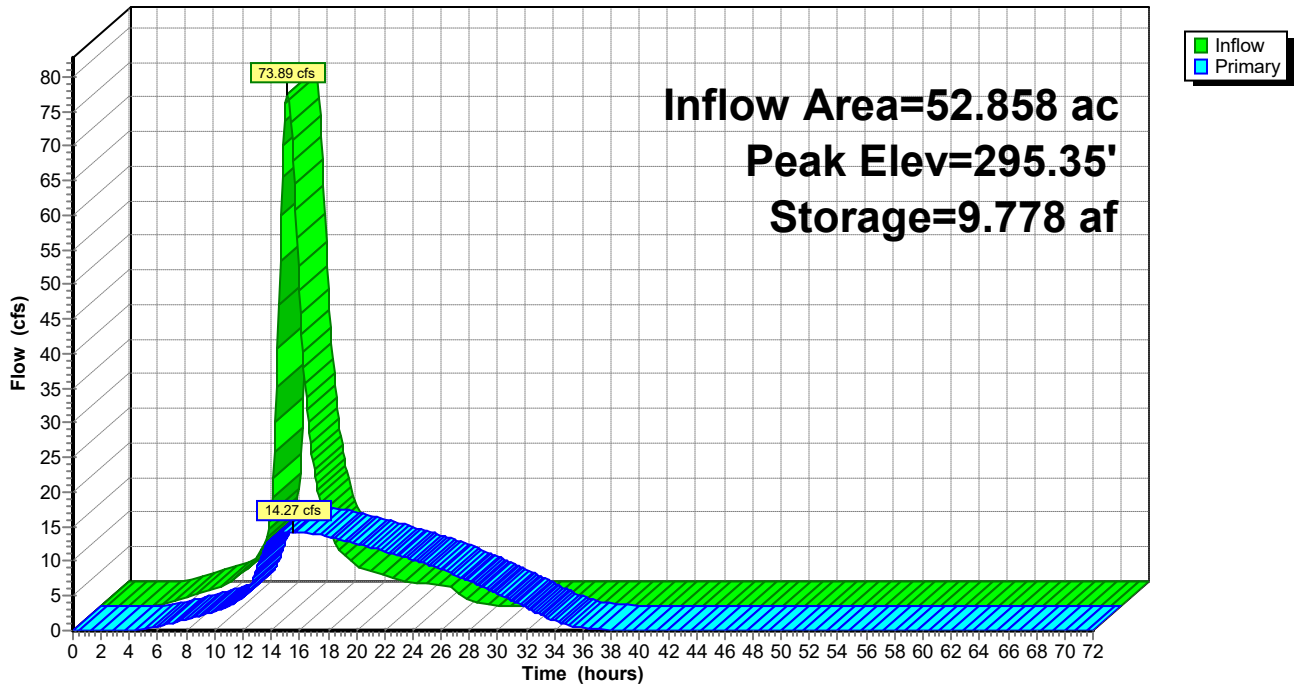
Primary OutFlow Max=14.27 cfs @ 15.55 hrs HW=295.35' (Free Discharge)

1=Culvert (Inlet Controls 14.27 cfs @ 11.63 fps)

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

Pond 4P: P-41

Hydrograph



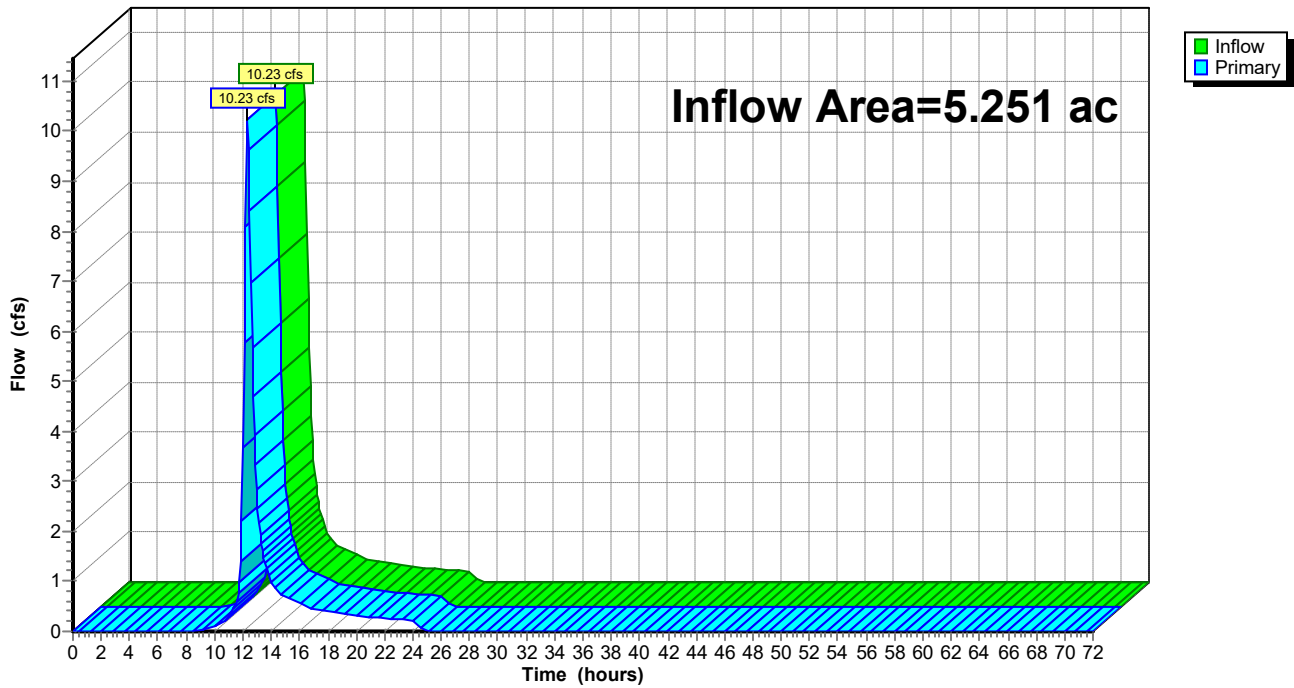
Summary for Link 1L: DP-49

Inflow Area = 5.251 ac, 0.00% Impervious, Inflow Depth = 2.52" for 100 Year event
Inflow = 10.23 cfs @ 12.32 hrs, Volume= 1.104 af
Primary = 10.23 cfs @ 12.32 hrs, Volume= 1.104 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 1L: DP-49

Hydrograph



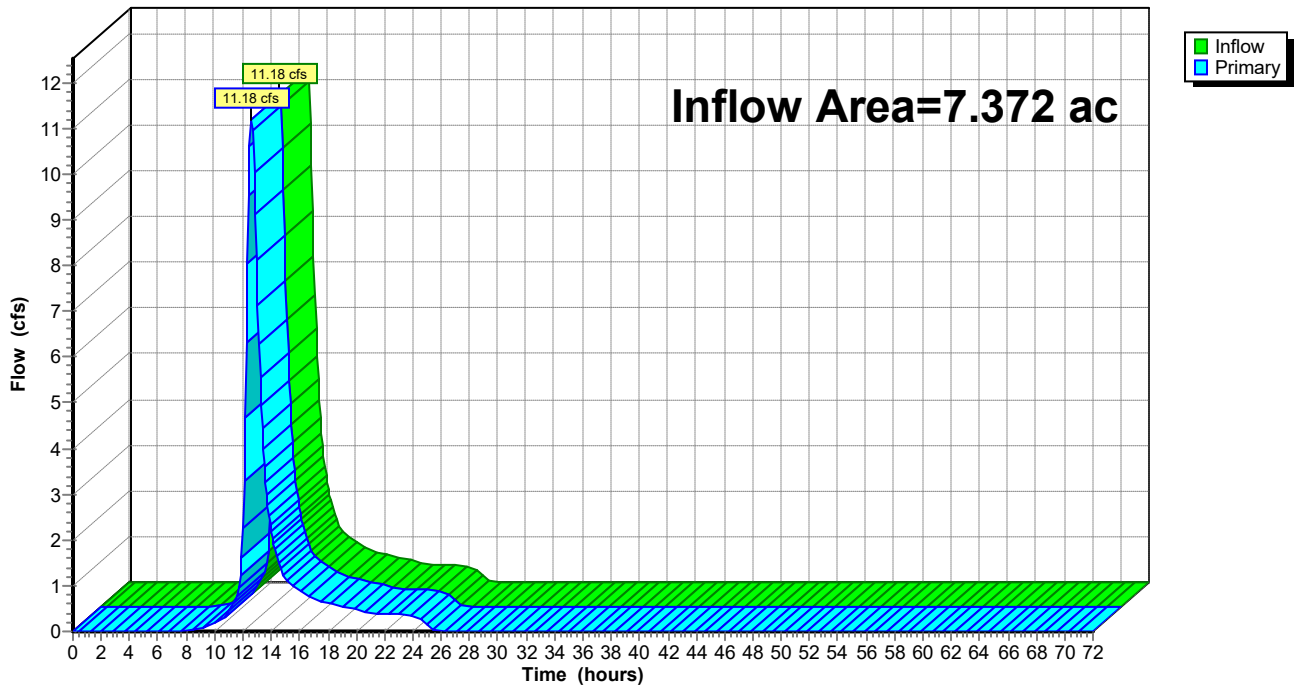
Summary for Link 2L: DP-48

Inflow Area = 7.372 ac, 0.00% Impervious, Inflow Depth = 2.79" for 100 Year event
Inflow = 11.18 cfs @ 12.60 hrs, Volume= 1.713 af
Primary = 11.18 cfs @ 12.60 hrs, Volume= 1.713 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 2L: DP-48

Hydrograph



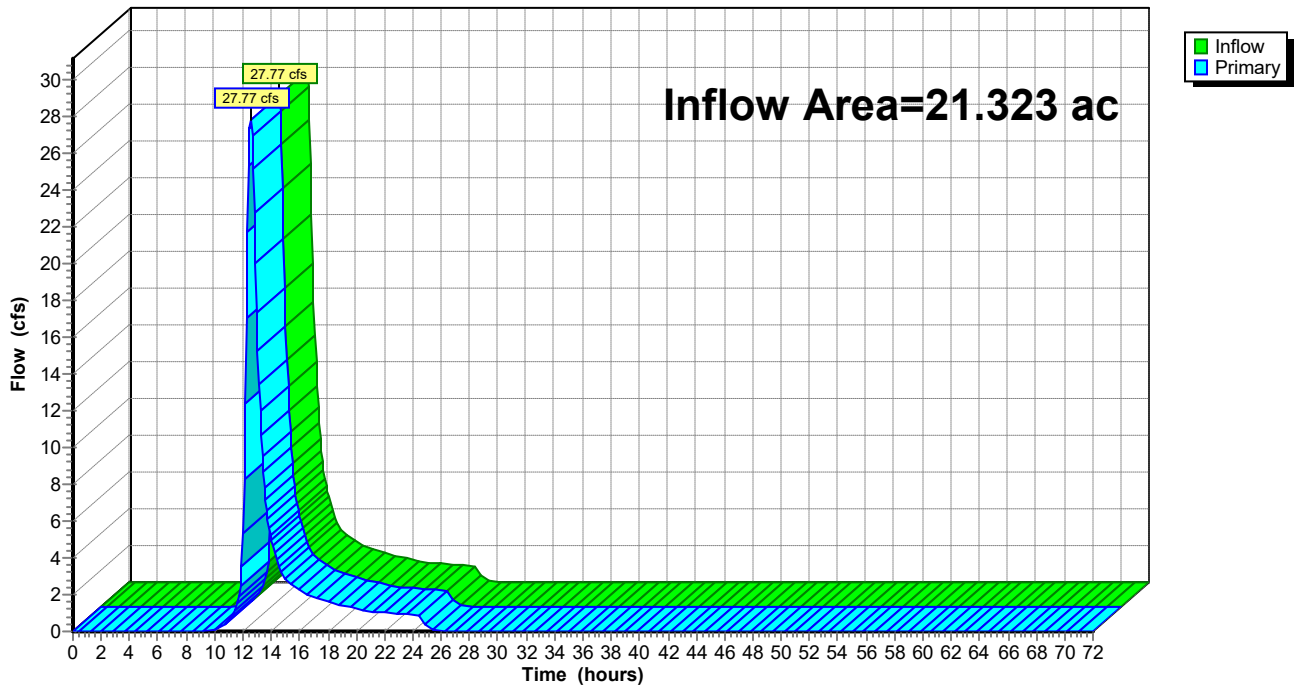
Summary for Link 3L: DP-50

Inflow Area = 21.323 ac, 0.00% Impervious, Inflow Depth = 2.27" for 100 Year event
Inflow = 27.77 cfs @ 12.55 hrs, Volume= 4.032 af
Primary = 27.77 cfs @ 12.55 hrs, Volume= 4.032 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 3L: DP-50

Hydrograph



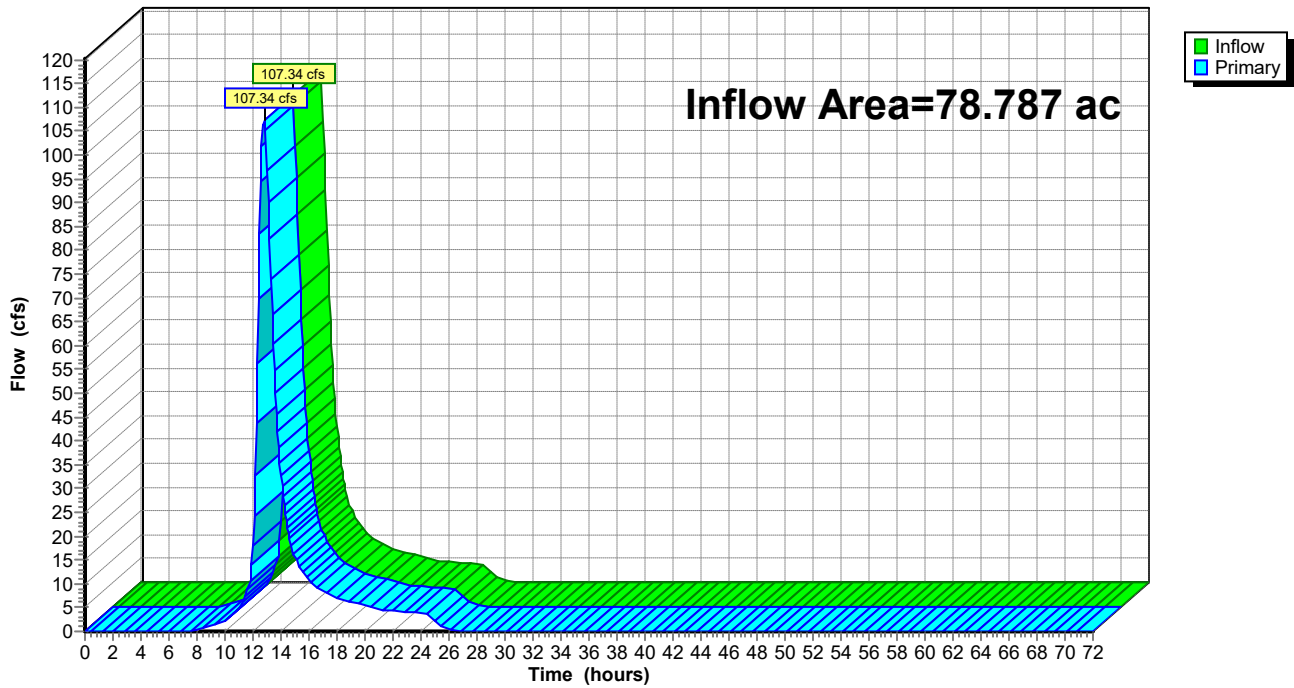
Summary for Link 4L: DP-46

Inflow Area = 78.787 ac, 0.00% Impervious, Inflow Depth = 2.97" for 100 Year event
Inflow = 107.34 cfs @ 12.80 hrs, Volume= 19.513 af
Primary = 107.34 cfs @ 12.80 hrs, Volume= 19.513 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 4L: DP-46

Hydrograph



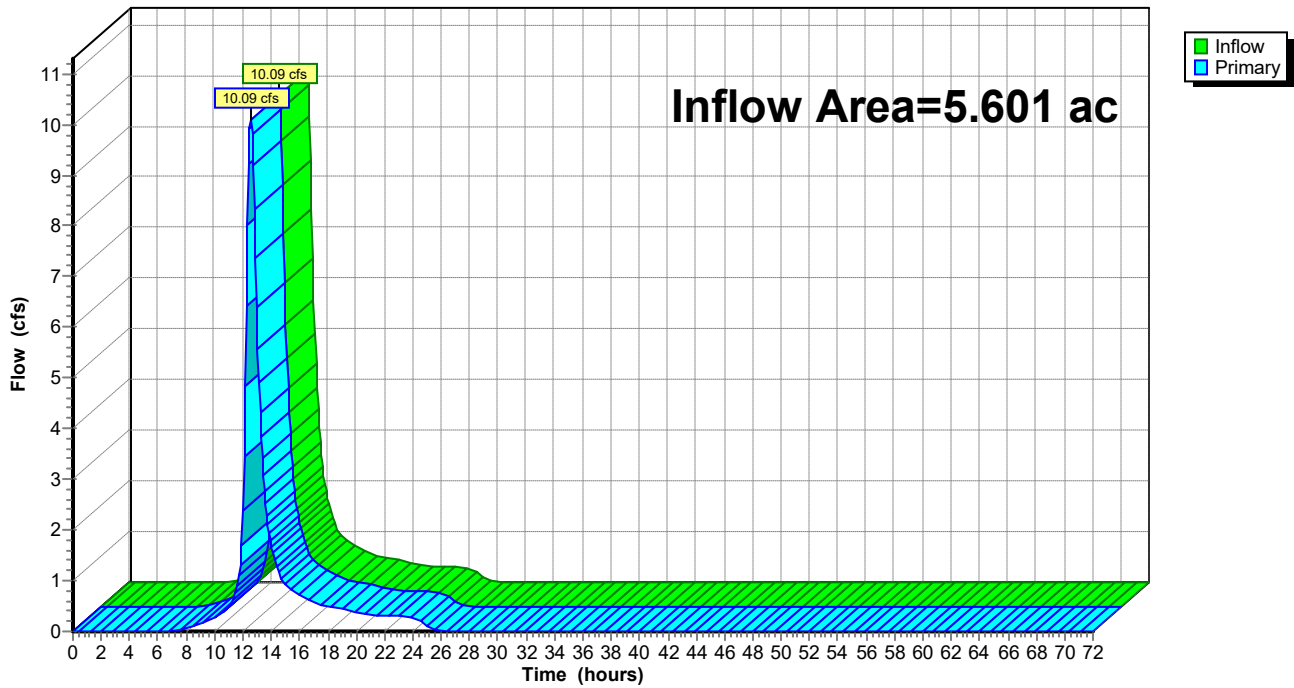
Summary for Link 5L: DP-47

Inflow Area = 5.601 ac, 0.00% Impervious, Inflow Depth = 3.16" for 100 Year event
Inflow = 10.09 cfs @ 12.55 hrs, Volume= 1.475 af
Primary = 10.09 cfs @ 12.55 hrs, Volume= 1.475 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 5L: DP-47

Hydrograph



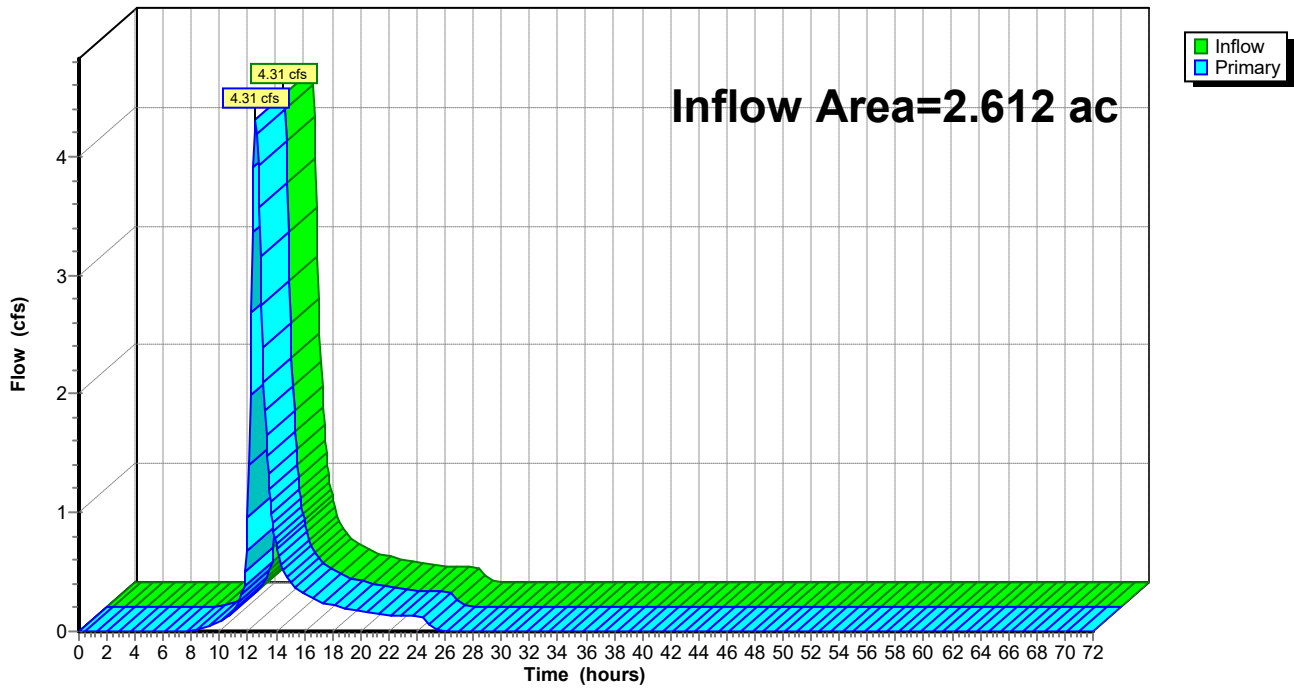
Summary for Link 6L: DP-45

Inflow Area = 2.612 ac, 0.00% Impervious, Inflow Depth = 2.88" for 100 Year event
Inflow = 4.31 cfs @ 12.55 hrs, Volume= 0.627 af
Primary = 4.31 cfs @ 12.55 hrs, Volume= 0.627 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 6L: DP-45

Hydrograph



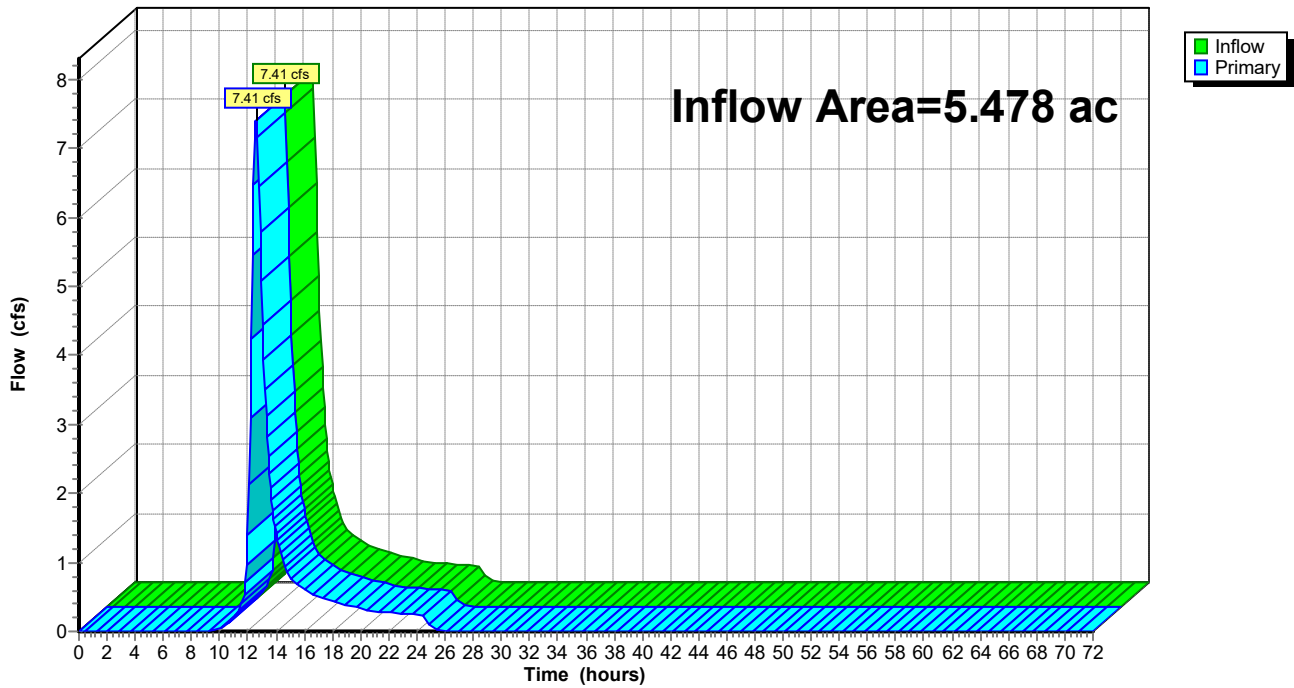
Summary for Link 7L: DP-43

Inflow Area = 5.478 ac, 0.00% Impervious, Inflow Depth = 2.44" for 100 Year event
Inflow = 7.41 cfs @ 12.58 hrs, Volume= 1.112 af
Primary = 7.41 cfs @ 12.58 hrs, Volume= 1.112 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 7L: DP-43

Hydrograph



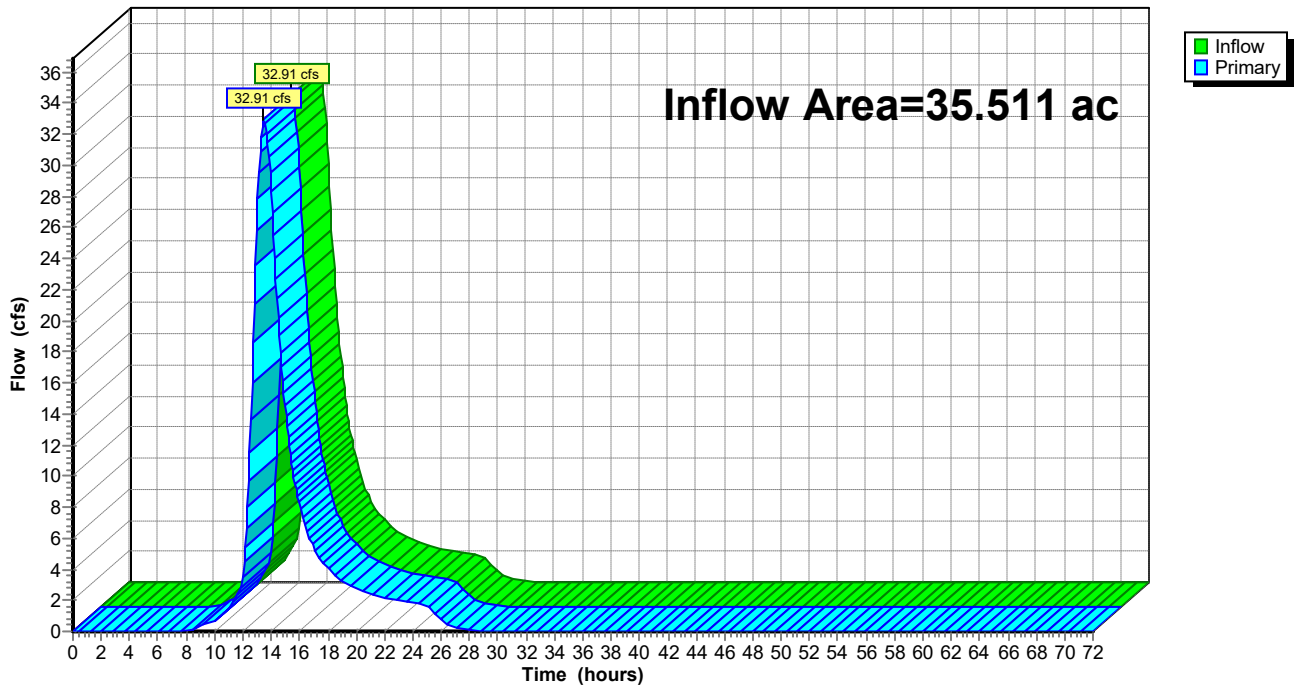
Summary for Link 8L: DP-44

Inflow Area = 35.511 ac, 0.00% Impervious, Inflow Depth = 3.07" for 100 Year event
Inflow = 32.91 cfs @ 13.48 hrs, Volume= 9.072 af
Primary = 32.91 cfs @ 13.48 hrs, Volume= 9.072 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 8L: DP-44

Hydrograph



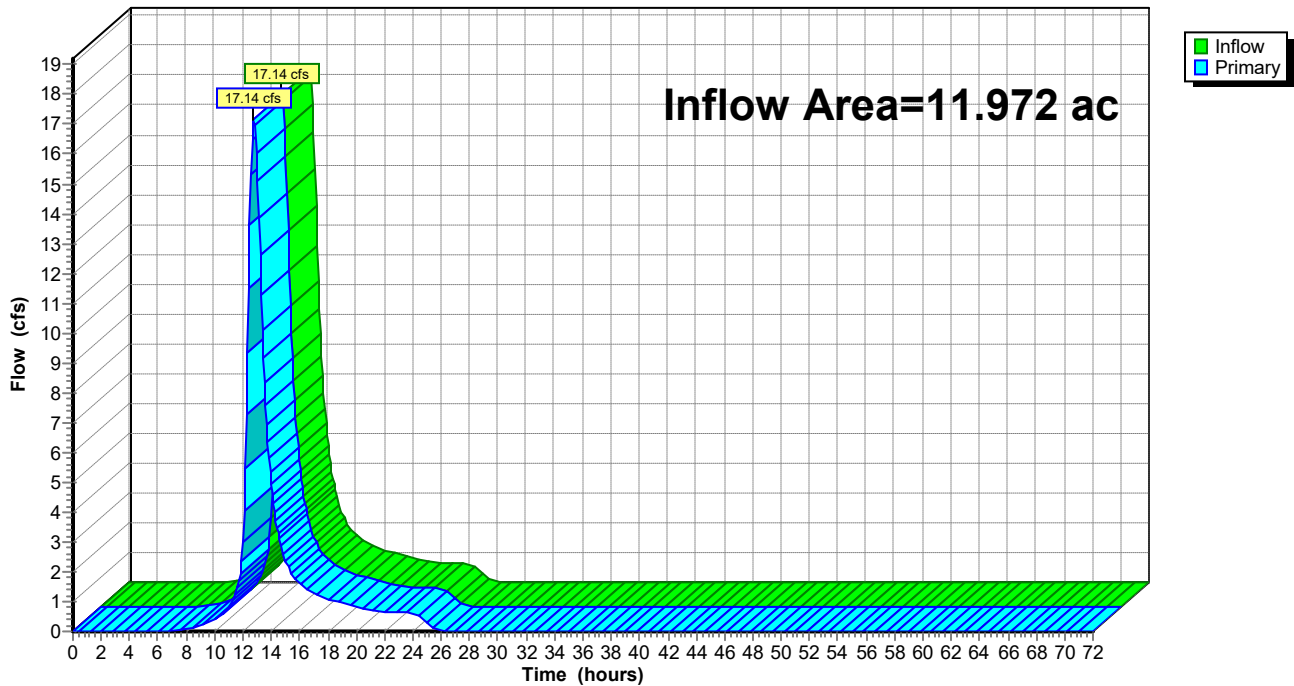
Summary for Link 9L: DP-51

Inflow Area = 11.972 ac, 0.00% Impervious, Inflow Depth = 3.07" for 100 Year event
Inflow = 17.14 cfs @ 12.77 hrs, Volume= 3.059 af
Primary = 17.14 cfs @ 12.77 hrs, Volume= 3.059 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 9L: DP-51

Hydrograph



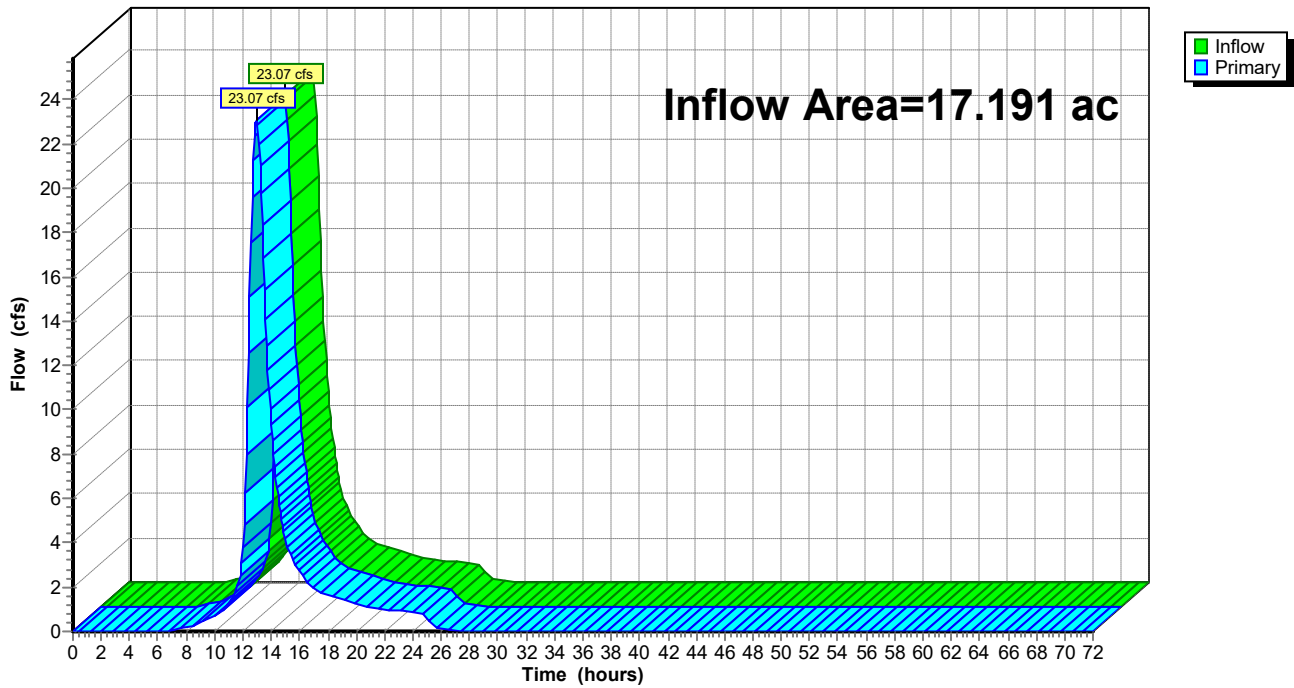
Summary for Link 10L: DP-52

Inflow Area = 17.191 ac, 0.00% Impervious, Inflow Depth = 3.26" for 100 Year event
Inflow = 23.07 cfs @ 12.94 hrs, Volume= 4.666 af
Primary = 23.07 cfs @ 12.94 hrs, Volume= 4.666 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 10L: DP-52

Hydrograph



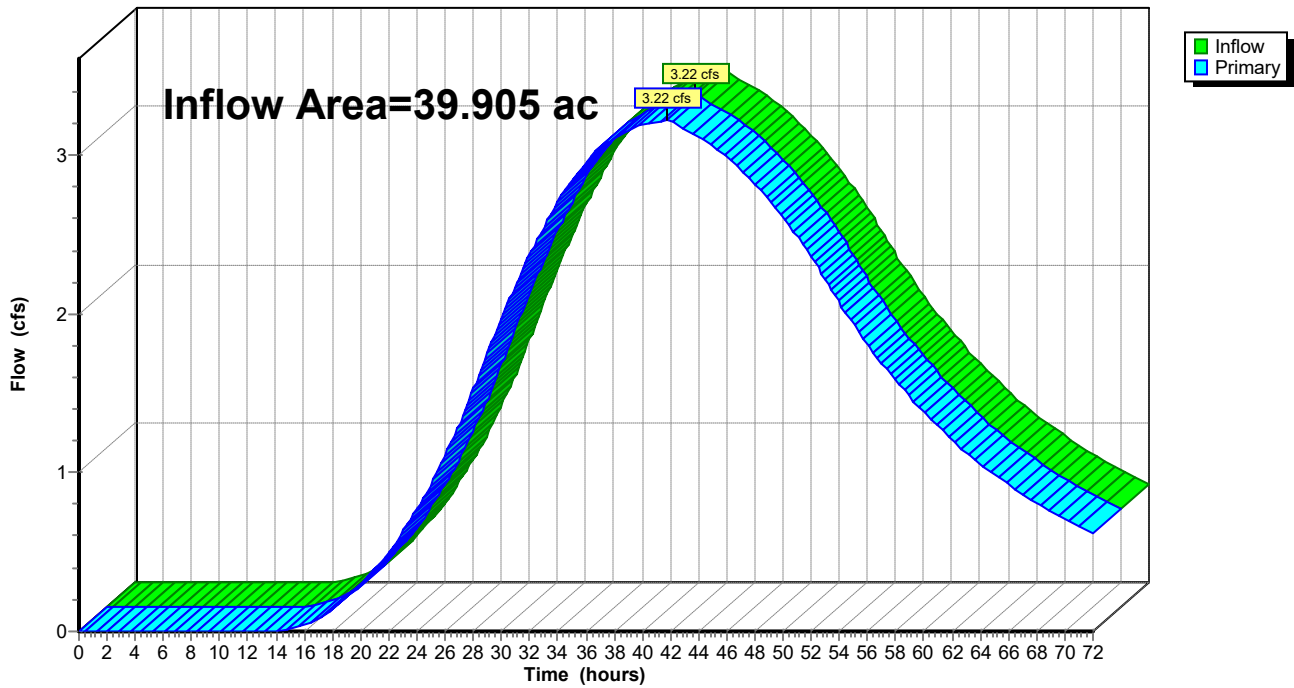
Summary for Link 11L: DP-34

Inflow Area = 39.905 ac, 0.00% Impervious, Inflow Depth > 2.47" for 100 Year event
Inflow = 3.22 cfs @ 41.77 hrs, Volume= 8.210 af
Primary = 3.22 cfs @ 41.77 hrs, Volume= 8.210 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 11L: DP-34

Hydrograph



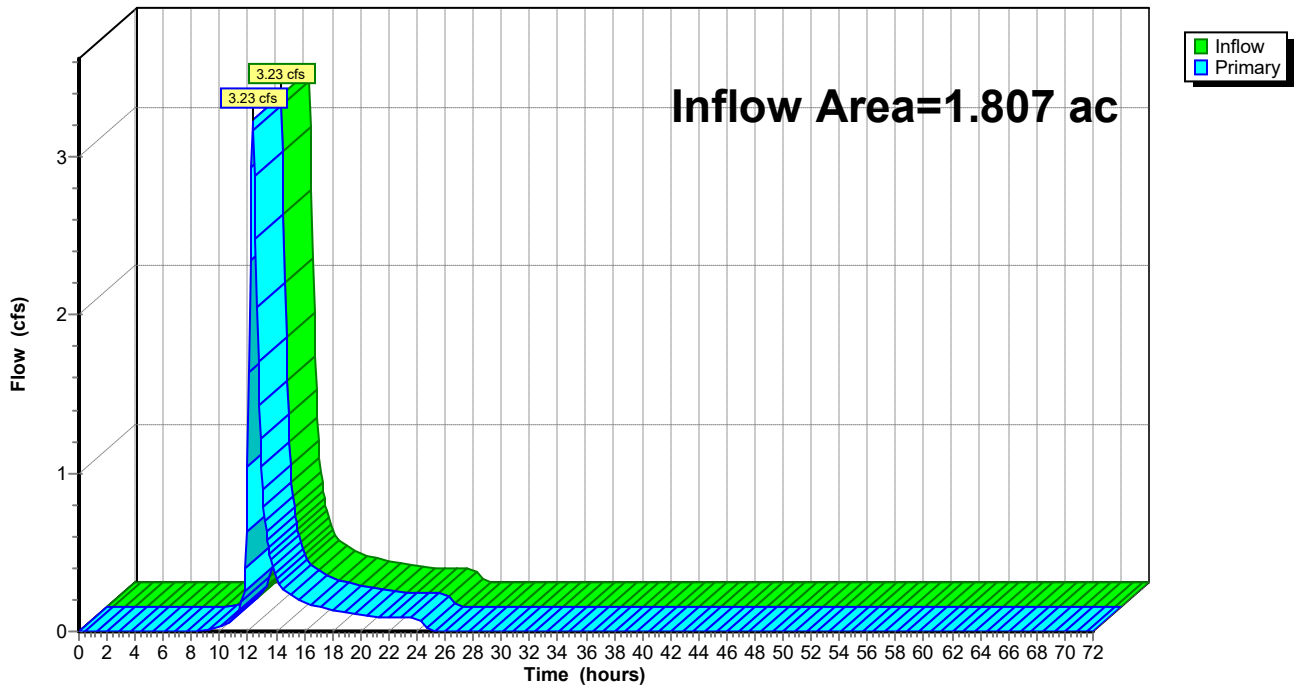
Summary for Link 12L: DP-3

Inflow Area = 1.807 ac, 0.00% Impervious, Inflow Depth = 2.44" for 100 Year event
Inflow = 3.23 cfs @ 12.35 hrs, Volume= 0.367 af
Primary = 3.23 cfs @ 12.35 hrs, Volume= 0.367 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 12L: DP-3

Hydrograph



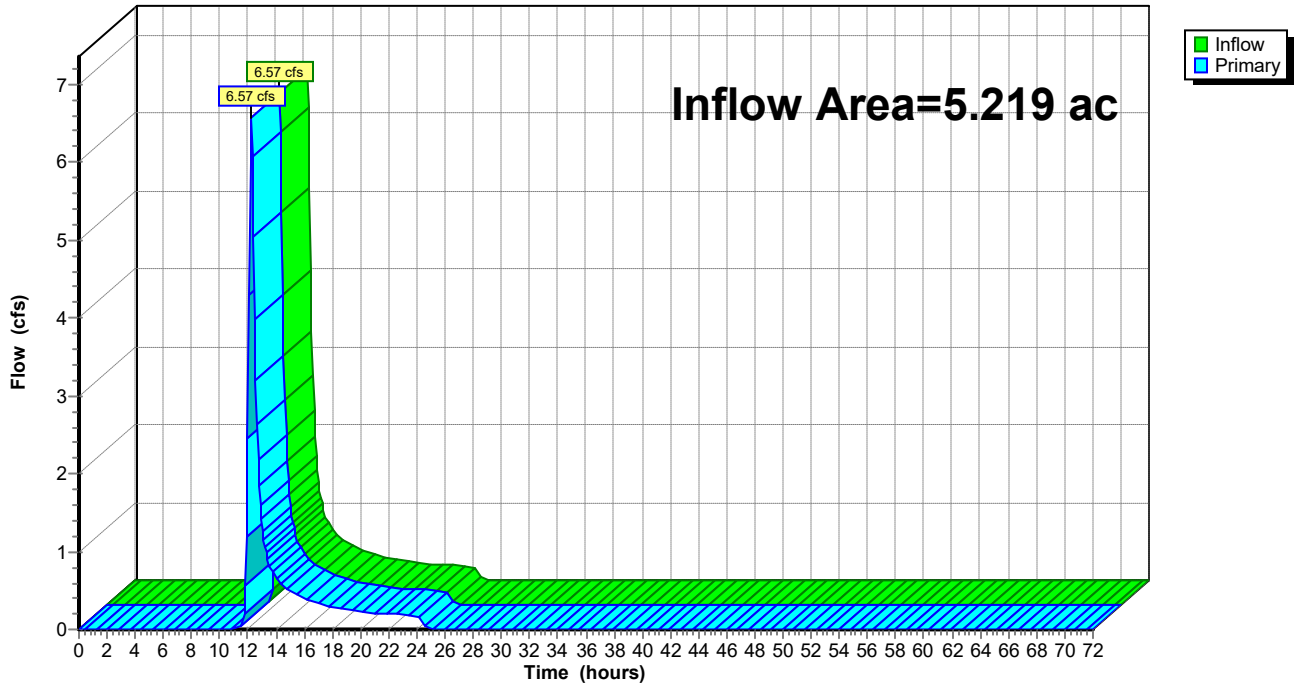
Summary for Link 13L: DP-1

Inflow Area = 5.219 ac, 0.00% Impervious, Inflow Depth = 1.50" for 100 Year event
Inflow = 6.57 cfs @ 12.24 hrs, Volume= 0.654 af
Primary = 6.57 cfs @ 12.24 hrs, Volume= 0.654 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 13L: DP-1

Hydrograph



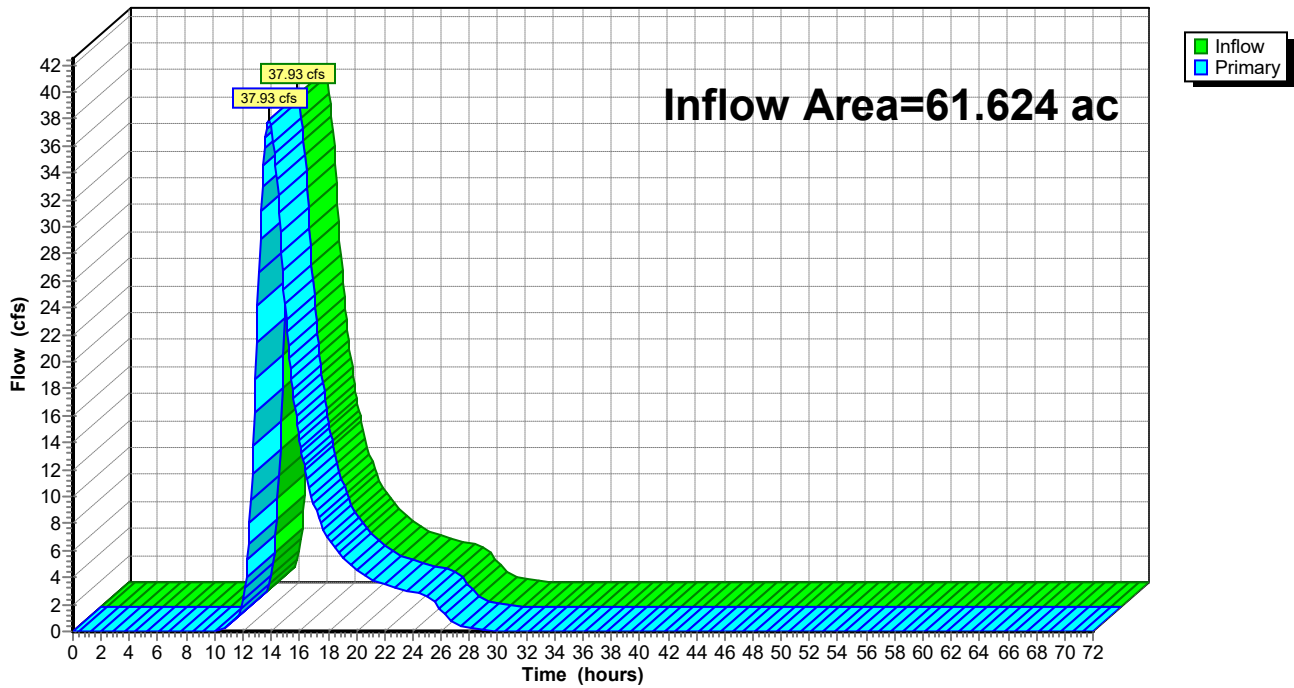
Summary for Link 14L: DP-5

Inflow Area = 61.624 ac, 0.00% Impervious, Inflow Depth = 2.35" for 100 Year event
Inflow = 37.93 cfs @ 13.87 hrs, Volume= 12.080 af
Primary = 37.93 cfs @ 13.87 hrs, Volume= 12.080 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 14L: DP-5

Hydrograph



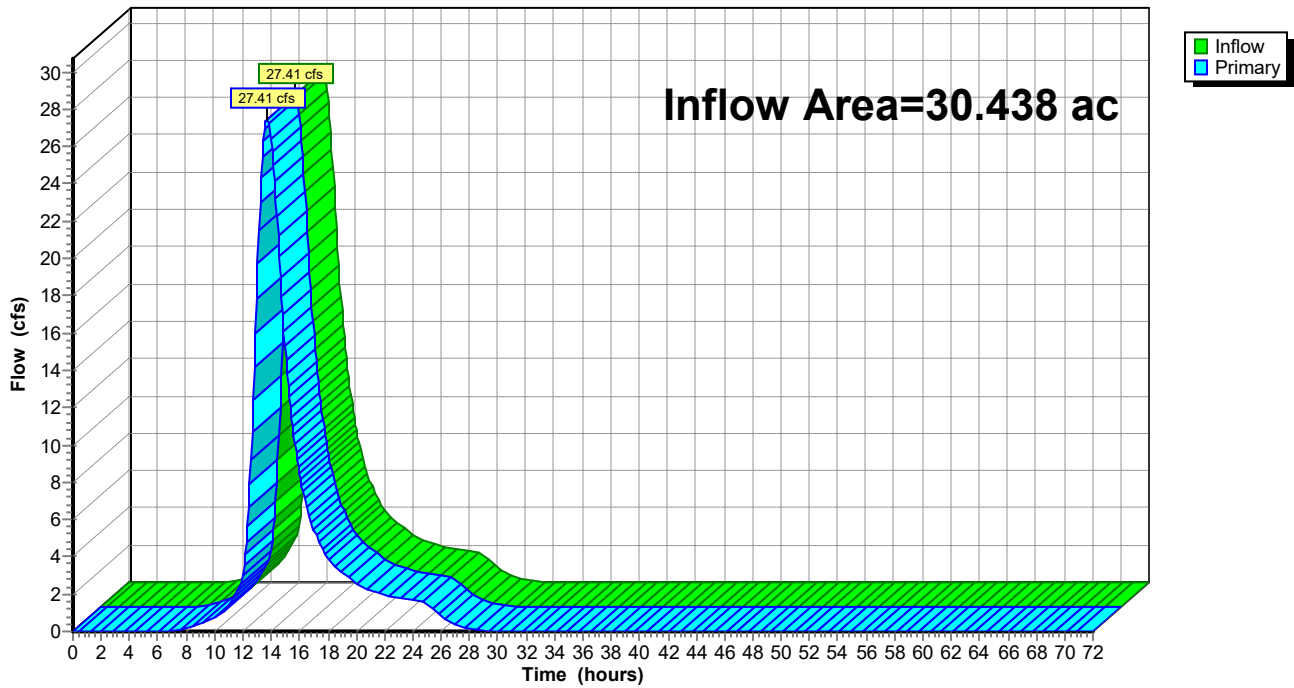
Summary for Link 15L: DP-7

Inflow Area = 30.438 ac, 0.00% Impervious, Inflow Depth = 3.26" for 100 Year event
Inflow = 27.41 cfs @ 13.71 hrs, Volume= 8.262 af
Primary = 27.41 cfs @ 13.71 hrs, Volume= 8.262 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 15L: DP-7

Hydrograph



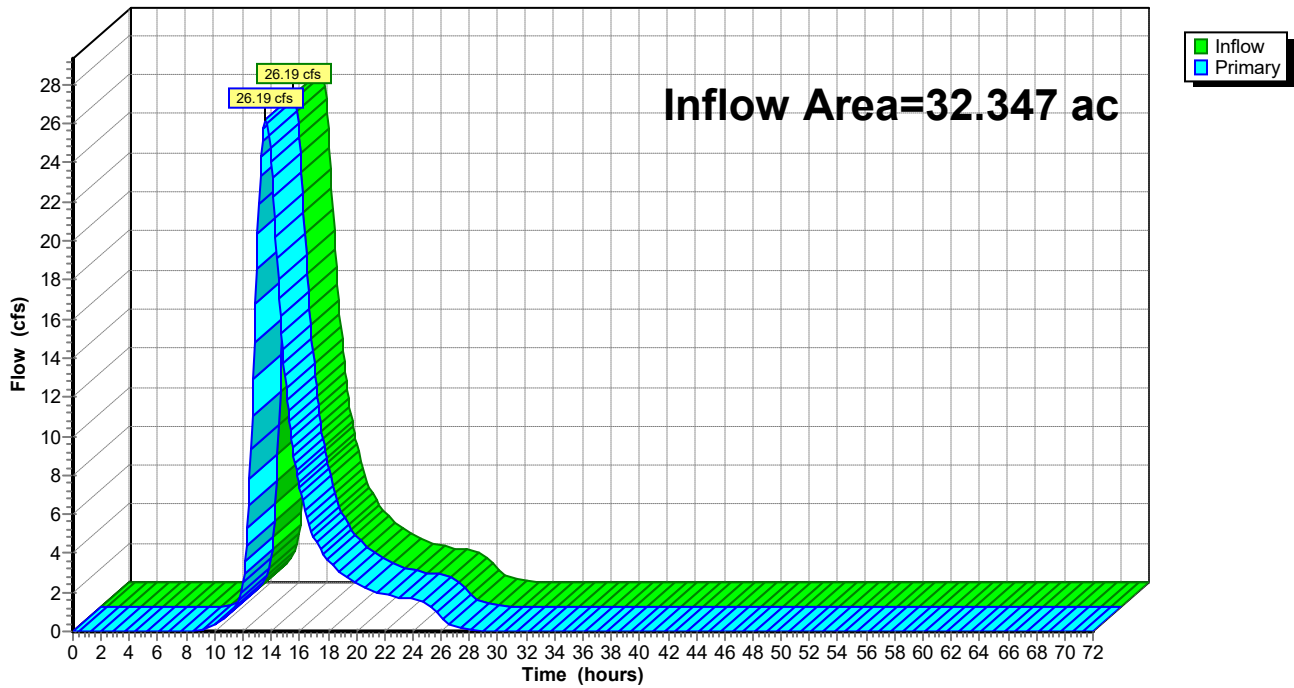
Summary for Link 16L: DP-53

Inflow Area = 32.347 ac, 0.00% Impervious, Inflow Depth = 2.79" for 100 Year event
Inflow = 26.19 cfs @ 13.56 hrs, Volume= 7.517 af
Primary = 26.19 cfs @ 13.56 hrs, Volume= 7.517 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 16L: DP-53

Hydrograph



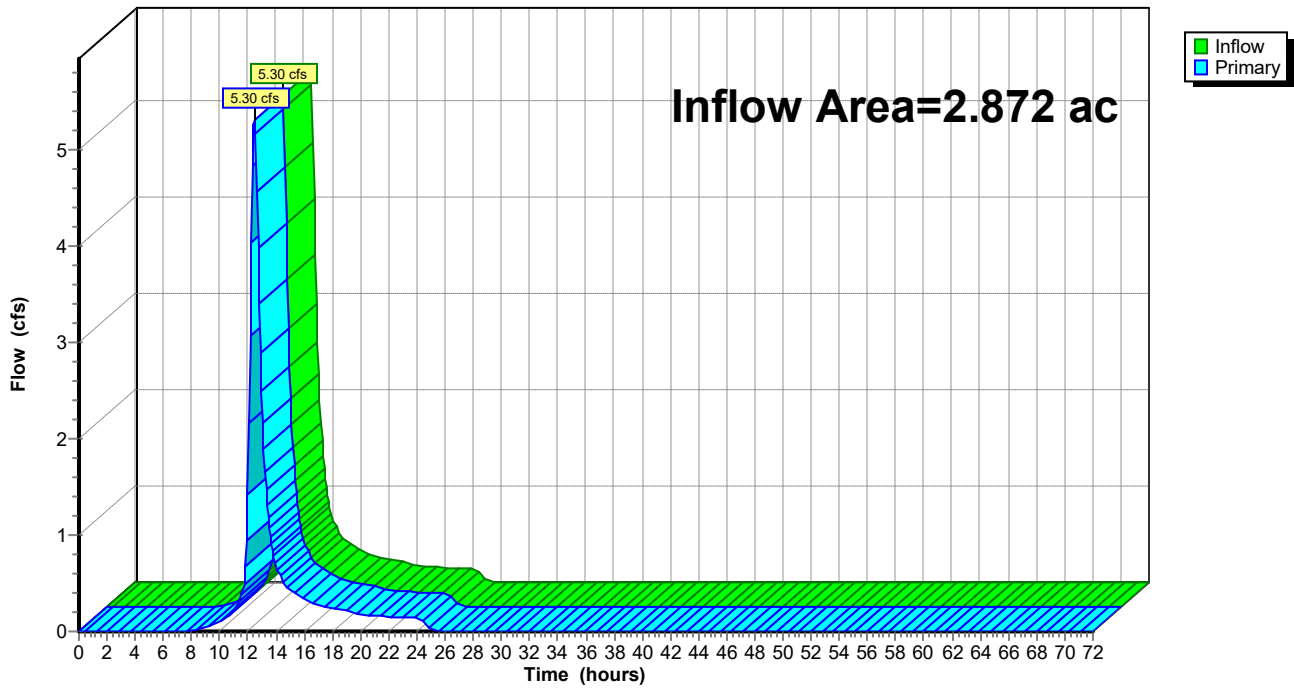
Summary for Link 17L: DP-54

Inflow Area = 2.872 ac, 0.00% Impervious, Inflow Depth = 2.88" for 100 Year event
Inflow = 5.30 cfs @ 12.45 hrs, Volume= 0.689 af
Primary = 5.30 cfs @ 12.45 hrs, Volume= 0.689 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 17L: DP-54

Hydrograph



Summary for Link 18L: DP-8

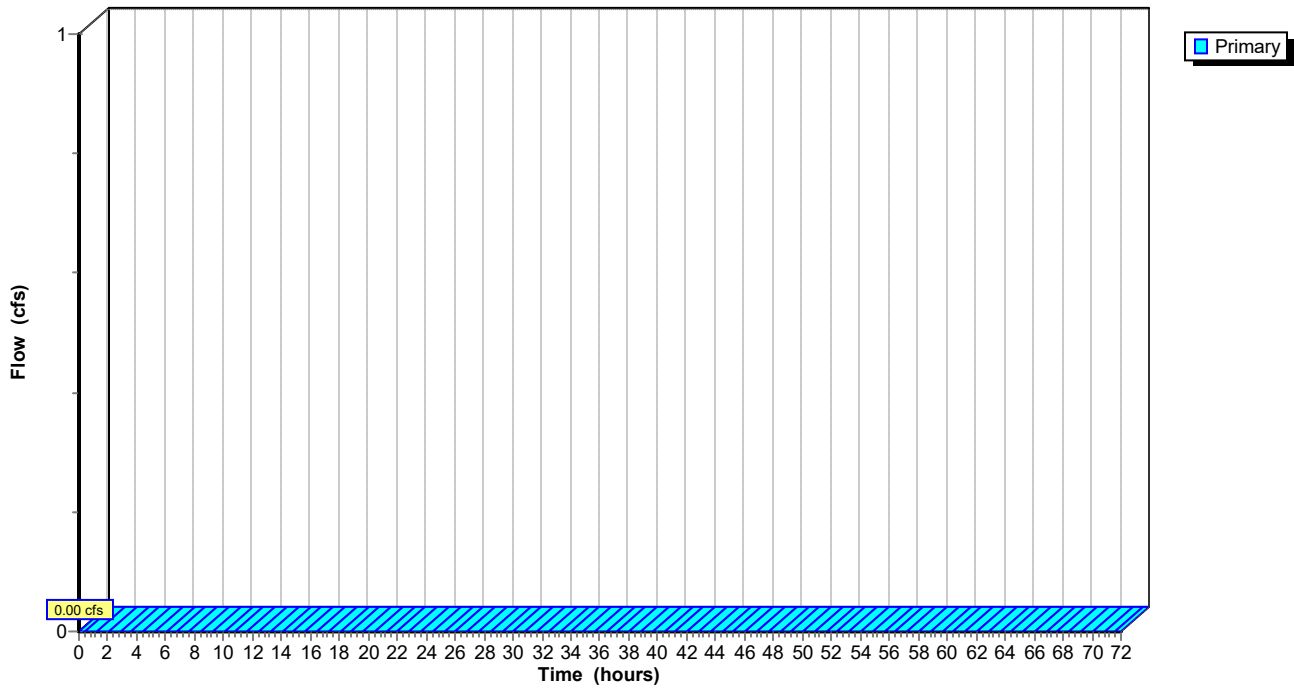
[43] Hint: Has no inflow (Outflow=Zero)

Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 18L: DP-8

Hydrograph



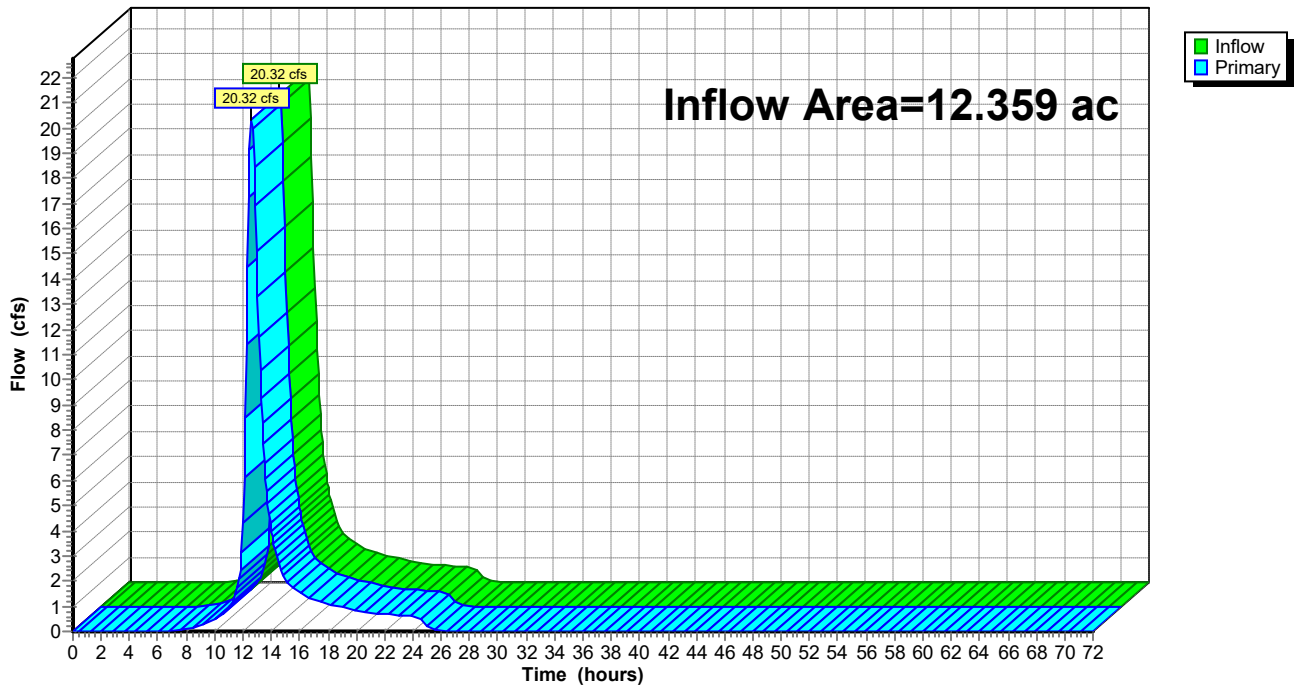
Summary for Link 19L: DP-9

Inflow Area = 12.359 ac, 0.00% Impervious, Inflow Depth = 3.07" for 100 Year event
Inflow = 20.32 cfs @ 12.61 hrs, Volume= 3.157 af
Primary = 20.32 cfs @ 12.61 hrs, Volume= 3.157 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 19L: DP-9

Hydrograph



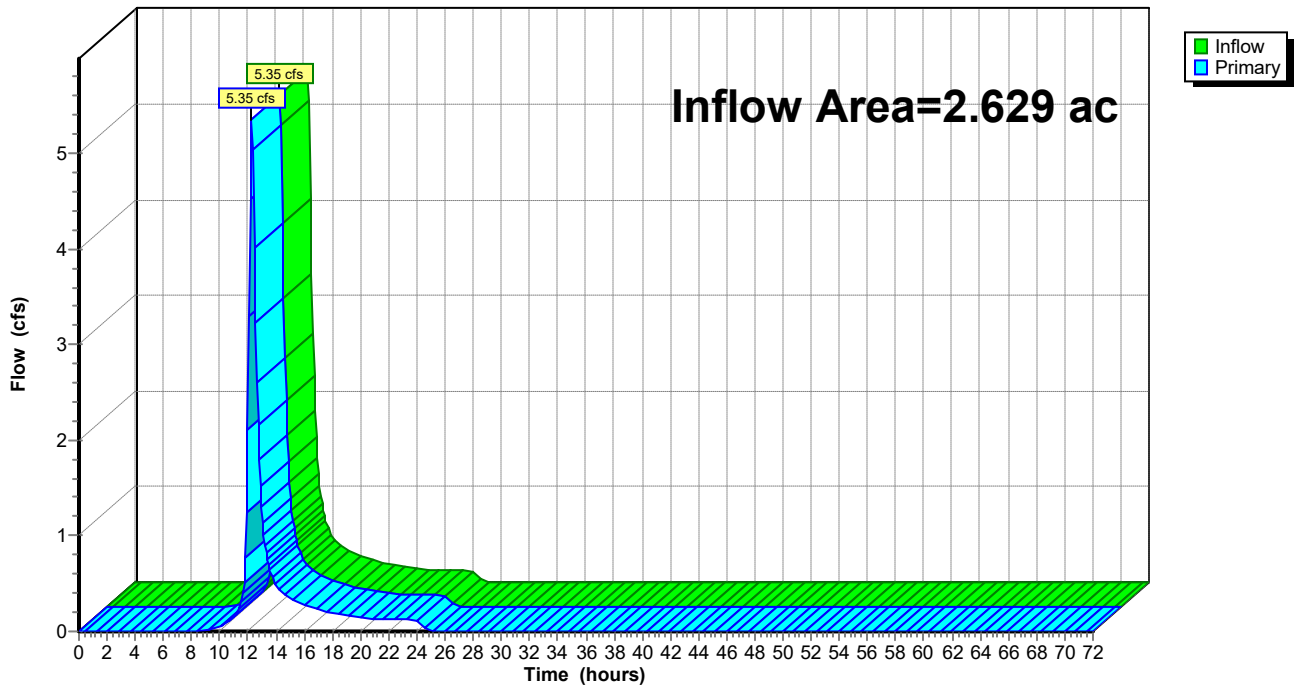
Summary for Link 20L: DP-10

Inflow Area = 2.629 ac, 0.00% Impervious, Inflow Depth = 2.52" for 100 Year event
Inflow = 5.35 cfs @ 12.28 hrs, Volume= 0.553 af
Primary = 5.35 cfs @ 12.28 hrs, Volume= 0.553 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 20L: DP-10

Hydrograph



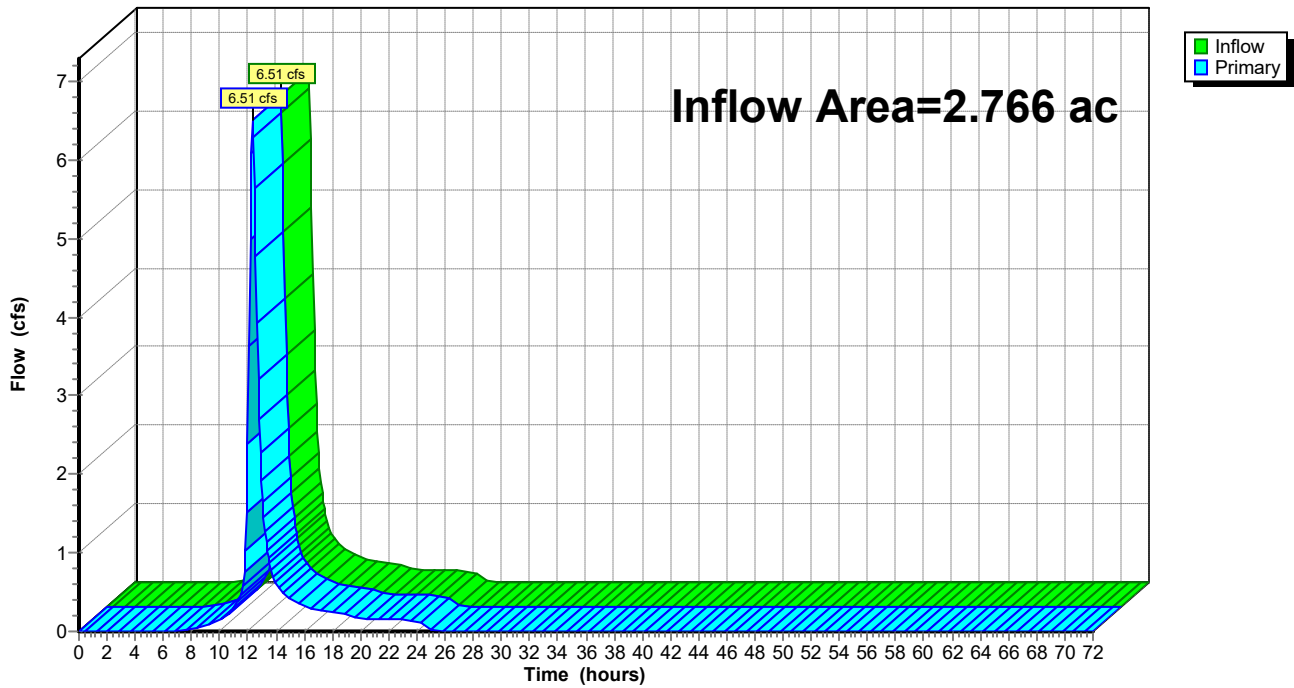
Summary for Link 21L: DP-11

Inflow Area = 2.766 ac, 0.00% Impervious, Inflow Depth = 3.16" for 100 Year event
Inflow = 6.51 cfs @ 12.33 hrs, Volume= 0.728 af
Primary = 6.51 cfs @ 12.33 hrs, Volume= 0.728 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 21L: DP-11

Hydrograph



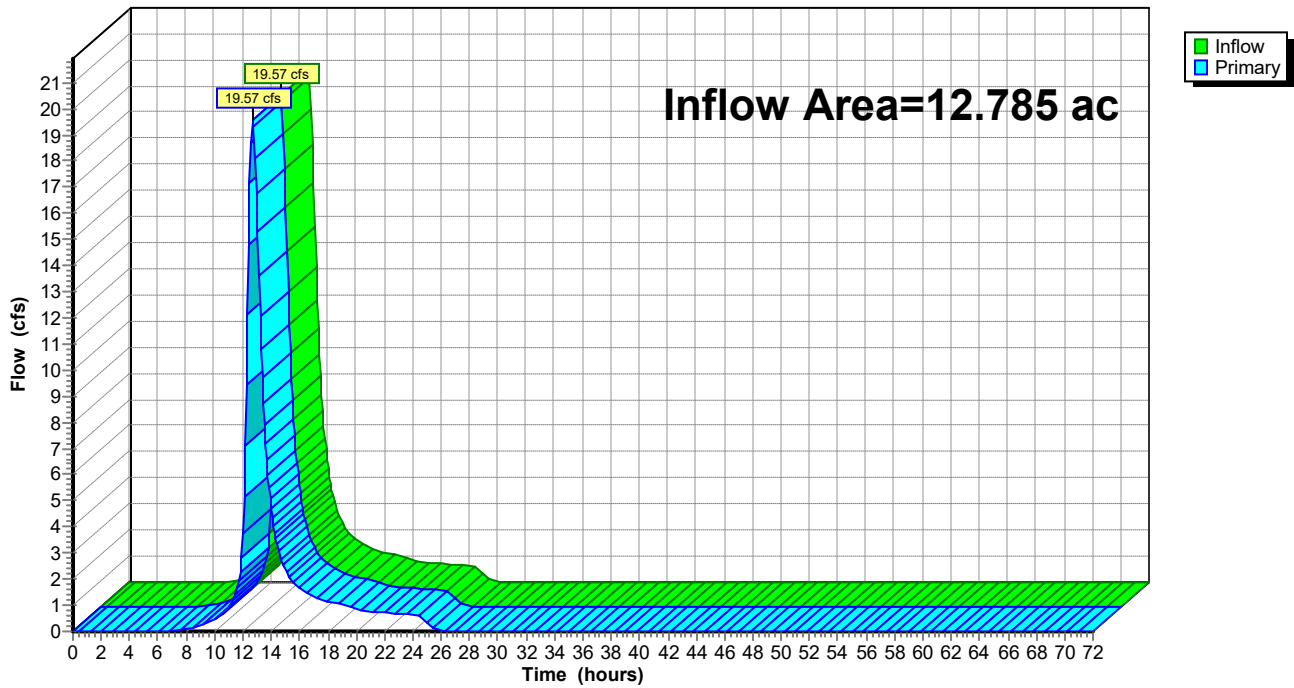
Summary for Link 22L: DP-13

Inflow Area = 12.785 ac, 0.00% Impervious, Inflow Depth = 3.07" for 100 Year event
Inflow = 19.57 cfs @ 12.69 hrs, Volume= 3.266 af
Primary = 19.57 cfs @ 12.69 hrs, Volume= 3.266 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 22L: DP-13

Hydrograph



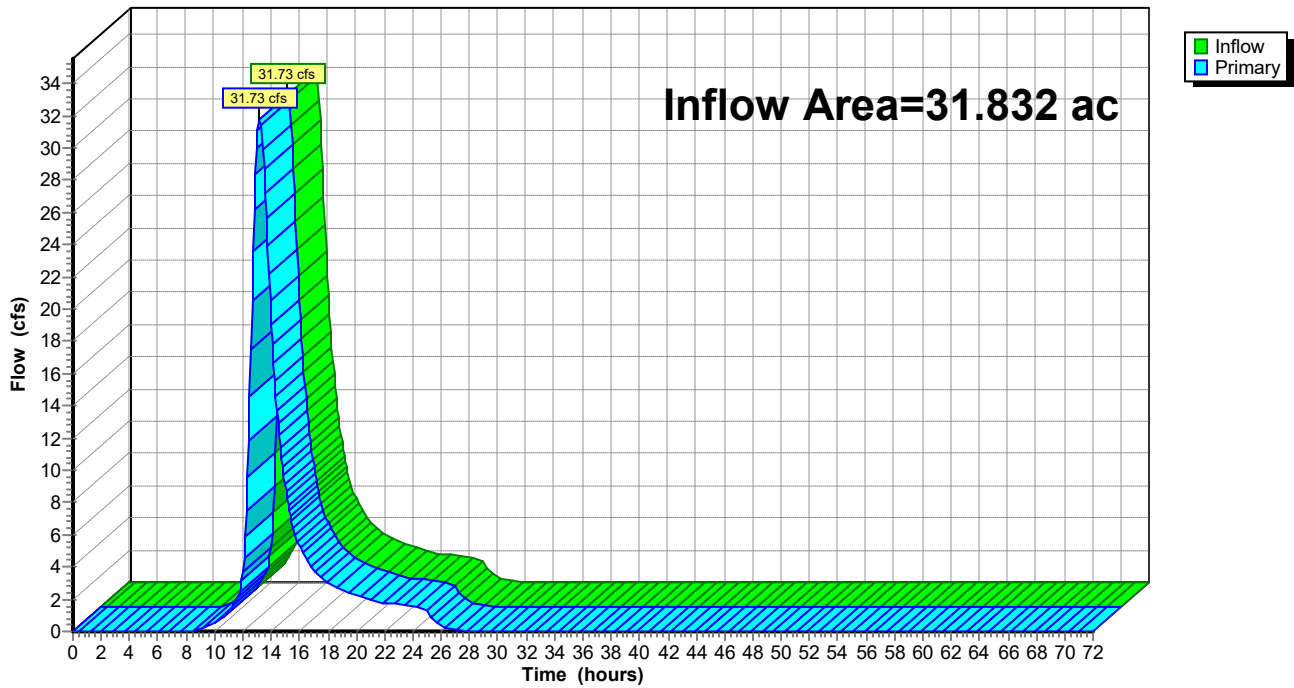
Summary for Link 23L: DP-12

Inflow Area = 31.832 ac, 0.00% Impervious, Inflow Depth = 2.79" for 100 Year event
Inflow = 31.73 cfs @ 13.19 hrs, Volume= 7.397 af
Primary = 31.73 cfs @ 13.19 hrs, Volume= 7.397 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 23L: DP-12

Hydrograph



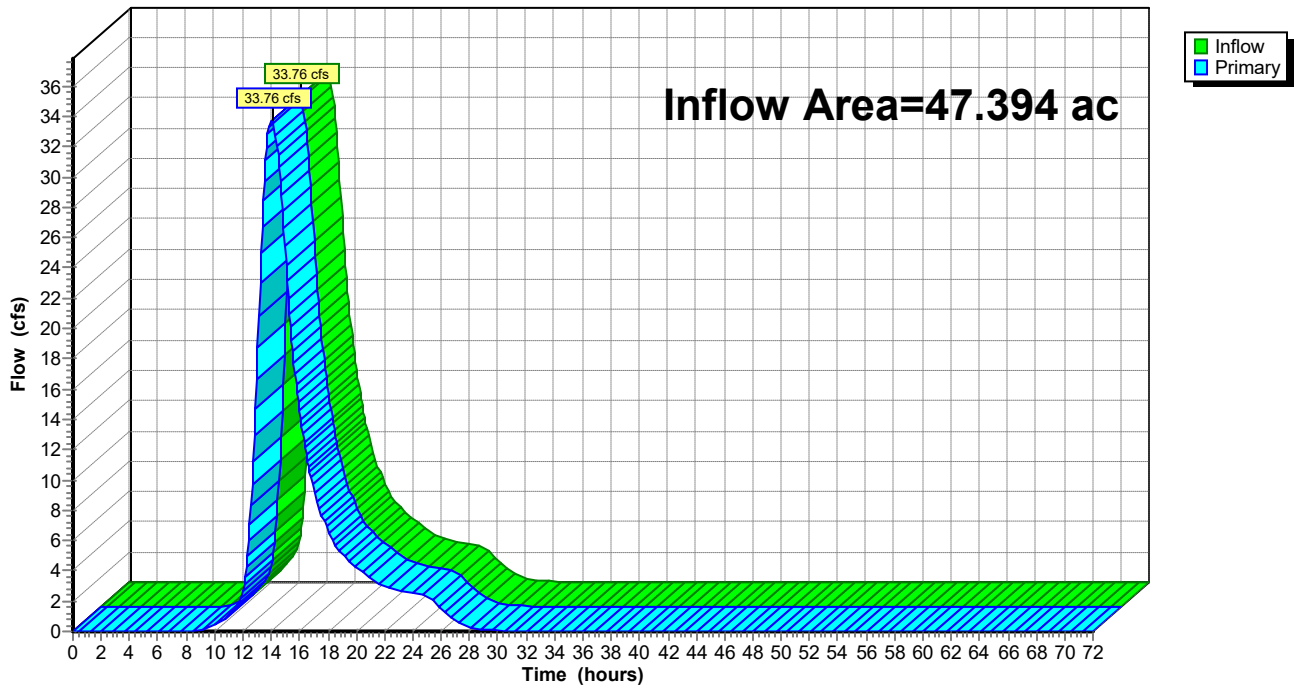
Summary for Link 24L: DP-14

Inflow Area = 47.394 ac, 0.00% Impervious, Inflow Depth = 2.88" for 100 Year event
Inflow = 33.76 cfs @ 14.06 hrs, Volume= 11.373 af
Primary = 33.76 cfs @ 14.06 hrs, Volume= 11.373 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 24L: DP-14

Hydrograph



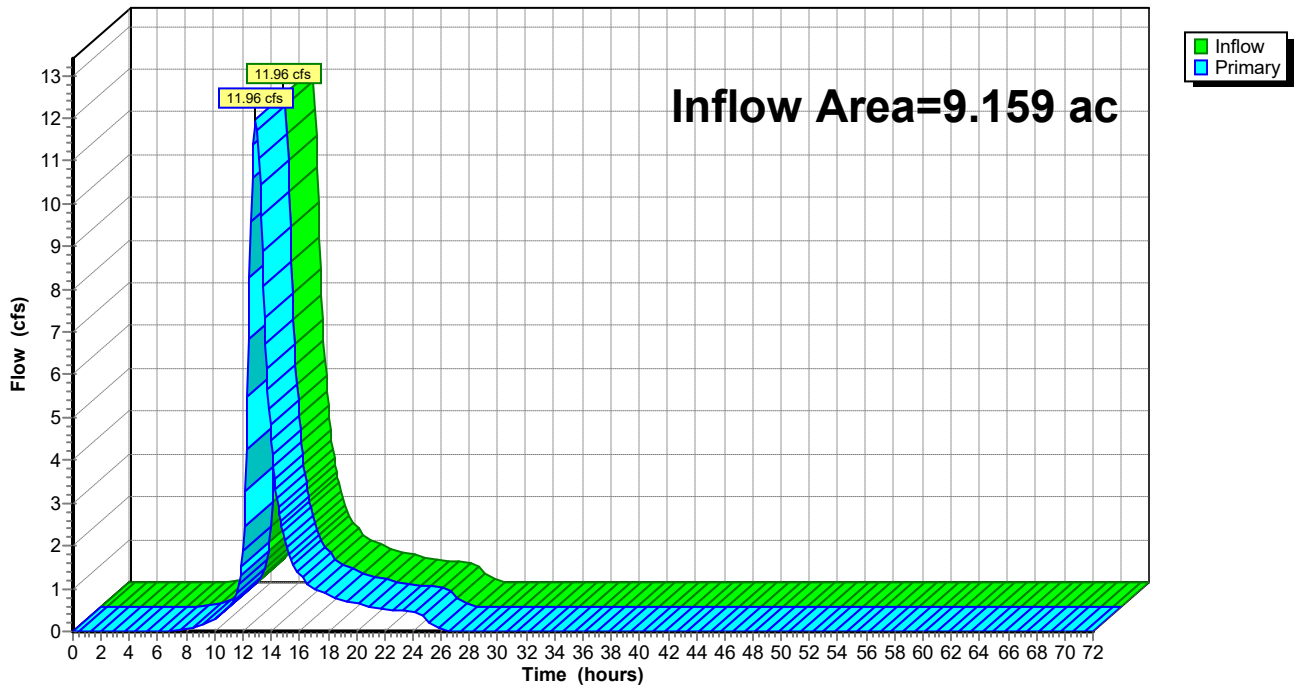
Summary for Link 25L: DP-15

Inflow Area = 9.159 ac, 0.00% Impervious, Inflow Depth = 3.07" for 100 Year event
Inflow = 11.96 cfs @ 12.90 hrs, Volume= 2.340 af
Primary = 11.96 cfs @ 12.90 hrs, Volume= 2.340 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 25L: DP-15

Hydrograph



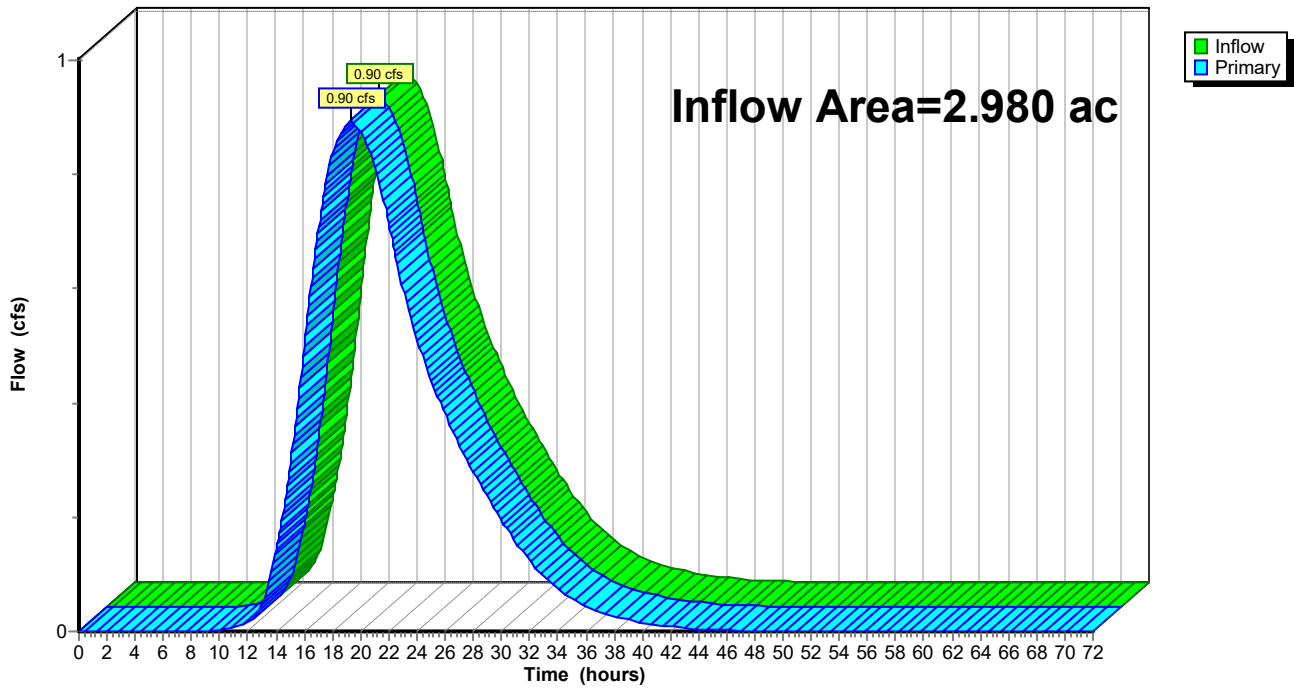
Summary for Link 26L: DP-17

Inflow Area = 2.980 ac, 0.00% Impervious, Inflow Depth = 3.16" for 100 Year event
Inflow = 0.90 cfs @ 19.31 hrs, Volume= 0.785 af
Primary = 0.90 cfs @ 19.31 hrs, Volume= 0.785 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 26L: DP-17

Hydrograph



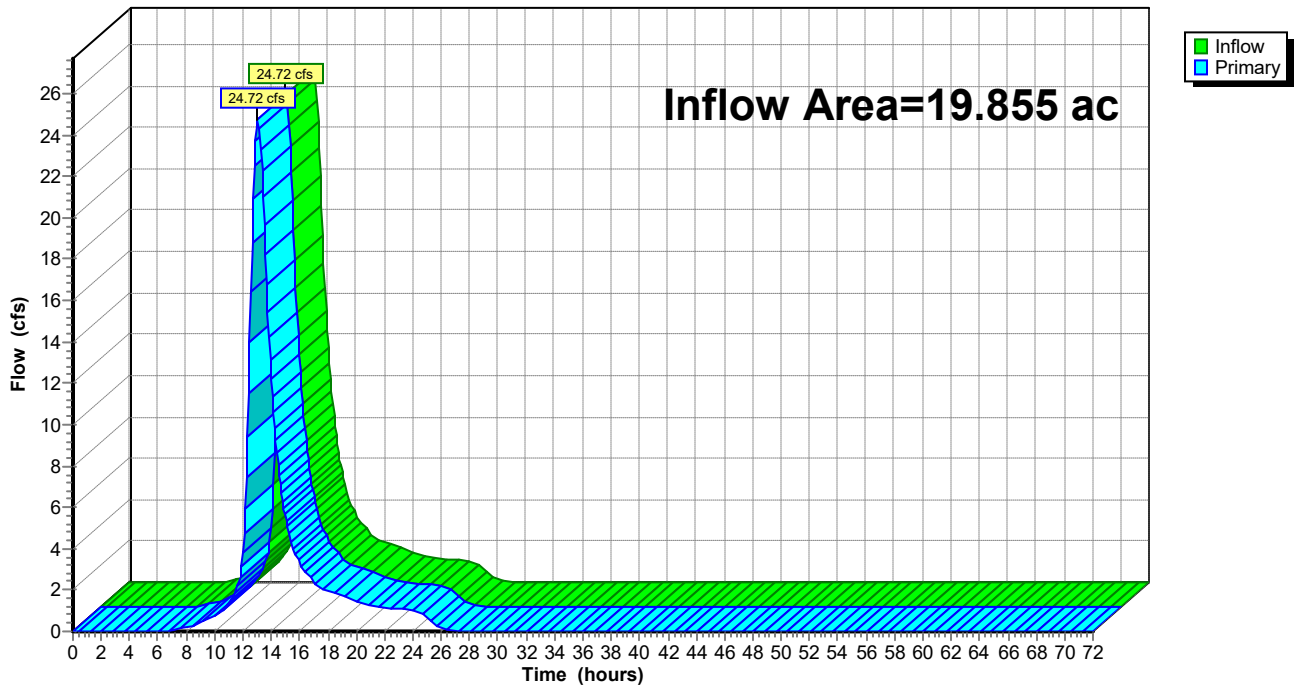
Summary for Link 27L: DP-18

Inflow Area = 19.855 ac, 0.00% Impervious, Inflow Depth = 3.26" for 100 Year event
Inflow = 24.72 cfs @ 13.05 hrs, Volume= 5.390 af
Primary = 24.72 cfs @ 13.05 hrs, Volume= 5.390 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 27L: DP-18

Hydrograph



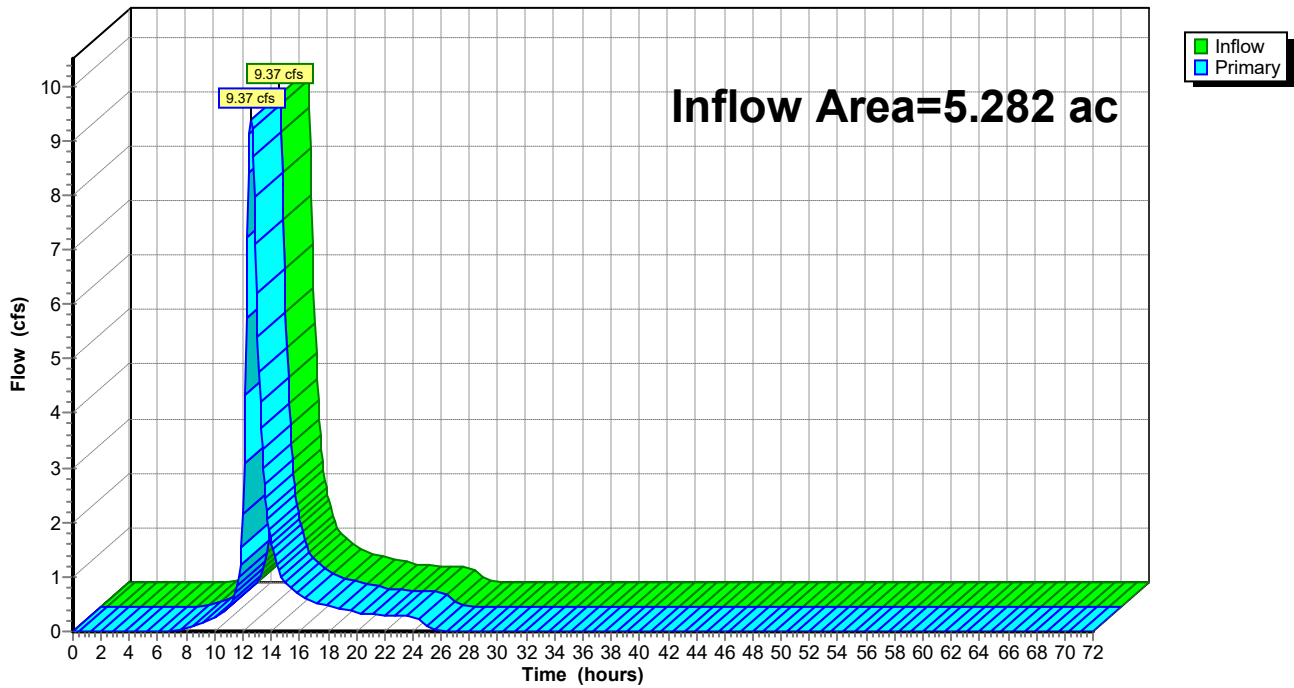
Summary for Link 28L: DP-19

Inflow Area = 5.282 ac, 0.00% Impervious, Inflow Depth = 3.16" for 100 Year event
Inflow = 9.37 cfs @ 12.57 hrs, Volume= 1.391 af
Primary = 9.37 cfs @ 12.57 hrs, Volume= 1.391 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 28L: DP-19

Hydrograph



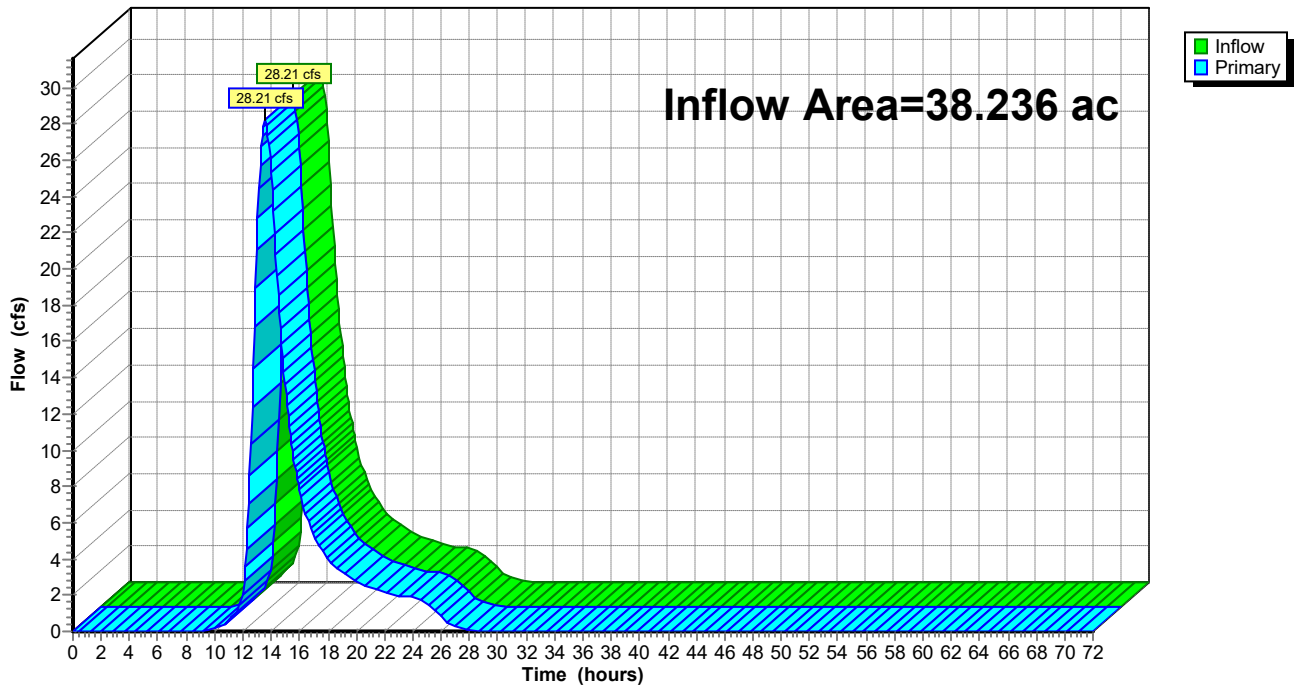
Summary for Link 29L: DP-20

Inflow Area = 38.236 ac, 0.00% Impervious, Inflow Depth = 2.52" for 100 Year event
Inflow = 28.21 cfs @ 13.55 hrs, Volume= 8.039 af
Primary = 28.21 cfs @ 13.55 hrs, Volume= 8.039 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 29L: DP-20

Hydrograph



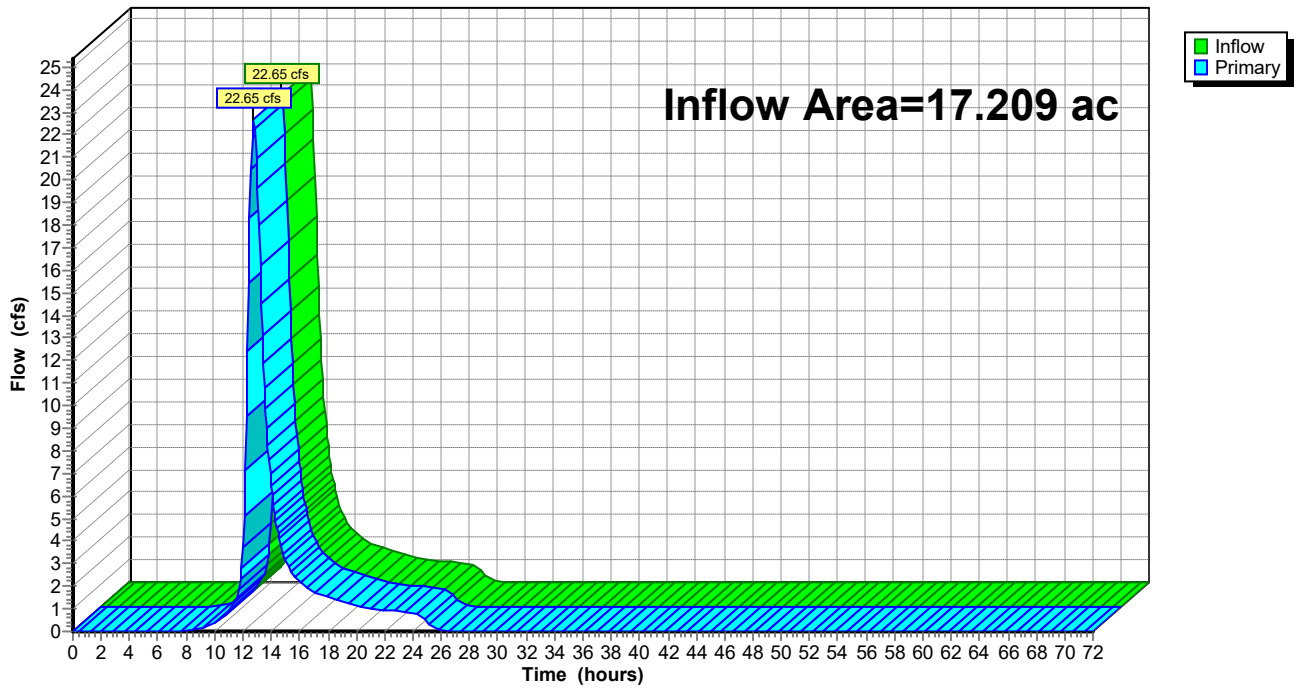
Summary for Link 30L: DP-22

Inflow Area = 17.209 ac, 0.00% Impervious, Inflow Depth = 2.79" for 100 Year event
Inflow = 22.65 cfs @ 12.77 hrs, Volume= 3.999 af
Primary = 22.65 cfs @ 12.77 hrs, Volume= 3.999 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 30L: DP-22

Hydrograph



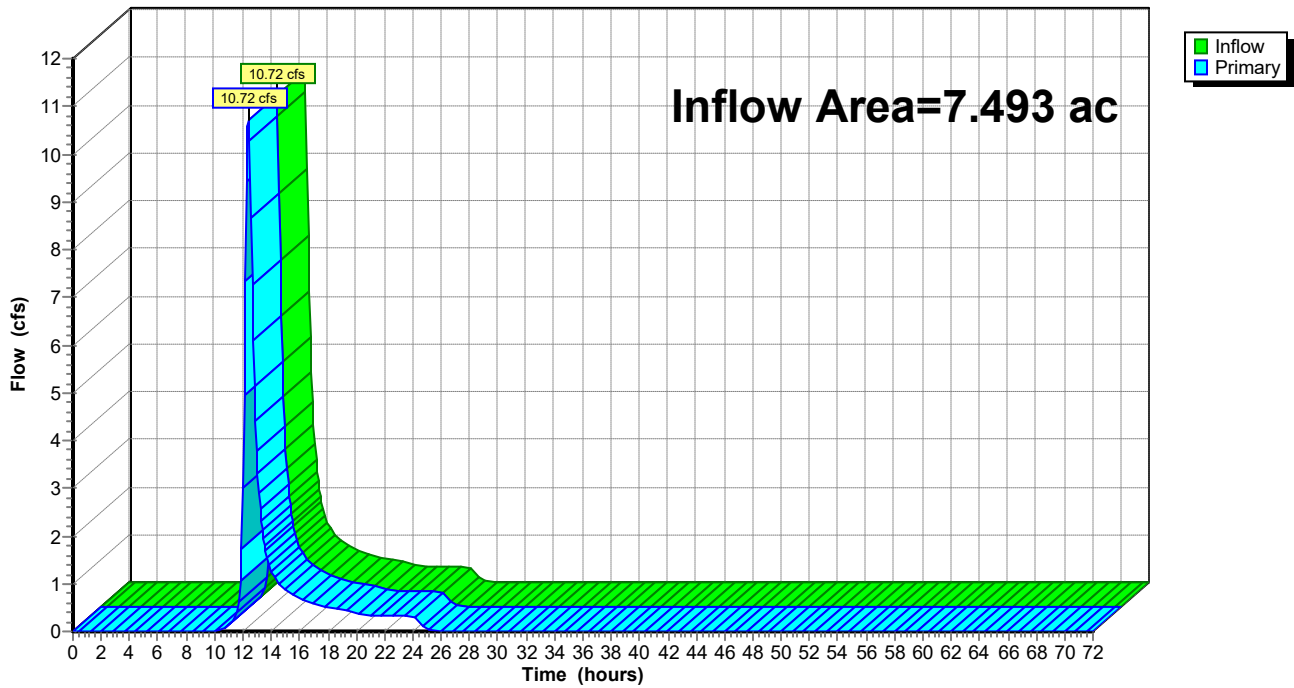
Summary for Link 31L: DP-23

Inflow Area = 7.493 ac, 0.00% Impervious, Inflow Depth = 2.03" for 100 Year event
Inflow = 10.72 cfs @ 12.37 hrs, Volume= 1.265 af
Primary = 10.72 cfs @ 12.37 hrs, Volume= 1.265 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 31L: DP-23

Hydrograph



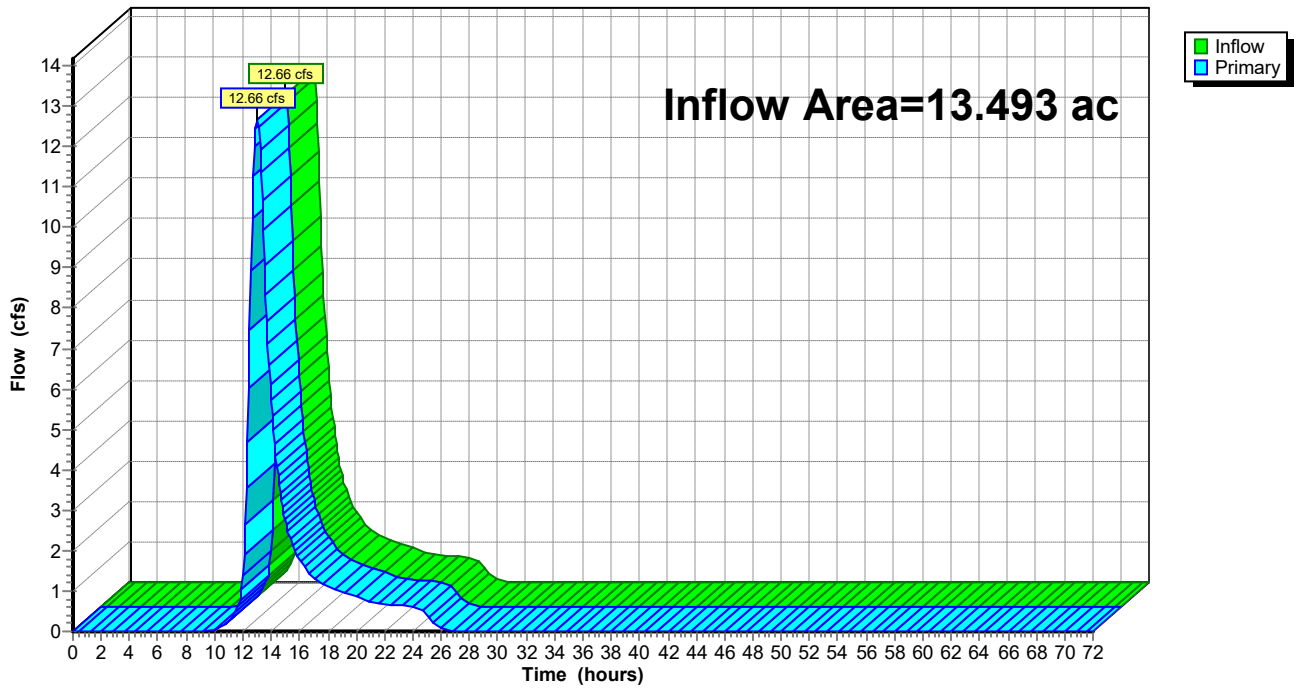
Summary for Link 32L: DP-24

Inflow Area = 13.493 ac, 0.00% Impervious, Inflow Depth = 2.35" for 100 Year event
Inflow = 12.66 cfs @ 13.00 hrs, Volume= 2.645 af
Primary = 12.66 cfs @ 13.00 hrs, Volume= 2.645 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 32L: DP-24

Hydrograph



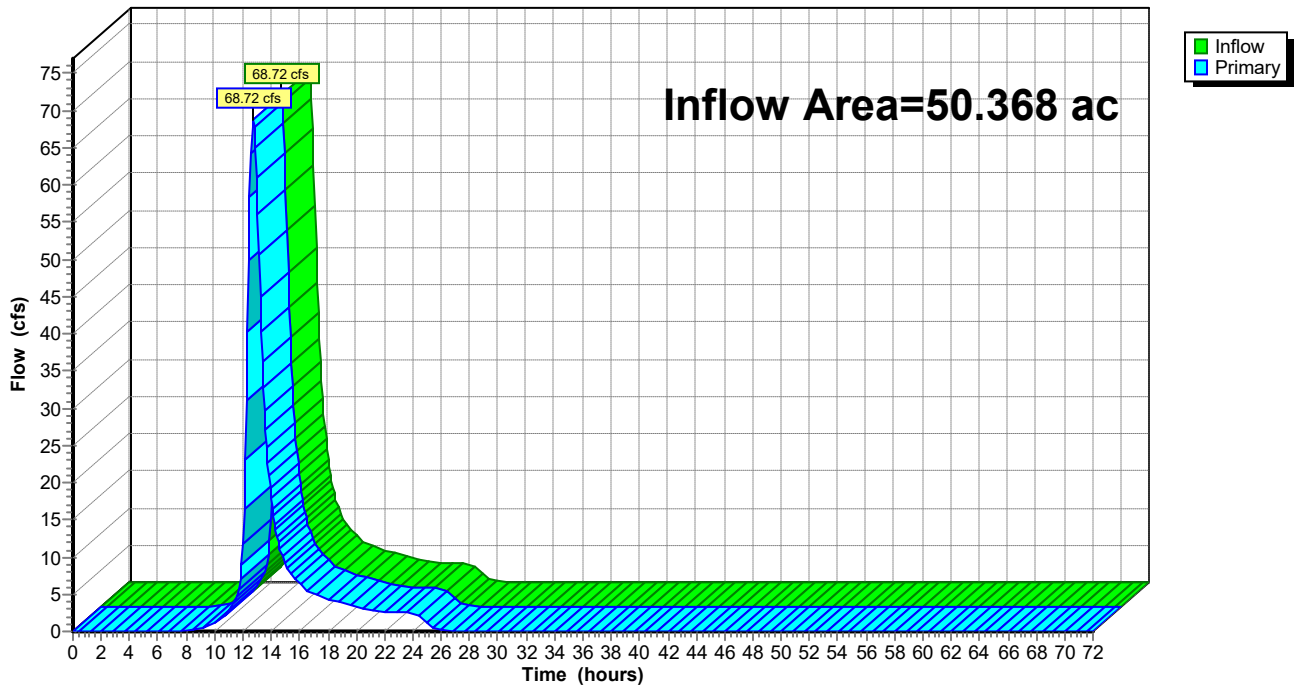
Summary for Link 33L: DP-25

Inflow Area = 50.368 ac, 0.00% Impervious, Inflow Depth = 2.79" for 100 Year event
Inflow = 68.72 cfs @ 12.72 hrs, Volume= 11.704 af
Primary = 68.72 cfs @ 12.72 hrs, Volume= 11.704 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 33L: DP-25

Hydrograph



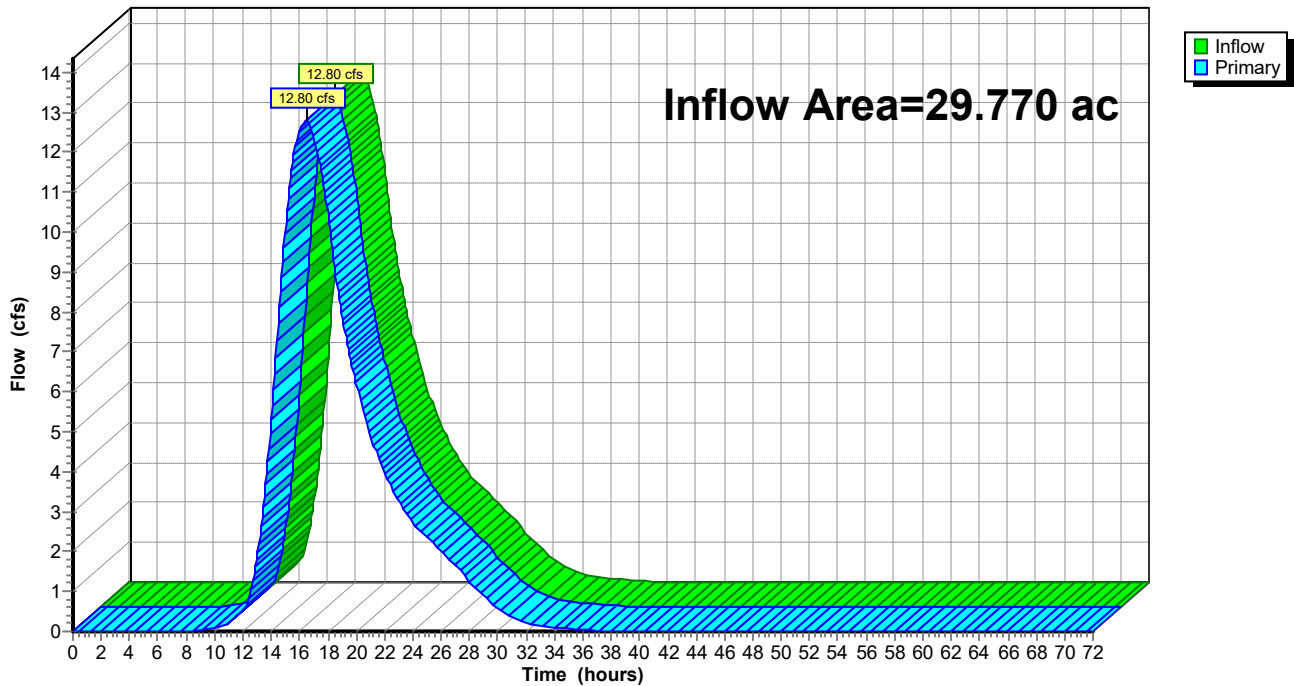
Summary for Link 34L: DP-33

Inflow Area = 29.770 ac, 0.00% Impervious, Inflow Depth = 3.07" for 100 Year event
Inflow = 12.80 cfs @ 16.46 hrs, Volume= 7.606 af
Primary = 12.80 cfs @ 16.46 hrs, Volume= 7.606 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 34L: DP-33

Hydrograph



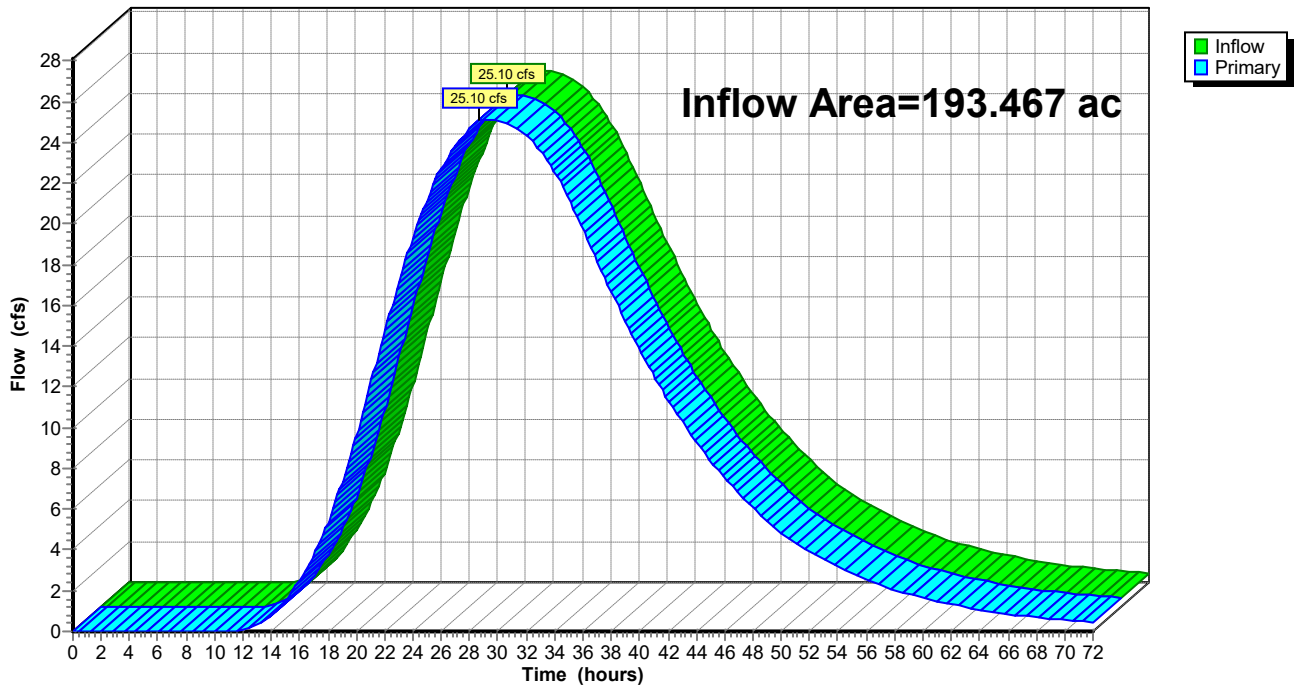
Summary for Link 35L: DP-26

Inflow Area = 193.467 ac, 0.00% Impervious, Inflow Depth > 2.86" for 100 Year event
Inflow = 25.10 cfs @ 28.64 hrs, Volume= 46.140 af
Primary = 25.10 cfs @ 28.64 hrs, Volume= 46.140 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 35L: DP-26

Hydrograph



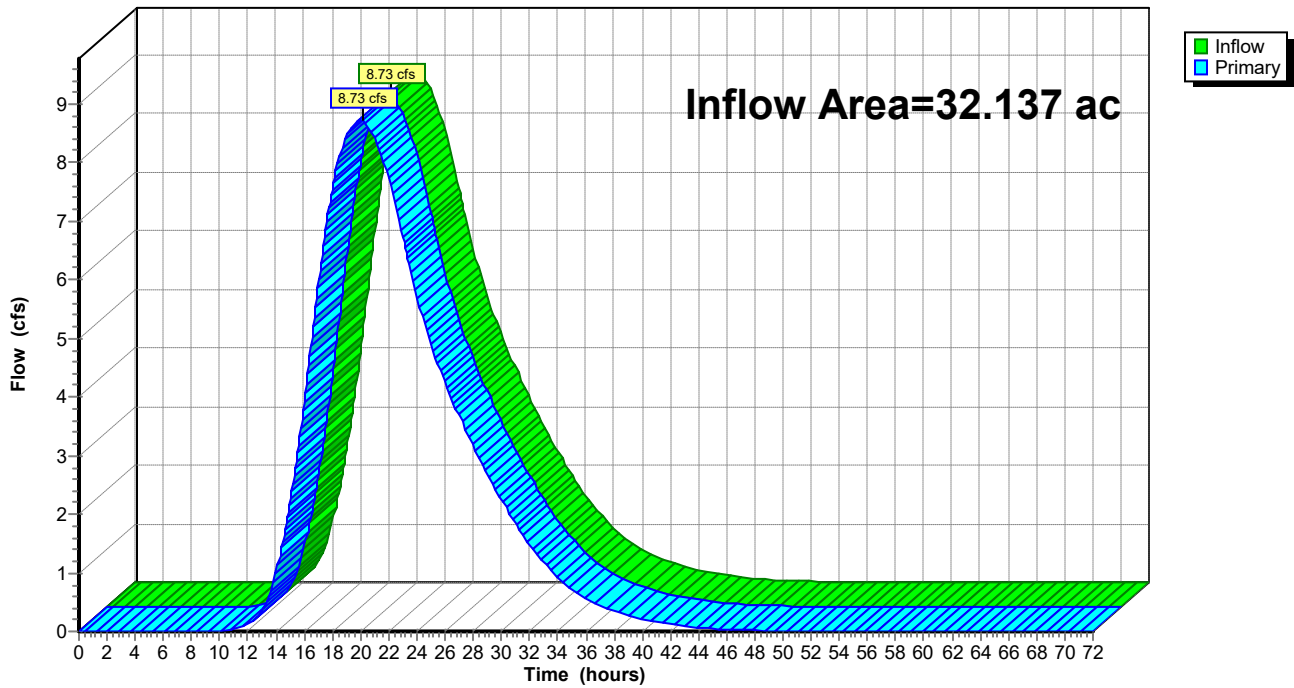
Summary for Link 36L: DP-27

Inflow Area = 32.137 ac, 0.00% Impervious, Inflow Depth = 2.97" for 100 Year event
Inflow = 8.73 cfs @ 20.20 hrs, Volume= 7.959 af
Primary = 8.73 cfs @ 20.20 hrs, Volume= 7.959 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 36L: DP-27

Hydrograph



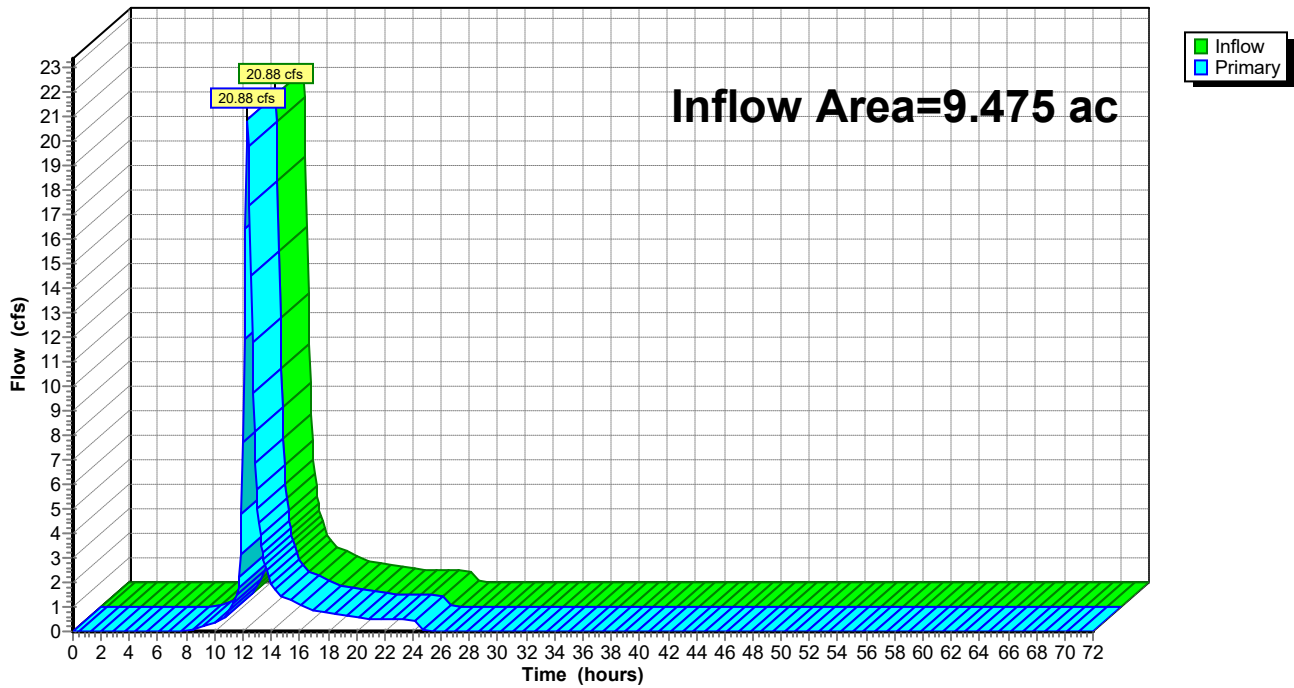
Summary for Link 37L: DP-28

Inflow Area = 9.475 ac, 0.00% Impervious, Inflow Depth = 2.88" for 100 Year event
Inflow = 20.88 cfs @ 12.32 hrs, Volume= 2.274 af
Primary = 20.88 cfs @ 12.32 hrs, Volume= 2.274 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 37L: DP-28

Hydrograph



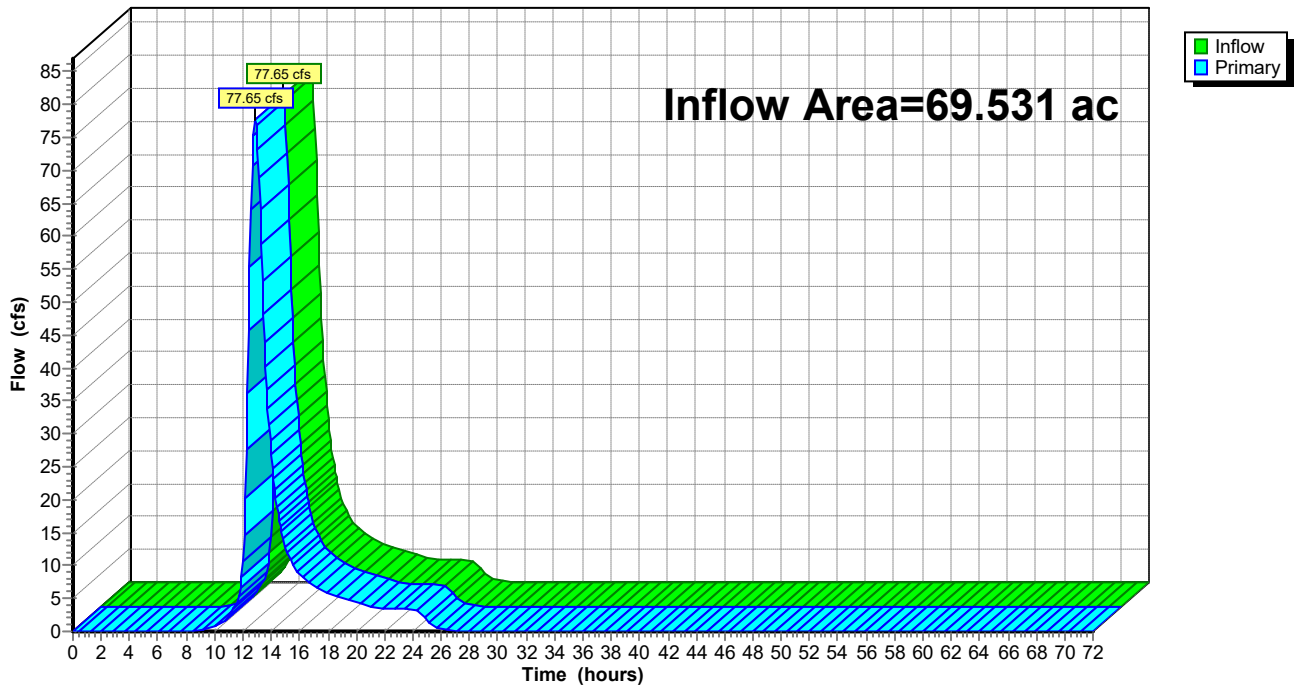
Summary for Link 38L: DP-29

Inflow Area = 69.531 ac, 0.00% Impervious, Inflow Depth = 2.52" for 100 Year event
Inflow = 77.65 cfs @ 12.84 hrs, Volume= 14.618 af
Primary = 77.65 cfs @ 12.84 hrs, Volume= 14.618 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 38L: DP-29

Hydrograph



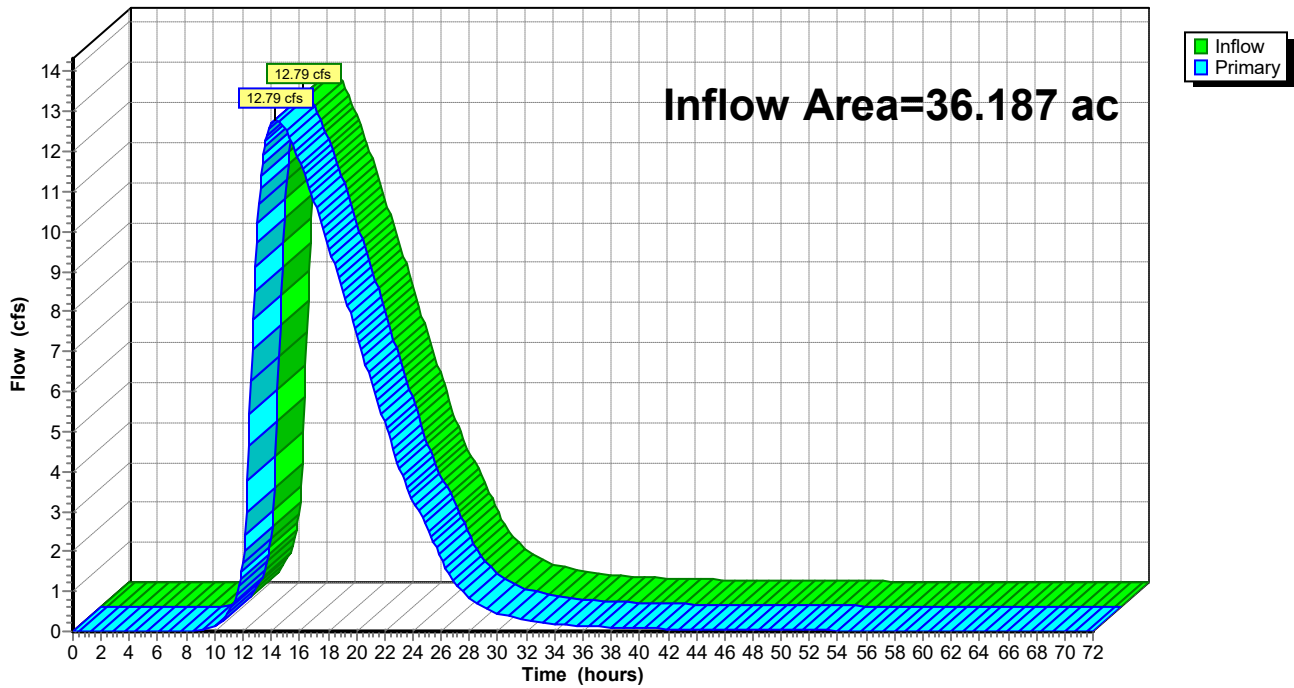
Summary for Link 39L: DP-30

Inflow Area = 36.187 ac, 0.00% Impervious, Inflow Depth > 3.15" for 100 Year event
Inflow = 12.79 cfs @ 14.31 hrs, Volume= 9.501 af
Primary = 12.79 cfs @ 14.31 hrs, Volume= 9.501 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 39L: DP-30

Hydrograph



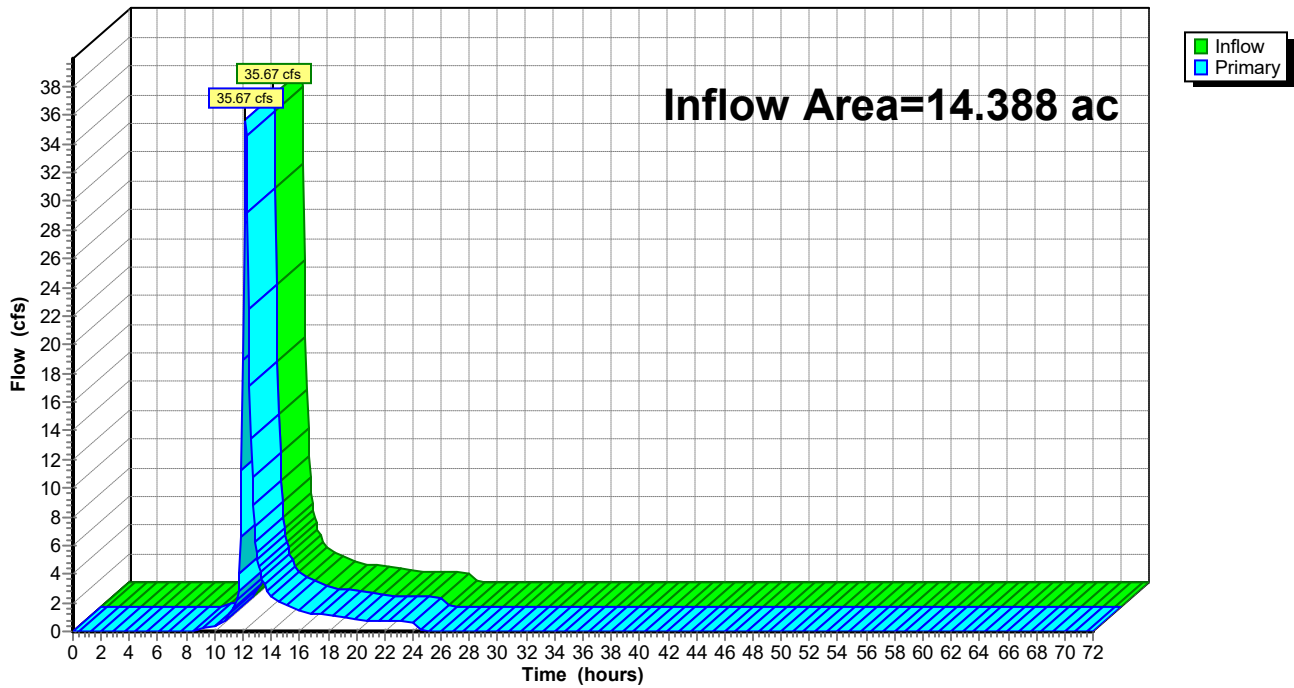
Summary for Link 40L: DP-31

Inflow Area = 14.388 ac, 0.00% Impervious, Inflow Depth = 2.61" for 100 Year event
Inflow = 35.67 cfs @ 12.20 hrs, Volume= 3.130 af
Primary = 35.67 cfs @ 12.20 hrs, Volume= 3.130 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 40L: DP-31

Hydrograph



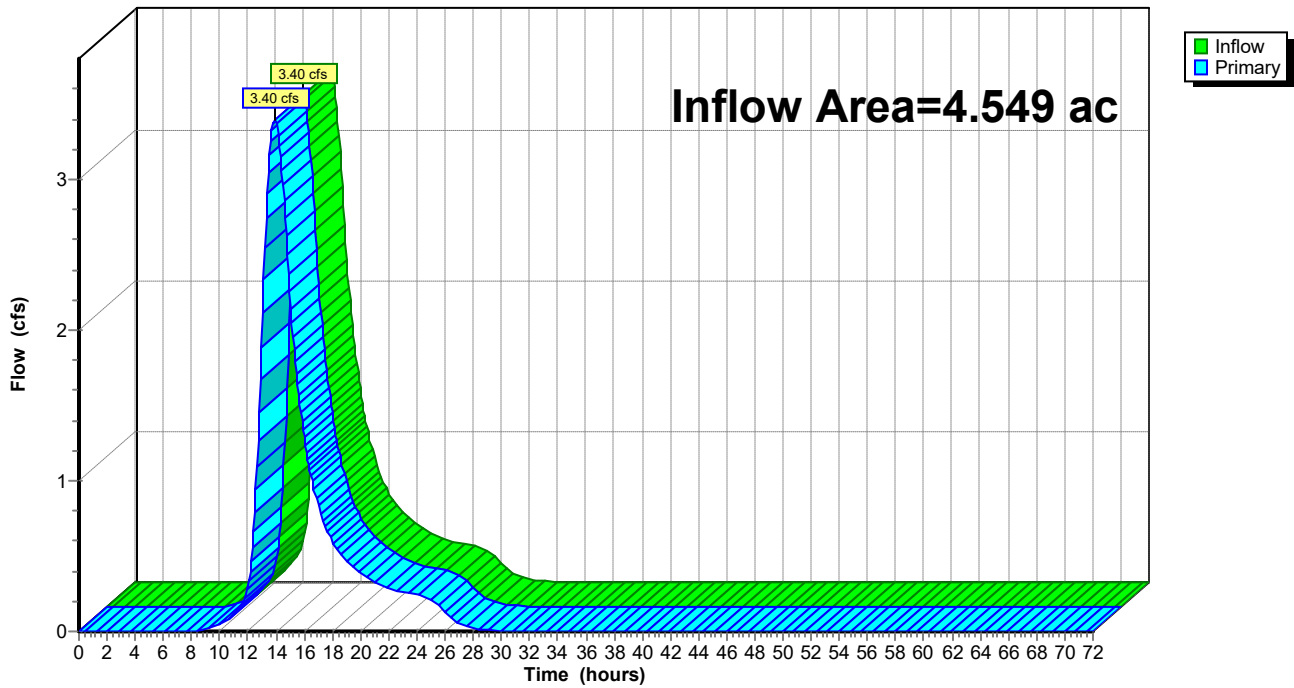
Summary for Link 41L: DP-32

Inflow Area = 4.549 ac, 0.00% Impervious, Inflow Depth = 2.88" for 100 Year event
Inflow = 3.40 cfs @ 13.93 hrs, Volume= 1.092 af
Primary = 3.40 cfs @ 13.93 hrs, Volume= 1.092 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 41L: DP-32

Hydrograph



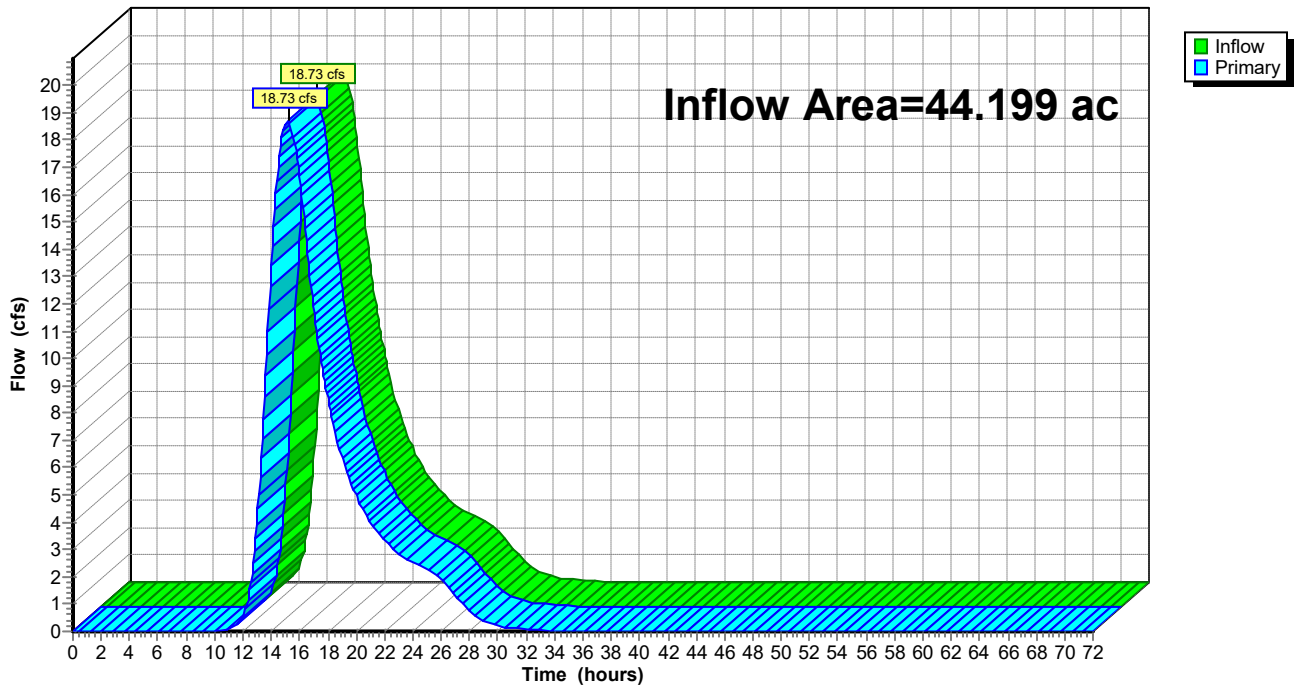
Summary for Link 42L: DP-35

Inflow Area = 44.199 ac, 0.00% Impervious, Inflow Depth = 2.35" for 100 Year event
Inflow = 18.73 cfs @ 15.25 hrs, Volume= 8.664 af
Primary = 18.73 cfs @ 15.25 hrs, Volume= 8.664 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 42L: DP-35

Hydrograph



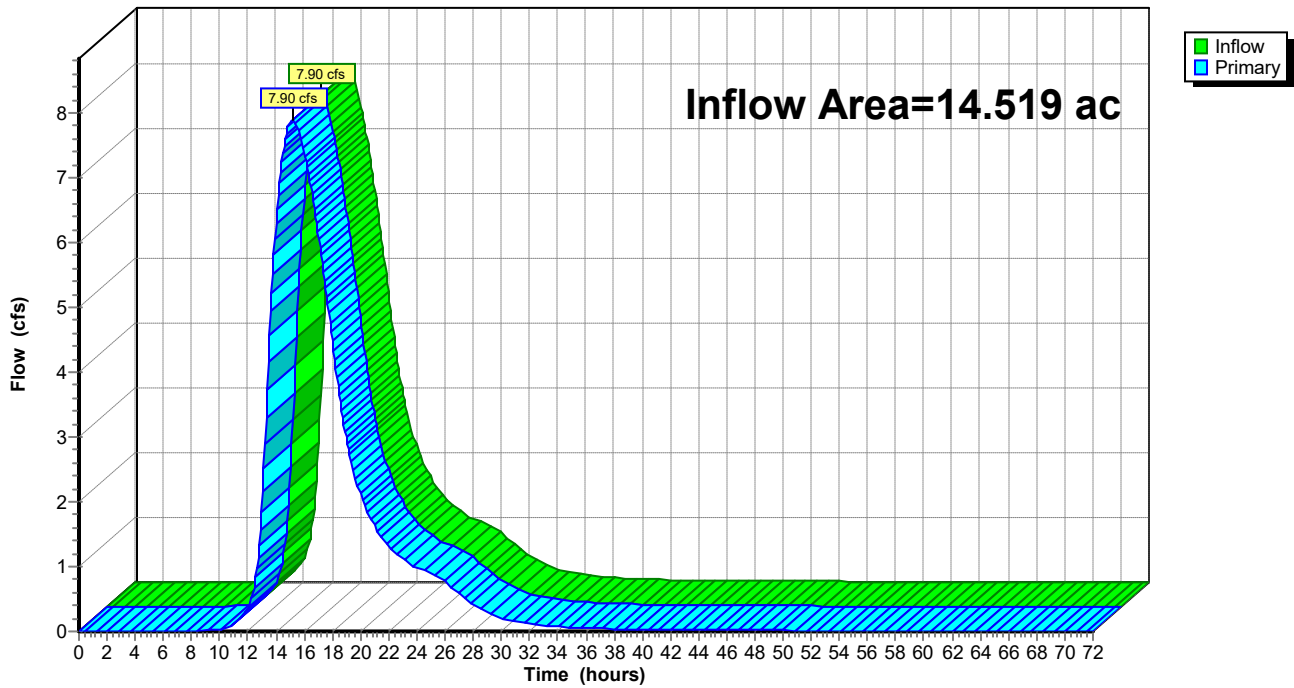
Summary for Link 43L: DP-37

Inflow Area = 14.519 ac, 0.00% Impervious, Inflow Depth > 3.35" for 100 Year event
Inflow = 7.90 cfs @ 15.17 hrs, Volume= 4.057 af
Primary = 7.90 cfs @ 15.17 hrs, Volume= 4.057 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 43L: DP-37

Hydrograph



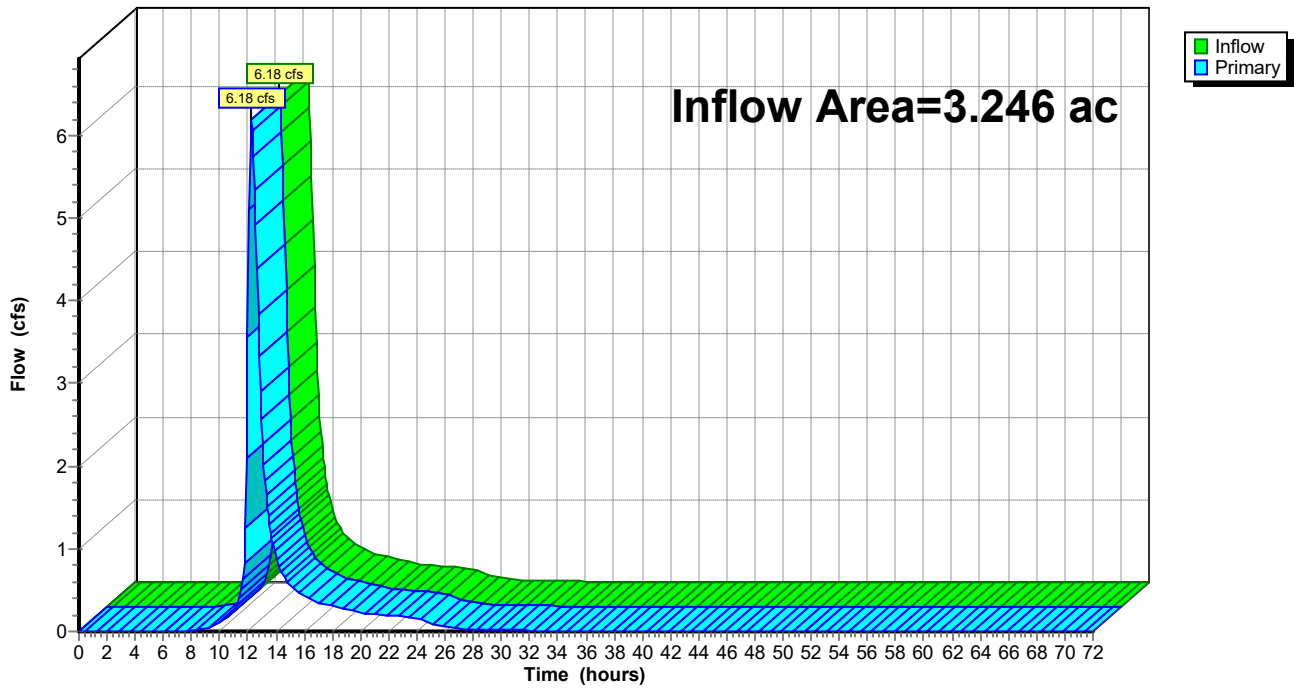
Summary for Link 44L: DP-38

Inflow Area = 3.246 ac, 0.00% Impervious, Inflow Depth = 3.26" for 100 Year event
Inflow = 6.18 cfs @ 12.25 hrs, Volume= 0.881 af
Primary = 6.18 cfs @ 12.25 hrs, Volume= 0.881 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 44L: DP-38

Hydrograph



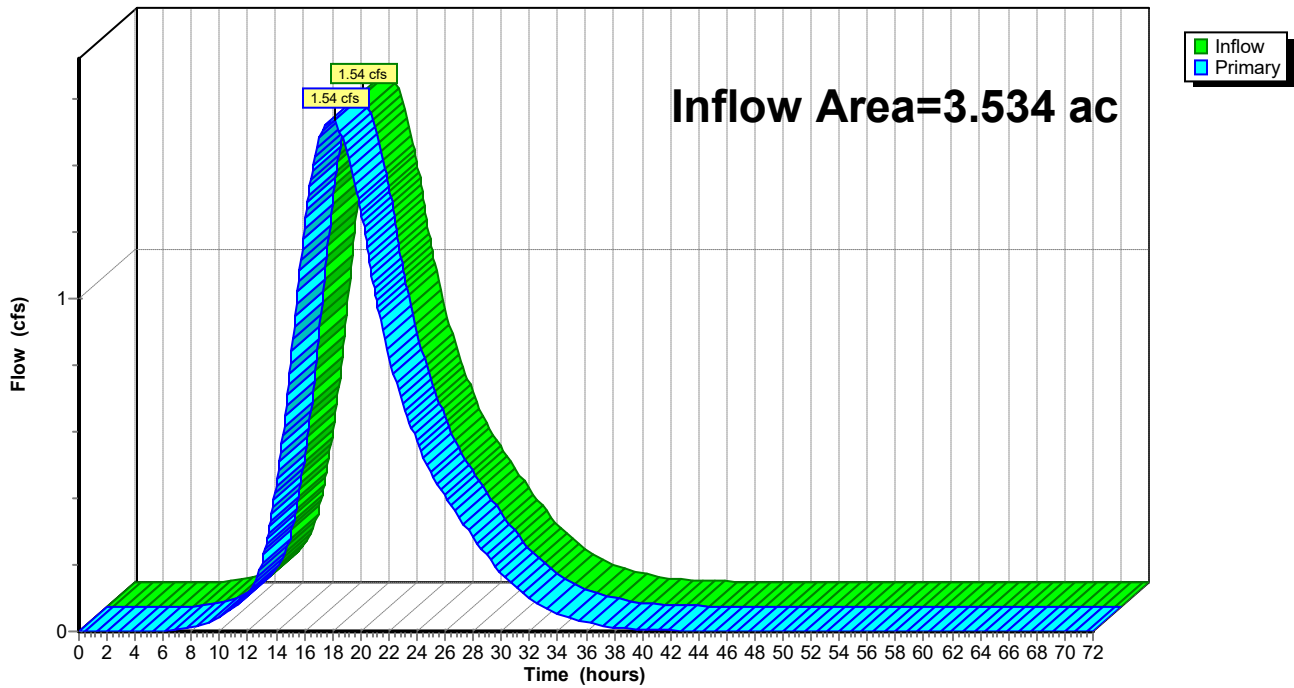
Summary for Link 45L: DP-39

Inflow Area = 3.534 ac, 0.00% Impervious, Inflow Depth = 3.97" for 100 Year event
Inflow = 1.54 cfs @ 18.12 hrs, Volume= 1.170 af
Primary = 1.54 cfs @ 18.12 hrs, Volume= 1.170 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 45L: DP-39

Hydrograph



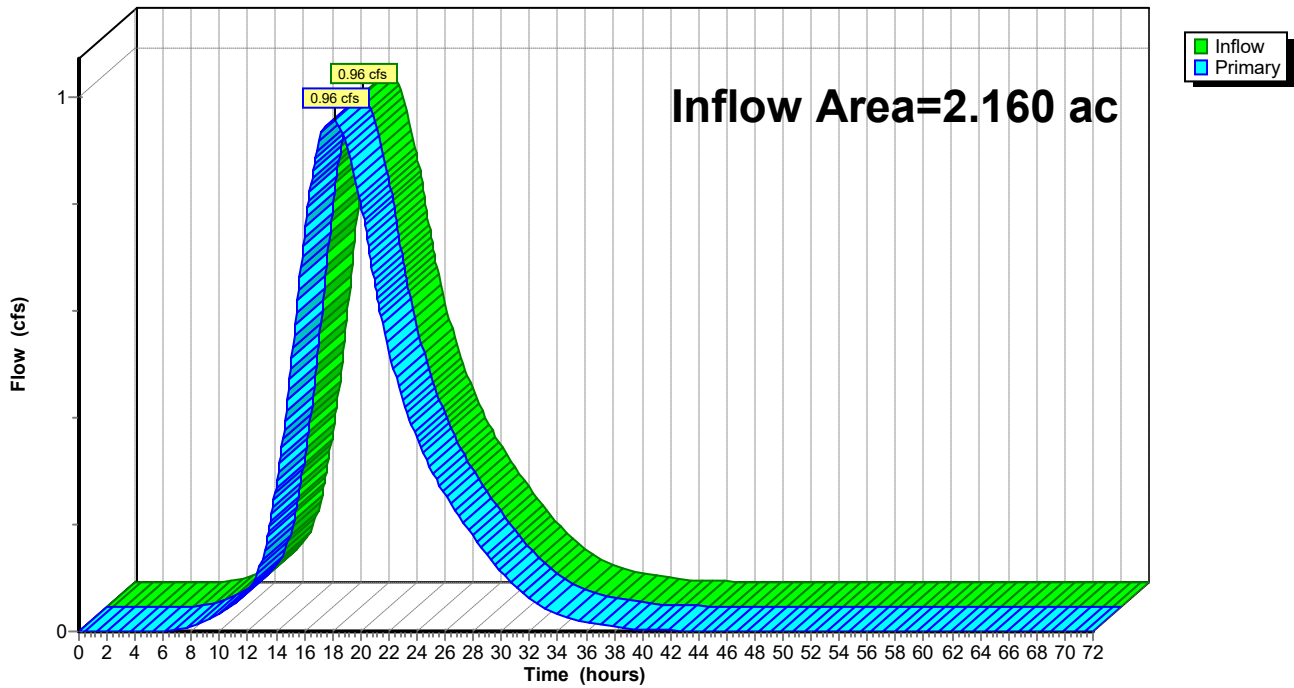
Summary for Link 46L: DP-40

Inflow Area = 2.160 ac, 0.00% Impervious, Inflow Depth = 4.08" for 100 Year event
Inflow = 0.96 cfs @ 18.22 hrs, Volume= 0.734 af
Primary = 0.96 cfs @ 18.22 hrs, Volume= 0.734 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 46L: DP-40

Hydrograph



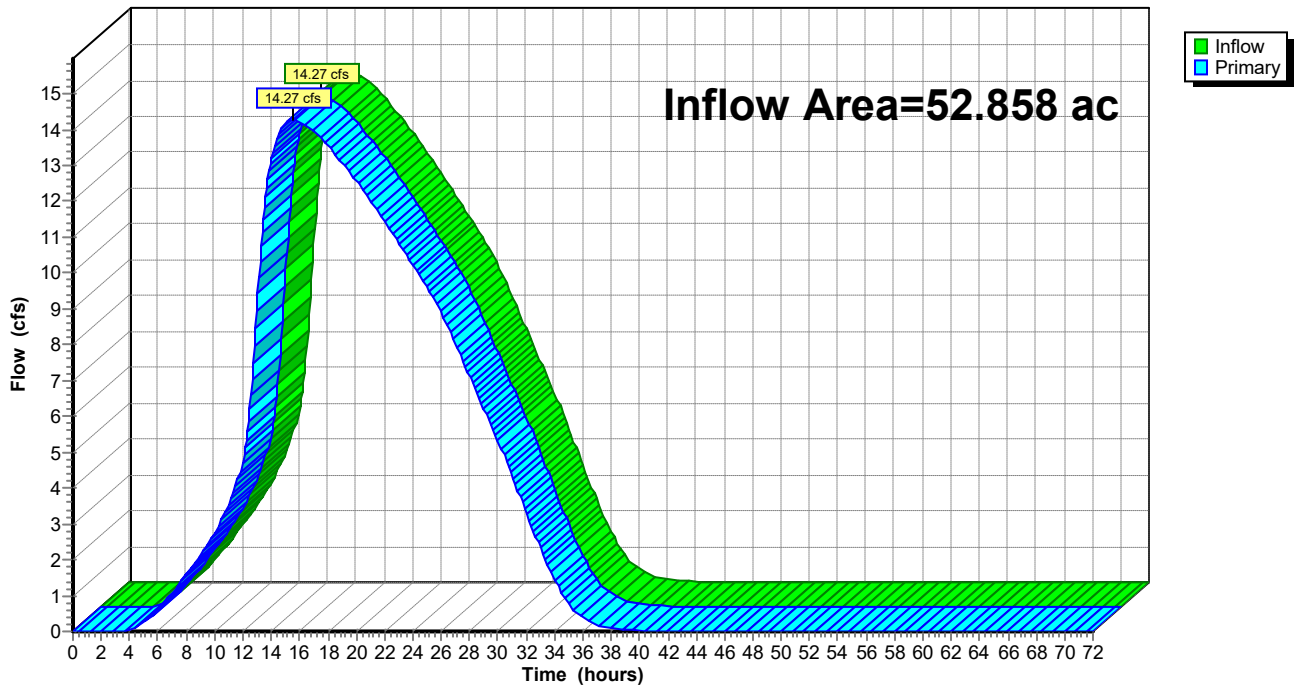
Summary for Link 47L: DP-41

Inflow Area = 52.858 ac, 0.00% Impervious, Inflow Depth = 4.19" for 100 Year event
Inflow = 14.27 cfs @ 15.55 hrs, Volume= 18.455 af
Primary = 14.27 cfs @ 15.55 hrs, Volume= 18.455 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

Link 47L: DP-41

Hydrograph



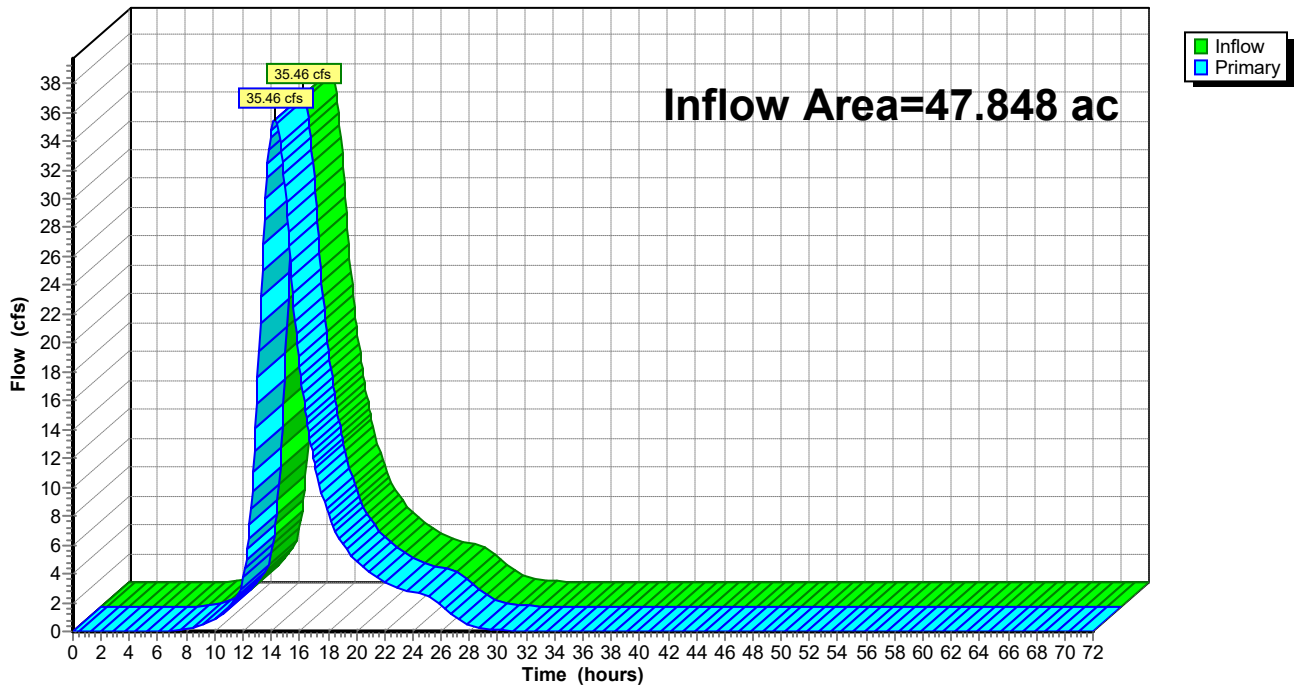
Summary for Link 48L: DP-42

Inflow Area = 47.848 ac, 0.00% Impervious, Inflow Depth = 3.26" for 100 Year event
Inflow = 35.46 cfs @ 14.22 hrs, Volume= 12.988 af
Primary = 35.46 cfs @ 14.22 hrs, Volume= 12.988 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.08 hrs

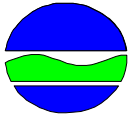
Link 48L: DP-42

Hydrograph



APPENDIX J – NOTICE OF INTENT (NOI)

NOTICE OF INTENT



New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

NYR
(for DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-20-001
All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

- IMPORTANT -
RETURN THIS FORM TO THE ADDRESS ABOVE
OWNER/OPERATOR MUST SIGN FORM

Owner/Operator Information

Owner/Operator (Company Name/Private Owner Name/Municipality Name)

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

Owner/Operator Contact Person First Name

Owner/Operator Mailing Address

City

State Zip -

Phone (Owner/Operator) - - Fax (Owner/Operator) - -

Email (Owner/Operator)

FED TAX ID - (not required for individuals)

3. Select the predominant land use for both pre and post development conditions.
SELECT ONLY ONE CHOICE FOR EACH

**Pre-Development
Existing Land Use**

- FOREST
- PASTURE/OPEN LAND
- CULTIVATED LAND
- SINGLE FAMILY HOME
- SINGLE FAMILY SUBDIVISION
- TOWN HOME RESIDENTIAL
- MULTIFAMILY RESIDENTIAL
- INSTITUTIONAL/SCHOOL
- INDUSTRIAL
- COMMERCIAL
- ROAD/HIGHWAY
- RECREATIONAL/SPORTS FIELD
- BIKE PATH/TRAIL
- LINEAR UTILITY
- PARKING LOT
- OTHER

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**Post-Development
Future Land Use**

- SINGLE FAMILY HOME
- SINGLE FAMILY SUBDIVISION
- TOWN HOME RESIDENTIAL
- MULTIFAMILY RESIDENTIAL
- INSTITUTIONAL/SCHOOL
- INDUSTRIAL
- COMMERCIAL
- MUNICIPAL
- ROAD/HIGHWAY
- RECREATIONAL/SPORTS FIELD
- BIKE PATH/TRAIL
- LINEAR UTILITY (water, sewer, gas, etc.)
- PARKING LOT
- CLEARING/GRADING ONLY
- DEMOLITION, NO REDEVELOPMENT
- WELL DRILLING ACTIVITY *(Oil, Gas, etc.)
- OTHER

Number of Lots

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***Note:** for gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger common plan of development or sale, enter the total project site area; the total area to be disturbed; existing impervious area to be disturbed (for redevelopment activities); and the future impervious area constructed within the disturbed area. (Round to the nearest tenth of an acre.)

Total Site Area	Total Area To Be Disturbed	Existing Impervious Area To Be Disturbed	Future Impervious Area Within Disturbed Area																				
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5. Do you plan to disturb more than 5 acres of soil at any one time? Yes No

6. Indicate the percentage of each Hydrologic Soil Group(HSG) at the site.

A <table border="1" style="display: inline-table; width: 40px; height: 20px;"> <tr><td></td><td></td><td></td></tr> </table> %				B <table border="1" style="display: inline-table; width: 40px; height: 20px;"> <tr><td></td><td></td><td></td></tr> </table> %				C <table border="1" style="display: inline-table; width: 40px; height: 20px;"> <tr><td></td><td></td><td></td></tr> </table> %				D <table border="1" style="display: inline-table; width: 40px; height: 20px;"> <tr><td></td><td></td><td></td></tr> </table> %			

7. Is this a phased project? Yes No

8. Enter the planned start and end dates of the disturbance activities.

Start Date <table border="1" style="display: inline-table; width: 40px; height: 20px;"> <tr><td></td><td></td></tr> </table> / <table border="1" style="display: inline-table; width: 40px; height: 20px;"> <tr><td></td><td></td></tr> </table> / <table border="1" style="display: inline-table; width: 40px; height: 20px;"> <tr><td></td><td></td><td></td><td></td></tr> </table>									-	End Date <table border="1" style="display: inline-table; width: 40px; height: 20px;"> <tr><td></td><td></td></tr> </table> / <table border="1" style="display: inline-table; width: 40px; height: 20px;"> <tr><td></td><td></td></tr> </table> / <table border="1" style="display: inline-table; width: 40px; height: 20px;"> <tr><td></td><td></td><td></td><td></td></tr> </table>								

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? Yes No Unknown

16. What is the name of the municipality/entity that owns the separate storm sewer system?

Two rows of empty grid boxes for text entry.

17. Does any runoff from the site enter a sewer classified as a Combined Sewer? Yes No Unknown

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law? Yes No

19. Is this property owned by a state authority, state agency, federal government or local government? Yes No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) Yes No

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)? Yes No

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? Yes No
If No, skip questions 23 and 27-39.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual? Yes No

Post-construction Stormwater Management Practice (SMP) Requirements

Important: Completion of Questions 27-39 is not required if response to Question 22 is No.

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

- Preservation of Undisturbed Areas
- Preservation of Buffers
- Reduction of Clearing and Grading
- Locating Development in Less Sensitive Areas
- Roadway Reduction
- Sidewalk Reduction
- Driveway Reduction
- Cul-de-sac Reduction
- Building Footprint Reduction
- Parking Reduction

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).

- All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).
- Compacted areas were considered as impervious cover when calculating the **WQv Required**, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout).

Total WQv Required

. acre-feet

29. Identify the RR techniques (Area Reduction), RR techniques (Volume Reduction) and Standard SMPs with RRv Capacity in Table 1 (See Page 9) that were used to reduce the Total WQv Required (#28).

Also, provide in Table 1 the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use Tables 1 and 2 to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

Table 1 - Runoff Reduction (RR) Techniques and Standard Stormwater Management Practices (SMPs)

<u>RR Techniques (Area Reduction)</u>	<u>Total Contributing Area (acres)</u>		<u>Total Contributing Impervious Area(acres)</u>	
<input type="radio"/> Conservation of Natural Areas (RR-1) ...	<input type="text"/>	<input type="text"/>	and/or	<input type="text"/>
<input type="radio"/> Sheetflow to Riparian Buffers/Filters Strips (RR-2)	<input type="text"/>	<input type="text"/>	and/or	<input type="text"/>
<input type="radio"/> Tree Planting/Tree Pit (RR-3)	<input type="text"/>	<input type="text"/>	and/or	<input type="text"/>
<input type="radio"/> Disconnection of Rooftop Runoff (RR-4) ..	<input type="text"/>	<input type="text"/>	and/or	<input type="text"/>
<u>RR Techniques (Volume Reduction)</u>				
<input type="radio"/> Vegetated Swale (RR-5)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Rain Garden (RR-6)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Stormwater Planter (RR-7)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Rain Barrel/Cistern (RR-8)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Porous Pavement (RR-9)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Green Roof (RR-10)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<u>Standard SMPs with RRv Capacity</u>				
<input type="radio"/> Infiltration Trench (I-1)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Infiltration Basin (I-2)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Dry Well (I-3)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Underground Infiltration System (I-4)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Bioretention (F-5)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Dry Swale (O-1)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<u>Standard SMPs</u>				
<input type="radio"/> Micropool Extended Detention (P-1)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Wet Pond (P-2)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Wet Extended Detention (P-3)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Multiple Pond System (P-4)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Pocket Pond (P-5)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Surface Sand Filter (F-1)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Underground Sand Filter (F-2)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Perimeter Sand Filter (F-3)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Organic Filter (F-4)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Shallow Wetland (W-1)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Extended Detention Wetland (W-2)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Pond/Wetland System (W-3)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Pocket Wetland (W-4)	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Wet Swale (O-2)	<input type="text"/>	<input type="text"/>		<input type="text"/>

**Table 2 - Alternative SMPs
(DO NOT INCLUDE PRACTICES BEING
USED FOR PRETREATMENT ONLY)**

<u>Alternative SMP</u>	<u>Total Contributing Impervious Area(acres)</u>	
<input type="radio"/> Hydrodynamic	<input type="text"/>	<input type="text"/>
<input type="radio"/> Wet Vault	<input type="text"/>	<input type="text"/>
<input type="radio"/> Media Filter	<input type="text"/>	<input type="text"/>
<input type="radio"/> Other <input type="text"/>	<input type="text"/>	<input type="text"/>

Provide the name and manufacturer of the Alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Name

Manufacturer

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29.

Total RRv provided

. acre-feet

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28).

Yes No

If Yes, go to question 36.
If No, go to question 32.

32. Provide the Minimum RRv required based on HSG.
[Minimum RRv Required = (P)(0.95)(Ai)/12, Ai=(S)(Aic)]

Minimum RRv Required

. acre-feet

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

Yes No

If Yes, go to question 33.

Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.

If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv(=Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and 2 the total impervious area that contributes runoff to each practice selected.

Note: Use Tables 1 and 2 to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question 29.

WQv Provided
 . **acre-feet**

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - RRv provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a). .

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? **Yes** **No**

If Yes, go to question 36.
If No, sizing criteria has not been met, so NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv) required and provided or select waiver (36a), if applicable.

CPv Required . **acre-feet** **CPv Provided** . **acre-feet**

36a. The need to provide channel protection has been waived because:

- Site discharges directly to tidal waters or a fifth order or larger stream.
- Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (37a), if applicable.

Total Overbank Flood Control Criteria (Qp)

Pre-Development . **CFS** **Post-development** . **CFS**

Total Extreme Flood Control Criteria (Qf)

Pre-Development . **CFS** **Post-development** . **CFS**

40. Identify other DEC permits, existing and new, that are required for this project/facility.
- Air Pollution Control
 - Coastal Erosion
 - Hazardous Waste
 - Long Island Wells
 - Mined Land Reclamation
 - Solid Waste
 - Navigable Waters Protection / Article 15
 - Water Quality Certificate
 - Dam Safety
 - Water Supply
 - Freshwater Wetlands/Article 24
 - Tidal Wetlands
 - Wild, Scenic and Recreational Rivers
 - Stream Bed or Bank Protection / Article 15
 - Endangered or Threatened Species(Incidental Take Permit)
 - Individual SPDES
 - SPDES Multi-Sector GP
 - Other
 - None

41. Does this project require a US Army Corps of Engineers Wetland Permit? Yes No
If Yes, Indicate Size of Impact.

42. Is this project subject to the requirements of a regulated, traditional land use control MS4? Yes No
(If No, skip question 43)

43. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? Yes No

44. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.

APPENDIX K – NOTICE OF TERMINATION (NOT)

**New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505**

(NOTE: Submit completed form to address above)

**NOTICE OF TERMINATION for Storm Water Discharges Authorized
under the SPDES General Permit for Construction Activity**

Please indicate your permit identification number: NYR _____

I. Owner or Operator Information

1. Owner/Operator Name:

2. Street Address:

3. City/State/Zip:

4. Contact Person:

4a. Telephone:

4b. Contact Person E-Mail:

II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/Zip:

8. County:

III. Reason for Termination

9a. All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP. *Date final stabilization completed (month/year): _____

9b. Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR _____
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. Other (Explain on Page 2)

IV. Final Site Information:

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? yes no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? yes no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

**NOTICE OF TERMINATION for Storm Water Discharges Authorized under the
SPDES General Permit for Construction Activity - continued**

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? yes no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

- Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.
- Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).
- For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.
- For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? _____
(acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? yes
 no
(If Yes, complete section VI - "MS4 Acceptance" statement

V. Additional Information/Explanation:
(Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:

Title/Position:

Signature:

Date:

**NOTICE OF TERMINATION for Storm Water Discharges Authorized under the
SPDES General Permit for Construction Activity - continued**

VII. Qualified Inspector Certification - Final Stabilization:

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:

Title/Position:

Signature:

Date:

VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:

Title/Position:

Signature:

Date:

IX. Owner or Operator Certification

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:

Title/Position:

Signature:

Date:

(NYS DEC Notice of Termination - January 2015)

APPENDIX L – CERTIFICATION STATEMENTS

CONTRACTOR CERTIFICATION PAGE

Somerset Solar
Lake Road, Barker, NY 14012

“I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *Qualified Inspector* during a site inspection. I also understand that the *Owner or Operator* must comply with the terms and conditions of the most current version of the New York State Pollution Discharge Elimination System (“SPDES”) general permit for stormwater *discharges from construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations.”

Name of Contractor/Subcontractor

Phone Number

Address

City, State, Zip Code

Signature of Person Completing this Form

Date

Printed Name

Title

Name of Trained Contractor

Title

Responsibilities (check all that apply):

Erosion and Sediment Control Practices:

- Installation and/or construction
- Repair
- Replacement
- Inspection
- Maintenance

Post-construction SMPs:

- Construction
- Repair
- Inspection
- Operation & Maintenance

CONTRACTOR CERTIFICATION PAGE

Somerset Solar

Lake Road, Barker, NY 14012

“I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *Qualified Inspector* during a site inspection. I also understand that the *Owner or Operator* must comply with the terms and conditions of the most current version of the New York State Pollution Discharge Elimination System (“SPDES”) general permit for stormwater *discharges from construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations.”

Name of Contractor/Subcontractor

Phone Number

Address

City, State, Zip Code

Signature of Person Completing this Form

Date

Printed Name

Title

Name of Trained Contractor

Title

Responsibilities (check all that apply):

Erosion and Sediment Control Practices:

- Installation and/or construction
- Repair
- Replacement
- Inspection
- Maintenance

Post-construction SMPs:

- Construction
- Repair
- Inspection
- Operation & Maintenance

APPENDIX M – INSPECTION FORMS

I. PRE-CONSTRUCTION MEETING DOCUMENTS

Project Name _____
Permit No. _____ **Date of Authorization** _____
Name of Operator _____
Prime Contractor _____

a. Preamble to Site Assessment and Inspections

The Following Information To Be Read By All Person’s Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified inspector¹ conduct an assessment of the site prior to the commencement of construction² and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State’s standards and meets all Federal, State and local erosion and sediment control requirements. A preconstruction meeting should be held to review all of the SWPPP requirements with construction personnel.

When construction starts, site inspections shall be conducted by the qualified inspector at least every 7 calendar days. The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified inspector perform a final site inspection. The qualified inspector shall certify that the site has undergone final stabilization³ using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 Refer to “Qualified Inspector” inspection requirements in the current SPDES General Permit for Stormwater Discharges from Construction Activity for complete list of inspection requirements.
2 “Commencement of construction” means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.
3 “Final stabilization” means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.



b. Pre-construction Site Assessment Checklist

(NOTE: Provide comments below as necessary)

1. Notice of Intent, SWPPP, and Contractors Certification:

Yes No NA

- Has a Notice of Intent been filed with the NYS Department of Conservation?
- Is the SWPPP on-site? Where? _____
- Is the Plan current? What is the latest revision date? _____
- Is a copy of the NOI (with brief description) onsite? Where? _____
- Have all contractors involved with stormwater related activities signed a contractor's certification?

2. Resource Protection

Yes No NA

- Construction limits are clearly flagged or fenced.
- Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.
- Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

3. Surface Water Protection

Yes No NA

- Clean stormwater runoff has been diverted from areas to be disturbed.
- Bodies of water located either on site or in the vicinity of the site have been identified and protected.
- Appropriate practices to protect on-site or downstream surface water are installed.
- Clearing and grading operations are divided into areas <5 acres.

4. Stabilized Construction Access

Yes No NA

- A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.
- Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.
- Sediment tracked onto public streets is removed or cleaned on a regular basis.

5. Sediment Controls

Yes No NA

- Silt fence material and installation comply with the standard drawing and specifications.
- Silt fences are installed at appropriate spacing intervals.
- Sediment/detention basin was installed as first land disturbing activity.
- Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

Yes No NA

- The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.
- The plan is contained in the SWPPP on page _____
- Appropriate materials to control spills are onsite. Where? _____



II. CONSTRUCTION DURATION INSPECTIONS

a. Directions:

Inspection Forms will be filled out during the entire construction phase of the project.

Required Elements:

- 1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;
- 2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;
- 3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;
- 4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);
- 5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and
- 6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.



Date of Inspection: _____

Time on site: _____

Time off site: _____

Name and title of person(s) performing inspection: _____

Description of weather: _____

Description of soil conditions: _____

Qualified Inspector (print name)

Qualified Inspector Signature

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.



Maintaining Water Quality

Yes No NA

- No substantial visible contrast to natural conditions at the outfalls caused by an increase in turbidity.
- Are outfalls free from residue from oil and floating substances, visible oil film, or globules or grease?
- All disturbance is within the limits of the approved plans.
- Are receiving lakes/bays, streams, and/or wetlands free from silt from project?

Housekeeping

1. General Site Conditions

Yes No NA

- Is construction site litter, debris and spoils appropriately managed?
- Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- Construction has not been impacting the adjacent property.
- Is dust adequately controlled?

2. Temporary Stream Crossing

Yes No NA

- Maximum diameter pipes necessary to span creek without dredging are installed.
- Installed non-woven geotextile fabric beneath approaches.
- Is fill composed of aggregate (no earth or soil)?
- Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

3. Stabilized Construction Access

Yes No NA

- Stone is clean enough to effectively remove mud from vehicles.
- Installed per standards and specifications?
- Does all traffic use the stabilized entrance to enter and leave site?
- Is adequate drainage provided to prevent ponding at entrance?

Runoff Control Practices

1. Excavation Dewatering

Yes No NA

- Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
- Clean water from upstream pool is being pumped to the downstream pool.
- Sediment laden water from work area is being discharged to a silt-trapping device.
- Constructed upstream berm with one-foot minimum freeboard.



Runoff Control Practices (continued)

2. Flow Spreader

Yes No NA

- Installed per plan.
- Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
- Flow sheets out of level spreader without erosion on downstream edge.

3. Interceptor Dikes and Swales

Yes No NA

- Installed per plan with minimum side slopes 2H:1V or flatter.
- Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
- Sediment-laden runoff directed to sediment trapping structure

4. Stone Check Dam

Yes No NA

- Is channel stable? (flow is not eroding soil underneath or around the structure).
- Check is in good condition (rocks in place and no permanent pools behind the structure).[]
- Has accumulated sediment been removed?

5. Rock Outlet Protection

Yes No NA

- Installed per plan.
- Installed concurrently with pipe installation.

Soil Stabilization

1. Topsoil and Spoil Stockpiles

Yes No NA

- Stockpiles are stabilized with vegetation and/or mulch.
- Sediment control is installed at the toe of the slope.

2. Revegetation

Yes No NA

- Temporary seedings and mulch have been applied to idle areas.
- 4 inches minimum of topsoil has been applied under permanent seedings

Sediment Control Practices

1. Silt Fence and Linear Barriers

Yes No NA

- Installed on Contour, 10 feet from toe of slope (not across conveyance channels).
- Joints constructed by wrapping the two ends together for continuous support.
- Fabric buried 6 inches minimum.
- Posts are stable, fabric is tight and without rips or frayed areas.
Sediment accumulation is ___% of design capacity.



Sediment Control Practices (continued)

2. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated; Filter Sock or Manufactured practices)

Yes No NA

- Installed concrete blocks lengthwise so open ends face outward, not upward.
 - Placed wire screen between No. 3 crushed stone and concrete blocks.
 - Drainage area is 1acre or less.
 - Excavated area is 900 cubic feet.
 - Excavated side slopes should be 2:1.
 - 2" x 4" frame is constructed and structurally sound.
 - Posts 3-foot maximum spacing between posts.
 - Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
 - Posts are stable, fabric is tight and without rips or frayed areas.
 - Manufactured insert fabric is free of tears and punctures.
 - Filter Sock is not torn or flattened and fill material is contained within the mesh sock.
- Sediment accumulation ___% of design capacity.

3. Temporary Sediment Trap

Yes No NA

- Outlet structure is constructed per the approved plan or drawing.
 - Geotextile fabric has been placed beneath rock fill.
 - Sediment trap slopes and disturbed areas are stabilized.
- Sediment accumulation is ___% of design capacity.

4. Temporary Sediment Basin

Yes No NA

- Basin and outlet structure constructed per the approved plan.
 - Basin side slopes are stabilized with seed/mulch.
 - Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
 - Sediment basin dewatering pool is dewatering at appropriate rate.
- Sediment accumulation is ___% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design. All practices shall be maintained in accordance with their respective standards.

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.



APPENDIX N – INSPECTION REPORTS & PHOTO LOG