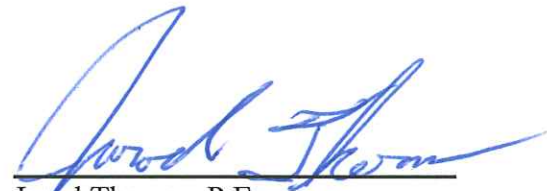


STORMWATER MANAGEMENT REPORT
FOR
MONROE-SICKLERVILLE ROAD LANDFILL SOLAR
BLOCK 901, LOTS 2 & 3
TOWNSHIP OF MONROE, GLOUCESTER COUNTY, NEW JERSEY
CES-3864
August 2020


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Prepared for:

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II. Appendices

- A. Pre Drainage Area Maps and Pre Drainage Conditions Storm Hydrographs
- B. Post Drainage Area Maps and Post-Development Conditions Storm Hydrographs
- C. Pre-Development and Post-Development Comparison Hydrographs

I Executive Summary

Consulting Engineer Services (CES) has prepared this Stormwater Management Report for the Monroe-Sicklerville Road Landfill Solar project. The applicant proposes to construct elevated solar panels on the cap of the closed landfill. The elevated solar panels are considered a pervious surface pursuant to New Jersey Law S-921, however, the concrete bases for the panels are not.

This report describes the existing stormwater conditions of the site and the potential effects of the proposed development. This report is intended to be used as part of the application review process, in conjunction with the site plan drawings.

The site has frontage on Williamstown-Sicklerville Road (CR 536 Spur). The site currently consists of a solid waste landfill and areas of freshwater wetlands.

Description of Existing Drainage Watersheds

The subject project area limits are comprised of two (2) drainage watersheds. Drainage maps of the existing conditions are included in this report entitled “Pre-Developed Drainage Area Map”. A general description of the existing watersheds and their approximate routes of flow are described below.

- Watershed EX1 consists of 9.562 acres that flows north to a wetlands area that discharges to a tributary of Four Mile Branch. The area is comprised of grasses on the top and sides of the existing landfill and the existing gravel roads.
- Watershed EX2 consists of 5.408 acres that flow south to the gutter line on CR 536 Spur and is conveyed via inlets to a bridge/culvert for Four Mile Branch. The area is comprised of grasses on the top and sides of the existing landfill and the existing gravel roads.

The stormwater drainage conditions for the subject property were analyzed using the method described in Technical Release No. 20 (TR-20), published by the U.S. Soil Conservation Service. Pervious and impervious areas were calculated separately. Unconnected impervious cover was calculated using the methods described in Technical Release No. 55 (TR-55).

Soils information from the Gloucester County Soil Survey were not utilized for the project due to the nature of the site's use as a landfill. Instead, HSG B soils were assumed for all project limits based on the following proposed closure documents:

- Township of Monroe Sanitary Landfill Closure Plan prepared by ARH Associates dated July 28, 2017;
- Closure/Post Closure Plan for Monroe Township Sanitary Landfill Facility #0811A prepared by ARH Associates dated September 13, 2017;
- Sanitary Landfill Closure/Post-Closure Approval issued by NJDEP on February 22, 2018 (Permit No. LCB830001).

Per these documents, the cap material for the landfill shall be a permeable sandy loam that shall have a minimum slope of 0.5% in the proposed condition.

Peak rates of runoff were determined for the 2-year, 10-year and 100-year storm events to facilitate assessment of impacts on downstream properties pursuant to applicable regulations. The following is a listing of the existing watersheds and the peak runoff rates:

Peak Runoff Rates for Existing Watersheds

Watershed From Site	Q₂ (cfs)	Q₁₀ (cfs)	Q₁₀₀ (cfs)
EX-1	1.47	5.28	15.78
EX-2	0.83	2.98	8.89
Combined Flow From Site	2.30	8.26	24.67

Description of Proposed Site Characteristics

Stormwater runoff under the developed conditions will be nearly identical to existing except for the addition of the proposed elevated solar panels, foundations, and a concrete equipment pad necessary to support the solar system.

Drainage maps of the proposed conditions are included in this report entitled “Post-Development Drainage Area Map”. The Post-Development Drainage Area Map reflects the changes to the watershed areas as a result of the plans. The updated results are summarized within the Appendices of this report.

Summary of Methodology

The project is designed to comply with NJAC 7:8 (Stormwater Management regulations promulgated by the NJDEP) and §175-140 “Stormwater Management” of the Monroe Township Comprehensive Land Management Ordinance.

As shown on the plans, the project includes 4-foot diameter tubs with poured-in-place concrete on the surface of the landfill. The tubs result in additional impervious cover as compared to conventional ground-mounted arrays, but this type of foundation system is required on landfills to prevent penetration of the cap. Based on information provided by the applicant, similar landfill solar projects have been designed with racking systems that include a pair of tubs every 23.07’ along each row of panels. To account for potential variations in the final electrical and racking design, we have conservatively assumed tubs every 22’ for calculation purposes. Based on the proposed layout shown on the plans, it is conservatively estimated that this will require 970 foundation tubs. Additionally, a concrete pad will be necessary for system electrical equipment. Therefore, the proposed impervious cover for the site will be increased by approximately 12,564 SF, which exceeds the 0.25-acre threshold (10,890 SF) for a Major Development as defined by NJAC 7:8.

Description of Proposed Drainage Watersheds

A general description of the proposed watersheds and their approximate routes of flow are described below.

- Watershed PR1 consists of 9.562 acres that flows north to a wetlands area that discharges to a tributary for Four Mile Branch. The area is comprised of grasses on the top and sides of the existing closed landfill, the existing gravel roads, and the unconnected impervious area from the elevated solar panel foundations.
- Watershed PR2 consists of 5.408 acres that flow south to the gutter line with CR 536 and is conveyed via inlets to a bridge culvert for Four Mile Branch. The area is comprised of grasses on the top and sides of the existing landfill, the existing gravel roads, unconnected impervious areas from the elevated solar panel foundations, and the proposed concrete pad.

Discharges from the proposed watersheds were determined using the requirements of TR-55 as it relates to the unconnected impervious areas. A summary of the proposed discharge from the site is tabulated below.

Calculation of Proposed Peak Runoff from the Site – Drainage Area 1

Design Storm	Existing (EX1) (cfs)	Proposed (PR1) (cfs)	▲ (cfs)
2-Year Storm	1.47	1.47	0.00
10-Year Storm	5.28	5.28	0.00
100-Year Storm	15.78	15.78	0.00

Calculation of Proposed Peak Runoff from the Site – Drainage Area 2

Design Storm	Existing (EX2) (cfs)	Proposed (PR2) (cfs)	▲ (cfs)
2-Year Storm	0.83	0.83	0.00
10-Year Storm	2.98	2.98	0.00
100-Year Storm	8.89	8.89	0.00

The proposed development does not increase impervious area by a sufficient amount to generate a measurable impact in the proposed condition. Furthermore, a comparison of the pre- and post-development hydrographs indicates that at no point does the post-development hydrograph exceed the pre-development hydrograph, thereby meeting the requirements for stormwater runoff per NJAC 7:8-5.4(a)3i.

Groundwater Recharge – High Pollutant Loading Area

The site is an existing landfill with an approved landfill closure plan and is therefore exempt from groundwater recharge per NJAC 7:8-5.4(a)2iii(1).

Water Quality – Grassed Surfaces

The site is a capped landfill with stormwater discharges occurring only from new impervious surfaces that are not traversed by vehicular traffic. Therefore, pursuant to NJDEP guidance documents, stormwater discharges from these surfaces do not need to be treated for TSS removal.

Off-Site Stability Summary

In accordance with *The Standards for Soil Erosion and Sediment Control in New Jersey*, Section 21, where there is no well-defined waterway, stability must be demonstrated. Stability can be demonstrated by one of the methods in Section 21, a, b or c. Choice a has been used for the EX1/PR1 drainage area:

- a) Retain preexisting runoff characteristics. Do not increase the amount and rate of runoff for the development and do not concentrate flows.

For this project, peak flows in the proposed condition do not exceed existing by a measurable amount.

Choice c has been used for the EX2/PR2 drainage area:

- c) Construct a channel or install a pipe to a stable condition (i.e. flat marsh, pond, lake, sizeable body of water, pit, etc.).

For this project, an existing swale and gutter along CR 536 will receive and convey the flows to existing inlets and piping.

Landfill Closure Approval

It may also be noted that the Sanitary Landfill Closure/Post-Closure Approval issued by NJDEP on February 22, 2018 (Permit No. LCB830001) included a proposed solar facility. The approval documents included a “Solar Array Site Plan” and “Solar Array Site Details” prepared by Adams, Rehmann & Heggan Associates (ARH) dated December 2017. The plans included 3.67’ x 8.75’ concrete ballast foundations for the racking, as well as 2’ x 4’ concrete blocks for combiner equipment on the surface of the landfill. Assuming a concrete ballast unit every 22 feet (consistent with the spacing of tub pairs for the proposed facility), the ARH solar layout would require approximately 636 concrete ballast units (or 1,272 tubs if tub design) and approximately 35 combiner blocks, totaling 20,405 SF of impervious cover. Therefore, we note that the proposed 12,564 SF of impervious cover for the subject project is approximately 38% less than the impervious cover for the solar layout that was approved by NJDEP in the Closure Plan.

Conclusions

As detailed above, the proposed development meets the requirements for a Major Development. As described above, the site either complies with or is exempt from the requirements for runoff quantity, groundwater recharge, and water quality.

Runoff quantity control is demonstrated by the post-developed hydrograph not exceeding the existing at any point. The site is exempt from the groundwater recharge requirements. Finally, new impervious from the site are not drivable surfaces and thus does not generate runoff necessitating treatment for water quality.

Finally, the proposed impervious cover is significantly less than the impervious cover that was approved by NJDEP as part of the Landfill Closure Plan.

Therefore, the project as designed complies with the applicable regulations.

APPENDIX A

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EX-1 DESIGN NOTES:

-GOOD GRASS COVER

-9.563 ACRES
+12,849 SF GRAVEL
+403,700 GRASS

-Tc=33.4 MIN (NO PROPOSED SLOPES
AVAILABLE, ASSUMED SLOPES BASED ON
CLOSURE DRAWING CROSS-SECTIONS -
ARH DATED APRIL 2017)
+0.50% ON TOP SHELF
+MATCH EX. SLOPE ON SIDESLOPE

WQ: 0.00 CFS
2-YR: 1.47 CFS
10-YR: 5.28 CFS
100-YR: 15.78 CFS

EX-2 DESIGN NOTES:

-GOOD GRASS COVER

-5.41 ACRES
+5,625 SF GRAVEL
+229,982 SF GRASS

-Tc=33.6 MIN (NO PROPOSED
SLOPES AVAILABLE, ASSUMED
SLOPES BASED ON CLOSURE
DRAWING CROSS-SECTIONS - ARH
DATED APRIL 2017)
+0.50% ON TOP SHELF
+MATCH EX. SLOPE ON SIDESLOPE

WQ: 0.00 CFS
2-YR: 0.83 CFS
10-YR: 2.98 CFS
100-YR: 8.89 CFS

EX-1

EX-2

PRE-DEVELOPED DRAINAGE AREA MAP

GRAPHIC SCALE

0' 100' 200' 300'



SCALE: 1" = 100'

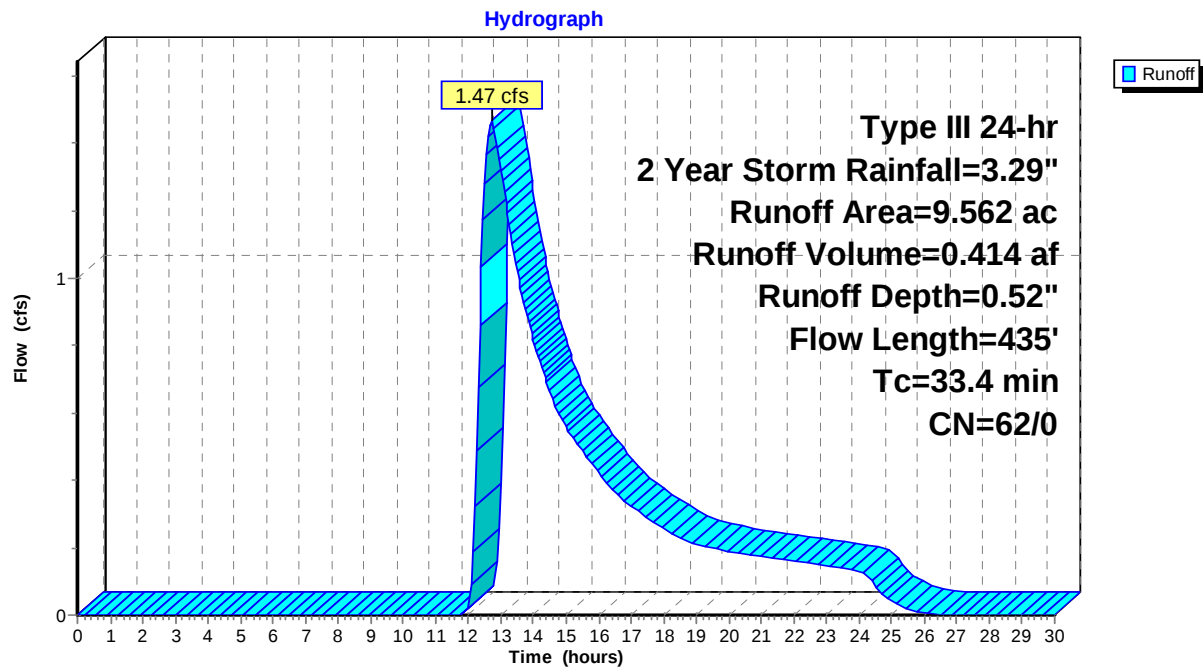
Summary for Subcatchment EX1: EX-1

Runoff = 1.47 cfs @ 12.71 hrs, Volume= 0.414 af, Depth= 0.52"

Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt
Type III 24-hr 2 Year Storm Rainfall=3.29"

Area (ac)	CN	Description
9.267	61	>75% Grass cover, Good, HSG B
0.295	85	Gravel roads, HSG B
9.562	62	Weighted Average
9.562	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
8.4	248	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.5	87	0.2100	3.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.4	435	Total			

Subcatchment EX1: EX-1

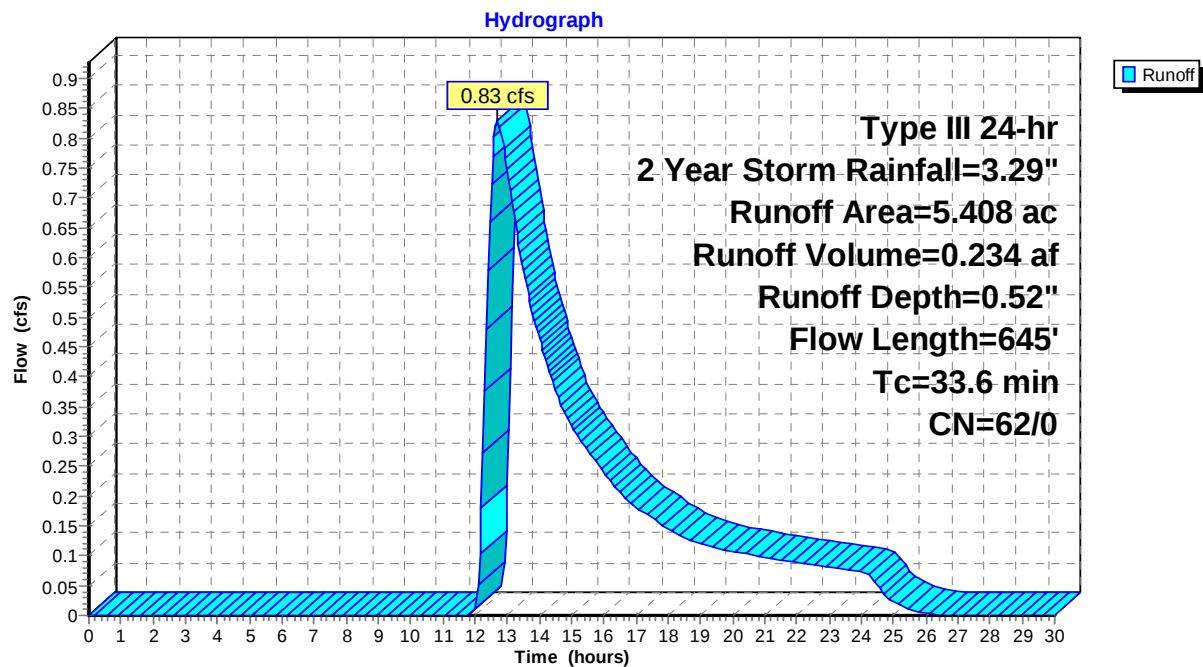
Summary for Subcatchment EX2: EX-2

Runoff = 0.83 cfs @ 12.71 hrs, Volume= 0.234 af, Depth= 0.52"

Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt
Type III 24-hr 2 Year Storm Rainfall=3.29"

Area (ac)	CN	Description
5.241	61	>75% Grass cover, Good, HSG B
0.167	85	Gravel roads, HSG B
5.408	62	Weighted Average
5.408	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
2.4	72	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.6	80	0.0875	2.07		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.1	393	0.0052	1.08		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.6	645	Total			

Subcatchment EX2: EX-2

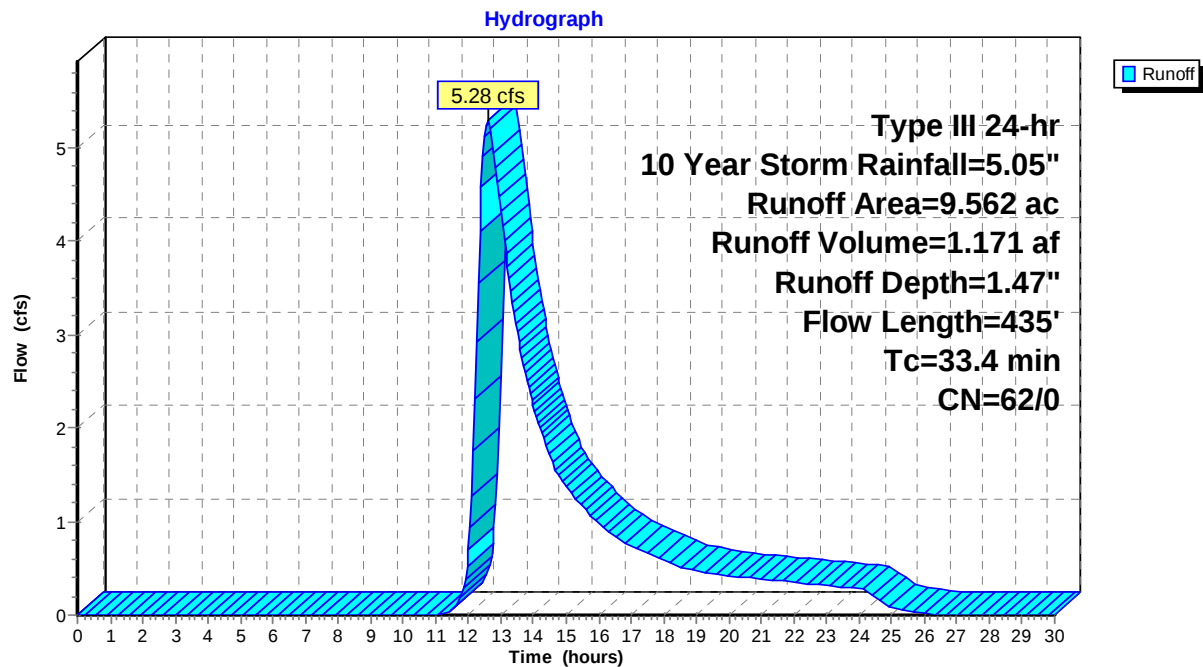
Summary for Subcatchment EX1: EX-1

Runoff = 5.28 cfs @ 12.61 hrs, Volume= 1.171 af, Depth= 1.47"

Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt
Type III 24-hr 10 Year Storm Rainfall=5.05"

Area (ac)	CN	Description
9.267	61	>75% Grass cover, Good, HSG B
0.295	85	Gravel roads, HSG B
9.562	62	Weighted Average
9.562	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
8.4	248	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.5	87	0.2100	3.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.4	435	Total			

Subcatchment EX1: EX-1

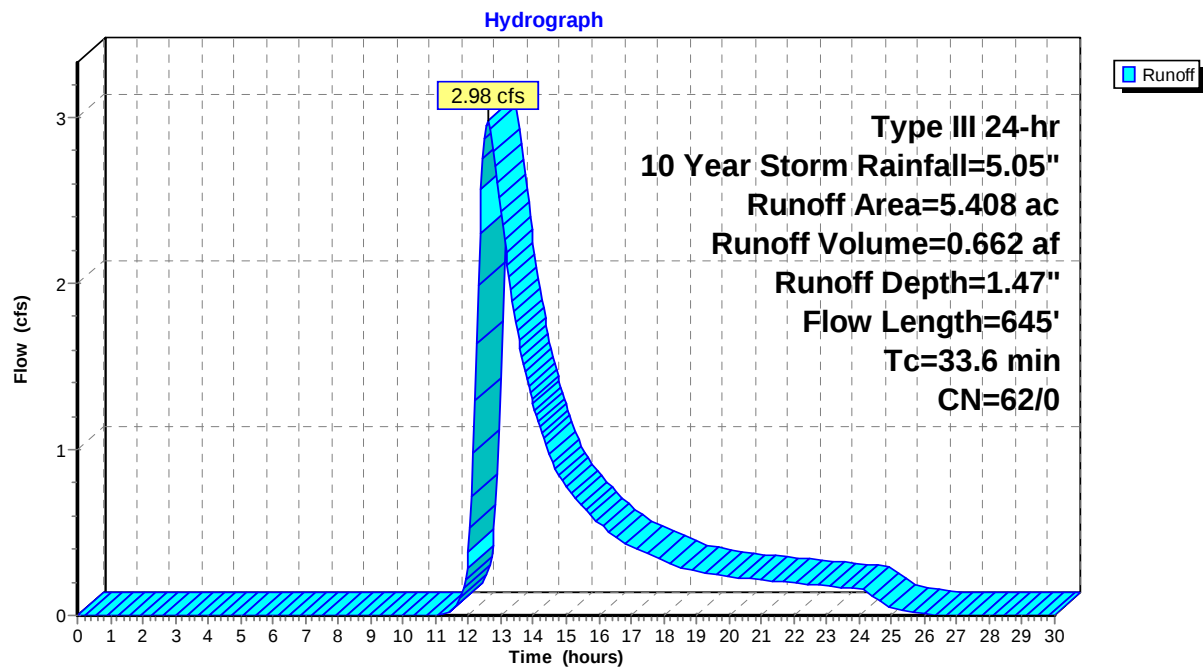
Summary for Subcatchment EX2: EX-2

Runoff = 2.98 cfs @ 12.61 hrs, Volume= 0.662 af, Depth= 1.47"

Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt
Type III 24-hr 10 Year Storm Rainfall=5.05"

Area (ac)	CN	Description
5.241	61	>75% Grass cover, Good, HSG B
0.167	85	Gravel roads, HSG B
5.408	62	Weighted Average
5.408	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
2.4	72	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.6	80	0.0875	2.07		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.1	393	0.0052	1.08		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.6	645	Total			

Subcatchment EX2: EX-2

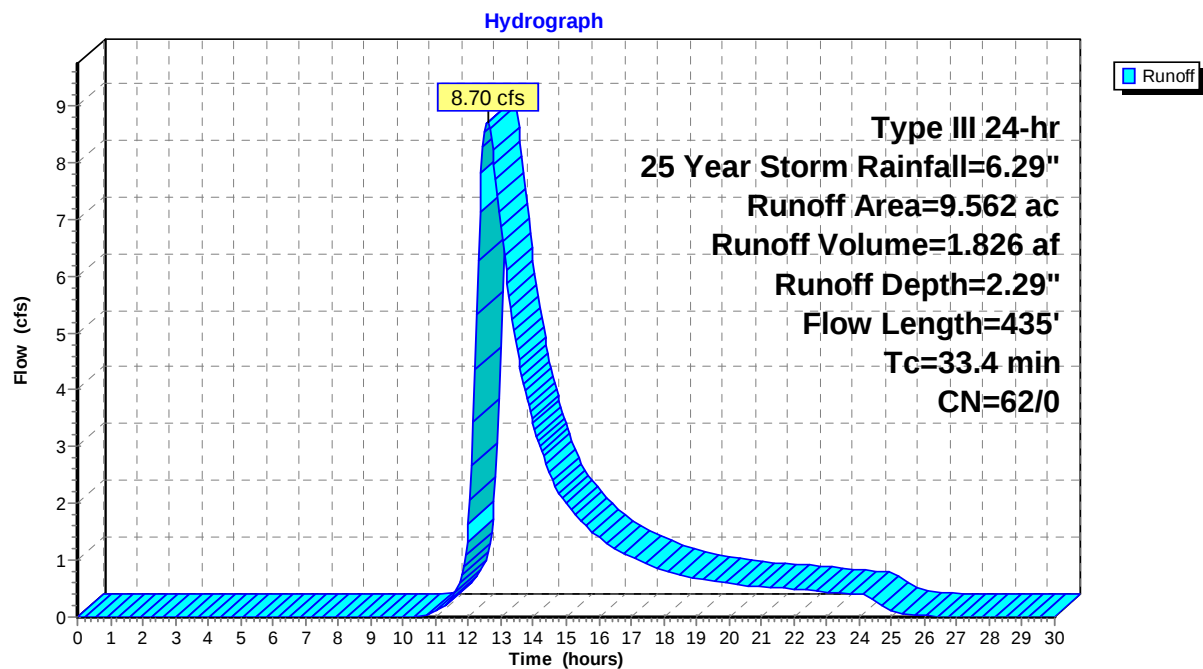
Summary for Subcatchment EX1: EX-1

Runoff = 8.70 cfs @ 12.58 hrs, Volume= 1.826 af, Depth= 2.29"

Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt
Type III 24-hr 25 Year Storm Rainfall=6.29"

Area (ac)	CN	Description
9.267	61	>75% Grass cover, Good, HSG B
0.295	85	Gravel roads, HSG B
9.562	62	Weighted Average
9.562	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
8.4	248	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.5	87	0.2100	3.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.4	435	Total			

Subcatchment EX1: EX-1

3864 Storm (2020-08-14)

Type III 24-hr 25 Year Storm Rainfall=6.29"

Prepared by CES

Printed 8/14/2020

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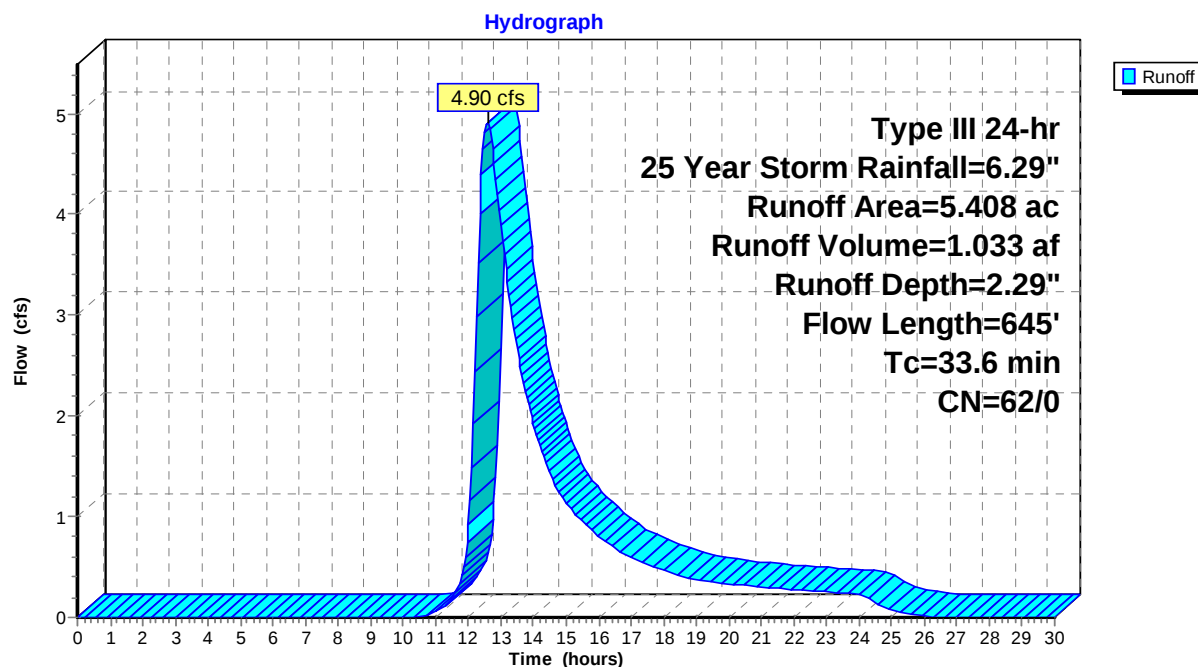
Summary for Subcatchment EX2: EX-2

Runoff = 4.90 cfs @ 12.58 hrs, Volume= 1.033 af, Depth= 2.29"

Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt
Type III 24-hr 25 Year Storm Rainfall=6.29"

Area (ac)	CN	Description
5.241	61	>75% Grass cover, Good, HSG B
0.167	85	Gravel roads, HSG B
5.408	62	Weighted Average
5.408	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
2.4	72	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.6	80	0.0875	2.07		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.1	393	0.0052	1.08		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.6	645	Total			

Subcatchment EX2: EX-2

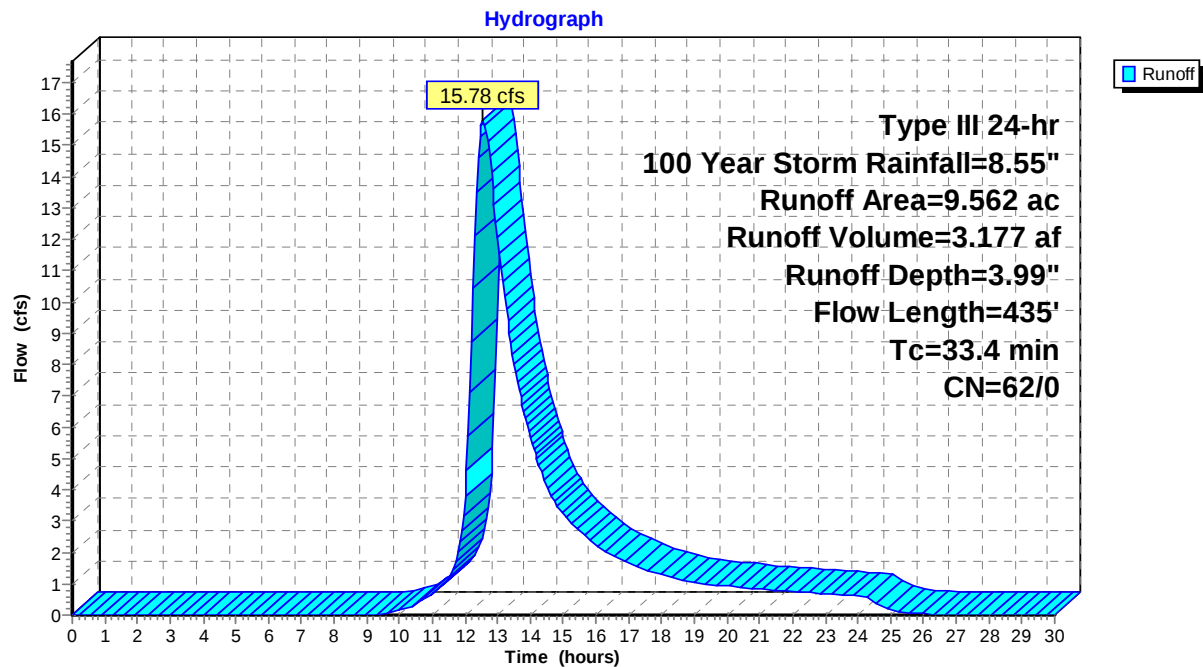
Summary for Subcatchment EX1: EX-1

Runoff = 15.78 cfs @ 12.56 hrs, Volume= 3.177 af, Depth= 3.99"

Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt
Type III 24-hr 100 Year Storm Rainfall=8.55"

Area (ac)	CN	Description
9.267	61	>75% Grass cover, Good, HSG B
0.295	85	Gravel roads, HSG B
9.562	62	Weighted Average
9.562	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
8.4	248	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.5	87	0.2100	3.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.4	435	Total			

Subcatchment EX1: EX-1

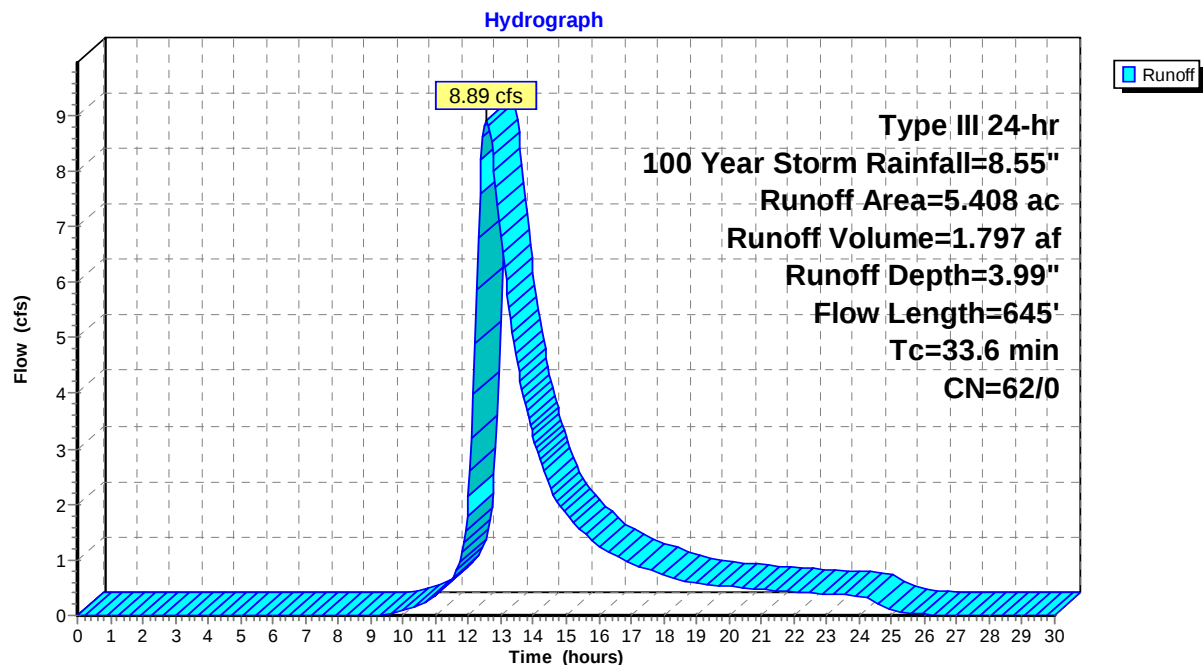
Summary for Subcatchment EX2: EX-2

Runoff = 8.89 cfs @ 12.56 hrs, Volume= 1.797 af, Depth= 3.99"

Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt
Type III 24-hr 100 Year Storm Rainfall=8.55"

Area (ac)	CN	Description
5.241	61	>75% Grass cover, Good, HSG B
0.167	85	Gravel roads, HSG B
5.408	62	Weighted Average
5.408	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
2.4	72	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.6	80	0.0875	2.07		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.1	393	0.0052	1.08		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.6	645	Total			

Subcatchment EX2: EX-2

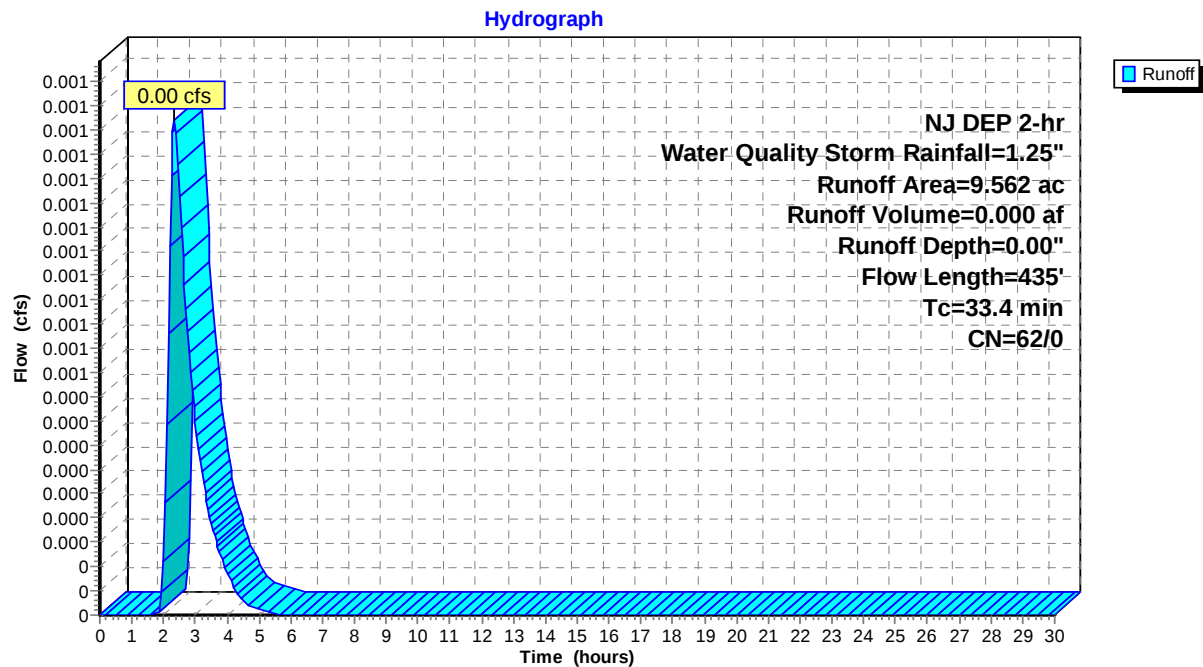
Summary for Subcatchment EX1: EX-1

Runoff = 0.00 cfs @ 2.35 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt
NJ DEP 2-hr Water Quality Storm Rainfall=1.25"

Area (ac)	CN	Description
9.267	61	>75% Grass cover, Good, HSG B
0.295	85	Gravel roads, HSG B
9.562	62	Weighted Average
9.562	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
8.4	248	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.5	87	0.2100	3.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.4	435	Total			

Subcatchment EX1: EX-1

Summary for Subcatchment EX2: EX-2

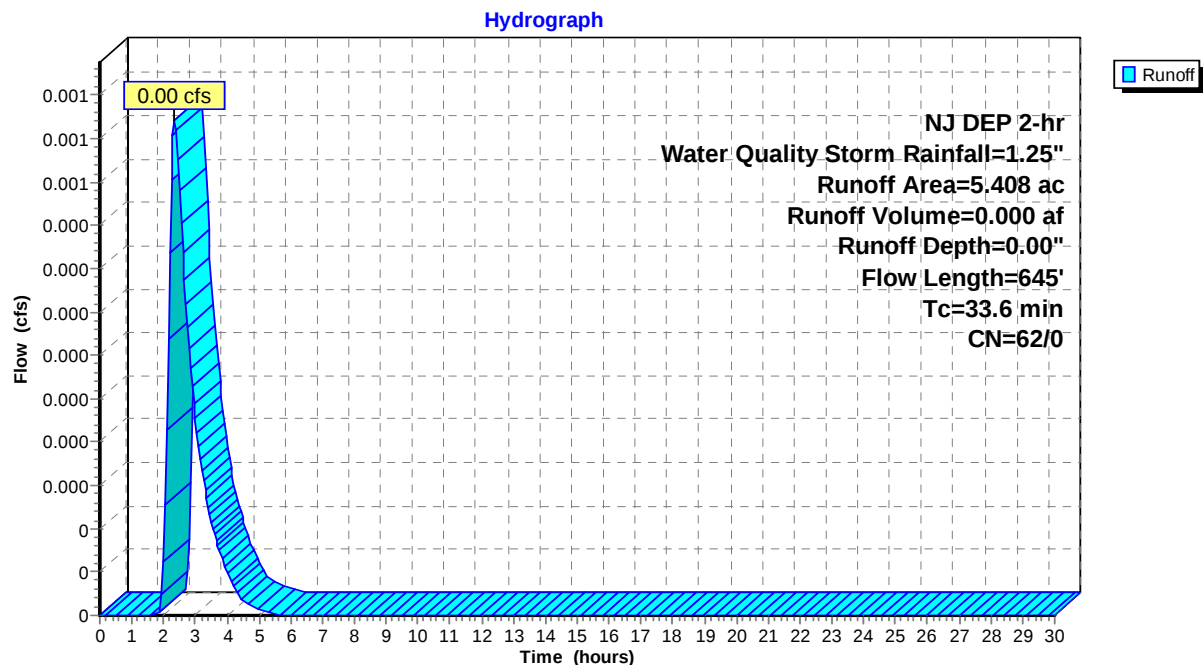
Runoff = 0.00 cfs @ 2.36 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt
NJ DEP 2-hr Water Quality Storm Rainfall=1.25"

Area (ac)	CN	Description
5.241	61	>75% Grass cover, Good, HSG B
0.167	85	Gravel roads, HSG B
5.408	62	Weighted Average
5.408	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
2.4	72	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.6	80	0.0875	2.07		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.1	393	0.0052	1.08		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.6	645	Total			

Subcatchment EX2: EX-2



APPENDIX B

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PR-1 DESIGN NOTES:

-619 TUBS SITUATED IN DRAINAGE AREA (7,779 SF IMPERVIOUS)

-GOOD GRASS COVER

-9.563 ACRES
+7,779 SF IMP (TUBS)
+12,849 SF GRAVEL
+395,921 GRASS

-Tc=33.4 MIN (NO PROPOSED SLOPES AVAILABLE, ASSUMED SLOPES
BASED ON CLOSURE DRAWING CROSS-SECTIONS - ARH DATED APRIL
2017)

+0.50% ON TOP SHELF
+MATCH EX. SLOPE ON SIDESLOPE

STORM	PEAK RUNOFF
WQ:	0.00 CFS
2-YR:	1.47 CFS
10-YR:	5.28 CFS
25-YR:	8.70 CFS
100-YR:	15.78 CFS

PR-2 DESIGN NOTES:

-351 TUBS SITUATED IN DRAINAGE AREA (4,411
SF IMPERVIOUS)

-GOOD GRASS COVER

-5.41 ACRES
+4,786 SF IMP (TUBS AND CONC PAD)
+7,286 SF GRAVEL
+223,535 GRASS

-Tc=33.6 MIN (NO PROPOSED SLOPES AVAILABLE,
ASSUMED SLOPES BASED ON CLOSURE DRAWING
CROSS-SECTIONS - ARH DATED APRIL 2017)

+0.9% ON TOP SHELF
+MATCH EX. SLOPE ON SIDESLOPE

WQ:	0.00 CFS
2-YR:	0.83 CFS
10-YR:	2.98 CFS
25-YR:	4.91 CFS
100-YR:	8.89 CFS

POST-DEVELOPED DRAINAGE AREA MAP

GRAPHIC SCALE

0' 100' 200' 300'



SCALE: 1" = 100'

3864 Storm (2020-08-14)

Prepared by CES

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Type III 24-hr 2 Year Storm Rainfall=3.29"

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Page 1

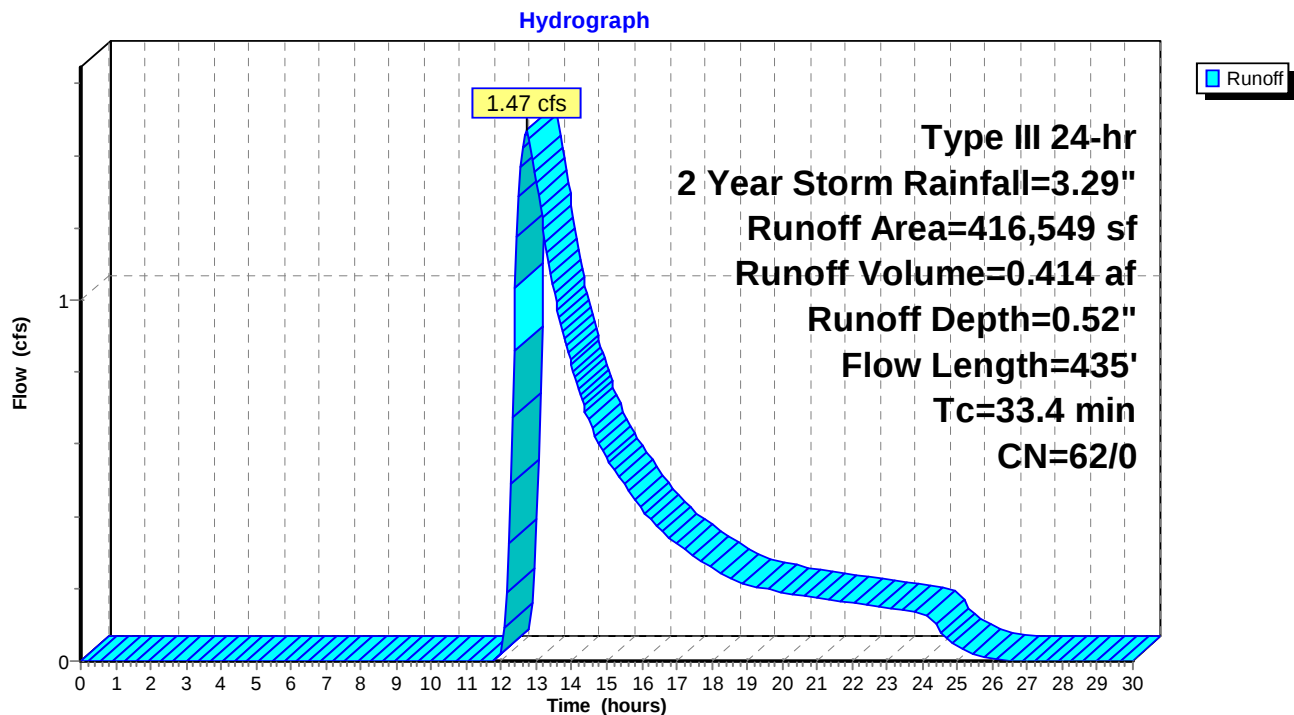
Summary for Subcatchment PR1: PR-1

Runoff = 1.47 cfs @ 12.71 hrs, Volume= 0.414 af, Depth= 0.52"

Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs, Type III 24-hr 2 Year Storm Rainfall=3.29"

Area (sf)	CN	Description
395,921	61	>75% Grass cover, Good, HSG B
12,849	85	Gravel roads, HSG B
7,779	98	Unconnected pavement, HSG B
416,549	62	Weighted Average
416,549	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
8.4	248	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.5	87	0.2100	3.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.4	435	Total			

Subcatchment PR1: PR-1

3864 Storm (2020-08-14)

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Type III 24-hr 2 Year Storm Rainfall=3.29"

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Summary for Subcatchment PR2: PR-2

Runoff = 0.83 cfs @ 12.71 hrs, Volume= 0.234 af, Depth= 0.52"

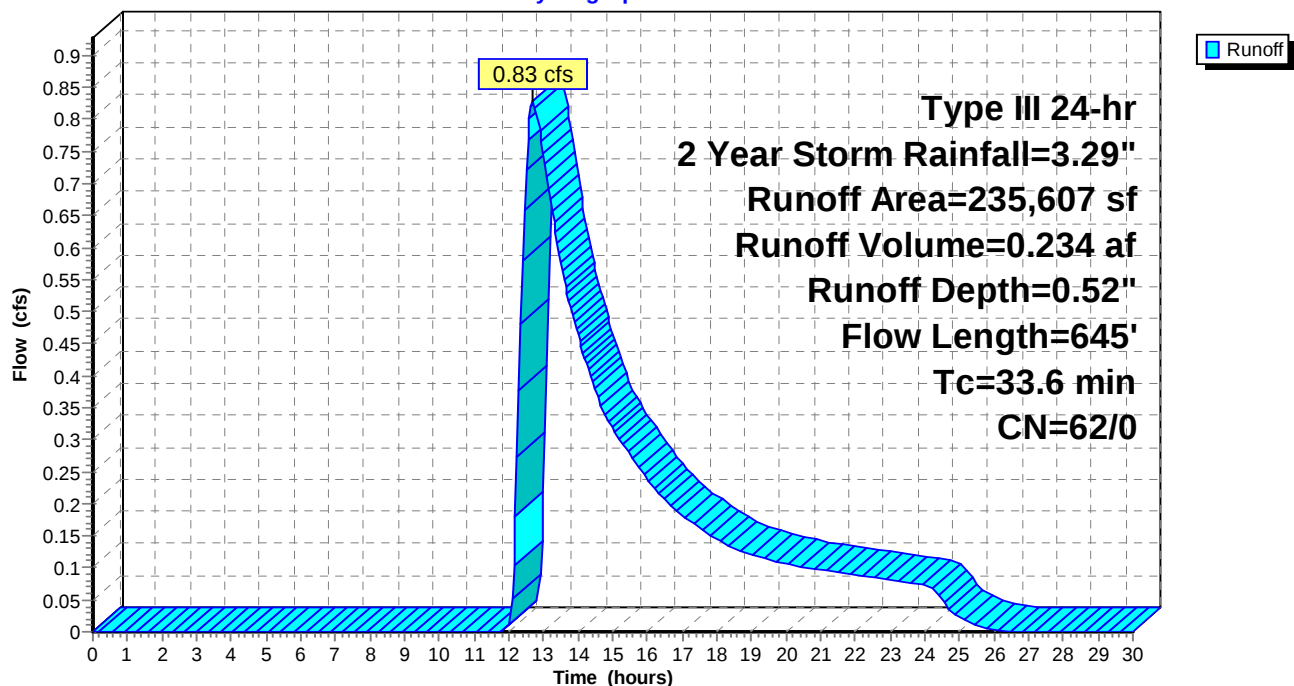
Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.1
Type III 24-hr 2 Year Storm Rainfall=3.29"

Area (sf)	CN	Description
223,535	61	>75% Grass cover, Good, HSG B
4,786	98	Unconnected pavement, HSG B
7,286	85	Gravel roads, HSG B
235,607	62	Weighted Average
235,607	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
2.4	72	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.6	80	0.0875	2.07		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.1	393	0.0052	1.08		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.6	645	Total			

Subcatchment PR2: PR-2

Hydrograph



Summary for Subcatchment PR1: PR-1

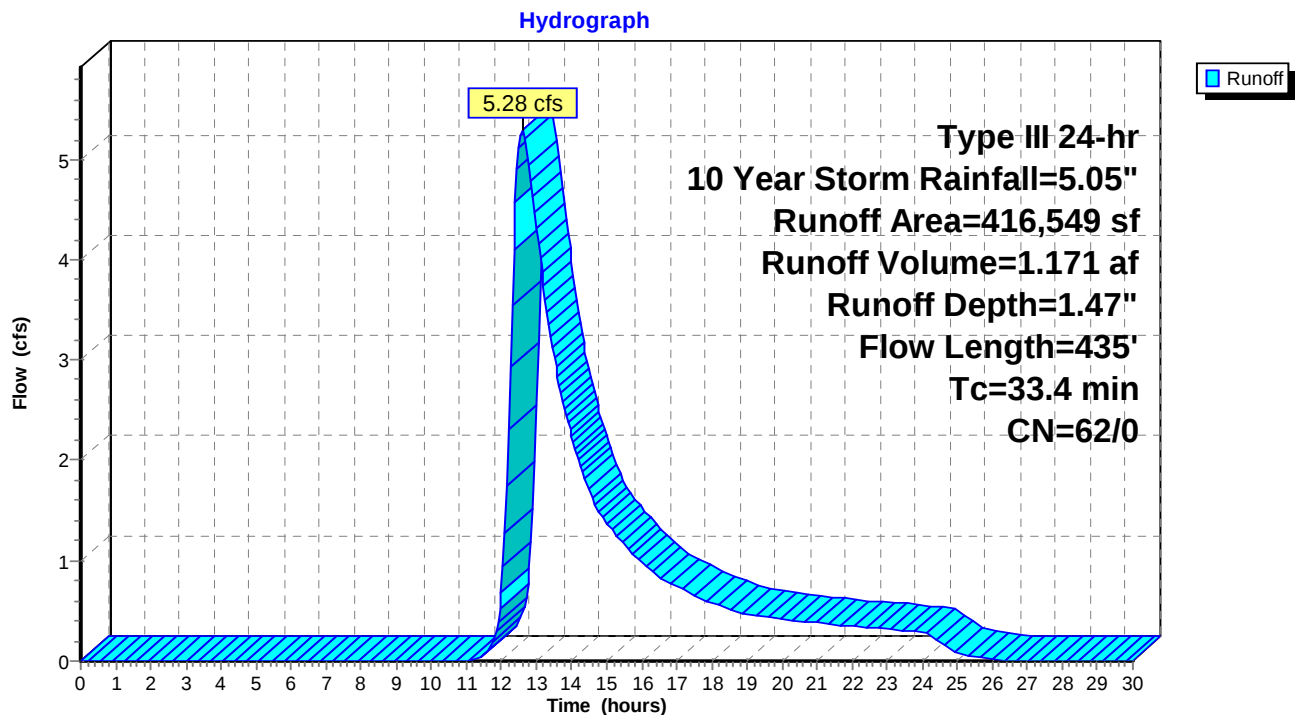
Runoff = 5.28 cfs @ 12.61 hrs, Volume= 1.171 af, Depth= 1.47"

Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.01
Type III 24-hr 10 Year Storm Rainfall=5.05"

Area (sf)	CN	Description
395,921	61	>75% Grass cover, Good, HSG B
12,849	85	Gravel roads, HSG B
7,779	98	Unconnected pavement, HSG B
416,549	62	Weighted Average
416,549	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
8.4	248	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.5	87	0.2100	3.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.4	435	Total			

Subcatchment PR1: PR-1



3864 Storm (2020-08-14)

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Type III 24-hr 10 Year Storm Rainfall=5.05"

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Summary for Subcatchment PR2: PR-2

Runoff = 2.98 cfs @ 12.61 hrs, Volume= 0.662 af, Depth= 1.47"

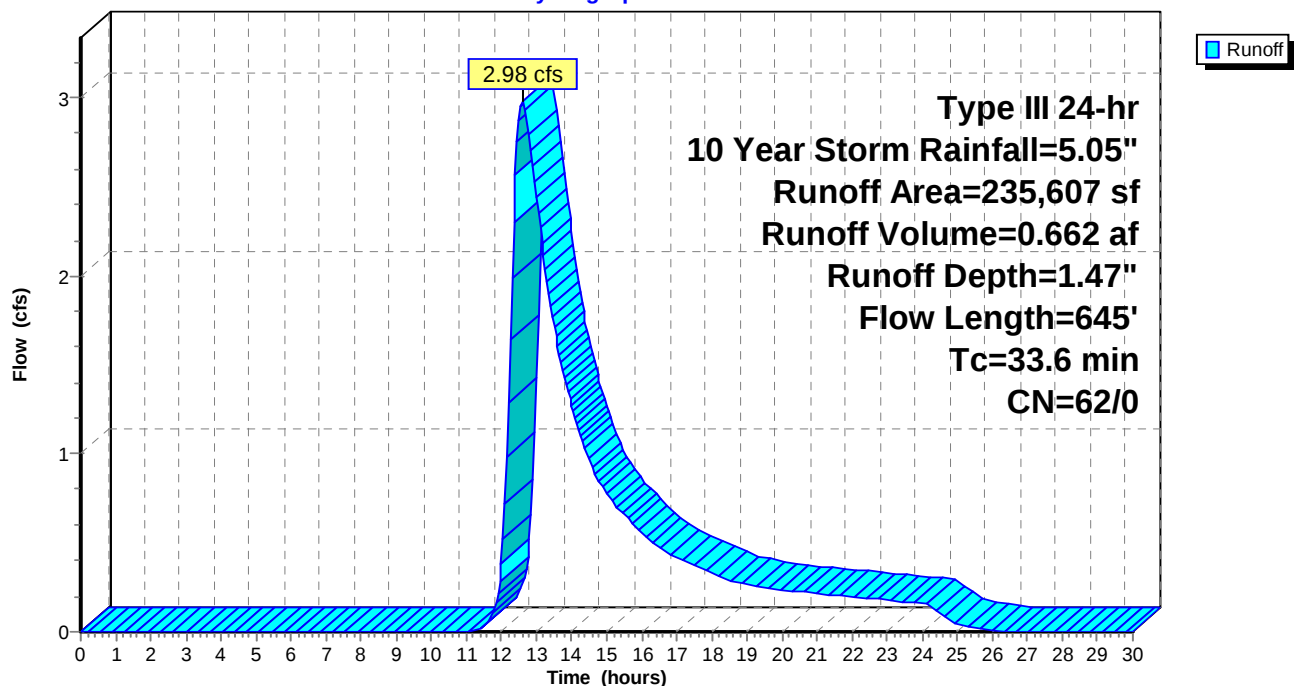
Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs, Type III 24-hr 10 Year Storm Rainfall=5.05"

Area (sf)	CN	Description
223,535	61	>75% Grass cover, Good, HSG B
4,786	98	Unconnected pavement, HSG B
7,286	85	Gravel roads, HSG B
235,607	62	Weighted Average
235,607	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
2.4	72	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.6	80	0.0875	2.07		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.1	393	0.0052	1.08		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.6	645	Total			

Subcatchment PR2: PR-2

Hydrograph



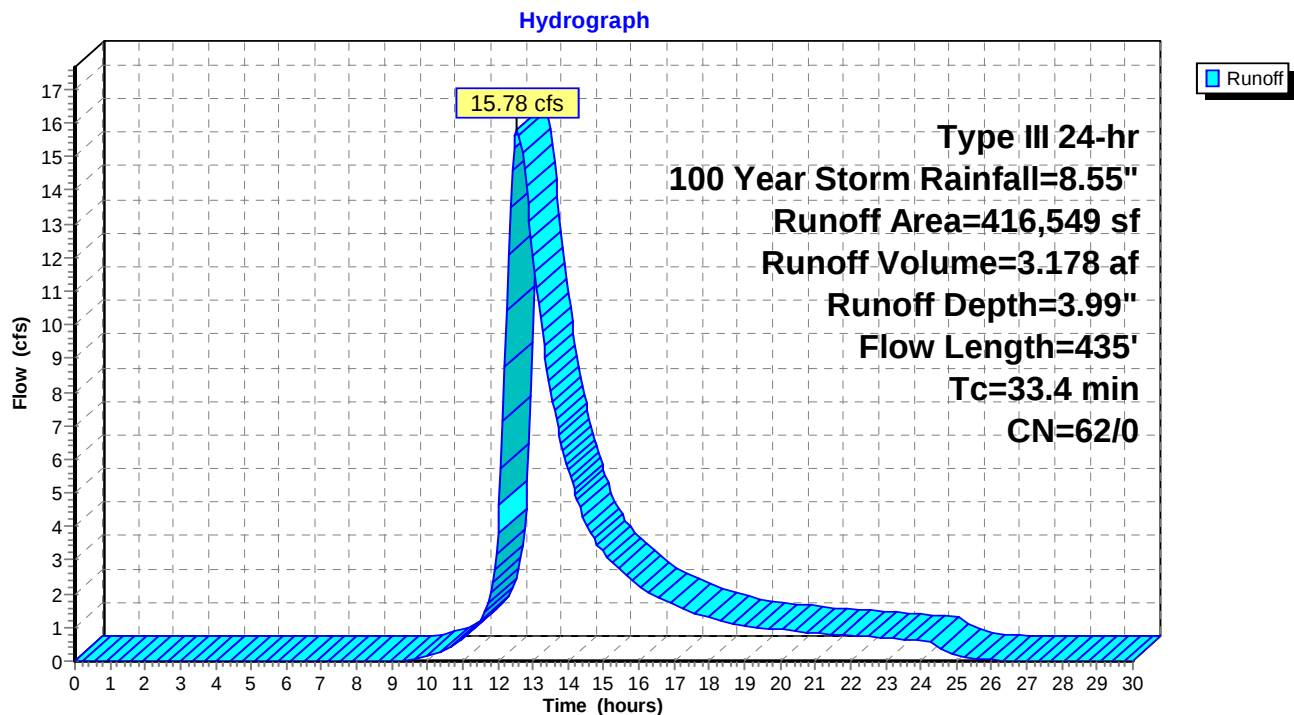
Summary for Subcatchment PR1: PR-1

Runoff = 15.78 cfs @ 12.56 hrs, Volume= 3.178 af, Depth= 3.99"

Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs, Type III 24-hr 100 Year Storm Rainfall=8.55"

Area (sf)	CN	Description
395,921	61	>75% Grass cover, Good, HSG B
12,849	85	Gravel roads, HSG B
7,779	98	Unconnected pavement, HSG B
416,549	62	Weighted Average
416,549	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
8.4	248	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.5	87	0.2100	3.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
33.4	435	Total			

Subcatchment PR1: PR-1

3864 Storm (2020-08-14)

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Type III 24-hr 100 Year Storm Rainfall=8.55"

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Summary for Subcatchment PR2: PR-2

Runoff = 8.89 cfs @ 12.56 hrs, Volume= 1.797 af, Depth= 3.99"

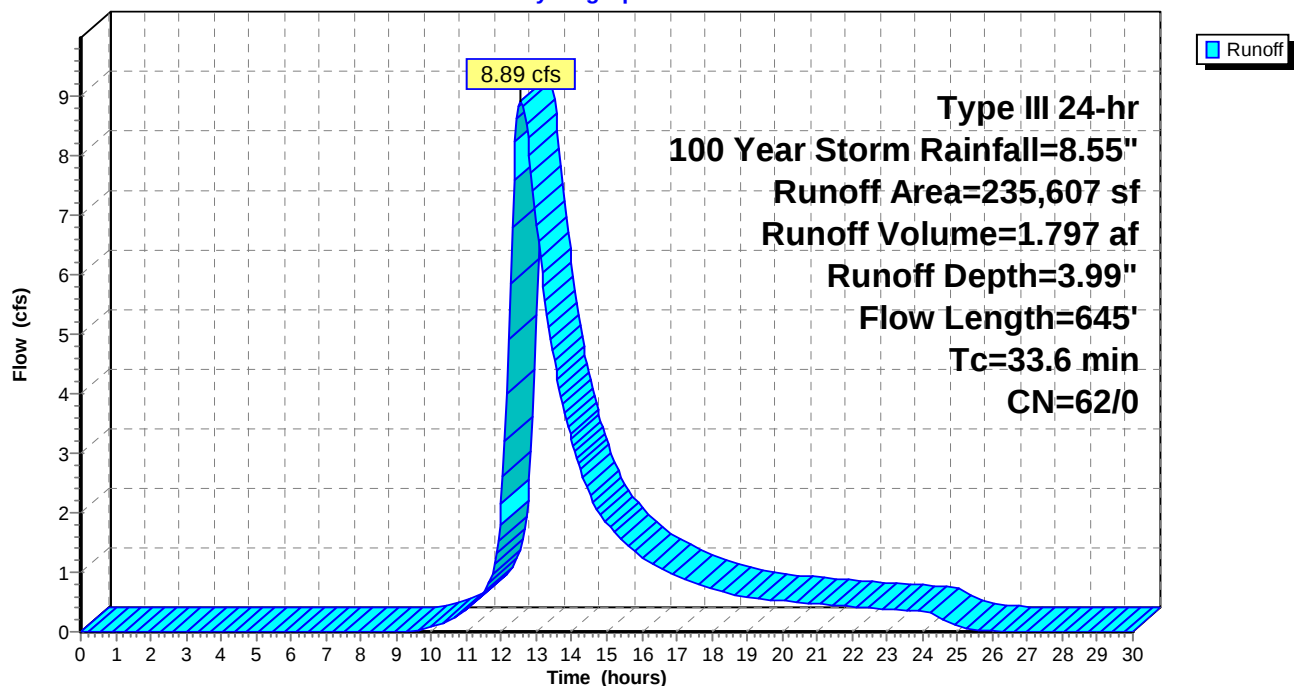
Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100 Year Storm Rainfall=8.55"

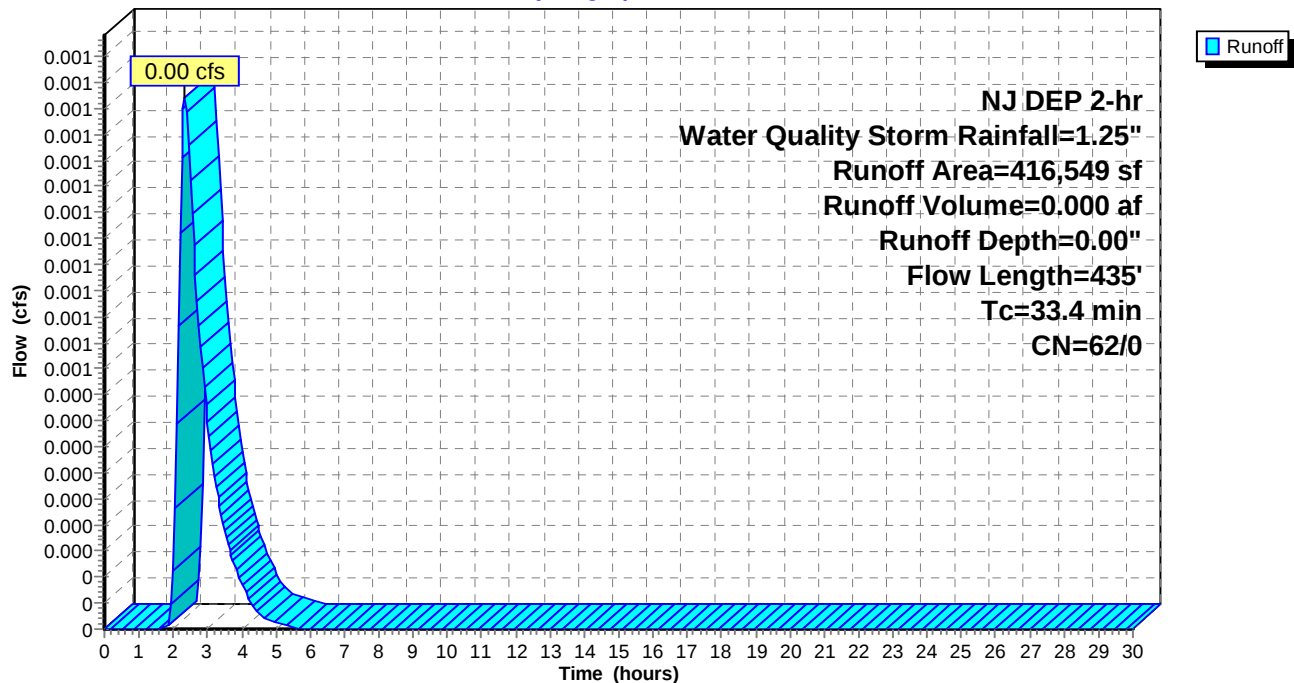
Area (sf)	CN	Description
223,535	61	>75% Grass cover, Good, HSG B
4,786	98	Unconnected pavement, HSG B
7,286	85	Gravel roads, HSG B
235,607	62	Weighted Average
235,607	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
2.4	72	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.6	80	0.0875	2.07		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.1	393	0.0052	1.08		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.6	645	Total			

Subcatchment PR2: PR-2

Hydrograph





Summary for Subcatchment PR2: PR-2

Runoff = 0.00 cfs @ 2.36 hrs, Volume= 0.000 af, Depth= 0.00"

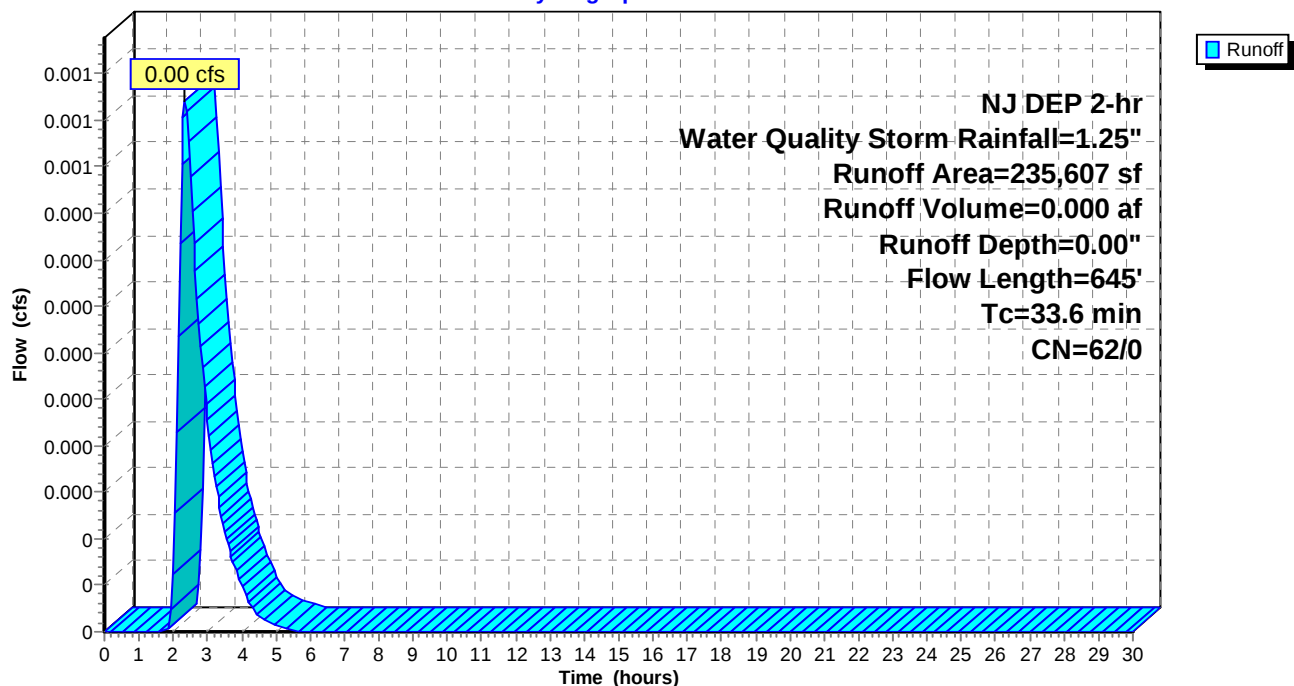
Runoff by SCS TR-20 method, UH=Delmarva, Split Pervious/Imperv. UI as Pervious, Time Span= 0.00-30.00 hrs, dt= 0.00
NJ DEP 2-hr Water Quality Storm Rainfall=1.25"

Area (sf)	CN	Description
223,535	61	>75% Grass cover, Good, HSG B
4,786	98	Unconnected pavement, HSG B
7,286	85	Gravel roads, HSG B
235,607	62	Weighted Average
235,607	62	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	100	0.0050	0.07		Sheet Flow, Grass: Dense n= 0.240 P2= 3.29"
2.4	72	0.0050	0.49		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.6	80	0.0875	2.07		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.1	393	0.0052	1.08		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
33.6	645	Total			

Subcatchment PR2: PR-2

Hydrograph



APPENDIX C

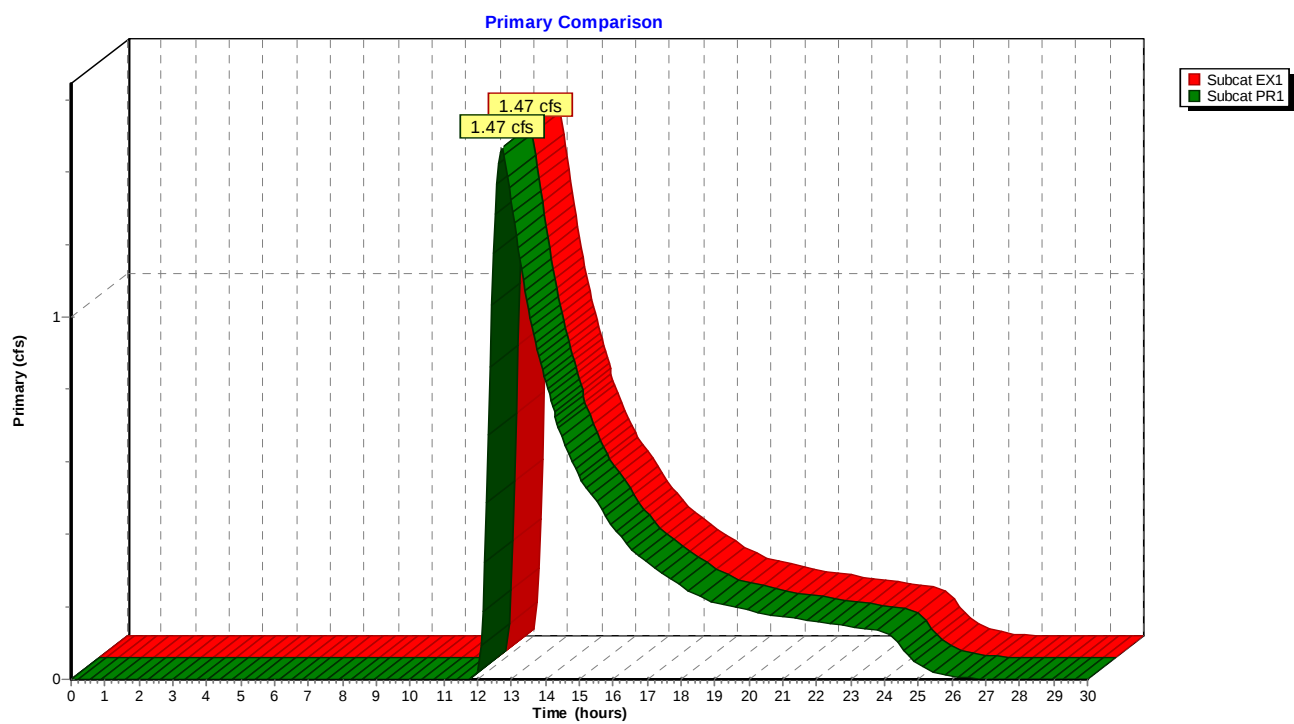
3864 Storm (2020-08-14)

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Type III 24-hr 2 Year Storm Rainfall=3.29"

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3864 Storm (2020-08-14)

Type III 24-hr 2 Year Storm Rainfall=3.29"

Prepared by CES

Printed 8/14/2020

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Primary Comparison

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
0.00	0.00	0.00	2.70	0.00	0.00
0.05	0.00	0.00	2.75	0.00	0.00
0.10	0.00	0.00	2.80	0.00	0.00
0.15	0.00	0.00	2.85	0.00	0.00
0.20	0.00	0.00	2.90	0.00	0.00
0.25	0.00	0.00	2.95	0.00	0.00
0.30	0.00	0.00	3.00	0.00	0.00
0.35	0.00	0.00	3.05	0.00	0.00
0.40	0.00	0.00	3.10	0.00	0.00
0.45	0.00	0.00	3.15	0.00	0.00
0.50	0.00	0.00	3.20	0.00	0.00
0.55	0.00	0.00	3.25	0.00	0.00
0.60	0.00	0.00	3.30	0.00	0.00
0.65	0.00	0.00	3.35	0.00	0.00
0.70	0.00	0.00	3.40	0.00	0.00
0.75	0.00	0.00	3.45	0.00	0.00
0.80	0.00	0.00	3.50	0.00	0.00
0.85	0.00	0.00	3.55	0.00	0.00
0.90	0.00	0.00	3.60	0.00	0.00
0.95	0.00	0.00	3.65	0.00	0.00
1.00	0.00	0.00	3.70	0.00	0.00
1.05	0.00	0.00	3.75	0.00	0.00
1.10	0.00	0.00	3.80	0.00	0.00
1.15	0.00	0.00	3.85	0.00	0.00
1.20	0.00	0.00	3.90	0.00	0.00
1.25	0.00	0.00	3.95	0.00	0.00
1.30	0.00	0.00	4.00	0.00	0.00
1.35	0.00	0.00	4.05	0.00	0.00
1.40	0.00	0.00	4.10	0.00	0.00
1.45	0.00	0.00	4.15	0.00	0.00
1.50	0.00	0.00	4.20	0.00	0.00
1.55	0.00	0.00	4.25	0.00	0.00
1.60	0.00	0.00	4.30	0.00	0.00
1.65	0.00	0.00	4.35	0.00	0.00
1.70	0.00	0.00	4.40	0.00	0.00
1.75	0.00	0.00	4.45	0.00	0.00
1.80	0.00	0.00	4.50	0.00	0.00
1.85	0.00	0.00	4.55	0.00	0.00
1.90	0.00	0.00	4.60	0.00	0.00
1.95	0.00	0.00	4.65	0.00	0.00
2.00	0.00	0.00	4.70	0.00	0.00
2.05	0.00	0.00	4.75	0.00	0.00
2.10	0.00	0.00	4.80	0.00	0.00
2.15	0.00	0.00	4.85	0.00	0.00
2.20	0.00	0.00	4.90	0.00	0.00
2.25	0.00	0.00	4.95	0.00	0.00
2.30	0.00	0.00	5.00	0.00	0.00
2.35	0.00	0.00	5.05	0.00	0.00
2.40	0.00	0.00	5.10	0.00	0.00
2.45	0.00	0.00	5.15	0.00	0.00
2.50	0.00	0.00	5.20	0.00	0.00
2.55	0.00	0.00	5.25	0.00	0.00
2.60	0.00	0.00	5.30	0.00	0.00
2.65	0.00	0.00	5.35	0.00	0.00

3864 Storm (2020-08-14)

Type III 24-hr 2 Year Storm Rainfall=3.29"

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Primary Comparison (continued)

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
5.40	0.00	0.00	8.10	0.00	0.00
5.45	0.00	0.00	8.15	0.00	0.00
5.50	0.00	0.00	8.20	0.00	0.00
5.55	0.00	0.00	8.25	0.00	0.00
5.60	0.00	0.00	8.30	0.00	0.00
5.65	0.00	0.00	8.35	0.00	0.00
5.70	0.00	0.00	8.40	0.00	0.00
5.75	0.00	0.00	8.45	0.00	0.00
5.80	0.00	0.00	8.50	0.00	0.00
5.85	0.00	0.00	8.55	0.00	0.00
5.90	0.00	0.00	8.60	0.00	0.00
5.95	0.00	0.00	8.65	0.00	0.00
6.00	0.00	0.00	8.70	0.00	0.00
6.05	0.00	0.00	8.75	0.00	0.00
6.10	0.00	0.00	8.80	0.00	0.00
6.15	0.00	0.00	8.85	0.00	0.00
6.20	0.00	0.00	8.90	0.00	0.00
6.25	0.00	0.00	8.95	0.00	0.00
6.30	0.00	0.00	9.00	0.00	0.00
6.35	0.00	0.00	9.05	0.00	0.00
6.40	0.00	0.00	9.10	0.00	0.00
6.45	0.00	0.00	9.15	0.00	0.00
6.50	0.00	0.00	9.20	0.00	0.00
6.55	0.00	0.00	9.25	0.00	0.00
6.60	0.00	0.00	9.30	0.00	0.00
6.65	0.00	0.00	9.35	0.00	0.00
6.70	0.00	0.00	9.40	0.00	0.00
6.75	0.00	0.00	9.45	0.00	0.00
6.80	0.00	0.00	9.50	0.00	0.00
6.85	0.00	0.00	9.55	0.00	0.00
6.90	0.00	0.00	9.60	0.00	0.00
6.95	0.00	0.00	9.65	0.00	0.00
7.00	0.00	0.00	9.70	0.00	0.00
7.05	0.00	0.00	9.75	0.00	0.00
7.10	0.00	0.00	9.80	0.00	0.00
7.15	0.00	0.00	9.85	0.00	0.00
7.20	0.00	0.00	9.90	0.00	0.00
7.25	0.00	0.00	9.95	0.00	0.00
7.30	0.00	0.00	10.00	0.00	0.00
7.35	0.00	0.00	10.05	0.00	0.00
7.40	0.00	0.00	10.10	0.00	0.00
7.45	0.00	0.00	10.15	0.00	0.00
7.50	0.00	0.00	10.20	0.00	0.00
7.55	0.00	0.00	10.25	0.00	0.00
7.60	0.00	0.00	10.30	0.00	0.00
7.65	0.00	0.00	10.35	0.00	0.00
7.70	0.00	0.00	10.40	0.00	0.00
7.75	0.00	0.00	10.45	0.00	0.00
7.80	0.00	0.00	10.50	0.00	0.00
7.85	0.00	0.00	10.55	0.00	0.00
7.90	0.00	0.00	10.60	0.00	0.00
7.95	0.00	0.00	10.65	0.00	0.00
8.00	0.00	0.00	10.70	0.00	0.00
8.05	0.00	0.00	10.75	0.00	0.00

3864 Storm (2020-08-14)

Type III 24-hr 2 Year Storm Rainfall=3.29"

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Primary Comparison (continued)

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
10.80	0.00	0.00	13.50	1.02	1.02
10.85	0.00	0.00	13.55	1.00	1.00
10.90	0.00	0.00	13.60	0.97	0.97
10.95	0.00	0.00	13.65	0.95	0.95
11.00	0.00	0.00	13.70	0.93	0.93
11.05	0.00	0.00	13.75	0.91	0.91
11.10	0.00	0.00	13.80	0.89	0.89
11.15	0.00	0.00	13.85	0.87	0.87
11.20	0.00	0.00	13.90	0.85	0.85
11.25	0.00	0.00	13.95	0.84	0.84
11.30	0.00	0.00	14.00	0.82	0.82
11.35	0.00	0.00	14.05	0.80	0.80
11.40	0.00	0.00	14.10	0.79	0.79
11.45	0.00	0.00	14.15	0.77	0.77
11.50	0.00	0.00	14.20	0.75	0.75
11.55	0.00	0.00	14.25	0.74	0.74
11.60	0.00	0.00	14.30	0.72	0.72
11.65	0.00	0.00	14.35	0.71	0.71
11.70	0.00	0.00	14.40	0.69	0.69
11.75	0.00	0.00	14.45	0.68	0.68
11.80	0.00	0.00	14.50	0.66	0.66
11.85	0.00	0.00	14.55	0.65	0.65
11.90	0.00	0.00	14.60	0.64	0.64
11.95	0.00	0.00	14.65	0.63	0.63
12.00	0.01	0.01	14.70	0.61	0.61
12.05	0.04	0.04	14.75	0.60	0.60
12.10	0.09	0.09	14.80	0.59	0.59
12.15	0.19	0.19	14.85	0.58	0.58
12.20	0.32	0.32	14.90	0.58	0.58
12.25	0.49	0.49	14.95	0.57	0.57
12.30	0.68	0.68	15.00	0.56	0.56
12.35	0.86	0.86	15.05	0.55	0.55
12.40	1.03	1.03	15.10	0.54	0.54
12.45	1.17	1.17	15.15	0.54	0.54
12.50	1.28	1.28	15.20	0.53	0.53
12.55	1.37	1.37	15.25	0.52	0.52
12.60	1.42	1.42	15.30	0.52	0.52
12.65	1.46	1.46	15.35	0.51	0.51
12.70	1.47	1.47	15.40	0.50	0.50
12.75	1.46	1.46	15.45	0.50	0.50
12.80	1.44	1.44	15.50	0.49	0.49
12.85	1.42	1.42	15.55	0.48	0.48
12.90	1.39	1.39	15.60	0.48	0.48
12.95	1.36	1.36	15.65	0.47	0.47
13.00	1.32	1.32	15.70	0.46	0.46
13.05	1.29	1.29	15.75	0.45	0.46
13.10	1.26	1.26	15.80	0.45	0.45
13.15	1.23	1.23	15.85	0.44	0.44
13.20	1.19	1.19	15.90	0.44	0.44
13.25	1.16	1.16	15.95	0.43	0.43
13.30	1.13	1.13	16.00	0.42	0.42
13.35	1.10	1.10	16.05	0.42	0.42
13.40	1.07	1.07	16.10	0.41	0.41
13.45	1.05	1.05	16.15	0.40	0.40

3864 Storm (2020-08-14)

Type III 24-hr 2 Year Storm Rainfall=3.29"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
16.20	0.40	0.40	18.90	0.21	0.21
16.25	0.39	0.39	18.95	0.21	0.21
16.30	0.39	0.39	19.00	0.21	0.21
16.35	0.38	0.38	19.05	0.21	0.21
16.40	0.37	0.37	19.10	0.21	0.21
16.45	0.37	0.37	19.15	0.21	0.21
16.50	0.36	0.36	19.20	0.21	0.21
16.55	0.36	0.36	19.25	0.20	0.20
16.60	0.36	0.36	19.30	0.20	0.20
16.65	0.35	0.35	19.35	0.20	0.20
16.70	0.35	0.35	19.40	0.20	0.20
16.75	0.34	0.34	19.45	0.20	0.20
16.80	0.34	0.34	19.50	0.20	0.20
16.85	0.33	0.33	19.55	0.20	0.20
16.90	0.33	0.33	19.60	0.20	0.20
16.95	0.33	0.33	19.65	0.20	0.20
17.00	0.32	0.32	19.70	0.19	0.19
17.05	0.32	0.32	19.75	0.19	0.19
17.10	0.32	0.32	19.80	0.19	0.19
17.15	0.31	0.31	19.85	0.19	0.19
17.20	0.31	0.31	19.90	0.19	0.19
17.25	0.30	0.30	19.95	0.19	0.19
17.30	0.30	0.30	20.00	0.19	0.19
17.35	0.30	0.30	20.05	0.19	0.19
17.40	0.29	0.29	20.10	0.19	0.19
17.45	0.29	0.29	20.15	0.19	0.19
17.50	0.29	0.29	20.20	0.19	0.19
17.55	0.29	0.29	20.25	0.18	0.18
17.60	0.28	0.28	20.30	0.18	0.18
17.65	0.28	0.28	20.35	0.18	0.18
17.70	0.28	0.28	20.40	0.18	0.18
17.75	0.27	0.27	20.45	0.18	0.18
17.80	0.27	0.27	20.50	0.18	0.18
17.85	0.27	0.27	20.55	0.18	0.18
17.90	0.26	0.26	20.60	0.18	0.18
17.95	0.26	0.26	20.65	0.18	0.18
18.00	0.26	0.26	20.70	0.18	0.18
18.05	0.25	0.25	20.75	0.18	0.18
18.10	0.25	0.25	20.80	0.18	0.18
18.15	0.25	0.25	20.85	0.17	0.17
18.20	0.25	0.25	20.90	0.17	0.17
18.25	0.24	0.24	20.95	0.17	0.17
18.30	0.24	0.24	21.00	0.17	0.17
18.35	0.24	0.24	21.05	0.17	0.17
18.40	0.23	0.23	21.10	0.17	0.17
18.45	0.23	0.23	21.15	0.17	0.17
18.50	0.23	0.23	21.20	0.17	0.17
18.55	0.23	0.23	21.25	0.17	0.17
18.60	0.23	0.23	21.30	0.17	0.17
18.65	0.22	0.22	21.35	0.17	0.17
18.70	0.22	0.22	21.40	0.17	0.17
18.75	0.22	0.22	21.45	0.17	0.17
18.80	0.22	0.22	21.50	0.17	0.17
18.85	0.22	0.22	21.55	0.16	0.16

3864 Storm (2020-08-14)

Type III 24-hr 2 Year Storm Rainfall=3.29"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
21.60	0.16	0.16	24.30	0.11	0.11
21.65	0.16	0.16	24.35	0.11	0.11
21.70	0.16	0.16	24.40	0.10	0.10
21.75	0.16	0.16	24.45	0.09	0.09
21.80	0.16	0.16	24.50	0.09	0.09
21.85	0.16	0.16	24.55	0.08	0.08
21.90	0.16	0.16	24.60	0.07	0.07
21.95	0.16	0.16	24.65	0.07	0.07
22.00	0.16	0.16	24.70	0.06	0.06
22.05	0.16	0.16	24.75	0.06	0.06
22.10	0.16	0.16	24.80	0.05	0.05
22.15	0.16	0.16	24.85	0.05	0.05
22.20	0.16	0.16	24.90	0.05	0.05
22.25	0.16	0.16	24.95	0.04	0.04
22.30	0.15	0.15	25.00	0.04	0.04
22.35	0.15	0.15	25.05	0.04	0.04
22.40	0.15	0.15	25.10	0.03	0.03
22.45	0.15	0.15	25.15	0.03	0.03
22.50	0.15	0.15	25.20	0.03	0.03
22.55	0.15	0.15	25.25	0.03	0.03
22.60	0.15	0.15	25.30	0.02	0.02
22.65	0.15	0.15	25.35	0.02	0.02
22.70	0.15	0.15	25.40	0.02	0.02
22.75	0.15	0.15	25.45	0.02	0.02
22.80	0.15	0.15	25.50	0.02	0.02
22.85	0.15	0.15	25.55	0.02	0.02
22.90	0.15	0.15	25.60	0.01	0.01
22.95	0.15	0.15	25.65	0.01	0.01
23.00	0.15	0.15	25.70	0.01	0.01
23.05	0.14	0.14	25.75	0.01	0.01
23.10	0.14	0.14	25.80	0.01	0.01
23.15	0.14	0.14	25.85	0.01	0.01
23.20	0.14	0.14	25.90	0.01	0.01
23.25	0.14	0.14	25.95	0.01	0.01
23.30	0.14	0.14	26.00	0.01	0.01
23.35	0.14	0.14	26.05	0.01	0.01
23.40	0.14	0.14	26.10	0.01	0.01
23.45	0.14	0.14	26.15	0.00	0.00
23.50	0.14	0.14	26.20	0.00	0.00
23.55	0.14	0.14	26.25	0.00	0.00
23.60	0.14	0.14	26.30	0.00	0.00
23.65	0.14	0.14	26.35	0.00	0.00
23.70	0.14	0.14	26.40	0.00	0.00
23.75	0.13	0.13	26.45	0.00	0.00
23.80	0.13	0.13	26.50	0.00	0.00
23.85	0.13	0.13	26.55	0.00	0.00
23.90	0.13	0.13	26.60	0.00	0.00
23.95	0.13	0.13	26.65	0.00	0.00
24.00	0.13	0.13	26.70	0.00	0.00
24.05	0.13	0.13	26.75	0.00	0.00
24.10	0.13	0.13	26.80	0.00	0.00
24.15	0.13	0.13	26.85	0.00	0.00
24.20	0.12	0.12	26.90	0.00	0.00
24.25	0.12	0.12	26.95	0.00	0.00

3864 Storm (2020-08-14)

Type III 24-hr 2 Year Storm Rainfall=3.29"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
27.00	0.00	0.00	29.70	0.00	0.00
27.05	0.00	0.00	29.75	0.00	0.00
27.10	0.00	0.00	29.80	0.00	0.00
27.15	0.00	0.00	29.85	0.00	0.00
27.20	0.00	0.00	29.90	0.00	0.00
27.25	0.00	0.00	29.95	0.00	0.00
27.30	0.00	0.00	30.00	0.00	0.00
27.35	0.00	0.00			
27.40	0.00	0.00			
27.45	0.00	0.00			
27.50	0.00	0.00			
27.55	0.00	0.00			
27.60	0.00	0.00			
27.65	0.00	0.00			
27.70	0.00	0.00			
27.75	0.00	0.00			
27.80	0.00	0.00			
27.85	0.00	0.00			
27.90	0.00	0.00			
27.95	0.00	0.00			
28.00	0.00	0.00			
28.05	0.00	0.00			
28.10	0.00	0.00			
28.15	0.00	0.00			
28.20	0.00	0.00			
28.25	0.00	0.00			
28.30	0.00	0.00			
28.35	0.00	0.00			
28.40	0.00	0.00			
28.45	0.00	0.00			
28.50	0.00	0.00			
28.55	0.00	0.00			
28.60	0.00	0.00			
28.65	0.00	0.00			
28.70	0.00	0.00			
28.75	0.00	0.00			
28.80	0.00	0.00			
28.85	0.00	0.00			
28.90	0.00	0.00			
28.95	0.00	0.00			
29.00	0.00	0.00			
29.05	0.00	0.00			
29.10	0.00	0.00			
29.15	0.00	0.00			
29.20	0.00	0.00			
29.25	0.00	0.00			
29.30	0.00	0.00			
29.35	0.00	0.00			
29.40	0.00	0.00			
29.45	0.00	0.00			
29.50	0.00	0.00			
29.55	0.00	0.00			
29.60	0.00	0.00			
29.65	0.00	0.00			

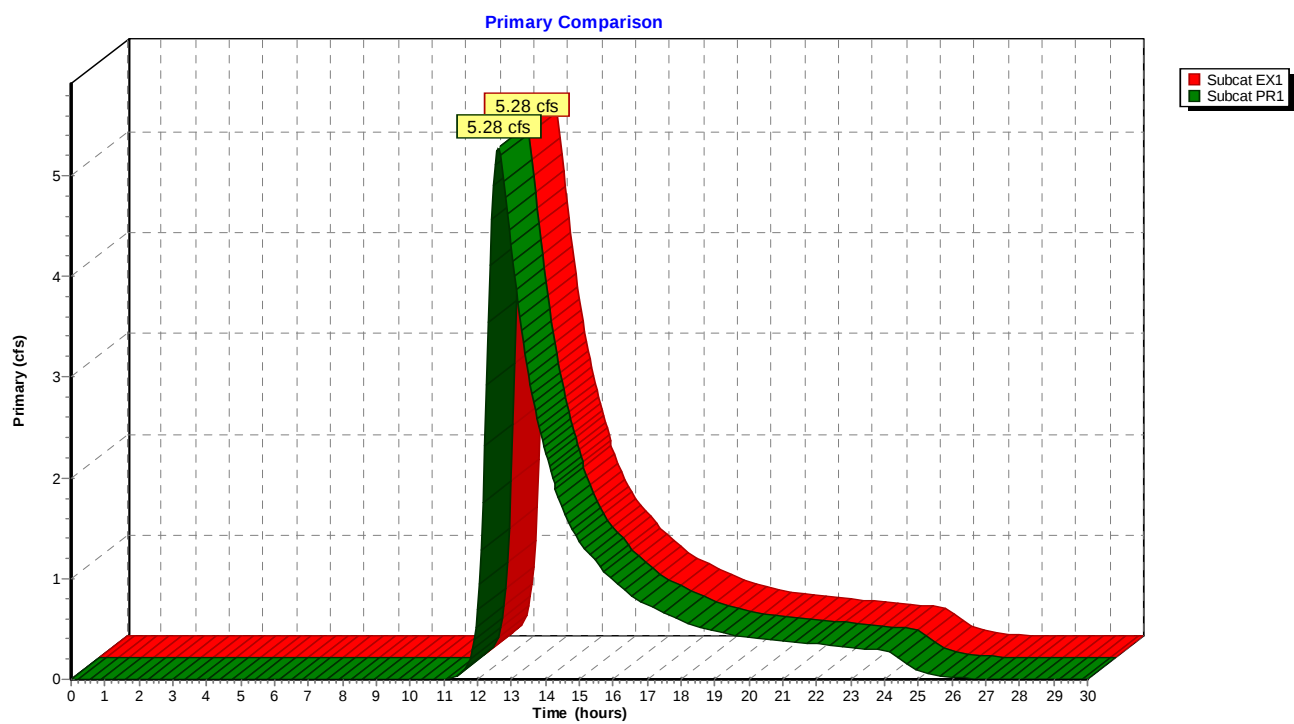
3864 Storm (2020-08-14)

Prepared by CES

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Type III 24-hr 10 Year Storm Rainfall=5.05"

Printed 8/14/2020



3864 Storm (2020-08-14)

Type III 24-hr 10 Year Storm Rainfall=5.05"

Prepared by CES

Printed 8/14/2020

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Primary Comparison

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
0.00	0.00	0.00	2.70	0.00	0.00	5.40	0.00	0.00
0.05	0.00	0.00	2.75	0.00	0.00	5.45	0.00	0.00
0.10	0.00	0.00	2.80	0.00	0.00	5.50	0.00	0.00
0.15	0.00	0.00	2.85	0.00	0.00	5.55	0.00	0.00
0.20	0.00	0.00	2.90	0.00	0.00	5.60	0.00	0.00
0.25	0.00	0.00	2.95	0.00	0.00	5.65	0.00	0.00
0.30	0.00	0.00	3.00	0.00	0.00	5.70	0.00	0.00
0.35	0.00	0.00	3.05	0.00	0.00	5.75	0.00	0.00
0.40	0.00	0.00	3.10	0.00	0.00	5.80	0.00	0.00
0.45	0.00	0.00	3.15	0.00	0.00	5.85	0.00	0.00
0.50	0.00	0.00	3.20	0.00	0.00	5.90	0.00	0.00
0.55	0.00	0.00	3.25	0.00	0.00	5.95	0.00	0.00
0.60	0.00	0.00	3.30	0.00	0.00	6.00	0.00	0.00
0.65	0.00	0.00	3.35	0.00	0.00	6.05	0.00	0.00
0.70	0.00	0.00	3.40	0.00	0.00	6.10	0.00	0.00
0.75	0.00	0.00	3.45	0.00	0.00	6.15	0.00	0.00
0.80	0.00	0.00	3.50	0.00	0.00	6.20	0.00	0.00
0.85	0.00	0.00	3.55	0.00	0.00	6.25	0.00	0.00
0.90	0.00	0.00	3.60	0.00	0.00	6.30	0.00	0.00
0.95	0.00	0.00	3.65	0.00	0.00	6.35	0.00	0.00
1.00	0.00	0.00	3.70	0.00	0.00	6.40	0.00	0.00
1.05	0.00	0.00	3.75	0.00	0.00	6.45	0.00	0.00
1.10	0.00	0.00	3.80	0.00	0.00	6.50	0.00	0.00
1.15	0.00	0.00	3.85	0.00	0.00	6.55	0.00	0.00
1.20	0.00	0.00	3.90	0.00	0.00	6.60	0.00	0.00
1.25	0.00	0.00	3.95	0.00	0.00	6.65	0.00	0.00
1.30	0.00	0.00	4.00	0.00	0.00	6.70	0.00	0.00
1.35	0.00	0.00	4.05	0.00	0.00	6.75	0.00	0.00
1.40	0.00	0.00	4.10	0.00	0.00	6.80	0.00	0.00
1.45	0.00	0.00	4.15	0.00	0.00	6.85	0.00	0.00
1.50	0.00	0.00	4.20	0.00	0.00	6.90	0.00	0.00
1.55	0.00	0.00	4.25	0.00	0.00	6.95	0.00	0.00
1.60	0.00	0.00	4.30	0.00	0.00	7.00	0.00	0.00
1.65	0.00	0.00	4.35	0.00	0.00	7.05	0.00	0.00
1.70	0.00	0.00	4.40	0.00	0.00	7.10	0.00	0.00
1.75	0.00	0.00	4.45	0.00	0.00	7.15	0.00	0.00
1.80	0.00	0.00	4.50	0.00	0.00	7.20	0.00	0.00
1.85	0.00	0.00	4.55	0.00	0.00	7.25	0.00	0.00
1.90	0.00	0.00	4.60	0.00	0.00	7.30	0.00	0.00
1.95	0.00	0.00	4.65	0.00	0.00	7.35	0.00	0.00
2.00	0.00	0.00	4.70	0.00	0.00	7.40	0.00	0.00
2.05	0.00	0.00	4.75	0.00	0.00	7.45	0.00	0.00
2.10	0.00	0.00	4.80	0.00	0.00	7.50	0.00	0.00
2.15	0.00	0.00	4.85	0.00	0.00	7.55	0.00	0.00
2.20	0.00	0.00	4.90	0.00	0.00	7.60	0.00	0.00
2.25	0.00	0.00	4.95	0.00	0.00	7.65	0.00	0.00
2.30	0.00	0.00	5.00	0.00	0.00	7.70	0.00	0.00
2.35	0.00	0.00	5.05	0.00	0.00	7.75	0.00	0.00
2.40	0.00	0.00	5.10	0.00	0.00	7.80	0.00	0.00
2.45	0.00	0.00	5.15	0.00	0.00	7.85	0.00	0.00
2.50	0.00	0.00	5.20	0.00	0.00	7.90	0.00	0.00
2.55	0.00	0.00	5.25	0.00	0.00	7.95	0.00	0.00
2.60	0.00	0.00	5.30	0.00	0.00	8.00	0.00	0.00
2.65	0.00	0.00	5.35	0.00	0.00	8.05	0.00	0.00

3864 Storm (2020-08-14)

Type III 24-hr 10 Year Storm Rainfall=5.05"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
8.10	0.00	0.00	10.80	0.00	0.00	13.50	3.02	3.02
8.15	0.00	0.00	10.85	0.00	0.00	13.55	2.92	2.92
8.20	0.00	0.00	10.90	0.00	0.00	13.60	2.83	2.83
8.25	0.00	0.00	10.95	0.00	0.00	13.65	2.75	2.75
8.30	0.00	0.00	11.00	0.00	0.00	13.70	2.67	2.67
8.35	0.00	0.00	11.05	0.00	0.00	13.75	2.59	2.59
8.40	0.00	0.00	11.10	0.00	0.00	13.80	2.51	2.51
8.45	0.00	0.00	11.15	0.00	0.00	13.85	2.44	2.44
8.50	0.00	0.00	11.20	0.00	0.00	13.90	2.37	2.37
8.55	0.00	0.00	11.25	0.01	0.01	13.95	2.30	2.30
8.60	0.00	0.00	11.30	0.01	0.01	14.00	2.24	2.24
8.65	0.00	0.00	11.35	0.02	0.02	14.05	2.18	2.18
8.70	0.00	0.00	11.40	0.03	0.03	14.10	2.12	2.12
8.75	0.00	0.00	11.45	0.04	0.04	14.15	2.06	2.06
8.80	0.00	0.00	11.50	0.05	0.05	14.20	2.00	2.00
8.85	0.00	0.00	11.55	0.06	0.06	14.25	1.94	1.94
8.90	0.00	0.00	11.60	0.08	0.08	14.30	1.89	1.89
8.95	0.00	0.00	11.65	0.10	0.10	14.35	1.84	1.84
9.00	0.00	0.00	11.70	0.13	0.13	14.40	1.79	1.79
9.05	0.00	0.00	11.75	0.17	0.17	14.45	1.74	1.74
9.10	0.00	0.00	11.80	0.22	0.22	14.50	1.69	1.69
9.15	0.00	0.00	11.85	0.29	0.29	14.55	1.65	1.65
9.20	0.00	0.00	11.90	0.39	0.39	14.60	1.61	1.61
9.25	0.00	0.00	11.95	0.52	0.52	14.65	1.57	1.57
9.30	0.00	0.00	12.00	0.69	0.69	14.70	1.54	1.54
9.35	0.00	0.00	12.05	0.94	0.94	14.75	1.50	1.50
9.40	0.00	0.00	12.10	1.28	1.28	14.80	1.47	1.47
9.45	0.00	0.00	12.15	1.75	1.75	14.85	1.44	1.44
9.50	0.00	0.00	12.20	2.31	2.31	14.90	1.42	1.42
9.55	0.00	0.00	12.25	2.93	2.93	14.95	1.39	1.39
9.60	0.00	0.00	12.30	3.55	3.55	15.00	1.37	1.37
9.65	0.00	0.00	12.35	4.10	4.10	15.05	1.34	1.34
9.70	0.00	0.00	12.40	4.57	4.58	15.10	1.32	1.32
9.75	0.00	0.00	12.45	4.90	4.90	15.15	1.30	1.30
9.80	0.00	0.00	12.50	5.11	5.11	15.20	1.28	1.28
9.85	0.00	0.00	12.55	5.24	5.24	15.25	1.26	1.26
9.90	0.00	0.00	12.60	5.28	5.28	15.30	1.24	1.24
9.95	0.00	0.00	12.65	5.26	5.26	15.35	1.22	1.22
10.00	0.00	0.00	12.70	5.20	5.20	15.40	1.20	1.20
10.05	0.00	0.00	12.75	5.08	5.08	15.45	1.18	1.18
10.10	0.00	0.00	12.80	4.94	4.94	15.50	1.16	1.16
10.15	0.00	0.00	12.85	4.79	4.79	15.55	1.14	1.14
10.20	0.00	0.00	12.90	4.62	4.62	15.60	1.13	1.13
10.25	0.00	0.00	12.95	4.46	4.46	15.65	1.10	1.11
10.30	0.00	0.00	13.00	4.31	4.31	15.70	1.09	1.09
10.35	0.00	0.00	13.05	4.16	4.16	15.75	1.07	1.07
10.40	0.00	0.00	13.10	4.01	4.01	15.80	1.05	1.05
10.45	0.00	0.00	13.15	3.87	3.87	15.85	1.03	1.03
10.50	0.00	0.00	13.20	3.73	3.73	15.90	1.02	1.02
10.55	0.00	0.00	13.25	3.60	3.60	15.95	1.00	1.00
10.60	0.00	0.00	13.30	3.47	3.47	16.00	0.98	0.98
10.65	0.00	0.00	13.35	3.35	3.35	16.05	0.97	0.97
10.70	0.00	0.00	13.40	3.23	3.23	16.10	0.95	0.95
10.75	0.00	0.00	13.45	3.12	3.12	16.15	0.94	0.94

3864 Storm (2020-08-14)

Type III 24-hr 10 Year Storm Rainfall=5.05"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
16.20	0.92	0.92	18.90	0.48	0.48	21.60	0.36	0.36
16.25	0.91	0.91	18.95	0.48	0.48	21.65	0.36	0.36
16.30	0.89	0.89	19.00	0.47	0.47	21.70	0.36	0.36
16.35	0.88	0.88	19.05	0.47	0.47	21.75	0.36	0.36
16.40	0.86	0.86	19.10	0.47	0.47	21.80	0.35	0.35
16.45	0.85	0.85	19.15	0.46	0.46	21.85	0.35	0.35
16.50	0.84	0.84	19.20	0.46	0.46	21.90	0.35	0.35
16.55	0.83	0.83	19.25	0.46	0.46	21.95	0.35	0.35
16.60	0.82	0.82	19.30	0.45	0.45	22.00	0.35	0.35
16.65	0.80	0.80	19.35	0.45	0.45	22.05	0.35	0.35
16.70	0.79	0.79	19.40	0.45	0.45	22.10	0.34	0.34
16.75	0.78	0.78	19.45	0.45	0.45	22.15	0.34	0.34
16.80	0.77	0.77	19.50	0.44	0.44	22.20	0.34	0.34
16.85	0.76	0.76	19.55	0.44	0.44	22.25	0.34	0.34
16.90	0.75	0.75	19.60	0.44	0.44	22.30	0.34	0.34
16.95	0.74	0.75	19.65	0.43	0.43	22.35	0.34	0.34
17.00	0.74	0.74	19.70	0.43	0.43	22.40	0.34	0.34
17.05	0.73	0.73	19.75	0.43	0.43	22.45	0.33	0.33
17.10	0.72	0.72	19.80	0.43	0.43	22.50	0.33	0.33
17.15	0.71	0.71	19.85	0.43	0.43	22.55	0.33	0.33
17.20	0.70	0.70	19.90	0.42	0.42	22.60	0.33	0.33
17.25	0.69	0.69	19.95	0.42	0.42	22.65	0.33	0.33
17.30	0.68	0.68	20.00	0.42	0.42	22.70	0.33	0.33
17.35	0.68	0.68	20.05	0.42	0.42	22.75	0.32	0.32
17.40	0.67	0.67	20.10	0.41	0.41	22.80	0.32	0.32
17.45	0.66	0.66	20.15	0.41	0.41	22.85	0.32	0.32
17.50	0.65	0.65	20.20	0.41	0.41	22.90	0.32	0.32
17.55	0.65	0.65	20.25	0.41	0.41	22.95	0.32	0.32
17.60	0.64	0.64	20.30	0.41	0.41	23.00	0.32	0.32
17.65	0.63	0.63	20.35	0.40	0.40	23.05	0.31	0.31
17.70	0.62	0.62	20.40	0.40	0.40	23.10	0.31	0.31
17.75	0.62	0.62	20.45	0.40	0.40	23.15	0.31	0.31
17.80	0.61	0.61	20.50	0.40	0.40	23.20	0.31	0.31
17.85	0.60	0.60	20.55	0.40	0.40	23.25	0.31	0.31
17.90	0.59	0.59	20.60	0.39	0.39	23.30	0.31	0.31
17.95	0.59	0.59	20.65	0.39	0.39	23.35	0.31	0.31
18.00	0.58	0.58	20.70	0.39	0.39	23.40	0.30	0.30
18.05	0.57	0.57	20.75	0.39	0.39	23.45	0.30	0.30
18.10	0.57	0.57	20.80	0.39	0.39	23.50	0.30	0.30
18.15	0.56	0.56	20.85	0.38	0.38	23.55	0.30	0.30
18.20	0.55	0.55	20.90	0.38	0.38	23.60	0.30	0.30
18.25	0.55	0.55	20.95	0.38	0.38	23.65	0.30	0.30
18.30	0.54	0.54	21.00	0.38	0.38	23.70	0.29	0.29
18.35	0.53	0.53	21.05	0.38	0.38	23.75	0.29	0.29
18.40	0.53	0.53	21.10	0.38	0.38	23.80	0.29	0.29
18.45	0.52	0.52	21.15	0.37	0.37	23.85	0.29	0.29
18.50	0.52	0.52	21.20	0.37	0.37	23.90	0.29	0.29
18.55	0.51	0.51	21.25	0.37	0.37	23.95	0.29	0.29
18.60	0.50	0.50	21.30	0.37	0.37	24.00	0.28	0.28
18.65	0.50	0.50	21.35	0.37	0.37	24.05	0.28	0.28
18.70	0.50	0.50	21.40	0.37	0.37	24.10	0.28	0.28
18.75	0.49	0.49	21.45	0.36	0.37	24.15	0.28	0.28
18.80	0.49	0.49	21.50	0.36	0.36	24.20	0.27	0.27
18.85	0.48	0.48	21.55	0.36	0.36	24.25	0.26	0.26

3864 Storm (2020-08-14)

Type III 24-hr 10 Year Storm Rainfall=5.05"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
24.30	0.25	0.25	27.00	0.00	0.00	29.70	0.00	0.00
24.35	0.23	0.23	27.05	0.00	0.00	29.75	0.00	0.00
24.40	0.22	0.22	27.10	0.00	0.00	29.80	0.00	0.00
24.45	0.20	0.20	27.15	0.00	0.00	29.85	0.00	0.00
24.50	0.19	0.19	27.20	0.00	0.00	29.90	0.00	0.00
24.55	0.17	0.17	27.25	0.00	0.00	29.95	0.00	0.00
24.60	0.16	0.16	27.30	0.00	0.00	30.00	0.00	0.00
24.65	0.15	0.15	27.35	0.00	0.00			
24.70	0.14	0.14	27.40	0.00	0.00			
24.75	0.13	0.13	27.45	0.00	0.00			
24.80	0.12	0.12	27.50	0.00	0.00			
24.85	0.11	0.11	27.55	0.00	0.00			
24.90	0.10	0.10	27.60	0.00	0.00			
24.95	0.09	0.09	27.65	0.00	0.00			
25.00	0.08	0.08	27.70	0.00	0.00			
25.05	0.08	0.08	27.75	0.00	0.00			
25.10	0.07	0.07	27.80	0.00	0.00			
25.15	0.07	0.07	27.85	0.00	0.00			
25.20	0.06	0.06	27.90	0.00	0.00			
25.25	0.06	0.06	27.95	0.00	0.00			
25.30	0.05	0.05	28.00	0.00	0.00			
25.35	0.05	0.05	28.05	0.00	0.00			
25.40	0.04	0.04	28.10	0.00	0.00			
25.45	0.04	0.04	28.15	0.00	0.00			
25.50	0.04	0.04	28.20	0.00	0.00			
25.55	0.03	0.03	28.25	0.00	0.00			
25.60	0.03	0.03	28.30	0.00	0.00			
25.65	0.03	0.03	28.35	0.00	0.00			
25.70	0.03	0.03	28.40	0.00	0.00			
25.75	0.02	0.02	28.45	0.00	0.00			
25.80	0.02	0.02	28.50	0.00	0.00			
25.85	0.02	0.02	28.55	0.00	0.00			
25.90	0.02	0.02	28.60	0.00	0.00			
25.95	0.02	0.02	28.65	0.00	0.00			
26.00	0.01	0.01	28.70	0.00	0.00			
26.05	0.01	0.01	28.75	0.00	0.00			
26.10	0.01	0.01	28.80	0.00	0.00			
26.15	0.01	0.01	28.85	0.00	0.00			
26.20	0.01	0.01	28.90	0.00	0.00			
26.25	0.01	0.01	28.95	0.00	0.00			
26.30	0.01	0.01	29.00	0.00	0.00			
26.35	0.01	0.01	29.05	0.00	0.00			
26.40	0.01	0.01	29.10	0.00	0.00			
26.45	0.01	0.01	29.15	0.00	0.00			
26.50	0.00	0.00	29.20	0.00	0.00			
26.55	0.00	0.00	29.25	0.00	0.00			
26.60	0.00	0.00	29.30	0.00	0.00			
26.65	0.00	0.00	29.35	0.00	0.00			
26.70	0.00	0.00	29.40	0.00	0.00			
26.75	0.00	0.00	29.45	0.00	0.00			
26.80	0.00	0.00	29.50	0.00	0.00			
26.85	0.00	0.00	29.55	0.00	0.00			
26.90	0.00	0.00	29.60	0.00	0.00			
26.95	0.00	0.00	29.65	0.00	0.00			

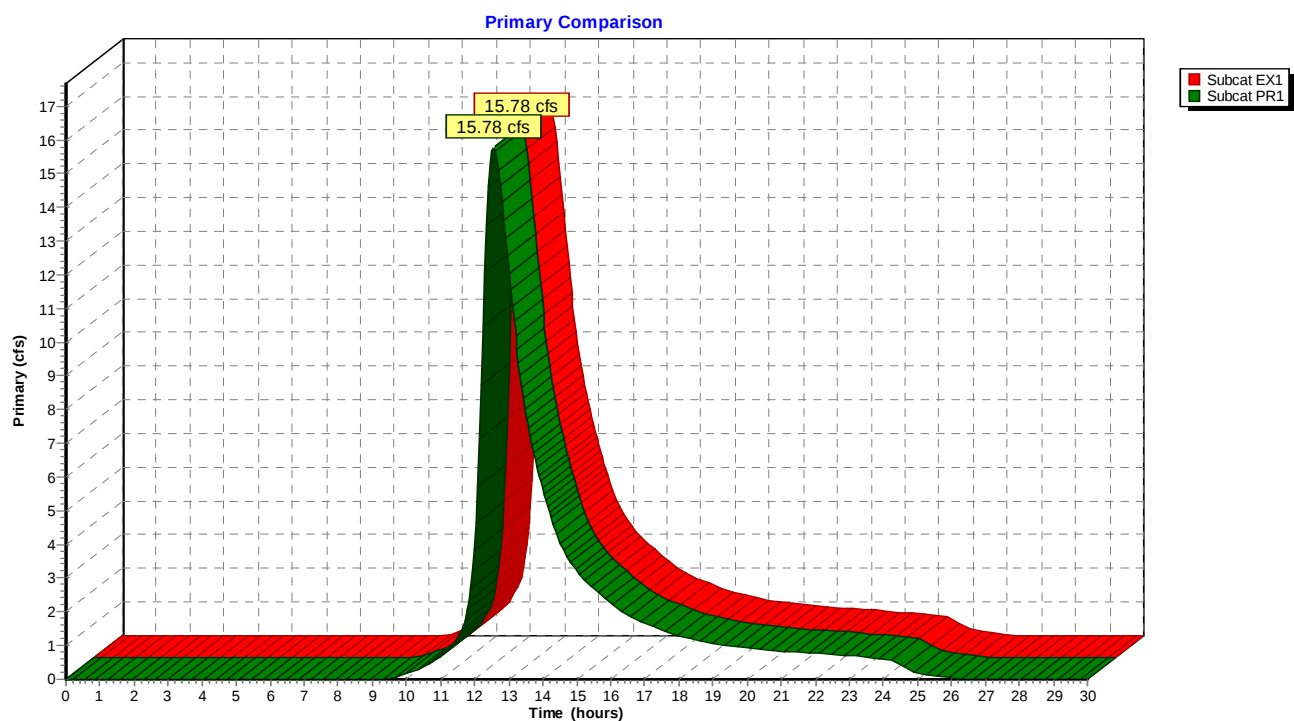
3864 Storm (2020-08-14)

Prepared by CES

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Type III 24-hr 100 Year Storm Rainfall=8.55"

Printed 8/14/2020



3864 Storm (2020-08-14)

Type III 24-hr 100 Year Storm Rainfall=8.55"

Prepared by CES

Printed 8/14/2020

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Primary Comparison

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
0.00	0.00	0.00	2.70	0.00	0.00	5.40	0.00	0.00
0.05	0.00	0.00	2.75	0.00	0.00	5.45	0.00	0.00
0.10	0.00	0.00	2.80	0.00	0.00	5.50	0.00	0.00
0.15	0.00	0.00	2.85	0.00	0.00	5.55	0.00	0.00
0.20	0.00	0.00	2.90	0.00	0.00	5.60	0.00	0.00
0.25	0.00	0.00	2.95	0.00	0.00	5.65	0.00	0.00
0.30	0.00	0.00	3.00	0.00	0.00	5.70	0.00	0.00
0.35	0.00	0.00	3.05	0.00	0.00	5.75	0.00	0.00
0.40	0.00	0.00	3.10	0.00	0.00	5.80	0.00	0.00
0.45	0.00	0.00	3.15	0.00	0.00	5.85	0.00	0.00
0.50	0.00	0.00	3.20	0.00	0.00	5.90	0.00	0.00
0.55	0.00	0.00	3.25	0.00	0.00	5.95	0.00	0.00
0.60	0.00	0.00	3.30	0.00	0.00	6.00	0.00	0.00
0.65	0.00	0.00	3.35	0.00	0.00	6.05	0.00	0.00
0.70	0.00	0.00	3.40	0.00	0.00	6.10	0.00	0.00
0.75	0.00	0.00	3.45	0.00	0.00	6.15	0.00	0.00
0.80	0.00	0.00	3.50	0.00	0.00	6.20	0.00	0.00
0.85	0.00	0.00	3.55	0.00	0.00	6.25	0.00	0.00
0.90	0.00	0.00	3.60	0.00	0.00	6.30	0.00	0.00
0.95	0.00	0.00	3.65	0.00	0.00	6.35	0.00	0.00
1.00	0.00	0.00	3.70	0.00	0.00	6.40	0.00	0.00
1.05	0.00	0.00	3.75	0.00	0.00	6.45	0.00	0.00
1.10	0.00	0.00	3.80	0.00	0.00	6.50	0.00	0.00
1.15	0.00	0.00	3.85	0.00	0.00	6.55	0.00	0.00
1.20	0.00	0.00	3.90	0.00	0.00	6.60	0.00	0.00
1.25	0.00	0.00	3.95	0.00	0.00	6.65	0.00	0.00
1.30	0.00	0.00	4.00	0.00	0.00	6.70	0.00	0.00
1.35	0.00	0.00	4.05	0.00	0.00	6.75	0.00	0.00
1.40	0.00	0.00	4.10	0.00	0.00	6.80	0.00	0.00
1.45	0.00	0.00	4.15	0.00	0.00	6.85	0.00	0.00
1.50	0.00	0.00	4.20	0.00	0.00	6.90	0.00	0.00
1.55	0.00	0.00	4.25	0.00	0.00	6.95	0.00	0.00
1.60	0.00	0.00	4.30	0.00	0.00	7.00	0.00	0.00
1.65	0.00	0.00	4.35	0.00	0.00	7.05	0.00	0.00
1.70	0.00	0.00	4.40	0.00	0.00	7.10	0.00	0.00
1.75	0.00	0.00	4.45	0.00	0.00	7.15	0.00	0.00
1.80	0.00	0.00	4.50	0.00	0.00	7.20	0.00	0.00
1.85	0.00	0.00	4.55	0.00	0.00	7.25	0.00	0.00
1.90	0.00	0.00	4.60	0.00	0.00	7.30	0.00	0.00
1.95	0.00	0.00	4.65	0.00	0.00	7.35	0.00	0.00
2.00	0.00	0.00	4.70	0.00	0.00	7.40	0.00	0.00
2.05	0.00	0.00	4.75	0.00	0.00	7.45	0.00	0.00
2.10	0.00	0.00	4.80	0.00	0.00	7.50	0.00	0.00
2.15	0.00	0.00	4.85	0.00	0.00	7.55	0.00	0.00
2.20	0.00	0.00	4.90	0.00	0.00	7.60	0.00	0.00
2.25	0.00	0.00	4.95	0.00	0.00	7.65	0.00	0.00
2.30	0.00	0.00	5.00	0.00	0.00	7.70	0.00	0.00
2.35	0.00	0.00	5.05	0.00	0.00	7.75	0.00	0.00
2.40	0.00	0.00	5.10	0.00	0.00	7.80	0.00	0.00
2.45	0.00	0.00	5.15	0.00	0.00	7.85	0.00	0.00
2.50	0.00	0.00	5.20	0.00	0.00	7.90	0.00	0.00
2.55	0.00	0.00	5.25	0.00	0.00	7.95	0.00	0.00
2.60	0.00	0.00	5.30	0.00	0.00	8.00	0.00	0.00
2.65	0.00	0.00	5.35	0.00	0.00	8.05	0.00	0.00

3864 Storm (2020-08-14)

Type III 24-hr 100 Year Storm Rainfall=8.55"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
8.10	0.00	0.00	10.80	0.52	0.52	13.50	8.02	8.02
8.15	0.00	0.00	10.85	0.56	0.56	13.55	7.73	7.73
8.20	0.00	0.00	10.90	0.59	0.59	13.60	7.45	7.45
8.25	0.00	0.00	10.95	0.63	0.63	13.65	7.19	7.19
8.30	0.00	0.00	11.00	0.67	0.67	13.70	6.94	6.94
8.35	0.00	0.00	11.05	0.71	0.71	13.75	6.71	6.71
8.40	0.00	0.00	11.10	0.75	0.75	13.80	6.48	6.48
8.45	0.00	0.00	11.15	0.79	0.79	13.85	6.26	6.26
8.50	0.00	0.00	11.20	0.84	0.84	13.90	6.06	6.06
8.55	0.00	0.00	11.25	0.89	0.89	13.95	5.86	5.86
8.60	0.00	0.00	11.30	0.94	0.94	14.00	5.67	5.67
8.65	0.00	0.00	11.35	1.00	1.00	14.05	5.48	5.48
8.70	0.00	0.00	11.40	1.07	1.07	14.10	5.30	5.30
8.75	0.00	0.00	11.45	1.14	1.14	14.15	5.13	5.13
8.80	0.00	0.00	11.50	1.22	1.22	14.20	4.96	4.96
8.85	0.00	0.00	11.55	1.30	1.30	14.25	4.80	4.80
8.90	0.00	0.00	11.60	1.40	1.40	14.30	4.65	4.65
8.95	0.00	0.00	11.65	1.51	1.51	14.35	4.50	4.50
9.00	0.00	0.00	11.70	1.64	1.64	14.40	4.36	4.36
9.05	0.00	0.00	11.75	1.81	1.81	14.45	4.22	4.22
9.10	0.00	0.00	11.80	2.04	2.04	14.50	4.09	4.09
9.15	0.00	0.00	11.85	2.33	2.33	14.55	3.97	3.97
9.20	0.00	0.00	11.90	2.72	2.72	14.60	3.87	3.87
9.25	0.00	0.00	11.95	3.19	3.19	14.65	3.76	3.77
9.30	0.01	0.01	12.00	3.81	3.81	14.70	3.67	3.67
9.35	0.01	0.01	12.05	4.64	4.64	14.75	3.58	3.58
9.40	0.01	0.01	12.10	5.72	5.72	14.80	3.50	3.50
9.45	0.02	0.02	12.15	7.13	7.13	14.85	3.42	3.42
9.50	0.03	0.03	12.20	8.74	8.74	14.90	3.35	3.35
9.55	0.03	0.03	12.25	10.45	10.45	14.95	3.28	3.28
9.60	0.04	0.04	12.30	12.09	12.09	15.00	3.21	3.21
9.65	0.05	0.05	12.35	13.49	13.49	15.05	3.15	3.15
9.70	0.06	0.06	12.40	14.61	14.61	15.10	3.09	3.09
9.75	0.07	0.07	12.45	15.29	15.29	15.15	3.04	3.04
9.80	0.08	0.08	12.50	15.65	15.65	15.20	2.98	2.98
9.85	0.10	0.10	12.55	15.78	15.78	15.25	2.93	2.93
9.90	0.11	0.11	12.60	15.69	15.69	15.30	2.88	2.88
9.95	0.12	0.12	12.65	15.46	15.46	15.35	2.83	2.83
10.00	0.14	0.14	12.70	15.11	15.11	15.40	2.78	2.78
10.05	0.16	0.16	12.75	14.66	14.66	15.45	2.73	2.73
10.10	0.17	0.17	12.80	14.15	14.15	15.50	2.68	2.68
10.15	0.19	0.19	12.85	13.62	13.62	15.55	2.63	2.63
10.20	0.21	0.21	12.90	13.07	13.08	15.60	2.58	2.58
10.25	0.23	0.23	12.95	12.55	12.55	15.65	2.53	2.53
10.30	0.25	0.25	13.00	12.04	12.04	15.70	2.48	2.48
10.35	0.27	0.27	13.05	11.55	11.55	15.75	2.44	2.44
10.40	0.29	0.29	13.10	11.08	11.08	15.80	2.39	2.39
10.45	0.32	0.32	13.15	10.63	10.63	15.85	2.35	2.35
10.50	0.34	0.34	13.20	10.20	10.20	15.90	2.31	2.31
10.55	0.37	0.37	13.25	9.79	9.79	15.95	2.27	2.27
10.60	0.40	0.40	13.30	9.39	9.39	16.00	2.23	2.23
10.65	0.43	0.43	13.35	9.02	9.02	16.05	2.20	2.20
10.70	0.46	0.46	13.40	8.67	8.67	16.10	2.16	2.16
10.75	0.49	0.49	13.45	8.33	8.33	16.15	2.12	2.12

3864 Storm (2020-08-14)

Type III 24-hr 100 Year Storm Rainfall=8.55"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
16.20	2.09	2.09	18.90	1.06	1.06	21.60	0.79	0.79
16.25	2.05	2.05	18.95	1.05	1.05	21.65	0.78	0.78
16.30	2.02	2.02	19.00	1.04	1.04	21.70	0.78	0.78
16.35	1.99	1.99	19.05	1.04	1.04	21.75	0.78	0.78
16.40	1.95	1.95	19.10	1.03	1.03	21.80	0.77	0.77
16.45	1.92	1.92	19.15	1.02	1.02	21.85	0.77	0.77
16.50	1.89	1.89	19.20	1.01	1.01	21.90	0.77	0.77
16.55	1.87	1.87	19.25	1.01	1.01	21.95	0.76	0.76
16.60	1.84	1.84	19.30	1.00	1.00	22.00	0.76	0.76
16.65	1.81	1.81	19.35	0.99	0.99	22.05	0.75	0.75
16.70	1.79	1.79	19.40	0.99	0.99	22.10	0.75	0.75
16.75	1.76	1.76	19.45	0.98	0.98	22.15	0.75	0.75
16.80	1.74	1.74	19.50	0.98	0.98	22.20	0.74	0.74
16.85	1.72	1.72	19.55	0.97	0.97	22.25	0.74	0.74
16.90	1.69	1.69	19.60	0.96	0.96	22.30	0.74	0.74
16.95	1.67	1.67	19.65	0.96	0.96	22.35	0.73	0.73
17.00	1.65	1.65	19.70	0.95	0.95	22.40	0.73	0.73
17.05	1.63	1.63	19.75	0.95	0.95	22.45	0.73	0.73
17.10	1.61	1.61	19.80	0.94	0.94	22.50	0.72	0.72
17.15	1.59	1.59	19.85	0.94	0.94	22.55	0.72	0.72
17.20	1.57	1.57	19.90	0.93	0.93	22.60	0.72	0.72
17.25	1.55	1.55	19.95	0.93	0.93	22.65	0.71	0.71
17.30	1.53	1.53	20.00	0.92	0.92	22.70	0.71	0.71
17.35	1.51	1.51	20.05	0.91	0.91	22.75	0.71	0.71
17.40	1.50	1.50	20.10	0.91	0.91	22.80	0.70	0.70
17.45	1.48	1.48	20.15	0.90	0.90	22.85	0.70	0.70
17.50	1.46	1.46	20.20	0.90	0.90	22.90	0.69	0.69
17.55	1.44	1.44	20.25	0.89	0.89	22.95	0.69	0.69
17.60	1.42	1.42	20.30	0.89	0.89	23.00	0.69	0.69
17.65	1.41	1.41	20.35	0.89	0.89	23.05	0.68	0.68
17.70	1.39	1.39	20.40	0.88	0.88	23.10	0.68	0.68
17.75	1.37	1.37	20.45	0.88	0.88	23.15	0.68	0.68
17.80	1.36	1.36	20.50	0.87	0.87	23.20	0.67	0.67
17.85	1.34	1.34	20.55	0.87	0.87	23.25	0.67	0.67
17.90	1.32	1.32	20.60	0.86	0.86	23.30	0.67	0.67
17.95	1.31	1.31	20.65	0.86	0.86	23.35	0.66	0.66
18.00	1.29	1.29	20.70	0.85	0.85	23.40	0.66	0.66
18.05	1.27	1.27	20.75	0.85	0.85	23.45	0.66	0.66
18.10	1.26	1.26	20.80	0.85	0.85	23.50	0.65	0.65
18.15	1.24	1.24	20.85	0.84	0.84	23.55	0.65	0.65
18.20	1.23	1.23	20.90	0.84	0.84	23.60	0.64	0.64
18.25	1.21	1.21	20.95	0.83	0.83	23.65	0.64	0.64
18.30	1.20	1.20	21.00	0.83	0.83	23.70	0.64	0.64
18.35	1.18	1.18	21.05	0.83	0.83	23.75	0.63	0.63
18.40	1.17	1.17	21.10	0.82	0.82	23.80	0.63	0.63
18.45	1.15	1.15	21.15	0.82	0.82	23.85	0.63	0.63
18.50	1.14	1.14	21.20	0.82	0.82	23.90	0.62	0.62
18.55	1.13	1.13	21.25	0.81	0.81	23.95	0.62	0.62
18.60	1.12	1.12	21.30	0.81	0.81	24.00	0.62	0.62
18.65	1.11	1.11	21.35	0.80	0.80	24.05	0.61	0.61
18.70	1.10	1.10	21.40	0.80	0.80	24.10	0.61	0.61
18.75	1.09	1.09	21.45	0.80	0.80	24.15	0.60	0.60
18.80	1.08	1.08	21.50	0.79	0.79	24.20	0.58	0.58
18.85	1.07	1.07	21.55	0.79	0.79	24.25	0.56	0.56

3864 Storm (2020-08-14)

Type III 24-hr 100 Year Storm Rainfall=8.55"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)	Time (hours)	Subcat EX1 (cfs)	Subcat PR1 (cfs)
24.30	0.54	0.54	27.00	0.00	0.00	29.70	0.00	0.00
24.35	0.51	0.51	27.05	0.00	0.00	29.75	0.00	0.00
24.40	0.47	0.47	27.10	0.00	0.00	29.80	0.00	0.00
24.45	0.44	0.44	27.15	0.00	0.00	29.85	0.00	0.00
24.50	0.41	0.41	27.20	0.00	0.00	29.90	0.00	0.00
24.55	0.37	0.37	27.25	0.00	0.00	29.95	0.00	0.00
24.60	0.35	0.35	27.30	0.00	0.00	30.00	0.00	0.00
24.65	0.32	0.32	27.35	0.00	0.00			
24.70	0.30	0.30	27.40	0.00	0.00			
24.75	0.27	0.27	27.45	0.00	0.00			
24.80	0.25	0.25	27.50	0.00	0.00			
24.85	0.23	0.23	27.55	0.00	0.00			
24.90	0.21	0.21	27.60	0.00	0.00			
24.95	0.20	0.20	27.65	0.00	0.00			
25.00	0.18	0.18	27.70	0.00	0.00			
25.05	0.17	0.17	27.75	0.00	0.00			
25.10	0.16	0.16	27.80	0.00	0.00			
25.15	0.14	0.14	27.85	0.00	0.00			
25.20	0.13	0.13	27.90	0.00	0.00			
25.25	0.12	0.12	27.95	0.00	0.00			
25.30	0.11	0.11	28.00	0.00	0.00			
25.35	0.10	0.10	28.05	0.00	0.00			
25.40	0.09	0.09	28.10	0.00	0.00			
25.45	0.09	0.09	28.15	0.00	0.00			
25.50	0.08	0.08	28.20	0.00	0.00			
25.55	0.07	0.07	28.25	0.00	0.00			
25.60	0.07	0.07	28.30	0.00	0.00			
25.65	0.06	0.06	28.35	0.00	0.00			
25.70	0.06	0.06	28.40	0.00	0.00			
25.75	0.05	0.05	28.45	0.00	0.00			
25.80	0.05	0.05	28.50	0.00	0.00			
25.85	0.04	0.04	28.55	0.00	0.00			
25.90	0.04	0.04	28.60	0.00	0.00			
25.95	0.03	0.03	28.65	0.00	0.00			
26.00	0.03	0.03	28.70	0.00	0.00			
26.05	0.03	0.03	28.75	0.00	0.00			
26.10	0.03	0.03	28.80	0.00	0.00			
26.15	0.02	0.02	28.85	0.00	0.00			
26.20	0.02	0.02	28.90	0.00	0.00			
26.25	0.02	0.02	28.95	0.00	0.00			
26.30	0.02	0.02	29.00	0.00	0.00			
26.35	0.01	0.01	29.05	0.00	0.00			
26.40	0.01	0.01	29.10	0.00	0.00			
26.45	0.01	0.01	29.15	0.00	0.00			
26.50	0.01	0.01	29.20	0.00	0.00			
26.55	0.01	0.01	29.25	0.00	0.00			
26.60	0.01	0.01	29.30	0.00	0.00			
26.65	0.01	0.01	29.35	0.00	0.00			
26.70	0.01	0.01	29.40	0.00	0.00			
26.75	0.01	0.01	29.45	0.00	0.00			
26.80	0.01	0.01	29.50	0.00	0.00			
26.85	0.00	0.00	29.55	0.00	0.00			
26.90	0.00	0.00	29.60	0.00	0.00			
26.95	0.00	0.00	29.65	0.00	0.00			

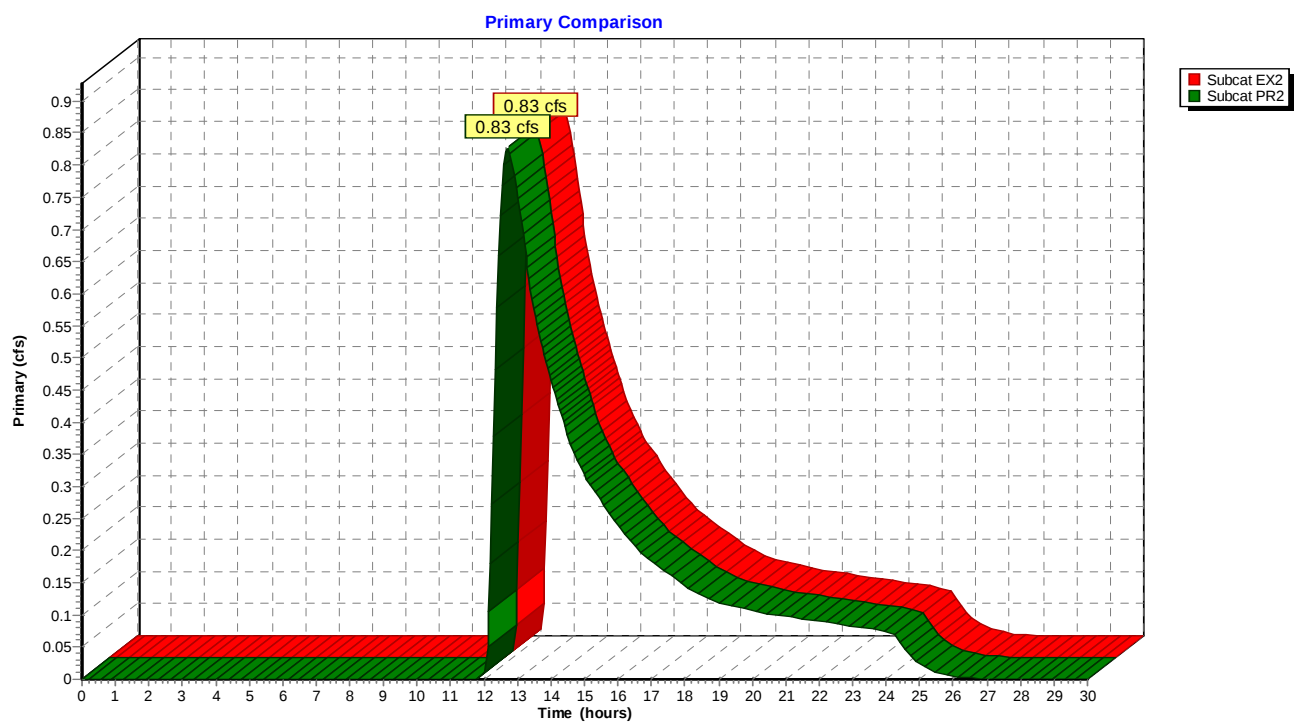
3864 Storm (2020-08-14)

Prepared by CES

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Type III 24-hr 2 Year Storm Rainfall=3.29"

Printed 8/14/2020



3864 Storm (2020-08-14)

Type III 24-hr 2 Year Storm Rainfall=3.29"

Prepared by CES

Printed 8/14/2020

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Primary Comparison

Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)
0.00	0.00	0.00	2.70	0.00	0.00	5.40	0.00	0.00
0.05	0.00	0.00	2.75	0.00	0.00	5.45	0.00	0.00
0.10	0.00	0.00	2.80	0.00	0.00	5.50	0.00	0.00
0.15	0.00	0.00	2.85	0.00	0.00	5.55	0.00	0.00
0.20	0.00	0.00	2.90	0.00	0.00	5.60	0.00	0.00
0.25	0.00	0.00	2.95	0.00	0.00	5.65	0.00	0.00
0.30	0.00	0.00	3.00	0.00	0.00	5.70	0.00	0.00
0.35	0.00	0.00	3.05	0.00	0.00	5.75	0.00	0.00
0.40	0.00	0.00	3.10	0.00	0.00	5.80	0.00	0.00
0.45	0.00	0.00	3.15	0.00	0.00	5.85	0.00	0.00
0.50	0.00	0.00	3.20	0.00	0.00	5.90	0.00	0.00
0.55	0.00	0.00	3.25	0.00	0.00	5.95	0.00	0.00
0.60	0.00	0.00	3.30	0.00	0.00	6.00	0.00	0.00
0.65	0.00	0.00	3.35	0.00	0.00	6.05	0.00	0.00
0.70	0.00	0.00	3.40	0.00	0.00	6.10	0.00	0.00
0.75	0.00	0.00	3.45	0.00	0.00	6.15	0.00	0.00
0.80	0.00	0.00	3.50	0.00	0.00	6.20	0.00	0.00
0.85	0.00	0.00	3.55	0.00	0.00	6.25	0.00	0.00
0.90	0.00	0.00	3.60	0.00	0.00	6.30	0.00	0.00
0.95	0.00	0.00	3.65	0.00	0.00	6.35	0.00	0.00
1.00	0.00	0.00	3.70	0.00	0.00	6.40	0.00	0.00
1.05	0.00	0.00	3.75	0.00	0.00	6.45	0.00	0.00
1.10	0.00	0.00	3.80	0.00	0.00	6.50	0.00	0.00
1.15	0.00	0.00	3.85	0.00	0.00	6.55	0.00	0.00
1.20	0.00	0.00	3.90	0.00	0.00	6.60	0.00	0.00
1.25	0.00	0.00	3.95	0.00	0.00	6.65	0.00	0.00
1.30	0.00	0.00	4.00	0.00	0.00	6.70	0.00	0.00
1.35	0.00	0.00	4.05	0.00	0.00	6.75	0.00	0.00
1.40	0.00	0.00	4.10	0.00	0.00	6.80	0.00	0.00
1.45	0.00	0.00	4.15	0.00	0.00	6.85	0.00	0.00
1.50	0.00	0.00	4.20	0.00	0.00	6.90	0.00	0.00
1.55	0.00	0.00	4.25	0.00	0.00	6.95	0.00	0.00
1.60	0.00	0.00	4.30	0.00	0.00	7.00	0.00	0.00
1.65	0.00	0.00	4.35	0.00	0.00	7.05	0.00	0.00
1.70	0.00	0.00	4.40	0.00	0.00	7.10	0.00	0.00
1.75	0.00	0.00	4.45	0.00	0.00	7.15	0.00	0.00
1.80	0.00	0.00	4.50	0.00	0.00	7.20	0.00	0.00
1.85	0.00	0.00	4.55	0.00	0.00	7.25	0.00	0.00
1.90	0.00	0.00	4.60	0.00	0.00	7.30	0.00	0.00
1.95	0.00	0.00	4.65	0.00	0.00	7.35	0.00	0.00
2.00	0.00	0.00	4.70	0.00	0.00	7.40	0.00	0.00
2.05	0.00	0.00	4.75	0.00	0.00	7.45	0.00	0.00
2.10	0.00	0.00	4.80	0.00	0.00	7.50	0.00	0.00
2.15	0.00	0.00	4.85	0.00	0.00	7.55	0.00	0.00
2.20	0.00	0.00	4.90	0.00	0.00	7.60	0.00	0.00
2.25	0.00	0.00	4.95	0.00	0.00	7.65	0.00	0.00
2.30	0.00	0.00	5.00	0.00	0.00	7.70	0.00	0.00
2.35	0.00	0.00	5.05	0.00	0.00	7.75	0.00	0.00
2.40	0.00	0.00	5.10	0.00	0.00	7.80	0.00	0.00
2.45	0.00	0.00	5.15	0.00	0.00	7.85	0.00	0.00
2.50	0.00	0.00	5.20	0.00	0.00	7.90	0.00	0.00
2.55	0.00	0.00	5.25	0.00	0.00	7.95	0.00	0.00
2.60	0.00	0.00	5.30	0.00	0.00	8.00	0.00	0.00
2.65	0.00	0.00	5.35	0.00	0.00	8.05	0.00	0.00

3864 Storm (2020-08-14)

Prepared by CES

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Type III 24-hr 2 Year Storm Rainfall=3.29"

Printed 8/14/2020

Primary Comparison (continued)

Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)
8.10	0.00	0.00	10.80	0.00	0.00	13.50	0.58	0.58
8.15	0.00	0.00	10.85	0.00	0.00	13.55	0.56	0.56
8.20	0.00	0.00	10.90	0.00	0.00	13.60	0.55	0.55
8.25	0.00	0.00	10.95	0.00	0.00	13.65	0.54	0.54
8.30	0.00	0.00	11.00	0.00	0.00	13.70	0.53	0.53
8.35	0.00	0.00	11.05	0.00	0.00	13.75	0.52	0.52
8.40	0.00	0.00	11.10	0.00	0.00	13.80	0.50	0.50
8.45	0.00	0.00	11.15	0.00	0.00	13.85	0.49	0.49
8.50	0.00	0.00	11.20	0.00	0.00	13.90	0.48	0.48
8.55	0.00	0.00	11.25	0.00	0.00	13.95	0.47	0.47
8.60	0.00	0.00	11.30	0.00	0.00	14.00	0.46	0.46
8.65	0.00	0.00	11.35	0.00	0.00	14.05	0.45	0.45
8.70	0.00	0.00	11.40	0.00	0.00	14.10	0.45	0.45
8.75	0.00	0.00	11.45	0.00	0.00	14.15	0.44	0.44
8.80	0.00	0.00	11.50	0.00	0.00	14.20	0.43	0.43
8.85	0.00	0.00	11.55	0.00	0.00	14.25	0.42	0.42
8.90	0.00	0.00	11.60	0.00	0.00	14.30	0.41	0.41
8.95	0.00	0.00	11.65	0.00	0.00	14.35	0.40	0.40
9.00	0.00	0.00	11.70	0.00	0.00	14.40	0.39	0.39
9.05	0.00	0.00	11.75	0.00	0.00	14.45	0.38	0.38
9.10	0.00	0.00	11.80	0.00	0.00	14.50	0.38	0.38
9.15	0.00	0.00	11.85	0.00	0.00	14.55	0.37	0.37
9.20	0.00	0.00	11.90	0.00	0.00	14.60	0.36	0.36
9.25	0.00	0.00	11.95	0.00	0.00	14.65	0.35	0.35
9.30	0.00	0.00	12.00	0.01	0.01	14.70	0.35	0.35
9.35	0.00	0.00	12.05	0.02	0.02	14.75	0.34	0.34
9.40	0.00	0.00	12.10	0.05	0.05	14.80	0.34	0.34
9.45	0.00	0.00	12.15	0.10	0.10	14.85	0.33	0.33
9.50	0.00	0.00	12.20	0.18	0.18	14.90	0.33	0.33
9.55	0.00	0.00	12.25	0.27	0.27	14.95	0.32	0.32
9.60	0.00	0.00	12.30	0.38	0.38	15.00	0.32	0.32
9.65	0.00	0.00	12.35	0.48	0.48	15.05	0.31	0.31
9.70	0.00	0.00	12.40	0.58	0.58	15.10	0.31	0.31
9.75	0.00	0.00	12.45	0.66	0.66	15.15	0.30	0.30
9.80	0.00	0.00	12.50	0.72	0.72	15.20	0.30	0.30
9.85	0.00	0.00	12.55	0.77	0.77	15.25	0.30	0.30
9.90	0.00	0.00	12.60	0.80	0.80	15.30	0.29	0.29
9.95	0.00	0.00	12.65	0.82	0.82	15.35	0.29	0.29
10.00	0.00	0.00	12.70	0.83	0.83	15.40	0.28	0.28
10.05	0.00	0.00	12.75	0.82	0.82	15.45	0.28	0.28
10.10	0.00	0.00	12.80	0.81	0.81	15.50	0.28	0.28
10.15	0.00	0.00	12.85	0.80	0.80	15.55	0.27	0.27
10.20	0.00	0.00	12.90	0.78	0.78	15.60	0.27	0.27
10.25	0.00	0.00	12.95	0.77	0.77	15.65	0.27	0.27
10.30	0.00	0.00	13.00	0.75	0.75	15.70	0.26	0.26
10.35	0.00	0.00	13.05	0.73	0.73	15.75	0.26	0.26
10.40	0.00	0.00	13.10	0.71	0.71	15.80	0.25	0.25
10.45	0.00	0.00	13.15	0.69	0.69	15.85	0.25	0.25
10.50	0.00	0.00	13.20	0.67	0.67	15.90	0.25	0.25
10.55	0.00	0.00	13.25	0.66	0.66	15.95	0.24	0.24
10.60	0.00	0.00	13.30	0.64	0.64	16.00	0.24	0.24
10.65	0.00	0.00	13.35	0.62	0.62	16.05	0.24	0.24
10.70	0.00	0.00	13.40	0.61	0.61	16.10	0.23	0.23
10.75	0.00	0.00	13.45	0.59	0.59	16.15	0.23	0.23

3864 Storm (2020-08-14)

Type III 24-hr 2 Year Storm Rainfall=3.29"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)
16.20	0.23	0.23	18.90	0.12	0.12	21.60	0.09	0.09
16.25	0.22	0.22	18.95	0.12	0.12	21.65	0.09	0.09
16.30	0.22	0.22	19.00	0.12	0.12	21.70	0.09	0.09
16.35	0.22	0.22	19.05	0.12	0.12	21.75	0.09	0.09
16.40	0.21	0.21	19.10	0.12	0.12	21.80	0.09	0.09
16.45	0.21	0.21	19.15	0.12	0.12	21.85	0.09	0.09
16.50	0.21	0.21	19.20	0.12	0.12	21.90	0.09	0.09
16.55	0.20	0.20	19.25	0.12	0.12	21.95	0.09	0.09
16.60	0.20	0.20	19.30	0.12	0.12	22.00	0.09	0.09
16.65	0.20	0.20	19.35	0.11	0.11	22.05	0.09	0.09
16.70	0.20	0.20	19.40	0.11	0.11	22.10	0.09	0.09
16.75	0.19	0.19	19.45	0.11	0.11	22.15	0.09	0.09
16.80	0.19	0.19	19.50	0.11	0.11	22.20	0.09	0.09
16.85	0.19	0.19	19.55	0.11	0.11	22.25	0.09	0.09
16.90	0.19	0.19	19.60	0.11	0.11	22.30	0.09	0.09
16.95	0.18	0.18	19.65	0.11	0.11	22.35	0.09	0.09
17.00	0.18	0.18	19.70	0.11	0.11	22.40	0.09	0.09
17.05	0.18	0.18	19.75	0.11	0.11	22.45	0.09	0.09
17.10	0.18	0.18	19.80	0.11	0.11	22.50	0.09	0.09
17.15	0.18	0.18	19.85	0.11	0.11	22.55	0.09	0.09
17.20	0.17	0.17	19.90	0.11	0.11	22.60	0.09	0.09
17.25	0.17	0.17	19.95	0.11	0.11	22.65	0.08	0.08
17.30	0.17	0.17	20.00	0.11	0.11	22.70	0.08	0.08
17.35	0.17	0.17	20.05	0.11	0.11	22.75	0.08	0.08
17.40	0.17	0.17	20.10	0.11	0.11	22.80	0.08	0.08
17.45	0.17	0.17	20.15	0.11	0.11	22.85	0.08	0.08
17.50	0.16	0.16	20.20	0.10	0.10	22.90	0.08	0.08
17.55	0.16	0.16	20.25	0.10	0.10	22.95	0.08	0.08
17.60	0.16	0.16	20.30	0.10	0.10	23.00	0.08	0.08
17.65	0.16	0.16	20.35	0.10	0.10	23.05	0.08	0.08
17.70	0.16	0.16	20.40	0.10	0.10	23.10	0.08	0.08
17.75	0.15	0.15	20.45	0.10	0.10	23.15	0.08	0.08
17.80	0.15	0.15	20.50	0.10	0.10	23.20	0.08	0.08
17.85	0.15	0.15	20.55	0.10	0.10	23.25	0.08	0.08
17.90	0.15	0.15	20.60	0.10	0.10	23.30	0.08	0.08
17.95	0.15	0.15	20.65	0.10	0.10	23.35	0.08	0.08
18.00	0.15	0.15	20.70	0.10	0.10	23.40	0.08	0.08
18.05	0.14	0.14	20.75	0.10	0.10	23.45	0.08	0.08
18.10	0.14	0.14	20.80	0.10	0.10	23.50	0.08	0.08
18.15	0.14	0.14	20.85	0.10	0.10	23.55	0.08	0.08
18.20	0.14	0.14	20.90	0.10	0.10	23.60	0.08	0.08
18.25	0.14	0.14	20.95	0.10	0.10	23.65	0.08	0.08
18.30	0.14	0.14	21.00	0.10	0.10	23.70	0.08	0.08
18.35	0.13	0.13	21.05	0.10	0.10	23.75	0.08	0.08
18.40	0.13	0.13	21.10	0.10	0.10	23.80	0.08	0.08
18.45	0.13	0.13	21.15	0.10	0.10	23.85	0.08	0.08
18.50	0.13	0.13	21.20	0.10	0.10	23.90	0.07	0.07
18.55	0.13	0.13	21.25	0.10	0.10	23.95	0.07	0.07
18.60	0.13	0.13	21.30	0.10	0.10	24.00	0.07	0.07
18.65	0.13	0.13	21.35	0.09	0.09	24.05	0.07	0.07
18.70	0.13	0.13	21.40	0.09	0.09	24.10	0.07	0.07
18.75	0.12	0.12	21.45	0.09	0.09	24.15	0.07	0.07
18.80	0.12	0.12	21.50	0.09	0.09	24.20	0.07	0.07
18.85	0.12	0.12	21.55	0.09	0.09	24.25	0.07	0.07

3864 Storm (2020-08-14)

Type III 24-hr 2 Year Storm Rainfall=3.29"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)
24.30	0.06	0.06	27.00	0.00	0.00	29.70	0.00	0.00
24.35	0.06	0.06	27.05	0.00	0.00	29.75	0.00	0.00
24.40	0.06	0.06	27.10	0.00	0.00	29.80	0.00	0.00
24.45	0.05	0.05	27.15	0.00	0.00	29.85	0.00	0.00
24.50	0.05	0.05	27.20	0.00	0.00	29.90	0.00	0.00
24.55	0.05	0.05	27.25	0.00	0.00	29.95	0.00	0.00
24.60	0.04	0.04	27.30	0.00	0.00	30.00	0.00	0.00
24.65	0.04	0.04	27.35	0.00	0.00			
24.70	0.04	0.04	27.40	0.00	0.00			
24.75	0.03	0.03	27.45	0.00	0.00			
24.80	0.03	0.03	27.50	0.00	0.00			
24.85	0.03	0.03	27.55	0.00	0.00			
24.90	0.03	0.03	27.60	0.00	0.00			
24.95	0.02	0.02	27.65	0.00	0.00			
25.00	0.02	0.02	27.70	0.00	0.00			
25.05	0.02	0.02	27.75	0.00	0.00			
25.10	0.02	0.02	27.80	0.00	0.00			
25.15	0.02	0.02	27.85	0.00	0.00			
25.20	0.02	0.02	27.90	0.00	0.00			
25.25	0.01	0.01	27.95	0.00	0.00			
25.30	0.01	0.01	28.00	0.00	0.00			
25.35	0.01	0.01	28.05	0.00	0.00			
25.40	0.01	0.01	28.10	0.00	0.00			
25.45	0.01	0.01	28.15	0.00	0.00			
25.50	0.01	0.01	28.20	0.00	0.00			
25.55	0.01	0.01	28.25	0.00	0.00			
25.60	0.01	0.01	28.30	0.00	0.00			
25.65	0.01	0.01	28.35	0.00	0.00			
25.70	0.01	0.01	28.40	0.00	0.00			
25.75	0.01	0.01	28.45	0.00	0.00			
25.80	0.01	0.01	28.50	0.00	0.00			
25.85	0.01	0.01	28.55	0.00	0.00			
25.90	0.00	0.00	28.60	0.00	0.00			
25.95	0.00	0.00	28.65	0.00	0.00			
26.00	0.00	0.00	28.70	0.00	0.00			
26.05	0.00	0.00	28.75	0.00	0.00			
26.10	0.00	0.00	28.80	0.00	0.00			
26.15	0.00	0.00	28.85	0.00	0.00			
26.20	0.00	0.00	28.90	0.00	0.00			
26.25	0.00	0.00	28.95	0.00	0.00			
26.30	0.00	0.00	29.00	0.00	0.00			
26.35	0.00	0.00	29.05	0.00	0.00			
26.40	0.00	0.00	29.10	0.00	0.00			
26.45	0.00	0.00	29.15	0.00	0.00			
26.50	0.00	0.00	29.20	0.00	0.00			
26.55	0.00	0.00	29.25	0.00	0.00			
26.60	0.00	0.00	29.30	0.00	0.00			
26.65	0.00	0.00	29.35	0.00	0.00			
26.70	0.00	0.00	29.40	0.00	0.00			
26.75	0.00	0.00	29.45	0.00	0.00			
26.80	0.00	0.00	29.50	0.00	0.00			
26.85	0.00	0.00	29.55	0.00	0.00			
26.90	0.00	0.00	29.60	0.00	0.00			
26.95	0.00	0.00	29.65	0.00	0.00			

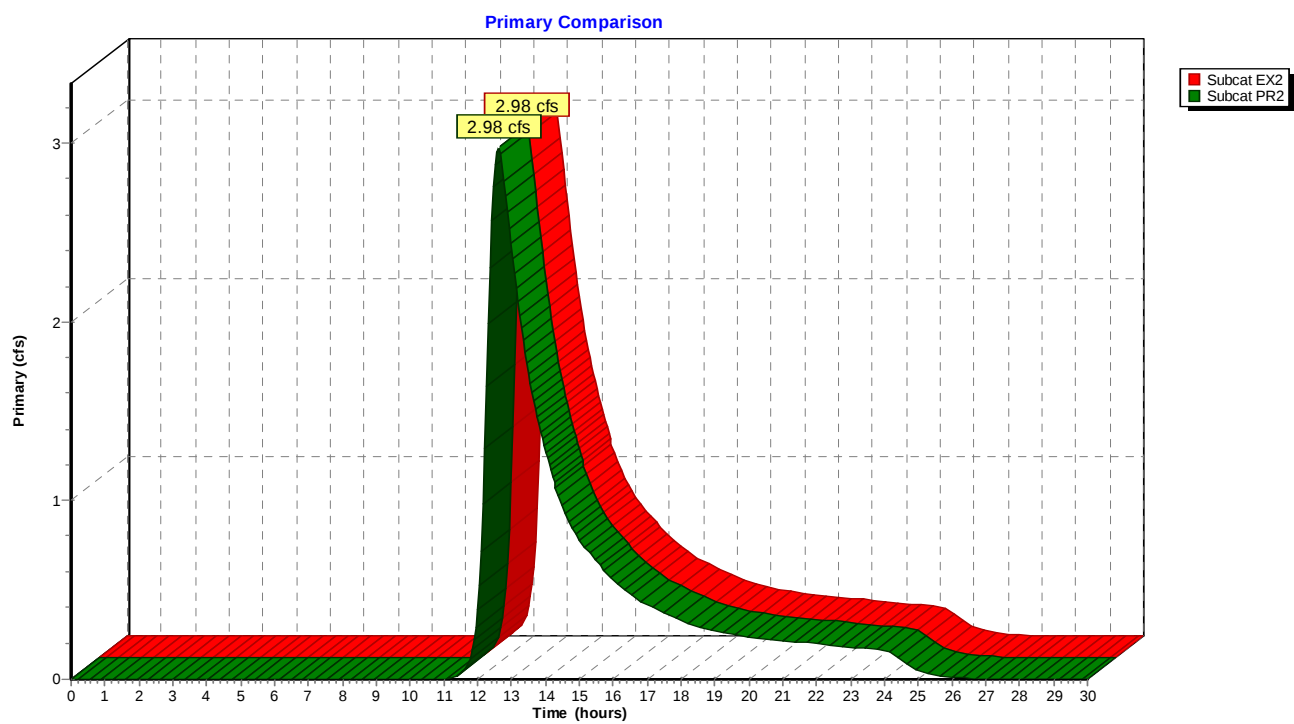
3864 Storm (2020-08-14)

Prepared by CES

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Type III 24-hr 10 Year Storm Rainfall=5.05"

Printed 8/14/2020



3864 Storm (2020-08-14)

Type III 24-hr 10 Year Storm Rainfall=5.05"

Prepared by CES

Printed 8/14/2020

HydroCAD® 10.00-25 s/n 02074 © 2019 HydroCAD Software Solutions LLC

Primary Comparison

Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)
0.00	0.00	0.00	2.70	0.00	0.00	5.40	0.00	0.00
0.05	0.00	0.00	2.75	0.00	0.00	5.45	0.00	0.00
0.10	0.00	0.00	2.80	0.00	0.00	5.50	0.00	0.00
0.15	0.00	0.00	2.85	0.00	0.00	5.55	0.00	0.00
0.20	0.00	0.00	2.90	0.00	0.00	5.60	0.00	0.00
0.25	0.00	0.00	2.95	0.00	0.00	5.65	0.00	0.00
0.30	0.00	0.00	3.00	0.00	0.00	5.70	0.00	0.00
0.35	0.00	0.00	3.05	0.00	0.00	5.75	0.00	0.00
0.40	0.00	0.00	3.10	0.00	0.00	5.80	0.00	0.00
0.45	0.00	0.00	3.15	0.00	0.00	5.85	0.00	0.00
0.50	0.00	0.00	3.20	0.00	0.00	5.90	0.00	0.00
0.55	0.00	0.00	3.25	0.00	0.00	5.95	0.00	0.00
0.60	0.00	0.00	3.30	0.00	0.00	6.00	0.00	0.00
0.65	0.00	0.00	3.35	0.00	0.00	6.05	0.00	0.00
0.70	0.00	0.00	3.40	0.00	0.00	6.10	0.00	0.00
0.75	0.00	0.00	3.45	0.00	0.00	6.15	0.00	0.00
0.80	0.00	0.00	3.50	0.00	0.00	6.20	0.00	0.00
0.85	0.00	0.00	3.55	0.00	0.00	6.25	0.00	0.00
0.90	0.00	0.00	3.60	0.00	0.00	6.30	0.00	0.00
0.95	0.00	0.00	3.65	0.00	0.00	6.35	0.00	0.00
1.00	0.00	0.00	3.70	0.00	0.00	6.40	0.00	0.00
1.05	0.00	0.00	3.75	0.00	0.00	6.45	0.00	0.00
1.10	0.00	0.00	3.80	0.00	0.00	6.50	0.00	0.00
1.15	0.00	0.00	3.85	0.00	0.00	6.55	0.00	0.00
1.20	0.00	0.00	3.90	0.00	0.00	6.60	0.00	0.00
1.25	0.00	0.00	3.95	0.00	0.00	6.65	0.00	0.00
1.30	0.00	0.00	4.00	0.00	0.00	6.70	0.00	0.00
1.35	0.00	0.00	4.05	0.00	0.00	6.75	0.00	0.00
1.40	0.00	0.00	4.10	0.00	0.00	6.80	0.00	0.00
1.45	0.00	0.00	4.15	0.00	0.00	6.85	0.00	0.00
1.50	0.00	0.00	4.20	0.00	0.00	6.90	0.00	0.00
1.55	0.00	0.00	4.25	0.00	0.00	6.95	0.00	0.00
1.60	0.00	0.00	4.30	0.00	0.00	7.00	0.00	0.00
1.65	0.00	0.00	4.35	0.00	0.00	7.05	0.00	0.00
1.70	0.00	0.00	4.40	0.00	0.00	7.10	0.00	0.00
1.75	0.00	0.00	4.45	0.00	0.00	7.15	0.00	0.00
1.80	0.00	0.00	4.50	0.00	0.00	7.20	0.00	0.00
1.85	0.00	0.00	4.55	0.00	0.00	7.25	0.00	0.00
1.90	0.00	0.00	4.60	0.00	0.00	7.30	0.00	0.00
1.95	0.00	0.00	4.65	0.00	0.00	7.35	0.00	0.00
2.00	0.00	0.00	4.70	0.00	0.00	7.40	0.00	0.00
2.05	0.00	0.00	4.75	0.00	0.00	7.45	0.00	0.00
2.10	0.00	0.00	4.80	0.00	0.00	7.50	0.00	0.00
2.15	0.00	0.00	4.85	0.00	0.00	7.55	0.00	0.00
2.20	0.00	0.00	4.90	0.00	0.00	7.60	0.00	0.00
2.25	0.00	0.00	4.95	0.00	0.00	7.65	0.00	0.00
2.30	0.00	0.00	5.00	0.00	0.00	7.70	0.00	0.00
2.35	0.00	0.00	5.05	0.00	0.00	7.75	0.00	0.00
2.40	0.00	0.00	5.10	0.00	0.00	7.80	0.00	0.00
2.45	0.00	0.00	5.15	0.00	0.00	7.85	0.00	0.00
2.50	0.00	0.00	5.20	0.00	0.00	7.90	0.00	0.00
2.55	0.00	0.00	5.25	0.00	0.00	7.95	0.00	0.00
2.60	0.00	0.00	5.30	0.00	0.00	8.00	0.00	0.00
2.65	0.00	0.00	5.35	0.00	0.00	8.05	0.00	0.00

3864 Storm (2020-08-14)

Type III 24-hr 10 Year Storm Rainfall=5.05"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)
8.10	0.00	0.00	10.80	0.00	0.00	13.50	1.71	1.71
8.15	0.00	0.00	10.85	0.00	0.00	13.55	1.66	1.66
8.20	0.00	0.00	10.90	0.00	0.00	13.60	1.61	1.61
8.25	0.00	0.00	10.95	0.00	0.00	13.65	1.56	1.56
8.30	0.00	0.00	11.00	0.00	0.00	13.70	1.51	1.51
8.35	0.00	0.00	11.05	0.00	0.00	13.75	1.47	1.47
8.40	0.00	0.00	11.10	0.00	0.00	13.80	1.43	1.43
8.45	0.00	0.00	11.15	0.00	0.00	13.85	1.38	1.38
8.50	0.00	0.00	11.20	0.00	0.00	13.90	1.35	1.35
8.55	0.00	0.00	11.25	0.00	0.00	13.95	1.31	1.31
8.60	0.00	0.00	11.30	0.01	0.01	14.00	1.27	1.27
8.65	0.00	0.00	11.35	0.01	0.01	14.05	1.24	1.24
8.70	0.00	0.00	11.40	0.01	0.01	14.10	1.20	1.20
8.75	0.00	0.00	11.45	0.02	0.02	14.15	1.17	1.17
8.80	0.00	0.00	11.50	0.03	0.03	14.20	1.13	1.13
8.85	0.00	0.00	11.55	0.04	0.04	14.25	1.10	1.10
8.90	0.00	0.00	11.60	0.05	0.05	14.30	1.07	1.07
8.95	0.00	0.00	11.65	0.06	0.06	14.35	1.04	1.04
9.00	0.00	0.00	11.70	0.07	0.07	14.40	1.01	1.01
9.05	0.00	0.00	11.75	0.10	0.10	14.45	0.99	0.99
9.10	0.00	0.00	11.80	0.12	0.12	14.50	0.96	0.96
9.15	0.00	0.00	11.85	0.16	0.16	14.55	0.94	0.94
9.20	0.00	0.00	11.90	0.22	0.22	14.60	0.91	0.91
9.25	0.00	0.00	11.95	0.29	0.29	14.65	0.89	0.89
9.30	0.00	0.00	12.00	0.38	0.38	14.70	0.87	0.87
9.35	0.00	0.00	12.05	0.53	0.53	14.75	0.85	0.85
9.40	0.00	0.00	12.10	0.71	0.72	14.80	0.84	0.84
9.45	0.00	0.00	12.15	0.98	0.98	14.85	0.82	0.82
9.50	0.00	0.00	12.20	1.29	1.29	14.90	0.80	0.80
9.55	0.00	0.00	12.25	1.64	1.64	14.95	0.79	0.79
9.60	0.00	0.00	12.30	1.99	1.99	15.00	0.78	0.78
9.65	0.00	0.00	12.35	2.30	2.30	15.05	0.76	0.76
9.70	0.00	0.00	12.40	2.57	2.57	15.10	0.75	0.75
9.75	0.00	0.00	12.45	2.75	2.75	15.15	0.74	0.74
9.80	0.00	0.00	12.50	2.88	2.88	15.20	0.73	0.73
9.85	0.00	0.00	12.55	2.95	2.95	15.25	0.71	0.71
9.90	0.00	0.00	12.60	2.98	2.98	15.30	0.70	0.70
9.95	0.00	0.00	12.65	2.97	2.97	15.35	0.69	0.69
10.00	0.00	0.00	12.70	2.93	2.93	15.40	0.68	0.68
10.05	0.00	0.00	12.75	2.87	2.87	15.45	0.67	0.67
10.10	0.00	0.00	12.80	2.79	2.79	15.50	0.66	0.66
10.15	0.00	0.00	12.85	2.70	2.70	15.55	0.65	0.65
10.20	0.00	0.00	12.90	2.61	2.61	15.60	0.64	0.64
10.25	0.00	0.00	12.95	2.52	2.52	15.65	0.63	0.63
10.30	0.00	0.00	13.00	2.44	2.44	15.70	0.62	0.62
10.35	0.00	0.00	13.05	2.35	2.35	15.75	0.60	0.60
10.40	0.00	0.00	13.10	2.27	2.27	15.80	0.59	0.59
10.45	0.00	0.00	13.15	2.19	2.19	15.85	0.59	0.59
10.50	0.00	0.00	13.20	2.11	2.11	15.90	0.58	0.58
10.55	0.00	0.00	13.25	2.04	2.04	15.95	0.57	0.57
10.60	0.00	0.00	13.30	1.96	1.96	16.00	0.56	0.56
10.65	0.00	0.00	13.35	1.90	1.90	16.05	0.55	0.55
10.70	0.00	0.00	13.40	1.83	1.83	16.10	0.54	0.54
10.75	0.00	0.00	13.45	1.77	1.77	16.15	0.53	0.53

3864 Storm (2020-08-14)

Type III 24-hr 10 Year Storm Rainfall=5.05"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)
16.20	0.52	0.52	18.90	0.27	0.27	21.60	0.20	0.20
16.25	0.51	0.51	18.95	0.27	0.27	21.65	0.20	0.20
16.30	0.51	0.51	19.00	0.27	0.27	21.70	0.20	0.20
16.35	0.50	0.50	19.05	0.27	0.27	21.75	0.20	0.20
16.40	0.49	0.49	19.10	0.26	0.26	21.80	0.20	0.20
16.45	0.48	0.48	19.15	0.26	0.26	21.85	0.20	0.20
16.50	0.48	0.48	19.20	0.26	0.26	21.90	0.20	0.20
16.55	0.47	0.47	19.25	0.26	0.26	21.95	0.20	0.20
16.60	0.46	0.46	19.30	0.26	0.26	22.00	0.20	0.20
16.65	0.46	0.46	19.35	0.26	0.26	22.05	0.20	0.20
16.70	0.45	0.45	19.40	0.25	0.25	22.10	0.19	0.19
16.75	0.44	0.44	19.45	0.25	0.25	22.15	0.19	0.19
16.80	0.44	0.44	19.50	0.25	0.25	22.20	0.19	0.19
16.85	0.43	0.43	19.55	0.25	0.25	22.25	0.19	0.19
16.90	0.43	0.43	19.60	0.25	0.25	22.30	0.19	0.19
16.95	0.42	0.42	19.65	0.25	0.25	22.35	0.19	0.19
17.00	0.42	0.42	19.70	0.24	0.24	22.40	0.19	0.19
17.05	0.41	0.41	19.75	0.24	0.24	22.45	0.19	0.19
17.10	0.41	0.41	19.80	0.24	0.24	22.50	0.19	0.19
17.15	0.40	0.40	19.85	0.24	0.24	22.55	0.19	0.19
17.20	0.40	0.40	19.90	0.24	0.24	22.60	0.19	0.19
17.25	0.39	0.39	19.95	0.24	0.24	22.65	0.19	0.19
17.30	0.39	0.39	20.00	0.24	0.24	22.70	0.18	0.18
17.35	0.38	0.38	20.05	0.24	0.24	22.75	0.18	0.18
17.40	0.38	0.38	20.10	0.23	0.23	22.80	0.18	0.18
17.45	0.37	0.37	20.15	0.23	0.23	22.85	0.18	0.18
17.50	0.37	0.37	20.20	0.23	0.23	22.90	0.18	0.18
17.55	0.37	0.37	20.25	0.23	0.23	22.95	0.18	0.18
17.60	0.36	0.36	20.30	0.23	0.23	23.00	0.18	0.18
17.65	0.36	0.36	20.35	0.23	0.23	23.05	0.18	0.18
17.70	0.35	0.35	20.40	0.23	0.23	23.10	0.18	0.18
17.75	0.35	0.35	20.45	0.23	0.23	23.15	0.18	0.18
17.80	0.34	0.34	20.50	0.22	0.23	23.20	0.18	0.18
17.85	0.34	0.34	20.55	0.22	0.22	23.25	0.17	0.17
17.90	0.34	0.34	20.60	0.22	0.22	23.30	0.17	0.17
17.95	0.33	0.33	20.65	0.22	0.22	23.35	0.17	0.17
18.00	0.33	0.33	20.70	0.22	0.22	23.40	0.17	0.17
18.05	0.32	0.32	20.75	0.22	0.22	23.45	0.17	0.17
18.10	0.32	0.32	20.80	0.22	0.22	23.50	0.17	0.17
18.15	0.32	0.32	20.85	0.22	0.22	23.55	0.17	0.17
18.20	0.31	0.31	20.90	0.22	0.22	23.60	0.17	0.17
18.25	0.31	0.31	20.95	0.22	0.22	23.65	0.17	0.17
18.30	0.31	0.31	21.00	0.21	0.21	23.70	0.17	0.17
18.35	0.30	0.30	21.05	0.21	0.21	23.75	0.17	0.17
18.40	0.30	0.30	21.10	0.21	0.21	23.80	0.16	0.16
18.45	0.29	0.29	21.15	0.21	0.21	23.85	0.16	0.16
18.50	0.29	0.29	21.20	0.21	0.21	23.90	0.16	0.16
18.55	0.29	0.29	21.25	0.21	0.21	23.95	0.16	0.16
18.60	0.29	0.29	21.30	0.21	0.21	24.00	0.16	0.16
18.65	0.28	0.28	21.35	0.21	0.21	24.05	0.16	0.16
18.70	0.28	0.28	21.40	0.21	0.21	24.10	0.16	0.16
18.75	0.28	0.28	21.45	0.21	0.21	24.15	0.16	0.16
18.80	0.28	0.28	21.50	0.21	0.21	24.20	0.15	0.15
18.85	0.27	0.27	21.55	0.20	0.20	24.25	0.15	0.15

3864 Storm (2020-08-14)

Type III 24-hr 10 Year Storm Rainfall=5.05"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)
24.30	0.14	0.14	27.00	0.00	0.00	29.70	0.00	0.00
24.35	0.13	0.13	27.05	0.00	0.00	29.75	0.00	0.00
24.40	0.12	0.12	27.10	0.00	0.00	29.80	0.00	0.00
24.45	0.12	0.12	27.15	0.00	0.00	29.85	0.00	0.00
24.50	0.11	0.11	27.20	0.00	0.00	29.90	0.00	0.00
24.55	0.10	0.10	27.25	0.00	0.00	29.95	0.00	0.00
24.60	0.09	0.09	27.30	0.00	0.00	30.00	0.00	0.00
24.65	0.08	0.08	27.35	0.00	0.00			
24.70	0.08	0.08	27.40	0.00	0.00			
24.75	0.07	0.07	27.45	0.00	0.00			
24.80	0.07	0.07	27.50	0.00	0.00			
24.85	0.06	0.06	27.55	0.00	0.00			
24.90	0.06	0.06	27.60	0.00	0.00			
24.95	0.05	0.05	27.65	0.00	0.00			
25.00	0.05	0.05	27.70	0.00	0.00			
25.05	0.04	0.04	27.75	0.00	0.00			
25.10	0.04	0.04	27.80	0.00	0.00			
25.15	0.04	0.04	27.85	0.00	0.00			
25.20	0.03	0.03	27.90	0.00	0.00			
25.25	0.03	0.03	27.95	0.00	0.00			
25.30	0.03	0.03	28.00	0.00	0.00			
25.35	0.03	0.03	28.05	0.00	0.00			
25.40	0.03	0.03	28.10	0.00	0.00			
25.45	0.02	0.02	28.15	0.00	0.00			
25.50	0.02	0.02	28.20	0.00	0.00			
25.55	0.02	0.02	28.25	0.00	0.00			
25.60	0.02	0.02	28.30	0.00	0.00			
25.65	0.02	0.02	28.35	0.00	0.00			
25.70	0.01	0.01	28.40	0.00	0.00			
25.75	0.01	0.01	28.45	0.00	0.00			
25.80	0.01	0.01	28.50	0.00	0.00			
25.85	0.01	0.01	28.55	0.00	0.00			
25.90	0.01	0.01	28.60	0.00	0.00			
25.95	0.01	0.01	28.65	0.00	0.00			
26.00	0.01	0.01	28.70	0.00	0.00			
26.05	0.01	0.01	28.75	0.00	0.00			
26.10	0.01	0.01	28.80	0.00	0.00			
26.15	0.01	0.01	28.85	0.00	0.00			
26.20	0.01	0.01	28.90	0.00	0.00			
26.25	0.00	0.00	28.95	0.00	0.00			
26.30	0.00	0.00	29.00	0.00	0.00			
26.35	0.00	0.00	29.05	0.00	0.00			
26.40	0.00	0.00	29.10	0.00	0.00			
26.45	0.00	0.00	29.15	0.00	0.00			
26.50	0.00	0.00	29.20	0.00	0.00			
26.55	0.00	0.00	29.25	0.00	0.00			
26.60	0.00	0.00	29.30	0.00	0.00			
26.65	0.00	0.00	29.35	0.00	0.00			
26.70	0.00	0.00	29.40	0.00	0.00			
26.75	0.00	0.00	29.45	0.00	0.00			
26.80	0.00	0.00	29.50	0.00	0.00			
26.85	0.00	0.00	29.55	0.00	0.00			
26.90	0.00	0.00	29.60	0.00	0.00			
26.95	0.00	0.00	29.65	0.00	0.00			

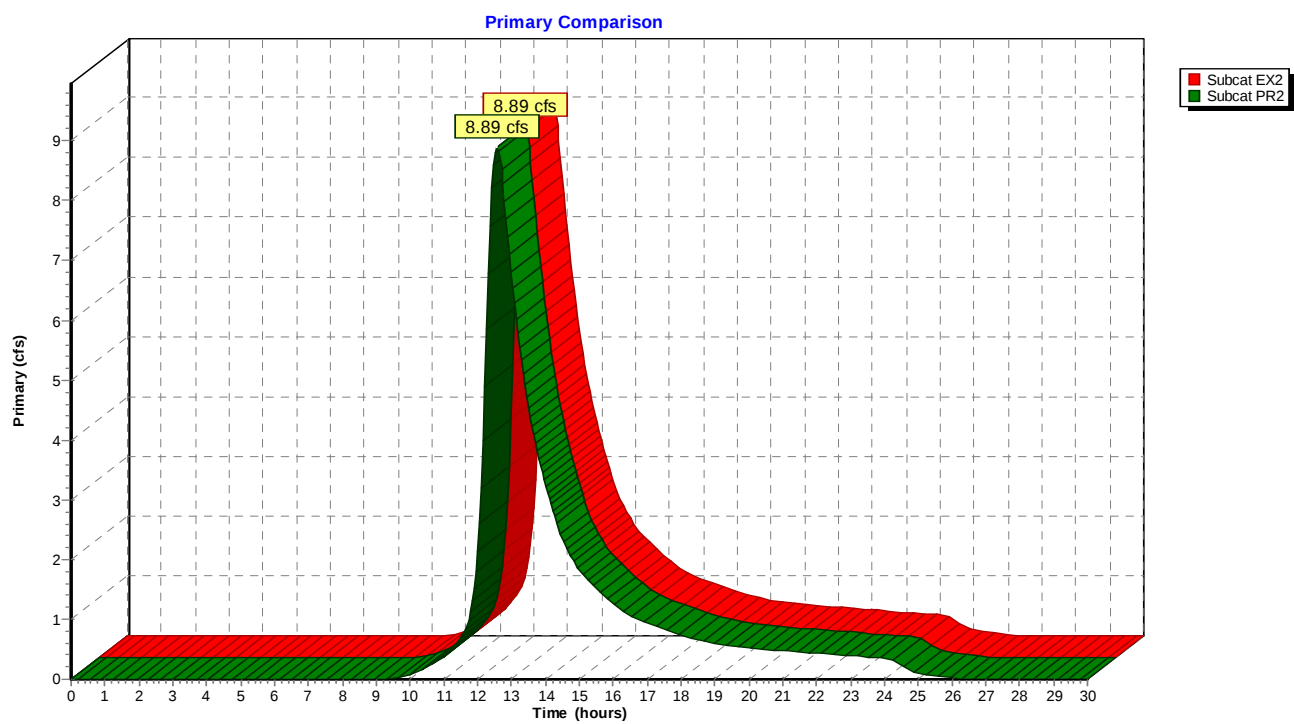
3864 Storm (2020-08-14)

Prepared by CES

HydroCAD® 10.00-25 s/n 02074 © 2019 HydroCAD Software Solutions LLC

Type III 24-hr 100 Year Storm Rainfall=8.55"

Printed 8/14/2020



3864 Storm (2020-08-14)

Type III 24-hr 100 Year Storm Rainfall=8.55"

Prepared by CES

Printed 8/14/2020

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Primary Comparison

Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)
0.00	0.00	0.00	2.70	0.00	0.00	5.40	0.00	0.00
0.05	0.00	0.00	2.75	0.00	0.00	5.45	0.00	0.00
0.10	0.00	0.00	2.80	0.00	0.00	5.50	0.00	0.00
0.15	0.00	0.00	2.85	0.00	0.00	5.55	0.00	0.00
0.20	0.00	0.00	2.90	0.00	0.00	5.60	0.00	0.00
0.25	0.00	0.00	2.95	0.00	0.00	5.65	0.00	0.00
0.30	0.00	0.00	3.00	0.00	0.00	5.70	0.00	0.00
0.35	0.00	0.00	3.05	0.00	0.00	5.75	0.00	0.00
0.40	0.00	0.00	3.10	0.00	0.00	5.80	0.00	0.00
0.45	0.00	0.00	3.15	0.00	0.00	5.85	0.00	0.00
0.50	0.00	0.00	3.20	0.00	0.00	5.90	0.00	0.00
0.55	0.00	0.00	3.25	0.00	0.00	5.95	0.00	0.00
0.60	0.00	0.00	3.30	0.00	0.00	6.00	0.00	0.00
0.65	0.00	0.00	3.35	0.00	0.00	6.05	0.00	0.00
0.70	0.00	0.00	3.40	0.00	0.00	6.10	0.00	0.00
0.75	0.00	0.00	3.45	0.00	0.00	6.15	0.00	0.00
0.80	0.00	0.00	3.50	0.00	0.00	6.20	0.00	0.00
0.85	0.00	0.00	3.55	0.00	0.00	6.25	0.00	0.00
0.90	0.00	0.00	3.60	0.00	0.00	6.30	0.00	0.00
0.95	0.00	0.00	3.65	0.00	0.00	6.35	0.00	0.00
1.00	0.00	0.00	3.70	0.00	0.00	6.40	0.00	0.00
1.05	0.00	0.00	3.75	0.00	0.00	6.45	0.00	0.00
1.10	0.00	0.00	3.80	0.00	0.00	6.50	0.00	0.00
1.15	0.00	0.00	3.85	0.00	0.00	6.55	0.00	0.00
1.20	0.00	0.00	3.90	0.00	0.00	6.60	0.00	0.00
1.25	0.00	0.00	3.95	0.00	0.00	6.65	0.00	0.00
1.30	0.00	0.00	4.00	0.00	0.00	6.70	0.00	0.00
1.35	0.00	0.00	4.05	0.00	0.00	6.75	0.00	0.00
1.40	0.00	0.00	4.10	0.00	0.00	6.80	0.00	0.00
1.45	0.00	0.00	4.15	0.00	0.00	6.85	0.00	0.00
1.50	0.00	0.00	4.20	0.00	0.00	6.90	0.00	0.00
1.55	0.00	0.00	4.25	0.00	0.00	6.95	0.00	0.00
1.60	0.00	0.00	4.30	0.00	0.00	7.00	0.00	0.00
1.65	0.00	0.00	4.35	0.00	0.00	7.05	0.00	0.00
1.70	0.00	0.00	4.40	0.00	0.00	7.10	0.00	0.00
1.75	0.00	0.00	4.45	0.00	0.00	7.15	0.00	0.00
1.80	0.00	0.00	4.50	0.00	0.00	7.20	0.00	0.00
1.85	0.00	0.00	4.55	0.00	0.00	7.25	0.00	0.00
1.90	0.00	0.00	4.60	0.00	0.00	7.30	0.00	0.00
1.95	0.00	0.00	4.65	0.00	0.00	7.35	0.00	0.00
2.00	0.00	0.00	4.70	0.00	0.00	7.40	0.00	0.00
2.05	0.00	0.00	4.75	0.00	0.00	7.45	0.00	0.00
2.10	0.00	0.00	4.80	0.00	0.00	7.50	0.00	0.00
2.15	0.00	0.00	4.85	0.00	0.00	7.55	0.00	0.00
2.20	0.00	0.00	4.90	0.00	0.00	7.60	0.00	0.00
2.25	0.00	0.00	4.95	0.00	0.00	7.65	0.00	0.00
2.30	0.00	0.00	5.00	0.00	0.00	7.70	0.00	0.00
2.35	0.00	0.00	5.05	0.00	0.00	7.75	0.00	0.00
2.40	0.00	0.00	5.10	0.00	0.00	7.80	0.00	0.00
2.45	0.00	0.00	5.15	0.00	0.00	7.85	0.00	0.00
2.50	0.00	0.00	5.20	0.00	0.00	7.90	0.00	0.00
2.55	0.00	0.00	5.25	0.00	0.00	7.95	0.00	0.00
2.60	0.00	0.00	5.30	0.00	0.00	8.00	0.00	0.00
2.65	0.00	0.00	5.35	0.00	0.00	8.05	0.00	0.00

3864 Storm (2020-08-14)

Type III 24-hr 100 Year Storm Rainfall=8.55"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)
8.10	0.00	0.00	10.80	0.29	0.29	13.50	4.55	4.55
8.15	0.00	0.00	10.85	0.31	0.31	13.55	4.38	4.38
8.20	0.00	0.00	10.90	0.33	0.33	13.60	4.22	4.23
8.25	0.00	0.00	10.95	0.35	0.35	13.65	4.08	4.08
8.30	0.00	0.00	11.00	0.38	0.38	13.70	3.94	3.94
8.35	0.00	0.00	11.05	0.40	0.40	13.75	3.80	3.81
8.40	0.00	0.00	11.10	0.42	0.42	13.80	3.68	3.68
8.45	0.00	0.00	11.15	0.45	0.45	13.85	3.56	3.56
8.50	0.00	0.00	11.20	0.47	0.47	13.90	3.44	3.44
8.55	0.00	0.00	11.25	0.50	0.50	13.95	3.33	3.33
8.60	0.00	0.00	11.30	0.53	0.53	14.00	3.22	3.22
8.65	0.00	0.00	11.35	0.56	0.56	14.05	3.11	3.11
8.70	0.00	0.00	11.40	0.60	0.60	14.10	3.01	3.01
8.75	0.00	0.00	11.45	0.64	0.64	14.15	2.92	2.92
8.80	0.00	0.00	11.50	0.69	0.69	14.20	2.82	2.82
8.85	0.00	0.00	11.55	0.73	0.73	14.25	2.73	2.73
8.90	0.00	0.00	11.60	0.79	0.79	14.30	2.64	2.64
8.95	0.00	0.00	11.65	0.85	0.85	14.35	2.56	2.56
9.00	0.00	0.00	11.70	0.92	0.92	14.40	2.48	2.48
9.05	0.00	0.00	11.75	1.02	1.02	14.45	2.40	2.40
9.10	0.00	0.00	11.80	1.14	1.14	14.50	2.33	2.33
9.15	0.00	0.00	11.85	1.31	1.31	14.55	2.26	2.26
9.20	0.00	0.00	11.90	1.53	1.53	14.60	2.20	2.20
9.25	0.00	0.00	11.95	1.79	1.79	14.65	2.14	2.14
9.30	0.00	0.00	12.00	2.14	2.14	14.70	2.09	2.09
9.35	0.00	0.00	12.05	2.61	2.61	14.75	2.03	2.04
9.40	0.01	0.01	12.10	3.21	3.21	14.80	1.99	1.99
9.45	0.01	0.01	12.15	3.99	4.00	14.85	1.94	1.94
9.50	0.01	0.01	12.20	4.90	4.90	14.90	1.90	1.90
9.55	0.02	0.02	12.25	5.86	5.86	14.95	1.86	1.86
9.60	0.02	0.02	12.30	6.78	6.78	15.00	1.82	1.82
9.65	0.03	0.03	12.35	7.57	7.58	15.05	1.79	1.79
9.70	0.03	0.03	12.40	8.21	8.21	15.10	1.76	1.76
9.75	0.04	0.04	12.45	8.60	8.60	15.15	1.72	1.72
9.80	0.05	0.05	12.50	8.81	8.81	15.20	1.69	1.69
9.85	0.05	0.05	12.55	8.89	8.89	15.25	1.66	1.66
9.90	0.06	0.06	12.60	8.85	8.85	15.30	1.63	1.63
9.95	0.07	0.07	12.65	8.72	8.72	15.35	1.60	1.60
10.00	0.08	0.08	12.70	8.53	8.53	15.40	1.58	1.58
10.05	0.09	0.09	12.75	8.28	8.28	15.45	1.55	1.55
10.10	0.10	0.10	12.80	8.00	8.00	15.50	1.52	1.52
10.15	0.11	0.11	12.85	7.70	7.70	15.55	1.49	1.49
10.20	0.12	0.12	12.90	7.39	7.39	15.60	1.47	1.47
10.25	0.13	0.13	12.95	7.10	7.10	15.65	1.44	1.44
10.30	0.14	0.14	13.00	6.81	6.81	15.70	1.41	1.41
10.35	0.15	0.15	13.05	6.54	6.54	15.75	1.38	1.38
10.40	0.16	0.16	13.10	6.27	6.28	15.80	1.36	1.36
10.45	0.18	0.18	13.15	6.02	6.02	15.85	1.33	1.33
10.50	0.19	0.19	13.20	5.78	5.78	15.90	1.31	1.31
10.55	0.21	0.21	13.25	5.54	5.54	15.95	1.29	1.29
10.60	0.22	0.22	13.30	5.32	5.32	16.00	1.27	1.27
10.65	0.24	0.24	13.35	5.11	5.11	16.05	1.24	1.24
10.70	0.26	0.26	13.40	4.91	4.91	16.10	1.22	1.22
10.75	0.27	0.27	13.45	4.72	4.72	16.15	1.20	1.20

3864 Storm (2020-08-14)

Type III 24-hr 100 Year Storm Rainfall=8.55"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)
16.20	1.18	1.18	18.90	0.60	0.60	21.60	0.45	0.45
16.25	1.16	1.16	18.95	0.60	0.60	21.65	0.44	0.44
16.30	1.14	1.14	19.00	0.59	0.59	21.70	0.44	0.44
16.35	1.12	1.12	19.05	0.59	0.59	21.75	0.44	0.44
16.40	1.11	1.11	19.10	0.58	0.58	21.80	0.44	0.44
16.45	1.09	1.09	19.15	0.58	0.58	21.85	0.43	0.43
16.50	1.07	1.07	19.20	0.57	0.57	21.90	0.43	0.43
16.55	1.06	1.06	19.25	0.57	0.57	21.95	0.43	0.43
16.60	1.04	1.04	19.30	0.57	0.57	22.00	0.43	0.43
16.65	1.03	1.03	19.35	0.56	0.56	22.05	0.43	0.43
16.70	1.01	1.01	19.40	0.56	0.56	22.10	0.42	0.42
16.75	1.00	1.00	19.45	0.56	0.56	22.15	0.42	0.42
16.80	0.99	0.99	19.50	0.55	0.55	22.20	0.42	0.42
16.85	0.97	0.97	19.55	0.55	0.55	22.25	0.42	0.42
16.90	0.96	0.96	19.60	0.55	0.55	22.30	0.42	0.42
16.95	0.95	0.95	19.65	0.54	0.54	22.35	0.41	0.41
17.00	0.94	0.94	19.70	0.54	0.54	22.40	0.41	0.41
17.05	0.92	0.92	19.75	0.54	0.54	22.45	0.41	0.41
17.10	0.91	0.91	19.80	0.53	0.53	22.50	0.41	0.41
17.15	0.90	0.90	19.85	0.53	0.53	22.55	0.41	0.41
17.20	0.89	0.89	19.90	0.53	0.53	22.60	0.40	0.40
17.25	0.88	0.88	19.95	0.52	0.52	22.65	0.40	0.40
17.30	0.87	0.87	20.00	0.52	0.52	22.70	0.40	0.40
17.35	0.86	0.86	20.05	0.52	0.52	22.75	0.40	0.40
17.40	0.85	0.85	20.10	0.51	0.51	22.80	0.40	0.40
17.45	0.84	0.84	20.15	0.51	0.51	22.85	0.39	0.40
17.50	0.83	0.83	20.20	0.51	0.51	22.90	0.39	0.39
17.55	0.82	0.82	20.25	0.51	0.51	22.95	0.39	0.39
17.60	0.81	0.81	20.30	0.50	0.50	23.00	0.39	0.39
17.65	0.80	0.80	20.35	0.50	0.50	23.05	0.39	0.39
17.70	0.79	0.79	20.40	0.50	0.50	23.10	0.38	0.39
17.75	0.78	0.78	20.45	0.50	0.50	23.15	0.38	0.38
17.80	0.77	0.77	20.50	0.49	0.49	23.20	0.38	0.38
17.85	0.76	0.76	20.55	0.49	0.49	23.25	0.38	0.38
17.90	0.75	0.75	20.60	0.49	0.49	23.30	0.38	0.38
17.95	0.74	0.74	20.65	0.49	0.49	23.35	0.37	0.38
18.00	0.73	0.73	20.70	0.48	0.48	23.40	0.37	0.37
18.05	0.72	0.72	20.75	0.48	0.48	23.45	0.37	0.37
18.10	0.71	0.71	20.80	0.48	0.48	23.50	0.37	0.37
18.15	0.70	0.70	20.85	0.48	0.48	23.55	0.37	0.37
18.20	0.69	0.69	20.90	0.47	0.47	23.60	0.36	0.36
18.25	0.69	0.69	20.95	0.47	0.47	23.65	0.36	0.36
18.30	0.68	0.68	21.00	0.47	0.47	23.70	0.36	0.36
18.35	0.67	0.67	21.05	0.47	0.47	23.75	0.36	0.36
18.40	0.66	0.66	21.10	0.47	0.47	23.80	0.36	0.36
18.45	0.65	0.65	21.15	0.46	0.46	23.85	0.35	0.35
18.50	0.65	0.65	21.20	0.46	0.46	23.90	0.35	0.35
18.55	0.64	0.64	21.25	0.46	0.46	23.95	0.35	0.35
18.60	0.63	0.63	21.30	0.46	0.46	24.00	0.35	0.35
18.65	0.63	0.63	21.35	0.46	0.46	24.05	0.35	0.35
18.70	0.62	0.62	21.40	0.45	0.45	24.10	0.34	0.34
18.75	0.62	0.62	21.45	0.45	0.45	24.15	0.34	0.34
18.80	0.61	0.61	21.50	0.45	0.45	24.20	0.33	0.33
18.85	0.61	0.61	21.55	0.45	0.45	24.25	0.32	0.32

3864 Storm (2020-08-14)

Type III 24-hr 100 Year Storm Rainfall=8.55"

Prepared by CES

Printed 8/14/2020

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Primary Comparison (continued)

Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)	Time (hours)	Subcat EX2 (cfs)	Subcat PR2 (cfs)
24.30	0.30	0.30	27.00	0.00	0.00	29.70	0.00	0.00
24.35	0.29	0.29	27.05	0.00	0.00	29.75	0.00	0.00
24.40	0.27	0.27	27.10	0.00	0.00	29.80	0.00	0.00
24.45	0.25	0.25	27.15	0.00	0.00	29.85	0.00	0.00
24.50	0.23	0.23	27.20	0.00	0.00	29.90	0.00	0.00
24.55	0.21	0.21	27.25	0.00	0.00	29.95	0.00	0.00
24.60	0.20	0.20	27.30	0.00	0.00	30.00	0.00	0.00
24.65	0.18	0.18	27.35	0.00	0.00			
24.70	0.17	0.17	27.40	0.00	0.00			
24.75	0.16	0.16	27.45	0.00	0.00			
24.80	0.14	0.14	27.50	0.00	0.00			
24.85	0.13	0.13	27.55	0.00	0.00			
24.90	0.12	0.12	27.60	0.00	0.00			
24.95	0.11	0.11	27.65	0.00	0.00			
25.00	0.10	0.10	27.70	0.00	0.00			
25.05	0.10	0.10	27.75	0.00	0.00			
25.10	0.09	0.09	27.80	0.00	0.00			
25.15	0.08	0.08	27.85	0.00	0.00			
25.20	0.08	0.08	27.90	0.00	0.00			
25.25	0.07	0.07	27.95	0.00	0.00			
25.30	0.06	0.06	28.00	0.00	0.00			
25.35	0.06	0.06	28.05	0.00	0.00			
25.40	0.05	0.05	28.10	0.00	0.00			
25.45	0.05	0.05	28.15	0.00	0.00			
25.50	0.05	0.05	28.20	0.00	0.00			
25.55	0.04	0.04	28.25	0.00	0.00			
25.60	0.04	0.04	28.30	0.00	0.00			
25.65	0.04	0.04	28.35	0.00	0.00			
25.70	0.03	0.03	28.40	0.00	0.00			
25.75	0.03	0.03	28.45	0.00	0.00			
25.80	0.03	0.03	28.50	0.00	0.00			
25.85	0.02	0.02	28.55	0.00	0.00			
25.90	0.02	0.02	28.60	0.00	0.00			
25.95	0.02	0.02	28.65	0.00	0.00			
26.00	0.02	0.02	28.70	0.00	0.00			
26.05	0.02	0.02	28.75	0.00	0.00			
26.10	0.01	0.01	28.80	0.00	0.00			
26.15	0.01	0.01	28.85	0.00	0.00			
26.20	0.01	0.01	28.90	0.00	0.00			
26.25	0.01	0.01	28.95	0.00	0.00			
26.30	0.01	0.01	29.00	0.00	0.00			
26.35	0.01	0.01	29.05	0.00	0.00			
26.40	0.01	0.01	29.10	0.00	0.00			
26.45	0.01	0.01	29.15	0.00	0.00			
26.50	0.01	0.01	29.20	0.00	0.00			
26.55	0.01	0.01	29.25	0.00	0.00			
26.60	0.00	0.00	29.30	0.00	0.00			
26.65	0.00	0.00	29.35	0.00	0.00			
26.70	0.00	0.00	29.40	0.00	0.00			
26.75	0.00	0.00	29.45	0.00	0.00			
26.80	0.00	0.00	29.50	0.00	0.00			
26.85	0.00	0.00	29.55	0.00	0.00			
26.90	0.00	0.00	29.60	0.00	0.00			
26.95	0.00	0.00	29.65	0.00	0.00			