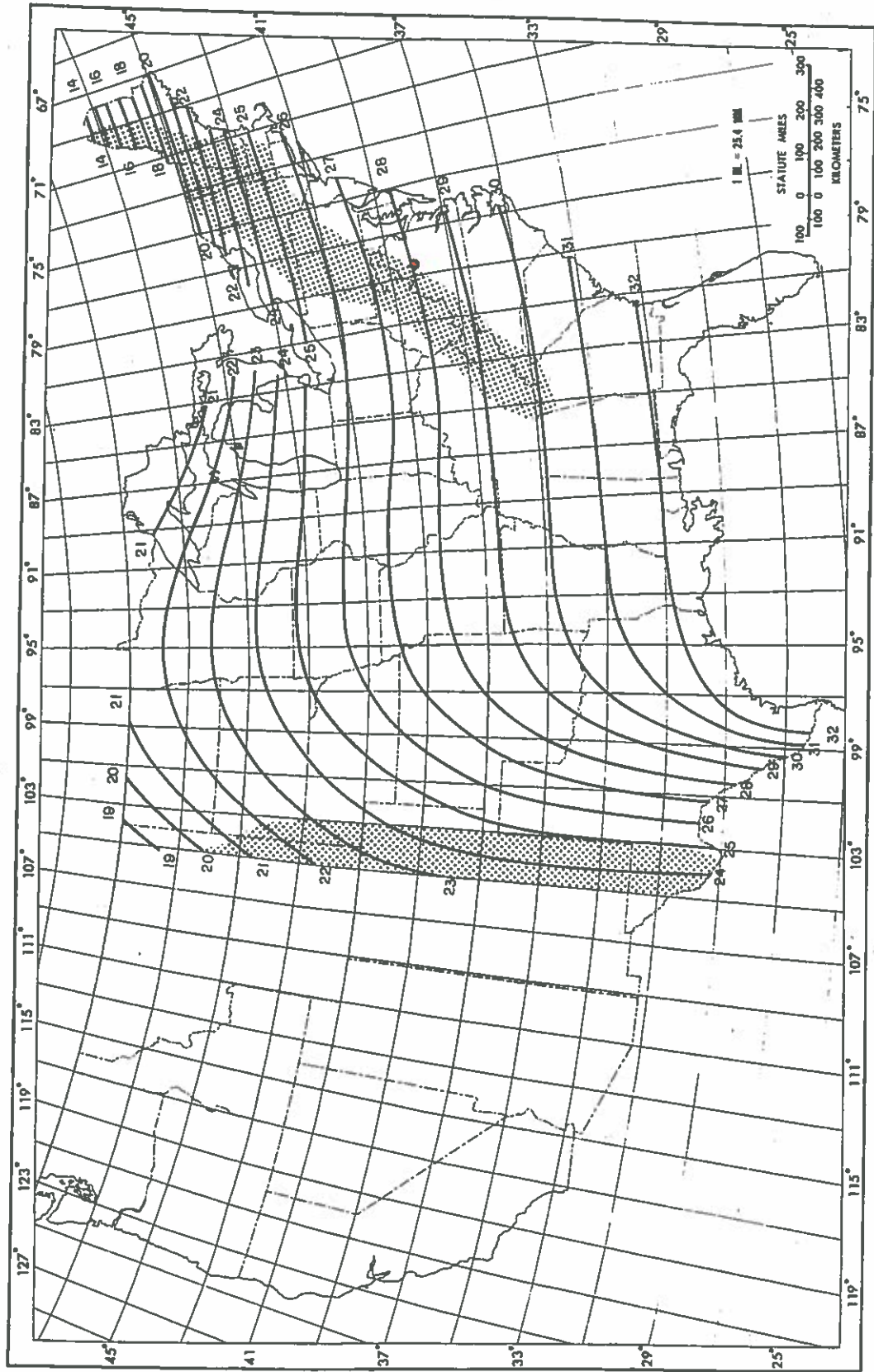


APPENDIX C
BASIN HYDROLOGY DATA

NOAA ATLAS 14 OUTPUT



PMP = 28 in
1/2 PMP = 14 in

Figure 18. --All-season PMP (in.) for 6 hr 10 min² (26 km²).



**POINT PRECIPITATION
FREQUENCY ESTIMATES
FROM NOAA ATLAS 14**



Virginia 38.01876 N 79.09754 W 1499 feet
from "Precipitation-Frequency Atlas of the United States" NOAA Atlas 14, Volume 2, Version 3
G.M. Bonnin, D. Marin, B. Lin, T. Parzybok, M.Yekta, and D. Riley
NOAA, National Weather Service, Silver Spring, Maryland, 2004

Extracted: Tue Apr 14 2009

- [Confidence Limits](#)
- [Seasonality](#)
- [Location Maps](#)
- [Other Info.](#)
- [GIS data](#)
- [Maps](#)
- [Docs](#)
- [Return to State Map](#)

Precipitation Frequency Estimates (inches)																		
ARI* (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr	4 day	7 day	10 day	20 day	30 day	45 day	60 day
1	0.30	0.48	0.61	0.83	1.04	1.23	1.34	1.70	2.11	2.60	3.04	3.46	3.99	4.57	6.09	7.51	9.46	11.22
2	0.36	0.58	0.73	1.00	1.26	1.50	1.62	2.04	2.53	3.15	3.68	4.18	4.81	5.48	7.24	8.88	11.14	13.16
5	0.43	0.70	0.88	1.25	1.60	1.91	2.05	2.55	3.16	3.99	4.64	5.26	5.98	6.71	8.69	10.44	12.89	15.02
10	0.49	0.79	0.99	1.44	1.88	2.25	2.41	3.00	3.73	4.69	5.42	6.13	6.91	7.66	9.81	11.62	14.20	16.40
25	0.56	0.89	1.13	1.67	2.23	2.68	2.89	3.61	4.54	5.69	6.54	7.36	8.20	8.94	11.33	13.16	15.87	18.11
50	0.61	0.97	1.23	1.85	2.51	3.04	3.28	4.13	5.25	6.54	7.46	8.37	9.24	9.94	12.50	14.32	17.09	19.34
100	0.66	1.05	1.32	2.02	2.79	3.40	3.68	4.67	6.01	7.44	8.43	9.44	10.32	10.96	13.68	15.45	18.27	20.47
200	0.70	1.11	1.41	2.19	3.07	3.78	4.09	5.25	6.84	8.42	9.47	10.56	11.45	11.99	14.86	16.55	19.39	21.52
500	0.76	1.20	1.51	2.40	3.44	4.27	4.65	6.06	8.05	9.84	10.95	12.15	13.00	13.36	16.44	17.97	20.77	22.78
1000	0.80	1.26	1.58	2.56	3.74	4.67	5.10	6.73	9.11	11.00	12.15	13.43	14.22	14.50	17.63	19.01	21.76	23.65

50-yr, 24-hr
= 6.54 in
100-yr, 24-hr
= 7.44 in

* These precipitation frequency estimates are based on a partial duration series. ARI is the Average Recurrence Interval. Please refer to [NOAA Atlas 14 Document](#) for more information. NOTE: Formatting forces estimates near zero to appear as zero.

* Upper bound of the 90% confidence interval Precipitation Frequency Estimates (inches)																		
ARI** (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr	4 day	7 day	10 day	20 day	30 day	45 day	60 day
1	0.34	0.54	0.67	0.92	1.15	1.36	1.49	1.90	2.40	2.90	3.36	3.82	4.37	4.98	6.57	8.07	10.10	11.89
2	0.40	0.64	0.81	1.12	1.40	1.66	1.80	2.28	2.87	3.50	4.06	4.61	5.26	5.97	7.82	9.55	11.89	13.94
5	0.48	0.77	0.98	1.39	1.78	2.11	2.28	2.85	3.59	4.43	5.12	5.79	6.54	7.30	9.38	11.23	13.77	15.91
10	0.54	0.87	1.10	1.59	2.08	2.48	2.68	3.35	4.23	5.20	5.98	6.74	7.55	8.33	10.59	12.48	15.17	17.37
25	0.62	0.98	1.25	1.85	2.46	2.96	3.21	4.03	5.14	6.30	7.21	8.09	8.96	9.72	12.24	14.14	16.95	19.18
50	0.68	1.07	1.36	2.05	2.78	3.36	3.64	4.60	5.93	7.24	8.21	9.19	10.10	10.81	13.52	15.39	18.28	20.50
100	0.73	1.16	1.47	2.25	3.09	3.77	4.10	5.21	6.82	8.24	9.27	10.38	11.28	11.93	14.82	16.63	19.55	21.71
200	0.78	1.24	1.56	2.44	3.42	4.20	4.58	5.89	7.79	9.33	10.42	11.61	12.51	13.06	16.11	17.85	20.77	22.86
500	0.85	1.34	1.69	2.69	3.86	4.79	5.23	6.85	9.25	10.89	12.06	13.36	14.24	14.58	17.88	19.43	22.30	24.22
1000	0.90	1.42	1.78	2.89	4.21	5.27	5.78	7.66	10.54	12.23	13.41	14.79	15.60	15.86	19.22	20.60	23.40	25.19

* The upper bound of the confidence interval at 90% confidence level is the value which 5% of the simulated quantile values for a given frequency are greater than.

** These precipitation frequency estimates are based on a partial duration series. ARI is the Average Recurrence Interval.

Please refer to [NOAA Atlas 14 Document](#) for more information. NOTE: Formatting prevents estimates near zero to appear as zero.

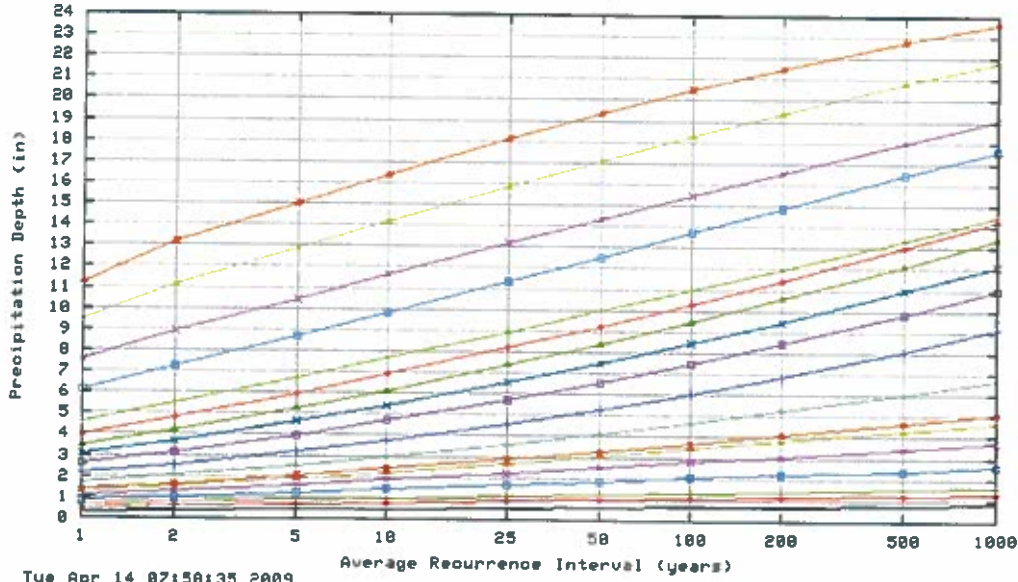
* Lower bound of the 90% confidence interval Precipitation Frequency Estimates (inches)																		
ARI** (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr	4 day	7 day	10 day	20 day	30 day	45 day	60 day
1	0.28	0.44	0.55	0.75	0.94	1.11	1.21	1.53	1.90	2.34	2.76	3.15	3.65	4.20	5.65	7.00	8.85	10.58
2	0.33	0.52	0.66	0.91	1.14	1.35	1.47	1.84	2.28	2.83	3.34	3.79	4.39	5.04	6.72	8.28	10.43	12.41
5	0.39	0.63	0.80	1.13	1.45	1.73	1.85	2.30	2.83	3.59	4.20	4.76	5.46	6.15	8.04	9.73	12.06	14.15
10	0.44	0.71	0.90	1.30	1.69	2.03	2.17	2.69	3.33	4.20	4.90	5.54	6.29	7.01	9.07	10.81	13.27	15.44
25	0.50	0.80	1.01	1.50	1.99	2.40	2.58	3.22	4.01	5.08	5.87	6.61	7.43	8.15	10.44	12.22	14.79	17.02
50	0.54	0.86	1.09	1.64	2.23	2.71	2.91	3.65	4.58	5.80	6.66	7.48	8.33	9.03	11.49	13.27	15.91	18.15
100	0.58	0.92	1.17	1.78	2.46	3.00	3.24	4.08	5.16	6.56	7.49	8.39	9.27	9.91	12.54	14.27	16.96	19.18
200	0.61	0.97	1.23	1.91	2.68	3.30	3.57	4.52	5.79	7.35	8.35	9.34	10.21	10.80	13.56	15.23	17.95	20.14
500	0.65	1.03	1.30	2.06	2.96	3.67	3.98	5.11	6.63	8.47	9.55	10.63	11.49	11.95	14.90	16.46	19.16	21.24
1000	0.68	1.07	1.34	2.18	3.18	3.96	4.31	5.59	7.34	9.38	10.50	11.65	12.48	12.90	15.89	17.35	20.00	22.01

* The lower bound of the confidence interval at 90% confidence level is the value which 5% of the simulated quantile values for a given frequency are less than.

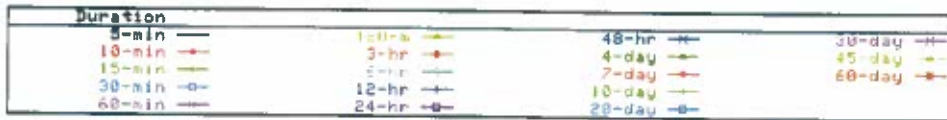
** These precipitation frequency estimates are based on a partial duration maxima series. ARI is the Average Recurrence Interval.
 Please refer to [NOAA Atlas 14 Document](#) for more information. NOTE: Formatting prevents estimates near zero to appear as zero.

Text version of tables

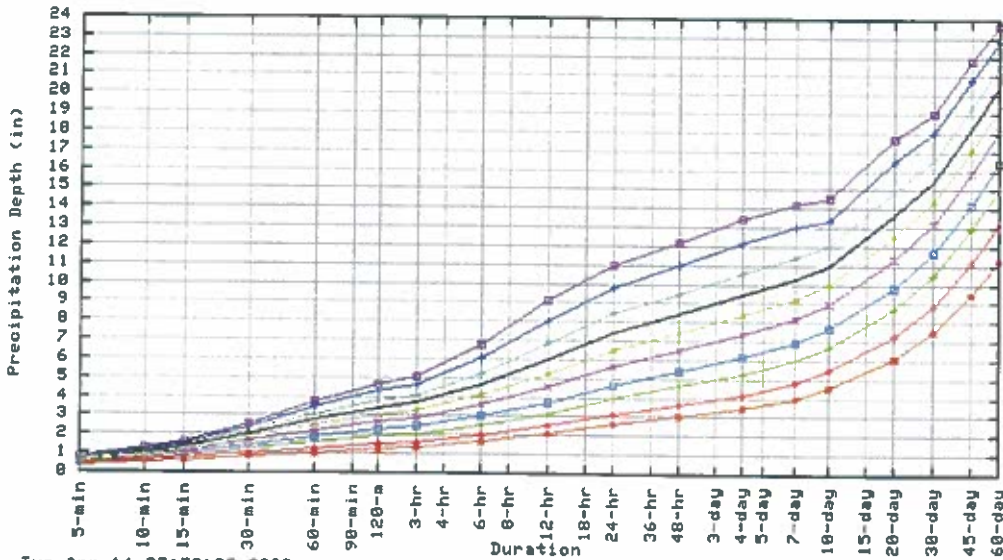
Partial duration based Point Precipitation Frequency Estimates - Version: 3
 38.01876 N 79.09754 W 1499 ft



Tue Apr 14 07:58:35 2009



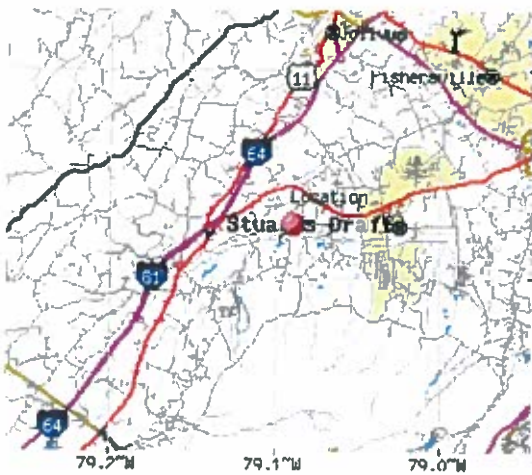
Partial duration based Point Precipitation Frequency Estimates - Version: 3
 38.01876 N 79.09754 W 1499 ft



Tue Apr 14 07:58:35 2009



Maps -



These maps were produced using a direct map request from the [U.S. Census Bureau Mapping and Cartographic Resources Tiger Map Server](#).

Please read [disclaimer](#) for more information.

LEGEND

- State
- County
- Indian Resv
- Lake/Pond/Ocean
- Street
- Expressway
- Highway
- Connector
- Stream
- Military Area
- National Park
- Other Park
- City
- County

Scale 1:220503
 *average—true scale depends on monitor resolution

Other Maps/Photographs -

[View USGS digital orthophoto quadrangle \(DOQ\)](#) covering this location from TerraServer; [USGS Aerial Photograph](#) may also be available from this site. A DOQ is a computer-generated image of an aerial photograph in which image displacement caused by terrain relief and camera tilts has been removed. It combines the image characteristics of a photograph with the geometric qualities of a map. Visit the [USGS](#) for more information.

Watershed/Stream Flow Information -

[Find the Watershed](#) for this location using the U.S. Environmental Protection Agency's site.

Climate Data Sources -

Precipitation frequency results are based on data from a variety of sources, but largely NCDC. The following links provide general information about observing sites in the area, regardless of if their data was used in this study. For detailed information about the stations used in this study, please refer to [NOAA Atlas 14 Document](#).

Using the [National Climatic Data Center's \(NCDC\)](#) station search engine, locate other climate stations within:

...OR... of this location (38.01876/-79.09754). Digital ASCII data can be obtained directly from [NCDC](#).

Hydrometeorological Design Studies Center
 DOC/NOAA/National Weather Service
 1325 East-West Highway
 Silver Spring, MD 20910
 (301) 713-1669
 Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)

SCS CURVE NUMBER AND LAG TIME CALCULATIONS



Worksheet 2: Runoff Curve Number*

Project: Wilda Dam
 Location: Augusta County, Virginia
 Subbasin: entire basin
 Dev. Condition: Present

By: WRW Date: 3/9/2009
 Checked: TAM Date: 4-14-09

Soil Name and Hydrologic Group	Cover Description (Cover type, treatment, and hydrologic description: % impervious; connected or disconnected, etc)	CN*			Area** Acres	Product CN*Area
		Table 2 2	Figure 2-3	Figure 2-4		
Water	Lake	100			10	1000
Allegheny-Cotaco C	Meadow - Continuous Grass	71			330	23430
Buchanan C	Woods, Fair Hydrologic Condition	73			35	2555
Burketown C	Woods, Fair Hydrologic Condition	73			46	3358
Chavies (B)	Woods, Fair Hydrologic Condition	60			32	1920
Cotaco (B)	Woods, Fair Hydrologic Condition	60			74	4440
Frederick-Christian (B)	Woods, Fair Hydrologic Condition	60			6	360
Monongahela C	Woods, Fair Hydrologic Condition	73			819	59787
Purdy (D)	Woods, Fair Hydrologic Condition	79			7	553
Sherando (B)	Woods, Fair Hydrologic Condition	60			234	14040
Unison (B)	Woods, Fair Hydrologic Condition	60			10	600
Totals:					1603	112043

*Use only one CN source per line.

**Indicate units (acres, square miles, or %)

Composite CN=

70



Worksheet 3: Time of Concentration (Tc)*

Project: Wilda Dam
Location: Augusta County, Virginia
Subbasin: entire basin
Dev. Condition: Present

By: WRW
Checked: TAM
Date: 3/9/2009
Date: 4-14-09

Note: Attach map indicating flow segments

Sheet Flow

- 1 Surface Description (Table 3-1)
- 2 Manning's n (Table 3-1)
- 3 Flow Length L (L <= 300 ft)
- 4 Change in Elevation
- 5 2-yr Rainfall, P2
- 6 Land Slope, s
- 7 $T_t = 0.007(nL)^{0.8} / (P2^{0.5} s^{0.4})$

Segment	1
	Woods
	0.400
ft	300
ft	100
in	3.0
ft/ft	0.333
hr	0.29

Shallow Concentrated Flow

- 8 Surface Description (paved/unpaved)
- 9 Flow Length L
- 10 Change in Elevation
- 11 Watercourse Slope, s
- 12 Average Velocity, V (Fig 3-1)
- 13 $T_t = L / (3600V)$

Segment	2
	unpaved
ft	1000
ft	220
ft/ft	0.220
fps	7.5
hr	0.04

Shallow Concentrated Flow

- 14 Surface Description (paved/unpaved)
- 15 Flow Length L
- 16 Change in Elevation
- 17 Watercourse Slope, s
- 18 Average Velocity, V (Fig 3-1)
- 19 $T_t = L / (3600V)$

Segment	3
	unpaved
ft	1320
ft	80
ft/ft	0.061
fps	4
hr	0.09

Channel Flow

- 20a Channel Bottom Width, B
- 20b Channel Side Slope z, where zH:1V
- 20c Full Bank Flow Depth, d
- 20d Cross Sectional Flow Area, A
- 21 Wetted Perimeter, P
- 22 Hydraulic Radius, $R = A/P$
- 23 Channel Drop
- 24 Channel Slope, S

Segment	4
ft	5.00
	1
ft	2.00
sf	14.00
ft	10.66
ft	1.31
ft	510
ft/ft	0.034

25 Manning's n		0.100
26 $V=1.49 \cdot R^{0.667} \cdot S^{0.5/n}$	fps	3.3
27 Flow Length L	ft	15125
28 $T_t=L/(3600V)$	hr	1.28

Flow in Reservoir

29 Acceleration due to Gravity g	Segment	5
30 Mean Depth of Reservoir Dm	fps ²	32.2
31 $V_w=(gD_m)^{0.5}$	ft	6
32 Flow Length L	fps	13.9
33 $T_t=L/(3600V_w)$	ft	930
	hr	0.02
34 Total Tt or Tc (7+13+19+28+33)	hr	1.72
	LAG (hr)	1.03

*Reference: Procedure from SCS TR-55, Urban Hydrology for Small Watersheds (June 1986)

HEC-HMS HYDROGRAPH OUTPUT

South River Dam #7 - Augusta County, Virginia
 HEC-HMS Hydrograph Output
 24-hr 50-yr Type II Storm

Date	Time	Inflow (CFS)	Date	Time	Inflow (CFS)	Date	Time	Inflow (CFS)	Date	Time	Inflow (CFS)
1-Jan-10	0:00	0	1-Jan-10	12:30	2,168	2-Jan-10	1:00	53	2-Jan-10	13:30	0
1-Jan-10	0:15	0	1-Jan-10	12:45	2,300	2-Jan-10	1:15	36	2-Jan-10	13:45	0
1-Jan-10	0:30	0	1-Jan-10	13:00	2,031	2-Jan-10	1:30	24	2-Jan-10	14:00	0
1-Jan-10	0:45	0	1-Jan-10	13:15	1,644	2-Jan-10	1:45	15	2-Jan-10	14:15	0
1-Jan-10	1:00	0	1-Jan-10	13:30	1,311	2-Jan-10	2:00	10	2-Jan-10	14:30	0
1-Jan-10	1:15	0	1-Jan-10	13:45	1,036	2-Jan-10	2:15	7	2-Jan-10	14:45	0
1-Jan-10	1:30	0	1-Jan-10	14:00	839	2-Jan-10	2:30	4	2-Jan-10	15:00	0
1-Jan-10	1:45	0	1-Jan-10	14:15	696	2-Jan-10	2:45	3	2-Jan-10	15:15	0
1-Jan-10	2:00	0	1-Jan-10	14:30	587	2-Jan-10	3:00	2	2-Jan-10	15:30	0
1-Jan-10	2:15	0	1-Jan-10	14:45	505	2-Jan-10	3:15	1	2-Jan-10	15:45	0
1-Jan-10	2:30	0	1-Jan-10	15:00	445	2-Jan-10	3:30	1	2-Jan-10	16:00	0
1-Jan-10	2:45	0	1-Jan-10	15:15	399	2-Jan-10	3:45	0	2-Jan-10	16:15	0
1-Jan-10	3:00	0	1-Jan-10	15:30	362	2-Jan-10	4:00	0	2-Jan-10	16:30	0
1-Jan-10	3:15	0	1-Jan-10	15:45	331	2-Jan-10	4:15	0	2-Jan-10	16:45	0
1-Jan-10	3:30	0	1-Jan-10	16:00	307	2-Jan-10	4:30	0	2-Jan-10	17:00	0
1-Jan-10	3:45	0	1-Jan-10	16:15	286	2-Jan-10	4:45	0	2-Jan-10	17:15	0
1-Jan-10	4:00	0	1-Jan-10	16:30	268	2-Jan-10	5:00	0	2-Jan-10	17:30	0
1-Jan-10	4:15	0	1-Jan-10	16:45	252	2-Jan-10	5:15	0	2-Jan-10	17:45	0
1-Jan-10	4:30	0	1-Jan-10	17:00	239	2-Jan-10	5:30	0	2-Jan-10	18:00	0
1-Jan-10	4:45	0	1-Jan-10	17:15	228	2-Jan-10	5:45	0	2-Jan-10	18:15	0
1-Jan-10	5:00	0	1-Jan-10	17:30	219	2-Jan-10	6:00	0	2-Jan-10	18:30	0
1-Jan-10	5:15	0	1-Jan-10	17:45	211	2-Jan-10	6:15	0	2-Jan-10	18:45	0
1-Jan-10	5:30	0	1-Jan-10	18:00	204	2-Jan-10	6:30	0	2-Jan-10	19:00	0
1-Jan-10	5:45	0	1-Jan-10	18:15	197	2-Jan-10	6:45	0	2-Jan-10	19:15	0
1-Jan-10	6:00	0	1-Jan-10	18:30	191	2-Jan-10	7:00	0	2-Jan-10	19:30	0
1-Jan-10	6:15	0	1-Jan-10	18:45	185	2-Jan-10	7:15	0	2-Jan-10	19:45	0
1-Jan-10	6:30	0	1-Jan-10	19:00	179	2-Jan-10	7:30	0	2-Jan-10	20:00	0
1-Jan-10	6:45	0	1-Jan-10	19:15	173	2-Jan-10	7:45	0	2-Jan-10	20:15	0
1-Jan-10	7:00	0	1-Jan-10	19:30	167	2-Jan-10	8:00	0	2-Jan-10	20:30	0
1-Jan-10	7:15	0	1-Jan-10	19:45	161	2-Jan-10	8:15	0	2-Jan-10	20:45	0
1-Jan-10	7:30	0	1-Jan-10	20:00	155	2-Jan-10	8:30	0	2-Jan-10	21:00	0
1-Jan-10	7:45	0	1-Jan-10	20:15	149	2-Jan-10	8:45	0	2-Jan-10	21:15	0
1-Jan-10	8:00	0	1-Jan-10	20:30	144	2-Jan-10	9:00	0	2-Jan-10	21:30	0
1-Jan-10	8:15	0	1-Jan-10	20:45	139	2-Jan-10	9:15	0	2-Jan-10	21:45	0
1-Jan-10	8:30	0	1-Jan-10	21:00	135	2-Jan-10	9:30	0	2-Jan-10	22:00	0
1-Jan-10	8:45	0	1-Jan-10	21:15	132	2-Jan-10	9:45	0	2-Jan-10	22:15	0
1-Jan-10	9:00	1	1-Jan-10	21:30	130	2-Jan-10	10:00	0	2-Jan-10	22:30	0
1-Jan-10	9:15	1	1-Jan-10	21:45	128	2-Jan-10	10:15	0	2-Jan-10	22:45	0
1-Jan-10	9:30	2	1-Jan-10	22:00	126	2-Jan-10	10:30	0	2-Jan-10	23:00	0
1-Jan-10	9:45	4	1-Jan-10	22:15	125	2-Jan-10	10:45	0	2-Jan-10	23:15	0
1-Jan-10	10:00	7	1-Jan-10	22:30	124	2-Jan-10	11:00	0	2-Jan-10	23:30	0
1-Jan-10	10:15	13	1-Jan-10	22:45	122	2-Jan-10	11:15	0	2-Jan-10	23:45	0
1-Jan-10	10:30	22	1-Jan-10	23:00	121	2-Jan-10	11:30	0	3-Jan-10	0:00	0
1-Jan-10	10:45	34	1-Jan-10	23:15	119	2-Jan-10	11:45	0			
1-Jan-10	11:00	51	1-Jan-10	23:30	118	2-Jan-10	12:00	0			
1-Jan-10	11:15	75	1-Jan-10	23:45	117	2-Jan-10	12:15	0			
1-Jan-10	11:30	111	2-Jan-10	0:00	116	2-Jan-10	12:30	0			
1-Jan-10	11:45	214	2-Jan-10	0:15	111	2-Jan-10	12:45	0			
1-Jan-10	12:00	662	2-Jan-10	0:30	97	2-Jan-10	13:00	0			
1-Jan-10	12:15	1,495	2-Jan-10	0:45	75	2-Jan-10	13:15	0			

South River Dam #7 - Augusta County, Virginia
 HEC-HMS Hydrograph Output
 24-hr 100-yr Type II Storm

Date	Time	Inflow (CFS)	Date	Time	Inflow (CFS)	Date	Time	Inflow (CFS)	Date	Time	Inflow (CFS)
1-Jan-10	0:00	0	1-Jan-10	12:30	2,545	2-Jan-10	1:00	62	2-Jan-10	13:30	0.00
1-Jan-10	0:15	0	1-Jan-10	12:45	2,700	2-Jan-10	1:15	42	2-Jan-10	13:45	0.00
1-Jan-10	0:30	0	1-Jan-10	13:00	2,384	2-Jan-10	1:30	28	2-Jan-10	14:00	0.00
1-Jan-10	0:45	0	1-Jan-10	13:15	1,930	2-Jan-10	1:45	18	2-Jan-10	14:15	0.00
1-Jan-10	1:00	0	1-Jan-10	13:30	1,539	2-Jan-10	2:00	12	2-Jan-10	14:30	0.00
1-Jan-10	1:15	0	1-Jan-10	13:45	1,217	2-Jan-10	2:15	8	2-Jan-10	14:45	0.00
1-Jan-10	1:30	0	1-Jan-10	14:00	985	2-Jan-10	2:30	5	2-Jan-10	15:00	0.00
1-Jan-10	1:45	0	1-Jan-10	14:15	817	2-Jan-10	2:45	3	2-Jan-10	15:15	0.00
1-Jan-10	2:00	0	1-Jan-10	14:30	689	2-Jan-10	3:00	2	2-Jan-10	15:30	0.00
1-Jan-10	2:15	0	1-Jan-10	14:45	593	2-Jan-10	3:15	2	2-Jan-10	15:45	0.00
1-Jan-10	2:30	0	1-Jan-10	15:00	522	2-Jan-10	3:30	1	2-Jan-10	16:00	0.00
1-Jan-10	2:45	0	1-Jan-10	15:15	468	2-Jan-10	3:45	1	2-Jan-10	16:15	0.00
1-Jan-10	3:00	0	1-Jan-10	15:30	425	2-Jan-10	4:00	0	2-Jan-10	16:30	0.00
1-Jan-10	3:15	0	1-Jan-10	15:45	389	2-Jan-10	4:15	0	2-Jan-10	16:45	0.00
1-Jan-10	3:30	0	1-Jan-10	16:00	361	2-Jan-10	4:30	0	2-Jan-10	17:00	0.00
1-Jan-10	3:45	0	1-Jan-10	16:15	336	2-Jan-10	4:45	0	2-Jan-10	17:15	0.00
1-Jan-10	4:00	0	1-Jan-10	16:30	314	2-Jan-10	5:00	0	2-Jan-10	17:30	0.00
1-Jan-10	4:15	0	1-Jan-10	16:45	296	2-Jan-10	5:15	0	2-Jan-10	17:45	0.00
1-Jan-10	4:30	0	1-Jan-10	17:00	280	2-Jan-10	5:30	0	2-Jan-10	18:00	0.00
1-Jan-10	4:45	0	1-Jan-10	17:15	267	2-Jan-10	5:45	0	2-Jan-10	18:15	0.00
1-Jan-10	5:00	0	1-Jan-10	17:30	257	2-Jan-10	6:00	0	2-Jan-10	18:30	0.00
1-Jan-10	5:15	0	1-Jan-10	17:45	247	2-Jan-10	6:15	0	2-Jan-10	18:45	0.00
1-Jan-10	5:30	0	1-Jan-10	18:00	239	2-Jan-10	6:30	0	2-Jan-10	19:00	0.00
1-Jan-10	5:45	0	1-Jan-10	18:15	231	2-Jan-10	6:45	0	2-Jan-10	19:15	0.00
1-Jan-10	6:00	0	1-Jan-10	18:30	224	2-Jan-10	7:00	0	2-Jan-10	19:30	0.00
1-Jan-10	6:15	0	1-Jan-10	18:45	217	2-Jan-10	7:15	0	2-Jan-10	19:45	0.00
1-Jan-10	6:30	0	1-Jan-10	19:00	210	2-Jan-10	7:30	0	2-Jan-10	20:00	0.00
1-Jan-10	6:45	0	1-Jan-10	19:15	203	2-Jan-10	7:45	0	2-Jan-10	20:15	0.00
1-Jan-10	7:00	0	1-Jan-10	19:30	196	2-Jan-10	8:00	0	2-Jan-10	20:30	0.00
1-Jan-10	7:15	0	1-Jan-10	19:45	189	2-Jan-10	8:15	0	2-Jan-10	20:45	0.00
1-Jan-10	7:30	0	1-Jan-10	20:00	182	2-Jan-10	8:30	0	2-Jan-10	21:00	0.00
1-Jan-10	7:45	0	1-Jan-10	20:15	175	2-Jan-10	8:45	0	2-Jan-10	21:15	0.00
1-Jan-10	8:00	0	1-Jan-10	20:30	169	2-Jan-10	9:00	0	2-Jan-10	21:30	0.00
1-Jan-10	8:15	0	1-Jan-10	20:45	163	2-Jan-10	9:15	0	2-Jan-10	21:45	0.00
1-Jan-10	8:30	0	1-Jan-10	21:00	159	2-Jan-10	9:30	0	2-Jan-10	22:00	0.00
1-Jan-10	8:45	0	1-Jan-10	21:15	155	2-Jan-10	9:45	0	2-Jan-10	22:15	0.00
1-Jan-10	9:00	1	1-Jan-10	21:30	152	2-Jan-10	10:00	0	2-Jan-10	22:30	0.00
1-Jan-10	9:15	1	1-Jan-10	21:45	150	2-Jan-10	10:15	0	2-Jan-10	22:45	0.00
1-Jan-10	9:30	2	1-Jan-10	22:00	148	2-Jan-10	10:30	0	2-Jan-10	23:00	0.00
1-Jan-10	9:45	5	1-Jan-10	22:15	147	2-Jan-10	10:45	0	2-Jan-10	23:15	0.00
1-Jan-10	10:00	9	1-Jan-10	22:30	145	2-Jan-10	11:00	0	2-Jan-10	23:30	0.00
1-Jan-10	10:15	15	1-Jan-10	22:45	143	2-Jan-10	11:15	0	2-Jan-10	23:45	0.00
1-Jan-10	10:30	25	1-Jan-10	23:00	142	2-Jan-10	11:30	0	3-Jan-10	0:00	0.00
1-Jan-10	10:45	40	1-Jan-10	23:15	140	2-Jan-10	11:45	0			
1-Jan-10	11:00	60	1-Jan-10	23:30	139	2-Jan-10	12:00	0			
1-Jan-10	11:15	88	1-Jan-10	23:45	138	2-Jan-10	12:15	0			
1-Jan-10	11:30	131	2-Jan-10	0:00	137	2-Jan-10	12:30	0			
1-Jan-10	11:45	251	2-Jan-10	0:15	131	2-Jan-10	12:45	0			
1-Jan-10	12:00	777	2-Jan-10	0:30	114	2-Jan-10	13:00	0			
1-Jan-10	12:15	1,755	2-Jan-10	0:45	88	2-Jan-10	13:15	0			

South River Dam #7 - Augusta County, Virginia
 HEC-HMS Hydrograph Output
 6-hour PMF

Date	Time	Inflow (CFS)	Date	Time	Inflow (CFS)
1-Jan-10	0:00	0	1-Jan-10	12:30	0
1-Jan-10	0:15	0	1-Jan-10	12:45	0
1-Jan-10	0:30	176	1-Jan-10	13:00	0
1-Jan-10	0:45	1,117	1-Jan-10	13:15	0
1-Jan-10	1:00	2,961	1-Jan-10	13:30	0
1-Jan-10	1:15	4,839	1-Jan-10	13:45	0
1-Jan-10	1:30	5,879	1-Jan-10	14:00	0
1-Jan-10	1:45	6,024	1-Jan-10	14:15	0
1-Jan-10	2:00	5,747	1-Jan-10	14:30	0
1-Jan-10	2:15	5,358	1-Jan-10	14:45	0
1-Jan-10	2:30	5,033	1-Jan-10	15:00	0
1-Jan-10	2:45	5,129	1-Jan-10	15:15	0
1-Jan-10	3:00	6,143	1-Jan-10	15:30	0
1-Jan-10	3:15	8,846	1-Jan-10	15:45	0
1-Jan-10	3:30	12,424	1-Jan-10	16:00	0
1-Jan-10	3:45	14,501	1-Jan-10	16:15	0
1-Jan-10	4:00	14,206	1-Jan-10	16:30	0
1-Jan-10	4:15	12,598	1-Jan-10	16:45	0
1-Jan-10	4:30	10,896	1-Jan-10	17:00	0
1-Jan-10	4:45	9,588	1-Jan-10	17:15	0
1-Jan-10	5:00	8,605	1-Jan-10	17:30	0
1-Jan-10	5:15	7,946	1-Jan-10	17:45	0
1-Jan-10	5:30	7,481	1-Jan-10	18:00	0
1-Jan-10	5:45	7,128	1-Jan-10	18:15	0
1-Jan-10	6:00	6,855	1-Jan-10	18:30	0
1-Jan-10	6:15	6,428	1-Jan-10	18:45	0
1-Jan-10	6:30	5,528	1-Jan-10	19:00	0
1-Jan-10	6:45	4,253	1-Jan-10	19:15	0
1-Jan-10	7:00	2,993	1-Jan-10	19:30	0
1-Jan-10	7:15	2,009	1-Jan-10	19:45	0
1-Jan-10	7:30	1,330	1-Jan-10	20:00	0
1-Jan-10	7:45	870	1-Jan-10	20:15	0
1-Jan-10	8:00	574	1-Jan-10	20:30	0
1-Jan-10	8:15	380	1-Jan-10	20:45	0
1-Jan-10	8:30	249	1-Jan-10	21:00	0
1-Jan-10	8:45	163	1-Jan-10	21:15	0
1-Jan-10	9:00	108	1-Jan-10	21:30	0
1-Jan-10	9:15	70	1-Jan-10	21:45	0
1-Jan-10	9:30	45	1-Jan-10	22:00	0
1-Jan-10	9:45	28	1-Jan-10	22:15	0
1-Jan-10	10:00	18	1-Jan-10	22:30	0
1-Jan-10	10:15	12	1-Jan-10	22:45	0
1-Jan-10	10:30	8	1-Jan-10	23:00	0
1-Jan-10	10:45	4	1-Jan-10	23:15	0
1-Jan-10	11:00	2	1-Jan-10	23:30	0
1-Jan-10	11:15	0	1-Jan-10	23:45	0
1-Jan-10	11:30	0	2-Jan-10	0:00	0
1-Jan-10	11:45	0			
1-Jan-10	12:00	0			
1-Jan-10	12:15	0			